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THE DEVELOPMENT OF PROTECTION ACTIVITIES FOR CHINESE ARCHITECTURAL HERITAGE AND ITS UNIQUE CONSERVATION CONCEPTS

ABSTRACT

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The historic architectural heritage of different regions has unique construction methods due to different geographical characteristics and cultural backgrounds. The methods of maintenance applied to them are also wide ranging. China's historic wood-framed architecture has its own characteristics, very different from that of Western architecture. The craftsmen who work on these structures have accumulated a wealth of conservation concepts and techniques suitable for Oriental architectural features over time. With the introduction of international heritage conservation policy, the Chinese government has developed its own conservation principles. These principles were adapted from international policies to suit traditional Chinese conservation experience, forming unique concepts of authenticity and integrity, as well as different conservation methods where necessary. The purpose of this paper is to introduce the development of Chinese architectural heritage conservation policy and analyse unique conservation concepts according to architectural heritage characteristics, as well as to highlight problems which China's architectural heritage has faced.

KEYWORDS: architectural heritage, China, protection activity, conservation concepts

1. Introduction

Historic buildings are living archives which witnessed the development of culture, technology, art and society in a region. Protecting this precious legacy is the responsibility of all mankind. However, historic buildings face various disaster risks, both natural and man-made, and the pressures of social development, which endanger these structures. Also, ongoing urbanization has increased the vulnerability of historic buildings. Inadequate urban planning, deliberate demolition, poor reconstruction and management issues can pose serious threats to cultural heritage sites. The number of sites is decreasing, and their quality is rapidly declining. The development of appropriate policies and legislation is necessary to protect architectural heritage for future generations. International heritage policy plays an important role in guiding the direction of legislation and regulation of architectural conservation worldwide.

Due to the differences in geographical location, cultural background, philosophy, lifestyle, etc., Chinese conservation policy possesses obvious unique Oriental characteristics. When Chinese traditional conservation methods encounter western policies, the ability to form legislation that adapts to international principles while maintaining local characteristics are an important issue.

1.1 The Concept and Value of Architectural Heritage

Architectural heritage is a historical legacy with artistic, cultural and scientific values which have been passed down through multiple generations. As awareness grows, architectural heritage laws and practice have developed to be mature international policies. In the *Convention concerning the protection of the World Cultural and Natural Heritage*, architectural heritage was defined as the groups of separate or connected buildings that have outstanding universal value from the point of view of history, art or science¹. In addition to the most important monuments, the *European Charter of Architectural Heritage* clearly states that architecture heritage also includes the groups of lesser buildings in characteristic old towns or villages².

1 UNESCO, *Convention concerning the protection of the World Cultural and Natural Heritage*, 1972, <https://whc.unesco.org/en/conventiontext> (accessed: 10.01.2019).

2 Council of Europe, *European Charter of Architectural Heritage*, 1975, <https://www.icomos.org/en/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/170-european-charter-of-the-architectural-heritage> (accessed: 10.01.2019).

With an increasing awareness of heritage interpretation and heritage integration into a contemporary context for present purposes, people pay more attention to the usage of architectural heritage. *The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas* proposed social values which connected with a social fabric, spirit of place, tangible and intangible elements that give an area specific identity, meaning, emotion³ which indicates the important role of architectural heritage in our present life. *The Florence Declaration* emphasizes the human values of cultural heritage in building a peaceful and democratic society⁴.

Preserving and using architectural heritage in our present society, therefore, will significantly benefit us in various aspects, such as strengthening local identity, revitalizing local economics, creating job opportunities and stimulating a sense of pride in residents, etc. Meanwhile, it should be noted that architectural heritage holds values not only for individual nations, but for all humankind; not only for our present generation, but future generations as well. Therefore, it is our duty to protect architectural heritage, revitalize it, integrate it in contemporary society, and pass it on to the next generation in good condition.

1.2 The Characteristics of Historic Chinese Architectural Styles

As a foundation of Chinese civilization, Chinese architecture developed “an indigenous system of construction that has retained its principal characteristics from prehistoric times to the present day.”⁵ Of course, there are various types of architecture which are associated with different geographic regions, status or affiliations, but the main styles of Chinese architecture possess common features such as a wooden structure, enclosed courtyard space, axis symmetry, the hierarchies system, horizontal emphasis, brilliant architectural painting and symbolism, which are mostly affected by the traditional Chinese concepts such as Confucianism, Taosim, Feng Shui, etc.

3 ICOMOS, *The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas*, 2011, https://www.icomos.org/Paris2011/GA2011_CIVVIH_text_EN_FR_final_20120110.pdf (accessed: 12.01.2019).

4 ICOMOS, *The Florence Declaration*, 2014, https://www.icomos.org/images/DOCUMENTS/Secretariat/2015/GA_2014_results/GA2014_Symposium_FlorenceDeclaration_EN_final_20150318.pdf (accessed: 12.01.2019).

