

FROM GERMANY TO AMERICA: WALTER GROPIUS AND MARTIN WAGNER ON SKYSCRAPERS AND THE PLANNING OF HEALTHY CITIES

Jeffrey M. Diefendorf

In order to explore the complex conjuncture of the themes of transatlantic exchanges between Germany and America, urban planning, and the design of skyscrapers, I have chosen to look at two émigré architects and planners, Walter Gropius and Martin Wagner, both part of the generation that created the modernist movement. They were designers, but also authors of prescriptive essays. Once in the United States, both sought to integrate European and American ideas about modern architecture, housing, and urban design.¹ Both were actively and self-consciously engaged in a dialogue between America and Germany, and a key feature of that dialogue was the place of skyscrapers in healthy cities of the future, although today neither Gropius nor Wagner is best known for skyscraper design.² Because they left Germany for America, it is tempting to see their careers as part of an American import of European modernism. But, in fact, they embody the interconnected movement of ideas about buildings and cities back and forth across the Atlantic. A primary aim of this essay is to see how those ideas were formed and then changed by relocation and new circumstances.

German émigré architects were fascinated by the possibilities of using industrial technology in designing both skyscrapers *and* houses. David Nye has argued that skyscrapers embody the American “technological sublime.” The technological sublime is experienced when “an object, natural or man-made, disrupts ordinary perception and astonishes the senses, forcing the observer to grapple mentally with its immensity and power.”³ Skyscrapers stimulate this experience from several perspectives. During construction, observers thrill at the creation of the rising steel frame. When the completed building is viewed up close from the street, mass and height cause dizziness and awe. When viewed from a distance, skyscrapers form “an artificial horizon” and conjure up the sensation of a Romantic landscape. Since many skyscrapers have observation platforms or windows at the top, viewers can also be dazzled by the powerful sensation of a commanding panorama of a miniaturized city, complete with tiny vehicles and pedestrians.

At the same time, industrial technology was considered as an almost magical solution to the housing crises faced by Germany in the 1920s, and by America during the 1930s and 1940s. Overcrowded, congested slums

made cities unhealthy both biologically and politically. New forms of housing, embedded in new concepts of urban design, promised a remedy. Architects and planners believed that elegant, simple design, the mass production of building elements or entire houses using modern materials, the absence of unnecessary and expensive decorative façades, and the standardization and prefabrication of bathrooms, kitchens, and laundries would result in the large-scale production of high-quality, low cost houses for the working class, unmarried adults (including war widows), and retirees. Erected on the right sites, with easy access to plenty of light, air, and greenery, the new housing would make for healthy, happy, and productive citizens—and healthy cities meant a healthy nation. By updating, modernizing, and vastly expanding the garden city ideal, architects could fulfill their deep-felt obligation to society as a whole and not just serve clients with deep pockets. But a common thread in both skyscraper and housing design was the fascination with industrial production and technology that characterized the modern age and promised revolutionary change.

While critics saw skyscrapers as a negative symbol of threatening materialism and American economic and imperial power,⁴ there was also a positive German and American image of America as a country characterized equally by skyscrapers and shining mobile homes. Both were featured in a 1949 exhibition in Frankfurt entitled “Wo wohnt Amerika?” (“Where does America Live?”). The reviewer for *Die Neue Stadt* saw both skyscrapers and mobile homes as expressions of modern industrial design and technology aimed at meeting consumers’ needs and wishes. He argued that because they shared this aim, German-born architects were well received in America.⁵ Furthermore, something modern skyscrapers and mobile homes had in common was steel. In a 1930 book entitled *Stahl-land Amerika* (America: Land of Steel), Otto van Halem celebrated “the symbolic power of steel in society,” as characterized by the Ford motor works.⁶ In Germany, “Fordism” meant the mass production of modern consumer goods. Perhaps the best example of such a product was the automobile, which was transforming modern life.

The career of Walter Gropius is well known. After working in Peter Behrens’s Berlin office, Gropius gained some fame before World War I for his modernist Fagus factory. When the war ended, he was one of many architects sharing a radical vision of solving society’s problems through design. He directed the Bauhaus, first in Weimar and then in Dessau, from 1919 to 1928, when he left to resume a full-time practice in Berlin. In 1934, recognizing that the combination of Nazi hostility to modernism and the depressed building market meant few opportunities to work, he left for England. In 1937, Gropius moved on to America, becoming head of the architecture department at Harvard.⁷

The connection between modern architecture and a radical social vision was already present in 1911 when, in a speech in Hagen, Gropius praised Behrens, who created ingenious monumental industrial buildings using iron and glass. Such buildings were “palaces which provide factory workers, the slaves of modern industrial labor, not only light, air, and cleanliness but also allow them to feel something of the value of the common great idea that drives the whole.”⁸ The creation of such “works of art,” Gropius said, required the “personality and power of genius. . . . Only a genius possesses the power to combine the natural and supernatural” and bring together the great ideas of the age in forms that were beautiful, practical, and economical.⁹ By 1919, Gropius saw the architect as the “Führer of the arts,” whose “high office must play a public role in a democracy,” creating great works by being in harmony with the spirit of the people and solving the great problems of the times.¹⁰

The most immediate way to do this was to mass-produce housing. Thus, in 1925, the Bauhaus developed a model house with the goal of encouraging the factory production of components which could be assembled on-site. Describing this project, Gropius anticipated the post-1945 image of America as a land of skyscrapers and mobile homes when he speculated: “Perhaps mobile houses, which would help us to enjoy the convenience of truly comfortable housing that we could take with us when we move, are no longer a distant utopia.”¹¹ Because of his advocacy of economical, factory-produced housing, Gropius became known as the “WohnFord,”¹² the innovator who would use American forms of industrial production to solve the housing problem. As we will see, however, this moniker was inaccurate.

As a leading advocate of the “new architecture”—buildings constructed from modern materials and devoid of historicist decoration—Gropius was also interested in skyscrapers, but opportunities to build them in impoverished, tumultuous post-1919 Germany were negligible. Hence Gropius submitted an entry for the *Chicago Tribune’s* 1922 international skyscraper competition. His design, a clean thirty-two-floor tower of asymmetrical cubic masses broken by cantilevered balconies, is a far cry from mass-produced housing, but it shows that Gropius was fascinated with American high-rise, steel-frame construction (Figure 1).¹³ That he did not win the competition left a sour taste in his mouth. Writing in 1926, he called skyscrapers “another creation of American technology,” one made possible by economic demand and low land prices. In Germany they would be an “unused luxury.” While skyscrapers could lay “claim to beauty” as long as they remain “objective” (*sachlich*), all too often Americans display “a latent Romanticism” and clad their skyscrapers with Gothic or Renaissance features. This, Gropius wrote, “made them as ridiculous as a Negro who wears [fancy shirt] cuffs with a loin-cloth.”¹⁴



Figure 1. Walter Gropius, Competition Entry for the Chicago Tribune Tower, 1922. Source: Walter Gropius Archive, Busch-Reisinger Museum, Harvard University. Reproduced with permission.

