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# Pungsu(Fengshui) Research of Location and Space Layout of Lee Nam-Gyu's Traditional House

### Han, Jong-Koo<sup>\*</sup>

\* Corresponding author, Associate Professor, Dept. of Architecture and architectural Engineering, Chungwoon Univ. Incheon Campus, South Korea (jkhan@chungwoon.ac.kr)

### ABSTRACT

Purpose: Pungsu is can be seen as an ecological architectural science regarding native natural environment of east asia. Even though the language used in Pungsu is different from that of ecological architecture. Pungsu considered the surrounding environment of the traditional house by various Pungsu method for making and keeping more healthy life and sustainable environment. The research is for finding out how the surrounding natural environment was considered with Pungsu, a traditional ecological architectural science in case of site selection and planning house by the confucian scholar in late Joseon period. Method: Sudan Nam-Gyu Lee's traditional house of Yesan in the middle of korea is selected. The study is processed as follows. The site was analyzed with feature and flow of mountains expressed as dragon in chapter 2 and four important hills around the house are analyzed in chapter 3. Finally Pungsu applied in architectural space is analyzed in chapter 4. Result: we can see that the traditional house of Sudang Lee Nam-Gyu has been planned considering Pungsu in details to minimize the negative factors and utilize the positive factors of nature as much as possible thinking nearby natural environment as environmental factors that can affect the residents of the house through Pungsu

# 1. Introduction

Pungsu can be seen as an architectural plan method in ecological way considering natural environment unique in East Asia. It can be seen as a kind of traditional ecological architecture study to keep the species and carry on family line through prosperity of descendants keeping more healthy lives through architectural plan considering nearby environment where building is located in various ways although terms used in Pungsu are different from the ones used in ecological architecture today.<sup>1)</sup>

This research intends to examine how nearby natural environment was considered in building through Pungsu which is traditional ecological architecture in those times when scholars who are ruling class and scholars by then created traditional house through Pungsu research targeting traditional house of Sudang Lee Nam Kyu famous for having been a patriot and nobleman in late Joseon.

Sudang traditional house is located in 181-8 of Sanghangbangsan-no(Sanghangri), Daesul-myun, Yesan-gun, Chungchungnamdo and has been appointed as No. 281 important folklore cultural properties. Yesan is originally Osan-hyun of Baekje, but its name changed to Yesan in 2 years of Taejo in Goryu

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#### KEYW ORD

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after becoming a hyun including Imsung-gun, again, after being changed into Gosan in king Gyungduk, the 35th king of Sila. In 1917, Insung-myun was changed into Yesan-myun and it raised to Ub by implementation of Ub system on October 1st of 1940 controlling 2 ubs, 10 myuns, 175 dongris currently. Daesulmyun where the traditional house is located is at east side of Yesangun and forms a boundary with Gongju-si in its southeast, has Mt. Chunbang. Bongsu in east and typical agricultural area, hill areas, in northeast.

Let's study about Sudang Lee Nam Kyu. In his family, the character in Jingbirok written by Yu Sung Ryong that organized morals of japanese invasion, Ahgye Lee Sanhe served the prime minister where there was Japanese invasion in Korea and called a good writer in times of Sunjo because he was so good at writing being friends with Lee lee, Jung chul. Sudang is the 10th descendants of Ahgye and was in Nam party. He was the scholar who fostered many students including Shin Chae-Ho, professor in Seonggyunggwan after passing civil service literary examination and was a confusian scholar of aristocrat bureaucrat who grew to junior grade of second rank, Gasundaebu, in his position. Min jong-Sik, leader of loyal troops resistance to japan escaped to the house of Sudang here that was supporting them both materially and

