

赫尔穆特・雅各比: 建筑绘画大师

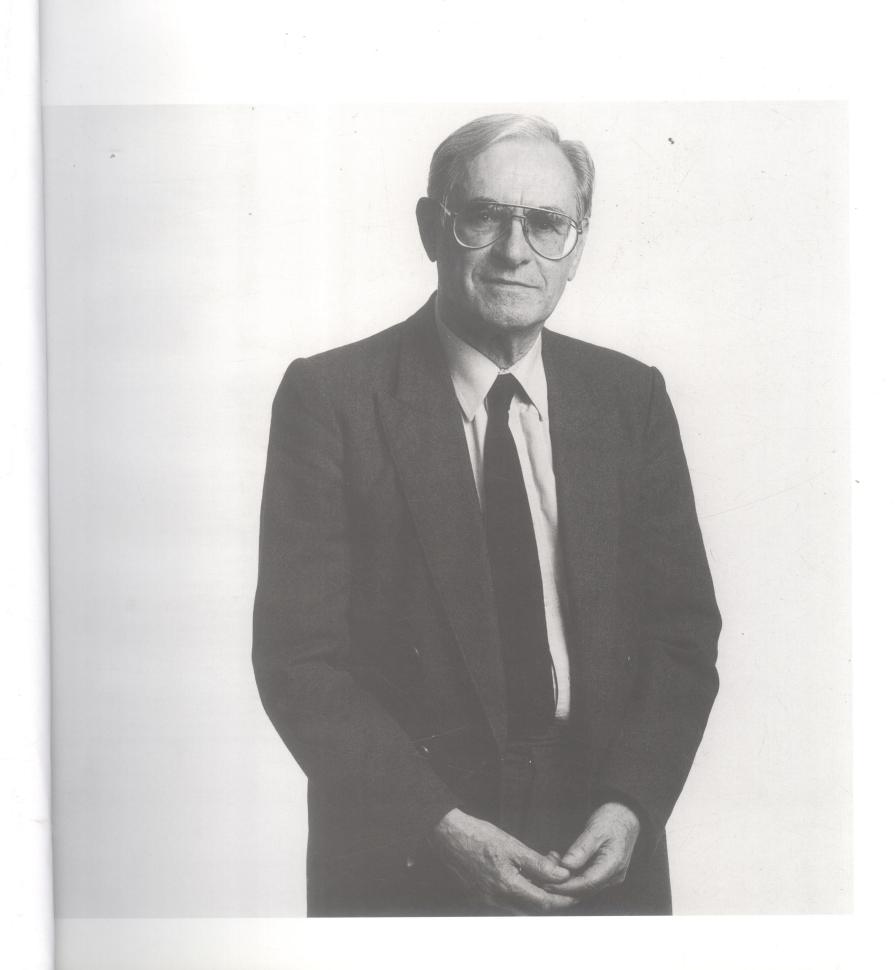
# HELMUT JACOBY

Master of Architectural Drawing

「徳] 聖尔格・博恭格 沃尔夫図・福格特/8

大连理工大学出版社





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# 赫尔穆特·雅各比: 建筑绘画大师

Helmut Jacoby. Master of Architectural Drawing

[德] 黑尔格·博芬格 沃尔夫冈·福格特/编 李 薇/译

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Tech Ming Pei

383 Madison Avenue New York 17, N. Y. Plaza 9-7800

8 October 1956

Dear Mr. Jacoby:

Congratulations on the opening of your new office. You are entering into a field which is in great demand.

I wish you success.

Very truly yours,

IMP:vt

Mr. Helmut Jacoby 221 East 50th Street New York 22, New York

# Foreword

赫尔穆特·雅各比可以说是 20 世纪最著名的建筑绘图家,他与在 20 世纪 20 年代绘制出纽约摩天大楼的休·费理斯 (Hugh Ferriss) 齐名。由于目前这种技术性很强的手工绘制透视表现图的技术正在被计算机设计所代替,雅各比有可能是这些著名的建筑绘图名家中的最后一位。

变化无时不在,而只有现在我们才能够慢慢地感受到这些变化将对建筑设计和绘图产生的影响。在 2001 年初夏的"数字化的现实,首批建筑师包豪斯建设项目"展览上,德国建筑博物馆以当代变革过程为主题展示了第一批根据一种特殊的计算机软件而非手工绘制的图纸建设的楼房。与这些现代的计算机绘图相对,我们这里要展示给大家的是一名建筑绘画大师,他的艺术绘画为那些 CAD 设计者们设定了标准。如果他们想超越单纯的计算机动画,这些标准是他们必须要遵循的。

赫尔穆特•雅各比生于 1926 年,是一位专业的绘图师。 他不仅选择了设计建筑, 而且能够将建筑师的设计放到假设 的现实环境中去考虑。移民美国后,他并没有做建筑师,而 是做了一名自由绘图师,为菲利普·约翰逊 (Philip Johnson)、埃罗·沙里宁 (Eero Saarinen)、贝聿铭 (I. Pei)、马 塞尔·布罗伊尔(Marcel Breuer)、凯文·罗克(Kevin Roche) 等一些主要建筑师绘图。雅各比在20世纪50、60年代的透 视表现图可以编纂起来成为那一时期创新的美国现代主义的 编年史。不论是水墨透视表现图、铅笔透视表现图或者是喷 漆透视表现图, 他的作品都影响着全世界建筑设计表现方 式。自1968年回到德国后,他越来越多地受到诺曼·福斯特 (Norman Foster) 爵士、赫尔穆特·雅恩 (Helmut Jahn) 和哈 里·塞德勒 (Harry Seidler) 等国际建筑师的委用。在德国, 他更与京特·贝尼施 (Günter Behnisch)、戈特弗里德·伯姆 (Gottfried Bohm)、迈哈德·冯格坎 (Meinhard von Gerkan)、 HPP 和克里斯托夫·英根霍芬 (Christoph Ingenhoven) 等人 合作。今天, 他的客观的风格仍然受到客户的推崇, 很多客 户仍认为他的绘画技术高于 CAD。

本书及 2002 年秋天于芝加哥艺术学院举行的展览会首次对赫尔穆特·雅各比的全部作品进行了回顾。他将他的部分作品捐献给德国建筑博物馆收藏,在此我们深表感谢。

如果没有这些发起人,此项目将很难得以进行。因此,我们要特别感谢法兰克福市,特别是科学与艺术部,他们提供了基本的资金支持;同时我们还要感谢黑塞(Hesse)文化基金会、管理协会柏林 mbH 办事处、维利 – 勃兰特 – 豪泽(Willy – Brandt – Hause.V.)等朋友、德国外交部、赫尔穆特·雅各比和德国建筑博物馆友人协会。

黑尔格·博芬格、英格博格·弗拉格、沃尔夫冈·福格特

Helmut Jacoby, to whom this exhibition catalog is dedicated, is probably the best-known architectural renderer of the 20th century – on a par with Hugh Ferriss, who in the 1920s drew the marvelous pictures of New York's skyscrapers. Jacoby is perhaps the last of the greats, for the skilled craft of creating presentation drawings seems to be giving way to animated computer images.

