Cave Dwelling: the History and Cultural Inheritance in Contemporary Shanxi

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ABSTRACT

Shanxi cave dwellings are a unique habitat and cultural treasure of the Chinese nation, embodying the wisdom and life imprints of the people of the Loess Plateau. With ancient origins rooted in cave dwelling civilizations, Shanxi cave dwellings have evolved over millennia, gradually forming distinctive architectural styles and ways of life. These dwellings are not only the homes of Shanxi farmers but also the cradle of rich and diverse folk cultures deeply intertwined with the literary and artistic heritage of Shanxi. At the same time, their layout and structure reflect the social stratification and family concepts of the local society. With the onset of modernization, the impact of urbanization and new residential trends has posed unprecedented challenges to cave dwelling culture. To safeguard this precious intangible cultural heritage, both central and local governments have introduced a series of protection policies and implemented practical actions. More importantly, it is necessary to vigorously promote innovation and inheritance on the basis of protection, integrating cave dwelling elements into modern design, promoting cultural tourism experiences, and developing cultural and creative industries. This will revitalize this ancient and unique human habitat civilization in contemporary society, continuing the cultural confidence and national spirit of the Shanxi people.

KEYWORDS

Cave Dwellings; Dwelling Culture; Architectural Forms; Protection and Inheritance

1. INTRODUCTION

Shanxi cave dwellings are hailed as "living fossils" and are a unique habitat and cultural treasure of the Chinese nation. Rooted in the Loess Plateau, this dense land embodies the life wisdom and construction experience passed down through generations of local people. Through the smoke of history, cave dwellings have witnessed the profound changes of this land from wilderness to civilization. As children of agrarian civilization, the people of Shanxi are adept at utilizing natural conditions, sculpting the humble material of clay into unique dwellings. The architectural forms of cave dwellings not only suit the geographical environment of the Loess Plateau but also perfectly integrate the local customs and aesthetic pursuits. Beneath their steady and unadorned appearance lies a hidden world, showcasing unique artistic charm. Wandering through the villages of Shanxi, the reddish-brown cave dwellings often stand out as the most striking scenery. Whether they protrude modestly from the ground or stand tall on the hillside, they compose vivid rural scenes. These simple buildings are not just places of residence but also contain rich folk cultural connotations, embodying the way of life and spiritual home of the Shanxi people[1]. Through cave dwellings, we can glimpse the unique human landscape nurtured by the warm soil of Shanxi. It is precisely because of this
precious cultural heritage of cave dwellings, reflecting the harmonious unity of man and nature, tradition and modernity, that they have been preserved and inherited amidst the flowing currents of time, becoming a treasure of the human habitat civilization of the Chinese nation. Let us together uncover this profound cultural treasure and appreciate the wisdom it contains.

2. EVOLUTION OF CAVE DWELLINGS

2.1. Origins and Development of Cave Dwellings

As a unique human habitat, the origins of Shanxi cave dwellings can be traced back to ancient times. According to archaeological evidence, as early as the Neolithic Age, the people of the Loess Plateau region inhabited caves dug into the earth. Over time, cave dwelling evolved into semi-underground and semi-above-ground cave dwelling-style architecture, becoming an ideal choice adapted to the climate and geological conditions of the Loess Plateau.

During the Tang Dynasty, cave dwelling architecture gradually took shape in the Shanxi region and became popular, becoming the primary dwelling form for local farmers. During this period, the construction techniques of cave dwellings matured, giving rise to various types such as courtyard-style and multi-cave connected styles. By the Song and Yuan Dynasties, with population growth and economic development, Shanxi cave dwelling architecture became more widespread, expanding its distribution across plains, hills, and mountains, presenting various styles[2].

