

A Study of the Visual Expressions of Traditional Culture in the 3D Animation Chang'an

Lei Xu, Jehun Chung*

*Doctor's Course, Dept. of Multimedia, Graduate School of Digital Image and Contents
Dongguk University, Korea*

**Professor, Dept. of Multimedia, Graduate School of Digital Image and Contents
Dongguk University, Korea*

*2658943782xl@gmail.com, * evengates@gmail.com*

Abstract

Chang'an (Chinese: 长安三万里), also known as 30,000 Miles from Chang'an, is a 2023 Chinese 3D animated historical drama film directed by Xie Junwei and Zou Jing. This thesis aims to explore the visual expression of traditional culture in the 3D animated film Chang'an as an example to reveal the reasons for the success of this type of film. The study analyses in detail the design of the character models and costumes, as well as the use of the traditional landscape painting technique of 'white space' in the composition of the screen from the visual aspect. Through the analysis of character design and screen composition, the thesis concludes that the success of Chang'an lies in its elaborate visual design and clever use of traditional culture, which makes it a 3D animation film with both artistic and commercial values. Finally, the thesis concludes that the production of a successful 3D animation film needs to combine the visual elements of 3D animation with traditional culture in order to win audience recognition and achieve commercial success.

Keywords: *3D animation film, traditional culture, visual representation*

1. Introduction

From the early 21st century to today, 3D animation, particularly exemplified by Disney, has dominated global cinema with both critical acclaim and box office success. Inspired by Western productions, Chinese animators have begun infusing local history and legends into their own 3D animations. "Chang'an," a notable example, seamlessly integrates traditional culture into its art design. This study focuses on "Chang'an" as a case study to explore how it combines visual elements of 3D animation with traditional culture, aiming to establish theoretical frameworks to enhance market competitiveness and promote the creative dissemination

Manuscript Received: April. 27, 2024 / Revised: May. 6, 2024 / Accepted: May. 11, 2024

Corresponding Author: evengates@gmail.com (Jehun Chung)

Tel: +82-2-2260-3, Fax: +82-2-2260-3766

Professor, Dept. of Multimedia, Graduate School of Digital Image and Contents, Dongguk University, Korea

of traditional culture in future 3D animation films.

2. Theoretical Background

Starting in 2015, the earliest 3D animated film *Monkey King: Hero Is Back* (Chinese: 西游记之大圣归来), then the phenomenal 2019 hit *Ne Zha* (Chinese: 哪吒之魔童降世), and in the same year *White Snake* (Chinese: 白蛇:缘起). All of these 3D animated films were successful at the box office and word-of-mouth, but starting with 2020's *Jiang Zi Ya* (Chinese: 姜子牙), these 3D animated films have struggled to get high scores on China's major domestic film rating sites, and have even begun to see the emergence of 3D animated films with very low ratings for traditional historical stories. It wasn't until the release of *Chang'an*, in 2023, that this type of 3D animated film was once again recognised by audiences, achieving high ratings and success at the box office. As an animated film based on history, *Chang'an* is different from animated films based on mythological stories in that the animation lacks the sky-high, colourful special effects to attract viewers, but it relies on the animation's own excellent design of characters, props, and scenes to be recognised by viewers on a visual level. A lot of the design combines the design style of traditional art works of the Tang Dynasty, the background of the story era, so that the audience in watching the animated film at the same time subconsciously feel the traditional culture and art of the Tang Dynasty, which is also an important reason for the success of this animated film.

