Characteristics and Causes of Cultural Landscape of Changbai Mountains Traditional Villages in Jilin Province Based on Regional Style and Features

Qunsong Zhang Dalian Polytechnic University Dalian, China 116034

Cuixia Yang Dalian Polytechnic University Dalian, China 116034

Abstract—As the carrier of living cultural heritage, traditional villages embody the regional cultural landscape formed by the comprehensive effects of natural resources, human history and the coexistence of human and environment. Based on the regional features of Changbai Mountains, this paper analyses the cultural landscape of 11 national traditional villages in Jilin Province, and elaborates the spatial form, residential features and intangible cultural landscape features of villages from the perspective of forestry, fishing, hunting, collection, farming and other cultural landscape, and analyzes the reasons for the formation of the characteristics. The purpose of this paper is to analyze the characteristics of Jilin traditional villages from the perspective of cultural landscape, which is of great significance to improve and protect the rural human settlements environment by Changbai Mountains, Jilin Province, and to lead the revitalization of traditional villages with green development as the basis and cultural continuity as the core.

Keywords—regional style and features; traditional villages; cultural landscape; Changbai Mountains

I. INTRODUCTION

Regional features are not only the key factor to maintain the rural character of traditional villages [1], but also the precipitation of the development history of villages and the external expression of human and nature relying on history and space. It is not only the soul and core of the rural human settlement environment [2] [3], but also the focus of the cultural landscape of traditional villages, as well as the soul of the implementation of the strategy of rural revitalization. Cultural landscape is a form of human activity attached to natural landscape [4], while traditional villages are the most representative regional cultural landscape [5]. Excavating the social value of traditional villages' humanistic landscape and deep analysis of regional cultural landscape [6], it is possible Fucun Cao Dalian Polytechnic University Dalian, China 116034

to expand the research dimension of traditional villages. Seen from the regional features of traditional villages, this paper analyses the forming factors of the human landscape [7] and the inhabiting environment of traditional villages [8], which is more conducive to restoring the vitality of the villages and inheriting the local regional culture. Local tradition and memory are the foundation of the richness and uniqueness of regional landscape. However, in the rapid development of urbanization, the fade and dissimilation of regional culture arise because of the impact of commerce, which hinders the dissemination and protection of regional features. So how to preserve and continue the original culture of traditional villages is still the most important part in the current strategy of rural revitalization.

Based on the concept of regional landscape, this paper takes the national traditional villages in Jilin Province as an example. Through extracting the features of the regional landscape, from the perspective of material culture and intangible culture, the characteristics and causes of the cultural landscape in traditional villages are analyzed in a multi-dimensional way. It is designed to better understand and protect cultural landscape of the traditional village from the perspective of cultural geography, and to provide a basis for the future continuation of the features of regional landscape.

II. RESEARCH OBJECTS AND METHODS

Changbai Mountains is one of the birthplaces of ancient civilization in China and an important nature reserve in cold regions at the national level. It is also an area with frequent activities of multi-ethnic groups. Changbai Mountains' culture has a long history. Changbai Mountains is the birthplace of Liao, Jin, Qing Dynasty and other dynasties, and of a unique regional style. Because of its primitive natural environment, less impact of urbanization, and relatively complete traditional villages, it has unique settlement patterns, traditional dwellings and folk culture. This paper takes Changbai Mountain culture as an example

^{*}Fund project: Art Science Project of National Social Science Foundation in 2017, "Research on the Construction of New Countryside and the Protection of Traditional Village Culture in Northeast" (No. 17BH151).



to discuss the cultural landscape of traditional villages in Changbai Mountains. The basic data of the study are from the National Space Data Cloud (www.gscloud.cn) and the 1:500000 map of Jilin Province. The data are digitized and corrected by actual research. The Changbai Mountains System covers not only the three northeastern provinces and the eastern part of Inner Mongolia, but also the Russian Far East and parts of the Korean Peninsula [9]. This study covers 11 national traditional villages in the mid-east region of Jilin Province by Changbai Mountains. It is a region bounded by Liuhe River, Huifa River, Songhua Lake and Jiaohe River systems to the eastern border of Jilin Province ("Fig. 1"). "Fig. 1" shows that 10 villages are located in the eastern part of Jilin Province and 1 in Jilin City in the central part of Jilin Province. Most of the traditional villages are close to the border between China and DPRK.

