

**Spatial and Visual Structure of the Historical Landscape in China and Japan:
Case Studies of Chinese Buddhist Temples in Sui and Tang Dynasties, and
Japanese Gardens**

(中国と日本の歴史景観の構造:隋唐時代の中国仏教寺院と日本庭園を対象として)

2017
ZHANG YUAN

Chapter1 Introduction.....	2
 1.1 Background and purpose.....	2
1.1.1 The ideal landscape in Chinese culture: <i>Shanshui</i> (山水)	3
1.1.2 Buddhist temple construction along with the development and localization of Buddhism in China	
4	
1.1.3 Influence of Chinese Buddhist temple landscape taken to Japan via Japanese monks during the Sui and Tang dynasties.....	5
1.1.4 Purpose	6
 1.2 Former research	7
1.2.1 Visual and Spatial structure of the historical landscape	7
1.2.2 Visual Landscape Assessment with GIS (Geography Information System)	8
1.2.3 Connotation of Chinese historical landscape	10
1.2.4 Research on the Chinese Buddhist temple landscape.....	10
1.2.5 Visual structure in Japanese gardening.....	11
 1.3 Objective and method	11
 1.4 Framework.....	12
 1.5 Reference.....	13

Chapter1 Introduction

1.1 Background and purpose

Since the industrial revolution, the contradiction between the man-made and the natural environments has become increasingly prominent. In the 1980's China began rapid economic growth and increased urbanization, but along with this, the relationship between man and nature has become extremely strained. Construction fever without adequate consideration of the natural environment and the cultural and historical condition has destroyed much of the local landscape and created numerous indistinctive landscapes. Being aware of these problems, the Chinese government has formulated a series of laws to help conserve the natural environment also and the historical landscape (Table 1-1). Experts and researchers have started to study methods of historical landscape conservation and design from developed countries such as the European countries, the United States as well as Japan. When utilizing these methods, the essence of the Chinese historical landscape needs to be deeply understood.

Table 1-1 Laws and regulations of conservation of the natural environment and historic landscape

(Peking University Center for Legal Information, 2016)

Year	Institution	Laws and regulations	Description
2014	Standing Committee of the National People's Congress	<i>Environmental Protection Law of the People's Republic of China</i>	Article 35 In urban and rural construction, vegetation, waters and the natural landscape shall be protected and attention paid to the construction of gardens, green land and historic sites and scenic spots in the cities in the light of the special features of the local natural environment.
2015	Standing Committee of the National People's Congress	<i>Urban and Rural Planning Law of the People's Republic of China</i>	Article 4 Urban and rural planning shall be worked out and implemented by following the principles of planning the urban and rural areas as a whole... protect farmland and other natural resource as well as cultural heritages, maintain local features, ethnic features and traditions, prevent pollution and other public nuisance...
2005	Ministry of Construction	<i>Measures for Formulating City Planning</i>	Article 4 The formulation of city planning shall be subject to the guidance of the scientific development concept and be based on the basic target of building a harmonious socialistic society... to protect the ecological environment and human resources as well as respect the history and culture.
1992	Ministry of Construction	<i>National ecological garden city standard</i>	
1994	State Council	<i>Regulations of the People's Republic of China on Nature Reserves</i>	Article 1 These Regulations are formulated with a view to strengthening the construction and management of nature reserves and protecting the natural environment and resources.

2006	State Council	<i>Regulations on Scenic and Historic Areas</i>	Article 13 The master plan for a scenic and historic area shall take into account the requirement to maintain harmony between human society and nature ... make the natural characteristics, cultural significance and local characteristics of the scenic and historic resources stand out.
1998	State Council	<i>Regulations on the Administration of Construction Project Environmental Protection</i>	Article 1 These Regulations are formulated with a view to preventing construction projects from generating new pollution and damaging the ecological environment.
2002	Standing Committee of the National People's Congress	<i>Law of the People's Republic of China on Appraising of Environment Impacts</i>	Article 1 The present Law has been enacted for the purpose of carrying out the strategy of sustainable development, prevent the unfavorable impacts of programs and constructions projects upon the environment after they are carried out, and promote the concerted development of the economy, society and environment.

1.1.1 The ideal landscape in Chinese culture: *Shanshui* (山水)

Religious beliefs can reflect the cosmology and worldview of a nation as well as the space image and space recognition in its culture. When studying the landscape of a place, an area or even a country, it is necessary to first learn in detail its beliefs. The cosmology of the Chinese people was strongly influenced by various religions and philosophies within their culture, such as Confucianism, Taoism and Buddhism. Therefore, the definition of space to the Chinese people includes not only buildings, but it is also integrated with landform, water and vegetation of the natural environment.

Throughout the long history of China, like most of the other world civilizations, because of the limitations of the harsh natural conditions in ancient times, people have built their faith on nature and the worship of nature. The understanding of the ideal space in Chinese traditional culture is often described in their folklore, mythology, and religion.

Kunlun Mountain is an important symbol in Chinese mythology representing the axis mundi and divinity. *Classic of Mountains and Seas* (山海經) described it as the dwelling place of various gods and goddesses, together with marvelous plants and fantastic creatures. Kunlun Mountain is surrounded by waters and steep cliffs of immense height¹.

¹ “海內崑崙之墟，在西北，帝之下都。崑崙之墟，方八百里，高萬仞。上有木禾，長五尋，大五圍。面有九井，以玉為檻。面有九門，門有開明獸守之，百神之所在。在八隅之巖，赤水之際，非仁羿莫能上岡之巖。” (Qin dynasty, 221 B.C. - 206 B.C.)

「山海經·海內西經」(Siku Quanshu, 1983)

In Chinese mythology, Penglai Mountain is said to be on an island at the eastern end of the Bohai Sea, along with four other islands where the immortals are said to have lived, called Fanghu (方壺), Yingzhou (瀛州), Daiyu (岱輿), and Yuanjiao (員嬌)². These islands had no foundations and drifted freely with the water. The Jade Emperor had a giant sea turtle carry these islands on its back. There is no pain and no winter; there are rice bowls and wine glasses that never become empty, no matter how much people eat or drink from them; and there are magical fruits growing in Penglai that can heal any disease, grant eternal youth, and even raise the dead.

Whether in the mythology of Penglai Mountain or Kunlun Mountain, the description of an ideal world usually combines with the image of *Shanshui* (山水, mountains and rivers). The ancient Chinese ritual system and philosophical system has its own understanding of the mountains and rivers. The Five Sacred Mountains, the ancient Chinese mountain worship, originated from the system of nine provinces and nine chief mountains built by the *Rites of Zhou* (周禮)³. The Five Sacred Mountains are considered to be the place where immortals continue to dwell on, thus Taishan Mountain and Songshan Mountain, among the five mountains, became the mountains where the Imperial rite ceremony was performed.

In Confucianism, mountains and rivers are symbolic of man's virtues. It is said in the *Analects* (論語) “The wise enjoy the waters, the benevolent enjoy the mountains⁴”. In the system of Chinese traditional geomantic omens, Fengshui, the ideal place to build dwellings or tombs is a place with “Qi (Invisible force 氣)” which binds the universe, earth, and humanity together. Ancient people usually explain and describe the form of “Qi” by using the mountain landform (Cai, 1992). Therefore when Chinese people choose the site to build a residence, landform, water and vegetation of the surrounding natural environment have become primary factors in their consideration.

When Buddhism was introduced into China, it provided another description of the ideal world as a “Western Paradise”. It is decorated with gold and jewels surrounded by seven layers of balusters, nets and trees. The pond called Qibao is full of giant lotuses and with gold dust covering its bottom.⁵ In Buddhist cosmology, there are seven seas and seven mountains surrounding the central Sumeru Mountain and ten billion Sumeru Mountain spaces form a universe (Mieda & Sugano, 1993).

1.1.2 Buddhist temple construction along with the development and localization of Buddhism in China

² “渤海之東有五山焉，一曰岱輿，二曰員嶠，三曰方壺，四曰瀛洲，五曰蓬萊” (*Spring and Autumn period & Warring States period, 770 B.C.- 221 B.C.*) 「列子·湯問」 (*Siku Quanshu*, 1983)

³ “以血祭祭社稷、五祀、五岳。” (*Han dynasty, 206 B.C.- 220 A.D.*) 鄭玄「周禮注疏」 (*Siku Quanshu*, 1983)

⁴ “仁者樂山，智者樂水” (*Spring and Autumn period, 770B.C.-256B.C.*) 「論語·雍也篇」 (*Siku Quanshu*, 1983)

⁵ “極樂國土。七重欄楯七重羅網七重行樹。皆是四寶周匝圍繞。是故彼國名曰極樂。又舍利弗。極樂國土有七寶池。八功德水充滿其中。池底純以金沙布地。四邊階道。金銀琉璃頗梨合成。上有樓閣。亦以金銀、琉璃、頗梨、車渠、赤珠、馬瑙。而嚴飾之。池中蓮花大如車輪。” (*Eastern Jin dynasty, 317A.D.-420A.D.*) 鳩摩羅什「佛說阿彌陀經」 (*Kumarajiva, Easter Jin dynasty*)

In the 1st century during the period of Emperor Ming in the Eastern Han dynasty, Buddhism was introduced from India into China. The first Buddhist temple, Baima Temple, was built in the capital city Luoyang and the Chinese character 寺 (Si) specifically referred to the meaning of Buddhist temple for the first time.

In fact, when Buddhism was introduced into China, it was influenced by Chinese Confucianism and Taoism, and experienced a process of localization. According to the Buddhist scriptures, Buddha Sakyamuni spoke the Buddhadharma on Vulture Mountain. Because of the very hot weather in ancient India, there were a lot of Vihara which were built deep within the mountains. The spiritual practice of Indian monks in the mountains is in common with the Chinese evasive thought of Lao Zi and Zhuang Zi and also Confucian reclusive thought. Therefore, Chinese monks followed in the footsteps of the Indian monks and escaped from the cities to seek a quiet place in the mountains for spiritual practice (Zhou, 2007).

In order to avoid disputes, especially during the Southern and Northern dynasties, monks tended to seek recluse in the mountains. During that time, numerous temples were established in the mountains. In the Tang dynasty, the famous “Four Buddhist Temples” consisting of Guoqing Temple, Yuquan Temple, Qixia Temple and Lingyan Temple were all mountain temples which were far away from any cities. “Buddhist temples are often hidden deep in the mountains. Monks can be seen along every mountain path⁶.” This poem describes the concealed and deep environment of the mountain temples. When asked about the reason for building a temple deep in the mountains instead of in the city, the monk Hongren answered “Living in the deep mountains and being away from the secular world you can't be bothered by trivialities and you obtain a real peace in your heart. In such a quiet environment, you will attain Buddha's enlightenment via meditation⁷.” The pursuit of building temples in the mysterious mountains was influenced not only by the pure land image of Buddhism, but also integrated with the ideal world image of Taoism and Confucianism.

1.1.3 Influence of Chinese Buddhist temple landscape taken to Japan via Japanese monks during the Sui and Tang dynasties

Chinese Buddhism was introduced from China to Japan by Japanese monks in the heyday of the development of Buddhism in China during the Sui and Tang dynasties. Japanese monks studied Chinese Buddhism in the famous Buddhist mountains in China. Along with their spiritual practices in these mountains, the surrounding environment affected their view on nature and influenced their decisions when choosing sites to construct temples in Japan. In the year 804, the Japanese monks Kukai and Saicyo went to China as part of Japanese missions. During their period of study in China, they visited Tiantai Mountain and Wutai Mountain. After returning to Japan, Saicyo build

⁶ “山當曲處皆藏寺，路欲窮時又遇僧。” (Ming dynasty, 1368A.D.-1644A.D.) 徐如翰「雨中尋普陀諸勝」(Mt. Putuo Chronicle Committee & Fang, C, 1995)

⁷ “又問。學道何故不向城邑聚落。要在山居。(弘忍 601-675)答曰...栖神幽谷。遠避囂塵。養性山中。長辭俗事。目前無物。心自安寧。從此道樹花開。禪林果出也。” (Tang dynasty, 618A.D-907A.D) 淨覺「楞伽師資記」(Jinjue & Jin, 1933)

Enryaku-ji temple on Hiei Mountain and Kukai built Kongobu-ji Temple on Koya Mountain. When the monk Kukai asked the emperor to build a temple on Koya Mountain, he suggested that the temple should be built deep within the mountains the same as the temples on Wutai Mountain and Guoqing Temple on Tiantai Mountain (Itsuki, 1976, 1976). He chose the temple's building site on a plateau in the Koya Mountains because it was an ideal place to practice meditation surrounded by high hills and far from the secular world⁸.

Heian-kyo, the capital city, was established on a position corresponding with the Four Symbols during the Heian period. Based on the belief that a Buddhist temple could guard the country and protect it from Kimon (鬼門) the monk Saicyo chose the site for Enryaku-ji Temple on Hiei Mountain (Murayama, 1975).

One after another the founders of different schools of Japanese Buddhism built their ancestral courts based upon their spiritual practices learned in the Buddhist temples in China. Understanding of the Buddhist temple landscape was taken to Japan via these monks and also greatly influenced the Japanese Buddhist temple landscape.

1.1.4 Purpose

Taking the historical landscapes of China and Japan as research objects, this research analyzed the visual and spatial structure of landscape, and its representation on the purpose of revealing the spatial and visual characteristics of a historical landscape. In specific, research on Chinese Buddhist temples during the Sui and Tang dynasties, and also Japanese gardens as study objects was carried out by analyzing the visibility, perspective form and enclosure of the topography and spatial elements.

In the first part, Chinese temples which were established from the Han dynasty through to the Sui and Tang dynasties were chosen as study objects. By investigating the site selection idea, construction history, peoples' descriptions and evaluation of the temple landscape in Buddhist scripture, local chronicles, mountain chronicles, temple chronicles as well as literature works, this research aimed to analyze the natural environment and landform of the temple, grasp the visual and spatial structure as well as the images of the temple landscape.

The second part of this research, studied the origin of "Okufukasa" in the Japanese landscape and the gardening technique of creating "Okufukasa" in the Japanese stroll garden. Two representative Japanese stroll gardens, Katsura Imperial Villa and Ritsurin Garden were chosen as research objects. Ideal sceneries in these gardens, which are considered to have a great sense of "Okufukasa", were picked out by researching literature reviews.

⁸ “又有台嶺五寺。禪客比肩。天山一院。定侶連袂...深山平地。尤宜修禪。空海少年日...南行一日。更向西去兩日程。有平原幽地。名曰高野...四面高嶺。人蹤絕蹊。”(Kukai (774-835), 1965)

Following this, this research then quantitatively analyzed the influence of the arrangement of islands on creating “Okufukasa”.

“Okufukasa”, as a word with rich meaning within Japanese culture, has great significance regarding the understanding of the Japanese landscape. The Japanese stroll garden was influenced not only by the “Oku” thought in Japanese culture, but also by the space composition in Chinese landscape painting along with the introduction of Chinese landscape painting and painting theory. In this research, the aim was to figure out the characteristics of the pond arrangement and the gardening technique of creating “Okufukasa”

1.2 Former research

1.2.1 Visual and Spatial structure of the historical landscape

Japanese researchers have done a great deal of work on the assessment of the Japanese historical landscape. Higuchi abstracted seven classic types of Japanese landscape, such as “The Eight-petal Lotus Blossom Type (八葉蓮華型)” “Storing-wind Aquiring-water type (藏风得水型) ” and explained their significance as well as their spatial structure and the spatial elements of which they are composed (Higuchi, 1981) (Higuchi, 1983). Nakamura studied the visual cognition and characteristics of the Japanese landscape and provided some quantitative ways to analyze the visual structure of landscapes (Nakamura, 1982). In Usugi’s research, he selected typical Japanese landscape elements, such as shrines, mountains, sea and islands as subjects to discuss the essence of the Japanese landscape and the relationship between space and the worldview of the Japanese people (Usugi, 2003). Kamiyama

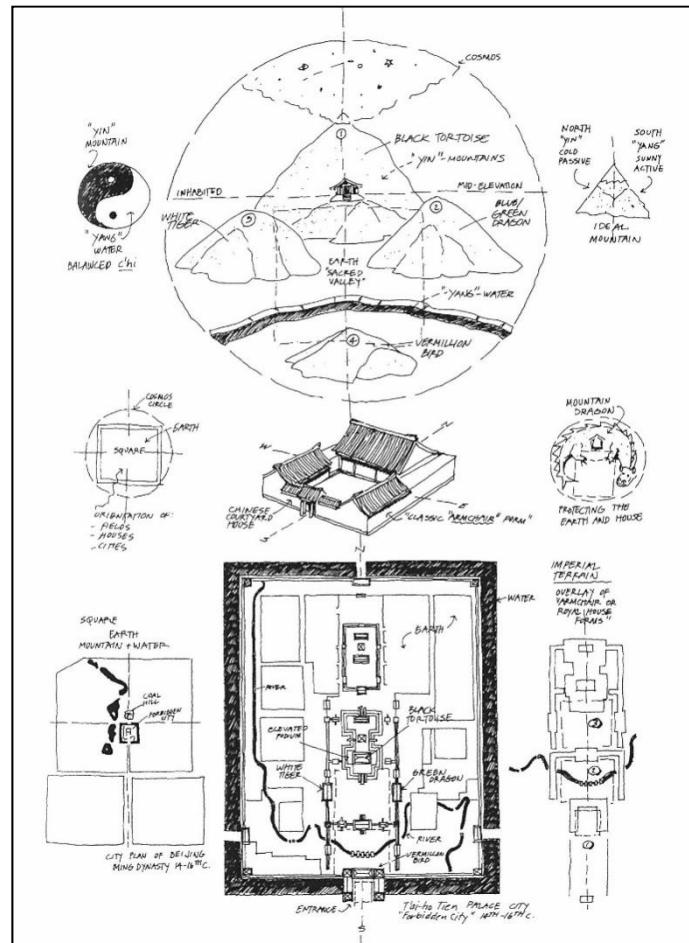


Figure 1-1 The Mountain Dragon Space (Morrish, 2010)

identified the traditional perceptual ways of viewing the mountain scenery of the northern part of Kyoto by analyzing the visibility of the mountains (Kamiyama, Demura, Kawasaki & Higuchi, 2008) (Kamiyama, 2011).

Yamaguchi et al. examined the characteristics of the scenic views and topographic enclosures of traditional gardens in Kyoto (Yamaguchi, Nakajima, & Kawasaki, 2008)

Morrish investigated historical roots and contemporary expressions of the role that the earth and sacred mountain play in the formation of the urban space. Forty-nine sketches, which were selected examples of historical archetypes, contemporary models, urban spatial patterns, building and site vocabulary and personal conjectures, portray a story concerning the role that the sacred mountain has had upon our formal and spatial thinking (Morrish, 2010) (Fig. 1-1).

In China, there has been a lack of systematic research on the spatial structure and understanding of the historical landscape. Yu has done some research work on analyzing the spatial characteristics of an ideal landscape for the Chinese people from the Fengshui (geomantic omens) viewpoint. He indicated that Chinese Fengshui is a cultural phenomenon rather than just a superstition or a science. It has existed deep within the hearts of the Chinese people and influenced the landscape in China. He summarized the characteristics of the ideal Fengshui environment in China as “Surround and block (围护与屏蔽)”, “Boundaries and dependency (界缘与依靠)”, “Separation and breath (隔离与胎息)”(Fig.1-2) and “ Breach and passage (豁口与走廊)” (Yu, 1998).

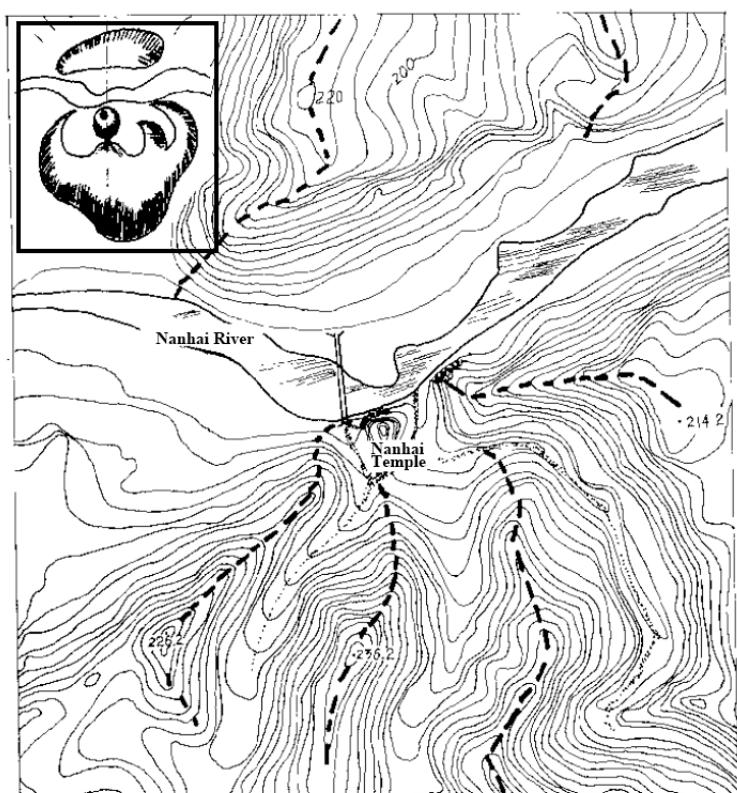


Figure 1-2 Typical "Breath" Fengshui Space in Nanhai Temple (Yu, 1998)

1.2.2 Visual Landscape Assessment with GIS (Geography Information System)

During the last forty years, the assessment of the visual landscape has been restricted by the limitations of computer technology and geo-digital data. However today, the Geography Information System and advanced computer graphics technology enable us to analyze historical landscapes with a multitude of digital geo-data. This is allowing for new insights and innovative synergies for an increased understanding of our world. By incorporating spatial location as an essential characteristic of what we seek to understand in the natural and built

environments, GIS provides the conceptual foundation and synergetic tools to explore the visual landscape (Kemp, 2008).

Steenbergen systematically introduced the rational analysis of landscape architectonic compositions and showcased an effective way of representing them. It elaborates various aspects of the architectonic form and its perception in order to understand the design discipline for landscape architecture. In his research, 3D models of architectural features and topography were utilized for examining the visual landscape of classic European gardens and landscapes (Steenbergen & Reh, 2003). He also introduced the analysis of the landscape architectonic process by providing numerous cases of research through drawings, most of which are research

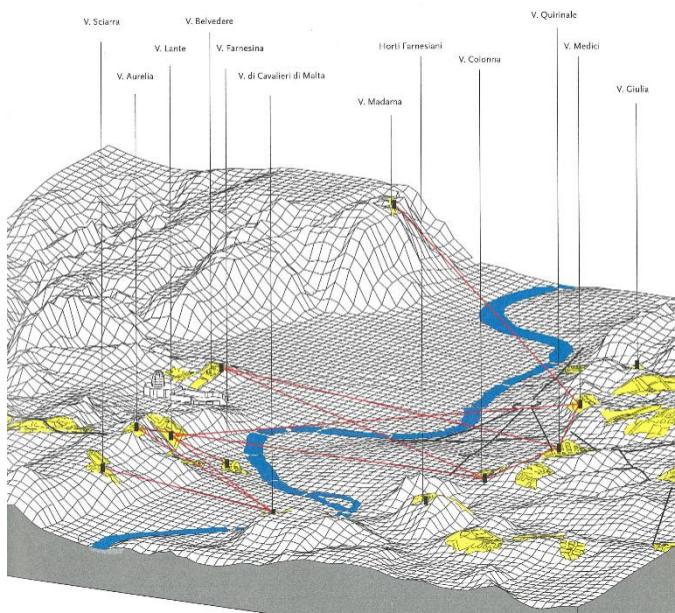


Figure 1-3 Analysis of the landscape staging and spatial relationships among Italian Renaissance villas in an urban landscape (Steenbergen, 2008)

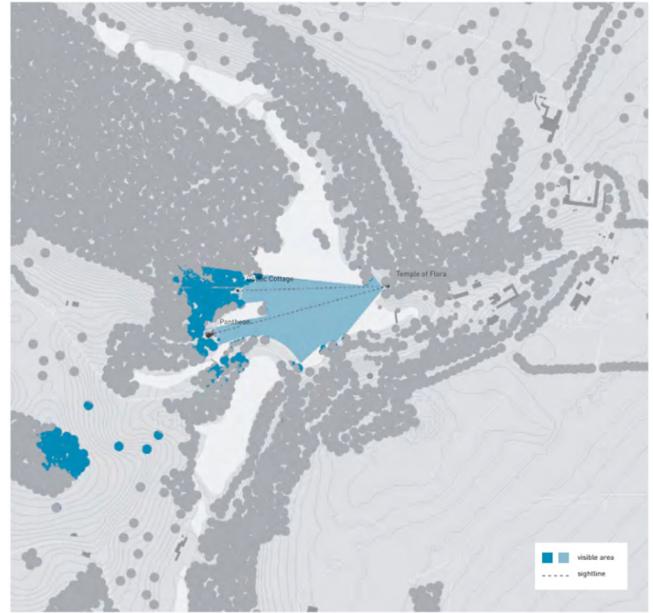


Figure 1-4 Viewshead analysis from one viewpoint in Valley Garden, Wiltshire (UK) (Nijhuis, Lammeren & Hoeven, 2011)

processing and visualizing of topographic and elevation data using GIS (Fig. 1-3) (Steenbergen, 2008). In their research, Nijhuis et al. offered clues for visual landscape assessment of spaces in cities, parks and rural areas with GIS. They provided a wide range of insights into the technical considerations of geomatics and methodology in landscape architecture and urban planning and design (Nijhuis, Lammeren & Hoeven, 2011). In some cases, GIS was utilized to reveal the particularities of the perceived landscape architectonic space by computational analysis and its representation (Fig. 1-4).

In China, Liu has done a lot of work on the quantitative evaluation of visual perception, especially landscape openness and serene ranking, for the landscape in China based upon the landscape digital terrain model (DTM) (Liu & Guo, 2014) (Liu, 2015). He also put forward the concept of a visual attraction mechanism of landscape space in which four visually attractive elements and their combinations were identified for the purpose of

studying different landscape experiences (Liu & Fan, 2013) (Liu & Fan, 2014). In addition, GIS technology has been widely applied to the research of visual landscape assessment in mountainous areas. This research has offered indicators for policy making of landscape conservation and planning (Zhang, Wang, Wu & Xiong, 2008) (Qiu, Gao & Zhan, 2011) (Tang, Wang, 2007).

1.2.3 Connotation of Chinese historical landscape

Omuro studied the development of the Chinese landscape during medieval times (Southern and Northern dynasties to the Sui dynasty) from a historical perspective, and discussed the influence of various aspects in Chinese culture, including the view of nature, hermit thought, painting, poetry etc., on the Chinese landscape (Omuro, 1985). Huang comprehended the historical city space from a Fengshui viewpoint. He investigated the ancient city space in China which was the birth place of Fengshui and selected cities and towns in Japan and Taiwan as research objects to study their spatial structure from a Fengshui perspective and explored its deep cultural connotations (Huang, 1999). Nakano studied Chinese Penglai immortal thought, Fengshui ideas and landscape painting to discuss their influence on Chinese design from the macro to micro level (Nakano, 1991).

1.2.4 Research on the Chinese Buddhist temple landscape

Zhou studied the history and culture of Chinese scenic mountains and discussed the planning of Buddhist and Taoist temples in the mountains, the planning of roads, the site selection of the temples, the design of the temple entrance and the temple gardening. He indicated that when choosing the sites for temples, it is important to consider not only

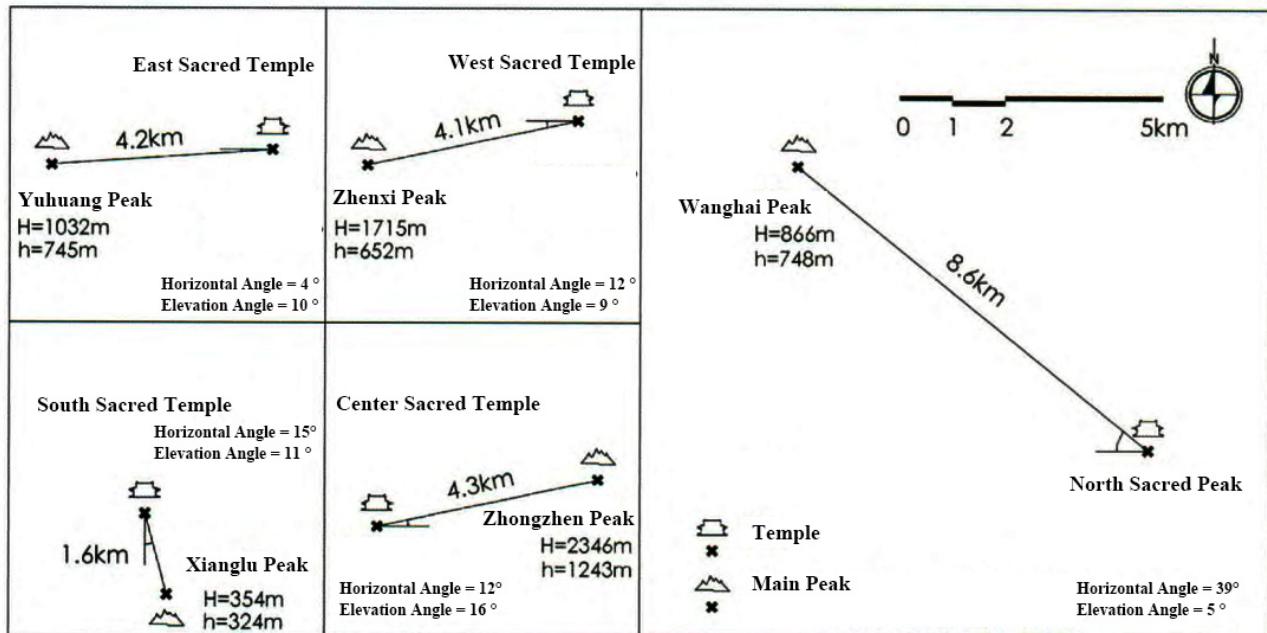


Figure 1-5 The Visual distance and the visual angle from the sacred temple to the main Peak (Shen, 2015)

the living function but also the “Visual width (广)” and “Visual depth (奥)” of the scenery. Then he summarized the spatial types of temples as “Four sided surrounding type”, “Three sided surrounding type”, “Hill side type” and “Mixed type” (Zhou, 1985a) (Zhou, 1985b) (Zhou, 2003) (Zhou, 2006). From the religious geographical viewpoint, Li studied the distribution of monks and temples during the Tang dynasty. He indicated that, natural environments, economic conditions, population, condition of transportation and political condition are the main reasons that effect the distribution of Buddhist temples (Li, 2004). Shen and Zhou studied sacred mountains and temples in combination and focused on the correlation between temples and surrounding geographical elements via literature review and simulation on the mountain landform. They found that temples in sacred mountains were built on sites where there is a view of the main peak in front of the temple with horizontal view angle and elevation view angle that are similar to each other (Fig.1-5). Furthermore the temple is surrounded by mountain branches thus the view is centered on the temple. (Shen, Zhou & Liang, 2015). By field investigation and literature review, Li summarized different surrounding types of the Buddhist temples as the “Mountain type temple” and the “Plain type temple” and discussed the gardening elements of the mountain Buddhist temples during the Tang dynasty (Li, 2012).

1.2.5 Visual structure in Japanese gardening

Gert et al. presented an investigation into the relationship between design principles in Japanese gardens and their associated perceptual effects. They found that guidelines for composition of rock clusters closely relate to the perception of visual figures. Garden design elements are arranged into patterns that simplify figure-ground segmentation (Van Tonder & Lyons, 2005). He also uncovered the implicit structure of the Ryoanji dry garden’s visual ground and has shown that it includes an abstract, minimalist depiction of natural scenery by examining the spatial structure of the garden (Van Tonder, Lyons & Ejima, 2002). Kayo et al. supported Gert’s theory by examining the pattern goodness using rock garden stimuli.

1.3 Objective and method

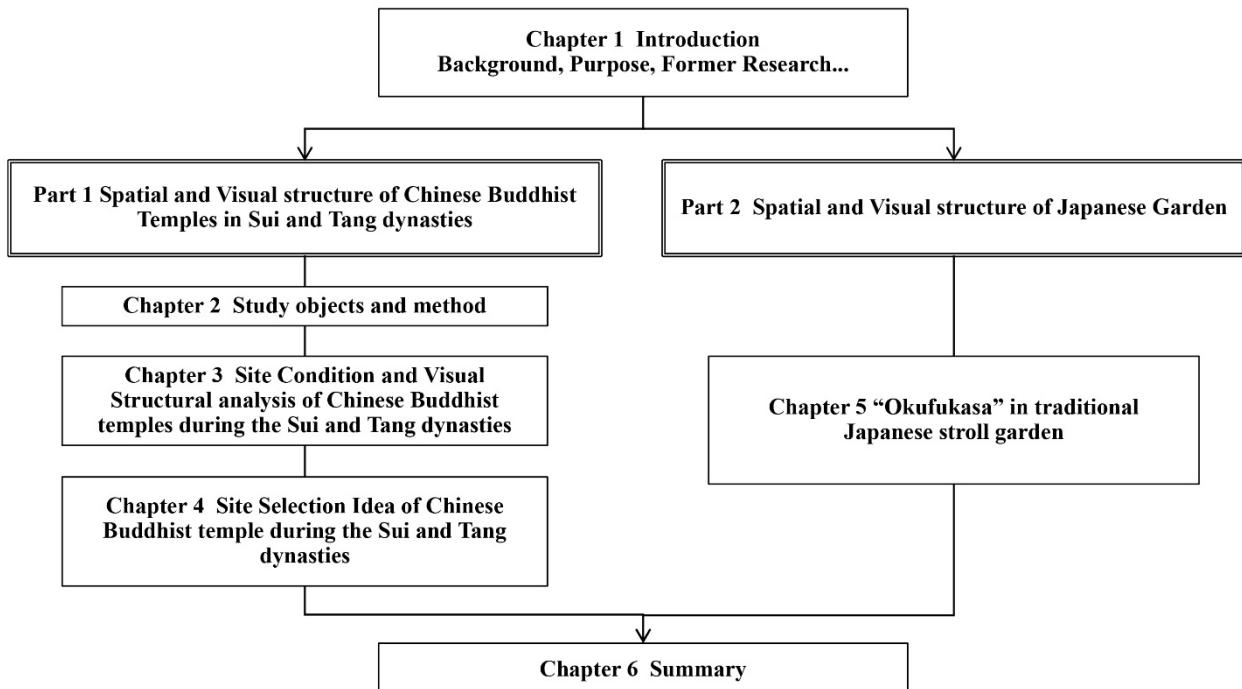
Up until now, the scholars listed above have carried out great deal of research on the visual structure and spatial structure of the landscape. In particular, Japanese scholars, represented by Higuchi, have chosen the Japanese historical landscape as their object, and have studied the Japanese landscape character by analyzing its visual and spatial structure. Due to the unavailability to the general public of high accuracy geodata, there are many historical studies on the Chinese historical landscape but there is a lack of visual and spatial analysis using GIS.

This study aims to analyze the visual and spatial structure of the Chinese Buddhist temple landscape. First, by literature review, this research studied the development of Buddhism and Buddhist temples in China before the Sui and Tang dynasties and 34 temples established during that period which were chosen as study objects. The main body of temple construction and site election as well as the site condition of the various temples were investigated.

Kashmir 3D software and the ALOS Global Digital Surface Model “ALOS World 3D -30m” were utilized to analyze the visibility of the temples’ surrounding mountains. According to the elevation angle and visual distance of the surrounding mountains, this research classified the temple visual type and discussed the relation of visual type and the construction purpose. By investigating the literature records, temple drawings, literature works, analysis of the 1/50000 topographic maps as well as the temple enclosure type, this research studied the site selection idea of the temples and investigated the spatial image of 15 temple landscapes. On the basis of the characteristics of the spatial structure and the spatial elements corresponding to the spatial image, the temple landscapes were classified into several symbolization spaces.

The second part of this research began from the investigation of the “Oku (Inmost)” space, which includes rich meaning in Japanese culture, and discussed the influence of the Chinese landscape painting theory on Japanese gardening, as well as the gardening techniques of creating “Okufukasa” in the Japanese stroll garden. Five ideal sceneries were chosen as the study objects from Katsura Imperial Villa and Ritsurin Garden respectively. Then this research built 3D models and analyzed the visibility of the gardens based on topographic map data. For the purpose of investigating the visual effect of the island outlines, two kinds of pond outlines were defined to measure the visual perspective and scenic layer of the pond view. This research also analyzed the layouts of the most important garden elements and their function in creating “Okufukasa”.

1.4 Framework



1.5 Reference

English

- Kemp, K., ed. (2008) *Encyclopedia of geo-information science*. London etc.: Sage publications
- Miura, K., Sukemiya, H., & Yamaguchi, E. (2011). Goodness of spatial structure in Japanese rock gardens1: Pattern goodness of Japanese rock gardens. *Japanese Psychological Research*, 53(4), 391-401.
- Morrish, W.R, (2010). *Civilizing Terrains: Mountains, Mounds and Mesas*. San Francisco: William Stout Publishers
- Nijhuis, S., Lammeren, R.V, Hoeven, F., (2011), Exploring the Visual Landscape: Advances in Physiognomic Landscape Research in the Netherlands. Amsterdam: Delft University Press
- Peking University Center for Legal Information. (2016). *Laws and regulations (PRC)*. Retrieved 11, 2016, from <http://www.lawinfochina.com/search/SearchLaw.aspx>
- Steenbergen, C.M., and Reh, W. (2003) *Architecture and Landscape: The Design Experiment of the Great European Gardens and Landscapes*. Basel etc.: Birkhäuser.
- Steenbergen, C.M., Meeks, S., and Nijhuis, S. (2008) *Composing landscapes: analysis, typology and experiments for design*. Basel etc.: Birkhäuser.
- Van Tonder, G. J., & Lyons, M. J. (2005). Visual perception in Japanese rock garden design. *Axiomathes*, 15(3), 353-371.
- Van Tonder, G. J., Lyons, M. J., & Ejima, Y. (2002). Visual structure of a Japanese Zen garden. *Nature*, 419(6905), 359-360.

Japanese

- Higuchi, T (樋口忠彦). (1981). 樋口忠彦著 (Ed.), *日本の景観: ふるさとの原型*. 東京: 春秋社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW00038752>
- Higuchi, T (樋口忠彦). (1983). Tadahiko Higuchi, translated by Charles S. Terry (Eds.), *the visual and spatial structure of landscapes*. Cambridge, Mass.: MIT Press. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TY86037552>
- Huang, Y(黄永融). (1999) .*黄永融著 (Ed.), 風水都市: 歴史都市の空間構成*. 京都:学芸出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00335415>
- Itsuki, J (五来重). (1976).*五来重編 (Ed.), 高野山と真言密教の研究*. 東京: 名著出版. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86102590>
- Kamiyama, R, Demura, Y, Kawasaki, M & Higuchi, T (神山藍, 出村嘉史, 川崎雅史, 樋口忠彦). (2008). 京都北山の山容景観についての考察. *土木学会論文集D*, 64(2), 266-278. doi:10.2208/jscejd.64.266
- Kamiyama, R (神山藍). (2011). 山の風景の「見方」の持続についての考察: 京都北山を対象として. *土木学会論文集D3, 土木計画学*, 67(5), I_15-23.
- Kukai(774-835) (空海(774-835)), 渡辺, 照宏, & 宮坂, 寿. (1965). 空海著, 渡邊照宏 宮 (Eds.), *三教指歸: 性靈集*. 東京: 岩波書店. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86061741>
- Murayama, S (村山修一). (1975). *村山修一編 (Ed.), 比叡山と天台仏教の研究*. 東京:名著出版. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86102589>
- Mieda & Sugano(三枝充惠, & 菅野博). (1993). *三枝充惠 ほか] 校註 (Ed.), 長阿含經*. 東京: 大蔵出版. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86176687>
- Nakano, M(中野美代子). (1991). *龍の住むランドスケープ—中国人の空間デザイン* 福武書店.
- Nakamura, Y(中村良夫). (1982).*中村良夫著 (Ed.), 風景学入門*. 東京: 中央公論社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00679699>

Omuro, M (大室幹雄). (1985). 大室幹雄著 (Ed.), 園林都市: 中世中国の世界像. 東京: 三省堂. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86002330>

Usugi, K(宇杉和夫). (2003). 宇杉和夫著 (Ed.), 日本の空間認識と景観構成: ランドスケープとスペースオロジー. 東京: 古今書院. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01386944>

Chinese

Cai, D. (1992). 风水术述评. *科学*, (03), 42-45.

Jingjue & Jin, J (淨覺 & 金九經). (1933). (唐釋) 淨覺撰], (朝鮮) 金九經校] (Eds.), 校刊唐寫本楞伽師資記. [瀋陽]: 金九經]. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB03819299>

Kumarajiva (鳩摩羅什). (Eastern Jin dynasty). ((仏說)阿彌陀經 Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/RB00009270>

Liu, B (刘滨谊). (2015). 风景园林主观感受的客观表出——风景园林视觉感受量化评价的客观信息转译原理. *中国园林*, (07), 6-9.

Liu, B & Fan, R(刘滨谊 & 范榕). (2013). 景观空间视觉吸引要素及其机制研究. *中国园林*, (05), 5-10.

Liu, B & Fan, R(刘滨谊 & 范榕). (2014). 景观空间视觉吸引机制实验与解析. *中国园林*, (09), 33-36.

Li, Y (李映辉). (2004). 李映辉著 (Ed.), 唐代佛教地理研究. 长沙: 湖南大学出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01874830>

Li, L (李玲). (2012). 中国汉传佛教山地寺庙的环境研究. 北京林业大学).

Mt. Putuo Chronicle Committee & Fang, C (陀山志編纂委員会 & 方长生). (1995). 普陀山志编纂委员会编, 方长生主编 (Eds.), 普陀山志. 上海: 上海書店出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01185356>

Qiu, Gao & Zhan, (2011). 山地视觉景观的GIS评价—以广东南昆山国家森林公园为例 (The GIS-based visual landscape evaluation in mountain area: a case study of Mount Nan-kun National Forest Park , Guangdong Province). *Acta Ecologica Sinica*, 31(04), 1009-1020

Shen, Y, Zhou, X & Liang, Y(沈旸, 周小棣& 梁勇) . (2015). 镇山与镇庙: 古代山川崇拜中的建筑与景观呈现. *中国园林*, (07), 92-96.

Siku Quanshu(景印文淵閣四庫全書). (1983). 台北: 臺灣商務印書館. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01171106>

Tang, Wang. (2007). 三峡成库前后沿江山水景观空间视觉特征比较(A Comparative Study of the Hills and Water Landscape Visual Features along the River Before and After the Reservoir Construction in Three Gorges). *Journal of Shanghai Jiaotong University*. 41(05). 818-829

Yu, K. (1998). 理想景观探源——风水的文化意义(The ideal Landscapes—The meaning of Feng-shui). 北京: 商务印书馆.

Zhang, Wang, Wu & Xiong, (2008). 基于GIS的视觉景观影响定量评价方法理论与实践(Quantitative method of visual landscape EIA based on GIS: a case of the Ming Tombs). *Acta Ecologica Sinica*, 28(06), 2784-2791

Zhou, W(周维权). (2007). 中国園林史 (第二版 ed.). 北京: 清華大学出版社.

Zhou, W(周维权). (1985a). “名山风景区”再议. *中国园林*, (02), 17-18.

Zhou, W(周维权). (1985b). “名山风景区”浅议. *中国园林*, (01), 43-46.

Zhou, W(周维权). (2003). 山的图腾——名山、名山风景区及其文化内涵. *今日国土*, (Z2), 14-19.

Zhou, W(周维权). (2006). 名山风景区它的历史、文化内涵与寺观建筑. *建筑史*, (00), 105-122.

Chapter2 Study objects and method in Part 1.....	16
2.1 Study objects and purpose	16
2.2 Method.....	19
2.2.1 Chapter 3.....	19
2.2.2 Chapter 4.....	20
2.2.3 Introduction of the literature materials and topographic maps (Table 2-2)	21
2.3 Reference	24

Chapter2 Study objects and method in Part 1

2.1 Study objects and purpose

Buddhism was first introduced from India to China in the period of Emperor Ming during the Han dynasty. It is said that the Buddhist scriptures were carried to the capital city Luoyang by white horses. Following that, the first Buddhist temple in China was built in Luoyang and was named as Baima Temple (White Horse Temple). The rise and mass distribution of Buddhism in China began from the Eastern Jin and Sixteen Kingdoms dynasties due to the fact that there were a large number of Chinese monks who traveled to India in order to study and translate the Buddhist scriptures. Starting during the Eastern Jin and Sixteen Kingdoms dynasties on to the beginning of the 5th century during the Southern and Northern dynasties then on to the end of the 6th century during the Sui dynasty and to the beginning of the 7th century during the Tang dynasty, Buddhism gradually spread throughout the China area, encompassing all within just a few hundreds of years. Although the government adopted a policy of "Taoism before Buddhism", especially during the periods of Emperor Gaozu and Emperor Taizong, it did not affect the development of Buddhism. Until the beginning of the period of Emperor Gaozong, especially during the period of Empress Wu, Buddhism developed very successfully in China. Whether in Chang'an, Luoyang, West Shu or Jiangnan, the construction activities of Buddhist temples began one after another. The rush of Buddhist temple construction extended through the glorious age of the Tang dynasty, and even up into the middle of the Tang dynasty (Fig.2-1) (Yamazaki, 1942).

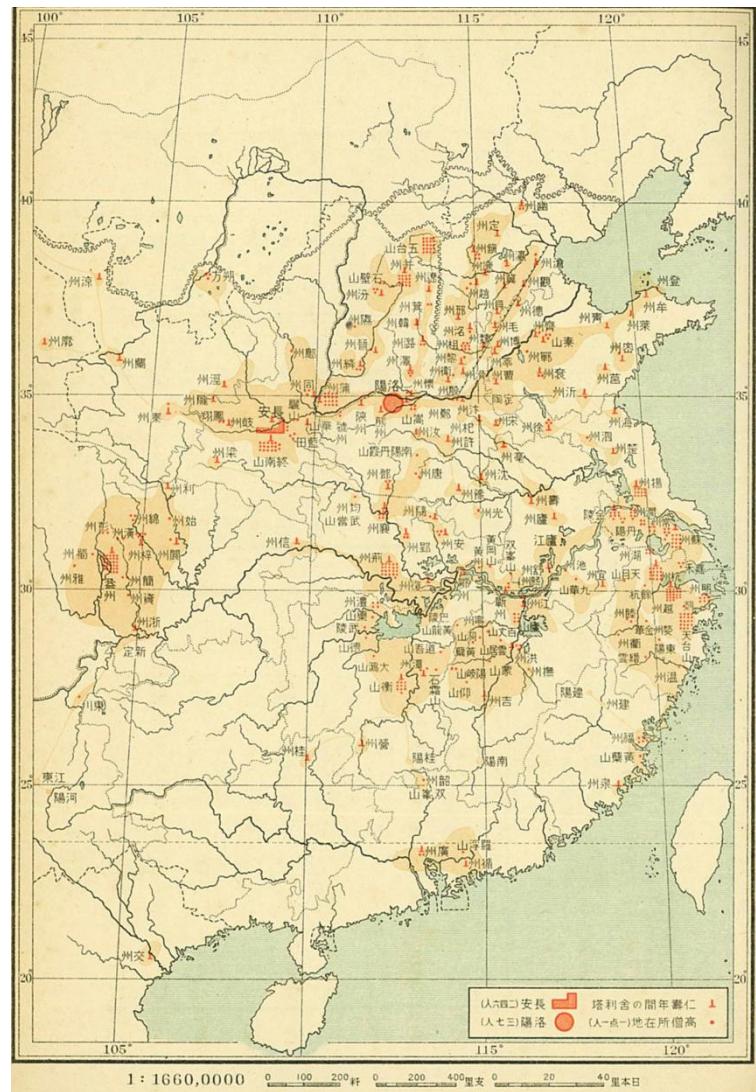


Figure 2-1 Temple distribution during Sui and Tang dynasties
(Yamazaki, 1942)

Table 2-1 General situation of the study objects

Province	No.	Temple	Dynasty	Environment			National Key Buddhist Temples in Han Chinese Area	Four Buddhist temples	Ancestor court/Major temples	Japanese Buddhist Priests	ALOS Global Digital Surface Model “ALOS World 3D -30m”	1/50000 (1/10000) Japanese military maps
				Mountain	City Plain	River						
Shanxi 山西	1	Xuanzhong 玄中寺	Southern and Northern dynasties	Shibi Mountain 石壁山 Wutai Mountain 五臺山			○			Ennin円仁	○	○
	2	Xiantong 顯通寺	Eastern Han dynasty				○				○	○
	3	Tayuan 塔院寺	Eastern Han dynasty				○					○
	4	Pusading 普薩頂	Southern and Northern dynasties				○			Eun惠運, Ensai円載	○	○
	5	Shuxiang 殊像寺	Eastern Jin dynasty				○					○
	6	Luchou 羅睺寺	Tang dynasty				○					○
	7	Jinge 金閣寺	Tang dynasty				○				○	○
Jiangsu 江苏	8	Qixia 栖霞寺	Southern and Northern dynasties	Qixia Mountain 栖霞山 Baohua Mountain 寶華山 Jinshan Mountain 金山			○	○		Jouyou常曉	○	○
	9	Longchang 隆昌寺	Southern and Northern dynasties				○				○	○
	10	Jinshan 金山寺	Eastern Jin dynasty		○	○						○
Zhejiang 浙江	11	Tiantong 天童寺	Western Jin dynasty	Tiantong Mountain 天童山 Tiantai Mountain 天臺山			○				○	○
	12	Guoqing 国清寺	Sui dynasty				○	○	Ancestor court of Tiantai	Saicyo最澄, Eun惠運, Ensai円載, Enchin円珍	○	○
Fujian 福建	13	Wanfu 萬福寺	Tang dynasty	Huangbo Mountain 黃檗山			○				○	○(West Part)
Jiangxi 江西	14	Donglin 東林寺	Eastern Jin dynasty	Lushan Mountain 嵩山			○		Ancestor court of Pure Land Buddhism		○	○
	15	Qiyin 楼隱寺	Tang dynasty	Yangshan Mountain 仰山					Ancestor court of Guiyang School		○	
	16	Dongshan 洞山寺	Tang dynasty	Dongshan Mountain 洞山					Ancestor court of Caodong School		○	○
Shandong 山东	17	Lingyan 靈岩寺	Southern and Northern dynasties	Taishan Mountain 泰山			○				○	○
Henan 河南	18	Baima 白馬寺	Eastern Han dynasty		○		○		The first Buddhist temple in China			○
	19	Shaolin 少林寺	Southern and Northern dynasties	Songshan Mountain 嵩山			○		Ancestor court of Zen		○	○
	20	Dafawang 大法王寺	Southern and Northern dynasties								○	○
Hubei 湖北	21	Yuquan 玉泉寺	Southern and Northern dynasties	Yuquan Mountain 玉泉山			○	○				○
Hunan 湖南	22	Zhusheng 祝聖寺	Tang dynasty	Hengshan Mountain 衡山			○				○	○
	23	Fuyan 福嚴寺	Southern and Northern dynasties				○				○	○
	24	Nantai 南臺寺	Southern and Northern dynasties				○				○	○
	25	Shangfeng 上封寺	Sui dynasty				○					
Sichuan 四川	26	Puxian 普賢寺	Eastern Jin dynasty	E'mei Mountain 峨眉山			○					
	27	Guangxiang 光相寺	Eastern Han dynasty				○					
Shaanxi 陕西	28	Daeicn 大慈恩寺	Tang dynasty	Xi'an 西安			○		Ancestor court of Faxiang school	Kukai空海		
	29	Daxingshan 大兴善寺	Western Jin dynasty				○		Ancestor court of Vajrayana	Kukai空海		
	30	Jingye 淨業寺	Sui dynasty		Zhongnan Mountain 終南山		○		Ancestor court of Vinaya school		○	○
	31	Caotang 草堂寺	Sixteen Kingdoms				○		Ancestor court of East Asian Mādhyamaka		○	○
	32	Huayan 華嚴寺	Tang dynasty						Ancestor court of Huayan school		○	○
	33	Qinglong 青龍寺	Sui dynasty						Saicyo最澄, Ensai円載, Enchin円珍, Kukai空海, Shimyo真如			
	34	Ximing 西明寺	Sui dynasty						Dousyou道昭, Kukai空海, Shimyo真如		○	○

The development of Chinese Buddhism reached its heyday during the Sui and Tang dynasties when thirteen Buddhist schools had been fully established and had completed their own doctrines, ceremonies and classic systems. Meanwhile, Buddhist temples gradually became well developed during that time. In the city, temples were not only the religious centers, but also the public centers for communication of their citizens. In the mountains, the beautiful landscape around temples, attracted countless tourists to visit. There are numerous literature and artistic works produced by scholars and artists in reference to the beautiful scenery of Buddhist temples and some of these works have become world-renowned. The site selection idea and construction of the temples was influenced not just by Buddhist thought, but also by Chinese Confucianism and Taoism. Therefore,

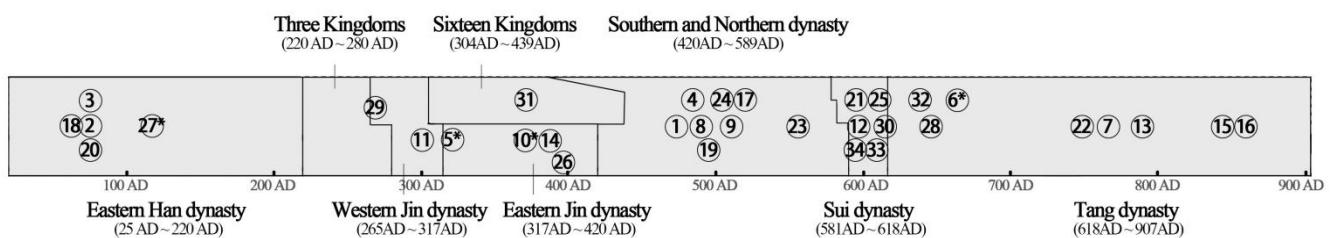


Figure 2-2 Temple construction year

the Buddhist temple landscape reflected the essence of Chinese culture and became the representative landscape type in China. In addition, during the Sui and Tang dynasties, Japanese monks traveled to China and took Buddhism back to Japan. Through their spiritual practices in the Chinese temples, understanding of the relationship between man and nature in Chinese culture affected them greatly. It can be said that the environment of these temples had a profound impact on their understanding of the temple environment, and also provided a great reference for them when they were choosing temple sites in Japan (Chapter 1 part 1.1.3).

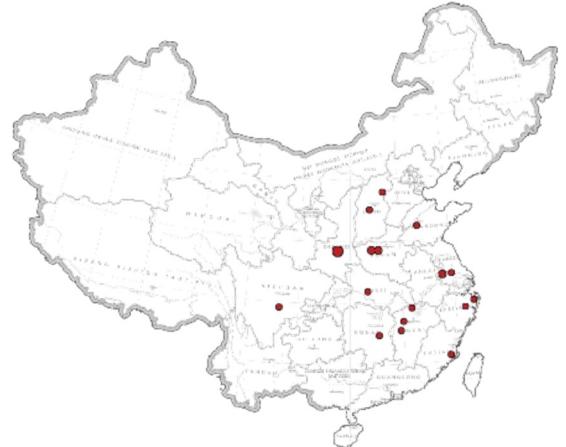


Figure 2-3 Location of the study object (State Bureau of Surveying and Mapping (China), 2008)

In this research, 34 temples which were established during the Tang dynasty and before (Table 2-1, Fig 2-2) were chosen as study objects. Among these temples, 27 were chosen from the *National Key Chinese Han Buddhist Temple List* (汉族地区佛教全国重点寺院) issued by the Chinese State Council in 1983, 1 temple from the *Four Buddhist Temples* (四大名刹) and 6 temples are ancestor temples or temples Japanese monks often visited during the Sui and Tang dynasties (Yoritomi, 2009) (The Buddhist Association of China, 1981) (Table 2-1 and Fig.2-3). These temples were established from the phase where Buddhism had just arrived in China to the phase where it had become well developed. There are 10 ancestor courts of different Chinese Buddhist schools among

the research objects, especially the ones located in Xi'an City which was called Chang'an (長安) during the Sui and Tang dynasties. The Japanese monks who came to China for the study of Buddhism founded the ancestor courts of various Japanese Buddhism schools after returning home to Japan.

This research aims to explore the cultural and historical significance of the Chinese Buddhist temple landscape by investigating literature and analyzing and evaluating the visual and spatial characteristics of the temple landscape. It is hoped it can provide some reference for the conservation and development of the Chinese historical landscape as well as giving indicators on revealing the essence of the Chinese culture contained in the landscape. In addition, it is hoped that this research can lay a foundation for the future study of the inheritance of the Chinese and Japanese Buddhist landscape.

2.2 Method

2.2.1 Chapter 3

In this chapter, the constructor and site condition of the temple by literature review of the Tripitaka, local chronicles, mountain chronicles, and temple chronicles for the purpose of grasping the temple general situation and figuring out the site condition types were studied. To study the visual enclosure characteristic of the temples located in mountains, the visibility, visual distance, horizontal view angle, angle of elevation and depression of the surrounding mountains were analyzed. For the temples located in the cities, the visual relationship of the temples, the city and the mountains were focused on.

According to the literature review of the construction of Buddhist temples before the Tang dynasty, different social classes participated in the construction as well as the site selection for the temples. Therefore, their different understanding of the ideal place was integrated into the idea of temple site selection. It included the emperor's religious requirements (promoting Dharma, praying and blessings for the Imperial Family, guarding the country and people etc.), Taoist and Confucian thought brought by the nobility, local officials and literati, and the monks' pursuit for a religiously pure land. After investigating the general situation of the temple sites, it was found that most of the temples were located in the foothills, flat ground surrounded by mountains and the tops of the mountains. Some of the temples were located on the plains between the cities and mountains or on the rivers. The record of the temple site conditions usually first described the space relationship between the temple and mountains, and a site surrounded by mountains is often considered to be the ideal place for Buddhist temples. When visiting a Buddhist temple in mountains, tourists paid more attention to the view of the surrounding mountains, for there are many descriptions of the surrounding mountains in literature works. Therefore, the sense of enclosure brought by the surrounding mountains is an important factor in the evaluation of the temple landscape.

In this part the ALOS Global Digital Surface Model “ALOS World 3D -30m” was used to analyze the visual characteristics of 22 temples. This is a digital surface model data set with a horizontal resolution of approximation. With this database, the visible and panoramic figures of temple surroundings was analyzed by using Kashimir 3D software. To evaluate the visual structure, the visual distance (within a radius of 5 kilometers) and the angles of elevation of the surrounding mountains was analyzed.

