VIA

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CULTURE AND THE SOCIAL VISION

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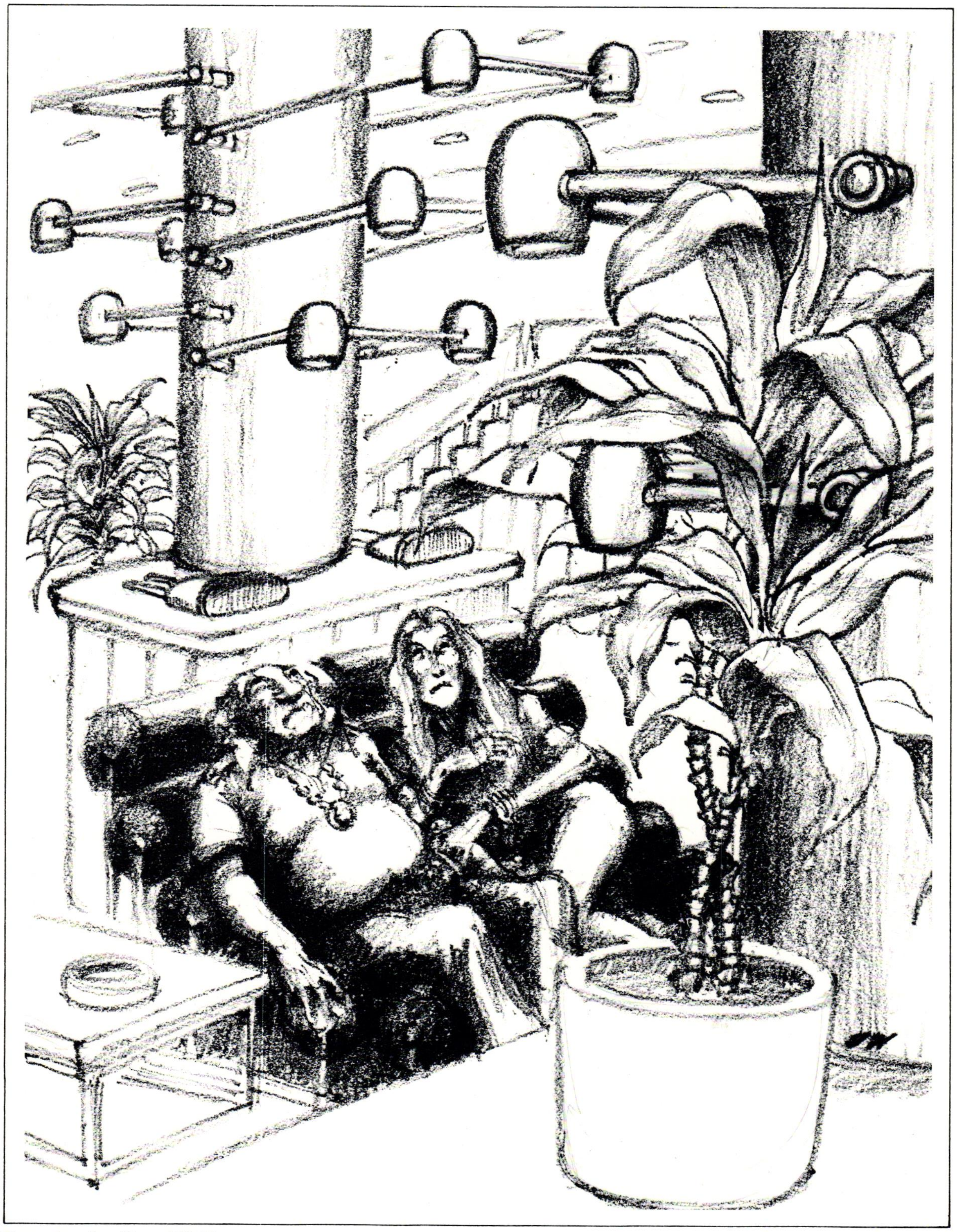

Drawing by Tom Wolfe
Great Moments in Contemporary Architecture: The Clients' First Night in the House.

INTRODUCTION
Tom Wolfe

ARCHITECTS are not the greatest egotists in the world—they can't really compete with surgeons or fighter pilots—but they usually make the playoffs. I wish I had some sort of remote-control laser-diode intragenicular scanning apparatus with which to read the secret hearts of architects as they confront the subject of "Culture and the Social Vision." I would like to record that almost subliminal dendritic spasm of the pyramids of Betz when for a micro-second the thought comes over them: "What inna namea christ do I care about *culture*?—or the *social vision*? I want to be famous!—and after that, rich!—and after that, invited to keys off the Leeward Islands by the sort of terrific people who invite Philip Johnson!" But it is only a spasm, of course. . . . After all, one can't go marching through life under banners that read: "FAME!" "MONEY!" "SMART WEEKENDS!" The architect (if he wishes to make *GA*, *AD*, or *Domus*) settles down into his public posture soon enough and undertakes the task of selecting his own particular brand of universal concern and public responsibility—his social vision, as our title puts it.

It is at this point that the intriguing part of the process begins. Architects choose their philosophical facades, only to discover, too late in most cases, that Dostoyevsky was correct: "Ideas have consequences." This is the great irony of American architectural history in the 20th century. A facade, a *social vision*—of a marvelously sectarian and bizarre sort, I might add—managed to overwhelm all but a few of the most obdurate egotists in the field . . . and has left the United States with an architecture that is bound to provide a great source of merriment for historians and their students twenty-five years from now.

The Modern movement, in its American form, comes unfiltered from the Bauhaus; and to understand the Bauhaus vision one has to go back to the student "worker-artist" enthusiasms in German universities following the first world war and the collapse of the monarchy. Like all worker-artist movements, the German version was made up of artists, architects, and designers and no workers at all, save for the charwomen who cleaned up after the meetings. All the same, it is instructive to recall the exhortations of that moment sixty years ago.

> Brothers of the world—bend your knees! The proletarian armies of the world have grasped at the stars, destroying and building at the same time in a heavenly craving for justice and love. Brothers, lift up your hearts and eyes to the firmament, and the ridiculous national boundary stone will be no obstacle to a single fatherland for us all—the World!—the Earth!

So ran a manifesto of the Novembergruppe, which included Mies van der Rohe and Mendelsohn. This was one of several utopian worker-artist councils organized on the assumption that a Soviet-style revolution (*soviet*, of course, meant *council*) was about to sweep Europe. Gropius was chairman of the Arbeitsrat fur Kunst (Working Council for Art), which sought to bring all the arts together "under the wing of a great architecture," which would be "the business of the entire People." As everyone understood in 1919, *the entire People* was synonymous with *the workers*. "The intellectual bourgeois . . . has proved himself unfit to be the bearer of a German culture," said Gropius. "New, intellectually undeveloped levels of our people are rising from the depths. They are our chief hope."[1] Gropius's interest in "the proletariat" or "socialism" turned out to be no more than aesthetic and fashionable, somewhat like the interest of President Rafael Trujillo of the Dominican Republic in republicanism. Nevertheless!—ideas have consequences!

Loos, before the war, had said that ornament was crime. Gropius and his circle

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updated that sentiment. They now depicted all ornamental toppings—such as cornices, pediments, even the wrought edges of tabletops and chair arms—as symbolic of the crowns of the discredited nobility and of the bourgeois who continued to ape them. Gropius's Bauhaus movement began with a vision of a monolithic world of architecture and design based on the scale (presumed to be humble) and needs of "the people." The holiest of all goals was: the perfect Worker Housing. Worker housing would have pure beige rooms, stripped, freed, purged of all moldings, cornices, and covings, all wallpaper, "drapes", Wilton rugs with flowers on them, and lamps with fringed shades and bases that looked like vases or Greek columns, all doilies, knickknacks, mantelpieces, headboards, and radiator covers. Radiator coils would be left bare as honest, abstract sculptural objects.

Gropius's egotism was by no means stunted, but not even Gropius dreamed that when he, Breuer, Mies, and the rest fled to the United States in the 1930's, seeking only asylum and a tolerant grin or two, they would be received instead like . . . White Gods! . . . of the sort who often turned up in native villages in the jungle movies of that period. They had no way of knowing, of course, that when it came to architecture and design—and painting, serious music, and dance, for that matter—America remained the most obedient colony a European could possibly ask for.

It must have embarrassed Gropius now and again, the way the natives installed him as the white god of architecture at Harvard. What a spectacle it was! Such demonstrations of devotion! Such prostrations! Philip Johnson, a 34-year-old museum curator at the time, immediately decamped to Harvard to be at Gropius's feet (and, by proxy, Mies's) and didn't get up again until 1960. The white gods were suddenly everywhere. Gropius and Breuer were at Harvard; Kiesler, at Columbia; Mies, at the Illinois Institute of Technology; Moholy-Nagy, at the Chicago Art Institute; Mendelsohn, at Berkeley. In less than five years, Wright and Sullivan were finished as major forces in American architecture; architectural students could have no other gods but the Bauhaus-Gotter. The movement was shot through with moralism: ornament *was* a sin; the employment of crown moldings and other pretensions of grandeur *were* acts a believer could not bring himself to commit. By the end of the 1939–45 war there was an entire new generation of American architects who had internalized the beliefs and taboos, concerning ornaments, Honest Materials, modular design, and Expressed Structure, as if these had been precoded in their genes.

Now, in 1979, architects and architectural historians are waking up as if from a cryogenic thaw and looking at the past forty years of American architecture. The school buildings all look like Sikorsky helicopter propeller plants. Every new $350,000 summer house on the Long Island shore, with its white pipe railings and hob-tread spiral metal staircases and tracks of PAR lamps, looks like the engine room of the Grand Teton dam. Every building more than ten stories is a *glass box* (the term is now used with a snigger). It's amazing! It's marvelous! This has been the American century—the century in which America grew into a giant, became the world's mightiest military power, devised the means to obliterate the earth and also the means to escape to the stars, the century in which her energies and appetites became gargantuan and every forty-eight-year-old vinyl wallet manufacturer ended up out on the disco floor with his shirt unbuttoned down to his sternum and a lot of brutal chainwork around his neck and his red eyes beaming out of his walnut-shell eyelids, doing the Robot, the Eel, or the Sado Macho until the onset of dawn or saline depletion, whichever came first. In short, this has been America's Elizabethan era, her Bourbon Louis romp, her season of the rising sap—and what architecture has she to show for it? From the shores of Long Island to the molten pavement of downtown Houston . . . nothing but dried-up humble pie left over from the "worker-artist" mental atmosphere of Weimar or Berlin in 1919. It's beautiful! From Century City to the World Trade Center . . . nothing but an eccentric sixty-year-old German student-socialist vision of Worker Housing blown up larger and larger—

Brethren! Down on your knees! Ideas have consequences!

Today, still blinking, we are assured that we are in the era of Post-Modern Architecture. As Charles Jencks has observed with some felicity, "Post-Modern" is a comforting term: it tells you what you've left without committing you to any particular destination. If anything, Jencks is too optimistic. The notion that the suddenly much-talked-of Post-Moderns have departed the little meeting rooms of Weimar is a delusion. There are no heretics in the entire Post-Modernism movement, only naughty priests and brave talk. The significance of Post-Modernism within the Modern movement in architecture is precisely comparable to that of Pop Art within the Modern movement in painting. Pop was not a rebellion. The Pop artists still religiously observed the central tenet of Modernism concerning flatness, "the integrity of the picture plane," non-illusionism. They were careful to do only pictures of other pictures— labels, comic strip panels, flags, pages of numbers and letters—so that their fellow hierophants in the Modern movement would realize that they were not actually returning to realism. Jasper Johns' proponents said that his pictures of flags and numbers, for example, were the *flattest* and most *non-illusionist* paintings yet, because they were of things that were by their very nature only two-dimensional and abstract. Pop was a leg-pull, a mischievous but respectful wink at the orthodoxy of the day. Post-Modernist architects use decoration in the same fashion, camping it up and vamping it up. Charles Moore decides to place a big piece of molding over a doorway inside a private home—as follows: (1) he puts it only at the top, leaving the rest of the doorway with the usual mean plaster Worker Housing frame; (2) he uses not casing or architrave molding but picture molding; (3) in case there is someone who *still* doesn't get it, he attaches a little strip of mirror vertically at one end of the molding so that the poor marooned piece of wood is repeated pointlessly. He does everything but mount a wall plaque saying: "For God's sake don't think I'm a revivalist—I'm merely doing architecture about architecture. I'm very P-M!"

Meanwhile, the entire enterprise is still carried on in the name of "the people," whether in terms of the new European fashion of "participatory architecture" or the American concern for "the vernacular." I love this word *vernacular.* Like the rhetoric of *the integrity of the picture plane* in painting, the current fashion of discussing architecture in the terminology of linguistics is solemn nonsense. Architecture is not, in point of fact, a language. Yet the architects now like to talk about *linguistic-cross references* and *the semantics of structure* and *syntactical nuance* and *grammars* and the *vernacular.* This is mainly euphemism used to avoid such sensitive subjects as class, status, and the priestly ambitions of the architect—when it isn't sheer brain fill. *Vernacular* is usually used to mean: "*Your* old urban workers are passe. My lower middle-class slobs in the suburbs are what's happening."

In real life, needless to say, these architects have as little to do with workers or suburban low-mids as possible and certainly don't want them as clients. The feeling is altogether mutual. In the United States the proles, *the people,* have regarded Weimar Worker Housing, in both its Modern and Post-Modern forms, as beneath contempt. As soon as they were able, which was about 1945, the urban workers began heading out to the suburbs and buying houses with clapboard siding and pitched roofs and shingles and gaslight-style front porch lamps and mailboxes set up on top of lengths of stiffened chain that seemed to defy gravity, plus all sorts of other unbelievably cute or antiquey touches, and they loaded these houses with "drapes" such as baffled all description and wall-to-wall carpet you could lose a shoe in, and they put barbeque pits and fish ponds with concrete cherubs urinating into them on the lawn out back, and they packed twenty-five-foot-long cars out front and Evinrude cruisers up on tow trailers in the carport just beyond the breezeway. The only people left trapped in Worker Housing today (better known as "the projects") are those who don't work at all and are on welfare—and, of course, the urban rich. Their version is called the "luxury highrise," the Olympic Tower on Fifth Avenue in New York being the drollest of the recent examples. Avoided by the proles as if it had a smell, Bauhaus interior design eventually triumphed as a symbol of wealth and privilege, attuned chiefly to the taste of the businessmen's wives who graze daily at the D & D Building. The last time I checked the price, which was in 1976, Mies's most famous piece of furniture design, the Barcelona chair, was retailing for $1680 and was available only through one's decorator. It must list at $2000 by now. The high price is due in no small part to the chair's Worker Housing Honest Materials: stainless steel and leather.

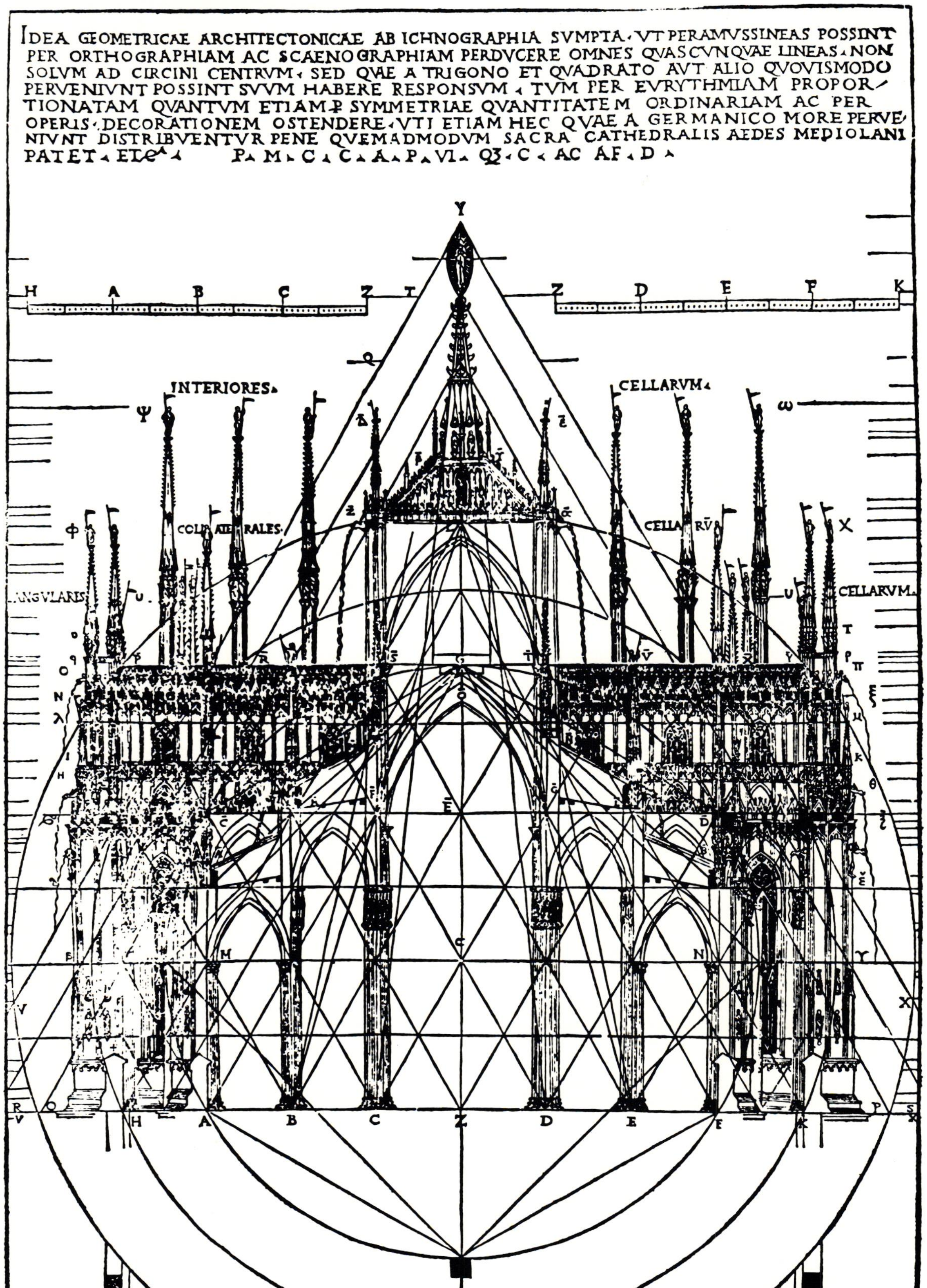
The whole business of *the vernacular* is a posture and part of what the Post-Modern architects seem to regard privately as The Game. In The Game, which is utterly serious, the architect uses each new building to make a comment—to his brother architects—about architecture. What on earth do the clients (who are corporations, institutions, government bureaus, and wealthy individuals) think of the process, assuming they are aware of it at all? It no longer matters. The sheer moral certitude of orthodox Modern architects over the past forty years has long since obliterated any resistance on the part of The Client. Hired to design an addition to an old Romanesque art gallery building at Yale that had huge windows framed in rusticated stone looking out on Chapel Street, Louis Kahn designed a blind-walled brick shed that looks like a knock-off of a W. T. Grant outlet. It even has a belt-course of the sort known as Shopping Center Modernismus about ten feet above ground level. Kahn said that the belt-line in the new building was a continuation of the plane of the main floor of the old building, which had been regrettably left hidden, "unexpressed," behind masonry. Baffled, but impressed, as if by Cagliostro or a Jacmel hoongan, the Yale administration yielded to the destiny of architecture and took it like a man. Administrators, directors, boards of trustees, municipal committees have been taking it like men for thirty years. Think of the happy times, the guffaws, the eyeball rolling, the explosions of laughter that await architecture students twenty-five years from now as the professor flashes his slide collection of "Notable Annexes in Late 20th-Century Architecture" upon the screen and adds: "But I assure you, they were *serious*!"

If the Post-Modern architects' Game were some sort of liberating frolic, along the lines of what Huizinga saw as "the play element in culture," that would be one thing. Alas . . . The Game is in dead earnest. Each architect plays it as if every other is looking over his shoulder, with hideous ridicule on a hair trigger. Year by year he pulls in the perimeters of his imagination. His theories become ever more rebellious and excited . . . as they sink into their pudding of *meta*-linguistics . . . while his work becomes timid, demure, and intramural. His heart, all-beige to the last, still belongs to the white gods. He can become a drunk but not an atheist.

Ten years ago I wrote an article called "Electrographic Architecture" in which I said that commercial designers were ten years ahead of "serious" or "avant-garde" architects both in understanding of new materials and in their willingness to break free of the orthodoxies of Modernism. Today the gap must be at least fifteen years. To tell a Post-Modernist that the work of the worst of the School of Portman hotel designers is freer, more energetic, more imaginative than his . . . would not even cause him to blink. He might even say that he has made use of their *vernacular* in his own work. The Post-Modernists prefer to look upon commercial designers as if they were primitives whose naive flair is to be drawn upon like a natural resource, after the manner of Picasso discovering African masks. But the commercial designers are neither primitive nor naive. They are usually well-educated and well-trained and have a mastery of current technologies that make, say, Moore's neon outlining—a device that is almost fifty years out of date in a commercial sense—look like the primitive part of the comparison.

I have no interest in arguing a case for "Pop architecture." I mention commercial design only by way of bringing out one final irony: today the practice of architecture is in such a strange state that straight commercial work offers the young architect more room to experiment than does architecture in its serious or aesthetic versions. The avant-garde is still tramping around in a German strike hall in 1919, thinking it to be The Celestial City minus the chandeliers and taking only a tentative look toward 1920. Somewhere out in the gloaming there must exist that independent soul who will, at last, say the hell with it and cut loose and give up The Game and bring architecture as far forward as, say, 1951. And surely he will be at least tempted to bring to his work a vision of the Dionysian spirit, the Rabelaisian richness, the Hog-stomping Baroque extravagance and rude joy-riding animal energy that started rolling through American life at that time (and rolls on today). 1951, as I say; the beginning of the second half of the 20th century. That will do for a start. There's no use suggesting, in the current climate, that anybody actually bring architecture up to date.

[1]John Willett, *Art and Politics in the Weimar Period: The New Sobriety, 1917–1933* (New York: Pantheon), 1979, pp. 49–50.



Milan Cathedral ad quadratum, ad triangulum, and ad circulum, from Book I of Cesariano's Vitruvius.

THE HISTORY OF DESIGN AND THE DESIGN OF HISTORY

James S. Ackerman

I INTEND to explain how the rhetoric and egoism of much recent monumental design and large-scale urban planning, the failure of designers to maintain contact with the consumers of built form, is at least in part to be blamed on architectural historians. The way a society views the achievements of the past and defines the goals of the present are inevitably interlocked, and when I and my fellow historians select which designers of the past are worthy of discussion and what features of their work are to be emphasized, we are applying the value standards of today and setting goals for tomorrow. I don't mean to exaggerate our importance; I owe infinitely more to inspiration from contemporary designers than they could ever owe to me but, to the extent that my supposedly objective account of the past has reinforced a view of designers as autonomous agents who must be judged primarily on their innovative "creativity," I have been a propagandist for values that now seem to me obsolete.

The close interaction between the design of the environment and the design of history is illustrated by the commitments of the three historians who most influenced thinking about architecture in the English-speaking world: Henry-Russell Hitchcock as the collaborator of Philip Johnson (in *The International Style,* 1932), which gave the modern "movement" its name; Siegfried Giedion as a secretary of the CIAM and ally-apologist of Le Corbusier and Gropius; and Nikolaus Pevsner, as editor of an influential professional journal, *The Architectural Review.*

Two of these authors can help us to clarify the issues raised by the idea of creativity as the generator of style through passages indicating their views on the roots of architectural value.[1] First, the opening lines of Pevsner's *Outline of European Architecture:*

> A bicycle shed is a building; Lincoln Cathedral is a piece of architecture. . . . the term architecture applies only to buildings designed with a view to aesthetic appeal.

From this there follows an account of churches, palaces, and villas from the Parthenon to Ronchamp. Pevsner's definition has the support of tradition; it represents an attitude that has been accepted so long and so universally in discussions of architecture that it appears to state a fact rather than a particular bias. But let us look closer: what distinguishes the shed from the cathedral is not that it is less beautiful (which one couldn't demonstrate anyhow, since it's a hypothetical shed), but that it is unlikely to have been conceived by anyone who could, like the designer of Lincoln Cathedral, have *meant* it to be beautiful. Art is thus separated from non-art not by any concrete, visible features of a particular work, but rather by the presence or absence of a presumed idea in the mind of the maker.

Whereas in Pevsner's definition the architect, as the individual endowed with aesthetic ideas, is by inference a superior being, in Giedion's classic account of modern architecture in *Space-Time and Architecture*, the ultimate value resides in a superhuman and equally elusive *Zeitgeist:*

> In the great architectural masterpieces, as in every great work of art, the human shortcomings which every period exhibits so liberally fall away. This is why these works are true monuments of their epochs: with the overlay of recurrent human weaknesses removed, the central drives of the time of their creation show plainly.

The concept comes from Hegel via Giedion's teacher Heinrich Wolfflin. In Hegel's theory of history an imminent Spirit guides the progress of each epoch and place; great works are those in which that Spirit is embodied. Giedion's architect, whose genius consists in his sensitivity to the "central drives," may be more accountable, less of a free agent, than Pevsner's. But both of them are distinguished by their ability to impart a certain *je ne sais quoi* that gives a special essence to architectural design that is absent from vernacular building. Because that essence escapes definition, discussion of the basic aesthetic element here, as in almost all earlier architectural discourse, is an invitation to mystification. It erects the whole critical structure on the presumption of intentions and abstract essences for which there is no sensible evidence: the expert or the architect can *tell* us that he sees a particular will or spirit embodied in a building, but since he cannot show it to us, we are forced to accept his word on faith. Reading the typical account of Lincoln Cathedral or of Ronchamps, we really *ne savons pas quoi* with respect to its claim to distinction: we are forced to accept the writer's intuitions about the architectural form, and we do so willingly because we are accustomed to this kind of criticism and have not been given any convincing alternatives.

II

The heroization of the architect implied in idealist criticism is not a modern invention. Michelangelo, Bernini, Schinkel, and Richardson were all seen by others and by themselves as Formgivers with an extraordinary gift. They were the descendants of Imhotep, the designer of the most ancient of the pyramids at Sakkara, the most glorified figure of his day, who referred to himself as: "Chancellor of the King of Lower Egypt, Chief under the King of Upper Egypt, Administrator of the Great Mansion, Hereditary Noble, Heliopitan His Priest."[2]

In later antiquity, architects were no longer eligible for the Pantheon: Ictinus, the architect of the Parthenon, was perhaps less celebrated than his patron, Pericles, who organized the resurgence of Athens. But at least he is remembered: in Roman times most architects were overshadowed, often to the point of historical extinction, by patrons whose names appeared in large letters on public buildings, and today we identify Roman monuments by Imperial reign, not by their designers. Even the Pantheon and the Colosseum are anonymous: on the former, Hadrian, the builder—and possibly the designer—exaggerated the vogue of anonymity by blazoning the name of Agrippa (an earlier builder on the site) across the facade.

We don't hear much of medieval architects, either: few of the great monastic churches and cathedrals are associated with the names of designers, because the formation of a distinctive individual style was not promoted by religious and cultural attitudes or by the functioning of the guild system. Master masons did, however, rise to positions of authority, as suggested by an excerpt from a thirteenth-century sermon:

> The master masons, holding measuring rod and gloves in their hands, say to the others, "cut here," and do not work; nevertheless they receive the greater fees, as do many modern churchmen. . . . in these large buildings there is wont to be one chief master who orders matters only by word, rarely or never putting his hand to the task.[3]

Apparently the preacher, who made this analogy in order to

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deprecate privilege within the church hierarchy, believed that it was improper for the supervisor (whether or not he was called "architect" or "engineer") to take on airs and to refuse to engage in physical work alongside other masons in his guild.

We find in documents on the construction of Milan Cathedral at the close of the fourteenth century that famous French and German masters were called in as consultants when it became apparent that the design conceived by the local Lombard masters was structurally inadequate.[4] Violent controversies broke out between the experts and the locals over the correct mass and height of piers and buttresses and the proper design of arches—at one point the Milanese expressed the extraordinary view that the main vaults would not require more buttressing because they would be built on pointed arches, which are vertical at the springing, "and what is vertical cannot fall." The French consultant at the time, Jean Mignot, replied with an aphorism that has long outlived his reputation as an architect: *"Ars sine scientia nihil est,"* by which he meant "technique without (structural) theory is nothing"; he wanted to tell the Italians that all their experience in masonry construction did not add up to a theoretical capacity adequate to large-scale designing. His expertise consisted in knowledge of how to plan safe and structurally economical buildings. Like certain engineering works of our own time, they probably were, incidentally, elegant, but there is no hint that either he or his adversaries had the kind of intention to create aesthetic form that modern architectural historians attribute to the designers of all periods of the past. Even the vocabulary for expressing aesthetic aims was lacking—*ars* meant "technique," and there was no equivalent to the connotations conveyed by the modern term *art* or *fine arts.* While those passages from medieval descriptions that praise the achievement of an architect or patron can sometimes be read as aesthetic criticism, the virtues actually are defined in terms of craftsmanship, labor, elegance—especially of materials—strength, and piety, not inventiveness or novelty in design. The following fourteenth-century description is an instance:

> Truly then, this master (Richard of Ditensheim) built a church of marvelous workmanship, elaborately adorned within and without with images of the saints, with molded window frames and piers, a work that caused much toil and large expenditure, and even now today it so appears to human gaze. Thus, as people come from all directions, they marvel at so noble a work, praise the master, revere Richard as the servant of God, rejoice that they have seen him, and his name is spread abroad far and wide . . . and he is very often mentioned by those to whom he is not known.[5]

The radical change in attitude and vocabulary from the medieval to the modern form of evaluation and description occurred in the Renaissance, or more precisely, in the ambience of Humanism. Humanism was the cultural accompaniment to the new economy of capitalism: both took form in the fourteenth century, particularly in Italy, and in communes and other free cities, where merchant families formed a new privileged class that supplanted or outstripped the feudal aristocracy. Humanism did not mean humanitarianism, as it sometimes does today, but the study of ancient literature, history, and rhetoric: the humanists were scholars, essayists, editors, and moral philosophers. They literally invented the concepts of creativity and of genius in the sense of a unique capacity to "create."

Creativity was a faculty that prior to the humanists had been God's alone. When it was attributed to artists as well, it implied overtly the reflected deity. The great artist had the capacity to make something out of nothing by virtue of his genius *(ingegno),* which made him superior to other mortals, though of course still dependent on the original Creator who had made, or was, the higher order that was reflected in great works of art.

> The building of something that seems functional, and which is without doubt suited to the program and to the available funds is not so much the work of an architect as of an [ordinary] builder. But to design in advance, to formulate by good judgement what is to be resolved and perfected in every part, that is peculiar to the genius that we seek.[6]

This passage from the first Renaissance treatise on architecture by Leone Battista Alberti (1404–1472) is the first that differentiates the architect from the builder by virtue not of his specialized learning but of his possession of an intangible gift of the spirit. It is, incidentally, the original source of Pevsner's distinction between the bicycle shed and the cathedral.

Alberti, the key figure in formulating the concepts both of creativity and of art as we think of it today, was a gentleman-architect and amateur painter, a humanist and philosopher, who wrote immeasurably influential treatises on painting (1435) and architecture (before 1450), as well as on a wide range of other subjects: he was the archetypal universal man of the Renaissance. In a way, Alberti was the opposite of his equally famous and versatile contemporary, Filippo Brunelleschi (1377–1446), who belonged to the medieval tradition of the master mason with his *scientia,* but at the same time to the prehistory of modern experimental science—a great engineer, architect, mechanic, and inventor, who expressed himself more readily in numbers and geometrical figures, drawings, models, and didactic demonstrations (like the first picture constructed in rationalized perspective) than in words. He did not think of himself as a superior being with unique endowments, though he might have granted that he was a cleverer craftsman than his contemporaries.

Alberti's system of architectural design was used on a mathematical system of proportions associated with contemporary music theory. He proposed that the intervals and harmonies of music (which are translatable into numerical ratios that are applicable to spatial measurements) must be identical to those of architecture, since both could reflect the harmony of the celestial spheres.[7] This derived from a fundamental proposition ultimately rooted in Platonic philosophy, that there is an ideal structure in the universe which is not apparent in the real world, but which may be grasped by superior minds and described most readily in the pure language of mathematics. The association of architecture and music was therefore not just an ingenious metaphor, but was ordained by the order of Nature: the shared harmonies might be revealed in other arts and in all spheres of human activity. It follows that the architect can no longer be just a master mason trained in structural theory, but must have wide learning and the capacities to understand, like Plato's philosopher-king, the mysteries of the universe.

In thus associating architectural and other artistic form with an ineffable and abstract ideal, Alberti became the father of the *je ne sais quoi* of criticism:

> What contribution the hand and imagination of man can [make to] confer grace and dignity [to things] can scarcely be satisfactorily explained, though it may be useful to imitate those who are held to have designed fabulous works, works that are not scorned by prudent men. . . .[8]

This passage, in placing superior architectural form beyond the reach of rational discourse, attempts to salvage the cause of criticism by deferring to the judgment of "prudent men"—evidently members of the educated elite which Alberti hoped architects and other artists would join.

Albertian theory was, in fact, not just aesthetic, but sociological as well, to the point of demanding a change in the existing class structure with respect to artists. Efforts at the liberation of the artist from the restrictions of the guild system apparently had started spontaneously when master masons began to affect rod and gloves as symbols of privilege; but significantly, we hear of these affectations only from a writer who scorned them. Alberti, on the other hand, sought to justify philosophically the elevation of artists into the privileged class by inventing the concept of genius and by basing art on higher learning in the liberal arts.

This sort of social mobility was inconceivable in the Middle Ages. It became possible first in the urban centers of the early Renaissance when gentility, which formerly had been attainable only by descent or by the favor of a feudal prince, began to be acquired by commercial leaders. What was possible for them, Alberti realized, was possible also for artists, whose claim to privilege was based on a spiritual rather than a material capital, and whose careers were to be closely allied to those of the merchant princes.

The architect-gentleman envisaged—and enacted—by Alberti was more of an entrepreneur than a mason. On becoming liberated from the restrictions of the guild, he also lost touch with the craft, and now the *ars-scientia* conflict that a generation before had split technique from structural theory began to be seen (as it has been ever since) as an antinomy of design (*ars* as "art") versus technique (*scientia* as "technology"). Alberti, after making preliminary drawings, rarely appeared at the building site. He normally had an expert technician as foreman and, for out-of-town commissions such as the churches at Rimini and Mantua, communicated his wishes by mail. Unlike Brunelleschi, he was not skilled or inventive in construction, and his sections on building technique in the *De Re Aedificatoria* were no more useful to contemporaries than those of Vitruvius, from which they were borrowed. In this he was not alone: of all eras in the history of architecture, the Renaissance was the least inventive in structure.

With the help of humanist schooling, the new architect-gentleman rose on the social scale only a generation or two later than his new merchant-client. The association of the two assured the architect of an income and gave the Medicis and Gonzagas and Sforzas an agent capable of translating their princely ambitions into monumental symbols. After 1400, architects rarely worked for the community, as they had in the brief period of the communes and free cities, building the great medieval town halls and markets. They became again the ally and spokesmen of the privileged minority—inevitably, since there were no other sources of income. From the social and economic perspective of the architect, Alberti's theoretical justification for uniqueness and individuality appeared, as it were, in the nick of time.

My extended speculation on the early Renaissance is justified by the fact that the following half-millennium has accepted the image of the architect, of the architectural profession, and of the history and criticism of architecture formed at that time, and particularly by Alberti. We are, for all our pretensions to the contrary, still in the Renaissance.

I have implied above that the architect's rise in social status and his alliance with political and economic power were somehow related to formal abstraction in design: why should this have been so? First, because his new social position tended to isolate him from the community as a whole and thus to cause him to regard a building as a unique jewel set off for contemplation rather than as a cell in a living social organism; and second, because powerful and wealthy patrons wish to use architecture to express their taste and their claims to superiority, and both these aspirations encourage abstract form over concreteness and utility.

The point is borne out by the history of urban design in the Renaissance and Baroque periods. In later medieval communes, the principal aim of citizens' committees was to facilitate the functioning of the city by discrete interventions that removed obstructions, straightened and widened streets, carved out squares (usually irregularly because of concessions to competing functions and to topography), improved and expanded walls and gates, and by other projects intended to respond to the needs of the community; the responsiveness was such that one can often read the institutional structure and functions of a town from its pre-Renaissance plan, where it survives. Renaissance and Baroque town planning, by contrast, rarely was stimulated primarily by communal functions: squares and allees often were cut by rulers arbitrarily into the urban fabric, interrupting and destroying established routes and places of communication and commerce. They were mostly conceived to be contemplated (if they also facilitated, so much the better) and to symbolize: monumental statuary, fountains, columns, and arches became the essential adornment of urban rhetoric, sustaining by allusion the ideals of the ruling class.[9] Most modern urban design and renewal became a pale descendant, similarly leveling chunks of the historic city to make room for imposing conglomerations, but now without a coherent message beyond what could be communicated by size and the display of wealth: a Renaissance process cut off from the philosophy and symbolism that gave meaning to Renaissance design.

The theory of urban design from the Renaissance on has been even more divorced from urban life, more arbitrary, than the practice. It has focused on the form of utopian communities rather than on the problems of adjusting the inherited environment to contemporary functions, and the utopias have mostly been both inachievable and rigid. From Filarete's Sforzinda to the Ville Radieuse, Broadacre City, and the projects of Tange, the dominant forces in planning theory have been rendered ineffectual by the assumption that existing cities could be made more beautiful or habitable if inspired by the image of the ideal city, and by the reluctance of the theorists to start off from a critique of the existing structure of power. In fact, most post-Renaissance urban utopias would have been achievable only through an increase in political and economic oppression.[10]

In spite of these limitations we historians, in teaching and writing, have taken up the Renaissance cause uncritically. The literature is sparse on the medieval or later towns that evolved organically out of communal functions and rich in treatments of ideal plans, of Versailles, Haussman's Paris, and Chandigarh. Our aesthetics have been based on the same philosophical idealism as those of the designers: we have made the same social contract, to voice the ideology of the dominant establishment (witness the fact that universities have sponsored some of the most arbitrary architecture in recent times).

III

I have used the word *ideology* not because Marxist criticism has made it fashionable, but because it denotes a concept that explains how designers and historians can for so long have failed to reexamine the formalist aesthetics of Renaissance idealism in the face of the failure of industrialized cities and the chaos of our environment. An ideology is defined as a largely unconsciously acquired structure, a pattern of thought and action ingrained in the individual by a culture; it is not a particular philosophy or faith that one elects or rejects but rather a state of mind that "has the social function of maintaining the overall structure of society by inducing men to accept in their consciousness the place and role assigned to them by the structure. At the same time, it works as an obstacle to real knowledge."[11]

It is, in brief, the societal equivalent of Freud's superego and serves similarly to repress conflict and to preserve the status quo. We don't know we have an ideology or a superego until things begin to collapse, which perhaps is the reason that Marx and Freud come to formulate similar concepts in the wake of the Industrial Revolution. A whole century later, designers and historians are still trying to deal with the failure of architecture as if it were the fault of clients or of the building trades rather than of an ideology which we ourselves share and promote; perhaps this is because Marxists have avoided architectural criticism.

A striking instance of the workings of an ideology is our own invention, in all earnestness and good faith, of the myth of a revolutionary modern "movement" in architecture when, as has become clear, the revolution was a brilliantly successful strategy (though not planned as such) to keep architecture in the grip of Renaissance idealism just at the moment when the exhaustion of the tradition threatened to do it in. A case in point would be the supposedly revolutionary program of the Bauhaus, which dominated "advanced" design education in America into the 1960s and beyond.[12] The Weimar program of 1922, while it rejected the sort of historical allusion that had remained central to the then-dominant Beaux-Arts curriculum in favor of a new machine aesthetic, still clung to the idealist core and to the ethos of creativity of Renaissance aesthetics. Walter Gropius described the approach in 1923:

> Although we may achieve an awareness of the infinite we can give form to space only with finite means. We become aware of space through our undivided Ego, through the simultaneous activity of soul, mind and body. A like concentration of all our forces is necessary to give it form. Through his intuition, through his metaphysical powers, man discovered the immaterial space of inward vision and inspiration. This conception of space demands realization in the material world, a realization which is accomplished by the brain and the hands.[13]

We managed to sustain the myth of a modern revolution for a long time, until the passing away of that great generation of architects—Wright, Le Corbusier, Mies, and so on—whose brilliance and depth justified our adulation and until it began to be exploded by less sophisticated critics, like those who burned out Rudolph's art school at Yale and wrecked the Pruitt-Igoe housing development in St. Louis, and finally, in a sort of revolt of the elements themselves, by the winds that sucked the elegant reflecting windows from Pei's Hancock Life Insurance building in Boston.

The concept of the unconscious pattern that integrates a culture and the individual's relation to it which we find in Marx and Freud gives us a chance to penetrate more deeply into our own motivations as designers, historians, and critics and to understand better the meaning of architecture in the past. There is a link between those nineteenth-century origins of the concept and linguistic (especially semiotic) and structuralist systems that have influenced discussions of the last decade on architecture (contemporary structuralist methods such as that of Levi-Strauss owe a good deal to earlier linguistics, but nevertheless linguistic systems like Saussure's semiotics can be thought of as genres of structuralism). Structuralism could be called the methodological common denominator of a number of contemporary systems of explaining patterns of human behavior in terms of a cultural structure, unconsciously or consciously adhered to, that manifests itself in many and diverse spheres of behavior.[14]

The appeal of structuralist methods since the last war is due to the hunger for an approach to human affairs that could be grounded in social and cultural realities, after centuries of abstract idealism, and an approach that would be synthetic, after generations of the positivistic analysis that led to the reduction of history to a tally of names and dates and to the reduction of design to a computer operation. Structuralism has had more impact on recent architectural thinking in England and America than Marxist theory, partly for political reasons and partly because the Marxist method that stimulated fine criticism of literature and figural art has not produced valid practical criticism in architecture: buildings are so directly linked to clients and to social institutions that Marxists cannot think of those made in bourgeois societies as primary objects and tend to treat them as counters in social-economic analysis. On the other hand, linguistic-structuralist methods, in spite of their popularity, have not produced a body of actual criticism or historical interpretations either, but much discussion about how it would be done if one were to do it.

IV

I sense that we are at the point of turning these impulses into an approach to architecture more relevant to our time and more responsible than that which exalted abstract form and space and deified the Formgivers. In this approach, the architecture of the past would be interpreted, and that of the present be conceived, as an outgrowth of the structures that articulate societies and cultures and of those that bring the individual designer into touch with the values of the community.

Two obstacles have to be overcome, however, in formulating a theory of design as the interpretation and articulation of communal values.

The first is the difficulty of formulating a nonidealist definition of "communal values." The temptation is to figure a utopian community of aspiring men and women—"the people" of radical rhetoric—joining together to express common needs and hopes with respect to their environment. In post-industrial bourgeois society most communities are formed, not to fulfill democratic ideals but to defend special interests that are often antithetical to the well-being of the majority. The designer or planner who wants to respond to "communal" needs is forced to define a community as best he can, with all the disadvantages that attend such dependence on arbitrarily conceived classifications. Furthermore, experience in participatory design has shown how little those selected as representative "users" of buildings and urban complexes are able to articulate their needs: knowing only the environments in which they have lived their lives up to the moment at which the opportunity to choose is thrust upon them, they have no vision of the possibilities of other environments. Moreover, the designer rarely finds the interests of the client and of projected users to be in harmony, particularly where private investment is involved. Finally, the traditional definition of the "needs" of individuals and groups is beginning to be challenged on the grounds that a society as fluid, as mobile, and as unpredictable as ours is best accommodated by design solutions of maximum flexibility and minimum functional specialization.[15] Yet, for all the amorphousness and inconsistency of whatever we regard as the community of users, buildings are made to be used by collections of real people—present and future—whose ways of life and preferences can be attended to or ignored in varying degrees by designers, and my chief aim in this essay is to suggest points of view that encourage attending and discourage ignoring.

The second challenge to a new theory is to find a definition of architectural invention and imagination that does not fall back on the mysterious abstract values of the Renaissance tradition, with their elitist implications and their isolation of the designer from his surroundings. A strictly social theory and criticism achieves that end by defining values in architecture and environmental design in terms of the greatest benefit (convenience, health, comfort, independence) for the greatest number: a good design is one that is most responsive to those who are expected to use or to be affected by it (this standard can be applied reductively, in a strictly utilitarian sense, but it is also potentially applicable to the psychological, cultural, and other needs of social groups).

But the glaring weakness in a strictly social theory is that every work of architecture or environmental design has to be validated by some external social referent (the bodily or mental well-being of users): there is no room for specifically architectural values. By "architectural values" I mean, first, the effects of organizing the basic elements of environmental form—light, shape, color, texture, the conformation of spaces—and second, the potential for symbolic expression. Architectural values make it possible for a church (synagogue, mosque) interior to convey not just a responsiveness to the demands of liturgy and congregation, but feelings of aspiration, encouragement to meditation, and a sense of connection with a religious tradition; or for a public library to provide, not simply optimal conditions for reading, but a statement of its accessibility and significance for the community and an environment that not only accommodates readers but actually makes reading seem more appealing than non-reading.

Although such values are the same as those that have been emphasized by traditional idealist theory, I would not justify them in reference to ineffable standards of quality, but in terms of the concrete experience we have as we grow up in a particular culture. We acquire our predilections and our standards through our contact with one another, our responses to our natural and man-made environment, and our inheritance of the past experiences and commitments of our culture. We call a particular effect of light exciting or an interior justly proportioned because they call up pleasurable responses that we have had or that we have been prepared by acculturation to have. The idea of just proportions, for example, is a characteristically culture-bound criterion; our own is the product of Mediterranean civilization and is inextricably linked to the role played by geometry in Western thought; the claim of idealist theorists that there are absolutes of proportion that are valid for all humanity is unfounded and is characteristic of the cultural chauvinism of the idealist tradition.

These observations lead me to suggest three basic critical criteria in assessing the experience of buildings and designed environments.

1. *Personal Experience.* The designer's interaction with other individuals and groups launches the architectural and planning process. Design is generated through personal transactions among the designer, the client, the craftsmen, the users, the representatives of government, and so on. The aim of the transactions is initially to resolve the diverging interests of those directly and indirectly affected by the project at hand, but with consideration for the values of the society as a whole and for the future impact of present decisions. The designer with such responsibilities is no longer the genius inspired by an inner voice to "create" the exceptional work, but becomes in a sense the very opposite: the absorber of experience, the interpreter of the culture in its consistencies and in its changes, the voice of those about him—a maker of things, whose skill and value increase to the extent that he is able to distill out of his experiences in the world both an assessment of current needs and a grasp of potential future meanings and functions.

2. *Experience of the Environment.* Every building is planned for a natural living environment, and the majority of buildings for a man-made environment as well. A work of architecture in its relation to this dual surrounding is like an organ transplanted into a strange body: it must, if the transplant is to succeed, not only be suitable to its host in function and design, but must nourish it and be nourished by it. This symbiotic relation to nature and to other buildings and objects is an essential factor in design that—apart from the Vitruvian admonition to select a healthy site—has been slighted in criticism and history and has been given merely lip service by generations of designers, whose goal has not been to integrate their work into a context but to create the unique form that will distinguish itself from everything around it.

3. *Experience of the Culture.* Every design has a cultural as well as a physical environment. By virtue of being conceived at a particular time and place, it inevitably reflects and contributes to the culture from which it is generated. The cultural tradition supplies the potentialities of meaning, form, and structural technology that makes it possible for structures to stand securely and to communicate: tradition is the language that the designer, the builder, and the public have in common. Tradition does not, as was often implied in modernist theory, restrain innovation, but rather stimulates it.

Cultures have weak as well as strong conformations and traditions, and good architecture builds on strengths. In the present unhealthy climate of our architecture and social relations, the strengths of the culture do not come to the surface unaided, and it is the responsibility of the architect, the critic, and the historian, not to determine unilaterally what the most promising alternatives may be, but to share in forming and in advising the groups who seek them.[16] Innovative design without a community that can absorb it is a futile gesture.

V

In the triadic system I have suggested to replace the traditional Vitruvian categories of structure, function, and aesthetic pleasure, the aesthetic element loses an autonomous and central position. This is not because I do not think that good architecture is pleasurable or inspiring as well as useful, but because I believe the pleasure and inspiration to be rooted in individual emotional and psychological needs, in our experience with the natural and manmade environment, and in responses for which we are prepared and conditioned by our culture. Because I am convinced that there are no aesthetic absolutes, that our liking and admiration for artistic achievements come from life experiences, I am proposing a critical-historical method based on life experiences rather than on transcendental ideals that cannot be demonstrated and that have about them a nasty aura of exclusivity.

I call exclusivity nasty because my value system is based on the community not just as a social unit but as a value, embodying human sympathy, interaction, mutual support, collaborative action, and harmony with the environment. The role of the architect in such a community would no longer be that of Formgiver, but rather that of the responsive agent. The architect, rather than overriding human shortcomings, as Giedion put it, would seek to deal imaginatively with them; and Creativity, rather than being a godlike realization of an abstract ideal, would become the sensitive shaping of the existing potentialities of society.

As designers and commentators, then, we should seek not monuments that illustrate unique flashes of genius, but instances of institutions evocatively expressing themselves and their bonds to the surroundings through built form. We cannot start this search with the assumption that the bicycle shed will be outstripped by the cathedral, or even that a community can build better with an architect than without one. As historians, rather than focusing on the development of architectural style in the formal sense, we should trace the story of the response of buildings to individuals, environments, and cultures and their institutions in the past. This suggests less emphasis on evolution and more on the synchronic treatment of chosen moments of the past through investigation in depth of the relation of buildings to the forces that generated them.

I have tried to show that the traditional theory of architectural invention of history and of criticism formed in the Renaissance is obsolete in a post-Renaissance society that aims to realize democratic principles, and I have proposed at the close the bare outline of a theory better suited to our present condition. I am assuming that the cohesive elements in our culture and society are stronger than the disruptive ones, without underestimating the antagonisms of individuals, classes, races, and ethnic/religious groups that may in time make reference to common values futile. Other recent theories have rejected the possibility of meaningful interaction between contemporary bourgeois society and design; they propose an abstract architecture only secondarily related to the accommodation of life as it is now lived. That solution seems to me to be only superficially neutral and detached: in a society controlled by power, privilege, and bureaucracy, a standoff position is in effect as elitist and as supportive of the establishment as Renaissance theory. The socialist alternative—replacement of our social-economic structure by a communal one—whatever its value as a political solution, has not led to any architectural principles applicable to existing conditions. My purpose is to suggest a way of thinking and talking about architecture of the present and past that is valid for this time and place and that can help to form an environment as egalitarian, as responsive, and as humane as possible.

NOTES

1. I do not want the critical scrutiny given here to isolated statements by Pevsner and Giedion to obscure my great admiration and respect for these two mentors, who opened my eyes to so much in architecture and who stimulated me to approach issues in a way that made it possible to find an alternate path.
2. Spiro Kostof, Ed., *The Architect: Chapters on the History of the Profession*, (New York: Oxford University Press), 1977, p. 6. This is a good source for documenting the status of the Western architect from antiquity to the present.
3. T. Frisch, *Gothic Art, 1140–c. 1450* (Englewood Cliffs, N.J.: Prentice-Hall, Inc.), 1971, p. 55.
4. J. S. Ackerman, "Ars Sine Scientia Nihil Est: Gothic Theory of Architecture at the Cathedral of Milan," *The Art Bulletin*, XXXI, 1949, pp. 84–111.
5. Frisch, *op. cit.*, p. 56. Meyer Schapiro, in a fine article devoted to criteria of value in medieval art ("On the Aesthetic Attitude in Romanesque Art," *Art and Thought, Issued in Honor of Dr. Ananda K. Coomaraswamy on the Occasion of his 70th Birthday* (London: Luzak, 1947, pp. 130–150), emphasizes documents—mostly pre-Gothic—that seem to conflict with my interpretation in their praise of individual artistic achievement. He points out, however, that the aesthetics of Thomas Aquinas did not admit of individual "creativity," which may be an indication that the emphasis on individual invention decreased in the later Middle Ages.
6. L. B. Alberti, *De Re Aedificatoria*, G. Orlandini and P. Portoghesi eds. (Milan: Edizioni il Polifilo), 1966, IX, 10, fol. 173v.
7. R. Wittkower, *Architectural Principles in the Age of Humanism* (London: Warburg Institute, University of London), 1949 (and later edns.), especially Parts I and III.
8. Alberti, *op. cit.*, VI, 4, fol. 96.
9. A characteristic instance is the square in Vigevano in Lombardy, designed by Bramante for Lodovico Sforza, partly as an emphatic demonstration of the Duke's dominion over the once-rebellious town. The history has been traced and interpreted in a way that can serve as a paradigm of a new historical awareness by Wolfgang Lotz, "The Piazza Ducale in Vigevano: A Princely Forum of the Renaissance," *Studies in Italian Renaissance Architecture* (Cambridge, Mass.: M.I.T. Press), 1977, pp. 117–139.
10. See Manfredo Tafuri's critique of modern planning in *Architecture and Utopia: Design and Capitalist Development* (Cambridge, Mass.: M.I.T. Press), 1976.
11. D. Agrest and M. Gandelsonas, "Semiotics and Architecture," *Oppositions*, 1, September 1973, p. 94.
12. I was alerted to this aspect of early Bauhaus teaching by an article that in many respects reinforces the opinions stated here, though its emphasis is on design education rather than on history: Hanno Weber and Michael Pyatok, "Ri-imparare la progettazione architettonica," *Spazio e Societa*, 3, 1976, pp. 19–40. The authors point out that Hannes Meyer attempted on his arrival as Chairman of the architectural program to impose a radically new, socially oriented approach to design, but was replaced after two years by Mies van der Rohe.
13. Walter Gropius, "Idee und Aufbau des staatlichen Bauhauses Weimar," Munich, 1923, as translated in *Bauhaus 1919–1928*, 2nd ed. (New York: Museum of Modern Art), 1959, p. 22. For the background of early Bauhaus aesthetic theory, see M. Franciscono *Walter Gropius and the Creation of the Bauhaus in Weimar: The Ideals and Artistic Theories of its Founding Years* (Urbana: University of Illinois Press), 1971.
14. See J. Piaget, *Structuralism* (New York: Basic Books), 1970, for a synoptic view of structuralist thought in various fields.
15. See Stanford Anderson, "Architecture in the Street," M.I.T., 1976, and "Thresholds," M.I.T., 1976 (works-in-progress circulated in mimeographed copies). I am indebted to Professor Anderson and to his colleagues, Wayne Andersen and Giorgio Gucci, for constructive criticism when I presented the kernel of this paper at an M.I.T. seminar.
16. My conviction that there are communal values that can be evoked by the designer is shared with Robert Venturi, Denise Scott Brown, and Steven Izenour (*Learning from Las Vegas* (Cambridge, Mass.: M.I.T. Press), 1972) but, while I respect their contributions to architectural discourse, I think they have mistaken the values of the exploiter for those of the public. Pop architecture is a branch of advertising, not the expression of a hypothetical folk culture.

MODERN ARCHITECTURE AS AN IDEOLOGY
Conrad Jameson

A KARL MARX reborn in our time would be forced to admit that it is not only a dominant social class that can invent a self-serving ideology to legitimate its interests; a number of professional elites have learned to do the same. At its most modest, a professional's ideology seeks only to guarantee security of employment: it must ensure that there is work, that the work is plentiful and that the work is so defined that the professional's services are thought to be essential. It is not enough for a professional to find a job; he must also make sure that, once found, the job is explained in such a way that everyone believes—not excluding, it should be added, the professional himself—that no one else could do it so well. At its most ambitious a profesional's ideology plays directly for influence and power. It does not do this in so many words of course: that would be dangerous. A judge-made law is not claimed by a judge as of right: he claims only that he has interpreted correctly the meaning of past precedents, or, if he is of a progressive turn of mind, that the restrictions of *stare decicis* have all but forced him to go beyond them. Told that Frederick the Great had written a refutation of Machiavelli, Voltaire retorted, "A good pupil." The professional is a better pupil still. For typically, he will neither request power nor deny it but simply repeat the catechism learned from his self-protecting system of belief: that power is not what he himself wants, but like Malvolio's greatness, only what has been thrust upon him.

Sometimes a professional's ideology will make a mystique of technical expertise; often it will practise a subtle deception whereby technical knowledge of means becomes a moral knowledge of ends; almost always it will insist that without the professional's services those whom he aids and advises would have more to lose than the professional himself.

But never will such an ideology be so bold as to allow a professional to assert that his is more than a servant's role or that he seeks power for its own sake. It may seem to the outsider that power is what he is after; yet seen from within the terms of the ideology itself, so naked a thrust for power is a mere layman's illusion: what others might call power is in truth only responsibility and duty.

If this latter-day Marx were to seek an example of a professional's ideology, he could hardly do better than to study the belief system of modern architecture. For what is broadly termed the Modern Movement—or, more prosaically, simply modern architecture—reveals the physique of a self-serving ideology at its most impressive. You may study this ideology in its broad contour. In doing so you will observe a mastery of a brilliant strategy: an attempt to enlarge the economic activity of the architect that at the same time catapults the profession into a position of independent power. You may also study this ideology in detail in observing how, in small things and in large, it acts as a kind of intellectual trade union for the architect's interest.

You will see, for example, how easily and compliantly it makes a deal with the powers that be. For all its fine talk of revolution and utopia, the Modern Movement has tended to stand, as Bertrand Russell once said about *The Times*, on the side of authority wherever it may be found. Surely it is curious that the same architectural movement should be found in East and West, developing and developed countries, with only a small time lag between them. International architecture we have had before, but never has it been international to such a degree that you could enter an office and realize that, save for the language of the signs on the wall, you could not know what country you are in. How is it that the same architectural movement can serve so many conflicting ideas and interests with so few moral complaints from its members?

Or, you will see how under the name of professional standards, the Modern Movement tries to bolster the profession's prestige, even while restricting freedom of entry. As the architect's qualifications are defined by the Modern Movement, some of the great amateurs of the past—a Vanbrugh, a Michaelangelo, a Thomas Jefferson—would be refused admission. The Modern Movement attempts to draw a mighty arc between art and engineering. No longer is the architect a superior kind of surveyor or draftsman; he is now a master of a special and even mysterious skill in which art and engineering are so seamlessly and uniquely joined as to disqualify those who do not possess it.

Or you may see how its propaganda is used not just to further its immediate ends but to change the categories of argument in such a way that the intellectual position of the modern architect becomes all but impregnable. To protect a position, an ideology must do more than provide answers to its critics; it must try to control the questions that are asked. The Modern Movement does both with such a skill you would think at times that the questions of critics had been purposely planted. Again and again one finds that even the most vociferous critic has been so carefully schooled in the architect's own ideological system that he repeats the very questions that modern architects most want him to ask. Is the building truly functional, the critic will ask, and has it been built according to the most cost-efficient principles of mass production and does it represent the fullest development of modern technology? Sensible questions they might seem, yet, as we shall see, their particular phrasing is uncannily friendly to the very architecture the questioner would attack.

Or you may see how the Modern Movement seals off criticism from without by all but preempting the right of criticism to its own followers: only an architect can truly judge another architect's work, and even he must be schooled in modernist beliefs before his criticisms will be allowed to carry weight.

In Palmerston's day a Prime Minister could not only overturn his advisers' opinion on an acceptable design for a major public building; he could dictate—as indeed Palmerston did dictate in the case of Scott's design for the Foreign Office—the style in which the building would be executed. Today such a form of patronage would be considered arbitrary. A fine arts committee must make such a decision, a committee made up of establishment architects, for who else would be able to judge the merits and demerits of the design submitted? Indeed, not only would architects judge the work of other architects and give out prizes to their colleagues—a hardly surprising strategem, it should be added unkindly, given the fact that few architects would be awarded prizes by anyone else—but on major commissions, most notably in the public sector, they would themselves act as patron and client. It is rare that architects can achieve the monopolistic position they have achieved in, say, Belgium, where no building may be built that has not been architect-

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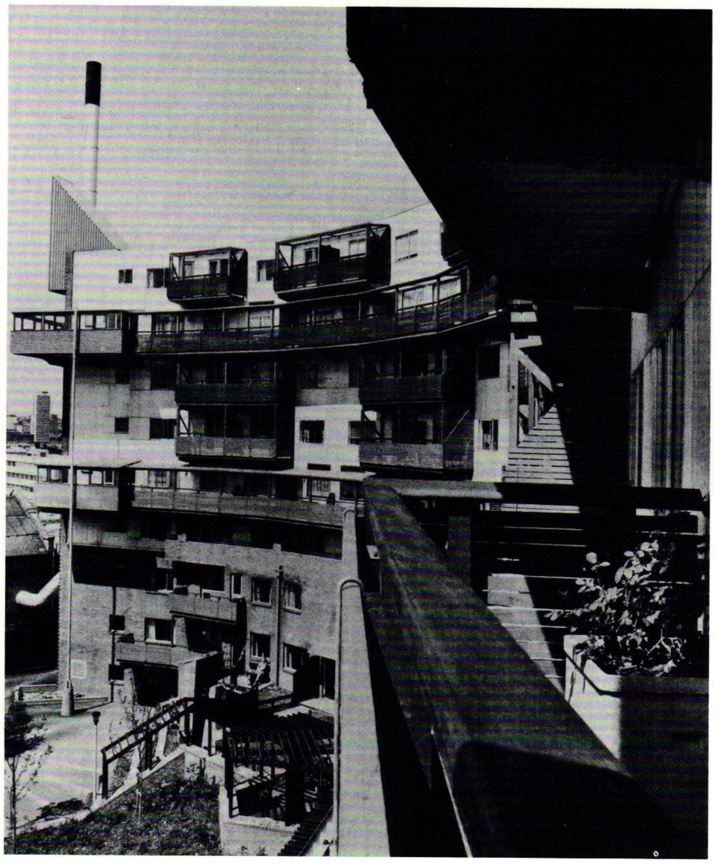


Fig. 1. Byker Wall. Newcastle, England. Ralph Erskine. 1974.

designed and approved. Yet, even without this monopolistic device, architects have been remarkably successful in sewing up the market in such a way that patronage comes from within the profession by merit of the fact that architects are appointed as public overseers for new developments. That the takeover of the client's position by the profession should occur with the spread of the Modern Movement is no accident. The Modern Movement legitimates just such a development in assuming, that since art and engineering are one, only those gifted with this two-way expertise can judge and supervise the architectural activities that have heretofore been left to the nonprofessional.