5 Gao Jianping, *Aesthetics and Art: Traditional and Contemporary China in a Comparative Perspective*, Springer 1984, s. 66.

Most historic Chinese architecture is framed in wood. In ancient China, wood was adopted often as a primary building material not only because of its availability and simpler basic construction, but also because Chinese people believe that “life is connected with nature and humans should interact with animated things.”⁶ The permanent maintenance needs of a living structure are not particularly sought after in normal life. Therefore, the wood material beam-column structure was very commonly adopted in ancient Chinese architecture. The Tailiang type (抬梁式) in the northern area and the Chuandou type (穿斗式) in the southern area are the two main wood structural styles. The wood components are connected by semi-rigid structural joints Sunmao (榫卯) and unique support Dougong (斗拱), which make the buildings flexible and easy to disassemble for repair and replacement. For example, the Yingxian Wooden Pagoda built in 1056 is the oldest all-wood pagoda in China. Due to its unique flexible technique, it has survived numerous earthquakes for nearly a thousand years. It is also worth mentioning the emergence of skyscrapers internationally that are being built in an architectural style derived from historic Chinese architectural wood design concepts.

Historically, Chinese architecture is known for its symmetrical layout and directional hierarchies. The central courtyard is the basic layout form of most Chinese historic building groups. It is an inward enclosed open space, which follows a axis symmetrical principle. The main buildings are “Aligned along a north/south axis, with the building facing south and the two sides facing East and West respectively”⁷. The order of alignment presents strongly hierarchical thinking. Starting from the entrance, the space moves from open to closed, from public to private, from low rank to high rank. Siheyuan (四合院) in Northern China and Tianjing (天井) in Southern China are typical examples.

Chinese architecture possesses a horizontally developed lowering façade. Due to the philosophy of integration into nature and the limitations of wood construction, other than some special function structures, most classical Chinese buildings normally have one or two floors. The façade stresses the visual

6 Li Lin, Tang Lei, Zhu Haihong, Zhang Hang, Yang Fan, Wenmin Qin, *Semantic 3D Modeling Based on CityGML for Ancient Chinese-Style Architectural Roofs of Digital Heritage*, “ISPRS International Journal of Geo-Information” 2017, no. 5, p. 132.

7 Kohrman Matthew, *Technology and Gender: Fabrics of Power in Late Imperial China*, “American Anthropologist” 1998, no. 100, p. 236–236.

impact of the width instead of height, because buildings that were too high were considered unsightly⁸. Even in the Forbidden City, as the premier Imperial architecture group the highest hierarchy possible, the Halls and Palaces have rather low ceilings, compared to equivalent western stately buildings.

Ancient Chinese buildings have brilliant colors and decorations, which not only beautify the facade but also clarify the building's hierarchy. The colours, images and sculptures were chosen vary according to the grade of the building, the location of the component and their material properties. In particular, the surface of the wood is painted with brilliant colors and patterns for protecting the material against weathering, corrosion, pestilence, wear and tear, etc. In addition to the decorative and hierarchical functions, the colors, sculptures and other decorations combine with the whole building and its environment to show a unique artistic realm and acquire spiritual meaning through metaphors and symbols. Furthermore, since ancient times, Chinese architecture have used concepts of Feng Shui⁹ to organize layouts and structures from common residences to Imperial and Religious structures¹⁰. Most Chinese ancient buildings adopt layouts "orienting the structure with its back to an elevated landscape and ensuring that there is water in the front"¹¹, trying to avoid adverse geographical and weather conditions, and at the same time seek methods to integrate themselves into nature.

2. The Development of China's Architectural Heritage Protection Policy

Architectural heritage is a part of cultural relics in China, which are called Architectural Relics (文物建筑). Chinese historic documents of cultural relics research can be dated back to 17th and 18th centuries¹², but the

8 Li Yih-yuan, *Chinese Geomancy and Ancestor Worship: A Further Discussion*, Ancestors, ed. William Newell, Mouton: The Hague 1979, p. 329–338.

9 Feng Shui (wind-water in English) was widely adopted to orient significant structures such as tombs, dwellings and other buildings in ancient China.

10 Knapp Ronald G., *Chinese Houses: The Architectural Heritage of a Nation*, Tokyo: Tuttle Publishing 2006.

11 Kohrman Matthew, *Technology and Gender: Fabrics of Power in Late Imperial China*, "American Anthropologist" 1998, nr 100, p. 236–236.

12 Guangya Zhu, *China's architectural heritage conservation movement*, "Frontiers of Architectural Research" 2012, no. 1, p. 10–22.

consciousness of preserving and reusing historical buildings has existed since ancient times. The typical case is the Forbidden City that was built in 1406 during the Ming Dynasty. It was once preserved and reused by 24 emperors as their palace. During this process, numerous craftsmen who maintained the buildings developed unique restoration techniques. The legislations on historic architecture are the important part of cultural relics conservation law which have been promulgated in feudal period. In 1906, the later Qing dynasty government promulgated *Promotional Measures on Conservation of Antiquities*, requiring the regional governments to investigate all heritage sites and report their findings to the Ministry¹³. In 1916, *Provisional Regulation on the Conservation of Antiquities* was promulgated and defined five categories of antiquities, architectural relics such as the tombs of royals and their predecessors, places of interest were included¹⁴. But conscious consideration of protection of historical architecture with respect for heritage value was rare in that time.