Gropius expresses reluctant admiration for the economic efficiency of American skyscrapers, built rapidly by teams of architects, draftsmen, engineers, and technicians.¹⁵

Gropius sought to combine his interests in housing construction and tall buildings in designs for new residential settlements between 1929 and 1931, including one for Berlin-Spandau-Haselhorst whose the prize committee included Martin Wagner, then chief planner for Berlin. This project would have housed nearly 18,000 people (Figure 2).¹⁶ Gropius discussed his design in several articles entitled “Flach-, Mittel- oder Hochbau” (low-, medium-, or high-rise). Wagner wrote an introduction to a version published in 1929, and this was also the title of Gropius’s talk to the 3rd CIAM (Congrès Internationaux de l’Architecture Moderne) conference in Brussels in 1930. The 1930 CIAM meeting focused on land planning and housing, contrasting high density, high-rise projects with the sprawl resulting from the garden city approach. Gropius was a prominent speaker at this conference, and Martin Wagner also attended.¹⁷ Gropius’s talk is worth our attention because therein he puts forth his ideas for healthy city living.¹⁸

Gropius admits that the current desire for healthy, hygienic housing stresses light and air, which is best achieved through single-family housing with gardens. The desire to go back to nature as an antidote to the overcrowded metropolis is entirely understandable, but this, he argues, is “an economic utopia.”¹⁹ Allowing cities to spread out into distant suburbs made up of single-family homes necessitates long commutes to work, which is a huge waste of time and an economic burden in terms of lost work time. In fact, new studies of several big cities show that cities do not necessarily lead to lower birth rates or bad health. It is not urban living per se but rather bad housing that is the problem. Gropius notes that even Martin Wagner, “a passionate advocate of *Flachbau*,” admits that small dwellings are not the solution to urban problems.²⁰

Instead, a properly designed high-rise, set in greenery with views of nature, can be “a biologically correct housing model for our times.”²¹ One can simply calculate the ideal height, based on cost of production (building and land costs) and how placement combined with size can maximize sunlight, even for apartments on the lower floors. Gropius concludes that high-rise buildings of ten to twelve floors are the ideal. In principle, though, the calculations can be made for any size, and he cites the study by the Hamburg Oberbaudirektor Gustav Leo who considered buildings up to sixty stories. Gropius’s housing projects, therefore, feature some low-rise buildings but are characterized by a series of carefully situated ten-to twelve-story slabs. They feature communal facilities, such as shops, on the ground floors, and he would build roof gardens for small children. Building only single-family houses would be “the dissolution and renun-

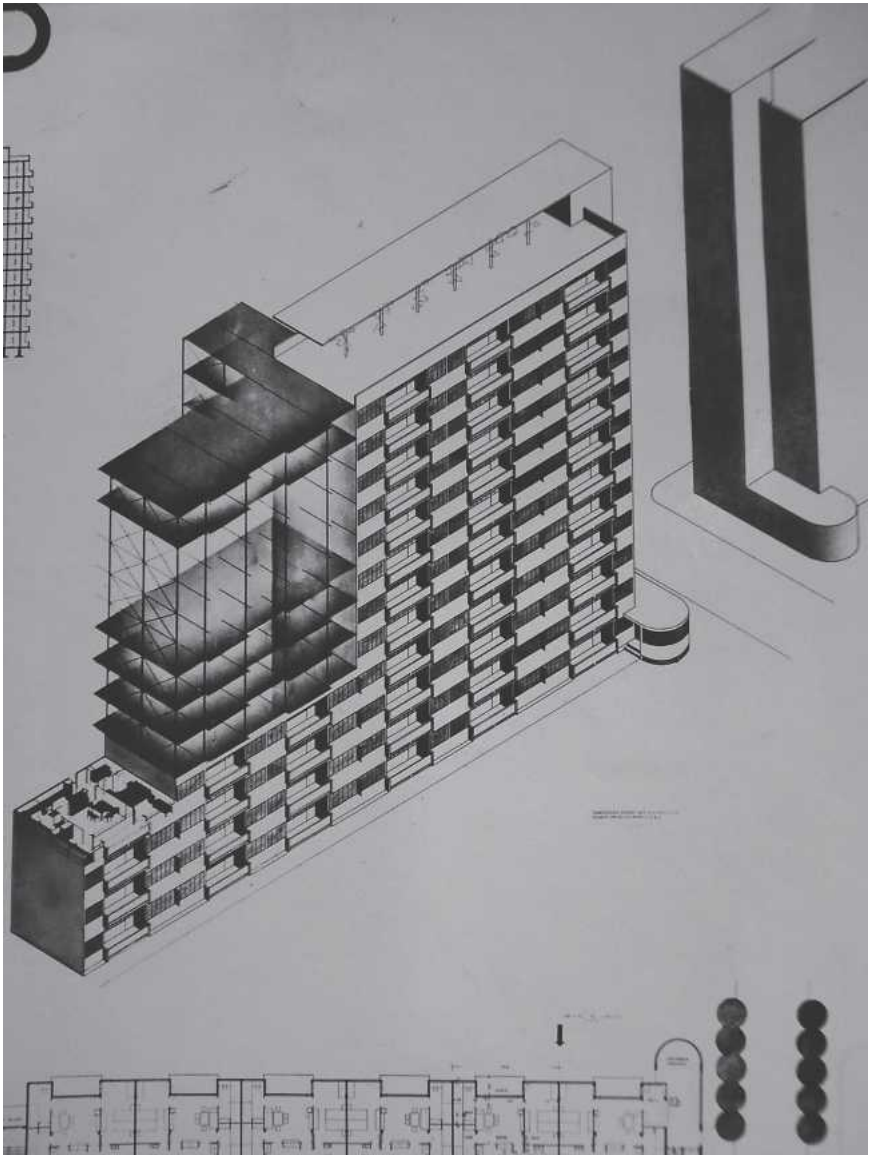


Figure 2. Walter Gropius, Drawing of a slab high-rise apartment, from a project for Berlin, c. 1930. Source: Walter Gropius Archive, Busch-Reisinger Museum, Harvard University. Reproduced with permission.

ciation of the city." Instead, one should pursue the "opening up (*Auflockerung*) of the city." Building high-rise apartments of the right kind allows for the introduction of greenery on the ground and roofs, thereby connecting (not separating) nature and the city.²² Since existing German

cities were already densely built up, new settlements of the sort Gropius suggested would have to be built on the edges, but he believed this design could stop what is today called sprawl.

