The Complementary Relationship between Architecture and Topography: Focus on the Performative Relationship between the Houses of Kim Incheurl and Topography

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Abstract

The aim of this study is to interpret the relationship between topography and architecture in the houses designed by the Korean architect, Kim Incheurl from the 2000s. Kim's various types of single houses built on a range of sites can be seen as representing a typology that addresses the complementary relationship between architecture and topography. His interpretation of the site considered neither narrativity nor romantic association, and rather focused on the physical realities of the site. His houses complemented what was lacking on the sites by architectural framing that contains the practices of human life. The topography of the site was reconfigured using architectural framing and was thus rehabilitated through the performance of window-walls. However, Kim's houses are limited in their reaction to the site, in terms of the consideration of site sustainability, plan type, material, and window-wall design. In order to suggest a productive criticism that can provide insight into the performative relationship between Kim's houses and topography, this paper suggests three topics: 1) creating sustainable outdoor settings on the site, 2) creating a deep structure of interior space, and 3) developing performative window-walls through the variation of materials and opening operation.

Keywords: topography; Kim Incheurl; inner space; single-row house; performative window-wall

1. Introduction

This research focuses on the complementary relationship between the architecture and topography of the houses designed by the Korean architect, Kim Incheurl. The study will analyze his houses as a performative reaction to typical Korean topography. Kim Incheurl's houses can be regarded as typical types that respond to Korean topography, since he develops a schema for the houses based on the site situation. In addition, his houses do not rely on place-bound narratives, but focus on a typically applicable concept in terms of the layout of houses. In his recent publication, *Space Opening* (2011), he criticizes the place-bound regional narrativity of a site, and instead proposes a factual and physical relationship between a site and its architecture. His factual analysis of a site (in which he substantiates natural vista, a visual target from the site, natural slope, and original vegetation), indicates his understanding of the intrinsic values of Korean traditional architecture His expression of 'performative relationship' between architecture and topography is not limited to naïve functionalism, but embraces a situational logic that has its origin in drama or theatrical performance, and further suggests a mutual relationship between architecture and topography, and between interior space and exterior nature. The performative relationship occurs through the interface between the window-wall and the operating architectural devices that stand between interior and exterior spaces. Thus, a performative relationship involves the visual, active, and possible mediation that can occur between the inside and outside.

This research will discuss Kim Incheurl's four houses that were designed after 2000 and will analyze the following three areas. 1) Site interpretations that demonstrate his interpretation of Korean traditional architecture and his therapeutic approach that opposes excessive disruption of the existing site, 2) life practices that are offered through the interior and exterior spaces around the window-walls, 3) theoretical implications that suggest a performative relationship between interior and exterior spaces through the complementation of architecture and topography.

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2. Theoretical Premise - Interpretation of Topography through Architectural Discourse

In order to discuss Kim Incheurl's interpretation of topography in terms of architectural discourse, this study introduces major discourses on the definition of topography in architectural history. The following three sections discuss topics based on Western architectural discourses that represent contemporary global perspectives.

2.1 Emphasis on Horizontal Leveling - Leon Battista Alberti and Le Corbusier



Fig.1. Site Water Analysis, Alberti, 1755

The emphasis on horizontal leveling is not based on any technical rationale, but follows a physical reality that involves the use of a site. Alberti wrote in his architectural treatise, "On the Art of Buildings" that a site necessitates horizontal leveling according to its shape and purpose.[1] His treatise suggested that horizontal leveling is achieved using a stylobate or platform, where the height of the platform is dependent on the function of the building. Alberti also wrote that the purpose of a platform is to facilitate an equal relationship among people standing or sitting on the platform. The objective of attaining equality between people in meetings or even when at war was also a political gesture. The definition of site needs to include the transformation of the natural topography into usable platforms that can cultivate activities of citizens within a culture.[2]

Following Alberti, Le Corbusier mentioned in his architectural treatises the technical and metaphoric importance of leveling in modern architecture. In "the Poem of the Right Angle", Le Corbusier wrote that the vertical represents the spiritual world, and the horizontal represents the physical world on which people stand; the vertical is the axis of the creative force, while the horizontal is the axis of water and earth at the ground level. This is clearly expressed in his poem, 'A.3 Environment'.[3]