2.1 Exploratory Stage: Before the Founding of People's Republic of China

Until 1919, the theoretical research and practice of protection activities that took into account the heritage value of ancient architectures began with the re-publishing of the 12th century book *Yingzao Fashi* (营造法式)¹⁵. In 1929, Zhu Qiqian, the former Minister of Public Works and Deputy Premier, initiated the Society for Research in Chinese Architecture (Yingzao Xueshe 营造学社) to study historic architecture in China. The society members such as Liang Sicheng, Liu Dunzhen, etc. devoted many years to the surveying, mapping, researching ancient architectures, publishing a series of books such as *Qing Structural Regulations* (清式营造则例), *Compilation of the Society for Research in Chinese Architecture* (营造学社汇刊), recording precious materials and research results¹⁶. From that beginning, modern conservation concepts and practices began to develop.

¹³ Zuozhen Liu, *The Case of Repatriating China's Cultural Objects*, Springer 2016, s. 42.
¹⁴ *Ibidem*.

¹⁵ The first official book on technical treatise on Chinese architecture and craftsmanship written by Li Jie in Song Dynasty of China.

¹⁶ Lin Zhu, *A History of the Society for Research in Chinese Architecture*, Tianjin: Baihua Literature and Art Publishing House, 2008.

Due to the civil war and Second World War, cultural heritage sites in most areas of China suffered trauma. In 1928, the Chinese Ministry of Interior Promulgated *Regulations Governing the Preservation of Scenic Resorts, Ancient Remains and Relics*, and established the Central Commission for the Preservation of Antiquities¹⁷. In 1930, *The Law on the Preservation of Antiquities* was promulgated, which is the first legislation issued by a Central Government in China, governing preservation, ownership, excavation, circulation and the export of antiquities¹⁸. In 1932, the first heritage management department, the Antiquities Preservation Central Committee was established. In 1935, the Ancient Capital Cultural Relics Organizing Committee was specially formed to protect the architectural heritage sites of Beijing (now Beijing). In 1944, the Cultural Relics Preservation Committee in War Zones was set up to compile a *Catalogue of Wartime Cultural Relics* for the avoidance of war damage. During this period, rescuing and preserving architectural heritage was the main task in Chinese heritage policy.

2.2 Fundamental Stage: From 1949 to the End of 1970s

Efforts to effectively protect architectural heritage with law can be seen from the PRC's foundation¹⁹. Due to resistance to the old Imperial society and its Republican hangover, added to the large-scale construction demands of the new society period, the status of ancient architecture protection in the beginning of the New China was not optimistic. For this phenomenon, the new government circulated special instructions to protect important ancient buildings. In 1949, under the appointment of newly organised Central Departments, Liang Sicheng organised and compiled the *Outline of National Important Architectural Relic* and attached the *Guidelines for the Maintenance of Ancient Buildings*, emphasising the daily maintenance needs, environmental protection methods, moisture prevention, fire prevention, and theft prevention for ancient buildings. Even though these efforts were made, there were still huge numbers of historic buildings destroyed. A typical occurrence was the demolishing of ancient city walls and many historic buildings in Beijing due to new city construction.

17 Zuozhen Liu, *The Case...*, s. 43.

18 Hsiang-yu Huang, *Background Analysis of the Birth of Legalization of Antiques Preservation (1911–1930)*, "Journal of the National History Academy" 2012, p. 22–26.

19 Zuozhen Liu, *The Case...*, s. 41.

In 1953 and 1956, due to the serious destruction of cultural relics occurring in urban construction and agricultural production, the government issued a series of notices and instructions protecting cultural relics, and proposed various ideas to integrated the cultural relics into the present plans of city construction. In 1960, the State Council issued the *Provisional Regulations on the Administration of Cultural Relics Protection*, promoting the specialization and systematization of cultural relics protection and management system. Since then, a hierarchical protection system was established for preserving and managing cultural relics according to national, provincial, municipal and count level. In 1961, the State Council issued the *Instructions of the State Council on Enhancing the Protection and Management of Cultural Relics*, and released the first batch of national key cultural relics, including sites, ancient buildings, historical monuments, temples, stone carvings, sculptures and ancient tombs.

For ten years during the Chinese Cultural Revolution, many cultural relics were destroyed. Change was finally made in 1974, the State Council issued the *Notice on Strengthening the Protection of Cultural Relics*, and emphasizing the “authenticity” preservation concept, opposing the reconstruction of the damaged cultural relics. During this time, administrative orders were the main norms for cultural relics protection, and the scope of cultural heritage was limited to the monument. The idea of combining heritage protection with new urban construction began to sprout.

