

Enclosed Spaces for Seoul and Kaesong based on Feng-Shui

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Keywords: Feng-Shui, enclosed space, city planning, landscape, mountain, river, Seoul, Kaesong

Abstract: This paper studies the relationships between the landscapes of Seoul and Kaesong and their interpretations based on Feng-Shui, which is a system of thought that originated in China, that is used for selecting the locations for cities, houses, and graves. Most previous Feng-Shui studies mainly addressed Feng-Shui interpretations using two-dimensional maps. However, in this study we consider the visual relationships between actual landscapes and interpretations based on Feng-Shui using a three-dimensional terrain model. Both Seoul and Kaesong have enclosed spaces and were influenced by Feng-Shui in the Korean Peninsula. Both Seoul and Kaesong have visually enclosed spaces, suggesting an outlook of nature that respects the connections of the mountain ranges.

1. Introduction

1.1. BACKGROUND

In Feng-Shui, an East Asian system of thought that stresses harmony with nature, a space enclosed by mountains and rivers is considered ideal. Such enclosed spaces are critical spatial elements that help humans can live peacefully. This space has good point that mountains give human beings the meaning where ourself is in the world and human beings lives in the meaning with common recognition. We believe that Feng-Shui has a big suggestion for the problems of modern society. This study identifies one view of nature in Feng-Shui for city planning.

1.2. SIGNIFICANCE AND OBJECTIVE

This paper studies the relationships between the landscapes of Seoul and Kaesong and interpretations based on Feng-Shui, which is a system of thought that originated in China for selecting locations for cities, houses, and graves. Both Seoul and Kaesong have enclosed spaces and are typical cities influenced by Feng-Shui for city planning.

Most previous Feng-Shui studies mainly addressed Feng-Shui interpretations using two-dimensional maps. However, in this study we consider the visual relationships between actual landscapes and interpretations based on Feng-Shui using a three-dimensional terrain model.

1.3. LITERATURE REVIEW

The most representative study in Feng-Shui studies in Japan is "Feng-Shui in Korea" by Chijyun Murayama¹ (1931). Murayama studied Feng-Shui and systematized it for the first time in the Government-General of Korea. After WWII, Ryokai Makio studied the relationship between Feng-Shui and Buddhism. The Feng-Shui boom of the 1990s fueled Feng-Shui studies in many scientific fields, including cultural anthropology, history, architecture, city planning, and geography.

In the cultural anthropological field, Yoshio Watanabe studies Feng-Shui in China and Okinawa and pointed out that a spatial composition method in Feng-Shui made a model of various kinds of artificial spaces (1990). In addition, he arrived at the view of the world of following two matters from examples of the graveyard Feng-Shui of the Han race. One is "a mechanical view of the world in which people assume that Feng-Shui is an overall environmental material influence through ancestral bones." The other is "a personal view of the world in which people assume that Feng-Shui is emotional influence from ancestors, recognizing ancestral bones as personal symbols." Kunio Miura (1994) studied literature named "Takurishi," which is a Korean geography book in the 18th century, from the viewpoint of a Chinese historiographer and described the relationship Taoism and Feng-Shui. Ka (1994) studied Chinese cities and villages through Feng-Shui and reevaluated the deep scientific wisdom of ancient people in Feng-Shui. Mitsuhiro Nozaki (1994) described the Nittei-danmyaku-theory² in detail. In the geographical field, Choi Chang-jo generally systematized Feng-Shui in the Korean Peninsula following Murayama in "Feng-Shui in Korea." Choi (1997) studied the principles of Feng-Shui and its interpretations about actual landscapes and confirmed the adaptive degree to their reality. Shizuaki Shibuya (1994) analyzed the geographical types of old Korean villages and confirmed the generality of spaces called "Haizan-rinsui" or "Zōfu-tokusui" in Feng-Shui. In the architectural field, Yasuhiko Nishigaki (1987) discussed Korean dwellings through Feng-Shui and pointed out the importance of the relationship between "Maru" and "Madang."³ In the city planning field, Haung⁴ (1999) described an ideal Feng-Shui model as a visually enclosed space and assumed that it influenced the ancient capitals of Japan: Fujiwara-kyō (present-day Kashihara in Nara Prefecture), Heijyo-kyō (present-day Nara), and Heian-kyō (present-day Kyoto).

There are many Feng-Shui studies in various fields. Most previous studies discussed about Feng-Shui interpretations of Seoul and Kaesong on two-dimensional maps, but no study has considered the adaptive degree to the real topography of Feng-Shui concerning landscapes in detail.

2. Enclosed Space Based on Feng-Shui

2.1. BASIC CONCEPT OF FENG-SHUI

“Feng-Shui” literally means “wind-water.” In Feng-Shui, all materials and energy are made from Qi. The following passage from Zangshu (Book of Burial) by Guo of the Jin Dynasty (265-420) explains:

Qi rides wind and scatters, but is retained when encountering water.

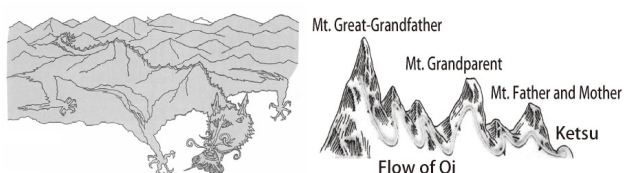
A burial depends on Qi. The Qi of Yin and Yang, when it spits it out, becomes wind. When it rises, it becomes a cloud. When it gets angry, it becomes thunder. When it falls, it becomes rain. When it flows through the underground, it becomes Qi.