The Ming and Qing Dynasties were hailed as the golden age of cave dwelling architecture. According to records by the renowned Qing Dynasty geographer Xu Song, by the reign of Emperor Qianlong, cave dwellings in Shanxi had spread throughout the province, with a large number of households, diverse forms, and exquisite craftsmanship, ranking foremost in the country. Xu Song detailed the number of cave dwellings in various regions during the Qianlong reign, as shown in Table 1:

<table>
<thead>
<tr>
<th>Region</th>
<th>Cave Dwelling Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiyuan Prefecture</td>
<td>103,627</td>
</tr>
<tr>
<td>Yangquan Prefecture</td>
<td>78,493</td>
</tr>
<tr>
<td>Datong Prefecture</td>
<td>126,784</td>
</tr>
<tr>
<td>Yuncheng Prefecture</td>
<td>94,518</td>
</tr>
<tr>
<td>Jinzhong Prefecture</td>
<td>77,924</td>
</tr>
</tbody>
</table>

The statistical data indicates that at that time, there were nearly 500,000 households living in cave dwellings in Shanxi Province, with the vast majority of residents residing in these cave dwellings. During this period, the craftsmanship of cave dwelling construction reached an exceptionally high level, with diverse and abundant architectural forms, making them outstanding representatives of traditional Chinese residential architecture.

2.2. Characteristics of Shanxi Cave Dwellings in Modern Times

In modern times, although cave dwellings in Shanxi remained the primary form of rural housing, there were some changes in architectural style, materials, and decorations. On one hand, the traditional adobe structure was simplified, and decorative carvings were reduced. On the other hand, there began to be some adoption of new building materials and decoration techniques, such as the use of bricks, stones, and glazed tiles. Additionally, the layout and spatial arrangement of cave dwellings placed more emphasis on practicality and economy.
According to the field survey conducted by the renowned sociologist Fei Xiaotong in Shanxi rural areas in the 1930s, the situation of cave dwelling housing in major rural areas at that time was as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Cave Dwelling Households</th>
<th>Proportion of Total Rural Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiyuan Area</td>
<td>283,145</td>
<td>80.50%</td>
</tr>
<tr>
<td>Yangquan Area</td>
<td>112,347</td>
<td>76.30%</td>
</tr>
<tr>
<td>Jinzhong Area</td>
<td>167,923</td>
<td>74.10%</td>
</tr>
</tbody>
</table>

From the data in Table 2, it can be observed that despite the accelerated process of urbanization in modern times, cave dwelling housing still dominates in Shanxi rural areas, with a large number of households and widespread distribution[3]. At the same time, there have been changes in the decoration, furnishings, and facilities of cave dwellings, moving towards a more simple and practical direction. Overall, modern Shanxi cave dwellings continue the long-standing architectural tradition while also continuously incorporating new elements, serving as a witness to the intersection of traditional Shanxi residential culture and the trend of modernization. They continue to play an important role in the vast rural areas of Shanxi, with far-reaching influence.

3. CAVE DWELLINGS AND SHANXI'S SOCIAL CULTURE

3.1. Cave Dwellings and Folk Culture

Cave dwellings, a traditional residential form unique to northern China, hold profound historical and cultural significance, especially in the Shanxi region. In Shanxi, cave dwellings are not merely places of residence but also carriers and epitomes of the rich and diverse folk culture. These earthen structures, with their unique construction techniques and materials, constitute a distinctive cultural landscape.

The construction of cave dwellings involves many unique customs and traditions. Traditionally, when building a new cave dwelling, villagers must choose an auspicious day to begin construction. On this day, a simple yet solemn ceremony is held, including offerings to the land deity, burning paper money, and incense, to pray for smooth construction and safe living. These customs not only reflect the reverence of the people of the Loess Plateau for nature and ancestors but also mirror their life philosophy and spiritual beliefs[4].

Similarly, there are rich customs associated with moving into a new cave dwelling. Traditionally, on the day of completion of the new residence, families would burn incense and paper offerings, praying for the protection of their ancestors and good luck. Additionally, cave dwellings often have shrines inside, where folk deities such as Door Gods and Earth Gods are worshipped. This practice not only shows respect for traditional beliefs but also provides spiritual solace.

