A Study on Characteristics of the Court in Mies van der Rohe's Hubbe House

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Abstract
Hubbe House, designed by Mies van der Rohe in 1935, although not actually built, is significant in that it marks the first application of his theoretical idea of a court to an actual site. In the Hubbe House, Mies's concept of a court, which he presented theoretically for educational purposes, was applied to build a practical and complex structure with consideration of site conditions and architectural ideas he had long sought to use. This paper interprets his idea concerning court in the following ways. First, as for its relationship with the interior space, the court has significance and effect as a method to make the relationship between the interior and exterior spaces more active. Second, the court prevents the view from extending beyond the site by means of intentionally devised obstructions. As a result, "quiet seclusion" is created in the court by blocking out the often hectic confusions of the outside world. Third, the court is designed to have both open natural scenery and closed artificial scenery, which are in contrast to each other, creating a harmonized composition of the building as a whole.

Keywords: Mies van der Rohe; Hubbe house; court; space

1. Introduction
The idea of a court house, which Ludwig Mies van der Rohe presented conceptually at the Bauhaus and the Illinois Institute of Technology from 1931 through 1938 for educational purposes, it was scarcely realized in actual buildings. The reason for this may be that the idea of a court house was originally presented not as a practical solution but as a theoretical suggestion. The only examples where the court idea was applied to an actual site-based project to be commissioned by a constructor were at Hubbe House in Magdeburg and Ulrich Lange House in Krefeld, although neither was actually built.

However, Hubbe House, Mies's unbuilt residence of 1935, can be considered significant in light of the fact that he applied his long-pursued idea of a court to an actual site. In particular, he seems to have considered the idea of the court in the context of the specific conditions of the site, located near a Magdeburg suburb by the Elbe River, and the actualities of the site's rural setting. Thus, the study of the court in Hubbe House can lead to reveal the process of Mies's thoughts concerning practical and complex problems met in the application of the court idea to other actual sites in general. In this light, the paper attempts to understand the spatial characteristics of the court, focusing on the example of the Hubbe House.

The paper studies the architectural characteristics of the court in the Hubbe House in relation to his previous works—the Glass Room at the 1927 Stuttgart Werkbund Exhibition, the German Pavilion in Barcelona (1928), Tugendhat House of Brno (1929), the homes for single people exhibited at the 1931 Berlin Building Exposition, and other court house projects carried out at the Bauhaus and IIT. This study of courts will focus on the effect they have in actual spaces and the arguments addressed in the process of applying the court to Hubbe House, rather than on the historical and architectural origins or other general characteristics of court houses or courts. This serves the paper's final aim of comprehending the position the court occupies in Mies's architectural oeuvre.

As Tegethoff points out, however, the court house schemes executed at the Bauhaus and IIT should be differentiated from other projects that utilize courts (Tegethoff, 1985). In other words, the fact that the Hubbe House contains the idea of a court house does not necessarily mean that it is one of his court house series (Tegethoff, 1985).

This paper, first of all, will pay attention to what Mies said regarding the Hubbe House. He states, "...
I extended the living area of the house towards the south by means of a garden courtyard surrounded by walls, thus obstructing this view while at the same time preserving the sunlight. Downstream, on the other hand, the house is completely open, flowing freely over into the garden. In so doing I not only followed the site conditions, but achieved a nice contrast of quiet seclusion and open expanse as well.\footnote{1}

The above statement by Mies is noteworthy in that he stated the basic ideas of the house in relatively concrete terms. The statement suggests in particular the concept of the court in terms of three conceptual strata. Primarily, the court is regarded as "an extended living area." Here, the concept of a court is understood in relation to the interior space. Secondly, consideration regarding views is emphasized, as stated in the phrase of the court "obstructing the view." The third important point in the statement concerns the idea of harmonizing the two contradictory elements of, "quiet seclusion and open expanse." Focusing on these issues, this paper will attempt to study the origin and context of these ideas as expressed by Mies and also their significance and effect.

