

Research on the protection and renewal of overlapping sites within the context of cultural ecology perspective

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Abstract

Industrial heritage, as an important part of human cultural heritage, is not well protected and reused in our country at present, and the experience and examples in dealing with overlapping heritage sites are even more limited. Studying its protection alone cannot fundamentally solve the problem. It must be placed in a comprehensive cultural ecosystem including the social environment, natural environment, and human environment, so that various elements can be integrated, intertwined, and coexist with each other. Faced with the complex cultural environment and the decline of its own industrial culture, this study takes the overlapping area of the Cultural Heritage for Wang mang's Nine Temples and the industrial relics for China Steel Plant as an example. Starting from the context of cultural ecology perspective, this study proposes three major implementation strategies for respecting cultural evolution, building cultural levels and strengthening cultural elements. Specific strategies are as follows: To begin, it is important to take a holistic view and comprehensively evaluate the cultural ecological evolution. The second step involves constructing a cultural ecological network based on the Symbiotic relationship. Finally, it is necessary to establish a cultural ecological memory with a coordinated concept.

Keywords

Cultural ecology, Cultural Heritage, Wang Mang's Nine Temples ruins, Industrial relics, Symbiotic protection

1. Project starting problem

1.1. Historical evolution

The ruins of Wang mang's Nine Temples are pivotal ritual architectural sites in Chinese history due to their unprecedented scale and unique structure. With the acceleration of urban construction in Xi'an, the China Steel Plant built on its ruins is the first metallurgical machinery production plant built in Shaanxi Province, leaving a large amount of industrial landscape and spatial resources for the city(Figure 1). Effectively protecting and showing cultural Heritage, as well as preserving and updating industrial relics in this overlapping area, has become an urgent matter given the increasing prominence of cultural heritage.

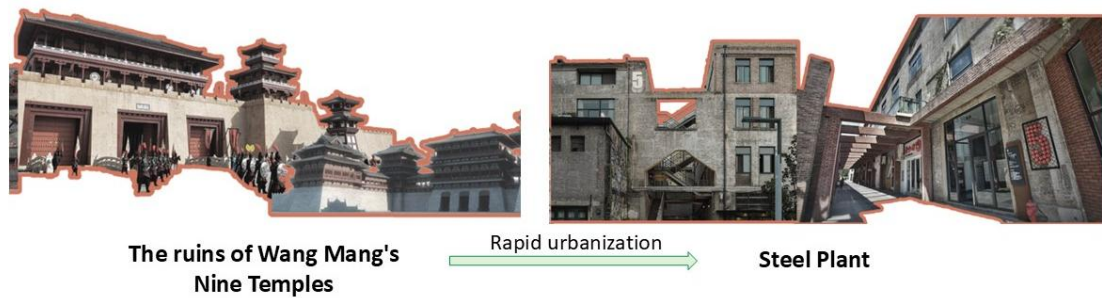


Figure 1. Historical evolution of Wang Mang's Nine Temples ruins & Steel Plant. Source: By Author.

1.2. Starting problem

One of the conference themes is cultural heritage for sustainable urban development, which harmonizes perfectly with the objectives of this research report. As an important part of human cultural heritage, the current level of protection and reuse of industrial heritage varies internationally, and the experience and examples of dealing with overlapping heritage area are even more limited. Faced with the complex cultural environment and the decline of its own industrial culture, this study takes the overlapping area of the ritual building area of the Wang Mang's Nine Temples ruins and the industrial relics of the old China Steel Plant as an example. Starting from the context of cultural ecology, this study proposes three major implementation strategies for respecting cultural evolution, building cultural levels and strengthening cultural elements. It forms a composite cultural ecosystem with the surrounding cultural environment, providing constructive opinions and feasible strategies for the protection and renewal of dual heritage.



Figure 2. Project starting problem. Source: By Author.

2. Project context

Nowadays, the transformation of industrial sites is stereotyped, such as industrial landscape parks (Beijing ShouGang Industrial Landscape Park), cultural and creative industrial parks (Beijing 798), etc. Therefore, based on the theory of cultural ecology, starting from the core viewpoint of cultural ecology theory "dynamic balance", from the perspective of structure and function, we follow the principles of holistic protection, dynamic balance, and in-situ protection. Combining the viewpoint of system theory to treat culture, we study the relationship between the system interior (factory texture and remaining

buildings), the system and surrounding environment (factory and surrounding plots), and the system and external environment (urban construction in Xi'an) to comprehensively examine cultural issues. In this regard, the renewal and transformation of the overlapping area is a realistic path for the practice of cultural ecology theory. Starting from the micro level, we can better use the methods of cultural ecology to solve the current dilemma of the protection, renewal and reuse of the overlapping area of the ruins. The following is a summary of the current problems in the SITE.