Angles of elevation and horizontal view angle to evaluate the enclosure of the mountains surrounding the temple within 30km were used. According to Higuchi’s research, people notice the existence of mountains when there is an elevation angle of 5 degrees or more. Mountains have visual importance as skylines when the elevation angle

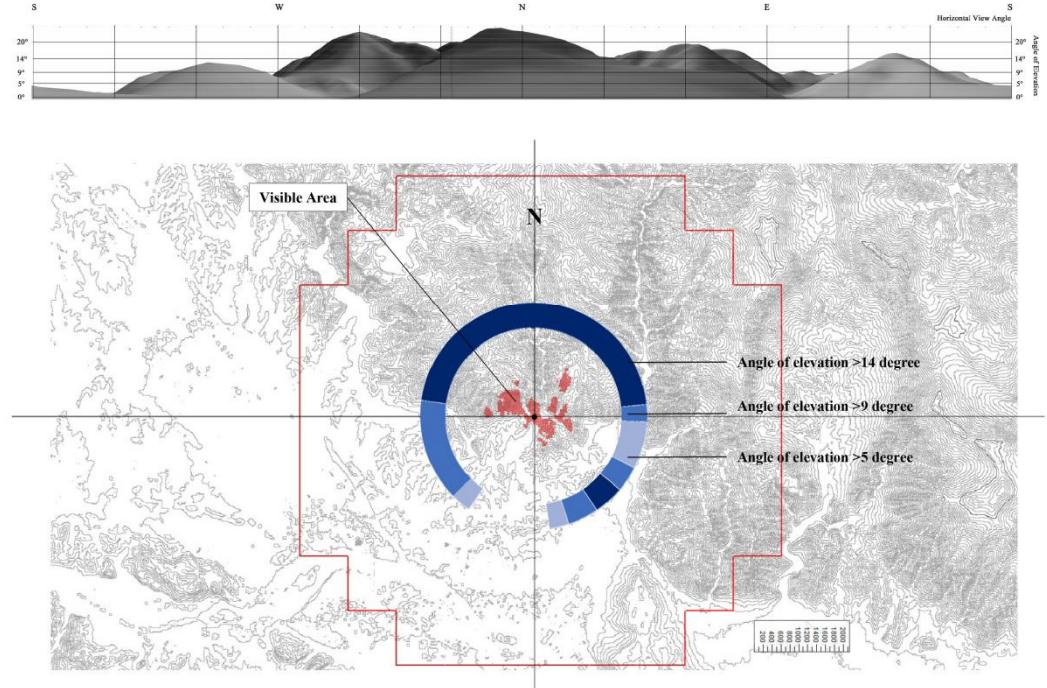


Figure 2-4 Panoramic figure of mountains (above); Visibility and elevation angle analysis (below)

is around 5 degree and occupies a much smaller section of the view than the foreground and the sky. Mountains with elevation angles in the range of 9 degrees, which is considered to be the best angle for looking at mountains, affords interesting views both of skyline and the mountainside (Higuchi, 1983). Meanwhile the surrounding mountains form an enclosed space to the observer when the angle of elevation is beyond 9 degree (Spreiregen, 1975).

2.2.2 Chapter 4

In this chapter, to interpret the symbolic meaning of temple landscapes the idea of site selection, the description of the natural environment, description of the temple landscapes and the experiences of tourists to 15 Chinese Buddhist temples during the Sui and Tang dynasties through literature review of the Tripitaka, local chronicles, mountain

chronicles, temple chronicles, poems and travel notes were studied. According to the site condition and visual structure of Chinese Buddhist temples in the last chapter, as well as the literature review, this chapter discussed the meaning of temple landform and divided the Buddhist temples into Lotus symbolization temple, Sumeru symbolization temple, Penglai symbolization temple and Fengshui symbolization temple. The spatial elements and characteristics of each symbolization were also discussed.

The spatial elements and their symbolic meaning from literature and topographic maps were picked out. To understand the landform and surroundings of the temples, the temple and mountain drawings were also studied.

2.2.3 Introduction of the literature materials and topographic maps (Table 2-2)

1) Chronicles

Chronicles, usually written by scholars interested in a region, city or temple, are a distinct genre of Chinese historiography. Chinese Buddhist temple chronicles contain valuable information for deepening our understanding of Chinese Buddhist temple landscapes. In this research, most of the temple chronicles were written in the Ming and Qing dynasties and some in the Republic of China, which recorded the temple site condition, history, architectures, monks, poems and so on since the founding of the temple.

2) *Quan Tangshi* (*Complete Tang Poems*) 全唐詩

Quan Tangshi (*Complete Tang Poems*) is the largest collection of Tang poetry, containing about 49,000 poems. It was published in the year 1705 during the Qing dynasty under the command of Emperor Kangxi. In *Quan Tangshi* there are nearly 10,000 poems about Buddhist temples and their surrounding natural environments. For some renowned temples, like Daci'en Temple for example, numerous poets wrote poems of the beautiful scenery within the temples. From these the most famous poems to study the temple landscapes were chosen.

3) Taisho Tripitaka 大正新脩大藏經

Taisho Tripitaka is one edition of the Chinese Buddhist Canon and the Japanese commentaries by Japanese scholars during the 20th century.

4) ALOS global digital surface model (DSM) 30m

The global digital surface model database, released 31st May 2016, was published by the Japan Aerospace Exploration Agency (JAXA). It was produced based on the DSM dataset (5-meter mesh version) of the "World 3D

Topographic Data", which is the most precise global-scale elevation data at this time, and its elevation precision is also at a world-leading level as a 30-meter mesh version. In this research, the visual characteristics of 22 temples by Kashimir 3D software with the 30-meter mesh version of the DSM were analyzed.

5) Japanese Military Maps (Gaihozu) 外邦図

Japanese military maps, referred to as "Gaihozu (Maps of outer lands)" were prepared in the early Meiji era and produced or copied during World War II by the Land Survey Department of the General Staff Headquarters, the former Japanese Army. Gaihozu are important materials for the study of landscapes in the area covered. These maps, most of which are in a scale of between 1/20000 and 1/100000, cover South and East Asia and the Southeast Asia area. In this study, most of the topographic maps utilized are in the scale of 1/50000 and some in the scale of 1/10000 (Jinshan Temple, Lingyan Temple) and were collected from the Center for Southeast Asian Studies at Kyoto University, Institute of Modern History Academia Sinica (Taiwan) Database and the 1/50000 topographic map collection of the Chinese mainland. This is the first time they have been utilized for the research of Chinese Buddhist temple landscapes.

6) Limitation of the ALOS 30m DSM and the Japanese military maps

Both ALOS 30m DSM and the Japanese military maps have their own advantages and limitations regarding analyzing temple landscapes. The 30m DSM has very high accuracy, which can be utilized for visual and spatial analysis of temple landscapes but lacks other site information such as water, architectural elements, toponyms and so on. The map information is not complete, and among the 34 temples there are 12 temples without data in such areas as E'mei Mountain in Sichuan province and Yuquan Mountain in Hubei province. In addition, the accuracy of the 30m DSM is not good enough for visual and spatial analysis of the plain, for instance the temples in Chang'an City, thus some corrections to the viewpoints needed to be made. The Japanese military maps, contain a lot of information such as toponyms, water, architectural elements etc., but some lack temple location tyoponyms or contain different toponym information from the literature works and parts of the maps are incomplete. In order to determine the temple locations and the toponyms of the temples and mountains, Google Earth satellite images to compare two kinds of map information were also utilized. It ensured the accuracy and consistency of the map information. The satellite images were also used to help understanding the temple site conditions.

Table 2-2 Introduction of the literature materials and topographic maps

	Literature review	Topographic Maps and Satellite Images
Local Chronicles; Mountain Chronicles; Temple Chronicles	<p>Emei Mountain Chronicle (Qing dynasty) Jiang 「峨眉山志」(清)江揚起</p> <p>Qingkang Mountain (Wutai Mountain) Chronicle (Ming dynasty) Zhen 「清京山志」(明)鎮澄</p> <p>Tiantai Mountain Chronicle (Qing dynasty) Zhang 「天臺山金志」(清)張麟元</p> <p>Lineyuan Mountain Chronicle (Qing dynasty) Wang 「靈岩志」(清)王沂</p> <p>Jinshan Mountain Chronicle (Qing dynasty) Lu 「金山志」(清)盧見曾</p> <p>Baolu Mountain Chronicle (Qing dynasty) De 「寶華山志」(清)德基</p> <p>Songshan Mountain Shaolin Temple Chronicle (Ming dynasty) Fu 「嵩山少林寺釋志」(明)傅每</p> <p>Daxingshan Temple Chronicles (1946) Kang 「大興善寺續記」(民國 1946)康毅園</p> <p>...</p>	<p>Quan Tangshi (Complete Tang Poems) 全唐詩</p> <p>Taisho Tripitaka 大正新脩大藏經</p> <p>JAXA The global digital surface model (DSM) (30m)</p> <p>Topographic maps of China main land</p> <p>EARTH Satellite Images</p>
General Information	<p>Sutra in Forty-Two Sections (Han dynasty) Kasyapa Matanga 「佛說四十二章經」(漢)迦葉摩訶尊者</p> <p>Memoirs of Eminent Monks (Northern and Southern dynasties) Huijiao 「高僧傳」(梁)慧皎</p> <p>(May, 2016) Japan Aerospace Exploration Agency (JAXA) A General History of Chinese Buddhism (Song dynasty) Zipan 「佛祖統紀」(宋)志磐</p> <p>The Buddha Speaks of Amitabha Sutra (Eastern Jin dynasty) Kumarajiva 「佛說阿彌陀經」(東晉)鳩摩羅什</p> <p>... ...</p>	<p>a. Japanese Military Maps (Gahozu) (1910-1936) Published by the former Japanese Army ● Center for Southeast Asian Studies Kyoto University</p> <p>b. 1:50000 topographic map collection of China main land Google Map Website (2016)</p> <p>c. Topographic maps of each province in China (1910-1936) Published by the Ministry of Defense, ROC ● Institute of Modern History Academia Sinica (Taiwan) Database</p>
Information	<p>Site condition; Drawing of the temple History; Founder; Site selection idea; Story Poems and travel notes; View; Landscape Experience</p>	<p>Visual structure analysis and assessment; Visibility and panoramic figures (Visual distance; Elevation angle; Horizontal view angle; Mountain outlines)</p> <p>Site condition; Topographic description Founder; Site selection idea; Story View; Landscape Experience</p> <p>Site condition: Landform; Water; City; County; Road and path... Satellite Images</p>

2.3 Reference

English

Higuchi. (1983). In Tadahiko Higuchi, translated by Charles S. Terry (Eds.), *the visual and spatial structure of landscapes*. Cambridge, Mass.: MIT Press. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TY86037552>

Chinese

State Bureau of Surveying and Mapping (China). (2008). Map of the people's republic of china

The Buddhist Association of China. 漢族地区全国重点寺院. Retrieved 10, 2016, from <http://www.chinabuddhism.com.cn/zdsy/>

Japanese

Spreiregen, P.D.(1975). *アーノンデザイン：町と都市の構成* (*Urban Design, the Architecture of Towns and Cities*). 東京:日本サムシング

Yamazaki, H(山崎宏).(1942). 支那中世佛教の展開. 東京:清水書店

Yoritomi, M(頼富本宏). (2009). 日中を結んだ仏教僧 波濤を超えて決死の渡海. 東京: 農山漁村文化協会

Chpater 3 Site Condition and Visual Structural analysis of Chinese Buddhist temples during the Sui and Tang Dynasties.....	26
 3.1 The constructor of the temple	26
3.1.1 Emperors: Main initiators of temple construction.....	26
3.1.2 Nobility, local officials and literati: Donation of houses as temples	27
3.1.3 Monks: Choice of sites for temples.....	28
 3.2 Temple site condition in literature	28
3.2.1 Temples in the city.....	28
3.2.2 Temples in mountains.....	29
3.2.3 On the river.....	32
 3.3 Site condition and Visual structural analysis.....	33
3.3.1 Temples in the city.....	33
1) On the side of the platform.....	33
2) Distant Mountain.....	34
3.3.2 Temples in the mountains	35
1) Flat ground surrounded by mountains.....	35
2) Valley.....	40
3) On the ridge/ mountain side	43
4) Surrounded by close mountains and distant mountains in the background.....	44
 3.4 Discussion	45
 3.5 Summary	49
 3.6 Reference.....	50

Chapter 3 Site Condition and Visual Structural analysis of Chinese Buddhist temples during the Sui and Tang Dynasties

3.1 The constructor of the temple

In order to understand the situation of the development of Buddhism and the purpose of building Buddhist temples, regarding the constructors and the reasons for building temples were summarized from records about the construction of temples before the Tang dynasty in *Fo Zu Tong Ji* (佛祖統紀) (Table 3-1)

3.1.1 Emperors: Main initiators of temple construction

The main constructors of Buddhist temples in Sui and Tang China were usually the emperors. The state's religious institution was called the Ci department (祠部) which belonged to the board of rite and ceremonies in the Council of Advisors to the Throne (尚書省禮部). The court of state ceremonial under the Ci department was directly responsible for the development of Buddhist affairs.

From the temple construction records in *Fo Zu Tong Ji* (佛祖統紀) it can be seen that the main initiators of temple construction were emperors. For example “Emperor Ming in the Han dynasty is the emperor who built Baima temple⁹,

Table 3-1 Temple construction before Tang dynasty

Dynasty	Constructor		Temple and Stupa	Area
Zhou dynasty	King MU 穆王	Emperor	Zhulin Temple 竹林寺	Mt. Gu 故山
Easter Han dynasty	Emperor Ming 明帝	Emperor	Baima Temple 白馬寺	Luo Yang 洛阳
Three Kingdoms Period	Great Emperor(Kingdom of Wu) 孫權	Emperor	Lechang Temple 昌黎寺	Wu Chang 武昌
	Lady Pan 潘夫人	Nobility	Hubao Temple 惠寶寺	
	Kan Ze 尚書令闕澤	Local official	Deran Temple 德潤寺	
	Zhuge 諸葛氏		Lingbao Temple 靈寶寺	Kuai Ji 會稽
	Li Mao 李邈	Local official	Lingyao Temple 靈耀寺	Ju Rong 句容
	Wang Xizhi 王羲之	Literati	Guizong Temple 錄宗寺	Mt. Lu 廬山
	Xu Xun 許詢	Literati	Stupa 塔四層	
	He Chong 何充	Local official	Jianfu Temple 建福寺	
Western Jin dynasty	Emperor Ai 懿帝	Emperor	Waguan Temple 瓦官寺	
	Emperor Fei 懿帝	Emperor	Wozhou Temple 沃州寺	
	Emperor Jianwen 築文帝	Emperor	Xinlin Temple 新林寺	
		Emperor	Stupa in Changgan Temple 長干寺三級塔	
	Tao Fan 陶範	Local official	Xian Temple 西林寺	
	Huan Yi 桓伊	Local official	Dongjin Temple 東林寺	
	Yun Yi 雲翼	Monk	Dong Temple and Xi Temple 東西二寺	
	Fan Qin 范秦		Zhuhuan Temple 祖烜寺	
	Xie Lingyun 謝靈運	Literati	Zhaoti Temple 招提寺	
	Emperor Wen 文帝	Emperor	Bao'en Temple 報恩寺	
	Dao Hu 道祐	Monk	Stupa	Mao County 马縣
	Yun Mo 曼摩	Monk	Ayuwang Stupa 阿育王塔	
	Xuan Chang 玄暢	Monk	Qidong Temple 齊隆寺	
	Ming Sengshao 明僧紹	Literati	Qua Temple 樓閣寺	Mt. She 抟山
			Guangzhai Temple 光宅寺	
	Emperor Liang 梁武帝	Emperor	Changgan Stupa 長干塔	
			Stupa	
	Tao Hongjing 陶弘景	Taoist	Stupa	Mt. Sanmiao 三茅山
	Xiao Cha 蕭騫	Nobility	Stupa	
	Emperor Wencheng 北魏文成	Emperor	Stupa	Each Prefectures and counties
			Luye Temple 麗野寺	
	Emperor Xiaowen 孝文	Emperor	Baode Temple 普德寺	
			Stupa	
	Duan Hui 段暉		Temple	
			Stupa in Changjian Temple	
Sui dynasty	Emperor Wen 文帝	Emperor	Temple	Xiangzhou 相州
	Xin Yanzi 辛彦之	Local official	Stupa	
	Emperor Wen 文帝	Emperor	Stupa	
	Li Yuan (Emperor Gaozu 唐高祖李淵)	Emperor	Qingchan Temple 清禪寺	
	Zhi Yi 智者禪師	Monk	Chanding Temple 禪定寺	
	Zhen Guan 頤觀禪師	Monk	Yuquan Temple 玉泉山	Mt. Yuquan 玉泉
	Emperor Yang (According to Zhi Yi's word) 智者遺言	Emperor	Tianzhu Temple 天竺寺	Mt. Hulin 虎林山
			Guoqing Temple 國清寺	Mt. Tiantai 天台山
	Emperor Gaozu 唐高祖	Emperor	Shengye Temple 勝業寺	
			Cibei Temple 慈悲寺	
			Yiying Temple 義興寺	
			Xingsheng Temple 興聖寺	
	Emperor Taizong 太宗	Emperor	Temple	Battle fields since the Jianyi Year
			Hongji Temple 虹濟寺	
			Cide Temple 慈德寺	
			Puguang Temple 普光寺	
			Tianguong Temple 天宮寺	Luoyang 洛阳
			Hongfu Temple 弘福寺	
	Prince Li Zhi 皇太子李治	Nobility	Cien Temple 慈恩寺	
	Emperor Ruizong睿宗	Emperor	Daxiangguo Temple 大相國寺	
	Emperor Xuanzong 宣宗	Emperor	Kaiyuan Temple開元寺+Longguang temple龍興寺	Each Prefectures
	Emperor Suzong肅宗	Emperor	Dashengci Temple 大聖慈寺	Chengdu 成都
	Wang Wei 王維	Local official and Literati	Temple	Wang Chuan 瓊川
	Emperor Daizong 代宗	Emperor	Baoying Temple 寶應寺	
			Stupa	Mt. Niushou 牛首山
	Emperor Xuanzong 宣宗	Emperor	Zushi Stupa 祖師塔	
	Emperor Zhaozong 昭宗	Emperor	Caotang Temple 草堂寺	
			Heya Temple 荷葉禪寺	

⁹ 漢明帝。始造白馬寺 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

“Emperor Ai ordered the building of Wanguan Temple¹⁰. ” During the Tang dynasty, the number of temples built reached a peak and most of these temples were built by emperors, especially by Emperor Gaozu and Emperor Gaozong. One reason that the emperors built so many Buddhist temples is “To vigorously revive and promote Buddhism¹¹” and accommodate the monks, the other was to satisfy their own secular desires. In some cases, they built temples to pray and offer blessings for the Imperial Family members. Emperor Taizong “Built the Daci’en Temple for Queen Wende¹²”, “Emperor Xiaowen built the Baode Temple for the Empress¹³. ” In other cases, the temples were built for the purpose of promoting the country. “When Emperor Suzong visited Chengdu, the monk Ying’gan was providing free porridge for the poor. To pray for the prosperity of the country and well-being of his people, Emperor Suzong then commanded the building of Dashengci Temple¹⁴. ” Emperors also built temples to release the souls of soldiers from suffering who had died for their country in war. “Emperor Wen in the Sui dynasty, commanded the building of Jianfu Temple in Xiangzhou, battleground of soldiers who had died in war.¹⁵ ” “Emperor Taizong in the Tang dynasty commanded the building of temples in the places where people had suffered war since the year of Jianyi¹⁶. ” (Zhipan & Benjue, 1910).

3.1.2 Nobility, local officials and literati: Donation of houses as temples

The “Donation of houses as temples” was a popular activity during the Southern and Northern dynasties when the development of Buddhism in China peaked. All the way from the general public, up to the Imperial Family members, people donated their houses as Buddhist temples to locate Buddhist statues and scriptures. Among them all, the nobility, local officials and literati were the main powers behind the donation of houses as temples. “He Chong, the head of the secretariat during the period of Emperor Kang in the

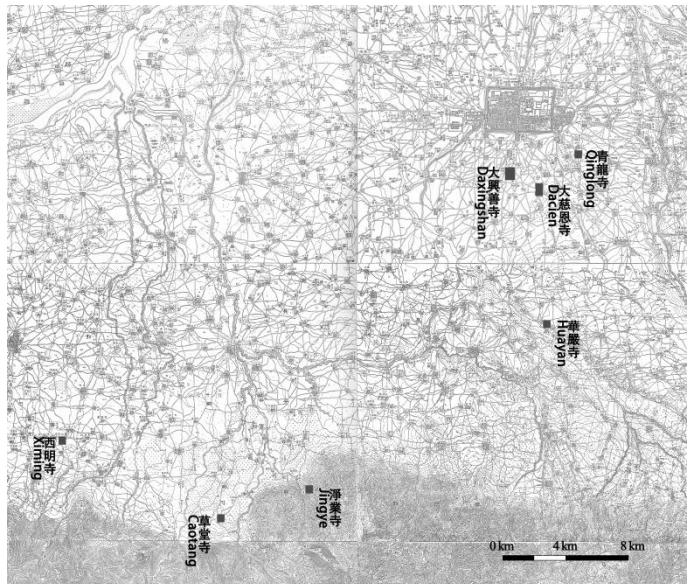


Figure 3-1 Distribution of the temples in Xi'an (Committee of Synthetic Index of China Mainland Maps, 2002)

¹⁰ 哀帝。詔建瓦官寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹¹ 大復佛法 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹² 爲文德皇后建慈恩寺 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹³ 孝文。為太后建報德寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹⁴ 上皇幸成都。沙門英幹施粥救貧餓。願國運再清。勅建大聖慈寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹⁵ 隋文帝。詔相州戰地。為軍士死事者建寺薦福。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹⁶ 建義以來交兵之處各建寺 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

Jin dynasty, donated his house as Jianfu Temple¹⁷.” “Tao Fan, the prefectural governor during the period of Emperor Xiaowu in the Jin dynasty, donated his house as Xilin Temple for the monk Huiyong.¹⁸” There are also numerous cases where the literati donated houses as temples. “A hermit called Ming Sengshao donated his house in Sheshan Mountain as Qixia Temple¹⁹.” “Poet Wang Wei and his brother Wang Jin were both Buddhists. They donated their Wangchuan house as a temple after the death of their mother²⁰.” The popularity of the “Donation of houses as temples” not only reflected the popularity of Buddhism in China but also showed the people’s respect for Buddhism during that time.

3.1.3 Monks: Choice of sites for temples.

In the process of constructing temples, monks played an important role in choosing sites for temples. Although “Jiujiang prefectural governor Huan Yi built Donglin Temple for monk Huiyuan²¹” Actually monk Huiyuan chose the site for Donglin Temple. “When Huiyuan build the Donglin Temple, he made the utmost of the beautiful natural environment of Lushan Mountain. The temple faces to the Xianglu Peak (Thurible Peak) and next to a valley with a waterfall²².” In the case of Guoqing temple Emperor Yang in the Sui dynasty built the temple in Tiantai Mountain, according to monk Zhiyi’s last words²³.” It is clear that before his death, monk Zhiyi had already chosen a place for building Guoqing Temple.

3.2 Temple site condition in literature

3.2.1 Temples in the city

Chang’an and Luoyang are two of the main cities where numerous Buddhist temples were built. Tang Chang’an City was built on the base of Daxing City during the Sui dynasty. Because Chang’an City was the center of Buddhism for the whole country, there are numerous temples distributed throughout the city (Fig. 3-1). According to *Liang Jing Xin Ji*(兩京新紀) there are 91 temples in Chang’an (Wei, Tang dyansty). *Chang’an Zhi* (長安志) recorded that there are 104 temples. Temples are located in most of the more than one hundred subdivisions within Chang’an City (Song, Song dynasty).

¹⁷ 康帝。中書令何充，舍宅爲建福寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹⁸ 武帝。潯陽刺史陶範。舍所居爲永法師建西林寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

¹⁹ 居士明僧紹。以攝山宅爲棲霞寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

²⁰ 王維與弟縉奉佛。母喪以輞川第爲寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

²¹ 九江刺史桓伊。爲遠法師建東林寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhipan & Benjue, 1910)

²² 遠創造精舍洞盡山美。却負香爐之峯。傍帶瀑布之壑。 (Southern and Northern dynasties, 420A.D.-589A.D.) 慧皎「高僧傳」(Huijiao, Southern and Northern dynasties)

²³ 智者遺言。於天台山造國清寺。 (Song dynasty, 960A.D.-1279A.D.) 志磐「佛祖統紀」(Zhi & Ben, 1910)

The general situation and location of the important Buddhist temples in Xi'an (Tang Chang'an) City were described in the *Da Xing Shan Si Lve Ji* (大興善寺志略)

"Daxingshan Temple is located about 5 miles to the south of Xi'an City... about 50 miles east to the Caotang Temple... about 3 miles west to Daci'en Temple... about 2 miles to the south of Jianfu Temple...about 5 miles to the west of Qinglong Temple...about 20 miles to the northwest of Huayan Temple...about 40 miles to Xingjiao Temple...about 50 miles to the northeast of Linggan Temple and Jingye Temple...about 10 miles to the north of Xiangji Temple...about 50 miles to the Zhongnan mountain pagoda and the monk Yin Guang's stupa²⁴."

Most of the temples are close to the Imperial City, for example, Daxingshan Temple is located in a place "about 5 miles to the city, where it is neither too noisy nor too remote²⁵." Daci'en Temple which is the ancestor court of Faxiang school is located on the southeast of the Imperial City. It is "on the north side of Qu River²⁶" "to the south of Daci'en Temple where Huangqu bamboo groves are located. It is the quietest and most bamboo surrounded place in the whole city²⁷ Ximing Temple is located in "the southwest corner of Chang'an²⁸" Qinglong Temple is "on the north of a mesa in Chang'an²⁹."

According to *Temple records in Luoyang City* (洛陽伽藍紀), Baima Temples is located on the Yu Road (road for the Imperial Carriage) 3 miles to the Xiyang Gate of Luoyang City.³⁰ (Fig.3-2)

3.2.2 Temples in mountains

1) Surrounded by peaks and hills

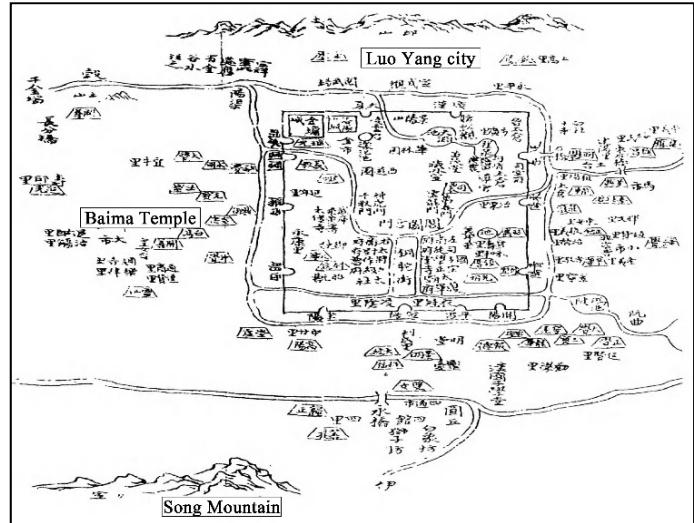


Figure 3-2 Baima Temple in Luoyang City (Yang, Southern and Northern dynasty)

²⁴ 西安南，有大興善寺，寺距城約五里許... 西距...草堂寺...約五十里。東距...大慈恩寺...約三里許。北距...荐福寺...約二里許。東距...青龍寺...約五里。東南距...華嚴寺，約二十里。距...興教寺，約四十里。西南距...靈感寺，及...淨業寺...約五十餘里。南距...香積寺...約十餘里。距終南山...寶塔，及...印光大師舍利塔約五十餘里。(ROC, 1946) 康寂園「大興善寺紀略」(Kang, 2006)

²⁵ 距城約五里許，既不喧囂，亦不偏僻。(ROC, 1946) 康寂園「大興善寺紀略」(Kang, 2006)

²⁶ 寺在曲江北。(ROC, 1946) 康寂園「大興善寺紀略」(Kang, 2006)

²⁷ 寺南臨黃渠之竹，森邃為京都之最。(ROC, 1946) 康寂園「大興善寺紀略」(Kang, 2006)

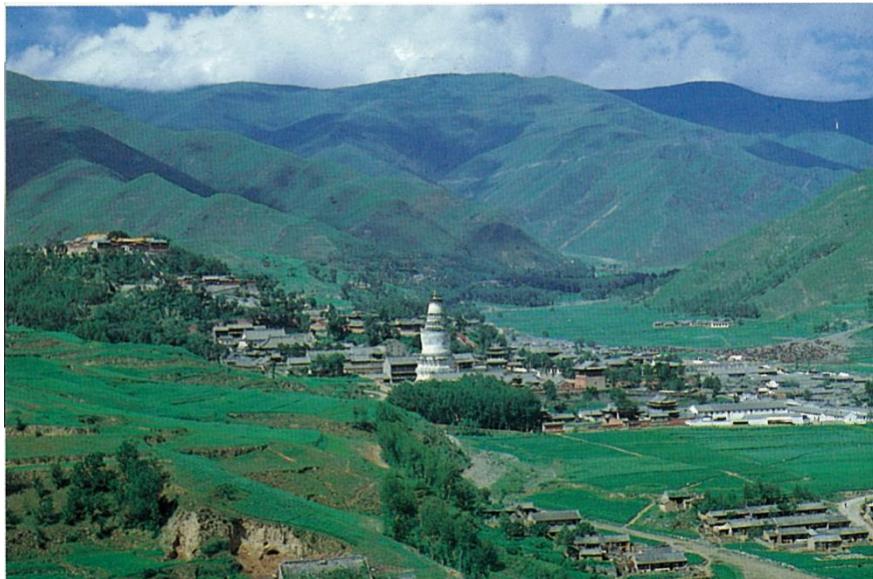
²⁸ 長安西南隅 (ROC, 1946) 康寂園「大興善寺紀略」(Kang, 2006)

²⁹ 北枕高原 (ROC, 1946) 康寂園「大興善寺紀略」(Kang, 2006)

³⁰ 在西陽門外三里御道。(Southern and Northern dynasties, 420A.D.-589A.D.) 楊銜之「洛陽伽藍紀」(Yang, Five Dynasties and Ten Kingdoms)

Peaks refer to high and sharp-topped hills. In the mountain landscape, the peak is usually the most attractive landmark thus is used to recognize the landscape of the temple surroundings. Numerous Chinese Buddhist temples built during the Sui and Tang dynasties are in places surrounded by peaks and some of them are well known for their unique peak surrounded environments.

Wutai Mountain, as the name suggests, has five terraces (五臺) or some say five peaks, on the east, west, north, south and middle respectively. *Qing Liang Shan Zhi* 清涼山志, described the landform of Wutai Mountain as “Five peaks are in the inner place and countless hills surrounding them in the outer place layer upon layer³¹. (Pic.1)”



Pic 3-1 Temples surrounded by Wutai Mountains (People's Fine Arts Publishing House, 1984)

Guoqing Temple is also situated in a place surrounded by five peaks. *Tian Tai Shan Quan Zhi* (天臺山全志) recorded its landform as “the temple is surrounded by five peaks and two gullies across two sides of Guoqing Temple³².”

Qiyin Temple is to the northwest of Yangshan Mountain in Jiangxi province. The surrounding landform of this temple is not written about in literature but according to the landform of Yangshan Mountain

described in *Yang Shan Cheng* (仰山乘), it can be speculated that Qiyin is surrounded by peaks. *Yang Shan Cheng* stated that “Yangshan Mountain is deep and unpredictable so that few people can get into this mountain. However, the sheer hills stand into the air. The mountain shape resembles the lotus flower thus it is named Lotus Mountain³³.”

Longchang Temple is in Baohua Mountain. *Bao Hua Shan Zhi* (寶華山志) recorded the mountain landform as “it resembles the calyx of the lotus flower and the lotus pod³⁴.” Longchang Temple is surrounded in the lotus calyx-like hills.

Hills rise up and down around the temples as screens and walls. This kind of landform created a more varied space for the temples. Shaolin Temple is at the bottom of Shaoshi Mountain, part of Songshan Mountain. The landform

³¹ 五峯中立，千嶂環開。(Ming dynasty, 1368A.D.-1644A.D.) 鎮澄「清涼山志」(Yin, 1861-1940)

³² 寺居五峯之內。夾兩澗之流。(Qing dynasty, 1644A.D.-1912A.D.) 張聯元「天臺山全志」(Zhang, 1721)

³³ 幽深叵測，人跡罕至。然峻嶺絕巘，有摩天挿漢之勢。山形絕肖蓮花，故名曰蓮花山。(Ming dynasty, 1368A.D.-1644A.D.) 程文舉「仰山乘」(Cheng, Ming dynasty)

³⁴ 如華之含萼，如蓮之有房也。(Qing dynasty, 1644A.D.-1912A.D.) 德基「寶華山志」(Liu, Qing dynasty)

of Shaolin Temple was described in the *Shao Lin Si Zhi* (少林寺志) as “Wuru Peak branches from the Boyu Peak and the five peaks of Wuru Peak extend for ten miles like the outspread wings of a phoenix. Shaolin Temple is built surrounded by Wuru peak³⁵. ” It can be found from this text that Shaolin Temple is surrounded by the hills composed of Wuru Peak, Yubo Peak and others. Dafawang Temple which is in Songshan Mountain has a similar landform with Shaolin Temple as “The temple is backed by Songshan Mountain, as the peak’s two outspread wings surround the temple on the right and left side³⁶. ”

Different from the “two wings alike” landform of Shaolin Temple and Dafawang Temple, Tiantong Temple in Tiantong Mountain and Qixia Temple in Sheshan Mountain are screened on three sides by hills. The Sheshan Mountain is “in a round shape like a lid, thus it is also referred to as Sanshan (Umbrella Mountain). The mountains are surrounding on the left and right. The mountain in the background stands erect between them³⁷. ” Qixia Temple is located in the middle of Sheshan Mountain and surrounded by hills. Tiantong Temple is situated at the bottom of Taibai Mountain and is surrounded by hills on three sides as well.

Lu Shan Zhi (廬山志) described the landform of Lushan Mountain where Donglin Temple is located as “Donglin Temple is facing Xianglu Peak. This peak branches to the east, and surrounds Donglin Temple from north to west as a city wall. Donglin Temple is in the middle of these mountains³⁸. ” The temple is surrounded by hills on four sides.

2) On the mountain top

The top of the mountain is the most strategic place on the whole mountain and some temples were built here. Guangxiang Temple in E'mei Mountain is “on the top of Da'e Peak (Jinding Peak)... It occupies the greatest place in the Emei Mountain³⁹. ” According to *E'mei Shan Zhi* (峨眉山志), the E'mei Mountain was considered to be



Pic 3-2 E'mei Mountain (The Buddhist Association of China, 1981)

³⁵ 五乳峯...自鉢盂峯斜分一支，五頂相連，圍踰十里。如鳳張兩翼，少林寺建其中。(Ming dynasty, 1368A.D.-1644A.D.) 傅梅「嵩山少林寺輯志」(Fu, 1980)

³⁶ 寺背負嵩岑，如倚左右，高峰張兩翼如衛。(Ming dynasty, 1368A.D.-1644A.D.) 傅梅「嵩山少林寺輯志」(Fu, 1980)

³⁷ 形團如蓋又曰繖山，左右環拱，遠近相望其間。屹然卓立。(ROC 1962) 朱潔軒「棲霞山志」(Zhu, ROC)

³⁸ 東林寺正對香爐峯，峯分一枝東行，自北而西環合四抱，有如城郭，東林在其中。(ROC 1933) 吳宗慈「廬山志」(Wu, 1980)

³⁹ 在大峨峯頂，即金頂...亦山頂形勢最勝處也。(Qing dynasty, 1644A.D.-1912A.D.) 蔣超「峨眉山志」(Jiang, 1861-1940)

“the highest mountain in Shu... Taishan Mountain in Qi and Wudang Mountain in Chu can't be compared to it⁴⁰. ” Ming Shan Ji (名山記) stated that “E'mei Mountain is two hundred and twenty miles high.⁴¹” Emperor Taizong described the scenery of E'mei Mountain in his poem Yong Qiu Ri (咏秋日) “Even from Chengdu City, I can see the view of E'mei Mountain in front of my eyes.⁴²” From the texts above it can be found that E'mei Mountain is extremely high and steep and the Guangxiang Temple is on the top of the mountain (Pic. 2).

3) On the mountain ridge or on the mountain side

Jinge Temple in Wutai Mountain is located on the “northwest ridge of the Nantai (West terrace).⁴³” Lingyan Temple is situated on the northwest of Taishan Mountain and the landform was described as, “Lingyan Temple is at the bottom of Fang Mountain, namely Shuijingyufu Mountain. It is a crag on the northwest of Taishan Mountain.⁴⁴” Huayan Temple is located on the edge of Shaoling Yuan (少陵原 Shaoling Platform) to the southeast of Xi'an City. From this temple, tourists can appreciate the view of the Fanchuan Plain (Pic. 3).

3.2.3 On the river

The case of temples built on the river is very rare and Jinshan Temple in Zhenjiang is one of the few temples which is surrounded by water. “Jinshan Mountain is located on the Yangtze River and five miles northwest to the town of Zhenjiang⁴⁵. ” “(Jinshan Mountain) sits on the south side of the Yangtze River ... standing erectly in the middle of the water⁴⁶. ” (Pic. 5)



Pic 3-3 Jinshan Temple located on Zhen Jiang River (The Buddhist Association of China, 1981)

⁴⁰ 峨眉山在蜀，爲最高峻...齊之泰岱，楚之武當，皆不及也。 (Qing dynasty, 1644A.D.-1912A.D.) 蔣超「峨眉山志」(Jiang, 1861-1940)

⁴¹ 高二百二十里 (Qing dynasty, 1644A.D.-1912A.D.) 蔣超「峨眉山志」(Jiang, 1861-1940)

⁴² 還似成都望，直見峨眉前。 (Qing dynasty, 1644A.D.-1912A.D.) 蔣超「峨眉山志」(Jiang, 1861-1940)

⁴³ 南臺西北嶺 (Ming dynasty, 1368A.D.-1644A.D.) 鎮澄「清涼山志」(Yin, 1861-1940)

⁴⁴ 靈巖寺在方山下，卽水經玉符山，乃泰山西北麓之一巖也。 (Qing dynasty, 1644A.D.-1912A.D.) 王昕「靈岩志」(Wang, 2006)

⁴⁵ 金山在鎮江府城西北揚子江中，自城至山五里。 (Qing dynasty, 1644A.D.-1912A.D.) 盧見曾「金山志」(Lu, Qing dyansty)

⁴⁶ 坐於江南京口...孤峙江心上。 (Qing dynasty, 1644A.D.-1912A.D.) 盧見曾「金山志」(Lu, Qing dyansty)

3.3 Site condition and Visual structural analysis

3.3.1 Temples in the city

1) On the side of the platform

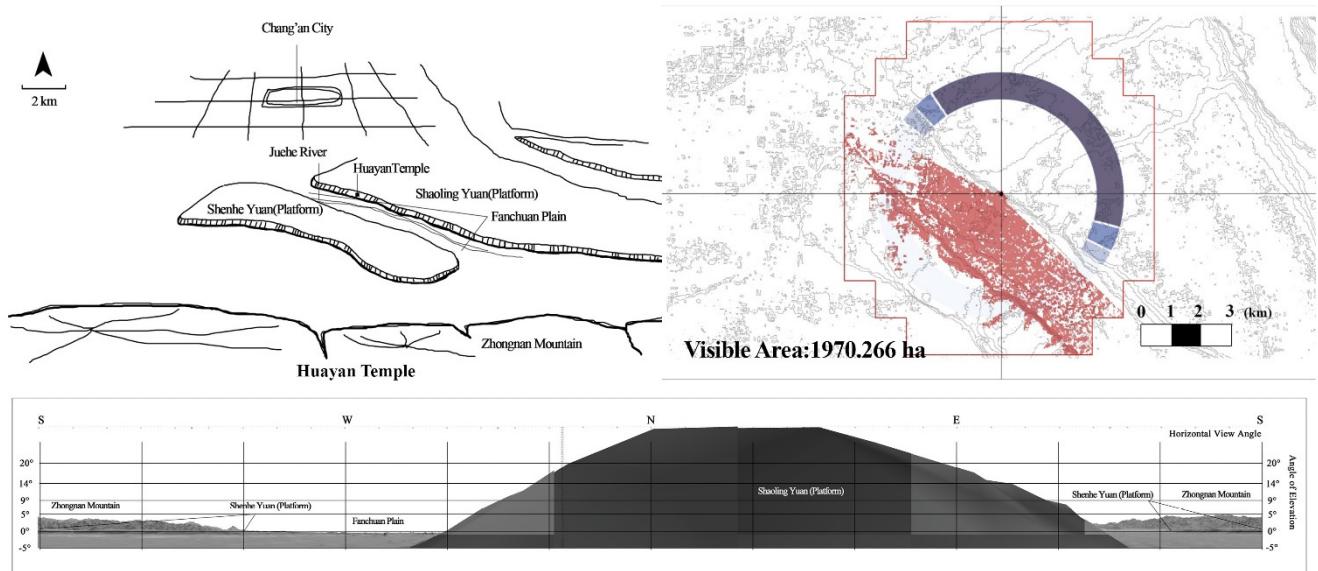


Figure 3-3 Site condition and visual structural analysis of Huayan Temple

Huayan Temple, in the south east of Xi'an City and north of Zhongnan Mountain, is located on the south side of Shaoling Yuan platform and facing the Shenhua Yuan platform (Fig. 3-3). The Fanchuan Plain is between these two platforms and the Juehe River, originating in Qinling Mountain, flows above it. Huayan Temple backs onto the Shaolin Yuan platform and there is an overlooking view of the Fanchuan Plain when looking to the Shenhua Yuan platform 2 km away to the southwest. The distant Zhongnan Mountain, about 13 km away to the southwest, can be seen from the Huayan Temple but the elevation angle is 5 degrees below thus the enclosure is weak in this direction.

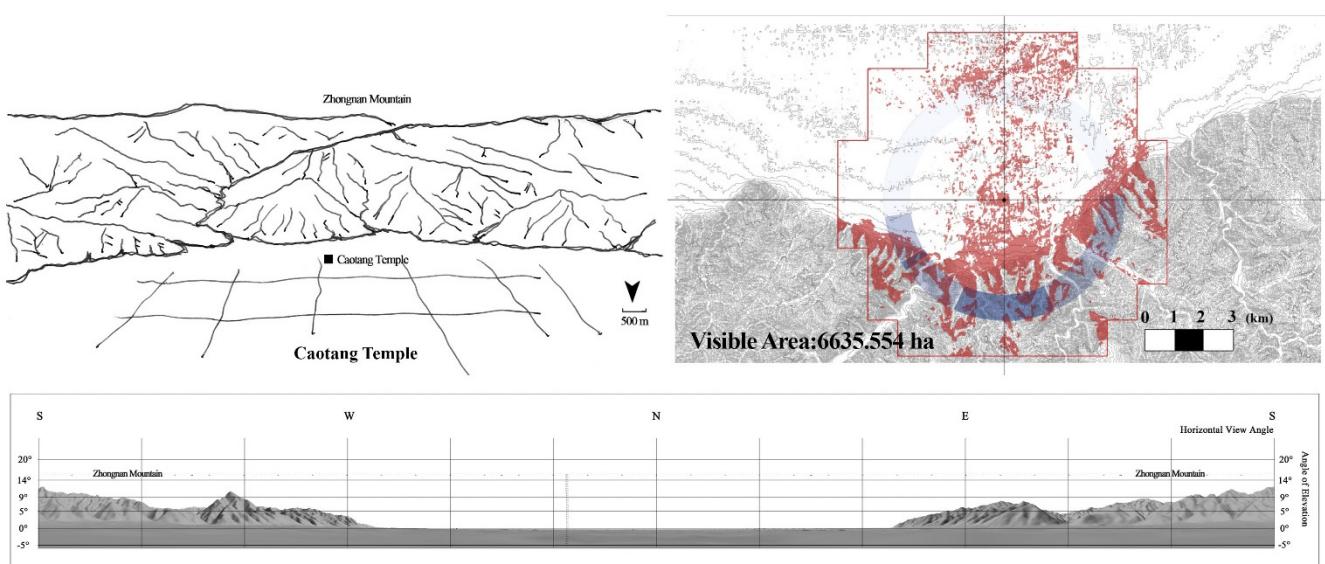


Figure 3-4 Site condition and visual structural analysis of Caotang Temple

2) Distant Mountain

Caotang Temple and Ximing Temple in the southern suburb of Xi'an City are near to Zhongnan Mountain with distances of 2 km and 3 km, respectively (Fig. 3-4, 3-5). The distant Zhongnan Mountain can be seen from these

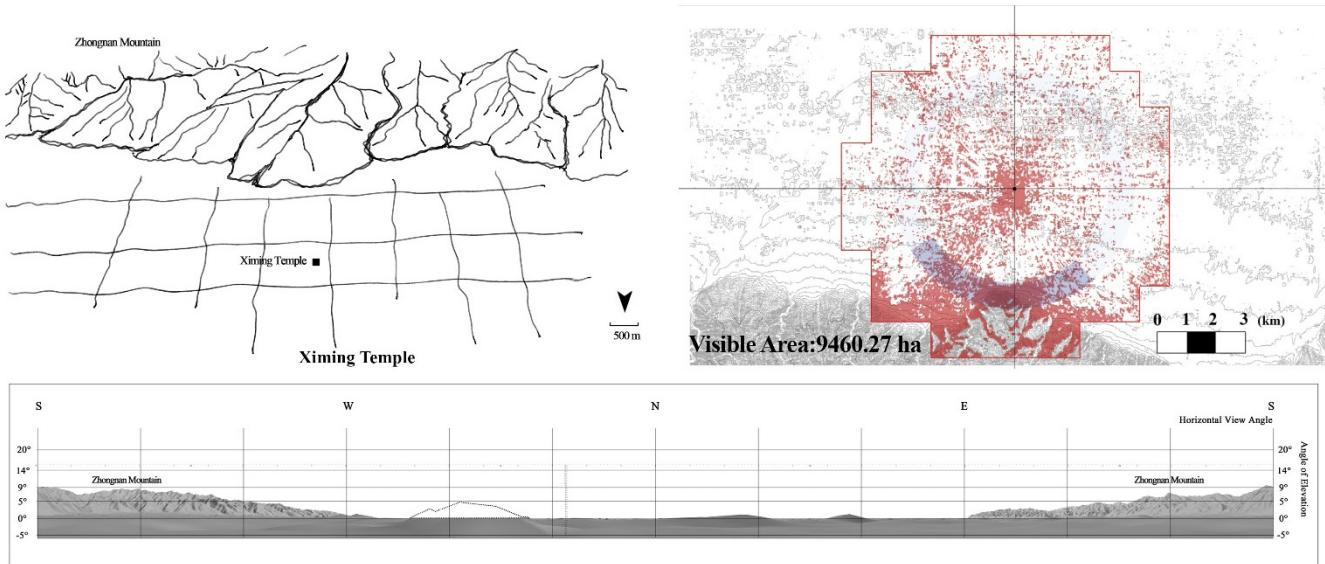


Figure 3-5 Site condition and visual structural analysis of Ximing Temple

temples. With a shorter distance to Zhongnan Mountain, the view of Zhongnan Mountain from Caotang Temple is with a shorter visual distance, greater elevation angle of the mountain and with clearer profiles of the peaks than that from Ximing Temple, therefore the sense of enclosure is stronger.

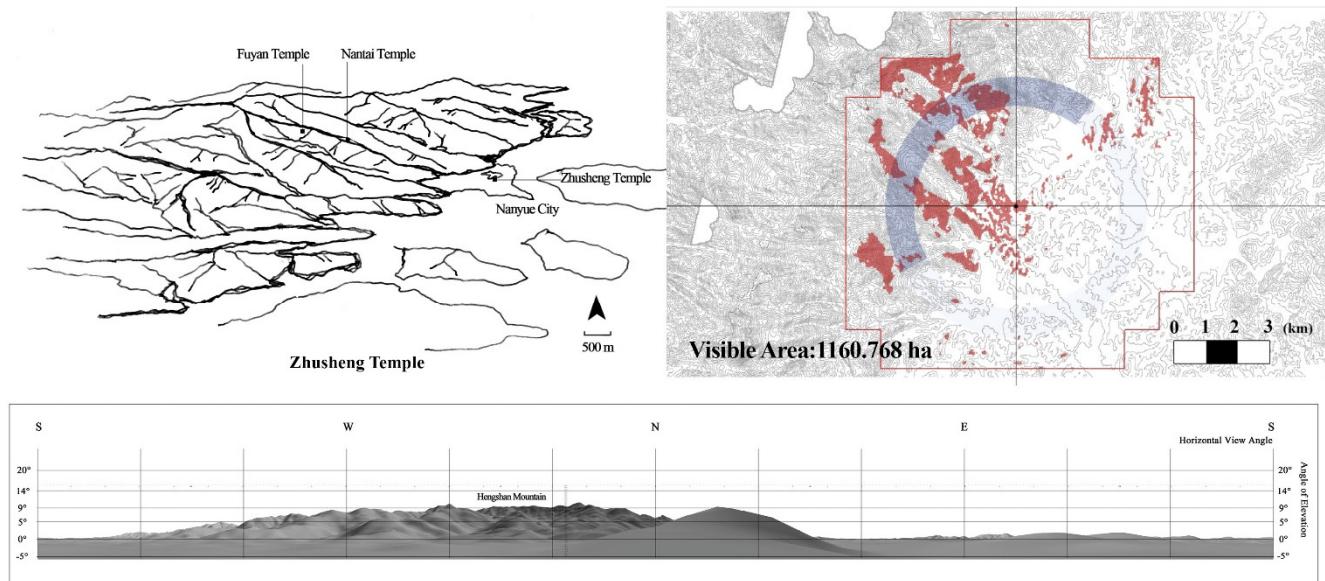


Figure 3-6 Site condition and visual structural analysis of Zhusheng Temple

Zhusheng Temple is located at the foot of a hill in Nanyue City. It is 2 km southeast of Hengshan Mountain and the view of the mountain can be seen from the temple (Fig. 3-6). Due to the short visual distance, the peaks on Hengshan

Mountain can be individually distinguished one by one from the temple. The horizontal view angle of mountain ranges less than 180 degrees in these 3 temples, thus the sense of enclosure is weaker than the temples surrounded by mountains.

3.3.2 Temples in the mountains

1) Flat ground surrounded by mountains

Among the study objects in this research, most of the temples were located on flat ground surrounded by mountains. However, because of their differences in area, height, shape of the mountains and temple location, the visual and spatial characteristics are quite different from one other.

a. Surrounded by near mountains and distant peaks

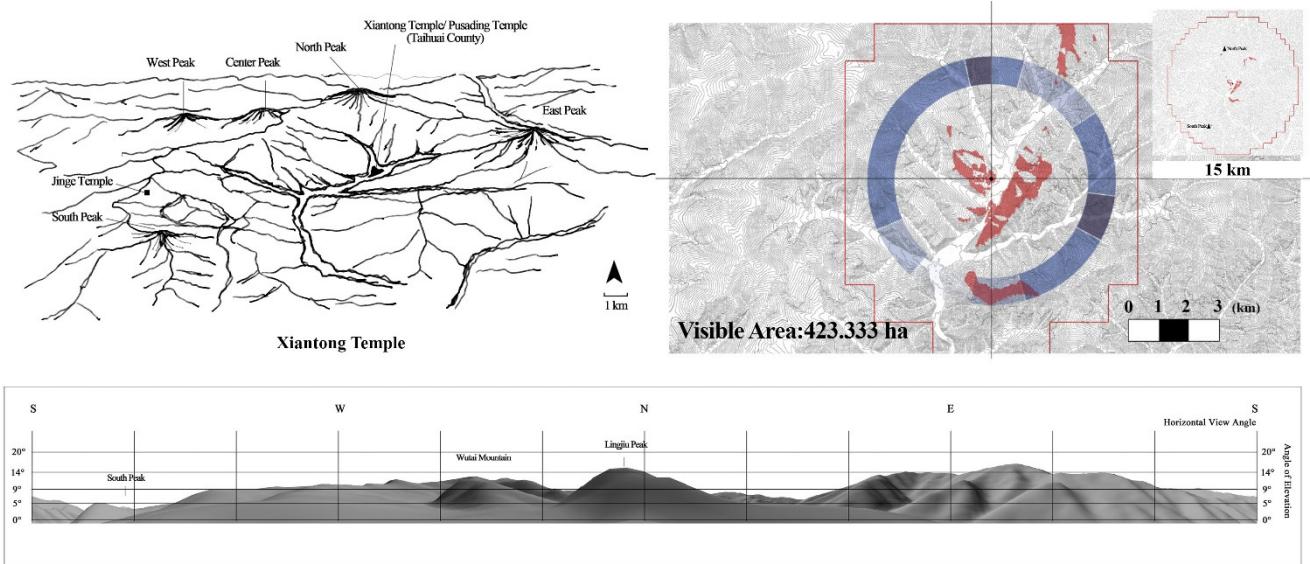


Figure 3-7 Site condition and visual structure analysis of Xiantong Temple

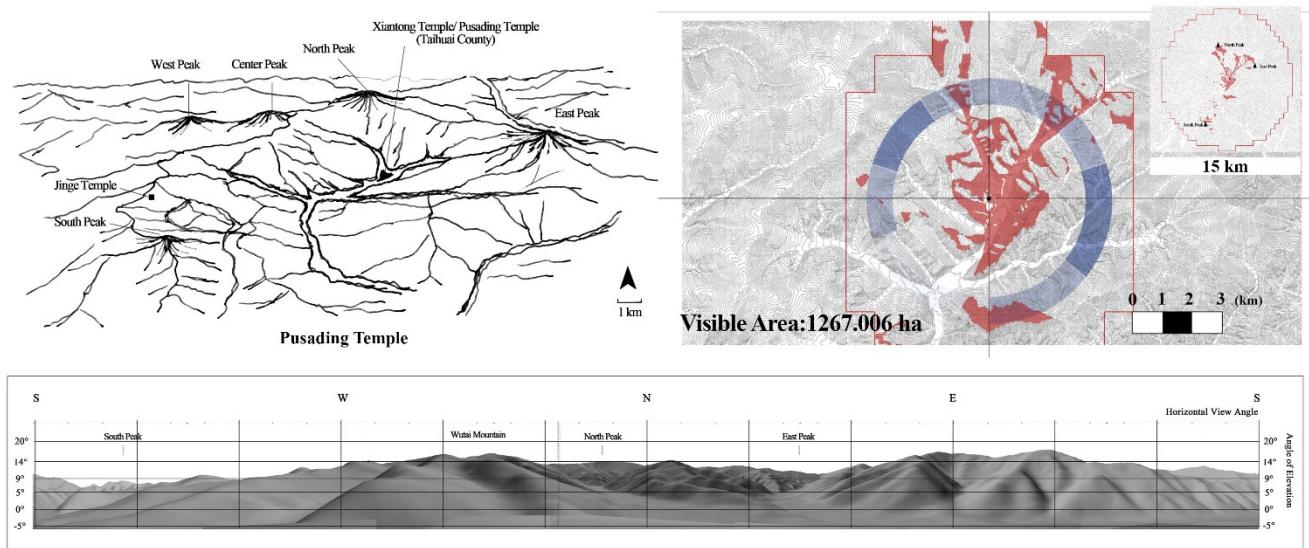


Figure 3-8 Site condition and visual structural analysis of Pusading Temple

Wutai Mountains are a series of mountain groups located in the northeast part of Wutai County in Shanxi province, with an area of 2837 square kilometers. Xiantong Temple and Pusading Temple are two adjacent temples located in Taihuai County, the central area of the Wutai Mountains. From Xiantong Temple, which has its back to Lingjiu peak, not only the peaks close by can be seen but also the northern and southern peaks of Wutai Mountains (Fig.3-7). The horizontal view angle of mountain is 330 degrees in the panoramic view from Xiantong Temple. Pusading Temple is on the top of a hill called Lingjiu Peak (Its name originates from the Vulture Peak in ancient India), which is also the highest point in Taihuai County, thus the view overlooking the near mountains as well as the north peak, which is 8 km away, the south peak, which is 10 km away, and the east peak, which is 7 km away, can be seen from Pusading Temple (Fig. 3-8).

b. Surrounded by near peaks

Guoqing Temple, to the south of Tiantai Mountain and is 11 km to the southwest of Huading Peak which is the highest peak on Tiantai Mountain. The temple is surrounded by five peaks, Lingqin Peak, Bagui Peak, Lingzhi Peak, Yingxia Peak and Xiangyun Peak which are close to Guoqing Temple with an average visual distance of about 600 meters (Fig. 3-9). Elevation angles of these peaks are above 9 degrees and their profiles are clearly visible thus create a strong sense of enclosure. Although Guoqing Temple is near to Tiantai County, due to its environment of

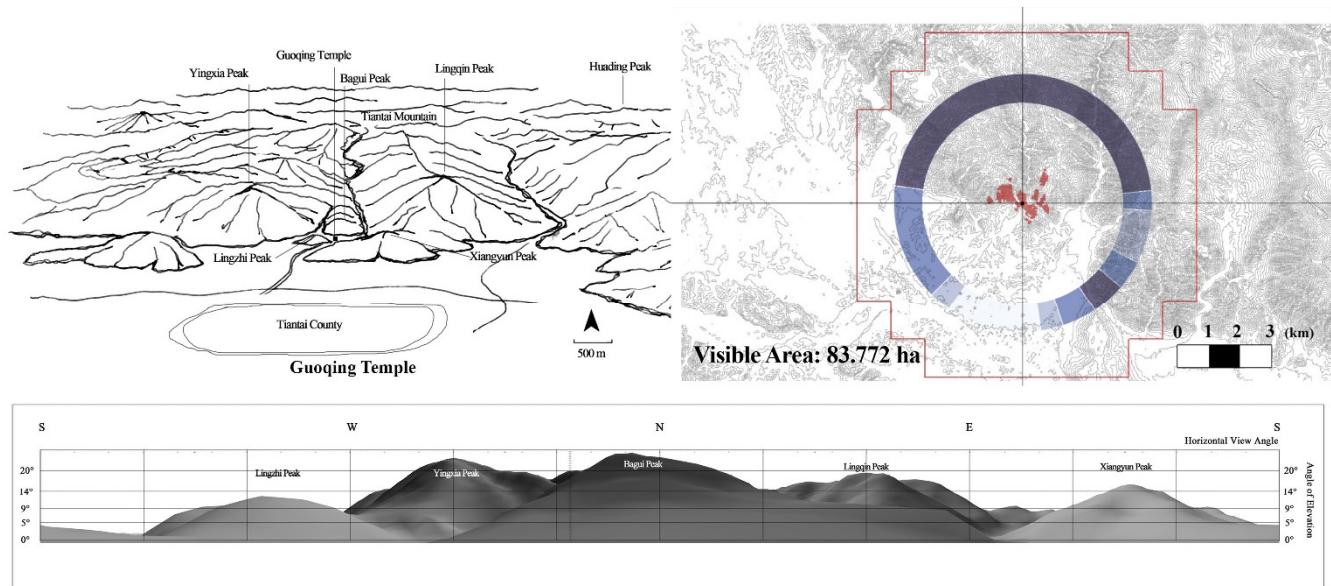


Figure 3-9 Site condition and visual structural analysis of Guoqing Temple

five surrounding peaks, the sight is completely separated from the outside and forms an enclosed space.