Here, it is grasped as a thing of the same quality variant that produced wind and Qi from Yin and Yang.⁵

The following are the properties of Qi:

- (1) It is invisible.
- (2) It flows through underground. Based on an area's topography, Qi become denser or thinner.
- (3) Human-beings harmonize with nature through Qi (Tenjin-gōitsu).⁶

Ideal sites are surrounded by mountains and rivers to accumulate Qi. Relationships with mountains and rivers are crucial to evaluate its invisibility. In Feng-Shui, mountain ranges are regarded as a Dragon Pulse⁷, through which Qi flows (Fig. 1). Fig. 2 shows its flow. In Feng-Shui, a connection of mountain ranges gives meaning to a place as a family tree. Qi flows from Mt. Great-Grandfather to Mt. Grandparent, to Mt. Father and Mother, and condenses in Ketsu, which means the most important place. In China, the father of all mountains is Mt. Kunlun.



left: Fig. 1 Image of Dragon Pulse (Sugimoto, 1992)

right: Fig. 2 Flow of Qi and connection of mountain ranges (Huang, 1999)

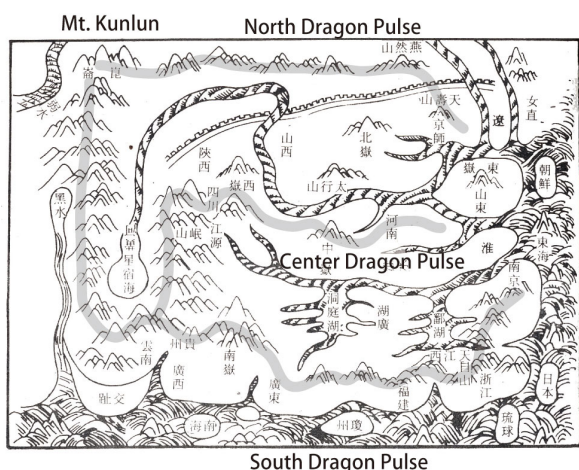


Fig. 3 Great Three Dragon Pulses
(“Sanzai Zue” 16th cent. Ming Dynasty)

Fig. 3 shows the Great Three Dragon Pulses from Mt. Kunlun: North Dragon Pulse, Center Dragon Pulse, and South Dragon Pulse. The Great Three Dragon Pulses branch off and lead to the main mountains of each city, village, house, and grave. In the Korean Peninsula, Qi from Mt. Kunlun flows through the North Dragon Pulse and condenses once in Mt. Baekdu, which is considered the father of all mountains (Fig. 4) (Murayama, 1931).



Fig. 4 Map of Korean Peninsula
 (“Daedong Yeoji Jeondo”
 Kim Jeong-ho, 1861)⁸

2.2. ENCLOSED SPACE BASED ON FENG-SHUI

Figure 5 shows a typical ideal model of Feng-Shui by Chijyun Murayama, who was the first person to study Feng-Shui in Japan (Murayama, 1931). This ideal model is applied to every standard from cities to villages, houses and graves. Ketsu contains the most condensed Qi due to the enclosed spaces. For a city's center, such structures as palaces located in Ketsu. For graves, the place where ashes are laid in state located in Ketsu. Shu-zan is the main mountain behind Ketsu. Sō-zan is a magnificent mountain that leads to Shu-zan. Qi comes to Shu-zan from Sō-zan.

Myōdō is a plain spread in front of Ketsu. In the case of a city, Myōdō is a city area. Sha are the mountains that enclose Myōdō and are offset from Shu-zan.⁹ An-zan is a mountain seen in front of Ketsu. Chō-zan is a mountain in the distance in front of Ketsu. Rivers flow through Myōdō. Suikou is a place crossed by rivers. Constructing cities, houses, and graves in Ketsu brings happiness and prosperity.



Fig. 5 Ideal Feng-Shui topographical model
 (“Sankyoku no zu” Murayama, 1931)

This model has an axis (Sō-zan - Shu-zan - Ketsu - Myōdō - An-zan - Chō-zan) and a direction called Zakō (In Fig. 5(a), from Shu-zan to An-zan). Zakō is a direction to see the front from Ketsu. In other words, its back is za, and its front is kō. Zakō is different from the concept of the direction. One place can have innumerable directions, but there is only one Zakō that is decided with choice enthusiast characteristics. For example, Zakō, which is the direction from North Shu-zan to South An-zan, is called Shiza-gokō.

The ideal Feng-Shui topographical model is described by some of the following terms. “Zofu-tokusui” means, “to prevent wind and to get water.” “Haizan-mensui” means, “burdened with a mountain and overlooking a waterfront.” “Sanga-kintai” means, “mountains and river enclosed like a collar and a fascia.”

This model is related to Shijinsō, which means the Four Celestial Animals (Black Tortoise, Green Dragon, White Tiger, and Red Phoenix) are in balance (Fig. 6) (Huang, 1999). In Feng-Shui, to embody the astronomical phenomena in ancient China, the natural terrain for all sides is as follows. The left side is a Green Dragon, the right side is a White Tiger, the front side is a Red Phoenix, and the back side is a Black Tortoise. Ideal Feng-Shui topographical structures have a central axis of mountains in a row: Shu-zan - Za-zan - An-zan - Chō-zan. Also, they have a vertical axis of symmetrical mountains: Blue Dragon - White Tiger. Myōdō is enclosed by these mountains.¹⁰

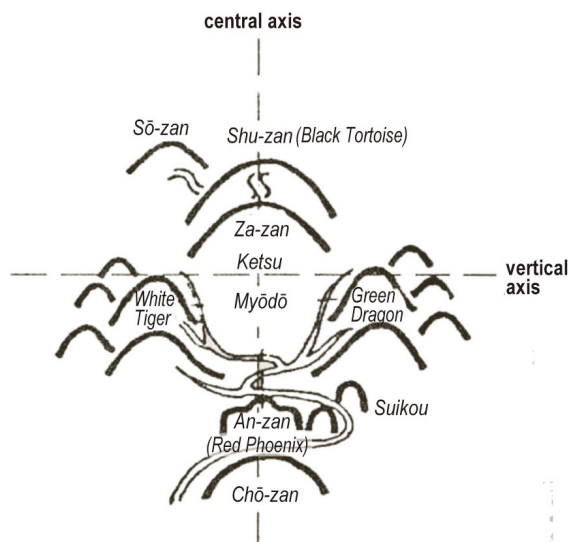


Fig. 6 Ideal Feng-Shui topographical structure (Huang, 1999)

3. Methods

3.1. OBJECTS

In this paper, we compare Seoul and Kaesong to clarify the relationship between actual landscapes and their interpretations based on Feng-Shui in the Korean Peninsula. Both Seoul and Kaesong have enclosed spaces and are typical cities influenced by Feng-Shui for city planning (Murayama, 1931) (Choi, 1997). When the Joseon Dynasty (1392-1910) came to existence, both areas are compared based on Feng-Shui interpretation in the discussion about relocating the capital.