Or you may see how the Modern Movement squashes its own dissidents: an internal critic may seem to raise an axe that would strike at the roots, yet when the blow actually falls it is found to have struck only another branch.

More likely than not, the pruning only helps the Modern Movement grow more vigorously. In recent years dissidence among architects has focused on the client/architect relationship, with young Turks proclaiming a participative approach to the development of a brief that allows the ultimate client, the user, to have a say in what is built. Perhaps their proudest achievement is the Byker Wall housing estate in Newcastle by Ralph Erskine, who lived among the would-be inhabitants in order to absorb their feelings and views. Yet ignore the apology and look only at the result, and one cannot help but be struck by the fact that the wall-like form that is the distinctive feature of the housing development reproduces almost exactly the form advocated by the most celebrated of the immediately preceding group of dissidents, Team Ten, a group to which Erskine belonged. These earlier dissidents were not interested in participation, but in a break with the Modern Movement that would cast aside a so-called abstract architecture of pure design in favor of a more sensuous architecture that is alleged to give a sense of identity and place. Look back still further, however, and one finds that wall-like forms were being exploited by Le Corbusier in the 1920s in his drawings for a new Paris and his housing scheme for Algiers. But in this period a wall-form of housing was not used to create a sense of the walled medieval town or the roofless room that Team Ten has favored: it was used simply as an aesthetic alternative to point blocks for the handling of massive forms with unadorned surfaces. *Plus ça change. . . .*

Or you may see how the Modern Movement swells the range of the architect's activities and with it the importance of his role. Of the achievements of the Modern Movement as an ideology none is more startling than its aggressive manner of staking out new territory. A sewage plant, a bus stop, a power station, the ramps for seals at a zoo: no assignment is too small or too humble. The laying out of new communities, the reshaping of a city, the planning of each and every aspect of what is spoken of significantly as the built environment: no assignment is too large or too grand. As for the economically most important sector of construction, popular housing, this is taken for granted as belonging within the modern architect's domain—and this despite the historic turnabout this act of empire-building requires. Before the Modern Movement, the design of ordinary housing by an architect was thought as impractical as it was demeaning: even up to the last war most architects would have asked why ordinary house forms should be designed afresh, when, with minor modifications for client group or site, designs copied from traditional pattern books would do better, or at least as well. By the dictates of the Modern Movement, however, house forms must now be designed *de novo*; which is to say designed only by a professional called an architect. Thumb through a standard text of architectural history and the point will not be missed; it is not just new forms that are added to the architect's repertory with the advent of the Modern Movement; there is a general enlargement and an enlargement on a massive scale of the architect's alleged areas of competence and the provinces that, by his own lights, he should be allowed to command.

Limitations of the thesis

To call attention to the ideological basis of the Modern Movement is not to overestimate its originality or its self-consciousness or even its success. It does not matter to the argument that each of the enlargements of the modern architect's territory has precedents. When the modern architect of today speaks of the need for a "total architecture," for example, he is only echoing ideas well developed in the Renaissance and already put into practice by the eighteenth century; the design of Bath by the Woods elder and younger is probably the most notable example of a city planned according to artistic principles as a single entity. According to Nicholas Pevsner, modern architects brought a greater and bolder revolution than had Brunelleschi and Alberti five hundred years before; "for the masters of the Quattrocento had preached a return to Rome, whereas the new masters preached a venture into the unexplored." It could be argued with at least equal force that these modern masters preached only a *return* to a Renaissance absolutism on questions of proportion and a Renaissance insistence on the primacy and purity of geometrical form. To discover historical precedents, however, is not to destroy the thesis that ideas taken up and evoked by the Modern Movement are largely enacted under its aegis; it is only to rid the argument of a boastful and unhistorical manner of thinking that has been favored by the Modern Movement itself in support of its claim to redefine and enlarge the nature of the architect's role.

Nor does it matter to the argument that the masters of the Modern Movement should seem disinterested in their motives, an impression, it must be admitted, that is sharply at variance with the notion of their promulgating ideas that were meant to work mainly to their own advantage. It is naive to assume that an interested belief system also requires interested motives, still less that these motives must be self-conscious or conspiratorial. The contrary is more likely to be the case. Before an ideologue can convince someone else, he must first of all convince himself: without an idealistic impulse he could fail before he begins. He could also fail if he spoke in the language of a partial interest rather than in the language of universals that appeal to the common good. Once this language of universals has been learned, it cannot be unlearned at will: as studies in seminology and linguistics have made plain, we are victims of the language we speak. If there is cynicism in a sociological analysis of an occupational ideology—and a sociological analysis, note, is first and last a functional description of power relationships and not an analysis of motivations as such—then it is a cynicism of a general kind rather than one that is directed at individual architects or architects as a group. An ideology, after all, is always what the other man believes. We ourselves, of course, speak the disinterested truth.

Nor does it matter to the argument that the Modern Movement has been less than successful in achieving its self serving purposes or that it has suffered setbacks in its growth. One can imagine the grief of an Inigo Jones should he have found that his commission for the Banqueting Hall extended only to the facade but not to the interior; yet in key instances —offices, factories, hotels, restaurants—modern architects have lost control of the interior to a specialist breed of interior designers. Or one can imagine the chagrin of a Bernini should he have discovered that the laying out of streets in Rome or the placing of buildings and monuments had been hived off as a specialist skill; yet the modern architect has had to bear just such a hiving off in admitting that the disposition of built forms has, to an increasing degree, fallen to the conquest of the urban planner. Yet there should be nothing surprising about such losses, nor should their admission cause doubts as to the ideological basis of the Modern Movement. It is no more surprising that the Modern Movement has been ineffective in preventing, say, overcrowding in the profession—at this writing, unemployment among architects in Britain is over a third—than that a capitalist ideology should fail to prevent a recession. By the same token, it is no more disconcerting that architects should lose parts of their empire in a *Leibersraum* campaign than that individual capitalists should go bankrupt or that one set of capitalists should prey successfully upon another. It would be surprising if, in either case, the losses were made to those outside the fold; but this is not the case. The losses are due mainly to subdivisions *within* the architectural profession—interior design and urban planning are still largely staffed by former architects—and against subdivisions the charms of an ideology cannot be expected to be effective.

All that matters in the argument is the recognition of a simple and incontestable historical truth: that the Modern Movement has justified—in theory if not always in practice— a remarkable growth in the architect's sphere of influence and power. It might seem at times that modern architecture represents merely a change in philosophy or style, that only the manner is changed while an old and venerable profession has continued as before. Such appearances deceive. The Modern Movement brings not just an aggrandisement of architecture, but of the architect as well; like it or lump it, the two go hand in hand, and not by accident but by design. Whomever else the Modern Movement has served, there can be no question about the most immediate beneficiary: the architect himself.

The deadly purposes of an ideological analysis

What is the purpose of identifying the Modern Movement as an occupational ideology? The answer must be given without guile: to destroy its power and replace it with a manner of design that serves the people it is supposed to serve rather than the self-aggrandizing ambitions of the architectural profession. In some cases it does no good to identify the ideological content of a system of belief: a discrepancy between the interests of serving and served is not large enough to warrant attack on the serving group; or even if such an attack is warranted, there is no likely alternative beyond reformist half-measures. But in other cases—modern architecture is again a specimen case—the exposing of an ideological interest can be expected to have the force of guessing the name of Rumplestiltskin. The power of the ideology vanishes and loses as if by magic its grip upon server and served alike.

A sociological analysis does more than unravel the arguments by which the Modern Movement has legitimated the architect's interest: these garments are, in any event, already known to be worn, and their threadbare patches have long been an embarrassment even to apologists. No, the benefit of a sociological analysis is to reveal the discrepancy between the interests of serving and served and to do so even while exposing opportunities for a new course of action and a new manner of design; or, more accurately, as we shall see, such an analysis exposes opportunities for the return of an old course of action and an old manner of design, both of which the Modern Movement has all but succeeded in trampling underfoot. It is an older and more traditional way of defining territories and doing things within them that a sociological analysis allows to revive.

A sociological analysis forces arguments about modern architecture to the crucial moment of choice. When a social criticism of a work of modern architecture is found to stick, it is easy to assume that the criticism must be limited to an individual architect or school or that an admonishment is itself sufficient to correct a previous error. We have learned the social lesson of high-rise or massive slab block flats, it will be said, or at any rate, we have learned this lesson in the West: Communist countries still take pride in such apartments as a symbol of the people's achievements. The blowing up of the Pruitt Igoe housing estate in St. Louis is the Western symbol of our change of heart: the mistakes of high-rise or slab blocks are of the past and we shall not be so foolish as to make them again. Do not believe it. As we shall see, the mistakes will be—and, indeed, are being—repeated in other architectural forms, and if not the identical mistakes, then other mistakes as inhumane or nearly so as the mistakes that have been overcome. It is not low-rise that has won the day but merely a low profile that might turn away public wrath. Only a sociological analysis of the modern architect's occupational ideology reveals how general is his antisocial penchant or how irremediable this penchant must remain unless the occupational ideology is destroyed.

For it should not be imagined that an architect has only to confront a design problem honestly and thoroughly to work out a practical and pleasing solution. Both the problem and the solution are conceived within a language or code that in effect dictates, if not the detail of the execution, at least the design concept and its manner of implementation. An architect is no more free to change his language than a composer using a twelve-tone system is free to break into a Viennese waltz. The language creates a logic that commands not only the form of what is said but, to a surprising degree, the content as well. If the language of modern architecture is left out of account, then it might seem that the practice of modern architecture can be modified and adopted as it learns from past mistakes. But once the controlling power of the modern architect's language is recognized, a lenient compromise with modern architecture becomes impossible. We shall soon see that the language of modern architecture is foreign to the purposes we would have the architect serve. And if that is the case, then there can be no turning back: this language must be replaced by one more suited to our needs, which is also to say that the ideology which creates this language must be replaced, since its grammar and syntax are the very habits of mind that prove so socially destructive. Get rid of one and you are forced to get rid of the other.

By the same token, it would be easy to assume that we ourselves can go on speaking as before about modern architecture, with the only change being that we now drive our arguments to a more critical conclusion. A sociological analysis shows at once that to leave the argument intact—that is, as it is discovered within the ideology under inspection—is to defeat the cause of healthy criticism even before it begins. The first lesson of such an analysis is to question the question: if we accept the questions as stated within the terms of the ideology under inspection, then we could well find that we can think of no conclusions other than the ones prescribed by the ideology itself. As asked within the terms of the Modern Movement, the key question to be answered is, "What is the alternative to modern architecture?" If the question is accepted at face value, then the battle is lost even before it has been fought. For what can the alternative be? Shall housing go back to what Osbert Lancaster calls Banker's Georgian or Stockbroker's Jacobean? Shall we repeat the revivals of the nineteenth century by which a factory is dressed as a Renaissance palace or a railway station becomes a Gothic cathedral, revivals which are not only tasteless in themselves but which in our time would be mock-heroic in pretending that the facades are load-bearing, when the actual method of construction—steel or reinforced concrete—renders such facades obsolete? Or shall we return to febrile arguments about the use of classical orders in asking which practices would or would not be sanctioned within the rules set down two thousand years ago by Vitruvius or which reinterpretations of these rules are or are not to be allowed?

The architect may make social mistakes in the application of modernist principles, but when these mistakes occur, the moral surely is *go thou and do better*, not *go thou and desert the modernist principle that must guide further experiment and development.* The modernist thesis must remain: an architecture of our own time using up-to-date methods of construction and befitting an up-to-date evaluation of our needs.

The critic of the Modern Movement cannot ignore the question of finding an alternative to modern architecture; plainly, if modern architecture is to go, something must be put in its place. But if the critic is thinking of the Modern Movement as an ideological system, he is likely to reinterpret the question in the light of an answer to another question that must precede it: do we need so many architects and do we need to allow these architects such influence and power that they become, in effect, their own patrons and critics? The question is blunt and even rude; yet bluntness and rudeness must stand us in good stead. For by the same logic that we must question the question we must also question the questioner. It is the modern architect who has posed the question about alternatives in an either/or manner. That he has been able to convince most of his critics to ask the question in the same way is more reason, rather than less, for looking beneath the question for a vested interest in make-work* that the question might conceal.

When this preliminary question about make-work practices is asked, then the question about alternatives takes on a new meaning. For what immediately becomes apparent is that the question about alternatives as asked by proponents of the Modern Movement is biased in favor of the architectural profession. As seen within the Modern Movement, modern architecture is set against one form or another of Revivalism. As seen from outside, however, the opposite of modern architecture is simply vernacular. The first contrasts two fine arts traditions. The second poses *any* fine arts tradition—modern, revivalist, or otherwise—against what might be thought of as a people's tradition in which, after allowing for modest adjustments and alterations, architectural forms are transmitted from one generation to the next with little or no intervention by a professional elite.

If vernacular is to be a viable alternative to modern architecture, then we must look for ways of circumventing the architect's activity and power. Is this possible? Yes, of course. One key area of design can be effortlessly removed from the architect's domain: housing. His entry into private housing has been successfully resisted: public housing, however, has in most Western countries fallen under his sway. Public housing is typically the largest consumer of an architect's skills; indeed, the size of the architectural profession as a proportion of the population tends to follow the proportionate size of the public sector housing. The social case for removing public housing from the architect will become clearer when we see how alien are his design codes to the ultimate user whom he serves; also how eternally youthful vernacular forms can be and how amiable they are to adjustment and updating. But even on *prima facie* grounds the reasons for removing public housing from the architect are compelling. If each new housing scheme must start from scratch, there will not be time and money to consider demands for variations between dwellings, much less the social aptness of the design itself. For contrary to what architects themselves so often claim, architect-designed popular housing allows for *less* variety rather than more—a proposition that can be tested easily enough by walking along a well-preserved street of, say, eighteenth-century houses and then walking through a typical municipal housing estate: in the one, there is endless modulation in layout and detail, which creates a sense of coherence yet one of individuality at the same time: in the other there is only too typically a regimented form in which, if there is substantial variety at all, it will not be between dwellings but only between one large housing estate and another.

The architect's cost is also a major consideration. Leave aside his fees—though these are high enough: about 11 percent or 12 percent of construction costs would be a typical figure for professional fees, with about a third of this figure for design work alone. Even these figures assume professional fees are rigorously controlled; they can be substantially higher when a local authority is left to its own devices to do its own design work internally without a fixed outside limit. The architect's real costs are indirect. For, given his head—and, remember, that with other architects within a local authority as his patron he is likely to get what he wants—the architect will eschew the obvious solution that is still so remarkably feasible in large Western cities, most of

*The suspicion of make-work practices has a particular relevance in Britain, which has an unusually large number of architects as a proportion of the population; by American levels of employment—and even American levels are high—Britain has five times too many architects.

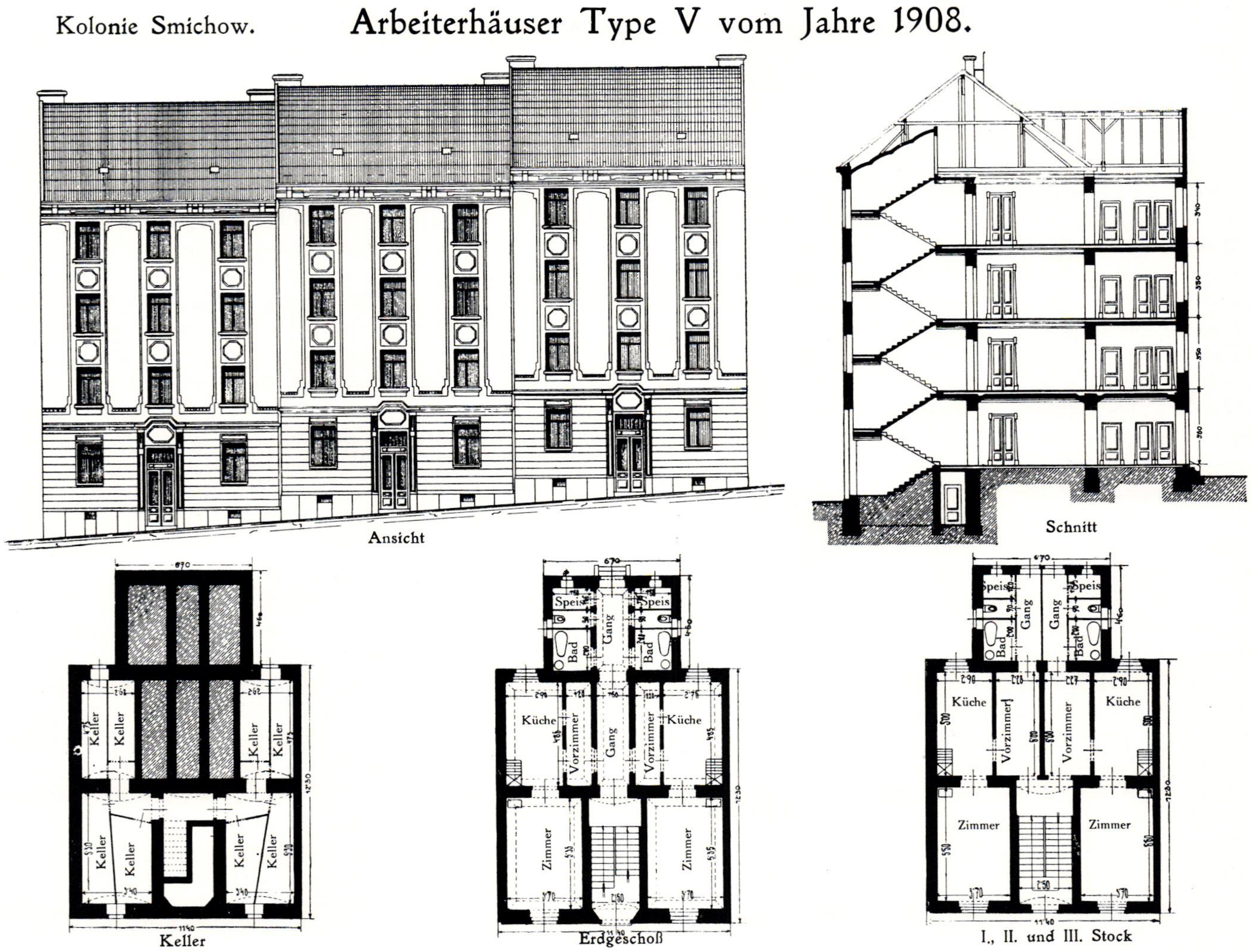


Fig. 2. Workers' Housing. Smichow, Czechoslovakia. 1908.

which have lost population: the building on existing streets on a patchwork principle that combines rehabilitation with infilling new development. The architect much prefers a fresh-field site or, if building in the city, a large site that is cleared, even though the act of clearance is likely to mean the knocking down of houses that need little or no repair (of the houses that were cleared for comprehensive development during the 1960s, noted a report of the Greater London Council in 1971, 59 percent were in good or fair condition) and the digging up of existing streets, only to lay down new streets that meet the architect's own specification of what a housing development should be.

Admittedly, the architect would not get his way if urban planners were not also convinced that street-based housing is only second best to the ideal of the model housing estate; but no doubts should be entertained that planners are not working in clear (if at times unconscious) collusion with architects in giving the nod to housing estate forms: the ideal of the housing estate is not only firmly rooted within the Modern Movement; it is undeniably implied by the doctrines of the Modern Movement, which require both segregation of city functions—the traditional mixed-used neighborhood was thought an outmoded throwback to the past—and the creation of a "total architecture" from a *de novo* design. These doctrines have been softened under the impact of angry public criticism that followed the debacle of high-rise development.

But that is only to say that the doctrines have become more resilient: the model housing estate created by architects from *de novo* designs still remains the ideal, an ideal that is clung to more rather than less tenaciously with each social failure, with the architect insisting that, but for the interference of ill-informed politicians or petty bureaucrats, the ideal of the model housing estate would be, not a failure, but a success.

How much the architect adds by way of unnecessary development costs will vary, of course, according to the country and situation. If we take London figures as an example, however, one can estimate that with land and development costing roughly double that of construction the architect—aided and abetted, to repeat, by the planner—is adding about 10 percent to costs by way of unnecessary development costs alone. Now add the compound interest that piles up for a model estate due to the chronic delays such massive developments so typically entail. The architect will cause some six to twelve months of delay just to prepare the design. But here too the indirect costs are the ones that prove most dear. Land acquisition will take longer as there is a need for a large acreage. So will planning consent, as any large scheme is likely to create resistance, particularly in urban areas when it means (again, as it has usually meant) the tearing down of good housing or housing that can be rehabilitated. So will planning approval, as new designs throw up complex costing that needs to be worked out from scratch for each new estate. So will tendering and construction time, since the builder is risking his money on an unfamiliar plan for which neither he nor the architect can anticipate the many variations that might be required: unnecessary professional fees, unnecessary development costs, and unnecessary interest charges, and any way you figure it the architect has added, as far as London is concerned, a solid third to the total costs. And this figure is more than probably an underestimate. It leaves out unnecessary administrative costs, unnecessary delays in building supplies caused by the extensive use of *de novo* designs, the *ex gratia* payments that are usually necessary because the design, in being unfamiliar, runs over its budget, the special budgets that are raided when planners and architects decide between them that utopia is worth that little bit extra (monies drawn from the parks budget, for example, to pay for extra landscaping), lost rent for any period in which lead times exceed those of private developers. An estimate of an excess cost of a third caused by the architect is almost face-saving in its tender regard for the modern architect's reputation.

One can see why the architect is left out of private housing or relegated to the role of a surveyor for dealing with difficult sites: he costs too much. In saying this, however, there is no need to imply that the solution is simply to let the private builder get on with it or push the local authority into a position in which it simply buys houses on the open market and then passes them on to those on its waiting lists at a subsidized rent. Here too one must beware of false antimonies as posed by the architect himself. There is no reason to choose between architect-designed municipal housing and so-called package-deal housing that the local authority must buy ready-made. There is still a need for local authorities to develop their own pattern books suitable for local conditions and client groups, pattern books that must be carefully prepared and groomed, both for their social effects and their acceptability to the consumer, if not by direct consultation, then by the use of social and market research. The pattern books used by private builders are only too likely to be poorly worked and insensitive to the consumer's needs. This stands to reason. The same housing shortage that has created the need for public housing has created the boom and bust cycles in which, at the top of the cycle, the builder could sell the key to a new house before he has built the frame for the door, and at the bottom of the cycle he is afraid to build at all. These are hardly the conditions for developing sensitive pattern books of the kind most Western countries enjoyed before the First World War threw the housing market into disarray. But what is the moral? The moral is surely not that the answer to insensitive pattern books is architect-designed housing which, if the architect gets his way, starts each design *de novo* for each new housing estate; the moral is simply better pattern books, and both on grounds of quality and cost.

One possibility opens another. If modern architecture is removed from popular housing, it is removed from much more than housing. This too stands to reason. Prior to the Modern Movement, the basic divisions in architecture were between public and private, with the one represented by vernacular domestic forms and the other, while more variegated, represented by what was in its classical origins a temple. The line between these two basic types was never distinct: a Georgian mansion, for example, might carry abbreviated classical columns at the doorway, while a modest Georgian church would be treated as a house with an enlarged classical portico plus a freely rendered Gothic tower thrown in for good measure. The architect was restricted to buildings in the public realm. As public and private realms overlapped, however, he could be sure that his design language would be understood if for no other reason than the fact that the design elements in his fine arts tradition were intermixed with the design elements of a vernacular.

With the advent of the Modern Movement, however, a third basic architectural form comes to the fore: the work form represented by the factory or office. Indeed, so pervasive do these work forms become that the old distinctions begin to fade, so much so that, without a prior knowledge, it is often difficult to distinguish a factory from a school from a hotel from an old age home from a hospital: they are all but identically clothed. It is not insigificant that in the bravest visions of modern architecture—say, Le Corbusier's vision of Paris rebuilt as he himself would have wanted it to be—there has been a conscious effort to erase the distinctions between the private and public realms in substituting instead the bureaucratic realm of the office block. It is this bureaucratic realm that is celebrated as expressing the essence of modern, industrial life: all other social purposes must pay homage to this bureaucratic ideal.

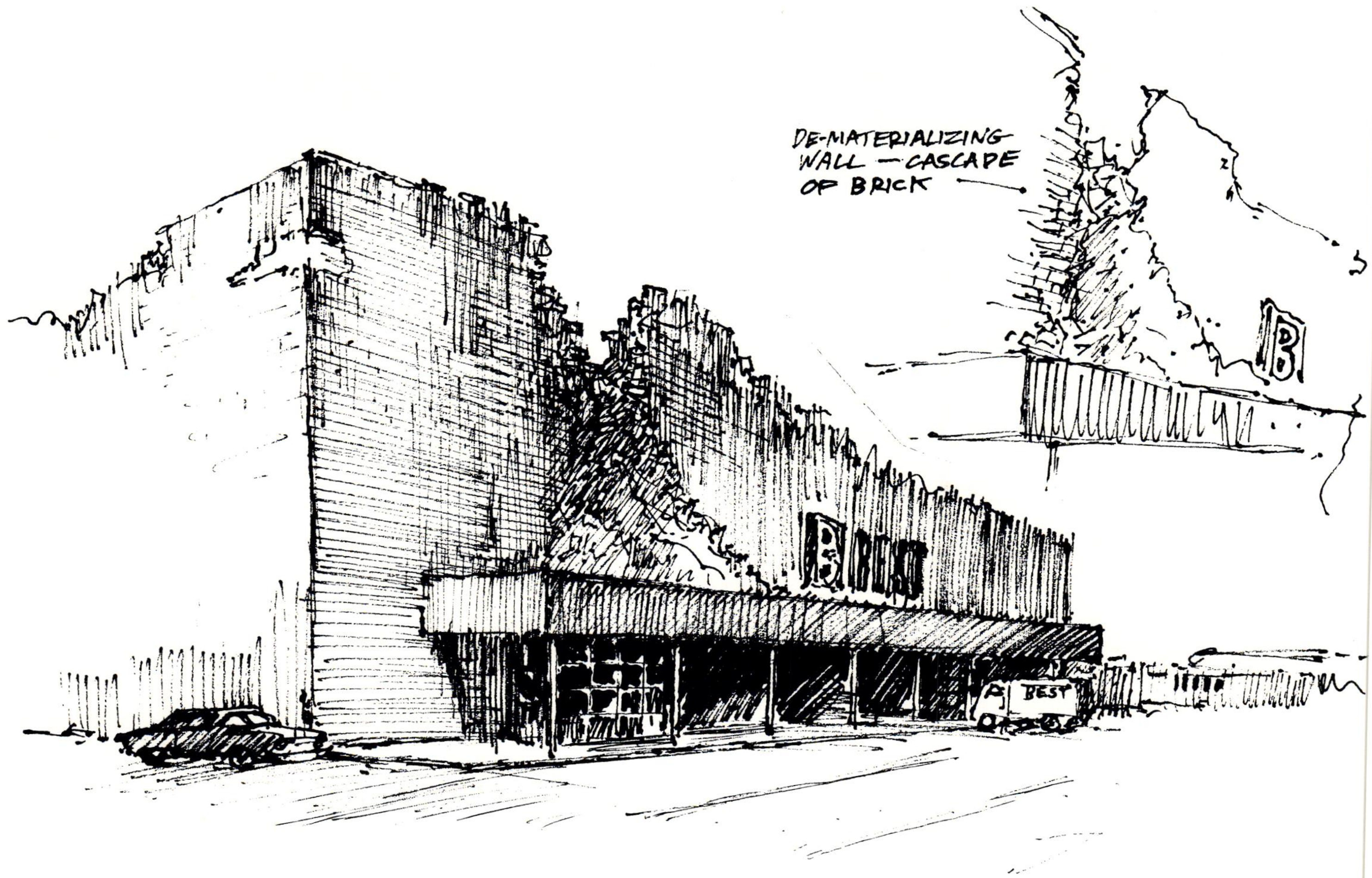
Now if housing is removed from modern architecture and given back to a vernacular tradition (a not difficult tactic, as we shall see) then several changes can be expected to occur, or rather could be made to occur: whether they happen will depend largely on how earnest the public is in getting what it wants. For one, the older distinctions should reappear. The private realm in architecture not only defines the public one, it provides much of the vocabulary for a heightened and more formal design language. For another, the present hegemony of work forms will be challenged, not only where these forms dominate former domestic or public uses, but within the work realm itself. There is, after all, no necessity that requires that an office be the distinctive form that we nowadays call an office: it was once a house or a public building; it could become so again. Finally, the rebirth of vernacular housing should bring in its wake the reassertion of a traditional design process that was lost with the Modern Movement: that to design a building is to mend and modify a traditional form, this rather than to invent a new one from scratch.

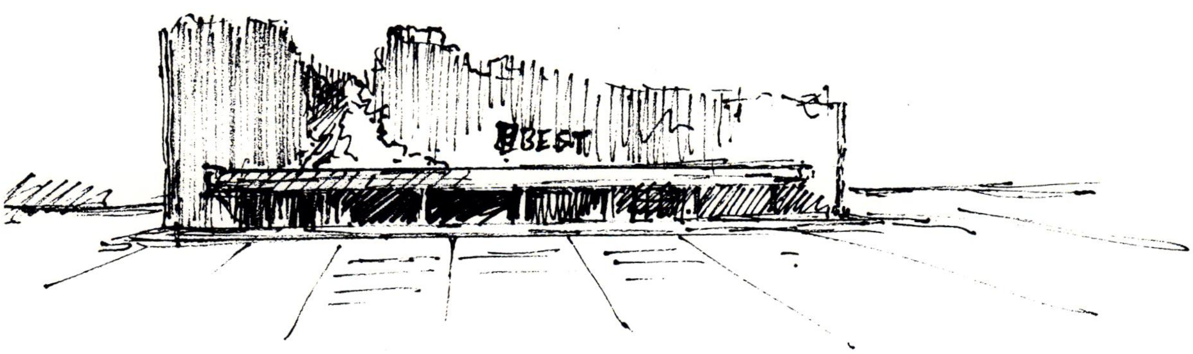
The New England clapboard house remains the New England clapboard whether one builds on a new wing or turns the interior into open plan or adds so unhistoric a feature as a garage. The changes, to repeat, are not those of invention but simply of mending and modification. The design principle is a simple one: keep what you can and change what you must. There is no longer a premium on change or invention, only a common-sense acceptance that change is a continuous process of accommodation which, while it bends with the remover, bends only that amount it needs to bend to suit a present or future need. The design process becomes in the best sense conservationist in giving traditional architectural forms—that is, forms that are time-tested and popularly understood and accepted—the crucial benefit of the doubt.

Once this historic design principle is pronounced—and it was only lost with the Modern Movement—it gives new meaning and life to the conservationism that has swept through the educated classes. As things stand now, conservation movements can only be negative: they can say what should not be torn down but are powerless to advise as to what should be constructed. With the reassertion of a traditional design process, its intellectual armory is completed: conservationists can say what to do and what not to do as the occasion requires. Indeed, conservationism itself is transformed into a fighting faith. Just how successful and mighty this movement could be should emerge as we turn to the challenge posed by the Modern Movement itself and reason out alternatives. But even now it is possible to see toward which conclusions the argument is already heading. For the largest category of built forms, domestic architecture, the moral can no longer be *go thou and do better*, but *go thou and do not return.* There is no need for the architect in his distinctive role as a creator of new forms, as the work of creation has already been done by that great people's architect, Adamo of *Adamo me fecit*, whose forms are habitable, readily adapted, and available for use. For the work forms based on the factory or office that the modern architect so exploited as the expression of a new age, but only to justify the founding of a new empire for himself, the moral must be *go thou and change your ways.* There is no need to give work forms such dominance or to cast the private and public realms into a bureaucratic image or even to use work forms at all where, more often than not, domestic or public architecture—or some combination of the two—can be used in their stead. For public architecture—that is, an architecture that belongs distinctly to the realm wherein we leave our private lives to share in matters common to us all—the moral for the architect is perhaps the most surprising one of *go thou and get started.* For with all his empire building, the modern architect has neglected public architecture, either by trying to assimilate it to work forms—typically, a public building becomes simply an office block—or by speaking in an arbitrary design language so foreign even to educated taste that public meanings are either misunderstood or incomprehensible.

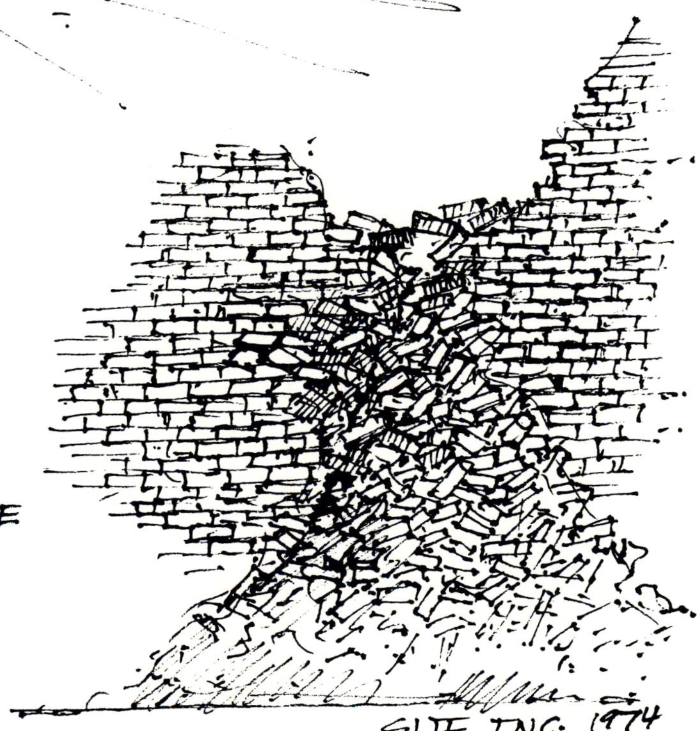
And where shall architects now find a public language? Here too the moral for the architect is clear: *go back*. An architect with public purposes to fulfill is no more free to choose his own language of design than we are to choose the language that we speak; in either case the language is the tradition we inherit, a language we may argue with, develop, or reinterpret (activities which are not to be confused, incidentally, with an eclecticism which, in thinking it can choose between cultures and histories, is the very antithesis of tradition) but which we can only cast aside at the risk of losing our right to take part in a public realm in which meanings are shared. The architect is only being self-destructive when he tries to convince himself, not less others, that he will lose the authentic voice of his age in binding himself to a tradition or that only a slavish revivalism can be the result when he pays this tradition homage. T. S. Eliot answers such a naive and self-conscious modernism in his compelling dictum: "To discover the present moment of the present is to discover the present moment of the past." For the architect to hold that the present can only be discovered in a rebellion against the past or to dismiss the past contemptuously as in Le Corbusier's phrase, "Nothing remains for us of the architecture of earlier epochs," or to think that the past can be condensed into tidy formulae about geometrical forms (in contradictory fashion, Le Corbusier believed this as well) is to end up only parodying the present in celebrating what we have least reason to be proud of—an ugly bureaucratic spirit that humiliates and degrades—even while forgetting that it is not the commonness of the common man that a public architecture of our time must express but the common man's capacity for uncommon achievement. Let the architect try to push away the past in the name of the present and he will not only lose the language by which the present and future may be discussed but push away the standards by which the present and future may be judged.

By no means must it be assumed that in cutting down to size the modern architect's flatulent claims or in removing the colonies that were never rightfully his that it is only the public that stands to gain. Architects stand to gain as well. They gain the world of public architecture that has been lost; indeed they enhance their claim to a key aspect of architecture which has been wrongly invaded by the urban planner: the setting out of public spaces. Where there are public and ceremonial purposes to be served, there is no way of severing public buildings from the public spaces that define them. "It's a gift to be simple/it's a gift to be free/it's a gift to come down where you ought to be." The words of the American folk song are suggestive. It is not just public architecture that the architect might discover but architecture itself. Public architecture *is* architecture: it is only the Modern Movement that has taught architects and public alike to use a special epithet to define what has traditionally been the only thing that architecture as an art form has ever been about. It is architecture that architects must rediscover, not a special form of it or a kind of architecture that requires a special adjective or phrase. Perhaps it is the architect who has most of all to gain: in rediscovering architecture he will rediscover himself.





BEST PRODUCTS - HOUSTON SHOWROOM
PROJECT FOR INDETERMINATE FACADE



Indeterminate Facade. (ink on paper) SITE, Inc., 1974.

ARCHITECTURE AND THE CRISIS OF COMMUNICATION

James Wines

THE responsibility of architecture—indeed, of any *public* art—is to communicate; and yet, a lack of communication has been the single most conspicuous failure of twentieth-century design. Since it is presently fashionable to deride the Modern Movement on every level (inclusive of its opaque imagery), it is not my intention here to further contribute to this chorus of abuse. However, its influence cannot be discounted because, in spite of persistent verbal denunciations by architects and critics, the Modernist legacy lives on beneath a barrage of thin disguises. Following the leadership of Robert Venturi and Denise Scott Brown who, in the early 1960s, pioneered the concern with such nonformalist issues as "complex and contradictory order, messy vitality, and inclusionism" in architecture, a second generation of populists is now voicing support of values like "pluralism, adhocism, and multivalence" (Charles Jencks) and "contextualism, allusionism, and ornamentalism" (Robert Stern). All of these humanizing ingredients form part of the so-called post-Modernist umbrella and are usually manifested in an array of design devices which include super-graphics, random fenestration, animated geometrics, hyperbolized technology, historical allusion, and eclectic decoration. The collective result is, to quote Peter Eisenman, nothing but "functionalism in drag." The design foundation has continued as essentially the same formalist/functionalist/moralist/rationalist pursuit it has been for the past three decades—and the public has continued to respond with the same indifference.

In his scathing indictment of the International Modernist tradition, entitled *Wasteland*, author Stephen Kurtz summarizes that "The processes of building—from those that produce its elements to those it shelters as a completed edifice—are such that it is virtually impossible for human beings to derive satisfaction from them. To the extent that the final product reflects these processes, it reflects that alienation as well." This gap between popular interests and buildings—our most public presences—is a tragedy of such profound implications that all other architectural problems pale beside it. Also, ironically, it is not an issue that can be resolved simply by socially conscious commitment. Even though architects, perhaps more than any other professional group, maintain a high level of idealistic and humanitarian purpose, it is not the motivations, but an insistence on solutions defined exclusively in terms of architectural dogma that is at fault. Paradoxically, there appears to be a direct equation between the degree of utopianistic resolve and the oppressiveness of the results. The more humanistic the intent, the more modularized the answer. At the core of the problem is the definition of architecture itself and, as a subdivision of this, the education of the architect. Obviously, these issues in question are so monumental and complex that an essay of average length can barely scratch the surface. What can be accomplished, I feel, is a summary examination of some twentieth-century precedents which have contributed to this decline in communication and the proposal of a few possible alternatives in attitude and educational process for the future.

Architects since the Industrial Revolution have been involved in a seemingly boundless love affair with technology, system, and service, as opposed to human energy, craft, and communication. The basis of this devotion is a myopic trust in the panacea of function—an allegiance undiminished since the Bauhaus first advocated its virtues in the 1920s. Function, like some kind of religious symbol, has remained unquestioned and omnipresent. Those etched-in-granite maxims—"Form follows function" (Sullivan), "A house is a machine for living in" (Le Corbusier), and "Less is more" (Mies)—all proposed that function and structure were synonymous with final aesthetic in a building. Implicit in this faith was the motive of "problem solving" and the concept that the expression of *use* should be the embodiment of form. Earlier in this century a new spartan, technologically oriented aesthetic was unquestionably needed to replace the irrelevant decorative tradition of the Beaux Arts and therefore it seemed only logical that the lack of artifice characteristic of industrial development should also influence architecture. In theory this has always made a lot of sense. In practice, the virtues have not been so clear. A reduction of means—specifically, a less personalized craft—has stripped twentieth-century architecture of its iconographic content and, with it, the qualities of idiosyncrasy, fantasy, and the evidence of human contact. Mies' "Less is more," which was originally intended to champion the cause of design clarity and structural integrity, became instead a hyperstimulant to industrialized building systems. In other words, the aesthetic of *less* contributed significantly to the economy of *more*. By eliminating all of those artisans identified with presumably "irrelevant decoration," architecture rejected craft in favor of impersonally produced elements. In the proliferation of seemingly endless glass and steel office towers, modular housing, and cubist private dwellings, there has been a failure to envision the dehumanizing and oppressive dimensions that visual economy would assume in a rapidly expanding technology with its increasing demand for the robotlike performance of urban dwellers.

While architecture has persisted in this techno-faith, human energy and its equitable use have come to be considered fundamental ingredients in a revised hope for the future. The ranks of scientists, economists, and sociologists who still cling to the technological solutions are rapidly shrinking. Those turn-of-the-century utopian promises that automation would free the toiling masses for a new leisure spent in self-enrichment are still woefully unfulfilled. Technology seems to have eliminated more jobs than it created, the liberty afforded by leisure has become the humiliation of unemployment and welfare, and the pursuit of enrichment is pretty much arrested at the level of television variety shows. Le Corbusier's ecstatic visions of Elysian communities living in Olympian towers surrounded by sylvan parks have degenerated into apprehensive urban/suburban dwellers jammed into anonymous shoeboxes enveloped by asphalt parking lots. And at the core of this tragedy there is a basic loss of individual identity. By opting for the technologically expedient answers, architecture has encouraged the deterioration of people's pride in city, pride in domain, pride in labor, and, consequently, pride in self.

The obsession with function and technology characteristic of the Modernist Movement would probably have been a more communicative force had it served as a source of imagery for art, rather than as a motivation for design. This question of the difference between art and design is a semantic ambiguity that has never been successfully resolved with respect to contemporary architecture. In fact, if memory

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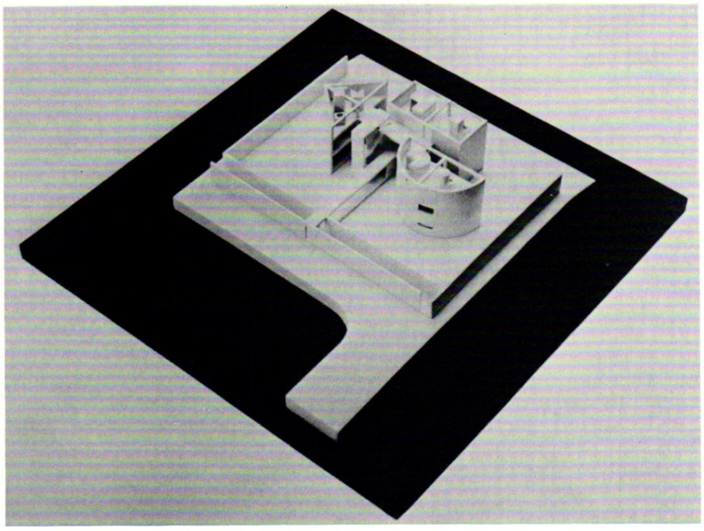


Fig. 1. House 14. (model) John Hejduk, 1967–70.

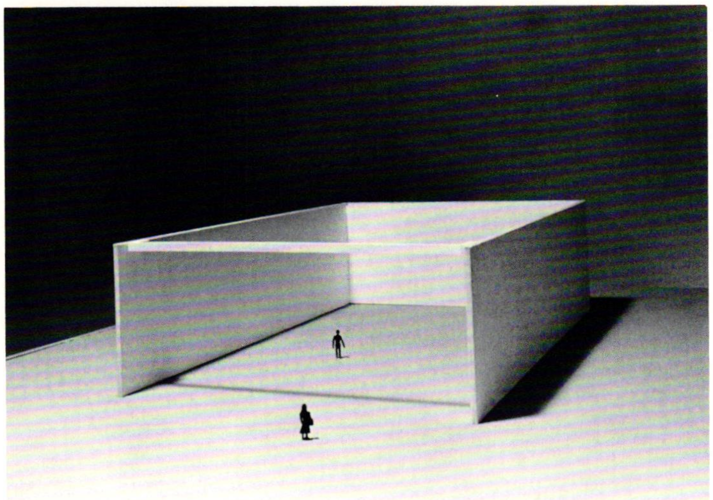


Fig. 2. "A simple rectangular enclosure . . . allowing the inhabitants a maximum free and organic use of their own domain." (model).

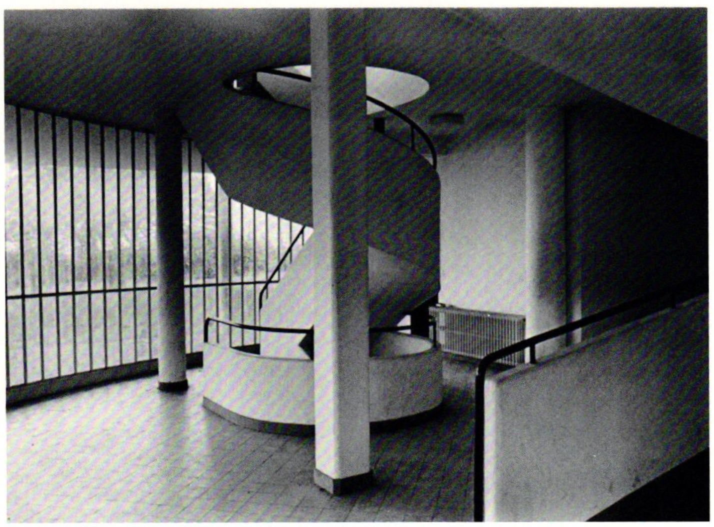


Fig. 3. Villa Savoie. (interior) Le Corbusier, 1929.

serves me correctly, the term *design* is a twentieth-century contribution to architectural language and not applicable historically. For the sake of argument here, we shall assume that art is an autonomous endeavor of independent aesthetic intentions, whereas design implies some form of accommodation. Art is answerable only to the subconscious rituals and impulses of a particular social/cultural situation. Design, on the other hand, infers the existence of a practical problem to be resolved on aesthetic terms—or some compromise of art in deference to the expedient. Since it now appears that architecture's dedication to functionalism is, in itself, questionable, the entire purpose of design is also subject to question. If the problem to be worked out is doubtful in the first place, then obviously no amount of skillful packaging can infuse it with relevance or social value. The ominous conclusion to be drawn now is that the commitment to design has allowed architecture to remain totally insulated from reality and to ignore its responsibilities as art. To the further discredit of design, it has become increasingly evident that the superimposition of complex programs on otherwise straightforward architectural problems is nothing more than an excuse for architects to play self-indulgent games with other people's spaces. There is, finally, nothing more practical in the conception of a building than a simple rectangular enclosure with the minimum of articulated space divisions, allowing the inhabitants a maximum free and organic use of their own domain.

Le Corbusier's Villa Savoie, at least by reputation, is the archetypal "articulated" structure. Therefore, when I finally made the pilgrimage to see the actual building for the first time a few months ago, I was predisposed to accept it on the formalist terms celebrated by his disciples. Also, as a confirmed antiformalist by taste, I was prepared to recognize the house historically and reject it philosophically. The reality of the villa was a startling revelation. Not only did I respond enthusiastically to the architecture, but I also realized that the formal content worshiped by Corbu's successors is only incidental to its triumph as art. The real dynamism derives from the fact that his "machine for living in" was inspired by sources outside of architectural concerns. The message of the Villa Savoie goes far beyond its skillful translation of services into formal counterpoint. More importantly, it is a powerful metaphor for the kinetic energy of the technological era and the embodiment of its social/psychological mythology.

This message also explains the subsequent misinterpretations of the Modern Movement, which have been responsible for the decline of architecture as art and as communication. When originally conceived, the relevance of the Villa Savoie depended upon its association with the myth of industrialization in the popular consciousness. The "Machine Age idea" evoked, at that time, a consensus reaction comparable to the reflex identification associated with Gothic iconography centuries earlier. In point, the technological spirit of the 1920s was so persuasive that it was embraced in less than a decade by capitalism, socialism, Marxism, and a host of lesser ideologies of the period. The urgency of the villa's image was simply a reflection of the urgency of its sources. The building was the essence of C.I.A.M's manifesto declaration of 1928 that "The destiny of architecture is to express the spirit of the epoch." If the course of architecture thereafter had simply followed this objective, with a constant attention to the renewal of sources, everything would probably have worked out favorably. Instead, the bulk of the profession became hypnotized by the seductive means of the Modern Movement and lost contact with the meaning. In what could be described historically as virtually overnight, architecture became submerged in a maze of theories, systems, and standards which insulated against change and alienated the very community it was supposed to serve.

The Modernist legacy has left architecture with a pervasive fear of indeterminacy and ambiguity, so that all energies are marshalled toward resisting these influences with ever greater organization, ever more useful purpose, ever more precise clarity. As the late sculptor Robert Smithson commented, "Architects tend to be idealists and not dialecticians. . . . They never seem to allow for any kind of relationships outside of their grand plan." The problem is a professional introversion which has created a poverty of language. By persistently turning to architectural/historical role models, architects have conveniently avoided confrontation with the more disturbing questions of cultural change and psychology. Instead, buildings with anthropomorphic, metaphysical, metaphorical, ritualistic, and psychological implications have been consistently dismissed by formalist ideologies as being peripheral and idiosyncratic. In opposition to this conformity, as I noted earlier, there is a current rash of populists among writers and designers who decry professional myopia and advocate what critic Charles Jencks calls a "pluralism of means." As embodied in the apartment buildings of Gaudi, 1930s Hollywood vernacular, and Queen Anne eclecticism (to cite several of Jencks' examples), these means are easily perceived. As recycled in the decorative appendages to otherwise conventional formalist architecture, the message doesn't come through. Therein lies the fundamental problem of contemporary architecture as communication. All good intentions aside, these devices injected to restore iconographic meaning to buildings are chosen primarily as the reinforcement of some compositional totality and not for their psychological content. In fact, the devices themselves invariably correspond to the profession's own methodical standards of "good taste" and have nothing to do with a response to the actual disordered vitality of social context. The "new pluralism" appears, then, to be little more than a camouflaged pursuit of the same objective clarity that has characterized design for the past fifty years—and, as critic Nicolas Calas has noted, "Clarity can be obtained by avoiding depth."

The crisis of communication in architecture is the crisis of sources. The declining potency of the Modern Movement and its heritage is due to its total irrelevance in a nonheroic world—a world distrustful of technology, economy, and government, a world of contraction and short supply. It is certainly a time for the profession to defeat that narrow, circumscribed definition of architecture responsible for a reduced level of interest. It is also a time to recognize that architecture cannot really solve any long-range problems. Like any art form, it can only comment on their existence. In the event of a catastrophic energy deficiency, for example, the shortage would surely determine the fate of architecture long before architecture could ever have a measurable effect on the shortage (the optimistic promises of solar enthusiasts notwithstanding). As critic Ada Louise Huxtable concluded in a recent essay on the demise of the Modern Movement, "Architecture is admittedly not going to save the world."

Architecture must share, with the other arts, a new dimension of social responsibility in preparation for a world of increased communications, economic interdependence, pluralist ideals, shared resources, and reduced expectations. German artist Joseph Beuys has described these objectives in his theory for an extended role of art. "I feel it is necessary to establish a new kind of art, able to show the problems of the whole society, of every living being—a new discipline which I shall call social sculpture. . . . Here my idea is to declare that art is the only possibility to change the situation in the world. But then you have to enlarge the idea of art to include the whole creativity. . . . Art is the only power to free humankind from repression."

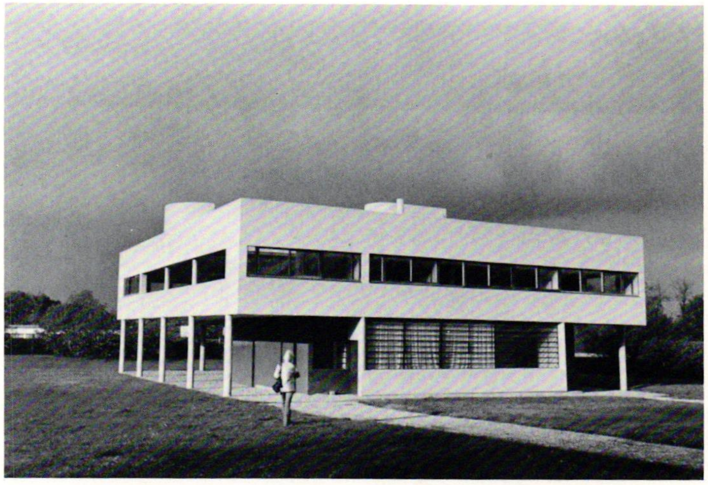


Fig. 4. Villa Savoie. Le Corbusier, 1929.

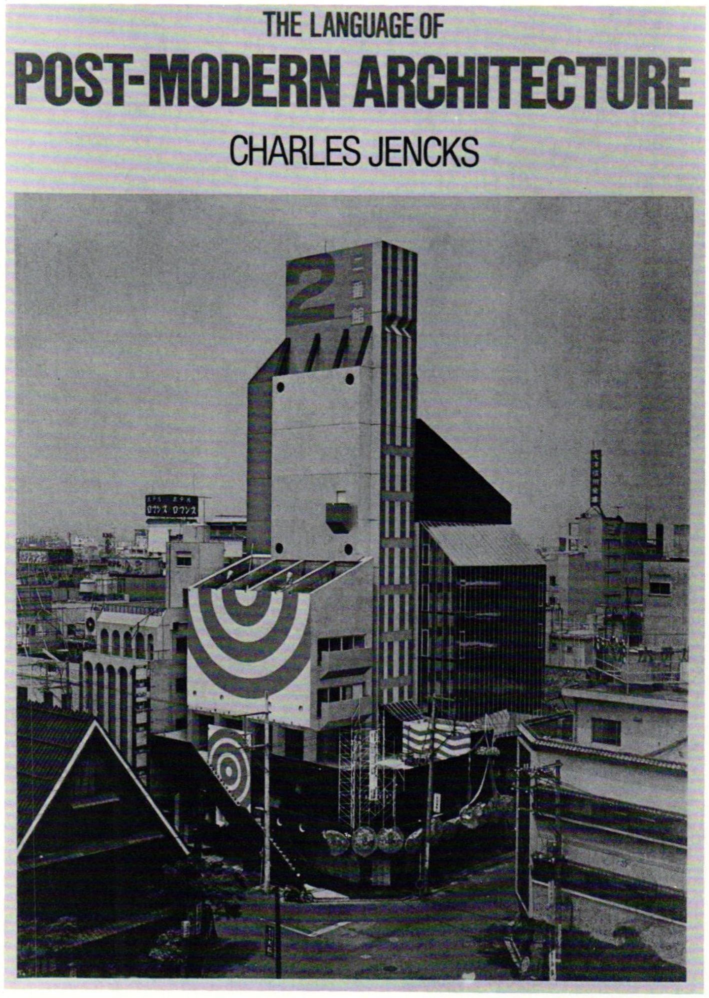


Fig. 5. The Language of Post-Modern Architecture. *(book cover) Charles Jencks, 1977.*

Fig. 6. Graffiti, New York City. circa 1975.

To suggest a shift of emphasis in the concerns of architecture from problem-solving design to information and psychology must inevitably provoke an outcry from mainstream moralists. Almost as these predictions are being written, one can hear the protests; "What about the practical need for housing, hospitals, factories, schools, etc., etc.?" There is no denial of architecture's basic responsibilities as shelter implicit in this change of focus. Whether, when, if, and how these various facilities are realized is the decision of society, government, economy, and engineering respectively. It is also their collective responsibility to plan these structures with intelligence and restraint, with an acute respect for the limits of growth; but the communicative message of these buildings belongs to art—or to architecture as art. For the first three-quarters of this century this message has been projected as the illusion of an orderly and rational world. To paraphrase Picasso, if "art is a lie which makes us realize truth," then a greater proportion of the built environment has been a lie to compound other lies. Perhaps a more appropriate application of this quote to the future of architecture would be to invert its meaning to "a truth which makes us realize lies"—exposing the lies of automation, standardization, and determinate systems. Of course, if the present situation is addressed realistically, these lies will prevail as long as they continue to turn a real estate profit. In all probability, the actual configuration and public message of architecture will not change fundamentally until a disastrous energy deficiency forces alternative choices. In the meantime, however, it could be one of the important iconographic contributions of architecture as art to prefigure and evoke the sense of a contractive world. In this respect, the public facade is one of the most direct vehicles of communication and, excluding the familiar exploitation by commercial advertising, one of the under-utilized resources available for the projection of socially conscious ideas.

As I indicated earlier, part of the restoration of architecture as a meaningful public language will evolve out of the rejection of its familiar design rhetoric. The most elusive part of this objective will be the identification of new sources which can be assimilated into a more meaningful iconography. Webster's Dictionary defines *icon* as an "object of uncritical devotion"—which would seem to preclude the use of "indeterminacy" as a viable source. The sculptures of a Gothic tympanum were the product of a consensus community response and carried a mythology of instant recognition. But now, as a result of economic expedience, rapid mobility, and the general depersonalization of the urban environment, the city dweller has been forced to withdraw increasingly into the privacy of the mind. Accordingly, the old notion of architecture as form and symbol is now less relevant than an architecture of information and thought. It is the fragmentary and the arbitrary that constitute the vitality of our present urban life, and therefore it is understandable that a new iconography growing out of this situation will be more diverse and less specific than its institutional predecessors. Its consolidating strength will derive from an appeal to the reflexive, subconscious responses of the public to changing phenomena, in place of fixed ideologies.

Before proposing some changes of sources and attitudes which may stimulate a revitalized architecture, I want to declare my suspicions of all attempts at definition and prediction in the arts (inclusive of my own contributions). The eternal problem of criticism and theory is that, in order to reject an outworn set of terms, the critic inadvertently supplies a replacement which in turn hardens into the same kind of tautology it was intended to supplant.

Fig. 7. Nathan's. Coney Island, New York.

Fig. 8. Suburban House. circa 1960.

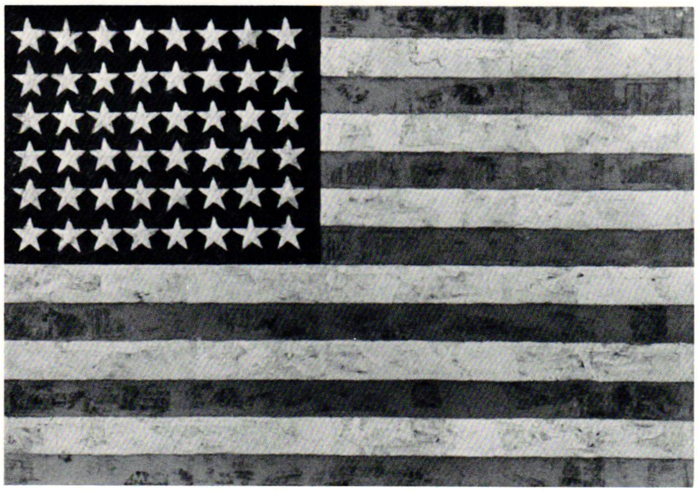


Fig. 9. Flag. (encaustic, oil, and collage on fabric) Jasper Johns, 1955.

Fig. 10. Fountain. *Marcel Duchamp, 1917.*

Several years ago I introduced the term *de-architecture* as a general way of describing a broad area of current activity —an area between art and architecture—emerging internationally. De-architecture refers to an inversion of architecture's traditional prerogatives and is contingent upon the "idea of architecture" as an unqualified set of hypotheses in the mind. For example, in the 1920s and 1930s Marcel Duchamp's redefinitions of art were successful to the degree that his audience maintained certain preconceptions of art (at that time, circumscribed by the categories of painting and sculpture), and his work was predicated on sabotaging these assumptions.

Many of my colleagues have expressed a feeling that the term *de-architecture* carries a negative connotation; or, as *Architectural Review* editor Lance Wright complained, "It seems a pity—and confusing—to choose a phrase which suggests that architecture should be permanently done away with." De-architecture is a paradoxical term, an inversion for critical effect, and not intended as a license for anarchy or demolition. If nothing else, in view of the massive commitment to an *over*-architecture of our urban environment (when contraction appears to be the only sane course for survival), de-architecture might be literally translated as the new state of optimism.

The sustaining force of any theory relies on the inclusion of its own contradictions as part of its explanation. The continuing potency of Duchamp's influence owes a great deal to the artist's stated objectives: "I have forced myself to contradict myself in order to avoid conforming to my own taste." Respectful of this example, it is my intention that the application of the term *de-architecture* remain as flexible and inclusive as possible, rather than being interpreted as some new category of airtight ideology.