Fig.2. Le Poème de l'Angle Droit A.3

The phrase "sign a pact of solidarity" refers to the connection between horizontality and verticality. Le Corbusier extolled not an aesthetic evaluation of verticality and horizontality, but an existential logic that architecture is a "frame" that stands on earth and has arisen from earth. Earth and frame are existential forms that can be intervened by water, stone, hand, light, and owl. Physical forms of earth are not merely horizontal features, but include the topography of the earth, the water in the earth, and the vegetation on the earth. Also, various forms of the frame include construction technology, materials, light and shadow, and enclosed spaces. The physical location where the earth and frame exchange their existential forms is the site where topography and architecture complement each other through life practices.[4]

The horizontal leveling emphasizes geometrical and constructive features that complement the site, and give primacy to the life practices that inhabit the frame and the earth.

2.2 Emphasis on Narrativity - Alexander Pope and Frank Lloyd Wright

Contrary to the existential logic of horizontal leveling, the emphasis on narrativity was proposed during the period of English Romanticism. In 1731, the poet Alexander Pope (1688-1744, English poet) wrote about the term *genius loci* in his recommendation to gardeners in his letter, "Epistle to Lord Burlington".[5]

Referring to the definition of *genius loci*, Pope introduced the peculiar character of nature through a debate with the philosopher Shaftberry III. He acknowledged, through an imaginary debate between Theacles and Philocles that Theacles fully understands the concept of *genius loci*, while Philocles's understanding of nature is superficial and limited to the visual aspects of nature. Pope's suggestion, though explanatory and poetic, illustrates the power of *genius loci* that is embedded in the site and in nature. He argued that Philocles should observe nature until he understands *genius loci*. It seems that the narrativity of a site needs to be confirmed through the substantial reality of the site.

In modern architecture, the architect Frank Lloyd Wright applied *genius loci* to the narrativity of the site and its architecture. Wright proposed that architecture and site could be made inseparable through the use of the indigenous material of the site. Wright regarded an architect as a "messenger of earth" and he used the stones of the site to create his architecture. He continued the romantic concept of *genius loci* and used the term "topogenesis" to explain his approach to the site.[6] He was convinced of his belief in the organic simplicity of nature and attempted to imitate the shape of nature in his projects. Many of his buildings emphasized the shape of the American prairie as horizontal planes. In summary, the emphasis on narrativity relied on the concept of *genius loci* and the

pursuit of topogenesis for the extraction of an historical and place-bound narrative.

2.3 Emphasis on Naturalness
- Marcel Breuer

Marcel Breuer interpreted the site as being distinctly different to the architecture of the site. Breuer often used *pilotis* in the same way as Corbusier, whereby the *pilotis* suggested the detachment of his buildings from the ground. However, raising the building on *pilotis* required certain topographical conditions; on uneven ground, the building looked like "a camera on a tripod". Breuer developed a hillside house which was built "so that you enter the top floor from the uphill side and the lower floor from the downhill side". Breuer wrote about this in the following passage,

> A building is a man-made work, a crystallic, constructed thing. It should not imitate nature- it should be in contrast to nature…
> I see it [a building] not as an isolated composition, but a composition of contrasts.[7]

The earliest experience that seems to have helped Breuer shape this concept was his critical attitude toward the garden designs in German avant-garde architectural culture. Breuer implicitly criticized the *Gesamtkunstwerk* of Peter Behrens, Josef Olbrich, and Josef Hoffmann, all of whom blended architectural and garden forms.

The contrast, which he expressed as *sun and shadow*, graphically illustrates Breuer's beliefs about the coexistent and contrastive relationship between site and architecture. This concept is expressed in the Spanish motto, *Sol y Sombra*, which acknowledges the relative positions of bright and shaded sections of the arena during a bullfight. The motto describes the link between compositional methods and between life situations: light to heavy, bright to dark, architecture to landscape, and private to public. In the built situation, however, the contrast is only a mere beginning because nature and life practices cannot be definitively prescribed.

