

Analysis on Fengshui Theory and Urban Planning in Ancient China

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Abstract

Chinese traditional Fengshui theory was commonly used in ancient China in the site construction of ancient capitals, ancient cities, villages, towns, houses, and graves throughout the entire country, particularly in Southeast, Southwest, South, and Central China. Langzhong ancient city, in Sichuan Province, was the case study in this paper, which was the typical representative Fengshui city in the Southwest of China. Site selection, spatial layout, landscape, and image of this city were analyzed in depth. With the guidance of Fengshui the ancient city satisfies not only physical needs, but also environmental, psychological and aesthetic ones. This analysis concludes that, Fengshui is rich in science and aesthetic principles, as well as contains the concepts and methods of landscape ecology and urban planning. The findings provide important theories and references for the planning, construction, and environmental improvement of modern cities.

Key words: Fengshui theory; Site selection; Spatial layout; Urban landscape; City image; Langzhong ancient city

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INTRODUCTION

Fengshui originated in the site selection of houses in early China; took shape in Han-Jin period; developed in Tang, Song, and Yuan dynasties; and approached perfection in Ming and Qing dynasties. Fengshui involves the examination of the geographical conditions of mountains and waters before selecting auspicious conditions and subsequently building city walls, houses, and graves to achieve the ideal of “unity of man and universe”. It encompasses the principles of geology, hydrology, ecology, microclimate, and environmental landscape. Hence, Fengshui is a practical technique in ancient China. Fengshui theory aims to “create favorable living conditions by thoroughly investigating all of the aspects of the natural environment and moderately making use of and transforming nature” (Yang, 2005). The scientific theoretical essence of Fengshui is expressed in the site selections of the remaining ancient capitals (i.e., Beijing, Chang’an and Luoyang) (Yi, Yu, & Hong, 1994), imperial mausoleums (i.e., Tomb of Emperor Zhu Yuanzhang, Eastern Qing Tombs, and Western Qing Tombs) (Wang, 2008; Cheng, 2010; Wang & Fu, 2007), and human settlements (i.e., Xidi village and Zhang Guying village in southern Anhui) (Yao & Liu, 1998; Zhang, 2003). From the perspective of modern theory of science, Fengshui is a comprehensive and systemic theory of planning and designing ancient architectures that integrate geology and geography, ecology, landscape science, architectonics, ethics, psychology, and human life informatics. Moreover, it continues to provide a significant reference and guidance values to modern urban planning.

Langzhong is located in the north of Sichuan Basin and the middle reaches of Jialing River. Archaeological findings revealed that ancestors had lived and multiplied in these areas in the Neolithic Age and built settlements and towns 2,300 years ago. Langzhong is an important land and water transportation hub and defense as early as in Warring States and Qin and Han dynasties.

Langzhong blocked the attack of main forces in the north, neighbored the rich and populous cities in the south, and facilitated commerce and trade with Jing-Xiang area (in Hunan Province) and Qinlong (in Shaanxi Province and Gansu Provinces) in the east and west respectively. Thus, Langzhong in ancient times was always the center of politics, economy, military, and culture in northern Sichuan. It was the first large settlement and an area of strategic importance where emperors reigned over the southwest. Langzhong's traditional layout in Tang and Song period and historical features of Ming and Qing dynasties have been kept until today; hence, Langzhong is one of the four best-protected ancient cities throughout China. This city was approved as a national famous historic and cultural city in 1986, and considerable efforts have been undertaken to declare it as a world cultural heritage.

Fengshui was applied in either the establishment of cities or the construction of houses in ancient China. In Langzhong, the relics of city in Shang dynasty and the remnants of city walls in Han dynasty indicated the application of Fengshui theory in site selection as early as Han and Jin dynasties when this theory appeared. Fengshui theory and technological development had developed until the Tang and Song dynasties. Its typical checkerboard layout in Tang and Song dynasties demonstrated the significant influence of the theory on spatial planning. In this paper, we discuss Langzhong

ancient city in terms of city location, spatial layout, urban landscape, and city image from the viewpoint of Fengshui.

