

# Study on the Influencing Factors of Spatial Reconstruction of Ethnic Minority Villages in Hunan Province

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## **Abstract:**

Characteristic villages, with plentiful historical relics and natural beauty, carry precious historical memory and culture. The study of spatial reconstruction in traditional villages is conducive to dynamic heritage of characteristic villages and preservation of ethnic characteristics and traditional styles. Based on a case study of ethnic minority villages in Hunan Province, the existing problems and their causes in characteristic villages are analyzed and sorted out through on-the-spot investigation. Furthermore, factors of spatial reconstruction are obtained by the questionnaire investigation. Finally, the design suggestions for spatial reconstruction are put forward in terms of spatial planning, cultural landscape planning and traditional architecture layout.

**Keywords:** Hunan ethnic minorities, Characteristic villages, Spatial reconstruction, Influencing factor

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## I. INTRODUCTION

Traditional ethnic minority villages are not only full of unique historical stories, but also witness the vigorous development of the motherland, and are the source of vitality of rural development. From nothing to prosperity, the traditional village stands quietly like an old and slightly mottled historical treasure box. Since the announcement of rural construction policies such as new rural construction and rural revitalization, the protection of traditional villages has been continuously implemented. The adjacent areas of Hunan-Guangxi-Guizhou- Chongqing are inhabited by ethnic minorities with rich ethnic cultures and characteristic villages. However, there are also various problems which need to be solved urgently. We use a questionnaire survey to obtain data about of villagers' realistic needs for protection and development of ethnic villages, and then summarize factors of the spatial reconstruction of ethnic minority villages.

## II. CONCEPT INTRODUCTION

### 2.1 Ethnic Minority Characteristic Villages in Hunan

Hunan has plenty of ethnic minorities, with a total of 55 ethnic groups. Among them, 11 ethnic groups have been living in this area for generations, accounting for the vast majority (99.69%) of the province's

ethnic minority population. Most of them live in the west, south and east of Hunan.[1] Ethnic cultures and customs are embedded in interior decoration, architecture, spatial layout, village texture and the surrounding environment, showing different ethnic minority colors and symbols.

**TABLE I. Statistics on the list of traditional villages in the top ten provinces (cities) in China in batches**

Provinces (cities) Batches	Guizhou	Yunnan	Hunan	Zhejiang	Jiangxi	Fujian	Anhui	Jiangxi	Sichuan	Guangxi
1 <sup>st</sup> batch	90	62	30	43	48	48	25	33	20	39
2 <sup>nd</sup> batch	202	232	42	47	22	25	40	56	42	30
3 <sup>rd</sup> batch	134	208	19	86	59	52	46	36	22	20
4 <sup>th</sup> batch	119	113	166	225	150	104	52	50	141	72
5 <sup>th</sup> batch	179	93	401	235	271	265	237	168	108	119
Total	724	708	658	636	550	494	400	343	333	280

According to the list of five batches of traditional villages published by the Ministry of Housing and Urban-Rural Development, the number of traditional villages rose from 646 in the first batch to 2,656 in the fifth batch, which shows that China's efforts to excavate and protect traditional villages were made from 2012 to 2019. The protection of traditional villages in all provinces of the country have been paid much attention to and the number continues to increase, especially from 2016 to 2019. From the list of the first four batches, it can be known that the number of traditional villages in Hunan province is less than that in Yunnan, Guizhou, Zhejiang and Shanxi provinces. The number in the first five batches is only less than that in Guizhou and Yunnan provinces, ranking third among 34 provincial administrative units (shown as TABLE I). Under the influence of targeted poverty alleviation, rural revitalization and other policies, Hunan has been paying increasing attention to characteristic villages.

As of December 2022, according to the distribution of characteristic villages, the top seven cities and prefectures in Hunan are Xiangxi, Huaihua, Chenzhou, Yongzhou, Shaoyang, Zhangjiajie and Hengyang, with 172, 169, 90, 85, 43, 29 and 28 characteristic villages respectively. Xiangxi prefecture ranks first, accounting for 26.1% of characteristics villages (shown in TABLE II). Most of the traditional villages in Hunan are distributed in the west and south of Hunan, and the number in the north and east of Hunan is significantly less than that in the west and south of Hunan.

