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A Study on the Revitalization of Traditional Villages in Southern Anhui based on the Symbiosis Theory: A Case Study of Nanping, Anhui Province

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ABSTRACT

China is a traditional agricultural country with villages distributed in vast areas. These traditional villages are rich in historical information and cultural landscapes and they are also the living heritage of traditional culture. The homesickness and historical memory of the Chinese are hidden in these traditional villages. With the change of China's late Qing Dynasty and the twists and turns in urban construction after the founding of the People's Republic of China, the traditional villages have been in an unstable state. In recent decades, with the development trend of social diversification the society has changed too much and too fast. The space of traditional villages is affected and the space is chaotic. The development and revitalization of traditional villages are severe. This research based on the symbiosis theory analyzes the logical relationship between the traditional village symbiosis unit, symbiotic environment and symbiosis mode, and constructs the symbiotic model of traditional villages in southern Anhui. This study takes Nanping Village in Anhui Province as an example. The study explores the rural revitalization model of Nanping Village from various perspectives such as industry, economy, population and culture. This paper provides specific rural renewal recommendations and measures in terms of architecture, planning and management.

Keywords: Symbiosis theory, Rural revitalization, Traditional villages.

Introduction

China is a traditional agricultural country with a wide range of villages. Plenty of traditional settlements are located all round China and include abundant historical cultural information. These traditional villages have experienced thousands of years of the change of dynasties, social disorders and frequent natural disasters and these experiences have given them a rich cultural heritage. Traditional villages are affected by natural environment, the destruction of war and the impact of modern civilization. Rural decline is the normal state in the process of urbanization in China in recent years. The imbalance between urban and rural development has become increasingly prominent.

Summary of Symbiosis Theory and its Application

The Concept and Application of Symbiosis Theory

Symbiosis theory originated from the concept of "symbiosis" put forward by German Mycologist De Bailey in 1879. He defines symbiosis as a common phenomenon in which different species live together, maintain a certain degree of physical contact, and constantly exchange material and transmit energy among them. Symbiotic system includes three basic elements: symbiotic unit, symbiotic mode and symbiotic environment, also known as symbiotic three elements, which together constitute the symbiotic system (Figures 1-2).

The symbiotic unit refers to the basic unit of energy production and exchange, and is the basic material condition for the formation of symbionts. The symbiotic mode, also known as the symbiotic relationship, refers to the way in which symbiotic units interact or form a combination of each other. The symbiotic environment refers to the exogenous conditions in which the symbiotic relationship exists.

Figure 1. *Connotation of the Three Elements of Symbiosis*

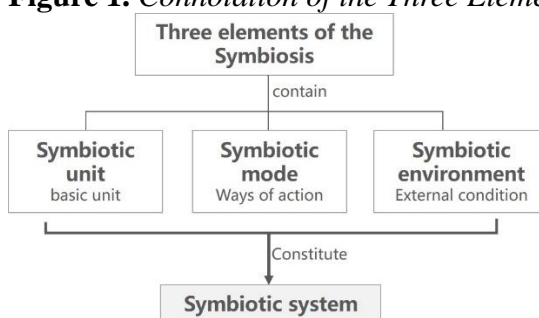
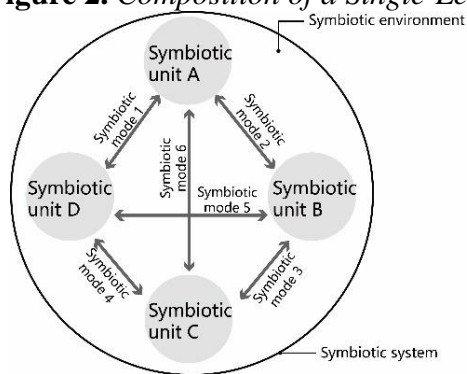


Figure 2. *Composition of a Single-Level Symbiotic System*



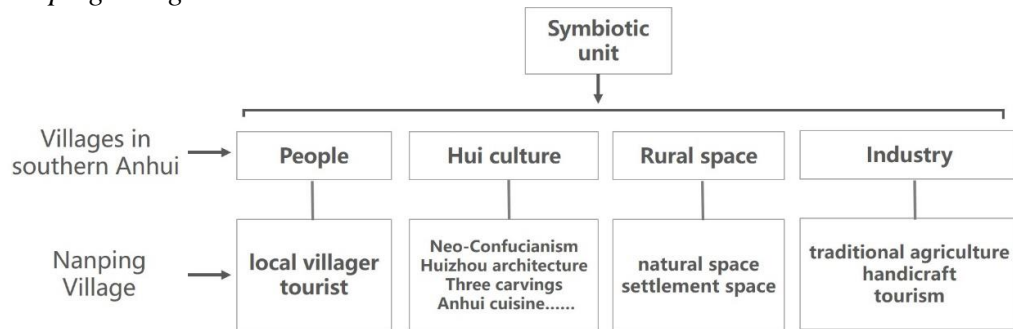
In recent years, Chinese urban planning scholars have conducted more in-depth research and application of the symbiosis theory. In the area of traditional village renewal and revitalization, the research mainly focuses on the analysis of the symbiotic system of ancient village protection and tourism development and the symbiotic relationship between city and its surrounding traditional villages. This paper studies the internal operation structure of traditional villages from the perspective of symbiotic relationship, considering the characteristics of historical relics, cultural system and economic industry. The main purpose of the study is to coordinate the development of various elements in rural revitalization and to provide theoretical support for understanding the essence of traditional villages and revitalizing development. The study aims to coordinate the development of various elements in rural revitalization and provide theoretical support for rural revitalization.