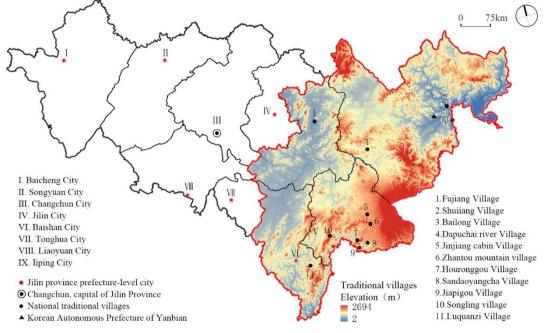


Fig. 1. Distribution of traditional villages in Jilin Province.

For the study of regional features, the continuity between different regional styles and cultures should be paid attention. Understanding the segregation and compatibility between different cultures is conducive to our continuous innovation on the basis of our predecessors. [10] In this paper, the cultural landscape of traditional villages is analyzed on the basis of different levels of regional features ("Fig. 2"), the characteristics of cultural landscape are extracted, and the reasons for the formation of cultural landscape are discussed in depth.

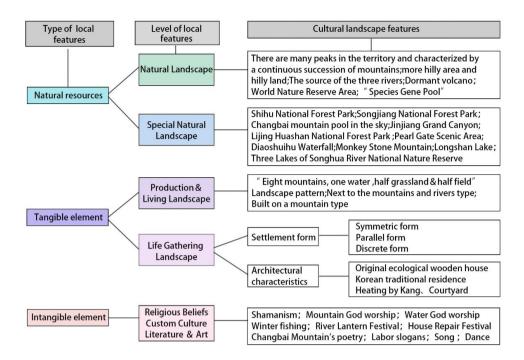


Fig. 2. Factor analysis of regional features.

III. CHARACTERISTICS OF CHANGBAI MOUNTAINS TRADITIONAL VILLAGES OF JILIN PROVINCE FROM THE PERSPECTIVE OF REGIONAL STYLE AND FEATURES

A. Features of Natural Conditions

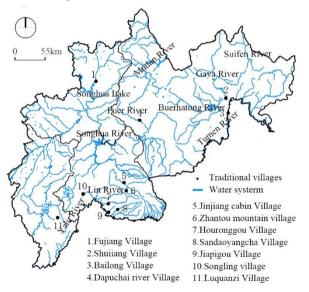


Fig. 3. Distribution of Water System and Traditional Villages in Changbai Mountains.

Changbai Mountains is a dormant volcano and the first mountain in Northeast China with the same name as the five mountains in China. Changbai Mountains is also the most representative natural complex in the northern part of Eurasia, and is a rare "species gene pool" on the earth. [11] Therefore, in 1980, Changbai Mountains joined the United Nations' Network of Human and Biosphere Reserves and was listed as a world natural reserve. Due to the influence of environment. topography and climate, many rivers, waterfalls and lakes are developed on the volcanic cone and lava plateau of Changbai Mountains. The Songhua River, Tumen River and Yalu River systems originate from Changbai Mountains and flow out radially ("Fig. 3"). Among them, the Songhua River system is the most important, whose basin area accounts for about 2/5 of the province's area. It has abundant water and hydraulic resources. It has built a number of large and medium-sized hydropower stations and provided a large number of industrial and agricultural water. Yalu River and Tumen River are diverted to southwest and northeast respectively, which are the Boundary Rivers between China and North Korea. Their common characteristics are large slope and large amount of water. Changbai Mountains is also very rich in forest resources. The most typical primitive forest in Changbai Mountains is "the underground forest" located on the Banks of the two rivers. In addition to rich natural resources, regional natural landscape is also quite unique, such as Changbai Mountains Tianchi, Songhua River Sanhu National Nature Reserve, Shihu National Forest Park and other scenic spots.