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<sup>1)</sup> Han Jong Koo, Pungsu research in space layout and location of Yoon Jung 's traditional house, No. 5 of Volume 14 of the Journal of Korea Institute of Ecological Architecture and Environment, 2014, 81p

morally after being defeated by Japanese army in Hongju castle battle in September of 1905 and was trying to reboot the loyal troops when he was captured by Japanese army on November 11th. Sudang, who hid Min jong-Sik, was killed with his son by Japaneses in the end because he did not reveal the hideout of Min jong -Sik despite being tortured severely with his son, Lee Chung-Gu in the prison after being arrested in front of living room of this house after house was searched, surrounded by 100 Japaneses.<sup>2)</sup> It is the house that patriot spirit that died or suffered for the country continues including that of 4th Lee Jang-Won and 3th Lee Seung-Bok even afterwards.<sup>3)</sup>

This house was recorded to have been built in 1637 (15 years of Injo) after Mrs. Lee of Jeonju who was the wife of Hanrimgong Lee Gu chose the spot for the house on her way to Ahgye Lee san he's grave, who was her grandfather-in-law<sup>4</sup>) then the fact that it was repaired extensively in 1846 (12 of Hunjong) was confirmed through Sangryang document in 1985.

# 2. Location analysis through dragon(龍勢論)

We have to analyze from which mountain range the location came from for analysis of Yong(龍) represented as a dragon first when we see the location in Pungsu method.<sup>5</sup>) The theory that sees the dragon like this is called dragon form theory(龍勢論). It is the one utilized in understanding the flow of energy from adjacent mountains to pull the good energy into the house understanding the flow of mountain or mountain range which keep changing.

The dragon in the traditional house of Sudang can be seen from Mt. Sojo(小祖山) that corresponds to the grandfather mountain of Hyunmubong, the hind hill. Following saying about Mt. Sojo is in Injasuji(人子須知) of Pungsu book of Ming dynasty of china. 'It is natural to seek the kind of dragon when you look for it but the kind of Taejo is nothing but real. It is quite scary and that is why Sojo cannot be excluded since its history and value should be examined.'6) This means that it is important to discuss Mt. Sojo which is grandfather mountain since there is a difficulty confirming discussion about Sojo exactly although it is very needed for it becomes the basic in finding the dragon. We would like to analyze Mt. Sojo going against the dragon entering the



Fig 1. Flow of Dragon Vein(龍脈) and Four God Hill(四神砂)

traditional house considering this.

Mt. Sojo of the traditional house is 535m Mt. Bongsu. Mt. Bongsu is the mountain named so because it looks like the head of phoenix. We can see the flow of mountain and nearby scenes leading to Hynmubong to Mt. Sojo up in Mt.. Jo(朝山), the front mountain located in front of the house. Mt. Sojo looks like Fire element shape(火體) Yeomjeongseong(廉貞星) in its hawk mountaintop helping the highest peak and is similar to Mt. Taejo with great power. Among them, 5th star of the Dipper is regarded as the most important one, its vigor is magnificent, a mystery since a rock mountain is high up in the sky<sup>7)</sup> and Mt. Bongsu is just like Taejo.

One big pulse from the head of phoenix corresponding to the highest top of Mt. Bongsu descends in stable, powerful form forming a spread form of dragon highly developed increasing and decreasing after becoming a dragon. And it reaches Galmak hill of Hwasan river corresponding to the entrance of the town of traditional house in the west. One pulse goes up after being separated at the rear end of Lee Nam-Gyu's traditional house before the Galmak hill showing alive vigor moving to the right and left with descending and ascending power. Then it descend with its head making a shadow over the traditional house raising the Hyunmubong about 170m in its height with round Venus.

# 3. Analysis of adjacent mountains represented as Sa(砂, Sands)

Sa(砂) refers to the mountain around the Hyeol(穴, an auspicious spot).<sup>8)</sup> Among this, Cheongyong(青龍, Blue Dragon or Azure Dragon), Baekho(白虎, White Tiger), Jujak(朱雀, Red Bird), Hyunmu(玄武, Black Turtle or Sombre Warrior) are called Four God Hills(四神砂). Hyeol(the auspicious spot, 穴) refer to residing space in the point that primitive men lived in the cave as illuminated by Chinese traditional Punsu and site selection book written by Iljung and 2 others describing the methods to choose the location for house and Pungsu of traditional Chinese and is what Hyeol jointed since the energy of dragon represented as mountain

<sup>2)</sup> Kim ki sang, Hongju loyal troops war and academics of Sudang Lee nam kyu, Society and thoughts of Josun, 1998

Recently, Lee Mun Won keeps the traditional house after rertiring from President of Independence memorial hall, a brother of Lee Jang Won.