3.2. METHODS

We made a three-dimensional terrain model of the topography to show the enclosed spaces of Seoul and Kaesong. A three-dimensional CG perspective can express visual three-

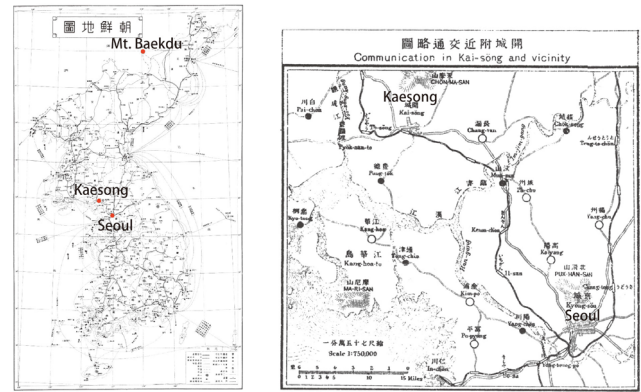
dimensional spaces, which are not expressed in words or by a two-dimensional map. Three-dimensional terrain models were made based on the contour line of the map by the Government-General of Korea.¹¹ The precision of the three-dimensional terrain models was confirmed by the fieldwork or references. In our discussion, we mainly treated the interpretations based on Feng-Shui in Seoul and Kaesong that were chosen as subjects to relocate the capital by Murayama (1931) and Choi (1997).

4. Discussion

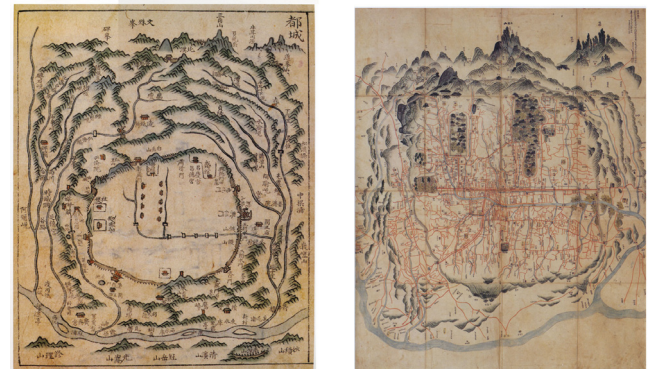
4.1. SEOUL

4.1.1. Outline of Seoul

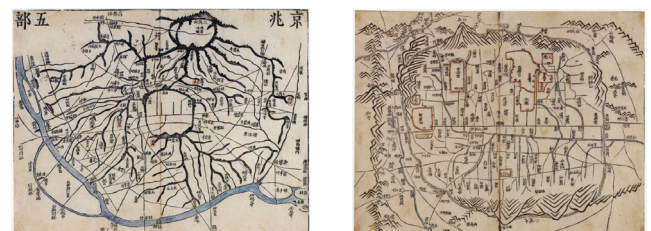
Seoul (Hanyan) was the capital city of the Joseon Dynasty (1392-1910), which was founded by I Seonggye. Seoul is located in the central area of the Korean Peninsula (Fig. 7). According to such literature as the Annals of the Joseon Dynasty¹² (True Record of the Joseon Dynasty), Seoul was clearly selected based on Feng-Shui in 1394 (Murayama, 1931) (Choi, 1997).¹³



(a) Korean Peninsula (b) Map of Seoul and Kaesong
Fig. 7 Positions of Seoul and Kaesong (Government-General of Korea, 1985)



left: Fig. 8 Hanyang Tosong-do: Map of Walled Capital (1720)
right: Fig. 9 Hanyang Tosong-do: Map of Walled Capital (1770)



left: Fig. 10 Kyongjo ohbu-do: Map of Five Districts of Seoul (1861)
right: Fig. 11 Hanyang do: Map of Seoul (1861)

Maps of Seoul from 1720, 1770, and 1861 are shown in Figs. 8, 9, 10, and 11, respectively. In these figures, the mountains and rivers are drawn so that Seoul has an enclosed space.

4.1.2. Topographical Features and Feng-Shui Interpretations of Seoul

Figure 12 shows a topographical map of Seoul. The following are its topographical features. The center of Seoul is the Gyeongbokgung Palace, which is a royal palace located in northern Seoul. First constructed in 1394 and rebuilt in 1867, it was the main and largest palace of the Five Grand Palaces built by the Joseon Dynasty. Its name, Gyeongbokgung, means "Palace of Shining Happiness." It is surrounded by the following mountains and rivers: North Mt. Bugak (342 m), Mt. Bukan (836 m), East Mt. Nak (126 m), Mt. Yongma (348 m), West Mt. Inwang (338 m), South Mt. Nam (265 m), Mt. Gwanak (629 m), and the Hangang River.^{14, 15}

Seoul faces south. Its central axis does not match the top of Mt. Bugak. When the capital was moved, the castle wall was 18-km long and a 20-km² area surrounded the city. The castle walls and the roads were not symmetrical, and there were indeterminate forms to the topography. In the topographical map, the east and southwest sides are open, and the impression of being surrounded by the mountains is weak.

The following are the Feng-Shui interpretations of Seoul. The Gyeongbokgung Palace is located in Ketsu. North Mt. Bugak is the Shu-zan, North Mt. Bukan is the Sō-zan, and Qi flows through from Mt. Baekdu to Mt. Bukan. East Mt. Nak is the Green Dragon, West Mt. Inwang is the White Tiger, South Mt. Nam is the An-zan, and South Mt. Gwanak is the Chō-zan. Myōdō is a space enclosed by four mountains: Mts. Bugak, Nak, Inwang, and Nam. The Cheonggyecheon River flows east through Myōdō, and the Hangang River flows from east to west south of Mt. Nam surrounding Myōdō.

