Spatial Consciousness Represented in Provincial Maps from the Late Joseon Period

Jeon Jong-Han

Abstract

This study is premised on the understanding that the purpose, perspective, and manner of representing land surfaces on a map may differ depending on who makes the map. The paper explores the characteristics of spatial perception as well as overall aspects of the spatial consciousness revealed in old provincial maps from the late Joseon period, with reference to the Haedong jido *(Atlas of Korea) in the mid-eighteenth century and the 1872 Maps.*

In the late Joseon period, local magistrates were the ones who usually had control over map production. They employed a painter well versed in the region or an experienced local official to draw the map for the purpose of effective governance and administration. Thus, old provincial maps from the late Joseon can be viewed as a visual representation of the power holder's view of space.

This paper also identifies the geometric elements of space that are exhibited in provincial maps and categorized them broadly into three: place, pathway, and area. Places of power or ritual were identified as major elements of place; road networks, fortress gates, or mountain passes as elements of pathway; and core, semi-core, and periphery as elements of area.

Finally, the paper examines the overall aspects of the map producer's spatial consciousness. It was concluded that a map producer's consciousness of space can be characterized by the power holder-centered view of space, "mountain-and-stream"-centered understanding of nature, and geomantic perception of topography.

Keywords: *Haedong jido*, *1872 Maps*, cartographer, representation of space, spatial perception, spatial consciousness

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Introduction

The process of making maps, or mapping, is the process in which the three-dimensional land surface is represented on a two-dimensional plane. Since representation is primarily carried out by people, one cannot escape the social geographical question of who is in charge of this representation. Since the way in which the earth's surface is viewed and space is represented is greatly influenced by those who do the representing, the goals, manner, and content of mapping can vary depending on the identity of the mapmaker.

The provincial maps produced in the late Joseon period are texts in which the earth's surface and its landscapes are represented. Approaching a provincial map as a text means understanding it as a subjective visual construct that represents the social context in which the map producer is situated and the world of meaning s/he created in his/her inner world, rather than as the results of an objective expression of reality. By observing the world from their own perspective, map producers identified themselves with that world in the process of creating provincial maps. This is an attempt to regard the spatial images represented in provincial maps as the map producer's "existential self-manifestation" toward the world. In short, provincial maps contain the spatial consciousness[1] of both the one who drew the map (the painter) and the one who ordered the map to be drawn (the power holder). By observing provincial maps, we can see the way in which the map producers of the time viewed their external world, what they understood them to be, and how they internalized them.[2]

Let us take an example of an old map of Seocheon, Chungcheong-do province, which is contained in *Haedong jido* (Atlas of

1. "Spatial consciousness" refers to an understanding of a certain social phenomenon from the perspective of spatiality or local differentiation, and the attempt to maintain a subjective relationship to that phenomenon. Therefore, it can also be defined as an overall worldview or spatial view formed through the subject's actual consciousness.
2. Jeon (2002, 237-240).

Korea) produced in the mid-eighteenth century. I consider this map to be a kind of "mental map," which not only depicts the world as it is but as it is mirrored in the map producer's inner mind. Furthermore, it contains a sort of "desired landscape," or what the map producer wanted the surface world to be. When a person sees the arrangement of human landscapes depicted in a map, such as mountains, streams, provincial government buildings, provincial guesthouses (*gaeksa*), and county schools (*hyanggyo*), and says, "I can imagine what the landscape actually looked like in Seocheon in the eighteenth century," I wonder how pertinent the statement really is. When viewed from a positivistic perspective, this old map might be regarded as of little value since it is a far cry from reality or it has many errors in terms of distance and distribution of geographical elements.

This map tells us that the creator of this map regarded all mountain ridges as being endlessly linked to one another, focusing above all on the longest mountain chains. In addition, it situates the guesthouses (among other buildings) at the foot of the mountain range (figure 1). If a mountain, small in height and width compared to other mountains, is depicted as larger than its actual size, this was because the mountain loomed large in the eyes of the map producer or the villagers. This suggests that the map producer of the time attached great importance to the guesthouse, regardless of the actual size or scale of the structures.

The flow of continuous mountain ridges also tells us that geomancy influenced the map producer's understanding of the landscape. It

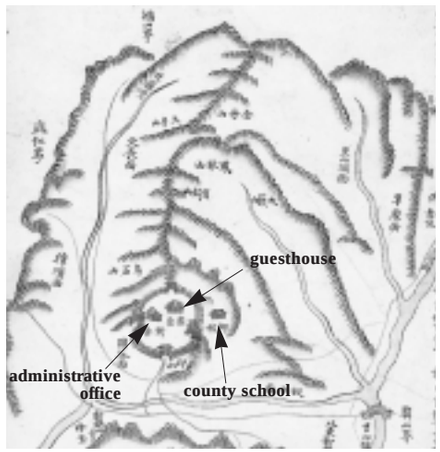

Fig. 1. Seocheon-gun, Chungcheong-do in *Haedong jido.*

was likely based on the idea of "five elements" (*ohaeng*) and the notion that the county schools, which educated future generations, were located in "the direction of the east, where the sun rises every day and which thus symbolizes the birth and growth of all things." If this kind of old map had been disseminated throughout the country, it can be surmised that this idea would have been strengthened at that time. This map demonstrates that the social ideology of a certain time and space (here, late Joseon), the resultant creation of landscape, the textual representation of such landscapes, and related discourses are interlinked to reproduce themselves.

With these in mind, this study attempts to grasp the map producer's spatial perception[3] represented in provincial maps of the late Joseon period. To this end, I first examine when those provincial maps began to be produced and what kinds there were, and then analyze *Haedong jido* in the mid-eighteenth century and *1872 nyeon jibang jido* (Provincial Maps of Joseon in 1872, hereafter *1872 Maps*), representative collections of provincial maps produced in the late Joseon period. After that, I explore why and how the map producers of the time created provincial maps. Reading provincial maps as texts amounts to reading a map producer's perception of space, formed through his contact with the world, and further to understanding the "spatial consciousness of an era," which enabled that perception. I try to develop the following two points, based on information about the map producer of provincial maps.