**TABLE II. Statistics on the list of Chinese traditional villages in various cities (autonomous prefectures) of Hunan Province in batches**

Provinces, cities (prefectures) Batches	Changsha	Zhuzhou	Xiangtan	Yueyang	Changde	Hengyang	Chenzhou	Yongzhou	Shaoyang	Loudi	Yiyang	Huaihua	Zhangjiajie	Xiangxi Autonomous Prefecture	Hunan
1 <sup>st</sup> batch	0	0	0	1	0	1	1	4	1	0	2	2	1	17	30
2 <sup>nd</sup> batch	1	0	0	0	0	4	6	2	9	1	5	6	0	8	42
3 <sup>rd</sup> batch	0	0	0	0	0	0	1	2	1	2	0	9	0	4	19
4 <sup>th</sup> batch	0	0	2	3	0	10	27	16	8	3	2	39	3	53	166
5 <sup>th</sup> batch	2	4	1	0	3	13	55	61	24	5	5	113	25	90	401
Total	3	4	3	4	3	28	90	85	43	11	14	169	29	172	658

## 2.2 Rural Spatial Reconstruction

Spatial reconstruction is a dynamic and continuous process of construction, which is reflected in the high unity of its function and spatial form. During reconstruction process, we need to promote the micro update of village regional features. What's more, the villagers' cultural identity and conscious compliance are important to sustainable rural development. [1]

As the host of characteristic villages, villagers are also the subjects of spatial reconstruction. They should not passively wait for the rural construction, but participate in the spatial reconstruction as designers. Not only villagers, but also government staff and tourists can contribute ideas and express their needs for rural construction and promote spatial reconstruction. Let more people realize the importance of characteristic village protection and participate in rural protection. Spatial reconstruction can serve as a bridge connecting the past and future of characteristic villages, endowing the protection and development of characteristic villages with historical memory and rural feelings. [2]

## III. ANALYSIS ON THE DEVELOPMENT PROBLEMS OF ETHNIC MINORITY VILLAGES IN HUNAN PROVINCE

### 3.1 Development Status of Characteristic Villages

Under the background of rural revitalization, China is in an active period of research on the development of characteristic villages. [3] Academic studies on traditional villages mainly focus on the

following aspects: the value of traditional villages, their elements or spatial morphology, the relationship between traditional villages and their surrounding environment, the protection and development methods and renewal mechanisms of villages, etc. Relevant results emphasize the importance of village culture protection; [4] the research of traditional village landscape gene identification; [5] classification of traditional village value identification standards; [6] the concept and strategy of village viability protection; [7] research on the relationship between village spatial form and social connotation; [8] emphasis of cultural inheritance in rural tourism; [9] integration of nostalgia into rural construction mode; [10] and suggestions on effective governance of rural areas by utilizing township sages culture. [11]

Researches on spatial reconstruction of villages mainly focus on spatial reconstruction process of traditional villages, [12] spatial reconstruction under village tourism orientation; [13] precise protection of traditional resources; [14] research on space production in traditional villages; [15] village-centered spatial reconstruction planning; [16] research on the role of tourism in rural development; [17] and specific classification protection methods for villages. [18]

As far as the scope and objects of the research are concerned, the research volume is expanding from one village to the characteristic villages in the whole country and from the local to the whole. As for research methods and perspectives, researchers are gradually enriched from single to diverse. As far as research content is concerned, research depth is deepening from descriptive research to specific planning of different villages. As far as the feasibility and necessity of village research are concerned, policies such as rural revitalization are constantly being improved, and various laws and regulations are gradually increasing. More and more people are beginning to realize the importance of protecting characteristic villages and historical memories, and more and more people are joining the big team for the protection and development of characteristic villages.