<sup>4)</sup> Park Man Sik and others(1975), Lee Wang Gi(1999) writes the basis of building year of the traditional house as that of Wansan Lee family but there is no contents about it as I check and I confirmed that it was in Lee's genealogy of Hansan through interview with Lee Mun Won.

Simryung 尋龍 Seonsimjoyujong 先尋祖與宗 Gotakjangno 辜託長老, Location safety guide edited 改良立地眼全書, Sanghae gangdong suguk, 1911,

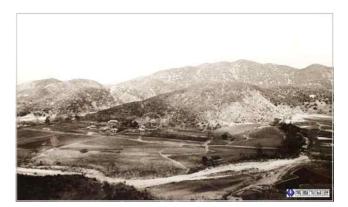
<sup>6)</sup> Su Sun-Gye, Su Sun-Seung, Kim Dong Gyu translated, Injasuji, Myungmundang, 2003, 161p

<sup>7)</sup> Jung Kyung Yun, Jungtonng Pungsu, Pyeongdan, 2003, 175p

<sup>8)</sup> Su Sun-Kye, Su Sun-Sul, books earlier, 2003, 624p

descended.<sup>9)</sup> The flow of energy flowing through the mountain range represented as dragon range stops not being able to move farther when it meets water, and it becomes the lucky spot if this energy is not spreaded by mountains around it. Mountains around it are what play an important role here represented as Sa. <sup>10</sup>)

First, let's look for the dragon and the tiger (refers to left Blue Dragon and White Tiger) at right and left side of the traditional house. Blue Dragon and White Tiger are descending to the side of house but stops a while later after passing it thus the house is not surrounded enough. Outside of the dragon and the tiger is outer Blue Dragon and White Tiger. But inner Blue dragon is rather far by about 500m in a straight line while outer White Dragon is near relatively but unable to surround it enough. (Refer to Figure 4) It is our Pungsu to artificially complement through prescription called Bibo when there is a deficiency although a certain amount is furnished. This house as well is shown to have Bibo prescription in Punsu in followings. Before Bangsan reservoir made in late 1970s is installed from 80m in the east of the house, there was Daegok stream flowing around the house largely at the rear end of current reservoir bank. Pictures in 1960s show trees planted in the direction of the house at stream.<sup>11)</sup> It is considered that Bibo forest complements the fact that outer blue dragon is too far away not being able to shield the house. Currently, a long forest that trespasses the farm field has been created in the inner side of outer White Tiger and this is seen as Bibo of outer White Tiger with same function, too. Likewise, trees complements what is deficient in right and left dragon and tiger of Sudang traditional house. Su Yu-gu, Silhak scholar in late Joseon, explained as follows about the land features regarded important for lot for a house in executive economics paper. 'Water flowing at the left side of the house is called the blue dragon, the big road at right side is called the white dragon and the pond inside the house is black dragon, these features are regarded the most important'. 12) Pictures in 1960s show the image of Daegok stream descending to the front of house while flowing to the south to rear end of the east of Hyunmubong. This Blue Dragon flowing at left side might have showed the image that it surrounds the house in every direction when first created. Besides, from black dragon, the pond inside the house, referring to the testimony that it was created in front of current living room, we can see that conditions of lucky features such as surrounding blue dragon and black dragon's presence are met in many parts.



