

Research on Applying the Deformation Design of Chinese Characters in the Literacy Animation

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Received: 20 October 2021; **Accepted:** 15 November 2021; **Published:** 29 November 2021

Abstract:

Aiming to study how to deform Chinese characters into specific objects and how to explore the combined application of deformation design of Chinese character and literacy animation in combination with animation, and create and explore literacy animation based on the deformation design of Chinese characters, this paper contains the knowledge of the composition of calligraphy and the “readability” characteristic of Chinese ink painting and involves how to personify the characters in classical literary works into animated protagonists to interpret the content of literary works; how to create the scene of literacy animation with ink painting, thus making the deformation design of Chinese characters closer to the artistic conception described in Chinese classical literature, and making the picture more attractive; how to improve readers’ interest in excellent classical literature and assist in the popularization, inheritance and promotion of traditional culture, ideology and morality.

Keywords:

Chinese Character Deformation, Literacy Animation, Design

1. Deformation Design of Chinese Characters and Its Necessity

1.1. Deformation Design of Chinese Characters

The word “deformation” can be called exaggeration in the field of painting. An image is subjectively processed on the basis of the original image, including but not limited to increase and trade-offs, or the image can also be associated with other objects with more expressive significance through the appearance of the image itself with its original meaning maintained. This kind of deformation is the most obvious in comics. For example, cartoonists often exaggerate the look of the image itself to achieve the ideal state. In the research on the application of calligraphy elements under digital media art, Zhou Xiaoqing and Zhang Jian adjust, modify and deform calligraphy to pursue the consistency between the characteristics of Chinese characters and works, and endow calligraphy with certain characteristics, so that the visual effect will be unique, novel and meaningful. [1] In this paper, the deformation design of Chinese characters is the decomposition and reorganization of its structure,

that is, the Chinese character is divided and combined into picture characters related to its semantics according to the composition structure of Chinese characters, just like redesigning picture characters with Chinese character characteristics based on Chinese characters. Due to the fact that the Chinese character itself has the object image elements, it is necessary to adjust, modify and deform the Chinese character first, and endow the Chinese character with certain image characteristics, so that the visual effect will be unique, novel and meaningful. In this way, it will be more vivid in expressing the word itself and the semantics and moral behind it, making the Chinese character itself, as a media carrier, play a more prominent and obvious role in literary communication.



Figure 1. Pig and Dog.

1.2. Necessity of Deformation Design

The necessity of deformation design of Chinese characters is to make Chinese characters more likely to be explained from a single image and specific content, play a better role in the application and communication of literacy animation and make Chinese characters interpret their own stories and express literary plots by moving themselves. The deformation design of Chinese characters does not only make it more interesting in the communication channels, but also can make the Chinese character widely used as an element in the field of painting and design because it is not only rich in the structural characteristics of Chinese character itself, but also makes Chinese characters have painting characteristics, enrich its meaning, give play to association, guide painting to be inspired in the field of creation and increase imagination space. The deformation design of Chinese characters does not only broaden the application of Chinese characters in daily life, but also plays an important role in painting and design. In the author's literacy animation works, the deformation design of Chinese characters does not only add new unexpected picture effects, but also complements the connotation of the works to be expressed by the author, and promotes a new way of realization. Different from the works on the market, the works from deformation design of Chinese characters have their own brand-new pictures and artistic characteristics and have played a very important role in the dissemination of Chinese culture and literary works, making Chinese culture go abroad and face the world.

1.3. Deformation Design and Pictorial Embodiment of Chinese Characters from the Perspective of "Oracle Bone Inscriptions"

