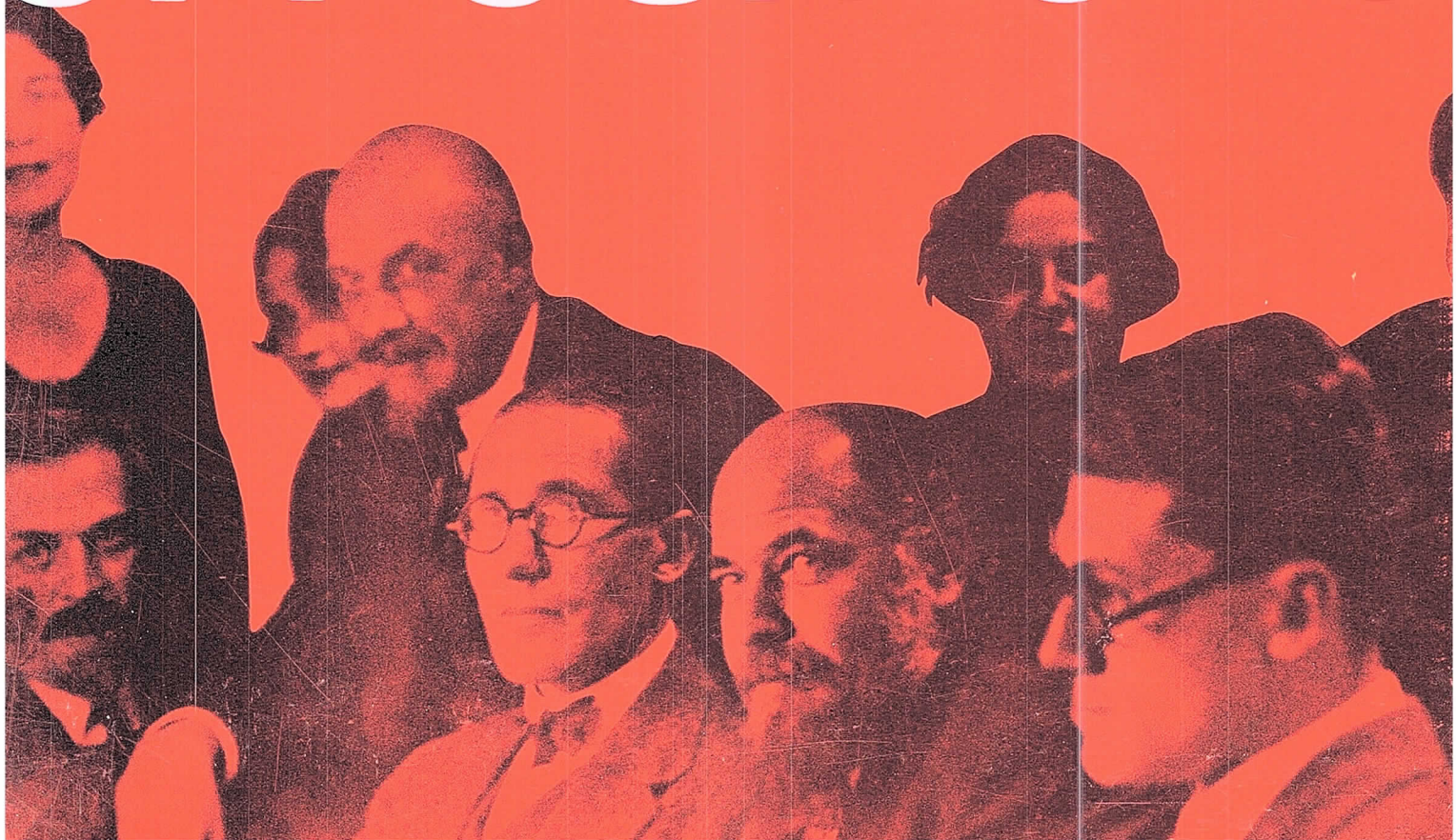


A Journal for Ideas and
Criticism in Architecture

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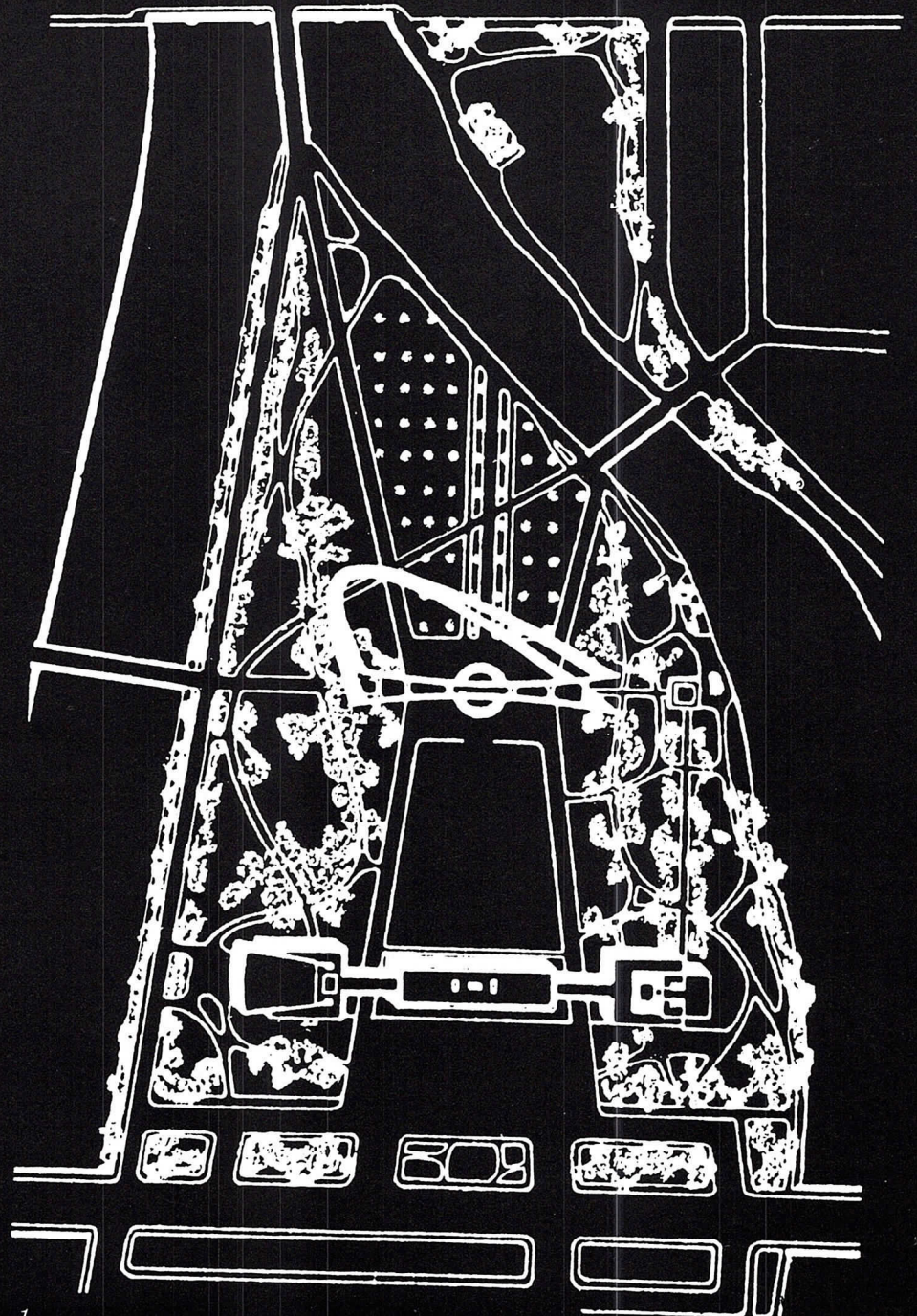
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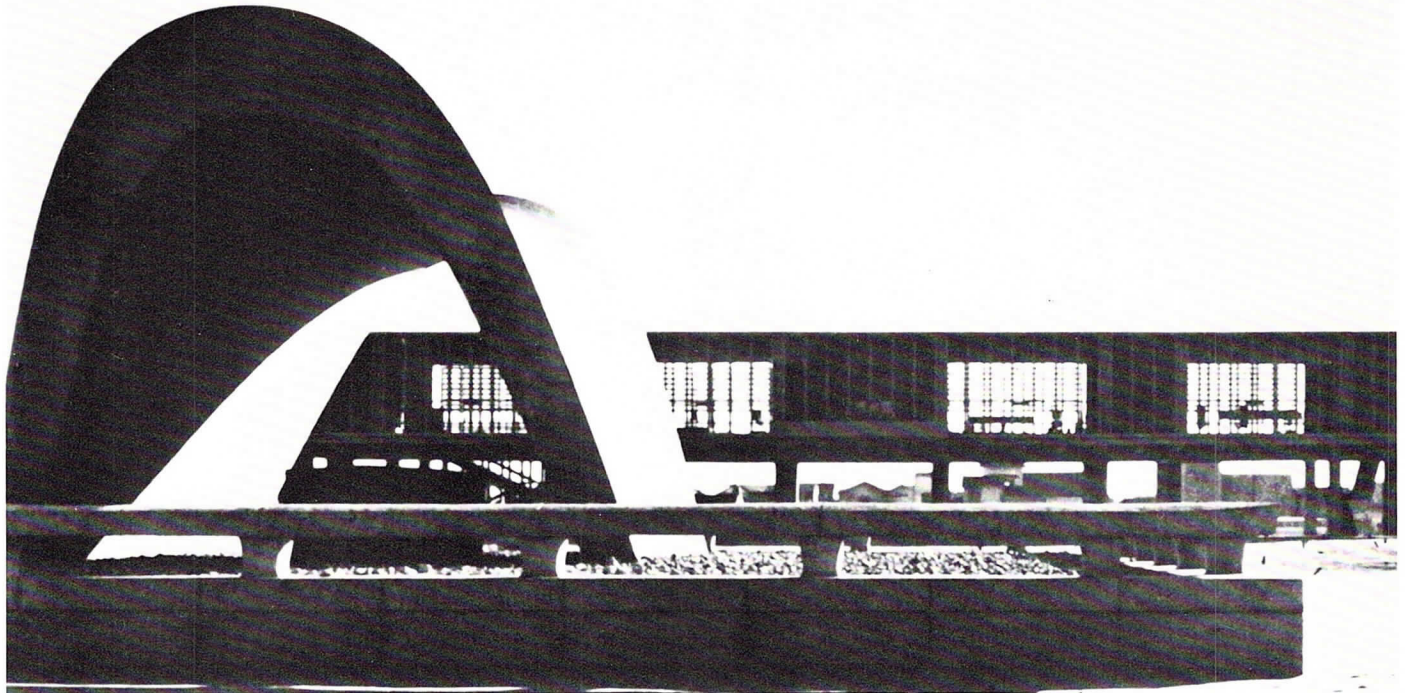


1 (frontispiece) Hiroshima Peace Memorial. Kenzo Tange, 1952. Site plan.

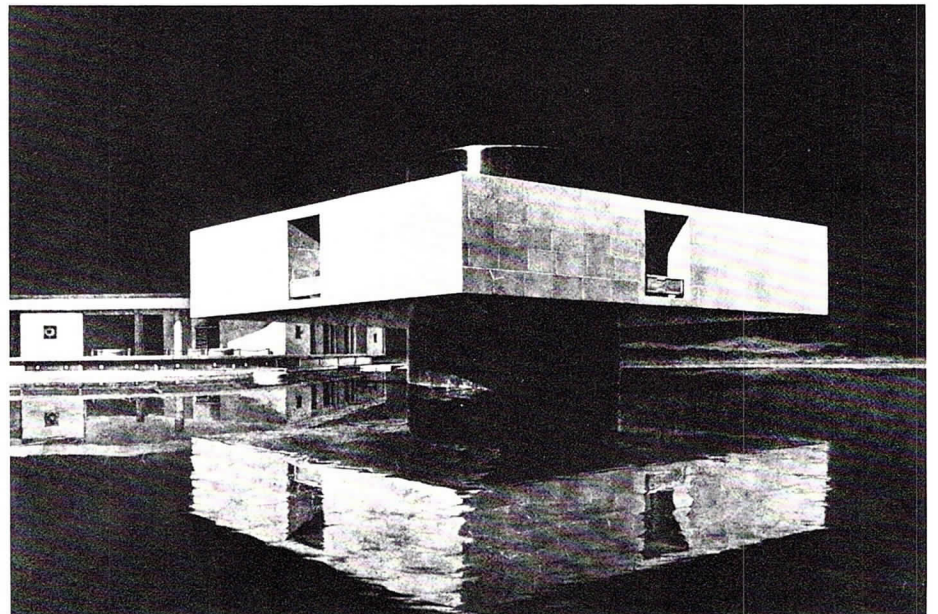
2 Hiroshima Peace Memorial. Kenzo Tange, 1952.

3 Temple of Atomic Catastrophe. Seiichi Shirai, 1955.

2



2



3

Architecture in the Urban Desert: A Critical Introduction to Japanese Architecture After Modernism

Hajime Yatsuka

The City—a bounded infinity. A labyrinth where you are never lost. Your private map where every block bears exactly the same number.

Even if you lose your way, you cannot go wrong.
Kobo Abe, *The Ruined Map*¹

The Thirst for the Symbolic: the 1950s

It need hardly be said that the Modern Movement, at least as literally interpreted, was characterized by an antagonism to symbolism and a rejection of historicism. Since the decline of the Modern Movement, symbolism has re-emerged as a protagonist, supported by a resurgent interest in historical context. This revenge of history has taken command of architectural culture in almost every developed country—in Italy, from Neo-Liberty to Rationalism; in the United States, from Louis Kahn to Robert Venturi and Michael Graves; and in Japan, from Kenzo Tange and Seiichi Shirai to the “New Wave” of the present day.

Indeed the first symptoms of the crisis of modernity—that is, Neo-Liberty, Kahn’s historicism, and in Japan the controversy between Tange and Shirai over the problem of “tradition”²—emerged almost simultaneously in each country, and these now distant phenomena still have a hold over the cultural crisis of today.

In Japan, Tange and Shirai, the two “*maîtres*” of postwar architectural development, led Japanese architecture in opposite directions. On the one hand Tange established the orthodox myth of the “tradition of the new” while on the other Shirai proposed a heretical antithesis to this tradition. The two monumental projects that they designed about the theme of the Hiroshima Peace Memorial—Tange’s entered for the official competition and Shirai’s designed for a private foundation—were clearly symptomatic of the basic difference between them (figs. 1–3).

Tange’s Hiroshima Peace Memorial was substantially a modern acropolis, revealing the architect himself as an authentic successor to the Hellenic tradition, extending from Phidias through Michelangelo to Le Corbusier. (As

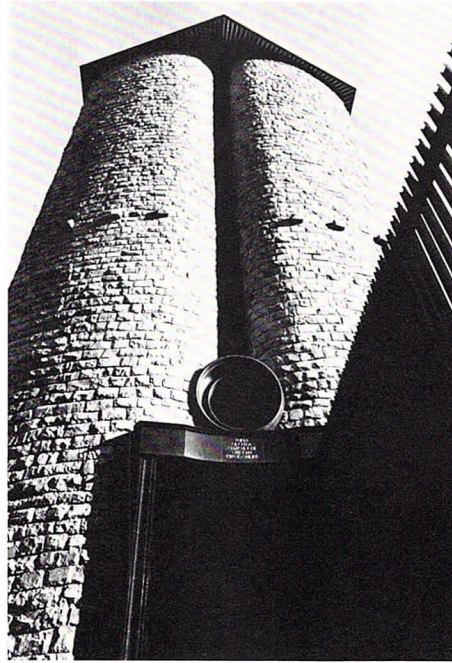
early as 1939—when he was twenty-six years old—Tange had developed this theme in a memorable article entitled “Eulogy on Michelangelo”—an introduction to a proposed thesis on Le Corbusier which never came to be written.) His Peace Memorial complex was based on a belief in the capacity of architecture to give order to the urban context, both physically and symbolically. By an extensive use of *pilotis* derived from Le Corbusier, Tange not only made possible a continuity between architecture and urban space but also afforded a dominant position to his elevated Parthenon. Shirai’s project for a Temple of Atomic Catastrophe, shaped after the mushrooming cloud of an atomic bomb, was also elevated, but it was not continuous with or open to its surroundings. For him, the unprecedented disaster of the atomic bomb could not be an occasion for a new public realm; but demanded instead an isolated space in order to permit contemplation and remembrance.

This difference was accentuated in their work from the 1950s to the 1960s. As a designer of many public buildings, Tange tried to achieve a dialectical synthesis between the Japanese tradition and the “tradition of the new,” thereby becoming the representative architect of Japanese postwar democracy. On the other hand, Shirai’s works were largely confined to private buildings imprinted with his individualistic fantasy, and he remained (especially on the international architectural scene) a “papal” figure who was largely unrecognized. While Tange wished to be seen as a prophet or as a preacher, Shirai proffered himself as a shaman or a monk. The eloquence and light of Tange versus the silence and shadow of Shirai marked the gulf between these two masters.

Nevertheless, both Tange and Shirai shared a common ground: the necessity of taking a critical stance toward the then disenchanting myth of the Modern Movement. Manfredo Tafuri has argued very appropriately that Tange’s works (together with those of other architects like Kahn, Rudolph, and Stirling) “are those which wish never to be consumed” (fig. 7).³ However Tange’s stance was always ambivalent, caught as he was between consumption and anti-consumption. Shirai on the other hand was totally alienated from the consuming process of mod-

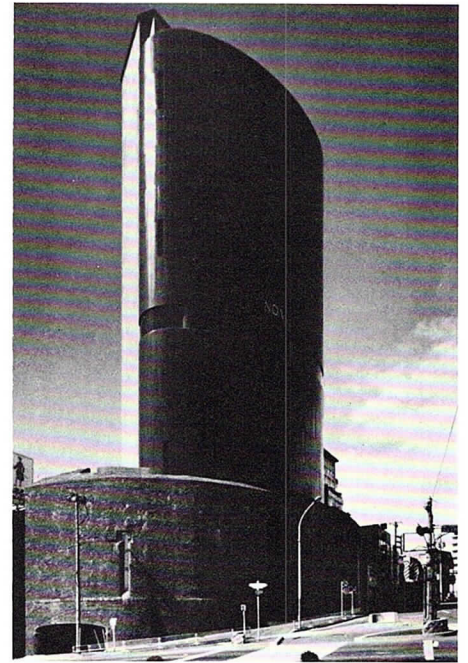


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*Shizuoka Newspaper and
Broadcasting Company Tokyo.
Kenzo Tange, 1967.*



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5
*Shinwa Bank Computer Tower.
Seiichi Shirai, 1977.*

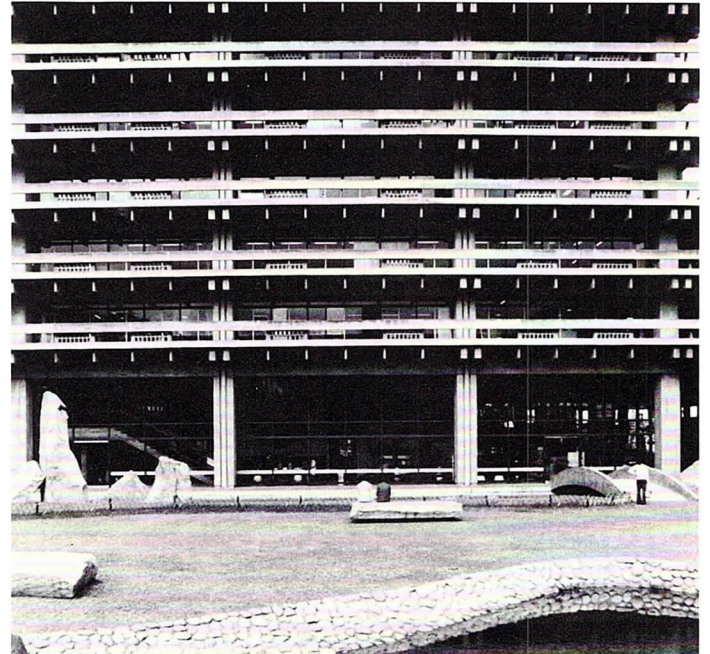


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*NOA Building. Seiichi Shirai,
1974.*

7
*Kagawa Prefectural Hall. Kenzo
Tange, 1959.*

8
Osaka World's Fair, 1970.



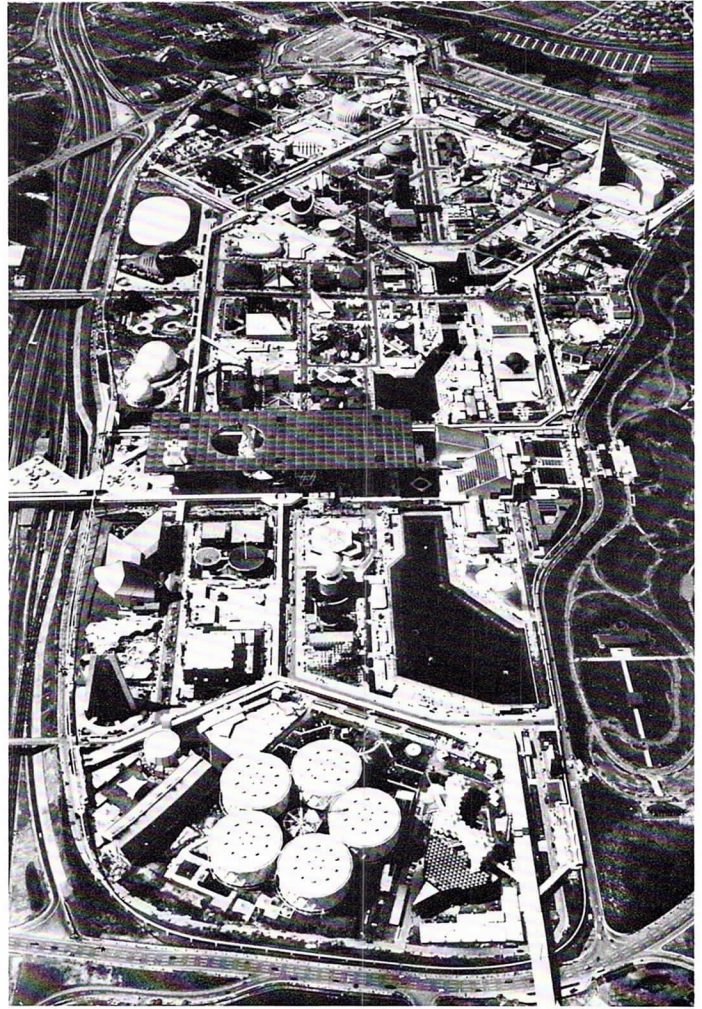
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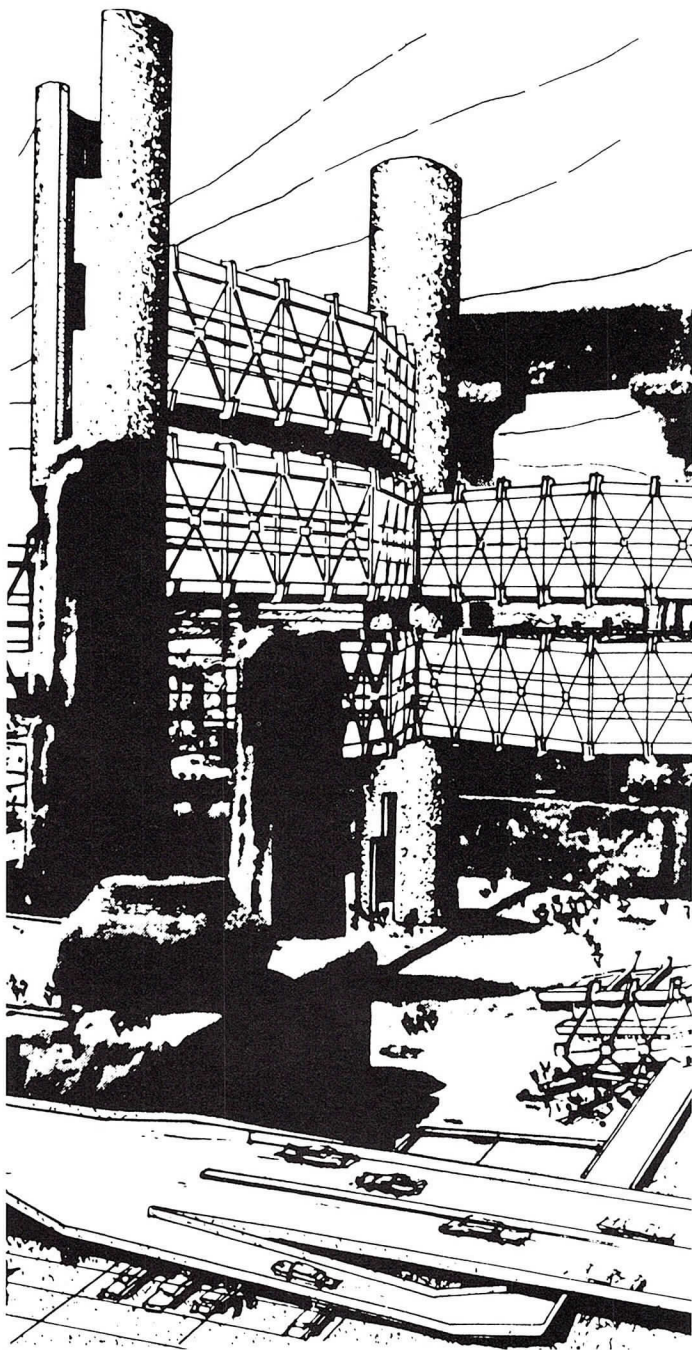
ern society. Tange's buildings always tended to become models for urban structure, each one forming a part of an urban megastructure (fig. 4), his "metabolic consuming mechanism." Hence Tafuri's comment is more relevant to Shirai (figs. 5, 6). Both of these two masters finally revealed a will toward the symbolic, a "will" which was in reality a "thirst" caused by some vacancy in the universe of meaning. And it is this thirst that marks a real starting point for our discussion of Japanese architecture after Modernism. The first question is, how has this *recherche du symbole perdu* manifested itself?

First Impulse: the 1960s

It has been a popular view in Japan to consider the Osaka World's Fair of 1970 (fig. 8) as the grand swansong of Metabolism, the final phase of the Modern Movement in Japan. Tange's magnificent space structure which defined the central plaza, as a form of modern agora, proved to be no more than a gigantic tombstone for the orgies of the Japanese economic miracle. After 1970, Japanese architects seemed to be without a guiding norm. However, in reality this was simply a final stage in the demythification of Modernism, and the first step toward a new phase had already begun some ten years before in a rather inconspicuous way, in 1962, with the appearance of two articles by young architects. At the moment of their publication, they had nothing in common except for the fact that they were both virtually ignored by the contemporary readership.

The first was written by Arata Isozaki, then thirty years old, and on Tange's staff as an urban designer. It was entitled "The City-Demolisher, Inc."⁴ The contrast manifested in the article between an evident interest in a quasi-Dadaistic process of "city-demolishing" and a passion for urban design was so striking at the time that readers chose the easiest way to resolve the contradiction—namely, to take the first position as a kind of capricious joke. But this ambivalence was immanent in the author, and the conflict remained unresolved. The article took the form of a dialogue between two persons, named *Arata* and *Shin*. But the Chinese character which is pronounced "Arata" (the architect's name) in Japanese is also





pronounced “Shin” in Chinese (most of the Chinese letters have both Japanese and Chinese ways of pronunciation). This two-sidedness of Isozaki was already apparent in his project of 1962 for a future city (fig. 9), in which the columns of an ancient ruin are superimposed on the site of the future city by means of a joint-core system; a demonstration of his reluctance to accept the optimistic faith in the future of Tange and the Metabolists. Although Isozaki himself was not at this time fully conscious of the future course of Metabolism, this was undoubtedly an early premonition of the downfall of the universe of technological signs. His future city was a kind of *città analoga* which clearly presaged the overturning of the technological universe through the poetry of ruin, which symbolized death. It was a historic irony that Isozaki should design his most technologically oriented project, the Robot at the World’s Fair of 1970, under the direction of Tange.

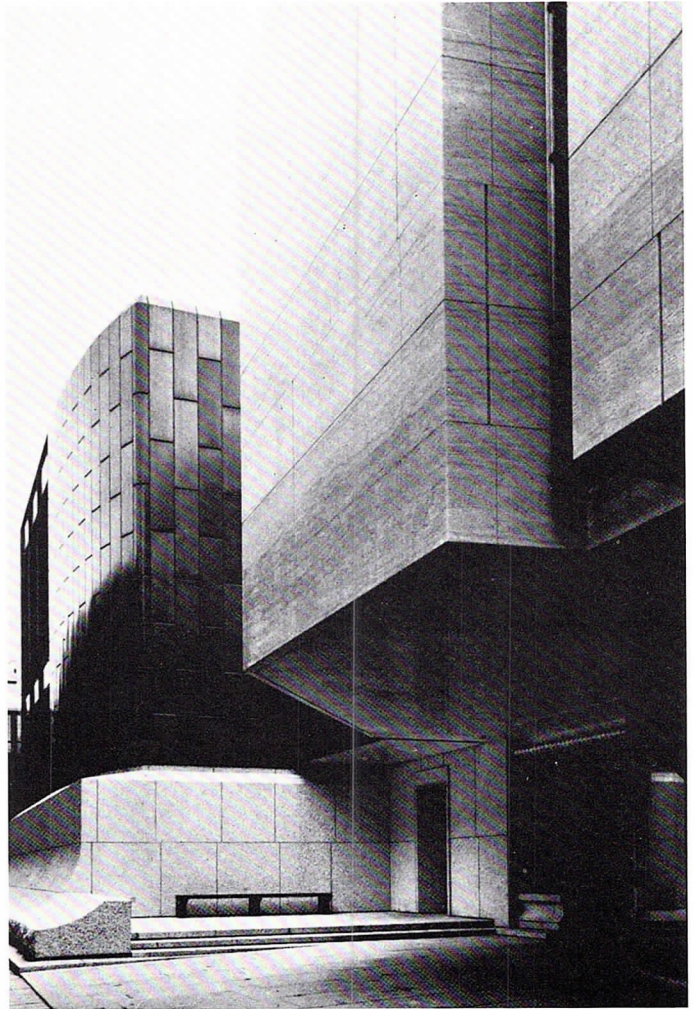
If Isozaki’s ironic manifestation of the “city-demolisher” was a gesture of rebellion against the tradition of the new avant-garde, the main subject of another article that appeared in 1962 was truly “reactionary” in the context of the period. “A House Is a Work of Art”⁵ by Kazuo Shinohara, then thirty-six years old, seemed to be no more than an outdated manifesto. For many architects who were beginning to develop the final stage of the orthodox Modern Movement, and whose chief means were industrialization (represented by science-fiction-like capsules), this young architect’s protestations sounded no more than a silly line drawn from Don Quixote. Had not the concept of architecture as art, and especially the house, already been rejected when Adolf Loos stated, “The work of art is revolutionary, the house conservative. . . . Does this therefore have nothing to do with art, and should architecture not be classified under the arts? This is so.”⁶

However, to compare historical discourses only on the literal level has scarcely any significance. It is essential to cast some light on the context in which such discourses are pronounced. When Loos declared the death of architecture as art, his target was not “art” in an abstract sense, but the particular “art” of fin-de-siècle Vienna, of the city he called “die Potemkinsche Stadt.”⁷ Loos’s ex-

clusion of art from the discussion of architecture was tactical in this milieu, arising out of the fear that any further talk of art would obscure the real cultural crisis of the ancient capital of the Hapsburgs. In a word, he feared that the “Potemkinsche” appearance of this city acted as a mask hiding cultural corruption. It is ironic that Loos’s recognition of the Ringstrasse as a “billboard” city should lead Venturi to posit the billboard as the basis of an “ugly and ordinary” architecture. However, Loos was confronting the problem of the symbolic. His theoretical position was an attempt to neutralize the poison of “the flourishing cancerous language,” as Karl Kraus put it. “If I saunter along the Ring,” he noted, “I always think someone has been trying to make us believe Vienna is a city of nobility only.”⁸ In place of the false sign of the old capital Loos posited the sign *ohne Eigenschaft*—without quality.⁹

But in the physical and cultural context of the Japanese city of the early 1960s, it was obvious that the critical gesture of the architect had to be based on something more than the simple “abandonment” advocated by the Viennese master. For Shinohara, what was lost, and what therefore had to be recovered, was “the resonance of space.” For Shinohara as opposed to Loos “A house is a work of art.” Although thoroughly alien to the esoteric mannerism of Shirai, Shinohara’s effort also concentrated on creating a self-contained symbolism of space which was “artistic” and heterogeneous within the surrounding urban milieu.

While Shinohara seemed to have nothing to do with Shirai except a desire for non-consumable symbolic objects, the influence of Shirai was more apparent in the work of Isozaki who was a student of Shirai’s opponent, Tange. When Shirai’s Shinwa Bank of Saseho—which had already been directly derived from his Temple of Atomic Catastrophe—was completed (fig. 10), Isozaki wrote an article which focused on the manneristic tendency of the older master as was represented in his sophisticated juxtaposition of heterogeneous furniture. At the same time Isozaki pointed out the tradition of Japanese Sukiya style since Rikyu. He posited that he had found a modernized way of applying this “manner” of fragmentation (fig. 11).



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8 Isozaki's first realized building, Oita Medical Hall of 1962 (fig. 12), already revealed a resemblance to the Temple of Atomic Catastrophe as an isolated heterogeneous object. This was, as an article "The City-Demolisher Inc." an ambivalent manifestation of his toward the relationship between architecture and city. It really can be "read" both as continuous (as the fragment of the cluster city in the air as in Tange's work) and as discontinuous (as the gesture of rejection to be assimilated in the amorphous city as in Shirai's work).

The Death of the Symbolic: Two Masters of the 1970s

The breakdown of Modernism in the Osaka World's Fair seemed to mark the arrival of a new era. But was it really something new in the progressive sense, as was then assumed, or was it not only the appearance of an old problem which had hitherto been ignored? One possible reading is this: just as the technologically oriented rationality of Metabolism failed to achieve a true public realm, so the grandiose void of the festival plaza revealed the limitations of Tange's symbolism and the bankruptcy of his aspiration not only to be an architect but also a leader of the people. This symbolic decline marked not only the invalidity of the orthodox Modern Movement, but also the unavailability of the symbolic not only for Tange and the Metabolists but also for Shirai and Shinohara. During this period certain architects and critics hoped to find an "other way" in the works of Shirai and Shinohara, who were then masking the real problem through their strength of character; appearing like phantoms of the "demiurge" after the decline of the false Moses, Tange. Nothing in fact was left for the architect as manipulator of the symbolic realm (architecture as language) but to attempt to "speak into the void."¹⁰ However it was now evident that the symbolic had incorporated the void into itself. The attempt of the Modern Movement to overcome this final crisis in modern culture had failed. The celebrated last phrase of *Vers une architecture*—"architecture or revolution? Revolution can be avoided"—is revealing in this context for neither the revolution nor architecture had proved to be Messianic.

In this transitional period, the paths of Isozaki and Shi-

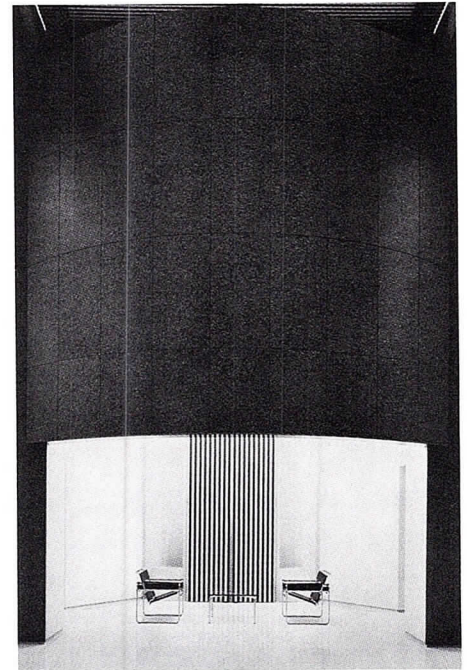
nohara, two young architects who were now themselves becoming masters, began to cross in a rather curious way. Isozaki's chief concern around 1970 was *The Dissolution of Architecture* (an echo of his earlier City-Demolisher Inc.), to quote the title of his book on international radicalism from Hans Hollein and Archigram to Superstudio and the Venturis. But as in the case of Loos's negation of architecture as art (although in a different way), the word "dissolution" for Isozaki was not supposed to be taken in a literal sense. For it was evident that Isozaki was himself an "art-oriented architect," and especially when compared to the attitude of his former teacher, Tange, the "society-oriented" architect. So it was natural for him to turn his interest from the "dissolution of architecture" to the former object of this act of dissolution, namely the architecture itself. And at the same time, "Arata's" former passion for urbanism finally was repudiated by the antagonism of the demolisher "Shin," but now from a completely different standpoint, because "a city is *not* an object of art."

This did not mean for a man of Isozaki's intelligence, to whom it was self-evident that art had already been "assassinated" many times in the course of modernist history, that the architect should relinquish his negative or ironic stance. To characterize his works after 1970 as "formalist" can, as he himself declared, be justified. But this term is in fact too vague to convey any precise sense of his position. There is, after all, little common ground among the "formalisms" of Mies van der Rohe, Eliel Saarinen, Kahn, and Isozaki. We can even pose the question, "Was not the functionalist style itself a kind of formalism?" In the case of Isozaki, his "formalism," as represented by his quasi-paranoiac use of geometry, is accompanied by his very particular concept of "manner." "Manner," as he uses the term, is, however, somewhat different from the original Italian concept of *maniera*. While *maniera* indicated a particularly personal mode of expression, as in "maniera di Michelangelo," Isozaki's "manner" was understood to be a transpersonal concept, something similar to the concept of "*autoécriture*" as developed by the Surrealists or to the idea of the "*procédé*" as developed by the French novelist and dramatist, Raymond Roussel, a precursor of the Surrealists and Dadaists. In this sense Isozaki's "for-

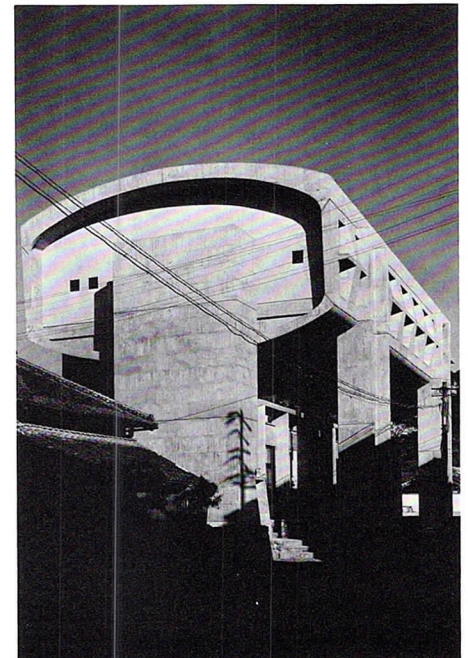
malism” is not intended to remain on the level of “form-giving.” Rather, for him, form is something not to be invented but to be manipulated, thus removing the architect from his previous form-giving function as demiurge.

It is clear that the crisis of architectural culture obliges self-conscious architects to reconcile themselves to a certain resignation. This resignation is also visible in the works of Shinohara. That his desire for symbolism had come into confrontation with the “impossibility of the symbolic” was already evident around 1970. However far removed Shinohara’s symbolism remained from the technological language of the Metabolists, he could not in the end be saved from this absence of ultimate signification. The more ardently he wished to create a symbolic space “full of resonance,” the more tragic his architecture turned out to be. His statement “because I have taken a long time pondering meaningful space, there has appeared within me a ‘meaningless’ meaningful space”¹¹ clearly indicates the next step for this tragic architect—to extinguish the trace of what he once so ardently wished to create. “These days I even wish I could dispense with the expression ‘space’,”¹² he concluded.

At the same time as Isozaki rejected the city as his subject for the sake of art, Shinohara, whose architectural concern had been confined to residences “as art,” began to refer more and more to the city. But this “city” could no longer be the object of design in the way that Tange and the Metabolists or even recent European “rationalists” believed it to be. “The city I have in mind,” stated Shinohara, “is a city with an attentive, caring [regard].”¹³ However, Shinohara like Jacques Derrida was certainly not sanguine about the possibility of “*parole pleine*.” Thus the next step for the architect was evident: to live in alienation—denying any hope for architecture to cure this alienation, because this would already be beyond the capacity of architecture. Toyo Itoh, for whom Shinohara’s influence was decisive, summed this up precisely: “The world around us turned out to be barren and uncertain, a world in which the city can no more provide an oasis. What Shinohara wishes to express now changes from the oasis to this devastation of the desert.”¹⁴ Architects were now

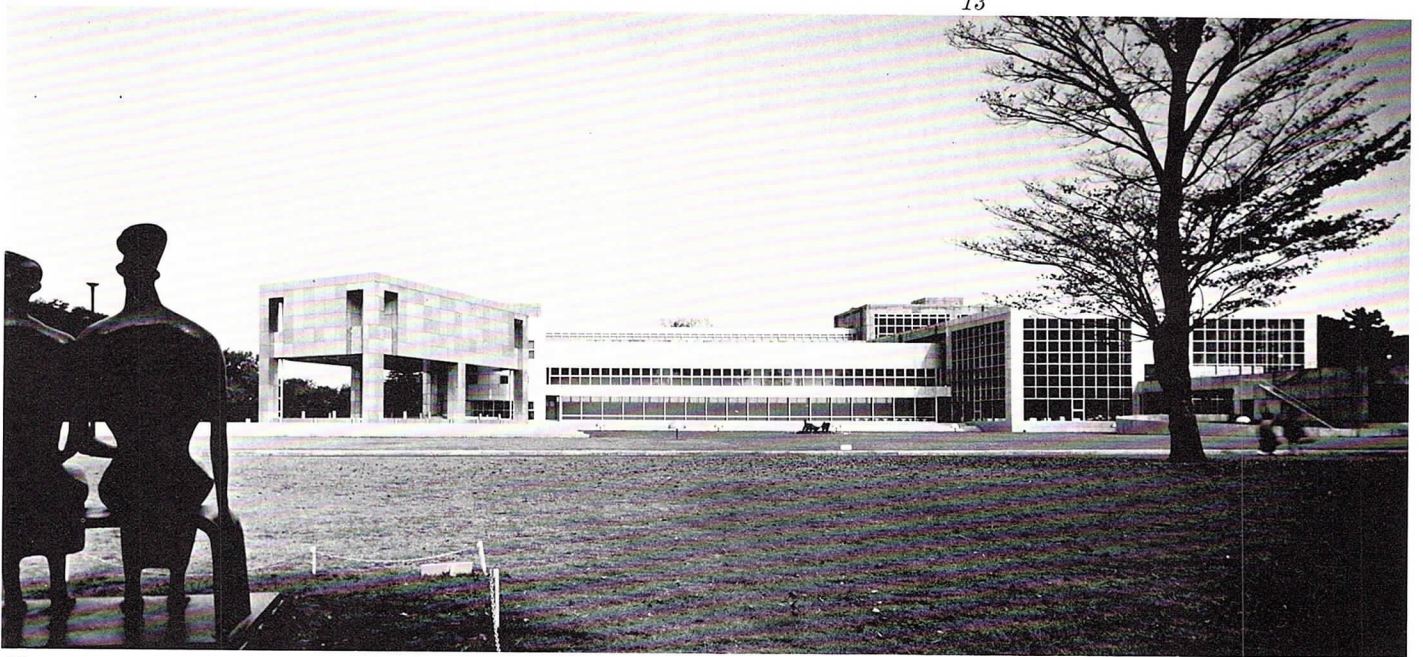


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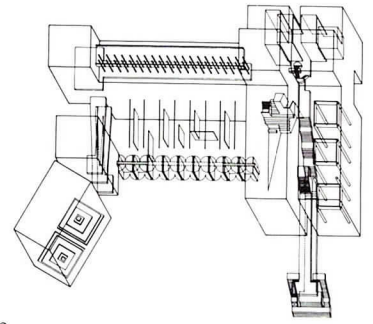
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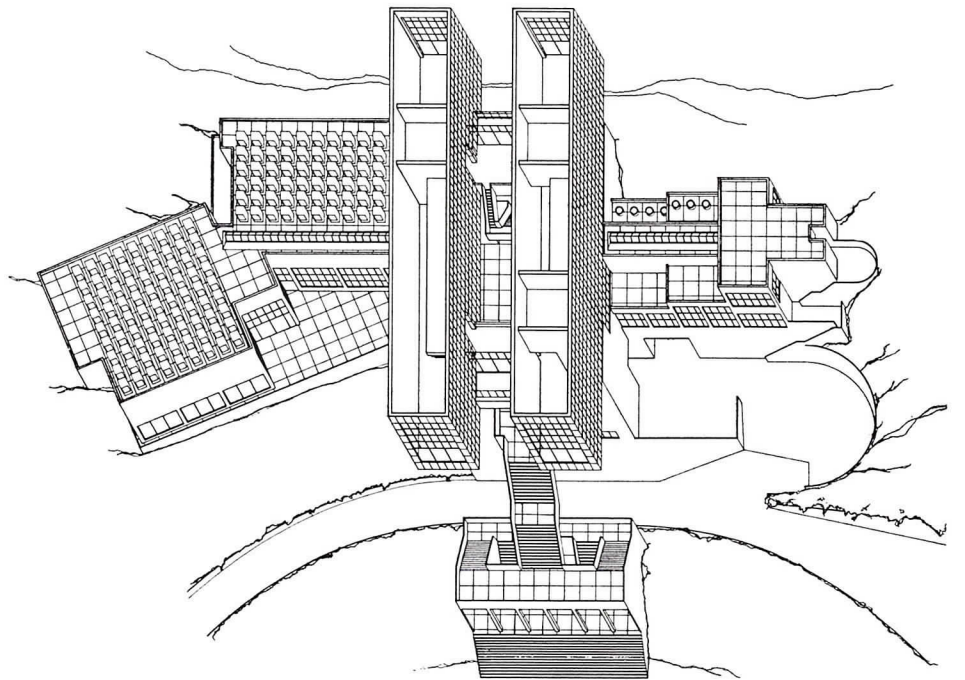


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13 *Gunma Prefectural Museum of Fine Arts*. Arata Isozaki, 1974.

Schematic drawing.

14 *Gunma Prefectural Museum of Fine Arts*. View from the south.

15 *Kitakyushu City Museum of Art*. Arata Isozaki, 1975. Axonometric.

obliged to live and still to “create” symbolic objects under circumstances in which true symbols had become impossible—in other words, dead.

Among the works of Isozaki, two museums of fine arts provide the most appropriate examples for our discussion. It is the city, again, that we must take as the point of reference, in spite of the architect’s self-proclaimed indifference to it. It might seem odd enough to discuss the city in relation to these buildings, because neither of them is in fact situated in an urban context but in a suburban natural setting. Yet an understanding of the basic significance of these works is not possible without reference to the relationship of architecture to the city, a relationship which is conceptually—if not physically—embedded in them.

The chief concept of the Gunma Museum (fig. 14) was, according to the architect himself, the museum as a void: “Today,” wrote Isozaki, “the Museum is no more than a temporary anchorage for the artistic objects which circulate in the world.”¹⁵ This notion of the lack of a fixed place for the art object clearly reflects his attitude not only toward the artistic scene but also toward the world itself. For him, nothing is certain. Even in his urban-oriented period (1964) he proposed the striking idea of the “invisible city” in which he suggested that in the future the only task of the urban designer would be to manipulate the ever-changing semantic aspects of the city, thus making the physical structure of secondary significance, that is, conceptually invisible. Ten years later, the architect, who had already lost interest in the city, again suggested that “an architecture for artistic objects that are chosen and arranged each time for exhibitions does not require a definite iconic quality of its own.”¹⁶

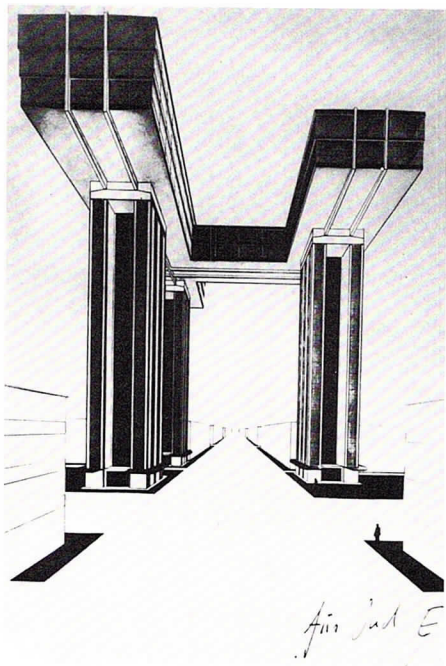
Mere enclosure or the frame now becomes appropriate in itself. As Isozaki writes: “So there we have a series of platonic cubes made out of silver aluminum panels lying on the grass. . . . The cubic frames which hold the inner space would themselves furnish the metaphor for the museum.”¹⁷ Isozaki further insisted that such frames were too familiar and neutral to evoke any specific image, and

that a division of the surface into squares would make this intentional neutralization of the architecture more effective. So for all intents and purposes we are presented with an “invisible” architecture—but is this really the case? The most interesting and appropriate answer is both yes and no. Certainly it is so on the level of architecture considered as an autonomous entity, because the grid system (both two- and three-dimensional) acts as a neutral setting into which various heterogeneous sub-elements may be inserted. Isozaki writes, “In Gunma additional elements have become part of the system as a supplemental structure. They are foreign elements that break up the order established by the cubic frame and create such effects as contrast and layering” (fig. 13).¹⁸ In short, the neutral grid acts as a mechanism for the effective signification of these elements which, in their turn, become a part of the artistic object itself. Nevertheless, on the supra-architectural level, that of the relationship between the architecture and its surroundings, the cubes also act as “defamiliarized” elements. The appearance of this museum is never as neutral or as “invisible” as the architect claims it to be. On the contrary, it is inserted into the natural setting to form a striking contrast, even as the inner sub-elements are inserted into the “abstract” grid system.

One might go further and posit that this seemingly serene but paranoiacally conceived order has the contemporary urban milieu as its ultimate target (if not by direct intention, then certainly by implication). The duality of the cube both as a heterogeneous and a homogeneous element clearly reflects the duality inherent in the form of modern cities (especially those of Japan), which are both complex (heterogeneous) and uniform (homogeneous). Perhaps we might be justified in claiming that, in this way, the “invisible” (and at the same time highly conspicuous) structure can be taken as a paradoxically inverted contextual model for the architecture of the city. And thus Isozaki’s lack of interest in the city can also be read as an inverted criticism of the city.

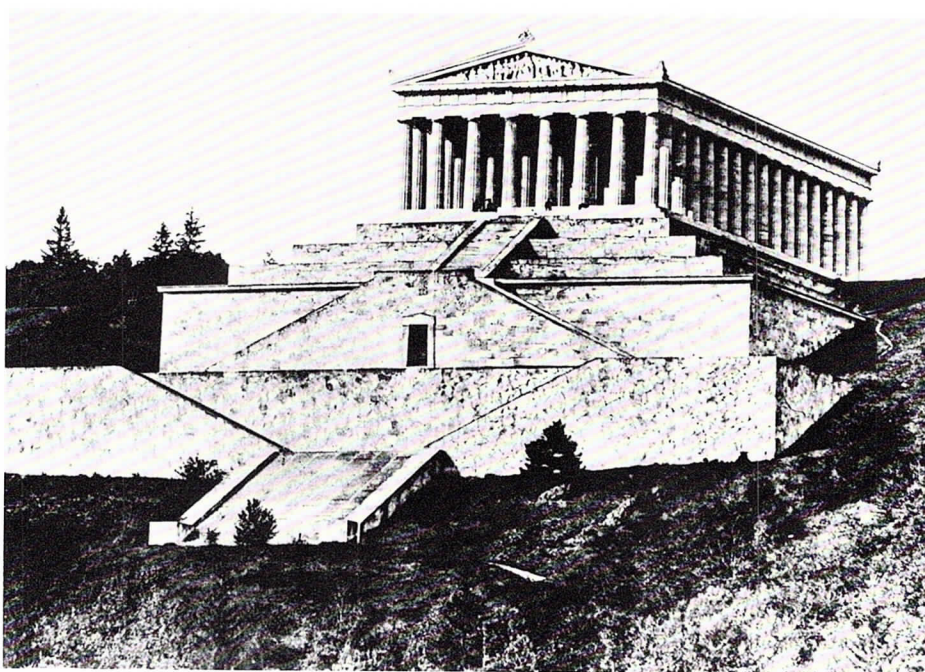
Such conspicuous and potent monumentality, hidden behind its supposedly “invisible” mask, becomes decisively

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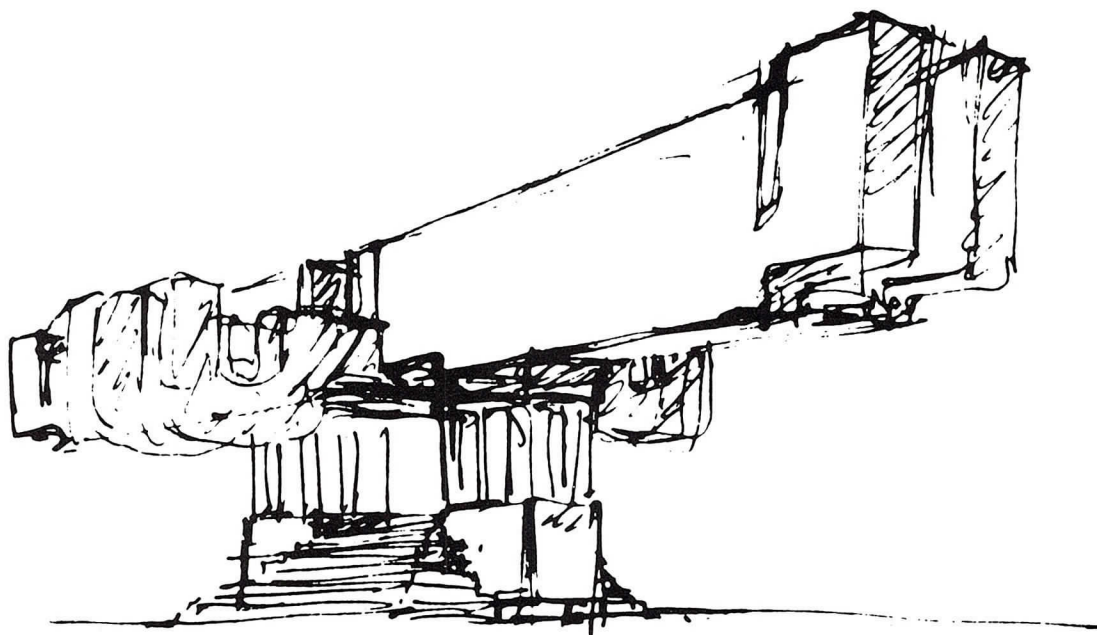


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16 *Wolkenbügel* project for a skyscraper office block, Moscow. El Lissitzky, 1924.
17 *Walhalla*, near Regensburg. Leo von Klenze, 1816–1842.
18 *Monument for Urban Communication*. Hans Hollein, 1961–1963.



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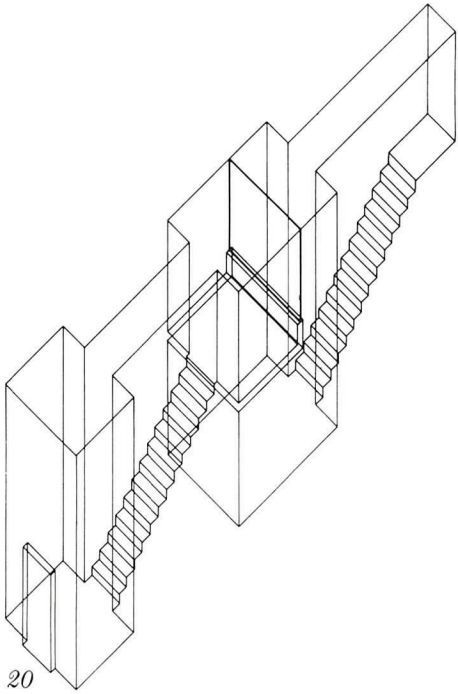
present in Isozaki's museum for Kitakyushu (fig. 15). Here we witness a combination of two motifs which are already familiar to us, that of a tube in the air (a motif which had appeared already in his earliest works, such as the Oita Medical Hall and Library for the same city) and, once again, the grid and square. Among those of Isozaki's works which employ the "flying tube," this is without any doubt the most overwhelming and monumental. Although it is clear that the setting for this building (the top of a hill which is part of a park) was decisive in the formation of this cannon-like shape raised in the air, it is perhaps more interesting to see the target of these huge cannons: the amorphous suburban settlements dispersed at the foot of the hill. In this modernized temple—recalling the Greek temple form of Leo von Klenze's Walhalla (fig. 17)—we cannot overlook the hostility of the architecture toward the existing urban settlement. Should this be interpreted as the arrogant and pseudo-heroic gesture along the lines of Venturi's familiar ridicule? Definitely not. Rather, one should see this project as the embodiment of a tragic architecture in which the architect is obliged to act as anything but a hero. Here we might contrast the museum with two works from the history of architecture which Isozaki himself listed as sources: the Wolkenbügel project of El Lissitzky (fig. 16) and the Monument for Urban Communication of Hans Hollein (fig. 18). Such a comparison reveals the uselessness of a superficial (or *Gestalt*) analysis for understanding the nature of the architectural discourse. While these three architectural objects have a striking likeness to each other, their rationales are in striking contrast: Lissitzky speaks of the abolition of an "outdated" and "bourgeois" concept of art, the liberation of the labor class from the old system of representation, and of the emergence of the architect as a new master builder, a new teacher of the alphabet; while Isozaki speaks of the predominance of the square, emphasizes the flying tubes, and insists on a classic symmetrical composition. In the Kitakyushu museum, there is no echo of Lissitzky's call for an "Architecture of World Revolution." The second reference, to the work of Hollein, Isozaki's close friend, is more suggestive. It is the sense of "death" that, according to Isozaki, makes the work of this Viennese architect so exciting; a destructive instinct as-

sociated with the memory of the Nazis. There is a connection between these "monumental" affinities and Isozaki's concern for Speer which was already apparent in his project for the Festival Plaza in the World's Fair of 1970, which he called an "invisible monument" inspired by the famous light show of the German architect. However, this observation (together with a labeling of Aldo Rossi's works as "fascist") turns out to be entirely superficial because it neglects the fact that these works, unlike Nazi propaganda monuments, have no real object to celebrate. Isozaki is no Speer because he has no Hitler. What is celebrated here is no more than the "form" as an autonomous "signifier." Isozaki was fully conscious of this paradox when he argued, "With the loss of the meaning of celebration the monument turns out to be an altar to this loss."¹⁹ Here we are confronted with one of the best examples of that "*architecture dans le boudoir*" described by Manfredo Tafuri.

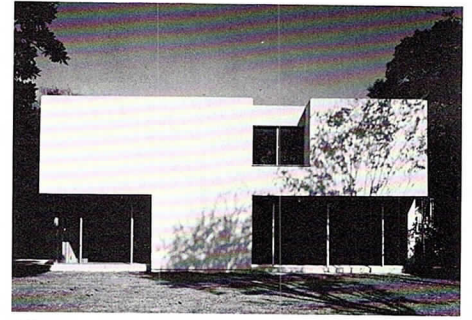
Indeed Tafuri speaks of the work of Aldo Rossi in terms that are perfectly applicable to the works of Isozaki and Shinohara: "The result that Rossi approaches is that of demonstrating, without any chance of further appeal, that by his removal of form from the domain of daily experience, he is continually forced to circumnavigate the central point from which communication springs forth, yet is unable to draw from the source itself."²⁰ Both Isozaki and Shinohara are conscious of the "loss of center" as reformulated by Tafuri. It is Shinohara, more than any other contemporary Japanese architect, who exemplifies this condition described by Tafuri, a condition that arises "not because of any inability of the architect, but rather because this 'center' has been historically destroyed."²¹

Around 1970, Shinohara's work changed from his earlier style, which was grounded in a modernized symbolism relating to the traditional typology of the Japanese townhouse, to one which was more abstract (fig. 19). The pitched roofs disappeared and cubic structures emerged which still maintained a Japanese character. (Note the difference between his residence of 1971 entitled "Cubic Forest" [see fig. 19] and Le Corbusier's residential works of the 1930s.) This stylistic change corresponded to a

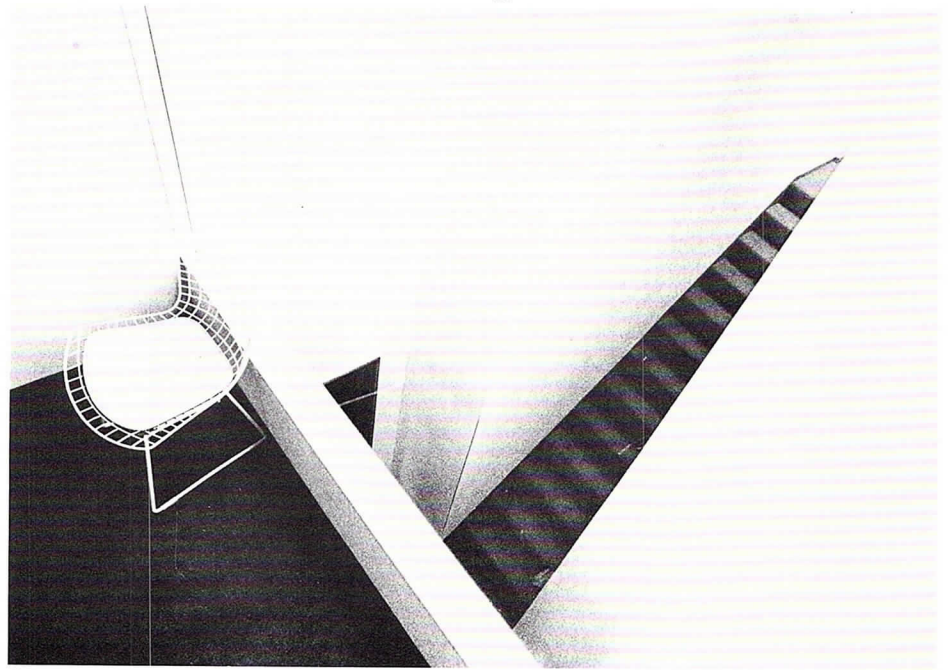
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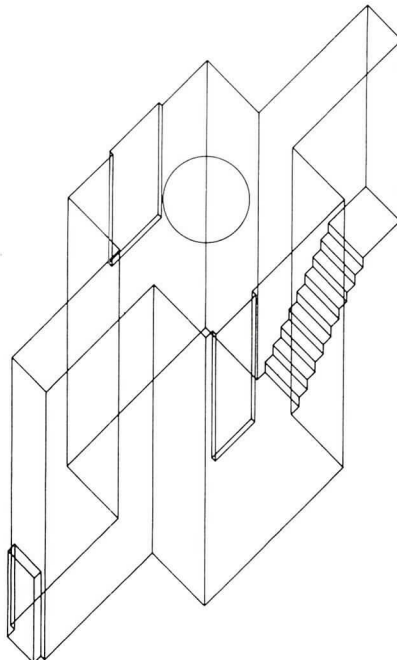
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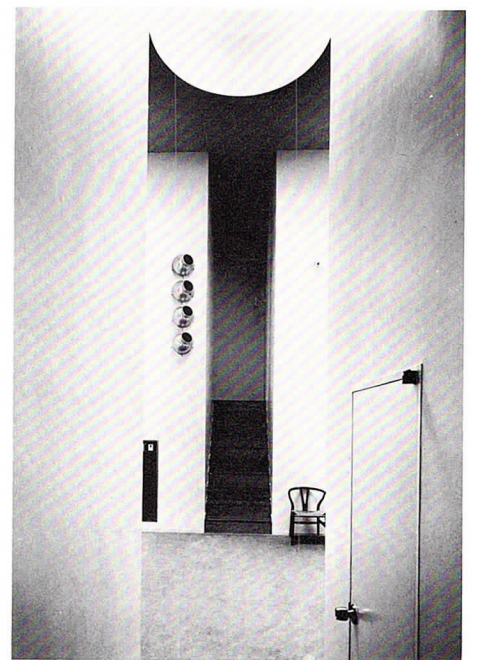
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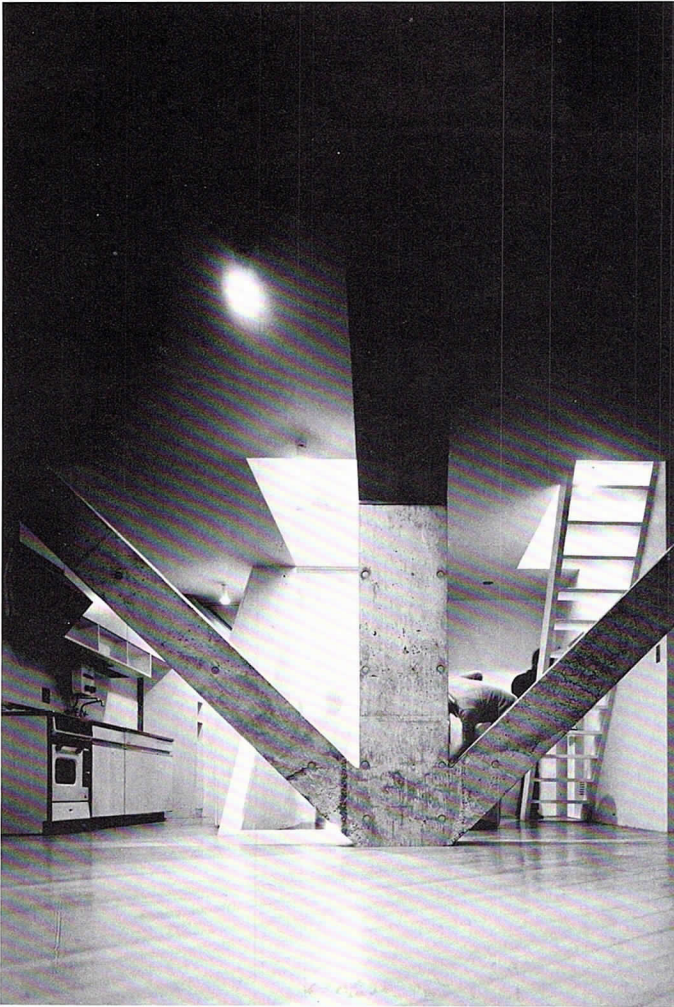
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 19 Cubic Forest house. Kazuo
 Shinohara, 1971.

20 Repeating Crevice house. Kazuo
 Shinohara, 1971. Axonometric.

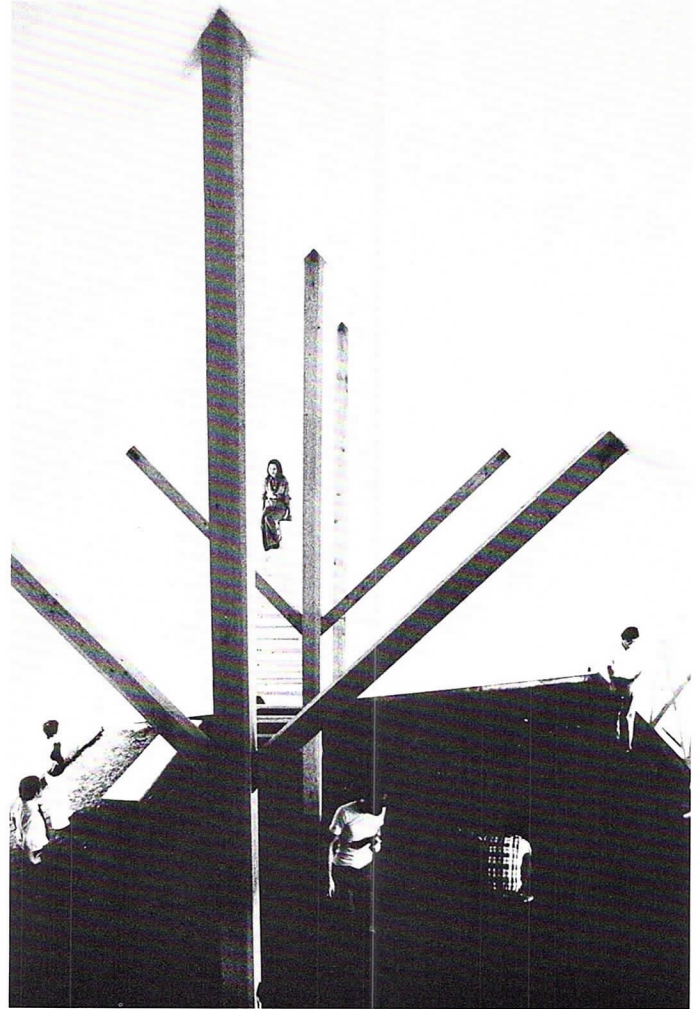
21 Repeating Crevice house. Kazuo
 Shinohara, 1971. Interior.

22 Uncompleted House. Kazuo
 Shinohara, 1970. Axonometric.

23 Uncompleted House. Kazuo
 Shinohara, 1970. Interior.

24 House in Uehara. Kazuo
 Shinohara, 1975. Interior.

25 Tanikawa Residence. Kazuo
 Shinohara, 1974.



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16 change of subject, as demonstrated in his writings of this period. He began to propose the “elimination of the meaning of space” or, in other words, a theory of “neutralized space.” However, when compared to his later work this “new” space, although reductive in the sense of not directly referring to the traditional concept of humanist space, was never entirely deprived of meaning or neutral in its connotations. As in the case of the homogeneous grid and the cubic sequences in Isozaki’s museum, this “neutrality” was no more than a rhetorical device designed to intensify its message. But what kind of message, and for what? In this context it is essential to note that this stylistic change in Shinohara’s work was closely related to a revision of his interest in the city.

In this period he was preoccupied with the idea expressed in an often-repeated key word—fissure—as represented in such poetic aphorisms as “it is a fissure-space that deals a direct blow to the whole of the given cubic body.”²² This “fissure” appeared in an extraordinary way in the “center” of his residences, as in the Uncompleted House of 1970 (figs. 22, 23), the Shino residence of 1970, and in Repeating Crevice of 1971 (figs. 20, 21). He named these central spaces or fissures “streets” in order to express a “sense of waiting for passers-by who appear out of nowhere.” The reductive sign of the city suddenly intruded into these cubic houses. The effect of this “direct blow” was made more intense by refusing to make any external gesture of the exterior toward the outer world. Again, as with Isozaki, we have a paradoxical model of the city represented in an autonomous building. We might be justified in comparing this highly theatrical setting to the symbolism of traditional Japanese stage performances like the Noh or Kabuki in which the concept of Michiyuki (or symbolic representation of actors in the street) plays so important a role; but Shinohara referred more specifically to the concept of the director Peter Brook: “An empty space, anywhere—this I will call a naked stage. A man walks through this space. Another man sees it. It is enough to make a dramatic action possible,”²³ wrote the British theatrical director. For the Japanese architect, this was enough to make an architectural action (in the city) possible.

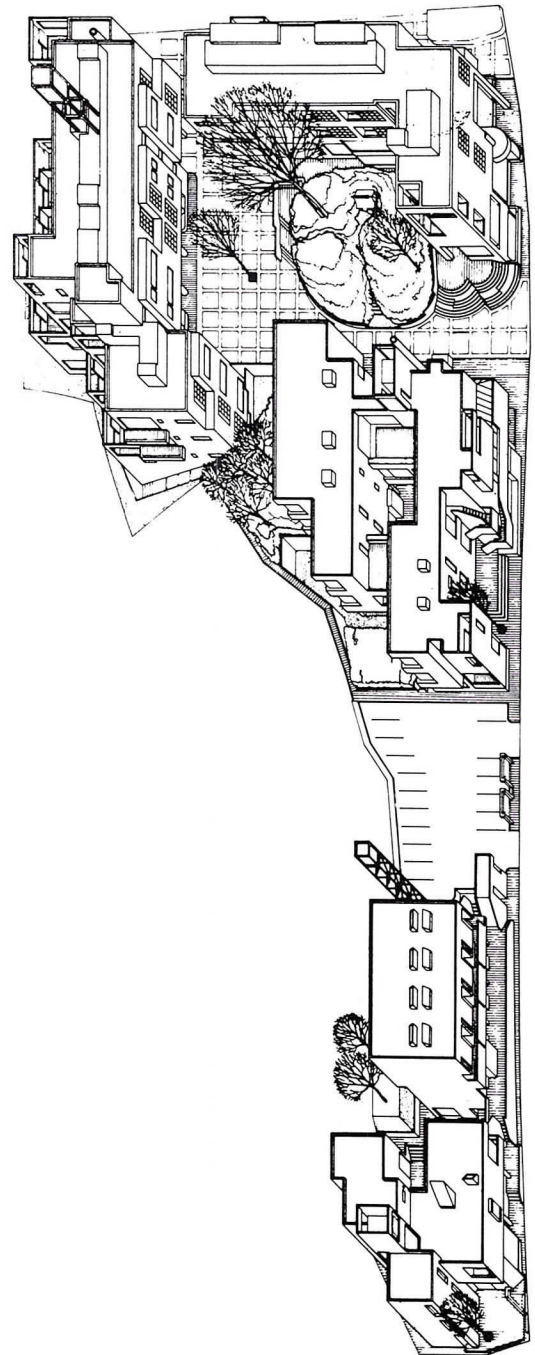
But what kind of action? Action for the sake of “art”—a device to attract the eye? Definitely not. In fact, these are not transcendental spaces completely “removed from the domain of daily experience.” Again Toyo Itoh affords us a precise description of these devices: “The word ‘fissure’, despite the architect’s intention of ‘eliminating meaning’, rings in deafening tones in the minds of people living in the devastating inquietude of the city.” And: “Thus it becomes the space which paradoxically symbolizes an absence of the ‘symbolic’ in the city.”²⁴ However, even within this limited stage, the architect continues to act as a “demiurge” who precedes and controls an unusual universe of signs relating to an anti-daily life. His desperate gesture is still directed toward an outer world full of agony and antagonism, his belief in his own ability to control these signs being a last stand in a process of contestation. However, the final tragedy was yet to come.

