Study on Landscape Features of Traditional Villages in Low Hilly Areas in Sichuan During Urbanization in China

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Abstract: The rapid urbanization is giving changes to China’s appearance. Urban areas, for their own sake, are encroaching on lands and villages. The traditional villages are open to exploitation for the development of tourism. They are severely destroyed and the buildings significantly altered for more economic benefits. The traditional culture has been lost; instead, modern villages are constructed. People have no idea about that the preservation of traditional villages can actually bring more benefits. The villages can be found in the specific environment and space, and traditional culture in these villages. The well preserved landscape of the villages lays foundation and is the prerequisite for their development. Among the 4,000 ancient towns in Sichuan Province in China, more than 1,000 of them are historically important and deserve preservation. This paper will study Shangli Town, a traditional one in the low hilly western areas in Sichuan, focus on the relation between its physical form and its traditional culture, and try to understand the deep structure which forms the featured landscape of the traditional village, so as to preserve the landscape features of the traditional villages and revitalize them in a real sense.

Keywords: Landscape features, landscape preservation, Shangli Town, Traditional villages.

1. INTRODUCTION

The population in urban areas, which accounted for 51.27% of the total, exceeded that in rural areas in China for the first time in 2011. The rapid urbanization is changing China’s appearance. Peasants’ dependence on lands dwindles, and the wish to get rid of lands gets stronger. Hundreds of the new generations of peasants come to the urban areas every day, therefore, the villages are vacated. According to relevant investigations, about 300 villages in China are disappearing every day [1]. There is an urge to protect the traditional villages in China. Since the end of 2012, the Chinese government has published some documents, such as Notice on Protection and Development of Traditional Villages in China in 2013 released in July 2013, Basic Requirements for Planning and Preparation for Protection and Development of Traditional Villages in September 2013, and Instruction on Strengthening the Protection of Traditional Villages in China in May 2014. Also, many helpful explorations have been made regarding the strengthening of protection of traditional villages, the improvement of living environment, and the realization of the sustainable development of traditional villages in the symposium on “Protection of Traditional Villages against Urbanization” convened in December 2014.

Sichuan, or “Chuan” or “Shu,” with Chengdu as its capital, is located in Southwest China. It has been known as the “land of abundance” and the center of China’s western region since ancient times. The east of Sichuan is featured by ridge-and-valley areas and hilly areas. Chengdu Plain lies in the middle, and the west is plateau, which makes Sichuan a basin. There are over 4,000 ancient towns in Sichuan [2], and over 1,400 with historical value have remained, most of which are located in the hilly areas. The terrain rises and falls, and is largely related to the river water system. The farm town in the hilly area, compared with those in the plain, is more closely related to natural landscapes. It has become a landscape for there are different views from different distances. Shangli Town in Yaan City in Sichuan is located at the border of Yaan, Lushan, Mingshan, and Qionglai. It is a remote town which keeps the productive, social, and cultural form of an agrarian society. Plans to protect its landscape features were made in the 1980s; therefore, it has been well preserved and is a typical hill-featured town. This paper is aimed to analyze its natural environment, buildings, and cultural landscape, make comprehensive understanding and exploration of the value of its landscape, and bring forward proposals to realize the sustainable development of the traditional villages in the hilly area in Sichuan which strive to maintain their landscape features and historical culture during the urbanization in China. This article content has no conflict of interest.

2. MATERIALS AND METHODOLOGY

Shangli Town has been established for about 300 years. It was named Luosheng (in the Ming Dynasty) or Luosheng Wujiakou. It is located in the north of Yucheng District in Yaan City, 72 kilometers south from Yaan. It covers an area of 75.8 square kilometers, among which is a well preserved historical block of about 30 hectares. It connects Sichuan Plain with Tibetan Plateau and is featured by hills. Shangli Town is located in south to Zhongli Town, west to Luoshenggang Mountains on the border of Yucheng District and Lushan County, east to Mingshan County, and north to Dengxia City under Chengdu (See Fig. (1)). The town is
Shangli Ancient Town is under rapid growth. There is a high demand for the development of the new town. Residents are highly motivated to construct buildings, most of which are located outside the Ancient Town and different in style from the traditional residential buildings. They have weak awareness of protection but strong desire to commercialize the historic heritages and turn them into tools of leisure.