2.3. Open Communication Stage: From 1978 until 2000

Since the promulgation of the reform and opening-up policy in 1978 which resulted in leap in economic productivity, an open-mind to new proposals in many areas of governance, and more opportunities to communicate with world, the theory and practice level of Chinese architectural heritage preservation reached a new stage. In 1979, The State Administration of Urban Construction puts forward *Opinions on Strengthening Urban Landscaping Work*, stipulating the protection of cultural relics and historic sites in scenic areas.

1982 is the key year in the field of Chinese cultural heritage protection. On February, the State Council approved the concept of National Famous Historical and Cultural City, released the *Notice on the Approval and Release of the Request of the National Construction Commission and Other Government Departments for the Protection of Historically and Culturally*

Famous Cities in China, and published the *First List of Historically and Culturally Famous Cities in China* in addition to the *First National List of Major Scenic Spots in China*²⁰. Later, the State Council proposed the concept of Historical and Cultural Areas which aimed to protect urban blocks and rural areas which are not famous but possess historic and cultural significance. Since then, the protection of individual monuments has been combined with their surroundings, extended into historical areas and the concept of integrated protection of architectural heritage has been promoted. In November, the Standing Committee of the 5th National People's Congress promulgated the *Law of the People's Republic of China on Protection of Cultural Relics* as a basic national law. In doing so, the protection system of Chinese cultural relics has risen to the level of the National Constitution. Combined with the specific conditions of different development periods, this law has been continuously revised in 1991, 2002, 2007, 2013, 2015 and 2017 respectively. In this way, China developed a relatively comprehensive conservation legislation for protection of cultural heritage.

Finally, in 1985, China became a High Contracting Party of the *UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage*. From 1986, China began to identify and nominate its heritage sites. At the same time, the Academic Committee for the Protection of Historical and Cultural Cities was established, organizing several conferences on strengthening the protection of ancient Chinese cities. In 1988, The Ministry of Construction and the Ministry of Culture jointly issued the joint *Notice on Key Investigations and Protection of Excellent Modern Buildings* to survey and preserve buildings which were built during 1840–1949.

In 1992 and 1993, the Government issued the *Rules for the Implementation of the Law on Cultural Relics Protection* and the *Regulations on the Protection of Historical Cultural City*. In 1996, an International Conference on the Protection of Historic Districts was held in Tunxi. Added to this, in 1998 an International Conference for Mayors of Historic Cities in China and the European Union was held in Suzhou. The meeting adopted the *Suzhou Declaration on International Co-operation for the Safeguarding and Development of Historic Cities*, which encouraged States to:

²⁰ Zheng Jun, *Comparison of Heritage Conservation Philosophies in China and Other Countries*, "International Principles and Local Practices of Cultural Heritage Conservation Conference Proceedings". Tsinghua University/ICOMOS China, Beijing 2014, p. 40–61.

develop an effective conservation policy particularly through urban planning measures to preserve and rehabilitate historic urban districts, respecting their authenticity” and “promote sustainable development of historic cities, towns and districts of different cultures, ecological environments in different stages of evolution.”²¹

In 1999, China became a member state of the World Heritage Committee.

In 2000, China ICOMOS (International Council on Monuments and Sites) promulgated the *Principles for the Conservation of Heritage Sites in China* with the approval of the State Administration of Cultural Heritage (SACH), which drawing up with the assistance of the Getty Conservation Institute and Australian Heritage Commission. The concepts of relic preservation gradually transformed into cultural heritage conservation. Chinese preservation systems were gradually integrated into international policies regarding cultural heritage protections.

2.4. Maturity Stage: Forming the Chinese Characteristics of Preservation Concepts with Respect for International Policies

Entering the 21st century, with the large scale of construction and the updating of living facilities, a large number of unlisted historic buildings and districts were destroyed, which greatly aroused the public’s enthusiasm to study and protect their traditional heritage. At the same time, international communication and exchanges in the field of heritage protection had an unprecedented increase in activity. Numerous important international conferences on architectural heritage were held in China, including the UNESCO International Conference on Cultural Heritage Management and Urban Development: Challenge and Opportunity held in Beijing in 2000; the 28th Session of the World Heritage Committee held in Suzhou in 2004; the 15th ICOMOS General Assembly held in Xi’an in 2005; the 2nd International Conference on Heritage Conservation and Sustainable Development held in Shaoxing in 2006. With these conferences the conservation policies of architectural heritage were also produced. International

²¹ The International Conference for Mayors of Historic Cities in China and the European Union, *Suzhou Declaration*, 1998, <http://whc.unesco.org/archive/suzhou.htm> (accessed: 16.01.2019).

conservation principles gradually became the main guiding ideology in Chinese architectural heritage conservation projects.