3. Kim Incheurl's Houses on Topography

3.1 Kim Incheurl's Site Interpretation: the Revelation of Inner Topographical Structure

Kim Incheurl's houses are located in suburban areas in the vicinity of Seoul. The characteristics of the sites do not imply any specific historical narrative. While many architects tend to focus on the meaning of a site, Kim Incheurl often does not develop elaborate interpretations. A Korean architect, Seung Hyosang wrote about the transience and visual imagination of temple ruins that do not have a foundation.[8] This approach is similar to that of 19th century romanticism that dwelt on the sentimental reconstruction of the past. Seung compared the Roman Forum with its stone foundations to a Korean Buddhist temple which similarly has no indication of foundations, mentioning that the latter provides an open empty courtyard, de-emphasizing the architectural object. Seung's interpretations of Korean architecture as evoking emptiness could be regarded as personal opinion, and it is doubtful whether the concept of emptiness impacted on the Korean life style. Seung's ideas reveal the spiritual aspect of Korean architecture.

The important aspect of Seung's comment is his suggestion that the Korean temple located in the "inner space" in mountains embodies emptiness. Currently, the empty temple precinct is surrounded by mountains. Since Korean topography consists of 70% mountainous regions, many Korean villages and temples are located in valley areas between mountains. Typically, a village or a temple is located where the topography changes. Other spiritual areas are located in deeper areas in the village. This deeper space of the "inward town" differs from open spaces of the Western plaza.

Kim Incheurl's houses are usually located in this inner space of the topography. Lacustrine (2008) is located at the bottom of mountains, Forest Garden (2006) is located on a sloped site, Tiltup (2008) is located on a site with a slope that varies by 15 meters, and Corridor (2012) is located at the end of a village in a valley area between mountains. These houses are located in the inner space of the topography, and the atmosphere is shaped by the shaded context. Houses in the inner space differ from those of the sunny area. The view to the house is not obvious since the houses are usually hidden; yet the view from the house to the outside is well lit. This technique is similar to the view from a cave into a well-lit open area or the view from the shadowy atmosphere of Korean traditional architecture into a temple precinct.

Kim Incheurl's interpretation of the site suggests the physical transformation of topography and most importantly a deep structure that is provided by a visual frame from a shadowy area to a well-lit area. In the following section, this research will follow the analysis of 1) house and site relationship and 2) performative aspect of the window-wall that enables interaction between the house and site.

3.2 Synchronization of Architecture and Site: *Tiltup* (2008)



Fig.3. Site Condition, Tiltup

Tiltup is located on a site with a 10-meter height difference from the front to the back. Tiltup weaves itself around a winding path that climbs up the site. The building mass follows the winding ascent of the site and its relationship with the site is defined through this ascent. Following the winding masses, the visual experience from the house is diverse. In the interior

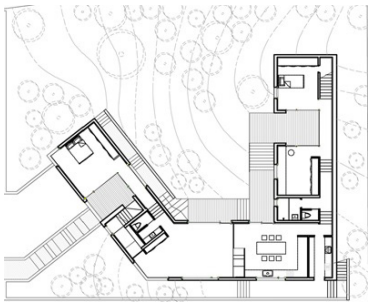


Fig.4. 2nd Floor Plan, Tiltup

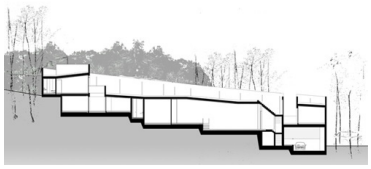


Fig.5. Section, Tiltup



Fig.6. Whole View, Tiltup

configuration, room floors and steps ascend with the site slope. Architecture and topography are synchronized. The difference between this concept and that of Frank Lloyd Wright's topogenesis is in the use of materials. While Wright used stones indigenous to the site, Kim used concrete that contrasts the site with its stark presence and indifference. Kim responded to the irregularity of the site with framed concrete masses and their contrast with the site creates both fluidity and tension in the site. Due to the steep slope, the house is entered from below the *pilotis* and at the top of the site; the view opens to the mountain opposite. In addition, the performative relationship between the inside and outside is achieved through the window-wall that climbs the site, corresponding to its slope.

