

# Discussion on the Feasibility of Spreading Weifang Kite Culture with Digital Animation Technology

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**Abstract:** This paper discusses the feasibility of using digital animation technology to spread Weifang kite culture. By analyzing the characteristics and advantages of digital animation technology and combining with the unique charm of Weifang kite culture, the positive role of digital animation in inheriting and promoting kite culture is demonstrated. The article points out that digital animation technology can vividly show the kite making technology, flight principle and cultural connotation of kites, enhance the audience's sense of participation and experience, so as to effectively promote the dissemination and development of Weifang kite culture. Furthermore, this paper delves into the challenges and recommendations that ought to be addressed when promoting kite culture through digital animation technology. It highlights the importance of maintaining authenticity and respecting the traditional values of kite culture while incorporating modern technological advancements. Additionally, the paper underscores the need for creative yet educational approaches to engage a wider audience and effectively convey the essence of kite culture.

**Keywords:** Digital animation technology; Weifang kite culture; craftsmanship.

## 1. Introduction

As a treasure of Chinese traditional culture, Weifang kite has attracted the attention of all over the world with its unique artistic charm and profound cultural connotation. However, in the context of globalization, how to spread and carry forward the Weifang kite culture more effectively and make it glow with new vitality in the modern society has become a topic worth discussing. As an important means of modern information dissemination, digital animation technology has the characteristics of vivid image, strong interaction and wide range of dissemination, which provides new possibilities for the dissemination of Weifang kite culture. Therefore, this paper aims to explore the feasibility of using digital animation technology to spread Weifang kite culture, in order to provide new ideas and methods for the inheritance and development of traditional culture.

## 2. Overview of Weifang Kite culture

### 2.1. The History and development of Weifang Kite

Weifang kite, as a bright pearl of Chinese traditional culture, can be traced back to the Spring and Autumn Period and the Warring States Period more than 2,000 years ago[1]. At that time, the prototype of the kite — "wood kite" has appeared, although its structure is simple, it is the original form of the kite. With the passage of time, in the Han Dynasty, the kite making skills have been significantly improved, not only the form is more beautiful, but also the flight performance has been strengthened. After the Tang Dynasty, kites began to change from military to entertainment, and became a beautiful scenery in people's lives.

In the Ming and Qing Dynasties, Weifang kite making skills reached their peak. During this period, the folk artists in Weifang area created kites of different shapes and colors with their rich imagination and exquisite craftsmanship. These

kites not only have high artistic value, but also contain profound cultural connotation. They either depict myths and legends, or show natural scenery, or symbolize good luck, and become an important carrier of folk culture[2].

In modern times, Weifang kite is with its unique charm, out of the country, to the world. In the international kite competition, Weifang kite has won many awards with its unique production technology and flight performance, and won wide praise from international friends. At the same time, Weifang has also held several international kite festivals, attracting kite lovers and tourists from all over the world, and becoming an important window to show the traditional Chinese culture.

It can be said that the history and development of Weifang kites is a vivid cultural history. It has witnessed the great changes of the Chinese nation from ancient times to modern times, and also carries people's yearning for and pursuit of a better life. Nowadays, Weifang kite has become a name card of Chinese culture and has attracted the attention of the world.

### 2.2. Cultural connotation and artistic characteristics of Weifang kites

As a treasure of Chinese traditional culture, Weifang kite is extremely rich in cultural connotation. First of all, Weifang kites reflect the Chinese people's pursuit and yearning for a better life. All kinds of patterns and colors on the kite place people's expectations and blessings for happiness, auspiciousness and peace. Secondly, Weifang kite also contains a profound folk culture and regional characteristics. Kites in different regions vary in shape, colors, patterns and other aspects, reflecting the local people's living customs and aesthetic concepts. In addition, Weifang kites also carry the traditional virtues and values of the Chinese nation, such as unity, courage, innovation and so on[3].

In terms of artistic characteristics, Weifang kite is famous for its unique shape and exquisite production technology. Kites have various shapes, including traditional animals and

characters, as well as modern innovative design. In terms of production technology, Weifang kite pays attention to details and skills. From the selection of material to painting to assembly, every step embodies the painstaking efforts and wisdom of the artists. At the same time, Weifang kite also pays attention to color collocation and pattern design, making the whole kite looks both beautiful and harmonious.

To sum up, Weifang kite is not only an important part of Chinese traditional culture, but also the crystallization of the wisdom of the Chinese nation. With its unique cultural connotation and artistic characteristics, it attracts more and more people to understand and appreciate it.

