

# Study on Characteristics of Public Space System in Nuohei Village from Multi-Dimensional Perspective

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**Abstract:** The village public space provides villagers with a spatial carrier for various forms of public communication activities. There is an interactive relationship between behavioral activities and spatial places. This study investigates public space, observes the characteristics of famous public space nodes and segmented streets, understands the basic attributes and specific characteristics of public space, measures and studies the characteristics of the public space system in Nuohei Village from a multi-dimensional perspective, and comprehensively interprets the characteristics of the public space of the village.

**Keywords:** Public spaces, Nuohei Village, Multidimensional perspective, Public space system.

## 1. Introduction

The public space of the village is the material platform for the organization and management of villagers and the development of daily communication, and it is also the "basic core" of the self-organization and evolution of the village form. In the contemporary village system, the continuous change of public space, many early public spaces can no longer meet the needs of contemporary people, a small part of the evolution process is still continuing, most of it has weakened.

Zheng Xia (2009) divided village public space into two types: physical and intentional space [1]. Yan Xueqing (2012) divides public space into five categories: street space, square space, public green space, house front space, and cemetery space [2]. Zhang Jian (2012) pointed out that due to changes in lifestyle and ideology, traditional public spaces and functions have gradually weakened or even ceased to exist [3]. Ye Yun (2013) found that the public space of villages is constantly encroached upon and occupied, and finally becomes a public space dominated by transportation functions [4]. Chen Ran (2017) uses behavioral architecture and environmental psychology to explore the key points of humanized communication space creation in ancient villages

[5]. Duan Degang et al. (2018) proposed to reshape the ecological ethics of public space to realize the revival of rural traditional culture [6].

## 2. Research Object

Located 30 kilometers southeast of Shilin County, Yunnan Province, Danohei Village is one of the Ashima ethnic cultural tourism ecological pilot villages in Shilin County, with a history of more than 600 years, and is one of the villages with relatively well-preserved Yi culture in Yunnan Province. Local residents use local materials to build houses and roads with stones, creating a unique "stone village". In 2007, it was rated as the first "Kunming Cultural Tourism Characteristic Village and Town". In November 2018, it won the honorary title of "2018 National Eco-cultural Village" by China Eco-Culture Association. In November 2020, it was awarded the title of "The Sixth National Civilized Village and Town".

## 3. Research on the Characteristics of Public Space

### 3.1. Categorized by space



Figure 1. Categorized by space

In the secondary classification according to space, all kinds of spaces are divided into portal space (village entrance archway, village entrance, national unity square, etc.), neighborhood space (dead branches and ancient trees, water-

loving pump heads, pond side, bluestone garden, etc.), assembly space (Panjiang Daily former site, Wang Family Courtyard, border longitudinal headquarters, beacon tower, etc.), street space (village main road, laneway, roadway

intersection, end end road, etc.) ribbon landscape.

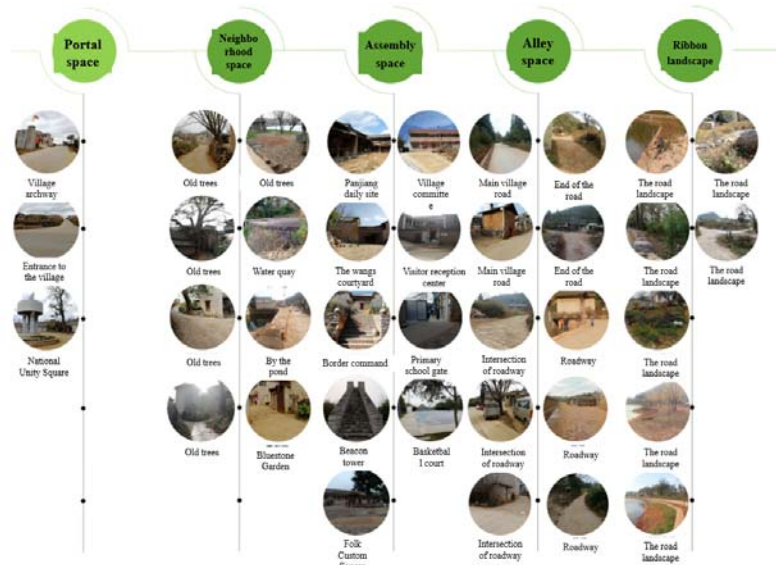


Figure 2. Classification by spatial quadratic

### 3.2. Categorized by social attribute

According to the classification of social attributes, the

study divides village public space into four categories: living public space, communicative public space, ritual public space and commemorative public space.

