docomomo International is a non-profit organization dedicated to the documentation and conservation of buildings, sites and neighborhoods of the Modern Movement. It aims at: • Bringing the significance of the architecture of the Modern Movement to the attention of the public, the public authorities, the professionals and the educational community. • Identifying and promoting the surveying of the Modern Movement’s works. • Fostering and disseminating the development of appropriate techniques and methods of conservation. • Opposing destruction and disfigurement of significant works. • Gathering funds for documentation and conservation. • Exploring and developing knowledge of the Modern Movement.

docomomo International wishes to extend its field of actions to new territories, establish new partnerships with institutions, organizations and NGOs active in the area of modern architecture, develop and publish the international register, and enlarge the scope of its activities in the realm of research, documentation and education.
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With infinite slowness arises the great form the birth of which is the meaning of the epoch...
Mies van der Rohe, lecture, Chicago, undated.

The building art is always the spatially apprehended will of the epoch, nothing else. Only when this simple truth is clearly recognized can the struggle for the principles of a new building art be conducted purposefully and effectively. Until then it must remain a chaos of confusing forces. For this reason the question as to the nature of the building art is of decisive importance.


The heritage of Mies van der Rohe is the theme of this 56th issue of docomomo Journal. As a tribute to Mies Van der Rohe (Aachen, 1886-Chicago, 1969) around the celebration of his 130th anniversary, this docomomo Journal is focused on the restoration and rehabilitation processes undertaken on some of his master buildings. As Fritz Neumeyer stated in 1986, “the effort to establish a philosophical foundation for building in the age of technology makes Mies’s statements important witnesses to a period of historical transition, whose importance has been unimpaired by the passage of half a century”. Mies raised a prominent position between Europe and America. Starting from Germany, his first incursions in Europe originated the German Pavilion for the Barcelona International Exhibition (1929, Barcelona, Spain), the Tugendhat House (1930, Brno, Czech Republic) and the silk factory and the private homes of Hermann Lange and Josef Esters in Krefeld. Several buildings of the Illinois Institute of Technology (ITI) (1943-1957, Illinois), the Lake Shore Drive (1951, Chicago), the Farnsworth House (1951, Illinois), the Seagram building (1958, New York) and the Toronto-Dominion Centre (1969, Toronto, Canada), witness his work in North America. Back in Berlin, the Neue Nationalgalerie (1968) testifies the sublime perfect achievement of his path towards the ideas of Baukunst and Zeitwill. These ideas, that one may name, respectively, as the art of building and the will of the time, are anchored in the belief of Mies van der Rohe that architecture should, “metaphysically charged with creative life force” (Neumeyer, 1986), serve the life of the current times. That led him to the modern achievement of a new kind of freedom of movement in space, following his sense of order (Blake, 1964) and his very unique urban space conception (Lambert, 1994, 2013). More than a half-century of use, it is a great honour to be the rehabilitation of these works a matter of the contemporary agenda. Not only these buildings are still a magnificent inspiration, as its resilience has been proving its capacity to keep being up-to-date with the times, through the collaborative efforts by some of the most skilled architects and architectural offices. Many could be the buildings featured in this issue, but a selection has to be made; from Europe to USA, docomomo International is happy to present recently finished or ongoing rehabilitation processes, from a cycle that has been started with the Mark Sexton’s keynote lecture at the 13th International docomomo Conference (2014, Seoul), on the restoration works conducted in the Crown Hall, by the office Krueck + Sexton Architects. That lecture was deeply developed and bravely turned into an inspiring paper for this journal. Since then, recognizing the research work conducted in the academic scope by the team of Christian Raabe, Daniel Lohmann and Norbert Hanenberg, at the Faculty of Architecture of the Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen University, namely within the restoration investigation of the Mies’s Verseidag silk factory in Krefeld, it became clear that it was the time to analyse the preservation question on the works of Mies van der Rohe. With the aim of creating a broad overview on the recent and current activities concerned with the heritage of Mies van der Rohe, this issue reveal new researches on his early youth years in his hometown Aachen, as new actions concerned with the Krefeld Golf Club never built, recently erected as a site specific installation, as recent investigations on the conception context of the German Pavilion in Barcelona. The reproduction of drawings hosted by the archive of the New York Museum of Modern Art (MoMA) was key for refreshed insights. The participation of several members of docomomo within THICOM unveils the amazing discussion process developed in the framework of the Tugendhat House restoration. Contemporary architectural and construction challenges are further analysed within the restoration of the God Box in ITI by Harboe Architects, and finally within the refurbishment of the Neue Nationalgalerie by David Chipperfield Architects, conducted by Martin Reichert in the Berlin office.
INTRODUCTION

The Heritage of Mies

BY NORBERT HANENBERG, DANIEL LOHMANN AND CHRISTIAN RAABE

Mies van der Rohe’s built work covers a timeframe of over 60 years, including two world wars and several revolutionary events in the history of architecture. The extraordinary architect has influenced 20th-century architecture worldwide like few others have. In the context of several restoration projects, the time has come to review the condition of his buildings: Is their materiality as timeless as their appearance? Did his constructions, which are of sometimes an experimental nature, prove to be sustainable, or did they fall into disrepair? How can Mies van der Rohe buildings be documented, repaired, restored, reconstructed, without losing the characteristic details of his work, and in order to preserve the architectural integrity and relevance of the Mies van der Rohe’s oeuvre?

This journal is the result of a set of activities concerned with the documentation, restoration and artistic reception of the oeuvre of Mies van der Rohe. These endeavors go way beyond questions of an adequate conservation and restoration of his preserved buildings. They begin with an academic approach towards Mies van der Rohe’s oeuvre in the context of several architecture schools, where his buildings are the focus of hand-in-hand teaching and research. The work with a current generation of architecture students and future protagonists may offer a relevant contribution to the actuality of Mies van der Rohe, especially in the discussion about Modern Movement and its allocation in a system of values that must be repeatedly reconsidered. In times of changing scientific objectives and methodology, research about this architect may offer new approaches and results, despite the large amount of literature that has shaped our image of Mies van der Rohe as an architect and a leading character of modernism. But beyond all theory, numerous projects from the practical world of conservation and restoration dealing with Mies van der Rohe’s built work have been initiated or finished recently, after many of his buildings have reached the end of a chapter in their lifecycle. Finally, several quite diverse approaches to the curatorial dissemination of Mies van der Rohe’s work through classical exhibitions and other ways of artistic reception and presentation have helped to show the role of modern architecture as a whole and its impact and relevance for our society.

The aim of this journal was to create a broad overview on the recent and current activities concerned with the heritage of Mies van der Rohe.

The exhibition Mies and the Inheritance of Modernism, which (Schunck) Glasparels Heerlen, Netherlands, April – August 2016) presented an overview of the built work of Mies van der Rohe with a detailed focus on five buildings and the methods of their preservation and restoration. Through this exhibit, and its broad framework program of lectures, symposia and guided tours, awareness was successfully raised for the concerns of heritage conservation of modernism and especially the built work of Mies van der Rohe. The contribution of curator Andrea Croé in this issue gives a good insight into the general concept.

The essays present restoration projects and other activities from academia and dissemination, and follow the chronological order within the professional life of Mies van der Rohe. He was born in 1886 as the youngest son of a stonemason in the West German city of Aachen. Around the occasion of celebrating 130 years since Mies van der Rohe’s birth, researchers Maike Scholz and Daniel Lohmann have gathered new information about Mies van der Rohe’s professional and personal relations to his home town, in order to add a dimension to the understanding of his first years in practice and his later work.

Amongst the numerous assignments that Mies van der Rohe received from Krefeld, Germany, the silk factory Verseidag has been disproportionately neglected in research, although it was the only industrial building that he ever built. On the occasion of current reuse and restoration work, a group of researchers and students directed by Norbert Hanenberg and Daniel Lohmann joined the team of architects and restorers to provide a scientific consultancy. Their article shows the way in which restoration decisions are based on current investigations into the history and materiality of the building. A new tenant in the former gatehouse of the silk factory is the company Interface, who is contributing to revive the site. Interface has developed a strong interest in Verseidag’s history and restoration, and has been a supporter in the realisation of this issue of the docomomo Journal.