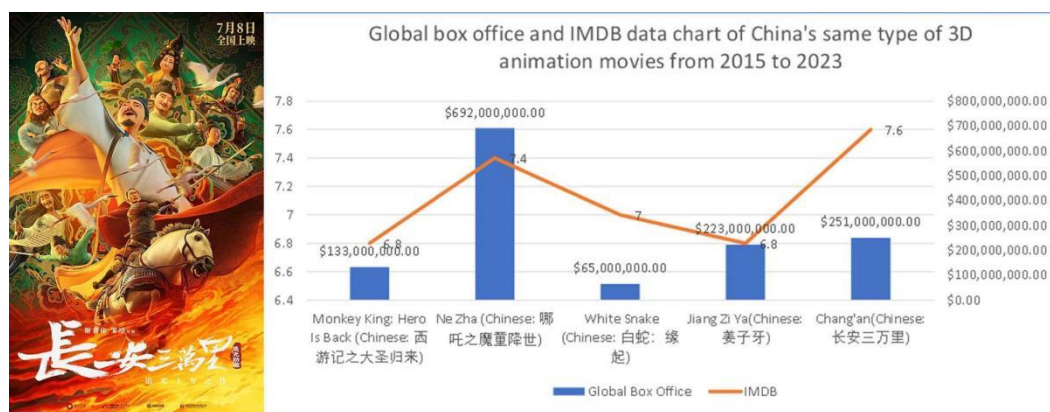


Figure 1. Global box office and IMDB tables; Chang'an's movie posters

3. Case Study Chang'an

3.1 Traditional Culture in Modelling

The styling of the male characters in the animation is much heavier on the upper body than the lower body, presenting an inverted conical silhouette, with a long head and rounded face, resulting in the character's body proportion being a 5-head body. Unlike other 3D anime characters who deliberately make their necks and limbs slender or elongate their body proportions for ease of animation, *Chang'an's* characters' necks are noticeably thicker, and their shoulders, chests, and arms are intentionally designed to be thicker and fuller in shape. Males in the Tang Dynasty had the clothing characteristic of wearing a belt, and the male characters in the anime clearly move the position of the belt downwards, lengthening the length of the upper body. The

lower legs are shorter than the upper body, and the part down to the feet gets smaller and smaller, so the whole body looks like it is closing down. The same design idea is also shown in the styling of the horse. Chang'an's horse's neck is almost the same width as its body, and its limbs and torso have an exaggeratedly rounded and full feeling, but the horse's legs are even thinner than the character's legs. This "expansion" of the upper body and "contraction" of the lower body, which is rhythmic and enhances the contrast between the forms, makes the male character and the horse look powerful, highlights the character's sense of strength, and makes the modelling richer and more interesting. This is not in line with the current aesthetic design is a reference to the animation of the era of the background of the Tang Dynasty ceramic figurines and figures in the painting of the horse, because the Tang Dynasty successively appeared in the "rule of Zhenguan" and "peace and prosperity", the country is rich and the people are strong, there is no internal and external problems, the people's thinking and Spiritual pressure is not big, naturally, the physical quality is slowly improved, and then formed the pursuit of physical fitness, in order to plump for the beauty of the social aesthetic tendency.



Figure 2. Chang'an's model compared to models in other animated films

In addition to reflecting traditional culture in the overall look of the characters, traditional culture can also be seen in the costumes of the characters. The main characters in the film, Li Bai and Gao Shi, are wearing round-necked robes, which are called "regular clothes" in the *New Book of Tang* and *Old Book of Tang*. In the animation, both Li Bai, who is considered to have a low status because his father is a merchant, and the royal nobles are wearing round-necked robes.



Figure 3. Chang'an's model compared to models in other animated films

In the animation, both Li Bai, whose status was considered low because his father was a merchant, and the royal nobles all wear round-collar robes, which is not a jerry-rigged animation, but a true restoration of history, and in addition to the men, there is also a female character in the animation, "Pei Gongzi," who wears round-collar robes. Round neck robe shirt in the Tang Dynasty is popular because the Silk Road in the Tang Dynasty period was well used, a large number of West Asia and Central Asia merchants came to Ancient China for trade and cultural exchanges, not only will the round neck robe shirt into China, but also for the popularity of laying the foundation. Another reason is that the Tang rulers were open-minded in their approach to foreign cultures, adopting an eclectic policy. The reason why women wore men's clothes was because during the Tang Dynasty, women's thinking was changed to a certain extent, and women began to engage in political and sports activities, as well as receiving an education, thus raising their social status. The reason for the popularity of the round-necked gowns mentioned above actually reflects the traditional values, customs and traditional knowledge of ancient China, i.e., traditional culture. Chang'an makes reference to history in its costumes and lets a large number of characters wear round-necked gowns, which not only saves on production costs, but also expresses traditional culture on a visual level.