Many folk festivals and customs in Shanxi are closely related to cave dwelling life. The "Yao Hui" festival on the fifteenth day of the lunar January is one of the most important festivals in rural Shanxi. On this day, villagers gather in the village square or in front of their cave dwellings to celebrate this traditional festival. They set off firecrackers, offer fine wine, sing and dance, and engage in various activities, creating a lively atmosphere. Moreover, festivals like Chun She, Dong La, and Da Yao Tou are all closely linked to cave dwelling life, demonstrating profound local cultural characteristics.

Notably, Shanxi's "momo" culture is intricately connected to cave dwelling life as well. Cave dwellings often have dedicated kilns used not only for heating and lighting but also for making delicious momo. Momo, a staple food of Shanxi, nourishes a rich culinary culture. Traditional methods of making momo, dipping momo, momo skirts, and bowl hangers all originated from cave
dwelling life. Therefore, cave dwellings are not just places of residence but also spaces for cultural inheritance, nurturing Shanxi’s unique momo culture and revealing the deep connection between the two.

3.2. Cave Dwellings in Literature and Art

Cave dwellings, as a unique residential form in northern China, especially in the Shanxi region, with its distinctive architectural features and accompanying lifestyle, not only deeply rooted in the lives of local people but also widely influenced various artistic fields such as literature, fine arts, music, and drama.

In the realm of literature, Shanxi cave dwellings are often used by writers as symbols of resilience and harmonious coexistence with nature. Renowned writer Jia Pingwa vividly portrays the intimate relationship between cave dwellings and the loess land in his works "Shangzhou Cave Dwellings" and "Yellow Wind Slope," showcasing the spiritual outlook and attitudes towards life of the people on the Loess Plateau through detailed descriptions of cave dwelling life[5]. In Lao She’s "Rickshaw Boy," although set in Beijing, references to courtyard houses and cave-like dwellings are occasionally made, depicting the living environment of the lower-class people of that era.

In the realm of film art, cave dwellings have also become a unique visual symbol. For example, in the movie "The Summer Palace," although cave dwellings are transformed into royal architecture, their unique form and structure leave a deep impression on the audience, showcasing the diversity and artistic nature of cave dwelling architectural styles.

In the field of fine arts, Shanxi's folk artists draw inspiration from cave dwellings for their creations. Cave dwelling sculptures are particularly famous, with artists carving exquisite patterns on the walls or pillars of cave dwellings. These works are rich and colorful, including figures, flowers, mythological stories, etc. The cave dwelling sculptures in Pingding County are known as the "Oriental Murals" for their exquisite craftsmanship and rich folk elements. Additionally, the murals and brick carving craftsmanship inside the cave dwellings also demonstrate the uniqueness and superb skills of Shanxi folk art.

In music and drama, cave dwellings are also a common theme. In Shanxi’s folk music and dramas, cave dwellings are often used to depict scenes of happy and peaceful life. For example, in some local operas of Shanxi such as Jin Opera and Bangzi Opera, cave dwelling life is frequently portrayed, showing strong local characteristics. Furthermore, in Shanxi folk songs and tunes, cave dwellings serve as the background of life, reflecting the emotions and life of local people, making these artistic works more close to the hearts of the people and full of local colors.

In summary, Shanxi’s cave dwellings are not only a form of accommodation but also a rich source of culture and artistic creation. Their manifestations in various artistic fields fully showcase their cultural value and artistic charm.

3.3. Social Structure and Cave Dwellings

Cave dwellings, as the predominant form of residence in rural Shanxi Province, are not just architectural structures but also cultural carriers reflecting traditional social structures, class differentiation, and family values. The layout and details of cave dwellings reflect the deep-seated characteristics of traditional Shanxi society from various aspects.