Xuanzhong Temple, located in Shibi Mountain, is also surrounded by near peaks. However, compared to Guoqing

Temple, the visual distances of the peaks are ever shorter, the average elevation angle is above 20 degrees (Fig. 3-10).

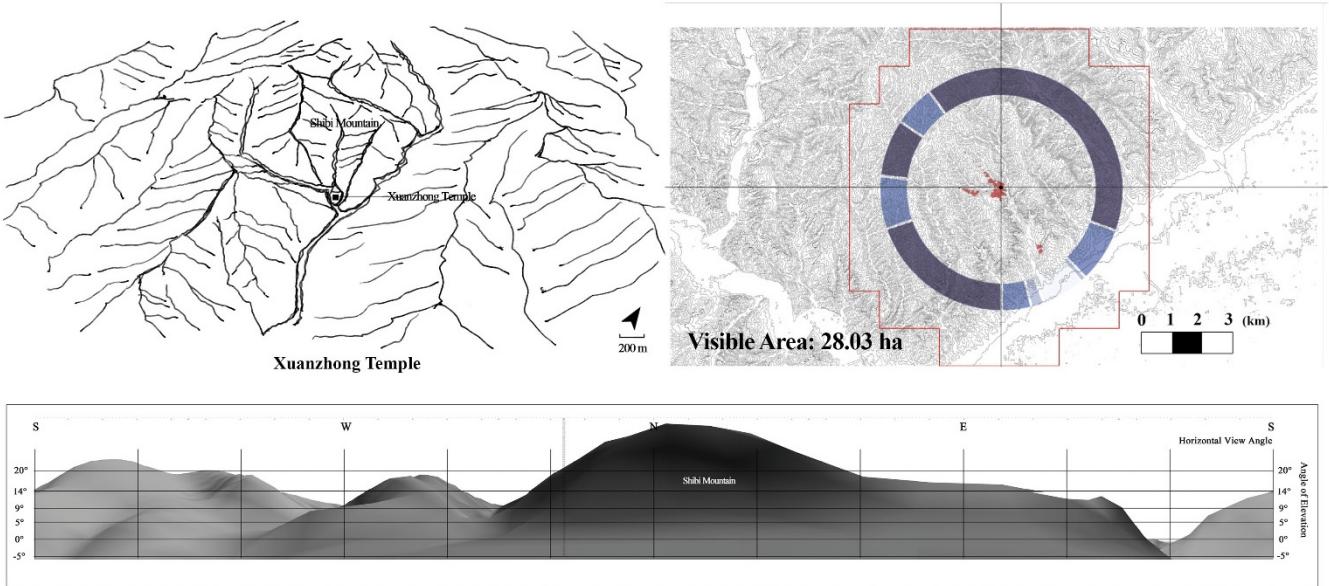


Figure 3-10 Site condition and visual structural analysis of Xuanzhong Temple

10). Therefore, the peaks surround the temple like walls.

c. Surrounded by multi-layer peaks

Tiantong Temple is to the south of Taibai Mountain, its back is to the south of Taibai Peak and is beside various peaks, such as Center Peak and Yubo Peak, situated on two sides layer by layer. With an opening to the south, the temple faces to Pan Mountain and the elevation angle is around 5 degrees (Fig.3-11). Due to its environment surrounded by mountains, the average elevation angle of the peaks is above 14 degree and the sense of enclosure is strong.

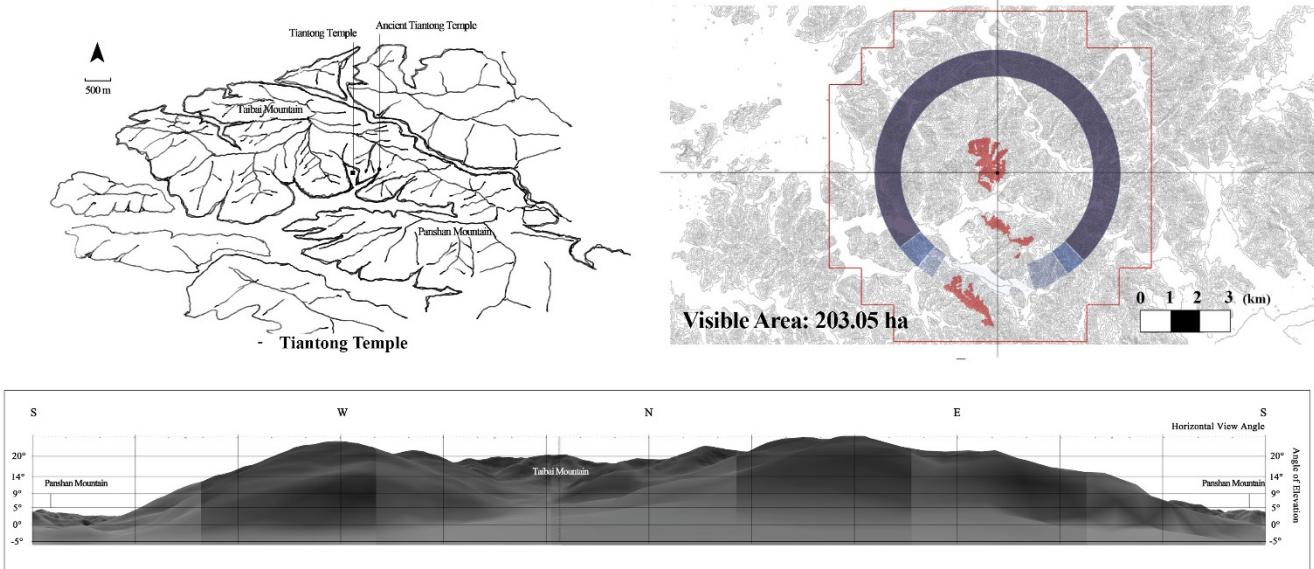


Figure 3-11 Site condition and visual structural analysis of Tiantong Temple

The site condition of Qiyin Temple is similar to that of Tiantong Temple. Backed to the north by Yangshan Mountain, the temple is surrounded by numerous peaks on two sides and faces a mountain to the south (Fig. 3-12).

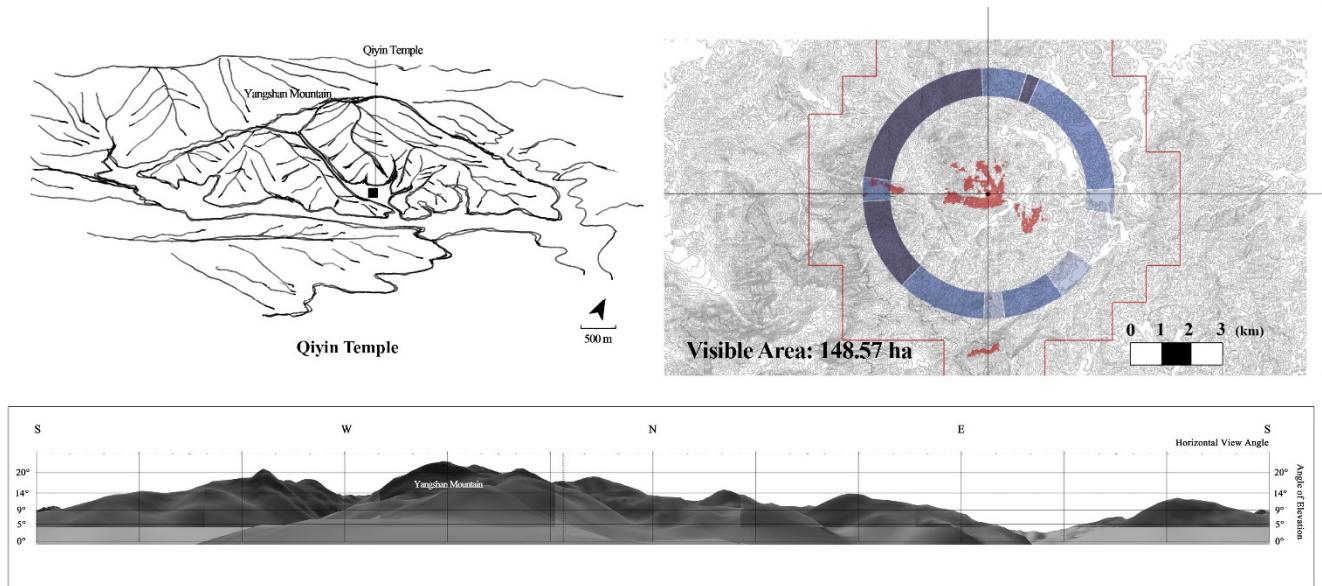


Figure 3-12 Site condition and visual structural analysis of Qiyin Temple

Wanfu Temple is located in Huangbo Mountain, its back to Yubo Peak, surrounded by Tianzhu Peak, Ziwei Peak and Pingzhang Peak on the east and west sides, facing a mountain to the south (Fig. 3-13). The elevation angle of these peaks is above 9 degrees with a short visual distance. Therefore the sense of enclosure is also strong in Wanfu Temple.

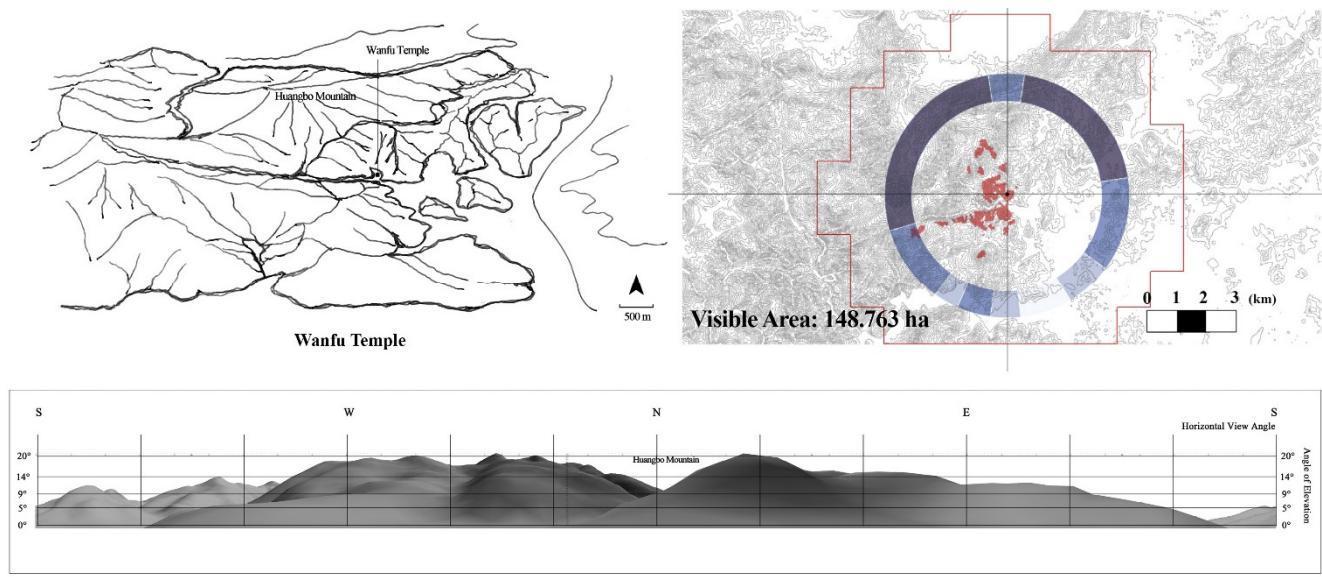


Figure 3-13 Site condition and visual structural analysis of Wanfu Temple

Dongshan Temple is surrounded by small rolling hills in Dongshan Mountain. Although the elevation angle of the mountains is above 5 degrees and the sense of enclosure is as strong as other temples surrounded by mountains, the

profile of the peaks is relatively gentle compared to the other temples (Fig. 3-14).

In front of these temples there are rivers that flow through or channels that pass through the gullies between the mountains.

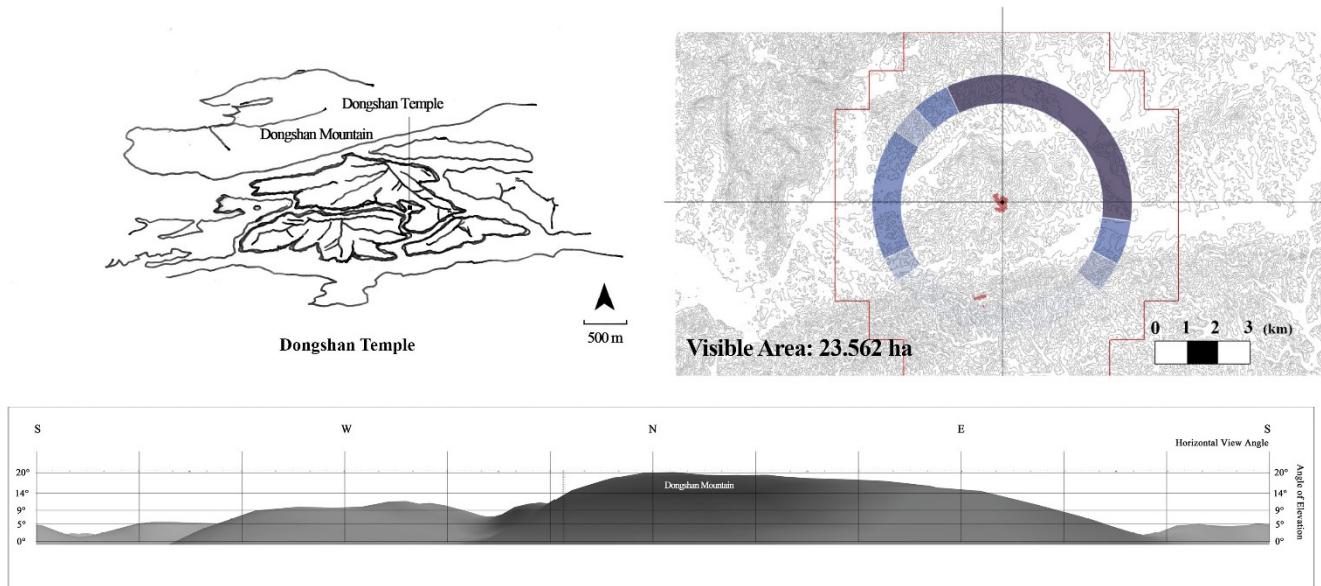


Figure 3-14 Site condition and visual structural analysis of Dongshan Temple

d. In a basin on the mountain

Qixia Temple is located in a basin on the eastern side of Qixia Mountain which is to the south of the Yangtze River. The temple backs onto East Peak and is surrounded by Long Peak to the south, Hu Peak to the north and Center Peak to the southeast (Fig. 3-15). There is a distant mountain 1.7 km to the west of Qixia Peak called Beixiang Mountain and the elevation angle of Beixiang Mountain is below 5 degrees. From the top of East Peak, the highest

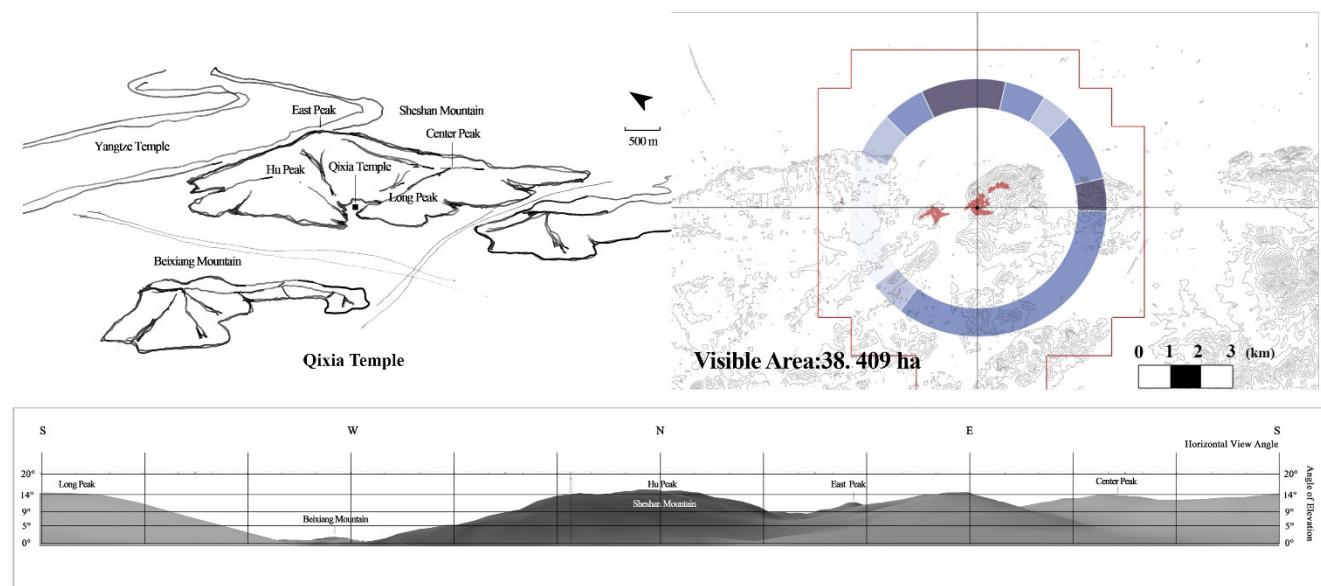


Figure 3-15 Site condition and visual structural analysis of Qixia Temple

peak in Qixia Mountain, people can enjoy the view overlooking the Yangtze River.

e. On the saddle between two peaks

Longchang Temple is located in a depression of the saddle between Dahua Peak and Tianlong Peak on Baohua Mountain. There are 36 peaks in total in Baohua Mountain, and the temple is situated in a relatively central position. Although Longchang Temple is in the middle of two peaks, they can't be seen from the temple due to the near mountains (Fig. 3-16). Only the view overlooking the distant mountain and the Yangtze River can be seen in the northern direction. Because of the contrast of visual distance and elevation angle between the mountain and river view to the north and the near mountain, there is a strong sense of "here" and "there" at Longchang Temple.

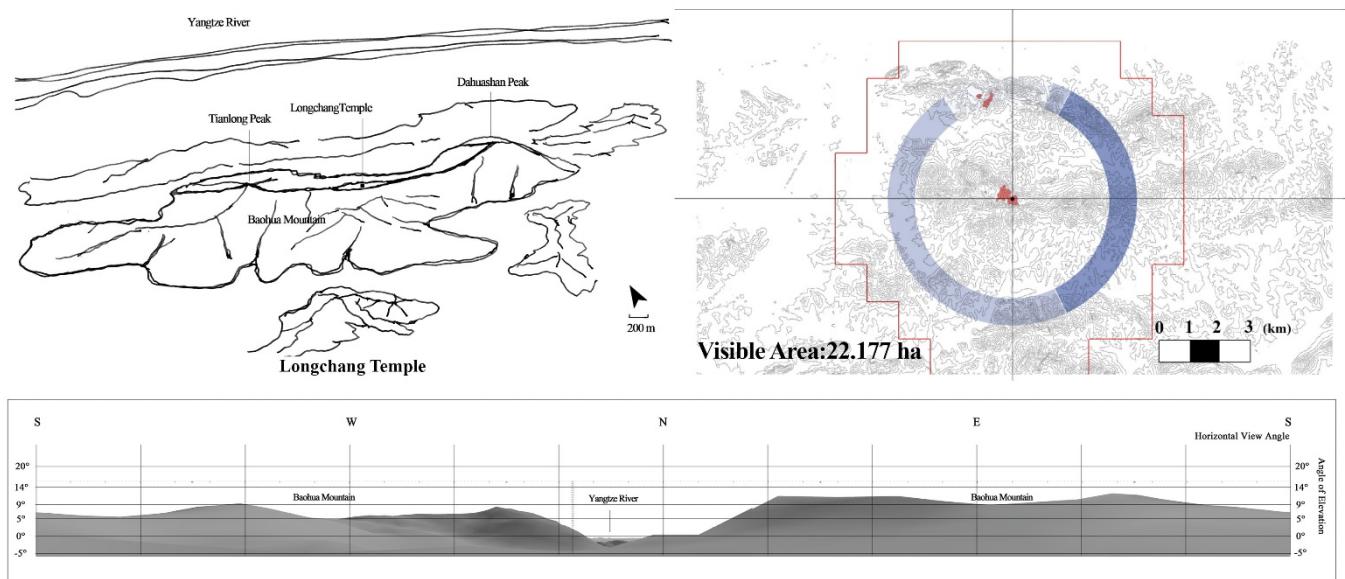


Figure 3-16 Site condition and visual structural analysis of Longchang Temple

2) Valley

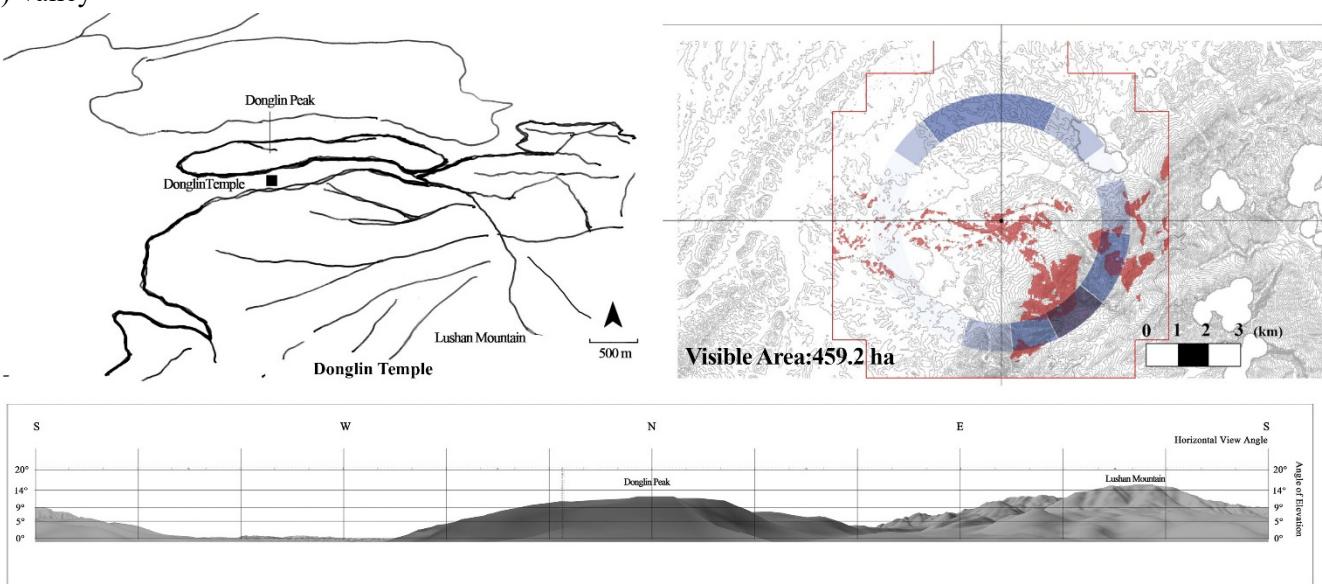


Figure 3-17 Site condition and visual structural analysis of Donglin Temple

a. In the middle of a valley

Situated in the middle of a valley, Donglin Temple is in a valley to the northwest of Lushan Mountain. It is backed to the north by Donglin Peak and faces to Xianglu Peak⁴⁷ in the south. Due to the high Lushan Mountain to the south, the magnificent Lushan Mountain view can be seen from Donglin Temple with a long visual distance and great elevation angle (Fig. 3-17). As the temple backs onto Donglin Peak, the elevation angle of the peak is above 9 degrees. On the west side of the temple is the entrance of a valley and on the other side is the mountain at end of the valley with an elevation angle below 5 degrees. There is a visual path in an east-west direction which makes the view not completely enclosed.

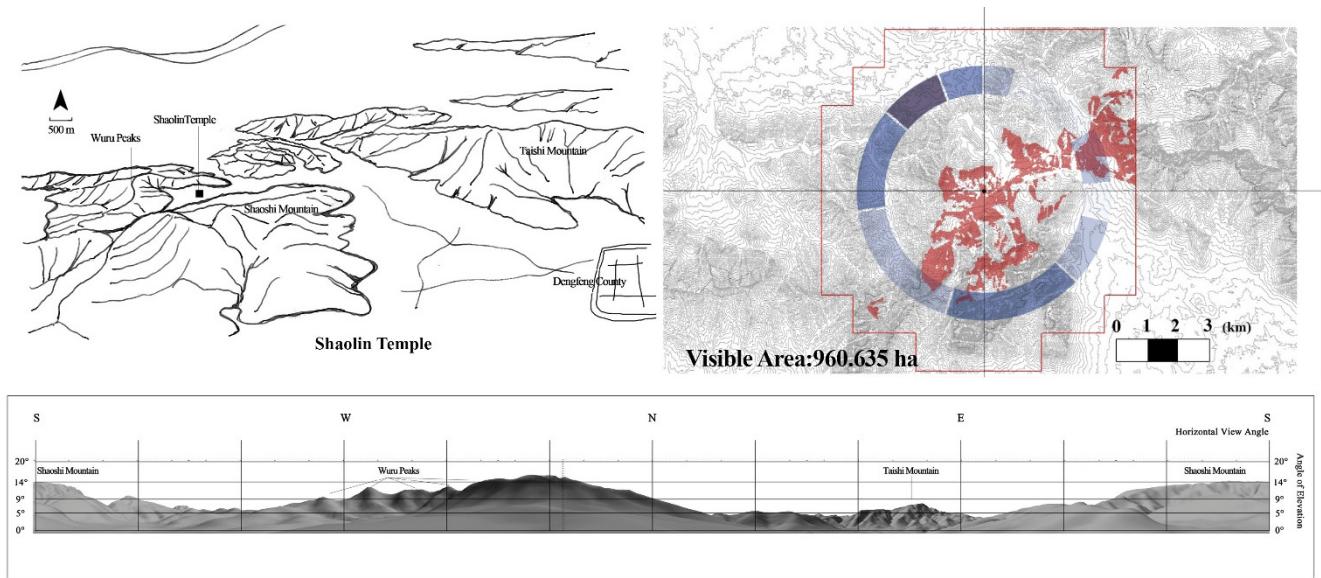


Figure 3-18 Site condition and visual structural analysis of Shaolin Temple

Shaolin Temple is located in the valley between the two wings formed by the Wuru Peaks and the Shaoshi Mountain. The temple backs onto the southeast of Wuru Peaks on which five peaks are plainly visible (Fig. 3-18). The elevation angle of Wuru Peaks is above 14 degrees and the visual distance is about 1 km. The elevation angle and visual distance of Shaoshi Mountain is greater than that of Wuru Peaks. Shaoshi Mountain and Wuru Peaks are connected on the west side of Shaolin Temple with an elevation angle of around 5 degrees. The Taishi Mountain is located to the east of Shaolin Temple with a visual distance of around 4.7 km. Compared to Donglin Temple, the sense of enclosure in Shaolin Temple is stronger.

b. At the endpoint of the valley

Lingyan Temple is beneath Fangshan Mountain, which is a mountain to the northwest of Taishan Mountain. It is located at the deepest place of the Lingyan Valley (Fig. 3-19). The temple backs onto Fangshan Mountain and faces

⁴⁷ There are two Xianglu Peaks in Lushan Mountain. Donglin Temple is facing the Xianglu Peak to the north of Lushan Mountain which is not the renowned Xianglu Peak as described in the poem Wan Lu Shan Pu Bu (View of a Waterfall at Lushan Mountain) by poet Li Bai

to Lingyan Valley. Fangshan Mountain top is visible from Lingyan Temple and the elevation angle is above 20 degrees and the visual distance is about 0.7 km. Lingyan Valley stretches 5 km from east to west. The mountains on both sides of the valley are visible and convey a great sense of depth when looking down through the valley

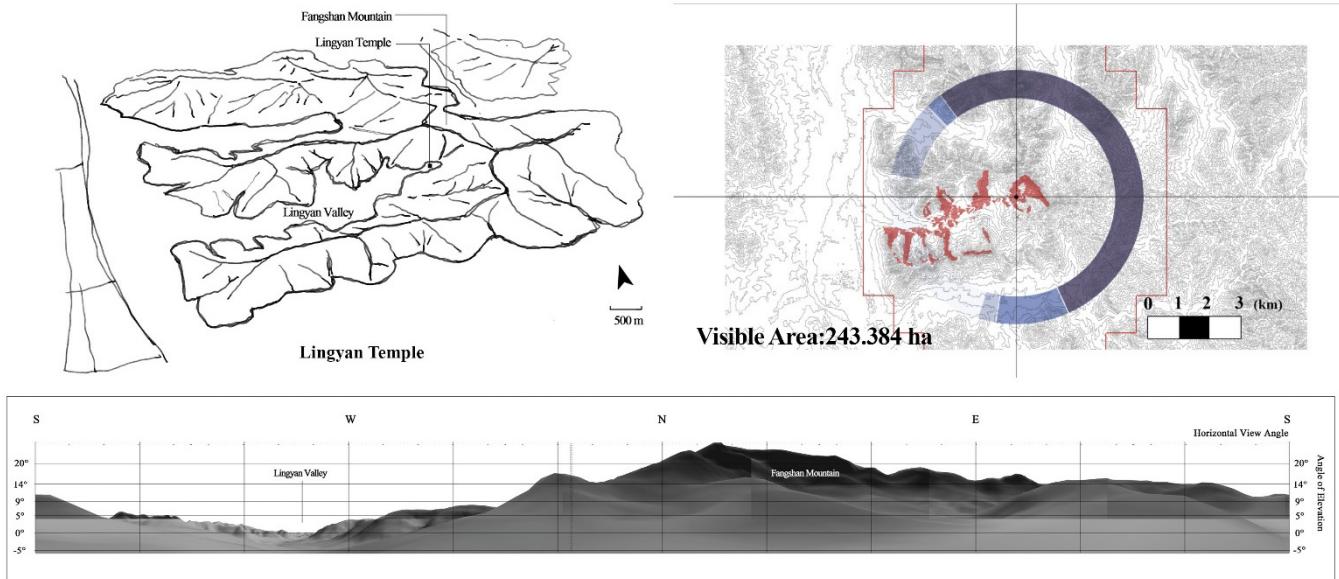


Figure 3-19 Site condition and visual structural analysis of Lingyan Temple

from Lingyan Temple. The contrast of the Fangshan Mountain view and distant Lingyan valley view enhance the sense of depth and enclosure of Lingyan Temple.

c. On the side of a ravine

Zhongnan Mountain is a branch of Qinlin Mountain to the south of Xi'an City. Jingye Temple is hidden on the side of Zhongnan Mountain and is to the side of Fengyu Ravine (Fig.3-20). Because the temple is located on the side of a mountain and close to a ravine, the elevation angle of the surrounding mountains is extremely great, in average

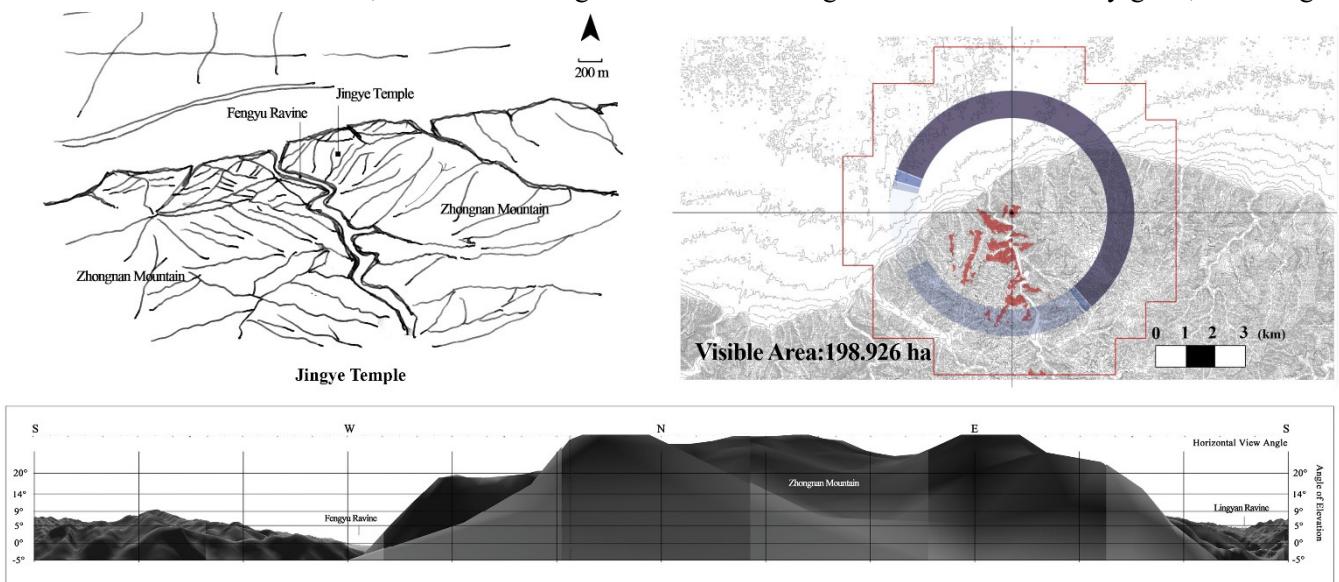


Figure 3-20 Site condition and visual structural analysis of Jingye Temple

above 14 degree. In addition, from the temple, people can overlook the peaks and the ravine with a visual distance of about 4 km to the south.

3) On the ridge/ mountain side

Nantai Temple and Fuyan Temple are on the eastern side of a ridge on Hengshan Mountain. Nantai Temple has its back to the ridge on the northeast and faces overlooking Nanyue City which is 5 km away to the southeast (Fig. 3-21). There is a distant view of the Hengshan Peaks to the southwest of Nantai Temple. Due to the fact it is located

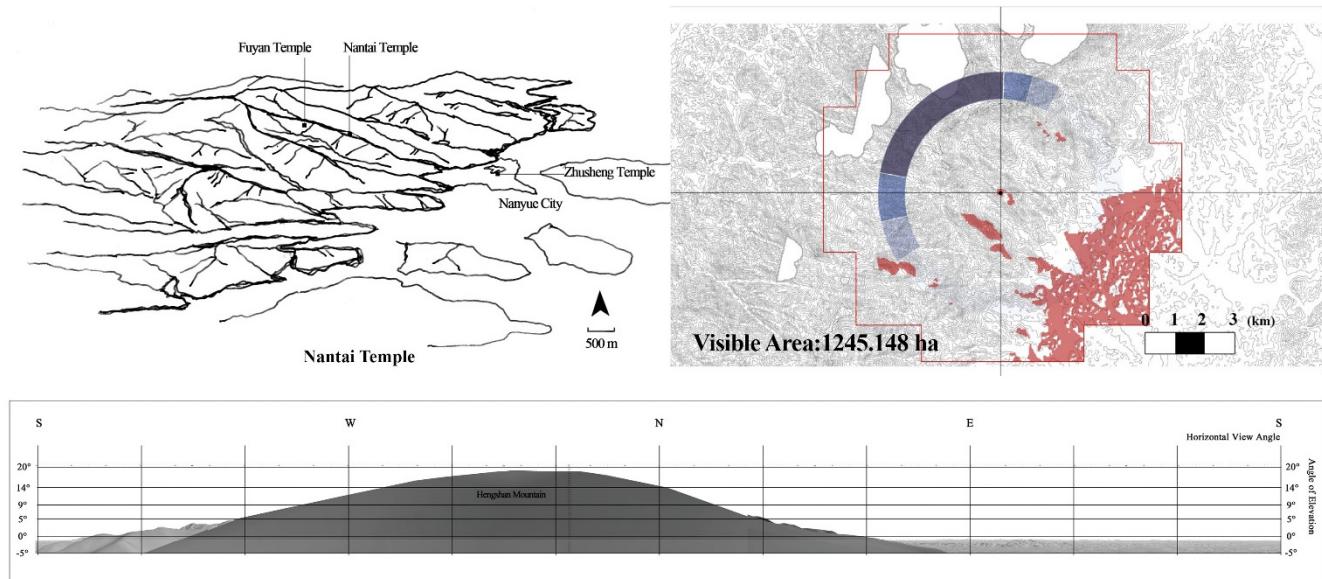


Figure 3-21 Site condition and visual structural analysis of Nantai Temple

on a ridge, the angle of elevation of the mountain view above 5 degrees ranges less than 180 degree in the horizontal angle, thus the sense of enclosure is weak and the scenery is more open and wide. Fuyan Temple, located 500 meters away to the west of Nantai Temple, backs onto the southwest of the ridge and faces the peaks to the southwest (Fig.

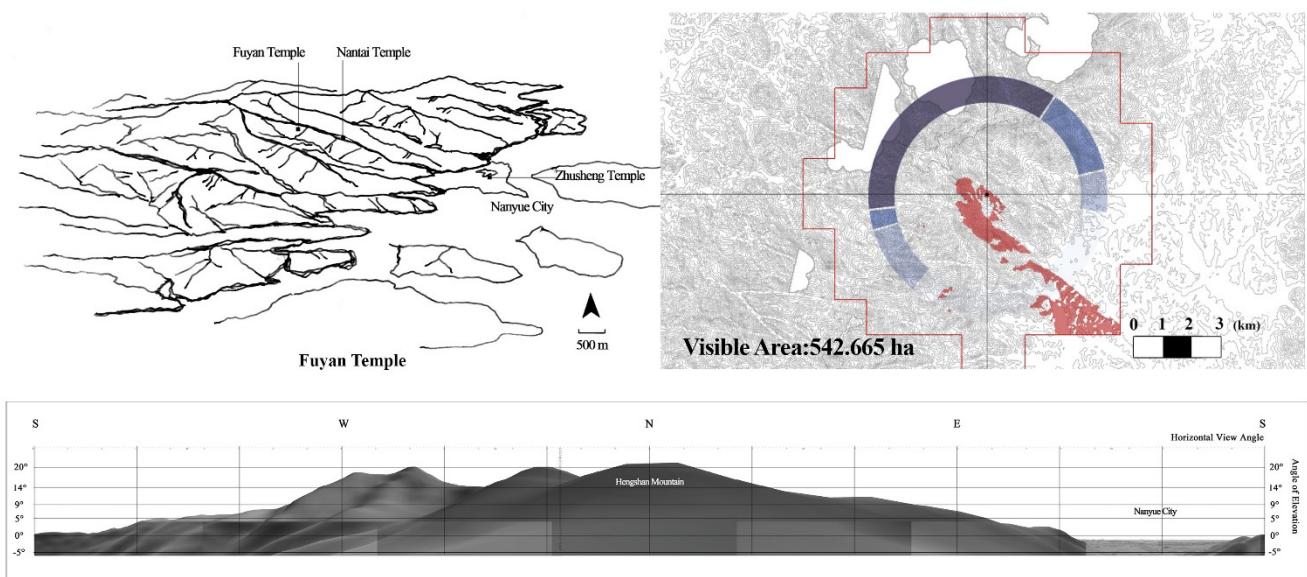


Figure 3-22 Site condition and visual structural analysis of Fuyan Temple

3-22). There is a view overlooking Nanyue City to the southeast of Fuyan Temple as well but the overlooking scenery is with less horizontal angle than that in Nantai Temple. Therefore the sense of enclosure is stronger than in Nantai Temple.

Jinge Temple is located on a ridge close to the South Peak of Wutai Mountain. It backs onto the southwest of the ridge with a short visual distance and the elevation angle is above 20 degrees (Fig. 3-23). On the southeast side of the temple, there is a view overlooking the Wutai Peaks as well as the South Peak at 5.4 km.

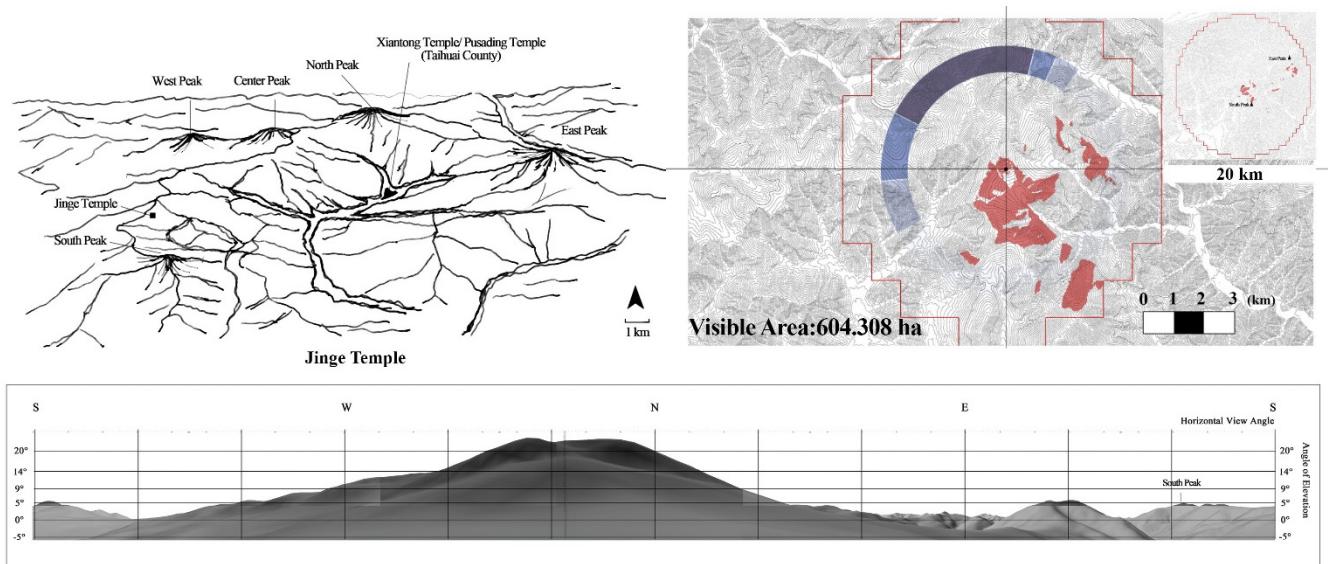


Figure 3-23 Site condition and visual structural analysis of Jinge Temple

4) Surrounded by close mountains and distant mountains in the background.

Dafawang Temple is on the south side of Taishi Mountain. To the north, there is a majestic view of Shaoshi Peaks within 2 km which makes the mountain look like a barrier standing behind the temple (Fig. 3-24). The elevation

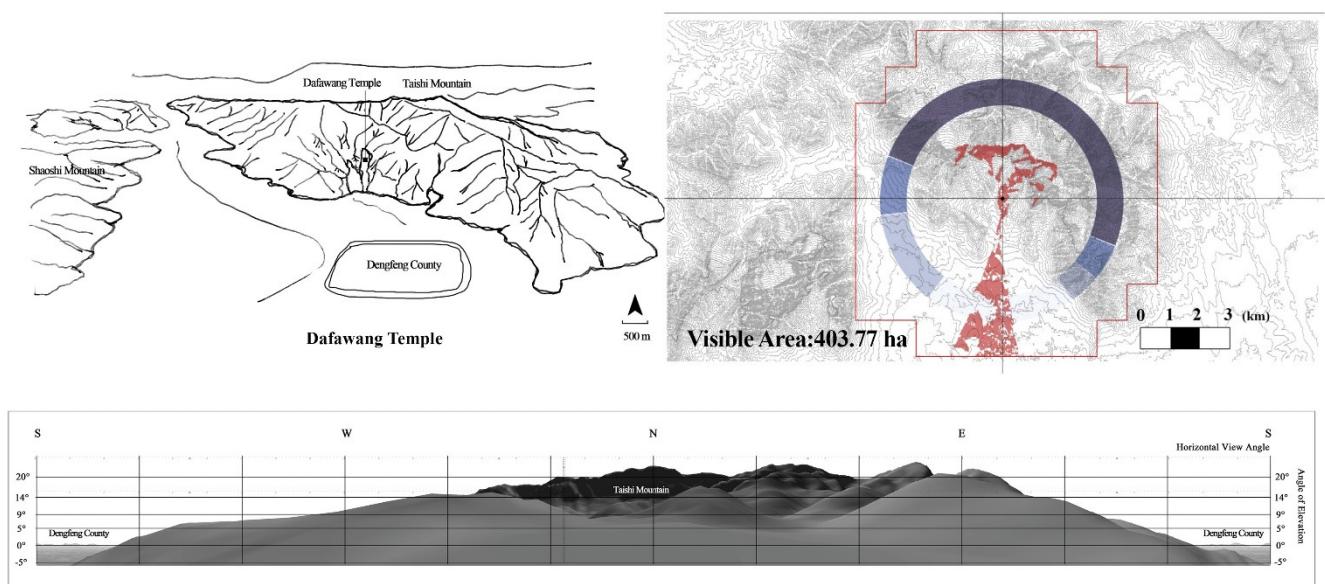


Figure 3-24 Site condition and visual structure analysis of Dafawang Temple

angle at the top is above 20 degree. The view of the near mountains surrounding the temple is with an elevation angle of above 9 degree and a relatively short visual distance. To the south of the temple, there is a view overlooking Dengfeng County 5 km away.

3.4 Discussion

Buddhist temples during the Sui and Tang dynasties were widely distributed throughout the whole country but were mainly located in the cities and in the mountains. Within these temples, the conditions in each individual site is quite different from one another. Some are located on the city plain or platform and some are located in a valley or on a mountain ridge or surrounded by mountains.

According to our investigation on various site conditions, especially on the landform, including the trends of mountains, peaks, and the visual expanse and enclosure of the mountain and the temple landscape were evaluated and the temple was classified into “Deep mountain type”, “High mountain type” and “City type”. (Fig.3-25)

3.4.1 The expanse and enclosure of the temple space (Fig. 3-25)

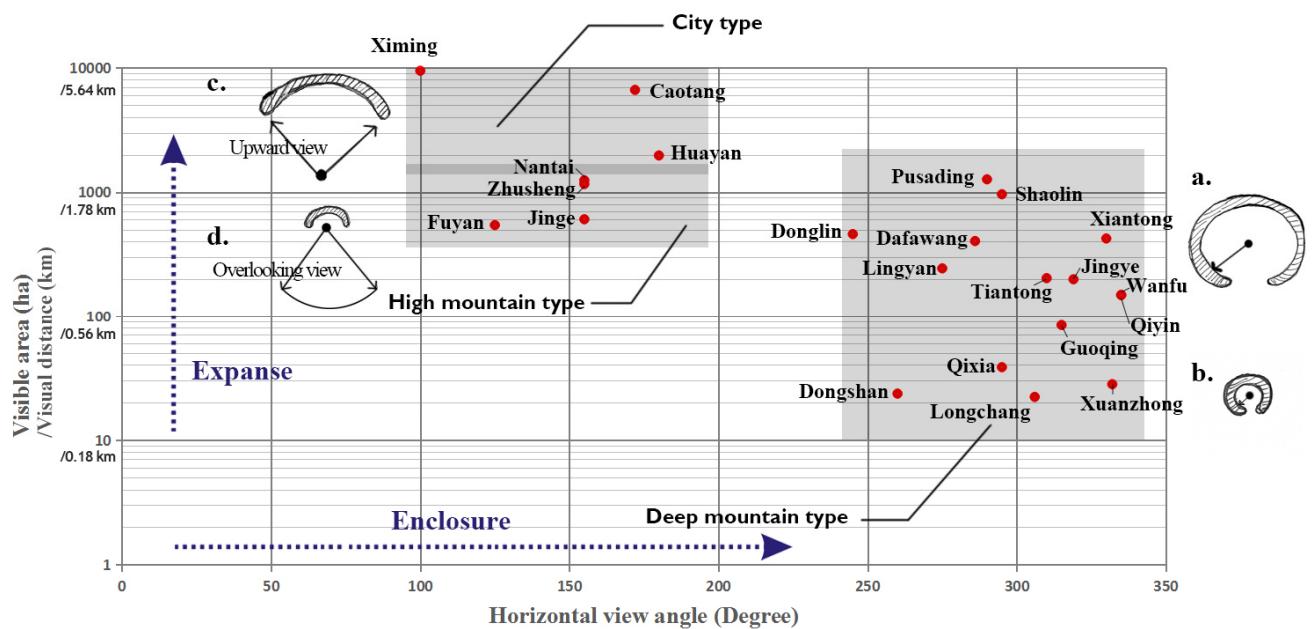


Figure 3-25 Spatial expanse and enclosure of different temples

By analyzing the visible area and horizontal view angle of the mountain (elevation angle above 5 degree), it has been shown that the spatial expanse and enclosure in the “Deep mountain type”, “High mountain type” and “City type” temple is quite different. Among 22 study objects, there are 15 “Deep mountain type” temples of which the horizontal view angle ranges between 250 degree and 335 degree. The sense of enclosure is quite strong in this type of temple, however, a large difference in the visible area and average visual distance due to the different site

conditions in this temple type is shown. For example, Xuanzhong Temple and Dongshan Temple which are surrounded by near mountains, and Longchang temple which is located on the saddle of the mountain shows small visible area ranges from 20 hectares to 30 hectares (Fig. 3-25-b). The visible area of temples surrounded by distant mountains or located in a valley, for example Xiantong Temple, Pusading Temple and Shaolin temple, reaches from 400 hectares to 1000 hectares (Fig. 3-25-a). In the case of temples with a small visible area, people can clearly distinguish the outline of peaks but the view is more open and wide in the case of temples with a large visible area. There are 3 “High mountain type” temples and 4 “City type” temples of which the horizontal view angle ranges from 100 degree to 180 degree. Temple space is open or half open and shows less spatial enclosure compared to the “Deep mountain type” temple. The visible area of the “City type” temple is quite large and reaches from 1000 hectares to 10000 hectares (Fig. 3-25-c). The main view of this type of temple is the upward view of the distant mountain. Compared to the “City type” temple, the visible area of the “High mountain type” is relatively smaller but still ranges from 400 hectares to 1000 hectares (Fig. 3-25-d). From this type of temple, there are overlooking views of the mountains (e.x. Jingye Temple) or the city plain (e.x. Fuyan Temple and Zhusheng Temple).

3.4.2 Site conditions, visual and spatial characteristics of temples (Fig. 3-26)

1) Deep mountain type

Deep mountain temple refers to the temple located in a mountainous area and surrounded space on the horizontal composition. Whether in mountain groups such as Tiantai Mountain and Wutai Mountain, or on a single mountain like Qixia Mountain, the deep mountain type temple is located on flat ground or on a slope in a relatively central place within the mountain. This kind of site condition ensures a separated space from the outside world.

Visually, the mountains around the temple have created a great sense of enclosure so that the horizontal view angle of mountain ranges from about 250 degrees to 335 degrees. Mountains surround all sides or three side of the temple. Visual distance of the deep mountain type temple varies a lot so that there are temples surrounded by near mountains like Dongshan Temple, Longchang Temple and Guoqing Temple of which the average visual distance is about 150 m to 800 m. Visual distance of the mountains around Dafawang Temple, Xiantong Temple and Pusading Temple ranges from 2 km to 8 km as these temples are visually surrounded by near mountains as well as by distant peaks. In most cases of the deep mountain type temples, the temple is usually located at the foot of the mountain, thus from the temple people can enjoy the upwardly angled view of these mountains. Besides these, there are a small number of deep mountain type temples, such as Jingye Temple and Dafawang Temple, which are located on the side of a mountain, from where there are upward views and overlooking views. The contrast of the visual distance of the overlooking views and upward views strengthens the sense of “here” and “there” in the temple landscape as well as the sense of spatial enclosure.

Because of its location surrounded by mountains, the space of Deep Mountain type temples is vertically non-

ccessible which makes the temple hidden and separated from the outside world and creates a sense of mystery and sanctity. This kind of space is in accordance with the pursuit of a quiet place for meditation in Buddhism and the hermits' needs for leading a life away from the secular world.

2) High mountain type

The High mountain type temple is located on the mountain top or on the ridge of the mountain. Because of its high viewpoint, the horizontal view angle of the surrounding moutain ranges from 0 degrees to 155 degrees, which means that the space is either open or half-open. From the temples on the mountain top, such as Guangxiang Temple in E'mei Mountain, there are overlooking views of the mountains below. From the temples on the ridge of the mountain, such as Nantai Temple and Fuyan Temple, there is an overlooking view of the countryside at the foot of the mountain.

Due to its high altitude location, the High Mountain type temple is vertically non-accessible. Compared to the Deep Mountain type temple, the view of the High Mountain type temple is open and magnificent. These temples occupy the most significant locations on the mountain and became objects of worship for people.

3) City type

There are various site conditions for the city type temple, such as being on a plain, platform, beside the river or near a mountain. The visual distance is longer than 5 km and the horizontal view angle of surrounding mountian ranges from 0 degrees to 180 degrees. The space is either open or half-open since these temples are a long way from the mountains. These temples are easily accessible and are located close to the city because they had to meet the religious needs of the emperor and of the local citizens rather than the pursuit of a quiet place for meditation. Some of the temples, such as the temples in the southern suburbs of Chang'an City, also serve as scenic spots and public centers.

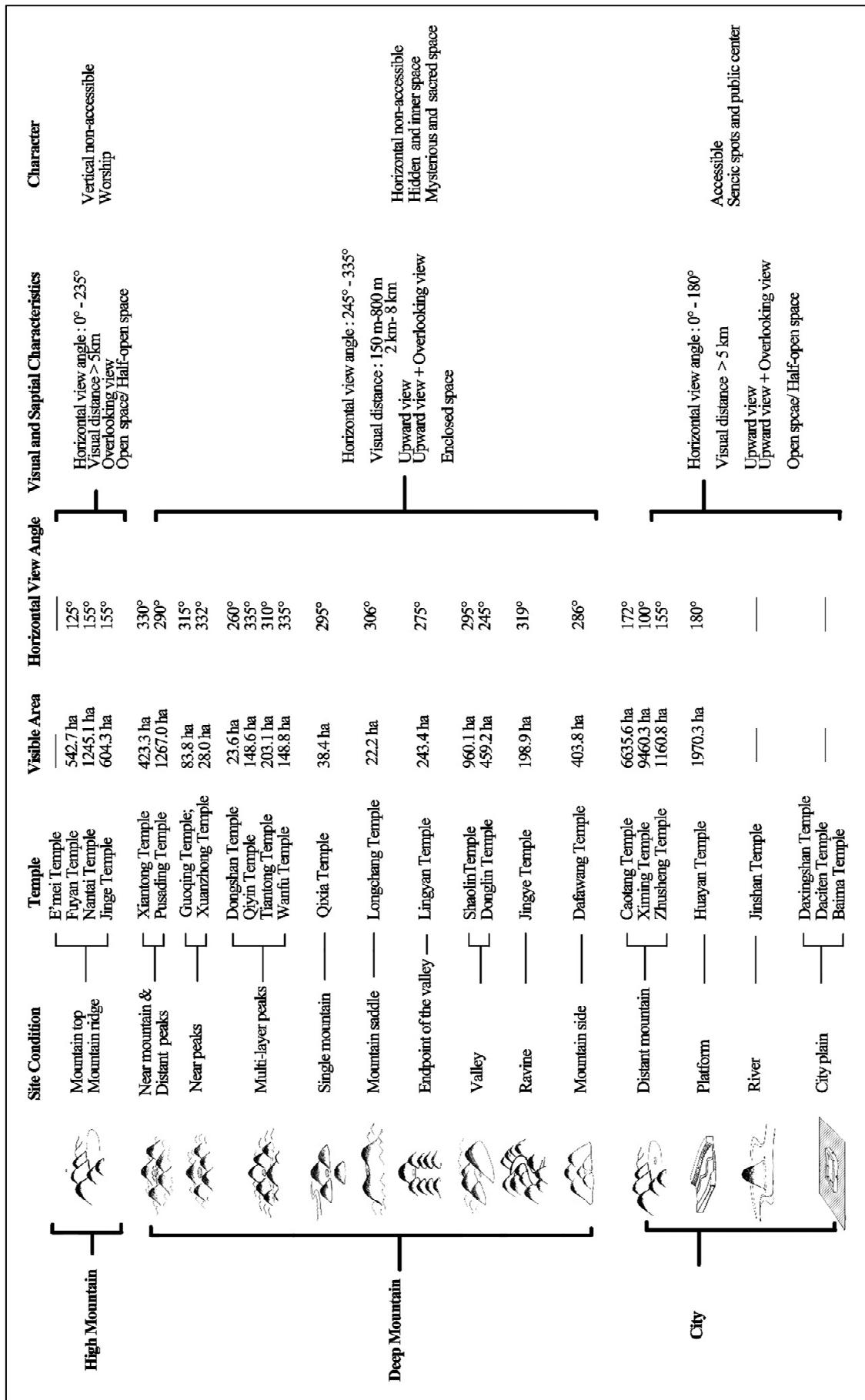


Figure 3-26 Three types of temple landscape

3.5 Summary

In this part, by literature review, the development of Buddhism and the Buddhist temples in China before the Sui and Tang dynasties and 34 temples established during that period were chosen as the study objects. The constructor of the temples were investigated and it was found that the emperors were the main initiators of temple construction, the nobility, local officials and literati usually donated their houses as temples and the monks were responsible for choosing sites for the temples. Their different understanding of the ideal place was integrated in the idea of temple site selection. The site condition was also examined via literature review, and it has shown that most of the temples are located in the mountain foothills, on flat ground in the mountains and on the tops of the mountains. Some of the temples are located on the plains between the cities and the mountains. As the surrounding mountains are important to the temple landscape, the visual spatial structure, focusing on the sense of enclosure, of 22 Buddhist temples was analyzed. Kashmir 3D software and the ALOS Global Digital Surface Model “ALOS World 3D -30m” were utilized to analyze the visibility of the mountains surrounding the temples. According to the site condition, the visual expanse and enclosure of the surrounding mountain, the temples into “Deep mountain type”, “High mountain type” and “City type” were classified and the relationship of the three types of temple environment and the construction purpose were discussed.

3.6 Reference

Japanese

People's Fine Arts Publishing House (中国人民美術出版社編). (1984) 仏教聖地五台山の旅. 京都: 美乃美

The Buddhist Association of China(中国佛教協会). (1981a). 中国佛教協会 日 (Ed.), 中国佛教の旅. 京都: 美乃美. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86102072>

Chinese

Cheng, W(程文舉). (Ming dynasty). (明) 程文舉編 (Ed.), 仰山乘, 5卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00632781>

Committee of Synthetic Index of China Mainland Maps(中国大陸地図総合索引編纂委員会). (2002). 中国大陸五万分の一地図集成. 東京: 科学書院

Fu, M(傅梅). (Ming dynasty). (明) 傅梅撰 (Ed.), 嵩山少林寺輯志, 輯自「嵩書」原 22 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00632799>

Huijiao (慧皎, 497-554). (Southern and Northern dynasties). 湯用彤. (1992). (梁) 釋慧皎撰, 湯用彤校注 (Eds.), 高僧傳. 北京: 中華書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00610740>

Jiang, C (蔣超). (1861-1940). 印光 (1980). In (清) 蔣超撰, (民國釋) 印光重修 (Eds.), 峨眉山志, 8卷・首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00631892>

Kang, J (康寂園). (2006). 大興善寺紀略. 扬州: 廣陵書社.