In Robert Venturi's seminal 1965 paper *Complexity and Contradiction in Architecture*, he advised that ". . . it is perhaps from the everyday landscape, vulgar and disdained, that we can draw the complex and contradictory order that is valid and vital for our architecture and urbanistic whole." With this immensely important observation he managed to both define the limitations of the Modernist tradition and offer an avenue of escape from its restraints—providing, of course, the architect was willing to admit that vitality is an asset. In his subsequent writings he elaborated on this concept by emphasizing that the popular and vernacular buildings of America embodied a truth far more profound than any involved design theories—the simple truth of an inherent mythology connected to the condition of habitat itself. Venturi noted that the public's reflex identification with the paradigms of dwelling or working and their most commonplace ingredients—the traditional notions of size, shape, and materials for doors, windows, roofs, and so on— was such that any design intrusions could usually be regarded as violations of meaning. The controversy later aroused by these revelations had a great deal to do with an implied threat to the serious designer's credibility. In reality, it was an invitation for architects to expand their aesthetic horizons and consider ideas suggested thirty years earlier by Dada and Surrealist precedents in modern art. Duchamp, in his series of "Readymades" and "Assisted Readymades," recognized that certain objects carried inherent associations and, with only a change of context or slight alteration, could be charged with a powerful psychological effect. Later on, in the 1950s, painter Jasper Johns, commenting on his flag-painting series, noted that "Using the design of the American flag took care of a great deal for me because I didn't have to design it. That gave me room to work on other levels." This discovery of "other levels" of communication is the dimension that has been peculiarly missing from recent architecture.

One frequently repeated deficiency in polemical essays of this kind is a failure to balance the criticisms with a supply of viable alternatives. In the case of an examination of other levels of meaning and new sources in architecture, the problem is compounded by a lack of constructed examples to illustrate the theories. For this reason, I shall limit my discussion of these issues to two projects with which I have had a personal involvement—SITE's Houston and Sacramento showrooms for Best Products.

In 1973 SITE began a series of related showroom projects for the Best Products Company, a nationwide catalog-showroom merchandiser. These facilities are invariably located on a commercial strip, near a major city, and surrounded by the omnipresent suburban sprawl. The showroom prototype is a rectangular brick structure of the familiar discount-center format, with all internal functions standardized to accommodate Best's sales processes. Accordingly, all public reaction to the buildings is conditioned by habitual use. Since they represent ideal "found objects" with inherent associations, SITE concluded that any new iconographic meaning should be achieved by incorporating these commonplace ingredients. For example, in the development of SITE's Houston and Sacramento structures, such influences as consumer culture rituals and the immediate strip context were the direct sources, thereby freeing the architecture to become the raw material (or "subject matter") for art, rather than the usual objective of design.

This shift of emphasis in the priorities of architecture (negating the importance of form, space, and structure) has been one of the principle sources of attack on the works of SITE by formalist architects. Whereas Venturi's earlier advocacy of "messy vitality over obvious unity" seemed to threaten only the architect's formal prejudices, treating architecture as raw material appears to be putting the architect out of business altogether. Even when they are sympathetic to the tradition of the readymade, most architects take a suspicious view of regarding an entire building as a "found," rather than "created" object. The consensus is that facade and other vertical surfaces may gain interest from a "collaging in" of certain existing ingredients, and yet there is a resistance to the idea of architecture itself *as* the main ingredient. This negative reaction is usually a misunderstanding of terms. It is obvious that any building must be "designed," insofar as it is necessary to coordinate functional components into a working unity. The course of design in this century has been a continuous endeavor to transform these components into sculptural form. The building as found object, on the other hand, proposes that the resolution of engineering requirements be totally separated from any art objective. The plan and elevation (traditionally the focus of innovation) should be reduced to the simplest possible enclosure which, when defined, can then be perceived as a paradigmatic structure within a larger social/psychological context. The invasion of this paradigm by contextual influences (filtered through the artist's sensibility) determines the nature of architecture's communicative level as art.

SITE's Houston and Sacramento buildings are the result of this conceptual process. Although these structures have been discussed at length in the architectural and popular press both here and abroad, the published information has dwelled rather unduly on the humor and "cultural ruin" analogies. I shall try here to clear up what I consider to be some critical misreadings of the buildings and also offer a few opinions on why the iconography seems to have sustained a successful dialogue with the public.

The Houston Indeterminate Facade Project offers a clear illustration of an inversion of the showroom prototype to

Fig. 11. Best Products Showroom Prototype. circa 1974.

Fig. 12. Indeterminate Facade. SITE, Inc., 1975.

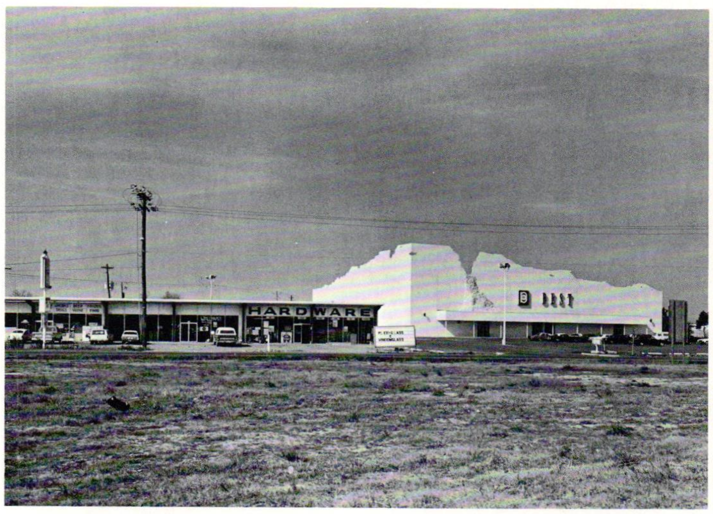


Fig. 13. Indeterminate Facade. SITE, Inc., 1975.

Fig. 14. Notch Project. SITE, Inc., 1977.

Fig. 15. Casa Batillo. Antonio Gaudi, 1903–07.

achieve a different reality and is also an example of de-architecture. The brick veneer of the facade and side walls has been arbitrarily extended beyond the logical edge of the roofline, resulting in the disconcerting appearance of a building arrested between construction and demolition. To intensify this ambiguity, a section of the central facade has been punched out and the waste brick allowed to cascade over the top of the pedestrian canopy. The typical response to the building has been to interpret it as some sort of metaphor for apocalypse or destruction. The intentions, however, are more concerned with "missing parts," with the gap between the known and the void, with equivocation versus expectation as sources for a new urban iconography. The impact of the building as a public image is, I feel, based upon these ambiguities. There is now a widespread popular suspicion of institutional systems and their monolithic structures and symbols. In fact, it appears that *distrust* of institutions has become one of the important consolidating forces in our society. By rejecting the idea that architecture must be a confirmation of industrial and financial autocracy, SITE's Houston showroom becomes a reversal of the notion of "corporate image." Also, as any assessment of American consumer culture indicates, there is a traditional obsession with completeness, with an all-inclusive, neatly packaged state of consummation. Consumerism has been based upon the gratification of this utopian objective—as product names like Total cereal, All laundry soap, True cigarettes, and Best Products will attest—and, therefore, the message of the Indeterminate Facade derives more from the cultural implications of the tentative and incomplete than from any association with ruin. The Houston building is a paradoxical reduction by construction which reverses Mies van der Rohe's familiar aphorism "Less is more." In this case the inclusion of *more* (material) implies that there is *less* (physical substance) and suggests that the intention of *less* can be as creditable a purpose as the aspiration to *more*.

The 1977 Sacramento Notch Project continues this de-architecture dialogue within the shopping center environment. Again, as in Houston, the standard merchandising warehouse is retained; but, instead of including additions as reductions, this concept uses reductions as additions. A large, raw-edged notch is cut away from one corner of the masonry structure, serving as a main entranceway. The positive, wedge-shaped unit extracted from this gap is mounted on an incised rail system under the paving and mechanized to move a distance of about forty feet to open and close the showroom. The project is an ironic commentary on contemporary "public art" and its token status as peripheral embellishment. Contrary to the use of art as an "integrated" accessory to the building, the Notch Project proposes an integration by retaining the biographical evidence of a *dis*integration, which then establishes a new kind of relationship between art and architecture. When the notch is closed, the showroom exists as a building distinguished only by its broken fissure. When open, it becomes both a building and a separate, but obviously related, "monument."

The Houston and Sacramento showrooms cannot be extracted from context without a complete loss of meaning —a universal claim, of course, made by every site-oriented architect concerning his work. The difference here is a question of sources and objectives. In a conventional design program such elements as surrounding edifices become "related structures," existing trees become "natural accents," and adjacent properties become "coordinated spaces." The final purpose is a formalized visual homogeneity. SITE's buildings, on the other hand, are psychological in content and drawn more from the public's subconscious reactions to the shopping center's ritualized experiences than from its landscape and/or architectural relationships. Albeit controversial, the Best showrooms have generated an extraordinary popular response and have become magnetic places of identity in their respective communities. The iconographic urgency can probably be attributed to few, if any, of the more esoteric conceptual motivations; but this is not really the important issue. What is important is that a language gap between architecture and the public has been successfully bridged through an inversion process and with a considerable economy of means.

A great deal of recent theory and dialogue recognizes the crisis of sources in architecture and the need for alternatives to the language of Modernism. For example, there is Manfredo Tafuri's position, which maintains that modern architecture's obsessive concern with form and symbol has been limited to communicating the specialized interests of industrial capital at the expense of the working class and therefore must be salvaged by a utopian design of nonreferential form, in order to bridge all social change. Opposing, there is Charles Jencks' view that the humanization of architecture should evolve through the inclusion of an idiosyncratic, fluctuating, popularized iconography—or, in Jencks' words, by ". . . using a redundancy of popular signs and metaphors. . . ." Tafuri observes that "the crisis of Modern architecture is not the result of 'tiredness or dissipation.' It is rather a crisis of the ideological function of architecture." He continues, "Modern Architecture has marked out its own fate by making itself, within an autonomous political strategy, the bearer of ideals of rationalization by which the working class is affected only in the second instance." He further argues that "First among the intellectual illusions to be done away with is that which, by means of image alone, tries to anticipate the conditions of an architecture 'for a liberated society.' Who proposes such a slogan avoids asking himself if, its obvious utopianism aside, this objective is pursuable without a revolution of architectural language, method, and structure which goes far beyond simple subjective will or the simple updating of syntax." Jencks counters these notions by suggesting that "If one wants to change a culture's taste and behavior, or at least influence these aspects, as modern architects have expressed a desire to do, then one must speak the common language of the culture first. If the language and message are changed at the same time, then both will be systematically misunderstood and reinterpreted to fit conventional categories, the habitual patterns of life. . . . A more promising approach for the modern architect, or social interventionist, would be to study the 'popular' house in all its variety and see how it signifies a different way of life for the different taste cultures and ethnic groups." Although both Tafuri and Jencks concur on the irrelevance of the Modernist legacy within our present social structure, they seem to disagree on the principles and methodology for arriving at a valid new language. Tafuri supports the concept of an architecture of responsible social process, but devoid of specific symbolism; whereas Jencks sees buildings as embodiments of popular imagery and applauds the use of referential signs and metaphors. If these two positions can be said to represent a basic polemic in current theoretical dialogue—most others are conventionally bound to formalism and the Modernist traditions—there is a third, and potentially more fertile, territory that includes aspects of both and yet has not been sufficiently explored. As I noted earlier, contemporary architecture has seldom utilized the culturally charged paradigm or symbol for the discovery of "other levels" of communication in the way pioneered by Duchamp and, later, by Jasper Johns. Jencks limits this associative aspect to obvious metaphor, to seeing "one building in terms of another, or in terms of a similar object,"

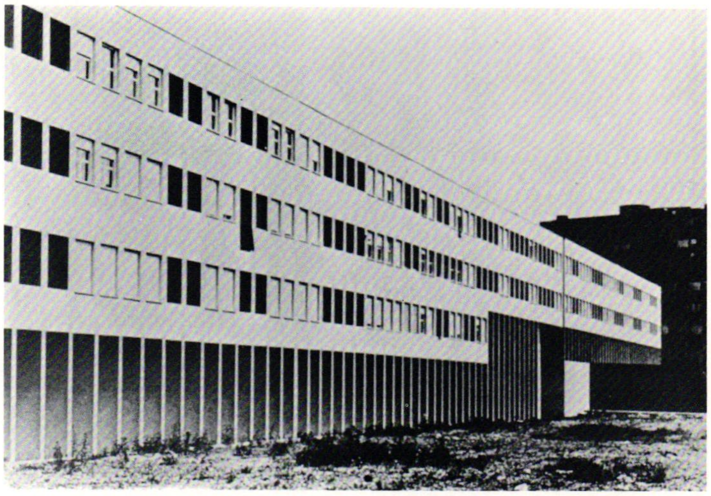


Fig. 16. Gallaratese Housing. Aldo Rossi, 1969–73.

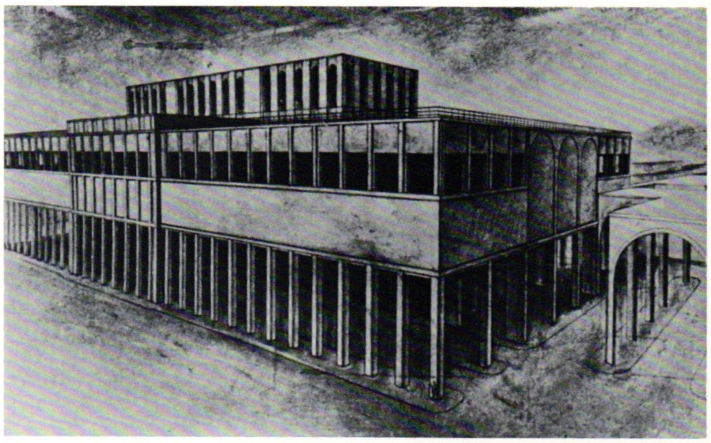


Fig. 17. Consoro per la nuova Stazione di Firenze. P. Pizzigoni, 1933.

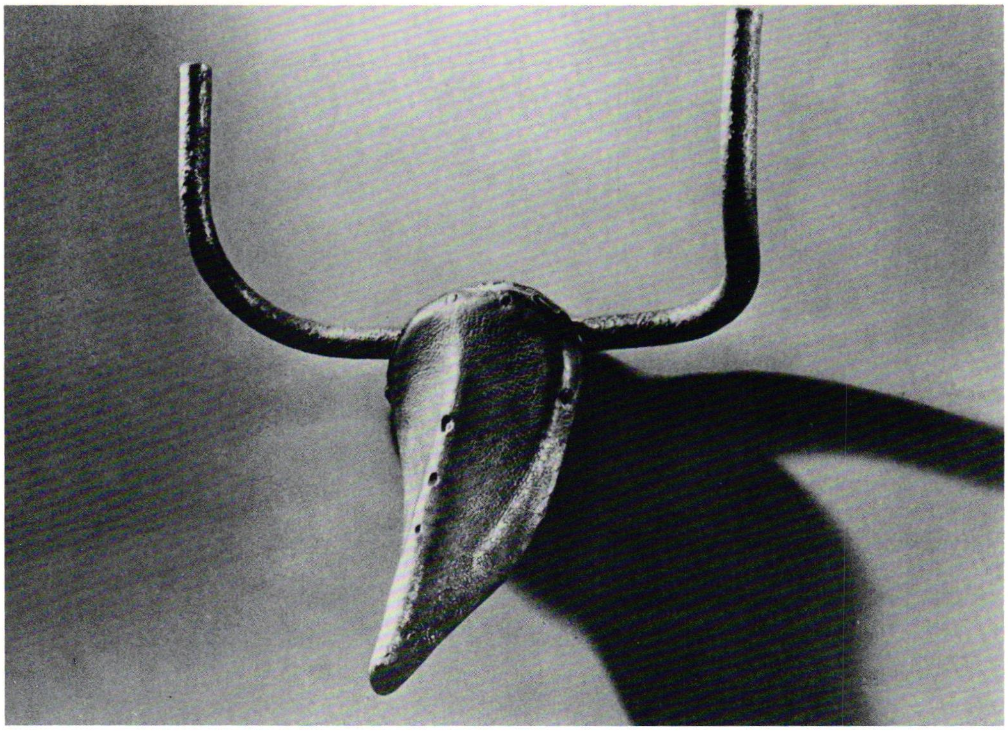


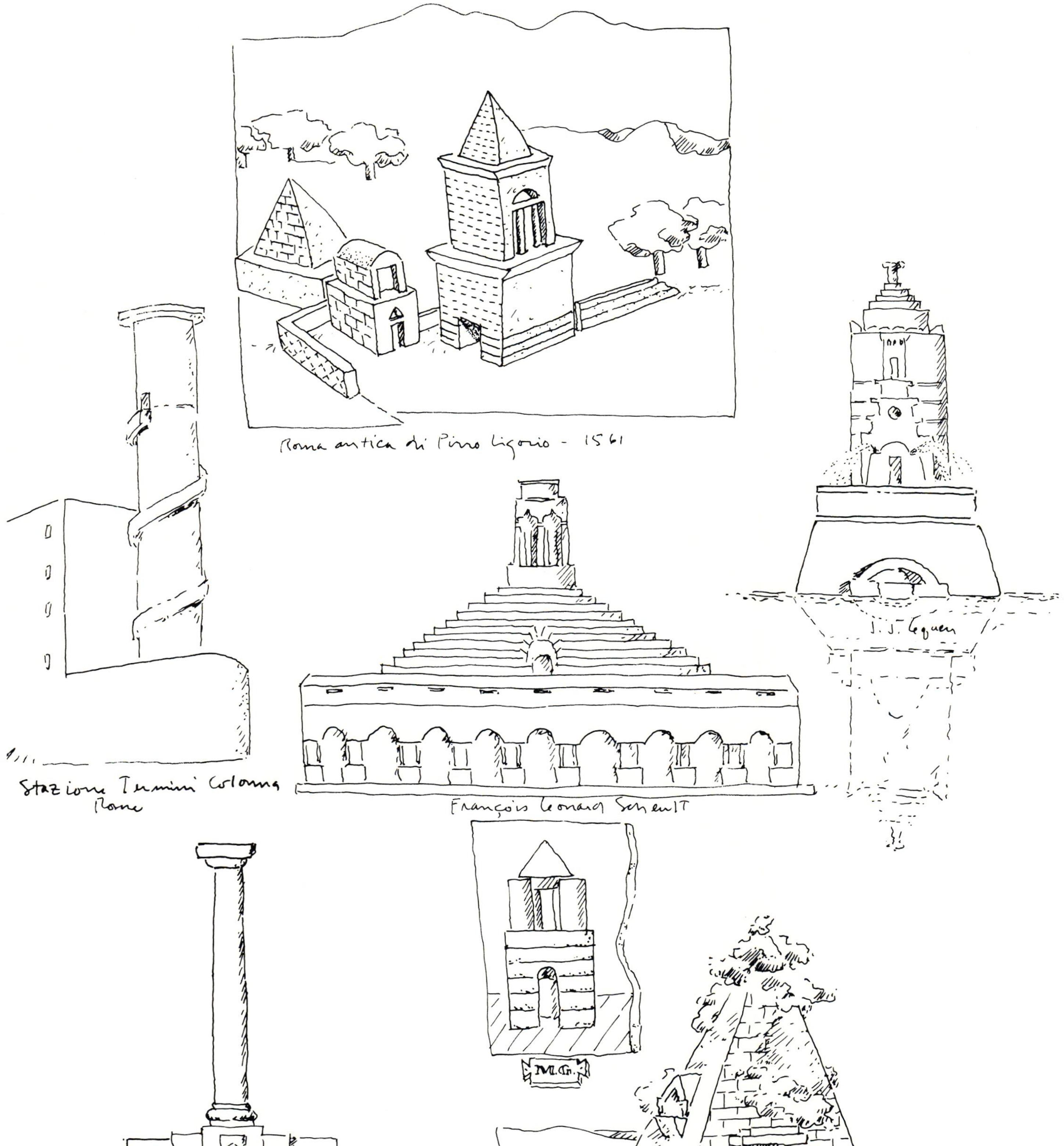
Fig. 18. Bull's Head. *(bronze) Pablo Picasso, 1943.*

citing such examples as the nun's cowl image evoked by Le Corbusier's Ronchamp Chapel or the anthropomorphic connections in Gaudi's Casa Batello. Tafuri advocates a kind of all-encompassing instant classicism which, if the work of Aldo Rossi can be considered representative, runs the risk of an even greater alienation from pluralist ideals by means of a rational control of space and form suspiciously reminiscent of fascist period design. The alternative to both positions is more interesting, more ambiguous, and potentially more communicative. This "other level" embraces the fact that an object—any object, including a building—can invade the subconscious without an obvious metaphorical association, but, instead as a question concerning the identity of the object itself and whether what we see as that object even exists as perceived. Science has repeatedly indicated that we are microcosms of the universe and that our inability to comprehend the total of phenomena is because we are the embodiment of the questions and therefore not vehicles through which the answers can be filtered. Yet science, like art, still uses models to retain what it assumes to be comprehensible in order to explore the incomprehensible. In this way the object and its associative level reach beyond metaphor and become a point of connection between the human sense of limitation, on one hand, and the sense of an abstract destiny on the other. For example, in art, Picasso's "Head of a Bull," fashioned from a bicycle seat and handlebars, was obviously a direct and easily recognizable metaphor. Duchamp's "Readymades," conversely, where chosen objects intended to remind the audience of shared identifications on the first level and yet to imply that this significance is not necessarily the only dimension of an object. In point, Duchamp often wrote of his interest in a fourth dimension which would be a "shadow of the third dimension." The object's associative aspect is merely a first plateau (or stabilized form) through which more intriguing questions can be proposed. Since these questions (other levels) are elusive, they connect more to a disordered subconscious than to a rational—and limited—conscious.

The concept of an uncontrollable destiny has threaded its way through all of twentieth-century philosophy, has directly affected most of the other arts, and has now begun to shape the popular sensibility. But architecture—particularly "built" architecture—has continued to maintain an abiding belief in the value of determinate symbols and systems. The late scientist/philosopher Jacques Monod summarized that "Chance alone is at the source of all novelty, all creation in the biosphere, . . . pure chance, only chance, absolute but blind liberty is at the root of the prodigious edifice that is evolution." Sculptor Robert Smithson extended this realization to the visual arts by concluding that "As long as art is thought of as creativity it will be the same old story. Here we go again, creating objects, creating systems, building a better tomorrow. I posit there is no tomorrow, nothing but a gap, a yawning gap. This seems sort of tragic, but what relieves it is irony, which gives you a sense of humor. It is that cosmic sense of humor that makes it all tolerable." Given the overwhelming scientific evidence supporting these views, it would appear to be total folly for any art form claiming relevance to continue to isolate itself from the influences of entropy and indeterminacy.

The monumental/symbolic function of architecture is dead, and all efforts to perpetuate this purpose are pretentious and extraneous, no matter how well conceived. We presently lack the cultural estate and unifying ideology necessary to lend it any significance. Whereas this century's earlier definition of social responsibility in architecture involved structured control of human behavior and visual response, the emerging definition seems more appropriately derived from contradictions to the concept of an orderly matrix. As I noted earlier, the nearest equivalent we have now to a public consensus is the universal suspicion of institutions. Therefore, an iconography which merely reinforces these institutions is doomed to fail as a means of urban communication. Our present sources of imagery are, instead, more naturally phenomenological, sociological, and psychological. If architecture is to regain it status as an urgent public art, this objective can only be accomplished with the humor, modesty, and arbitrariness so lacking in every aspect of its present character.

Fig. 19. Bicycle Wheel. *Marcel Duchamp, 1913.*



Drawing by Michael Graves.

AN INTERVIEW WITH MICHAEL GRAVES
VIA Editors

THE *VIA* editorial board conducted a series of informal conversations with Michael Graves in Princeton in 1976 and 1978. The material presented here is excerpted from those discussions.

VIA: We have seen your interest in symbolic communication as having a social value, and we thought we might talk about the sources and intent of meaning in your work.

MICHAEL GRAVES: I think we need to clarify what is being suggested by your phrase "social value."

Your conscious involvement with communication, and your concern with meaning in architecture, the "audience" that's implicit in such a framework—these are the issues. We may be focusing here on things you might consider outside the scope of your interest, but there was discussion of primary and secondary meaning in your work, primary expressing functional concerns, and secondary commenting on the rules, the expression, and the experience of architecture. That's how Mario Gandelsonas wrote about your work in a Progressive Architecture *article. One should ask whether you agree with him.*

I have always felt that architecture as a discipline can be discussed in terms of social issues, or political, or economic, or literary issues, etc.; however, in any such discussion, it is important to establish the primacy of the culture of architecture itself. It has always been my understanding that other disciplines, such as literature, might use architecture referentially or metaphorically, but as a discipline literature defines itself through its own medium. It seems to me that the richness inherent in an architectural culture can, or should, do this as well.

While focusing on social concerns, we hope still to be talking about architecture.

This is something I feel rather strongly about. I prefer to keep architecture as the subject matter here, and its social dimension as one of its supports, rather than the reverse. "Architecture has a social value"; probably, but that's not what architecture is about. Architecture is about architecture. That's not an elitist position, that's a cultural position. Of course, buildings are for people; that goes without saying. There are those, however, who feel strongly that since architecture is in part shelter, its value exists only in the pragmatic realm. But we know that culture in general has always regarded architecture not only in its discursive or pragmatic dimension, but also in its nondiscursive or symbolic dimension. It is a characteristic of any society to impart meaning to its artifacts, and architecture is surely considered one of a society's primary cultural artifacts.

You talk about meaning, but to communicate the meaning there would seem to be the need for a code, a certain agreement between the architect and the persons toward whom this meaning is aimed. The criticism is that the code you employ is private and personal, and to understand it requires a certain initiation, which architects of the past did not necessarily need to rely upon in order to communicate their intentions. For example, Charles Moore wrote in Architectural Forum *that he had tried to understand the book* Five Architects *(New York: Oxford University Press, 1975) but could understand only a little. He found this rather distressing, since he says that he tests "well for that sort of thing." If Charles Moore has difficulty understanding, what does it say about your architecture? If many people find your architecture hermetic, what does it mean? Does it mean that you need a new code?*

Well, Moore's quote is taken from the criticism of two buildings, the Benacerraf House (Fig. 1) and the Hanselmann House (Fig. 2). I think that to some extent, he's right on those two projects, because these early buildings of mine are my most abstract compositions. In fact, they tend to overlook the figurative aspects of architectural representation for the sake of the multiple readings inherent in a code of abstraction. In other words, the bias in this case was toward abstraction to the exclusion of any literal or figurative suggestion. There is a very nice Wallace Stevens quote, something on the order that without abstraction the composition cannot affect more than one group of listeners, or one group of viewers. Without abstraction you cannot have multiple meaning. And we might say that without ambiguity, you cannot have multiple meaning. Conversely, without a degree of literalness, one cannot set up the meaning; one cannot establish the code. If I were to redesign the Benacerraf House now, I probably would be slightly more literal about some of the elements I was trying to abstract. What one is eager to find is a way of employing both abstract and figurative elements in any composition in a balance that is relative to the culture at large, in order to effect its understanding and its reading.

In Baroque architecture, the tower of Borromini's S. Andrea della Fratte (Fig. 3) in Rome, for example, there is a degree of literalness involved in the caryatid supporting the soffit: a certain ephemeral quality is established by the use of a female figure as support. Though the caryatid is a literal figure, there is nevertheless ambiguity in the idea of a female figure carrying the load; however, Borromini continually took the code and gave it prominence, shifted it, changed it, forcing you to look at the way the code had been shifted, and what the code really was, what it stood for, and how it has been represented.

I have another question, relating to Robert Venturi's idea about culture and architecture. The taste of "architects" and the taste of "people" for architectural form is frequently different. The approach in Learning From Las Vegas *is to respect the taste of the "people" by emulating the forms of the strip and the suburb. By comparison, your formal vocabulary seems quite separate and distinct from the general context of present-day America. This would seem indicative of a breach between the architectural sensibilities and aspirations of the "average" American and your own architecture. Do you consider yourself an elitist?*

I would like to respond by discussing the issue of popular culture. Popular culture gets its strength, it seems to me, through its transitory nature. It is probably interesting to us because it is short-lived, a part of fashion or trends, and probably has a commercially oriented base. It must change or be supplanted by other trends and fashions. It must be made over to feed its commercial orientation. It gets its strength from being here today and gone tomorrow. Its

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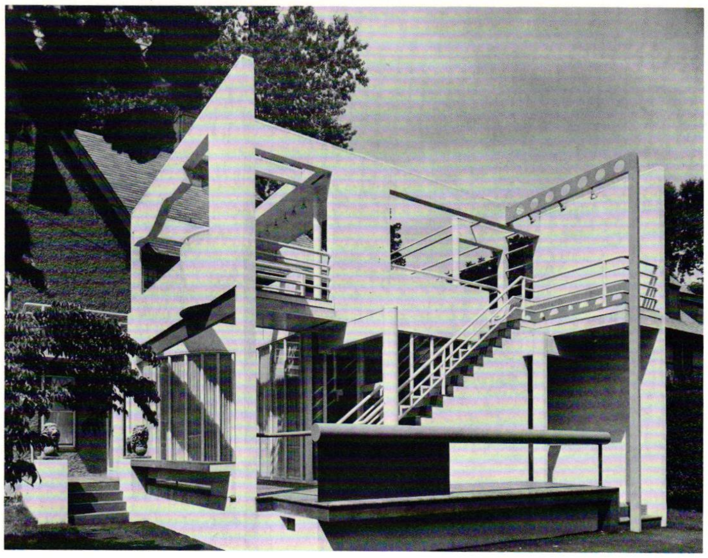

Fig. 1. Benacerraf House Addition, Princeton, New Jersey. Michael Graves. 1969.

Fig. 2. Hanselmann House, Fort Wayne, Indiana. Michael Graves. 1967.

symbols are, in fact, transitory. To codify elements of the popular culture is to make them static, which is contrary to their ephemeral nature.

I think it's more than just signs on the strip. I think it's also an attitude toward learning from people, and what they use as systems of communication, and employing some of the same code in order to arrive at an understanding. Which leads to another question: Should not architects aspire to a large and diverse audience? Should not architects understand that, since they are dealing with a form of public communication, they ought to try to communicate as fully, and as well, as they can?

Certainly; however, architecture is surely more than a system of communication. I tend to think that the communicative value of architecture, though necessary, exists primarily on the surface, and that what one is ultimately interested in is a level of participation that involves the reciprocal act of ourselves with the figure of the building, which, like good literature, goes beyond communication and ultimately involves us in the text. There are parts of the architectural code that do have to be learned. And one of the joys in architecture, by the way, is learning them. If it were all accessible, it would be a bore, even for the man in the street. In any discipline or art form, some of the symbolic value is immediate and accessible, and some is less so. The discovery of the less accessible meaning is part of what we as a culture have always valued. I think what is implicit in your question is that since building is by nature public, it should necessarily follow that *all* its symbols are easily read and understood. You would not ask that of literature or painting because, you might suggest, they are less public. At the same time, you would not ask that journalism be literature, and I would agree. You would agree, I think, that architecture is both: By its nature, it is pragmatic and discursive, but it is also symbolic and nondiscursive.

I should be more specific. One assumes that in the development of an architectural code, there is a transferal from the literal conditions of nature, which through the devices of metaphor and analogy are transformed into architectural form. This process involves a degree of abstraction. In moving from the tree to the column as representing the tree (Fig. 4a, b), one loses the original, figurative natural form that reminds us of its beginnings. The final abstraction becomes the plain cylindrical post, whose lack of identification of top and bottom, head and foot, capital and base, reduces our ability to make those original natural associations.

Bernini's serpentine columns in the St. Peter's baldachino (Fig. 5) are probably ultimately derived from the idea of the serpent entwining the tree in the Garden of Eden. The baldachino columns were read by virtue of the observer's ability to participate in an architectural code that was both understood and learned. It is the extension of our current inability to make such associations that has led in part to our current sense of alienation with architecture itself.

How do you reconcile this in your work?

It is my intention, in order to counteract the current abstract nature of architecture, to derive some meaning in the building by virtue of classifying, or describing, the differences between elements such as doors, windows, floors, and ceilings—elements that are more germane to an architectural code than to any other art form. A novelist can use a window as a metaphor, because it is an element of an architectural code that derives part of its significance from being different from a door. If one describes the door and the window as the same in an architectural composition, con-

Fig.3. S. Andrea della Fratte, Rome. Francesco Borromini.

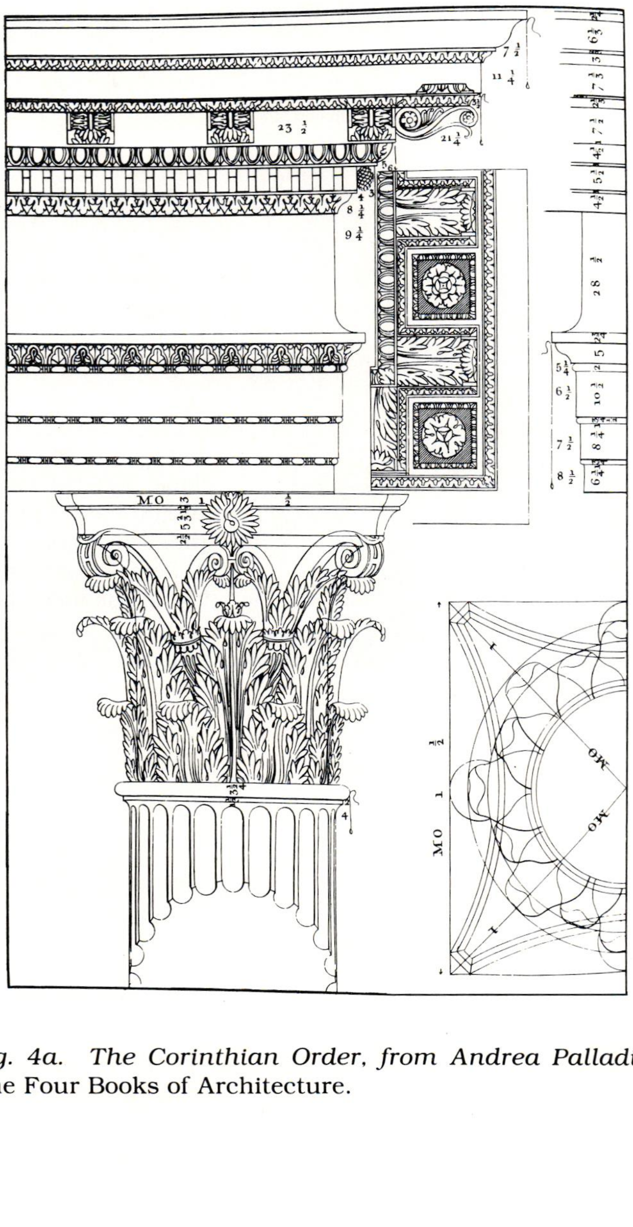

Fig. 4a. The Corinthian Order, from Andrea Palladio's The Four Books of Architecture.

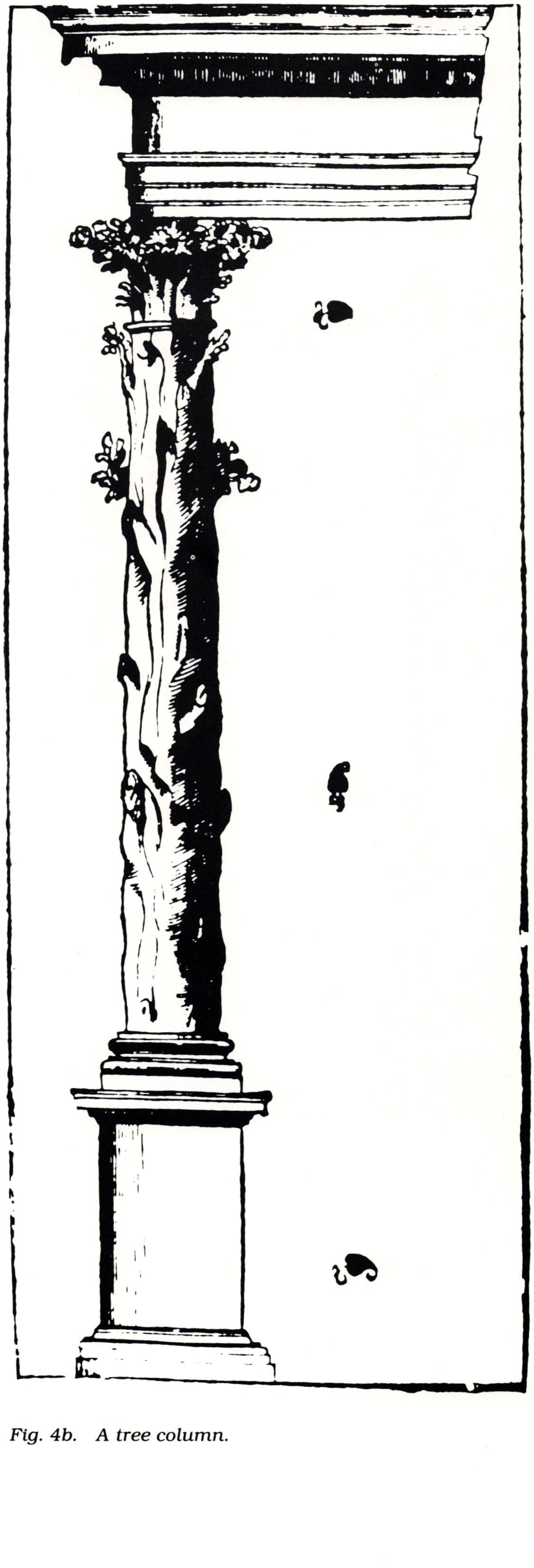

Fig. 4b. A tree column.

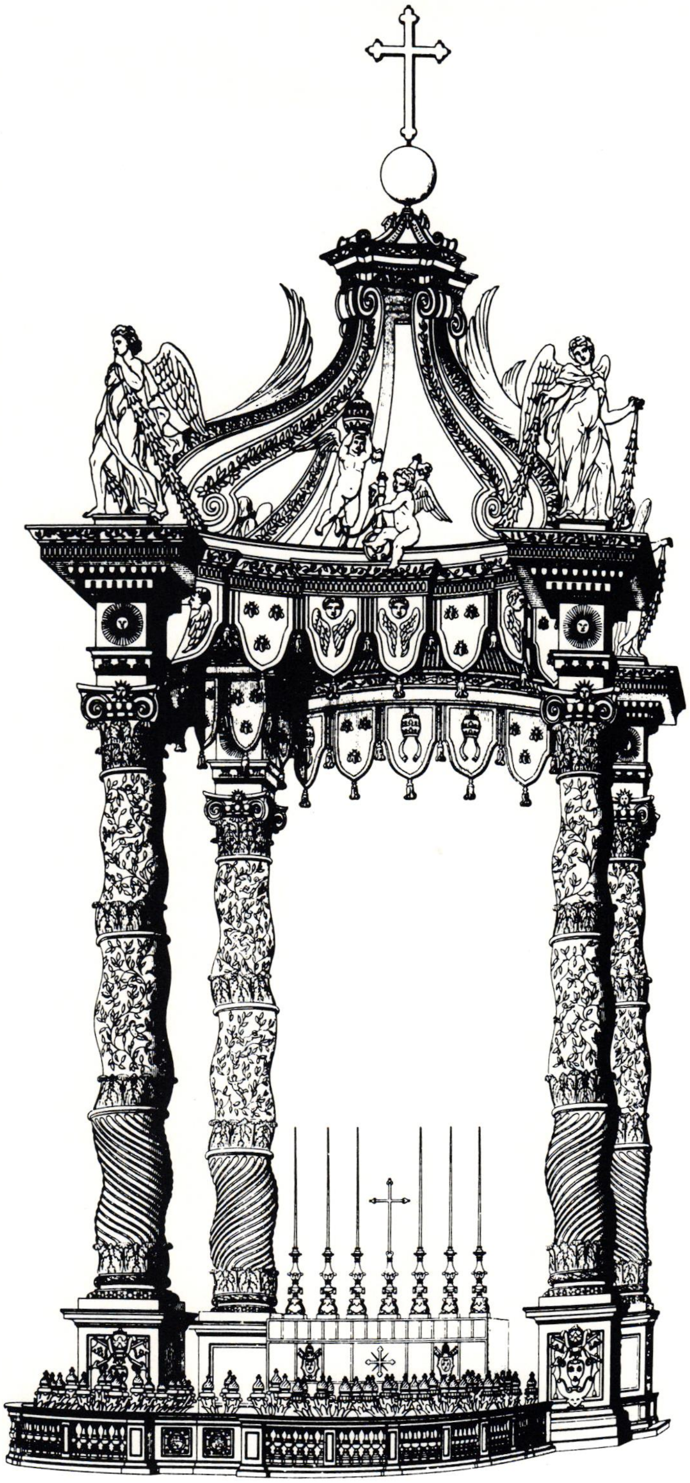

Fig. 5. The Baldachino, S. Pietro, Rome. Gianlorenzo Bernini.

Fig. 6. Pavilion IX, University of Virginia. Thomas Jefferson and Benjamin Latrobe.

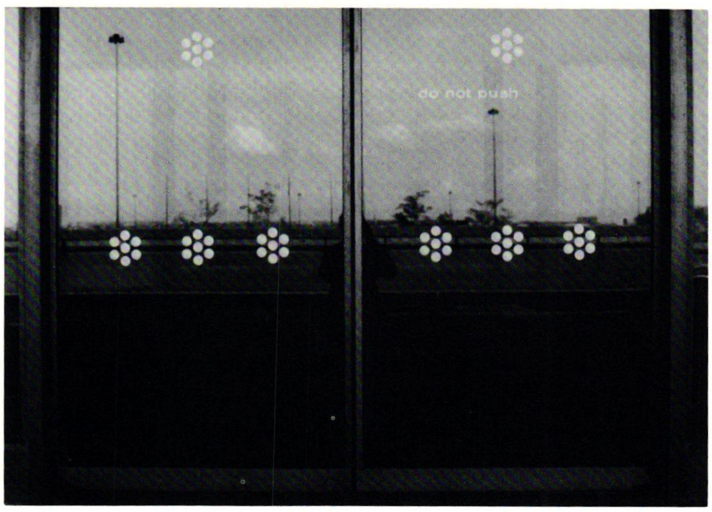

Fig. 7. Newark Airport door.

Fig. 8. Claghorn House Addition, Princeton, New Jersey. Michael Graves. 1974.

fusion about these elements arises. The level of abstraction that one finds in architectural practice today forces one to see more similarities than differences among those elements. Because a door might have a piece of glass in it, and a window might have a piece of glass in it, certain architects trained in the Modern Movement would try to see a unity by making them the same and stripping each one of its individual significance.

A classical code would describe differences in the elements and derive unities from the ensemble of these different elements. Classical thinking would make associations with both nature and our own bodies. Thus, the differences between foot, body, and head can be seen in a column, in a window frame, and in a whole building (Fig. 6). But when such differences are not recognized, and all the elements are seen as the same, or nearly the same, when the same materials are used on the floors and the ceilings, then the code becomes confused (Fig. 7). As the hierarchies and distinctions are eliminated in the Modern Movement's mode of expression, we lose not only the familiar but also the idea not just of house, but of domesticity. We lose our ability to express ritual, the opportunity to make distinctions that are based in the culture, to act in some sort of unity with the ritual or mythic aspirations of society.

In your Claghorn Addition (Fig. 8) *you employed an abstracted split pediment. Would you now say that it would work better if it were more similar to the classical paradigm?*

Yes. It is interesting, however, that you can say the "split pediment," since calling it that is pretty literal. The device used is more complex than that of the classical split pediment, as the pediment is first broken, and then the two pieces are pulled apart and engaged to separate faces of the house. This was done in order to call attention to the addition itself, as if the broken pediment had once occupied the same plane, and by virtue of the addition was disengaged, with one half extended into the garden. However, in order not to lose the observer's understanding, it needs to be further identified as a pediment (Fig. 9). In this particular case, though what one was after was a more accessible or literal reading, I nevertheless feel that it has been extended to a level of abstraction that makes its reading difficult.

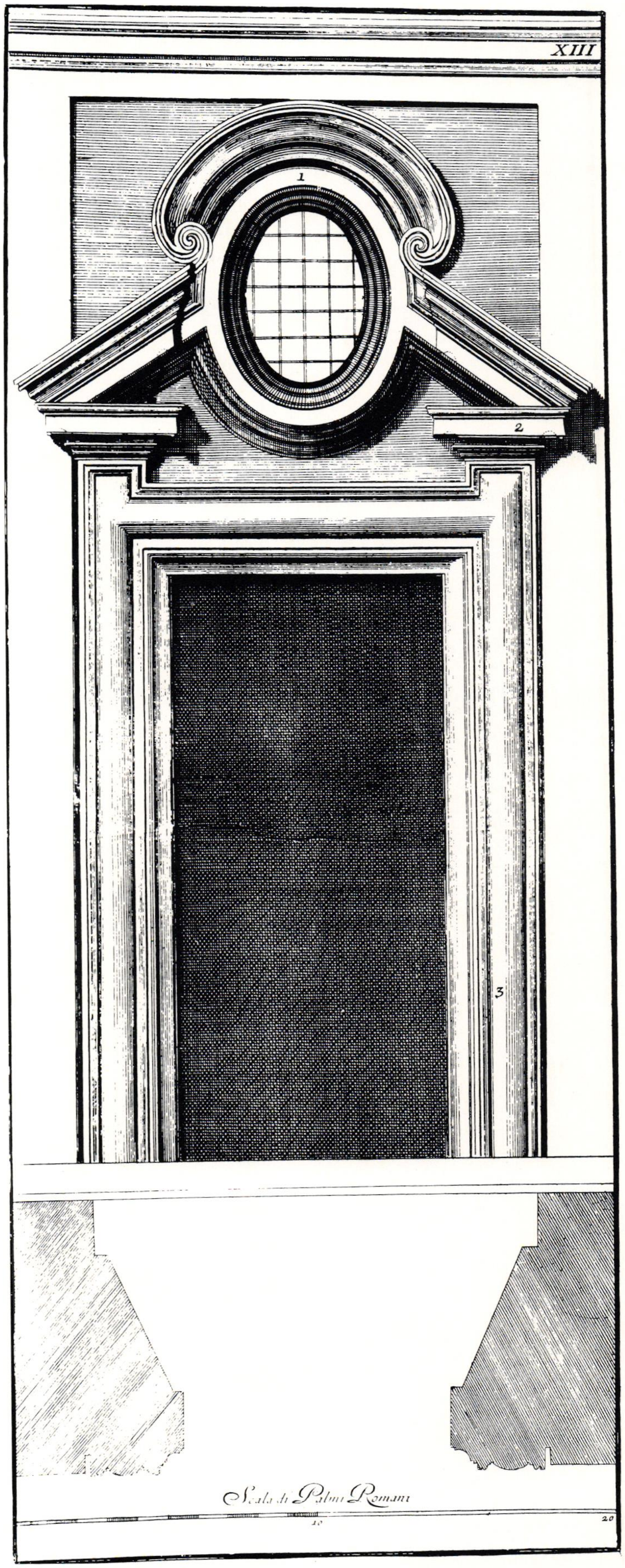

Fig. 9. A door by Francesco Borromini, from Opera & Opus Architectonicum.

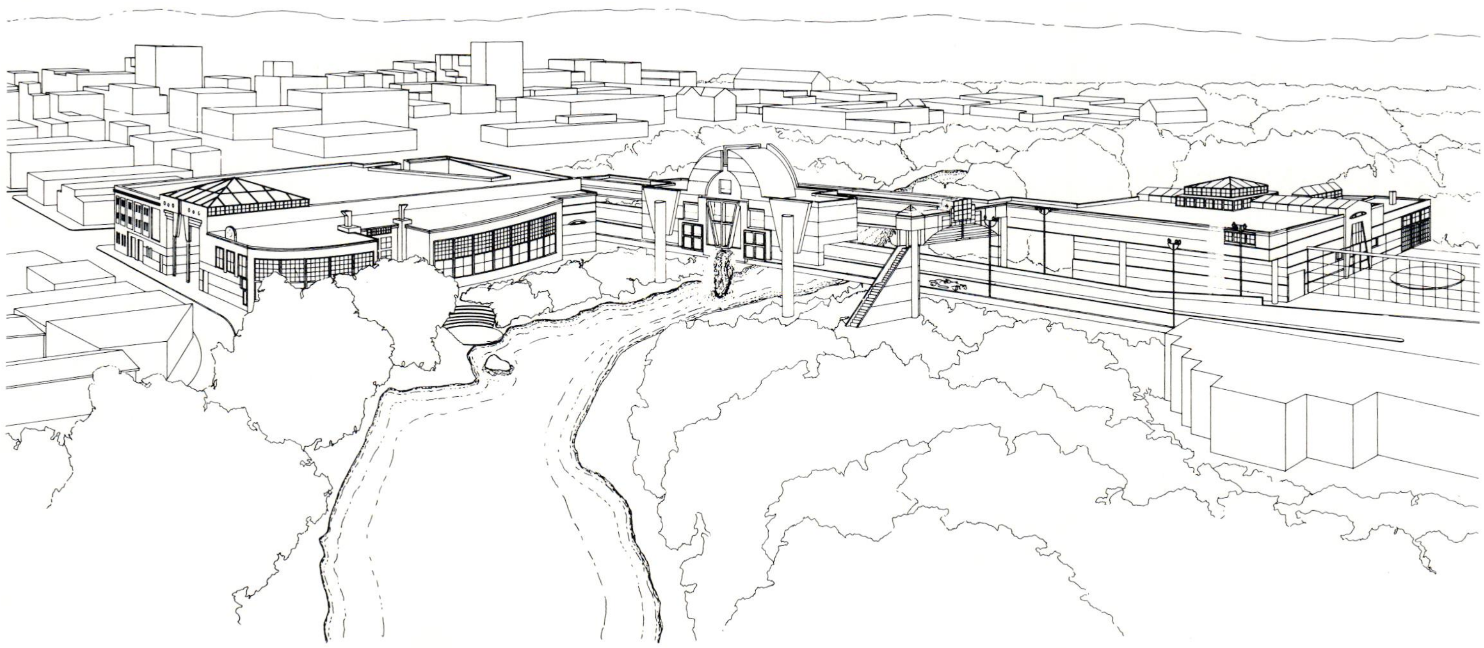

Fig. 10. Fargo-Moorhead Cultural Center. Michael Graves. 1977–78.

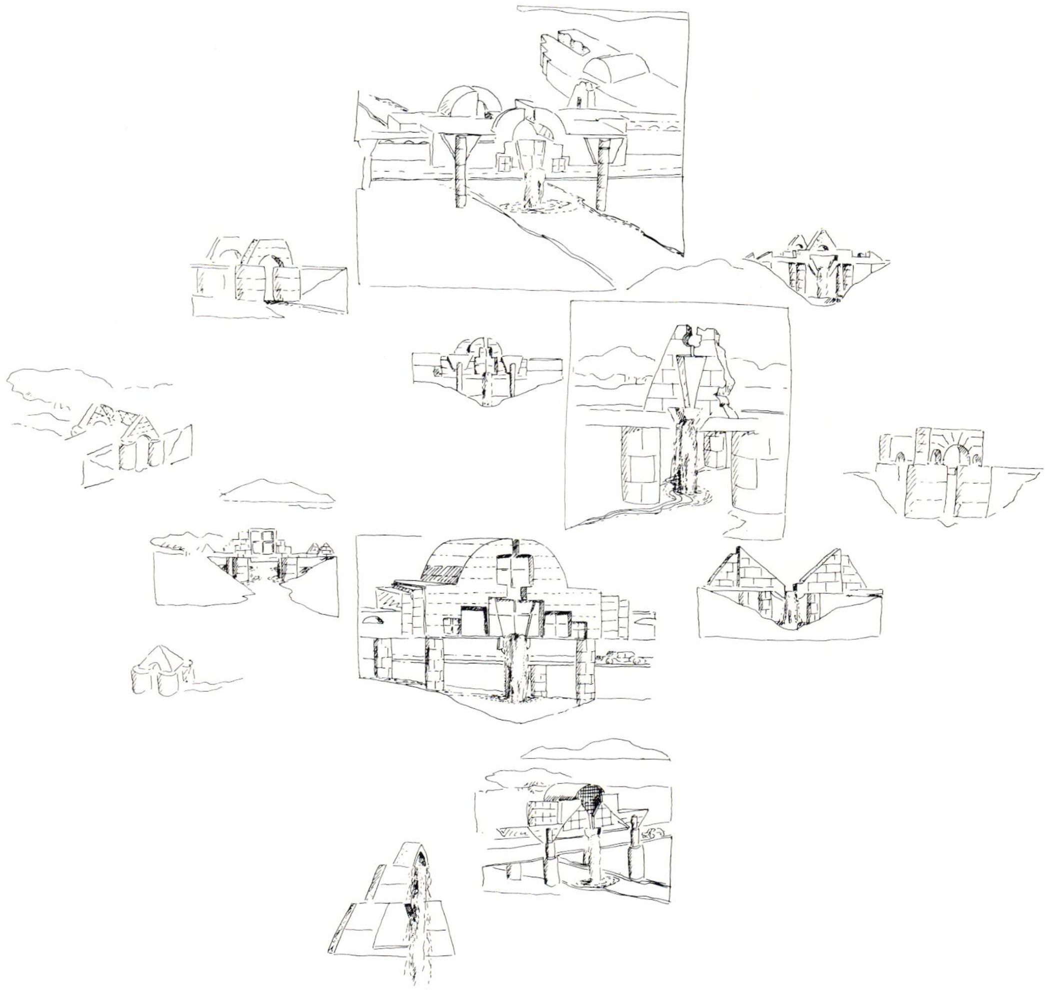

Fig. 11. Sketches for Fargo-Moorhead Art Museum.

How do you relate the issue of symbolism to building on a larger, more public, scale, such as your recent project for a cultural center in Fargo, North Dakota and Moorhead Minnesota (Fig. 10)?

Let me describe the context. The Red River of the North runs between, and separates, two cities in adjacent states—Fargo, North Dakota, and Moorhead, Minnesota. These cities have been politically and geographically divided by the river. When the two communities decided to have a new cultural center, it was apparent that a shared facility would offer them the most economical solution, and the region around the river was an appropriate site.

The program called for a new concert hall, a history museum, an art museum, and facilities for public media. With the buildings sited along the river's edge on opposing banks, and the art museum spanning the river atop a vehicular bridge, the center was seen as an actual and symbolic bridge between the two communities. Heidegger describes how a river enjoys specificity for the first time when a bridge is made across its width; through the specific location of the line of passage, a place is established on each side. Pragmatic considerations dictated that certain parts of the center should be located on one side or the other, but this is less interesting than the concept of a cultural span across the river. By identifying the image of the cultural center with that of a bridge, the synthetic role of the complex is made symbolic. This idea is further elaborated by the large keystone-shaped window in the middle of the bridge.

When viewed in its traditional architectural role, the keystone also acts as a symbol of bringing together the two communities. It is still further identified as an element capable of acting as a scupper, collecting the sustenance of the sky and feeding the river below. The water issuing from the bridge is something one might not expect, but therein lies the possibility for seeing the role of the water as a fore-grounded element. The presence of the water makes one more conscious of the river itself, rather than seeing the river as only a horizontal plane. The verticality of the waterfall combined with the horizontality of the river allows one to read the dimension between the bridge and the river as a part of the architectural form, analogous to the classical basement story. The pedestrian crossing that connects one side of the river to the other is articulated as an enlarged cornice, capping the lateral facade spanning the river. The classical tripartite relationship of basement, *piano nobile,* and attic are here seen by means of the waterfall as base, the keystone window as identifying the body of the museum itself, and the attic as skylight for the collection below. It is by the use of such natural and anthropomorphic references that one is attempting to reaffirm the archetypal meanings held by the culture of architecture.

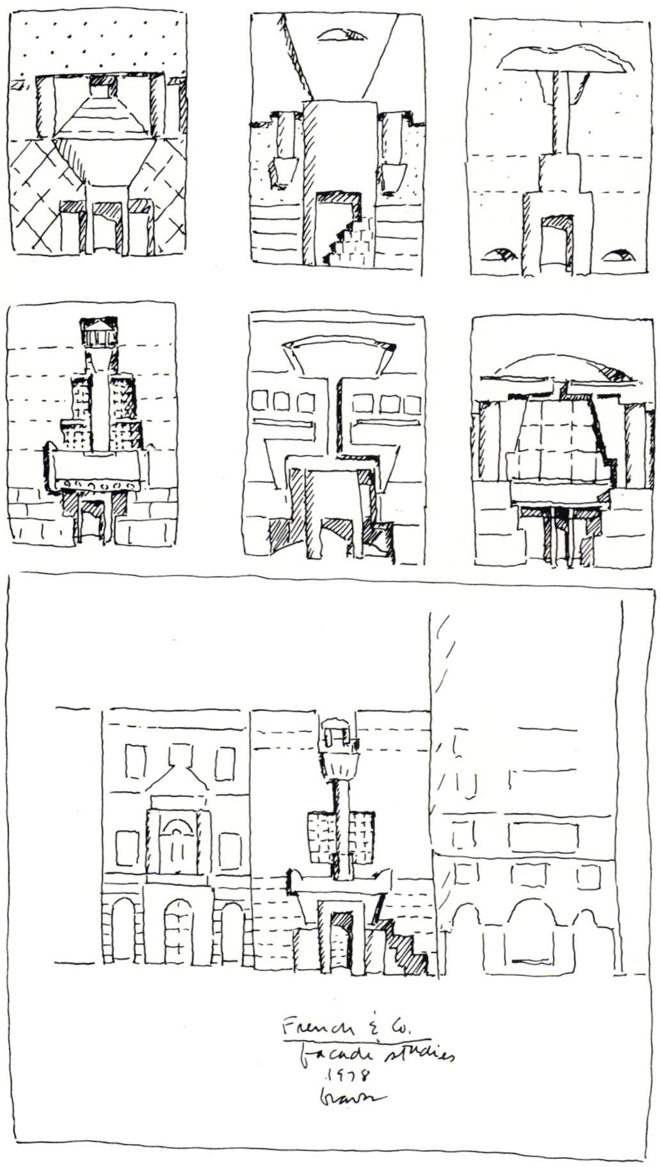

Fig. 12. Facade studies for French and Co. New York City. 1978.

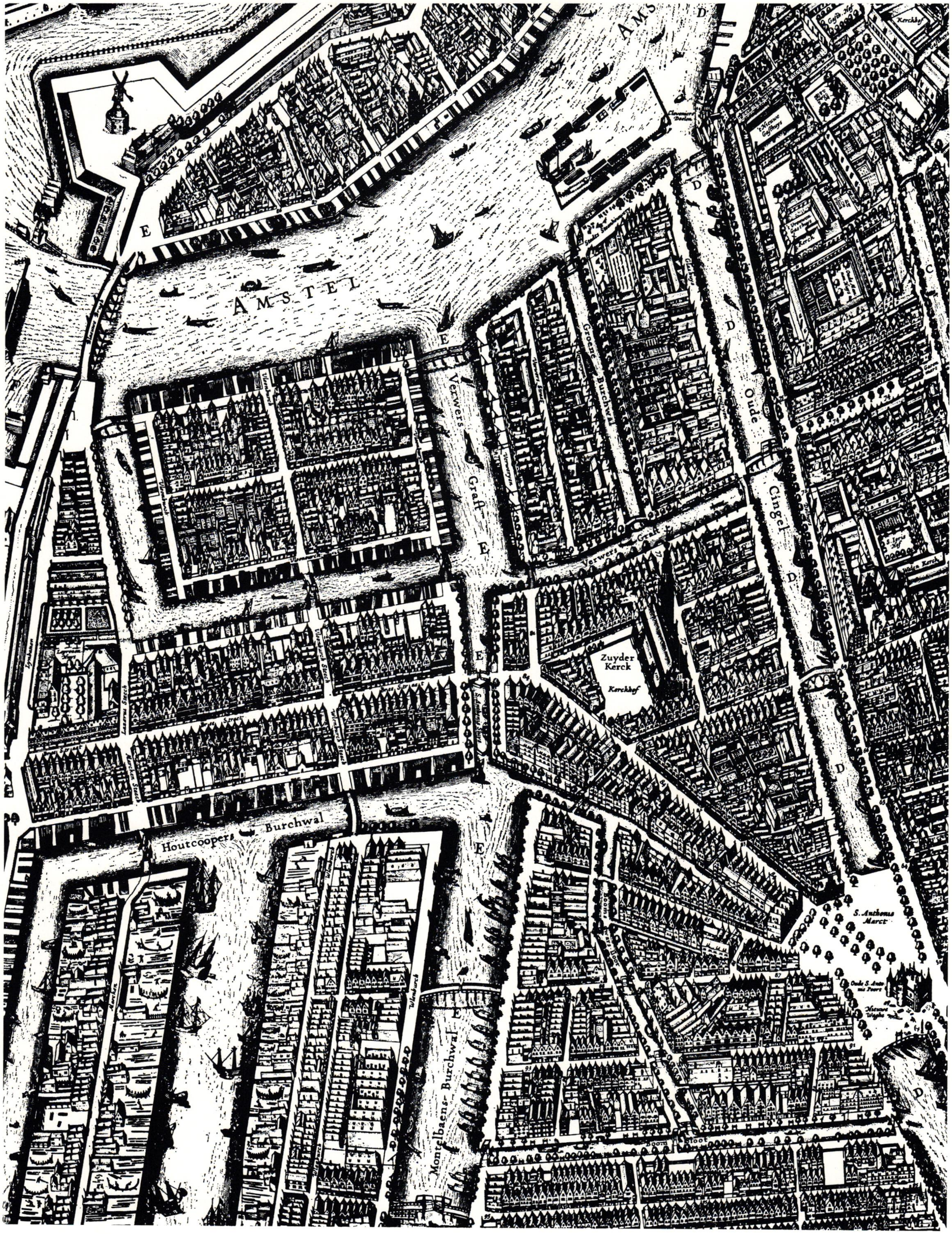

Fig. 1. The site on the Amstel River as it appeared on a map of 1625.

