Research on the Authenticity Experience in the Digital Protection of Cultural Heritage taking the Scenic Spot of the City of Youli as an Example

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Abstract
From the perspective of digitization of cultural heritage, this paper puts forward ideas on how to digitize and protect cultural heritage in the cultural tourism industry and explores the path of combining metaverse with the Authenticity experience of cultural heritage. By studying the application prospect and policy support of metaverse in cultural heritage digitization, combined with the characteristics and needs of cultural heritage tourism originality, the paper aims to provide specific combination strategies and implementation paths for cultural heritage scenic spots to enhance further the attractiveness of the scenic spots and tourists' experience. The thesis case is based on the example of Youli City Scenic Spot in Tangyin County, Henan Province, and part of the experience is summarized through the production of the digital protection project of Youli City Scenic Spot, which provides reference and reference for the development of similar scenic spots in the field of metaverse.
Keywords: Cultural Tourism, Metaverse, Authenticity, Youli City

Introduction
Located in the northern suburb of Tangyin County, Anyang City, Henan Province, Youli City is known as "the first state prison in Chinese history," which was built by King Zhou of the Shang Dynasty to imprison Ji Chang, the King of Zhou Dynasty, and it is the birthplace of the I Ching. In November 1996, Youli City was named the fourth national key cultural relics protection unit batch. In 2007, Zhou Yi Culture became the first batch of intangible cultural heritage in Henan Province. In 2007, "Zhouyi Culture" became the first batch of intangible cultural heritage in Henan Province. In June 2018, the city was approved by the Taiwan Affairs Office of the Central Committee of the Communist Party of China and the Taiwan Affairs Office of the State Council to be established as a cross-strait exchange base.

The digital development of the scenic area is relatively traditional, and the guiding method is still based on visual information design and manual explanation. Build a website platform, "Tangyin County, Henan Province, Yi Zhou Museum," operating WeChat small

program "Youli City Scenic Spot," "Youli City Scenic Spot Tickets," and public number, "Tangyin Zhouyi Museum." The content of the website and the minor program is conventional in design, and the cultural and creative products have apparent homogeneity with other scenic spots.

Analysis of the Current Situation
Metaverse

metaverse as a digital space concept is traceable in many Chinese classical works; the Taixu fantasy world depicted in A Dream in Red Mansions, the scholar in Liaozhai Zhiyi entering the paradise beyond the world in the painting can be considered as the prototype of metaverse. Qian Xuesen had an early outlook on virtual reality and metaverse; he wrote in his letter to Wang Cheng on July 3, 1993, "My interest in the spiritual realm technology and multimedia lies in the fact that it can greatly expand the perceptions of the human brain and enable people to enter new worlds never seen before and that a new era of history is about to begin!" Where in the technology of the spiritual realm is precisely the metaverse referred to.

Dai Liang proposes in "The Four Dimensions of metaverse in Epistemological Perspective" that games are the prototype of "metaverse," which integrate elements of art, culture, and technology into the wave of exploring "metaverse." It is the forerunner and leader of "metaverse" and drives related industries to enter the era of "metaverse" one by one. (Dai, 2022) "It is the forerunner and leader of the "metaverse" and drives related industries to enter the "metaverse" era one by one. metaverse is a new concept in the world. metaverse indeed has many similarities with games, but metaverse can also achieve artistic heights that games cannot reach.

In 2013, the China Art Palace Art Digital Museum, China's first 360-panoramic virtual museum, laid a good foundation for digital archive management and network application of precious collections. Xi'an Datang Nocturnal City and Zhangjiajie have also begun to practice in the "metaverse + digital culture and tourism" industry, and the Palace Museum has also made various attempts in the metaverse-related industry.

Theory of Authenticity

The concept of authenticity was first initiated in Europe, and with the progress and development of the times, authenticity was first mentioned and applied in heritage conservation. In the 1960s, the concept of "authenticity" was introduced into the field of heritage conservation, and it became the basic and core concept in preserving world heritage. In the 1970s, "authenticity" was extended to tourism research. In the 1970s, "authenticity" was extended to tourism research.