Overall, the protection of characteristic villages is positive, but still have some shortcomings. The research on villages in Hunan covers the factors affecting characteristic villages, the status quo of villages, traditional buildings, spatial forms, spatial patterns, and landscape types, as well as the principles, methods, and strategies for the protection of characteristic villages. Generally speaking, the research cover a wide range, ranging from western Hunan, southern Hunan, central Hunan to northern Hunan. The research focus on more specific and detailed methods of spatial reconstruction. However, many presented reconstruction methods are similar in specific villages, in which some remote and poor characteristic villages are not involved.

### 3.2 Analysis on Problems in Characteristic Villages

In July, September and October 2020, we visited some characteristic villages. We went to Jiangyong County in south Hunan, Chengbu County in west Hunan, Yongshun County and Tongdao County for field investigation. The survey includes the landscape nodes, human environment, basic service facilities, architectural style, indoor and outdoor space and the overall rural environment atmosphere of the characteristic villages. The investigation mainly involved nearly 20 villages with Miao, Dong and Tujia

characteristics. During this period, an in-depth interview was conducted with 190 people of different ages in the village, focusing on the development history and current situation of the village, villagers' real life needs, tourists' personal feelings about the village, difficulties faced by the development and local people's expectations for the future development of the village.

Traditional villages are an important part of Chinese farming civilization, and ethnic characteristic villages are the foundation of national cultural development. Nowadays, however, the characteristic villages are showing signs of decline and even extinction. The common problem of characteristic villages is that all kinds of resources in villages are unused. Although they have been developed to some extent since the implementation of the rural construction policy, there are still some problems, such as different levels of development, insufficient motivation, secondary damage in the process of protection, and failure to achieve effective and sustainable development. The following is the status quo of six ethnic minority villages with different development levels which include Furong Town, Gou LAN Yao Village, Taro Dong Village, Morong Miao Village, Xieli Village and Tea Garden Village (shown in TABLE III).

**TABLE III. Analysis of the present situation of minority characteristic villages**

Name of villages	Problems	Advantages	Disadvantages	Common points
Goulan Yao nationality village	The modern facilities are incompatible with traditional buildings, and there are many damages in some areas.	1. The natural surroundings are superior, the central landscapes layout is surrounded by water and have a harmonious design. 2. Small medical and legal consultation offices and various infrastructures are relatively complete.	1. The wall is peeling off and the indoor decorations are dated, but the toilets in the scenic spot are brand new. 2. Dilapidated houses has potential safety hazards.	1. The damaged area has not been professionally and timely maintained and handled. 2. Most of the villagers have not participated in the construction to a high degree. 3. To varying degrees, self-constructed buildings are interspersed in the characteristic villages.
Furong Town	Due to its terrain, there are more and steeper steps to enter the village, and there is a certain safety problem in rainy days.	1. The natural surroundings are superior, the buildings are located above the waterfalls, and the central landscapes are set by water, which is more experiential and interesting.	1. There are many shops 2. The ancient buildings are mixed with McDonald's and other modern fast food restaurants.	

		2. Passenger flow is great.	
Yutou Dong nationality village	Some houses in traditional architecture have not been used reasonably, and some houses have not been maintained in time.	1. The appearance of the village entrance service area is more integrated into the village, and the internal facilities are more modern. 2. The traditional buildings such as Drum Tower, stilted buildings are well preserved, and the traditional features are relatively unified.	From the village entrance service area to the Dong nationality village, there are a few modern self-built houses in the countryside that are not very harmonious with the village.
Morong Miao nationality village	There is a strong commercial atmosphere, but no space for leisure and entertainment for the elderly in the design, which ignores the real life needs of the elderly.	1. The degree of publicity and development is relatively high, attracting a large number of tourists. 2. It is not discordant for many villagers to set a vendor's stand at their own doorsteps or by their houses.	1. Compared with Goulun Yao nationality village and Yutou Dong nationality village, there is stronger commercial atmosphere here. 2. Indoor facilities of traditional buildings are dated and mixed with modern design style
Lali Village	terraced fields lead to uneven roads and difficult water supply.	1. The natural surroundings are superior and there is a unique terrace landscape. 2. There are Miao Embroidery of the Miao nationality in Chengbu County, wax printing technology inheritance base and inheritors, and they	1. modern houses are mixed with traditional buildings. 2. The road is winding due to the altitude difference.