Regarding the structure of this research, an outline of the information and features of Hubbe House and its court is first provided as a background study. This will be followed by analyses on the court of Hubbe House in the context of the above-mentioned conceptual strata. Since the chief focus of the paper is not on the overall study of Hubbe House, but only on its court, this paper concentrates mainly on the residence's court, the living area related to it, and its northern garden.

### 2. Outline of Hubbe House and Its Court

Hubbe House was designed in 1935 on the Elb-Insel in the Elbe River located in Magdeburg, the capital of Sachsen-Anhalt state in middle-east Germany.\footnote{2} The client, Magarete Hubbe, inherited a large property on the island and wanted to build a house to accommodate her single life. Mies was at that time experiencing a difficult period in terms of his professional practice\footnote{3}, and it was at this time that he focused intensely on the idea of a court. During this period, the idea of a court was not only part of the education program he was delivering at the Bauhaus\footnote{4} but also reflected heavily in his designs such as the row house project (1931), the house for the Berlin Building Exposition (1931), the Gericke House (1932), the house with three courts project (1934), the court house with a garage project (1934), the Hubbe House, and the Ulrich Lange house (1935).

With the exception of the 1931 Berlin project, none of these designs were actually built, but Mies seems to have concentrated highly on the idea of a court during this period, since the use of a court cannot be found in any of his other actual projects save for houses designed later in the U.S. such as the one-story row houses in Lafayette Park (Detroit) designed between the late 1950's and early 1960's. This fact also shows that the idea of a court was employed in a limited way for the projects in urban areas in terms of its spatial environment.\footnote{5}

In other words, it can be said that a court was used as an appropriate solution for situations in which it is difficult to secure open views towards the outside, such as in highly dense urban areas. Thus, it seems probable that in the Hubbe House, which is sited where urban
and rural features coexist, the idea of a court would not have been Mies's singular focus in the course of the design. Instead, harmonizing all existing factors, both rural and urban, would have been his main concern. In the Hubbe House, he put glass curtain walls on three sides of the living room, each side open to different external views. The east side commands a natural sight of the Elbe River, while the fence bordering the southern court, reaching into the realm of inner columns of the living room, blocks the view to the southeast. Fences to the north and south form a type of light-court, while the east side is completely open. Mies most valued this view to the Elbe River while he found the outlook to the south, the upper stream, dull and almost disturbing (Terence Riley, p.288 / Neumeyer, p.314). For this reason, Mies divided the long north-south rectangle into the eastern and western lots, and placed a court in the south of the living room on the east side facing the Elbe River as well as a garden in the north, so that, by opening the east side, one can enjoy a view of the Elbe River.

The living room is formed by glass curtain walls on three sides with different views. On its east, the natural landscape of the Elbe River is seen, while the view to the southeast is blocked by the fence to the south that contains the court and extends into the living room past the row of perpendicular inner columns.

Here, we find different characteristics between the southern court and the northern garden. While the northern garden is open mainly toward the east with a relatively weak degree of enclosure, in the southern court a wall blocks part of the living room, forming a solid enclosure. These differences, in terms of the degree of enclosure, result in a variety of visual directions beyond the site. While the view is limited to the inside of the court in the southern court, in the northern garden one can view both inside the fence and the Elbe River beyond the site. Accordingly, a comprehensive view of all these areas can be seen from the living room. In addition, the dull sight toward the south is blocked, while the scenic view toward the upper stream is further opened up.

As shown in the perspective drawing, Mies placed a sculpture in one corner of the court to create a focal point. This idea is very similar to that created in a scene at the German Pavilion in Barcelona and shows some modification from the 1929 masterwork. The similarity is more apparent in terms the court's spatial composition, as can be seen in the relationships between the three views of Hubbe House and the German Pavilion shown in Figs.8. and 9.: the southern court / small pool (A / A'); the northern garden / Platform with main pool (B/ B'); and living area with fireplace / hall with onyx wall (C / C').
The space with the large pool in the German Pavilion is partially surrounded, similar to the northern garden in Hubbe House that provides both limited and open views simultaneously. In the German Pavilion, the space that accommodates the small pool with Kolbe's sculpture allows only a limited view, similarly to the southern court in Hubbe House. That is, the views are divided into the following spaces: the space with the natural view, which is completely open from the living room (A), the space with both artificial and natural views (B), and the space with only an artificial view (C). In fact, this spatial composition recurs in many of Mies's post-German Pavilion works.