Also in Krefeld, in the summer of 2013, an initiative of Christiane Lange led to a widely perceived and respected exhibition of a temporary artistic reconstruction of Mies van der Rohe’s unbuilt Golf Club as a 1:1 model. In her article, she describes the project’s background and the way, in which the architects Paul Robbrecht and Hilde Daem created an adequate and intelligent enrichment of the current discussion about full reconstruction through deliberate artistic abstraction and interpretation.

Concerned with the Krefeld commissions of Mies van der Rohe, Norbert Hanenberg and Daniel Lohmann have gathered new material from the archives of the Verseidag company archives to clarify the architectural history of the urban layout of the plant, and the possible involvement of
Mies van der Rohe in this process. In this way, the correlation of this last of his pre-war European commissions to his first American project – the urban design of the Illinois Institute of Technology in Chicago – was investigated and offered new information about continuity in his oeuvre.

The paper about the restoration of the Tugendhat house in Brno, Czech Republic by Ana Tostés, Ivo Hammer and Zara Ferreira present the spectrum between historic significance, thorough research and careful restoration that led to the revitalization and restored accessibility of the public to one of Mies van der Rohe’s masterpieces.

Two of the buildings on the IIT campus have been restored recently, and help to show the importance of thorough preparatory studies in order to execute a comprehensive refurbishment preserving the building’s structural and visual integrity. In the first article, Mark Sexton and his team deliver insight into the intense forensic research that was carried out on the S. R. Crown Hall, the heart of the Chicago campus, and the complex path towards material choices for its repair, in order to closely maintain the originally intended appearance of the Mies van der Rohe masterpiece. Secondly, Gunny Harboe was facing quite similar challenges in his restoration project of Robert F. Carr Memorial Chapel of Saint Savior. His article shows how the small building on the IIT campus was restored over a long period of time with challenging financial means, in order to rehabilitate the important religious and social function of the building on the campus.

Back in Berlin, Germany, and after its opening in 1968, the Neue Nationalgalerie had been in continuous intense use since its construction and was in urgent need of restoration. Because of the immense significance of the building, a meticulous process is currently being carried out in the coordination of a team of architects in the office of David Chipperfield. As the article by Martijn Jaspers shows, the project may serve as a textbook example of conservation in the future, in the same way that Chipperfield’s Neues Museum concept has already enriched the conservation discussion not only in Berlin and Germany, but internationally.

With this variety of essays, not only significant restoration solutions are documented through different projects of outstanding value and in varying dimensions, but also a range of diverse methodologies for research and conservation. Historic building research contributes to understand and preserve the work of Mies van der Rohe. The survey of the original substance gives indications of the time determination of individual components and provides evidence for the reconstruction of the architectural concept and the process of construction. As shown in the case of the survey of the Verseidag site and the restoration of the Crown Hall, new assignments to the oeuvre are possible and temporal developments become visible. Without an understanding of the building’s idea, the structure and the substance, restoration work and thus the preservation of the buildings of Mies van der Rohe are unthinkable.

His architecture is essentially determined by the selection and fitting of materials and less by constructive inventions. If we understand the concept of Tectonics in architecture as a narrative element that leads the spatial structure, the volumes of material and space as the appearance of the materiality to a concerted statement, then this is very similar to the work of his important model Karl Friedrich Schinkel. Both combine traditions of architecture with their own new ideas. In this sense Schinkel commented very carefully on his Bauakademie: “Some will rarely notice the novelty, whose (...) merit will lie more in the consistent application of a quantity of inventions made over a long period, which could not be brought together before in architecture”.

Notes

1 Mackowsky, H., Karl Friedrich Schinkel, Briefe, Tagebücher, Gedanken, Berlin, 1922, 194 (Free translation).

Norbert Hanenberg


Daniel Lohmann


Christian Raabe

Architectural studies at Technical University of Berlin. PhD from RWTH Aachen University in 2007, where he is Full Professor for Historic Building Conservation and Research at the Faculty of Architecture. Scientific researcher and assistant professor at the Institute for History of Construction at the University of Cottbus (1993-1994). Lecturer at the International Film School in Cologne (1998-2002), and at the Berlin University of Applied Science (2001-2004). Founder and practicing architect at Abri-Raabe Architekten, since 1993, in partnership Martina Abri. Development of several conservation projects, such as the restoration of different Karl Friedrich Schinkel’s architectural works. He has received the Schinkel Award by the Association of Architects and Engineers in Berlin (1997), and the Borchers Plaque by the RWTH Aachen University (2009).
“Zur Neuen Welt” — Towards the New World. Ludwig Mies and his Architectural Youth in Aachen.

BY MAIKE SCHOLZ AND DANIEL LOHMANN

Ludwig Mies van der Rohe’s personal and professional connections to his hometown Aachen in Germany are mostly unknown today. Through the analysis of both old and new written and graphic sources, the authors give an insight into Mies van der Rohe’s lifelong bond to his hometown. In the personal friendships, his friends Ferdinand Goebbels and Franz Dominick play a key role. Furthermore, the paper presents previously unknown buildings that young Mies was working on in the office of Albert Schneiders around 1905. One of the buildings, the house “Zur Neuen Welt” for client Joseph Oeben, is still standing and represents a lively example of the stylistic search in architecture after the turn of the millennium, and an early step towards Mies van der Rohe’s architectural maturity.

Letters from the Past
In 1947, almost 10 years after Mies van der Rohe’s emigration to the United States and shortly after World War II, the architect received two letters from one of his childhood friends from his hometown Aachen.

Little is known about the activities and personal connections in Aachen of the man, who later called himself Ludwig Mies van der Rohe and became one of the most important architects of the 20th century: who were his companions in the early years? Which of these connections lasted throughout his later life? Where did he get his first education in the field of architecture and construction? What projects did young Ludwig Mies work on?

Those almost forgotten letters from Germany give a rare insight into the first years of Mies’s career, decades before he was well established in the United States as a teacher and an architect. The sender Franz Dominick (1888-1954) was also an architect, born in Aachen, and a companion of Ludwig Mies van der Rohe in the early years of his career in both Aachen and Berlin. Dominick had not been in contact with Mies for 25 years. In these more than two decades, he had worked in a successful architectural office in his home town together with Ferdinand Goebbels (1885-1955), another childhood comrade of the two. Their office, Goebbels & Dominick, had built numerous houses, settlements, churches and other buildings between the end of the war and 1939 that are still present in Aachen’s cityscape and the surroundings today.

Dominick’s letters from March and August of 1947 are seemingly written amidst the rubble of destroyed Aachen. While his main intention was to ask for work in his postwar hardship, both of his letters include melancholic accounts of their youth and early career. Dominick recalls joint activities like hikes in the nearby Eifel region. He even suggests to write a biography of the years of apprenticeship between 1908 and 1920 — what he calls the Werdejahre of his now-famous old friend and the common time in Aachen and Berlin. His description gives an insight into the relatively unknown first steps of Mies’s architectural career. “I would start with the first years at Albert Schneiders — Öben house with the Prometheus – Levy – then Behrens – Riehl – Perls – Kröller (...).” While Riehl and Perls are known as original works of Mies in Berlin, and Kröller is a project of Peter Behrens, the first two listed houses Öben and Levy have never been mentioned before. This short list can be considered as a rare account of the buildings that young Mies was working on in his first years of practice. Are the two unknown projects original ones, or did he work on them in his time of employment in the architecture office of Albert Schneiders between 1924 and 1925? Interestingly, Dominick does not mention the only project known through Mies’s own memories of this time — the Leonhard Tietz department store at Aachen’s market place.