3.3 The Contrast of Architecture and Topography - *Forest Garden* (2006)

Forest Garden reminds us of Marcel Breuer's concept of the contrast between architecture and landscape. Kim Incheurl explains the relationship between a house and its site in reference to a Korean temple as follows:

There is no reason to disrupt the topography to align a visual axis of Muryangsujeon…Neither, the visual axis orients towards a peak, Dosolbong. It is evident that the axial direction of the site determined the visual axis of Muryangsujeon.[9]



Fig.7. Site Condition, Forest Garden

Kim Incheurl suggested that the misalignment of the visual axis in Buseoksa is derived from neither Feng Shui theory nor the view to the mountain peak, but from the natural topography of the site and the site's function. In Forest Garden, Kim applied this technique to the site with its 10-meter difference from the front to the back. The typical frontal image of a house is replaced with an image of the visual contrast between architecture and landscape. The house has a courtyard along its slope and each wing faces the courtyard, while the front is connected at the 2nd level. Facing the town, the house has an opaque façade above the view frame. In contrast, facing the mountain, the window-wall opens the view to the mountain, while nature continues inside the house.



Fig.8. Sloping Garden, Forest Garden



Fig.9. Plan, Forest Garden

As shown in Fig.8., in the existing site, the vegetation was the main motive for saving the topography in the house design. In addition, rainwater collection is used to demarcate the boundary at the entrance to the house. The C-shaped mass is used to provide a sloped courtyard; the courtyard does not accommodate a designed garden, but its features resemble the mountain and the courtyard space continues a path to the mountain.

In addition, the overhanging structure of the mass operates as a visual frame that emphasizes the contrast between architecture and landscape. In the performative relationship between the inside and outside, the lower concrete mass contrasts nature, and the upper floor mass with the window-wall opens views to the outside of the site.

3.4 Enframing of Architecture and Topography - *Lacustrine* (2008)



Fig.10. View of Living Room, Lacustrine

While Forest Garden did not utilize the full view of the landscape, the architectural frame opens to the mountain behind. However, in order to access views such as Muryangsujeon, the site needs to be leveled and open to all directions, such as the site of Lacustrine, a house designed on a flat site with an open view to the outside.

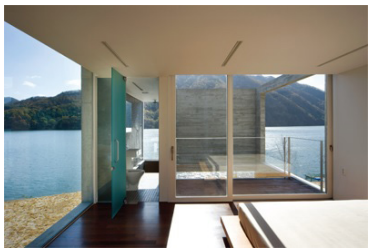


Fig.11. Entire View of Living Room, Lacustrine



Fig.12. Site Plan, Lacustrine

In his explanation of Lacustrine, Kim Incheurl referred to various characteristics of Korean architecture. He referred to the multiple viewpoints in the Changduk Palace architectural layout that responded to the topography, as expressed in Jeong Sun's well-known painting, In Wang Je Sek Do. Especially, he inherited Jeong Sun's painting method of using diverse viewpoints in one painting. In addition, in its layout that follows the natural topography, Changduk Palace differs significantly from Kyungbok Palace. Kim Incheurl interpreted this as representing the integration of life and topography.



Fig.13. Plan, Lacustrine

Lacustrine is located on a flat site surrounded by a lake and mountains. It is designed as a single-row box that has multiple visual frames open to the scenes of the site. The house itself is a tool for viewing multiple facets of the landscape on the site. Kim Incheurl mentions this diverse experience in a metaphoric comment: "Architecture shows its true meaning when natural light stops, and the internal depth of spaces reveal." Kim incorporated multiple visual frames in order to create a certain relationship between architecture and landscape, and further created multiple perspectives that have long-ranging views toward the landscape and close views that show interior features.

3.5 Therapeutic Relationship between Architecture and Landscape – *Corridor* (2012)



Fig.14. Front View, Corridor

While the houses discussed above express the approaches to the site discussed previously in chapter 2, Kim's recent house, Corridor, expresses an approach where the site is used for healing.



