

MIES
VAN DER ROHE

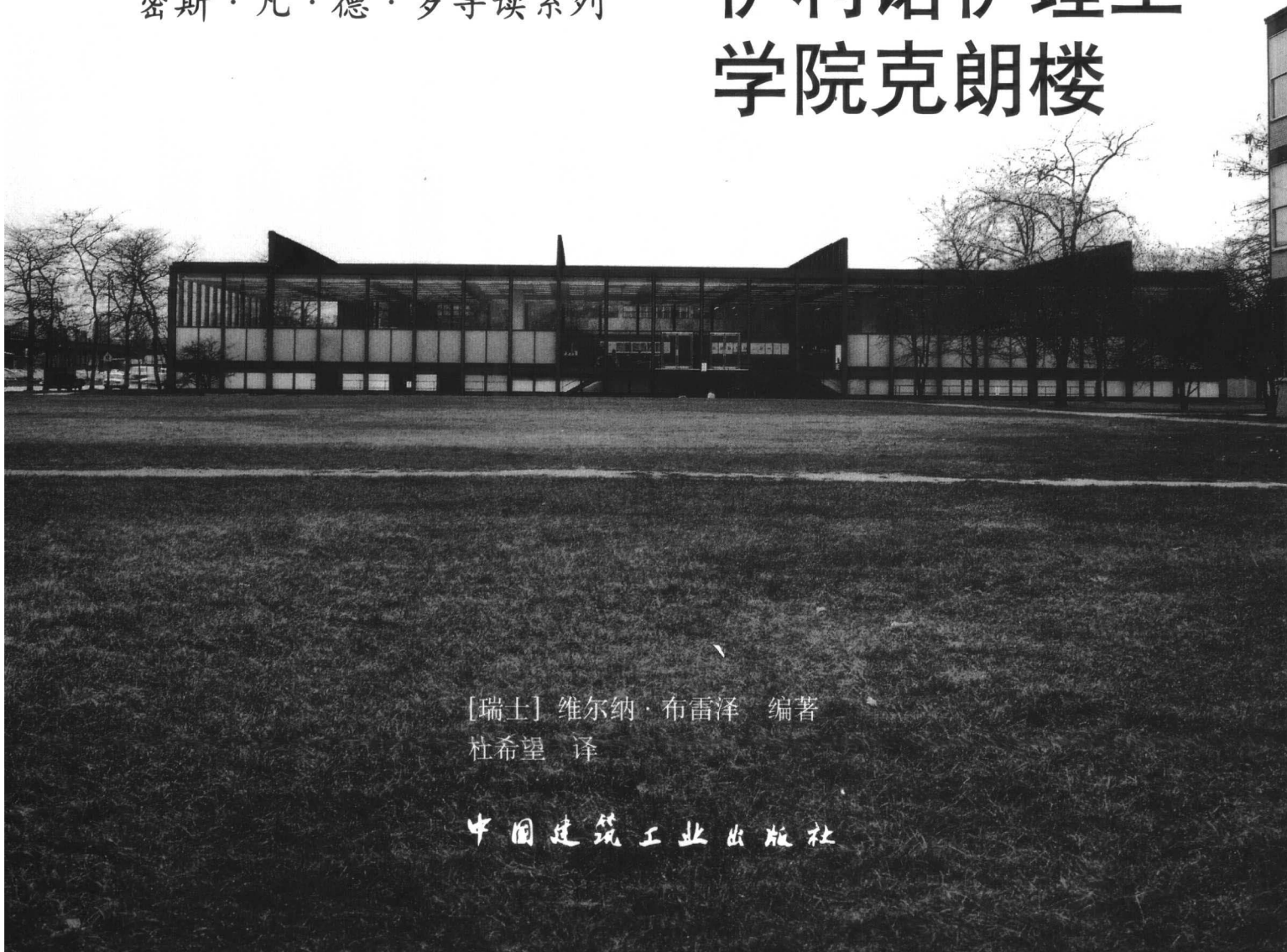
CROWN HALL

密斯·凡·德·罗导读系列

伊利诺伊理工 学院克朗楼

[瑞士] 维尔纳·布雷泽 编著
杜希望 译

中国建筑工业出版社



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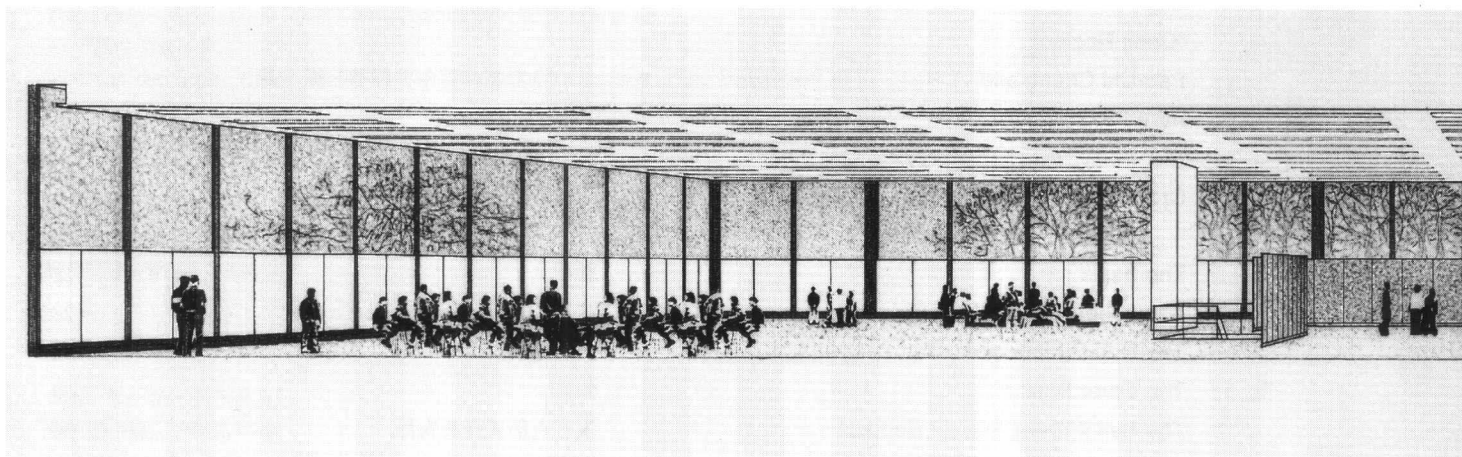
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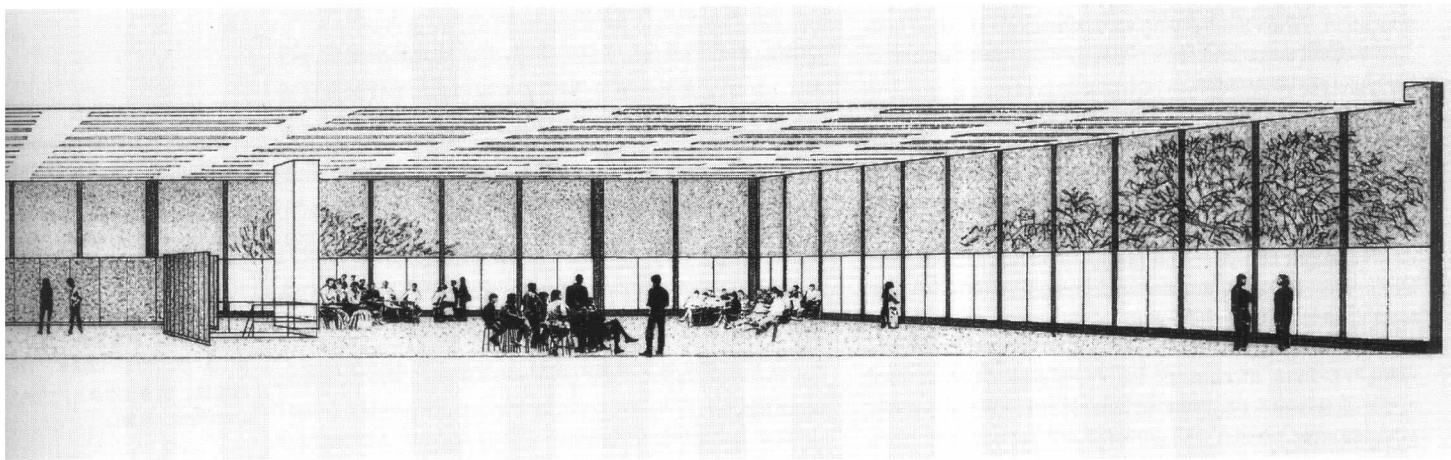
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Crown Hall, IIT, Ludwig Mies van der Rohe, Chicago, 1950-56.
Interior Perspective View showing the Zone of the "Open Region" and the Quotidian Zone. All the figures are IIT architecture students and faculty.