1. SITE SELECTION

The capital is located at the foothill of a big mountain or in the vast plains (Guan, 1987). Therefore, although the position is high, the water is enough. It is near rivers and can protect with a defensive fortification. Mountains and waters were crucial to the people's residence (Wang, 2012). Hence, the sites in states, capitals, counties, or houses must be close to mountains and waters.

The name "Langzhong" implies its landscape pattern. Surrounded by mountains on four sides, the area is named Langzhong (Le, 1985). Water flows along three sides. Hence, it is named Langzhong (Liu, Tang dynasty). The geographical layout of Langzhong is under the control of Bashan Range, Jianmen Range, and Jialing River (Figure 1). Bashan Range consists of four major mountains, namely, Panlong, Fangshan, Longshan, and Dayishan, and runs to the north of Langzhong. The Jianmen Range, which consists of Daluo and Xianlian mountains, runs to the east, south, and west of Langzhong. These mountains and their unique features have formed complex landforms and comprise the basic framework of the Fengshui structure. Jialing River embraces Langzhong on three sides from the west to the south and then the east, which

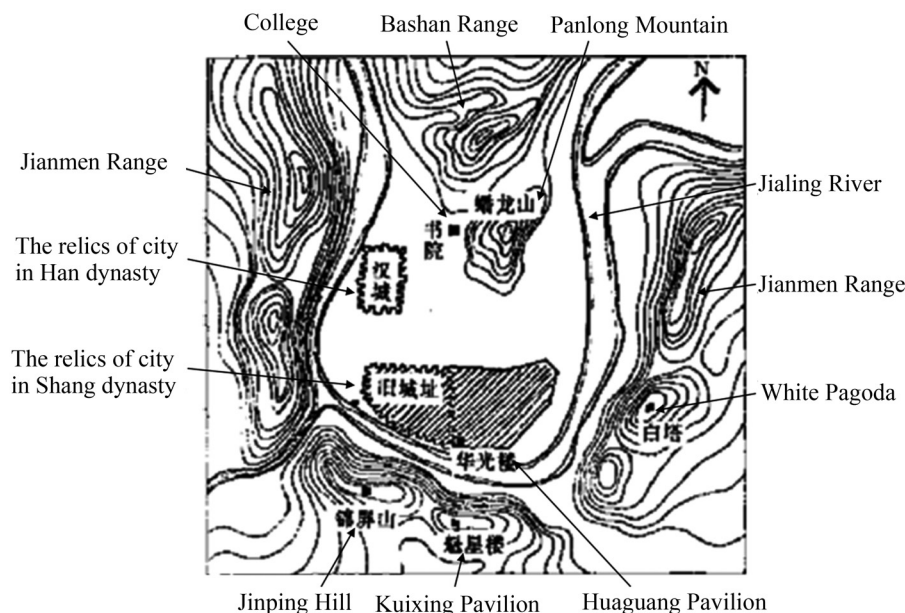


Figure 1
Geographical Environment of Langzhong, Sichuan

denotes the so-called Fengshui idea of "embracing the golden city". Langzhong ancient city is surrounded by mountains and rivers, which meets the requirement of Fengshui for the landscape environment surrounding cities and demonstrates the principle of "defense by selecting a place difficult to access" in establishing ancient cities. The structure of this ancient city also adheres to the Confucian

idea of "looking through the selection" of "the king must be in the center of the world, which is rite¹." Additionally, site selection enabled this city to possess favorable ecological environment and landscapes.

¹ In the Warring States period, Langzhong had been the capital of Bazi State.