The Three Elements of Symbiosis in the Traditional Villages in Southern Anhui

Symbiotic Unit

The symbiotic unit is the basic material basis for energy production and exchange in the symbiotic relationship. This research studied the symbiotic system of a single traditional village in southern Anhui. According to the system theory, its symbiotic unit contains people, rural space, Hui culture and industry. People are the main body of this symbiotic system, including local villagers and tourists. Rural space is the carrier of the symbiotic system, including natural space and settlement space. Hui culture is the soul of the symbiosis system of traditional villages in southern Anhui. It includes Neo-Confucianism, Xin'an education, Xin'an painting, Huizhou engraving, Huizhou architecture, Three carvings, Huizhou cuisine, and Huizhou opera. Industry is the driving force for the development of the symbiosis system in the villages of southern Anhui, including traditional agriculture, handicraft, and tourism. The four symbiotic units are interconnected and interact, promote or restrict each other. The four interrelated major symbiotic units influence, promote or restrict each other (Figure 3).

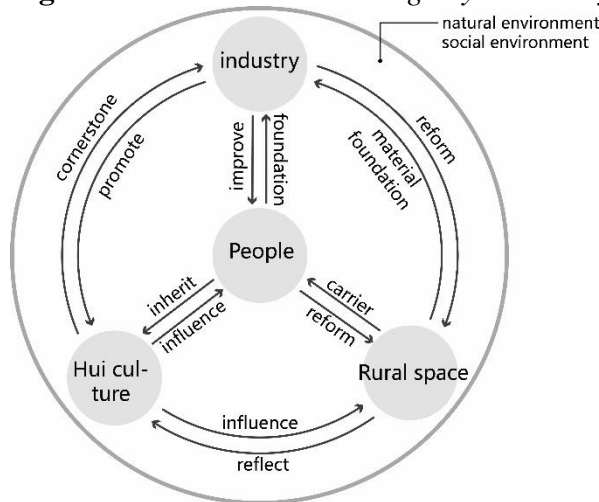
Figure 3. *Connotation of Symbiotic Unit in Villages in Southern Anhui and Nanping Village*



Symbiotic Model

The symbiotic mode is a way of symbiotic unit interaction or a combination of forms. It reflects the mode of interaction between symbiotic units and the relationship between the units exchanging material, energy and information. The symbiotic model of traditional villages in southern Anhui is the way of symbiotic units interacting in the process of development under the background of rural environment. Taking the traditional villages in southern Anhui as an example, the symbiotic units interact with each other in obvious or potential ways. Rural space provides residents with the carrier of living space while residents transform rural space for their living needs. The character and habits of the local people are influenced by Hui culture. Hui culture can be passed down from generation to generation by the aboriginal people. People's economic activities are the foundation of local industry development and the vigorous development of the industry can give local people better living conditions. Rural space provides a space carrier for the survival and development of industry, and the change of industrial demand will lead to the change of space carrier. Hui culture is the cornerstone of the development of the local cultural industry. The prosperity of the industry will also promote the pluralistic prosperity of the local culture. The Huizhou culture affects the environment of the local settlement space, and the characteristics of Huizhou culture are also largely revealed through the rural space (Figure 4).

Figure 4. *The Traditional Village Symbiosis System in Southern Anhui*



Symbiotic Environment

Symbiotic environment refers to the external conditions for the symbiotic relationship. The interaction between symbiosis and environment is realized through the exchange of material, information and energy. In the context of various symbiotic systems, the connotation of the symbiotic environment is also different. The natural environment and social environment are the exogenous conditions most closely related to the development of traditional villages in southern Anhui. The natural environment is an objective condition for the existence of this symbiotic system because the formation, development and operation of the village are largely influenced by the environment. The support of social environment such as government policies, financial support, and geographical connections plays a crucial role in the development of contemporary traditional villages.

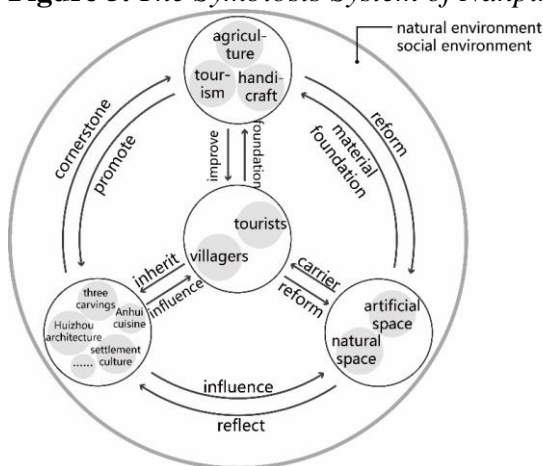
Symbiotic System

The interaction between the symbiotic unit, the symbiotic model and the symbiotic environment determines whether the symbiotic system can exist. The development of symbiotic systems is characterized by self-organization. The symbiotic units work together in this system to develop evolution together. New symbiotic units and new organizational structures may be formed in this innovative development process. "all-win" is the most ideal mode of symbiotic system. The bidirectional promotion between units promotes the co-evolution of multiple units, and ultimately realizes the ideal model of "all-win". Symbiosis is not a state of constant change, but a dynamic process of continuous development and change, which can produce diversified development results.