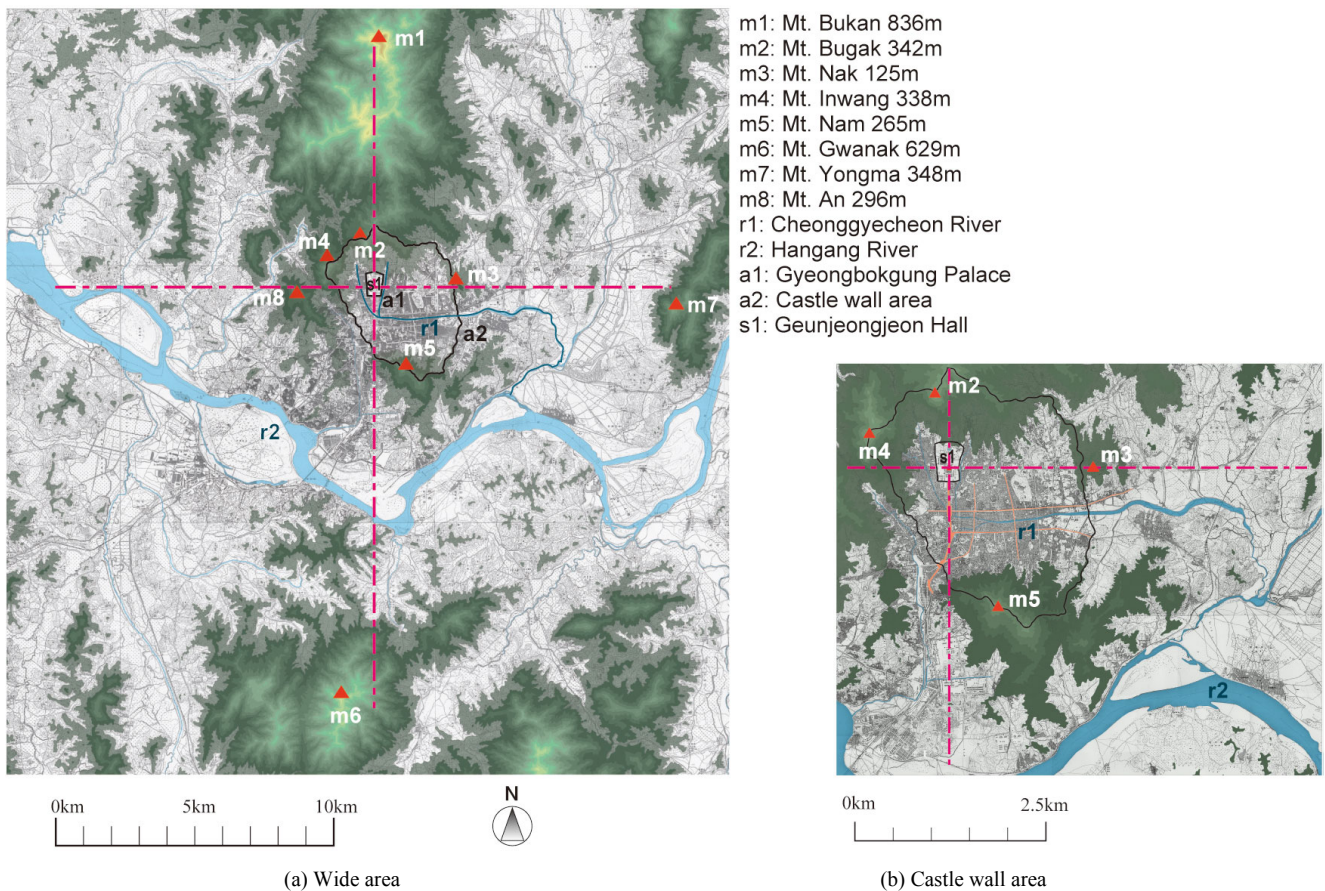


Fig. 12 Topographical map of Seoul
(created based on maps by Land Survey Department, Imperial Japanese Army General Staff Office and Government-General of Korea)

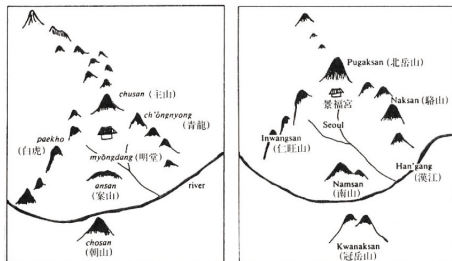


Fig. 13 Feng-Shui model and diagram of Seoul
(Choi, 1986)



Fig. 14 Keikyoku of Seoul
(Choi, 1997)

Figure 13 shows a Feng-Shui diagram of Seoul. The Four Celestial Animals are all associated with mountains (Choi, 1986). Fig. 14 shows the Keikyoku¹⁶ of Seoul. In this diagram, the Gyeongbokgun Palace is represented by a peony bud that Seoul is about to development as a peony is going to right bloom (Choi, 1997). Fig. 15 shows the Inner Four Mountains and Outer Four Mountains of Seoul (Choi, 1997). The Inner Four Mountains are Mts. Bugak, Nak, Nam and Inwang. The Outer Four Mountains are Mts. Bukan, Yongma, Gwanak and Tokuyo. In this figure, Seoul is enclosed by double mountain ranges.

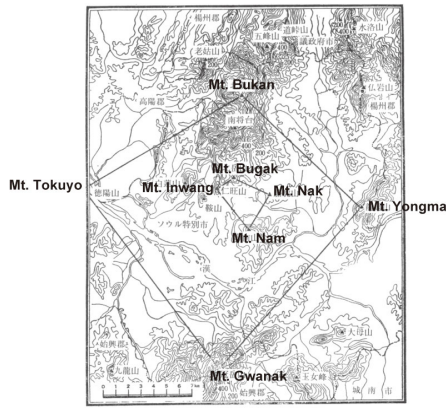


Fig. 15 Inner and Outer Four Mountains of Seoul (Choi, 1997)

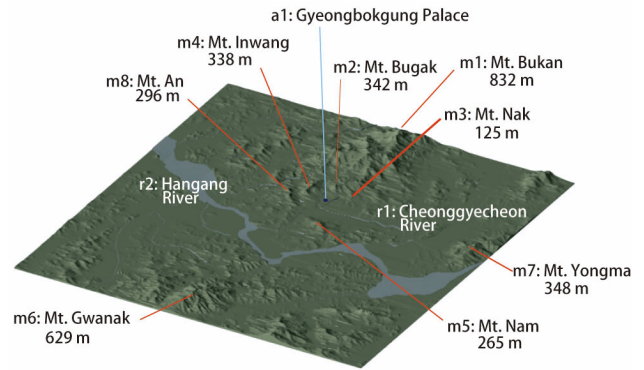


Fig. 17 Three-dimensional Terrain model of Seoul

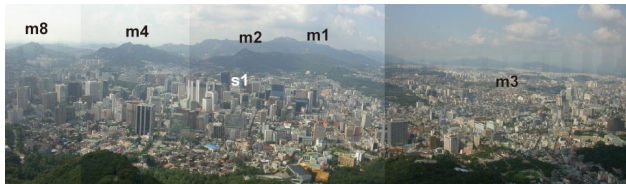


Fig. 16 Panoramic view of Seoul from Seoul Tower in Mt. Nam (created based on photos by author in 2004)

