# A study for the protection and utilization of the Huzhou new rural tourism landscape resources based on a Rural Residence Image System (RRIS)

#### Q. Yang<sup>1</sup> and K. Sheng<sup>2</sup>

#### ARTICLE INFORMATION

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#### ABSTRACT

The utilization of rural tourism landscape resources is an important aspect of new rural development. How to effectively balance the protection and construction of rural landscape resources has recently become the focus of research studies. By taking Huzhou City as an example, this study summarized the problems in the current based on an investigation. Then, it reconstructed the development goals of the tourism landscape resources in the rural areas, introduced an innovation idea of a "Rural Residence Image System", and established a new development model based on "nature, entirety, and sharing". A Rural Residence Image System is in fact the sum of the tangible and intangible cultural landscape resources, which continue the existing rural cultural traditions. Also, it is the exploration and practice of innovation concepts regarding the in-the-field planning science and architecture of rural tourism landscape development. On this basis, countermeasures and suggestions were formulated for the protection and utilization of resources.

#### 1. Significance and objectives of the research

In 2015, the urbanization rate of the resident population in China was 56.1%. Over the past decade, this proportion has increased by 11.8%. China's urbanization rate has exceeded the world average level and continues to show a very rapid development process. On one hand, urbanization refers to the expansion of the scale of cities and towns, as well as the decline and extinction of villages. On the other hand, the government has always regarded "agriculture, rural areas, and farmers" as the foundation of governing the country and has regarded the new rural construction as a parallel track of a balanced rapid urbanization.

In the exploration of new rural industries, rural tourism has been proven to be the main means to highlight the characteristics of rural resources, as well as to realize the value of these resources. It has also been a reliable pathway to achieve rural economic growth and cultural promotion. However, it has also been found that the unreasonable development and utilization of tourism resources has brought a series of serious problems, which tend to influence the sustainable development of the rural economy, such as land occupation, waste of resources, and environmental pollution, as well as the rapid disappearance of ecological and cultural landscape features. Therefore, it has become very urgent to construct a rational development and utilization mode for rural tourism landscape resources, and to cultivate growth points for the sustainable development of rural tourism. One method to accomplish these goals is by utilizing the opportunities presented in the new rural planning and construction processes.

<sup>&</sup>lt;sup>1</sup> Associate Professor, Hangzhou Vocational& Technical College, Xueyuan Street 68, Hangzhou, China, zyhyqmm1@163.com

<sup>&</sup>lt;sup>2</sup> Architect, Correspondence author, East China Architecture Design& Research Institute, Hankou Road 151, Shanghai, zjusk@126.com *Note:* Discussion on this paper is open until December 2018.

In developed countries, rises in rural tourism are generally considered to be effective means to prevent the decline of agriculture, increase farmers' incomes, and create employment opportunities (Reichel et al., 2000). For example, European governments vigorously promote rural tourism, and provide a great deal of support in order to solve the economic and social problems in rural areas. This is especially relevant in the areas facing recessions in traditional agricultural industries. In developing countries, the development of rural tourism is a derivative of political will, which can potentially narrow the gap between the rich and poor in urban and rural areas (Fleischer and Tchetchik, 2005). Some researchers have found that that tourism is not only an effective way to prevent economic recession in rural areas, but also a means to prevent imbalances in social structures which may be caused by the lack of public services, emigration of high-quality populations and so on. Close links have been established between coordinated economic and social development. Therefore, these can be assumed to be comprehensive influencing factors for rural development policies (Sharpley et al., 1997).

Most researchers agree that rural tourism plays a certain promotional role in rural economies and employment. However, they also stress that rural tourism is only a beneficial complement for the increasing of rural economic incomes and cannot fundamentally deal with all rural economic problems. From the aspect of social culture, many research consensuses have found that villages are helpful in the promotion of rural social and cultural exchanges with the outside world and enhance a sense of pride in the local community while promoting local cultural development and heritage protection (Nilsson, 2002). It has been demonstrated that, when the number of tourists exceeds a certain quantity and destroys the rural lifestyle, the positive significance of this type of cultural exchange disappears (Macbeth, 1997).