3. LANDSCAPE FEATURES OF SHANGLI TOWN

It is important to “understand” the historical information conveyed by the Ancient Town, explore its uniqueness, and grasp the past and present of its natural and cultural heritages before the study of its landscape features. This paper will analyze the landscape features of Shangli Town from four aspects including its overall landscape, inner space, buildings, and cultural landscape.

3.1. Overall Landscape

3.1.1. Site Selection and Geomantic Omen

The Ancient Town is located beside the intersection of Baima Brook and Huangmao Brook, surrounded by hills, and against Mozi Hill. Baima Brook and Huangmao Brook converge in the southeast of the Town to become Longxi River flowing southward (See Fig. (2)). The land on the south bank of Huangmao Brook is fertile and even. The eighteen bun shaped hills in the south are covered in green and surround Shangli Town. The Town is surrounded by two brooks and green lands, as well as towering trees. The rural houses, brooks, bridges, towers, and trees constitute a beautiful picture and bespeak good omens [3]. It is a land of treasure which gathers resources and anima in geomantic terms (See Fig. (3)).
The site has been taken into consideration for the geomantic purpose. Besides, the streets in Shangli Town are arranged in the shape of “#” or the Chinese character “jing” (which means the “well”). The buildings in the town are made from wood, which means there is water in the well, and water is incompatible with fire. It is hoped that the water will protect the town from fire, which is a delicate design not frequently seen in farm towns in Sichuan.

3.1.2. The Ancient Town and Natural Scenery

The layers of scenery are one unique feature of Shangli Town. Its spatial structural system consists of three layers including the natural scenery, villages, and inner space [4]. In terms of geographical location, the town as the center is contiguous to Mozi Hill in the north. There are undulations from north to south—Huangmao Brook, the rural scenery area, and Luohan Mountain. Mozi Hill is about 950 meters high, 301 meters higher than the Ancient Town. The “Eighteen Arhats” is about 980 meters high and 100-150 meters from and about 60 meters higher than the Town. The natural scenery and unique geographical location of Shangli Town are seen in its surrounding mountains, brooks, green lands, and towering trees (See Fig. (4)).

![Fig. (4). Natural scenery of the ancient town.](image)

The spatial layers of its landscape can be seen vertically and in depth. Vertically, there are seven layers including the water body, shoreline, ridge, building elevation, roof, vegetation, and the mountain line. Each layer has different texture, color, and landscape features. These features have coordinated with each other and the overall landscape, which have created a rich and beautiful scenery. In depth, there is a foreground composed of the bamboo forest, river, and shoreline, a mid-ground of buildings and the greenery landscape, and a background of the greening mountains and the skyline [5]. The vertical and layered space on the whole has endowed Shangli Town with glamorous idyllic scenery (See Fig. (5)).

![Fig. (5). Countryside landscape outside Shangli Town.](image)

3.2. Features of Inner Space of the Ancient Town

3.2.1. Components of Space

The lanes and streets, form of buildings, and life of residents as reflected in its streets for business, residential lane, and fair trade constitute its inner space. The space goes from the entrance to the streets, and the central street. The opening-closing-opening-closing pattern of the space is in contrast to the busy and mess modern towns. Especially, the entrance indicates the boundary of the town for the residents. It is often marked by a bridge or a tree. The lanes and streets as the main body of the inner space and a flowing space, like the artery of the Town, demonstrate the local customs and practices. The section mainly makes introduction to the inner spatial form and features of Shangli Town.

3.2.2. Features of Inner Space of the Ancient Town

3.2.1. Components of Space

The main streets are the principal axis of the inner space. They rise and fall with the topographical changes of the hills and valleys. They rise in terms of plane and space. The width of the street is proportional to the height of buildings. The width of the street ranges from 3-4 meters to 5-8 meters. The ratio of its width to the height of buildings is 1:1.2 or 1:2.0. The weather in Sichuan is hot and rainy, therefore, there are many eaves galleries on both sides of the streets, which gives prominence to the Town (See Fig. (6)).

![Fig. (6). Display of facilities and space in Shangli Town.](image)

The width of the eaves gallery is between 1.5 and 1.8 meters, half of that of the street.

If the semi-closed space of the eaves gallery is a “gray space,” then the totally closed space of the shops can be called “dark color space” (black), and the street “white space.” The combination of black, white, and gray gives changes to the space.
Shangli Town is located in an area full of rivers and channels with developed irrigation system; therefore, the streets and lanes cannot be separated from the water system, and form new patterns. The side street, for instance, has buildings on one side and water flowing on the other. There is limited space for buildings on the side street, so it makes good use of the space beside water. That it has water on one side makes it the best place to enjoy the cool and leisure in the Town (See Fig. (9)). The water lane is built by digging an opening on the street to the water. It is convenient for residents living on the long streets to fetch water and also plays as an important role to enrich the scenic value of the street (See Fig. (10)).