The house in Uehara of 1975 (fig. 24) suddenly announces a second and decisive turning point; one which was nevertheless foreshadowed by the Prism House and the Tanikawa residence (fig. 25), built one year before. This time the “fissure” is brought into the space. It is no longer a “fissure space” but rather a “fissured space” or, strictly speaking, a spatiality already destroyed by the violent intrusion of exposed structures, which the architect called a “jungle.” Shinohara explained, “It was just an off-the-cuff analogy that I made, but it was about this time that the term and concept of ‘savagery’ took shape in my mind.”²⁵ The concept of “savagery” has two sources for him, both acting only as suggestive limits. One came from the impression left by his travels in Africa—the scenes of the street in African cities—his memory furnishing him with an intense and temporary impression as shimmering as the air itself.

This personal memory was then connected to a second source, the description of the savage mind in Claude Lévi-Strauss: “The cause of savage thinking is a will to symbolization experienced as the most vehement passion man has ever known, and, at the same time, the utmost attentiveness directed to the phenomenon of concreteness.”²⁶ However, we need not interpret Shinohara’s metaphoric

use of the term as depending literally on the more general concept of the French anthropologist, because for Shinohara “savagery” is that which casts a new light on the “symbolization” and “attentiveness” for which he had been so ardently longing. The word “savagery” was chosen by the architect not because of its validity in a general cultural discussion, but because of its violent connotation and its appropriateness as an adjective describing this “jungle” or “unrefined scene,” “a sort of anarchy,” as he called it himself. This anarchy rejects the intent of the architect to dominate the universe of signs, even down to the details. Compared with the barrel vaults of Isozaki, which were chosen for their historical associations and geometrical perfection—in other words, for their status as sophisticated artistic devices—the barrel vault which also crowns the cubic body of the small house in Uehara (added because of a change in the program) is a bricolaged element (to refer to another concept of Lévi-Strauss), thereby bearing witness to anarchy in the universe of signs. Here, we see only naked signs without any precise meaning or any trace of the omnipotent manipulator. Through “savagery,” the architect has finally exiled himself from his role as “demiurge.” What is left is nothing but an anonymous, violent, and unquenchable thirst for the symbolic. Such a scene of devastation can only have been generated in the cities, which were the settings of a cultural crisis never to be resolved.

These “tragic views of architecture” by the “unhappy avant-gardes” are surely not shared by the majority of Japanese architects. These, like architects in other countries, still believe in the possibility of achieving architecture. We need not devote general space to this phenomenon. However, one instance is worth some discussion, namely the work of a third master, Fumihiko Maki. Maki’s Daikanyama hillside terraces (fig. 26), built in three stages over more than a decade, provide us a good example of positive architecture. For supporters of this complex, it affords a convincing street scene, with sophisticated articulation and a human scale avoiding the monotony of dogmatic Modernism. Surely we have no reason to oppose this exercise in *bon gout* after the manner of Josep Lluís Sert, who was Maki’s tutor at Harvard. It is clear that



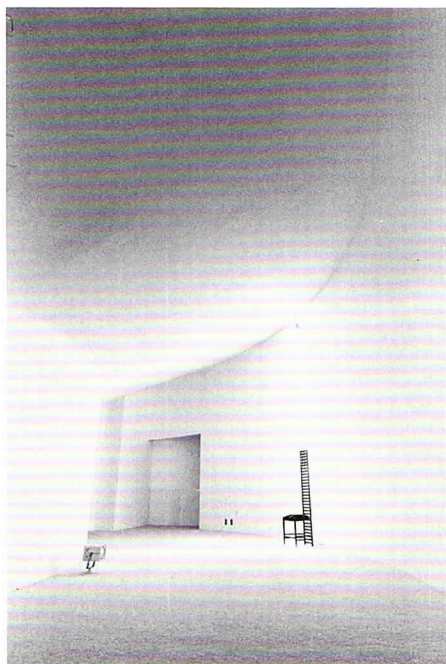
27 *House in Nakano. Toyo Itoh, 1976. Interior.*

28 *PMT Building, Nagoya. Toyo Itoh, 1978.*

29 *House in Chuorinkan. Toyo Itoh, 1980.*

30 *House in Chuorinkan. Toyo Itoh, 1980. Early scheme.*

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the rejective or violent reactions of say Isozaki or Shinohara cannot be the only way of responding to urban “context” and Maki’s serene “contextualism” can be justified to a degree. Most of the Japanese architects are optimistic enough to believe in the general applicability of this principle of good taste. They admit to the aesthetic of the upper-middle class which is after all a certain form of ideology or myth as Roland Barthes so brilliantly showed, ignoring the fact that not everyone can be upper-middle class. It is symptomatic that in this complex the strangest deviation from the “humanist” line occurs in the cut-out corner and the sensual curve revealed against the rigid frame. This hypothetically felicitous relationship between what speaks and what is spoken is the essence of Humanism. Because, here, what speaks is nothing else than form itself. Humanity is excluded from this autonomy of the form, betraying the intention of the architect. This anti-monument proves that even humanistic intention cannot be saved from the death of the symbolic.

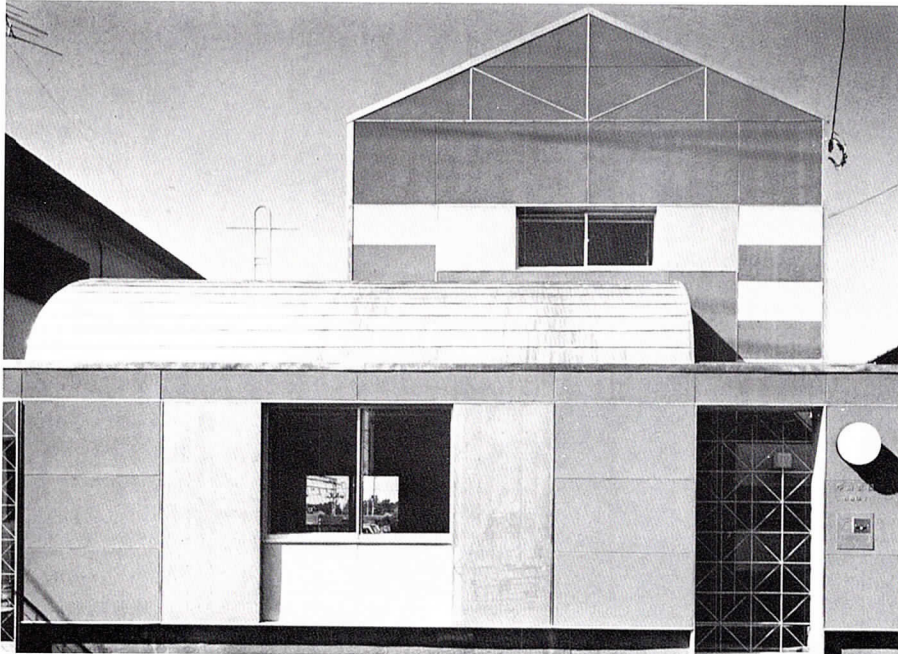
Architects at a Masked Ball

Every argument on “Post-Modernism” is nothing but superfluous, because for all of the liberating tone, supposedly due to the end of Modernism—even if we could safely assume this—does not assure liberation in itself. It denotes instead a failure of the action of liberation, thus leaving the object of this act untouched. Therefore condemning Modernism without proposing a radically new approach—which seems to be almost impossible at present—does not make any substantial sense. The fact is the crisis from which the heroic avant-gardes tried to salvage the Western culture still remains. However, it is not only Western culture which suffers from this profound crisis. Japanese architects were also to lose their true objects when the World’s Fair of 1970 proved the bankruptcy of the illusion of miraculous prosperity.

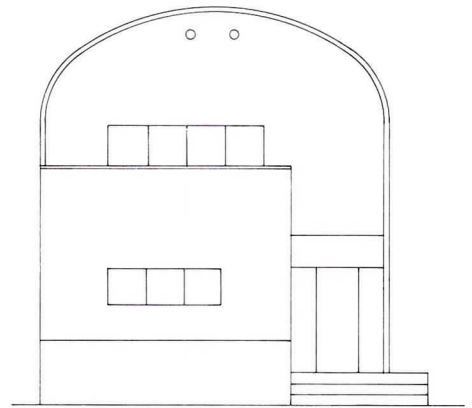
However, immediately after the World’s Fair which had celebrated the utopia of Metabolism, the crisis for most architects was only outside themselves. Such works as the Exploding House of Hayashi, the Blue-Box of Miyawaki, Azuma’s own house or the Face House of Yamashita (architects who belonged to the generation fol-



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20 lowing Isozaki and Shinohara) represented gestures contesting the outer world. These singular shapes were generated by the desire of the architects to establish their identity in the city “without quality.” However, in spite of their antagonism to the city, they were rather optimistic in believing that there remained a non-collective possibility for the “*parole pleine*.” Symptomatically these architects grew to be more conservative and professionally oriented during the 1970s and it was the next generation of architects who embraced the essentially “tragic” view of the architecture of the two above mentioned masters.

It might be too much to say that architects of the generation “after the orgy” have a truly “tragic” view. Precisely speaking, the “tragedy” is not necessarily in their beliefs but rather in the semantic universe which surrounds them. Their personal views are already of secondary significance. Their architecture seems destined to repeat the final scene of the ball of the Modern Movement, but this time with masks. The architects are no more than dancers in this ball, and their views—whether optimistic or pessimistic—are simply masks or mirrors to reflect reality in various ways (but without making any substantial change). This scene does not mark the beginning of any new phase, but just the phantasmagoria of a final stage in the development of a certain language—“modern architecture.” And our task is nothing but to describe the strange distortions occurring within the universe of logic during this last phase.

“[Literature], having attained the state of maturity which enables it to manifest itself as a system and no longer merely as a mirror, confronts its function through the word; the mechanism of this function, once alluded to, obliges it to deal with what is not a problem inherent to its mission, but one which inevitably concerns the receiver (the reader-the listener), the problem of that indispensable mask it assumes in order to construct itself in relation to this mask: verisimilitude.”²⁷ Thus writes Julia Kristeva, referring (again) to Raymond Roussel. In this passage we find a means of analyzing an architectural language “having attained the state of maturity.” Now it is *parole* itself which speaks. The speaker is a transparent

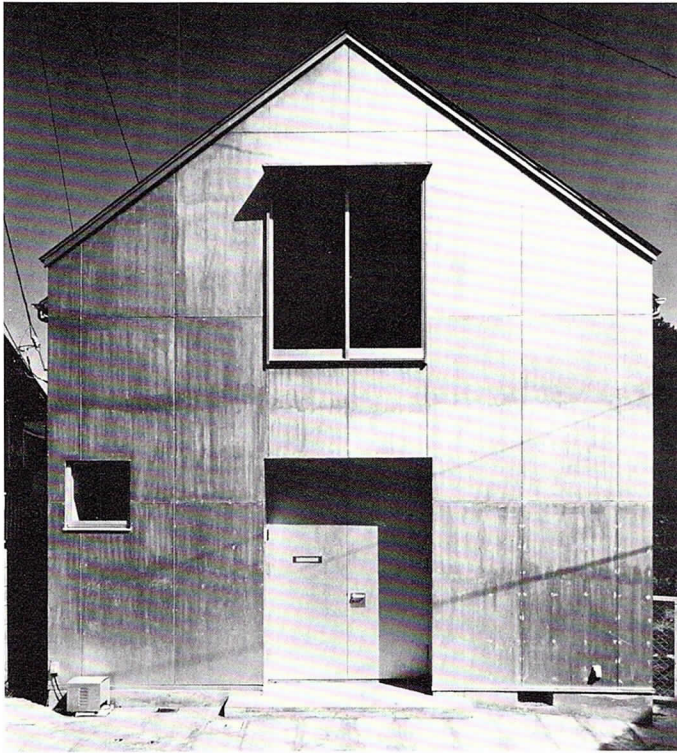
organism, not even the subject called an “author.” It is not only the readers but also the authors who require the mask of “verisimilitude.” The ambiguity which relates the “mask” and the “verisimilitude” marks “a strange distortion in the universe of logic,” and is best illustrated by the work of two young architects, Toyo Itoh and Kazunari Sakamoto.

Itoh is often criticized for lacking an apparent style or *écriture* of his own. Two examples are sufficient to show this: the PMT Building in Nagoya of 1978 (fig. 28) and the house in Nakano of 1976 (fig. 27). The influence of Isozaki (in PMT) and of Shinohara (in Nakano) is clear. At the same time, it is not difficult to find traces of influence from many other precedents (such as Le Corbusier, Loos, Mackintosh, Venturi, and Hiroshi Hara). Of course, by the same token, it is not difficult to identify departures from these influences and a uniqueness of sensibility in both the PMT and the house in Nakano. Both designs are far more “sensitive”—as Kenneth Frampton puts it—than the works of the two masters, and the violence latent in them has now been modified for the sake of lyricism. However, these considerations—whether positive or negative—have only a secondary importance. The more essential question for us is whether any truly personal style is possible in this world which has lost its center. Isozaki himself rejected any idea of personal style in his theory of *maniera*. Since Mallarmé, the idea of the “death of the author” has been familiar in the history of twentieth-century art. In fact, as Roland Barthes notes: “To write is, through a prerequisite impersonality . . . to reach that point where only language acts, ‘performs’, and not ‘me’.” Mallarmé’s entire poetics consists in suppressing the author in the interests of writing.”²⁸ Itoh’s work included in the exhibition “A New Wave of Japanese Architecture” which toured the United States is suggestive in this context—his panels presenting the image of the PMT Building—the building as a mask—reflected in a mirror. The role of the mirror is simply to reflect; no personal identity can be acquired from it, nor—even more decisively—from a “mask.” Aside from a faint echo of narcissism, the PMT building “manifests itself as a system,” is a “superfluous” building. As Itoh himself says, it is too feeble to permit

the dominance of the strong intention of the “author.” Nor is it powerful enough to be a *parole pleine*. Here, a comparison to Adolf Loos, enemy of the superficial and masked architecture of Potemkin city, is instructive. Should we look at the PMT building with its Viennese windows as testifying to the historical invalidity of Loos’s polemic, in a word, to the end of moralism in the Modern Movement in architecture? Definitely not. While the masked architecture of the Viennese Ring concealed “contrivance,” dressed up in “cancerous language,” Itoh’s building conceals nothing behind it. The thin facade just stands independently between outside and inside without expressing any positivity. On the basis of this comparison we may identify four types of loss of identity (or quality). The first is the false architecture of fin-de-siècle Vienna. The second is its counterpart, the “abandoned” architecture of Loos which is nothing more than “reservation (*non-différence*) as sign of distinction (*différence*),” as Hubert Damisch appropriately characterized it.²⁹ The third is the “superfluous thin facade” inserted in the Japanese contemporary city. And the fourth is the quality-less objects of this insertion. Itoh states, “The incessant change and rapid development through which Japanese cities have passed have favored lightness, superficiality, and disorder.”³⁰ However, his architecture, floating in this amorphous semantic universe, refuses assimilation. Representing no distinctive intention, it is clearly defamiliarized from its surroundings. As in the case of Loos’s “contextualism” in Vienna, this mechanism of “defamiliarization” is more complex than Victor Shklovsky conceived it to be, and it is difficult to tell whether Itoh’s “superficial facadism” is more than a simple transgression of the lesson of the Viennese master. If Itoh intended to eject the Loosian position this is certainly not evident from the initial appearance of his work, and in this context it is interesting to note that it is Itoh, the architect “without qualities,” who turned to borrow the “hard-boiled” forms of Loos for his first project for the Chuorinkan house of 1980 (figs. 29, 30). Only one thing is certain—while Loos tried to speak “into the void,” the thin mask of the PMT building is already an architectonic void in itself, speaking “into nowhere.”

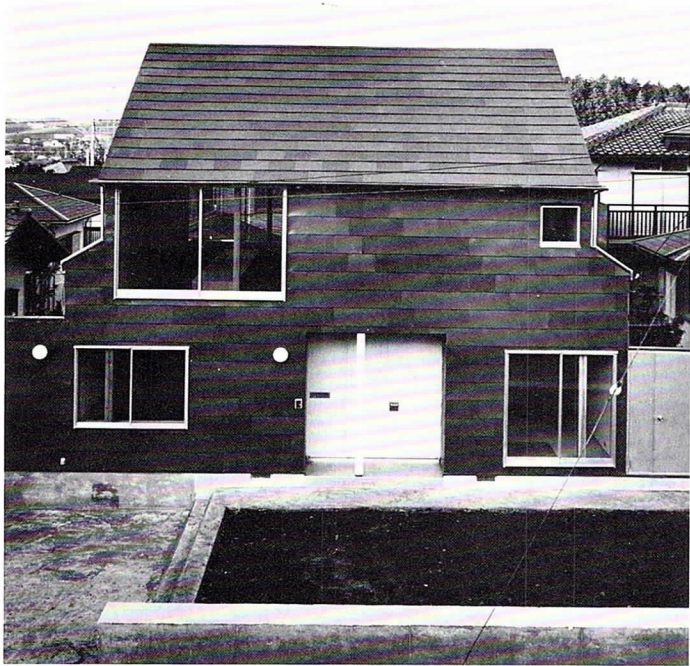
While Itoh’s intention of superficiality is undoubtedly a paradoxically critical gesture toward the urban desert of Japan, it is also certain that other approaches can be taken with regard to the iconography of the city. The works of Kazunari Sakamoto, a former student of Shinohara, are especially of interest because of their ambivalence which is a typical phenomenon in our distorted universe of signs. His works are such at first glance that they may be easily taken as simply realistic and not as conceptual at all. In fact, his works, almost all of which are low-cost residences, have ordinary house-like forms (figs. 31–33) and seemingly have nothing to do with any novel conception about architecture. It was Peter Eisenman who condemned Post-Modernism’s preference for “the classical imagery of ‘houseness’ (the concept that Gaston Bachelard identified with a particular coalescence of form about a central hearth or focus, under a pitched or gabled but always enclosing roof).” This image “has remained essentially unchanged” because it does not “suggest that any cultural or institutional change animates it”; the result, Eisenman continues, “turns out to be no more than decorative, literal, or nostalgic appliqué.”³¹ Taking into account the fact that Eisenman is the architect who is commonly considered today to be among the most conceptual, the above observation might seem almost self-evident. However, this is also the consequence of a too literal understanding, which, as we have seen before, is a frequent occurrence in this cultural crisis. It is rather ironic, in this context, that it was Sakamoto who, like Shinohara (but in an opposite sense), advocated the concept of the “elimination of meanings” which today is looked upon as the conceptual monopoly of Eisenman himself.

It is evident that each formulated this concept (or at least its terms) independently. Our concern, of course, lies in the meaning of the concept rather than a trivial discussion about the priority of its formulation. For despite the apparent difference in their positions, the objects of their “elimination of meaning” have more than a little to do with each other. Both Eisenman and Sakamoto are involved in the creation of an autonomous architecture and both display a repugnance for the polluted universe of daily language. Sakamoto summarizes his work of “elim-



ination” as an effort to arrive at a “degree zero” in house-form. He agrees that architecture is captured in the layering of meaning or multi-meaning, as Charles Jencks would argue, thereby making its own essence all the more ambiguous. Thus he tries to evade every type of discussion which is not peculiar to architecture. For him, architecture should not be a symbol of anything else, but rather a symbol of architecture itself. Thus begins his “search for house form,” which does not speak about anything but itself. His reductive working process, an act of ridding the work of all “appliqué,” which he calls an “infinite chain of connotation,” is explained by his intention to get to the last residue which can be called “architectureness.” While Eisenman attempts to follow the radical twentieth-century avant-gardes in his effort to achieve the degree zero of form—the absolute language (the trans-rationality of Alexei Krchonuiev and Victor Khlebnikov, the phonetic poem of Hugo Ball, the non-objective painting of Kasimir Malevich, the Neo-Plasticism of Piet Mondrian, El Lissitzky’s Prouns, etc.)—Sakamoto dares to reconstitute the lost norm of architecture, which is associated with the Enlightenment theory of the primitive hut. What is too much a *a priori* to be an essential subject for Eisenman is not *a priori* enough for Sakamoto. These are two opposite types of autonomous architecture. Both of them ultimately belong to a utopia of *écriture*, of architectural form. It is strange (and thus most interesting) to see that Sakamoto’s “ordinary” architecture is a utopian device on the conceptual level. This “ideal” architecture seems to exist anywhere, but in reality it exists nowhere, just as Marc Antoine Laugier’s House of the Noble Savage (possibly Adam?) exists only in Paradise. When we hear Sakamoto say, “I will have to do away with the subject, the word, and finally even the concept itself,”³² we are witnessing the act of an architect who is going to exile even himself. His words sound similar to those of Wittgenstein, who intended to exile “what cannot be told” from the realm of his philosophy. However, in any case, if the ultimate object of this reductive work exists only in a conceptual utopia, then how should we interpret these houses produced in actuality by the architect? As unfinished fragments of utopia? The only possible answer is, again, in terms of the concept of mask. The mask, to use Kristeva’s

- 31 *House in Sakatayamatsuki.*
Kazunari Sakamoto, 1978.
32 *House in Imajuku.* Kazunari
Sakamoto, 1978.
33 *House in Daita.* Kazunari
Sakamoto, 1976.



term, is the “verisimilitude” of house-form. Perhaps this is the only way to slip out of the tautological circle (a house is a house), which otherwise would constitute a conceptual prison for the architect. Does not Kristeva state that this mask in reality “is not a problem inherent to its mission”? Is it not more essential to see the paradoxical difficulty of “ordinariness” in a universe of the lost symbolic? Does not the reduced sign “without quality” naturally form a Nowhere (utopia) for itself in the city “without quality”? It is interesting, in this context, that Sakamoto’s recent works approach the mannerism of Venturi, for whom defamiliarized “ordinariness” is nothing more than a strategy, and is therefore hardly a utopian pretext.

Two other Japanese architects have spoken coincidentally of this project in metaphorical terms as “embedding” architecture within the city. Their relationship is at once close and remote. Thus the Silver Triangle House (fig. 34) by Itsuko Hasegawa, another former student of Shinohara, and the Reflection Houses of Hiroshi Hara offer us good examples of this ambiguous work of “embedding,” as they call it. Hasegawa’s house stands on a suburban site facing a national autoroute often crowded with cars. But no concern for the special condition of the site seems to have played a role in determining this purely geometric form. Or rather, this “autonomous” form rejects any form of assimilation into its surroundings. As the architect clearly explains, “For buildings designed according to criteria inherent in architecture, the site or the city does not have any implications.”³³ However, it would be a misunderstanding to take this to be a statement of ignoring the city. This puristic “house-form” does not stand like the Villa Savoye on an “ideal plain” (to use Reyner Banham’s description). And yet while for the advocate of the anti-urban Ville Radieuse, the city is an object to be denied and the house is thereby completely without any external relations, for Hasegawa, the self-sufficiency of the form of the house is a sufficient condition for the defamiliarization of the scene in a cityscape without quality. This can also be observed in her Stationary House, with its less abstract and more realistic house-form. Like the more violent works of Shinohara, and the more reticent works

34 Silver Triangle House, Yaizu.

Itsuko Hasegawa, 1976.

35 Stationary House, Yaizu. Itsuko Hasegawa, 1978.

36 Tokumaru Children's Clinic.

Itsuko Hasegawa, 1978.

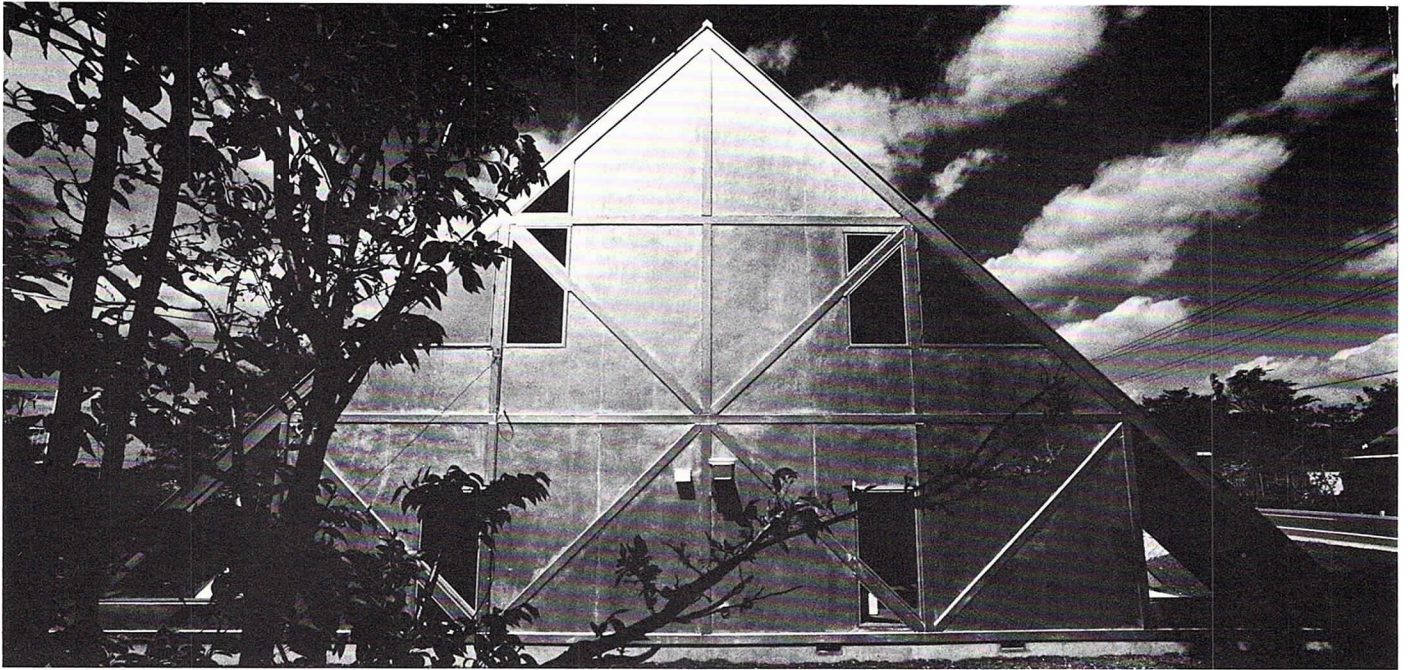
37 Toy Block House I. Takefumi Aida, 1979.

Aida, 1979.

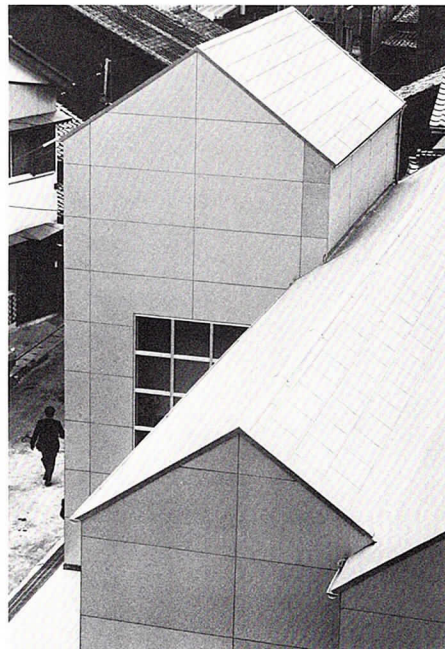
38 House in Nakano. Toyo Itoh, 1976.

1976.

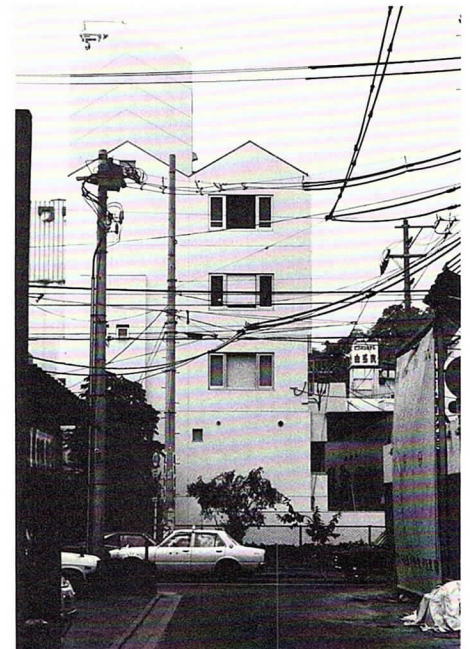
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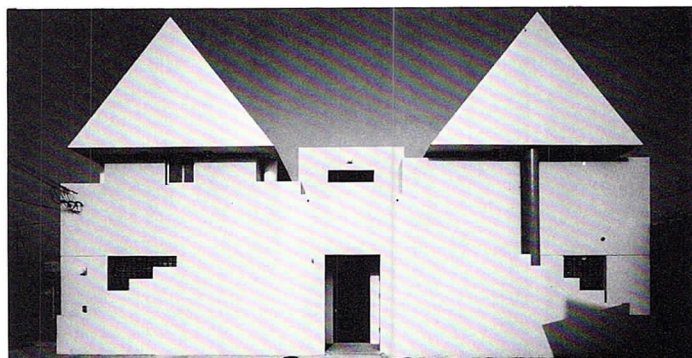
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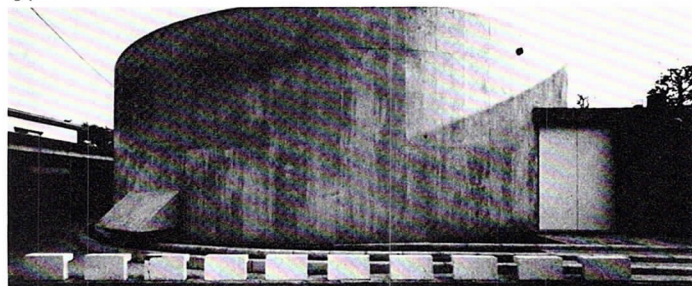
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of Sakamoto, the sharp silhouettes of Hasegawa's works cut them off like some extraordinary snapshot from the townscape of everyday life (fig. 35). The clarity and intensity of the naked structure in her work reveals the architect's desire to escape from the amorphous semantic setting of the city and to establish for the houses an identity of their own. However, as long as this defamiliarized "snapshot" is just a fragmentary protest against its context, this straightforwardness hardly produces anything that is essentially different from the ambiguous icons of Itoh. This can be illustrated by the collage-like—almost decorative—composition of one of her recent works, the Tokomaru Children's Clinic (fig. 36). This work, while still maintaining her personality, clearly acknowledges the influence of both Itoh and Sakamoto, thus delimiting a certain common ground for the architects of her generation. Compared to the works of architects of an older generation from Azuma to Miyawaki, each element in Hasegawa's work—structure, openings, walls, etc.—has a peculiarly autonomous and fragmentary quality, giving the impression of being dispersed in the cityscape as a "sementeme." This can be compared to Aldo Rossi's collages with their "*pezzi e parti*." That her real subject is the city—a surrealist cityscape—becomes apparent when her work is compared to that of Takefumi Aida, who was directly influenced by the Milanese master. The house-form of Aida, which he describes as comprised of toy-block elements (fig. 37), reveals its formal intention to make itself a self-sufficient monument. Placed in the city context, which seems to be of little interest to the architect, it engenders a strong defamiliarization. Unlike Aida what is at issue for Hasegawa and Sakamoto is the ambiguity of the processes of assimilation and contrast—not a one-way operation of defamiliarization.

The career of Hiroshi Hara might be seen as one more retreat from the city on the part of Japanese architects. In the late sixties, Hara, together with Isozaki and Kurokawa, was looked upon as one of the most talented architects of his generation. Although even in the sixties he refrained from the technological urbanism so characteristic of the Metabolist group, his "architecture with holes" took the relationship of architecture to its sur-



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26 roundings as its main subject. His most representative work at this time, his Keisho Kindergarten, assumed the image of a responding-machine and thereby created a science-fiction image similar to that of the Metabolists. However, “holes,” as openings of various types were in some way the symbol of his partial acceptance of the surrounding environment. However, in his Reflection House series of the seventies, this relationship was virtually rejected. It is interesting to see, in this context, that the most representative works of this series, the Awazu House (fig. 39), the architect’s own house (fig. 40) and the Niramu House (figs. 41, 42), situated in the “natural” purlieu of suburban Tokyo categorically reject the external world. Hara wrote at the time that the Reflection Houses were an expression of a critical attitude toward the present-day urban communities.³⁴ In these houses, the exteriors are almost totally abandoned, as in many works of other architects. But this “indifference” to the external appearance is not a sign of true indifference to the outer world. In fact, recent Japanese architects’ abandoning of the facade paradoxically betrays an ardent concern for it. The best examples of this are the house in Nakano (fig. 38) and the Nagoya PMT building by Itoh and the Midorigaoka House and Silver Triangle House by Hasegawa. In Hara’s case, the facade is not really abandoned but only reversed, as he explains: “Elimination of the outside facade, to be replaced by a new type of facade inside the house,” and “Exterior is a device to invert outside and inside . . . One of the conditions for this rhetorical device is that the appearance of the building should only be prosaic.”³⁵ Thus he wants to create a space of “anti-establishment” within his house, like an autonomous microcosm. This could be read as an ironic interpretation of the classical proposition that the house is a small city. These houses are fragments of all the “other cities” embedded in the ordinary city. As in the “fissure space” of Shinohara (and perhaps or even more consciously), Hara introduces urban elements like street, intersection, and landmark into the interior of his tiny house. Inasmuch as the resistance is destined to be fragmentary and partial, the actual physical size of this gesture is only of secondary importance. Although it might have something to do with Japanese traditional miniaturization, it is more essential to

note that these are semiological, not physical, devices.

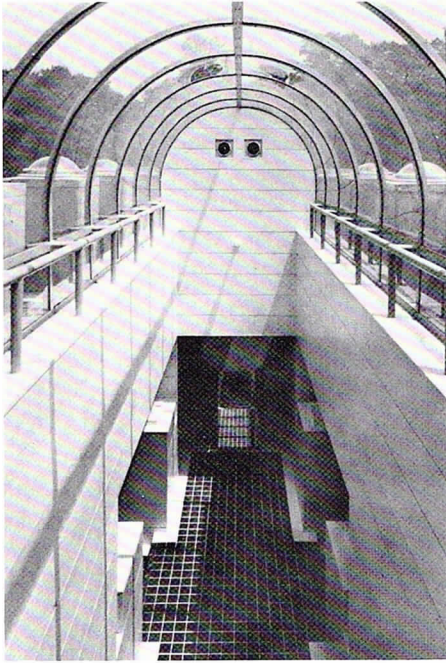
The architectural works of Hiromi Fujii (figs. 43, 46, 47) are—like those of Peter Eisenman, his counterpart in the United States—popularly associated with semiological considerations because of their purely abstract nature. Although in principle no form is by nature any more semiological than any other, the neutral surfaces with grids of Fujii’s architecture seem to manifest themselves as signs more strongly than in other architects’ works (fig. 47). It is paradoxical to realize that these Cartesian grids become signs of some subjective intention because of their excessive and obsessive use. Fujii too speaks of the elimination of meaning. However, this degree zero of meaning (of a different kind to the degree zero of Sakamoto) in fact eloquently informs us that it is concerned with the semantic aspect of architecture. Fujii indeed is absorbed in describing the rules of a formal operation which he calls “transformation,” an idea indubitably borrowed from Noam Chomsky via Eisenman, and thus he insists (again together with Eisenman and Eisenman’s interpreter Mario Gandelsonas) that he exclusively deals with the syntactic aspect of architecture thereby “cutting” (Eisenman’s term) the building out of the semantic universe of reality in order to achieve the autonomy of architecture (fig. 46). That these “hermetic” and “cruel” “games” of language are inherently ideological and thus concerned with the semantic dimension has already been made explicit by Tafuri when writing of the work of Eisenman. Our critical aim then is to describe the different “fissure” engendered by Fujii’s absurd “hyper-rationalism.” This fissure is the one between absolute rationality and the world of experience. Each of these aspects alienates the other because of the fact that no one (except, perhaps on occasion, the architect himself) can understand the rules of the game exactly; the autonomy of the rules allows the illusion of a perfect rationality unaffected by ignorance. How this intentionally “neutralized machine,” as Fujii called it, referring to the concept of Deleuze-Guattari (writers who also incidentally inspired Shinohara due to their rejection of the manipulative demiurge), should function when placed in the city has already been hypothesized in my comments about Isozaki’s Gunma Museum. How-

39 Awazu House. Hiroshi Hara, 1972. Interior.

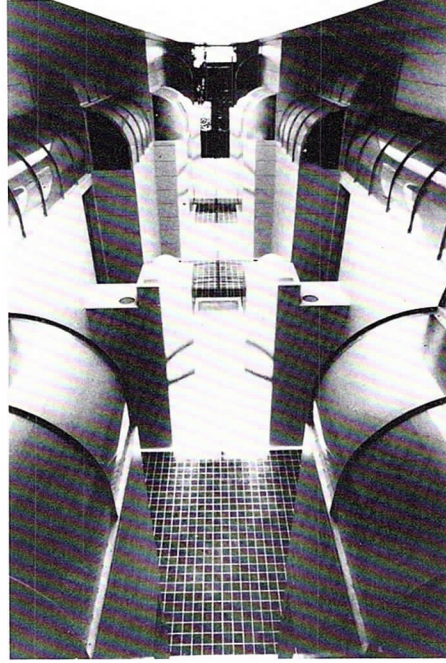
40 Architect's House. Hiroshi Hara, 1974. Interior.

41 Niramū House, Tokyo. Hiroshi Hara, 1978. Interior.

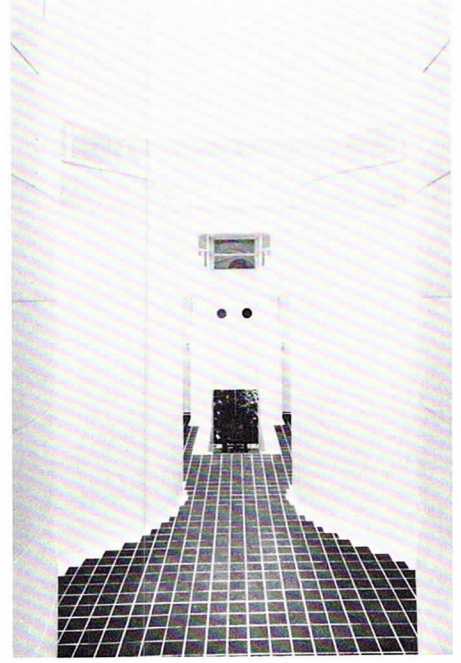
42 Niramū House, Tokyo. Hiroshi Hara, 1978.



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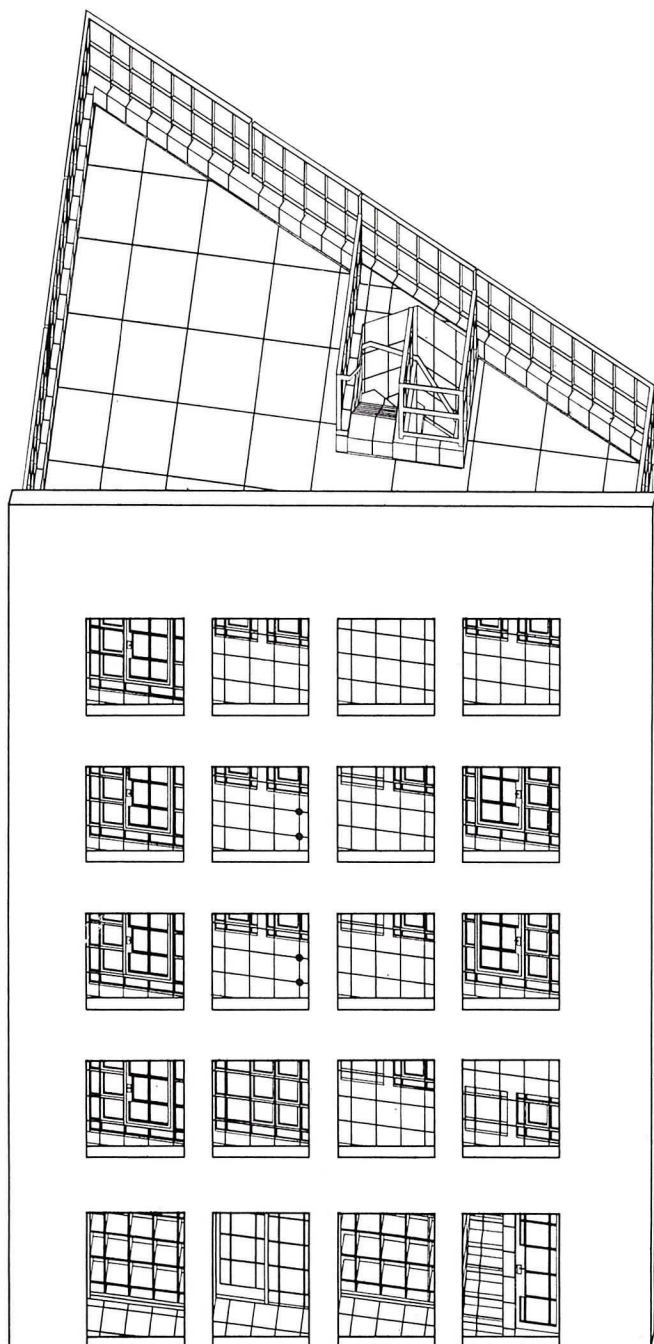
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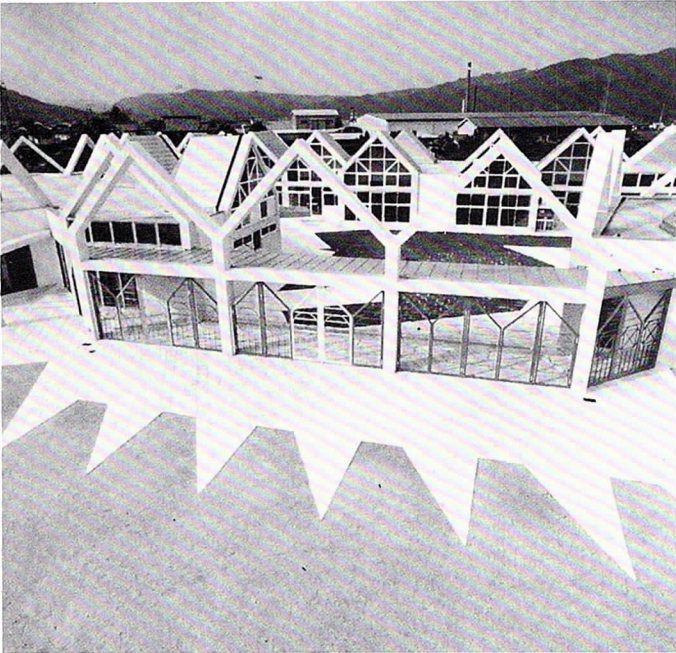
ever, Fujii's unreserved and more menacing image of absurdity tells us explicitly that his work is a challenge to the amorphous city deprived of rules. But "challenge" might be an inappropriate way of characterizing this fissure because the "function" of this "cruel machine" is less positive and less personal. Even the architect himself is not a master of the game; he is no more than one of the wheels of the machine.³⁶ At the same time, given the failure of architecture as a tool of "world revolution" we cannot entirely agree with the architect's remark that "this very suspension in mid-air is what provides the key to the restoration of the self, a restoration which the hollow object has hitherto denied."³⁷ Nevertheless Fujii's "suspended" form reveals to us that it, in fact, is a mirror of reality, in spite of the fact that it is reality's opposite and complementary pole. What it tells us is that the "elimination of meaning" is nothing other than a demonstration that on both an architectural and urbanistic level, the cruelty of control and the cruelty of the absence of control are equally absurd. Again, for this architecture to attain "the state of maturity which enables it to manifest itself as a system," to attain a complete autonomy in the linguistic game, is to pursue another "verisimilitude" (of absolute architecture) which "is not a problem inherent to its mission."

In Fujii's recent works the facades of his former works, which obliquely followed the doctrine of modern architecture through expressing their "function" (surely not of *Zweckmassigkeit* but rather the working process of a transformation machine), are abandoned for the sake of an appliqué mask (fig. 43). And paradoxically enough, this "mask" undoubtedly refers to the anti-appliqué tradition of the Viennese architects, from Loos to Wittgenstein. Like the thin facade of Itoh's PMT building, these masks float in the city, suspending their origins, and as such may be interpreted as an ironic inversion of history.

Another side of this adventure, this search for the lost symbolic realm, is represented by the self-proclaimed "symbolists" themselves, such as Kazuhiro Ishii, Tadao Ando, and Monta Mozuna. While the architects discussed earlier were ambiguous (or even skeptical) about the pos-

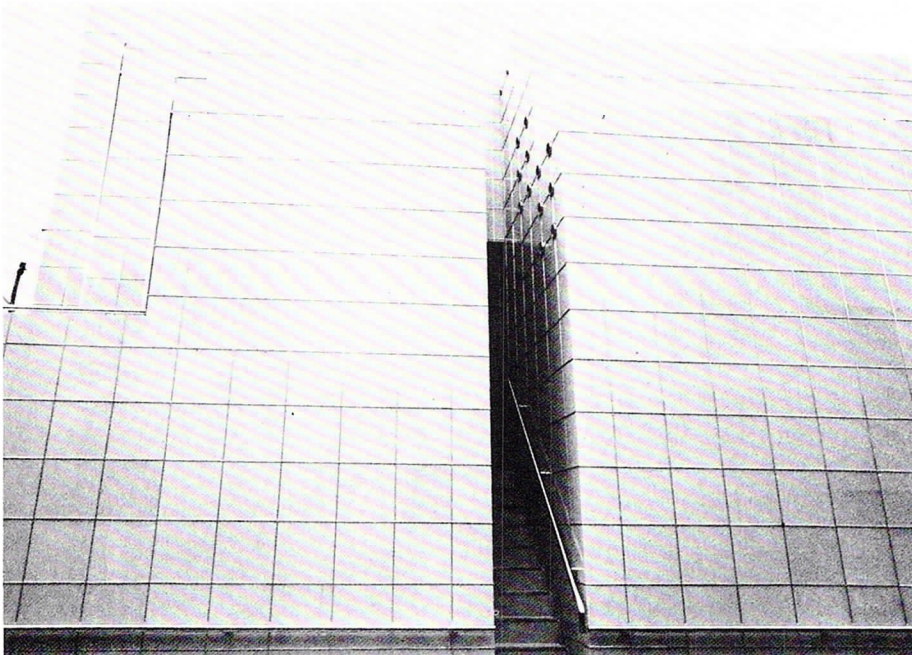


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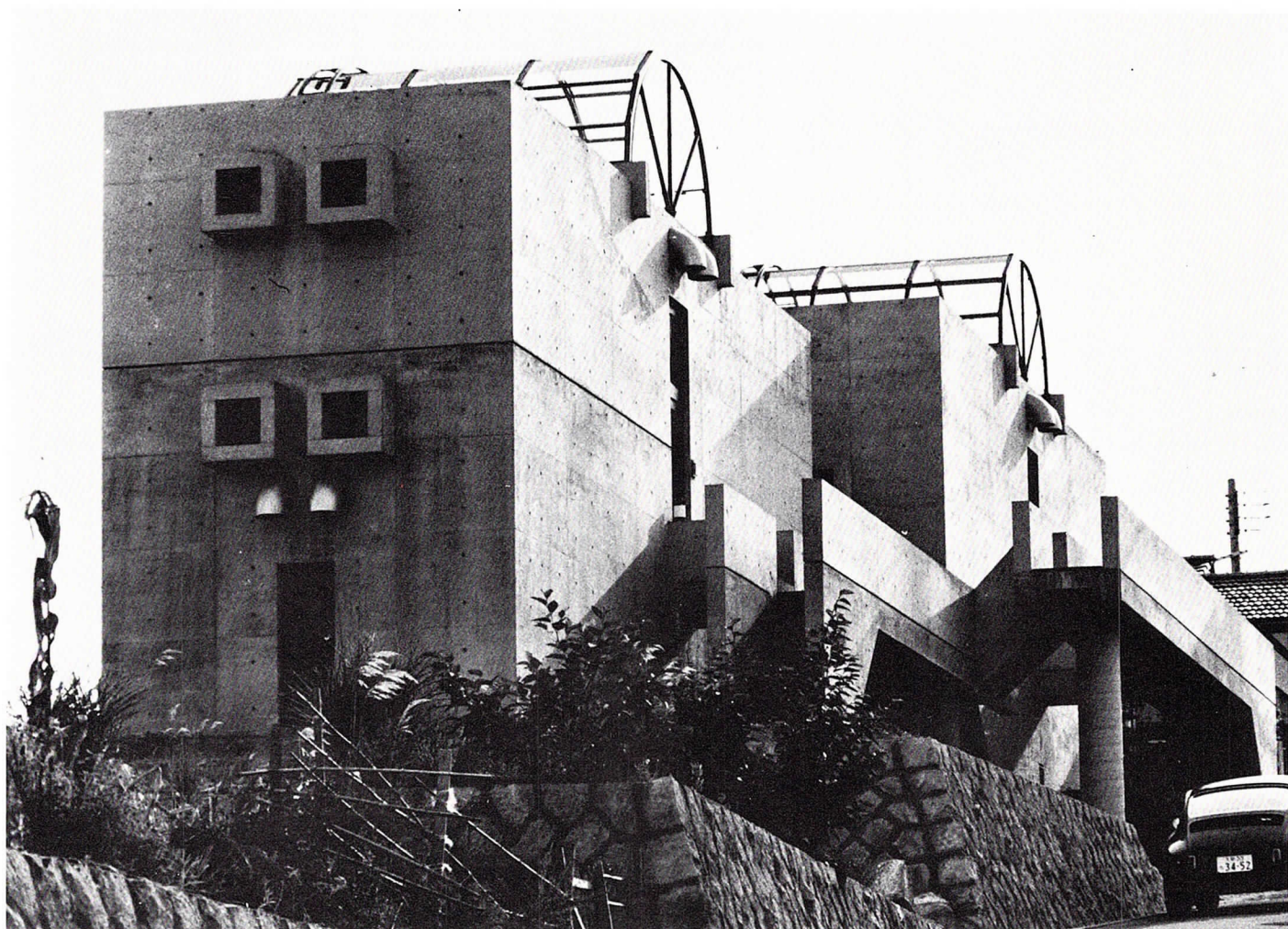
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- 43 Mochida Building. Hiromi Fujii, 1979.
 44 Takebe Nursery School. Kazuhiro Ishii, 1978. Elevation.
 45 Takebe Nursery School. Kazuhiro Ishii, 1978.
 46 Todoroki House. Hiromi Fujii, 1975.
 47 Miyajima House. Hiromi Fujii, 1973.

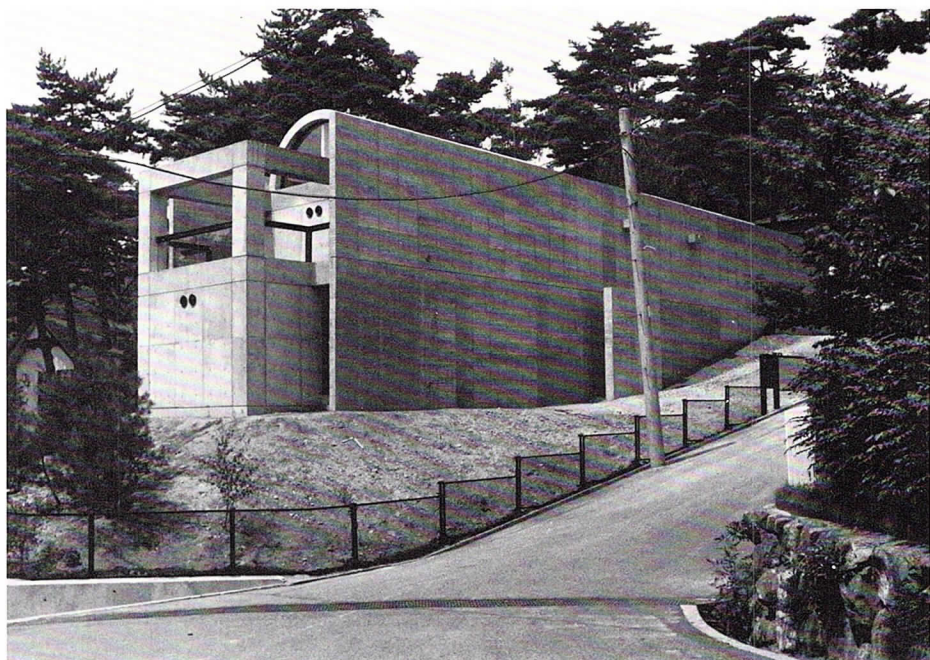


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48 *Soseikan House. Tadao Ando, 1975.*

49 *Ryoheki House. Tadao Ando, 1977.*

50 *Penetration House. Tadao Ando, 1976.*



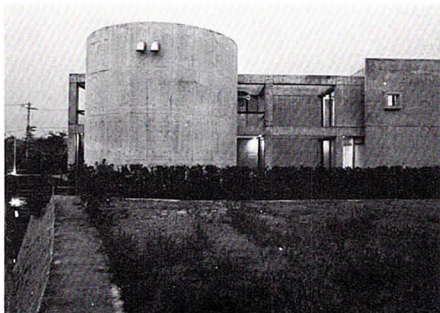
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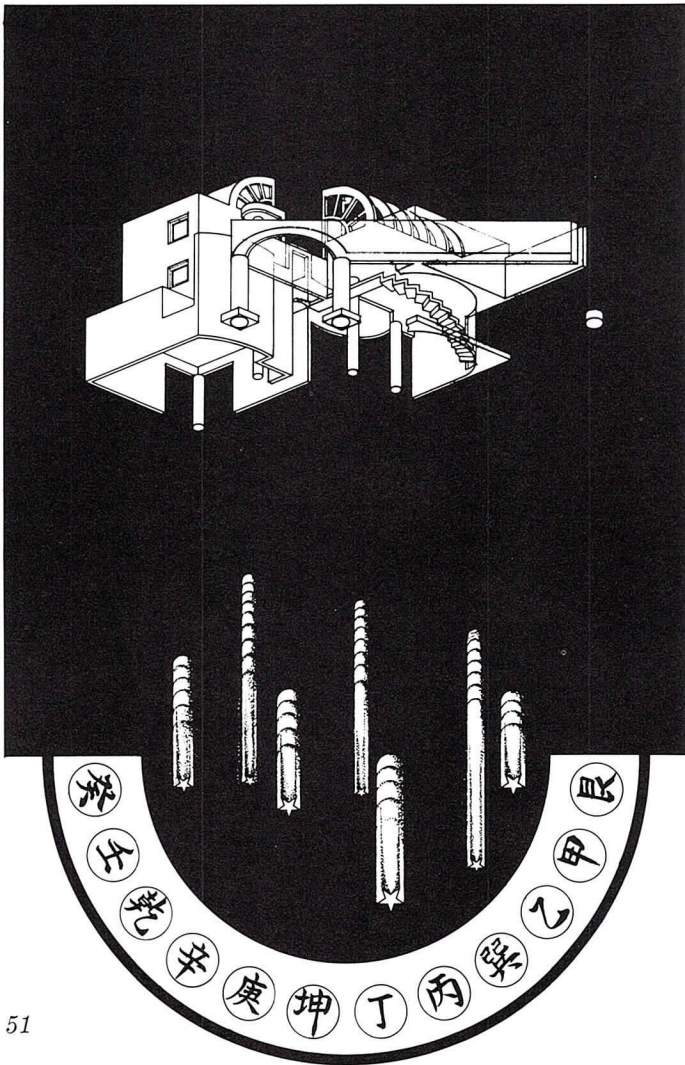
sibility of the symbolic, these architects—in spite of the diversity of their intentions—seem to ground their architecture in “symbolism.” The house-forms of Ishii (figs. 44, 45), for instance, clearly reveal this disposition, when compared to those of Sakamoto or Hasegawa. That which was a tool and at the same time an object of criticism of the city for the other two is merely a hedonistic sign to play “social conventions” in the case of Ishii. However, even this typically Post-Modern iconism is close to that hollowness of the semantic universe which obsesses the first group of architects. For just as the works of the latter are ultimately deracinated from daily city life—from the insubstantial icons of Itoh to the “realistic utopias” of Sakamoto—so Ishii’s works are ultimately alienated as well. His architectural language, being transplanted from a grassroot American context via Charles Moore (his tutor at Yale) is idiosyncratically modified, so as to become defamiliarized in the Japanese urban context. While Moore’s toy-like architecture anticipates an easy public reception, the “trickier” works of his former student stand isolated, talking or joking only with themselves. It is a little doubtful if Ishii finally believes his own remarks about his works, which he gives names like “Heart-Easing House” or “Kind Service for Clients.” Is he not really just pretending to be optimistic? Anyway, it is certain that this clever architect has chosen to be a clown, and everyone knows that the jokes of a clown should not be taken too literally because they are also a kind of mask.

The more serious side of the ambition to rescue architecture from the absence of the symbolic is represented by Tadao Ando, as expressed in his comment, “the catabolism of the memory and its sublimation cross the chaotic, seeking a new landing of order.”³⁸ In his works, we again see the theme of the closed box, which was also present in such works as Itoh’s Nakano House (see fig. 38), Hasegawa’s Midorigaoka House, Hara’s Reflection House, and Fujii’s Miyajima House (see fig. 47). However, Ando’s notion of “embedding” is not marked by the same negative attitude as the other architects. In spite of its defensive posture, his architecture speaks in a positive way to its surroundings, not into the void. His is an attempt to exile the void itself through establishing “a new landing of or-

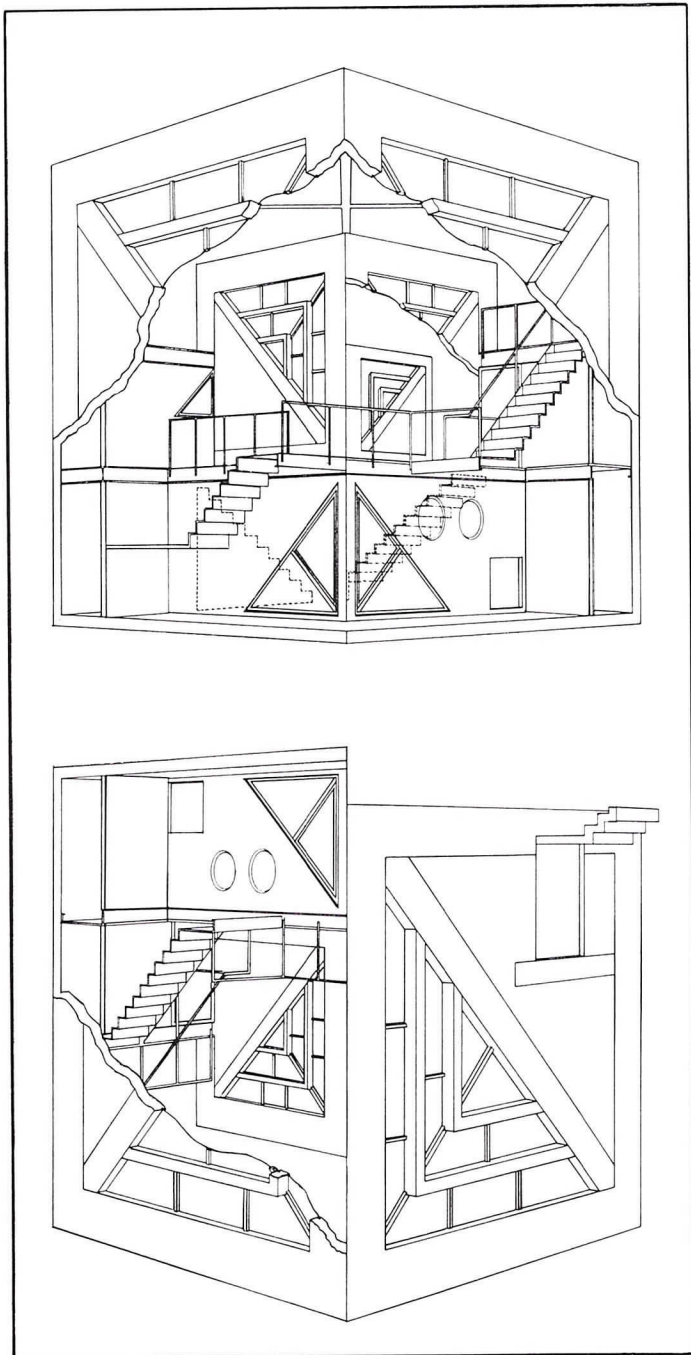
der.” His obsessive use of reinforced concrete walls reveals that he is close to such masters as Louis Kahn or Mario Botta, for whom the existential fullness of the bare wall is symbolic of the dignity of human architectural practice, as is attested to by another of Ando’s comments, “The memory of an endless wall, of a mass of concrete confronting space, pushes the grayness into the subconscious world” (figs. 48–50).³⁹ However, it is interesting to note that Itoh, the architect of “superficiality,” has criticized Ando, the architect of “substantiality,” for his semantic emptiness.⁴⁰ For Itoh, the “substantiality” of objects is not enough to fill the universal emptiness of meaning. Thus we return to the same problem, the impossibility of the symbolic. Aside from judging which is the more effective strategy, we can see that Ando’s works are just another aspect of the same problem, and insofar as they express an emptiness, his seemingly positive gesture might be nothing but an expression of a nostalgia for a lost world, which was already demonstrated by Tafuri in his commentary on Kahn.

Surpassing the existentialism of Ando, the attempt to compensate for the “affluent famine” of the symbolic finds its most intense representation in the fanatical symbolism of Monta Mozuna (along with his precursor Toyokazu Watanabe). Perhaps we could safely say that what Moore is to Ishii, Isozaki is to Mozuna. Both architects have modified the symbolism of their older masters in an idiosyncratic way. Like Ishii’s architecture of pragmatism, Mozuna’s architecture wears another kind of clownish mask. His symbolism has three self-proclaimed sources: one is the traditionally reductive symbolism of Taoism and Buddhism, another is patently sexual, and yet a third is astrological. In fact, his pedantic discourse on the first source is so erudite (there is no doubt that he is really seeped in it) that even the Japanese are easily persuaded that his symbolism is genuinely Oriental and mystical. This is still more true in the case of Westerners, for whom Oriental elements—especially when they have something to do with the ancient tradition—appear to be more puzzling than they are in actuality. Thus such an intelligent critic as Kenneth Frampton took him for being “the prime mystical representative” of the Japanese New Wave.

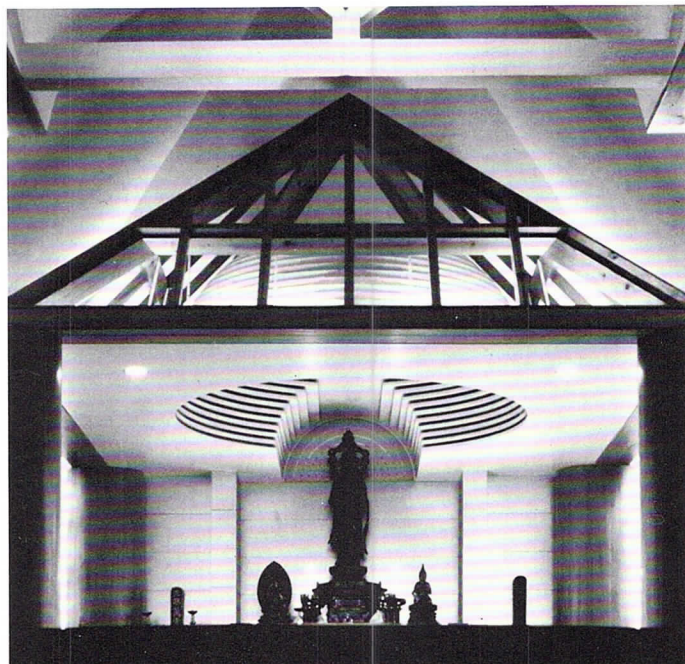




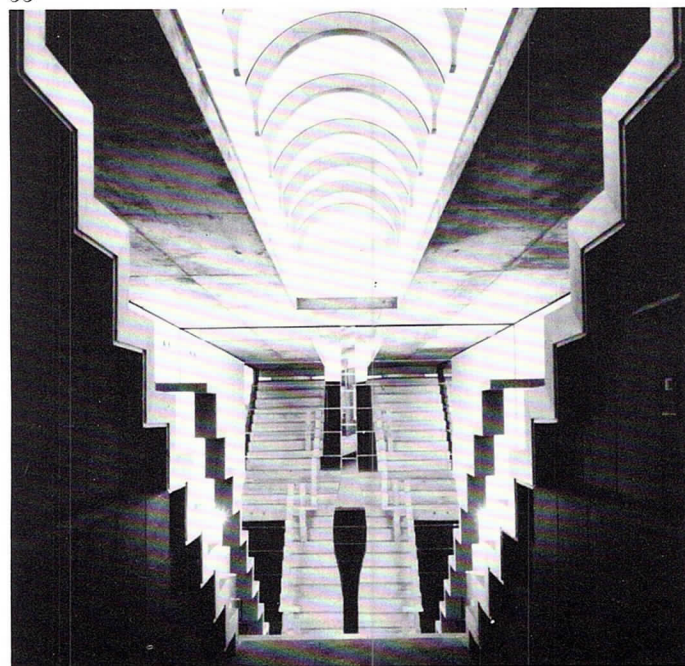
However, in fact, his *maniera*, inspired by Isozaki as well as by an obsession with geometry, has no essentially Oriental character, nor does his architectural form. This is clearly demonstrated by his design for the Buddhist nunnery Eishoji (fig. 53). What we find here is a play of geometrical forms which is more related to the symbolism of the Freemasons than to the Oriental tradition, even though his written text for this work alludes to the paradigmatic arrangement of symbolic objects in the design of the traditional Buddhist temple precinct. A similar observation can be made of the sexual symbolism in his recent work, the Yosue House (fig. 54). Unlike Ledoux's project for the Oikema, this overt symbolism has no rational ground. What supports it, what "speaks" in this architecture, is nothing but the desire to speak. This *architecture parlante* as a tautological object ultimately refers only to itself. In this sense, both the Orientalism and sexuality (and also astrology as in the Taniguchi House [fig. 51] or the archaeological center for Kushiro which incidentally is reminiscent of Ledoux's cemetery in Chaux) have no substantial importance. They are no more than the pretexts of a frustrated architect for a *plaisir de texte* which has no ultimate significance. That Mozuna's intention has no positive direction but only a negative one is clearly revealed in his most successful work, the Anti-dwelling House (fig. 52), which would seem to be a suitable residence for Isozaki's "City-Demolisher." What seems to be an over-abundance of meaning at first glance is, in fact, yet another mask indicating an absence; a further perfection of the clown's art. We are returned to the impossibility of the symbolic. In the absence of ultimate signification, language forms a totally closed circuit. The boundary of this circuit is like a two-sided mirror which reflects the vision from outside to outside, from inside to inside. The sophisticated, logical universes of these architects, each locked into his own way, seems to the public and to the "happy" members of the profession to be no more than an absurd and unreasonable play in an isolated operating theater. But, however "barren" this work might be—and did not almost all modern art prove to be barren?—it stands as a criticism of architects in another land (in the land of Alice perhaps?) as evidence of the right to contest the existence of that other barren situation, which



52
 51 Taniguchi House. Monta
 Mozuna, 1976.
 52 Anti-dwelling House, Hokkaido.
 Monta Mozuna, 1971. Conceptual
 axonometrics.
 53 Eishoji Nunnery. Monta
 Mozuna, 1979. Interior.
 54 Yosue House. Monta Mozuna,
 1980. Interior.



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54

34 exists outside such closed spheres. Here then we stand transfixed before a desert, which extends both inside and outside, with nothing but a cruel mirror as a separating device. Across this gulf the perspective is completed—at least for a while.

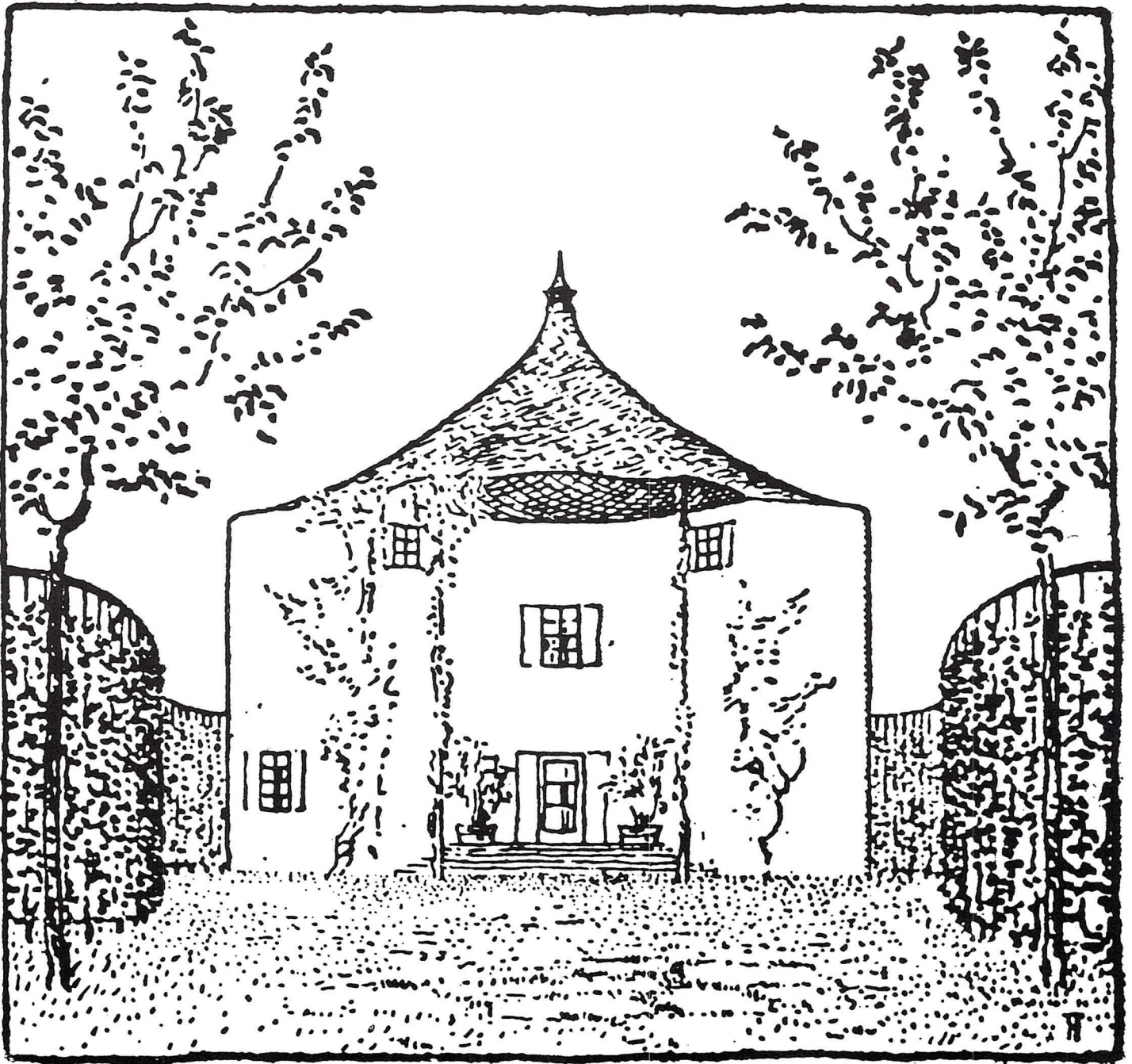
1. Kobo Abe, *The Ruined Map*, Eng. trans. by E. Dale Saunders (Rutland, Vermont: Charles E. Tuttle Co.).
2. This controversy (1953–56) marked a last phase of a long drawn out discussion in Japanese architectural culture of the postwar years. In the earlier stages the discussion focused on the relationship between architects and the society. An attempt was made to reflect the new tasks arising out of the reconstruction of society along democratic lines. With the introduction of the issue of Social Realism, the problem of heritage in terms of the Japanese tradition was brought into the limelight. In this later period two opposing archetypes of Japanese ancient culture dating from prehistoric times were returned to; the Jomon style (characterized by animistic hermeticism and violent passion) and Yayoi style (characterized by serene formality and sophisticated taste). This opposition could be readily compared to Nietzsche's conception of the opposition between Apollo and Dionysus. While Shirai was searching for the now forgotten sublime passion of people in the Jomon, Tange insisted on a dialectical synthesis of both, thus, in reality, rejecting the chaotic nature of Jomon culture and representing only the side of Yayoi tradition.
3. Manfredo Tafuri, *Teoria e storia dell'architettura* (Bari: Laterza, 1968).
4. Arata Isozaki, "The City-Demolisher, Inc." first appeared in *Shinken-chiku*, September 1962. Eng. trans. in *A New Wave of Japanese Architecture* (New York: The Institute for Architecture and Urban Studies, 1978).
5. Kazuo Shinohara, "A House Is a Work of Art," in *Shinken-chiku*, May 1962.
6. Adolf Loos, "Architecture," (1910), reprinted in *Architecture and Design 1890–1939*, Tim and Charlotte Benton, eds. (New York: Whitney Library of Design, 1975), p. 45.
7. Adolf Loos, "Die Potemkinsche Stadt" (1898). When General Potemkin entertained the Empress Catherine he presented an instant city constructed of billboards. By "Potemkinsche" Loos referred to the false 'masks' of Vienna. As for the following discussion concerning Loos, good references are: Allan Janik and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon and Schuster, 1973); Massimo Cacciari, "Loos-Wien," in *Oikos, da Loos a Wittgenstein* (Rome: Officina Edizioni, 1975).
8. Adolf Loos, "Die Potemkinsche Stadt." Nikolaus Pevsner quoted this passage in his introduction to the English translation of Ludwig Munz and Gustav Kunstler, *Adolf Loos* (Vienna: Anton Scholl & Co., 1964).
9. Reference to the work of the Viennese writer Robert Musil, *Der Mann ohne Eigenschaften* (1931–33); Eng. trans., *The Man Without Quality* (Capricorn Books, 1965).
10. Reference to the title of the first anthology of Adolf Loos, *Ins Leere Gesprochen* (1900).
11. Kazuo Shinohara, "Now and Function," *SD*, January 1979.
12. Kazuo Shinohara, Introduction to *Kazuo Shinohara: 11 Houses and Architectural Theory* (Bijutsu Shuppan-sha, 1976).
13. Kazuo Shinohara, "Nonrational City and Space-Machine," *Shinken-chiku*, March 1975.
14. Toyo Itoh, "Kazuo Shinohara," *Shinken-chiku*, special issue on houses of the Showa period, 1976.
15. Arata Isozaki, *SD*, special issue on Isozaki, April 1976.