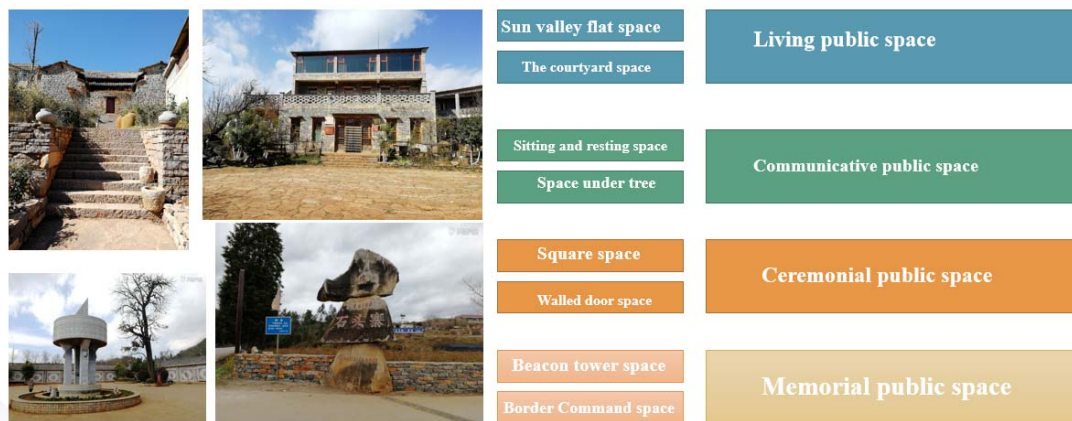


Figure 3. Categorized by social attribute

#### 3.2.1. Living public space

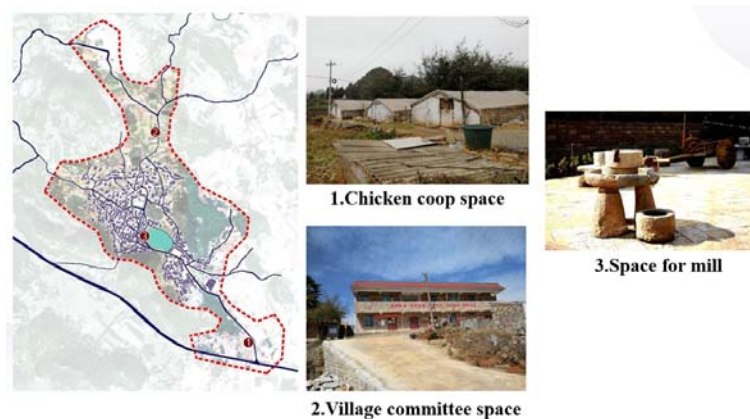


Figure 4. Living public space

Characteristics of living public space: In the living public space of Nuohei Village, the breeding farm and mill space are

open spaces that undertake people's daily access activities. The village committee is a semi-open space that undertakes

the daily assembly work space of people.

Characteristics of human settlements: The main activity space during the day is for people to go in and out of the activity place for raising poultry and working. The main

activity space in the evening is a place for people to move and rest.

### 3.2.2. Communicative public spaces

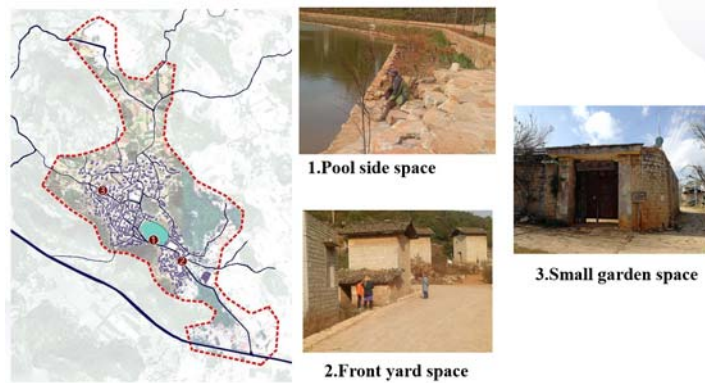


Figure 5. Communicative public space

Characteristics of communicative public space: In the communicative public space, the pond and the pre-courtyard space are open spaces, spaces that undertake people's daily rest activities. The small amusement park space is an enclosed space to undertake people's daily activities.

Characteristics of human settlements: the activity space

during the day is an activity place for people to rest and play. In the evening, the main activity space is a place for people to relax and chat.