THE LEAVES AND THE FLOWERS

N. John Habraken

I TAKE this opportunity to write about a few things that are very dear to me: architecture, first of all; secondly, the beautiful city of Amsterdam that I love so much: and lastly, a design exercise I did, the drawings of which I have not seen myself for many years. They are for a project I did almost ten years ago, a competition to design the new Amsterdam Town Hall. I had just taken on the organization of a new Department of Architecture in Eindhoven and, although I had not time for this competition, for some reason or other I was so intrigued with the problems it posed that I spent several nights pondering them.

It has suddenly dawned on me now that the problem I saw in the competition was indeed representative of so much I have always been thinking and writing about that it was quite understandable why it had intrigued me at the time. And now, ten years later, I can perhaps explain what it was I tried to do then.

I also realize, looking at the drawings I made at the time, that the problem is still worth some attention. In fact, it is perhaps even more pertinent now than it was ten years ago, in the sense that perhaps there will be an opportunity now for dialogue.

What was the exercise about? A big building, mostly housing administrative offices, but accessible to the citizenry as well—a place where the community could feel at home, as well as conduct business. It had to be done on a site that was part of the fine-grained historical tissue of one of the most beautiful and characteristic cities of Western culture. It could not be a palace; it could not be an office building. It could not be a high-rise; it had to be accessible to everyone. It had to function for many, many years in an uncertain future. If it had to be a symbol, what powers should it represent? If it had to become a functioning place, what values would people attach to it? These were the obvious questions posed by the competition.

First there was the city of Amsterdam. The rich urban tissue, so distinct in scale, monumental in its tree-lined canals, ever human in its abundant variety of individual buildings, a generous organism full of vitality, capable of growth and self-renewal for many centuries. Would it be possible to cultivate the organism, to have it sprout yet another part? Could something grow there in an almost natural way, or did something have to be imposed, alien and artificial—a dead stone in living vegetation? Here you can see the themes that have fascinated me for so long: growth and change, the continuation of patterns as results of human action; the way living urban tissues are developed out of many small, individual entities; and, above all, the underlying structure, the relatively constant holding the relatively ephemeral; the unity and diversity; the beauty of the extraordinary that compliments the beauty of the ordinary—the leaves and the flowers that speak of the same tree.

Let me show you part of a seventeenth-century map of Amsterdam that gives you the site of the project (Fig. 1). It is the rectangular island neatly divided into four blocks by two streets. It faces the River Amstel at the point where it flows into the city. As it bends at that point, there is a beautiful view down the river from the site we are interested in. At the time that this map was made the city was engaged in its most ambitious extension plan ever. Three major new canals were to circle the existing town. When these were completed the city had more than doubled its building area (Fig. 2). Ambitious and bold in scale as it was, the new extension was a continuation of the old. The elements were the same: a hierarchy of canals and streets laid out in an orderly pattern, along which buildings were built, following the same patterns as those that the citizens already knew. Certainly, there was development in style, in materials, in the treatment of façades and floor plans. But it was development, not innovation. No revolution. No alienation either, apparently. What is most remarkable is the consistency in the dimensions that are the most structural of all: the size of the lots, the width of buildings. Six meters is the dimension that perhaps denotes the scale best of all. It is the space you can span with a wooden beam from one brick wall to another.

Around 20 or 21 Amsterdam feet (28.3 cm) seems to be the dimension that was used from earlier times. On the new canals, where the rich merchants built when the city was at the peak of its prosperity, we find 30-foot lots, and sometimes a person bought two lots to build one monumental house in stone. The working class and lower middle class, the bulk of the population, built in brick on 20-foot lots, sometimes less, sometimes a bit more. Six to seven meters seems to be the dimension that most reveals the underlying system.

And the system of the town is really walls perpendicular to the streets—brick walls, one next to the other, each holding its own floors. Since the time of the early fires in the fifteenth century that devastated the city, partywalls have had to be brick. And they held the building together. The façades were really nonstructural "curtain-walls" that literally were hung

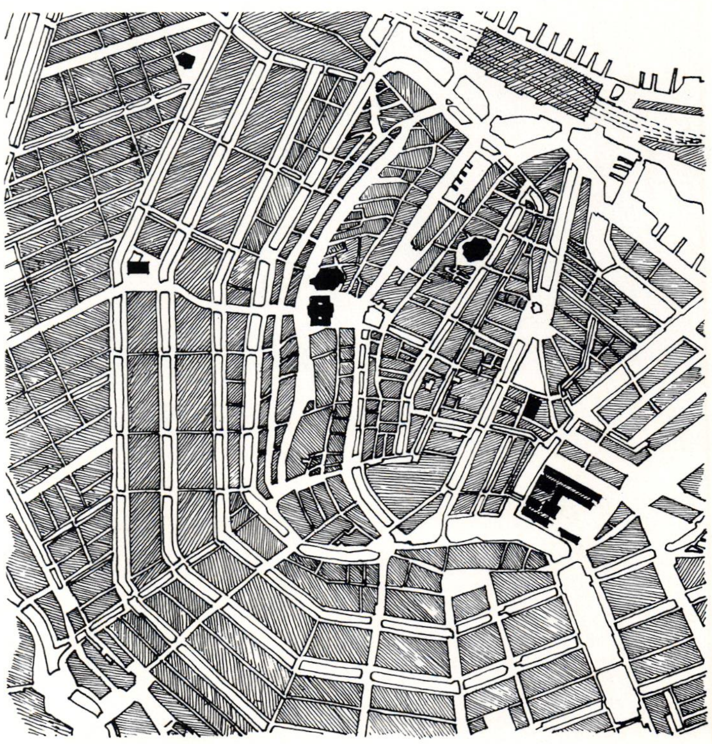

Fig. 2. Amsterdam center. Note the seventeenth-century extension by the three major canals around the medieval core.

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Fig. 3. The facades of canal houses are curtain walls suspended on a structure of brick party walls and wood beam floors, lending themselves to change over a period of time.

Fig. 4. Aerial view of Amsterdam center. In circle: site of the new town hall.

on the structure behind. That is why they could be mostly glass in large wood frames with brick filling up the spaces in between (Fig. 3).

The site today is still surrounded by many of the same buildings that you can see on the map (Fig. 4). I felt that the new use of the site should have a structure akin to what the town was about: walls perpendicular to streets at distances around 20 feet, some less, some more. That structure had to be established first. It should be a continuous thing that could cover the entire site—a structure that had to be the essence of the urban tissue I had tried to understand. It is another characteristic of the Amsterdam tissue that building facades line the streets in straight lines. They press themselves forward, possessive of the public space they make together. Straight lines are consistent with the digging of canals in flat land. Curves are only found in the medieval part, where dikes and cow paths followed the flow of the Amstel River. The flat facades display color, texture, and sharp profiles against the sky, but no plasticity (Fig. 5). The skies are often gray and cloudy. Shadows do not work in that atmosphere. The facades are cut out against that sky and the steeples of the churches, whether they are medieval or renaissance, are open webs drawing their inky lines against gray clouds.

The tightly packed buildings that jealously hide the often generous gardens behind them suggest a dense tissue in which streets and squares are carved out. The new structure had to have that same quality. I tried to develop it in such a way that I had a choice of streets and alleys and squares to work with. The continuous structure had to represent a tissue in which public spaces could be carved out. The actual organizational decisions made in this exercise meant less to me than the general principle. Should the program change, should the dialogue develop through which the real thing had come into being, then there would be an overall structure that could easily be understood by everyone involved. Then we would see how to proceed in developing this neighborhood called a "town hall" (Fig. 6).

Because that is what it wanted to be: a piece of urban fabric. If you look at the site and see what was there, virtually until the bulldozers cleared it, you will understand why I felt we did not need a big building, but an urban tissue that would house the various activities anticipated in the elaborate and detailed program (Fig. 2). I have been told that Rietveld once said, when asked about the way he would go about designing a new extension of a town: "I think I first would fill the site with houses and then take some away where streets were needed." I cannot vouch for the veracity of this quote, but it is something I have remembered ever since I heard it. Its naive poetry gives the essence of what urban space is all about.

So I wanted to carve out streets and places. You will understand that this poses some problems in the design of a structure. Somehow its parts and dimensions must allow for such choice. Well, if you measure the dimensions used in this structural grid you will be surprised not to find any real 6-meter dimension. What you find is two dimensions that together are 2 times 6. One is 7.20 meters and the other 4.80 meters, or roughly 24 and 16 feet (Fig. 7). These two dimensions are repeated differently in the two horizontal directions. In one direction it repeats simply on a straight *a,b,a,b* rhythm. Material is 6 feet and space in between is 24 feet. In that direction, then, I can make "streets" 24 feet wide, and they can repeat on a 40-foot grid. In the other direction there is a more subtle rhythm. It basically runs *a,a,b,a,a,b*; the *a* is 24 feet. But you will notice some 10-foot dimensions thrown in. They come in at places where I wanted to make "alleys" that run perpendicular to the rectangular 24-foot "streets." So it is not as neutral as it seems, and that is no

Fig. 5. The architecture is one of silhouettes cut out against the sky. Shadows don't play a role, but color and texture are important.

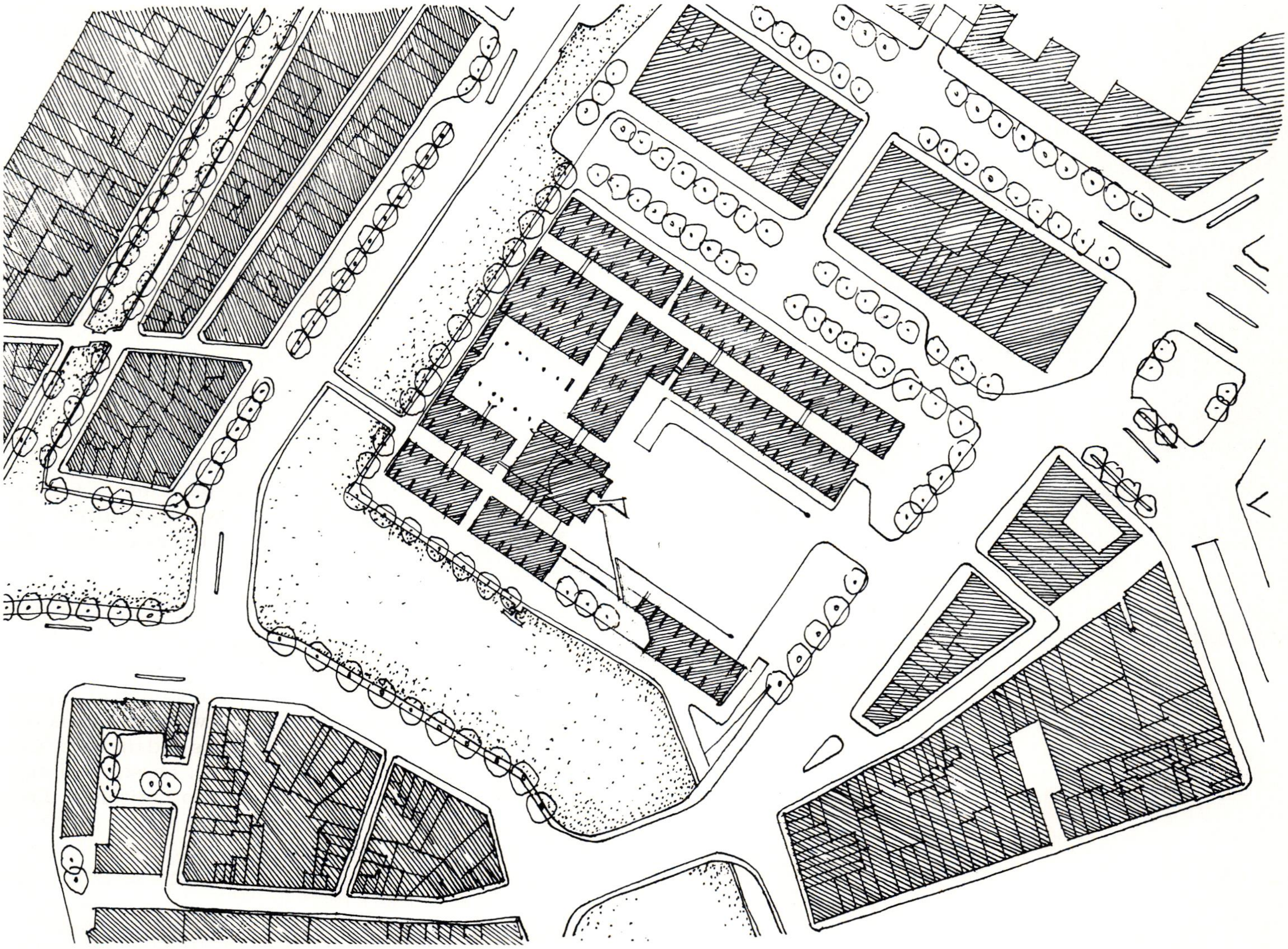


Fig. 6. The extension of a living urban tissue. New urban spaces carved out.

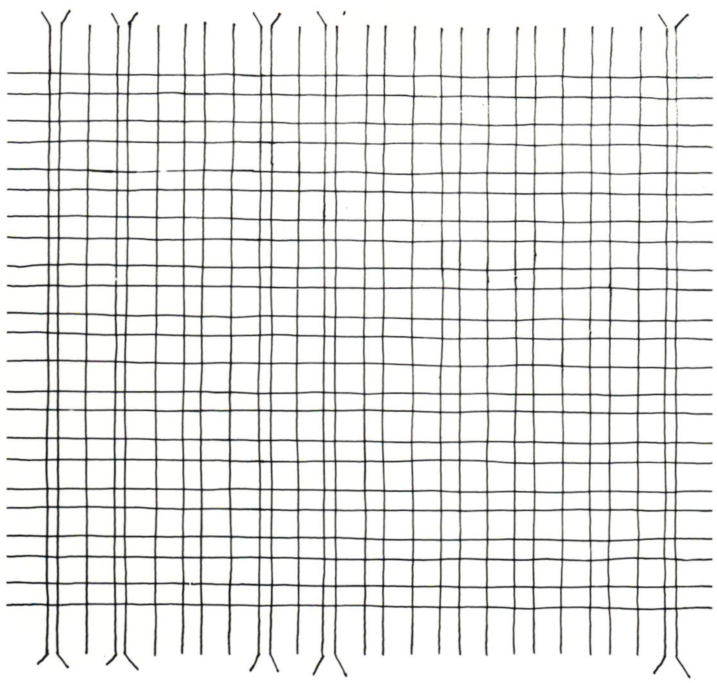


Fig. 7. The grid applied to the site.

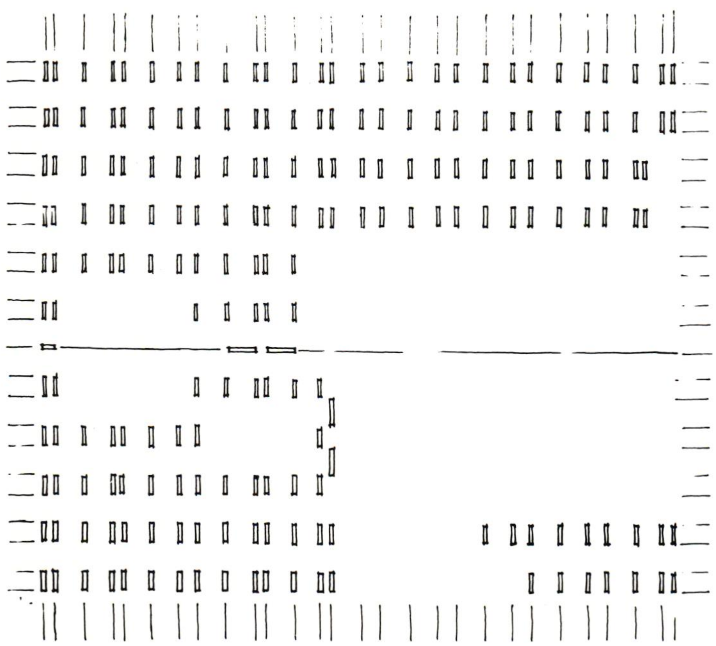


Fig. 8. The primary structural elements as distributed on the site after carving out the urban spaces.

coincidence. A good structure must be interrupted from time to time if you have reason to do it. And you can only do it convincingly, I think, when the basic principle is really well formulated and clear. In the other direction there is also an interruption: an *a,a* axis in the *a,b* rhythm.

There you have the first articulation of the new territory: lines crossing in space. Now imagine walls 16 feet deep, 2 feet thick and 4½ floors high set on the distances described above, and you have the first spatial formulation of the structural principle. With these decisions the scale is set. We have established a material-space relationship in dimensional terms that from now on will govern all the decisions we make, whether they are about urban space or buildings, inside space or outside, communal or individual. There are two additional rules: first, larger spaces are made by taking away material; second, you can take away the upper part of a structure wall if you like, but not the lower part. In other words, in cross-section you may see less structural material as we build higher (Fig. 8).

As you can see, on the plan I took away most material at the southwest quarter of the site to get a large urban space—with the help of some of the old buildings—that relates to the river (Fig. 9). The bridges in Amsterdam have a strong pitch (you can even see that on an old map, where they are wooden constructions) to allow for ships to pass under them. This means that a bridge that connects two streets at the same time separates them because it is raised to eye level or higher. The new town hall square rises toward the northeast until it attains about the same height as the bridge over the Amstel River. At that point the river becomes visible. As one moves toward it, one can look down the river's axis into the distance, where a sequence of bridges links the two parts of the city that are separated by the water (Fig. 10a,b). The new square we will call Amstel Place (Amstelveld in Dutch), which is the name of the place that was there before the site was cleared. It was a place with a long tradition and it seems proper to keep the name.

Next I took away material in the middle of the structure on the northeast side. That is the square inside the structure. It must have a glass roof like the streets and alleys that connect through it. I will tell you more about these spaces later on, but let me first give you an overall view (Fig. 11). There are two major "streets" running southeast-northwest or, if you like, running parallel to the river side. They must have names. In the age-old tradition that names streets for what the people do there, we should call one the street of the weddings and the other the street of the bureaucrats, because the one closest to the river feeds into the houses where people get married, whereas the other brings you to all the places where you can get passports, pay your local taxes, register your newborn infant—in short, the places you go for the profusion of permits and forms that local administration feeds to those that it serves.

Again, more about that later. These two streets simply are where the structure permits them. There are secondary streets and alleys that connect them. The one between Bureaucrat Street and Citizen Square is the same width of 23 feet. Another continues in the same direction but is 15 feet wide, and then there are a number of alleys no more than 9 feet wide that you will have no problem finding (Fig. 11).

There is one more place where material was taken away: the "building" that is on your left when you enter the structure from Amstel Place. This is the town hall proper. It is where the city council meets. It is the real center of the government, the "special" building nested in the tissue of "ordinary" buildings and streets formed by the structure.

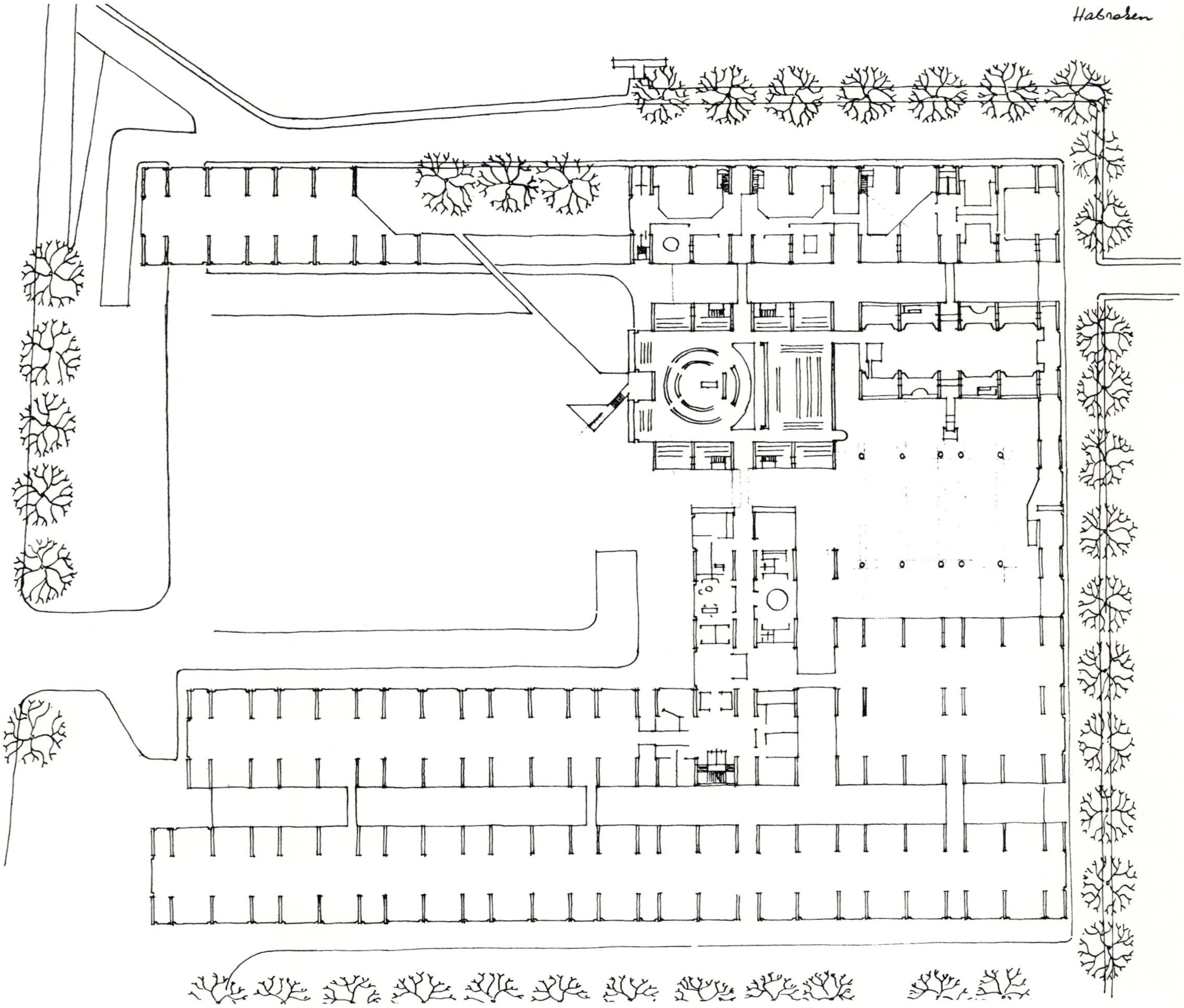
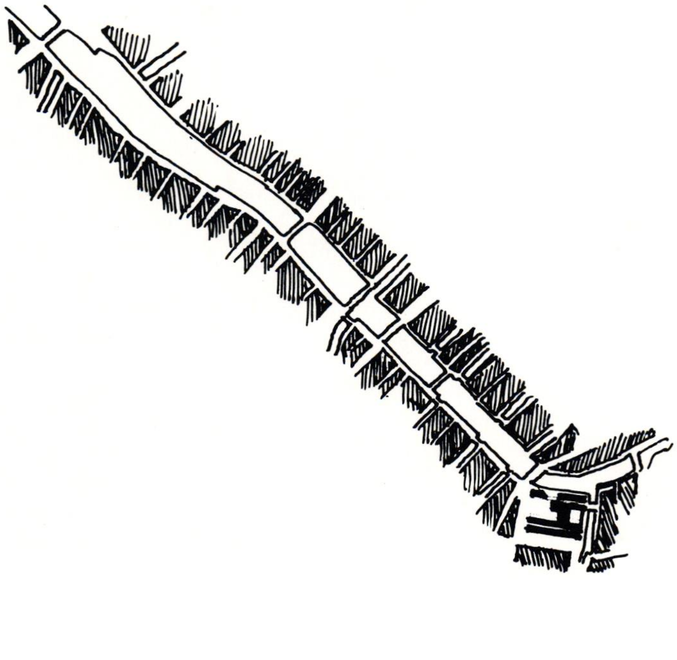


Fig. 9. Main floor plan.



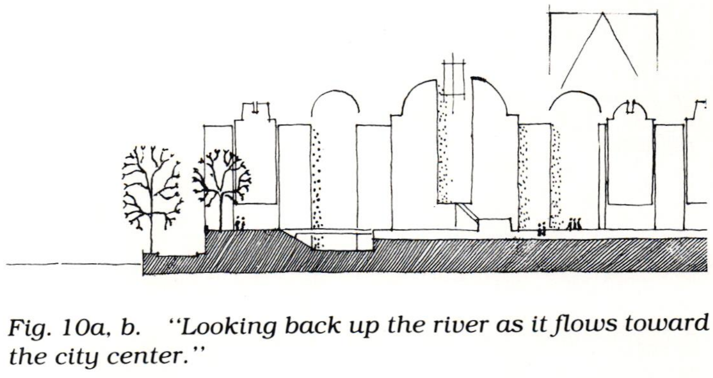


Fig. 10a, b. "Looking back up the river as it flows toward the city center."

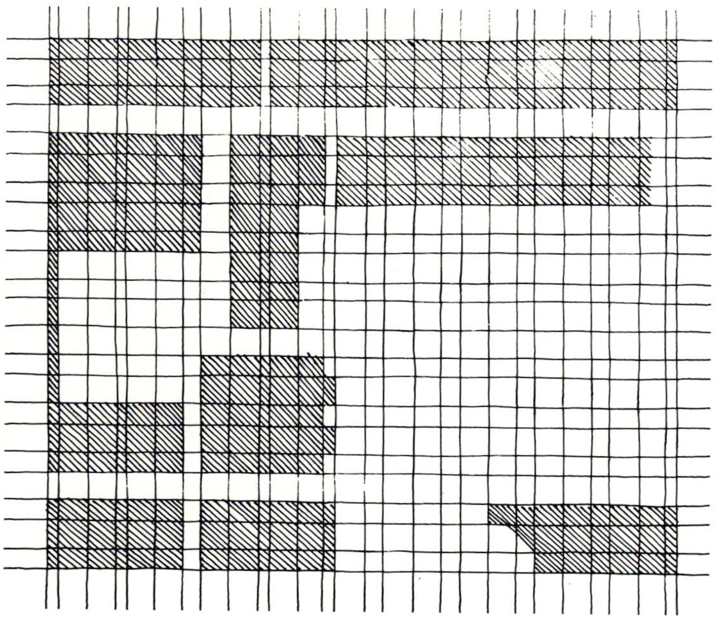


Fig. 11. The public spaces in relation to the grid.

I would like you to have a look at the way the "special buildings," the large churches in which the citizens of Amsterdam have congregated throughout history, are planted in the tissue of Amsterdam. There are two large medieval churches and at least three major ones that were built in the Renaissance. The church that you can see in Fig. 12 is the Zuiderkerk (South Church), built by Hendrik de Keyzer between 1603 and 1611. As I was writing this, I took out an old history book on the architecture of the Netherlands and found a plan of that church (Fig. 13). It is the first time I have really seen the plan, but I have been in the church itself several times. The structure of the building, both its spatial organization and dimensional structure, astonishes and delights me. I had always thought that the large interior system looked like a town square lined by houses, and the image is strengthened by the way the building is placed in the urban tissue. It is not a free-standing building in an open space. The church itself is as jealous of the public space as the houses. It lines up right at the street edges. There is no way in which you can perceive the whole building from any one vantage point. The view is always partly obstructed by houses (Fig. 14, Fig. 15a,b,c,). The building does not stand apart, but it is intimately integrated with the city fabric. The cemetery is walled off from the

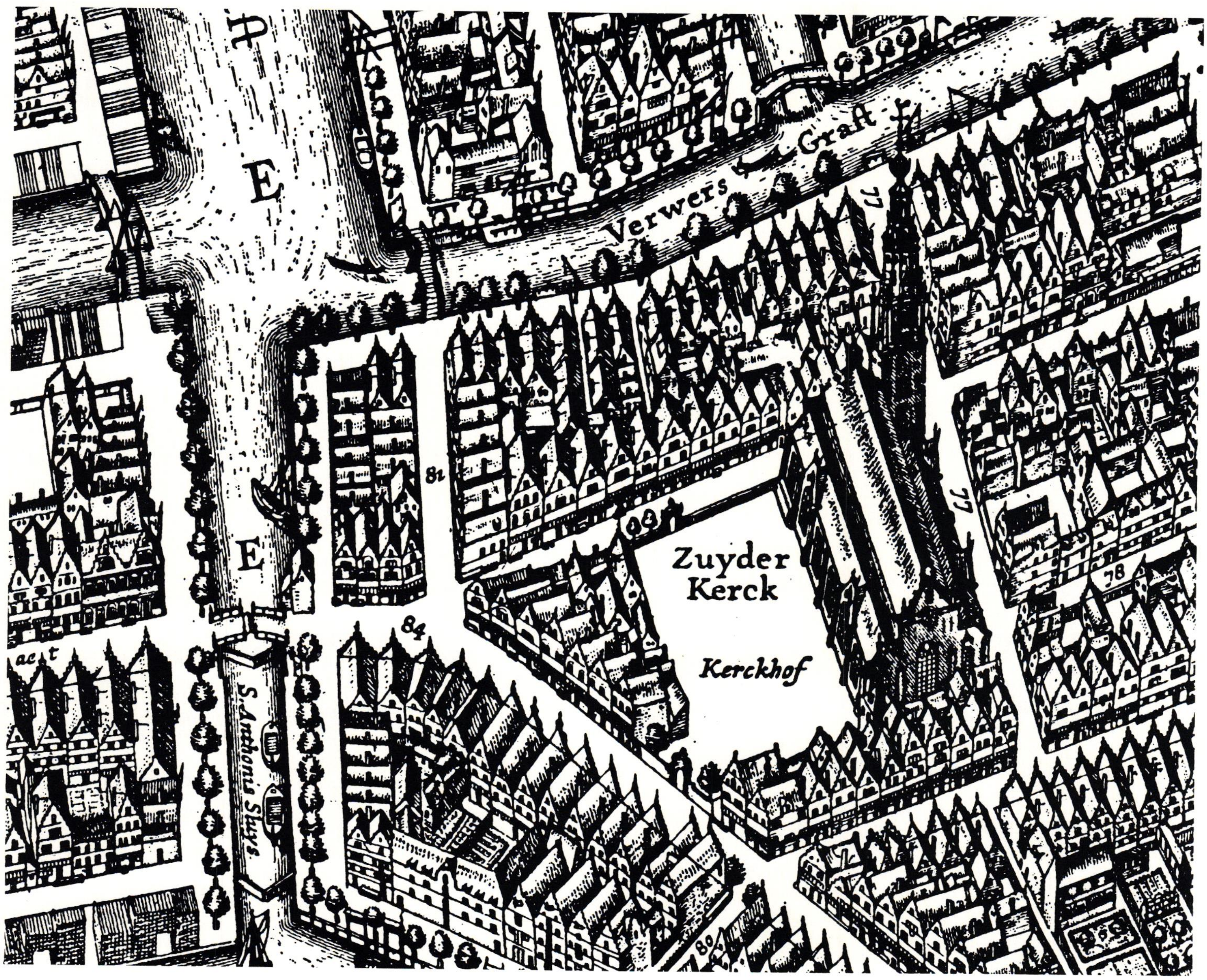


Fig. 12. The "South Church" (1616) as it appeared in the 1625 map.

streets. It is not the mass of the building that its builders were interested in; its interior space was what mattered most. That space is in fact a public space like any other town square. The only difference is that it has a roof.

The middle space in the Zuiderkerk is about 40 feet wide. Its bays are half of that: 20 feet, the width of the townhouses around it.

What more is there to say? The same pattern is revealed by the medieval churches. The Ouderkerk (the "Old Church"), although more complicated in its structure—the result of enlargements in history—is built on the same structural principle: a large public square covered by a roof and lined by secondary spaces, the dimensions of which, again, equal those of the houses and streets in the town. It is not the horizontal dimensions that make the structure different from the fabric of the town, but the vertical. As you walk through the maze of streets, canals, and alleys of the urban environment you see the high roof and the steeple from afar. As you come closer, the streets do not open up to make a place for a large building, but they lead you to the interior, where you find a large space. It is an architecture of space, first of all.

Now let me take you into that urban tissue that I hoped to be the result of my exercise in structure and dimension. Perhaps you are troubled by the long, narrow Bureaucrat Street. I think I already indicated that all the "streets" and "alleys" should be open spaces right from the ground floor to the glass roof. The length of this street does not bother me at all. To begin with, it is typical in its size and dimensions for the tissue around it. You will note that the street in the old town that you find perpendicular to it, to the northeast of the site, has the same width and is even longer. This will only work on one condition: that the facades that make the street have individuality and are not endless repetitions of the same design. As we are conditioned to think of massive repetition of uniform elements, we assume almost automatically that any long, straight facade must have such a uniform repetition. But what I would like it to be is a series of individual "houses." After all, the people who work there, and their activities, are different from each other. They surely arrange their furniture differently. Why should they work behind uniform facades?

But uniformity, as we all know, is the result of centralized decision making. It is *not* the result of industrialized building. On the contrary. We can produce systems of industrially made elements that allow themselves to be combined in endless variation. There is no reason why our streets should not have a variation similar to the older streets. This should not be an aesthetic exercise, however. When we want the result to be a living thing that in its long lifetime will reflect the changes and idiosyncrasies of its population, then we must conceive it as the result of that life within. Consequently, the issue is decentralization of decision making and recognition of the individuality of the smaller units in the organization of the inhabitants.

Along Bureaucrat Street the public will find all the offices that serve as the meeting places of the municipal administration and its citizens. These offices, where bureaucrats and public meet, should be on the ground floor. The activities that back them up should be above them. In other words, the smaller office units in the larger bureaucracy should be housed vertically. They should have their own stairs and elevators. The idea is not new. Again we can observe it in reality. Along the canals of Amsterdam many of the historic houses are now occupied by a variety of commercial enterprises. The public enters these from the street. Sometimes such organizations occupy several buildings connected by openings cut in the party walls. The

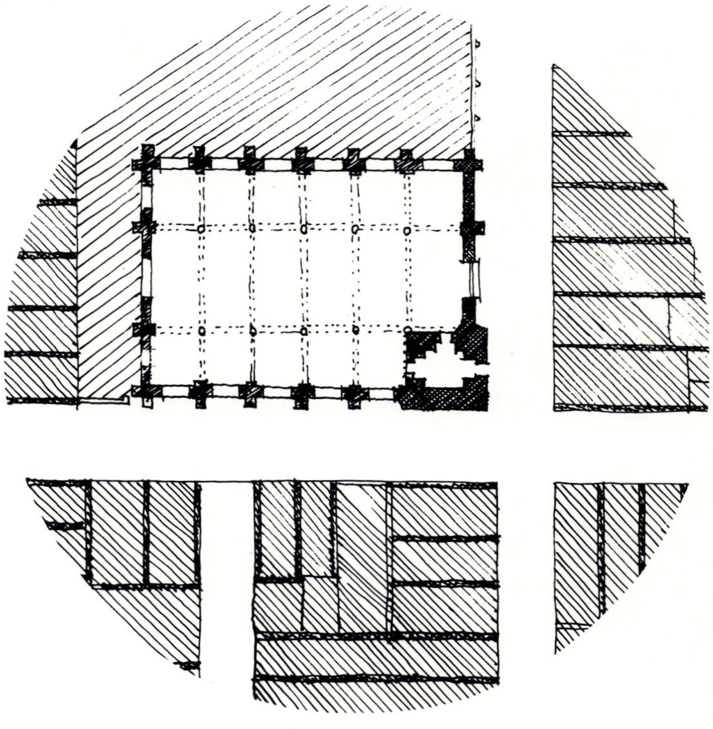


Fig. 13. The "South Church." Like the medieval churches embedded in the urban fabric, it creates a covered public space.

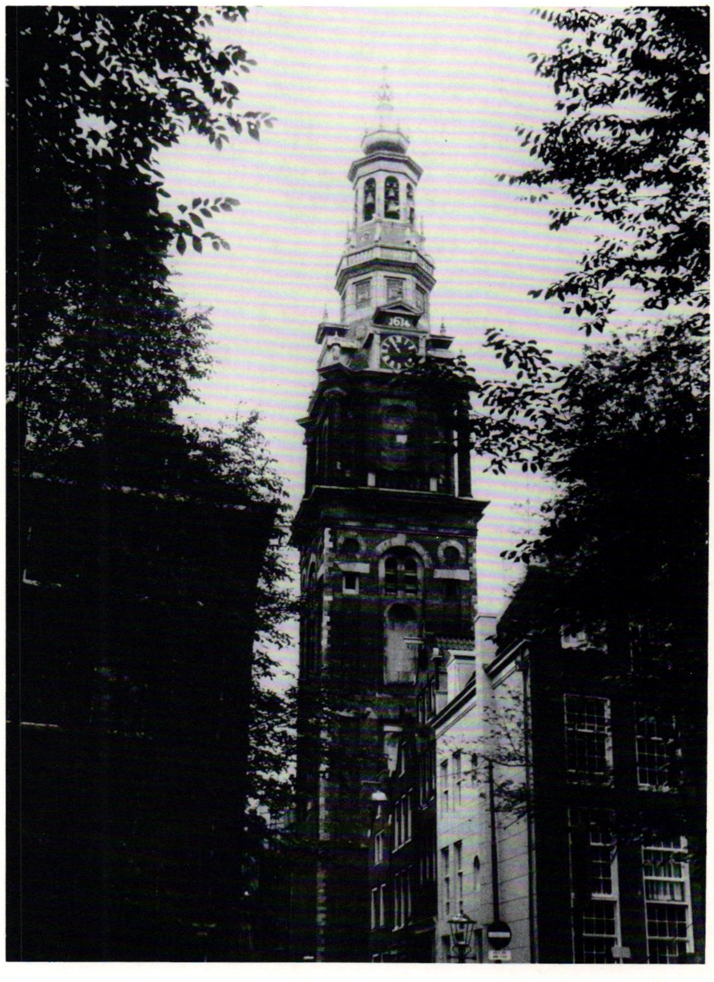


Fig. 14. The "South Church" steeple. The building never reveals itself as a whole except from the inside.

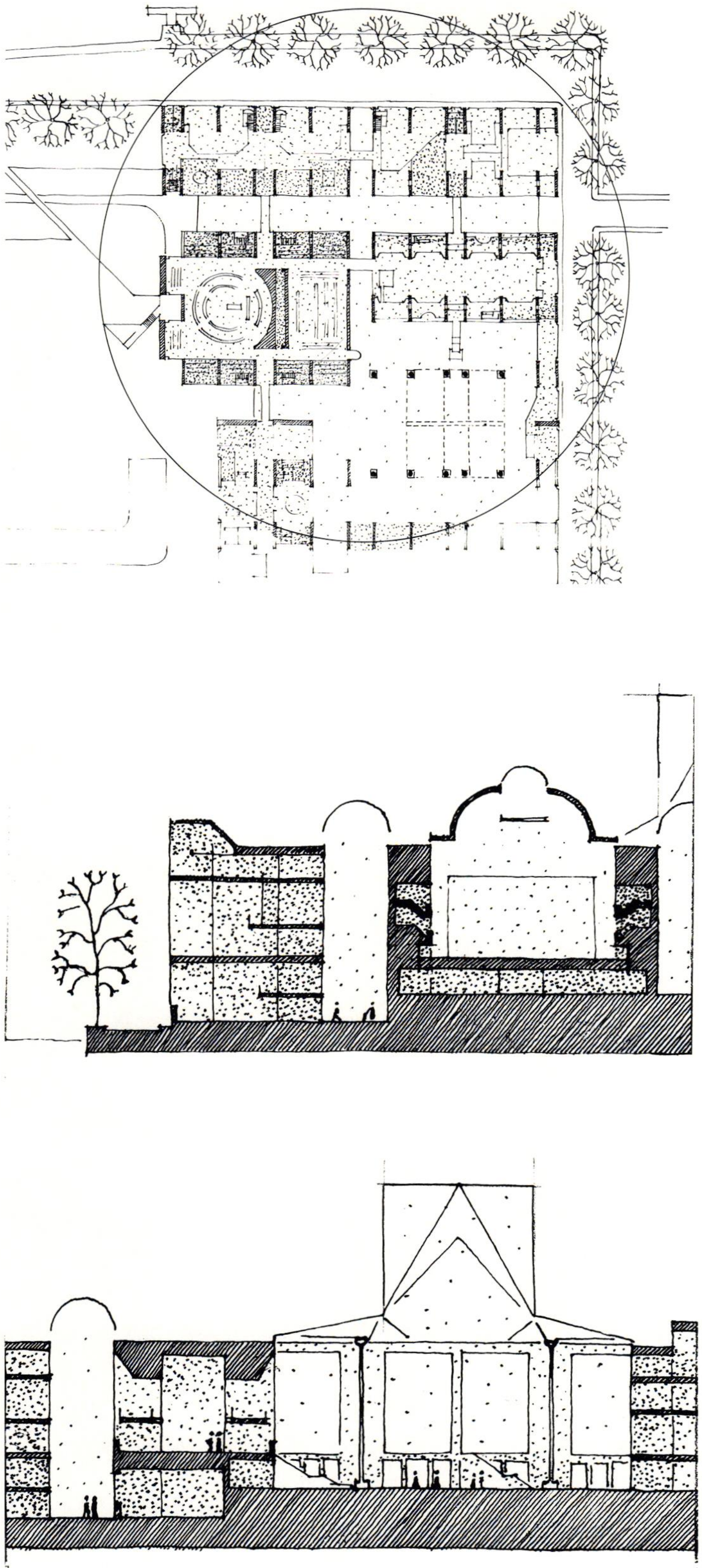


Fig. 15a, b, c. The "town hall in a town hall." The council chamber building surrounded by "Citizen Square," "Amstel Square," and "Wedding Street."

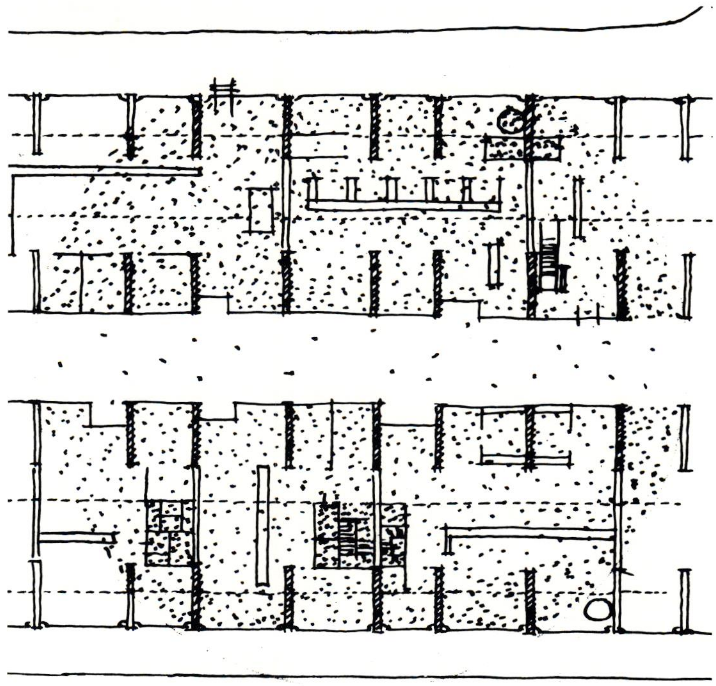


Fig. 16. Bureaucrat Street.

Fig. 17a. The entresol as it appears in the traditional Parisian vernacular.

result can be awkward where floors are not on the same level, but the principle is clear.

The administrative units that will occupy the houses in our new structure are the units that must serve as the clients to the architects who made the building (Fig. 16). Yes, indeed, I am talking about architects, not one architect. When we take decentralization of decision making seriously, we should start with ourselves. Who wants to make all the decisions in such a large enterprise as the one we are discussing now? The very concept of structure means delegation of decision making. Variety within a framework. What I would like to do is to work out a system of rules, regulating the choice of elements and their combination in space in such a way that many of us could work with the project and create parts within the larger framework. This is not new either. The American shopping mall is conceived on a similar principle. There the occupants deal with their own interior designers, building their shops in the larger framework. It would be worthwhile to develop this principle. I am convinced there is a younger generation of architects in the Netherlands who would be happy to play this game; the result could of course be much better than any precedents we can point to now. It certainly would be much more interesting than anything that even the most talented architect could design alone.

Here we touch the heart of what I am used to calling the "support" concept. I use the term *support* because the framework in which the individual interpretations of different architects, who are serving different administrative units of the municipality, are developed should be much more than only a number of load-bearing walls or columns. It must—in itself—be a true piece of architecture, strong enough to hold the variety of forms that will be expressed within it, complete enough to be good art, satisfactory even when empty. If you want another example, take the Rue de Rivoli in Paris—a true support of a strong and dominating architecture. But within it you find a rich population of shops, restaurants, cafes, and even hotels. True, the Rue de Rivoli is perhaps an extreme case, in the sense that it does not allow any expression of its interior variety toward the street. From within its arcade, however, things are different. The late nineteenth-century shopping arcades in London (not to mention Milan) are another case in point. The Rue de Rivoli, by the way, is interesting because its structure is a faithful reflection of the Parisian urban fabric. Here too, its dimensions and spatial organization can be recognized in the ordinary streets of Paris, the dominating feature of which is the *entresol*, a low floor over the ground floor that sometimes falls back as a mezzanine, sometimes even disappears, to allow for a much higher space or a monumental entrance (Fig. 17 a, b). But that is another subject. Let's go back to the Amsterdam environment and the lessons it teaches us.

Although I have not mentioned it explicitly, you will have understood that, of course, the outside facades of our support should be governed by the same principle. Don't ask me to give you details of that aspect. I am not prepared to go that far. Something must be left for your imagination. I can, however, point out some aspects of the historic facades in Amsterdam that in my opinion could very well be incorporated in the rules of the game that we want to play here. I mentioned earlier the fact that these facades are true "curtain walls." The traditional Dutch townhouse has its own version of the *entresol*. The ground floor is usually very high. The tall windows let the light penetrate deep into the interior space. This height allows for a mezzanine that often can be reached by a separate stair. Figure 18 gives you a glimpse of that pattern. The interesting proportions that are

Fig. 17b. Rue de Rivoli. Note the entresol which continues inside the arcade—formal use of a vernacular element.

Fig. 18. The mezzanine floor as a traditional element in the canal house allowing for tall ground floor windows.

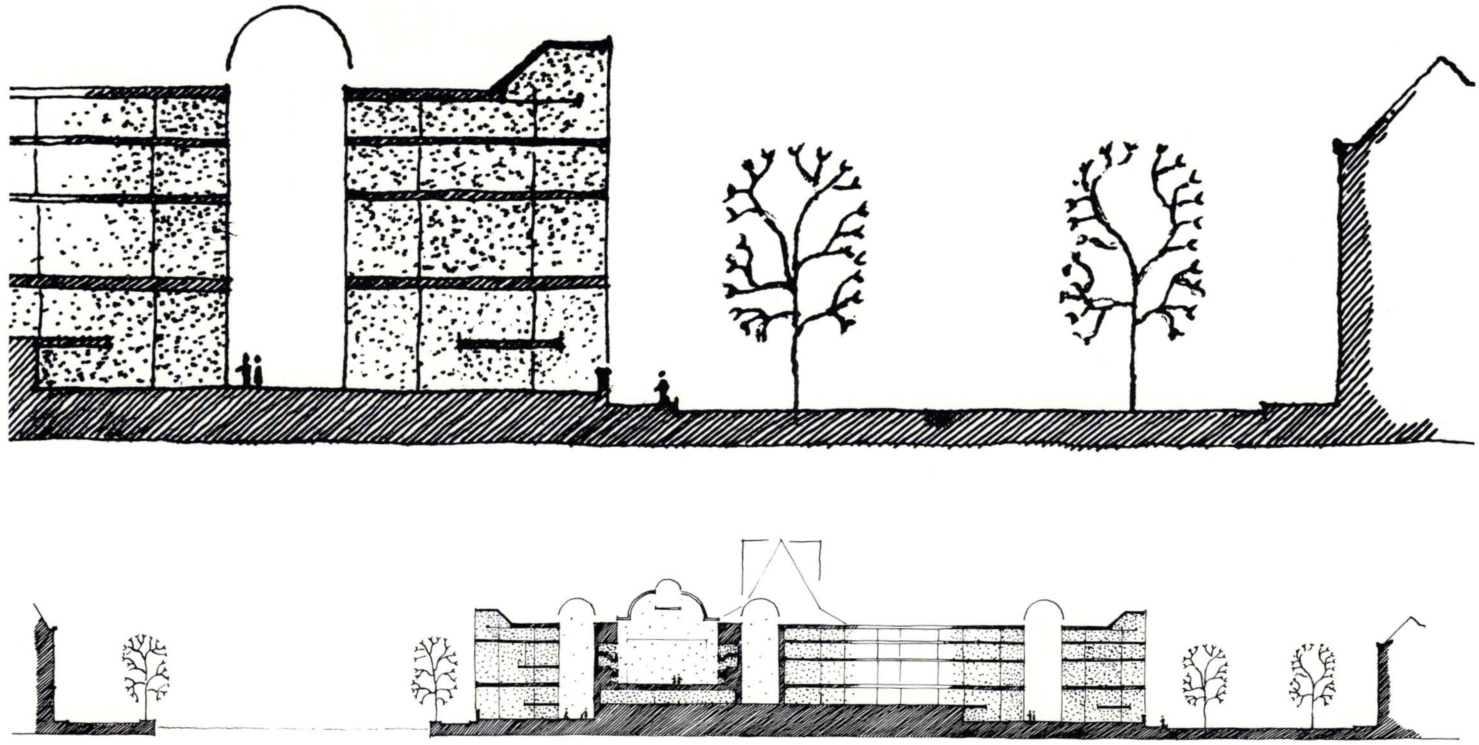


Fig. 19a, b. *Cross-section perpendicular to the river across the council chamber.*

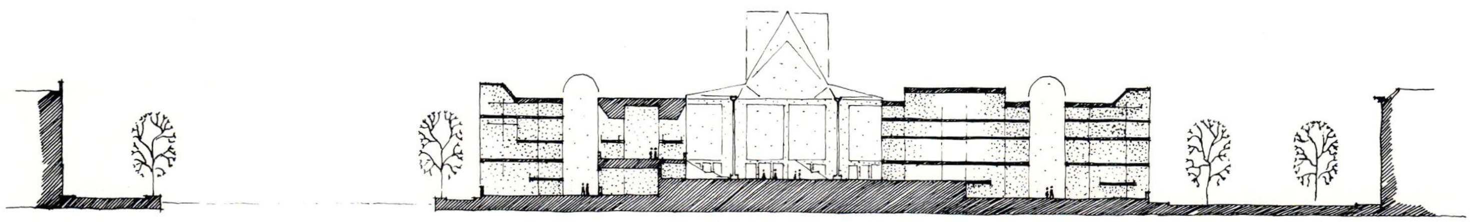


Fig. 19c. *Cross-section perpendicular to river across "Citizen Square."*

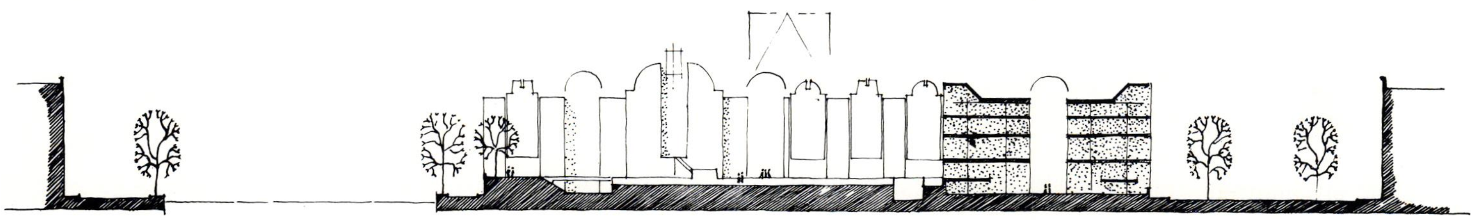


Fig. 19d. *Cross-section perpendicular to river across "Amstel Square."*

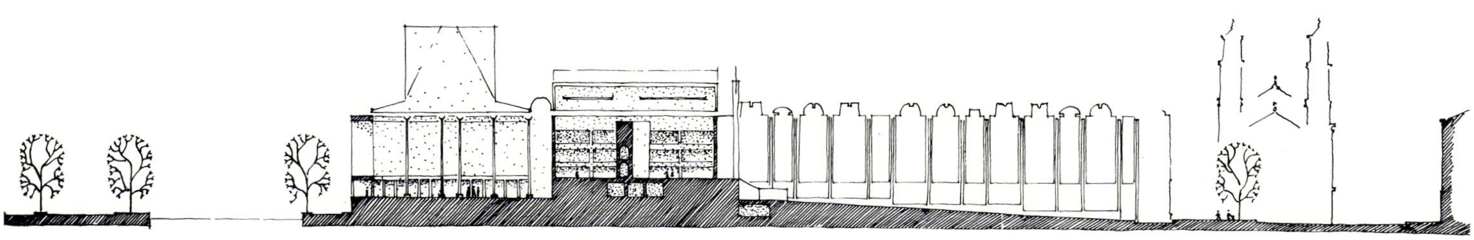


Fig. 19e. *Cross-section parallel to river.*

the result of that solution do not need to be stressed. Such a mezzanine, together with the high ground-floor windows, could serve very well in our administration building, it seems to me.

And then, of course, there is the top—the silhouette against the sky that marks the roof. The structure should have roofs; they make the top floor that much more interesting, or they can serve as lofts to house whatever additional functions may be needed by the clients—a storage space to put all the old files in, a place to relax and drink coffee. In our vertical organizational concept it is the bosses of the administrative units who, perhaps, want to be in the top spaces with their high-pitched ceilings.

To conceive of a physical system for the variety of facades would be an exciting design challenge. I must concede that I keep thinking of this in metal. They should not be all glass, although glass should be dominant. They certainly must be flat. Metal in a flat surface with glass in it, hovering over an almost total glass first floor, would be nice. It would lend itself to the kind of cut-out profile that the sky needs.

But let's go to Wedding Street, leading to the eight houses facing the Amstel in which weddings take place (Fig. 20). The cars come around the lower part of Amstel Place to unload the wedding party at the entrance of that street. They then disappear in the underground garage under the Amstelplace to wait. Finally, they pick up their party on the river side, where relatives can make pictures of the young couple as they descend the steps to the outside street, lined by trees.

The spaces in which the ceremony takes place are again those high spaces with tall windows looking out over the river and the houses on the other side. The water of the river sometimes reflects against the ceiling as the sun comes through. The mezzanine gives some of the guests the opportunity for a good view from above.

As even Dutch society has its class structure, some weddings are more important social affairs than others. A party can use the main entrance and proceed through the citizen square inside. This, of course, will also be the route taken by all those other groups to be received by municipal dignitaries—foreign visitors, local groups, demonstrators, petitioners, and the like. Citizen Square should have a light glass and metal roof. Its slender columns follow the rhythm of the structure. Have you ever seen those old Byzantine churches in which the builders used columns found in even more ancient Roman ruins? Some are better than others, some are fat, others are slender. What I would like to do is to invite some artist to make a few columns. Public buildings in Holland are allowed some 2 percent of building costs to spend on art objects. This would be one way to use that money. The structure that covers the roof on the citizen square should be light and transparent, weblike, the metal frames painted in bright colors.

A stair climbs from this square into the building on the river side. On its second floor we find the large, formal banquet and reception hall (Fig. 15a). This hall looks out onto Citizen Square. Its space extends horizontally across the wedding street into other reception rooms that look out over the river. A bridge spans the interior street.

The assembly hall is on this same level. It is connected by three bridges to the adjoining buildings. One comes from the banquet hall to make a more formal entrance. The other two bridges lead from the reading and committee rooms of the council members at the river side and from the building facing Amstel Place, where the mayor and the aldermen have their offices. There are internal stairs and entrances in each of these buildings. The assembly hall is, in fact, two spaces. One, facing Amstel Place, is the real city council chamber; the other is for special committee meetings of a less formal nature. Both spaces will have balconies between the structural walls for public and press, accessible by stairs and elevators from the ground floor of this building.

Light for this space will penetrate from the top and reflect toward both sides of the structure above the balconies. On the Amstel Place side a wall stands apart as a facade, identifying this town hall within a town hall as a separate entity. A balcony protrudes into the public space outside, from which the Queen can wave at the crowds when she visits the city, and where the mayor can preside at other celebrations.

As we have taken our tour through this little town within a city, I have tried to explain the objective of this exercise: the design of a structural concept in which structure means much more than just physical elements that bear loads. It concerns the concept of support, in fact, this time not applied to residential use but to the operations of a municipal administration. It concerns the development of an architectural theme that in its spatial variations and dimensional rhythm picks up the themes that reverberate from a past that is still alive. The exercise illustrated the continuation of some values as they are expressed in the composition of physical elements in space.

At the same time, it is an exercise in the dispersion of decision making. There are no big buildings. There are only big organizations that want to centralize decisions, and the message that I would like to put across is that there should be a hierarchy of decision making in design, that one decision will give structure to those that follow. As I accept the structural concepts imbedded in the city of Amsterdam that tell me how to deal with this fascinating site at the Amstel River, I find myself in a situation in which decision making is delegated to me by that physical fabric that is already there, and I have to listen very carefully. But the corollary is that I should give structure so that there is a point where one must stop, to leave the process open to those who come next—the smaller groups of occupants and their consultants who will inhabit this new place. And to inhabit is to build. The process never ends.

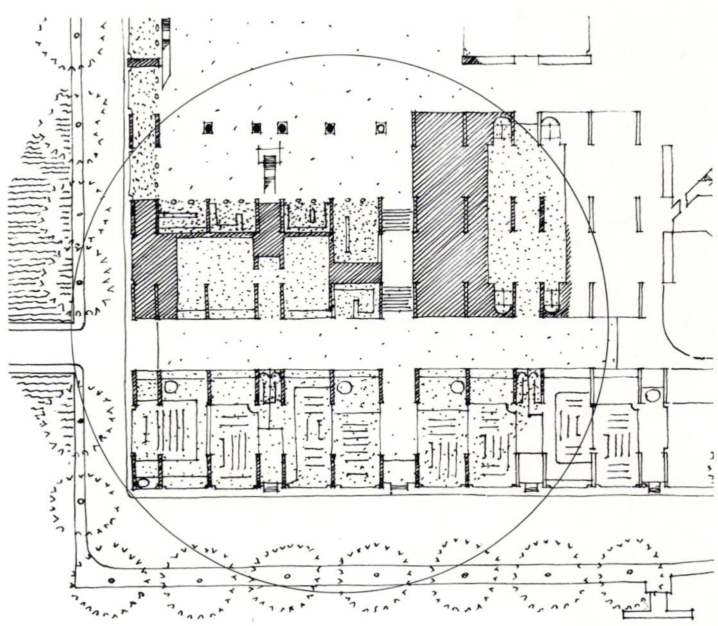


Fig. 20. "Wedding Street" and the spaces for the wedding ceremonies overlooking the Amstel River.

Amsterdam South. Takbuurt district. Air view from northeast.

AMSTERDAM SOUTH: SOCIAL DEMOCRACY'S ELUSIVE HOUSING IDEAL

Helen Searing

DURING the 1920s in Europe, a number of far-reaching attempts were made to solve one of modern society's most stubborn problems, the provision of decent housing for all. These attempts were made primarily by the social democratic left which, following the First World War, had gained sufficient power to act on its conviction that housing must be the responsibility of government. Vienna, Frankfort, and Berlin (see p. 112 ff.)[1] come immediately to mind as cities which, for a time, were successful in supplying their citizens with sound and attractive dwellings that made a decisive improvement in the living conditions of the working class.

The vast housing complexes erected in these municipalities are characterized not only by unprecedented scale and cohesion, but also by the fact that they were shaped by aesthetic no less than by utilitarian considerations. Satisfaction of the immediate material need for shelter did not exhaust the dwelling's purpose; it was also to function as a tangible image of the potential benefits of the new socialist society, and a previously humble building type was thereby transformed into a vehicle for the most advanced stylistic tendencies in architecture.

It was in Amsterdam that this identification of political and architectural reform was made first, and most explicitly. From 1915 to 1930, that municipality was a veritable laboratory for experiments which embraced the full range of the socioeconomic, technical, and aesthetic factors which impinge on housing. This was possible because of the dedication of a group of social democratic officials and a school of architects who shared the belief that the worker deserved spiritual as well as material sustenance. Under their leadership, many exciting new residential areas arose in the Netherlands' chief metropolis. Space permits an analysis of only one of these, and the extension plan Amsterdam South has been chosen as illustrating with particular clarity the socialist commitment to housing as architecture. At the same time, Amsterdam South, realized for the most part during the third decade of this century, illuminates the painful compromises that inevitably attend the pursuit of the social democratic housing ideal.