16. Ibid.
17. Ibid.
18. Ibid.
19. Arata Isozaki, comment on Hollein's Monument for Urban Communication as a reference to the museum of Kitakyushu, *Kenchiku-Bunka*, July 1975.
20. Manfredo Tafuri, "L'architecture dans le Boudoir: the Language of Criticism and the Criticism of Language," *Oppositions* 3, May 1974.
21. Ibid.
22. Kazuo Shinohara, "On the Residential Architecture," *Shinken-chiku*, February 1972.
23. Peter Brook, *The Empty Space* (London: MacGibbon & Kee, 1968).
24. Toyo Itoh, "Kazuo Shinohara," *Shinken-chiku*.
25. Kazuo Shinohara, Introduction to *Kazuo Shinohara: 11 Houses and Architectural Theory*.
26. Claude Lévi-Strauss, *The Savage Mind* (London: Weidenfeld & Nicolson, 1966).
27. Julia Kristeva, "La productivité du texte," *Sémiotiké: Recherches pour une sémanalyse* (Paris: Editions du Seuil, 1969), p. 210.
28. Roland Barthes, "The Death of the Author," *Image-Music-Text*, trans. Stephen Heath (New York: Hill & Wang, 1977), p. 143.
29. Hubert Damisch, "L'autre (ich) ou le désir du vide: pour un tombeau d'Adolf Loos," *Critique*, no. 339–340, 1975.
30. Toyo Itoh, "Collage and Superficiality in Architecture," *A New Wave of Japanese Architecture*.
31. Peter Eisenman, "Transformations, Decompositions, and Critiques: House X," *A + U*, January 1980, p. 27.
32. Kazunari Sakamoto, "Architecture in the Residential Architecture," *Shinken-chiku*, special issue on houses of the Showa period, 1976.
33. Itsuko Hasegawa, "Embedding Architecture in the City," *Shinken-chiku*, June 1978.
34. Hiroshi Hara, "On the Form of Reflection Houses," *G. A. Document*, special issue 1970–1980.
35. Ibid.
36. For more detailed discussion, see my article "Hiromi Fujii's Vision-Reversing Machine," *Oppositions*, 22, Fall 1980.
37. Hiromi Fujii, "Existential Architecture and the Role of Geometry," *A New Wave of Japanese Architecture*.
38. Tadao Ando, "The Genealogy of Memories and the Revelation of Another Space," *A New Wave of Japanese Architecture*.
39. Ibid.
40. Toyo Itoh, *Kenchiku-Bunka*, October 1977.
- 11 Photo © *Kenchiku-Bunka*.
- 12, 13, 19, 23 Photographs by Osamu Murai.
- 15 From *Kenchiku-Bunka*, no. 345, July 1975.
- 16 From Sophie Lissitzky-Küppers, *El Lissitzky: Life, Letters, Text* (London: Thames and Hudson, Ltd., 1968).
- 17 From Robert Rosenblum, *Transformations in Late Eighteenth Century Art* (Princeton: Princeton University Press, 1967).
- 18 Courtesy of Hans Hollein.
- 21, 25, 27 Photographs by Koji Taki.
- 24, 31–33, 37 Photographs © *Japan Architect*.
- 26 From *Japan Architect*, no. 265, May 1979.
- 28 Photo by Shuji Yamada.
- 29, 35, 36, 39 Photographs by Tomio Ohashi.
- 34, 53, 54 Photographs by Mitsumasa Fujitsuka.
- 38, 39 From *Japan Architect*, no. 247, Oct.–Nov. 1977.
- 40–42 From *Kenchiku-Bunka*, no. 398, December 1979.
- 43–45 From *Kenchiku-Bunka*, no. 396, October 1979.
- 48–50 Photographs by Tadao Ando.

Figure Credits

- 1 From Paolo Rini, *Kenzo Tange* (London: Hamlyn, 1970).
- 2, 8 From *Japan Architect*, no. 11, 1978.
- 3, 5, 6, 10 From *Space Design*, no. 137, January 1976.
- 4, 7, 11–14, 19–25, 27–37, 48–51, 53, 54 Courtesy of the author.
- 7 Photo by Naoki Inagawa.
- 9, 46, 47, 52 From *A New Wave of Japanese Architecture* (New York: The Institute for Architecture and Urban Studies,

1 (frontispiece) Project for a one-family house. Heinrich Tessenow, ca. 1924.



Notes Concerning the Phenomenology of the Limit in Architecture

Francesco Dal Co

Translated by Stephen Sartarelli

The formal expressions of the modern and the linguistic structures of modernization have been fragmented, even in their practical applications, by the re-emergence of the *classical*.

In two articles that appeared in the journal *Il Convegno* in 1920, Giorgio de Chirico, focusing his attention on Arnold Böcklin and Max Klinger, grasped the particular importance of this problem. “While in Wagner the power of cosmic evocation arises from a kind of indefinite and elusive chant,” he asserted, “in Böcklin metaphysical power always springs from the exactness and clarity of a specific apparition. Never did he paint a fog, or trace an uncertain contour, and therein lies his classicism and his greatness.” De Chirico goes on to show how compositional concerns in painting, or better yet *composition* in itself, can only be resolved through a set of “tricks,” decadent deceptions, acts of subversion of that “fatal law” that one finds expressed in the supreme order of the figures of Paolo Uccello, to use the clearest example cited by De Chirico.

The cutting precision of Böcklin’s stroke does not allow for any indulgence or giving in to such “tricks” or “subversions”: his classicism, sustained by a great mastery of and profound love for the secrets and the most hidden refinements of his trade, finds expression in a *design* epitomized by its own precision and by a *line* which acts as an insurmountable barrier to the artifices of composition.

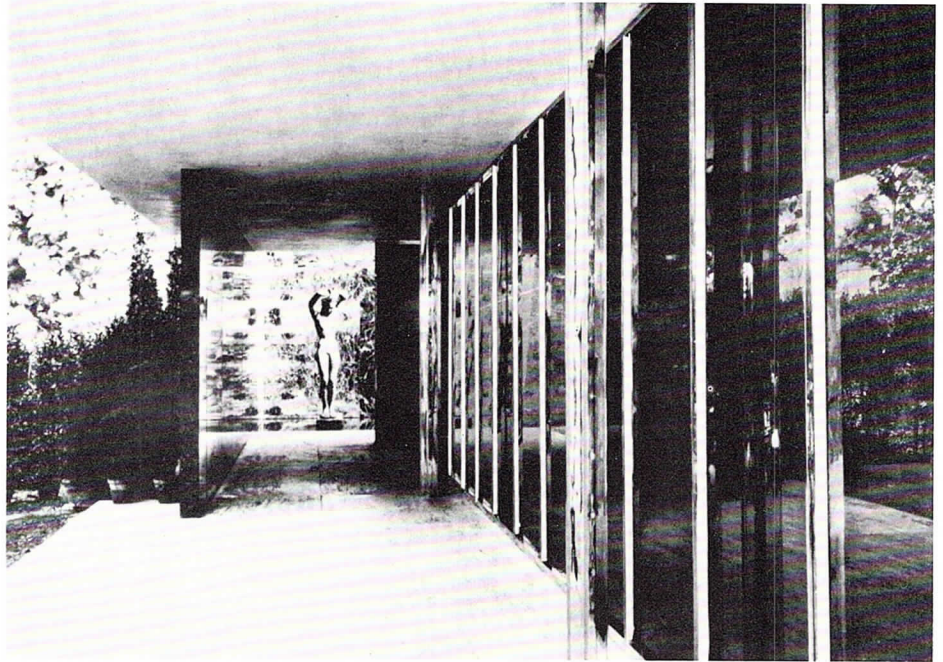
With equally decisive implications the classical bursts forth from the diverse experiences of architecture, interrupting from within any genealogical progress hitherto achieved. It is part of an age that has come to recognize, as the latest practicable form of domination over transformation and development, the profound essence of tradition as a force tending toward the destruction of tradition itself.¹

The classical is the negative backbone of contemporary developments in architecture: in certain modern experiences, the architectural project realizes itself in an appearance of immobility, its design gathering the traces of a now private order of its own original perfection, re-

vealing itself in the end to be ineffectual, impotent, ambiguous—and at times, nostalgic. In architecture’s most profound significations and tensions—in those cases where the modern turns out to be founded on a classical attitude—the relation to tradition is manifested in tradition’s remembered negative function; meanwhile architecture’s perpetual tending toward a domination by forms of transformation exposes the precarious foundations of such an attitude. And wherever the modern has a classical inclination, the order which is displayed in it is not expressed as *composition*, as De Chirico well understood. The very “tools” of architectural representation—that is, the *way* in which architecture places itself in a propulsive position within the forms of the division and organization of labor—and the very *content* that the design communicates no longer have as their goal the synthetic reconciliation of artifices and ends, of techniques and forms. Aims and appearances are intended to present themselves as essential differences, as independent *events*. In this way the design, tensed in its effort to approach a classical coherence, comes to be part of a code of rules whose loss of power over the internal rationale of the project is exposed by the design itself; at the same time the design assumes the function of a *limit* denoting the intrinsic diversity of such rationales—it makes manifest the boundaries of the powers of architecture and the differences that oppose its survival.

The project, then, is an assemblage of *different*s. It expresses itself through the intelligibility of its lines of difference. It acquires concreteness in the clarity and radicality of the limits of which it is made up. The limit itself produces clarity to the point where, in classical formulations, *renunciation* prevails in the face of the evidence of the multiplicity traced by the disjunctive sign. Even in the extreme diversity of their formulations, those contrasting practices that have been examined in relation to the meaning of the limit in the project fulfill a function of extreme importance, one whose purpose is to connote the real, but not always manifest, complexity of contemporary architectural experience.² It is necessary to sketch certain examples of this emergence of complexity—even though they may be arbitrary and in certain ways unrepresent-

- 38 2 *German Pavilion, International Exposition, Barcelona. Ludwig Mies van der Rohe, 1929.*
3 *Keramisches Hof, Dresden. Peter Behrens, 1906. Sculpture by Rudolf Bosselt.*
4 *Music room for the Arts and Crafts Exhibition, Dresden. Peter Behrens, 1906.*
5 *Exhibition of Deutsche Werkbund, Bern. Peter Behrens, 1917.*
6 *Garden design for the Art and Garden Exhibition, Düsseldorf. Peter Behrens, 1904.*



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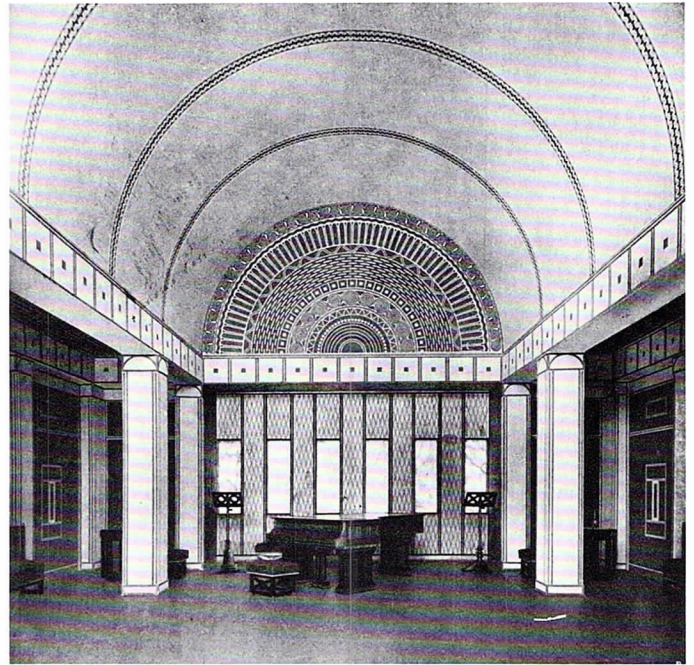
tative—if we are to pinpoint the fundamental opposition between certain intellectual attitudes, an opposition I should like to dwell upon in these notes.

In the work of Peter Behrens (figs. 3–6) we can distinguish one of the most contradictory efforts made by modern architecture to put into positive practice a dialectical relation with tradition, an effort whose purpose was to pre-establish strategies of control over the transformations effecting the evolution of the forms and languages of technical creativity. It was an effort which was resolved in a kind of *reduction* of architectonic form to a classical fixity, where the value of the *image* tended to take on a predominant importance. Behrens's design extended to the most diverse “objects,” with the purpose of exorcizing their unstable appearances and above all their continual modifications of form. The classical mask of a world in search of new orders, Behrens's architecture aimed at reviving a sense of tradition, making tradition the strongest “coil” of a program that, like the snake of Midgard, coiled up on itself to reconstitute new possibilities for uniquely livable and communicable experiences.

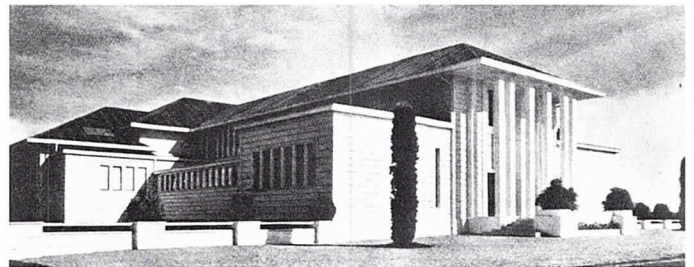
Behrens's architectural practice has several points of contact with the Böcklinian attitude. The tectonics of Bötticher strengthen his capacity for critical judgment regarding the limits of the modernization of building, while his design strives toward a perfection and sharpness of contours and partitions that display a Tuscan inclination with a Florentine inflection.³ The limpid clarity of his design, however, and those of his works that seem to want to call attention to the essential differences which render the act of building infinitely complex seem to pursue a physically perceptible, palpable *Aufklärung* which will allude to a synthetic and harmonizing power in architecture, a *locus* of reconciliation between different forces intermingling in the dream of a new *Industrienwissenschaft*.⁴

The work of Adolf Loos (figs. 7–9) exhibits a contrary tendency. His design work is never an attempt to mediate between the diversity of separate parts and situations. It does not *cover up* multiplicity; if anything it assumes it in

3:



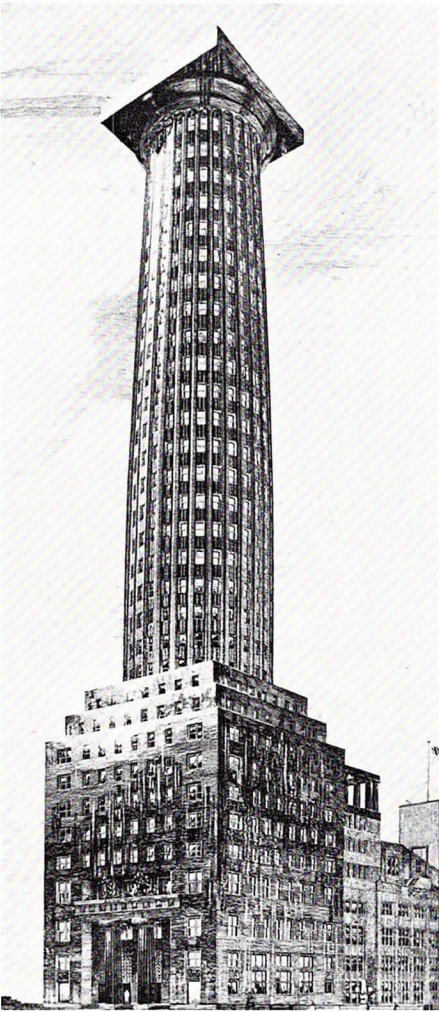
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order to render it fully perceptible: it traces limits and boundaries, identifying in them the chief characteristics of the architectural practice. While Behrens engages in an all-out battle with appearances, Loos accepts them by refusing to impose himself as mediator of their differences. His design takes upon itself the task of laying bare the uselessness of any program devoted to the control of the forms of becoming through unifying linguistic formulations. Loos's environments pay no attention to the obvious; they do not display themselves. Their real dimension is that of the time lived within an *interior*, an interior that refuses to satisfy an understanding that is pursued through the opacity of the external appearances of architecture.⁵ Such *duplicité* ends up revealing the peculiar character of the experience that takes place in Loos's interiors, those impenetrable refuges of a hidden mode of inhabiting. The architectural language constructs the boundaries within which such an experience becomes feasible through its separateness. In Loos, the limit is never a point of contact or of passage; nor can his forms be conceived of as masks, since his design makes subtle differences manifest, plans for differences and separations, reflects upon the modern poverty of language by laying bare its fleshless reality, and points out that every reassuring possibility of reconciliation is past because, as Karl Kraus said, "Life and language will combat each other until they succeed in tearing each other to shreds, and the end result is an inarticulate tangle, the true style of our age."⁶

The theme of renunciation reappears in Heinrich Tessenow. In his work (figs. 1, 10–12) the "practice of the limit" has implications that smack of coercion: constituted as such a "practice," Tessenow's architecture attempts to circumscribe with analytical precision the range of the domain of experience. In the end, the boundaries within which movement is permitted are narrow and in any case rigidly delineated: the cognitive space of architecture is in this way defined in a restrictive manner and from an essentially *nostalgic* point of view. Tessenow's projects, which are illustrated by a drawing technique as light and tremulous as it is inflexible in delineating the boundaries within which the transformation of forms is possible, in



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7 Project for the Chicago Tribune Tower Competition. Adolf Loos, 1924.

8, 9 Villa Karma, Clarens, Switzerland. Adolf Loos, 1904–1906. Library.

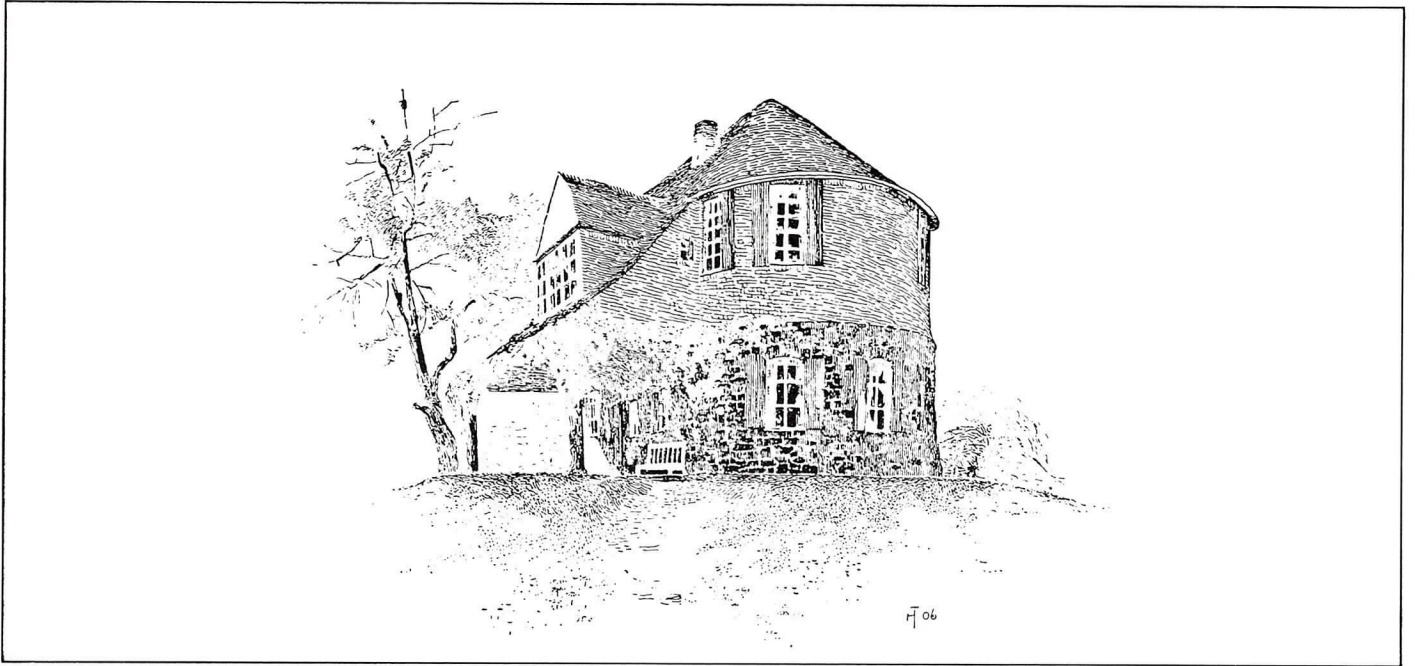
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10 Project for a house in the Eifel.
Heinrich Tessenow, 1906.

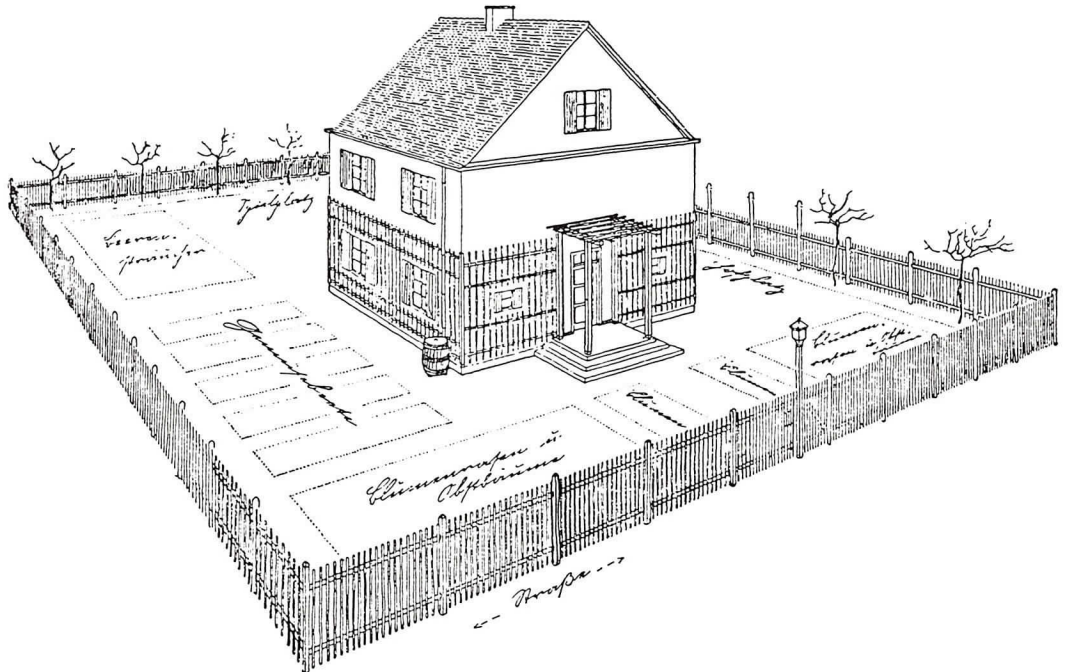
11 Project for a one-family house.
Heinrich Tessenow, ca. 1913. Aerial
perspective.

12 Project for six-family rowhouses,
Gröba-Riesa Colony. Heinrich
Tessenow, ca. 1913. Floor and
garden plans.

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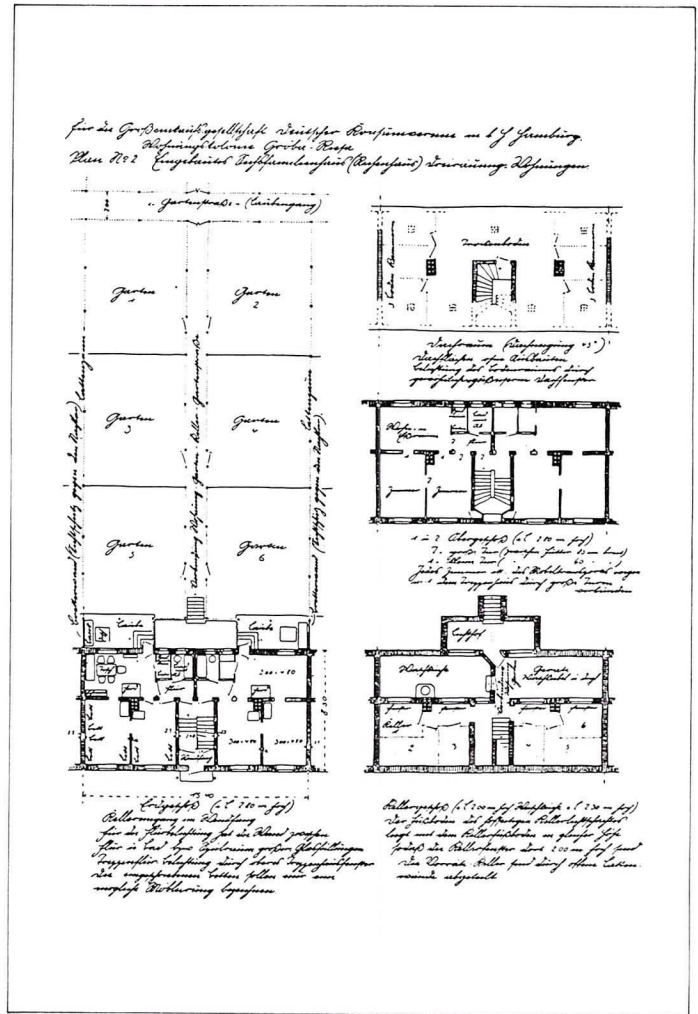


11

the end reveal an inconsolable nostalgia for a primitive simplicity, for an original purity, for an essential *consciousness* of the world. Such nostalgia seems to serve to demonstrate how the multiplicity of modernization can add nothing to the limpid perfection and transparency of the archetypal forms of experience. Tessenow's design, moreover, establishes a bridgehead that separates form from the evidence of signification: the upholding of this relation and this circularity between form and meaning is pursued to the point where architecture is nothing but a regret for forms of *previous existence* long past.

Only with Mies van der Rohe (figs. 2, 13–17) does the limit, which has now become an inflexible *condition* for the functioning of architecture, lose the ambiguities so far described, completing the final stretch of a journey leading to the recognition of the classical attitude as one of the fundamental aspects of the history of the modern.

Miesian space finds its matrix in difference too. But while Loos follows a program aimed at functionalizing difference in support of the *intérieur*, Mies, formulating labyrinthine solutions, fiercely opposes any apparent warmth in his conception of the environment. In addition, in Mies the sign has no allusive functions and never becomes a mediation: his classical autonomy is radical. His design does not connect but rather communicates the cold tasks of the operations of assemblage into which the strategies of modernization are translated. Mies exposes the ambiguity of such strategies, as well as that of the technical apparatus that gives them substance, without himself intervening in the process. Hence his great sheets of plate glass: these are great exemplars of transparency but at the same time impenetrable barriers, or even mirrors meant at once to multiply images and to repel them. As labyrinthine immobility, the Miesian environment is articulated through the indication of such ambiguities as the only possible forms of experience; we are thus led to recognize the intrinsic reversibility of every value promised by the technical modernization that brought to an end the past age of the experience of inhabiting. It is the architecture of Mies and not the steel constructions of the Bauhaus which tells of the withering of modern experience, a pro-



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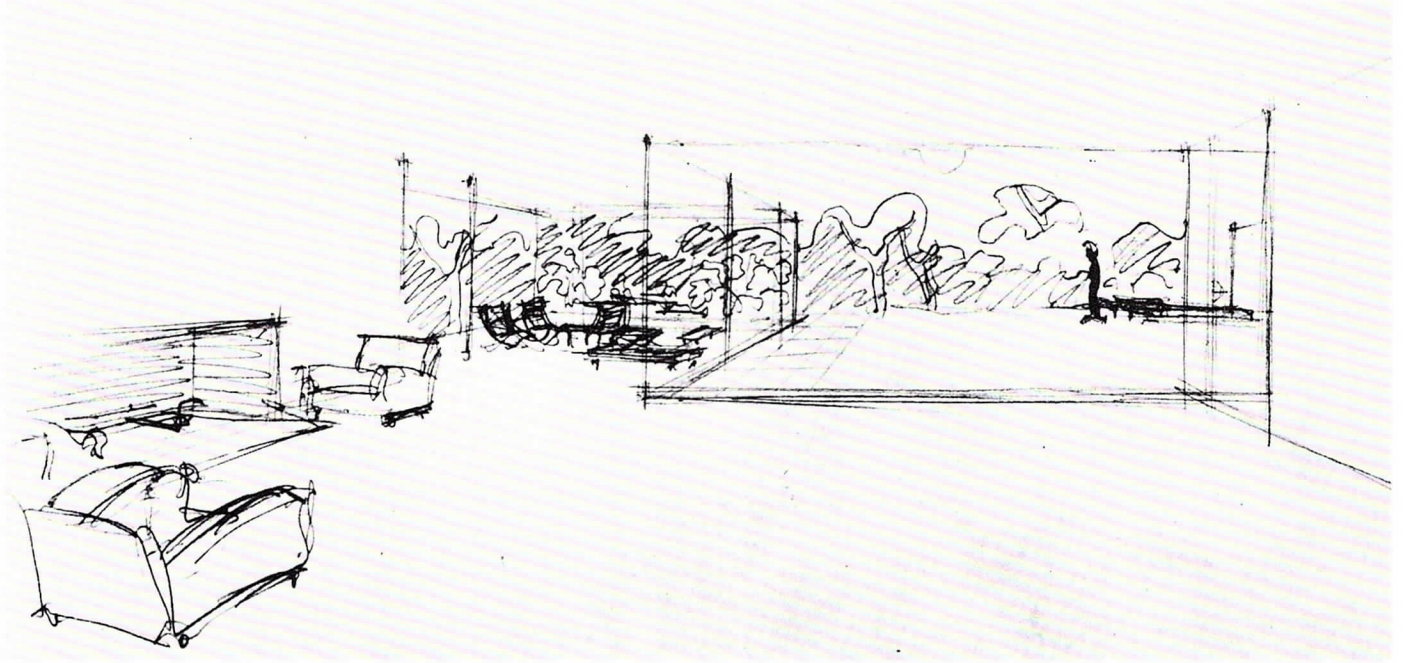
13 Gericke house, Wannsee, Berlin.
Ludwig Mies van der Rohe, 1930.
Perspective from dining room.

14 Hubbe house, Magdeburg,
Germany. Ludwig Mies van der
Rohe, 1935. Terrace.

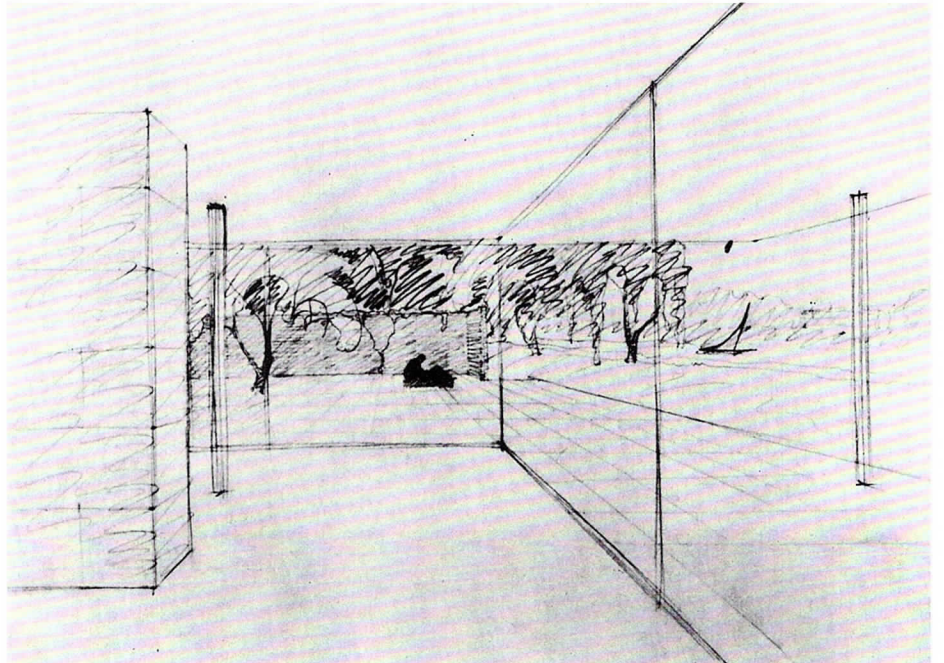
15, 16 German Pavilion,
International Exposition,
Barcelona. Ludwig Mies van der
Rohe, 1929.

17 Tugendhat house, Brno,
Czechoslovakia. Ludwig Mies van
der Rohe, 1930. Dining room.

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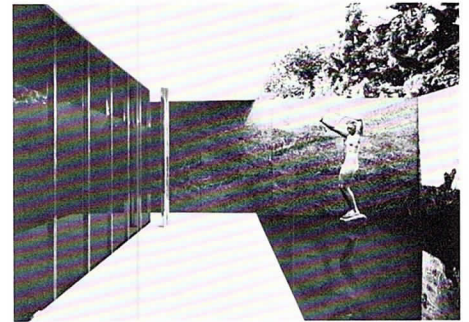
cess analyzed in depth by Walter Benjamin.⁷

As an architecture that is diagrammatically classical, Mies's work finds expression in aphoristic and profoundly enigmatic configurations—"the artist is the only one who can make of the solution a riddle," proclaimed Kraus. Every act of confidence to which Mies seems to abandon himself regarding the implications of modernization is revealed in fact to be nothing but a further step in his unending analysis of the essential ambiguity of every aspect of the forms in an age of technological supremacy.

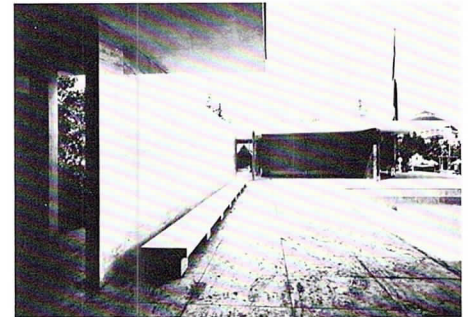
But modern architecture, and especially those experiments which with stylistic unities reinforce the cultural pressures to form "movements," offers no realistic alternatives to such problems as the one just discussed, in which one finds overlapping, mutually implicating one another, the concerns for a classical precision and those for a renunciation that finds its most radical expression in Mies and its most nostalgic voice in Tessenow. The only answer provided reveals itself to be, in the end, a painful wandering, a flight from a destiny which sanctions, nonetheless, the living out of the architectural experience in a Krausian *superfluity*.

To such a destiny, the work of Frank Lloyd Wright (figs. 18–29), in its adoption of highly original tactics, offers a strong and very specific resistance. His work was at least as instrumental in dissecting the body of the modernist program as any of the instances that we have so far traced.

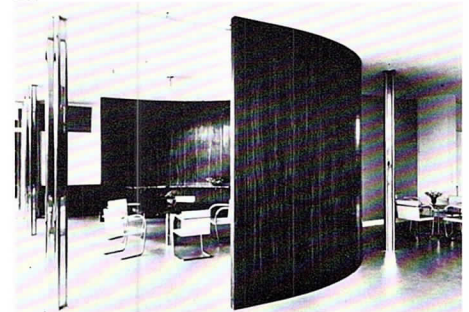
If the classical reveals the relationship of the environment to the limits of the possible, isolating in this way the *void* of experience that characterizes the modern way of finding a home,⁸ Wright's program detaches itself from the mystical implications of such a renunciation. At the same time, however, it reconfirms, in *religious* terms, the nostalgic element that the classical attitude fails to wipe out from among the range of motivations affecting contemporary architecture. Wright's architecture is aimed at re-establishing a foundation for architecture through a revival of the evocative fullness of the practice of building—he



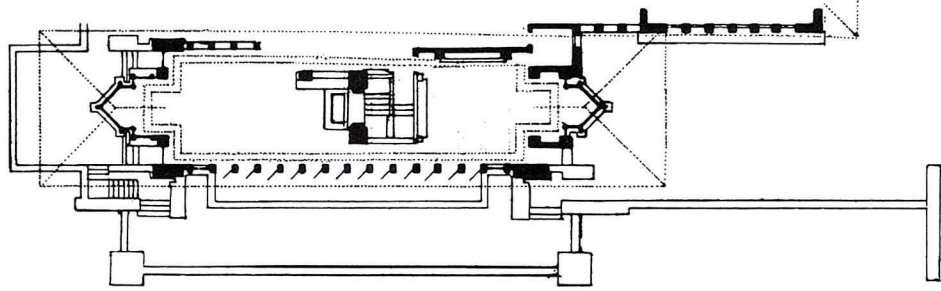
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17



46 seems, to cite Ernst Bloch, to “yearn for a homeland that has never existed, but which is nevertheless a homeland.”

The role of the limit in the classical experience, as that *place* where renunciation is manifested, takes on an opposite function in Wright, since the limit becomes an element in a strategy of conquest. A fundamental trait of Wright’s work is the *crossing*: in appearance, as the mystifications in critical literature—placing themselves above the clarities of architectural “declarations”—seem to confirm, the privileged space of such a practice is nature. In reality, the crossing through nature produces no experience of any real substance: on this matter, Wright even banalizes stereotypes typical of the American cultural tradition. While in the Emersonian tradition the relationship with nature is an integral part of the structure of a mechanism of deciphering and consciousness, in Wright the sole real experience of nature is one which is totally conditioned by the ways in which the architectural project finds expression in its domination of nature. Nature “speaks” only in so far as it is part of the work of architecture; architecture enables it to signify, since nature is essentially amorphous *material*—it is as much an instrument of the work as the tradition provided by uprooted historic memories. But as an instrument nature is also a limit to be crossed since, as such, it ends up by stipulating a set of rules for its use.

Wright’s structures are aimed at reviving forms of fullness for dwelling, at making each house a special place which as such cannot be repeated in its configuration, even though each is inspired by an identical ritual—which is precisely its crossing through nature, the conquest of nature. As an instrument of the work, nature broadens the connotative potentialities of architecture, which in violating nature’s indifference accomplish the fundamental task of isolating and distinguishing the architectural space as a circumscribed place.

Initially in Wright’s work nature appears as a fundamental boundary, for it separates the reach of spaces destined to become a mere continuity of places from the world of artifice, from the equivalent of living coercively in a col-

lective manner—finally, from the city. In the city, Wright intervenes with acts aimed at exalting architecture’s power of abstraction: in his urban structures the richness of the interior environments is directly proportional to the ability of the manufactured materials to deny themselves externally, turning in upon themselves like impregnable fortresses. The modalities of such self-enclosure, however, have particular inflections, especially in his more strictly geometrical structures. In such works as the Midway Gardens (figs. 23–25) and the German Warehouse (fig. 26)—works which represent two quite obviously different typologies—the refined and emphatic decorative treatment of the perimeter elements ends up taking on a declarative function, calling attention to the place of passage between qualitatively opposite environmental situations. If the places thus singled out seem designed to reflect their own otherness, their “limits” are instead just so many instances of allusion. In the Midway Gardens, the formal exuberance of the enclosure and the emphatic differentiation of the entrances end up lending a processional flavor, if not an actual function of “initiation,” much as does the arrangement of the interior passageways. This characteristic is one which can also be found in Wright’s other, more complex formulations of the “limit”; one thinks of Ocotillo Camp or of Taliesin—but what should especially come to mind is the ritualistic movement imposed on the public inside the Guggenheim Museum.

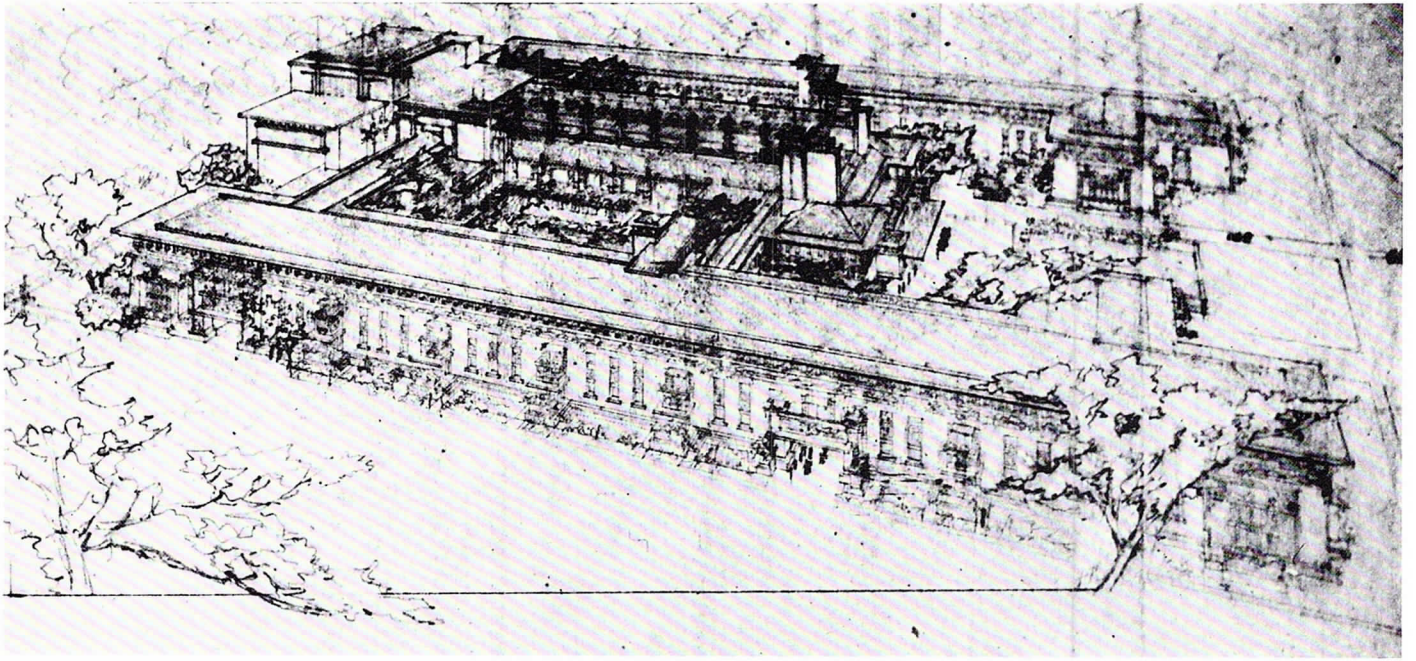
Only in appearance does Wright’s design attitude seem different in architectural problems of more limited scope, such as in his numerous projects for single-family houses. But in this case too the question of the relation with the natural surroundings is prominent. The axes about which Wright’s environments are organized, taking on configurations that complicate themselves until they are resolved in the open symbology of geometric forms engaged in continually varying distortions and concluding with an emphasis on the theme of the circle and the spiral—these axes seem to want to liberate the forms of dwelling and reestablish them in a new order, where the artificial and the natural overlap, thereby losing their distinctiveness. The fraternity between nature and architecture, asserted in this way, turns out to be fictitious: organized as an

18 Frederick C. Robie house,
Chicago, Illinois. Frank Lloyd
Wright, 1909. Partial plan.

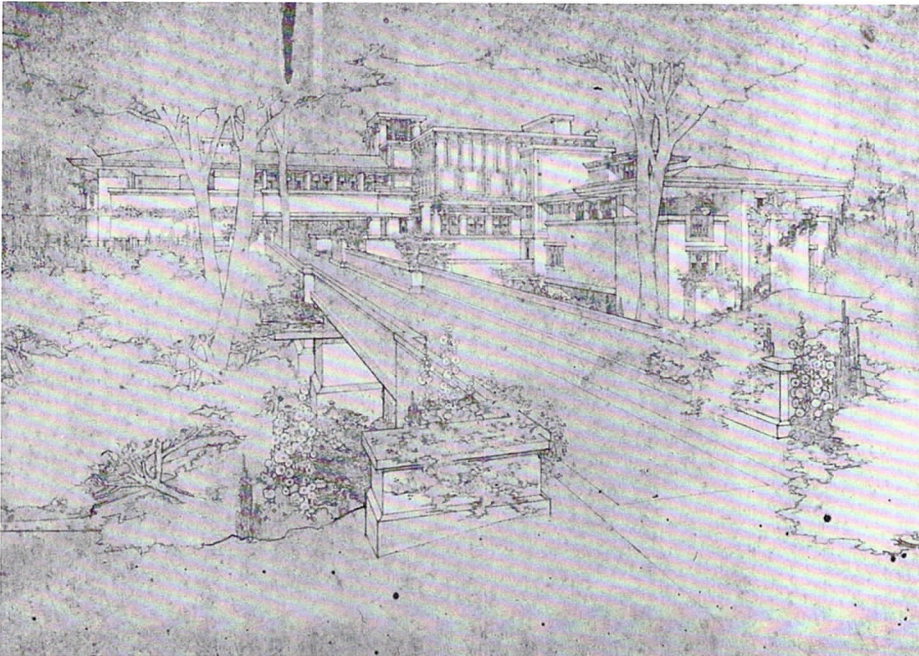
19 Imperial Hotel, Tokyo. Frank
Lloyd Wright, 1915. Aerial
perspective.

20 Sherman M. Booth house,
Glencoe, Illinois. Frank Lloyd
Wright, 1911. Perspective.

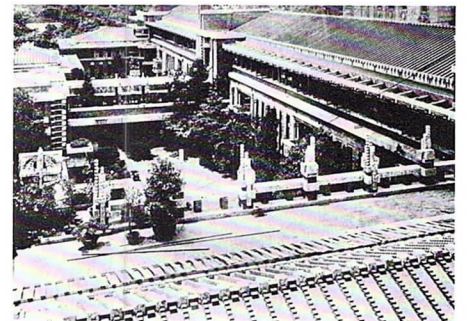
21, 22 Imperial Hotel, Tokyo. Frank
Lloyd Wright, 1915.



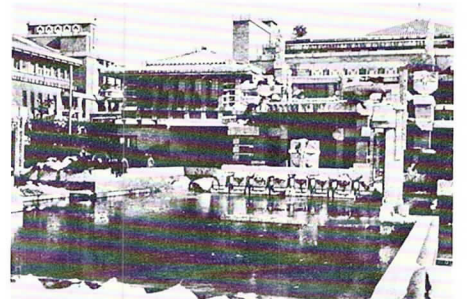
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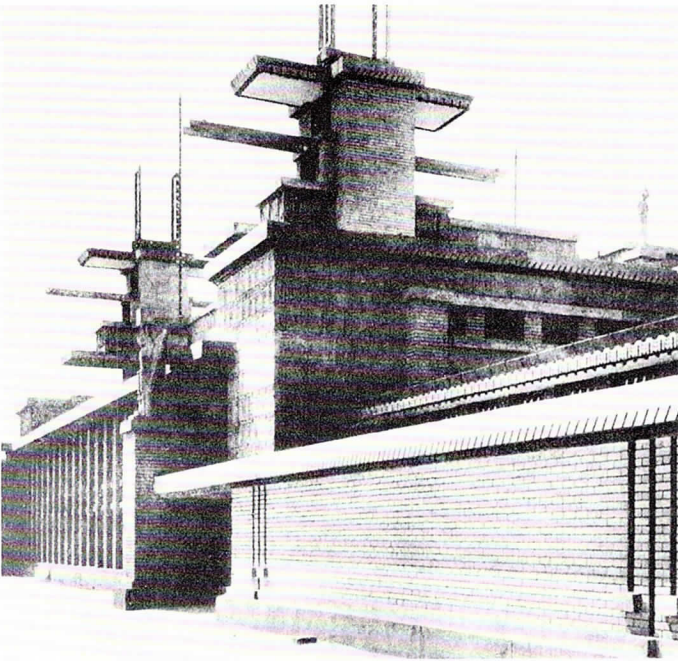
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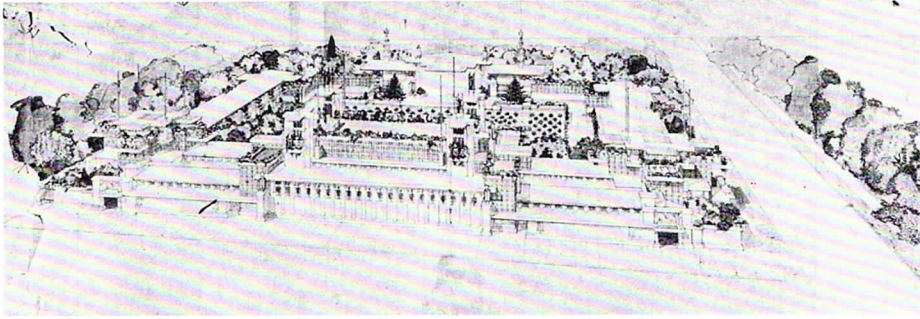


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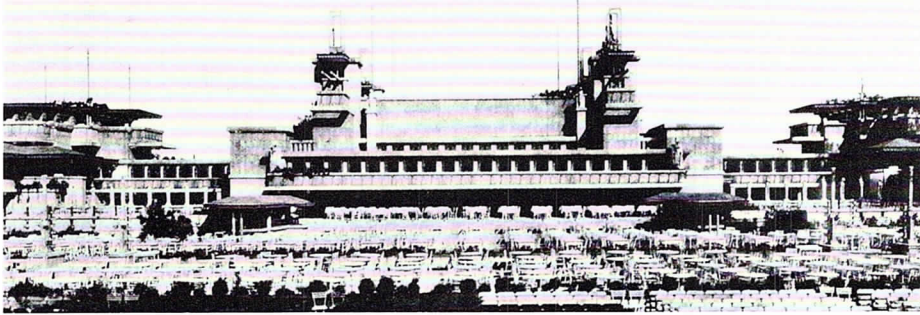


integral part of *environments* that cannot be repeated, nature becomes an artificial presence, a *structure* in the literal sense. Every one of Wright's houses tests this procedure in a distinctly different way; this is because each building conveys the appearance of being *one* place—each house is a highly personal “homeland,” where the religious ritual of the environment is repeated to an equal degree, despite the changing of the subjective forms in which it is interpreted. Architecture in this way wrenches the place of dwelling away from nature, revealing that its infinite richness can be conquered once the rite that architecture itself celebrates is respected. Every structured environment thus acquires life as a ritual space; but to arrive at such a state it must be totally *protected*. This explains Wright's definitive choice: his final refuge becomes, in fact, the *desert*. In the desert, the power that nature preserves, the power of preconstituting unassailable refuges, appears to be a supreme challenge directed at the crossing of experience—and at the same time a final test of architecture's power to overcome once again the world's inhospitality to life.

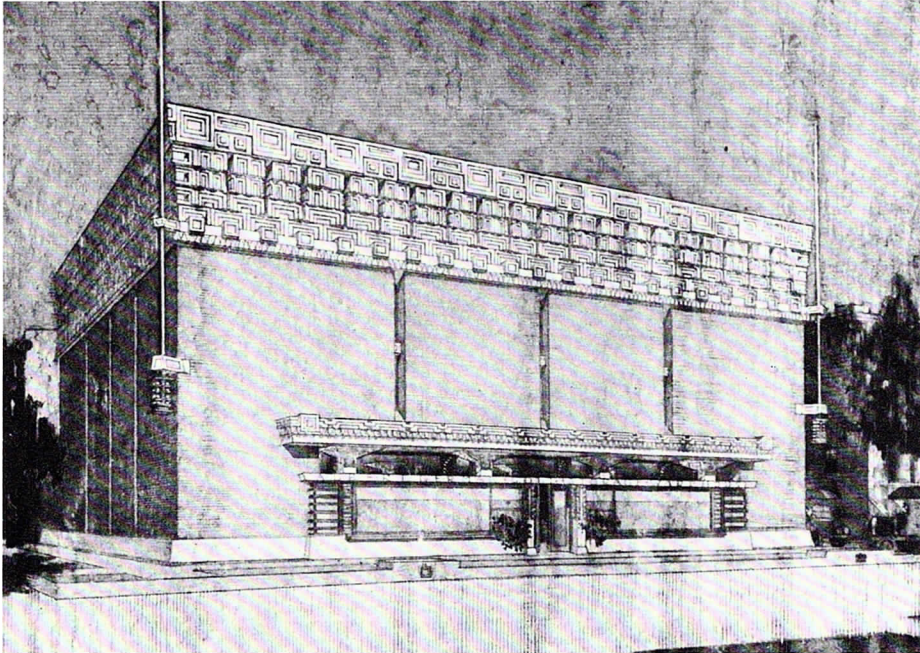
Such a strategy ends up expressing itself in a ritualistic attitude that finds an oneiric representation in Broadacre City and a “perverse” application in the Guggenheim. As has already been mentioned, in Wright's work it is often the elements of enclosure that reveal the presence of such an attitude. So much so that in certain cases, as for example in the Midway Gardens, the solutions adopted to convey the *boundaries* of the architectural intervention seem to take on meanings similar to those that are imputed to Hindu constructions, as for example in the building of the temples where “the edge of the surrounding wall marks the inversion of the polarity of opposites,” where artifice and chaos exist side by side in order both to overlap and to separate from each other.⁹ Just as the geometric system of the *mandala* marks the path back to the divine and traces the form of the “consecrated surface” which *preserves and joins*, protecting the *center* where the union between the earth and the sky finds its proper *place*, since *mandala*, like *yantra* (bond), is the artifice that binds together the *supreme principle* and makes it appear¹⁰—in the same way, in Wright, circumscription



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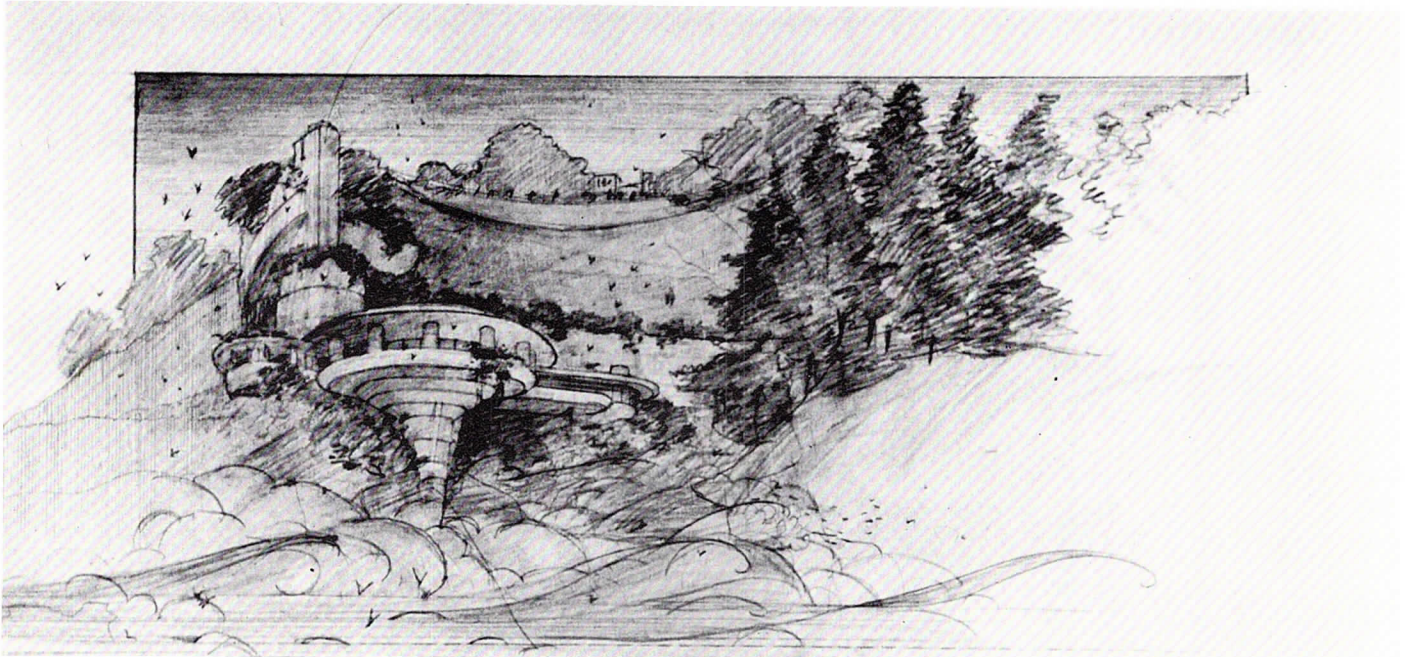
23 Midway Gardens, Chicago, Illinois. Frank Lloyd Wright, 1913.
24 Midway Gardens. Aerial perspective.
25 Midway Gardens.
26 A. D. German Warehouse, Richland Center, Wisconsin. Frank Lloyd Wright, 1915.

27 V. C. Morris house, San Francisco, California. Frank Lloyd Wright, 1953. Second scheme.

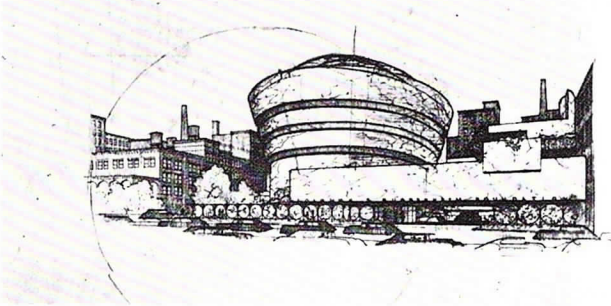
28 Solomon R. Guggenheim Museum, New York. Frank Lloyd Wright, 1943-1959.

29 Gordon Strong Automobile Observatory and Planetarium, Sugar Loaf Mountain, Maryland. Frank Lloyd Wright, 1924.

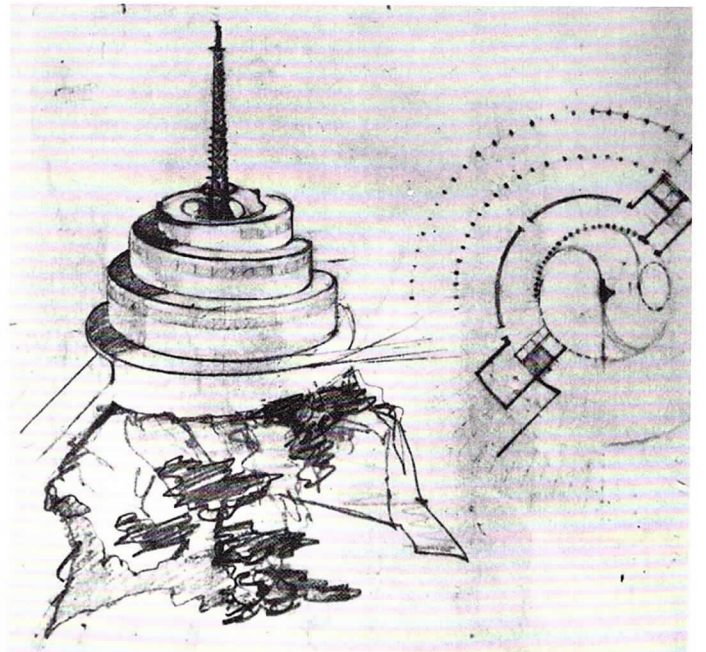
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and crossing (the perimeter and the axes of the house) are acts of a ritual intended to reconcile difference and to restore an existence in the world that is the fruit of a full and peaceable experience.

If in Mies the limit is the signal of a breakdown in the face of the multiplicity of the unfolding circularity of experience, in Wright the limit instead individuates the space where differences arrange themselves in a unified manner, offering themselves to experience—which, once ritualized, tends toward becoming an activity of religious pacification.

While “modern classicism” testifies to the end of every hope of rediscovering a homeland for the contemporary wayfarer, Wright searches for a homeland for all dwelling, in forms which, moved by faith, reach beyond time. In this way Wright proves once again that the constitutional differences within the *modernist program* are so widespread that the mere hope of bringing them back to some form of unified practice can only render more elusive the unfathomable multiplicity of our *possible space*.

Notes

1. See E. Severino, *Legge e Caso* (Milan, 1979).
2. See Manfredo Tafuri and Francesco Dal Co, *Modern Architecture* (New York: Abrams, 1979).
3. See Adolf Behne, “Peter Behrens und die toskanische Architektur des 12. Jahrhunderts,” *Kunstgewerbeblatt*, 1912.
4. See Massimo Cacciari, *Walter Rathenau e il suo ambiente* (Bari, 1979).
5. See Massimo Cacciari, “Loos-Wien,” *Oikos*, 1975.
6. See Karl Kraus, *Detti e contraddetti* (Milan, 1972).
7. See Walter Benjamin, “Esperienza e Povertà,” *Metaphorein*, no. 1, 1919, and the notes of G. Agamben in *Infanzia e Storia* (Turin, 1978).
8. See Martin Heidegger, *Saggi e discorsi* (Milan, 1976).
9. See Mircea Eliade, *Trattato sulla storia della religioni* (Turin, 1970) and Stella Kramrisch, *The Hindu Temple* (Calcutta, 1946).
10. See Kramrisch, *The Hindu Temple* and G. Tucci, *Teoria e pratica del Mandala* (Rome, 1969).

Figure Credits

- 1, 10–12 From Gerda Wangerin and Gerhard Weiss, *Heinrich Tessenow* (Essen: Verlag Richard Bacht, 1976).
- 2, 13–17 From Philip Johnson, *Mies van der Rohe* (New York: Museum of Modern Art, 1978).

3–7 Courtesy of the author.

8, 9 From Ludwig Munz and Gustav Kunstler, *Der Architekt Adolf Loos* (Vienna: Anton Scholl & Co., 1964).

18–20, 24, 26–29 From Alberto Izzo and Camillo Gubitosi, *Frank Lloyd Wright Dessins 1887–1959* (Florence: Centro Di, 1976).

21–23, 25 From *L'Architecture Vivante*, 1930. Reprinted by Da Capo Press (New York, 1975).

History

1 (frontispiece) AEG Humboldtthain
factory complex, Berlin. The High
Tension Factory (completed 1910)
and, at the right, the New Factory
for Electric Railway Equipment and
the Factory for Large Machines.
Peter Behrens, 1911–1912.



Modern Architecture and Industry: Peter Behrens and the AEG Factories

Stanford Anderson

During his first years in Berlin, Peter Behrens projected the overtly Neoclassical house for Dr. Wiegand in Dahlem (fig. 3) and the equally classicizing and oppressively assertive German Embassy in St. Petersburg (fig. 7). At the same time he designed the AEG factories in Berlin (see figs. 15, 33) which eventually led Nikolaus Pevsner to extol Behrens as an innovator of “functional directness” in architecture. If such a claim cannot be fully sustained, there remains a remarkable difference in the manner and degree to which these two groups of buildings rely on historical precedent. This difference is all the more remarkable in that these structures seemingly marked two divergent routes from the highly abstract historical references of Behrens’s Düsseldorf period. While at first glance it appears that Behrens adopted a more academic and conventional attitude toward his public and domestic buildings and a more independent and functional one toward his industrial work, it is the purpose of this paper to reveal basic commonalities in Behrens’s work of these years.

Ludwig Mies van der Rohe offered a simple explanation for the apparent differences of these two groups of works. Mies argued that Behrens successfully concerned himself with a new expression for industrial buildings because this use-type was largely independent of any strongly held expectations on the part of the client, the public, or the architectural profession; on the other hand, Mies asserted, at that time no one could have conceived of a parallel formulation for significant public buildings.¹ One correct implication of Mies’s observation is that Behrens shared the attitudes that in those years led even progressive architects to employ conventional solutions for such traditional problems as public edifices and private dwellings.² The conventions were perhaps innovatively explored, but there was a reliance on convention nonetheless. However, Behrens’s factories are not anomalous in this setting. Within the greater latitude allowed to utilitarian structures, Behrens chose *not* to emphasize that “functional directness” which was already manifest in many engineer-designed factories (figs. 4–6); he rather sought to incorporate such works within an established but evolving political and architectural tradition. Behrens sought to bring

the factory under the rubric of the embassy—not to bring the embassy under the rubric of the factory. 53

The stance adopted in Behrens’s industrial architecture was a resigned acceptance of industrial civilization.³ The industrial revolution had brought new patterns of organization, new personality types, new structural systems, and new materials and techniques of construction. These were rational extensions of earlier stages of human development and had, therefore, to be accepted as elements of a “new nature.” For Behrens, the artist’s role, as ever, was to exercise his will-to-form in shaping this new nature—the modern condition—into a true culture. He felt that there was a spirit and a rhythm to modern times which would find its true expression only through the artist.

In his Düsseldorf period, Behrens was concerned with a formal distinction between spatial definition and the occupation of space. The culmination of this concern was the exhibition hall at Mannheim, an abstract stereotomic space defined by immaterial planes and complemented by plastic sculptures (see *Oppositions*, 11, p. 55). However, such an abstract formulation provided little guidance in meeting the physical and material problems of building.

Behrens’s first major architectural commission in Berlin, the Turbine Factory of 1909 for the AEG, forced him to recognize and accept certain material considerations. The very large dimensions of the factory, the rugged industrial operations which it housed, and its necessity for durability precluded the use of those ephemeral materials which had been both acceptable and appropriate in the earlier exhibition structures.

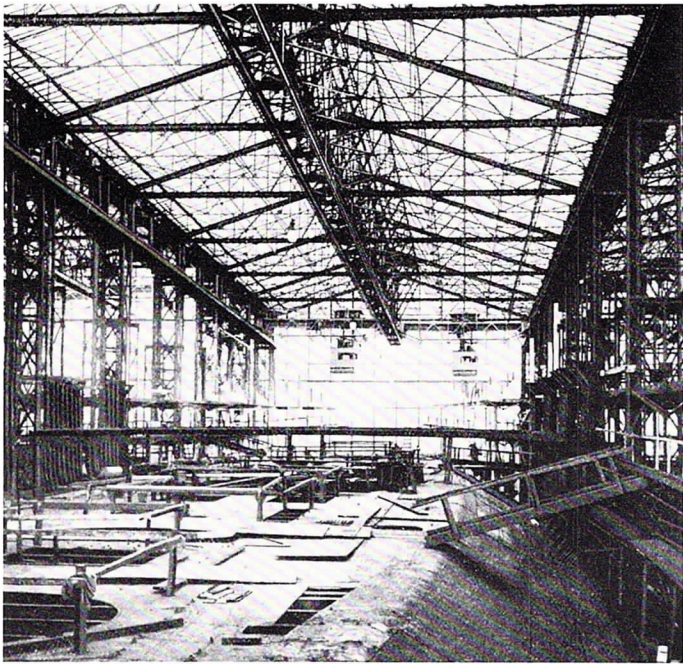
The Turbine Factory brought about a confrontation between the artist’s stereotomic preferences and the tectonic character of the ferro-vitreous wide span frame. The resolution of this conflict was facilitated by a shift in German architectural theory from emphasis on material form to emphasis on space. Stated differently, the polarity of *Tektonik* and *Stereotomie* was subsumed within an understanding of architecture that emphasized space.⁴



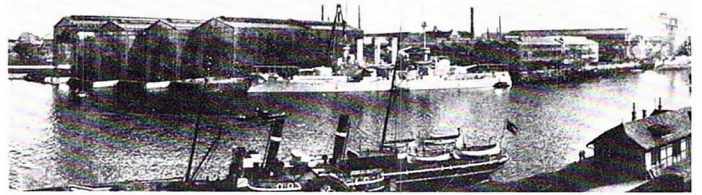
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 2 Gate to the AEG factories on the Humboldthain, Brunnenstrasse, Berlin. Franz Schwechten, 1896. The architectural sensibility of the corporation a decade before Peter Behrens was associated with the AEG.

3
 3 Wiegand House (now the seat of the Deutsche Archeologisches Institut), Berlin-Dahlem. Peter Behrens, 1911–1912.

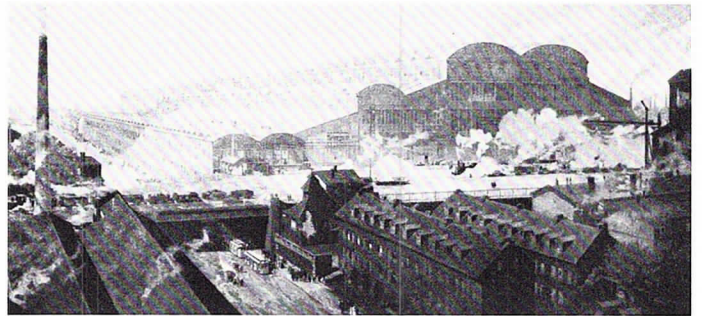




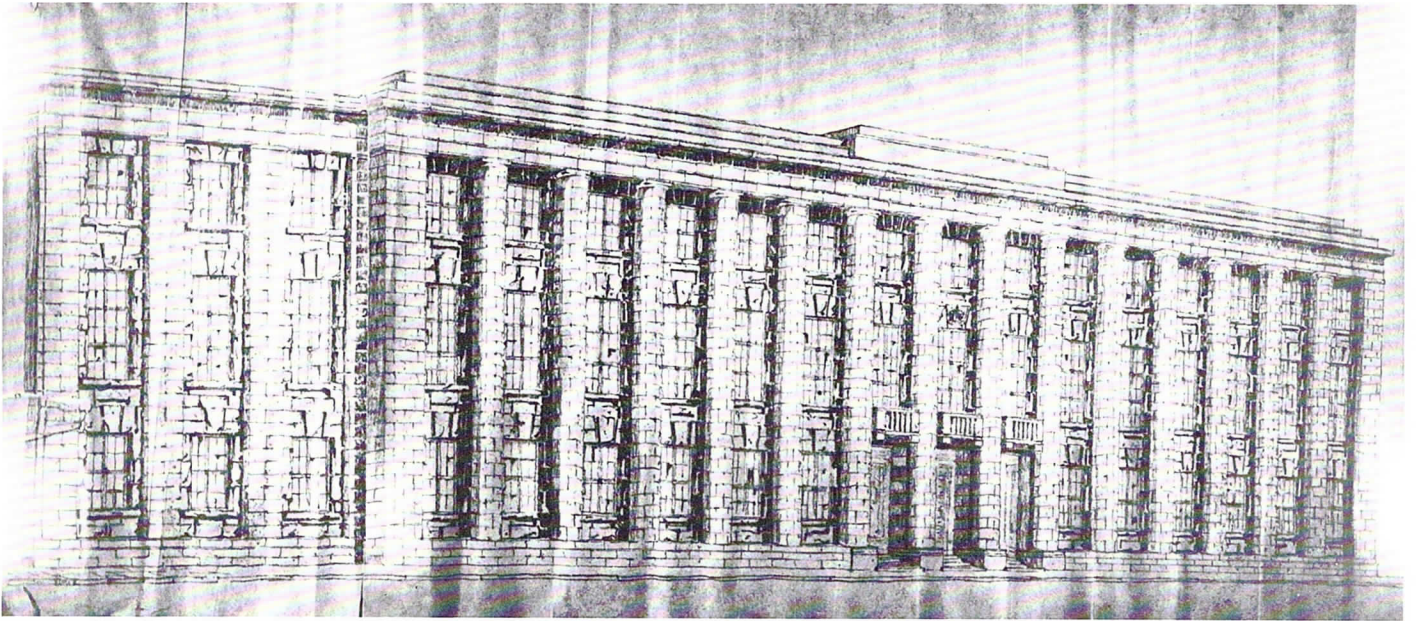
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7
 4 Friedrich Krupp AG,
 Germaniawerft, Kiel-Gaarden.
 Interior of the covered slip with deck
 of the battleship "Hessen."
 5 Germaniawerft. General view,
 1898–1902.
 6 Friedrich Krupp AG, Ninth
 Machine Workshop, Essen, 1906ff.
 7 German Embassy, St. Petersburg
 (now Leningrad). Peter Behrens,
 1911–1912. Presentation drawing.

