



Study on Introducing Digitalization in Folk Art

Taking Beautiful! Chinese New Year Paintings as an Example

Song Lu^(✉)

Shandong University of Art and Design, No. 1255, University Road, University Science Park,
Changqing District, Jinan, Shandong, People's Republic of China
slu009@qq.com

Abstract. The rich and colorful folk arts are varied in categories, but its inheritance and protection are experiencing a period of stagnation with the social development due to the traditional recovery and protection approaches. Digitalization of folk arts is an effective approach to protect folk arts forming with the development of computers. Taking *Beautiful! Chinese New Year Paintings* as an example, this paper analyzes the necessity of introducing digitalization into the protection of folk arts, with the mutual relationship between folk arts and digitalization as main clue and combining the technology application in animation production.

Keywords: Folk arts · Digital animation · Spring Festival paintings of Yangjiabu
Animation based on Spring Festival paintings

1 Rich and Colorful Folk Arts Provide Materials for Digitalization

Folk arts, as the public culture existing in the daily life, are the visual and graphic arts created by the folk populations to meet their demands on social life. Folk arts have a long history, as well as deep roots that they rely on for existence and development. Digitalization means the process that voices, texts, graphs, images, animations, motion pictures and other multi-media information are subject to digital processing on computers through the modern multi-media technologies. Folk arts are converted into digital arts that can display folk arts more visually. Specifically, digital animation is a method that can realize the perfect combination of multi-media technologies and folk arts. Rich and colorful folk arts provide abundant materials for the creation of digital animation.

Folk arts have a long-standing relationship with animation. The animations, ranging from the first animation *Princess Iron Fan* produced by WansBrother to the first puppetoon *Dream of being Emperor* of China, reflect the styles and characteristics of folk arts. The forms and colors of Spring Festival paintings were embodied in the animations such as *The Monkey King*, *Prince Nezha's Triumph against Dragon King*, *Pride General*, *A Small Carp's Adventures*, etc., produced by Shanghai Animation Film Studios. Folk

toys made of different raw materials have different effect, and they were perfectly integrated into the animations such as *Princess Peacock*, *A Daoist from Lao Mountain*, *Inscription of Dragons*, *Watermelon Gun*, *Fake or Real Li Kui*, etc. The folk drawing techniques on ceramics and porcelains were fully displayed on *Fish Dish* and *Conflict*. The styling features of folk paper-cut were skillfully used in *Fishing Child*, *Piggy Eats Watermelon*, *Ginseng Baby*, *Red Army Bridge*, *A Mouse Marriage*, *Eight Immortals with Flea*, etc. The styles, colors, materials, themes, etc. of folk arts are indirectly or directly employed in the creations of Chinese animations. Paper-cut animated cartoon *Fishing Child*. An animated cartoon using styles and colors of Chinese New Year paintings (Fig. 1).



Fig. 1. Paper-cut animated cartoon *Fishing Child* (Color figure online)

Simple, exaggerate, generalized and concise styling features of folk arts such as shadow puppet, puppet, Spring Festival paintings, paper-cut, folk toys, etc., fit exactly with the motion ways and rules of animation, and match perfectly with the styling requirements of animation. The beautiful, pure and intense colors of folk arts are accord with the art language and the pattern of manifestation of animation. Therefore, in the history of Chinese animation, the puppet animation, paper folding animation, paper-cut animation, clay sculpture animation, etc. corresponding to folk arts. In 1970s, the creation of Chinese animation won the good reputation of “Chinese School of Animation” in the international animation circle. Traditional folk art was well referenced and

explored in animations, becoming the source and basic material of animation creation (Fig. 2).



Fig. 2. An animated cartoon using styles and colors of Chinese New Year paintings (Color figure online)

2 Necessity of Digitalizing the Spring Festival Paintings of Yangjiabu

Yangjiabu is located at the south bank of Laizhou Bay, Bohai Sea, and 10 km in the northeast of downtown of Weifang City. Yangjiabu makes Spring Festival paintings seasonally, from the end of busy season in autumn to the December 23 of lunar calendar. The themes of Spring Festival paintings include exorcising evil spirits, auspicious sign, folk customs, tales of legend, historical stories, fiction and opera, current event and humor, acrobatics and entertainment, scenery and flower, auspicious birds and beasts,

etc. Farmers post gate paintings, door paintings, paintings with a character of “fu (fortune)”, beauty paintings, paintings with standing children, moonlight paintings according to their demands in daily life, which are full of rich folk and local flavors (Fig. 3).