Drawing/Collage
by Pao-Chi Chang,
©2000 Pao-Chi Chang.



伊利诺伊理工学院克朗楼，路德
 维希·密斯·凡·德·罗，芝加
 哥，1950—1956年。内部透视图
 显示了“开放空间”和日常活动
 区。所有的人物都是伊利诺伊理
 工学院的师生。

素描 / 拼贴画

张宝基 (Pao-Chi Chang) 制作

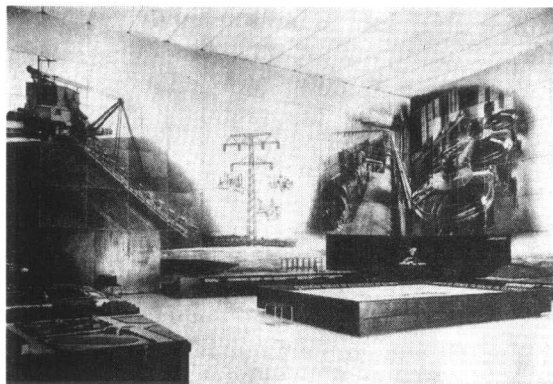
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Experiencing Crown Hall: Mies and the "Open Region"

Pao-Chi Chang and Alfred Swenson

Crown Hall represented a unique opportunity in Ludwig Mies van der Rohe's career. In 1938 he had been appointed Director of the Department of Architecture at Illinois Institute of Technology (IIT) and given a free hand to establish a new curriculum for it. In 1939, he was chosen as the architect for the new IIT Campus, and was commissioned in 1950 to design a new building for the Department of Architecture and the Institute of Design. Mies was in effect his own client, and could at last fulfill the task of designing a building that would embody both his ideas of architecture and architectural education. When the building was completed in 1956, both architectural critics and Mies himself recognized it as one of his major achievements.

We were both students of Mies, and later we would both come to be professors in this school, spending more than two decades of teaching in this building, and experiencing the challenging and provocative qualities of its glass-walled interior. In this great space we taught our courses: Pao-Chi Chang taught fifth-year and graduate design studios, and lectured on theory in architectural design; Alfred Swenson taught second and third-year construction studios and lectured on energy in architecture and building systems. We were in it under all kinds of circumstances, day and night and in all seasons; on golden autumn afternoons and in winter snow storms; when it was crowded with people, and when

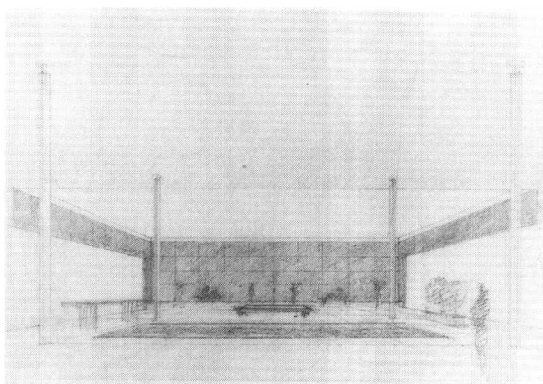


a

体验克朗楼: 密斯和“开放空间”

张宝基和阿尔弗雷德·斯文森

克朗楼为密斯·凡·德·罗的职业生涯提供了独一无二的机遇。1938年他被任命为伊利诺伊理工学院(IIT)建筑系主任,并被赋予设立课程的全部权利。1939年,他当选为新伊利诺伊理工学院校园的建筑师,1950年被委以设计建筑系和设计学院新馆的责任。实际上,密斯是他自己的委托人,他可以最终设计出一幢既能体现他的建筑思想、又能融入教学的建筑。当该建筑在1956年竣工的时候,建筑评论家和密斯自己都认为这是他的主要成就之一。我们都是密斯的学生,后来均成为该学院的教授,在这幢建筑中度过了20年以上的时间来讲授课程,对它富有吸引力与争议的玻璃幕墙室内质量有着亲身经历。在这伟大的空间里,我们讲授课程:张宝基为大学五年级和本科毕业设计工作室讲课,并作建筑设计理论讲座;阿尔弗雷德·斯文森为大学二年级和三年级的工作室讲课,并作建筑和楼宇系统能源的讲座。我们熟悉这里的所有环境:一年四季中的白昼和黑夜;金秋的午后和冬日的雪暴;人群拥挤或我们独处的时刻。在这期间,我们逐渐形成了对克朗楼的理解,这就是本文中我们将要介绍的内容。



b

a) German Electrical Industries Pavilion at the Barcelona International Exposition, Ludwig Mies van der Rohe, 1928-29, demolished 1929. Interior view. Berliner Bildbericht, Berlin.

a) 巴塞罗那世界博览会的德国电气工业馆,路德维希·密斯·凡·德·罗,1928-1929年,1929年拆除。内景, Berliner Bildbericht, 柏林。

b) Project for the German Pavilion for the Brussels World's Fair, Ludwig Mies van der Rohe, 1934. Interior perspective. Pencil on tracing paper, 10" x 17" (26.5cm x 43.9cm). The Mies van der Rohe Archive, The Museum of Modern Art, New York. Gift of the architect. © 2000 The Museum of Modern Art, New York.

b) 布鲁塞尔世界博览会德国馆设计,路德维希·密斯·凡·德·罗,1934年。室内透视。描图纸上铅笔草图,10英寸×17英寸(26.5cm×43.9cm)。密斯·凡·德·罗档案,现代艺术博物馆,纽约。建筑师赠品。© 2000年现代艺术博物馆,纽约。

we were all alone there. It was during this time we gradually came to our understanding of Crown Hall, which we now offer in this essay.