56 Elaborating on Neoclassical theory, Gottfried Semper had contrasted the crystalline, mechanical wholes of *Stereotomie* to the organic, membered structures of *Tektonik*.⁵ Coming from a different quarter Jacob Burckhardt accepted the idea of an organic architecture, but claimed that this could only result from a fortunate conjunction of naiveté and closeness to nature. Burckhardt postulated that this had happened only twice in history, arguing that there had been only two organic styles, each with its single grand type: the peripteral temple of the Greeks and the multi-aisled Gothic cathedral complete with its front towers. Any “diversion” from the tectonic norm of the great organic types would cause a transformation into a spatial style (*ein Raumstyl*). “The late Roman style is already close to such a transformation, developing a significant spatial beauty which then lives on to varying degrees in the Byzantine, Romanesque, and Italo-Gothic styles—finally culminating in the Renaissance.”⁶ As the “diverted” types tend toward planar and cubic compositions, so the space, with an equally assertive cubic quality, comes to have an importance equal to that of the solids. Thus Burckhardt, by contrasting organic styles to spatial styles, honored the great tectonic prototypes but also implied that the organic, tectonic structures were emphatically corporeal and material.⁷

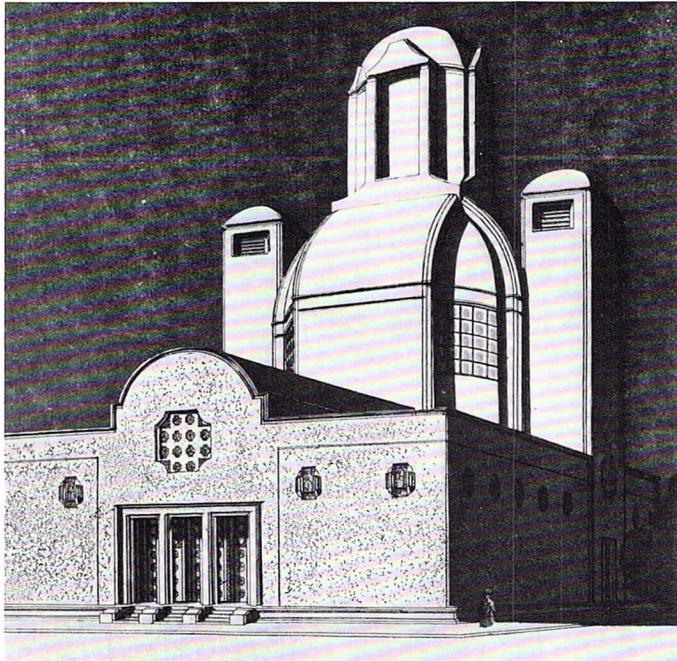
The shift in theoretical dominance from the tectonic conception of architecture to a spatial conception was fixed with August Schmarsow’s inaugural lecture at Leipzig in 1896 in which he characterized architecture as, essentially, the forming of space (*Raumgestalterin*).⁸ The apparent obviousness of this description compelled Schmarsow to engage in a polemic against established positions. He argued that contemporary architectural education, like Semper’s theory, sought to construct the essence of a building style in terms of the orders, of the vaulting construction, or even from the crafts of the period. On the contrary, he suggested, an architectonic work is not achieved through the mere assembly of tectonic components. The emphasis must shift from material calculation and the *Formbildung* or *Ausgestaltung* of individual members, to a larger sense of the whole.

In architecture, Schmarsow continued, the forming of space is the principle of style formation in all times. He felt that Wölfflin, relying on Semper, was completely wrong in saying that the birthplace of a new style was in decoration. Decoration was merely the easiest place to introduce a new feeling for form. Wölfflin’s definition of architecture as the art of corporeal masses was also wrong in that it depended upon the material aspect of architecture. In this Wölfflin was echoing Burckhardt whose division of all styles into “organic” and “diverted” left the starting point in the corporeal realm. Furthermore, Schmarsow pointed out, even Semper had considered Gothic architecture to be merely constructive, not organic in the sense assigned to Hellenic works.

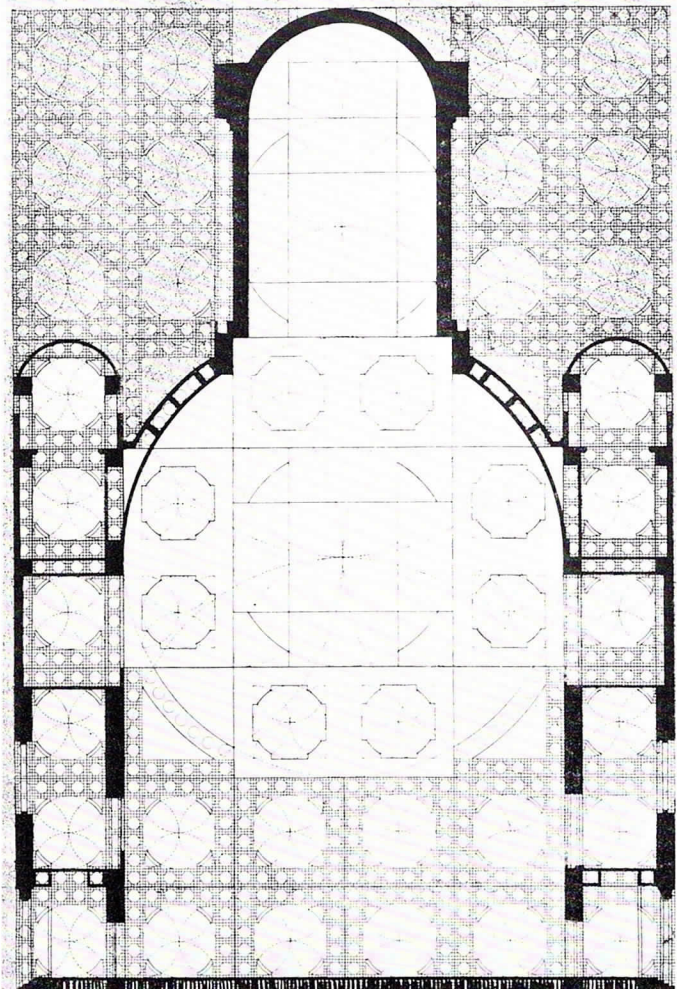
Schmarsow felt that architecture understood as the “former-of-space” had several results. The *Tektonik* of the orders, admired by the Neoclassicists, was no longer an absolute norm; thus other styles could be more fully appreciated. The search for the spatial conception would be in accord with what Schmarsow considered Aristotle’s genuine artistic truth, “The whole precedes the parts.” Finally, Schmarsow suggested, the source of such a new holistic spatial conception would be found in the innermost energies of the culture.⁹

Behrens came to be indirectly influenced by Schmarsow’s themes of “painterly, optical” perception, holism and endemic cultural energy, and Schmarsow’s acceptance of generally depreciated styles. These same themes also lead us to another scholar by whom Behrens was much influenced—Alois Riegl.¹⁰

Although Schmarsow, Riegl, and Behrens were to move away from the internal, “materialistic” criteria of the theory of *Tektonik* toward an understanding that could positively incorporate both tectonic and non-tectonic architectural styles, they did not wish to advocate an arbitrary randomness. If the processes of artistic creation could lead to formal results that were polar opposites, then the determining criteria must be external to the creative process. Here Riegl supplied the missing link between the established concept of the *Zeitgeist* and specific artistic



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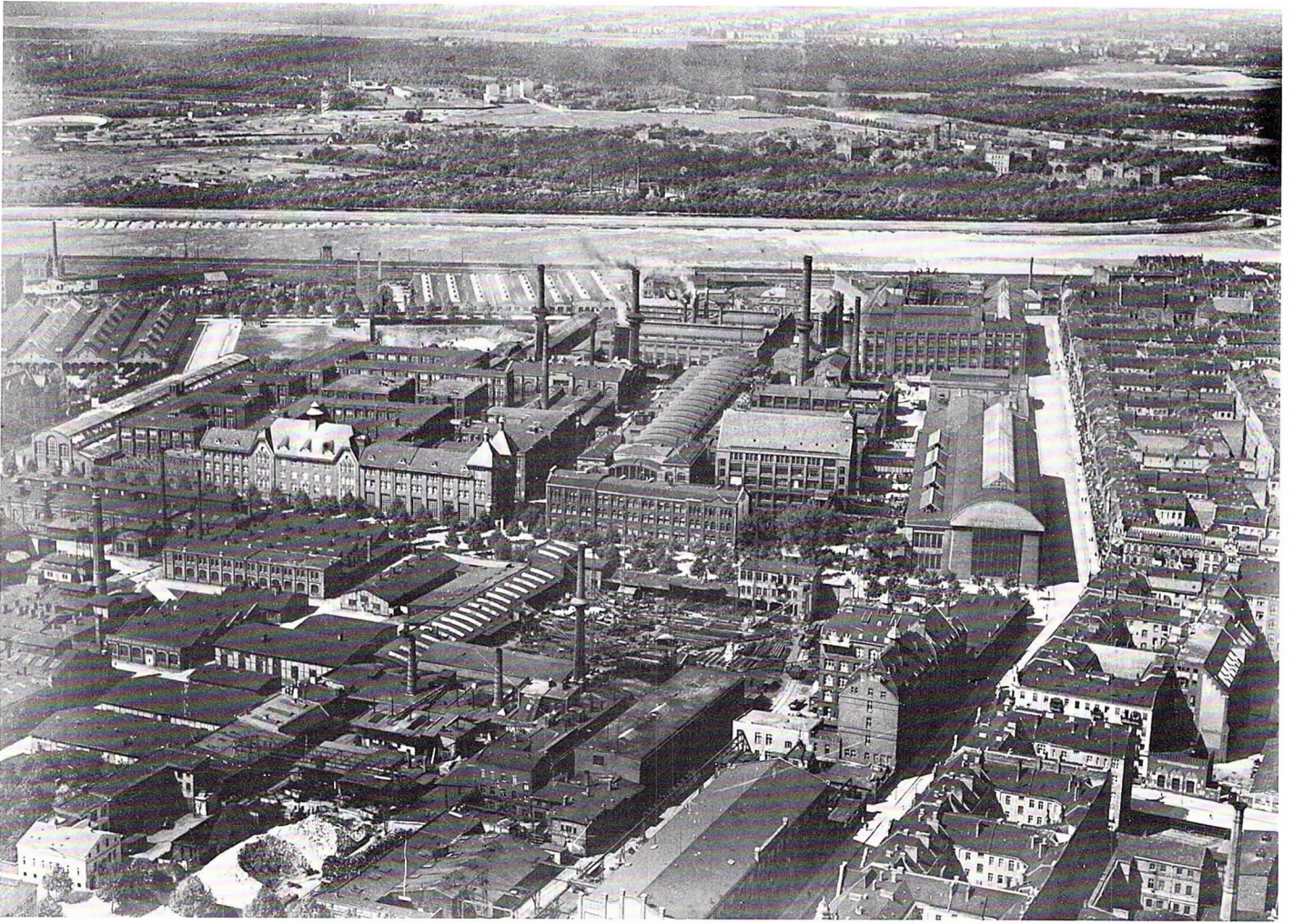
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8 Project for a church. Christian Bayer, pub. 1909. Perspective. Designed according to a method advocated by J.L.M. Lauweriks in which the same differentiated grid underlay the plan, sections, and elevations.

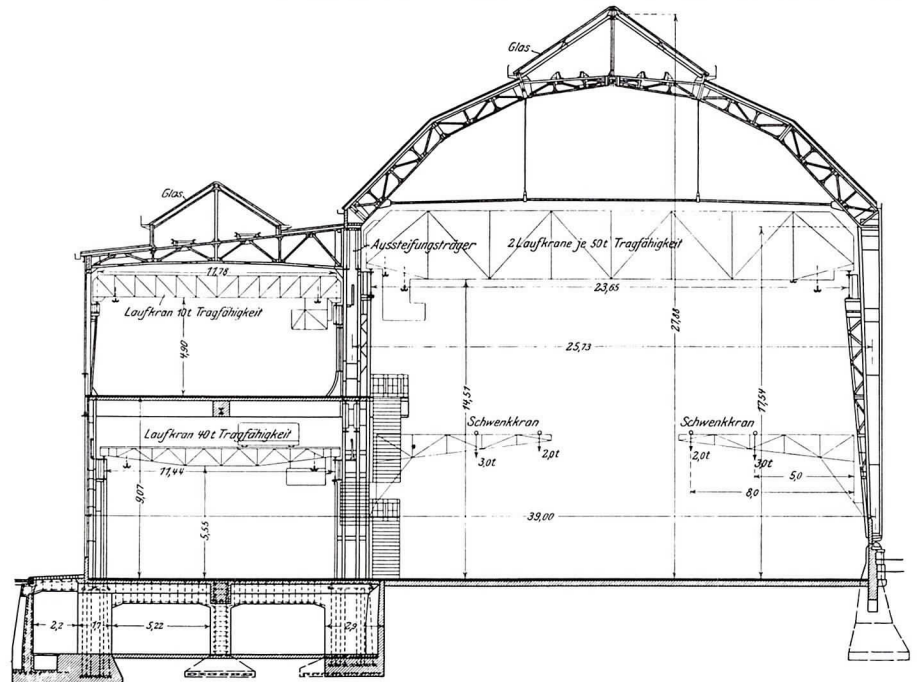
9 Project for a church, section.

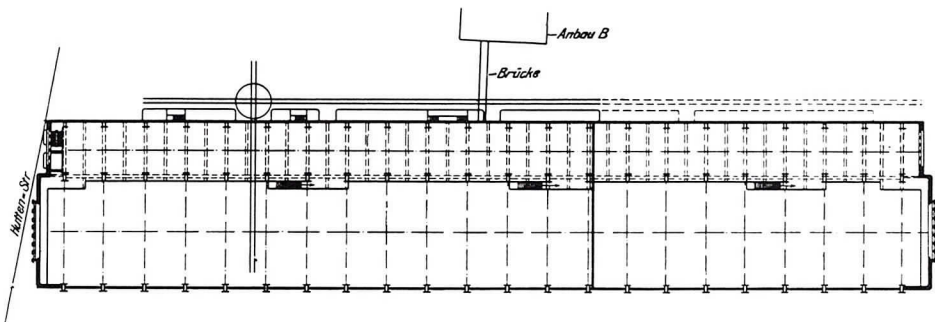
acts. This link he termed *Kunstwollen*—the will to art. At the first level, *Kunstwollen* accounted for the artist's control of the creative process *against* the practical dictates of the problem itself. However, to account for the determining criteria behind the unified style of a time, this apparently free will of the artist came to be associated with a collective, goal-oriented, motivating volition shared by the entire culture of which the artist was a part. For Behrens this meant an acceptance of the spirit of the times which he perceived to involve "an absolute clarification of spatial form to mathematical precision."¹¹ He regarded this as a metronomic, staccato pulse, as a form of reductionism implicit in the concept of *Sachlichkeit* which at that time was not yet confused with functionalism. There had also to be a recognition of the spirit of the people, of a *deutsche Volksgeist* of clarity and power. For Behrens the great imperative was that these collective, teleological wills be fulfilled—even in battle *against* function, material, and technique.¹²

It is largely due to his avoidance of total or continuous immersion in the industrial situation that Behrens's first works for the AEG (both in architecture and industrial design) were unprecedented in industry; his ideological dictates overcame gratuitous ornamentation and naive engineering functionalism while also undermining the more sophisticated functional theory of *Tektonik*. Behrens was the one to set this precedent in industry, but it must be admitted that there were other theoreticians and artists who also might have applied their version of the modern *Zeitgeist* to industry. Ideologically, Behrens is of a school that includes all those who were devoted to *Sachlichkeit* as a symbol of the times, to a cubic definition of space, and to a domination of the idea over the existential situation. Among those who were similarly committed one should include the more vigorous Viennese who were influenced by Otto Wagner; the more radical geometers among the Dutch, e.g., J. L. M. Lauweriks (figs. 8, 9); Hermann Muthesius in his insistence on conventional types; art theorists such as Alfred Lichtwark and J. A. Lux; and even political ideologists such as Friedrich Naumann.¹³

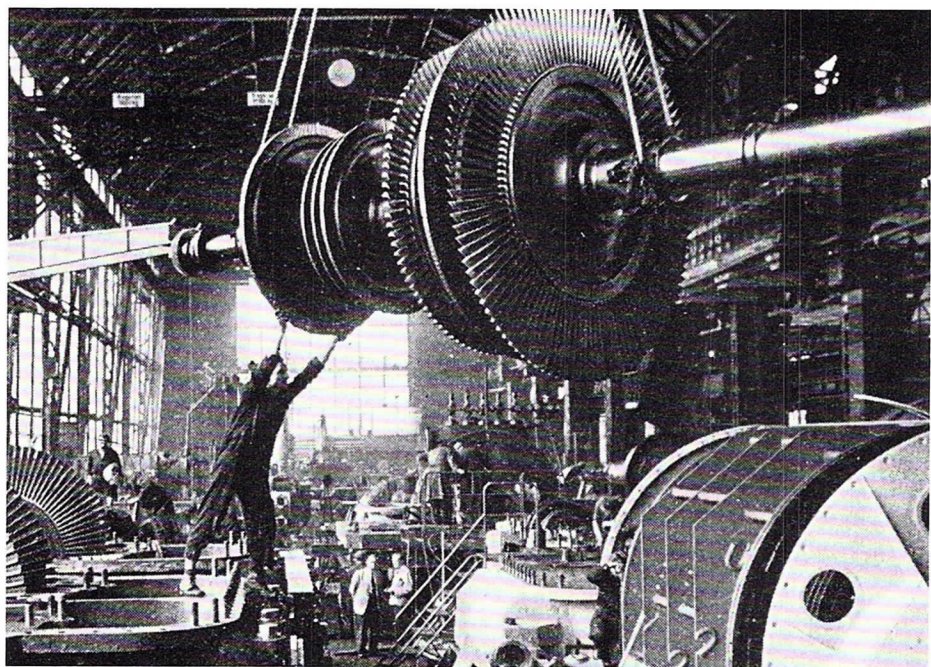


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 10 AEG Turbine Factory site,
 Berlin-Moabit. Peter Behrens with
 Karl Bernhard, 1908–1909. The
 “temple” facade of the Turbine
 Factory is at the right center.
 11 AEG Turbine Factory.
 Transverse section.
 12 AEG Turbine Factory. Plan.

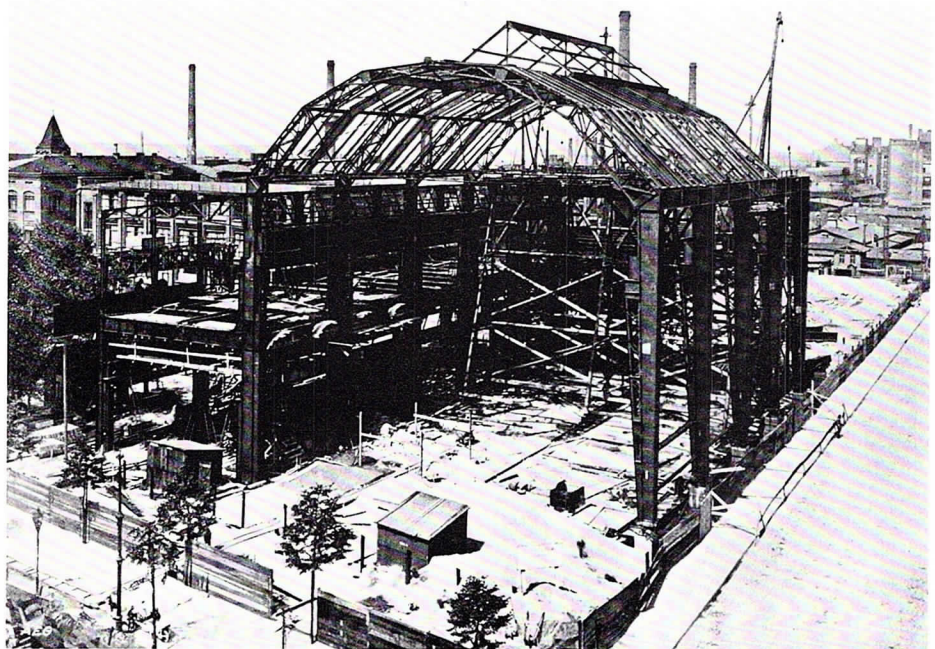




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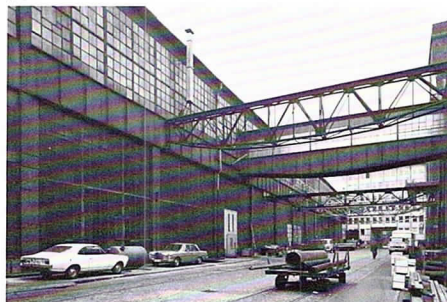
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13 AEG Turbine Factory. Interior.

14 AEG Turbine Factory. Under construction.

15 AEG Turbine Factory. The two street facades (Huttenstrasse and Berlichingenstrasse).

16 AEG Turbine Factory. Side to the factory complex.

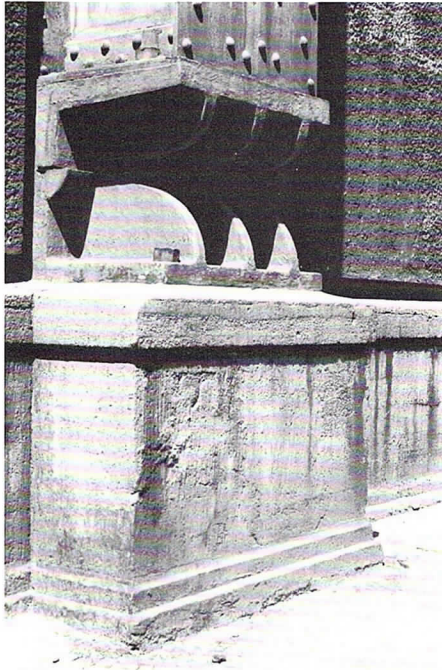
17 AEG Turbine Factory, Berlin-Moabit. Hinge of arch, Berlichingenstrasse.

18 AEG Turbine Factory. Berlichingenstrasse side.

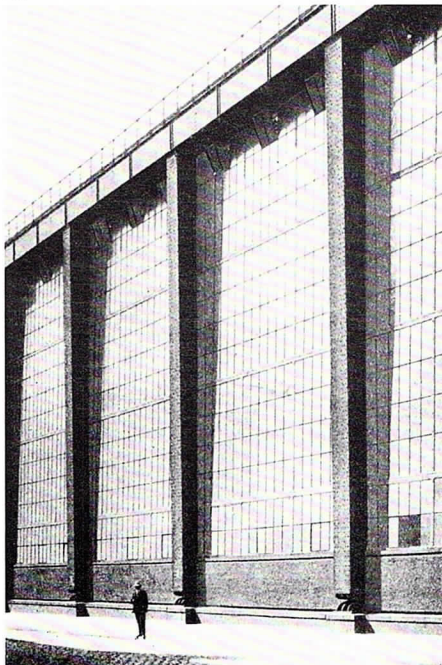
19 Tower and gable of the infirmary, Mittelschloss, Marienburg.

20 Cathedral and castle, Marienwerder.

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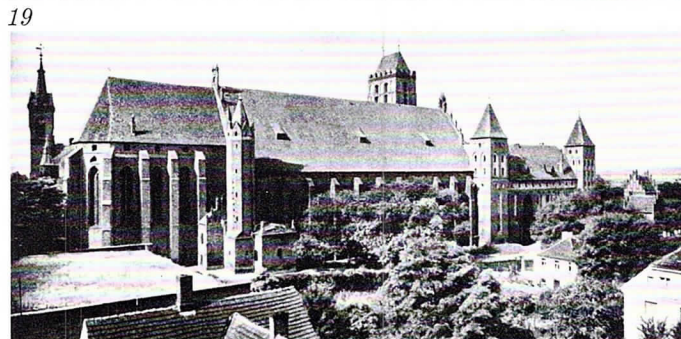
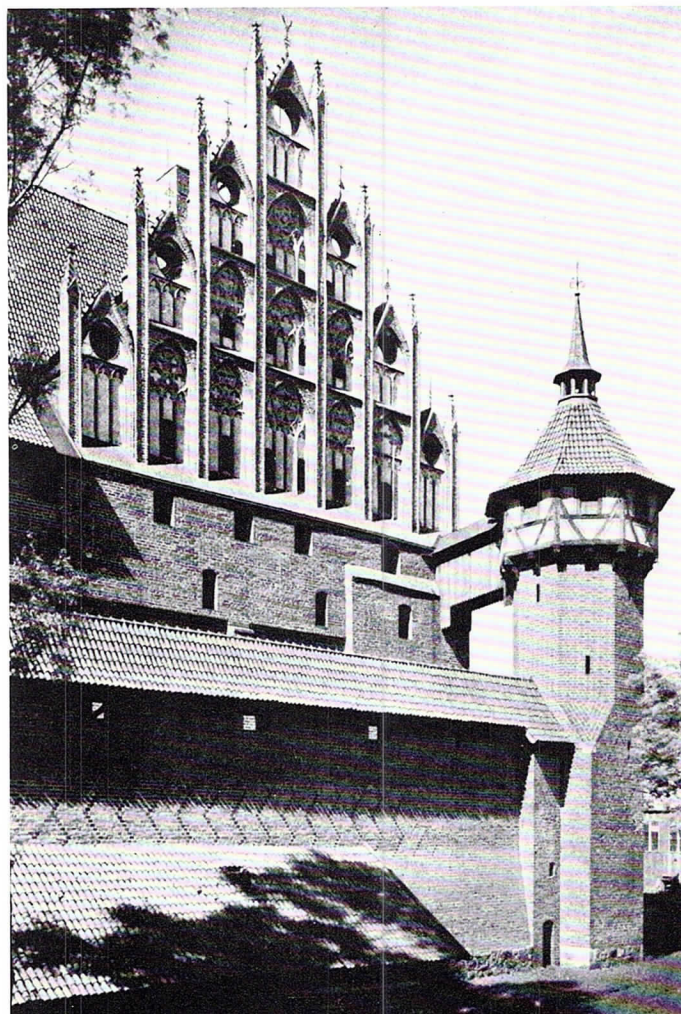
The most remarkable and well known example of Behrens's *Kunstwollen*, of his "historicist" form-giving, was the AEG Turbine Factory (figs. 10–18). The peculiar industrial circumstances surrounding this commission require some discussion.

The AEG, founded in 1883, was already a thriving corporation by the early 1890s. In 1896, it began to build its first extensive industrial site on a large terrain on the Humboldthain in northern Berlin (not far from its existing factory in the Ackerstrasse). This was the complex which Behrens was to bring to completion before the first World War. The pre-Behrens factories on this site (the latest of which appears at the left of fig. 23) were nondescript buildings of conventional mixed brick and iron construction employing modest amounts of medievalizing ornament. The most exuberant yet characteristic element in this first group was the polychromed and castellated main gate which still stands at the northeast corner of the site, facing onto the Brunnenstrasse (see fig. 2).¹⁴ However, a more general comparison between the old and the new order may be seen in the Factory for Electric Railway Equipment (Fabrik für Bahnmaterial [see fig. 23]). This building had been undertaken in 1905 with masonry detailing derived from late medieval north German brickwork. When Behrens arrived, the wing that appears at the left of Figure 23 was complete, as was most of that wing which appears on the right, inclusive of the structural ironwork for the clock and water tower.¹⁵ A study of the facade at right, and especially of the clock tower, reveals how Behrens, unlike his predecessor, was to achieve a broad and simple grandeur in his own derivations from medieval prototypes, such as the Marienwerder and the Marienburg (figs. 19, 20).

Under General Electric patents for the Curtis steam turbine and AEG's own patents acquired through the work of Professors Riedler and Stumpf of the Technische Hochschule, Berlin, the AEG was to start the production of turbines in 1902. After merging with the Union Elektrizitätsgesellschaft in 1903, the AEG moved its turbine fabrication to the former Union factory site (see fig. 10, a site of almost 88,000 square meters) in the Moabit dis-

trict of Berlin. There, housed in an existing 200 meter by 18 meter iron-framed, clerestory and sky-lit shed (near the center of fig. 10), the first AEG-Curtis turbine was produced in 1904.¹⁶ The large-scale development and production of these turbines began about 1907, and soon after, the demand for more and larger turbine construction space had to be met. It was in response to this need that Peter Behrens was commissioned to design his first factory, the giant turbine fabrication hall which was to stand on the southeast corner of the Moabit factory site at Huttenstrasse and Berlichingenstrasse (see fig. 10, right center).¹⁷ The factory was designed in 1908–1909; construction began in the spring of 1909 and the plant was in full operation at the beginning of 1910. Oscar Lasche, an engineer and the director of turbine fabrication for the AEG, specified the physical requirements for the new factory: full utilization of the available site, a main assembly hall having dimensions of approximately 80 by 400 feet (able to be extended to about 650 feet); two relatively fast traveling cranes capable of lifting almost 100 tons together and installed at such a height that the largest machine parts could be carried over machines on the assembly floor; radial cranes at regular points along both sides of the hall; the capability of bringing railroad cars directly into the work space; a smaller flanking construction to accommodate storage and secondary manufacturing operations (also equipped with traveling cranes); and the maximum amount of natural light consistent with the strength demanded in a building for such heavy and dynamic utilization.¹⁸

It is clear that Behrens, a man completely untrained in engineering and even lacking formal schooling in architecture, a man who had built only small buildings in the most traditional materials and then with a remarkable lack of sense for practical considerations, was ill-prepared for the technical problems of this new building program. There was an obvious need for the talents of an accomplished engineer, and consequently also the need for Behrens to come to terms with both new building materials and the problems of collaborative design. To this end, the respected engineer Karl Bernhard¹⁹ became Behrens's collaborator on the Turbine Factory. However, despite



62 Bernhard's expertise, Behrens used the engineer as an agent for his design rather than as a full collaborator, as we shall see.²⁰ Beyond the forcefulness of his own personality and his intimate connections with the directors of the AEG, the symbolic significance presumed for the Turbine Factory may have helped Behrens to achieve this control.

The Turbine Factory was meant to be symbolic in several senses. Elaborate significance was attached to the turbine and to the turbodynamo as impressive sources of modern power. One of the executives of the AEG later wrote that Behrens felt something of that which vibrates in the words of the poet Heinrich Lersch:

*Maschinen rauschen in Heiligen Liedern, Fabriken sind gottliche Kirchen der Kraft.*²¹

With a sense for turbines as the sources of power, the Turbine Factory would stand in a relation to other factories like a great abbey to its priories. The new hall was not only to be the most important building on the Moabit site, it was also to occupy the southeast corner of the site, oriented toward the center of Berlin, and thus would serve as the show-front of the entire factory complex. Executed in the way it was, this facade was to become *the* face that the AEG turned to the world, superseding the castellated gate on the Brunnenstrasse.

Behrens's design for the Turbine Factory called for a main assembly hall running for 207.38 meters along the Berlichingenstrasse, although a unit only 127 meters in length was built in the first phase (see fig. 12). Bernhard's structural design is most easily appreciated in the transverse section (see fig. 11). The basic structure of the main hall is an asymmetrical three-hinged arch with a tie-rod. The impressive mechanical detail above the reinforced concrete foundation along the Berlichingenstrasse (see figs. 17, 18) is one of the hinges. From this hinge the first, and longer, member of the asymmetrical arch ascends vertically and then arcs, in three facets, into the central hinge at the apex of the main structure (see figs. 11, 14). The other, shorter member springs from the highest point of the structure shared by the main and side halls. The tie-rod is attached just above this point; the span is 25.73

meters; a large, continuous skylight about ninety feet above the floor crowns the entire construction. The shorter member of the arch and the corresponding part of the longer member have box-like open lattice-work cross-sections, while the vertical segment of the long member has a plated box section. Attached to the interior of this vertical segment is a lattice-work member which supports one of the traveling crane tracks which run immediately below the tie-rods. The clearance below the cranes is 14.51 meters; their clear span, 23.64 meters. The asymmetrical arches occur at 9.22 meter centers along the length of the building, with continuous glazing between; at every other arch is located a radial crane cantilevering eight meters (2000 kilograms capacity at full reach). The side hall included a basement in reinforced concrete and a two-story superstructure of mixed construction.²² The structure had not only to incorporate large glazed areas for the provision of light to the working surface but also to resist the forces involved in braking heavily loaded cranes moving at the rate of two meters per second.²³ This accounting of the main physical aspects of the building evokes the scale of the problem and the technology that was employed. However, as we have come to expect with Behrens, such technical matters were only means to more ambitious ends.

Behrens was anxious to correlate a number of different concerns. The practical needs outlined by Oscar Lasche dictated a gargantuan scale²⁴ and a ferrous structure much influenced by these magnitudes. Behrens himself wanted to express the quality, scale, and cultural significance of this "new nature," convinced that such an expression required the formulation of a symbolic structure outside the province of the engineer. He sought to give his architecture a corporeality which it previously lacked but which he now, like most architects before him, thought was necessary even in the housing of a taut structural cage. And he desired to be the prophet of a new classicism destined to reinterpret the energies of contemporary life in terms of the eternal verities.

This search for corporeality and classical expression was a distinctive point in Behrens's development. The sym-

bolic expression of a “new nature” constituted the challenge to his new position. Less important, but not to be ignored, was the fact that this orchestration was to be played out in Berlin, where Behrens admired but also aimed to rival the work of Germany’s most famous Neoclassical architects, Carl Friedrich Schinkel and Friedrich Gilly.

In a statement made by Behrens at the time of the completion of the Turbine Factory,²⁵ several of these concerns can be noted. Behrens stated that the architectonic concept behind the main body of the building was to draw the construction together into an emphatic mass of iron rather than to allow the iron framing to dematerialize into a dispersed network.²⁶ This hall should have an enclosed, planar definition emphasizing the architectonic proportions of its space. The principal vertical members were detailed with solid-web walls in order to give them mass, emphasizing their dual roles as both structural supports and as space-definers. The massiveness of these members was all the more important since the building was to be constructed, so far as possible, of iron and glass. Where Behrens felt that these materials were architecturally inadequate, carefully executed concrete walls were to be used. Behrens maintained an understandable but highly problematic conception of concrete as a plastic material that could easily assume any form desired. In the Turbine Factory, he sought to use concrete as an infill material that would not possess the load-bearing appearance of masonry. Only the iron members were meant to suggest a supporting function; the windows of the side elevation were inclined along the inner face of the structural members, allowing those members and the beam at the cornice line to stand in strong relief. This entablature-like beam and the gable of the front elevation were to establish, according to Behrens, a corporeality, a body resting on the principal members of the side elevation and on the structural mullions of the window at the front. The iron bands set in the rounded concrete corner elements made horizontal lines which, Behrens felt, provided a distinction between the structural verticals and the more plastic infill. The mullions and glass of the end window were detailed as one large plane in order to suggest its bearing

function: all mullions of the same size, the glass in the front plane of these members, and the whole in the plane of the gable.

At the two-story side hall (see figs. 15, 16) the street elevation and four meters of the long side elevation were rendered in concrete so as to accent, according to Behrens, the totally iron and glass construction of the side wall. However, since iron and glass lack the volumetric quality of stone, the concrete end walls of both the halls were needed to tie the composition together and ensure its desired massiveness. Thus though the engineer’s calculations ensured unity and stability, the eye was seen as requiring its own cues. At the same time, Behrens eschewed sculptural and ornamental decoration as being inappropriate to a factory and inimical to the goal of corporeality.

Behrens could hardly have been more specific about his rejection of normal factory construction in iron and glass; nor could he have been more frank about his endeavor to bring these materials into what he saw as the elevated tradition of architecture. In the side elevation on the Berlichingenstrasse (see fig. 18), Behrens and Bernhard succeeded in fulfilling the architect’s aims with a minimum of technological compromise: the large scale, the industrial materials, the machine-like details are technically appropriate, but also achieve an intensified character. Set on a high pedestal, the hinge (see fig. 17) becomes a reference to the more complex engines within. These bases, the solid, boldly revealed uprights, the concealment of the diagonal bracing, and the shadow cast by the trabeation establish a machine classicism rich in corporeality, in nuance of detail, and in levels of evocative meaning. By the testimony of Bernhard, the simple iron and glass elevation on the Turbine Factory toward the rear yard (see fig. 16) was very different from that on the Berlichingenstrasse (see fig. 18). Of course, there are differences inherent in the operation of the two parts of the building itself: two small stories as against one large; an active face toward the factory complex in contrast to an inactive face lining the street. Beyond these contextual differences there were also fundamental differences in the design process.

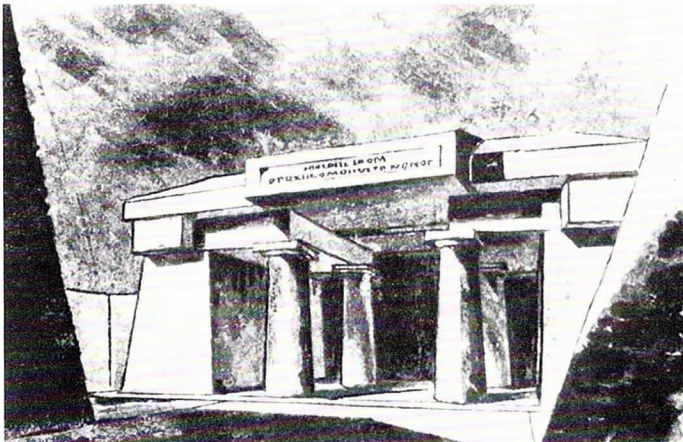
21 Siemens-Schuckert-Werke,
Metallwerk, Berlin-Siemensstadt.
Hans Hertlein, 1917.

22 Project for a city gate. Friedrich
Gilly, c.1800.

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Bernhard actually thanked Behrens for accepting, on the courtyard side, what the engineer took to be the direct result of pragmatic considerations.²⁷

Bernhard juxtaposed this mildly ironic gratitude with a criticism of Behrens's artistic control of the Huttenstrasse elevation, which needed to be no more than a closure for a series of arches, logically related to the cross-section as given by the structural members (compare figs. 4–6, 21). Asymmetries in the function of the building and in the urban situation led to the use of asymmetric arches which were then concealed by the symmetries of the Huttenstrasse facade. Similarly, the two stories of windows in the Huttenstrasse facade of the lesser side hall mask the irregular conditions of a stairwell and an elevator shaft. In both cases, form and fact are in conflict and the awkward juncture of the side hall against the inclined pylon gives some indication of how independently form was conceived with respect to function.

Something similar can be said of the gable front which Reyner Banham regarded as displaying the traditionally acceptable formalism of Behrens. Surprised that Behrens did not hold to a normal triangular pediment, Banham offered a technological explanation of the polygonal gable-form: the need to gain clearance for the traveling cranes.²⁸ However, as the section (see fig. 11) indicates, the tie-rods forced the cranes to run well below the extra space created by the unusual roof form. Structurally, the spanning portion of the three-hinged arch could have ascended in a straight line from its springing to the crown. According to Bernhard it was Behrens's decision about the facade that predetermined Bernhard's attitude toward the arch. In this case, ideas concerning form and symbolism dictated the physical solution.²⁹

Behrens wanted the roof in particular to establish the corporeality of the Turbine Factory.³⁰ Only by creating a heavy gable, which is not in any way implicit in the asymmetrical arch and tie-rod, could Behrens give the roof the desired weightiness. Behrens's image of the building as a whole, and his desire for a corporate display-facade, required him to move out of the plan of the last arch and

establish a new structural system for the facade. The concrete gable, with Behrens's hexagonal signet for the AEG, is borne by an iron truss, the top chord of which coincides with the profile of the arches beyond. This truss had to be supported, and Behrens thus provided his show-front with bearing members which were not just stabilizing mullions or the infill of a plane below a structural arch.

A strange phenomenon may be observed in the completed building. Behrens considered the concrete corners to be infill detailed in such a way as not to compete with the iron structure.³¹ Concrete was a rather odd choice for this purpose, but in fact Behrens was creating a building without structural support at the corners—a kind of corner window rendered in concrete! The implication of this would seem to be that he was creating independent facades which required rather neutral transitions from one to another. The structureless corner was the unexpected and even unexploited consequence of other decisions.³²

Thus for Behrens the Turbine Factory was clearly a compound of metal supports and concrete infill. Bernhard, on the other hand, was displeased that concrete was used so freely in the Huttenstrasse facade and found it only natural that people interpreted the Turbine Factory as two massive corner piers with a high pediment—or that Oberbaurat Erhard of Vienna misclassified the building as one of reinforced concrete construction.³³ However, the alternative readings of the Turbine Factory are too obvious to encourage the belief that Behrens was unaware of the ambiguities he had established. The unusually weighty, and even classical, character explicitly intended by Behrens in this iron-framed building delighted many contemporaries because it brought this type of utilitarian construction into the architectural tradition.

However, a comparison of the Turbine Factory with a Neoclassical portal by Friedrich Gilly (fig. 22)³⁴ yields some notable contrasts. The flanking pylons, the overhanging masses above, and the central void are similarities of the two designs. Yet Gilly was consistent at both a traditional and utilitarian level: solids support or span; voids serve for passage. In the Turbine Factory, the cen-

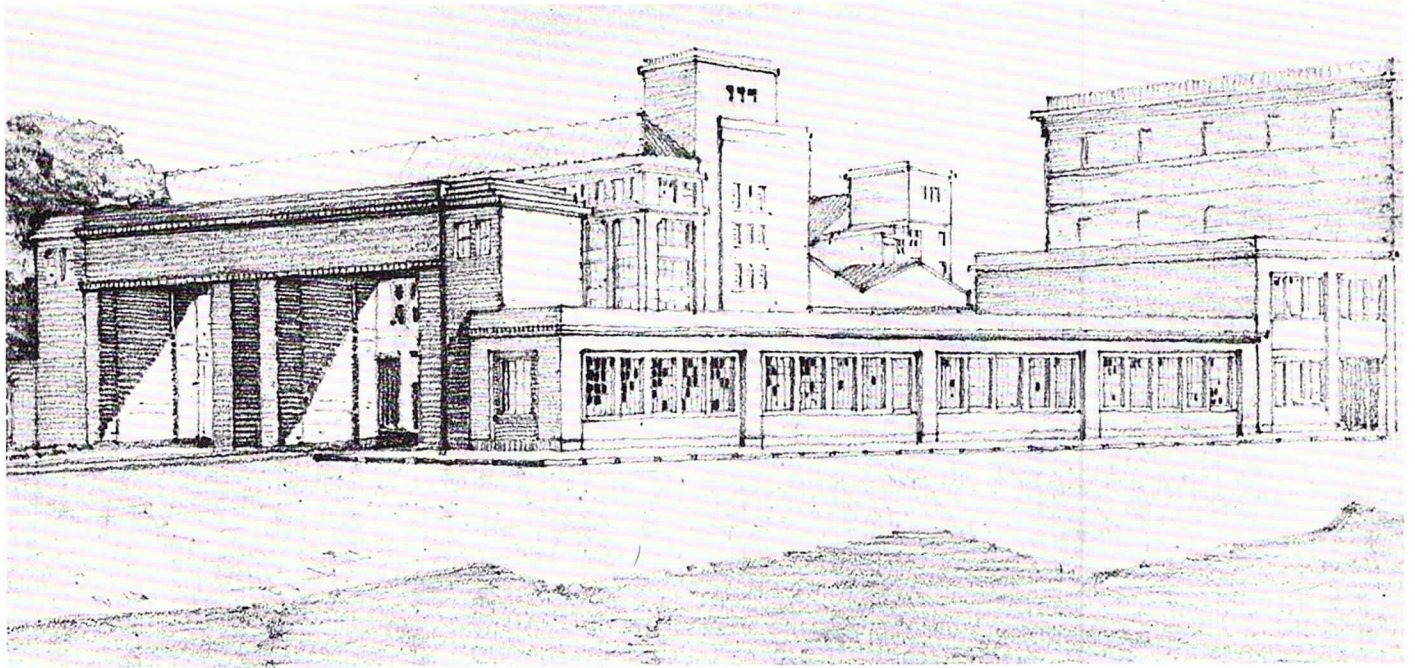
tral void did not serve for passage; indeed, its unemphatic framework was simply the support for the overhanging mass. The factory-temple had no corner columns; the most massive elements of the building, the pylons, were to be read as mere infill. The inherent ambiguities of the factory and its inversion of classical form are consistent with Behrens's will to mark his resigned endorsement of industrial civilization.

Any appraisal of the Turbine Factory as Germany's first monumental iron and glass building³⁵ may be refuted by citing such precedents as August von Voit's Munich Crystal Palace (Glaspalast, 1854), or the more monumental great circular hall by Friedrich von Thiersch in Frankfurt (Fest- und Ausstellungshalle, 1907–1908), and a number of railway stations, including the very impressive structure built in Hamburg by the architects Reinhardt and Süssenguth and the engineer Medling (1903–1906).³⁶ If one chooses to see the Turbine Factory as the “first piece of modern architecture” because it makes “logical use of modern materials such as steel and glass” and “solves a typically modern industrial problem,”³⁷ or as “frank industrial architecture,”³⁸ then one is failing to take note of another factory that is even more frank, more logical, of grander scale, and which integrates within it an impressive differentiation of transport systems: namely, the thirty-one meter wide Krupp Ninth Machine Shop in Essen, which is a strictly iron framed building with glass and brick infill (see fig. 6).³⁹ Another example of impressive iron and glass factory buildings could be the completely glass-covered slips of the shipyard Friedrich Krupp AG Germaniawerft at Kiel-Gaarden (see figs. 4, 5), built in the years 1898–1902.⁴⁰

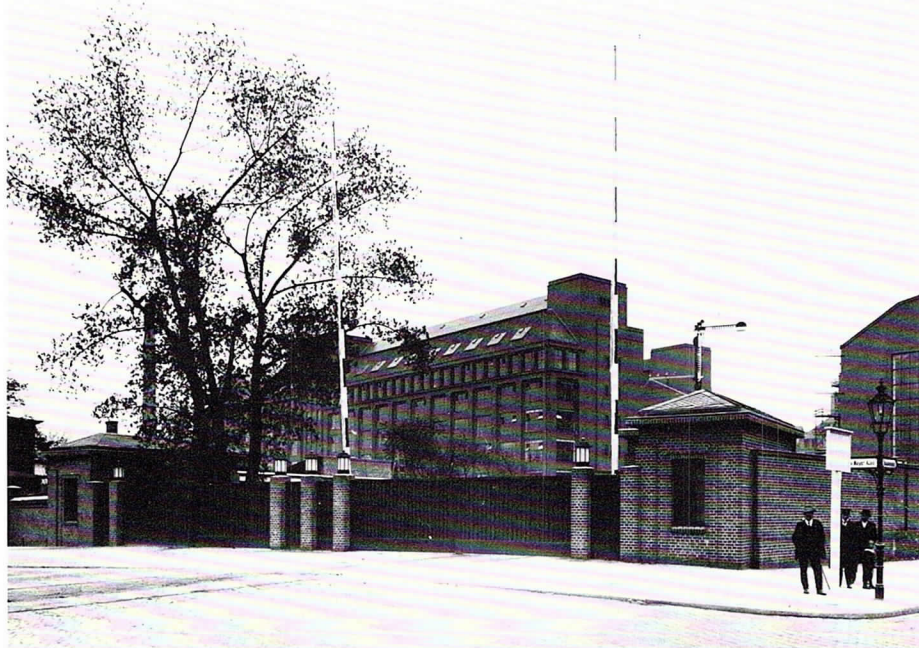
These Krupp factories serve as precedents for an industrial architecture developed within the conditions of site, use, process, and construction.⁴¹ These factories were light and spacious, and free of historical reference.⁴² On the other hand, it was Behrens's intention to express the essence of powerful contemporary collective institutions. Beyond mere utility, Behrens sought to create the monuments of a culture based on modern industrial power—both physical and corporate power. Behrens's success in

24 AEG Humboldthain factory site, Brunnenstrasse, Berlin. Development as of 1914; factories by Behrens are the High Tension Factory (upper left, compl. 1910), the Small Motors Factory (bottom center, 1910–1913), and the western

part of the Factory for Electric Railway Equipment and the Factory for Large Machines (lower left, both 1911–1912). The latter factory was shortly extended through the corner site to the Voltastrasse.



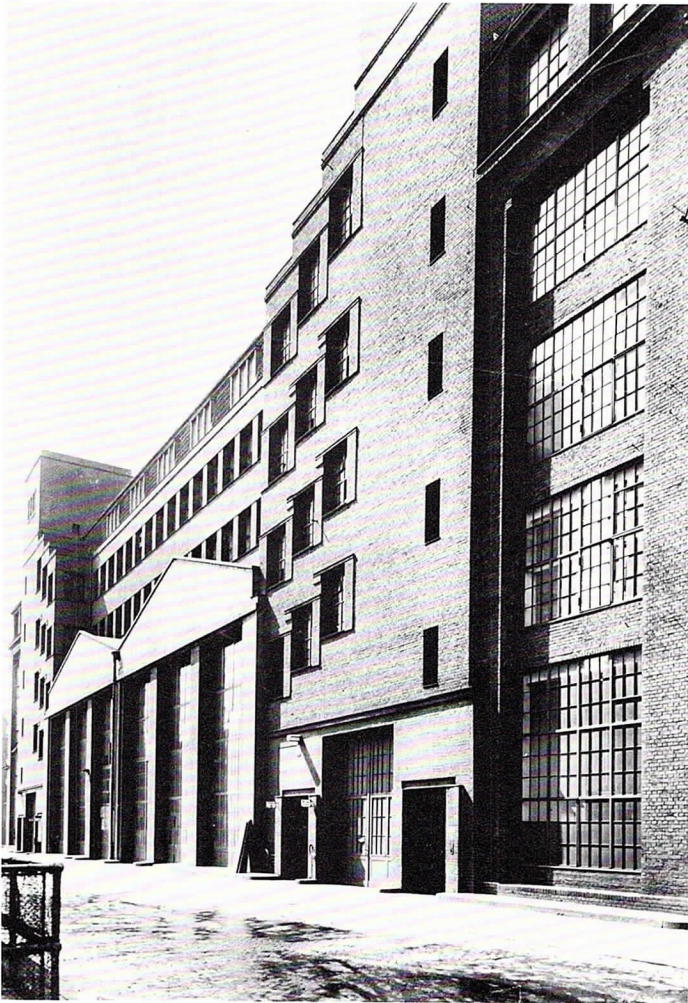
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25 Project for goods entrance gate, AEG Humboldthain factory site, Berlin. Peter Behrens, 1910–1911. Unexecuted design. High Tension Factory in background.

26 Goods entrance gate, AEG Humboldthain factory site, Berlin. Peter Behrens, 1912. Factory for Large Machines at right.



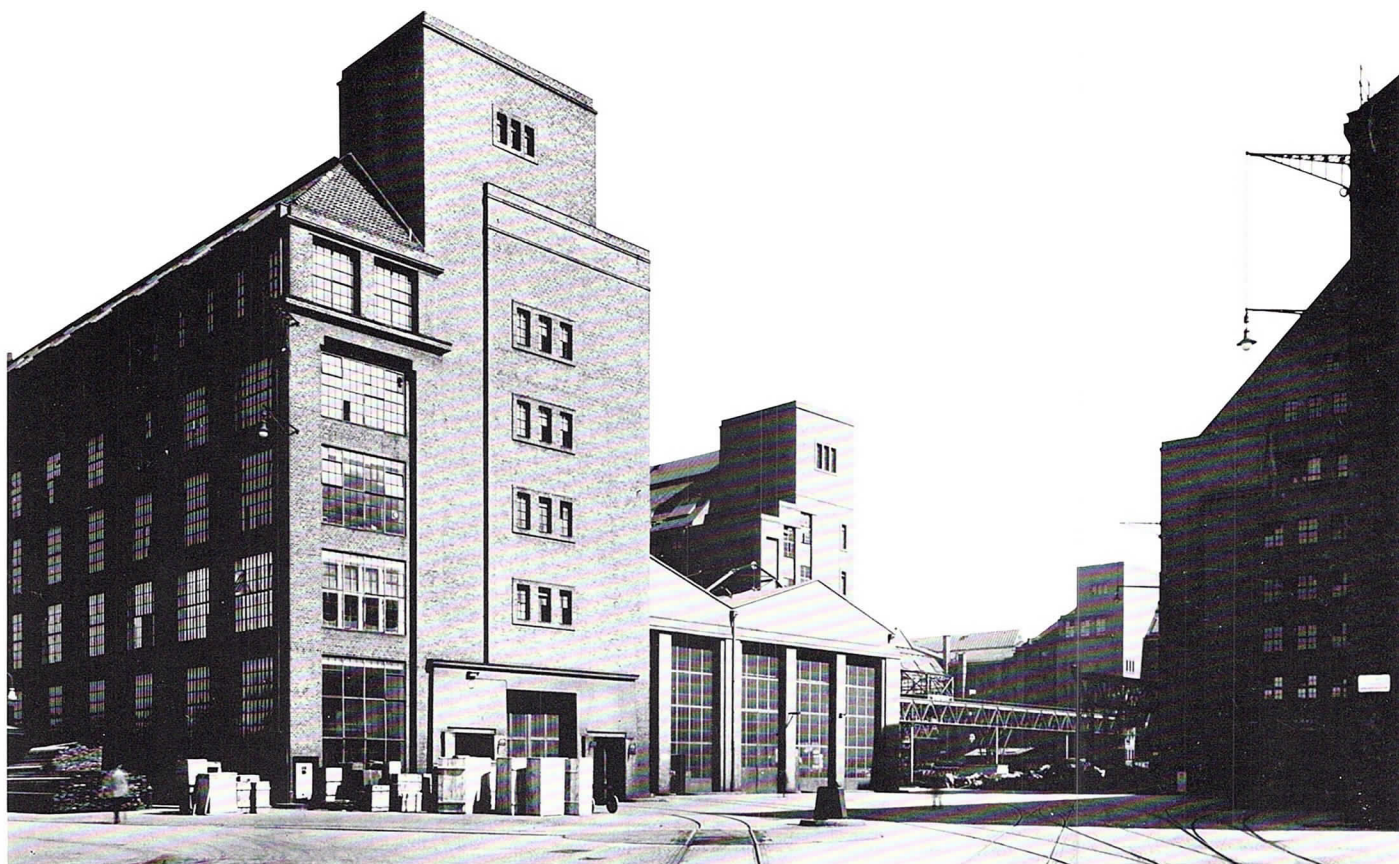
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this program made his Turbine Factory unprecedented.⁴³

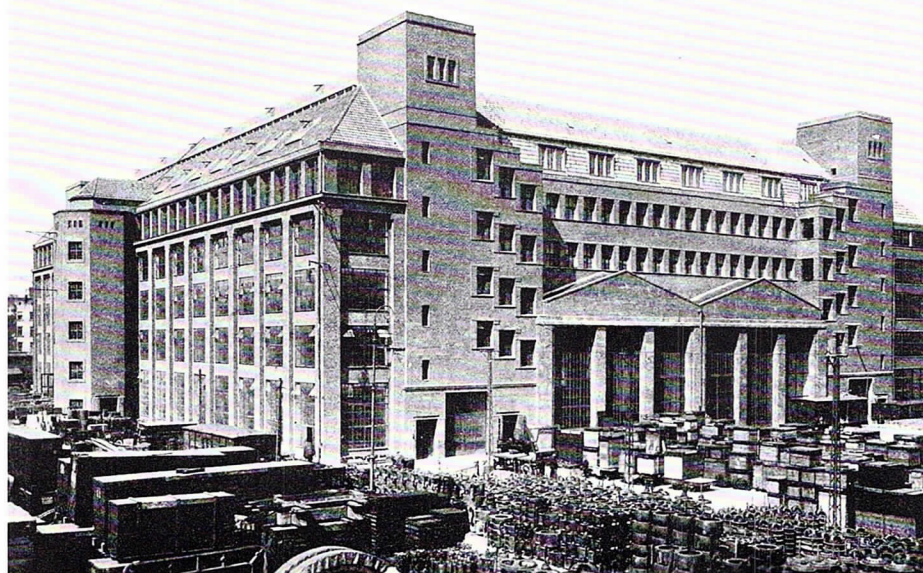
As has been stated, from the time of its completion, the Turbine Factory was recognized as a significant pioneering work in the field of modern architecture. However, a review of Behrens's subsequent industrial work reveals interpolations and variations that produced quite different results. The principal site of these later buildings was the 117,628 square meter AEG Humboldthain complex in northern Berlin (figs. 23, 24). Within this complex certain factories existed before Behrens's arrival. These were concentrated in the central and northern part of the site, separated from the street by a group of residential buildings. The administrative approach to this complex was marked by the castellated gate on the Brunnenstrasse (see fig. 2), appearing at the upper right corner of the site plan.⁴⁴ The railroad and freight approach (at the upper left corner of the plan) ran parallel to the Hussitenstrasse, across the Gustav-Meyer-Allee and into the site from the west. Behrens proposed but never carried out a portal and service building at this point (fig. 25).⁴⁵ The comparatively simple gates and lodges that were later built to Behrens's design appear in Figure 26. The totally unornamented simple cubic forms of emphatically exposed, hard bluish-red (*Eisenklinker*) brick, characteristic of many of Behrens's designs, provided a very different introduction to the factory site than the castellated gate on the Brunnenstrasse.

The rail lines continue eastward into the large yard which is the physical and organizational center of the factory complex. To the north is the first factory built to Behrens's design on this site, the High Tension Factory (*Hochspannungsfabrik*, completed 1910, figs. 24, 28).⁴⁶ Only slightly later came Behrens's Small Motors Factory facing southeast on the Voltastrasse (*Kleinmotorenfabrik*, 1910–13, see fig. 33).⁴⁷

In contrast to the Turbine Factory, the High Tension Factory, an assembly plant for transformers and other equipment for high voltage transmission (figs. 27–32), presents an irregular silhouette. It consists of interlocking blocks which make asymmetrical concessions to the site



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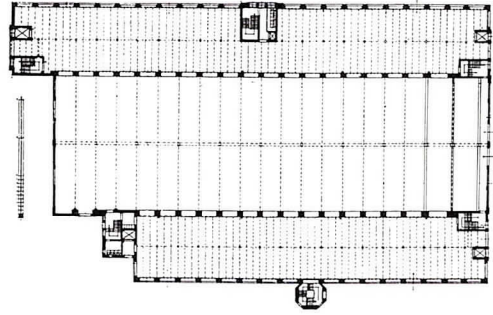


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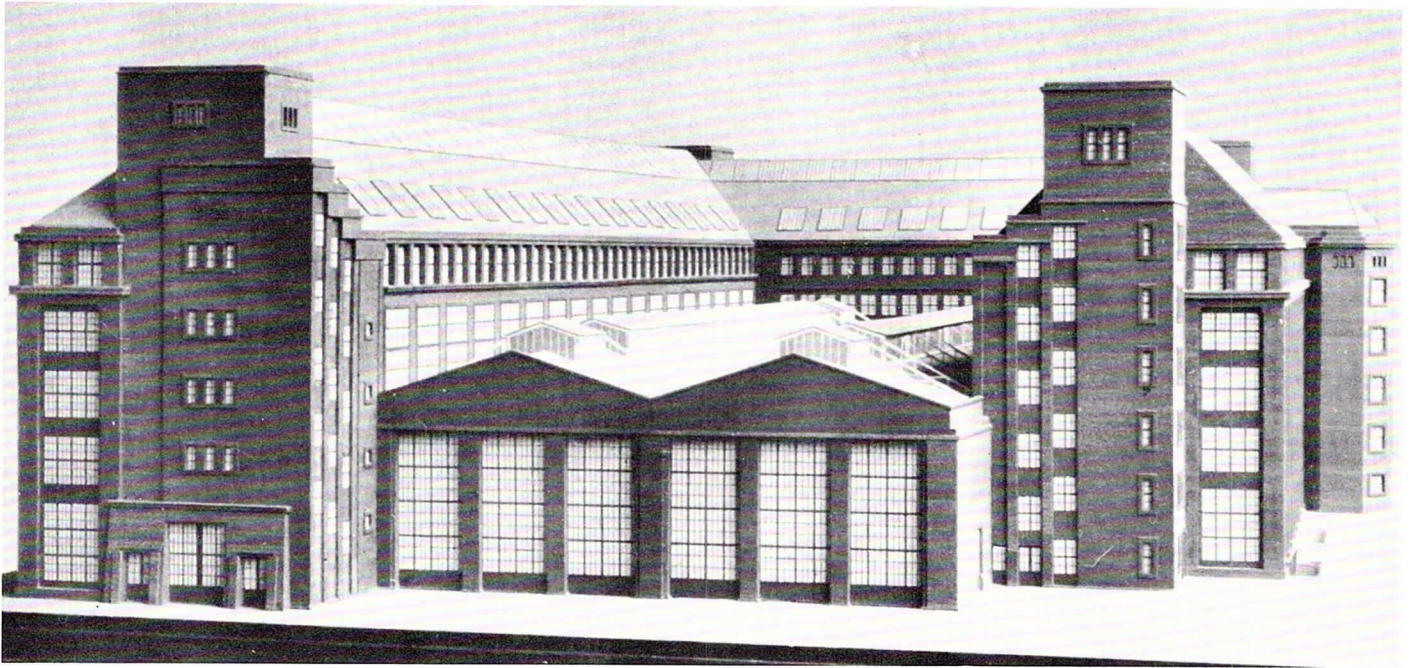
27 AEG High Tension Factory, Berlin. Peter Behrens, compl. 1910. East face.

28 AEG Humboldtthain factory complex viewed from the goods entrance at the northwest, off the Gustav-Meyer-Allee, Berlin. The High Tension Factory is at the left.

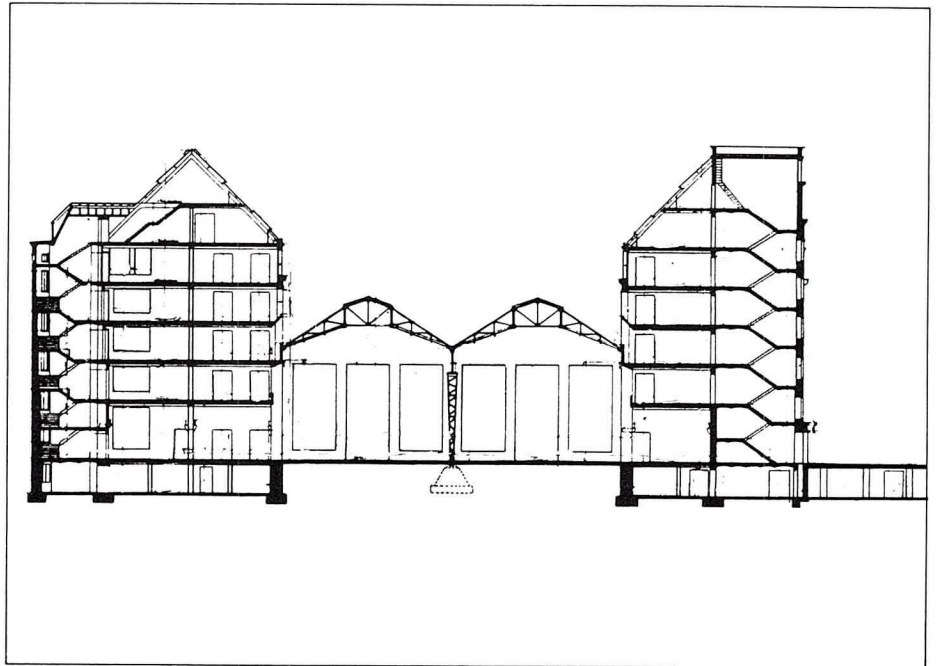
29 AEG High Tension Factory. Viewed from the southeast.



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31
 30 AEG High Tension Factory,
 Berlin. Plan.
 31 AEG High Tension Factory.
 Model, viewed from the southwest.
 32 AEG High Tension Factory.
 Transverse section.



32

(see fig. 31). The entire surface is clad in brick and tile.⁴⁸ The central part of the complex consists of two large, ferro-vitreous skylit halls thirty-five meters in width, seventeen meters high and just over one hundred meters in length (figs. 30–32). This double hall is flanked by basement services with locker rooms and multi-story working areas which comprise, in ascending order, a six-meter-high storage and assembly floor at the main level, four four-meter-high work floors, and two more work floors under the roof. At the eastern end (fig. 29), two regular stories plus a mansard story literally bridge the wide-span halls below.

At both east and west ends the main halls terminate in greatly simplified temple fronts in hard steel-blue *Eisenklinker* bricks. However, by far the strongest impression is made by the multi-storied parts with their repetitive bays and prominent access towers. Continuously open horizontal runs for the assembly lines were attained by the placement of these towers at the ends or outside the main envelope of the building (or, subject to the site constraint on the north, in a position that preserved as much of the horizontal continuity as possible). The repetitive bays of the first four floors (see fig. 29) are slightly recessed within a flat brick colonnade; the entire fifth floor serves as an entablature for this colonnade. The doubled mullions⁴⁹ give the effect of a frieze. The more emphatic cornice being below rather than above this “frieze,” it establishes an ambiguous continuity with the roof rather than with the colonnade—an intentional rupture in classical syntax. In the stair towers (see figs. 27, 28), Behrens delighted in working with a broken silhouette, irregular openings for various purposes, and stepped windows for the stair runs.⁵⁰

The picturesque projections of this factory, its irregular western termination in accordance with movement patterns, its overall plan around interlocking courtyards—all these characteristics are reminiscent of the ideas of another architect who fused medieval and academic sensibilities, Camillo Sitte.⁵¹ Speaking of the Humboldtthain courtyard, Behrens acknowledged his debt to Sitte: “Now as to the placement of buildings! In this the process

of manufacture is paramount. The disposition of trackage will govern building location. By stepping back the buildings, portals and driveways are well accommodated; at the same time liberal loading courts must be provided and thus contact is made with an outstanding principle of city planning. Because of the practical necessity of recession, the group acquires an effective silhouette, and due to the necessary arrangement of courts, a requirement of that old master of city planning, Camillo Sitte, is complied with. Sitte pronounces plazas enclosed by building units one of the most essential elements in creating artistic effects in city planning. It is only necessary to have had the opportunity for comparison between layouts directed from a purely practical viewpoint by an understanding mind, and those created by chance or time’s accretions, granted an equal expenditure in money and equivalent materials, to find an astounding difference in the impression created.”⁵²

It is characteristic of Behrens that he addressed himself to the understanding mind as well as to practical necessities. For Behrens, this mind worked one way when presenting a street-oriented monument like the Turbine Factory and completely otherwise when creating a factory courtyard interlaced and surrounded by practical operations.

Behrens’s ability to embrace these various conditions was demonstrated in a single building, the Small Motors Factory of 1910–1913,⁵³ across the courtyard from the High Tension Factory. The courtyard side of this later work (figs. 33, 34) is articulated by lateral projections and loading courts. The dimensions, the materials, and the detailing are all similar to the High Tension Factory, although a somewhat different inflection is evident in the placement of a stair behind the windows (fig. 34). The repression of an access element within the whole permitted the simple termination of this wing with a strong triangular pediment. This return to the sovereignty of the whole over the parts is emphatic on the opposite, Voltastrasse elevation (fig. 33).

The stance of the Small Motors Factory relative to the



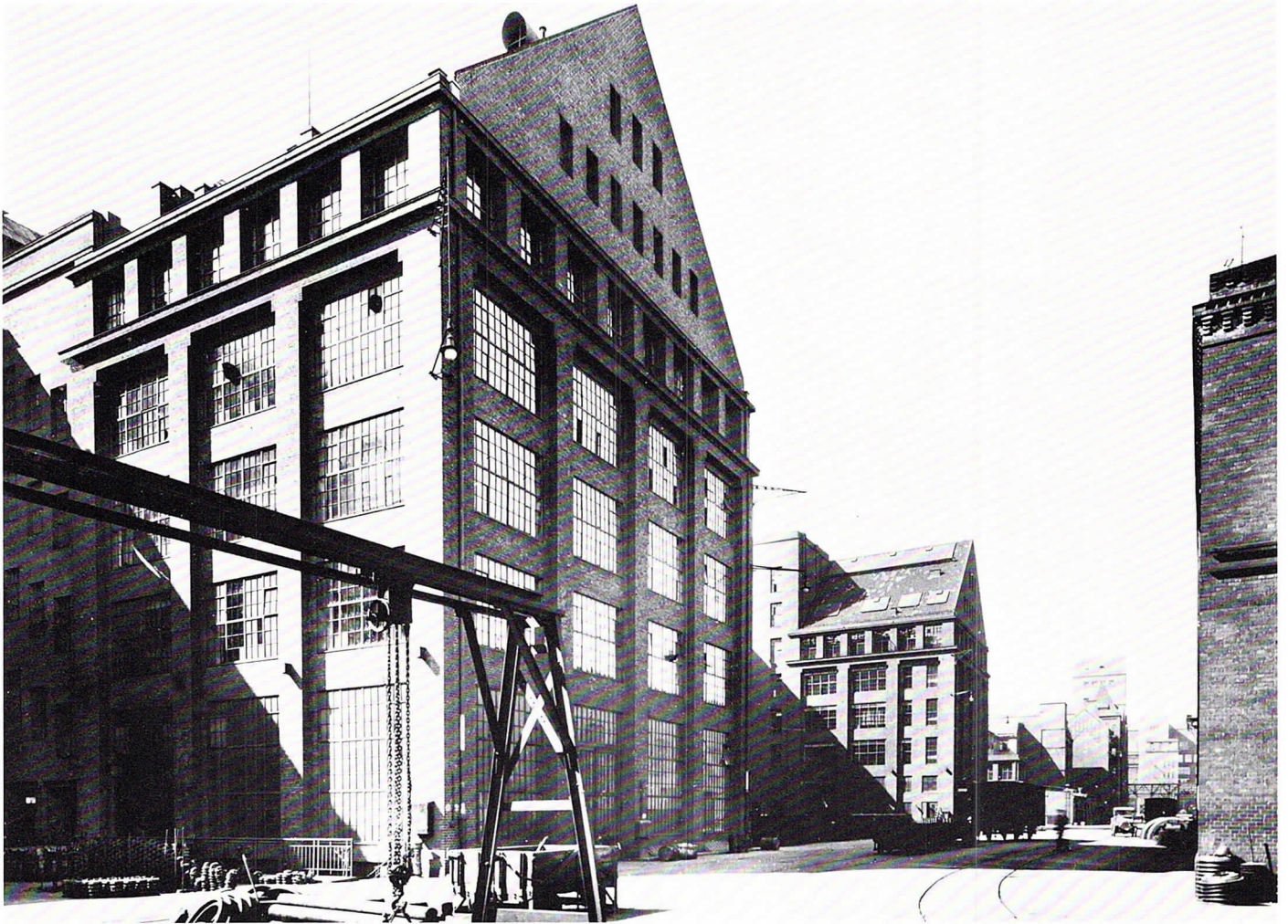
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street is significantly different from that of the Turbine Factory. The Voltastrasse plant was part of a long wall on a secondary street, not a corner building at a principal point of arrival. The operations housed did not require spaces of unusual size. This fact, together with the need for relatively intense utilization of this site, encouraged the construction of a multi-story factory (see figs. 15, 33). On the other hand, like the Turbine Factory, the Small Motors Factory presented a closed and classicizing form to the street; there a frame forming a temple front, here a wall architecture providing a semi-utilitarian facade. It is an ambiguous wall, its layering of wall and column reminding one of Roman buildings, although here the columns are revealed within the wall rather than being superimposed upon it.⁵⁴ The emphatic wall segment at the left of Figure 33 continues below the cornice line and into the square piers that divide the long facade into four segments, each of which contains seven round-faced pier-columns. Behrens chose an odd number of columns so that a column rather than an intercolumniation would be on center. The asymmetric placement of entrances in the end bays and the central column signified that this was, after all, only a side of a larger factory complex.

Behrens designed two other factories on the Humboldtthain site, one of which is especially important for adding a subtle variation to the industrial format that he developed for the AEG.⁵⁵ Figure 24 shows, at the southwest, the extension to the Factory for Electric Railway Equipment (Neue Fabrik für Bahnmateriale) and the Assembly Plant for Large Machines (Grossmaschinenfabrik) on the right in Figure 26.⁵⁶ The New Railway Factory and the northern thirteen bays of the Assembly Plant were built in the winter of 1911–1912. These buildings completed the industrial courtyard which Behrens had conceived and executed over the years 1909 to 1912. Figure 28 gives the view as one entered through the northwest gate on the Gustav-Meyer-Allee.

In concept and execution, the New Factory for Electric Railway Equipment (figs. 35, 38) was a slightly simplified variant on the Small Motors Factory, displaying a restrained colonnade to the Voltastrasse (fig. 35), a feature

33 AEG Small Motors Factory,
Berlin. Peter Behrens, 1910–1913.
Facade on the Voltastrasse.
34 AEG Small Motors Factory.
Factory yard side.