1.3.1. Formation of Chinese Characters and "Natural" Images Contained

Luo Junyun and Zhuang Qianzhi mentioned in the formation of the theory of "Cangjie making the character" and the evolution of the connotation of Chinese characters that the theory of "Cangjie making the character" was born in the pre-Qin Dynasty, developed in the two Han Dynasties, and finally established its authority in Xu Shen's discussion in the Eastern Han Dynasty. The formation of Chinese

characters comes from the image of natural objects. The method of Cangjie making the character is natural. Liu An of the Western Han Dynasty believes that “Cangjie making the character” has certain non-“natural” attributes. The Weishu system believes that “Cangjie making the character” is not only based on nature but also aided by natural divine power. Wang Chong of the Eastern Han Dynasty also believes that “Cangjie making the character” fits the attribute of “natural”, which was promoted by Xu Shen in the middle of the Eastern Han Dynasty, and added with the dimension of establishing the law. On the one hand, Xu Shen acknowledges the natural method of “Cangjie making the character”, and on the other hand, he emphasizes the role of “Cangjie making the character” in establishing rules in the field of assisting the king’s government. According to Xu Shen’s interpretation, it is the combination of these two aspects that the theory of “Cangjie making the character” finally establishes a more stable legitimacy and authority. The various connotations of Chinese characters, including reflecting skills, symbolizing everything in nature, establishing social laws, interacting with heaven and assisting king’s government, have been integrated in the narrative of Xu Shen’s theory of “Cangjie making the characters”. According to Xu Shen’s narrative, Chinese characters, as a technique for recording things, do not only come from nature, but also understand the will of heaven. Therefore, Chinese characters can set rules for society and play an auxiliary role in the king’s rule of the world. Xu Shen’s summary organically and systematically reconciles and synthesizes various narrative versions of the theory of “Cangjie making the character” since the Pre-Qin Dynasty, and makes the most authoritative definition of the theory of “Cangjie making the character”, that is, the theory of the origin of Chinese characters. The connotation of Chinese characters is established summarily and authoritatively by Xu Shen, thus laying the foundation for Chinese people’s basic understanding and cognition of Chinese characters in the future. Chinese characters do not only retain the pictographic factors, but also have more philosophical, religious, legal and political meanings, which have been laid in the Pre-Qin and Han Dynasties [2].

It can be seen that the formation and source of Chinese characters are inseparable from the original image containing the original appearance of the object and the character maker’s individual abstract understanding of things, so as to form a kind of character symbol with a sense of tacit understanding, making the public coincidentally understand the symbol and even think of everything behind the symbol after seeing it.

As the oldest characters in China and the earliest existing form of Chinese characters, oracle bone inscriptions are characterized by describing according to the characteristics of the real object. No matter how many strokes the character has, it has a strong object image. Proved from the law of pictograph and image meaning, oracle bone inscriptions are highly related to the object image [3].

As shown in Figure 2:



Figure 2. Hieroglyphic Comparison Table, digital photo, 60cm*20cm.



Figure 3. *Rain, Cloud, Mountain, Water, Fish, Deer.*

Its value in painting is to turn the image into highly generalized abstract lines to make the image related to painting. Just like the line drawing in Chinese painting, although it is depicted with highly generalized lines, its image is still based on concrete objects. Zhou Tongbin often uses the technique of line drawing originally referring to a painting technique of Chinese painting. He only outlines with ink lines without coloring the painting, that is, decoration and rendering are not required, and only simple words are used to describe the state and spirit of people, things, scenery and things. [4] Therefore, there are some connections between Chinese characters and paintings. The deformation design of Chinese characters exists painterly to a certain extent, but it is more or less metaphorical, vague and associative due to its painterly feature. When compared with simplified Chinese characters, it is not very intuitive. The origin and development of Chinese characters include oracle bone inscriptions. The Chinese characters are pictorial in oracle bone inscriptions, fully showing that there is more or less pictorial existence in Chinese characters, and there is a looming connection and interaction between Chinese characters and painting.

