"Germanic" Structure versus "American" Texture in German High-Rise Building

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A few weeks after the unification of the two Germanies, the *Frankfurter Allgemeine Zeitung* published a supplement which presented architectural visions for Germany's future capital sketched by international stararchitects. Most imagined a new scale, a skyline represented by skyscrapers. But, in reality, the "master plan" for Berlin developed over the last decade aims instead at the reconstruction of the city's historic (seventeenth- to nineteenth-century) ground plan and restricts the height of new buildings to the traditional measure of twenty-two meters. Since reunification, only a few modest-scale high-rise buildings have been built, on the Potsdamer Platz. A few more are to be added here and there, to keep up a little bit with international standards. This lessening of ambitions is not only the result of vanishing hopes for glorious economic growth in Berlin; it also results from an enduring struggle for historical and national identity which always distrusted the Babylonian symbols of "Metropolis," as Fritz Lang had depicted them in his famous 1926 film.²

My argument is less about the well-known general objection to the importation of American skyscrapers, which, up to the 1960s, was more or less characteristic of all nations in "old Europe." Rather, I am concerned here with architectural language and style, especially in regard to structure, texture, and their ideological implications. By "structure" I mean the parading of the tectonic forces of construction, by "texture" the surface modeling of the façades, which is more or less dependent on the structure. Sometimes, tectonics are exhibited by unveiling construction and material, but (as we will see) much more often by dressing up modern steel or concrete skeletons with ashlar, thus representing historic or abstract monumental orders. Texture, in a dialectic response, might support this fiction of "firmitas" by pattern, rhythm, color, or material—or counteract construction in favor of the effects of plastic volume and pure surface.

An attempt to establish a political iconography for German high-rise buildings, based on an attitude towards tectonics, might seem outdated to postmodern eyes. But by sketching, however briefly, the changing contexts and discourses up to nineteenth-century Romantic classicism, I hope to provide a better historical understanding of the rivalry between "conservative" and "progressive" formal languages in German postwar

architecture. Because of its representational and ideological (rather than realistic) aspects, being more concerned with collective memory than with architecture as constructive art, this subject is not touched upon in Kenneth Frampton's thorough study of the "poetics of construction" (1995).⁴

If we compare two famous competitions of 1921-22, the Chicago Tribune Tower Competition and the Skyscraper Competition for Berlin's Friedrichstrasse, we might be surprised at the extent to which, in the Chicago case, modern steel and concrete skeletons were interpreted as Gothic or classic, not only in structure but also by the application of stylistic detail and historic texture. The Berlin competition, by contrast, drew almost exclusively modernist proposals. The discussion about the necessity to abandon historic style after World War I in Germany was so advanced that nobody dared to present a skyscraper in historic costume.⁵ But it was not so easy to abandon history and meaning: verticalism in construction was transformed into a Gothic-Expressionist idiom, investing the new challenge of height with a neo-Romantic, even mystic spirit.⁶ Because of the nationalist connotations of Gothic style, those high-rises actually built, such as Fritz Höger's Generalanzeiger in Hannover (1927), have convincingly been interpreted as a "Germanization of the skyscraper," something postulated by the nationalist newspaper Vossische Zeitung as early as 1922.7 We also find hardly any examples of neoclassical style, as in Chicago. More typical for Germany are the different attempts to avoid or at least to modernize classical form and structure, for example in Otto Kohtz's pyramidal-cubic tower compositions.

The most radical denial of tectonic structure is of course the curtain wall, which forms a homogeneous skin, producing effects of reflected light, shade, and color on monumental abstract spaces, while the vertical tectonic skeleton is pushed back into the interior.8 It was in the United States that the curtain wall was first invented for industrial buildings as a façade aesthetically independent of tectonic construction. In Germany, it had been applied to civil construction by the end of the nineteenth century⁹ and introduced by Walter Gropius as a basic feature of modern style as early as 1911, although still in an industrial context. 10 As an all-over system for the texture of high-rise buildings, it was first proposed by Mies van der Rohe in his famous glass tower project for the Friedrichstrasse competition 1921–22 (Figure 1). Except for a few experiments, for instance the new Bauhaus building in Dessau, the curtain wall system did not really succeed. Among seventy German high-rise buildings built before 1945 there is not one single curtain-wall construction. 11 Aside from the serious air conditioning problems demonstrated by Le Corbusier's applications in Paris and Moscow in the early 1930s, 12 the failure of the new texture was certainly due to the neutralizing abstract message of its



Figure 1. Ludwig Mies van der Rohe, Perspective Photomontage for the Berlin Friedrichstrasse Skyscraper Competition (1921). Source: Bauhaus-Archiv Berlin.

aesthetics: it lacked representational ties to earth, region, tradition, and nation.

When tensions between modernist and conservative building ideologies became more brutal in Germany and, after 1933, were decided by

Nazi building regulations, the American skyscraper was at first completely rejected as commercial, materialistic, and un-German.¹³ Alfred Rosenberg, a chief Nazi propagandist, had condemned American models, but as early as 1930 he acknowledged the challenge for National Socialist architecture, especially in relation to his demand for enhanced monumentality through the solemn isolation of the building. 14 Accepted after 1937 in order to add landmarks of power to the new Nazi building plans, high-rise buildings were supposed to emulate neo-classical patterns deeply rooted in German building tradition rather than the Gothic-Expressionist idiom or the abstract modernism of the hated Weimar Republic.