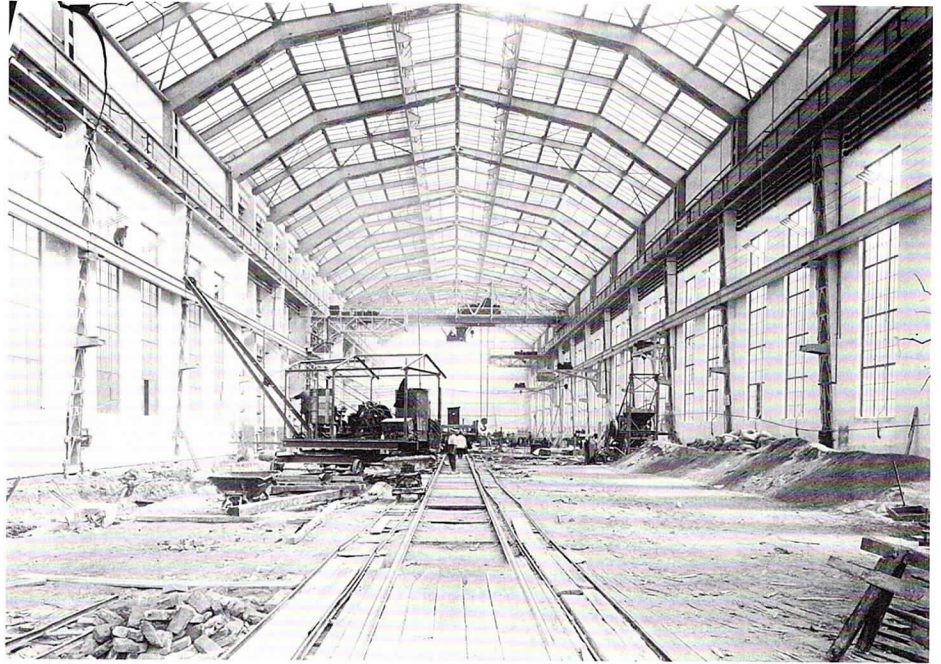
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35 Voltastrasse fronts of AEG factories at the Humboldthain, Berlin. Near to far, the Factory for Large Machines, the new and old Factories for Electric Railway Equipment, the gap for the site marked Berliner Elektrizitäts-Werke in fig. 24, and the Small Motors Factory. A street in accord with Behrens's concept of modern urbanism.

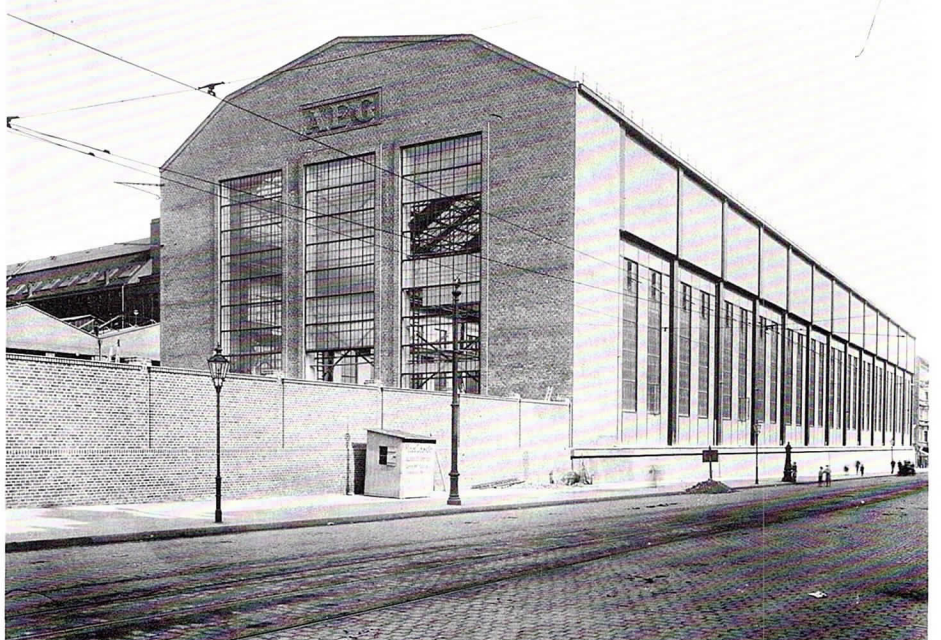
36 AEG Factory for Large Machines, Berlin. Peter Behrens, 1911–1912. Interior.
 37 AEG Factory for Large Machines. Viewed from northwest.
 38 AEG Factory for Large Machines (bottom) and new extension of the Factory for Electric Railway Equipment, Berlin. Plans.



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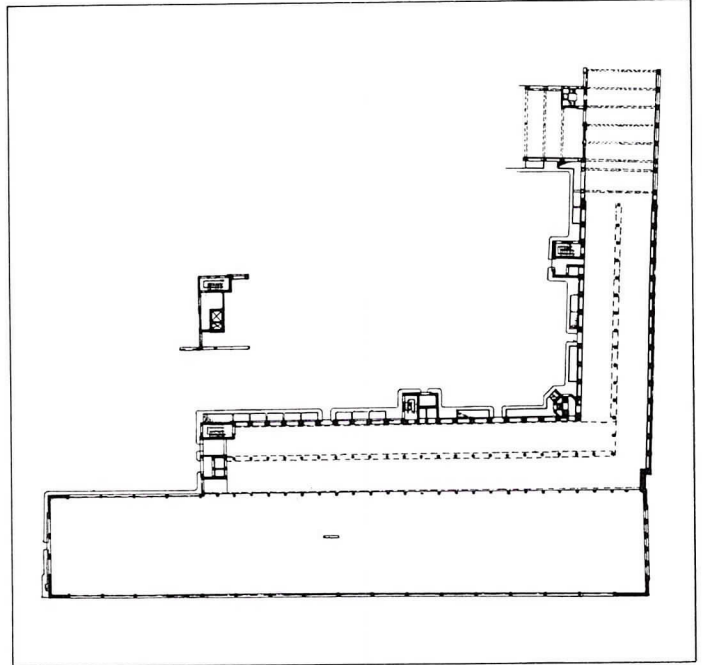


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which in detail was closer to the courtyard elevation of the Small Motors Factory.

The Assembly Plant for Large Machines is a single large factory space with a thirty-meter span (fig. 36) and it presents an imposing end elevation at one corner of the site (fig. 35). To the north, a similar elevation appears, directly confronting the northwest gate (see figs. 26, 37). While these elevations invite comparison with the Turbine Factory, the points of arrival which they front do not necessitate a major representative gesture as in the earlier factory—even the northwest gate is principally for workers and freight. In contrast to the Turbine Factory, the north end elevation of the Assembly Plant (see fig. 37) is also the main point of entry; however, since Behrens would not celebrate mere function, the portal front of the Assembly Plant received a less elaborated form than the closed facade serving as the symbolic point of arrival at the Turbine Factory. The facade of the Assembly Plant, for all its formal impressiveness, is little more than a pragmatic terminal to a repetitive, wide-span structure; and yet this facade, too, should be distinguished from one such as that of the slightly later Siemens-Schuckert Factory (see fig. 21), which loses nothing of architectural impressiveness for being relentlessly pragmatic.

By the time of the Assembly Plant, Behrens seems to have been confident of integrating his own intentions with practical conditions. Perhaps the clearest indication of this new attitude is Behrens's use of iron framing (*Fachwerk*, as in the Siemens Factory [see fig. 21]) together with brick infill—a conventional system⁵⁷ which Behrens had formerly despised both for the linearity of the iron and the apparently insubstantial quality of the brick infill. The principal structural members of the Assembly Plant are three-hinged arches; however the cross-section of these elements is solid-walled throughout their length (see fig. 36), not just in the principal elevation as in the Turbine Factory. These solid-walled arches contrast sharply with the lightly framed skylights that extend from wall to wall. Arches, secondary bents, purlins, diagonal bracing, and glazing bars are here arranged in an easily recognizable hierarchy. The Assembly Plant employed no tie-rods; con-



38

76 sequently, the truss structures of the two high traveling cranes were free to operate in the faceted space under the arches.⁵⁸ The result is an interior (see fig. 36) that is much more comprehensible than that of the Turbine Factory (see fig. 14). The arches are carried on uprights that also support the beams of the crane tracks. In contrast to the superimposed verticals of the Turbine Factory, a single upright provides the critical place in the structure, which is simultaneously the top of the vertical support, the springing of the arch, longitudinal bracing, and crane track; this element is given a strong and rational articulation both inside and out (see figs. 36, 37). On the long facade, between the uprights and below the line of the crane track, a well-defined sequence of brick infill panels imparts a certain weight to the building (see fig. 37). Here Behrens comes close to approximating iron framing and brick infill as conventionally used in factories.

It would seem that Behrens's expressed wish for an architectonic embodiment of the "new nature" of technology was fulfilled in the Assembly Plant, while the arbitrary and ambiguous formulations that led to Bernhard's criticisms of the Turbine Factory were avoided (see figs. 37, 38). Characteristically, Behrens did not terminate the building by glass or brick infill within the plane of the last arch. He chose to establish an independent masonry construction at each end. The AEG signet (see fig. 37) was carved in the depth of the brick wall, and as this wall turned into the side elevation it remained outside the plane of the brick infill. Behrens's design eliminated two arches and transformed the required end closure into a structurally contributive element. When designed as simply as here, such a termination was a reasonable alternative to a design that employed only arched framing and infill (see fig. 4). However, the decision to bracket the production processes within these embodying end walls arose from abstract rather than technical reasons.

On his arrival in Berlin, Behrens came to accept contemporary industrial civilization resignedly; nonetheless he saw in it a "new nature" and the source of a "new spirit" which the artist had to master.⁵⁹ The more abstract aspect of Behrens's new spirit was built on the concept of a

strongly interwoven industrial and socio-political organization, as advanced by such men as Walther Rathenau and Friedrich Naumann.⁶⁰ For Behrens the new spirit would come into being only through the interaction between the social context *and* the creative man, endowed with both tradition and critical acumen. Behrens believed that industrial civilization had brought about a sensory and perceptual reorganization which implied a new form of environment. The two faces of the AEG Small Motors Factory—the broad sweep of its street elevation (see fig. 33) and the articulated forms of its court side (see fig. 34)—illustrated Behrens's "rhythmic principle."⁶¹ This principle held that modern life had altered our perception of the environment. He argued that fast trains transport us so rapidly that the effective image of the city is reduced to a silhouette. Similarly, our rapid passage through the city precludes any consideration of building details. These conditions implied for Behrens an architecture of compact and serene planes which would be easily perceived. Even special details could be handled in a manner harmonious with this intent, Behrens claimed, if one employed broadly conceived elements, contrasted or arranged in repetitive series.⁶²

When Behrens visited the United States in 1912,⁶³ he especially appreciated the accumulation of skyscrapers; these huge particulars, he felt, added up to a massive vertical body, and a tall urban body was necessary if the vastly extended modern city was to have any silhouette. Furthermore, the competitive skyscrapers were striking emblems of the drive of industrial civilization. As a vast, modern entrepreneurial city, Behrens felt Berlin too needed such a silhouette;⁶⁴ but his own opportunities for such work were at the scale of the street. If we add to these formulations Behrens's call for a metronomic industrial pulse,⁶⁵ we have a fairly complete formal program for the street facade of the Small Motors Factory—and a contrast to the Sittesque program of an operational articulation for the courtyard elevation.

In 1913, Walter Gropius, who had left Behrens's studio to build the Fagus Works, provided what he called the "aesthetic scaffolding" for a modern industrial architect: pre-

cisely characterized form, elimination of all that is incidental, clear contrasts, ordering of the elements, identical parts in series, and unity of form and color. While Gropius saw these qualities to be the correlates of the energy and economy of modern life, he also recognized that they were only guide lines, still in need of the fantasy of an artist. In industrial building, he acknowledged his former master Behrens and the AEG as the team that had first successfully embodied these modern characteristics in a factory.⁶⁶

But as Gropius also noted, Behrens was inclined to emphasize understanding at the expense of feeling.⁶⁷ So Behrens's observations about man's altered perceptual, sensory, productive, societal, or political conditions remained just that: cool observations. He did not wax enthusiastic, as Le Corbusier would do in 1923 in the pages of *Vers une architecture*.⁶⁸ For Behrens "the Engineer's Aesthetic" celebrated by Le Corbusier was finally a false aesthetic. The engineer's calculations were universal, like Nature, and neither amounted to Culture. For Behrens, the engineer was, alas, the archetypal man of modern civilization. Such a qualified position could hardly serve as the basis for enthusiasm. Instead Behrens continued to endorse the traditional concept of culture. This endorsement permitted him to be critical of modernity and to claim that the artist had the will to reform the modern condition. And yet while one may admire this spirit of critique and reform, in practice Behrens exercised this will in an authoritarian manner, imposing *a priori* laws rather than allowing for conditions to test those laws and lead him to better formulations. Although the Assembly Plant for Large Machines represented a closer correspondence between idea and fact than was evident in the Turbine Factory, this conjunction was like the refinement of a grand theory through the addition of epicycles. The Assembly Plant remained a concretization of an ironic and pessimistic view of modernity. Indeed all of Behrens's AEG factories are cool monuments to the accommodation of giant magnitude, to the representation of the "new nature." Le Corbusier, on the other hand, within his apparent technological determinism, was to discover new opportunities. Eluding the learned detachment and aesthetic distance of Behrens, Le Corbusier presented his idea of the *esprit*

nouveau as something to be lived. Behrens, in contrast, chose to complete, to close the serial processes which were present both in the functions and in the structures of his factories. He did not emphasize the environment as a place for human activity, nor architecture as a context for a fuller life. Instead the Turbine Factory was the expression of an ideal vision of a technological civilization related to earlier utopian visions. It was intended as something which ordinary men should "live up to," rather than as an occasion for evolving elements of use and enjoyment within a newly conceived and highly operational environment. Behrens sought to render his factories as monuments to an evolving social condition—monuments which were imbued with Spenglerian overtones of both engagement and ominous foreboding.

Source Note: This essay is adapted from chapter seven of my doctoral dissertation, "Peter Behrens and the New Architecture of Germany: 1900–1917" (Columbia University, 1968). Together with chapters five and six of that dissertation (which have been published in *Oppositions* 11 and 21), this chapter completes my discussion of Peter Behrens and the AEG. One should now also see the excellent work by Tilmann Buddensieg et al., *Industrie-Kultur. Peter Behrens und die AEG. 1907–1914* (Berlin: Gebr. Mann, 1979). See page 69 of *Oppositions* 11 for further references and acknowledgements.

During the final editing of this manuscript, I have learned of the untimely death of two former students. I would like to recognize Kenneth H. Kaiser for years of close friendship as well as shared interest and discussion on historical topics relating to this article. I wish also to remember Paul Birnbaum for more than is conveyed in the credits to his photographic work.—S.A.

1. From a conversation with Mies van der Rohe in his Chicago office, June 27, 1961. This assessment of the situation in Germany prior to the first World War is corroborated by Theodor Heuss, *Hans Poelzig* (Tübingen: Wasmuth, 1948), p. 31. Heuss cited Poelzig's *Werdermühle* of 1906 as an example of the simplicity allowed to utilitarian buildings. But, of course, the lack of preconceptions about the form of industrial buildings didn't necessarily imply a reductionist attitude. *Dekorative Kunst*, VII (Jan. 1901), 148, gave an exemplary presentation to a design, in limited competition, for a power station by Schilling und Gräbner of Dresden; this was an overwrought Sezessionist temple complete with atlantes and at least thirty-four ornamented chimneys belching Art Nouveau smoke.

2. See chapter eight of my dissertation as described in the source note.

3. See the discussion in my articles "Modern Architecture and Industry: Peter Behrens and the Cultural Policy of Historical Determinism," *Oppositions*, 11, Winter 1977 and "Modern Architecture and Industry: Peter Behrens, the AEG, and Industrial Design," *Oppositions*, 21, Summer 1980.

4. Iron construction, architecture as the forming of space, the concepts of *Tektonik* and *Stereotomie*, and prospects for architecture appeared as key topics in Julius Lessing's introduction to Alfred G. Meyer, *Eisenbauten. Ihre Geschichte und Aesthetik* (Esslingen a. N.: Neff, 1907).

5. G. Semper, *Der Stil in den technischen und tektonischen Künsten* (Munich: F. Brinckmann, 1878–79, 2 vols., 2nd ed.), vol. ii, pp. 341–2.

6. Jacob Burckhardt, *Geschichte der Renaissance in Italien* (Stuttgart, 1891, 3rd ed.), §32, p. 46, and §61, pp. 113–5.

7. It is now difficult to think of Gothic architecture in other than spatial terms. In view of the fact that "the orders" had long been the touchstone of classical architecture, however, and that the nineteenth century treated Gothic architecture first as "pointed" and then as "ribbed," it is easier to comprehend the categorization of such buildings as "material." The planes of Renaissance architecture seemed, by comparison, inert and primarily descriptive of the space enclosed. See also P. Frankl, *The Gothic* (Princeton, N.J.: Princeton University Press, 1960), pp. 606–7. In 1904, Alois Riegl still spoke of membered structures

as distracting the observer from the "pure appreciation of free space"; quoted in Frankl, p. 637.

8. A. Schmarsow, *Das Wesen der architektonischen Schöpfung* (Leipzig, 1894).

9. A. Schmarsow, *Zur Frage nach dem Malerischen*, in *Beiträge zur Aesthetik der bildenden Künste*, I (Leipzig, 1896), pp. 14–24.

10. One of Schmarsow's students, Wilhelm Niemeyer, was the art historian under Behrens at the Kunstgewerbeschule in Düsseldorf and testified to Behrens's interest in Riegl: W. Niemeyer, "Peter Behrens und die Raumästhetik seiner Kunst," *Dekorative Kunst*, X (Jan. 1907), pp. 131–76.

11. *Ibid.*

12. Another documentation of Behrens's independence from functional and technical factors was provided by K. E. Osthaus, "Ein Fabrikbau von Peter Behrens," *Frankfurter Zeitung* (Feb. 10, 1910, author's translation): "Among the modernists, Behrens has long been almost alone in the view that one can find no creative basis for artistic form in function and technique. It is largely owing to Behrens that we today know how to grasp optical and rhythmic values independently of questions of style." It is important to remain aware of the distinction between such ideas and the concept of new forms evolving from a considered engagement with the given situation. The formal expectations of the adherents of these two methods may, at times, be similar. However, those devoted to the artist's formalization of the collective will *will* see to it that their formal expectations are fulfilled. Those devoted to the exploration of a problem are prepared to have the dynamics of that situation alter, transform, or even destroy their formal expectations.

Behrens and those of his persuasion triumphed over those who were most open to the problematic situation, despite the appearance of clear and compelling articulations of the "situationist" position earlier than the *Zeitgeist* formulations. Consider the following example. The first director of the Kunstgewerbemuseum in Berlin, Julius Lessing, who like Franz Reuleaux had been favorably impressed by the simple American products at the Philadelphia exposition of 1876, published an insightful article ("Neue Wege," *Kunstgewerbeblatt*, N.F. VI [Oct. 1894], pp. 1–5, author's translation). Lessing had developed an understanding of late nineteenth-century eclecticism but was more concerned to point the way beyond historical allusion. He wanted his contemporaries to see iron girders as they saw Greek columns; to look for inspiration in railroad stations and the Paris exposition of 1889 (Eiffel Tower and Halle des Machines) rather than in the sham edifices of Chicago's exposition of 1893; to recognize that new lighting techniques and doorbells implied new art forms. He again praised the American furniture and hardware exhibited at Chicago, claiming they were so clearly developed out of the materials and techniques involved that they exceeded the calculations of reason and gave to the eye "that joy which we call beauty." Lessing insisted that those who saw the machine as an enemy could not be helped. "Whether we like it or not, our work must be staked out on the ground of the practical life of our time and must create those forms which bespeak our needs, our technique, and our material. If in this way we achieve a form of beauty in the sense of our scientific

age, this form will not appear like the pious beauty of the Gothic or the luxurious beauty of the Renaissance, but rather as the perhaps somewhat austere beauty of the end of the nineteenth century—and that is all that one can ask of us.”

See also Lessing, “Das Kunstgewerbe als Beruf,” *Volkswirtschaftliche Zeitfragen*, no. 97 (Berlin: L. Simon, 1891).

13. See O. Wagner, *Moderne Architektur* (Wien: Spieghagen und Schurich, 1897); H. Muthesius, “Kunst und Maschine,” *Dekorative Kunst*, IX (Jan. 1902), pp. 141–7; F. Naumann, “Kunst im Zeitalter der Maschine,” *Kunstwart*, XVII (July 1904), pp. 317–27; J. L. M. Lauweriks, “Architektur,” *Ring*, no. 4 (Apr. 1909).

14. The reliance of contemporary architects on accepted styles for factory buildings may be seen in C.Z., “Fabrikarchitektur,” *Architektonische Rundschau*, XXVI (1910), pp. 65–72 and pls. 57–64.

The respectable, but not unusual, early stages of the AEG’s factory construction can be seen in: Berlin, AEG, *Elektrischer Einzelantrieb in den Maschinenbauwerkstätten der A.E.G.* (Berlin: AEG, 1899). This book also gives a good impression of contemporary AEG machinery and of the graphics (conventional job printing; see also *Oppositions*, 11, p. 58 ff.) employed by the firm immediately before its flirtation with *Jugendstil*. Just as the AEG had, before Behrens’s arrival, turned to a noted graphic artist, Otto Eckmann (*ibid.*, p. 61), so too they had commissioned Berlin’s most renowned architect of that time, Alfred Messel, for the design of a central office building on the Friedrich-Karl-Ufer in Berlin (1905–06). But this was an office building, not a factory, and of a sober, classicizing manner. In fact, this building should be recognized as a precedent for Behrens’s general development, but not for his immediate contribution to the industrial architecture of the AEG.

15. The commencement in 1905–06 is recorded in [Berlin, AEG], *Ansichten aus den Fabriken Brunnenstrasse* (Berlin: AEG, n.d. [c. 1913–14]). F. Hoerber, *Peter Behrens* (Munich: Müller and Rentsch, 1913), p. 136, records the state at the time of Behrens’s redesign (1908). The photograph for Figure 23, from the AEG-Archiv in Berlin, is dated June 30, 1909. This work thus constitutes Behrens’s first, limited contact with industrial architecture. The Turbine Factory remains Behrens’s first major work for the AEG. Its only other predecessors are the AEG pavilion for the Deutsche Schiffbauausstellung of 1908 in Berlin (see *Oppositions*, 11, p. 58) and a small AEG exhibition pavilion of 1907 illustrated without credit in *Mitteilungen der Berliner Elektrizitätswerke*, III (Sept. 1907), p. 131. Both pavilions have characteristics closely allied with the work of Behrens’s Düsseldorf period.

16. In the same year, incidentally, a complete 100 horsepower, direct-current AEG turbo-dynamo system of handsome construction won wide popular attention at the same Düsseldorf exhibition where Peter Behrens had built a garden and restaurant.

Hermann Muthesius, in “Die ästhetische Ausbildung der Ingenieurbauten,” *Zeitschrift des Vereines deutscher Ingenieure*, LIII (July 31, 1909), p. 1212, cited the Düsseldorf exhibition of 1904 as the point when the modern movement in the arts and crafts recognized the beauty of the machine—an appreciation that was shared by the press.

17. Much of this information comes from: Berlin, AEG, *25 Jahre AEG-Dampfturbinen* (Berlin: AEG, 1928), pp. 1–27, 96–101.

18. This and most of the factual information about the executed building is taken from articles by the engineer of the building, Karl Bernhard: “Die neue Halle für die Turbinenfabrik der Allgemeinen Elektrizitäts-Gesellschaft in Berlin,” *Zeitschrift des Vereines deutscher Ingenieure*, LV (Sept. 30, 1911), pp. 1625–31, and (Oct. 7, 1911), pp. 1673–82. See also *idem*, “Die neue Halle der Turbinenfabrik der Allgemeinen Elektrizitäts-Gesellschaft in Berlin,” *Zentralblatt der Bauverwaltung*, XXX (Jan. 15, 1910), pp. 25–29. West of the well known Turbine Factory, Behrens built at the same time a small, handsome, and meticulously detailed power station in brick; see Hoerber, *Peter Behrens*, p. 114.

19. Works by Bernhard were illustrated in: Deutscher Werkbund, *Jahrbuch 1913* (Jena: Diederichs, 1913), pl. 48 (with Hermann Muthesius), and *idem*, *Jahrbuch 1914* (Jena: Diederichs, 1914), pl. 42.

20. In Behrens’s article “Kunst und Technik,” *Elektrotechnische Zeitschrift*, XXXI (June 2, 1910), pp. 552–5, he recognized the need to use new building materials such as iron but also continued his argument that no style could be achieved through material conditions alone. The conclusion he drew was that artists and engineers must collaborate—even referring to them as equals—but it was “good artistic form” that the buildings had to have. This belief in the supremacy of the artist was not heavily disguised from the audience of technicians to whom he was speaking.

21. Literally, “Machines roar in sacred songs/Factories are godly churches of power.” Quoted in Lanzke, *Peter Behrens. 50 Jahre Gestaltung in der Industrie* ([Berlin?], 1958), p. [5]. This divine imagery contrasts interestingly with, and is perhaps an over-compensation for, the recurrent nineteenth-century conflation of industrial and infernal imagery. See the chapter “The Age of Despair” in Klingender, *Art and the Industrial Revolution* (London: Carrington, 1947). K. E. Osthaus, “Ein Fabrikbau. . .,” found the Turbine Factory to be perfected “like a Doric temple.”

22. The supports of this side hall have a span of 12.93 meters, center to center. The two traveling cranes for the ground level of this side hall had a capacity of 40,000 kilograms each and a span between supports of 11.44 meters; at the upper level, the cranes were designed for 10,000 kilograms each.

23. At the time of its completion, the Turbine Factory was Berlin’s largest ferrous construction. For details, see Bernhard, *Z.d.V.D.I.*, IV, pp. 1625–31, 1673–81.

24. Just as Behrens participated in the transformation of factory imagery from the infernal to the divine (see note 21), so also he participated in an inversion of value associations related to the gigantism of modern industrial buildings. Hoerber, *Peter Behrens*, p. 165, pointed out that if Viollet-le-Duc thought that scale and proportion were based on the dimensions of man, then Behrens’s industrial buildings were created for an industrial race of vastly increased power. That is, for Viollet-le-Duc man was the measure of his environment; for Behrens, the industrial environment was the measure of Man. There is in this an inversion of the dependent-independent relationship and a shift from man

- 80 the individual to Man as a race. Again the decision to deflect or rebut the criticism of industrial civilization led to over-compensation.
25. P. Behrens, "Die Turbinenhalle der Allgemeine Elektrizitäts-Gesellschaft zu Berlin," in Düsseldorf, Rheinischer Verein für Denkmalpflege, *Mitteilungen*, IV (Mar. 1910), pp. 26–9. See also *Deutsche Technikerzeitung*, XXVII (Feb. 12, 1910), pp. 87–90.
26. Hermann Muthesius in *Zeitschrift des Vereines deutscher Ingenieure*, LIII (1909), p. 1213, traced back to Semper a common opinion that iron construction tended toward dematerialization and was therefore antithetical to the essential materiality of architecture. Praising the Eiffel Tower, Muthesius sought to expand the architects' range of aesthetic appreciation to include the transparencies of iron frameworks. Anticipating Muthesius' position, Friedrich Naumann had spoken of a new style which must have "iron bones" (1896) and repeatedly praised the Eiffel Tower. See Naumann, *Ausstellungsbriefe* (Berlin, 1909), pp. 31, 73, 103–9. Typically, Behrens sought to give the new material sufficient visual weight to bring it into conformity with a traditional esthetic; accordingly, he condemned the Eiffel Tower for its lack of corporeality: Behrens, *Elektrotechnische Zeitschrift*, XXXI (1910), pp. 552–5.
27. Bernhard, *Z.d.V.D.I.*, LV, p. 1630.
28. R. Banham, *Theory and Design in the First Machine Age* (London: Architectural Press, 1960), p. 83.
29. Bernhard, *Z.d.V.D.I.*, LV, p. 1628. On the multiple symbolisms of pylon, temple, crystal, and machine parts, see also chapters one through three of my dissertation as described in the source note. Chapter two appeared as "Peter Behrens's Changing Concept of Life as Art," *Architectural Design*, XXXIX (Feb. 1969), pp. 72–8.
30. Behrens, "Die Turbinenhalle...," p. 26.
31. *Ibid.* Inspection does reveal light iron framing and diagonal bracing at the inner surface of the concrete pylons.
32. The same situation arose with the famous corner window of the Fagus Works by Walter Gropius. Using glass as the neutral transition from one elevation to the other avoided the ambiguous sense of support evident in the Turbine Factory. But like Behrens, Gropius arrived at this arrangement through visual explorations. "I liked it that way. Only later did I realize that there was structural logic to it as well." Gropius made these comments to me (Cambridge, Mass., Feb. 6, 1964) as a means of emphasizing the importance of intuition and feeling in the creative process. In his later works, too, Gropius explored the visual character of materials—in the Fagus Works a transparent material—not new conceptions of space. Like Behrens, he was not concerned about "destroying the box." On Gropius and transparency, see C. Rowe and R. Slutzky, "Transparency: Literal and Phenomenal," *Perspecta*, no. 8 (1964), pp. 45–54; reprinted in Rowe, *The Mathematics of the Ideal Villa and Other Essays* (Cambridge, Mass.: MIT Press, 1976), pp. 159–83.
33. Bernhard, *Z.d.V.D.I.*, LV, p. 1629. Without mistaking the structural elements of the factory, W. Müller-Wulckow found its expressive force to be in the concrete pylons and gable: in *Bauten der Arbeit und des Verkehrs aus Deutscher Gegenwart* (Königstein und Leipzig: Langewiesche, 1925), p. 24.
34. Behrens's relation to the classicism of 1800 becomes still more evident in the works (see figs. 3, 7) discussed in chapter eight of my dissertation. One may note here that, according to Harry Graf Kessler, Friedrich Gilly was the favorite architect of Walther Rathenau. Rathenau bought the country seat Schloss which, though Kessler implies it was designed by Friedrich Gilly, was designed by Friedrich's father David (1798); Kessler, *Walther Rathenau* (New York: Harcourt, Brace, 1930), p. 135. Hermann Schmitz illustrates the elegantly simple facade of Freienwalde (five two-storied bays controlled by flat giant pilasters) and credits Rathenau as one of the first and most ardent admirers of the classicizing architecture of 1800 (see his *Berliner Baumeister vom Ausgang des achtzehnten Jahrhunderts* [Berlin: Wasmuth, 2nd ed., 1925], pl. 206 and p. 330).
35. Anon., "Peter Behrens," *Allgemeines Lexikon der bildenden Kunst des XX. Jahrhundert*, H. Vollmer, ed. (Leipzig: Seemann, 1953 ff.), I, pp. 157–8.
36. The Frankfurt and Hamburg buildings are illustrated on pp. 187–8 of G. A. Platz, *Die Baukunst der neuesten Zeit* (Berlin: Propylaen, 1927).
37. J. M. Richards, *An Introduction to Modern Architecture* (2nd ed., Harmondsworth: Penguin, 1953), p. 76.
38. H. R. Hitchcock, "Peter Behrens," *Encyclopedia of World Art* (New York: McGraw-Hill, 1959ff.), vol. ii, col. 413.
39. This factory and Krupp's Eleventh Cannon Workshop were built over a period of a few years beginning in 1906. Exterior illustrated in: Essen, Krupp, *Fried. Krupp Aktiengesellschaft* (Essen: Krupp, 1927), p. 10; and W. Berdrow, *Alfred Krupp und sein Geschlecht* (Berlin: Krupp, 1937), p. 205. Interior of both shops illustrated in D. Baedeker, *Alfred Krupp und die Entwicklung der Gusstahlfabrik zu Essen* (Essen: Baedeker, 1912, 2nd ed.), plates following p. 278. Dates and statistics from first work cited in this note, p. 34, and in Essen, Krupp, *Krupp. A Century's History of the Krupp Works. 1812–1912* (Essen: Krupp, c.1912), pp. 323–4.
40. Essen, Krupp, *Fried. Krupp Aktiengesellschaft. Statistical Data* (Essen: Krupp, 1907), pp. 87–93.
41. The best of such factories are architectural parallels to the process-oriented design of Thonet chairs which I discussed in the related article in *Oppositions*, 21. Such works break down the simplistic notion of technical solutions *plus* aesthetics—a notion that stood behind much of the (often slightly ornamented) factory architecture around 1900. For example, the advice given in one handbook: "Considerations about the architectonic organization of the whole take only a second place. Only after the functional form has been established in all its parts may one reflect on how this functional form is to be brought into relation with the most suitable aesthetic form." Wilhelm Rebber, *Fabrikanlagen* (Leipzig, 1901, 2nd enl. ed.; first pub. 1888), p. 94 (author's translation).
42. Most industrial cities in the United States could also provide examples.
43. In a formulation such as Rebber's (see note 41), the aesthetic characteristics were superimposed on the functional form. The situational approach was capable of drawing these together, but could not claim to generate forms that were immediately applicable, or stylistically appropriate to other new situations. As a

third formulation, Behrens conceived of technical and artistic forms as separate, and sought to control the utilitarian aspect by his artistic form. He did feel that modern times required that the artistic form be related to the conditions of industrial civilization, but he believed that forms could be generated which were general to the time and applicable in various situations. That is, Behrens sought the formal basis for a contemporary style, as recognized in Karl Scheffler's commentary (*Vossische Zeitung* [Berlin, Sept. 26, 1912], author's translation) on the AEG factories: "One would, with praise, stress the eminent cultural sensibility of the AEG which can be of the greatest significance for the future in as much as its architectonic products allow one to glimpse the nuclei of a new, modern, international architecture—the seed of a new 'Style'." Intimations of an International Style!

44. For this reason, the complex was also referred to as the "Factories at Brunnenstrasse," although none of the factories fronted directly on that street.

See Berlin, AEG, *Elektrischer Einzelantrieb...* (1899); Berlin, AEG, *Ansichten aus den Fabriken Brunnenstrasse* (Berlin: AEG, n.d. [c. 1914]), a picture book; and Berlin, AEG, *Führer durch die Fabriken Brunnenstrasse* (Berlin: AEG, 1929), a guidebook. A. Fürst, in *Emil Rathenau* (Berlin, 1915), reported the following statistics as contemporary with his work: area of site 117,628 square meters; floor area, 211,130 square meters; 14,000 workers.

45. A slightly later, but very similar design appears as Figure 164 in Hoeber, *Peter Behrens*. The pairs of windows in the street front of the pylons were shifted to the side elevation, thus preserving the massive portal from any reference to domestic scale. The only other significant change in the design illustrated by Hoeber was the addition of windows in the side elevation of the two-story block at the right of the drawing. The four-story building at the far right was an existing building which, along with all the residential buildings facing on the Hussitenstrasse, were later demolished to make way for Behrens's Assembly Plant for Large Machines.

46. Franz Mannheimer records that this factory was completed in the summer of 1910, "Arbeiten von Professor Peter Behrens für die AEG," *Der Industriebau*, II (June 15, 1911), p. 127. All the factories on the site still exist.

47. The two small buildings to the southwest of the Kleinmotorenfabrik on the Voltastrasse were earlier constructions and part of the Berliner Elektrizitäts-Werke (BEW). The BEW was the electric utility corporation for Berlin. The AEG was commissioned to administer and develop this utility company with control reverting to the municipality in 1915. See A. Fürst, *Emil Rathenau* (Berlin, 1915).

48. Hoeber, *Peter Behrens*, p. 58, has rightly pointed out that Behrens's unpremiated competition design for the Tietz Department Store in Düsseldorf (1906; competition won and building executed by Joseph Olbrich) was a precedent for the High Tension Factory. Behrens's department store design was singular in his oeuvre until the High Tension Factory. Distinctive in these two buildings are the wholly masonry exteriors, the exterior detailing of a simple classicizing character which unifies the repetitive bays; the clear articulation of stairs and elevators

in plan and in external detailing; and skylines broken by elements that indicate separate uses below.

The factual information on the High Tension Factory is from Mannheimer, *Der Industriebau*, II (1911), pp. 121–40.

49. Neither of the bay dimensions of these facades was set by the structure immediately behind the facades. The beams in these assembly line floors span perpendicularly to the facade, at the third points of the large bays established by the main assembly halls (fig. 30). These smaller floors were probably framed in this way in order to maintain a constant beam size (with no deep girders) over the assembly lines.

50. In their material (red brick) and their form and detail, these towers are reminiscent of the late medieval brickwork celebrated a century earlier by the eminent classicist Friedrich Gilly. See, e.g., Figure 20 and A. Rietdorf, *Gilly. Wiedergeburt der Architektur* (Berlin: Hans von Hugo, 1943), pp. 32–3.

51. C. Sitte, *City Planning According to Artistic Principles*, G. R. and C. C. Collins, trans. (New York: Random House, 1965) and G. R. and C. C. Collins, *Camillo Sitte and the Birth of Modern City Planning* (New York: Random House, 1965).

52. P. Behrens, "Seeking Aesthetic Worth in Industrial Buildings," *American Architect*, CXXVIII (Dec. 5, 1925), p. 476. The German version appeared as "Werbende künstlerische Werte im Fabrikbau," *Das Plakat*, XI (June 1920), pp. 269–73.

53. On the Kleinmotorenfabrik, see Mannheimer, *Der Industriebau*, II (1911), pp. 121–40. Construction of this long building began at the western end in 1910; by the summer of 1911 construction had been terminated at the tenth bay on the street side. By the fall of 1912 over half of the 196 meter long building was completed (Hoeber, *Peter Behrens*, p. 140). Berlin, AEG, *Ansichten aus den Fabriken Brunnenstrasse* (Berlin: AEG, n.d. [c. 1913–14]), pl. 4, gives the completion date as 1913.

54. This comparison is more fully discussed, with reference to the German Embassy in St. Petersburg, in chapter eight of my dissertation.

55. Mention should be made of other industrial or commercial works by Behrens for the AEG, although they do not give rise to significantly different discussion. These include the AEG appliance shops in Berlin, one in the Königgrätzerstrasse, the other in the Potsdamerstrasse (1910); see Hoeber, *Peter Behrens*, pp. 155–63; apparently these shops no longer exist. At the Turbine Factory site in Berlin was the Munitionsfabrik (1916); see T. Buddensieg et al., *Industriekultur* (Berlin: Gebr. Mann, 1979), pp. D24–5. A factory about which little is known is that for the AEG in Riga, Latvia (1913); see P. J. Cremers, *Peter Behrens* (Essen: Baedeker, 1928), p. 25. At Hennigsdorf near Berlin, another significant but lower-density AEG industrial site, were the Porzellanfabrik (1910–11) and the Öltuchfabrik and the Lackfabrik (1911), the Lokomotivfabrik (1913), and the Flugzeughalle (1915); on these factories, see Anon., "Einige Neubauten von Professor Peter Behrens, Berlin," *Industriebau*, VI (Aug. 15, 1915), pp. 396–9; and Buddensieg, *idem*, pp. D83–93. In Berlin–Oberschöneweide was the factory for the Nationale Automobil AG (1915–16); *idem*, pp. D94–7. Further works include a showroom in the AEG's old Apparatefabrik (ill. in Deutscher Werkbund, *Jahrbuch 1913*, pl. 80), and the AEG exhibition pavilion in Brussels (1916); Buddensieg, *idem*, p. D7.

82 56. Constructionally related, these factories are usually discussed together: Hoeber, pp. 144–50; *idem*, “Die neuen Bauten von Peter Behrens für die AEG,” *Kunst und Künstler*, XI (1913), pp. 262–6; Berlin, AEG, *Ansichten...*, pls. 1, 5–7; Franz Mannheimer, “AEG-Bauten,” in Deutscher Werkbund, *Jahrbuch 1913* (Jena: Diederichs, 1913), pp. 33–42 and pls. 2, 4; Anon., “Grossmaschinenhalle der AEG in der Hussitenstrasse in Berlin,” *Der Industriebau*, VI (Sept. 15, 1915), pp. 411–2.

57. Interesting examples of this type of construction are illustrated in: Munich, Die Neue Sammlung, *Industriebauten 1830–1930* (Munich: Die Neue Sammlung, 1967).

58. The text to note 28 above pointed out that this was not the case at the Turbine Factory despite its high-shouldered, faceted arches. At the Montagehalle the space was available, but Behrens diminished the “shouldering” by eliminating two “facets.” Again Behrens’s form depends on his volition rather than on technical considerations, although the basis for the form that Behrens willed may at this point be something as modest as a sympathy with neighboring gable forms (figs. 23, 37).

59. “It is precisely the inner organism of a building that serves industrial purposes which must be clearly retained and which must come to be the origin of a new beauty that bespeaks the spirit of our time. Everything great that will be created in life is the result not of a scrupulous professionalism, but rather of the energy of a great and strong personality.” P. Behrens, *Elektrotechnische Zeitschrift*, XXXI (1910), p. 554 (author’s translation).

60. See the earlier articles in this series, *Oppositions*, 11, 21.

61. This discussion is based on the work cited in note 59. See also Behrens, “Kunst und Technik,” *Werkkunst*, VI (1910–11), p. 132; *idem*, “Über den Zusammenhang des baukünstlerischen Schaffens mit der Technik,” in Berlin, Kongress für Ästhetik und allgemeine Kunstwissenschaft 1913, *Bericht* (Stuttgart, 1914), pp. 251–65; *idem*, “Einfluss von Zeit- und Raumausnutzung auf moderne Formentwicklung,” in Deutscher Werkbund, *Jahrbuch 1914*, pp. 7–10.

62. M. Creutz, in “Das Krematorium von Peter Behrens in Hagen in Westfalen,” *Kunstgewerbeblatt*, XX (Dec. 1908), pp. 41–8, referred to Behrens’s reliance on what he called the “Prinzip der unendlichen Musterung.”

63. A. Behne, *Preussische Jahrbücher*, CLIV (Oct. 1913), p. 172.

64. P. Behrens, “Zustimmung der Städtebauer,” in *Berlins dritte Dimension. Offener Brief an Herrn Oberbürgermeister Wermuth* (Berlin, 1913), pp. 9–11.

“There is no longer any doubt that Berlin will increasingly be a new city of business. Therefore, rather than suffering this inevitability with a lighter or heavier heart, nothing could be more correct than that one purposefully aspire to this character and that all measures which are taken in the interest of the city seek fully to realize this character. The characterization—the creating of a type—is for every art, and not least for architecture, the most important moment in the whole of form-making (*Gestaltung*). One can imagine nothing more imposing than the realization of a unified character and stylistic idea for an entire city.

“... In the aesthetic realm—and quite generally—that which made the greatest impression on me in America was without question precisely the giant office buildings. These office build-

ings, in their bold construction, carry the seed of a new architecture.

“Nevertheless, one cannot be convinced of the correctness of this building principle solely by the impression that one allows to work upon oneself; but rather this conviction must also be supported by an aesthetic consideration. A city should still, in an urbanistic sense, be comprehended as a contained architectural image. A metropolis that spreads out incomprehensibly will not, in a spatial-aesthetic sense, be helped by a considered layout of squares. Similarly the effect of a church tower will fail to affect the total image of an excessively flat, spreading city: such a horizontally extended plan needs corporeality, which will only be found in the joining of compact vertical masses.” (Author’s translation from a public letter originally published in the *Berliner Morgenpost* [Nov. 27, 1912].) Behrens’s image of these compact vertical masses appeared as the cover image of a special issue of *Das Plakat* (June 1920, fig. 39).

65. Hoeber, in *Peter Behrens*, p. 216, refers to Behrens’s uniform repetition of a coordinated type with the resultant infinite movement of the factory facades, in contrast to the rhythmic intensification toward the center of a Renaissance facade.

66. Walter Gropius, “Die Entwicklung moderner Industriebaukunst,” in Deutscher Werkbund, *Jahrbuch 1913*, pp. 17–22.

67. W. Gropius, *Apollo in der Demokratie* (Mainz/Berlin: Florian Kupferberg, 1967), p. 125.

68. Le Corbusier, *Towards a New Architecture*, F. Etchells, trans. (New York: Praeger, 1946), p. [16.] French original, 1923.

Figure Credits

- 1, 2, 10, 14, 23, 24, 26–29, 32–34, 36, 37 Courtesy of AEG-Telefunken, Berlin.
- 3 Courtesy of Landesbildstelle Berlin.
- 4, 5 From Essen, Krupp, *Friedr. Krupp AG. Statistical Data* (Essen: Krupp, 1907).
- 6 From Essen, Krupp, *Friedr. Krupp AG* (Essen: Krupp, 1927).
- 7 Courtesy of Auswärtiges Amt., Bonn.
- 8, 9 From J. L. M. Lauweriks, “Architektur,” *Ring*, no. 4, April 1909.
- 11, 12, 18 From Karl Bernhard, “Die neue Halle für die Turbinenfabrik der AEG,” *Zeitschrift des Vereines deutscher Ingenieure*, LV, no. 39, Sept. 30, 1911.
- 13 From W. W. Schutz, *Unteilbares Deutschland* (Berlin, 1960).
- 15, 16, 35 Courtesy of Paul Birnbaum, Boston.
- 17 Courtesy of the author.
- 19, 20 From K. H. Clasen, *Marienburger und Marienwerder* (Berlin: Deutscher Kunstverlag, 1931).
- 21, 25 Courtesy of Dr. Franz Stödtner, Düsseldorf.
- 22 From H. Beenken, *Schöpferische Bauideen der deutschen Romantik* (Mainz: Matthias-Grünwald-Verlag, 1952).
- 30, 38 From F. Hoeber, *Peter Behrens* (Munich: G. Müller and E. Rentsch, 1913).
- 31 From R. Breuer, *Deutschlands Raumkunst und Kunstgewerbe auf der Weltausstellung zu Brüssel, 1910* (Stuttgart: Julius Hoffman, 1910).
- 39 From *Das Plakat* (June 1920). Courtesy of British Library.

39 Peter Behrens. Image of the
"compact vertical masses" of the
modern city as inspired by
American cities and advocated by
Behrens. Published 1920.



History



Le Corbusier and the Mystique of the U.S.S.R.

Jean-Louis Cohen

Translated by Stephen Sartarelli

1 (frontispiece) *Le Corbusier and Nikolai Kolli on the site of the Centrosoyuz, Moscow, March 1930.*

“So what does this word ‘Bolshe’ mean?

—Big!

—And Bolshevism? . . .

—Bolshevism means: everything at its biggest. The biggest proposition. The biggest undertaking. The maximum. Going to the root of the question. Seeing the question through to the end. Envisioning the whole. Breadth.”¹

85

Mad hopes, a fascination with the Plan and with the radicalism of the Soviet avant-gardes—for a good number of years the U.S.S.R. held for Le Corbusier “this mystique”² so long sought after and so quickly lost.

Three journeys; two projects for public buildings, of which the first, which was realized, is the largest of his constructions built before World War II (fig. 1 [frontispiece]); an urban project fundamental in the formulation of the Ville Radieuse; a great enthusiasm for the country of the Five Year Plan coupled with a keen disappointment with the country of socialist realism: the sum total of Le Corbusier’s relations with the U.S.S.R. is certainly not slight, and in the topology of his life between the wars (Paris, New York, Rome, Algiers, Buenos Aires, Rio . . .), Moscow’s position is by no means secondary.

Certainly his Soviet adventure later provided him with a whole gamut of self-justifications, each to be used according to whom he was speaking at the moment: “It took a bit of courage to go ‘do business’ with the Soviets,” he wrote when seeking the support of workers’ organizations.³ “I was an effective tool of French propaganda in the Soviet Union,” he explained when asking the French Foreign Minister to intervene on his behalf in Moscow.⁴ But there were other experiences as well that were fostered by the relations that Le Corbusier maintained with the U.S.S.R. for ten years: from the start of the 1920s, relations of mutual esteem—and often of misunderstanding—came to characterize his ties with the various currents of the Soviet avant-garde.

Le Corbusier and the Soviet Avant-gardes

Quite early on, *L’Esprit Nouveau* became interested in the Soviet scene: Ilya Ehrenburg sent them the first in-

86 formation published in France concerning the tower “done by Vladimir Tatlin out of iron and glass in 1919–1921.”⁵ Ivan Puni later stated in this publication that “Constructivism strips art of its symbolic meaning . . . and replaces it with ‘a material object’ that is more or less well executed and totally useless.”⁶ The review, which echoed the appeals for money for the “starving in Russia,” also welcomed calls for the opening of diplomatic relations between France and the U.S.S.R., a move advocated by Anatole de Monzie, among others.⁷ In *Veshch* (“object”), which they published in Berlin, Ehrenburg and El Lissitzky repeated the ideas of the founders of *L’Esprit Nouveau*,⁸ while certain of Le Corbusier’s essays, such as “Des yeux qui ne voient pas” (“Eyes that Do Not See”), were directly presented to the Soviet public.⁹ *Towards a New Architecture* was immediately read and applauded by officials like Anatoly Lunacharsky, the People’s Commissar of Education (fig. 2), a man very much attuned to the activities of the Western avant-gardes and who would remain until his death Le Corbusier’s only “direct” contact with the Soviet government apparatus.¹⁰

In a programmatic article on “The Ideology and Duties of Soviet Architecture” that appeared in *LEF*, the review of the artistic Left, Kornel Zelinsky pointed out that “by ridding Le Corbusier-Saugnier’s book of all of its petit-bourgeois and metaphysical contents, we will find therein a mass of valuable materials concerning contemporary architecture. In particular, he describes extremely well the situation of architecture in the West since the War, and unmasks its ideology.”¹¹ At this same time, more direct relations were established between Le Corbusier and the Soviets: Lissitzky passed on to Le Corbusier various materials concerning Soviet architecture, and then found himself drafting an article on this subject for *L’Esprit Nouveau* (which was not published, however); as for the newly founded Association of New Architects (ASNOVA), it maintained a close correspondence with Le Corbusier¹² and even went so far as to count him, in 1926, among its correspondents and members in the West.¹³

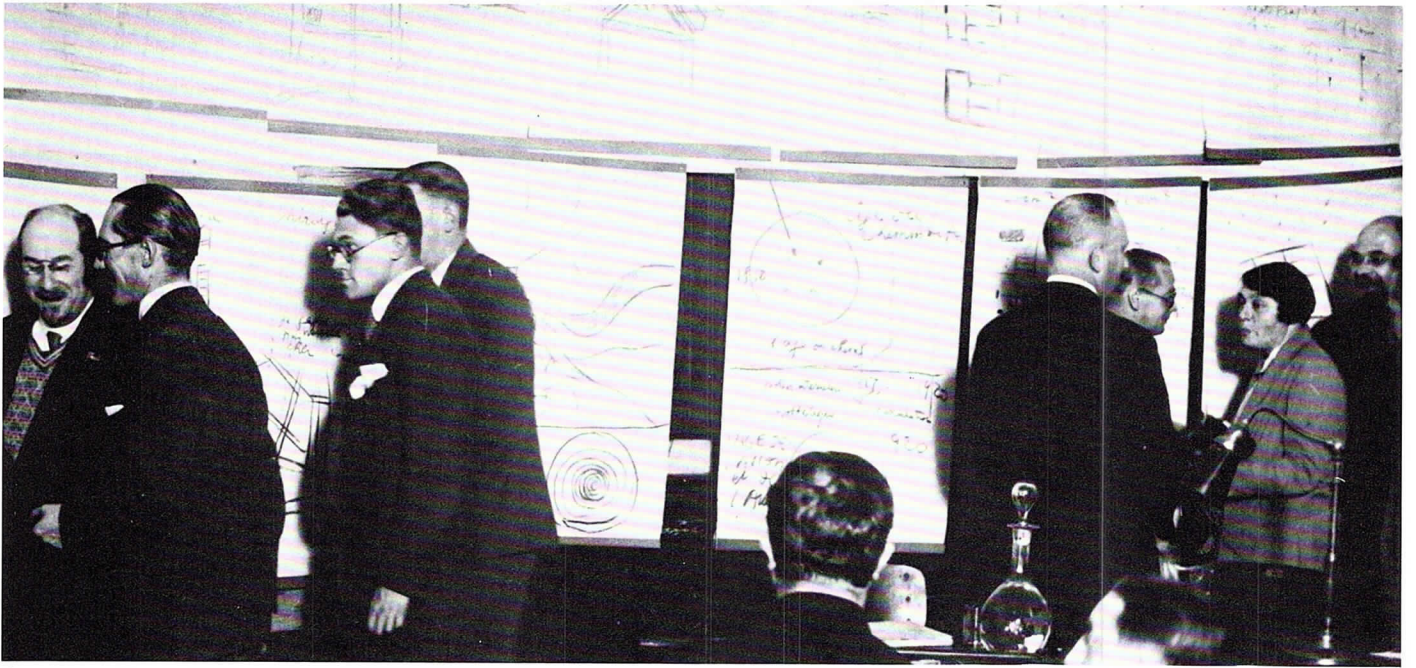
The scandal concerning the pavilions of the U.S.S.R. and of *L’Esprit Nouveau* at the Exposition of 1925 coincides

with the moment when Le Corbusier began to situate his own development in relation to that of the other currents in the new European architecture: “Art need only resemble a machine (mistake of *Constructivism*). But our eyes are seduced by pure forms.”¹⁴ At the same time his urban proposals began to be taken into account in Moscow, where the debate over the expansion of the city was in full swing and the Garden-City movement was at its peak. Upon reading *Urbanisme*, many immediately proposed that Le Corbusier’s ideas be introduced into Soviet cities, and his work began to serve as a standard of modernity and a gauge of the level to be attained in the U.S.S.R.: “Le Corbusier’s ideas, just like every new contribution in the area of urbanism that brings up new and serious problems, are of great interest to those in our country who work in the development of cities, and they forcefully demand to be applied to the conditions in our country.”¹⁵ The activity of Le Corbusier was uppermost in the minds of the patrons under whom the Constructivists of the OSA worked. Moisei Ginzburg wrote that “they are very enthusiastic about the inventive genius of Le Corbusier, whose projects and theoretical works have renovated all the architectural values of the past.” But although he published the “Five Points of a New Architecture” in *Sovremennaia arkhitektura* in 1928, Le Corbusier did not deplore any less the essentially formalistic character of all the borrowings from his buildings made by the Soviets up to that point.¹⁶ Ginzburg himself, in retracing the history of the new architecture, found the words to explain the “differences that separate us from him and his disciples”: “armed with an aesthetic puritanism, Le Corbusier runs up against the wall of the new aestheticism. He finds himself at an impasse whose only outlet was opened by the October Revolution.”¹⁷ But this is the same analysis made by Zelinsky as early as 1925, when he saw in Le Corbusier’s cult of primary forms “organically suited to our psychology” a position which unfortunately (for Zelinsky) made it equally acceptable to both “the academicism of A. V. Shchusev and comrade Lunacharsky.”¹⁸

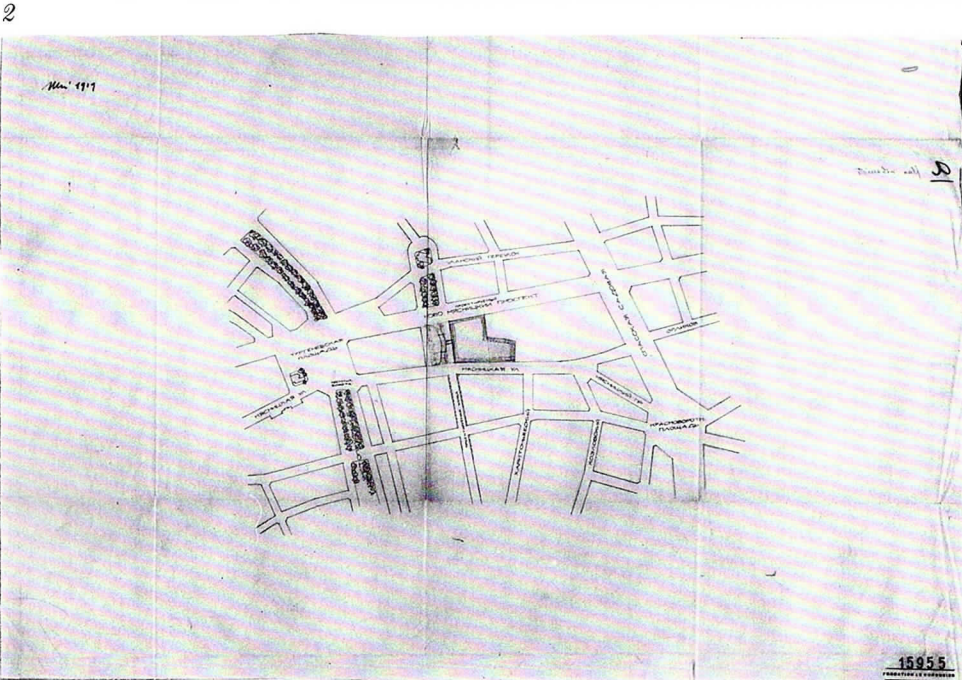
These critical points were expanded several months later by El Lissitzky. The first to exploit a vein of criticism that would become inexhaustible for Soviet critics in years

2 Le Corbusier at the end of his lecture at the Polytechnic Museum, October 1928. On Le Corbusier's left, Anatoly Lunacharsky; on his right, Andrei Burov, stage architect of S. M. Eisenstein's *The General Line*; on the extreme right, Aleksander Vesnin.

3 *Centrosoyuz*, Moscow. Le Corbusier, summer 1928. Site plan showing a new street on the left of the proposed building.



87



3

88 to come, Lissitzky reproached Le Corbusier for being nothing but a fashionable artist: in the tradition of the nineteenth-century “bourgeois engineers,” working only “for art patrons and sensationalism” and for capitalists (Voisin, Frugès, etc.), Le Corbusier allegedly “creates a habitat that nobody would want to inhabit, above all himself. . . .” The major reproaches: “He has no ties to the proletariat, only to industrial capital”; the forms that he proposed were not based on any law, but rather on an intuition governed by—*quel scandale*—the painter’s eye; the city he envisioned was “neither capitalist nor proletarian nor socialist, which explains the academicism of his *parti*.”¹⁹ It must be pointed out that Lissitzky was taking as his target the project of Le Corbusier and Pierre Jeanneret most criticized by the new architectural Left: the Mundaneum, whose *plan masse*, based on the golden section, was attacked by Karel Teige in *Stavba*²⁰ and by Roger Ginsburger in *Das Neue Frankfurt*:²¹ “Confronted with this work, I seem to see opened up before my eyes, after many years, the second volume of Perrot and Chipiez’s *History of Ancient Art* (on Chaldea and Assyria), at the page where one finds the palace of Sargon in Khor-sabad; but the original is distinguishable from its copy by the fact that it functions, and such is always the case. . . .”²²

The Epic of the Centrosoyuz

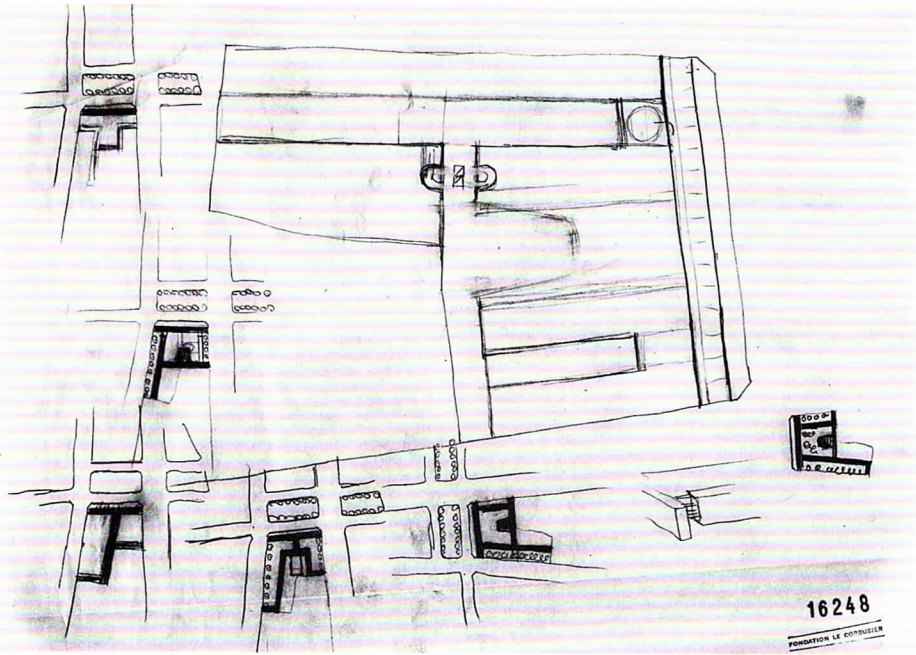
These controversies did not, however, prevent the representatives of the various architectural organizations from joining forces to permit Le Corbusier to obtain the commission for the Centrosoyuz. The Central Union of Consumer Cooperatives, which was founded in 1898 and which grew very rapidly under the Five Year Plan, decided in 1928 to build its central office in Moscow on a very irregular plot of land (fig. 3) of about 11,000 square meters, bordering the old radial axis of the Myasnitskaya Prospect (renamed Kirov Street in 1935). It was destined to be bisected by two new routes: the new Myasnitskaya Prospect and a perpendicular boulevard connecting the old Myasnitskaya and the new.

At the request of the Centrosoyuz, the Society of Civil Engineers organized a first competition in early 1928. B.

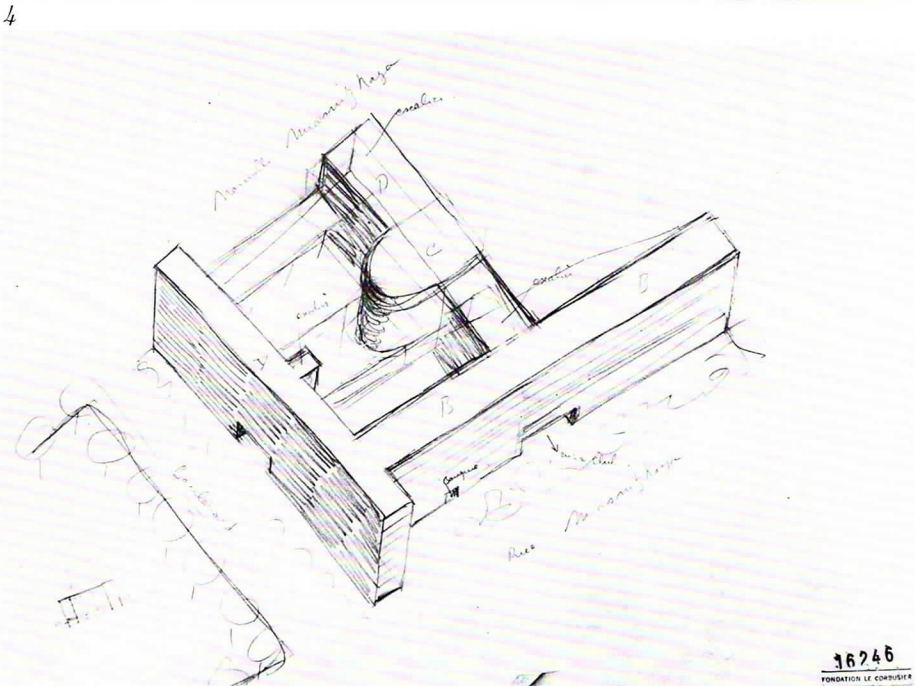
M. Velikovskiy, architect of the nearby Gostorg, and V. M. Voinov received the first of the twelve prizes distributed among the thirty-two competitors. In mid-May the Centrosoyuz-France asked Le Corbusier and Pierre Jeanneret to present in July of 1928 a project for a second competition (figs. 4–10, 13), to which Max Taut and Bennet & Tate (of London), most notably, were also invited, as well as a group of “house architects” from the Centrosoyuz. After the submission of this second series of projects, a third competition found among its entries the following: Aleksander and Viktor Vesnin, Ivan Zholtovsky, Ivan Leonidov, A. S. Nikolsky, A. A. Ol, A. V. Samoylov and P. M. Nakhman, a group from the OSA gathered around A. L. Pasternak—V. Vladimirov, L. Slavina, N. Vorotyntseva—as well as Peter Behrens.²³

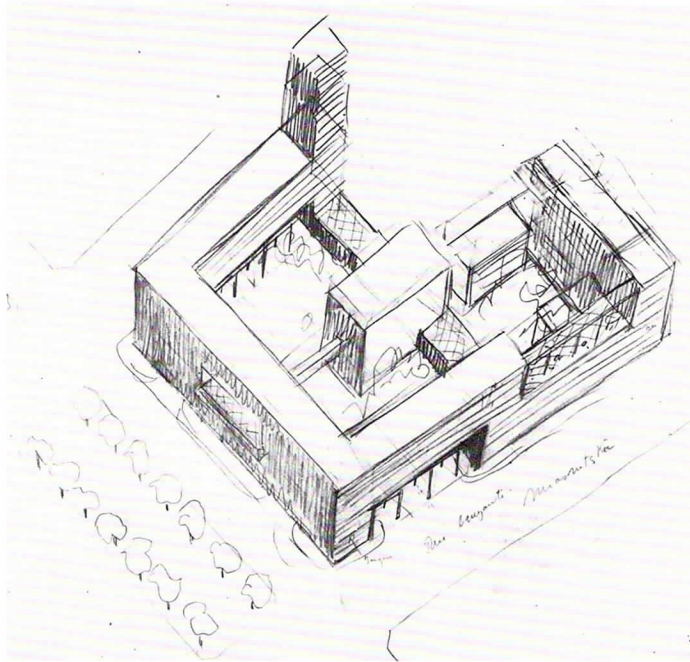
Le Corbusier made his way to Moscow by train in early October and on the twenty-second of the month presented his project to the competition committee (fig. 11, 12). At the close of this presentation, on October 27, the majority of the Soviet participants in the third competition declared that it was indispensable for the future of the new architecture to entrust full control to Le Corbusier and Pierre Jeanneret, and this was done on October 30. (During this time, Le Corbusier was very busy: he held a conference presided over by Lunacharsky at the Polytechnical Museum [see fig. 2]; Aleksander Vesnin presented him with 150 architectural projects drafted by his students; he met with Moisei Ginzburg, Sergei Eisenstein, Vsevolod Meyerhold; etc. [figs. 14–17].) In their address, the competition participants pointed out that “the conservative traditions continue to hold the command posts”; consequently, “Le Corbusier’s will be a clear and effective representation of the architectural ideas of today.”²⁴ On October 29, a statement by Aleksander Vesnin, president of the OSA, and Moisei Ginzburg, editor-in-chief of *Sovremennaya arkhitektura*, hailed the decision and expressed the conviction that the building would be “not only a splendid edifice of contemporary Moscow, but also a great stimulus to the reconsideration of those buildings which are out of phase with respect to contemporary life.”

This statement did not, however, prevent the Centroso-



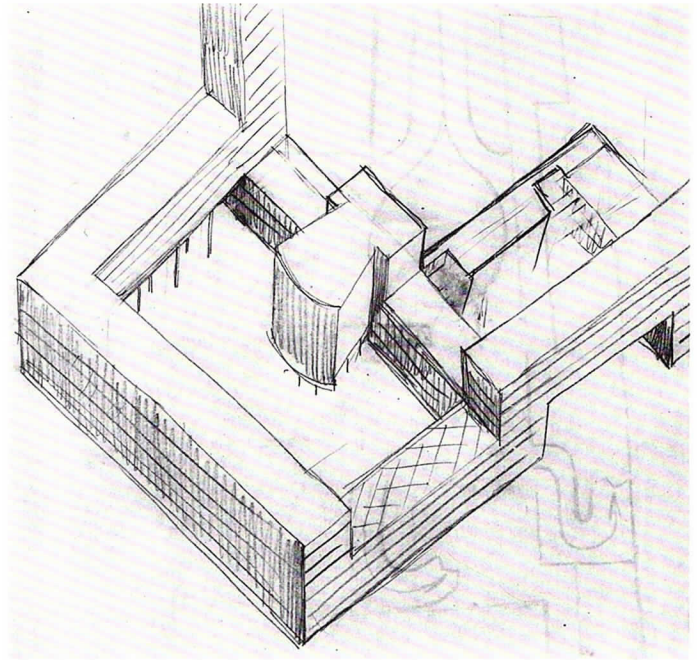
4 Centrosoyuz, Moscow.
 Le Corbusier, summer 1928. First sketches, note the main facade on the projected new street.
 5 Centrosoyuz, Moscow.
 Le Corbusier, summer 1928. First scheme.



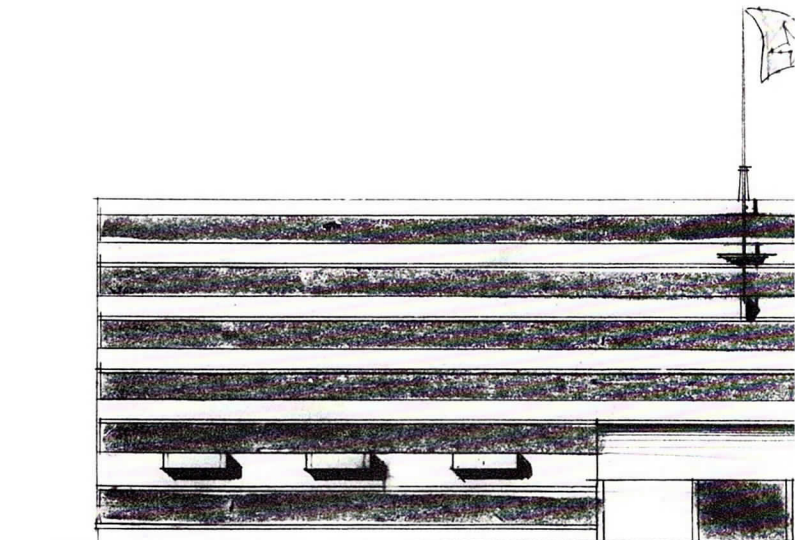


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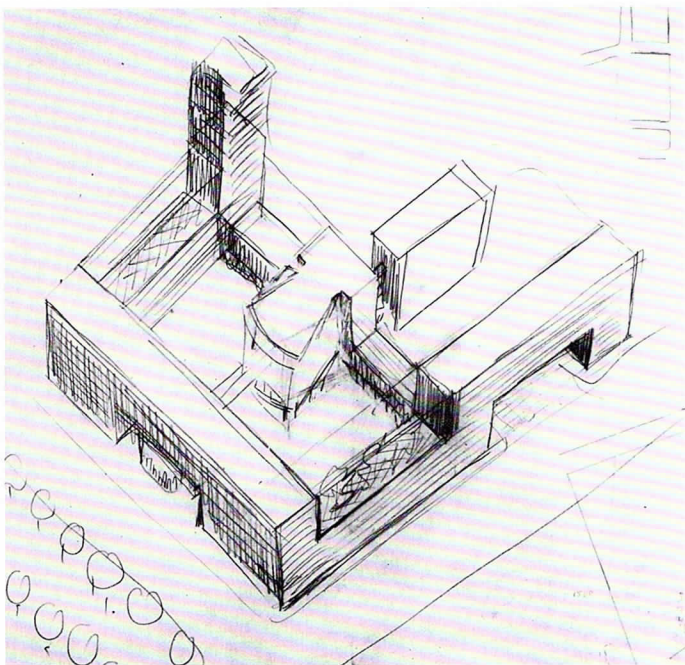
6-9 *Centrosoyuz, Moscow.*
Le Corbusier, summer 1928.
Variations on the first scheme.
 10 *Centrosoyuz, Moscow.*
Le Corbusier, summer 1928. First
scheme showing the facade on the
proposed new street.
 11 *Centrosoyuz, Moscow.*
Le Corbusier, summer 1928. General
plan of scheme sent to Moscow.