We begin with the observation that Mies seemed to make Crown Hall different from his other IIT campus buildings. The site of the building had already been determined in Mies' campus plan, with its many small buildings treated as "sliding planes" to create a series of flowing spaces. But other than that, Crown Hall departs from all the conventions he had established for the campus. The footprint of the building is much larger than that shown on the original plan, indeed it is the largest Mies would build on the academic campus. The predominant materials of earlier buildings are black-painted steel frames, in-filled with buff brick and clear glass; Crown Hall has no brick, only steel and glass, and large areas of obscure glass as well. The six ft. by six ft. module used in all the other campus buildings is here abandoned for a five ft. by five ft. module. All the other academic buildings are entered directly from the flat plane of the site; Crown Hall's entrance is dramatically raised above grade.

Perhaps Mies made Crown Hall unlike the rest of the campus because he saw in it the chance to realize for the first time a large glass-walled, column-free space — a building type which would become a major theme in his late work. This type was first adumbrated in the German Electrical Industries Pavilion at the 1929 Barcelona International Exposition (1928-29, demolished 1929). The interior of this cubical windowless building was lighted by a luminous ceiling plane, and the walls were completely covered by photomurals which gave the illusion to the observer of looking into "virtual" space (ill. a). The next development appeared in his project of 1934 for the German Pavilion for the Brussels World's Fair, a large hall with a glazed wall opening to a court (ill. b). The idea emerged further in his Project for a Concert Hall of 1942; here an auditorium defined by free-standing planes was enclosed within a huge glass-roofed industrial structure (ill. c). The type reached full definition in his project of 1945-48

我们开始注意到,密斯似乎有意将克朗楼建造得不同于伊利诺伊理工学院校园其他建筑物。密斯的校园规划已经决定了建筑物的位置,规划中很多小建筑物作为“滑动面”处理,以创造出一系列流动空间。但是克朗楼与此不同,它打破了所有密斯为校园建立的惯例。该建筑的基底面积远大于最初规划图上所显示的大小,事实上它是密斯在高校校园内建立的最大的建筑物。早期建筑的主要材料是黑色钢架,填充以浅黄砖和透明玻璃;而克朗楼却没有砖,只有钢、玻璃和大面积的毛玻璃。其他校园建筑中所使用的6英尺×6英尺(1英尺=0.3048m)的模数,在这里被5英尺×5英尺的模数所取代。其他系馆都是从其所在位置的地平面直接进入的;而克朗楼的入口却明显地升高在台阶之上。

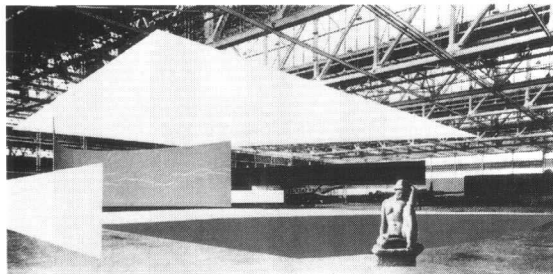
密斯使克朗楼不同于其他校园建筑物的原因可能是,他洞察到这是首次实现大玻璃墙、无柱空间——一种将是他后期作品主要题材的建筑类型的机会。该类型于1929年在巴塞罗那世界博览会的德国电气工业馆(1928—1929年,1929年拆除)中最先体现。无窗的立体建筑物室内照明由发光顶棚提供,墙面完全被壁画式照片覆盖,给观察者以窥视到“虚拟”空间的幻觉(插图a)。接下来的发展出现在他于1934年为布鲁塞尔世界博览会设计的德国馆中,这是一个朝向庭院的珐琅墙大厅(插图b)。密斯的这种思想进一步体现在他1942年设计的音乐厅中,一个大玻璃屋顶的工业结构包围着被自由式墙板所限界的音乐厅(插图c)。该类型在其1945—1948年为汽车餐馆进行的设计中得到完全明确,其屋顶尺寸为152英尺×104英尺,悬挂在两个钢桁架上,遮盖了具有开放用餐区域和中心封闭厨房的玻璃包围的空间(插图d)。

c) Project for a Concert Hall, Ludwig Mies van der Rohe, 1942. Collage. Hedrich Blessing Archive.

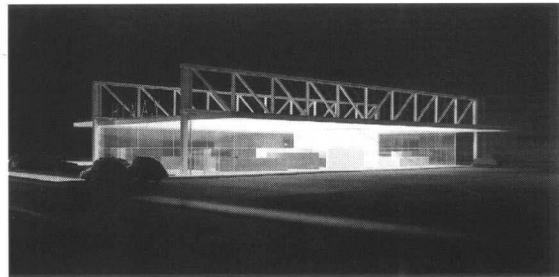
c) 音乐厅设计。密斯·凡·德·罗,1942年。拼贴画。海德里希·布莱辛档案。

d) Project for a Drive-in Restaurant, Ludwig Mies van der Rohe, 1945-48. Photograph of Model. Chicago Historical Society, Hedrich Blessing Archive.

d) 汽车餐馆设计。密斯·凡·德·罗,1945—1948年。模型照片。芝加哥历史学会,海德里希·布莱辛档案。



c



d

for a Drive-in Restaurant, where a roof plane 152 ft. by 104 ft. was suspended from two steel trusses, spanning in the long direction, sheltering a glass-enclosed space with open dining areas and a central enclosed kitchen (ill. d).

Crown Hall extends the structural steel part of the Drive-in Restaurant, with an even larger 220 ft. by 120 ft. roof plane, suspended from four 120-ft.-long plate girders six ft. deep, which are supported by columns at the long sides (ill. e). The columns and girders are spaced to form three 60 ft. bays with 20 ft. cantilevers at each end. Under the steel clear span roof, a secondary concrete flat-slab structure, with small bays, rises from the lower level to support the upper level floor. This great glass-enclosed room of the upper level, with a ceiling height of eighteen feet, was designed to house the Department of Architecture with all classes meeting in this one open space, where each student could see the work of all the others. The lower level, partly raised above grade and partly recessed, and lighted by clerestory windows, was divided into more conventional rooms to accommodate the Institute of Design. The glass enclosure of the building is supported by steel I-beam mullions spaced ten ft. apart, which run continuously from grade level up through the upper level floor fascia to the roof fascia. The walls are glazed entirely with obscure glass, except for an eleven ft. high ribbon of clear glass that runs around the upper level, and extends to the floor at the entrance bays.

Crown Hall's exterior is a masterpiece of great architecture, exquisitely proportioned and composed. The details are crisp and refined. The overall impression is one of strength and serenity. The steel elements have somehow transcended their mundane origins in the rolling mill and the engineers' calculations. Like a superb work of abstract sculpture, it seems to draw the observers' attention beyond the realm of materiality.