Lu, J(盧見曾) . (Qing dynasty). (清) 盧見曾撰 (Ed.), 金山志, 10卷・首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00636259>

Liu, M (劉名芳). (Qing dynasty). (清) 劉名芳撰 (Ed.), 寶華山志, 15卷・首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00636583>

Song, M(宋敏求). (Song dynasty). 董越. In (宋)宋敏求撰 . 朝鮮賦 / (明)董越撰 . 朝鮮志 / (明)不著撰人 (Ed.), 長安志. 台北]: 臺灣商務印書館]. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01518761>

Wang, X(王昕). (2006). 馬大 (Ed.), 靈岩志 紫蓬山志 (中國佛寺志叢刊 ed.). 臺北: 明文書局

Wei, S(韋述). (Tang dynasty). 尊經閣文庫. (1934). (唐) 韋述撰 (Ed.), 兩京新記. 東京: 育德財團. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB04468027>

Wu, Z(吳宗慈). (1980). (民國) 吳宗慈撰 (Ed.), 廬山志, 原 12 卷・収録 10 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00632773>

Yang, H (楊衒之). (Five Dynasties and Ten Kingdoms) 張元濟, 吳若準, 唐晏, 張宗祥. (1980). (後魏) 楊衒之]撰 (Ed.), 洛陽伽藍記. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00636671>

Yinguang (印光). (1861-1940), 白志謙. (1980a). (民國釋) 印光重修. 雲岡石窟寺記 / (民國) 白志謙撰 (Ed.), 清涼山志: 8 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00634870>

Zhang, L(張聯元). (1721). (清) 張聯元輯 (Ed.), 天台山全志 18 卷. 台郡: 尊經閣. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB04050112>

Zhipan & Benjue (志磐,本覺). (1910). (宋釋) 志磐撰. 續佛祖統紀 . 歷代編年釋氏通鑑 / (宋釋)本覺編 (Ed.), 佛祖統紀. 京都: 藏經書院. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01902670>

Zhu, J (朱潔軒). (ROC). 殊致, 王鎬. (1980). 樓霞山志, 2 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00632729>

Chapter 4 Site Selection Idea of Chinese Buddhist temple during the Sui and Tang Dynasties	52
 4.1 Lotus symbolization temple landscape.....	52
4.1.1 Lotus in Buddhist cosmology and Confucianism	52
4.1.2 Case study	53
 Guoqing Temple	53
 Longchang Temple	56
 Wutai Mountain- Xiantong Temple.....	58
4.1.3 Spatial characteristic of the Lotus symbolization temple landscape.....	61
 4.2 Sumeru symbolization and Penglai Mountain symbolization temple landscape	63
4.2.1 Sumeru Mountain in Buddhist cosmology and Penglai Mountain in Chinese legend.....	63
4.2.2 Case study	64
 Jinshan Temple	64
4.2.3 Spatial characteristic of Sumeru Mountain symbolization and Penglai Mountain symbolization temple landscapes	66
 4.3 Fengshui symbolization temple landscape.....	67
4.3.1 Fengshui (Geomantic omen).....	67
4.3.2 Case study	68
 Qixia Temple	68
 Wanfu Temple.....	71
 Tiantong Temple.....	73
 Donglin Temple.....	74
 Temples in Chang'an City	77
4.3.3 Spatial characteristic of Fengshui symbolization Buddhist temple	83
 4.4 Temples in scenic mountains.....	85
4.4.1 Case study	85
 Lingyan Temple	85
 Shaolin Temple	86
 Dafawang Temple	89
 4.5 Discussion	90
4.5.1 The Peach Blossom World symbolization: an ideal place for hermit life	90
4.5.2 Comparison of five Buddhist temple spaces.....	92
 4.6 Summary	94
 4.7 Reference	98

Chapter 4 Site Selection Idea of Chinese Buddhist temple during the Sui and Tang Dynasties

4.1 Lotus symbolization temple landscape

4.1.1 Lotus in Buddhist cosmology and Confucianism

Buddhism aims to liberate people from misery and reach the pure land, as is the lotus, born and raised up from the dirt without becoming polluted. The image of the lotus was recorded in Buddhist Scriptures as,

“... Lotus born and raised up in the mud, but not polluted, just as the Buddha was raised up in the secular world but not polluted by it. Then, the people became enlightened by Buddha through their meditation just like the lotus blossoms coming out by their own power. The lotus blossom pollen is carried around by bees just as the Buddha was utilized and disseminated by people. In addition, the lotus has four features which are its fragrant smell, cleanliness, softness and loveliness which resemble the four virtues of eternity, happiness, freedom and being without worry in Buddha...⁴⁸”

“... We, as Buddhist monks, should not be led astray by the secular world as the lotus has not been polluted by filth...⁴⁹”

Not only the noble qualities of the lotus is often used as a metaphor for the lofty realm of Buddhism, the lotus image also often appears in the description of the western paradise in Buddhism⁵⁰. In the center of Mandala, Buddha is sitting on an eight petaled lotus on which is sitting Bodhisattva and Tathagata. The lotus is a thousand times bigger than the lotus in man's world (Kui, Tang dynasty). In Avatamsaka Sutra, it is proposed a “Lotus-Sea (蓮華藏莊嚴世界海)” universe model⁵¹. According to its description, the “Lotus-Sea” universe is the Buddhist pure land and is located on flat, solid and clean earth among a giant lotus which is surrounded by the Xiangshui Sea (香水海)(Fig. 4-1). This world includes the countless Xiangshui Seas and on each there is a giant lotus, thus forming a multi-level world⁵² (Fig. 4-2). This kind of universe model reflects that in Buddhism space is without limit and is inclusive.

⁴⁸ 蓮華雖在泥水之中。不爲泥水所汚。譬法界真如雖在世間。不爲世間法所汚。又蓮花性自開發。譬法界真如性自開發。衆生若證皆得覺悟。又蓮花爲群蜂所採。譬法界真如爲衆聖所用。又蓮花有四德。一香二淨三柔軟四可愛。譬法界真如總有四德。謂常樂我淨。（Tang dynasty, 618A.D.-907A.D.）玄奘「摶大乘論釈」(Vasubandhu & Xuanzang, Tang dynasty)

⁴⁹ 吾爲沙門處于濁世。當如蓮花不爲泥所汚。(Han dynasty, 206 B.C.- 220 A.D.)迦葉摩訶「佛說四十二章經」(Matanaga, Five dynasties and ten kingdoms)

⁵⁰ 極樂國土有七寶池...池中蓮花大如車輪。（Eastern Jin dynasty, 317A.D.-420A.D.）鳩摩羅什「佛說阿彌陀經」(Kumarajiva, Eastern Jin dynasty)

⁵¹ (Song dynasty, 960A.D.-1279A.D.)志磐「佛祖統紀」(Zhipan & Benjue, 1910)

⁵² 此香水海。有大蓮華。名種種光明蕊香幢。華藏莊嚴世界海。住在其中。四方均平。清淨堅固。金剛輪山。周匝圍邊。（Tang dynasty, 618A.D.-907A.D.）實叉難陀「大方廣佛華嚴經」(Siksananda, Tang dynasty)

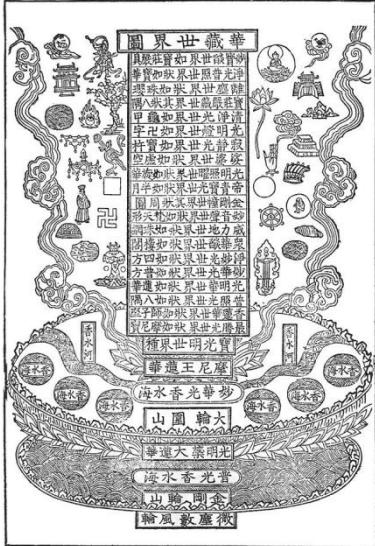


Figure 4-1 Lotus-Sea Universe
(Siksananda, Tang dynasty)

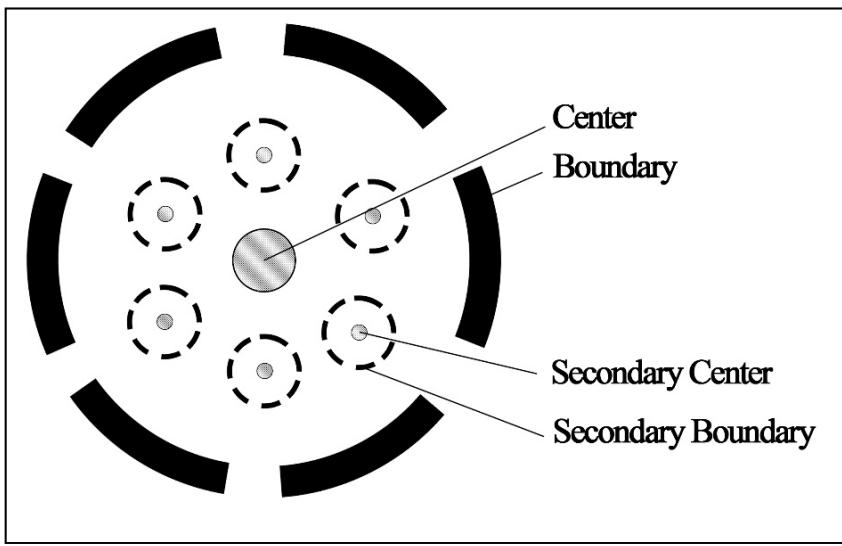


Figure 4-2 Multi-level Lotus space

In Chinese traditional culture, the lotus is also popular because of its elegant and refined appearance. It was a metaphor for woman in *Shi Jing* (詩經) and was compared to superior man in *Chu Ci. Ode to Lotus Flower*, a famous literature work song for the lotus, describes the quality of the lotus as “I love the lotus because it grows in mud, yet is never contaminates by it. Floating on the waving water, yet never dances with it.⁵³”

4.1.2 Case study

Guoqing Temple

Guoqing Temple is located 10 Li away from the north of Tiantai County and 50 Li away from the south of Huading Peak (Fig. 4-3). It was built in the Sui dynasty in Kaihuang year 18 (598) and is considered the cradle of the Tiantai Sect (Chen & Ren, 1991).

Master Zhiyi, who is generally considered to be the founder of the Tiantai Sect, chose the site for Guoqing Temple in front of the Five Peaks and designed the architecture for Guoqing Temple in the October of Kaihuang year 17 (597).

⁵³ 予獨愛蓮之出淤泥而不染，濯清漣而不妖。 (Song dynasty, 960A.D.-1279A.D.) 周敦頤「愛蓮說」(Siku Quanshu, 1983)

“...Zhiyi had spent some time traveling around numerous mountains and he always remembered the beautiful views he had seen in the deep mountains while he was living in the secular world...⁵⁴”

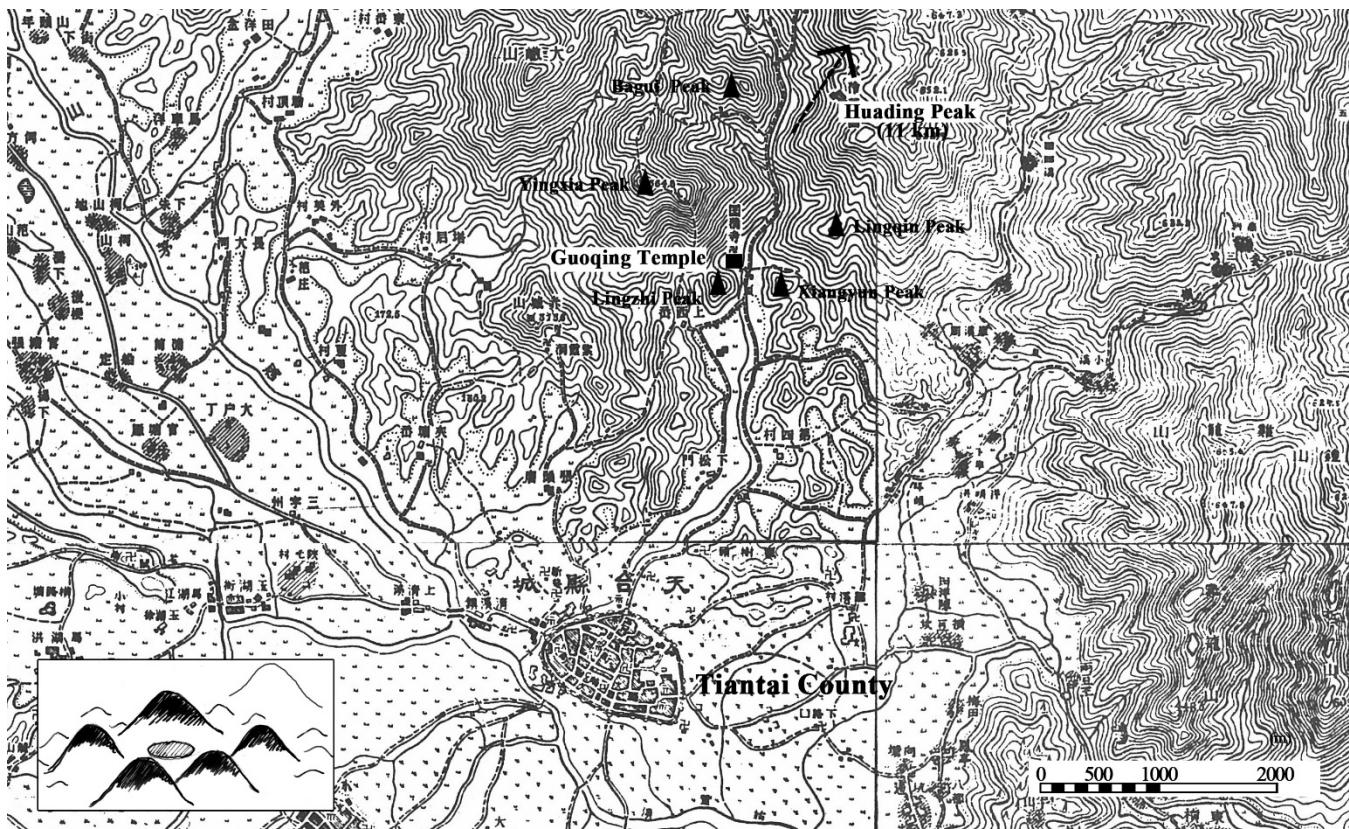


Figure 4-3 Drawing of Tiantai Mountain in 1/50000 topographic map

He instructed his monks to build the temple according to his own design. Furthermore, when he fell ill and knew he was soon to die, he sent his will to Emperor Jin Wang requesting that the temple be built.

“Under the (Tiantai) mountain, there is an ideal place to build the temple. I have just cut down the trees to use to build the foundations. I feel regret that I can't last until the day it is finished...⁵⁵”



Figure 4-4 Drawing of Tiantai Mountain (Yang, Ming dynasty)

⁵⁴ 智者雅好泉石負杖閑游。若吟歎曰。雖在人間弗忘山野幽幽深谷愉愉。(Sui and Tang dynasties, 581A.D.-907A.D.)灌頂「隋天台智者大師別傳」(Guanding & Yaoshu, 1955)

⁵⁵ (天台)山下一處，非常之好，又更仰立一伽藍。始翦木爲基，弟子營立。不見寺成，瞑目爲恨。(Ming dynasty, 1368A.D.-1644A.D.)傳燈「天台山方外志」(Chuandeng, Ming dynasty)

Jin Wang was deeply touched by Zhiyi's letter and asked Wang Hong to build the temple according to Master Zhiyi's will in the year 598.

Guoqing Temple is located to the south of Tiantai Mountain which is considered to be the most beautiful mountain in the east of the Zhejiang area due to the marked change of its topography, with picturesque cliffs and deep valleys. The remarkable scenery and the Buddhist temples in Tiantai Mountain attracted countless tourists to visit there. Huading Peak (華頂峰), which is the highest peak in Tiantai Mountain, has a unique view overlooking the surrounding mountains. According to literature works, since the ‘shape of Huading Peak and surrounding mountains evokes a scene like a lotus flower, the name of Huading Peak comes from its corolla tube-alike shape.⁵⁶

From ancient times, men of letters have written itineraries, proses and poems to describe the amazing views from Huading Peak (Fig. 4-4). Some of them have been chosen to describe the characteristics of the varied sceneries from Huading Peak.

“...Huading Peak is the highest peak on Tiantai Mountain. On sunny days the view is so boundless that the great ocean stretches away to meet the sky. Even the Qiantang River can be seen from here. It is said that the height of Huading Peak is 18,000 Zhang (Chinese measuring unit in olden times. During the Qing dynasty, 1 Zhang ≈ 3.45 meters), that is higher than all the surrounding mountains. The Huading Peak and mountains for a hundred Li (Chinese measuring unit in olden times. During the Qing dynasty, 1 Li ≈ 576 meters) make a scene of the lotus flower...⁵⁷”

“...(Huading Peak is) 60 Li away from the northeast of Tiantai County, 200 Li away from the southwest of Ninghai County and 100 Li away from the southeast of Xinchang County. It is on the top of the eighth level in Tiantai Mountain, with a height of 18,000 Zhang and a radius of 800 Li. The weather is usually cloudy rather than sunny on the mountain. Huading Peak is topped with snow all the year round, even during the summer.

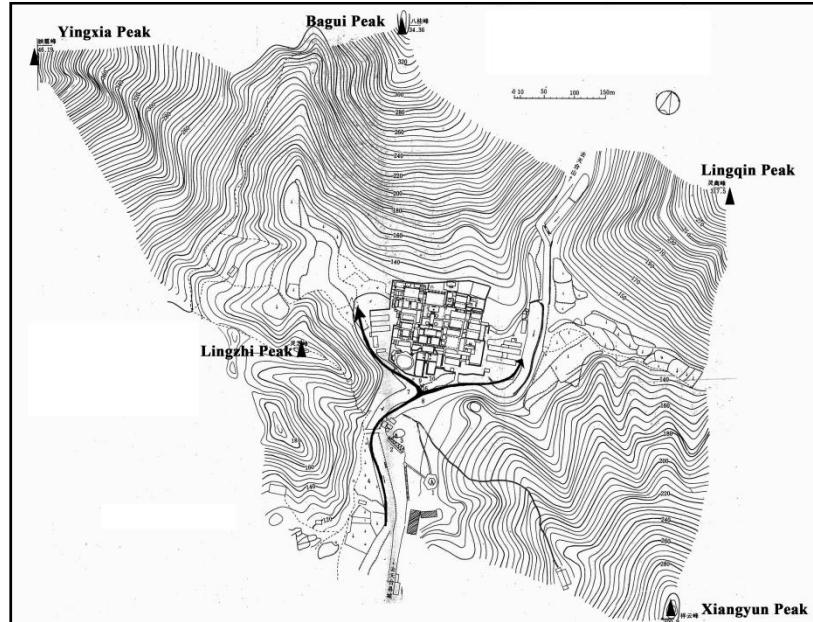


Figure 4-5 Five peaks and two gullies (Chen & Ren. 1991)

⁵⁶ 華頂峰爲台山最高處,下瞰衆山如虎龍盤踞旗鼓布列之狀,又如蓮華爲華心之頂故名。 (Qing dynasty, 1644A.D.-1912A.D.) 張聯元「天臺山全志」(Zhang, 1721)

⁵⁷ 華頂爲天台絕巔 適當晴朗 臨望無際 天海一盃 錢塘一帶 髮鬚見之 人言此山之高一萬八千丈 宜乎萬山在下 而四周青峰插漢競勢爭高者頗多 蓋台山甚大 綿亘數百里如蓮華 然衆山爲千葉環羅其外 而華頂爲一房端然在中 衆山高則劃定益高 彼獨露一尖者皆山之小也。 (Qing dynasty, 1644A.D.-1912A.D.) 潘耒「遊天台山記」(Zhang, 1721)

People can enjoy the sunrise and sunset ... the boundless Donghai Sea in the east. Visitors can overlook mountains from around Huading Peak as well...⁵⁸”

“Guoqing Temple is located to the south of Tiantai Mountain. It backs on to the high mountains, surrounded by five peaks (Usui, 2011). This location has the advantages of convenient traffic as well as a quite environment.”

“Five peaks are Bagui Peak (八桂峰) in the north, 344 meters; Lingqin Peak (靈禽峰) in the northeast: 318 meters; Xiangyun Peak (祥雲峰) in the southeast, 301 meters; Lingzhi Peak (靈芝峰) in the southwest, 180 meters (Fig. 4-5). From the pavilion on this peak, people can overlook the whole of Guoqing Temple.⁵⁹”

Guoqing Temple is surrounded by these five peaks and is situated in a wonderful location. The panoramic figure of Guoqing Temple shows that five peaks surround the temple in five directions respectively (Fig. 3-9). The profile of the five peaks can be clearly distinguished and it reminds people of Buddhist characters. In most literature works, people visit Guoqing Temple not only for the beautiful view there, but also for becoming enlightened by Buddha Dharma.

“... (He) invited me to go to Guoqing Temple and we went for 7 or 8 Li north to there. This temple is located to the south of Tiantai Mountain and is surrounded by five peaks. ... The gullies fall from the mountain and gather in front of the temple...⁶⁰”

“...There are many pine trees on the way to Guoqing Temple that even block the sky for about 9 Li ... five peaks were standing around the temple...⁶¹”

“...Five peaks surround the Guoqing Temple like five masters sitting around...⁶²”

It can be said, Zhiyi chose this place to build the temple most likely because of the symbolic meaning of the five peaks in addition to the quiet and beautiful natural environment.

Longchang Temple

⁵⁸ 在天台縣東北六十里 寧海縣西南二百里 新昌縣東南一百里 天台第八重最高處 舊傳高一萬八千丈 周回八百里 少晴多晦 夏有積雪 可觀日之出入 中有洞石色光明 登絕頂 東望滄海 彌漫無際 號望海尖 下瞰衆山如虎龍盤踞旗鼓布列之狀 草木薰郁 殆非人世 (Qing dynasty, 1644A.D.-1912A.D.) 張聯元「天臺山全志」(Zhang, 1721)

⁵⁹ 八桂峰在國清寺正北 靈禽峰 在國清寺東北 祥雲峰 在國清寺東南 靈芝峰 在國清寺西南 映霞峰 在國清寺西北 以上五峰回環國清寺。 (Qing dynasty, 1644A.D.-1912A.D.) 張聯元「天臺山全志」(Zhang, 1721)寺有五峯。一八桂峯。二映霞峯。三靈芝峯。四靈禽峯。五祥雲峯。雙澗迴抱。 (Tang dynasty, 618A.D.-907A.D.) 徐靈府「天台山記」(Xu, Tang dynasty)

⁶⁰ 邀與偕行北上七八里至國清寺 寺在台山南麓 五峰環抱 餘支折而屏蔽者數重左右 溪翔舞而下 會於寺門。 (Qing dynasty, 1644A.D.-1912A.D.) 潘耒「遊天台山記」(Zhang, 1721)

⁶¹ 盤松國清道 九里天莫覩 穹崇上巒三 突屼旁聳五。 (Tang dynasty, 618A.D.-907A.D.) 崔湜「寄天台司馬先生」(Zhang, 1721)

⁶² 五峯如五老，環坐天華臺。 (Yuan dynasty, 1271A.D.-1368A.D.) 楊維楨「國清寺」(Ding, 2009)

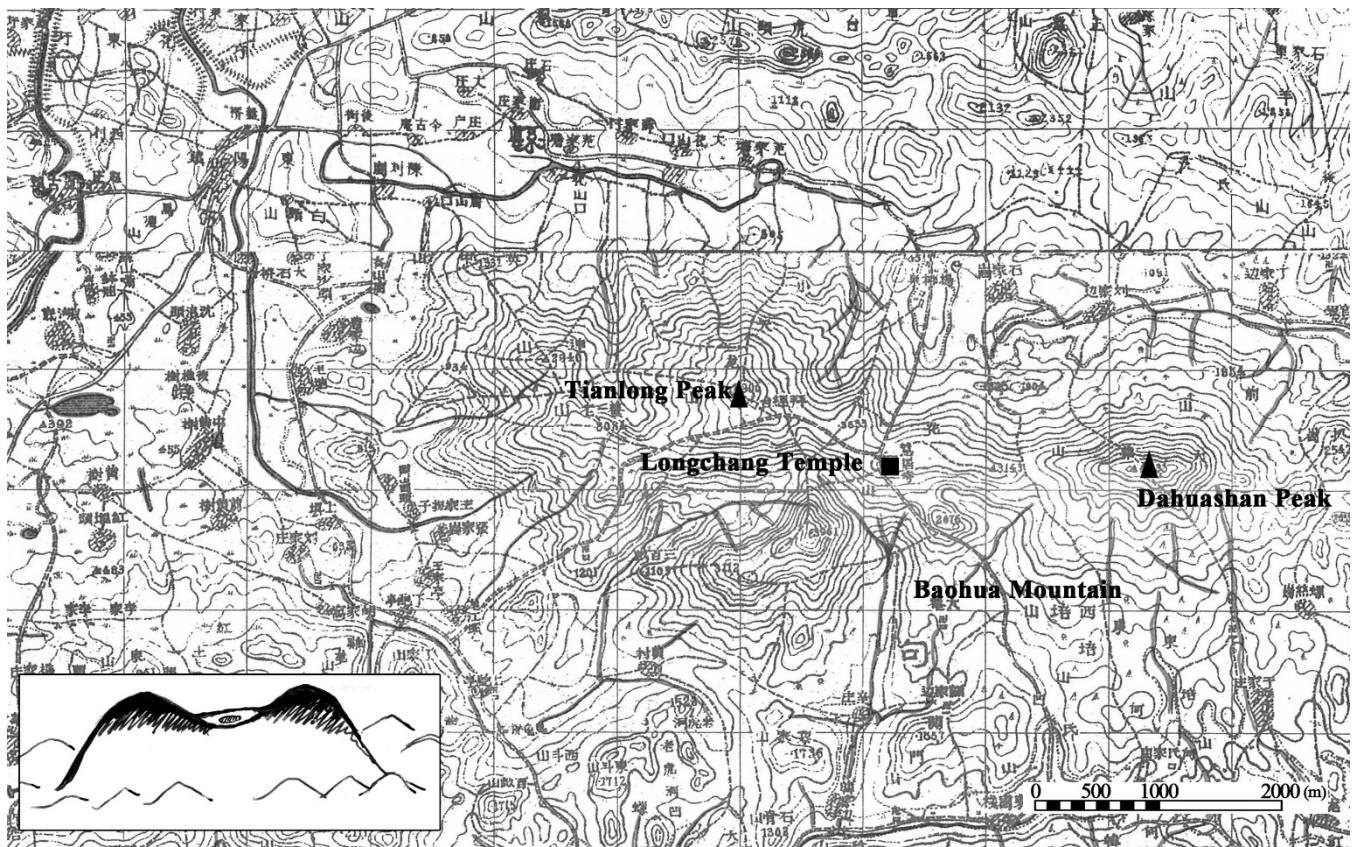


Figure 4-6 Longchang Temple and Baohua Mountain in 1/50000 topographic map

Longchang Temple was established in the first year of Tianjia (502 AD) by the monk Baozhi. The temple is located in Baohua Mountain and according to *Baohua Mountain Chronicle* (寶華山志), the form of mountain and rivers was described as (Fig. 4-6):

“...Two peaks stand erectly into the air. Numerous mountains surround layer upon layer beneath them. Therefore it is said that the mountain form is like the calyx of the lotus flower and pod...Tieweng

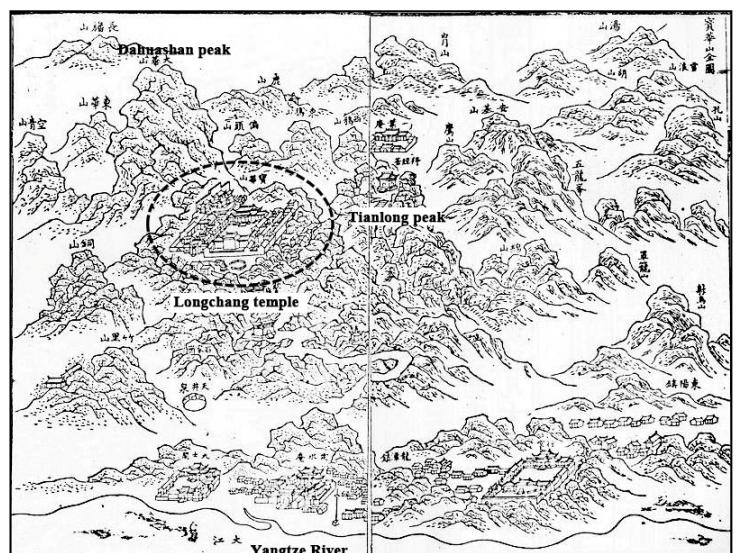


Figure 4-7 Drawing of Longchang Temple (Liu, Qing dynasty)

Town in the east, Jinling Town in the west, Juqu Town in the south and the Yangtze River to the north. There is a spring rolling down the mountain...⁶³”

⁶³ 雙峰突起干霄矗漢，萬山羅羅環拱其下，故曰如華之含萼，如蓮之有房也...東凌鐵甕，西控金陵，南負句曲，北俯大江。山之所趨，水亦至焉。（Qing dynasty, 1644A.D.-1912A.D.）德基「寶華山志」(Liu, Qing dynasty)

“... (Baohua) Mountain is 60 miles north of Jurong Town, and rises in the surroundings and makes a depression in the middle. Peaks are surrounded below like the calyx of a flower and temples lie in the mountains like a lotus pod. This mountain was named as Baohua from the Prajnaparamita...⁶⁴”

Longchang Temple is surrounded by numerous stable and imposing mountains. Because the mountain form resembles the shape of a lotus, it was named from the Prajnaparamita (Fig. 4-7). From the visual and spatial structural analysis, it can be found that the visible area from Longchang Temple is quite small, about 22.2 hectares, due to its mountain saddle location (Fig.3-16). The profile of surrounding mountains is relatively gentle, with no obvious peaks. However, when people enjoy the view of Longchang Temple, they usually integrate the image of the lotus petals, like the 36 peaks in Baohua Mountain, with this temple. When tourists climbed this mountain and saw the incredible view of the mountain, they were often reminded of the lotus flower and the Buddha's paradise.

“...On the west of the Buddhist country, the lotus is blossoming. A peak is standing erectly into the air. Here, world affairs can't bother me anymore. The one who can accompany me is the smoke and mist....⁶⁵”

Because of its quiet and supramundane environment, the Baohua Mountain was also compared with the immortal Penglai Mountain by the poets

“...I climbed on the mountain with a stick. This place is so beautiful that I suspected I was standing on the sea turtle's back and climbing on the Penglai. I became wet by the moist air from cloud and mist. The sound from the secular world can't be heard from here...⁶⁶”

Wutai Mountain - Xiantong Temple

Wutai Mountain is one of the four famous Buddhist mountains in China. The first Buddhist temple that was built on Wutai Mountain was called Xiantong Temple, built during the East Han dynasty, and was first named as Dafulingjiu Temple. This temple was established only a few years after the first Buddhist temple in China, Baima temple. The site of Xiantong Temple was chosen for its unique topography.

“...At the very beginning of the Ming period of the Han dynasty, Kasyapamatanga saw a tower through his Inner Eye. He requested the emperor to build a temple. The form of mountain was similar to that of the Vulture Peak in

⁶⁴ 隸句容距治北六十里，山勢崛起而中凹。羣峰環繞其下，若華之含萼，窩藏寺宇，如蓮之有房。也曰寶華，蓋取般若經。(Qing dynasty, 1644A.D.-1912A.D.) 德基「寶華山志」(Liu, Qing dynasty)

⁶⁵ 蓮域之西蓮萼開，一峰突兀絕塵埃。本無雞犬能相擾，但有烟霞可作陪。(Qing dynasty, 1644A.D.-1912A.D.) 嚴鈺「登拜經臺詩」(Liu, Qing dynasty)

⁶⁶ 一杖凌虛兩履輕，疑乘鰲背上蓬瀛。身沾碧漢雲霞氣，耳斷紅塵雞犬聲。(Qing dynasty, 1644A.D.-1912A.D.) 劉名芳「登眺大華山詩」(Liu, Qing dynasty)

India and so named the mountain Dafu, “Fu” meaning faith. The emperor believed in Buddhism and therefore built this temple in order to carry forward Buddhism...^{67”}

Vulture Peak is located in the west of Rajgir in ancient India, and by tradition, it is one of several sites frequented by Buddha and his community of disciples for both training and retreat. Its location is frequently mentioned in Buddhist texts like the Pali Canon of Theravada Buddhism. Chinese monks Faxian, Xuanzang and Yijing had visited Vulture Peak and had lived there before. In the Eastern Han dynasty, Indian monk Kasyapamatanga saw the five peaks of Wutai Mountain and noted its resemblance to the landform of Vulture Peak, therefore he asked Emperor Ming to build Xiantong Temple there.

Mount Wutai, as the name suggests, is a mountain of five units, or five peaks, in five directions, south, east, north, west and the middle, respectively (Fig. 4-8). In the *Qingliang Mountain Chronicle* (*清涼山志*) the landform of Wutai Mountain was described as:

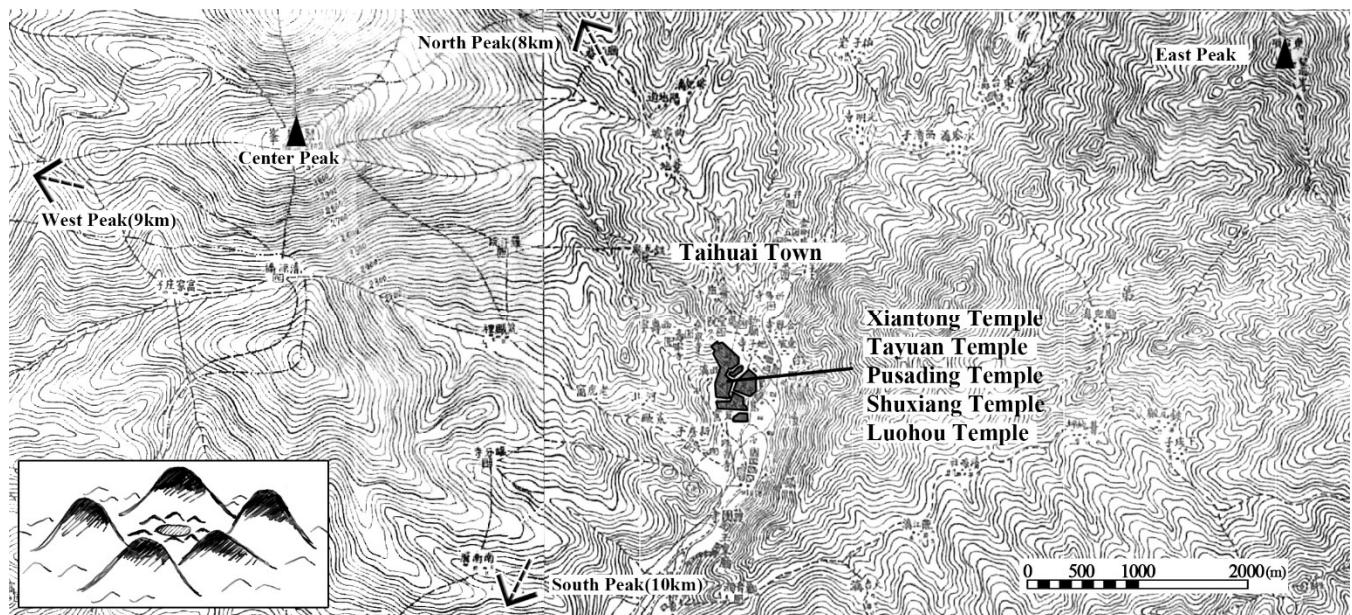


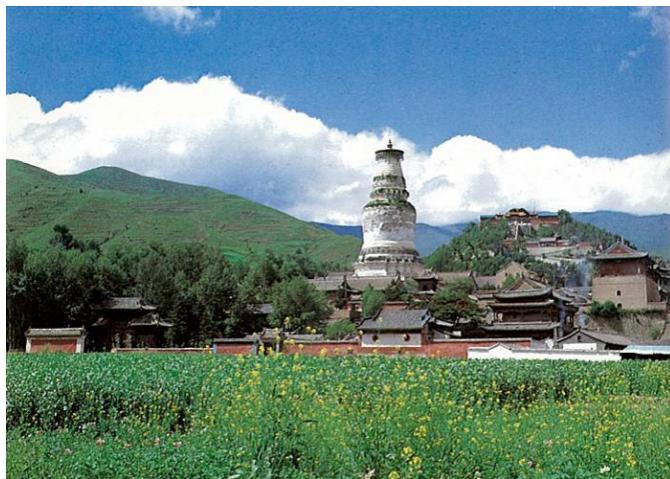
Figure 4-8 Temples in Taihuai Town in 1/50000 topographic map

“...It is hard to describe the landform of Wutai Mountain in extenso. There are five peaks standing in the middle, thousands of peaks overlaps around. Long valleys that are winding and deep, hundreds of layered ridges are covered by green trees and mountain mist...^{68”}

⁶⁷ 漢明之初。摩騰天眼亦見有塔。請帝立寺。山形像靈鷲。名曰大孚。孚者信也。帝信佛理。立寺度人。(Tang dynasty, 618A.D.-907A.D.) 道宣「律相感通傳」(Daoxuan, Tang dynasty)

⁶⁸ 山之形勢，難以盡言，五峯中立，千嶂環開。曲屈窈窕，鎖千道之長谿，疊翠迴嵒，幕百重之峻嶺。(Ming dynasty, 1368A.D.-1644A.D.) 鎮澄「清涼山志」(Yinguang, 1861-1940)

Xiantong Temple on Wutai Mountain is surrounded by the five peaks, as are the temples that are located close to Xiantong Temple, such as, Tayuan Temple which “is on the south of Xiantong Temple, in the middle of the five peaks”, Pusading Temple, and Luohou Temple. Temples are distributed throughout each of the varied terrains of Wutai Mountain thus this creates a varied landform of temple environments (Pic. 4-1). It is said that “Some of the temples are surrounded by five peaks, some are in the middle of two ridges, some are on the cliff edge and some are at the top of the mountain.⁶⁹” In fact, not all of the five peaks are visible from temples in Taihuai Town at the



Pic 4-1 Temples in Taihuai Town (People's Fine Arts Publishing House, 1984)

center of Wutai Mountains. For instance, only the

South Peak and the near Lingjiu Peak can be seen from Xiantong Temple (Fig. 3-7). Furthermore, because of the long visual distance of the South Peak, it is hard for people to distinguish its profile from other peaks when seen from Xiantong Temple. However, from ancient times, the five peaks and their symbolic meaning of Bodhisattva Manjusri has been integrated with the image of all the temples in Wutai Mountains. According to the drawing of Wutai Mountains, the five peaks are quite outstanding and significantly higher than other mountains, showing the five peaks of the whole mountain has a unique meaning (Fig. 4-9).

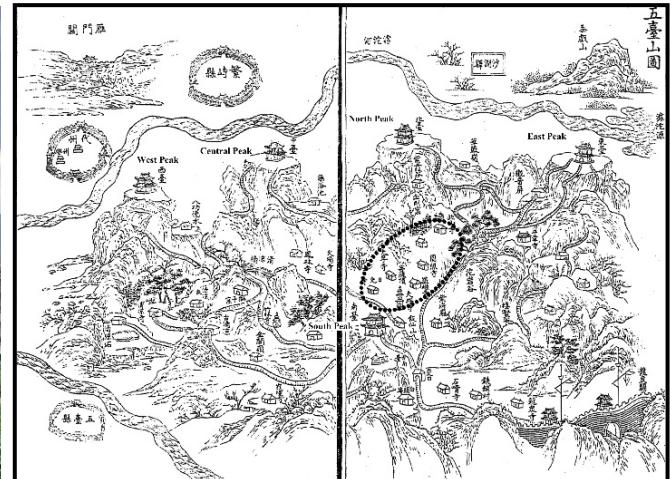


Figure 4-9 Drawing of Wutai Mountain

(Siku Quanshu, 1983)

According to *Qingliang Mountain Chronicle* (清涼山志), the reason for using the number “five (peaks or terrains)” to describe the landform of Wutai Mountain is that

“...Monk Chengguan said, ‘five’ symbolizes that our beloved Buddha (Bodhisattva Manjusri) has five wisdoms completed, five eyes purified. He has summarized the essence of the five Buddhist scriptures and has insight into

⁶⁹ 或五峯抱出，或雙嶺中開，或壘起巔中，或聳居雲外。（Ming dynasty, 1368A.D.-1644A.D.）鎮澄「清涼山志」(Yinguang, 1861-1940)

the origin of the five elements. So he wears a crown with five Buddhas on it, wears his hair in five buns. He uses the five Buddha Dharma to eliminate the five disasters...⁷⁰”

“There are five peaks on Wutai Mountain and on which there is flat ground with no trees thus it is also called five terraces as well... It is said that, the five terrace are the Buddha’s pedestals and they symbolize the five hair buns of Bodhisattva Manjusri⁷¹. ”

The five peaks symbolize the Buddha’s pedestals, five wisdoms, five eyes, five scriptures, five crowns and five hair buns of the Buddha (Bodhisattva Manjusri). The chronicle also states that Wutai Mountain is the residence and the preaching place of Dharma for Bodhisattva Manjusri and the other Bodhisattvas. Before the late Tang dynasty, the five peaks of Wutai Mountain had become linked with the image of Bodhisattva Manjusri and in the process of the development of Buddhism throughout China, step by step the image of Bodhisattva Manjusri also became attached to the natural environment of Wutai Mountain.

In this poem, the five peaks view is described as a Buddhist sacred site:

“People climb up Wutai Mountain with the purpose of pursuing in the steps of Bodhisattva Manjusri. When the scene of five peaks appears in front of the tourist, they associate the view with the image of Bodhisattva Manjusri⁷². ”

4.1.3 Spatial characteristic of the Lotus symbolization temple landscape

1) Center area: flat ground surrounded by peaks/ a depression on the mountain saddle

Towering picturesque mountain scenery, in the eyes of people, is just as a lotus flower is in full bloom upon the ground. The conspicuous peaks within the mountains, as they are the highest peaks, are usually compared to the central part of the lotus flower and the peaks surrounded it are described as the petals of the lotus flower. The “Lotus” symbolization Buddhist temples were hidden on the land surrounded by these petal-like peaks or on the saddle part of a mountain which looks like the lotus pod (Fig. 4-10). These temples are in a relatively central location within the mountains. This kind of peak-surrounded landform created a secretive and sacred space for the Buddhist temple, meanwhile isolating it from the outside world. The quiet environment of the “Lotus”

⁷⁰ 觀國師云，表我大聖，五智已圓，五眼已淨，總五部之真，秘洞五陰之性源，故首戴五佛之冠，頂分五方之髻，運五乘之要，清五濁之災矣。(Ming dynasty, 1368A.D.-1644A.D.) 鎮澄「清涼山志」(Yinguang, 1861-1940)

⁷¹ 五峯聳山。頂無林木。有如累土之臺。故曰五臺。海東文殊傳云。五臺。來之座也。亦象菩薩頂有五髻。(Song dynasty, 960A.D.-1279A.D.)「廣清涼傳」(Yanyi, Song dynasty)

⁷² 迢迢雲水陡峯巒，漸覺天低宇宙寬...一片烟霞籠紫府，萬年松徑鎖莓苔。人遊靈境涉溪去，我訪真容蹋頂來...五色雲中遊上界，九重天外看西方...北臺高峻碧崔嵬，多少遊人到便迴...中臺岌岌最堪觀，四面林峯擁翠巒...總信文殊歸向者，大家高步白雲端。(Song dynasty, 960A.D.-1279A.D.) 張商英「咏五臺詩」 豐衣足食處莫住，聖跡靈蹤好遍尋。忽遇文殊開慧眼，他年應記老師心。齊己「病中勉送小師往清涼山禮大聖」(Yinguang, 1861-1940)

symbolization Buddhist temple is in line with the needs of Buddhist meditation.

2) Landmark: Peaks around the temple

The surrounding peaks, which were endowed with a great deal of religious meaning, are the landmarks in the “Lotus” symbolization temple landscape. From Guoqing Temple the outline of the five nearby peaks can clearly be seen. Starting from Tiantai County then passing through the pine tree path, the view of the five peaks opens out before us, symbolizing the five masters who are guarding the temple.

The landform of Tiantai Mountain, where Guoqing Temple is located, is compared to the lotus flower and the highest peak, Huading Peak, was compared and named from its lotus-pod like shape. Xiantong Temple and Pusading Temple, located in the center of Wutai Mountain, are surrounded by the five peaks. These five peaks, which symbolize the five hair buns of Bodhisattva Manjusri, are the landmarks of Wutai Mountain as well as of the Buddhist temple landscape. Looking from the temple, the five peaks tower magnificently in the distance. These peaks, with their religious meaning, are significant landmarks of the temple landscape. They represented people’s longing for the ideal Buddhist world.

3) A multi-layered space

The “Lotus-Sea Universe” model, which is a multi-level space similar to the lotus flower, portrayed the understanding of the universe in Buddhism. The “Lotus” symbolization Buddhist temple is located in just such a kind of multi-level mountain. In the case of Guoqing Temple, the multi-level space contains two levels: Huading Peak and the other surrounding peaks form the first level, while the second level is made up of the expansive flat ground and its surrounding peaks space in the mountains, such as the place where Guoqing Temple is located (Fig. 4-10-1). In Wutai Mountain, the near mountains surrounding central Taihuai County constitute the first level space, and gradually outwardly, the distant five peaks form the second level space (Fig. 4-10-2). The saddle of the mountain, where Longchang Temple is located, is the first level space of Baohua Mountain (Fig. 4-10-3). Two peaks, Dahuashan Peak and Tianlong Peak and 36 other peaks surrounding Baohua Mountain form the second and third space level respectively.

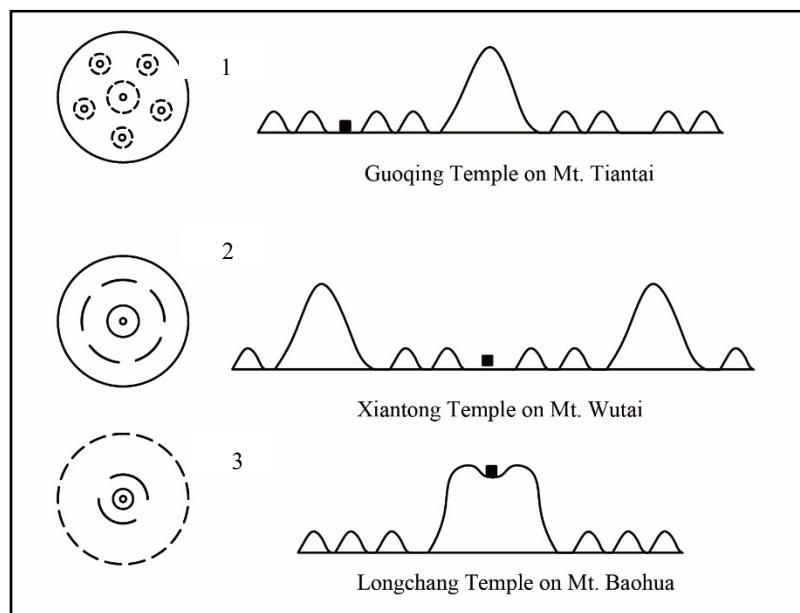


Figure 4-10 Spatial elements in “Lotus” type temples

4.2 Sumeru symbolization and Penglai Mountain symbolization temple landscape

4.2.1 Sumeru Mountain in Buddhist cosmology and Penglai Mountain in Chinese legend

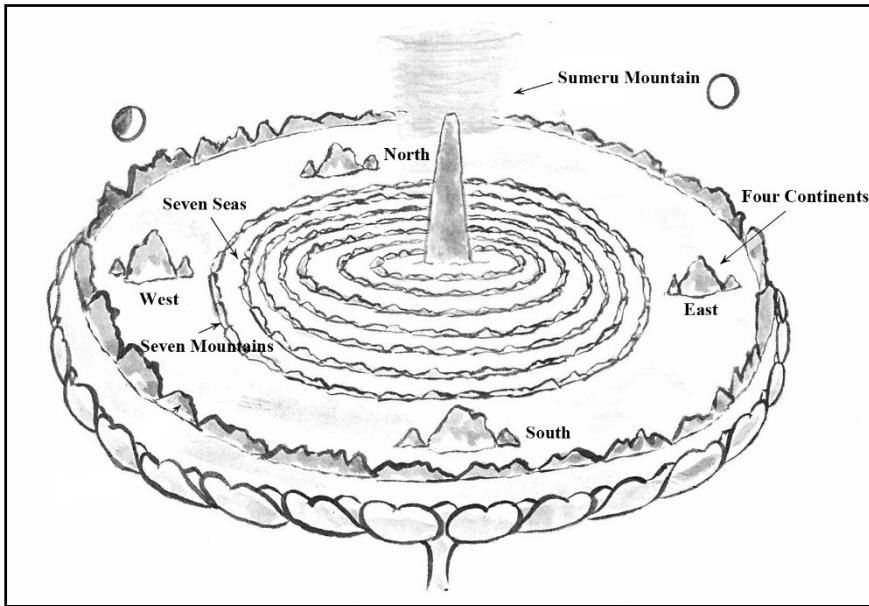


Figure 4-11 Sumeru Mountain (Nishimura, 1979)

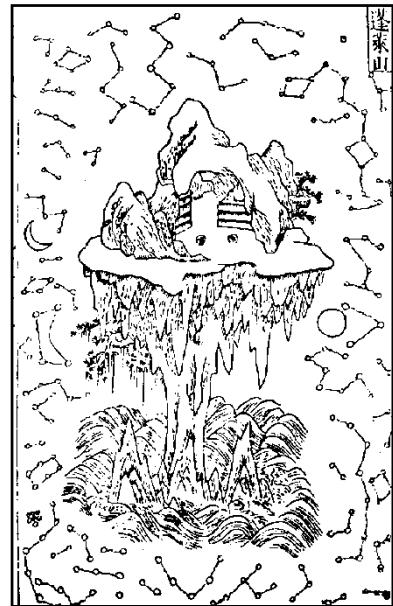


Figure 4-12 Penglai Mountain (Wang, Ming dynasty)

Sumeru Mountain, the conception of the universe in Buddhism, was absorbed from the Sumeru Mountain conception myth in India, as the center of the universe. However Sumeru Mountain in Buddhism is a pluralistic and multi-layered structured space. Around Sumeru Mountain there are seven seas and seven mountains which are like walls, and a vast outer sea which covers most of the surface of the world. In this outer sea, there are four continents (Fig. 4-11). Sumeru Mountain is based on the “Gold wheel”, “Water wheel” and “Wind wheel”. In Buddhist cosmology, a thousand Sumeru Mountain spaces form a small universe, one thousand small universes form a middle universe, one thousand middle universes form a big universe, and countless big universes form the whole universe (Mieda & Sugano, 1993).

In Chinese mythology, **Penglai Mountain** is said to be an island at the eastern end of Bohai Sea, along with four other islands, where the immortals lived, called Fanghu (方壺), Yingzhou (瀛州), Daiyu (岱輿), and Yuanjiao (員嬌). These mountains are 30,000 miles high and 9,000 miles wide at the top. There is 70,000 miles between each mountain. There is countless gold and jade, and pure white fowls and animals; and there are magical fruits growing in Penglai that can heal any disease and grant eternal youth. Immortals live on these mountains and fly between the mountains (Fig. 4-12). These islands have no foundations and have drifted with the waters from the

very beginning. The Jade Emperor made five giant sea turtles carry each mountain on each of their backs, and from then the five mountains finally stayed still within the sea⁷³.

4.2.2 Case study

Jinshan Temple

Jinshan Temple in Zhejiang province was established in the Eastern Jin dynasty by monk Baozhi. Due to the need for performing the Shuilu Rite, Baozhi built the temple on Jinshan Mountain. He chose this site because it was "extremely auspicious". The reason, perhaps is because the terrain and the position of Jinshan Temple are quite unique (Fig. 4-13):

"... There is no mountain, of which, the hills are as wonderful and elegant as that of Jinshan Mountain. Jinshan Mountain sits on the south side of the Yangtze River ... standing erectly in the middle of the water..."⁷⁴

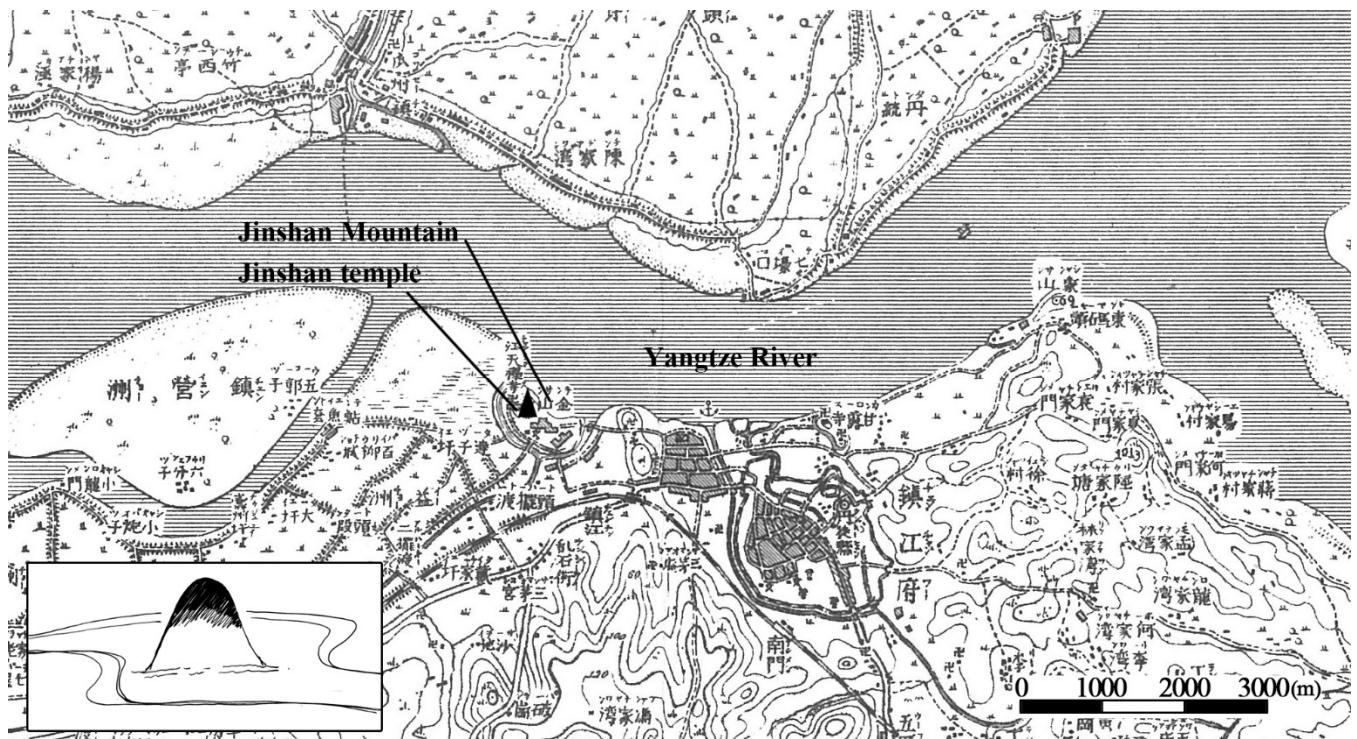


Figure 4-13 Jinshan Temple in 1/100000 topographic map

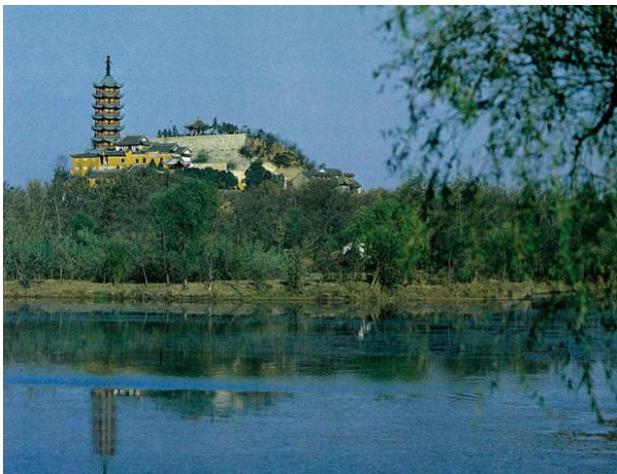
⁷³ 渤海之東不知幾億萬里，有大壑焉，實惟無底之谷，其下無底，名曰歸墟...其中有五山焉：一曰岱輿，二曰員嶠，三曰方壺，四曰瀛洲，五曰蓬萊。其山高下周旋三萬里，其頂平處九千里。山之中間相去七萬里，以為鄰居焉。其上臺觀皆金玉，其上禽獸皆純縞。珠玕之樹皆叢生，華實皆有滋味；食之皆不老不死。所居之人皆仙聖之種；一日一夕飛相往來者，不可數焉。而五山之根無所連箸，常隨潮波上下往還，不得暫峙焉。仙聖毒之，訴之於帝。帝恐流於西極，失群仙聖之居，乃命禺彊使巨鼈十五舉首而戴之。迭為三番，六萬歲一交焉。五山始峙而不動。(Spring and Autumn period & Warring States period, 770 B.C.- 221 B.C.) 「列子·湯問」(Siku Quanshu, 1983)

⁷⁴ 夫山川奇秀而萃樞無過金山若也，坐於江南京口...其巖巒屹立，孤峙江心上。(Qing dynasty, 1644A.D.-1912A.D.) 行海「金山龍游禪寺志略」

(Xinghai, Qing dynasty)

“... 7 miles from the town there is a river in which the Chang Mountain rises in five parts. When it reaches Bipu, Chang Mountain goes through the river and rises as Jinshan Mountain. Jinshan Mountain was also called Fuyu, Huofu and Funiu for it has the shape like floating jade or a lying cow...⁷⁵”

Jinshan Mountain is described as a solitary peak in the Yangtze River, surrounded by water (Pic.2). The mountain has a unique and beautiful form, protruding above the river surface. So there are some figurative names such as “Floating jade”, “Lying cow” and so on. Due to this the large scale Jinshan Temple was built on the mountain, and it forms a unique scenery called “Si Bao Shan (寺包山, Temple covers the mountain)”. The terrain of Jinshan



Pic 4-2 Jinshan Temple (The Buddhist Association of China, 1981)

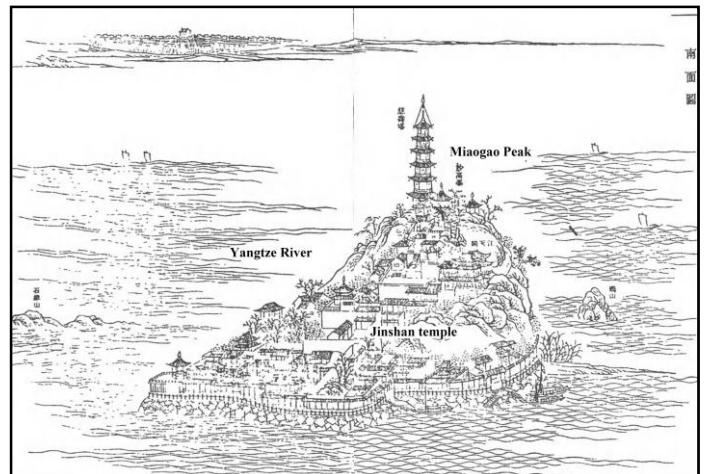


Figure 4-14 Drawings of Jinshan Temple (Lu, Qing dynasty)

Temple is that of a mountain sitting in the middle of the water and is very similar to Sumeru Mountain, which is the description of the world according to the Buddhist scriptures (Fig. 4-14). One of the peaks of Jinshan Mountain, called Miaogao Peak, is directly compared to Sumeru Mountain:

“...Miaogao Peak, is like Sumeru Mountain, and stands out from other mountains. It is said that Gaosibao, aware that in the south there is a country called Lesheng, and a peak there is Miaogao. The monk Deyun lives here and the Sudhan serve him...⁷⁶”

The mountain form of Jinshan Temple is so special that it is a metaphor for the center of the world. This also expresses the fact that the temple occupies a noble status. Interestingly, when people saw the distant view of Jinshan Temple, which stands out in the middle of the water, the scene often reminded them about the legendary land, Penglai Mountain, in the East China Sea in Chinese mythology. In many poems Jinshan Temple is often compared to the legendary land. In the poems people imagine that fishes and dragons come and go in the surrounding water.

