KOREAN ARCHITECTURE AND DWELLING CULTURE: PAST AND PRESENT

SOGU HONG

Hankuk University of Foreign Studies, E-mail: soguhong@hanmail.net, soguhong@daum.net

Abstract— This study discusses the striking differences between traditional and modern architecture and dwelling culture of Korea. Also it suggests how to integrate old and new tradition in the contemporary Korean architecture and dwelling culture.

Keywords- Architecture, Korean Apartment, Dwelling, Hanok, Tradition.

I. INTRODUCTION

This paper focuses on the striking contrast between traditional and modern architecture of Korea. The aim of this paper is to investigate the traditional and modern Korean architecture to answer a number of questions: Are the roles once played by the traditional architecture and dwelling still relevant? Does the old architectural elements still persist despite social changes and new ways of living? What caused the change of dwellings from Hanok to Apatu (apartment)? If social and formal concepts behind the traditional architecture have changed, what new forms and concepts have taken their place? Is there any kind of integration between old and new architecture? What is the problem of modern architecture and dwelling of Korea? What is the aesthetic difference between traditional and modern architecture?

Based on my research and personal experience, I will discuss the above-mentioned issues. Finally, I will discuss my opinion on how to solve the problems of contemporary architecture and dwelling of Korea.

II. BACKGROUND: CHARACTERISTICS OF TRADITIONAL ARCHITECTURE

A. A close relationship with nature

Korea was an agricultural society, and Koreans established a close relationship with its nature. The strong characteristics of traditional Korean architecture are its simpleness, spontaneity and respect for nature. According to Matosian, "Koreans readily accepted naturalistic philosophies and applied their own interpretation of them to architectural plans and placement of buildings" (Matosian 2012).

One of the most important elements in Korean architecture is the natural environment.

Matosian(2012) says that Korean traditional architecture did not resist the magnificence of the natural environment nor compete with it.

On the contrary, its traditional architectural design sought to attain an ideal harmony between their structures and their natural surroundings: "Efforts were made to avoid having man-made construction disrupt the natural contour of the terrain, thereby disrupting the highly revered harmony of nature" (Matosian 2012).

B. Reflecting Simple and frugal lifestyle

Traditional Korean architecture is relatively simple in scale or ornamentation. Rooms were of relatively small size and simply decorated. They are usually filled with not too many materials. Thus we can enjoy the beauty of emptiness, leaving "the room as less occupied as possible" (Jang-Gwon Kim 2009). This reflected the Confucian ideology of emphasising a simple and frugal lifestyle (Matosian 2012). The feeling of openness is important. The house in ' π ' shape has a open garden in the centre. From the garden we can see the wide-open sky and birds flying over it. In this way, *hanok* usually harmonize with the natural surroundings (Jang-Gwon Kim 2009).

C. Aesthetic aspects: Non-symmetrical and natural design

According to Matosian, most designs are nonsymmetrical, following the natural setting. The use of irregular stone and wood is combined with an aesthetically pleasing touch, being as natural as possible. The eco-friendly and environment-friendly concept already began in Korea few thousand years ago. Another strength of the *hanok* is its a ability to "contain light" (Jang-gwon Kim) Since doors and windows of Korean *hanok* are covered with Korean paper, *hanji*, the inside of the whole house is easily filled with full of direct and indirect lighting, "which creates diverse colors and beauty" (Jang-gwon Kim).

D. Scientific elements

Traditional architecture, especially *hanok* has many scientific elements. The stylobate - *choseak* (foundation stone) supports a row of wooden columns and protect wooden materials from humidity and insects. According to Jang-Gown Kim, because of "a difference in the meridian altitude of the winter solstice and the summer solstice, the varying lengths of the eves are intended to screen or allow in the light"(Jang-Gwon Kim 2009). During four seasons, it was important to make people stay warm and cool enough. In order to help to stay cool in the summer, *hanok* has a *daecheong*(main floored room) which is

a large space between the rooms and can be compared to living room nowadays. The floor of *daecheong* is made out of wood. Also the front and back windows of *daecheong* can be always open or very easy to open. Thus this place helps to keep the whole house stay cool by letting the air enter(Na-eum Kwon 2014).