The geographical environment of Langzhong is very perfect in an ideal pattern in terms of Fengshui; that is, it “faces onto the sunny side and baking onto the shadowy side, fronting water and with hills on the back” and embodies the perfect conditions of “dragon, sands, water, spot, and direction” (Peng, 2005) (Figure 2). The above quoted Fengshui idea pattern is the fundamental principle and ideal pattern in selecting the site of houses, villages, towns, and cities. The site is backed by Dragon Mountain and supported on the left by Blue Dragon Mountain and on the right by White Tiger Mountain. These mountains are covered by flourishing plants and facing toward a

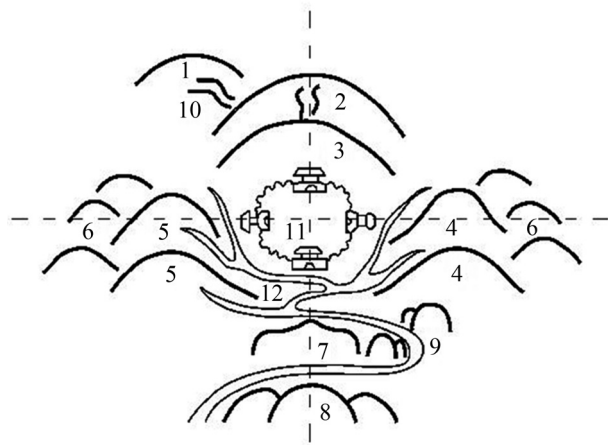


Figure 2
The Ideal Fengshui Pattern

1. Ancestral dragon mountain; 2. Young ancestral dragon mountain; 3. Main dragon mountain (the Black Turtle) sheltering the dwelling is undulating and beautiful shape; 4. Left Blue Dragon should be higher; 5. Right White Tiger should be lower; 6. The Protective sands (hills); 7. The desk hill (the Red Peacock); 8. The facing hill; 9. The meander of water-mouth and the two water-mouth hills defend it; 10. The Dragon Vein; 11. The Dragon Spot is broad, level and rectangular; 12. The facing river curves like a golden band.

crescent pond or winding river that faces a mountain of scenery. The site should face the south.

Langzhong’s Fengshui pattern is quite typical (Figure 3). According to the *Langzhong County Annals* (1982), Panlong Mountain, the guardian mountain of Langzhong city, winds 3 miles away to the north and crosses over 10 miles from the east to the west. Langzhong ancient city backs north and faces south. Panlong Range, the main mountain (black turtle), forming the natural barrier in north, exerts the greatest influence on the environment in this city because it can prevent the cold current in winter in the north and bring sunshine and warm wind in the south, forming a favorable microclimate. In terms of landscape composition, Panlong Range serves as the background of Langzhong, enriching the skyline; therefore, ancient people offered spirits to this mountain in their wildest imagination to represent the fate of this city, which embodied the so-called idea of “the virtuous finding pleasure in hills” (Liu & Li, 2005). Langzhong ancient city rest head on the tail of Bashan Mountain in the east and lean on the arm of Jianmen Mountain in the west, as well as it is under the protection from wind and surrounded by the gentle mountains (Li & Wen, 2005). Jianmen Range (Blue Dragon) and Bashan tails (White Tiger), support Langzhong on the left and right sides, respectively, which play an important role in ecology, landscape, and people’s mental feelings. Jialing River runs along the three sides of the city and forms a “U” shape at the foot of Panlong Mountain, which is the major reason for Langzhong becoming the geomantic treasure ground. Fengshui suggests that the mountains must be in the direction that a spot faces (Li & Wen, 2005). Jinping Hill (Red Peacock, the desk hill) and Xiangui Hill (the facing hill) form a splendiferous opposite scenery of the ancient city.