Source : The Independence Hall of Korea Fig 2. Distant View of the House(Circle) of the 1960 s

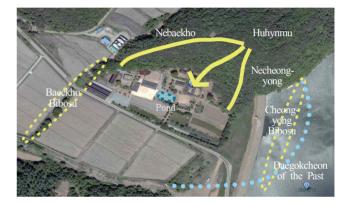


Fig 3. Analysis of Four God Hill(四神砂) and Bibo(裨補)

Next, let's examine Red Bird in front and Black Turtle at back of mountain. The black Turtle sits quietly in height of 150m, not that high, and looks like a phoenix about to fly after resting for a while in round Venus form(金星體). That phoenix looks like it is going to fly to the east where Mt. Sojo is, its ancestors.



Fig 4. Phoenix(鳳凰) shaped Hyunmu(Black Tutle, 玄武)

Red Bird is near to every mountain known in front of Hyeols and the small and near one is  $Ansan(\Xi \sqcup)$  or Peace Mountain, the high and further one is  $Josan(朝 \sqcup)$  or Facing Mountain.<sup>13)</sup> They are

<sup>9)</sup> 一丁 外, 中國古代風水與建築選址, 中國 河北科學技術出版社, 1994, Kim Du Kyu, Pungsu dictional, 2005, 585p re-referrence

<sup>10)</sup> The reason that we use the term mountains originated from sand is because it is easy to get from river of water and proper to test making the shape of maountain in various forms in 3 dimensions under the situations that paper was rare when educating people about Pungsu. In actuality, I have seen the people using sand while teaching Punsu years ago.

Refer to testimony of janitors residing in the house next to Sudang memorial hall and pictures of nearby house in 1960s

<sup>12)</sup> Su Yu Gu, Translated by An Dae Hui, How to build a house by old people in forestry economic paper- Build a house in the forest, Dolbegae, 2005, 110p



Fig 5. Jusak(Vermilion Bird, 朱雀)

called Joan(朝案) combined together. Joan stands at the back of wide field in front of the house, and mountains 200m in its height including Silobong line up horizontally in front. These are called Hwingjo(橫朝, horizontal facing mountains). Injasuji mentions followings about Hwingjo. 'Horizons open the curtains and it refers to the state that both sides and two couples in comparison have the same image of polite whisper of pulling town. Facing mountain is originally the best in its special form but better if horizons become mornings, head raises responding mountaintop and its body greets bowing'.14) The relation between Josan or facing mountain in front and black Turtle at back of the auspicious spot(穴) of the house can be seen that of guest and host. Here, what is good in them is expressed as follows. 'What I feel compassionate is just as same as guest seeing the host, the ruler seeing the father, the wife driving the husband out. '15). Further, the height of Joan (mountain) is an important factor as well. If it is too low, people say it is suppressed because it threatening and if it is too low, they worry because it can be void.16) The Joan(朝案) here is Hwingjo (橫朝, horizontal facing mountains) spreaded long, horizontally and forms Venus with its peak flat in the Principle of Five Elements(五行論) and the rather high height is a flaw although it seems lucky to humbly prostrate towards the Hyeol(穴) lining up.

Outer Blue Dragon resembles the back of horse because its one side is low and the other is high. 'What looks like the back of horse is called Cheonma or sky horse. Since there is a lifespan of sky, it raises up high adhering to the outer sky being clear and excellent, and becomes more valuable if located in south and southwest.'<sup>17</sup> (Refer to Figure 7 & 8. Left side) Besides, dragon pulse powerfully descending from Mt. Sojo seems to spurt its pulse that leads to

14) Su Sun Kye, Su Sun Sul, books earlier, 2003, 644p

Hyunmubong from rear direction of Hyunmubong reaching outer White Dragon of the house after passing the east far. Here, rising mountaintop and others around it form three mountaintops in a series and the look just resembles the shape of piedra that civil and military officials used to wear on head in the past. This kind of mountain is called Gwanmosa or Crown Wearing Mountain and from the saying that 'If it is soil mountain, civil officials come and stone, military officials come,' there is a high possibility of civil officials since it is in sand. (Refer to right Figure 7 & 8)



