



Research on the Digital Design of Traditional Cultural IP

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Abstract. With the advent of the digital age and the advent of cultural confidence, traditional cultural IP has been rapidly gaining popularity in various digital media in recent years. The development of digitization is driving a wave of technology-oriented design that conveys traditional cultural concepts and connotations of national temperament. This paper examines traditional cultural IP design expressions in the context of the digital age from the perspective of traditional culture and digital design at an academic level. It proposes design principles and methods for integrating traditional cultural elements into digital media art creation. On this theoretical basis, attempts are made to use digital technology to design the expression of traditional cultural IP. On a practical level taking the Tao Yuanming IP as an example, the combination of Tao Yuanming's poetic imagery and Tao Yuanming's image with modern multimedia technology, three-dimensional models, and digital product development. A new model and strategy for the revival of traditional culture in digital design form and the creation of outstanding traditional cultural IP is explored. The contribution of this paper is to investigate the method of transforming the content and spirit of traditional culture into visual elements and symbols, and then digitally designing them. Digital design revitalizes and reproduces traditional culture, gives it a sense of modernity, and expands the scope and connotation of digital media art creation. It provides new ideas for the study and redesign of traditional cultural communication and development in the digital context.

Keywords: Digital Design · Traditional Cultural IP · Digital Media · Visual Communication Design · Design Translation

1 Introduction

In recent years, with the rapid development of the Internet industry, various communication media and technical means have also changed. While this has brought new opportunities for the transmission and promotion of traditional culture, it has also posed great challenges for the transmission of traditional Chinese culture. On the one hand, without innovative expressions of traditional culture, it will not appeal to the general

public, especially young people. On the other hand, traditional cultural expressions are relatively homogeneous and have insufficient market dynamics for sustainable development. As society moves into a digital media environment, traditional culture should also be disseminated and promoted in line with the development of digital media. Therefore, there is still much room for improvement in the way traditional culture is passed on and the forms of communication. People can learn more about traditional culture from multiple elements, levels, and perspectives, and spread it to a wider space. This is an inevitable trend in the transmission and development of traditional culture. Digital media art is a combination of science and art. Through digital media, audiences can have a more intuitive and profound experience of traditional cultural content. If traditional cultural materials can be explored in-depth, integrated into digital media art creation, and traditional cultural IPs created, traditional culture can be made more contemporary and its value can be maximized.

2 Research on the Expression for the Digital Design of Traditional Cultural IP

2.1 Communication of Traditional Cultural Symbols Through the Digital Design of the Brand Image

IP is a natural brand, and an excellent brand image design can enhance the entire IP's ethos and style. At the same time, brand image building is also an important means of IP communication. Digital design is a low-cost and efficient way to communicate brand images [3]. The digital design of traditional cultural IPs can shorten the promotion cycle, shorten the time to update information, and speed up the operation of the brand. With the support of today's digital technology and media pluralism, traditional cultural IP design will also have digital characteristics to a certain extent. The traditional culture IP design will also be digital to a certain extent and will develop from traditional media to multimedia visual integration [4]. The digital design of the brand image is therefore a way of bringing the traditional brand image into a virtual, open, and highly interactive world. This is to meet the strong demand of brand consumers for an increasingly digitalized material and cultural life. In exploring the digitization of traditional cultural IPs, digitization has given traditional cultural IPs a breadth of design expression. Taking the emblem of the Palace Museum as an example [6], the emblem of the Palace Museum, as the brand visual identity of the super IP of the Palace, conveys the spiritual connotation of Chinese culture comprehensively in terms of visual design. At the same time, the digital design extends the brand to dynamic and diverse audio-visual variations. The digital design of the brand image should therefore have two characteristics. Firstly, in terms of expression, the digital design, and promotion of the brand image in terms of graphics, text, color, and interaction with digital technology. Secondly, in terms of content, it emphasizes the prominence and differentiation of the brand. Both the design of the brand visual image for traditional cultural IP should draw on the traditional cultural symbols contained in the content itself in the design process to create a special traditional cultural meaning and realm. It can also enhance the cultural heritage of the brand image.