New rural constructions are part of China's urbanization strategy and aimed at meeting the modernization needs of all people with limited per capita resources, which is different from the global experience. The goal of the new rural constructions is not simply to change the rural economic situation, but also to rebuild the rural life pattern, based on the continuation of both traditional and local characteristics. This is a system engineered to consider construction and protection, as well as development and operation. A single perspective of the development, whether it is space construction and environmental improvement, or industry arrangement and tourism resource development, cannot effectively promote the system's engineering of rural construction. This study therefore broke through the boundaries of the disciplines, and integrated innovative ideas for the

planning of science and architecture, through the practice of management science and sociology, to effectively determine a sustainable model for the protection and utilization of the rural areas.

#### 2. Investigation& analysis of the current situation

Huzhou is located on the south bank of Taihu Lake, and covers an area of 5,818 km<sup>2</sup>. It has a population of more than 2.59 million and a history of more than 2,300 years. Huzhou has made remarkable achievements in promoting new rural constructions, and its experience has been summarized as the "Huzhou Mode", which has been widely promoted. This research study selected the three most representative villages of Huzhou City for its investigation. These were Digang Village in Nanxun District; Gaojiatang Village in Anji County; and Zhongguan Village in Deqing County. These three villages were found to display differences in topography, historical context, industrial structures, and economic levels, which was conducive to the comparative implementation of this study's research.

Digang (a waterside village, Fig.1) is an ancient waterside village with a history dating back thousands of years. It has an area of 6.3 km<sup>2</sup>, with a residential central village area of 1.3 km<sup>2</sup>. Gaojiatang (a mountainous village, Fig.2) is known as one of the most beautiful villages in Zhejiang Province. This village has a total area of 7.0 km<sup>2</sup>, and a population of 827. It has good vegetation, picturesque and attractive scenery. Zhongguan (a plain village, Fig.3) has explored a mode for the new rural construction by relying on the villagers' houses, which were constructed through a brand-new planning of the township's development. It has a regional area of 5.8 km<sup>2</sup>, and a population of 2,308.



Fig. 1. Photos of Digang Village



Fig. 2. Photos of Gaojiatang Village



Fig. 3. Photos of Zhongguan Village

This study's research team conducted investigative visits to each village. The investigation methods included home visits, questionnaires, and interviews with the village officials. The analyses were carried out from the aspects of the industrial structures, ecological resources, cultural environments, living spaces, and open spaces of the three villages. Then, according to the results of the questionnaires, the following conclusions were made:

#### (1) Industrial structures(Fig.4)

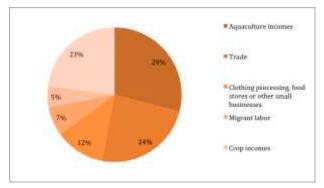


Fig. 4. Composition analysis of the industrial structures

From the view of industrial structures, the main industry still occupied a large proportion, while the other industries in the rural areas still relied on the agricultural industry to a certain extent. This meant that the rural planning and construction could not completely transplant the city mode, but explored a reasonable mode in compliance with the rural industrial structures.

#### (2) Residential satisfaction(Fig.5)

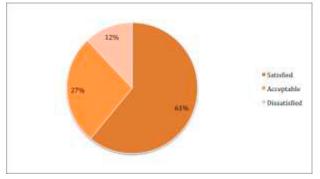


Fig. 5. Satisfaction analysis of the living conditions

The questionnaire results showed that the satisfaction level for the rural living conditions had reached 61%, and the proportion of the absolute dissatisfaction was only approximately 12%. Since most of the villagers were found to be satisfied with their living conditions, the current new rural planning and construction should be fully respected, rather than completely denied. The new rural tourism landscape resources are based on the elements, which are helpful for the improvement of the satisfaction levels of the villagers, and should be fully retained during the development process.