The Present Situation of Three Elements of Symbiosis in Nanping Village

The three elements of symbiosis in Nanping Village are similar to those in traditional villages in southern Anhui (Figure 5). This study subdivides the four symbiotic units of people, culture, rural space and industry in Nanping Village in order to study the internal logic of the symbiotic system. "People" includes villagers and tourists. "Rural space" includes artificial space and natural space. "Industry" includes agriculture, tourism and handicraft industry. "Hui Culture" includes settlement culture, Huizhou architecture, three carvings, Huizhou cuisine and so on.

Figure 5. *The Symbiosis System of Nanping Village*



Status of Symbiotic Units

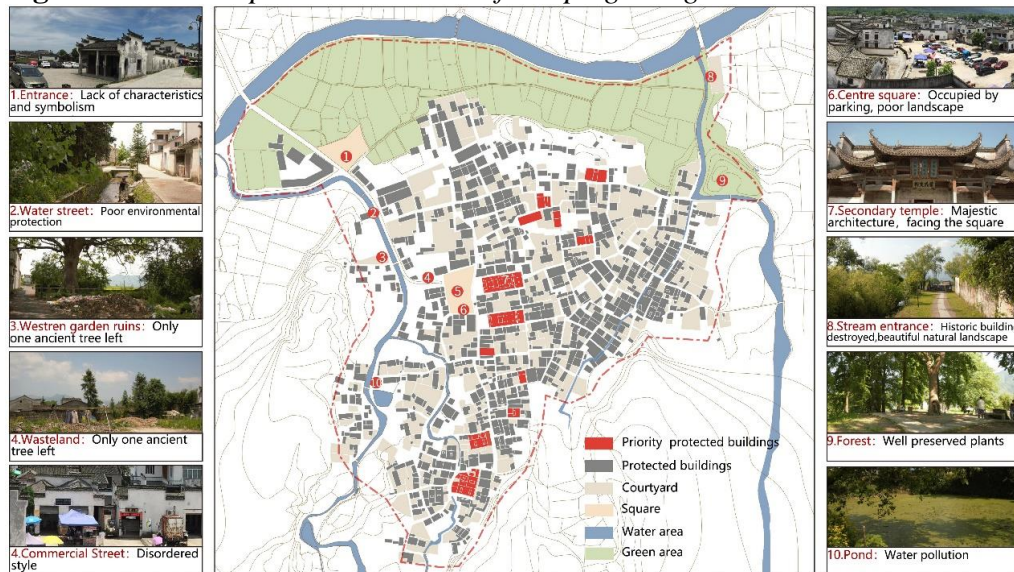
Rural Space: Rural Space is Well Preserved and Ancient Buildings are Well Protected

Nanping Village is located in Biyang Town, Yixian County, in the southern part of Anhui Province. It is the fourth batch of national-level historical and cultural famous towns in China. It is a traditional village where Huizhou merchants gather for more than a thousand years. The village is backed by mountains and surrounded by water on three sides. It is situated in the mountains and waters with superior natural conditions. There are more than 300 ancient buildings and unique ancestral temples in the village. The space of streets is tortuous and complex, with 72 narrow streets in total. After thousands of years of vicissitudes, the village still retains a relatively complete spatial form of natural growth. The buildings of Nanping Village have typical Huizhou architectural features. The tortuous street space, progressive courtyard layout and exquisite sculpture decoration constitute the space characteristics of Nanping Village (Figure 6).

Huizhou merchants obtained a lot of wealth by going out to do business. They used these funds to build their hometowns and built a large number of houses, ancestral halls, arches, gardens, etc. in the traditional village. The ancient buildings of Nanping Village have been listed as a protected national heritage site and the

restoration and repair of ancient buildings is also being carried out in an orderly manner.

Figure 6. *Plane Map and Node Status of Nanping Village*



People: Villagers Reduced and Tourists Increased

There are more than 900 residents registered in Nanping Village, but the proportion of resident population is getting lower. The villagers currently living in the village are mainly elderly and young children, and the population structure is irrational. Some aboriginal people moved to work and live in the city for higher economic income. Meanwhile, traditional villages cannot meet the needs of contemporary villagers' living standards, and medical facilities and educational facilities are backward. Based on the above reasons, the indigenous people in the village are mainly self-careable elderly and preschool children.

In recent years, the number of tourists and tourism service workers in Nanping Village has increased year by year. Complete ancient buildings and beautiful rural landscape provide a good tourism foundation for Nanping Village and its tourism industry started in the 1990s. The film *Judou* was set here. After that, many films and TV works were shot here. Therefore, Nanping was also praised as "China Film and TV Village". In recent years, the number of tourists in Nanping has gradually increased, and the types of tourism activities are also diversified. This is due to the overall improvement of tourism environment in Yixian County and the increase of exposure rate in Nanping Village.