2.2 Digital IP Image Design to Bring Historical Figures Closer to Modern People

When creating traditional cultural IPs, it is important to define the brand's IP image, which is a virtual product of digital design that is given a unique connotation and story, thus extending the content. The media context created by short videos has a "human-centered" cultural DNA. By using specific personalized symbols, the communication subject can trigger emotional resonance and relationship recognition in the short video space, thus generating positive communication effects [8]. At the same time, the IP image gives a rich and complete story, so that the culture follows the image and is more suitable for young people. From analyzing the characteristics of the more popular IP images in the market, we can see that although each region has different aesthetic trends for IP images, an excellent IP image will have three characteristics. Firstly, the image should be supported by a unique and creative backstory as content. Secondly, the style should be witty and interesting. With the development of the Internet, more and more images are being made into emoji stickers to convey the various emotions people feel in communication. In this case, people tend to favor the trend of more cute and bitchy personalities. Thirdly, in terms of design drawing style, the general shape of the IP image is different from traditional 2D images. It needs to be minimalistic and use high-quality 3D effects and textures. The minimalist shapes make it easier to use the IP images in various derivative products. The 3D textures also make it easier to create a more vivid IP image. The Grandpa Confucian, for example, combines the culture of the sacred place of Southern Confucius with modern design to create a time-traveling cartoon version of Confucius to promote the culture of Confucianism in China. A series of emoji packs and related cultural and creative derivatives have been created. So when it comes to cultural IP design. The style should be grasped in a way that is on the cute side. The overall character of the image and background story support should be fleshed out. This will make the traditional culture more vivid and more resonant to the public's life. At the same time, the IP image can be redesigned into a chibi version of the image used for expression packs.

2.3 The Revitalization of Famous Ancient Works Through Modern Technology

Digital communication is a newer, more convenient, more intuitive, and more contemporary way of communication. By fully exploring innovative ways and means of digitizing traditional paintings and literary works, digital communication can provide a broader, richer, and more unique content resource [7]. The traditional appreciation of famous works is often limited by the space available for display and the characteristics of the works themselves. It is difficult to give the viewer a full understanding of the details and their appreciation value. With the advent of the digital age, traditional art forms are breaking through the old constraints of time and space through the multi-dimensional experience of sight, sound, and touch. Gradually, they are beginning to convey more information to the viewer, broadening the historical value of the traditional works themselves. When digitally designing Chinese historical paintings, it is often by breaking away from the flat two-dimensional presentation of the painting. For example, the Palace Museum has taken the "Along the River During the Qingming Festival" and recreated it in the form of a three-dimensional paper sculpture, creating a paper sculpture bedside

lamp [2]. This is a three-dimensional restoration of the urban landscape and life in Bianliang, the capital of the Song Dynasty. Alternatively, the static works are made dynamic through modern technology. For example, the dome theatre at the Fantasia theme park combines a thousand miles of rivers and mountains with full 3D technology, increasing the dynamism and realism of the images [5]. This allows the audience to experience the green hills and waters of the painting through different perspectives. Through technology, the audience is placed on the screen and experiences the green hills and waters of the painting from a different perspective. It achieves the collision, innovation, and integration of traditional Chinese culture and modern technology.

3 Traditional Cultural IP Digital Design Practice with Tao Yuanming IP as an Example

This chapter examines the feasibility of a digital design approach to the traditional culture at a practical level. From the perspective of traditional culture and digital visual communication design, design forms that intermingle the two are studied and explored. The digital design of Tao Yuanming IP is used as an example to develop Tao Yuanming cultural IP. The whole study designs digital brand visual images, Tao Yuanming IP images with their emoji packs, and designs a series of digital illustrations of “The Peach Blossom Colony” at a practical level. The attempt is to digitally innovate the design and creative transformation of traditional culture to be more in line with contemporary aesthetics. In terms of promoting traditional culture, the exploration and creation of the Tao Yuanming IP is itself a simple response to the public’s deep attachment to and yearning for traditional culture. Through the means of digital media communication, people around the world can experience the charm of traditional Chinese culture.

3.1 Digital Brand Image Design

Traditional cultural IP is a very broad field and does not belong to only one brand, Tao Yuanming. The design practice uses a complete set of digital design systems and strategies to clarify the brand’s stylistic positioning in the digital market for traditional cultural IP. Combining Tao Yuanming’s ideology and culture with the Tao Yuanming IP brand strengthens the sense of historical heft. The unique attributes of the brand, such as the Taoist colors of nature and the seclusion of the ancient Chinese literati class, are highlighted to promote and revive traditional culture. At the same time, through digital visual design, the brand uses the excellent display characteristics of the digital medium to create innovative creative and design expressions to bring into play the advantages of digital media and digital media communication [1].