		pay more attention to traditional culture.		
Chayuan Village	1.The water quality is poor. 2.The roads are narrow and some sections of roads are not easy to be changed because they are close to the roadsides, which is not conducive to traffic development. 3.The villagers changed and built houses indiscriminately.	many traditional ethnic buildings and features are relatively intact.	1. The road is rugged and very remote. 2. Due to the change of living needs, the traditional building components are replaced by modern facilities, which leads to the disharmony of the overall color tone.	

### 3.3 Factors of Spatial Reconstruction of Ethnic Villages

Spatial reconstruction is based on preserving the authenticity, integrity and sustainable development of the existing architecture and village appearance, eliminating the false and preserving the true. The spatial reconstruction mainly includes four aspects: historical buildings, public space, road planning and cultural landscape. Focusing on the content of spatial reconstruction, based on the research status and field investigation, we designed 33 influencing factors related to spatial reconstruction in combination with the needs of villagers in characteristic villages, etc., as the basis of empirical research on spatial reconstruction.

Through field investigation, it is found that there are some urgent problems in Hunan characteristic villages, which can be alleviated to a certain extent through spatial reconstruction. With the continuous deepening of the research, it is found that more and more villagers like to participate in the construction of their own initiative, and many local villagers such as squires and village intellectuals have returned to their hometown to offer suggestions for the development of traditional villages in their hometown. In addition, laws and regulations concerning rural construction and the development of ethnic minority areas have also made certain progress in recent years. The existing various resources in Hunan, the funds provided by the state for characteristic villages, and the living and spiritual needs of modern people all indicate the importance and feasibility of the spatial reconstruction of traditional villages.



## IV. QUESTIONNAIRE SURVEY AND RESULT ANALYSIS

### 4.1 Questionnaire Design

Based on the above survey results and combined with the factors of spatial reconstruction, this paper designed a questionnaire to further investigate the factors of spatial reconstruction of traditional minority villages in Western Hunan. The final questionnaire design is based on several modifications and pre-surveys.

Road planning is based on the prediction of rural economic and social development planning and the rules of villagers' activities, the village and some transportation distribution points (agricultural and animal husbandry bases, agricultural products processing bases, etc.) are regarded as nodes, which are called transportation points. The transportation points are connected with each other, and each route is connected according to requirements for road network layout, forming an organic whole as a road network, and appropriate transportation facilities are arranged according to the functional requirements of the road network. [19] The construct of road planning contains 6 items (DLGH01- DLGH06).

Spatial layout contains the ideal and life philosophy of villagers in different historical periods, and refers to the long-term process of interactivity between villagers and environment. The villagers have formed a local regional cognition, as well as unique customs, patriarchal rituals, etc., which are reflected in the spatial configuration of traditional villages. [20] The construct of spatial layout contains 10 items (KJBJ01- KJBJ10).

Cultural landscape is a complex of rural life culture attached to the natural environment. The cultural landscape is based on human cultural activities, which is formed naturally with the production and lives of local villagers and is also continuously updated with the change of lives. The information conveyed is not only historical information, but also the manifestation of rural cultural information in the changing and developing society. Different rural cultural landscapes tell different stories. [21] The construct of cultural landscape planning contains 6 items (WHJG 01- WHJG 06).

Traditional architecture is formed through long-term natural adaptation and artificial transformation in the process of thousands of years of development. It is typical of distinctive regional architectural complex with artistry, scientific and cultural. [22] The construct of traditional architecture layout contains 11 items (CTJZ 01- CTJZ 11).

