

Research on the Planning of Tourism-type Town

Taking a Tourist Town in Henan Province as an Example

Hui Zhang

School of Architecture and Civil Engineering
Zhongyuan University of Technology
Zhengzhou, China

Zilong Liu

School of Architecture and Civil Engineering
Zhongyuan University of Technology
Zhengzhou, China

Fan Zhang

Zhengzhou Railway Vocational & Technical College
Zhengzhou, China

Abstract—In recent years, the tourism-oriented towns that have gradually emerged have not only enriched the content of characteristic towns, but also become a key project of tourism development. Taking the specific project that the author touched during the internship as an example, through systematic analysis of its current situation and existing problems, it is hoped to find a characteristic town planning and design model based on mountain features in order to find a characteristic town planning and design pattern based on mountain features, finally providing some inspiration and reference for the creation of diversified and holistic tourism-type town that in line with the characteristics of the mountain.

Keywords—*mountain characteristics; tourism-type towns; planning and design*

I. INTRODUCTION

In 2014, China first proposed the concept of characteristic towns. By the rapid development stage in 2016, China's characteristic towns have developed into a new model. By February 2018, there were more than 2,000 featured pilot towns in China. [1]. However, with the rapid development of characteristic towns, how to develop characteristic tourism in small towns with outstanding tourism resources has become a clear goal. Accordingly, how to find a characteristic town planning and design pattern based on mountain characteristics and human characteristics has become the focus of people's attention.

II. RESEARCH ON THE PLANNING BACKGROUND AND TARGET

A. Planning Background

Under the general trend of national and international development, making full use of the existing resources in the region to create a characteristic town and conform to the development trend of the national characteristic towns not only assists to relax the regional tourism pressure while ensuring the service to tourists, but also drives the rapid

development of the urban economy while guaranteeing economic development in the area.

This project is located in the Wangwu Mountain Scenic Area of Jiyuan City. It is well known that Jiyuan is named for the origin of Jishui. The city is settled in the Yellow River Basin equipped with alpine, river, hill and plain. Featured by natural and human landscapes, it is mainly covered with mountain and hilly with complex landforms and crisscrossing rivers. As a famous scenic spot in Jiyuan City, Wangwu Mountain is known as "the first cave in the world", which integrates majesty, wonder, danger, beauty and seclusion. In addition, Jiyuan also has rich cultural wealth, such as Gong Yu's controlling water, Houyi shooting sun, Yu Gong moving mountains and so on. Such abundant natural and cultural landscapes provide valuable information for our project planning and design.

B. Research Target

The main purpose of the project is to construct a characteristic humanistic town with development value. Combining with the special background that the project is located in Wangwu Mountain Scenic Area, how to successfully construct the town without destroying the texture of the natural environment in Wangwu Mountain Scenic Area, how to fully develop the theme of the town by analyzing and refining the local customs, regional culture, customs and etiquette to study the planning and design methods of small towns with specific regional environmental characteristics and provide a model for the planning of small towns have been become urgent problems to be solved [2]. At the same time, how to ensure the integrity and scientificity of the construction of characteristic towns [3], and provide a reference basis for a series of problems that may arise in the process of the construction of small towns are the main research purposes of this paper.

III. CURRENT SITUATION ANALYSES

A. Overview of Current Situation

Wangwu Mountain is a national scenic spot with beautiful scenery. It is also the origin of the legend of "Yugong Moving Mountains" [4]. Wangwu Mountain is located between the North China Plain and the Loess Plateau. Its landform is ladder-like. From north to south, it is the middle mountains, low hills and the Yellow River valley, and its elevation varies greatly [5]. The town planned for this project is located in Wangwu Mountain Scenic Area (as shown in "Fig. 1").