The first concerns the classification of spatial elements depicted on provincial maps into three geometric categories: point, line, and plane, and then examines the characteristics of the map producer's spatial perception. Kevin Lynch earlier categorized the basic elements of spatial perception into paths, edges, districts, nodes, and land-

3. "Spatial perception" is a geographical conceptualization of perception originally employed in the field of Cognitive Psychology. It entails an agent's subjective and experiential evaluation of his or her individual or collective surroundings. The characteristics of this spatial perception thus reveal which elements constitute a specific space and how that agent evaluates each element, thereby displaying some aspects of the agent's spatial consciousness.

marks.[4] However, I believe that these categories can boil down to the elements of point, line, and plane. When they are translated into geographic terms, they can be termed as place (point), pathway (line), and area (plane). The other is concerned with the approach to the overall aspects of a map producer's spatial consciousness represented in provincial maps by examining the descriptive style exhibited in the maps. I consider that the aspects of the spatial consciousness represented in provincial maps can be explained by the following three points: the power holder-centered view of space, "mountain-and-stream"-centered understanding of nature, and geomantic perception of topography.

Who Produced Provincial Maps and When?

Era of Production and the Two Atlases

"Provincial maps" refer to the maps depicting provincial administrative units of Joseon dynasty, such as province (*bu)*, district (*mok*), county (*gun*) and prefecture (*hyeon*). As these units are altogether referred to as *eup* (township), provincial maps are also called "township maps." The production of maps in the late Joseon period is marked by the development of provincial maps, the most extant of which were produced in the eighteenth century.[5] From the fact that most of these provincial maps depict administrative towns, road networks, and military facilities, centering on "rulers' area," it can be presumed that provincial maps were mainly produced for administrative and military purposes. The Kyujanggak Institute for Korean Studies provides the images and explanations of various kinds of provincial maps collected and archived at the institute on its website (http://e-kyujanggak.snu.ac.kr).

Provincial maps are usually large-scale maps that depict small

4. Lynch (1960, 47-48).
5. Yang (1995, 60).

areas in much great detail. Not to mention natural landscapes like mountains and rivers, various elements of landscape including townships, villages, road networks, sea routes, markets and cultivated lands, academies and ritual places, and communication and military facilities are depicted in minute detail. Provincial Joseon-era maps still in existence today can be divided into three different forms: sheet maps, maps annexed to the township annals (*eupji*), and atlases (or album of maps).

Of these three, the atlases are considered very useful because they contain provincial maps of the entire country. Major atlases containing provincial maps, which are known to date, include *Joseon jido* (Map of Korea), *Paldo gunhyeon jido* (Provincial Maps of Eight Provinces), and *Haedong yeojido* (National Atlas of Korea), which are grid system maps or provincial maps with longitude and latitude lines, and *Haedong jido* (Atlas of Korea) and *1872 Maps*, which are map collections consisting of provincial maps without longitude and latitude lines or grid systems.[6] A grid system map, which was produced by reducing and transcribing the land surface onto grid paper, has been highly esteemed for its precision and scientific value.[7]

However, I believe that the focus needs to be on the maps without longitude and latitude lines rather than those that have them, because the maps without them would mirror more clearly the map producer's subjective worldview than the maps with them, which systematically depict the land surface using the objective frame of a grid. For this reason, *Haedong jido* and *1872 Maps* are the main subjects of analysis in this study.

Let us take a brief look at these two materials. *Haedong jido,* a government-compiled painted provincial map, consists of eight books

6. Among these maps, *Haedong jido* and *1872 Maps* were photoprinted by the Kyujanggak Institute for Korean Studies and have been distributed to relevant academic groups and scholars since 1995. *Haedong jido* was published by the Samsung Foundation of Culture in 1995, and *1872 Maps* were published from 1996 through 2002 under the title of *Joseon hugi jibang jido* (Provincial Maps of Late Joseon Period).
7. Yi C. (1981); Yang (1995); and Kim Gi-hyeok (2007).

that include 370 maps. Considering that all the maps contained in *Haedong jido* share a descriptive style, it is presumed that their original drawings existed separately from these maps and that a few painters drew them based on the original drawings. Each map has noticeable margin notes giving geographic information on the provincial area in the corner. The margin notes give specific basic data on mid-eighteenth-century Joseon society, such as population, area of paddies and dry fields, crop yields, number of soldiers, and names of townships (*myeon*). For example, provincial maps from Gyeonggi, Gyeongsang, and Jeolla regions give detailed geographic information concerning the area, including the chronicle of each region, mountains and waters, historic sites, pavilions, shrines, private academies, provincial products, dams, and post-town inns.

1872 Maps were produced under the initiative of the government during the reign of King Gojong of Joseon dynasty. According to *Cheongha-hyeon eupji* (Township Geography of Cheongha-hyeon), "In 1871, the Royal Secretariat issued an order to each region to create and submit maps of its area."[8] This map collection contains a total of 460 individual map sheets, including not only provincial maps but maps of garrison forts, stock farms, and fortresses. Considering that the size of each provincial map and the manner of representing surface landscapes on the map differ from each other, it can be concluded that the provincial maps contained in this map collection were not copies but originals, published just as they were presented by each provincial area to the central government. In those maps, geographic information is given in detail, but exactly what is depicted varies depending on the region. Besides, some of them, like *Haedong jido*, have notes, but most do not.

8. "Huseo" (Epilogue), in *Cheongha-hyeon eupji* (Annals of Cheongha-hyeon Prefecture) kept at the Kyujanggak Institute for Korean Studies; quoted from Yang (1995, 66).

Map Producers and Their Selective Representation of Structures in Joseon Provincial Maps

Along with time, space is an important factor that governs the world of human experience. A certain space can serve as a pathway to a larger, external world including that space, and at the same time, restrict and govern the inner world of human beings.[9] If we agree with this, we may approach the map producer's experienced world, his perception of the world, and further aspects of his spatial perception by exploring who made provincial maps in the late Joseon period.

