Cultural Identity of Korean Traditional Dwellings: A Comparative View in North-Eastern Asia

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1. Foreword

The huge tide of globalization, with rise of the modern industrial capitalism and the colonialism, has nearly faded out the cultural identities of the Third World. This identity crisis threw major repercussions on the study of traditional dwellings and settlements. A number of researchers made their efforts on the historical approaches to the physical environment within domain of their own cultures.

As Irwin Altman noted, however, an understanding of human behavior is not wholly achieved through the study of physical setting within one's own culture. It also requires that we identify similarities and differences among the various cultures. Accordingly, the cross-cultural perspective is getting ever more important in the study of cultural identity.

Korea, China and Japan have developed unique cultures of their own even in their closely inter-related course of history. But owing to the lack of cross-cultural studies on the dwellings and the settlements, their cultural identities are not fully investigated yet. I would like to present a comparative view on the traditional dwellings and the settlements of these three countries although it is based on my very limited knowledge. I hope that it will serve as a first small step for the future of the cross-cultural studies.

2. The living spaces of a dwelling

Basically, the traditional dwellings of Korea consist of three kinds of space. These spaces are characterized with their floor systems: the *Ondol*, the *Maru*, and the earth floor. The floor system of Korean dwelling is very significant for characterizing a space, because it designates level of floor, material or structure, heating system, public or private nature, and function of a space,

The living spaces of a dwelling are covered with either the *Ondol* or the *Maru*. Both the *Ondol* and the *Maru* floors are elevated from the ground level, as it differentiates the sacred, living space from the profane, ground space. The users take off their shoes to enter the living space.

Ondol is installed with slabs of stones, mud-plastered on top of it, under which run several funnels, enabling the heat transfer from the furnace to warm the floor. It is an efficient heating device for a long and cold Korean winter time. The furnace is installed outside of the space, and the surface of the Ondol is neatly covered with a

layer of brownish oiled paper and provide users with a clean and comfortable living surface. The *Ondol* spaces are usually assigned to the specific member(s) of the family for living and sleeping, while the *Maru* space serves as more public and open space.

The *Maru* designates a flooring structure covered with wood-plank and elevated from ground level. The void underneath allows air ventilation and protects the wooden floor from moisture. The *Maru* space is occasionally utilized for living in summer time while the *Ondol* for winter time. Both the *Ondol* and the *Maru* are suitable for the 'sitting life style' of Koreans.

In Chinese dwelling, the floor system is not so significant for characterizing a space. The floor of the Chinese dwelling, though diverse regionally, is usually installed with tile or brick on the ground floor, or with wood-plank on the upper floors. Chinese use Kang(坑) or bed for sleeping within a bedroom. Kang is very similar to Korean Ondol in its basic structure, however, it is elevated higher than Ondol. And Kang is installed in one part of a room, while the Ondol covers the whole space. It is similar to a bed in concept. This kind of floor system may come from the Chinese 'standing life style'. They do not take off shoes before entering a room, and they sit on chairs instead of on floors.

The unique floor system of Japanese dwelling may be said to be the *Tatami*. The *Tatami* designates a mat made of rushes with a fine layer woven of a grass called *Igusa*. More importantly, the *Tatami* serves as a floor module, for it is made in the standard size. It covers a whole room and its surface is used for sitting and sleeping. The Japanese share the 'sitting life style' with Koreans, and they also take off their shoes to enter a house. The Japanese do not employ the elaborate heating system such as the Korean *Ondol* or the Chinese *Kang*. They use the hearth instead. The *Tatami* provide them with comfortable living surface in Japanese summer climate which is more humid and warmer than in Korea.

Figure 1. Distinctive Features on Living Space and Floor

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Dimensions of	Korea	China	Japan
Contrast		•	
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Level of ground floor	elevated	ground level	elevated
Floor material	Ondol, Maru	tile, brick	Tatami
Heating system	Ondol	Kang	hearth
Sleeping space	Ondol	bed, <i>Kang</i>	Tatami

3. The Buildings and Layout of a Dwelling

The building layout in the traditional Korean dwelling is closely related to the traditional life style. Members of the literati class, who were basically confucian scholars, devoted themselves in study and cultivation of self after the Confucian

doctrines, in receiving visitors, and in the ritual ceremonies for their ancestors. A strong distinction existed between sexes and ages. The layout of buildings is mostly subject to the rigid regulations of Confucian ethics.

One of the characteristics of Korean dwellings, especially of the literati class, is in the spatial composition within the dwelling. The dwelling consists of several domains while each domain consists of buildings and a courtyard. These domains may either be connected with buildings or detached from one another.

The innermost domain is exclusively occupied by the female and the younger members of the family. Annexed to it, is the domain for the male householder and his guests. And alongside to the entrance gate, is the quarter for the servants. In some cases, a family shrine occupies an independent domain within the dwelling.

Cosmology is also related to the building layout. Relation between the building(-che) and the courtyard(-madang) represents the symbolism based on the age-old Yin-Yang(陰陽) theory which comprises a very intricate system of knowledge about men and the universe. The courtyard is regarded as the place where the Yang-chi(陽氣) from heaven is admitted, while the main building as the place ascending Yin-chi(陰氣) from earth. Building and courtyard are considered a inseparable unit in accordance with the Yin-Yang theory. Courtyard is kept free of plant to admit ample sunlight. Altogether planting in the courtyard is avoided except for the case of back yard or side yard.

The asymmetrical arrangement of building layout and consistency of single story building are also regarded as important characteristics of the Korean dwelling.