Nazi architecture produced no homogeneous style but rather different "modes," according to a revived hierarchy of building functions. Industrial construction deliberately continued many international modernist achievements. In the country, for youth organizations as well as private housing, buildings looked back to regional traditions and the materials propagated by the *Heimatschutzbewegung* since 1900. For stately architecture and memorials, the classical tradition provided models. 15 Moreover, this mode was also inspired by prehistoric Celtic and Germanic monuments (Hünengräber), which had previously been glorified by the Romantics in the late eighteenth and early nineteenth centuries. 16 In fact, although the heroic vocabulary of Nazi architecture was already in place by the end of the Weimar Republic, it was pushed to an extremity of articulation, which has to be read in the context of the racist ideology of National Socialism. 17 Generally, the "heroic style" of Nazi architecture was inspired by the Greeks and Romans, by French "revolutionary architecture" and, of course, by the "Prussian Style," which had already been canonized by Arthur Moeller van den Bruck during World War I and included the tradition from Friedrich Gilly, Friedrich Weinbrenner, Karl-Friedrich Schinkel, and Leo von Klenze up to neo-classicists like Peter Behrens and the young Wilhelm Kreis. ¹⁸ It was Gilly in particular who was celebrated as a hero and forefather of contemporary architecture; his famous Academy project—a Monument for Frederick the Great (1797)—influenced several plans for war memorials and celebration halls by Wilhelm Kreis and Hanns Dustmann. 19 Albert Speer, at least in his memoirs, saw himself as a successor to Gilly and Karl Friedrich Schinkel. from whom he borrowed several motifs and details—abstracted, of course, from their structural context and human scale. He also pitied himself because Hitler, an admirer of Vienna's Ringstrasse, had no sense for Prussian virtues in architecture. For Speer, Hitler's demands led him down a false path towards gargantuan splendor and historicist eclecticism.²⁰ Klenze also became an important model for Nazi architecture, notably on account of his national monuments Walhalla (1830-42) and

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Befreiungshalle (1847–63), but even more so for his view that monuments needed not just memories but rites,²¹ and, even more importantly, for his cultural and racist interpretation of tectonics.

Surprisingly, the imitation of classicist models was explicitly rejected during the Nazi period. "Those who speak of neo-classicism have not understood the spirit of our buildings," wrote Rudolf Wolters in 1943.²² In 1936, orders were given to architectural journalists—perhaps by Hitler himself in his role as the patron of German building (Figure 2), but more likely by Alfred Rosenberg, who was responsible for the ideological education of the NSDAP—to avoid any terminological allusions to the classical tradition, which had long been identified with humanist and even democratic values.²³ Instead, they were to emphasize the Germanic and martial roots of Nazi architecture.²⁴ The propaganda term coined to serve this goal was based not on style but on structure: *Germanische Tektonik* (Germanic tectonics).²⁵ The man who promoted this concept, a reference to Karl Bötticher's book *Tektonik der Hellenen* (1842–44), was the art historian Hans Kiener in Munich, a disciple of Heinrich Wölfflin and a specialist in German Romantic classicism, which prefigures Nazi architectural ideology in important ways.²⁶ So before we finally return to the subject of high-rise buildings, we have to step back once more.

The key to understanding early nineteenth-century German classicism is the struggle of Gilly, Schinkel, Klenze, and their colleagues to escape sentimental imitations of the classical past and to invent a new architecture. This architecture was to serve contemporary functions and modern ideas based on classical principles, but principles beyond the rules of Vitruvius (which had been proved wrong by the critics of the Enlightenment). They found their answer by analyzing the Greek temple as the most perfect manifestation of "Greek tectonics," a term introduced by the archaeologist Karl Otfried Müller in 1830.²⁷ Greek tectonics had already been discussed around 1820, by philosophers like Schelling and Schopenhauer and by many architects. They saw Greek tectonics as a harmonized equilibrium between contradictory physical and mental potentialities: the upright column as force, resistance, or a metaphor for the human will; the horizontal entablature as the counterpoint to gravity; and the visible balance itself, represented in particular by the entasis and the capital, as the expression of the freedom of man, who, as Schinkel and Klenze argued, is able to reconcile spirit and matter.²⁸

But how could a general discussion about structure be transformed into a national argument, urgently needed in the process of nation-building after the German wars of liberation against Napoleon? It was Leo von Klenze who, based on contemporary ethnology, tried to prove in 1821 that, rather than Gothic Romanticism, Greek tectonics should serve as the genuine principle for a national German style. His argument:



Figure 2. Fritz Erler, Portrait of Hitler as the Patron of Architecture and Sculpture (1938). Source: *Die Kunst im Dritten Reich*, TU Berlin.

Greeks and Germans were believed to derive from the same prehistoric Indo-Germanic tribes who had originated in India or the Caucasus and migrated to Greece and northern Europe. Thus, the Greek temple not only appeared related to Alpine houses, but also to megalithic monuments like Stonehenge, which was based on the same tectonic principle²⁹ (certainly the recent archaeological revelation, which identified the skeleton of the "builder" of Stonehenge as a foreigner from the South would have given satisfaction to Klenze). In the early 1860's, Klenze tried to support his idea of Greco-Germanic tectonics with racist arguments.³⁰ Having read the cultural theories of Comte de Gobineau and Ernest Renan,³¹ he attributed the architecture of Asia Minor (which he classified as "artless") to the Semitic race, whereas buildings based on the principles of Greek tectonics were credited to the Aryan race, which he considered superior.³²

Nazi propagandists inverted this Romantic theory, claiming that the classical culture of Greece originated in the prehistoric North (Rosenberg). By considering those "extraordinary ice-age heroes" from the North Pole as their ancestors, the Germans should cut any ties to the Latin humanist tradition.³³ It was not only Walther von Fritschen's book *Von deutscher Baukunst* (1939)—which illustrates how the Greek temple derived from the Germanic *Vorlaubenhaus* (Figure 3)—that profited from Klenze's Indo-Germanic theories.³⁴ Klenze's first biographer, the same Hans Kiener who propagated the term "Germanic tectonics," also found support for his anti-Semitic architectural propaganda in Klenze's documents, thus legitimizing Paul Ludwig Troost's completion of Klenze's Königsplatz in Munich as a National Socialist "Acropolis Germaniae" (Figure 4).³⁵