Let us examine the following three passages in order to find out who produced provincial maps in the late Joseon period. The first passage is from Kim Jong-jik's *Ilseonji*, geography of Seonsan-gun, Gyeongsang-do province, published in 1630; the second is from the "Jeseongdo jeonpyeon" chapter of *Hongjae jeonseo* (Collected Works of King Jeongjo), published in 1795; and the third is from *Mongmin simseo* (Admonitions on Governing the People), written by Jeong Yak-yong in the early nineteenth century.

> Maps have existed in this world since long ago. There are maps for the world, maps for states, and maps for townships. Township maps are very useful for provincial magistrates. From the maps, magistrates can usually get information on the size of the district's territory, the size of the population, and the management of arable lands, as well as information on distances and journey times. Considering that the maps served as basic information when enforcing fair taxation and reporting it to the central government, how can we disregard maps? . . . The magistrate orders a painter to draw mountains, streams, villages, storehouses, public buildings, roads, and stations in one chart, and to write information on the population, arable lands, and distances and travel times, and then to hang it on the wall of the magistrate's office, allowing people to get a good glimpse of the whole district under the jurisdiction of the

9. Shin (2003, 47).

magistrate.[10]

> [They] order a painter to draw maps of Gyeongdo (Seoul), Songdo (Gaeseong), Ganghwado (Ganghwa), and Hwaseong (Suwon) and as well to make maps that depict army barracks, forts, and fortresses in each region. Although indications of whether spaces are wide or narrow, flat or sloped, vacant or in use, sparse or dense are not consistent in all maps, with maps you can get a whole picture of a district. It's as easy as reading the lines on the palm of your hand.[11]

> Ten days after assuming office, *the magistrate calls several clerk officials (that is, petty officials of the provincial government), who are very experienced and well versed in writing, to draw maps of the district*, using a *jucheok*, or ruler, and making every 1 *cheok* (= 20.66cm) on the map correspond to 10 *ri* on the ground. For instance, if the length of the village is 100 *ri* and its width is 80 *ri*, the map of the village is supposed to be 10 *cheok* long and 8 *cheok* wide. *He has to draw the fortresses first*, and then draw the shape and location of mountains, forests, hills, streams, and ponds, brooks, and lastly illustrate the village . . . . He has to draw every detail of the road as it appears in reality. The map should be painted in light colors, while tile-roofed houses should be painted blue and straw-thatched houses yellow. Mountains should be depicted with green, waters with greenish-blue, and roads with brick red. If maps produced in this way are hung on the wall of the government office to be viewed by all in the building, it will be easier to comprehend the living conditions in the whole district. And when sending official correspondence or messengers, it would be possible to know the distance and travel time. The whole area can be known as easily as the back of your hand (emphasis is mine).[12]

From the three passages quoted above, we can come up with the following points. First, in the late Joseon period, the magistrate of each

10. "Huseo" (Epilogue), in *Ilseonji* 一善志 (Geography of Seonsan).
11. *Hongjae jeonseo* (Collected Works of King Jeongjo), *gwon* 55 (kept at the Kyujanggak Institute for Korean Studies, *gyu* 3775).
12. Dasan Institute (1981, 81-82); quoted from Yang (1995, 62).

county was in charge of producing provincial maps. He oversaw a painter who was well acquainted with the geography of the area or an experienced provincial official. However, government military maps displaying major military facilities were only produced by the order of the king for purposes of national security. Second, it was for the purpose of effective governance and administration that the magistrate of each county was in control of provincial map production. Third, the administrative unit called *eupchi* occupies the center in provincial maps, and accordingly what the maps carried was geographic information on the relevant jurisdiction.

The geographical information contained in provincial maps is based on the map producer's "selective" representation of an area. As seen in *Dongnamdo*, a map of the Korean peninsula produced in the sixteenth century, in which only a few mountains and rivers are depicted, or in *Joseon chongdo* (Complete Map of Joseon) from the eighteenth century, the map producers of each period selectively represented the elements of space that they believed to be important from their own perspective on maps, just the way they saw, felt, and imagined the elements to be. Based on a comprehensive examination of *Haedong jido* and *1872 Maps*, I observed that the elements of space contained in provincial maps can be analyzed according to three elements: place, pathway, and area. I begin by identifying the characteristics of spatial perception based on these three elements of space.

Spatial Elements and Characteristics of Spatial Perception in the Joseon Provincial Maps

Places: Places of Power and Ritual

A place refers to a specific part of the land surface invested with meaning by people and perceived as a point from a geometric viewpoint. The human act of giving meaning to space is usually expressed physically through certain natural objects. The meaning

that a certain place has is strengthened by the creation of cultural landscapes and the naming of a place, in other words, giving special value and meaning to a certain space, which otherwise exists without being endowed with any significance. Likewise, a place refers to a space that is originally abstract and formless, and then is given meaning, value, and identity.[13] A place in this sense holds importance in that it exists as a system of symbols, when the common experiences and associations of a group that have been accumulated over a long period of time are added to the place, and in that it functions as a frame of self-perception through which to perceive the existence of self within the world.

Provincial maps from the late Joseon feature a variety of ritually significant places; among these, places related to the source of power or to the exercise of power (hereafter, "places of power") and places related to the performance of rituals (hereafter, "places for rituals") are most prominent. This means that the map producer's subjective view of space is focused on places of power and places for rituals. Typical of "places of power" are provincial guesthouses and main

Fig. 2. Sincheon-gun, Hwanghae-do in *Haedong jido* (left), and Ulsan Seosaeng-jin, Gyeongsang-do in 1872 *Maps.*

13. Tuan (1977, 17).

office buildings (*dongheon*) located within administrative towns. The guesthouse, where the royal tablet (*gwolpae*) was enshrined, and its site were considered to signify the existence of the king, the supreme power holder, and the main office building, where the magistrate governed and carried out administrative tasks by mandate from the king, was considered to symbolize the executor of power.

