Research on New Rural Planning and Design based on Urban Design Techniques

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Abstract. Urban and rural areas jointly build the living place of our people, as a very important form of population aggregation, in the process of promoting China's urbanization process, the feasibility of rural planning and design has become an important factor affecting the urbanization process. In this paper, according to the urban construction and planning process of technical design lines and design ideas and the actual situation of China's rural integration, and from the spatial form of the design system integration, planning and design scheme.

Keywords: Urban design techniques; New countryside; Planning and design.

1. The Development Process and Current Situation of Village Planning in China

As the longest settlement mode in the development process of human society, rural areas have been continuously increasing their social functions and social status in the thousands of years of historical changes. At present, China's society is still in the development stage of urbanization, and China's unique national conditions indicate that rural areas will still be the main way of living and gathering of Chinese population in the future. Therefore, in the future planning and design process, how to achieve "thousands of villages and thousands of faces", retain the original customs and local flavor of the village, and at the same time combine urban design techniques with it, has become one of the problems worthy of discussion and solution in the process of village planning and development in China.

1.1 Development History of Village Planning in China

China has experienced a series of changes and innovations in the development of village planning over the years. Initially, the village based on the advantages of the terrain, the structure of the houses near the mountains and by the water, can fully enjoy the gift of nature, but also reached the lofty state of thinking of "the unity of man and nature". With the change of the social system, the modern population showed a trend of intensive growth. In order to expand people's living space, the pattern of village layout began to develop. In terms of the way of village planning, I began to pay more attention to the laws of nature and the laws and regulations issued by the government, even approaching and drawing closer to the idea and direction of urban planning in an orderly way. Up to now, villages have been specialized, diversified and modernized in the process of urbanization planning.

1.2 Current Problems in Village Planning and Design in China

It has been more than ten years since China implemented the new socialist rural development strategy. A relatively complete and comprehensive mature system has been formed from the aspects of supervision over the planning and construction of villages and the management implementation, which provides strong institutional support and technical guarantee for the construction of new rural features in China's urbanization process [1]. However, under the constant influence of the economy and society, the economic level of rural people has gradually improved, and their demands for society have also changed quietly. Therefore, in the process of village planning, its development planning system is also faced with the impact and restriction of various factors, and it is difficult to achieve smooth planning, design and development. First of all, the quickening pace of life makes the word "efficiency" very applicable in any situation. In the process of village planning and design, it is hard
to avoid the phenomenon of blindly following the wind and mechanically applying urban planning methods. It not only affects the original natural ecological environment of the village, but also makes the recognizability and sensibility of the village in the natural environment weaker and weaker [2]. At the same time, in the process of spatial image design of the village, the reconstruction and renovation of two-dimensional space are often pursued, while the design of humanistic environment is often neglected. The property of the village's land structure is relatively complex and loose in terms of sorting and layout. In the process of village planning, excessive attention is paid to the pursuit of efficiency and interests. There is a lack of research on the division of the ownership right of the house site, and there is a lack of respect and control of the will of the villagers. It is not conducive to the complete implementation of the overall village layout plan. For better understanding, it is presented as a chart below.

<table>
<thead>
<tr>
<th>The development status of village planning in China</th>
<th>New rural planning and design concept</th>
<th>The significance of the application of urban design techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature and man are one</td>
<td>Master the spatial system of historical layout</td>
<td>Housing is unified and coordinated</td>
</tr>
<tr>
<td>Specialization, diversification, modernization</td>
<td>Humanized design enhances the vitality of space</td>
<td>Respect for natural symbols</td>
</tr>
</tbody>
</table>

2. The Significance of New Rural Planning and Design to the Application of urban Design Techniques

The planning and design of new rural areas refer to urban design methods, which can not only help unify and coordinate the diverse housing in rural areas, but also change the design defects that are incompatible with the environment in rural housing. Moreover, from the perspective of social culture, the effective transformation and design of natural and social historical resources into the lives of villagers is not only an important inheritance of excellent traditional historical culture, but also a kind of respect for natural symbols in cultural space. Different from the traditional way of painting and design in villages, urban planning and design is mainly based on the compilation of planning contents and results, which is used as a criterion for the expression [3]. For this reason, scholars in the industry have made expressions, especially this chart, as shown in Table 2. In the process of planning and design, the content of urban design and planning is effectively applied in the new countryside, and targeted displays are made to villagers through posters, picture albums and other expressions. This vivid way of communication not only provides specific spatial guidance for villagers' construction, but also provides scientific and effective theoretical basis for grassroots managers in the new countryside.
### Table 2. Consolidation of Research Results on Rural Development Strategies in Small Towns

