

## RELATIONSHIPS BETWEEN FENG-SHUI AND LANDSCAPES OF CHANGAN AND HEIJO-KYO

Hideaki Tembata<sup>1</sup>, Shigeyuki Okazaki<sup>1</sup>

<sup>1</sup> *Mukogawa Women's University, Japan*

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### Introduction

This paper studies the relationships between the landscapes of Changan (present-day Xian, China) and Heijo-kyo (present-day Nara, Japan) and interpretations based on Feng-Shui, which is a system of thought that originated in China for selecting locations for cities, houses, and graves. We previously studied the relationships between Feng-Shui and landscapes of Seoul, Keasong and Kyoto [1, 2]. In this paper we study Changan and Heijo-kyo. Tong Changan was influenced by Feng-Shui and was one of the largest cities along the Silk Road. Heijyo-kyo was influenced by Feng-Shui and was modeled after Changan [3]. There are a lot of comparative studies between Changan and Heijo-kyo, but most previous studies compare the inside of each capital, and there is no study comparing both from the viewpoint of Feng-Shui thought, including the neighboring geographical environment.

### Enclosed Space based on Feng-Shui

In Feng-Shui, ideal sites are surrounded by mountains and rivers to accumulate "Qi." Relationships with mountains and rivers are crucial to evaluate invisible "Qi." In Feng-shui, mountain ranges are regarded as Dragon Pulse, which "Qi" flows through.

Figure 1(a) shows the ideal Feng-Shui model [4]. "Ketsu," which is the most important place, contains the most condensed "Qi" due to enclosed spaces. "Shu-zan" is the main mountain behind "Ketsu." "Sō-zan" is a mountain that leads to "Shu-zan." "Qi" comes to "Shu-zan" from "Sō-zan." Constructing cities, houses, and graves in "Ketsu" brought happiness and prosperity. This model has an axis (Sō-zan - Shu-zan - Ketsu - Myōdō - An-zan - Chō-zan) and a direction called "Zakō." This model is related to "Shijinsoō", which means the Four Celestial Animals (Black Tortoise, Green Dragon, White Tiger, and Red Phoenix) are in balance (Fig. 1(b)) [5].<sup>1</sup>

### Changan (present-day Xian)

Changan was an ancient capital of more than ten dynasties in Chinese history. Changan flourished in the golden age of the Tang Dynasty (618-907), which was founded by the Li family. During its heyday, Changan was one of the largest and most populous cities in the world. Sui Daxing, which was designed by Yuwen Kai, was the predecessor of Tang Chang'an. It is an established theory that city planning of Changan was influenced by Feng-Shui [6, 7]. On the other hand, there is an opinion that Changan does not fit into the ideal Feng-Shui model [8].

Figure 2(a) shows topographical maps of Changan. On a grand scale, Changan is naturally quite a good site because it is a large flat basin [8]. The Qinling Mountains rise to the east and west to approximately 35 km south. The Weihe River, which is a branch of the Yellow River, flows to the north side of Changan. Changan faces south. During Tang, the main exterior walls of Changan rose 5.5 m high and formed a rectangle extending 9.7 km east to west by 8.6 km north to south with an inner surface area of 78 km<sup>2</sup>. The castle walls and the roads were symmetrical. On the topographical map, the north and west sides are open and the neighboring mountains are too far, so the impression of being surrounded by the mountains is weak. The south side is higher and the north side is lower.

Figure 2(b) shows a Feng-Shui diagram in *Dili-Renzixuezh* (a Feng-Shui book from the Ming Dynasty) [10]. This figure shows Changan equivalent to Supreme Palace enclosure, but there is no explanation about the relations with the actual topography. The Four Celestial Animals are not equivalent to its topography and become the names of the gates of north-south direction, Black Tortoise and Red Phoenix [6]. There is an interpretation that the topography of the Changan meets 64 hexagrams in Yi-king [11]. Atago argued that the central axis of Changan was determined based on the Shibianyu Valley in the Qinling Mountains [12].

Figure 2(c) shows panoramic views of Changan from the former Imperial Palace. To the south, the Qinling Mountains are the most prominent mountains in Changan. Mountains are hardly seen to the north and west. On a grand scale, Changan is an enclosed space, but in terms of landscapes, Changan is not a visually enclosed space. In the Qinling Mountains, there is no characteristic heap of becoming the standard for the central axis. Also, in terms of landscapes, the selection criterion of the east-west axis is ambiguous.