### **3. Digital Animation Technology and Its Application in Cultural Communication**

#### **3.1. Concept and development of digital animation technology**

Digital animation technology, as an outstanding representative of modern information technology, refers to the use of computers and related software, through a series of digital technologies and algorithms, to create dynamic and virtual images. This technology combines the knowledge of computer graphics, image processing, digital audio, physical simulation and other fields, so that the production of animation is no longer limited to the traditional hand-drawn or fixed-frame shooting, but has a broader creative space and higher production efficiency[4].

The development of digital animation technology has gone through several stages. From the early two-dimensional animation, such as the classic Disney cartoon, to the later three-dimensional animation, such as Pixar's animated film, every technical innovation has brought a great leap in the field of animation. With the improvement of computer performance and the improvement of the software, the fidelity, delicacy and smoothness of digital animation have been significantly improved, enabling the audience to immerse themselves in a more real and vivid virtual world.

Nowadays, digital animation technology has been widely used in film, television, games, advertising and other fields. It not only changes the way of animation production, but also profoundly affects people's aesthetic concepts and cultural consumption habits. In the future, with the continuous progress of technology and the continuous expansion of application fields, digital animation technology will bring richer forms of expression and broader development space for cultural communication.

#### **3.2. The application status of digital animation in cultural communication**

In the context of globalization, the ways and means of cultural communication are increasingly diversified, and digital animation technology is playing an increasingly important role in cultural communication with its unique advantages[5].

On the one hand, digital animation has been widely used in film and television works. From special effects scenes in Hollywood blockbusters to animated characters in domestic films, digital animation adds luster to them, enabling audiences to enjoy a more shocking audio-visual experience. At the same time, digital animation also provides a more vivid and intuitive way for documentaries, scientific and

educational films, so that complex knowledge and information can be more easily accepted and understood by the audience.

On the other hand, digital animation also plays an important role in the network communication. With the popularization and development of the Internet, network animation and short video have become important ways for people to obtain information, entertainment and leisure. Digital animation, with its unique form of expression and creative content, has attracted the attention and love of a large number of netizens, and has become an important carrier of cultural communication.

In addition, digital animation also plays a unique role in cultural heritage protection, tourism promotion and other fields. Through digital animation technology, cultural heritage can be restored and reconstructed, in a new face, tourist attractions can be presented virtually to provide more intuitive and vivid tourist experience.

#### **3.3. Analysis of the advantages of digital animation in cultural communication**

Digital animation has many advantages in cultural communication. First of all, it can break the limitation of time and space, present the content in different regions and under different cultural backgrounds in a unified and intuitive form, and make the cultural communication more convenient and efficient. Secondly, digital animation is highly creative and flexible, and can be customized according to different communication needs and audience characteristics to achieve accurate communication. In addition, digital animation can also provide an immersive experience for the audience through virtual reality, augmented reality and other technical means, so that it can appreciate the animation, but also can deeply understand and feel the cultural connotation contained in it[6].

To be specific, digital animation can present the stories, characters and scenes in traditional culture in a new way through rich colors, delicate pictures and vivid sound effects, so that the audience can feel the charm of traditional culture more intuitively. At the same time, digital animation can also combine modern aesthetic concepts and technical means to innovate and reconstruct the traditional culture, so that it is more in line with the aesthetic needs and cultural needs of modern people. In addition, digital animation can also be widely spread through the Internet and other new media platforms to expand the coverage and influence of cultural communication.

To sum up, digital animation has a unique application value and a broad application prospect in cultural communication. With the continuous progress of technology and the continuous expansion of the application fields, digital animation will play an increasingly important role in the cultural communication, and make greater contributions to the inheritance and promotion of the excellent traditional Chinese culture[7].

## **4. Feasibility Analysis of Using Digital Animation Technology to Spread Weifang Kite Culture**

### **4.1. The convergence point between digital animation technology and Weifang kite culture**

There is a natural convergence point between digital animation technology and Weifang kite culture. This fit is not only reflected in the perfect combination of technical means and traditional cultural content, but also reflected in their common pursuit of innovation, aesthetic feeling and cultural inheritance.

First of all, the digital animation technology, with its powerful expressive force, can vividly and vividly show the diversity and uniqueness of Weifang kite. Whether it is the traditional leading centipede kite, butterfly kite, or modern innovative design, digital animation can show its characteristics and charm vividly through exquisite pictures and smooth movements. This visual impact and shock helps to enhance the audience's cognition and interest in Weifang kite culture.

Secondly, digital animation technology can break through the limitation of time and space, and spread the charm of Weifang kite culture to a broader field. Through the Internet, mobile media and other channels, digital animation works can quickly spread all over the world, so that more people can understand and appreciate Weifang kite culture. This cross-regional and cross-cultural communication mode is helpful to help enhance the international influence of Weifang kite culture and promote it to the world stage[8].

