Research on the Construction Strategy of Multi-level Demand Rural Living Space

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Abstract: In order to create a multi-level demand for rural living space, this article conducts research on three types of rural living spaces and their current problems through methods such as literature and case studies, in-depth interviews and field research, data induction and summary, and comprehensive analysis, and proposes various optimization suggestions with a focus on improving living spaces.

Keywords: Living Space; Rural Area; Optimization

1. Introduction
With the implementation of the rural revitalization strategy, the living space in Chinese rural areas is about to enter the new era, and people's living standards will also be improved. Therefore, a study on the construction strategy of rural living space with multi-level demands has been carried out, and the optimization and upgrading of rural living space has been carried out by analyzing the problems in the current stage of development of rural living space, and under the organic combination of environmental protection, economic development, and social progress.

2. Analysis and Situation of Rural Living Space

2.1 Object of the Study
Through the investigation of all the villages in Zhangqiu District, they can be divided into four categories according to their characteristics: ordinary type of village, collective improvement type of village, characteristic protected type of village, and suburban integrated type of village. This study focuses on the villagers, tourists, village committees, and related agricultural management departments in Zhangqiu Zhujiayu Village, Sandefan Village, Sanjianxi Village and other villages.

Table 1. Research Object and Classify

<table>
<thead>
<tr>
<th>Research Object</th>
<th>Research Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Living Space</td>
<td>Architecture, Human Living Space</td>
</tr>
<tr>
<td>External Activity Space</td>
<td>Roads, Sanitation, Infrastructure</td>
</tr>
<tr>
<td>Supporting Facilities</td>
<td>Education, Medical Care, Culture, Industrial</td>
</tr>
</tbody>
</table>

2.2 Situation of the Living Space of the Villagers
The building structure is solid with sufficient area and good ventilation and lighting, but the style of residential buildings is dilapidated, especially in color matching and elevation organization. There is a lack of spiritual functions in the overall distribution of residential buildings, and the separation of public and private spaces is not clear, ignoring the creation of functional spaces such as balconies, terraces, and study rooms.

For the human settlements, the functional layout and landscape style of the courtyard are poor, making it difficult to create a good spatial atmosphere. The current courtyard space currently undertake more basic living functions such as the storage of sundries, livestock farming, and vegetable and fruit planting, and the overall space utilization efficiency is relatively low.

Table 2. Summarize and classify the problems.

<table>
<thead>
<tr>
<th>Research Object</th>
<th>problems</th>
<th>Problems exist in proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>The layout division of living space is not reasonable</td>
<td>88%</td>
</tr>
</tbody>
</table>

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The lighting and ventilation of the house is insufficient 54%
Insulation and waterproofing of the house 82%

<table>
<thead>
<tr>
<th>Human Living Space</th>
<th>The utilization rate of courtyard space is low 86%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural toilets have not been uniformly transformed 50%</td>
</tr>
<tr>
<td></td>
<td>Problems frequently occur in the supply of water and electricity 20%</td>
</tr>
</tbody>
</table>

2.3 Outdoor Activity Space for Villagers

In terms of road pavement, the main vehicle roads in the village are fully asphalted, resulting in smooth driving. However, in the ancient street alleys, most of the alleys are cement-hardened and damaged, which is not conducive to displaying the original style. In addition, there is a certain lack of lighting and guidance facilities in various levels of roads and alleys, except for some main vehicle lanes, which poses certain hidden dangers to the night travel of villagers.

Problems exist in the scale of the alley space. The scale of most alleys meets the requirements, which can form a good sense of spatial enclosure according to the traffic needs. However, in some villages, there are cases where the alleys are too narrow, making it difficult for vehicles to pass, causing great depression for people to pass through, and even posing safety hazards.

Traffic flow and parking area issues. There are too few parking spaces in the village, and there are too many random parking phenomena. In the south corner of Sanjianxi Village, there is a well-known hospital, with a large flow of vehicles and few parking spaces, resulting in the problem of random parking on the roadside, which affects passing vehicles and causes traffic jams.

2.4 Rural Supporting Public Facilities

The content is incomplete, the distribution is concentrated, and the service level is low, which fails to meet the public service and living needs of residents. In terms of facility content, education, and medical care, most villages lack primary schools, kindergartens, and health clinics and other facilities with a high service level; moreover, some well-developed villages, such as Sanjianxi Village, also have nursing homes and hospitals. In the configuration of municipal infrastructure, Sanjianxi Village has specialty stores, rural revitalization exhibition halls, and wireless charging seats. Public service facilities are mostly distributed on both sides of the village roads, which greatly facilitates the use of residents' lives.

The existing leisure and communication spaces in the village are primarily scattered throughout various corners, essentially existing in the form of isolated points. Based on their spatial hierarchy and location, they can be classified into three categories: the square space at the village entrance, the green leisure space, and the space surrounding the buildings. Despite their relatively extensive range of settings, it is overall fragmented, and certain individual leisure areas are lacking in essential infrastructure.