Fig. 3. Spring Festival paintings of Yangjiabu: *Men Busy at Ten Farming Activities*

Yangjiabu Spring Festival paintings have passed over 500 years from Ming Dynasty to now. Since Jiaping Period of Ming Dynasty, Yangjiabu has begun to make Spring Festival paintings, and over 30 stores such as Jixing, Tongshunde, Yongsheng, etc. were opened in Qianlong Period of Qing Dynasty and over 80 stores were reached in Daoguang Period of Qing Dynasty. The situations with “over thousands of painting varieties and hundreds of workshops” and “painting skills was popularized every household” appeared. In Xianfeng Period of Qing Dynasty, Yangjiabu integrated the local styles with the styles of Yangliuqing Spring Festival paintings in Tianjin, which not only carried forward the “half-printing, half-drawing” technique of Yangliuqing and expanded the contents, but also enriched the varieties. Afterwards, Yangjiabu Spring Festival paintings developed towards an unprecedented prosperous period, and some paintings were even exported to foreign countries. In the period of “Culture Revolution”, the layout designs of Yangjiabu Spring Festival paintings were damaged because they were one of “four olds”, but in recent years relevant departments and the artists of Yangjiabu Spring Festival paintings began the systematic arrangements and collections of traditional Spring Festival wood-block prints. Through efforts in all directions, Yangjiabu Spring Festival wood-block print was listed into the first batch of National Intangible Cultural Heritage on May 20, 2006 as approved by the State Council (Fig. 4).



Fig. 4. Yanjiabu Spring Festival painting: number one scholar got married (Color figure online)

Although Yangjiabu Spring Festival paintings are properly protected, the values, beliefs, ways of thinking and aesthetic ideas of the public and the relationship between traditional lifestyle, culture and natural ecology change with times, which is a significant impact on the existence of Yangjiabu Festival Paintings. “We have no reasons to force the publics to post those paintings of immortals in loud colors in their chic rooms.”¹ The functions of Spring Festival paintings have been faded out in the modern society, and its markets narrow down largely with the reduction of sales volume. In addition, Yangjiabu Spring Festival paintings, like other intangible cultural heritages, are also at the embarrassing situation of “lacking the inheritors”. How to review Yangjiabu Spring Festival paintings in a better way is urgent for its protection and inheritance. The traditional collection and sorting of Spring Festival paintings are just a passive protection, and deeper exploration is required by other approaches such as digital animation. Digital animation restores the characteristics of Spring Festival paintings by its technologies, which makes it easy to be accepted by the publics, and also conforms to the visual appreciation habits nowadays. Thus, digital animation ushers a new approach for protecting the intangible cultural heritage. Feng Jicai, in his interview about *The Protection of Chinese Folk Culture*, noticed that “what we pass down to our descendant is not just the written record, but also those visible, audible and dynamic”.

In 1990s, Chinese government actively applied for the “World Cultural and Natural Heritages”, and put more efforts in restoring and protecting the folk culture and art. Specifically, the protection on folk cultural and artistic heritages is mainly implemented

¹ Pan Lusheng Digitalized Folk Art [C]: Theory Committee of China Artist Association. Collected Works of Chinese Art Chengdu Forum, Current Meaning of National Traditional Art. Chengdu: Sichuan Art Publishing House, 2007.263.

from three aspects: investigation and recording of folk handicrafts and cultural ecological protection, collection and sorting of folk artworks, tourism regeneration and development of folk artworks. However, the above three approaches have their limitations due to their particularities. First, folk art spreads widely, almost covering most regions throughout the country; second, folk art has a variety of forms. Therefore, it is complex cause to protect the folk art.