Socialist involvement with the housing question developed only gradually. While early socialists like Robert Owen (1771–1859) and Charles Fourier (1773–1837) were at least implicitly concerned with the problem, in the sense that carefully planned dwellings were an integral part of their ideal communities, housing became a subordinate issue when Utopian socialism perished in the revolutionary flames of the 1840s. The next generation of socialist thinkers, including Karl Marx (1818–1883), were hostile to any specific attempts at the immediate amelioration of living conditions, reasoning that such improvements would vitiate the workers' will for class conflict. This attitude was reflected in the orthodox Marxist position on housing, formulated by Friedrich Engels (1820–1895), to the effect that any solution had to await the revolution, when expropriation and redistribution of the existing dwelling supply would automatically solve the housing shortage.[2]

Engels' formulation was accepted by the social democratic parties which began to emerge as viable political entities in the last quarter of the nineteenth century. Preoccupied with problems more immediately connected to labor, such as the minimum wage and the maximum working day, they overlooked the political importance of the housing issue. The Erfurt Program of the German Social Democratic Party in 1891 "which had such an influence on European socialism in the 1890s,"[3] did not mention housing, although it covered many other areas such as industrial legislation, free medical and legal services, and compulsory secular education. Housing was not in fact placed on the agenda until the social democratic parties drew up a *municipal* program. The shift toward municipal action coincided with the triumph of reformers over revolutionaries in the social democratic left and the concomitant substitution of parliamentarianism for a belief in the violent overthrow of the existing order.

Once housing was recognized as a responsibility of the government, it was a short step to press for intervention and financial support nationally as well as locally. Initially, however, the housing problem was confronted at the municipal level. Thus in 1900 the Paris Congress of the Second International passed a resolution demanding the municipal takeover of a number of activities, including the construction of workers' lodgings. Noting that the "municipality can be a tool of great power in the hands of local socialist pluralities against the bourgeois majority in the central government," the resolution asserted that municipal socialism was possible even within the capitalist system.[4] Although the structural changes necessary to bring about collective ownership of the means of production could come about only nationally or internationally, municipal socialism could be a temporary means of equalizing wealth and benefits, pending final socialization of the entire economy.

The Paris Resolution had been preceded in 1899 by the municipal program of the Dutch SDAP (Sociaal-Democratische Arbeiderspartij), the first of any social democratic party. That program placed the municipal control and creation of housing sixth on its list of demands. Further, the housing problem was seen not as an isolated phenomenon but within the context of the entire program, which read like the blueprint for a microcosmic socialist Utopia. The municipality was envisaged as the entity for regulating an extensive range of economic and social activities in the best interests of its inhabitants. It was to extend land holdings, own and operate all enterprises which had a monopolistic character (especially such goods and services as transit, electricity, water, and gas), provide educational opportunities for even the poorest families through the establishment of schools, libraries, and lecture halls, and build workers' dwellings which fulfilled all reasonable requirements of comfort and hygiene.[5] This was a bold program for a tiny party that had been founded only five years previously, by dissidents who had rejected the anarchistic and antiparliamentary stance of the original socialist party, the SDB (Sociaal Democratische Bond).[6] Nevertheless, the shift to municipal goals and to the attainment of local power proved wise tactically since the left-wing voters tended to be concentrated in the major cities.[7] In 1902 Amsterdam seated its first "red" councillor, and fifteen of the thirty-nine members of its city council were social democrats by 1913. Leftist representation in that body would be crucial to the accomplishment of the SDAP's municipal program, with its demand for housing progress, as well as to the specific realization of Amsterdam South.

Despite its rapid growth, the SDAP never attained a clear majority in municipal councils and, even after the introduction of universal manhood suffrage in 1918, remained in a minority position nationally. This was due in part to the

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strong hold retained by the churches over a large proportion of the population, a situation which prevented the development of that class solidarity on which socialist hopes were pinned. Workers who were staunch Calvinists or Roman Catholics had been taught to abhor the pronouncements of the godless socialists, and the SDAP was never able to wean the devout away from the conservative confessional parties that dominated the national political scene after 1918.[8]

The SDAP did not, however, remain without allies. Ironically, the most important of these were drawn from the class which purportedly was the chief enemy of the workers. Many enlightened members of the bourgeoisie, although nominally liberal, had abandoned by the end of the nineteenth century the traditional hostility of liberalism toward any and all governmental interference. The more radically inclined had formed in 1884 a political party to enact legislation that would temper the evils brought about by unfettered laissez-faire. This party, the Liberale Unie, passed a number of bills that anticipated socialist demands. The most important was probably the Woningwet (Housing Act),[9] which became law in 1902 and was ideally suited to further a part of the SDAP's municipal program.

The social democrats would exploit the Woningwet with imagination and vigor, above all in Amsterdam, yet its Liberal parentage would ultimately create difficulties. For the members of the Liberale Unie still believed in capitalism. While willing to curb its excesses, they were wary of interfering too much with the free play of the economy, and therefore drew up an act to improve housing through voluntary initiative rather than by legislative fiat. Only two measures were mandatory and both concerned the municipalities: each was obliged to establish a building code and, if its population exceeded 10,000, to prepare an extension plan. There were no national guidelines for the code, and its rigor was a matter of local option. The same was true with regard to the powers of condemnation and expropriation which the Woningwet confirmed and strengthened, and which were necessary for effective implementation of extension plans; the local authorities chose whether or not to exercise these powers. Indeed, the byword of the act was *"de volkshuisvesting rijkszaak, doch gemeentelijke taak"* (housing is a national matter but a municipal task),[10] an interesting slogan in light of the social democrats' belief in local action.

In placing the burden of execution on the local authorities, however, the Liberale Unie was not proposing socialization of the dwelling supply. Only for victims of slum clearance was it expected that the municipality itself would build and operate dwellings; rather, the municipality was seen chiefly as the agent of *regulation.* (Since there was no specific prohibition, many of the larger cities would eventually construct housing for their poorer citizens.) The main agent of housing *production* was to be a new type of organization, the *woningbouwvereeniging* (housing society). The liberals designed these societies to conform to their own belief in self-help, but the SDAP would see more clearly than any other party their manifold possibilities. Constituted by and for the workers, the housing societies were to erect model dwellings for their members, using loans provided at modest interest rates by the central government, whose main role was to act as a sort of national mortgage bank. As nonprofit bodies, the housing societies would be able to construct accommodations superior to those of the private builders, but at the same time might exert a subtle pressure on the latter to upgrade their product. Competition would thus complement the more direct persuasions of the building code as a stimulus to the housing improvement that was the goal of the Woningwet, a solution dictated by the liberal distaste for too severe a meddling with the private sector.

Such Liberal indirectness was matched by the vagueness of the law with regard to the nature and extent of the government's financial responsibilities. These were not spelled out in the Woningwet but had to be formulated subsequently in a series of Royal Decrees and ministerial decisions. At first this ambiguity had positive consequences. When the severe inflation that resulted from the First World War drove up building costs drastically,[11] nothing in the legislation explicitly precluded the government from deciding that subsidies as well as loans could be provided to both the housing societies and the municipalities to enable them to continue to erect good dwellings, and socialist cities like Amsterdam took immediate advantage of this bounty.[12] But the looseness of the wording had another aspect and allowed the coalition of confessional parties which came to power in 1918 to transform the Woningwet's purpose. While the goal of its framers had been qualitative improvement of housing, the new government changed the emphasis to quantitative increase and to that end moved to put the housing market back into the hands of the private builders. In the interests of expanding the dwelling supply, even the SDAP did not immediately oppose government support to private builders. But when it appeared that this support was to be at the expense of the housing societies, the stage was set for a fierce struggle between social democratic municipalities and the conservative central government.

Not unexpectedly, Amsterdam was the foremost contestant in this struggle. As the most defiant municipality in fighting to maintain its housing goals, it achieved a measure of success that was due in the first place to the size and commitment of its social democratic constituency. Credit must be given as well, however, to the radical Liberals who had created in Amsterdam an independent and progressive tradition on which the SDAP could build.

Thus a decision which would have a particular impact on housing and urban development was made in 1896 when the city council voted to halt the sale of municipal property to private developers. A pioneering system of long-term leasehold *(erfpacht)* was instituted, which gave Amsterdam control over the purposes for which its land would be used. Two years later a related proposal became a reality when a *Schoonheidscommissie* (Committee of Aesthetic Advice) was established to review the exterior design of all buildings destined to be erected on land leased from the municipality. The Commissie was the first such body in the Netherlands and remained unique for a decade—when a few other Dutch cities slowly began to follow suit. In these same years the radicals took other actions which would play into the hands of the SDAP when it came to power. In 1896 the water supply, in 1898 the gas factory, and in 1900 the tram were taken over by the municipality from private concessionaires, so that certain aspects of the social democratic municipal program were already being tested in Amsterdam by the century's end.

A further step, which would be of signal importance for extension plans such as Amsterdam South, and for housing in general, was taken in 1905 with the introduction of a new building code prescribing strict standards of space, hygiene, and solidity for all buildings erected in Amsterdam. Written by the Building Inspector, J. W. C. Tellegen (1859–1921), a radical who would serve as mayor from 1915 until his death, the code was the most stringent in the Netherlands, and its adoption was bitterly opposed not only by the private builders but by a number of members of the confessional parties, on the ground that it conflicted with "constitutional freedoms." However, the code was passed by a vote of 28 to 8, the two socialists who sat on the council in 1905 giving the radicals their support.[13]

As its representation on the city council grew, the SDAP

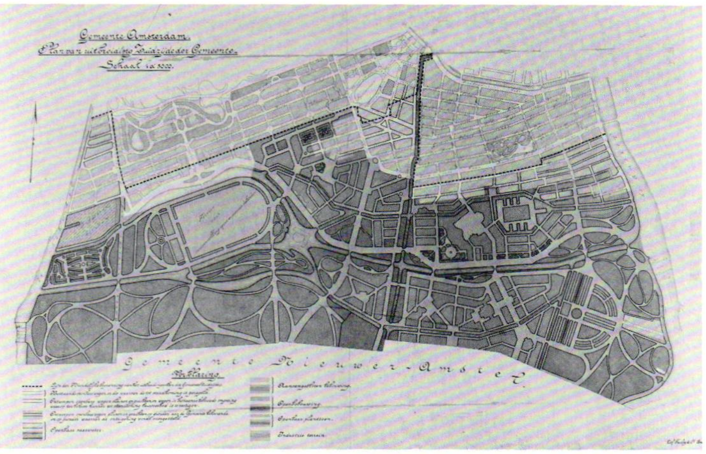

Fig. 1. Plan South, first version. H. P. Berlage, 1904.

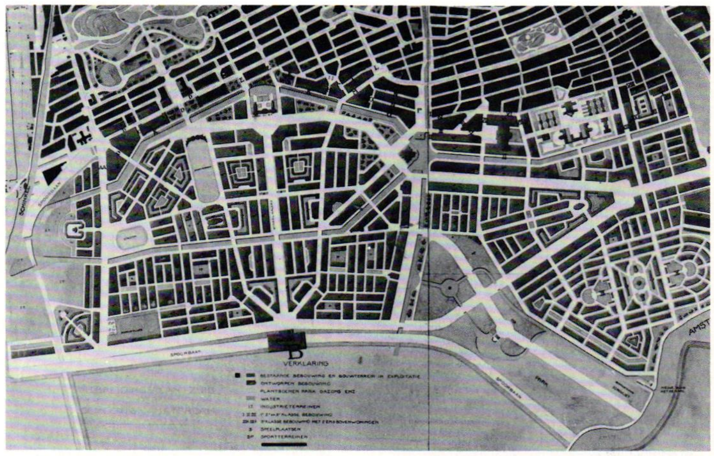

Fig. 2. Plan South, Final version. H. P. Berlage, 1915.

assumed leadership in the housing field and by 1915 had begun to achieve results,[14] based partly on the valuable infrastructure bequeathed by the radicals. But the social democrats went far beyond the radical liberals in the comprehensiveness of their vision. They took the disparate means already available through local ordinances and national legislation and forged them into a coherent policy. The socialists grasped with unusual insight the causal relationships between city services like tramways and electric power and the development of new neighborhoods, between the activities of a health commission and slum clearance, between a rigorous building code and sound dwellings, between the Schoonheidscommissie and a viable environment, and between a handsome townscape and a happy populace. They recognized further the urgent connection between the acquisition, preparation, and leasing of municipal land at reasonable prices and the goals of the Woningwet. Other parties may have promulgated certain municipal measures which could facilitate the improvement of housing but, as in the case of the Woningwet itself, it was the SDAP which realized, in both senses of the word, the vital significance of these measures.

For example, when the leasehold system was first instituted, it was seen as a means of filling the coffers of the city treasury rather than of encouraging housing construction. In 1911, the social democrat F. M. Wibaut (1859–1936), who had been at that time a councillor for four years, complained about the shortage of decent dwellings and observed that

> the current administration has taken no account of the first requirement of a housing policy—to offer a generous amount of land . . . especially at cheap prices. The city has been running its land offers like a regular trade, as if it were dealing with coffee or tea, offering land to the highest bidder.[15]

Wibaut cited statistics which showed that the housing crisis had arisen in part through the lack of inexpensive sites. The housing societies, which were just beginning to build in those years, found it cheaper to buy land from private owners than to lease sites from the city. Wibaut thereupon called for a "systematic housing policy and with it a systematic land policy," a call he would himself be able to answer in 1914 when he became the first Alderman for Housing.

Dutch cities are administered by a "College van B en W," made up of the Burgomeester (mayor), who at the period under review was appointed by the Crown, and the Wethouders (aldermen), elected by and from the city council. The number of Aldermen was not fixed, but it rarely if ever exceeded four until Amsterdam decided in 1914 to add a fifth, who would be chiefly concerned with housing. Wibaut, who held this post until 1921, was the first social democratic Wethouder, but he was shortly joined by another, who took the portfolio of public works. In 1919, because of the increasing arduousness of municipal administration, a sixth Wethouder's seat was created, opening the way for socialist domination of B en W, for during the 1920s the SDAP frequently held three of the six portfolios. Wibaut resigned as Alderman for Housing, only to become Wethouder for Finances, and his former seat was taken by the social democrat S. Rodrigues de Miranda (1875–1942), who held it with distinction until 1927. Such leadership was crucial for achieving a "systematic land and housing policy," the demand for which was reiterated in 1919, when the social democratic councillors of Amsterdam published their own municipal program. Housing was now number one on the list of urgent demands; under its rubric were included

> a. Extension of municipal land ownership; management of land for the purposes of a progressive housing policy;
> b. Vigorous continuation of municipal housing; further support of the housing societies.[16]

The extent to which these demands were effective can be demonstrated by tracing the realization of Amsterdam South.

Until the mid-nineteenth century, there had been sufficient land within the seventeenth-century "plan of the three canals" to satisfy Amsterdam's needs. But as the Netherlands entered the industrial age and its urban population began to increase, the city fathers found it necessary to consider expansion. The most logical direction was southward, where some private development was already taking place. As all the meaningful schemes spilled over into the neighboring municipality of Nieuwer-Amstel, it was necessary to await permission to annex relevant portions of that municipality. This came in 1896, and the Director of Public Works submitted a project. However, the council found it lacking in aesthetic appeal and in March 1900 invited the Netherlands' most renowned architect, H. P. Berlage (1856–1934),[17] to prepare an extension plan, two years, it may be noted, before the Woningwet made such plans obligatory. The fact that aesthetic no less than practical considerations weighed so heavily with the city council established a precedent that would exert a continuous influence on the development of Amsterdam South.

Although Berlage's plan (Fig. 1) was approved in 1905, nothing was immediately done to obtain land in the designated extension. It was not until June 1911 that the council agreed to acquire the relevant territory, action that became energetic only after Wibaut was elected Wethouder. In the

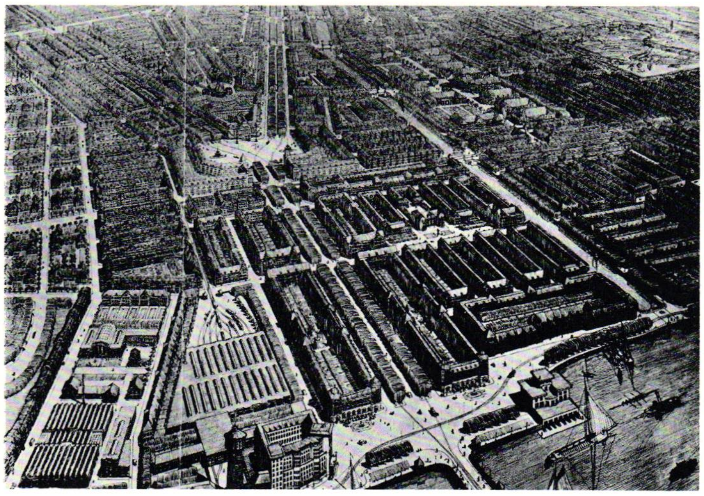

Fig. 3. Imaginary bird's-eye view of Amsterdam South. H. P. Berlage, 1915.

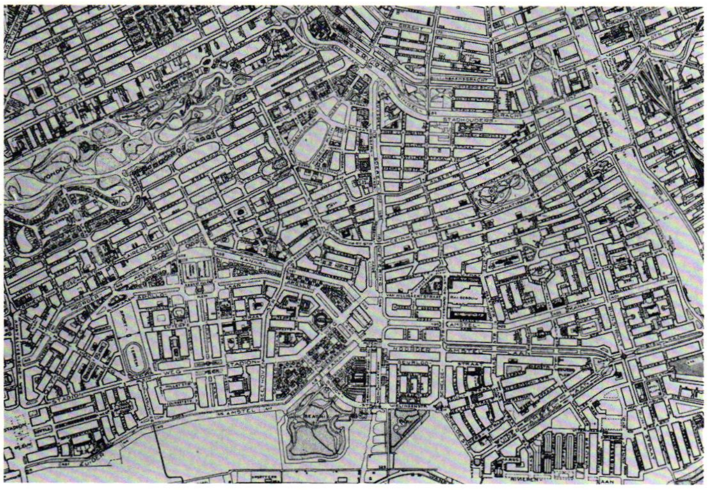

Fig. 4. Map of Amsterdam South in 1939.

meantime, altered circumstances had required a revision of the scheme, and Berlage completed a second Plan South in 1915 (Fig. 2). By mid-December 1916 over eleven million guilders had been expended for the purchase and expropriation of sites in the proposed extension, and when the council accepted the revised plan in 1917, execution could be immediately commenced.

It was undoubtedly fortunate that the first plan did not go forward. An insufficient amount of land had been set aside for housing, and the layout was impracticably picturesque and unsuitable for a modern metropolis. Berlage himself had changed his ideas about city planning since submitting the first plan and willingly drafted a new proposal. Dwelling sites, including a workers' garden suburb,[18] now comprised over 52 percent of the area, compared with less than 40 percent in the first plan; in order to justify expropriation on the basis of the Woningwet, extension plans had to be conceived "in the interests of housing." However, it should be noted that from the very beginning a compromise was embedded within Plan South, for this housing "was not intended in the first place for workers with little earning power."[19] Plots were set aside for single-family villas and semidetached middle-class houses, and although three-quarters of the housing area (Fig. 2, "III") was assigned to workers' dwellings, only 224 *municipal* flats were projected.[20] It was the skilled workers and the middle class who would be the primary beneficiaries of this scheme.

Yet in other ways Plan South was cast in the image of the ideal social democratic city. It was not to be just a dormitory; the housing was seen as part of that comprehensive whole called for by the SDAP. Terrain was set aside for industry (Fig. 2, "I.T."), and the proposed railroad station further reinforced the economic viability of the extension. Buildings for municipal services (powerhouses, fire stations, a tram barn) were distributed throughout the scheme, as were sites for schools, parks, and even churches. Monumental public buildings also found a place, among them an Academy of Fine Arts, a Free University, a teaching hospital, an arts center, and a stadium. Such building types formed a vital part of Berlage's urbanistic expectations and fulfilled the SDAP's demand that the municipality be responsible for both the cultural and the physical well-being of its citizens.

In the end, most of the monumental buildings were sacrificed to the urgent need for housing, although the stadium survived, thanks to the presence in Amsterdam in 1928 of the Olympics. Neither the station nor the tram barn were built in the allocated areas, and the garden suburb was replaced by denser development. The social democrats acquiesced in many of these changes because they recognized that housing had first priority. An alteration that enraged some of them, however, and further compromised the scheme, was the necessity for having so many of the dwellings produced not by the housing societies but by private builders operating for profit rather than improvement, which damaged the opportunities for genuine housing progress in Amsterdam South.

From the start Plan South had been designed to accommodate changes and yet remain effective, at least on the formal level. Although Berlage made detailed three-dimensional renderings (Fig. 3), he had been commissioned to prepare only a framework *(geraamteplan)*. This he conceived chiefly as a communications network, which meant that the basic skeleton of the plan could survive alteration over time (cf. Figs. 2 and 4). The orientation of this network was east–west, with the major avenues and the bifurcated Amstel Canal running in that direction. The north–south streets which connect the new and old city are less imposing and direct, a device that reinforces physically the ideologically self-contained character of the original plan.

Berlage's new comprehension of the importance of traffic flow to the twentieth-century city was one of the reasons he had shifted from a picturesque to a monumental scheme.[21] Another was his own belated experience with housing commissions.[22] A contemporary commentator, J. H. W. Leliman, had observed when comparing the first and second extension schemes that "medieval principles have made way for the Baroque. The lots are no longer parcelled out in capricious patterns, but 'blokbouw' is the newest slogan."[23] As the bird's-eye view (Fig. 3) reveals, Berlage had indeed accepted the suitability of large-scale blocks for housing, and he understood that such a building type required generous, regular sites.

Leliman warned, however, that "while 'blokbouw' impresses by monumental application, it can be tedious if consistently executed with sober means." The officials charged with executing Plan South understood this and prevented monotony by encouraging the employment of a number of different architects to design the blocks, architects who knew how to achieve what Berlage had once identified as the charm of the traditional Dutch city: monumentality of layout, picturesqueness of detail.[24]

A major advantage of Berlage's scheme was that, within the framework established by the major traffic arteries, there was a series of discrete neighborhoods, each with its own major axis or focal point. The independent nature of each section of Plan South meant that the execution could proceed by separate stages, and subsequent alterations in the nature or purpose of unrealized areas need not disarrange those parts already completed. Although not required to do so, Berlage had provided detailed two- and three-dimensional designs for each neighborhood. In some cases his suggestions were followed quite faithfully (Fig. 5). In other sections, especially those endowed with unexecuted monumental buildings, the site plan had to be prepared *de novo* by the Department of Public Works or the Municipal Housing Service.

To properly appreciate the texture of Amsterdam South, all of its neighborhoods should be examined. However, there is room here for an analysis of only two, which are comparable in size and date of execution. Both are in the eastern half of the extension. The one immediately west of the Amstel (today Berlage) Bridge (Fig. 5) retained the layout which Berlage had given it; the other, north of the Amstel Canal (Fig. 6), arose on the site originally allotted to the teaching hospital (Akademische Ziekenhuis), and therefore a new street plan had to be made. The former will be called the ABV-buurt (*buurt* means "neighborhood" or "district"), the latter, the Takbuurt, after its major street, named for P. L. Tak, a prominent social democrat. Both were in the planning stages in 1919 and largely completed by the end of 1923. There are 1688 dwellings on 12 hectares in the Takbuurt (in 1927, an additional 178 units were added), and 1750 dwellings on 10 hectares in the ABV-buurt. A complex street pattern distinguishes each neighborhood, and the perimeter blocks of varied height which create those patterns were designed for the most part by architects associated with the Amsterdam School. But the methods of financing and execution differed markedly, as did the final results. The Takbuurt was the product of six housing societies, the other of a consortium of private builders, Amstels Bouwvereeniging (ABV).

It is at this point that architecture becomes part of the saga of Plan South, but the aesthetic quality of workers' housing in Amsterdam had been an issue for more than a decade. The SDAP saw in the financial provisions of the Woningwet a means to achieve dwellings which were not only comfortable and sound but also architecturally distinguished. To that end, local socialist officials habitually urged the housing societies to seek the services of prominent architects. The most significant functionaries in this respect were Wibaut and his brother-in-law, Ary Keppler (1876–1941), the director of the Gemeentelijke Woningdienst (Municipal Housing Service) and a zealous member of the SDAP.[25]

Although the social democrats prescribed no particular style, by their suggestions to the housing societies about suitable architects they influenced the direction of architectural development. Initially *sachlichkeit*,[26] the dominant movement in Holland during the first part of the century, prevailed among the architects employed by the housing societies; it informs, for example, the executed designs of Berlage and those he projected for Plan South (Fig. 3). While such rationalistic blocks were sturdy and well-planned within the limits of expectation of the time, there is evidence that some of the workers and their socialist leaders found them too sober and severe.[27] Thus the interest of the workers was aroused when in 1913 a housing design appeared that broke dramatically with all that had gone before. It was by the brilliant newcomer, Michel de Klerk (1884–1923), the future leader of an architectural group whose commissions were generated primarily by the Woningwet. Collectively known as the Amsterdam School, these architects would be responsible for a major portion of the housing erected in the city between 1915 and 1930.[28]

De Klerk's first block of workers' dwellings had been prepared for Klaas Hille, a contractor who realized that by employing an architect to design his building, he could facilitate approval by the Schoonheidscommissie. It is unlikely, however, that Hille foresaw that his choice of such a bold iconoclast would completely alter the direction of housing design in Amsterdam. But when the war outside Holland's borders made privately constructed housing prohibitively expensive,[29] and construction of the second block designed by de Klerk for Hille had to be assumed by the housing society, Eigen Haard, a new architectural style indeed was launched. Subsequently de Klerk received a third commission in the same neighborhood, the Spaarndammerbuurt. Since all three of the executed buildings have been extensively analyzed elsewhere,[30] the first project of November 1913 (Fig. 7), not previously published, will be used to illustrate de Klerk's method of design. In execution the project underwent change and simplification, but some of the suppressed portions were incorporated into the block erected by Eigen Haard (Fig. 8).

A comparison with earlier (Fig. 8, right side) and contemporary (Fig. 9) housing blocks [31] demonstrates immediately the originality of de Klerk's conception. On the one hand, he has succeeded in conveying the true scale of the multiple dwelling block; it is not merely the sum of a series of indi-

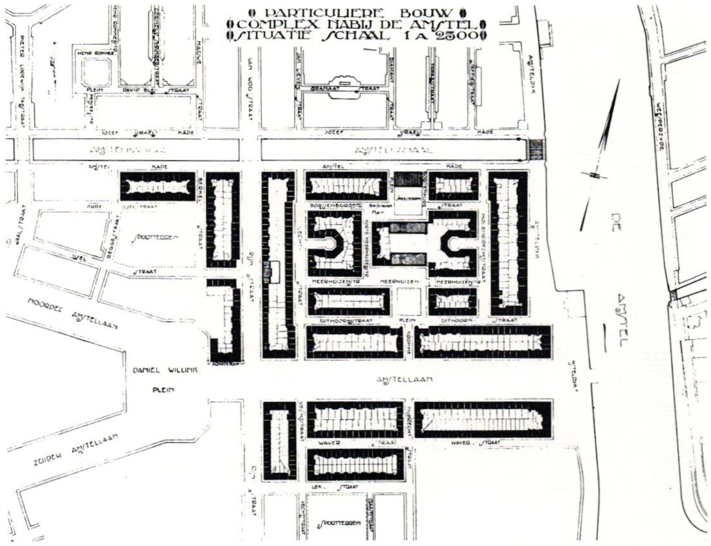

Fig. 5. ABV-buurt, Amsterdam South. Site plan, with dwellings of Amstels Bouwvereeniging.

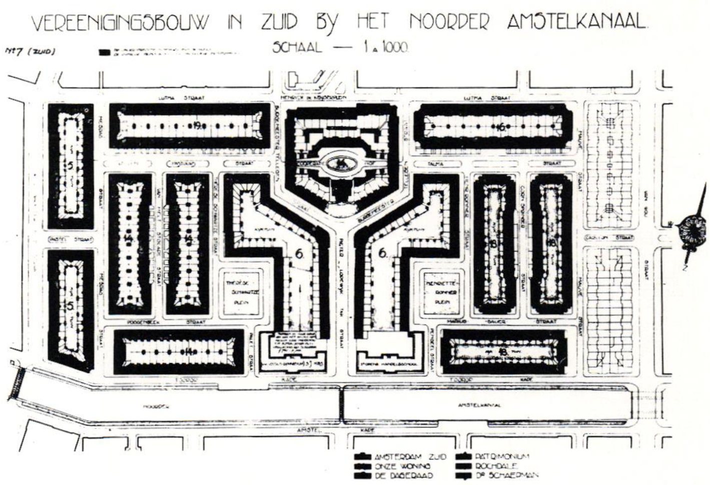

Fig. 6. Takbuurt, Amsterdam South. Site plan.

Fig. 7. M. de Klerk. Project for a block of workers' dwellings in the Spaarndammerbuurt, 1913.

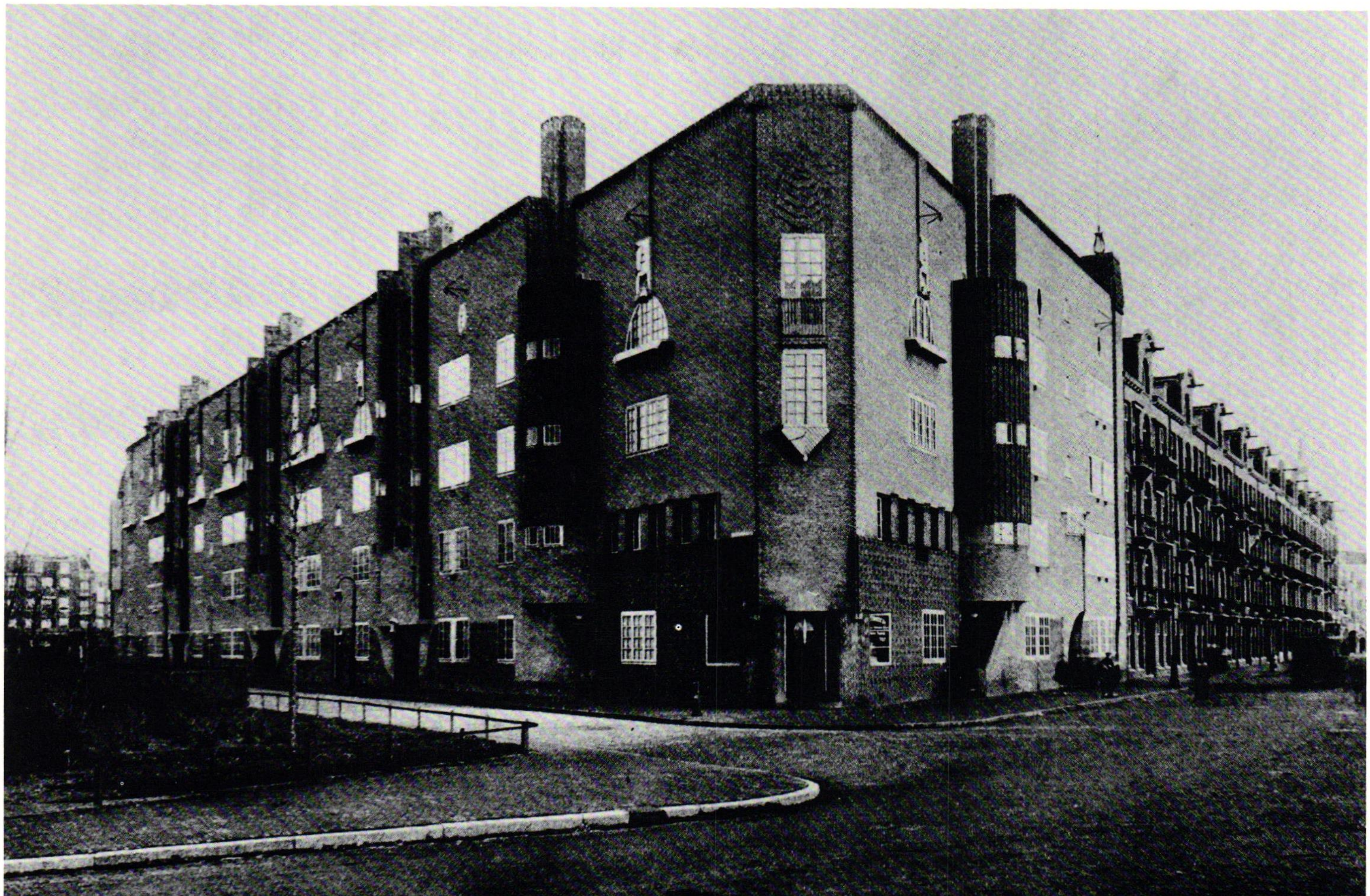

Fig. 8. Dwellings of Eigen Haard, Spaarndammerbuurt. De Klerk, 1915.

vidual units, as were the tenements of the nineteenth century. On the other hand, the barrackslike effect often produced by such large buildings, an effect some commentators feared to be endemic to the program of housing, and one found in many projects (Fig. 9), has been avoided through a series of architectural events. Major occurrences (three-dimensional insertions into the wall) and minor accents (odd shapes and varied sizes for windows) enliven the façade. The stairhalls offer examples of both strategies for preventing visual monotony. The presence of one series of stairs is signalled two-dimensionally, by hexagonal windows set flush with the wall plane; the other group of stairhalls is indicated plastically, by an explosion of angular and cylindrical shapes which vigorously interrupt that plane above the ground-story level. This rhythmic alteration of stresses breaks down the huge scale of the block and gives it an uncanny sense of animation. The potentially brutish dimensions are further tamed by the diversity of colors and textures. Through the employment of tile and of bricks of varied hues and formats, the viewer's attention is drawn to the small details which play across the long surfaces.

One can extrapolate from de Klerk's first project for workers' housing a principle which will guide the practice of the Amsterdam School: each dwelling block or ensemble must present a unique image. This uniqueness is to be achieved through a two- and three- dimensional manipulation of mass and detail which calls into play all of the architect's powers of formal invention. This desire for uniqueness is characteristic of Expressionist architecture, and the designs of the Amsterdam School must be placed in that stylistic category.[32] Yet the choice and treatment of materials is unmistakably Dutch, as is the emphasis on small-scale, handcrafted detail. Unlike many Expressionist architects, the members of the Amsterdam School saw their projects realized essentially as they had designed them, perhaps because the program imposed by housing as a building type tempered the tendencies toward hallucinatory extremism found in so many German Expressionist projects.

By adopting the principle of uniqueness rather than standardization for workers' dwellings, the Amsterdam School created a stimulating environment that invariably evoked pride and satisfaction among the inhabitants. The extravagant formal exuberance of the architecture erased the old stigma attached to "workers' housing." Obviously such projects were more costly to execute than the sober, *sachlich* blocks that were the usual fare of the working class, and members of the Amsterdam School have been called "antisocial" because they used these commissions to express their own visual fantasies. Yet such criticism bespeaks a rather constricted view of the social component in architecture. A building does not fulfill its social function merely by serving pragmatic needs; its image-making role is no less crucial than its role as shelter. For a dwelling block does not just house individual families; it is the basic component of the neighborhood and, as such, must aspire to more than quantitative standards.

The social democrats of Amsterdam recognized this and, in the interests of heightening the symbolic content of these blocks, encouraged the housing societies to employ architects who could create the visual embodiments of proletarian aspirations, promising subsidies to help defray costs. When architects for the Takbuurt were selected by the housing societies, four were members of the Amsterdam School, and all but one of the other four produced work influenced by this group. These architects, de Klerk in particular, also played a role in creating the site plan, which is complex in form and functional in effect. Since no street within the Takbuurt runs directly into any street beyond it, except for the four thoroughfares which establish its outer

Fig. 9. Workers' dwellings, Tusschendijken, Rotterdam. J. J. P. Oud, 1920–1921.

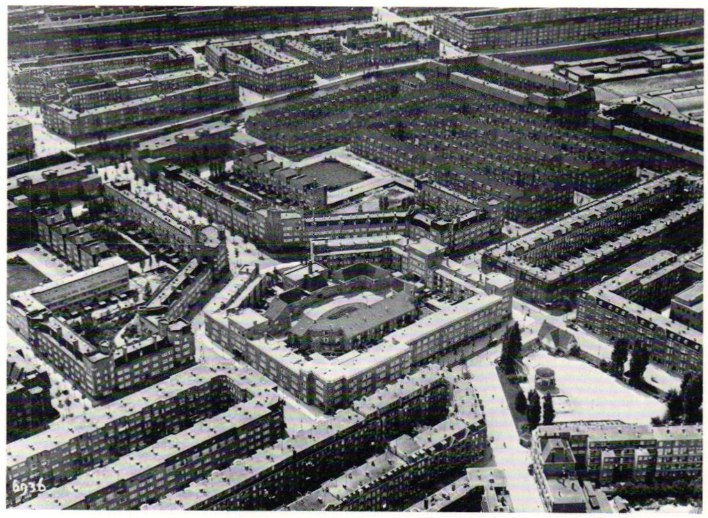

Fig. 10. Takbuurt. Air view from the northeast (reproduction forbidden).

Fig. 11. Takbuurt. Pastoorsstraat. View from entryway of Amsterdam Zuid. Left, Dr. Schaepman. Near right, Onze Woning.

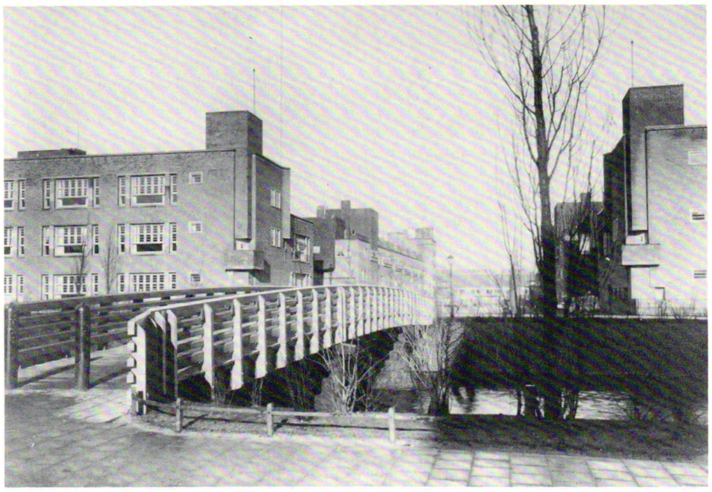

Fig. 12. Takbuurt. Public schools. Department of Public Works, 1923–1924.

Fig. 13. Takbuurt. View along Toorop–(now Josef Israels–) kade. Left, Amsterdam Zuid, Gulden and Geldmaker, 1921. Right, Onze Woning, A. W. Weissman, 1923–1925.

boundaries, the pace of traffic is slowed, and the neighborhood's nature as a dwelling place is reaffirmed.

Several aspects of the scheme (Figs. 6 and 10) are typical of local practice. Perimeter blocks are the dominant building type; they enclose interior gardens and literally mold the spaces of street and square. A modest amount of land is allotted to public green space; there are small gardens along the Talma- and Pastoorsstraat (Fig. 11), streets which also are provided with a tree-lined central strip, which further inhibits traffic circulation within the complex. The two squares, arranged in the form of turbine plazas (a form advocated by the planner Camillo Sitte), offer additional areas of vegetation. Shops have been included in a number of the housing blocks, and the municipality has erected two schools, which frame the central axis of the scheme (Fig. 12).

The strict symmetry of the layout was unusual for Amsterdam. Most of the sites available for housing complexes were too irregular to accommodate such a formal scheme, but the large, oblong parcel where Berlage had situated the hospital made symmetry, and the monumentality that is its byproduct, possible. Nevertheless, the plan, with its closed vistas and curving central street, is not devoid of picturesque elements, and symmetry has been mitigated in the third dimension, for the only architectural mirror images are in the center—along the Takstraat and on the inner faces of the two squares. Elsewhere diversity reigns, because the buildings were designed by different architects and because of height variations from two and a half to four and a half stories.

The distribution of parcels among the six housing societies is shown in Fig. 6 and in the table below. The column at the far right gives the total number of dwellings in Amsterdam owned and operated by each society in 1925.[33]

Name of society	*Size of parcel in M2*	*Dwellings in Takbuurt*	*Dwellings in Amsterdam*
Dr. Schaepman	6,860	150 + 4 shops	381
Patrimonium	6,860	180 + 4 shops	1,287
•Amsterdam Zuid	One: 5,540 One: 5,085	274 + 4 shops	565
•De Dageraad	Two: 8,526 each	298 + 6 shops	298
•Rochdale	Two: 5,549 each One: 5,454	378	1,365
Onze Woning	Same as Rochdale	408	801

•Predominantly socialist membership

Quite properly, the two denominational housing societies, Dr. Schaepman and Patrimonium, received equal plots in matching locations. Of the remaining societies, three were predominantly left-wing in membership while the fourth, Onze Woning, may be considered neutral. The latter leased additional land around Cooperatiehof at a later date for the construction of 178 dwellings, bringing its total ownership in the Takbuurt to 586. The two blocks in the easternmost portion of the district, pendant to those of Amsterdam Zuid, were leased to private builders.

The oldest of these societies was Rochdale, the first organization in the Netherlands to construct Woningwet dwellings. Although the impetus for its founding came from municipal workers of divergent political backgrounds, by the time the society received juridical recognition in 1906, its membership had become thoroughly socialist. The society Amsterdam Zuid also was socialist. When the municipality decided in 1910 to build a gas factory, its third, on the southeast bank of the Amstel River directly across from the proposed new extension, its employees became concerned about the lack of housing in that locality. Tellegen, then the building inspector, advised them to ask the municipality to build a garden suburb near the new factory, probably in the very spot where the workers' suburb of the second Plan South was to be placed (see note 18). That idea came to nothing, however, and the gas workers who belonged to the social democratic union set up a Woningwet organization in 1911. Despite its name, Amsterdam Zuid operated dwellings not only in Plan South, but also in the Spaarndammerbuurt, near the older, western gas plant.

The other societies were not as self-generating. Dr. Schaepman was established in 1908 by Roman Catholics, and the Calvinist Patrimonium was set up in 1911 by the huge central trades union organization of the same name, which was the labor arm of the Anti-Revolutionary Party (see note 7). De Dageraad ("Dawn"), whose statutes received approval in 1917, was the offspring of a social democratic consumer's cooperative with many Jewish members. Onze Woning ("Our Dwelling") also was the child of an existing organization, the Society for the Acquisition of One's Own Dwelling (Eigen Woning).

Eigen Woning had been founded in 1868 by and for workers, although a few representatives of the philanthropic bourgeoisie were active in its administration. Denominationally and politically neutral, it was capitalist in orientation, for its initial purpose was to build houses that would become the property of its members. Although this goal proved unfeasible, Eigen Woning remained capitalist in that

Fig. 14. Takbuurt. Dwellings of Patrimonium. Kuipers and Ingwersen, 1922.

its shareholder members received a modest return on their investment, and for this reason it could not subsequently qualify as a Woningwet society. In order to take advantage of the benefits made available by that legislation, it founded Onze Woning in 1919 as a foundation eligible to receive loans and subsidies.[34]

The political affiliations of these societies have been briefly noted because there is a correlation between political and architectural progressiveness. The three socialist societies employed members of the Amsterdam School, while Onze Woning's rather conservative background may account for the fact that its dwellings (Fig. 11, far right, and Fig. 13) are stylistically traditional. One is not surprised to learn that this ensemble was designed by the oldest architect to work in the Takbuurt, A. W. Weissman (1858–1923). Chosen because he had helped the parent organization in 1911, when the façade design of Eigen Woning's proposed housing blocks had been rejected by the Schoonheidscommissie, Weissman belonged to the generation that considered an inexpensive, *sachlich* mode the most suitable for utilitarian commissions like housing. His disapproval of the romantic and extravagant projects of his colleagues in the Amsterdam School is revealed in the following verse, which he wrote in 1919 under the name Candidus:

Art and Housing
Art also in workers' housing? Good,
Provided no harm is done to its function,
For a house is meant to be lived in,
And not to show an artist's caprice.[35]

Weissman had already come into conflict with the members of the Amsterdam School. His impertinent but witty architectural rhymes had appeared regularly in *Architectura,* the weekly organ of the club Architectura et Amicitia (A et A), but when H. Th. Wijdeveld (b. 1885), the Amsterdam School's chief publicist, became editor in 1917, the verses were promptly proscribed. (They were subsequently published in *De Bouwwereld,* whose editorship Weissman assumed in 1921.) Wijdeveld's opposition to Candidus rested on a fundamental disagreement which divided Dutch architects of the period, a disagreement played out dramatically on the premises of A et A.

Since its founding in 1855, the club had as members contractors, engineers, businessmen, and technicians as well as architects and artists. At the turn of the century, its meetings had become increasingly involved with the technical and management problems connected with professional practice, an involvement fostered by the prevailing architectural rationalism. The club's younger constituents disapproved of that emphasis and agitated for a greater focus on the artistic side of the profession. In 1916, the group which would form the Amsterdam School led a palace revolt, which commenced as a dispute over the statutes regulating membership. De Klerk and his followers wanted to exclude all those who were not creative designers or artists. This attempt failed, but in 1917 the young Turks succeeded in passing a less sweeping proposal. It allowed current members to remain but established an elite category within the club, the Afgevaardigde Leden (delegated members), for whom architecture was "the play and

Fig. 15. Takbuurt. Dwellings of Amsterdam Zuid. Gulden and Geldmaker, 1921.

Fig. 16. Takbuurt. Dwellings of Rochdale. Gulden and Geldmaker, 1923. Attic story added later.

Fig. 17. Takbuurt. Dwellings of Rochdale, Bauer-(now David Bles-) and Mauvestraat. Attic story added later. Gulden and Geldmaker, 1923.

language of form,"[36] rather than the mere fulfillment of function. Although a few older notables like Berlage were included, most of the Afgevaardigde Leden came from the ranks of those associated with the Amsterdam School, which had received its name the previous year.[37] Weissman had not been in favor of creating such a select band, nor were his designs among those shown when A et A exhibited the work of this elevated corps in 1921.

The attack against the utilitarians in A et A was conducted on other fronts as well. During 1917 Wijdeveld made plans for the club to publish a sumptuous monthly magazine, which would provide a forum for the aesthetic concepts and the work of the delegated members. The organ would also survey new trends in the other arts, particularly dance and drama. By emphasizing the visual kinship between arts with such seemingly diverse purposes as theatre and architecture, Wijdeveld hoped to undermine the functionalist bias propagated by so many of the older architects. The intensely scenographic buildings which form such dramatic backdrops to the spaces of Plan South are one result of this desire to fuse architecture and stage design.

When the first issue of the pretentious new periodical appeared in January 1918, Candidus struck back with a stream of verses that made biting play upon its title, *Wendingen* ("Turnings"). He called those associated with the movement expounded by *Wendingen* "the bolsheviks of our architecture/ always off on new turnings," and complained in another poem:

> Architecture, once so chaste,
> Offers her naked self shamelessly,
> Now that she is invited to dance in turnings.[38]

The man who wrote these verses would make no concessions to architects whose aims he considered false and self-indulgent. Unfortunately, his version of chastity, as it appears in the staid dwellings of Onze Woning, is forbidding and joyless; indeed he had difficulties with the Schoonheidscommissie on this account. Thus Weissman's work, completed posthumously in 1925, is something of an anomaly in the Takbuurt.

The earlier housing blocks by the architects who acted for the two confessional societies had been marked by the same veneration for sobriety and tradition found in Weissman's architecture. But in the Takbuurt they attempted to adjust their designs to the newer, more exuberant mode. J. H. Rijna (1871–1941), who planned Dr. Schaepman's dwellings (Fig. 11, left), remained tentative in his incorporation of motifs invented by the Amsterdam School, and novel elements coexist rather awkwardly beside conventional ones. A bolder transformation has overtaken the work of Patrimonium's architects, Tj. Kuipers (1858–1942) and A. Ingwersen (1883–1959), who have introduced features which do not usually appear in their commissions for that society. Their new design, under construction in 1922, owed a great deal to de Klerk's block in the Spaarndammerbuurt (compare Figs. 8 and 14), particularly in the powerful way the monumental corners step back and are framed by staircases which give entry directly to the second story. The flat roof, tile-hung attic story (the tiles have been replaced by asbestos shingles), the oblong format of the living-room windows, and the distinctive framing of the entry portals are all compositional devices derived from de Klerk and his followers.

It was not necessary for Z. D. J. Gulden (1875–1960) and M. Geldmaker to modernize their style, for they were already affiliated with the Amsterdam School. The firm worked for the two societies in the Takbuurt with parallel socialist origins—not surprisingly, since Gulden served as a social democratic councillor for many years after taking a seat in 1909. While not as outrageously inventive as de Klerk, Gulden and Geldmaker knew how to adopt his mannerist design strategies, using fragments of recognizable architectural forms divested of their original context and purposes. For example, in the block for Amsterdam Zuid which lies along the canal (Fig. 15), the gambrel shape has been used as a leitmotif, but it no longer has its original format and function. The gambrel is not here an embracing roof but, more stilted in outline than traditionally, it appears at street level in two dimensions, indicating an entry, and at roof level in three, crowning a bay window. The gambrel motif is repeated in the buildings for Rochdale (Figs. 16 and 17); in this way, the eastern and western portions of the Takbuurt are visually unified and the kindred allegiances of the two housing societies are underscored. Yet the firm has differentiated each society's domain. The windows and doors are distinct for each, and the corners are individually eventful and conform to the plans and to the special nature of the site.

Like other members of the Amsterdam School and like the workers themselves (see note 27), Gulden and Geldmaker had an antipathy to standardized plans. Thus they have provided in the same housing block (Fig. 18) accommodations which vary not only in size but in the distribution of spaces and the arrangement of rooms. The most obvious differences are summarized in the table below.

Type	*Number of bedrooms*	*Living room location*	*Balcony*
A	2	Rear	Yes
A′	2	Rear with bay	Yes
B	3	Front with bay	Partial
C	2 + parlor	Front with bay	No
D	2	Rear	Yes
E	2	Front	Yes
E′	2	Front with bay	Yes
F	3	Front	Yes
G	3	Front with bay	Partial

All of the kitchens are in the rear, but some are polygonal (B, D, F, and G), the others rectangular (A, A′, C, E, and E′). Further diversity is achieved by variations in the square footage from type to type. This diversity in plan is the spatial equivalent of the wealth of exterior detailing and massing and bespeaks a recognition of different individual needs. The dwelling types reflect the differences among the families who belong to Rochdale; the overall ensemble expresses the collective image of the society.

While the buildings of Rochdale and Amsterdam Zuid are rich in plastic force, it is De Dageraad's complex (Figs. 19–23) which dominates the Takbuurt. Since the detailed imagery of this *chef d'oeuvre* has been described elsewhere,[39] the discussion will center on the urbanistic novelties of the scheme. The ensemble was designed in 1920 by de Klerk and Pieter Lodewijk Kramer (1881–1961), the other major figure of the Amsterdam School. De Klerk alone was responsible for the slabs on the two squares and the dwellings along Takstraat (Fig. 19). Kramer designed the striking corners, completed in 1923 (Fig. 20), the portions which snake around Burgomeester Tellegenstraat, and the slightly later portions which link de Klerk's slabs to the society's remaining dwellings along Ronner- and Schwartzestraat. The air view (Fig. 10) shows the eastern part before and the western section after Kramer's additions, which De Dageraad erected in the early 1930s.

De Klerk has modified the usual arrangement of the perimeter block in order to enhance certain aspects of the site plan. Ordinarily the slabs on the squares would have been joined to the units on the Takstraat to form self-contained interior gardens, but here that wing has been omitted, so that gardens continue the open space of the schoolyards (Fig. 10). The slabs are attached instead to the school

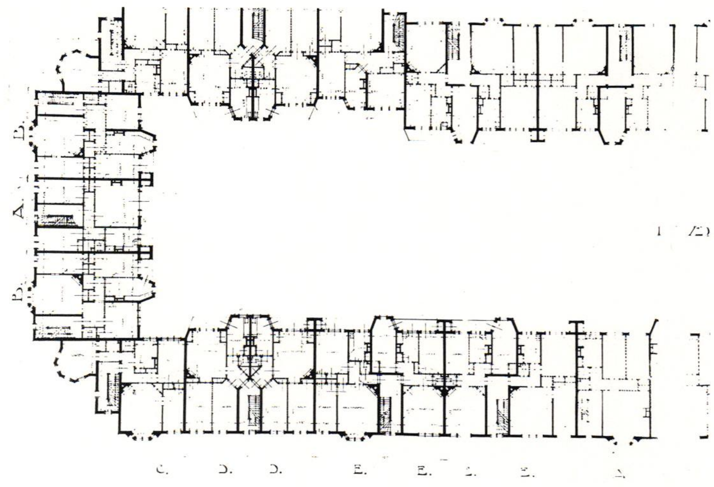

Fig. 18. Plan of Fig. 17.

buildings, a device that turns the squares into turbine plazas (Fig. 21). Along Takstraat, on the other hand, an opening has been created between the schools and the dwellings to form a secondary visual axis perpendicular to the major axis of the street (Fig. 22).

De Klerk and Kramer have created in the Takbuurt a variety of urbanistic experiences. In the buildings which line the streets the composition constantly shifts, offering dynamic new impressions as one progresses along the bifurcated axis of Tellegenstraat. In the façades which front the squares, however, calmness reigns. The sense of repose is heightened by the vertical accents created by the chimneys and the indentations in the wall. De Klerk understood the role of architectural composition in the cityscape and typically emphasized flowing, horizontal rhythms along streets and more restful, vertical stresses when creating the backdrop for a square. Yet, although contrasts exist among the different parts of the ensemble, there are visual codes which link these parts. Thus projecting red tile roofs extend downward over the wall at the terminations of the slabs (Fig. 21), and similar configurations confront the observer as he looks up Takstraat (Fig. 12) or across the schoolyards (Fig. 22). The fenestration patterns also have been carried over from street to square, and the complex has been coloristically unified by the yellow and purple hues of the brickwork.

Like Gulden and Geldmaker (cf. Figs. 15 and 22), but with greater daring, de Klerk has wrenched recognizable architectural forms from their original settings to create effects which are new, yet retain comfortably familiar references. Thus the strikingly novel façade of each slab may be read as a quartet of enlarged farmhouses framed by smaller cottages, the program (housing) being conveyed by a pictorial overlay of house images. Similarly, the brick "baskets" which link the farmhouses at first shock by their huge scale and unexpected texture, but, filled with plants as had been intended (Fig. 19), they would also have enchanted by reminding the viewer of a nature-filled, rural world.

The long buildings which whip around Tak- and Tellegenstraat have a more futuristic design; the composition has been generated by the flowing rhythms of the street. The architects have remained faithful to the symmetry of the layout, in that the elevations which are located in corresponding portions of the site plan are identical. But as the buildings change direction, the design alters. Every shift is emphasized by plastic extrusions, and wherever a corner is turned the height increases by one story (Figs. 20 and 23). The two partners have brilliantly coordinated all the parts of

Fig. 19(a). M. de Klerk. Rendering of De Dageraad, 1920. P. L. Takstraat.

Fig. 20. Takbuurt. View at Tellegenstraat. Left, Onze Woning, Kramer, 1926–1927. Center and right, De Dageraad, Kramer, 1920–1923.

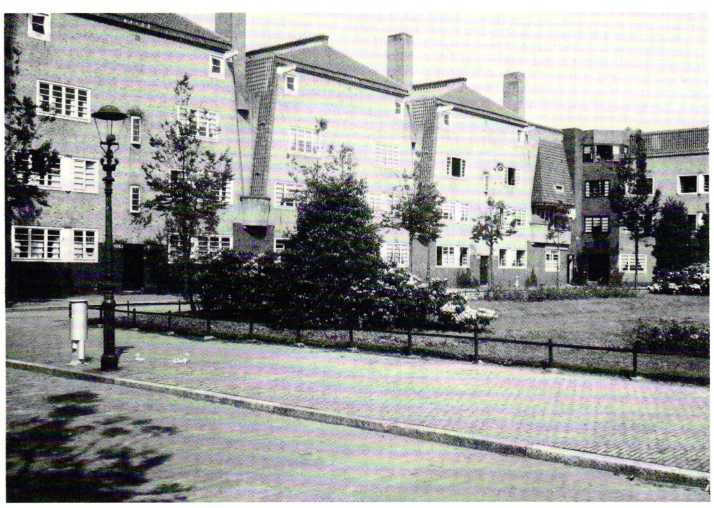

Fig. 21. De Dageraad. Dwellings. View at Henriette Ronnerplein. Left, de Klerk, 1920–1923. Right, Kramer, 1926–1930.

the ensemble to create a gigantic stageset which animates the spaces of the district.

The dwellings of the socialist housing societies in the Takbuurt mark the climax of the first stylistic phase of the Amsterdam School. During this phase the architects drafted intricate masses and an abundance of differentiated details. Literally dozens of working drawings were made for the complexes of De Dageraad and Rochdale, which were expensive to execute because of the variety of materials and details. Further, well-trained craftsmen had to be employed to cope with the complicated forms. It is tempting to speculate in this connection that the individualized details were intended not only to please the occupants but also to utilize the talents of the skilled workers who formed the backbone of the SDAP.[40] However, by the time these projects in the Takbuurt were completed, the Amsterdam School had been pushed into a new phase by economic exigencies and a change in clientele.

In 1918 it had become apparent that the severe housing shortage could not be solved by the housing societies and the municipalities alone. The Liberals, shortly before leaving office, proposed that subsidies be extended to private builders to encourage them to reenter the housing market. The socialists of Amsterdam agreed that it was necessary to involve the private sector, and in 1919 the council voted to grant municipal mortgages and subsidies to contractors who would erect dwellings for the working and lower-middle classes.[41] This proposal was superseded the following year by the government decree inaugurating "premises" (grants or premiums) for the construction of middle-class dwellings of a restricted size. Each contractor would receive outright a premium of 25 guilders per square meter of housing completed, to a maximum sum of 2500 guilders per dwelling.

Although the social democrats criticized the decree because it regulated neither the quality nor the rents of these dwellings, they decided to use the system to develop portions of Amsterdam South. Land was leased to the ABV in the new extension and its members were allowed to apply for premiums. The municipality did insist that its aesthetic standards be maintained, and a new method of controlling the townscape was introduced. Because the board of Amstels Bouwvereeniging feared that valuable time would be lost "if the usual procedures with the Schoonheidscommissie were followed," it invited the municipality to set up a

Fig. 19(b). M. de Klerk. Rendering of De Dageraad, 1920. Therese Schwartzeplein.

special advisory committee to act in place of the Schoonheidscommissie and to offer centralized aesthetic direction on a large scale.[42] This body, consisting of four architects, took over from the Department of Public Works the task of determining building heights and street profiles, and of refining Berlage's layout, which was followed quite closely (cf. Figs. 2 and 5). The committee also was charged with suggesting which materials should be used and deciding which parts of a given street or square were considered an architectonic entity to be designed by a single architect.[43] However, since no architect was made responsible for an entire perimeter block, as would have been the rule with a housing society's project, there resulted a disquieting lack of harmony in some areas of the Takbuurt.

Another of the committee's duties was to guide the ABV in selecting architects. The consortium first submitted a list of architects with whom its members were familiar; the committee approved some of these and added other names. Each architect was to design at least 20 meters of street wall and would work with four builders on the average. Unfortunately, in most cases it was only the front elevations which concerned the architects, for the members of the ABV provided their own plans, which did not offer the variety found in the blocks of the housing societies (cf. Figs. 18 and 25). Furthermore, serious problems ensued because the exterior envelope was designed independently of the interior spaces. The epithet "apron architecture" (*schortjesarchitectuur*), which is so often hurled unfairly at all of the designs of the Amsterdam School, was in fact justified when applied to the productions in the ABV-buurt.

For it was predominantly the members of the Amsterdam School who designed the façades in this district. The list of seventeen names compiled for the ABV included de Klerk (Figs. 25–28), Kramer (Fig. 26, right side) and Wijdeveld, and most of the others on the list were their followers. But new strategies have made their appearance here. In many cases the intricate massing has been smoothed out, and the detailing has been simplified. While some familiar features remain—native brick laid in unusual patterns, multipaned windows of varied format, occasional plastic flourishes to prevent the façades from being perceived as flat elevations—the designs have been created with a broader brush (cf. Figs. 19 and 24). In their sweeping dynamism and less intimate scale, the new projects reveal a kinship with Ger-

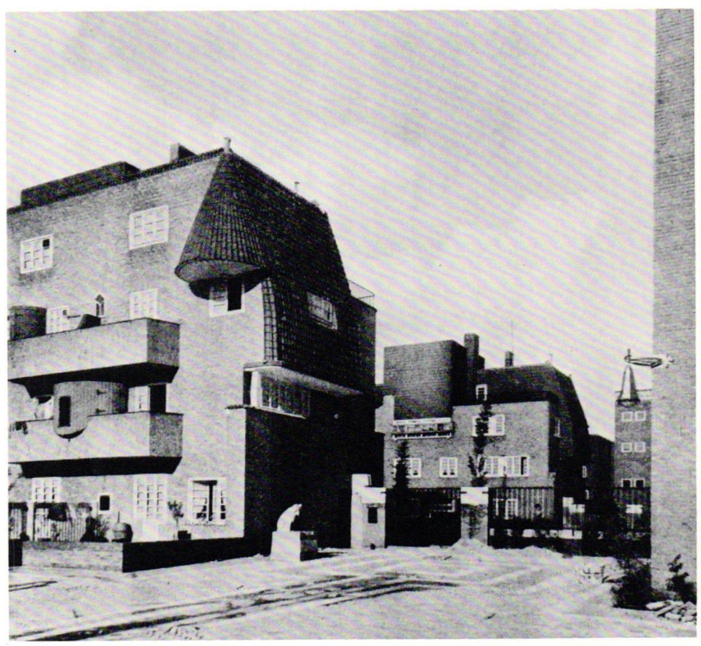

Fig. 22. Takbuurt. View east across Takstraat. Left, De Dageraad. Right, Schools.

