

# The Spatial Sustainability of Power Structure

Traditional Villages and Houses in Korea

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## Abstract

This article intends to understand the relationship between power and space constituted in Korean traditional society, a strictly status-oriented society. For the purpose, this study speculates on two traditional villages and houses within them. The analysis on the villages shows not only different patterns of spatial morphology but also different spatial strategies for consolidating power innate to each community. In Hahoe with a spatial structure in the form of a concentric circle, the ruling class located their houses in more easily accessible and exposed spaces with lower class's houses in secluded spaces. By contrast, in Yangdong with more complicated spatial and power structures, the ruling class appeared to locate their houses in an opposite way to that of Hahoe. The analysis on the positioning of important houses shows a basic principle of sustaining power structure, that is, a strong congruence between consanguine hierarchy and spatial hierarchy. The analysis on the historical transition of the spatial structure of houses suggests a shift of power structure between male and female members within a family. The study clearly illustrates that a spatial structure can be understood as a historical text on which one can read a history of producing and sustaining power structure within a society as shown in the analysis. The findings also imply that power-space relationship can be meaningfully described only on its cultural ground

## 1. Introduction

This article intends to understand the relationship between power and space, i.e. the way in which power is represented, modulated and reproduced in terms of space in Korean traditional society. If we are concerned with society in terms of its interrelationship of individuals, power is intrinsically innate to every social mode. As Hawley suggests, "Every social act is an exercise of power, every social relationship is a power equation, and every social group or system is an organization of power" (1970, p.10). As power is of intrinsic importance and necessity for the discourse of society, what matters in architectural discourse is the practical mode of power, or more precisely, *the spatial mode of power* (Foucault, 1979; Markus, 1987). Admitting that architecture is a primary social product and that every social system is an exercise of power, architectural interpretation of power inevitably involves the notion of space and society intertwined together.

This study speculates on two Korean traditional villages, Yangdong and Hahoe, which were formed during the time period of the Chosun Dynasty that reigned the country from 1392 to 1910. By using the theory of space syntax (Hillier & Hanson, 1984), the spatial

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structure of the two villages will be analyzed and described. As in many other traditional societies around the world, existed a strict system of social strata in the villages. The question asked is how the powerful exhibited and sustained their power through space.

The study also includes an analysis on some important houses in the villages, which are known for their cultural significance and, accordingly, their historical records such as the owners' identity and the year of construction are kept well. The analysis on these houses will add a historical dimension to this study. In other words, it is expected to interpret and understand the historical context and transition of power-space relationship during a period of time.

The villages and houses are, as we shall see, of utmost interest in many ways, since they latently contain various aspects of social dynamics. In their spatial structure, power exhibits itself in such a way that it reveals the cultural idiosyncrasy of the society. The spatial discourse of the settlements therefore inevitably leads to the inclusion of cultural notion of the society. As Geertz insists, "society's forms are culture's substances" (1973, p.28).

## 2. The Society and the Two Villages: Yangdong & Hahoe

Both of the two villages, Yangdong and Hahoe, are the products of the Chosun Dynasty, a monarchical kingdom. The dynasty, a strictly status-oriented society, formally envisaged three social classes; the *yangban*, the ruling class, monopolized virtually all government positions and alone owned most of lands; the *sangmin*, the commoner, were the majority of the population majoring in tenant farming on government lands or yangban holding; at the bottom, the *chunmin*, the degraded class, composed of several elements including slaves who were sold and bought as servants for lifetime. Such social stratification was an official one of the dynasty. Furthermore one's class was hereditary. In short, the kingdom was a highly stratified society with little mobility, in which the three classes kept their own position given; the ruling class as the ruler, the commoners as the ruled, and the slaves as the possessed (Oh, 1958).

Another important factor to characterize the society was community solidarity. In the whole society or in a micro-scale community level like villages, most of the population were related by such combinatory reasons as consanguinity and tenantry interwoven into the social hierarchy (Henderson, 1968). The commoners, most of whom were farmers, were bound to tenant farming, and consequently were thought more like semi-serfs of the ruling class who owned land; and the slaves were legitimate properties of the owner family (ruling class). These composite relations interwoven into the society produced a strong solidarity among the members. In every day life the inhabitants of a community interacted with each other much more frequently than with outsiders. Their community was almost a world in itself for the members.