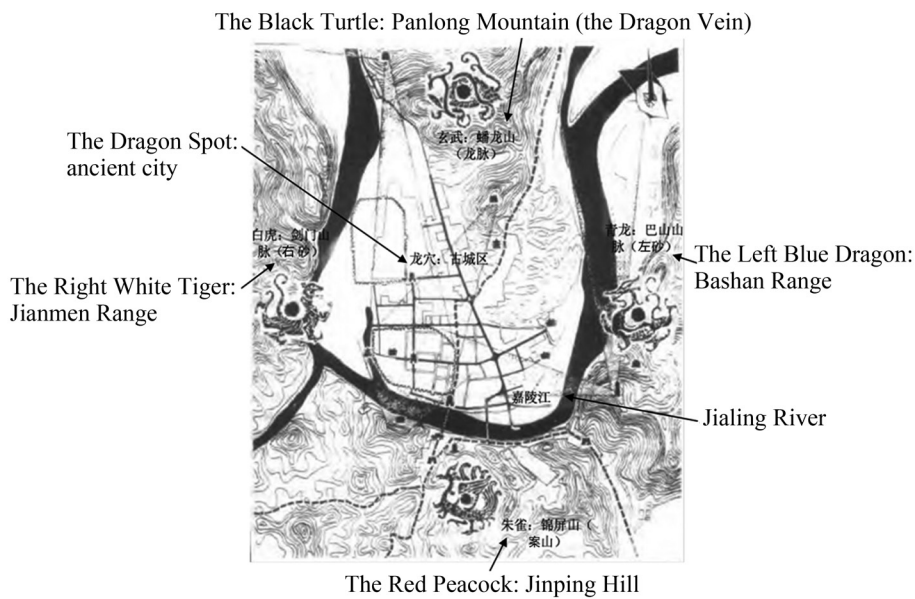


Figure 3
The Fengshui Pattern of Langzhong Ancient City

2. URBAN LAYOUT

Langzhong was protected by the surrounding walls in ancient times. Four gates were built in four directions. Aside from the West Gate, a barbican was also set up outside the gate in a picturesque disorder. Moreover, a dignified gatehouse was erected on the barbican. Gate counts for so much for citizens that it must greet mountains and waters (Qi, Niu, & Chen, 2005). In this ancient city of Langzhong, no barbican was built at the West Gate because of the special landform. Hence, a barbican should be established; otherwise, a pavilion or pagoda should be built up. Langfeng Pavilion has been constructed outside the West Gate since Song dynasty. The pavilion was improved by a stone dam, stone chests, stone fins, iron rhino, stone rhino, Pavilion of Stone Chest, and Royal Highness Shrine. Streets and lanes were outside the other three gates, and residents lived outside the South Gate and East Gate, which created a busy image of life. The South and East gates are expected to be high. To keep the “luck”, the East Gate is built southward and the South Gate is built eastward; all gate towers are high and magnificent; Huaguang Pavilion was built on the ancient road of the north bank of Jialing River in the southeast of Langzhong, and it has become a landmark of the ancient city.

According to the *Langzhong County Annals* (1982), the overall layout of Langzhong shows that the imperial court is in the front of the market, ancestral temples are on the left, and the god of the land and the god of grain are on the right, all of which are in perfect order. Zhongtian Pavilion was built at the center of this ancient city—the junction of North Avenue, East Avenue, West Avenue, and Shuanzha Street. This pattern symbolized the “cross-shaped center of sky” of Fengshui. The other streets and lanes are centered on the Zhongtian Pavilion and extend to the east and west direction respectively. Thus, the entire layout of the ancient city is a typical checkerboard of Tang and Song dynasties. The urban layout follows the natural geographical circumstance of high in the north and low in the south of city; that is, the city faces to the south with low and high buildings in order. According to the traditional principles of architecture layout is that the ancestral temple and government office should be located in the center of the city, which is the active region for top leaders, high officials, and noble lords. Fengshui theory has a saying that the imperial court in capital city and government offices in state and prefecture should be located in the most important place (Yi, Yu, & Hong,

1994). Therefore, the offices of prefectural governors and magistrates in all dynasties have been built on the highland to the west of Zhang Fei Temple in the West Avenue since Tang and Song dynasties. Military forts were located in the southeast on the highland, occupying a commanding position to facilitate the control over the entire city. Commercial and trade areas and dwelling zones were in the southeast fronting the Jialing River; such location was deemed to be beneficial to trade and living.

