

The Inheritance and Innovation of Digitalized Traditional Chinese Culture Based on Unity3D

Yuehua Cai¹ Yuan Yin²

^{1,2} *Guangzhou Institute of Science and Technology, Guangzhou, China*

² *Corresponding author. Email: yinyuan@gzist.edu.cn*

ABSTRACT

With the development of science and technology, the dissemination of culture has changed dramatically in the information age, with the Internet serving as the main means of dissemination, and many excellent traditional media channels of dissemination have been marginalized. Young people are influenced by information technology culture when they are young, and the invasion of many foreign cultures, such as Japanese, Korean culture and European and American fashion, has influenced the lifestyle of contemporary young people, which undoubtedly affects the atmosphere of the excellent traditional Chinese culture in the society, and reduces the interest and opportunity of young people to learn the traditional culture. In this paper, we take “Jingwei Filling the Sea” in one of the famous Chinese novels “Classic of Mountains and Seas” as an example, and use Unity3d technology to let teenagers play the game in the field they are familiar with and interested in, so that teenagers can understand the development and content of the story more realistically and pertinently. Through the research of this paper, the traditional Chinese literature and culture can be understood and learned by more people, so that it can be better inherited and continue to develop in an innovative way.

Keywords: *Unity3D, Traditional Chinese literature, Adolescents, Interaction design.*

1. INTRODUCTION

1.1 Current Situation and Development of Chinese Traditional Culture

Since the reform and opening up, China's socio-economic changes have been tremendous, which also brought various social problems, the trend of globalization, such as the “Japanese stream”, “Korean stream” and many other foreign cultures continue to impact on China's traditional cultural education, which also exposes many shortcomings in China's traditional cultural education. At the same time, it also exposes many shortcomings in our traditional culture education. Precisely because we attach importance to the lack of traditional cultural education among young people, it has become particularly urgent to promote the awareness and understanding of traditional culture among young people. Although many schools offer courses in language and history, these courses are mainly concerned with the transmission of knowledge and test scores, and seldom involve in-depth study and experience of traditional culture.

The above reasons have led to the fact that although traditional culture has shown a prosperous development trend in the society, it is still a certain distance away from the full prosperity of traditional culture. With the deepening of globalization, the relevant talents in various fields will surely dig deeper into the connotation of traditional culture and further promote the prosperity of traditional culture in China.

1.2 Importance of Inheriting Traditional Chinese Culture

The traditional virtues and national spirit of Chinese culture have a long history and are the spiritual lifeblood of the Chinese nation, and culture is the embodiment of the spiritual values of a country and a people. First, traditional culture is the ideological foundation and spiritual guarantee for the realization of socialist modernization. Secondly, the national spirit nurtured by traditional culture is the value bond that unites people of all ethnic groups throughout the country. Finally, the ideological wisdom of traditional culture can

provide useful help for the development of today's society. For young people, excellent traditional culture can help establish correct values, outlook on life and worldview. Young people in the new era should "better take up the new cultural mission", be firm in cultural confidence, be open and tolerant, adhere to righteousness and innovation, and bear in mind the wishes of General Secretary Xi Jinping to create a new culture belonging to our era and build a modern civilization for the Chinese nation.

1.3 Significance and Purpose of the Study

This paper is an example of "Jingwei Filling the Sea" from one of the famous Chinese novels, "Classic of Mountains and Seas", which is one of the ancient Chinese myths and legends, and such stories are both the crystallization of Chinese wisdom and the treasures of Chinese culture. However, in the age of information technology, young people's understanding of traditional literature is only partial. A survey of post "00" college students conducted by three language institutes in Beijing found that less than 10% of the students had an in-depth understanding of traditional Chinese culture, and only 20% of the students were interested in traditional culture. The most important thing is that 59% of the students think that the society itself lacks the atmosphere and dissemination channels of culture, and nowadays the dissemination channels of many cultures only stay in the traditional dissemination channels such as books and TV, which lacks innovation and attraction to the youth. The use of Unity3d technology can be a good solution to this problem, Unity is a real-time 3D interactive content creation and operation platform, allowing young people to play games in areas they are familiar with and interested in, enter the game from a third perspective so that they can understand the background of traditional literature in a more immersive way, and control the game from a first perspective, so that young people can more realistically understand the development of the story and its content. Through the game, players can experience the adventurous journey of Jingwei and realize the connotation of traditional literature.

This project designs a Unity3D interactive adventure game. With the advent of digital media technology, the game can better attract the attention of young people so that they can learn traditional culture in entertainment. This project allows players to enter the story scene from a third-person perspective, which brings out the background and

moral in "Jingwei Fill the Sea". The design of collision interaction levels and adventure picking up items allows teenagers to participate in a relaxing and entertaining atmosphere and gain a new understanding of the story and idioms. Through the research and dissemination of the game, the traditional Chinese literature and culture will be understood and learned by more people, so that the traditional Chinese culture can be better inherited and continue to develop in an innovative way.