Xu Honggang et al. argued that "authenticity" is the core of cultural heritage protection and is primarily controlled by local governments, which is similar to the results of this paper. (Shang, Hou, & Toa, 2024) According to Chen Kunli, tourists' perception refers to the tourists' unique personal feelings about the tangible and intangible environment of the tourist destination, which is formed under the influence of various elements and runs through the entire tourism process. Visible tourist perception has an intense subjectivity; this study will be used to analyze the authenticity of the tourist perception; the higher the degree of tourist

perception, the more authentic it is (Chen, 2017) Cai Libin in the digitalization process of the Ming and Qing dynasty forbidden city in the protection of the authenticity of the article, from the interpretation system and graffiti behavior of the two aspects of the analysis of deficiencies on the destruction of the Authenticity of the forbidden city (Cai et al., 2017). Similar problems also exist in the scenic area of Youli City.For China, the concept of heritage, the concept of authenticity, and the system of heritage protection and management are all imports. In the process ofing with international standards, China's heritage protection has not refined its operations based on the Chinese cultural context (Xu, Wan, & Fan, 2012).

Authenticity is the core value of the cultural and tourism industry. Travelers pursue the original feeling in tourism, and they want to experience the real history and cultural heritage in tourism. However, the current development status of most scenic spots in China is serious homogenization and excessive commercialization, which seriously affects the Authenticity experience of tourists.

Youli City Metaverse Project
Project Introduction
In 2022, the Department of Culture and Tourism of Henan Province of China, together with the NetEase Group, will organize the "Walking Henan - Understanding China" Brand Promotion and metaverse Creator Competition under the theme of "Stagging in the Central Plains - Creating metaverse," to create online digital spaces and products through crowdsourcing and customized modes. "Walking Henan - Read and Understand China" 100 logo projects, major historical events, important historical figures, and significant iconic IP, through the crowdsourced and customized two modes to create gameplay and digital scenes, innovative online digital space and products, to promote the construction of Henan culture and tourism digital industry innovation, culture and tourism, cultural and creative fusion strategy to break the opening. The authors have been working on this project for many years. The author's "Digital Villager" team participated in this competition with the Tangyin County, Henan Province, Youli City Scenic Spot as the theme and digitally restored the Youli City Scenic Spot to its original state. (Figure 1)
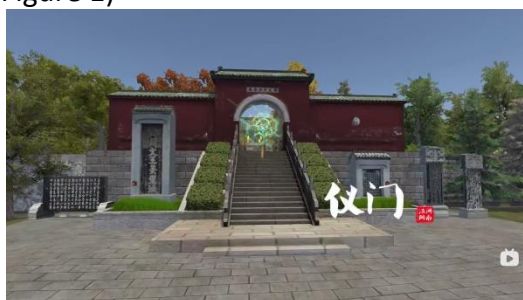

Figure 1: Screenshot of the metaverse Project in Youli City

Difficulties in the Development of Youli City
1. Youli City is the birthplace of Zhou Yi, China's 4A-level scenic spot. Although it has unique cultural advantages, looking at the national historical heritage scenic spot, its scale is still small. In China's various types of historical heritage scenic spots, different heritage levels, and different geographical areas of the scenic area, service capacity varies greatly; high-level scenic spots tend to attract more tourists, and tourists are an essential source of scenic area development.

2. At present, most scenic spots have more or less digital display resources, but the quantity and quality are small; most scenic spots have audio and video displays and panoramic displays. In each scenic spot, there is no unified standard and platform. The scenic spot of Youli City also faces the problem of low-quality digital display resources and low investment of related funds.

3. Although contemporary young people are also keen to card historical scenic spots and other attractions, they are relatively more like net red attractions, for some remote and small-scale scenic spots of little interest. Tangyin County area attractions are limited, and the number of scenic spots in Luoyang and Xi'an, these historical cities, have a large gap, as the "three saints of the township" are also relatively well-known only: Yue Fei Temple, Magpie Temple, the three scenic spots of the city of Youli, although the Yue Fei Temple and Youli City two scenic spots between the opening of the free shuttle bus and the set of tickets mode, but by the three scenic spots affected by the scale, the number of tourists is also minimal. Visitor volume is also minimal.

