
Protection and Ecology Planning Strategy of Traditional Village Heritage, Take the Chen Lou Village as an Example

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Abstract

In this paper, on the traditional village construction and the analysis of existing problems in environmental planning and design, with the policy of new countryside planning movement in the developed countries, get inspired for the Chinese traditional villages planning and design, finally get should be combined with the present national conditions and the current situation of rural reasonable planning, such as making reasonable planning and design, strengthening the traditional villages public infrastructure planning, adjust measures to local conditions. Based on the above specific Suggestions on the comprehensive planning and design of traditional villages buildings and environment, a new rural area that meets the needs of farmers in the new era is designed to avoid the appearance of large-scale demolition and construction, which will result in waste of resources. Through the analysis of the existing problems in the construction protection and environmental design of the rural traditional villages in Xuzhou, the necessity of protecting the architectural features of the traditional villages in the north of Xuzhou is expounded in combination with the protection and present situation of the Chen Lou village in Pizhou village, Xuzhou, and the protection and development strategy of the rural space environment based on the ecology is put forward.

Keywords: ecology planning, traditional villages, protection, planning development strategies

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INTRODUCTION

The construction of local characteristic villages plays an important role in China's economic construction. If there are no beautiful local villages, "Beautiful China" will lack content. However, the construction of local villages is not only an economic construction, because traditional villages are not isolated things, and the villages are regarded as an organic part of the earth's life system, which is influenced by the natural environment and cultural ecology. Therefore, the construction of traditional villages should be a comprehensive and comprehensive sustainable construction of "economy, culture and ecology".

The traditional villages in the northern part of Jiangsu Province have unique local artistic features and historical features. They are valuable material cultural heritage resources and an indispensable part of Jiangsu province traditional culture and art. Traditional village

cultural heritage should not become a burden and burden in the process of urbanization and socialist new rural construction. On the contrary, these heritages are the catalyst for the construction of new communities, providing the basis for grassroots beliefs for urbanized communities, and the culture of new communities (Peng 2016). Social harmony contributes and creates opportunities for leisure and tourism for the development of the city. It is of positive and practical value to investigate the spatial pattern of traditional villages in the northern part of Jiangsu province. Especially in the process of building a new socialist countryside in China, effective protection and in-depth study of traditional villages have far-reaching theoretical value.

The current situation of traditional villages in northern Jiangsu province: the concept of protection is not deepened. Due to the villagers' lack of

understanding of the value of traditional buildings, the concept of protection has gradually faded, and the damage caused by traditional people is serious (Romeu et al. 2015). Many traditional buildings have been improperly refurbished or remodeled, using a lot of new materials. This topic explores how to use appropriate methods under the current system, how to specifically guide the traditional village protection project with the goal of ecologically sustainable development, and to enable research results to maximize this goal, which will help us to protect the traditional villages well and pass it on. The protection and utilization of traditional villages in northern Jiangsu province provide us with ideas of more cultural values, economic values and ecological values. The regional economy has been reborn in the protection inheritance. In-depth study of the cultural connotation of traditional villages to implement effective protection and inheritance is an important support for promoting rural cultural prosperity and guarding the cultural roots in the construction of beautiful villages, and has positive practical significance. Therefore, the project will have important practical application value.

CURRENT STATUS AND TRENDS OF RESEARCH

In the past three decades, the protection and utilization of traditional villages in developed countries such as Europe and the United States has received increasing attention and has spread to the whole world (Kristian 2013). This phenomenon also reflects the dialectical return of the regional development model in the post-industrial era. The theory of traditional village protection is relatively mature abroad, especially in Western countries. European countries have classified traditional villages as some protection grades, carefully protected, and constantly repaired. Demolition and reconstruction of valuable historical buildings, strengthening the structure and keeping the original appearance as much as possible. In 1954 and 1976, Europe promulgated two very important international charters, the "Venice Charter" and the "Nairobi Proposal", which have had a profound impact on the protection of traditional villages in the world.