The House with three courts in 1934 shows similarities to the the Hubbe House in its T-shaped composition, whereby the three courts create three different views. This similarity suggests that Mies's idea of a court shown in Hubbe House developed not only from the idea of the court house he pursued at Bauhaus but also from the idea of a spatial composition for creating views, which had occupied part of his architectural thoughts for some time.

3. Analyses of Spatial Characteristics of the Court

3.1 Analyses of the Characteristics of the Relationship between Exterior and Interior Spaces

An early form of the court appears in the Glass Room at the Stuttgart Werkbund Exhibition in 1927. Here we find the use of two ideas for the court: one, a long and narrow space with the impression of a winter garden, and the other, a space with a torso of Lehmbruck (Figs.11. and 12.). Both spaces are auxiliary and create an atmospheric effect through the use of their transparent glass curtain walls. These spaces needed to generate the atmosphere of an exterior space, although in actuality they are situated in the interior space inside the hall of the exhibition. It can be assumed that the specific space where the exterior and interior spaces are combined, which becomes a background space with a limited view, was created from this particular situation inside the exhibition hall.

This winter garden creates an exterior-like atmosphere created by the differentiated ceiling heights, use of lighting, and potted plants. The transparent glass curtain walls give this space an impression of visual extension into the living area. In this way, the space has the combined characteristics of interior and exterior spaces.

This idea of integrated interior and exterior spaces was further developed in the German Pavilion and at Tugendhat House in 1928-29. In Tugendhat House, the idea is realized in the form of the winter garden in the southeastern part of the living area on the first floor. This space plays the role of a spatially expanded living area. This is a type of neutral space between interior and exterior spaces and has a similar composition to...
that of the winter garden in the Glass Room. However, there are differences between the two, whereby the winter garden in the Glass Room is an interior space with a ceiling and does not function to obstruct the view. Such space does not appear in any further developed form in Mies's later works.9

In contrast, the space with a small pool highlighted by the Georg Kolbe's sculpture in the German Pavilion shows typical characteristics of a court. This space extends from the interior space, and its marble walls limit one's views. Natural light is drawn into the space, while Kolbe's sculpture, an artifice, also draws our attention. In fact, the two spaces previously mentioned regarding the Glass Room can be found in this work in an integrated form. For these reasons, it is plausible that the German Pavilion is the first court among Mies's works to be actually built.

In comparison with this, the House for a Bachelor exhibited at the 1931 Berlin Building Exposition10 is significant in that it adopted the theme of a court for residential architecture for the first time. In this building, the open view from the living room area and the private space of the bedroom and the library create an extended space with quiet seclusion. However, the idea here differs from that of the court as a type of extended interior space. This is because this space is not completely enclosed, so views are not entirely obstructed. This concept will be further elaborated in section 3.2 of this paper.

However, it is noteworthy that Mies started to actively develop the idea of a court while teaching at the Bauhaus in Dessau during the same period in which he was working on this house. An examination of the drawings and sketches done by his students provides a clue to Mies's ideas. In the drawings, each court is surrounded firmly with right-angled walls forming a stronger enclosure than that of the court in the house at the Berlin Building Exposition.

The perspective drawing completed for the House with Three Courts project in 1934 shows that the difference between interior and exterior spaces is only apparent in the existence of ceilings. Furthermore, these spaces can be perceived as having identical features by the use of transparent glass curtain walls, walls flowing from the inside to the outside, and homogeneous floor patterns (Fig.15.). Similarly, the perspective drawing of the living room in the Hubbe House made by Mies emphasizes the integrated relationship of the living room area with the court more than the distinctions between the spaces (Fig.19.). Here Mies seems to have focused more on the relationship between the living room area and the exterior space than on the quality of the space itself.