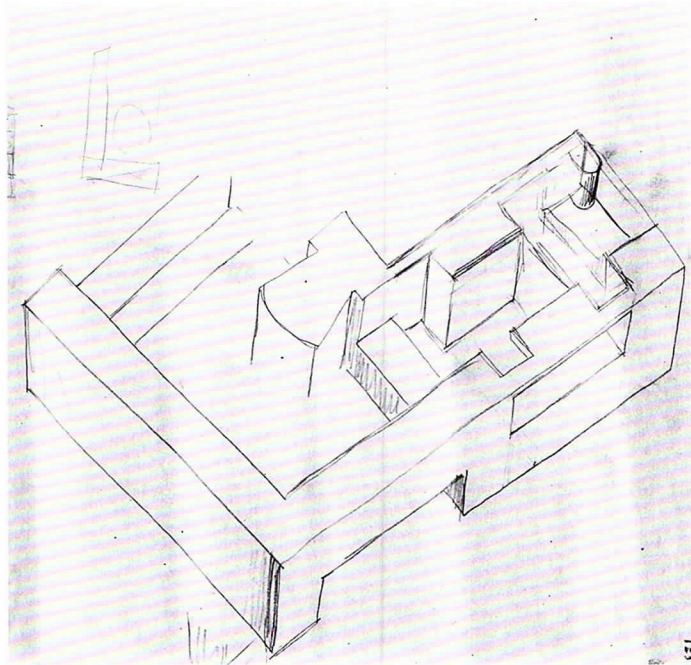
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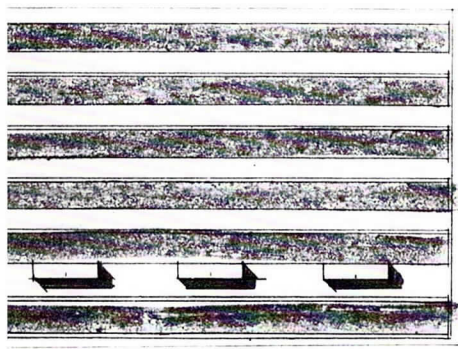
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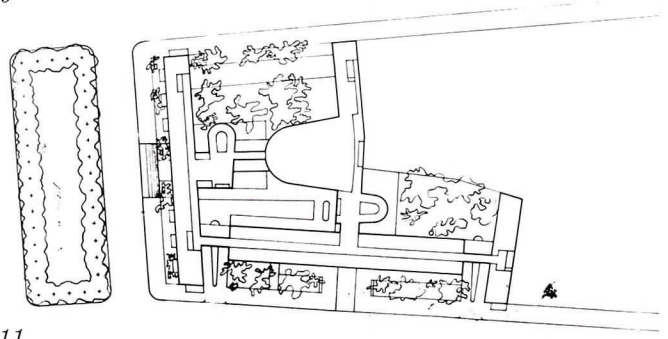
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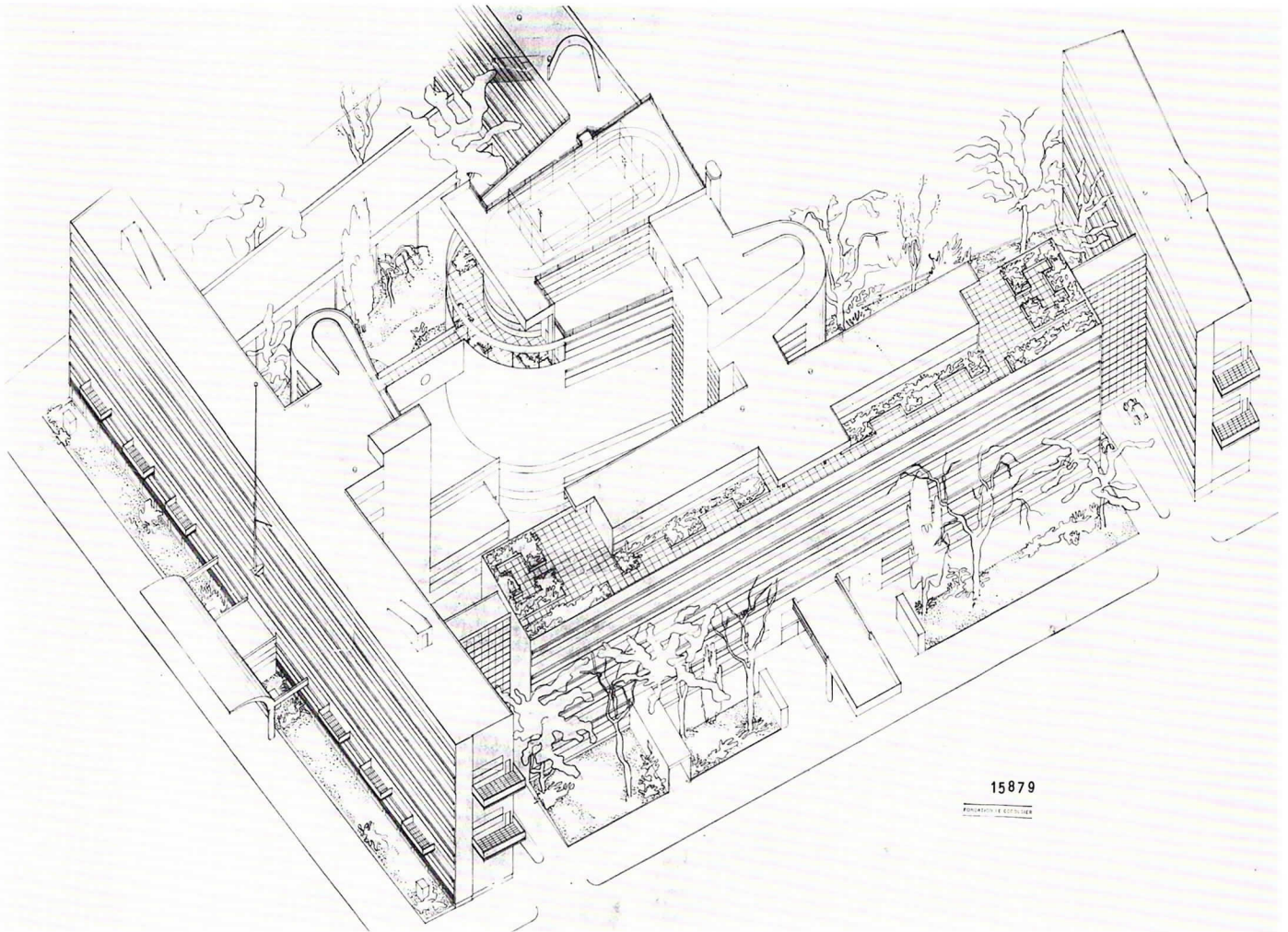


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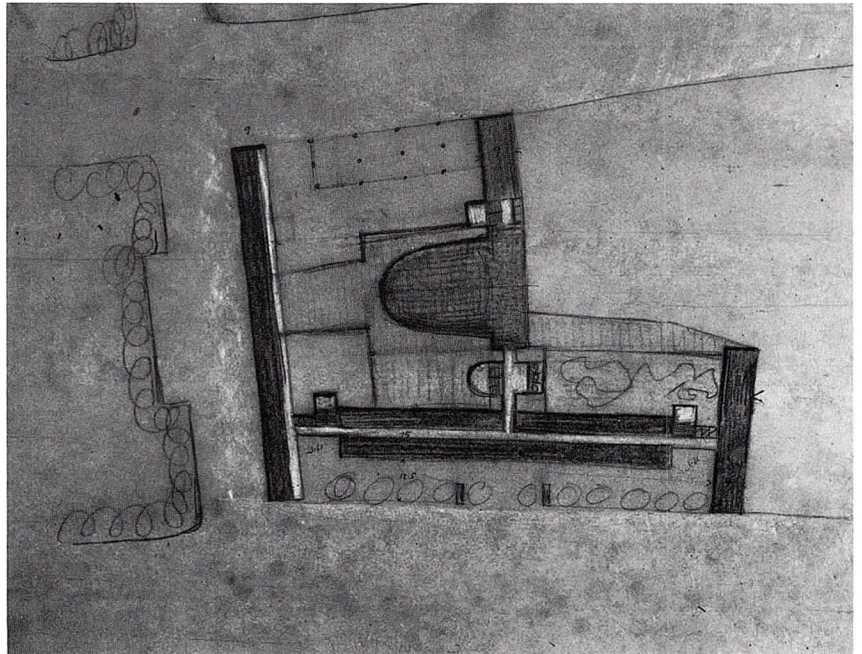


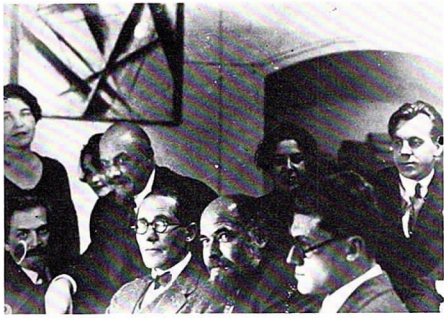
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12
 12 Centrosoyuz, Moscow.
 Le Corbusier, summer 1928.
 Axonometric of scheme sent to
 Moscow. Note the absence of pilotis,
 the main entrance on the proposed
 new street giving the axis for the
 auditorium.





14



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13 *Centrosoyuz, Moscow.*

Le Corbusier, summer 1928. Final sketch of the scheme sent to Moscow.

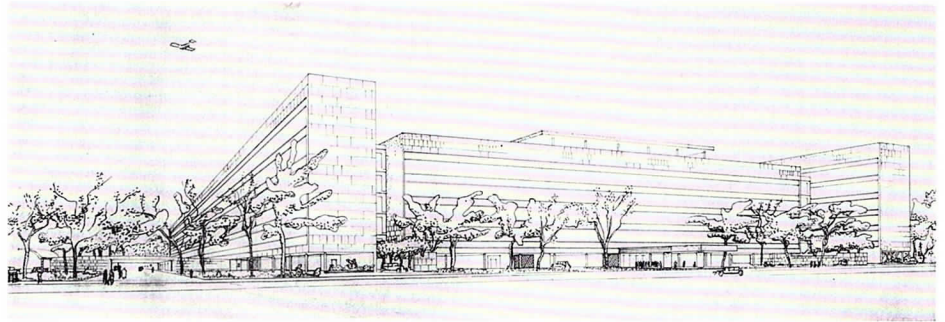
14 *Le Corbusier in Moscow, October 1928. On the left, Viktor Vesnin; behind Le Corbusier, Leonid Vesnin; on the right, Aleksander Vesnin and Andrei Burov.*

15 *Le Corbusier in Moscow, October 1928. On the right, Andrei Burov and Aleksander Vesnin.*

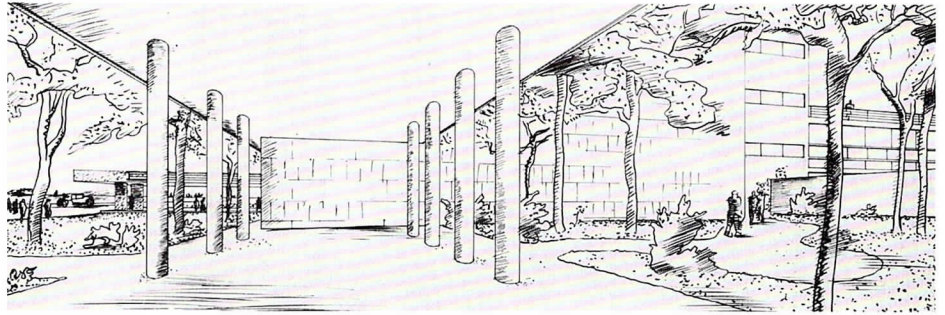
16 *Le Corbusier in Moscow, October 1928. On the left, Andrei Burov; on the right, Aleksander Vesnin and Georgi Goltz.*

17 *Le Corbusier in Moscow, October 1928. On the left, Andrei Burov; in the middle, Georgi Goltz; on the right, Nikolai Kolli.*

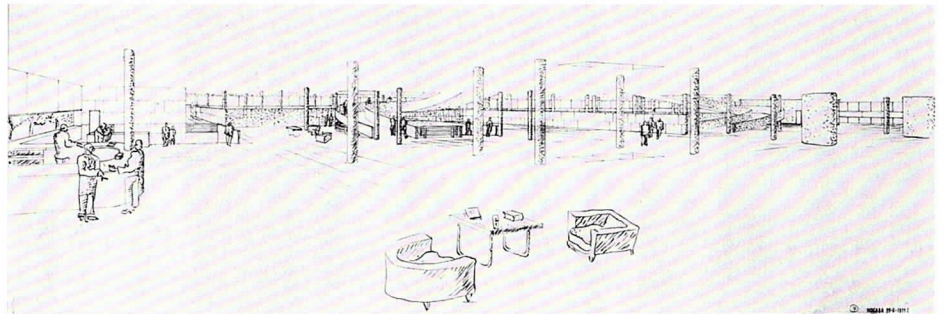
- 94 18 *Centrosoyuz, Moscow. Le Corbusier, October 1928. Perspective of the scheme as transformed in Moscow. Note the balance of the two entrances on the left and right and the newly introduced pilotis.*
- 19 *Centrosoyuz, Moscow. Le Corbusier, October 1928. Scheme as transformed in Moscow, perspective of the galleries on the ground floor.*
- 20 *Centrosoyuz, Moscow. Le Corbusier, October 1928. Scheme as transformed in Moscow, perspective of the main lobby.*
- 21 *Centrosoyuz, Moscow. Le Corbusier, October 1928. Axonometric of scheme as transformed in Moscow.*
- 22 *Centrosoyuz, Moscow. Le Corbusier, 1928–1929. Angular deformations of the project.*
- 23 *Centrosoyuz, Moscow. Le Corbusier, October 1928. Transformation of the scheme sent to Moscow showing the introduction of pilotis and the rotation of the auditorium.*



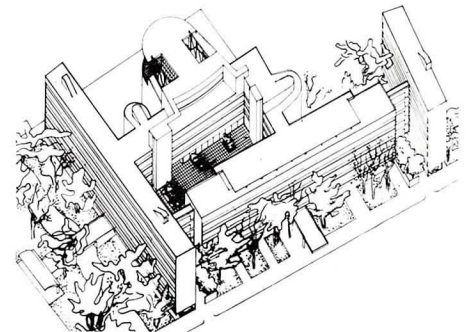
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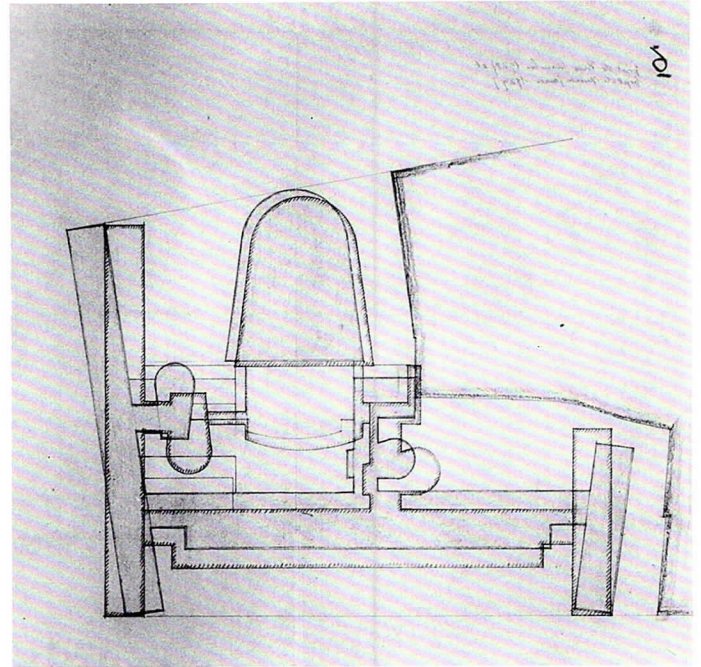
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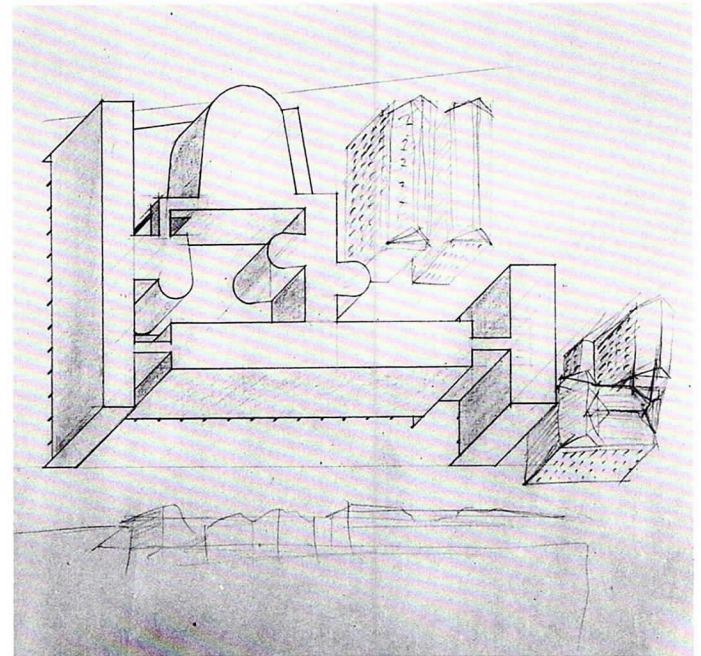
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yuz from establishing contacts with Aleksander Vesnin behind the scenes just in case Le Corbusier's project was judged unsatisfactory. Moreover, Nikolai Dokuchaev, one of the founders of ASNOVA, attempted shortly thereafter to pit Le Corbusier against the Constructivists, whose support had been instrumental in the Centrosoyuz decision: "Why do the Russian followers of Le Corbusier not see the difference between 'aesthetic purism' and the utilitarianism of 'Constructivism'?"²⁵ As for Le Corbusier himself, he would present in 1939, in *Sur les quatre routes*, his own modest account of the unfolding of the competition: "The Frenchman triumphed because his project explains itself through reason and because it is harmonious."²⁶

As the program became clarified, the final project took shape. Starting with the first sketches (see figs. 4–10), which outlined a building conceived as an enclosed block and presenting the main facade on the new street, perpendicular to the Myasnitskaya, the *parti* of a marked articulation of the different programmatic elements began to emerge. From the successive projects for the League of Nations Le Corbusier borrowed the angular couplings of office buildings: the main body (B) was placed along the Myasnitskaya; the two lateral bodies (A and B') were, in the first project sent to Moscow, set at an obtuse angle with respect to the main body (figs. 18, 19). The club for Centrosoyuz employees with its large meeting hall (fig. 20), the anomalous element of the program, was introduced in the empty space of the 'U' formed by this arrangement. On the basis of the remarks made by the review committee ("the club does not stand out enough"), the meeting hall and its annexes underwent a rotation of ninety degrees and were placed at an angle perpendicular to building B (fig. 21). In the second design presented—and concluded—in Moscow in October of 1928, in addition to this modification, an orthogonal system was to come in 1929 to govern the whole of the design (figs. 22, 23). At this point, Nikolai Kolli and P. Nakhman came into the picture soon after Le Corbusier's journey to Moscow: they were assigned to follow the project on behalf of the Centrosoyuz and subsequently spent two months in Paris starting in December of 1928.



22



23

In a project which was, after all, rather compact, the contrast between the curved exterior of the club and the rectangular prisms within which it is inscribed, the widest of which runs along the Myasnitskaya, creates an urban tension. In this way the compositional method of the League of Nations and of certain sub-units of the Mundaneum complex was revived in a more urban framework and given greater density. In harmony with the form of the club's exterior, two ramps corresponding to the plans enhance the vertical circulation within the block, using an odd horseshoe-shaped plan.

In other respects Le Corbusier takes quite literally certain statements in the program concerning the "character" of the work: "the beauty and the grandiosity [*sic*] of the edifice depend upon the simplicity of the forms. Decorative details must be avoided as much as possible . . . The House of the Centrosoyuz, giving onto three wide streets and situated in an elevated place [*sic*], could be a noteworthy architectural unit."²⁷

This call for monumentality was understood in a totally different manner by Peter Behrens, who presented his own project for the Centrosoyuz as follows: "the administrative building is characterized by a monumentality that expresses the meaning and majesty of the edifice. Monumentality surely does not lie in the richness of the articulation of the parts of a building, but rather in its unity and massiveness, which cannot be achieved except through integration and simplification."²⁸

In a separate drawing (fig. 24), Le Corbusier for his own part extended the theme of the Centrosoyuz to the remainder of the district. His *plan masse* of this fragment of a supposedly administrative district has no strict grid; but nonetheless the urban "free plan" thus proposed does not entirely dissolve the relations between the built structure and street: in a discontinuous manner, these buildings of the same typological family as the Centrosoyuz somewhat foreshadow the *redents* of the Ville Verte. "In studying the plan for the structures of the new boulevard, I had the impression that it would be worthwhile to modify this plan and anticipate the way in which the neighborhood

could be usefully built up according to the principles of a new and sound urbanism. Such a modification would have the most welcome effect on the appearance of the new Centrosoyuz."²⁹

Architecture is Circulation

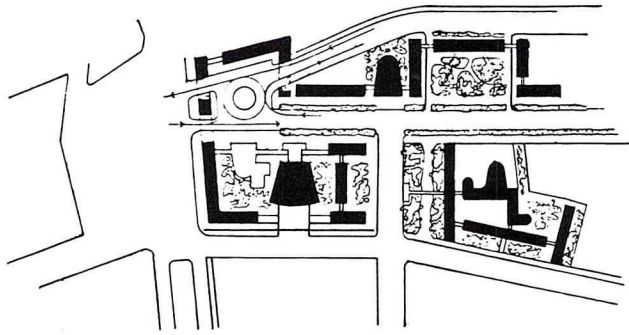
While the initial program called for "the construction of a base that [will] give an air of grandiosity [*sic*] to the whole edifice," the first design by Le Corbusier and Jeanneret called for a totally inhabited and opaque ground floor. It was not until the variant of this plan was presented in Moscow that *pilotis* were introduced, although in *Précisions* Le Corbusier retrospectively treated this solution as self-evident, evoking the specter of the Moscow crowds: "obligatory classification of this crowd entering and exiting at the same time; need for a kind of forum at such hours for people whose overshoes and furs will be covered with snow in winter. . . . Circulation is a word that I used incessantly in Moscow, to the point that several delegates from the Soviets ended up by getting nervous about it. I stuck to my position . . . *Architecture is circulation*. If you reflect upon this matter, you will find that it condemns the academic methods and consecrates the principle of the *pilotis*."³⁰

Similarly, describing in the first person the planning of the Centrosoyuz, Le Corbusier accords a fundamental role to the *pilotis* when he specifies the function of each type of volume:

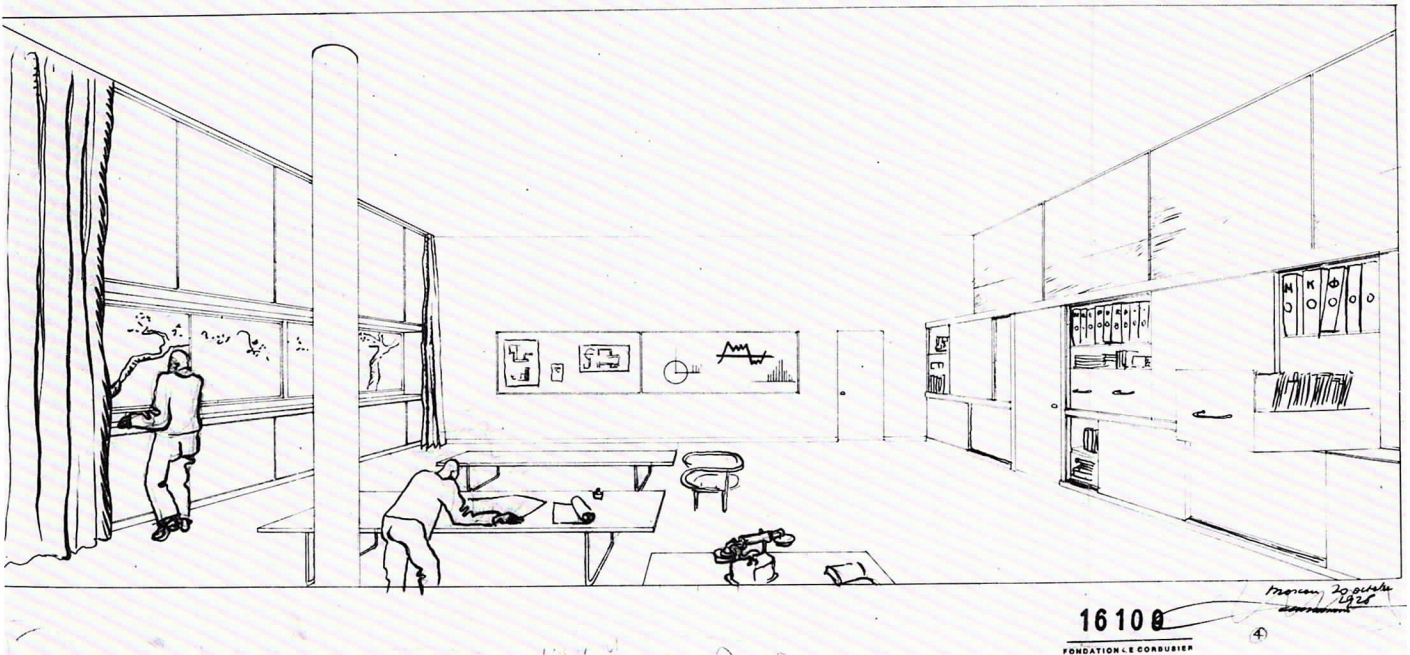
"I am designing the first of the central office volumes: depth dimensions determined for perfect lighting, this office volume calls for large, collective work halls (fig. 25), and it is furnished with a glass skin on two facades. The flanks are opaque walls made of light volcanic rock [a pink volcanic stone from the Arctic—J.-L. C.] of double thickness. . . .

"I am also determining the other two office volumes: a glass skin on one side and a composite wall (of stone and glass) to serve the corridors; at the back, an entire wall of the same opaque stone.

"The scale of these three prisms is the essential feature of the architectonic composition: they are arranged in plan and section in such a way as to create the appearance of,

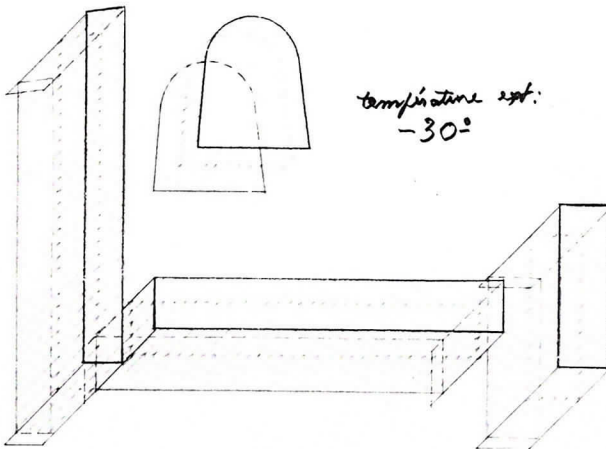


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circuit fermé rapide
 d'air chaud (+60°) de
 dans le vide des membranes
 les murs de terre ou
 les murs de pierre plaquée

24 Extension of the architectural principles of the Centrosoyuz to the neighboring blocks. Le Corbusier, October 1928.

25 Centrosoyuz, Moscow. Le Corbusier, October 1928. Scheme as transformed in Moscow showing perspective of the offices.

26 Centrosoyuz, Moscow. Le Corbusier, October 1928. First illustration of the proposed heating and cooling system.

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26

98 27 Le Corbusier sitting on the site of
the Centrosoyuz, Moscow, March
1930.

28 Centrosoyuz, Moscow.
Le Corbusier. Building under
construction, April 1934.



28

on the one hand, a peak, and on the other, a gracious basin. That the central volume is one story lower than the two lateral bodies was important.

“The whole is in the air, on the *pilotis*, detached. “Behold this formidable, entirely new architectural advantage: *the impeccable line of the bottom of the building*. The building presents itself as a showcase object on a display stand; it reveals itself entirely.”³¹

The final plan brings another element into play: the obtuse angles between the two lateral bodies and the principal building reappear. The continuity of the facade along the Myasnitskaya is, however, ensured by the slanted section of the gables of the lateral buildings, which convey their parallelism to the three planes bordering the street.

It is a well known fact that Le Corbusier attached importance to the realization of a system of “exact respiration” (fig. 26) to condition the air in the Centrosoyuz. But we should beware of condemning too quickly the “Russian authorities [who] did not agree to carry it out.”³² Le Corbusier endeavored to seek “the technological support of the Americans” and addressed himself to the American Blower Corporation, of whom he requested a consultation on his system, intimating to them the vastness of the Soviet market; the reply was clear: “The method that you propose requires four times the steam and twice the motor force” of the usual methods.³³

The definitive project was presented by Le Corbusier during his second trip (from June 6 to 17, 1929). A third trip in March 1930 enabled him to see the beginnings of the construction work (fig. 27), and coincided with a presentation at the Museum of Contemporary Western Art of the maquette of the Centrosoyuz along with some canvases of Amédée Ozenfant, Fernand Léger, and himself, in an exhibition on “The Art of the Industrial Bourgeoisie.”³⁴ Meanwhile, a long phase of clarification would necessitate laborious exchanges between Paris and Moscow, and these were handled by Nikolai Kolli, assistant to the Vesnin brothers in the dam project of the DneproGES, who would realize his full capabilities as a professional in the difficult construction work of the Myasnitskaya. The

adaptation of the plan to Soviet technological standards, or the transformation of these standards, the problems of heating—a hot-water system was used in the end—and the lack of materials forced the project to be modified continually.

A Closely Observed Construction Site

The priority granted to the industrial sites of the first Five Year Plan ended up actually causing the suspension of the work in June of 1931. Lyubimov, the man who presided over the undertaking, and in whom Le Corbusier saw the prototype of the new construction foreman of the mechanical age—and “a man who loves architecture,” as he emphasized in a letter to Sigfried Giedion³⁵—was named to the U.S.S.R. Commerce Agency in Berlin. Kolli, who had been directing the work of the Mosproekt on the Centrosoyuz, turned his attention to the realization of the DneproGES. The construction site was reopened a year later: in the spring of 1932, Lyubimov, named People’s Commissar of Light Industry, again took control of the building in order to adapt it to its new use, and as a result the large rooms of the original design were replaced by a traditional system of small offices in a row (today one finds there the Central Office of Statistics of the U.S.S.R.).

Little by little every form of supervision eluded Le Corbusier, who expressed his displeasure at not having received even a photograph of the construction site (fig. 28). The visit to Moscow in early 1934 of Charlotte Perriand, who on her return to Paris informed Le Corbusier of the treacheries uttered in his regard by André Lurçat in a lecture given to the Union of Architects, did not in any case help toward restoring Le Corbusier’s supervision of the interior spaces. The bitter letter that he sent to Kolli—who had meanwhile become the chief of Atelier No. 6 of the Mossoviet—criticizing the colors chosen by the latter for the interior of the Centrosoyuz bears witness to this: “This is boudoir polychromy, not Soviet polychromy!”³⁶

It goes without saying that the absence of Le Corbusier, and the failure of his numerous attempts to get himself invited once again to Moscow after 1930, explain the build-



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29 *Centrosoyuz, Moscow, completed, 1936.*

30–32 *Centrosoyuz, Moscow. Le Corbusier. Photos taken in 1973.*

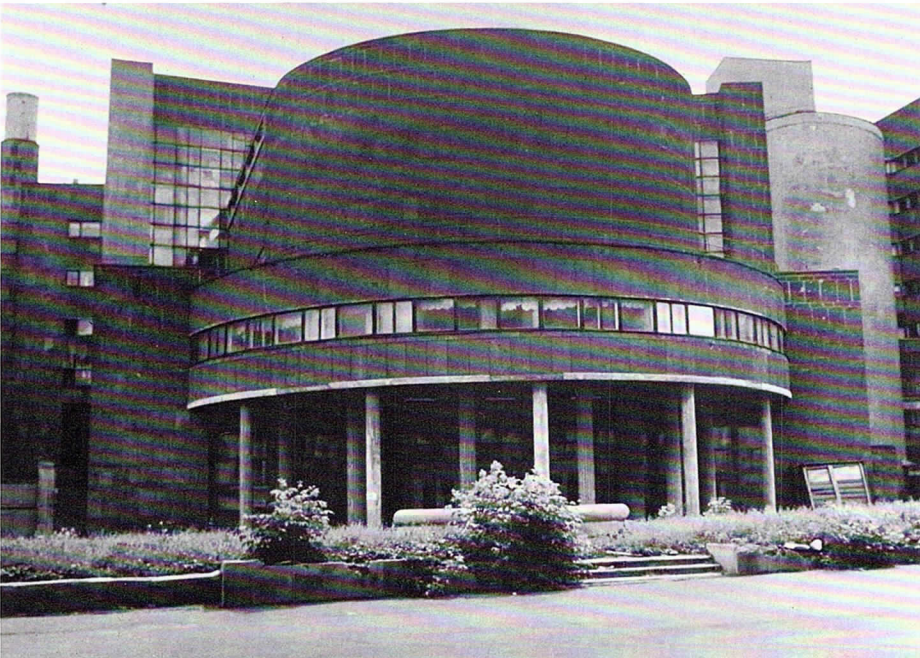
ing's final aspect, adapted as it was to the petit-bourgeois tastes of the Soviet bureaucracy in full triumph. The "exact atmosphere" between the two glass partitions was replaced by stiff white pleated curtains, an image which is symbolic. And Le Corbusier's final request made to Lyubimov in 1936, asking that Jacques Lipschitz (in Moscow at that time) be entrusted with the statues overlooking the main entrance, seems naive only a year before the first Congress of Soviet Architects.

The last ties that Le Corbusier would maintain with the largest and most distant of his construction sites from the period between the wars were very prosaic: indeed, he did not succeed in obtaining photographs (figs. 29–32) of the completed Centrosoyuz and had to procure them through the French Embassy! Above all, he had to fight hard in order to secure payment for his contracts, which were by good fortune made out in dollars from before the Depression of 1929. The final payments were late in arriving, and Le Corbusier used every means available to speed them up, asking Alexis Léger to intervene through the Ministry of Foreign Affairs, and entrusting Francis Jourdain, who attended the Congress of Soviet Architects in 1937, with the task of presenting his request, which was finally met late that same year.³⁷

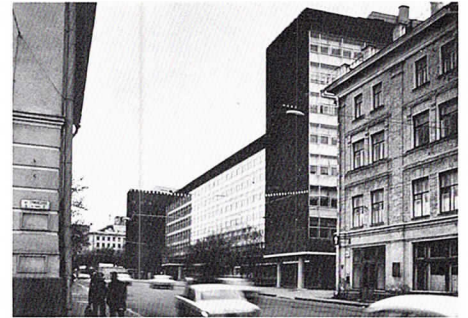
Le Corbusier's work evidently held a privileged position in the violent polemics waged from 1931 onward against the architecture of Constructivism and functionalism: beyond the problem of the colors chosen, the very materials of the interior were transformed to comply with the new canons. Although the access ramps retained their rubber finish—a first in the U.S.S.R.—the *pilotis* of reinforced concrete gave way—thanks to a marble veneer and the addition of a thin molding in the manner of a base and capital—to the dignity of the column. Kolli himself had to step back from his own work and denounce the "nudity and schematic nature of the forms and the crude proportions which deprive the building of a good deal of its expressive power."³⁸ At the 1937 Congress moreover, Kolli would have to save his own skin, as he was threatened for his relations with Le Corbusier, by presenting a violently anti-Constructivist speech. But the Centrosoyuz



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was also attacked “from the Left” and, this time around, more for its extravagance than for its asceticism. The representatives of the German avant-garde at work in the U.S.S.R., aware of the backward state of the technology used in most of the country’s construction sites, saw the Centrosoyuz more as a provocation than as a point of support for the propagation of new ideas, while the architects of Constructivism were accused of being fundamentally unrealistic. Hannes Meyer exclaimed, “This orgy of glass and concrete cannot be completed, and will be abandoned, if only because of the materials. . . .” He invited the Soviets to abandon “the work begun, as one abandons a pastry in the course of preparation in order to be able to have one’s daily bread”;³⁹ meanwhile Bruno Taut saw in it “a pseudo-rational craftiness, yet the fruit of a talent so dazzling that they have been left flabbergasted in Moscow by it.”⁴⁰

Aleksander Vesnin, for his own part, had the courage to appreciate positively “the lightness, solidity, and clarity” of the Centrosoyuz, while others, such as V. Kokorin, denounced its “foreign” architecture.⁴¹

D. Arkin was probably one of the most attentive critics of Le Corbusier in the U.S.S.R., and one of the most open; he directly echoed Emil Kaufmann’s essay “Von Ledoux bis Le Corbusier,” even though he took the opposite course in his own architectural references.⁴² He alludes to the importance of the Centrosoyuz for “quite a few inhabitants of the capital.” Arkin further asserts that “Le Corbusier was practically deprived of the right to experiment” in the West; this fact makes the realization of the Centrosoyuz all the more meritorious in his eyes, as this building testifies to the “fatal schematic quality” of the “new architecture.”⁴³ Arkin deplores above all the “inhumanity” of the Centrosoyuz and its disregard for its surroundings; the only aspects to find favor are the interior spaces which were, as we have seen, slightly “improved.” Indeed, in the new political and cultural state of affairs, Le Corbusier found himself reproached precisely for a good deal of that which had made his success in 1928.

Moreover, the Centrosoyuz could have in time led to other

Soviet commissions. Le Corbusier went to great lengths in 1929 to get the Union of Power Stations of the Moscow Region (MOGES) to entrust him with the construction of the facade of the Bobriki station, and in February of 1930, he proposed to Lyubimov a plan for the construction of a hotel in Berlin with Soviet capital; in connection with this, on his way to Moscow for the third time, in March, he arranged a rather curious rendezvous with Walter Gropius on the Platform of the Berlin-Friedrichstrasse Station.⁴⁴ It was, however, in the field of urbanism that Le Corbusier shortly thereafter established a new tie with Moscow.

The “Green City” and the Dispute with Ginzburg

“A gigantic proletarian sanatorium at the gates of Moscow,” the “Green City” was an idea launched in 1929 by the publicist Mikhail Koltsov with the concurrence of the Moscow Soviet, the government, and the workers’ unions. It was to be a “cultural complement, a socialist corrective to the already existing city of Moscow, which is compressed and lacking in air with its labyrinths of tortuous streets and lanes.”⁴⁵

The Green City claimed to offer an ensemble of cultural and recreational facilities to the workers of the capital, who could use them one day per week or one day out of five, in rotation, or could remain there for more considerable lengths of time. The concept is more that of a forest-town than that of a garden-city: the chosen land, linked to Moscow by train—a freeway, the first of its kind in the U.S.S.R., was foreseen as complementing the train—was situated fifty kilometers north of the city. On the 150,000 hectares provided (370,500 acres or about 578 square miles), the organizers planned to build after 1930 a very broad network of public buildings and, above all, to test new forms of communal habitat: the reproduction of the work force that would take place there would reflect “as much as the present stage of development permits it, the collectivization of the forms of existence.”⁴⁶

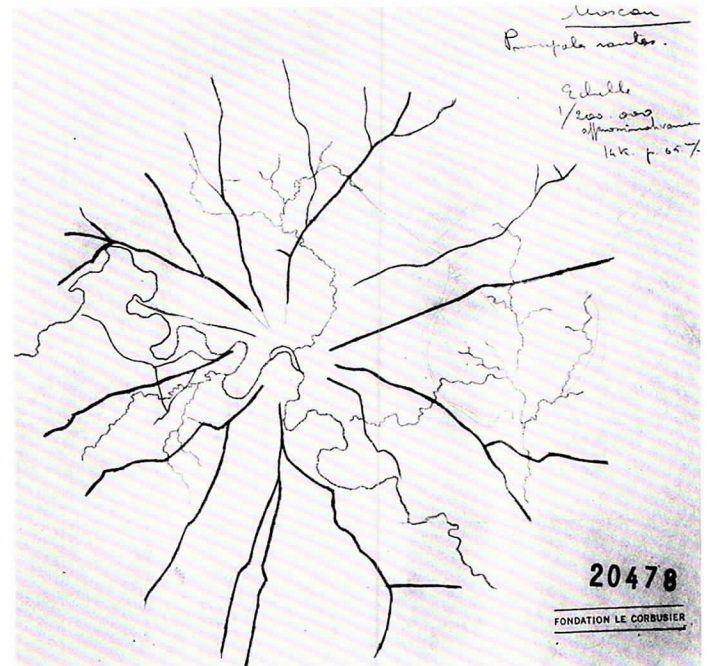
In early 1930, at a ‘closed’ competition in which D. Fridman, Konstantin Melnikov, and a group from the OSA headed by Ginzburg and M. Barshch, were the partici-

pants, the proposals of Nikolai Ladovsky were chosen as the working base for the development of the plan, despite the criticisms of the press with respect to all of the projects.⁴⁷

Visiting Moscow for the third time, Le Corbusier was invited to give his opinion on the projects of the competition. There is no doubt that the very idea of the Green City overwhelmed him: the “fifth day of rest” seduced him to the point that in his report written on the eve of his return to Paris he advocated the “designation of a day of rest,” to which “the designation of an appropriate sport would be added” as a means of control over the “clients” of the city.⁴⁸ He even outdid the rather mechanical Soviet conception of human life when he wrote to Ginzburg that “the Green City becomes the garage where the car is overhauled (oiling, greasing, inspecting of parts, overhauling, and upkeep of the car).”⁴⁹

Next to Melnikov’s fantastic project, which openly ridiculed the functional demands of the program, and Ladovsky’s project, a brilliant exercise in composition using experimental types of industrialized buildings, it was precisely the project of Ginzburg and Barshch which brought to light the practical application of Le Corbusier’s critique. The OSA group made the reflections on the Green City a pretext for posing the question of Moscow: of the entire area of Moscow they wanted to preserve only the historic center and a few industrial areas, and intended to divide the residential areas into parkland. In this key project of “de-urbanism,” the Green City, “the first link to the future Moscow,” prefigured an arrangement of territory conceived “in such a way as to ensure the maximum proximity between man and nature.”⁵⁰

In his “Commentaries relating to Moscow and the Green City,” Le Corbusier joined the de-urbanists in his critique of the existing city for his own part taking aim primarily at the structure of Moscow: “If one lives along the ‘donkey road’ can one really act in accordance with the present work conditions in Russia?” he wonders (fig. 33).⁵¹ He also joined Ginzburg and Barshch in making the Green City the pretext for a master plan for the city of Moscow:

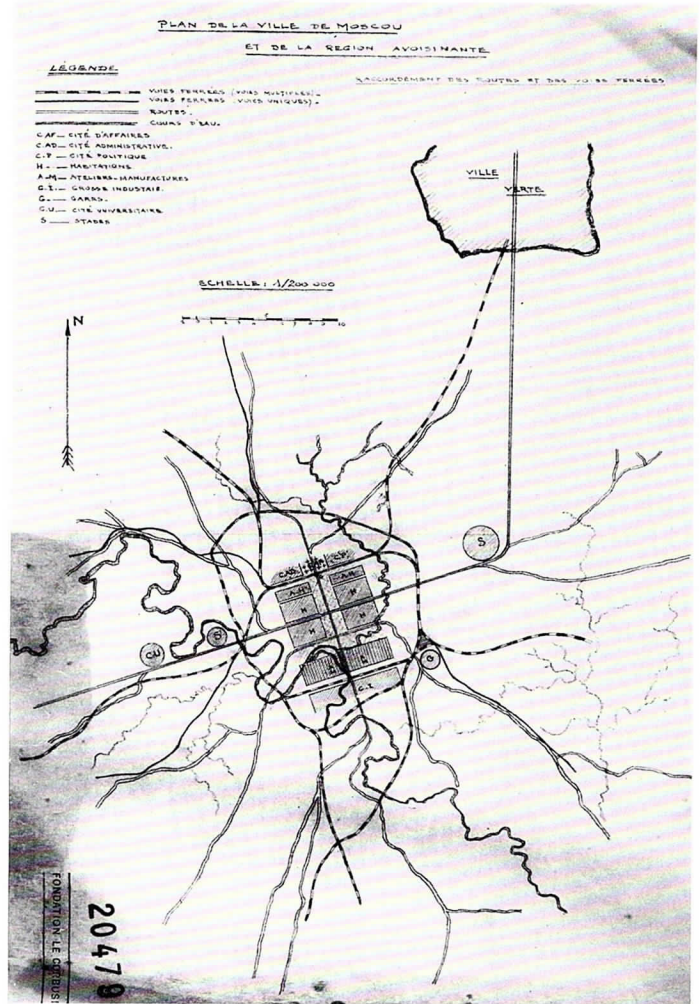


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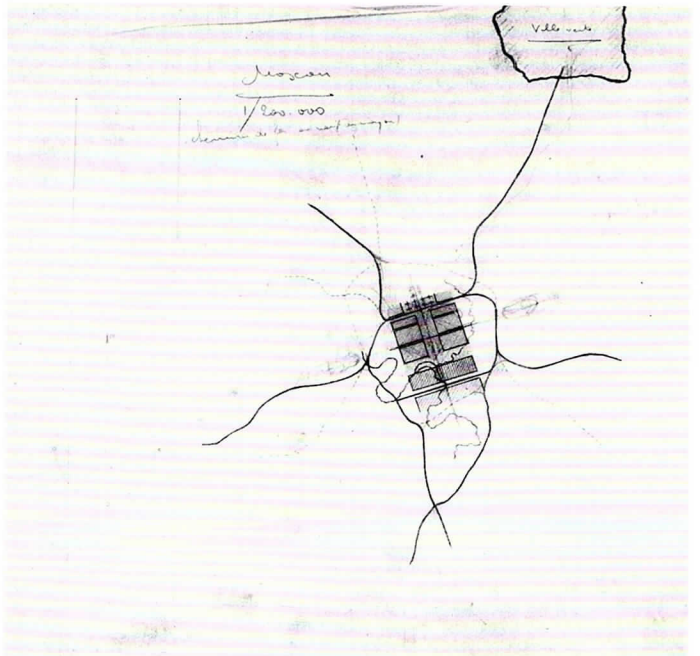
104 but what pushed his thinking toward the reconstruction of the capital were principles diametrically opposed to those of the de-urbanists. Like them, Le Corbusier meant to demolish the main part of the existing city, preserving only the most symbolic monuments; but he wanted primarily to rebuild, on this land, a “GQG” (General Headquarters), a “Soviet command post,” some “warehouses of consumer goods,” and a residential zone—with the industrial enterprises situated “at qualified sites distributed throughout the land.”⁵² The metropolis is not destroyed forever, but only rationalized by Le Corbusier, who in this respect harks back to his proposals regarding the Cité d’Affaires (Business City) and his prototypes for collective habitation. While fully adhering to the program of the Green City, he proposes that it be arranged around a network of specialized routes and that the communal housing used should be chosen from those being tested at that time in the U.S.S.R. In this way the theme of the Ville Verte took shape for Le Corbusier, conceived as a component to be eventually integrated in his Ville Radieuse.

In his text, Le Corbusier maintained only a slight distance from the de-urbanists. But in a letter he attacked Ginzburg, repeating to him that “man tends toward industrialization” and adopting for his own use the criticisms that the Soviet press had leveled against those who proposed “the construction of straw huts in the forest of the Green City”: “Bravo, wonderful! . . . provided it be only for the weekend! But do not say that once you have built these straw huts, you will then be able to raze Moscow” (fig. 36).⁵³

Addressing Le Corbusier as “the greatest surgeon of the city of today,” Ginzburg responded by reproaching him in *Sovremennaiia arkhitektura* for wanting to “look after the city only for the purpose of preserving it just as capitalism had made it.”⁵⁴ In refuting the quotations from Marx and Lenin cited in passing by Le Corbusier, Ginzburg further explained that the urbanization of one hundred million peasants would destroy all of the U.S.S.R.’s agriculture (in making this point he only anticipated to a small degree the consequences of the brutal collectivization of the peasantry . . .). Le Corbusier resumed his own part in the



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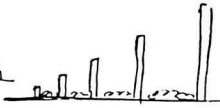
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"Désurbanisation"



maisons à gradins
ville de " " " "
erreur de postulat:
le recherche de la lumière
favorise l'ombre!



une solution
de raison
mais le cœur
n'y trouve
plus son
compte

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discussion shortly thereafter, when the Moscow Soviet invited him to answer a questionnaire on the rebuilding of the city.

The Ville Radieuse: a Plan Voisin for Moscow?

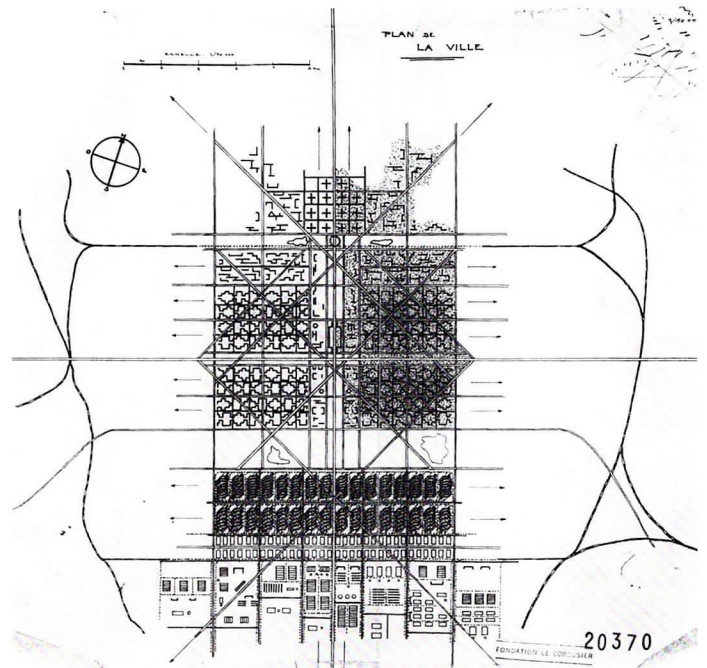
The detailed questionnaire submitted to Le Corbusier by Sergei M. Gorny, who at that time was elaborating a new plan for "Greater Moscow,"⁵⁵ dealt with the respective situations of the administration and the industry of the city of Moscow, with their prospects of development within the capital city and on Soviet territory, with the respective roles of the various modes of transport (fig. 35), and with the types of collective habitation, whether permanent or temporary; it also dealt with the density of the buildings, the system of services and their spatial organization, domestic services, and the distribution of goods; lastly it dealt with the fundamental question of the structure of the city and the extent of the demolitions necessary for its "modernization."

The "Reply to Moscow," dated June 8, 1930, was accompanied by a group of twenty plates which were but a preliminary formulation of what would become the Ville Radieuse, later presented in seventeen plates at the Brussels CIAM (November 27–28, 1930).⁵⁶

The "Reply" reiterates the "Commentaries": the industries must disappear from Moscow in order "to stimulate the introduction of industrialization in the countryside"; what is described is an "industrial city," at once "clean, joyous, and alive." As regards transportation, it seems to Le Corbusier that the automobile should be limited to serving the "green cities," which he claims should be created on the outskirts and be banished from inter-urban routes. The pre-condition for its use within the city would be the construction of a new system of specific roads (fig. 34).

He gives particular consideration to the subway system—which, unlike the bus, "escapes the influence of winter"—at the very moment when construction work on the first subway line was becoming the order of the day: "the subway lines must not be in any way linked to the network

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34 Plan of the city of Moscow and the neighboring area, showing proposed road and railway network, 1930.

35 The "Green City" as connected by the railway to the new Moscow, 1930.

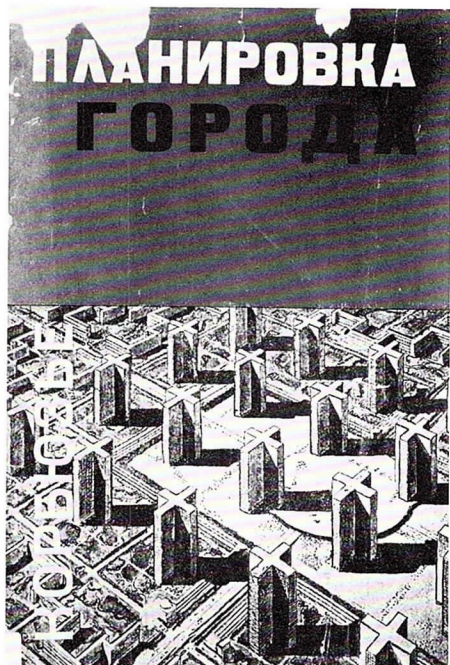
36 "De-urbanization. Tiered houses, city of tiered houses. Mistake in the postulation: the search for light provokes shade. A solution of logic. But there is nothing left in it for the heart."

37 "Plan of the City," Moscow, 1930. From top to bottom: business city, residential city, factories, heavy industry.

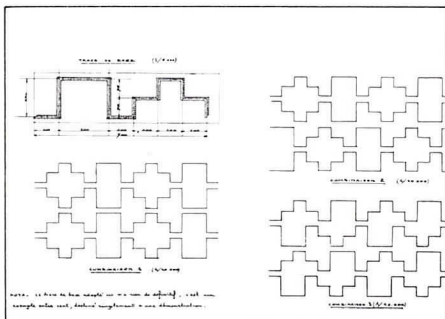
38 *Planirovka Goroda, the Russian edition of Urbanisme, Moscow, 1933.*

39 A 1930 drawing of the housing redents, with “foundation layout” and three “combinations”; the note at the bottom says, “the foundation layout adopted here is by no means final, it is one example out of a hundred, used simply for the sake of demonstration.”

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of existing streets; the basic principle of the subway is to follow a straight line.”⁵⁷

The general structure of the city was to be based on two systems: “on the one hand the streets, on the other the houses: these are two totally independent processes.”⁵⁸

The orthogonal system of principal streets is cut diagonally by a second network (fig. 37), while the housing takes as its starting point the Soviet experience with communal houses, even though the barrenness and “lack of feeling” of the prototypes seen in Moscow was strongly criticized by Le Corbusier. On this matter he reaffirms the “autonomous, closed, private, sacred” nature of each dwelling, while declaring himself in favor of the collectivized form of domestic labor. But Le Corbusier refuses all excesses, and, for example, declares himself against the obligation to eat all meals collectively so praised by the architects of the “doma-komuny.”

All of the existing housing should be destroyed and replaced with the fabric of the Green City, in this way introduced into Moscow itself; it should also be oriented in relation to “the solar axis” and should have a population density of 1000 inhabitants per hectare (or about 259,000 per square mile);⁵⁹ the theme of the Green City rejoins then that of the Ville Radieuse, and this convergence comes to form the central component of the new organism. Intersecting the *redents* of the apartment buildings (fig. 39) and serviced by “superimposed internal streets,” a triple network of services is put into place: a schooling system, from day-nurseries to primary schools; a club system, “a place for people to gather according to their spiritual tendencies, which is not the case in the housing units” (the location of the clubs with respect to the living areas therefore being unimportant); and recreational centers, intended for the “preservation of the race” and filling in the free space between the *redents*. These same *redents* are therefore very precisely defined, even if they have not yet been conceived as they would be several months later in Brussels, in the form of an assemblage of “housing units” (*unités d’habitation*). More broadly speaking, the triad of “air, sound, light” is Le Corbusier’s most effective

weapon in responding to the hygienic concerns of the questionnaire.

Overall, the radiocentric structure of Moscow would unquestionably be destroyed by Le Corbusier's proposal, to make room for a new organism whose functioning and orientation are very precisely described in plate 15 of *La Ville Radieuse*.

The plan for transforming the existing city of Moscow into a Green City would, however, tolerate the preservation of the Kremlin, St. Basil, the Bolshoi Theater, and . . . the mausoleum of Lenin, as well as a few other religious buildings. As early as 1928, Le Corbusier had affirmed, in an article published in *Neue Zürcher Zeitung* upon his return from the U.S.S.R., that "Moscow, the embryo of a new world, still inhabits the old shell of an Asiatic village";⁶⁰ he now asserted that "it is not possible to reconcile the past city with the present or future one."⁶¹ With this approach, which combined the attitude of the Plan Voisin for Paris with a new conceptual apparatus, it ultimately became conceivable to transfer the new city onto another, less congested terrain with a more favorable topography.

In the face of de-urbanism and garden cities, "which are a kind of narcotic from a social point of view," the new Moscow would be a manifesto "for planning, for concentration, and for urbanization." Le Corbusier in this way meant to affirm "man's freedom within the collective process of urbanism-architecture."

The Turn Toward a "Realistic" Urbanism

The "Reply to Moscow" that was to be published together with the translation of *Urbanisme* as the only book of Le Corbusier to appear in Russia before the war (fig. 38), came about exactly one year before the June 1931 meeting of the Central Committee of the Communist Party of the U.S.S.R., where the question of the "socialist rebuilding of Moscow" was to be decided. In the meantime the "Reply" was used as a foil in the press: the principal reproach, which was formulated in 1930 by Sergei Gorny and would later become the crux of the polemic against Le Corbusier,

did not deal with the real substance of the "Reply"—namely, the demolition of Moscow and the construction of a "new organism"—but rather with the ideological presuppositions of his ideas. The "talented replies" of "the greatest practitioner of the reconstruction of material culture"⁶² did not allow one to forget the critiques that they contained against the collectivism of certain of the Soviet proposals of the time. Characterizing the "Réponse" as a sort of cross between H. G. Wells, who imagined cities enclosed beneath domes, and the herald of "exact respiration," Gorny disparaged it as being so many "drawing-room theories of a utopian character"; and in remaining silent about the homage paid by Le Corbusier to the experiments of the communal houses, Gorny could infer that the Parisian architect had not sufficiently studied the "Soviet realizations." Responding to Gorny, Le Corbusier reaffirmed his "optimism" and clarified the meaning of his "Reply": "Had I been sufficiently clear in my reply to Moscow, you would have understood that sun, air, light, comradeship, and social strength are in fact the goal of my research."⁶³

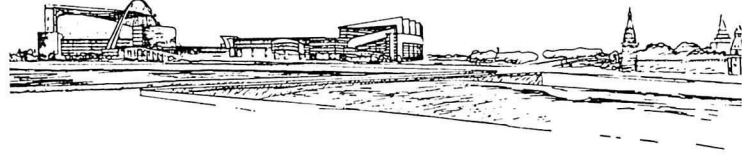
With the implementation of the first two Five Year Plans, priority was given to investments designated for the construction sites of the "industrial giants." The realization of the Green City was suspended, and the final competition for the Moscow development plan, held in 1932, was without results. The General Plan adopted in 1935 within the framework of the orientation of the Central Committee of June 1931⁶⁴ was the work of V. N. Semionov, pioneer of the Garden City movement before 1914, who derived his urban models from Haussmann's Paris, the Vienna of the Ring, and Burnham's Chicago. Semionov of course maintained a most unequivocal distance from the "Reply," although in a manner clearly less ideological than Gorny's: "we deem that what is not acceptable for Paris is no more acceptable for Moscow. . . . As far as we are concerned, it is a question of reconstructing Moscow, not of annihilating it. To be sure, such reconstruction demands radical measures, but a surgeon is not an executioner. . . ." ⁶⁵

All the same, Le Corbusier did not immediately abandon

40 *Palace of the Soviets, Moscow.*
Le Corbusier, 1931. Perspective
showing relationship to the Kremlin.

41 *Palace of the Soviets, Moscow.*
Le Corbusier, 1931. Axonometric of
the competition entry.

42 *Palace of the Soviets, Moscow*
Le Corbusier, 1931. Successive
stages of the design.



08 all hope of influencing “the Moscow authorities” and soon rejoiced in the defeat of the de-urbanists, which seemed to him a turn in his favor: “one fine day, the authority that stands at the gate of reason, where correct and chimerical dreams both come knocking, said in the U.S.S.R.: ‘Enough! No more! And stop kidding around!’ The mystique of de-urbanism found no one at home!”⁶⁶

The “wild, enormous, phenomenal clamor” over the assertion of a “sacred respect for individual liberty” which was at the source, according to Le Corbusier, of the reception given to the “Reply,” did not prevent him from consoling himself later by invoking the “Slavic soul”: “the Russian is an artist, which however does not hinder business relations when it is a matter of choosing a line of conduct, a concept of life. My work will not remain—so I believe—in a Soviet drawer until the next ice age.”⁶⁷

Nevertheless, things became definitively colder with the competition for the building that was supposed to crown the Five Year Plan: the Palace of the Soviets.

The Palace of the Soviets: an Organism for the Voice

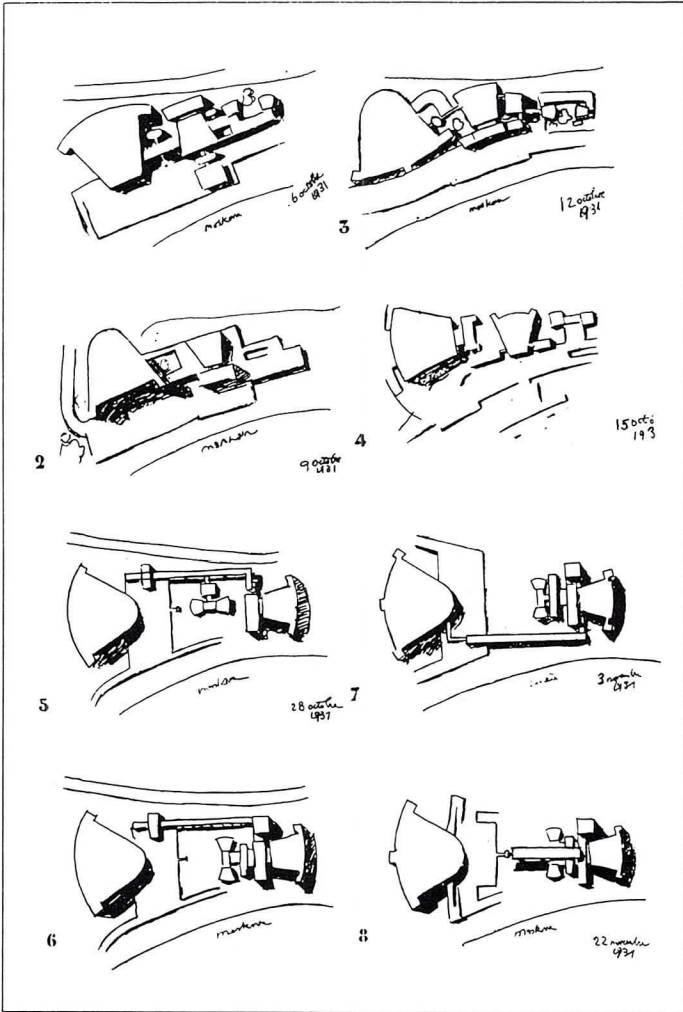
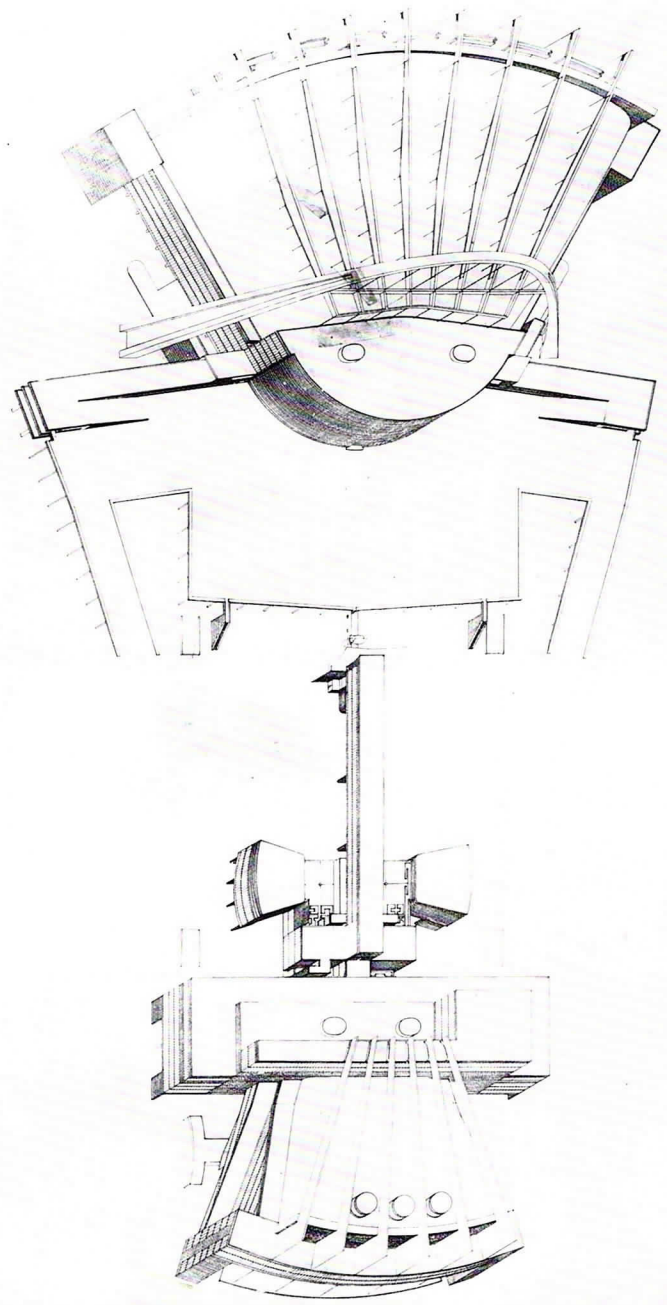
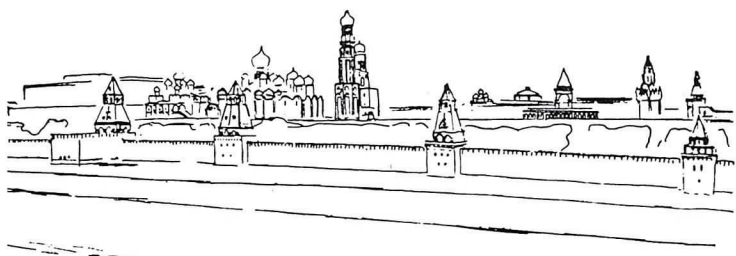
This time around Le Corbusier ceased to be the *deus ex machina* who resolved difficult challenges in favor of modern architecture, as had been the case with the Centrosoyuz. He was used on the one hand as a source of ideas, as a consultant, and on the other hand as a fetish of what socialist architecture must reject—in a competition whose increasingly historicist orientation was presented as a model and example to all Soviet architects.⁶⁸

Conceived as an “organism” or rather as a totality of “organisms large and small,” the Palace of the Soviets kept alive the ideas implemented with the League of Nations, the Mundaneum, and the Centrosoyuz; but this time the solid framework of office buildings, which had constituted a base for the freer forms of the meeting halls, has disappeared: the administrative component of the program is almost non-existent, and the project is defined by the meeting halls, both large and small. The eight successive solutions presented before the choice of the final *parti*—if we go by the diachronic plate adjoining the

40 chosen project—between October 6 and November 22, 1931 (fig. 42), show the gradual emergence of local systems of symmetry at first—the two small halls; then regional systems of symmetry—the 6,500-seat hall and the small halls, then finally the triumph of an arrangement endowed with an overall symmetry. The axis connecting the 15,000-seat hall with the 6,500-seat hall organizes the covered spaces and coincides with the virtual (acoustic) axis of the open-air gathering place called for by the program: 50,000 people must have access, by means of ramps, to a platform turned toward a rostrum whose sound effects are amplified by a play of parabolic reflectors, and where the listeners “can be addressed by a speaker standing in a spot particularly favorable to the projection of his voice.”⁶⁹ From the profile of the ceilings of the large hall and the 6,500-seat hall to the sound-volume of the meetings, acoustics—and the curves that they are supposed to justify—govern the space of the Palace (fig. 41).

But in arriving at a symmetrical solution, Le Corbusier also got rid of any preoccupations with urban space: in the first sketches, the gathering place connects the Palace with the Moscow river; in the final draft, the platform for the meetings, folded back on its symmetrical axis and raised with respect to the natural ground level, acquires the status of unified space: it becomes the largest room in the Palace but, for this very reason, the whole loses contact with the urban space of Moscow. It becomes a floating composition as splendid as the ensemble of churches that make up the Kremlin, whose attachment to the ground is masked by a high defensive wall of bricks. Yet it is a more rigid composition, whose severity is softened only from the longitudinal view which, by itself, would later lead Le Corbusier to draw the famous parallel between the Palace and the Piazza dei Miracoli in Pisa, an idea that came to him during his trip to Italy in 1934 (fig. 44).

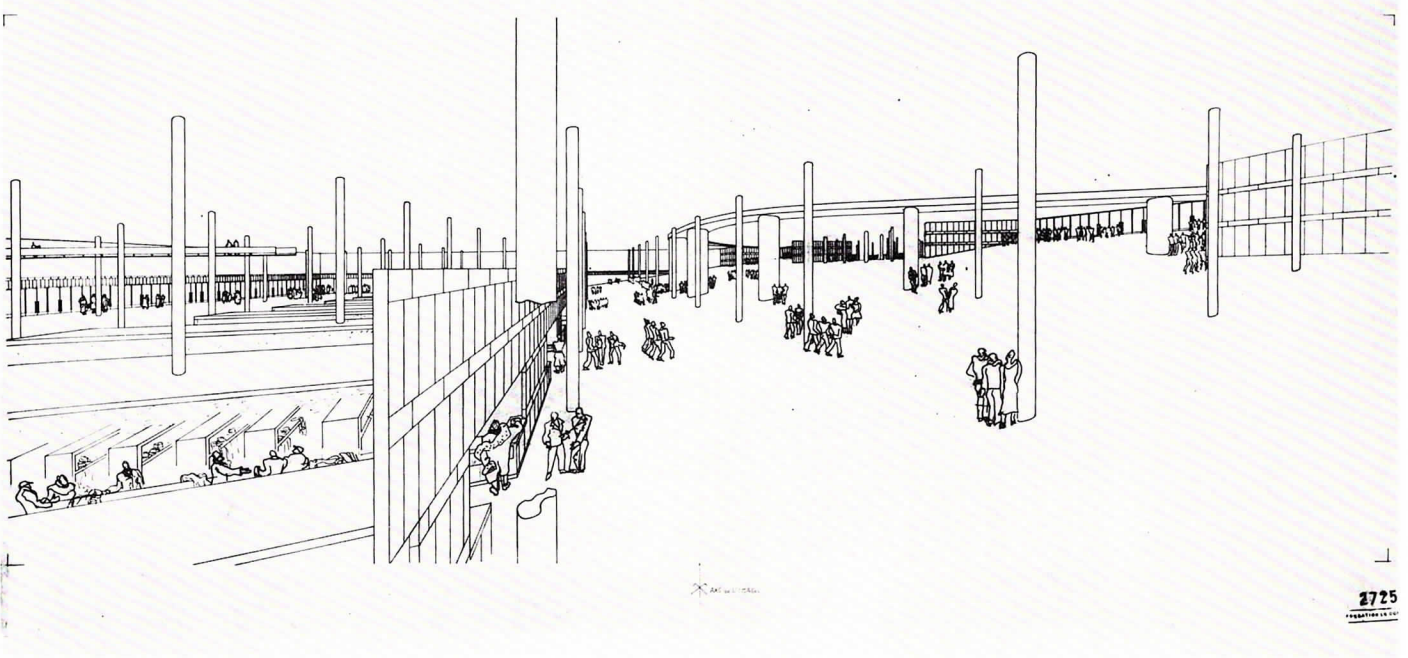
“A unity as material as it is spiritual” was achieved in this way, for Le Corbusier had resolved to “center the whole of the palace on the longitudinal axis of the Kremlin, parallel to the river.”⁷⁰ A pure, unblemished, whole organism, the Palace was in fact oriented according to the large side of the Kremlin’s surrounding wall—which has



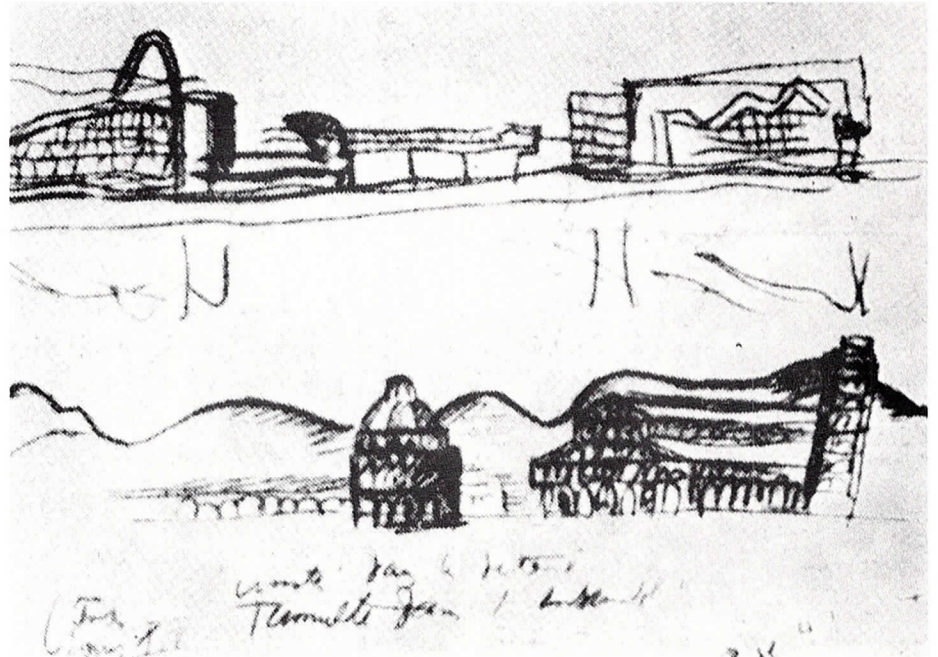
43 Palace of the Soviets, Moscow. Le Corbusier, 1931. Perspective of the main foyer.

44 Le Corbusier sketch done at Pisa, August 4, 1934. "Unity in detail, turmoil in the whole." "P. of S.: same unity."

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no axis—yet without Le Corbusier’s ever dealing with the problem of the urban surroundings (fig. 40); in the absence of a master plan for restructuring the capital, he refused to do so.

What Le Corbusier retained from Moscow was therefore once again less a problem of “integration” than a certain vision of the *crowd*, which was already fixed in his mind at the time of his reflection on the Centrosoyuz: the management of this crowd’s circulation, whether on foot or motorized, was the focus of his energies. The “processions”—a solemn aspect of circulation—and the accidents—a more exceptional and gloomy aspect—make the Palace into a sort of gigantic filing cabinet for the crowd. Under these conditions Le Corbusier’s biological metaphor seems wonderfully apt: “the circulation of the hall is based on a normal arterial operation with arteries, arterioles, capillaries.”⁷¹ The filing instrument, and the instrument of organization, is the *inclined plane*: the ramps spread out in broad, sloping surfaces to serve the halls or better yet the immense “forum” inserted beneath the large hall, a proletarian version of the foyer at the Paris Opéra (fig. 43).

