# Review of Chinese Ethnic Minorities Rural Landscape from the Perspective of Heritage by Citespace

# Jinvi Zhou\*

Academy of Art, Nanjing Normal University, Xianlin Street, Nanjing, China 1349139716@qq.com
\*corresponding author

*Keywords:* rural Landscape, rural heritage, cultural landscape, ethnic minority.

Abstract: Taking the rural landscapes of ethnic minorities as the research object, this article analyzes the research status of Chinese ethnic minorities rural landscapes via the method of Citespace. The research results indicate the fragmentation and theorization of the domestic rural landscapes, which is due to the lack of rural landscape assessment system from the perspective of domestic heritage. Hence, it leads to the disjunction between the landscape theory and practice, as well as the insufficiency of landscape man-land consciousness. As a result, this article intends to start from the perspective of rural landscape heritage. Through the analysis of domestic and foreign landscape cases, it initially constructs an ethnic minority rural landscape evaluation system from the heritage perspective, so as to promote the further integration and improvement of theory and practice in domestic ethnic minority landscape.

# 1. Introduction

Because of the long-term dispute about the concept of "landscape" in Europe, the term "cultural landscape" is of deep philosophical foundation. At the beginning of last century, geographer Otto Schlüter formally adopted "cultural landscape" as an academic term for the first time, and defined two different landscape forms, that is, original landscape and cultural landscape. Later in the middle of the 20th century, American geographer Carl Thor proposed a classic definition with great influence. Culture is the agent of human behavior, while natural region is the medium, and cultural landscape is the result. So far, the concept of cultural landscape has been widely recognized and implemented in academia. With the development of environmental philosophy and the spring up of the landscape protection movement, in 1992, the World Heritage Committee formally listed "cultural landscape" as a fourth-category heritage item in the protection list. Thus, the development of "cultural landscape" has reached a peak.

The cultural landscape embodies the synchronism between nature and human development. With the extensive discussion of cultural landscape and the signing of the *European Landscape Convention*, rural landscape, anti-wilderness activities and removing Eurocentrism have become the hotspots in European landscape at the beginning of the new century. As an evolving cultural landscape, rural landscape is of deep significance for carrying multiple values such as nature, humanity and economy, since it enjoys rich ecological and cultural resources. In the aspect of the research content, as the cultural landscape of "man-land relations" embeds, rural landscape

establishes an excellent evaluation criterion for rural landscape from multiple dimensions such as the landscape resources protection, land use planning, historical interpretation, cultural heritage protection, the adaptability reform of community autonomy and aesthetic perception, with cultural landscape as the goal. These guidelines not only preserve the authenticity and integrity of the cultural and natural heritage, but also improve the living quality of the residents, thus bring about sustainable economic growth to the local.

#### 1.1. The Heritage Value of Rural Landscape

With the development of cultural landscape, rural landscape is worthy of further study in principles, methodology, planning and management, as well as public cognition. *Principals Concerning Rural Landscapes as Heritage* puts forward the theoretical concept of regarding rural landscapes as heritage and establishes the corresponding code of conduct[1]. This paper elaborates the heritage value of rural landscape in detail, breaking the label of static and special heritage in the traditional concept, making the general and traditional rural landscape get different degrees of heritage protection and attention in the aspects of ecological wisdom, economic benefits, cultural protection, etc. Besides, the heritage value of the rural landscape leads to a more appropriate code of conduct for the local area. In addition to the corresponding legal provisions, economic support, management planning, landscape design, information sharing and other basic methods, the timeliness of policies and the feasibility of protection methods, namely long-term management costs, adaptive reforms, landscape protection and renovation, etc., have also received more detailed attention.

# 2. Research Status of the Rural Landscape of Ethnic Minority Villages at Home and Abroad

#### 2.1. Foreign Research Status

Foreign research has a long tradition on rural landscape. Judging from the data of Google Scholar, current research hotspots of rural landscape based on heritage in foreign countries are concentrated on the identification of rural landscapes and the protection of threatened landscapes. Among which threatened landscapes have been widely discussed. On the one hand, this "threat" is reflected in the harm and change of landscape brought by natural disasters (earthquake, tsunami, hurricane, flood, etc.) or man-made disasters (armed conflict, environmental pollution, desertification, etc.). Thereinto, climate change poses a great challenge to the existing cultural heritage policies[2][3]. On the other hand, the authenticity and integrity of the rural landscape is influenced by the abandoned farmland, the decline of traditional villages, the deficiency of traditional techniques, and the pressure from tourism and commercialization, which results in pressure for the protection, supervision, planning and maintenance of the landscape. Taking the abandoned terraced landscape as an example, the collapse of retaining walls, soil erosion and extreme rainfall events all threaten the local rural cultural landscape, which might destroy the existing agricultural land [4]. Therefore, in order to construct a sophisticated heritage assessment standard and conservation methods, risk assessment and supervision of heritage site decision-making as well as post-disaster renovation and reconstruction have become hot topics to solve the vulnerability of rural landscape heritage.