### Heijo-kyo (present-day Nara)

Heijo-kyo (present-day Nara) was the capital city of Japan (710-740 and 745-784). According to the Emperor Genmei's words, "the place of Heijo is in accordance with the painting of Shikin (four beasts); Sanzan (three mountains) assuage things (平城之地 四禽凶叶 三山作鎮)," which can be found in the *Shoku Nihongi* (second of the six classical Japanese history texts), Heijo-kyo was selected based on Feng-Shui, "Shijinsoō" [4, 7, 13].

Figure 3(a) shows a topographical map of Heijo-kyo. Heijo-kyo is surrounded by the mountains and rivers as showed in this figure. Heijo-kyo faces south. It had no castle walls and was an irregular rectangle<sup>2</sup>, and the area of city is more than 25 km<sup>2</sup>. The north side is higher and the south side is lower.

The Feng-Shui interpretations of Heijo-kyo are as follows. There are various theories as to an interpretation of "Shijinsoō" and "Sanzan" in Heijo-kyo as follows: (1) Mt. Amanokagu, Mt. Unebi and Mt. Miminashi. (2) To the east, Mt. Kasuga; north Mt. Nara; west Mt. Ikoma. (3) To the east Mt. Mikasa; north, the tomb of the Emperor Heizei; west the tomb of the Emperor Suinin [15, 16]. Sijin is also described in the display in the First Imperial Hall, which was restored, but it is unknown which mountains each Celestial Animal is equivalent to. Huang argued that the central axis matches the Ochioka Hill, which is Red Phoenix. He said that "Sanzan" is "mountains surrounding the Heijo-kyo area," and there is no explanation about relations with the actual mountains [4, 17].

Figure 3(c) shows a view from the First Imperial Hall. Figure 3(d) shows panoramic views of Heijo-kyo from the Nara Palace Site. Heijo-kyo is surrounded in three directions by mountains. To the north, Mt. Nara is not prominent because no noticeable features of Nara's landscape on the central axis can be found. Also, the selection criterion of the east-west axis is ambiguous. Mountain ranges of the south side are prominent in comparison with the mountain ranges of the north side. To the South, Mt. Kongo and Mt. Yoshino are conspicuously seen as relatively high mountains in Nara. Rolling mountains on the east and west sides and high mountains on the south side enclose Heijo-kyo.

### Comparison of Changan and Heijo-kyo

On a grand scale, Changan is an enclosed space, but in terms of landscapes, it is a very large area and is not a visually enclosed space. The topography in which the south is higher and the north is lower does not accord with an ideal Feng-Shui model. Meanwhile, Heijo-kyo is a space visually enclosed by mountains in three directions. The topography in which the north side is higher and the south side is lower accord with an ideal Feng-Shui model. Neither Changan nor Heijo-kyo has big mountains on the north side. In both cities, southern mountains are the highest in the area, and there is no interpretation of the Dragon Pulse. Also, in terms of landscapes, the selection criterions of the axes are ambiguous.

### Conclusion

We studied relationships between Feng-Shui and landscapes of Changan and Heijo-kyo. Changan does not accord with an ideal Feng-Shui model, while Heijo-kyo accords with an ideal Feng-Shui model partially. Neither Changan nor Heijo-kyo has big mountains on the north side, and there is no interpretation of the Dragon Pulse.