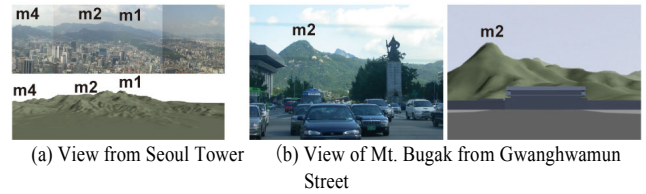


Fig. 18 Comparison of photos and three-dimensional terrain model view (photos by author in 2004)

Figure 16 shows a view from Seoul Tower (observation deck 378 m) in Mt. Nam. A mountain range from Mt. Bugak Shu-zan to Mt. Bukan So-zan is prominent, as is Mt. Inwang. On the east side, the widespread green part resembles Mt. Nak at a glance, but it is actually the Changdeokgung Palace. Mt. Nak is east from there, but its precise location is hard to pinpoint. In Fig. 13 Seoul is surrounded in three directions by mountains of the same height. Mt. Nak has been exaggerated to resemble the Green Dragon of Seoul.

The impression of being surrounded like a Feng-Shui ideal topographical model is not common. Instead the presence of the mountain range from Mts. Bugak to Bukan is prominent.

4.1.3. Enclosed Space for Seoul

As Fig. 16 shows, since high-rise buildings are jumbled close together in Seoul, it is difficult to see the neighboring mountain ranges within the city. Therefore, we simulated the view from the Seoul by a three-dimensional terrain model. The three-dimensional modeling area is shown in Fig.11, because this area includes the mountains in Seoul used in the interpretations based on Feng-Shui and drawn in ancient maps, can be seen from the city.

Figure 17 shows a bird's-eye view of a three-dimensional terrain model of Seoul. Fig. 18 shows a precise three-dimensional terrain model. Mt. Bugak can be seen from the south side of the Gyeongbokgung Palace, but it is blocked by high-rise buildings when it deviates from the straight road.

Next we show how the mountain ranges surrounding Seoul, which are Sha in Feng-Shui, can be seen visually. Fig. 19 shows panoramic views of Seoul from Gyeongbokgung Palace. The mountain ranges in all directions are approximately recognizable as follows: North Mt. Bugak (342 m), which is the Shu-zan of Seoul, Northeast Mt. Nak (125 m), which is the Green Dragon, East Mt. Yongma (348 m), from southeast to south Mt. Nam (265 m), which is the An-zan, South Mt. Gwanak (629 m), West Mt. An (296 m), and Mt. Inwang (338 m) from west to northwest. Because Mt. Nak is only 125 m, its presence is weak. Among mountain ranges to see around, it is Mts. Bugak, Nak, Nam, and Inwang border the city, but West Mt. Yongma (about 20 km from the palace) and South Mt. Gwanak (about 25 km from the palace) compensate for the part where the mountains are interrupted. Mountains visually enclose Myōdō. Mt. Bugak is not only the highest mountain that borders the city area, but it is also the mountain with the most distinctive shape. We consider that Gyeongbokgung Palace was built behind Mt. Bugak to emphasize the symbolism.

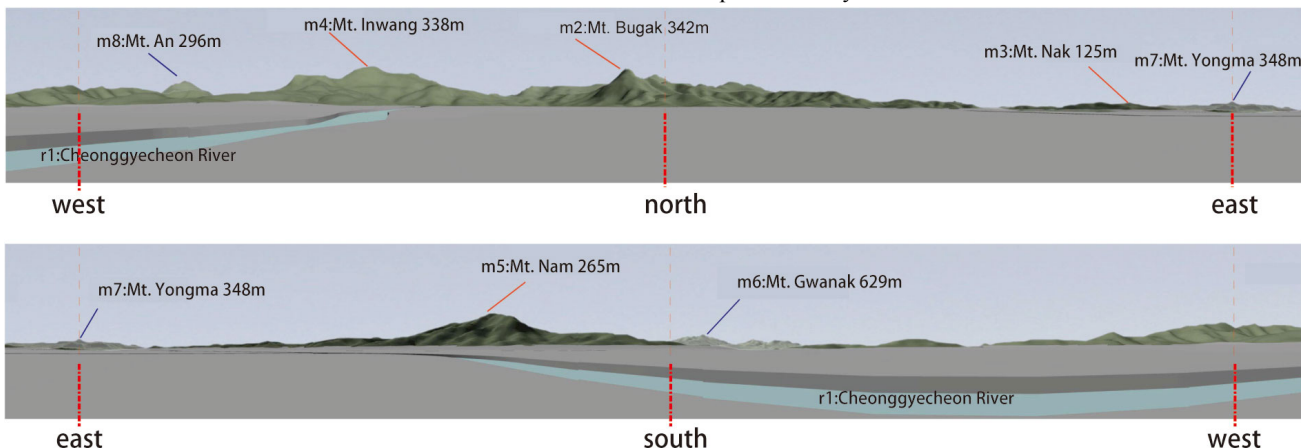


Fig. 19 Panoramic views of Seoul from Gyeongbokgung Palace

4.2. KAESONG

4.2.1. Outline of Kaesong

Kaesong (Kegyon), which is in the south part of North Korea, not far from the demarcation line with South Korea, is a modern city with broad avenues. However it also has an old center between the main road and the river with many traditional buildings. Kaesong is an historical city. It was the capital of the Koryo dynasty (918-1392) and still has many sights from that period.

Kaesong is located in the central area of the Korean Peninsula like Seoul. Kaesong is located between the Yesong-gang and Imging-gang Rivers and contacts with the Ganghwa-do northern coast where the Imging-gang River flows into the Hang-gang River to the south. Kaesong is located about 400 km northwest of Seoul (Fig. 7).

Maps of Kaesong are shown in Fig. 20, 21. Fig. 20 shows an 18th century map of Kaesong, and Fig. 21 shows a map of Kaesong “Daedong Jeondo” from 1861. In these figures, mountains and rivers in Kaesong are drawn so that Kaesong has an enclosed space.

