

Metabolism of Heritage Preservation Practice

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Abstract: *Conservation values are not static, but rather dynamic. Examine the evolution of conservation practice and our subjective relationship with heritage, as well as the importance of taste in developing and sustaining the historic built environment.*

Keywords: *Historical Architecture; Conservation and Regeneration; Taste and Culture*

1. Introduction

Metabolism is the law of development of things. A building, architectural complex or a city will always develop with the social economy and the background of the history, moreover, be affected by the changes in life and the progress of science and technology. Every era creates and leaves its own unique traces in the city, but it also has a process of development and decline. In addition to creating a new culture, the process of city modernization is still accompanied by the protection of historical buildings or relics, which are mutually integrated and promoted.^[1] The historical architectural heritage contains rich memories, reflecting the unique historical, social and ideological changes of the city, and it is possible to touch the reality that has disappeared. People's attitudes towards urban buildings or regions are constantly changing, and their manifestations will also show different states according to different times or cultural rendering.

The great variety of taste, as well as the views which prevails in the world, is too obvious not to fall under every observation. The sentiments of humans often differ with regard to beauty and malformation of all kinds, even as their common discourse is the same.^[2] At the same time, the principles and tastes of conservation are more complex and diverse, based on the different perspectives of different nationalities and countries. Furthermore, the supreme principle of urban heritage protection is still to maintain the authenticity of history. Generations of ancient buildings of people are full of knowledge from past years and bear witness to the history of man. The unity of this significance must be understood and this monument must be considered a collective heritage.^[3]

The charm of a city lies in its characteristics. Based on culture, architectural heritage is an expression of individuality and unique creation. This article will discuss the influence of taste on architectural protection from different national backgrounds and different periods, and come to the view of respecting and preserving the authenticity and integrity of historical features and avoiding "duplication".

2. Based on taste —— The principles of conservation

In the preservation and planning of historic aspects, most ancient cities in Europe have formulated unique protection plans and established approaches according to the different characteristics of their cities. Conservation practices can be seen as prolonging the life of architectural heritage and preventing its decay, in the process avoiding historical damage, but also cannot destroy and forge the historical evidence.

The historical environment is a shared resource, which can provide a source of identity for people and is also a public interest, which needs to satisfy the environment benefited by a generation.^[4] The value or benefits of a place directly reflect the impact of the environment on the values of residents and deepen people's cognition of the place. Different city characteristics should be given priority protection, and any reconstruction should be based on historical background and coordinated with local traditions and current environment, which is also an embodiment of different tastes.

In order to protect cultural relics and buildings, it is necessary to make sustainable and reasonable use of them and give full play to their social benefits. Therefore, through the exploration of most building protection methods, there are three specific ways to improve. The first category, architectural remains,

are still being visited by citizens as witnesses of history.^[5] The refurbished remains should retain the intrinsic authenticity and avoid damages in the process. In addition, the properties of the space were changed for other purposes, most of which were converted into museums and kept the information contained in the original constructions. Last, part of religious buildings continue to be used according to their original functions, maintain them regularly, and adopt necessary technologies and alms to meet the requirements of modern life. In accordance with the objective and true historical preservation, combining with the environmental and social requirements of different times, the balance between relics and the modern world can be harmonized faithfully and objectively.

3. The Regeneration of Basilica Palladiana in Vicenza, Italy



Figure 1: The exterior of the original basilica cathedral.



Figure 2: The appearance of the post-war restoration.

“The Basilica in Vicenza is not only iconic, but also much used for public events and much visited by tourists, and therefore takes a good deal of punishment”.^[6] The building was originally built in the 15th century and includes two pre-existing independent public buildings. The interior of the building is Vicenza's government public hall, the exterior of the first floor is a shop, and the exterior is built with double columns surrounding the palace. However, two years after the completion of the project, its southwest corner collapsed. Therefore, Palladio proposed to surround the Palazzo della Ragione with a corridor of two layers of white marble, which is an elastic structure called "serliane" and is aligned with the previous entrance and passageway. In addition, two small columns are added between the previous large columns, and the corner columns of the side span ensure the overall balance for the double columns.