Besides, there is an ancient street nearly 100 meters long which serves as a road and a bank, and is built along the water and well preserved. There are slogans by the Red Army for the Long March (See Fig. (11)), which make the street more historic.

(2) The central space with the form of a “point”

The node space beside water, the central space of the town, and the entrance to the town are the most important space with the form of a “point.”

The “opera court” is a classic work in the central space of Shangli Town. It is located in the east of the Town. It connects the two main streets and is a rectangle shaped square on the east-west direction. A delicately constructed stage sits on one side of the square, which serves as the center of cultural and commercial events in Shangli Town (See Fig. (12)).

The space with the bridge at its center is also one unique feature of Shangli Town. Stores are built beside the bridge because that people like water and out of economic consideration. Thus, a vivid scenery is created which is composed...
of residential buildings, wharf, stores, and trees (See Fig. (13) and Fig. (14)).

Shangli Town was an important post on the Silk Road in the south historically and a node on the Horse and Tea Trade Route. The buildings there normally have one or two floors, and occasionally three or four floors. Some quadrangle dwellings have been built in the Town by wealthy family, with similar appearances to buildings from the Ming and Qing dynasties in western Sichuan [6]. The store turned from the residential house has a timber frame and a low space, sometimes with two-fold eaves and an outer veranda (See Fig. (15)). The buildings in the town are densely arranged with small space, which are in harmony with the grand mountains, rural scenery, and river surrounding it.

Shangli Town is rich in historic sites (see Table 1), which including the Wenfeng Tower with historic value, the delicately constructed ancient stage, the fine and solemn Shuangjiexiao Dolmen, the peculiar Erxian Bridge, Lijiao Bridge, Tashui Bridge, and the water-driven mill made in the Qing Dynasty, wonderful structures and sculptures, and the quaint stone-paved streets [7].

(1) The courtyard of the Hans is the most prominent among the buildings in the Town, especially the House of the Hans (See Fig. (16)). The House of the Hans was built in the fourth year into the reign of Emperor Daoguang (1824), and covers an area of 4,600 square meters. It is located on the east side and faces the west. It is a quadrangle courtyard with a timber frame covered with grey tiles. Blocks of stones are used as the bases of its pillars, and the floor is paved with stone. The courtyard consists of seven dwellings and two dragon characters, hence the name “seven stars encircling the moon.” The doors, windows, columns, and eaves are decorated with relief, hollowed-out patterns, and inlays. They are delicately carved with many shapes and topics which involve cultivation, fishing, carp jumping over the dragon gate, and Chen Zhou donating grains, etc. The wood made buildings are well preserved, thus enjoying tremendous value. The courtyard was listed as one of the officially protected monuments and sites by the Yaan government in 1985.