During this period, national legislations and academic activities were strengthened. In 2005, the State Council issued the *Notice on Strengthening the Conservation of Cultural Heritage*, stated basic principles, overall goals and major measures, which reached a new level of the heritage conservation in China. Since 2006, the State Administration of Cultural Heritage (SACH) has annually organized the Wuxi Forum on the conservation of China's cultural heritage, focusing on conservation and utilization of cultural heritage, industrial heritage, sustainable development of World Heritage Sites, strengthening the legal protections system, and discussing the new types of architectural heritage such as vernacular buildings, twentieth-century heritage, cultural routes, heritage canals, and other sites.

However, concerns over specific conservation principles, the application of international conservation methods in Chinese heritage site projects has caused numerous problems. Domestic heritage protections began to realise that international conservation principles cannot be directly applied to the unique nature of traditional buildings within China. Many well-trained heritage protection experts have put forward their own views, in part to defend Chinese conservation methods. Forming specific Chinese principles with their own characteristics is essential to promote harmony in the understanding and promotion of domestic cultural heritage affairs.

In 2005, the *Symposium of Contemporary Architectural Heritage Scholars* was held in Qufu, resulting in the adoption of the Qufu Declaration. This is a specific principle developed for Chinese architectural heritage conservation, based on decades of experience in traditional Chinese architectural protection practices.

Meanwhile, numerous international conferences were held to discuss architectural heritage conservation methods for the Orient. In 2007, SACH²², ICCROM²³, ICOMOS and the UNESCO World Heritage Centre held an International Symposium on the Concepts and Practices of Conservation and Restoration of Historic Buildings in East Asia in Beijing. This conference addressed the concerns and recommendations of the 30th Congress of the World Heritage Committee on the current restoration work of the Forbidden City,

22 State Administration of Cultural Heritage in China.

23 International Centre for the Study of the Preservation and Restoration of Cultural Property.

the Temple of Heaven and the Summer Palace in Beijing and following-up to the disputes arising between western and eastern world on the conservation principles. *Beijing Document on the Conservation and Restoration of Historic Buildings in East Asia* was produced. In 2008, the International Symposium on the Conservation of Painted Wood Architectural Surfaces in East Asia held in Beijing. Finally, the *Beijing Memorandum on the Conservation and Restoration of Caihua (decorative painting on wood) in East Asia* was adopted.

In view of the new international policy concerning Oriental practices, materials, and techniques, and the discussion of domestic architectural heritage experts on the protection of architectural heritage with Chinese characteristics, in 2010, it was decided to revise *Principles of the Conservation for Heritage sites in China*. The new edition which published in 2015 reinforces protection methods with Chinese characteristics on architectural heritage, and answered questions that were not resolved in previous versions. For example, on the issues of replacement, reconstruction, authenticity, and architectural painting methods.

During this time, based on international policies and domestic characteristics, China has developed its own principles for heritage site conservation. At the same time, the legislation concerning heritage protection has been further improved, the research into the results of heritage protection have increased significantly, and China's traditional conservation concepts to architectural heritage is gradually taking shape.

3. Chinese Unique Conservation Concepts

The *Qufu Declaration* stated that ancient Chinese architecture with wood structure is unique. It possesses distinctive features which are very different from Western architecture in terms of materials, technology, construction, damage characteristics and protection methods²⁴. Therefore, it is necessary to formulate conservation principles, policies and methods with respect for Chinese characteristics and the status quo.

Due to the vast differences between Chinese and Western principles on geographic environment, culture, artistic and techniques, the architectural heritage preservation concept is very different in concept and practice.

²⁴ Zhewen Luo, et al., *Qufu Declaration: Consensus on the theory and practice of architectural relics conservation with Chinese characteristics*, 2005, <https://wenku.baidu.com/view/01611c43011ca300a6c3907b.html> (accessed: 20.01.2019).

Additionally, the differences in structures and materials between Western and Eastern architecture also produced a variety of conservation methods. In the practice of repairing ancient buildings, China's ancient craftsmen have accumulated a wealth of successful experience. When international conservation concepts which are substantially different from the Chinese experience were introduced to China, local scholars and craftsmen were confused, resulting in issues with implementation.

However:

Value and authenticity of architectural heritage cannot be based on fixed criteria because the respect due to all cultures also requires that its physical heritage be considered within the cultural context to which it belongs.²⁵

Therefore, simply accepting all international conservation methods was not suitable for architectural heritage in China, which had to develop its own characteristics. In some cases, implementing Western practices would damage these structures. Based on the constant renewal and deepening of the international understanding on the value, authenticity and integration of domestic practices, China's unique conservation methods on architectural heritage are strongly supported globally.