Figure 4. Costumes worn by characters in Chang'an and figurines from the Tang Dynasty

3.2 “White space” in the composition of the picture

Zou Jing, the director of Chang'an, said in an interview, “We wanted to present a poetic, oriental visual thing, for example, we have some white space and some generalisations, some more formal compositions, some more central compositions, and deliberately weaken the perspective, which is seldom used in previous films.” The director has deliberately tried to show an oriental sense of mood when setting up the composition of the shots, and the author believes that the scenes in Chang'an can be analysed by combining the images with the knowledge of landscape painting. As one of the important elements in landscape painting, “white space” is an artistic language and way to enhance and deal with the artistic effect of the picture, reflecting the unique aesthetic taste and historical and cultural heritage of the Chinese people. In the traditional Chinese philosophical work Zhouyi (Chinese: 周易), it is said, “One yin and one yang is called Tao.” The most essential cosmology of the Chinese is the combination of yin and yang in the Zhouyi, and this cosmology is expressed in Chinese landscape painting, which is the combination of white space and ink and brushwork, as well as the chapter layout of the picture composition is also the unity of the virtual and the real, the yin and the yang, the unity of the real and the virtual combination of the picture will flow under the unity of the vividness of the

rhyme, in order to reflect the world of vitality, and therefore the use of white space for the landscape painting realm is indispensable. Essential to deal with the dialectical unity of the real and the virtual, can form the landscape painting mood. Below is a panoramic shot of the war-damaged Yellow Crane Tower from an animated film, and another image from the Xiaoxiang Tu (Chinese: 潇湘图), an ancient landscape painting from the Southern Tang Dynasty. Both this scene and Xiaoxiang Tu use the traditional compositional method of landscape painting: “white space”. The animated scene has a diagonal line running from the upper right to the middle left of the sky and a diagonal line running from the lower right to the middle left of the water. In the animated scene, a diagonal line from the top right to the middle left of the sky and a diagonal line from the bottom right to the middle left of the water form the “white space” in the picture, and in the middle of the two diagonal lines is the dilapidated Yellow Crane Tower in the centre of the picture, adopting a composition similar to that of Xiaoxiang Tu. The animation scene forms two visual guide lines through the “white space” composition of clouds and water, guiding the viewer's eyes from the right side of the screen to the left side, giving the screen a sense of dynamism and letting the viewer feel the spatial extension, and making the war-damaged Yellow Crane Tower even more desolate in the picture under the backdrop of the “white space”. The Yellow Crane Tower in the picture is even more desolate.

