

A Study on the Adaptability of Shadow Puppet Elements to Side-Scrolling Games

Qi Yi, Jehun Chung*

Doctor, 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**

*2350161zs@gmail.com, evengates@gmail.com**

Abstract

Chinese shadow puppetry is an ancient form of drama with a long history. Known as the "mother of Chinese folk opera", it has rich cultural connotations and artistic value. At the same time, as a classic video game genre, side-scrolling games have many loyal fans around the world. However, in recent years, some previous entertainment cultures such as shadow puppetry are slowly disappearing. In contrast, video games play an increasingly important role in people's entertainment. Combining Chinese traditional culture with video games can be a great way to promote the preservation of these cultures. By making traditional culture more accessible and engaging, developers can help to ensure that these cultures continue to be enjoyed by future generations. The side-scrolling game is a classic game type, and it has many similarities with shadow puppetry. This paper will analyze the similarities and differences between Chinese shadow puppetry and horizontal version games, and try to explore how to organically integrate the two, so as to promote the inheritance and development of traditional culture, and promote cultural innovation and the development of creative industries.

Keywords: *Chinese Shadow Puppetry, the fourth Wall, Side-scrolling Game, alienation effect*

1. Introduction

As one of the traditional art forms, Chinese shadow puppetry has a long and unique historical inheritance in Chinese culture. Through handmade shadow puppets, lighting projections and performance skills, it shows an exquisite artistic style and profound cultural connotations. However, with the advancement of technology and the development of society, people's demand for art and entertainment forms is also constantly evolving. Shadow puppetry has gradually faded out of people's vision and is no longer one of people's entertainment methods. At the same time, horizontal games, as one of the most representative game types in the modern game industry, have attracted players from all over the world with their unique interactivity and visual expression. In this era of diversity and strong interaction, whether the combination of the artistic style of Chinese shadow puppetry and horizontal version of the game can produce surprising and innovative artistic

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

Tel: +82-2-2260-3767, Fax: 82-2-2260-3767

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

effects has become a topic of concern. This dissertation aims to explore the applicability of combining the artistic style of Chinese shadow puppetry with the horizontal version of the game, and to deeply study its potential artistic expression and cultural value. By analyzing and comparing these two different art forms, we will explore their similarities and differences in terms of vision and experience, and discuss how to combine them organically to create a novel and unique entertainment experience. The research goal of this paper is not only to meet people's diverse needs for entertainment forms, but also to promote the innovation and inheritance of traditional art.

2. Chinese Shadow Puppetry

Chinese shadow puppetry is a traditional form of theatrical art with a long history and a unique artistic style. It involves the use of figures made from sheepskin or cowhide, which are projected onto a white screen with the aid of lighting. As shown in Figure 1, the performer manipulates the puppets using delicate hand movements and conveys the story and emotions through their actions and vocalizations. Through long-term development and innovation, it has evolved into a distinct performance style. During the show, performers employ subtle techniques and a wide range of movements to manipulate the shadow puppets, effectively conveying the emotions and dynamics of the characters. Additionally, they coordinate their actions with singing and music to enhance the expressive power and dramatic effect of the storytelling. It not only provides entertainment but also carries rich cultural connotations and values. Through shadow puppetry, audiences can experience the profound cultural heritage of China and gain insights into different eras, regions, and societal values.



Figure 1. Chinese Shadow Puppetry

Despite facing challenges from other forms of entertainment in modern society, Chinese shadow puppetry has managed to receive a certain degree of preservation and continuation. In 2009, Chinese shadow puppetry was inscribed on the Representative List of UNESCO (United Nations Educational, Scientific and Cultural Organization) in recognition of its importance in cultural tradition, artistic expression and community engagement. This recognition elevates the status of Chinese shadow puppetry to the international level, and makes it more widely valued and protected. Many traditional shadow puppet troupes and artists are dedicated to passing on this traditional art form and creating resonance with modern audiences through innovation and reform. Chinese shadow puppetry is an important component of Chinese traditional culture. It is not only a form of entertainment but also a unique means of artistic expression. By appreciating and understanding

Chinese shadow puppetry, people can experience the charm of traditional art and witness the inheritance and innovation of culture.

