Opportunities and Challenges for the Protection of Architectural Cultural Heritage of Traditional Village in the Big Data Era

Zhao Manli

Guizhou University of Commerce, 550000, China

Keywords: Big Data Age; Traditional Village Architecture; Cultural Heritage Protection; Opportunities and challenges

Abstract: Traditionally, China is an agricultural society. Village culture is not only a special relic, but also a non-material cultural relic. Computer-led data processing technology has gradually changed people's data processing methods, however, there are many shortcomings in information security. If information is leaked, it will cause great losses. At this time, it is crucial to protect information security in the era of big data. The author explores the opportunities and challenges of information security in the era of big data, and puts forward practical countermeasures to provide a reference for the improvement of information security protection in the era of big data. And the research shows that the architectural environment and intangible cultural heritage of traditional villages are mutually similar and mutually beneficial. Moreover, the correct understanding and understanding of the relationship between the two is the premise of maintaining cultural heritage in the protection and renewal of villages. Interaction, large amount of data, fast updating, and many kinds of data are the characteristics of big data, which is different from small data, so it arouses controversy in all aspects. Urban planners should grasp the development opportunities in the era of big data and constantly overcome challenges.

1. Introduction

The protection and development of traditional villages has always been an important issue in the field of architectural culture research, and it has also attracted the attention of the Chinese government in recent years [1]. Like other parts of the country, there are problems of protection. Roughly estimated, an average of 80 to 100 traditional villages disappeared every day [2]. Big data makes people's communication more closely, providing many conveniences for people's daily life [3]. However, the rapid development of modern social economy has made information security in the era of big data a great challenge, and this is also an important opportunity for sustainable development in the era of big data [4]. Traditional villages, as an important carrier of the cultural space and intangible cultural heritage of Chinese traditional ethnic culture, have been paid more and more attention by the society. However, due to the lack of adequate understanding of the attributes of traditional villages by individual local government officials and villagers, etc [5]. Moreover, some improper actions in the process of urbanization make the protection of traditional villages face severe challenges. The destruction and disappearance of traditional villages rich in historical and cultural heritage means the disappearance of historical and cultural accumulation inherited from generation to generation, and also means the disappearance of a large number of resources with potential tourism value, which is a huge economic loss for the people of the province [6]. Modernization is closely linked to industrialization. In the process of industrialization, individualism has become increasingly prominent, gradually replacing family and group consciousness. The society is increasingly influenced by specific customs or major traditions and becomes a trend, while society is more influenced by the Abstract principles constructed by the ruling class. Religious beliefs are diminishing, and the characteristics of traditional culture are gradually disappearing or even disappearing. These are the challenges of protecting traditional culture.

The form and perspective of Asian architectural heritage has its unique and far-reaching

DOI: 10.25236/ecomhs.2019.050

significance. But in the wave of modernization, the heritage of Asian buildings seems more vulnerable to destruction. With the face-to-face communication of scenes, events and regions with scenes, events and regional villages, they become cultural symbols that represent the national cultural characteristics and have profound meanings [7]. The cultural contract of traditional villages includes material culture and non-material culture, which is the consensus of academic circles. These cultural heritages are all based on villages. We should fully realize that the protection of historical relics is also an important part of urbanization [8]. In this context, the Ministry of Housing and Urban-Rural Development, the Ministry of Culture, the State Administration of Cultural Heritage, and the Ministry of Finance jointly issued the Notice on the Investigation of Traditional Villages in 2012, and a comprehensive survey of traditional Chinese villages was officially launched. Exploring the opportunities and challenges of information security in the era of big data has greatly promoted the sustainable development of the era of big data [9]. However, it is gratifying that we have seen that the governments at all levels from the central to the local governments have begun to consciously and from the height of government decision-making to the top of the "spiritual homeland" that protects the Chinese nation - "traditional villages" design". Therefore, it is extremely important to have a deep understanding of the significance of protecting traditional villages.