If there was a common principle to the "modes" of Nazi architecture, it was the deliberate parading of tectonics wherever possible. Texture, material, and form could vary in relation to the purpose and message, however fictional. The supporting skeleton or applied portico could be exhibited by simplified classical columns without entasis, as in Paul Ludwig Troost's Haus der Kunst in Munich (1934-37), which often is unfairly compared to the ionic subtlety of Schinkel's Altes Museum in Berlin (1826-30). More frequently we find sharp cut square pillars, either with capital and fluting, as in Troost's Ehrentempeln in Munich (1934), or covered with archaic granite, as in Albert Speer's Reichskanzlei in Berlin (1938). Sometimes they were even more sublime, stripped of any ornament, as in the Wehrkreiskommando Kassel (1937). Other times, they were more practical, covered by brick, their authoritarian character translated into the modern functional language of industrial architecture, as in Herbert Rimpl's Heinkelwerke Oranienburg (1936). Characteristic of National Socialist ideology, tectonic motifs ranged from refined classical

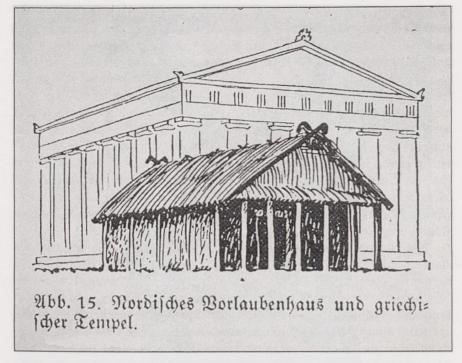


Figure 3. Walther von Fritschen, Deduction of the Nordic House (1939). Source: von Fritschen, *Von deutscher Baukunst*.

tradition to archaic brutalism. Rosenberg even justified the deliberate omission of the classical capital, which expressed the humanism of Greek tectonics. For Rosenberg, the subtle classical transition between pressing weight and supporting pillar, a softened harmony, should be replaced by an open confrontation of forces, hard like fists, piling up stone by stone.³⁶

As Hermann Giesler (Speer's rival) stated in his memoirs, Hitler explicitly postulated such visible tectonics for his high-rise buildings as well, which were to be constructed in steel and concrete but dressed in stone as symbols of power and eternity.³⁷ Some unrealized projects from the late 1930s—Giesler's National Socialist Party school in Seebruck (Bavaria), his entrance towers for Munich's new axis, Wilhelm Kreis's Army Headquarters (which would have measured 17 floors and 156 meters), or other high-rises for Berlin's transformation into the new capital "Germania" all followed the same model: a monumentality in material and tectonic structure that overemphasizes the strength of the corner pylons by squeezing the receding central window-grid, while (in contrast to the typical Art Deco structure of American skyscrapers) the vertical forces are heavily balanced by horizontal entablatures, cornices, and attics. They are then adorned with monumental eagles by Arno



Figure 4. Paul Ludwig Troost, Temple for the National Socialist Martyrs (1933–36) on Leo von Klenze's Königsplatz in Munich (1816–62). Source: *Die Kunst im Dritten Reich*, TU Berlin.

Breker or with a statue of a giant warrior (Figure 5). Again it was an art historian, Hans Gerhard Evers, who theorized in his famous book *Tod*, *Macht und Raum* (1939) that tectonics in columns, piers, and pillars illustrate the laws of authority, power, order, respect, and obedience to the community, rather than the laws of physical gravity and human freedom.³⁹

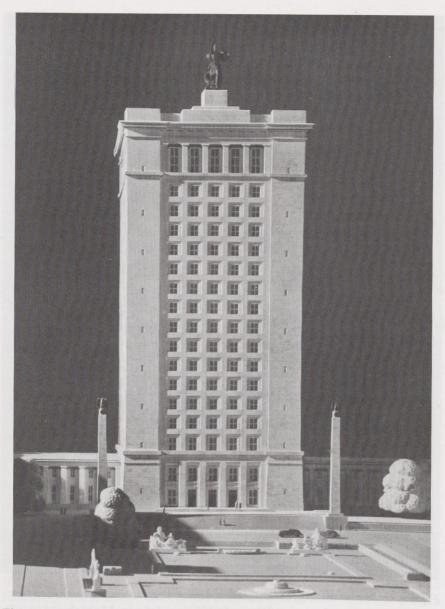


Figure 5. Wilhelm Kreis and Arno Breker: Model of Army Headquarters "Oberkommando des Heeres" (OKH) Berlin, 1939. Source: *Die Kunst im Dritten Reich*, TU Berlin.

Although the propagandistic discourse of National Socialist architecture collapsed in 1945, its architectural language and "what it betrays" (to quote Panofsky) obviously died much more slowly. After liberation by the allies, the skyscraper became a symbol of (West) Germany's accep-

tance of Western economic and democratic values, yet all of Germany's important modernists had emigrated. Rebuilding, as Werner Durth has demonstrated, was largely administered by experts who had been prominent representatives of the Nazi regime, or at least collaborators. Hence the question of continuity versus radical change after 1945 has been widely debated. Both were evident in the forthcoming "battle" between modernists and conservatives. Hence the forthcoming "battle" between modernists and conservatives.