Fig.15. Rear View, Corridor

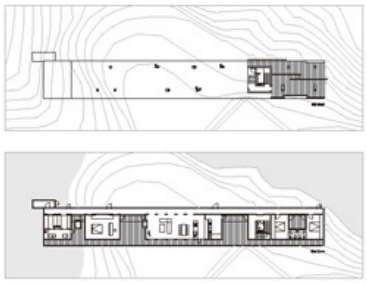


Fig.16. Plan, Corridor



Fig.17. Entire View of Living Room, Corridor

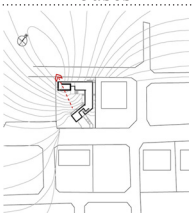
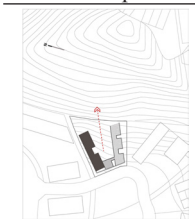
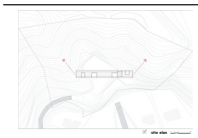
Originally, the middle of the site was divided by the valley that carried rainwater to the bottom of the mountain. Incheurl flattened the site using the cut and fill method, transforming the site for construction and placed a rainwater collector at the rear of the site. The site then cut through the valley and created a horizontal viewpoint towards the vast area below the site. Since the site is enclosed by woods at the sides, Incheurl lifted the house on *pilotis* and created a narrow 60-meter-long mass that followed the site regulation line dividing the site.

In his early scheme, he suggested a much longer mass than that of the completed house, and reduced the length to utilize only one side of the site, creating the illusion that the mass was jutting into the mountain. From the street below the site, the house appears to hover in the middle of the mountain and seems to have grown from the topography of the mountain. This shape contrasts that of house development in these areas and works as a healing device for the site. In fact, the earthworks of the houses in this area that are built on sloped sites were more damaging, where the steep slope was cut and the surface was sprayed with concrete. This appeared to be very clumsy and the construction was unable to be finished.

Kim Incheurl was aware of these problems and his house was proposed as an alternative solution that would heal the site. The intention of Corridor was to heal the site with minimum earthworks; the building will be tested in the following years through the change of weather and topography.

The architectural feature of the window-wall designed on *pilotis* in the Corridor signifies the relationship between the site and the house. The 60m-long single-row house with windows on both sides creates a tension toward the mountain and the open yard. Walking through the hallway of the Corridor house, one crosses the place of the original valley, reminding us of the healing of the topography.

Table 1. Analysis of Relationship between Site and Houses

Houses	Concepts	Characteristics
 Tiltup	Relation between Site and House	Syncronization of architecture and topography
	Performative Relation through Window	Visual, physical connection between site and house through windows and garden
 Forest Garden	Relation between Site and House	Contrast between architecture and topography
	Performative Relation through Window	Maximization of contrast through visual opening in 2nd floor and visual blocking at ground level
 Lacustrine	Relation between Site and House	Framed visualization of architecture and topography
	Performative Relation through Window	Connection discontinuity of distant view and close view
 Corridor	Relation between Site and House	Healing complementation of architecture and topography
	Performative Relation through Window	Same way as Lacustrine in the front/Expression of tension in the rear

4. Critical Analysis of the Relationship between Kim Incheurl's Houses and Topography

This chapter discusses various themes related to the performative relationship between architecture and landscape in Kim Incheurl's house design. Three themes will be discussed, site, life practices, and architectural devices, that substantiate the mediative roles of architecture and site.

4.1 Site: Sustainable Value beyond Aesthetics

In all the above works, the sites were treated as canvases for the buildings. While the sites were regarded as 3-dimensional spaces for the making of platforms for houses, recreational yards were seldom used on the sites. The natural vegetation of the site and the contrasting concrete wall did not express the residents' functions since the exposed concrete wall did not reveal the performative window-wall. Although one can consider the fact that the above houses were built on sloped sites, and thus the use of flat areas was difficult, Kim Incheurl's houses nevertheless needed to incorporate areas for practical functions and garden cultivation. In his book "Space Opening", he commented on the characteristic feature of Korean architecture of incorporating not only architectural elements but also a well-designed garden and untrimmed landscape.

Despite the expression of narrativity in Kim Incheurl's earlier houses, as previously mentioned the narrativity of the site was less obvious in his later works and the physicality became more prominent. Since the characteristic of platform and slope has already been considered here, the sustainability of the site needs to be evaluated, as it is equally important. The sustainability of a site can be achieved through the use of garden, recreational yard, and kitchen garden. Architectural historian, Joseph Rykwert has suggested an alternative concept of landscape whereby the site becomes an "edible landscape" that has both visual aspects and sustainable aspects. In Kim Incheurl's houses, these sustainable values beyond aesthetic values are not incorporated.