The Chinese character for ‘Tao’ was chosen as the basis for the logo design. In terms of the font, the character is a long, thin rectangle with a pendulous foot, and the strokes are round and even, with a square within the circle. The design is based on the traditional national aesthetic and interest behind the logo and has a more classical flavor. The theme color of the brand image is selected and extracted according to the traditional Chinese colors. The green color “Neptune Green” reflects the elegance of the brand, while “Moon Yellow”, the most distinctive of the traditional Chinese pigments,

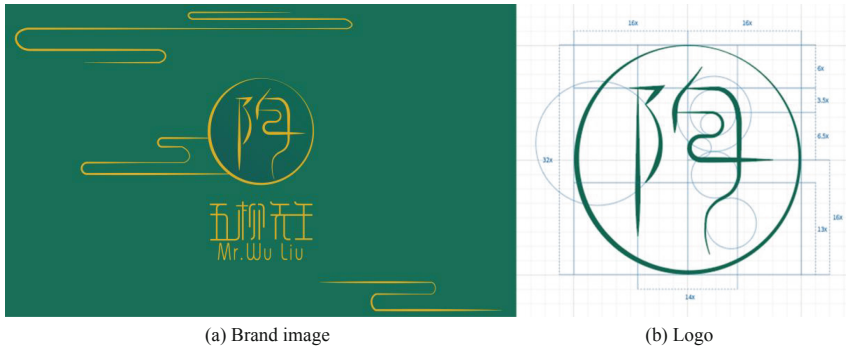


Fig. 1. The standard drawing.



Fig. 2. The supporting graphics.

is used to complement the overall design. The “Moon Yellow”, the most distinctive of the traditional Chinese pigments, complements the overall design. The overall design expresses the brand’s character and Tao Yuanming’s culture, as well as showing the beauty of traditional Chinese colors to the public. In contrast to traditional hand-drawn designs, Adobe Illustrator was used to creating the standard drawing as shown in Fig. 1 and the supporting graphics as shown in Fig. 2. Vector drawing can produce images with unlimited magnification. This allows you to flexibly adapt the presentation characteristics of different media to achieve excellent brand image communication needs.

3.2 Digital IP Image Design

In the design of the Tao Yuanming IP, the recognizable features of the Tao Yuanming appearance symbols, such as the white robe and long sleeves, as summarised by successive generations of painters, were retained. At the same time, the design of Tao Yuanming’s IP image has been made more youthful, bringing the historical figure closer to modern people. In the drawing of the demeanor, Tao Yuanming’s plump face and clear, upturned eyebrows are retained, while the face shape is adjusted to the very popular bun face of modern people. The combination of traditional aesthetics and modern design has resulted in an IP image that is free from the traditional image of Tao Yuanming as a poor, old man. For the first time, he is presented to the public with a bun face that meets modern aesthetics as shown in Fig. 3, but in his clothing he continues the image of Tao Yuanming in the minds of Chinese literati, giving the Tao Yuanming IP image a sense of historical weight. After the main image of Tao Yuanming is designed, four scenarios are created for him as shown in Fig. 4, all of which are based on anecdotes and anecdotes that have been passed down to the present day, showing Tao Yuanming’s

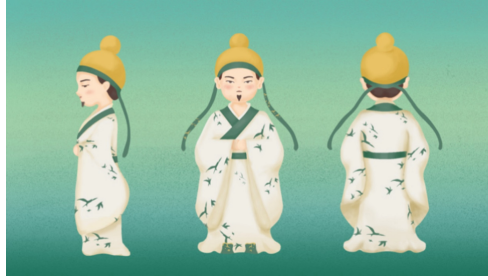


Fig. 3. Tao Yuanming IP image design.

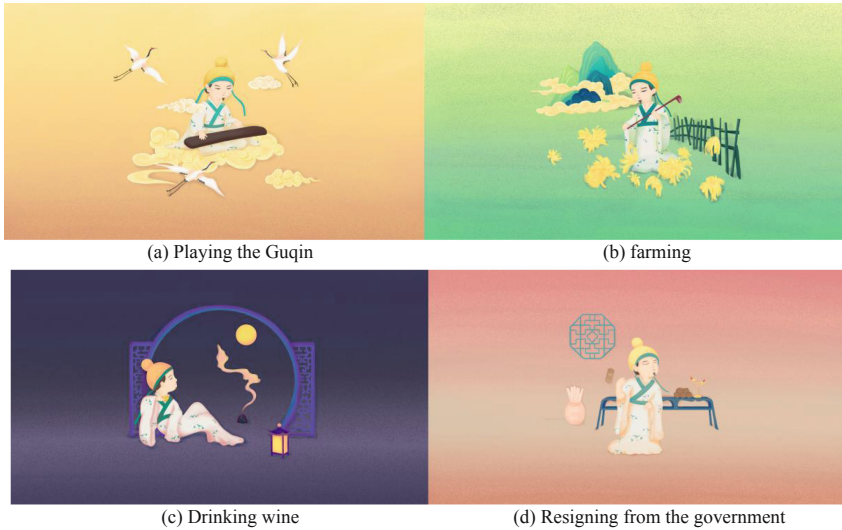


Fig. 4. Four scenarios of Tao Yuanming IP image.

hobbies: playing the Guqin, farming, drinking wine, resigning from the government, and writing poetry. The character is enriched. To give practical value to Tao Yuanming's IP image, Design House further digitized the image and extended it into a complete set of WeChat emoji packs.