Scholar Kristian F proposed that the protection should be recorded on the local buildings by means of drawings; Italian scholars proposed that the protection should be improved on the structure of traditional village buildings; scholar Carmen S.H. proposed to use instrumental experiments on the protection of buildings. The structural component system is tested to

see the degree of damage, and statistical analysis is performed on the data.

However, these work are mainly for the traditional villages in the western developed countries. Their cultural background, geographical environment and technical measures are quite different from those of China. Some of their theories and methods are not fully applicable to China.

China is a big agricultural country. With the development of our society and economy, we gradually recognize the importance of traditional village protection. The many impacts brought about by this are also enormous. In particular, the protection of the ancient city of Pingyao in Shanxi province and the protection of Zhouzhuang Water Town in Suzhou city brought economic and social benefits to the urban economy, and set off a small climax to study the study of traditional village protection.

On the practical level, for example, as early as 2000, Wang Lu proposed that the rich architectural culture tradition and settlement planning and construction experience of traditional villages have great reference value and reference significance for future village construction and contemporary settlement planning. In 2001, Yuan Qifeng and Li Pingping proposed strategies such as hierarchical protection and functional replacement. In 2003, Fan Xiaopeng and others proposed the design concept of building a new type of village settlement with regional and cultural characteristics through the planning and design of Xinwu zhuang. In 2011, Li Jianhua et al. used the Black Tiger and Taoping Village as examples to analyze the spatial three-dimensional defense system composed of linear streets, mortuaries and point slabs.

On the theoretical level, in 2001, Wu Xiaoqin advocated the protection of ancient villages and the characteristics of residential houses, and excavated its environmental characteristics full of cultural connotations; Xing Saibo, taking the villages in Hebei as an example, analyzing the material environment under its specific cultural structure, cultural and psychological characteristics; Guo Linlin proposed that the precious cultural resources contained in traditional villages include both tangible material culture and intangible non-material culture (Christopher and Margaret 2007, Zhang and He 2011).

It can be seen from the above literature that although there are many discourses and works on the protection of traditional villages, there are not many theoretical

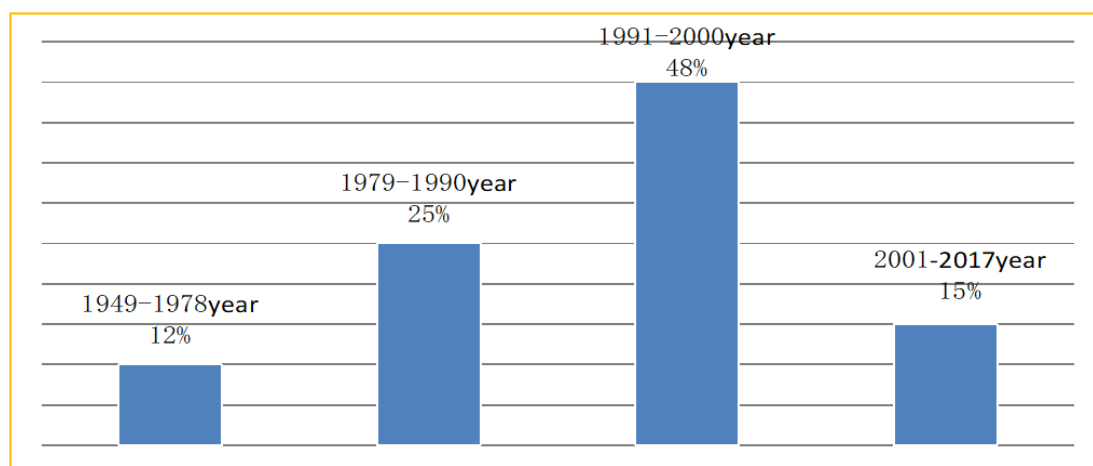


Fig. 1. The age distribution of Chen Lou village architecture

studies on traditional villages in northern Jiangsu province, and there are few practical summaries. A complete and systematic model has not yet been formed. There is a lot of room for further research and development, especially the theoretical research in the northern Jiangsu province area needs to be improved, and the practical research needs to be expanded.

