Indigenous East Asian Settlements

Spatial Organizations of Korean Clan Villages

The clan village type in Korea is one of the few types of traditional, archetypal settlements that have survived the pressure of so-called 'modernization' since the 1960's. Developed over the course of centuries, the clan villages hold many valuable lessons for planning and designing residential site, notably from an 'environmentally friendly' perspective - a topic of major concern today among many disciplines, including architecture.

The following is one result of an ongoing research conducted by the author with the objective of clarifying environmental friendliness in traditional East Asian settlements. The study is based on field surveys of traditional Korean clan villages that sustain original dwelling spaces. The clan village that became prevalent in the latter half of Joseon dynasty shows the representative aspects of the traditional Korean settlement. Its basic industry has been farming and it possesses a clear spatial order based on the hierarchical relationship of villagers, who mostly belong to the same clan. Such villages were typically laid out on sites that fulfilled the requirements of 'a mountain in the rear and water in front'.

TERRITORY

A Korean clan village generally has the form of a nucleated village, with a strong physical and psychological territoriality. The territoriality may be expressed in terms of the way in which the entrance and the boundary of the territory are defined. The clan village is typically located at a site with three sides enclosed. Traditionally, mountain ridges naturally define the three boundaries of the settlement. The front of the settlement is delineated with an entrance, roads, and waterways, so that the boundary between the housing area and farmland is clearly visible and hence, the territory of a clan village is framed.
SPATIAL ORDER
A clan village is generally approached sequentially from the settlement entrance to the housing area, that is the settlement proper. Topographically, the settlement entrance corresponds to the lowest point. The location of the settlement entrance closely corresponds to the overall direction of the settlement since the houses of the settlement are often laid out facing the entrance. The settlement entrance is usually at the junction of the road running outside the village and the road leading out from the village.

In the front part of a Korean clan village generally is a jeongja and a pond. Around the pond, at the central place of settlement, are usually planted tall trees. The trees along with the jeongja create a landmark that is recognized from all points of the settlement. This area is characterized as a social space mainly used by men in traditional society. It is often the center of daily activities in the settlement; the pond functions as a medium to encourage social contacts among villagers. Such daily contacts contribute the sense of community of the villagers.

On the other hand, the rear part of the housing area is defined as a ceremional space, where a family graveyard, an ancestor worship house, and an ancestral shrine are all grouped. (Fig. 2).

CIRCULATION
The framework of a clan village is a circulation system, consisting of a hierarchical road system comprising of main roads and sub-roads. The main road, an axis running from the settlement entrance to the rear edge of the housing area, links the important components of the settlements. It often forms the boundary of the housing area or acts as the settlement's central axis. In the former case, the main waterway of the settlement runs along the main road. In general, the direction of a main road influences the orientation of the whole settlement space and the layout of the spatial elements.

Sub-roads usually branch out from the main road to provide access to individual lots. Shaped like a ring or a cul-de-sac, they are found to terminate at homes of the villagers. The drainage system often runs alongside the sub-roads.

WATER SYSTEM
The water system of a Korean clan village generally consists of wells as points, waterways as lines, and ponds as planes.

In many Korean clan villages, the main waterway, along with the main road, tends to be the boundary of the housing area. The edges of the water spaces are usually heavily planted with greenery, and hence these water spaces are found to be ecologically rich.

Traditionally, the communal wells that are often found in Korean clan villages, function as social places for women. The wells often influence the spatial and social organization of settlements in that the houses around a well are grouped into a ban. However, communal wells and wash places are losing their importance as the new water supply systems installed recently pipe potable water directly to individual homes. Accordingly, the social interaction among women at water spaces is diminishing.

A pond, a static water space and easily supplied with water, since it is the lowest point topographically in the village, is generally placed in the front of the jeongja, a central facility in the Korean clan village. Exceptionally in Gang-gol, the jeongja is not closely located to the ponds. When linked, the jeongja and the pond function as a medium to encourage social contacts among villagers. Such daily contacts contribute of sense of community to the villagers. In this way, the pond is not only useful environmentally, but also meaningful as an indispensable element for the central space of the settlement.

WONTUH VILLAGE
Wonju village is regarded as a typical of Korean clan village settlements and demonstrates key features that make up a typical clan village type. The settlement is composed of spatial elements such as roads, houses, and communal facilities that have a structural relationship with one another and to the whole settlement space.

The main road of Wonju is L-shaped. At the place where the road divides stand a jeongja called Bangcho-jeong, two monuments for virtuous women, and a grocery store. In front of the Bangcho-jeong is a pond with two circular islands. The jeongja, which was the only two-story building in this village till the 1970's, has always been a landmark of the village. The circulation system of Wonju means that residents leaving or entering the village have to pass by the Bangcho-jeong, encouraging social interaction around the jeongja; a careful use of an architectural device that promotes a community feeling between villagers and a watchfulness over outsiders. The sub-roads of Wonju are of the cul-de-sac type and terminate at the villagers' homes.
With reference to the drainage, the drainage for sewage and rainwater are constructed along sub-roads in Wontuh. Just as sub-roads are linked to a main road, drainage ditches are linked to a main waterway. Parts of the drainage of settlements are linked to the aforementioned pond and occasionally the village waterways, but this varies with each village. Scientific experiments conducted in June 2002 verified the ability of the water system of Wontuh village to naturally purify sewage.

CONCLUSION

Through this ongoing research of the Korean clan village, one of the archetypal settlement types in East Asia, it has been found that the water systems of Korean clan villages function naturally to purify sewage and also hold a spatial meaning. Consequently, the water system is considered indispensable for both the environmental sustainability and spatial organization of the Korean clan village.

As a consequence of the study, it is clarified that the pond often paired with a jeongja (to generate social territory in the Korean clan village), a core element of the water system, is an important element of the spatial structure in a Korean clan village.

This study is based on limited number of cases. So, more research is needed to generalize the findings of this study. Text & Images: Pilwon Han, PhD.

1 Ban is the lowest administrative unit in Korea. It is often a territorial unit with social homogeneity which usually resulted from the historical background of the settlement.
2 Here, 'dan' refers to a group of people who belong to the same branch of a family name.
3 In Wontuh, the drainage paths were laid underground using conduits. According to a survey by Korean Women's Development Institute (1988), 31.4% of the rural settlements repaired their drainage systems by laying underground conduits. It may be favorable in the aspect of management but not environmentally.
4 The water quality experiment was assisted by professor Kim Geonho of the department of civil engineering, Hannam University. The author would like to thank him.

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