Facing the conflicts between the reasonable development and utilization and the effective protection of ethnic and folk art culture heritage, “it is necessary to keep consistent with the country’s modernization, and utilize the modern digital information acquiring and processing technology to the protection of ethnic and folk handicrafts and its ways of cultural existence.”² It is necessary to establish a comprehensive, digitalized and virtual basic framework for the protection, inheritance and development of ethnic and folk art heritage.

From the theory level, the digitalization of folk art provides theories and models for the digitalized digging, storage, propagation and development of intangible cultural heritage, as well as provides education methods and basis for the future protection of intangible cultural heritage. From the content level, a comprehensive, digitalized and virtual basic framework for the protection, inheritance and development of ethnic and folk art heritage based on computers needs to be established, and a symbolic library for ethnic and folk art that can be applied to modern design, covering the basic element base of folk Spring Festival painting art, symbolic library of common Spring Festival paintings and Spring Festival painting library needs to be constructed. From the technology level, it is required to explore and embrace the multi-media virtual scene modeling technology of intangible cultural heritage, the coordinated display technology with multi-media virtual scene and the computer-based innovative design technology of Spring Festival painting.

3 Trial of Digitalized Spring Festival Painting –*Beautiful!Chinese New Year Paintings*

The animation *Beautiful!Chinese New Year Paintings* was produced by a production team of Shandong University of Art and Design after more than 40 days hardworking by the end of December 2010. The animation takes Yangjiabu Spring Festival paintings, including *Men Busy at Ten Farming Activities*, *Women Busy at Ten Domestic and Weaving Activities*, *Number One Scholar Got Married*, *Celebration of the Lantern Festival*, etc., as the creative materials, uses the theme music of the feature film *Celebration of Spring Festival* as the background music with a large amount of sound effects. The animation keeps the original styles of Weifang Spring Festival paintings, and repaints the figures and scenes by digital technology to display the traditional and two-dimensional Spring Festival paintings in a new form of digital animation. The animation

² Tang Jialu. *Cultural Ecology of Folk Art* [M]. Beijing: Tsinghua University Press, 2006.

displays the actual joyful scenes from farm work, needle work to family life and celebration of Spring Festival, and is filled with the rich local flavors as well as the simple and distinct artistic style (Fig. 5).