Fig. 23. Takbuurt. View along Tellegenstraat. Left, Patrimonium. Center, De Dageraad. Right, Onze Woning.

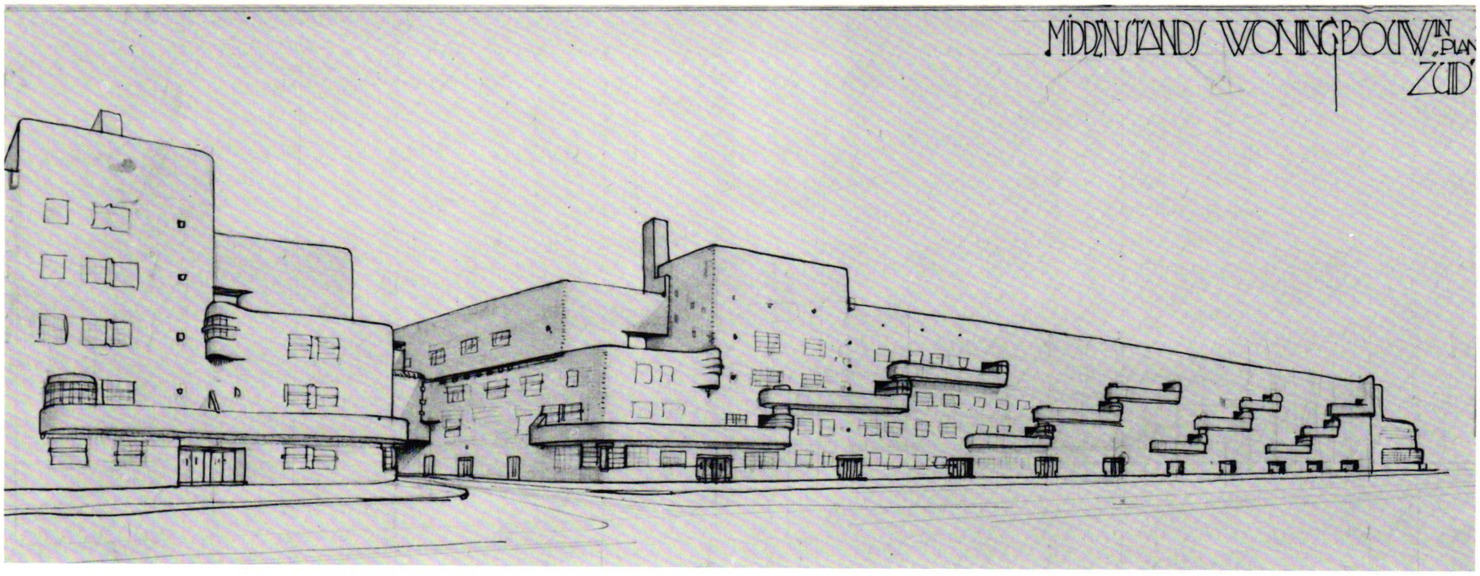

Fig. 24. M. de Klerk Preliminary perspective rendering for H. Breek, Amstels Bouwvereeniging, 1921.

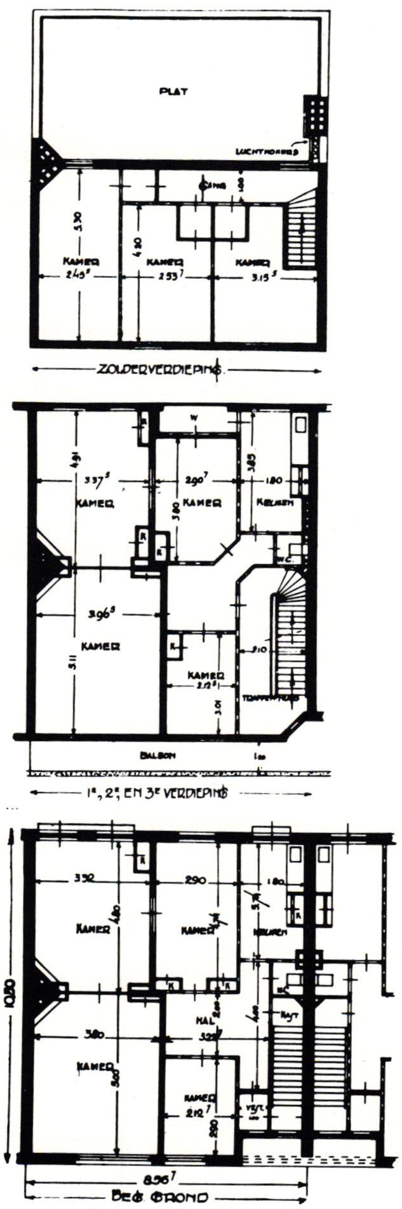

Fig. 25. ABV-buurt. Plan, dwellings at 10–46 Amstel– (now Vrijheids–) laan.

man Expressionism, and the growing influence of architects like Erich Mendelsohn and Bruno Taut may be one reason for the stylistic mutation. Another may be the spread of the style to architects who did not possess the unbridled imaginative powers of the founders of the Amsterdam School. But an important contributing factor was surely that the clients for the projects were interested primarily in making a profit. They were unwilling to pay for expensive details, and the standardized plans they provided made it necessary to simplify façades and massing. The responsibility for creating the total ensemble that the architects enjoyed when working for the housing societies was withheld by the ABV.

Even de Klerk had to adjust his method to the new demands for economy and simplification. The drawings he made for the ABV are dated 1921, one year after his definitive designs for De Dageraad. While the exuberance associated with his architecture has been merely chastened, not abandoned, his new work bears the stamp of "design by the meter," for the infinitely varied touches found in the earlier commissions have been replaced by more repetitive details.

Nevertheless, de Klerk's composition was considered by his contemporaries to be a "truly great architectonic concept . . . taking up as none of the other designs the challenge posed by the breadth of the street."[44] With his customary sensitivity to the site, de Klerk has taken as his inspiration the rapid traffic along the broad Vrijheidslaan that "hurtles along, slows down, rushes forth."[45] Located on the northern flank of that boulevard, to either side of Kromme Mijdrechtsstraat, the elevation was designed to be seen by a swiftly moving passerby. The sweeping street walls are articulated chiefly by the trios of balconies which climb at intervals from the second to the fourth story, then are terminated, to begin the ascent again further along the façade. These staggered, horizontal projections are connected vertically by barrel-like windows, whose circular format lends a sense of torque to the composition. The horizontal rhythms do not overwhelm the design, as sometimes occurred in the work of Dutch colleagues more heavily indebted to German Expressionism, because they have been broken up into segments at different levels.

Moreover, there are still some artful, small-scale touches which provide interest for the viewer who sees the building at close quarters. The wall surface has not been totally standardized, but rounded bricks are used when one plane meets another, and facing bricks of larger format have been introduced to clad the balconies and the shops (Fig. 28). These circular shops gave de Klerk an opportunity to develop the design in three dimensions and form a counterpart at ground level to the balconies of the upper stories. A close examination indicates that de Klerk was not merely a brilliant draftsman but a master of structure who knew how to realize his visions. The glass had to be curved in a special arc so that it would not break, and complex mathematical formulae determined the size and shape of the granite columns.[46] The shops could not have been inexpensive to construct; on this occasion de Klerk apparently was able to persuade the private builder to risk something for the cause of architecture.

Yet the care with which the shops were executed did not extend to the entire building. Cracks were visible as early as 1926, and projecting roof slabs had to be added to protect portions of the wall. Many of the intricate window frames were replaced by simpler sash, a change that violated the visual integrity of the design. An architect hired to restore the building claimed that the façades were not executed in agreement with de Klerk's drawings and that materials and colors other than those specified by the architect had been used.[47]

It is proper to consider how this "great architectonic concept" functioned as housing. The design was clearly arbitrary with regard to the distribution of the balconies; at least half of the tenants are without them. Even more damaging to the building's validity as housing are the ludicrously tiny dimensions of the stairhall windows, which could hardly have provided sufficient light and ventilation. Many of the tenants found the atmosphere dark and gloomy, for the window sills were too high and the panes too small; they also complained that the round bay windows were difficult to clean. There was an unusually high turnover, and one dwelling remained empty for seven years. A survey made in 1934 showed that 23 of the 114 dwellings were unoccupied, a high proportion in a city with a chronic housing shortage.[48]

The architects and the local authorities must share responsibility with the contractors for these problems, many of which were caused by the divorce of planning from façade design. While Amsterdam's insistence on an aesthetically conceived townscape was admirable, greater control should have been exercised over the arrangement and soundness of the dwellings. Cooperation with the private sector compromised housing improvement and, to a certain extent, architectural quality.

Yet one must recognize the SDAP's dilemma. Faced with a persistent shortage of housing, it had to try to increase the supply by any available means. Nor was the government's solution entirely arbitrary. Between 1915 and 1923 it had paid out 667 million guilders in loans and 91 million in subsidies to housing societies and municipalities; this expenditure produced 104,257 dwellings, of which 91,110 were subsidized. These figures may be compared with the 76 million guilders spent on premiums between 1920 and 1923, which resulted in 90,575 dwellings.[49] The latter were not qualitatively comparable to those constructed by the housing societies, and the motivation for aiding the private builders was political no less than economic. Nevertheless, the premium system did provide a large number of dwellings in a short time for a relatively modest outlay by the government.

One can appreciate why the social democrats of Amsterdam acquiesced, albeit reluctantly, in accepting premium dwellings in parts of Amsterdam South. But they still preferred to support the housing societies, and when the conservative coalition in The Hague refused to fund new projects submitted by these societies, Amsterdam responded by

Fig. 26. ABV-buurt. View along Vrijheidslaan. Left, de Klerk, 1921–1922. Right, Kramer, 1921–1922.

Fig. 27. ABV-buurt. Dwellings of Amstels Bouwvereeniging, Vrijheidslaan. De Klerk, 1921–1922.

Fig. 28. ABV-buurt. Dwellings of Amstels Bouwvereeniging, Kroome Mijdrechtsstraat. De Klerk, 1921–1922.

Fig. 29. Takbuurt. Dwellings of Onze Woning. Cooperatiehof. Kramer, 1926–1927.

Fig. 30. Takbuurt. Dwellings of Onze Woning. Lutma and Tellegenstraat. Kramer, 1926–1927.

devising a local substitute for the Woningwet. In 1926, the council budgeted 7 million guilders to guarantee mortgages obtained by the societies from outside sources, such as the National Postal Savings Bank. While this measure required the societies to put up 5 percent of their own capital, and therefore was not as advantageous as the original Woningwet system, which covered 100 percent of building costs, it did enable them to resume their activities. The additions to De Dageraad, and the group of 178 dwellings, three stores, and eight workshops erected by Onze Woning in 1927, were financed in this manner. The mortgage program thus made possible the completion of the Takbuurt.

Both projects were designed in 1926 by Piet Kramer, and they manifest the sense of uniqueness that informs even the final productions of the Amsterdam School. Onze Woning's new complex, located in the heart of the Takbuurt (Fig. 10), consists of an inner ring of two-story dwellings (Fig. 29) and an outer perimeter block three stories high, which rises to four at the corners of Lutma- and Tellegenstraat (Fig. 30). Four stories also mark the axis of Talma- and Pastoorsstraat (Fig. 11), which is traversable at ground level through Cooperatiehof (Fig. 29). This *hof* (courtyard) provides a peaceful area of openness and greenery within the district; once again a representative of the Amsterdam School has known how to orchestrate the space, and the buildings which define it, to provide a harmonious variety of experiences within a three-dimensional continuum.

Incorporated into the complex is a public library (Fig. 31),[50] which was financed by the municipality and offers that access to intellectual stimulation which the SDAP desired for the workers. Fittingly, the rear wall of the library, which closes the axis of Takstraat, commemorates Tellegen (Fig. 32); this monument was commissioned by the Federation of Amsterdam Housing Societies.

Onze Woning's new dwellings differ sharply in style from those designed by Weissman (Fig. 13), although Kramer has retained a traditional sloping roof for the inner circle. For the rest, his work belongs to the second phase of the Amsterdam School. The familiar elan remains, to be sure, particularly along Lutmatstraat, where the wall plane curves and billows in a manner reminiscent of De Dageraad's corners (cf. Figs. 20 and 30), and brick and tile have been handled with verve and sensitivity, although there are fewer contrasts in hue. But while the stairhall windows have been custom designed to add plastic interest to the facade (Fig. 30), the detailing has been made more abstract, and the simplified horizontal dynamism so prevalent in the ABV-buurt has replaced the more complex imagery of Kramer's earlier work. With subsidies no longer available, the housing societies also had to practice economy.

In 1930–1931, the remaining portions of De Dageraad (Fig. 21, right) were erected in a style consistent with that of Onze Woning. With this construction, the working-class district first envisioned by the social democrats in 1918 was finally realized. The Takbuurt has remained one of the most attractive neighborhoods in the Netherlands, if not in all of Europe. But Amsterdam would not see its like again, for in 1934 the municipality's mortgage-guarantee program was terminated by the higher authorities. This action dealt a further blow to the operations of the societies and meant that private entrepreneurs would continue to dominate the housing market. A survey of 1936 showed that private contractors had built 78,000 dwellings in Amsterdam since 1905, compared with 17,000 constructed by housing societies and 11,000 by the municipality.[51] The profit-seeking private sector was incapable of supplying the variety of dwelling types, the solid construction, and the urbanistic drama found in the districts created by the housing societies.

While socioeconomic conditions were in part to blame for the disappearance of housing that functioned symbolically and provided a richly textured neighborhood setting, radical changes on the architectural scene were responsible as well. The architects of the Amsterdam School, who had superseded the *sachlich* older generation, in turn made way for advocates of das *neue* Sachlichkeit, who abjured the personalized details, the three-dimensional flourishes, and the striving for uniqueness of the local Expressionist style in favor of standardized, "objective," universal forms. Freestanding towers and slabs *(zeilenbau)* replaced the perimeter block, the format of which had ideally suited the Amsterdam School's principles of design. Although economical to construct and superior in terms of orientation to the light, the new buildings in most cases could not reproduce those qualities which Berlage had sought for Amsterdam South: monumentality of layout, picturesqueness of detail.

Nevertheless, by challenging the old stereotypes about workers' dwellings, the social democrats and the members of the Amsterdam School had for a decade at least suggested

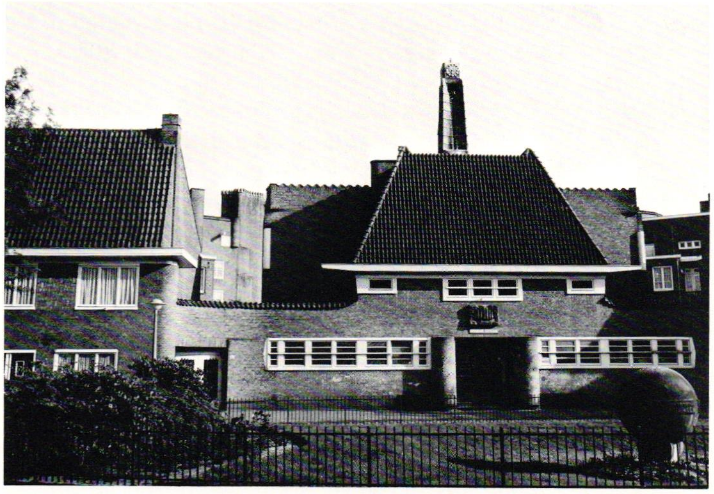

Fig. 31. Takbuurt. Public Library. Cooperatiehof. Department of Public Works, 1927.

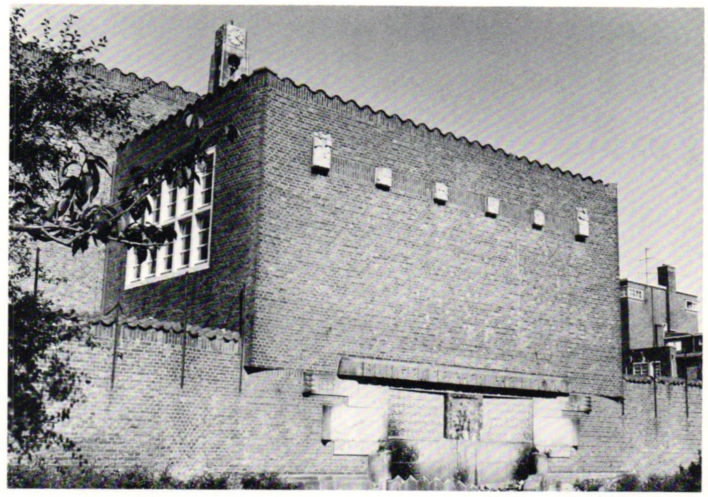

Fig. 32. Takbuurt. Tellegen monument. Kramer, 1922–1927.

the political and cultural potentialities of housing as architecture. That their goals were elusive and their achievements ephemeral should not occasion surprise, for architecture, like politics, is the art of the possible.

ACKNOWLEDGEMENTS

The author acknowledges with gratitude the kind assistance of the following: Fons Asselbergs, Manfred Bock, Francis Fraenkel, Johanna Kreiner, Tom van Leeuwen, and Wim de Wit.

NOTES

1. The most recent consideration of German housing of this period is found in the catalogue *Wem gehort die Welt: Kunst und Gesellschaft in der Weimarer Republik* (Berlin, 1977).
2. Engels' articles "How Proudhon Solves the Housing Problem," "How the Bourgeoisie Solves the Housing Problem," and "Proudhon and the Housing Question" appeared in the Leipzig *Volksstaat* from June 1872, to February 1873. They were subsequently collected and published as *Zur Wohnungsfrage.* An English translation, edited by C. P. Dutt, was published in New York c. 1940.
3. G. D. H. Cole, *A History of Socialist Thought* (London and New York: Macmillan, 1955–1960), Vol. II, p. 428. For the Erfurt Program, see S. F. Markham, *A History of Socialism* (New York: Macmillan), 1930.
4. The text of this program, in Dutch, is published in G. W. Borrie, *F. M. Wibaut, Mens en Magistraat* (Assen, 1968), Appendix V.
5. *Ibid.*, Appendix IV.
6. A brief history of the SDB and the SDAP is given in the author's article, "With Red Flags Flying: Politics and Architecture in Amsterdam, 1915–23," to be published in 1978 by the M.I.T. Press in the volume *Art and Architecture in the Service of Politics.*
7. Thus while social democratic membership in the second chamber more than doubled between 1901 and 1913, climbing from 7 to 18, the number of social democrats on municipal councils increased tenfold during the same period, from 24 and 251. Figures from Borrie, *op. cit.*
8. Although the religious parties supported some social legislation, they maintained a belief in the sanctity of private property and rejected the idea of class conflict. Thus the members of the Catholic and Calvinist trade unions refused to take part in the first major strike in the Netherlands, the railroad strike of 1903. See A. J. C. Ruter, *De spoorwegstaking van 1903* (Leiden, 1935). There were two major Protestant parties. The ARP (Anti-Revolutionary Party) was the first Dutch political party. Founded in 1879, it became, under the leadership of Abraham Kuyper (1837–1910), the organization of the "little people" *(kleine luyden),* the workers and the *petit bourgeoisie.* The wealthier and more sophisticated Protestants belonged to the rightist CHU (Christian Historical Union), founded in 1908. The Roman Catholics had at first no actual party, but agreed on a common policy through their local electoral associations. These united to form the Algemeene Bond (General Union) in 1904, which was reorganized in 1926 as the RKSP (Roman Catholic State Party). (I. Lipschits, *Politieke stromingen in Nederland* (Deventer, 1977).) From 1918 to 1933, the government was formed by members of these three confessional parties. See Willem Verkade, *Democratic Parties in the Low Countries and Germany* (Leiden, 1965).
9. For brief considerations of the Woningwet in English, see Catherine Bauer, *Modern Housing* (Boston: Houghton, Mifflin), 1934 and Donald Grinberg, *Housing in the Netherlands, 1900–1940* (Delft), 1977.
10. P. A. van der Drift, "Financiele hulp aan de woningbouw," *50 Jaar Woningwet,* Alphen a/d Rijn, 1952, p. 223.
11. Calculated on a base of 100 for 1914, they rose to 225 percent in 1917, 300 percent in 1918, and 350 percent in 1919. Thereafter, building costs began to decline; by 1924 they had fallen to 150 percent.
12. By Royal Decree of November 19, 1916, the "cost-of-materials subsidy" was introduced. The difference between prewar construction costs and the inflated prices cited in Note 11, as reflected in the increased loans requested by the housing societies, was to be covered by the state and the municipality. Originally they were to split the difference; on January 29, 1917, the state increased its share to 75 percent. Significantly, Amsterdam's municipal council had anticipated this decree by a few months; it had promised to pay the local housing

societies those costs which exceeded the estimates calculated on a prewar basis. The Royal Decree meant that the city's share was reduced from 100 to 50 percent, and finally to 25 percent. This measure was replaced on June 25, 1919, by a "crisis-subsidy," whereby the difference between operating costs and rental income would be covered by the government (with the proviso that the housing societies make every effort to bring their rents up to a realistic level). In 1921, however, all grants to housing societies were frozen, on the grounds that enough schemes had been approved to occupy available manpower and materials for two years.

13. Egbert Ottens, *125-Jaar Sociale Woningbouw in Amsterdam* (Amsterdam, 1975), p. 19.
14. In that year, the council accepted the SDAPs proposal that the municipality erect 3000 dwellings, to be rented below cost to those families who could not afford to belong to the housing societies; the latters' membership, as a practical matter, was restricted to the better-paid skilled workers. The first municipal housing blocks were completed in 1919, and the local authorities continued to erect these simple, subsidized dwellings. By 1924, 6335 municipal dwellings were in operation, compared with 11,253 run by the Woningwet societies.
15. *Gemeenteblad*, 1911, Part II, pp. 593 ff.
16. Borrie, *op. cit.*, Appendix VII.
17. The most recent work on Berlage is the catalogue published in conjunction with an exhibition at the Gemeentemuseum in The Hague: M. Bock and P. Singelenberg, *H. P. Berlage* (Amsterdam, 1975), which includes a fascinating Marxist analysis by Bock of Berlage's extension schemes. See also Francis F. Fraenkel, *Het plan Amsterdam-Zuid van Berlage* (Alphen a/d Rijn, 1976), which has a summary in English. Fraenkel has traced the history of the southern extension and the development of Berlage's urbanistic conceptions with exemplary thoroughness. His essay on the actual development of Amsterdam South is cogent but brief; there is no analysis of the architecture. There is a remarkable appendix, however, in which the author identifies the architect and date of almost every building constructed in the extension.
18. B en W's proposal explained that Berlage "was of the opinion that since the garden city movement is advancing rapidly at the present time, Amsterdam should not lack an example of such a district and 57 hectares have been set aside." ("Het Uitbreidingsplan-Zuid," *Architectura*, 1917, p. 248.) The actual plan of the garden suburb was based on an entry to the competition held in 1915 by the Sociaal Technische Vereeniging van Democratische Ingenieurs en Architecten. The scheme, by J. F. Repko Rzn., evidently captured the imagination of local planners, for although it was not a part of Amsterdam South, it influenced the design of another garden suburb, Betondorp, constructed by the municipality in the early 1920s.
19. "Het Uitbreidingsplan-Zuid," *op. cit.*, p. 244.
20. See note 14. In the end, even these were not constructed by the local authorities. The municipality did eventually become a landlord in Plan South, however, when the expropriation of a number of privately built dwellings became necessary during the 1930s (Otten, *op. cit.*, p. 106).
21. Bock and Singelenberg, *op. cit.*, "Stedebouw," pp. 70–71.
22. For Berlage's housing, see Bock and Singelenberg, *op. cit.*, "Woningbouw," and Helen Searing, "Berlage and Housing," *Nederlands Kunsthistorische Jaarboek*, XXV, 1974.
23. J. H. W. Leliman, "Het Uitbreidingsplan Amsterdam Zuid," *De Bouwwereld*, XVI, 1917, pp. 253–255.
24. I owe this quotation to Fraenkel, *op. cit.*, p. 46; it appeared in Berlage's description of his first Plan South.
25. Keppler's role has been indicated in the article cited in note 6. His service played a vigorous part in the realization of Plan South; it selected the sites for the various housing societies and required them to choose their architects from a list prepared by his office (Keppler, "Amsterdamsche Bebouwingsplannen," *Tijdschrift voor Volkshuisvesting*, II, 1921, pp. 21–23).
26. *Sachlichkeit* (in Dutch, *zakelijkheid*) was a reaction against the extravagant styles of the *fin-de-siecle* as well as against nineteenth-century historicism. Programmatic requirements and sound, economical construction took precedence over personal artistic expression in this philosophy. The severe, undecorated buildings produced by this early twentieth-century movement were forerunners of the functionalist architecture of the 1920s—Das *Neue* Sachlichkeit.
27. At a congress held in 1918, a proposal to standardize housing, which was defended by Berlage, met with bitter opposition not only from most of the other architects but also from the workers. The latter "were afraid that monotony and uniformity in the neighborhood would have a detrimental effect on their psyches." A commission, which included Keppler, studied the standardization proposal and concluded that it "would lead to few savings in cost and time, and would do great harm from an aesthetic and social standpoint." (Both quotations from *De Gemeente*, XIII, No. 2, February 15, 1920.) Another indication of this sentiment is the dislike felt by the tenants who occupied the sober workers' dwellings designed by K. P. C. de Bazel (1869–1923), the only architect at the congress to support Berlage's defense of standardization. Supposedly, "they did not understand the architecture, and were offended by the details" (A. W. Reinink, *K. P. C. de Bazel-Architect* (Leiden, 1965), p. 165).
28. For the most recent considerations of the Amsterdam School, see the catalogue *Amsterdamse School* (Amsterdam, 1975), and Wolfgang Pehnt, *Expressionist Architecture* (New York: Praeger), 1973.
29. In Amsterdam, private contractors erected 1777 dwellings in 1914, compared with 582 built by the housing societies; in 1915, the number fell to 634, compared with 1638 for the societies. The low point was 1918, when only 130 privately constructed dwellings were completed. Figures from *Amsterdam: Stadsontwikkeling, Volkshuisvesting* (Amsterdam, 1925), p. 15.
30. Suzanne S. Frank, "Michel de Klerk's Designs for Amsterdam's Spaarndammerbuurt," *Nederlands Kunsthistorische Jaarboek*, XXII, 1971, and Helen Searing, "Eigen Haard: Workers' Housing and the Amsterdam School," *Architectura*, 2/1971.
31. The work of J. J. P. Oud, with its minimal detailing and repetitive rhythms, has been chosen to illustrate a contemporary approach to housing design antithetical to that of the Amsterdam School. In an article on "Architecture and Standardization in Large-Scale Building," Oud attacked the individualistically detailed building as outmoded. He took issue with the position of the workers (see note 27), remarking that they "apparently don't understand that the partial elimination of the architect's individualistic form-making brings a saving in cost, which would benefit the size, arrangement and form of each dwelling . . . without aesthetic harm." He concluded that "once again we have been shown that

one can be a socialist and even a Marxist without feeling social responsibility." (Oud, "Bouwkunst en Normalisatie bij den Massabouw," *De Stijl*, I, No. 7, 1918, pp. 77–79.)

32. For Expressionism in architecture, see Pehnt, *op. cit.*, Marcel Franciscono, *Walter Gropius and the Creation of the Bauhaus in Weimar* (Urbana: U. of Illinois Press), 1971, and Dennis Sharp, *Modern Architecture and Expressionism* (New York: George Braziller), 1966. The Dutch Expressionists shared with their German counterparts the background of *Jugendstil*, a search for dynamism (which related both movements to Futurism), a willingness to sacrifice pragmatic considerations to artistic ends, a rather exalted view of the cultural mission of the architect, and a belief in subjectively determined design. The first phase of the Amsterdam School, which lasted from about 1913 to 1921, is in other respects quite independent of collateral movements in Germany. After 1921 there were closer contacts between Amsterdam and Germany and the work of some members of the Amsterdam School shows an influence from Bruno Taut and Erich Mendelsohn.
33. The figures are compiled from various reports prepared by Keppler's office and published in the *Gemeenteblad*.
34. The information comes from various commemorative booklets published by these societies: *Rochdale: 50 Jaar* (Amsterdam, 1953), *50-jaar woningbouwvereeniging "Amsterdam-Zuid"* (Amsterdam, 1960), and *Gedenkboek 50-jarig bestaan der vereeniging "Bouwmaatschappij tot verkrijging van Eigen Woning"* (Amsterdam, 1918).
35. *De Bouwwereld*, XVIII, 1919, p. 217.
36. The phrase *spel en taal der vormen* comes from de Klerk's one published utterance of any length, an invited statement which appeared on the occasion of Berlage's sixtieth birthday in *Bouwkundig Weekblad*, XXXVI, 1916, pp. 331–332. In the statement, de Klerk deplores Berlage's *sachlichkeit*, and claims that he had contributed only to the bouw*vak* (profession), not to bouw*kunst* (architecture as art).
37. Although buildings which display all the stigmata of the Amsterdam School's style were designed as early as 1913, the term was introduced in 1916. (Wim de Wit, "De architectuur der Amsterdamse School," *Amsterdamse School*, p. 51.)
38. *De Bouwwereld*, XVIII, 1919, p. 29 and p. 112.
39. In the publication cited in note 6. This long article, written in 1972, discusses issues for which space was not available here and should be read as a complement to the *VIA* study.
40. The role of the craftsman in architecture, considered so important in England from the time of Ruskin and Morris, became an issue in Holland in the late nineteenth century. Thus in 1898, Berlage's *sachlichkeit* was attacked on the grounds that his "modish sobriety and arbitrary simplicity" would have the result that the core of highly skilled workmen trained in the trade schools would either become unemployed or would have to lower the level of craftsmanship. See the catalogue *Architectura* (Amsterdam, 1975), p. 5. The reliance on fine workmanship and the maintenance of individualized details unique for each building are features that distinguish the Amsterdam School from more orthodox modern architectural movements.
41. *Gemeenteblad*, Part I, 1919, pp. 3481–3489.
42. L. van der Schaar, "Het werk van Amstel's Bouwvereeniging," *Tijdschrift voor Volkshuisvesting*, IV, 1923, pp. 95–97.
43. A. R. Hulshoff, "De aesthetische leiding . . . ," *Bouwkundig Weekblad*, XLII, 1921, p. 103.
44. J. P. Mieras, "De Zuidkant van Amsterdam," *Bouwkundig Weekblad*, XLIV, 1923, p. 242.
45. Jan Boterenbrood, "Plan Zuid," *Tijdschrift voor Volkshuisvesting*, IV, 1923, p. 151.
46. This information from Mieras, *loc. cit.*, p. 242. The "dynamic theorems" were no doubt related to the ideas of J. H. de Groot (see R. Banham, *Theory and Design in the First Machine Age* (New York: Praeger), 1960, Chaps. 11–13). For de Klerk and de Groot, see Frank, *loc. cit.*, pp. 205 ff.
47. Letter in Dossier 37735 of the archives of the Bouw- en Woningtoezicht, Amsterdam. The changes were mainly in the fenestration. Some of the windows are narrower than de Klerk had drawn them—the builders claimed that this alteration was for structural reasons—and in some cases they were shifted to left or right (cf. Figs. 27 and 28), presumably to make the façade conform with the plans.
48. Survey from the same dossier. One might ask whether the high sills and small windows are an example of thoughtless design or architectural paternalism. Wijdeveld claimed that some of the innovations of the Amsterdam School were made to encourage the tenants to change unhealthy dwelling habits. "In the old workers' districts, the people hung out of the windows all evening long to look on to the narrow streets. By placing the windows higher and making them smaller, we forced the worker to look into his own dwelling and enjoy it." Quoted by Adriaan Venema, "Sociaal-economische aspecten van de Amsterdamse School," *Amsterdamse School*, p. 11.
49. Van der Drift, "Financiele hulp," *loc. cit.*, p. 223. It should be noted that while these dwellings originally were intended for the *petit bourgeoisie*, on the grounds that the housing societies provided for the workers, in fact both classes occupied them. Some of the lower-income tenants could only afford the rent by sharing the flat with another family. (Fraenkel, *op. cit.*, p. 76.)
50. Like most of Amsterdam's public buildings, the library was designed by the Department of Public Works. Since Kramer worked for this service from 1912 on, it is likely that he was entrusted with the design, which harmonizes with the rest of the composition.
51. Otten, *op. cit.*, pp. 98 and 112.

Fig. 1. Astor Court. Charles Platt. 1916. View from north-west.

Fig. 3. The Century. Irwin S. Chanin and Jacques Delamarre. 1931. View from Central Park.

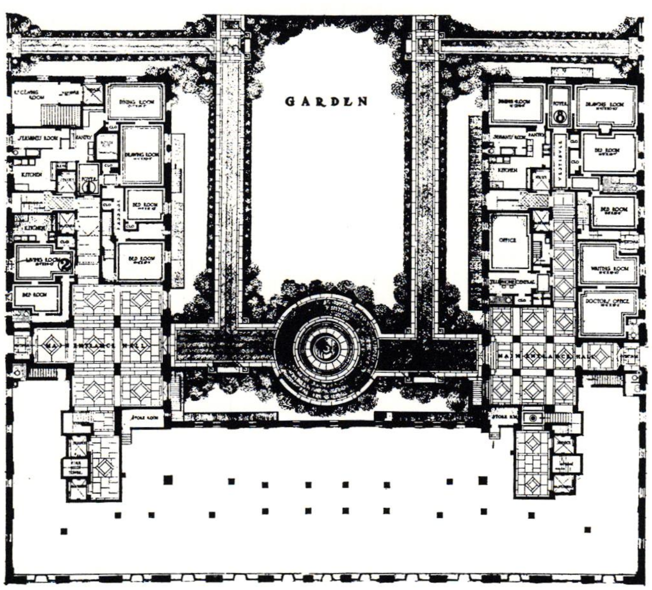

Fig. 2. Astor Court. Charles Platt. 1916. Plan of ground floor.

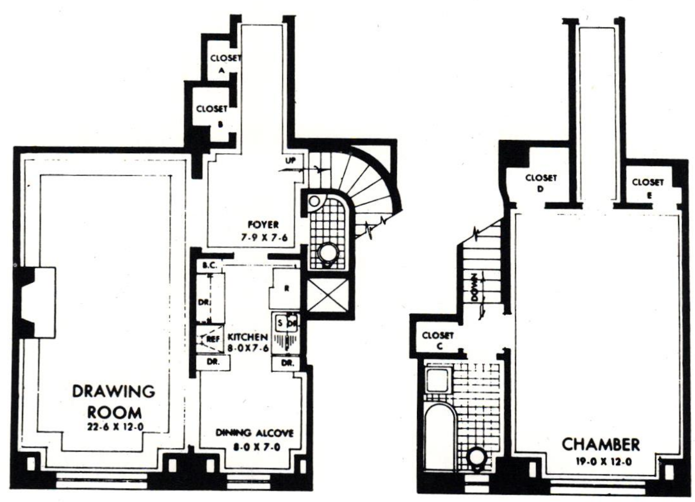

Fig. 4. The Century. Irwin S. Chanin and Jacques Delamarre. 1931. Plan of one-bedroom duplex apartment.

WITH RHETORIC: THE NEW YORK APARTMENT HOUSE

Robert A. M. Stern

APARTMENT-HOUSE design is at a low point in its history. Critiques of modernism's housing experiments by sociologists such as Jane Jacobs, Herbert Gans, and Oscar Newman long ago helped us to see the antisocial nature of those designs, but a survey of contemporary American housing would reveal that the majority of architects continue to design apartment houses that are in the mainstream of the modernist tradition. Failures of the past are freely acknowledged, yet the feeling persists that if architects would simply combine new solutions—defensible space, a mix of low-rise and high-rise buildings, and the like—with modernist typologies, the profession will finally get it right. Even after more than fifty years of experimentation, however, the result all too often is more of the same, as, for example, at Ralph Rapson's Cedar Riverside housing in Minneapolis. Picked by the American Institute of Architects in 1975 as a model housing project and Gold Medal winner, less than one year later Cedar Riverside was declared by a federal judge to be "socially destructive."[1] The landmark decision, which ordered HUD to stop any further funding of the project, may some day make Cedar Riverside as famous as Pruitt-Igoe, an AIA honor-award winner in 1951.

Thus, although the shortcomings of modern housing are evident, the question of how to overcome them remains. Unquestionably, part of the problem is a lack of historical perspective. In comparison with the extensive documentation and critical discussion that accompanied the parallel development of the office building, the study of the apartment house has been neglected by modernist historians and theorists. Office- and industrial-building typologies were preferred because they demonstrated the clearest and most polemical use of what Sigfried Giedion called the "constituent facts" of the industrial age—the new technologies, the increased mechanization and accelerated pace of life, and so on. Moreover, because the pre-modernist architects did not revel in the "constituent facts" but continued to use the traditional languages of architecture in their housing, modernist polemic has insisted that those architects were ignorant or even contemptuous of the urgent social and economic problems that are inextricably linked in our time with the issue of housing, and that their apartment-house forms were irrelevant to modern needs.

This persistent myth has been fostered by a passion for a new formal language, not by the facts. Before the presumed reforms of modernism, some of the most eminent American practitioners of the academic styles loosely labeled "Beaux-Arts," such as Ernest Flagg, I. N. Phelps Stokes, and Clarence Stein, were intimately involved in the fight for housing reform and produced designs for multiple dwellings that pointed the way toward the legislation that established those reforms in daily practice. The classical or historical dress that they used on these dwellings added scale and associational meaning to carefully planned building types; they would have considered most modernist buildings unfinished, still awaiting the crowning touches that give life and character to a building and often distinguish the good architect from the bad.

The confusion between style and ideology that has colored much of our recent architectural history tends to cloud all discussions of housing. The origin of this confusion, which can be traced to the influence of Ruskin and Morris on the pioneers of the modern movement, is by now well known.[2] As this high-minded morality developed into the artistic puritanism that has characterized many of the modernist styles of the past fifty years, the modern movement took on the aspect of a purgation and a crusade. From small scale to large, from ornament to building type, those architectural elements most intimately involved with traditional values were banished. New churches looked like factories, apartment houses looked like office buildings, and architecture lost much of its richness and became increasingly incomprehensible to its users. As we begin to recover from this puritan revolution, it is appropriate to look back and see how things were before architecture's traditional discourse—the conversation between examples of the past and the pressures of the current situation—was so peremptorily interrupted.

This brief essay, then, is in line with the current revisionist interest in the apartment house and other traditional building typologies. It is also an initial attempt to redress the balance of the rich but generally overlooked history of architecture and urbanism in New York City. Because of the essay's necessarily short length, I have limited myself as much as possible to two traditions found in the New York apartment house that offer us valuable lessons today. One is a dwelling-unit type, the duplex apartment. The other is a building type for organizing the units, the courtyard apartment house.

The Development of the Apartment House

The apartment house is not a New York invention. The Romans built multiple dwellings, and that tradition was carried on in Italy during the Renaissance, and later, in the eighteenth century, in workers' housing built in northern Europe, especially Scotland. In the first half of the nineteenth century, the tradition of multiple dwellings for workers was combined with certain utopian proposals, for example Charles Fourier's *phalansteries*, and was strengthened during the Second Empire by Napoleon III, who encouraged "collective habitation" for the working classes as part of Baron Haussmann's reconstruction of Paris.[3] By the end of the Second Empire, the French had brought a high degree of refinement to apartment design, establishing two building types. One, the courtyard apartment house, was based on a socially cooperative idea of collective habitation, with the apartments forming a barrier around a courtyard, which thereby became a private realm reserved for the tenants exclusively. The second type, the tenement, was collective but not cooperative in its implications; in it, the multiple nature of the dwelling was deemphasized in favor of its public aspects, as represented in the street facades and the circulation spaces—lobbies, stair halls, and corridors—which were often quite grand and were thought of as extensions of the street. Contact between the residents of such buildings was minimized; families in the early Parisian tenements were from mixed social strata, with the richest tenants living on the second floor, *le bel etage*, the more bourgeois on the third floor, and so on up the flights, but down the social ladder, to the servants living under the roof.

Because the origins of the courtyard apartment house lie at least in part in the proposals of social reformers for working-class utopias, in which the communal activities in the courts would further the cause of class solidarity, it might be argued that there was a class difference between

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Fig. 5. Stuyvesant Apartments. Richard Morris Hunt. 1869. View.

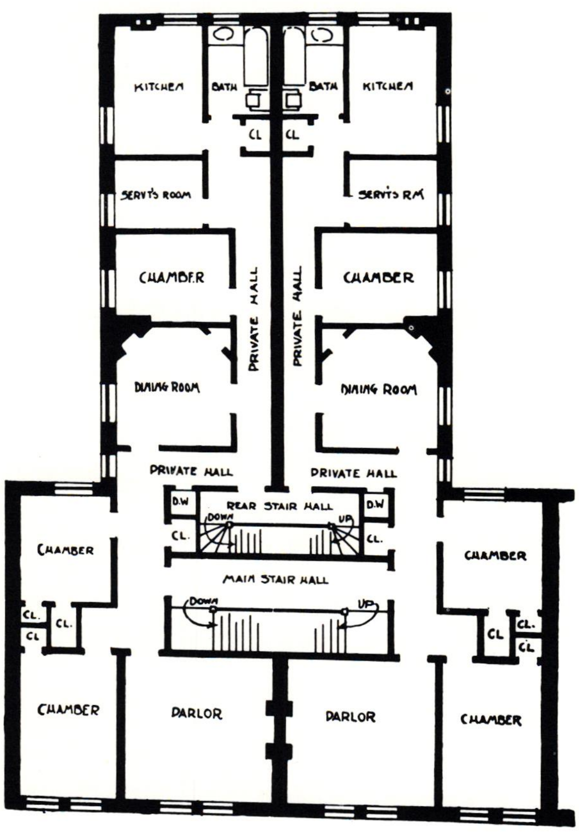


Fig. 6. Stuyvesant Apartments. Richard Morris Hunt. 1869. Plan of typical floor.

courtyard apartment buildings and tenements. In practice, however, two factors minimized this difference in Paris and the other European cities where the apartment-house type established itself in advance of New York. First, speculative developers built courtyard apartments and, just as in the tenements, rented the upper floors for less money than the lower floors. Second, the invention of the elevator subsequently made the higher floors as desirable as the lower floors, so that by the late nineteenth century both types of apartment houses had become single-class dwellings: for the upper classes, there were elevators, while the poor continued to make do with walk-ups.

The first multiple dwellings in New York were working-class tenements, a type that began to appear in the 1830s. The first tenement designed by an architect was also, not surprisingly, the first intended to attract an upper-class clientele: Richard Morris Hunt's Stuyvesant Apartments (Figs. 5–6), built in 1869 at 142 East 18th Street.[4] In its essential aspects—its bulk, its dense site coverage, and its poorly lit, ill-ventilated rooms—the Stuyvesant marked no advance over the working-class tenements of its day. But the spaciousness of its apartments, with only two per floor, combined with the prestige of a prominent sponsor and a notable designer—the first American to attend the Ecole des Beaux-Arts—enabled the Stuyvesant to attract and hold an affluent tenantry. It initiated a new category of tenement, first described as a "French flat," and later as an "apartment house"; although the buildings were inferior to contemporary French tenements, the terms were devised to make clear the distinction necessary to give them the social cachet needed if they were to compete successfully with the brownstone—the preferred residence of New Yorkers in the second half of the nineteenth century. Parisian apartments, on the other hand, were the grandest in the world, and it was not uncommon for Parisians to feel they were enhancing their status by moving out of private houses into apartments.[5] As more architects followed Hunt to the Ecole des Beaux-Arts, French architecture became increasingly well known and popular on this side of the Atlantic; a number of prominent turn-of-the-century articles and books documented the history of the French apartment house for American architects.[6]

One problem with French flats was that living on one floor was regarded with considerable suspicion by middle-class New York families in the 1870s and 1880s (the Stuyvesant Apartments had been intended for bachelors). Well known, but worth repeating, is Edith Wharton's description of the shocking situation that arose when, in the 1870s, an old lady whose

> burden of . . . flesh had long since made it impossible for her to go up and down stairs . . . established herself (in flagrant violation of all the New York proprieties) on the ground floor of her house; so that as you sat in her sitting room . . . you caught . . . the unexpected vista of a bedroom. . . .
>
> Her visitors were startled and fascinated by the foreignness of this arrangement, which recalled scenes in French fiction, and architectural incentives to immorality such as the simple American had never dreamed of. That was how women with lovers lived in the wicked old societies, in apartments with all the rooms on one floor, and all the indecent propinquities that their novels described.[7]

The introduction of the duplex apartment, then, may be seen as an attempt to combine the conveniences and economic advantages of collective habitation with a type of dwelling unit in which the "indecent propinquities" could be shared *upstairs*, just as they would be in a house, thereby making the apartments more competitive with the brownstone row houses that were still very much the standard of respectability. The duplex was introduced to New York by Hubert, Pirsson & Company (later called Hubert, Pirsson & Hoddick), an innovative firm combining the roles of architects and developers in their cooperatively financed and maintained apartment houses called Hubert Home Clubs.[8] The first of these, built in 1883 at 121 Madison Avenue, consisted of stacked duplex apartments, with two separate elevator cores serving five apartments per floor.[9] A more interesting early duplex building, because of its more intricate cross section, was the Dalhousie (Fig. 7), by an architect whose name has been lost.[10] Built in 1884 at 40–48 West 59th Street, it had alternating duplex and simplex apartments, so that the duplexes had living and dining rooms with 15½-foot ceilings facing Central Park, and bedrooms, baths, and kitchens grouped at the rear under 10-foot ceilings.

Hubert wrote that the French apartment house was the source of the duplex apartment in New York,[11] but it is likely that its inspiration can also be traced to Hunt's adaptation of Parisian precedent for his Studio Building, 51–55 West 10th Street, which provided some cooking and sleeping facilities as well as double-height work spaces.[12]

Another possible source of inspiration was Richard Norman Shaw's Albert Hall Mansions in London, 1879–86, whose success in a market similar to that of New York undoubtedly gave the duplex the kind of endorsement that could only help in the effort to acquire for it the necessary social status.[13] As Andrew Saint suggests, Shaw probably introduced the duplex at Albert Hall Mansions for precisely the same reason that made it so appealing in New York: the simplex flat was associated in the public mind with housing for the poor.[14] We know that Shaw made a trip to Paris to study French apartment houses before he designed Albert Hall Mansions,[15] and though there is no evidence of a similar trip by Hubert, he was French by birth and education.

No matter how the duplex apartment was introduced to New York, it was the financial failure of the Hubert Home Clubs that temporarily killed the type. Duplexes flourished again, however, in the apartment house building boom that developed around 1900.[16] At first, they were built for artists to work and live in; their glory was a double-height "studio" space that functioned as both atelier and living room. But later, as the *Architectural Review* (Boston) pointed out:

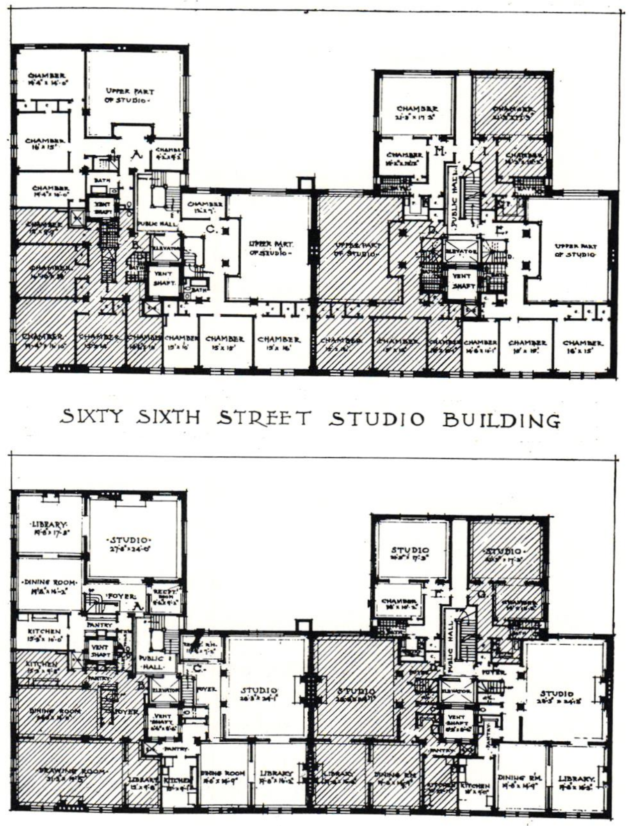
> So many other people have taken to studio apartments that, it is safe to say, the artists are in the minority in some buildings at least. Probably in the last analysis the motive is in most cases the same that has brought the big living room into favor in moderate size houses—a desire for simplicity and breadth, for at least one room big enough so that one does not feel restricted.[17]

Among the duplex or studio apartments intended for artists that were built during this boom, which continued more or less unabated until cut off by our entry into the First World War, were the Bryant Park Studios, 80 West 40th Street, designed around 1900 by Charles Rich;[18] the Gainsborough Studio (Fig. 70) at 222 Central Park South, designed by Charles Buckham and completed in 1908;[19] the Studio Building, 44 West 77th Street, designed by Harde and Short in 1909, and notable for its exceptionally lofty studios supplemented by living rooms;[20] and the last—and grandest—of the sequence, George Pollard's Hotel des Artistes at 1 West 67th Street, completed in 1916.[21] In addition to a wide variety of apartment-unit plans, the Hotel des Artistes originally provided such amenities as a communal kitchen, a ballroom, and a theater, as well as squash courts and a swimming pool.

Duplex apartments intended for conventional family life include 471 Park Avenue, also designed by Buckham and completed in 1908,[22] and what is surely one of the most elegant apartment houses of any time, the duplex cooperative at 131–135 East 66th Street (Figs. 8–11), designed by Charles Platt in 1908.[23]

Fig. 7. Dalhousie. 1884. Elevation.

The duplex-apartment type persisted into the 1920s, but not only were there fewer examples than in the two decades preceding the war, but also those built were less distinguished in their interior planning (often there were no double-height studio spaces, though ceilings were sometimes higher in the living room than in the rest of the apartment); their exterior expression, too, was far less exuberant than in the prewar duplexes. Examples include John Sloan and Adolph Nast's 898 Park Avenue of 1924,[24] Caughey and Evans's 71 East 77th Street of around 1928,[25] and 1020 Fifth Avenue, a particularly distinguished exception to this postwar crop.[26] Designed by Warren & Wetmore in 1925, its cross-sectional organization offers a dazzling variety of apartments, each of which enjoys an extra-high-ceilinged living room facing Central Park. Also interesting is the extension G. B. Beaumont added in 1928 to 31 East 79th Street.[27] The original building of 1925 has only one apartment per floor, well-detailed but less novel than the triplexes found in the extension, which replicate four times over the plan of the brownstone previously on the site. Presumably this was meant to provide an apartment for the brownstone's former owner, in the manner of Mrs. E. F. Hutton's (Marjorie Meriweather Post's) fifty-four-room triplex at 1107 Fifth Avenue.[28] That apartment was probably the most luxurious built until Stewart Mott's at the top of the Galleria, 119 East 57th Street, in 1975.[29] Certainly the architects of 1107 Fifth Avenue, Rouse and Goldstone, one of the most prolific apartment house firms in the city, never came close to equaling it again. Duplex apartments were


SIXTY SIXTH STREET STUDIO BUILDING

also included throughout the period in buildings predominantly composed of flats. Late examples that use this parti are River House (discussed below) and 740 Park Avenue.

The duplex was one means of making the tenement more amenable for the well-to-do; but the poor, and many others, had to rely on other reforms to ameliorate the worst limitations of the tenement-house type as it was built in New York. The Stuyvesant had established not only a tradition of fashionable, luxurious tenements but had also paved the way for numerous moderately priced tenements, so that the tenement house became the basic urban dwelling unit for all classes between 1870 and 1930. Whether built on Fifth or Park avenues, on the Upper West Side, in the Bronx or Brooklyn, the tenement houses varied enormously in terms of desirability of location, sizes of apartments and rooms, luxury of appointments, and amount of associated services offered, but were all nonetheless characterized by the same problems of density, bulk, and high land coverage that inherently characterized the Stuyvesant.

The tenement-house type was first codified by the guidelines established in the Tenement House Law of 1867, modified in 1879 to ensure the reforms introduced in what came to be known as the "dumbbell" type, and again by the so-called New Law of 1901. It was not until the passage of the Multiple Dwelling Law of 1929 that the tenement-house era ended.

The Courtyard Apartment House

While there was comparatively little apartment-house construction for the middle and upper classes in the 1880s and 1890s, owing as much to the instability of the national economy as to the failure of the new typology to gain a foothold of acceptance, working-class tenements continued to proliferate, often bringing slum conditions with them. By the late 1870s, the limitations of the narrow-lot tenement had become plainly evident, and the movement for the reform of this building type became interwoven with a more general movement for the amelioration of a host of social conditions that plagued the poorest classes. Strong public support for housing reform in New York led to the adoption of the dumbbell plan, but by the 1890s its inadequacies were all too apparent to a number of crusaders, the most notable architect among these being Ernest Flagg. Flagg had close connections with the Vanderbilt family and, like Hunt, was trained at the Ecole des Beaux-Arts. His architectural practice was diverse and distinguished; among his most notable works, both of about 1907–8, are the now-demolished Singer Tower, for a brief time the world's tallest building, and the Singer Building (now the Paul Building) on Prince Street at Broadway, with lovely ironwork tracery that emulates the work of Viollet-le-Duc. In 1894, Flagg wrote an important article in *Scribner's Magazine* outlining the evils of the tenement house.[30] He contended that the root of the problem was Manhattan's typical, narrow building lot (25 x 100 feet), which under the prevailing legislation not only permitted but even encouraged the worst type of land speculation and overcrowding. Flagg argued for a wider minimum lot size (Fig. 12); his own submission to the competition held in 1896 for a model tenement house proposed a lot size 100 x 100 feet as a workable standard, which would permit the

Opposite page:

Fig. 8. 131 and 135 East 66th Street. Charles Platt. 1908. View from southwest.

Fig. 9. Plans of typical floors.

Fig. 10. Interior view of the studio in apartment "C".

Fig. 11. Interior view of the staircase in apartment "C".

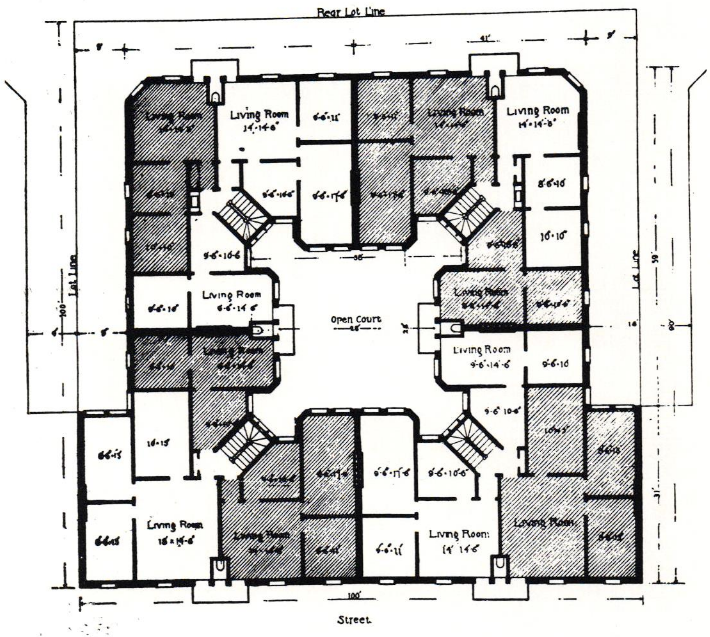


Fig. 12. Model Tenement Design. Ernest Flagg. 1894. Plan of typical floor.

design of a building surrounding a hollow center. Though the core was so small that it was hardly a courtyard in the sense that would have been understood by the designers of the best courtyard apartments already existing in New York, it at least provided adequate light and air to all apartments. Flagg's model tenement house was divided by fire walls into four sections and had stairways at each corner of the courtyard.[31]

Flagg's proposal was shortly realized by the newly formed City and Suburban Homes Company, a limited-profit development company specifically devoted to the building of houses for wage earners. In 1898, the company commissioned Flagg to design a complex of model tenements to house 373 families. They stood at West 68th and 69th streets, between Amsterdam and West End avenues, until they were demolished in the late 1950s as part of the Lincoln Square Urban Renewal Project.[32] In 1900, Flagg designed a development of eleven six-story walk-up tenements for 470 families, constructed on a large parcel of land on Tenth Avenue between West 41st and 42nd streets. These were notable in that the sponsorship of the New York Fireproof Tenement Association introduced a new and highly significant note of concern into the project.[33]

However, it was not Flagg who won the 1896 competition, but James E. Ware, so that when the City and Suburban Homes Company built a second project, this time on East 64th Street between First Avenue and Avenue A (York Avenue), Ware's ideas were incorporated into the design. Like Flagg's tenements, these were six-story-high walk-ups, but they showed improvements in the organization of the interior plan.[34]

The competition of 1896, the two built examples of the new ideas, and the continual proselytizing by Flagg and others for reform, led to the implementation of the New Law of 1901, which remained on the books until replaced by the currently operative Multiple Dwelling Law of 1929. The New Law for the first time encouraged large-lot development—the basic lot size was doubled from 25 feet to 50 feet wide, while land coverage was held to 70 percent—and led to what might be considered a truncated version of the courtyard apartment. Examples are Harde and Short's Alwyn Court of

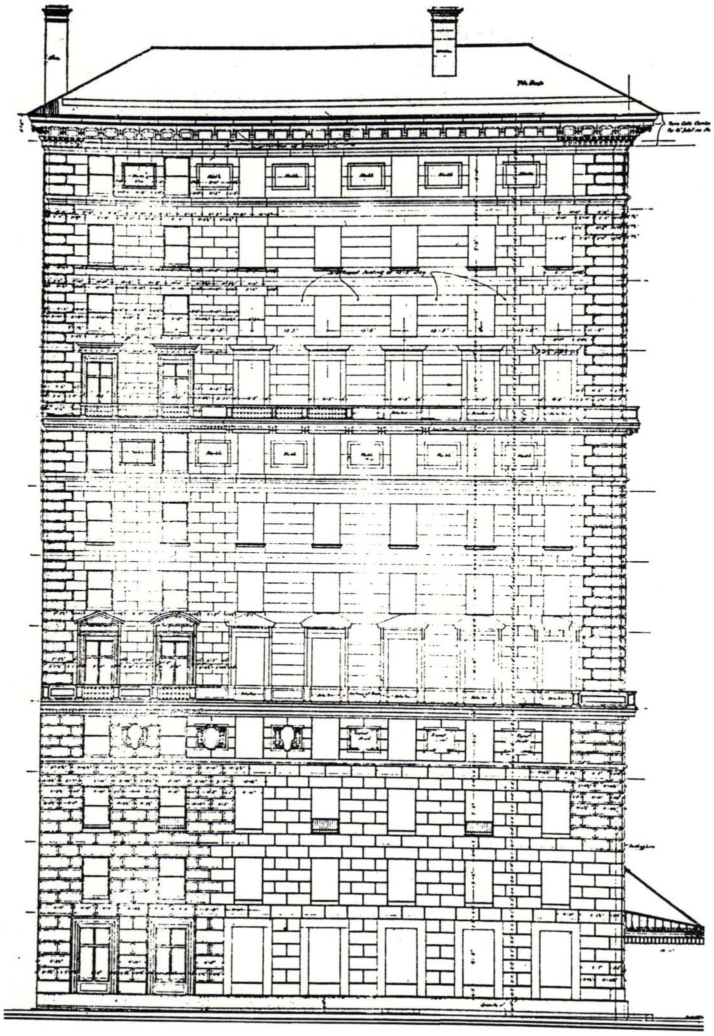


Fig. 13. 998 Fifth Avenue. McKim, Mead & White. 1910. West elevation.

1908, at 180 West 58th Street;[35] McKim, Mead & White's 998 Fifth Avenue (Figs. 13–14), 1910;[36] and Schwartz & Gross's Heathcote Hall, 609 West 114th Street, 1911.[37] Each is, in effect, as much a tenement as a courtyard apartment house.

The most notable of the truncated-courtyard apartment houses were the East River Houses, also known as the Cherokee Flats or Cherokee Apartments. Working-class housing that was even more successful than Flagg's group for the City and Suburban Homes Company, the East River Houses were designed by Henry Atterbury Smith, and built under the sponsorship of Mrs. William K. Vanderbilt in 1908 and 1909.[38] The group of four buildings, housing a total of 384 families, is sited along Cherokee Place between East 77th and 78th streets facing John Jay Park (Figs. 15–16). Although the courtyards around which the apartments are grouped are only marginally larger than the light wells of speculatively built hollow-core tenements, they nevertheless ensure cross-ventilation in all apartments and break down the scale of the development.