(3) Main living problems(Fig.6)

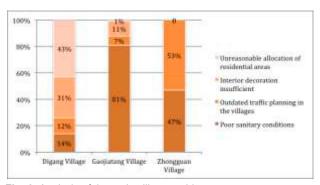


Fig. 6. Analysis of the main village problems

In the traditional villages, the living problems were mainly concentrated in non-residential aspects, such as health conditions, traffic conditions, and so on. In the newly constructed villages (Zhonggguan Village), the villagers complained about area ratios and internal decorations. Under the unified planning, the new living conditions are likely to deviate from the actual needs of the villagers, and the uniformly formulated indexes of shape and size has not only caused waste, but has also brought heavier economic burdens to the villagers due to the decorating needs of their oversized houses. Now, the greatest drawback in the new rural construction mode is the rural public spaces, which have not yet been transformed. The transformed rural living houses have caused new problems for the farmers.



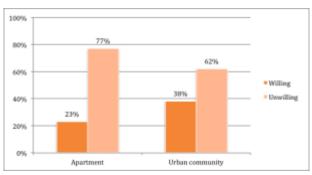
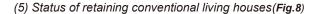


Fig.7. Analysis of the living willingness of the villagers

It was found that 77% of the villagers were unwilling to change the existing rural houses to apartments, and 62% of the villagers were reluctant to migrate to urban areas. Therefore, despite some dissatisfaction with the existing living conditions, the villagers were still reluctant to leave their rural living patterns. The intangible charm behind this type of living mode is the source of rural living happiness and cohesion. Therefore, the arrangement of the new rural tourism landscape resources should focus on maintaining this local sense of belonging.



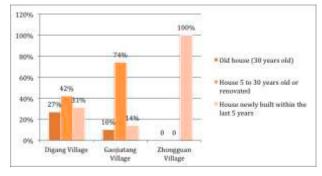


Fig. 8. Analysis of the retaining percentage for living houses

The metabolism of rural living houses is an objective law. However, in a strong wave of construction, the continuation of rural living houses has experienced a fault, which also means that the traditional cultural traditions have been interrupted. In fact, the construction of new rural areas needs to focus on two aspects: the protection of the traditional buildings with historical value; and the construction of new living houses in line with this era and in compliance with the interests of the village residents.

#### (6) Evaluation on the different living patterns(Fig.9)



**Fig. 9.** Villagers' keyword ranking of the advantages of conventional living houses and urban type houses

In addition to the above questionnaire analyses, it was also found in the field survey that the main problems, which existed in the development of the new rural landscape resources, were as follows:

#### 2.1 Unsuitable development and construction leading to the damage of resources and oblivion of wonderful pleasant scenery

The local governments regard the exploration, development, and utilization of rural tourism resources as a "magic weapon" of the new rural construction, which also reinforces the construction. However, due to limited understanding, or conflicts and disputes among the stakeholders, the local governments do not incorporate rural tourism resources into the larger system of regional tourism development, and fail to make comprehensive planning and overall arrangements. This has led to such problems as single or similar resource utilization forms, regional decentralization, low grades, repeated development, and so on. Therefore, the rural tourism resources have not successfully attracted tourists, and have had difficulties in forming clustering and scale effects. This type of unsuitable development and construction will potentially lead to damages of resources, and the oblivion of pleasant scenery.

For example, in Gaojiatang (**Fig.10**) the original vegetation has been cut down, and the land on the back mountain has been developed for villa construction under the guidance of a policy for the "vigorous development of eco-tourism". In accordance with the feedback of the villagers, there is an increasing number of cars from other places traveling on the roads, which run through the entire village. The original quiet mountain living environment has become noisy, and the tourism resources' famous beautiful bamboo town is being destroyed (**Fig. 11**).



Fig. 10. General layout of Gaojiatang Village



Fig. 11. New houses on the back mountain in Gaojiatang

2.2 Stereotypical "urbanization" planning has caused the rural tourism areas to lose their vitality and sense of belonging

The largest resource feature of a rural tourism destination is the fact that the rural settlements are different from the urban styles, in other words, its "rurality". However, due to the limitations of

understanding, and the abilities of the management entities, the new rural constructions have shown a certain degree of urbanization tendency. It was found that there were deliberate imitations of cities being made from the aspects of architectural form, material, facilities, equipment, and so on. The construction of the rural settlements is increasingly showing from the current rural development situation that industrial civilization and agricultural civilization features are parallel, and modern features are becoming mixed with the traditional rural scenery. The rustic flavor of the countryside is being gradually lost, and the agricultural civilization on which the rural tourism is based is disappearing. This stereotypical "urbanization" planning has caused the rural tourism development to lose its vitality and sense of belonging.