The surviving patterns of "Germanic tectonics" were adapted to new political contexts after 1945, but the conviction that, in addition to "power" and "sublimity," they also best expressed the German national character still seemed valid. The office building for the Gerling-Konzern in Cologne (1950-53) is closely related to Giesler's and Kreis's high-rise projects by its strong corner pylons and sharp cut square piers in the colonnades, as well as by its sublime cover of dark and light limestone. Although shaped as an upright cube and rather abstract in its vocabulary, the Gerling-Konzern building still aims at an emotional representation of tectonics, especially when illuminated in the manner of Albert Speer's lighting effects (Figures 6 and 7). The official architect was the relatively unknown Erich Hennes, but it was the owner Hans Gerling himself and Arno Breker, Hitler's favorite monumental sculptor and former partner of Kreis, who surveyed the "Endlösung" [sic] of the whole project. 42 As a close friend of Hans Gerling, Breker remained in charge of the Gerling buildings up to the 1970s. It is interesting to observe how he assimilated his stylistic language to a more modernist appearance as Gerling developed into a more international company. For the Gerling office in Düsseldorf (1957–58), Breker used a round twin pier to form an upright grid, which had become the most conventional façade pattern during the 1950s. In pre-postmodern times, it certainly was read as an unbroken belief that tectonic values transcend constructive needs, something which Breker still seemed to share with Giesler in 1977.43

It was not only Wilhelm Kreis himself who returned to pylon structure in his proposals for high-rise buildings at the Rochusmarkt in Düsseldorf (1949–51). Hermann Henselmann, an industrial architect during the Nazi period and later a leading exponent of socialist planning in the German Democratic Republic, also employed it in his apartment tower on Weberwiese near East Berlin's Stalinallee (later, Karl-Marx-Allee, 1951). Originally conceived in an international modernist idiom, by 1950 the style of the socialist "Magistrale" had to be modified according to Stalin's policy of Socialist Realism, which meant "democratic" and "socialist" in regard to program, but "national" in regard to form. That same year, Lothar Bolz, East Germany's construction minister, published a demand to take up national traditions in his book *Von deutschem Bauen*. But Henselmann's apartment building only unites the memory of tectonic

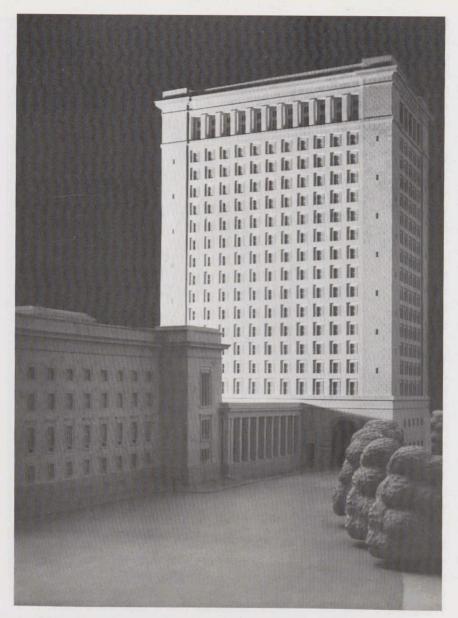


Figure 6. Wilhelm Kreis and Arno Breker: Model of Army Headquarters (OKH) Berlin, 1939. Source: Die Kunst im Dritten Reich, TU Berlin.

monumentalism with a light postmodernist flair: plastered walls, bright color, elegant "Schinkel windows" penetrating the corner piers, and two polished Doric columns inserted into the entrance portico. It thus reacts against the abstract "Formalism" of Western architecture. In the later

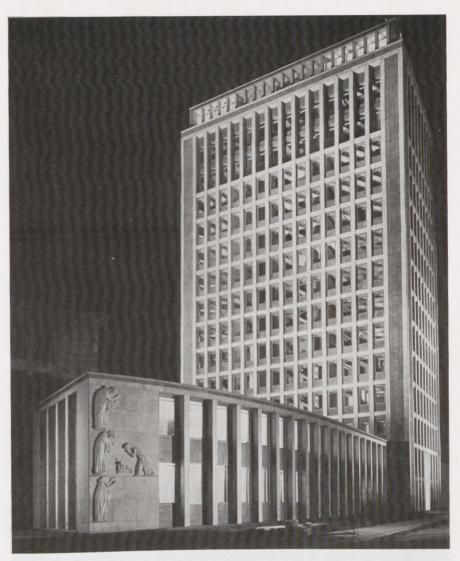


Figure 7. Erich Hennes, Hans Gerling, and Arno Breker: Gerling Highrise at Gereonshof. Cologne, 1950–53. Source: *Das Gerling Hochhaus in Köln* (Cologne, 1953).

development of the Stalinallee, this playful mode had to give way to a more heroic neo-classical historicism.⁴⁷

The assimilation of Germanic tectonics to the needs of Western postwar society can be observed in the high-rise buildings of Breker's friend Hanns Dustmann, as Eva Maria Krausse-Jünemann has recently shown in her thesis on this architect's varied career. ⁴⁸ Dustmann, a chief collabo-

rator in Gropius's office, became the official architect of the Hitler-Jugend soon after 1933. While on Albert Speer's staff, he also planned Nazi monuments. Although Speer was imprisoned after the war because of his role as minister of armaments, another prominent member of his staff, Friedrich Tamms, was appointed as a building surveyor in Düsseldorf in 1948. There, he started a network for his Nazi friends, including Kreis, Breker, and Dustmann, who became one of the Rhineland's most successful architects for banks and insurance buildings. He contributed to that special solemn and conservative modernist style (dozens of examples survive in many German towns) which, in my opinion, distinguishes the 1950s in Germany: functionalist concrete-skeleton cubes dressed with stone, and vertical grid façades filled in with golden elongated metal windows, emphasizing a clear hierarchy. Moreover Dustmann and his "conservative" colleagues could not do without features of monumental tectonic structure and allusions to classical frieze and entablature, even if they were only ornamental (as in his Vereinigte Glanzstoff-Fabriken AG in Wuppertal, 1952-57) or nearly abstract (as in his later administration tower for the energy trust RWE in Essen, 1959-62).49