Korean *hanok* has *ondol* which literally means "warming the stone" (Oxford Dictionary). *Ondol*, the heating system helps to heat the floor of the house. The fireplace of the kitchen is connected to the rooms. Once the fireplace is heated up, the heat is moved to the floor of other rooms. Then, the layer of stone in the floor gets heated(Na-eum Kwon 2014). Finally the warm air circulates and makes the room temperature go up. The *ondol* floor is designed to heat the room not only in winter, but also in summer to avoid moisture.

The floors and *ondols* of traditional *hanok* are constructed higher than ground level for keeping the house warm and dry. The main material for *ondol* is usually baked clay plastered with oiled rice paper. Rice paper used for windows and doors add aesthetic beauty to *hanok*. Also it is so functional that it keeps warmth inside and quickly dries during the rainy season.

III. THE FACTORS OF CHANGES: MODERNI-SATION, INDUSTRIALISATION AND URBA-NISATION

There has been several attempts to change Korean traditional architecture. First of all, during the Japanese occupation, Japanese colonial government attempts to replace Korean architecture with Japanese architectural traditions(Bartholomew 1993). According to Bartholomew, Japanese colonial government attempted to demolish structures of Korean Imperial palace and traditional Korean garden.

During the Korean war(1950-1953), many buildings were destroyed. Thus, after the war, the modernisation and the industrialisation of the nation, became the most important task that the Korean government should pursue. Since then, traditional buildings became marginalised and actively destroyed during Korea's rapid period of industrialisation. American models became popular for new Korean buildings. Most buildings tended to be built quickly with little regard for local identity. While urbanisation was occurring rapidly in Seoul, migrated workers needed their new homes in city. Because of urbanisation and industrialisation, while traditional hanok villages were gradually disappeared, hundreds of simple cheap apartments were constructed very fast. The following short history of apartment in Seoul shows us how many apartments have occupied everywhere in this city:

Seoul has been noted for its beautiful scenery comprised of surrounding mountains ... with the

historic villages, which have been built and thrived for hundreds of years. However, since its first construction of apartments in the 1930's, and after its rapid industrial expansion in the 1970's and 1980s, many historical and traditional parts of Seoul, including hanok houses and small alleys, were changed and erased by an exploding number of apartments built in Seoul. In only 30 years, apartments have occupied everywhere in Seoul, including mountain and river areas, and they have become Korea's representative residential housing type and a major element of cityscape ... The supply of apartments in Seoul has reached almost 1,381,252 units (the total area of the units is 117.41km2), and the length of total apartment is about 1/2 of the circumference of the earth(Chung Kee Lee).

IV. PROBLEMS OF MODERN DWELLING - APARTMENTS

A. Uniformity and Homogeneity

Apartments in South Korea used to be built in a uniform, linear arrangement using the basically same floor plan, stacking it vertically and horizontally (Chung Kee Lee). Korean apartment buildings are similar to a series of boxes. They look very simple and undecorated. Even though every building is slightly different in its hight, design and logo painting, it is true all apartments are homogeneous and repetitive shape of housing complexes. On the outside, there are open green fields and parking lots. This open space is possible because each unit is built vertically, not horizontally. On each floor of an apartment complex there are usually multiple units. Two or three, or sometimes more units share one elevator, hallway, stairway and electricity. Even the floor plan of each unit is just same in most cases. The following is the explanation about the Korea-

The following is the explanation about the Korea nized Apartment Design:

Every unit is designed for a nuclear family of 4 people. Two bedrooms for children are right in front of the entrance. The master bedroom for the parents is placed in the deepest room and has a separate bathroom. The living room is located in the center of the unit, integrating the other rooms. Balconies, which mostly face the south, provide extra sunshine and outdoor access. There might be little variation from this plan, but it is very rare. Considering that this is the result of a long period of adaptation, the main characteristic of a Korean apartment is the 'living room centered plan'. This is a reflection of the 'madang centered plan' of hanoks, or Korean traditional houses(Wonseok Jang 2014).