4.2 Life Practices: Spatial Structure of the Single-Row House

Discussions on Kim's floor plans of houses can elucidate the use of site and spatial depth that allows views to the outside. Similar to Korean traditional architecture, many contemporary Korean architects use a single-row house structure. Traditional single-row houses were constructed from timber structures. In the traditional Korean saying, "North window three friends" refers to the way noblemen would look out of the window and enjoy three friends, the Korean harp, drinking, and poetry. Clearly, the single-row house provides much more immediate contact with nature than the layered-row houses. Single-row houses that are built in an urban context do not provide an immediate contact with nature, but rather focus on the central courtyard. The large yard on the site restricts the single-row house due to the increase of corridor space. Instead, layered-row houses were developed as a traditional Korean house type. Layered-row houses have short corridors and can provide a relatively larger yard than that of the single-row house; they therefore have developed into a typical urban housing type.

In the 1990s, architects proposed upgrading existing single-row houses as an alternative to developing widely spread layered-row houses. Since then, house design has tended to adopt the single-row housing type. However, on sloped sites, the single-row house does not provide a sufficient yard for outdoor activities. Especially, the single-row house does not allow a visual depth that can penetrate through interior spaces to the outside. This means that the spatial quality can become dull and less vibrant; Single-row houses often cannot create deep views that originate from deep spots inside a house. Deep views are typically utilized in many of the designs by master architects; these houses simultaneously feature an interior view frame with a long view frame. The creation of deep view is much easier in a layered-row house than in a single-row house, and in Kim Incheurl's houses, there is a need to incorporate the delicacy of the deep space in the connection between the interior and exterior spaces.

4.3 The Development of the Performative Window-Wall[10] through the Interaction between Architecture and Topography

From the 1990s, Kim Incheurl's architecture has focused on "The aesthetics of nothingness" and the materiality of concrete and glass has been extended.[11] His houses of concrete mass contrast with the undulating landscape and are often regarded as conceptual gestures. As suggested above, the performative window-wall should not be limited to concrete walls, but should be extended to the window-wall in order to create a spatial zone around the wall. This concept is explained below with examples from world architecture.



Fig.18. Performative Window Wall, Villa Busk



Fig.19. Performative Window Wall, Entrance, Villa Busk

Firstly, the combination of a concrete wall with wooden window-walls suggests the comfort of life practices around the window-wall. Norwegian architect, Sverre Fehn, shows the complementary relationship between architecture and nature in Villa Busk. Fehn expressed the comfort of a single house through wood and its tectonic nature, which contrasted with the concrete wall on the rock cliff at the back of the house, evoking the symbolic image of standing on nature.[12] The comfort of the wood structure and the roughness of rock and concrete are expressed as contrasting elements. This composite structure expresses both the practices of life and the complementary relationship between architecture and landscape. Kim Incheurl does not utilize this technique in his house design. In his concrete mass houses, it is difficult to feel warmth or convenience. In Fehn's Villa Busk, the sense of movement created by the wood windows makes the house convenient and warm. Kim Incheurl's houses do not employ such window techniques. While his windows provide a visual contrast to the concrete wall, they would benefit from the warmth and convenience as expressed in Fehn's Villa Busk.

Secondly, the materials and techniques could be used more liberally without being limited to local and regional traditions. The Portuguese architect, Eduardo Souto De Moura used this approach in his house designs, Baiao Weekend House and Casa A Moledo. He classified the Baiao Weekend House as a representative Portuguese house, whereby site-specific materials are used in a traditional or site-specific way. However, in De Moura's works, he used global materials within a tight budget in order to provide a well-performing house while retaining a certain spatial character.