3.1. On the Value of the Intangible Architectural Heritage

In international policy, architectural heritage belongs to the tangible cultural heritage group because of its physical attributes. However, buildings do not exist in isolation. In ancient China, intangible factors of architectural heritage were specially emphasised. Taoist philosophy profoundly influenced the culture of architecture, stressed the relationship of "Being (有)" and "Not-being (无)" which indicates the importance of intangible aspects of objects in Chinese culture. Intangible culture is always an essential element of building. Therefore, Chinese ancient architecture is not only concerned with the physical form of appearance, structure, and materials, but also the intangible heritage including aesthetic, lifestyle, handcrafts and cultural connotation behind of the architectural heritage.

Chinese conservation concepts, therefore pay attention to the restoration of the whole, including the spirit of architectural relics. The ultimate

25 ICOMOS, *Principles for the Analysis...*

goal of restoration is not only the building itself, but spirit and culture behind it. Article 11 in the *Qufu Declaration* declared that the protection of architectural relics not only protects the relics themselves, but also their traditional culture, materials and crafts. Otherwise there is no relic protection at all²⁶.

In actuality, the authenticity and integrity of the Chinese conservation principles are closely related to the intangible cultural heritage.

Intangible heritage is an important medium for retaining the significance at a site and is a 'living' attribute. Conservation of these types of sites must also include intangible forms of cultural heritage.²⁷

Therefore, in Chinese conservation concepts, the preservation of intangible element of architectural heritage is as important as the tangible elements. Without intangible elements, tangible elements of architectural heritage will be changed easily or may even be demolished. For example, the former residences of historical figures without their historical and cultural significance are only common houses which can be easily transformed or torn down. It is the intangible cultural spirit behind these ordinary and even shabby looking homes that demonstrates the value of these buildings.

3.2. Concerning the Original Condition

International heritage policy stated that:

Imperfections and alterations, when they have become part of the history of the structure, should be maintained so far so they do not compromise the safety requirements.²⁸

Preventing changes to the original condition is the essence of cultural heritage preservation. However, what does the "original condition" refer to? Is it the current status, the historical situation, or the state of the best period of cultural heritage? In Chinese conservation principles, keeping the

²⁶ Zhewen Luo, et al., *Qufu Declaration...*

²⁷ ICOMOS China, *Principles for the Conservation of Heritage Sites in China*, Beijing: Wenwu Press 2015.

²⁸ ICOMOS, *Principles for the Analysis...*

original condition is also the basic requirement, but the understanding of “original condition” is unique, due to the long period of use and the resulting changes in Dynastic ideals over the centuries.

In the *Qufu Declaration*, the original condition is defined as “the healthy state of cultural relics, not the existing state of destruction, distortion, or wear”²⁹ and pointed out that

for damaged architectural relics, as long as they are carefully repaired according to the original prototype, original materials, original structure and original crafts, their scientific value, artistic value and historical value still exist.³⁰

Chinese conservation principles states that the original condition involves a combination of the existing condition and a restored historic condition. In the understanding of the preservation or restoration of a site, it is considered that any damage must be preserved for research value and commemorative significance³¹. But on the other hand,

Where there exists sufficient physical remains to reveal the historic condition of a small number of missing parts, and where there are no physical remains to reveal the original condition of a small number of missing or altered components, but where after scientific investigation and comparison with components of the same type and period, the original condition can be determined.³²

The spatial integrity of Chinese architecture reflects ritual and spirit of the space. The incompleteness of the building will lead to a weakening of spiritual essence. The overall layout of Chinese architecture is also a reflection of intangible cultural heritage such as Taoist, Confucianism philosophy and Feng Shui concept. Therefore, if a defect is the result of vandalism, or natural disaster without commemorative significance or research value, it is necessary to restore it to the original condition based on authentic information.

29 Zhewen Luo, et al., *Qufu Declaration...*

30 *Ibidem.*

31 ICOMOS China, *Principles for the Conservation...*

32 *Ibidem.*

3.3. On Dismantling and Reassembly Restoration

International conservation policy stressed that:

Each intervention should be in proportion to the safety objectives set, thus keeping intervention to the minimum to guarantee safety and durability with the least harm to heritage values³³ (...) deteriorated structures whenever possible should be repaired rather than replaced.³⁴

However, most of China's architectural heritage uses wood structures which is not easy to sustain for a long period, even with regular preventive maintenance. Article 4 of *Qufu Declaration* declares that the main disadvantages of Chinese wood-framed buildings are that:

they are easily decayed, wormed and burned. Decay is the most important problem. The most perishable part of the timber frame is the wooden pillars buried in the walls and roofing wood beams, (...) The rotted root can easily cause the sinking of the column which will then cause the upper frame to deform, allowing the roof to leak. The result is that the leaking roof will increase the risk of damage to the timber frame.³⁵

Therefore, it is not realistic to preserve the original structure when it has serious rot damage. In this case, the decaying materials have to be replaced to ensure the safety of the entire building and any visitors.