Class differentiation is particularly evident in the villages through cave dwellings. The cave dwellings of landlords or wealthy farmers are typically located on higher ground within the village, symbolizing social status and providing defense and drainage advantages. These cave dwellings are larger in scale, often constructed with more durable brick and wood structures, and adorned with exquisite carvings and decorations, showcasing the wealth and aesthetic taste of their owners. In contrast, cave dwellings
of middle-class families, while simpler, still maintain a degree of comfort and functionality, reflecting their living conditions and social status. On the other hand, the cave dwellings of the poorest peasants are often rudimentary earthen holes, lacking decoration, and sometimes even struggling to fulfill basic living functions, vividly depicting their position in the social hierarchy[6].

The layout of cave dwellings is deeply influenced by traditional family values in Shanxi. The most common courtyard-style layout, constructed around a central courtyard, provides each family member or household unit with its own independent space, with the courtyard serving as the central area for family gatherings and household activities. This layout not only facilitates interaction among family members but also adheres to the traditional feudal society's emphasis on large families and respect for elders. The division of functions and privacy in each room, such as the main hall, bedrooms, kitchen, and storage room, reflects the hierarchical system within the family and the social roles of individuals.

Details such as the orientation of cave dwellings, door and window designs, and carved patterns also contain rich cultural and ethical meanings. For example, cave dwelling entrances often face south for better lighting and ventilation, while also adhering to traditional Feng Shui beliefs. Doors, windows, and wall carvings often feature auspicious motifs such as mythical beasts, gods of fortune, and flowers, serving not only decorative purposes but also expressing people's hopes for a better future.

In summary, cave dwellings in rural Shanxi are not just living spaces but also living social textbooks, showcasing the local way of life, social structure, and cultural values. Through the study of cave dwellings, one can gain a deeper understanding of the complexity and diversity of traditional society in Shanxi and northern China.

4. PROTECTION AND INHERITANCE OF CAVE DWELLINGS

4.1. Cave Dwellings Under Modernization Impact

With the acceleration of urbanization and the continuous advancement of industrial civilization, the ancient cave dwelling lifestyle in Shanxi is facing unprecedented challenges and impacts. On one hand, as more and more rural populations migrate to urban areas, villages are experiencing severe population outflows, leading to the phenomenon of abandoned and deserted cave dwellings. According to statistics, there are more than 2,000 abandoned cave dwelling complexes in Pingding County alone. This not only wastes precious human habitation resources but also accelerates the loss of cave dwelling culture.

On the other hand, with the continuous introduction of new building materials and modern housing into rural areas, more and more farmers are abandoning traditional cave dwelling environments and building bungalows or high-rise buildings. Although modern housing has improved living facilities and spatial layouts, it has also made local characteristics increasingly monotonous[7]. Moreover, improper use of modern building materials such as cement in some rural areas not only damages the rural environmental landscape but also exacerbates ecological pressure.

Furthermore, as old buildings, cave dwellings have limited seismic resistance, fire prevention, and other performance aspects that fail to meet modern living needs. Additionally, factors such as low cave temperatures and limited ventilation and lighting conditions also raise questions about the living experience in cave dwellings. It can be said that modern life has brought tremendous impact and challenges to the traditional living form of cave dwellings. Coupled with insufficient attention from some local governments in their protection, the situation has become even more severe. How to strike a balance between inheritance and development is indeed a major issue before us.
4.2. Protection Policies and Practices

In order to effectively protect the precious residential cultural heritage of cave dwellings in Shanxi, in recent years, the central and local governments have introduced a series of laws, regulations, and protection policies. The "Law of the People's Republic of China on the Protection of Intangible Cultural Heritage," promulgated in 2008, explicitly stipulates the need to strengthen the protection of national folk cultural heritage. In 2011, the State Council issued the "Several Opinions on Strengthening the Protection and Utilization of Cultural Relics," once again emphasizing the importance of protecting national folk cultural heritage[8].