Both the generalized inclined plane—a quasi-suppression of the rectilinear volumes and the static systems, like the arch holding up the roofing of the large hall—and the plastic rediscovery of acoustical principles engender an ensemble of curved forms whose opposition to the orthogonal compositions creates all of the project’s emotional power. Only the “sickles”—a timely choice of image—supporting the roof of the 6,500-seat hall call back to mind in some way the geometrism of the plan.

A Failed Revenge on the League of Nations

Le Corbusier took pleasure in revising, when the opportunity arose, the history of his affair with the Palace of the Soviets, emphasizing the personalized nature of his confrontation with “Moscow”; he casually ignored the three successive competitions, implying that the whole thing had been only a single combat: “they were so satisfied with my designs that the government of the U.S.S.R. in 1929–1930 entrusted me with drawing up a

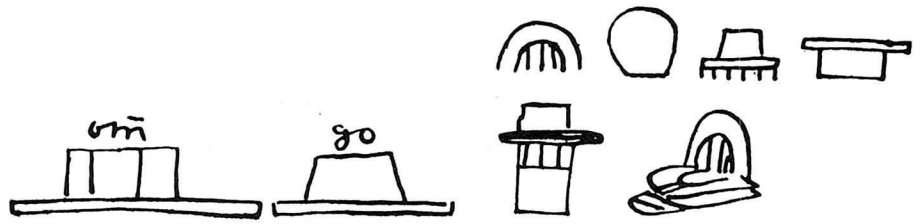
project for the Palace of the Soviets, which was destined to be the crowning glory of the Five Year Plan. . . . My project met with unanimous favor in all the working circles in Moscow. It was even declared fit to be executed (it was a terrific work). I was even informed that the decisions had already been made. . . .”⁷²

In point of fact, Le Corbusier and Pierre Jeanneret were not invited to participate in the first conference aimed at preparing the main competition until September of 1931, together with eight other foreign architects and three Soviet ones (the contract was signed October 7, 1931, for a total amount of 3,000 dollars). It all took place in the few months between the autumn of 1931 and April of 1932, a period which came to mark the real turning point in the epic of the Palace of the Soviets toward academic expressionism.

Mailed in December of 1931, the twenty plates of Le Corbusier and Jeanneret’s project, which were later complemented in February by a 100-meter film on the maquette of the Palace, were quickly taken into consideration: *Pravda* pronounced judgment on it as early as January 20, 1932: “The project provides a bold solution of halls; but what is unacceptable in Le Corbusier’s project is that he conceives of the Palace of the Soviets in terms of the most stripped down ‘industrialism’, as though it were an airplane hangar for congresses.” TASS’s statement of February 29, which announced the prolongation of the competition, set the tone for the new line: it was a question of “adapting the best methods of classical architecture to the achievements of modern architectural technology.”

Le Corbusier let his old acquaintance Lunacharsky know of his disappointment:

“The Palace of the Soviets, through the majesty of its proportions, will express those goals that have been pursued since 1918. People will see what all the talk is about. The whole world will see. And more than this, under the auspices of architecture, mankind will find a *language* incontaminable, beyond all intrigue, trickery, and camouflage: the Palace, center of Soviet institutions.



112 “You made it known across the world that this palace would be the expression of the anonymous masses living in the present age.

“And then the decision: that the Palace of the Soviets, just like that of the League of Nations, will be built in the style of the Italian Renaissance!!!

“. . . The U.S.S.R., a union of Soviet proletarian republics, will erect its palace, which will be superior and beyond the people. Let us not delude ourselves with rhetoric: I know perfectly well that the people—and the muzhik too—greatly admire the palaces of kings and that they eagerly ornament their wooden beds with pediments as on a church. But what should the thinking leaders of the Soviet republic do: move forward, or patronize and cultivate tastes that only attest to human frailty? We were expecting of the U.S.S.R. an example of authority, edification, and leadership, since such an example expresses the noblest and purest judgment. And if this is not to be? Then there is no more U.S.S.R., no doctrine, no mystique, or anything else!!!

“. . . It is frightening, anguishing, tragic, and pathetic to think that Moscow’s present decision could begin to bring about disunity of opinion, disenchantment, and cynicism. And that the Five Year Plan should be crowned with one thing: man’s smallness.”⁷³

Persuaded that the Palace would be built by the academician Zholtovsky, Le Corbusier rather obsequiously declared himself ready to meet with this man, who “is a true, serious architect, with much talent”; and he went further: “With him I shall talk about architecture far more satisfactorily than with most of my Western colleagues who call themselves ‘modern architects’.”

But was it not precisely Lunacharsky, Le Corbusier’s last resort, who said of the Palace of the Soviets, “given the novelty of the construction, we should prefer to base our work on a classical architecture rather than a bourgeois architecture: better yet, we should base it on the successes of Greek architecture since Marx’s attitude toward Rome was different from his attitude toward Greece. . . .”⁷⁴

Meanwhile Le Corbusier announced to Lunacharsky that the CIAM had sent a message of protest to Stalin; the message, sent April 19, 1932, repeated the following assertion by Le Corbusier in its text: “The Palace of the Soviets will become incarnate in the form that the committee of old regimes claims to give it, and will manifest a total disdain for the gigantic cultural endeavor of the modern age. A dramatic betrayal.”⁷⁵

Several weeks later a second message signed by Cornelius Van Eesteren and Sigfried Giedion, which was every bit as confidential as the first, requested Stalin and the People’s Commissars to “make the necessary moves to avert this catastrophe.”⁷⁶

The episode of the decision of the competition for the Palace of the Soviets would in fact consecrate the break between the CIAM and the U.S.S.R. The Fourth Congress, which at the close of the third CIAM in Brussels the Soviets had claimed to want to hold in Moscow, was henceforth compromised before being ungraciously postponed by the Soviets until 1934, and then finally held aboard the *Patris II*, between Marseilles and Athens.⁷⁷

In the meantime, the loyal Kolli clarified somewhat the terms of the competition decision, and not without a certain bitterness: “There are still eyes that do not see. . . . They did not want to understand your project: they were vainly seeking a new monumentality worthy of the age, and no one noticed that such was at the very foundation of your project. . . . We fought hard, Viktor Vesnin and I, to explain and demonstrate the essential aspects of your work to this commission. How we bickered!”⁷⁸

Kolli also pointed out that “the Vesnin brothers, Ginzburg, Burov, and myself have felt a great admiration for your work,” but the wind had already shifted, and only a few rebellious students still dared consult Le Corbusier, among them Viktor Nekrasov and his comrades from Kiev.⁷⁹

In an irony of fate, it was a man who was but an architect in the making, Sergei Eisenstein, who would pay Le Cor-

45 S. M. Eisenstein's 1933
transformation of the traditional
Kabardino-Balkarian hat into an
architecture inspired by Le
Corbusier's Palace of the Soviets.

busier's Palace of the Soviets its most authentic homage: during his 1928 sojourn in Moscow, Le Corbusier had met the filmmaker together with A. Burov, architect of the decorations of *The General Line*, "constructions of reinforced concrete attesting to the new spirit," about which he had said at the time: "the muzhik will certainly be left flabbergasted by this. . . ." ⁸⁰ Le Corbusier had emphasized the convergence of his work with that of Eisenstein, dedicating *L'Art décoratif d'aujourd'hui* to the filmmaker: "It seems evident to me that I think like Mr. Eisenstein when he is making a film: spirit of truth, whitewash, two chapters of this book which also express the same conviction." ⁸¹

Invited along with the Vesnins and Ginzburg in autumn of 1933 to judge the architectural projects for the center of Nalchik, capital of the Soviet Republic of Kabardino-Balkaria, Eisenstein used the forms of Le Corbusier's Palace of the Soviets to ridicule the new official line on the national forms of Soviet architecture: the curved forms and flat roofs of the Palace of the Soviets gave him the idea to take off from the only authentic national form of Kabardino-Balkar culture, the hat of the traditional costume, and to present a series of variations on this hat, its lining, and its rim, as though it were an architecture at once national and "consonant with the ideas of the new architecture, according to which Le Corbusier has formed us all" (fig. 45). ⁸²

Of the Palace of the Soviets Le Corbusier would in the end preserve nothing more than a simulacrum: the maquette (only film footage of it had been sent to Moscow). The epilogue of this story stretched from October 1938 through August 1939, when Le Corbusier attempted, through Fernand Léger, to sell the maquette to the Museum of Modern Art in New York, seeking to have the purchase financed by the Rockefeller family. . . . "The few museums that possess maquettes from the Renaissance are very proud of them. Why not assume that one day the maquette of the Palace of the Soviets will itself represent something like a Renaissance?" ⁸³

After the latest failure of the Palace of the Soviets, Le

Corbusier's tone became more embittered, although it remained as romanesque as always: "Danger walks alongside heroes, and those who risk everything for an adventure (your Moscow plans) walk a path that skirts the abyss." ⁸⁴ But did he not all the same propose to Lunacharsky that he come once more to Moscow to speak about the Ville Radieuse? In any case, the copies of the book sent to Moscow to be sold in bookstores there were later returned accompanied by a note saying "of no interest here". . . . ⁸⁵

Le Corbusier was thus left standing outside the gate of the "Factory of Planning," rejected from "the Promised Land of the technicians" which he had wanted so much to embrace. The attitude of Soviet architects in his regard had obviously changed. Miliutin, who in 1930 had dedicated his book *Sotsgorod* "to the Creator of the new architecture," still included Le Corbusier's architecture in the book as a point of reference in defining the architectural prototypes of the socialist city. But he took care to condemn the Plan Voisin, which he called an example of the "nightmares of urbanism," and the reaction to the publication in Russian of *Planirovka goroda* in 1933 was quite critical, unlike the warm reception given the original *Urbanisme* in 1925, as though the book had been published only for the catastrophic vision of the capitalist city that it presented. . . . Thus was Le Corbusier considered from this moment on to be the preeminent critic of the Western city. ⁸⁶

But they attempted to recuperate him in another manner, this one even more amusing: the young Academy of Architecture of the U.S.S.R. asked Le Corbusier in 1936 to become a member-correspondent, and he accepted with some reservations, proposing in particular that they change the name of their institution, since he could never, he wrote, confuse "for a moment your institution with what we call an 'academy' in our common speech." ⁸⁷ Invited to the Congress of Architects of 1937, he did not attend—the business of the fee for the Centrosoyuz had not been settled—contrary to Francis Jourdain, Marcel Lods, and Frank Lloyd Wright who went to Moscow. ⁸⁸

Behind the operating problems, Le Corbusier's relationship with the Soviet architectural scene was played out on three levels:

—*A fascination with the Plan and with a strong government.* In the early stages, at the time of the U.S.S.R.'s opening up to the "progressive intelligentsia of the West" and to foreign technicians—this coincided with the privileged treatment reserved for him by officials. He later retained illusions about this treatment, as well as a certain nostalgia: "The U.S.S.R. had created a wonderful term: 'the general line' . . . 'This keeps to the general line!' . . . 'This does not keep to the general line!' . . . Men could not live up to the ideal; in certain cases they sank very low. . . . Disaster, treason, a slap in the face of the sympathetic elite of the world. To console ourselves, we tell ourselves; 'Just a bit of growing pains. It will pass!' But in the meantime, they are strong, these little pains!"⁸⁹ But this myth of the organic fusion of the skill and the drive of the technician with the power of a strong state, which sent Le Corbusier running from Moscow to Vichy by way of Rome, would soon melt like snow in warm sunshine.

—*Another, more lasting fascination with the Soviet avant-gardes.* Le Corbusier, reticent in 1925 in the face of Constructivism and identified at that time with the Dutch adherents of De Stijl, changed his mind during his first sojourn in Moscow, as attested by his 1928 article for the *Neue Zürcher Zeitung*: "the Germanic soul found only a momentary point of support in the springboard of Russian Constructivism." Exonerated of the accusation of having been the matrix of the hated *Neue Sachlichkeit*, Soviet Constructivism recovered its appeal: "In Moscow I found not spiritual antagonisms but enthusiastic adherents for what I consider fundamental in the human task. . . . In Moscow I found an extreme enthusiasm for things architectural."⁹⁰ This about-face threw him into the arms of Aleksander Vesnin, "the father of Constructivism," "a great-hearted man with a great artistic passion," to whom he dedicated his *Défense de l'architecture*, drawn up in response to the attack by Karel Teige intended to sully the *Sachlichkeit*.⁹¹ It should be pointed out that Le Corbusier would later have the opportunity

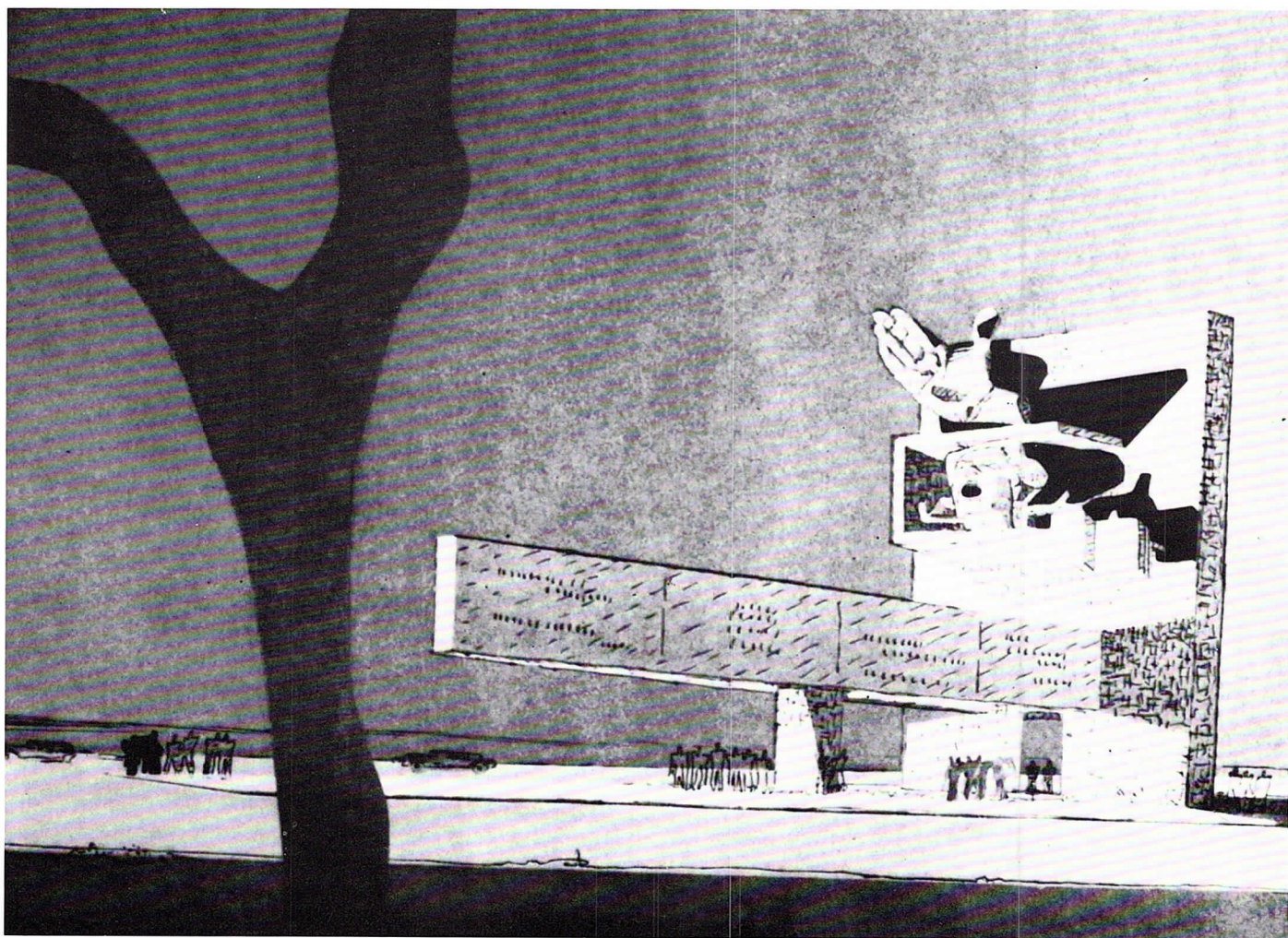
to thank Vesnin for having preserved "friendly feelings" for him, in spite of the "attacks and accusations of the mean people attempting to blacken [his] name in Soviet Russia."⁹²

—*A fascination with collective housing and the communal ideal in Soviet architecture.* This surfaced as early as his 1928 journey, and we have seen the importance of the question of communal housing in his "Reply," as well as his reservations in this regard. Conversely, both the Constructivist program on the question of communal housing and Ginzburg and Milinis's Narkomfin building were criticized in Moscow precisely because they manifested a "critical attitude vis-à-vis the experiments of Western architects" and vis-à-vis Le Corbusier above all. "The principles guiding Le Corbusier's search for new forms and new types of housing, which correspond to the 'social operation' of capitalism . . . cannot serve as a program for the construction of a new type of housing."⁹³ It was, on the other hand, with the purpose of reaching the French public that Mikhail Ilyn, in presenting a year later the same Narkomfin building in *L'Architecture d'Aujourd'hui*, saw in it nothing less than a manifestation of "Corbusianism in the U.S.S.R.": "in searching for a 'style' that might correspond to the wholly new form of life in the U.S.S.R., our architects have in their first realizations drawn inspiration from the work of Le Corbusier, the most radical artist of the new forms, and in so doing they have set our architecture on the road to the discovery of forms, volumes, and compositions within the framework of creative rationalism."⁹⁴

For their part, French travelers could not help but see, as early as the late 1920s, "imposing cement edifices . . . in this style of Le Corbusier that is becoming international."⁹⁵ Thus, at the very moment in which he was inserting an anti-collectivist refrain in his "Reply to Moscow," Le Corbusier saw himself branded as the inspirer of the Soviet communal experiments.

*Le Corbusier and the French Left:
the Reflection of the Friction with Moscow*

Having been deemed instrumental in the Soviet debate, Le Corbusier used his relations with the U.S.S.R. as a



*46 Project for a monument
dedicated to Paul Vaillant-
Couturier, in the southern Parisian
suburb of Villejuif. Le Corbusier,
1939.*

116 weapon in the French debate, and most notably in his polemics with the Left and the French Communist Party. Condemned by Jacques Mesnil—one of the first sympathizers to make the trip to Moscow in 1921—in *l'Humanité* as early as the Salon d'Automne of 1922,⁹⁶ Le Corbusier was again pilloried in their pages in 1932: “fundamentally idealistic,” his *Ville Radieuse* is based on “an essentially petit-bourgeois and counterrevolutionary concept, since it consecrates the capitalist system of production.”⁹⁷ L. M. Kaganovich’s report was presented as an alternative to the position of Le Corbusier, who “claims to be unaware of social relations, of relations among men and class conflict.”

Condemned in Paris for the contents of his “Reply to Moscow,” Le Corbusier would have to wait for the emergence of the Front Populaire before the hostilities would subside: Paul Vaillant-Couturier intended to bring an end to the “serious misunderstanding” which pitted Le Corbusier against the communists and declared that he regretted *l'Humanité*’s attacks. As a result Le Corbusier came forward with new offers for his service, offers which were connected to his project for the Exposition of 1937: “For the Front Populaire, there exists but one way to demonstrate that something new has begun to happen in the realm of social justice: this would be to build immediately, in Paris, housing elements which would reflect at once the latest advances in modern technology and your will to place such technology at the service of the people.”⁹⁸

On a more theoretical plane, Le Corbusier participated in the activities of the “Maison de la Culture,” the heir of the Association des Artistes et Ecrivains Révolutionnaires, directed by Louis Aragon, which echoed the Soviet debate over “realism.” Le Corbusier opposed the arguments of Jean Lurçat, who defended realism “in the face of painting and within painting,” and continuing the polemic begun in Moscow through the medium of architecture, he refuted the latter’s conclusion that “the new age demands mimetic arts to satisfy the masses. . . . I suffocate and all within me rebels when I see such obsequiousness toward a working mass that should on the contrary

be raised up.”⁹⁹ Le Corbusier maintained that “French art, said to be abstract, is concrete. It is fundamentally concrete. The realism is within.” He declared himself in favor of a collaboration between painting, sculpture, and architecture, on the condition that the whole “platter” be called “the architecture of the modern age.”¹⁰⁰

Upon the death of Vaillant-Couturier, Le Corbusier participated in a competition launched by the Maison de la Culture for the construction of a monument to the mayor of Villejuif. His astonishing project, based on the double perception of pedestrians and motorists (fig. 46), received little more than passing comments of praise in the competition; it seems that within the jury, of which M. Cachin, Francis Jourdain, and Jean Renoir were part, the pressures of Léon Moussinac—who had violently attacked Le Corbusier in 1934 by way of Charlotte Perriand in Moscow, at the time of André Lurçat’s lecture—were a determining factor in the rejection of such a striking idea: a stone wall, intersected by a fender of reinforced concrete bearing three “symbolic motifs”: “the orator’s hand, the orator’s head, and the book.” Its effect would have been violent: “The monument, facing the route d’Italie, confronts. It presents itself from afar to travelers; it is also like the first boundary-mark of Paris. After it one enters Paris. Thus from this point it can convey a message. . . .”¹⁰¹

This message, which was interrupted by the war, was at the time of the Liberation still obscured by minor attacks, such as the article in the Communist-sympathizing weekly *Action* that provoked the irritation of Le Corbusier in September 1945, when he was associated with the creation of the Union Nationale des Intellectuels (U.N.I.). Le Corbusier at the time appealed to the future inhabitants of the Marseilles Unité apartments: “One must know how to inhabit them! I am addressing myself to the CGT [Confédération Générale du Travail] for this reason, saying, ‘It is for you, but you must teach your people the necessary discipline.’” At last Le Corbusier could expect to collect the dividends of his Soviet adventure: “In Moscow I built the Centrosoyuz. Unspeakable accusations were leveled at me: capitalist architecture by a fascist individ-

ual. In 1928 I had . . . considered my fee for this work to be the simple repayment of my expenses . . . but I was adamant about the Palace of the Soviets, which is an architectural work the likes of which I defy anyone to equal. I have neither made compromises nor shaped reinforced concrete in the Greco-Roman style.”¹⁰²

It was not until after 1954 that Le Corbusier, by that point forgotten in Moscow, gradually recovered his place in Soviet architectural culture: that is, at the time when functionalism in the U.S.S.R. enjoyed a victory as complete as it was late in arriving. It was an article by Nikolai Kolli, who was undoubtedly aware of all these sudden changes of fortune, that restored Le Corbusier to his deserved place in history.¹⁰³ From this point on, the way was paved for the canonization and the academic recuperation of the forms of the “master”—which is how he came to be known again, and not surprisingly, since his work had always influenced, in point of fact, a great deal of Soviet architecture. As for the frictions and the insults of the 1930s, they quite simply fell silent, or better yet, were lost in a rather convenient haze, and still are today.¹⁰⁴

A “guest star” in the U.S.S.R. at the time of the Stalinist turning-point and the death of the avant-gardes, a fundamental point of reference in the practices of the Constructivist architects, Le Corbusier has been all the more easily reintegrated today in the Pantheon of Soviet architecture, as he has amply had his revenge on that realm: indeed, if there is any country where the rules set down in *The Radiant City* and codified in the *Athens Charter* have the weight of law, it is certainly the U.S.S.R.

And yet, if there is a striking characteristic of the two large projects constituting Le Corbusier’s most authentic formal “reply” to the U.S.S.R., is it not their *autonomy* with respect to the urban context?—the autonomy of the internal structure of the Centrosoyuz, whose design evokes, in its curves and right angles, the eyes, cheeks, and mouth of a human face as seen by a Purist, and the radical autonomy of the “organism” of the Palace of the Soviets, whose design can perhaps, for its own part, also be seen as a humanoid form (see fig. 41). Is this rather

curious anthropomorphism an unconscious chapter of the “Reply to Moscow” affirming the value of the human, as Le Corbusier always liked to remember it? Is it not above all a fundamental stage in the transformation of his formal universe, a kind of foreshadowing of the forthcoming Plan Obus for Algeria, and above all, a question posed to architecture itself, whose answer would only be found—if at all—in the postwar projects and buildings?

Source Note: This article was originally published in French, in a shortened version, in Architecture, Mouvement, Continuité, 49, Sept. 1979.—Ed.

1. Le Corbusier, "Bolche ou la notion du grand," in *Prélude*, March 1932, and *La Ville Radieuse* (Paris: Editions de l'Architecture d'Aujourd'hui, 1935), p. 182.
2. Le Corbusier, letter to A. V. Lunacharsky, March 13, 1932. Fondation Le Corbusier (hereafter F.L.C.).
3. Le Corbusier, letter to Jean Nicolas, September 27, 1945. Jean-Louis Cohen archives. Jean Nicolas, secretary of the Maison de la Culture from 1936 to 1939, was after the war one of those responsible for the political direction taken by the French Communist Party in the area of architecture.
4. Le Corbusier, letter to Alexis Léger, May 9, 1935. F.L.C. Alexis Saint-Léger Léger, called Alexis Léger (1887–1975), Secretary General of the French Ministry of Foreign Affairs from 1933 to 1940, wrote his poetic oeuvre under the pseudonym of Saint-John Perse.
5. *L'Esprit Nouveau*, no. 14, Jan. 1922, p. 1683.
6. *L'Esprit Nouveau*, no. 22, April 1924, unpagged.
7. Anatole de Monzie, radical-socialist Minister of Public Instruction in 1925 and an ardent supporter of friendship between France and the U.S.S.R.—which he describes sympathetically in his travel journal *Du Kremlin au Luxembourg* (Paris: A. Delpeuch, 1924)—protected Le Corbusier from the obstacles posed to the Pavillon de L'Esprit Nouveau at the 1925 Exposition, to the point of presiding at its inauguration. Also see *L'Esprit Nouveau*, R. Chenevier, "Où mène la politique anti-sovietique," no. 9, June 1927, pp. 1046–57.
8. Le Corbusier, A. Ozenfant, "Sovremenniaia arkhitektura," in *Veshch*, no. 1–2, 1922, pp. 20–1, and Le Corbusier, "Po povodu purizma," in *Veshch*, no. 3, 1922, pp. 9–11.
9. Le Corbusier, "Ochi nevidyashie," in *Khudozhestvenny Trud*, no. 2, 1923, pp. 26–7.
10. A. V. Lunacharsky, "Iskusstvo i ego noveishie formy," in *Iskusstvo i Revolyutsia* (Moscow: Novaya Moskva, 1924), pp. 222–9.
11. Kornel Zelinsky, "Ideologia i zadachi sovetskoy arkhitektury," in *LEF*, no. 3, 1925.
12. In a letter dated June 23, 1924, the secretary of ASNOVA, V.A. Lavrov, sent Le Corbusier six photographs of the work of students of the Vhutemas. Cf. ASNOVA, letter to Le Corbusier, June 23, 1924. For his own part, El Lissitzky wrote to Le Corbusier from Locarno on March 23, 1924, to inform him of ASNOVA's activity, to request of him material for publication in Moscow, and to inform him of the possible holding of a congress of modern architecture in Moscow. He also consulted Le Corbusier regarding the desirable circumstances for the architectural competitions to be held in the U.S.S.R. Cf. El Lissitzky, letter to Le Corbusier (in German) Mar. 23, 1924, F.L.C. Le Corbusier in return asked El Lissitzky for a very informative article in "telegraphic style" on the situation in Russia. Cf. Le Corbusier, letter to Monsieur Lissitzky, May 6, 1924 (in German), in El Lissitzky, *Proun und Wolkenbügel, Schriften, Briefe, Dokumente* (Dresden: VEB Verlag der Kunst, 1977), pp. 180–1.
13. Cf. *Izvestia ASNOVA*, no. 1 (the only issue published), 1926.

14. Le Corbusier, *L'Art décoratif d'aujourd'hui* (Paris: Crès & Cie, 1925), p. 115.
15. B. Korshunov, "Novejshie vzglyady na gorodskoe stroitelstvo," *Stroitel'naya Promyshlennost*, no. 12, 1925, p. 874.
16. M. Ginzburg, "Itogi i perspektivy sovremennoy Arkhitektury," in S.A., no. 4–5, 1927.
17. M. Ginzburg, "Konstruktivizm v arkhitekture," in S.A., no. 5, 1928.
18. K. Zelinsky, *LEF*, no. 3, 1925.
19. El Lissitzky, "Idoli i idolopoklonniki," in *Stroitel'naya Promyshlennost*, no. 11–12, 1928, pp. 854–8.
20. Karel Teige's text, and Le Corbusier's response, which have lent themselves to numerous exegeses, are well known; this is not the case however with Teige's response to Le Corbusier, which concludes the polemic: Karel Teige, "Mundaneum," in *Stavba*, no. 10, 1929, pp. 145–55. Le Corbusier, "Obrana arkhitektury, Odpoved' K. Teigomu," in *Musaion*, 1931, pp. 27–51; French text in *L'Architecture d'aujourd'hui*, no. 10, 1933, pp. 34–61. Karel Teige, "Odpoved' Le Corbusierovi," in *Musaion*, no. 2, 1931, pp. 52–3. Cf. for more detailed commentaries on this fundamental debate: George Baird, "Architecture and Politics: A Polemical Dispute. A critical introduction to Karel Teige's 'Mundaneum', 1929, and Le Corbusier's 'In Defence of Architecture', 1933," in *Oppositions*, no. 4, Oct. 1974, pp. 80–2. Otakar Májel and Stanislaus von Moos, "Nachbemerkung 1980," in *Archithèse*, no. 6, 1980, pp. 31–2. Jean-Louis Cohen, Introduction to *Karel Teige, Textes sur l'Architecture et l'Art* (Paris: Francois Maspéro, currently in publication).
- On Le Corbusier's Mundaneum project, see: Giuliano Gresleri and Dario Matteoni, "La Cité Mondiale e la costruzione della nuova Babilonia" in *Le Corbusier, La ricerca paziente* (Lugano: Federazione Architetti Svizzeri Gruppo Ticino, 1980), pp. 69–86.
21. Roger Ginsburger, "Neue Genfer illusionen, Das Mundaneum, ein neues Projekt von Le Corbusier und P. Jeanneret," in *Das Neue Frankfurt*, no. 2, 1929, pp. 36–7.
22. El Lissitzky, *Stroitel'naya Promyshlennost*, no. 11–12.
23. E. Tamarinov, "Dom Centrosoyuz v. Moskve," in *Stroitel'naya Promyshlennost*, no. 9, 1928, pp. 646–51.
24. P. Nakhman, A. Ol, A. Samoylov, A. Nikolsky, Galperin, "V Pravlenie Centrosoyuz," Moscow, Oct. 27, 1928, F.L.C.
25. N. Dokuchaev, "Corbusier-Saugnier," in *Iskusstvo*, no. 3–4, 1929, p. 140.
26. Le Corbusier, *Sur les quatre routes* (Paris: N.R.F./Gallimard, 1941; written in 1939); republished (Paris: Denoël, 1970), p. 170.
27. "Programme pour la construction de la maison du Centrosoyuz à Moscou," in French, May 21, 1928. F.L.C.
28. Peter Behrens, in *Die Baugilde*, no. 22, 1929, p. 680.
29. Le Corbusier, "note à Monsieur Lubimoff," Moscow, Oct. 20, 1928, p. 1. F.L.C.
30. Le Corbusier, *Précisions sur un état présent de l'architecture et de l'urbanisme* (Paris: Crès et Cie, 1930), pp. 46 and 48.
31. *Ibid.*, pp. 59–60.
32. Le Corbusier and Pierre Jeanneret, *Oeuvre Complète 1929–1934*, W. Boesiger, ed., vol. 2 (Zurich: Girsberger, 1935), p. 35.
33. American Blower Corporation, letter to Le Corbusier, Jan. 3, 1930. F.L.C.
34. On this rather exceptional exhibition in the Moscow of the 1930's, see the work tracing the activities of Boris Ternovets, director of the Museum: B. N. Ternovets, *Pisma, Dnevnik, Stati* (Moscow: Sovetsky Khudozhnik, 1977), pp. 143–4.
35. Le Corbusier, letter to Sigfried Giedion, Apr. 16, 1932. F.L.C. Isidor Lyubimov (1882–1939), teacher and professional revolutionary after 1902, was a member and then president of the Moscow Soviet during the 1920s. He became a member of the Central Committee of the Communist Party (6) during the 1930s. A "small house" had been planned for him on the roof of the Centrosoyuz. Cf. Christian Borngräber, "Le Corbusier a Mosca," in *Rassegna*, no. 4, July 1980, p. 80.
36. Le Corbusier, letter to Monsieur Kolli, Apr. 13, 1934. F.L.C.
37. In response to the invitation to participate, Le Corbusier addressed himself directly to the Congress for the purpose of bringing up the question of his fee. Le Corbusier, letter to the Committee of the Architectural Congress of Moscow, May 22, 1937. F.L.C.
38. N. Kolli, "Dom Narkomlegproma," in *Arkhitektura SSSR*, 1936, no. 10, p. 39.
39. "Bauen, Bauarbeiter und Techniker in der Sowjetunion, nach einem Vortrag von Hannes Meyer," in *Das Neue Russland*, no. 8–9, 1931, pp. 47–8.
40. Bruno Taut, "Russlands architektonische Situation," in *Moderne Bauformen*, no. 2, 1930, p. 59. On the relations between German architects and the U.S.S.R., cf. Christian Borngräber, "Ausländische Architekten in der UdSSR: Bruno Taut, die Brigaden Ernst May, Hannes Meyer und Hans Schmidt," in *Wem gehört die Welt-Kunst und Gesellschaft in der Weimar Republik*, exhibition catalogue (Berlin: NGBK, 1977), pp. 109, 137. In English in *Architectural Association Quarterly*, no. 1, 1979, pp. 50–62. Barbara Kreis, "Bruno Tauts Verhältnis zum Bauen in der Sowjetunion und seine Tätigkeit in Moscow," in *Bruno Taut 1880–1938*, exhibition catalogue (Berlin: Akademie der Künste, 1980), pp. 104–19.
41. A. Vesnin, "Legkost, stroynost, yasnost; Dom Narkomlegproma v. Moskve," in *Arkhitektura SSSR*, no. 12, 1934, p. 9, and V. D. Kokorin, "Chuzhoy dom," in *Arkhitektura Gazeta*, Jan. 24, 1935.
42. D. Arkin, "Ot Ledoux do Corbusier," in *Arkhitektura za rubezhom*, no. 1, 1934, p. 41. In his time Arkin had hailed Le Corbusier's arrival in Moscow: D. Arkin, "K priedzu Le Corbusier," in *Pravda*, Oct. 13, 1928.
43. D. Arkin, "Dom na ulitse Kirova," in *Arkhitektura SSSR*, no. 10, 1936, pp. 34–5. Cf. also D. Arkin, "Dom Corbusier," in *Arkhitekturnaya Gazeta*, Jan. 8, 1935.
44. Le Corbusier, letter to Walter Gropius, Feb. 25, 1930. F.L.C.
45. M. Koltsov, in *Revolyutsia i Kultura*, no. 2, 1930, p. 42; in French, Michel Kolzov, "La Ville Verte," in *VOKS*, no. 8–10, 1930, p. 45. Koltsov launched the idea of the "Green City" in *Pravda*, no. 24, Jan. 30, 1929.
46. Koltsov, *Revolyutsia i Kultura*, p. 47.
47. Cf. the editorial in *Stroitelstvo Moskvyy*, no. 3, 1930, and the

postscript by V. N. Simbirtsev.

48. Le Corbusier, "Commentaires relatifs à Moscou et à la Ville Verte," Moscow, Mar. 12, 1930, typed ms., p. 4. F.L.C. Also in: Pier Giorgio Gerosa, *Le Corbusier—urbanisme et mobilité* (Basel/Stuttgart: Birkhäuser Verlag, 1978), pp. 138–65. A summary in French of the program of the "Green City" was drawn up for Le Corbusier's appraisal: "La Ville Verte (résumé des matériaux)," Moscow, 1930, 11 pp., typed. F.L.C.
49. Le Corbusier, letter to Ginzburg, in *Précisions . . .*, p. 268.
50. M. Barshch, M. Ginzburg, "Zeliony Gorod, Socialisticheskaya Rekonstruktsia Moskv," in *S. A.*, no. 1–2, 1930. In French (abridged) in A. Kopp, *Architecture et mode de vie, textes des années 20 en URSS* (Grenoble: PUG, 1979), pp. 250–7. Cf. M. De Michelis, E. Pasini, *La Città sovietica 1925–1937* (Venice: Marsilio, 1976), pp. 173–81.
51. Le Corbusier, "Commentaires relatifs . . .," p. 2. F.L.C.
52. *Ibid.*, p. 7.
53. Le Corbusier, letter to Ginzburg, in *Précisions . . .*
54. M. Ginzburg, in *S. A.*, no. 1–2, 1930, pp. 61–2.
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56. The Russian text of the "Reply" is published in full in an appendix of the Soviet edition of *Urbanisme: Planirovka goroda*, preface by S. M. Gorny (Moscow: OGIZ/IZOGIZ, 1933), pp. 175–208. Cf. Thilo Hilpert, *Die Funktionelle Stadt, Le Corbusiers Stadtvision—Bedingungen, Motive, Hintergründe* (Braunschweig: Vieweg, 1978), pp. 154ff.
57. Le Corbusier, *Planirovka goroda*, p. 182.
58. *Ibid.*, p. 185.
59. *Ibid.*, p. 191.
60. Le Corbusier, "L'architecture à Moscou," typed ms., p. 2. F.L.C. The text was published under the title "Die Baukunst in Moskau," in *Neue Zürcher Zeitung*, Sept. 4, 1929, and Oct. 4, 1929.
61. Le Corbusier, *Planirovka goroda*, p. 204.
62. S. M. Gorny, "Corbusier o rekonstruktsi Moskv," in *Stroitelstvo Moskv*, no. 12, 1930, pp. 16–20. In French (revised), in S. Gorny, "Les villes socialistes," in *VOKS*, no. 5–6, 1932, pp. 147–54.
63. Le Corbusier, letter to S. M. Gorny, in *Planirovka goroda*, pp. XI–XII.
64. Cf. L. M. Kaganovich, *L'Urbanisme soviétique, la réorganisation socialiste de Moscou et des autres villes d'URSS* (Paris: Bureau d'Éditions, 1932).
65. Prof. Semionov, "Exposé au groupe de l'Architecture d'Aujourd'hui," Sept., 1932, in *Architecture d'Aujourd'hui*, Nov. 1932, unpagéd. Cf. Jean-Louis Cohen, "La Forme urbaine du 'réalisme socialiste,'" in J.-L. Cohen, M. de Michelis, M. Tafuri, *URSS 1917–1978, l'architecture, la ville* (Rome: Officina; Paris: L'Équerre, 1979), pp. 140–99.
66. Le Corbusier, *La Ville Radieuse*, p. 74.
67. *Ibid.*, p. 90.
68. See Giorgio Ciucci, "Concours pour le Palais des Soviets" in "L'architecture et l'avant-garde en Russie de 1917 à 1934," *VH* 101, no. 7–8, spring-summer 1972, pp. 113–33.
69. Le Corbusier and Pierre Jeanneret, "Projet pour la construction du Palais des Soviets à Moscou," prefatory note, Dec. 1931, p. 12. F.L.C.
70. *Ibid.*, p. 35.
71. *Ibid.*, p. 8.
72. Le Corbusier, letter to Alexis Léger, May 9, 1935. F.L.C.
73. Le Corbusier, letter to A. V. Lunacharsky, Mar. 13, 1932. F.L.C. Having fallen out of favor under Stalin, Lunacharsky died in 1933.
74. A. V. Lunacharsky, proposal made in a meeting of the VO-PRA, in A. Kut, "Dvoretz Sovetov," in *Sovetskoe Iskusstvo*, Jan. 26, 1932, in G. Ciucci, "Concours pour le Palais des Soviets."
75. Le Corbusier, "Manifeste des CIAM à Josef Staline," ms. dated Apr. 19, 1932. F.L.C.
76. CIAM, "Message à Staline," Apr. 28, 1932. F.L.C.
77. On the failed Moscow CIAM, see: Christian Borngräber, "Le Corbusier a Mosca," in *Rassegna*, 4, p. 83–4; "Da Bruxelles ad Atene, la Città funzionale," special issue of *Parametro*, no. 52, Dec., 1976, pp. 5–17; Martin Steinmann, ed., *CIAM Dokumente 1928–1939* (Basel: Birkhäuser, 1979), pp. 113–28.
78. N. Kolli, letter to Le Corbusier and Pierre Jeanneret, Moscow, Apr. 25, 1932. F.L.C.
79. It was a group of architectural students assembled around the future writer Viktor Nekrasov who wrote to Le Corbusier to ask him his opinion of the Palace of the Soviets and whom he thought was "the most eminent architect in the U.S.S.R." On October 13, 1932, Le Corbusier answered all of these questions except the last one, and later received a new letter from Nekrasov criticizing the Ville Radieuse: "the center of the city must not be the stock-exchange, but the factory, the works." Nekrasov published Le Corbusier's letter in V. Nekrasov, *Pervoe znakomstvo* (Moscow: Sovetsky Pisatel, 1960), pp. 103–8.
80. Le Corbusier, "L'architecture à Moscou," typed ms., 1928, p. 5. F.L.C.
81. Le Corbusier, dedication to S. M. Eisenstein, Oct. 25, 1928, Moscow, Cabinet Eisenstein. Cf. *Sovetsky Ekran*, no. 46, 1928, p. 5.
82. S. M. Eisenstein, "Prikluchenie na Kurorte," intro. by Oleg Khadyka, in *Tvorchestvo*, no. 11, 1971, pp. 18–20.
83. Le Corbusier, letter to Wallace Harrison, Oct. 15, 1938. F.L.C.
84. Le Corbusier, letter to A. V. Lunacharsky, Apr. 25, 1932. F.L.C.
85. Le Corbusier, letter to A. Vesnin, Jan. 28, 1936. F.L.C.
86. "Où est le problème américain?" published in 1936 in Moscow as Le Corbusier, "Chto takoe amerikanskaya problema?" in *Arkhitektura za rubezhom*, no. 5, 1936, pp. 46–7. Cf. also D. Arkin, *Arkhitektura Sovremennogo Zapada* (Moscow: IZOGIZ, 1932), pp. 36–50.
87. Le Corbusier, letter to l'Académie d'Architecture de l'URSS, Sept. 13, 1936. F.L.C.
88. Cf. Giorgio Ciucci, "Le Corbusier e Wright in URSS," in *Socialismo città architettura, URSS, 1917–1937, il contributo degli architetti europei* (Rome: Officina, 1971), pp. 171–93.
89. Le Corbusier, *Quand les cathédrales étaient blanches* (Paris: Plon, 1937), p. 264.

90. Le Corbusier, "L'architecture à Moscou," typed ms. 1928, p. 1.
91. Le Corbusier, "Défense de l'architecture," 1929, in "Le Corbusier et Pierre Jeanneret," special issue of *L'Architecture d'Aujourd'hui*, no. 10, 1933, pp. 37ff.
92. Le Corbusier, letter to A. Vesnin, Aug. 10, 1934. Cf. A. G. Chinyakhov, "Le Corbusier i Vesniny," in *Sovetskaya Arkhitektura*, no. 18 (Moscow: Stroyizdat, 1969), pp. 133–42.
93. V. Lavrov, A. Popov, "Protiv nekriticheskogo otnosheniya k eksperimentam zapadnykh arkhitektorov," in *Stroitelstvo Moskvyy*, no. 10, 1930, pp. 8–12.
94. Mikhail Ilyn, "Le Corbusianisme en URSS," in *L'Architecture d'Aujourd'hui*, no. 6, 1931, pp. 59–61.
95. This was also asserted by the author of one of the innumerable journals of travel to the U.S.S.R. published between 1917 and 1939 in France: Marc Chadourne, *L'URSS sans passion* (Paris: A. et G. Mornay, 1932), p. 22.
96. Jacques Mesnil, in *L'Humanité*, Nov. 11, 1922, p. 5.
97. J. Peyralbe, "Deux conceptions de l'urbanisme," in *L'Humanité*, Mar. 31, 1932.
98. Maximilien Gauthier, *Le Corbusier, ou l'architecte au service de l'homme* (Paris: Denoël, 1944), p. 223.
99. *Ibid.*, pp. 191–2.
100. Le Corbusier, in Lurçat, Gromaire, Goerg, Aragon, Kuss, Léger, Le Corbusier, Lhote, Labasque, Cassou, *La Querelle du réalisme* (Paris: Editions Sociales Internationales, 1936), p. 85.
101. Le Corbusier and Pierre Jeanneret, "Projet de monument à la mémoire de P. Vaillant-Couturier," explanatory note, Dec. 1938. F.L.C. Le Corbusier would later write, "The Museum of Modern Art of New York, which is organizing a campaign throughout the United States with regard to future and imminent war 'memoirs', is counting on this project, considering it to be the most beautiful prototype of what should be done in the United States to commemorate the great events just recently lived." In Le Corbusier, *Oeuvre Complète de 1938–1946*, W. Boesiger, ed. (Zurich: Girsberger, 1946), p. 10.
102. Le Corbusier, letter to J. Nicolas, Sept. 27, 1945, J.-L. Cohen archives.
103. N. Kolli, "K 75-letyu Le Corbusier (Le Corbusier v. Moskve)," in *Arkhitektura SSSR*, no. 12, 1962, pp. 36–42.
104. See on this subject V. Khazanova, O. Chvidkovski, "L'architecture soviétique 1900–1930," in *Paris-Moscou*, exhibition catalogue (C.N.A.C. G. Pompidou, 1979), p. 302.

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- 24 From Le Corbusier and Pierre Jeanneret, *Oeuvre Complète 1920–1929* (Zurich: Girsberger, 1931).
- 28–32 Courtesy the author.
- 36 From Le Corbusier, *La Ville Radieuse* (Paris: Editions de l'Architecture d'Aujourd'hui, 1935).
- 42 © S.P.A.D.E.M. Paris/V.A.G.A. New York, 1981.
- 44 From Le Corbusier and Pierre Jeanneret, *Oeuvre Complète 1929–1934* (Zurich: Girsberger, 1935).
- 45 From *Tvorchestvo*, Moscow, no. 11, 1971.
- 46 From Le Corbusier, *Oeuvre Complète 1938–1946* (Zurich: Editions d'Architecture Erlenbach, 1946).



S. Frederick Starr

Frontispiece, Le Corbusier in the U.S.S.R., 1928.

The outward facts of Le Corbusier's brief involvement with the U.S.S.R. between the years 1928 and 1932 are by now well known, thanks in part to the architect's own writings¹ and in part to subsequent works of scholarship.² In 1928 he was approached by the head of the Soviet trade union combine Centrosoyuz, who proposed that he design the union's Moscow headquarters. Le Corbusier agreed, and the structure was built, the largest project he carried to completion before 1945. Two years later he was invited to submit a proposal to the competition to design a Palace of the Soviets in Moscow. Though he entered the competition with high hopes, his project did not receive so much as an honorable mention. Angered when his entry was brushed aside in favor of a bombastic and academic entry by Boris Iofan, Le Corbusier had little further contact with the Soviet Union. 123

Such are the facts. What they do not indicate is the significance of the short-lived mutual attraction between the Swiss architect and his erstwhile Soviet patrons. On each side, the relationship and its breakdown set attitudes that endured for a full generation. For Le Corbusier, the Soviet Union became a land of democratic reaction in which the lowest element of popular taste was permitted to define the man-made environment; for the U.S.S.R., Le Corbusier became the bourgeois technocrat *par excellence*, blind to the need for an art that was both uplifting and accessible.

Several pieces of documentation crucial to these issues remain unavailable, either destroyed or preserved only in closed Soviet archives. Among these, far the most significant is the lengthy explanatory text that Le Corbusier submitted with his Palace of the Soviets entry, and which is referred to approvingly in the official Soviet publication on the competition.³ Offsetting these lacunae are three recent finds that help clarify Le Corbusier's relationship to the U.S.S.R. in general and to the Palace of the Soviets competition in particular. The first, a collection of photographs and reminiscences by Sergei Kozhin,⁴ a young Moscow architect assigned to guide Le Corbusier during his 1928 visit to the U.S.S.R., hints at contacts between Le Corbusier and the Russian peasantry which help ex-

124 plain his later readiness to dismiss the rejection of his design for the Palace of the Soviets as being inevitable, given popular attitudes within Russia. The second, a letter from the architect to the Soviet Commissar for Public Enlightenment, Anatoly Lunacharsky, reveals a shocked Le Corbusier trying desperately to hold on to his illusions about the attitude of the Soviet government toward modern architecture in the face of the rejection of his own design of the Palace of the Soviets, and his last-ditch effort to ingratiate himself with the Soviet Commissar.⁵ The third, an exchange of letters between Le Corbusier and a young student of city planning in Kiev, Viktor Nekrasov, indicates the bitterness of Le Corbusier's disappointment with the Soviet leaders and suggests why he could later turn with such enthusiasm to support Marshal Pétain's government at Vichy.⁶

The key to Le Corbusier's infatuation with the Soviets as patrons is the 1927–1928 rejection of his entry to the competition for a headquarters for the League of Nations at Geneva. Among the various sins cited by the jury when it rejected Le Corbusier's entry was the fact that he had submitted his drawings in India ink rather than the specified Chinese ink.⁷ Convinced that an international cabal of academic architects had conspired to humiliate him, Le Corbusier objected publicly to the jury's decision and then sought redress through a lawsuit. As this was proceeding, he was approached to design the headquarters for the trade union conglomerate in Moscow. Being himself strongly attracted to the doctrine of syndicalism⁸ and perhaps thinking that the Centrosoyuz was dedicated to such a program, Le Corbusier found the commission a sympathetic one and in 1928 traveled to Moscow to inspect the site. Thus began a relationship that was to cause Le Corbusier to be attacked in the West as “Moscow's torchbearer”—*die Brandfackel Moskaus*.⁹

Le Corbusier had every reason to think he would be welcomed in the Soviet capital. As early as 1922, Moisei Ginzburg, later the founder of the Constructivist movement in Russian architecture, had published materials taken from the serialized version of *Vers une architecture* as this appeared in the pages of *L'Esprit Nouveau* in his

own theoretical text *Stil i epokha*.¹⁰ Scarcely had the Constructivists founded their journal *Sovremennaiia arkhitektura* in 1926 than Le Corbusier's name appeared on the masthead as a member of the international board of consultants.¹¹ Within the journal, his projects were frequently published and analyzed as examples of the highest ideals toward which the younger generation of Soviet architects should aspire. Even non-Constructivists like Konstantin Melnikov gauged their success by the extent to which the Parisian master approved their work.

Arriving in Moscow, then, Le Corbusier had reason to expect an enthusiastic reception. A year before the stock market crash imposed a virtual freeze on building in the West, Le Corbusier was astonished by his hosts' constant use of the term “big” and their apparent desire to break with the past. When he asked his Russian interpreter about the association of *bolshoi* (big) with Bolshevism he was told “Bolshevism means everything as big as possible; the biggest theory, the biggest projects. Maximum. Going to the heart of any question. Examining it in depth. Envisaging the whole. Breadth and size.” “Till then,” Le Corbusier confessed, “I had understood from our newspapers that Bolshevik meant a man with a red beard and a knife between his teeth.”¹²

While in Moscow, Le Corbusier had as guide the architecture student Kozhin, on whose kitchen table he executed the first sketches for the Centrosoyuz.¹³ It was Kozhin, too, who took Le Corbusier into the countryside to inspect traditional Russian wood architecture. A series of photographs preserved by Kozhin's family in California show Le Corbusier, bowler hat on his head and a cigarette in his mouth, in front of various wood houses and barns, and side by side with a weathered and hard-looking peasant woman (fig. 1 [frontispiece])—this, of course, on the very eve of the enforced collectivization of agriculture that was to cost millions of lives. Such face-to-face contact with the Russian countryside was later to enable him to write off the Soviet masses as being unprepared for modern architecture.

For the time being, though, Le Corbusier saw the Soviet

government as providing the enlightened and technologically literate leadership of which he had long dreamed. Returning to Paris with the Soviet architect Nikolai Kolli to assist him, Le Corbusier completed plans for the Centrosoyuz building and dispatched them to Moscow, where a construction schedule began at once. Never mind that the closed ventilating system—the famous *respiration exacte*—was scrapped in favor of traditional radiators, and that various other unwelcome modifications were effected.¹⁴ The fact that Le Corbusier's most ambitious project to date was actually being constructed gave him reason enough to look forward to future commissions from Moscow with enthusiasm.

In 1931 Soviet officials sent Le Corbusier a lengthy questionnaire on the reconstruction of the city of Moscow. Neither the questionnaire nor Le Corbusier's initial response is available. But the fact that the theoretical drawings of Le Corbusier's most important work—Ville Radieuse—were made in order to answer this Soviet questionnaire attests to the centrality of the project in the architect's total oeuvre.¹⁵ To say that Le Corbusier proposed to rehabilitate Moscow with a ruthlessness that Baron Haussmann might have envied is an understatement. Upon the radial plan of the historic capital Le Corbusier imposed a roughly rectilinear organization of arteries that would have required the virtual destruction of the city.

By early 1932 Le Corbusier was receiving reports on the progress of his Centrosoyuz building and was otherwise in frequent contact with authorities in Moscow regarding his proposals to redesign their city. To be sure, he was not inactive at home, either. His Salvation Army building was under construction in Paris, incorporating the closed ventilation system that had been rejected for the Centrosoyuz in Moscow. Moreover, his Swiss students' dormitory for the Cité Universitaire in Paris was also under construction at this time, suggesting that Le Corbusier's fortunes had rebounded from the low point they had hit during the League of Nations dispute. Yet it was not Paris but Moscow on which he now placed his hopes.

In 1928 he had penned a tract *Vers le Paris de l'époque machiniste*,¹⁶ but by 1931–1932 he was preoccupied with Moscow. Identifying himself consciously with the architect of the sixteenth century Pont Neuf, he declared “Du Cerceau, architect to the King, created for his master what was needed: Bigness.”¹⁷ These words were written as Le Corbusier's studio on rue de Sèvres was awaiting the Soviet jury's decision on the second phase of the competition for a Palace of the Soviets.¹⁸ This building was conceived by the Soviet government, no less than by Le Corbusier himself, as a response to the League of Nations' claim to be constructing the capital of all nations in Geneva. The direct heir of Soviet efforts in 1919 and 1922 to construct a world capital for workers, it was at the same time a lineal descendant of several nineteenth century attempts by the czarist government to build on the same Moscow river site a national memorial that would symbolize the aspirations of the entire Russian nation.¹⁹

While never a Communist Party member and not even a Marxist in any rigorous sense of the term, Le Corbusier embarked on this project with a messianic fervor that rivaled that of its sponsors. In the same essay of early 1932 cited above, he conjured up a picture of a thoroughly defeated West, its banker-leaders hoping desperately to recoup their nations' economies by fanning war between Russia and China, a war that would at once create endless possibilities for foundering European and American industries in the form of orders for weapons and food and would also pin down on its eastern border Soviet power for a generation, thus taking the pressure off the West.²⁰ A bizarre scenario, perhaps, but all the more significant in that Le Corbusier credited it as real. Clearly, he had absorbed the heady utopianism of the First Five Year Plan and was using the threat of future Soviet greatness to ridicule those who had thwarted his career at home.

That there was a great deal of naiveté in this need scarcely be said. But the tragedy of collectivization was little appreciated in western Europe and America in the early spring of 1932, and the dramatic change in temperament that the U.S.S.R. had undergone during the last year of the First Five Year Plan was all but unknown abroad,

126 even as its importance was grossly underestimated by members of the Soviet intelligentsia at home. What Le Corbusier might have been apprised of, but evidently was not, was the changing Soviet attitude toward his own work that was already manifest by 1931, as he was working on his Palace of the Soviets. On the one hand, several Soviet architects who had heretofore withheld praise appeared in print with fulsome acknowledgments of his accomplishments. One, the formalist Nikolai Dokuchaev, a member of the Association of New Architects (ASNOVA) and therefore opposed in principle to Constructivist utilitarianism, found praise for Le Corbusier's new purist aesthetic based on Cubism.²¹ But on the other hand, the rising tide of populism was expressed in what Ilya Ehrenburg called the "cult of accessibility," which was eventually to be channeled into the doctrine of Socialist Realism. One hostile critic, D. Aranovich, in a review of contemporary French architecture, noted with unfeigned delight, albeit inaccurately, that Le Corbusier had "neither followers nor students" in the U.S.S.R.²² Another, writing in *Pravda*, admitted Le Corbusier's influence but decried the fact that it seduced students in the U.S.S.R. into drafting projects embodying "abstraction going all the way to utopianism."²³ In still another vein, the Moscow proletarian architect Alexander Nekrasov attacked the domination of architecture by utilitarian engineers, who, he claimed, "had opened a deep gulf between their art and architecture." Nekrasov argued that true contemporary architecture does not derive from the machine, as Le Corbusier claimed, but from the combination of classical principles with socialist ideals, which the former czarist academician Ivan Zholtovsky and his younger Soviet disciples, including Boris Iofan, were developing. In these and other essays of 1929–1932 the names of those who were eventually to defeat Le Corbusier and the other modernists were already coming to the fore.²⁴

This threatening current was far from Le Corbusier's mind as he set out to develop his entry for the Palace of the Soviets competition. After three months of frantic work, he and his colleagues developed a plan which has been called by one writer "perhaps the greatest building never built."²⁵

Only a handful of the dozens of drawings, plans, and elevations for this mammoth structure have been published. The remainder are preserved in closed archives in Moscow, although numerous drawings and plans are also to be found in the archives of the Fondation Le Corbusier in Paris. Until these have all been analyzed in detail, one cannot speak with precision of the significant alterations the project underwent in the course of preparation.²⁶ What is clear is that the suspension of the ceiling for the 15,000-seat assembly hall from a soaring ferro-concrete parabolic arch constituted a singular innovation in its day, as did the elaborate system of ramps and roadways by which Moscow's non-existent automobile fleet would gain access to the building. Le Corbusier attached great importance to these technical achievements and elaborated his conception of the building in a model of such exactitude and elegance that it was later exhibited at the Museum of Modern Art in New York and then toured the United States for several years thereafter.²⁷ Its present whereabouts are unknown.

No winner was named for the first round of the competitions, although entrants were given critiques of their projects. Le Corbusier was apparently told that his entry had caused a considerable stir, and that various technical aspects of his design had earned high praise among the Moscow architectural and political elite. He was also given certain suggestions for changes which he was able to introduce into the design without unduly altering the overall scheme. Finally, he was informed that the selection process would now enter a second phase to which any architect in the world would be free to submit proposals. Eventually over 160 projects were to be received, including twenty-four from abroad and eleven from the United States alone. In a flush of democratic zeal, amateurs too were encouraged to submit their ideas and a large number actually did so.²⁸

At the same time as this procedure was made known to Le Corbusier he was told that the solicited projects from the first phase would automatically qualify for the second phase. In short, Le Corbusier had reasonable grounds for thinking that he would be among the finalists, if not ac-

tually the winner of the grand prize to design a capital for the workers of the world. Hence, when the blow fell on February 28, 1932, he was totally unprepared. The three first prizes of 12,000 rubles each were offered to Ivan Zholtovsky, a court architect to Nicholas II; Hector Hamilton, a virtually unknown designer of office buildings from New Jersey; and Boris Iofan, the young Moscow architect whose work appeared to be a crossbreed of Zholtovsky's and Hamilton's. Le Corbusier was not even among the runners-up. Everything on which he had placed his hopes since 1928 now lay in ruins.

The explanations offered by the seventy-member jury and the several commentators whose critiques were later published in the official book of the competition provided no consolation. Academician A. V. Shchusev, for example, wrote that

"The predominance of skeletal-industrial motifs of construction emphasized by Le Corbusier, when applied to a building for the center of Moscow, imparts a completely incorrect interpretation to the idea of the Palace. This incorrectness is only reinforced by the separated disposition of the halls on the site, which recalls the confusion of an industrial town."²⁹

Another critic acknowledged the immense Soviet interest in Le Corbusier's work but, after examining with care and respect the purely technical aspects of the project, attacked its outward appearance:

"On the artistic expressiveness of his project Corbusier says nothing, supposing that this expressiveness should appear as a natural consequence of the functional solutions and techniques of construction he has employed. But it is clear that [all this] is still insufficient for imparting to the structure the degree of high artistic expressiveness that is unconditionally essential for a project like the Palace of the Soviets."³⁰

The rejection of his project by the Soviet judges and the blatantly traditionalist basis of their opposition outraged Le Corbusier. After staking his hopes on the U.S.S.R., he found that, with respect to architecture, it behaved no better than the League of Nations. It is a bitter irony

that Le Corbusier's letter of complaint to his old acquaintance, the Soviet Commissar of Public Enlightenment Anatoly Lunacharsky, should have been addressed to Geneva, the scene of Le Corbusier's earlier humiliation. As it happened, Lunacharsky was in the Swiss city as a member of the Soviet delegation at the meetings of the preparatory commission for the League of Nations' disarmament conference. Unknown to Le Corbusier, the U.S.S.R. was at that very moment on the verge of joining the League!

Le Corbusier's letter, the original of which is presented for the first time below, reveals the extent of his shock at the Moscow jury's decision and at the same time his monumental egotism, which led him still to assume that the U.S.S.R. would eventually embrace his vision of a modern architecture and society, in the face of all the contrary forces at work within that nation. It is this egotism, too, that led Le Corbusier, in his letter to Lunacharsky, to misread completely the nature of Stalin's rise to power and of his chief instruments of success, the collectivization of agriculture and the First Five Year Plan. Clearly, Le Corbusier hoped that the setback in his personal fortunes would be only temporary and that it lay within his powers, through shameless ingratiating and gratuitous attacks on his Western colleagues, to attain the position of court architect in Moscow to which he had long aspired.

Letter to Anatoly Lunacharsky from Le Corbusier,

March 13, 1932

Dear Mr. Lunacharsky,

I hope that you will not be angered by the fact that I am returning to the conversation that we had last Saturday in Geneva concerning the Palace of the Soviets.

The Palace of the Soviets (as it is stated in the program) should be the crown of the Five Year Plan. And what is the Five Year Plan? It is the most heroic and truly majestic attempt ever to accommodate contemporary society through technology in such a way as to permit it to live harmoniously. At the core of the Five Year Plan lies an idea. What idea? Simply to enable man to be happy. And yet, how is it possible, amid the endless garbage of the first cycle of machine civilization, to

128 attain that condition of purity which alone is capable of opening such an era of happiness? By decisively and unflinchingly turning one's face to the future, having decided firmly to belong to the present, to act and to think "Today"!

This is what the U.S.S.R. did. At any rate, we believe this to be so, having observed your activity from a distance. We have followed this activity with so great an interest, and with such a thirst to discover that the general striving for a condition of harmony would be realized at least somewhere on earth, that everywhere a certain faith arose—a mystical cult of the U.S.S.R.

Poets, artists, sociologists, young people, and especially those who, knowing about life, have nonetheless stayed young—they all recognized that somewhere, in the U.S.S.R., in fact, fate had permitted the work to be accomplished. The day will dawn when the U.S.S.R. will proclaim itself materially through the fulfillment of the Five Year Plan. But the U.S.S.R. has already kindled the dawn for all humanity. All sincere hearts are turned toward it. This victory is even more significant than what will come later in the material realm.

"Architecture expresses the spirit of the age."

Consequently, the Palace of the Soviets, through the majesty of its proportions, will express those goals that have been pursued since 1918. People will see what all the talk is about. The whole world will see. Moreover, under the auspices of architecture, mankind will find a language, incontaminable, beyond all intrigue, trickery, and camouflage: the Palace, center of Soviet institutions.

You made it known across the world that this Palace would be the expression of the anonymous masses living in the present age.

And then the decision: that the Palace of the Soviets, just like that of the League of Nations, will be built in the style of the Italian Renaissance!

The Italians of the Renaissance—like the Romans and Greeks—built in stone. However great the conception, the boundaries of the Renaissance's actual achievement and of its subordination to the law of gravity were defined by stone construction.

In the age of the Renaissance there were enlightened princes who ruled over the masses. A gulf separated the rich from the masses. A gulf separated the palace where the prince lived from the masses of people.

The U.S.S.R., a union of Soviet proletarian republics, will erect its palace, which will be superior and beyond the people.

Let us not delude ourselves with rhetoric: I know perfectly well that the people—and the muzhik too—greatly admire the palaces of kings and that they eagerly ornament their wooden beds with pediments as on a church.

But what should the thinking leaders of the Soviet republic do: move forward, or patronize and cultivate tastes that only attest to human frailty?

We were expecting of the U.S.S.R. an example of authority, edification, and leadership, since such an example expresses the noblest and purest judgment.

And if this is not to be? Then there is no more U.S.S.R., no doctrine, no mystique, or anything else!!! The very thought that I should have to pose such questions in our day is awful.

To conclude briefly, it is frightening, anguishing, tragic, and pathetic that Moscow's present decision could begin to bring about disunity of opinion, disenchantment, and cynicism. And that the Five Year Plan should be crowned with one thing: "man's smallness."

There is in my words not one drop of the bitterness of a rejected candidate. No. But I love architecture too much, I love Truth too much, to despair immediately. I would like to go to Moscow in order to talk, to explain myself, to express myself. I would like to go there and say the following: through countless exertions and great labor, by well known and nameless people working over the past century to develop Science, there has been created in the world a great collaboration. There is not one technical innovation, whether in ferro-concrete, steel, glass, heating, ventilation, acoustics, statics, dynamics, or any type of tool or machine, that does not affirm this great collaboration!

The mission of architecture—in this case of the architect—is to bring order into this entire army of collaborative effort: through the creative power of

composition and the power of its conception architecture can express the unity and the fairness of face of the entire working humanity. Surely that face will not be changed into a mask? Never! No, never!

Will you permit me to speak openly? I would like to go to Moscow.

On May 29 I open a session of the international committee to prepare for the International Congress of Architects, which is to take place in Moscow in September.

I could put off my trip to Algeria (of which I have only now learned) until May.

Could you not prepare my trip to Moscow? I will even be brash. You will recall that you said you would soon be returning to Moscow. This being so, if I could make the trip with you I could speak with you of everything that is boiling within me—of cities and houses.

In Moscow I could, in addition to lecturing on the Palace, make public presentations on the Ville Radieuse and explain what progress and a broad point of view have led us to; I could also set forth in your country, which alone possesses institutions that would permit the realization of contemporary programs, the technical details and proportions of such matters as the following:

—architectural reform

—the solar day of twenty-four hours and its cycle

—technical innovations for correct circulation of air within structures (along with the results of the most recent experiments in the St. Gobain laboratory) (on a large scale, so as to solve the problem for the U.S.S.R.)

—the problem of economy of land, in relation to economy of construction

—soundproof housing

—acoustics.

These truths, actual tasks, and long-range perspectives correspond much more closely to the spirit of the Five Year Plan than do several of the confined, unimaginative and Malthusian methods that have been so joyously received in the U.S.S.R.

And if you would like, I could speak of the proportions of beauty, of that which dominates my entire life, for happiness is impossible without a sense of beauty.

In Buenos Aires in 1929 I delivered a series of ten

lectures over two weeks. I want very much to do the same in Moscow.

Dear friend, this is the twentieth year that I have lived under pressure. Up to now Paris has been essential to me, for it has been the field on which the battle for beauty has been fought. The strict life I lead here has brought fruits. I understand that I am ignorant of much, but I nonetheless have a not insignificant understanding of architecture and city planning.

In Moscow I have close friends, colleagues in whom I place great hopes. I have enemies in Moscow as well, but I believe there are many friends there.

I will say one more word to you: I always defended Mr. Zholtovsky in Moscow; he is a true, serious architect, with much talent. It is his unexpected backwardness with respect to the history of form in architecture that gave rise to our disagreements. But with him I shall talk about architecture more satisfactorily than with most of my Western colleagues who call themselves “modern architects.”

I end: being completely unselfish in my devotion to architecture and being of that mature age when every person should give something, I offer my collaboration in full candor and without any calculation of gain.

That is all. This letter has turned out to be very long. Forgive me for abusing your attention.

Yours sincerely,

Le Corbusier³¹

Since one copy of this letter was preserved in the Lunacharsky archive, we can be sure that Le Corbusier's fulminations reached their destination, though we have no evidence of Lunacharsky's reaction or response. It is certain, however, that Lunacharsky's response—or silence—was unsatisfactory from Le Corbusier's standpoint. His offer to visit Moscow and set forth his ideas having been rebuffed, Le Corbusier grew increasingly angry. One may suppose that he discussed the outrageous notions of the Soviet jury with his fellow Western architects when they met in Barcelona—not mentioning, of course, the snide remarks about them that he had only recently made in his letter to Lunacharsky. At any rate, by the time Le Corbusier received a questionnaire from a group of students

of city planning in Kiev, his wrath had reached monumental proportions. The students, headed by Viktor Nekrasov (no relation to the Alexander Nekrasov cited above), turned to the Swiss master builder with a series of very mild questions:³²

Letter to Le Corbusier from Viktor Nekrasov et al., n.d.

Dear Sir,

We—a group of students from the department of architecture at the Kiev Institute of Construction—address ourselves to you with a request which, we hope, will not inconvenience you too much.

As we are very interested in the fate of contemporary architecture and would like to know the opinions of its most eminent representatives, we here take the liberty of asking you the following four questions:

- 1) What do you think of the results of the international competition for the Palace of the Soviets in Moscow?*
- 2) Whom do you consider to be the most eminent among contemporary architects of Western Europe and the Soviet Union?*
- 3) Do you not find that in recent times architecture has shown a marked tendency to drift to the right, and how would you explain this?*
- 4) How would you explain the fact that some of the most interesting and original works, in terms of modern architecture in Western Europe, are churches—e.g., the Bialostok cathedral (Poland), the churches of Düsseldorf, Frankfurt am Main, etc.?*

Once again excusing ourselves for having disturbed you, we beg you to accept our profound esteem for you. We impatiently await your response.

V. Nekrasov,

L. Serpilin,

Domansky,

V. Mustishenko,

L. Barabach.

P.S. Attached is an envelope with our address.

Le Corbusier's reply of October 13, 1932, must have shocked the young Ukrainians with its vitriol. With the concurring signatures of other distinguished West European architects, Le Corbusier voiced all the bitterness

that had been festering in him since the springtime announcement:³³

Letter to Viktor Nekrasov et al., October 13, 1932.

Dear Sirs,

I respond gladly to questions 1, 3, and 4 that you addressed to me:

Question 1: Results of the competition for the Palace of the Soviets. *When the results of the competition came to be known in the architectural circles of Western Europe, the effect was that of a punch in the face. The bourgeoisie and the academicians responded with a burst of laughter and felt a great satisfaction in seeing that academic architecture is decidedly immortal.*

Modern architects instead were dumbfounded and left with a sense of disgusted gloom, great bitterness, and discouragement. The news was spread by American newspapers, at the very moment in which the CIRPAC (International Committee for the Realization of Contemporary Architectural Problems) was holding a meeting in Barcelona! The news provoked a very emotional response among the members of the Committee, which was meeting precisely to work out the details for the fourth of the "International Congresses of Modern Architecture" (CIAM), which is supposed to be held in Moscow. An appeal to Mr. Stalin was drawn up, in which the representatives of all of international modern architecture politely but forcefully made known to him the reactions elicited by the outcome of the competition and very energetically beseeched Mr. Stalin not to let such a sensational affront to world opinion be perpetrated in Moscow. A copy of this appeal was also sent to Mr. Lunacharsky in Geneva and to Mr. Lyubimov in Moscow. See attached.

From 1927 to 1931, the construction of the League of Nations in Geneva had provoked a violent struggle between academics and modernists. The decision of the Moscow competition was strikingly reminiscent of the methods adopted by the League of Nations.

The Palace of the Soviets, which should be the culmination of the Five Year Plan, should also be the glorification through architecture of the principles of the new order which inspired the Five Year Plan. How can

one tolerate in Moscow even the thought of the bourgeois caricature that was chosen by the jury? What sort of jury, what judges were involved in this matter?

To illustrate the situation created by the Moscow verdict here is an account of our own experiences in the whole affair of the competition:

The Soviet authority had commissioned me for a project. The program called for the use of all the modern techniques. For three months fifteen designers were busy with the anatomical analysis of the project. During the final month we worked night and day. There was great enthusiasm in our workshop. The minutest, most delicate details were passionately studied. With each discovery, with each solution, one designer or another would shout "They'll be pleased in Moscow!" Indeed we all thought that the project would be scrutinized technically, on the basis of constructional and architectural reality. The foundation of our project was the circulation, the orientation, the acoustics, the aeration-ventilation, the statics of the work. But when it came to the judges' decision, none of this was even considered! None! They awarded the prize to some renderings of academic facades and domes, and the jury, in its report, acknowledged that the winning projects provided no instructions as to the manner in which to support the ceilings of the halls, no instructions as to the acoustics or heating-ventilation!!! The culmination of the Five Year Plan flopped in the "spirit of Geneva."

You cannot imagine the disappointment of our fifteen designers: it went from anger to disgust.