(2) “Shuangjiexiao” Dolmen and the “Jiushi Tongju Memorial Archway” and the Monument of Virtue of the Chen family are still protected in the Ancient Town. “Shuangjiexiao” Dolmen was built in the 19th year into the reign of Emperor Daoguang (1839) to praise the mother-in-law and daughter-in-law of the Han family. It was made from quality Quartz sandstone and is a gate type building. It is 11 meters high, 8 meters wide in the base, and 11 meters for its eaves. It is delicately carved with vivid figures. There are two 11-meter-high grand stone masts before the Dolmen, which are among the best stone carvings. In 1935 when the Red Army made the Long March and
Table 1. Statistics of cultural relics and heritages in Shangli Ancient Town.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of cultural relic</th>
<th>Location</th>
<th>Dated back to</th>
<th>Status of protection</th>
<th>Degree of protection</th>
<th>Features and value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shuangjiexiao Dolmen</td>
<td>Community 3 of Sijia Village</td>
<td>The 19th years since the reign of Emperor Daoguang (A.D. 1839)</td>
<td>Mostly intact</td>
<td>Provincial level</td>
<td>It was ordered by the emperor to be built to praise the filial piety of the two women in the Han family. Its double masts emanate a sense of solemnity. The carving on the stone archway is delicate.</td>
</tr>
<tr>
<td>2</td>
<td>Baima Fountain</td>
<td>Community 3 of Baima Village</td>
<td>The 1st year of Zhen-guan Period (A.D. 627)</td>
<td>Mostly intact</td>
<td>Provincial level</td>
<td>Also known as “Abyss of Dragon,” it was titled “Marquis of Radiance” during the Song Dynasty. It is time-honored and legendary.</td>
</tr>
<tr>
<td>3</td>
<td>House of the Hans</td>
<td>Community 8 of Sijia Village</td>
<td>The 4th year since the reign of Emperor Daoguang (A.D. 1825)</td>
<td>Mostly intact</td>
<td>City level</td>
<td>The mosaic carving is a marvelous creation</td>
</tr>
<tr>
<td>4</td>
<td>Jiushi Tongju Memorial Archway</td>
<td>Community 4 of Sijia Village</td>
<td>The 6th year since the reign of Emperor Jiaqing (A.D. 1801)</td>
<td>Mostly intact</td>
<td>City level</td>
<td>It is built to praise the management of domestic affairs by the Chen family. It has over 1,000 descendants with 9 generations. Its method of management shall be promoted throughout the country.</td>
</tr>
<tr>
<td>5</td>
<td>Stone carved slogan of the Red Army</td>
<td>Community 4 of Wujia Village</td>
<td>1939-1936</td>
<td>Well preserved</td>
<td>City level</td>
<td>It is carved along the Lindeng Ancient Road, hence a “Gallery for the Red Army.”</td>
</tr>
<tr>
<td>6</td>
<td>Erxian Bridge</td>
<td>Community 1 of Zhian Village</td>
<td>The 41st year since the reign of Emperor Qianlong (A.D. 1776)</td>
<td>Well preserved</td>
<td>City level</td>
<td>It is a bridge with one arch and paved with stone. It is located among mountains and waters, thus blending into the nature.</td>
</tr>
<tr>
<td>7</td>
<td>Post house</td>
<td>Wujia Village (Farm Town)</td>
<td>Ming and Qing Dynasties</td>
<td>Mostly intact</td>
<td>City level</td>
<td>The scenery along the river is amazing. Tourists can revisit the history by walking on the then silk road.</td>
</tr>
<tr>
<td>8</td>
<td>Wenfeng Tower</td>
<td>Community 2 of Sijia Village</td>
<td>The 5th year since the reign of Emperor Tongzhi (A.D. 1866)</td>
<td>Well preserved</td>
<td>City level</td>
<td>It is used to burn the manuscript paper, and it shows the disposition of the ancient town.</td>
</tr>
</tbody>
</table>

Fig. (16). House of the Hans.

Fig. (17). Shuangjiexiao Dolmen in Shangli Town.

passed by, the Dolmen was carved with anti-Japanese and anti-Chiang slogans, which endows it with double values and bring it into the list of officially protected monuments and sites by the Sichuan government (See Fig. (17)).

(3) Bridges with different styles are also the important historic heritages of Shangli Town. Over 10 bridges stretch across Baima Brook and Huangmao Brook. The bridges witness the history of the Town and artistry of the craftsman. There are three types of bridge in Shangli
Town—arch bridge, slab bridge, and water bridge. Erxian Bridge, Gao Bridge, and the Shangshou Bridge under construction are typical arch bridges.

Erxian Bridge was built in the 41st year into the reign of Emperor Qianlong (1776). It is a stone arch bridge with one arch, and has been listed as one of the officially protected monuments and sites by the Yaan government. The bridge spans 15 meters and is 12 meters high. It is a landmark (scenic spot) in Shangli Town (See Fig. (18)).

Gao Bridge was built in the 14th year into the reign of Emperor Qianlong (1727) with several arches [8]. It has three large arches and two small ones. The three large ones stretch across Baima Brook and the two over the bank for people to cross. It has been acclaimed as a “Passover of the Qing Dynasty” (See Fig. (19)).

(4) Stone carved slogan of the Red Army. There are over 70 slogans of the Red Army in Shangli Town, most of which are in Guchang Town. It boasts the most stone carved slogans in Yaan, hence listed as one of the officially protected monuments and sites (Fig. (11)).

(5) The Town constructs many public buildings as water wheels and mills so as to satisfy the tourists’ needs, enrich the Town’s cultural content, and create a new image (See Fig. (20)).

