A CATHEDRAL OF WORK AND NEW SOCIAL LIFE: THE CONTRIBUTION OF MAX BERG TO THE GERMAN SKYSCRAPER DEBATE

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Convinced of Centenary Hall’s importance for the city of Breslau (today Wrocław), its creator, Max Berg, wrote thirty years after its construction: “The hall’s characteristic form already appears on stamps and so forth as a symbol of Breslau, just as the city’s old Gothic town hall once did.”

Kathleen James-Chakraborty has compared the influence of the hall on architecture to the impact of Kandinsky’s works on modern painting, emphasizing that Berg managed to combine abstract forms with unparalleled engineering achievement. She notes that the reinforced concrete ribs of the vault, big arches, and details create an effect similar to the abstract forms of Kandinsky’s paintings, and that the interior expression achieved by the concrete construction heralded the dynamism of Erich Mendelsohn’s work.

During his pre-World War I period, Max Berg elaborated concepts of modern architecture and town planning which remained crucial for his further work. In 1909, Berg was elected chief architect of the city of Breslau and worked in that capacity until 1925. He considered problems of urban agglomeration in terms of the organization of social life, with the credo that “a well-designed town makes its inhabitants better.” Like many German architects, Berg was fascinated with the Chicago School and Frank Lloyd Wright. Around 1910, inspired by the American metropolis, an increasing interest in the architecture of skyscrapers can be noted in Germany, a fascination which to a certain extent emerged from a desire for monumentalism in Wilhelminian architecture. German architects and town planners accepted the high-rise building as a characteristic component of the cityscape in a rapidly expanding metropolis, something that would transform its center into an important core for business.

In 1910, the Gross Berlin competition was announced to solicit proposals for a new master plan for the German capital. Skyscraper projects designed in this context by Paul Wittig and Bruno Schmitz occasioned a long-lasting debate. Max Berg’s submission to the Gross Berlin competition presented his first urban plans. They contain his main ideas about the shape of a big city, which were expanded in the following years. He suggested new building regulations for Berlin, which would take account of economic and hygienic conditions and offer the ability to develop and expand the city in accordance with an agreed plan. Using the
example of Berlin, Berg proposed that a town should be divided into three functionally different zones: Wohnstadt (a residential zone), Arbeitstadt (a zone for work, subdivided into a business center called Geschäftstadt or City and an industrial park called Industriestadt), and Monumentalstadt (an area for culture and state administration). Around that time, Berg wrote of his business district, the City:

For functional reasons, the City should not be too spacious, as it would lose its density; its layout should be determined by the saying “time is money”... Therefore the City should grow high... Everybody familiar with American cities knows that business matters are simpler there and require much less time. By building adequately wide streets and big yards, high-rise development can be shaped as successfully as low-rise areas.

A heated discussion about skyscrapers broke out after World War I and became so widespread that it came to be called Hochhausfieber (skyscraper fever). Not only professional periodicals, but also daily newspapers devoted much attention to the subject. Despite the lack of an appropriate architectural form for this type of structure, German architects were united in regard to its function in city planning. The skyscraper was to enrich and compositionally unite the city panorama. However, German architects maintained an ambivalent attitude toward the American pattern. Neither the historicizing manner of the École des Beaux-Arts style nor the concept of a city densely built up with skyscrapers found favor in Germany. The latter stood in contrast to the proposals put forward by early twentieth-century reformers, such as the garden-city movement, who demanded light and green areas for the towns. It is worth noting that even in the biggest German towns there was no need to build a dense network of skyscrapers, as they did not lack space to the extent that American cities did.