According to Wonseok Jang, the living room is the place where many family activities take place such as watching TV, ancestral rites, and receiving guests. It is also important to note that "in Korean culture the living room plays a role in reinforcing patriarchy. For example, when the whole family watches TV, the person who controls the remote is the one who controls the family" (Wonseok Jang).

I remember when I was traveling in Europe and North America, I saw a variety of dwellings that enriched the street with rhythmical elevation and diverse construction materials. But in Seoul, where I live, the streets are filled with homogeneous apartment buildings. After Korea became industrialised, the Korean apartment has become standardised. Consequently people's lives reflect this. Despite the complaint of a boring urban landscape, apartment complexes continue to contribute to the housing problem in Seoul(Wonseok Jang 2014).

B. Non-aesthetic and non-natural

The problem of uniformity and homogeneity also causes aesthetic issues. While *hanok* are harmonised with the natural surroundings, most apartments usually have small green fields and playgrounds for children. Disconnecting from natural surroundings, the modern apartment buildings concentrate their vertical elements, so that they look like outstanding tower in the middle of town.

CONCLUSIONS: NEW HORIZON FOR KO-REAN ARCHITECTURE - "INTEGRATING OLD AND NEW"

In order to provide varieties in design and form, Korean architects and designers try to create various floor plans and elevation types of apartment building. They even change the unit plans, deleting or adding balconies. Additionally, they provide different facilities, such as fitness rooms, community rooms, public gardens and others. As for interior amenities, apartment builders install a office den in the living room, a computer in the kitchen, an extra kitchen in the balcony, and even a small garden. Chung Kee Lee says that "some builders even install a space for a foot bath, hip bath, or lower-body bath"(Chung Kee Lee). Such changes has been possible to satisfy the widen consumers' demand. Nowadays apartment builders bring up and emphasise such words, as "wellbeing, health, nature", "royal, noble", "information, knowledge", "culture, art", "family, harmony" etc. These attempts may provide customers better dwelling condition. However, I believe, it will be more important toreinterpret and research our traditional architecture, and regenerate old natures in modern dwelling culture. Perhaps most interesting of all is the question of how the essential elements of *hanok* can be retained and adapted to create well-insulated, modern dwelling in Korea(Ben Jackson and Robert Koehler 2012). I hope we can unlock much of Korean traditional architecture from the past.

ACKNOWLEDGEMENT

This paper is supported by Hankuk University of Foreign Studies Research Fund 2015.

BIBLIOGRAPHY

- Bartholomew, Peter (1993) "Choson Dynasty Royal Compounds: Windows to a Lost Culture", in *Transactions: Royal Asiatic Society, Korea Branch* Vol. 68 (Seoul: RAS)
- [2] Jackson, Ben & Robert Koehler (2012) Korean Architecture: Breathing Nature. The Korean Foundation
- [3] Jang, Wonseok (Jan. 2, 2014) "Seoul and the Apartment Complex II: Form Follows Function" CityNet Blog. Web.<u>https://citynetmembers.wordpress.com/2014/01/02</u> /seoul-and-the-apartment-complex-ii-form-followsfunction/
- [4] Kwon, Na-um (Nov. 05, 2014) "Excellence of Hanok, Traditional Korean House." The Postech Times. <u>http://times.postech.ac.kr/news/articleView.html?idxno</u> =8053
- [5] Kim, Jang-Gwon (2009) "Hanok" HANSTYLE. Web. http://www.han-style.com/english/hanok/science.jsp
- [6] Lee, Chung Kee. "Apartment City Seoul". http://www.korean-
- pavilion.or.kr/10pavilion/pdf/artist3.pdf [7] Lee, Sang Hae (1991) Continuity and Consistency of
- the Traditional Courtyard House plan Korean Dwellings. *TDSR* No.1: 65-76.
- [8] Matosian, Marilyn. "Traditional Korean Architecure." <u>http://www.koreasociety.org/doc_view/154-traditional-korean-architecture-grades-6-8</u>
- [9] Pernice, Raffaele (10-12 December 2012) From "Hanoak" to "A-pa-tu". Korean Urbanism in the XXth Century. *Proceedings of EAAC 2012* Hong Kong.
