

Effect of Information Technology in Transmitting the Spirit of Place

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Abstract. The spirit of place is the objective reality in people's mind which gives expression to their style of life. More or less, the tangible cultural heritage located in a place could reflect the spirit of place in many ways. The information technology is the newest and the most advanced method among all the traditional and modern ones to transmit the spirit of place with unique effect, being advantageous or not. China Cultural Heritage Information and Consulting Center (CCHICC, Data Center of State Administration of Cultural Heritage) is an institution to manage and deal with all kinds of related data of tangible and intangible heritage in China. Its members have their own valuable experience while devoting themselves to discover, explain, enhance and transmit the spirit of place by utilizing the information technology.

Spirit of place¹ refers to the unique, distinctive and cherished aspects of a place; often those celebrated by artists and writers, but also those cherished in folk tales, festivals and celebrations. It is thus as much in the invisible weave of culture (stories, art, memories, beliefs, histories, etc.) as it is the tangible physical aspects of a place (monuments, boundaries, rivers, woods, architectural style, rural crafts styles, pathways, views, and so on) or its interpersonal aspects (the presence of relatives, friends and kindred spirits, and the like).

The spirit of place can also be thought as some aspects such as ideology, religious or non-religious belief, culture character, which belongs to the objective reality in people's mind reflected in the people's life style. Each place has its unique spirit which makes the place distinctive from others. Therefore, the spirit of place is various, with some similar content. At the same time, any description in words or images can only respect some characters of spirit of place because of the limits of themselves.

Effect of information technology in transmitting the spirit of place

The methods to transmit the spirit of place are changing all the time. In early time, it is oral or action presentation, accompanied with poems, songs, and books, artifacts over a related narrow space and time, with less relation and exchanges with other spirits of places, and the people who live there gain experience from all these aspects through their whole life. The spirit of place has been embedded into the peoples' language and routine action. People traveled less in the past and have little chance to know about and understand other kinds of spirit of place. With the development of information technologies, people can utilize various tools such as telephones, computers to obtain the information they are interested in at any place and at any time. The obvious difference between the past and present locates in whether the content involved in the spirit of place might be changed at aim. Everything will be industrialized in modern time, even culture. T·W·Adorno thought that culture industry melts the old and new things into a newer one, and each branch of the culture processed the information at aim.²

Obviously, information technology is one of the most important methods to demonstrate the information of cultural heritage and transmit the spirit of place, but the much more important thing is how to make the spirit of place understood well and welcomed by people far from the place. Massive works need us to finish. Firstly, enormous information has to be collected, analyzed and displayed, including historical, scientific and artistic documents, files, and pictures on the cultural heritage and the place. Secondly, All the information must be easy to access in order to educate or entertain the public. Then, suggestions, even complaints from the public have to be collected. Finally, the content must be enriched and the quality of these information resources muse be improved, etc. Again and again, step by step, the spirit of place will become clearer and clearer. It is necessary to keep up with its changing and update it constantly because the spirit of place is always changing.

During this period, we have to know that technology is always technology and it means nothing unless it can strengthen the understanding of the spirit of place. The disadvantage for information technology in transmitting the spirit of place usually occur when the method displayed and content adopted are not clear and attractive enough because of limitation of description ability of human beings or the shortcoming of itself. It could mislead or confuse the public when related information on web is added or distracted at will by the

individuals who are in charge of displaying and processing the information. Particularly, the cultural heritage institutions must monitor their open information from time to time.

Experience of CCHICC (China Cultural Heritage Information and Consulting Center)

There are a few institutions in China which can carry out the work to digitalize their data resources, to store and secure them carefully while trying to make the data more useful. The Imperial Palace started to establish its database system which is mainly composed of pictures of its collection in 1999. It has finished the digitalization of the basic information (mainly in words) for 900,000 collections, produced the digital pictures for 140,000 collections by the end of 2004. It owns its LAN in 2002. During 2003 to 2005, the imperial Palace made two large-sized virtual reality videos, *Forbidden City*, *Palace of Emperors*, to reconstruct the images of the buildings from the time of Emperor Kangxi to the time of Emperor Qianlong. Shanghai Museum, Nanjing Museum, Henan Museum and Institute of Dunhuang Mogao Caves have also formed their IT teams to carry out this kind of task. Different from other institutions, the Imperial Palace and Institute of Dunhuang Mogao Caves manage World Cultural Heritages of the same names, their staff know better about the heritage than the others. They are in a favored position in producing and spreading the information on the heritages, and then have the advantage in transmitting the spirit of place combined with their resource.