1.4 Relevant Domestic and International Research

Take Wang Xinhe and Ye Fenghua's "Huizhen - Miao Bi Qian Shan" as an example, the game is a digital game made with the "Thousand Miles of Jiangshan Tu" as the core, which utilizes the memory construction and cultural inheritance of digital games [2]. On the one hand, the project investigates how physical objects can be better presented in the digital virtual game technology; more importantly, how to make the digital game more interactive and immersive for the players, so as to increase their interest in the digital game and arouse their empathy. The storyline of the game is produced by integrating many popular traditional Chinese literature, and with many traditional Chinese musical instruments as background music, it shows a multi-faceted, multi-dimensional and multi-perspective image for the player. Players experience the fun of the game at the same time also cultivate their own, undoubtedly in the auditory and visual enjoyment. ("Figure 1")



Figure 1 A Thousand Miles of Rivers and Mountains.

In China, the 2019 Spring Festival launched an online game - "Justice", in the game reproduced the Northern Song Dynasty "Chinese New Year" activities in the atmosphere, in the game also "reproduced" a lot of traditional Chinese cultural programs, widely acclaimed. The game's scenes are

also modeled after the Northern Song Dynasty's "Chinese New Year" event. The scenes in the game are also modeled after Wang Ximeng's "Thousands of Miles of Rivers and Mountains", while the nature and scenery of the Jiangnan water town in the game also draws on the historical and cultural elements of the Song Dynasty, allowing players to immerse themselves in the ancient Jiangnan society and deeply feel the precipitation of the thousand years of culture and heritage. As shown in "Figure 2":



Figure 2 Justice.

In Against the Current, the game's development team not only designed the traditional ink painting into a game copy, allowing players to experience the "body into the painting" of the wonderful, but also non-heritage "shadow play" designed as a copy of the level, so that players incarnated non-genetic heritage of the shadow role! In addition, the non-heritage "shadow play" is designed as a copy level, allowing players to take on the role of non-heritage shadow characters, and start a fight to the death with the legendary demon god "Interceptor", so that players have a close contact with traditional culture without any distance.

In foreign countries, in the game "The Witcher 3" and other role-playing games (RPG), many scenes are based on the relevant traditional literature associated with the game, the game players can also be in the cliff side to enjoy the beauty of the landscape, a lot of players to take screenshots of the card. Joshua Stevens "The Witcher 3" soundtrack music for the break-up and research, elucidated how to convey the folklore of the culture of the symbols through music[3]. He also looks at both how the game's music can better represent the traditional music of Eastern European folklore, while using these traditional elements to enhance the narrative and emotional experience of the game. This gives us an idea of how the combination of art systems and games can allow us to better understand and pass on our local folklore and culture.

It also proves that integrating culture into online games is a major hotspot in today's era. Letting online games become the carrier of China's excellent traditional culture is an important direction and principle for online games to observe and innovate. Traditional culture has a certain influence at home and abroad, and young people need to let more excellent traditional culture continue to be well inherited.

2. PROJECT ANALYSIS

2.1 Project Background

"Jingwei" is one of the myths and legends of ancient China. Jingwei was the youngest daughter of Shen Nong, the Emperor of Yan, and was named Nuwa. "Jingwei" is a typical myth of deformation, as if the soul of oneself after death is placed on an object in reality. The story also belongs to the revenge myth because Jingwei's anger towards the sea made him hate the sea. There are many ancient Chinese myths that record many typical unnatural deaths, which are meant to show that human beings have become extremely small and helpless in front of nature, and at the same time suggest that human beings should better protect nature and coexist with nature peacefully, otherwise human beings will face unpredictable and tragic consequences! The story of Jingwei tells us that we should protect nature better and live in peace with it. This story tells us that it is useless to fight against nature in front of it, and that it is impossible for human beings to overcome the tremendous power of nature, which also reflects the fragility of human life and the power of nature. The famous writer Mao Dun thinks: "Jingwei and Interceptor belong to the same type of myth, both are depicted to symbolize the perseverance and will, which belongs to the bird and beast myth of moral consciousness."