⁷⁵ 郡城西北七里大江中，長山西北起為五州，至下鼻浦遂入大江，突起而為金山。又名浮玉，又名獲符，又名伏牛，皆相形之比擬而已。（Qing dynasty, 1644A.D.-1912A.D.）秋崖「續金山志」(Lu, Qing dynasty)

⁷⁶ 妙高峰，即須彌也，獨出眾山，曰高四寶所感，曰妙南方有國名曰勝樂，峰名妙高，比丘德雲常居於此，善財童子奉之。（Qing dynasty, 1644A.D.-1912A.D.）秋崖「續金山志」(Lu, Qing dynasty)

The pavilions on the mountain, reflecting in the river like a mirage. The unique environment of Jinshan Temple is in full accordance with a wonderland in the imagination of the people⁷⁷.

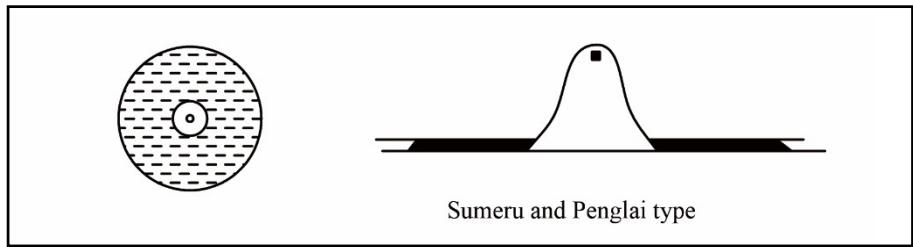
4.2.3 Spatial characteristic of Sumeru Mountain symbolization and Penglai Mountain symbolization temple landscapes

1) Landmark: An Isolated mountain in the river

The peak located in the middle of the river symbolized Sumeru Mountain in the center of the Buddhist universe. It was also compared to Penglai Mountain in Chinese mythology. The peak is a landmark of the temple landscape for its magnificent height, highest within the entire county, and made the temple a sacred place for people to worship (Fig. 4-15). Due to its mountain top location, from the temple there is an overlooking view of the surrounding river and the county.

2) Boundary: Surrounding river

The Yangtze River around the Jinshan Mountain defined the area of the temple and mountain and separated them from the county space. The vertical non-accessibility of the temple space created a sense of mystery. The river functions as the boundary of the temple symbolizing the seven seas under Sumeru Mountain and the East Sea around Penglai Mountain.



However, as the boundary of the temple space, the river is not stable. For instance, with changes to the course of the river, Jinshan Temple now connects to the south side of the Yangtze River. On the other hand, temple construction under such unstable river site conditions reflected the people's pursuit of an ideal religious world.

⁷⁷ “一點青螺白浪中，全依水府與天通。晴江萬里雲飛盡，鼇背參差日氣紅。”(Tang dynasty, 618A.D-907A.D) 竇庠「金山」(Lu, Qing dynasty)

“一朶蓬萊在世間，梵王宮闕翠雲閑。近南秋水更清淺，聞道遊人未忍還。”(Tang dynasty, 618A.D-907A.D) 鮑溶「望金山寺」(Lu, Qing dynasty)

“山載江心寺，魚龍是四鄰。樓臺懸倒影，鐘磬隔囂塵。過櫓妨僧定，驚濤濺佛身。誰言題詠處，流響更無人” (Tang dynasty, 618A.D-907A.D) 孫舫「金山寺」(Lu, Qing dynasty)

“樓高雉堞千師壘，峰拔驚波萬壑攢。山絕地維消虎踞，水浮天險上龍盤。蜃噓雲棲飛江島，鼇噴仙巖隔海瀾。長對碧波臨古渡，幾經風月與悲歡。” (Tang dynasty, 618A.D-907A.D) 李紳「憶萬歲樓望金山」(Lu, Qing dynasty)

4.3 Fengshui symbolization temple landscape

4.3.1 Fengshui (Geomantic omens)

The word Fengshui first appeared in the *Burial Book* (葬書) written by Guo Pu during the Jin dynasty. “Qi rides the wind and scatters, but is retained when encountering water⁷⁸”. It is also known as Bu Zhai (卜宅), Xiang

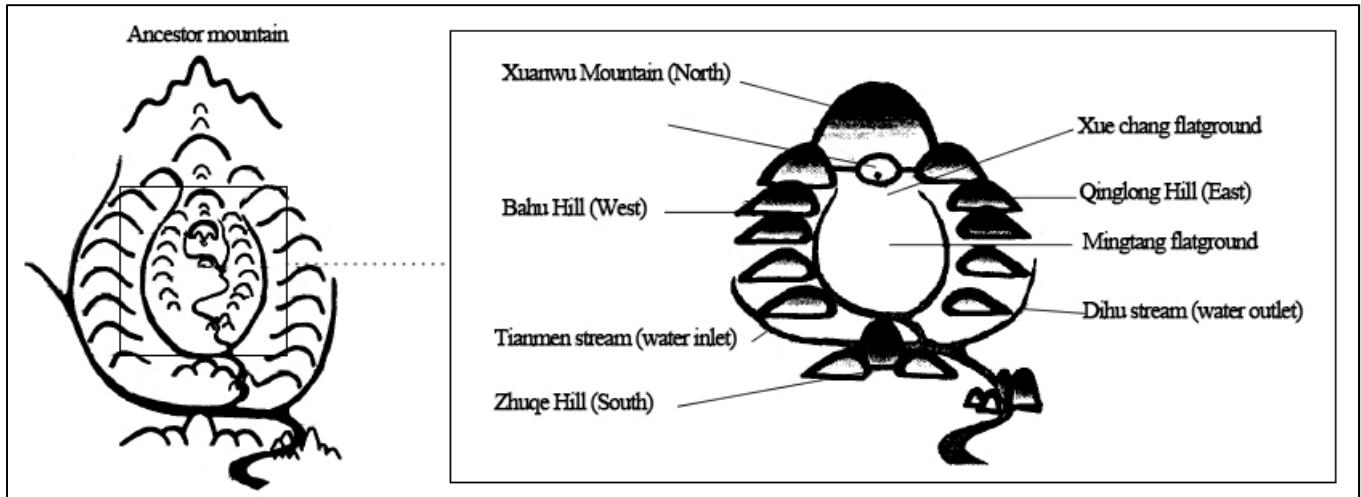


Figure 4-16 Ideal Fengshui model (Yang, 2005)

Zhai(相宅) and Kan Yu (堪輿). The essence of Fengshui is the Chinese peoples' view of nature, focusing on the relationship between heaven, people and the earth. It has a unique system to evaluate the natural environment. There are such steps as “Find the main mountain (尋龍)”, “Investigate on the hills (察砂)”, “Investigate on the water (觀水)”, “Find the Qi spot (點穴)” and “Choose the building orientation (立向)” in Fengshui to discover the most ideal place for, not only the site to build a tomb, but also for the site to build a residence and cities. Fengshui was widely used in ancient China for choosing sites as there is a model for the ideal space according to Fengshui. The ideal space is enclosed and basin-shaped, and facing to the north. There are three layers around the basin and is centered in the Spot (穴点). The inner layer, middle layer and outer layer have similar spatial structures in which there are Xuanwu Mountain, Qinglong Hill, Baihu Hill and Zhuque Hill as boundaries; Xuechang and Mingtang flat ground as the base; and the Tianmen stream and Dihu stream as the water inlet and outlet (Fig. 4-16).

⁷⁸ 氣乘風則散，界水則止，古人聚之使不散，行之使有止，故謂之風水。(*Han dynasty, 206 B.C.- 220 A.D.*) 「葬書」郭璞
(Guo, Han dynasty)

However, because of the ever-changing situation of the mountains and rivers in different areas, it is necessary to highly abstract and generalize the Fengshui space model to seek a universally applicable model. Furthermore, in order to achieve the unlimited application of this model, deduction of the spatial elements is also needed. Actually, the four symbols concept was utilized to deduct and abstract the ideal Fengshui model, as “On the left (east) is the Qinglong (Blue Dragon, 青龍); On the right (west) is the Baihu (White Tiger 白虎); In the front (south) is the Zhuque (Red Phoenix 朱雀); Behind (north) is the Xuanwu (Black Reptiles. 玄武)⁷⁹” (Fig. 4-17) These four symbols can be understood as mountains, hills, rivers, roads, paths, forests and even buildings within the space when applying it in areas with various natural environments.

4.3.2 Case study

Qixia Temple

Qixia Temple, originally established in the Nanqi dynasty, was the residence of the hermit Ming Sengshao. *Biographies of Eminent Monks* (高僧傳) recorded on the establishment of the Qixia Temple stating that:

“...a superior man called Ming Sengshao was living in Qi Prefecture. He prefers to be away from the secular world, thus leaded the life of a recluse on Sheshan Mountain in Langya. He respects Monk Fadu’s noble character and treats him like a teacher and friend. Ming Sengshao donated his house as Qixia vihara before his death and invited Monk Fadu to live there. Before Ming Sengshao, there was a Taoist who also wanted to build a Taoist temple on this site, however, he who lived here soon died. After Qixia Temple was built and Monk Fadu lived in it, all the demons disappeared...⁸⁰”

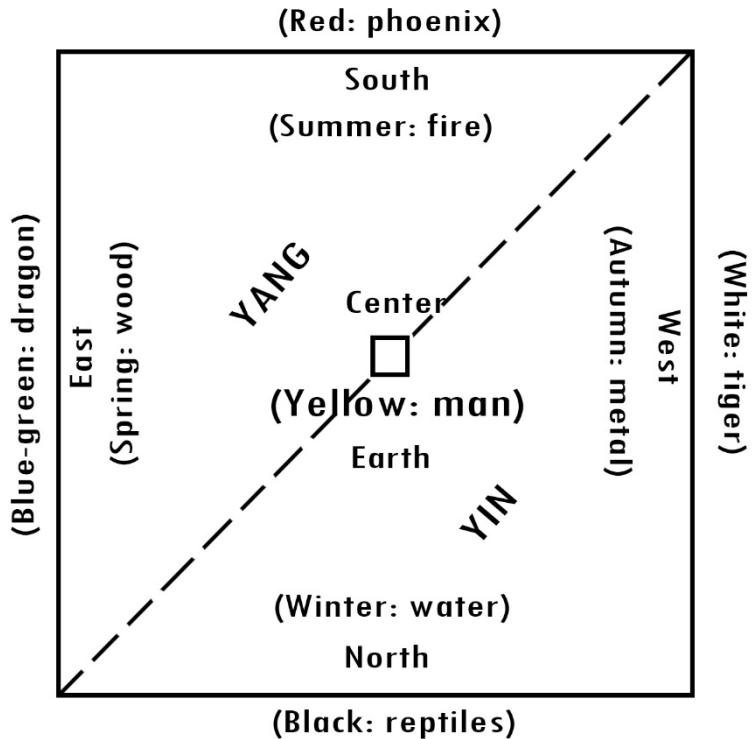


Figure 4-17 Four symbols: traditional Chinese world view (Tuan, 1977)

⁷⁹ 左為青龍，右為白虎，前為朱雀，後為玄武。 (Han dynasty, 206 B.C.- 220 A.D.) 郭璞「葬書」(Guo, Han dynasty)

⁸⁰ 高士齊郡明僧紹抗迹人外。隱居鄆鄖之攝山。挹（法）度清徽，待以師友之敬。及亡捨所居山為栖霞精舍。請度居之。先有道士欲以寺地為館。住者輒死。及後為寺。猶多恐動。自度居之群妖皆息。 (Southern and Northern dynasties, 420A.D.-589A.D.) 慧皎「高僧傳」(Huijiao, Southern and Northern dynasties)

The site of Qixia Temple was not only chosen by Ming Sengshao for him to live a hermit's life, but was also preferred by the monk Fadu and the Taoist. Many people regarded this location as a treasured place, because it has a quiet, mountainous surrounding environment. In *Sheshan Zhi* (*摄山志*, *Sheshan Mountain chronicle*), the environment of Qixia Temple was described as:

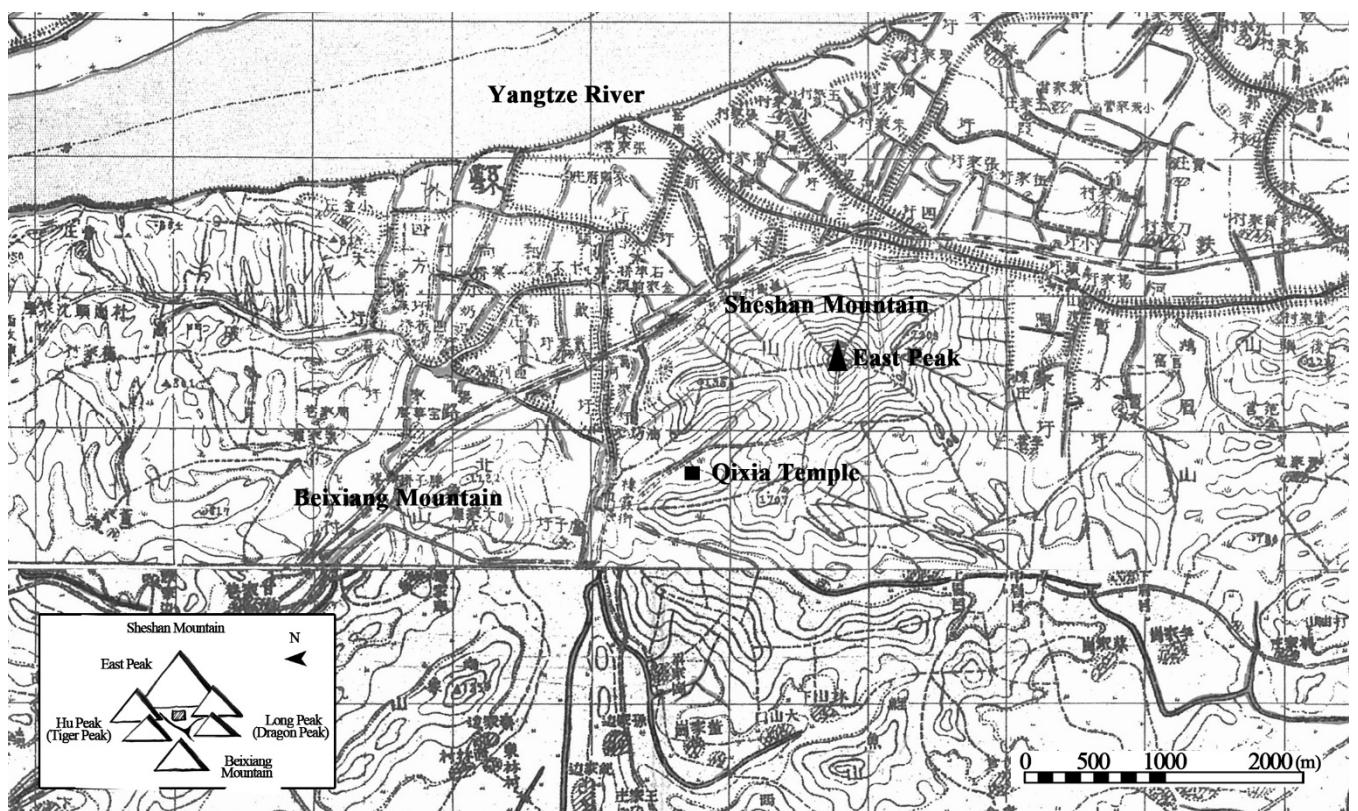


Figure 4-18 1/50000 Topographic map of Qixia Temple

“... (Sheshan Mountain) is in the round shape of a lid thus it is also called Sanshan (Umbrella Mountain) as well. Mountains surround on the left and right (Fig. 4-18). A mountain in the background stands erect between them. The winding peak in the southern direction is called Zhongfeng (Middle Peak), to the south is Qianfo Cliff. ... on the left there is a peak with a spring streaming down it... there is a white colored spring called Bairu Spring (White milk spring)... There are lined mountains in the south and Bailu Spring (White deer spring) in the east... When arriving at the top of the mountain from the east, there is a beautiful view of the surrounding mountains. Peaks stand erect covered with trees. Cliffs and gullies go far and deep... Yangtze River comes from the west and surrounds this place on three sides like beautiful white silk...⁸¹”

Qixia Temple is surrounded by hills, ridges and peaks one after another, of which, Middle Peak, Qianfo Cliff and East Peak are the most famous (Fig. 4-19). In the panoramic view from Qixia Temple, there are East Peak in the

⁸¹ (摄山)形團如蓋又曰繖山，左右環拱，遠近相望其間，屹然卓立。邇而南者謂之中峰。少南爲千佛巖。...左則泉流縈帶隱約旁達者...其色正白者曰白乳泉。...南爲列岫。東爲白鹿泉...又東始陟絕頂。四顧諸山，峰巒聳翠，巖壑窈窕...而長江西來，三面環繞，瑩如縞練。(Qing dynasty, 1644A.D.-1912A.D.) 陳毅「攝山志」(Chen, Wang & Qian, Qing dynasty)

east as well as Hu Peak and Long Peak which symbolize the Fengshui Baihu Hill and Qinglong Hill in the north and south (Fig. 3-15). In addition, the Middle Peak is to the southeast. To the west of Qixia Temple, there is the view of Baixiang Mountain, which symbolizes the Zhuque Hill in Fengshui. Although Qixa Temple is east-west orientated, its spatial structure is in accordance with the Fengshui space model. Maybe it was the reason that the site of Qixia Temple was also preferred by the Taoist.

On the highest peak, East Peak, there is a view overlooking the mountains and the Yangtze River. In addition to the excellent view of the mountains, the waterscape of Bairu Spring and Bailu Spring makes the environment more suitable as well. In *Sheshan Mountain Qixia Temple Travel Notes* (游攝山棲霞寺記) Wang Shizhen described his tour to Qixia Temple:

“...although on the way to Qixia Temple there are only barren hills on both sides, when arriving at a bowl-shaped depression, a mountain with numerous ancient cypress and pine trees suddenly appears and in the front of the eyes,

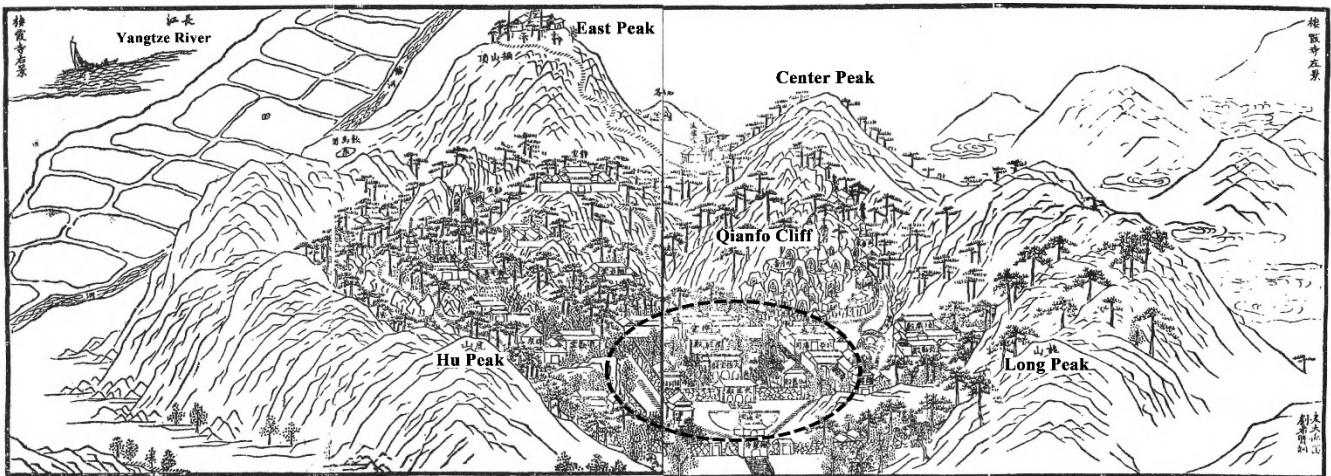


Figure 4-19 Drawing of Qixia Temple (Ge, Ming dynasty)

this is Sheshan Mountain. Go along the path and walk some hundreds of steps, there you will find Qixia Temple...follow along the meandering stream by Qianfo Cliff, it seems an endless way. Verdant grasses and trees covering the hills reflect the sunlight. After the rain, rushing stream water cascades to the bottom and makes a sound like falling jade beads... the west is layered ridges which looks like the waves of a seaway...⁸²”

From this text it can be seen that Qixia Temple is in the middle of a depression and surrounded by the peaks of Sheshan Mountain. When entering this mountain with such beautiful scenery, the tourist experiences a change of mood from the secular world to a pure land. In addition to the amazing view, the soundscape of the spring stream

⁸² 然所過諸嶺多童，至中凹處，忽得蒼松古柏之屬，是為攝山。趨馳道數百武，得寺曰棲霞...循千佛岩沿澗而進，迤邐不可窮，時旭日漸融，草樹被之，蔥蘢葦，有光澤。澗水受雨，爭道下迸，勢如散珠，聲若夏玉...其西則層疊浪嶺...若海波萬沸，洶湧瀨漾。(Ming dynasty, 1368A.D.-1644A.D.) 王世貞「游攝山棲霞寺記」(Shen & Wang, Ming dynasty)

in the Sheshan Mountains is quite impressive.

The seclusion and quiet environment of Qixia Temple often lead tourists to visit here. Poet Pi Rixiu wrote, “I can’t find the hermit Ming Sengshao here. I just feel lonely in this isolated mountain...when the moon rises I want to discuss Master Zhuang’s *Xiao Yao You* (逍遙遊) with someone.” To Pi Rixiu, the isolated environment of Qixia Temple reminds him of the Taoist and the ideal of living a hermit life⁸³.

Wanfu Temple

Wanfu Temple was established by the monk Zheng’gan in the Tang dynasty. The *Huangbo Mountain Chronicle* (黃檗山志) has recorded the reason the monk Zheng’gan chose here to build the temple stating:

“...The founder of Wanfu Temple is the monk Zheng’gan, his family name is Wu and he came from Putian. After he studied Buddhism in Caoxi, he arrived at Huangbo Mountain, where there were numerous Amur cork

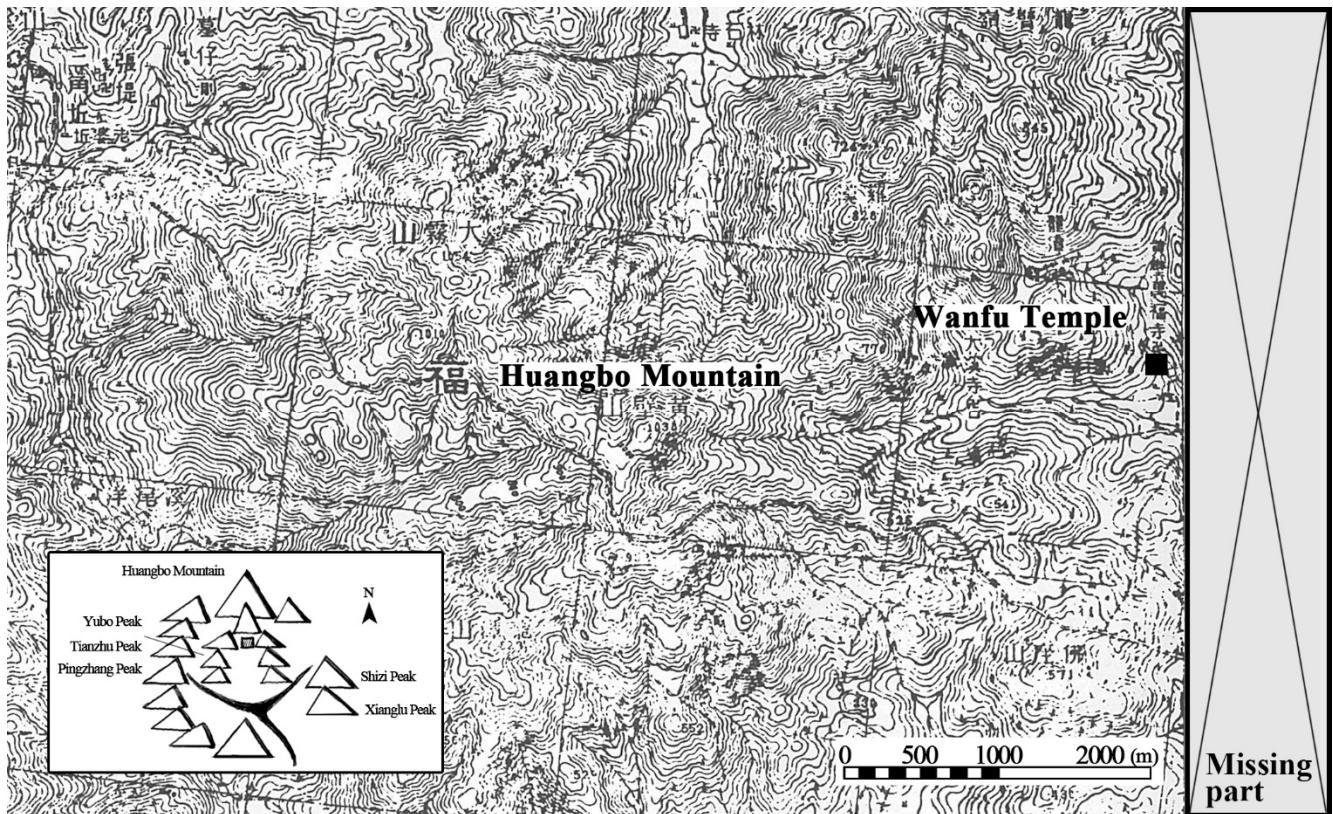


Figure 4-20 Wanfu Temple and Huangbo Mountain in 1/50000 topographic map

trees on the way back to home. He said, “My teacher has told me I should stop where there is something bitter. I

⁸³ 不見明居士 ,空山但寂寥...何時石上月 ,相對論逍遙。(Tang dynasty, 618A.D-907A.D)皮日休「游栖霞寺」全唐詩 (Siku Quanshu, 1983)

think it's here (Huangbo Mountain)", then he built a temple here. This is the story of the establishment of Huangbo Mountain's Wanfu Temple...^{84,,}

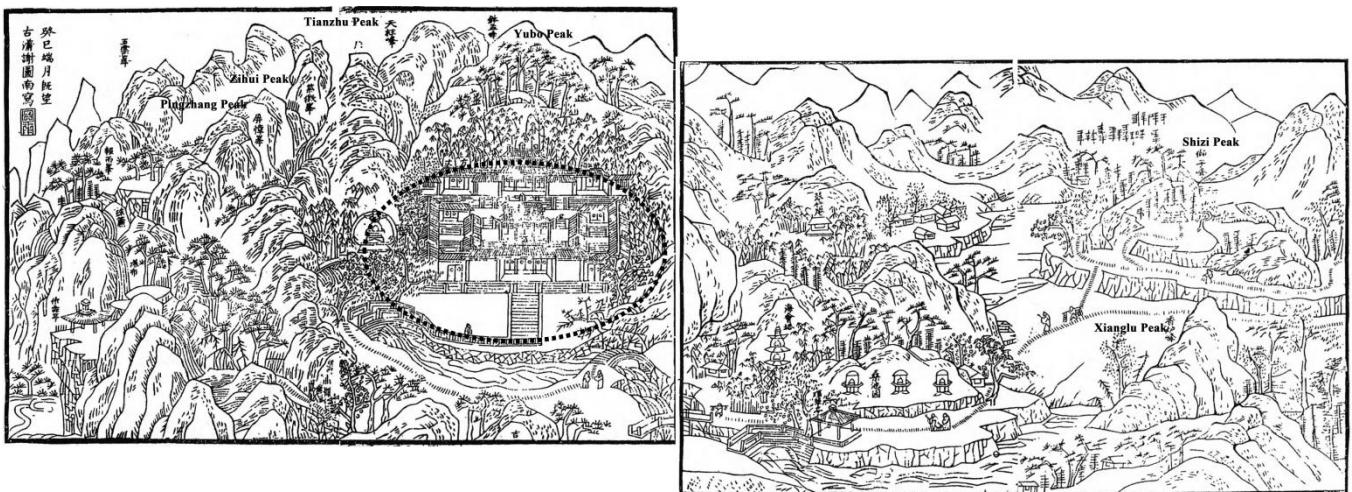


Figure 4-21 Drawing of Wanfu Temple (Yinyuan, Ming dynasty)

This story showed that the monk Zheng'gan built Wanfu Temple in the Huangbo Mountains because there are Amur cork trees here. But the establishment of Wanfu Temple in the Huangbo Mountains also has its basis in the great situation of mountains and rivers.

“...It (Huangbo Mountain) is precipitous and stands high into the sky. Huangbo Mountain is called the main dragon vein of the whole town. The mountain is divided into two branches, east branch called Bao Peak... and west branch called Luohan Peak. Jiangjie Peak is the main mountain of Wanfu Temple. Jiangjie Peak branches off from the east and surrounds the left side of the temple as a wall. Luohan Peak, Tianzhu Peak and Pingzhang Peak range on the west as a wall to the temple's right. On the southwest is Wuyun, Baoyu, and Jixiang Peak. The offshoot of Jixiang Peak and Xiaqilong Peak surround the temple as an inside wall. Xianglu Peak and Shizi Peak are the inside wall on the east of the temple...^{85,,}

The mountain form of Wanfu Temple is described as numerous peaks that surround the temple on the south, west, east and southwest (Fig. 4-20). There are two layers of mountains and the outer mountains are described as the “wall” of the temple. This kind of mountain form is also shown in the temple drawing (Fig. 4-21). Especially on the northwest side of the temple, there are a series of peaks layered around. Although the exact name of each peak

⁸⁴ 開山正幹禪師。師姓吳，莆田人。得法於曹溪，後辭歸，至福唐黃檗山，乃曰：「吾師受記，遇苦即止，其在是乎？」遂結庵於茲，為黃檗之肇始云。（Southern and Northern dynasties, 420A.D.-589A.D.）慧皎「高僧傳」（Huijiao, Southern and Northern dynasties）

⁸⁵ (黃檗山)高出雲表，峭拔無雙，本縣中龍之祖也。剝下兩枝，東為寶峰，西行十里許...突起為羅漢峰...絳節峰，乃寺之主山也。東自絳節分岫，由化龍直趨下棋壠為寺左障。西自羅漢、天柱、屏嶂列擁為寺右障。西南自五雲、報雨、吉祥諸峰湧騰而下為寺內案。吉祥之餘麓屹然環遶，與下棋壠相構，為寺內垣。從前案遙引而東，復有香爐峰與獅子峰對峙，為寺外垣。（Ming dynasty, 1368A.D.-1644A.D.）隱元「黃檗山寺志」（Yinyuan, Ming dynasty）

can not be determined in this study, the spatial characteristics of numerous layered peaks in the panoramic figures is in accordance with the description in the literature works and the drawings (Fig.3-13). Furthermore, a river flows in the front of Wanfu Temple, as in the drawing of Wanfu Temple, and is thus in line with the river to the south in the Fengshui model.

Tiantong Temple

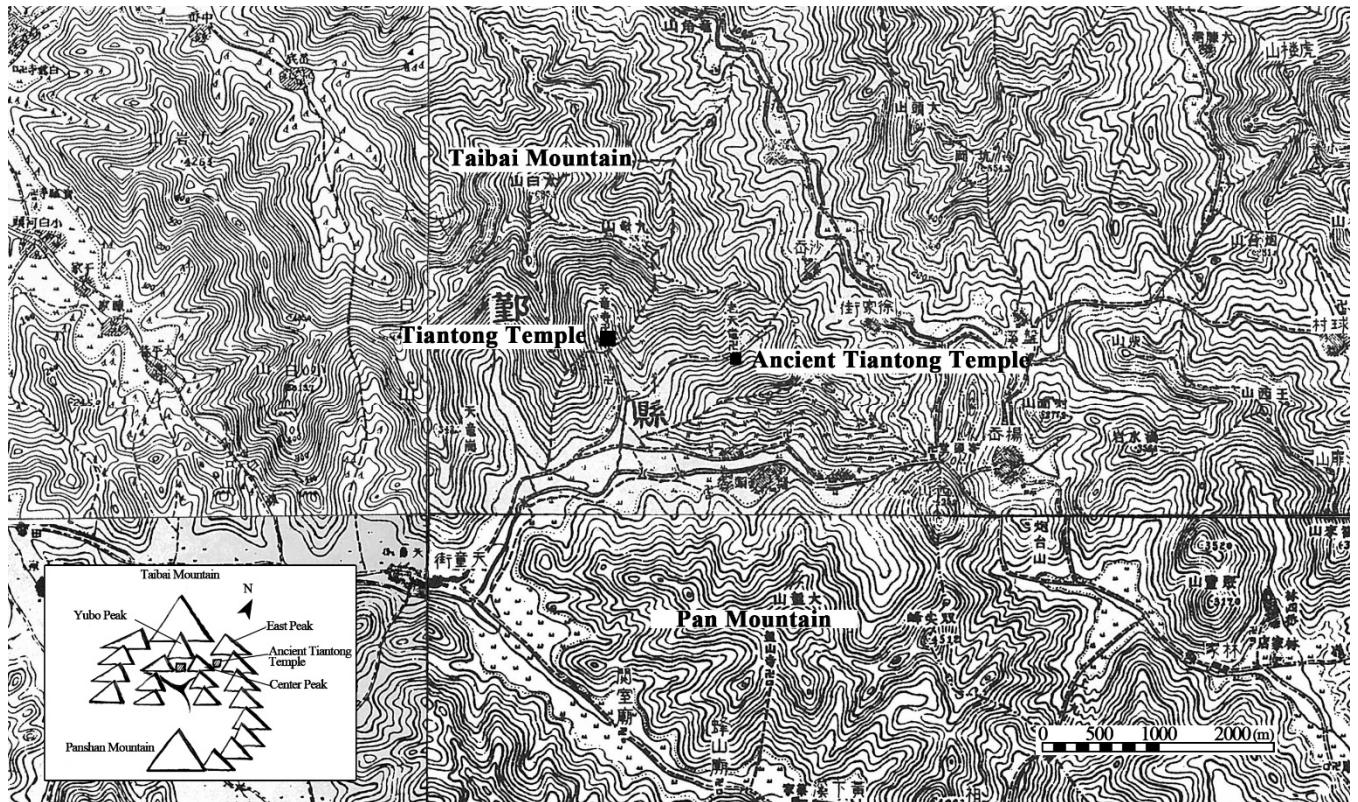


Figure 4-22 1/50000 Topographic map of Tiantong Temple

Tiantong Temple is located in Tiantong Mountain which is also known as Taibai Mountain (Fig. 4-22). It was named as “Taibai” because in the first year of Yongkang (300) during the Jin dynasty, the monk Yixing built a temple here and the Taibai immortal was deeply touched. The Taibai immortal turned into a child and went down to the secular world to serve the monk Yixing. The monk Farui chanted the Fahua Sutra every day in the temple thus touched the Tiantong immortal, this mountain is also called “Tiantong”. From the *Tiantong Temple Chronicle* (天童寺志) the description of the surroundings of the temple is stated as:

“...This mountain originates from Zhaixing Peak on Tiantai Mountain. A branch rises in the east of the Zhaixing Peak and is called Mingjiaolou, which continues extending as Pan Mountain.... Where the mountain winds to Dong Peak, the ancient Tiantong Temple was built on the Dong Valley below Dong Peak. There is another rising peak

named Ru Peak and a peak opposite to it in the northeast called Zhong Peak. Tiantong Temple is built on flat ground surrounded by these peaks...⁸⁶

From this text, it is shown that the ancestor mountain of Tiantong Temple is Tiantai Mountain. Not only the ancient Tiantong Temple but also the newer Tiantong Temple is located on the flat ground surrounded by a number of peaks. In the panoramic figure of Tiantong Temple, there are near peaks surrounding the temple to the north, east and west directions. In the south, there is the distant view of Panshan Mountain (Fig. 3-12). The mountain form of Tiantong Temple is a typical Fengshui model space. This kind of characteristic is also shown in the temple drawing: to the north there are Taibai Peak and Yubo Peak, to the east there is Zhong Peak and to the west there are Shiqi

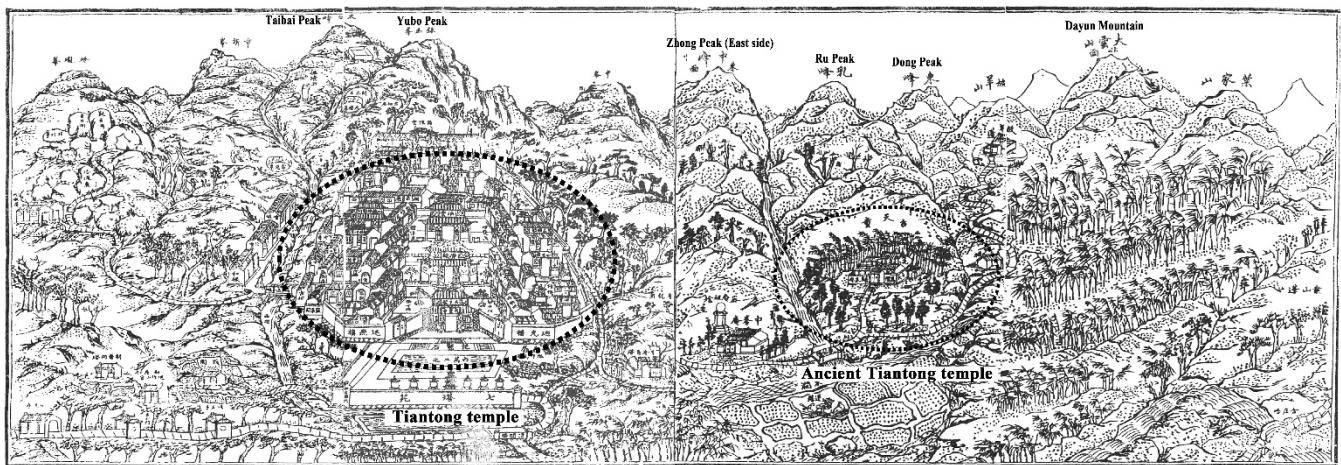


Figure 4-23 Drawing of Tiantong Temple (Lian, 1920)

Peak and Linglong Peak (Fig. 4-23). A stream originates from Taibai Peak and flows around the sides of Tiantong Temple and then past the front of the temple. The ancient Tiantong Temple had similar spatial characteristics with Tiantong Temple.

Donglin Temple

⁸⁶ 山之本自天台摘星峰來，山之支從東而起者曰明角巒，行為盤山。盤山折而北稍伏度太白嶺，更起為大雲山，落大雲而復聳者曰東峰。關其天下為東谷，即古天童也。復起一峰曰乳，折而東北峙者曰中峰，此逶迤頓伏即為高原，而梵刹今奠於斯。

(Qing dynasty, 1644A.D.-1912A.D.) 聞性道「天童寺志」(Wenxingdao, Qing dynasty)

Lushan Mountain's Donglin Temple was established by the monk Huiyuan during the East Jin dynasty. Huiyuan and scores of his disciples went to Luofu Mountain from Jinzhou. When they arrived at Xunyang and saw Lushan Mountain, Huiyuan said "This place is quiet enough to calm my mind", therefore he started to live in the Longquan Vihara. Later the monk Huiyong from Xilin Temple invited him to stay in Lushan Mountain and requested local official Huan Yi to build a temple for Huiyuan, which now became Donglin Temple (Fig. 4-24, Fig. 4-25).

"... When Huiyuan built Donglin Temple, he made the utmost of the beautiful natural environment of Lushan Mountain. The temple is facing Xianglu Peak (Thurible Peak) and next to a valley with a waterfall. Piling up the stones as the base, planting pine trees around. The temple is surrounded by a spring, the room is full of clouds. Huiyuan then built another temple at Donglin Temple. For it has such quiet and such a beautiful environment, people who enter Donglin Temple will feel refreshed..."⁸⁷"

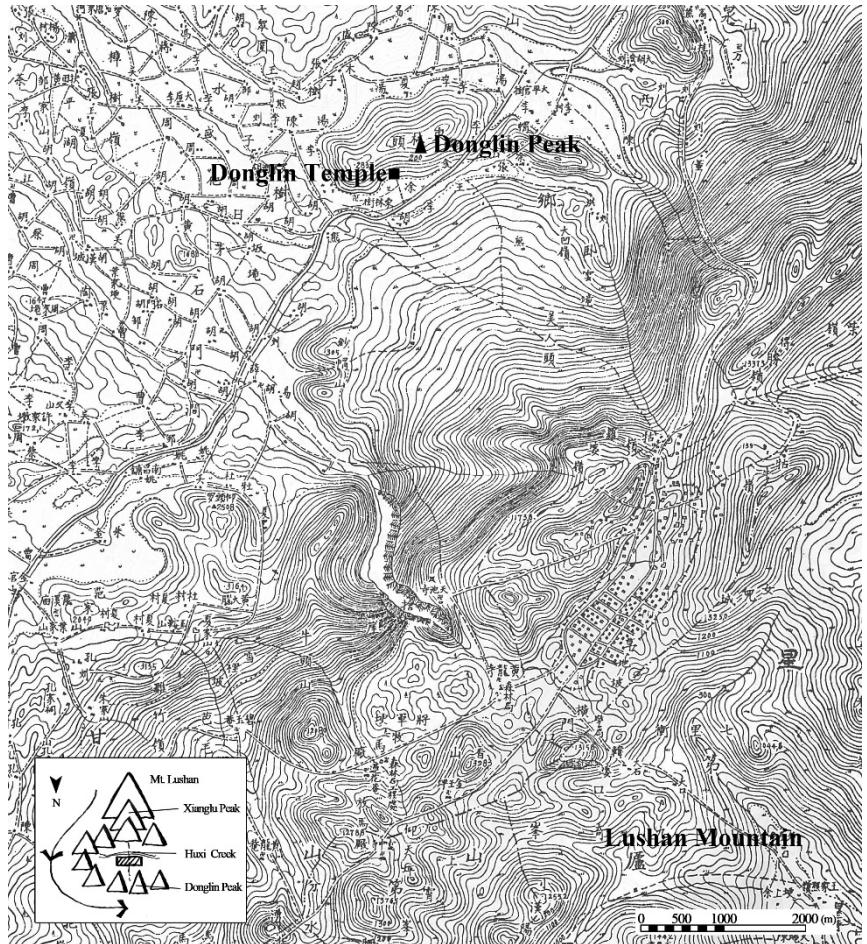


Figure 4-24 1/50000 Topographic map of Donglin Temple

Choosing the site for Donglin Temple, the main consideration of Huiyuan was to create a pleasant surroundings by utilizing the mountains, peaks, valleys, waterfalls, trees and so on. In *Lushan Chronicle* (廬山志), the natural environment is described as:

"...There is a valley to the northwest of Donglin Temple called Xiang Valley, to the west is Xilin Temple, in the southeast is Wulong Pool, in the south is Xianglu Peak..."⁸⁸

⁸⁷ 遠創造精舍洞盡山美。却負香爐之峯。傍帶瀑布之壑。仍石壘基即松栽構。清泉環階，白雲滿室。復於寺內別置禪林。森樹烟凝石筵苔合。凡在瞻履皆神清而氣肅焉。(Southern and Northern dynasties, 420A.D.-589A.D.)慧皎「高僧傳」(Huijiao, Southern and Northern dynasties)

⁸⁸ (東林)寺西北有谷曰香谷，西為西林寺，東南有烏龍潭，南有香爐峯。(ROC 1933) 吳宗慈「廬山志」(Wu, ROC)

“(Poet) Lu You said, “Donglin Temple is facing to the Xianglu Peak. This peak branches to the east, and surrounds the Donglin Temple from the north to west like a city wall. Donglin Temple is in the middle of these mountains. A geomancer said, in geomancy the so-called ‘Dao Gua Long Ge (倒挂龍格)’ refers to the mountain form of Donglin Temple⁸⁹. In the “Dao Dua Long Ge” Fengshui pattern, the dragon vein ends where it turns around. The temple is located under the Dongling Peak, which is at the end place of Lushan Mountain. Meanwhile,

the temple is facing toward the ancestor mountain Lushan thus this kind of geomantic pattern is also called “Long Gu Zu (龍顧祖).”

It can be found from this text that, the natural environment of Donglin Temple is in line with the good environment standards of Chinese Fengshui. Compared to other Fengshui models, Lushan Mountain, as the ancestor mountain, faces to the temple and its elevation angle reaches to 14 degree, even greater than that of Donglin Peak (Fig. 3-17). Because it is located in a valley between Donglin Peak and Lushan Mountain, the sense of enclosure is relatively strong in the view of north and south directions but is weak in east and west directions where the ends of the valley are.

Poet Li Bai loves the beautiful scenery in Lushan Mountain and composed a lot of poems about Lushan. In addition to the famous poem *Wang Lu Shan Pu Bu* (望廬山瀑布 *Watching the waterfall in Lushan Mountain*), he described the night view of Donglin Temple in *Lu Shan Dong Lin Si Ye Huai* (廬山東林寺夜懷 *Visiting Donglin Temple during the night*). When Li Bai arrived at Donglin Temple, he was deeply touched by the bell ringing during the silent night and the beautiful moon reflecting on the Huxi Creek. He then sat and started to meditate and muse about the ever detailed surroundings⁹⁰. Poet Meng Haoran, in order to follow in the footsteps of the monk Huiyuan, went to Xunyang City by boat. When he saw the distant view of Xianglu Peak, he understood that the reason monk Huiyuan had built a temple here was because he wanted to live in a secluded

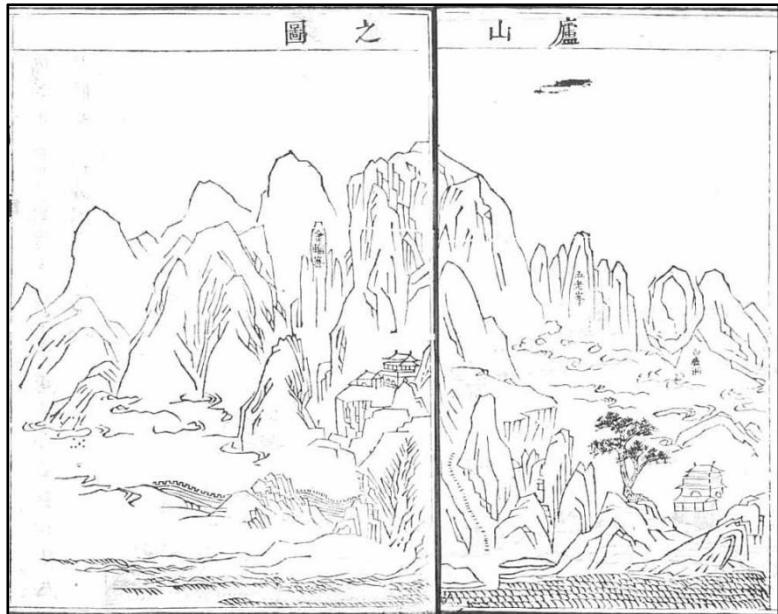


Figure 4-25 Drawing of Lushan Mountain (Zhao, 1881)

⁸⁹ 宋陸游云，東林寺正對香爐峯，峯分一枝東行，自北而西環合四抱，有如城郭，東林在其中。相地者謂之，倒挂龍格，當即指此。(ROC 1933) 吳宗慈「廬山志」(Wu, ROC)

⁹⁰ 我尋青蓮宇，獨往謝城闕。霜清東林鐘，水白虎溪月。天香生虛空，天樂鳴不歇。冥坐寂不動，大千入毫髮。湛然冥真心，曠絕斷出沒。(Tang dynasty, 618A.D-907A.D) 李白「廬山東林寺夜懷」(Siku Quanshu, 1983)

place. As he came nearer to the temple, it started getting dark. He saw nothing, but heard the bell ringing. Xianglu Peak can be seen whether from a distant place or from the temple⁹¹. It became the landmark of Donglin Temple. A quiet environment here makes visitors feel refreshed and provides them with the chance to meditate.

Temples in Chang'an City

During the second year of Kaihuang (582) in the Sui dynasty, Emperor Wen personally investigated the topography in Chang'an City and chose the Longshou Yuan (Platform) in the southeast of Chang'an City to build a new city, the Sui Chang'an City. Longshou Yuan (Platform) is a series of terraces and slopes between the Chanhe River and the Bahe River, originating from the Zhongnan Mountain in the south and ending at the Weihe River in the north. In the south there are terraces such as Shaoling Yuan (Platform), Shenhe Yuan (Platform) and in the north the slope alternates with depressions, such as Qujiang pond and Leyou Yuan. This kind of landform is in accordance with the “Dao Gua Long Ge (倒挂龍格)” Fengshui pattern, and Sui Chang'an City is located at the place where the ancestor mountain, Zhongnan Mountain and a series of terraces ends where the temples are facing to the ancestor mountain (Fig. 4-26).

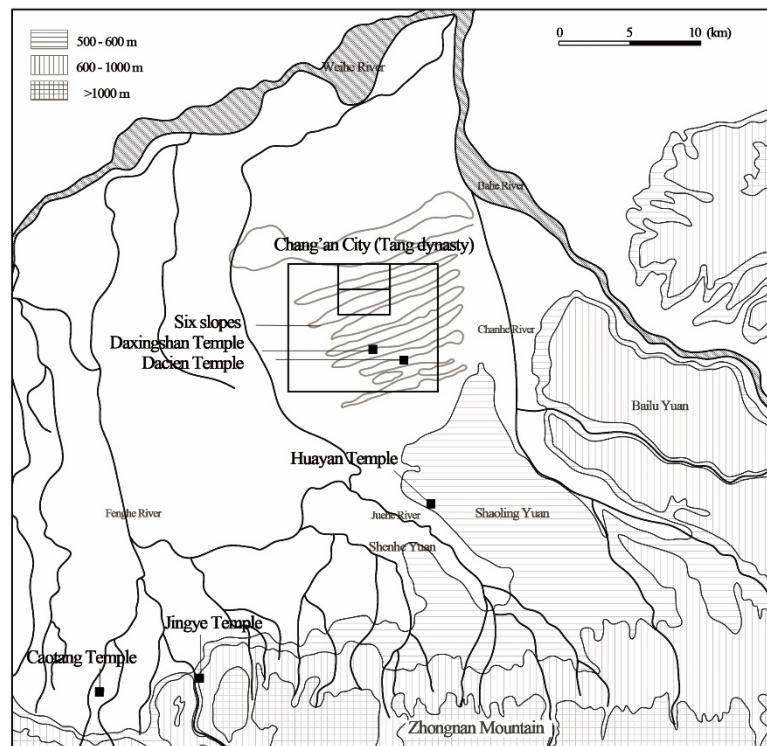


Figure 4-26 Topography of Tang Chang'an City (Li, 2009)

Yu Wenkai, the planner of the Sui Chang'an City, applied the “Qian” hexagram of Zhou Yi (周易) to the urban design. He found six east-west trend high slopes in the city to symbolize the “Six trigrams” in the Qian hexagram. These slopes were named as “Chu Jiu”, “Jiu Er”, “Jiu San”, “Jiu Si”, “Jiu Wu” and “Shang Jiu” from the north to the south. According to their importance, various architectures were built on different trigrams. Buddhist temples such as Daxingshan Temple, Qinglong Temple and Daci Temple were arranged on the “Jiu Wu” “Shang Jiu”

⁹¹ ...泊舟潯陽郭，始見香爐峯。嘗讀遠公傳，永懷塵外蹤。東林精舍近，日暮空聞鍾。(Tang dynasty, 618A.D-907A.D) 孟浩然「晚泊潯陽望廬山」(Siku Quanshu, 1983)

slopes of great significance in Fengshui. In addition to the Imperial Palace, Imperial City and the city walls, Yu Wenkai also planned the suburbs according to the “Six trigrams” in Fengshui. The Shaoling Yuan, where the Huayan Temple is located, is on the third trigrams (Xi'an Toponymy Committee, 1986). There are numerous temples such as Caotang Temple, Ximing Temple, Xingjiao Temple and Jingye Temple in the southern suburbs of Chang'an City. The southern suburbs of Chang'an City back onto Zhongnan Mountain on which there are such rivers as Juehe River, Bahe River, Chanhe River, Fenghe River and so on. From the terraces in the southern suburbs, the view of distant Zhongnan Mountain and overlooking view of Chang'an City can be seen. The superior natural conditions in the southern suburbs created a charming scenery, quiet and pleasant environment which is in line with the needs of Buddhist meditation. Therefore, not only temples, but also numerous villas were built here.

Daxingshan Temple

Fo Zu Tong Ji (佛祖統紀) recorded the establishment of Daxingshan Temple as “During the fourth year of Kaihuang, Emperor Wen and the monk Lingzang became friends and thus Daxingshan Temple was built for Lingzang to live in.⁹²” Daxingshan Temple occupied the whole of Jingshan Street in Daxing City (Chang'an City), thus this temple is named by combining the name of Jingshan Street’s “Shan” and Daxing City’s “Daxing” as “Daxingshan temple” (Kang, 2006). According to the *Chang'an Chronicle* (長安志), Yu Wenkai planned the layout of the whole city and he chose the site for Daxingshan Temple:

“...during the second year of Kaihuang year (582) in the Sui dynasty, Tongdao Taoist Temple was moved from the old Chang'an City to here and renamed as Xuandu Taoist Temple. This temple is in the neighborhood of Zunshan Temple (Daxingsha Temple) to the east. When Yu Wenkai was planning the design of this city, he planned a north-south crossing street called Zhuque (Rose Finch) Street. There are six city walls. The slopes symbolize the Qian Gua (Qian trigram) thus the Emperor's palace should be built on the ‘Jiu Er’ trigram and the Tang government department building on the Jiu San trigram. This place occupies the most superordinate ‘Jiu Wu’ trigram where the average citizen isn't allowed to stay. Therefore Xuandu Taoist Temple and Zunshan Temple (Daxingshan temple) were built here to guard the whole city.⁹³”

Yu Wenkai, who was the planner of Daxing City during the Sui dynasty, regarded the six slopes in Chang'an City as the “Six Trigrams” in the Qian Gua. He investigated the landform and adapted things to the local situation

⁹² (隋文帝，开皇)四年。靈藏律師始與帝爲布衣交。及即位建大興善寺以居之。勅左右僕射。兩旦參問起居。嘗陪駕洛州。歸之者衆。(Song dynasty, 960A.D.-1279A.D.)志磐「佛祖統紀」(Zhipan & Benjue, 1910)

⁹³ 隋開皇二年。自長安故城徙通道觀於此，改名玄都。東與大興善寺相比。初宇文愷置都，以朱雀街南北盡。郭有六條。高坡象乾卦。故於九二置宮殿，以當帝王之居。九三立百司，以應君子之數。九五尊位，不欲常人居之。故置此（玄都）觀及興善寺以鎮之。(Song dynasty, 960A.D.-1279A.D.)敏求「長安志」(Song, Song dynasty)

thus he decided to plan the key architectural elements such as temples, palaces and towers on these slopes. Among the site slopes, the slope where Zunshan Temple (Daxingsha Temple) is located is on the most superordinate Jiu Wu trigram. Zunshan Temple (Daxingsha Temple) was built here for the purpose of guarding Daxing City.

Actually Emperor Wen also asked the monk Lingzang to choose the site for the temple "...wherever you want". In consideration of national affairs as well as the Buddhist Dharma, he chose the location which is equidistant to other important parts of the whole city (Daoxuan & Guo, 2014).

In fact, Yu Wenkai took this problem into account as well. Therefore, Daxingshan Temple is located in a place "...which is neither too noisy nor too remote, just like the Jetavana outside Shravasti City." Jetavana (祇樹孤獨園精舍) is a temple in the countryside to the south of Shravasti City, where the Buddha gave the majority of his teachings and discourses. From Daxingshan Temple looking over to the south direction:

"...Zhongnan Mountain stands erect like in a drawing screen. Numerous towers surround it. This is a rare and great place..."⁹⁴

Huayan Temple

Huayan Temple was built in the Zhenguan years during the Tang dynasty, and is the ancestor court of the Huayan School of Chinese Buddhism. This temple is located on the Shaoling Yuan (少陵原 Shaoling Platform) to the southeast of Chang'an (Fig. 4-27, Pic. 4-3). In the record of *Shanxi Province Xi'an Gazetteer*, the planning of the Imperial Palace, Imperial City as well as the city walls in Daxing City during the Sui dynasty, was based on the "Six Trigrams" in *Yi Jing* and the Shaoling Yuan is located at the place which is called "The third trigram".