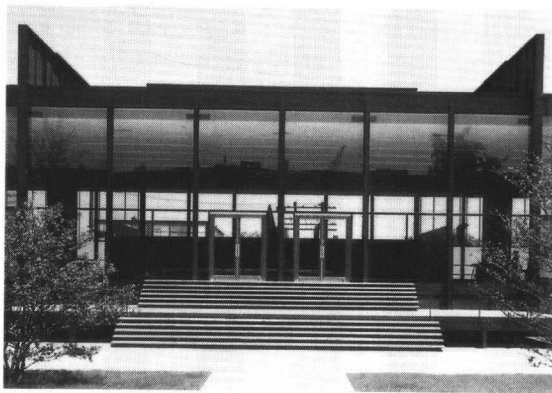


e

克朗楼扩大了汽车餐馆钢结构方案,使其具有更大的屋顶平面,达到220英尺×120英尺。屋面悬挂在4个120英尺长、6英尺高的桁架上,由长边的柱子支撑(插图e)。柱子和桁架被隔开,以形成3个60英尺的大跨,每端有一个20英尺的悬臂。在钢跨屋顶下,另一个小跨度的混凝土平板结构从低层升起,以支撑高层地板。这个顶棚高度为18英尺的巨大的玻璃围合的上层空间,是为容纳建筑系各年级学生在这开敞空间聚集而设计的。这里,每名学生都可以看到其他学生的作品。天窗采光、与台阶有一定高差、部分缩进的底层,被分割成较常规的房间,以提供给设计学院。该楼的玻璃围墙由间隔10英尺的工字钢梁挺支撑,从台阶平面向上延续,穿越上层地板,并直达屋顶挑口。除了11英尺高的透明玻璃带环绕上层,并在入口开间延伸至地板外,墙体完全由毛玻璃构成。

克朗楼的外观是伟大的建筑杰作,极其匀称与沉静,细部干脆洗练,给人的整体印象是力度与静谧。钢元素不可名状地超越了轧钢厂和工程师计算的平凡的初始状态。犹如抽象雕塑的宏伟杰作。克朗楼的外观引起的关注超越了物质领域。

接近入口时,人们会觉得意外:该建筑物由位于上层两个长边的中部开间进入。这与其整体的完全对称结合在一起,令人想到密斯可能是遵照了古典建筑的规则。但我们很快就会发现事实并非如此。在南侧主入口,观察者通过较短的石灰华台阶,到达一个60英尺宽的石灰华铺就的平台。然后穿过平台,登上另一段类似的台阶,到达一个较小的平



f

e) Crown Hall, IIT, Ludwig Mies van der Rohe, Chicago, 1950-56. Elevations.

e) 克朗楼,伊利诺伊理工学院,密斯·凡·德·罗,1950—1956年。立面图。

f) Crown Hall, IIT, Ludwig Mies van der Rohe, Chicago, 1950-56. South entrance. Chicago Historical Society, Hedrich Blessing Archive.

f) 克朗楼,伊利诺伊理工学院,密斯·凡·德·罗,芝加哥,1950—1956年。南入口。芝加哥历史学会,海德里希·布莱辛档案。

When one approaches the entrance, one encounters the unexpected. The building is entered at the central bays of the upper level on both of the long sides. This, together with the general overall symmetry of the building, suggests that Mies may be following the rules of classical architecture, but soon one finds this is not so. At the principal entrance on the south side, observers ascend a short flight of planar travertine steps to a 60 ft. wide travertine-paved platform. They then cross the platform and climb another flight of similar steps to a smaller platform, where one must choose one of two pairs of doors to enter the building (ill. f). The classically-expected axial entrance is unclassically blocked by a steel mullion. This entrance configuration may be a reference to another school of architecture building admired by Mies ⁽¹⁾, Karl Friedrich Schinkel's equally unclassical Bauakademie in Berlin (1831-35, demolished 1959), which also had two entrance doors approached by a flight of steps (ill. g). This deviation from the classical architectural principle of an axial procession (or marche) continues on the interior, where the axis leads to no emphatic central architectural event, as one would find in a classical building ⁽²⁾. Instead observers find themselves in the central exhibition area, defined only by low oak partitions. These partitions were carefully composed by Mies so that a direct view through to the north entrance bay is blocked, but one's gaze is drawn everywhere outward over the tops of the low partitions to the glass walls beyond. The overall effect can be likened to being transposed into a special space - one is presented with a sense of openness of the entire space, with no loss of definition even when one looks back at the south entrance bay.

By contrast, the north entrance is approached by a bridge-like pair of stairs and landing rising to the upper level floor, where one again must choose between two pairs of doors. Here one enters into a narrow vestibule-like space, defined

台, 在这里从两对门中任选其一进入该建筑物 (插图 f)。通常会出现的古典轴向入口被钢挺非古典地阻塞。该入口的构造可以参考密斯欣赏的另外一幢学院建筑 ⁽¹⁾, 即卡尔·弗里德里希·辛克尔在柏林建造的同样非古典的建筑学院 (Bauakademie) (1831 — 1835 年, 1959 年拆除)。它也是通过一段台阶进入的两个入口门 (插图 g)。与古典建筑原理的轴线一直延伸至室内不同, 这里的轴线并没有导向古典建筑物中可见的那种引人注目的中心建筑现象。⁽²⁾ 观察者发现自己不是在中心展览区域, 而是仅仅处于被限定的低矮的橡木隔间之中。密斯精心构造了这些隔间, 使它不能直接看到北入口开间。但人们的视线可以通过低矮的隔间顶部, 透过远处的玻璃墙看到外面的任何地方。对此的整体印象可以比作来到了一个特别的空间——它呈献给人们一种整个空间开敞的感觉, 而且即使是在人们回顾南入口开间的时候, 也毫不损失清晰度。

相对应地, 接近北入口处是一对桥状阶梯。阶梯平台升至上层地板, 人们需要再次从两对门中选择一对进入。这里是一个狭窄的橡木隔间的前厅, 它延伸了入口开间的整个宽度。人们绕过这个前厅隔墙后, 就会置身于它们两侧的巨大的开敞空间。

和密斯以前音乐厅中的净跨设计不同, 那里很多空间被音乐厅的墙和屋顶平面阻断; 也不像汽车餐馆, 它包含了充分的固体元素, 直达屋顶。密斯使克朗楼的上层几乎是空旷的。空间只被两个小的全长的导管道和几个低矮的橡木隔间打断。在这奇异的内部空间中, 人们失去了对所欣赏的外

g) Bauakademie, Karl Friedrich Schinkel, Berlin, 1831-35, demolished 1959. Entrance. Institut für Denkmalpflege, Berlin.

g) 建筑学院, 卡尔·弗里德里希·辛克尔, 柏林, 1831 — 1835 年, 1959 年拆除。入口, Denkmalpflege 学院 柏林。

h) Alumni Memorial Hall, IIT, Ludwig Mies van der Rohe, Chicago, 1945-46. South elevation. Chicago Historical Society, Hedrich Blessing Archive.