Question 3: Moscow set the example for the retreat. Beside the bourgeois world the U.S.S.R. constitutes a new social order. And what should express the clarity of a new social order if not its architecture? Is not architecture the material form in which the social order finds fulfillment? How can one then accept that there be any question whatsoever in the U.S.S.R. as to the tendency of its architecture?

Architecture expresses the spirit of an age. And so? This problem is not addressed in the U.S.S.R. The only problem that needs to be addressed is the following: The U.S.S.R. is creating a new order. The modern age

being the age of techniques, the U.S.S.R. at the start of its endeavor was able to take advantage of the entire international endeavor (machines, equipment, etc.). Modern techniques come into play at the basis of architecture as in mechanics. The professional architects of the U.S.S.R. are of two kinds:

1) the academicians who did their studies in times past and have adopted the methods of that decadent period. The Revolution did not alter their methods and techniques and they stand in the way, in the U.S.S.R., as in France and elsewhere: they are the element of paralysis and retreat. It is they who in the face of the necessary thrust of a new architecture exert pressure on the authorities and invoke the experience of their white hair. It is the same story here!!!

2) the young who have the revolutionary spirit and the creative force. From a distance, the U.S.S.R. presents the impression of conducting an intense undertaking of modern architecture, and world opinion is tempted to believe that modern architecture is being developed in your country. Alas, the truth is otherwise. In the U.S.S.R., reaction dominates. Why is this so? Because modern architecture cannot be created on paper. You must build, realize, experiment, begin again, judge, learn, continue, correct, persist, persevere. Your architectural technicians are just beginning their experience. Errors and misjudgments will therefore be made. But you must not say, "Modern architecture is to blame!" Instead you must tell yourselves, "We will profit from the experience and start over."

But what is most important is that the authorities are watching, and they demand that you move forward, that you progress without ever looking back. They are trying to create a sense of nationalism in your country. But isn't this word unheard of in the Soviet vocabulary? You should instead apply the modern sciences (the most efficient and the most advanced) to regional climatic and ethnic conditions. This would indeed be a true and useful nationalism.

Question 4: I am not of your opinion that a few "modern style" churches should command such interest in the West. Not at all! The central problem of architecture lies elsewhere: It lies in the building of

132 cities. Architecture and Urbanism are one and the same. That is, human feeling and sociology. As for me, I have devoted myself to a task that to me seems worthy of all of a man's energies: to create the classless city, the human city, the city that functions and gives joy and courage. I have christened it the Ville Radieuse. And, having verified certain conclusions, I am ready to donate the result of this labor, wherever it will be understood that the essence of everything is human happiness, vigilant spirit, and heartfelt generosity.

In all sympathy,

Le Corbusier

[Also signed by, among others: Walter Gropius for Germany, Sert for Spain, Weissmann for Yugoslavia, Steiger and Giedion for Switzerland, Bottoni for Italy, Bourgeois for Belgium, Van Eesteren for Holland, Le Corbusier for France.]

Nekrasov and his friends might well have been astonished at this from a person whom he had scarcely met and with whom he had little in common. But undaunted, they turned once more to Le Corbusier with a second letter, dated November 13, 1932. It is unfortunate that this document no longer exists, for without it one is at a loss to explain the much milder tone in which Le Corbusier couched his letter of response:³⁴

Letter to Viktor Nekrasov from Le Corbusier, December 20, 1932.

Dear Sir,

Here is my belated response to your letter. You asked me some questions:

1) If you go to Moscow in January and you see Mr. Lunacharsky, please tell him that I am very happy that the plans for the Palace were entrusted to my friends the Vesnins, but that I would like to add my collaboration on various points about which I have a strong sense of certainty. Also tell him that I consider it my right to take part in this collaboration, since our project is certainly one of the most serious-minded of those that were presented.

2) You asked me my opinion on the role of sculpture,

painting, color, and even graphic arts in architecture.

Here is my response:

First of all, I must clear up a serious misunderstanding. This question was studied last summer by a "French delegation attending a congress in Moscow." This French delegation was not in any way a delegation, but a few architects who have nothing to do with the avant-garde movements and therefore with the spirit that reigns in the U.S.S.R. These architects came to Moscow—taking advantage of good Russian hospitality and of the fact that no one in Moscow was aware of their real situation—to put on airs of an officiality which was in reality non-existent. These people represent neither architecture in general nor any particular group; they recently published reports and innumerable speeches in the November issue of L'Architecture d'Aujourd'hui. A Russian committee which officially welcomed these architects made speeches and elaborated on certain Russian themes, but it certainly does not represent the trend of ideas which is the object of our common interest.

Let us now move on to the question:

Painting and sculpture are manifestations of the realm of plastics, which have a life of their own and which permit the expression or the provocation, in those who observe them, of emotions which no other plastic activity or manifestation can provoke. At times sculpture and painting have decorated the interiors and exteriors of buildings.

Polychromy is another matter. Color is a function of biology and of feeling, and indispensable to human nature. Man cannot do without colors. Polychromy thus presents a problem which goes beyond that of frescoes or decoration.

I have always attached the greatest importance to polychromy, and I have sought for years to discover the natural functions of color. These functions are of a physical order and an emotional order (red and brown assure the wall's apparent solidity, blue and green distance the wall, etc.).

An architect may therefore work with color as confidently as he works with proportions or, if you prefer, with the geometric relations of surfaces and

volumes.

SCULPTURE AND PAINTING—I accept neither as decoration. I accept that sculpture or painting can provoke the profoundest emotions and thereby enrich us as music and the theater do. It all depends on the quality of the work.

By that very fact, I would insist that an artist of great talent be accorded the greatest possible freedom of expression, but never would I permit him to be made to repeat one of his works five, ten, or a hundred times for decorative reasons. Nor would I allow subordinates to repeat it.

I therefore plainly deny decoration. On the other hand, when one envisages an architectural work and especially the architectural site on which this work stands, one calculates that at certain points of the building there are intense mathematical loci, which are like the key to the work's proportions with respect to its environment. These are points of high intensity, and it is at these points that a purpose may manifest itself, be it a water basin, a block of stone, or a statue. You could say that at this point come together the circumstances which enable a statement to be made.

This statement will be of a plastic nature, and it may encompass, of course, all that the plastic arts can sustain in the way of lofty and subjective manifestations.

So much for sculpture. But the very same phenomenon occurs within the interior volumes of a construction, within a hall, a room, etc.

To seek to recuperate the classical methods of that sculpture which forms part of the wall or part of the construction itself is to provoke a misunderstanding, to detract on the one hand from the eloquence of the proportions of the architectural work and to diminish on the other the intensity of the work of sculpture. I have given this question much consideration. For the moment I opt for the relative independence of sculpture and architecture.

PAINTING—You have in Moscow the most beautiful monumental paintings that one could ever dream of. I mean the great icons of the eleventh, twelfth, thirteenth, and fourteenth centuries: they are independent of

architecture, they have their own emotional energy in themselves, and they could quite well be hung on a wall of any epoch: like beautiful, pure works, they live through themselves and of themselves.

You have in Moscow, in the churches of the Kremlin (and elsewhere in the U.S.S.R.) many magnificent Byzantine frescoes. In certain cases, these paintings do not undermine the architecture. But I'm not sure that they add to it, either; this is the whole problem of the fresco. I accept the fresco not as something which gives emphasis to a wall, but on the contrary as a means to destroy the wall violently, to remove any notion of its stability, weight, etc.

I accept Michelangelo's Last Judgment in the Sistine Chapel, which destroys the wall; and I accept the Sistine Chapel's ceiling as well, which completely distorts the very notion of ceiling.

The dilemma is simple: if the Sistine Chapel's wall and ceiling were intended to be preserved as form, they should not have been painted with frescoes. Therefore if they were covered with frescoes, it means that someone wanted to remove forever their original architectural character and create something else, which is acceptable.

But why have the walls of chapels been painted at the risk of killing the architecture? Evidently those responsible had a different goal in mind, that of telling stories to the people who would see these walls; they wrote books in painting.

I do not accept decoration (I repeat) since it is done by the mediocre. I accept that stories be told when there are indeed stories to be told and when these stories are interesting. One could easily say that the U.S.S.R. is passing through a moment in which prodigious stories could be told, and in which it may deem useful that these stories be written in painting.

I have difficulty accepting that stories be told in canvas-paintings, but on the other hand I am persuaded that the walls of buildings can, by sacrificing themselves, accept frescoes if these are of a major interest in terms of the story that is told.

It remains to be seen whether they will be well painted, and in this regard the Russian past is reassuring,

although not the nineteenth century.

I said that you have made many projects on paper. This is not a criticism. I think it is an excellent exercise, and I myself have elaborated a considerable number of projects which have remained on paper; but I make corrective comparisons to realized constructions, and these constitute genuine revelations and provide me with conclusions of great importance to the studies which remain on paper.

I believe that at all costs one must test one's ideas in real experience, otherwise it's a waste of time. Are you building many cities? That is what we are told. I still am acquainted with only a few realized things.

I have been repeatedly asked to draw up plans for cities in the U.S.S.R., but none of this has ever gone beyond idle talk. I regret this fact because I feel that I currently possess certain truths from which I would like to be able to have others profit. I have so thoroughly studied the fundamental social truths that I have succeeded in becoming the first to create the large classless city, a city of harmony and joy. I am sometimes distressed to find that I am opposed in the U.S.S.R. for reasons which seem to me non-existent.

One final question: everyone keeps bringing up European churches when speaking to me. Of what interest are these churches to me? That is not the issue, or is no longer the issue. Once and for all, it should be said that there are other problems of greater concern. And so you see, my dear Sir, I have answered your questions fittingly. My response is a bit long without being sufficiently clear because such subjects call for more elaborate argument, which is hardly possible to do in a letter.

Please accept, dear Sir, my sincerest regards.
Le Corbusier

Comparing these lines with Le Corbusier's earlier letter of October 13, 1932, one wonders what had caused the *volte face*. The relative mildness of this second reply to Nekrasov can be traced to two quite different causes. First, Le Corbusier seems to have decided that the involvement of his friends and disciples the brothers Vesnin in the task force assigned to rework Iofan's winning entry

opened the way for him to influence the outcome of events in Moscow and even perhaps to insinuate part or all of his own project into the final design. Second, he apparently came to accept the official view that a purely avant-garde project would not appeal sufficiently to the tastes of the Russian masses. At any rate, he was willing at least to acknowledge that "the judgment of the jury was probably the result of careful attention to psychology. I recognize the reasons but still not without regret."³⁵ In other words, the lack of sophistication of the Russian masses rendered them unfit to appreciate modern architecture.

Whether this judgment, elaborated at some length in a memorandum of 1934, was a mere rationalization or the considered result of his impressions of the Russian peasantry, garnered during his 1928 trip, it marked Le Corbusier's decisive turning away from the U.S.S.R. and the Communist experiment in general. True, he maintained contact with Aleksander Vesnin, who continued after 1932 to publish laudatory articles on him and even to compare him to Brunelleschi.³⁶ He also received at least one more letter from his young correspondents in Kiev, who, to be sure, stayed prudently within the bounds of what was officially acceptable.³⁷

Letter to Le Corbusier from Viktor Nekrasov, February 28, 1933.

Dear Sir,

I received your second, most interesting letter—in which you speak of the role of painting and sculpture in architecture—at the very beginning of January, and immediately afterward I left for Moscow. To my great disappointment Mr. Lunacharsky had not yet returned from abroad, and I had to be content with writing a letter, which I requested be passed on to him at his arrival. So far I have received no response.

The questions you address in your letter are extremely interesting, and as it is now difficult to find books which treat these questions, I will venture once again to request of you explanations to a series of questions. It is possible that I am being too bold in asking such and I would not at all be surprised if I did not receive a response to this letter, but your first two letters lead me

to hope that you will respond once again. It is possible that all the questions I ask have already been answered in your books, but the fact is that in our country it is absolutely impossible to procure them. This is why I am venturing to correspond with you personally, which I hope does not inconvenience you greatly. In Moscow I recently saw, among others, the architect M. Ginzburg, who has taken a great interest in your letters, which I have shown to him, and has related them to several of his colleagues. You say that you do not in any way accept decoration. But what are we to understand by the word "decoration"? I conceive of it in the following manner: decoration is a specific element having no significance in construction and serving solely to render the work (volumes or surfaces) more beautiful, that is, provoking in the observer the strongest emotions possible. But then one may say that the wall painted in a particular color (blue or green for example) is also a decoration, since in this case we want to distance the wall, that is, to change its constructional form, the form that we have obtained by bringing together volumes and surfaces. Therefore the method that you adopted in the building of the Centrosoyuz in Moscow—a method involving contrasts between a smooth glass surface and a solid mass of "old stone"—is also one of decoration, for in this way you want to achieve a specific optical effect; in other words you want to render the building more beautiful. By the same token were the Greeks not justified in introducing bas-reliefs in their temples, or the Baroque architects in their orgy of swirls on their facades? In all these cases, the goal is the same—to produce a specific impression on the observer. But this does not of course refer to those so-called "decorations" with which some would seek to hide an "ugly" construction. Here another question is raised: What are the problems of architecture itself? Until now the history of architecture has been based on palaces and temples—dwellings of kings and gods, if one may put it so. Architecture fulfilled the role, sui generis, of agitator. It was profoundly functional.

Emperors, princes, chieftains—all wanted to emphasize their greatness through architecture. They wanted to fill the observer with a sense of awe, by means of grandiosity, scale, and various optical illusions. Architecture subjugated man. And even nowadays when we enter the cathedral of Isaac in Leningrad or Notre-Dame de Paris we involuntarily begin to speak in a low voice. But today, it would seem, the problems of architecture are different, at least in our country. There are no more kings, nor gods, and therefore no palaces or temples. There is only man who lives and works, and architecture must therefore be ad hoc. But why these monumental dimensions that oppress man? It is not architecture that dominates man, but man who dominates architecture. It is for this reason that the projects for the Palace of the Soviets in the second competition (which I have had the chance to see in Moscow) do not respond in any way to the exigencies of modern architecture. Such exaggerated dimensions are unparalleled in the entire history of humanity. (The halls are one hundred meters high, with columns of fifty meters which do not support anything, etc.) Man is nothing but an ant—that is, exactly what we do not want. But what do we want then? As yet nobody, alas, has been able to give a precise response to this question. It is possible that our ideas are not totally correct; we are not yet strong enough for these questions and we would be greatly pleased if you would be so kind as to impart to us your ideas on such questions. One more question: you have spoken of your "Ville Radieuse." Unfortunately, your basic idea is totally unknown to us. Is it different from the idea behind the Voisin plan for Paris? And how would you picture the Ville Radieuse in a Soviet context, where the center of the city (not the geometric center) is not the stock exchange but the factory, the workplace? All of these questions are of great interest to us, myself and my comrades, and soon we should have a collective discussion of these matters in our Institute. Thus your response will be extremely valuable and instructive. Please accept, Sir, my profound esteem. V. Nekrasov and comrades

36 But with the exception of such personal associations and the continuing contact necessitated by the final stage of work on the Centrosoyuz building, Le Corbusier's break with the U.S.S.R. was already complete. For its part, the world of Soviet architecture turned decisively away from the ideals espoused by Le Corbusier and his Russian friends and manifested so fully in the project for the Palace of the Soviets. Henceforth, no project in the utilitarian spirit of Le Corbusier could hope to succeed in the U.S.S.R. unless it was thoroughly masked with frescoes, statues, and other ornamentation of heroic proportions. "Le Corbusianism" became a term of abuse, defined by novelist Aleksei Tolstoi in the pages of *Izvestia* as a symbol of "isolation, the power of the sword, of gold, or of mystical delusion—in short, individualism."³⁸ Those friends of Le Corbusier who continued to function professionally—notably Ginzburg and the Vesnins—either muted their avant-gardism or retreated into pedagogy or purely technical experiments. Others, such as Kolli, switched over to a safe Socialist Realism; while still others, such as Sergei Kozhin, emigrated.

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Editor's Note: The following letters were translated by Stephen Sartarelli: Nekrasov et al. to Le Corbusier, n.d.; Le Corbusier to Nekrasov et al., October 13, 1932; Le Corbusier to Nekrasov, December 20, 1932; Nekrasov to Le Corbusier, February 28, 1933.—Ed.

1. Le Corbusier, *La Ville Radiieuse* (Paris: 1933); and Le Corbusier and Pierre Jeanneret, *Oeuvre complète de 1929–1934*, Willy Boesiger, ed., (Zurich: 1964).
2. See especially Giorgio Ciucci, "Le Corbusier e Wright in URSS," *Socialismo, città, Architettura URSS 1917–1937: il contributo degli architetti europei*, Manfredo Tafuri, ed., 2nd edition (Rome: 1972), pp. 171–94.
3. "Soiuz sovetskikh arkhitektov," *Dvoretsov sovetskoi arkhitektury 1932g.*, Iu. M. Slavinskii, ed. (Moscow, 1933), p. 84.
4. Sergei Kozhin, *Zapiski arkhitekora*, n.d.
5. From the Central State Archive of Literature and Art, Moscow, fund 279.2; published in A. V. Lunacharsky, *Ob izobrazitel'nom iskusstve*, I. A. Sats, compiler (Moscow: 1967), vol. I, pp. 489–92.
6. These documents were made available to the author by Dr. Marc Ferro, whose assistance is here acknowledged, and by the Fondation Le Corbusier in Paris. In thanking the directors of the Fondation, the author wishes also to express his gratitude to Dominique Negrel for her timely assistance.
7. Robert Furneaux Jordan, *Le Corbusier* (London: 1972), pp. 52ff.
8. Robert Fishman, "From the Radiant City to Vichy; Le Corbusier's Plans and Politics, 1928–1942," *The Open Hand: Essays on Le Corbusier*, Russell, Walden, eds. (Cambridge: 1977), 245ff.
9. Cited in Le Corbusier and Pierre Jeanneret, *Oeuvre complète de 1929–1934*, p. 16.
10. Moisei Ginzburg, *Stil i epokha* (Tver: 1922).
11. On this relationship see S. Frederick Starr, "The Union of Contemporary Architects," in *The Russian Avant-Garde, 1900–1930*, George Gibian, ed., (Ithaca: 1974).
12. Le Corbusier, *La Ville Radiieuse*, p. 183.
13. Kozhin, *Zapiski arkhitekora*, p. 139.
14. Jordan, *Le Corbusier*, p. 55.
15. Le Corbusier, *La Ville Radiieuse*, p. 291.
16. Issued as a supplement to the bulletin *Redressement français*, Feb. 15, 1928, p. 12.
17. Le Corbusier, *La Ville Radiieuse*, p. 183.
18. See the excellent accounts by Anatole Kopp, *L'architecture de la période stalinienne* (Grenoble: 1978), chap. 7; and Antonia Cunliffe, "The Competition for the Palace of Soviets in Moscow, 1931–33," *Architectural Association Quarterly*, vol. 11, no. 2, 1979, pp. 36–48; and the list of sources in Anatole Senkevitch, Jr., *Soviet Architecture 1917–1962. A Bibliographical Guide to Source Material* (Charlottesville, Va.: 1974), pp. 166–73.
19. See S. Frederick Starr, "The Incomplete Symbol: Russia's Search for a National Capitol, 1800–1950," for the Tulane University School of Architecture (New Orleans: 1980).
20. Le Corbusier, *La Ville Radiieuse*, pp. 184–5.

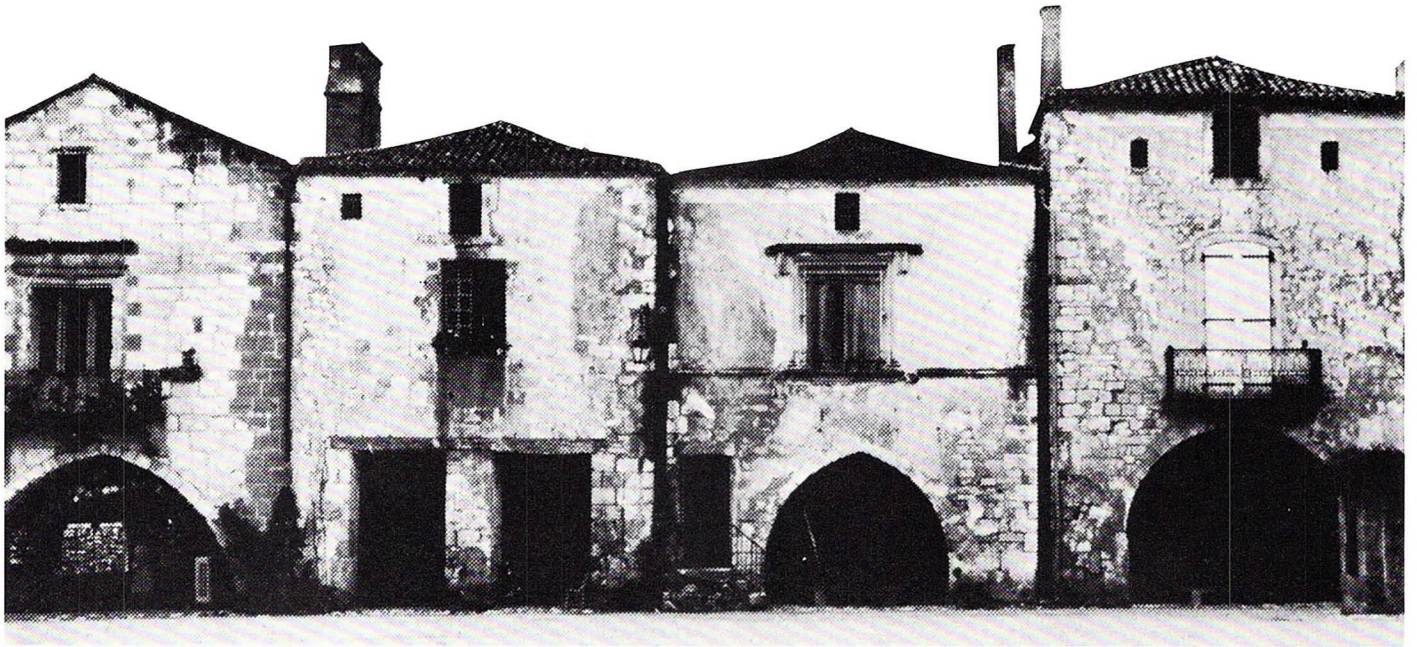
21. N. Dokuchaev, "Korbuze-Sone," *Sovetskoe iskusstvo*, 1929, no. 3–4, p. 140.
22. D. Aranovich, cited in *Iz istorii Sovetskoi arkhitektury 1926–1932 dokumenty i materialy*, K. N. Afanasev, ed. (Moscow: 1970), p. 112.
23. D. Arkin, "V poiskakh novoi arkhitektury," *Pravda*, July 14, 1928.
24. A. Nekrasov, "Puti arkhitektury; k probleme stilia sovetskoi arkhitektury," *Pechat i revoliutsiia*, 1928, no. 4, pp. 69ff.
25. Jordan, *Le Corbusier*, pp. 57–8.
26. *Dvoretsov sovetskoi arkhitektury*, p. 84.
27. Jordan, *Le Corbusier*, p. 59.
28. Cf. B. N. Zasyppkin, "Tvorcheskaiia initsiativa rabochikh predlozhenii v proektirovanii dvortsa sovetskoi arkhitektury," *Dvoretsov sovetskoi arkhitektury*, pp. 95–9.
29. A. V. Shchusev, "Mexhdunarodnyi konkurs dvortsa sovetskoi arkhitektury," *Dvoretsov sovetskoi arkhitektury*, p. 78.
30. *Ibid.*, p. 85.
31. Archive of the Fondation Le Corbusier; a Russian translation has been published in A. V. Lunacharsky, *Ob izobrazitel'nom iskusstve*, I, pp. 489–92.
32. Fondation Le Corbusier.
33. Made available through the courtesy of Dr. Marc Ferro.
34. *Ibid.*
35. Le Corbusier et Pierre Jeanneret, *Oeuvre complète de 1929–1934*, p. 17. In the Soviet edition the letter is inaccurately dated as May 13, rather than March 13, 1932.
36. A. Vesnin, report to Moscow architects, Feb. 1936, reproduced in *Mastera sovetskoi arkhitektury ob arkhitekture*, Mikhail G. Barkhin and Iurii S. Iaraloc, compilers, 2 vols. (Moscow: 1975), II, p. 23.
37. Dated February 28, 1933. Fondation Le Corbusier.
38. Aleksei Tolstoi, "Poiski monumental'nosti," *Izvestia*, Feb. 27, 1932.

Figure Credits

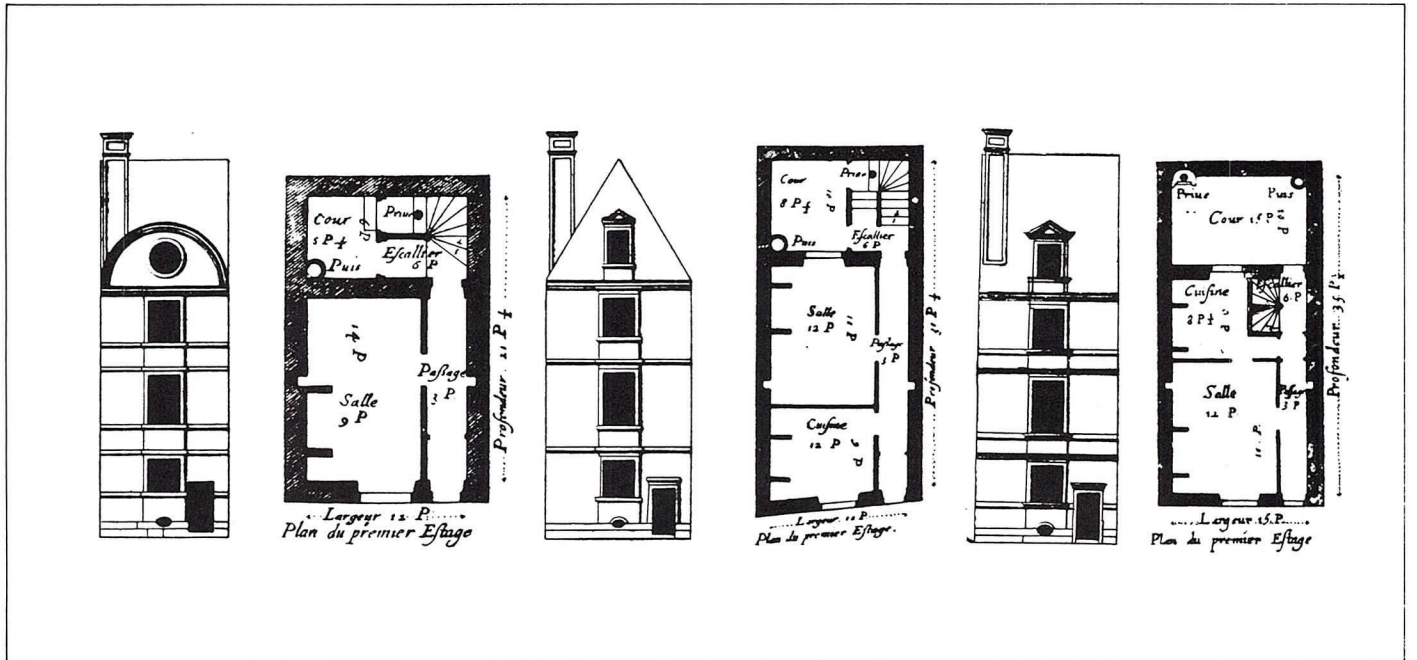
Frontispiece, courtesy of Mrs. S. Kozhin.

Review

1 Montpazier, typical square of an English bastide town.
2 Urban building types, 17th century.
From P. le Meuet.



1



2

Critical Discipline

Giorgio Grassi. *La architettura como oficio*. 1980, Barcelona, Gustavo Gili;
L'architettura come mestiere. 1980,
Milan, C. L. U. V. A.

Ignacio Sola-Morales
Translated by Silvia Kolbowski

The simultaneous publication in Spain and Italy of Giorgio Grassi's *La architettura como oficio* affords an occasion for critical review of Grassi's theory. A result of patient labor, Grassi's second book, seemingly located somewhat outside the perimeter of contemporary discourse, displays an intellectual position of a detached maturity and clarity.¹ Although the text is actually a collection of different writings, some previously published in periodicals or university publications and others until now unpublished, the unity of his thought goes beyond that of commentary on the current situation to present key ideas concerning the paths taken by contemporary architecture and how these might be conceptualized: how problems should be confronted, and how a theory of positive and progressive architecture, in the sense of its social effectiveness, might be constituted.

Given the present state of the architectural debate, and the values established by the orthodoxy of the Modern Movement in a general state of crisis, the position from which Giorgio Grassi speaks to us merits attention. Given, that is, the currently popular idea that Modernism has been superseded by a new condition called Post-Modernism, or the opposing idea that nothing is viable without an assumption of the conditions and objectives from which Modernism originated, the author of this book locates himself at an almost Olympian distance from this polemic, negating it and maintaining an attitude which is simultaneously marginal to both vanguardism and Post-Modern nostalgia.

The tone of his writings is more that of a calm repetition of obvious truths than that of an announcement of new discoveries. With a strong pedagogical will and a sometimes repetitious manner, Grassi's discourse refers, in the first place, to an ethic of truth in the face of the chaotic opinion, and, second, to a *recherche patiente* in which the discovery of elemental

truths appears to be the result of an effort to uncover that which is essential and valid, to which human reason can logically aspire.

One might say that through setting himself apart from the many prophets who arise continually in the world of art and culture, Grassi has established a position which by contrast seems traditional, calling for essential concepts and for the permanent and immutable conditions of architecture. Thus, in the face of the romantic obsession which pervades contemporary artistic thinking, Grassi's attitude toward reconciling personal artistic creation with the spirit of the times is fairly modest, his assumption being that elemental truths are enduring and that tradition is not a ballast but a teacher of life. This traditionalism is not simply a reaction to a "tradition of the new," as Rosenberg called it.² Nor is it the survival of an academic form of teaching which resurfaces as a new repertory of cultural consumption. On the contrary, the fundamental characteristic of this thinking is a new attitude toward revealing the objectives of architectural work: what its instruments are, what determines the relationship between a contemporary architecture which can be carried out with integrity and an architecture of the past, and finally, a questioning of the object of architectural education—all subjects which pose the problem of producing an architecture which can be culturally valid and which can act in the service of the society which produces it.

To formulate these aims, all the writings which are collected in this book are presented with a constant reference to the permanent, to the essence of architecture. Throughout much of the book the tone is that of the spiritual guide, the argument always relying on the classical distinction between truth and opinion, between that which is permanent and that which is mutable. In a sense, Grassi's traditionalism approaches a form of classicism in its man-

ner of citing exemplars of style and reflecting the universal and real character which such assertions purport to represent. In fact, not a ghost of utopianism is to be found in this work; there is no announcement of a new plane on which contradictions might be overcome. On the contrary, the way in which Grassi formulates his proposals is characterized by his desire to be accessible, to be approached through an exercise of reason and a knowledge of the craft, of the practical learning of a discipline whose epistemological laws do not belong to the field of pure science but rather to a branch of knowledge generated by the confrontation between reason and the reality of the material world.

To explain Grassi's position it is necessary to return to the climate in which he was formed and the points of departure from which he began to define his positions in light of the larger question surrounding contemporary architecture. Thus, first, we should remember that his formative years were those of the late fifties and the early sixties, spent in the Centro di Studi created by Ernesto N. Rogers as an annex to the editorial department of *Casabella Continuità*, then directed by Rogers. The most revisionist aspects of Italian intellectual orientation in the sixties and seventies cannot be understood without recognizing the climate which Rogers created through his professional and educational activities and as editor of one of the most influential magazines of the epoch.³

It was, in reality, a part of the critical conscience of the Modern Movement, one whose origins were already apparent in the CIAM of Oterloo, as well as in the work of Louis Kahn and the Smithsons. The work which Rogers initiated relaxed the frontiers between what was accepted and what was rejected by the vanguard, dissolving the rigorous Manicheism in which the dissemination of the Modern Movement had taken place. It was a matter of revising the modern tradition, of

142 discovering the absence of a singular thread in its argument and thematic, and the complexity of its objectives, proposals, and protagonists.

To consider the teaching of the history of architecture as that of mastering the knowledge of problems, and of inculcating the will to resolve these problems in design: such new ideas typified the revision which Rogers had animated and stimulated in the younger people who worked, through their fascination with his persona, toward the attainment not only of a product of collective reflection but toward rigorous and demanding objectives. Aldo Rossi, Carlo Aymonino, Manfredo Tafuri, Guido Canella, and Giorgio Grassi were part of this group of younger architects united by a common task.

This revision was not produced in inconsequential historical circumstances. On the contrary, the boom in construction and the postwar Italian and European economic growth brought commissions for architecture professionals which in number and magnitude had probably never before been equaled in the history of architectural practice. It was within this framework of professional demands that a fundamental distinction was made between the indiscriminate acceptance of professionalism and a critical attitude which was taking shape, for the most part through the efforts of the younger members of *Casabella*. This critical attitude, especially toward the prevailing Christian Democratic social program characterized by disorderly consumption, typifies a group whose major common commitment was colored by their political and ideological proximity to the Italian Communist Party, the only major force on the Left.

This attitude was also characterized by its rejection of professionalism, or that aspect of it which was a collaboration with the system and which presupposed the purely mechanical use of the repertoire of the Modern Movement. In its place the

group proposed a planning policy more rigorous than the revisionism that Rogers had initiated: an effort to ground a theory of contemporary architecture in response to the internal exigencies of the discipline and align itself with the social, cultural, and political objectives which the Left opposition was proposing as a response to the burgeoning growth of capitalism after the war. The effort on the part of Italian Marxism in these years to define a critical cultural system found many of its most representative examples in the thought and work of the “youngsters” of *Casabella*.

Even though, with time, these positions tended to differentiate themselves, it is important to locate the common origin and problematic out of which this group of critical Italian architectural thinkers emerged. Together with the others, Grassi searched for a cultural foundation from a Leftist point of view, relying particularly on the theoretical influence of a certain group of thinkers, three of whose texts appear to have been intellectually decisive in the formation of his thinking. One of these was Max Horkheimer and Theodor Adorno's *The Dialectic of Enlightenment*.⁴ Written during the second World War, this book was one of the most definitive texts of the Frankfurt School and strongly influenced Marxist cultural reflection in the postwar years. The rejection of an alienated and consumerist late-capitalist culture, with its consequent banality of mass culture and its production of valueless objects, and the call for a return to the rational consciousness of the Enlightenment are the essential points of the Horkheimer and Adorno text. The authors' objective was to recover for an alternative Leftist culture the primacy of pragmatic reason in the Enlightenment, an act which would constitute a reconsideration of European culture from its own roots, while at the same time anticipating a revolutionary effect on reality and the critical value of an ordered and efficacious knowledge and the destruction of myth.

We are not here able to treat other aspects of the dialectical-critical dimension comprising the Adorno-Horkheimer aesthetic, of which few traces can be found in Grassi's thinking, attached as it is—as will be seen—to an Aristotelian Neoclassicist aesthetic formulated by Gyorgy Lukács, whose influence is quite explicit in Grassi's writings. But it is of interest to note here that the Frankfurt School influence would take the form of an almost pragmatic reconsideration of critical culture and thus, by association, would involve an interest in the architecture and theory of this school by way of its most objective historian, the Viennese Emil Kaufmann.⁵

Kaufmann's work would effectively become converted, from this moment on, into a bedside book for most of these young critical architects. There are two reasons for this. In the first place, the work uncovered relationships which, if not always linear, were quite apparent between the origins of consciousness and of modern society and the revolutionary project of rationalist thought in the Enlightenment.

In the second place, this relationship between the current situation and the moment of the Enlightenment was formally analyzed by means of architectural linguistic instruments which had their own formal logic, and thus entered into the notion of an internal history—an “autonomous” history in the sense described by Kaufmann⁶—of the architectural process. Mention must here be made—if only in passing—of the indirect influence of another Viennese thinker, Hans Sedlmayr, whose reactionary attitude toward modern industrial society could also be seen as a critical attitude toward bourgeois art, thereby offering a new historical interpretation of modernity, as much in formal as in ideological terms.⁷

Finally, the third *maître à penser* in Grassi's formation, as already indicated,

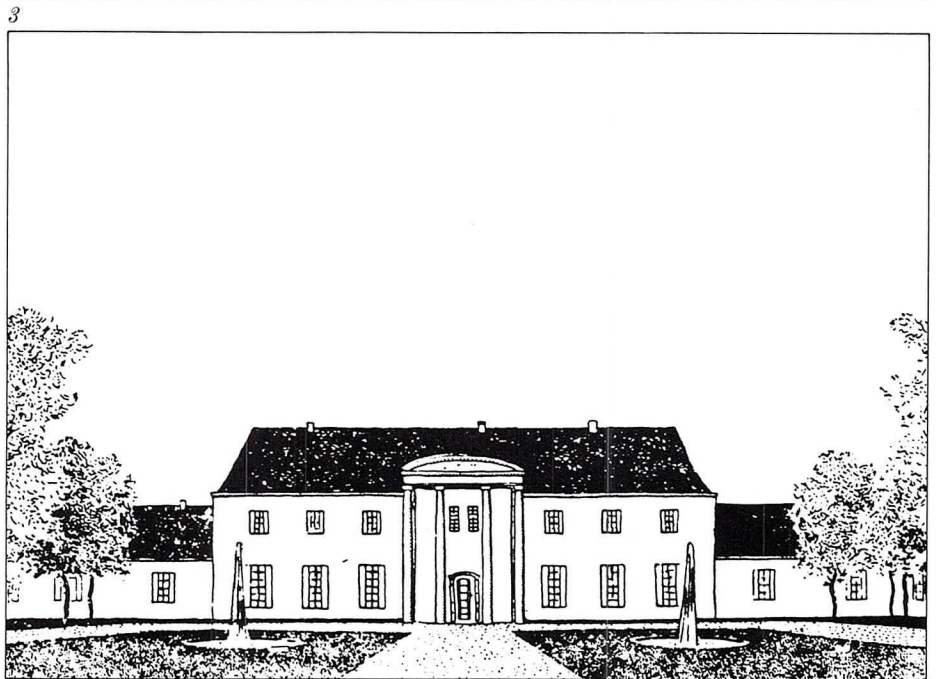
was the Hungarian Lukács, not so much through his social theory as through his work on aesthetic theory.

There are many elements of Lukács's Neoclassicist aesthetic which can be found in Grassi's discourse, beginning with the conception of mimesis, that is, with the consciousness of the object as fundamentally self-referential. For Lukács, aesthetics lay in typification, in type-making, which universalizes individual experience by endowing it with a permanent character, conferring on it transcendent human values. These values are not those of invention, creation, or adventure—all spiritual and romantic designations—but rather the key to this aesthetic is an Aristotelian and *illuministic* concept of realism as a synthesis of the universal and the particular.

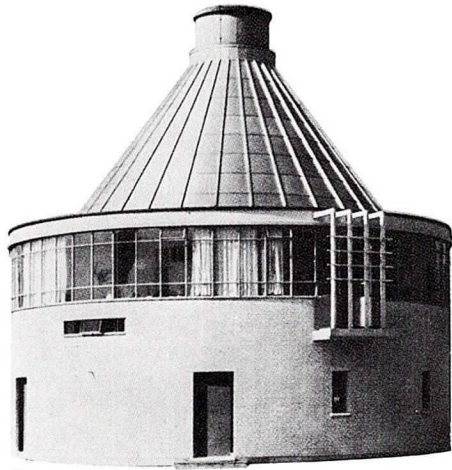
In the same manner in which the Balzacian novel in its capacity to represent the reality of society before the Second Empire is the most perfect example of Realist representation, architecture, through a mimetic process—that is, through a self-consciousness of its own history—should reach, by means of a discourse based on representation, the most authentic and most realist logic of its own production.⁸

The importance of Lukács's theory is patently evident. It is a theory which facilitates a connection between formal typological analysis on the one hand and historicist Neoclassicism on the other, and which also allows, precisely at a point of departure from a conception of Realism as the concrete particularization of the real, for the possibility of a morphological elaboration of architectural analysis and discourse.

Finally, if we add to the impact of sixties structuralism the recovery of Enlightenment rationalism as a critical consciousness in our industrial society and Lukács's Neoclassicist theory, we have, in the main, the components which make up



- 5 Central heating chamber, Arnheim.
 J. J. P. Oud, 1952–1960.
 6 Villa Allegonda, Katwijk aan Zee.
 J. J. P. Oud, 1917.
 7 Maison Casandre, Versailles.
 A. Perret, 1924.



Grassi's theory of architecture.

The influence of structuralism on architectural theory has undoubtedly been both profound and diverse. At first sight it might seem that architectural semiology was the most literally structuralist phenomenon to occur in architectural theory in the sixties and yet this is only a superficial reading, for in a less literal but more profound way the influence of structuralism on architectural analysis actually occurred along different lines. Primarily, this influence took the form of privileging formal rather than ideological criticism, with a consequent expansion of interest in the formalist tradition of analysis and criticism in art and architecture. In this sense, the timeliness of Kaufmann's contribution was double, in that it reunited a thematic interest in the Enlightenment with a methodological interest in formal analysis.

But above all it was the approach of an analytic methodology of architecture and the city by way of the concepts of typology and morphology which unchained a whole new assessment and consideration of the essential aspects by which architecture gains its definition and the instruments through which these aspects are understood. Rossi's *Architecture of the City*, in which geomorphological analysis gives rise to a description of the city,⁹ the elaboration by Aymonino of the modern concept of typology as an instrument of the rereading of modern tradition,¹⁰ and Grassi's morphological-typological analysis and classification are all contributions more directly indebted to the methods of Lévi-Strauss or De Saussure than to many of the proposals of architectural semiology which arose from a theory of paralinguistic signification, one which was hardly able to explain the underlying formal structures of architectural production.

It is hardly surprising that due to its elaboration and development of practical ex-

amples, typological-morphological structuralism passed from being an instrument of analysis to constituting a true doctrine by which to characterize an autonomous epistemology of the architectural discipline, which was, at this moment, formulating for itself an initial theoretical premise of the necessity to re-create its own identity.

Thus, for Grassi, structural analysis was a search for an autonomous discourse, a disciplinary reflection paradoxically justifying itself precisely as a consequence of the scientific and social—the enlightened and therefore collective—domains from which it had previously separated itself. To reveal the internal logic and to clarify the essential structures of the architectural discourse: these were the progressive objectives in an effort to produce a simple architecture which would be a direct outgrowth of these proposals—and consequently, the best possible answer to the empty professionalism of the architecture of an alienating capitalism.

How is this theory articulated? What makes for the movement from theory to practice? These are the logical problems which have to be clarified, and Grassi's formulation of these problems should be briefly examined. As a consequence of his understanding that the architectural discipline develops reflexively, the aspects which interest Grassi as being fundamentally architectural are those which are clearly rational and transmissible. Recurrent in Grassi's thinking is the Enlightenment notion of the handbook, which for him constitutes an example of precise knowledge, that is to say, the unified and economic exposition of precepts which sum up a body of experience. The architectural handbook synthesizes the problems of architecture on both a constructional and typological level, so that the logic of construction and the logic of spatial forms are recapitulated as simple formulas and as a repertoire which jointly exemplify the potential that architectural

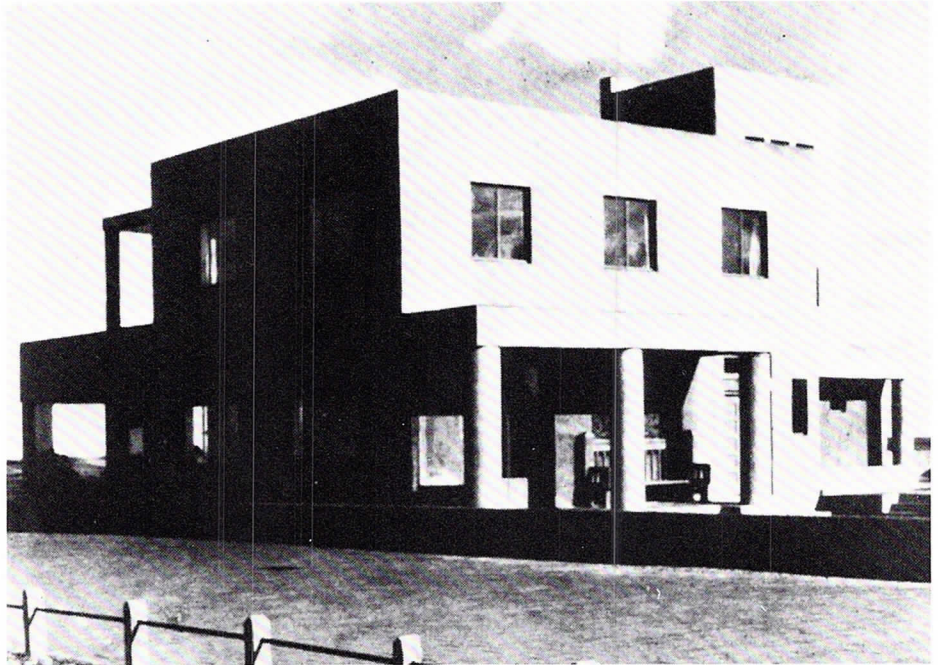
experience has shown as being the most obvious and efficacious.

In contrast to the idea of invention as a process, Grassi's method relies on classification and logical ordering. It is not a matter of inventing architecture, but rather of understanding the rationality of its practice. It may be posited that during the course of history so many architectural solutions have been put forth with such clarity that one may come to produce new architecture of equivalent quality and coherence simply through an informed evaluation of the basic repertoire.

This conception of a closed and finite body of architectural knowledge presupposes, therefore, not only the transmissible and rational nature of architecture—the first premise of practical knowledge in Enlightenment thought—but also an ahistorical idea of the production of architecture.

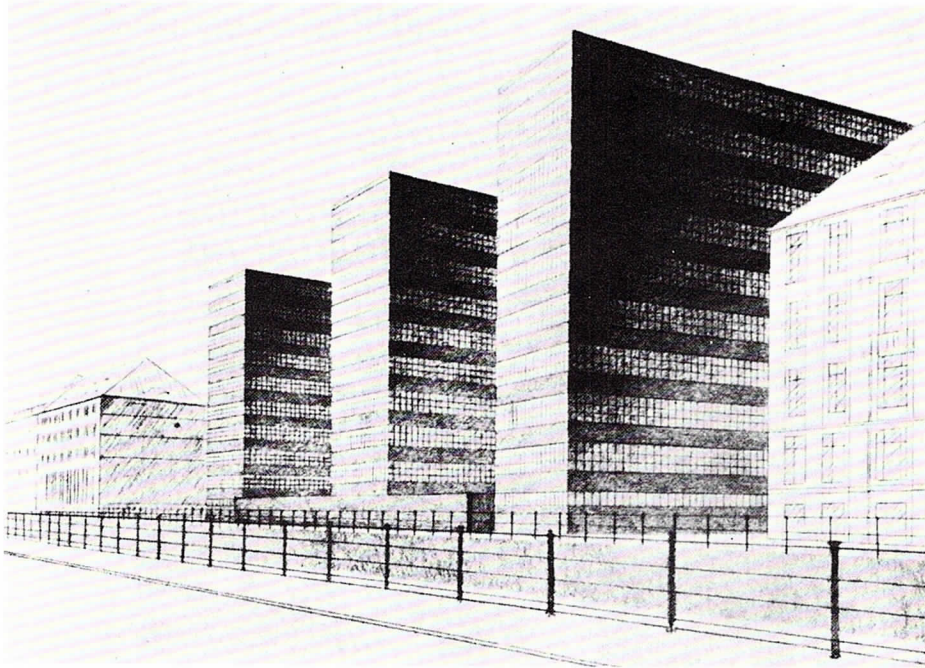
Thus, for Grassi, the repertoires of clear and elemental solutions are permanent. Reinforcing the synchronic character of his structuralist focus through formal typological analysis, he tends to downplay the notion of historical change, privileging in turn the permanence and immutability of types. A certain metaphysical, if potentially schematic, conception of basic forms seems to run through his thinking, opposing the experimentalism of modern architecture. The experience of historical architecture is revised into a great museum in which objects which have lost their role as objects of use are at the same time classified according to neutral taxonomic criteria of ordering, strictly based on the logic of their formal types.

As to the coherence between construction and form, Grassi's preoccupation at all times is with demonstrating how formal repertoires in this desired and coveted handbook are validated by the logic of good construction which constitutes a tried and true knowledge. Here too, technology is seen as the essential fact of con-



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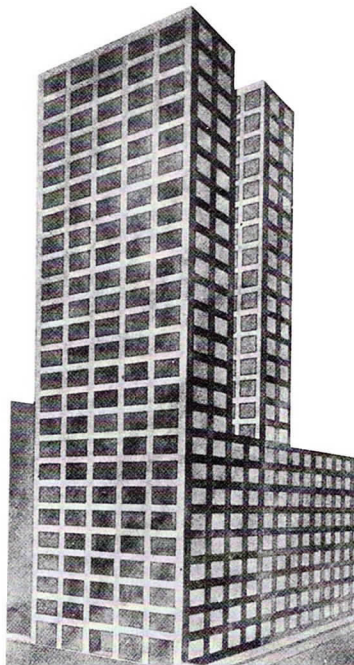
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8 *Reichsbank project, Berlin. Ludwig Mies van der Rohe, 1933.*

9 *Project for the Chicago Tribune competition. L. Hilberseimer, 1922.*



9

struction—not as a changing phenomenon subject to innovation and the laws of the social division of labor in the construction industry, but rather as a hypothetical and atemporal art of construction traversing the history of humanity and presenting as permanent the essential elements of the construction of the house.

From construction to a definition of the elements, from the elements to typology, from typology to the parts of the city: these are the successive stages by which the logic of the process of design shows itself to be coherent and linearly rational. Clearly, the hierarchical logic of the handbook continues to be present as an inspiration to this pedagogical development. It is the logic of the practice of construction which seemingly reveals itself in this process and keeps discontinuities from appearing which would impede a perception of the totality of the process of design as a simple exercise in practical knowledge.

Architecture is posed as craft, that is to say, as the practical application of established knowledge through rules of comprehension of reality and articulation of the different levels of intervention. Thus no notion of architecture as problem-solving, as innovation, or as invention *ex novo*, is present in Grassi's thinking, since he is interested in showing us the permanent, the evident, and the given character of knowledge in the making of architecture. In its Enlightenment inspiration this attitude derives from the encyclopedic conception of Diderot, in which knowledge is practical knowledge, cumulative and rational, coming into being simply as a result of its logical ordering. Just as the different practical learnings were confidently considered susceptible to ordered and logical description in the encyclopedia, so architecture can be seen in the same light.

Given that this is Grassi's conception of architectural knowledge, what then are the criteria which permit actual design?

How does design allow for the notion of free decision, of the choice of this or that solution, and of the establishment of appropriate criteria for employing the repertoire proffered by the classificatory system of the handbook?

The ultimate criterion of architectural validation is the city, which also represents the highest form of social action. Architecture, beyond the internal logic which analysis shows us, must have a will to civic responsibility. This is a fundamental notion in the Grassian intellectual system, and it derives from the Italian Leftist thinking of the sixties which tried to formulate a cultural alternative for architecture in the face of the banality and consumerism of the architecture of economic development.

This ethical-political root is the key to Grassi's discourse. Through it is introduced a point of reference which permits a cultural and social valuation of architectural proposals. The bourgeois city of advanced capitalism is the city of private ownership and individualism. To recover the public and social dimensions of the architectural work means to find its justification, its meaning as a contribution to a socialistic conception of human life.

From various points of view, Grassi's analysis attempts to understand where and how architecture realizes these social values and where, conversely, these values are negated. For example, in analyzing the different types of organization of the house, the theme of the central space, urban or suburban, appears every so often as an emblem of the collective sense which the house can and should have. The significance of the house that is partly open to public spaces, and the public sense of such common spaces, should become clear when there is a move from a typological to a cultural and political valuation of different solutions, so that the typological repertoires which analysis offers us become susceptible to an ethical-political

valuation. This could logically determine the way they are incorporated in the design of the city.

The same thing appears *analogically* in his analysis of rural architecture, where in addition to finding an almost uncontaminated relationship between construction, typology, and morphology, Grassi also discovers a sense of civic architecture, that is to say, a form of organization and design in which what is individual and private becomes incorporated and synthesized into a collective form which is at one and the same time both an abode and a unit of economic exploitation.

In addition, with regard to the problem of urban housing, it is important to view these lessons from the collective point of view; the issue of privacy is not something which should be resolved through the mere juxtaposition of isolated private units but rather through the idea of a more general residential order—urban or at least collective—one which would be capable of including the particularity of a specific urban intervention within the generality of its social significance. The city is thus transformed by Grassi into the ultimate referent, a general framework on which the knowledge and practice of architecture depend. But what is the idea of the city that is at issue here? This is in fact the point on which Grassi's intellectual exploration loses its focus. In the first place, Grassi argues that the European bourgeois city of the nineteenth century must be recognized as the clearest reference for certain values of civilization and collective life. Clearly this is linked in part to Lukács's view of Balzac. For Lukács, Balzac's novels have a paradigmatic value as the synthesis of an Enlightenment sensibility; one which typifies the characters and their concrete social condition in the bourgeois society of Louis Philippe; while for Adorno and Horkheimer, on the contrary, a critique of self-mystification and falsity in the bourgeois world leads by way of critical theory to an opening of new

possibilities for social organization. Lukács's classicist conservatism and Adorno's criticism together represent the juncture at which Grassi's thinking is found. On the one hand there is typification and the interdependence of the public and the private, both of which the bourgeois European city habitually and effectively displays as "that which we cannot ignore" (Grassi). In the second place, Grassi draws our attention to the proposals of a certain segment in the Modern Movement, to Hilberseimer and Oud, for example—who were attempting to go, earnestly and cautiously, beyond the idea of the bourgeois European city.

How is this contradiction to be resolved? This is the point at which Grassi's thinking fails to define itself and, by appealing to essentials, attempts to reconcile several different possibilities. It is very important to distinguish here between the point at which Grassi's thinking is characterized by subtlety and the point at which it seeks to force a reconciliation of opposite extremes which are in tension. While the last few years have witnessed the proliferation of a purely reactionary nostalgia relative to the European city—that is, the mercantile, proto-industrial European city with its public and private order and its architectures¹¹—Grassi never succumbs to the dangers of such a reactionary position.

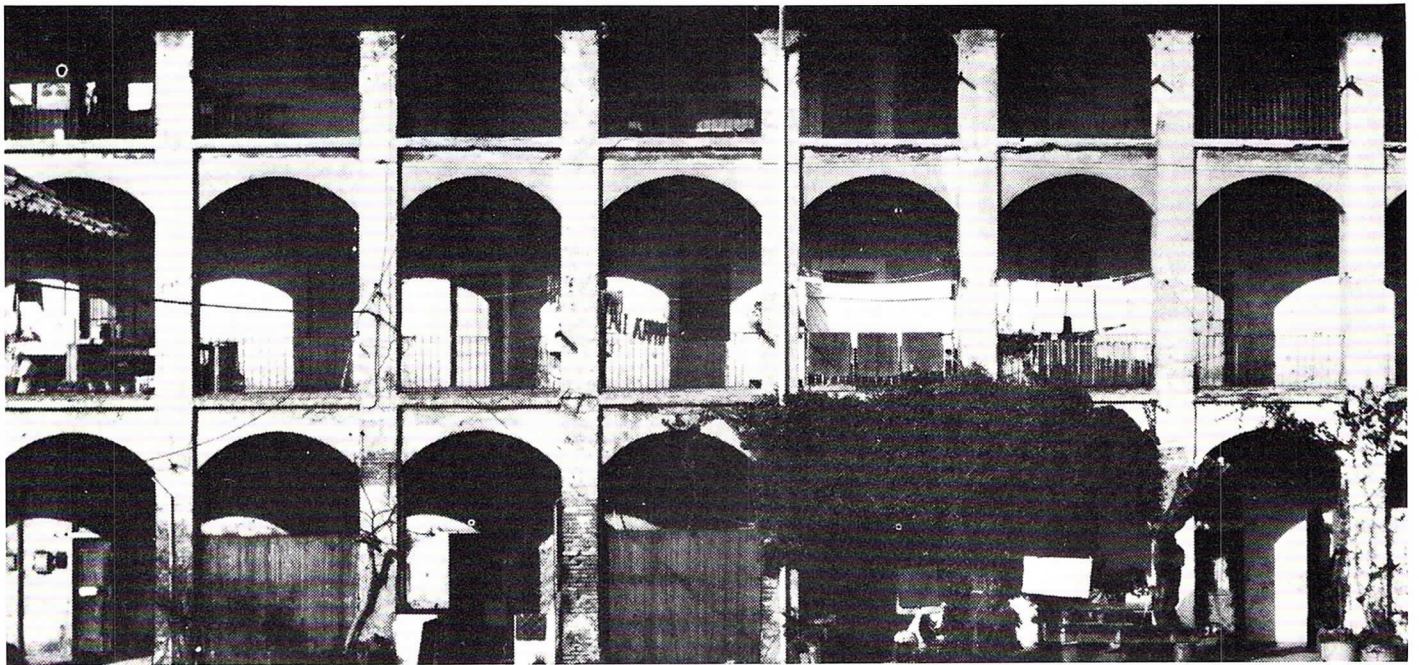
On the contrary, his effort, his search for an understanding as evidenced in his book, lies precisely in his finding modes of reasoning which, while encompassing the collective character of certain aspects of the traditional European city, do not remain nostalgically anchored within it, but which instead posit themselves as being comparable to aspects of the same sign as posited in the so-called school of modern architecture.

What Grassi's rigor and discipline demand is, in the last analysis, a volition toward system, that is to say, a determination to

10 Rural courtyard in Milan, arcaded section.

11 Farmhouse near Bergamo.

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12 Student housing at Chieti. Giorgio Grassi, 1980. Perspective view of central street.

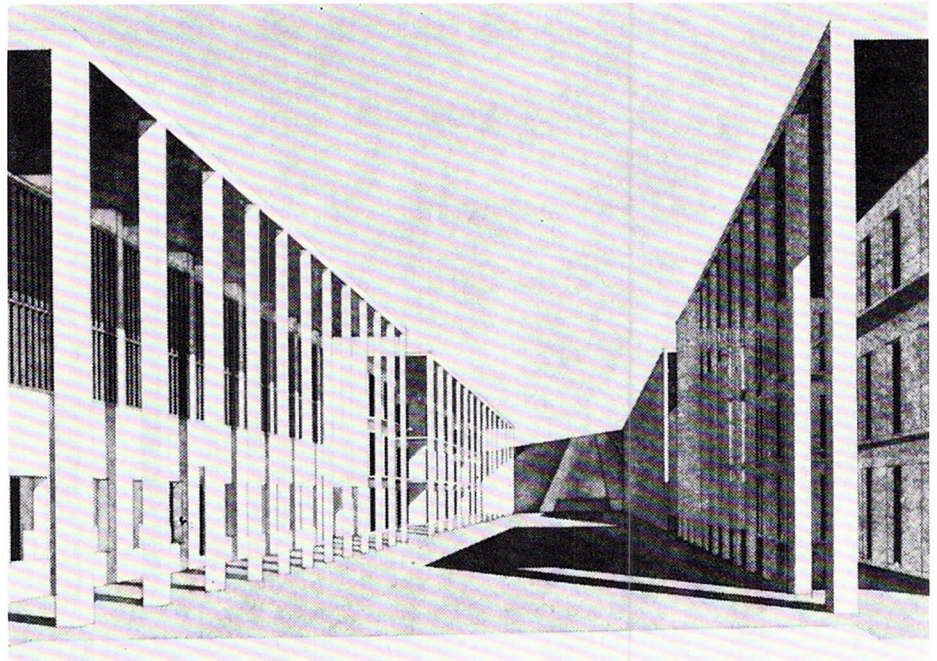
13 House for Four Brothers, Chieti. Giorgio Grassi, 1978.

maintain a repertoire of architectural forms which would be typifiable and rationally codifiable in a general system pertaining to solutions. He seeks to achieve this *without* indulging in a nostalgia for the past.

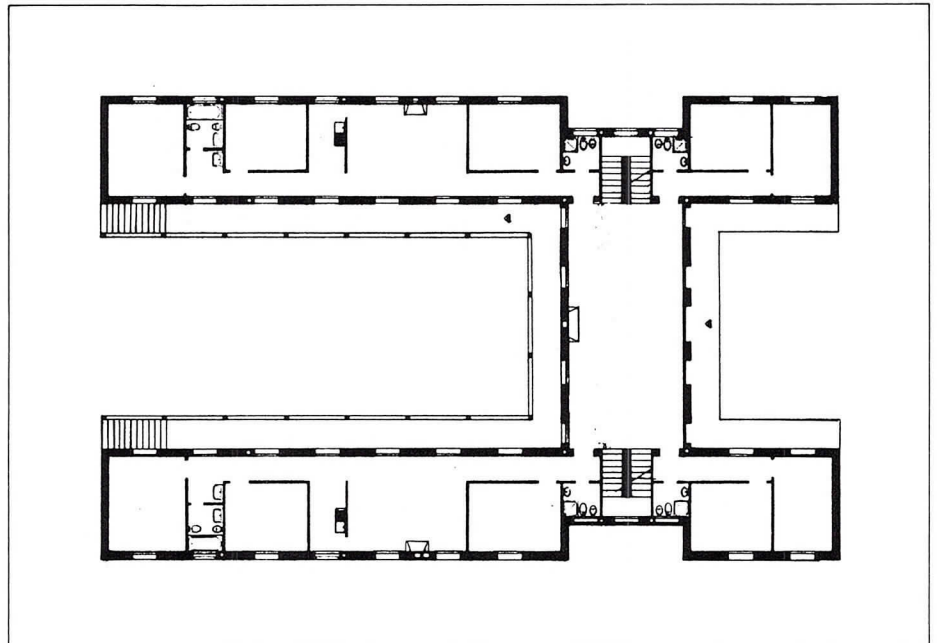
Just as Grassi's architectural drawings remain distanced at all times from any narrative or literary temptation (they resist indulging in anecdotal forms of perspectival representation, in order to concentrate more fully on a logical-geometric description of his buildings), so his criteria for evaluating the architecture of the traditional city are never either contextual or figurative. It is architecture's morphological-typological structure which he is interested in emphasizing; and it is through his projects, through the solitariness of his buildings as represented by planar, tinted washes, that he is able to determine and control both the concept and its representation.

In contradistinction to the ever more personal and autobiographical tone in Rossi's architecture, immersed in the heights and depths of dream, and the nostalgic *trompe l'oeil* re-creations of the bourgeois city in the work of Leon Krier, Grassi's work maintains a stripped-down dryness, a quality which one also encounters in the best Minimalist artworks of this period.

Minimalism too, like the work of Grassi, is born of a reflection upon the essential resources of a discipline, and it focuses on specific media which determine not only aesthetic choices but also the ethical content of its cultural contribution.¹² Through these channels of ethical and political will, the concern of the Enlightenment mentioned at the outset becomes enriched in its most critical tone. It is not solely the superiority of reason and the analysis of form which are vindicated, but rather, the *critical* role (in the Kantian sense of the term)—that is, the judgment of values the very lack of which is felt in society today in which rationality and col-



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150 lective values are systematically mocked and insulted.

In this sense, neither the iconography of Enlightenment rationalism nor that of conceptual reductionism—from the problems of design to the basic problems of architectural practice—has any value other than as the formulation of an unattainable objective. Grassi's work is not a book of good advice on how to begin to produce an architecture that is valued politically and culturally. On the contrary, it is only a reflection from the interior of the discipline on the difficulty of this task, given the actual conditions which contemporary society offers.

In the sense that his architecture is a meta-language, a reflection on the contradictions of its own practice, his work acquires the appeal of something that is both frustrating and noble. In showing both the necessity and the impossibility of being an architect in this society, in rationalizing this problem theoretically and practically, Grassi goes beyond the essentialist ahistoricism which appears to run through his thinking. His is an act of historical conscience that is profoundly alive and immediate. His Minimalist attitude is, in effect, a critical discipline in the face of our culture today.

Notes

1. Although certain of the themes of this book have already appeared in his previous work, *La costruzione logica dell'architettura* (Padua, 1967), it is in the later book that the intentions of the author are more carefully measured with regard to the general problems of current architectonic culture.
2. Harold Rosenberg, *The Tradition of the New* (New York, 1959).
3. Ezio Bonfanti, *Città, Museo, Architettura. Il Gruppo BBPR nella cultura architettonica italiana. 1932-1970* (Florence, 1973).
4. Theodor W. Adorno and M. Horkheimer, *Dialektik der Aufklärung* (Frankfurt am Main, 1947); English ed., *Dialectic of Enlightenment* (New York, 1972).
5. Emil Kaufmann, *Von Ledoux bis Le Corbusier; Ursprung und Entwicklung der autonomen Architektur* (Vienna, 1933); *ibid.*, *Three Revolutionary Architects: Boullée, Ledoux, Lequeu* (Philadelphia, 1952); *ibid.*, *Architecture in the Age of Reason. Baroque and Post-Baroque in England, France, and Italy* (Cambridge, Mass., 1955).
6. For an analysis of the concept of autonomy in E. Kaufmann see Meyer Schapiro, "The New Viennese School," *Art Bulletin*, XVIII, 1936.
7. The most influential text of Sedlmayr was without a doubt *Verlust der Mittel* (Salzburg, 1948); English ed., *Art in Crisis: The Lost Center* (London, 1978). For a "recuperation" by leftist thought see especially N. Hadjinicoulou, *Histoire de l'art et lutte des classes* (Paris, 1974); English ed., *Art History and Class Struggle* (London, 1978).
8. See Gyorgy Lukács, *Die Theorie des Romans* (1963); English ed., *The Theory of the Novel* (Cambridge, Mass., 1971). See also *Gegenswartsbedeutung des kritischenrealismus* (Hamburg, 1958); English ed., *The Meaning of Contemporary Realism* (London, 1963) and *Aesthetik*, vol. XII and XIII of G. L. Werke (Berlin, 1962-75).
9. See Aldo Rossi, *L'architettura della città* (Padua, 1966).
10. See Carlo Aymonino, *Lo studio dei fenomeni urbani* (Rome, 1977).
11. See *Rational architecture/Architecture rationale* (Brussels: Archives d'Architecture Moderne, 1978).
12. See Barbara Rose, "ABC in Art," *Art in America*, October 1965.

Figure Credits

1-13 From Giorgio Grassi, *La architettura como oficio e otros escritos* (Barcelona: Editorial Gustavo Gili, 1980).

Errata

The Editors regret that in Mary McLeod's introduction to the Plans bibliography, Oppositions, 19/20, Winter/Spring 1980, there appeared the following errors: Faisceau des Protecteurs should be Faisceau des Producteurs; Louis Dupuis, Louis Dupuy; and Henri de Jouvenal, Reynaud de Jouvenal. Henri de Jouvenal, Reynaud's father, was also an associate of Lamour. The Editors also regret that the following acknowledgment was omitted: "I [Mary McLeod] would also like to express my appreciation of the Social Science Research Council for providing funding for a year of research in Paris. Information for both the Plans bibliography and the Algiers article in Oppositions, 19/20, was gathered during this period."

Stanford Anderson

Stanford Anderson was born in Minnesota in 1934. He received his B.A. in 1957, his M.A. (Arch.) in 1958, and his Ph.D. in Art History from Columbia University, New York, in 1968. He has taught at the Architectural Association, London, 1962–63, and 1974–77, and at the Massachusetts Institute of Technology, Cambridge, 1963–present, where he is also the Director of the Ph.D. program of the Department of Architecture, 1975–present. His published work includes: “Architecture and Tradition,” in the *History, Theory and Criticism of Architecture*, Marcus Whiffen, ed. (Cambridge, Mass.: MIT Press, 1966); also published in A.A.J. (London), May 1965; “Louis I. Kahn in the 1960s,” *Boston Society of Architects Journal*, no. 1 (June, 1967); editor, *On Streets* (MIT Press, 1978).

Jean-Louis Cohen

Jean-Louis Cohen was born in Paris in 1949. He has taught at the *Ecole d'Architecture* in Nantes and is currently professor of architectural history at the *Unité Pédagogique d'Architecture* no. 1 and lecturer on architectural theory at the *Ecole Nationale des Ponts et Chaussées*, both in Paris. He was a consultant on architecture for the Centre Georges Pompidou on exhibitions such as “Paris-Moscow” in 1979. He is now in charge of the scientific direction of the *Secrétariat de la Recherche Architecturale*, in Paris. His published work includes *USSR 1917–1978*, *l'architecture, la ville with Marco de Michelis and Manfredo Tafuri* (Paris: *L'Esquerre*, 1979). He is now working on a monograph about André Lurçat and designing a restoration and an extension of Lurçat's Karl-Marx School built in 1933 in Villejuif near Paris. He is also preparing other publications on the *Weissenhofsiedlung* in Stuttgart and about Karel Teige's writings.

Francesco Dal Co

Francesco Dal Co was born in Ferrara, Italy, in 1945. He received his architecture degree in 1970 from the *Istituto de Architettura di Venezia*, where he presently teaches the history of architecture. He has lectured extensively in Europe and the United States. From 1974 to 1976 he was a member of the Commission for Architecture and Visual Arts of the Biennale in Venice, and organized and published the catalogues for the exhibition “Cinema, città, avanguardia.” His published work includes: Hannes Meyer. *Scritti, 1921–42* (Venice-Padua, 1979); *La città americana*, in collaboration with others (Bari: Laterza, 1973; American edition, New York: Abrams, 1979); *Abitare nel moderno* (Milan: Feltrinelli, 1981). He directs the “Library of Architecture” published by Feltrinelli and the “IDEM” series of *Electa Editrice* in Milan.

Ignacio Sola-Morales

Ignacio Sola-Morales was born in Barcelona in 1942, where he studied architecture and philosophy. He obtained a Ph.D. in architecture in 1973. At present he is Catedrático at the *Escuela Técnica Superior de Arquitectura* of Barcelona in the Department of Theory and History. He has also been a visiting fellow and faculty member at the Institute for Architecture and Urban Studies. Among his publications are the following: *La arquitectura del Expresionismo* (Barcelona, 1976); *Apuntes sobre Pugin, Ruskin y Viollet-le-Duc*, in collaboration with Rafael Moneo (Barcelona, 1976); *Centenari de l'Escola d'Arquitectura de Barcelona: un assaig d'interpretació* (Barcelona, 1976); *Eclecticismo y Vanguardia* (Barcelona, 1980). He has also written introductions or prologues to the following books: *Angelus Novus* by Walter Benjamin (Barcelona, 1970); *A. C., Magazine of the G.A.T.E.P.A.C.* (Barcelona, 1975); and *Problemas de Estilo de Alois Riegl* (Barcelona, 1980).

S. Frederick Starr

S. Frederick Starr was born in New York in 1940. He received his B.A. at Yale University in 1962, his M.A. from Cambridge University (1964) and his Ph.D. from Princeton in 1968. He was Associate Professor in the Department of History at Princeton University (1968–1974), founder and secretary of the Kennan Institute for Advanced Russian Studies, The Wilson Center, Smithsonian Institution (1974–1979), and Vice President for Academic Affairs, Tulane University (1974–present). His published work includes: *Decentralization and Self-Government in Russia, 1830–1870* (Princeton University Press, 1972); *Konstantin Melnikov: Solo Architect in a Mass Society* (Princeton University Press, 1978); *Il padiglione di Melnikov a Parigi* (Rome: *Officina Edizioni*, 1979); “G. Costakis: A Russian Mycaenas,” *The Costakis Collection* (New York: Harry N. Abrams, 1981). He has also published many scholarly and professional articles in various journals—*Arts Quarterly*, *Cahiers du Monde*, *Global Architecture*, *AAQ*, *Lotus*, *Architectural Design*, *Change*, and *The New York Times*.

Hajime Yatsuka

Hajime Yatsuka was born in Yamagata, Japan in 1948. He received his B.A. and M.A. from Tokyo University, where Kenzo Tange and Sachio Otani were his tutors. He is now working as a practicing architect in the office of Arata Isozaki and Associates. He won the Japan Architect competition in 1977 and 1979. He has also been active as a critic, and has published articles in the *Japanese magazines*, *Architecture + Urbanism*, *Japan Architect*, *Space Design*, and *Kenchiku-Bunka*. His first anthology, *Architecture as Criticism*, will be published in the near future.

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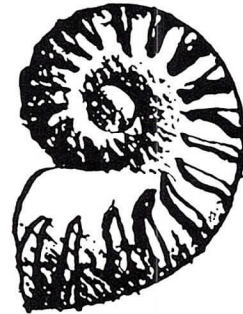
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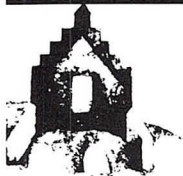
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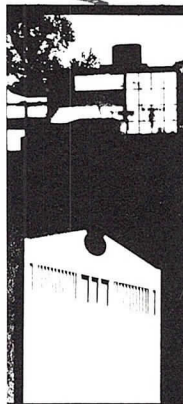
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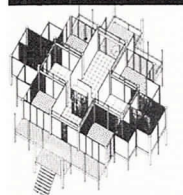
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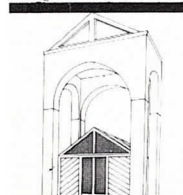
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