B. Tangible Elements of Traditional Villages

1) Landscape characteristics of life and production: The location and layout of traditional villages mostly make use of natural mountains and waters to build human settlements according to local conditions, and follow the ancient geomancy and the philosophy of "harmony between man and nature". These traditional villages are basically the landscape pattern of "8/10 area of mountain land, 1/10 area



of water land, 1/20 area of grass land and 1/20 area of farming land". According to the spatial combination characteristics of the traditional villages and their natural geographical environment in the study area, the location and layout of the traditional villages in Changbai Mountains can be divided into two basic types: one is built by mountains; the other is built and surrounded by mountains and rivers. Around the traditional villages are basically cultivated land and field. Among them, the Korean villages near the Tumen River system mainly grow paddy fields, supplemented by dry fields. For example, Bailong Village, Shuinan Village, Sandao Yangcha Village and Naitoushan Village mainly grow rice, corn and soybean crops on the floodplains and highlands around the villages. The villages in the hilly area of Zhongshan mainly consist of dry land, and take into account the economic aspects of forestry such as ginseng and fruit trees, such as Jinjiang Muwu Village, Zhuantoushan Village, Huoronggou Village and Songlingtun Village.

2) Landscape of life cluster

a) Settlement form: The formation and evolution of settlement forms are carried out under the conditions of organic combination and mutual influence of natural environment, social relations and cultural forms. Case villages are mainly divided into three forms. First of all, the symmetrical structure is characterized by the obvious main axis in the center of the village, and the settlement extends around the axis. For example, Luquanzi Village has neat spatial layout and obvious axis form formed during the Anti-Japanese War because Japanese army used it to prevent the combination of mountain people and armed forces. Jiapigou Village is situated on the gentle slope surrounded by mountains on three sides. Its axis is in the north-south direction and the layout is of "±" shape. The South Bank of Yalu River at the 180 degree turning point was selected for its flat alluvial plain formed by the slowdown of flow speed. The obvious patriarchal settlement of Han nationality is formed in a square shape, and diffuses around along the axis, which reflects the spatial distribution state of the harmonious coexistence of the inhabitants mainly engaged in farming, production and life with nature. Secondly, there are parallel structures, such as Sandaoyangcha Village, originated from Qidaohe Waterway Junction, and Bailong Village, located in narrow valley corridor and surrounded by wells on gentle slopes. The Korean people have the tradition of digging wells and standing wooden piles before building houses. Therefore, Bailong Village has formed a group form centered on water wells, and shows a bar-shaped distribution. The primitive settlement of Dapu Chaihe Village, located in the valley plain on the East Bank of Fuer River, is in a natural scattered pattern. The Pearl Gate Hydropower Station was established in 1987 to transform the original village into the present pattern. Finally, there is a discrete structure. Songlingtun Village is situated on southeast gentle slopes of two nearby hills. Because of the lifting of the ban on

Changbai Mountains, the immigrants inside Shanhai Pass formed villages. The average elevation of the village is as high as 1100 meters, with a long snowpack period. In order to resist the cold wind and prevent mutual shelter, the subsidiary structures in each independent courtyard have different orientations and distances from the main buildings, which highlight the discrete structure.

b) Architectural characteristics

• Primitive and ecological wooden house

The most noticeable architectural form in Changbai Mountain area is the wood-carved corrugated building known as "primitive and ecological wooden house". Jinjiang Wood-house Village is built by stacking the whole log vertically and horizontally into "the wood-carved corrugated wall". The main structure and wall are constructed by the wood overlapped with tenons and mortises. The walls are covered with mud to keep warm and wind-proof. The roofs are mostly covered by progressive wooden tiles with double slopes, and the chimneys are also made of the whole hallowed log. In terms of interior layout, the front of the door is a wide kitchen. On both sides of kitchen are bedrooms with heated kangs. Most of the windows are in the form of supporting and removing windows, and other furniture and furnishings are wood. The buildings in Furonggou Village are mostly built with adobe walls. Some roofs in Dapu Chaihe Village are still made of grass, and the sloping roofs without tiles and ridges are propitious to removing snow in winter. Generally speaking, the well-dry dwellings in Changbai Mountains are generous in shape and rarely decorated, with rough and simple style.