CCHICC was formed in 2001, with a duty of establishing a governmental website and maintain it for the State Administration of Cultural Heritage of China(SACH). The website was then built with the web address of <http://www.sach.gov.cn/>. There were more than 600 pages of information on news, law, knowledge, institutions introduction, information navigation related with cultural heritage, including more than 200 pictures and 10,000,000 Chinese words. The SACH has been developing Geography Information System (GIS), building Chinese Digital Museum(virtual museum) and improving remote education since that time. Until July, 2008, the website of SACH has been finished very well with much more interesting and useful information and tools than before.

Of course, as the data center of State Administration of Cultural Heritage, CCHICC carries on many tasks such as collecting, storing, administrating, studying Chinese cultural heritage information, training employees for cultural and heritage institutions and helping

them to built their own websites besides maintaining and developing SACH website,. After six to seven year's development, CCHICC has played a very important role in the collection and transmitting of cultural heritage information. CCHICC has been devoting itself to serve the public through developing related database, software and standard.

There are two important programs carried out by CCHICC at present, *Establishing a System of Relics Investigation and Database Management*, and *the 3rd Relics Investigation in China*.

The first program, *Establishing a System of Relics Investigation and Database Management*, started in Sep. 2001 by Chinese Ministry of Finance, Chinese State Administration of Cultural Heritage and CCHICC together, in order to make the situation of cultural heritage clearer, the information of cultural heritage be monitored and managed. At the beginning of this program, only four provinces, Shanxi, Henan, Liaoning and Ganshu were included as pilots. These provinces had finished the installation of special software, and collected 1,540,000 relics' digital information by the end of 2004 under the technology support of CCHICC and fund support of Ministry of Finance and their provincial finance. There have been 11 provinces included in this program till 2008. The system framework of three levels including heritage institutions, provincial and national institutions of administration has been in shape. With the development of this program, many application systems such as Identification System for Relics in or out of China, Examining and Approving System for Archeological excavation and Information Management System for Museum Collections have been studied and developed under the organization of CCHICC. Among these systems, Information Management System for Museum Collections passed the experts' examination.

The second program, *the 3rd Relics Investigation in China* started in Apr, 2007, in order to investigate the cultural heritage wherever on the ground, underground or under water in the territory of the Mainland China (Hong Kong, Macau and Taiwan are not included). Ancient sites, ancient tombs, ancient buildings or structures, ancient rock caves or temples, important modern sites and buildings and others are the six categories took into consideration. This investigation aims at the discovery of new heritage, but at the same time, the original heritage sites which are about 400,000 in registration list will be checked again. This investigation will go on until Dec., 2011. There were two heritage investigation carried out in China before 2007, the first investigation was started in 1956 and the second in

1981. Different from these two investigations, the 3rd investigation utilizes the information technology. CCHICC is in charge of the development of related software, the drafting of related standards, the training of technicians and the final collection and study of data.

Someone thought that the key aspects of digitalization and data transmitting of cultural heritage are data, standard and software. Data is the soul, standards are methods and software is the tool.³ Without doubt, these three aspects are also the basis of transmitting the spirit of place.

During the year 2003 to 2005, CCHICC organized some institutions to carry out the study of rules and standards based on the work of *Establishing a System of Relics Investigation and Database Management* program and related state laws. The three standards of Administration Rules to Pilot Provinces, Standard for Recording the Information Items of Museum Collections, Standard for Collecting and Updating Information of Museum Collections have been drafted after research. CCHICC always pays particular attention to problems such as:

- a. The stability and usability of data. Only information of a few tangible and movable cultural heritages in a few provinces can be collected and stored by CCHICC, and the quality of data is out of control.
- b. Planning and drafting a standard and extensive system. Standards are seriously in lack due to the complicated procedure and complexity of metadata
- c. Software is underdeveloped, and can not meet well the need of heritage institutions. At the same time, the performance of software has to be improved.
- d. All provinces of China own some of their cultural heritage which can reflect their spirit of place. However, men who understand the spirit well are very difficult to find. Even we've found such a man, it will take a long time to contact with him, to make him understand what we need and to find a better way to demonstrate and transmit the spirit of place.
- e. Generally, better the data is, more difficult to get it because of administration limit or intellectual property right.