Albert Schneiders
Three employers of young Ludwig Mies are known. After first experiences in his father’s shop and as a mason on construction sites, he got a job in the studio of architect and stucco factory owner Max Fischer. After half a year in the office he was promoted to the drafting room. Mies spoke of this job as a time of intense learning to draw full-scale ornaments in all styles. The next architect to hire him was a man with the widespread Rhineland name, Goebbels. He was certainly neither Ferdinand nor his father, as it has been suggested by previous research. Ferdinand was obviously a youngster himself, and Ferdinand’s father Johann Wilhelm was a simple stoker. Mies’s employer was most likely a man with the illustrious name Josef Goebbels, architect and member of the Aachen town council. His family relation with Ferdinand is unknown.

Mies’s last and most influential boss before his departure to Berlin was the architect and engineer Albert Schneiders (1871-1922) (figure 01). His office was an enterprise success-
The Verseidag Silk Factory in Krefeld.
Architectural History and Restoration of a much-neglected Mies van der Rohe Project

BY NORBERT HANENBERG AND DANIEL LOHMANN

Although the buildings for the Verseidag silk factory, in Krefeld, Germany, are the only factory buildings that Mies van der Rohe ever planned and built (1931-38), many open questions remain about the history and development of the site. The paper presents new research results on the architectural history and materiality of the site that are derived from detailed documentation on site and analysis of newly available archive material. The scientific results and the acquired knowledge directly influence the current restoration of the buildings, in which the key characteristics designed by Mies van der Rohe are preserved and restored.

The Buildings for United Silk Weaving Mills Krefeld — Vereinigte Seidenwebereien AG
The buildings that belong to the so-called “Mies van der Rohe Business Park” today are directly connected with the industrial and economic history of the West German city of Krefeld. Originally, they were built for the Vereinigte Seidenwebereien Aktiengesellschaft – in short VerSeidAG – which translates to United Silk Weaving Mills Incorporated. Hermann Lange and Josef Esters founded the company in 1920 by joining several silk factories in the Rhineland and Thuringia regions of Germany. The aim was to reach a stronger market position against powerful national and international competitors. In the following years, Verseidag became the largest producer of necktie and silk fabrics.

The architect Mies van der Rohe was consulted several times for the design and planning of the company’s buildings. His most intense work started in 1930 and concentrated on the design of the office and storage building called HE-building (“HE” is an abbreviation for Herrenfutterstoffe, which is “lining fabric”). The functional cubic building with a flat roof and white stucco and dark rectangular windows dominates the overall image of the site (essay cover). Its evenly distributed window bays are ordered into symmetrical groups of 1-2-3-2-1 by the positions of the rainwater downpipes. The design of the main staircase received special attention by the architect. Its walls are constructed of exposed clinker brick, just like the base running around all exterior walls of the Verseidag buildings.

The HE building was built together with a dyeing plant, which was also designed by Mies van der Rohe. The unusually tall saw-tooth roofs of the plant with their north facing glazed surfaces ensure a maximum amount of daylight in the production areas. The two very differently shaped white buildings were connected with a recessed delivery ramp clad in dark brick, in order to clarify and underline their formal coexistence. The dark ramp area also serves to hide the glazed double pitched roof of a low connecting hallway between the two buildings. It provides an open connection between the ground floor areas of the HE-building and the dyeing plant. In the back of the building, this connection is hidden behind a projecting secondary stairwell.

Mies van der Rohe developed a set of common formal characteristics and details for the two buildings. Both rest on a visible brick base of five courses. The stucco above this base was applied flush with the brick surface. Large dark window openings were cut into the bright surfaces, allowing for even more daylight in the production areas. By carefully detailing these features, Mies van der Rohe created a common language for the strongly differing building shapes.

The architect created fundamental principles for this building, which he regarded as essentials for an industrial building: the articulated shape, few spatial partitions, and the creation of light-flooded, clearly arranged, and ideally column-free spaces. The conditions and necessities of functions led to the essential appearance of the buildings, derived from the recognition of the problem, and its seemingly inevitable solution.

Several indications point to Mies van der Rohe’s involvement in the design of further Verseidag buildings, such as the power house and the film printing plant. Furthermore, his atelier worked on a design for the company’s administration building on a nearby empty plot between 1938 and 1939. The imminent outbreak of the WWII however stopped this project.

Research in Verseidag
The Verseidag silk plant remained the only industrial building that Mies van der Rohe ever designed. In spite of this unique feature, the historical development and the authorship of the individual buildings is surprisingly obscure.
In the literature about Mies van der Rohe and his built work, the Vereinigte Seidenwebereien AG (Vesseidag) silk factory in Krefeld has only been mentioned marginally. If so, the area was described as “unremarkable, strictly functionalist”, and “not especially relevant”. However, Alison and Peter Smithson claimed as early as 1968, that a typically Miesian “open-space-structured urban pattern” first became real in the Vesseidag factory, “in which are displayed all the formal characteristics — in the buildings, in the layout, and in the planning (weeping willows, smooth lawns) — that we are so familiar with from the Illinois Institute of Technology in Chicago (IIT) campus. In some way it was all already there at Krefeld”. From this moment on, the Vesseidag silk factory was regarded an inspiration for the urban masterplan of the IIT campus, that Mies van der Rohe designed shortly after his emigration to the US. This intriguing theory is based on the overall final shape of the two ensembles as green urban areas with freely arranged low pavilions. The theory’s attraction is derived from the rare possibility of bridging the gap between Mies van der Rohe’s European and American work, due to the few buildings that he realized between 1931 and 1941. However, a real comparison of the two schemes can only be successfully proven or rejected when looking at the two projects in detail. New plan material from Krefeld allows for a precise reconstruction of the urban development of the Vesseidag silk factory and unveils surprising parallels with Mies van der Rohe’s first design for the IIT campus of 1939.

In the following, the historic urban development of the industrial plant on Girmesgath will be displayed, based on an analysis of the site plans from 1925–39, preserved in the company’s archives today. The dialogic process between strategic development of the company management and the building planning and realization with Mies van der Rohe’s participation will be investigated and, finally, the interplay between this last European project and the first American project of the Campus master plan for the IIT.

The Urban Development of the Vesseidag Plant in Krefeld

Vesseidag was founded in 1920 by four cloth manufacturers from the area around Krefeld in Germany’s Lower Rhineland. Together with Hermann Lange and Josef Esters, who had already joined forces with Carl Kniffler Jr. in a loose association, the founding fathers of Vesseidag also included the brothers Paul and Rudolf Oetker. These founding members were directors of textile companies, some of whose traditions in the lower Rhineland industry went back into the early 19th century. By joining these silk factories based around Krefeld, the partners hoped to reach a better market position against national and international competitors in times of serious economic troubles. After the founding in 1920, a property on 52 Gartenstrasse, built by Deuss & Oetker before WWI became the administration building for the new company. In the following decade, several other companies joined Vesseidag, and broadened not only the product scope, but also increased the capacity. Furthermore, they brought new facilities in Thuringia and Saxony into the business. In the following years until 1925, Vesseidag grew to become the world’s largest producer of cravat and silk cloth. The individual producers remained at their traditional bases after their association in 1920. Only the management found a new and representative domicile in Krefeld. Another five years later, Vesseidag decided to develop their own supply service on Girmesgath in Krefeld.

The reason why the plot of land on Girmesgath was chosen is unknown. Most likely, the principal motives for choosing this site were the fortunate infrastructural connections.
Summer 2013: a long, flat formation of wood and steel lies nestling in swaying cornfields at the top of a hill on the outskirts of Krefeld. Mies 1:1 The Golf Club Project is an architectural model on a 1:1 scale which can be viewed and accessed physically. The initiative Projekt MIK e.V. built the model together with Ghent-based architects Robbrecht en Daem according to the plans for the clubhouse at Krefeld Golf Club. These were drawn up by Mies van der Rohe in 1930, but never implemented. For a period of 6 months, it provides a report of Mies van der Rohe’s architecture at the height of his European career. The attitude of a memorial was inherent to the design as it refers to the context of his origins.

After its opening in May 2013, news of the 1:1 model circulates slowly through the professional and public media and it attracts more and more visitors. The model is accessible at any time, including at night. It stands free within the landscape for which Mies van der Rohe had planned it. There was a golf course here until 1938, but then the area was turned into a practice area for troops. After the closure of the British bases following German reunification, the area was restored and listed for environmental protection.