Fig 6. Cheonmasa(天馬砂, Sky Horse Hills) and Gwanmosa(官帽砂, Crown Wearing Hills)



Fig 7. Cheonmasa(天馬砂) Source: Inzasuzi, p.792 & Gwanmosa(官帽砂) Source:Jeongtongpungsujiri, p.475

# 4. Space layout and Pungsu of the house

The house has its Saranchae(a house for the men and serving guest) at right (west) and Anchae(a house for the women) at left (east) horizontally from the garden. The Sarangchae is straight form and the Anchae is opened square form since there is a space before going to Anchae, straight in form. Saranchae and Anchae have a form of chinese letter Ya 也 using as a particle in classical

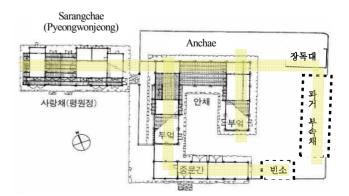


Fig 8. Chinese letter Ya (也) shaped Lay-out Plan

<sup>13)</sup> Su Sun Kye, Su Sun Sul, books earlier,2003, 638p

<sup>15)</sup> Su Sun Kye, Su Sun Sul, books earlier, 2003, 643p

<sup>16)</sup> Elder asking flaws 辜託長老, Safety guide of location edited 改良入地眼全書, Dongjun mansu hwainchon 東田萬樹華仁村, Sanghae gangdong suguk, 1911, gwon5sabum4b項, Jo in Chul, Pungsu in our age, folklore institute, 2008, 226p re-reference

<sup>17)</sup> Injasuji, books eariler, 2003,792p

Chinese for connection. (Refer to Figure 11) The form of the letter Ya has a meaning that it ends the sentence by being inserted thus it is regarded as 'Great writer will be born'<sup>18</sup>) or 'all the questions of tests are filled; genitals of the female' meaning many births. We can see this as the lucky form with wishes about descendants who wanted to continue the honor and family line, great interest of classical scholar in Joseon.

### 4.1. Sarangchae space

The Sarangchae space is a structure of 5 ryang(梁, beam), 2 goju(高柱, High Collum) using rectangular shape column on square cornerstone well trimmed after creating high stone mass in 1m height, with rough stone. The front has 6 Gan(間, spaces), side has 2 Gan(間, spaces) and the front has veranda. It is a special room big in its size as a Sarangchae space in this region and its scene is very brave with its front having 6 Gan like Lee Lo dang(二老堂) of Unhyun palace, a special house . One Gan at left and two Gan at right form Twebang(退房), receding room closed by blocking spaces. 'Receding room acts as a shelter for prevention against cold and safety and is a space where guard role is performed as well as being preparation space for servants to care.'<sup>19</sup>).

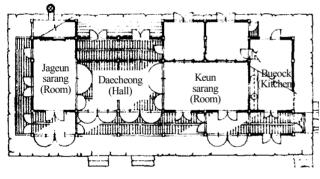


Fig 9. Floor Plan of Sarangchae

The room is composed of small bedroom(Jageun sarang), hall(Daecheong), big bedroom(Keun sarang) and kitchen(Bueoc) from the left (West). Strangely, there is a kitchen at the right side of bedroom. But it can be just to be the room to ignite the fire mainly since there is not wood-burning stove. It has attic above. A small living room had a furnace at the half size of space and there was a trace that it was used as a saucer <sup>20</sup>), but it became a strange structure that fire cannot be lit even with chimney since it was blocked by wall. Sarang Daecheong, Bedroom hall with wooden

floor is 4-Gan hall, and added 7 Chon more than that of floor in front installing the floor over the space between pillars is installed on one space in size of half space at back (north) unlike it is generally composed of well floor with same height. It is not easy to find examples that hall is made with height difference and the reason of it is not clear. Annex building is thought to be built to serve the manners heightening the level depending on the position upon interaction and utilized as a place for communication of many people and teachers educated students on its high place when used as village school in the past.<sup>21</sup>) High rear floor has hanji on its door, not on panel door just like ordinary floor and veranda is added at back of it. Seeing that a crude window with a small frame is installed although a wooden door can have visual blockage as well as wind blockage it seems it is to facilitate the relation with back garden and in actuality, seeing that there are two flower garden with floor at the back of Sarangchae, it seems that it considered its view to back garden from here.