The digital course of tangible cultural heritage in China has been on for many years. The categories, quantity, range of the documents become more and more abundant, basic data about the cultural heritage is larger and larger. So, how can CCHICC deal with the data? If all the data is stored unutilized, it means nothing. CCHICC has to think about the problem and make great effort to solve it. The data

collected by CCHICC is very useful for government, but it has not become cultural and educational resources for the public. In fact, the data is not meaningful enough to reflect the spirit of place where the cultural heritage locates. In other words, more useful and meaningful data has to be collected, analyzed in order to accumulate cultural and educational resources. CCHICC has a long way to go for its duty.

Examples

There is a topic named **historic cities** in the website of State Administration of Cultural Heritage (www.sach.gov.cn). Under this topic, only the names of the historic cities in China are displayed with no further information about each city. CCHICC is going to add some contents and links to **historic cities**. For example, Beijing is the capital city of China, it has been the capital of China for a long time and it is well known for its unique character. There are six World Heritage sites in Beijing including the Great Wall, the Forbidden City of Ming and Qing Dynasty, the Zhoukodian Pithecanthrope (ape man) Site, the Imperial Altar, the Imperial Garden, and the Tomb Building of Ming and Qing Dynasty. Not any other cities in China can own as many World Heritage sites as Beijing. Then, what is the spirit of these sites? Is there a spirit which can be named as Beijing Spirit? If so, how can we reflect it with information technology? The answers are still not known by CCHICC.

On the assumption that there is a unique spirit of place named Beijing Spirit. However, neither the Great Wall nor the Zhoukodian Pithecanthrope (ape man) Site can reflect this kind of spirit of place because that the Great Wall is not only own by Beijing but also own by many other provinces or cities, while the Zhoukodian Pithecanthrope (ape man) Site is prehistorical. The other four heritages have close contact with the emperors in Ming Dynasty and Qing Dynasty although there is no emperor in Beijing now. There are more scientists, artists, historians, economists and politicians in Beijing than in any other cities. Beijing is a city composed of emperor blood and populace blood, it is good at melting two kinds of blood, get nutrition from them, become more and more advanced and attractive. Chinese government pays more attention to the protection and conservation of other kinds of spirit of place in other provinces but neglect the conservation and protection of Beijing Spirit. Maybe

due to the Chinese proverb, “Distance brings about beauty”, that is, further it is, more attractive it might be.

In fact, the Beijing people (who live in Beijing for more than twenty to thirty years) have their own dialects, hobbies, food, artifacts, etc. There are a lot of literature works, movies and pictures to reflect these elements. A special study focused on Beijing has appeared. Even so, Beijing people are losing their local culture because of the rapid urban development of Beijing. Contrasted with Beijing local culture, foreign cultures are more welcome to young people in Beijing. Something has to be done to conserve the Beijing Spirit. CCHICC is going to collect documents and information about Beijing and Beijing people under history, politics, art, science, technology, exchange, etc. The staffs of CCHICC are going to analyze the spirit of Beijing by referring to a thematic framework built by ICOMOS⁴ as follows:

I_Cultural Associations

Human interaction in society
Cultural and symbolic associations
Branches of knowledge

II_Expression of Creativity

Monuments
Groups of buildings
Sites

III_Spiritual Responses

Ancient and indigenous belief systems
Buddhism
Confucianism, Taoism
Christianity
Islam

IV_Utilization of Natural Resources

Agriculture and food production
Mining and quarrying
Systems of manufacturing

V_Movement of People

Migration, Nomadism, Slavery
Routes and systems of transportation

VI_Development of Technologies

This is a comprehensive and perfect framework for analysis, but there is another problem here. The tangible cultural heritage is administrated by State Administration of Cultural Heritage, and intangible cultural heritage is administrated by other institutions of