2. Deformation Design of Chinese Characters and Its Modeling Characteristics

2.1. Deformation Design of Chinese Characters and Modeling Characteristics of Hieroglyphs

The modeling characteristics of the deformation design of Chinese characters are similar to those of hieroglyphs. The origin of the deformation design of Chinese characters is based on the process of hieroglyphs evolving into Chinese characters, and then restored to its state with picture characteristics, which is determined by its picture characteristics and also what the author needs in character literacy animation to appropriately express the author's wishes and emotions, increase the scope and possibility of the application of Chinese characters in painting, and have a certain significance in carrying forward the importance of Chinese characters. The modeling feature of hieroglyphs is that its character making begins with the specific depiction of the original image. The specific image itself has the characteristics of pictures, but there is an image and emotion between the character and the picture, that is, the symbol is agreed to be defined as a certain object. Of course, it also has a certain degree of abstraction. Due to the fact that some objects are very complicated, and the

drawing with hieroglyphs is too cumbersome, the objects are replaced with abstract lines or symbols, which is one of its characteristics. However, the characteristics of the deformation design of Chinese characters are on the contrary. The abstract lines, strokes and symbols are summarized and embodied into a certain object image and its metaphorical objects are used to simulate, deduce the story plot, express emotion, and achieve the purpose of spreading Chinese literature. As shown in Figure 5, the author designs the Chinese characters “horse”, “wood” and “grass” with the reverse thinking formed by oracle bone inscriptions to restore the specific images of horse, wood and grass, so as to produce artistic effect, association and interest in literacy as shown in Figure 4.



Figure 4. Horse, Wood and Grass.

2.2. Stroke Accumulation and Formal Beauty

The composition of Chinese characters is diverse and ever-changing and the combination of different radicals can form single individual with its own characteristics with different intonations, different contents and different emotions, such as the structure, the layout and the composition of Chinese characters. When divided into small ones, the Chinese character is specially composed of related stroke radicals such as 丿, 丨, ㇇ and ㇇. In addition to the formal beauty rules of strokes, the structure and the layout of Chinese characters, calligraphy also includes other contents, such as adjective structure and layout [5].

In the scene application of literacy animation, the formal beauty formed by the accumulation of strokes also has its unique style. As shown in Figure 5, the author flips the 丿, ㇇ of the Chinese character “water” 90 degrees to the right, and takes it as the center to continuously stack, repeat and extend to form a rhythmic, neat, diverse, unified, symmetrical and balanced wavy formal beauty pattern finally. In his works, the author regards it as a water wave. Taking the Chinese character “net” as an example, the author turns it back 45 degrees, takes it as the center, and then copies and expands around to form a “net”, which can be used as fishing net or a tent...



Figure 5. Animation Manuscript of Chinese Character Literacy.

The accumulation of radicals of Chinese characters will form different visual graphics, which is of great help in the field of painting and painting creation and also extremely important in the field of design.

3. Analysis on the Deformation Design and Method of Chinese Characters in the Author's Work - Animation Manuscript of Chinese Character Literacy

3.1. Introduction to the Author's work - Animation Manuscript of Chinese Character Literacy

In his works, the author chose the sentence “who knows the rice that feeds is the fruit of hard toil” in Li Shen's Tang poetry of Sympathizing the Peasants to create, showing the scene of hard work and hard-won food in the whole poem. In his works, the author first attempts to use the characteristics of Chinese characters to evolve into the protagonist to deduce his own plot, so as to better reflect the content of the story.

At the beginning of the works, the author designs the word “meal” in the literacy blue and white porcelain disk, which means food in the plate as shown in Figure 6 below:



Figure 6. *Animation Manuscript of Chinese Character Literacy.*

Then, when the plate disappears at a uniform speed to half, it evolved into a mountain, and only the word “meal” remains next to it. At this time, the word “meal” evolves into a farmer in a straw hat who climbs up the mountain. When he climbs to the top, he already sweats, just as “sweat dripping into the soil” as described by the author. When sweat drips into the soil, the author arranges the word “all” on the ground, which sprouts and grows under the irrigation of sweat, evolves into tender buds, thrives under the cultivation of the farmer, and finally turns into an apple tree and bears fruit. Later, when the fruit matures and falls to the ground, the farmer is unable to carry it, feeling helpless. The author designs “hard work” into a donkey pulling a cart to help the farmer harvest the fruit.