• Korean traditional dwellings

Sandao Yangcha Village, Shuinan Village and Bailong Village all have very remarkable Korean characteristics. Most Korean dwellings are single houses with simple and lively shape. The building structure uses wooden frame to bear the load. It is surrounded by 20-30 cm short pile abutments and covered with wooden boards. The walls are often sandwich walls or hollow walls. The outer walls are decorated with white ash, and the chimney is independent of the house. Indoor space is mainly around the floor canal (warm kang), mostly with white paper pasted sliding doors and flexibly separating space in "" and "" and "" shaped graphic layout. [12] Bailong Village's "100-year-old House" is the representative of the Xieshan Peak dwelling of the Korean nationality. The cornices of the eaves and the ends of the roof are raised upwards, the breadth of the tiles and the narrowness of the tiles are wide. The whole building has a clear contrast of colors, and the materials have the characteristics of the traditional culture of the Xianjintao Road.

• Traditional houses of the Han nationality

Most of the Han people in Changbai Mountains come from immigrants inside Shanhai Pass. They are engaged in farming and are influenced by Manchu architecture and geological climate. The traditional Han dwellings in villages are typical of courtyard buildings facing south. In Fujiang Village, for example, are mostly three-section courtyards, facing south with large roof truss room as main, supplemented by wing room on both sides of the main room. Wing rooms are small, and mostly used as warehouses, corn buildings or livestock barns. The main room mainly has three suites. More than two-thirds of the indoors are heated kang built by bricks or adobe.

C. Intangible Elements of Traditional Villages

1) Religious beliefs: The foothill of Changbai Mountains is the main birthplace of Shamanism. The Shamanism culture of all nationalities in Northeast China is the culture of worshipping natural objects such as mountains, rivers, wind and thunder. The traditional folk beliefs of Manchu people are Shamanism and ancestor worship and so on. There are many sacrificial activities, among which ancestor worship is the most important. Various forms of singing and dancing are accompanied by sacrificial rites such as "Drum Grabbing Dance", "Single Drum Dance", "Waist Bell Dance", "Divine Bobo Dance". They are precious intangible cultural heritage of Changbai Mountains. The Manchus in the Changbai Mountains and their neighboring nationalities have also worshipped the Changbai Mountains as sacred mountains for thousands of years. With the development of forestry activities such as ginseng collection and hunting, people mainly sacrifice tiger-imaged mountain gods and humanized gods called "gangmaster" to protect the safety of entering the mountains and take care of people's pursuit of wealth and profit. The belief that reflects fishing and hunting culture is manifested in the worship of the goddess of water by fishermen, and even in the larger fishing boats, there is a water goddess. Near the Changbai Mountains and rivers, there are fish temples, water temples and other places for people to worship. River Lantern Festival is an artistic form of worship of water gods.

2) Custom culture: The fishing and hunting culture in Changbai Mountains is mainly embodied in the folk winter hunting and hunting customs. Fujiang Village and Dapu Chaihe Village were the early villages mainly for pearl harvesting and fishing. Fujiang villagers, who lived close to Songhua Lake, used to rely on fishing for their livelihoods. They formed the habit of making and lighting river lanterns in order to pray for peace. Now they have evolved into the custom of River Lantern Festival. Hunting organizations are diverse. The Manchu people use hawks to catch prey, commonly known as "releasing hawks". The House Repair Festival is a grand festival in the wooden house village of Changbai Mountains. It is held in sunny May and June with the main activities of changing wooden tiles and plastering walls. In order to ensure the cold-proof effect of the wooden house, the mud skin on the wood spread last year were peeled off, and new mud are mixed and smeared on to seal the cracks in the wood. Since modern times, the life style of sitting on the ground brought by overseas Korean

immigrants and their excellence in singing and dancing have enriched the customs and culture of Changbai Mountains.