One way to rescue the representation of tectonics in more liberal times was to expel strict urbanistic symmetry from monumental structures, or to give a flying roof some extravagant, more or less "organic" form. This was exemplified by the Allianz tower in Berlin (1953–55) by Alfred Gunzenhauser and Paul Schwebes, who also had worked under Speer, ⁵⁰ and by Ernst Nolte's bank building for the Stadtsparkasse in Cologne (1955–57). ⁵¹ It took several years before Dustmann and the others finally adopted the "American" texture of the curtain wall, which for their clients now became a testimony to their orientation towards the "American way of life." ⁵²

The curtain wall system, used by Mies in the United States from the late 1940s onward and popularized by Gordon Bunshaft for SOM in the Lever Building (1952),⁵³ re-entered Germany in the mid-1950s as an American import. Already in 1948, an exhibition arranged by the Museum of Modern Art—"In USA erbaut 1932–1944"—tried to fill the gap in information about new American architecture and to set up new models of International Style. SOM, which also built the American consulates in Bremen and Düsseldorf, especially helped to identify dominating glass façades as typically "American," interpreting their transparency as "democratic"—a metaphor that remained valid up to the 1980s, as Heinrich Wefing has recently shown.⁵⁴

As early as 1952, strong resistance from modern architects emerged against the Nazi conspiracy in Düsseldorf and produced remarkable results.⁵⁵ Among the first fully glazed German skyscrapers was the Mannesmann-Hochhaus by Paul Schneider-Esleben (1955–56), which, in

opposition to Tamms's demand for monumentality, was innovative in its use of thin tubes (i.e. symbols of corporate identity) for the skeleton. ⁵⁶ The elegant curtain wall construction of the Thyssen-building in Düsseldorf by Helmut Hentrich and Hubert Petschnigg (1957-60)—the future worldfamous partnership HPP—became even more important for developments in Germany.⁵⁷ Both architects were admirers of SOM's Lever building and Mies's Seagram building, which they each visited separately in 1955.58 Schneider-Esleben, who also contacted Mies and studied his Lake Shore Drive apartments, had started building shortly after the war. Hentrich, who had studied under Poelzig before the war, admired Mies and then contributed to Speer's giant plans for Berlin. In his Trinkaus bank building in Düsseldorf (1951), he still clung to the tectonic system. Speer himself commented from prison in 1955 that its double-pier structure reminded him of Kreis's army headquarters project OKH (Figure 5).59 Nevertheless, Hentrich succeeded already in his early projects to turn the demonstrative representation of tectonics into a poetics of construction. Mies himself, a true German idealist, had long pondered the artistic problem of how to unite texture with structure, skin with skeleton, as an expression of clarity and truth.60



Figure 8. Willy Kreuer, Technische Universität Berlin, Mining and Metallurgy Building 1955–59. Photograph by the author.



Figure 9. Helmut Hentrich, Hubert Petschnigg: Europa-Center Berlin (1963–65). Source: Archive, TU Berlin.

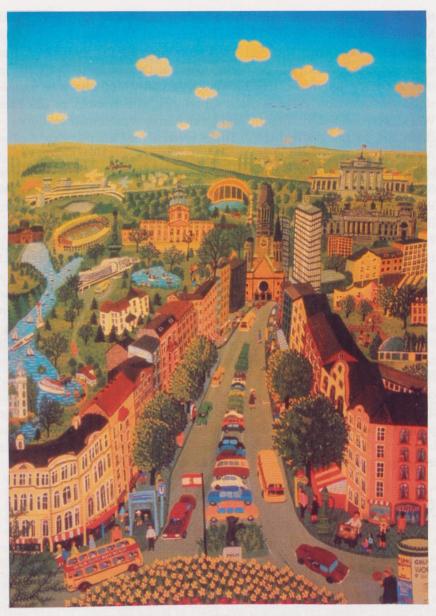


Figure 10. Postcard (1970s). West Berlin with Europa-Center. Personal archive of the author.

In postwar Germany, and especially in Berlin, the reception of the new "American" achievement still meant something more than an expression of modernity, attacked by conservatives as "monotony" and "uniformity." Willy Kreuer, whose early projects in the 1930s also re-

flected the tectonic style, combined both principles in his Mining and Metallurgy Building for the Technical University of Berlin (1955–59). He framed the long sides with thin steel piers carrying the flying roof, but exhibited the first curtain in Berlin towards the square (Figure 8). In contemporary discourse, this building's modern aesthetic was understood to symbolize West Berlin's superiority as a frontier of the Free World, surrounded by communism (at the time, represented by the neoclassicism of the Stalinallee).62 There were a few attempts to escape American influence by looking to alternatives from Italy or France. 63 But by the early 1960s, we can see the triumph of the curtain wall in every German town. Nowhere was it as programmatically "American" as in West Berlin's Europa-Center, designed by HPP (1963-65). The center (Figure 9) was an American commercial enterprise and served as the keystone for the Western postwar business city, dominated thus far by the formal influence of Le Corbusier. 64 A naïve Cold War-era postcard proudly shows the new skyscraper, crowned by the Mercedes star, as a Western landmark in the divided city, while the historic (at that time communist) town center behind the Brandenburg Gate does not even exist (Figure 10).65

When the Europa Center was outdone by a communist curtain wall hotel tower on the Alexanderplatz in 1967,⁶⁶ it marked the end of the transatlantic dialogue through architectonic language. Curtain walls now could no longer be read as strictly "American." Rather, as in the 1920s, they again signified modernity, technical progress, and the search for political equality within the new context of international competition between "systems." It thus opened the door for postmodern criticism of its artistic deficiencies.