In the design of the main IP image of the emoji pack, exaggeration and contrast are used as shown in Fig. 5. The head-to-body ratio of the form is exaggerated to give the whole IP image a punchy visual impact, reinforcing the user's perception of the image. At the same time, the larger head proportion better highlights the chibi and cute attitude of Tao Yuanming. When designing the chibi image for the IP, the character dimension was analyzed. In the scenario extension of the emoji, 16 emojis are shown in Fig. 6, mostly derived from life scenarios. They can be applied to common everyday conversations. The digital design of the Tao Yuanming IP breaks down historical sub-walls and sees Tao Yuanming as an intimate friend to modern people daily. It can be cute, angry, and crying, reducing the distance of the official IP and bringing Tao Yuanming closer



Fig. 5. The IP image of the emoji.



Fig. 6. The 16 emojis.

to the dialogue with the user. A perfect blend of traditional culture and biochemistry is achieved. In the design of the emoticon series of emoticons, vivid and in-depth portrayals are made of the big cry, love, cheek resting, and anger. Internet popular phrases such as secretly observing are also added to make the whole emoji pack close to life and more practical. In addition to spreading traditional culture, it has greatly enriched the way of interpersonal communication and has become an important carrier and element of virtual social communication.

3.3 Digital Illustration Design for “The Peach Blossom Colony”

The illustration is a departure from traditional hand-drawn artwork and is digitally designed using Photoshop. The text “The Peach Blossom Colony” by Tao Yuanming is presented in a new way. “The Peach Blossom Colony” breaks the whole work down into four parts as shown in Fig. 7, all of which is dynamic illustrations. Eventually it was also made into a stereotype book. The four illustrations were drawn separately for this purpose, and the design style was grasped to make the whole Tao Yuanming IP unified and integrated. At the same time, the traditional painting is transformed into a more diverse work by incorporating modern digital technology, contemporary design techniques, and a variety of expressions. This has contributed to the development of its dissemination and the renewal of its form.

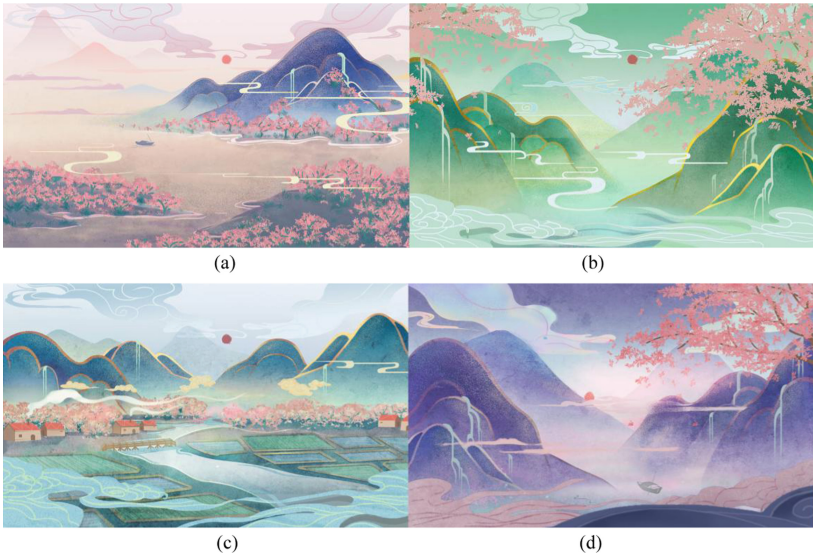


Fig. 7. “The Peach Blossom Colony”

4 Conclusion

With the rising awareness of cultural confidence among young people, the era of revival of traditional culture has arrived. This paper aims to conduct a preliminary study on the digital innovation design of traditional cultural IP. It explores the forms of digital expression and design methods. Modern digital cultural symbols can present the unique spirit and artistic style of traditional culture, and traditional culture also provides a strong vitality for the creation of quality digital IPs. The article successfully demonstrates the digital design of traditional cultural IPs from conceptualization to the digital transformation of elements. In the end, through the combination of theory and practice, many manifestations of Tao Yuanming’s IP digital design are successfully studied. Overall, traditional culture gives cultural connotation and value to digital products, and digitalization integrates traditional culture into modern trends and aesthetics. The digitalization of traditional culture into modern trends and aesthetics. The traditional culture IP should be more creative while retaining the essence of traditional culture, and the fusion between digital media art and traditional symbols will rejuvenate traditional culture.

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