⁹⁴ 南望終南，有如畫屏，環顧諸塔，棋布星羅，勝地名區，洵稱希有。(Kang, 2006)

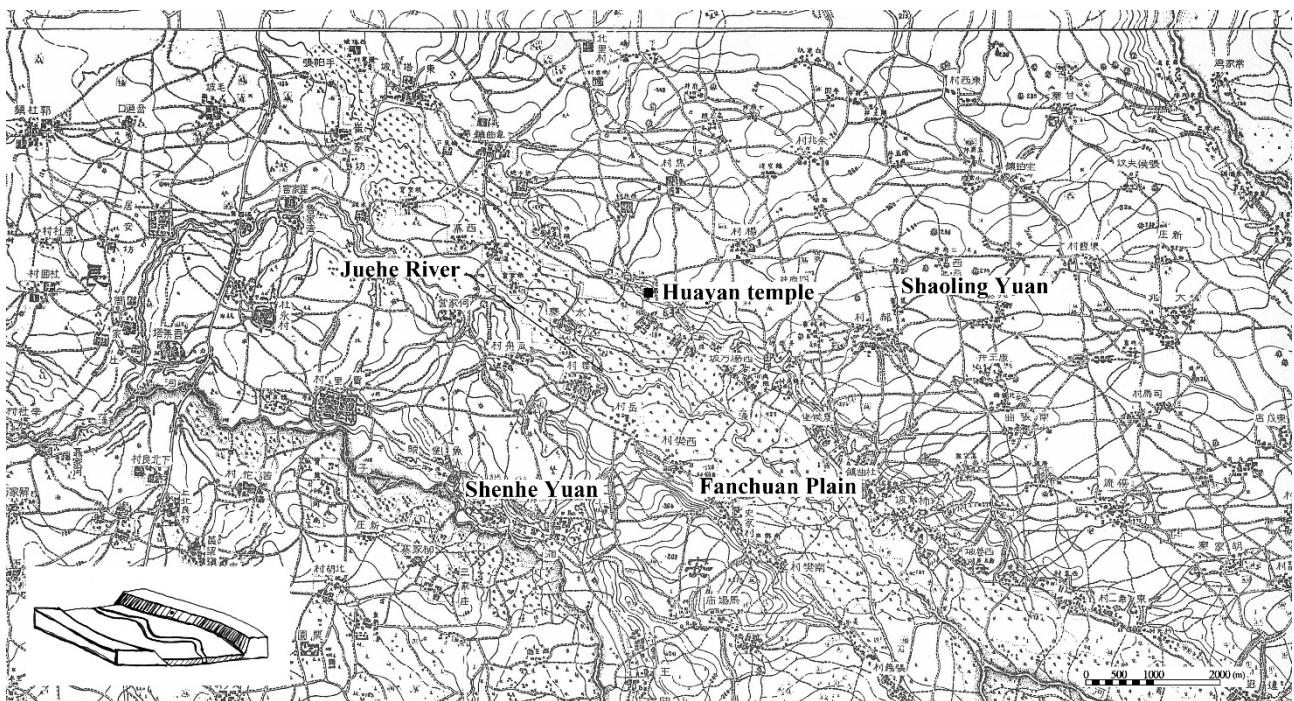


Figure 4-27 Huayan Temple in 1/50000 topographic map



Pic 4-3 Huayan Temple (The Buddhist Association of China, 1981)

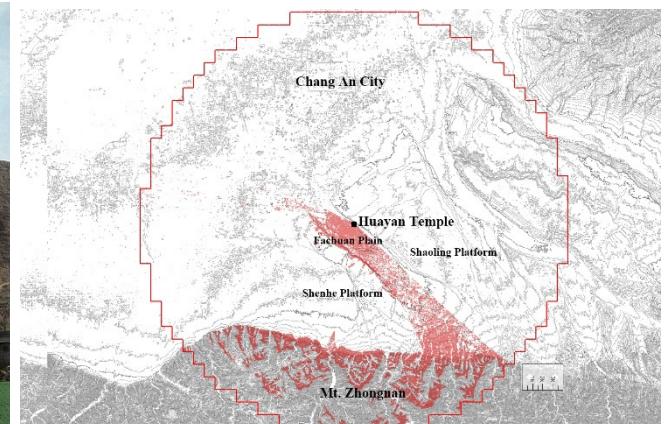


Figure 4-28 Visibility of Huayan Temple (20km)

During the Tang dynasty, numerous tourists visited

Huayan Temple to enjoy the view of Zhongnan Mountain and the peaceful environment.

“Dozens of peaks stand to the south of Huayan Temple. On sunny days the peaks which are covered by woods are a beautiful green color. I had my breakfast with an old monk for I stayed in this temple last night... If I lived a life in the deep mountains, who could chain me anymore?”⁹⁵”

In this poem, the poet described the Zhongnan Mountain view to the south of the temple, and expressed an ideal to live in such a quiet place as Huayan Temple.

⁹⁵ 寺南幾十峰，峰翠晴可掬。朝從老僧飯，昨日崖口宿。錫杖倚枯松，繩床映深竹。東溪草堂路，來往行自熟。生事在雲山，誰能復羈束。（Tang dynasty, 618A.D-907A.D）岑參「題華嚴寺瑰公禪房」(Siku Quanshu, 1983)

In the poem *Looking over to Fanchuan Plain from Huayan Temple* (華嚴寺望樊川), the Fanchuan Plain view is described as:

“Countless maple tree leaves had begun to turn red. There were many houses nestled among these trees. The temple bell was swaying with the rain, and the clouds were reflected in the river⁹⁶. ”

From this poem it can be known that, not only the Zhongnan Mountain can be seen from Huayan Temple, but also the view of Fanchuan Plain and Shenhe Platform (Fig. 4-28). The visible area from Huayan Temple is mainly concentrated in the Fanchuan Plain within 5 km. The distant Zhongnan Mountain visually functions as the background of the view of Fanchuan Plain (Fig. 3-3).

Caotang Temple

Caotang Temple was built for Indian monk Kumarajiva to live in and translate Buddhist scriptures in by Emperor Fu Jian during the Jin dynasty. There are few literature works that describe the surroundings of Caotang Temple

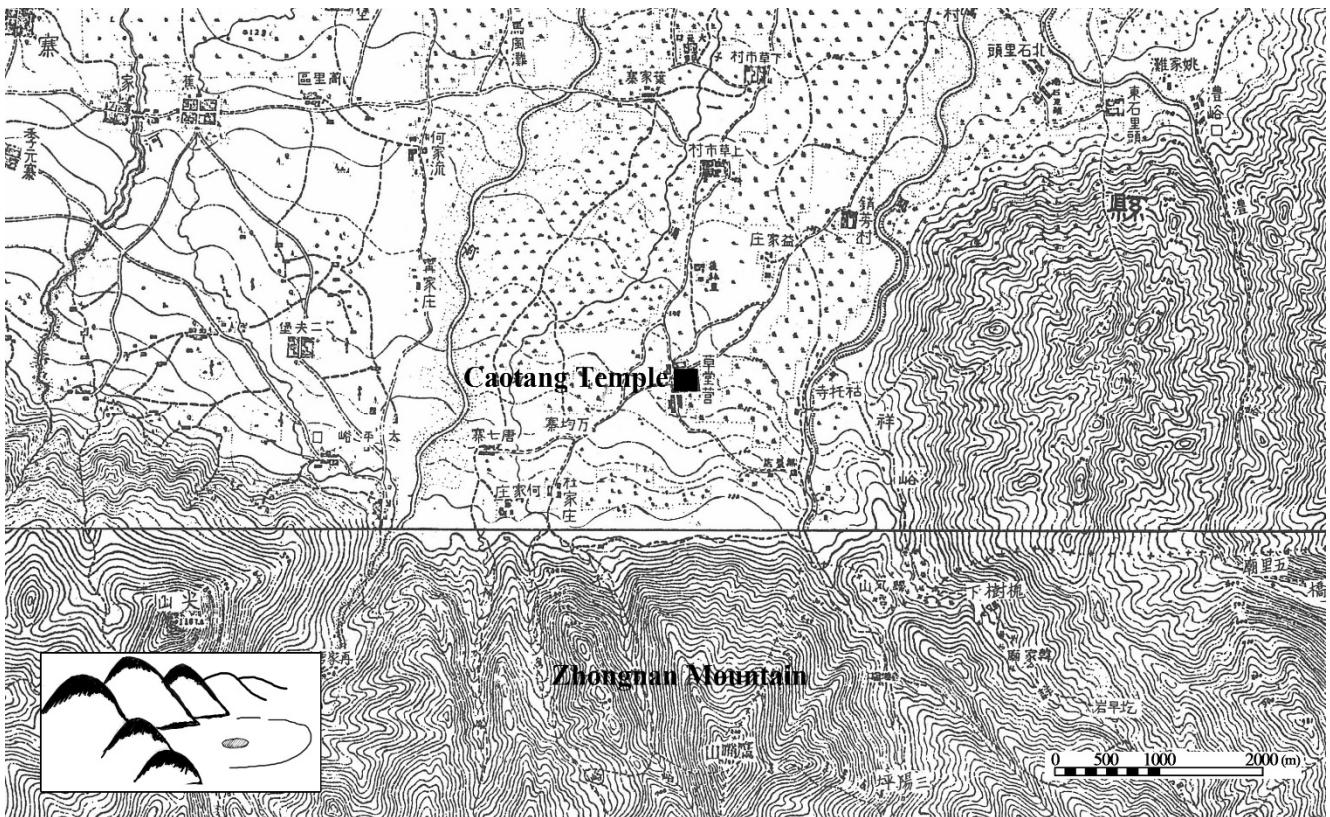


Figure 4-29 Caotang Temple in 1/50000 topographic map

⁹⁶ 萬木葉初紅，人家樹色中。疏鐘搖雨腳，秋水浸雲容... (Tang dynasty, 618A.D-907A.D) 子蘭「華嚴寺望樊川」(Siku Quanshu, 1983)

except that it is located “in Zhongnan Mountain.⁹⁷” in Chang’an City (Fig. 4-29). In the poem, the view of Zhongnan Mountain and the surrounding temples states:

“The top of Zhongnan Mountain can be seen on a sunny day. In the cold winter days, the sound of spring water is gone, for the spring becomes frozen during the cold winter. Only Caotang Temple is an ideal place to lead a suitable life away from the secular world.⁹⁸” As described in the poem, the main view from Caotang Temple is the distant Zhongnan Mountain within 3 km and the elevation view angle of the mountain is 172 degree thus creates a greater sense of enclosure than that of Ximing Temple (Fig.3-4).

Jingye Temple

Jingye Temple was built during the Sui dynasty and the monk Dao Xuan was teaching about Buddha in this temple during the Tang dynasty (Fig. 4-30).

“...Monk Daoxuan, Dharmapala told him, there is Jingye Temple in Qingguan village. It is located at a place with excellent surroundings and if you study the Buddha here you will make great achievements. Daoxuan heard this and went to investigate this place...⁹⁹”

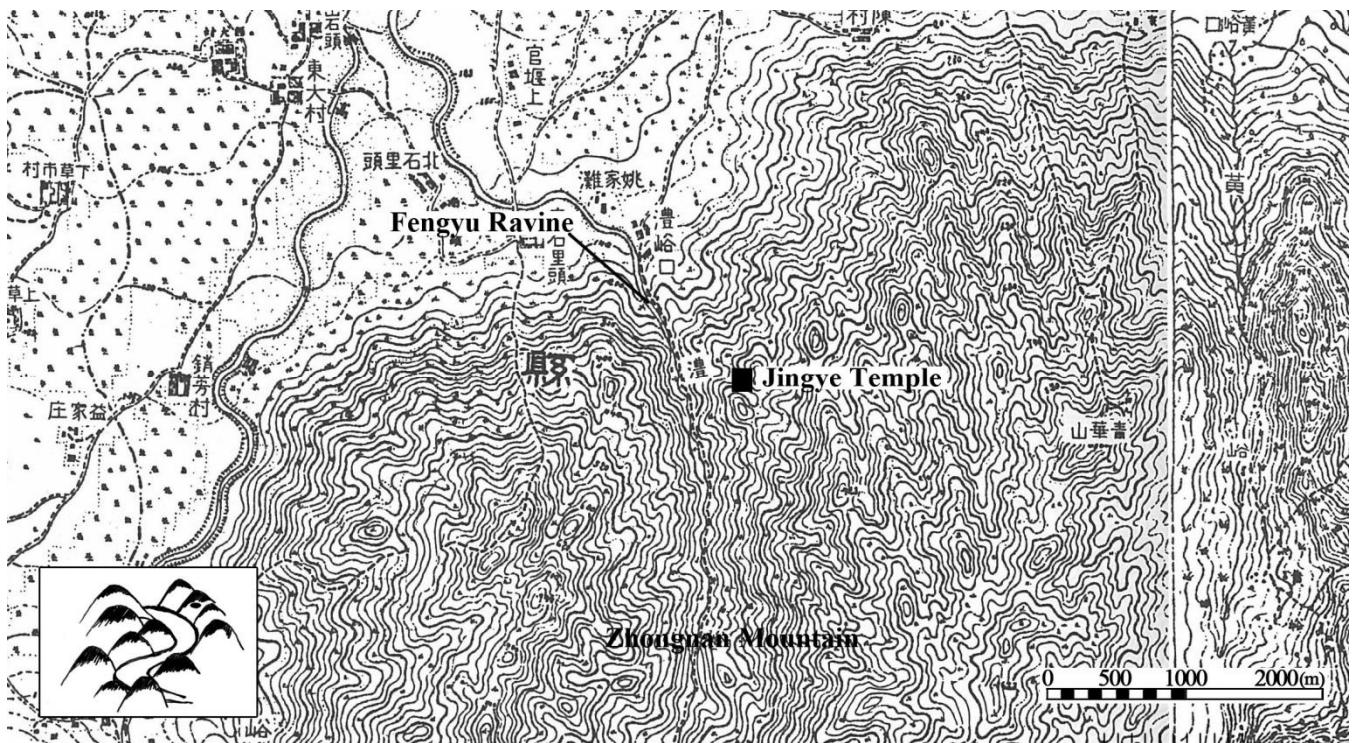


Figure 4-30 Jingye Temple in 1/50000 topographic map

⁹⁷ 草堂寺名。在終南山。 (Tang dynasty, 618A.D-907A.D) 法藏「大乘起信論疏科文」(Fazang & Zongmi, Tang dynasty)

⁹⁸ ...絕頂晴多去，幽泉凍不聞。唯應草堂寺，高枕脫人群。(Tang dynasty, 618A.D-907A.D) 無可「金州冬月陪太守游池」(Siku Quanshu, 1983)

⁹⁹ 釋道宣。...護法神告曰。彼清官村故淨業寺。地當寶勢道可習成。聞斯卜焉。 (Southern and Northern dynasties, 420A.D.-589A.D.) 慧皎「高僧傳」(Huijiao, Southern and Northern dynasties)

In this text, that the Jingye Temple is with excellent surroundings and is a great place for meditation in Buddhism is mentioned. According to Fig. 3-20, the temple located on the mountain side by Fengy Ravine, backs onto Zhongnan Mountain to the northeast and faces to the ravine in the southwest. There is an overlooking view of the ravine and also an upward view of numerous peaks in the mountain.

Poet Jia Dao wrote about the view on the way to Jingye Temple and described his emotions as:

“I came from Chang'an City and climbed up Zhongnan Mountain. Finally I arrived at Jingye Temple during the night. There are many times I tried to talk to my friend (about my troubles) but at last I kept silent, just appreciating the view of rain drops falling softly on the pine trees.¹⁰⁰” In this poem, the view of falling rain and pine trees in Zhongnan Mountain were described.

4.3.3 Spatial characteristic of Fengshui symbolization Buddhist temple

1) Temples in the mountain

a. Center area : a flat ground surrounded by mountains

The surrounding mountains and the water in front forms an enclosed space for the temple. It meets the requirement of the landform,

“Storing wind and acquiring water

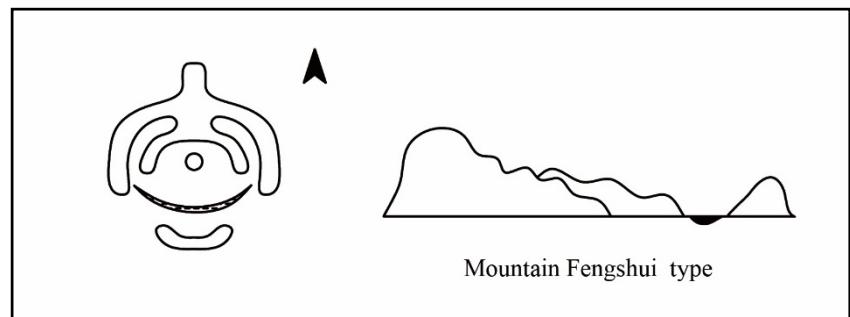


Figure 4-31 Spatial elements in “Fengshui” type temples

(藏風聚水), according to Fengshui. Unlike the “Lotus” symbolization Buddhist temple, the space of the “Fengshui” symbolization Buddhist temple has a clear orientation and opening. In the general situation, the temple faces south and backs to the north (Fig. 4-31). The opening of the surrounding mountains is to the southern direction. This orientation is in line with the topography and climatic characteristics in China for the ancestor mountain in the north will block the cold wind in the winter meanwhile the forward mountain will channel the warm and humid air to the temple area. The opening of the temple space not only leads people’s sight toward the temple but also helps people to recognize and identify the temple landscape.

b. Boundary: Multi-level mountains and water

The ideal Fengshui pattern space is formed by multiple enclosed mountains. The mountains and water are important elements for the boundary in space: the ancestor mountain (Xuanwu), the Xuechang flat ground, the

¹⁰⁰ 來從城上峰，京寺暮相逢。往往語複默，微微雨灑松… (Tang dynasty, 618A.D-907A.D) 賈島「淨業寺與前鄆縣李廓少府同宿」(Siku Quanshu, 1983)

front water and the front hill (ZhuqZue) from the north to the south direction, meanwhile the Baihu Hill and Qinglong Hill on east and west side. These mountains which contain important symbolic meaning in Fengshui are also landmarks of the temple landscape. This kind of space is relatively symmetrical and from the inside to the outside, the height of mountains decrease progressively, thus the sense of visual and spatial depth is strengthened by the multi-level mountains. It is in line with the spatial characteristic of the “Deep mountain” type temple in the previous chapter.

2) Temples in the city

In the ideal city Fengshui pattern, the city is in the center at the intersection of the mountain and the river and located on the dragon vein. It can be regarded as the amplification of the residence Fengshui pattern. Because of its different landform to the mountain, in the city, the Fengshui pattern should be deduced and changed by modification with some essential elements. For example, in Sui and Tang Chang'an City, there are six high slopes which were used to symbolize the “Six Trigrams” in *Zhou Yi* for the purpose of creating an ideal Fengshui pattern. Buddhist temples such as Daci'en Temple, Daxingshan Temple and Huayan Temple were considered as

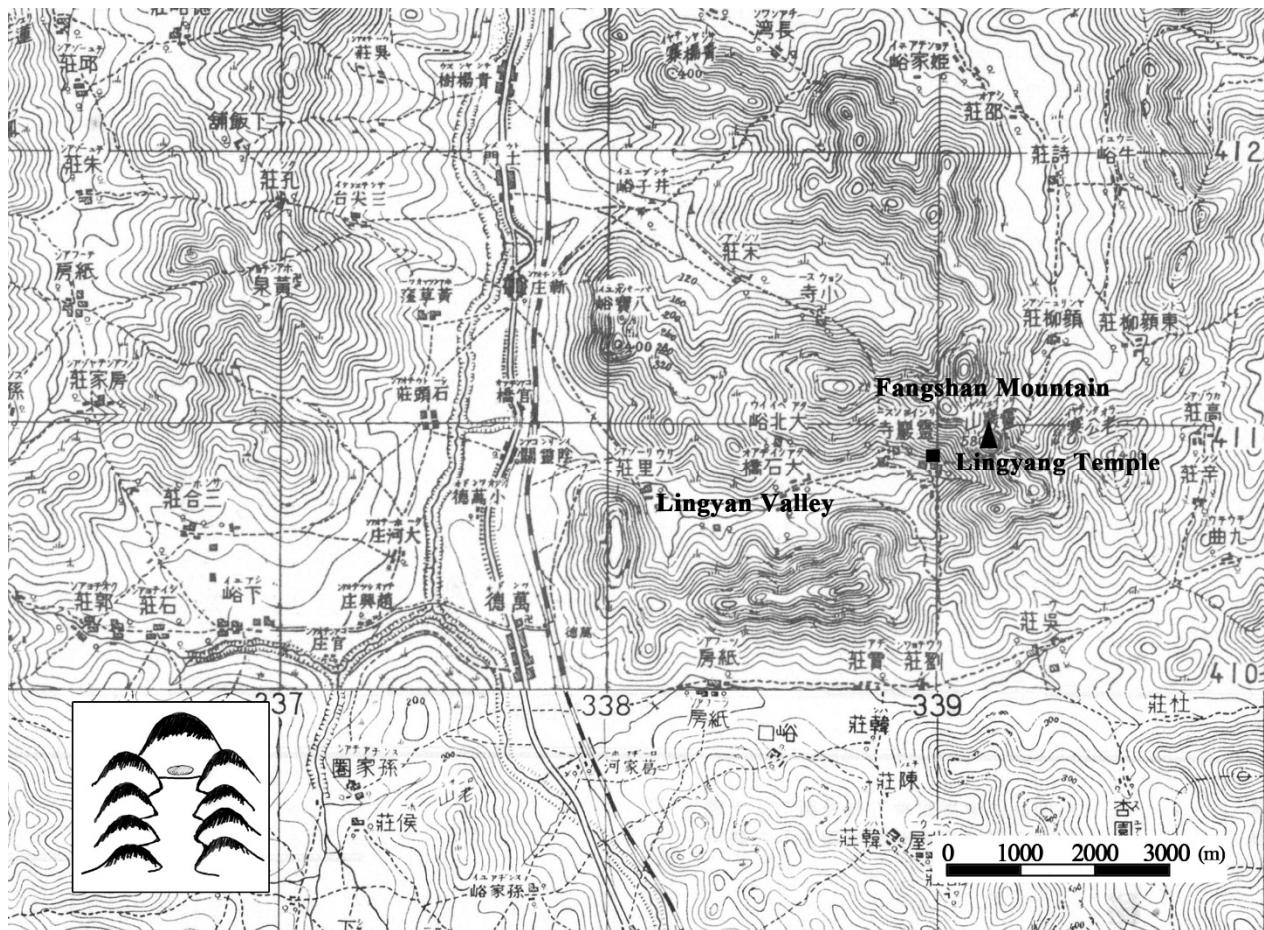


Figure 4-32 Lingyan Temple and Fangshan Mountain in 1/100000 topographic map

sacred architecture which have the function of eliminating pathogenic factor and guarding the country. Therefore they were located on the important “Jiu Wu”, “Jiu Liu” places in the “Six Trigrams”.

4.4 Temples in scenic mountains

In this study, the Buddhist temples during the Sui and Tang dynasties were constructed for their surrounding space in accordance with the spatial characteristics of Lotus, Sumeru Mountain, Penglai Mountain and the Fengshui space. In addition to these four symbolization of Buddhist temple, some temples were built in scenic mountains for their beautiful natural scenery as well as their pleasant and quiet environment.

4.4.1 Case study

Lingyan Temple

The monk Fading, who was the founder of Lingyan Temple, went on an excursion to Fangshan Mountain during the year of Zhengguang in the Wei dynasty. Because of the beautiful view, Fading “loved the mountain and the spring of Fangshan Mountain. He considered this to be an ideal place to build a temple¹⁰¹. ” He first build



Pic 4-4 Lingyan Valley (Wang, 1999)

Shenbao Temple on the north of the mountain, then Lingyan Temple on the south (Fig. 4-32). Fangshan Mountain was named “Fang (Quadrat)” for this mountain has a quadrate top which is quite different from the shape of other mountain tops (Fig. 4-33). According to *Lingyan Mountain Chronicle* (靈岩志), Fangshan

¹⁰¹ 愛其泉石，可建寶刹。 (Qing dynasty, 1644A.D.-1912A.D.) 王昕「靈岩志」 (Wang, Qing dynasty)

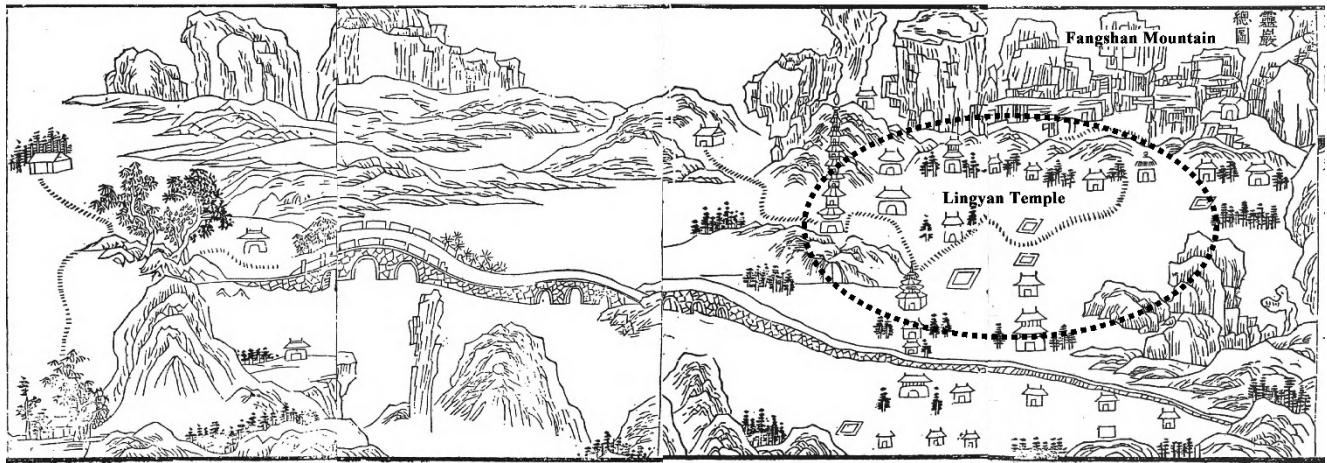


Figure 4-33 Drawing of Lingyan Temple (Wang, Qing dynasty)

Mountain is “a cliff on the northwest of Taishan Mountain¹⁰².” Lingyan Temple is just at the bottom of this cliff. In addition to the magnificent view of Fangshan Mountain, Lingyan Valley is also a main view from Lingyan Temple. Due to the temple’s location at the end of Lingyan Valley, from Lingyan Temple people can enjoy the layered mountains by the sides of Lingyan Valley and the visual distance of the valley reaches to about 4 km thus creating a strong sense of depth (Fig. 3-19).

Due to its impressive steeply rising into the clouds cliff view, Fangshan Mountain and Lingyan Temple are often phrased by the poets:

“Going through the pine tree path and heading, visitors can feel the quiet environment of the temple. From Lingyan Temple overlooking to the west, it is the view of the river and distant mountains covered with trees and grass.¹⁰³” The magnificent scenery of Fangshan Mountain and the quiet temple environment are in stark contrast, but also complement one another.

Shaolin Temple

¹⁰² 乃泰山西北麓之一巔也。(Qing dynasty, 1644A.D.-1912A.D.) 王昕「靈岩志」(Wang, Qing dynasty)

¹⁰³ 始入松路永，獨忻山寺幽。不知臨絕檻，乃見西江流。吳岫分煙景，楚甸散林丘。方悟關塞眇，重軫故園愁。聞鐘戒歸騎，憩澗惜良遊。地疏泉穀狹，春深草木稠。茲焉賞未極，清景期杪秋。(Tang dynasty, 618A.D.-907A.D.) 韋應物「遊靈岩寺」(Siku Quanshu, 1983)

Shaolin Temple was established during 495 AD by Emperor Xiaowen of the Northern Wei dynasty. This temple was built to accommodate the Indian master Batuo who “preferred the view of Songshan Mountain (志愛嵩嶽)

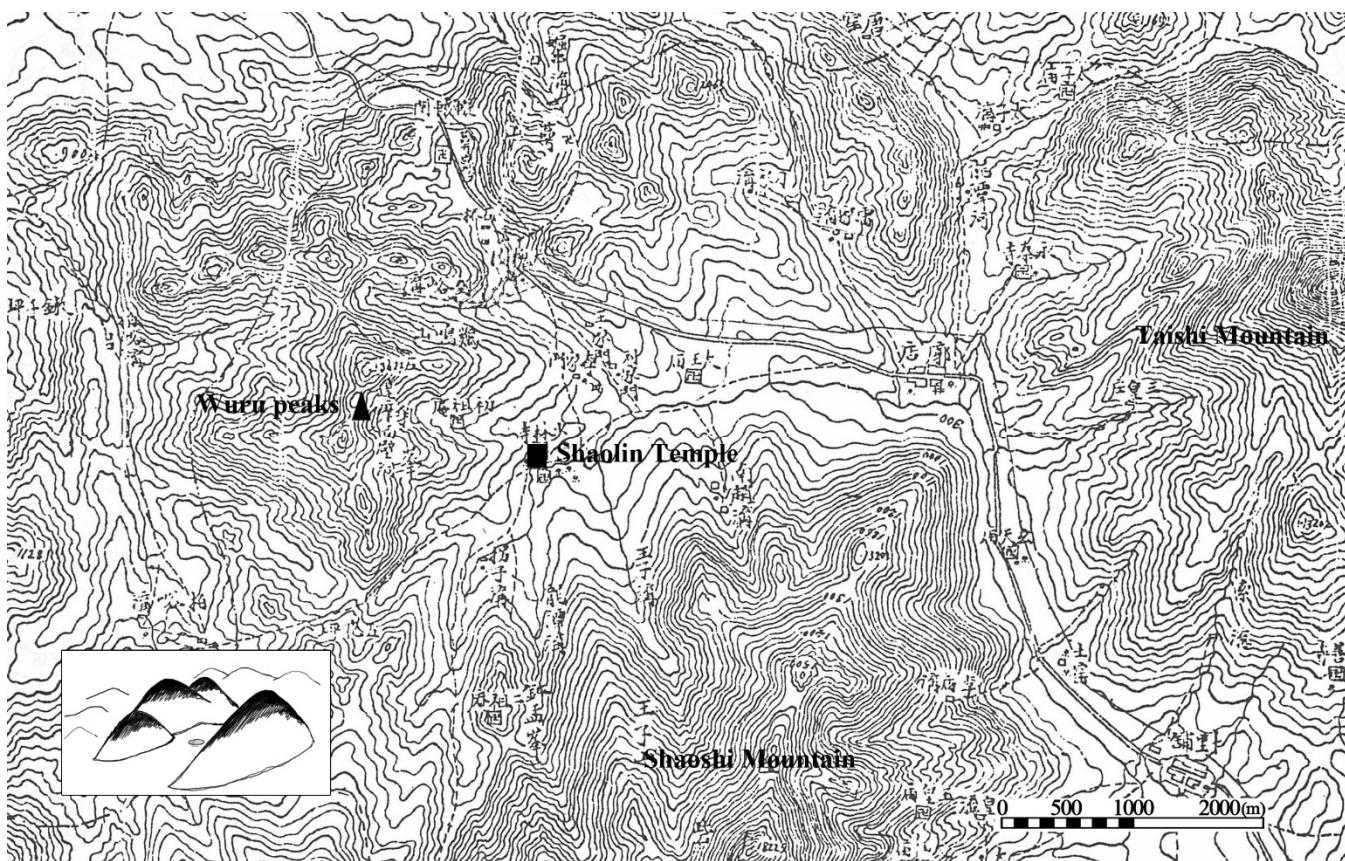


Figure 4-34 Shaolin Temple, Wuru Peak, Shaoshi Mountain in 1/50000 topographic map

(覺岸, 1910)”。According to the *Da Tang Ci En Si San Zang Fa Shi Zhuan* (大唐大慈恩寺三藏法師傳), the surroundings of the temple are described as

“...Shaolin Temple was built on the north side of Shaoshi Mountain by Emperor Xiaowen. This place has amazing mountain and spring views...¹⁰⁴”

“...There is a temple called Shaolin on the north side of Shaoshi Mountain, which is a peak to the south of Songshan Mountain. It is a quiet place with a beautiful view of mountains and springs, which is also far from the cities...¹⁰⁵”

¹⁰⁴ 某少室山北少林寺。是魏孝文所立。極山泉之美。 (Tang dynasty, 618A.D-907A.D) 寅詳「大唐故三藏玄奘法師行狀」(Mingxiang, Tang dynasty)

¹⁰⁵ ...今知此嵩岳之南少室山北有少林寺。遠離壘落泉石清閑... (Tang dynasty, 618A.D-907A.D) 慧立「大唐大慈恩寺三藏法師傳」(Kyoto Oriental Culture Research Institute, 1932)

“...Shaolin is to the front of Wuru Peak and faces Shaoshi Mountain which stands erect like a green screen (Fig. 4-34, Fig. 4-35). The landform of Shaolin Temple is exceptionally perfect. In the Wei Book, it is said that Batuo, who came from India, had achieved greatness in Dharma. Emperor Xiaowen respected him a lot and built Shaolin Temple to accommodate Master Batuo...¹⁰⁶”

“...There are 36 peaks between Shaolin Temple and Shaoshi Mountain... Fu Mei said, observing the form of a mountain resembles observing a person, we should first notice the face and back. When looking at Shaoshi Mountain from the Mengjin River, the back of the mountain is just standing like a wall. Going through Shaolin Temple to the east across a dangerous path is just like going through from the bottom of Shaoshi Mountain... Peaks and hills are lying layer upon layer and reaching high into the air...¹⁰⁷”

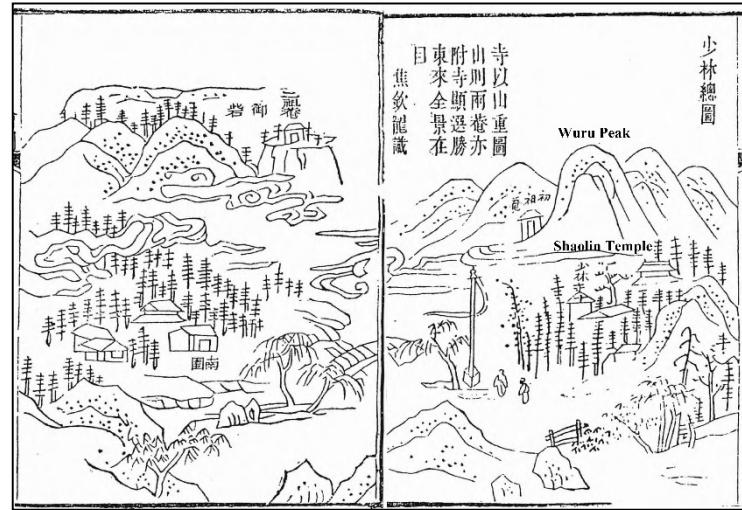


Figure 4-35 Drawing of Shaolin Temple (Ye, Qing dynasty)

“...Wuru Peak is on the north of Shaoshi Mountain. It is branches off from Boyu Peak and the five peaks of Wuru Peak extending for ten miles like the outspread wings of a phoenix. Shaolin Temple was built surrounded by the peaks of Wuru Peak. The Chinese name of Wuru Peak includes the character for “Wu (Five)” and therefore Zen was later divided into five sects. In addition the mountain top is in a round shape similar to a monk’s hat, thus it is said that this was an excellent place for building a Buddhist temple...¹⁰⁸”

According to the visibility analysis of Shaolin temple, the visible area from Shaolin temple is concentrated in the valley between Wuru Peaks and Shaoshi Mountain (Fig.3-18). Wuru Peaks, which is to the northwest of the temple, has clear peak profiles in the panoramic view from Shaolin Temple and has become the landmark of Shaolin Temple. The importance of Wuru Peaks is also reflected in the drawing of Shaolin Temple: the temple is backed by five outstanding peaks and hidden in the forest at the foot of the mountain.

¹⁰⁶ (少林) 在五乳峯前 對少室 如翠屏端立 形勢絕佳 魏書云 跋陀自西來 有道業深 為孝文所敬 詔於少室山陰立少林寺以居之... (Qing dynasty, 1644A.D.-1912A.D.) 葉封「少林寺志」(Ye, Qing dynasty)

¹⁰⁷ 少室在少林寺前有三十六峯..傅梅云，看山如相人，先論面背。由孟津渡河望之，見少室之背如牆壁 然若踰轂轅，歷少林東去，正從脣下過耳...峯巒層疊，聳出雲表。(Qing dynasty, 1644A.D.-1912A.D.) 葉封「少林寺志」(Ye, Qing dynasty)

¹⁰⁸ 五乳峯在少室北自鉢孟峯斜分一支五頂相連圍踰十里，如鳳張兩翼，少林寺建其中。山名五乳，後傳法源流分為五宗若預兆云，又山頂皆圓如僧帽，宜其為釋家勝地也。(Qing dynasty, 1644A.D.-1912A.D.) 葉封「少林寺志」(Ye, Qing dynasty)

“I hummed along to the Shaolin Temple, the Buddhist holy site, and appreciated the scenery here. The Yan Pagoda appeared to be age-old for its long history, and the Jiu Long pond is deep. The garden scenery became clear under the sunshine after the rain. The color of the green temple hall turned dark because of the gloomy autumn day. When I was on the way back home, I could hear the chirps of cicadas in the mountain.¹⁰⁹”

Dafawang Temple

Dafawagn Temple is located northwest of the town of Dengfeng and was built in the 14th year of the reign of Emperor Ming (71) during the Han dynasty (Fu, 1980). According to the *Songshan Mountain Shaolin Temple chronicle* (嵩山少林寺輯志), the surroundings of the temple are stated as:

“...Ten miles north of the town, Shaolin Temple is situated with its back to Songshan Mountain (Fig. 4-36). There are hills on the right and left and a peak behind the temple. The mountains surround the temple like wings. Looking down from Dafawang Temple, mountains such as Er'xiong Mountain range as an arch in front of your eyes. It is unique and one of the greatest mountain forms in the world...¹¹⁰”

For the temple is backed by a peak of Songshan Mountain and surrounded by hills on two sides. The visual distance of east and west surrounding mountain is within 200 meters and elevation angle is above 9 degree thus creates a great sense of enclosure, as described in the literature works as “surrounds the temple like wings” (Fig. 3-24). Furthermore, from this temple there is a view overlooking the distant Dengfeng County. Bai Juyi, one of the most renowned poets during the Tang dynasty, wrote of his tour from Fawang Temple to Songyue Temple and compared the landscape with the Buddhism world as:

“Between the two temples (Fawang Temple and Songyue Temple) there is an Akasha space (虛空, open space, vacuity), only a small path connects them. I went back from Fawang Temple to Songyue Temple along this path as I came down from (Buddhism) heaven and went through the Jianmen Pass (剑门)...¹¹¹”

¹⁰⁹ 長歌遊寶地，徙倚對珠林。雁塔風霜古，龍池歲月深。紺園澄夕靄，碧殿下秋陰。歸路煙霞晚，山蟬處處吟。（Tang dynasty, 618A.D.-907A.D.）沈佺期「遊少林寺」(Siku Quanshu, 1983)

¹¹⁰ 在縣北十里嵩山之南麓....寺背負嵩岑 如倚左右 高峰張兩翼如衛 俯瞰二熊諸山 排列如拱 真天下形勝之區也。（Ming dynasty, 1368A.D.-1644A.D.）傅梅「嵩山少林寺輯志」(Fu, Ming dynasty)

¹¹¹ 雙刹夾虛空，緣雲一徑通。似從忉利下，如過劍門中...（Tang dynasty, 618A.D.-907A.D.）白居易「夜從法王寺下歸嶽寺」(Siku Quanshu, 1983)

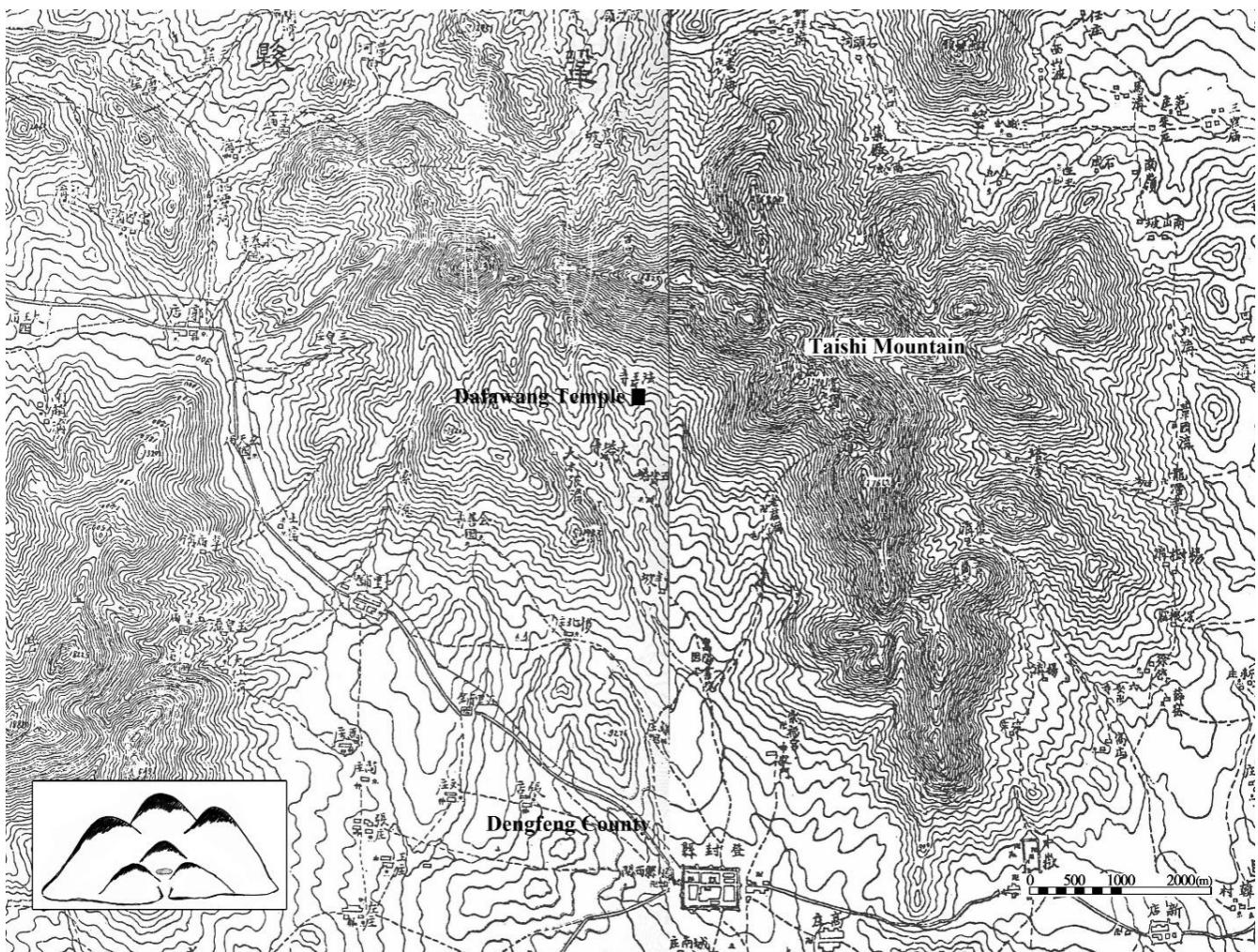


Figure 4-36 Dafawang Temple in 1/50000 topographic map

4.5 Discussion

4.5.1 The Peach Blossom World symbolization: an ideal place for hermit life

The site selection of Buddhist temples during the Sui and Tang dynasties was influenced not only by Buddhist cosmology, Chinese immortal thought and the Fengshui idea but also by Tao Yuanming's idea of seclusion. There were many hermits who donated their residences to be used as Buddhist temples during the Sui and Tang dynasties. It could be said, their understanding and creation of an ideal place to leading a hermit life was reflected in the Buddhist temples.

The Peach Blossom Spring (桃花源記) is a fable by poet Tao Yuanming written during the East Jin dynasty. In this fable, a fisherman discovered an ethereal utopia where the people live an ideal life in harmony with nature and secluded from the world. The Peach Blossom Spring was written in an era of political instability and people were suffering the scourge of wars. It actually expressed Tao's dissatisfaction with this turbulent society and the longing for an isolated and self-sufficient world within a beautiful environment. Tao Yuanming himself was a famous hermit

from Chinese history, and there are many descriptions about his hermit life in the countryside in his literature works. In this fable, Tao showed not only an ideal society but also an ideal living space stating:

“In the Jin dynasty, a fisherman of Wu-ling, who had followed up one of the river branches without taking note whither he was going, came suddenly upon a grove of peach trees in full bloom, extending some distance on each bank, with not a tree of any other kind in sight. There was a fresh and pleasing scent of fragrant grass. Fallen peach blossoms were scattered about in abundance. Amazed at the sight, the fisherman pressed ahead. He wanted to make his way to the end of the forest. The forest ended at the headwaters of the stream, whereupon he arrived at a mountain. There was a small cave in the side of the mountain. It seemed as though light was emitting from it. He abandoned his boat and went inside.

At first it was extremely narrow, allowing for only one person to squeeze through. After walking another twenty or thirty paces, he suddenly exited into an open clearing. The land became flat and broad. Houses were neatly arranged in rows. There were fertile fields, beautiful ponds, mulberry trees, bamboo groves and the like. Pathways crisscrossed the fields, and one could hear the intermingled sounds of chickens and dogs. There were people walking back and forth, busying themselves with planting crops. The clothing of the men and women was unlike anything he had ever seen. Old and young alike seemed happy and contented¹¹². ”

From the text we found that, the Peach Blossom World is a basin surrounded by mountains, on the way of which there is a long passage and an extremely narrow entrance. The fisherman experienced moods changing from “surprise”, “curiosity and anxiety” and “brightness” along with the space change as “Peach forests on each bank”, “Narrow cave” and the “Open and flat land” (Fig. 4-37). This ideal world inspired the poets, artists, architects and gardeners in later ages to describe The Peach Blossom world in their creations. In the Poem *Tao Yuan Xing* (桃源行), poet Wang Wei described his imagination of discovering the Peach Blossom Land. He “went down the stream surrounded by peach trees” and “entered the cave. Then he came out of the cave and saw an open and flat land in front of his eyes¹¹³. In the painting of the Peach Blossom Spring by artist Qiuying during the Ming dynasty, the long passage can also be found, narrow entrance and basin surrounded by mountains (Pic. 4-5) .

¹¹² 晉太元中，武陵人捕魚為業緣溪行，忘路之遠近。忽逢桃花林，夾岸數百步，中無雜樹，芳草鮮美，落英繽紛。漁人甚異之。復前行，欲窮其林。林盡水源，便得一山。山有小口，鬚鬚若有光。便捨船，從口入。初極狹，才通人。復行數十步，豁然開朗。土地平曠，屋舍儼然。有良田、美池、桑竹之屬。阡陌交通，雞犬相聞。其中往來種作，男女衣著，悉如外人。黃髮垂髫，並怡然自樂。晉(Jin dynasty, 265A.D. – 420 A.D.) 陶淵明「桃花源記」 (Tao (365-427) & Wang, 1956)

¹¹³ 漁舟逐水愛山春，兩岸桃花夾古津。坐看紅樹不知遠，行盡青溪不見人。山口潛行始隈隩，山開曠望旋平陸。 (Tang dynasty, 618A.D-907A.D) 王維「桃源行」(Lin, Li & Ni, 1998)

Buddhism has the same pursuit for escaping from the troubles and temptations in the secular world, looking for a quiet place to practice meditation and achieving a superb realm. This is called other-worldliness. Other-worldliness requires the practitioner to remove all distractions and abandon outside things. The ultimate goal is to pursue one's own liberation. There are a lot of similarities with the reclusive thought expressed by the Peach Blossom Spring fable.

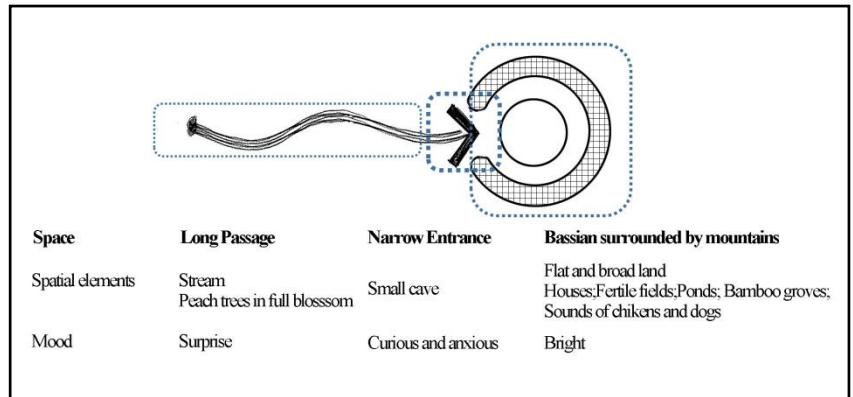


Figure 4-37 Schema of the Peach Blossom Land

The spatial characteristics of the Peach Blossom Land is a basin (or flat place surrounded by mountains) away from the hustle of secular life. It has a relatively narrow entrance or visual entrance and a passage, stream or path, to it. In addition, there are trees, flowers, and a pond in the Peach Blossom Land. Actually many of these features can be found in Buddhist temples. Firstly, the “Deep mountain” visual structure type temples, in which the horizontal view angle of the mountain ranges about 250 degree to 335 degree, for example, Qixia Temple, Tiantong Temple and Xuanzhong Temple are in accordance with the “Basin surrounded by mountains” spatial characteristic in the Peach Blossom Land. Most of these places are with a narrow entrance of which the elevation angle is below 5 degree and is about or less than 60 degree in the horizontal angle, for example.



Pic 4-5 Peach Blossom Spring by Qiu Ying (1494-1552) (Museum of Fine Arts Boston, 2017)

Therefore visiting these temples, where there is a process of entering into a space surrounded by mountains through a path or a stream and then a narrow entrance, just as into the Peach Blossom Spring, people escaped from the secular world and came to an ideal world isolated and with a beautiful environment.

4.5.2 Comparison of five Buddhist temple spaces

1) Comparison of “Lotus” and “Fengshui” Buddhist temple landscape

Both the “Lotus” and “Fengshui” Buddhist temples are located on the flat ground which is surrounded by multi-layered mountains. Layers of surrounding mountains hide and separate the temples from the outside world thus created a sense of religious mystery but also meet the Fengshui pattern which considers people as the center of the space. However, the boundaries of the two space symbolization are quite different from each other. Firstly, religious symbolic peaks compose the boundary of the “Lotus” symbolization Buddhist temple landscape. These peaks not only function as the elements to define the temple area but are also the landmark of the temple. On the other hand, the boundary of the “Fengshui” symbolization Buddhist temple landscape is surrounded by mountains and water. The ancestor mountain in the north, the front mountain in the south, the side hills on the east and west sides and the front water have different functions in the “Storing wind and requiring water” of Fengshui. Compared to the “Lotus” temple, the “Fengshui” temple emphasizes the importance of the orientation and opening of the space which is a vital condition for creating a livable environment. It can be said that the “Lotus” temple is a religion centered space and the “Fengshui” temple is a human centered space. However, because of the similarity of their landform of multi-layered surrounding mountains, sometimes there are both “Lotus” symbolization and “Fengshui” spatial characteristics in one temple space. For instance, the “Five peaks surrounding and two gullies in the front” site condition of Guoqing Temple.

2) Comparison of “Lotus” and “Sumeru” “Penglai” Buddhist temple landscape

The “Lotus”, “Sumeru” and “Penglai” Buddhist temple landscape portrayed the ideal world in Buddhism or in Chinese myth. In these temple landscapes, the landmarks of the space are the symbolic peaks but they are located in different place. The peaks functioning as a landmark are the peaks around the temple in the “Lotus” symbolization Buddhist temples. However, the landmark peaks in the “Sumeru” and “Penglai” symbolization Buddhist temples are located in the center space beneath the temple, additionally the river around the peaks which symbolizes the seven seas and east seas is the boundary to the temple space. Therefore, the “Lotus” symbolization and “Sumeru” “Penglai” symbolization temple forms two kinds of space, one is a concave space where the temple is hidden in the deep mountains, and the other is a convex space where the temple is revealed to the outside world. The concave space of the “Lotus” symbolization temple emphasizes the horizontal multi-layers and the non-accessibility which creates a sacred and mysterious space. This kind of space is in accordance with the “Deep Mountain” symbolization temple raised in the previous chapter. The convex space of the “Sumeru” and “Penglai” symbolization temple stressed the non-accessibility on the vertical space which makes the temple an object of worship.

3) “Peach Blossom World” symbolization space: The simplification of the “Lotus”, “Sumeru”, “Penglai” and “Fengshui” symbolization space

The “Peach Blossom World” symbolization temple is located on flat ground surrounded by mountains, which conforms to the landform of the “Lotus” and “Fengshui” symbolization space but in a single level space. It can be seen as the smallest level in the multi-level space of the “Lotus” and “Fengshui” symbolization temple.

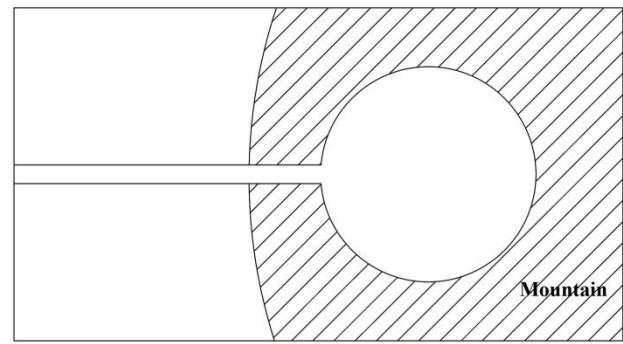
Compared to the “Sumeru” symbolization temple, the “Peach Blossom World” symbolization has a different boundary as well as enclosure of the space, however, they have a high similarity on the figure-ground relation of the space. (Fig. 4-38) While entering both kinds of temple, brings a change of space as well as a change of mood.

Different symbolization of Buddhist temples during the Sui and Tang dynasties reflects the diversity of the site selection idea which not only reflects the cosmology in Buddhism, the livable environment in Chinese Fengshui but also the longing for the Utopian world of the hermit ever since the Jin dynasty and Southern and Northern dynasties. Meanwhile the similarity of these space symbolization is a combination of Buddhism and Chinese culture. The constructors of the Buddhist temples combined their understanding of the nature-human relationship in Chinese culture with the cosmology of Buddhism to create a unique Chinese Buddhist temple during the Sui and Tang dynasties.

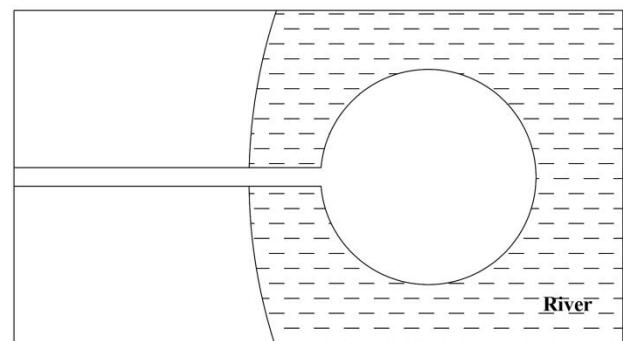
4.6 Summary

In this chapter, the site selection idea of 15 Chinese Buddhist temples during the Sui and Tang dynasties by literature review was investigated. The temple spatial characteristics and people’s understanding of the temple was analyzed by utilizing the literature works, topographic maps and drawings of the temples. It was found that the site selection idea of the Buddhist temples was influenced by the “Lotus-Sea” and “Sumeru” cosmology in Buddhism, the “Penglai Mountain” in Chinese Immortal thought, Chinese “Fengshui” as well as the preference for scenic mountains. In this chapter, the characteristic of landmarks, boundary and area in four symbolization of temple space and summarized another space symbolization of temple space, the “Peach Blossom World” symbolization was analyzed. By comparing these five temple symbolization, it was found that

1. The “Lotus” and “Fengshui” symbolization temple spaces have similarities in the multiple layers of surrounding mountains landform but differences in the direction and opening of the space.



Peach Blossom World Type



Sumeru Type and Penglai Type

Figure 4-38 Figure-ground relationship in two kind of space

2. The landmarks of the “Lotus”, “Sumeru” and “Penglai” symbolization temple spaces are religious symbolic peaks but the enclosures of the temple spaces are quite different.
3. The “Peach Blossom World” symbolization space is the simplification of “Lotus”, “Sumeru”, “Penglai” and “Fengshui” symbolization space.