3.2 Obstructed Views

Another characteristic of a court is that it creates a mood of quiet seclusion by blocking views outside the walls. It is assumed that the effect of the previously mentioned two spaces of the Glass Room, in continuous relationship with the interior while limiting the exterior view, was reapplied in the space with a small pool and a Kolbe sculpture in the German Pavilion, designed later. Here, the view is obstructed by the marble wall, natural light is drawn in, and our eyes are drawn to the Kolbe sculpture. In so doing, it
gives the effect of preventing an interruption from the outside by drawing light in and blocking the outside view.

In comparison, a freestanding wall, which does not completely enclose, appears in the 1931 Berlin Building Exposition. In fact, the idea of the walls here is closer to that of the Brick Country House project of 1923. This shows that Mies's idea of a court is still rather passive at this stage. Strictly speaking, the idea of the house for the Berlin Exposition differs from that of a court house. As shown in the photos from that period (Fig.17.), the view is not obstructed but continues to the outside, and the walls play the role of directing our eyes toward the view. In other words, the walls do not form a complete enclosure, but give the effect of freestanding walls. Consequently, these walls differ from those of the courts in the court houses at the Bauhaus in Dessau where walls were closed firmly at right angles to form strong enclosures.  

Compared with this, a court forms a closed space and its walls act more like a background than as visual objects. When the walls act as a background in this way, the sculpture or trees in the garden play the role of objects. As shown in Mies's sketch, the sculpture plays this same role. (Fig.7.) This phenomenon can be seen in Group of Three Court Houses and Ulrich Lange House.

The enclosing walls of a court have exactly the opposite effect of the freestanding walls. In other words, these walls constitute a background and prevent our eyes from roving towards the hectic outside view. In so doing, the walls create an artificial background by preventing our gaze from extending to the outside. This creates a placid atmosphere, which Mies describes as "quiet seclusion," within the space. This characteristic of the court is seen in the New National Gallery, Berlin (1962-8) designed later in Mies's professional life. Here, the four walls are glass curtain walls that open the view visually. The upper level accepts all the surrounding urban views, while on the lower level the view is obstructed, creating a quiet and placid atmosphere. In this way, the issue of obstructing views eventually becomes an issue of background and objects.

3.3 Natural View vs. Artificial View

The perspective drawings by Mies depict both the court and the landscape of the Elbe River and its vicinity (Figs.7., 19. and 20.). This suggests that Mies considered both spaces as equally important and also indicates that the artificial space created by the court and the natural space (or original view) coexist. The fact that Mies included both spaces in all of his three perspective drawings means that he regarded the integration of both spaces as significant. This differs from the case of the German Pavilion, in which each view (Figs.9. and 21.) exist independently, but is not integrated. However, in the Gericke House project (1932), the views can be understood in one glance, making the relationship between the interior and exterior more integrated and comprehensive. In the living room of the Gericke House, all the views into the court in the north and the natural scenery in the south are open, maximizing the sense of openness.
In the House project (1950) and in the 50x50 Feet House (1950-51), the idea of the court house was not adopted any more because in these houses the relationship between the interior and the exterior was maximized through the universality of the interior space and the maximum degree of transparency to create a house in which the relationship with the exterior space is actively used (Kim, 2008). This seems to have resulted from the influence on Mies of the natural environment of America. In other words, unlike the site in Germany, which are closely related to urban areas, the vast and abundant natural environment in the United States required Mies to create an active relationship with nature instead of creating artificial scenery.

This kind of court, although not placed in a house, reappears in Mies's later work, the New National Gallery, Berlin. Here, the idea of a courtyard is closely related to the urban surroundings. This building, where the universality of space was maximized more strongly than in Mies's other works, is lifted from the ground, in harmony with the urban features of Berlin and the courtyard is placed in the raised area.

The fact to be noted here is that a court is not used independently when it is actually applied. In other words, Mies attempted to use the court to harmonize the open natural scenery with the closed artificial scenery. This was requested by the client, who lived alone, for her social life and privacy. As stated in the conversation with Noberg-Schulz in 1958, this idea was a part of an "attempt to bring nature, houses, (and) human beings together into a higher unity" (Noberg-Schulz, 1958). Eventually, this is the thesis that Mies pursued throughout his life.