3. Academic Summary of Rural Living Space Issues

3.1 Partial Space With Functional Deficiencies

Rural functionally deficient space refers to the inactive space lacking functional facility support, failing to meet the activity needs. It should be a place for leisure, entertainment, and communication, but due to the lack of precise design, layout, and management, it leads to inactive, low-popularity, and poor-utilization phenomena. For example, the roads in the village are crooked, the pavement is uneven, the landscape is shabby, and there is a lack of basic spaces.

3.2 Scattered Unused Space

There are numerous fragmented and underutilized spaces within Zhangqiu. The rural space optimization studied in this article encompasses spaces such as abandoned ponds in Zhangqiu, waste land beside houses, unused farmland, and idle village committee courtyards. In the process of rural design and planning, the production function and landscape should be perfectly combined to activate the fragmented and unused spaces in the countryside and maximize the use of space.
3.3 Suboptimal Transportation Facilities
Transportation spaces are crucial for villagers' travel and communication. However, some transportation spaces are not used reasonably due to bad design and private occupation. In Zhangqiu's rural villages, passive transportation spaces are common, which can be divided into streamline and obstructive types. The former seriously threatens villagers' daily life and poses a safety hazard, while the latter leads to low space utilization. Currently, the chaos of the road traffic system in rural villages has caused chaos in the use of village spaces, a decline in the quality of life, and the misuse and waste of space resources, which has a negative impact on villagers' quality of life.

3.4 Disappearance of Regional Characteristics
Rural builders have insufficient recognition of the value of rural traditional culture, lack of exploration of rural culture and characteristics, and imitate urban construction in the construction. The one-sided pursuit of novelty and urbanization makes the whole countryside appear uniform without rural characteristics, destroys the original construction texture of the countryside, and weakens the rural culture and characteristics. Culture and spring water, as the characteristics of Zhangqiu, have not been brought into play. Urban-rural integration and the combination of urban and rural areas do not completely separate the countryside, but to build a city with rural characteristics. The most prominent problem in rural construction is the disappearance of rural regional characteristics due to the blind pursuit of advanced technology and modern technology, making it a uniform city.

3.5 Insufficient Consideration for Special Populations
At the present stage, the supporting entertainment facilities in rural areas are gradually improving, and facilities such as basketball courts, table tennis courts, and outdoor fitness equipment have appeared, enriching the entertainment activities of the villagers. However, a large number of rural labor forces in Zhangqiu have flocked to the cities, and the users of rural public spaces are mostly the elderly and children, and the utilization rate of basketball courts, table tennis tables, and badminton courts is relatively low. There is a lack of special designs for the elderly in the village, the most notable being the lack of accessible ramps. There is also a lack of consideration for low-income groups, such as whether everyone can afford the newly built buildings and what kind of life these people aspire to.

4 Optimization Suggestions for Rural Living Space

4.1 Optimization of Rural Ecology
In the process of rectifying and optimizing the rural space in the village area, the priority should be given to the ecology, and attention should be paid to planning and guidance. According to the optimization idea of "harmonious coexistence between man and nature", through comprehensive planning, overall design, comprehensive improvement of rural entertainment space construction, housing renovation, and public facility areas, and redevelopment of abandoned land, improvement of unreasonable land, and ecological environment restoration such as treatment of abandoned ecological land and river basins.

4.2 Optimization of Rural Production
Rural industries are diverse, and villagers can develop freely. For example, small supermarkets are randomly opened, and service stations lack unified management. By optimizing rural space, we can explore the combination of rural industries with local culture and "Internet +", create characteristic rural industries, and drive the development of the rural experience economy.

4.3 Optimization of Rural Life
Traditional rural construction often only focuses on the planning of homesteads, while lacking the configuration of facilities such as leisure and entertainment activities. Villagers' lives are monotonous, and there are almost no cultural and sports activities. In the new era of new rural construction, people have new spiritual needs for cultural and sports activities in the countryside, and the awareness of national fitness has also been popularized and publicized. Therefore, in the process of carrying out the comprehensive improvement
and optimization of rural land, we must pay attention to the needs of villagers for a new rural life. Focus on the inheritance of rural culture, enrich the leisure and entertainment activities of villagers, and comprehensively enhance the sense of happiness of villagers' lives.

4.4 Enrich the Types of Business, and Develop Internally and Externally

The narrow streets and uneven road surfaces result in limited development space. The core of street renovation lies in stimulating the vitality and coordinated development within the street, not just focusing on the exterior. The business layout needs to be rearranged. Firstly, some catering should be moved indoors, and replaced with health centers and tea houses. Secondly, local nostalgia folk museums should be established in some abandoned buildings. This fully demonstrates the interpretation of local culture and the continuation of the context, which not only evokes the villagers' sense of belonging to the countryside.

5. Conclusion

The development of rural living space faces multiple dilemmas, mainly manifested as: functional deficiencies in space, fragmented and idle space, damaged landscape space, poor traffic space, disappearance of regional characteristics, and lack of consideration for special groups. The overall rural area has been interactively influenced by the natural environment, political environment, economic environment, and the progress of residents' concepts. In different periods and stages, the roles and status of each element have changed. In the current new urbanization stage, the macro urban-rural integration policy and the cultural concept of residents have become the dominant factors influencing it.

Acknowledgments

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