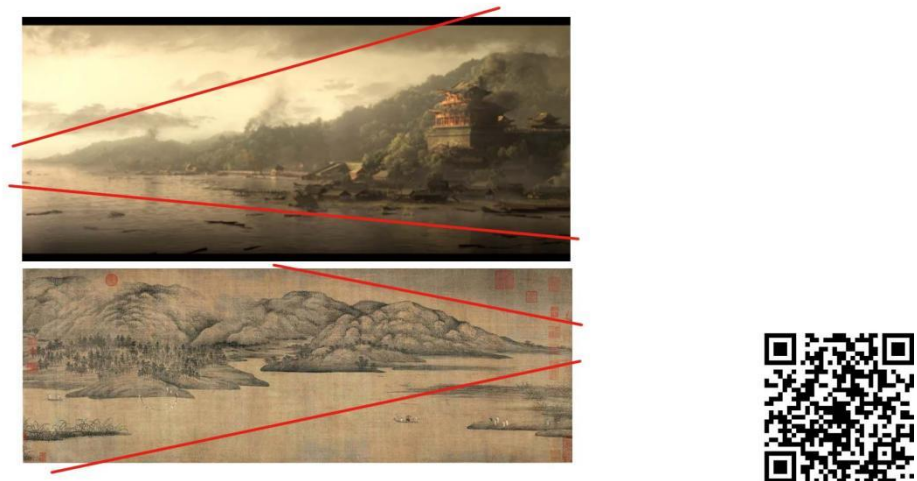


Figure 5. Comparison of animation screenshots and Xiaoxiang Tu

There are other images in the animation that use the technique of “white space” in their composition. In the next image, there is only one house on the right side of the screen, surrounded by a large area of white space made up of dark sky and snow, creating a depressing, cold, and silent atmosphere. In the next image, similar to the scene of the Yellow Crane Tower, water and clouds are also used for the compositional method of “white space”.

4. Conclusion

Indeed, "Chang'an" stands as a testament to the harmonious blend of artistic excellence and commercial viability in the realm of 3D animation. Through meticulous visual craftsmanship and astute incorporation of traditional cultural elements, it has achieved both critical acclaim and box office success. This study underscores the importance of actively intertwining the visual components of 3D animation with traditional culture, particularly in the context of historical narratives. Such integration not only enriches the cultural depth

and artistic merit of the animation but also resonates with audiences, thereby fostering both recognition and commercial prosperity. In essence, "Chang'an" exemplifies how leveraging traditional culture within 3D animation can yield a winning formula that transcends mere entertainment to become a conduit for cultural preservation and commercial success.

References

- [1] Zheng Siqi. "Research on the art of blank space in landscape paintings"[D]. Northwest Normal University, 2021. DOI:10.27410/d.cnki.gxbfu.2021.000559.
- [2] Jiayuan Liang, Xinyi Shan, Jeanhun Chung. "A Study on Process of Creating 3D Models Using the Application of Artificial Intelligence Technology" *The International Journal of Advanced Culture Technology* Vol.11 No.4 346-351,2023 DOI:DOI <https://doi.org/10.17703/IJACT.2023.11.4.346>
- [3] Shi Rui. "Research on round-neck robes in the Tang Dynasty"[D]. Beijing Institute of Fashion Technology, 2020. DOI:10.26932/d.cnki.gbjfc.2020.000083.
- [4] Chenghao Wang, Jeanhun Chung. "A Study of Artificial Intelligence Generated 3D Engine Animation Workflow" *The International Journal of Advanced Smart Convergence* Vol.12 No.4 286-292,2023
- [5] DOI:<https://doi.org/10.7236/IJASC.2023.12.4.286>
- [6] Chen Jing. "The modeling characteristics and aesthetic characteristics of pottery figurines of the Tang Dynasty" [J]. *Big Stage*, 2014, (07): 249-250. DOI:10.15947/j.cnki.dwt.2014.07.087.
- [7] Qianqian Jiang, Jeanhun Chung. "A Case Study of Creative Art Based on AI Generation Technology" *The International Journal of Advanced Smart Convergence* Vol.12 No.2 84-89,2023 DOI:<http://dx.doi.org/10.7236/IJASC.2023.12.2.84>
- [8] Pingjian Jie, Jeanhun Chung, Xinyi Shan. "A Comparative Analysis Between <Leonardo.Ai> and <Meshy> as AI Texture Generation Tools" *The International Journal of Advanced Culture Technology* Vol.11 No.4 333-339,2023 DOI:<https://doi.org/10.17703/IJACT.2023.11.4.333>
- [9] Wu Guanhua. "Research on the structural modeling of traditional Chinese figure paintings" [J]. *Fine Arts*, 2013, (11): 115-118. DOI:10.13864/j.cnki.cn11-1311/j.2013.11.026.