The Jingwei is from the "Shan Hai Jing" (Classic of Mountains and Seas)-"Bei Shan Jing" [4]. The Shan Hai Jing is an ancient Chinese book that describes the ancient mysteries and preserves a number of popular ancient myths, legends and fables, including those related to Kua Fu chasing the sun, Jingwei filling in the sea, and Dayu curing the water. This project will use Unity3D technology, which allows players to more easily experience the 3D type of interactive integrated game, the game scenes and game characters using 3D creation can be highly reproduced in the "Jingwei Fill the Sea" in the scene, the game contains the content of the article and the analysis, but also to the Jingwei pick

up the branches of the wood and other design of the competitive interactive game, so that players as if they were in the realm of the more vivid! The content of traditional Chinese literature is presented in a more vivid way, which changes the boring way of learning, improves the learning efficiency of young people and greatly increases the interest of young people in learning traditional Chinese culture[5].

2.2 Project Design Ideas

The game will start with a conversation between the player and the protagonist, where the player enters the game from a third perspective to have an interactive conversation with the main character of the story, allowing the player to understand the background of the story. The game scene will be dominated by the forest, and the characteristics of the “Seiko” scene will be integrated into the scene design to make the game more immersive. The protagonist of the game “Jingwei” will also be highly reproduced, and players need to complete the game from the first perspective to understand the story content more intuitively. The first level is the basic content of the story, players need to answer the questions in the correct order of the article in order to obtain the article fragments. The second level is to analyze the content of the article further questions, players need to choose the correct answer options. The third level is a parkour type of challenge, where the player controls the main character of the story to collect items placed in the scene from the first point of view, simulating the Jingwei's collection of stones and branches. Players need to collect a sufficient number of items before reaching the end, otherwise the challenge is failed.

3. PROJECT APPLICATIONS

3.1 Interactive Experience to Convey Traditional Culture

In many traditional literatures, the plot is usually linear and the reader's experience is very singular. However, through the game as a digital platform, the player can be personally involved in the storyline and be immersed in it, no longer just a bystander, but able to experience and even change the plot of the story as a seiyuu.

In the game, players need to go through three levels of tasks and challenges, players can not only understand the development of the story, but also experience the persistence and tenacity of the

Jingwei bird. For example, every time the game fails, the challenge to collect different materials to complete the task again reflects the spirit of the bird's perseverance against all odds, an experience that traditional textbooks can't give. Through this interactive storytelling, players can gain an in-depth understanding of the cultural meaning and spirit behind the story of Jingwei, which is easier for players to relate to and empathize with than traditional literature.

3.2 Multi-dimensional Storytelling

The game is a digital media platform that allows the story of “Jingwei” to be more than just a retelling of the story. For example, the game adds an inner monologue from the bird's own mind to help the player better understand the bird's journey. It also adds conversations between it and other NPCs, allowing the player to better understand the background of the story and explore its motivations and its story with nature.

This design makes the story not only stay at the level of story content, but also allows for a more realistic experience of what the Jingwei Bird has gone through and better inspires the player's thoughts on the story in a more modern way, which allows traditional culture to continue to be passed down in a constant state of innovation.

3.3 Visual System and Aesthetics

Vision is an important sense for players to receive game information. The game scene is highly reproduced through 3D modeling and exquisite mapping, which can better show the traditional Chinese aesthetics. The characters, scenes and props in the game are all designed based on ancient Chinese art styles. Chinese mythological characters, lifelike, full of distinctive oriental cultural characteristics, which is particularly notable is the spirit of virtue. For example, the modeling of the role of the Jingwei bird, unique appearance, shaped like a crow, but with a pattern on the head, white beak and red feet these features can be a good show, than a simple description of the text, modeling allows players to more intuitively appreciate, and so that players can leave a deeper impression, at the same time, these characters also determines the content and purpose of the society's education of people.

3.4 Auditory System

In the game soundtrack and sound effects are very important, in many games, many players feedback after hearing the traditional Chinese music, there is an inexplicable sense of immersion and a sense of pride, these instruments bring a thrilling, passionate and heart like a knife and so on. In the game with the rich oriental charm of sound effects, such as guzheng, erhu, etc., to create a strong cultural atmosphere, the art of traditional culture elements can be vividly reproduced, these instruments have always played an important role, become an important carrier of cultural heritage. They not only record the life scenes and emotional world of ancient people, but also reflect the cultural characteristics and aesthetic pursuits of different historical periods. Therefore, traditional Chinese musical instruments are not only instruments of music, but also symbols of culture and witnesses of history. The soundtrack in the game, with various sound effects, reflects the psychological reaction of the game's protagonist at that time, giving the player a more immersive feeling, as if they were there.