During the day, tour guides are available at the 1:1 model and offer descriptions and background information. There are no signs with information. The 1:1 model is an exhibit, not an exhibition space. The cash desk and bookshop are set up on a makeshift table - a wooden board on trestles.

Many visitors book tours. Many universities come with large groups of students. Whether joggers or cyclists, or simply out for a walk, people constantly pass through the building: once there was even someone on a horse! Occasionally, the 1:1 model becomes a venue for academic or cultural events. In the open building, they are exposed to the changeable Rhineland weather.

Some visitors told us that they feel overwhelmed by the spatial effect of the 1:1 model. The place exudes an atmosphere of great peace and triggers a feeling of longing. The rhythm of the columns, the wide-framed views, the hall, reminiscent of a prostyle: all of this radiates an atmosphere that was conveyed to the visitors. Is it the “consistency”, which Alexander Schwarz uses when talking about the 1:1 model to refer to Heidegger – an experience of “truth”– that arouses these observations?

Many were saddened that the building was only temporary. The comments in the guestbook and on social media bear witness to such unusual reactions to an architectural exhibition. Some, however, thought it was simply a waste of money because the model was to be taken down again after six months.

The 1:1 model achieved something that a presentation with plans, sketches, photographs and spare models could hardly have achieved. It was completely self-explanatory and direct. The physical presence of the architecture leads foremost to knowledge through experience, not through description. This ability of the object to mediate by spatial experience was underpinned by the specific quality of the building. The 1:1 model did not try to suggest a functional building. It always revealed enough to allow Mies van der Rohe’s spatial idea to become tangible and visible, but where no clear decision was recognizable in Mies van der Rohe’s plans, or where it was not necessary to include it in order to make plain his architectural concept, it retained the nature of a sketch. It hung in the space between physical architecture and architectural concept. That it was made possible to conceptualize and implement this intermediate space as an architectural form is the achievement of the architects Robbrecht en Daem. They transposed Mies van der Rohe’s design from 1930 to a temporary contemporary model.

**Background History: 1927–1937**

Mies van der Rohe received nine commissions from a group of influential silk factory owners from Krefeld, their companies and their association between 1927 and 1937. The
Mies van der Rohe and Lilly Reich, Tugendhat House, Brno, Czech Republic, 1929-30. Entrance hall, staircase, detail showing the travertine, the chromed and polished brass cladding of the cruciform pillar and the reconstructed stucco lustro; in the background, the reconstructed semi-translucent curved glass wall and the original metal framing painted with cream-white oil paint. © Ana Tostões, 2012.
Every reconstruction remains hypothetical. Even the most industrious attempts can only approximate the fine details of the original techniques and aesthetic. Neither the replacement of non-existent parts nor the restoration or repair of damage create conditions of which one can say more than "it might have looked like that".

A Modern House for Cultivated Owners

Greta Tugendhat, born Löw-Beer (1903, Brno-1970, St. Gallen) and Fritz Tugendhat (1895, Brno-1958, St. Gallen) came from Jewish German speaking families of industrialists and traders who had lived in Brno for several generations, expressively contributing to the industrialization of the area of Czechoslovakia since the 19th century, owning and operating a number of textile, sugar and cement factories.

Mainly motivated by Grete, in 1928 the couple commissioned Mies van der Rohe to design their family house: "I had always wanted a spacious modern house of clear and simple forms, and my husband had been almost horrified by the interiors of his youth, stuffed with trinkets and lace".

The exclusive building plot was given to Grete by her parents in March 1929, in anticipation of her inheritance, being part of a lot behind the Alfred and Marianne Löw-Beer villa, with beautiful views of the historic skyline of Brno. Mies van der Rohe, fascinated with the plot, immediately started working on the design, exploring his will to realize "the concept of opening up the interior space of the house to its natural surroundings". Impressed by the high level of Brno architecture and construction, Mies van der Rohe entrusted the construction works to a local construction company of the brothers Artur and Moric Eisler, who finished the work in 14 months. The local company Standard bytová společnost of Jan Vaněk created the built-in furniture. In December 1930, the couple moved into the house, where they lived with their children for seven happy years. In fact, they left the house in March 1938, the Anschluss day, when, in order to survive the Holocaust, they decided to abandon Czechoslovakia.

Through a combination of a precise design, good construction, advanced technologies and outstanding materials, Mies van der Rohe, together with Lilly Reich, satisfied the Tugendhat family's wish for innovation, originality and truth, creating an exceptional way of modern life based on an open plan.

It consists of a unique global work of art – Gesamtkunstwerk – in terms of its placement into its natural setting, its spatial organization, construction, technical equipment and interior furnishings.

In terms of its spatial arrangement, the 2000m² house was designed on 3 levels, with each level's plan related to the variation of the slope of the terrain, providing an innovative distribution of space. The entrance is situated at the top level, together with the rooms family area on the one side and the garage and driver's apartment on the other, separated by a perspective view through to Spilberk castle on the mountain opposite. The main living and social areas of the house are disposed on the floor below along with the kitchen and servants' area. The basement below this main level integrated Fritz' photo laboratory, the "moth room" and facility rooms for technical equipment such as central heating water and central air-conditioning.

Regarding construction, a steel support structure in the form of cross-shaped columns was used for the first time in the history of single residential houses. It allowed thinner walls, open spaces and larger openings in connection with the garden. The works were closely monitored and followed the highest possible requirements of the time.
Since the significant international symposium held in Brno in April 2006, “materiality” had become the motto for the restoration of the Tugendhat House. But what to do when important original parts had disappeared? If they need to be reconstructed, the eye wants to compare the new shine with traces of historical evidence. Unfortunately, all the bathroom tiles and appliances as well as all the moveable furniture (!) had to be redone from scratch. But when it came to the re-building of the outstanding half-round dining room screen, an incredible miracle happened and art historian Miroslav Ambroz presented us with part of the extra-long original Macasar veneers that had been reused for the paneling of an underground SS bar in the Gestapo Headquarters, now a canteen of Masaryk University. 10 of the former 22 panels could be restituted and carefully integrated into the inner surface of the new screen. The result is stunning and adds decisively to the credibility of the iconic furnishings.

Arthur Rüegg  
Arch. ETH SIA 954, Prof. Em. ETH Zurich,  
Ruggero Tropeano Architekten (Zurich)  
thicom Member

The Villa Tugendhat was inscribed on the World Heritage List on 16 December 2002. Almost 8 years of preparations have been filled by above-standard multi-professional surveys and project documentation. The establishment of thicom by the Council of the City of Brno then turned out to be an enlightened and unique opportunity to capitalize on the experience of an international team of specialists and docomomo members. The limit of the legislative framework of monument care in the Czech Republic or the financing conditions attached to EU funds introduced a regulated spectrum of changes; however, enthusiasm, expert erudition and argumentation was reflected in a total of 27 changes to the project. thicom has created an exemplary model situation. In addition to the primary assistance in the most significant intervention in the building’s history, there is also the highly appreciated foreign reflection and popularization of the restoration process. I personally appreciate the dedication and commitment of all members who have been able to respond flexibly to the progress of the building and conservation. For me personally, the involvement in thicom has become an unforgettable professional experience.

Iveta Černá  
Director of Villa Tugendhat  
thicom Secretary

“There is still little awareness concerning the restoration of architecture, especially of modern architecture. Architects and art historians believe themselves to be competent enough on their own. For the restoration of modern architecture, it is absolutely necessary to develop awareness of the very specific problems regarding the restoration process, which means conservators/restorers need to be consulted as well”. “My parents identified with Mies van der Rohe’s architecture. It was one of those rare occasions of a happy co-operation between an architect and his client and their individual ideas”. “From my perspective, the Tugendhat House is an ideal architectural expression of my parents, at least how I see and experienced them, also in their ambivalence: on the one hand, there was the admirable striving towards ‘spirituality’ and ‘truth’, which on the other hand implied an attitude of excessive strictness and demands. The question of Justus Bier concerning whether or not the Tugendhat House was habitable might thus perhaps be answered this way: for my parents, it was”.

