# The Fusion Mechanism of Digital 3D Animation and Chinese Traditional Culture

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**Abstract:** With the continuous development of information technology, China's animation industry has developed rapidly in recent years, and the competition pressure on the animation market has become more and more intense. The innovation and development of the animation industry has gradually received widespread attention from the society. This article discusses the fusion and innovation development mechanism of digital 3D animation from the perspective of the integration and development of digital 3D animation and Chinese traditional culture.

With the development of the times and changes in concepts, digital art and traditional culture have gradually merged and coexisted. Digital art needs to rely on traditional culture to find its foundation and show its own characteristics [1]. In addition, with the continuous development of information technology, traditional culture also needs to use new communication channels and channels to spread and inherit, and inject new vitality into traditional culture. This article takes the integration and development of digital 3D animation and traditional culture in China as an example. Starting from the current integration of digital 3D animation and traditional culture in China, this paper explores the development path of the integration mechanism of digital 3D animation and traditional culture in China.

## 1. Analysis of the Current Integration of Digital 3D Animation and Traditional Culture in China

The change of technology will inevitably lead to the innovation of art [2]. As early as 2003, the short film work "Summer" integrating 3D animation and traditional culture in China was shortlisted at the annual conference of the Siggraph Computer Graphics and Image Association in the United States. This is a recognition of China's animation works, and it is also the first time that China has been selected for such a grand event Show the charm of Chinese culture to the world. Since then, there have also been some three-dimensional ink and wash animation effects. In 2006, "Peach Blossoms" also creatively added artistic elements such as paper-cut art, shadow play and gongbi, incorporating Chinese folk art into 3D animation creation, and incorporating Chinese traditional culture into 3D animation creation. The charm and profound meaning of the works make the animation works more energetic, but also help the spread and inheritance of Chinese traditional culture, and play an important role in the inheritance of excellent culture.

With the continuous development of digital information technology, the digital 3D animation industry is rapidly emerging. However, the heroic tendency of some digital 3D animation characters is getting more and more serious, and there are also some problems in shaping important characters. In this context, we must attach importance to the integration and development of China's traditional culture and digital three-dimensional animation. Based on the excellent traditional culture, we can better disseminate the excellent traditional culture and the great national spirit. China is a multi-ethnic country with a splendid history and unique traditional ethnic styles. Whether it is folk paper-cut art, colorful national costumes, long-lasting landscape paintings, or national drama, it is an important form of China's outstanding traditional culture These arts originated from folk life, and

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at the same time played an important role in enriching people's spiritual life and inheriting excellent culture.

### 2. Analysis on the Development Path of the Fusion Mechanism of Digital 3D Animation and Chinese Traditional Culture

With the continuous development of digital information technology and the acceleration of the marketization process, the competition between enterprises in the society is becoming more and more fierce. Compared with other industries, the digital 3D animation industry has higher requirements for innovation. Moreover, the integration and development of the digital 3D animation industry and traditional culture is difficult, and there are many issues that need to be explored. Even so, it can not give up the inheritance of traditional culture. This article mainly discusses the development path of the integration mechanism of digital 3D animation and traditional culture in the new era from the following three aspects.

#### 2.1. Adhere to the National Style

China is a multi-ethnic country, and national style is an important part of traditional culture. The integration of digital 3D animation and traditional culture is an innovative development path. The most important point that animated works attract attention is the characteristics. National style is the most distinctive part of traditional culture. Some existing digital 3D animation works have similar styles and high overlap, and lack recognition. This makes an originally outstanding work look like a crowd and it is difficult to pick out. Integrate digital 3D animation with traditional Chinese culture and persist in making works with a national style. For example, you can choose to use the art of paper-cutting and colorful clothing of ethnic minorities in digital 3D animation. In this way, paper-cutting is not common in our lives. At the same time, it can inject new development vitality into national costumes, add national style characteristics, and also change people's fixed thinking about paper cutting and national costumes, so that they can see the beauty of traditional national costumes in the digital age and 3D animation, and see 3D Paper-cut art in animation. In addition, the integration of digital 3D animation and traditional culture also needs to pay attention to not copying and copying. Moving the tradition directly onto a new carrier is just a simple addition. The fusion effect is not achieved, and it is difficult to form its own unique style charm. Therefore, we must deeply explore the spiritual connotation of traditional national culture and start from the content and value of the work.