Notes

¹ "Zwölf Architekten entwerfen 'Berlin morgen' das Herz einer großen Stadt," Frankfurter Allgemeine Zeitung Supplement No. 4, January 5, 1991; Annegret Burg/Senatsverwaltung für Stadtentwicklung, Umweltschutz und Technologie, ed., Planwerk Innenstadt—Ein erster Entwurf (Berlin, 1997). Cf. the discussions after each stage of the master-plan was realized.

² Helmut Weihsmann, *Gebaute Illusionen—Architektur im Film* (Vienna, 1988), 170–75; Wolfgang Jacobsen and Werner Sudendorf, *Metropolis—in filmisches Laboratorium der modernen Architektur* (Stuttgart, 2000).

⁴ Kenneth Frampton, Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture (Cambridge, MA, 1995).

⁵ The Tribune Company, ed., *Tribune Tower Competition* (Chicago, 1923); Katherine Solomonson, *The Chicago Tribune Tower Competition: Skyscraper Design & Cultural Change in the 1920s* (Cambridge, 2001); Florian Zimmermann, ed., *Der Schrei nach dem Turmhaus—Der Ideenwettbewerb Hochhaus am Bahnhof Friedrichstraße Berlin 1921–22* (Berlin, 1988).

- ⁶ Cf. Magdalena Bushart, Der Geist der Gotik und die expressionistische Kunst 1911–1925 (Munich, 1990).
- ⁷ "Das Danziger Hochhaus: Eine Germanisierung des Wolkenkratzers," Vossische Zeitung, October 7, 1921; Vittorio Magnago Lampugnani, "Die Moderne und die Architektur der Großstadt" in Mies in Berlin—Ludwig Mies van der Rohe. Die Berliner Jahre 1907–1938, ed., Terence Riley and Barry Bergdoll (Munich, 2001), 40–45. For Höger, cf. Matthias Schmidt, Der Dom der Sterne—Fritz Höger und das Anzeiger-Hochhaus in Hannover (Münster, 1995).
- ⁸ William Dudley Hunt, The Contemporary Curtain Wall (New York, 1958).
- ⁹ See, for example, the Tietz department store in Berlin by Bernhard Sehring and L. Lachmann (1899–1900), in Julius Posener, *Berlin auf dem Wege zu einer neuen Architektur, Das Zeitalter Wilhelms II* (Munich, 1979), 479.
- Although Annemarie Jaeggi, Fagus—Industriekultur zwischen Werkbund und Bauhaus (Berlin, 1998), 29, denies that the window system of Gropius's Fagus Factory (1911) constitutes a curtain wall in the strict sense of the term, its appearance comes very near to it.
- ¹¹ Rainer Stommer, Hochhaus—Der Beginn in Deutschland (Marburg, 1990).
- 12 Cf . Le Corbusier's early curtain wall facades for his Cité de Refuge in Paris (1929–33) and his Centrosoyuz building in Moscow (1929–34).
- ¹³ Hermann Giesler, Ein anderer Hitler—Bericht seines Architekten (Leoni, 1977), 203.
- ¹⁴ Alfred Rosenberg, Der Mythus des 20. Jahrhunderts (Munich, 1930), 380.
- ¹⁵ Cf. Winfried Nerdinger, "Bauen im Nationalsozialismus—Zwischen Klassizismus und Regionalismus" and Werner Durth, "Stadtplanung 1930–1950 zwischen Kontinuität und Bruch," in *Architektur und Städtebau der 30er und 40er Jahre*, Duth and Nerdinger, eds. (Bonn, 1994), 8–37. See also the images in Gerdy Troost, ed., *Das Bauen im Neuen Reich* (Bayreuth, 1938).
- ¹⁶ Frank-Berthold Raith, Der heroische Stil—Studien zur Architektur am Ende der Weimarer Republik (Berlin, 1997).
- ¹⁷ In regard to the continuity of the national Romantic symbolism of prehistoric monuments, see Gert Gröning and Uwe Schneider, eds., *Gartenkultur und nationale Identität—Strategien nationaler und regionaler Identitätsstiftung in der deutschen Gartenkultur* (Worms, 2001).
- ¹⁸ Arthur Moeller van den Bruck, Der preußische Stil (Breslau, 1916).
- ¹⁹ Cf. Kreis's project for a war memorial on the Channel coast and Dustmann's Langemarck-halle project for the National Socialist University Campus in Berlin (both 1942). On Gilly, see the articles by Rudolf Wolters, Heinrich Johannes, and Hella Jacobs in *Die Kunst im Deutschen Reich—Die Baukunst* 8 (1942), and Alfred Rietdorf, *Friedrich Gilly*, *Wiedergeburt der Architektur* (Berlin, 1940).
- ²⁰ Albert Speer, Erinnerungen (Berlin, 1969), 417–18.
- ²¹ See Hubert Schrade, Das deutsche Nationaldenkmal (Munich, 1934).
- ²² Rudolf Wolters, "Vom Beruf des Baumeisters," Die Kunst im Deutschen Reich—Die Baukunst 9 (1943), 143–45.
- ²³ Winckelmann's view that Attic democracy was a basic condition for the emergence of classical art in Greece was denied by Hitler, who dismissed any connection between the Parthenon and democracy. See Giesler, *Ein anderer Hitler*, 203. This ideological deviation is not reflected in Alex Scobie, *Hitler's State Architecture: The Impact of Classical Antiquity* (London, 1990).
- ²⁴ Martin Elbeshausen, "Architektur als Propaganda: Bauen im Dritten Reich im Spiegel zeitgenössischer Veröffentlichungen" (master's thesis, Philosophische Fakultät der Christian-Albrechts-Universität zu Kiel, 2000).
- ²⁵ Hans Kiener, "Germanische Tektonik," *Die Kunst im Deutschen Reich* I.2 (1937), 48–64. See Adrian von Buttlar, "Germanische Tektonik: Zur Rezeption Gillys, Schinkels und Klenzes