In particular, the provincial guesthouse was usually supposed to be situated in the most visible location within the administrative town, for its symbolic significance. In most cases, it was located behind the government office or at the northern end of the administrative town, and thus symbolized the spatial origin of the power held by the magistrate. The administrative town was structured around these two places (figure 2). This method of structuring space is deeply related to the "naturalization of power" and "the conception of the center as a holy place" through the "hierarchical arrangement of landscapes."[14]

Places for rituals depicted in provincial maps include the Confucian shrine (*munmyo*), the altar for the land and grain gods (*sajikdan*), the altar for a tutelary deity (*seonghwangdan*), the altar for restless spirits (*yeodan*), and the altar for the mountain spirit (*sancheondan*). In particular, the first four are referred to as "three altars and one shrine," and, as a rule, each provincial area had one altar (Table 1). These ritual places bore symbolic significance associated with the wish for peace and abundance in the area, and one altar ritual was performed for various deities, which were believed to grant peace and fertility. It is therefore natural that these places were also clustered around the administrative town, the map producer's base of life. According to *Mongmin simseo* (Admonitions on Governing the People), written by Jeong Yak-yong in the early nineteenth century, "The Confucian shrine is situated within the county school, and with the administrative town as the central point, *sajik* is located in the west, *seonghwangdan* in the east, and *yeodan* in the north. Of all these places, the most important is the altar for land and grain

14. Choe G. (1982); Yun (2001); and Jeon (2003).

Table 1. Places for Rituals According to Region in the Joseon Period

*This table was recreated from Han (2004, 21, 28)

Region \ Type	15th century				18th century			
	Sajik-dan	*Mun-myo*	*Seong-hwangsa*	*Yeo-dan*	*Saijk-dan*	*Mun-myo*	*Seong-hwangsa*	*Yeo-dan*
Gyeonggi-do	37	37	36	37	38	24	34	34
Chungcheong-do	54	54	54	54	50	39	51	53
Gyeongsang-do	66	66	66	66	71	64	71	71
Jeolla-do	56	56	55	56	55	50	56	54
Hwanghae-do	24	24	24	24	23	13	19	23
Gangwon-do	25	25	25	25	26	26	27	25
Hamgyeong-do	22	22	22	22	24	10	23	21
Pyeongan-do	42	42	42	42	42	42	37	41
Total	326	326	324	326	329	268	318	322

Source: *Dongguk yeoji seungnam* (Augmented Survey of the Geography of Korea) in the 15th century; and "Anmyojo" in *Yeoji doseo* (Cultural Geography of Korea) in the 18th century.

gods, which began to be installed in the early Joseon period.[15] The location of these places was determined through a combination of the principle of "ancestral temples on the left, temples to the deities on the right," expounded in *Zhouli* (Rites of the Zhou),[16] the theory of "five elements" in *Yijing* (Book of Changes),[17] and geomantic theory .[18]

For example, *yeodan*, an altar built to appease restless spirits, was usually located near the guardian mountain in the region or to the north, the place for the dead, based on the principle of *yin-yang* and five elements. *Munmyo*, a shrine where Confucius was worshipped, was supposed to be located in the east of the administrative town, in accordance with the principle of "ancestral temples on the left, temples to the deities on the right." In addition, since the principle of *yin-yang* and the five elements considered the west as the direction where all things wither and fade while the east is where all things are born and grown, the Confucian shrine symbolizing the education of future generations was located in the east (figure 3).

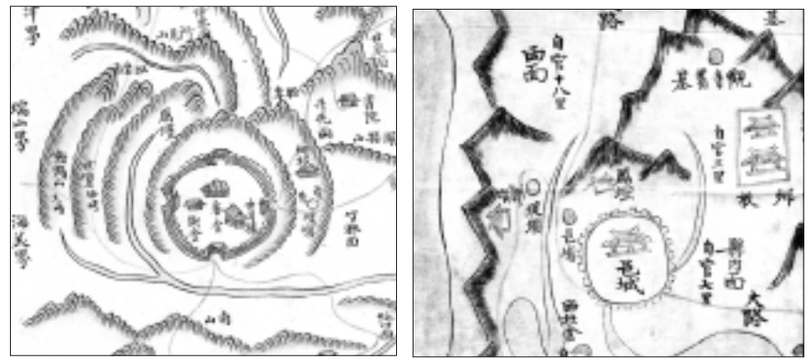

Fig. 3. Biin-hyeon, Chungcheong-do in *Haedong jido* (left), and Myeoncheon-hyeon, Chungcheong-do in *1872 Maps*.

15. Jeong (1989, 216).
16. *Zhouli* (Rites of Zhou) refers to the ritual law of the Chinese Zhou dynasty. According to this law, the royal ancestral shrine and the Confucian shrine are supposed to be situated on the left (in the east), while the altar for land and grain gods must be situated on the right (in the west).
17. The concept of *yin-yang* refers to the two different energies that compose all things in the world, while the concept of *wuxing* refers to the five natural elements of water, fire, wood, metal, and earth. The "theory of *yin-yang* and five elements" explains the universe in terms of them. For example, the five elements were believed to correspond to different colors, directions, and tastes: the element of fire corresponds to the color red, the direction of south, and the bitter taste. The element of water corresponds to the color black, the direction of north, and the salty taste, the element of wood corresponds to the color green; the direction of east, and the sour taste. The element of metal corresponds to the color white, the direction of west, and the spicy taste; the element of earth corresponds to the color yellow, the direction of center, and the sweet taste.
18. *Fengshui* or geomancy is a theory and method that originated in East Asia of evaluating the auspiciousness of a geographic site based on the combination of the theory of directions and the theory of *yin-yang* and five elements. *Fengshui* identifies the topographical or geographical features of a given location based on the belief that *qi* (the vital energy of the universe) flows along mountain ridges.

Pathways: Road Networks, Fortress Gates, and Mountain Passes

Pathways represent conduits between different places or areas. Included here are road networks clustered around the center of town, fortress gates, which one had to pass through to enter administrative towns with fortresses, and mountain passes that traverse the ridges surrounding the center of towns. These pathways are an important marker of how the map producer perceived space.