Culture: The Diversity of Hui Culture Types

There are many kinds of cultural heritage in Nanping Village. Settlement culture reflecting the relationship between man and nature, Huizhou cuisine culture reflecting regional characteristics, Hui carvings with exquisite skills and etiquette culture showing social relations all constitute the cultural heritage.

The settlement form of Huizhou is a typical spatial form under the influence of farming culture, focusing on the harmony between man and nature and the pragmatic thinking. The planning of Nanping Village starts from the ecological perspective. The site selection follows the traditional Feng Shui model “Lean on the mountain, Locate near the water, Face the barrier”. The layout of the village emphasizes both water management and various types of water landscape elements such as the entrance water, water irrigation, wells and pools. The entrance Garden, which consists of pavilions, bridges and other buildings implies safety, longevity and prosperity (Figure 7).

The art of Hui carvings is also vividly embodied in Nanping Village. Hui carvings include stone carvings, brick carvings and wood carvings. In Nanping Village, whether it is a brick carving of a gate building, a hollow stone window, or a wood carving construction of a residential building, all show exquisite carving techniques (Figures 8-9). In addition, traditional cultures such as etiquette culture, Huizhou cuisine culture, Xin'an education and so on have also been glowing in recent years, which has played an important role in promoting the development of local tourism industry.

Figure 7. *The Garden of Nanping Village*

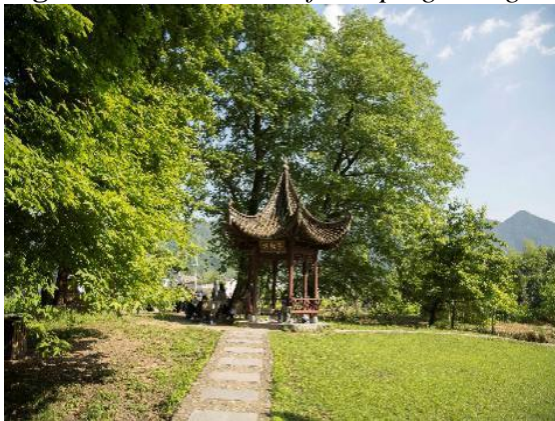


Figure 8. *Stone Carving of Gatehouse*



Figure 9. *Wood Carving*



Industry - Handicraft Industry is Difficult to Inherit, Tourism Service Industry Has Become the Main Driving Force for Economic Growth

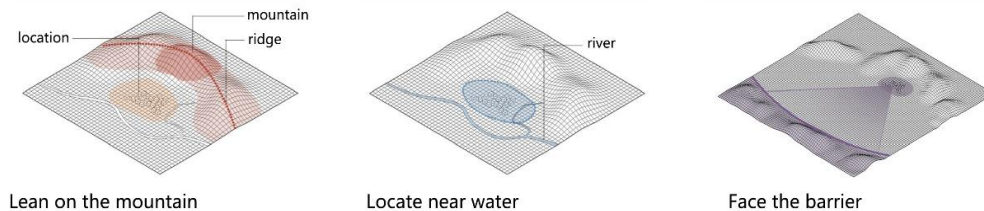
In the traditional society, the main economic source of Nanping village was the income of Huizhou merchants, and the local farming was mainly self-sufficient small-scale peasant production. In modern times, with the development of urbanization and the flow of population, the industrial structure has changed. At present the traditional industries of Nanping Village are mainly agricultural production and handicraft manufacturing including grain production, tea production, three-carving production, bamboo weaving, cloth dyeing, and hand-carpenter. Due to population loss and poor economic returns, there are fewer local people engaged in traditional industries. Taking the three-carving industry as an example, the inheritance of craftsmanship requires many skilled and patient apprentices, but young people are more willing to work in cities to earn more money.

In recent years, the proportion of tourism service industry in Nanping village's total economic output has increased, and it has become the pillar industry of rural revitalization. Yixian cCounty government relies on environmental advantages, implements "tourism plus" and builds scenic spots in the whole county to promote rural revitalization by rural tourism. In today's new media era, hot events will greatly enhance regional visibility. For example, the 2017 variety show "First Grade" and the 2018 "Flesal World" increased the popularity of Nanping Village and drove the local tourism boom. In recent years, Nanping Village has tapped local resources to create diverse tourism products such as research trips and parent-child tourism, and has established municipal-level research and tourism demonstration sites. However, at present the overall level of tourism supporting services in Nanping Village is relatively poor and the quality of service and the number of facilities have a large room for improvement.

Status of the Symbiotic Environment

Nanping Village has obvious advantages in terms of natural environment. Nanping Village is located in the upper reaches of Xin'an River. It has a favorable natural environment and is close to mountains and rivers. The village is surrounded by water on three sides and backed by mountains on one side so it has a great view of the landscape (Figure 10).

Figure 10. *The Principle of Location Selection of Traditional Villages in Southern Anhui*



The social environment, including political and economic policies and conditions, plays an important role in the future development of the village. Yixian county government is implementing the county tourism development policy. Based on the existing formats of country home stay, paintings, photography, research tours, the county actively cultivates new forms of agricultural tourism like folk performances, food experiences, sports activities and so on. In accordance with the image orientation of “all region tourism and panoramic county”, the government actively promotes the cross-border cooperation between various departments and the tourism industry and improves the supply structure of tourism products in order to fully develop rural tourism. For Nanping Village, with government policy support and abundant local resources, the rural revitalization in the new era has reached a critical period.