4. Conclusion

Although not actually built, Hubbe House designed by Mies in 1935 is significant in that the idea of a court was applied to the actual site. The idea of a court, presented mostly conceptually for educational purposes at the Bauhaus and the Illinois Institute of Technology from 1931 to 1938, was adopted in the Hubbe House to provide the house with practical and complex characteristics through the consideration of its site conditions and his long-pursued architectural ideas. This paper attempted to understand the court in terms of its relationship to the house as follows.

First, the paper dealt with the relationship between the interior and the exterior spaces of the court. The idea of a court is an important and effective method to create a more active relationship between the interior and exterior spaces. This is also a continuation of the idea of extended interior spaces as can be seen in the Glass Room.

Second, the court prevents views from extending beyond the site and blocks the hectic confusion from the outside by obstructing views to create quiet seclusion. Unlike an open space, by creating a background with walls and placing objects in the background, a placid and artificial atmosphere is created.

Third, the closed artificial scenery in contrast to the open natural scenery is used to harmonize the composition of the whole building. This practice keeps appearing in Mies's works and is distinctive especially in his urban houses where natural scenery cannot be included easily.

Therefore, Mies's idea of a court is valuable in that it was an important part of his lifelong process to develop his architectural ideas as well as in that he concentrated on the idea intensely when he applied the theoretical idea of a court in actual practice.

Notes

1. Tegethoff, p.121.
2. Mies divided the site and designed Hubbe House in the eastern area, which is the most spacious and has the best view. It can be inferred that the subdivisions of Hubbe House were designed for the prospective sites for court houses and that the theme of the court house was very powerful in the design of Hubbe House.
In the period of 1933 to 1938, Mies was given only 4 design projects; the Factory building for the silk industry, Ulrich Lange House, the Administration building, and Hubbe House. Only two of these were realized.

Here Mies educated students on “the problem of designing a settlement of economical houses with individual gardens and courts on small plots defined by a perimeter wall (Terence Riley, 2001, p.292). This continued when he taught at the Illinois Institute of Technology in Chicago.

This is because, unlike in Germany, the houses in the U.S. were designed for low-density rural areas. Thus, in the U.S. the idea of a country house was considered more important, as shown in the Resor House (1937-40), Farnsworth House (1945-50), the Cain House project (1950), and the 50x50 Feet House (1950-51).

Commenting on the site of Hubbe House, Mies states that “The house was supposed to be built on the Elb-Insel in Magdeburg, under the lovely old trees and with a broad panorama of Elbe ....” Tegethoff, p.121.

The Glass Room was installed in a hall of the municipal building on Gewerbehalleplatz. Tegethoff, p.68.

In Tugendhat house, a courtyard exists as a small courtyard in the space next to the kitchen in the northwestern part of the building. However, since this courtyard is a kind of service area and does not create the main view from the living room, it has little to do with the main focus of this paper, it was excluded from the main argument here. This type of court can also be seen in Gericke House of 1932.

Tegethoff regards the starting point of Mies' usage of the term court as the year 1931, when Mies taught at the Bauhaus in Dessau (Tegethoff, p.124). Here, the shape of the court in the house for single people exhibited at the 1931 Berlin Building Exposition is regarded as an important example.

The freestanding walls used by Mies have the following visual characteristics in general. First, they play the role of an objet placed in the background of an open space. As shown in the onyx wall in the German Pavilion and at Tugendhat House, the column exists as a linear objet, furniture and sculpture as plastic objets, while the wall exists as a plane objet. Second, the wall plays the role of indicating directions. In the Brick country house project (1923), edges of the open walls suggest a sense of direction or movement stretching outwards.

In the U.S., Mies used courts partially for terrace houses in Lafayette Park, Detroit, but not anywhere else. Particularly in houses, as in typical country houses, he did not use courtyards. Instead, he used inner-courts as at the Chemical Engineering and Metallurgy Building at IIT(1945-46).

References