Figure 3: Basilica Palladianain in the 15th century.

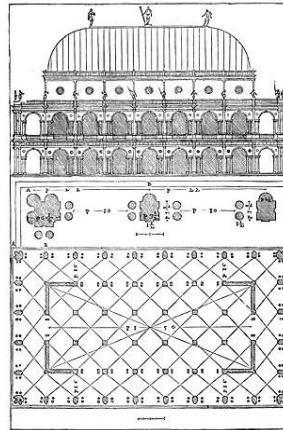


Figure 4: Layout of the Palladianain restored after the war.

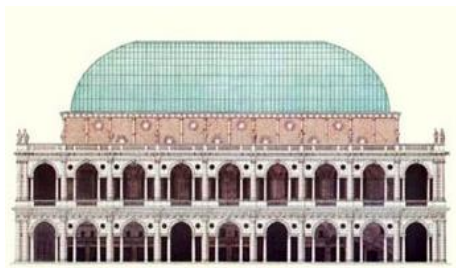


Figure 5: This is the Palladianain restored after the war.

Basilica Palladianain was damaged during the Second World War, the pristine roof was severely destroyed. Therefore, in 1947, reinforced concrete was used to reshape the roof structure and materials, and the prototype of the current style was also formed.^[7] Basilica was listed as a world heritage site in 1994 and was restored and renewed in 2007 through government intervention and funding, with a strategy of historic preservation to halt the process of degradation. Among the protection measures, the most complicated is the replacement of the material of the roof load-bearing arch. After confirming the real situation of the building, the extremely heavy structures repaired and used after World War II will be rebuilt and replaced with lighter structures according to the latest anti-seismic regulations to avoid the collapse of the history. Repaired and reinforced the better preserved areas of the building's facade, using the methods of "strengthening by substitution" in case of cracking or stability problems.^[8] Additionally, on the ground floor, new modern facilities such as elevators, staircases and equipment rooms were added, as well as a cafeteria and a lobby for exhibitions and public events. The modern architect Arnold researched its sound quality and adopted a series of technical measures to restart the central hall so that it could meet the requirements of the place for music performance.

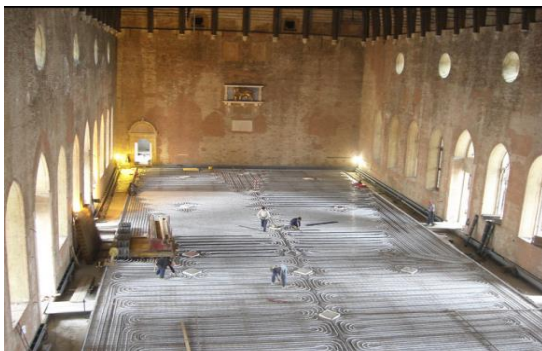


Figure 6: The Interior regeneration in 2007.



Figure 7: The present facade of the building.

3.1 Evaluation of Taste and The Value Based on The Context (Basilica Palladiana)

In the 15th century, Italy was in the stage of Renaissance protection. After a long period of ideological confinement in the middle ages, people had a strong interest in the splendid ancient Roman architecture, so they carried out large-scale restoration and protection of cultural relics. Secondly, during

the period from 1920 to the end of the war, buildings were destroyed and almost all the country rebuilt their homes on the ruins. Through the Venice Charter and the Urban Planning Law, principles and guidance were provided for urban restoration and intervention. There was also a breakthrough in the concept and technology of protection at the end of the 19th century. Instead of repair or renovation, emphasis was placed on structural reinforcement and overall protection.