A change is under way, and only now are we slowly being able to discern the impact it will have on building designs and presentations. In the shape of the exhibition "digital real.Blobmeister, first built projects," the German Museum of Architecture (DAM) took this contemporary process of change as an occasion in early summer 2001, to showcase the first buildings constructed with free-form surfaces based on drafts that are no longer drawn but computer-generated by a special software. In contrast to these current computer depictions, we are now presenting a master of architectural rendering, whose art sets the standard to which CAD designers have to square up if they wish to achieve more than mere sterile machine-based animations.

Born in 1926, Helmut Jacoby is a professional 'renderer' who has opted not for designing buildings but for taking the designs of architects and placing them into the assumed reality. After emigrating to the United States, he was not active as an architect, but worked freelance, rendering drawings for major architects such as Philip Johnson, Eero Saarinen, I. Pei, Marcel Breuer, Kevin Roche and many others. Jacoby's 'renderings' from the 1950s and 1960s can be compiled to provide a chronicle of innovative US Modernism of that period. His perspectival drawings in ink, pencil, or spray-paint influenced architectural presentations all over the world. After having returned to Germany, his services from 1968 onwards were increasingly commissioned by international architects such as Sir Norman Foster, Helmut Jahn and Harry Seidler. In Germany he worked, among others, with Günter Behnisch, Gottfried Böhm, Meinhard von Gerkan, HPP, and Christoph Ingenhoven. His objective style continues to attract clients today, who still rate his craftsmanship higher than CAD.

The book and the exhibition, which will be shown at the Art Institute of Chicago in fall 2002, offer for the first time an overview of Helmut Jacoby's entire œuvre. He kindly will donate some of his works to the DAM's collection, for which we would like to thank him very much.

The project would not have been possible without the help of our sponsors. Special thanks therefore to the City of Frankfurt/Main, to the Department of Science and Art, which provided the basic financing; to the Hesse Cultural Foundation, to the Verwaltungsgesellschaft Bürohaus Berlin mbH, to the Freundeskreis Willy-Brandt-Haus e. V., to the German Foreign Ministry, to Helmut Jacoby and to the Society of Friends of the Deutsches Architektur Museum.

Helge Bofinger, Ingeborg Flagge, Wolfgang Voigt



95/01.4 博芬格建筑设计事务所,维利-勃兰特-豪斯饭店,柏林,1995年

# 赫尔穆特·雅各比:建筑绘画大师

Helmut Jacoby – Master of Architectural Drawing

黑尔格·博芬格

赫尔穆特·雅各比的作品为 20 世纪下半叶建筑领域的发展提供了独特的历史性记载。他的作品跨越 20 世纪 60 年代,这是"现代主义"垄断整个建筑业的年代,是鲍豪斯建筑学派的学生密斯·范德·罗(Mies van der Rohe)、格罗皮乌斯(Gropius)。和布罗伊尔(Breuer)跨入国际建筑领域并继续欧洲被中断的现代主义建筑发展的时代。这些人从德国移民至美国,将建筑教育担为己任。

这也是"美国时代"。20世纪五六十年代雅各比正在纽约。这个时期美国的建筑业是以广泛的担保为特征的。这种信任在1966年 Sibyl Moholy – Nagy 在不伦瑞克(Braunschweig)理工大学做客座教授时表露无疑。作为鲍豪斯建筑学派的一位讲师的遗孀、美国建筑业的评论家和理论专家,她声称她认识世界所有的著名建筑师,并想要了解他们在做什么。

这个时期同样也是信息时代的开始。在这一时期,来自 美国的许多建筑杂志,如《建筑论坛》、《建筑记录》和《前 进的建筑业》,迅速地展现在建筑师和学生的课桌上以及大 学的图书馆里。这也是赫尔穆特·雅各比和他的绘画作品一 夜之间在建筑业界成名的原因之一。

如果想学习当时美国先锋派建筑设计的背景下为尚未完成的项目找到创新的想法,我们所需要做的就是翻查上述建筑杂志中的雅各比的绘画。事实上,这其中的许多项目从未实施过,而它们存在的惟一线索是在雅各比的构思中,只有这样它们才能够由于与建筑业的继续发展存在历史性的关联而被评价。如果没有雅各比的高超技术,许多建筑物不会得以建设。雅各比作为一名合格的建筑师可以预测建筑物建成后的实际效果,也就是说,他可以在他的作品中诠释建筑效果和潜在的观念。

他时常要描绘的是全新样式的建筑。尽管没有相似的实例建筑存在,但是他必须使开发商们充分理解他的设计,毕竟开发商们需要确切地了解建筑的影响,后期建设细部的质量和材料的类型,更不要说建筑对都市风景在空间上的影响效果。如果作为许多建筑师的同等合作伙伴的雅各比不能诠释并描绘出逼真的现实效果的话,一些建筑师们是很难开展他们的面向世界的业务的,同时许多当代历史上重要的建筑也不可能建成。

这种现象在20世纪70年代以后的欧洲和亚洲的建筑设计竞争中更能得以体现。如果没有雅各比的完全史无前例的

The work of Helmut Jacoby provides a unique historical record of the architectural development in the second half of the 20th century. His work spans the 1960s, the decade when 'modernism' asserted itself as architecture's global language, the years when the Bauhaus students – Mies van der Rohe, Gropius and Breuer – who had emigrated to the United States from Germany and taken up lecturing appointments, made their entrance on the stage of international architecture, and resumed the interrupted development of the modern age in Europe.

But it was also the 'American age', which Jacoby participated in during the 1950s and 1960s in New York. The architectural scene in the States at the time was characterized by immense assurance. This confidence was evident when Sibyl Moholy-Nagy introduced herself as visiting professor to her German colleagues at the Braunschweig Technical University in 1966: the widow of the Bauhaus master-class lecturer, critic and theoretical expert on the US scene, explained she knew all the world's important architects; now she wanted to discover what the others were doing.