3) Myths, legends and literature and art: Traditional forestry techniques include both the work of logging and transporting wood. The workers are commonly known as "Shanchangzi". In Changbai Mountains, work songs are created in the process of logging (which has been listed as the national intangible cultural heritage by the Ministry of Culture). In the process of collecting ginseng, the culture of collecting ginseng mainly concentrates on Dapu Chaihe village, and evolves into folk songs such as "Kaishan" and "Fangshan". In long-term fishing activities customs and operas are formed and derived into plays, such as "Long Voyage to Home" and "Fishing and Woodcutting Talk". Various cultural and artistic forms have been formed in hunting activities, such as folk song and dance "Hunting Dance", "Mink Hunting Dance" and "Mohe Dance". [13] Fujiang villagers, who lived close to Songhua Lake, used to rely on fishing for their livelihoods. They formed the habit of making and lighting river lanterns in order to pray for peace, which has now evolved into the custom of River Lantern Festival. As a cross-border ethnic group, the Korean people are good at singing and dancing, and have been engaged in rice production in cold regions for a long time. They mostly take collective labor and use happy group singing and dancing to wash away fatigue during rest. The representative singing and dancing are Happy Farming Dance, Crane Dance and long drum dance related to agricultural activities.

IV. INFLUENCING FACTORS OF CULTURAL CHARACTERISTICS OF TRADITIONAL VILLAGES IN CHANGBAI MOUNTAINS

A. The Natural Environment in Changbai Mountains, the Root of the Formation of the Cultural Characteristics of Traditional Villages

Changbai Mountains is the ecological barrier of the three eastern provinces. The cold climate, vast forest ridges and abundant water system have created the production and life style of Changbai Mountains which is different from that of the Central Plains in forestry, fishing, hunting, collecting and farming. The unique traditional agroforestry production system in Changbai Mountains, including the ecosystem of basic elements such as forests, farmland and villages, and the landscape formed by the interaction between human and nature, can not only make local residents rich in food and clothing, stable in society, but also ensure biodiversity, maintain environmental stability, and form a sustainable lifeproduction-ecosystem. The freezing period of the hinterland of Changbai Mountains lasts for about 5 months. In order to ensure the illumination, the buildings do not block each other, and the production and life compatibility is strong. The courtyard layout of the large area of the open space in front of the house is relatively common. In order to cope with the cold climate, the traditional villages in Changbai Mountains



have formed the characteristics of simplicity and vigor, roughness and sincerity.

B. Cultural Heritage, the Driving Force for the Formation of Cultural Landscape in Traditional Villages

Changbai Mountain area has been the place where Han and minority nationalities multiplied and lived since ancient times. Manchu is the oldest indigenous people at the foot of Changbai Mountains. At present, the formation of multicultural landscape in Changbai Mountains is mainly influenced by two immigration tides in modern times. First, in the late Qing Dynasty, the policies of "Border-enriching immigration" and "Brave Journey to the East China" were undertaken. Changbai Mountain area was deeply influenced by the Han culture inside Shanhai Pass. Hunchun and Huinan preferred the Han culture. During the Anti-Japanese War, most of the immigrants in Linjiang area came from Shandong and were influenced by Oilu culture, which laid the multi-ethnic regional features of Changbai Mountain area. Second, Koreans migrated across the Yangtze River to the northeast, and the early immigrants were mainly Xianjingdao people in the northern part of North Korean. Because of the similar climate, they are mostly distributed in Yanji region. Korean culture is also one of the features of Changbai Mountain area. Although there are different cultural zones in the region, the cultural landscape has significant cultural genes of Changbai Mountains. Architectural layout, construction and material selection all pay attention to ethnic culture, cold prevention and moisture-proof. There are strong regional characteristics in the artistic treatment of architecture. The removable window structure and the interior space of the building pasted with window paper all adopt decorative contents reflecting local production and life, folk worship and moral enlightenment. This reflects the inherent aesthetic taste and spiritual pursuit of the villagers.

C. Social Economy, the Guarantee of the Formation of Cultural Landscape in Traditional Villages

The development of cultural village landscape needs a certain economic basis. To maintain the special cultural landscape of the region, it is necessary to protect the traditional mode of production. With the formation of nature reserves and the implementation of comprehensive utilization of forestry, forest-based development, forest conservation construction and cultural tourism policies, Changbai Mountain forestry has changed from a single industrial structure to a combination of scientific research and modern industrial facilities, forest recreation activities and other multi-industrial structure with national strategic significance. There are abundant forest resources around the villages. The temperate coniferous broad-leaved mixed forest area mainly consists of Korean pine, larix olgensis, ulmus propinqua, Mongolian oak and other precious tree species. The unique forest landscape resources integrated with the traditional villages have become an organic part of forest recreation activities, which provides a material basis for the protection and development of traditional villages and the benign development of cultural tourism in Changbai Mountain area.