Confucianism, which strongly emphasizes education and men of letters, is widely respected. Hence, many cultural buildings, including Confucian Temples, state schools, and academy of classical learning, occupy important positions in the urban layout. Confucian Temple in prefectures and Confucian Temple in counties of Langzhong are official architectures. Thus, they were commonly built beside government offices while considering the surrounding natural environment in the site selections of state schools, academy of classical learning, Writing Brush Pagoda, and Kuixing Tower for people to place dream and pursuit. A number of varied folk houses run along the checkered street. The layout expresses images of Fengshui and presents traditional social ideas of “accomplishing self-cultivation and running a state with both benevolence and resolution”; at the same time, it highlights the idea that “rites are also orders”. The distribution of public buildings, including Altar of Land and Grain, Altar of Gods and Spirits, Altar of the Goddess of Silkworms, Altar of the God of Agriculture, Temple of Locusts, Shrine of the God of Fire, Shrine of the God of Water, Dragon King Temple, and Hall of the God of Thunder, was arranged according to the concept that ancestors are supposed to be superior to gods and goddesses in Fengshui. Hence, all of these public buildings were located in the suburbs, far away from the clamor of worldly activities.

The functions, site selection, and style of all these architectures in Langzhong ancient city form the spatial pattern. The planning and layout are quite logical. The clear-cut partition of functions between towns and the city avoids the mutual interference of buildings with various functions. The traffic and transport can be organized rationally and orderly. The establishment of landmarks improves the identifiability of this city and completes the composition of the city view. All of these aspects present the systemic and scientific planning of Langzhong city (Figure 4).

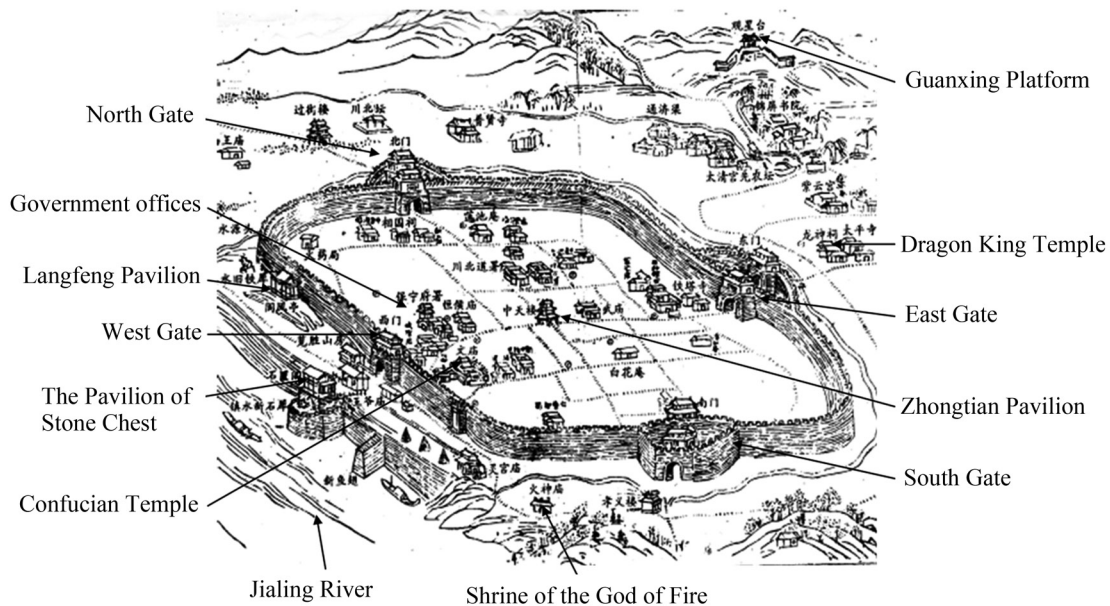


Figure 4
The Map of Langzhong Ancient City (the First Year of Daoguang in the Qing Dynasty (1821) Woodcut)

3. URBAN LANDSCAPE

The stringent requirement of Fengshui theory for site selection blesses the city with advantaged natural scenery, and the ideal pursuit in Fengshui idea for mundane life adds a lot of humanistic sceneries for people to appreciate; both factors constitute the city's colorful and unique urban landscape.