2. Methodology

Traditional villages are the birthplace of farming civilization. There are a large number of intangible cultural heritages, and the traditional architectural environment and intangible cultural heritage of the villages are inextricably linked. The formation of traditional villages has experienced a long-term historical accumulation. It is a natural village formed by a specific natural geographical environment. It has water systems, hills and arable grazing [10]. It carries the historical and cultural information of the dwelling space and the blood relationship in the inheritance of the dwellings, as well as the collateral relationship between the neighboring villages. Many important historical figures and events are closely related to traditional villages and are "living fossils" of human civilization. It is the crystallization of Chinese traditional concepts, customs, society and family, and is known as the "pearl of traditional culture". However, if we can adopt positive methods and appropriate control mechanisms, these challenges can be solved easily, thus turning into opportunities for the protection of cultural heritage and creating a solid foundation and dual impetus for its development. By sorting out the general situation of archives departments participating in cultural heritage protection projects, this paper probes into the opportunities and challenges brought by the projects to the development of archives departments, and probes into the future development trend, so as to further improve the professional level of archives departments and play their greatest role.

According to the roles and functions of the relevant parties in the development of intangible cultural heritage tourism, it can be seen that in the construction and protection of folk tourism villages, the government, tourism enterprises, local villagers and scholars can form a positive interaction, as shown in Figure 1.

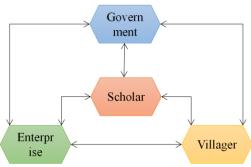


Fig.1. Diagram of Interactive Relations among Various Forces in the Development of Folklore Tourism

Through the analysis of the current academic achievements, most of them take a project as the main body to discuss the opportunities and challenges that the project brings to the archives department. From the perspective of integration, this paper combs the three popular cultural heritage protection projects, and compares the similarities and differences of the three projects horizontally. Deeply excavate the importance of the participation of archives departments in cultural heritage protection projects, and emphasize that the participation of archives departments can not be ignored. Faced with the challenges, this paper looks forward to the future development countermeasures, and puts forward how the archives department should adjust its working methods, open up new working forms, and promote the cultural heritage protection project to a higher and deeper level. Archives departments bring new opportunities and vitality for the development of archives departments in the process of carrying out cultural heritage protection projects. Therefore, the author specifically discusses the development opportunities brought by the cultural heritage protection project to the archives department from the three aspects of "receiving, managing and using". It is undeniable that in recent years, the archives department has achieved remarkable results in the implementation of the cultural heritage protection project. It has not only accumulated work experience, but also changed its working methods and concepts. It brings development opportunities for the work of the archives department, and also makes outstanding contributions to the protection, inheritance, sharing and development of human cultural heritage. However, opportunities and challenges coexist. Because there is no fixed development model and implementation plan, the archives department is also advancing in the process of exploration, problems and deficiencies still exist.

China's tourism industry has entered an era of unprecedented vitality, and cultural heritage sites have become important tourist destinations with their unique charm. At the same time, people's growing cultural needs and their past commemoration and pursuit of past times have also made cultural heritage destinations popular. See Table 1.

Types of	Quantity
National key units	1268
National key scenic spots	154
National historical and cultural city	97
National historical and cultural town	18
National Folk Culture Protection Project Pilot	31
World Heritage	16

Table 1 Chinese Cultural Heritage Summary

3. Result Analysis and Discussion

In the process of performance, the use of technical means has also become a "double-edged sword." As developing countries focus on practicality and aesthetics in the modernization process, they are receiving more and more attention from developed countries. At the same time, developing countries are still a fertile ground for attracting foreign investment. A large number of ethnic minorities have no written language, and their unique folk culture comes from oral teaching. All their history, culture and memory are in their inherited villages. From the larger background of the village, it is the grass-roots component of the society, the cell in the process of the formation of the country, the foundation of Chinese traditional culture, carrying both big culture and small culture. In the villages along the Hanjiang River in Hanzhong area, the Dragon King temples of different sizes and the rituals of worshipping dragons and fearing dragons, dragon dance performances and their props making skills are scenes and inherited from each other.

In the vertical administrative management, the protection management is basically shared by two parallel administrative systems, the construction department and the cultural department (Figure 2).