First, regarding road networks, in many provincial maps the roads end at the guesthouse or office, located within the administrative town. In Hanyang, the capital of Joseon, or modern day Seoul, as well as in most provincial areas, there was, in most cases, a main road that led from the guesthouse or office down to the main gateway of the administrative town, which usually stood to the south. Some argue that the direction of the first main road was closely related to the location of the guardian mountain in the area.[19] Notable is that the road leading from the main gateway to the guesthouse or the government office was usually curved rather than straight (figure 4).

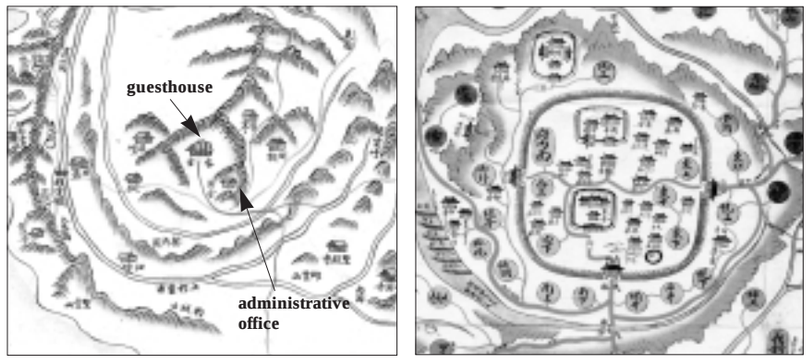

Fig. 4. Dangjin-hyeon, Chungcheong-do in *Haedong jido* (left), and Jindo-bu, Jeolla-do in *1872 Maps.*

19. Choe W. (2003).

It may have been for the purpose of defense that the road in this section was curved, but more importantly, it held the symbolic meaning that places of power like the guesthouse or the main office building should not be easily revealed to or regarded lightly by outsiders. The main road passes through the main gate and joins another main road from the outside (which usually runs in an east-west direction when the main gate stands in the south of the county or prefecture), forming a three-way intersection outside the main gate. This point served as the most important node in the district, from which all roads stretch to the major parts of the county or prefecture as well as to its neighboring counties or prefectures.

Fortress gates and mountain passes in the provincial area constitute pathways between inner and outer space. When administrative towns were surrounded by fortress walls, the fortress gates served as pathways that both divided and linked the central and peripheral areas of the county or prefecture. For towns without fortresses, mountain passes served as pathways. As can be seen in the map of Haenam-hyeon, not all fortress gates seem to have been considered equal. The main road goes through the most important fortress gate in the town while branched roads pass through other fortress gates, a testimony to a kind of hierarchy among the different fortress gates. This is also the case with mountain passes. In the mountain passes that were considered important by the power holder, symbolic landmarks such as the altars for a tutelary deity, restless spirits, and land and grain gods, were built to stress their spatial significance, in comparison with other mountain passes (figure 5). In this context, the map producer perceived road networks, fortress gates, and mountain passes in terms of a hierarchy, such as main pathways and branch pathways, or first pathways and second pathways.

Areas: Core, Semi-core, and Periphery

In provincial maps, the core and the periphery are divided, and such natural borders as ridges, rivers, and shorelines separate the former

from the latter.[20] The space of the administrative town, the core of the county or prefecture, is clearly defined by the walls of the fortress. In cases where there was no fortress, the mountain ridges surrounding the administrative town, which were symbolized by the "four deities" of *fengshui* or geomancy—the "guardian mountain" (*jusan*) in the back, the "blue dragon mountain" on the left, the "white tiger mountain" on the right, and the "table mountain" (*ansan*) in the foreground—were considered secondary boundaries (figure 5).

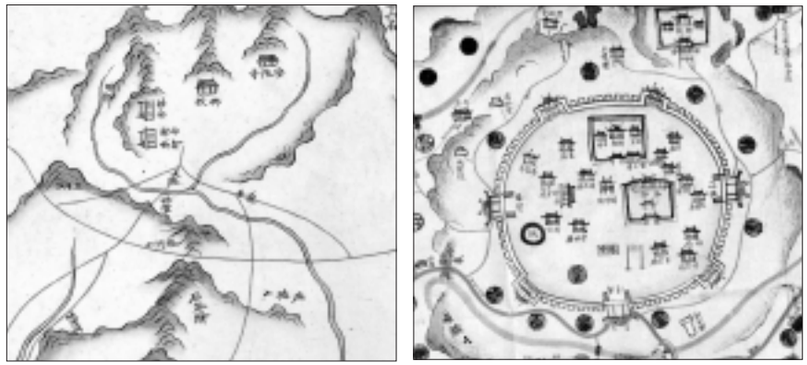

Fig. 5. Ansan-gun, Gyeonggi-do in *Haedong jido* (left), and Haenam-hyeon, Jeolla-do in *1872 Maps.*

In a sense, space is a place where human consciousness of existence is strongly engraved and revealed.[21] Most provincial maps tried to distinguish between interior and exterior space or between inner and outer worlds. This distinction can be understood as a way of mutually complementing the two different areas, rather than as a confrontation between the subject and the other. This is an important aspect that reveals how map producers of the late Joseon period perceived

20. Bak (2005, 126).
21. Kim Gyeong-bok (1990, 2).

the land surfaces. It seems that map producers usually perceived the space of a county or prefecture as being divided into three areas: the core, the semi-core, and the periphery.

The map of Gimhwa-hyeon, Gangwon-do province, contained in *Haedong jido*, and the map of Gaeseong, Gyeonggi-do province, contained in *1872 Maps*, are the most typical examples of how these three different areas were represented (figure 5). The map of Gimhwa-hyeon reveals that the map producer of this map first perceived the region as being divided into three areas with the ridges and streams as boundaries, and marked the places of power as the center point of the town. The administrative facilities are situated in the core areas, and the ridges surrounding it are perceived as boundaries between areas. For instance, the locations of Gosanseong fortress, Hyeonnae-myeon office, and Chungnyeongsa temple are considered semi-core areas, while the ridges surrounding the areas are perceived as boundaries, and the areas outside the boundaries as peripheral areas. The complete map of Gaeseong city, contained in *1872 Maps*, vividly shows how each area is differentiated within an area where a fortress was built: the areas within the fortress constitute core areas; the areas surrounded by mountain ridges as semi-core areas; and the areas outside the boundaries of ridges as peripheral areas.