The acceptance of the skyscraper concept was not brought about by the fantastic ideas of Taut and the Gläserne Kette (Glass Chain). Instead, it resulted from the popularization of projects for specific sites, even if from the very beginning there was little chance of realizing them. Berg’s articles in several periodicals in 1920–21 were important in this process. One was entitled “The Construction of High-rise Office Buildings in Order to Alleviate Housing Shortages, With Examples for Breslau,” in which he stated the need to concentrate offices in high-rise buildings. Thanks to this solution, many flats hitherto used as offices could regain their original function. Berg was the first German architect to connect the issue of skyscrapers with the housing shortage haunting Germany after the war. Due to the influx of refugees, this especially effected Breslau. Berg thus advanced a powerful argument for this type of building.
Max Berg executed his first skyscraper studies in late 1919. During the next two years, together with his assistants Ludwig Moshamer and Richard Konwiarz, he prepared a redevelopment project for Breslau’s city center, based on his concept for the Gross Berlin competition (Figure 1). He proposed to change Breslau’s transportation system by remodeling and widening streets and creating new commercial centers with buildings of various heights, from eight to twelve stories high. The city’s skyscrapers were to be located on large squares or on the banks of the Odra River and the city moat, functioning as hubs for future administrative, trade, and cultural centers (Figure 2). The dominant feature of Breslau’s old town was to be a high-rise building situated next to the Gothic town hall. The tall building on Lessingplatz (today, Powstańców Warszawskich) was to be the focal point of the future Monumentalstadt, consisting of a new arts and crafts museum, a university campus, and more (Figure 3). On the other side of the river, the head of the former Imperial Bridge was to be preceded by two high structures which would form a gate to the Lessingplatz. This cultural district was to supplant the market square and, at the same time, to become a symbol of new times and new architecture. A high-rise building near the Freiburger Bahnhof (Dworzec Świebodzki) was to be a destination for travelers, as that station was envisioned as Breslau’s main railway stop (Figure 4). The skyscraper near the

Figure 1. Max Berg (with Ludwig Moshamer and Richard Konwiarz), Project for the reorganization of the Breslau (Wrocław) city center, with locations for high-rise buildings, 1919. Source: Siedlung und Stadtpla-nung in Schlesien, vol. 1. (Breslau, 1926).
Figure 2. Max Berg, Model groundplans for high-rise buildings, 1922. Source: Institut für Regionalentwicklung und Strukturplanung, Erkner bei Berlin, Teilnachlass Max Berg.
Figure 3. Max Berg, Project for a high-rise building on the Lessingplatz, Breslau (Wrocław), view from the Odra river, 1920. Source: Muzeum Architektury we Wrocławiu—Wrocław Museum of Architecture.

Figure 4. Max Berg, Project for a shopping mall near Freiburger railway station, Breslau (Wrocław), 1920. Source: Muzeum Architektury we Wrocławiu—Wrocław Museum of Architecture.
city moat (Schweidnitzer Stadtgraben/ Podwale) was intended as an auxiliary center for the old town (Figure 5). Two other high-rise towers were planned by Berg near Centenary Hall, within Breslau’s exposition grounds, the principal site for trade and cultural exchange for the entire province.\footnote{13}

An important aspect of Max Berg’s work was the rational preparation of the structural layout, composition, and construction. Apart from aesthetic considerations, he was very concerned with the technical issues of a given project. Berg aimed for optimum use of the advantages of a high-rise building, through economy in planning and construction according to the following three requirements: 1) good lighting for the interior; 2) good lighting for nearby buildings; 3) an optimum usable to

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\caption{Max Berg, Project for a high-rise at the Schweidnitzer Stadtgraben, Breslau (Wrocław), 1920. Source: Muzeum Architektury we Wrocławiu—Wrocław Museum of Architecture.}
\end{figure}
non-usable area ratio.\textsuperscript{14} In order to fulfill these requirements, Berg created auxiliary models: geometric projections of high-rise buildings, which he divided into two categories, taking account of differences in the transportation system. He explained how to use these models:

The basic form of a high-rise building (through a reduction in size below the standard and, to balance this, a partial increase beyond it, and a sequencing of the building parts) grows organically, almost mathematically like a crystal, when it fulfills these three requirements. In this way, the shaping hand of the artistically sensitive architect creates artistic cultural value through the sensitive placement of the building within the network of urban spaces and streets.\textsuperscript{15}

Berg had already applied this organic “from inside to outside” approach in the design of Centenary Hall. Starting work on a skyscraper from a plan, and not from the three-dimensional modeling of the mass according to its intended function, is also reminiscent of the concepts of Frank Lloyd Wright and Louis Sullivan, as well as Hugo Häring’s “organic architecture.”\textsuperscript{16}