<table>
<thead>
<tr>
<th>Year</th>
<th>Author</th>
<th>Article Title</th>
<th>Main Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>Xiaotong Fei</td>
<td>Small towns, big problems</td>
<td>If our country only has the city, the medium-sized city, does not have the small town, the countryside is the political center, the cultural center does not have the foot, the small town construction is develops the countryside economy, solves the person from the outlet big question.</td>
</tr>
<tr>
<td>1988</td>
<td>Ganshi Zhou</td>
<td>We will encourage small cities to play a greater role in urbanization</td>
<td>Claim to give priority to the development of small towns is achieved: &quot;encouraged from the soil, into the factory don't go to town&quot;, &quot;surplus labor force in situ digestion&quot;, &quot;small towns is the reservoir in the process of the rural population urbanization&quot; the development of small towns can effectively solve a large number of surplus rural labor force, effective organization of rural production and living and coordinate relationship between urban and rural areas, to realize rural urbanization</td>
</tr>
<tr>
<td>1989</td>
<td>Gonghao Cui</td>
<td>Research progress of urbanization in China in the past decade</td>
<td>To Chinese special dual structure between urban and rural areas through the analysis of the formation mechanism and its relations with small towns, think rural investment in urban and rural development dividend feedback is the key to solve the urban and rural dual structure, only put the small towns in urban and rural dualistic framework, from urban and rural dual economic and social dual dual three dimensions are studied, and the system can correctly grasp the trajectory and the trend of its development and changes</td>
</tr>
<tr>
<td>2006</td>
<td>Zhongjinyuan</td>
<td>Research on the development strategy of small towns in China</td>
<td></td>
</tr>
</tbody>
</table>

## 3. Specific Application Measures of Urban Design Techniques

Different from the emphases of urban planning and design, the planning and design of new rural areas need to carry out industrial planning and specific positioning from different key contents, effectively distinguish the rural land area from the homestead, and carry out micro-design from the layout of public construction and the planning of municipal infrastructure. Rural planning and design can be helped from the macro to micro, the overall to the details of the guidance and expression.

### 3.1 Master the Spatial System of Historical Layout

From the analysis of the spatial system of the new rural planning and design, the village pattern in different periods reflects different historical information. Due to China's vast territory, the geographical environment and customs of different regions are different, and the layout characteristics of villages also show richness and diversity. Therefore, based on the concept of urban planning and design of new countryside in the process of planning, need to fully grasp the historical
pattern of the surrounding natural ecological environment and climatic conditions make detailed research, through physical form on the characteristics of layout, architecture characteristics and so on carries on the plan as a whole, at the same time, to the geomancy idea in the form of material culture, folk culture in depth. Adapt to the contemporary social development situation, create a new countryside with local style civilization, rich life and clean village appearance. In terms of the macro layout, not only the new facilities cost of the public activity center should be reduced, but also the ancestral temple with local characteristics should be appropriately built and used as the public activity center of local villagers to increase the utilization rate and effectively inherit the customs. The planning of children and primary schools should be integrated and arranged with the local village business circle, with the geometric center as the divergence center of villagers' access or work, to adapt to the daily life and behavior habits of villagers, and at the same time, to enable children to be in a safe and comfortable environment.

3.2 Humanized Design of Public Space Improves the Vitality of Space

Public space refers to the public service facilities and related places for villagers to carry out activities and work in the process of daily life and work [4]. As an important activity and work place for villagers, a good traffic function is very necessary and important. Therefore, in the process of referring to the urban design and planning, it is necessary to design the public space of the new countryside humanely, strengthen the safety and entertainment, and effectively meet the actual needs of the villagers, so as to improve the vitality of the public space and form a harmonious and mutual-aid friendly relationship. In order to further achieve the humanization design of the new rural public space, but also pay attention to in the process of planning and design scale, needs to be the height of the surrounding buildings and public buildings for study and define, safeguard the square and the park planning and so on can provide comfortable space for the villagers, also want to ensure the safety of the public space of the villagers' activity coefficient reached the highest. In addition, for the construction of space content, reasonable integration and color summation should be carried out on the site from the perspective of the use of villagers, so as to closely connect the content of public facilities and make it a complete and independent space system.

3.3 Creating Individual Villages and Shaping a Good Village Style

The existing years of villages in different parts of China are different, and the architectural color and style also reflect the characteristics of different periods. Therefore, in the various periods of different buildings to the process of planning and design, need according to oneself of the development of architectural style and architectural style with specific, to ensure the new countryside construction and planning process can keep the characteristics of the original historical architecture style, and the new architectural form and architectural style and the coordination. The design of architectural form can be controlled and expanded by means of adapting measures to local conditions and taking advantage of circumstances, combining with the needs of local production and life. At the same time of creating individual villages, a good village style will be created. For example, in the process of defining the house style, the core style elements such as roof, stitching and doors and Windows can be sampled for reference, and then promoted to complete the reconstruction of new rural planning and design.

4. Conclusion

With the acceleration of urbanization in China, the urban economy has gradually extended and penetrated into the rural economy. In the important period of large-scale reform planning and design of new countryside, we should not only refer to the new ideas and methods of urban design, but also try our best to meet the living and production needs of local villagers, make breakthroughs and innovations in new countryside planning and design, and create more new rural features with local characteristics.
References