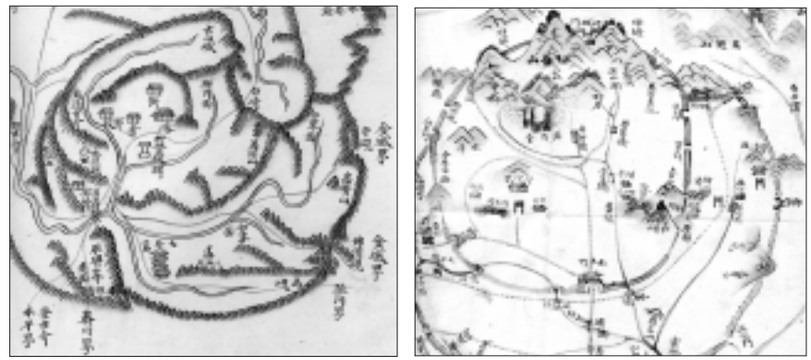

Fig. 6. Gimhwa-hyeon, Gangwon-do in *Haedong jido* (left), and Gaeseong, Gyeonggi-do in *1872 Maps.*

Descriptive Style and Spatial Consciousness in the Joseon Provincial Maps

Power Holder-centered Depiction of Space

The most notable descriptive style employed in *Haedong jido* and *1872 Maps* is that the administrative zone/center is displayed on a large reduced scale while the other peripheral areas are depicted on a small reduced scale, with areas further from the center appearing smaller. This testifies to the map producers' power-holder-centered depiction of space. In other words, the provincial maps mirror the power holder's (the king at the center) view of provinces, or the governors' views of their jurisdictions.

This "duality of reduced scale" becomes more prominent when the administrative town is surrounded by a fortress. In this case, the fortress is highlighted with bold lines, and the administrative facilities, such as guesthouse, armory, main office building, living quarters (*naea*), and district offices (*jilcheong*), are illustrated one by one, in great detail. In contrast, rural areas outside the administrative town are depicted in a simple manner. Very few houses are seen, except for a few community buildings such as private academies and county schools, while only some mountain ridges and streams are illustrated in a simple way. From this, it can be ascertained that different reduced scales were applied to central areas and peripheral areas, respectively, and this fact means that more focus was placed on the administrative town, the center of power in a county or prefecture, than on the peripheral areas.[22]

Map producers' ruler-centered view of space is also confirmed in the place names and distances displayed in the map. For example, in the map of Sakju-bu, Pyeongan-do province, the fortress is highlighted in detail; also, three fortress gates, the guesthouse, and public office building are clearly depicted. In contrast, as noted above, peripheral areas were highly simplified in the map. In the map of

22. Noh (1980, 11).

Baekcheon-gun, Hwanghae-do province, contained in *1872 Maps*, the administrative town served as a reference for creating place names, as can be seen in the names of villages like Dongchon (village east of town) and Seochon (village west of town). Just as they used to say, "It is 4km away from the government office in town" or "It is 8km away from the government office," the administrative town served as a reference point in measuring the relative location of other places.

"Mountains-and-Streams"-Centered View of Nature

Mountains and streams have been traditionally regarded as holy places in Korea. The so-called guardian mountain (*jinsan*) refers to "a mountain where the guardian of the region lives," which suggests that Koreans had worshipped mountain gods even before the Chinese concept of *fengshui* was introduced to Korea. Following the introduction of *fengshui* or geomancy, it is widely recognized that this worshipping of mountain centered on the guardian mountain gradually turned into a form of geomancy centered on the main mountain (*jusan*), i.e. the mountain that serves as the backdrop for a propitious site.[23] In Korea, mountains and streams were deeply associated with geomancy on the one hand, and also had symbolic meanings as objects of rituals, which existed on a different level from geomancy, on the other.

From the Goryeo to Joseon periods in Korea, rituals were performed for major mountains and streams in the country either under the initiative of the government and provincial authorities or on the folk level. In the Goryeo period, folk beliefs were combined with Taoism or Buddhism, and a custom of giving titles to mountains and streams developed along with the performance of specialized rituals. In the Joseon period, this system of giving titles to mountains and streams was abolished, and rituals were only performed under the aegis of the government. Major mountains and streams in the country were classified according to importance, and "middle rituals"

23. Choe W. (2003).

(*jungsa*)[24] were supposed to be performed at the site of famous mountains, seas, and river ports (*akhaedok*)[25] while "small rituals" (*sosa*) were held at noted mountains and renowned rivers *(myeongsan daecheon*).[26]

It is presumed that state-initiated rituals for mountains and waters helped the religious belief in mountains and streams to spread rapidly and systemically. The three-dimensional depiction of famous mountains in Joseon provincial maps, along with the names of those mountains, seems to stem from this religious belief in mountains and streams (figure 7). This type of government-sponsored religious belief in mountains and waters must have stimulated map producers of each region to assume a power-oriented view of the world and become engrossed in linking the ridges and streams of their region to

