

MONIKA GAŁA-WALCZOWSKA\*

## DRAWING SERACH FOR ARCHITECTURAL SPACE. UNREALIZED HOUSES OF MIES VAN DER ROHE

### RYSUNKOWE POSZUKIWANIA PRZESTRZENI ARCHITEKTONICZNEJ. NIEZREALIZOWANE DOMY MIESA VAN DER ROHE

#### Abstract

Design studies in the field of searching for modern architectural space of a single family house led by Mies van der Rohe in 1920s and 1930s, have survived as drawings – sketches, plans, perspectives and photographs of models. Projects of the Brick Country House (1923) and the Concrete Country House (1924), the urban Court-house and the House with tree courts (1934) and drawing studies of the Mountain House (1934), although they have never been realized, had a great impact on development of modern architecture. The drawings illustrating the architecture of the houses are a breakthrough in thinking about a creation of a place, about living space, about a relation between inside and outside. They permanently went down in history of architecture, still being an inspiration for new generations of contemporary architects.

*Keywords: drawing, search for architectural space of a house*

#### Streszczenie

Studia projektowe poświęcone poszukiwaniu nowoczesnej przestrzeni architektonicznej domu jednorodzinnego, prowadzone przez Mies van der Rohe w latach 20. i 30., przetrwały w postaci rysunków – szkiców, planów, perspektyw oraz zdjęć modeli. Projekty podmiejskich domów z cegły (1923) i betonu (1924), miejskich domów z dziedzińcami (1934) oraz rysunkowe studia domu w górach (1934), choć nigdy nie doczekały się realizacji, przyczyniły się do rozwoju architektury nowoczesnej. Rysunki obrazujące architekturę tych domów stanowią przełom w myśleniu o kreowaniu miejsca, przestrzeni mieszkalnej, powiązaniach wnętrza i zewnątrz. Trwale wpisały się one w historię architektury, wciąż inspirując nowe pokolenia współczesnych architektów.

*Słowa kluczowe: rysunek, poszukiwania przestrzeni architektonicznej domu*

\* Ph.D. Arch. Monika Gała-Walczowska, Chair of Housing Architecture and Architectural Composition, Faculty of Architecture, Cracow University of Technology.

*Creativity of an architect is fulfilled in joining mental and drawing activity*<sup>1</sup>.

Maria Misiągiewicz

Architecture and the profession of an architect are usually perceived as being strongly connected with drawing, as a central area of such an activity. Drawings of famous architects, among them drawings of unrealized houses of Mies van der Rohe created in the 1920s and 1930s have a special artistic, cognitive and didactic value. “A drawing presenting an architectural object enables an access to such a thing, Maria Misiągiewicz mentions, this very state is characterized by a specific kind of directness and immediateness as well as by being unarbitrary while the object is visually unrepresent<sup>2</sup>”. Sketches, conceptual projects – projections, plans, views of elevations, perspective drawings let us follow the architect’s way of thinking.

Looking for the essence of contemporary architecture, Mies van der Rohe works according to the concept less is more, reflecting the character of his entire architectural activity. “In those words ‘the great internationalist’ expressed his faith in perfection of simple solids and ‘minimalistic’ architecture”<sup>3</sup>. His works are characterized by discipline and order, purity of construction and honesty in use of materials. “Formally ascetic architecture of Mies van der Rohe, being an effect of a process of reduction of unnecessary decorations and details”<sup>4</sup>, was, in his original assumption, supposed to reflect the spirit of the time. Mies, “rejecting any type of historicism or futurism, definitely chooses the way of realism”<sup>5</sup>. Analyzing space conditioning, treating a construction, materials and technology as a means, pursues a goal set by himself, which is an architectural form, understood as a representation of its own destiny. “For Mies a cognition of a function doesn’t mean an understanding what outer form it should be expressed by”, Antonio Monestiroli explains, “but an understanding, what is its general value. Learning about the function means defining the value, which should be expressed by concise form, showing the value in an evident way”<sup>6</sup>. Looking for the superior value in architecture, the architect focuses on the analysis of chosen types of buildings. Comparing architecture and nature, Mies says: “there are good roses, but not all plants can be roses; there are also good vegetables”<sup>7</sup>. A similar approach is characteristic of his search for an appropriate relation between architecture and a place. The attitude of the architect is reflected in his words: “every building has its position

<sup>1</sup> M. Misiągiewicz, *On Presentation of the Architectural Idea*, Cracow 1999, p. 15.