#### 2.2. Domestic Research Status

In terms of the data of CNKI, theoretical researches on rural landscape in China is rather abundant, including the evaluation principles of rural landscape, the protection mechanism of rural landscape, along with the planning and design of rural landscape. Under the policy of "beautiful country" at this stage, domestic research hotspots on rural landscapes focus more on rural environmental

features, ecological protection, sustainable development, and rural tourism development. Among them, the landscape research on the rural landscape of ethnic minorities generally takes the landscape of a single ethnic minority as the research object, and analyses the characteristics and significance of its settlement in detail[6]. In addition, rural tourism has become an emerging pillar for the development of ethnic minorities rural industries. Currently, another research hotspot is on the development of tourism industry, resource allocation and landscape space construction. Among which, heated discussion has been made on the planning and spatial layout of rural landscape from the perspective of tourism or the assessment of rural ecological security brought by tourism development[7]. In general, the research on rural landscape of ethnic minorities in China is a hot spot. However, due to the large number of case studies, the overall trend is fragmented, and systematic research is insufficient.

Comparing the research on rural landscape at home and abroad, we can find the research differences. First of all, rural landscapes among traditional villages of Chinese ethnic minorities outshine foreign rural landscapes in terms of scale and quantity. There are few villages of ethnic minority in one foreign country. Secondly, in the aspect of landscape research, there is no lack of macro level landscape evaluation, protection and operation mechanisms in current domestic research on ethnic minority rural landscapes, but there is a scarcity of corresponding evaluation principles from the perspective of heritage. On the other hand, from a micro perspective, although there are researches on the landscape characteristics and historic culture of ethnic minority villages in China, the research methods are relatively single and insufficient. Firstly, the research methods of geography, namely land utilization and land cover, ecosystem services, and gradients analysis, are adopted in large-scale physical geographic research, whereas small scale cultural landscape studies are rarely involved. Secondly, the separation of human-land relationship research is obvious. The cultural research is not closely related to the design and planning of ethnic minorities rural landscapes in China, and the follow-up of landscape planning is short of a complete supervision system.

#### 3. Methodology

#### 3.1. Data Source

As of May 18, 2021, a total of 1066 articles were selected from the CNKI database by using the topic Ethnic Minorities \* Landscape. The literature was selected from periodicals, and the time node was set from January 1992 to May 2021. The language was limited to Chinese. Title, author, organization, key words, and abstract are all exported in RefWorks document format.

#### 3.2. Data Analysis

Citespace 5.7.R version was adopted for this study, and four folders of Input, Output, Project and Data were established for the data conversion of literature in CNKI. The parameter is set as g-index: K=10; time slicing: years per slice = 1. Term Source selects title, abstract, Author Keywords, Keywords and Plus. Pruning selects Pathfinder, Pruning sliced networks, and Pruning the merged network, aiming to ensure the stability of network nodes. In addition, this article chooses circulation, keywords and burst terms as important reference indicators. Firstly, the circulation of papers directly reflects the changes and research developments in scientific field. Secondly, by using Citespace software to conduct co-occurrence analysis and cluster analysis of high-frequency keywords in the research field, we can sort out the quality of paper publication, research status and hot topics. Finally, burst terms are generated by the change of keywords over time, which can reflect the variation of research direction.

# 4. Result Analysis

# 4.1. Research Development and Status

As is illustrated in Figure 1, the research focus has been ethnic minorities, cultural landscapes, traditional settlements, cultural landscapes and rural tourism since 1992. Among them, "ethnic minority", as the keyword with the highest frequency, has a co-occurrence relationship with other keywords such as cultural landscape, landscape design, ethnic culture and linguistic landscape. In terms of the time line (Fig. 2), the number of articles related to rural landscape of ethnic minorities was small from 1992 to 2001, without a rising trend. In 2001, there were only four relevant articles focusing on the development and utilization of natural resources of ethnic minority rural tourism.