Admittedly, the ten-to-twelve-story slabs proposed by Gropius might not be considered skyscrapers in New York, but they were the sort of *Hochhäuser* he thought best for Germany. Gropius displayed a model of a steel-skeleton apartment tower, an eleven-story slab, at the Paris exhibition of 1930. According to his friend and biographer Reg Isaacs, the idea of the steel frame was something he brought back from the United States. He undoubtedly observed the technique in New York and Chicago during his first trip to the United States in 1928, where he also met the Austrian-born architect Richard Neutra in Los Angeles. Neutra, who had come to the United States in 1923, had already praised steel-frame high-rise construction in his 1927 book *Wie baut Amerika?*²³ At the time they met, Neutra was heavily involved in designing his pioneering steel-framed Lovell House. Surely the two modernists discussed it.

Once he moved to the United States, Gropius's time was mostly taken up with teaching and establishing an architectural practice, initially with Marcel Breuer. Together they designed the 1941 housing settlement in New Kensington, Pennsylvania, a one-to-two-story, 250-unit project for employees of a nearby ALCOA aluminum plant. This small project is emblematic of the challenge confronting all architects in America as the country rearmed and then joined World War II. Huge amounts of housing needed to be built quickly to accommodate the migration of workers to key industrial sites, and the German-born architects were all involved in this effort.

Martin Wagner studied in Berlin and Dresden, then moved back to Berlin in 1914. In 1918 he was chosen as chief planner in the suburb of Schöneberg.²⁴ During the heady days of the revolution of 1918–19, he cautioned against the rapid socialization of the building industry, preferring instead that the trade unions form their own building companies on a capitalist basis and then sponsor mass housing programs. When Schöneberg was incorporated into Greater Berlin in 1920, he went to work for one of the largest social housing corporations, which sent him in 1924 on a study trip to the United States. In 1925–26, he joined Bruno Taut (certainly one of the utopians in 1919) in designing the famous “Horse-shoe” settlement in Berlin Britz, with 1,000 dwellings constructed using the rationalized building practices of the “new building.” And in late 1926, Wagner was appointed head of the Berlin planning department, where he became a firm proponent of the industrialization of housing production and initiated several large housing construction projects. In other words, where Gropius was a theoretician of industrialized mass

housing, Wagner sought to put this combination of social vision and architectural design into practice.

As Berlin's chief planner, he had other tasks as well. He prepared proposals to redesign both Potsdamer Platz and Alexanderplatz in 1928–29, and photos of the models show massed cubic buildings of varying heights, including modest towers of perhaps sixteen stories on Alexanderplatz and a considerably taller tower on Potsdamer Platz. In 1929 he traveled again to New York, this time with Ernst Reuter, the head of the traffic planning department, and came away with strong impressions of the negative impact of skyscrapers on the land prices of neighboring properties in inner-city areas and of the growing problem of automobile traffic.²⁵ In an essay written in 1929, he drew on his American trip to argue that “modern city planning desires the freedom to design,” and that new urban forms include skyscrapers. However, since such buildings create problems relating to land speculation, traffic flow, light, and air, planning for skyscrapers requires comprehensive planning for the “entire city,” not just a few blocks.²⁶ The onset of the Great Depression, of course, meant that such projects could not be realized.

Identified both with the Social Democrats and with Berlin's huge social housing corporation, Wagner quickly came under fire from the Nazis in 1933. When the *Werkbund* was “coordinated” and it moved to expel Käthe Kollwitz and Heinrich Mann, Wagner resigned from the board in protest and Gropius joined him. Ousted from the city government in March 1933, Wagner first went in 1935 to become chief planner in Ankara, Turkey, but in 1938 Gropius was able to find a position for him at Harvard, teaching town planning. Between 1941 and 1943, Gropius and Wagner co-authored a half-dozen essays and reports on city planning and housing in wartime America.

The themes of these papers reveal a greater shift for Gropius than for Wagner. For example, “*Cities' Renaissance*” begins boldly: “Our cities are sick, deathly sick, machine sick.”²⁷ American cities built in the railroad age were now decaying and run by corrupt politicians. With words that show their embrace of American democracy, the German exiles endorse town meetings that could only be found in small communities, where living would be on a human scale. The creation of such towns would not mean that people would be forced to live there. Although people have freedom of choice, however, these townships would offer a qualitatively better life that would reduce nomadism and build community values. What is needed is large-scale comprehensive planning, national building laws, and “compulsory amortization and depreciation of all building structures” so that planning authorities can demolish and renew big cities. Moreover, Wagner and Gropius denounce skyscrapers in no uncertain terms, calling them “light robbers, traffic compressors, and space

squeezers . . . stone masses and crematoriums of real life and happiness." Consequently, they argued that in the new central cities there should be no "business cathedrals' in the form of huge skyscrapers" because people want to be able to drive and park, which requires space for traffic. The "people's" cultural buildings should not be "overtopped by profane business buildings . . . A people that tolerates business cathedrals has lost its soul to them and should not be surprised at being sold to usurers and usurpers."

In other essays, Wagner and Gropius argue that people flee cities for the suburbs so they can live closer to nature. Planners thus need to devise a transportation system to ease traffic flow between (the) old cities, which should be rejuvenated, and (the) new neighborhoods on the edges. Hence "the goal of the modern town-planner is to bring town and country into a closer relationship," ending the distinction between the two.²⁸ The old cities' excess population should be siphoned off to populate the new small towns, freeing up urban space for renovation.²⁹ City land should be acquired on a large scale by the public and consolidated to facilitate new planning and building. In this way, "all those employed in the central areas will live in dwelling quarters which, more widely spaced and surrounded by parks, will [make] their inhabitants [fit to build] that constructive community interest and neighborhood spirit long lost in the old cities."³⁰ Communities, neighborhoods, town meetings, the union of town and country - these were the ingredients for healthy cities and a healthy democracy.

At the same time as they put forth this planning vision, Wagner and Gropius also advocated prefabrication as a way to meet wartime demand for new housing. Gilbert Herbert has argued that "Gropius and Wagner, in the American context, were ideologues of prefabrication, and not practitioners."³¹ Yet Gropius certainly sought to be a practitioner of a certain sort. In 1941, Konrad Wachsmann, yet another refugee from Berlin, arrived at the Gropius home with a design for a steel-frame for prefabricated wall panels. Before fleeing Germany, Wachsmann had been the chief engineer for its biggest producer of prefab wooden houses. Wachsmann and Gropius collaborated on designing and patenting a panel system for on-site housing construction, known as the "Packaged House" system, and Gropius and Wagner proposed building settlements using this system.³² After the war, Wachsmann went on to found the General Panel Corporation, with the goal of producing 10,000 houses each year. In fact, the corporation was a failure and went into bankruptcy in 1951. Far too many firms were competing to produce prefabricated housing.³³

What is of interest here is that this effort was entirely directed toward single family homes and embraced the American ideal of indi-

vidual home ownership. This was a kind of Fordism, to be sure, but the Gropius-Wachsmann panels did not sell. Gropius was not the WohnFord after all. Herbert suggests that Wachsmann (and, I think, Gropius too) was most interested in

the elegant exploitation of advanced technology. He was drawn, philosophically, aesthetically (in the sense of a mathematician seeking the beauty of an elegant, minimalist equation) to the materials of tomorrow . . . rather than to the cumbersome and crude mass materials of yesterday; he was fascinated by the fineness of machine production, not by the quantitative bulk output of the concrete mixer. [Gropius] saw in the repetition of large units, or of total dwellings, a perversion of technology, exploiting its mechanical potential through soulless multiplication of identical units, without the saving grace of variability and individual choice.³⁴

Production of these panels, in other words, was perhaps an exercise in the technological sublime and not a realistic attempt to solve the problem of mass housing. Elements were prefabricated, not whole houses, thus avoiding the threat of monotony and uniformity. Moreover, Gropius's ideal of high-rise slabs of apartments disappeared in favor of individualized homes: *Flachbau* won out over *Hochbau*.