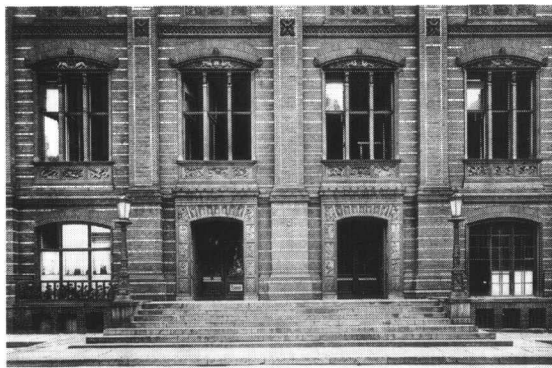
h) 校友纪念楼, 伊利诺伊理工学院, 密斯·凡·德·罗, 芝加哥, 1945 — 1946 年。南立面图。芝加哥历史学会, 海德里希·布莱辛档案。

(1) Fritz Neumeyer, *The Artless Word: Mies van der Rohe on the Building Art*, Cambridge, 1991, p. 227.

(1) 弗利兹·纽莫尔, 《质朴的语言: 密斯·凡·德·罗论建筑艺术》, 剑桥, 1991 年, 227 页。

(2) Colin Rowe, "Neo-'Classicism' and Modern Architecture II", in *The Mathematics of the Ideal Villa and Other Essays*, Cambridge, 1976, p. 149.

(2) 柯林·罗, “主义和现代建筑二”, 《理想住宅的数学和其他文章》, 剑桥, 1976 年, 149 页。



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by one low oak partition which extends the full width of the entrance bay. One then walks past this vestibule wall and encounters the great open spaces on either side.

Unlike his precursor clear-span projects for the Concert Hall, where much of the space was interrupted by the walls and ceiling plane of the auditorium, or the Drive-in Restaurant which contained substantial solid elements extending to the ceiling, Mies was able to make the upper level of Crown Hall nearly empty. The space is punctuated only by two small full-height duct shafts and a few low oak partitions. In this remarkable interior, one loses awareness of the great steel structure one has admired on the outside. The beams of the roof plate are hidden by the vast white plane of the acoustic tile ceiling, with its minor rhythmic interruptions of recessed light fixtures and air grills. It is the neutral tranquillity of this planar surface that everywhere deflects the observers' gaze to the empty light-filled space above them. The effect of this ensemble of interior elements is, we believe, exactly what Mies intended: it looks at once simple and natural, yet clearly intentional.

Crown Hall's upper level interior, we believe, is of equal, if not greater significance than the exterior. Here in this vast open space, with this glazed enclosure, we come face to face with Mies' life-long struggle with the philosophical expression of his architecture. Here, we believe, is where his "architecture of truth" is at last clearly realized.

Our attempt to understand the Crown Hall interior began with a reading of Mies' few written statements of his architectural intentions. We found these remarks of 1961 of particular interest, in which he describes his work as a search for truth in architecture:

"In 1900 there was a group of very talented men in Europe who founded the Art Nouveau Movement. They tried to develop everything anew, houses new, dresses new, spoons new, life new, everything new. They thought, however, that it was a question of form. The whole movement didn't last much longer than a typical fashion and nothing came out of it. They were most talented people - there were no finer in the world, and they still could not do it. It then became clear to me that it was not the task of architecture to invent form. I tried to understand what that task was. I asked Peter Behrens, but he could not give me an answer. He did not ask that question. The others said: 'What we build is architecture', but we weren't satisfied with this answer. Maybe they didn't understand the question. We tried to find out. We searched in the quarries of ancient and medieval philosophy. Since we knew it was a question of the truth, we tried to find out what the truth really was. We were very delighted to find a definition of truth by St. Thomas Aquinas: 'Adequatio intellectus et rei', or as a

部空间宏伟的钢结构的知觉。吸声瓦顶棚的巨大白色平面遮挡了屋顶平面的梁架,它上面是有规律间隔的凹进的灯具与换气格栅。克朗楼随处可见的平面所具有的中性的平静,使得观察者的目光转向他们上方空旷而光线充足的空间。这种内部元素总体的效果,让我们相信正是密斯所要实现的目标:一眼看去,它简单自然,却是纯粹有意为之的。

我们确信,克朗楼上层室内的意义即使不比外部伟大,也绝不会逊色。在这巨大的玻璃围合的开敞空间中,我们与密斯终生奋斗的建筑哲学表达相遇。我们相信,这里是他的“真理的建筑”的最终明确实现。

我们对克朗楼室内的认识始于阅读少量的密斯自撰的建筑意图的书面陈述。我们对这些1961年的评论有着特殊的兴趣,其中他把自己的工作描述成寻求建筑的真理:

"1900年,欧洲有一群极具天分的人物,他们开展了新艺术运动(Art Nouveau Movement)。他们试图重新开发一切事物:新的房屋,新的服饰,新的餐具,新的生活,新的一切。但是,他们认为这是一个形式问题。整个运动持续的时间不长于一个典型的时尚流行的时间。最终他们一无所获。他们是最具天分的人物——世界上没有比他们更优秀的人了,连他们都不能实现自己的想法。于是我清楚了,发明形式并非建筑的任务。我试图理解这任务应该是什么。我请教彼得·贝伦斯(Peter Behrens),但是他不能给我一个答案。他没有问过那个问题。其他人说:‘我们建造的东西就是建筑’,然而我们并不满意这个回答。也许他们并不理解这个问题。我们试图发现它。我们在古代和中世纪的哲学资料中查寻。因为我们知道这是一个真理的问题,所以我们努力寻求这真理究竟是什么。我们高兴地发现圣托马斯·阿奎那(St. Thomas Aquinas)的话‘真理是知与物的符合’,或如现代哲学家用现代的语言所表达的:‘真理是事实的意义’。我终生牢记此格言。这对我非常有帮助,是我的引路灯。为了发现建筑到底是什么,耗去了我整整50年——半个世纪的光阴。”⁽¹⁾

尽管在这些陈述中,密斯给出了阿奎那所定义的真理,但这显然仅是密斯研究中的一个转折点。发现满意的真理的文字定义后,他声称又耗费了更多年的时间,将其转化成同样满意的建筑真理的定义。现在,密斯还告诉我们,他在18

(3) Peter Carter, "Mies van der Rohe", Architectural Design, XXXI, 3, March, 1961, p. 97.

(1) 彼得·卡特,“密斯·凡·德·罗”,《建筑设计》,XXXI, 1961年3月3日,97页。

modern philosopher expresses it in the language of today: 'Truth is the significance of fact.' I never forgot this. It was very helpful, and has been a guiding light. To find out what architecture really is took me fifty years - half a century"⁽³⁾. Although in this statement Mies gives a definition of truth from Aquinas, it was apparently only a turning point in his search. Having found a satisfactory verbal definition of truth, he says it took him many more years to translate it into an equally satisfying architectural definition of truth. Now Mies also tells us that his interest in philosophy began at the age of about eighteen, when he started to work in the office of the architect Albert Schneider in Aachen circa 1904⁽⁴⁾. There he by chance found in his drawing table a copy of "Die Zukunft" [The Future], a leading intellectual journal of the day; he began reading it regularly and it marked the beginning of his life-long engagement with philosophy and the spiritual aspects of culture. It must have been shortly after this that Mies first posed his question: "What is truth in architecture?", and he tells us that he arrived at his answer some 50 years later, which would be in the early 1950's when Crown Hall was being designed.