From 2002 to 2010, there was an obvious upward trend in the number of articles. In 2002, the 16th National Congress of the Communist Party of China set "continuously enhancing the ability of sustainable development" as one of the goals of building a moderately prosperous society in all respects. In 2005, the Fifth Plenary Session of the 16th CPC Central Committee passed the Proposal on the Outline of the Eleventh Five-Year Plan to further promote the construction of a new socialist countryside. During that period, the content of ethnic minorities rural construction was explained more comprehensively, and the related rural tourism landscape, cultural landscape and cultural resources further developed and utilized. Finally, from 2011 to this day (except 2021), the number of articles on rural landscape of ethnic minorities showed a trend of rapid increase. In 2015, there was a slight decline, but from 2016 to 2019, it began to rise gradually and reached the peak in 2019, with nearly 136 articles published, which was nearly three times the number in 2011. When it comes to the data, ethnic regional culture, traditional villages and landscape design have become important research trends since 2011. Landscape resources, evaluation, genes, planning and design of traditional villages became more abundant. In addition, with the proposal of the "Rural Revitalization" strategy in October 2017, research on the development strategy of the rural landscape in 2018-19 also became more pioneering and enterprising.

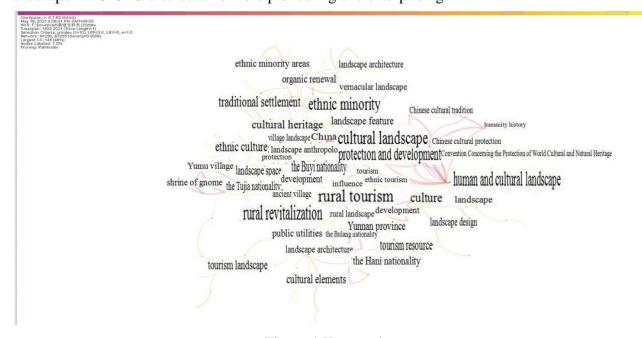


Figure 1 Keywords.

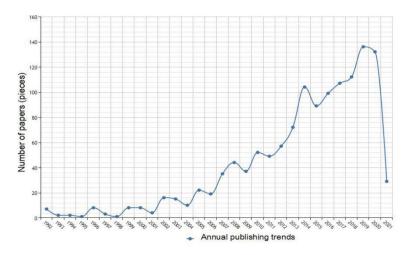


Figure 2: The circulation of papers.

### 4.2. Analysis of Research Focus

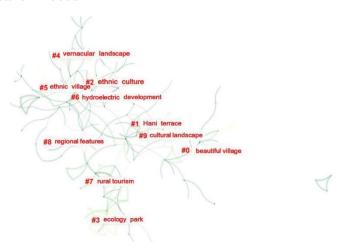


Figure 3: Keywords of cluster analysis.

By using Citespace to conduct cluster analysis on the characteristics of keywords, we can effectively grasp the research focus and evolution trends in the field of rural landscape of ethnic minorities. After a variety of algorithm comparison, this paper eventually adopts the latent semantic algorithm (LSI) and summarizes the following nine research hotspots (Figure 3). Since this paper concentrates on the exploration of ethnic minority rural landscape, in the first nine research hotspots, ecological park, hydropower development, rural tourism and other clusters are not included in the discussion. The article focuses on clusters 1, 2, 4, 5 and 8. Research focus, such as Hani terraces, ethnic culture, local landscape and ethnic villages will be discussed in detail in the following sections. the Hani nationality

At present, research is concentrated on Hani terraces. Qiu Yan and Cao Likun published the first research on Hani ecological villages in 2002, aiming to emphasize that the architectural reconstruction of should be based on the terrace ecosystem to protect the local features and ethnic characteristics of the villages[8]. Subsequently, in 2007, the landscape characteristics of Yunnan region and other ethnic minorities were further studied. As Hani Honghe terraces were officially incorporated in the world cultural landscape heritage in 2013, the research on Hani nationality and terraces gained more attention. The research content also changed from the development of tourism

resource in 1995 to landscape characteristics in 2007, and finally to the research on cultural elements in rural landscape.

Secondly, village culture is one of the hot topics, including national culture, ethnic villages, regional characteristics, etc. As the key point of ethnic minority studies, ethnic culture has been heated discussed since 2012. In 2016, there were four articles on the development of ethnic minority rural space culture and tourism respectively, which conducted case studies on the tourism landscapes of the Tujia, Zhuang, Yao and Choseon nationality. Meanwhile, with the rise of the traditional villages concept, the protection, development and cultural inheritance of traditional villages further emphasize the national culture. From the perspective of time line, the study on traditional villages can be dated back to Zhang Hou's field investigation on Yumu Village of Tujia nationality in 1992[9]. By 2014, traditional villages have become the research focus of rural landscape. In 2019, the 19th National Congress of the Communist Party of China elevated "rural revitalization" as a national strategy, making local culture a breakthrough for the development of remote ethnic minority areas. Hence, it has reached the peak of traditional village research in 2019.