The community solidarity and the strict social stratification, two seemingly incompatible paradoxes, were subtly mingled within this idiosyncratic culture of the society. How the idiosyncrasy revealed itself spatially in the two villages and what kind of role space played in the society and its power structure, are the questions to be pursued.

These two villages are similar in the sense that they were both organically formed over a long period, geographically separated from surrounding regions, and therefore contained relatively independent cultures. And the villages have maintained the physical properties of the past quite well. Figure 1 and 2 are the maps of the villages. Hahoe is located on a flatland



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**Figure 1. Left. Map of Yangdong**

**Figure 2. Right. Map of Hahoe**



**Figure 3. Left. Axial map of Yangdong**

**Figure 4. Right. Axial map of Hahoe**

surrounded by a river, and Yangdong in a hilly terrain. This topographical difference may have influenced their corresponding patterns of settlement. Figure 3 and 4 show the axial maps of the villages with more integrated spaces shown in darker lines.

The comparison between the shapes of integration core shows the different morphological traits of the two villages. The integration core of Hahoe is located in its geometrical center connecting the encompassing lines in its peripheries consisting of segregated spaces. Hahoe's concentric circular form of integration core clearly shows the result of a fundamental process of urban settlements as they grow into an aggregated whole. On the other hand, the integration core in Yangdong consists of lines extended with many lumps of segregated

lines. The most integrated lines are located at its southern periphery and extend into the northern part of the village through the valleys. However, they do not penetrate into the inside of the village but are immediately broken up with short axial lines (Chang, 1999). While the topological center of Hahoe concurs with its geometric center, the two of Yangdong differ from each other. Table 1 shows the basic data of the villages. These syntactic differences represent the two villages' particular patterns of spatial structure. Hahoe is more intelligible and integrated than Yangdong.

**Table 1. Basic syntactic data of the two villages**

	Number of houses	Number of axial lines	Mean integration	Mean connectivity	Mean local integration	Mean depth	Intelligibility (r-squared)
Hahoe	118	292	0.79	2.73	1.65	9.10	0.176
Yangdong	149	497	0.53	2.58	1.50	9.61	0.124

In sum, whereas Hahoe has a simpler spatial structure of a system as a whole with a higher integration and intelligibility with shallow depth, Yangdong constitutes a more complex system with a lower integration and intelligibility with deeper depth. As these basic syntactic data illustrate the morphological characteristic of the settlements, the social implications of these spatial properties innate to each village need to be clearly described and interpreted with in-depth analysis on its community.

### 3. The Spatial Hierarchy of Houses and Social Hierarchy

As mentioned above, there existed three social classes in each village, the ruling class, the commoners and the slaves. Because the slaves owned by a family lived within the same house, two different types of house coexisted for these two classes. The house types were categorized mainly by the materials, the *kinvajip* or tile-roofed house for the ruling class and the *chogajip* or thatch-roofed house for the ruled class. The commoners were not allowed to have tile-roofed house even though they were able to afford it. The house by themselves thus showed strong cohesive relations with the people who lived in them. The house served as an object in which one was able to tell which social class the owner was from. In each village, its power structure was clearly visible and ostensibly represented in the community.

Nevertheless, there also existed another invisible social demarcation amongst the families of the ruling class, which was much more difficult to be identified by outsiders. There were several important families in each village, called the *jonga* or the head family. The head family originally meant the founder of the village, and therefore each village had a head family. However, as the village and the family had enlarged through time and generations, some other families appeared to claim as new head families, which were led by the members with distinguished achievements in the central government. The original, the first head family had still been considered the most important within the village, even though many other head families emerged.

The houses of these head families played accordingly important roles. One of the most important events performed in those houses was to host ancestral rites, a religious gathering of those who shared same ancestors. Furthermore, since the head families were considered as agents of the central government in such a small community, the houses often acted as a place of governing. Some acted as even a court for exercising jurisdiction or a private school for teaching the children of the ruling class families. Monopolizing the economic power, the houses of the head families were literally the religious and political center of the small society.



**Figure 5: Left.**  
**Location of houses in**  
**Yangdong according to**  
**the owner's class**

**Figure 6: Right.**  
**Location of houses in**  
**Hahoe according to**  
**the owner's class**

These important houses were of course tile-roofed houses. And they were often larger than other houses of the ruling class but not always. So the head families' houses were not easily distinguished by just appearance. The historical records can only show which houses belonged to the head ruling class.

