# Study on protection and utilization of Anshan Mining Heritage from the perspective of red research

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**Abstract:** With the strengthening of the state's ecological and environmental governance policy, the ecological remodeling and industrial transformation of mines have become a trend. Red research has the dual functions of education and tourism, which is helpful to the protection and utilization of mining heritage, and has important significance in promoting economic transformation, reshaping image and sustainable development of resources in mining areas. From the perspective of red research, this paper takes Anshan mining heritage as the research object, explores its advantages of red research, and puts forward strategies for the protection and utilization of Anshan mining heritage in view of the current difficulties, in order to provide useful references for the activation and utilization of mining heritage in the future.

Key words: Red research, mining heritage, protection and utilization

# 1 Red Research and mining heritage

- 1.1 Red Studies
- 1.1.1 Development status of red research

The term "red research" was first seen in 2017, and its application is increasing year by year. However, there are few studies on its conceptual meaning in the academic circle, and there is a lack of a broad and persuasive definition. In order to clarify the research object, this paper considers that "red research" is the conjunctive concept of "red tourism" and "research" through recursive definition method. With the development of tourism, the focus of the supply side of the tourism market has gradually shifted from "visited" to "experienced". As a unique "immersive" tourism mode, "research" has developed rapidly. At the same time, with the concept of "making good use of red resources and continuing red blood", all places have begun to actively explore, the popularity of red tourism continues to rise, the call for in-depth Tours and educational Tours is getting higher and higher, and the trend of cultural, educational and travel integration is gradually obvious.

# 1.1.2 Participants and main forms

As a new type of "immersive" tourism mode, red research emphasizes the interaction design and subjective feeling stimulation of the main body. In the existing literature, "red research subjects" are often limited to the categories of "students" and "primary and secondary school students", ignoring their overall development potential and development needs. Therefore, this paper comprehensively compares the development cases of red research and related literature across the country, and divides the red research subjects into the following categories. First, the organs, enterprises and institutions under the background of the Party's innovation theory and Party history learning and education normalization. The second is to comprehensively promote the construction of "big ideological and political courses" under the background of college teachers and students. The third is the core values education, quality education concept and the "double reduction" policy under the primary and secondary school teachers and students. The fourth is the "silver-haired tourists" under the background of the booming middle-aged and elderly tourism market. The fifth is the new family under the background of family travel and travel with children.

Although the focus of red research is "learning", its form is no longer limited to the traditional education model of "lecture-listening", but more creative practical teaching. According to the length of time, it can be divided into short-distance study and long-distance study. The former is mainly the "doorstep" research in the surrounding areas, the pace is relatively slow, and the security services such as public transportation and parking convenience are considered more; While the latter is mainly carried out by teams or individual tourists in other provinces and cities, focusing on the intuitive feeling of the place, considering the tourism ecology around the place and the cost performance of the route. According to the type of place, it can be divided into indoor red research and outdoor red research. Indoor focus on reading study, visiting exhibitions, multimedia interaction and other forms, while outdoor focus on field study, expansion sports, multiplayer games and other forms, the two are often combined in practice.

# 1.2 Mining Heritage

Mining heritage refers to the special industrial heritage formed in the development process of mining industry, and is a subdivision of industrial heritage. The mining heritage referred to in this paper not only includes the valuable mining heritage formed by the mining industry development, but also includes other industrial historical heritage closely related to the mining industry formed on the basis of mining development, which is the dialectical unity of "tangible heritage" and "intangible heritage". For mining cities, mining heritage is the witness of major events and major nodes in various historical periods of revolution, construction and reform, the carrier of the party's struggle course and spiritual power, the telling of "red story", and the cradle of "red gene". Therefore, judging by the value criterion, all the mining relics with historical origin, historical significance and protection possibility can be included in the category of "mining heritage".



# 2. Anshan mining heritage development of red research advantages

## 2.1 Geographical Advantages

Anshan City is located in the middle of Liaodong Peninsula. It is an important connection belt between the city cluster of Central and southern Liaodong Peninsula and the open area of Liaodong Peninsula. It has developed transportation networks such as highways and high-speed railways. Anshan, bordering on the provincial capital Shenyang and the coal and iron city Benxi to the east, is rich in tourism resources. In addition, most of Anshan's mining heritage is located in the city boundary, and reasonable development can take advantage of the city's convenient public facilities.

## 2.2 Abundant resources

Anshan is an important steel industry town in China, rich in mineral resources and rich in mining heritage resources. At present, Anshan has a number of large and small mines, including Dagushan open pit iron mine, Qianshan open pit mine and Qidashan open pit mine, which are distributed successively from the south to the east of the main city in a belt. Among them, Dagushan open pit Iron Mine has been listed in the National Industrial Heritage list. Anshan Municipal government is actively exploring and utilizing these resources, hoping to become a new name card of the city.

#### 2.3 Historical background

The "Six Places in Liaoning" is the concentration and simplification of red cultural resources such as red history, red story and red spirit formed by six cities such as Shenyang, Dalian, Anshan and Fushun in the long-term construction practice. It represents the struggle and sacrifice spirit of Liaoning people in the revolutionary historical period, and also shows the struggle and enterprising spirit of people in the modernization construction, with profound spiritual connotation. Anshan is "the foundation of the Republic of China's industry". In the early days of the founding of New China, the people of Anshan relied on hard work and used steel to provide important support and guarantee for the industrial construction of New China. At the same time, batches of heroic role models emerged, forming Anshan's unique heroic culture with the spirit of model workers and artisans as the core.