Appendix 4-1 Literature review of the temple site selection idea and landscape

Temple	Founder	Site selection idea	Site condition (Physical aspects)	Experience (Non-physical aspects)
Guoqing Temple	Master Zhiyi (538-597, Founder of the Tiantai School of Chinese Buddhism; Zhiyi loved the beautiful view of the deep mountain)	Zhiyi "Beneath the (Tiantai) mountain, there is an ideal place to build a temple"	<u>Location</u> On the north of Tiantai County, south of Huading Peak <u>Landform</u> Mountain Area: Huading Peak and surrounding mountains Temple Area :Guoqing temple backs onto high mountains, surrounded by 5 peaks Bagui Peak Lingqin Peak Xiangyun Peak Lingzhi Peak <u>Water</u> Faces two gullies <u>Vegetation</u> Pine trees <u>Path</u> Pine tree path	<u>Activities</u> Climbing Tiantai Mountain, visiting Guoqing Temple <u>Imagination</u> : Landform of Tiantai Mountain→Lotus flower; Five peaks around Guoqing Temple→ five masters; immortal world <u>Emotion</u> Enlightened by Buddha Dharama
Qixia Temple	Hermit Ming Sengshao (?-483) → Monk Fadu (Donates house as temple)	Ming Sengshao preferred to be away from the secular world and lead the life of a recluse in Sheshan Mountain	<u>Location</u> In Sheshan Mountain which is to the south of the Yangtze River <u>Landform</u> Flat ground in the middle of Sheshan Mountain Center Peak; Qianfo Cliff; East Peak <u>Water</u> Bairi Spring; Bailu Spring <u>Vegetation</u> Cypress; pine trees ; grass; trees <u>Path</u> Path to the temple	<u>Activities</u> Visiting the temple; Climbing on East Peak and enjoying the overlooking view of the Yangtze River <u>Imagination</u> : Hermit Ming Sengshao; Hermit life Taoism and the ideal of living a hermit life <u>Emotion</u> When entering this mountain with such beautiful scenery, the tourist experienced a change of mood from the secular world to a pure land.; loneliness <u>Soundscapes</u> Sound of springs
Longchang Temple	Emperor Liangwu (464-549) Monk Baozhi (418-514)		<u>Location</u> In Baohua Mountain which is to the south of the Yangtze River. <u>Landform</u> (Baohua Mountain) Numerous mountains surround layer upon layer under two peaks (Tianlong Peak and Dahuashan Peak); Mountains rise in the surroundings and make a depression in the middle. Peaks surround below these mountains Tianlong Peak; Dahuashan Peak <u>Spring water</u> rolling down the mountain	<u>Activities</u> Climbing on Baohua Mountain <u>Imagination</u> Landform of Baohua Mountain→Lotus flower and the Buddhas paradise; Penglai Mountain; Sea turtle's back <u>Emotion</u> Escape from the secular world <u>Soundscapes</u> Quiet
Wanfu Temple	Monk Zheng'gan	(Zheng'gan) said, my teacher told me I should stop where there is something bitter. I think it's here (Huangbo Mountain). The Amur cork trees on Huangbo Mountain symbolized the "bitter" taste	<u>Location</u> In Huangbo Mountain <u>Landform</u> Numerous peaks surround the temple on the the south, west, east and southwest. There are two layers of mountains and the outer ones are described as the “wall” of the temple Bao Peak, Luohan Peak, Jiangjie Peak, Tianzhu Peak, Pingzhang Peak, Wuyun Peak, Jixiang Peak, Baoyu Peak, Jixiang Peak, Xiaqilong Peak, Xianglu Peak, Shizi Peak. (according to the drawings of the temple)	
Tiantong Temple	Monk Yixing		<u>Location</u> In Tiantong Mountain <u>Landform</u> On the flat ground surrounded by numbers of peaks Panshan Mountain, East Peak, Ru Peak, Center Peak <u>Vegetation</u> Grass and trees	<u>Legend</u> The story of the Taibai immortal
Lingyan Temple	Monk Fading	Fading loved the mountains and springs of Fangshan Mountain. He considered this site as an ideal place to build a temple	<u>Location</u> In Fangshan Mountain, a cliff on the northwest of Tai Mountain <u>Landform</u> Back to Fangshan Mountain <u>Vegetation</u> Pine trees; grass; trees <u>Spring water</u> <u>Path</u> Pine tree path	<u>Activities</u> Visiting the temple <u>Emotion</u> Sadness <u>Soundscapes</u> Bell ringing
Xiantong Temple	Indian monk Kasyapamatanga	The site of Xiantong Temple was chosen for its unique five peaks surrounding landform which resembles the Vulture Peak landform	<u>Location</u> In Wutai Mountain <u>Landform Peak</u> Mountain Area: Five peaks, in the five directions, south, east, north, west and the middle respectively, thousands of peaks overlap. Long valleys are winding and deep, hundreds of layered ridges <u>Vegetation</u> Trees	<u>Activities</u> Climbing on Wutai Mountain to follow in the footsteps of Bodhisattva Manjusri; Visiting temples <u>Symbolization</u> Five peaks symbolized the Buddha's pedestals, five wisdoms, five eyes, five scriptures, five crowns and five hair buns of the Buddha (Bodhisattva Manjusri)

Shaolin Temple	Emperor XiaoWen (467-499) built the temple for the monk Batuo	Accommodate the India master Batuo who "preferred the view of Song Mountain"	<p><u>Location</u> On the north side of Shaoshi Mountain; be far from the cities</p> <p><u>Landform</u> in the front of Wuru Peak and facing to Shaoshi Mountain ; peaks and hills are lying layer upon layer and reaching high into the air; Wuru Peak extending for ten miles as the outspread wings of a phoenix</p> <p><u>Spring water</u> Jiu Long pond</p>	<u>Activities</u> Visiting the temple <u>Symbolization</u> The name of Wuru Peak includes the character for "Wu (Five)" and Zen was divided later as five sects. In addition the mountain top is in a round shape like the hat of a monk, thus it is said this was an excellent place for building a Buddhist temple <u>Soundscapes</u> Chirps of cicadas
Huayan Temple	Monk Dushun	Shaoling Yuan is located at the place which is called "The third trigram" in <i>Yi Jing</i>	<p><u>Location</u> On Shaoling Yuan (Shaoling Platform) in the southeast of Chang'an City</p> <p><u>Landform</u> On the slope of Shaolin Platform and facing the Fanchuan Plain</p>	<u>Activities</u> Visiting and accomodation in the temple Enjoying the view of Zhongnan Mountain and Fanchuan Plain <u>Soundscapes</u> Bell ringing
Caotang Temple	Emperor Fu Jian	Built for Indian monk Kumarajiva to live in and translate Buddhist scriptures	<p><u>Location</u> To the south of Chang'an City and at the foot of Zhongnan Mountain</p> <p><u>Landform</u> Zhongnan Mountain on the south</p>	<u>Activities</u> Enjoying the view of Zhongnan Mountain <u>Emotion</u> Only Caotang Temple is an ideal place to lead a suitable life away from the secular world
Dafawang Temple	Emperor Ming built this temple		<p><u>Location</u> On northwest of the town of Dengfeng and backing onto Songshan Mountain</p> <p><u>Landform</u> Hills on the right and left and a peak behind the temple. The mountains surround the temple like wings</p> <p><u>Path</u> Path between Dafawang Temple and Songyue Temple</p>	<u>Activities</u> Visiting Dafawang Temple <u>Imagination</u> Buddhist world (Buddhism); Jianmen Pass
Donglin Temple	Monk Huiyuan	<p><u>Huiyuan</u> "This place is quiet enough to calm my mind"</p> <p>A pleasant surroundings by utilizing the mountains, peaks, valleys, waterfalls, trees and so on</p>	<p><u>Location</u> In Lushan Mountain</p> <p><u>Landform</u> Facing Xianglu Peak (Thurilble Peak) and next to a valley with a waterfall; Xianglu Peak branches to the east, and surrounds Donglin Temple from north to west like a city wall. Donglin Temple is in the middle of these mountains. A geomancer said, "in geomancy the so-called "Dao Gua Long Ge (one kind of great mountain form)" is in line with the good environment standards of Chinese Geomancy"</p> <p>Xiang Valley, Xianglu Peak</p> <p><u>Spring water</u> Huxi Creek; Wulong Pool</p> <p><u>Vegetation</u> Pine trees</p>	<u>Activities</u> Visiting Donglin Temple by taking a boat to Lushan Mountain; meditation and musing the ever detailed surroundings <u>Imagination</u> <u>Emotion</u> refreshed; secluded place <u>Soundscapes</u> bell ringing
Jingye Temple	Monk Daoxuan	"It is located in a place with excellent surrounding and if you study Buddha here you will make achieve greatness "	<p><u>Location</u> In Zhongnan Mountain</p> <p><u>Vegetation</u> Pine trees</p>	<u>Activities</u> Climbing Zhongnan Mountain and visitign Jingye Temple
Jinshan Temple	Monk Baozhi	For the purpose of holding the Shuilu Rite. The location and landform is "extremely auspicious"	<p><u>Location</u> Sitting on the south side of Yangtze River</p> <p><u>Landform</u> Jinshan Mountian is standing erectly in the middle of the water; Miaogao peak</p>	<u>Activities</u> Climbing the Jinshan mountian and visitin the temple <u>Imagination</u> Mountain Penglai; back of the sea turtle; fishes and dragons come and go in the surrounding waters <u>Symbolization</u> Sumeru
Daxingshan Temple	Emperor Wen; Monk Lingzang	<p><u>Emperor Wen</u>: To accomodate Monk Lingaang</p> <p><u>Yu Wenkai</u>: Built the temple to guard the whole city. This place occupies the most superordinate Jiu Wu trigram where the average citizen isn't allowed to stay</p> <p><u>Monk Lingzang</u>: In consideration of national affairs as well as for the Buddha Dharma "...where it is neither too noisy nor too remote, just like the Jetavana outside Shravasti city"</p>	<p><u>Location</u> Occupied the whole of Zhuque (Rose Finch) Street</p>	<u>Activities</u> Enjoying the view of Zhongnan Mountain <u>Imagination</u> : The Zhongnan Mountain stands like a screen drawing

4.7 Reference

Chapter 4

English

Museum of Fine Arts Boston. (2017). Peach blossom spring [taohua yuan]. Retrieved 10, 2016, from <http://www.mfa.org/collections/object/peach-blossom-spring-taohua-yuan-poem-by-ao-qian-365%E2%80%93427-29998>

Tuan, Y. (1977). Yi-Fu Tuan (Ed.), *Space and Place: The perspective of experience*. Minneapolis: University of Minnesota Press. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01842716>

Japanese

Committee of Synthetic Index of China Mainland Maps(中国大陸地図総合索引編纂委員会). (2002). *中国大陸五万分の一地図集成*. 東京: 科学書院

Mieda & Sugano(三枝充惠, & 菅野博). (1993). 三枝充惠 ほか 校註 (Ed.), 長阿含經. 東京: 大蔵出版. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86176687> Nishimura, K(西村公朝). (1979). 西村公朝著 (Ed.), 仏の世界觀: 仏像造形の条件. 東京: 吉川弘文館. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00147125>

The Buddhist Association of China(中国佛教協会). (1981a). 中国佛教協会 日 (Ed.), *中国佛教の旅*. 京都: 美乃美. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86102072>

Usui, S(薄井俊二). (2011). 薄井俊二著 (Ed.), *天台山記の研究*. 福岡: 中国書店. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB03588028>

Chinese

Chen, G & Ren, L (陈公余 & 任林豪), (1991). *天台宗与国清寺*. 北京: 中国建筑工业出版社

Chen, Y, Wang, Z & Qian, D(陳毅, 汪志伊 & 錢大昕). (Qing dynasty). In (清) 陳毅撰, (清) 汪志伊刪補 and (清) 錢大昕考訂 (Eds.), *攝山志*, 8 卷 · 首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00635944>

Chuandeng (傳燈). (Ming dynasty). *天台山方外志*, 30 卷. 台北: 丹青圖書

Daoxuan (道宣, 596-667). (Tang dynasty). *律相感通傳*. 京都: 藏經書院]. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01901477>

Daoxuan & Guo, S (道宣, 596-667 & 郭紹林). (2014). (唐) 道宣撰, 郭紹林點校 (Eds.), *續高僧傳*. 北京: 中華書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB04904602>

Ding, T (丁天魁). (2009). *國清寺志*. 上海: 華東師範大学出版社东师范大学出版社

Fazang & Zongmi. (Tang dynasty). 法藏, 宗密(780-841), 子璿, 繼法, 戴京曾. In (唐釋)法藏定, et al (Eds.), *大乘起信論疏科文*. 神戸]: 濱田篤三郎]. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01898728>

Fu, M(傅梅). (Ming dynasty). (明) 傅梅撰 (Ed.), *嵩山少林寺輯志*, 輯自「嵩書」原 22 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00632799>

Guanding & Yaoshu (灌頂(561-632)), & 眧怨(1640-1695). (1955). 灌頂撰, 體素註 (Eds.), *隋天台智者大師別傳註*. 京都: 妙法院門跡事務局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01906898>

Guo, P(郭璞). (Han dynasty). 青烏子, 兀欽仄, 郭璞, 繆希雍. 宅經 2 卷. 青烏先生葬經. 上海: 涵芬樓. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB02357821>

Huijiao (慧皎, 497-554). (Southern and Northern dynasties)湯用彤. (1992). (梁) 釋慧皎撰, 湯用彤校注 (Eds.), *高僧傳*. 北京: 中華書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00610740>

Jue, A(覺岸). (Ming dynasty). (明釋) 覺岸編 (Ed.), *釋氏稽古略*. 京都: 藏經書院. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01902737>

- Kang, J (康寂園). (2006). *大興善寺紀略*. 扬州: 廣陵書社.
- Kumarajiva (鳩摩羅什). (Eastern Jin dynasty). (*仏說阿彌陀經*) Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/RB00009270>
- Kui, J (窺基, 632-682). (Tang dynasty). (*唐釋*) 基撰 (Ed.), *大智度論疏*. 神戸: 濱田篤三郎. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01899379>
- Kyoto Oriental Culture Research Institute (東方文化學院京都研究所). (1932). 東方文化學院京都研究所編輯 (Ed.), *大唐大慈恩寺三藏法師傳*. 京都: 東方文化學院京都研究所. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01892853>
- Li, L(李令福).(2009). *古都西安城市布局及其地理基础*. 北京: 人民出版社
- Lian, P (蓮萍). (1920). *天童寺續志*. 廣陵書社.
- Lin, D, Li, J & Ni, W (林德保,李俊 & 倪文杰). (1998). 林德保 李, 倪文杰 主編 (Ed.), *詳注全唐詩*. 大连: 大连出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01113435>
- Liu, M(劉名芳). (Qing dynasty). (清) 劉名芳撰 (Ed.), *寶華山志*, 15 卷 · 首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00636583>
- Lu, J(盧見曾) . (Qing dynasty). (清) 盧見曾撰 (Ed.), *金山志*, 10 卷 · 首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00636259>
- Matanaga, K (迦葉摩謹).(Five dynasties and ten kingdoms). 竹.カシヨウマトウ、ジクホウラン (Ed.), *佛說四十二章經* Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/RB00016956>
- Mingxiang (冥詳). (Tang dynasty). ミヨウシヨウ (Ed.), *大唐故三藏玄奘法師行狀* Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/RB00016558>
- Shen, Y & Wang, S(沈雲 & 王世貞). (Ming dynasty). (明) 王世貞撰 (Ed.), *弇州山人續稿*. 台北: 文海出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01571125>
- Siksananda (實叉難陀). (Tang dynasty) . 實叉難陀譯, 澄觀撰述 (Eds.), *大方廣佛華嚴經*. 臺北: 臺灣商務印書館. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00506009>
- Siku Quanshu(*景印文淵閣四庫全書*). (1983).台北: 臺灣商務印書館. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01171106>
- Song, M(宋敏求). (Song dynasty). 董越. (宋)宋敏求撰 . 朝鮮賦 / (明)董越撰 . 朝鮮志 / (明)不著撰人 (Ed.), 長安志. 台北]: 臺灣商務印書館]. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01518761>
- Tao, Y(陶淵明) & Wang, Y(王瑤). (1956). 陶淵明著, 王瑤编注 (Eds.), *陶淵明集*. 北京: 人民文学出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01214980>
- Vasubandhu & Xuanzang (玄奘), (Tang dynasty) 勝呂, 信, & 下川邊, 季. (2007).世親釈, 玄奘訛 and 勝呂信靜 下 (Eds.), *攝大乘論釈*. 東京: 大藏出版. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB02437590>
- Wang, X(王昕).(Qing dynasty). 馬大 (Ed.), *靈岩志 紫蓬山志* (中國佛寺志叢刊 ed.). 臺北:明文書局
- Wan, Q (王圻).(Ming dynasty).*三才圖會*.
- Wang, R(王容玉). (1999)《灵岩寺》编辑委员会编. *灵岩寺*. 北京: 文物出版社
- Wenxingdao (聞性道). (Qing dynasty). 德介. (1980). (清) 聞性道. 德 (Ed.), *天童寺志*, 10 卷 · 首 1 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00636781>
- Wu, Z(吳宗慈). (ROC). 吳宗慈撰 (Ed.), *廬山志*, 原 12 卷 · 収錄 10 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00632773>
- Xi'an Toponymy Committee (西安市地名委员会).(1986). *陕西省西安市地名志*.出版地不明: 出版者不明
- Xinghai (行海). (Qing dynasty). (清釋) 行海撰 (Ed.), *金山龍游禪寺志略*, 4 卷 · 首 1 卷 · 附錄 2 篇. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00635820>

Xu, L(徐靈府). (Tang dynasty). 天台山記 Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/RB00017410>

Yang, L(杨柳). (2005). 风水思想与古代山水城市营建研究. 重庆大学

Yang, E (楊爾曾).(Ming dynasty). In 明 · 楊爾曾輯.名山圖 一卷, 海內奇觀 十卷.上海:上海古籍出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB02454736>

Yanyi (延一). (Song dynasty). 廣清涼傳 三卷 Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/RB00016771>

Ye, F(葉封). (Qing dynasty). (清)叶封, 焦钦宠采辑.少林寺志. 郑州: 中州古籍出版社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB03614382>

Yinguang (印光). (1861-1940),白志謙. (1980a). (民國釋) 印光重修. 雲岡石窟寺記 / (民國) 白志謙撰 (Ed.), 清涼山志: 8 卷. 臺北: 明文書局. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00634870>

Yinyuan (隱元, 1592-1673). (Ming dynasty). 性幽(1601-1668). (1985). (明) 隱元編, (清) 性幽 ほか續修 (Eds.), 黃檗山寺志, 8 卷. 台北: 丹青圖書. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01065360>

Zhang, L(張聯元). (1721). (清) 張聯元輯 (Ed.), 天台山全志 18 卷. 台郡: 尊經閣. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB04050112> 趙之謙. (1881). (清) 趙之謙等編輯, (清) 劉繹等總纂 and (清) 曾國藩等監修 (Eds.), 江西通志 180 卷首 5 卷. 出版地不明:出版者不明. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB05135767>

Zhao, Z, Liu, Y & Zeng, G (趙之謙, 劉繹 & 曾國藩). (1881). (清) 趙之謙等編輯, (清) 劉繹等總纂 and (清) 曾國藩等監修 (Eds.), 江西通志 180 卷首 5 卷. 出版地不明: 出版者不明. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB05135767>

Zhipan & Benjue (志磐,本覺). (1910). (宋釋) 志磐撰. 繢佛祖統紀 . 歷代編年釋氏通鑑 / (宋釋)本覺編 (Ed.), 佛祖統紀. 京都: 藏經書院. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01902670>

Chapter 5 “Okufukasa” in traditional Japanese stroll gardens	102
 5.1 Introduction.....	102
5.1.1 The sense of Inmost (Oku 奥) in Japanese culture——Origin of the “Okufukasa”	102
5.1.2 Chinese landscape painting and Okufukasa in Japanese gardening.....	102
 5.2 Katsura Imperial Villa.....	106
5.2.1 Literature review of visual structure in Katsura Imperial Villa	106
5.2.2 Five ideal views	107
 5.3 Ritsurin Garden	109
5.3.1 General situation and construction history of Ritsurin Garden.....	109
5.3.2 Ideal views	110
 5.4 Method	112
5.4.1 Gardening techniques for creating Okufukasa.....	112
5.4.2 Definitions	112
5.4.3 The research subject.....	113
5.4.4 Procedure	114
 5.5 Results	116
5.5.1 Katsura Imperial Villa.....	116
5.5.2 Characteristics of the visual structures in Katsura Imperial Villa	122
5.5.3 Ritsurin Garden.....	125
5.5.4 Comparision of Katsura Imperial Villa and Ritsurin garden	129
 5.6 Summary	130
 5.7 Reference	131

Chapter 5 “Okufukasa” in traditional Japanese stroll gardens

5.1 Introduction

In a traditional Japanese garden, the overall layout is structured with the aim of evoking imagery in the mind's eye of the observer of a Deep Mountain or a Dark Valley. Thus, various garden elements such as water, trees and rocks can be transformed into vast oceans and towering mountains. To describe and conceptualize this kind of imagery, which exists not only in garden design but also in traditional Japanese aesthetics, in the Japanese language there is a single but powerful term, "Okufukasa".

Okufukasa, a sense of depth, arises from a variety of cues as the distance of the object from the eye, objects in perspective, visionary obscurity, unreachability and mystery, and so on (Kobayashi, 2007). From here-on-in this term to portray this idea will be used. This practice of manipulating the viewer's depth perception in traditional Japanese garden design can also be applied to contemporary gardening to create an effect of artificial depth not dissimilar to that employed in traditional Japanese gardens. A strong understanding of *Okufukasa*, a sense of depth, is needed to fully understand and appreciate the layout of stroll Japanese gardens.

5.1.1 The sense of Inmost (Oku 奥) in Japanese culture——Origin of the “Okufukasa”

The sense of Inmost deeply influenced the space of Japanese culture. From ancient times it germinated in Japan, for Japanese society in comparison to society in other nations, has a high social density. Space is relatively limited and people will pay special attention to slight differences in distance, which is called the sense of Inmost. This word Inmost (奥) meanwhile, contains the abstract meaning of “deep”, “foresight” and so on. The sense of Inmost presents in various spaces, from mountains and forests in nature, to the artificial garden environment which represented the mountain and forest, and to the traditional residence (Shinohara & Society for Landscape Design, 1998).

Maki indicated that the sense of Inmost is the visual cognition present in horizontal visual distance (Maki, 1980). There are ways to present the sense of Inmost. Blocking the visual sight, shadowing so that in the core of the space it is not easy to see the center of the space, this method is called the Invisible Inmost. On the way to the center of the multi-layer space, there is a strong sense of sacredness, this kind of Inmost is the combination of the Invisible Inmost and the Experience Inmost.

5.1.2 Chinese landscape painting and Okufukasa in Japanese gardening

The introduction of Chinese landscape painting and landscape painting theory into Japan during the Northern Song dynasty had a great impact on Japanese gardening.

First, *Sakutei-ki* (作庭記), which is considered to be the oldest gardening theory book in Japan, recorded the stone groups design in a pond garden starting with the text “Chinese people said... (宋人曰)”. This indicated that *Sakutei-ki* was influenced by Chinese literature and painting theory. Actually, Tachibana (橘俊綱), the author of *Sakutei-ki*, was living in the Kamakura period in Japan which is the Northern Song dynasty in China. Chinese landscape painting from the represented painters Wu Daoxuan, Li Xun, Wang Wei during the Tang dynasty experienced the Five dynasties up to the Song dynasty, has matured. During the Song dynasty, there were many representative painters such as Li Cheng, Guo Xi, Dong Yuan and Fan Kuan, as well as painting theory books like *Lin Quan Gao Zhi Ji* (林泉高致集) written by Guoxi, *Gu Hua Pin Lun* (古畫品論) by Xie He and *Li Dai Ming Hua Ji* (歷代名畫記) by Zhang Yanyuan. Numerous artistic conceptions and compositions of the garden space recorded in *Sakutei-ki*, are consistent with Chinese painting theory (Tamura, 1964) (Table 5-1).

Table 5-1 Painting theory before the Song dynasty and its view point (Luo & Liu, 2006) (Li, 2010)

Dynasty		Artist	Painting Theory	View point	Influence
Eastern Jin dynasty		Gu Kaizhi (顧愷之)	<i>Lun Hua</i> (論画); <i>Wei Jin Ming Liu Hua Zan</i> (魏晉名流画贊)	"Chuan Shen 傳神" Vivid expression to show the spirit	The first painting theory in Chinese landscape painting history
		Zong Bing (宗炳)	<i>Hua Shan Shui Xu</i> (画山 水記)	"Cheng Huai Guan Xiang (澄懷觀象)" Through the performance of landscape painting, reflecting the nature of things.	Complete landscape painting theory system
		Wang Wei (王微)	<i>Xu Hua</i> (敘画)	Landscape painting has an independent language and art form, rather than a copy of the mountains and rivers in nature.	
Southern and Northern dynasties		Xie He (謝赫)	<i>Liu Lun Fa</i> (六論法)	"Qi Yun Sheng Dong (氣韻生動)"	
Sui and Tang dynasties		Zhang Yanyuan (張彥遠)	<i>Li Dai Ming Hua Ji</i> (歷代名畫記)	Systemically studied the history of Chinese painting, biography of artists, appreciation of painting works. He also made a brilliant introduction to the humanistic spirit of painting and the relationship between painting and Confucianism.	

	Zhang Zao (張璪)	<i>Hua Jing</i> (画境)	"Wai Shi Zao Hua, Zong De Xin Yuan (外師造化，中得心源)“	For the first time clearly pointed out that the creation of landscape painting must follow the law of uniting subjective and objective
	Wang Wei (王維)	<i>Shan Shui Jue</i> (山水訣)	“The ink landscape painting, the highest level of all the painting types, created on the base of nature and shows the essence of nature. (夫画道之中，水墨為最上，肇自然之性，成造化之功。)”	His painting theory was widely accepted by the literati class during the Song and Yuan dynasties, and became the theoretical guidance of Chinese ink-wash landscape painting.
Five Dynasties and Ten Kingdoms	Jing Hao (荆浩)	<i>Bi Ji Fa</i> (筆記法)	"Six points of landscape painting: Qi, Yun, Si, Jing, Bi, Mo (氣;韻;思;景;筆;墨) "	
Song	Guo Xi (郭熙)	<i>Lin Quan Gao Zhi Ji</i> (林泉高致集)	"Three distance: high-distance, deep-distance and level-distance (三遠:高遠,深遠,平遠)"	Guo Xi presented a method of composition of landscape painting.

In addition, in the early Kamakura period, people who mastered Chinese landscape painting techniques were usually Japanese monks, and most of them, represented by Sessyu (雪舟), not only achieved greatness in landscape painting, but also designed excellent gardens (Cao & Xu, 2004). Sessyu integrated the mountains and rivers in garden design with that in landscape painting. The space composition in these gardens is similar to the composition of his landscape painting. The three visual directions on the vertical level, horizontal level as well as the front and rear in the garden scenery corresponds with the “three-distances” in landscape painting (Shigemori, 1974b). Garden designed by Sessyu shows the characteristics of visual direction by utilizing the upper and lower space structure. In the upper and lower space structure, the foreground space is relatively lower than the background space in order to create a vertical level direction. At the same time, the stone groups were set in a relatively high space in the background in order to create a direction in distance. There is another typical garden design by Sessyu which is the half round yard, which can bring a sense of wideness in the horizontal level (Maki & Sekimoto, 2008).

1.3 Gardening techniques of creating “Okufukasa”

During the history of stroll gardens in Kyoto, especially after the 14th century, the pond layout became more complicated and the pond shorelines, as well as the outlines of center islands and the convex part of islands, were designed to be more winding with the purpose of creating scenic beauty (Shigemori, 1947). Shigemori suggested

that horizontal lines are often used in the pond view to stress the scenic beauty and the gracefulness that comes from Japanese Yamato-e painting-style beauty.

Maki investigated the spatial composition of stroll Japanese gardens in relation to the configuration methods of landscape painting, especially “three distances” (Maki & Shiba, 2013). This approach showed how the arrangement of elements in stroll gardens is designed to create visual depth as well as lateral and vertical expansion.

In *Lin Quan Gao Zhi Ji* (林泉高致集), Guo Xi introduced the “three distances” meanwhile he suggested to create such distance by blocking part of the mountains and rivers as

“...A scene controlled by tall vertical peaks provides a “high-distance” view; a panorama that represents the progress from the front to the back of the mountain and stands for a “deep-distance”; and a giant leap of the perception from the foreground mountain to the mountain that is far away indicates a “level-distance” view...If you want to draw a majestic mountain, covering the middle of the mountain with clouds is far better than to show the mountain overall. If you want to show far-reaching water, covering part of the stream and making it look intermittent is far better than to draw out all the water...¹¹⁴”

Yamaguchi et al. examined the characteristics of the scenic views and topographic enclosures of traditional gardens in Kyoto (Yamaguchi, Nakajima, & Kawasaki, 2008). They pointed out that by rimming, strengthening, and contrasting surrounding views, landform characteristics creates an enclosed space characterized by various types of views, such as Illusionary Mountain and Prospect views.

Higuchi was one of the earliest researchers to systematically study the visual structure of Japanese landscapes. Based on J. J. Gibson’s theory of the visual perception of space, Higuchi suggested that visual depth is one visual property that determines the perception of a three-dimensional space. Visual depth is an effect produced not only by continuous change in the surface of a terrain but also by atmospheric factors and the overlapping of objects. Higuchi provided several approaches to understand visual depth, such as analyzing terrain texture, landform, and overlapping of objects (Higuchi, 1983). Based on his theories of visual depth, some researchers have tried to understand the relationship between visual depth and spatial structure in Japanese gardens.

This research focuses on water design and aims to clarify Okufukasa, a sense of depth, in relation to the layout of Japanese stroll gardens. Using two typical cases of stroll gardens (Katsura Imperial Villa and Ritsurin Garden), the Okufukasa characteristics of five highly evaluated views was investigated. How the shape and layout of islands

¹¹⁴ 山有三遠：自山下而仰山顛，謂之高遠；自山前而窺山後，謂之深遠；自近山而望遠山，謂之平遠…山欲高，盡出之則不高，煙霞鎖其腰則高矣。水欲遠，盡出之則不遠，掩映斷其派則遠矣。（Song dynasty, 960A.D.-1279A.D.） 郭熙「林泉高致集」（*Siku Quanshu*, 1983）

affects Okufukasa to clarify the gardening techniques used to create such imagery in stroll gardens was then discussed.

5.2 Katsura Imperial Villa

5.2.1 Literature review of visual structure in Katsura Imperial Villa

Katsura Imperial Villa was built during the early and mid-seventeenth century by Prince Toshihito and Prince Toshitada. It is located by the Katsura River in the western part of Kyoto. It occupies 66,990 m², including 8,854 m² of water area.

Research suggests that the garden of Katsura Imperial Villa was built to take advantage of the natural beauty of the area and optimally use the space available. The architecture is arranged in a precise location, facing the ideal orientation to fully capture the beauty of the space. While the pond, surroundings, and the center islands are all designed to create *Okufukasa* (Table 5-2).

Table 5-2 Research at Katsura Imperial Villa

Year	Research
1950	Gaijiro Fujishima: <i>Katsura Imperial Villa</i> (藤島亥治郎:桂離宮)
1952	Sutemi Horiguchi: <i>Katsura Imperial Villa</i> (堀口捨巳:桂離宮)
1955	Osamu Mori: <i>Research about Katsura Imperial Villa</i> (森蘊:桂離宮の研究)
1956	Osamu Mori: <i>Katsura Imperial Villa</i> (森蘊:桂離宮)
1962	Kunihei Wada: <i>Katsura Imperial Villa</i>
1972	Osamu Mori: <i>Katsura Imperial Villa</i> (森蘊:桂離宮)
1983	Arata Isozaki: <i>Katsura Imperial Villa: Space and shape</i> (磯崎新:桂離宮:空間と形)
1991	Tetsuro Watsuji: <i>Katsura Imperial Villa: Discover beyond the pattern</i> (和辻哲郎:桂離宮:様式の背後を探る)

Fujishima's study of the design of Katsura Imperial Villa is considered an important piece of work in this area. He suggested that viewpoints in the garden are situated in the best locations, providing ideal vantage points from which to appreciate the beautiful pond scenery (Fujishima, 1950). Though the scenery varies with changing viewpoints, three visual axes are designed to sequence the various scenes. The first axis extends from the moon-viewing platform to Firefly Valley, the second from Geppa-ro to Shokin-tei and vice versa, and the third from the cape where the Sumiyoshi pine tree stands to Firefly Valley.

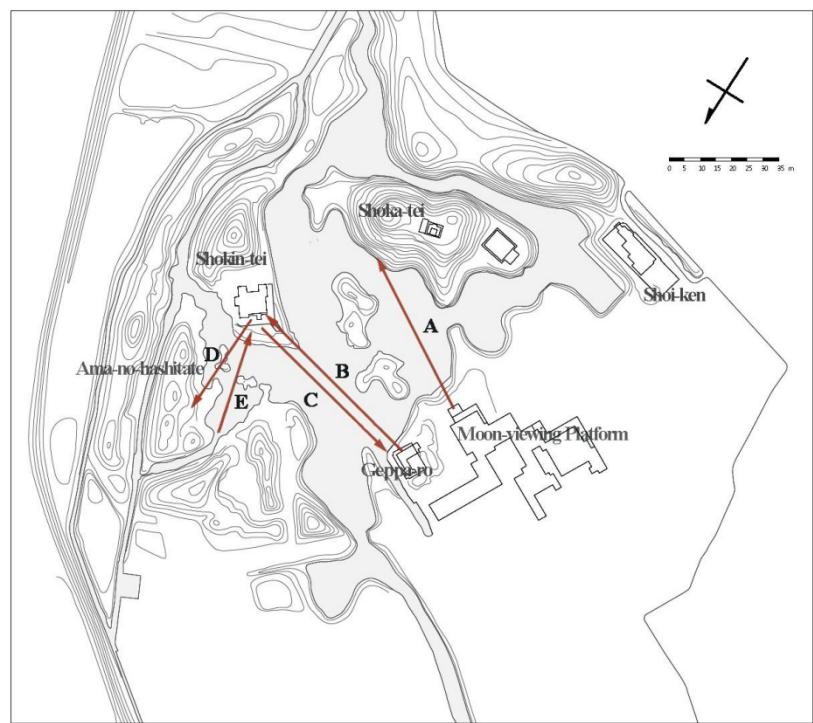


Figure 5-1 Five ideal sceneries at Katsura Imperial Villa

Fujishima also suggested that the garden of Katsura Imperial Villa can be divided into two themes, yin and yang, based on the layout and visual perspective of the architecture and the pond. Yin, wherein the scenery appears dim and tranquil, is opposed to yang, wherein the scenery is bright and sunny. This contrast between yin and yang—lively and silent, light and shade—comprises the varying views in the garden (Fujishima, 1950).

According to Isozaki, in gardens with differing characteristics, the features of the views can be emphasized by establishing a regular visual axis. Different from the perspective technique used in formal European gardens, the visual axis in Katsura Imperial Villa changes with the viewpoints, thus segmenting the scenery. However, the circulating walking paths serve to join the pieces of scenery together (Isozaki, 1983).

Watsuji pointed out that the pond at Katsura Imperial Villa expands in the northeast and southwest areas to offer better views from the moon-viewing platform and Shokin-tei (Watsuji, 1958).

Describing the different views at Katsura Imperial Villa, Horiguchi identified the important viewpoints and views around the pond (Horiguchi, 1952). He noted that the view of Firefly Valley from the moon-viewing platform has a great sense of visual depth.

5.2.2 Five ideal views

Five highly regarded views at Katsura Imperial Villa for investigation were chosen (Fig. 5-1). Table 5-3

presents descriptions of the pond views based on literature review.

Visual axis A: Moon-viewing platform to Firefly Valley

The pond view seen from the moon-viewing platform is the main view in the garden (Horiguchi, 1952).

Geppa-ro, the pond, and the roofs of Enrin-do and Shoi-ken can be observed from left to right. In this axis, the eye is intrinsically drawn to the innermost depths of Firefly Valley while observing the overlapping center islands on the left. Moreover, when the view of the distant Higashi Mountain is not blocked by trees, the sense of visual depth is even stronger (Fujishima, 1950).

Table 5-3 Descriptions of ideal views

VisualAxis	Viewpoint	View	Description
A	Moon-viewing platform	Firefly Valley	<ul style="list-style-type: none"> ▪ Moon-viewing platform is mainly used for enjoying the moon view ▪ Main view in the garden ▪ The pond scenery here has a great sense of visual depth ▪ To better appreciate the moon view, the center island, where Shok-tei is located, was built to obstruct the view of the distant mountain
B	Geppa-ro	Shokin-tei	<ul style="list-style-type: none"> ▪ Scenery changed from yang to yin; the foreground is bright and expansive and the distant view is deep and dark ▪ Left: two center islands; right: narrow water area with winding shorelines ▪ The surrounding trees enclose space in the distance; the view thus changes from expansive to narrow, deep ▪ The overlapping bank stones also effect the distant view and create a sense of visual depth
C	Shokin-tei	Geppa-ro	<ul style="list-style-type: none"> ▪ The foreground is dark and narrow ▪ However, the distant view of Geppa-ro is wide
D	Shokin-tei	Ama-no-hashitate	
E	Suhama	Ama-no-hashitate	<ul style="list-style-type: none"> ▪ The scenery is exquisite with high gardening techniques because there is so much to see from here, including the cape, Ama-no-hashidate, and the architecture

Visual axes B and C: Geppa-ro to Shokin-tei and vice versa

Along the visual axis between Geppa-ro and Shokin-tei, the sense of visual contrast produces a harmonious,

unparalleled pond view. Geppa-ro, located on the highest point of the garden, is in the yang area, surrounded by a light, relaxed atmosphere. Meanwhile, Shokin-tei occupies the lowest area, where there is a sense of solitude and silence. Because of this remarkable contrast between yin and yang—lively/silent, light/shaded—this pond view is regarded as one of the greatest (Fujishima, 1950).

Visual axis B: Geppa-ro to Shokin-tei

Throughout this visual axis, two center islands overlap on the right, and the water area on the left is narrow with winding shorelines. This arrangement gives the view a powerful feeling of distant visual depth and appears endless. Shokin-tei is especially beautiful from this angle, compelling the observer to look further into the remarkable scenery. The surrounding trees enclose the space in the distance. Thus, the view changes from wide to narrow, enhancing the strong feeling of visual depth, directing the observer's gaze into the distance (Fujishima, 1950).

Visual axis C: Shokin-tei to Geppa-ro

In the foreground, groups of stones by the bank overlap by the side of the narrow water area. In the distant wide water area, Geppa-ro is stably situated on a gently rolling hill. The expanse of the water surface brings a sense of relaxation to the observer, both visually and emotionally (Fujishima, 1950).

5.3 Ritsurin Garden

5.3.1 General situation and construction history of Ritsurin Garden

Ritsurin Garden is a traditional strolling-style Daimyō (feudal lord) garden located in Takamatsu City, Kagawa Prefecture, Japan. It received national designation in 1953 as a Special Place of Scenic Beauty. This spacious garden of 75 hectares features 13 landscaped hills, 6 ponds and many stone arrangements that have been placed in perfect balance in front of a vast green vista of Mt. Shiun.

It is considered that the construction of Ritsurin Garden was started in the 1620s

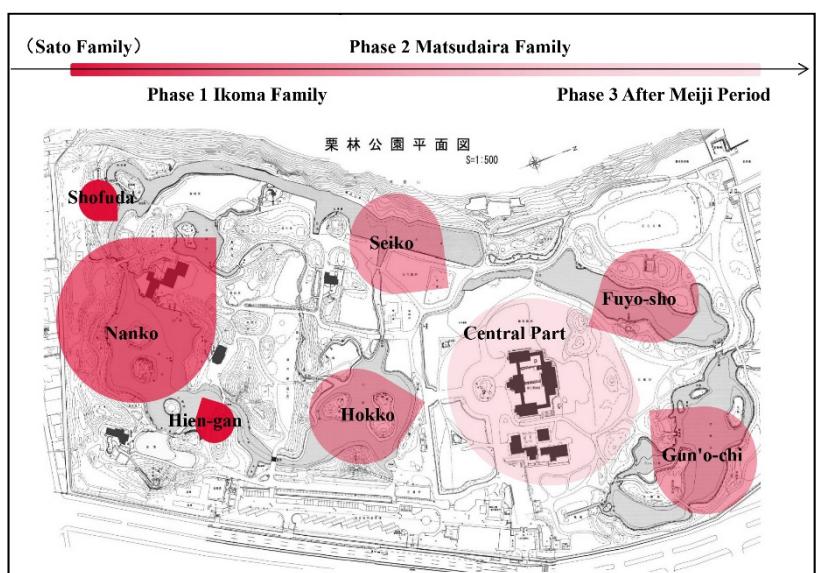


Figure 5-2 Park areas constructed in different period

by the Ikoma Family, who were ruling Sanuki at the time. Then a new ruler, Yorishige Matsudaira, inherited the garden in 1642 and continued its construction. The garden was completed more than 100 years later in 1745 and was used as a villa of the Matsudaira Family until about 1870 (Ihara, 2005). Following the Meiji Restoration in Japan, Ritsurin Garden became a public garden in 1875 (Fig. 5-2). Two stone groups called shofuda and hien-gan are considered using Muromachi-period gardening techniques, firstly built by the Sato family. But generally speaking, the construction of the garden started from the Ikoma family. During this phase, the construction was centered on the Nanko area. There is a saying that the design of the Nanko area is influenced by the gardener Kobori Enshu who is also the designer of Katsura Imperial Villa (Shigemori, 1974a). Then the Matsudaira family built the Sekiko Hokko Fuyo-sho and Gun'o-chi. After the Meiji Period the central part was rebuilt to meet contemporary needs and the garden was named as Ritsurin-park.

5.3.2 Ideal views

Ritsurin garden is famous for the “Yippo Yikkei” which means the sceneries in the garden change along with the tourists’ moving steps. It has so many changes in scenery, mainly because of its large scale, numerous spatial elements, rich terrain changes and borrowed scenery from the Shiun Mountain.

The large scale garden accommodates a number of landscape elements such as the Nanko and Hokko ponds on which are located lots of islands. Hills surround these ponds and countless bridges connect the islands. Tea houses in different regions can be used for scenery at the same time, also they can decorate the garden scenery. Lawns, pine trees, maple trees and other vegetation also enrich the four season scenery in the garden. Moreover, variable terrain in the garden provides tourists with changing viewpoints thus there are not only flat views but also over-looking views and upward

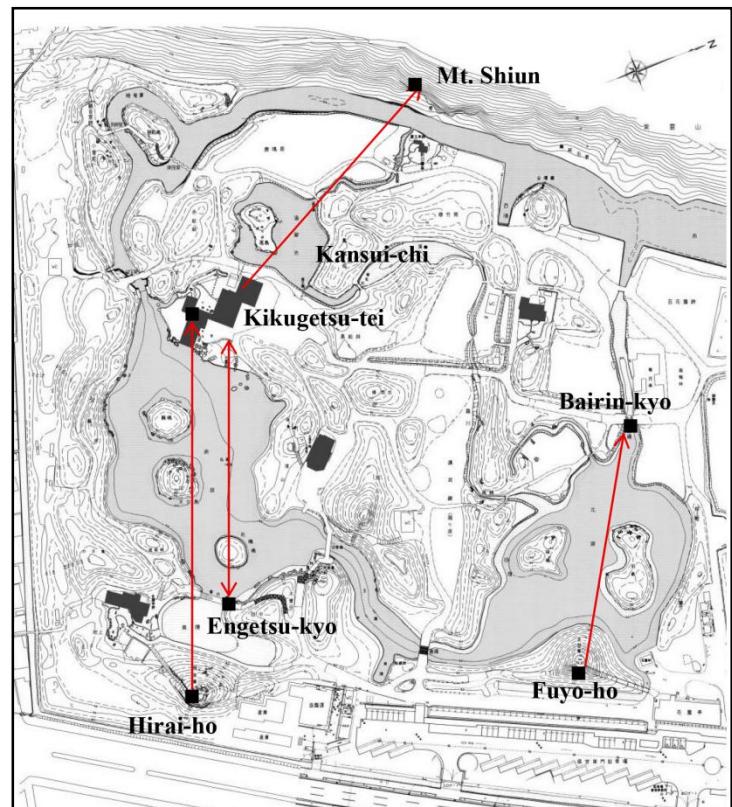


Figure 5-3 Five ideal sceneries at Ritsurin Garden

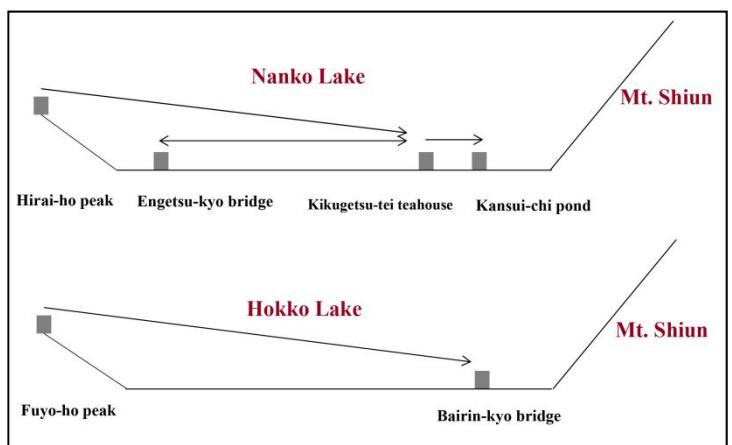


Figure 5-4 Height of the viewpoints

looking views. In addition, Ritsurin Garden borrows the scenery of Shiun Mountain and uses it in the garden, which increases the sense of depth of the view in Ritsurin Garden.

Although there is no solid evidence to show that Enshu designed the Nanko area in Ritsurin garden, some researchers suggest that the design is more or less influenced by him. Fujita and Unno say that the renowned gardener Enshu was a relative of the Ikoma family, it is reasonable to speculate that he affected the design of Ritsurin garden (Nakamura, 1983) (Fujita, 1974). Fujita also shows other evidence, that the technique of using a bamboo wall resembles that of Katsura Imperial Villa which is one of the designs of Enshu (Fujita, 1974). Shigemori suggests that the sense of visual depth brought by the well-designed pond layout is parallel to that in Sento Imperial Palace which is also a design by Enshu (Shigemori, 1974). Shigemori supposed that the garden should not be studied as a whole because the garden was constructed by different designers throughout such a long time. Architectural elements and garden styles are varied therefore the view becomes dynamic while viewpoints change.

The most highly evaluated area in the garden is the Nanko area (South pond area) because the pond arrangement and stone groups design quite stands out (Table 5-4). The view seen from Kikugetsu-tei tea house, Hirai-ho Peak, Engetsu-kyo Bridge and Fuyo-ho Peak are the most highly evaluated sceneries in Ritsurin garden, four of which are in the Nanko pond area (Fig. 5-3 and Fig. 5-4).

Table 5-4 Description of the ideal views

Visual Axis	Description of the views
Engetsu-kyo Bridge to Nanko Lake	The overall view of Nanko Lake can be seen from Engetsu-kyo Bridge. (Shirahata, 2013)
Fuyo-ho Peak Hokko Lake (Bairin-kyo Bridge)	From the red-painted Engetsu-kyo Bridge, the beautiful scenery of Nanko Lake unfolds in front of the viewer. To the east of the bridge there is a hill called Hirai-ho Peak. (Shigemori, 1974a)
Hirai-ho Peak to the whole garden	The scenery of Shiun Mountain is borrowed when seen from Fuyo-ho Peak Hokko Lake. The color contrast of red Bairin-kyo Bridge and green vegetation is extremely beautiful. (Shirahata, 2013)
Kansui-chi Pond	It is an excellent over-looking view. (Shigemori, 1974a)
	The view is composed with central islands in the pond and a group of stones by the pond side. It is said that this set of stone groups is the most outstanding of the stone groups in the Kikugetsu-tei tea house to garden. (Shigemori, 1974a)
	Looking from the west side roof of the tea house, Kansui-chi Pond is in front of the eyes. Behind it stands Shiun Mountain as a background to the pond. The scenery here is approaching as if the mountain is within reach. The main view is the close mountain which

creates a sense of oppression and the composition of the view is vertical. It can be said that it is a static view as if we are appreciating a landscape drawing. (Nakamura, 1983)

From the east side of the tea house roof look to South Lake, you can enjoy the open lake scenery. (Shirahata, 2013)

The view of Nanko Lake is extremely beautiful when seen from the Kikugetsu-tei tea house which is located on the south shore of the lake. From east to west, Token-sho Island,

Kikugetsu-tei tea house to Ten'nyo-to Island and Fu-sho Island stand in the lake side by side. Small stones lay in the Nanko Lake shallow pond close to the tea house. On the north are mountains covered by pine trees and to the south of the tea house it is the Wolong plum tree and Dejima Island. (Shigemori, 1974a) The main view seen from the east side of the tea house is the lake. It is horizontal and dynamic scenery. The scenery of both sides of the tea house dramatically changes and is in sharp contrast. (Nakamura, 1983)

5.4 Method

5.4.1 Gardening techniques for creating Okufukasa

Based on our field investigation and literature review, it was found that the water surface and the shorelines greatly influence the visual structure of the pond view. Thus, the following was hypothesized:

- To create a vista, the pond water moves in one direction to create visual depth.
- The winding shorelines and the islands create overlaps in the pond view
- The shorelines are partly hidden to make the observer imagine the invisible spaces in the garden.

To test these hypotheses, answering the following was focused on:

- What kind of pond shape creates visual depth in the pond view?
- How are islands arranged to bring the overlap into view?
- How are shorelines hidden to make the water surfaces seem expansive?

5.4.2 Definitions

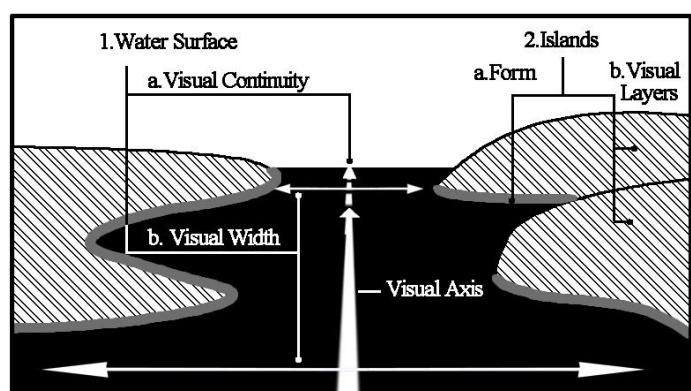


Figure 5-5 Research subject

To analyse *Okufukasa*, a sense of depth, in the stroll garden, the following definitions should be introduced (Fig. 5):

- Visual axis: The visual axis is the horizontal line from the viewpoint to the view. It is a fundamental definition for this study, which concerns the quantification of visual continuity, the expanse of the water surface, and so forth.
- Visual Depth and Width created by water surface (Table 5-5)
- Perspective and Scenic Layers created by Directional and Stratification Outlines (Table 5-5)

5.4.3 The research subject

In this study, the water surface and islands as the research subjects to investigate *Okufukasa* in stroll gardens was chosen. These are the two vital elements that compose the pond view (Fig. 5-5 and Table 5-5).

Table 5-5 Research subjects and definitions

Subject	Definition	Factors
Water surface	<p>Visual depth The distance and orientation of the visible continual water surfaces; it reflects the visual depth of the water surface.</p>	Projection distance of the visible unobstructed water surface (Fig. 5-6: 1-2)
	<p>Visual width The width variation of the water surface from near to far</p>	Angle from distant water surface to the visual axis(Fig.5-6: 1-2) Visible width/ Distance on visual axis (Fig.5-6: 1-3)
Perspective	The island outlines which direct toward nearly the same direction as the visual axis in the view are used to show the visual depth direction.	Directional Outlines (Fig.5-6: 1-4)
Islands	Considering the islands as vertical planes facing the viewpoint. The overlap of these layers makes the viewer imagine the deepness and broadness (Higuchi, 1983)	
Scenic layers	<p>The island outlines which are nearly perpendicular to the visual axis are used to show the scenic layers.</p>	Stratification Outlines (Fig. 5-6: 1-4)

1) Visual Depth and Width

As a continuous plane, the water surface is disrupted by the islands in the pond. The visual depth of the distant water surface and the variations in width of the water surface influence the *Okufukasa* of the garden. While analyzing the visibility of the pond view, the visible distance and visible width of the water surface were collected

to separately quantify visual depth and width variation.

2) Perspective and Scenic Layers

In addition to determining the shape of the water surface, the islands' function as overlapping objects that create *Okufukasa* in the pond view (Table 5-4). Therefore, the winding forms of the islands, which can be classified as directional outlines and stratification outlines, were used to analyze perspective and overlaps of islands. Considered as vertical planes, the overlapping island layers obscure one's vision of parts of the pond and are significant elements of *Okufukasa*.

5.4.4 Procedure

The procedure of analyzing *Okufukasa* in the pond view is shown in Fig. 5-5.

- Visibility analysis of the pond view (Fig. 5-6: 1-1¹¹⁵)
- Data processing of distance, angle, width, obscured vision of the water surface, and visible outlines of the islands (Fig. 5-6: 1-2)
- Visual width processing (Fig. 5-6: 1-3)
- Visible outline processing (Fig. 5-6: 1-4)
- Creating 3D models (Fig. 5-6: 2-1)
- Creating 3D images (Fig. 5-6: 2-2)
- Island layers processing (Fig. 5-6: 2-3)
- Two types of outlines and other important garden elements processing

¹¹⁵ View angle 120° (Hershenson, 2000)

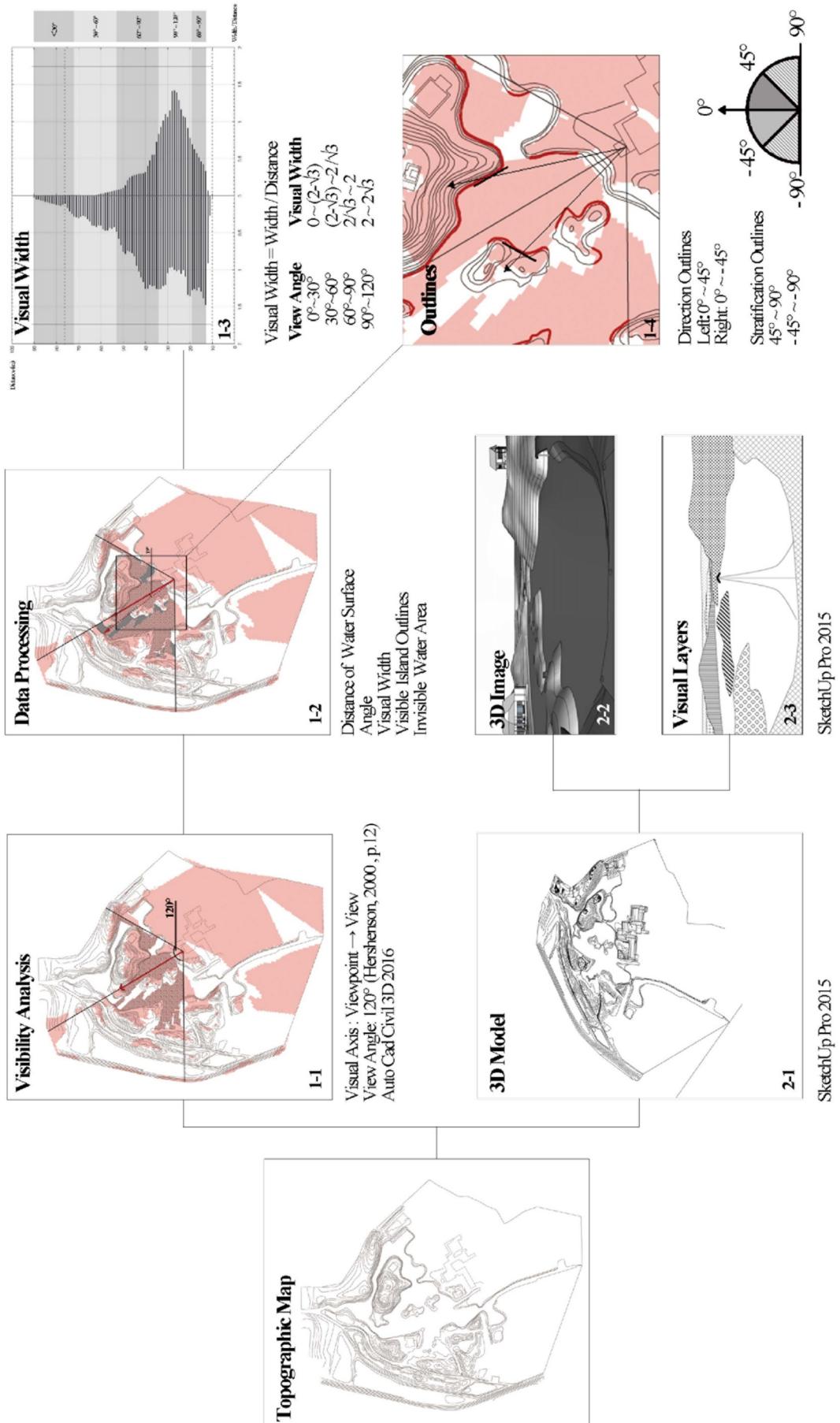


Figure 5-6 Procedure

5.5 Results

5.5.1 Katsura Imperial Villa

1) Visual axis A: Moon-viewing platform to Firefly Valley (Pic.5-1)



Pic 5-1 View from moon-viewing platform to Firefly Valley (A)

The view from the moon-viewing platform is considered the main view in this garden. As its name suggests, this platform is mainly used to look at the moon. Geppa-ro, Onrindo, Shoiken, and the pond can all been viewed from this axis. The scenery here is serene and has a great sense of *Okufukasa*.

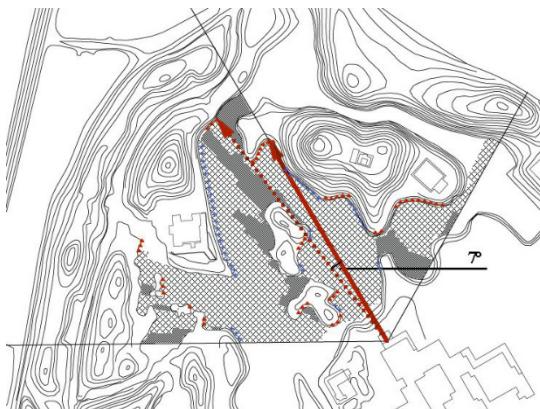


Figure 5-7 Visible area of the water (A)

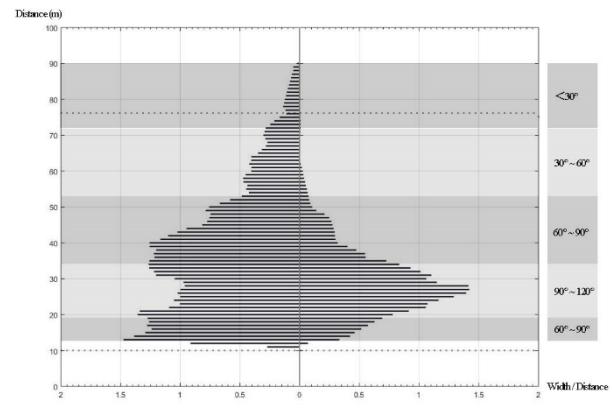


Figure 5-8 Width variation of the water surface (A)

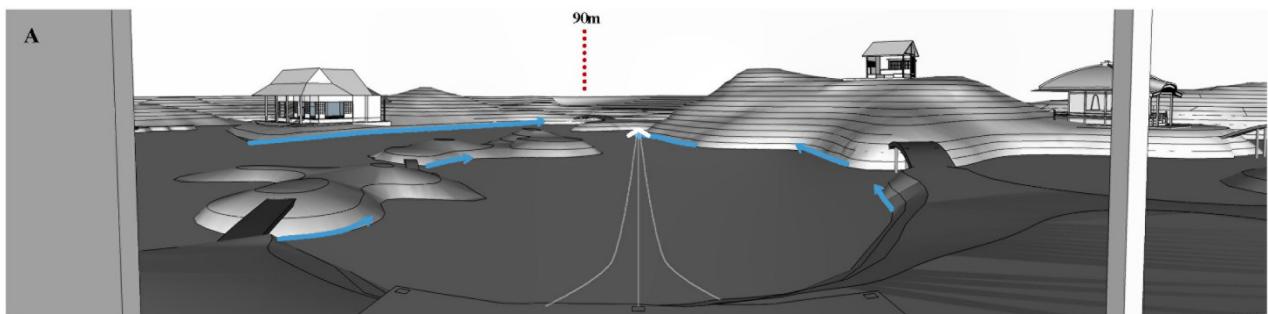


Figure 5-9 3D image and directional outlines (A)

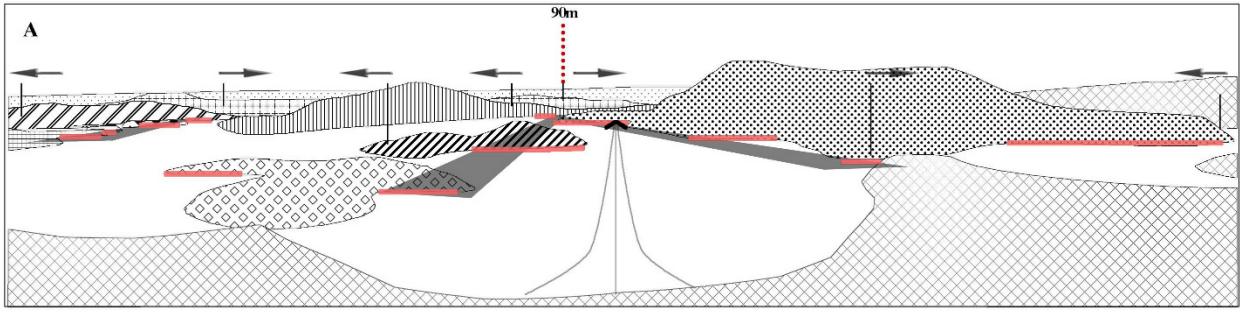


Figure 5-10 Islands in layers and stratification outlines (A)

The visible water is 90 m away and 7° left of the visual axis. It is quite near the end point of the visual axis, which means it is easy for the observer to look far into the distance along this axis (Fig. 5-7). The visual width of the water surface gradually decreases from foreground to the background of the pond, which means the view is slowly directed toward Firefly Valley (Fig. 5-8). In this view, most of the island outlines function as directional outlines, which focus the viewer's eyes in one specific direction. Almost all of these directional outlines are oriented toward the furthest visible water surface (Fig. 5-9). Meanwhile, the convex parts of the islands create stratification outlines (Fig. 5-10). The islands block vision of the scenery behind them and give the garden the appearance of being tiered. The varied heights of the islands make the water surface obscured from vision, which is quite important for tricking the eye into believing the garden is much wider than it actually is.

2) Visual axis B: Geppa-ro to Shokin-tei (Pic.5-2)

Along this visual axis, the scenery changes from one purveying a sense of 'bright and wide' to one giving a feeling of 'dark and deep'. Two center islands overlap on the right, and the pond on the left is narrow with winding shorelines.