In addition, the structures of traditional Chinese wood building are connected by special non-rigid joinery Sunmao (榫卯), which make the buildings flexible and at the same time make it easy to disassemble, replace and repair. The article 6 in *Qufu Declaration* stated that:

the dismantling of wooden structures is one of the important methods for its restoration. It is a thorough and effective traditional repair method for architectural relics.³⁶

But at the same time, the process of dismantling and reassembly restoration should be prudent. It has been found that:

³³ ICOMOS, *Principles for the Analysis...*

³⁴ *Ibidem.*

³⁵ Zhewen Luo, et al., *Qufu Declaration...*

³⁶ *Ibidem.*

this method should only be used when the wood structure has deep damage to the whole or key parts and cannot be solved by other methods.³⁷

Beijing Document highlighted that:

All works should be properly recorded... Replacement timber should be used with due respect to relevant values.³⁸

Additionally, any significant material removed from the site should be preserved for research and education³⁹. China Principles also emphasized that:

Major restoration through complete disassembly of a structure should be avoided as far as possible; (...) Restoration through disassembly should result in the removal of all unsafe elements and should ensure that no further treatment is necessary for a long period.⁴⁰

Disassembling of a wood frame is a traditional conservation method of Chinese architectural relics. This kind of metabolic protection method with respect for the historical information still conforms to the principle of authenticity. Especially for religious architecture, updating the decaying materials and renewal of components are inevitable. At the same time, the process of dismantling and reassembly is also a means to review the ancient architectural crafts to update procedures and increase our understanding of historic construction methods.

3.4. On Wooden Surface Re-Painting

In the *ICOMOS Principles for the Preservation and Conservation/Restoration of Wall Paintings*, Article 5 pointed out that:

Natural aging is a testimony to the trace of time and should be respected. Irreversible chemical and physical transformations are to be preserved if their removal is harmful.⁴¹

³⁷ *Ibidem*.

³⁸ ICOMOS, *Beijing Document on the Protection and Restoration of Built Heritage in East Asia*, 2007, <http://orcp.hustoj.com/2016/06/04/beijing-document-on-the-conservation-and-restoration-of-historic-buildings-in-east-asia2007> (accessed: 20.02.2019).

³⁹ *Ibidem*.

⁴⁰ ICOMOS China, *Principles for the Conservation...*

⁴¹ ICOMOS, *Principles for the Preservation and Conservation/Restoration of Wall Paintings*, 2003, <https://www.icomos.org/en/what-we-do/focus/179-articles-en-francais/>

As the *Beijing Document* has declared,

Architectural surfaces and their finishing layers, with historic, aesthetic and technical qualities, represent an essential component of the visible part of monuments.⁴²

The best way to care for these surfaces is through regular maintenance. As we know, architectural painting, especially wood component painting, serves not only as an art deco, but protects wood from physical and chemical damage. Due to the effects of weathering and natural wear and tear, the finishing materials used cannot remain intact over a long period of time. The natural materials used need repairing and restoration for the long-term preservation of the wood materials used in construction. Article 7 in the *Qufu Declaration* states that:

the role of architecture painting is to protect the wood and beautify the building. At the same time, it also shows the architectural level and the function of the building. If the remaining architecture painting has completely lost the original function and has no artistic value, it should be re-painted.⁴³

And the principle of architectural re-painting should follow the “Four Originals”⁴⁴.

In the repainting process, the *Beijing Document* highlighted that:

all painted surfaces should be first investigated by means of scientific analysis to reveal all possible information concerning the original materials and techniques, past interventions, current condition, and decay mechanisms on both macro and micro scales. Appropriate traditional technologies and craftsmanship should be used whenever feasible.⁴⁵

Therefore, repainting should follow the authenticity of the structures historic state which includes the original materials, patterns, crafts and be developed through proper professional consultation. At the same time,

ressources/charters-and-standards/166-icomosprinciples-for-the-preservation-and-conservationrestoration-of-wall-paintings (accessed: 06.02.2019).

⁴² ICOMOS, *Beijing Document...*

⁴³ Zhewen Luo, et al., *Qufu Declaration...*

⁴⁴ Four Originals refers to original prototype, original materials, original structure and original crafts.

⁴⁵ ICOMOS, *Beijing Document...*

Article 31 in *Principles for the Conservation of Heritage Sites in China* stressed that “it is not permissible to redo decorative painting for new or cosmetic purposes.”⁴⁶ Any work performed should be in the interests of restoration, not further development, which may result in destruction of the original cultural and societal value of the site.

3.5. On Reconstruction

In international policy, reconstruction and authenticity is contradictory. However, it is noteworthy that authenticity refers to not only the original physical architecture, but also the available original historic information, date of construction, etc. Although it is not always possible to replace the original structure completely, reconstruction heritage is still significant in the processes ability to recover the function and original city fabric, lead to an increased understanding of traditional techniques and cultural atmosphere, especially after the trauma natural and man-made disasters.