<sup>2</sup> *Ibidem*, p. 3.

<sup>3</sup> M. Misiągiewicz, *Architectural Geometry*, Cracow 2005, p. 104.

<sup>4</sup> M. J. Żychowska, *The New Description of Architecture*, [in:] *Technical Transactions*, issue 10-A/2004, *Defining of Architectural Space – Architecture as Art*, M. Misiągiewicz (ed.), Cracow 2004, p. 181.

<sup>5</sup> A. Monestiroli, *The Metope and the Triglyph*, Cracow 2009, p. 42.

<sup>6</sup> *Ibidem*, p. 43.

<sup>7</sup> [after:] K. Frampton, *The Unknown Mies van der Rohe*, [in:] D. Spaeth, *Mies van der Rohe*, New York 1985, p. 7.

in a stratum – every building is not a cathedral”<sup>8</sup>. Drawing studies in architecture of a house are led in analogy to a landscape, to the nature perceived as both – an ideal and an inspiration. For Mies van der Rohe architecture of a house is a pretext for search for a relationship between a low building and its direct surrounding, where “constructing of a house equals constructing of a place”<sup>9</sup>. It is the search for a defined living space, understood as human’s place in space, concerning urban, suburban and open landscape.

In the 1920s Mies van der Rohe created the conceptual drawings of suburban villas, where he redefines the architectural space of a house. In the drawing studies of the “Brick Country House (1923), where the spatial expression owe to the Neoplastic architecture of the Dutch De Stijl movement”<sup>10</sup>, says Kenneth Frampton. The irregular scheme makes the architecture innovative, and the shape of the projection connotes Mondrian’s paintings as well as Frank Lloyd Wright houses wide projections. The composition of the *Brick Country House* was based on geometry of a right angle and on a combination of contrary directions – the vertical and the horizontal, accented by interpositions of walls. The segmentation of the projection is being continued in the third dimension of the drawn architecture, which is shown in the perspective drawing. Cuboidal, intermingling solids, which derived from the core of the building, established the sculpturally deconstructed architectural form. Rising up pyramidal solids with different areas and height, change gradually while distancing themselves from a compositional core and transform into walls, which are ejected far outside. In the drawings of the villa Mies defines a new concept of wall in architecture. A wall does not limit architectural space anymore. On the contrary, overrunning an outline of a solid, it becomes a constituent element of a connection between outside and inside, as if it was creating a spatial dialog with nature<sup>11</sup>. It is visible in the perspective drawing that thanks to the juxtaposition of full-brick and glass parts of the walls make the interior of the house open into the landscape. The choice of the traditional material, which was juxtaposed with the avant-garde form also creates the uniqueness of the villa.

In the drawing studies of the Concrete Country House (1924) the innovative form was supported by a modern technology of reinforced concrete. The perspective drawing shows a horizontal, spatially expansive solid. The architectural form is characterized by recumbent cuboids, penetrating in the central part of the building. In this drawing architecture possibilities created by a monolithic construction were used and highlighted. “Boldly leaned out slab cantilevers, banded arrangement of windows and glass corners, writes János Bonta, show that Mies was also the incomparable master in creating reinforced concrete forms”<sup>12</sup>. The irregular outline of the plan shows a dynamic relation between the architecture and the landscape. Each solid – a component part of the composition, corresponding with each usable zone of the villa, faces a different direction, as if Mies wanted to fully benefit from a value of the place. The irregular solid is complemented by surfaces of adjoining terraces, partly covered by cantilever roof. Big banded glass surfaces highlight the horizontal

<sup>8</sup> *Ibidem*.

<sup>9</sup> A. Monestiroli, *op. cit.*, p. 45.

<sup>10</sup> K. Frampton, *op. cit.*, p. 8.

<sup>11</sup> P. Trzeciak, *The Adventures of Architecture in 20th Century*, Warsaw 1974, p. 121.