RESEACH OBJECTIVES

In the protection of traditional villages in the northern part of the Soviet Union, the traditional villages are preserved and differentiated according to the existing forms and functions. Relevant historical information can be read on the preserved architectural remains. It mainly refers to the historical dwellings in traditional villages, which are closely related to people's daily lives. The research objectives mainly include aspects: clarifying the history, cultural background and geographical environment of traditional village development. According to the field research data, different types of traditional villages are divided. According to different types of traditional villages, propose development strategies and decision-making suggestions for architecture and society. The following figure shows the age distribution of Chen Lou village architecture (as shown in **Fig. 1**).

Through the design concept mining to ensure the promotion of cultural tonality. From the point of view of reality, high Starting from a high level, building a comprehensive tourism countryside with local characteristics. Need to develop rules from Start with the principle of drawing, and reasonably inherit the characteristic road system and architectural courtyard formed in history Space pattern, coordinate the contradiction between modern life and traditional style

and feature protection, and try to reform a unique local style.

RESEACH ON VILLAGE ECOLOGY

Pay Attention to the Protection of the Geopolitical Environment

The environment is a concept with relatively vague semantics and wide meaning. In the era of discourse interchange, it is also a frequently used word, such as natural environment, artificial environment, psychological environment, social environment, historical environment, artistic environment, etc. (Shi and Xu 2005, Tong and Xiong 2016, Zhou et al. 2017). The geopolitical environment mentioned here is as large as the overall status of the traditional village where the building is located, as small as the green road around the building. The spatial pattern of traditional villages is closely related to the geopolitical environment in which it is located. The geopolitical environment is the basis and background of traditional villages and is very important for studying the historical development of traditional villages.

Protection and Development of Traditional Cultural Resources

The rich historical information and cultural landscape contained in the traditional villages of northern Jiangsu province is a vivid "cultural carrier". The local architecture and history it contains are the root of the beautiful rural construction. The most effective protection for the traditional village culture is to continue its protection. The vitality of oneself ensures that in the process of its inheritance, it is not distorted, not assimilated, and maintains the authenticity of culture. How to protect and develop is very important.