Max Berg placed great emphasis on “noble” proportions. In the 1930s, he dealt with the issue in a treatise entitled “Proportions and Artistic Creativity,” which shows the influence of the esoteric teachings of Pythagoras and the Neo-Pythagoreans:

At the basis of all creation, from the macrocosm to the microcosm, are the cosmic-mathematical proportions that we can also identify in art works of all eras . . . The magic world of symbols found in medieval cathedrals is alive and vibrant and was only completely and willingly taken up by Christianity because it refers, beyond the mystical-esoteric Greek and Egyptian tradition, to a common heathen world of symbols of a monotheistic Ur-religion, more or less related to all Urvölker (ancient peoples).\textsuperscript{17}

For the construction of high-rise buildings, Berg planned to use reinforced concrete.\textsuperscript{18} He had applied this material before, in Centenary Hall and other edifices in Breslau. Walter Gropius also considered using reinforced concrete in a skyscraper, when he was preparing his design for the competition held by the Chicago Tribune.\textsuperscript{19} In Berg’s considerations, the town planning aspect, i.e. the function of skyscrapers in the city structure, played an important role. Max Berg suggested the introduction of adequate building regulations in order to protect towns from a chaotic increase of skyscrapers (as had happened in America) because this would distort the historically evolved cityscape and drastically worsen living conditions.
Pointing out the difference between Europe and America (“in America the town center is perceived as vertical; in Europe, horizontal”), Berg thought that modern European towns should blend verticalism and horizontalism by decentralizing their traffic systems. He recommended that prior to making a decision to erect a high-rise, the city’s general redevelopment plan had to be drawn up. He also advocated considering spatial planning from the perspective of regional planning and economic, transportation, and energy conditions, just as Martin Mächler (a Swiss town planner and Berg’s friend) had done. Both architects regarded spatial planning as an activity that should be undertaken in tandem with the introduction of a new economic policy that would make social reforms and radically improve living conditions. In a sense, Berg’s town planning proposals anticipated the designs of the Tennessee Valley Authority during President Roosevelt’s New Deal.

Like Taut and Gropius, Berg compared skyscrapers to Gothic cathedrals and large parish churches. Just as the latter had dominated the medieval townscape, skyscrapers would dominate the business center (Geschäftsstadt) of the modern city, as temples of human labor. However, from among the formal reminiscences of the Gothic, perceived as the triumph of verticalism, Berg left only pilaster strips crowned with wave-like, pointed forms and pointed crowns on top of roof edges (e.g. the high-rise building on the Lessingplatz). Instead, Berg’s designs anticipated the principles of the Neues Bauen movement from the later 1920s: the rhythmization of the structure’s gigantic mass was in agreement with its harmonious proportions, taking account of the height of the neighboring buildings. Berg dematerialized the walls by means of window strips and, in so doing, uncovered the building’s skeleton. His main achievement with this concept was the 1920 design of a shopping mall near the Freiburger railway station in Breslau (Figure 4). Along a broad street, Berg planned eight- and twelve-story buildings in which the accentuation of verticals would be entirely replaced with a horizontal structure, composed of alternating strips of windows and walls. These characteristic forms with rounded house corners heralded the famous department stores of Erich Mendelsohn. For Berg, the point of reference was Hans Polezig’s office building in Breslau (Junkernstrasse/ul. Ofiar Oświęcimskich), erected in 1911–12.

Near the city moat, Berg planned a twenty-five-story building, consisting of a circular core with a round inner yard surrounded by four-story houses (Figure 5). The design shows a much more advanced reduction of architectural form, cut down to a compact geometric solid. Its readable and simple architectural form anticipated structures such as the model of the Haus Berlin, designed for the Potsdamerplatz by Hans and Wassili Luckhard and Alfons Anker in 1929–31.
Together with Richard Konwiarz, Max Berg created three versions of the office building at Siebenhufener Strasse (ul. Tęczowa), which are among the most interesting and mature of all his work (Figure 6). They differ stylistically, showing expressionist or constructivist tendencies. The ground floor had one large room intended for ticket counters, which was modeled on the Larkin Building in Buffalo, designed by Frank Lloyd Wright in 1904. In the second version, the building has twenty-five stories, growing narrower at the top. This was the most dynamic model, reminiscent of Bruno Taut’s expressionist projects. The third version (Figures 7 and 8) is the opposite of the second: it is calm, even static, based on an intermingling of cubic solids. The concept reflected Berg’s inclination toward functionalist architecture. He was close to the Chicago School and Louis Sullivan, as well as to the work of Ludwig Hilberseimer, from