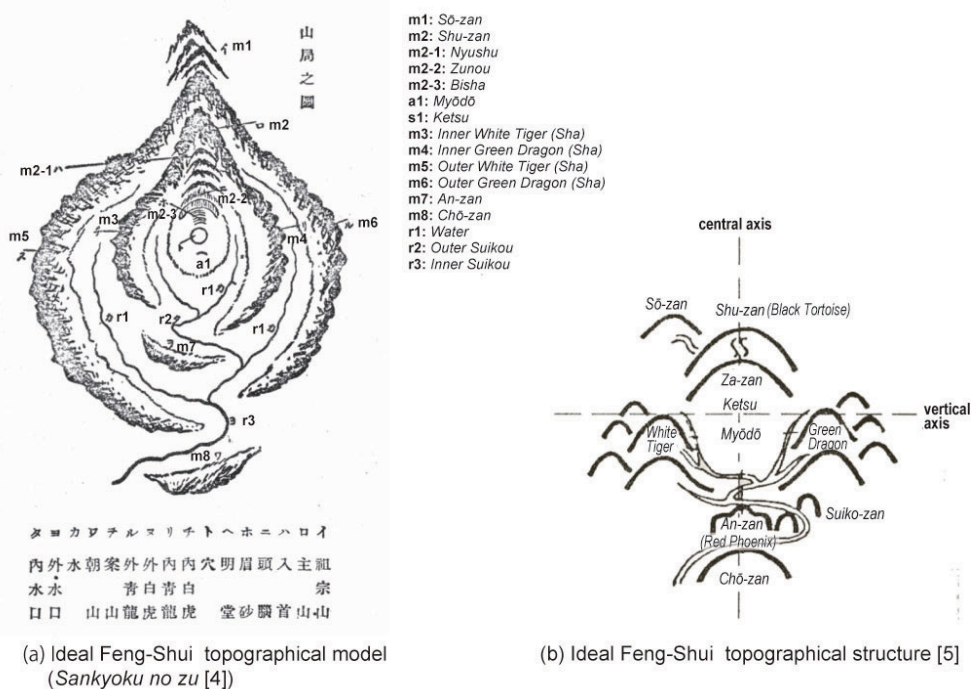
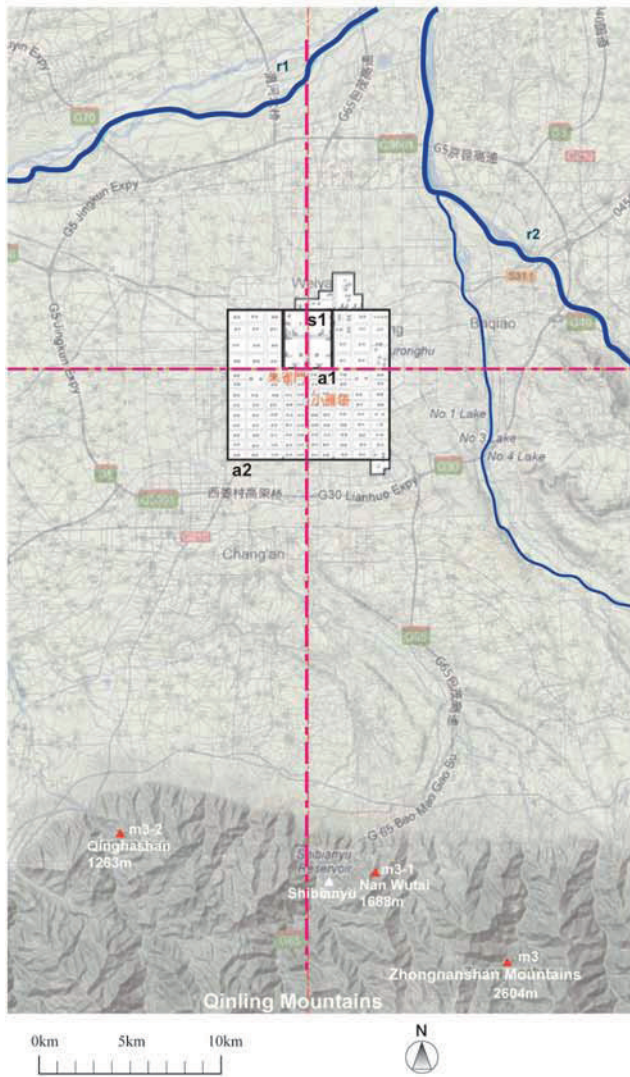
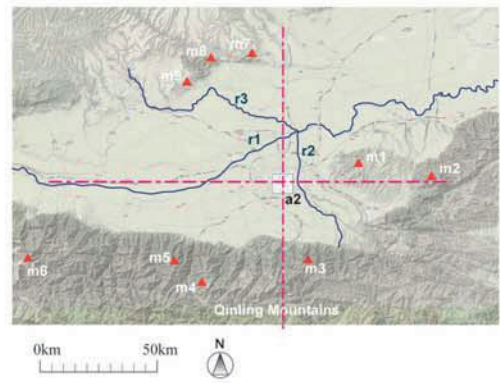