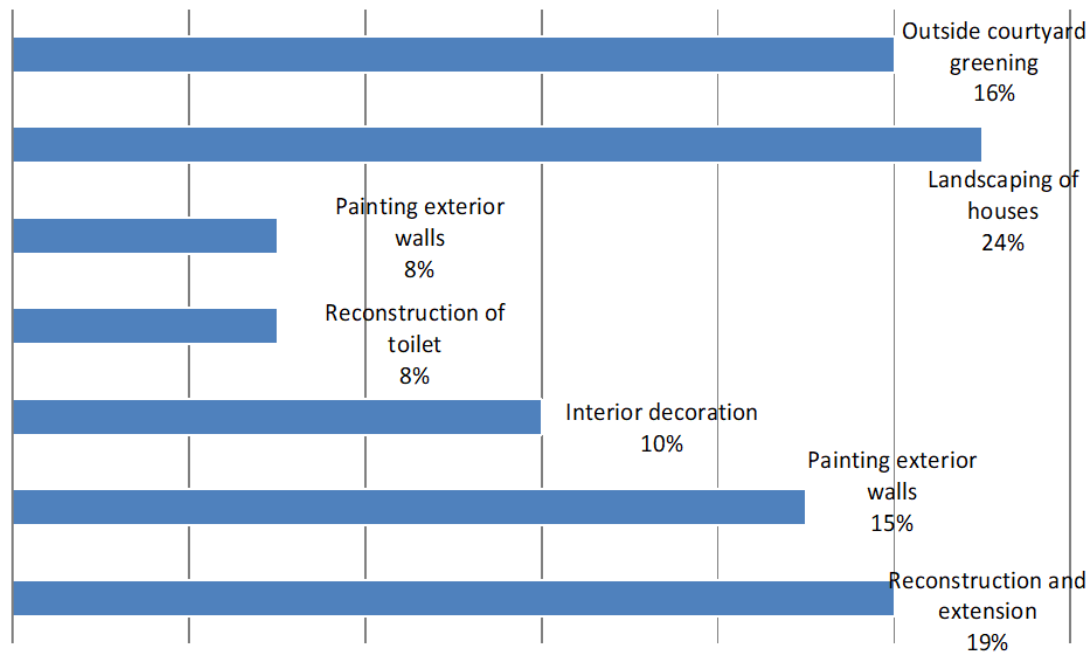


Fig. 2. Building types of Chen Lou village renovation

Reconstruction Design of Landscape Features and Spatial Patterns

The traditional village landscape spatial pattern reflects the historical accumulation of the village’s humanistic tradition in its development process and is the spiritual core that constitutes the characteristics of the village. The historical buildings that constitute the village landscape should be reflected in the architectural features. Therefore, it is necessary to protect the traditional village architecture features in the traditional village landscape protection. However, how to reflect the characteristics of the spatial pattern in the traditional village landscape and make it regenerative is a very pressing issue (Fan et al. 2011, Valentina et al. 2017). The following figure shows the age distribution of Chen Lou village architecture (as shown in **Fig. 2**).

KEY ISSUES DISCUSSION

1. Research on the spatial pattern of villages with local artistic characteristics is one of the research focuses:

Space of traditional village in northern Jiangsu province pattern has a unique artistic features and local history, a large number of bearing the different historical period, the different regional culture information, is precious material cultural heritage resources. The study of the village spatial pattern with local artistic characteristics is not only a study on the

village protection strategy, but also a study on the uniqueness of the village artistic characteristics.

2. Protection of individual buildings in traditional villages is the second research focus:

In the protection of the traditional village in north Jiangsu province, in order to “authenticity” as the principle, the analysis of the traditional village monomer building, in the traditional villages according to the existing form and function properly preserved, namely preserved monuments are real. Therefore, such protection strategy is based on multi-directional and multilevel protection of architectural heritage (Kragh and Wittchen 2014, Margarita and Artemis 2017).

3. The protection of traditional village community buildings is the third research focus:

The traditional village group architecture in northern Jiangsu province mainly refers to the historical dwellings in those traditional villages, which are closely related to People’s Daily life and still play a role in real life. They are generally built in a later age and have a lower level of protection, but they are an important part of the overall regional landscape. In the protection of traditional villages, with “readability” as the goal, to analyze group building art value, according to the existing form and function of traditional village historic buildings have distinction and targeted preservation, on preserved ruins can read the history of the relevant information.

SCIENTIFIC DESIGN OF THE COMBINATION OF VILLAGE ECOLOGY AND PROTECTION TECHNOLOGY

Protection of Characteristics of Traditional Villages

In the long-term practice, various areas formed its own unique view of nature and its corresponding construction technology of architecture refers to the original traditional villages in north Jiangsu province as a great natural conditions affect the formation of the unique architectural style, its direct to influence of spatial patterns in the protection of traditional villages. How to protect the characteristics of traditional village construction technology is a difficult problem.

Coordinated Development of Ecological Environment and Social Economy

After economic and social development, the building environment and greening were destroyed. Therefore, the coordinated development of ecological environment and social economy is a difficult problem. It will be the starting point of traditional village construction planning to protect the ecological environment, inherit the history and culture, maintain the grassroots belief system, and establish a dynamic and harmonious society. We should not simply copy or restore a traditional village, but reject the new opportunities brought by modern science and technology and make it live for a long time.

Technical Problems in Construction

On the basis of summing up the former classics of alkali, and in the long practice, the northern area of the Soviet union has formed its own unique view of nature and its corresponding construction technology. The architectural technology referred to here refers to the unique architectural style formed by historical buildings greatly influenced by natural conditions, which has a direct impact on traditional village forms. How to continue its technical is a difficult problem.