### 3.2.3. Ceremonial public space

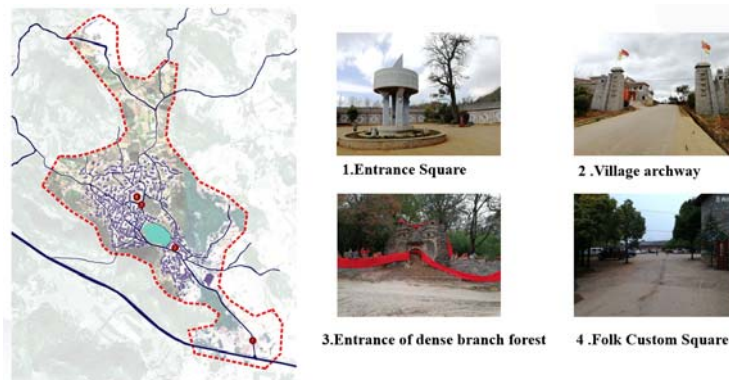


Figure 6. Ceremonial public space

Characteristics of ritual public space: The ritual space is mainly for activities held in the village, and as the main large-scale activity place in the village, it belongs to the all-day open space.

Characteristics of human settlements: As the main research place for people to hold activities, festivals are only a few

villagers gather here on weekdays. It is almost unfrequented at night and serves as a parking and stacking site for the village.

### 3.2.4. Monumental public space

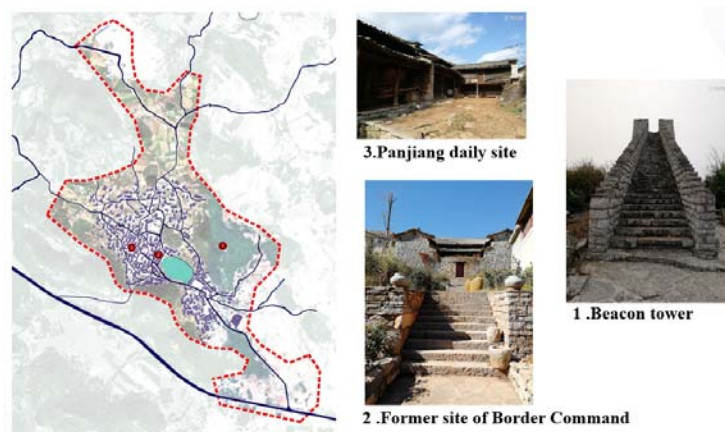


Figure 7. Memorial public space

Characteristics of monumental public space: Monumental space is mainly used as a corner of village tourism, and few people gather on weekdays, but only as a memorial site of the village, and the building is for protection, not as other functions.

Characteristics of human settlement behavior: During the day, all tourists will visit, and villagers will at least enter. It is unmanned at night.

### 3.3. Public space structure

The current situation of public space forms a spatial structure of "two sides, two axes and multiple nodes".

Two sides: Folk Square and National Unity Square with a large scale of face-shaped public space; Two axes: the main axis of the village public space and the secondary axis of the main public space of the village; Multi-node: the first level is formed with the main nodes such as the former site of Panjiang Daily and the royal courtyard; The second level is formed with secondary nodes such as dead branches, ancient trees, roadway intersections, etc.

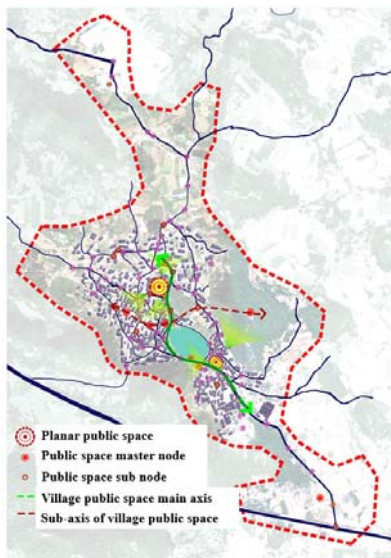


Figure 8. Village public space structure planning

## 4. Analysis of Public Space Issues

### 4.1. Neighborhood space (dead branches, water pumpheads, pond sides, bluestone gardens, etc.)

Under dead branches and ancient trees: the space under the tree is not used, let the weeds grow, the environment is poor, and the environment under the tree is piled up at will, destroying the environment; (2) Pond side: the safety facilities on the pond side are poor, and there are no shading, seating and other facilities; (3) Clean water pump head: the surrounding environment is poor, there is no treatment means, overgrown with weeds, and villagers cannot use it; (4) Next to the monkey pond: the underground is not paved, and there is a lot of garbage and debris; The facilities are relatively old; Lack of security facilities by the lake; (5) Bluestone Garden: hang things in the yard at will, raise dogs; There are no public facilities such as seating in the hospital; The environment outside the hospital is dilapidated and the greenery is insufficient.