The ideal Fengshui pattern has been shaped with the help of the superior natural and geographical environment in Langzhong, which also enriches the scenery composition surrounding the city, both materially and spiritually. An enclosed, in-depth, balanced, symmetric, dynamic, and "wonderland-like" landscape has been formed (Gao, 2004). Thus, the places of interest in Langzhong attracted numerous poets and literary men, leaving behind immortal works. Wu Daozi, a famous painter in Tang dynasty, painted the famous picture of the *300-Long Scenery of Jianglin River* with Jinping Mountain as the axis. Emperor Xuanzong gasped in admiration, "no matter the great efforts in several months of Li Sixun or a day work of Wu Daozi, both are wonderful!"

Fengshui focus on largely on what is called the "water-mouth"; that is, the point where the watercourse flows into and leave the area of the site. The upper inlet of waters is called "up water-mouth" (also called "Tianmen", the door of the Heaven), and the outlet is named "down water-mouth" (the other name is "Dihu", the door of the Earth). The traditional idea is that Fengshui determines people's fate, fortune, and literacy. Hence, a saying declares the need to open the "Tianmen" and close the "Dihu". That is, the up water-mouth where the watercourse flows into the site should be open space in order to receive living breath and the down water-mouth where the watercourse leaves should enclose the site in an

"embrace" (He & Luo, 2000). Both areas are the entrance and exit of "gas" and are extremely vital so that they must be guarded by mountains and architectures.

For good luck instead of disaster, Fengshui pagodas on the water-mouth hills, Fengshui bridges over waters, and guardian temples at waters are commonly built to enclose passes and prevent fortune from leaving. Writing Brush Pagodas and Kuixing Towers prevailed at the zone of water-mouth where pavilions, platforms, embankments, bridges, and trees decorated the pagodas and towers to inspire literacy. Strong emphasis has been attached to these constructions in Langzhong, leaving many rare human landscapes, such as the Wangshui Temple and Pavilion of Prince Teng on Yutai Mountain in the north of the city; Huaguang Pavilion, Zhongtian Pavilion, and Fenghuang Pavilion in the center of the city; White Pagoda on the Dongshan mountain and Nanjin Pass at the mountain pass in the south of the city. Specifically, the up water-mouth ("Tianmen") is guarded by the Pavilion of Prince Teng², which becomes a beautiful water-mouth garden because of its advantageous geographical position. White Tower, being Writing Brush Pagoda, guards the down water-mouth ("Dihu") and promotes literacy, which is also the landmark of Langzhong ancient city. All of these constructions meet Fengshui requirements and play important functions. They have become the landmark, control point, vision focus, and composition center, thereby improving the imaginability and identifiability of this city (Figure 5).

² The Pavilion of Prince Teng, was built by Prince Teng (LI Yuanying), Who was the twenty-second sun of Li Yuan, Tang Gaozong.



Figure 5
The Distribution of Fengshui Landscape of Langzhong Ancient City

4. CITY IMAGE

Traditional Chinese Fengshui theory originated thousands of years ago. It contains the classical conclusion made by Kevin Lynch, a famous American expert in urban planning in 1960s, studied urban landscape by perceiving the environment. Lynch believed that the image of a city consisted of five major elements, namely, path, edge, district, point, and landmark. Each element constitutes the city's readability and imaginability with time process and mobile elements (i.e., humans and their activities). In *The Image of the City* (2001), three case studies were limited within the inner part of three cities (i.e., Boston, Jersey

City, and Los Angeles), and an analysis on surroundings was far from sufficient. Hence, he pointed out the shortcomings of imaginability: We should have focused on an open environment, and Chinese Fengshui theory is a special solution in an irrational way.