3.5 Instructive

Games can be used as an effective cultural education tool. Nowadays, many game makers add the meaning of the story or the positive thoughts they want to convey into their games, which are no longer just for pure entertainment, but are involved in cultural dissemination and learning. For example, "Black Myth - Wukong"; "Genshin Impact" and so on added many traditional Chinese cultural elements, so that the player to understand the daily life did not understand the knowledge, for example, the Black Myth introduces many scenes are real Chinese landmarks or integrated into the Taoism, Buddhism and Confucianism system of thought[6]. Many players go to this game to really understand and learn the true meaning of these elements, which has a very good educational nature. And in the "Jingwei Tian Hai" game to add ancient poems and quiz game design, involving many traditional cultural knowledge, so that players in the entertainment at the same time get the cultural cultivation. While allowing players to relax effectively, they can also absorb cultural knowledge, stimulate their interest in traditional culture through the game, and deepen their understanding and memorization of the cultural content in a relaxing and enjoyable way.

3.6 Dexterity

The content of the game can be constantly innovated and integrated at any time according to the feedback of the public and the needs of the market. The production team can make targeted designs according to specific audience groups, and this flexibility can quickly keep up with the trend of the times, while also maintaining the characteristics of traditional culture. The game is based on mythological stories, and while using the story content as a base, it can also be adapted and innovated according to the story and the interests of young people, conveying positive energy ideas and thus obtaining an extension of knowledge.

3.7 Multicultural Communication

As a globalized cultural communication medium, video games have greatly facilitated the spread of transnational culture. The game "Jingwei Fill the Sea", which is based on traditional Chinese literature, not only allows Chinese players to have a deeper understanding of their own country's culture and also possesses a great sense of pride, but also gives players around the globe the opportunity to come into contact with traditional Chinese myths, and then to understand and respect Chinese culture. For example, Junxin Li and Zihan Zhou have taken "Black Myth - Wukong" as an example, suggesting that digital games are an emerging vehicle for cultural dissemination, and play an increasingly important role in promoting the international dissemination of Chinese traditional culture and enhancing the cultural confidence of youth groups[7]. What's more, the game is the first large-scale game in Chinese as the main language, which has also aroused the national pride of the majority of Chinese netizens, and made many foreigners choose to watch Journey to the West to understand the specific story. Therefore, games like "Journey to the West", which is based on traditional Chinese literature, will greatly promote the spread of culture, especially for those foreigners who are already interested in Chinese culture, providing them with a platform to learn about Chinese culture and stories, and enhancing the possibility of cultural export, while promoting the global spread of Chinese culture.

4. CONCLUSION

4.1 Project Summary

The game is a digital game created by combining Unity3D and traditional Chinese literature, allowing young people to understand and learn the story of “Jingwei Filling the Sea” in a game way. The game can realize the effects of cultural transmission, educational significance, and emotional resonance on multiple levels. Firstly, the game provides a new interactive platform for players, allowing them not only to understand the basic content of traditional Chinese culture, but also to create an emotional connection with the culture in the process of in-depth experience, and to enhance the sense of identification with traditional culture. Second, the educational function of the game allows players to learn about history, morality and philosophy while being entertained. Finally, the cross-cultural communication potential of the game enables traditional Chinese culture to go global and promotes global cultural exchange and understanding.

This project uses “Jingwei Fill the Sea” as an example of a game that is based on the most authentic Chinese mythological stories in terms of the visual, auditory and educational aspects of the game. This also greatly increases young people's interest in traditional Chinese culture and allows them to get a good knowledge infusion while playing and relaxing, killing two birds with one stone. At the same time, a large number of modernized elements are incorporated, allowing young people to use modern technology to understand traditional culture, and to come up with a new generation's understanding and viewpoints on mythological stories, which in turn is a fusion and innovation of traditional culture. Taking the essence and discarding the dregs, it is not just a popularization based on traditional culture, but also to let the youth take a new perspective, a new understanding and inheritance of our traditional culture.

Through games, traditional culture can not only be transmitted in a more vivid and attractive way, but also break through the limitations of time and space to realize cross-regional and cross-cultural dissemination. Therefore, games are undoubtedly popular and have great potential as a way of cultural dissemination.

4.2 Expectations for Project Development

This study is about the combination of games and traditional Chinese culture, hoping that through the spread of the Internet, more people can have a better understanding of traditional Chinese culture and become interested in it through such cultural games. We hope that more games can be combined with excellent traditional Chinese culture and spread at home and abroad, so that more people can understand the power and charm of traditional Chinese culture, and more young people are willing to be the inheritor of culture, so that Chinese culture with a history of thousands of years can be integrated into the digital world and develop its own characteristics, so that traditional Chinese culture can be better adapted to the times and better inherited, and above all, to continue in a constantly innovative way. The most important thing is to continue to develop in a constantly innovative way.

ACKNOWLEDGMENTS

Fund project: Guangzhou Institute of Science and Technology 2024 Research Feedback Teaching Special Project on Innovation and Practice of Deep Integration of Industry, Academia and Research in New Engineering Science (2024KB004) Funding.

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