3. Side-Scrolling Game

The side-scrolling game is a classic type of game, and after continuous development, it has become a favorite type of stand-alone game for players as figure 2 shows. The most important feature of this type of game is the fixed plane viewing angle. In this viewing angle, the player can only control the character to move up, down, left, and right. Compared with the current 3D games, it lacks a movable dimensional space. In addition, it is precisely because of this game perspective that the player cannot explore the game world in 360 degrees when playing the game. During the game, the player is like sitting under the stage and watching the characters on the screen perform. Because of its relatively simple production, low investment, and short production cycle, it has become a game type that small and medium-sized game studios like to develop very much. And this feature has also become the advantage of using it to carry out some cultural communication work.



Figure 2. Side-Scrolling Game 'Cuphead'

4. Comparative Analysis of Chinese Shadow Puppetry and Side-Scrolling Game

Chinese shadow puppetry and side-scrolling games are two different forms of performance. They have similarities in some aspects, but also have obvious differences. These similarities and differences are discussed in detail below.

4.1 The Similarity Between Shadow Puppetry and Side-Scrolling Games

- **Flat Perspective.** Both Chinese shadow puppetry and side-scrolling games share the characteristic of a flat perspective. As shown in Figure 3, in Chinese shadow puppetry, the audience sits in a fixed position and enjoys the theatrical performance by watching the shadow images of the puppet characters projected onto a white screen. Similarly, as shown in Figure 4, side-scrolling games also employ a similar flat perspective, where players control their game characters through a side view displayed on the screen. This flat perspective allows both the audience and players to observe and engage in the performance or gameplay from a fixed angle. Expanding on this characteristic, the use of a flat perspective provides stability and consistency for both

the audience and players. Whether observing a Chinese shadow puppetry performance or playing a side-scrolling game, the audience and players can observe the entire performance or game from a fixed angle, allowing for a detailed appreciation of the character designs, expressions, and movements, as well as the development of the narrative and artistic charm.

In addition, the plane perspective will also strengthen the existence of the "fourth wall", so that players can always maintain the identity of a relatively rational viewer to experience shadow puppetry and games. The fourth wall will be discussed in detail below.



Figure 3. Chinese Shadow Puppetry



Figure 4. Side-scrolling Game 'Limbo'

- **Flat Character.** The flat silhouette is a distinctive feature of characters in Chinese shadow puppetry. The characters are typically crafted from cut paper or thin leather, meticulously shaped and carved. This flat silhouette gives the characters clear outlines and a unique visual effect. Despite their two-dimensional nature, the characters exhibit intricate details. Lines and etchings on the cut paper or thin leather depict facial features, costume details, and movements, bringing them to life. In side-scrolling games, most of the characters are also two-dimensional. With the continuous advancement of technology, many 3D side-scrolling games have also appeared. Although the scenes and characters in the game are 3D, players cannot rotate the characters 360 degrees to view the characters and scenes, which is caused by the planar view. Therefore, in this case, despite being a 3D game, but the visual experience given to players in the game is not very different from that of flat 2D side-scrolling games.
- **The Fourth Wall.** As Figure 5 shows, the fourth wall is a concept in theater, which means an invisible wall that separates the world in the play on the stage from the real world in which the audience lives. In the side-scrolling games, this wall is the screen of the device used by the player, such as a mobile phone screen or a computer screen. In Chinese shadow puppetry, it is the white or yellowish cloth.

According to Brecht's theory, when the audience is aware of the existence of the fourth wall, the audience can carry out rational aesthetic activities, so that the audience can actively think about the background of the drama they are watching or the game they are playing during the viewing process. story. Brecht called this phenomenon the alienation effect. There are three ways to achieve the alienation effect, namely strengthening the existence of the stage, the third person, and the narrative in the past tense. In side-scrolling scrolling games and shadow puppetry, first of all, the perspective of the audience and the player is a third-person perspective to watch or experience. Secondly, because the perspective of the audience and players is always the same, in the eyes of the audience and players, there is always a stage in front of them, and in their consciousness, they are never able to enter the stage, and they are always in a state of sitting under the stage to watch the

performance. Finally, in traditional shadow puppetry, the stories performed are often historical events or deeds in mythology, while in side-scrolling scrolling games, there are also many games with historical backgrounds.