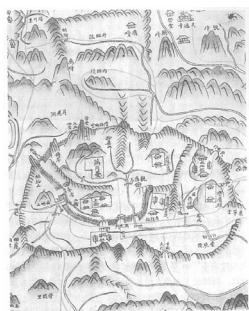
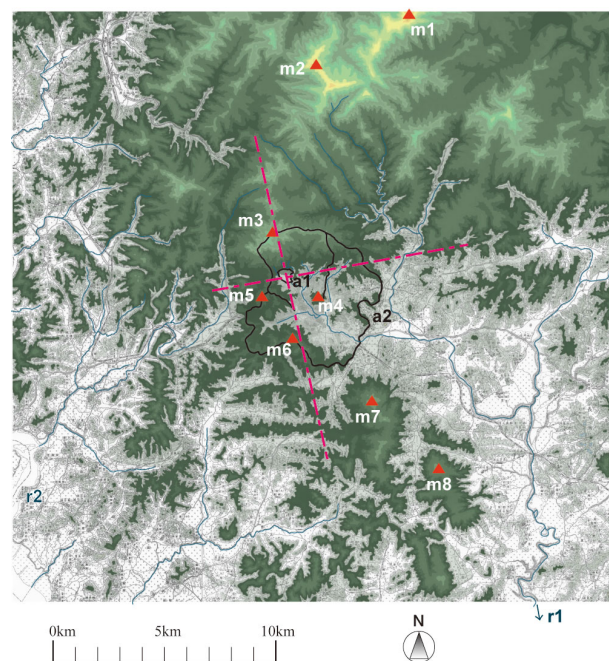


Fig. 20 Map of Kaesong
(18th cent.)



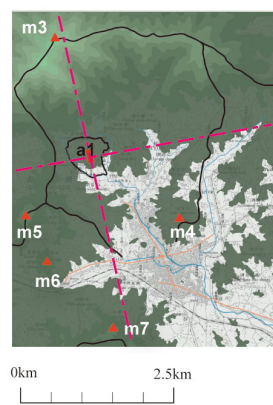
Fig. 21 Map of Kaesong
("Daedong Jeondo" Kim Jeong-ho, 1861)



(a) Wide area

Fig. 22 Topographical map of Kaesong (created based on maps by Land Survey Department, Imperial Japanese Army General Staff Office and Government-General of Korea)

- m1: Mt. Kuksabong 764 m
- m2: Mt. Chonma 782 m
- m3: Mt. Songak 488 m
- m4: Mt. Janam 103 m
- m5: Mt. Okong 209 m
- m6: Mt. Ryushu 177 m
- m7: Mt. Chinpong 310 m
- m8: Mt. Tongrung 288 m
- r1: Imging-gang River
- r2: Yesong-gang River
- a1: Manwoldae Palace
- a2: Castle wall area



(b) Castle wall area



Fig. 23 Plan of Kaesong
(Murayama, 1931)

4.2.2. Topographical Features and Feng-Shui Interpretations of Kaesong

Figure 22 shows a topographical map of Kaesong whose topographical features of are as follows. Its center is the Manwoldae (Full moon tower) Palace, which was the official royal residence during the Goryeo dynasty, whose construction began in 919. It burned to the ground in 1361 during the invasion of the Red Kerchiefed Rebel Army; today, only the ruins of its foundation remain.

The Manwoldae Palace is surrounded by mountains and rivers: North Mt. Chonma (762 m), Mt. Songak (488 m), East Mt. Janam (103 m), West Mt. Okong (209 m), the Yesong-gang River, South Mt. Ryushu (177 m), Mt. Chinpong (311 m), Mt. Tongrung (288 m), and the Imging-gang River (Fig.22).¹⁷

Kaesong faces southeast. Its central axis does not match the top of Mt. Songak. The castle walls and the roads were not symmetrical, and there were indeterminate forms to the topography like Seoul. In the topographical map, there are impressions surrounded by mountains, and the southeast side is open.

The following are the Feng-Shui interpretations of Kaesong. The Manwoldae Palace is located in Ketsu. North Mt. Songak is the Shu-zan, North Mt. Chonma is the Sō-zan, and Qi flows from Mts. Baekdu to Chonma. East Mt. Janam is the Green Dragon, West Mt. Okong is the White Tiger, South Mt. Ryushu is the An-zan, and South Mt. Chinpong is the Chō-zan. Myōdō is a space enclosed by four mountains: Mts. Songak, Janam, Okong, and Ryushu. The White and Karasu Rivers flow east through Myōdō. The Imging-gang River flows from east to west south of Mt. Chinpong, and the Yesong-gang River flows from west to south east of Mt. Okong.

Figure 23 shows a plan of Kaesong (Murayama, 1931). Fig. 24 shows a view from Mt. Janam (103m). The mountain range from Mt. Songak Shu-zan to Mt. Chonma So-zan is prominent. Mountain range from Mt. Okong to Mt. Ryushu is outstanding. The impression of being surrounded like a Feng-Shui ideal

topographical model is common. The presence of the mountain range from Mt. Chonma to Mt. Songak is prominent.



Fig. 24 Overview of Kaesong from Mt. Janam (Pvince)

4.2.3. Enclosed space for Kaesong

Figure 25 shows a bird's-eye view of a three-dimensional terrain model of Kaesong. The three-dimensional modeling area is shown in Fig. 21.

We show how the mountain ranges surrounding Kaesong, which are Sha in Feng-Shui, can be seen visually. Fig. 26 shows panoramic views of Kaesong from Manwoldae Palace. The mountain ranges in all directions are approximately recognizable as follows: North Mt. Songak (488 m), which is the Shu-zan of Kaesong, East Mt. Janam (103 m), which is the Green Dragon, South Mt. Ryushu (117 m), which is the An-zan, South Mt. Chinpong (311 m), and West Mt. Okong (209 m). Mts. Songak, Janam, Ryushu, and Okong border of the city area, but South Mt. Chinpong compensates for the part where the mountains are interrupted. Mountains visually enclose Myōdō. Mt. Songak is the highest of the mountains that border the city. Manwoldae Palace was probably built behind Mt. Songak to emphasize the symbolism.