# 3. The dilemma facing Anshan mining heritage from the perspective of red research

#### 3.1 Low awareness of the research brand

Anshan City has rich mining heritage resources, but there is still a problem of lack of brand awareness. First of all, there is the problem of unclear tourism positioning, which leads to the fuzzy development direction, the lack of in-depth exploration of tourism resources in the region, the lack of novel research routes and research brands. Secondly, Anshan's promotion of the mining heritage is not in place, and the lack of effective integrated marketing strategy leads to the low popularity of tourism brands and poor marketing effect.

# 3.2 Low degree of integration of research resources

The degree of development and resource integration of mining heritage in Anshan is not high enough, and it is still in the initial stage. The mining heritage resources in Anshan City are distributed in many areas and have many types, lack of effective integration and utilization, and have not yet formed research scale effect. Secondly, the mining heritage tourism in Anshan lacks cross-industry cooperation mechanism and unified planning and coordination, resulting in limited integration and penetration; In addition, the development and management of mining heritage needs professional research talents. At present, Anshan's research talents reserve is insufficient, which restricts the process of resource integration.

# 3.3 Monotonous research mode

At present, there are many problems in Anshan's research mode, such as monotonous development mode and lack of innovation. Many mining heritage research projects only pay attention to the natural landscape and historical knowledge of the mine, lack of in-depth excavation and interpretation of mining related historical buildings, technology and other aspects, and the research content is simple and lack of depth. In addition, some research projects still adopt the traditional way of explanation and visit, lack of interaction and experience, and it is difficult to meet the tourists' needs for personalized and diversified research forms.

# 4. Anshan Mining heritage transformation strategy from the perspective of red research

## 4.1 Improve the construction of research base

Research base is an important carrier to carry out red research activities, and the layout, function division and facility configuration of the base should be carefully planned to meet the needs of research activities. First, the traffic around the research base should be solved. Cooperate with the local government and the tourism department to investigate and evaluate the red resources around the mining heritage, and plan a red traffic route according to the resources and traffic conditions. In addition, the internal traffic facilities of the base will be updated and upgraded, such as lighting, drainage, monitoring and other facilities, and the hardware level of the base will be improved. The second is to create a distinctive research function. Relying on the huge pits left by Anshan mine and related historical buildings, the geological museum and mining culture experience museum will be developed. By displaying various minerals, geological specimens, machinery and equipment related to the mining industry, the historical scenes of the mining industry will be reproduced, and the history, technology and culture of Anshan mining industry will be displayed to visitors. Using mining machinery, the abandoned mines and mining equipment will be transformed into laboratories, practice workshops, art installations, etc.

## 4.2 Create research and learning tour routes

Through careful planning and design, to create research and study tour routes with characteristics and significance. First, mining science popularization knowledge route. Set up display boards and interpretation boards along the way, provide mining science popularization materials, plan geological exhibitions and geological science popularization lectures, etc., so that the research group can have an in-depth understanding of mining. The second is the century-old mining culture route. By visiting mines, old mines and mines museums, as well as inviting local residents or history experts to tell their stories and personal experiences with mining areas, it aims to enhance the sense of patriotism and social responsibility among the research community. Third, the route of mining heroics. In the century-old mining history of Anshan, countless touching stories have emerged, such as Meng Tai, "BF guard", Zhao Yulin, "Iron and Steel hero", "500 Arhats" and so on. Heroic monument and memorial hall are set up to let the research community understand the deeds of the mining heroes and feel their patriotism. Fourth, diversified theme routes. More diversified theme routes should be formulated in light of actual conditions and needs. For example, target specific groups, such as teenagers, students, or corporate teams, and design featured routes that meet their needs.

## 4.3 Build a digital research model

Through digital technology, the research resources of Anshan mining heritage will be converted into digital formats, for example, the mining cultural history, mining science knowledge and other materials into electronic documents, pictures, audio and video, which are easy for the research community to browse, download and use online. In addition, the use of virtual reality (VR), augmented reality (AR) technology, holographic technology, 5D gallery and other high-tech means to reproduce the specific era of Anshan mining scenes, symbols or symbol buildings, strengthen the immersive and interactive research experience of the research community.

## 4.4 Construction of research galleries in joint areas

In the 14th Five-Year Plan for tourism development, the importance of cross-regional resource integration and coordinated development was emphasized. The Anshan municipal government can cooperate with other cities rich in mining heritage resources, and build a new tourism spatial pattern through regional integration with cities such as Benxi, Shenyang and Jinzhou, which are adjacent to Anshan. For example, combining the mining heritage resources of each city, jointly develop a characteristic research and tourism route, so that the research group can systematically understand the industrial development course of Northeast China.

# 5 Epilogue

Under the background of the upsurge of red research, Anshan mining heritage has ushered in a new opportunity and new path of "Phoenix nirvana", and has also brought great potential benefits of preserving urban memory, inspiring urban character and adding urban vitality. Under the guidance of the new development concept, it is necessary to grasp the objective law, fully understand the significance and unique advantages of the protection and utilization of Anshan mining heritage, face up to the current problems of Anshan mining heritage such as low brand awareness, low integration of resources, and a tendency to a single model, and construct, maintain and develop it well through scientific transformation principles and strategies.

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