The Forbidden City Conservation Project in the Contemporary International Cultural Heritage Protection Movement

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Chinese cultural heritage protection is a cause in progress. Cultural heritage in China is divided into intangible and tangible cultural heritage; tangible heritage is further divided into three categories: immovable heritage, movable cultural relics and sites of historical and cultural value (districts, townships and villages.)

After the Chinese National People's Congress approved the UNESCO "Protection of the World Cultural and Natural Heritage Convention" in 1985, six projects, such as the Ming and Qing Imperial Palace, Qin Shi Huang Mausoleum, were inscribed on the World Heritage List in 1987, marking China's entry into the contemporary international cultural heritage protection movement. Since then, The Forbidden City conservation project has been a part of China’s immovable heritage protection program as well as international cultural heritage protection movement.

1. The Forbidden City Conservation Project

In 2001 China’s State Council commenced the comprehensive conservation and maintenance works on the ancient architectural complex in the Forbidden City. After extensive preparation, the project started in 2003; according to the plan, the whole project should continue into 2020. The principles and procedures for the Forbidden City conservation project are based primarily on the philosophy and methodology framework of *Cultural Relics Protection Law of People's Republic of China* and *Chinese Cultural Relics Protection Regulations*, also making reference to a series of documents and articles published by the Chinese National Committee for the International Council on Monuments and Sites (ICOMOS) and other professional cultural heritage protection agencies.

The Forbidden City is the most complete architecture complex of ancient palace in China, situated in the core historical area of Beijing; the Palace Museum houses 1,807,558 items (sets) of cultural relics mainly from the imperial collections. The conservation project of the Forbidden City primarily focuses on two issues: first, to correct and to repair the alterations and damages caused by human power or natural forces. Second, since the Forbidden City has been transformed from an ancient palace complex into a modern museum, the renovation of the museum should be conducted under the premises of preserving its historical authenticity and architectural cohesion. To fulfill these two missions requires a well-coordinated design and planning. The Palace Museum organizes the preparation of *The Forbidden City Conservation Project Master Plan (Scheme)*, which defines the project objectives as: to achieve the comprehensive protection, to reproduce the magnificence and glory of its golden age, and to demonstrate the historical and cultural values and implications.

Since this ancient palace complex is the core of the conservation project, it is important to know its architectural features: from the perspective of architecture history, 1. Guided by the system of rites in a feudal society, the architecture is to represent the supremacy of the emperor’s power through the magnificent style. Its design also exemplifies the philosophy of “the golden mean” and “to respect the heaven/gods and follow the example of ancestry.” 2. To carry on the tradition and legacy, the layout of the Forbidden City reflects two thousand years of history of palatial architecture of Chinese dynastic tradition. 3. Based on the official specification compiled and published by the imperial court and the implementation of standardized modular system, the architectural quality and volume are far superior to residential buildings. 4. Under a management system operated by official organizations, professionals and technical personnel were given a distinct identity, which expected and required better artistry and higher quality of work than that by a "private workers" in the civil society. From the perspective of architectural art, 1. the Forbidden City is placed in the center of Beijing, constituting a cohesive composition with the capital city. 2. The Forbidden City is composed of various courtyards, and divided into three major different functional zones, namely, defense, meeting, and inner court. The major architectural buildings are arranged along the axis that runs from south deep into north, while the secondary/auxiliary buildings are built along the east-west axis, illustrating a distinguishable hierarchy of the feudal society. 3. Highlight of the Forbidden City is the central axis, which is also the central section of the axis of Beijing city, and along which are the prime buildings in terms of their sizes and scales. Jingshan Hill, standing outside the North Gate, serves as a screen to the city. 4. The city functions are properly planned out and utilized. 5. A rich and colorful aesthetic effect is achieved by combining a series of varying courtyards with the application of three major traditional crafts-- sculpture, glaze and architectural color painting. 6. The interior decoration of ancient architecture in the Forbidden City is elegant, colorful, exquisite, successfully enriching the atmosphere of interior space as well as satisfying practical functions. These artistic characteristics are the features that distinguish the ancient architecture of the Forbidden City from other ancient buildings; they are also the elements that constitute the ancient architectural value of the Forbidden City. Recognizing and understanding these characteristics helps us survey and record each of the architectural elements in a more detailed, comprehensive, and faithful way, so that we can carry out the preservation and protection the tradition and craftsmanship, "such as the form and design, materials and material, usage, features, location and the environment."

Due to limitation of time, I’ll introduce two projects with the most architectural features in the Forbidden City.

II. The Conservation of architectural color painting of the Forbidden City

Architectural color painting is one of the characteristics of ancient Chinese architecture; it is also one of the challenges in the conservation project. In the conventional technology, painting and architectural color painting are different types of work. We only discuss the architectural color painting here.

In the Forbidden City, the ancient buildings bearing the architectural color painting occupy an area about 140,000 square meters. Based on the location, there are exterior architectural color painting and interior architectural color painting. Since the founding of New China, architectural color paintings have been applied on about 76,000 square meters of ancient building, mostly treated with oil finish. The architectural color painting in the Forbidden City, in addition to its function in protecting and beautifying the wooden structure, possesses a high cultural value. In terms of preservation conditions, interior painting is generally significantly better than the exterior painting and no big surface area warrants immediate protection treatment. However, the exterior color painting is usually not well preserved. First of all, the base coat cracks, separating from the wood, popping up and even falling off; these problems cause damages to the color painting. There are also serious and widespread inherent problems of the architectural color painting, such as the toxic substance in the painting itself, pigment fading, hardening, and chalking.