- im Dritten Reich." (unpublished course lecture for "Die Kunst Preußens," Schinkel-Zentrum der Technischen Universität Berlin, July 5, 2001).
- ²⁶ Kiener's unpublished dissertation (Kunsthistorisches Institut, Ludwig-Maximilians-Universität München, 1920–21) was the first monograph (though fragmentary) on Leo von Klenze. He also contributed the article on Klenze in Thieme-Becker, *Allgemeines Lexikon der bildenden Künstler*, vol. 20 (Leipzig, 1927). Cf. Adrian von Buttlar, *Leo von Klenze—Leben, Werk, Vision* (Munich, 1999), 16, 313–16.
- ²⁷ Frampton, Studies in Tectonic Culture, 4.
- ²⁸ Buttlar, Leo von Klenze, 306–7.
- ²⁹ Leo von Klenze, "Versuch einer Wiederherstellung des toskanischen Tempels nach seinen historischen und technischen Analogien" (1821), Denkschriften der Kgl. Akademie der Wissenschaften zu München für die Jahre 1821 und 1822, vol. 8 (Munich, 1824), 1–86. Cf. Buttlar, Leo von Klenze, 288–292.
- ³⁰ Dirk Klose, Klassizismus als idealistische Weltanschauung: Leo von Klenze als Kunstphilosoph (Munich, 1999), 162–73; Buttlar, Leo von Klenze, 313–15.
- ³¹ Joseph Arthur de Gobineau, *Essai sur l'inégalité des races humaines*, 4 vols. (Paris, 1853–1855); Ernest Renan, *De la part des peuples sémitiques dans l'histoire de la civilisation* (Paris, 1862).
- ³² Leo von Klenze, "Architektonische Erwiederungen und Erörterungen über Griechisches und Nichtgriechisches von einem Architekten," MS, Bayerische Staatsbibliothek München, Handschriftenabteilung, Klenzana I/9–12. Cf. Klenzeana I/9, 457–573.
- ³³ Alfred Rosenberg, "Germanische Charakterwerte. Rede gehalten auf der Großkundgebung der 5. Reichstagung für deutsche Vorgeschichte in Hannover," Germanen-Erbe. Monatsschrift für Deutsche Vorgeschichte 11 (1938): 322–27; Josef Strzygowksi, Geistige Umkehr: Indogermanische Gegenwartsstreifzüge eines Kunstforschers (Heidelberg, 1938).
- ³⁴ Walther von Fritschen, *Von deutscher Baukunst* (Leipzig, 1939), Ill. 15. I thank Martin Elbeshausen for this reference.
- ³⁵ Hans Lehmbruch, "Acropolis Germaniae. Der Königsplatz—Forum der NSDAP," in *Bürokratie und Kult. Das Parteizentrum der NSDAP am Königsplatz in München*, Iris Lauterbach, ed. (Munich, 1995), 17–46.
- ³⁶ Alfred Rosenberg, Der Mythus des 20. Jahrhunderts (Munich, 1930), 382.
- ³⁷ Giesler, Ein anderer Hitler, 202. For the iconography of building materials, see Christian Fuhrmeister, Beton—Klinker—Granit, Material—Macht—Politik (Berlin, 2001).
- ³⁸ The model of Giesler's NSDAP school in Chiemsee was published in 1938 in *Das Bauen im Neuen Reich*, 38–39. Two high-rise buildings should have flanked Giesler's axis from the new central train station to Munich's inner city. Wilhelm Kreis followed Giesler's pattern in 1938–39 in his 156-meter OKH tower in Berlin. Similar high-rise buildings were projected for a hotel tower (Caesar Pinnau), for city hall, the Reichversicherungsamt, the university hospital (Friedrich Tamms) and the headquarters of the Waffen-SS (H. Stich). See Lars Olof Larsson, *Die Neugestaltung der Reichshauptstadt—Albert Speers Generalbebauungsplan für Berlin* (Uppsala, 1978), 50, Ill. 58, 59, 66, 69, 77–82, 143, 162, 168. On the OKH-tower, see *Die Kunst im Dritten Reich*, Vol. 2 (Die Baukunst), Feb. 1939, 46–49, 58–64. Karl Arndt, "Problematischer Ruhm—Die Großaufträge in Berlin 1937–1943," in *Wilhelm Kreis—Architekt zwischen Kaiserreich und Demokratie* 1873–1955, Winfried Nerdinger and Ekkehard Mai, eds. (Munich, 1994), 183–86.
- ³⁹ Hans Gerhard Evers, Tod, Macht und Raum als Bereiche der Architektur (Munich, 1939), 98.
- $^{\rm 40}$ Werner Durth, Deutsche Architekten—Biographische Verflechtungen 1900–1977 (Braunschweig, 1988).
- ⁴¹ Christoph Hackelsberger, Die aufgeschobene Moderne, ein Versuch zur Einordnung der Architektur der Fünfziger Jahre (Munich, 1985).