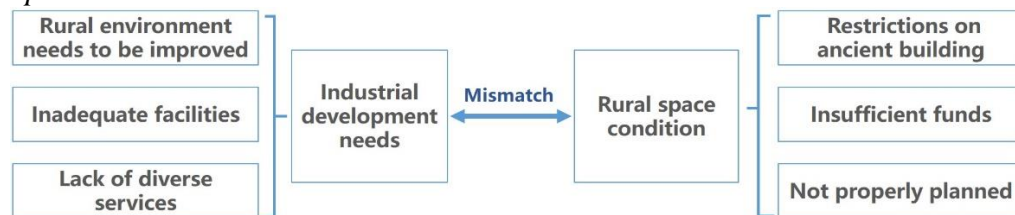
Current Status of Symbiotic Model

The symbiotic mode refers to the relationship between symbiotic units. The contradiction between the symbiosis units in Nanping Village has begun to appear, such as the contradiction between industry and space, the contradiction between human needs and space constraints. Firstly, the relationship between industrial development and rural space is poor. The rural space of Nanping Village cannot meet the increasing demand for industrial development. So far, the rural renewal that has been carried out in Nanping Village is dominated by several core tourist attractions. However, due to insufficient funds and restrictions on the protection of ancient buildings, many non-attractive sites have been damaged more seriously and the overall environment needs to be improved. In recent years, activities such as group tourism, souvenir sales, and sightseeing agriculture have gradually increased but the number of supporting facilities in the village is insufficient. For example, the current commercial space of the village focuses on the entrance and the ancestral hall, and the available commercial services are limited. The current

type of business services provided by Nanping Village is simple and monotonous. The type of commercial services currently offered by Nanping Village is simple and monotonous. It does not reflect the characteristics of the local and the project is similar to other tourist villages in southern Anhui (Figure 10).

Secondly, the contradiction between the need of residents to improve their living standards and the protection of ancient buildings is beginning to appear. The ancient buildings of Nanping Village are Important Historical Monuments under Special Preservation, and buildings cannot be easily reconstructed. The traditional architectural form is difficult to meet the needs of modern villagers.

Figure 11. *Incorrect Symbiotic Model between Industrial Development and Rural Space*



Revitalization Strategy of Nanping Traditional Villages based on Symbiosis Theory

After analyzing the local resources and the three elements of symbiosis in Nanping Village, we use the theory of symbiosis as the guiding ideology to update the traditional villages from the following aspects.

Symbiotic Unit Evolution

Coordinate the Relationship between Villagers and Tourists Properly

Rural tourism often plays an important role in the revitalization of traditional villages, especially in historical villages. Tourism service industry is closely related to local residents and foreign tourists. In the symbiotic system, the relationship between villagers and tourists should be properly handled.

The most directly related to the revitalization of the ancient village in Nanping Village is the local residents. The best way is to seek the understanding and active participation of all villagers. Therefore, it is necessary to carry forward the characteristics of the settlement culture, build village communities, enrich public activities, strengthen neighborhood relations and activate rural vitality. On the basis of protecting the characteristics of the village, the settlement environment will be upgraded to improve the quality of life of the villagers. A new travel service space will be arranged to meet the needs of tourists and the quality of tourism services will be improved. The rural space is reasonably divided into tourist areas and residential areas (Figures 12-13).

Figure 12. *Planned Commercial Structure of Nanping Village*

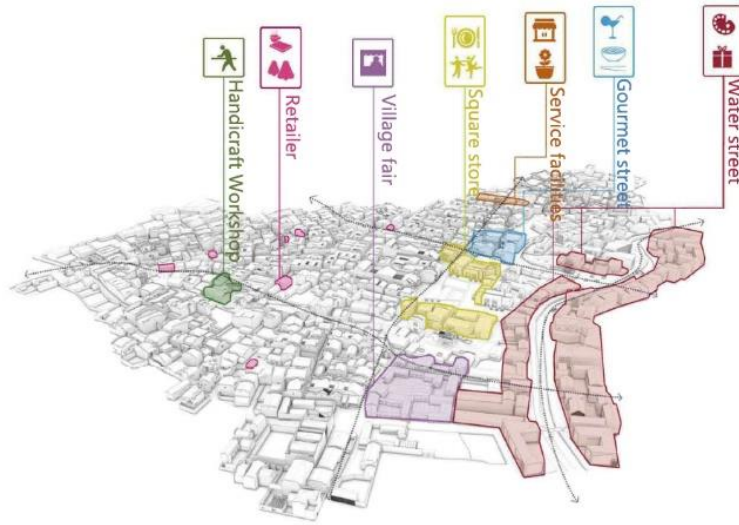
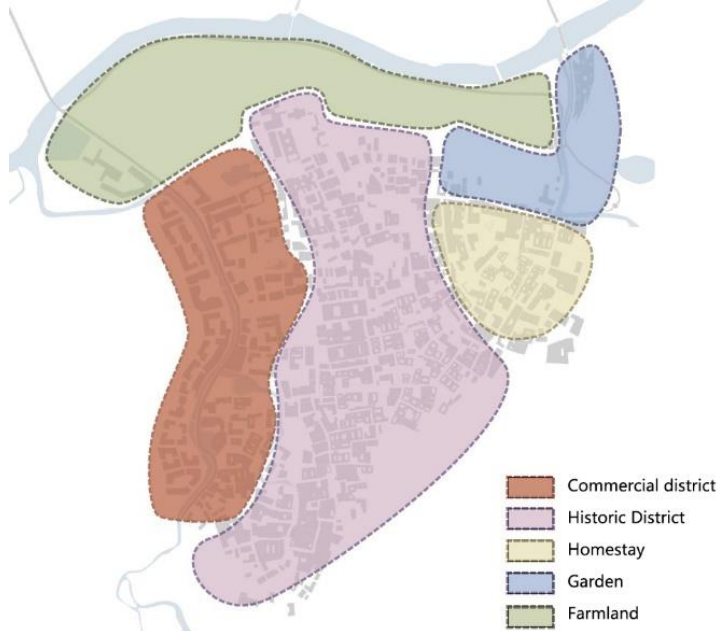