Finally, rural landscape has been widely discussed under the policy of "rural revitalization". In 1999, Yu Hong carried out an anthropological and ecological investigation and research on the evolution and development of ethnic minority groups[10]. The development of ethnic minorities groups began to link with ecological geography. Since then, ethnic minorities have attracted extensive attention and become more closely related to ecology, botany and landscape architecture. As can be seen from the connecting lines in the figure, ethnic minorities are closely related to the local landscape, ethnic settlements and landscape design. Before 2010, researches on ethnic minorities and vernacular landscape focused on tourism development and leisure vacation, etc. Since 2010, vernacular elements as well as folk tradition and fold customs of ethnic minorities have become hot topics in vernacular landscape.

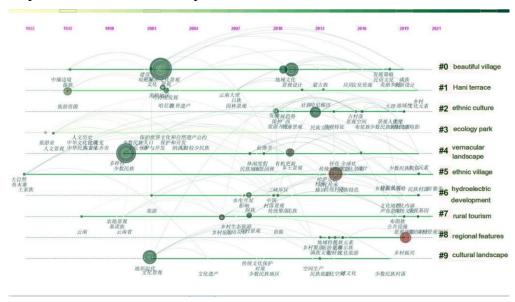


Figure 4: Timeline view of keywords

# 4.3. Analysis of Research Direction Transformation

Burst terms reflect the direction change and development trend of related research, which adds to convenience for researchers to better understand the transformation process and development trend in this field. Based on the analysis of Citespace burst terms, this article drew a total of 7 related burst terms, namely, human landscape, tourism resources, Guizhou, rural landscape, traditional

village, rural revitalization, and language landscape (Figure 5). Among these seven emergent words, the burst intensity of "traditional village" is the highest at 9.32. The prominence started in 2018 and continues till now. Before 2018, the keywords related to "traditional villages" were embodied as "village landscape" or "settlement landscape", which was specifically expressed as a landscape study of physical space, including natural environment, agricultural land, community space, and architectural forms.

Secondly, from the perspective of time period, the burst word "linguistic landscape" initiated at the latest, which begun in 2019 and lasted only 3 years. Linguistic landscape is a brand-new interdisciplinary field, mainly involving linguistic and semiotic systems, which aims to understand linguistic attitudes and socio-cultural trends in a place via its linguistic signs[11]. In terms of research methods, linguistic landscape applies research methods of other disciplines in the context of semiotics, that is, eye movement tracking, inferential statistical research, and linguistic landscape variation, to deeply decode the complex relationship between language, spatial location and the perceiver, as well as the relationship between linguistic landscape, social economy and culture. Such research method deeply interprets the local social culture and ethnic concepts, which provides a new way of thinking for the study of ethnic minority landscape culture. Therefore, since 2019, the analysis of symbol identification in ethnic minority traditional villages has rapidly become an emerging research hotspot.

The keyword "Guizhou" is the only local region. The burst time started in 2008 and ended in 2013. Guizhou is located in the highland and mountainous region of southwest China, with rich geographical features and natural scenery. In addition, there are 17 permanently resident ethnic minorities in Guizhou, accounting for about 39% of the total population. The ample natural resources and unique multi-ethnic culture make Guizhou a popular area for the study of ethnic minority rural landscape.

Year Strength Begin End 1992 - 2021 Keywords Cultural landscape 1992 3.51 1994 2004 Tourism resource 1992 4.81 2002 2008 Guizhou 1992 4.66 2008 2013 Vernacular landscape 1992 3.6 **2016** 2021 Settlement landscape 1992 9.32 2018 2021 1992 7.34 2019 2021 Rural revitalization 1992 Linguistic landscape

Top 7 Keywords with the Strongest Citation Bursts

Figure 5: Keywords with the strongest citation bursts.

#### 5. Findings

To conclude from the above Citespace analysis, the research on ethnic minority rural landscape in China is rich in history, and the research content includes ethnic minorities, cultural landscape, traditional settlements, rural tourism and other aspects. According to the cluster analysis of keyword, the research hotspots in this field focus on Hani terraces, ethnic culture, local landscape, ethnic villages and rural tourism. Among them, the number of articles is the largest in national culture, ethnic villages and regional characteristics, which is also confirmed by the surge in the number of relevant articles after 2011. From the perspective of burst word, the burst words ranked in the top0 three are traditional villages, rural revitalization and linguistic landscape, which concentrated from

2018 to 2021. This phenomenon indicates that the research on rural landscape of ethnic minorities has developed from multiple aspects. When it comes to the policy, rural landscape has been valued to and supported by the state. As for the content, rural landscape, semiotics and linguistics appear a trend of integration. From the perspective of time, the high burst degree from 2018 to 2021 also indicates that the rural landscape of ethnic minorities is a hot topic.