Protection Strategy Problem

There are two tendencies in the protection of traditional villages. Second, blind reconstruction has changed the original appearance of traditional villages. The research of traditional villages in north Jiangsu province is to avoid the above two kinds of irrational tendency, make protection work more rationalization, achieve authenticity and readability both integrity and character both, humanism and modernization and purpose.

A CASE STUDY ON “CHEN LOU VILLAGE” DEVELOPMENT STRATEGY

“Chen Lou Village” Status

A. Lack of scientific and reasonable planning. At present, all traditional village self-built houses are planned, designed and constructed by the construction team of the host looking for rural areas according to the characteristics and dimensions of the proposed land. The newly-built houses have the local characteristics of the place where the house is located. This is inseparable from the development of technology and new materials and new technologies (Ekkel and Vries 2017).

B. The natural damage of traditional villages is serious, and the disorderly construction destroys the ancient style and ancient appearance. Due to the high cost of protection and development of traditional villages and the lack of initiative and enthusiasm for protection of villagers, traditional villages are damaged naturally and even some ancient buildings cannot be repaired. The traditional villages lost their cultural continuity and are showing a similar pattern. Although local construction team with local characteristics such as more understanding, but in the planning, design and construction by experience.

C. The development of traditional villages has lost its original characteristics and is showing a trend of homogenization. Under the influence of climate, the residential buildings in northern China are mainly composed of courtyard houses, with thick walls, strict doors and Windows, and strong privacy. The architectural features of the village of Chen Lou in Pizhou, Xuzhou, basically accord with this feature (Yung and Chan 2012). As the village has been renovated, the form of house building can be analyzed with time as the lead. When there exist many problems, such as the lack of a scientific and reasonable planning and management, the construction quality cannot be guaranteed, poor village road through sex between, the building is poor and artistic effect is not strong, poor rural construction living environment.

Planning of “Chen Lou Village”

The planning takes the existing road and village forms of “Chen Lou village” as the framework, and organizes the village spatial structure at the level of village-group and sub-district to form a public service center (as shown in **Fig. 3**) and four residential groups. There are four types of residential buildings in the group: reservation, relocation, reconstruction and new construction. It is recommended to keep the houses with good quality, and the homestead should not be



Fig. 3. Central building design village

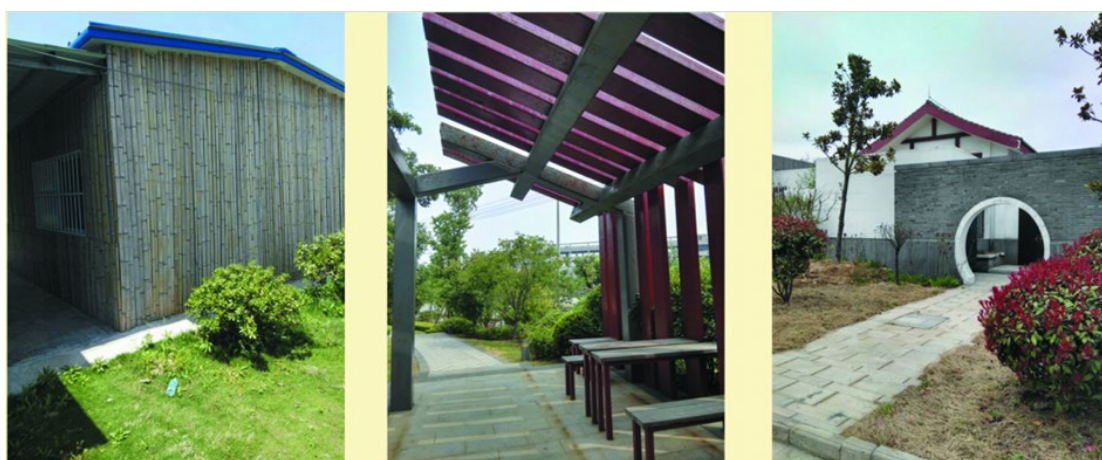


Fig. 4. Residential buildings model example

Table 1. Proposal for distinguishing feature areas

		Protects	Protects way
1	The characteristic space	the lane space	protects the original texture of the old streets and roads, and harden the roads
		Water front space	Waterfront space for remediation of reservoirs, roads and reservoirs to set up isolation zone, refuse can not be thrown at random.
2	Old building and tree	Characteristic buildings	Stone masonry houses protect stone houses and repair them
		Old trees	In special facilities villages are forbidden to destroy ancient trees, and strengthen personnel care.