2.1. The cultural heritage lacks protection and display

Due to the urban construction in the central urban area of Xi'an and the lack of awareness of protection among the people, the site of Xi'an China Steel Plant was directly superimposed on it, which damaged the protection of the Wang Mang Nine Temples Site. Its original "U"-shaped building structure consisting of a central building, a wall, four gates and four corners was also destroyed (Figure 3). It was a huge innovation in architectural form, although it was burned down shortly after it was built. Afterwards, the ruins under the rammed earth were superimposed and not fully displayed.

2.2. The industrial relics needs to be protected and renewed

The subsequent shutdown and relocation of the China Steel Plant resulted in many idle factory buildings and a large area of idle space resources in the factory area, and the surrounding residents also lacked public activity venues for leisure and entertainment. In recent years, the abandonment of the factory area has caused serious damage to the appearance of many industrial relics, but its workshops, auxiliary buildings, and office buildings are still there, but they have not played their due value in all aspects (Figure 4). It is imperative to protect and utilize them.

2.3. The contradiction between urban construction and protection of the overlapping area

With the development of Xi'an, the "withdraw from the second and enter the third" industrial policy was issued, and the China Steel Plant stopped relocating. As a result, the original factory building was abandoned and vacant, and the surrounding residents lacked public activity space, and the industrial development of the plot lagged behind. While the Wang Mang's Nine Temples ritual building area under the rammed earth and the China Steel Plant industrial remains on it brought opportunities for the development of the plot, many construction requirements also brought restrictions to the development of the plot. How to balance the contradiction between dual heritage protection and urban development and construction is a contradiction that needs to be solved urgently.

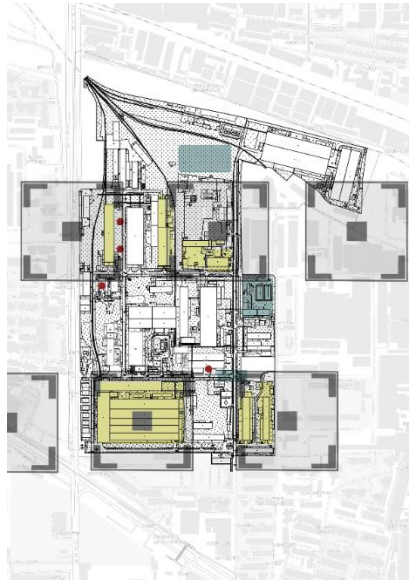


Figure 3. Overlay of Wang Mang Jiu Temple Site and China Steel Plant Site. Source: By Author.



Figure 4. Architectural features of some parts of the China Steel Plant. Source: By Author.

3. Project results AND Broader impact

3.1. Respect cultural evolution

The overlapping area of the double heritage has experienced the evolution from Han culture to industrial culture, from the ruins of the ritual building area of the Wang Mang's Nine Temples to the industrial remains of the China Steel Plant. The inherent cultural value of the ruins area is quite high. The project object of cultural ecology is culture. It respects the cultural evolution process of the overlapping area of urban ruins. While focusing on the present, it also needs to inherit the cultural context and look to the future.

First, inherit the cultural context to enhance the readability of culture. On the basis of continuing the traditional Han culture, industrial culture, and Silk Road culture, implant new creative culture, resort out the cultural context, and realize the symbiosis of multiple cultures on the site. Second, focus on meeting the needs of multiple groups of people in the present. The essential service object of urban space renewal and transformation is people. Understand the needs of multiple groups of people, put forward targeted transformation suggestions, and formulate a reasonable spatial function layout to meet multiple needs. Third, focus on the future to stimulate the vitality of the cultural and creative industry. The vigorous development of a place is inseparable from the support of the economic industry. A reasonable and appropriate layout of the cultural and creative industry will bring new vitality to the land,

thereby promoting the Han culture and industrial civilization in the overlapping area of the double ruins(Figure 5).



Figure 5. Industrial Culture Experience Hall AND Maker Market. Source: By Author.

3.2. Build cultural levels

The protection and reuse of the site cannot exist in isolation, but must coexist and prosper with the surrounding cultural environment, social environment, and natural environment. From the perspective of cultural ecology, urban space is a diverse cultural circle composed of local culture, society, economy, politics, etc. Compared with the Han culture of the site, industrial culture is more like an invasive culture that has entered the cultural ecosystem of the site. Therefore, our protection and renewal strategy should start from the symbiotic view, classify, grade, and hierarchically give it corresponding protection, and place it in the overall cultural ecosystem of the surrounding environment, link it with cultural clusters such as the Han Chang'an City Ruins in the north and the Da Ming Palace Ruins in the east, form a cultural ecological chain, and then construct a cultural ecological network.