Figure 13. Functional zoning of Nanping Village



Promote and Integrate the Spatial Environment

The rural space is the carrier of the traditional village symbiosis system, providing residents with living and production space, and also an important material carrier that reflects the cultural characteristics. To achieve the revitalization of traditional villages, it is necessary to improve the quality of rural space and coordinate environmental integration.

In the design of space renewal, we adhere to the basic principles of protecting historical authenticity, integrity of style and sustainable life. We adopt a variety of ways to improve the living space, commercial space, communication space and production space of Nanping Village. There are many small-scale courtyard spaces

in the current villages, which are in a dilapidated and wasted state due to disrepair and economic factors. In the design, the waste courtyard is comprehensively considered to be transformed on the basis of the intersection of human flow and the current public venues, so as to create a continuous and comfortable public activity space, which combines delicate and compact communication space with a petty street garden. Watchtowers have been set up in some public spaces to overlook and enjoy the whole village landscape (Figures 14-15).

Figure 14. *Improvement of Public Communication Space*

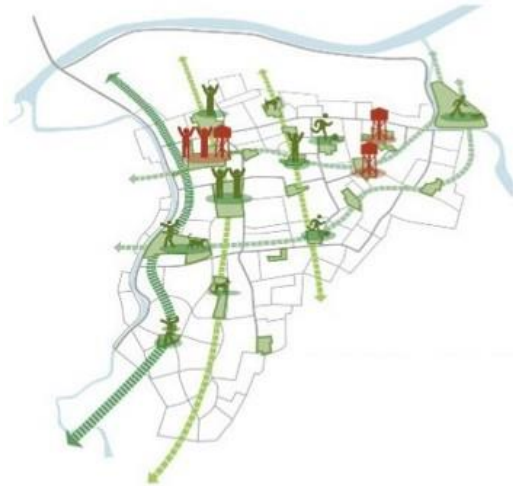


Figure 15. *Rendering of a Petty Street Garden*

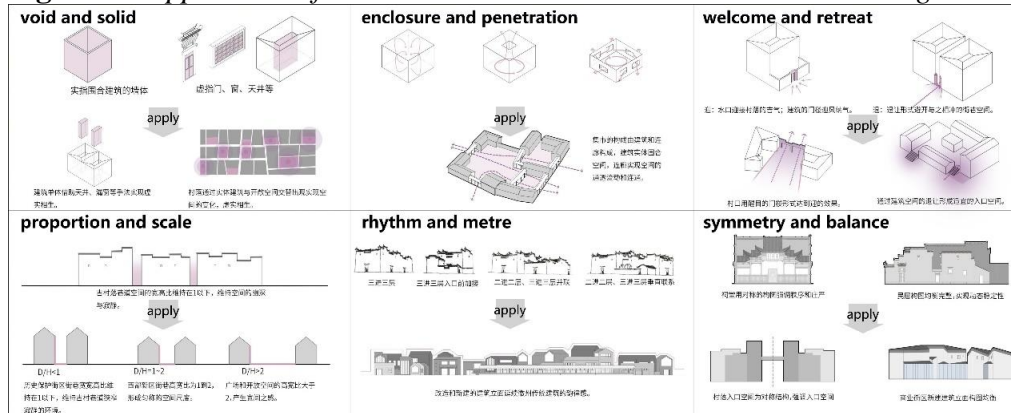


We should pay attention to the harmonious coexistence of man and nature, strictly control the total amount of construction, and carry out space transformation in an orderly manner, so as to realize the integration of natural environment and man-made environment, ancient buildings and new buildings, historical relics and new village landscape.

The design of new building groups emphasizes the integration of the concepts and rules of traditional buildings such as the change of void and solid of entity buildings and open space, the enclosure and penetration of building group space, the welcome and retreat of village entrance and building entrance, the proportion

and scale of streets and squares, the rhythm and metre of new street facades and the symmetry and balance of building groups (Figure 16).

Figure 16. *Application of Traditional Elements in New Architectural Design*



Blending and All-Win of Industries

Industry is the driving force for the existence and development of traditional villages. The prosperity of the industry promotes the transformation of people, the improvement of material space and the diversity of culture. Industrial development in the symbiotic system is the guarantee to achieve the symbiosis and common prosperity of each symbiotic unit.