The development difficulties of the city are also the development difficulties of most of the small and medium-sized scenic spots. The digitization of the scenic spots in the city is difficult to overcome. It needs to be regulated by the government as a whole to have better development. The competition led by the Department of Culture and Tourism of Henan Province is an excellent government-led attempt to use provincial resources to organize a professional team of digitization, reasonable deployment to all parts of the province, for the digitization of local history and culture and tourism to make intuitive help. The government-built metaverse display platform can also better attract tourists from across the province and the country to visit and interact online.

The Necessity of Cultural Tourism Metaverse

The culture and tourism industry needs to closely combine the current popular technology to show the content to attract more tourists, increase income, feed the scenic area, improve service quality, and contribute to a virtuous cycle. In recent years, promoting science and technology to the tourism industry, the social needs of the tourism industry expectations, and the epidemic of this kind of unique situation inspired people to promote the tourism industry to combine with the latest metaverse to develop. The outbreak of metaverse in recent years has provided traditional culture with many new marketing means and tools to meet the needs of non-heritage in digital protection and inheritance, innovative product design, etc., and further promoting the culture of non-heritage while bringing a more immersive and interactive experience to the public.

The metaverse of the Youli City project has promoted the development of the cultural tourism industry, essentially due to the existence of a typical genetic quality between the realistic characteristics of the metaverse and the purpose of cultural tourism activities. The literature and tourism industry is an important economic pillar of Henan Province. How intelligent, diversified, integrated development, artificial intelligence, big data, VR, and other digital technologies in the scenic area design, not an individual or a unit, can be solved needs the whole society to work together Literature and Tourism metaverse to run better.
The cultural and tourism digital protection development dilemma and
solution ideas

At present, the metaverse is still in the primary stage of development; wanting to develop on a large scale is still affected by many aspects, and how to solve these problems is directly related to the development speed of the cultural tourism metaverse.

Affected by the Development of Technology

Whether it is text, pictures, or video, new communication media is often related to the development of science and technology. In developing the metaverse through communication technology, computer hardware, software, and other top human technology development limitations, each technical bottleneck may affect the metaverse experience smoothness and sense of reality. The 2021 metaverse outbreak is also because of big data, artificial intelligence, 5G, blockchain, the Internet of Things, and other technologies. Progress accumulated to a particular stage before the formation of the future development of the metaverse also needs to progress together with science and technology.

Limited by Brand Influence

Most of the existing digital platforms or products are in the pilot stage, each scenic spot or some pilot made by a company alone. Research shows that most tourists have more or less heard of metaverse but do not know much about how to log into It and what kind of equipment to use. It is urgent to unify the interface and the visitors' entrance to the metaverse according to provinces or even the whole country.

Physical Effects of Virtual Devices

The harm of electronic products on the human body is actual, especially regarding the eyesight and body of teenagers and children. The global myopia rate is increasing in the era of the popularization of TV and cell phones. Prolonged play of computers, cell phones, and other electronic products can also deform human bones. It can be said that long-term contact with virtual reality equipment will also indeed affect the human body. Upgrading the technology of the equipment and reasonably arranging the time to use the equipment is the only way to solve such problems.

Protection of Privacy and Security

In the digital era, people's privacy is more likely to be threatened, and hacking and big companies selling user information will bring uneasiness and benefit infringement to people. For example, Meta pioneered the development of the metaverse and was sued for illegally collecting facial information on social platforms without users' consent. If the development of the metaverse is strong enough to be relevant to people's lives, information security is an aspect that we need to be careful about.

Innovative Ideas in Digital Protection of Cultural Heritage
Innovative Ideas for Scenic Features Design Services

1. Increase the authenticity of the experience: With the importance of cultural relics protection, cultural relics' scenic spot security is becoming stricter and stricter. Early in many scenic spots, tourists could directly enter the interior of the building and even directly touch the exhibits. Now, many places railing visitors isolated far, it is difficult to appreciate the beauty of cultural relics up close, which, to a certain extent, lost the significance of the Authenticity of the experience; the development of a cultural tourism metaverse can be a solution to the contradiction so that tourists can be close to the visit. In addition, the ancient

literati on historical relics have an appreciation graffiti hobby; modern people are also keen to leave their names on the heritage sites, although this type of behavior is not worth advocating, and now the quality of tourists is gradually improving, the tragedy of destroying the cultural relics still happen occasionally. This behavior can be a different way of thinking and methods in the metaverse to channel if combined with the metaverse to add a particular interactive graffiti area. Still, it may also bring more fun to the digital heritage.