<sup>12</sup> J. Bonta, *Ludwig Mies van der Rohe*, Warsaw 1983, p. 13.

charakter of the solid, which guarantees the visual connection between the interior and the surrounding landscape.

Opposing spatial concept is characteristic of introvert urban houses, which were drawn in the early 1930s. “Think about a gesture of space closing, says Antonio Monestiroli, sanctified gesture, repeated in the history of a humankind every time, when it is necessary to distinguish inside and outside of limited space. Close to protect but also to identify, to make a place proper and recognizable”<sup>13</sup>. The architectural “closing gesture” lets Mies assign space, which belongs to a house, but also clarify a living area, distinct from urbanized and often chaotic city space. This assumption is present in Mies’s design studies led at Bauhaus in Dessau and next in Berlin, where he demonstrated his own personality of “a purist and perfectionist, obsessed with a passion of order, clarity and perfection”<sup>14</sup>.

The drawing showing the plan of the Court House (1934) lets us see the basic design concept. The house was placed in the middle of the space appointed by the outside wall. The compact solid of the building appoints the entrance yard and the bigger garden yard. The plan of the house was based on a rectangular outline whose regularity was interrupted by excision of a part of a corner. The interior of the house is defined by the free plan, where the living space is accented by free positioning of the partition. The glass wall visually connects one-space interior with the garden yard.

The architectural idea of the Three Courts House (1934) was recorded as conceptual drawings – a plan and a view of the building, read through the windowless wall surrounding the house. The house was designed on a lying T-shape projection. The solid was set up in a way, which lets it ring-fence three garden interiors: the entrance yard and two smaller, quiet yards. “Introducing this type of a building in an arrangement appointed by two parallel streets, Antonio Monestiroli explains, closed parts communicated with the street only through open gates in a fence were obtained. The achievement is similar to an ancient city, connotes its general concepts and confirms them in the present day”<sup>15</sup>. Because of the glass walls the interior of the house stays in visual connection with the yards, while the wall isolates it from the neighbouring development and the streets.

One of 37 archive sketches of the Mountain House (1934) shows the drawing record of theoretical studies of modern house architecture in the Alpine landscape of South Tyrol. “By the project we will discover some aspects of drawings as theoretical and operational designing tool”, used for defining of architectural space<sup>16</sup>. In the Mountain House sketches, the architect focuses on nature and relation between architecture and landscape. He establishes a condition for existence of a house, which is perceived as a place to

<sup>13</sup> A. Monestiroli, *The Responding Form I Short Lecture on Architecture*, [in:] *Pretext Research Bulletin of the Chair of Housing Architecture*, D. Kozłowski (ed.), M. Charciarek, T. Kozłowski, Cracow 2003, p. 39.

<sup>14</sup> G. Naylor, *Bauhaus*, Warsaw 1977, p. 138.

<sup>15</sup> A. Monestiroli, *The Metope and the Triglyph*, Cracow 2009, p. 47.

<sup>16</sup> C. Battaino, *Defining rather than depicting architectural spacer. Abstraction and variation in the Mies van der Rohe’s Mountain House*, [in:] *Defining of Architectural Space – Description of Architectural Space*, M. Misiągiewicz, D. Kozłowski (ed.), Monograph, No 441, vol. 1, Series Architecture Cracow University of Technology, Cracow 2013, p. 17.

contemplate nature<sup>17</sup>. The horizontal, one-storey solid was composed on an L-shape plan. The solid of the house includes the surface of the observation deck, which opens into the mountain pass. The Mountain House is an observatory house, Claudia Battaino writes, “panoramic viewpoint”, “architecture seeks to catch an abstract order of landscape”<sup>18</sup>. Spatial, compositional, and scenic connections between architecture and nature determines the innovative character of the concept of the Mountain House. The horizontal solid seems to melt in the immensity of the alpine landscape.

The drawings of the unrealized houses of Mies van der Rohe went down in history of architecture. In the drawing studies one can find typical features of Mies’s creative work: opening of the building to the nature and continuation of the classical architectural order. The diverse character of landscape inspired Mies to open to eternal, opposed concepts of architectural space: centrifugal concept of a country house in spatial and visual connection with a landscape as well as an introvert urban house.