- ⁴² The first project planned by Helmut Hentrich, Hans Heuser, and Hubert Petschnigg showed a freestanding abstract steel grid, forming tower-galleries in front of the offices, but was greatly altered for Brekers and Gerlings "Endlösung" [sic]. Cf. Das Gerling-Hochhaus in Köln, ed. Gerling Konzern (Cologne, 1953); Hiltrud Kier, Architektur der 50er Jahre: Bauten des Gerling-Konzerns in Köln (Frankfurt/Main, 1994), 47–67.
- ⁴³ This might be extrapolated from his letter to Giesler, when Giesler's memoirs were published. Cf. Giesler, *Ein anderer Hitler*, 523.
- ⁴⁴ Sabina Gierschner, "Bauten und Planungen nach 1945," in Winfried Nerdinger and Ekkehard Mai, eds. Wilhelm Kreis, 190–94, 202–3.
- ⁴⁵ Cf. the "sixteen principles of town-planning" imported from Moscow July 1950, in Jörn Düwel, *Baukunst voran! Architektur und Stadtplanung im ersten Nackriegsjahrzehnt in der SBZ/DDR* (Berlin, 1995), 85–88.
- ⁴⁶ Lothar Bolz, Von deutschem Bauen—Aufsätze und Reden (Berlin, 1951).
- ⁴⁷ Henselmann also follows projects for the Friedrichstrasse-Competition by Otto Kohtz 1921. Cf. Helmut Engel, "Anmerkungen zum Hochhaus an der Weberwiese," *Karl-Marx-Allee—Magistrale in Berlin*, ed. Helmut Engel and Wolfgang Ribbe (Berlin, 1996), 43–58.
- ⁴⁸ Eva-Maria Krausse-Jünemann, *Hanns Dustmann* (1902–1979) Kontinuität und Wandel im Werk eines Architekten von der Weimarer Republik bis Ende der fünfziger Jahre (PhD diss., Universität Kiel, 2002).
- ⁴⁹ Krausse-Jünemann, *Hanns Dustmann*, W-No. 073, 305–6, ill. 168 and W-No. 114, 332, ill. 190.
- ⁵⁰ Regine Beckmann, "Das Telefunken-Hochhaus am Ernst-Reuter-Platz: Ein West-Berliner Bau," (master's thesis, TU Berlin, 1999), 76–83.
- ⁵¹ Hildrud Kier and Werner Schäfke, Die Kölner Ringe: Geschichte und Glanz einer Straße (Cologne, 1994), 20.
- ⁵² Stadtsparkasse Dortmund (1961–68), cf. Krausse-Jünemann, *Hanns Dustmann*, W-No. 126, 338–39.
- ⁵³ Architektur von Skidmore, Owings & Merrill 1950–1962 (Stuttgart, 1962), 22–27.
- ⁵⁴ Werner Durth and Niels Gutschow, Architektur und Städtebau der Fünfziger Jahre (Bonn, 1987), 38, 90; Heinrich Wefing, Parlamentsarchitektur: zur Selbstdarstellung der Demokratie in ihren Bauten; eine Untersuchung am Beispiel des Bonner Bundeshauses (Berlin, 1995).
- 55 Durth, Deutsche Architekten, 297-312.
- ⁵⁶ Durth and Gutschow, Architektur und Städtebau der Fünfziger Jahre, 67; Paul Schneider von Esleben, Paul Schneider-Esleben—Entwürfe und Bauten, (Stuttgart, 1996), 75–83; Rolf Beckers, Der Architekt Paul Schneider-Esleben (Weimar, 1995), 87–92.
- ⁵⁷ Durth and Gutschow, Architektur und Städtebau der Fünfziger Jahre, 36; HPP—Hentrich, Petschnigg, Partner: Buildings and Projects (New York, 1997), 34–36.
- ⁵⁸ While Hentrich in his memoirs, *Bauzeit: Aufzeichnungen aus dem Leben eines Architekten* (Düsseldorf, 1995), 222, dates his first postwar journey to New York in summer 1954, Beckers, *Schneider-Esleben*, 87, states that, according to Heinrich Klotz, Schneider-Esleben visited Detroit, Pittsburgh, Chicago, and New York for his Mannesmann building and met Helmut Hentrich and Friedrich Tamms.
- ⁵⁹ Durth, Deutsche Architekten, 308.
- ⁶⁰ Cf. Fritz Neumeyer, *The Artless Word: Mies van der Rohe on Building Art* (Cambridge, MA, 1991).
- ⁶¹ Cf. for instance Alfons Leitl's review of the UN-building in New York, *Baukunst und Werkform*, No. 3: 1950, 8–11, and the rejection of the glass house in East Germany; Werner Durth, Jörn Düwel, Niels Gutschow, *Architektur und Städtebau der DDR*, Vol. 2 (Frankfurt, 1998), 308. Thanks for this reference to Roman Hillmann, who is preparing a PhD thesis at

the TU Berlin on the contemporary and present evaluation criteria of postwar architecture in Germany.

⁶² Willy Kreuer: Architekturplanungen 1929–1968, ed. Kunstbibliothek Berlin (Berlin, 1980), 38–39; Die Technische Universität Berlin und ihre Bauten, ed. Christoph Brachmann and Robert Suckale (Berlin, 1999), 121–26.

⁶³ Schwebes and Schoszberger in their Telefunken Hochhaus (1958–62), also at Ernst-Reuter-Platz, adopted the spherical shape of Le Corbusier's project for Algier (1939) and Gio Ponti's Pirelli skyscraper in Milan (1956–59), but stressed tectonics by dynamic concrete piers. Atmer's and Marlow's police tower in Hamburg (1958–62) closely resembles the asymmetrical *brise-soleil* surfaces of Le Corbusier. Cf. Beckmann, "Das Telefunken-Hochhaus," 32–34, 69–70 and Anke und Folkwin Marg, *Hamburg—Bauen seit* 1900 (Hamburg, n.d.), 87.

⁶⁴ Cf. Berlin und seine Bauten, ed., Architekten- und Ingenieurverein zu Berlin, vol. VIII A (Berlin, 1978), 270–272, and Alexander Sedlmaier's contribution in this volume.

⁶⁵ C. 1972. Archive of the author.

⁶⁶ Hotel Stadt Berlin (today Forum Hotel) 1967–70 by Kollektiv Scharlipp, Bogatzky, Kaiser, etc. The curtain wall in East Berlin had already been used in Hermann Henselmann's "Haus des Lehrers" 1961–64, but its western flair was neutralized by Walter Womacka's socialist wall-painting in the style of Rivera.