

A Study on the Landscape Planning Concept of the Traditional Urban Forest in Korea

- In the Case of Kyeongju -

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I. Introduction

The Korean traditional urban forest has been generally formed in the Korean city. The forest that has a long history could have been formed inside of the Korean city or near it. So the forest is inclined to have those characteristics as follows:

(1) The Korean traditional urban forest is not a naturally formed forest but a intentionally formed forest around a Korean city. (2) Citizens have given special intentions and meanings into the construction of the forest. (3) The forest has been related to citizens' social activities and has had various functions something like an urban park. So the forest has been usually planted inside of the public space. (4) Citizens regard the forest as a symbol of home town and a source of pride.

The Korean traditional urban forest was one of the best places easily feeling the sense of place. It consists of three interlocking components of place(meanings, physical attributes, activities). It has been used to enhance the sense of place-identity of the city.

For a long time, a variety of urban forests have been built in Korea's traditional cities, offering a variety of environmental functions and meanings, and up to now these urban forests have been called 'Limsu'. There have been many types of traditional urban forests deeply in Kyeongju(慶州) city.

The goal of this study is to find out the landscape planning concept of the traditional urban forest in the case study of Kyeongju city. In this study I analyze a old map of the landscape of Kyeongju city. It was made during the middle period of Choseon dynasty. There have been many types of traditional urban forests deeply related with the composition of the city space and landscapes in Kyeongju city. In next

chapter these place's components of the traditional urban forest which are landscape concepts and historical backgrounds, landscape characteristics and functions, and people's activities will be discussed.

II. Main Discourse

1. The Traditional Urban Forest of Kyeongju

Kyeongju is located on the basin which is surrounded like a folding screen by Sogeuimgangsan(小金剛山) to the north, Seondosan(仙桃山) to the west, Myeongwhalsan(明活山) to the east and Namsan(南山) to the south.

In the case of Kyeongju, there were 22 traditional urban forests.

We can divide four eras of urban forests with the changes of times(ancient Silla era, Silla era, Korea era, Choseon era)¹⁾.

Ancient Silla era: Najeong(蘿井), Oreunglim(五陵林), Ajinpo(阿珍浦), Kyelim(鷄林), Cheonkyeonglim(天鏡林), Sin-youlim(神遊林)

Silla era(after the middle of fifth century): Oangkasu(王家藪), Bongwhoangdae(鳳凰臺), Koyangsu(高陽藪), Limjeong-su(林井藪), Jibuklim(枝北林), Youlim(柳林), Seobulyublim(西部獵林), Youlim(栗林)

Korea era: Olisu(五里藪), Hanjisu(閑地藪), Dongjeongsu(東亭藪), Bibosu(裨補藪)

Chonseon era: Namjeongsu(南亭藪), Oeodaesu(魚岱藪), Kyolitaegmog(校里宅木), Koseongsu(古城藪)

2. The Beginning Backgrounds and Meaning of Traditional Urban Forest

As divine places for people living in cities, traditional urban forests have improved place-identity by enhancing divineness

Table 1. Landscape concepts of the traditional urban forest in Kyeongju

Class	Name	Meaning		Location and function							Activities			Exist or not exist	etc.
		Native	Fengshui	Center	Around	Topo-preserve	Flood pre-vention	Wind pre-vention	Produc-tion	Agri-culture	Hun-ting	Play	Ritual		
Ancient Silla Era	Najeong(蘿井)	○		○										○	
	Oreunglim(五陵林)	○		○				○						○	
	Ajinpo(阿珍浦)	○		○				○						○	
	Kyelim(鷄林)	○		○				○						○	
	Cheonkyeonglim(天鏡林)				○		○	○				○		×	
	Sinyoulim(神遊林)	○			○	○		○						○	
Silla Era	Oangkasu(王家藪)	○			○			○					○	×	
	Bongwhoangdae(鳳凰臺)		○	○							○			○	
	Koyangsu(高陽藪)	○	○		○			○			○	○	○	○	
	Limjeongsu(林井藪)				○			○			○			×	
	Jibuklim(枝北林)				○		○	○						×	
	Youlim(柳林)				○		○			○				△	
	Seobulyeoplim(西部獵林)				○			○			○			×	
	Youlim(栗林)		○	○					○			○		×	
Korea Era	Olisu(五里藪)				○		○							×	
	Hanjisu(閑地藪)		○	○		○								×	
	Dongjeongsu(東亭藪)				○		○	○				○		×	
	Bibosu(裨補藪)		○	○				○						×	
Chonseon Era	Namjeongsu(南亭藪)				○		○					○		×	
	Oeodaesu(魚岱藪)				○		○							×	
	Kyolitaegmog(校里宅木)				○			○						○	
	Koseongsu(古城藪)				○		○		○					×	

and authority being created around places where spirits of the city were enshrined. Background and meanings presented in traditional urban forests of Kyeongju consists of a native religious tale and Fengshui(the theory of geomancy). Native religious facilities such as a pavilion for a monument and an altar are easily found in traditional urban forests in Kyeongju, which demonstrates that traditional urban forests are centers of native religion of the surrounding areas.