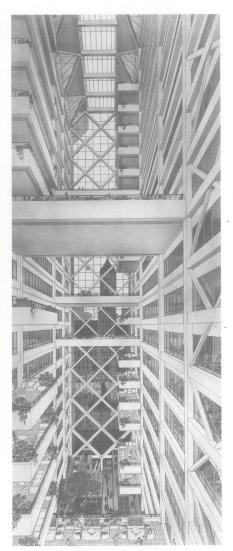
And it was equally the start of the information age when architectural journals from the United States – Architectural Forum, Architectural Record and Progressive Architecture – were quick to land on the desks of architects, students and university libraries. This is one of the reasons why Helmut Jacoby and his amazing drawings became famous overnight in the world of architecture.

As students, all we needed to do in order to find new, innovative plans for as yet incomplete projects by the then avant-garde scene in the United States, was to thumb through the aforesaid architectural magazines for Jacoby's drawings. In fact, many of these projects were never completed, so that the only reality they preserved was on Jacoby's plans, and only thus can they be evaluated in terms of historical relevance for the further development of architecture. Some buildings would not have been constructed if not for the skill Jacoby, as a qualified architect, demonstrated in anticipating their reality, i.e. interpreting in his work their architectural effect and underlying concepts.

More often than not he was dealing with totally new forms of architecture, which had to be made comprehensible to developers, despite there being no similar structures in existence, that would have served as illustration. After all, the developers needed to understand the exact impact of the architecture, the quality of later construction details and types of materials, not to mention the dimensional effect within the cityscape. Several architects would have found it much harder to begin their world careers, and many important examples of contemporary history would not have been built, if Jacoby, as an equal partner to various architects, had not taken on the role of interpreting, then conveying virtual reality.

60/03.1 迈耶(Mayer)、惠特利西(Whittlesey) 和玻璃公寓楼,纽约,1960年





68/11 Karl Warnecke 大厅, 亨内平 (Hennepin)县法庭,明尼阿波利斯(Minneapolis),

建筑艺术诠释或者他高度逼真的设计理念的传达,诺曼·福 斯特是不大可能赢得设计香港和上海银行的竞争的。这个设 计使他一跃成为世界最重要的建筑师之一。简而言之,雅各 比所描绘的逼真的现实效果使银行家们虽然不能十分了解这 个建筑,但是他们掌握了他的想法,从而使他们非常信服 (见 124~127 页的图)。

同样的, 雅各比的另一个展示图也很有趣, 这是他于 1968年为建筑师卡尔·瓦内克 (Carl Warneche) 的亨内平 (Hennepin) 法庭而画的。这个图展示了雅各比 11 年前为香 港的一个与其高度相比很窄并且垂直的中庭的设计理念。这 个中庭设计的美学概念主要体现在其技术性建设的纯绘画质 量上,与福斯特的设计相似。

准确的说是雅各比的艺术造诣和他的从建筑师角度想象 的能力使他能够转达某一构思的基本理念。由于这正是建筑 师们所寻找的, 所以不仅仅是美国的完全先锋派, 而且许多 像 SOM、克利和格鲁森 (Kelly & Gruzen)、埃默里・罗思父 子 (Emery Roth & Sons)、柯蒂斯和戴维斯 (Curtis & Davis) 等许多大的公司也选择了雅各比。这并不是一种巧合, 而是 他们知道雅各比的技术能够确保他们项目的成功。

作为学生我们很自然地想了解是否雅各比也设计过某些 建筑。事实上在1964年就有消息透露他自己的在纽约的房 子就是他自己设计的,至今这个房子仍属于纽约最好的市内 住房。尽管雅各比在建筑设计师中很著名,但以其自身的谦 逊,他从未如此看待自己。

雅各比的画已经享誉盛名长达 40 年之久,这在应用 CAD 盛行的年代里是很难想象的,目前许多建筑师已经忘记 如何绘图了。在 1973 年当 KSP 的创始人、布伦瑞克理工大 学教授弗里德里希·威廉·克雷默 (Friedrich Wilhelm Kraemer) 在向我展示他的科洛涅罗马风格的房屋改造时, 他突 然打开一个柜子,指着一张画着在杜伊斯堡(Duisburg)的 克勒克纳·洪堡·多伊茨 (Klöckner Humboldt Deutz) 的画说: "顺便提一下,这是一张雅各比的真迹。"他很清楚这会给我 留下很深的印象。很自然地, 当雅各比从美国回来时, 许多 德国和欧洲的建筑师们是很高兴把他的名声变成资本的。

另外,要提醒读者的是这本书中编排了各项目的日期, 目的是使读者了解许多建筑业的趋势,这种预见比一些大的 商业公司预见的还要早很多的,有些趋势在多年以后才被欧 洲或德国的先锋派誉为是其自身的创新。例如,由贝聿铭 (I.M. Pei) 设计的华盛顿邮政大楼——一个理性主义的先驱, 这种设计理念在 20 世纪 90 年代盛行的所谓的柏林现代派设 计中从未实现过 (见81页图)。通常,在法兰克福或其他一 些地方建造的高层建筑,特别是以先进的玻璃表面技术著称 的欧式高层建筑,尚未达到早在六十年代的美国就已经达到 的概念标准。因此,雅各比的作品也是一个最先进的历史资 源。它们记载的建筑虽然有一些从未建过,但是它们为建筑 发展进步起到了促进作用。

This phenomenon repeated itself from the 1970s onwards in Europe and Asia. It would hardly have been possible for Norman Foster to win the competition for the Hong Kong & Shanghai Bank, an achievement which suddenly made him one of the world's most important architects, if not for Jacoby's artistic interpretation of architecture, which was on a totally unprecedented scale, or his highly visual communication of the design. In short, the bankers were convinced by a virtual reality Jacoby had rendered, which allowed them to grasp his idea even though they did not understand much about it (see figs. page 124-127).

In this context, another presentation drawing by Jacoby, which he created in 1968 for architect Carl Warnecke's Hennepin Courts Facilities, is very interesting. It shows that eleven years before Hong Kong, a plan existed for an atrium which was narrow and vertical in relation to its height, whose aesthetics was also defined by the pure graphic quality of its technological construction,

and which is similar to Foster's design.

It is precisely Jacoby's artistic ability and his capacity to think as an architect, which enable him to convey the essential quality of an idea. Since this was exactly what architects were looking for, it was no coincidence that the entire avant-garde in the United States, but also large, established offices such as SOM, Kelly & Gruzen, Emery Roth & Sons, Curtis & Davis and others, chose Jacoby knowing his skills would help secure their projects.

Naturally, as students we were curious and naive enough to wonder whether Jacoby had also built something. And in fact news spread of his own 'town house' in New York, which in 1964 represented a significant typological contribution to the topic, and is still amongst the best of its kind in New York. Though he is known to be the designing architect, Jacoby, in his modesty, never saw himself as such.