24. *Jungsa* (medium sacrifice) refers to the second greatest sacrificial rite next to *daesa* (great sacrifice), the largest-scale national sacrificial rites that were performed at state ritual halls. Included in the "great sacrifices" are the royal ancestral rites to worship the spirits of successive kings and queens of the Joseon dynasty (*jongmyo daeje*), the sacrificial rites performed at the Hall of Everlasting Peace (*yeongnyeongjeon jerye*), and the religious rites for the land and grain gods (*sajik daeje*).
25. *Akhaedok* means "famous mountains, seas, and river ports" in the country. The country's famous mountains include Mt. Jiri in the south, Mt. Samgak in the center, Mt. Songak in the west, and Mt. Bibaek in the north. Famous seas include Donghaesin Sea in Yangyang city on the east coast in Gangwon-do province, Namhae Sea in Naju city on the south coast in Jeolla-do province, and Seohaesin Sea in Pungcheon city on the west coast in Hwanghae-do province. Famous river ports include Hangang in Hanyang, Ungjin in Gongju, Chungcheong-do province, Gayajin in Yangsan, Gyeongsang-do province, Deokjin in Jangdan, Hwanghae-do province, Daedonggang in Pyeongyang, Pyeongan-do province, Amnokgang in Uiju, Pyeongan-do province, and Dumangang in Gyeongwon in Hamgyeong-do province.
26. *Myeongsan daecheon* refers to "noted mountains and renowned streams" in the nation. What is included in the category of noted mountains and renowned rivers varies according to period, but in *Gukjo oryeui* (Five Rites of the State) published in early Joseon, eleven mountains including Mt. Chiak, Mt. Gyeryong, Mt. Joheul, Mt. Geumseong, and Mt. Mongmyeok and ten streams including Jang-san got in Jangyeon, Hwanghae-do province, Yangjin in Yangju, Gyeonggi-do province, Cheongcheongang river in Anju, Pyeongan-do province, and Yangjinmyeongso in Chungju, Chungcheong-do province are specified as noted mountains and renowned rivers.

the famous mountains, seas, and river ports as well as to noted mountains and renowned rivers in the nation (figure 7). The mountains and streams depicted in provincial maps were not merely natural environments depicted in a purely physical form, but were imbued with "cultural" values.[27] The map of Jeongsan-hyeon, Chungcheong-do province, contained in *Haedong jido*, depicts major mountains and their names around Jeongsan-hyeon in such a picturesque manner as to recall landscape paintings. The map of Guseong-bu, Pyeongan-do province, contained in *1872 Maps*, effectively highlights the central location and importance of the administrative town by depicting the town as being surrounded by range after range of mountains and numerous streams.

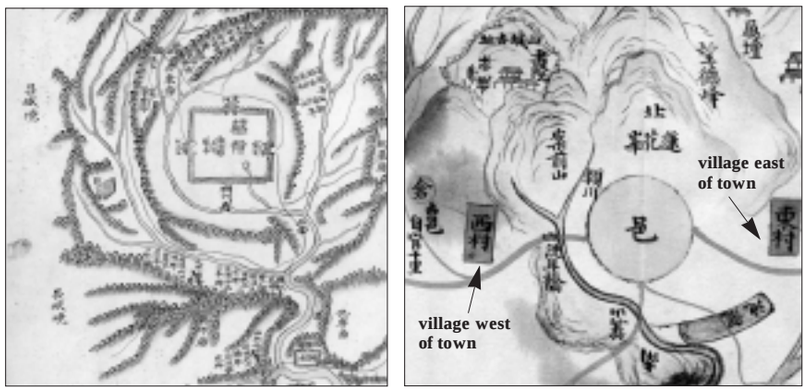

Fig. 7. Sakju-bu, Pyeongan-do in *Haedong jido* (left), and Baekcheon-gun, Hwanghae-do in *1872 Maps*.

Geomantic Perception of Topography

Most of the provincial maps from the late Joseon period depict mountain ridges as being connected to each other. Regarding this style of depiction, Kim Jeong-ho earlier wrote, "This method may not only

27. Yi Gyeong-mi (1998, 131).

gloss over the truth, but it may even cause confusion," and insisted that it should be corrected.

> Mountain ridges and streams converge on land. Since mountain ridges were formed as a result of the deep erosion of land by streams, we can locate mountain ridges by following the diverging paths of water. If all mountains and hills are unnecessarily depicted as being linked together, it may lead to confusion or distortion of the truth. That is why I only depicted several famous mountains on a map.[28]

Nevertheless, the depiction of mountain ridges and streams as being continuously linked on the map was prevalent in the late Joseon period (figure 8). This style is understood as representing, above all, the geomantic perception of mountain ridges. In geomancy, *qi*, or

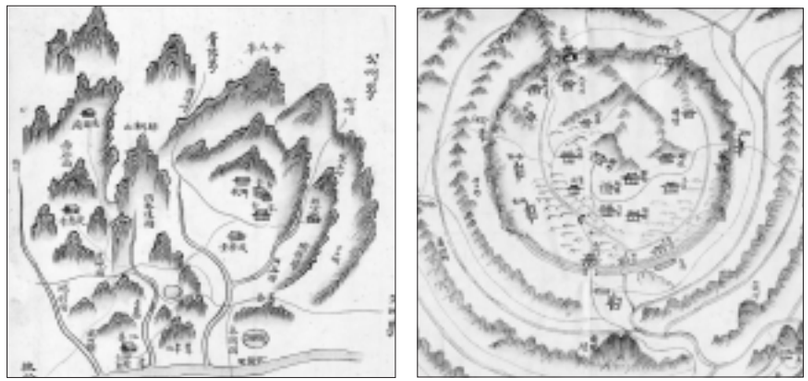

Fig. 8. Jeongsan-hyeon, Chungcheong-do in *Haedong jido* (left), and Guseong-bu, Pyeongan-do in *1872 Maps*.

28. 山脊水脈連絡地面 水之所滀削立爲山則 從其水源之相分可知山脊之連絡 不必連岡接麓而亂紙面而且易失眞只書有名山作三四峯. Kim Jeong-ho, "Cheonggudo byeomnye," in Vol. 1 of *Cheonggu yoram* (Survey of Korea) (19th century); kept at the Kyujanggak Institute for Korean Studies, *gyogo* 4709-21A.

energy, moving beneath the ground is considered most important, and mountain ridges are perceived as the very pathways through which *qi* passes and flows. Therefore, any break in the ridges means the flow of *qi* is broken or blocked. That is why the producers of maps tried to locate a province behind mountain ridges as continuously connected to each other. They also regarded all mountain ridges in the Korean peninsula as being ultimately linked to Mt. Baekdu, which was considered the highest peak in the nation and the sacred origin of the nation.