By the end of the war, Gropius may have absorbed American values like individualism and small-town democracy, but he had lost most of the radical social vision that had animated his earlier thinking and led him to advocate the complete transformation of cities. For example, in a speech to the Associated General Contractors of Massachusetts in November 1943, he stressed the role of the architect as a humble coordinator of building activity, no longer the "Führer of the arts," as he had proclaimed in 1915. Indeed, he condemned any architect who "suffers from the antiquated dream of genius, forgetting that 'genius is 5% inspiration and 95% perspiration,' as Edison once aptly put it."³⁵ Here, Gropius is a long way from that praise he lavished on the genius of Behrens before World War I. Furthermore, he admits that prefabrication "was a slow, evolutionary movement" and not "a sudden revolutionary break" that would provide good housing for all. "For the time being, people will unavoidably connect prefabrication in their mind with jerry-building."³⁶

In mid-1944, the remnants of CIAM held several meetings in New York. Attended by a few American architects and exiles like Gropius, Neutra, Siegfried Giedion, and José Luis Sert (now head of the organization), the goal was not so much to revitalize CIAM as to define a role for themselves in postwar reconstruction. To this end they created a "Chapter for Relief and Postwar Planning," and Neutra was elected its presi-

dent. War damage, combined with a global enthusiasm for planning, seemed to present a golden opportunity not just to further their ideas but to win actual commissions. They hoped both to renovate unbombed but run-down cities and to rebuild bombed cities. To promote this goal, Neutra subsequently attended the spring 1945 meeting in San Francisco at which the United Nations was created, but CIAM's dream of leading postwar reconstruction was realized neither in war-torn Europe nor in America.³⁷

If the dialogue between Germany and America was broken off by Nazism and the war, there was an opportunity to revive it after 1945. Gropius was invited by General Lucius Clay to come to Germany in 1947 and advise the military governor on rebuilding bombed cities. His visit generated great excitement among "progressive" architects who had stayed in Germany, hunkered down, and survived the war. They were looking for support from Gropius to bolster their ideals, but they were to be disappointed. Gropius was horrified by the damage and he did not feel up to the challenge of really engaging with reconstruction. To Clay and to the Germans who heard him speak, he recommended creating broad agencies, strong laws, and research institutes for planning. He called for constructing small neighborhood units of five to eight thousand people as vehicles for building community and promoting democracy. He encouraged prefabrication of housing elements but urged Germans to avoid "the prevalent mechanistic approach to standardization," noting that "a mechanistic and technocratic attitude derived from the Nazi mentality, instead of a creative one, is still prevalent." And he offered general support for the Deutscher Werkbund, the Bauhaus, and CIAM, all of which represented modern ideas.³⁸ Karl Bonatz, then head of planning in West Berlin, found Gropius's Berlin lecture "disillusioning," offering little more than utopian platitudes with little relation to reality.³⁹

When Gropius went to Frankfurt am Main, where the Americans had their headquarters, he was invited by his German hosts to prepare plans for the city's reconstruction. He declined, though again he argued for a new kind of city, a healthier city made up of small communities surrounding a core. In the core there could be tall buildings to allow for an opening up of the city and the introduction of greenery, but he warned against over-mechanization and over-standardization.⁴⁰ These themes echoed his speech to the CIAM Congress in Bridgewater, where he had argued that a community that was healthy in a spiritual and physical sense had to be made of small neighborhoods connected by a good transportation network.⁴¹ When it came to specifics, however, Walter Gropius simply was not willing to assume any responsibility for rebuilding Germany, nor did he contribute much to any dialogue about reconstruction. This was something best left to Germans; Gropius was now an American.

While some German planners, like Bonatz, rejected Gropius's "advice," others welcomed it. Notable is Rudolf Hillebrecht, who had worked with Gropius on his proposal for the Reichsbank and for a Haus der Arbeit in 1933, and then worked in the office of Konstanty Gutschow in Hamburg until 1945, before becoming the chief planner for Hannover. As such, he gained the reputation as postwar Germany's most important and successful reconstruction planner. Hillebrecht met Gropius in Stuttgart in 1947 and reported in detail on their conversation. He observed that Gropius now "distances himself" from high-rise apartments, though most people remember him as "a one-sided and apodictic defender" of such buildings.⁴² Gropius would now allow for high-rises for the elderly or retired people, but generally favored low housing to encourage community formation and democracy. Hillebrecht expressed amazement and pleasure at how close Gropius's ideas of neighborhood-based small towns were to those of the English and also the Germans during the war. Nazi-era planners used the term "Ortsgruppen als Siedlungszellen," which is still essentially a neighborhood "in spite of all the unmistakable Nazi diction." All of them conceive of towns of five to eight thousand people, or two to three thousand families. "We are talking about a necessary decentralization of the metropolis," Hillebrecht said. Gropius also saw the bomb damage as "an opportunity" for a "mighty renewal" of cities.⁴³ Furthermore, Gropius rejected the whole idea of an "international style" of architecture. Gropius found the term misleading, since in reality practitioners of "functional building" tailor style to suit local conditions, including "climate, geographical position, landscape, orientation to sky and wind, [and the] customs and practices of residents."⁴⁴ Style was thus individual and local, not international at all.

In other words, Gropius made it clear that he could offer only general advice to his former countrymen. Rebuilding postwar cities was an opportunity to renew and rebuild healthy cities, but those should consist of small clustered neighborhoods of low structures. Only a few tall buildings should still rise in city cores, but probably no higher than ten to twelve floors. The style of construction should be functional, not "international," based on local physical conditions and human needs. The prefabrication of building components was fine, but not excessive standardization or entire prefabricated houses. There was no grand social vision, no endorsement of skyscrapers, no strong praise for the plain, cubic, steel and glass boxes based on the Bauhaus. With that, Gropius returned to Harvard to teach and build his architectural practice, The Architects' Collaborative (TAC), a new firm that embodied Gropius's model of shared project design.

By this time, Gropius had broken with Martin Wagner, precisely because Wagner openly criticized him for having lost his reforming spirit.