In the process of analyzing keyword, in addition to the positive aspects, it also revealed certain problems. Firstly, the rural landscape research of ethnic minorities focuses on the settlement landscape and cultural landscape, whereas the relationship between productive agricultural landscapes and ethnic minorities is relatively weak. Many documents also ignore the research of productive landscapes in the analysis of ethnic minority rural landscapes. Secondly, in the context of analyzing the keyword time map and the detailed reading of articles on key nodes, domestic study on ethnic minority rural landscapes indicates a certain degree of separation between theory and practice. Specifically, the ethnic minority rural landscape research focuses on the historical evolution, space layout and development driving force of the traditional village, which belongs to the theory level. The quantity of articles is relatively small on the practices of design planning and regulatory protection of rural landscape. Finally, from the research methods of relevant literature, the use of quantitative research is far less than that of qualitative research. Most of the articles emphasize the local distinguishing landscapes, phenomena and ethnic groups, and makes cultural explanations and definitions. Data collection and visualization are rarely adopted to reflect the problems of local landscapes, communities and people. From the above three points, the research on rural landscape of ethnic minorities in China reveals the problems of fragmentation and theorization, which are embodied in the separation of agricultural landscape from settlement landscape and humanistic landscape, as well as the separation of landscape planning and conservation from landscape cultural studies. The separated content reveals that the domestic research on the rural landscape of ethnic minorities has not constructed a systematic and dynamic relationship between human and landscape and the reason is closely relative to the incomplete land evaluations implemented in China, especially having shortage in accomplishing a holistic assessment. Therefore, in order to solve this problem, it is rather essential to construct a landscape evaluation system from the perspective of heritage. On the one hand, a perfect evaluation system can protect the corresponding local landscape and culture. On the other hand, it can make up for the disintegration of the research content, especially the productive landscape or landscape planning issues related to contemporary people can be linked with the cultural and historical research of landscape.

#### 6. Analysis of the Evaluation Elements of Domestic Ethnic Minority Rural Landscape

It can be extracted from the literatures mentioned above that current research about ethnic minority rural landscapes in China is concentrated in the settlement landscapes and cultural landscapes of traditional villages. There is scarce discussion about productive agricultural landscapes, except for the research on the terraced landscapes of the Hani nationality. The research attention to other productive landscapes is obviously insufficient. In addition, due to the lack of evaluation criteria for rural landscapes from the heritage perspective, current evaluation of ethnic minority rural landscapes is based on the *Evaluation Index System for Famous Historical and Cultural Towns* (Village) in China and Evaluation and Recognition Index System of Traditional Villages (Trial), which is specifically embodied in the evaluation of traditional buildings, village site selection and layout, intangible cultural heritage, protection measures, etc. Therefore, this article aims to fill the research gap on the basis of current traditional village evaluation system[12]. It selects three ethnic minority concentrated areas from the existing publications, namely Southeast Guizhou Prefecture, Western Hunan Prefecture, and Shangri-La, and analyzes the evaluation elements of ethnic minority

rural landscapes through relevant literature analysis, hoping to build a framework for the evaluation of ethnic minority rural landscapes from the perspective of heritage.

Table 1: Evaluation and Recognition Index System of Traditional Villages (Trial).

Evaluation index system of traditional village		
Criterion	Factor	
Traditional architecture	Age	
	Scarcity	
	Scale	
	Proportion	
	Richness	
	Integrity	
	Value of craft aesthetics	
	Inheritance of traditional craftsmanship	
Village site selection and pattern	Age	
	Richness	
	Patter integrity	
	Value of science and culture	
	Coordination	
Intangible culture heritage	Scarcity	
	Richness	
	Continuity	
	Scale	
	Inheritor	
	Living state	
	Dependency	

The Southeast Guizhou Prefecture is a multi-ethnic autonomous prefecture where the Miao nationalities and Dong nationalities are demographically dominant. Upon the knowledge built in the existing articles, the research on the rural landscape in this area focuses on the three aspects of landscape characteristics, spatial layout and planning protection. Among them, the study of landscape characteristics and spatial layout is investigated in the elaboration of rural landscape natural environment, settlement location, classic buildings and places, and ethnic culture[13]. The content of protection is discussed in terms of spatial planning of architecture, transportation, green space, and the industrial planning and architectural style of agriculture and tourism, as well as the protection of intangible cultural heritage. Traditional villages in the western Hunan region are featured with single ethnic minority villages which are composed by the Miao and Tujia nationalities. At present, a total of 172 villages in this area are included in the national list of traditional villages. From the perspective of the article, the research content of this area is still analyzed from the natural, ethnic and cultural characteristics of the landscape[14]. Although there are differences in the composition of local village community, the research direction of the rural landscape is basically the same as that of Southeast Guizhou. Shangri-La is one of the famous

ethnic minority areas in northwestern Yunnan. Due to its remote location and unique religious, a large number of ethnic minority villages are located in Shangri-La. In addition, Shangri-La is an area with a high percentage of religion prevalence. The lifestyles, farming methods and folk activities of the villages in this area are all based on traditional religious believes. Therefore, the proportion of analysis in terms of the influence of religious belief in these researches is very high.