Figure 6. Max Berg, Project (first version) for a high-rise on Siebenhufener Strasse, Breslau (Wrocław), 1920. Source: Muzeum Architektury we Wrocławiu—Wrocław Museum of Architecture.
Hilberseimer’s 1922 skyscraper design for the *Chicago Tribune* competition to his city architecture concept of later years.

Berg’s design, submitted in several versions, for a twenty-to-thirty-story skyscraper on Breslau’s market square on a site immediately adja-

Figure 7. Max Berg, Project (third version) for a high-rise on Siebenhufener Strasse, Breslau (Wroclaw), 1920. Source: Muzeum Architektury we Wroclawiu—Wroclaw Museum of Architecture.
cent to the Gothic town hall evoked vigorous protest from municipal authorities. Berg’s vision, striking even today, derives from his convictions about the essence of architecture:

> It is not the historical form (never mind whether Romanesque, Gothic, baroque, or modern) that determines the harmony of works of art from various historical periods and styles. What matters is the artist’s sensitivity for the right form. Well-comprehended architecture fits together well, irrespective of the period in which it was created.23

Despite the fact that his third version of the market square skyscraper was clearly influenced by American examples (above all, the Equitable Life Insurance building in New York, designed by Ernest E. Graham in 1915), and despite frequent technical “borrowings” from the United States, Berg rejected the American skyscraper, as did most German architects: “It is generally agreed that American solutions cannot be models for Germany in terms of town planning, architecture, or society.”24 His theoretical works are very concerned with a critical assessment of the
American skyscraper, as well as with the criteria for a better, “German” type of high-rise:

Although many skyscrapers have been built in the United States, no well-worked-out architectural form has been developed for them. The building is most often eclectic and combines components of various origin. America’s most frequent solution is a ground floor modeled on palace or temple architecture; above it, telescopically formed stories with windows in classical or Renaissance frames, with a pillar order motif. The whole edifice is crowned with a superstructure, again resembling church or palace architecture, usually topped with a pointed roof, cupola, or pyramid.

According to Berg, American architects were much more interested in a building’s economy than its aesthetic or town-planning components:

Knowing that a skyscraper’s outline must be as clear and simple as possible because of the density of rooms and intensive traffic within, [the architect] chooses a compact projection, fills in the building plot as fully as possible and raises the edifice high, in the simplest cubic form, disregarding the environment. Like a mess of enormous building blocks one atop the other, by its dimensions alone the city of New York astonishes those who enter its harbor.

Comparing American skyscrapers to the designs of German architects, Max Berg noticed that Germans emphasized a structure’s external form, adapting it to the city’s appearance. Berg did not overlook this issue in his own work, and took account of the city’s panorama. A new building’s height should correspond to that of nearby existing structures and should not exceed a certain limit established for the city; in the case of Breslau, this was to be the tower of St. Elizabeth’s church (Figure 9). The importance Berg attached to this is clear when his design for Breslau is compared with other high-rise structures, such as skyscrapers in New York.

Berg’s ideas differed from American concepts, not only in purely architectural and city planning terms, but also in the social and political sphere. The American skyscraper was to Berg a symbol of wild, land-speculating capitalism, which he described as “a concrete indictment of the oppressive rule of capital.” In opposition, Berg, who like Taut and other architects of the younger generation regarded himself as a Social Democrat, wanted the German skyscraper to symbolize a new social vision. To deter speculation in real estate, skyscrapers were only to be permitted on public land. The construction and, later, the administration
of the edifices would be in the hands of publicly owned building companies.