There appears an interesting question with regard to the spatial positioning of the houses within the spatial structure of each village. In other words, the questions are where these three classes located their houses within the villages and if there were any spatial strategies employed. The location of every house in each village is shown in figure 5 and 6. From the corresponding axial map, the syntactic values of the street right in front of each house were assigned to it. In each village, the mean syntactic values of the houses of each class were then calculated. Table 2 shows the results.

	Social class	Number of houses	Mean integration	Mean connectivity	Mean control value	Mean altitude
Hahoe	The head families	6	0.97	5.33	2.84	-
	The ruling class	32	0.91	4.78	2.29	-
	The ruled class	80	0.80	3.89	1.76	-
	All classes	118	0.84	4.21	1.96	-
Yangdong	The head families	12	0.52	2.10	0.82	27.43
	The ruling class	36	0.55	2.40	0.87	23.86
	The ruled class	101	0.56	2.50	0.96	25.38
	All classes	149	0.55	2.44	0.93	25.20

**Table 2. Syntactic values and other measures of the houses of three classes in the two villages**

As in the table, the result of Hahoe shows a sharp contrast from that of Yangdong. In Hahoe, the houses of the head ruling class are located in the most integrated, connected and controlled spaces, whereas those of the ruled class are located in more segregated, less connected and controlled spaces. And the houses of the ruling class are located in the middle

between those of the two classes. On the contrary, the houses of each class in Yangdong are located in an exactly opposite way to those in Hahoe. The head ruling class occupies the most segregated, less connected and controlled spaces with the ruled class located in the most integrated, connected and controlled spaces.

The residential choice of the more powerful families occupying more exposed and easily accessible spaces may not be surprising in traditional villages like Hahoe, considering the fact that the choice might locate the lower class in more secluded places in return.

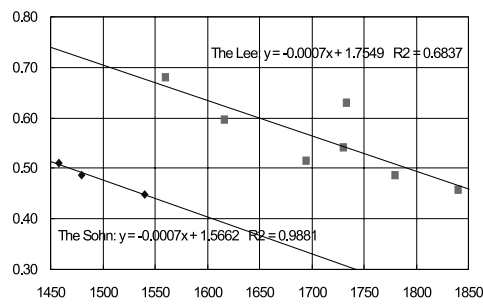
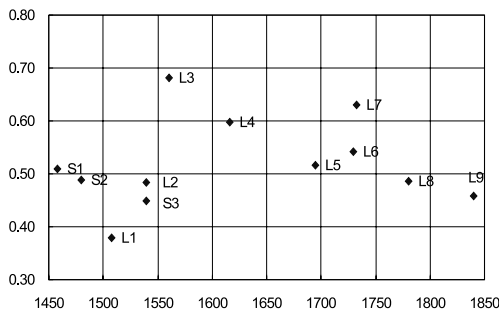
To compare Hahoe with other settlements of other cultures such as English and Iranian cities in this regard, however, produces a more interesting discrepancy. For example, the most integrated parts of those cities are usually occupied by such public facilities as markets, cathedrals and mosques (Karimi, 1997). In the integration core of Hahoe, by contrast, there exist no such public facilities. Instead there are the houses for the head families, which exemplifies their omnipotent role as the religious and political center in the society. In Hahoe there consequently were no needs for public facilities as in other cultures, since the houses of the head family could perform their roles. The only exception was a market. Markets in Korean traditional villages did not exist permanently but activated only for a day at a certain interval. In Hahoe, there is a record that such temporary market was set up in quite segregate parts (Kyungsangbukdo, 1979a). This was possible because, while the commoners had to carry out everyday activities including shopping, the ruling class people did not have to go to market because the servants did the job for them. Since the only people who went to market were the commoners and servants, market was not necessarily located at the center of the village. Instead, the center was occupied by more noble and spiritual activities of the ruling class families. The expression of social implications must have been more important than mere everyday convenience.