For forty years, Jacoby's renderings enjoyed a standing, which is difficult to conceive in an age dominated by CAD applications, in which architects have forgotten how to draw. When in 1973 Friedrich Wilhelm Kraemer founder of KSP and Professor at the Braunschweig Technical University – showed me the alterations to his house Am Römerturm in Cologne, he suddenly opened a cabinet, pointed to a drawing for Klöckner Humboldt Deutz in Duisburg and said, very much aware that it would impress me, "incidentally, that's a real Jacoby." Naturally, on his return from the United States many German and European architects were happy to capitalize on Jacoby's reputation.

Moreover, one only has to consider the dates of the projects featured in this book were conceived to realize that many trends were anticipated much earlier, sometimes fairly casually by large, commercial offices, trends which years later were celebrated as innovations of the European or German avant-garde. For instance, the Washington Post building designed by I. M. Pei is an early forerunner of a rigorous rationalism, whose powerful expression was never achieved again by the so-called Berlin realism propagated in the 1990s (see fig. p. 81). Fairly often, designs for high-rise buildings, created in Frankfurt or elsewhere as specifically European highrises by virtue of their progressive glass and façade technology, do not match the conceptional standards already reached during the 1960s in the United States. Accordingly, Helmut Jacoby's work is also a first-class historical source, precisely because it documents buildings which, though never built, provided a stimulus for the advancement of architectural development.

Although he made light of the fact, Jacoby always thought like an architect in his work. Specifically, his

虽然雅各比只是绘制建筑图,但是在他的作品中他总是能够从建筑师的角度来考虑问题。尤其是他能熟练而感性地解读建筑师的想法,这使他能与精通设计和建筑的建筑师们一样描绘出精确的空间尺度。普通建筑师认为难以胜任的任务对于雅各比来说却相对容易,因为他不仅具备与许多知名建筑师合作的经验,并熟悉他们的思考方式,而且由于他的广泛的训练和能力使他保持了一种独立意识,这最终使他比他的一些客户更优秀。

雅各比并不像一些著名的建筑绘图人,例如休·费理斯(Hugh Ferriss),他们采用的是城市景物画和环境图画风格。雅各比受到一种不同的历史资源的影响,那就是申克尔(Schinkel)的线性建筑透视表现图。这种透视表现图比城市景物画更注重建筑完成的正面效果。而雅各比又更进了一步,他对申克尔的光度和精确性进行添加,从而使以二十世纪建筑为例的"技术"特色受益匪浅。有几种因素对这种建筑的成功贡献颇多,即建设细部的准确性、建筑材料、结构,更不要说开放规划的透明度。要想转达一个建筑的背景,有许多新的概念是雅各比之前的任何人在同样的预期现实绘画中未能做到的:绘画的准确度,个体细部在环境中的影响,石头、钢材和玻璃在光线作用下的效果,特别是玻璃作为反映天空和环境的方式的效果。

他试图做到准确地知晓所设计的楼房的每个细部的样子。当他画科恩·佩德森·福克斯(Kohn Pedersen Fox)协作设计的法兰克福 Westend 塔(见 146 页图)的时候,他向我展示了包含所有建筑细部的建筑师的方案。这在美国是一个办事常规步骤,一旦工程开始建设,方方面面都要确定并且不能再改动。对于他当时正在画的柏林的维利-勃兰特-豪泽(Willy-Brandt-Haus)(见 153 页图),我不仅为他提供了建筑的可能的正面细部,而且他还获得了一块真的石板,这样他才能在他的描绘中包含材料的特点,从而决定建筑的特征。

为什么要如此精确呢? 他关心描绘和阐明设计:设计在现实中的样子。他并不想只是制作一张照片,这和 CAD 制图一样只能预见大楼将来的样子。他的目的不是简单地制作一个拷贝,而是为大楼在个性特征和建筑自身的环境中如何影响都市风景提供一个合适的印象,换句话说也就是一个真正的现实。

在科恩·佩德森·福克斯建筑事务所为伦敦加那利(Canary)码头(见 144 和 145 页图)的设计中,从不同角度展示了建筑与周围环境的搭配。建筑场地的特点和与人相关的都市背景主要是以抽象的手法完成的,只有建筑本身是精确详细地绘出的。汽车、树木和人物在他的绘画中总是含有特定的目的。在多数粗劣的 CAD 绘图中包括人物在内的任何东西都像是在照片中一样,与此不同的是在雅各比的作品中这些东西都显得很含糊并且没有影子。

雅各比在人物表达上的一个例外是在明顿·凯恩斯 (Mil-

adeptness at sensitively interpreting an architect's plan, enabled him to portray its spatial dimensions with the same precision of an architect accustomed to designing and constructing. The task that would demand a high degree of self-denial from a normal architect is relatively easy for Jacoby, since he has not only experience of working with many important architects, and is familiar with their way of thinking, but has also maintained a sense of detachment and independence — not least of all because of his extensive training and ability, which ultimately made him superior to some of his clients.

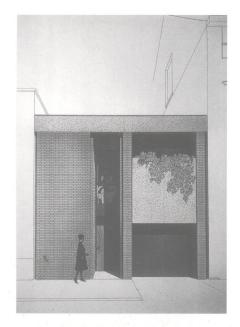
Unlike many famous architectural renderers – such as Hugh Ferriss – who worked in the style of painterly veduta and atmospheric pictures, Jacoby was guided by a different historical source, namely the linear, architectural perspective by Schinkel, which came closer to the façade intended for the execution of the constructionthan the veduta. But Jacoby goes one step further, adding something to Schinkel's lightness and precision, which befits the 'technical' character exemplified by 20th century architecture. Several factors are crucial to the success of this architecture, namely accuracy of constructional details, the material, structure, not to mention the transparency of open planning. The accuracy of portrayal, the impact of individual details in context, the effect of stone, steel and glass in conjunction with light, in particular the effect of glass as a means of reflecting sky and surroundings, in order to convey an architecture's setting - these are all new concepts which nobody before Jacoby produced in the same perfection of anticipated reality.

His favorite scenario was to know down to the smallest detail exactly what the planned building was to look like. When he drew the Westend Tower in Frankfurt by Kohn Pedersen Fox Assoc. (see figs. page 146), he showed me the architect's plans containing all the constructional details – a normal procedure for offices in the United States where everything is determined and no longer altered, once construction has begun. For the drawing he was doing on the Willy-Brandt-Haus in Berlin (see fig. page 153), in addition to the probable details of the façade, I also procured him an original natural stone slab, so that he could include in his rendering the tone of the material, which would determine the building's character.