For decades, the Palace Museum has employed consistent approach to preserve the interior color painting, while continued exploring measures to preserve the exterior color paintings. Although to conserve the color painting in situ is the ultimate goal, such technology for the exterior painting has not yet been discovered as of now. So replication and restoration, when necessary, are still an effective approach to carry on the architectural value and the historic information of the ancient architecture in the Forbidden City. In the Forbidden City, the practice of color painting, in terms of traditional materials and building techniques, basically complies and continues the imperial regulations of the Qing Dynasty; for various color painting designs, there is no problem in locating references, which safeguard and justify the tasks of replication and restoration. This conservation project continues the traditional practice of the Palace Museum in that the technical measures are selected after careful evaluation of historical value and present conditions, and that each case is given special attention and specific treatment. Following are the techniques applied:

1. Preservation and repair. Architectural color painting, though containing a certain degree of deterioration and disintegration, still can maintain its proper function and be kept in its original location after selected preservation treatments according to its conditions, such as cleaning, reapplication and reinforcement of base coat, color reinforcement, complementation, balance, partial reproduction, color balance (antique finishing) and the like.

2 Replication/reproduction. When the original painting cannot be conserved in situ, rubbing, recording, sketching, and drawing are employed to copy the original design of the color painting from existing remains at its current location.

3. Restoration. When the original color painting is faded or the subsequent painting is not precise and deteriorates, restoration design and re-painting is carried out in accordance with valid reference resources.

4. Lift and transfer (removal). Some remnants, though the pattern is visible but difficult to preserve in situ, can be approached with “lift and transfer” and made into a living sample of the ancient architectural color painting to be preserved in the relics library/storeroom.

In addition, the Palace Museum also uses modern technology to examine and analyze the chemical structures and physical conditions of the paint and materials used in color painting, accumulating some data and experience.

III. The conservation of the interior decoration of the Forbidden City

Interior decoration is an integral part of Chinese ancient architecture, installed between the structural wooden framework, functioning as interior partition or creating a spatial atmosphere. There is a wide range of interior decoration. The existing interior decoration in the Forbidden City is mostly relics from the Qing Dynasty, made of precious materials with unique craftsmanship. There are numerous imperial documentations of the Qing Dynasty pertaining to the production, installation, and renovation processes of the interior embellishment. They have not received active maintenance for a very long time.

Juanqinzhai, or Studio of Exhaustion from Diligent Service, is tucked in the northeast corner of the Qianlong Garden in the Forbidden City. Constructed between 1771 and 1776 (from the 36th-41st year of Emperor Qianlong Reign), Juanqinzhai has only nine rooms, covering an area of 224 square meters. The interior, from the worship/ceremony loft to partition boards, was built, in accordance with Emperor Qianglong’s request, by the southern artisans with materials and technique specific of the southern China. Ceiling and wall are covered with murals, the Scenic Illusion Paintings, which are painted with western techniques. From 2001 to 2008, Juanqinzhai was under a comprehensive restoration by the joint effort of the American World Monuments Fund and the Palace Museum. The work procedures and technical measures adopted are as follows:

1. To conduct a thorough inspections, record, set goals and complete planning of the Juanqinzhai conservation project.

2. Remove Scenic Illusion Paintings, calligraphy and paintings, wallpaper, to expose woodwork. Remove partition and wooden kang.

3. Conduct conservation work in according with the category of techniques and material of the preservation object.

⑴ To ensure the structural security of ancient building.

⑵ Remove and repair the paper-based relics such as the Scenic Illusion Paintings.

(3) Conserve the interior decoration; keep in situ those should not be disassemble, such as the worship/prayer loft, bamboo marquetry; clean and repair the interior architectural paintings. Remove moveable parts, such as partition board, and transfer to workshop for repair. Repair those carved ornaments embedded in the wooden material. Preserve and reproduce the double-sided embroideries. Conduct tests on most relics from different material categories to verify the original material and the cause of deterioration so as to identify the proper techniques and materials needed for the purpose of protection and reproduction. A trip to the southern China is sometimes necessary to visit the heritage inheritors who still practice and produce traditional arts and crafts, such as xuan paper, zhuhuang bamboo carving, zhusi bamboo weaving and special processing technique.

4. Air filtering devices are installed for the purpose of conservation; lighting fixture is added in order to protect and to re-produce the historical glory.

5. Assemble and restore all sorts of cultural relics of the ancient architecture after repair

6. Integrate conservation with the exhibition design that is geared toward cultural dissemination

Juanqinzhai Conservation Project is a pilot project to the overall conservation of the Forbidden City. When the restoration of Juanqinzhai was concluded, the project scheme has been extended to the entire Qianlong Garden. When developing the new conservation planning, the Palace Museum also included the interior decoration in the project scope. The Hall of Mental Cultivation, the emperor’s living quarter as well as the place for state affairs governance since the Qing Emperor Yongzheng period, is a tangible witness of at least 290 years of history. Only by strengthening our research and treating every architectural detail with respect can we really restore the Hall to its original spatial state.