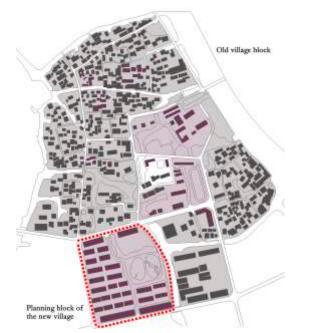


Fig. 12. General layout of Digang Village



Fig. 13. New living houses in Zhongguang after integral moving

As far as the Digang Village was concerned, a section of land had been cleared in the southwest of the old village to building a new village. It was found that the form of the new village completely imitated the construction pattern of urban communities (**Fig. 12**). The new village was quite different from the old village from the point of view of texture. Therefore, it had completely lost the symbolic "water town" image. The horizontal, vertical, and orderly arranged rural houses ignore the construction of outdoor spaces. In the new village, people cannot see the lingering charm of the millennium village. Nor can they experience the pleasure of walking through the streets, along the front eaves and backs of houses, or the bridgehead and shore side. Similarly, in the new Zhongguan Village, people can only see rows of houses with uniform appearances, and the new village has completely lost the lingering charm of a village, as well as the diversity of village life (**Fig. 13**).

#### 2.3 Unilaterally emphasizes the upgrading of rural living houses and ignores the integration of outdoor spaces with the environmental landscapes of rural settlements

The "new" in "new village" was expressed very straightforwardly and quickly with the overturning and reconstructions of single buildings. Therefore, the construction's main body, along with the government, placed unilateral emphasis on the upgrading of the rural living houses during the construction. However, they did not take outdoor spaces into account, nor the related environmental landscapes, which were cherished by the villagers. These features added a lingering charm to the spaces, as well as manifesting the culture. On the other hand, the planners and designers lacked scientific and reasonable analyses and construction methods for the rural settlements, which led to the construction results lacking the most essential parts of the villages to pursue formalized content which did not conform to the use demands.

### 3. Developmental goals of the rural tourism landscape resources

#### 3.1 Connotation of the rural tourism landscape resources

The new rural planning and construction based on rural settlements not only can potentially improve the local population's production and living conditions, but also can create a rural tourism landscape with unique characteristics. In this manner, the development of related industries and agriculture, as well as other modern service industries, can be driven along with the tourism industry, and a growth point for the transformation and upgrading of the tourism industry can be reached. The reasonable development of rural tourism landscape resources will also complement the protection goals due to the following characteristics:

### 3.1.1 Rural settlements and residential buildings are often closely combined with the tangible rural landscapes

Rural settlements and residential buildings are the main places for the reproduction and living of human beings. They are often constructed near mountains, or by rivers, which indicate close links with production sites (such as farmlands, pastures, and other places), and living sites (such as religious sacrifice sites, historical sites, and so on). If tourism continues its developed by regarding the rural settlements and residential buildings as the main body, the entry points for the development of tourism can be found, as well as the links to tangible rural landscapes, such as topography and landforms, river systems, road pavement, agricultural products, and so on. In this manner, a type of sustainable development and living landscape can be formed.

### 3.1.2 Rural settlements and residential buildings are the material carriers of the intangible rural landscapes

Lifestyle, folk art culture, handicrafts, farming culture, clothing culture, diet culture, festival events, and folk customs, are all closely linked with the rural settlements and residential buildings. The construction of rural settlements and residential buildings will undoubtedly reflect the elements of these intangible rural landscapes with rich local characteristics and traditional cultures, and will thereby become their substantial carrier (Huang Yucheng, et al., 2003).

## 3.1.3 Reasonable planning and construction are conducive to the transformation of rural landscape resources into in-depth experience products

The in-depth experience type rural tourism products must improve the interaction and participation of the tourism projects, which requires good environmental atmospheres, and places of experience. Therefore, the reasonable construction of rural settlements and residential buildings, which will make them become representative subjects of the local rural tourism, along with in-depth experience type tourism, will be conducive to the realization of distinctive tourism competitiveness. These steps will transform the tangible and intangible rural landscape resources into in-depth experience type products for tourists (Huang Shan, et al., 2013).