This explanation does not seem to apply to Yangdong. The houses of the head families in Yangdong appear to be located in the most secluded spaces, even though they performed the same role as those in Hahoe. A probable explanation could be derived from its unique geographical condition. Unlike Hahoe that is on a flatland, Yangdong has a terrain with hills and valleys. Most researches insist, therefore, that the ruling class located their houses on hilltops with the ruled class in the valleys (Kim, 1999). It suggests that the houses for the ruling class were positioned to be visibly exposed, while those for the ruled class were invisible and hidden. In short, the more powerful chose visual exposure accepting spatial segregation.

However, it does not seem proper to explain this positional characteristic of the houses only by their altitudes, because not all the houses of the ruling class were located on higher locations. Table 2 shows the mean altitude of each class's houses, which are not in the exact order of the class hierarchy. In such case, then, what could be a more plausible explanation? For the answer, it is necessary to understand the unique history of power structure of Yangdong, which is much more complicated than that of Hahoe.

#### **4. A Tale of the Two Families in Yangdong**

Hahoe was ruled by a single family, the Yoo. Due to this single powerful family, its community had a simple demarcation between the Yoo as the ruling class and the rest as the ruled class. The Yoo families' houses were of course located around the center of the village with the non-Yoo families in the peripheries. And the houses of the Yoo head families simply



**Figure 7. Left. The correlation of construction year with integration values for the important houses in Yangdong**

**Figure 8. Right. The correlation of construction year with integration values for the important houses in Yangdong by separating them into two groups according to their owners, the Sohn and the Lee (excluding two houses L1 and L2 shown in figure 7)**

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occupied the most integrated center. In other words, the monopoly of power by a single family produced and sustained a spatial hierarchy in a rather simple manner; the further from the center a house was located, the less power its household was supposed to hold.

By contrast, Yangdong through its long history was ruled by two families, the Sohn and the Lee. As a result, there existed not only a social hierarchy between classes but also a competition between the two powerful families. Building a larger house might have been an easy way to boast one family's power over the other's. However, the elite of the ruling class in the village seems to have employed an *invisible* and much *subtler strategy* with regard to the spatial positioning of houses.

The brief history of the village tells that the Sohn family settled down in the village in the 1400's and ruled the village. The Lee began to migrate into the village from the 1500's. From then on the Sohn began to lose their power, as the new Lee families took over the power and control over the village (Kim, 1999). How this history of competition between the two families has influenced the spatial structure of the village is the question to be discussed (Jang, 2000).

For the purpose, the twelve houses of the head families for both of the Sohn and the Lee were analyzed in order to find out if there was any principle with regard to their locations. First of all, the relationship between the construction year of each house and its integration value with respect to the whole village was checked. Figure 7 shows the correlation, and there appears to be no relation at all.

Considering the fact that this village was ruled by two families, however, the same relationship was again checked by separating the houses into two groups according to their owner; one group including three houses of the Sohn and the other nine houses of the Lee. The analysis with these separate groups shows a remarkable result. As in figure 8, the integration value of the houses for the Sohn is almost perfectly correlated with the construction year (r-squared is 0.9881). This correlation suggests that the first house built by the Sohn family occupied the most integrated space and the latter ones started to locate in less integrated spaces in a perfect order. Even though a member of the Sohn's offspring became more powerful and renowned in the society, he could not possibly build a

**Table 3. Integration value and construction year of the twelve important houses in Yangdong**

House	Owner	Construction year	Integration value*
S1	Sohn	1458	0.5100
S2	Sohn	1480	0.4875
L1	Lee	1508	0.3797
S3	Sohn	1540	0.4487
L2	Lee	1540	0.4837
L3	Lee	1560	0.6810
L4	Lee	1616	0.5968
L5	Lee	1695	0.5159
L6	Lee	1730	0.5416
L7	Lee	1733	0.6309
L8	Lee	1780	0.4866
L9	Lee	1840	0.4588

house in a more integrated location than the one built by the first Sohn. This hierarchical choice for the location of houses suggests an invisible but clear strategy to sustain the power of the precedents of the same family.

As the Sohn was performing this careful procedure, the Lee began to move into the village. Probably the Lee had to be very careful with locating their houses since by that time the Sohn's influence over the village was almost indisputable. This careful choice of location is exemplified by the Lee's first house (L1) shown in figure 7. For the house, the Lee chose a more segregated space than those existing ones of the Sohn. The first house of the Lee was located in a more segregated space than even the most segregated one of the Sohn. However, as the Sohn began to lose their influence over the village, the Lee started to gain the power in return. Accordingly the Lee houses began to move into more integrated locations. The relative change of the location of the first three houses (L1, L2 and L3) illustrates the story. This period from 1500 to 1550 might have been the time of competing between the families.