Unlike Gropius, who was invited by General Clay to Germany in 1947, who built in Berlin in the 1950s and 1960s, and who was feted world-wide as a pioneer genius of modern architecture, Wagner sank into relative obscurity—a fall partly of his own making. For unlike Gropius, who had either abandoned his earlier radical social vision or had given work for individual clients much higher priority, Wagner clung to his revolutionary vision of healthy cities and healthy, prefabricated housing for the masses. More importantly, he desperately wanted to return to Germany to play a leading role in rebuilding. He bombarded the reemerging German architectural and planning periodicals with articles demanding that Germans engage in comprehensive planning to completely restructure their bombed cities. He firmly believed that this was a one-time opportunity to remake nearly all of Germany's outmoded cities and thereby remake German society, and he declared himself ready to help. His earlier experience in Berlin and his knowledge of American planning and prefabrication gave him unique qualifications.

As an example, he offered the radical redesign of all of downtown Boston proposed by Wagner and his Harvard students. The proposal featured a huge artery ringling the central city, at the heart of which would be a green park. It would be surrounded by cultural buildings, shops, hotels, a number of eighteen-story office buildings, and lots of parking. Some of these elements harken back to Wagner's ideas for Berlin in the late 1920s. Very few of Boston's historic buildings on Beacon Hill were to be spared the mighty hand of redevelopment (Figures 3–4). This dramatic proposal grew out of a project at Harvard's Graduate School of Design in fall 1942. The draft of the project suggests that it was another collaborative effort with Gropius, but the tone of the work and the line drawings were by Wagner, and Gropius's name does not appear on the post-war versions.⁴⁵ The Boston drawings were published in *Baurundschau* in 1948 and exhibited at the 1951 Constructa building exhibition in Hannover. There, plans for Braunschweig bore the caption "the evolutionary path" and Wagner's proposal for Boston "the revolutionary path."⁴⁶ His Boston proposal was certainly more radical than even the dramatic urban renewal of Boston's West End and construction of an urban freeway in the 1950s.

When Wagner's offer of his services to help rebuild Germany was not accepted and his revolutionary advice ignored, he condemned German reconstruction planning as "bankrupt."⁴⁷ German editors printed his in-temperate polemical missives, but they sometimes noted that readers might be left "speechless" by Wagner's "Philippics."⁴⁸ Far more than Gropius, Wagner strove to engage in a dialogue with Germany after 1945, but in spite of his many publications, it was a dialogue that remained fruitless.

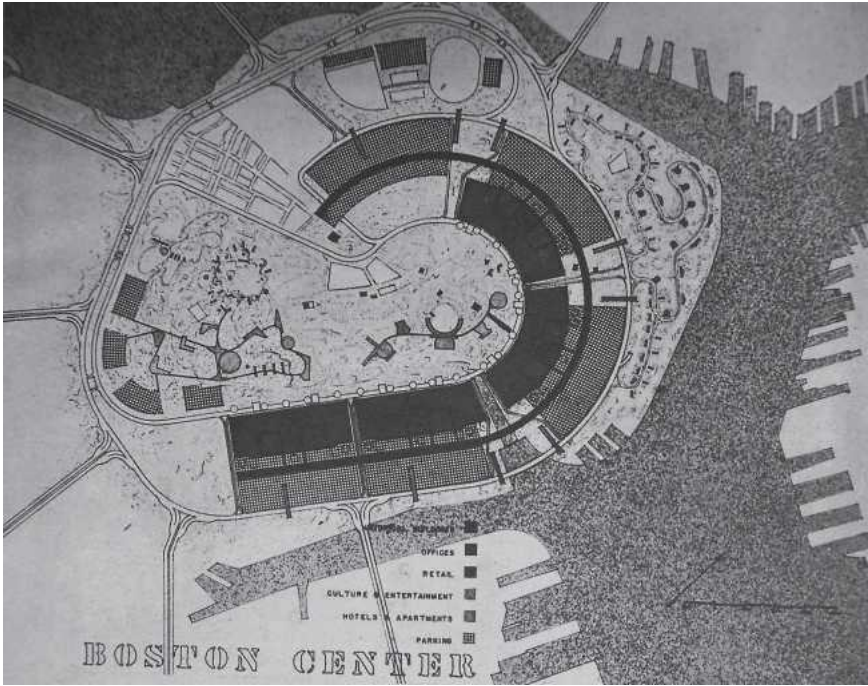


Figure 3. Martin Wagner and Walter Gropius, Proposal for Boston, 1942. Source: Frances Loeb Library, Harvard Design School. Reproduced with permission.

By contrast, Gropius had further opportunities to build in Germany. Working through TAC, between 1955 and 1957 he contributed a rather unremarkable nine-floor apartment building to the redevelopment of the Hansaviertel in Berlin, though he was not pleased with the overall planning and coordination of that enterprise. He was asked by a big Berlin social housing corporation to design apartments for the area around Mehringplatz, but this was later built by Hans Scharoun, not Gropius. Beginning in 1960, Gropius and TAC began design work on a gigantic housing project in Berlin's Britz-Buckow-Rudow area. This development, which subsequently became known as Gropiusstadt, included 16,400 dwellings for 44,000 inhabitants who resided in apartment blocks of various sizes, including sixteen-story slabs and a thirty-one-story tower. The tower was dedicated at a festive ceremony in 1968 by the mayor with Gropius at his side (Figure 5).⁴⁹ Gropius died just a year later, and it is hard to know just how much the design of Gropiusstadt was his alone. Still, it is clear that this development was a far cry from both his designs of the 1920s and his call for small neighborhoods during and after World

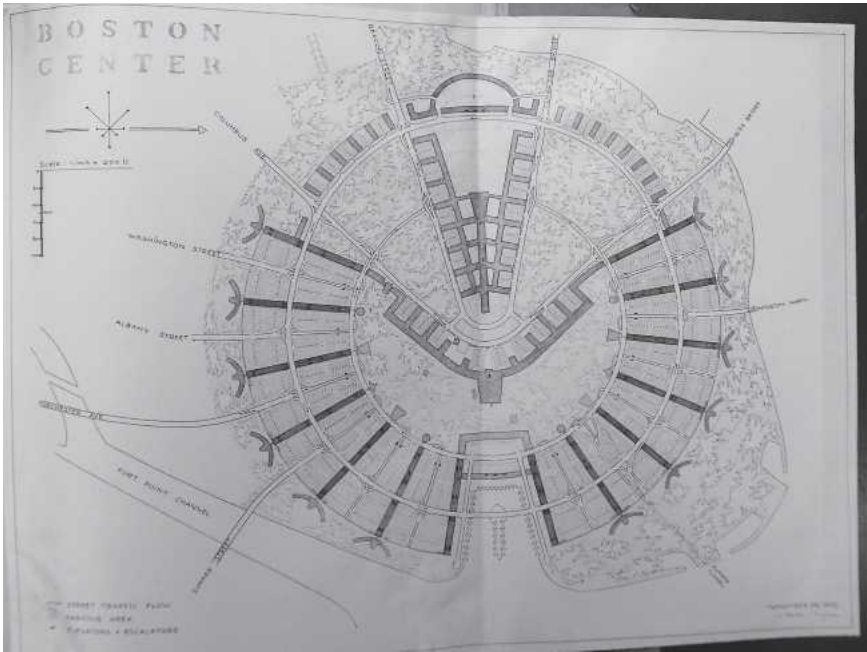


Figure 4. Martin Wagner and Walter Gropius, Proposal for Boston, 1947. Source: Frances Loeb Library, Harvard Design School. Reproduced with permission.