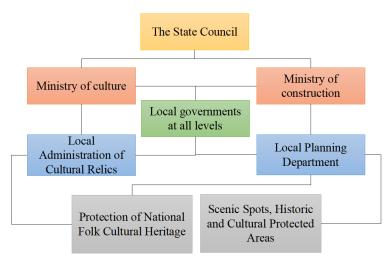


Fig.2. Administrative System of Cultural Heritage Protection in China

With the development and growth of modern information technology, the traditional forms of archival work can no longer meet the rapidly developing information needs, bringing new opportunities and challenges to the traditional forms of archival work. Under the new situation, the archives department should combine the development requirements of informatization and actively explore new countermeasures for the use of archives in cultural heritage protection projects, keep pace with the times, deepen the work content of archives utilization, and improve the quality of archives utilization. The archives department should learn from the relevant experience of the bookkeeping department in the digital construction of the document heritage protection project. Pay attention to the content system and database construction of the city in this region, seize opportunities, enrich the archives collection resources, enhance the service capacity of the archives, and make the archives closer to the work, study and life of the general public. In 2012, the United States took big data as the new oil in the future. It also proposed the advantage of using big data, which was gradually used in the field of science and engineering. According to the actual situation, corresponding innovations have been made, and the educational learning model has been improved, which effectively strengthens the security of the United States. Traditional villages, which integrate architecture, painting, sculpture and local culture, are known as "national treasures of folk collections". As Mr. Feng Jicai said, "Traditional villages are the precious historical heritage of the Chinese nation, a cultural container and a combination of material and cultural heritage". However, it can not be ignored that folk literature and the local people's living environment complement each other. Only in the local rituals, festivals and social life, can folk literature truly play its cultural value and inheritance significance to the local people.

4. Conclusions

The opportunities and challenges brought by cultural heritage protection projects to archives departments coexist, and different cultural heritage protection projects bring different opportunities and challenges to archives departments. The direction of big data research may be influenced by the popular view of big data. Researchers need to use small data to improve the quality of big data, use professional knowledge to analyze data, and use limited data to predict large data. There is no doubt that the archives department plays a leading role in projects involving the professional fields of archives departments, such as archives, documents and heritage projects, and urban memory projects, which are not only guaranteed by national policies. At the same time, in the development of the project, resources and professional and technological advantages can be brought into play, so that the protection results can be shared by the whole society. Despite this, the era of big data has greatly changed the way humans are researching and thinking, actively promoting the research of big data, accurately grasping potential opportunities, overcoming the arduous challenges, and thus making new developments in urban planning.

References

- [1] Mortara M, Catalano C E, Bellotti F, et al. Learning cultural heritage by serious games[J]. Journal of Cultural Heritage, 2014, 15(3):318-325.
- [2] Bellotti F, Berta R, De Gloria A, et al. A serious game model for cultural heritage [J]. Journal on Computing and Cultural Heritage, 2012, 5(4):1-27.
- [3] Coenen T, Mostmans L, Naessens K. MuseUs:Case study of a pervasive cultural heritage serious game[J]. Journal on Computing & Cultural Heritage, 2013, 6(2):1-19.
- [4] Sterflinger K, Guadalupe Piñar. Microbial deterioration of cultural heritage and works of art -tilting at windmills?[J]. Applied Microbiology and Biotechnology, 2013, 97(22):9637-9646.
- [5] Chelazzi D, Poggi G, Jaidar Y, et al. Hydroxide nanoparticles for cultural heritage: Consolidation and protection of wall paintings and carbonate materials [J]. Journal of Colloid and Interface Science, 2012, 392(1):42-49.
- [6] Lagomarsino S, Cattari S. PERPETUATE guidelines for seismic performance-based assessment of cultural heritage masonry structures [J]. Bulletin of Earthquake Engineering, 2015, 13(1):13-47.
- [7] Fanti R, Gigli G, Lombardi L, et al. Terrestrial laser scanning for rockfall stability analysis in the cultural heritage site of Pitigliano (Italy)[J]. Landslides, 2013, 10(4):409-420.
- [8] Banerjee R, Srivastava P K. Reconstruction of contested landscape: Detecting land cover transformation hosting cultural heritage sites from Central India using remote sensing[J]. Land Use Policy, 2013, 34:193-203.
- [9] Duijn M V, Rouwendal J. Cultural Heritage and the Location Choice of Dutch Households in a Residential Sorting Model[J]. Jan Rouwendal, 2013, 13(3):473-500.
- [10] Baglioni P, Chelazzi D, Giorgi R, et al. Colloid and Materials Science for the Conservation of Cultural Heritage: Cleaning, Consolidation, and Deacidification[J]. Langmuir, 2013, 29(17):5110-5