Why such precision? He is concerned with portraying and clarifying the design; how it will appear in reality. He is not interested in producing a photograph, which like a CAD rendering, anticipates what the building will later look like. His aim is not to produce a mere copy, but rather to provide a proportional impression of how the building will influence the cityscape, embedded in a setting reduced to characteristic features and the architecture itself – in other words a distilled reality.

In Kohn Pedersen Fox Assoc.'s plan for Canary Wharf in London (see figs. page 144, 145) the building was shown from various sides as it fitted into its surroundings. What is typical for the location and defines the scale of the urban setting in relation to people, was largely executed in an abstract manner, only the building itself is presented in precise detail. Automobiles, trees and figures, often have a defining purpose in his drawings. Unlike the often kitschy CAD renderings, in which everything including real-looking people resembles a photograph, these items appear vague and shadowless in Jacoby's work.

One exception in the presentation of people can actually be seen at the drawings of Milton Keynes, where a huge amount of pictures were drawn, not least because of the intention to attract young residents to the draw-



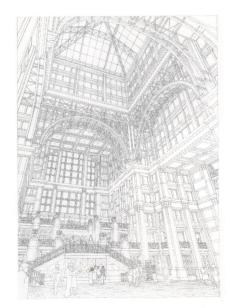


64/02 赫尔穆特·雅各比和莱昂纳德·弗尔德 曼(Leonard Feldmann),雅各比住宅,纽约, 1964年

素描图和照片对比

73/03.3 克雷默 (Kraemer)、西弗茨 (Sieverts) 建筑设计事务所, Kloeckner, Humbold Deutz, 杜 伊斯堡, 1964 年





87/04.4 SOM 公司办公楼,1310 G 街,华盛顿,1987年

74/02.1 巴里·加森(Barry Gasson)设计的位于格拉斯哥的伯利尔(Burrell)收藏品博物馆,1974年

透视表现图和照片对比





ton Keynes)的绘图中。在这个设计中,他画了大量的图片,以此来吸引年轻的住户。建筑师德里克·沃克(Derek Walker)在描绘人物和汽车(英式标识!)上做了详细的指示。为沃尔韦尔顿·安格拉(Wolverton Angora)的绘图是为了表现一个公共节日的照片。雅各比接到了戴夫·雷迪克(Dave Reddick)为这个节日画的一张草图,该草图上有节日的装点和欢庆的人群,这与 1975 年的时代精神完全吻合。草图看上去像一幅拼贴画,雅各比为其添加了内部和大厅建筑布局(见 59 页图)。

通常,雅各比绘出的图画似乎能描绘出从真实的角度看到的所有东西,尽管实际上人们只有通过眼睛在实际情况下的移动才能感受到。在维利 – 勃兰特房子中,视野从饭厅穿过通道进入大厅深处,视角达到了180°,这是任何照相机和CAD相机的模拟角度在不扭曲事物的情况下都做不到的。通过这张图可以看出建筑位于柏林,而这些正在做着各种各样动作的抽象化的人物表明了建筑的用途。视线进入该建筑,然后又穿过建筑到达外面的街上。图中惟一详细画出的是建筑结构部分,即材料、石头和玻璃,以及光线。所描绘的是潜在的建筑理念以及建筑区域的用途(见8页图)。

这个作品代表了一种选择性的诠释,作为绘图这最终能够满足对一件完美作品的基本要求,因此这个作品也就不单单是偶然对现实的反映。作品并没有刻意去追求这种效果,但是这种建筑理念的效果体现在这种现实中。玻璃的运用具有一种特殊的作用:玻璃能够反射画内外光线和城市的环境,最终玻璃是一种透明的界面。雅各比总是详细地画出玻璃后面景象和事物的细部,这只是为了体现玻璃后内部空间的深度,通过改变被反射状态的反射作用,使人能够体会到这种材料作为建筑表面的基本部分的透明性。

之后,还有一些元素可以说明与城镇风光相关的建筑的规模或者突出建筑的位置。例如,在 ABB 建的德雷斯德纳(Dresdner)银行第一塔的图中画的歌德纪念堂就表明了该建筑位于法兰克福的 Gallusanlage(见 115 页图)。有时,雅各比利用透视表现法能够制造出幻想。在我为重建德雷斯德纳银行第二塔(见 163 页图)的竞标绘图中,为将新塔与法兰克福高耸的城市轮廓连接在一起,他在画中包括了科恩·佩德森·福克斯建筑事务所建造的Westend塔。他画得如此的逼真以至于没有人会想到在这个角度根本看不到这个塔。只有当人走近第二塔时才会看到Westend塔,但是站在离第二塔较近的地方,图中右侧银行的旧楼就不在视野范围内了。

以这种方式,建筑被描画得如同人们可以身临其境地体验它,这是一种用照相机观察一个固定角度时无法得到的体验。同样的,在赫尔穆特·雅恩(Helmut Jahn)所画的梅塞(Messe)塔中(见 140 页),大厦看起来要比实际更广阔,目的是为了更形象地表现出该摩天大厦对都市风景的影响。

雅各比高超的技能体现在他可以将建筑及其周围的环境的三维效果在只能体现两维效果的纸上记录下来。这可能是

ing-board city. Architect Derek Walker gave detailed instructions about the depicted people and cars (British trademarks!). The drawing for Wolverton Angora was meant as a photograph of a public festival. Jacoby received a sketch which Dave Reddick produced for that occasion, with a festive decoration and celebrating people, whose appearance corresponded exactly with the Zeitgeist of 1975. The result was a collage, to which Jacoby added a realistic presentation of the interior and the hall-construction (see fig. page 59).

More often than not, the picture of reality Jacoby presents, depicts everything in a seemingly authentic angle, though in fact only the moving eye is capable of perceiving it so. The view from the restaurant over the passage into the depth of the atrium in the Willy-Brandt house encompasses an angle of 180 degrees, which no camera and no CAD camera simulation angle can portray free of distortion. The photograph which is incorporated defines the location as Berlin, while the abstract figures engaged in activities are a reference to utilization. The view goes into the building, then out into the street area. The only components of the drawing which are fully worked out are the architectonic area, i.e., the material, stone and glass, and the light which defines this area. What is depicted is the function of the area together with the concept underlying the architecture (see fig. page 8).