War II. Moreover, in spite of the presence of greenery, shops, access to public transportation, and community facilities, the project quickly earned a reputation as cold and alienating, just the sort of thing that Gropius had earlier warned against.

There is perhaps an irony to be found in Gropius's contributions to skyscraper design. His most famous skyscraper is the fifty-nine-story Pan-Am building in New York. Built between 1958 and 1963, it was the largest office tower in the world in terms of its capacity. It was criticized by Philip Johnson, who suggested that it would have been better to create a green space on that location. Gropius responded angrily that this criticism was an example of "prevailing urbanistic sentimentality, a blindness in regard to new trends and changing standards of size and orientation of building mass in cities"—a statement which clearly shows how far Gropius had moved from his earlier ideas about healthy cities.⁵⁰ Between 1961 and 1966 Gropius and TAC also built the twenty-six-story towers of the John F. Kennedy Federal Building in Boston, Gropius's adopted home city (Figure 6).⁵¹ This steel-skeleton structure, with its prefabricated concrete-panel cladding, has not enjoyed much favor with critics or histori-



Figure 5. Walter Gropius and TAC, Tower apartment for Berlin Gropiusstadt (1960s). Source: Walter Gropius Archive, Busch-Reisinger Museum, Harvard University. Reproduced with permission.

ans.⁵² It is interesting, however, that the two offset towers may be a deliberate quotation of the most famous skyscrapers built in Germany in the 1950s, the Thyssen building in Düsseldorf.⁵³ This is a twenty-eight-floor, 100-meter, asymmetrical ensemble of three staggered towers, built

with the greatest technical exactitude and time-saving precision as a steel-frame building.⁵⁴ In fact, for the first post-1945 decade it was not Frankfurt am Main which merited the term “Mainhattan” but Düsseldorf.

The irony is that the sponsors of modern architecture in that city were Konstanty Gutschow, Friedrich Tamms, and Helmut Hentrich, all of whom had enjoyed successful careers during the Third Reich. Perhaps because these men were wedded neither to the social housing agenda of Weimar nor to the programs of the Third Reich, nor were they politically committed to the psychological sense of modesty and humility that characterized so much post-1945 German architecture, they were able to open the way for modern corporate architecture in the form of glass towers. Before building the Thyssen tower, Hentrich and Tamms (the latter was Düsseldorf’s chief planner) went to America to study skyscrapers. They consulted with the architects at Skidmore, Owings & Merrill, studied New York’s central business district, and admired the vertical city as well as the new traffic arteries.⁵⁵ In other words, it may be that the model of the New York corporate skyscraper was transported to Düsseldorf and perhaps then back to Boston in the form of Gropius’s Federal Building.⁵⁶

I have argued that Gropius and Wagner started with a vision in which technology and rationalized, Fordist industrial production would allow architecture to solve great social problems, transform urban living, and produce a better world. This revolutionary vision involved sublime steel-skeleton skyscrapers and mass-produced, prefabricated housing within a context of comprehensive urban planning, and it was a vision that had evolved out of an exchange of ideas between Europe and America. However, in their American setting, from the late 1930s through 1945, Wagner and Gropius came to see rather small neighborhoods as the kernel from which healthy societies grow, people become less nomadic, and genuine community and democracy form. Gropius’s reforming spirit, however, waned by the time the war ended. He wanted to build, not pursue dreams. His firm built mega-settlements and skyscrapers in Berlin, central Boston, and New York, but not the kind of neighborhood settlements he had earlier advocated. Martin Wagner, in contrast, held fast to his revolutionary vision of new cities, but his unrealistic expectations and acerbic voice precluded a planning position in Germany. He learned the bitter lesson that the opportunity for radical urban change was a chimera. Wagner misunderstood the realities of post-1945 Germany and postwar America. Time had passed him by, and he was unable to realize his visions. Gropius became an icon of architectural modernism while Wagner’s name faded in comparison.⁵⁷



Figure 6. Walter Gropius and TAC, Boston Civic Center, with John F. Kennedy Federal Building towers in upper center (1961–66). Source: Walter Gropius Archive, Busch-Reisinger Museum, Harvard University. Reproduced with permission.

Notes

¹ Gropius (1883–1969) and Wagner (1885–1957) left Germany in the mid-1930s and are thus of the same generation. Mies van der Rohe (1892–1970) would also fit here. More than any other architect, Mies is identified with the modern steel and glass skyscraper, yet he was far less interested in urban design. See Christian Otto, “American Skyscrapers and Weimar Modern: Transactions between Fact and Idea,” in Jarrell C. Jackman and Carla M. Borden, eds., *The Muses Flee Hitler: Cultural Transfer and Adaptation, 1930–1945*, (Washington, D.C., 1983), and Philip C. Johnson, *Mies van der Rohe*, rev. 3rd ed. (New York, 1978). Johnson was pivotal in making skyscrapers and the new architecture the basis of a dialogue between Germany and America; he was the prime organizer of the 1932 Museum of Modern Art exhibition that trumpeted architectural modernism and elevated the international reputations of Gropius, Mies, and Richard Neutra.

² For a general introduction to the subject of skyscrapers and the relations between German and American architecture I have used William H. Jordy, *American Buildings and Their Architects*, vol. 5, *The Impact of European Modernism in the Mid-Twentieth Century* (New York, 1972) and John Jacobus, *Twentieth-Century Architecture: The Middle Years 1940–1965* (New York, 1966). The word “skyscraper” is somewhat ambiguous. Germans more often use *Hochhaus* than *Wolkenkratzer*. How “high” must a building be to count as a skyscraper? For a German in 1920, a twelve-story *Hochhaus* might have been perceived as a skyscraper, but perhaps not in 1970.

³ David E. Nye, *American Technological Sublime* (New York, 1994), 15, 91, and 96.

⁴ John Czaplicka, “Amerikabilder and the German Discourse on Modern Civilization, 1890–1925,” in Beeke Sell Tower, ed., *Envisioning America: Prints, Drawings, and Photographs by George Grosz and his Contemporaries, 1915–1933* (Cambridge, MA, 1990), 39–41.

⁵ Hinrich Borbecker, “Das Amerikanische Wohnen. Anmerkungen anlässlich der Ausstellung ‘So wohnt Amerika’ in Frankfurt am Main,” *Die Neue Stadt* 3 (1949): 257–58.