In ancient Silla era, The backgrounds of Kyeongju traditional urban forest was most affected by the influence of native belief. As a main example Heolim(墟林) which is maintained by a local government for a long time is Najeong, Oreunglim, Ajinpo, and Kyelim. They are a birth place or tomb of three founders in Silla.

Korean traditional urban forests based on Fengshui are planted near enclosing surroundings(mountains and ridges, water course, and a floodgate) of the city. In order to satisfy

the desire to see without being seen, one of the most effective methods is the forest planting around urban boundaries. The landscape which affords both a good opportunity to see and to hide is aesthetically more satisfying than one which affords neither. The enclosed landscape of the Korean traditional city is accomplished by the construction of urban forest. This is the key role of it.

Forest that has geomantic meaning is originally very closely associated with a sense of values on 'a propitious site' of Fengshui. The sense of values on a propitious site means a encircled landscape that is completely surrounded without any opening like a castle. This closed landscape is originated from an attitude of ancestor in which they wanted to look for a safe place from various disasters and wars. Like this, considering from the geomantic principles, topography encircling a traditional city should not have any openings or weak points like a fence. However, traditional urban forests in Kyeongju

that were created from the geomantic landscape principle have a forest on the mountain range from the rear mountain, a water hole damming forest that fills an opening of the entrance of a stream, an artificial forest for better landscape, a watercourse that supplements weak points using the surrounding marshy places, and the surrounding forest.

We preserve all vegetation on hills and mountains in order to keep up good quality and plenty of water. Especially the highest mountain we called Jusan(the Concept of Fengshui) located to the north is most important to secure water in Korea. The forest on the contiguous line of a terrestrial stratum from Jusan into city center must be preserved and constructed if there were no trees.

Because the urban center of Kyeongju was located on a wide flatland surrounded by rivers on three sides and on the east side there is a small hill. Kyeongju is about 4km to the southeast from Myeongwhalsan(明活山). Therefore, for a long time the area of Jusan in Kyeongju, namely the contiguous area of a terrestrial stratum from Jusan to Kyeongju center, has been strictly preserved by the government. Jusan of Kyeongju is 'Nangsan' which is a small hill with the height of 106m and locates between Kyeongju and 'Myeongwhalsan', what is called, Sinyulim. Because the meaning of Sinyulim is a forest where the god who descends from heaven stroll about, the logging was prohibited inside of Nangsan²⁾.

Besides, Hanjisu(閑地藪) was built between Pomundong(普門洞) and Kuwhangdong(九黃洞). Because Hanjisu located at the contiguous area of a terrestrial stratum from Jusan of Kyeongju in which Kyeongju people held ritual services, it was preserved and planted. If this contiguous area of a terrestrial stratum might be cut or damaged, supplementing a lot of soil and planting were done.

By the theory of Hyunggukron, a Fengshui expert judges good or ill of the shape of topography on the analogy of a bird, animal, or human form. When a mountain is referred to as an animal form, the fate of the people is usually related to the animal's character.

In Kyeongju, traditional urban forests in the geomantic meaning improve place-identity of the city through forming the entrance landscape by being located around the entrance of a stream or a curve, or forming main landscape connected with the center of the city along the range of a rear mountain.

3. The Physical Landscape and Function of Traditional Urban Forest

Therefore, it is considered that traditional urban forests occupy certain areas in a traditional city and they are main factors to make the city recognized as a place from the fact that the forests are located around the main facilities or in boundary areas. The above place implies formation of a feeling of 'being in the place' by fixing the center, 'me', and the range, 'us'. Hence, a clear boundary between the center and the range is a representative factor to make spatiality look better.

Spatiality of traditional urban forests are easily seen in an old map of Kyeongju. Natural landscape elements in the map include mountains, rivers, the sea and traditional urban forests. However, the map seems to be made by collecting spatial images of the city, not an actual measurement, because the size and shape of the traditional urban forests do not accord with a reduced scale. The traditional urban forests in the map can be considered as an equivalence of main buildings in the city.

The practical function of the traditional urban Forest is prevention against disasters(For example: flood prevention, protection against wind, and prevention against fire). Especially, the forest on a river bank make it solidified because roots of trees make the structures more firm on the bank and control the speed of running fluid in the case of the heavy flood. And the forest planted on the bank on a reservoir and an irrigational canal has played the role of supporting water supply into a paddy field.