The Fengshui pattern of Langzhong expresses the "imaginability" and compensates for Lynch's theory by virtue of the organic integration of city and environment (Li & Wen, 2005). The image of the ancient city is expressed in three layers, namely, inner layer (core image of the city), middle layer (image of landscape control), and outer layer (image of natural mountains and waters) (Figure 6). In the first layer, the image of natural

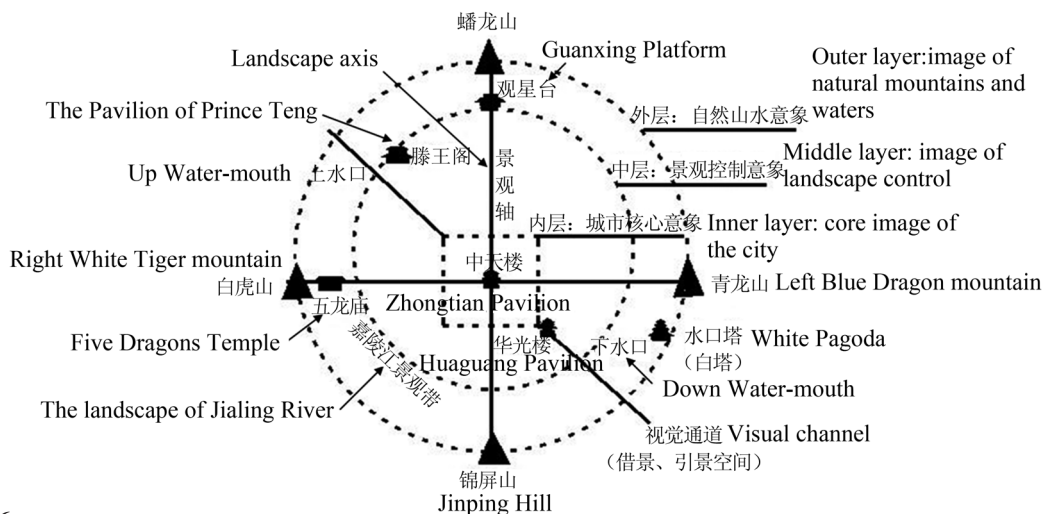


Figure 6
The City Image of the Fengshui Pattern of the Langzhong Ancient City

mountains and waters is the changeful and magnificent landscape of Panlong mountain (Black Turtle) in the north, Jinping mountain (Red Peacock) in the south, Jianmen mountain (Left Blue Dragon) and Bashan mountain (Right White Tiger) in the east and west sides respectively. The second layer is the image of landscape control, which is the scenery of observatory “Tianmen”, “Dihu”, and Jialing River. It combines Fengshui with astronomy and humanity. The third layer, which is the core image of the city, is enclosed by ancient city walls with Zhongtian Pavilion at the core. The inner scenery is defined by Huaguang Pavilion as the visual perspective point, which is concentrated and colorful. All of the sceneries form the complete, distinctive, and colorful image of the landscape and shape a landscape image in which nature, humanity, and city exhibit different features and meanings.

SUMMARY

The core theory of the Fengshui pattern in the ancient city is considering the geographical environment outside the city and inner land range, landscape situation, direction, partition of functions, paths and axes, landmark architectures, humanity scenery image, and the nature and scale of a city in a unified manner. The theory includes an organic coordination concept and investigates the dynamic development and change of a city. Therefore, Chinese traditional Fengshui theory is rich in science and aesthetic principles, as well as contains the concepts and methods of landscape ecology and urban planning. The findings provide important theories and references for the planning, construction, and environmental improvement of modern cities.

China’s position of planning and construction of ancient cities in the world history of city construction was acknowledged by the international academic world long ago. In this lengthy history of city development, ancestors have left behind abundant practices and historical experiences and achieved remarkable accomplishments that attract worldwide attention. Chinese traditional Fengshui culture was spread to South Korea and Japan in the Tang and Song dynasties. Fengshui theory has long been used for land-use policy and landscape restoration in East Asian countries (Choi, 1991; Whang, 1991). There is little doubt that this traditional paradigm will continue to influence landscape and urban planning in China, Korea, and other Asian countries with similar culture heritage (Hong, Song, & Wu, 2007). While there have been many reviews about the urban planning, such as the “Garden Cities” of Ebenezer Howard and the “Image of the City” of Kevin Lynch. The Fengshui theory, that has influenced landscape design and urban planning in Asia for centuries, should also be applicable to different parts of the world.

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