In China, historic wood structure buildings were easily destroyed by war, fire and the ravages of weather and time. This lead to a situation where “In the early 20th century there were no known fully wood-constructed Tang Dynasty buildings that still existed”⁴⁷. The oldest existent fully wooden pagoda that has survived intact is the Pagoda of Fogong Temple of the Liao Dynasty. While the East Hall of Foguang Temple features only seven types of bracket arms in its construction, the 11th-century Pagoda of Fogong Temple featured a total of fifty-four⁴⁸.

Therefore, the significance of ancient construction is not only the existence of a specific building in a certain period, but also the continuous renewal and circulation of specific architectural forms. China’s ancient construction will achieve its metabolism and continuation of development in the process of continuous reconstruction, which is one of the important ways for our knowledge of wooden frame structures to be handed down to future generations. Nevertheless, in ancient China, the process of reconstruction was considered a prudent activity. Nowadays, the regulations for

⁴⁶ ICOMOS China, *Principles for the Conservation...*

⁴⁷ Steinhart Nancy Shatzman, *The Tang Architectural Icon and the Politics of Chinese Architectural History*, “The Art Bulletin” 2004, no. 86, p. 228–254.

⁴⁸ Steinhart Nancy Shatzman, *Liao: An Architectural Tradition in the Making*, “Artibus Asiae” 1994, no. 54, p. 5–39.

reconstruction are still strict. Article 10 in *Qufu Declaration* emphasized that when there is a need for reconstruction,

the specific analysis and evaluation should be carried out according to the environment, status, the role of the building group, the integrity and authenticity of the damaged architectural relics. The reconstruction of the damaged architectural relics should be approved by experts and the supervisor department of cultural relics.⁴⁹

China conservation principles highlighted that:

When the overall layout of building ensembles is still basically intact, restoration may be considered by reconstructing a small number of missing buildings as a means of conserving the overall integrity of the complex, but only when there is sufficient documentation and visual evidence. The physical architectural remains of the site such as footings must be protected and they must not be altered or damaged.⁵⁰

Article 43 also points out that:

in special circumstances, as when a lost structure has great significance for an architectural ensemble, reconstruction may be considered provided there is sufficient visual evidence and textual documentation on the missing structure. (...) Reconstruction must ensure that the site is not damaged, particularly any structural ruins. Reconstructed buildings must be clearly marked as such.⁵¹

Following these methods allow for our understanding and appreciation for the original nature of such projects to be transferred to future generations, in case the information currently available is subsequently lost to mankind.

4. Conclusions

The emergence of a fabric of international policies has played a major role in the development of international heritage protection. And this is not a rigid provision, but a flexible guideline, since:

⁴⁹ Zhewen Luo, et al., *Qufu Declaration...*

⁵⁰ ICOMOS China, *Principles for the Conservation...*

⁵¹ *Ibidem.*

the respect due to all cultures requires that heritage properties must be considered and judged within the cultural contexts to which they belong.⁵²

China's 5,000-year history has left a huge amount of architectural heritage sites with unique characteristics. The craftsmanship of restoration architectural heritage practices by Chinese artisans has also gone through thousands of years of development which cannot be easily denied and abandoned. These special architectural types as well as their traditional construction techniques and conservation concepts are a precious tangible and intangible cultural heritage of the world, which presents cultural diversity through their survival. When China's conservation methods encounter international heritage policies, consideration of how to adapt to international principles, maintain local characteristics, and form its own policies and legislations that are in line with local conditions are an important issue.

Chinese conservation policy has experienced several stages, which form the exploratory stage, fundamental stage, and open-communication stage through to the maturity stage which forms a conservation ideology with Chinese characteristics, combining traditional concepts under the guidance of international policies. The mature architectural heritage conservation policies in China have developed to legally guarantee the status of traditional restoration techniques and ideas. In this process, the understanding of the scope of cultural heritage preservation is constantly expanding, and the degree of protection is constantly deepening. The type of architectural heritage, the value standards and the conservation methods also present a diversified trend that is unique to China, in part due to its long history.

However, in this process, the protection policies of Chinese architectural heritage protection is still facing many problems in the hierarchical management system, heritage usage and public participation, and so forth. Although it is not possible to treat all heritage sites equally, different treatment by heritage hierarchical management has led to a large number of less significant historical building groups being demolished. How to protect these heritage sites that are not included on key cultural relics list is a big issue. Additionally, the struggle between heritage preservation and economic development is intensifying, which leads to the greater fragility of heritage sites. Furthermore, most ordinary people have not considered architectural

52 ICOMOS, *Nara Document on Authenticity*, 1994, <https://www.icomos.org/charters/nara-e.pdf> (accessed: 15.01.2019).

heritage protection. They believe that architectural heritage sites are only tourist attractions which provide venues for recreation. Therefore, strengthening relevant legislation, handling the relationship between heritage and urbanization, heritage and economy, heritage and public, cultivating the public awareness of heritage preservation, and establishing a healthy public participation mechanism are ongoing important issues for the heritage policies of China.

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