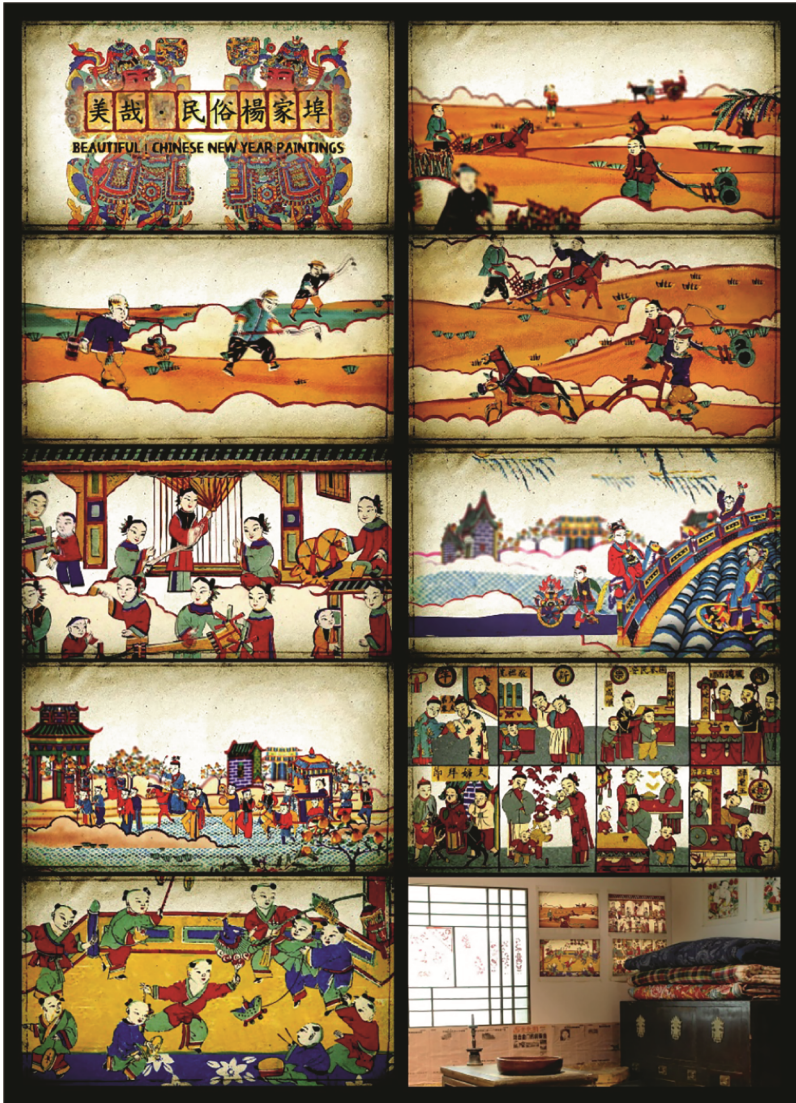


Fig. 5. Animation *Beautiful! Chinese New Year Paintings* (Color figure online)

To vividly show the true Yangjiabu Spring Festival paintings and better convert image information to digital signals, many international standards were adopted during the design and production of this animation. First of all, for the key performance indicators of image resolution and sharpness, the resolution ratio was determined as 800 PPI

(Pixels PerInch), scanning gray level 256, number of color 24bit that are internationally universal. The storage file is the PSD hierarchical file with a resolution ratio of 3508×2480 . While producing the output sequence frame animation, the image technical indicator is TAG format with Alpha channel and a resolution ratio of $1920 \times 1080P$. In the composition stage of character animation and scenes, the output format is uncompressed AVI with a resolution ratio of $1920 \times 1080P$. In the stage of editing the composite materials of uncompressed animation, the sampling frequencies of dubbing files and music files are high quality 320Kbps MP3 audio files. The final output format is MP4 video format with a resolution ratio of $1920 \times 1080P$, 1125 vertical scanning lines, 1080 visible vertical scanning lines, an aspect ratio of 16:9 and H.264 code. The final technology video format of the displaying and demonstrating systems is the standard digital TV display model, which is the most high-end high definition format in the world, supports the internationally universal computer platform and can be played smoothly on display equipment such as back protection, plasma, LCD and projectors.

On January 10, 2011, the animation made its first appearance on Weifang Pavilion in the “Handicraft in the Countryside: Exhibition of Cultural Industry Research in the Rural Areas of Shandong Province” organized by National Art Museum of China. On May 13, 2011, the animation was displayed on spherical LED device and LED screens at the entrance of Shandong Pavilion on the 7th China (Shenzhen) International Cultural Industries Fair. On May 21, the animation, as one of the works of China, was exhibited in the New Age New Media Exhibition held in Jinan Expo Garden International Convention Center. *CCTV News* and *Shandong News* and also obtained a very high click rate on various web portals (Fig. 6).



Fig. 6. Displaying on the 7th China (Shenzhen) International Cultural Industries Fair

This animation allows the publics to understand and view the national intangible cultural heritage –Yangjiabu Spring Festival paintings. It is especially important that the production team of Shandong University of Art & Design begins to systematically research and explore new thoughts to protect more intangible cultural heritage by multimedia digital art approaches. These approaches make Spring Festival paintings advance with the times and adapt to the modern aesthetic idea while showing a more real appearance of heritage, and the intangible cultural heritage can be inherited, developed and utilized in wider and more comprehensive ways.

4 Conclusions

In view of the specialty of current existing environment of folk arts and the transformation of in Chinese society, economy, culture and lifestyle, devoting to the research and development of digitalized protection technology is a reasonable and effective solution for the restoration and protection of ethnic and folk arts. The research and development of digital key technology of ethnic and folk arts will provide technical possibility for the conservation of ethnic and folk arts, the academic research and industrialization, etc.

References

1. Hui, Y., Yabin, S.: History of Chinese Animated Movies. China Film Press, Beijing (2005)
2. Xiaolu: Traditional Aesthetic Features of Domestic Animated Movies and its Cultural Source. Shanghai People's Publishing House, Shanghai (2008)