#### 2.2. Strengthening Large-scale Development

Unlike ordinary animation short films, if the digital 3D animation industry wants to achieve better development, it also needs to strengthen the development of large-scale operations, not just staying in the production of short films in the works of teachers and students in universities. From the perspective of the development of the entire industry, although this simple short film production shows the innovative development of the digital 3D animation industry, it is relatively small in terms of publicity or dissemination, and it is difficult to have a large impact. For the entire industry, even if the production of short digital 3D animation videos is not enough to represent the development of the industry, it is precisely because of the lack of large-scale representative works that the Chinese animation industry has been despised, and it has only gradually improved in the past two years. The integration of digital 3D animation with China's traditional culture also needs to strengthen the development of large-scale operations. Scale is an inevitable trend of industrial development and expansion. Only in this way can more people pay attention to industrial development and enhance the business of digital 3D animation. Value, expand publicity and dissemination. The market is an important force to promote the development of the industry, especially in today's rapid economic development, if the large-scale development of digital 3D animation cannot be achieved, the integration of digital 3D animation and traditional culture is bound to have problems, and it is even difficult to develop rapidly in marketization. Survive today. Therefore, the digital 3D animation industry must strengthen innovation in the context of marketization, continuously expand the influence of traditional culture, promote integration and innovation, and thereby achieve greater development and progress [4].

#### 2.3. Multi-faceted Integration of Content and Form

At present, there are some digital 3D animations in the society that are fused with traditional culture. They are only a simple addition in form, and the traditional cultural content is copied to 3D technology, which has not achieved true integration and development. Just shouting the slogan of integration does not count as true integration development. To many people, tradition and new life are a conflicting and opposite concept, but in fact they are mutually reinforcing. The reason why traditional culture can go through a long history is because of their unique charm. The era needs a new carrier, but the cultural spirit does not disappear with the development of the era, nor can it disappear with the development of the era. Inheritance is also the foundation of the nation's national security [5]. The true fusion is not simply the addition of forms, nor the copying of content, but the multifaceted integration of content and form. Those successful digital 3D animation works are not only concerned with technological innovation or content addition, but they extract the essence of the traditional culture of the game and use the traditional art forms to explain the spiritual connotation of traditional culture.

For example, "The Return of the Great Saint", this movie starts with the myths and legends of Sun Wukong in the Journey to the West, tells stories loved by the Chinese people, and breaks away from traditional thinking. There is also a mythical character loved by the audience-Nezha. This year's film "Nazi's Devil's Birth" directly refreshed the movie box office, whether it is the character image design and production, the novel storyline setting novelty, Find new points in myths and legends to create, humor is serious, and the spread of ideas is an important factor in the success of animation works. Many people say "I have to take my life by myself" after watching a movie. This is the key to conveying ideas in animation, and it is also the key to the work being called classic. And use digital three-dimensional technology to present and spread it in the form of animation, so as to ensure that traditional culture is truly integrated into digital three-dimensional animation works, and only in this way can we create unique digital three-dimensional animation works with soul.

In summary, with the continuous development of digital information technology, the development of digital 3D animation has gradually received widespread attention from the society. This article mainly starts from the current status of the development of the integration of digital 3D animation and Chinese traditional culture, analyzes and discusses the development path of the integration mechanism of digital 3D animation and Chinese traditional culture, and concludes that the simple addition does not merge. Only with the style characteristics, the restriction of the form, and the realization of large-scale development can we better promote the integration and development of digital 3D animation and China's traditional culture, further promote innovation and development, and produce more excellent works that are loved by the audience.

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