3.2. Deformation Design of Chinese Characters and Character Image Design

The application of Chinese characters is relatively extensive in the author's Animation Manuscript of Chinese Character Literacy. For example, in character design, the author transforms the word “meal” into a protagonist to deduce the story. The specific method is to evolve the left radical at the top of the word “meal” into a bird; the word “you” into a worm held in the mouth of bird. The word “meal” on lower part and the word “person” on the upper part are evolved into a hat, the dot in the word “liang” is enlarged and evolved into a figure head, the word “yue” is transformed into a chest bone, and the lower part is transformed into a limb stem. The

whole character image design is shown in Figure 8 whole character image design is shown in Figure 7:

In addition, the author deforms the Chinese characters “poor”, “rich” and “illiterate” into vivid and interesting character images. Of course, plane images will inevitably give people a dull feeling, but the author applies them to literacy animation through the interpretation of character images and language output. Combined with ink and wash scenes, its effect will interact with the viewer visually and emotionally, making the viewer be personally on the scene, resonate and be easier to remember as shown in Figure 8.



Figure 7. Animation Manuscript of Chinese Character Literacy.

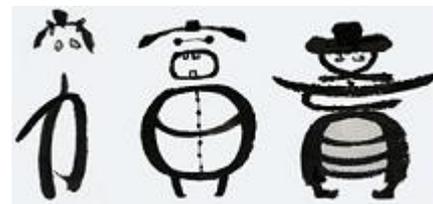


Figure 8. Poor, Rich, Illiterate.

3.3. Deformation Design of Chinese Characters and Animal Image Design

Animal images can be more “presumptuous” than character images, but their evolution principles are similar to the character images described above. Similarly, in Animation Manuscript of Chinese Character Literacy, the author flips the Chinese character “ku” 90 degrees to the right, moves the first two vertical strokes of the “+” upward, and evolves it into a donkey’s ear, while the horizontal stroke deforms into a donkey’s face, and the rest horizontal stroke moves to the back and evolves into a donkey’s tail; the word “mouth” turns into donkey’s body. The specific design image is shown in the following group of Figure 9.

In addition, taking the word “crane” as the material, the author evolves the word “xian” into the head and mouth of the crane; | into the neck; “mountain” into a feather on the back; left part of the word “crane” into the wing of the crane; the word “bird” on the right into a crane’s ass, and the inside horizontal stroke into a bird’s leg. The overall design of animal image is shown in Figure 10.

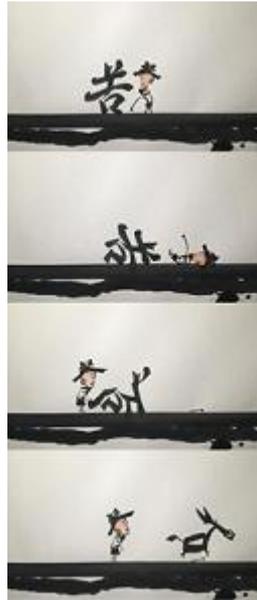


Figure 9. Animation Manuscript of Chinese Character Literacy.



Figure 10. Crane.

4. Conclusions

Through the theoretical exploration on the deformation design of Chinese characters and its image modeling, this paper deeply demonstrates that the deformation design of Chinese characters can be combined with literacy animation. At the same time, it also has enlightening significance for painting creation and design, thus making painting creation and design combine with Chinese characters, develop into the homology of characters and paintings and form a visual image of pictures in characters and characters in paintings. The deformation design of Chinese characters does not only broaden the application of Chinese characters in daily life, but also endows Chinese characters with new vitality, making it more convenient and interesting in literature and children's literacy animation, so that people pay more attention to the role and function of Chinese characters. At the same time, it also enriches the art field and gives a new perspective to painting creation and design. Besides, traditional Chinese characters and Chinese literature are inherited, so that the characters and paintings complement each other, making them rich and colorful. It also plays a very important guiding role in my innovation and entrepreneurship as well as the graphic research of Chinese characters, helping me in divergent thinking and in finding my own research direction. In the whole process, it also enriches the creative resources and innovative ways of art, making people more enthusiastic about Chinese characters and literary works.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Acknowledgments

The author would like to acknowledge Hubei Institute of Fine Arts, for its cultivation and teaching on me, as well as Associate Professor Zhu Guodong who tirelessly guided my thesis writing and practice.

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