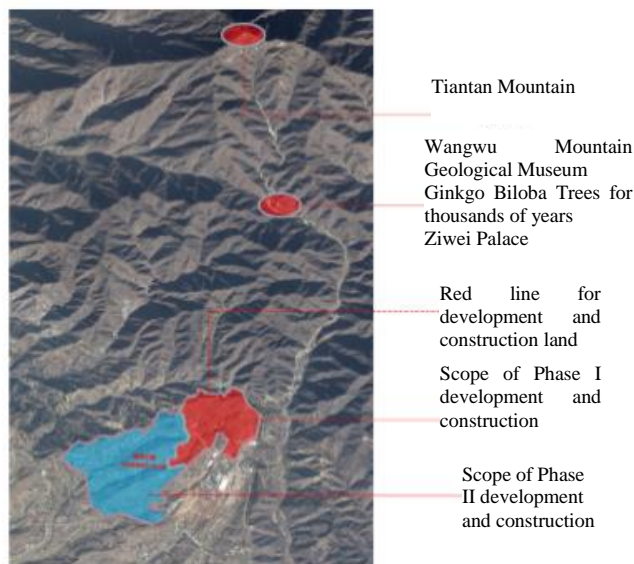


Fig. 1. Project location. (made by the author).



Fig. 2. Map of the status quo of the Wangwu Mountain.

B. Difficulties in Planning and Design

1) *Road planning of steep slope-type base:* The special terrain of the base also puts forward requirements for the construction of the project. How to plan the road well has become the primary task of planning. As is known to all, the road is the skeleton of a town. It not only plays the role of ventilation, sunshine, greening and drainage, but also has an important impact on the planning and appearance of the building. Reasonable, economical and comfortable road planning is the premise that whether the town planning is sound. Then, how to make a clear, independent and non-interfering traffic system according to the nature and scale of the town, functional zoning and natural conditions in the case of poor base condition and large height difference?

From the picture, it can be seen that the town is located on the hillside of Wangwu Mountain. The terrain along the hillside is low in the West and high in the east, and the height difference is large. This ladder shape poses a challenge to the planning and design work. How to make a characteristic town in such a terrain of great height difference that not only conforms to the local natural environment texture, but also does not fall into the stereotype is an important key to the project planning.

In addition, it can be seen from (as shown in "Fig. 2") that the local soil surface is dominated by soil, sand and stone, and the lower layer is red-brown rock. The base is located in Wangwu Mountain, surrounded by mountains with lush trees, and the terrain conforms to the mountain topography with platform and soil dunes. As for the building, adobe is the main material, which reduces the dependence on wood and the cost, offering the effect of moisture insulation and heat preservation. At the same time, the architectural style with local characteristics can be formed.

2) *Collision between humanistic spirit and modern planning:* Wangwu Mountain is a famous Taoist mountain in China with profound cultural connotations. The story of "Yu Gong Moving Mountains" originated from it. Despite the changes of the times, the precious spirit of Yu Gong is still the spiritual driving force for Chinese to make the change and build a better homeland. How to plan modern buildings and supporting facilities while embodying the spirit of Yu Gong has also become a challenge in design.

3) *Integration of natural environment and characteristic themes:* The project is located in Wangwu Mountain Scenic Area, surrounded by hills, with undulating topography, sand and soil as the main soil, adobe as the main surrounding buildings, and the project base is situated at the hillside. In

this context, how to plan a characteristic cultural town that conforms to the terrain without destroying the local natural environment and features, and how to integrate the characteristic theme with the natural landscape has become a focus of our thinking.

4) *Combination of traditional architecture and modern craft*: Through research, it is found that the local buildings are mainly adobe houses. It is well known that adobe houses have the advantages of thermal insulation and insulation. It is an early model of green buildings, not only reducing the consumption of wood, but also reducing the higher cost brought by transportation, saving resources and providing convenience for the construction of buildings because it takes local materials. However, it is not stable enough and easy to collapse, which has become a fatal shortcoming. The government even issued policies to strictly control the construction of adobe houses. In response, how to use modern technology to express the traditional architectural style and how to integrate the current architectural style with the traditional one have posed challenges again and again.