Pic 5-2 View from Geppa-ro to Shokin-tei (B) (川上, 1932)

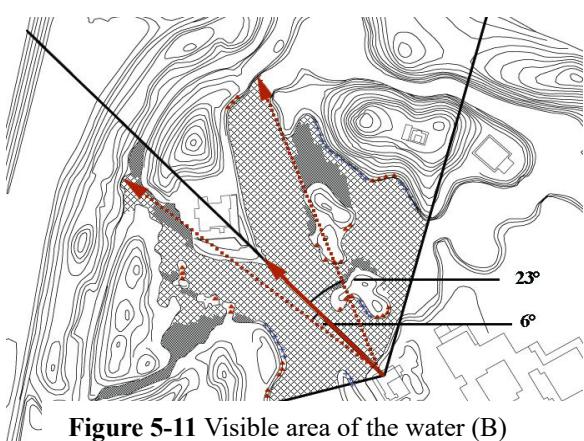


Figure 5-11 Visible area of the water (B)

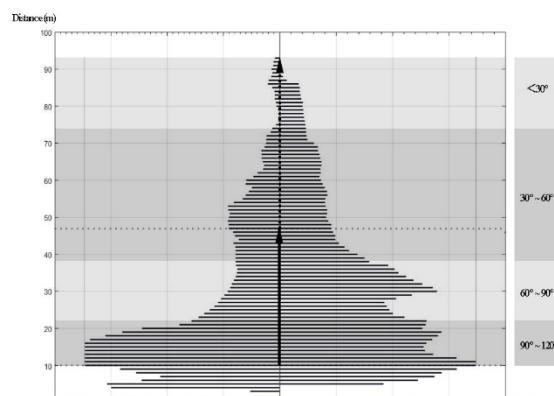


Figure 5-12 Width variation of the water surface (B)

Consequently, there is a great sense of visual depth, and the view seems endless. The overlapping bank stones also contribute to visual depth since they can be clearly seen from Geppa-ro, which is located on a raised hill.

From this view, the water surface extends to two distant places left (93 m, 6°) and right (88 m, 23°) of the visual axis (Fig. 5-11). The left distant water area is in front of Shokin-tei; this is understood as the “yin” (dark and tranquil) part of the pond. Actually, the visual width analysis (Fig. 5-12) shows that the water surface is narrow in

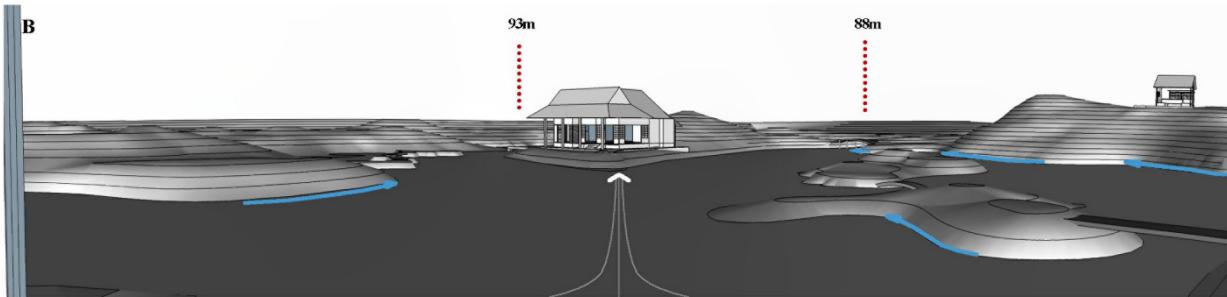


Figure 5-13 Islands in layers and stratification outlines (B)

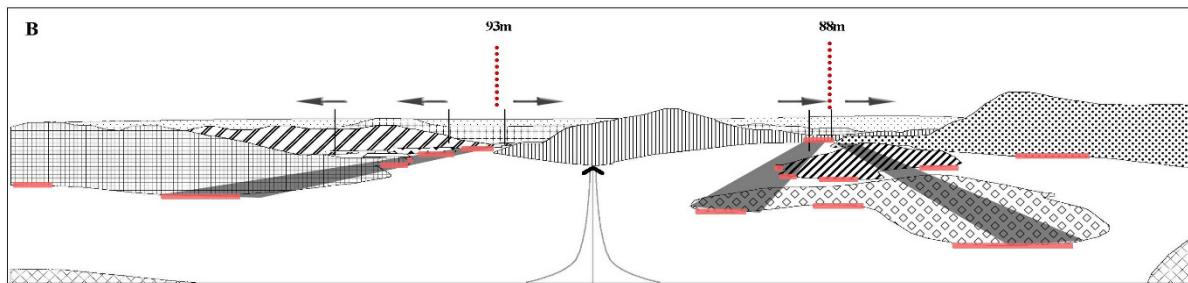


Figure 5-14 3D image and directional outlines (B)

this area. By contrast, the water surface in the foreground is nearly 120° wide, creating expansive scenery. The stratification outlines play an important role in directing the gaze toward the distant water surface (Figs. 5-13 and 5-14). In particular, the stratification outlines, distributed along the convex parts of the right center islands, cause the view to gradually extend outwards. Then, the obstruction caused by the overlapping islands produces lateral extension in the two distant water areas; thus, the observer cannot help but imagine the vast space of the pond.

3) Visual axis C: Shokin-tei to Geppa-ro (Pic.5-3)



Pic 5-3 View from Shokin-tei to Geppa-ro (C)

It is said the foreground here is dark and narrow because of the winding shorelines and bank stones in this water area. On the contrary, the distant view of Geppa-ro is actually wide.

The furthest visible water surface is 93 m away and 19° to the right of the visual axis (Fig. 5-15). Although the water surface suddenly narrows from Geppa-ro to the distant point, the water area in front of Geppa-ro (about 30

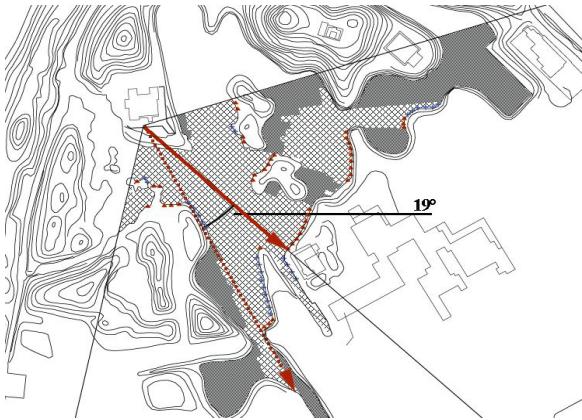


Figure 5-15 Visible area of the water (C)

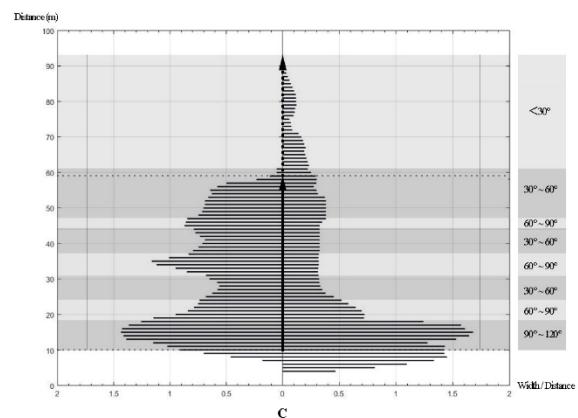


Figure 5-16 Width variation of the water surface (C)

m to 60 m from the viewpoint) is still open and wide compared to the water areas at the same distance in the two cases above. Such an expansive distant water area makes the view from Geppa-ro seem bright (Fig. 5-16). There are far more stratification outlines than directional outlines, and they are distributed along almost all of the islands (Figs. 5-17 and 5-18). These outlines show a clear orientation toward the *Okufukasa* place and help to create overlap in the scenery. Overlapping islands also create obstructed views of the water surface, thus producing *Okufukasa* in the lateral direction.

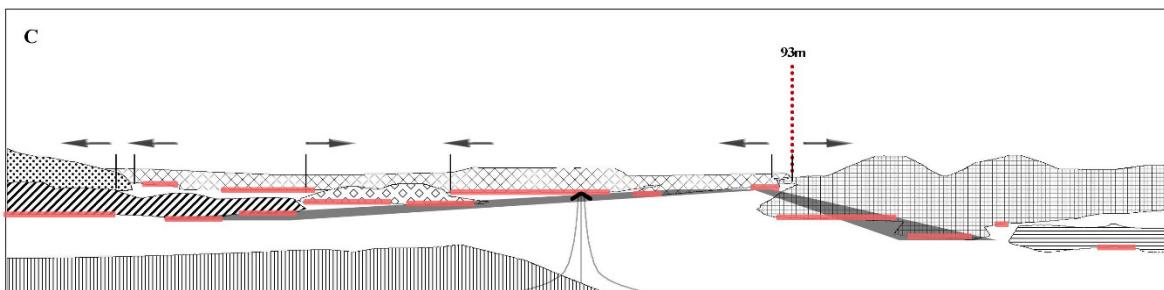


Figure 5-17 Islands in layers and stratification outlines (C)

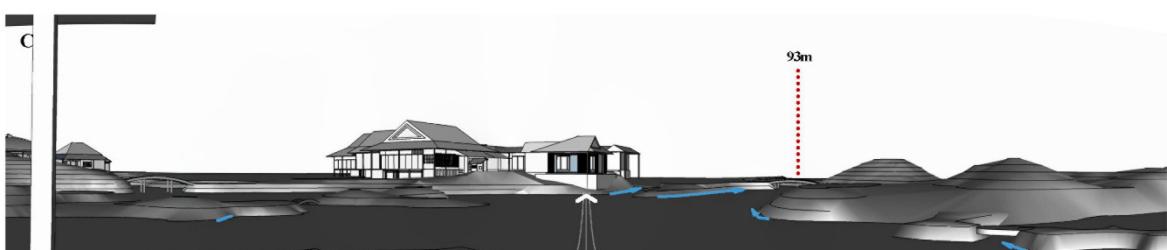


Figure 5-18 3D image and directional outlines (C)

4) Visual axis D: Shokin-tei to Ama-no-hashi-date (Pic. 5-4)

This area is located on the “yin” of the pond, where the scale is much smaller and has winding shorelines near the viewpoint. Consequently, not only is the distant water view much closer to the viewpoint but the main visible water area is within 40 m. Furthermore, the visual angle from the distant water surface to the visual axis is 46°.



Pic 5-4 View from Shokin-tei to Ama-no-hashidate (D)

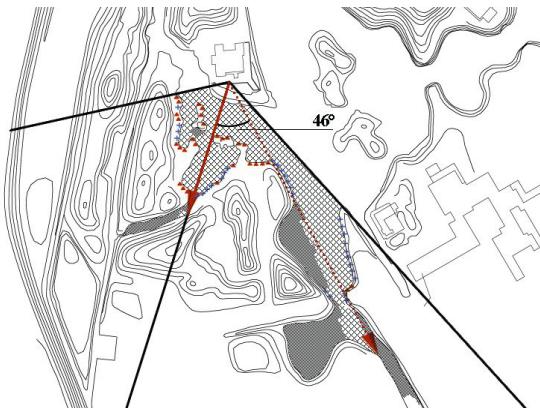


Figure 5-19 Visible area of the water (D)

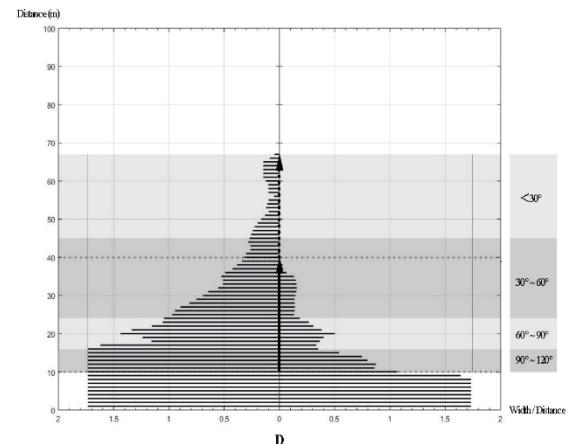


Figure 5-20 Width variation of the water surface (D)

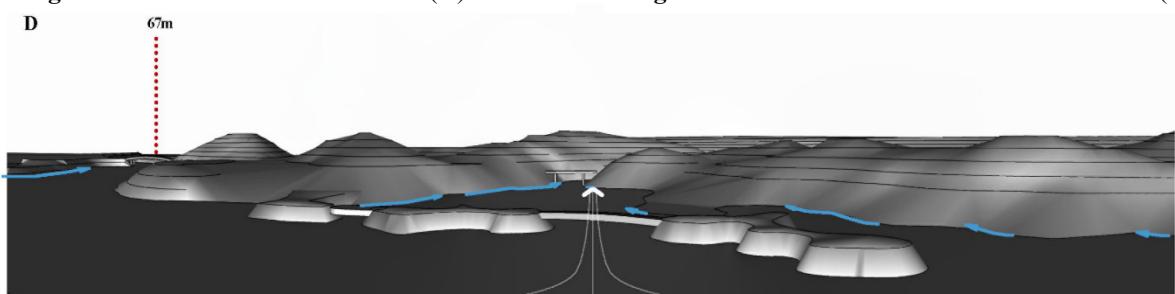


Figure 5-21 3D image and directional outlines (D)

This makes the orientation of the distant water surface quite far away from the center of the view (Fig. 5-19). The width of the water area narrows gradually from the viewpoint to the end of the visual axis, thus showing a clear stream direction to the middle of the scenery (Fig. 5-20). Although this scenery has few islands in the pond view, the variable shorelines create several stratification outlines, which direct the visual depth toward the center of the view (Figs. 5-21 and 5-22). These outlines also cause overlaps in the scenery. However, this scenery lacks lateral

extension because of the lack of obscured vision created by layered overlapping islands. Thus the observer is unable to generate a sense of lateral extension in their mind's eye.

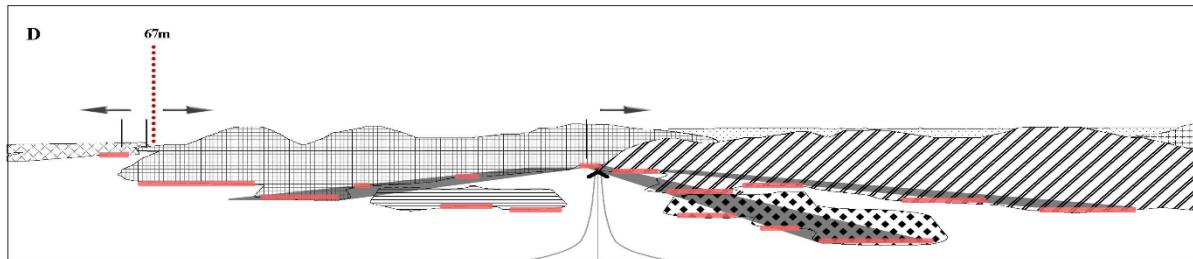


Figure 5-22 Islands in layers and stratification outlines (D)

5) Visual axis E: Suhama to Ama-no-hashi-date (Pic. 5-5)

In this visual axis, the water area has a much smaller reach due to the close surrounding islands. However, the water surface is still visible 91 m away from the viewpoint, even though it is 46° to the right of the visual axis (Fig. 5-23). There is no expanse of water area because sight is blocked by the islands close to the viewer (Fig. 5-24). In this view, neither the directional outlines nor the stratification outlines show a clear orientation toward the distant water surface (Figs. 5-25 and 5-26). However, the bridges that connect the islands play a role in directing the viewer toward the horizon. The numerous stratification outlines here cause visual overlaps and thereby



Pic 5-5 View from Suhama to Ama-no-hashi-date (E)

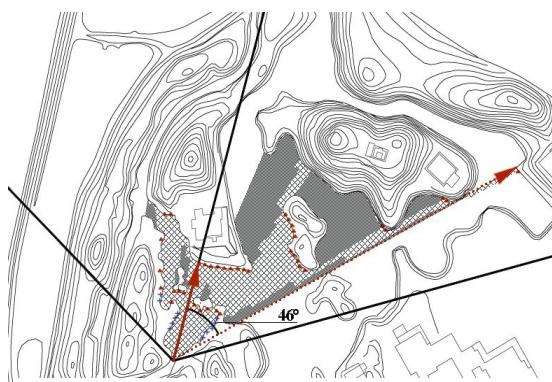


Figure 5-23 Visible area of the water (E)

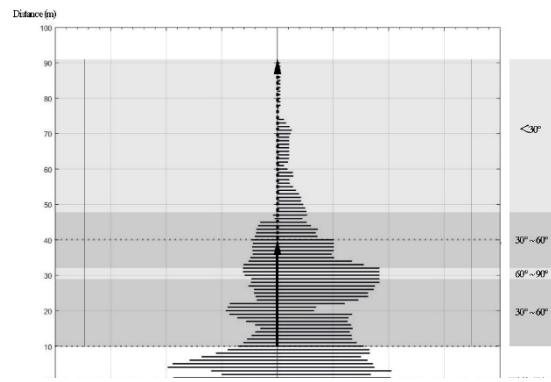


Figure 5-24 Width variation of the water surface (E)

produce *Okufukasa*. *Okufukasa* caused by islands is much stronger than that created by water areas.

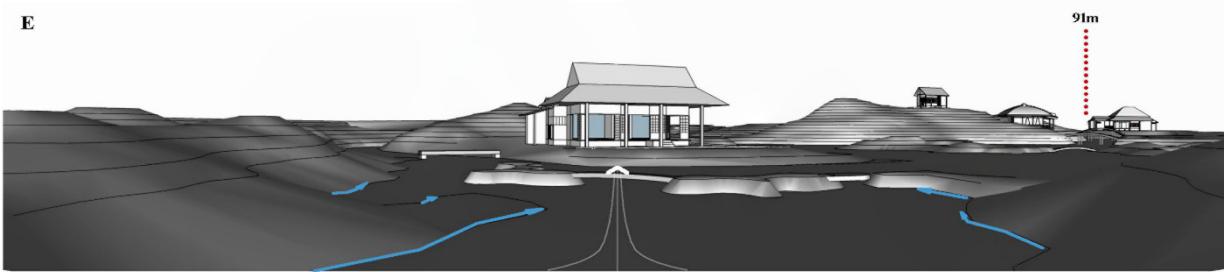


Figure 5-25 3D image and directional outlines (E)

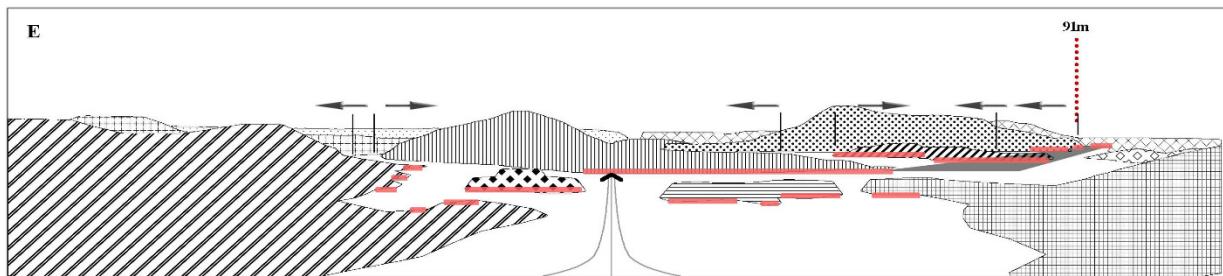


Figure 5-26 Islands in layers and stratification outlines (E)

5.5.2 Characteristics of the visual structures in Katsura Imperial Villa

In the analysis of the visual structures of different views in Katsura Imperial Villa and Ritsurin garden it was found that in this garden, the layering effect creates a great sense of *Okufukasa*, even when only considering the effect of the layout. In other words, when the islands were built and renovated, their layout and shape were

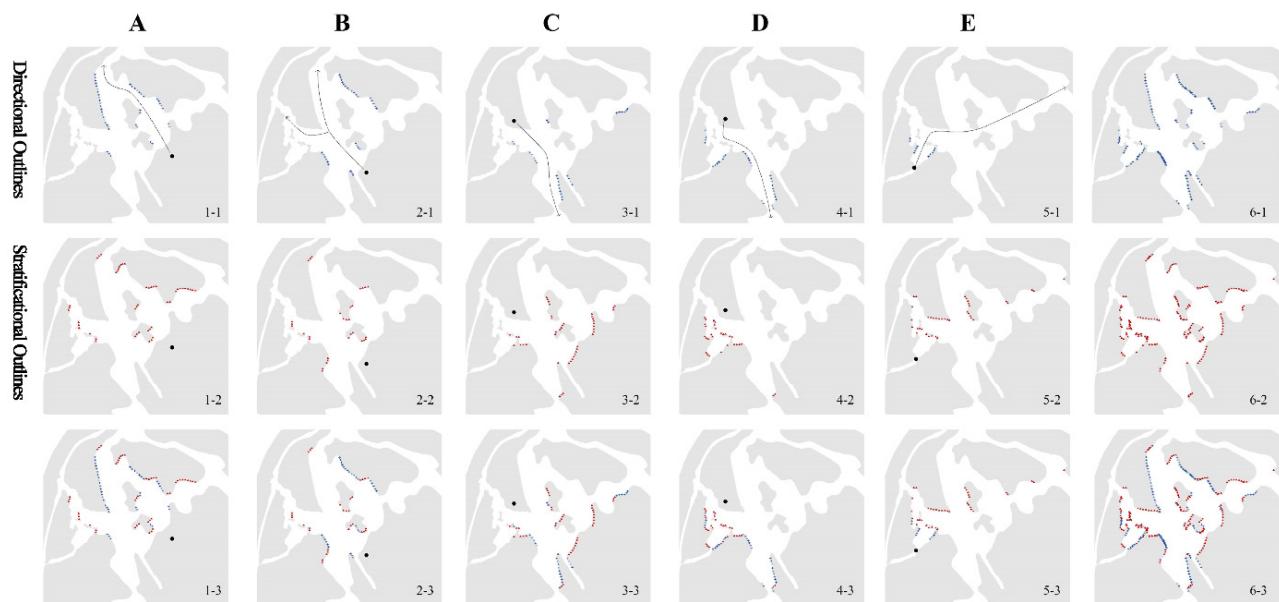


Figure 5-27 Layout of important garden elements

expertly designed to expand the perceived area of the garden (Fig. 5-27: 6-3).

▪ Vista and Visual depth

To create a vista, the designer tried to make the water surface continuously appear to move toward the horizon. Directional outlines—the shorelines arranged in the same direction to create visual depth—play a significant part in creating this type of vista and feeling of visual depth. Fig. 5-27 (1-1 to 6-1) shows that at Katsura Imperial Villa, the directional consistency of the island outlines are the main reasons for the visual synchronization with the surface of the water that creates a tremendous sense of depth.

By analyzing the layout of essential garden elements at Katsura Imperial Villa, a technique was found for creating *Okufukasa* in the stroll garden. Fig. 5-28 shows the horizontal angled view of the garden elements and the distance from them to the viewpoint. It helps one understand the way these elements affect the visual depth and horizontal composition of the pond's view.

The distance between the main view and viewpoint is the major factor that affected the visual depth of the scenery. Based on the distance from the main view, the view type into ‘Background View’ and ‘Foreground View’ were classified.

- Background View: The main focal point is approximately 70 meters away from the viewer. It is near the horizon of the scenery and the directional and stratification outlines. The stone piles and lanterns focus one's attention on the background, thus creating *Okufukasa*, a sense of depth. Many long and continuous directional outlines in this type of view can be found, which meet at the focal point of the scenery (Fig. 5-28 A, B and C).
- Foreground View: In this view, the primary interest is in the foreground (less than 40 m) or at the mid-distance (40 m to 65 m). The viewer's attention is focused on the foreground and mid-distant area. However, a sense of depth because of the island's outlines, multiple scenic layers, and the stone piles and lanterns which direct our eyes towards the distant horizon can be perceived (Fig. 5-28 D and E).

▪ Overlap of scenic layers

The winding shorelines create overlapping layers, especially the stratification outlines, which are nearly perpendicular to the horizon. Fig. 5-27 (1-2 to 6-2) shows that the stratification outlines are usually distributed along the center islands and the convex area (called Dejima in traditional Japanese gardens) of the surrounding islands. In other words, these elements are designed to create *Okufukasa* by layering visual elements behind one another in rapid succession to give the viewer the idea that the garden continues onwards much farther than it actually does. Furthermore, the contrast between the foreground and the background also helps create *Okufukasa*.

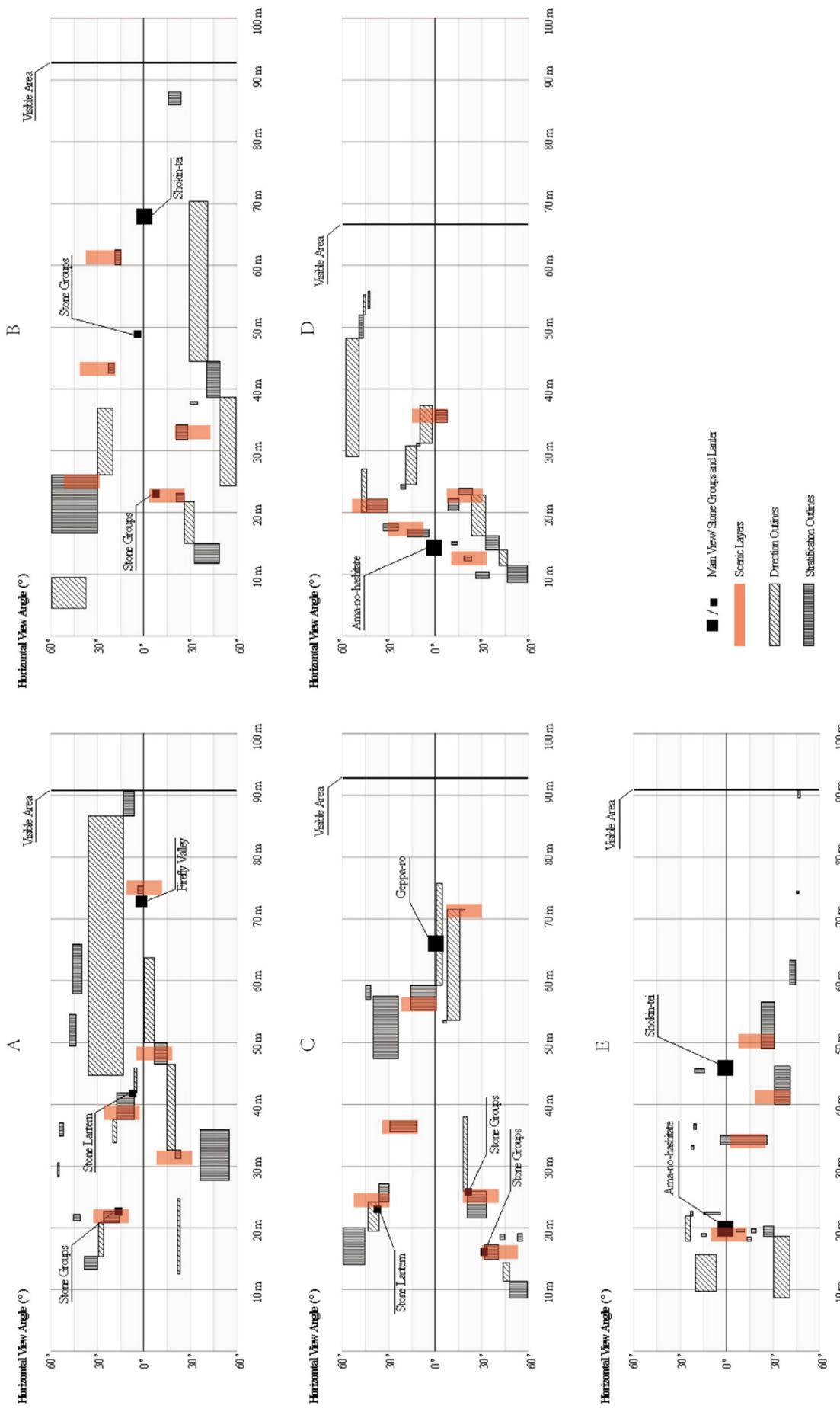


Figure 5-28 Layout of important garden elements

•Horizontal Composition

According to the horizontal-angled view of the garden elements, the pond's view was classified into 'Centralized Water Area View' and 'Expansive Water Area View'.

- Centralized Water Area View: Most of the garden elements are centralized in the landscape at an angle less than 30 degree. The water area is relatively narrow and surrounded by islands, creating a closed space (Fig. 28 A, D and E).

-Expansive Water Area View: The garden elements are distributed in the foreground, creating an open and expansive water area. This view has more stratification outlines and scenic layers because the islands distributed along the edge cause obstruction when viewed (Fig. 28 B and C). The shorelines are partly hidden to create the sense that the water surface is flowing in a lateral direction. The water area appears infinite, and observers cannot help but imagine the concealed space.

Moreover, that the stone piles and stone lanterns are also essential for creating a sense of depth because they focus one's sight on the depth of the field, while balancing the horizontal composition of the viewable area and blocking the scenic areas at the ends of shorelines was noticed.

5.5.3 Ritsurin Garden

1) Hirai-ho Peak to Kikugetsu-tei teahouse (Pic. 5-6)



Pic 5-6 Hirai-ho Peak to Kikugetsu-tei teahouse

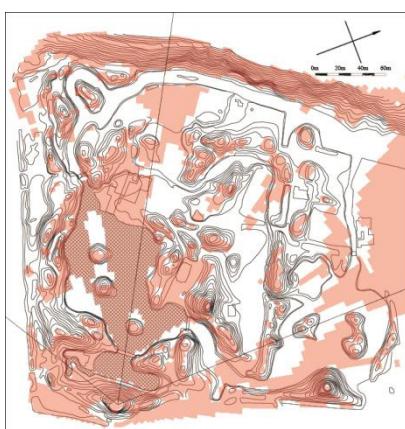


Figure 5-29 Visibility analysis

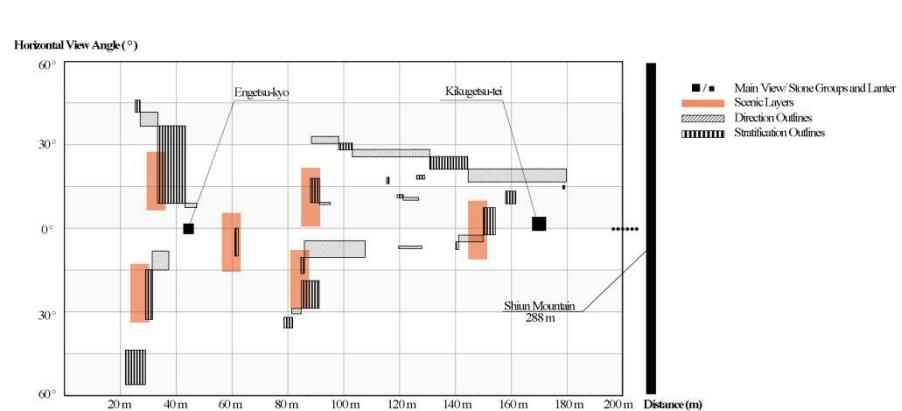


Figure 5-30 Layout of important garden elements

The relative height of Hirai-ho Peak which makes the scenery from here an overlooking view and the water visible distance is about 180m (Fig.5-29 and Fig.5-30) . Engetsu-kyo Bridge, a main view here, is located 40m visual distance away on the Nanko Lake. The water area in the foreground extend to both sides and the horizontal angle is more than 90° . In the foreground, the islands outlines are mainly the Stratification outlines. Three central islands in Nanko Lake are in the middle distance view. The Island outlines of these central islands and the north shore of the Nanko Lake are mainly Directional outlines and leading the observer's sight to the distant Kikugetsutei teahouse. Lake water gradually flows to the deep to the south side of the teahouse. Islands in the foreground and middle view constitute the main scenic layers and the Shiun Mountain, located in 288 meters away, play an important role of background for the scenery.

2) Engetsu-kyo Bridge to Kikugetsutei teahouse (Pic.5-7)



Pic 5-7 Engetsu-kyo Bridge to Kikugetsutei teahouse

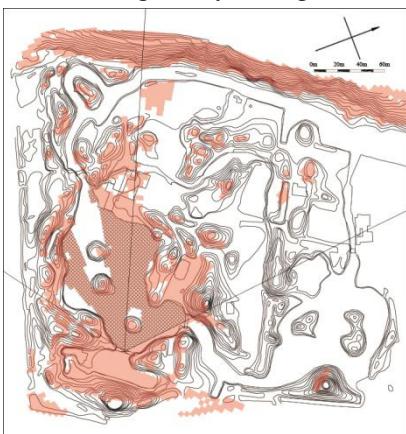


Figure 5-31 Visibility analysis

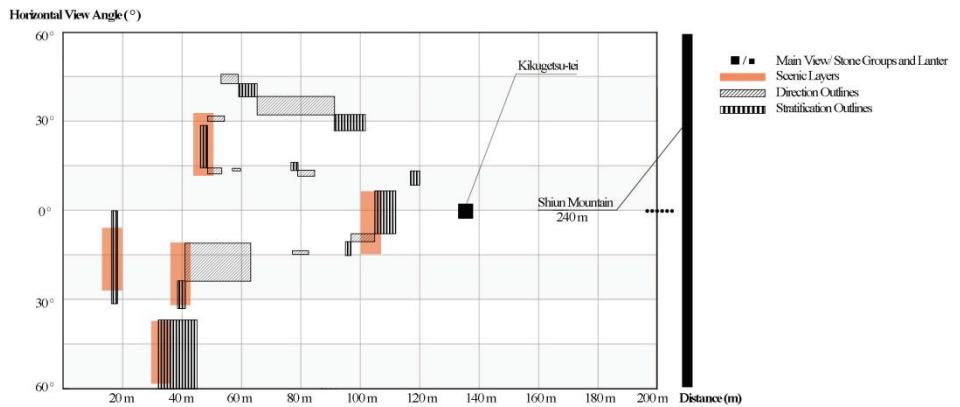


Figure 5-32 Layout of the garden elements

The scenery here is a flat view from Engetsu-kyo Bridge to Kikugetsutei teahouse. The visible distance of the water area which flows to the lake shore by Kikutetsu-tei teahouse is about 130 meters (Fig. 5-32 and Fig.5-33). Because the view point is on the bridge, the horizontal extension of the foreground water area is wide and the horizontal angle is more than 120° . The central islands, the outlines of which are mainly stratification outlines, composed the foreground. Therefore, there are more scenic layers in the foreground than the middle and distant view. On the other hand, due to the relatively small number of directional outlines, the sense of direction is weak. As the background of this view, the distant Shiun Mountain is much closer to the observer than the view from

Hirai-ho Peak.

3) Fuyo-ho Peak to Bairin-kyo Bridge (Pic. 5-8)



Pic 5-8 Fuyo-ho Peak to Bairin-kyo Bridge

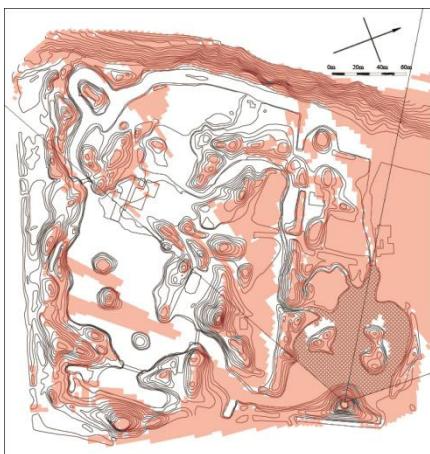


Figure 5-33 Visibility analysis

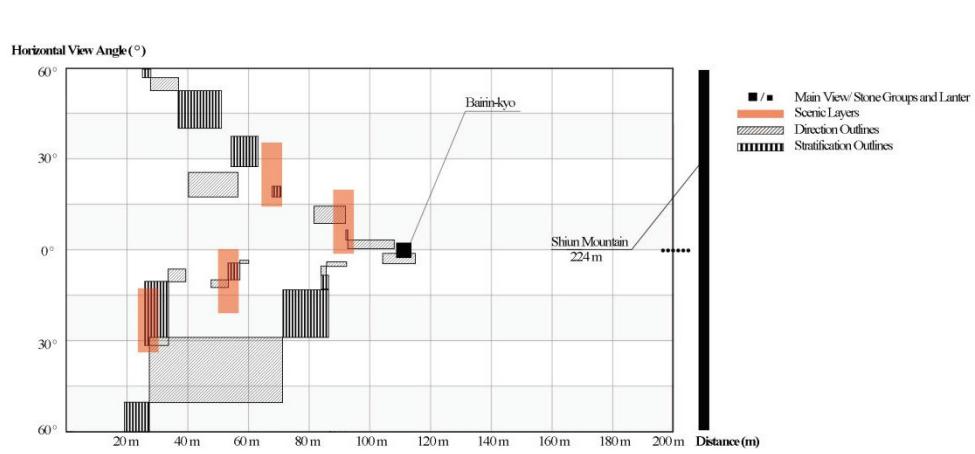


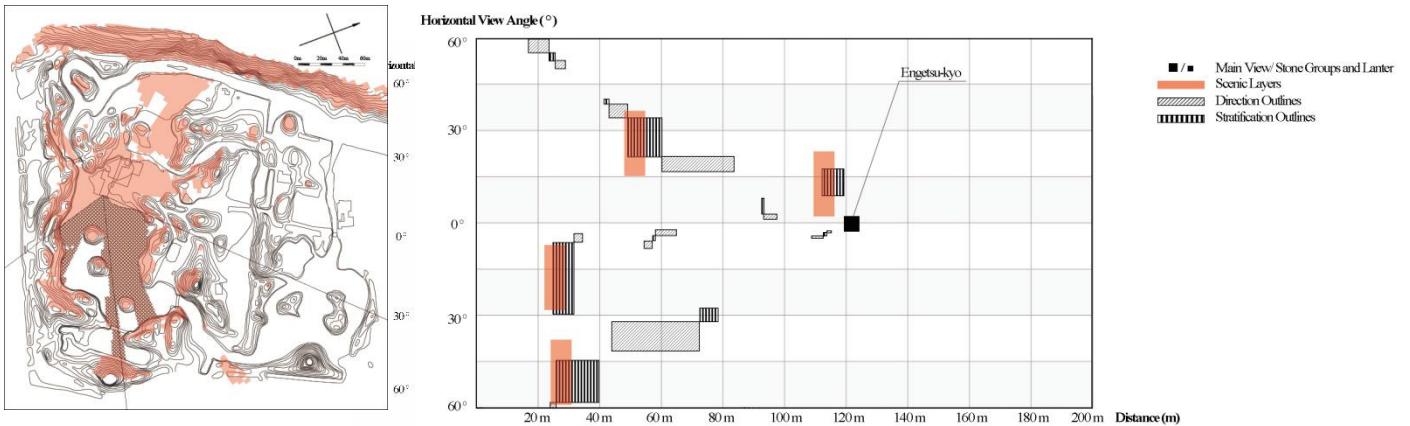
Figure 5-34 Layout of garden elements

The scenery seen from Fuyo-ho peak to Bairin-kyo Bridge, is the only ideal scenery chosen from the Hokko Lake among the five ideal sceneries. The view point is on the 9 meters high hill, therefore the scenery is an overlooking view as is that of Hirai-ho Peak. Here the focus of the entire scenery is the bridge not only for the color contrast between the red bridge and the surrounding plants, but also the visual structure of the water surface and the islands outlines makes the observer look into the depth of the view. First, the water is flowing into the deep place where, behind the bridge and then the directional outlines of the central islands and the lake shore, lead the observer's eye to the bridge as well (Fig. 5-33 and Fig. 5-34). Although the outlines of the islands and shore in Hokko Lake is relatively soothing, the just perfect twists and turns of the islands bring a strong sense of depth to the view.

4) Kikugetsu-tei teahouse to Nanko Lake (Pic. 5-9)



Pic 5-9 Kikugetsu-tei teahouse to Nanko Lake



As part of the east side of the Kikugetsu-tei teahouse is erected above the water, the water view of Nanko Lake is wide and open. The horizontal view angle is up to 120° in the foreground and 60° in the middle view 40 m away (Fig. 5-35 and Fig. 5-36). Correspondingly, the island and shore outline with less twists and turns make the view lacking a sense of direction and with less stratification outlines and scenic layers as well. However, the stone groups on the central islands and shore can be seen clearly from Kikugetsu-tei teahouse, the stone groups assume more function of leading the sight to the distant Engetsu-kyo Bridge. There is no borrowed landscape of Shiun Mountain in this view, thus the distant forest skyline stands out in the background and makes the view here more wide open.

5) Kikugetsu-tei teahouse to Kansui-chi (Pic. 5-10)



Pic. 5-10 Kikugetsu-tei teahouse to Kansui-chi

Looking from the west side of the Kikutetsu-tei teahouse to Kansui-chi Pond, the visible distance of the water surface is within 40m in the foreground (Fig.5-37). The shoreline of the pond, mainly of which is stratification outlines, is gently surrounding the water surface. But the central islands as main view and the main scene of the island are composed with more winding outlines. As the visible distance is relatively shorter than other sceneries, the details of the stone groups can be seen in this view. Shiun Mountain, as a background of the view, is within 100

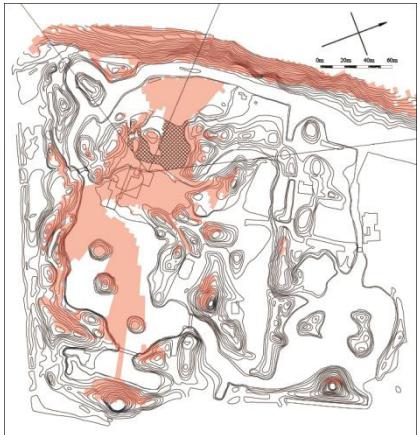


Figure 5-37 Visibility analysis

meters, creating a strong sense of surrounding (Fig.5-38).

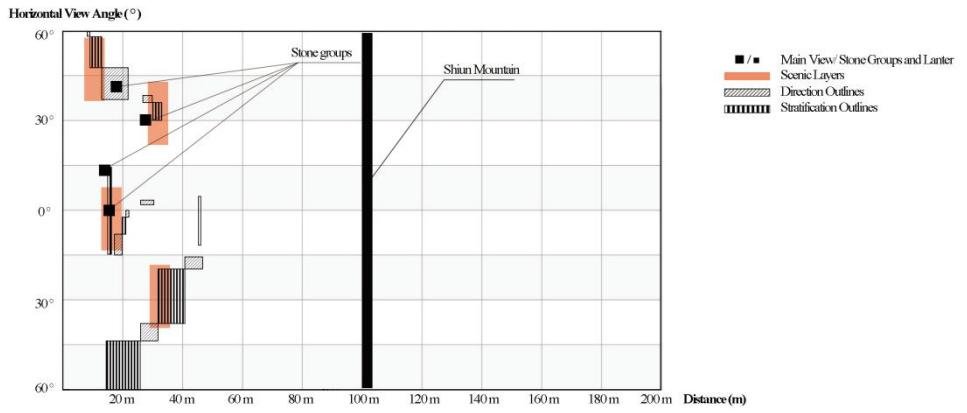


Figure 5-38 Layout of the garden elements

5.5.4 Comparision of Katsura Imperial Villa and Ritsurin Garden

According to the distance between the main view and viewpoint and the horizontal-angled view of the garden elements, the pond's views in Ritsurin Garden can be classified as 'Background View' and 'Foreground View', 'Centralized Water Area View' and 'Expansive Water Area View'. Comparing the same view type in Ritsurin Garden and Katsura Imperial Villa, there are several differences in the visual structure.

Take the view of Kikugetsu-tei teahouse to Nanko Lake in Ritsurin Garden and the view of Shokin-tei to Geppa-ro as an example. Both of the views are 'Expansive Water Area View' type in the horizontal composition, in which the garden elements are distributed in the foreground, creating an open and expansive water area. This view type contains more stratification outlines and scenic layers. However, the most obvious difference between these two views is that the visual distance of the former is much longer than the latter. It was found that even though the visual distance is quite different from each other, the sense of depth in Katsura Imperial Villa is as strong as that in Ritsurin Garden, or even stronger because there are more scenic layers and stratification outlines in Ritsurin Garden. That is to say, the density of scenic layers is higher than in Ritsurin Garden. Another reason is the design of setting the stone groups on the edge of the islands in Katsura Imperial Villa not only focus one's sight on the deep of the water and blocking the scenic areas at the ends of shorelines. Although there are also stone groups in Ritsurin Garden, its visual function is weakened by the large garden scale.

The other example is the view of Kikugetsu-tei teahouse to Kansui-chi Pond in Ritsurin Garden and the view of Shokin-tei to Ama-no-hashi-date in Katsura Imperial Villa. The view type of these two sceneries are both ‘Foreground View’ according to their visual distance. Due to the gentle shore lines and islands outlines, the view in Ritsurin Garden contains less stratification outlines and scenic layers than in Katsura Imperial Villa, another saying, small density of scenic layers. Therefore the sense of depth is not as strong as that in Katsura Imperial Villa.

However, thanks to the large scale of Ritsurin Garden, there are more garden elements, multiples scale visual distance and variable view point elevation, the scenery in Ritsurin Garden is changing along with moving steps. Furthermore, the borrowed landscape of Shiun Mountain plays an important part in enriching the scenery in the garden.

5.6 Summary

By analyzing the visual elements of the water surface and islands in two representative Japanese ponds, this study shows that visual continuity in the water surface, overlapping scenic layers, and the concealment of shorelines and their scenic endpoints are the characteristics of pond views with Okufukasa. To understand the gardening techniques used to create Okufukasa, two kinds of outlines which exist along the sides of the visual path, contribute to the vista and perspective of the water surface. Stratification outlines, which are seen along the center islands and convex parts of the surrounding islands (Dejima), create overlapping scenic layers and create visual depth by contrasting the foreground and background. By analyzing the implementation of these two types of outlines as well as other essential garden elements in the pond view, this study discussed the gardening technique used to artificially create a sense of depth. The visual space was classified into ‘Background View’ and ‘Foreground View’ based on the distance from the viewing area and ‘Centralized Water Area View’ and ‘Expansive Water Area View’ the horizontal-angled view of the garden elements. In the final, the visual structure in two different scale gardens was compared and it was found that not only the visual distance but also the scenic layer density is important to Okufukasa.

This study is limited in that it only examined the effects of islands on creating Okufukasa in a stroll garden. In future research consideration of the role of vegetation and distant mountains in creating Okufukasa in traditional Japanese gardens is planned.

5.7 Reference

English

- Hershenson, M. (2000). *Visual space perception: A primer*. United States of America: Massachusetts Institute of Technology.
- Higuchi. (1983). Tadahiko Higuchi, translated by Charles S. Terry (Eds.), *the visual and spatial structure of landscapes*. Cambridge, Mass.: MIT Press. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TY86037552>
- Wada, K. (1993). *Katsura, imperial villa*. Osaka: Hoikusha.
- Yamaguchi, K., Nakajima, I., & Kawasaki, M. (2008). The application of the surrounding landform to the landscape design in japanese gardens. *WSEAS Transactions on Environment and Development*, 4(8), 655-665.

Japanese

- Fujishima, G(藤島亥治郎).(1950). *桂離宮*. 京都:推古書院
- Fujita, K(藤田勝重). (1974). *栗林公園*. 東京:学苑社.
- Horiguchi, S(堀口捨巳).(1952). *桂離宮*. 東京:毎日新聞社
- Ihara, Y (井原縁).(2005). 栗林公園にみる文化遺産の公園化とその変容に関する史的研究. *ランドスケープ研究*, 68(5), 389-394.
- Isozaki, A(磯崎新).石元泰博(1983). *桂離宮: 空間と形*. 東京:岩波書店
- Kawashima, K (川上邦基).(1932). *桂離宮御寫眞及實測圖* [出版者不明]
- Kobayashi, S(小林聰). (2007). 「奥」空間の位置と性格に関する研究: 神社建築を対象とした空間構造の分析を交えて. 三重大学
- Maki, R & Sekimoto, K(真木利江 & 関本佳奈). (2008). 重森三玲がみる「雪舟作庭」における地割の「絵画的構成」. *ランドスケープ研究 : 日本造園学会誌 : Journal of the Japanese Institute of Landscape Architecture*, 71(5), 445-448.
- Maki, R. & Shiba, T (真木利江, 柴惟史). (2013). 山水画の構成手法と池泉鑑賞式庭園の景観構成に関する研究. *ランドスケープ研究 : 日本造園学会誌 : Journal of the Japanese Institute of Landscape Architecture*, 76(5), 405-410.
- Maki, F (槙文彦). (1980). *槙文彦他著 (Ed.) 見えがくれする都市: 江戸から東京へ*. 東京: 鹿島出版会. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00181765>
- Mori, O(森蘊). (1956). *森蘊著, 新版 (Eds.), 桂離宮*. 東京: 創元社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86273076>
- Mori, O(森蘊). (1972). *森蘊著 (Ed.), 桂離宮*. 東京:至文堂. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB01181718>
- Mori, O(森蘊) .(1955). *桂離宮の研究*. 東京: 東都文化出版
- Nakamura, A(中村昭夫).(1989). *栗林園: 変幻する六十景*. 東京: 集英社
- Shigemori, M(重森三玲), 大橋治三. (1974a).重森三玲 重, 大橋治三撮影 (Eds.), *江戸初期の庭*. 東京: 社会思想社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86190001>
- Shigemori, M(重森三玲), 大橋治三(1974b).重森三玲 重, 大橋治三撮影 (Eds.), *鎌倉の庭*. 東京: 社会思想社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/TW86190002>
- Shigemori, M(重森三玲) .(1947). *京都庭園の研究*. 京都: 河原書店.
- Shinohara, O & Society for Landscape Design (篠原修,景観デザイン研究会). (1998). 篠原修編, 景観デザイン研究会著 (Eds.), *景観用語事典*. 東京: 彰国社. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00247684>
- Shirahata, Y(白幡洋三郎).(2013).*大名庭園: 家の美意識ここにあり*. 東京: 平凡社

Tamura, T(田村剛). (1964). 田村剛著 (Ed.), *作庭記*. 東京: 相模書房. Retrieved from <http://m.kulib.kyoto-u.ac.jp/webopac/BB00182638>

Watuji, T(和辻哲郎).(1958). *桂離宮: 様式の背後を探る*. 東京: 中央公論社

Chinese

Cao, L & Xu, J (曹林娣&许金生). (2004). *中日古典园林文化比较*. 北京: 中国建筑工业出版社.

Li, J(李俊). (2010). 略论中国山水画理论体系之嬗变. *东南文化*, (01), 112-116.

Luo, Y & Liu, G(罗瑜斌 & 刘管平). (2006). 山水画与中国古典园林的起源和发展. *风景园林*, (01), 53-58.

Chapter 6 Conclusion

Taking the historical landscapes of China and Japan as research objects, this research analyzed the visual and spatial structure of landscape, and its representation for the purpose of revealing the spatial and visual characteristics of a historical landscape. In specific, research on Chinese Buddhist temples during the Sui and Tang dynasties, and also Japanese gardens as study objects was carried out by analyzing the visibility, perspective form and enclosure of the topography and spatial elements.

Chapter 1

In this part, first a brief introduction was given of the background. Along with the development and localization of Buddhism in China, Buddhist temple construction was influenced by, not only Buddhism, but also Chinese traditional culture. The site selection idea of the Buddhist temple was brought to Japan via Japanese monks during the Sui and Tang dynasties. In addition to the Chinese Buddhist temple as a macro scale landscape, on the micro scale, Chinese landscape painting theory in the Song dynasty also influenced the “Okufukasa”, a sense of depth, in Japanese gardens. It is worth revealing the spatial and visual structure of the historical landscape in China and Japan when understanding the transnational culture development of these two countries. Then the purpose, former research, objective, method and framework of this research was introduced.

Chapter 2

This part introduced the the study objects, method and materials (literature works, topographic maps and database) that were utilized in this study. 34 Buddhist temples which were established during the Tang dynasty and before were chosen as study objects. Among these temples, 27 were chosen from the *National Key Chinese Han Buddhist Temple List* (汉族地区佛教全国重点寺院) issued by the Chinese State Council in 1983, 1 temple from the *Four Buddhist Temples* (四大名刹) and 6 temples are ancestor temples or temples Japanese monks often visited during the Sui and Tang dynasties. The “ALOS Global Digital Surface Model 30m” published in Oct. 2015, which is world-leading in level elevation precision was utilized to analyze the visual structures of temple landscape. The Japanese military map (外邦图), prepared and published from the early Meiji to 1940s, was first utilized for the research of the Chinese Buddhist temple landscape.

Chapter 3

Different social classes participated in the construction as well as the site selection for the Buddhist temples in China in and before the Sui and Tang dynasties. The site selection idea was influenced by the emperor's religious requirements, Taoist and Confucian thought brought by the nobility, local officials and literati, and the monks' pursuit for a religiously pure land. From the literature review of tourists' evaluation on the view of the temples, it was found that the mountain form, sense of enclosure and expanse brought by the surrounding mountains are important factors to the temple landscape. The temple landscapes were categorized into “High mountain type”, “Deep mountain type” and “City type” according to

the site condition and expanse and enclosure of the mountain view. Among 22 study objects, there are 15 “Deep mountain type” temples of which the horizontal view angle ranges between 250 degree and 335 degree. The sense of enclosure is quite strong in this type of temple, however, a large difference in the visible area and average visual distance due to the various site conditions. The temples surrounded by near mountains, shows small visible area from 20 to 30 hectares. The visible area of temples surrounded by distant mountains, reaches from 200 hectares to 1000 hectares. There are 3 “High mountain type” temples and 4 “City type” temples of which the horizontal view angle ranges from 100 degree to 180 degree. Temple space is open or half open and shows less spatial enclosure compared to the “Deep mountain type” temple. The visible area of the “City type” temple is quite large and reaches from 1000 hectares to 10, 000 hectares. The main view of this type is the upward view of the distant mountain. The visible area of the “High mountain type” is relatively small. Finally, the relationship of the site condition and visual structure of the temple and the construction purpose were discussed.

Chapter 4

According to the meaning of the temple landscape in literature review, and the spatial and visual characteristics of temples, the site selection idea of temples were concluded as prototypes from the ideal space in Chinese culture, and people’s preference on building temples in scenic mountains. The prototypes were divided into Lotus symbolization, Sumeru symbolization temple, Penglai symbolization and Fengshui symbolization. Another symbolization of temple, the Peach Blossom World, was proposed besides these 4. The Spatial and visual characteristics of 5 symbolizations was summarized as:

Lotus symbolization: **A.** the center area is a flat ground or a depression surrounded by petal-like peaks. The “Lotus” symbolization Buddhist temples were hidden on the land and looks like the lotus pod. This kind of peak-surrounded landform created a secretive and sacred space for the Buddhist temple **B.** the landmark of the temple are the outstanding peaks around the temple. The surrounding peaks, which were endowed with a great deal of religious meaning. **C.** a multi-layered space.

Sumeru and Penglai symbolization: **A.** the landmark and the center area is an isolated mountain in the river. This mountain has a symbolic meaning of Sumeru cosmology in Buddhism and Penglai Mountain in Chinese mythology. **B.** the Boundary of the temple space is the surrounding river The River around the mountian defined the area of the temple and separated the temple from the land.

Fengshui symbolization: **A.**Temples in the mountain: a. the center area of Fengshui symbolization temples in the mountain is a flat ground surrounded by mountains and oriented to the south and backs to the north. b.The Boundary of the Fengshui symbolization is the multi-level mountains and water and they formed an enclosed space for the temple. These mountains which contain important symbolic meaning in Fengshui also are landmarks of the temple landscape. **B.** Temples in the city: on the places of great significance to the Fengshui model of the whole city

Peach blossom symbolization: A basin surrounded by mountains, on the way of which there is a long passage and an extremely narrow entrance.

By comparing the 5 symbolization temple landscapes, it was found that,

1. The “Lotus” and “Fengshui” symbolization temple spaces have similarities in the multiple layers of surrounding mountains landform but differences in the direction and opening of the space.
2. The landmarks of the “Lotus”, “Fengshui” “Sumeru” and “Penglai” symbolization temple spaces are religious symbolic peaks but the enclosures of the temple spaces are quite different.
3. The “Peach Blossom World” symbolization space can be considered as a simplification of “Lotus”, “Sumeru”, “Penglai” and “Fengshui” symbolization space.

By analyzing the expanse and enclosure of temples in different symbolization, it was found that, firstly, most of the Fengshui and lotus temples can be categorized as Deep mountain type due to their peaks surrounded and multi-layered space. However, the Fengshui symbolization temple in cities shows totally different visual characteristics, which has longer visual distance and more open space. The Sumeru and Penglai symbolization temple has an open space and visual distance longer than 5 km for it is located on the peak..

Chapter 5

“Okufukasa”, a sense of depth, arises from a variety of cues as the distance of the object from the eye, objects in perspective, visionary obscurity, unreachability and mystery, and so on. It originated from the “oku”, the sense of inmost which deeply influenced the space of Japanese culture. In a Japanese garden, the overall layout of the garden is structured with the aim of evoking Okufukasa in the mind’s eye of the observer of a Deep Mountain or a Dark Valley. During the Song dynasty in China (about the end of Heian period and Kamakura period in Japan) the Chinese landscape painting and painting theory, such as the three distance raised by Guoxi in his work Linquangaozhiji, also influenced the Japanese gardening design with “Okufukasa”. By analyzing the visual elements of the water surface and islands in two representative Japanese stroll gardens, Katsura Imperial Villa and Ritsurin Garden, it showed that visual continuity in the water surface, overlapping scenic layers, and the concealment of shorelines and their scenic end points are the characteristics of pond views with Okufukasa. To understand the gardening techniques used to create Okufukasa, two kinds of outlines which exist along the sides of the visual path, contribute to vista and perspective of the water surface. Stratification outlines, which are seen along the center islands and convex parts of the surrounding islands (Dejima), create overlapping scenic layers and create visual depth by contrasting the foreground and background. By analyzing the implementation of these two types of outlines as well as other essential garden elements in the pond view, this study discussed the gardening technique used to artificially create a sense of depth. The visual space into ‘Background View’ and ‘Foreground

'View' based on the distance from the viewing area and 'Centralized Water Area View' and 'Expansive Water Area View' the horizontal-angled view of the garden elements was classified. In the final, the visual structure in two different scale gardens was compared and it was found that, not only the visual distance, but also the scenic layer density is important to Okufukasa.

Chapter 6 The conclusion

Future work

- The comparative study of Chinese and Japanese landscape
- Visual and structural analysis of historical landscape in China on a micro scale

Acknowledgment

I would like to express the deepest appreciation to my supervisor Professor Kawasaki, whose useful suggestions, incisive comments and constructive criticism have contributed greatly to this thesis. I am also indebted for his support during the first year when I was down and depressed due to personal problems.

My thanks also go to Professor Kubota, for his great comments and suggestions for my research during the lab seminar. I am also greatly indebted to Assistant Professor Yamaguchi, who has instructed and helped me a lot in the past 3 years. His deep insights helped me walk through various stages of my research.

I would also like to thank Professor Uno and Associate Professor Matsushima, my external examiners, for their helpful comments and suggestions to the research.

Besides, a heartfelt thanks goes to all the students in our lab. Their hard working attitude encouraged me a lot when I experienced great difficulty with the research. Special thanks to my tutor Zhao, who helped me a lot on my school life, and Mr. Graham who helped me on proofreading my paper and thesis.

Without the support and scholarship from CSC (China Scholarship Council) and MEXT (Ministry of Education, Culture, Sports, Science and Technology, Japan), my dream of studying in Japan and this work would never be possible.

I am also indebted to my parents for their unconditional support during the past 30 years, especially their encouragement on my decision to study in Japan.