As such the work represents a selective act of interpretation, which as a drawing ultimately satisfies all the classic demands for an exciting composition, thus making it more than a copy of incidental reality. Not the latter is sought, but rather the later effect of the architectonic idea in this reality. The presentation of glass is assigned a special role: glass as a means of reflecting light and city surroundings, inside and outside the actual picture, and finally, glass as a transparent medium. Jacoby often draws minutely detailed scenes or objects behind the glass, simply to suggest the depth of the interior behind it, and to enable one to experience the transparency of the material as an essential part of the façades, by alternating the act of reflection with the state of being reflected.

Then there are the elements, which illustrate the building's scale in relation to the townscape, or characterize the location, such as the Goethe memorial in the drawing for Dresdner Bank's first tower by ABB, which identifies the location as the Gallusanlage in Frankfurt (see figs. page 115). And sometimes, Jacoby uses perspective to create illusions. In the drawing of my competition entry for the reconstruction of Dresdner Bank's second tower (see fig. page 163), as a reference to the connection between the New Tower and Frankfurt's highrise skyline, he includes the Westend Tower by Kohn Pedersen Fox Assoc. in the picture, in such a convincing manner that nobody realizes that it cannot be seen from this standpoint. It is only when one moves closer to the building, that it becomes visible, but from this closer viewpoint, the old bank buildings on the right-hand side of the picture would disappear.

In this manner, the building is portrayed as one would experience it in reality, an effect which one cannot depict using a fixed angle of perspective as is shown by a camera. Similarly, in the drawing of Helmut Jahn's Messe Tower (see fig. page 140), the plaza appears to be much more extensive than it is in reality, in order to visualize the impact the skyscraper has on the cityscape.

Jacoby's great skill lies in recording on paper, a twodimensional medium, the three-dimensional effect of a building in a scale which relates it to its surroundings. Perhaps it is because of Jacoby's artistic interpretation of 因为雅各比对现实的艺术诠释和他能够表达出来的独特而又实际的真实,许多建筑一旦建成就缺乏雅各比在他的绘画中捕捉到的光度和意境。很少有建筑能够在雅各比对它们各自设计的艺术诠释上有所突破。从另一方面讲,很多绘画与之后建成的建筑是非常相似的。

由此可以想到另一个问题:是雅各比的绘图对建筑师们产生了影响,还是建筑师们在见到他们的大厦在图中的效果而改变或改进了他们的设计呢?雅各比非常谦虚地否定了这一看法。不过,可以肯定的是每一位与其合作的建筑师都可以用雅各比的绘图来检验他(她)的设计理念的正确性。如果不是这样的话,人们对建筑的体验将完全不同。

由凯文·罗赫、约翰·丁克罗(Kevin Roche John Dinkelloo)建筑设计事务所设计的福特基金会(见本页和 90、91 页图)是一个有名的例子。该设计的第一草稿没有最终决定是用石头结构还是钢架结构,而其成稿却是非常清楚明了,与第一草稿的含糊不清形成鲜明对比,最终使该建筑成为未来建筑理念的标志。当雅各比接受采访被问到这个问题时,他评价说这并不是一个好例子。但是,尽管他并没有直接对该设计进行修改,他为建筑师出谋划策,从而使建筑师在建造20世纪最伟大的建筑物之一之前能够重新审视该设计并使该设计更加细致,因此他的这种贡献是相当巨大。而在人们的观念中,雅各比仅仅把自己视为传达建筑师设计思想的人。

在评价雅各比的作品时,必须要考虑紧密相关的两个不同层次。第一,在 1956~2000 年间绘画的发展和受他的影响同期建筑的发展。第二,权威的手工艺术绘画,它不仅成功地描绘可见到的材料和细部,而且还包含组成设计理念的所有建筑特色。正是这种强烈的令人信服的艺术描绘才使许多不太相关的建筑成为当代历史的标志性建筑。

本书中的绘图所涉及的建筑历史展示了来自欧洲、美国、亚洲和澳大利亚的一些著名当代建筑师的杰作,其中有些已经建成,而有些并没有建。在电子信息时代,本书将为这些精巧实施的建筑绘图对上个千年建筑业的发展记载下可观的文档。本书证明只有那些经验丰富并且头脑聪慧的技术高超人士才能创造出经得起时间考验的艺术作品。

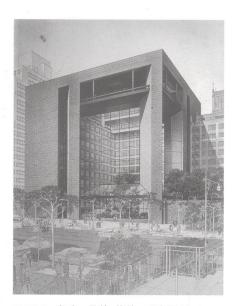
reality, his somewhat alienated, virtual reality that many buildings once complete, lacked the lightness and poetry of concept which Jacoby had breathed into his drawings. Few buildings are an improvement on Jacoby's artistic interpretation of their respective plan. On the other hand, very many drawings are ultimately similar to the buildings later constructed.

This gives rise to another question. Did Jacoby's drawings exert an influence on the architects or did the architects, seeing the effect of their buildings as evidenced in the drawings, alter or improve their plans? Jacoby rejects such a view with all modesty. What is sure, though, is that every architect who worked with him, was able to check the correctness of his/her concepts using Jacoby's drawings. It would be contrary to human experience were this not the case.

There is a famous example, the Ford Foundation by Kevin Roche John Dinkeloo & Assoc. (see figs. in the margin and page 90, 91), whose first draft version does not make a final decision between a stone or steel structure, while the final version is clear and powerful, and by presenting itself as a monument to the concept of future architecture, is a definite move away from the ambiguity of the first version. When asked about this in the interview Jacoby argues that it is not a good example to take. But while he did not, of course, directly influence the plan, he contributed to the architect being able to review and make his plan more specific, before constructing one of the best buildings the 20th century has produced. That is a considerable contribution when one bears in mind that Jacoby has never seen himself as more than the person who communicates an architect's design ideas.

In assessing Jacoby's work, one must consider two different levels which are closely intertwined. First there is the development of drawing between 1956 and 2000, and the architectural development of the same period which he influenced. And secondly, there is the masterly artistic handwriting, which not only successfully portrays the visibility of material and detail, but all architectonic characteristics which make up the design conception. It is this strongly convincing artistic portrayal, which has ennobled many a building of lesser relevance for contemporary history.