expanded for the buildings with poor quality between the houses. The reconstruction housing can improve the loose layout of the internal residence in the village, remove the scattered houses with poor quality, sort out the build-able land space, implement the spatial demand of the surrounding villages, and build a group of residential space (as shown in Fig. 4).

According to the living habits of the villagers in Xuzhou area, combined with the construction organization, make a good greening and beautifying plan, enrich the landscape, and create a good living environment (Blundo et al. 2018). Carry out road greening along two main roads, one vertical and two

horizontal, to form a linear greening infiltration of the village. In addition, in the residential group, a block of green space and leisure space are planned between the building gables and roads, and fitness facilities are arranged to appropriately increase the planting of trees in the four seasons. Point, Line, Surface combination of a variety of green venues, the formation of Xuzhou characteristics of open space, creating a good living environment (as shown in Table 1, 2).

Table 2. Suggestions for improving the living environment

Improving Way		
1	Central square	There is no in the central square village of the village for public activities. It is urgent to plan a square of reasonable size.
2	Trees plant	Some trees in front of the greenbelt house in front of the house were cut down by the villagers, so the importance of trees was emphasized in the planning, and flower beds were planted so that the villagers could plant their favorite flowers and plants
3	Residential buildings	The architectural renovation and transformation of residential buildings are messy and need to be well planned. Some characteristic traditional buildings can be preserved and toilets need to be improved. Therefore, the pipeline of municipal facilities needs to be built vigorously.

CONCLUSIONS

The revival of traditional villages should be based on protection and development. However, most of the construction work of traditional villages in China is still at the stage of protection. The functional properties of space should be planned only according to current needs, but the opportunities and sustainability of space development brought by diversified demands are ignored (Li 2017, Liu et al. 2016, Wang and Sim 2014).

In traditional village reconstruction, the original logic of space should be taken as the operational focus, and the function loss and structure should be promoted in time. The laminar fracture is repaired and reconstructed so that space can continue to operate under the excitation of events and activities.

One of the Development Strategies: Maintaining the Integrity of Traditional Villages

Pay attention to the integrity of the village space, maintain the overall spatial form and internal relationship of the buildings, villages and surrounding environment, and avoid the “flower arrangement” mixed construction and the old and new villages are not coordinated. Pay attention to the integrity of the village history, protect the historical memory of each period, and prevent blindly shaping the style of a particular period. Pay attention to the integrity of the village’s value, and explore and protect the historical, cultural, artistic, scientific, economic, and social values of traditional villages, and prevent one-sided pursuit of economic value.

Development Strategy 2: Improvement of Ecological Environment in Traditional Villages

Respect the production and lifestyle that people live in harmony with nature. Form a good model of the ecological environment and promote the coordinated development of the ecological environment and the social economy. For example, combined with the design of the village green space, the formation of wind-blocking forest. Setting up a windbreak can play a role in slowing down the speed and is effective for sheltering the building from energy. After the economic development, the improvement of the local ecological environment is very important (Carmen et al. 2015).

Development Strategy 3: Typical Traditional Building Protection and Utilization

In the main historical buildings, the entrances and exits of traditional courtyards, try to choose local materials, hang protection signs, and implement listing protection. The interior renovation of historical buildings and traditional courtyards are carried out according to three types: protected buildings, reserved buildings and reconstructed buildings. Restoration of environmental elements in traditional villages: repairing the walls, stone steps, trees, mountains, water systems and other elements that make up the historical features of the village.

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