In terms of Vicenza's basilica, due to the original constructions not meeting the requirements of beauty and harmony considered by the present age, the coordination ratio of the facade of classical buildings was taken as a guide to balance the relationship between the whole and the part. Palladio adopted the Doric order on the first floor and the curved Ionic order on the second floor to honor tradition. At the same time, the most stable column can be placed at the bottom according to structural criteria.^[9] This shows that creativity is not contrary to the design criteria, but highlights the unique artistic taste. After the completion of the construction in basilica in 1614, the Palladian doctrine, which emphasized symmetry, perspective and classical formal rules, became popular in Europe and the United States. According to Goethe, there are three levels of architecture, the present purpose corresponds to the imitation of nature; medium is the corresponding design approach; higher is the style that can meet people's spiritual needs; "No one can match palladin in this respect".^[10]

The recent historic preservation project in 2007 stopped the deterioration of the building, with the goal of cleaning, strengthening and repairing the original decorations inside and outside. Not only has the damaged and vulnerable parts been repaired, but also a new network has been installed in the existing passageway and the floor of the hall after thorough investigation. In particular, the damage to the roof caused by roof repair and capping 60 years ago has been corrected, which is in sharp contrast to the previous repair methods, therefore, high-quality repair work is also crucial. Today, the building is one of the most significant historic constructions in Vicenza and has been evaluated as a reasonable and professional restoration.^[11] The formation of the principles of architectural preservation in Italy has been a long process. After the consideration of the ruling class for their own interests and the combination of the rational factors of heritage preservation since the 18th century, a meticulous and rigorous theoretical system and practical experience have been formed.^[12] The protection of ancient buildings and their environment here has become a national awareness. Even if the process may bring inconvenience to the citizens, they can still accept the protection behavior and participate in suggestions and supervision, so as to combine it with modern cities and pass it on.

4. The Renewal of Kolumba Art Museum in Cologne, Germany



Figure 8: Kolumba cathedral, destroyed by World War ii.



Figure 9: The present cathedral of Kolumba.

Cologne is the fourth largest city in Germany, located on the Rhine River in western Germany. It is an ancient and elegant city and a metropolis with strong modern flavor. At the end of World War II, many German cities were bombed by the war, causing huge losses of life and property. The majestic Kolumba cathedral is left with only the old gothic Madonna. In 1949, Gottfried, a local architect, designed a small church on the site to rekindle people's motivation for active living. The rest of the ruins lasted until 1997, half a century later, architect Zumthor redesigned a fine building above the ruins of the post-Gothic church. It not only retains the memory of history, but also adds modern scent.



Figure 10: Böhm designed an octagonal chapel in 1957.

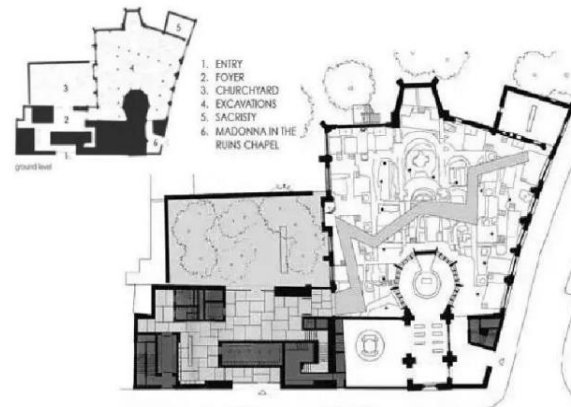


Figure 11: Kolumba Art Museum layout.

Before the "ruins museum" was built, the church was an octagonal chapel with the new building opposite the main axis of the original structure. Besides, colored glass flower windows have been added, which are in strong contrast with the ruins but very harmonious. However, the existence of Roman ruins was discovered in 1973, which also brought great difficulties to the protection of the ruins at that time. There were four thorny challenges in this region: how to protect Roman architectural relics; how to stack buildings on ruins and preserve city memory; how to combine with chapel and how to coordinate with the balance of urban texture.



Figure 12: Kolumba Art Museum.