From the review of literatures about three regions, it can be seen that the domestic analysis of ethnic minority rural landscapes focuses on the natural environment, traditional architecture and village site selection, religious culture, intangible cultural heritage, and industrial structure. The value connotation covers ecological value and archeology value, cultural and aesthetic value, spiritual value, economic value and other dimensions. From the analysis of the specific criteria, the natural environment can be analyzed from the levels of abundance, degree of protection, and integration with the village. From the perspective of traditional buildings and village patterns, the reference content covers the age, scale, proportion and degree of protection of traditional buildings or villages. In addition, the cultural connotation and aesthetic value of traditional buildings are also of important guiding significance. From a cultural perspective, in addition to the original physical space, intangible cultural heritage also has appraisal value and is included as an important criterion.

# 7. Analysis of Foreign Rural Landscape Cases Evaluation Elements

The rural landscape research in Europe started much earlier, and they have developed a more comprehensive scheme in terms of evaluating rural landscape heritage. Many European regions, such as Italy, the United Kingdom, and Germany, have benefited from a well-rounded interpretation of the "human-land consciousness" of cultural landscapes, and have formed a guiding model that centers on heritage protection and coordinates local social and economic development. This model takes interactive relationships between people, land and buildings as a source of connection, and makes a comprehensive analysis of natural, humanistic, aesthetic, economic and other elements, ensuring the utility of landscape planning and the economic transformation of heritage value. This article will analyze the protection and development methods of Pfaffenhofen County in Germany and Piedmont Heritage in Italy, extract relevant evaluation elements and use this as a reference to further construct the evaluation system of domestic minority rural landscapes from the perspective of heritage.

The rural landscape planning in Pfaffenhofen County is based on effective land use planning and resource protection, which divided by biodiversity and crop yield as units of protection[15]. It protects habitats of wild animals and agricultural land at the same time, and highlights the intrinsic ecological value of the landscape carrier. Compared with the status of domestic natural landscapes, biodiversity is often underestimated in landscape research. However, it cannot be ignored that biodiversity is often positively correlated with cultural diversity. Cultural ethnic groups are of great significance to the management of local ecological species. It is important to emphasize biodiversity protection from the perspective of heritage.

The Piedmont Heritage Site of Italy is a famous vineyard countryside landscape. In order to realize the dynamic development of the heritage site, the local area has constructed a strategy of heritage protection and community development[16]. First, establishment of clear landscape quality goals based on the current status of the heritage site are carried out. Specifically, it can be divided into efficient landscape, social landscape, harmonic landscape and economic landscape. Second, a landscape social network is designed, based on the value of heritage, which aims to strengthen the connection between community residents, self-employed, enterprises and the government, and to ensure positive agricultural production relations and economic benefits, thus realizing the coordinated development of heritage sites and communities. The establishment of this method provokes enthusiasm of local residents for autonomy, which meets their life and cultural needs. It

also highlights the importance of community residents as the main body of the the rural landscape. Therefore, in the construction of the ethnic minority rural landscape evaluation system from the perspective of heritage, the awareness of community residents and the content of life should also be emphasized. This is a great manifestation of the relationship between man and land.

Combining the above two foreign landscape cases, the construction of ethnic minority rural landscape assessment frameworks from the perspective of heritage has been inspired. On the one hand, biodiversity conservation is an essential path to connect humans and the natural environment. The focus of attention has become an important criterion in the study of natural environment. On the other hand, the subject consciousness of local residents and communities is of great significance to the reform of community autonomy, optimization and upgrading of tourism, as well as the enrichment of community activities. Therefore, attention to community life can effectively grasp the goal of rural landscape activity.

# 8. A preliminary framework for minority rural landscape assessment

With the combination of the above analysis and research of rural landscape at home and abroad, this paper draws a preliminary ethnic minority rural landscape assessment framework from the perspective of landscape heritage. Compared with the original traditional village assessment system in China, this framework highlights the importance of landscape subjects, as well as the dynamic relationship between human and land evolution. This concept is consistent with the concept of human and land consciousness and active protection in rural landscape heritage. Therefore, the establishment of this framework will enhance the deeper research from the perspective of heritage protection and development.

Table 2: A framework for minority rural landscape assessment.