In addition, the fit between digital animation technology and Weifang kite culture in innovation can not be ignored. The continuous innovation and development of digital animation technology provides new ideas and means for the inheritance and promotion of traditional culture. Weifang kite culture, as a treasure of Chinese traditional culture, also needs to innovate and develop constantly to meet the needs of modern society. The combination of digital animation technology and Weifang kite culture can inject modern elements and innovative thinking on the basis of maintaining the essence of traditional culture, so as to make it glow with new vitality and vitality.

### **4.2. Digital animation presents the potential in the process of Weifang kite making and flight principles**

Digital animation has great potential in presenting Weifang kite making technology and flight principles. Through digital animation technology, we can disassemble and reconstruct the complex process of kite making, and show it to the audience in an intuitive and easy to understand way. From material selection, design, painting to assembly and debugging, every link can be vividly presented in the form of animation, so that the audience can have a deep understanding of the exquisite skills and unique charm of kite making.

At the same time, the digital animation can also simulate the kite flying in the air, showing its flight principle. By simulating the flying state of kite under different wind speed and wind direction conditions, as well as the influence of factors such as adjusting the center of gravity and tail length on flight performance, digital animation can directly reveal the scientific principle of kite flying and enhance the

audience's understanding and interest in kite culture[9].

In addition, digital animation can combine virtual reality technology to provide an immersive experience. By wearing VR equipment, viewers can be in the scene of kite making or the sky of kite flying, and feel the unique charm of kite culture. The immersive way of experiencing Weifang kite culture through digital animation is bound to significantly enhance the audience's awareness and participation. This innovative approach allows the viewer to step into a virtual realm where the beauty and intricacies of the kite-making process, as well as the soaring elegance of the kites in flight, are brought to life in vivid detail. By leveraging the latest digital technologies, digital animation can transport the audience to the heart of Weifang's kite culture, making the experience feel more authentic and engaging.

### **4.3. The Role of digital animation on improving the communication effect of Weifang kite culture**

Digital animation plays an important role in improving the communication effect of Weifang kite culture. First of all, the vividness and image of digital animation can attract the attention of more audiences. Compared with the traditional way of text and picture communication, digital animation can show the characteristics and charm of Weifang kite culture more intuitively through dynamic pictures and sound effects, so that the audience is more likely to resonate and interest.

Secondly, the cross-media communication characteristics of digital animation are helpful to expand the influence of Weifang kite culture. Digital animation works can be spread through the Internet, TV, mobile media and other channels, covering a wider audience groups. This diversified mode of communication can not only improve the popularity of Weifang kite culture, but also attract audiences of different ages and cultural backgrounds, and promote cultural exchange and integration.

In addition, digital animation can also innovate the way of communication, enhance the interactivity and sense of participation. Through digital animation technology, interactive kite culture experience games or applications can be made, so that the audience can understand and learn Weifang kite culture in the process of participating in the game. This interactive communication mode can not only improve the participation and stickiness of the audience, but also deepen their understanding and memory of Weifang kite culture[10].

To sum up, digital animation technology and Weifang kite culture have a natural meeting point. Digital animation shows great potential in presenting the process of Weifang kite making technology and flight principle, and plays a significant role in improving the communication effect of Weifang kite culture. Therefore, it is feasible to use digital animation technology to spread Weifang kite culture, and it is expected to inject new vitality into the inheritance and development of Weifang kite culture.

## **5. Conclusions**

The combination of digital animation technology and Weifang kite culture has a natural convergence point. The vividness, image and cross-media communication characteristics of digital animation can perfectly show the unique charm and profound connotation of Weifang kite culture, and attract more people's attention and love. Digital

animation has great potential in presenting Weifang kite making technology and flight principles. Through digital animation technology, we can present the complex production technology and scientific flight principles to the audience in an intuitive and easy to understand way, and enhance the audience's understanding and cognition of Weifang kite culture. Digital animation technology plays a significant role in improving the communication effect of Weifang kite culture. It can not only expand the scope of communication and cover a wider audience, but also improve the audience participation and stickiness through innovative communication methods and enhanced interactivity, so as to promote the extensive dissemination and in-depth development of Weifang kite culture. It is feasible to spread Weifang kite culture with digital animation technology, and it has a broad application prospect. We should actively explore and practice the application of digital animation technology in the dissemination of Weifang kite culture, and make greater contributions to the inheritance and promotion of the excellent traditional Chinese culture.

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