The courtyards are also the common elements in the traditional Chinese dwellings. The Siheyuan(四合院), the most notably traditional dwelling of Chinese, is formed around the rectangular courtyard. The buildings surrounding the courtyard are either single or double story units with narrow verandas to the front. The verandas serves as covered circuit for movement about the complex. The symmetrical placement of trees, walkways, and gateways complements the proportional balance of the Siheyuan itself.

The Courtyard is called Tiangjing(天#) in the Southern areas of China, meaning sky-well or light-well, which again seems to be connected to the Ming-tang(明 堂) concept of Feng-shui(風水) theory based on Yin-Yang theory.

The layouts of Chinese dwelling are characterized by simplicity and symmetry based on balance and axiality. Space is organized around a center, whether a courtyard or a central room; spaces are articulated to represent hierarchy and systematic interaction. The individual nature is essentially disregarded in the layout of a Chinese dwelling. Space is defined in term of family rather than personal need. Little consideration is given to privacy of individuals or even of parents. Futhermore, no sexual distinction of space seems to exists.

Although the dwelling types of Japan are as diverse as their owners and their periods, *Minka*(民家) may be regarded as the typical Japanese dwelling. *Minka* is basically a single building which contains all the living spaces within, and rarely has a courtyard comparable to the Korean *Madang* or the Chinese *Tianjing*. Instead of a courtyard, *Minka* sometimes has a well-kept garden, which may be more comparable

to the back-vard or the side-yard of Korea and/or China.

Japanese *Minka* may be similar in concept to the vernacular, single-building dwelling of the northern and mountainous area of Korea, except that it is usually multi storied while the latter is always single storied. It also includes the earth floor space in a building which might be regarded as inner courtyard.

The sexual distinction of space is not so strict. Irregularity, lack of formal canon, free and ambiguous spatial disposition are some of the characteristics of the Japanese dwellings.

Figure 2. Distinctive Features on Building and Layout

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Dimensions of Contrast	Korea ====================================	China	Japan
Building(s)	multiple	multiple connected	singular
Building arrangement	separated detached	centered	
Division of building	by sex, age	family	
Building story	single	single or double	single or double
Courtyard Layout form	indispensible asymmetrical	indispensible symmetrical	dispensible asymmetrical

4. The Forms and Shapes of Building

The forms and shapes of a traditional building also represent the cultural identities of their own. The traditional architectures of Korea have three parts articulation visually distinguished from one another in its material, form, and scale. These three parts of a building are the lower part, the middle part, and the upper part, respectively. They conform to the image and form of each cosmic dimension: the Earth, the Man and the Heaven.

The rectangular stones and horizontal designs of the lower part conform to the nature of $Yin(\cancel{E})$ principle and the image of the Earth. The personified designs of column, wall, and window in the middle part conform to the image of human body. Elements of a roof conform to the nature of $Yang(\cancel{E})$ principle and the circular image of the Heaven.

The three-part articulation may not be unique exclusively in Korea, because the cosmology based on *Yin-yang Wu-hsing*(陰陽五行) has been shared by the larger Asian society throughout the history. The traditional Chinese and Japanese architectures may likely share similar concepts of design.

However, it can be easily seen that the physical proportion of three parts is not the same. Chinese architecture tends to exaggerate the middle part, while Japanese architecture tends to exaggerate the upper part, for example.

The lower part of Korean architecture is higher than in other countries. Mostly it is constructed in stone structure, while Japanese architecture uses wooden structure.

Structural members of the Korean middle part are even thicker than Chinese or Japanese. Japanese architecture seems to have the most economized structure of all. The ornamentation of the middle part in Chinese architecture tend to be delicate, while that of Japanese architecture is very simple. The sharply curved roof line of Chinese architecture may differ from the straight line of Japanese roofs. The Korean architecture is well known for its gently curving roof lines.

This and other differences in the articulation of various design elements may serve to give distinctive identities to architectures of each country, notwithstanding the common natures due to the shared cosmology or tradition.

Figure 3. Distinctive Features on Building Form

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Dimensions of Contrast	Korea	China	Japan
The lower part (structure)	higher	lower	lower
	stone structure	stone structure	wooden structure
The middle part (ornamentation) (timber frame)	lower	higher	lower
	rather simple	decorative	simple
	thicker	moderate	thinner
The upper part	equal to	lower than	higher than
	the middle part	the middle part	the middle part
Roof line	slightly curved	sharply curved	straight

5. Conclusion

We just looked around the cultural identities and diversities of the dwelling in North-Eastern countries of Asia. It covered only a small part of their diversities viewed from the comparative analysis. We seem to need more knowledges about the neighboring cultures.

As many researchers mentioned, the cultural identities concerning to dwelling design are deeply related to the ecological environment, the cosmology and value system, and the life style. But I would say more importantly that it depends on how they deal with such factors to their dwelling design. That is why we should pay attention to the neighboring cultures.

Comparative views on the diverse cultures, I believe, will surely open a new horizon in studying cultures of our own and of others. I hope this conference will contribute in expanding our ethnocentric knowledges on other cultures. And this approach will certainly be the first step for our cooperation for the 21th century which is just a few years ahead of us.

Biography

Kang, Young Hwan Born in 1953

Hold a Master and Ph D. Department of Architecture, Seoul National University 1983 – present: Professor, Chairman (from 1998), School of Architecture, University of Ulsan

1992 – 1993: Visiting Professor, School of Architecture, University of Virginia 1987 to present: A Committee Member, Central Board for National Construction Technology

1994 to present: A Committee Member, Provincial Board of Cultural Property Published Books: History of Korean Dwellings, Kimundang Co., 1991. 9

Meaning of Dwelling Culture in Korea, Ungjin Co., 1992. 10

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