### 4.2 Sample Distribution and Descriptive Statistics

#### 4.2.1 Sample distribution

According to the relevant literature and field interviews, the spatial structure factors were divided into four factors: road planning, spatial layout, traditional architecture and cultural landscape, including a total



of 33 items, all of which were measured by a Lickert 5-point scale. Respondents were asked to indicate their level of agreement with each item, where 1 represented “Strongly Disagree” and 5 represented “Strongly Agree”.

The questionnaire was distributed by wx.cn, QQ and email, which lasted for one month. A total of 200 questionnaires were collected, of which 102 were valid. After T-test, the difference analysis shows that there is no non-response error.

Firstly, the sample distribution was analyzed. Among the 102 respondents, the proportion of men and women is 45.1% and 54.9% respectively. In terms of age, it covers those under 20 years old and those between 20 and 60 years old, of which those between 20 and 40 accounts for 90.2%. In terms of educational level, it involves junior college, junior college, undergraduate, and master's degree or above, and respondents with bachelor's degree accounts for 68.63%.

#### 4.2.2 Descriptive statistical analysis

First, a descriptive statistical analysis was performed on the collected questionnaire items to understand the degree of respondents' identification with each item. The results are shown in TABLE IV.

As shown in TABLE IV, the mean of the road planning (DLGH01-DLGH06) ranged from 3.7549 to 3.9608, that of the spatial layout (KJGH01-KJGH10) ranged from 3.8431 to 4.2059, that of the traditional architecture (CTJZ01-CTJZ11) ranged from 3.6863 to 4.0294, and that of the cultural landscape (WHJG01-WHJG06) ranged from 3.9414 to 4.0882. On the whole, respondents have a high recognition of spatial reconstruction factors.

**TABLE IV. Descriptive statistical analysis**

Items	Min.	Max.	Mean	SD
DLGH01	1.00	5.00	3.9608	1.21803
DLGH02	1.00	5.00	3.9412	1.14168
DLGH03	1.00	5.00	3.7941	1.22141
DLGH04	1.00	5.00	3.7745	1.15961
DLGH05	1.00	5.00	3.7549	1.19766
DLGH06	1.00	5.00	3.8431	1.20021
KJBJ01	1.00	5.00	3.8725	1.14036
KJBJ02	1.00	5.00	3.8431	1.01225
KJBJ03	1.00	5.00	4.2059	1.08398
KJBJ04	1.00	5.00	4.0196	1.15167
KJBJ05	1.00	5.00	3.8922	1.07083
KJBJ06	1.00	5.00	4.0490	1.06592

KJBJ07	1.00	5.00	4.0784	1.13178
KJBJ08	1.00	5.00	3.9510	1.08434
KJBJ09	1.00	5.00	3.9314	1.02696
KJBJ10	1.00	5.00	3.9902	.99995
CTJZ01	1.00	5.00	3.8431	1.08769
CTJZ02	1.00	5.00	3.7451	1.12299
CTJZ03	1.00	5.00	3.6863	1.18556
CTJZ04	1.00	5.00	3.7059	1.17388
CTJZ05	1.00	5.00	3.9510	1.00865
CTJZ06	1.00	5.00	3.9020	1.03894
CTJZ07	1.00	5.00	3.8725	1.06865
CTJZ08	1.00	5.00	3.8137	1.09662
CTJZ09	1.00	5.00	3.7745	1.11610
CTJZ10	1.00	5.00	4.0294	1.01918
CTJZ11	1.00	5.00	3.8725	.97159
WHJG01	1.00	5.00	3.9804	1.01455
WHJG02	1.00	5.00	4.0882	.85715
WHJG03	1.00	5.00	3.9314	.92554
WHJG04	1.00	5.00	4.0196	1.00475
WHJG05	1.00	5.00	3.9412	1.02275
WHJG06	1.00	5.00	4.0196	.97473