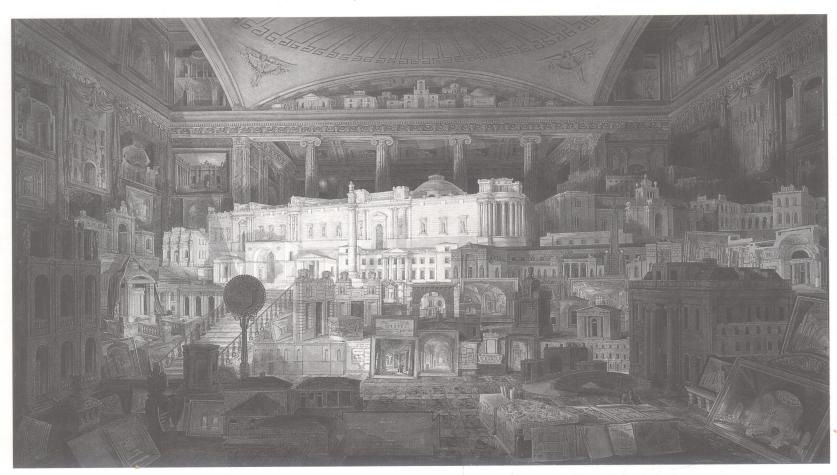
The history of architecture captured in drawings in this book shows masterpieces by important contemporary architects from Europe, the United States, Asia and Australia, some of which were built, some that were not. In the age of electronic media, it is a remarkable document for the influence that masterly executed drawings had on the development of architecture in the last millenium. And it attests to the fact that it takes an experienced hand, and the clever mind of a skilled person to create art capable of standing the test of time.



64/14.2 凯文·罗赫、约翰·丁克罗 (Kevin Roche John Dinkelloo) 建筑设计事务所, 福特基 金会,第一稿, 纽约, 1964 年

翻译:杰里米·盖恩斯

Translation Jeremy Gaines



约瑟夫·迈克尔·甘地,约翰·索恩爵士(John Soane)实施的各种建筑设计透视图,1818年伦敦,约翰·索恩爵士博物馆保管人提供

# "建筑肖像画家", 1800 年至今建筑图解和专业透视图的命运

'Portrait Painters of Buildings'. The Fate of Architectural Illustration and Professional Rendering From 1800 Until Today'

沃尔夫冈·福格特

### 为建筑师服务:英国的皮兰内西

在伦敦的约翰·索恩 (Soane) 爵士博物馆里存放着一件 奇怪的 1818 年的画,画的是一个以古典风格设计的一个巨 大的古典大厅内部的景观。这个大厅里堆放着很多比实例还 大的建筑模型,它们好像就是摆放在一个倾斜的舞台上。在 这些模型的前面好像为拍卖准备似的放着许多附有框架的建 筑绘图。城市景物布局规划图和局部设计图或挂在墙上或靠 在柱子和桌子旁,它们占据了所有的空间。

这个被填充得近乎要爆炸的景象实际上是虚构的,但是 图中所说的类似的建筑物和附有框图的建筑绘图在当今世界 仍然存在。伦敦建筑师约翰·索恩(1753~1873年)声称这 张画真实地反映了他在35年设计生涯中所设计的所有建筑。 从设计风格创新和自我推销方面,作为一名自由建筑师,他 很明显地走在了他所生活的时代的前面。

为了确保他在皇家学院展览会的成功以及从评论家那里得到较高的评价,自 1798 年起索恩开始作一名专业透视表现图画家,开始是受别人雇用,后来是自我雇用。这里要说的是约瑟夫·迈克尔·甘地(1771~1843 年),他被称为"英国的皮兰内西"。甘地是索恩为准备参加学院展览会时一幅画的助手,索恩想要通过这幅画为其建筑成就更填一笔。这幅画的成功成就了一个人,这不是建筑师本人,而是他的挚友甘地。甘地沉浸在他画板上的作品中,他自己几十年来为索恩的建筑所绘制的图一直陪伴着他。从甘地和后期雇用的透视绘图者和着色家亨利·帕克(Parke)(1790~1835 年)的身上,索恩预言了建筑设计和建筑绘图专业的分家。直到19世纪他的预言才得以实现。

建筑透视表现图起源于早期文艺复兴时期,最早时与实际建设大厦并没有联系。一点透视画法的应用始于 1475~1490年间,归因于皮尔罗·德拉·弗朗塞斯(Piero della Francesca)在他的一幅关于虚拟的城市中所画的街道和广场等。虽然人们对这种画法的真正目的并不了解,但是人们设想这些比喻的形象构成了为乌尔比诺(Urbino)公爵夫人卧室设计的整套油画的一部分。在 17 和 18 世纪,这种观点使剧院里的舞台设计更加生动活泼。在罗马和威尼斯,体现古代纪念物和浪漫的都市风景艺术特别盛行。但是,只有到了18世纪晚期法国建筑师提出的"设计绘图"才将透视法纳入建筑设计表现方式之一。在 1800 年左右,埃迪纳·布雷(Etienne Boullée)和乌费达拉·普来斯(Uvedale Price)等理论家

### Serving the architect: the English Piranesi

In the Sir John Soane Museum in London there is a bizarre painting dated from 1818 which presents the interior prospect of a classicist hall of immense proportions designed in the Classicist style and filled with a collection of larger-than-life sized architectural models, crowded together as if on a sloping stage. In front of the models, as if arranged for an auction, we can see dozens of framed architectural views. Veduta, layout plans and sectional views occupy every little bit of free space, hanging on the walls or leaning against plinths and tables.

This scene, filled fit to burst, was a figment of the imagination, but most of the architectures illustrated still exist today, as well as do all of the framed pictures. London architect John Soane (1753–1873), commissioned the painting which features all the buildings he designed during his 35-year career. In terms of stylistic innovation, advertising and self promotion, as a freelance architect he was evidently well ahead of his day.

In order to secure his success both at Royal Academy exhibitions and amongst critics, from 1798 onwards Soane engaged a professional perspective painter, initially as a salaried employee, later on a free-lance basis. The man in question, Joseph Michael Gandy (1771-1843), earned himself a sterling reputation as the "English Piranesi."2 Gandy was the hand behind the painting intended for an academy exhibition and with which Soane wished to create a lasting testimony to his highly successful architectural achievements. In the foreground, there is a single person; it is not the architect, but his alter ego Gandy, immersed in his work at the drawing board, and framed by the very presentations of Soane's buildings he had himself created over the decades. With Gandy and the perspective draftsman and 'colorist' Henry Parke (1790-1835) whom he hired at a later date, Soane anticipated a professional division of tasks between architectural design and presentation, that was not to become an established practice until very late in the

The origins of architectural drawings in perspective date back to the early Renaissance, and initially had no connection with the actual work of building the edifices. The famous use of central perspective dating from around 1475-1490 and ascribed to Piero della Francesca, show the roads, squares and façades of an imaginary ideal city. Though nothing is known about their purpose, it is assumed that these allegorical images formed part of set of paintings created for the Duchess of Urbino's bed chambers. In the 17th and 18th century, such views enlivened the stage sets used in theaters. In Rome and Venice, the art of the veduta (which Canaletto and Piranesi took to such a sophisticated level) with its focus on antique monuments and romanticized cityscapes flourished.3 But it was 'project paintings' by French architects in the late 18th century which gave rise to perspective as a means of presentation for architectural plans. Around 1800, theorists such as Etienne Boullée and Uvedale