We will argue that the remarkable spatial quality which Mies first achieved in the upper level of Crown Hall was an important aspect of his demonstration of architectural truth. All of Mies' other concerns, such as structural clarity, refinement of detail and elegance of proportion help to bring about this demonstration. It was an achievement worthy of the challenging aphorism of Spinoza that Mies alluded to in his "Address at the Dedication of Crown Hall": "All things excellent are as difficult as they are rare"⁽⁵⁾.

But how is this building, and especially its spatial qualities, related to Aquinas' definition of truth? His formula, "veritas est adaequatio rei et intellectus", "Truth is the correspondence of statement and thing"⁽⁶⁾, seems to have no obvious interpretation that would relate to Mies' late architecture, or indeed to any architecture at all. Likewise, the paraphrase by the un-named "modern philosopher", "Truth is the significance of fact", is no more helpful. It is the singular spatial quality of Crown Hall that appeals to the imagination, and yet both these definitions have nothing spatial about them. When asked to explain his work, Mies would offer laconic remarks, always in terms of function or construction, which would indeed be true, but which would give no insight into the spatial character of his buildings. He was certainly not being deceptive, but we believe he left much unsaid.

Our intellectual understanding of Crown Hall began to approach its present form when we were studying at Oxford University some ten years ago. While there, we encountered a book⁽⁷⁾ on the work of the German philosopher Martin

岁左右开始对哲学产生兴趣。那是1904年前后，他刚开始在亚琛（Aachen）的阿尔伯特·施耐德（Albert Schneider）建筑室开始工作。⁽¹⁾在那里，他偶然发现在他制图台上的一本当时很新潮的知识杂志《Die Zukunft》[未来（The Future）]。他开始定期阅读，这标志着他终生从事哲学和文化精神方面事业的开始。一定是在此后不久，密斯提出了他的问题：“建筑的真理是什么？”他告诉我们，大约过了50年后，他才找到答案，而那正是20世纪50年代前期设计克朗楼的时候。我们将证明，在克朗楼上层中，密斯首次实现了杰出的空间质量。这是他建筑真理的实证。密斯涉及的所有其他方面，如结构清晰、细部精致以及比例优雅，都将帮助达成此实证。这一成功配得上密斯曾在其“克朗楼启用演说”中提到的斯宾诺莎（Spinoza）的引人深思的格言：“所有卓越的事物如其稀有一般艰难”。⁽²⁾

然而该建筑，特别是它的空间质量，是如何与阿奎那真理的定义相关的呢？他的表述，“真理是知与物的符合”⁽³⁾似乎并没有明显地解释这与密斯后期建筑相关，或实际上与任何建筑相关。同样，佚名的“现代哲学家”，“真理是事实的意义”都不再有帮助。克朗楼奇异的空間质量引起人们的想像，而这些定义与空间没有任何关系。当被请教解释其作品的时候，密斯总是从功能或结构方面进行简洁的评论。这些当然都是实话，却不会提供对建筑空间特性的任何领悟。当然，他不是欺骗，但我们相信他保留了很多。

大约10年前在牛津大学研究的时候，我们对克朗楼理性的理解开始接近它现在的形式。在那里，我们看到了一本美国文艺批评家乔治·斯坦纳（George Steiner）写的关于德国哲学家马丁·海德格尔的书。⁽⁴⁾当我们第一次翻阅的时候，被斯坦纳为其所选的引言所震动：它与密斯提到的斯宾诺莎的格言一样，只是用拉丁原文写的——“Omnia praeclara tam difficilia quam rara sunt.”阅读该书的时候，我们越来越清晰地发现，作为哲学家的海德格尔与密斯一样，热烈地投身于对真理的追求。事实上，在后来对与密斯作品显著精神相似的海德格尔的后期作品的研究中，我们发现了真理的空间概念，它把阿奎那的“知与物的符合”与密斯的后期作品联系起来。

密斯对海德格尔的著作了解多少？我们发现的惟一联系

(4) Franz Schulze, Mies van der Rohe. A Critical Biography, Chicago, 1985, p. 17.

(1) 弗朗兹·舒尔茨，密斯·凡·德·罗——评论性传记，芝加哥，1985年，17页。

(5) See text p. 79.

(2) 参见79页文字。

(6) Saint Thomas Aquinas, Summa Theologiae, 1266-1273, Prima Pars, Quaestio XVI - "De Veritate", Articulus I: "Quod autem dicitur quod veritas est adaequatio rei et intellectus".

(3) 圣托马斯·阿奎那，Summa Theologiae, 1266-1273年，Prima Pars, Quaestio XVI - "De Veritate", Articulus I: "Quod autem dicitur quod veritas est adaequatio rei et intellectus".

(7) George Steiner, Heidegger, London, 1978.

(4) 乔治·斯坦纳，海德格尔，伦敦，1978年。

Heidegger by the American literary critic, George Steiner. When we first opened it, we were struck by the epigraph Steiner had chosen for it; it was the same aphorism of Spinoza alluded to by Mies, only it was given in the original Latin: "Omnia praeclara tam difficilia quam rara sunt." As we read the volume, it became clear that Heidegger as a philosopher had applied himself to the pursuit of truth as intensely as Mies. And indeed we found in our subsequent study of Heidegger's later work, a remarkable intellectual parallel to the work of Mies, a spatial conception of truth that connects Aquinas' "correspondence of statement and thing" to Mies' late work.

How much did Mies know of the work of Heidegger? The only connection we have found is that a copy of Heidegger's "Kant and the Problem of Metaphysics" (the original German edition of 1929) was listed in an inventory of the books in Mies' library when he died.⁽⁸⁾ Nevertheless there are some provocative similarities in their lives and work. Mies (1886-1969) and Heidegger (1889-1976) were exact contemporaries, and shared the turbulent German culture of their times. Both had a strict Roman Catholic upbringing, Mies in Aachen as the son of a stonemason, and Heidegger at Messkirch in Baden-Württemberg as the son of a church sexton - but both would later abandon the formal practice of their faith. Both had intellectual masters or mentors who helped to establish them in their respective fields, with whom they would later break. Mies' master was the architect Peter Behrens (1868-1940) for whom he worked in Berlin during 1908-1912 and Heidegger's was the philosopher Edmund Husserl (1859-1938) under whom he served as an assistant teacher at the University of Freiburg during 1918-1922. Both rose to prominence in the feverish years of the Weimar Republic; Mies with the building of the Weissenhof Siedlung in Stuttgart (1927) and the Barcelona Pavilion (1929), and Heidegger with the publication of "Being and Time" (1927) and "Kant and the Problem of Metaphysics" (1929). Both had encounters with the Nazis; Mies with the closing of the Bauhaus and the design of the Brussels Pavilion, and Heidegger during his short tenure as Rector of the University of Freiburg. They then both went into exile. Mies left Germany for Chicago in 1938, and Heidegger withdrew into a kind of internal exile for the rest of the Nazi period and the subsequent Allied occupation. Finally, after the age of 70, both would make symbolic visits to Greece. It was in this later period of exile that both intensified their search for truth, and the parallels in their work emerge.