### 3.3 Analysis of Questionnaire Reliability and Exploratory Factor

#### 3.3.1 Reliability analysis

Firstly, the reliability of the items in the questionnaire was analyzed by SPSS23.0. The Cronbach's  $\alpha$  value and the deleted Cronbach's  $\alpha$  value of each item were used to analyze the reliability of each item. As shown in TABLE III, the Cronbach's  $\alpha$  coefficient of the total items was above 0.9, and all Cronbach's  $\alpha$  values of road planning, spatial reconstruction, traditional architecture and cultural landscape were above 0.9, indicating that the reliability of the scale was good. Except for DLGH03, the Cronbach's  $\alpha$  values did not increase after the deletion of the measurement items, indicating that these items should be kept. Considering that the Cronbach's  $\alpha$  value of the Road Planning Scale increased from 0.935 to 0.936 after deleting DLGH03, the increase was not significant, so DLGH03 was kept (shown in TABLE V).

**TABLE V. Reliability analysis of constructs**

Variables	Items	Cronbach's Alpha	Cronbach's Alpha if item deleted
(DLGH) Road planning	DLGH01	0.935	.926
	DLGH02		.920
	DLGH03		.936
	DLGH04		.914
	DLGH05		.923
	DLGH06		.915
(KJB) Spatial layout	KJB01	0.965	.963
	KJB02		.963
	KJB03		.959
	KJB04		.961
	KJB05		.962
	KJB06		.959
	KJB07		.960
	KJB08		.960
	KJB09		.959
	KJB10		.962
(CTJZ01) Traditional architecture	CTJZ01	0.956	.950
	CTJZ02		.950
	CTJZ03		.954
	CTJZ04		.952
	CTJZ05		.953
	CTJZ06		.952
	CTJZ07		.950
	CTJZ08		.950
	CTJZ09		.950
	CTJZ10		.950
	CTJZ11		.954
(WHJG) Cultural landscape	WHJG01	0.926	.912
	WHJG02		.914
	WHJG03		.911
	WHJG04		.908
	WHJG05		.911
	WHJG06		.911

#### 4.3.2 Exploratory factor analysis

Exploratory factor analysis was used to get the factors affecting spatial reconstruction. As shown in the results of exploratory factor analysis in TABLE VI, the KMO value was 0.935(>0.9), the approximate chi-square value of Bartlett's spherical test was 3,772.194, the significance probability value was 0.000 less than 0.05. Data analysis shows that the KMO values (Kaiser-Meyer-Olkin measure of sampling adequacy) of the constructs are suitable for factor analysis. Then, principle component analysis (PCA) with Varimax rotation was used to extract the principal factors. Items with factor loadings of less than 0.5, a minimum threshold value recommended, or items that do not load any factor or load on different factors are eliminated.

Factor analysis for spatial reconstruction items yields three factors explaining 73.091 percent variance. Items CTJZ09 and CTJZ02 are deleted for loading on two factors The three factors are named as road and spatial planning, cultural landscape planning and traditional architecture layout. All Cronbach's alpha values are above 0.90, exhibiting ideal reliability.

**TABLE VI. Result of exploratory factor analysis**

Items	Factor loading			Factor (Variance explained)	KMO	Bartlett's sphere test	
	Factor 1	Factor 2	Factor 3			Approximate chi-square	Significance probability
KJBJ03	.825			Road and spatial planning (33.986%)	0.935	3772.194	0.000
DLGH06	.812						
DLGH04	.807						
KJBJ08	.801						
KJBJ01	.787						
KJBJ09	.749						
KJBJ07	.748						
DLGH02	.745						
KJBJ06	.737						
KJBJ02	.722						
KJBJ04	.714						
DLGH01	.713						
KJBJ10	.686						
DLGH05	.681						
KJBJ05	.664						
DLGH03	.655			Cultural landscape planning			
WHJG03		.871					
WHJG02		.743					
CTJZ11		.684					

WHJG01		.666		(20.278%)			
WHJG05		.648					
WHJG04		.618					
WHJG06		.610					
CTJZ09		.578	.536				
CTJZ10		.527					
CTJZ02	.512	.516					
CTJZ07			.709	Traditional architecture layout (18.827%)			
CTJZ04			.702				
CTJZ03			.694				
CTJZ05			.693				
CTJZ08			.671				
CTJZ06			.634				
CTJZ01			.565				

#### 4.4 Result Analysis

First, it is more reasonable to integrate road planning and spatial layout into road and spatial planning because of the close relationship between road and space.