At the very moment in the 1560's when the Lee was able to show off their stronger power than the Sohn's, however, the Lee's house (L3) occupied finally much more integrated space than even the Sohn's first house (S1). Even though this house was only the third house for the Lee families, it must have been a symbolic monument to them. Once occupied this most integrated and therefore significant location, every subsequent house of the Lee had followed the footprint of the Sohn's houses. As in figure 8, the correlation between integration value of the Lees' houses and their construction year is quite strong excluding the first two houses (L1 & L2: r-squared is 0.6837). It is clear that they occupied more segregated locations than the most symbolic house, L3. The basic principle of *sustaining power structure* remained same, that is, the later a house was built it occupied a more segregated location. And it illustrates a strong congruence between *consanguine hierarchy* and *spatial hierarchy*.

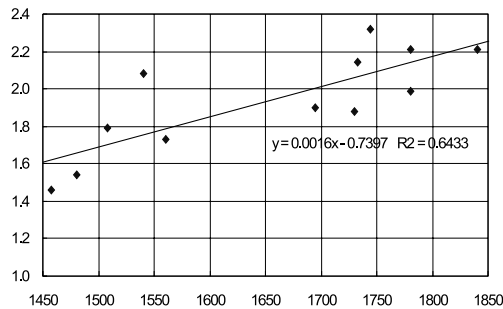
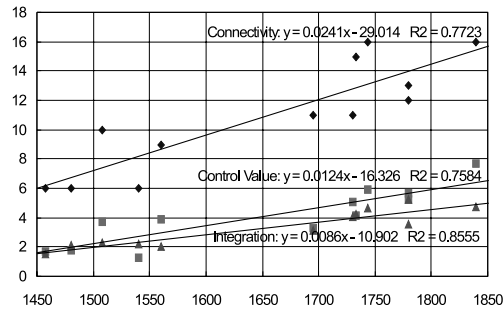
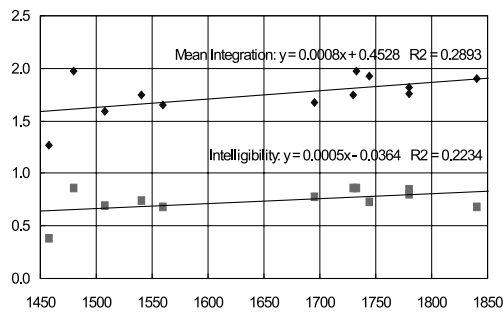
The answer to the question of why the ruling class of this village locate their houses in less accessible location than the ruled class may be derived from the combinatory of its unique geographical condition and this principle of sustaining power structure in the society. The power-space relationship displayed in Yangdong can be fully explained not only by such physical condition but also by understanding the idiosyncratic social structure innate to its community. Furthermore it is quite fascinating that a spatial structure can be understood as a historical text on which one can read such a long history of sustaining power structure including competition between the powerful and their rise and fall. The spatial structure of Yangdong is literally a great spatial epic.

### 5. Diachronic Evolution of the Houses: Power within

So far it has been discussed how the location of the important houses exhibited and sustained the social hierarchy within the villages. In this chapter, there will be a discussion of how the spatial structure of the houses had evolved during the period and if there existed any power-space relationship revealed in the process.

First of all, it is necessary to introduce the general structure of the houses. Figure 9 shows the ground plan of a typical house (S3) consisting of several buildings and corresponding courtyards surrounded by buildings and fences. The constituent spaces of the house are multi-purpose rooms and courtyards categorized according to their occupants rather than their functions. Actually a room functions as sleeping, studying or dining, simply by shifting the corresponding furniture. The spaces are therefore divided into three categories, men's





**Figure 10. The correlation of construction year with the mean integration and the intelligibility of the important houses**

**Figure 11. The correlation of the construction year with the connectivity, control value, and the integration of women's courtyard in the important houses**

**Figure 12. The correlation of the construction year with the integration of kitchen in the important houses.**

general tendency of becoming more integrated. Between the two periods (before and after 1600), whereas servants' rooms became more segregated, masters' rooms became clearly more integrated. Before 1600 men's rooms were most integrated followed by servants', and women's rooms were most segregated. It suggests that the private space of women had to be secured and separated. After 1600, however, women's rooms were much more integrated than servants', though not as much as men's rooms.