⁶ Quoted by Paul Gleye, “Fordismus und Amerika in den zwanziger Jahren: Vorstellung und Realität,” in Regina Bitner, ed., *Zukunft aus Amerika: Fordismus in der Zwischenkriegszeit: Siedlung, Stadt, Raum. Stiftung Bauhaus Dessau and Rheinisch-Westfälische Technische Hochschule Aachen*, (Dessau, 1995), 97.

⁷ Reginald R. Isaacs, *Walter Gropius: Der Mensch und sein Werk* (Berlin, 1984), 2 vols. Isaacs worked closely with Gropius at Harvard after Wagner retired.

⁸ Gropius, “Monumentale Kunst und Industriebau” (speech, April 10, 1911), Folkwang-Museum Hagen, ms in Bauhaus-Archiv, Berlin, Gropius-Sammlung 20/3, in Hartmut Probst and Christian Schädlich, eds., *Walter Gropius: Ausgewählte Schriften* vol. 3 (Berlin, 1988), 31.

⁹ *Ibid.*, 29.

¹⁰ Gropius, “Baukunst im freien Volksstaat” from *Deutscher Revolutionsalmanach für das Jahr 1919* (Berlin, 1919), in Probst and Schädlich, *Walter Gropius*, vol. 3, 65.

¹¹ Gropius, “Wohnhaus-Industrie” from “Ein Versuchshaus des Bauhauses” (Munich, 1925): 5–14; (Bauhausbücher 3), in Probst and Schädlich, *Walter Gropius*, vol. 3, 97.

¹² Harald Bodenschatz, “Analogismus von Fabrikarbeit und Alltag ausserhalb der Fabrik: Ein Essential des Fordismus?” in Bittner, ed., *Zukunft aus Amerika* (Dessau, 1995) 41.

¹³ See the reproductions in Probst and Schädlich, *Walter Gropius*, vol. 1, *Der Architekt und Theoretiker*, 218–26.

¹⁴ Gropius, “Grundlagen für Neues Bauen,” from *Bau- und Werkkunst* (Vienna) 2:1 (1925–26): 134–47, reprinted in Probst and Schädlich, *Walter Gropius*, vol. 3, 108–09.

¹⁵ Gropius, “Tatsachen und Zahlen über Wolkenkratzer.” This four page typescript (dated 7 August 1928) with handwritten corrections was published, according to Gropius’s nota-

tion, in *Kunst und Künstler* 23:6. Houghton Library, Harvard University, Gropius papers, 86M-32, bms Ger 208.2 (36).

¹⁶ See Probst and Schädlich, *Walter Gropius*, vol. 1, 117, 132–35.

¹⁷ See Eric Mumford, *The CIAM Discourse on Urbanism, 1928–1960* (Cambridge, MA.,2000), 49–58.

¹⁸ *Ibid.*

¹⁹ Gropius, “Flach-, Mittel- oder Hochbau?” (talk to 3rd CIAM conference, Brussels, 27–30 November 1930), published in *Moderne Bauformen* (Stuttgart), 30:7 (1931): 321–328, reprinted in Probst and Schädlich, *Walter Gropius*, vol. 3, 123.

²⁰ *Ibid.*, 125.

²¹ *Ibid.*, 126.

²² *Ibid.*, 129.

²³ Isaacs, *Walter Gropius*, vol. 2, 543. The 1928 trip is described at length, 501ff. See also Margaret Kentgens-Craig, *The Bauhaus and America: First Contacts, 1919–1936* (Cambridge, MA, 1999) 85ff, and Richard Neutra, *Wie Baut Amerika? Gegenwärtige Bauarbeit. Amerikanischer Kreis* (Stuttgart, 1927).

²⁴ This biographical sketch is constructed from Klaus Homann, “Biographie, Werkverzeichnis, Bibliographie,” in Akademie der Künste, ed., *Martin Wagner 1885–1957. Wohnungsbau und Weltstadtplanung. Die Rationalisierung des Glücks* (Berlin, 1986), 157–87.

²⁵ Martin Wagner, “Städtebauliche Probleme in amerikanischen Städten und ihre Rückwirkung auf den deutschen Städtebau,” originally published in 1929 as a *Sonderheft* of *Deutsche Bauzeitung*, reprinted in part in *Stadtbauwelt* 96 (December 23, 1987): 1802–03.

²⁶ Martin Wagner, “Ein Generalplan für Hochhäuser?” reprinted from a manuscript in Nachlass Martin Mächler, Plansammlung TU Berlin, 1929, in Akademie der Künste, ed., *Martin Wagner*, 108–09.

²⁷ Walter Gropius and Martin Wagner, “Cities’ Renaissance,” typescript in Houghton Library, Gropius papers, BMS Ger 208 (56) [from the tone, probably written by Wagner], 1. For the following quotations see pp. 5, 9, 11, and 14.

²⁸ Walter Gropius and Martin Wagner, “The New City Pattern for the People and by the People,” *The Problem of the Cities and the Towns: Conference on Urbanism, March 5–6, 1942* (Cambridge, MA, 1942), 102.

²⁹ Gropius and Wagner directed a studio project at Harvard, where students designed suburban housing developments to help reduce Boston’s population. See Walter Gropius and Martin Wagner, “A Program for City Reconstruction,” *Architectural Forum* 79 (July 1943): 83–5. Initial drafts of this essay are in the Houghton Library, Harvard University, Gropius papers, 81m-84, bMS Ger 208 (62). The initial draft, in folder 1, begins with Daniel Burnham’s call to “Make no little plans; they have no magic to stir men’s blood,” but this was not included in the print version.

³⁰ Gropius and Wagner, “The New City Pattern,” 115.

³¹ Gilbert Herbert, *The Dream of the Factory-Made House: Walter Gropius and Konrad Wachsmann* (Cambridge, MA, 1984), 233.

³² Herbert, *Dream*, 243ff; Isaacs, vol. 2, 910–14.

³³ Herbert, *Dream*, 276, 306–7. For examples of prefabricated houses, see *Architectural Forum* 86 (1947), which featured stories on General Panel (February, 115–120) and other firms, such as Kaiser Community Homes, which also aimed to produce 10,000 units annually (March, 105–13).

³⁴ Herbert, *Dream*, 317–18. Herbert also observes (321) that “it is interesting that neither Gropius nor Wachsmann ever seriously related to the mobile home industry, for it was to prove to be, according to informed judgment, ‘by far the most efficient building industry in

the United States and probably in the world.” For Wachsmann, mobiles were technologically primitive. For Gropius, they were complete and monotonous units.

³⁵ Walter Gropius, “The Architect’s Contribution to the Postwar Construction Program,” *The Bay State Builder* 1:12 (1943): 30.

