On the Relationship Between the Cultural Form of Huangshi Mining and Metallurgy and the Construction of Ecological Urban Landscape

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Keywords: Mining and metallurgy, Culture, Ecology, Urban landscape.

Abstract. As a resource-exhausted city, how to use mining and metallurgy and its culture to serve modern urban construction and promote urban economic development and healthy growth is a question worth considering. This paper explores the feasibility of using these two cultural forms in the process of urban construction from the aspects of material culture and spiritual culture of mining and metallurgy.

Introduction

Since Huangshi City has been listed as a resource-exhausted city, it has been exploring the direction of urban development and the positioning of the city. Not only actively support the development of emerging industries such as electronic information, equipment manufacturing, new energy vehicles, but also innovate, upgrade and transform old technologies, and strive to transform from resource-exporting cities to port-based logistics cities; The mines and industrial relics have made efforts to turn Huangshi into a base for research and study in the local sciences, and have achieved certain results. On November 1, 2017, the China (Huangshi) Geology and Mineral Science Conference was grandly opened. At the opening ceremony of the Science and Technology Popularization Conference, Bai Xi, Minister of Science and Technology of the China Association for Science and Technology, mentioned in his speech that Huangshi is committed to building a Chinese popular science resort and world. The idea of a famous mine city is a historical gene that is highly compatible with the city's "bronze ancient capital" and "steel cradle". It promotes the adjustment of Huangshi's industrial structure, strengthens ecological environmental protection, enhances citizens' scientific literacy, promotes geological heritage culture, and realizes social and ecological benefits. And the multi-win of economic benefits is of great significance.

Huangshi Mining and Metallurgy Cultural Form

Huangshi has rich mineral resources and a long history of mining and metallurgy. The site of the Tonglushan ancient ore deposit discovered in 1973, which fully proves that Huangshi has already started mining and smelting mineral resources as early as two or three thousand years ago. The resulting mining and metallurgy culture stretched for thousands of years and was deeply rooted in Yellowstone. Among the land. Up to now, the form of mining and metallurgy culture can be divided into two types: material culture form and spiritual culture form.

Mining and Metallurgy Material Culture Form

The cultural form of mining and metallurgy refers to all tangible and visible items related to mining and metallurgy. It is mainly discussed from two aspects: geology and mineral relics and mining and metallurgical industrial heritage.

The main geology and ore sites in the Huangshi area have been discovered at the Lijiayuan site (1.5 km west of Tieshan Town, Tieshan District), Zhan Aiyu Site (100 m east of Zhan'aiyu Village, Dongfangshan Township, Xiaer District), and Tieshan Smelter (Daye, Huangshi City) Iron ore mining area), Lihe site (50 meters north of Lihe Village, Chengui Town), Hulushan Mining and
Metallurgy Site (400 meters southeast of Zouziyan Bay, Xiaotunpu Village, Datunpu Town), Tonglushan Copper Mine Site (Tonglushan Street Office, Ke Xitai) There are 38 places such as the southeastern bay of the 100 meters), the Fengsandong bronze mine site (the Yangxin Fengshan copper mine), and the Shangshang site (500 meters southeast of Yangxin Xiayingyang Town). [1] After archaeological excavations, new stone relics such as stone axe were found at the site of Lijiayuan. The relics of Shang and Zhou Dynasties include Dakouzun, beans, etc., as well as a large number of ancient refining slag; the mountain frontage in the Tieshan smelting plant is almost all over the ancient times. Refining slag, and some even piled up to more than ten meters, this is the remains of different eras; a large number of ancient mines, as well as stone, copper and iron, were found in the Tonglushan bronze mine site, including Shang, Xizhou, Chunqiu, and Warring States to Qin and Han Dynasties. Mining tools of different textures, such as bamboo, were listed as national key cultural relics protection units in 1982.

The mining and metallurgical industry heritage can be analyzed from the aspects of steel industry heritage, cement industry heritage, non-ferrous metal industrial heritage, coal industry heritage and power industry heritage. [2] The representative steel industry heritage of Huangshi in recent times has the site of Hanyeping coal iron mine. It is an important industrial site in China's early industrialization; the cement industry heritage has the site of Huaxin Cement Plant – the production line of cement production in the plant is intact. The non-ferrous metal industrial heritage includes Daye Nonferrous Metals Co., Ltd. – an office building and dormitory building with imitation Soviet-style buildings; the former site of the coal industry heritage Xinhua Coal Mine.

The material and cultural forms of these mining and metallurgy carry the time with the real thing and tell the history with the site. This is a unique story that happened in the land of Huangshi.

Spiritual Culture of Mining and Metallurgy

In the article "The Spiritual Connotation and Realistic Enlightenment of Huangshi Mining and Metallurgy Culture", Yu Liguo mentioned that the spiritual connotation of mining and metallurgy culture can be summarized as the entrepreneurial spirit of mining and casting, and the spirit of seeking truth and being pragmatic and innovative. Eclectic and inclusive spirit of cohesiveness; not afraid of hardships and hardships, Huitong's dedication.

Entrepreneurship, science, tolerance and dedication are not only the cultural form of the spirit of mining and metallurgy, but also the development direction of Yellowstone. Although Huangshi has a long history of mining and metallurgy, it cannot be limited to the physical economic model of the mining and metallurgical industry. For the existing mining and metallurgical resources, do not stick to it, do not abandon. On the basis of the old, carry out innovation and entrepreneurship. For example, the site of the Huaxin Cement Plant was refurbished into a museum on the basis of the assembly line equipment for the production of cement.