Some urban forests were planted on the bank on a stream, a reservoir, and an irrigational canal. Planted forests on banks have been created and maintained for various functions and purposes, such as flood prevention, wind shield, and rest. Examples of forests on waterfront banks are proved to us that forests are positive addition to waterfront banks.

Kyeongju urban forests in Korea and Choseon era mostly have various practical functions. Namjeongsu as a recreation place, Olisu and Oeodaesu for prevention of floods, Kyolitaegmog for protection against wind, and Koseongsu for production.

When we considered the center of Kyeongju, the directions of wind in Kyeongju city are usually north, south-south west and south east. Around Kyeongju, there are a gorge from the south to the southeast(an area along Namcheon(南川)), a

gorge from the west to the south(an area along to Seocheon(西川)), and a gorge from the west to the north(an area along Seocheon(西川)). Especially, in the region of Kyeongju the typhoon sometimes blows along those three gorges in summer, and the bitter cold wind blows from the northwest in winter. In this case, because wind usually blow along the flatland around water course, it is necessary to construct forest in gorges in order to protect against wind.

For example, Namcheon(南川) flows from the south of Wolseong(月城) to the west. There were many forests built in order to prevent flood at Namcheon. The south side of Namcheon were Dongjeongsu and Oreunglim in the upper stream order and The north side of Namcheon were Sinyulim, Kyelim, Namjeongsu, Cheonkyonglim.

Because in the case of Kyeongju oriented to open to the north, it is necessary to plant some forests to the north area. This forest in the north is called 'Sugumagi'. Sugumagi as an example of the urban forest made around mountain and water was built at the floodgate. As for selection of location of a traditional city, a floodgate the place where water flows into or flows out was an important place of observation. Thus the creation of Sugumagi made traditional cities enclosed by mountains and urban forests.

The area of Sugu(水口) in Kyeongju city is between Sogumkangsan(小金剛山) and Keumjangdae(金藏臺) which all water courses of Kyeongju area flow out. Sugumagi in Kyeongju was composed of Koyangsu, Limjeongsu, Youlim, Jibunglim, Seoburyeoplim. Putting all accounts together, we can guess that Sugumagi was a gigantic forest linked to Limjeongsu - Koyangsu - Jibunglim - Youlim - Seoburyeoplim from east to west. This Sugumagi plays an important role in protection against a cold wind in winter and strong sunlight in summer and saves heating and cooling energy by controlling internal temperature and humidity.

4. The Activities Inside of Traditional Urban Forest

Traditional urban forests functioned as public open spaces as well where play, memorial services, meetings, etc. took place, therefore, they are frequently visited or well known by local people. Here, a place where people often visit or remember well plays an important role in distinguishing traditional urban forests from other forests around the city. That is, emergence of traditional urban forests relating with culture and life could be possible because reciprocal behaviors and