The critical position toward American models was to no small degree a result of Germany’s defeat in World War I: the “German” skyscraper was to manifest the independence and superiority of German culture. Thus, it was no coincidence that the first German skyscraper competition was announced in May 1920 in Danzig (Gdańsk), a city which had been separated from the “Reich” by the Versailles Treaty. Many works prepared for the competition contained intentional references to the architecture of Prussia at the time of the Teutonic Knights, thus stressing the “Germanness” of the land. The significance of the “skyscraper debate” for the self-determination of the Germans as a steadfast and unbroken nation was also noticed outside their country. Le Corbusier noted in 1921: “The systematic use of the vertical line is mystical in Germany . . . Germans wish to turn their architecture into one of the most effective weapons of Pan-Germanism.”

Max Berg’s skyscraper designs and his proposals for the redevelopment of Breslau’s center did not find favor with the city authorities, and not only because of their cost. However, they inspired many German architects in the interwar period. This is best evidenced by the competition for a skyscraper near Berlin’s Friedrichstrasse railway station, announced in 1921, which marked the peak of German “skyscraper fever.” The organizer received 144 designs for the development of a triangular plot in downtown Berlin, which prior to World War I had already been considered as a potential site for a skyscraper. The terms or the competition set the maximum building height at eighty meters. Financial considerations and bureaucratic problems prohibited the competition designs from ever being implemented.

Because the competition was restricted to free-lance architects, as a civil servant, Max Berg could not take part, but he joined the discussion and was one of the competition’s most discerning observers. Berg criti-
cized the winning designs for misunderstanding the concept of a skyscraper in a European city. He also condemned the various historicizing projects which treated the skyscraper as a palace or sacred building. On the other hand, he emphasized the interesting proposals by Hans Scharoun, Hugo Häring, and Ludwig Moshammer. Furthermore, Berg was the only critic to draw attention to Mies van der Rohe’s “Honeycomb.”

In the periodical *Die Bauwelt*, Max Berg presented five versions of his own proposal for a skyscraper in Berlin, which were reminiscent of his Breslau projects.

During the 1920s, Berg took part in several skyscraper competitions, including ones in Cologne, Breslau, and Hindenburg/Zabrze (Upper Silesia). None were realized. Generally, visions for German skyscraper were seldom executed, due to building laws. A building counting more than six stories was considered a “high-rise building” and the tallest edifices in German towns reached only ten to thirteen stories.

In the end, Max Berg’s idea of erecting skyscrapers to fight the housing shortage did not convince the authorities. During the financial crises of the first Weimar years, they rightly chose to concentrate public spending on building residential quarters. In Breslau, Berg’s position weakened after the dispute over the market square skyscraper. To end his quarrels with the municipal authorities, Berg left his position as chief architect before the end of his term. Nevertheless, Berg was one of the most eminent architects and town planners in early twentieth-century Germany. As pointed out by Adolf Rading, an architect and a professor at Breslau’s Art Academy, Berg’s importance for Breslau was not recognized until the creator of Centenary Hall had left the city.

In 1925 Paul Heim, a local architect, wrote about him:

> Berg rejects compromises . . . Such people make many enemies . . . However, there are two things undisputed even by his most ardent opponents: his intentions were perfectly clear and his skills impeccable. His buildings are of lasting value. They show how to move away from fossilization towards function and purity of form, shaping frames for a new life.

**Notes**


2 Max Berg, letter to Friedrich Sesselberg, February 18, 1941, Nachlass Max Berg, Deutsches Museum München, box 050/001.

4 Wolfgang Pehnt, Die Architektur des Expressionismus (Stuttgart, 1973), 35.

5 Ilkosz, “Das Hochhaus in der Stadtstruktur.”


7 Zimmermann, Der Schrei, 238–9.


9 Ibid.


13 Ilkosz, “Das Hochhaus in der Stadtstruktur.”


15 Ibid., 58.

16 See Jerzy Ilkosz, Hala Stulecia i Tereny Wystawowe we Wrocław (The Centenary Hall and the Exposition Grounds at Wrocław-Szczytniki), (Wrocław, 2005), 148–212.


21 See Jerzy Ilkosz, “Koncepcje urbanistyczne Maxa Berga na przykładzie projektów przebudowy Berlina w 1910 i Wrocławia w latach 1919–1920” (Max Berg’s urbanistic concepts—


26 Ibid.


29 Zimmermann, *Der Schrei*.