Thoughts on the Construction of Huangshi Ecological City Landscape

Eco-city and Landscape Construction

“Ecological City” is an important concept put forward during the research of the “Man and Biosphere Program” initiated by UNESCO. The criteria for the creation of an eco-city should be determined from three aspects: natural ecology, social ecology, and economic ecology. Natural ecological development should be based on the protection of nature. Natural development and construction activities must always be coordinated with the carrying capacity of the environment. Within the carrying capacity of the environment, we must not overdraw the ecology of the environment and make rational use of natural resources. Social ecological manifestation is that people have conscious ecological awareness and environmental values. Population quality, quality of life, and health level are in line with social progress and economic development. There is a guarantee of equality for all, freedom, education, human rights and freedom from violence. Social environment. The
ecologicalization of the economy is characterized by adopting sustainable development modes of production, consumption, transportation and housing development, achieving clean production and civilized consumption, promoting ecological industries and ecological engineering technologies, improving the level of resource regeneration and comprehensive utilization, saving energy and improving utilization of heat energy, reducing the use of fossil fuels, research and development of alternative energy sources, and promoting the vigorous use of natural energy. [3] The development goal of eco-city is to realize the harmony between man and nature, including the harmony between man and man, the harmony between man and nature, and the harmony of natural system.

To a certain extent, the design and construction of urban landscapes is actually the construction of culture. What kind of thought a city wants to convey and what kind of sound it wants to express is felt through the environmental experience of the city's landscape or the image of the city. Therefore, the urban environmental experience is inseparable from the cultural orientation of urban landscape construction. What kind of cultural orientation, what kind of environmental experience will be formed, what kind of urban landscape will be formed.

**Reflections on the Construction of Huangshi Landscape**

In the process of ecological development of Huangshi City, a lot of planning and construction have been done. The core is to transform the physical economy of industrial civilization into a knowledge-based economy of ecological civilization. From the perspective of urban landscape construction, Huangshi has a mountain and water, which is a very livable city, but how to plan, design and build, but requires a lot of thinking. The construction of urban landscape combines natural landscape elements with artificial landscape elements, combining mountains, water bodies, vegetation and industrial sites, architectural squares, and art pieces to create a city atmosphere with historical humanities, pleasant and comfortable, and finally make people have a great sense of security and happiness in urban life.

Taking the master plan of Huangshi Tieshan Mountain as an example, it is necessary to become a gateway to the west of Huangshi City in the coordinated development of Wuhan Optics Valley. It is also necessary to transform part of the mining and metallurgy site into a demonstration zone for the national independent industrial and mining area, and a unique domestic mining and metallurgy. The cultural tourism area will also become the advanced manufacturing base in the Huangshi area. The core of the cultural tourism area is to become an ecological city in the northwest of Huangshi. Therefore, Tieshan has established two core development axes during the planning: First, the industrial development axis (G106 and Guanggu Avenue along the re-division, forming the axis of industrial development), and the first is the tourism development axis (G106 and the East along the status quo) Avenue, forming a tourism development axis). These two axes pass through the Western Industry and Trade Logistics New City, which is composed of the Western Industrial Park and the Logistics New City with the core of Tieshan as the core, and the eastern mining and smelting tourism main city consisting of the main urban area of Tieshan District and the East Tourism New City. (See Figure 1).

![Figure 1. Huangshi Tieshan Group Master Plan (Source: Yellowstone Planning Bureau).](image-url)
When designing the greenland landscape system, the landscape pattern of “one heart, one axis, three corridors and multiple points” is formed. “One Heart” refers to the landscape center formed by the Yellowstone National Mine Park and the surrounding ecological green space; “One Axis” refers to the green belt of the Oriental Avenue on the north side and the landscape green belt on the south side of the city, forming the urban landscape green axis; "Garden" refers to the greening corridor from Dongshan Scenic Area to Yujiatun, the greening corridor from Jianshan to Guangcai Mountain, and the greening corridor from Jianzhushan to Dongfang Mountain; “multi-point” mainly refers to the landscape nodes distributed within the planning scope.

Relationship between the Cultural Form of Huangshi Mining and Metallurgy and the Construction of Ecological Urban Landscape

As a representative city of mining and metallurgy culture, Huangshi can combine the material form and spiritual form of mining and metallurgy culture in the construction of urban landscape, designing from multiple layers and multi-dimensional, so that citizens or tourists in Yellowstone can understand the history of Huangshi mining and metallurgy from all aspects, feel the mining and metallurgy culture of Huangshi, and experience the precipitation of Huangshi mining and metallurgy. For the mining and smelting culture of Huangshi, do not stick to it and do not abandon it. It is possible to continue to develop and utilize a part, protect a part, dismantle a part, rebuild a part, and combine it with the economic development and the actual situation of the area.

Conclusion

The mining and smelting cultural form of Huangshi can mainly be considered from two aspects in the construction of ecological city landscape. On the one hand, it renders the image of the city from the perspective of tangible materialization; on the other hand, it is the smudged urban atmosphere from the perspective of intangible consciousness. Through such design and construction, it will surely highlight the profound cultural and mining culture of Huangshi, thus forming brand competitiveness, and then driving the economic development of the Yellowstone region.

Acknowledgement

This research was financially supported by the Research Center for Mining and Metallurgy Culture and Socio-economic Development in the Middle reaches of the Yangtze River, project number: 2017kywh12, all support is gratefully acknowledged.

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