Using a relaxed variation on a Florentine Renaissance vocabulary, Smith was able to infuse the Cherokee Flats with considerable grace and intimacy. A number of attractive features were introduced to modify the austerity of the overall massing. The tunnels leading to the interior courts from the street are lined in Guastavino tile; they not only connect the courtyards with the street but also establish a grid of pedestrian circulation through the block. Delicate glass and iron pergolas at the roof shelter the stairs, which are left open to enhance the movement of air through the buildings; wrought-iron seats at the landings are provided for those made weary by the climb; and triple-hung windows opening onto openwork-iron balconies are included in each apartment (Figs. 17–18). In fact, the fine sense of detail rivals (and in some ways exceeds) that of contemporary luxury apartments. The gentle scale, which results as much from the decision to build walk-ups and from the intimate relation to John Jay Park as it does from the delicate handling of the forms, makes the complex a very special oasis in the city.

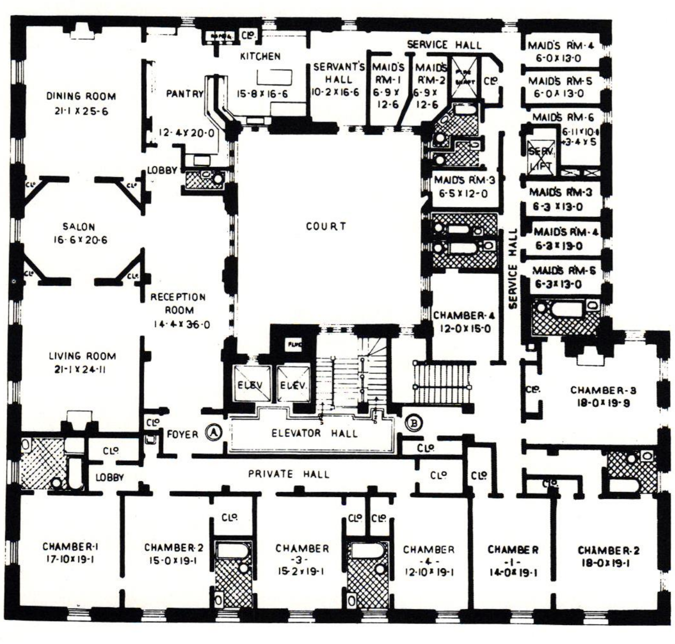


Fig. 14. 998 Fifth Avenue. McKim, Mead & White. 1910. Plan of second floor.

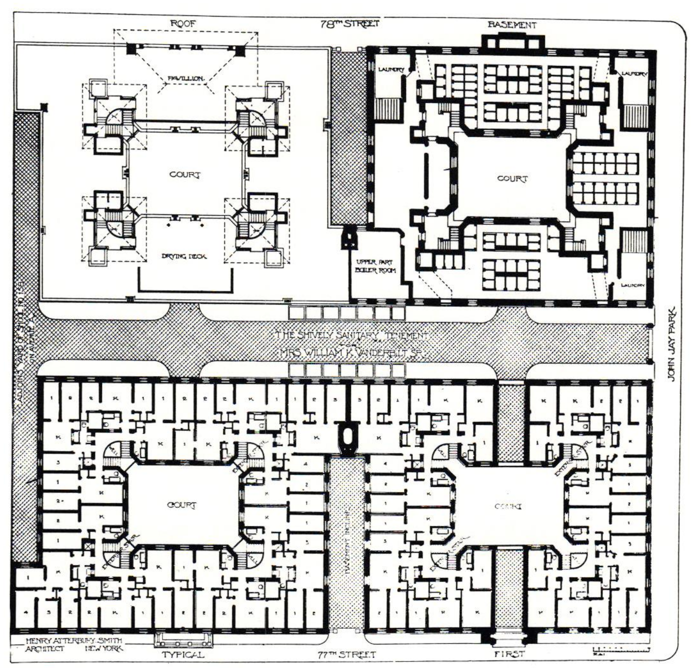


Fig. 15. East River Houses. Henry Atterbury Smith. 1908–1909. Plan of typical floor, basement, and roof.

Fig. 16. East River Houses. Henry Atterbury Smith 1908–1909. View from southeast.

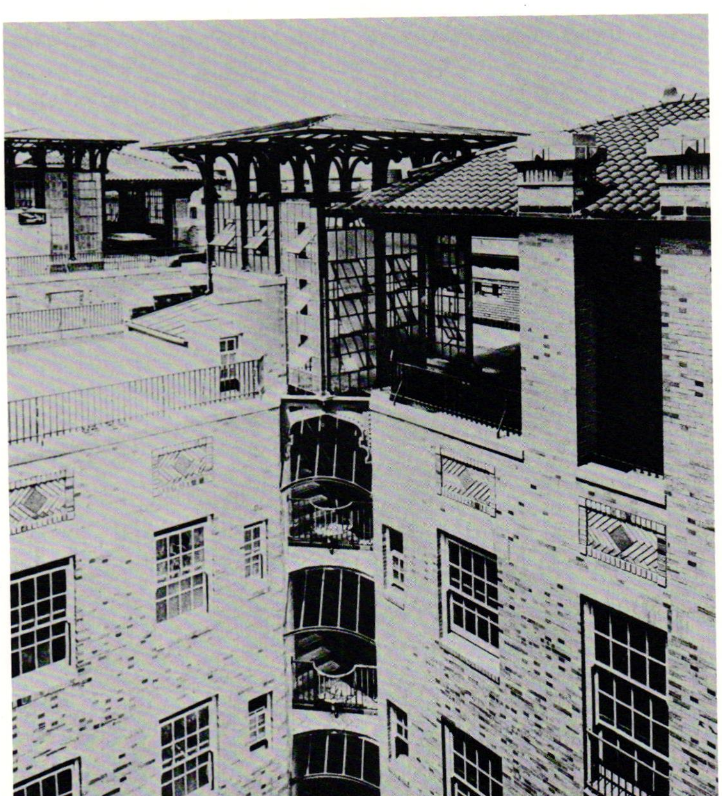


Fig. 17. East River Houses. Henry Atterbury Smith. 1908–1909. View of courtyard from roof.

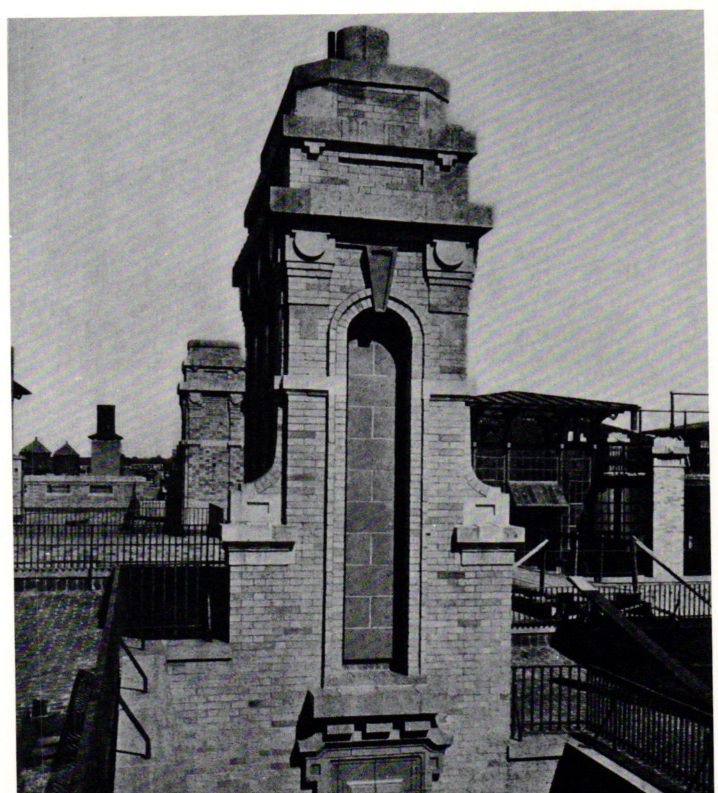


Fig. 18. East River Houses. Henry Atterbury Smith. 1908–1909. Chimney detail.

Fig. 19. Home and Tower Buildings. William L. Field & Son. 1877–1879. Architects' rendering.

Fig. 20. Tower Mews (now Warren Place). William L. Field & Son. 1879. View looking south.

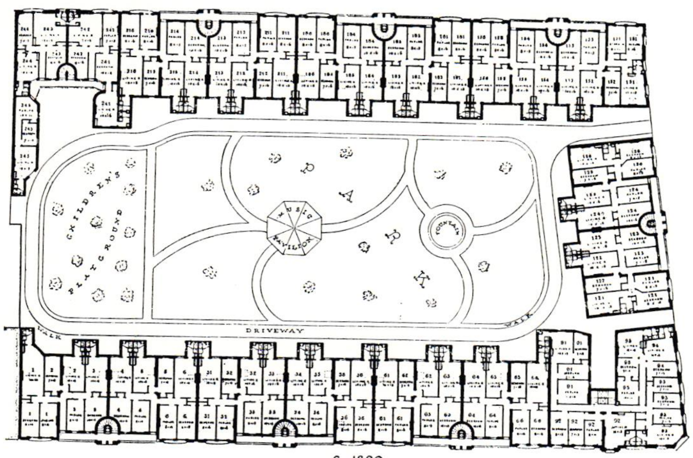


Fig. 21. Riverside Buildings. William L. Field & Son. 1890. Plan of typical floor, almost identical to plan of Home and Tower Buildings.

Although the New Law was general enough to allow different building types, it was clearly influenced by an interest in the true courtyard apartment, an interest that many architects had shared for years. As early as 1877, twenty-four years before passage of the New Law, Alfred T. White, a Brooklyn businessman interested in housing reform, had hired the architects William L. Field & Sons to build the first courtyard apartment house in New York.[39] The project, the Home Buildings at Baltic and Hicks streets in Brooklyn, was probably influenced by model working-class developments dating from the 1860s in London, the most notable examples being those of Sir Sydney Waterlow's Improved Model Dwelling Corporation.[40] In 1879, White built a second and more important development on an adjoining lot, the much larger Tower complex (Fig. 19), also designed by Field. This consists of three six-story buildings on Hicks, Baltic, and Warren streets, all set around a large courtyard, and two rows of two-story cottages built along a mews (Fig. 20), the entire group housing 260 families. The Home Buildings and the Tower apartment houses all featured open stairs on their fronts, and perimeter galleries leading to shallow, floor-through apartments that ring the court. All rooms had outside windows, and each apartment had a water closet, although communal bathing facilities were located in the basement.

With these projects, White, whose motto was "philanthropy plus 5 percent," introduced the concept of limited-dividend housing, later to be carried forward by the City and Suburban Homes Company and many subsequent sponsors of working-class housing. White sponsored a third project in Brooklyn in 1890, the Riverside Buildings at Columbia Place, again designed by Field (Fig. 21): they are now partially demolished as a byproduct of Robert Moses's Brooklyn-Queens Expressway construction, which slashed through the complex in the 1950s, destroying half the buildings and more than half of the internal garden that was its glory.[41]

The introduction of the courtyard parti in Brooklyn established in the metropolitan area a new type of multifamily accommodation with distinct advantages over the tenement. The court was a social amenity, which not only supplied reasonable amounts of light and air to the apartments, but provided a communal oasis away from the teeming streets of a poor section of Brooklyn. Children could play under the watchful eyes of their families, with the children of other families whom the parents knew and with whom they shared a sense of identity. At night and on weekends, the parents could also relax under the trees in the courtyard. The individual floor-through apartments, of course, also had their advantages. Being double-sided, they probably felt psychologically more like a house than any apartment that the tenants had been able to afford before. In the days before air conditioning, such considerations, combined with those relating to contemporary theories of disease, gave these apartments special significance.

Later advocates of courtyard apartments appreciated these virtues, but they also admired the French associations of the courtyard type. The popularity of the courtyard apartment in America, like that of the duplex, was enhanced by the social cachet attached to all French architecture. White may have discovered the type in London, but it was the French who had raised the courtyard apartment house to its most refined level, and it was this model that was known in America. Architects who did not know the French examples at firsthand were familiar with them from articles in magazines.

Richard Morris Hunt, who was to import to America so many French architectural ideas, was the first well-known architect to advocate the courtyard type. He saw it as a model upon which to base tenement-reform proposals. Commenting on the results of the competition held in 1879 for the design of a model tenement that had produced the dumbbell type, Hunt prophetically pointed out that the problem could not be effectively tackled within the constraints imposed by a narrow lot, and that, in any case, James E. Ware's three-court dumbbell type would be better replaced by a model with one large courtyard.[42]

Hunt's proposal was realized architecturally, if not sociologically, by the architect Henry J. Hardenbergh in his Vancorlear Apartments,[43] built on Seventh Avenue in Manhattan in 1879. A few years later, in 1882, Hardenbergh also built the Dakota Apartments facing Central Park West between West 72nd and 73rd streets.[44] Both the Vancorlear and the Dakota were based on the Parisian courtyard apartment in which, in the more elaborate examples, the courtyard was often combined with a *porte-cochere* to provide carriage access and turn-around, with the concierge's apartment functioning as a guardhouse. The Vancorlear's courtyard (Fig. 22) was large enough to drive in but, unlike the Parisian prototypes, it was reserved for tradespeople and did not function either as a "yard" or garden for the tenants or as a *cour d'honneur*. At the Dakota, however, the courtyard (Fig. 24) functions admirably as a *cour d'honneur* for all users of the building, giving access at its four corners to the public stairs and elevators and at its midpoints to service entrances. Broad enough to accommodate carriages, the courtyard is guarded from the street by a concierge, is entered through a majestically proportioned gateway, and is embellished by a fountain. Other notable organizational features include the use of an entry system to enhance a sense of privacy; the setting of first-floor apartments well above street level to ensure visual privacy; the introduction of "moats" along all street frontages to increase safety and supply light and air for basement spaces; and the provision of collective spaces (which once included a restaurant, a ballroom, and a suite of bedrooms for guests).

The Dakota is, of course, much more than just the exemplar of a planning type. It is the first American courtyard apartment intended for an affluent tenantry; it makes a truly grand statement of what an apartment house could be—the first to give convincing expression to a new way of living in American cities. The Dakota is as much a paradigm of the organization and iconography of the early twentieth-century social life in New York it anticipates as the great chateau of

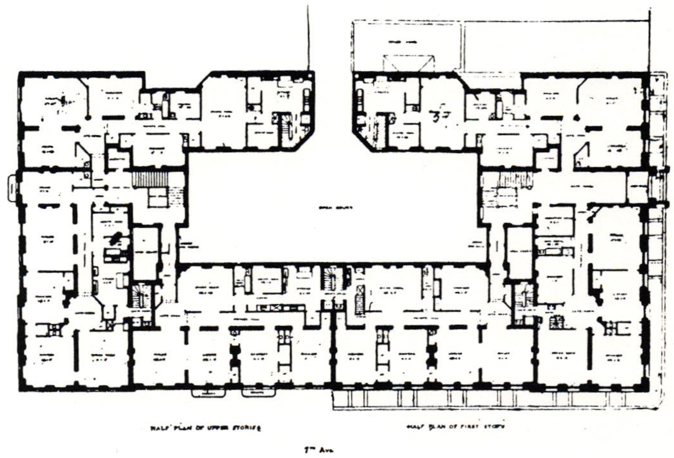


Fig. 22. Vancorlear. Henry J. Hardenbergh. 1879. Combined plan of first floor (right) and typical upper floor (left).

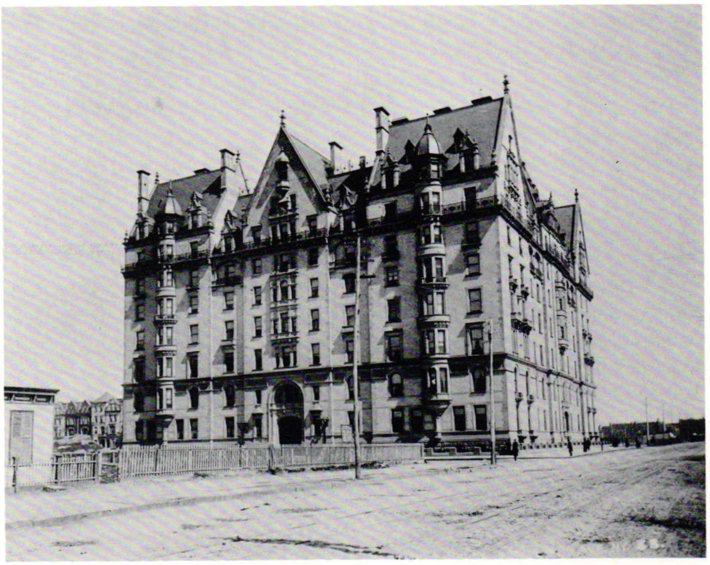


Fig. 23. Dakota. Henry J. Hardenbergh. 1882. 1890 view looking north on Central Park West.

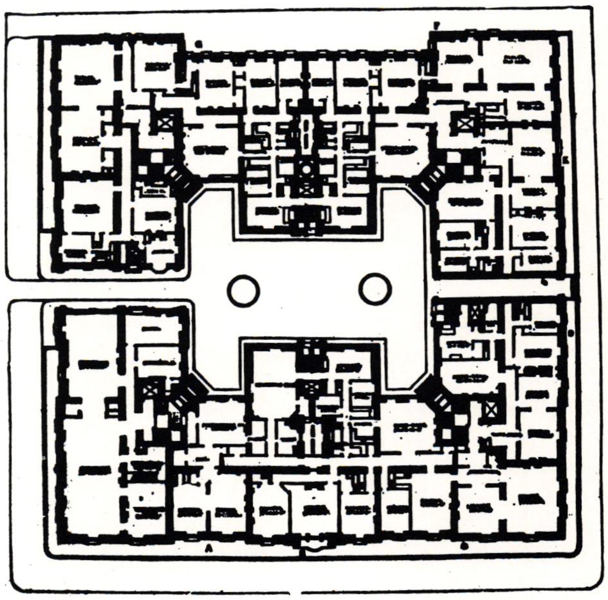


Fig. 24. Dakota. Henry J. Hardenbergh. 1882. Plan of typical floor.

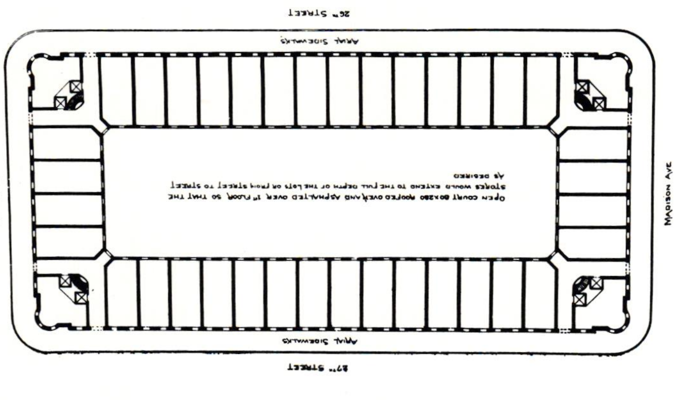


Fig. 25. Madison Square Garden Project. Hubert, Pirsson & Hoddick. Circa 1890. Plan of typical floor.

the Loire were paradigms of their time and place.

From the iconographic point of view, the image of the chateau is splendidly exact (Fig. 23). A great, broad pile of tawny brick trimmed in stone, the Dakota sits behind a moat, guarded by iron railings and crowned by a vigorous roofscape worthy, if not of Blois or Chambord, at least of some outsized mid-Victorian hunting lodge in England, France, or Germany (the remoteness of its location in 1882 surely reinforced this impression). A guarded sentry box screens visitors at the two-story-high archway that leads from the street to the *cour d'honneur* within (a democratic court, as we have seen, shared by servants and those they serve). Though each stack of apartments is virtually identical from top to bottom, different window shapes and the selective use of balconies give the facades a subtle liveliness and variety that lend a measure of individuality to each apartment without compromising the total image.

Despite the fact that the Dakota and the Tower Buildings supply housing for families at opposite ends of the economic spectrum, they are alike in a variety of ways. Though each occupies only a portion of a full block, they initiate a movement to establish the entire city block as the unit of development most appropriate to the street grid of New York. They make it clear that the perimeter-block apartment house is capable of development at different scales and building densities for different social classes; its fundamental organizational features—the courtyard, the entry system, the floor-through apartment—are shown to be both applicable and appropriate at large and small scales, for luxury as well as modest flats. Today, with a marked dwindling of maintenance and security staffs in even the most prestigious buildings, the courtyard organizational system of the Dakota and the Tower Buildings continues to function admirably. The Dakota remains a prestige address, and the Tower Buildings, though somewhat run down, continue to function.[45]

One large apartment-house complex contemporaneous with the Dakota tentatively explored the lessons of the courtyard plan. In 1882, the firm of Hubert, Pirsson & Hoddick designed the Central Park Apartments, or Spanish Flats, as they came to be known.[46] Eight twelve-story apartment buildings located on a 200- x 425-foot site at the west side of Seventh Avenue between 58th Street and Central Park South, the Central Park Flats were originally planned as a cooperative venture, but when the financing could not be arranged, they were built on a conventional rental basis by a developer named J. Jennings McComb. Constructed from Hubert, Pirsson's plans, the buildings surrounded a long narrow courtyard that was more of an alleyway than a public space. Flamboyantly eclectic in design, with a complex roofline, the Central Park Flats were a notable feature of the skyline until their demolition in 1927.

In about 1890, Hubert and his partners proposed building apartments on the site of the original Madison Square Garden (McKim, Mead & White built a new Garden complex instead).[47] This premonitory project (Fig. 25), sponsored by William K. Vanderbilt, called for a thirteen-story building running along the perimeter of a full city block, to consist of six layers of "small two-story houses, each 22 x 50 feet, and set one on the top of another." The idea was based in part on Hubert's belief that "the French, except perhaps for the very poorer classes, do not live in apartments, but in *small private dwelling houses, built on one level on the top of one another* and reached by a narrow ascending street."[48] Shops were to have been located on the ground floor and to have extended the full depth of the site, their roofs forming the floor of the 80-foot-wide courtyard. The 240 "houses" were to have been connected at their parlor levels by 14-foot-wide "aerial sidewalks," which would have cantilevered beyond the building line by 4 feet. Pairs of elevators at each of the four corners of the building were to provide vertical circulation for tenants and guests, while dumbwaiters situated between each pair of apartments would have handled deliveries and garbage removal. The aerial-sidewalk arrangement, Hubert and his partners wrote, "by making the public access to the houses absolutely open and free, carries out to the utmost the French idea, that the public hall and stairs are a mere continuation of the public street, and that each apartment is in all its essentials a separate and individual home."[49]

The dramatic proposal for the Madison Square Garden site combines two typologies of the apartment house, the perimeter-block and the duplex apartment, with a third, implicit in the tenement: that of the internalized street. These ideas were taken up again in the 1920s by Le Corbusier in his Immeubles Villa, which became the model for such disastrous CIAM experiments as the Smithsons' Robin Hood Gardens,[50] and eventually led to New York City's Riverbend Houses, to be discussed later. As proposed by Hubert, the Madison Square project offered a potentially dazzling antidote to the evils of the tenement apartment house. Its synthesis of the duplex and the courtyard makes it a unique statement. Unfortunately, no documents other than the plans remain, so that the imagery which was no doubt an important part of the proposal (and which, it has been argued by Jencks and others, has contributed so much to the failure of the twentieth century's schemes that employ gallery/streets)[51] remains an unknown quantity.

The passage of the New Law in 1901, the general rise of the economy that accompanied the arrival of the new century, and the political consolidation of New York and Brooklyn in 1898, and innovations in elevator technology all combined to foster an upsurge in apartment-house construction that continued until the first World War. The new wave of activity brought with it not only a revival of the duplex type, as we have seen, but also of the courtyard apartment on a grand scale. For the next three decades, most courtyard apartment houses were built in the image of the palace. This palatial mode, which I call the "imperial" style, originated with the chateaulike Dakota and the castellated Tower Building and was intended to impress the visitor and the passerby with the status of the inhabitants. Four of the most significant imperial courtyard apartments were built by the Astor family: Graham Court, designed by Clinton & Russell and built in 1901;[52] the Apthorp, designed by the same architects and built in 1908;[53] Astor Court, designed by Charles Platt and completed in 1916;[54] and Astor Concourse, designed by Aymar Embury II and completed in 1926.[55]

The imperial style produced almost as many similarities in style as in organization. Graham Court, located on a 200-

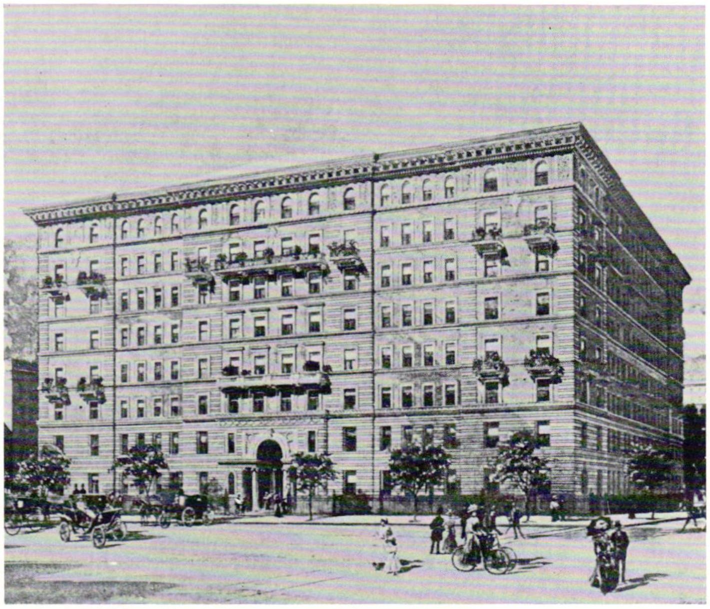


Fig. 26. Graham Court. Clinton & Russell. 1901. Architects' rendering.

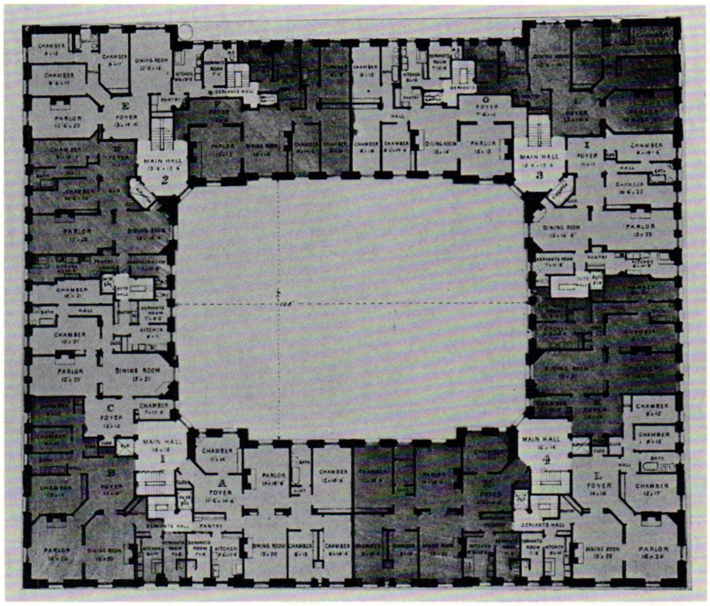


Fig. 27. Graham Court. Clinton & Russell. 1901. Plan of typical floor.

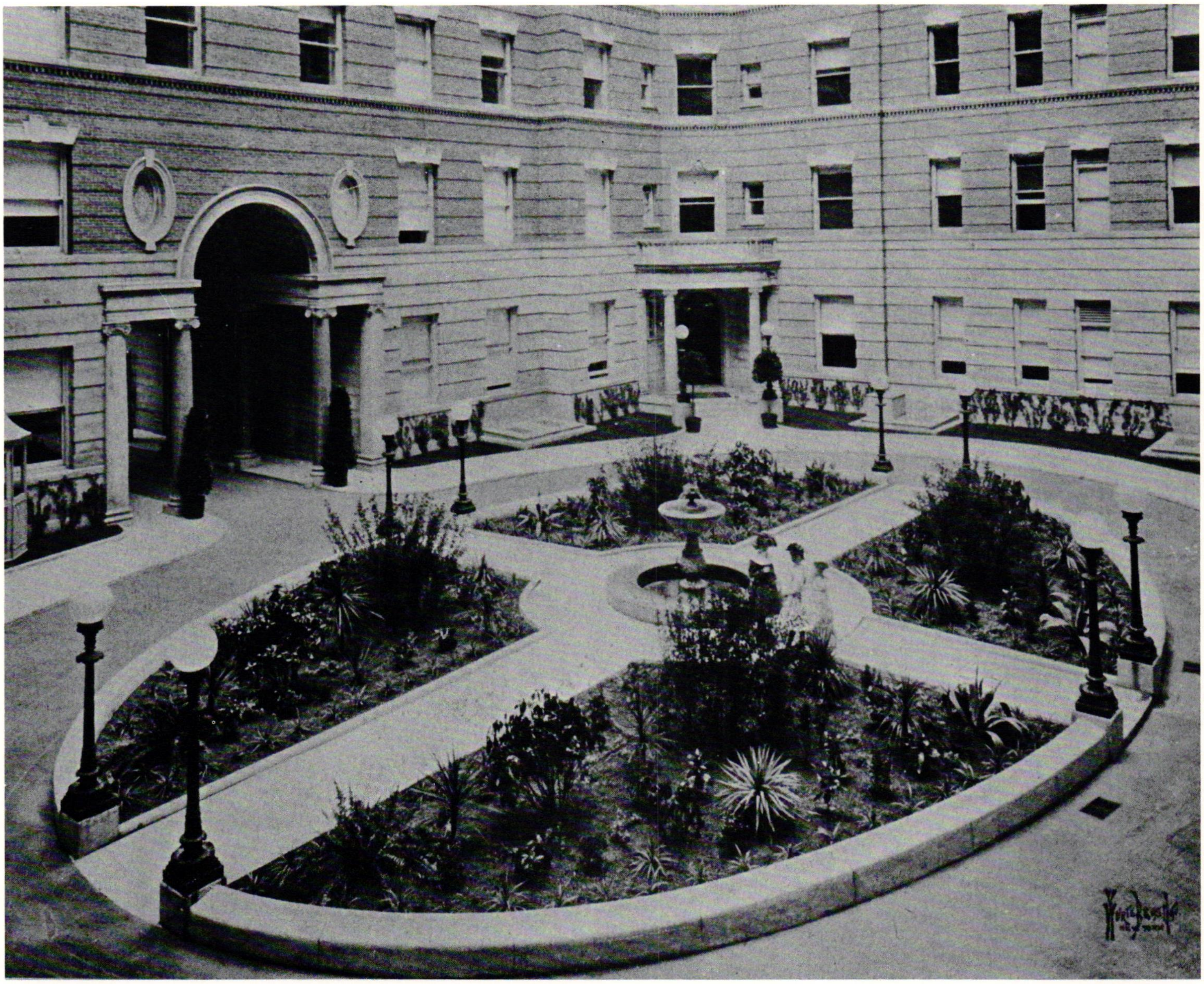


Fig. 28. Graham Court. Clinton & Russell. 1901. View of courtyard.

Fig. 29. The Apthorp. Clinton & Russell. 1908. Architects' rendering.

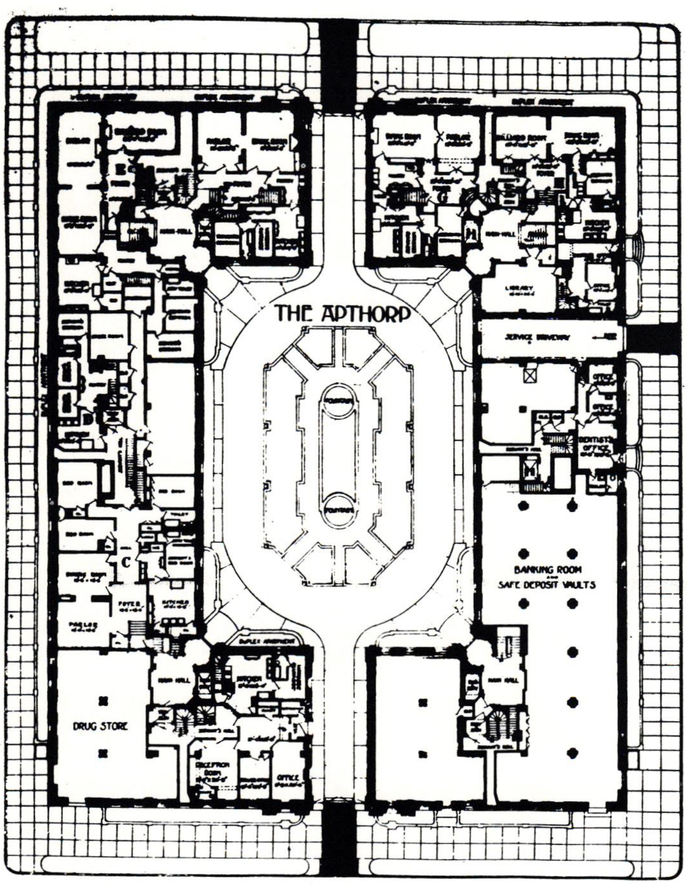


Fig. 30. The Apthorp. Clinton & Russell. 1908. Plan of ground floor.

x 200-foot lot on Seventh Avenue between West 116th and 117th streets in Harlem, is an eight-story-high Florentine palace (Fig. 26), whose splendid arched opening permits tenants and their vehicles to enter a landscaped court from Seventh Avenue; elevators at each of the four corners then give access to the ninety-six apartments above (Figs. 27–28). The Apthorp, built on a full block site from Broadway to West End Avenue between 78th and 79th streets (Fig. 29–30), though similar to Graham Court, is much larger, with even more luxurious flats. However, the increased density unfortunately results in a stark, almost gloomy courtyard, too narrow for its height, and therefore too often shrouded in shadow.

Astor Court is perhaps the loveliest of all the courtyard apartments built between 1900 and the First World War. Located on the east side of Broadway, between West 89th and 90th streets, it is distinguished by an almost plain Italianate facade of red brick (Fig. 1). The Broadway frontage at grade is given over to shops; the courtyard and apartments are entered from the cross streets (Fig. 2). The courtyard is not treated as a *cour d'honneur* but as a garden. Astor Concourse in the Bronx, on the Grand Concourse at 171st Street, is the last of the courtyard apartments built by the Astors and is related in scale and overall design to the first, Graham Court; its tight, classical composition seems old-fashioned in the light of contemporary and more innovative courtyard apartments by Andrew Thomas, which I shall discuss shortly. Though the clarity of its plan is notable, as is the provision for through ventilation in every apartment, the courtyard and the building that defines it are prosaic.

The Belnord (not built by the Astors) is an early example of the imperial type.[56] Designed in 1908 by H. Hobart Weekes, it occupies a full block between Broadway and Amsterdam Avenue, from 86th to 87th Street. The Belnord's block is larger than the Apthorp's, resulting in a larger courtyard that is better proportioned and also more generously planted, although the building itself is not nearly so elegant. Less successful are 270 Park Avenue, designed by Warren & Wetmore in 1918;[57] its identical twin across Park Avenue, Number 277 (Figs. 31–32), designed by McKim, Mead & White in 1925[58] (both were demolished in the 1950s to make way for office buildings); and Schwartz & Gross's 1185 Park Avenue of 1928.[59] In these later examples, the courtyards of the enormous apartment buildings function more as vehicular circulation devices and sources of light for the apartments than as parks or gardens (Fig. 33). Farrar & Watmaugh's London Terrace, 1930, can be seen either as a transitional example or as a degeneration of the type. Occupying a full block between Ninth and Tenth avenues, from 23rd to 24th Street, London Terrace is a colossally scaled complex of fourteen buildings containing 1,670 apartments in all.[60] Its courtyard does not function as a *cour d'honneur*—the individual buildings are entered directly from the street—but is little more than a landscaped alley running down the center of the block. The ten mid-block buildings contain studio and one-bedroom apartments; the larger apartments are located in the four corner buildings. Shops occupy the avenue frontages, and small gardens line West 23rd and 24th streets.

The last of the high-rise, perimeter-block, imperial schemes built in Manhattan is Knickerbocker Village, which unlike the Astor apartments was intended for a middle-class, rather than upper-middle-class, tenantry.[61] It was the first major housing project in New York to receive any federal assistance in financing. Built in 1934 by Van Wart & Ackerman, Knickerbocker Village demonstrates that the courtyard can function as a social amenity in a building of very large scale, but that the block size must be increased with the number of dwelling units (Fig. 34). Like London Terrace, its population is enormous, but its site is much bigger; 1,600 families are housed in two twelve-story-high perimeter courtyard buildings which occupy a three-acre site, from Catherine to Market streets and from Monroe to Cherry streets, that functions in part as a superblock. The landscaped interior courts provide the sole access to the elevator lobbies; the former right-of-way of an abandoned street separating the two buildings was also originally intended to be landscaped but has now been paved for games.

Although Knickerbocker Village retains the imperial scale of the traditional closed-perimeter courtyard apartments the typical neoclassical vocabulary of earlier models has been abandoned; here, the architecture employs a vocabulary that is largely Amsterdam School and Viennese in inspiration, though free of any specific imagery. It is largely dependent for its effects on the fineness of its overall making and on some nice craftsmanship in brick at the entrance portals. In this respect, Knickerbocker Village initiates the decline in standards that, under the twin banners of economy and modernist minimalism, within a generation's time has reduced the design of the envelopes of multifamily housing to little more than a process of packaging—not the fancy packages of boutiques but the all-too-sensible brown bags of supermarkets.

Medium- and low-density courtyard schemes were reasonably common in the outer boroughs in the 1920s but much less so in the 1930s. An early example that I admire extravagantly is Springsteen & Goldhammer's 3224 Grand Concourse of 1923, which offers wonderful messages about how a single building can enhance a sense of place for the individual and for the general public. The building occupies a more-or-less triangular site, all the edges of which respect the street. The apartments are entered from a courtyard, connected to the Grand Concourse by a tunnel (Fig. 35) but also opening directly onto Mosholu Parkway. The courtyard is filled with architectural magic: a fountain, a tempietto, plantings, small half-timbered, sentry-box entries, and rich red concrete paving combine to produce sheer delight (Fig. 36). From the street, the image is of a late-medieval English country house, or perhaps a country inn. On the Grand Concourse facade, the location of the tunnel is emphasized by treating the window in the apartment above as a balcony. Instead of a cornice, a pitched parapet of slate is used. Identical apartments are given slightly different appearances on the facade; in the courtyard, certain apartments have bay windows, which in combination with the more lavish use of wood and the other features that I have described help establish a cozy domesticity that seems utterly appropriate. These images are very powerful and yet very relaxed; they are so evocative that Charles Moore or Walt Disney might have designed them. The result is good architecture that makes a statement and sets a mood without tyrannizing its users. It seems equally at home to matrons in ranch-mink stoles, young management types in leisure suits, and kids racing about on roller skates and tricycles.

Another exceptional example is Noonan Plaza, built in 1931 and named after its owner, Bernard Noonan.[62] After a successful career in real estate, including the development of several apartment houses, Noonan wanted a building that would reflect his status and set out to erect "the most advanced structure that modern technology and design could create."[63] Having chosen a site, a large lot at the corner of West 168th Street and Nelson Avenue in the Bronx, and an architect, Horace Ginsbern, the next step was to select a distinctive design. The result, a Mayan/Art Deco

Fig. 31. 277 Park Avenue. McKim, Mead & White. 1925. View from northeast.

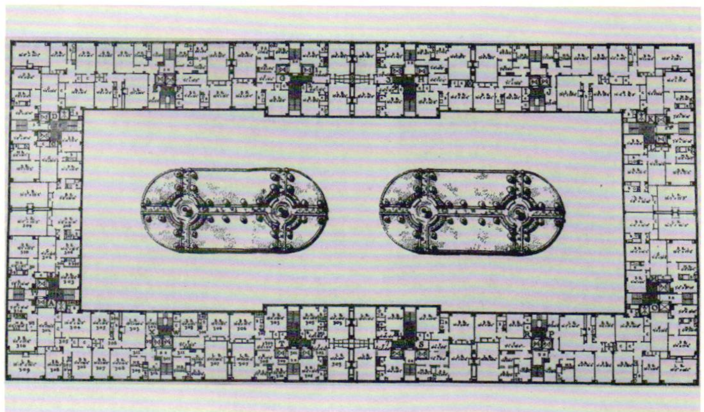


Fig. 32. 277 Park Avenue. McKim, Mead & White. 1925. Plan of typical floor.

Fig. 33. 277 Park Avenue. McKim, Mead & White. 1925. View of courtyard.

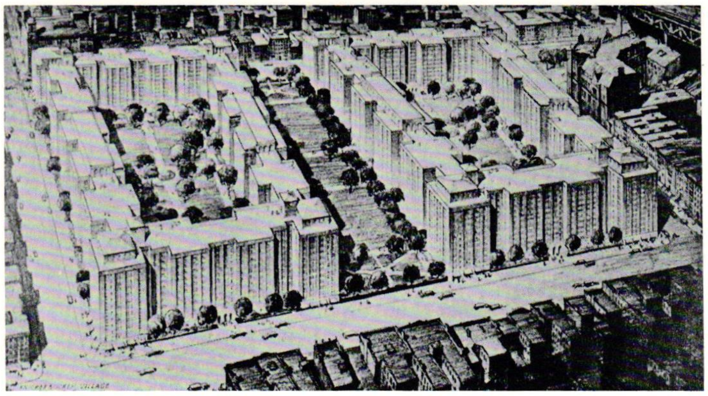


Fig. 34. Knickerbocker Village. Van Wart and Ackerman. 1934. Architects' rendering.

Fig. 35. 3224 Grand Concourse. Springsteen & Goldhammer. 1923. View from Grand Concourse.

Fig. 36. 3224 Grand Concourse. Springsteen & Goldhammer. 1923. View of courtyard.

landmark dominated by twin-tower pyramids flanking the entrance (Fig. 37), was one of the most lavish apartment houses yet seen in the Bronx. The 15,000-square-foot interior garden was festooned with shrubbery, fountains, and mosaic walkways. In the center was a pool stocked with swans, goldfish, and water lilies, while in one corner a waterfall flowed into a pool crossed by Japanese-style bridges. Inside the building, the apartments were large and fully equipped; each had two exposures, one of them overlooking the garden. As its rental brochure proclaimed, Noonan Plaza was meant to be "one's permanent home . . . destined to remain ever free from mediocrity."[64]

Other medium-density schemes, though not without interest, are less successful. Flagg Court, built in 1933–36 by Ernest Flagg at 7200 Ridge Boulevard between 72nd and 73rd streets in Brooklyn, is only partially realized.[65] As built, it is a group of 422 units in six buildings around two-and-one-half sides of a courtyard. Despite a swimming pool served by a diving tower in the form of a Hindu *chatri*, arcaded passageways at the courtyard's edge, numerous and thoughtful technical innovations, and the provision of an auditorium and other community facilities, Flagg Court seems dry and impersonal when compared with previous courtyard schemes. Such is also the case at the Celtic Park Apartments, situated on a full block in Long Island City between 43rd and 44th streets, and 48th and 50th avenues.[66] In this project, Flagg designed the end "A" unit, while the remaining six units flanking the central court were designed by Springsteen & Goldhammer. The apartments in both sections of the Celtic Park development are comfortably and competently laid out, but the detailing and the massing of the buildings as a whole are uninspired and dull.

The Garden Apartment

The garden apartment is a variation of the courtyard type. It was introduced around the time of the First World War as a solution to the problem of the wage earner who occupies the lower stratum of the middle-income economic category. Its chief advocate was Andrew J. Thomas, who quite probably was the author of the term "garden apartment," and whose work marks the culmination of the development of the courtyard-apartment house in New York.

Thomas was a self-taught architect whose unusual background and aggressive nature caused him to be regarded with some suspicion by his colleagues in the profession. In his influential book *The New Day in Housing*, Louis H. Pink characterized Thomas as

> a genius, an enthusiast, excitable, talkative, always making speeches in favor of better housing and often commanding newspaper space on the first page. Housing is his religion. "What better religion could there be than this?" he oftens exclaims, pointing to the interior garden with its shrubs and pools, its chaste but tasteful doorways and pleasant brick walls. He is a "good mixer," and is as much at home with plasterers and carpenters and walking delegates as with millionaires. . . .
>
> Thomas's work is much criticized by other architects, but he alone has built model tenements in times of high costs. . . .
>
> Thomas has always been an adventurer. He followed the lure of gold to the Klondike in 1896. He hired out as a carpenter at Skagway. He worked in a jeweler's shop in New York and was bellboy in a hotel in Los Angeles. He collected rents for real-estate speculators, became a speculative builder himself, and got his training in architecture from his daily work. He was the first to

> build apartments with a little court or setback in front with some trees in it. This proved popular and the idea of the garden apartment was born. He learned that beauty pays. He also learned that it does not pay to crowd the land. He became a crusader for beauty, light, and air.[67]

Lewis Mumford, who in the 1920s was more favorably disposed to the industrially inspired forms of the modern movement than his later attacks on the International Style might suggest, was among those who were not very enthusiastic about Thomas's work. Nonetheless, he grudgingly acknowledged that "Andrew Thomas's plans for apartment houses . . . are admirable to the last degree, provided one must respect lot lines and provided one does not change the depth of the block."[68]

Thomas's most important work in New York (he also built notable housing projects in Bayonne, New Jersey, and in Chicago, as well as the Princeton Inn at Princeton, New Jersey) was done for large developers such as the Metropolitan Life Insurance Company, the Queensboro Corporation (the developers of Jackson Heights in Queens), and also for John D. Rockefeller, Jr., who assisted in the organization of what is probably Thomas's masterpiece, Thomas Gardens, named after its architect. Under pressure from the black community, Rockefeller also commissioned Thomas's Paul Lawrence Dunbar Houses in Harlem.

Thomas established a key principle in the design of the urban multiple dwelling—that the true unit of planning is the city block and not the individual building.[69] The New York precedents for this principle can be traced as far back as the Dakota and Tower Buildings and were implicit in the New York City Tenement Act of 1901, which made narrow-lot development virtually impossible. But Thomas took the idea much further, insisting on 50 percent land coverage as opposed to the 70 percent permitted by the 1901 law. He established a new, urban-suburban multiple-dwelling type, in which the courtyard was treated as a continuous green space. Modest garden courts, introduced along the street front and side alleys separating the individual apartment houses, contributed to a reduction in the apparent density of the development, offered an increase in recreational amenities, and introduced into the multiple dwelling more of that sense of individuality characteristic of the single-family house than had the work of any previous designer. At the same time, Thomas jettisoned high-style, imperial neoclassicism in favor of an essentially vernacular vocabulary of ornamental details that can best be described as eclectic. In any one of Thomas's buildings, a strong stylistic association is established at key points of the facade, usually around the principal doorway and at the roofline. Not surprisingly, Thomas's use of the courtyard parti led him to prefer a vocabulary with distinct Mediterranean overtones.[70]

At Jackson Heights, Thomas pursued the garden-apartment idea over and over again in a series of apartment-house projects built in the first half of the 1920s. John Taylor Boyd observed that

> in these great developments . . . the use of the block as the unit . . . reached its fullest development. This is possible because the developers, the Queensboro Corporation, owned a large tract of land which they were willing to develop over the period of years as an investment. Providing community amenities as well as housing accommodation, this little-known development is a "sub city within the city."[71]

In all of Thomas's work involving groups of buildings, the individual structures are massed to reflect the role of the block as the development unit and at the same time preserve the character, individuality, and domestic scale of the com-

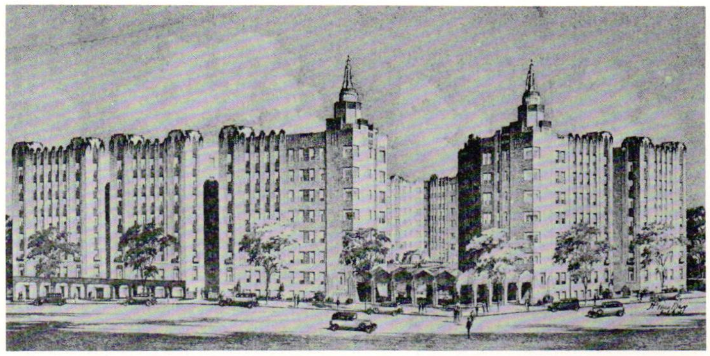


Fig. 37. Noonan Plaza. Horace Ginsbern. 1931. Architect's rendering.

Fig. 38. Cambridge Court. George H. Wells. 1918. View.

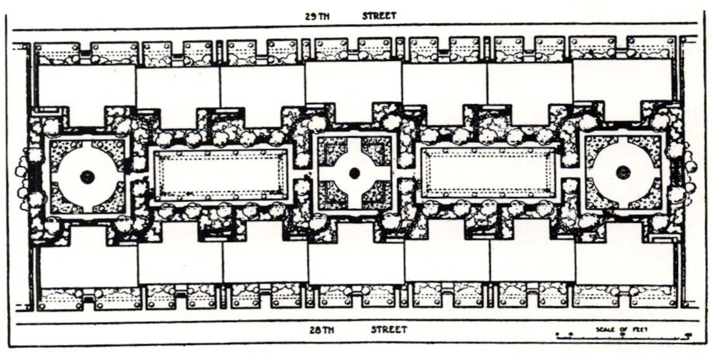


Fig. 39. Cambridge Court. George H. Wells, 1918. Site plan.

ponents. Corners are emphasized by towers and act as terminating masses for the elevations of the block. The towers and the horizontal moldings on the lower stories of the buildings help tie the groups together, while the use of specific historical styles not only helps to distinguish one group from another but also makes it possible to particularize each building in a given complex.

Thomas's compactly planned buildings give up some perimeter along the street and thereby lose some of the sense of frontality traditionally associated with high-density housing. The introduction of a planned garden in the interior of the block provides recreational amenities and makes the rear apartments at least as desirable as those in the front. Thomas's courtyards are distinguished in a number of important respects: they separate garden space from service space and often include limited amounts of covered garage space reached by the service alleys that separate the individual buildings in the group. These alleys have other advantages; they break up the street facade and thereby break down the scale of development, they permit each apartment to have at least two exposures, and by increasing the number of corners they increase first-floor as well as exterior walls, roofs, stairwells, and elevator cores.

Thomas's work demonstrated that economy and high density were not necessarily two sides of the same coin. He made the idea of neighborhood planning more glamorous than it had ever been before and established new and practical standards for the physical organization of the city, comparable in quality and popular appeal to prevailing suburban models. Earlier projects at Jackson Heights designed by George H. Wells had also explored the garden-apartment idea (Figs. 38–39), but Wells failed to go as far as Thomas to break up the perimeter wall into individual buildings.[72] It was Thomas's design for Operation No. 8 of the Queensboro Corporation, completed in 1920, that marked the decisive turning point in the evolution of the garden-apartment idea. According to Boyd, it established Thomas as the author

> of the first true garden apartment group in a city block that has been designed as a whole. In it the garden is an integral part of the scheme; the rooms are planned to take full advantage of the garden outlook, and, besides, elevations on the garden are as attractive as those on the street fronts. . . .
>
> There is not that dreary, mechanical, institutionalized aspect of the whole block by which row housing has sucked out all the character and individuality from the streets of American cities. Each individual building of Operation No. 8 has something of individuality, of "homeness," that one does not expect to find in apartment houses, and surely, cannot find in the row type. Their appearance at the rear . . . is also far better than the row type, for the alleys between the buildings break up the length of the court giving it character and form.[73]

The first of Thomas's projects for the Queensboro Corporation (Figs. 40–42) consisted of four-story walk-up apartments grouped around a continuous courtyard.[74] Of their innovations, surely the inclusion of garage space was the most prophetic. The construction is wood frame, sheathed in common red brick trimmed with Indiana limestone; the imagery is a loosely conceived emulation of the Spanish Renaissance.

Thomas's next project for Queensboro was the Chateau, a group of sixteen five-story apartment houses (Fig. 43), in which the newly devised automatic elevator is used to advantage.[75] At the Chateau, the space between the buildings is 19½ feet, a marked increase over Thomas's previous effort. The Towers (Fig. 44) carried these ideas even further.[76] With eight six-story-high buildings in the

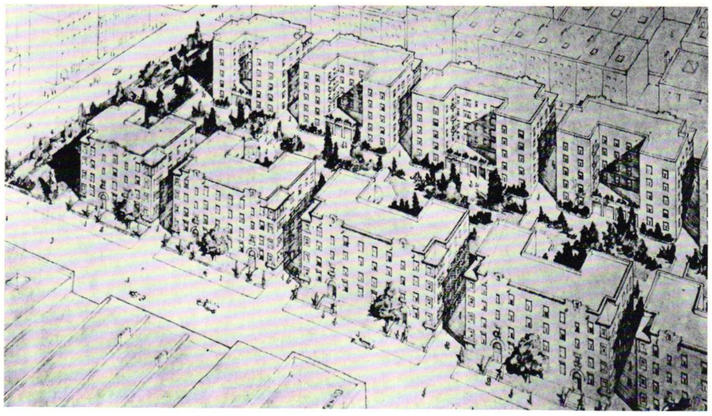


Fig. 40. Operation No. 8. Andrew J. Thomas. 1920. Architect's rendering.

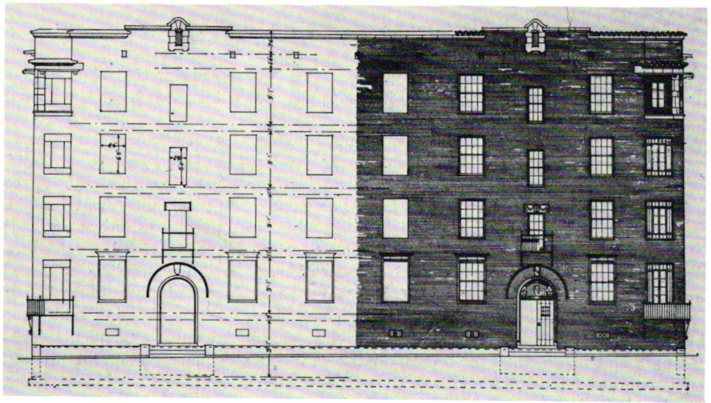


Fig. 41. Operation No. 8. Andrew J. Thomas. 1920. Street elevation.

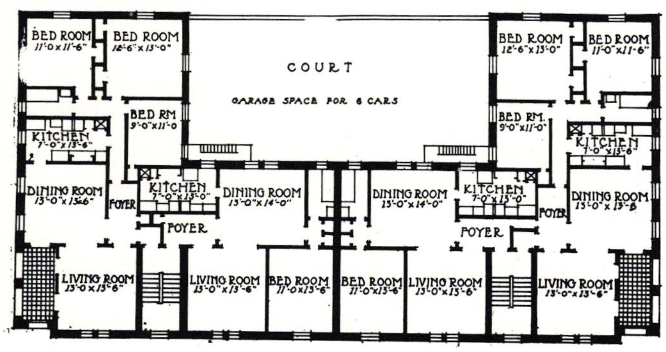


Fig. 42. Operation No. 8. Andrew J. Thomas. 1920. Plan of typical floor.

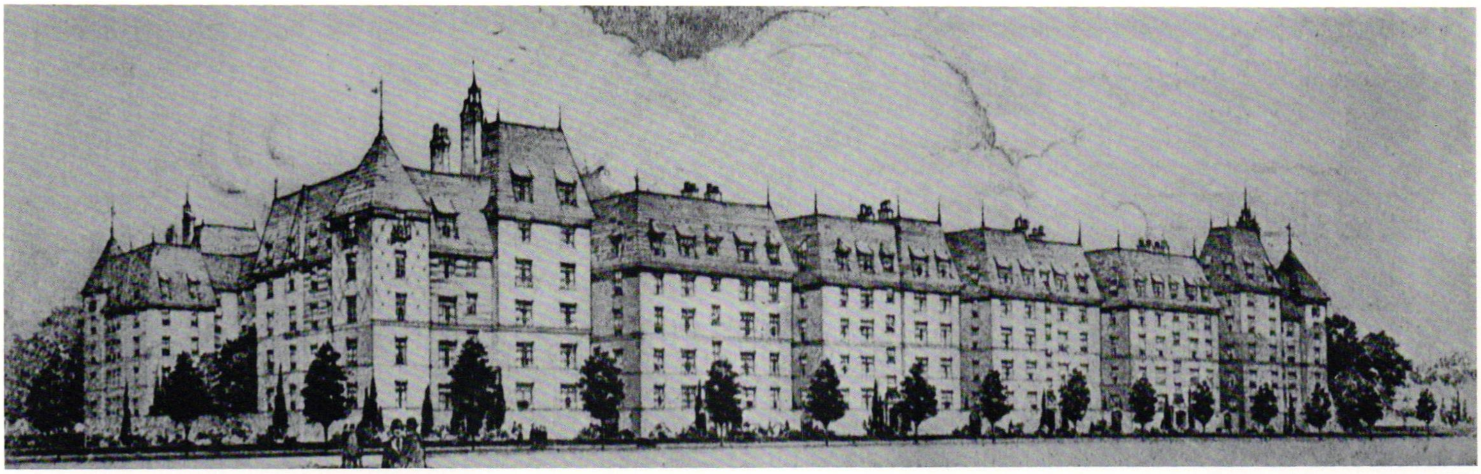


Fig. 43. The Chateau. Andrew J. Thomas. 1922. Architect's rendering.

group, the site coverage is reduced to 25 percent. The courtyard is sunk below grade, making it possible to introduce additional apartments at the basement level and set the courtyard apart from the life of the street (Fig. 45).

Not all of Thomas's buildings at Jackson Heights were remarkable. Cedar Court occupies a higher percentage of its site and does not fully enclose its courtyard, which is open to the street.[77] The Spanish Gardens apartment house is also a U-shaped building surrounding a courtyard opening to the street.[78] Its use of Spanish architectural motifs is quite successful, especially in the interior public spaces.

In 1924, Thomas designed his largest single project, in association with D. Everett Waid, and under the sponsorship of the Metropolitan Life Insurance Company.[79] All in all, there were fifty-four buildings in different parts of Queens; thirty buildings were built on three blocks in Long Island City, ten more buildings were built on a block in Woodside, and a last group of fourteen was built on two blocks along Ditmars Avenue in Astoria.

Thomas and Waid's scheme consists of five-story U-shaped buildings opening to a central mall (Figs. 46–47). The court formed by the U is narrow, as is the thirty-foot-wide central court or mall. The narrow courts combine with the rather mean architectural expression to give a somewhat gloomy character—though it should be noted that the Metropolitan Life apartments originally rented for only nine dollars a month per room, considerably less than those at Jackson Heights. Moreover, other aspects keep the Metropolitan project from being easily dismissed. Compared with working class tenements there is a sense of spaciousness (50 percent of the site is open space), and the apartments, though small, are admirably planned (Fig. 48). The entry sequence to each apartment, which leads through an arched passage to the interior court from which four entranceways lead to stair halls, is clear and effective in securing the project from unwanted intruders.

The Paul Lawrence Dunbar Houses in Harlem, on Fifth Avenue between 142nd and 143rd streets, is Thomas's only garden apartment complex in Manhattan.[80] The construction of Dunbar was the result of pressure brought to bear on John D. Rockefeller,Jr., by the Urban League to help blacks secure decent housing. It represents the final example of the type initiated by Thomas at Jackson Heights, that is, the double file of independent buildings grouped along a continuous courtyard.

Thomas experimented with a second, more traditional type that I have associated with the imperial style, in which a single building fully encloses a courtyard, or at least defines it on three sides. His contributions to the evolution of

Fig. 44. The Towers. Andrew J. Thomas. 1924. View from northwest.

Fig. 45. The Towers. Andrew J. Thomas. 1924. View of garden.

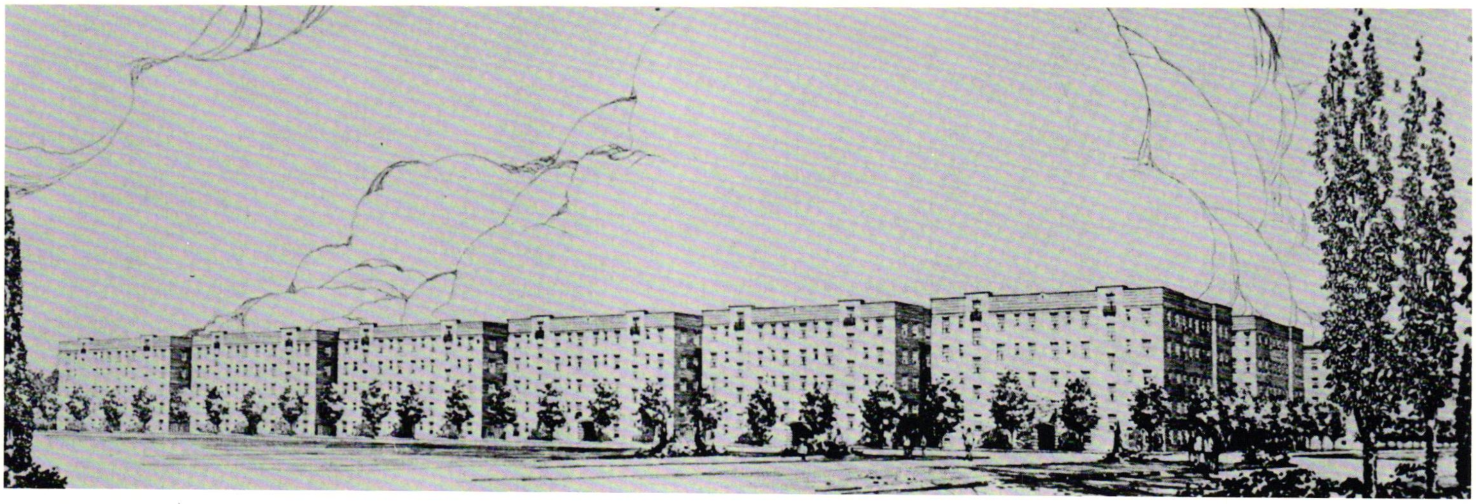


Fig. 46. Metropolitan Life Apartment Houses. Andrew J. Thomas. 1924. Architect's rendering.