3.4. Cultural Landscape Features

There is a colorful folk culture in Shangli Ancient Town, such as Sichuan Opera highlights, “legend of five” (a legend circulated in Shangli Town: silver of the Han family—rich, roof of the Yang family—high official rank, daughter of the Xu family—beautiful, grains of the Chen family—abundance, anchor of the Zhang family—martial arts), traditional wedding ceremony, sacrifice of swine, swine killing at the turn of a year, nine big bowls (local banquet), flying Kongming lanterns, and floating river lanterns. The tourists can participate in these events and taste the local dishes if the local tourism is further developed.

4. RESULTS AND DISCUSSION

The government is a policy maker and an investor as well as a driving force behind the development of tourism in the traditional villages in China currently [8]. We have to balance the power of the government and that of the market to prevent the over-commercialization during the intervention of the market in the exploration of traditional villages, and the relation between the protection of old buildings and living environment (See Fig. (21)).
4.1. Discussion Over Protection and Planning

The landscape features of Shangli Town are frequently seen in the low hilly areas in Sichuan. From the above analysis, it is known that the physical form and cultural landscape features have contributed to the development of traditional villages and borne the past and future of them, therefore, they deserve careful planning and protection.

(1) The key of the physical spatial structure

The structure has three aspects—overall landscape, inner pattern of streets and lanes, and architectural form. The natural environment, inner space and architecture should be made clear to constitute a 3-D structural system of landscape space. The mountains, waters, and vegetation are the key to the protection of the overall landscape. The space and form of the streets and lanes should also be paid attention to. In terms of architecture, the key is to ensure which are listed as the officially protected monuments and sites, keep them in file, and specify the persons in charge. Attention should also be given to the functional spatial layout, architectural form, materials, and color of the traditional buildings.

(2) Protection of cultural landscape

The key lies in inheritance. The local cultural department should promote the local culture and history among the residents, formulate measures to protect the valuable relics and sites, and appoint person for inheritance to ensure that the cultural landscape will never disappear and will be continued.

4.2. Discussion Over Development of Tourism

The development of tourism is inevitable for traditional villages. The planning and protection shall be given priority for the development of tourism. The planning for the traditional villages in the low hilly areas shall be made from the four aspects as follows:

(1) The emphasis should be given to differences and attractiveness and the disorder of business in the Town prevented. The two modes—government leading the project companies and transfer of management right—should be adopted to promote the people-scenery construction, reduce the number of copycats in business, and lay stress on the features of the theme, scenic elements, and tourist products of each village. For example, the ship-shaped space in Jianweiluo City, lord manor museum in Anren Town, Li Manor, the top one along the Yangtze River, and Hakka Culture of Luodai. Resource integration and coordinated development with the neighboring scenic spots should also be conducted to development by learning from each other and cooperation.

(2) It should involve the participation of the public. Residents, as the user and dwellers of the Town, have the right and obligation to contribute their opinions to the development of the Town. The non-governmental groups should be established to bridge the gap between the public and the government and the planning departments to motivate the participation of the residents, to popularize some laws and policies, and play a certain role in raising funds for construction, implement the planning, protecting and collecting folk arts, and giving full play to the cultural landscape features of the towns.

(3) Small-scale renovation. Compared with big cities, traditional villages are marked by their “smallness.” They have small scales, small sizes, and small changes. The smallness of scale and size more suits the behavioral features and psychological feelings of people. The smallness of changes meets the principle of "organic" which thus preserves the historical fragments and memories. So, the renovation of ancient towns should be small, both in time and space. It is important to control the scale and speed of renovation to avoid the sightless large-scale construction and irreversible losses.

(4) Multi-channel funds collection. It is the government’s role to protect and develop the traditional villages. It should explore more channels of funding, and encourage the diversification in the protection of and investment in traditional villages. Private investment and bank loans have become the important source of funds. These channels effectively relieve the budgetary pressure on the government and the capital for protection is more flexible.

CONCLUSION

The layout of the overall landscape features, inner pattern of streets and lanes, and the architectural form constitute the physical form of the ancient town. They are the (hard) cultural part of the landscape features, and the carrier and reflector of the residents’ lives—"soft" part cultural part of the landscape features. The two parts have influenced and integrated with each other as time passes, together constituting its landscape features. The landscape features in the traditional villages in the low hilly areas in Sichuan the paper studies are limited to specific geographical conditions. Some of the content does not apply to traditional villages in the plain. Yet, the traditional villages are gradually formed and reflect the natural conditions, culture and history of a specific region. To study the landscape features, conduct protection and make good use of them are important to extending the historical line and protecting the local features in a realistic sense.

CONFLICT OF INTEREST

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