#### 3.2 Development objectives

The development and utilization of the rural tourism landscape resources in the planning and construction of

new villages can be divided into three levels of objectives as follows (Hu Jing, et al., 2007). (**Fig. 14**)

The first is the resource objective, which includes the planning of the main scenic spots that can be relied on by the local rural tourism, as well as the resources available for the development and utilization. Then, the resources can be integrated with the construction of the rural settlements and living houses to revitalize the resources. In this way, the village home images can be maintained, which will benefit local economic.

The second is the benefit objective. The development and utilization of the rural tourism landscape resources are first aimed at increasing the tourism income. The building of rural reception and vocational products, featured food and beverage services and products, handicrafts, native products, and special activities, transform the tourism resources to the tourism economy, and will also promote the common development of rural agriculture, industries, and modern service industries, as well as the progress of various social undertakings.

The last is the ultimate objective. The development and utilization of the rural tourism landscape resources shall not only achieve win-win economic and ecological benefits, but shall also improve the harmony between man and nature. It is recommended that the development of rural tourism should therefore be based on the use of tourism resources to create employment opportunities, improve the quality of life, and change the concept of development, to achieve the triple sound development of society, economy, and ecology (Yin Zhenhua, 2004).



Fig. 14: Development objectives of tourism landscape resources

#### 4. Rural Residence Image System (RRIS)

RRIS was first proposed by the scientific research team of Zhejiang University in 2010. It is a new construction concept based on field investigation and theoretical refinement. Like the image of city, rural space is also composed of a series of images, including the tangible things and the invisible space. There are also differences in form between points, lines and surfaces. A rural residence image system is an entire integration of the essence of rural life with rural cultural traditions, which mainly includes the rural public living spaces and their symbol as cultural carriers. If the farmers regard their rural residences as the "map" on the "bottom", then a rural residence image system is the "lining" under the "map" after sorting, acceptance, or rejection. A rural residence image system starts from a public space, which maintains the plain characteristics of rural life, and is related to a feeling of livability.

RRIS includes three levels: Linear element (streets, corridors, rivers, etc.); Punctiform (courtyards, areas, etc.); Memory carriers (wells, gables, ancient trees, stages on the riverside, etc.).

Social capital refers to a social network based on the mutual trust of individuals, and the more that its value and enhancements are discussed, the potentially higher the improvements to social welfare will be (Peter, 2000). Many researchers have studied the social capital stock within villages. The results have shown that, with the impact of the market economy and the widening gap between the rich and poor, the social capital stocks in villages have decreased.

There should be a focus on the maintenance and enhancement of social capital in villages with a rural residence image system, and the spiritual connotation of rural life should be excavated from the point of view of rural lifestyles, communication laws, and rural cultural traditions.

#### 4.1 Rural modernization rather than rural urbanization

Villages have high-quality humanistic and cultural tourism resources, as well as profound historical accumulation, and simple humanistic spirit. Therefore, villages have irreplaceable cohesion. However, once these essences disappear, villages will lose their vitality and go into decline. The development direction of the new rural tourism resources should be rural modernization. That means the improvement of the material standards of living, along with the inheritance of the spiritual essence, should not be biased. Although rural urbanization seems lively, it is in fact a deep contradiction. Due to rural urbanization not conforming to industrial structures or population quality and life modes, the construction efforts have had the opposite effect to what was the intention, which has led to the destruction of humane tourism resources and rural residential images during the construction processes (Song Linfei, 2000).

### 4.2 Residential houses in the new villages rather than new residential houses in the villages

The rural residential construction in the new villages is integral to the whole, and the growth of all the residential units should be attached to the continuation of the cultural traditions in the new villages. Many new residential houses cannot constitute ideal new villages in the minds of the villagers. Meanwhile, the rural residences, which are constructed based on the continuation of rural cultural traditions, and in compliance with the traditional living habits, are more in line with the real interests of the villagers.