Objective level	Value connotation	Criterion layer
Natural environment	Ecological value	Richness of natural environment
		Degree of natural environment protection
		Degree of biological diversity protection
		Degree of integration between natural environment and village
		Degree of integration between natural environment and agricultural land
	Aesthetic value -	Geography of natural environment
		Seasonal beauty of landscape
Village pattern	Historical value	Village age
		Village scale
		Village integrity
		Village richness
	Cultural and aesthetic values	Aesthetic connotation of village planning and construction
	Ecological value	Integration of village pattern and agricultural land
	Economic value	Traffic planning
Traditional architecture	Historic value	Age of traditional architecture
		Scale of traditional architecture

		Proportion of traditional architecture
		Richness of traditional architecture
		Protection of traditional architecture
	Cultural and aesthetic value	Aesthetic significance of the shape, structure and decoration of traditional architecture (group)  Matching degree between new buildings and traditional buildings
Ethnic culture	Spiritual value	Scale of religious person
		Proportion of religious person
	Historical value	Age of minority culture
		Protection of minority culture
		Integrity of local law and discipline rite
	Historical value	Age of intangible cultural heritage
Intangible cultural heritage	Cultural and aesthetic value	Cultural connotation and aesthetics of intangible cultural heritage
	Economic value	Scale of intangible cultural heritage
		Heritage status of intangible cultural heritage
		Economic scale of intangible cultural heritage
	Ecological value	The attachment relationship between intangible cultural heritage and environment
	Economic value	Agricultural production
		Tourism development
Industrial structure		Commercial events
		Brand influence
	Ecological value	Stats quo of land utilisation and protection
		Tourism resources protection
Community life	Historic value	Integrity of clan culture
	Social value	Richness of folk custom and recreational activity
		Adaptability of convention and laws
	Spiritual value	Intensity of resident self-esteem

From Table 2, there are seven target levels in the table. The first three levels are natural environment, traditional buildings and village patterns, which are evaluated from the physical space of the landscape, while ethnic culture and intangible cultural heritage are based on cultural factors. The rural landscape of the region was investigated, and finally the industrial structure and community life were an overall evaluation of the local landscape from the perspective of production and social culture. Compared with the original evaluation system, the natural environment, national culture, industrial structure and community life are all new evaluation content. The natural environment is the very basis of the landscape. It has the dimensions of ecological value and aesthetic value, which is an important factor in landscape evaluation. The emphasis on ethnic culture is determined by the diverse status quo of ethnic minorities in the country. It can indirectly promote the protection of ethnic culture in relevant areas from. The expansion of the industrial structure, community life, reform and other content is the focus of the evaluation system. The original landscape research theory and practice are separated from the status quo, which, to some

extent, is due to the ignorance of public subjective initiative. The production and life of contemporary people still has a huge influence on the formation of the landscape. Therefore, in the landscape assessment, the investigation of the main body of the landscape and the industrial structure can help understand the reasons for the current landscape, provide a basis for the future planning and practice of the landscape, and promote the integration of landscape theory and practice. The integration makes the landscape not static at the original cultural interpretation, thus fully manifesting its economic and social value. Finally, in terms of the criteria level, the increase of the two criteria, "land use planning and protection status" and "integration of village pattern and agricultural land", can strengthen the connection between productive landscapes, settlement landscapes, and cultural landscapes, so as to solve the current status of insufficient research on domestic productive landscapes. In general, the construction of this table can endow the heritage value of the rural landscape, so that it can be accordingly protected and developed. On the other hand, in landscape research, the application of this framework can also reasonably solve the separating limitations in domestic landscape research, so that the content of landscape research can be used in a systematic and diversified manner.

In order to highlight the significance of the human and land evolution in the table, this paper selects the Meidaishao village in Inner Mongolian Autonomous Region as the research object, and further elaborates on the usefulness of this framework through a comparative analysis of the existing "Evaluation and Recognition Index System of Traditional Villages (Trial)" and the self-drafting assessment system. The Meidaizhao village is included in the list of the first batch of traditional villages in China because of the large scale and rich content of the existing "Meidaizhao Temple Complex", which demonstrates the local ethnic characteristics of the fusion of the Mongolian, Chinese and Tibetan communities and forms a special ecological landscape and humanistic landscape. Under the original village evaluation system, the historical value of traditional architectural complex and the village pattern occupies a major proportion, in which the longevity, scale, ratio, richness and aesthetic value of the traditional buildings were fully evaluated. However, with the development of local tourism resources, the tourism industry and related cultural industries in Meidaishao village have been further developed, and the village life has correspondingly changed dramatically. For one thing, the upgrading of the tourism industry has led to the commercialization of local dining, accommodation, folklore celebrations and cultural experiences. For another thing, the assessment of the landscape pattern is not confined to the original traditional architecture and village because the development of community life and industrial structure has a strong influence on the current rural landscape pattern. Therefore, in the proposed landscape assessment system, the assessment of industrial structure and community life can better reflect the restoration and authenticity of the current landscape, and provide a reasonable reference for the development of the rural landscape in terms of economic, social and cultural values.