Quotes from the book Daniela Hammer-Tugendhat, Mies van der Rohe, Basel, Birkhäuser Verlag, 2015, 99, 72, 73

Daniela Hammer-Tugendhat  
Hon. Prof. Dr. Phil. University of Applied Arts in Vienna  
thicom Honorary Chairperson

When reflecting on docomomo’s wish for a statement about thicom I realized that I had an incredible chance to follow the destiny and the development of the renovation of the Tugendhat House in the years between 1983 and 2012. As a young architect visiting the building site of the first renovation campaign directed by Kamil Fuchs I met Jan Otava, Jan Sapak, Vladimir Slapeta and, later on at the beginning of Docomomo, Iveta Černá, then the opportunity to be invited by Pavel Liska on occasion of the inscription of the house on the World Heritage List. The “materiality” meeting presented the groundwork done by Ivo Hammer and the researchers setting the basis for the renovations to come and a signal for thicom. The commission had the task to evaluate the renovation in the planning and in the realization process. Out of the enormous number of discussions and surprises came a due consideration: The first renovation period of the 1980s presented, in some cases, a surprising reversibility, for example the Xylolite underflooring was preserved under the layer of the synthetic floor, the same resulted by the original stuccos inside and outside under the acrilic coating. While in the final full reconstructive minded renovation there are some informative references, the renovation history of the first period lacks of the presence of material testimonies.

Ruggero Tropeano  
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thicom Member
Materiality is essential to Mies van de Rohe’s architecture. The composition, texture, color and finish of the surface materials are crucial to the perception of his masterfully designed forms and spaces. This applies to glass just as it does to other materials; although transparent, glass is never “invisible”.

Mies van der Rohe was fortunate to be acquainted with the top-quality window glass production in the Czech Republic when designing the Tugendhat House. The 3x4.8m clear glass panels for the legendary living room windows were almost certainly produced in the Chuderce Glass Works, one of the very few factories worldwide where plate glass in these sizes could be polished to perfection – as required by Mies van der Rohe. But the glass panels had all been lost and are no longer produced.

Our concern that the typical green hue of today’s standard glass would compromise the original architecture, particularly in case of the etched panels at the entrance, was finally responded by restoring the glazing with “extra clear” low-iron glass from Saint Gobain.

“Every famous house has it’s secret…”  (Iveta Cerná, 2012)

Having been listed as World Cultural Heritage in 2001, it was evident that all the material and immaterial values of the Tugendhat House should be treated with the greatest possible care.

A sequence of breathtaking events started with the passionate and adventurous renovation work undertaken in 2010-2012. At regular meetings involving a constant exchange of ideas, THICOM members discussed and meticulously decided upon every detail. The process involved a lot of adrenaline, passion and personal commitment, with great tension and a propelling strength always perceptible. Political and cultural differences marked the whole process of this special collaboration, with different interests being displayed by local and international actors – the Brno council, companies, craftsmen, curators, the general public, the press and the family.

Visitors will never know which judicial discussions walked ahead of the renovation work, nor the violent discussions and personal insults originated in the course of time. However, professionalism prevailed, enabling the work to be done with the highest possible quality, and the house was opened on time and within the budget.

Secrets will remain, but the Tugendhat house, outstanding architectural piece of art, has fortunately withstood the tests of time and will carry it in itself, maybe as a secret to be experienced now and in the future.

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The recent celebration of the 30th anniversary of the German Pavilion’s reconstruction (1986-2016) has offered an opportunity to reassess the range of the work that Mies van der Rohe (1886-1969) and Lilly Reich (1885-1947) carried out for the 1929 Barcelona International Exhibition. The goal of this article is to trace the origin, interpret the work developed from May 1928 to May 1929, and reveal the project of the German Pavilion as part of a much broader exhibiting sequence, which Mies van der Rohe and Lilly Reich constructed in line with their main task of designing the entire German section of the Barcelona industrial exhibits.

The Commission
In September 26, 1928, after a long process of diplomatic affairs between the two countries, Germany would finally accept the challenge proposed by Spain to build a small national representative pavilion. As the agreement signed between Santiago Trier (chair of the executive committee of the exhibition in Barcelona) and Baron George von Schnitzler (general commissar of Germany) states, the executive committee of the exhibition would put a total of 16,000 m² distributed in different palaces – and free of charge – at the disposal of the German general commissar, while the latter would be willing to “build a representative pavilion of their country... of a surface between 200 and 300 m²”. Hence, the contract Mies van der Rohe signed with von Schnitzler in November 12, 1928, included – besides the architectural development of the German Pavilion –, what had originally been commissioned to Mies van der Rohe at the end of May: the architectural design of the area the German industries would occupy in various palaces and the furniture and complete formation of the exhibition stands.

As the contract, agreement, and exchange of correspondence reveals, Mies van der Rohe was appointed to be in charge of the entire German industrial section 4 months before the commission to build the German Pavilion. In June 1, 1928, 3 days after the official notification of Germany’s commitment to participate in the world fair (and the appointment of von Schnitzler, general manager of the IG Farben, as the general commissar), Enrique D. Rodino (attaché of the Spanish Embassy in Berlin), announced to Trier that “Germany had already selected the architect to be in charge of the entire German section”. From June to September, before any decision about the construction of a national pavilion was made, Mies van der Rohe undertook two trips from Berlin to Barcelona.

The goal of the first trip, which Mies van der Rohe did alone in June 7, was to choose the spaces that Germany would occupy inside each of the given palaces, and to find the most visually privileged positions for several companies, including Deutsche Seide and IG Farben. As Rodino insisted, this first visit of Mies van der Rohe was of a “pure technical character”. During his site exploration, Mies van der Rohe would find that, regardless of his project, the experience of the German industrial exhibits would inexorably be fragmented throughout the exhibition grounds of Montjuic. The number of palaces in which the German industries would be on display (eleven in the beginning, eight at
Introduction

S. R. Crown Hall is widely recognized as one of the supreme achievements of 20th century architect Mies van der Rohe. Housing the College of Architecture on the campus of the Illinois Institute of Technology (IIT), the building was designated a City of Chicago Landmark in 1997 and a National Historic Landmark in 2001. National landmark recognition is very rare for a building fewer than 50 years old. At its dedication in 1956, Mies van der Rohe characterized Crown Hall as “the clearest structure we have done, the best to express our philosophy”. The exposed structural system is central to its design. Whether observed from the interior or exterior, the glass curtain wall reveals a straightforward understanding of the clear-span universal-space structure. As a physical manifestation of Mies van der Rohe philosophy of “almost nothing”, it imparts the De Stijl principles of rationalization and universality combined with Frank Lloyd Wright’s open plan. After 50 years of continuous use, Crown Hall remained a fully functional school of architecture. Although the structure remained sound, specific components of the building were in a condition of significant deterioration including the south terrace and entry, wood partitions, glazing stops, glazing, and coating. Past renovations intended to address code issues and patchwork/emergency repairs undermined the space’s original character. The damaged envelope obscured the aesthetic clarity of the structure and threatened its longevity. This essay focuses on the most substantial structural phase: the curtain wall.

Mies van der Rohe: Germany to USA

Mies van der Rohe was born into a family of stone carvers in Aachen, Germany, in March of 1886. Ambitious to shed his artisanal heritage, he worked at several architecture offices throughout Germany. His work with various leading architects imparted certain influences on form, proportion and detail influencing his architectural perspective. Eventually, his innovative structures on the drawing board and in built form were held in high regard throughout Europe. In 1930, he was chosen to succeed Walter Gropius as director of the Bauhaus, the German school of experimental art and design. Under pressure from the Nazis, Mies van der Rohe closed the school in 1932, after a short two-year tenure. Lacking work, he departed Europe for Chicago in 1938, accepting an offer to head the Department of Architecture the Armour Institute (now IIT).