Fig. 1 Enclosed space model based on Feng-Shui



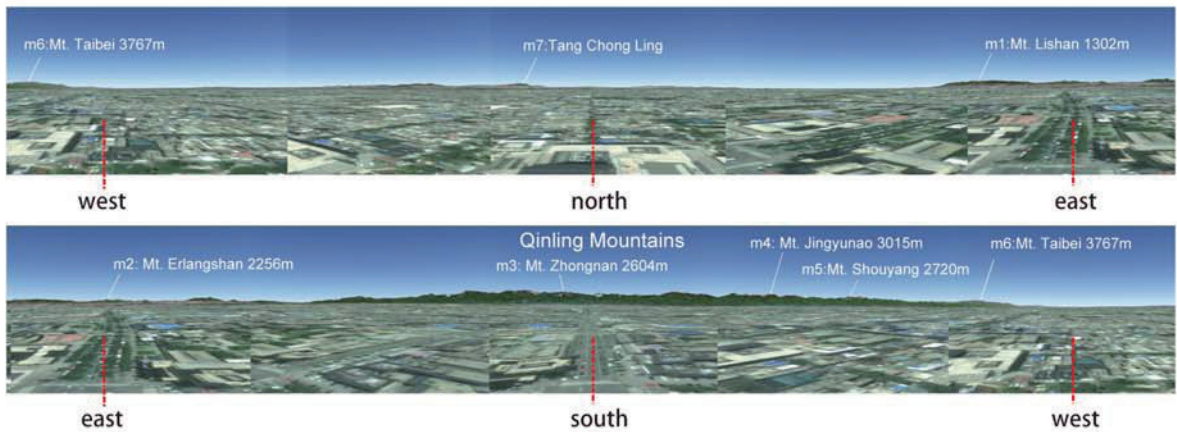
(a) Topographical map of Changan (created based on maps [9, 18])



- m1: Mt. Lishan 1302m
- m2: Mt. Erlangshan 2256m
- m3: Mt. Zhongnan 2604m
- m3-1: Mt. Nan Wutai 1688m
- m3-2: Mt. Qinghashan 1263m
- m4: Mt. Jingyunao 3015m
- m5: Mt. Shouyang 2720m
- m6: Mt. Taibei 3767m
- m7: Tang Chong Ling
- m8: Mt. Laolongshan
- m9: Zhao Ling
- r1: Weihe River
- r2: Bahe River
- r3: Jinghe River
- a1: Imperial Palace
- a2: Tang Changan area [19]
- s1: Imperial Hall

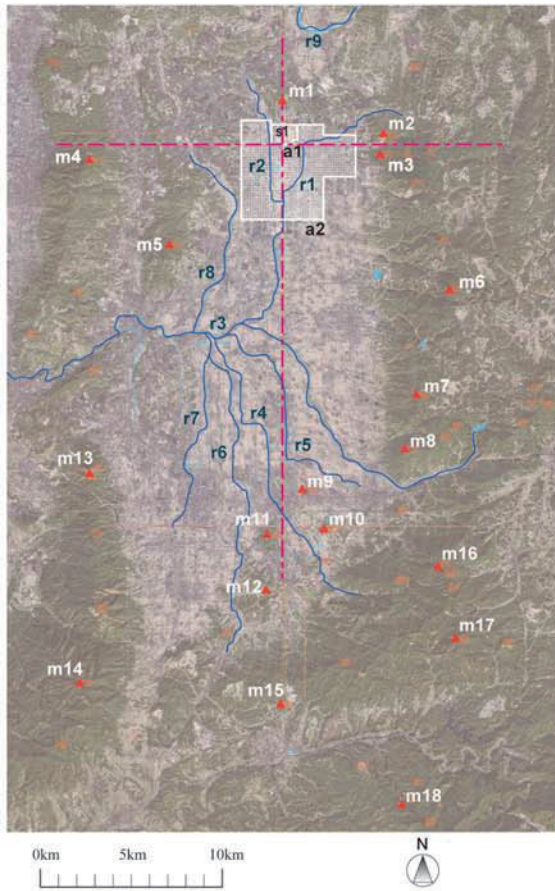


(b) Taibien Celestial map and topographical map [4, 10]



(c) Panoramic Views of Changan from former Imperial Palace (altitude 400m) created based on Google Earth