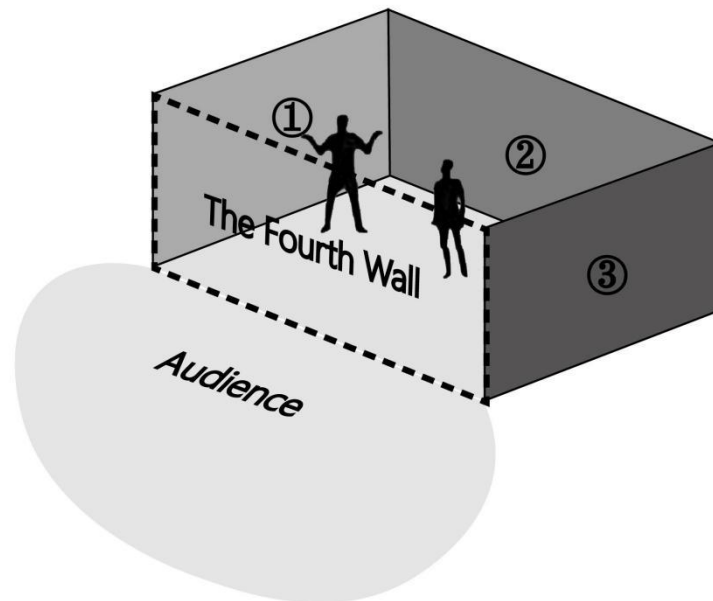


Figure 5. The Fourth Wall

4.2 The Difference Between Shadow Puppetry and Side-Scrolling Games

- **The Role.** Chinese shadow puppetry is a traditional form of theater performed through handcrafted shadow puppet figures and light projections. The audience is passive watching, they cannot directly intervene in the plot or the actions of the characters. In contrast, side-scrolling games are an interactive medium in which players can directly control the actions of game characters, and promote the progress of the game through operations and decisions. Players play a leading role in the game, with a real sense of participation and autonomy. That is to say, in the side-scrolling game, the player is both the controller of the character and the viewer of the game, but in the watching process of the shadow play, the audience is just the audience, and the performers of the shadow play are professional actors.
- **Perform:** Furthermore, side-scrolling games are played on electronic devices such as computers, game consoles, or mobile devices. They utilize computer graphics and sound technology to create game worlds and interactive experiences. Developers can leverage advanced technological tools to produce vibrant and colorful game visuals and realistic sound effects. In contrast, Chinese shadow puppetry relies on traditional handcrafted processes and light projection to showcase imagery, with its expressive forms being more constrained by traditional craftsmanship and performance techniques. This also means that in terms of creative themes and expressiveness, horizontal games have a wider space for expression and development potential than Chinese shadow puppetry. Can create many things that do not exist in the real world, and is not limited by the ability of the performer.

5. Conclusion

This paper will analyze and compare these two different art forms, and we can see that they have similarities

in many aspects, such as visual experience, they are all flat viewing angles, and the characters are also flat 2D. Both have a fourth wall. These commonalities are important factors for the combination of the two. The difference between the two is also something that needs to be paid special attention to when making and combining the two. The research goal of this thesis is not only to meet people's diverse needs for entertainment forms, but also to promote the innovation and inheritance of traditional art. We will explore how to use the technical means and innovative design of the horizontal version of the game to give Chinese shadow puppets a wider performance space and inject new vitality and charm into it. It is hoped that through the research of this article, the potential and innovation of the combination of Chinese shadow puppets and flat knitting machines will be discovered, and new ideas and paths will be provided for the inheritance and innovation of traditional art. Finally, we hope that through this research, we can contribute to the integration of traditional culture and modern entertainment, and explore new possibilities for the intersection of art and technology.

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