IV. PLANNING AND DESIGN OF TOURISM-TYPE TOWN

A. Core Design Concept of Tourism-type Town

In order to further determine the planning scheme, the author made a landform model (as shown in “Fig. 3”), from which it can be seen that the height difference of the base is large. The planning concept of the construction town is mainly based on “adapting to local conditions”. To avoid damaging the local natural features and maintaining the geomorphological features, the building must be arranged in accordance with the terrain, and the specific volume of the building is also restricted, forming a unique mountain environment different from plain.

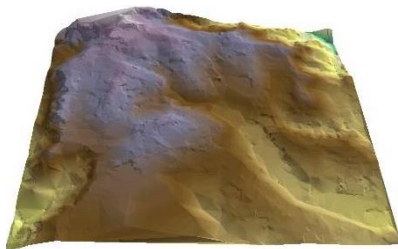


Fig. 3. Landscape model of the tourist town. (taken by the author)

B. Planning of Tourism-type Town Characteristics

It is schemed to plan and construct "Yu Gong Culture" as the theme of characteristic tourism. The project aims to build a diversified tourism town for the purpose of food, housing, transportation, tourism, shopping, entertainment under the premise of protecting the local ecological environment, and do a good job in the construction of the town environment and supporting service facilities. The project planning is divided into three phases and the author mainly takes the first phase planning as an example to carry on the concrete research.

1) *Functional zoning*: The project planning takes Henan characteristic food street as the axis, along which Qifulin, Yanyilin and Yugong Village are set up to provide a leisurely long street feature for tourists. At the same time, an entertainment center and Daoxiang Fuyuan Hotel are set up at the other end of the food street for tourists to visit. The project covers three major sections: Yangtai Palace (historical relics), Chinese cultural tourism and Yugong cultural tourism. For example (as shown in “Fig. 4”), Yugong cultural tourism includes commercial and catering areas, training bases and Yugong cultural areas as (as shown in “Fig. 5”).

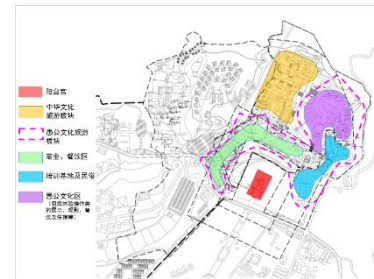


Fig. 4. Planning zoning of the Tourist town. (made by the author)

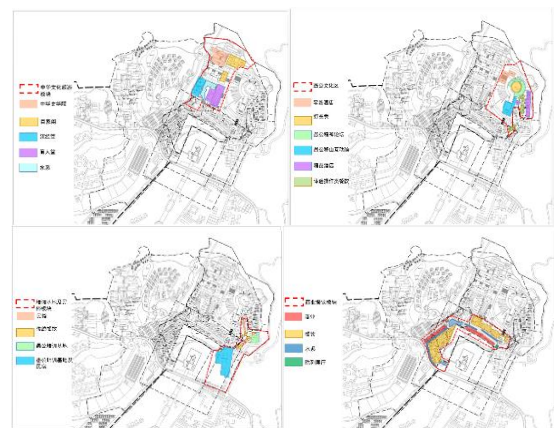
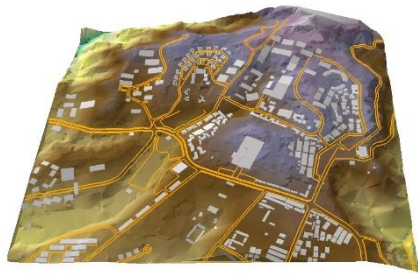


Fig. 5. Cultural tourism plate partition of the Yugong Mountain. (made by the author)

2) *Space format design*: Based on the topographic analysis of GIS software, the author knows that (as shown in “Fig. 6”), it can be seen from the figure that the northeast corner is a gentle slope, and the terrain is less undulating, which is suitable for construction. Together with the well-preserved cypress forest, the environment is beautiful, so it is planned as the Yugong Cultural District with a large Yugong Cultural Square. And accompanied by the light show, the spirit of the Yugong culture is emphasized once again. The “U”-shaped valley bottom in the southwestern part has a large height difference. The lake landscape is built by layered water, and a small, easy-to-construct, and hydrophilic traditional building is built on the lakeside to form a visual center and a viewing center.