The philosophy of *fengshui* or geomancy was introduced to Korea at the end of the Silla period and spread widely across the population, in particular among the upper class in the Goryeo period. In the Joseon period, it affected all parts of society. It can be easily conjectured that geomantic perceptions were also employed in provincial maps in the late Joseon period. According to one study, thirty percent of provincial maps produced in the late Joseon period contained geomantic depictions,[29] which are marked by the following two features: first, the ridges diverging from the main mountain behind are described as looking towards the major facilities of the administrative town. This can be explained as an attempt to express the idea that vital energies, which are considered important in Korean geomancy, are channeled into the administrative town or the government office. That is why the mountain ridges diverging from the "main mountain" and, further back, from the "ancestor mountain" (*josan*) are depicted on this map. Second, the administrative town and the area around major facilities are surrounded by fold after fold of mountain ridges. This also reflects the geomantic idea that the area around a propitious site should be surrounded by mountains so vital energies will not be dissipated by wind. In the map of Okgu-hyeon, Jeolla-do province, the guesthouse is situated at the foot of the longest ridge, while in the map of Jinsan-hyeon, the areas around the "placenta chamber" (*taesil*) of Yi Seong-gye, King Taejo of Joseon dynasty, are surrounded by layers of small ridges (see figure 9).

29. Shibuya (1998, 106).

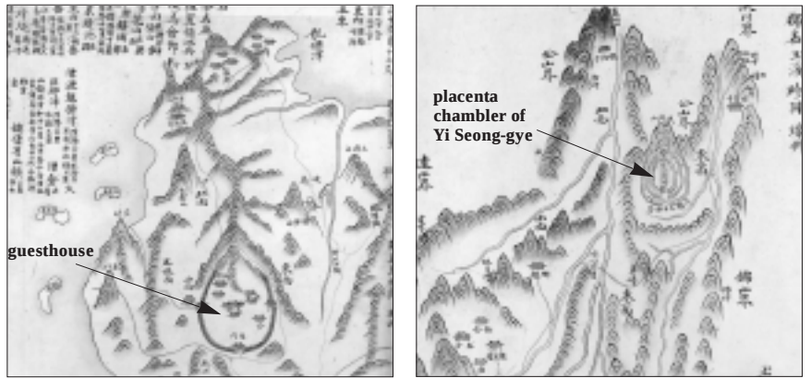

Fig. 9. Okgu-hyeon (left) and Jinsan-hyeon, Jeolla-do province in *Haedong jido*.

Conclusion

A map is a two-dimensional representation of the three-dimensional space in which people live. In this transfer of dimensions, errors cannot be avoided, but those errors should not be regarded as merely scientific or technical ones. It is therefore necessary to consider a map as a text in which the map producer's underlying notions of space are reflected. In particular, in terms of content and expression, such old maps as provincial maps from the late Joseon era, strongly demonstrate what the map producers tried to describe on the map and how. For instance, if a spatial object is depicted as larger than its actual size, this is because its map producer attached greater cultural importance to it.

Based on the understanding that the purpose, perspective, and manner of representing land surfaces may differ according to who makes the map, I explored the features of spatial perception and the overall aspects of spatial consciousness embedded in provincial maps from the late Joseon period, with a focus on *Haedong jido* and *1872 Maps*. Below, I summarize my research findings and make some suggestions for further study.

In the late Joseon period, provincial magistrates controlled the production of provincial maps. Except for maps produced by the order of the king for national defense, such as military frontier maps, in most cases the magistrate was the primary map producer who took the initiative in making provincial maps. That is why the power holder's spatial perception or consciousness permeated provincial maps in the late Joseon period.

I was able to obtain some understanding of the map producers' spatial perception by identifying geometric spatial elements in provincial maps. From the starting point that all geometric spatial elements can be classified into points, lines, and planes, I categorized the spatial elements displayed in provincial maps into places (point), pathways (line), and areas (plane). Thus, locations of power and ritual were categorized as places; road networks, fortress gates, and mountain passes as pathways; and core, semi-core, and periphery as areas. These spatial elements commonly highlighted in provincial maps were shielded by places of power and ritual, while roads and mountain passes traversed boundaries like fortress walls or mountain ridges to connect those places of power with the surrounding areas. Finally, the total space of a county or prefecture consisted of a core, semi-core, and periphery.

I also tried to approach the overall aspect of the spatial consciousness of map producers as mirrored in provincial maps, based on my understanding of the descriptive style employed in these maps. In terms of descriptive style, one of the most notable is that a so-called duality of reduced scale can be found. In other words, the administrative town is displayed on a large-reduced scale while the peripheral area is depicted on a small-reduced scale. Second, except for the administrative town, the area is depicted as being surrounded by major mountains and streams. Third, mountain ridges are depicted as continuously interlinked with the major facilities of the administrative town located at the foot of the longest ridge. All being considered, it can be assumed that the map producers of the late Joseon period were characterized by their adherence to the ruler-centered view of space, "mountain-and-stream"-centered view of nature, and

geomantic understanding of topography.

However, the scope of this study is limited to those provincial maps that omit longitude and latitude lines and is insufficient for fully demonstrating the spatial perception of map producers of the Joseon period. In addition, though I tried to examine provincial maps from the late Joseon as a whole in this paper, it was based on an "intuitive interpretation" of descriptive styles or images, rather than on objective standards. Thus, in order to make up for the intuitive understanding, further study is needed to explore the historical context that makes such an interpretation possible. Above all, the challenge remains to more vividly reveal the overall aspects of map producers' spatial perception as represented in provincial maps, by fully understanding the characteristics of people's worldview and perception of provincial areas as well as social and spatial changes in the late Joseon period.

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GLOSSARY

akhaedok	嶽海瀆	*Hongjae jeonseo*	弘齋全書
Cheonggu yoram	靑丘要覽	*Ilseonji*	一善志
Cheongha hyeoneupji	淸河縣邑誌	*jinsan*	鎭山
Danmyojo	壇廟條	*josan*	祖山
Dongguk yeoji seungnam	東國輿地勝覽	*Joseon chongdo*	朝鮮摠圖
		jungsa	中祀
Dongnamdo	東藍圖	*myeongsan daecheon*	名山大川
eupji	邑誌	*Yeoji doseo*	輿地圖書
gwolpae	闕牌	*Yijing* (Ch.)	易經
Haedong jido	海東地圖		

(Ch.: Chinese)