Ministry of Culture, Ministry of Education or other ministers such as Land and Resources Minister, Administration Bureau of Religious Affairs, etc. That is to say, most of men who understand the spirit of place well in those institutions are not so easy to join in us and work together. The situation of administration of cultural heritage in China is different from many Europe countries. For example, there is only one ministry, Ministry of Culture, to manage the cultural heritage in Italy, and the staff in different heritage institutions could work together, and information exchange become easy and fast. Therefore, CCHICC has to contact with the intangible heritage experts on its own initiative in order to go further and further in transmitting the spirit of place.

It is certain that one part of the spirit of place can be seen in cultural heritage because they have come through from the past. There are two examples here.

One is the site of Yin Xu, which spreads across the Huanhe River in the northwestern downtown area of Anyang City in Henan Province, is the site of the capital of the Late Shang Period. Among such capitals recorded in Chinese historical sources it was the first to be confirmed by modern archaeological excavations and contemporary oracle bone inscriptions. Yin Xu is also an important representative of Bronze Age civilizations worldwide. Besides the oracle bone inscriptions, the other major type of find that has attracted a lot of study both in China and abroad is the ritual bronze vessels which played important functional roles during the time of their use. They can also be considered as magnificent pieces of art. Other find also show that the Shang also excelled in jade, bone carving and ceramic manufacture. As we know that Yin Xu has little historical and cultural link with Anyang City or Henan Province because of isolation over 3,000 years. No one will think that there is a kind of spirit of Yin Xu similar to the spirit of Anyang City or Henan Province. Only when we link it with the whole history of China, we can discover that it reflects some kinds of spirit of China.

Another is the group buildings of Kaiping Diaolous in Guangdong Province. It is much newer than Yin Xu. The oldest one of Kaiping Diaolous was built in late Ming Dynasty or early Qing Dynasty and most of them were built in 1920s to 1930s. These Diaolou buildings combined the Chinese traditional building elements with European architectural elements during the seventeenth and eighteenth century. People lived in Diaolous treat them as homes in normal time and as military buildings when combats with cracksman were unavoidable. It

links tightly with the place and the people in Kaiping, and it should reflect one part of the spirit of Kaiping.

In a word, Cultural heritage can reflect the spirit of place more or less whatever and wherever it is. What we can do is to find and transmit the spirit through information technology. Information technology has gone deep into modern society. GIS, GPS, RS are applied in many fields, and they are not strange words for the public anymore. In the field of conservation of cultural heritage, besides the application of GIS, GPS and RS, many kinds of digital technology and related equipment are widely used. More and more information products have been developed through information technology. It is now possible for people to access to cultural and educational resources on line, sometimes to take interesting experience in some of them. More and more museums change exhibition ways of their collections and information through multi-media technology, 3D technology, virtual technology, etc.⁵ In China, the Imperial Palace and the Museum of the Terra-cotta Warriors and Horses of Qinshihuang (<http://www.bmy.com.cn/index.htm>) have made some wonderful production. CCHICC has also developed some video or pieces of works for introducing the Chinese cultural heritage (<http://www.sach.gov.cn>). It is very expensive for heritage institutions to make IT products to display their resources at present. It is necessary for them including CCHICC to make better products on cultural heritage and finally to transmitting the spirit of place, to cooperate with each other in the future, to obtain new spot light.....It will be another Long March.

Maybe we should look into other fields such as commerce and art to get some useful tips. For example, the old marks with a long history in Beijing and Tianjing are seeking their chance on line.⁶ And the students and teachers in Beijing Secondary School of New and Advance Technology made up a 3D digital works on Beijing Opera which depicts a famous story in *Water Margin* (with another name as *Outlaws of the Marsh*). It is a kind of new media art combining the traditional art of China with the new information technology.⁷

Conclusion

It is a new trend that information and communication technologies will play an important role in spreading the information of Cultural heritage and transmitting the spirit of place. It is a duty for cultural and heritage institutions to serve their resource to the public with new information and communication technologies.

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