Second, as CTJZ02, CTJZ09 and CTJZ11 in the traditional architectural layout were more closely related to the cultural landscape, they were adjusted and moved to the cultural landscape according to the data analysis.

Therefore, in the end, the spatial reconstruction involved in this paper was summarized from three aspects: road and spatial planning, cultural landscape planning and traditional architecture layout.

## V. DESIGN SUGGESTION

Based on the investigation and analysis of the results, the spatial reconstruction should be started from three aspects: road and spatial planning, cultural landscape and traditional architecture.

First, road and spatial planning mainly includes three levels: the division of different spaces, the reconstruction of road space and the relationship between road and space, involving the reasonable planning for different needs of basic facilities and service facilities such as study, culture, leisure and entertainment space and the integration of resources, the reasonable planning of roads and functional zones in the spatial structure such as distribution and management of roads, the rationality and security reconstruction of function partition, the division, connection and integration of road and space to clarify the relationship between road and space, combining the development needs of characteristic villages, integrate social funds, and reconstruct road and space planning, such as road green planting integrated with local resources of characteristic villages, and combination of characteristic crops and space to form

landscape with local characteristics.

Second, the cultural landscape mainly includes three levels: national culture, daily production and life of ethnic minorities, and the present situation of characteristic villages. The national culture is the root of the characteristic village, we need to take root in it and absorb nutrition from it, in order to provide continuous vitality for the reconstruction of the minority cultural landscape. The rural cultural landscape needs to reflect the real life of characteristic villages and present the natural and humanistic landscape. The reason why it is realistic is that it must be daily life before it can finally be implemented, instead of letting the villagers in characteristic villages "act with masks" together, which is neither long-term nor the original intention of the development of characteristic villages. The natural and cultural landscape shall be built in accordance with the daily production and living, and in combination with the existing natural resources in the ethnic village. The existing problems in the characteristic villages should be solved from the reality and in combination with the current situation of the villages. Through the reconstruction of cultural landscape, ethnic culture should be excavated to reflect the local characteristics.

Third, traditional architecture mainly involves its protection and development. First, the protection of traditional buildings should be emphasized. The awareness of protection should be strengthened. The potential safety hazards should be carefully taken in traditional buildings mostly made of wood. Second, the development of traditional architecture should be planned cautiously. In many traditional villages, the abrupt and rough connection between traditional architecture and modern architecture can be witnessed. With the changes of history and living needs, local people don't have enough energy to pay attention to the natural connection and transition between modern and traditional architecture. Moreover, traditional architectural history has not been effectively spread, and local people do not pay enough attention to traditional architecture. Therefore, from the perspective of protection and development, the reconstruction of traditional architecture needs to start from the material and spiritual aspects, which should be protected as well as developed by enhancing ethnic cultural confidence, enriching the content of characteristic villages and extending the connotation of minority characteristic villages.

## **VI. CONCLUSIONS**

In this paper, after sorting out and analyzing the list of the first five batches of traditional villages, related documents of characteristic villages and field investigation, it is found that the excavation of characteristic villages in Hunan as a whole shows an upward trend. According to the present situation of literature research, the methods and contents of research based on characteristic villages are becoming more and more abundant. According to the questionnaire survey, spatial reconstruction of ethnic village includes road and spatial planning, cultural landscape planning and traditional architecture layout. Finally, the design suggestions of spatial reconstruction were put forward from three aspects: road and spatial planning, cultural landscape planning and traditional architecture of minority villages, which provided some reference for spatial reconstruction of characteristic villages in Hunan.

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