This parallel construction begins with Heidegger's essay "On the Essence of Truth", first delivered as a lecture in 1932, published in German in 1943 and first translated into English

是, 密斯去世时, 他的图书室图书编目中列出了一本海德格尔的《康德与形而上学的问题》(1929年德国初版)。⁽¹⁾ 不过, 在他们的生活与工作中, 有一些令人兴奋的相似之处。密斯(1886-1969年)与海德格尔(1889-1976年)完全是同一时代的人, 他们都遭遇了当时德国文化的混乱, 都具有严格的德国天主教教养。密斯是亚琛一个石匠的儿子, 海德格尔是巴登州(Baden-Württemberg)梅斯基尔希(Messkirch)一个教堂执事的儿子——但是后来, 都放弃了以前他们信仰的修练。他们都具有精神上的导师或指导者, 在各自领域帮助他们形成自我; 后来, 他们又与之绝交。密斯的导师是建筑师彼得·贝伦斯(1868-1940年), 密斯于1908-1912年期间在柏林为其工作; 海德格尔的导师是哲学家埃德蒙·胡塞尔(1859-1938年), 海德格尔于1918-1922年在弗赖堡(Freiburg)大学任其助教。他们都在魏玛共和国的狂热年代名声鹊起: 密斯通过在斯图加特(Stuttgart)的魏森霍夫社区(Weissenhof Siedlung)(1927年)和巴塞罗那馆(1929年)成名; 而海德格尔通过《存在与时间》(1927年)和《康德与形而上学的问题》(1929年)的出版成名。他们都遭遇了纳粹: 密斯关闭了包豪斯建筑学院, 设计了布鲁塞尔馆; 海德格尔那时在弗赖堡大学任短期校长。后来, 他们都被迫流亡: 密斯在1938年离开德国, 来到芝加哥; 海德格尔在其后的纳粹时期与联军占领时期, 退回到一种国内流亡生涯。最终, 70岁以后, 两人都对希腊进行了象征性的访问。就是在后来的流亡期间, 两人都对真理进行了强烈的追求, 在他们作品中出现了相似之处。

这相似之处的构建始于海德格尔的论文“论真理的本质”(On the Essence of Truth), 最初在1932年作为演说发表, 1943年于德国出版, 1949年最先翻译成英文。海德格尔以密斯引用的阿奎那的同样的真理的定义作为议论开头: “真理是知与物的符合”。接下来, 指出“知与物的符合”这个概念包含着内在的冲突: “知怎样能够与其他的固守于其自身本质而精确的物相符合?”⁽²⁾ 然后, 他提出了这一冲突的解决办法, 利用的是他著名的“das Offene”或“开放空间”概念:

“所表象的知就像对一个如其所是的、被表象之物那样, 来说其所说。这个‘像……那样’(such as)涉及表象及其

(8) Werner Blaser, *Mies van der Rohe: Principles and School*, Basel, 1977, p. 284.

(1) 维尔纳·布雷泽(Werner Blaser), 《密斯·凡·德·罗: 原则与学院》, 巴塞尔, 1977年, 284页。

(9) David Farrell Krell, Editor, *Martin Heidegger: Basic Writings*, New York, 1977, "On the Essence of Truth", p. 123. English translations © 1977 by Harper & Row Publishers, Inc., reprinted by permission of HarperCollins Publishers, Inc.

(2) 戴维·法雷尔·克雷尔, 编辑, 马丁·海德格尔, 基本著作, 纽约, 1977年, 《论真理的本质》, 123页。

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in 1949. Heidegger begins his discussion with the same definition of truth from Aquinas quoted by Mies: "Veritas est adaequatio rei et intellectus". He goes on to point out that this notion of "correspondence of statement and thing" contains an inherent conflict: "How is the statement able to correspond to something else, the thing, precisely by persisting in its own essence?"⁽¹⁰⁾ He then sets forth his resolution of this conflict with his remarkable concept of "das Offene" or the "open region":

"What is stated by the presentative statement is said of the presented thing in just such a manner as that thing, as presented, is. The 'such as' has to do with the presenting and its presented. Disregarding all 'psychological' preconceptions, as well as those of any 'theory of consciousness', to present here means to let the thing stand opposed as object. As thus placed, what stands opposed must traverse *an open field of opposedness* and nevertheless must maintain its stand as a thing and show itself as something withstanding. This appearing of the thing in traversing a field of opposedness takes place within an *open region*, the openness of which is not first created by the presenting but rather is only entered into and taken over as *a domain of relatedness* ... All working and achieving, all action and calculation, keep within an *open region* within which beings, with regard to what they are and how they are, can properly take their stand and become capable of being said." [Our italics]⁽¹⁰⁾

Heidegger then goes on to identify truth and the "open region" with the Greek word *aletheia* (*alhqeia*), which is usually translated as "truth", but which he turns as "unconcealment": "Western thinking in its beginning conceived this open region as *ta aletheia*, the unconcealed. If we translate *aletheia* as 'unconcealment' rather than 'truth', this translation is not merely more literal; it contains the directive to rethink the ordinary concept of truth in the sense of the correctness of statements and to think it back to that still uncomprehended disclosedness and disclosure of beings."⁽¹¹⁾

Clearly Heidegger is dissatisfied with much of the classical development of Western metaphysics, and wishes to withdraw from Cartesian subjectivism to the simpler and more profound insights of the pre-Socratics. In the "Letter on 'Humanism'" (1947), Heidegger traces the origin of the "open region" to Heraclitus:

"The saying of Heraclitus (Fragment 119) goes: 'Ethos anthropoi daimon'. This is usually translated, 'A man's character is his daimon.' This translation thinks in a modern way, not a Greek one. Ethos means abode, dwelling place. The word names the open region in which man dwells ... The fragment says: Man dwells, insofar as he is man, in the

所表象的东西。这里，在不考虑所有那些‘心理学的’和‘意识理论的’先入之见的情况下，表象意味着让物对立而为对象。作为如此这般被摆置者，对立者必须横贯一个敞开的对立领域。而与此同时，自身又必须保持为一物，并且自行显示为一个滞留的东西。横贯对立领域的物的这一显现实行于一个开放空间中，此开放空间的开敞状态首先并不是由表象创造出来的，而是一向只作为一个关联领域，为后者所关涉和接受……任何作业和动作，所有行动和筹谋，都处于一个开敞领域之中。其中，存在者作为所是和如何是的存在者，才能够适得其所，并且成为可言说的。”（斜体字部分）⁽¹¹⁾

海德格尔接着利用希腊词语 *aletheia* (*αληθεια*) 将真理与“开放空间”等同，该词通常译作“真理” (truth)，而他改译为“无遮蔽” (unconcealment)：