V. CONCLUSION

Based on the concept of regional landscape, taking 11 traditional villages in Jilin Province as an example, this paper has analyzed the regional landscape of Changbai Mountains, the characteristics of the cultural landscape of the villages, and then the causes of the cultural landscape of the traditional villages in Changbai Mountains. According to the structural types of village buildings and the cultural characteristics of the inhabitants, this paper has systematically summarized the basic structures of traditional village buildings in Changbai Mountains, which are divided into three types: well-dry, Korean and courtyard dwellings. Multinational integration is one of the factors forming the diversified architectural characteristics of Changbai Mountains. From the perspective of the cultural landscape of Changbai Mountains, this paper has discussed the influence of forestry, the form of fishing and hunting culture and belief characteristics on traditional villages, and the inheritance form of villages. It provides good facilitation to leading the Rural Revitalization with green development, ensuring the living inheritance of cultural heritage, strengthening the development of folk activities and related traditional folk culture industries, recording and inheriting the historical forms of forestry, fishing and hunting culture, and developing rural tourism economy.

REFERENCES

- Hartel, T., J. Fischer, C. Campeanu, A. I. Milcu, J. Hanspach, and I. Fazey. The importance of ecosystem services for rural inhabitants in a changing cultural landscape in Romania. Ecology and Society, 2014, 19 (02): 42.
- [2] Whelan Y. Heritage, memory and the politics of identity: New perspectives on the cultural landscape. Routledge, 2016.85-94
- [3] Zou Shuzhen, Tao Biaohong, Duan Wanjun. Regional Cultural Characteristics and Rural Residential Space Construction. Jiangxi Social Science, 2014 (10): 239-243. (in Chinese)
- [4] Kingsbury A J. Running ethnography: Engaging the culture and landscapes of rural Japan. Asian Anthropology, 2019: 1-13.
- [5] Hu Zui, Zheng Wenwu, Spatial Morphology and Structural Characteristics of Genome Maps of Traditional Settlements Landscape in Hunan Province. Journal of Geography, 2018, 73 (02): 317-332. (in Chinese)
- [6] Xie Xubin, Zhang Xin. Discussion on Educational Characteristics of Landscape in Traditional Village of Hunan. Journal of Hunan University (Social Science Edition), 2017 (09); 115-121. (in Chinese)
- [7] Liu Peilin. Homeland Landscape and Gene: Deep Interpretation of Gene Map of Traditional Settlement Landscape. Beijing: Commercial Press, 2014. (in Chinese)
- [8] Li Bohua, Zeng Can, Dou Yindi and so on. Evolution and Driving Mechanism of Human Settlement Environment in Traditional Villages based on "Sansheng" Space: taking Lanxi village in Jiangyong County, Hunan Province as an example. Progress in Geographic Science, 2018, 37 (05): 677-687. (in Chinese)
- [9] Liu Housheng. Definition of Changbai Mountain Culture and Other. Study on History and Geography of China's Border Region, 2003, 13 (04): 71-75. (in Chinese)
- [10] Liu Jinyuan. Study on the Evaluation Elements of Urban Environmental Landscape with Regional Style. Hefei University of Technology, 2013. 04: 1-55. (in Chinese)
- [11] Lu Mingzhi. Study on the Impact of Tourism Development on Land Use Patterns in National Nature Reserve of Changbai Mountains, Jilin



Province, China. Northeast Normal University, 2010.05:45-103. (in Chinese)

- [12] Zhang Yuhuan. Jilin Residence. Beijing: China Construction Industry Press, 2017. 10: 1-139. (in Chinese)
- [13] Cao Baoming. Fishing and Hunting Culture. Changchun: Jilin Literature and History Publishing House, 2010. (in Chinese)