皮兰内西 (Piranesi)的带拱桥的城市景物想像 画,18世纪



马丁·哈勒(Martin Haller),汉堡市政厅的设计作品之一,1876年

称赞艺术建筑师的观念与此后较有影响的巴黎的美术学院一样有见地,一样出色。在新成立的建筑学院举办的竞赛典礼上(巴黎的"罗马奖"和柏林的申克尔比赛),未来建筑师们利用所有的艺术效果展示了艺术透视法。

#### 竞标说明

19世纪是透视表现法真正盛行的时代。越来越多的重要 建筑物的兴建决定权不再受旧政治体制下的私人委员会的控 制,而转为由公众委员会决定。在德国,为许多在威廉一世 和威廉二世统治时期兴建的公共建筑物举办了招标。在向这 些竞标投设计稿件的关键时刻,设计的表现方式就变得极为 重要了。例如,在柏林的德国国会大厦和一些大城市的市政 府、法院和火车站等都采用招标的方式。更加精致的描述会 为评判委员会成员、地方高官、评论家以及群众留下深刻印 象。尤其是广大群众,他们现在可以细读发表在杂志上的建 筑规划,并且得出自己的结论。历史相对论的风格分支伴随 着典型插图的兴起容易形成下面的说法,"想要通过建筑唤 起历史的努力将使越来越多的人自由运用历史的主题,并会 导致更多的艺术细部的发展。"这里不仅有投标人的竞争, 而且有不同学派间的竞争。每个学派都发布其自身的风格, 并试图通过创造出以更加注重美术细部为特点的建筑绘图而 与其对手竞争。

#### 绘图职业

在美国建筑业高度发展的 19 世纪 90 年代,首批大型的建筑公司在纽约和芝加哥涌现。当时的城市规划规模很大,只能将多种任务分开来处理。专业的"透视图画家"或"绘图人员"开始从事绘画"示意图",也就是我们说的透视表现图。建筑师雇用绘图员在其工作室工作,或者只是与其建立自由的服务关系。绘图员本人是专业画家或没有实际建设经验的建筑师。例如,尤勒斯·居林(Jules Guérin)(1866~1946年)就是在美术学院受过专业培训,并为丹尼尔·H·伯纳姆和爱德华·H·班尼特(Bennett)创作出了芝加哥城市规划鸟瞰图(1909年)。在欧洲大陆上人们认为绘图主要是公开竞争的产物,但是在美国绘图的主要目的是为了取悦私人投资商,从而使这些开发商们相信通过图中的建筑他们可以获得很多盈利。

正当艺术历史学家们已经习惯了将米开朗基罗或伦勃朗(Rembrandt)的作品看做是画室或"学派"的产物时,建筑业的历史仍然在继续培养具有独创性的画家兼建筑师的形象,他们创造出了大量的个人作品。画家与建筑师分工合作很有意义,特别是对于一些无名的绘画天才来讲他们可以将自己的个性充分地展现在所画的作品中。例如,年轻的弗兰克·劳挨德·赖特(Frank Lloyd Wright)在路易斯·亨利·沙利文(Louis Henry Sullivan)画室的工作以及瓦尔特·格罗皮乌斯雇用的高品位的绘画师阿道夫·迈尔(Adolf Meyer)都是通过其作品展现他们的个性的。实际上,没有人注意到在画家兼建筑师职业中出现的透视图绘画和初步规划的逐步分工。

Price praised the notion of the brilliant artistic architect as cultivated and championed as a role model by the henceforth influential École des Beaux-Arts in Paris. In the rituals of the competitions held by the newly-created architectural colleges ("Prix de Rome" in Paris, Schinkel competition in Berlin), trainee architects practised artistic presentation using the whole range of artistic effects available.

# Illustrations for competitions

The bourgeois 19th century witnessed a veritable boom in illustrations in perspective. Increasingly, decisions on important buildings were no longer the domain of privy councils under the ancien régime and more the ambit of public committees. In Germany, competitions, aptly referred to as "Konkurrenzen", were held for numerous public buildings constructed during the reign of Kaiser Wilhelm I and Wilhelm II. When submitting entries to the important competitions were at stake, such as that for the Reichstag in Berlin, or town halls, court buildings and railway stations in the large cities, presentation of the plans became of paramount importance. More refined depictions tended to impress the juries, local dignitaries, critics, and not least of all, an interested public, which was now able to peruse the plans in the journals that had since appeared on the scene and thus reach their own conclusions. The stylistic offshoots of historicism, which accompanied the rise of representative illustrations, aptly fostered this desire to present: "The striving to evoke history through architecture led to the increasingly free use of historical motifs and to an aggregation of artistic details."4 There was not only competition between those people submitting entries, but also amongst the different schools, each of which promulgated a style of its own and attempted to vie with its enemies by creating architectural drawings featuring an ever greater attention to painterly detail.

## The profession of a renderer

In the midst of the high-rise boom in the United States, around 1890 the first large architectural offices arose in New York und Chicago - the construction plans in questions were now on such a scale that they could only be handled by dividing up the various tasks. Specialized "perspectivists" or "renderers" were commissioned to produce the 'presentation drawings', known as renderings. Architects employed renderers in their offices or engaged their services on a free-lance basis. The renderers themselves were trained artists or architects without practical construction experience, such as Jules Guérin (1866-1946) who was trained in the Beaux Arts and created the bird's-eye views for the large ground plans for Chicago (1909) on behalf of Daniel H. Burnham and Edward H. Bennett. 5 However, whereas on the Continent of Europe renderings were largely produced for public competitions, in the United States they were generally intended to appeal to private investors and aimed to convince such developers that a lot of money could be earned with the illustrated building.

While art historians have become accustomed to regarding the paintings of Michelangelo or Rembrandt as productions of a studio or 'school', the history of architecture continues to nurture the image of the ingenious artist-cum-architect who creates a body of individual works. Dividing work up especially made sense when anonymous talents were able to stamp their own personality on the presentation, as it was the case of the young Frank Lloyd Wright at work in Louis Henry Sullivan's studio, or a renderer of the quality of Adolf Meyer who was employed by Walter Gropius. Indeed, nobody heeded the

弗里德里希·蒂尔施(Friedrich Thiersch),柏林德国国会大厦设计竞赛作品,1882年,一等奖