First, the revival of cultural clusters. Cultural clusters are like cultural units of different sizes in space. Extract the cultural elements of the cultural clusters, awaken the historical memory of the cultural clusters, revitalize the carrying space of the cultural clusters, and realize the revival of the cultural clusters. Second, the link of cultural chains. The link of cultural chain is the link of urban space. A single cultural cluster cannot exert its maximum vitality. The link between cultural clusters such as the ritual architecture of the Han Chang'an City Ruins, Ming Tang Bi Yong, Silk Road Group Sculpture, Kaiyuan Gate, etc., can make the entire cultural ecosystem more symbiotic and prosperous. Third, the integration of cultural clusters. Diverse cultures are in a comprehensive cultural cluster, forming a cultural circle of double ruins superimposed sites. When the cultural clusters, cultural chains, and cultural clusters in the cultural circle reach a state of dynamic balance, a stable cultural ecosystem will be formed(Figure 6).

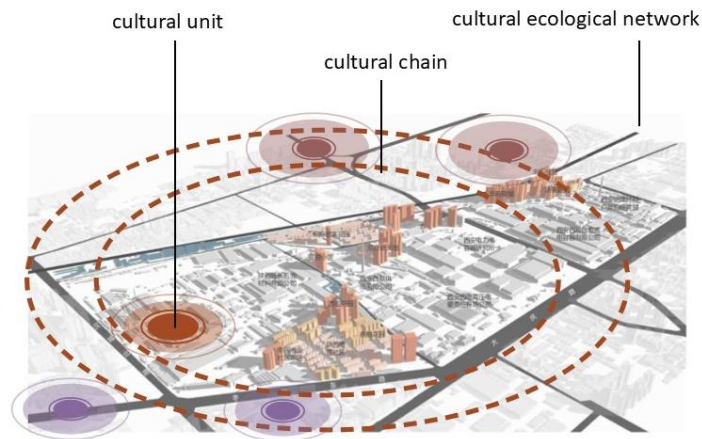


Figure 6. Construct a cultural ecological network. Source: By Author.

3.3. Strengthen cultural elements

The structure of the cultural ecosystem of China Steel Plant has multi-dimensional diversity, the coordination of Han culture and industrial culture, the coordination of tradition and modernity, and the mutual influence and restriction of various cultural elements. Protection and renewal is to coordinate these different cultural elements and strengthen their influence, transforming the original abandoned factory into an industrial heritage museum, artist workshop, cultural and Creative Center, commercial supporting facilities, etc., and coordinating tradition and modernity to shape the cultural ecological atmosphere.

Starting from the view of coordination, it can be regarded as a targeted protection of the classification and block of the site to shape its cultural atmosphere in the details. The main points can be divided into two points: protection and renewal of material cultural elements and protection and renewal of intangible cultural elements. First, create a recognizable space. Identify the spatial cultural elements through specific means such as exposing some old structures, comparing the old and new elements, and abstracting cultural elements (Figure 7). Second, awaken cultural memory. Record the special events that occurred in different periods such as the Han cultural memory and industrial memory of the site, plan cultural activities, immerse in cultural experience, etc., to arouse people's civilization resonance and build the collective memory of the people (Figure 8).



Figure 7. Expose old building structures. Source: By Author.

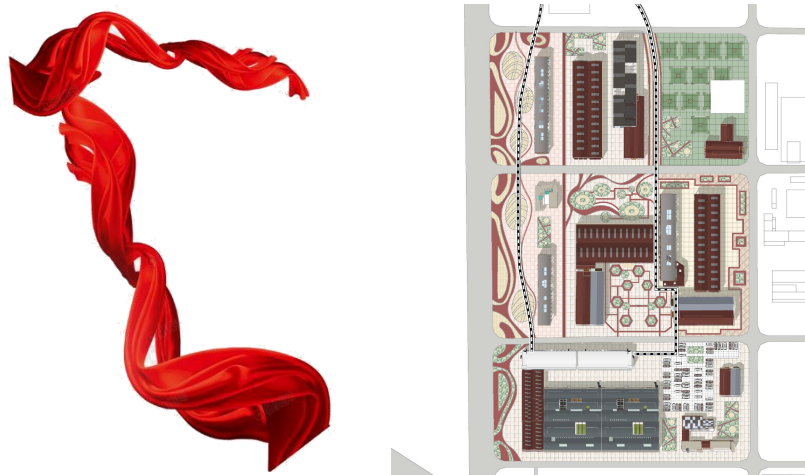


Figure 8. Application of Silk Road Cultural Elements. Source: By Author.

3.4. Future Development

The overlapping area of the site is the product of the joint action of multiple heritage elements from multiple eras. However, the protection and renewal of the overlapping areas in the city is not a new topic. The isolated study of its protection cannot fundamentally solve the problem. It is necessary to place it in the comprehensive cultural ecosystem of the social environment, natural environment, and human environment, so that all elements can be integrated, interconnected, and coexist and prosper. Faced with the complex cultural environment of the Sinosteel plant area under the overlap of the two sites and the decline of its own industrial culture, from the perspective of cultural ecology, this paper proposes a practical guidance strategy based on respecting cultural evolution, building cultural levels, and strengthening cultural elements, so that it can coexist and prosper with the surrounding cultural environment, thereby forming a complex cultural ecosystem for the site to better protect the two sites.

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