³⁶ *Ibid.*, 37. According to a recent report using census data, about six percent of new homes built in the U.S. in 2001 were prefabricated or modular, compared to 3.4 percent in 1992, suggesting that resistance to them has remained strong. Thomas Grillo, “Signed, sealed and delivered,” *Boston Globe* (February 2, 2003): J1.

³⁷ Mumford, *The CIAM Discourse*, 144–49, and Thomas S. Hines, *Richard Neutra and the Search for Modern Architecture: A Biography and History* (New York, 1982), 196.

³⁸ Walter Gropius, “Reconstruction: Germany,” *Task* 7–8 (1948): 35–36. This is Gropius’s report to General Lucius Clay.

³⁹ Karl Bonatz, “Anmerkungen zu den Presseinterviews mit Professor Gropius und zu seinem Vortrag im Titania-Palast am 22. August 1947,” *Neue Bauwelt* Heft 35 (1947): 550.

⁴⁰ “Berichte,” “Gropius und das künftige Frankfurt,” *Die Neue Stadt* 1:3 (Dec. 1947): 128–29.

⁴¹ “Walter Gropius spricht über Städtebau,” excerpt from speech to CIAM Congress in Sept. 1947 in Bridgewater, reported by Eduard F. Sekler, *Der Aufbau* 3 (1948): 83–84.

⁴² Rudolf Hillebrecht, “Gespräch mit Gropius,” *Baurundschau* 38:9/10 (1948): 68.

⁴³ *Ibid.*, 72.

⁴⁴ *Ibid.*, 73–74.

⁴⁵ See Martin Wagner and Walter Gropius, “The New Boston Center: a Planning Problem for Harvard University’s School of Design,” typescript, September 1942, in Special Collections, Loeb Library, Harvard University. On the split between Wagner and Gropius, see Jeffrey M. Diefendorf, *In the Wake of War: The Reconstruction of German Cities after World War II* (New York, 1993), 182–86

⁴⁶ Martin Wagner, “Der Neubau der City,” *Baurundschau* 38 (1948): 129–60 and 413–421. I have a photocopy (provided by Niels Gutschow) from the private archive of Konstanty Gutschow, now in the Hamburg Architecture Archive, showing the Constructa posters.

⁴⁷ See Wagner, “Städtebau und Baubankrott,” *Baurundschau* 42 (1952): 241. Simply scanning the titles of his essays between 1946 and 1956 reveals Wagner’s Olympian posture toward his German colleagues. See Akademie der Künste, ed., *Martin Wagner*, 185–87.

⁴⁸ Martin Wagner, “Vernunft-Perspektiven im Städtebau,” in *Die Neue Stadt* 4 (1950): 140.

⁴⁹ Isaacs, *Walter Gropius*, 1061ff, 1079, 1082–85.

⁵⁰ *Ibid.*, 1055. Isaacs discusses the project on 1050–56. See also Probst and Schädlich, vol. 1, 238–43.

⁵¹ Isaacs, *Walter Gropius*, 1134–45 and Probst and Schädlich, vol. 1, 244–46.

⁵² In his definitive book on Boston’s urban renewal, Thomas H. O’Connor does not mention Gropius, and the Federal Building only in passing. See O’Connor, *Building a New Boston: Politics and Urban Renewal, 1950 to 1970* (Boston, 1993).

⁵³ Isaacs, *Walter Gropius*, 1134–35.

⁵⁴ Werner Durth, “Developments in Architecture and Urban Planning: A Sketched Review,” in Bundesministerium für Raumordnung, Bauwesen und Städtebau and Bundesministerium für innerdeutsche Beziehungen, ed., *Ideen, Orte, Entwürfe: Architektur und Städtebau in der Bundesrepublik Deutschland* (Berlin, 1990), 24–25. Christoph Hackelsberger is generally scathing in his criticism of postwar German skyscraper architecture, which he finds mostly “a scandalous declaration of bankruptcy . . . formulaistic modernism,” in *Die aufgeschobene Moderne. Ein Versuch zur Einordnung der Architektur der fünfziger Jahre* (Berlin, 1985), 54.

⁵⁵ Werner Durth, *Deutsche Architekten: Biographische Verflechtungen, 1900–1970* (Braunschweig, 1986), 370–71. Sponsored by the U.S. aluminum industry, a Düsseldorf group headed by Tamms returned in 1959; they again met with Skidmore, Owings & Merrill, but also Mies, Saarinen, and others. (See p.431, note 236.) See also Helmut Hentrich, *Bauzeit: Aufzeichnungen aus dem Leben eines Architekten* (Düsseldorf, 1995), 102–03 and 222.

⁵⁶ Interestingly, in the 1980s at least two Düsseldorf towers (one fourteen, the other sixteen stories) were given slick new Miesian polished glass facades. Jörg Schulze, “Veränderungsdruck bei Bauten der 50er Jahre. Ein Bericht über Erfahrungen in Aachen, Bonn, Düsseldorf, Köln und Krefeld,” in Werner Durth and Niels Gutschow, eds., *Architektur und Städtebau der fünfziger Jahre. Ergebnisse der Fachtagung in Hannover 1990, Schriftenreihe des Deutschen Nationalkomitees für Denkmalschutz*, vol. 41 (Bonn, 1990), 170–72. On the postwar conflicts in Germany between architects and planners who had prospered under the Third Reich and proponents of modernism and the Bauhaus, see Joachim Petsch, “Die Bauhausrezeption in der Bundesrepublik Deutschland in den fünfziger Jahren,” *Wissenschaftliche Zeitschrift der Hochschule für Architektur und Bauwesen Weimar* 26 (1979): 433ff; Hackelsberger, *Die aufgeschobene Moderne*; and Paul Betts, “Die Bauhaus-Legende: Amerikanisch-Deutsches ‘Joint-Venture’ des Kalten Krieges,” in Alf Lüdtkke, Inge Marssolek, and Adelheid von Saldern, eds., *Amerikanisierung. Traum und Alptraum in Deutschland des 20. Jahrhunderts* (Stuttgart, 1996). I have written about the relationship between German and American postwar planning in Diefendorf, “The West German Debate on Urban Planning,” German Historical Institute Conference on “The American Impact on Western Europe: Americanization and Westernization in Transatlantic Perspective,” March 1999 (Conference papers published on web site of the German Historical Institute: www.ghi-dc.org/conpotweb/westernpapers/diefendorf.pdf)

⁵⁷ A good indication of Wagner’s declining status in relation to Gropius is his absence from a 1947 conference in celebration of Princeton’s bicentennial. Gropius joined fifty-six other luminaries of architecture, including Frank Lloyd Wright, Alvar Aalto, Sigfried Giedion, George Howe, Philip Johnson, Robert Moses, and Mies van der Rohe. Wagner’s boss, Dean Joseph Hudnut, was there, as was Konrad Wachsmann, Gropius’s partner in the prefabricated panel firm. See *The Princeton University Bicentennial Conference on Planning Man’s Physical Environment* (Princeton, 1947), 28–30.