In an ideal rural living space, the single rural residences are combined to form a spatial structure filled with rural cultural traditions, and containing spontaneous sequence relationships. The sequence structure is based on the rural residence images, including space sequences, which reflect the directions of streets and river flow, as well as a hierarchical sequence representing the primary and secondary affiliation relations. As the initial expression of the sequence structure, rural residences mix the basic characteristics and specific behaviors in the village houses. By maintaining the transitions of the rural residents through courtyards, alleys, streets, rivers, and other public places, the volume of living space will continue to expand. The local flavor will also be more intense, and village life will be naturally agglutinated. This type of dynamic evolvement from development relationships, to virtual relationships with alternative contractions and releases, becomes a true reflection of the comparison and link between the village houses and rural residences. The construction of rural tourism landscape resources in the new villages therefore cannot ignore this essential evolution relationship, nor can it block the continuation of these important rural life patterns.

#### 4.3 Expanded living concept: village houses

The general understanding is that a rural residence is a place for the daily living behaviors of the villagers. Therefore, the construction of rural residences should include the substantial environmental content of living places, such as spatial attributes, composition, size and materials, configuration, construction, structure, environment, equipment, and so on (Zou Denong, 2002). From a broader perspective, the construction of rural tourism landscape resources in the new villages should also take into account the different living behaviors of the residents, or the spatial patterns and rural residence images reflected by the life trace. A unique feature of rural life is that the spatial images contain a strong sense of belonging. These spatial images not only include living spaces, but also include outdoor spaces. More importantly, the outdoor public spaces are more valuable

for rural organic growth, and the continuation of traditions, than the rural residential buildings. Therefore, they are also more urgent.

### 4.4 Development and utilization of tourism resources in accordance with the local conditions

A rural residence image system requires that the development of rural tourism must be based on different resources in different regions. Also, the promotion of scenic spots, and the sequential development of resources should be implemented in accordance with the local conditions. Specifically, the following steps should be taken:

During the first stage, the local famous scenic spots and other resources can be relied on to develop farmhouses and villas which can be targeted at urban leisure tourism, and have a unified architectural style to allow the scenic spots to play leading roles.

During the second stage, agricultural and forestry production resources, as well as ecological resources, can be used to develop the characteristic picking base, agricultural tourist spots, agricultural science and technology parks, and other tourist attractions.

In the third stage, the supporting service facilities of tourism should be completed. A comprehensive rural tourism demonstration village constructed integrates sightseeing, experience, and leisure, has been made in the environment and construction of the rural settlements.

### 5. Development mode of rural tourism landscape resources based on RRIS

In July 18, 2017, the Chinese government issued the action plan for promoting the promotion and upgrading of rural tourism development. According to this document, China's rural tourism presently completed investment of about 550 billion yuan, and the number of visitors in the year exceeded 2.5 billion and the scale of rural tourism consumption has increased to 1.4 trillion yuan, which drove about 9 million farmers to benefit. Therefore, it's necessary to develop a sustainable mode of rural tourism.

### 5.1 Establishment of an overall concept for the development and utilization of tourism resources

Each village has formed an organic system in its own development process. Therefore, the development of rural tourism landscape resources should not only be limited to the considerations of the rural residences, but should have an overall concept (Yu Kongjian, et al., 2006). This study's investigation showed that, although the villagers had expectations to improve their living conditions, they had paid more attention to their mode of life and enjoyment of the country life. They also displayed irreplaceable attachments to their local cultural traditions. Quiet and peaceful living environments, along with harmonious neighborhood relationships, provided a fundamental sense of belonging to the villagers. Therefore, with the development of rural tourism landscape resources, special attention should be paid to the preservation, continuation, and overall design of the public spaces beyond the rural residences.

### 5.2 Attention given to the construction and protection of the natural environments

The development of the villages is restricted by the surrounding natural factors, and the production and life of the villagers also depends on their lands. Therefore, the protection of the natural environments of the villages is not only about the respect for the nature and history of the villages, but also be a type of behavior which is taking responsibility for the future development of the villages. (Luo Zhongzhao, 2008)

In the rural areas, the natural environmental factors of the villages mainly include both non-biological and biological factors. The non-biological factors are the basic environments in which the villages exist, including mountains, river networks, farmlands, and so on. These factors limit the spatial layouts of the villages, and determine the way of life and customs of villagers to a certain extent. The biological factors include the natural vegetation, crops, poultry, livestock, and so on. The characteristics of the vegetation are the most easily perceived biological features in the villages. There are many types of plants, which display a rich vegetation landscape with the changes in the seasons. Regarding the crops, which are artificially created human factors, these are also considered to be important parts of the village landscapes.