Two units of hot floor is inside and two boxes are made to connected box and at the back of is sliding door. By having the door divided into 4 portions at front of rear floor one box front of right bedroom, one could secretly move to any room in Sarangchae entering the door beside the kitchen without being seen. A wooden door is at east end of earth floor, its upper door frame gives female sensation with arch form and sign board of Blue left, life in mountain hang.

Outer space of Sarangchae is opened without fence and has a yard in front. But the environment that house is overexposed was not preferred traditionally. Although house does not have fences, it has devices acting as White Tiger and Blue Dragon symbolic playing boundary role of space. The garden and trees are those. When we consider Pungsu sees even a little ground as a mountain, creating the garden in front of the Sarangchae and trees property can be seen as White Tiger and Blue Dragon that complement overexposed hall limiting space. Besides, it helps the ramp enter the house in curved ways rather than in straight through this. The road is the passage that flows of people and things come and go occur. This seems similar to water that comes and goes. Traditionally, water approaching the house in a straight line in the relation of water and house is seen bad being referred to as 'shot' in a Pungsu book, Sulsimbu. Shot refers to the image of water entering the good site in front of Hyeols where energy of Pungsu is collected striking it or the shape that shots the Blue Dragon and White Tiger at left and right, and is not seen good if water comes straight to the house. Among them, a cedar is planted with a name 'Oryn tree, tree of five values' in the garden that plays a role of White Tiger in the spot where it is easy to view from the hall. 5

<sup>18)</sup> Kim Kwang Un, Pungsu, Daewonsa, 1993, 114p

Song Myung-Hui, Lighting system of space layout and building factors of Unhyun palace, Master's thesis in Korean national university of arts, 2013

<sup>20)</sup> Park Man Sik, Lee Jong Yun, Lee Dal Hun, houses in Chungchung region - finances, targeting Gotaek Ub of Hwaduk, Baekje cultural research institute, 1521p, Lee Dal Yun, Research on patterns of annex building in Chungnam region, Master's thesis in Chungnam university, 1980, 21p, refer to floor plan

<sup>21)</sup> Testimony of janitor

values refer to 5 practical virtues regarded important in Confuscian! We can see the thoughtful intention that we should bear 5 virtues in mind as a scholar. Besides, it complements the flaws that it is opened and Tiger, Dragon at both sides do not surround it enough and like any other traditional house in Chungchungdo, a pond was created to use it as water for fire upon fire occurrence.



Fig 10. Pungsu Setting of Sanrang Madang(yard)

### 4.2. Anchae space

The Anchae is shaped as an opened square in a nut since the door is located in front with its wings at both sides centering on 6 Gan(a boxes space made of 4 column) of hall. West wing of the main building is composed of 1.5 Gan of shrine room, 2 Gan of floor room(Andaecheong), the opposite room and 2 Gan of kitchen(Buoeck) from the back (north). The opposite east wing is composed of upper room, two Gan of main room(Anbang) and kitchen(Buoeck). West side protrudes long in front (south) since it has one more Gan and the east wing makes the connection to east Madang(yard) and east small gate easy because of it. Originally, east Madang had one more annex building but it is not there now, only newly made small gate and blank yard are there.

What's unusual in the Anchae is the location of main room and shrine room. Family manner(家禮) by Juja(朱子) is the book that regulated examples that scholars should keep. In Chungchung region, homeland of manner study, many scholars including Kim Jang-Seng published commentary about manners and books on manners such as Collection of family manners(家禮輯覽), Basic flow of family manners(家禮原流) largely affected the pattern and allocation of houses as a practical space of manners.<sup>22)</sup> After middle of 17th century, family shrine was very important object that keeps the ancestral tablet of ancestors in gentry house at least.