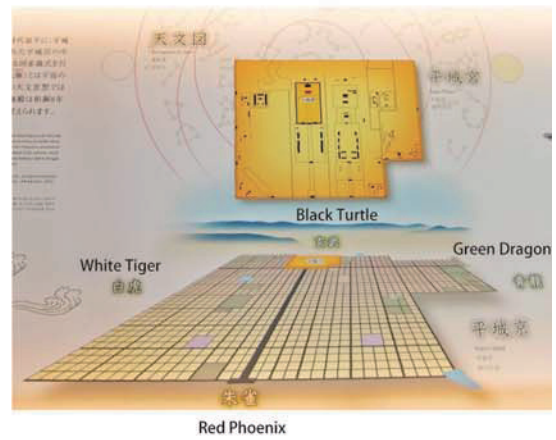
Fig. 2 Landscape and Feng-Shui interpretational diagram of Changan



- m1: Mt. Nara 90-100m
- m2: Mt. Wakakusa (Mikasa) 342m
- m3: Mt. Kasuga 297m
- m4: Mt. Ikoma 642m
- m5: Mt. Matsuo 315m
- m6: Mt. Takamine 632m
- m7: Mt. Ryuo 585m
- m8: Mt. Miwa 467m
- m9: Mt. Miminashi 139m
- m10: Mt. Amanokagu 152m
- m11: Mt. Unebi 199m
- m12: Ochioka Hill 150m
- m13: Mt. Futagami 517m
- m14: Mt. Kongo 1125m
- m15: Mt. Atago 258m
- m16: Mt. Otoha 851m
- m17: Mt. Ryumon 904m
- m18: Mt. Yoshino 500-900m

- r1: Saho River
- r2: Akishino River
- r3: Yamato River
- r4: Asuka River
- r5: Tera River
- r6: Soga River
- r7: Takada River
- r8: Tomio River
- r9: Kidu River

- a1: Imperial Palace (present-day Nara Palace site)
- a2: Heijyo-kyo area
- s1: First Imperial Hall

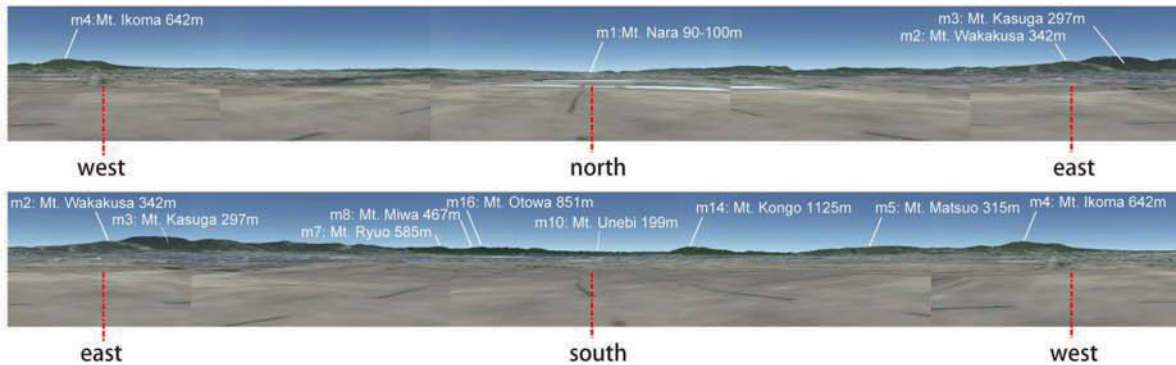


(a) Topographical map of Heijyo-kyo (created based on maps [14, 18])

(b) "Shijinsō" and Heijyo-kyo (display in the First Imperial Hall, Daigokuden)



(c) Panoramic View of Heijyo-kyo from First Imperial Hall (altitude 72m) (created based on photos by author in 2012)



(d) Panoramic Views of Heijyo-kyo from Nara Palace Site (altitude 68m) (created based on Google Earth [18])

Fig. 3 Landscape and Feng-Shui interpretational diagram of Heijyo-kyo

## Notes

1. Please refer to our previous studies [1, 2] for more information about the basic concept of Feng-Shui and ideal Feng-Shui models.
2. Heijo-kyo was divided by Suzaku Boulevard, the western part of the city was called the Right Capital, and the eastern part the Left capital, which together measured 4.9 kilometers from north to south and 4.3 kilometers from east to west. The Left Capital had an extension, called Gekyo toward the east on its northern half.

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