#### 5.3 Create shared spaces for the rural residences

Each village presents a different spatial pattern, which largely depends on the forms of the shared spaces and exchanges among the neighbors. The village households are connected by these shared spaces as follows:

#### 5.3.1 Streets and corridors

Street and corridor spaces are linear elements, which play important contacting roles in the rural residence space environments (Huang Bin, 2009). They are also the main flow spaces for the daily communications among the residents. The streets, roadways, and corridors have their own characteristics in terms of spatial scale, proportion, and continuity. Therefore, they have different degrees of openness, and give the villagers a sense of belonging.

#### 5.3.2 Rivers

In the southern portion of the lower reaches of the Yangtze River, the rivers are not only the products of a combination of nature and people, but also important linear or reticular spaces for the village communities (McHarg, 2006). The horizontal and vertical river networks not only provide convenient transportation for the villagers, but also promote the development of businesses. They create romantic memories of watery places, which cannot be forgotten by the people, no matter how many years may pass.

#### 5.3.3 Courtyards

China's rural areas have experienced change processes in their architectural spaces, which are composed of different ages, forms, and functions. The courtyards play fundamental roles, and are key points for the preservation of the integrity and authenticity of the cultural and visual identity of the villages. They are also the basic systems used to maintain the vitality and historical charm of the villages. (**Fig. 15**).



Fig. 15. Public spaces of the rural residences

### 5.4 Preservation of the memory vectors of the rural residences

Each village has its own stories and memories, and the people living in the villages may not see the entire village picture. It is likely that a well, a wall, an old tree, a stage at the edge of river, along with other "scattered" fragments, create the most humanistic atmosphere. These memory carriers will become recognition systems for "hometown" in the memories of a few generations, and even become the searching objects and emotional sustenance of the people (Kevin Lynch, 2001). In the villages, the carriers of these memories are often organized at centralized outdoor public spaces, which preserve the respect for the villagers' lifestyles and human emotions. (Fig. 16)



Fig. 16. Memory carriers of rural residences

#### 6. Conclusions

As can be seen from the above, the current development and utilization of rural tourism resources in new rural constructions lack systematic thinking, as well as scientific and rational planning schemes. Therefore, the construction is mixed with destruction, which has led to deviations from the wishes of the villagers to a certain extent. A rural residence image system is a new cognitive concept, which integrates the concept of public spaces into the planning and architecture science, and the concept of rural tourism resources into the tourism science. This system is also a hierarchy analysis method, which makes effective use of the new understanding regarding local cultural traditions, physical environments, and tourism factors. The introduction of a "rural residence image system" has the following positive significance to the construction and development of new villages:

Firstly, the system advocates respecting the local cultural traditions, and seeks local characteristics. Each village has its own unique image, which exists in its physical landscape, as well as in its invisible landscape. Therefore, creating identifiable "rural residence images" is the strategic starting point of rural tourism development.

Secondly, the system regards the "rural residence images" as being entirely composed of visible and invisible landscapes. The objectives of the rural construction are not only focused on the "entity" of the buildings, but also pay more attention to the "virtuality" of the more charming rural public spaces. In this way, the system regards the creation of shared space atmospheres as the emphasis of the development and construction process.

Lastly, the system emphasizes the memory carriers of the rural cultural continuation. The memory carriers may have or not have visual recognition, but the memory carriers should be selected and protected as far as possible during the construction process. These memory carriers constitute important veins of the "rural residence images", and they add unique charm endowed by time. Therefore, they will effectively promote the development of rural tourism, and maintain reasonable sustainability during the development process. A rural residence image system is helpful for the rational development and utilization of the tourism landscape resources in new rural construction, and potentially provides a useful way to promote the sustainable development of the rural tourism industry.

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