Mies van der Rohe: IIT, Curriculum, Campus Plan

Upon his arrival, Mies van der Rohe set out to “rationalize” the architecture curriculum. The Institute’s Beaux Arts curriculum gave way to Bauhaus principles developed in 1922 by Walter Gropius. Students received a 3-step education. The first stage focused on drawing. Next came mastering the uses and qualities of materials. Finally, students trained in the fundamental principles of design and construction. Building practices were covered in courses while the studio was dedicated to problem solving. Like his buildings, Mies van der Rohe’s curriculum was an update on contemporary craft and materials, combining art, craft and technology with an emphasis on aesthetics. As architectural historian, Kevin Harrington explains, “Mies wanted to create a curriculum which would always yield excellent craftsmen and occasionally produce or encourage those with gifts to make expression of technique an act of high art.”

Early in his tenure, Mies van der Rohe taught in rooms provided by the Art Institute of Chicago. In 1945, Armour Institute and Lewis Institute merged, forming the Illinois Institute of Technology. This development required a new campus plan which Mies van der Rohe was commissioned

This essay documents the research of restoration and modifications to Mies van der Rohe’s masterwork, Crown Hall, the heart of the Chicago campus of the Illinois Institute of Technology. Restoration was necessitated by 5 decades of use during which the building had fallen into major disrepair. During the restoration, practical and philosophical issues arose from the building’s landmark designation by regional and national authorities. The essay describes the forensic research that preceded design, investigation and selection of alternate materials modifications to the building envelope. This includes a detailed description of modifications balancing original materials and systems with current codes. The essay concludes by placing the restoration of Crown Hall in the larger context of preservation of modern buildings and the threat to these works which, unlike Crown Hall, are rarely protected by landmark designation.
Restoring the “God Box”:
Mies van der Rohe’s Carr Chapel at IIT

BY GUNNY HARBOE

Perhaps no building designed by Mies van der Rohe better exemplifies his dictum, “less is more”, than Carr Chapel. Its rectangular prismatic form and unadorned architecture led to its being called “the God Box” by the students. It served at the Illinois Institute of Technology (IIT). When a building is so simple and direct, every little detail needs to be understood and attended to with great care in its conservation treatment. Combined with a chronic lack of funding, a seemingly simple project can become quite challenging and take over a decade to complete.

As with many heritage conservation projects the restoration of Mies van der Rohe’s Robert F. Carr Memorial Chapel of Saint Savior (Carr Chapel) was many years in the making. Funded by the Chicago Episcopal Diocese in honor of Robert Franklin Carr, Carr Chapel was intended to serve the broader student community at the Illinois Institute of Technology (IIT). Though the building was quite simple in its conception of design and the execution of its construction, its restoration was challenging. With something as simple and direct as Mies van der Rohe’s architecture, any intervention is difficult. While there was nothing particularly extraordinary or innovative required from a technical point of view, the execution had to be completed with great skill and extra care. The project was made even more difficult by the lack of funding available. The rich legacy of buildings that remain on the campus of the IIT is a treasure greatly valued by the University, however money is always hard to come by, especially for major renovation projects such as was needed for the restoration of Carr Chapel. To that end, the Mies van der Rohe Society was formed to raise funds specifically for the restoration and preservation of the many Mies van der Rohe buildings on campus. The first project was the exterior restoration of S. R. Crown Hall followed by the restoration and renovation of Wishnick Hall. Carr Chapel was identified as the third project needing the Mies Society’s attention.

Originally completed in 1952, Carr Chapel had long suffered from deferred maintenance and by the year 2000 was in need of major repairs. Unfortunately, IIT had no money to fund a restoration project at that time. In order to gain a better understanding of the true condition of the building and to begin to plan for its eventual restoration IIT commissioned the author to prepare a condition assessment for the building in 2001. This included some preliminary research and a full condition assessment of the existing conditions as well as recommendations for its future conservation treatments. This document served as the basis for the eventual restoration but was supplemented with further research for the development of full construction documents a number of years later.

The restoration itself had to be conducted in several phases as funding became available. It began with the roof, exterior or masonry, and steel and glass curtain walls. Several years passed before enough money was raised to begin on the interior. All in all, it took about 15 years from the time it was recognized that Carr Chapel needed conservation until the time it was completely restored.

The Original Design – “Less is More”

Carr Chapel was Mies van der Rohe’s only built ecclesiastical building (figure 01). It is said he had always wanted to design a cathedral, but this modest chapel was his only opportunity to create a worship space. At the dedication ceremony, he said: Too often we think about architecture in terms of the spectacular. There is nothing spectacular about this chapel; it was not meant to be spectacular. It was meant to be simple; and, in fact, it is simple. But in its simplicity it is not primitive, but noble, and in its smallness it is great, in fact, monumental. I would not have built the chapel differently if I had had a million dollars to do it.

Its simple design and rather small size led to Carr Chapel becoming affectionately known by the students of IIT as “the God Box”.

Having sufficient funding to carry out any project was an underlying condition at IIT even at the time Carr Chapel was originally built. Although Mies van der Rohe claims he wouldn’t have done it any differently even if money had not been limited may have been a rationalization after the fact. Mies van der Rohe’s original design for the chapel had been a bit grander than what was eventually built. It appears he began on the design in 1949 and there was to be both a chapel and a parish house. The original chapel scheme was a bit larger, 72 x 52 foot (22 m x 16 m), and had exposed interior steel columns enclosed by solid walls of brick with openings of glass at either end. The ceiling was to be plaster hung from the steel framing and there was to be a small mezzanine over the entrance. It is not known why this scheme was not the one built, but it is assumed the lack of funding played an important role. In any event, it was a much more modest scheme...
Mies van der Rohe, Neue Nationalgalerie, Berlin, Germany, 1968. Collage of Mies van der Rohe showing the main design intent of the floor covering for the exhibition room in the basement floor. © bpk / Kunstbibliothek, SMB / Dietmar Katz, 1963.
In times of a divided city and country, the appointment of Mies van der Rohe for the design of a “gallery of the 20th century” reflected the desire for a cultural rebirth in West Berlin. Following the ground-breaking ceremony in 1965, the Neue Nationalgalerie opened on the 15th September 1968 and provided a house for the outstanding collection of both 19th and 20th century art. The gallery, widely hailed as a major work in the oeuvre of Mies van der Rohe and as an icon of late modernism, was the last development in the typological series of large column-free universal spaces. With this museum, Mies van der Rohe finalized the second and final museum of his career, moreover his only German post-war building, thus returning to the roots of his architectural practice.

After 46 years of continuous use, the building closed its doors on the 31st of December 2014. Paintings were stored, sculptures left the sculpture garden and furniture was packed, announcing the end of the gallery’s first lifecycle.

Approaching the Project
Due to its continuous use as well as the users’ respect for the building, no significant structural changes were made up until its point of closure. Preventative measures and maintenance did not result in overly designed interventions, but merely served the building to keep it functioning. The necessity for its refurbishment lies in the subtle damage, the outdated building services and fire safety issues.

Being one of the first high-tech museums in Germany at its time of construction, the Neue Nationalgalerie was provided with an in-depth designed technical infrastructure, following the needs of that time. Now, 50 years later, the demands for the technical performance of the museum hadn’t changed much, but rather the technical requirements for its use.

Therefore, at the center of our planning, stands the moderation of the conflict between the requirements for the use of the building and those of the physical monument. The conflict was therefore not between monument values and external requirements or expectations, but in the internal conflict between different monument values.

The conviction that a careful anamnesis and diagnosis sets the basis for every therapy, made us strive for a detailed and extensive basic evaluation, running parallel to the concept and the design development phases. Aspects of building history, historic preservation and conservation, restoration, visual integrity and materiality were all taken into account.

Clarification of Tasks
A clear and coherent impression of the planning and construction history of the Neue Nationalgalerie was obtained by going through the office archives of Mies van der Rohe at the Museum of Modern Art in New York and the private archives at the Library of Congress in Washington. Having scanned, saved in high resolution and gathered in a database the relevant drawings for the refurbishment, they were ready to be used during the planning process. In addition to the American archives, the viewing of archives in Berlin revealed not only unique planning documentation, including floor plans, sections and details, but primarily unpublished photos and slides revealing insights into the construction stages of the building.