We try to construct a system of integration of primary, secondary and tertiary industries to promote the diversified development of rural economy. While introducing tourism and service-related industries, we upgrade our traditional industries. We try to promote the revitalization of traditional crafts, continue the traditional handicraft industry in the way of family inheritance and policy attraction and enrich the types of traditional industries. For example, we can organize research activities, teach handicraft knitting skills and narrate the traditional history and culture. In addition, we make full use of local resources in the form of activities to encourage business and public welfare events, such as "Rape Huahai Village Photography Competition" and "Huizhou Public Welfare Cycling Competition" and so on. We should actively use diversified new media propaganda methods to promote the popularity of Nanping Village through regular activities and competitions so as to lay the foundation for the development of cultural tourism industry.

Construct a full-cycle tourism service industry chain, study and predict the evolution of tourism development in Nanping Village, and guide local planning and design and tourism marketing in order to improve the matching of tourism services and tourists' needs. The tourism industry in Nanping Village is currently in a transitional phase from "participation period" to "development period". The number of tourists has increased year by year. At present, most of the management rights are in the hands of the villagers while the foreign companies begin to participate in tourism operations. We need to properly assess the needs of tourists, handle the tourism competition relationship with other southern villages properly,

and plan and design in phases.

Multiculturalism Promotes Rural Prosperity

Culture is the soul of the existence and development of traditional villages. Local traditional culture gives each village its distinctive qualities. In the symbiosis system of traditional villages in southern Anhui culture shapes the character and habits of local residents, determines the manifestation of rural material space and affects the development of the industry.

We adopt various modes to inherit the representative architectural culture, Huizhou cuisine culture, handicraft production and custom culture of Nanping Village relying on industry. We upgrade the rural space and provide a good space environment for cultural activities. Combining cultural creativity, Internet creativity, rural heritage protection and other disciplines, we introduce social capital to encourage local entrepreneurship and actively build the derivation of Hui culture. We have carried out architectural design and planning related to rural culture, such as water street on the west side of Nanping village, tourist service center, three carving workshop, tea culture center, etc. to provide space to carry the development of new culture and new industries (Figure 17).

Figure 17. Multi-Element Coordination of Water Street



Enhancement of Symbiotic Environment

We advocate protecting the natural ecological environment, minimizing the

intervention of the ecological environment, and maintaining the local landscape characteristics of Nanping Village. The new buildings absorb the local building's characteristics and provide public places for villagers and tourists in the form of enclosing courtyards. We carry out the architectural design on the basis of retaining the original trees of the village. Traditional architectural forms such as sloping roofs, horse head walls, patios, and inner courtyards have been adopted to keep the old and new architectural styles consistent (Figure 18).

Figure 18. *Renewal of Nanping Village under Symbiosis Theory*



We plan to strengthen infrastructure support. The traffic conditions in Nanping are backward. The external traffic is the highway from Yixian to Nanping, and the bus runs very infrequently. We plan to upgrade the level of external roads, improve the village traffic system and expand the parking lot. We will improve infrastructure construction for drainage, electricity, telecommunications, sanitation, environmental protection, fire control and flood control.

Nanping Village has already formulated protection and development plan but the current plan focuses on the protection of ancient buildings and lacks a comprehensive system of overall planning.

It is recommended to carry out comprehensive design including infrastructure, rural renewal, environmental protection, etc. to achieve the continuous protection of historical culture and the orderly use of new business space. It is also crucial to mobilize the enthusiasm of the villagers. It is recommended to establish the ancient village protection committee which is based on the village committee. This committee will improve the participation of villagers and guide the protection of traditional villages.

Symbiotic Mode Optimization

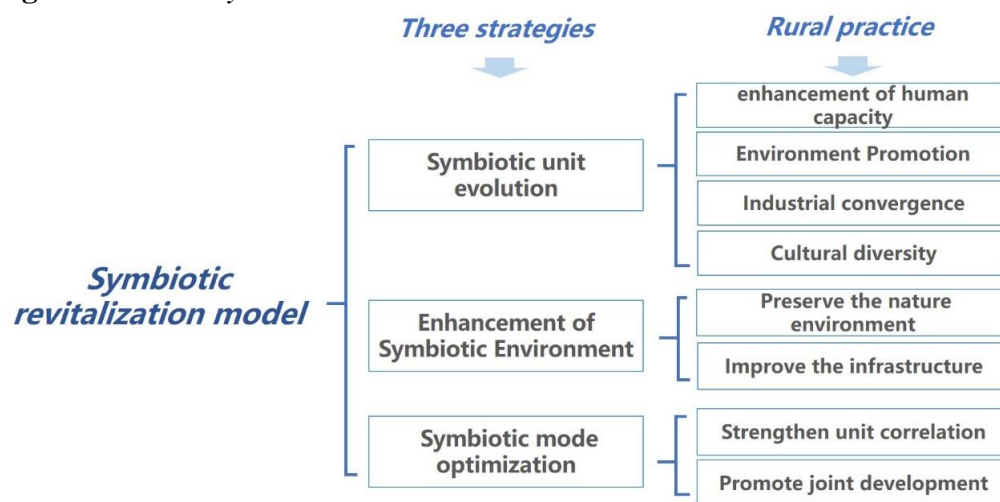
In order to achieve the ideal "all-win" symbiosis system, we must not only analyze individuals from the perspective of a single symbiotic unit, but also focus on the internal evolution of the unit. More attention should be paid to the relationship between the various units, and the impact of the external environment.