To sum up these periodical changes, an appealing explanation about the transition of power and leadership structure within family is possible. Most of all, the radical change of women's courtyard from a periphery space to the center of a house implies the consolidation of women's role in a family. It is exemplified in women's courtyard becoming far more integrated than men's courtyard. Women's rooms becoming more integrated than the servants' seem to back up this trend.

The transition of kitchen, a major workplace for women, seems to intensify this progress of the centralization of women's space and role, and at the same time emphasize practical aspects. With no designated dining room, as mentioned above, each room performed for

The basic syntactic data and construction year of the twelve houses analyzed in this study are shown in table 4. Because two houses (S3 & L4) were extended and renovated after the initial construction, their construction years appeared in this table are different from those in table 3. The other houses are recorded to have no alteration.

Figure 10 shows the correlation of construction year with mean integration value and intelligibility of each house. Despite weak correlation, its general inclination indicates that the houses had become more integrated and intelligible gradually as time passed by.

Analyzing the historical change of each spatial constituent, some spaces appear to lead this tendency. As seen in figure 11 and 12, it is obvious that women's courtyard and kitchen among others became more integrated according to the time period. Statistically women's courtyard shows a strong correlation (r-squared is 0.8555) and so does kitchen (r-squared is 0.6433). As in table 4, the average integration value of women's courtyards in the houses built after 1600 became nearly double as much as that in the houses built before 1600. Between the two periods, the integration value of men's courtyard rather decreased while servants' courtyard remained almost same. In short, men's courtyard was the center of each house until 1600, but women's courtyard obviously became the center ever since. All the other syntactic values (connectivity and control value) of women's courtyard increased gradually, which suggests that its role as the center of a house has been emphasized.

The other parts of the houses show slightly different results. Both men's and women's rooms seem to lead the

dining as well as other functions. The meals prepared in kitchen therefore had to be delivered to each room. Accordingly, delivering meals must have been a very demanding labor. The change toward more integrated kitchen must have considered this practical aspect.

It has long been understood and agreed without any dispute that the Chosun dynasty was a strict patriarchal society. The historical evolution of the spatial structure of the house shown in the analysis, however, reveals that the power structure between men and women within the family has changed or at least the role of women has strengthen during the long period of time. And, in this historical procedure, consideration on functional aspect of domestic life must have played a significant role.

## 6. Summary: Space and Power

Both of the two villages are organic settlements formed through a long period of time. Nevertheless, the spatial structure of each village displays the long process of the intensification and, if there is any, shift of power structure innate to each society, as if planned intentionally. The ruling class in each village constituted the legitimization of their power not only through such visible modes as the material and size of their houses but also such invisible and subtle modes as their spatial positioning. The powerful understood the way in which the location of houses reflected and sustained the social hierarchy within the villages.

The spatial strategies employed by the ruling class in the two villages, however, are different from each other. The ruling class in Hahoe achieved the consolidation of its power by keeping the social structure in accord with the spatial integration of the houses. The ruling class in Yangdong appears to have preferred the visual exposure of the houses. However, the spatial integration conveyed a more complicated role with regard to the power structure based on a strong congruence between consanguine hierarchy and spatial hierarchy. Furthermore, the analysis on the historical change of the important houses reveals that the power structure within the family has changed though invisibly during the time period.

The spatial reflection of the social structure exhibited in the villages and houses is thus a fascinating epic describing the historical procedure to produce and sustain the power structure for a long period of time. And, each of the villages and houses was a *spatial apparatus* or *mechanism* which produced, promoted, served for the power structure of the society. The spatial structure was a setting in which the people who were in it realized automatically their classes and roles. As Foucault suggests, "Space is fundamental in any form of communal life; space is fundamental in any exercise of power" (1982, p.20). Space realizes the social nature through its structure, organization or unity; it signifies the social relationship through its metaphoric relationship. And it is the specific technology of exhibiting power constituted by and innate to the society it belongs to. In the sense, the spatial mode of power cannot clearly reveals and manifests itself without its cultural ground; power as a social dynamics can be richly discussed in its cultural context.

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