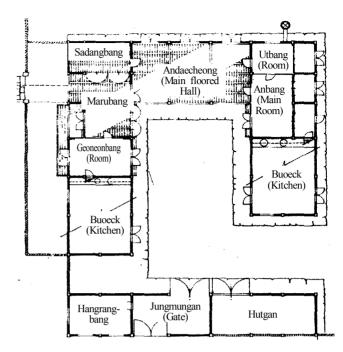


Fig 11. Floor Plan of Anchae

According to family manners by Juja, family shrine was first built when building the house and the location should be east side of Anchae. <sup>23</sup> However, sometimes it was not at east side depending on situations. The shrine is located at west of the room in case of this house. Besides, shrine room which has a function of shrine is in Ancahe without extra building. This shrine room actually saved ancestor tablets until 4th family tree and portrait of Agye Lee San-He in the past. Next one we should focus is the location of Anbang(main room). This house has its Anbang located in the left side while many traditional house has it in the right of Daecheong(Main floored hall) when viewed from a hall corresponding to the Hyeol, auspicious spot. Why is that?

As mentioned earlier, this house got its site while Mrs. Lee of Jeonju was visiting the grave of grandfather-in-law Lee San He accidentally. However, it seems that shrine room was not built for some reasons although it can't be checked since there is no accurate record. It seems that the main room was built without considering shrine room from the start if we take a look in the land. Because, it can only be built under the mountain of the east when the main room is at lower of the west than now. But they have sought other ways since the main room is at current location without considering the shrine room. They couldn't have ignored the duty to keep ancestors. Next, then, is the question where to have the shrine space. In many korean buildings, shrine space is sometimes secured in Daechung, main floored hall space of the Anchae which is the center. Even the house of Sung Jung-Gyeong founded in 25 years of Seonjo (1825) in Asan Dogomyun nearby did not have

<sup>22)</sup> Kim Ki-Ju, Traditional house culture in Chungchung area, Journal of th Korean housing association No. 1 of volume, 2009, 14p

<sup>23)</sup> Kim Dong Uk, History of Korean Architecture, Kimundan, 2007, 283p

shrine space additionally but connected one room that usually Anbang, main room is at right side when viewed from the Daecheong and 1 Gan of the Daecheong to use it for a rituals, is similar to this. <sup>24</sup>) Dogomyun and Daesulmyun is a neighborhood. They are far from each other by only 30 ri(12Km) and referring to the testimony of Lee Mun-Won that Mrs. Lee of Jeonju once lived under the Unju temple near persimmon of Sijeonri where Sung Jung-Gyung's house was located in 160125), there might have been some relations between those houses despite the difference in built years. Sudang traditional house as well keeps the portrait of Agye in upper by decorating the northest room of west wing next to the Daechung(hall) as the shrine room and has a shrine room for 4th man\ service below. And the wife used the opposite room from the hall as the Anbang(main room). In these points, it is considered that west side of hall of main room was thought to be superior room when there was no additional shrine like their houses. And west wing where shrine is located is gambrel roof leveling the quality of roof and the east wing where the Anbang(main room) is balances the quality with its gambrel roof as well.

Now let's go to the door.