Drawing visions of unrealized houses of Mies were a point of reference for architects of the time and have been an inspiration for next generations of architects, especially for representatives of minimalism in architecture. Among inheritors and continuators of Mies’s search and, in the same time, authors of single-family houses one can find: Alberto Campo Baeza, Peter Zumthor, John Pawson, David Chipperfield and Japanese architects Tadao Ando and Shigeru Ban. The relevance of Mies ideas is confirmed by European realisations, honored by the award of his name.

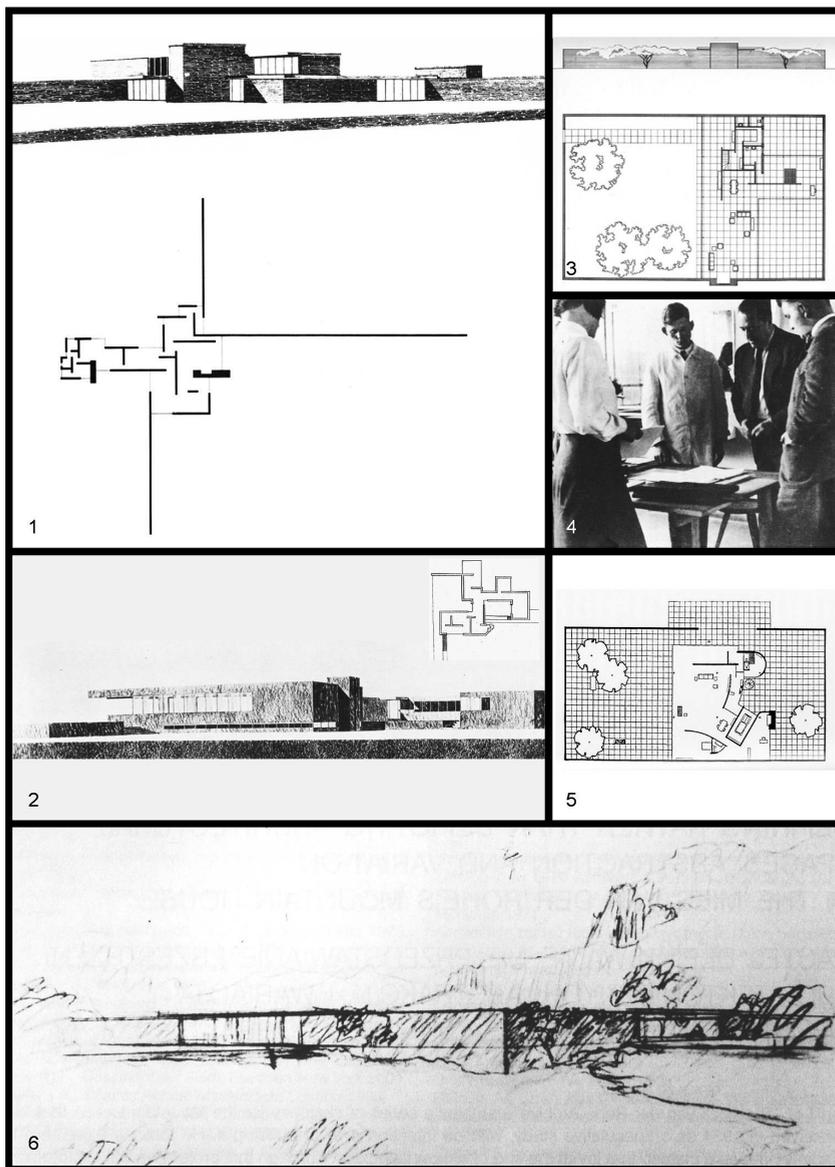
Studies of drawings of unrealized houses of Mies van der Rohe might have an educational value and let student of architecture discover next steps in search for modern space of a house and right relation between architecture and a place.

To sum up the reflection on the drawing studies of Mies van der Rohe, it is important to underline perennial role of a drawing as creative tool of an architect. An architectural drawing, similar as in the past, is still a “method of searching for the perfect esthetic effect”<sup>19</sup>.