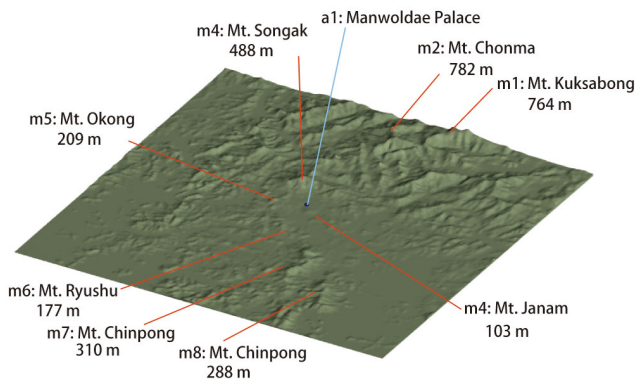


Fig. 25 Three-dimensional Terrain model of Kaesong

4.3. COMPARISON OF SEOUL AND KAESONG

A comparison of Seoul and Kaesong clarifies the following shared points and differences about enclosed spaces based on Feng-Shui.

Shared points:

- (1) The mountain ranges, Dragon Pulse, through which Qi flows from Sō-zan to Shu-zan behind Ketsu, characterize the enclosed spaces of Seoul and Kaesong. But the central axes do not match the top of Shu-zan.
- (2) The enclosed spaces based on Feng-Shui are appeared as the visible mountain ranges. The visible mountain ranges outside the castle wall compensate for the part where the mountains that border he city are interrupted. Mountains visually enclose Myōdō.
- (3) The castle walls and roads were not symmetric, and there were indeterminate forms to the topography.

Differences:

- (1) Kaesong, which is more enclosed by mountains than Seoul, better matches an ideal Feng-Shui model. Interpretation based on Feng-Shui in Seoul has been exaggerated.
- (2) Since Seoul faces south, its Zako is Shiza-gokō. Kaesong faces southeast to the topography which southeast opens.

5. Conclusion

We studied the relationships of the landscapes of Seoul and Kaesong and their interpretations based on Feng-Shui and confirmed shared points and differences. Both Seoul and Kaesong have visually enclosed spaces, suggesting an outlook on nature that respects the connection of mountain ranges. In the future, we plan comparative studies with cities having similar enclosed spaces in China and other Silk Road countries.

Endnotes

The following quotations are English translation by author.

1. Murayama (1931: 1-2) described it as follows: "In western geography, people think that a ground is a useful material for a human beings. On the other hand, in Feng-Shui, people think that a ground is a life, which controls the good and bad luck of humans. A purpose of Feng-Shui is