In the practice of rural revitalization, we should analyze the research object from a holistic perspective and propose corresponding strategies.

Strengthen the correlation between symbiotic units and enhance the ability of residents in Nanping village. Increase villagers' ability to cope with changes in industry, culture and space. Improve the living of local residents through infrastructure improvement. Local people will be able to learn skill of modern agriculture, homestay management and tourism services through regular training and community classes.

Units promote each other and prosper together. Nanping Village focuses on the common prosperity of cultural undertakings and cultural industries. Fully explore the intrinsic value of local traditional culture such as architectural culture, three carvings culture and settlement culture. The village can gather popularity and capital injection through the rich cultural heritage and beautiful space environment, so as to realize the industrial development and rural revitalization (Figure 19).

Figure 19. *Rural Symbiosis Revitalization Model*



Summary

The widely used symbiosis theory has now formed a relatively mature theoretical system. Using symbiosis theory to study the pattern of revitalization of traditional villages is to analyze rural issues from a higher level. This paper uses the symbiotic system to recognize and interpret the problems and strategies of rural revitalization. This study regards a single traditional village as a symbiotic system, studies the relationship between its four symbiotic units, and then creatively develops the symbiosis theory and explores the path of rural symbiosis revitalization. In the context of the grand narrative of the rural revitalization strategy, this paper uses the symbiosis theory to find breakthroughs and innovations in the revitalization of traditional villages. It aims to provide a runnable and decision-making reference for the revitalization and development of traditional villages in southern Anhui. In the same way, in the context of a wider

regional development, the symbiotic rural revitalization model can also be used to analyze the symbiotic systems and interactions of many traditional villages.

References

- [1] Fan Haiqiang, Chen Yafeng, Zhan Ye, Guo Yu. Analysis and Design of the Garden Complex under the Symbiotic Theory: A Case Study of ShuiWei Village [J]. DEVELOPMENT OF SMALL CITIES & TOWNS 2018, 36(12): 26-31.
- [2] Zhu Yan. Study on the symbiosis-suitability of space utilization in the town of Dian [D]. Southeast University, 2017.
- [3] Zhu Shengdong. Research on the Overall Development Model of Ancient Village Heritage Tourism Based on Symbiosis Theory——Taking Xidi as an Example [J]. Journal of Central South University of Forestry and Technology (Social Science Edition), 2015, 9(04): 33-37+43.
- [4] Wu Hong, GU Chaolin. The Cooperation—Competition of Regional Tourism Based on the Symbiosis Theory——A Case Study On Huaihai Economic Region [J]. ECONOMIC GEOGRAPHY, 2004(01): 104-109.
- [5] Sun Yingkui, Sel Jiang Hallik, Wang Wei. Research on the Protection and Tourism Development Strategy of Ancient Villages Based on Symbiosis Theory——Taking Qionghushtai Village in Turks County, Xinjiang as an Example[J]. Western Habitat Environment Academic Journal, 2017, 32 (06): 84-91.
- [6] Ma Hang, Liu Lin. Research on Protective Renewal Strategy of Urban Edge Ancient Village Based on Symbiosis Theory——Taking Fenghuang Ancient Village in Shenzhen as an Example [J]. Modern City Research, 2016(01): 30-37.
- [7] Li Fan, Jin Zhongmin. A Comparative Study of the Influence of Tourism on Ancient Villages in Southern Anhui——Taking Xidi, Hongcun and Nanping as Examples [J]. Human Geography, 2002(05): 17-20+96.
- [8] Jiang Youming. Research on the Protection and Inheritance Mechanism of Anhui Local Culture in Rural Revitalization [J]. Journal of Chizhou University, 2018, 32(05): 77-81.
- [9] Fang Guohong. Exploring the Thoughts of Rural Industry Revitalization in the Mountainous Areas of Southern Anhui [J]. Anhui Agricultural Science Bulletin, 2018, 24(17): 10-11+66.
- [10] Yin Shimei, Liao Liping, Li Kui. The Construction of Symbiosis Strategy for Rural Revitalization Planning and Practice in Guangxi [J]. Planner, 2018, 34(08): 68-73.
- [11] Ma Guoqiang, Wang Huiling. The Cooperative Development of Tourism Industry in Lanxi City Group from the Perspective of Symbiosis Theory [J]. Urban Problems, 2018(04): 65-71.
- [12] Yang Jianchao, Zhu Jingjing, Ding Xinjun. Research on the development of urban recreation space system based on symbiosis theory [J]. Ecological Economy, 2018, 34 (03): 137-141.
- [13] Chen Yu, Chen Shulin. The Construction of the Idyllic Complex Planning Model Based on Coupling Symbiosis Theory [J]. China Agricultural Resources and Division, 2018, 39(12): 7-12.
- [14] WU Min, ZHANG Zhihui. Study on the Symbiotic Development Model of "Outoral Complex" [J]. Journal of Hefei University of Technology (Social Science Edition), 2017, 31(06): 115-119.