Visiting the American works of Mies van der Rohe provided an opportunity to get a sense of the way his buildings have been dealt with in USA. The Dominion Center in Toronto, visits to Chicago and Houston and the Seagram building in New York revealed, despite the different building types, consistent tendencies: repetitive damage such as imperfect waterproofing on the terraces and roofs and corrosion and leakage of the curtain wall façades. The treatment of these building-physical and energy-related deficits is in general limited to a structural maintenance and repairs without trying to upgrade the building and in that way accepting its limitations. The American interest in the conservation of the Mies van der Rohe monuments
Fritz Neumeyer

In June 2017, Ana Tostões interviewed Fritz Neumeyer, reference expert on Mies van der Rohe, in order to discuss the importance of Mies’s legacy. Neumeyer conducted a deep research on Mies’s writings and intellectual activity that has resulted in the worldwide renowned publication: Mies van der Rohe. Das kunstlose Wort. Gedanken zur Bautenkunst [The Artless Word: Mies van der Rohe on the Building Art] (Berlin, 1980; Cambridge/London, 1991; Madrid/Paris/Nilvan, 1996; Seoul 2007 - see p 54) offering a precious critical anthology of Mies theoretical corpus.

This issue of docomomo Journals intends to discuss how the buildings of Mies van der Rohe survived the time and the challenges encountered on the restoration works conducted so far. I may say that the balance between construction and tectonics - evident in the works of Mies - has been resilient. How do you explain this relationship within his architecture?

Construction refers to the empirical act, how something is done, put together. Tectonics is the expression, using construction as a means of architectural expression. A column has a curve, a head, a flute, etc.; it’s not just a constructional form. It explains to our senses the act of carrying load, how the building and its members are carrying. Mies was interested in tectonics from the very beginning, leading to its higher explicitly in his last work, the Neue Nationalgalerie, in Berlin. In the construction plans, we find the word “column”. Mies not only used the term, as he actually designed a column, which so far was a taboo for the modern architect. 4 industrial profiles diminishing to the top were welded together to implement a kind of entails and even capital had been de-signed. He knew that this would be much more expressive than the mere technical form. This formal decision was about architectural values in their elementary expression. As an equivalent to abstraction, the richness of materials secures the perception qualities of architectural space. This is what makes Mies so unique as a modern architect.

He used modern and classical materials next to another, without any ideological constraints. Maintaining opulence and richness under the condition of abstraction was the issue, and this prevented him from making the mistake of simplifying things to a dead end. I think one of the great virtues of his architecture is that it cultivates in a classical manner the sensitive relation between the haptic and the optic.

Daniela Hammer-Tugendhat once told me, that when her mother Greta returned to the fire house, in 1969, she was so relieved when she found the onyx wall, caressing it while muttering – “oh, thanks god you still here!” - like it was an animal.

This quality of a seemingly “bodily” physical presence is exactly what makes architecture open to acquaint life and allow specific experiences. The surfaces and materials and their careful embodiment define the atmospheric quality of a space and its peculiar aesthetic life.

I was very surprised while visiting the Dom in Aachen, when I immediately realized “Mies was here”.

I’ve always had a rather similar impression, with regards to the marriage of opposites which determines the philosophy of Mies — and the Neue Nationalgalerie is a brilliant demonstration of it; the marriage of the monumental and heavy with transparency and openness. I don’t know any other architect who was able to produce a kind of light monumentality or vice versa a monumental transparency. In the Aachener Dom, you have exactly these two different architectural worlds attached to another: the massive Octagon Romanic building and the filigree construction of the gothic chapel with walls consisting almost only of pure colour attached to another as if they were Siamese twins; two opposite worlds come together, if you wish, the classical and the modern, and form a whole. To unite these two worlds has been Mies’s ultimate goal, according to his own words. Maybe, Aachen was already preparing the grounds for what Mies called “bound dualism” as he described his concept for architecture in the late 1925s. But one can also think of Schinkel’s concept of morphology, which also relates to opposites and their gradual transformation from one condition into the other. It is possible to create a tangent between two poles, the monumental and the transparent, the classic and the modern. In the typical modernist perspective, if one is a classicist, one can’t be modern. Mies proves that these are stupid dichotomies and that it is artistically much more interesting to have opposites starting a dialogue and being used for expressing architectural ideas. When I first stood inside the Dome of Aachen I also thought: “Here you have it, Mies!”. On the outside the magnificent bronze door from the 19th century shows a grid with proportions that make one think of the Seagram’s façade.

Your work from the 1980s, Das kunstlose Wort, was fundamental to further understand Mies. In his text “Baukunst und Zeitwille” (1924), Mies makes clear that he was not looking for being or not being modern, but the ability of translating the time into space.

Yes, Mies was not so much interested in modernity as such, but in what could be regarded as essential for his own time and how to translate it into architectural properties. First modern construction work as such seemed for him to be the expression of it; but rather soon he realized that not the technical as such was valuable but what you are able to take out of it. For Mies the modern achievement of a new kind of freedom of movement in space challenged the architectural understanding of space and the relation between inside and outside. As modern transportation techniques like cars, airplanes etc. allowed man to freely move in space, modern construction in architecture would allow a new type of architectural space open for movement and bringing closer together the opposites of inside and outside. The ground floor plans of Mies tell a fascinating story about this idea.

It’s very interesting to find that idea in a family house too, as it is the case of the Tugendhat House. Always explain the students that it’s not a house of a marquand d’art or from an exotic couple; it’s a normal house, with children, parents, cakes, birthdays, bicycles, with a family who lived there appreciating everything and creating this notion of freedom in space.

In his explanations for the House Hubbe of 1935, Mies speaks about an architectural space sheltering and protecting us, but at once making the horizon to become part of the interior. This space is at once both confining and defining. In the Tugendhat House, you can experience this double orientation towards two poles in an exemplary fashion: you have the openness of the glass walls providing a great view into the landscape in front of you and a monumental slab of onyx marble in your back which holds you in your place like a magnet and protects you from being pulled away through the lowerable glass walls into the open space, to the horizon.

Looking at so many unique, almost epic and transcendental, characteristics of Mies architecture, it is inevitable to conclude how difficult must be to rehabilitate his works.

It’s not easy. Within the refurbishment works of the Neue Nationalgalerie, I was hired as an independent person to evaluate things from my point of view of Mies’s architecture;
BOOK REVIEWS

Mies in Berlin
Edited by Terence Riley and Barry Bergdoll
Publisher: The Museum of Modern Art
ISBN: 978-0810962163
Language: English
Year: 2001

When Mies van der Rohe left Germany for the United States, in the summer of 1938, he was 52 years old. He had practiced as an architect for over 3 decades; had published, lectured, and exhibited; had produced designs not only for Germany but for The Netherlands, modern-day Poland, Spain, the modern-day Czech Republic, Belgium, and the United States; and had been a leader of the architectural community in his native land. Yet the book that accompanied his first retrospective exhibition, at The Museum of Modern Art in 1947, could nevertheless open with the remark, “Of all the great modern architects Mies van der Rohe is the least known.”

Despite the historical importance of Mies van der Rohe’s architecture, this observation holds in certain respects, for Mies van der Rohe’s Berlin work has never been fully explored. Outside the handful of manifesto projects and built works that have become famous, his German practice has tended to be seen retroactively as but the first step toward the triumph of the International Style, which came during his years in the United States. Mies himself edited the story of his early career, focusing attention on his most dramatic designs.

Mies in Berlin undertakes a new study of Mies van der Rohe’s Berlin production — not only his best-known projects but the work he excised from the record. The book is newly sensitive to the urban, suburban, and intellectual contexts of Mies van der Rohe’s thought. Discussing his metropolitan skyscrapers and office buildings, it also examines the dense and vibrant urban fabric of central Berlin; analyzing his private houses, it relates them to German ideas about nature, and to the great work of environmental art constituted by the cultivated landscape of Potsdam. It also explores Mies van der Rohe’s responses both to Berlin’s inherently conservative building tradition and to the city’s artistic avant-gardes. Essays on recent discoveries and ideas, and on Mies van der Rohe’s understanding of America, expand our knowledge of Mies van der Rohe’s German career and offer new perspectives on his work as a whole. A plate section richly documents forty-six projects from his German years and includes an explanatory text on each one. Finally the book contains a project by the contemporary artist Thomas Ruff in reaction to Mies buildings. Mies in Berlin — which accompanies an exhibition of the same name at The Museum of Modern Art, New York — offers new insights into the work of this architect, so vitally significant both historically and in our own new century.