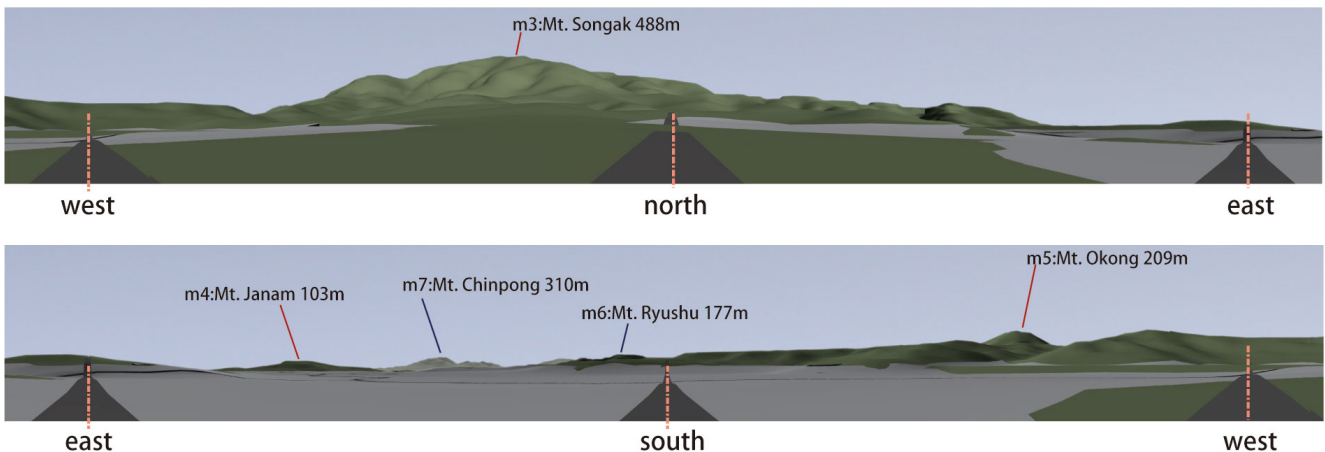


Fig. 26 Panoramic views of Kaesong from Manwoldae Palace

- to search how to avoid bad luck and obtain good luck.”
2. The Nittei-danmyaku-theory is described it as follows: “The Government-General of Korea drove a big iron column deep into the ground and laid a railroad and a road to cut out the Dragon Pulse of Seoul’s Myōdō called the ‘Shōgunsyutujin-type’ or ‘Hiryuushōten-type’ in which a leading talented person of a people is born” (Nozaki, 1994: 140).
 3. Nishigaki (1987) described it as follows: “In Korea human relationships within a family can be expressed by such Confucian ideals as duty, virtue and belief. As exemplified by the illustrations in tonggukshinsoksamsgnghengshildo these relationships are most clearly manifested through ‘Maru’ and ‘Madang’ in a Korean dwelling.”
 4. Haung (1999: 42) defined ‘an enclosed space’ in Feng-Shui as follows: “It is not a completely enclosed space, but a visually enclosed space which people feel as a kind of enclosed space by the mass of the mountain range when they look at neighboring mountain ranges from the Dragon lair (Ketsu).”
 5. Yin and Yang is another name for Feng-Shui. Yin and Yang is also the basic concept of Feng-Shui. In Feng-Shui, all the phenomena of the pitch and unevenness of the natural topography are interpreted in Yin and Yang. The earth that human beings live on is regarded as one “Taikyoku,” which means existence divided into Yin and Yang. Furthermore there is Yang in Yin, and there is Yin in Yang. Whereas Yin specifically means sinks and low, Yang means prominence and high. By a method that selects location in Feng-Shui, the “Yin” and “Yang” of the topography must be in harmony with each other. Yin and Yang, the Five elements, and fortune-telling were closely combined by Dong Zhongshu (B.C. 176-B.C.104) in the Han dynasty.
 6. Tenjin-gōtsu is the thought that a human being is part of nature and his/her life must create a harmonious coexistence with nature and be united with nature. In Feng-Shui, the earth is considered a sham human body. “A pulse of Qi” runs in the underground along a dragon pulse in parallel with “a meridian” of the human body. The dragon hole where Qi is concentrated corresponds to an acupuncture point, which is crucial for applying acupuncture and moxibustion in the physical channel. In ancient times, the earth was considered a holy body and to be living.
 7. Dragon Pulse is a phenomenon that appeared as a visible substance in which all principles contained by Feng-Shui is a mountain, that is, “a dragon” in Feng-Shui terms. Predicting the good or bad of the flow of the dragon pulses from Sō-zan to Ketsu is called the Dragon Method in Feng-Shui. When people see a dragon, they do not consider all the groups of the mountain ranges from Mt. Kunlun and Mt. Baekdu, but figuratively recognize it as a large dragon. When a diviner sees a dragon, he judges whether the dragon is leading to the back of the main mountain of a suitable range.
 8. “Daedong Yeoji Jeondo” is a map of the Korean Peninsula made by Kim Jeong-ho (1861) (pen name Gosanja, 1804-1866?), a Korean geographer and cartographer. He literally walked the entire length of the Korean peninsula through its mountains and valleys to research and compile his magnum opus.
 9. Zofu-method (wind control method): It is important how a Myōdō, the neighboring topography, and the geographical features are recognized in understanding Feng-Shui. The Feng-Shui theory about the geographical features around Myodo is called the Zofu-method. Ketsu is decided by this method. The combination and the activity of Yin and Yang are brought to Ketsu by the surrounding mountains.
 10. Haung (1999: 44) explained an ideal topographical structure as follows: “The design method of Feng-Shui uses the concept of the cross axis of every direction symmetry. The space structure has landscape that is symmetric all around. This idea is explained as Tenshin-Judō. It expresses the symmetrical topography with the mountains facing each other back and forth that are not inclined to the right or left, and with mountains of the right and left without a difference of height. Such topographical places become ideal Feng-Shui locations.”
 11. We made a three-dimensional terrain model made with the following procedures:
 - (1) two-dimensional contour line data (software, Illustrator 10): traced contour lines of topographical maps (Government-General of Korea, 1994).
 - (2) three-dimensional contour line data (software, VectorWorks 9): gave two-dimensional contour line data height and made three-dimensional contour line data.
 - (3) three-dimensional terrain model (software, form Z 3.6): used a terrain tool to three-dimensional contour line data and made a three-dimensional terrain model.
 12. The Annals of the Joseon Dynasty comprise 1,893 books covering 472 years (1392~1863) of the history of the Joseon Dynasty, from the reign of King Taejo (r.1392-1398), the founder, to the end of the reign of King Cheoljong (r.1849-1863).
 13. Most studies agreed that Seoul was clearly selected as a capital of the Joseon Dynasty based on Feng-Shui (Murayama, 1931) (Choi, 1997) (Takeda, 1996) (Sunamoto, 2009) (Yoshida, 2009) (Funo et al., 2010). On the other hand, Son et al. (2006) denied the influence of Feng-Shui, suggesting the reason was that Seoul, which was surrounded by mountains and located in the center of the Korean Peninsula, met the condition appropriate for the capital of a country enough as an important area of the traffic of a land route and a waterway. We want to assume it a future problem how a factor except Feng-Shui influenced the selection of Seoul.
 14. Murayama (1931) explained the topographical features of Seoul using “Sanga-kintai” as follows: “Keijo (Seoul) lies at 126.59 degrees east in longitude and 37.34 degrees north in latitude and the following beautiful place of “Sanga-kintai.” North Mt. Bugak, South Mt. Nam, West Mt. Inwang, and Northwest Mt. Nak enclose and form a natural castle, and the water from the Hang-gang River surrounds the southeast whole area.”
 15. Choi (1991) explained the mountain situation of Mt. Bukan, which is Seoul’s Chin-zan (Shu-zan) and the neighboring situation as follows: “Seoul is located where Koyo and Yoshu Hills touch the Kyoki Plain. But it is a basin-shaped zone enclosed by high mountains, and the east side slightly opens, and the Cheonggyecheon River flows east. Seoul’s topography is ideal for defense, because the Hang-gang River flows through the southeast like a natural moat. In addition, the mountain ranges of Northwest Mt. Inwang, North Mt. Bugak, East Mt. Nak, and South Mt. Nam form a castle wall of nature, and enable the strong construction of a castle. Outside these castle walls, North Mt. Bukan, South Mt. South Han, and Mt. Gwanak tower, creating a natural fortress with a triple defensive wall. In addition, the Cheonggyecheon River flows in the east, and the soil is high, with good drainage, and the Hang-gang River flows to the border that is connected to the Yellow Sea. This is the position where the supplies of each place are concentrated on. The north side is Hanyang (Seoul), which is the border to the Hang-gang River. Mt. Bugak, Mt. Inwang, Mt. Nak, and Mt. Nam form a basin-shaped topography.
 16. Keikyoku is to liken the geographical features around a Ketsu to an animal, a material, a plant, a person, a letter, and an astronomical body. Good and bad luck of the place is judged by the analogy of the figure. For example, Kinkeihouran (golden cock sitting on an egg) type gives the prosperity of a descendant by analogy.
 17. Choi (1991) explained the topographical features of Kaesong as follows: “Around Manwoldae, the location of the royal palace, there is Mt. Mt. Songak (488 m) which is Kaesong’s Chin-zan (Shu-zan) 19.6 km to the north. In addition, Mt. Chonma, Mt. Seikyo, and Mt. Kuksabong (764 m) are to the north, and the Daxing Castle is constructed as a vice-castle in the valley where Mt. Kuksabong meets Mt. Chonma. Kaseong is surrounded by relatively steep mountains, including East Mts. Tsukide and Janam, West Mts. Tsukide and Houmei (411 m), South Mts. Ryushu and Chinpong (310 m) and Kotoku (146 m) and Gunzo (283 m), although it is a coastal area. Because Kaesong is surrounded by mountains, it forms a typical “Zofu-kyoku” that accumulates the energy of the Five Crown mountains. However, the amount of water was insufficient, and the southern district was forced to use well water until the waterworks facility was constructed.

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