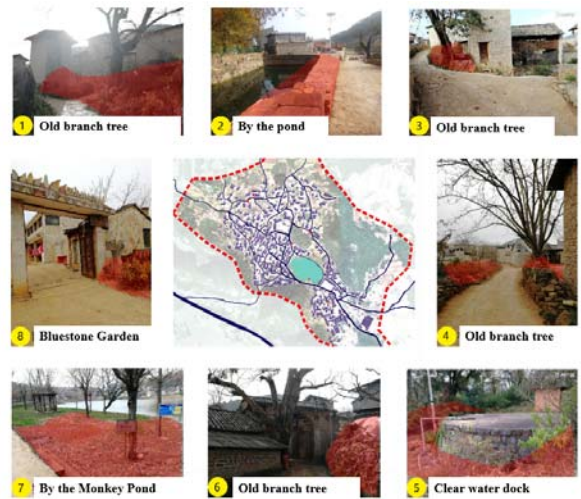


Figure 9. Illustration of neighborhood space problems

### 4.2. Assembly space (former site of Panjiang Daily, Wang Family Courtyard, Border Headquarters, Beacon Tower, etc.) Street space (village main road, laneway, laneway intersection, end end road, etc.)

(1) The old site of Panjiang Daily: it has not been repaired for many years, the building has been dilapidated, the courtyard is overgrown with weeds, and all kinds of facilities are not configured; (2) Royal Courtyard: There are situations where items are piled up indiscriminately and vehicles are parked in disorder; (3) Tourist reception center: the outside is not greened, and the wire is crossed; (4) The former site of the border longitudinal headquarters: the space in front of the hospital was not effectively used; (5) Primary school entrance: space clashes with village roads, causing crowds picking up children to congest the roads and have nowhere to stop; (6) Village committee: poor spatial appearance, more weeds and debris, no service facilities in the yard; (7) Folk Square: the square is less green, and the seats and other facilities are not equipped, resulting in the crowd having nowhere to shade and rest; The original pavilion in the square is relatively old; Vehicles parked in a disorderly manner; (8) Beacon tower: Only a single building is retained, and no facilities are equipped around it, which cannot attract people.



Figure 10. Illustration of the issue of meeting space

### 4.3. Street and lane space (village main road, laneway, laneway intersection, end road, etc.) ribbon landscape

Streets and alleys: the space of streets and alleys is not used, piled up indiscriminately, there are many weeds, there is insufficient greening, and the crowd cannot stop; (2) National Unity Square: the square is not equipped with seats and shading facilities; poor greenery; disorderly parking of vehicles; (3) End road: the end space is not used, piled up indiscriminately, there are more weeds, insufficient greening, and the crowd cannot stop; (4) Strip landscape: the ribbon landscape level is not enough; A large area of space is not used and optimized, the environment is poor, and items are piled up indiscriminately; (5) Roadway intersection: vehicles at the intersection occupy the road to park, and the environment is not optimized.

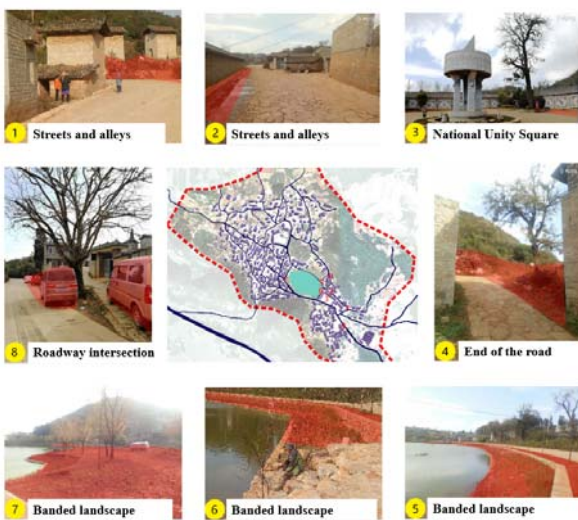


Figure 11. Illustrating the problem of street space

## 5. Reflections on the Public Space System of Nuohei Village

Based on the theory of scale space, place space, fuzzy space and sequence space, the public space of Danohei Village is identified and classified, and divided into different levels and different types of public space.

Nuohei Village has a rich history and many folk elements. There are many public space nodes in the village, which are

evenly distributed and rich in layers. In general, there are still the following problems in the public space of the village: (1) the lack of greenery in the public space; (2) low use of public space; (3) Lack of supporting facilities related to public spaces, such as sitting umbrellas; (4) Some public spaces have low transportation convenience; (5) The historical value of some public spaces has been forgotten by the villagers.

In the context of rural revitalization, village public space, as an organic part of village revitalization and development, has attracted more and more social attention. Clarifying public space and its fundamental value, exploring its mechanism and studying its optimization strategy, is conducive to the restoration and shaping of public space, and promotes the healthy development of traditional villages.

## Acknowledgment

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