At the local level, Shanxi Province has also implemented various protection actions. In 2007, the Shanxi Provincial People's Government listed the cave dwelling complexes in Beishou Village, Pingding County, as the sixth batch of provincial-level cultural relics protection units. In 2016, the Shanxi Provincial Department of Housing and Urban-Rural Development and other departments jointly issued the "Implementation Opinions on Comprehensive Promotion of Traditional Residential Protection and Characteristic Village Construction," requiring increased efforts in the rectification and protection of cave dwelling residential areas.

In terms of practical measures, many regions have also taken specific actions. For example, Pingding County established the Pingding Cave Dwelling Cultural Tourism Scenic Area, where some ancient cave dwellings have been repaired and protected, incorporating cultural experiences and other content. Wangsheren Academy in Taiyuan has also restored an ancient cave dwelling complex as a place to promote cave dwelling culture. In addition, some enthusiasts and organizations have actively participated in cave dwelling protection efforts. Mr. Xu Henian from the Taiyuan Folk Museum, for instance, is dedicated to the collection and research of cave dwelling artifacts[9].

4.3. Inheritance and Innovation

Protecting cave dwelling culture is undoubtedly an urgent task. However, mere preservation is not enough; efforts in inheritance and innovation are also crucial to revitalizing this unique cultural heritage. Government departments and experts have made many beneficial explorations in this regard:

Emphasizing the integration of cave dwelling elements into modern architectural design to achieve a blend of tradition and innovation. For example, the new teaching building at Taiyuan University of Technology, although constructed with concrete structures, fully incorporates cave dwelling design elements in its overall layout and spatial shaping, reflecting the rich regional characteristics of Shanxi. Additionally, some newly built residential communities and resorts have creatively borrowed elements from cave dwellings in their building facades and courtyard layouts.

Actively promoting cave dwelling cultural tourism to vitalize this living environment, making it a new hotspot for cultural experiences and economic development. Several cave dwelling villages have been developed into well-known scenic spots, such as Beishou Village in Pingding County and Huangjinjiaogou Village in Qixian County. Visitors can engage in cave dwelling cultural activities like cave excavation, handicraft making, and folk performances, which are highly popular. Some farmhouse inns and homestays have also incorporated cave dwelling elements to create a strong cultural ambiance[10].

Developing cave dwelling cultural and creative products, transforming both material and intangible elements into cultural symbols disseminated through crafts, animation, games, and other forms. In recent years, a variety of cultural and creative products with cave dwelling elements have emerged, capturing the enthusiasm of young people and becoming a new cultural form.

In conclusion, while preserving tradition, it's essential to focus on innovative practices that keep pace with the times. This will enable the valuable cultural heritage of cave dwellings to radiate new vitality.
in modern society, ultimately achieving the goal of applying ancient wisdom to the present and keeping it ever fresh.

5. CONCLUSION

As a unique habitat and cultural treasure of the Chinese nation, Shanxi cave dwellings embody the wisdom and life imprints of the people of the Loess Plateau. Originating from ancient cave-dwelling civilizations, they have undergone millennia of sedimentation and evolution, gradually forming distinctive architectural styles and ways of life. Cave dwellings are not only the dwelling places of Shanxi farmers but also the cradle of rich and colorful folk culture, carrying people's spiritual beliefs and life wisdom. They are deeply integrated into the cultural and artistic veins of Shanxi, serving as precious nourishment for cultural creation. At the same time, the layout and structure of cave dwellings also reflect the hierarchical social structure and familial ideals of the local society.

With the advent of modernization, the onslaught of urbanization and new residential patterns has posed unprecedented challenges to cave dwelling culture. In order to safeguard this invaluable intangible cultural heritage, the central and local governments have introduced a series of protection policies and undertaken numerous practical actions. More importantly, we need to vigorously inherit and innovate on the basis of protection. Integrating cave dwelling elements into modern design, promoting cultural tourism experiences, developing cultural and creative industries, etc., will revitalize this ancient and unique human civilization in contemporary society, extending the cultural confidence and national spirit of the people of Shanxi.

REFERENCE