Fig.20. Performative Window Wall, Front View, Baiao Weekend House

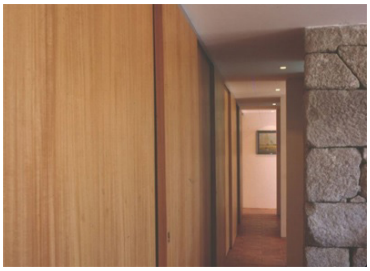


Fig.21. Performative Window Wall, Indoor Stonework, Baiao Weekend House

De Moura suggests an approach that gives equal importance to local site-specific materials and contemporary high performance materials from world-wide locations. To achieve the best performance in the house, these materials are assembled in a composite manner. Local materials that are complemented by high performance non-local materials allow the house to function according to the Portuguese life style and to accommodate out-door activities.

Kim's houses are mostly made of industrial materials and do not incorporate local materials. When the performance of non-local materials and the warmth of local materials are combined, the performance of window-walls can create much diverse interaction between architecture and topography.



Fig.22. Performative Window Wall, Casa A Moledo



Fig.23. Performative Window Wall, Casa A Moledo

5. Conclusion

For house design, Kim Incheurl relies neither on the narrativity of a site nor on the *genius loci*. Instead, he remains faithful to the factual and physical realities of the site. Kim Incheurl interpreted Korean topography from an aesthetic and ethical viewpoint, similar to the viewpoint used in the Chosun dynasty's painting technique which allowed multiple views of nature that reveal its deep structure. The four houses analyzed above illustrate the performative relationship between architecture and

topography: 1) the houses become the topography and complement nature, 2) on sloping sites, the houses shape multiple views toward the landscape, 3) on flat topography, the house is used as a frame to view nature, and 4) when the site is not easily inhabited, the house plays the role of enhancing the site condition.

Considering these features, three analyses are made here concerning deficiencies in Incheurl's house design: 1) the lack of sustainable outdoor settings on the site, 2) the lack of a deep structure of interior space by adjusting the single-row house type, and 3) the lack of performative window-walls through the variation of materials and opening design. The deficiencies of these elements are a prerequisite to the development of architecture and topography.

In conclusion, Kim Incheurl's houses suggest that their residents must withstand the balance between architecture and topography. These houses require the residents to spend a lot of time maintaining this relationship and the environment. According to the seasonal changes, one must perform tasks related to cleaning, repairing, and gardening in order to maintain a healthy environment. Kim Incheurl's houses facilitate this process and elevate our understanding about the performance of window-walls; the relationship between architecture, topography, and nature is therefore complementary.

Notes

[1] Rykwert, Joseph (1991) On the Art of Building in Ten Books. Cambridge: MIT Press.

[2] Leatherbarrow, David. (2004) Topographical Stories: Studies in Landscape and Architecture. Philadelphia: Penn Press.

[3] Le Corbusier. (1993) The Poem of the Right Angle, New York (Original Publication, Le Poeme de l'Angle Droit, 1955).

[4] In the interpretation of Le Corbusier's poems, the emphasis on horizontality is selected for the purpose of this paper. Although Le Corbusier somewhat followed the concept of narrativity, since English Romanticism proposed narrativity much earlier, in this paper, Le Corbusier's poem A.3 will be emphasized as a historical example that proposed horizontality.

[5] Pope, Alexander. The Works of Alexander Pope, Esq: With Notes and Illustrations by Himself and Others, Vol. 8. (Google eBook).

[6] Secrest, Meryle (1998), Frank Lloyd Wright: A Biography. Chicago: University of Chicago Press. 53.

[7] Breuer, Marcel. (1955) "Architecture in the Landscape," Sun and Shadow, the Philosophy of an Architect. Ed. Peter Blake. New York: Dodd, Mead. 388.

[8] Seung, Hyo Sang. (2011) The Most Beautiful Ruin. JoongAng Ilbo (2011.04.30).

[9] Kim, Incheurl. (2011) Space Opening. Seoul: DongNyuk.

[10] The subjects of chapter 4.1 and 4.2 are theoretical, but chapter 4.3 shows exemplary cases.

[11] In the 1990s, Korean architects such as 4.3 Group preferred elevation design without decoration, as a foil to decorated buildings. Kim Incheurl used concrete structures in tall buildings and experimented with construction technology. However, in his house design, the concrete structure is stylized and used as a style.

[12] Olaf Fjeld, Per. (2009) Sverre Fehn: The Pattern of Thoughts. New York: The Monacelli Press. 209.

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