“西方思想在其刚开始的时候，设想这个开放空间是 *ta aletheia*，即无遮蔽。如果我们更愿意把 *aletheia* 译作‘无遮蔽’而非‘真理’，那么这样的翻译并不仅仅是更直白的：它还包含从陈述正确的角度对一般的真理概念直接的重新思考，以及对还未被理解的揭露和存在的揭露的直接反思。”⁽¹²⁾

显然，海德格尔对西方形而上学的很多传统发展是不满意的。他希望离开笛卡尔 (Cartesian) 主观主义，到达苏格拉底以前的更简单更深刻的领悟。在“论‘人性’的信件” (Letter on Humanism) (1947年) 中，海德格尔将“开放空间”的起源追溯到赫拉克利特 (Heraclitus)：

“赫拉克利特的名言 (119段) 说道：'Ethos anthropoi daimon'。这通常译作‘人的性格是他的魔鬼’。这一翻译是用现代而不是希腊的方式思考的。Ethos 意思是住所，居住的地方。该词是指人所居住的开放空间……该段说道：人居住，在他是人的范围，在神的附近……（或）‘（常见的）住所是为人享有的，开放空间是为神享有的（不常见的住所）’。”⁽¹³⁾

最后，在“哲学的终点与思考的任务” (The End of Philosophy and the Task of Thinking, 1966年) 中，海德格尔继续确定“开放空间”。他使用了一个更加原始的图像，即“Lichtung”（字面意思是“照亮”）或“林中旷地” (forest clearing)，那是他年少时在黑森林 (Black Forest) 的梅斯基

(10) Krell, Heidegger, "On the Essence of Truth", pp. 123-124.

(11) 克雷尔，海德格尔，《论真理的本质》，123 - 124 页。

(11) Krell, Heidegger, "On the Essence of Truth", pp. 127-128.

(12) 克雷尔，海德格尔，《论真理的本质》，127 - 128 页。

(12) Krell, Heidegger, "Letter on 'Humanism'", pp. 233-234.

(13) 克雷尔，海德格尔，“论‘人性’的信件”，233 - 234 页。

nearness of god ... [or] 'The (familiar) abode is for man the open region for the presencing of god (the unfamiliar one).' ”⁽¹²⁾

Finally, in “The End of Philosophy and the Task of Thinking” (1966), Heidegger goes on to identify the “open region” with an even more primitive image, the “Lichtung” (literally “lighting”) or “forest clearing”, a familiar sight to him ever since his youth at Messkirch in the Black Forest:

“To open something means to make it light, free and open, e. g., to make the forest free of trees at one place. The free space thus originating is the clearing ... Light can stream into the clearing, into its openness, and let brightness play with darkness in it. But light never first creates openness. Rather, light presupposes openness. However, the clearing, the open region, is not only free for brightness and darkness but also for resonance and echo, for sound and the diminishing of sound. The clearing is the open region for everything that becomes present and absent.”⁽¹³⁾

Now it is certainly possible that Mies may have read these works of Heidegger, either in German or in English translation, although we can find no direct evidence that he did. But the parallel lines of their thought seem unmistakable. Heidegger's exposition of truth consisted of two facets, “aletheia” and “das Offene”, the physical and the metaphysical. In Mies' search for truth, these two facets were first developed independently in his later work in Chicago, and finally coalesce in his design for Crown Hall.

Thus while Heidegger first sets forth his concept of truth as the “open region”, this abstract space to achieve the correspondence of statement and thing, in “The Essence of Truth” in 1932, Mies had first suggested his architectural “open region” in the German Electrical Industries Pavilion of 1929. And Heidegger's other facet of truth, the pre-classical notion of aletheia or “unconcealment” can be identified with Mies' advocacy of the equally unadorned, and craftsmanlike use of traditional architectural materials such as timber, stone and brick, which he announced in his “Inaugural Address as Director of the Department of Architecture at IIT” in 1938:

“... Let us guide our students over the road of discipline from materials, through function, to creative work. Let us lead them into the healthy world of primitive building methods, where there was meaning in every stroke of an axe, expression in every bite of a chisel. Where can we find greater structural clarity than in the wooden buildings of old? Where else can we find such unity of material, construction and form? ... What better examples could there be for young architects? Where else could they learn such simple and true crafts than from these unknown masters? ... Nothing can express the aim and meaning of our work better than the profound words of

尔希就已熟悉的景象:

“展现某事物意味着使它明亮、自由和开敞。例如使森林在某一处没有树木。这样创造的自由空间是旷地……光线可以流入旷地，流入它的开敞，让光明在其中操纵黑暗。但是光线从不开创开敞。实际上，有光线必有开敞。然而，旷地、开放空间并不仅为光明和黑暗而自由，还为回声与反响、为声音与声音的衰减而自由。旷地是所有存在与不在场事物的开放空间。”⁽¹⁴⁾

现在，密斯当然可能已经读过德文版或是英译版的海德格尔的这些著作，尽管我们没有直接证据来证明。但是，他们思想的相似性基本上是不会错的。海德格尔对真理的阐述包括两方面：“aletheia”和“das Offene”，物质的和形而上学的。在密斯对真理的追求中，这两个方面首先独立地体现在他后期在芝加哥的作品中，最终凝结于克朗楼的设计。

海德格尔于1932年的“真理的本质”中首次提出他的真理概念是“开放空间”，该抽象空间实现了知与物的符合。这时，密斯已经于1929年的德国电气工业馆中首次暗示了他的建筑“开敞空间”。海德格尔的真理的其他方面，aletheia或“无遮蔽”的前古典概念可以认为是和密斯的主张相同：密斯在他1938年的“伊利诺伊理工学院建筑学院院长就职演说”中声明，他主张的是平等朴素，以及精巧地使用传统建筑材料如木材、石头和砖等：

“……让我们指引我们的学生，通过功能走材料方法之路以完成创造性的工作。让我们带领他们走进基础建筑方法的健康世界中去，那里，每砍一斧都有它的意义，每刺一鋸都有它的表现。我们还能从哪里发现比过去的木头建筑更加结构清晰的呢？还能从哪里发现这种材料、结构与形式的统一呢？……对于青年建筑师而言，还有比这更好的实例吗？除了学习这些不知姓名的大师之外，在哪里还能学到这么质朴而真正的技巧呢？……对我们工作的目标和意义最好的表达，莫过于圣奥古斯丁（St. Augustine）所说的话：‘美是真理的光辉。’”⁽¹⁵⁾

难道密斯没有“回溯”建筑到其最初的根源，到海德格尔也追寻的“未被理解的暴露和存在的暴露”吗？

1942年，密斯又一次着手音乐厅设计，进行其“开放空间”的探索；其拼贴画是由天窗引进的自然光定义的巨大净

(13) Krell, Heidegger, “The End of Philosophy and the Task of Thinking”, p. 384.

(14) 克雷尔，海德格尔，“哲学的终点与思考的任务”，384页。

(15) Philip Johnson, Mies van der Rohe, New York, 1947, pp. 191-195. Reprinted by permission, © 1947 The Museum of Modern Art.

(16) 菲利普·约翰逊，《密斯·凡·德·罗》，纽约，1947年，191-195页。经授权后重印，© 1947年现代艺术博物馆。