# 9. Conclusion

Aimed at fully understanding the current situation of research on rural landscapes of ethnic minorities in China, this paper firstly provides a preliminary preview of rural landscape research hot spots at home and abroad. For the sake of obtaining more scientific and systematic analysis results, based on the existing landscape cognition, this paper uses the Citespace method to analyze the current research hotspots of rural landscape of ethnic minorities in China, and finds that the domestic research on rural landscape focused more on the cultural elaboration of landscape and ethnicity, specifically on the level of ethnic minorities, humanistic landscape, traditional settlement and cultural landscape. However, the number of studies on rural landscape from the perspective of heritage is small. Due to such deficiency, the current research on rural landscapes of ethnic

minorities in China shows a disconnect between theory and practice, which essentially reflects the inadequate understanding of the relationship between human and land. Based on the original assessment system of traditional villages and through case studies of rural landscapes at home and abroad, this paper constructs a preliminary framework for assessing rural landscapes of ethnic minorities from the perspective of heritage, with the hope that this framework will bridge the gap between theory and practice in current domestic landscape research and provide a reasonable perspective and method for the development of rural landscapes of ethnic minorities in the awareness of human-land interaction.

#### **References**

- [1] ICOMOS.2017a. "ICOMOS IFLA Principles Concerning Rural Landscapes as Heritage". Accessed 14 September 2018. HTTP://www.icomos.org/images/DOCUMENTS/Charters/GA2017\_6-3-1\_RuralLandscapesPrinciples\_EN\_adopted-15122017.pdf
- [2] Dastgerdi A S, Sargolini M, Pierantoni I. Climate change challenges to existing cultural heritage policy[J]. Sustainability, 2019, 11(19): 5227.
- [3] Hall M P, Lewis Jr N A, Ellsworth P C. Believing in climate change, but not behaving sustainably: Evidence from a one-year longitudinal study[J]. Journal of Environmental Psychology, 2018, 56: 55-62.
- [4] Boccia L, Capolupo A, Rigillo M, et al. Terrace Abandonment Hazards in a Mediterranean Cultural Landscape[J]. Journal of Hazardous, Toxic, and Radioactive Waste, 2020, 24(1): 04019034.
- [5] Tengberg A, Fredholm S, Eliasson I, et al. Cultural ecosystem services provided by landscapes: Assessment of heritage values and identity[J]. Ecosystem Services, 2012, 2: 14-26.
- [6] Zhou Zhengxu, Yan Ni. Characteristics and value analysis of Miao nation settlements in the southeast Guizhou from the perspective of rural landscape heritage. Journal of Original Ecological National Culture, 2020: 78-84.
- [7] Wang Yanan, Yang Shu, Zhou Yan, Fan Lei. Research on the landscape planning and design of Choseon nationality villages from the perspective of rural tourism. Journal of of Yanbian University (Agricultural Science). 2021: 48-56
- [8] Qiu Yan, Cao Likun, Yuanyang. Research on Hani terrace ecological village. Chinese Landscape Architechture, 2002: 34-35
- [9] Zhang Hou. National spirit of self-reliance against danger. Journal of Hubei Minzu University (Philosophy and Social Sciences Edition), 1992: 52-55.
- [10] Yu Hong, Dai Bo, Ma Shaobin, Deng Yongjin. Research proposition of Yunnan ethnic minority groups and their cultural evolution. Thinking, 1999: 88-92
- [11] Fu Wenli, Bai Limei. Study of linguistic landscape from an interdisciplinary perspective, Chinese Social Science Today, 2021:03.
- [12] Long Bin, Zhang Jing. Research on the composition and evolution mechanism of rural landscape heritage—Taking traditional villages in Southeast Chongqing as an example. New Architecture, 2020: 130-135.
- [13] Hou Xiancheng, An Youzhi. Research on the spatial distribution characteristics of traditional village groups in Southeastern Guizhou. Anhui Agricultural Science Bulletin, 2021: 11-14.
- [14] Li Guo, Wang Yiying. Research on the identification of landscape types and key features of traditional villages in Xiangxi Prefecture. Chinese ancient city. 2021: 94-100
- [15] Stadtverwaltung Pfaffenhofen a.d. Ilm, BBP Stadtplanung Landschaftsplanung PartGmbB. Stadt Pfaffenhofen an der Ilm Landschaftsplan Erläuterungsbericht[EB/OL]. https://pfaffenhofen. de/artikel/landschaftsplan/.
- [16] Guo Xiaotong, Han Feng. A collaborative study on rural heritage protection and sustainable development from the perspective of cultural landscape: inspiration from Piedmont heritage sites in Italy. Landscape Architecture, 2021: 118-122.