高程	708 - 710	680 - 682	656 - 658	572 - 574
730 - 732	706 - 708	678 - 680	654 - 656	570 - 572
728 - 730	704 - 706	676 - 678	652 - 654	568 - 570
726 - 728	702 - 704	674 - 676	650 - 652	566 - 568
724 - 726	700 - 702	672 - 674	648 - 650	564 - 566
722 - 724	698 - 700	670 - 672	646 - 648	562 - 564
720 - 722	696 - 698	668 - 670	644 - 646	560 - 562
718 - 720	694 - 696	666 - 668	642 - 644	558 - 560
716 - 718	692 - 694	664 - 666	640 - 642	556 - 558
714 - 716	690 - 692	662 - 664	638 - 640	554 - 556
712 - 714	688 - 690	660 - 662	636 - 638	552 - 554
710 - 712	686 - 688	658 - 660	634 - 636	550 - 552
708 - 710	684 - 686	656 - 658	632 - 634	548 - 550
	682 - 684	654 - 656	630 - 632	546 - 548

Fig. 6. Topographic Analysis Based on GIS Software. (made by the author)

3) *Road planning*: The project road planning is divided into three levels, namely trunk road, branch road and commercial pedestrian street, as (as shown in “Fig. 7”). The main road connects the traffic between the town and the city, and the branch road is the main internal transportation system, which is responsible for connecting the main areas and functional groups in the town. Besides the traffic function, the commercial pedestrian street also creates the characteristic cultural vitality blocks, which attract people for the business, and is also an important display area of the town's characteristics. In addition, there are many parking lots in the town, which are located at the junction of main road and urban road respectively. It is convenient for parking, and at the same time, responsible for diverting people and vehicles.

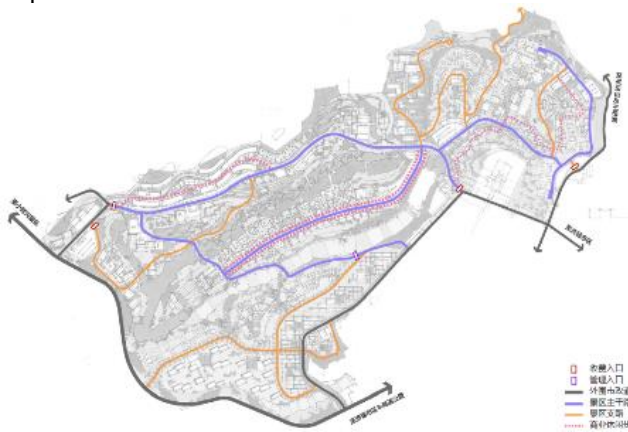


Fig. 7. Road classification of the project. (made by the author)

V. CONCLUSION

In recent years, the tourism fever has made the characteristic towns gradually enter the people's vision. The definition of “characteristic towns” has also been

continuously enriched and developed. So what is a characteristic town? The author believes that the characteristic town is an ecological community with local features and culture, which integrates ecology, economy, leisure and landscape. It can not only promote the economic development of the region, but also drive the surrounding areas, which is a new driving force and innovative carrier for regional economic development [6].

The construction of the characteristic town focuses on “being special”. Whether the construction of the town will be successful mainly depends on whether the local industrial characteristics can be explored, and whether the innovation brought by the development can be combined with the local industrial characteristics in the construction process [7]. This paper only takes the specific cases that the author have encountered during the internship process as an example to put forward some thoughts on the construction of the town, hoping to provide a scientific basis for the promotion of the characteristic town.

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