The gate is made so that inside cannot be seen clearly from outside for visual privacy of Anchae(main building), space for female, by having a wall. From Daecheong(hall) of main room, outside is not seen at all. This structure is the land obstructing the view of the mouth of a river that makes vigor of Hyeol of hall in the main building stay longer in main yard, not easily going out



through the gate.<sup>26)</sup> Unlike other houses Chungchungdo in that only install the door of the gate outside usually, it strengthens its safety building it for the main role of female by putting doors both inside and outside. On the other hand, the gate where energy is from outside comes in at the same time being the spot where energy inside can go

Fig 12. Noble sumit shape Ansan(facing mountain) view from Jungmoongan (gate)

24) Refer to spring periodics of Hanok Munhwa(Korean Traditional house culture), Traditional house of Sung Jung-Gyeong in Asan, Hang Jong-Koo for more details.25) Sijeonri got its name from persimmon and because there were many fields for it.26) Han Jong Gu, Thesis eariler, 2014, 85p out. Inner energy should leak at minimum with the wall, outer good energy should come in softly. Faching mountain that line up horizontally in front is seen as high, has a image of a bridge to God that only god in the sky can step on by the looks of Mars and Jupiter at both sides of Mercury supporting it from the view of outer gate and it forms a shape of flawless mountain that leads to God with summits being seen as so like that of Jupiter which sits quietly in its front. This shape reaches high position when young and does not

covet properties even if loved by the king. And it is a lucky shape that makes one's name famous respecting the honor and integrity. <sup>27)</sup> This house points to noble summit as if it wishes a noble character who does not covet properties by pulling the energy inside the house.



Fig 13. Seongyosangguiin(仙 橋上貴人) Source: Inzasuzi, 2003, p.732

# 5. Conclusion

This research examined how Confuscian scholars built the house considering surrounding natural environment through Pungsu. Ecological architectural study in tradition at that time by considering it targeting the traditional house of Sudang Lee Nam-Gyu who is famous for being a patriot and in an elite class in late Joseon. Followings are major research results.

First, one range of main summit comes down to the house after forming Hyunmubong of round Venus and being separated at the rear end of the house before going to Galmak hill while going to the west setting Mt. Bongsu that just resembles Mt. Taejo as Mt. Sojo.

Second, although inner Blue Dragon and outer White Tiger come down to the side of the house, they do not wrap it enough. Thus what is deficient is complemented by trees by creating a garden inside the White Dragon which is in the west and Daegok riverside of Bangsan reservoir now in the east of the house.

Third, Black Tutle resembles a phoenix about to fly after resting a while as a round Venus. Facing mountain is standing horizontal and Jupiter in five planets(or Wood element in the Principle of Five Elements), its high height is rather a flaw although it is seen lucky leading to the Hyeol, an auspicious spot.

Fourth, outer Blue Dragon has a shape of Cheonma(sky horse, Pegasus) and summits of rear Hyunmubong of the house has an image of Gwanmosa(crown-wearing hills).

Fifth, Sarangchae in the right (west), Anchae in the left (east) are located horizontally from the garden forming the shape of Ya,  $\pm$  a particle in classical Chinese with the wish of descendants who

<sup>27)</sup> Refer to Injasuji, 732p and Jung Kyung Yun, traditional Pungsu, critics, 2003, 496p

wanted to carry on the family line and honor, the great interest of scholars in Joseon.

Sixth, outer space of the Sarangchae has a garden and trees created to paly a role of Blue Dragon and White Tiger symbolic as well as being a boundary between space despite the absence of the wall. Also, access road towards the house is curved, not straight through this.

Seventh, the Anchae space is seen to have been built without considering the family shrine space from ground analysis but shows the allocation of space that roof is raised to gambrel roof and the shrine room is provided in the space where usually the Anbang(main room) is to care for ancestral tablet according to the Confuscian law.

Eighth, the gate has inner and outer wall and doors were installed both inside and outside for security and outer gate was located to lead to Gwiinbong(a noble summit) of a bridge between God and noble man.

Through theses, we can see that the traditional house of Sudang Lee Nam-Gyu has been planned considering Pungsu in details to minimize the negative factors and utilize the positive factors of nature as much as possible thinking nearby natural environment as environmental factors that can affect the residents of the house through Pungsu which can be said to be ecological architectural study in tradition from allocation of each room, selection of location for the house to garden creation. Besides, we can see that shrine space is raised in its class for Confuscian manners ritual as nobleman in space allocation.

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