From the Publisher.

Mies van der Rohe – The Built Work
Author: Carsten Krohn
Publisher: Birkhäuser Verlag AG
ISBN: 978-3-03821-287-4
Language: English
Year: 2014

This essential and comprehensive Mies van der Rohemonograph focuses in its analysis on Mies van der Rohe’s design intentions: it reconstructs the buildings in their original state, examines them from the present day perspective and rediscovers the inspiring architecture of a great modern master. The book presents eighty of Mies van der Rohe’s works in chronological order. Approximately thirty of these works are analyzed in detail in three parts. In the first part, the construction is documented in its built state; for this all the ground plans were redrawn by the author. The second part outlines the changes to the buildings and the third part develops the results of this investigation with regard to their relevance to the contemporary view of Mies van der Rohe’s work.

From the Publisher.

Ludwig Mies van der Rohe. Architecture for the Silk Industry
Author: Christiane Lange
Publisher: Nicolaische Verlagbuchhandlung GmbH
ISBN: 978-3-89479-673-0
Language: English
Year: 2011

Mies van der Rohe (1886-1969) is one of the most important architects of the 20th century. Until 1938 he worked in Europe, ten years of which he cooperated with a small group surrounding the Krefeld collector and silk manufacturer Hermann Lange. During this extraordinary long term collaboration between Mies van der Rohe and his partner Lilly Reich with the Krefeld friends numerous important buildings were designed that are extensively presented in this splendid book.

From the Publisher.
Ludwig Mies van der Rohe. Mies 1:1: Das Golfklub-Projekt in Krefeld / The Golf Club Project

Edited by Christiane Lange and Robbrecht en Daem architecten
Publisher: Buchhandlung Walther König
ISBN: 978-3-86335-644-6
Language: English and Deutsch
Year: 2014

Ludwig Mies van der Rohe's 1932 design for a golf club house in Krefeld never reached the construction phase. In 2013, however, a full-size model that could be entered and walked around was built at the originally planned site in cooperation with the Belgian architects Robbrecht en Daem architecten, based in Ghent.

The 1:1 architectural model took shape on the basis of the original plans, available in Mies's estate in MoMA in New York. In this way, one of Mies van der Rohe's never implemented designs was turned into a visible and phenomenological experience for visitors.

Over the course of five months, it was possible to observe and walk through this exciting combination of architecture and nature and experience Mies van der Rohe's unique understanding of space as an open structure of tense balance. The 1:1 model also served as a temporary memorial of Mies van der Rohe's comprehensive work for the German silk industry which resulted in a total of ten contracts.

This volume documents a unique exhibition project, MIES 1:1. With revealing series of photographs by well-known photographers, it discusses possible insights that architects could gain from such models, both with regard to our understanding of space as well as further research on Mies. The publication of both the historical plans and the construction drawings of Robbrecht en Daem architecten makes this volume an indispensable reference for appreciation of Mies van der Rohe.

From the Publisher.

Tugendhat House.
Ludwig Mies van der Rohe

Authors: Daniela Hammer-Tugendhat, Ivo Hammer and Wolf Tegethoff
Publisher: Birkhäuser Verlag GmbH
ISBN: 978-3-99043-509-0
Language: English
Year: 2015

Built and designed by Mies van der Rohe 1928–1930, the Tugendhat House in Brno/Czech Republic is one of the most significant buildings of European modernism. In 2001, UNESCO added the house to the List of World Cultural Heritage Sites.

Building on the book published by Daniela Hammer-Tugendhat and Wolf Tegethoff in 1998 (English edition 2000), the three authors, in this new edition, give personal and historic insights relating to the house; also documenting aspects pertaining to art history and conservation-science studies.

The appeal of this monograph lies in the published photographs which reveal an unusual view of the house and highlight the intended fusion between architecture and nature. The experimental artistic colour photographs by Fritz Tugendhat are among the pioneering achievements of amateur photography; that these images have remained intact is indeed remarkable.


Using the example of the Tugendhat House Wolf Tegethoff explores the living concept of modernism. At the beginning, he critically reflects on the discourse surrounding the relationship between client and architect. Based on his research on the preserved plans and drawings he meticulously reconstructs the genesis of the project until the building’s completion in late 1932.

In two contributions Ivo Hammer documents the eventful history of the house from the time its occupants emigrated until today. Based on the results of the international Conservation Investigation Campaign concerning the Tugendhat House he interprets the materiality of this modern building in a cultural context, while outlining the results of the restoration from 2010–2012.

From the Publisher.

Photography or Life & Popular Mies

Author: Juan José Lahuerta
Publisher: Editorial Tenov
ISBN: 978-84-939231-5-0
Language: English
Year: 2015

“Photography or life” and “Popular Mies” make up the first volume of Columns of Smoke, a collection of essays which review the bases on which modernity has been constructed. Contrasting the canonical images of the history of 20th-century architecture with anonymous graphic materials or pictures from the popular press, Lahuerta creates an illuminating dialogue that dismantles stereotypes by revealing a less perfect but more plausible idea of modernity.

Pointing a camera at a building is not natural (innocent/unconscious); rather it involves making decisions that are closely related to the meaning of architecture. Juanjo Lahuerta makes this clear in his analyses of, inter alia, the photographic gaze of Loos and Le Corbusier, whose irreconcilable approaches represent radically opposed ways of understanding architecture and life. Furthermore, scrutiny of the snapshots of Walter Gropius’s Bauhaus building taken by teachers and students can also lead us to unexpected insights into the construction of the myths associated with the Dessau school.

Using this same method, Lahuerta’s analysis of the photographs of his works that Mies commissioned and published shows us how much the architect was influenced not only by Stieglitz and Camera Works but also by the popular tropes of a mass culture that included zeppelins, the music hall, X-rays and fantasmagorical gadgets. At the same time, in their portrayals of Mies van der Rohe’s work, the press and anonymous photographers
situated it in a popular context that provides the necessary counterpoint to conclude the account of a modernity that can no longer be thought of as heroic.

From the Publisher.


Coauthored with Edward Windhorst, this revised edition, features extensive new research and the best recent work of both American and German scholars and critics. The authors describe Mies van der Rohe’s professional career from his incorporation in the modern avant-garde, with innovative architectural works but with a modest scale, until his second stage in the United States, where he created a new architectural language with objective structural expression. The authors’ major contributions and discoveries of this new edition include the massive transcript of the early-1950s Farnsworth House court case, disclosing for the first time the facts about Mies van der Rohe’s battle with his client.

The text provides new information on Mies van der Rohe’s relationship with women, including the nature and the break-up of his marriage with Ada Bruhn, his close professional and personal relationships with Lilly Reich, and new details drawn from interviews with his American partner Lora Marx. This edition gives voice to dozens of architects who knew and worked with Mies, largely thanks to the exceptional collection of “oral history” from the Architecture Department of the Art Institute of Chicago. This complete and comprehensive biography tells the fascinating story of how Mies van der Rohe (and his students and followers) created some of the most significant buildings of the 20th century.

Translated from the Publisher.
docomomo International is a non-profit organization dedicated to the documentation and conservation of buildings, sites and neighborhoods of the Modern Movement. It aims at: • Bringing the significance of the architecture of the Modern Movement to the attention of the public, the public authorities, the professionals and the educational community. • Identifying and promoting the surveying of the Modern Movement’s works. • Fostering and disseminating the development of appropriate techniques and methods of conservation. • Opposing destruction and disfigurement of significant works. • Gathering funds for documentation and conservation. • Exploring and developing knowledge of the Modern Movement.

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