<sup>17</sup> A. Monestiroli, *The Responding Form 1 Short Lecture on Architecture*, [in:] *Pretext Research Bulletin of the Chair of Housing Architecture*, D. Kozłowski (ed.), M. Charciarek, T. Kozłowski, Cracow 2003, p. 41.

<sup>18</sup> C. Battaino, *op. cit.*, p. 17-22.

<sup>19</sup> A. Bialkiewicz, *The role of Drawing in a Modern Architect’s Workshop. Krakow School against the Background of the Achievements of selected European and Polish Universities*, Cracow 2004, p. 43.



- III. 1. The perspective and the projection of the *Brick Country House*
- III. 2. The perspective and the projection of the *Concrete Country House*
- III. 3. The view and the projection of the *Tree Courts House* (Spaeth D., *Mies van der Rohe*, New York 1985)
- III. 4. Mies van der Rohe with Bauhaus students (<http://theredlist.com/> [data dostępu: 19.02.2015])
- III. 5. The projection of the *Court House* (Spaeth D., *Mies van der Rohe*, New York 1985)
- III. 6. The skatch of the *Mountain House* (<http://www.ncmodernist.org/> [data dostępu: 19.02.2015])

## References

- [1] Battaino C., *Defining rather than depicting architectural space. Abstraction and variation in the Mies van der Rohe's Mountain House*, [in:] *Defining of Architectural Space – Description of Architectural Space*, M. Misiągiewicz, D. Kozłowski (ed.), Monograph, No 441, vol. 1, Series Architecture Cracow University of Technology, Cracow 2013.
- [2] Białkiewicz A., *The role of Drawing in a Modern Architect's Workshop. Krakow School against the Background of the Achievements of selected European and Polish Universities*, Cracow 2004.
- [3] Blake P., *Mies van der Rohe – Architecture and Structure*, Warsaw 1991.
- [4] Bonta J., *Ludwig Mies van der Rohe*, Warsaw 1983.
- [5] Frampton K., *The Unknown Mies van der Rohe*, [in:] D. Spaeth, *Mies van der Rohe*, New York 1985.
- [6] Kozłowski D. (ed.), Charciarek M., Kozłowski T., *Pretext. Research Bulletin of the Chair of Housing Architecture*, Cracow 2003.
- [7] Mielnik A., *Contemporary Minimalistic Tendencies in Architecture of One-Family Houses*, PhD dissertation elaborated at the Faculty of Architecture of the Cracow University of Technology, under the academic supervision of Prof. Dariusz Kozłowski, Cracow 2010.
- [8] Misiągiewicz M., *On Presentation of the Architectural Idea*, Cracow 1999.
- [9] Misiągiewicz M., *Architectural Geometry*, Cracow 2005.
- [10] Misiągiewicz M. (ed.), *Defining the Architectural Space – Architecture as Art*, Technical Transactions, issue 10-A/2004, Cracow 2004.
- [11] Misiągiewicz M., Kozłowski D. (ed.), *Defining the Architectural Space – Description of Architectural Space*, Technical Transactions, Monograph, No. 441, vol. 1, Series Architecture Cracow University of Technology, Cracow 2013.
- [12] Monestiroli A., *The Responding Form I Short Lecture on Architecture*, [in:] *Pretext Research Bulletin of the Chair of Housing Architecture*, Kozłowski D. (ed.), Charciarek M., Kozłowski T., Cracow 2003.
- [13] Monestiroli A., *The Metope and the Triglyph*, Cracow 2009.
- [14] Naylor G., *Bauhaus*, Warsaw 1977.
- [15] Stelmach B., *Minimalism and the Avant-garde. Minimalistic Tendencies in the Modern Architecture in the Light of the Architectural Conception of the "Original Order" of Avant-garde 1930s*, [in:] *Teka Kom. Arch. Urb. Stud. Krajobr. – Polish Academy of Science Branch in Lublin*, Lublin 2009.
- [16] Spaeth D., *Mies van der Rohe*, New York 1985.
- [17] Trzeciak P., *The Adventures of Architecture in 20th Century*, Warsaw 1974.
- [18] Żychowska M.J., *The New Description of Architecture*, [in:] Technical Transactions, issue 10-A/2004, *Defining of Architectural Space – Architecture as Art*, M. Misiągiewicz (ed.), Cracow 2004.