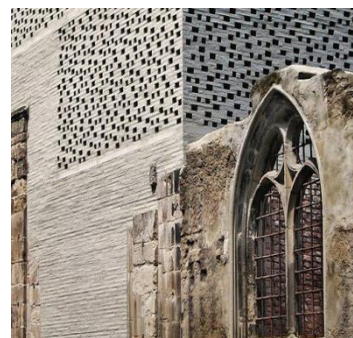


Figure 13: Facade of Kolumba Art Museum.



Figure 14: Protection of Roman ruins heritage.

Finally, Zumthor came up with an audacious answer. Integrating the new building with the ruins, the existing walls of the gothic church and the irregular polygonal ground floor plan are used to build, combining the broken site and retaining all the church foundation. On this basis, the remaining mark of history was wrapped in a huge building body. The facade is made of handmade bricks. In order to avoid messiness, gaps and windows are scattered on the walls, natural light could be directly projected on the internal vestiges. And the pillars hidden in the walls are important load-bearing structures. At the bottom layer of the interior is a complete archaeological site, the new part of the building is raised on stilts. The main hall connects the exhibition room with the original chapel through a winding covered bridge, which also ensures that the impact of tourists on the archaeological site is minimized. Besides, the third floor is a showroom for art collection and exhibition.^[13] The external form of the new Kolumba museum is interspersed with blocks. Although it is linear and has a large area, it merges with the city and shows its uniqueness.

4.1 Evaluation of Taste and The Value Based on The Context (Kolumba Art Museum)

What remains of Kolumba cathedral is not so much conservation and innovation as a dialogue between history and modern architecture. The ruins left in broken walls are re-stitched with bricks. The gray modern feeling is reflected in the mottled ruins. The newly-built parts are well integrated and not superior. This design method is perhaps missing from the duplication and patchwork of architecture that is common in the formal contemporary world. Architectural space is a silent language, it affects us and controls our spiritual activities.^[14]



Figure 15: The combination of the new building and the heritage.

Admittedly, this might be detrimental to the protection of the ruins, but as a building relic, the Kolumba Museum provides a new way of thinking for the heritage architecture from a brand-new perspective compared with the simple way of enclosure. The need for the protection of old constructions is widely recognised in western culture, underpinned by the European Charter of Historical Heritage, which has been an important framework for conservation planning since the 1970s.^[15] History should be remembered and passed down. In order not to let history disappear, designers record history through more special ways to preserve the authenticity of historical buildings.^[16] Simple buildings heal and heal the wounds of the German people after the war. The only thing worth elevating is the human soul. "I mean 'soul' in the extensive sense...".^[17] It is different from Bauhaus's theory of "completely splitting

from the past". Germany carried out rescue measures for the restoration of ancient buildings after the war, which protected the ruins as a whole and at the same time awakened the memory of city people. Moreover, architectural taste, like moral opinion, may be based on other attitudes and judgements.^[18] The expression form and protection strategy of buildings are all influenced by environmental and social phenomena, thus making buildings unique.

5. Conclusion

In conclusion, the urban culture of any era is not created out of thin air. Its prosperity and development are the process of re-creation based on the cultural heritage created by previous people. Tastes change all the time, from monomer conservation to environmental restoration, as the restoration of the old goes to the pursuit of retro art. Like the Kolumba Art Museum, it accurately records the history, preserves the history and expresses the attitude of a generation towards history, which will surely become a part of world history in the future. Architecture is embedded in ruins, not jumping or judging, which is itself a kind of respect for the past.

Be good at dealing with the contradiction between economic development and heritage protection.^[19] Vicenza's basilica, driven by the interests of the ruling class, changed the overly heavy roof structure, causing damage to the building. The historical relics did not disappear until the policies and theories were systematized. Furthermore, owing to architecture serving residents, it is necessary to attract public participation in the practice. Zumthor fully considered the pain brought by the war on buildings, reflected on the inner trauma of citizens, and encouraged them to interact with the city and the new and heritage. The urban culture of any era affects the taste of contemporary architectural protection practice, and is a process of re-creation based on and starting from the cultural heritage created by previous people.

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