2. needs. Although many scenic spots have set up barrier-free access, many barrier-free accesses have irrational designs. They are occupied, which is not friendly to the disabled people who need to use them, and the natural advantages of the metaverse can take care of more groups. With the development of society, many people with mental illnesses are also valued and concerned. In the imagination of the metaverse, each person applies for a virtual digital ID, which not only helps disabled people to visit scenic spots all over the country and travel all over the world but also helps socially dangerous groups to build a new way of cognizing the world.

Expanding Ideas for Scenic Product Innovation

1. add reality-enhanced products combined with AR, VR, and other virtual reality technologies to develop online products. Traditional cultural creations of various classic patterns and appearances combined with modern household goods are based on practical ways to increase the aesthetic. Still, there is little actual online digital content. For the characteristic culture of the city, we can combine AR to recognize the environment of the user's home and help the user adjust to the feng shui problem by combining the knowledge of I Ching and Feng Shui.

2. Add more learning paths: Many tourists will use the corresponding travel strategy before leaving again, and they will want to understand the beauty of a scenic spot, feel the shock of cultural relics, and be clear about its history. Early on, people learned the story of the scenic area in advance by flipping through the information, and now we will also check the Internet before traveling. In the future, we can go to the metaverse before departure to feel a bit; compared with the previous strategy query, the metaverse can provide more information to the tourists, to meet the new mode of doing strategy, to do "familiar with the history of the line, touch the history of the line."

3. the manufacture of scarce products: The blind box economy continues to be hot, the scenic spots have also followed up, and blind box content material is not worth money, mainly trafficking in goods scarcity. Compared to the scarcity, the current blockchain, NFT digital collections are enough to meet enough scarcity, but they also can be traded online; relative to the upgrade of traditional cultural and creative products, you can open up the digital collections market to cope with more age groups, consumption levels of tourists.

Innovative Expansion of Traditional Exhibition Content

1. Creating super field visual experience: the birth of metaverse is an upgrade on top of the traditional communication media, which is much richer than the content delivered by the previous text, picture, and video, increasing the interaction and in the future, it may also increase the tactile feedback and so on. And our existing cultural travel experience, if combined with VR, AR, and other technologies, will bring a better understanding and more culture. For example, the "Heritage Conference" tells the heritage more vividly and flexibly through stories, videos, stage plays, and other methods. In the future, we can also restore cultural relics' past and present life in the metaverse through similar methods. The author

participated in the "Walking Henan - Read China" competition; some critical parts of the city of Youli added dynamic effects, and later also considered adding story animation, online interaction, and other links, giving the audience a different experience offline.

2. expand the online study path: study is a learning method advocated by the state in recent years; there are many study bases across the country, and students can learn traditional culture at the base. The conventional study time is fixed, study resources are affected by geographical influence and uneven distribution of resources. A reasonable increase in the metaverse online study can give students more ways to experience more conveniently and quickly, to a certain extent, to alleviate the uneven distribution of cultural resources status quo.

Conclusion

This project is established in the direction of cultural heritage protection, combined with the actual case of "Youli City," a scenic spot in Henan Province, China; the design process refers to the relevant excellent program, the combination of culture and tourism and authenticity to analyze from multiple perspectives, to solve the integration of traditional and digital difficulties so that the digital protection project can reasonably show the original authenticity. The digitization of this project has enriched the digital assets of the Youli City Scenic Spot, opened up digital tours for the scenic spot, and increased the number of tourists visiting the area. Through the design of the original authenticity experience, relevant practitioners can more intuitively see the practical application effect of the theory of original authenticity in the digital protection of cultural heritage. It has made innovations in scene restoration and virtual storytelling to enhance the online experience of digitized scenic spots and brought guiding ideas to other cases in the industry.

The future belongs to science and technology, how to make science and technology better serve humanity and protect the excellent cultural heritage of humankind; all sectors of society need to actively explore the path of development so that precious historical and cultural resources can be better protected and promoted. Through this research, we can see that the combination of cultural heritage and metaverse has a broad prospect and can solve many existing problems in cultural heritage protection and the cultural tourism industry. However, we also need to focus on solving some pain points in the development of the metaverse to increase the original authenticity experience of tourists so that we can have better development in the future.

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