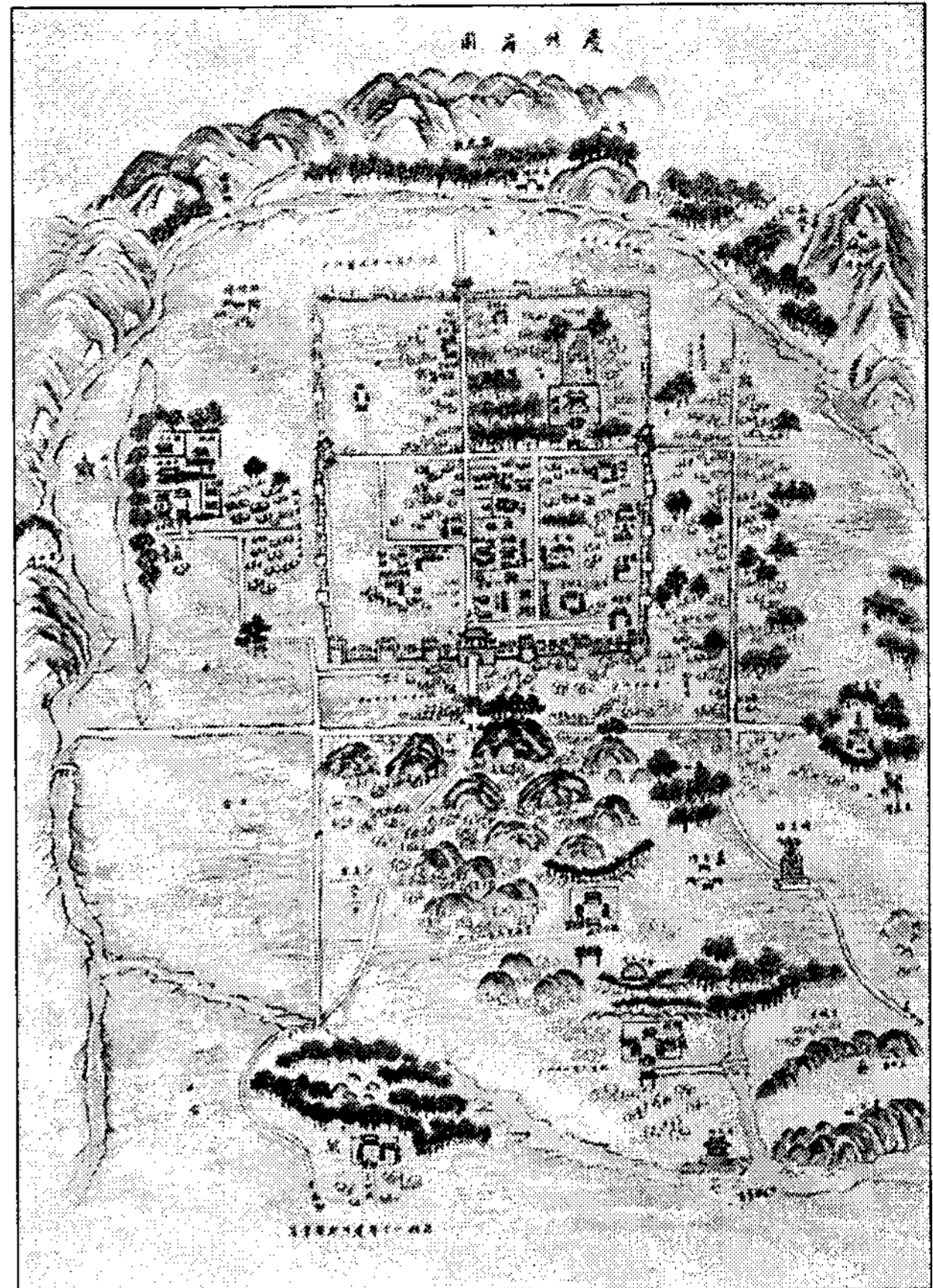


Figure. 1. An old map of Kyeongju

activities between human being and forests have been accumulated for a long time.

In Silla era Kyeongju urban forests usually appeared by the influence of people's activities. There are some forests Koyangsu, Limjeongsu, Jibuklim, Youlim, and Seobulyeoplim as a hunting ground, Youlim and Dongjeongsu as a recreation place, and Oangkasu as a ritual site.

III. Conclusion

Because the main facilities located on the central axis of traditional cities, the urban forest around them make their visual and symbolic sense of authority emphasizing. If the front and the flank of a traditional city are opened, urban forest should be built in order to fence off wind into it. Most of urban forests around main facilities have played the protection role against cold wind from northwest direction and prevention against fire. And urban forests were used to function as the comfortable place for people to relax like an urban park.

As a result, when considering three factors of meaning,

external appearance and activity, traditional urban forests do not have only one of three factors, but have two or more spatial factors. Also it is also possible to say that traditional urban forests have very high level of place-identity including interactions as well as three factors.

The traditional urban forest in Korea, its unique cultural product, is beautiful traditional urban park that stores long historical background, accepts various human activities like rest, play, exercise, etc. by being located in or around a city, and prevents natural disasters.

As stated above, the fact that a lot of meanings related with traditional urban forests are emerging proves that they are more interested places than other places around the city. On the contrary, these meanings played an important role in improving spatiality of traditional urban forests. However, meanings of traditional urban forests are regarded as just forgotten historical record because of dramatic changes in sense of values these days. Therefore, we should reflect on our stinginess in creating forests in cities and spatializing them, and follow the philosophy and sense of values of spatialization through discovering meanings related with past forests.

The Korean traditional urban forest has been served as a conspicuous visual element that enhances the sense of place in a city, because it locates in the center(administrative buildings and facilities) and enclosing boundaries(river banks, ridges, castle). So the forest can easily be a famous place in a city. This landscape structure with internal emphasis on the central location and enclosing boundaries enhances the identity of the place as the Korean traditional city.

People can feel that a city is intimate as 'here, not there' through improved their sense of belonging and unity, and internal intimacy since they live in an enclosure surrounded by traditional urban forests. Therefore, even though people leave the city, they feel an attachment for their native village as an impressive place. So similar places surrounded by forests are created around places where they currently live. For example, immigrants from other regions often create similar places to those in their native villages.

As a conclusion, planting traditional urban forests of the city are to accomplish the green network which links and divides urban region. It is one of the best ecological methods to construct friendly environmental city.

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