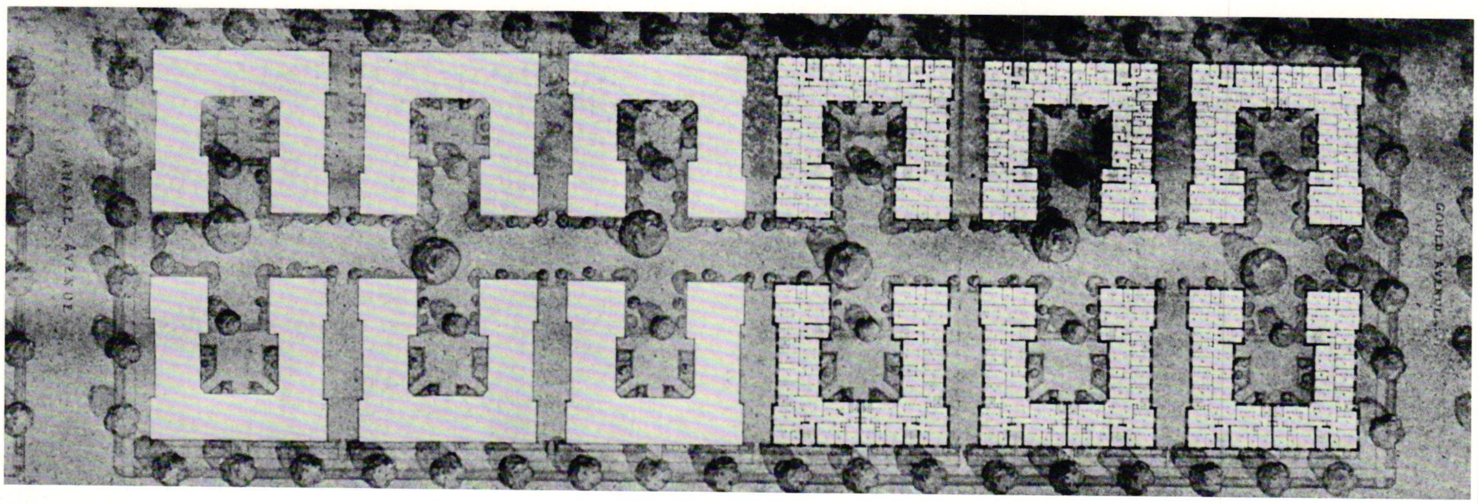


Fig. 47. Metropolitan Life Apartment Houses. Andrew J. Thomas. 1924. Block plan.

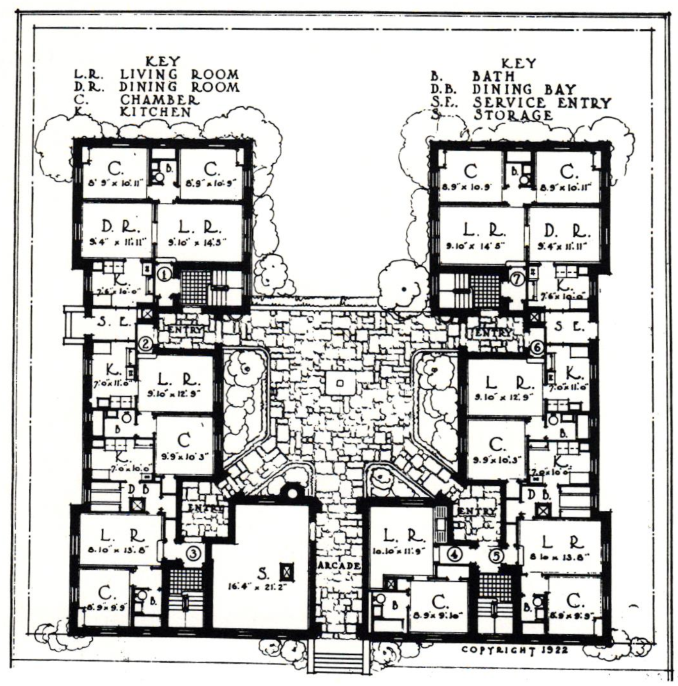


Fig. 48. Metropolitan Life Apartment Houses. Andrew J. Thomas. 1924. Plan of typical ground floor.

this type consisted of a drastic reduction of the height of the buildings as compared to earlier examples such as 270 Park Avenue, and of the introduction of the relaxed and domestic imagery which characterized his best work. Thomas's first continuous-perimeter-block development was the Homewood Garden Apartments, built in Brooklyn in 1919 by the City and Suburban Homes Company on a site on 17th Avenue between 73rd and 74th streets.[81] The original design for Homewood is even more inventive in its handling of the open spaces than the work at Jackson Heights, though the complex as executed seems rather dry. The Hayes Court Apartments is his sole experiment at Jackson Heights with the perimeter block, and perhaps Thomas's most traditional scheme.[82] The relatively small site, between 23rd and 26th streets on Hayes Avenue, seems to have encouraged him to revert in plan and style to a miniaturized example of the imperial mode; the building looks like a toytown Dakota (Figs. 49–50).

Brooklyn Garden Apartments (1929), at Fourth Avenue between 23rd and 24th streets,[83] is bigger than Homewood or the Hayes Court, though it is not as interesting, as what I believe to be Thomas's best work of the late 1920s—Thomas Gardens (Fig. 51), in the Bronx at 158th Street and the Grand Concourse, completed in 1927.[84] This complex is an exception in Thomas's oeuvre: though occupying a full city block of unusually large dimensions, the courtyard is not continuously enclosed but opens to the Grand Concourse at

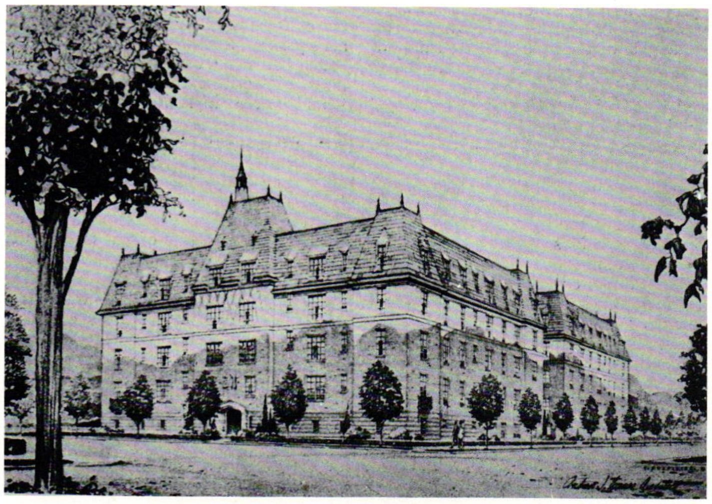


Fig. 49. Hayes Court. Andrew J. Thomas. 1924. Architects' rendering.

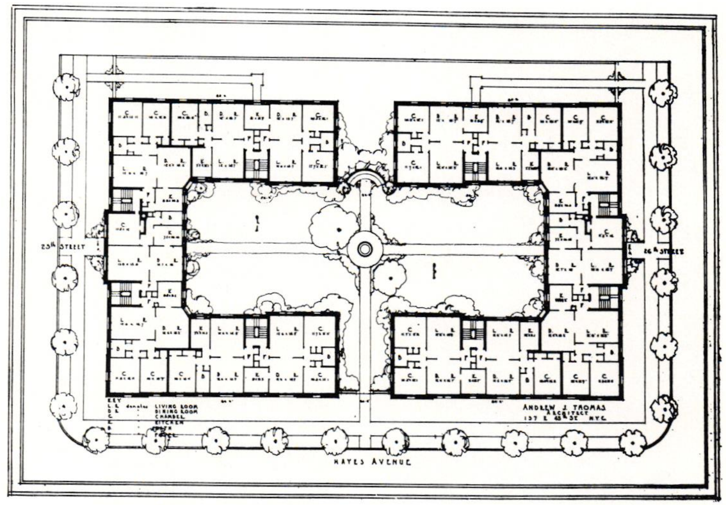


Fig. 50. Hayes Court. Andrew J. Thomas. 1924. Plan of typical floor.

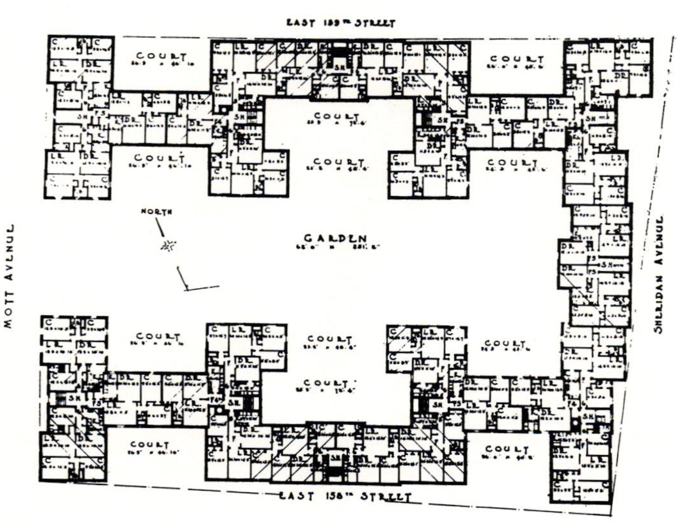


Fig. 51. Thomas Gardens. Andrew J. Thomas. 1927. View on Sheridan Avenue from northeast.
Fig. 53. Plan of typical floor.

Fig. 52. Thomas Gardens. Andrew J. Thomas. 1927. View of courtyard from Grand Concourse.
Fig. 54. Courtyard detail.

Fig. 55. Amalgamated Dwellings. Springsteen & Goldhammer. 1930. Courtyard view looking north.

Fig. 56. Amalgamated Dwellings. Springsteen & Goldhammer. 1930. Entryway detail.

the raised, upper end of the site (Figs. 52–53). The large court is delightful, with Japanese-style lanterns and a lovely four-way footbridge at the center (Fig. 54). The site's change in level permitted Thomas to gain extra apartments without increasing apparent bulk, but the six-story walk-ups (a type soon to be rendered illegal by the Multiple Dwelling Law) seem incongruous, particularly considering the generosity of the overall conception.

Thomas's continuous-perimeter-block type was more influential on later garden apartments than the interrupted block type, because it did not require large sites, such as had been available at Jackson Heights. Its impact on middle- and low-income housing can be seen in the work of less theoretical architects such as Springsteen & Goldhammer, who produced a number of interesting continuous-perimeter-block garden apartments in the 1920s and 1930s. The best known of these, the 1930 Amalgamated Dwellings at 504–520 Grand Street (Fig. 55) on Manhattan's Lower East Side, bears stylistic witness to the influence of the Amsterdam School housing of the late 1920s.[85] The detailing throughout is inventive and stylish, especially the wonderful illuminated keystones in the doorway surrounds (Fig. 56). Several measures were taken to separate the tenants from the noise of Grand Street: community rooms are placed between that street on the south and the courtyard, which is furthermore set a level below the street. The courtyard is entered through a parabolic tunnel on axis at its northern end or from the east and west by a deliberately circuituous path and tunnel system.

Earlier projects of Springsteen & Goldhammer's are also worth noting. In addition to 3224 Grand Concourse, which I have already discussed, the Sedgwick Avenue Apartments function so admirably and are so eminently likable that Louis H. Pink observed that they are "perhaps the finest tenements erected by anybody."[86] The first housing built by the Amalgamated Clothing Workers' Cooperative, the Sedgwick Avenue Apartments bear strong resemblance in plan, though regrettably not in elevation, to Thomas's Dunbar Apartments. The Alhambra Gardens, on Pelham Parkway in the Bronx, contain an eccentric but charming courtyard.[87]

The last significant perimeter-courtyard projects were designed by Clarence S. Stein, who skillfully adapted Thomas's ideals to the reduced circumstances of wage-earners' housing built at the depth of the Depression and seized the opportunity for development at a scale hitherto unexplored even by Thomas. Though trained at the Ecole des Beaux Arts and apprenticed in the office of Bertram G. Goodhue, Stein was not a strong designer. He was, however, a solid synthesizer, who absorbed ideas from Ebenezer Howard, Patrick Geddes, Raymond Unwin, Henry Wright, as well as Andrew Thomas. Plagued by ill health in the late 1930s and the 1940s, Stein's career was prematurely cut off, yet his succession of projects, beginning with the two-family houses on West 239th Street, attests to a serious purpose, imagination, and determination, if not much wit. His work was thoroughly decent and ethical, in the best sense of those terms.

Stein's West 239th Street project is a variation of the Thomas Garden apartment type; it is a building housing six families in a T-shaped configuration.[88] The location of the broad arms of the T at the rear permits this small apartment house, a kind of hybrid between a group house and a garden apartment, to read from the street almost like a single-family dwelling. Set on a 65 x 100-foot lot, it could, as Boyd notes,

> replace three houses of the block semi-detached type or else two isolated houses with one apartment house containing quarters for six families. And, since each family has its separate entrance, the old American

> small town ideal of individuality and privacy is thus preserved to a degree, which is why the dwellings are only two stories high.[89]

Stein also proposed to combine these units with another U-shaped one that would surround three sides of a courtyard facing the street, thereby providing in a single block a considerable variety of house types at a density of about twenty families to the acre.

Stein's first courtyard apartment, the Phipps Garden Apartments of 1931, was built as part of his work at Sunnyside Gardens.[90] Interestingly enough, they conform quite closely to the imperial courtyard mode that I have previously discussed. Louis Pink felt that Stein's low-rise work at Sunnyside has

> none of the artistry of Forest Hills or Mariemont. It has no Grosvenor Atterbury to insure architectural beauty and mounting expenses. It lacks grace and charm. The flat roof predominates. There is little variety. The buildings are square boxes relieved only by good proportion. But for the tree and shrub planting and occasional window boxes and awnings, Sunnyside would be somber as well as plain. What it lacks in art it makes up in intelligence.[91]

The Phipps Garden Apartments are the architectural jewel of the Sunnyside complex. Because they were intended to house white-collar workers rather than the lower-income workers housed at the rest of Sunnyside, the sponsors "wanted exteriors less severe in appearance than the Sunnyside houses," and so Stein used brick laid up in exuberant patterns (Fig. 57) which he was later to regret.[92] At Phipps, six-story elevator units were combined with four-story walk-ups, all focused on the great court (Figs. 58–59), or "central park," as Stein preferred to call it. All the apartment units are entered from the court, which all balconies and most living rooms face. The sloping site permitted the introduction of apartments with private terraces and enclosed gardens, a strategy first used by Thomas but further developed by Stein at his later Hillside Homes.

Phipps demonstrated to Stein's satisfaction that elevator apartments were less efficient and less desirable than walk-ups from the point of view of privacy and ventilation. Later he was to become highly critical of the twelve- to fourteen-story towers built by the New York City Housing Authority and various life insurance companies, which he believed would have been more efficient and more amenable had they been less high.[93] Stein's walk-up apartment buildings were in fact cheaper to build, cheaper to operate and maintain, and more livable than equivalent unit-plan elevator buildings.[94]

Hillside Homes is Stein's masterpiece, perhaps the best of the continuous-perimeter projects.[95] Begun in 1932 and completed in 1935, it began as "an architect's abstract conception," without site, client, local precedent, or financing—just an idea "for a self-contained residential neighborhood for desirable community living in apartments" that would be available at very low rentals (far lower than Phipps).[96]

Nathan Strauss finally made available a twenty-six acre site in the northeast Bronx, on which Stein built the last great monument of the courtyard tradition. He wanted to push the unit of planning beyond the city block to superblock, but he was prevented from doing so by the City's refusal to close mapped but unbuilt streets (Fig. 60). Stein was therefore forced to maintain the orthagonal relationship of the grid (Fig. 61), and to keep the very clear relationship between building and street that had been characteristic of housing development since White and Hardenbergh, but which in the early 1930s was already under assault by

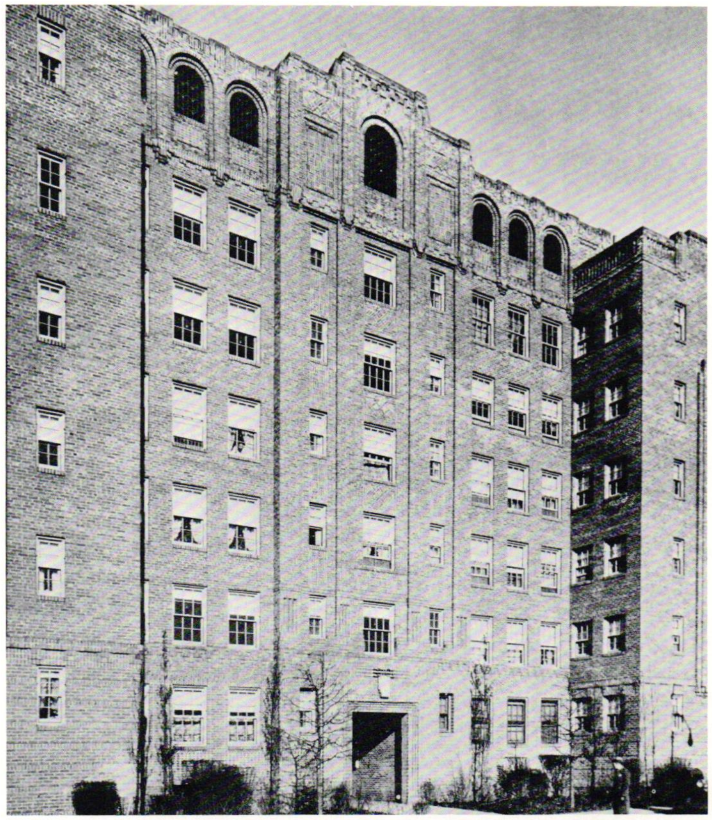


Fig. 57. Phipps Garden Apartments. Clarence S. Stein. 1931. View on 39th (Middleburg) Avenue looking north.

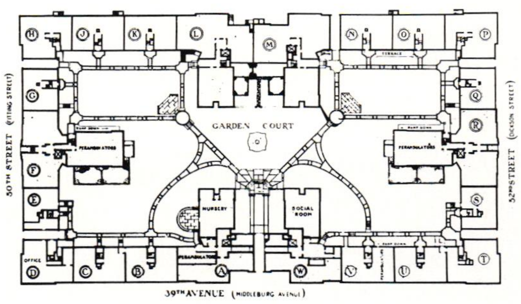


Fig. 58. Phipps Garden Apartments. Clarence S. Stein. 1931. Plan of ground floor.

Fig. 59. Phipps Garden Apartments. Clarence S. Stein. 1931. View of courtyard.

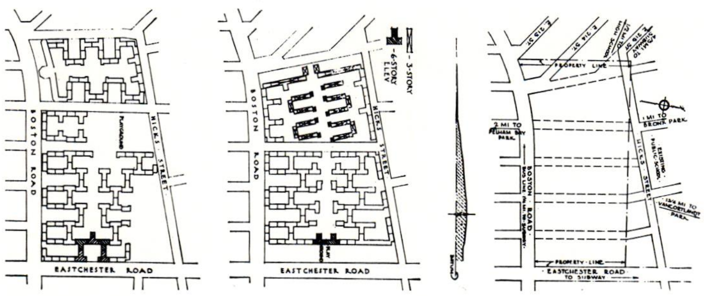


Fig. 60. Hillside Homes. Clarence S. Stein. 1932–1935. Preliminary site plans.

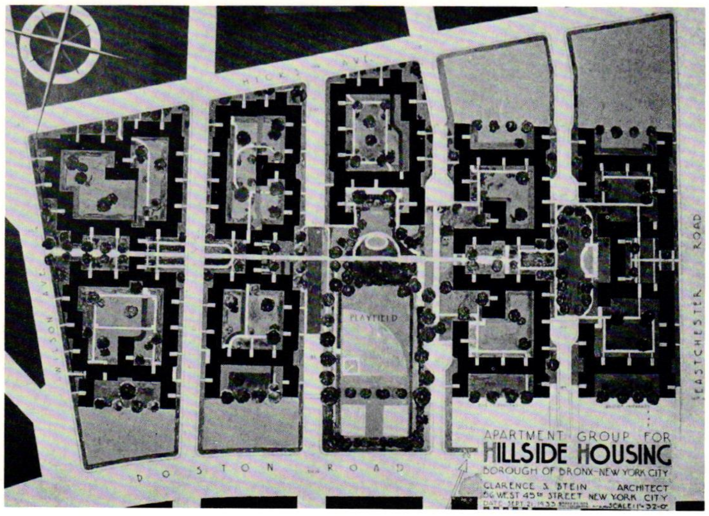


Fig. 61. Hillside Homes. Clarence S. Stein. 1932–1935. Final site plan.

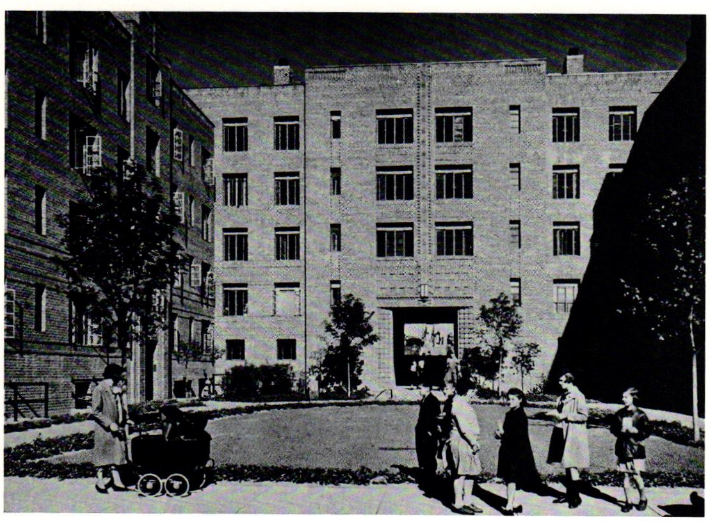


Fig. 62. Hillside Homes. Clarence S. Stein. 1932–1935. View of courtyard.

advocates of the tower-in-the-park as the appropriately contemporary housing model.

Stein built 1400 apartments in eight continuous buildings. Because the site was ample and the population density relatively low, the courtyards are the most generous of all the examples within the tradition: some are large enough for active sports, though the continuous wall of buildings and the splendidly framed gateways that connect one with the other contribute to the sense of security one feels throughout even the most expansive public open spaces in the development (Fig. 62). Taking advantage of the sloping site, Stein was able to provide a number of apartments at grade suitable for the elderly. These have private gardens abutting the sunken interior courts from which they can be entered; the gardens can also be entered from the public stair serving the upper-level apartments.

The Impact of Modernism

Though certain subsequent projects of the late 1930s attempt to draw upon the experiences of Hillside Homes, the energy, the focus, and, most importantly, the artistic cohesion that seem to be inherent to the courtyard system collapsed as the more informal compositional modes derived from European modernist prototypes were introduced. This can be seen to some extent in the extravagently praised Harlem River Houses, designed for the New York City Housing Authority by a large team headed by Archibald Brown and built in 1937 between West 151st and 153rd streets and between West Macombs Place and the Harlem River Drive.[97] Mumford wrote that this, the first federally funded, owned, and built housing project in the city, contained "the equipment for decent living that every modern neighborhood needs: sunlight, air, safe play space, meeting space, and living space. The families in the Harlem River Houses have higher standards of housing in tangible benefits, than most of those on Park Avenue."[98] The tendency toward loose composition suggested by the site plan of Harlem River Houses is even more pronounced at the Williamsburg Houses, also built in 1937 and designed by a large team of architects, this time headed by Richmond H. Shreve.[99] At Williamsburg, located in Brooklyn on Bushwick Avenue between Maujer and Scholes streets, the use of the super-block combines with an almost obsessive concern for establishing an orientation for the project's site that is totally removed from the neighborhood context: the open space is unassigned and therefore public only in the pejorative sense. Whereas the Harlem River Houses seem under-appreciated, Williamsburg seems overrated. Talbot Hamlin was one of the few to criticize the design:[100] White and Willensky's characterization in the *AIA Guide* of Williamsburg as "the best public housing ever built" is more common, though I think their admiration stems from its use of modernist formal and site planning conventions.

The best apartment houses of the period were neither for the poor nor of the traditional courtyard type. The cult of the skyscraper, combined with the Multiple Dwelling Law of 1929, brought about a courtyard/tower hybrid ideally suited to the dense land pattern and skyline of Manhattan. The Multiple Dwelling Law imposed new restrictions that were to affect the housing of lower-income families, but in the reckless prosperity that prevailed when it was passed the law was more influential in spurring on the construction of the high-density apartment houses built for the affluent in Manhattan: in particular, it permitted mechanically vented public hallways and staircases, and mechanically vented kitchens and bathrooms in the windowless depths of the apartments. The San Remo (Figs. 63–64), built by Emory Roth in 1930 at 145–46 Central Park West;[101] River House, designed by Bottomley, Wagner & White and completed in 1931 at 435 East 52nd on the East River;[102] the Majestic, 115 Central Park West, 1930,[103] and the Century (Figs. 3–4) 25 Central Park West, 1931[104]—the latter two both by Irwin S. Chanin and Jacques Delamarre—are wonderful examples of the new hybrid.

The courtyards in these examples are regrettably much too small, but the parti these buildings share is exemplary: it consists of one or two towers atop a U-shaped perimeter-block base, which forms a courtyard to supply light and air for the larger apartments at the base of the building and is potentially useful as recreation space. The towers, being free of the city grid, can inflect toward desirable orientations. Such a typology, though complex to design and expensive to construct because of structural difficulties arising from the nonrepetitive nature of the plans, is nonetheless rewarding—the Century has fifty-two types of apartments, ranging from one-room flats to eleven-room suites, with a good number of one-bedroom duplexes.

After the collapse of the real-estate market in the Depression, the type was never again seriously pursued, except at 240 Central Park South, which despite the limitations of its courtyard remains a paradigm of the contextually responsible high-rise apartment in Manhattan.[105] Designed by Mayer & Whittlesey in 1941, 240 Central Park South comes at the point when the transition between traditional and modernist styles strongly affected American practice and produced a number of interesting buildings which, because of the ideological positions the shift forced architects and critics alike to take, have been largely overlooked. Two hundred and forty Central Park South sits at a most complex point of transition in the character of the city as well: it faces Columbus Circle, Central Park South, and the diagonal of Broadway and West 58th Street, each of which has its own distinct character, ranging from one that can be likened to the Champs Elysees at the Etoile to another resembling a quiet backwater at the edge of the metropolis.

It is not its facades that lend 240 Central Park South distinction—they are in fact even blander than those at Knickerbocker Village—but the shaping of the two buildings, particularly the northern one, in response to the complex perimeter of the site (Figs. 65–66). Aspects of the courtyard type are combined with those of the tower to establish a horizontal and vertical response to the character of the city. Terraces begin only above the level of the trees in Central Park (high enough to be free of the street fumes); roofs are set back to conform to zoning, to solar orientation, and to views; chimneys and mechanical equipment combine with the penthouse suites to ensure a lively skyline. At the street level the building respects the varied nature of its locale: a deep, planted courtyard on Central Park South creates an elegant pocket of shade, while a vigorous one-story commercial strip along Broadway uses curved corners to define the diagonal of the street.

In 1950, the architects of 240 Central Park South worked with Skidmore, Owings & Merrill to design Manhattan House, located on East 65th and 66th streets between Third and Second avenues.[106] The lessons of 240 Central Park South were largely forgotten in favor of one of the two new apartment-house models which were becoming established. One was a slab configuration, as seen at Manhattan House: New York examples of the type include Washington Square Village, designed by S. J. Kessler and Paul Lester Weiner in 1958, built between West Third and Bleecker streets on West Broadway;[107] and Kips Bay Plaza, designed by I. M. Pei & Associates and S. J. Kessler in 1960 and built between East 30th and 33rd streets and First and Second avenues.[108] As used in these examples the slab was a descendant of the work of Le Corbusier, Gropius, and canonical modernism's

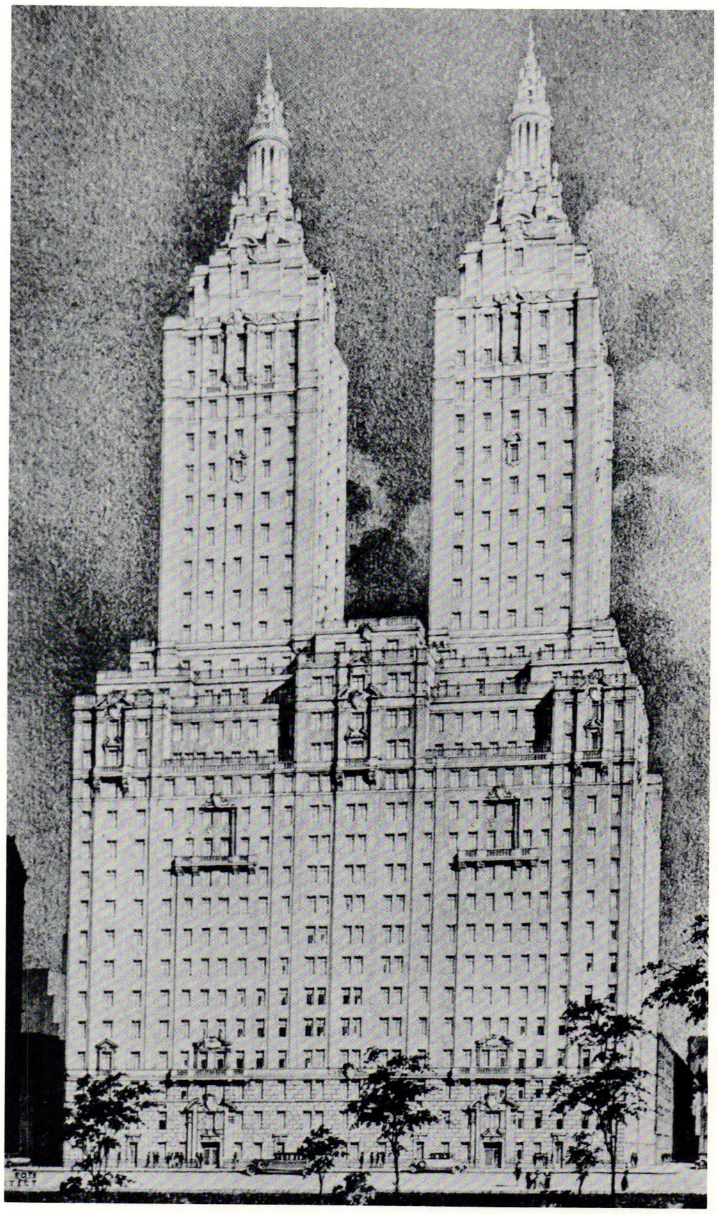


Fig. 63. The San Remo. Emory Roth. 1930. Architect's rendering.

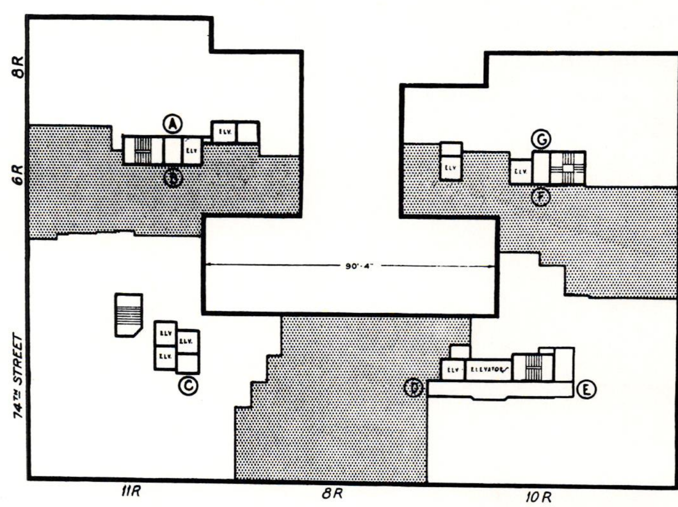


Fig. 64. The San Remo. Emory Roth. 1930. Diagram of typical base floor.

Fig. 65. 240 Central Park South. Mayer & Whittlesey. 1941. View on Broadway from southwest.

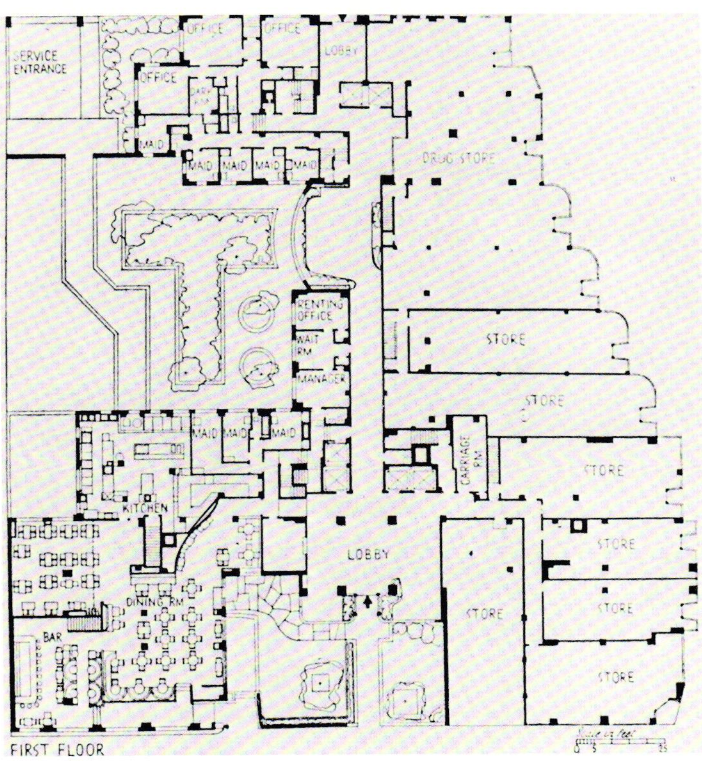


Fig. 66. 240 Central Park South. Mayer & Whittlesey. 1941. Plan of ground floor.

polemical arm, the Congres International d'Architecture Moderne (CIAM), although it had been used more sensitively in some of the open-ended courtyard apartments we have seen.

The second model was the tower-in-the-park, also related in form to the work of Le Corbusier, although it did not originate there. Le Corbusier had never intended the tower-in-the-park to be used for housing;[109] moreover, the cruciform-apartment tower-in-the-park had been found as early as 1913 at the Wardman Park Tower in Washington, D.C., and was undoubtedly given important impetus by Frank Lloyd Wright's unrealized New York apartment house, St. Mark's-in-the-Bouwerie of 1929.[110] Apartment towers with cruciform plans were soon built in several cities; two notable early examples were Edwyn Rorke's six towers in historical dress built in Alden Park, Philadelphia in 1920,[111] and Boillots and Lauck's The Walnuts, a complex of three ten-story towers completed in Kansas City in 1930.[112] The "idealized" site planning that is characteristic of these apartment tower groupings, in which the towers relate to each other and the solar orientation rather than the existing street pattern, can also be seen in other American examples. Henry Atterbury Smith's partially realized La Mesa Verde at Jackson Heights is an early case (1926) of its use in a courtyard scheme.[113]

In any case, by the 1940s and 1950s groupings of free-standing towers-in-the-park had become the almost ubiquitous solution for large-scale urban renewal/slum clearance projects. New York examples include Stuyvesant Town designed by Irwin Clavan and Gilmore Clarke in 1947 (between East 14th and 20th streets and from First Avenue to F.D.R. Drive);[114] the Governor Alfred E. Smith Houses, Eggers and Higgins, 1952 (between South, Madison, and Catherine streets and Robert F. Wagner Sr. Place);[115] Penn Station South, Herman Jessor, 1962 (West 23rd to 29th streets. Eighth to Ninth avenues);[116] and Co-op City. Herman Jessor, 1968–70 (built on filled marshland between the New England Thruway and the Hutchinson River Parkway on what was once the site of an amusement park called Freedomland).[117] University Village, by I. M. Pei & Associates, built in 1966 on the block bounded by La Guardia Place and Bleecker, Mercer, and West Houston streets, is less common because of its relatively small site and elegant design.[118]

In the mid-1960s, architects began to sense the inadequacies of the prevailing tower-in-the-park typology. Their response was a return to the courtyard type. Davis, Brody's Riverbend Houses, built on Fifth Avenue between East 138th and 142nd streets in 1967, is one of the most interesting of these late courtyard buildings, not only because of its quality, but also because of its inherent contradictions.[119] Though Riverbend's design is undoubtedly based on a close reading of Le Corbusier's and CIAM's work, its sociological earnestness seems more in the tradition of Sir Sydney Waterlow and Alfred T. White, while its organization comes quite close to Hubert, Pirsson & Hoddick's 1890 proposal for apartments on the site of Madison Square Garden. Moreover, though Riverbend is probably intended to be "kitchen-sink Brutalist," its unusually patterned elevations are strongly evocative of Sir Edwin Lutyens's idiosyncratic Page Street Houses of 1930–31.[120]

Not so notably glamorous as Davis, Brody's subsequent and less innovative Waterside Apartments of 1974,[121] Riverbend suffers from a lack both of sporting silhouette and of a strong relationship to its riverfront site. Tall buildings contain small apartments for singles and childless couples; lower buildings, defining rectangular courtyards, contain duplex apartments with front "porches" accessible from continuous open galleries, which occur on alternate floors and connect to the elevators. The galleries are screened from the porches; they overlook the courtyard, which is in effect a roof-deck play space covering the garage at grade. By deliberate intent, the decks do not cover all the cars, so that the relationship of car to owner within the complex is clearly revealed. The galleries are not conceived of as "streets-in-the-sky" but as discontinuous alleys—more like culs-de-sac—serving only ten apartments, and thereby fostering a sense of neighborhood.

Though the ideas exemplified by Riverbend were only tentatively carried forward by Davis, Brody in their next project, East Midtown Plaza,[122] and largely abandoned by them in such later work as Waterside, other architects working in the late 1960s were quick to see the continuing validity of the courtyard parti. A number of proposals were made, many of which were never realized, owing to the collapse of the housing-subsidy programs and the general economic downturn in the early 1970s. Richard Kaplan's Crown Gardens of 1971, on Nostrand Avenue between President and Carroll streets in Brooklyn, is one which did get built, though as executed it is rather disappointingly severe.[123] William Pedersen & Associates' proposal for housing at Seward Park Extension, only a few doors away from the Amalgamated Dwellings of 1930, is conceived at the scale of Knickerbocker Village and is notable for the vigor of its massing and its responsiveness to the problem of orientation to view and sun.[124] The courtyard type was revived in a different, though related, context by Lawrence Halprin, who proposed to use low-rise apartments to connect the freestanding towers of Penn Station South and thereby attempt to reweave the urban fabric that had been so horribly rent by the redevelopment patterns of the 1950s.[125]

All of these late courtyard apartment houses were improvements on the prevailing norm, but though they go beyond mere functional accommodation or technological innovation to provide good urban environments, they suffer in comparison with their more traditional equivalents of thirty or forty years earlier.

The Lessons of History

I have written this essay to offer a number of lessons. The first, always worth repeating, concerns the use of history by architects. We have lost the habit of thinking of individual buildings as fragments of a larger totality, not merely in the physical sense but in the sociological, functional, and cultural sense as well. Architects should look at old buildings, not so much to copy them literally (though I am certain there are appropriate times to do that), but to rediscover in the present the kinds of things architects did better in the past—things done for people, for cities, for the landscape, for the sake of art. This retrospection is particularly urgent now, when the public, with justification, seems to have lost confidence in our abilities to do as well as our colleagues of two or three generations ago.

Another lesson concerns the symbolic nature of housing typologies. In this essay I have emphasized one building type, the courtyard apartment house, because I believe in its continuing viability. But as one reviews its history in New York, it becomes clear that examples of this type fall into two distinct categories of symbolic meaning. Many examples, especially those from before the First World War, are palaces of privilege that are not really domestic in character, in the sense that the freestanding suburban houses of their time were, or even the brownstones; like the great townhouses that lined Fifth Avenue and Riverside Drive, these palaces were intended to function as architecture with a capital *A*, to represent, even to monumentalize, the collective wealth and status of the inhabitants. This monumentalizing of the collective is true even of working-class developments, such as

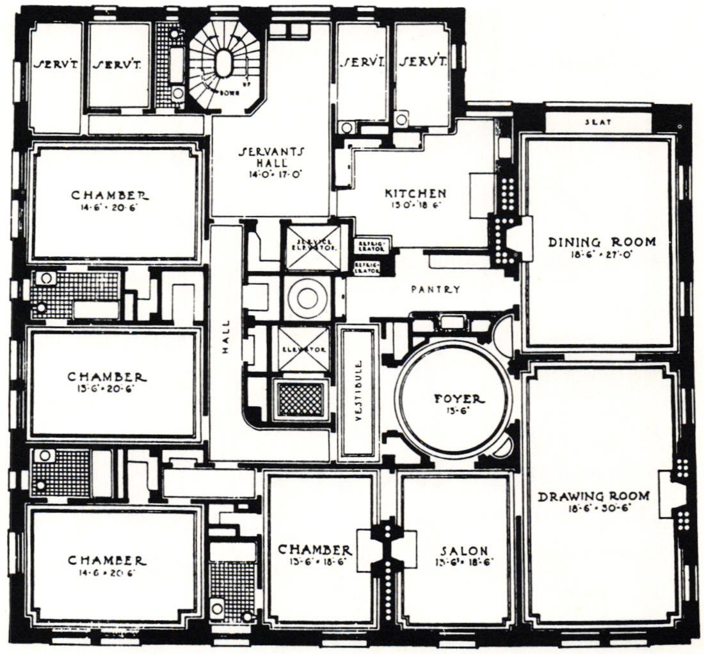


Fig. 67. 635 Park Avenue. J.E.R. Carpenter. 1912. Plan of typical floor.

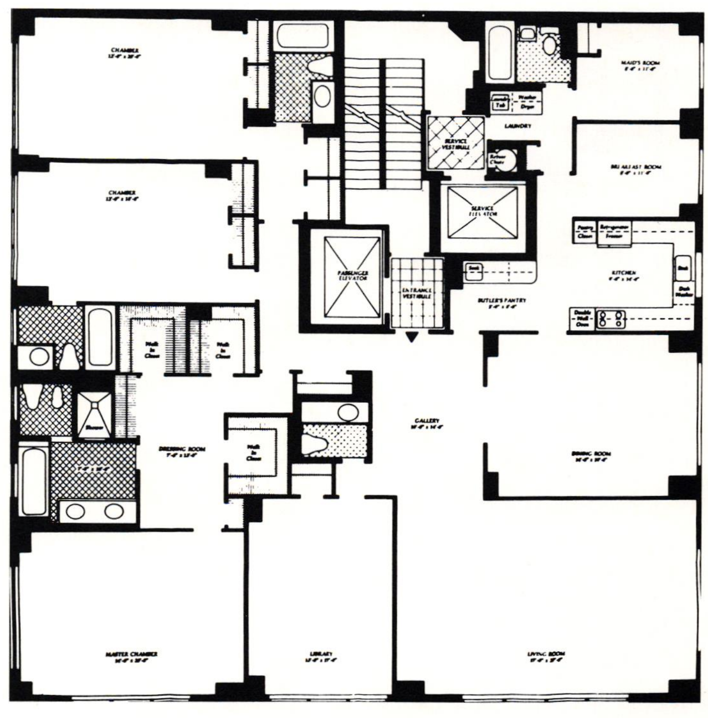


Fig. 68. 733 Park Avenue. Kahn & Jacobs. 1971. Plan of typical floor.

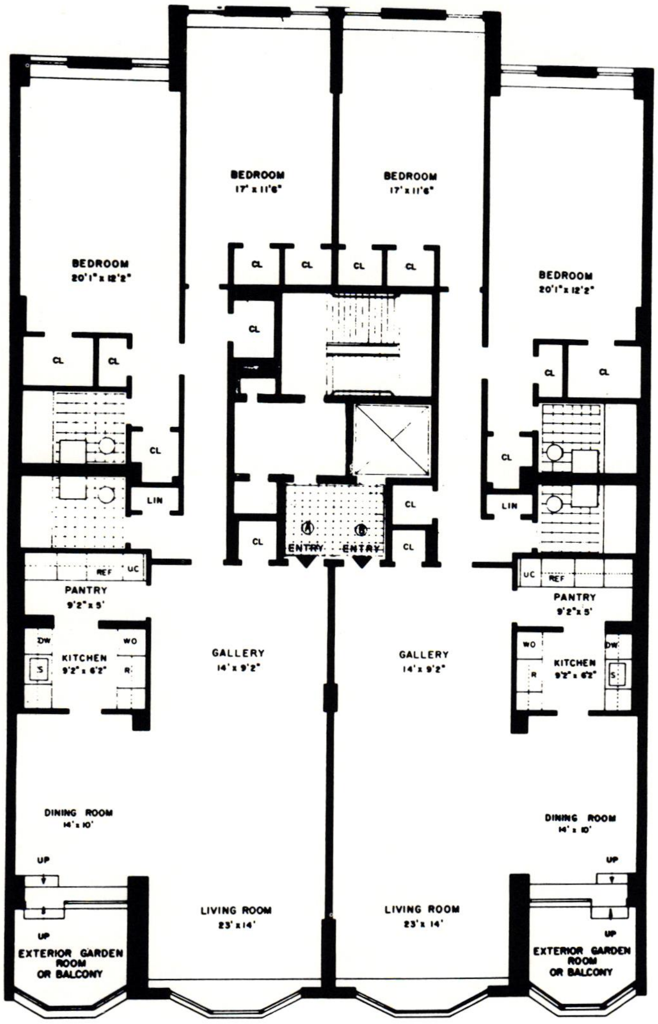


Fig. 69. Butterfield House. Mayer, Whittlesey & Glass. 1972. Plan of typical floor.

those commissioned by Alfred T. White; like such later European examples as the Karl Marx Hof at Vienna by Karl Ehn, they are exemplars of class consciousness—though of course White's is the product of capitalistic do-goodism, and Ehn's of socialist revolution.

The second category of symbolism that was explored in conjunction with the courtyard type seeks to be much more overtly domestic in its character. It takes the single-family house on a freestanding lot as the standard of measurement and combines it with the domesticity of early twentieth-century house design as exemplified in the work of Frank Lloyd Wright, C. F. A. Voysey, Barry Parker, and others. This type, more prevalent after the First World War, is also more frankly democratic and middle-class in its aspirations. It is adequately exemplified in the work of Andrew Thomas and Clarence Stein. While it may recognize the issues of social status and class, it prefers to ignore them and turn its attention to those qualities that can be characterized as "human," friendly," or even "cozy"—terms that currently make many architects wince. The work of Thomas and others should make it perfectly clear that architecture can incorporate these characteristics without sacrifice of compositional discipline or appropriate technological innovation. Careful study of Thomas's work makes Ernst May's accomplishments in Frankfurt, though staggering in the number of individual buildings constructed and of neighborhoods designed, seem as aesthetically dry as dust. In offering a glimpse of a "brave new world," May and other modernists shouted their hopes for a new social state but barely whispered about those components of day-to-day life in a city that must be endured. Not so, of course, should we compare Thomas with Michel De Klerk and his followers in Amsterdam, who were far more accomplished stylists than Thomas and fairly equal to him as urbanists, but whose work has also been ignored until recently.

The third lesson has to do with the design of individual apartments or "dwelling units"—a loathsome and revealing pseudo-scientific term arising out of a production, as opposed to a consumption, mentality. Architects have lost touch with the skills necessary to design well at a small scale. Practice as represented by the office building has focused on the large-scale project and ignored the design of the habitable realm, responsibility for which has been gradually surrendered by the architect to the interior designer (who is not even a decorator, but a professional called in to do what the architect used to do). Because of the agglomeration implicit in the apartment-house type, the design of the individual apartment is even more complex than that of the house. It is true that the modern movement has contributed to the rational design of the apartment unit, though its emphasis on efficient planning and adequate ventilation have too often been viewed as enough to ensure success.

The problem is compounded by the fact that, whereas the American practitioners of the academic styles loosely labeled "Beaux-Arts" saw the housing problem as one in which it was necessary to raise the standards of accommodation for the poor *up* toward those of the rich, the modernists, for reasons no doubt related to their political beliefs, set out to perfect the design of minimal housing on its own terms: *existenz minimum* became not only inevitable, but also, in some peculiar way, desirable. Ultimately, the modernist principles of abstraction and minimalism have served to legitimize the mediocre commercial apartment as luxury housing for a society that accepts that "less is more," provided that the less is air-conditioned, free of cockroaches, and near a Bloomingdale's.[126] Rich man and poor man still live in similar buildings, but the role model has been reversed.

A contrast of two super-luxury apartments of comparable size and in buildings of similar location, 635 Park Avenue (Fig. 67) and 733 Park Avenue (Fig. 68), is instructive (the former was designed by J. E. R. Carpenter in 1912,[127] the latter by Kahn & Jacobs in 1971).[128] The rich spatial characteristics and hierarchical sequences that characterize the earlier plan are in no way echoed in the later, whose thin-walled minimalism has drained it of all energy. A similar lack of detail in the vertical plane will require major intervention on the owner's part in order to render the space comfortably habitable. The same lack of richness is found in comparing two less luxurious apartments, a one-bedroom duplex from the Century (Fig. 4) and a two-bedroom flat from Butterfield House (Fig. 69),[129] built in 1962 at 37 West 12th Street by Mayer, Whittlesey & Glass, and like 733 Park Avenue, an above average modern apartment house.

All of these lessons concern values: in the area of housing, we have become obsessed with the production of shelter and have lost the sense of the house as a place to live. In our fixation upon the dwelling unit and the constructional matrix, we have lost the sense of the collective implicit in the apartment-house type. At the same time, we have lost the ability to design simultaneously at the big and the small scales which constitute the dual nature of the housing problem. We have dealt so long in gross masses that we have lost a sense of detail, especially of detail that does not grow directly out of the construction process. Our palette of materials has been virtually wiped clean, leaving us with a very few crude techniques; we have made a cult of brutality. Perhaps the Modern Movement was a necessary purgation, but as Bruce Alsopp writes, "We can't live in the loo forever."[130] Our wealth and our technology should free us, they should permit us to live better than our ancestors. How strange that they have done the opposite, and that we are the first culture to reject ornament and fine craftsmanship; that ours is the first culture to believe that the subject of architecture is its own process and not the relationship of individuals to each other, to their city, to their history, and their culture.

ACKNOWLEDGMENTS

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N.B. The most useful general sources are listed after the notes.

NOTES

1. Paul Goldberger, "Ruling Against Model High-Rise Disputes Federal Housing Ideas," *New York Times*, October 8, 1978, pp. A–1, A–14.
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3. Sigfried Giedion, *Space, Time and Architecture* (Cambridge, Mass.: Harvard University Press, 1941), pp. 493–95; David H. Pinkney, *Napoleon III and the Rebuilding of Paris* (Princeton: Princeton University Press, 1958), especially pp. 8–9.
4. Andrew Alpern, *Apartments for the Affluent* (New York: McGraw-Hill, 1975), pp. 12–13. Alpern suggests that the Stuyvesant, razed in 1957, may have been a reconstruction of several older houses. In an introduction to Alpern's book, Harmon Goldstone states that Hunt changed affluent New York's attitude toward the apartment-house concept which he "imported from Paris. . . . No doubt the impeccable social credentials of Rutherford Stuyvesant, who financed the venture, were also helpful in making the project a success" (p. 1). See also "The Apartment Houses of New York: With an Example from Berlin in Comparison," *Real Estate Record and Guide* 85 (March 26, 1910): 644–46; R. W. Sexton, *Apartment Houses, Hotels, and Apartment Houses of Today* (New York: Architectural Book Publishing Co., 1929), p. 3; Anthony Jackson, *A Place Called Home* (Cambridge, Mass.: The MIT Press, 1976), p. 86; Charles Lockwood, *Manhattan Moves Uptown* (Boston: Houghton Mifflin, 1976), p. 294.
5. "The Modern Apartment House in Paris," *Architectural Record* 2 (January–March 1893): 324–31. Also see Helene Lipstadt, "Housing the Bourgeoisie: Cesar Daly and the Ideal Home," *Oppositions 8* (Spring 1977): 33–47.
6. Among others are Sarah Gilman Young, *European Modes of Living, or, The Question of the Apartment House* (New York: Putnam, 1881); Hubert, Pirsson & Hoddick, "New York Flats and French Flats," *Architectural Record* 2 (July–September 1892): 55–64; "The Modern Apartment House in Paris," and Fernand Mazade, "How and Where to Live in Paris on $3000 a Year," *Architectural Record* 13—Part I (April 1903): 349–57, Part II (May 1903): 423–32, Part III (June 1903): 548–54; and Jean Schopfer, "City Apartments in Paris," *Architectural Review* (Boston) 10 (July 1903): 91–97. In addition, general articles of the period on the apartment house usually included comparative French examples; see, for example, Irving K. Pond, "Architecture of Apartment Buildings," *Brickbuilder* 7—Part I (June 1898): 116–18, Part II (July 1898): 139–41, Part III (December 1898): 249–52; "Apartment Houses," *American Architect and Building News* 29—Part I (September 27, 1890): 194–95; 30—Part II (November 15, 1890): 97–100; 31—Part III (January 10, 1891): 20–23; Ernest Flagg, "Apartment Houses and Tenements," *Architectural Review* (Boston) 10 (July 1903): 85–93. See also E. D. Lindsay's "French Flats" (New York, 18–), prospectus for his cooperative apartment house.
7. Edith Wharton, *The Age of Innocence* (New York: D. Appleton, 1920), pp. 25–26.
8. "The Duplex Apartment House: A Comparison of the Newest Buildings of this Type," *Architectural Record* 29 (March 1911): 326–34; C. Matlack Price, "A Pioneer in Apartment House Architecture: Memoir on

Philip G. Hubert's Work," *Architectural Record* 36 (July 1914): 74–76.

9. "The Duplex Apartment House," p. 326; Price, p. 75; Alpern, pp. 14–15; Norval White and Elliot Willensky, *AIA Guide to New York City*, rev. ed. (New York: Collier Macmillan, 1978 [hereinafter referred to as *AIA Guide*]), p. 117.
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11. Hubert, Pirsson & Hoddick, p. 62.
12. Alan Burnham, "The New York Architecture of Richard Morris Hunt," *Journal of the Society of Architectural Historians* 11 (May 1952): 9–14; Alpern, p. 11.
13. "Apartment Houses," Part III, p. 21.
14. Andrew Saint, *Richard Norman Shaw* (New Haven: Yale University Press, 1976), p. 195.
15. Saint, p. 197.
16. "The Duplex Apartment House," pp. 326, 328; C. Matlack Price, "The Apartment House Today," *Arts and Decoration* 3 (January 1913): 86–88.
17. "Studio Apartment House at 70 Central Park West, New York City," *Architectural Review* (Boston) 27 (February 1920): 33–34.
18. "Bryant Park Studio Building," *American Architect and Building News* (International Edition) 64 (October 5, 1901): plates; "Bryant Park Studio Building," *American Architect and Building News* 109 (January 19, 1916): plates; *AIA Guide*, p. 136.
19. "Apartment Houses of Duplex and Studio Plan in New York City," *Architects' and Builders' Magazine*, n.s. 10 (March 1909): 222–61; "The Gainsborough Studio," *American Architect and Building News* 100 (November 29, 1911): plates and plans; *AIA Guide*, p. 172.
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21. Alpern, pp. 90–91; *AIA Guide*, p. 199. Pollard also built an earlier (1907) studio building on the same block at 33 West 67th Street; see "Sixty-Seventh Street Atelier Building, New York," *American Architect and Building News* 91 (January 5, 1907): plates and plans; "Some Interesting Studio Apartments in the Atelier Building, 33 W. 67th St., N.Y.," *Architectural Record* 21 (May 1907): 385–88; "Atelier Building," *Architecture* 15 (April 4, 1907): pl. 37; *AIA Guide*, p. 199.
22. Richard Morton, "An Essay on Duplex Apartments in General and Those at 471 Park Avenue in Particular," *Apartment Houses of the Metropolis* (New York: Hesselgren, 1908), pp. 5–6; "Apartment Houses of Duplex and Studio Plan in New York City," pp. 222–23; Charles W. Buckham, "Duplex Co-Operative Apartment Houses," *American Architect* 96 (December 22, 1909): 266–67.
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26. Electus D. Litchfield, "Cooperative Apartments," *Architectural Forum* 53 (September 1930): 313–49; Sexton (1926), pp. 99–100; Alpern, pp. 102–3.
27. Alpern, pp. 106–7.
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30. Ernest Flagg, "The New York Tenement House Evil and Its Cure," *Scribner's Magazine* 16 (July 1894): 108–17.
31. Jackson, pp. 107–9.
32. See "The Works of Ernest Flagg," *Architectural Record* 11 (April 1902): 11–104. Flagg's Mills House No. 1, at 160 Bleecker Street, is a remarkable example of the use of the courtyard, here glazed, to provide light and air to the interior rooms. Though built as a hotel, it was remodeled in the 1970s and is now an apartment building, the Atrium. See "The Works of Ernest Flagg," pp. 42–43; Steven Greenhouse, "Down-At-Heels Hotel Gets a Natty New Identity," *New York Times*, September 28, 1975, section 8, pp. 1, 12; *AIA Guide*, pp. 69, 563.
33. "The Works of Ernest Flagg," pp. 38–39; Ernest Flagg, "Fireproof Tenements and the Building Law," letter to the editor, *New York Architect* 5 (February 1911): 13–14.
34. Jackson, pp. 107–8.
35. "What A Tenant Gets For $10,000," *Real Estate Record and Guide* 74 (December 6, 1909): 807–8; "Alwyn Court," *Architects' and Builders' Magazine*, n.s. 10 (June 1910): 336–40; Alpern, pp. 54–55; *AIA Guide*, p. 173.
36. "No. 998 Fifth Avenue," *Architecture and Building* 42 (February 1912): 91–102; "998 Fifth Avenue," *The Architect* 6 (March 1912): 218–22, plus plates; Alpern, pp. 74–75; *AIA Guide*, p. 234.
37. Elizabeth Hawes, "The Annals of Apartments: Courtyards," *The New York Times*, September 12, 1976, section 8, pp. 1, 6; Alpern, pp. 82–83.
38. "Building For Health: Sensible and Hygenic House Plans Are One Significant Result of the Present Campaigning Against Disease," *The Craftsman* 19 (March 1910): 552–61; Henry Atterbury Smith, "Open-Stair Apartments: A New Development in City Architecture," *The Craftsman* 20 (July 1911): 364–71; "Prize Winning Houses," *Real Estate Record and Guide* 89 (February 24, 1912): 386–87; H. A. Smith, "Some Facts and Figures About Some Successful Housing Schemes," *Architecture* 37 (March 1918): 72–74; *AIA Guide*, p. 245.
39. Alfred T. White, *Improved Dwellings for the Laboring*

Classes (New York: Improved Model Dwelling Co., 1879); Louis H. Pink, *The New Day in Housing* (New York: John Day, 1928), p. 99; Edith Elmer Wood, *Recent Trends in American Housing* (New York: Macmillan, 1931), p. 11; Jackson, p. 55; Charles Lockwood, "Quintessential Housing of the Past: Tenements Built for the Poor," *New York Times*, July 23, 1978, section 8, pp. 1, 6; *AIA Guide*, p. 397.
40. Jackson, p. 41.
41. Alfred T. White, *The Riverside Buildings of the Improved Model Dwelling Co.* (New York: Improved Model Dwellings Co., 1890); *AIA Guide*, p. 376.
42. Jackson, p. 55. Ware was the winner of both the 1879 and 1896 competitions.
43. "Apartment Houses," *American Architect and Building News* 31—Part IV (January 17, 1891): 37–39.
44. "The Dakota Apartment House," *American Architect*, 20 (July 24, 1886): plate; "Apartment Houses," Part IV, pp. 38–39; Alpern, pp. 20–21; *AIA Guide*, pp. 200–201.
45. Just as Alfred T. White and his architects, William Field & Sons, felt the need to supply an appropriate neighborhood context to the Tower Buildings and therefore introduced the mews houses, so Edward Severin Clark, the developer of the Dakota, in order to provide it with an appropriate setting commissioned Hardenbergh to design a continuous row of town houses along the north side of West 73rd Street between Central Park West and Columbus Avenue. Many of the Dakota's town houses have given way to apartments, but the Tower Mews, now called Warren Place, remain splendidly intact.
46. "The Central Park Apartments," *Building* 2 (December 1883): 32, plate; "The Duplex Apartment House," p. 326; Price, "A Pioneer in Apartment House Architecture," p. 75; "Street That Has Maintained Its Character. Central Park South, Where Some of the First Apartment Houses Were Erected, Still Retains Its Hold As a Residential Center," *Real Estate Record and Guide* 96 (August 7, 1915): 225; Alpern, pp. 16–17.
47. Hubert, Pirsson & Hoddick, pp. 55–64.
48. Hubert, Pirsson & Hoddick, p. 58.
49. Hubert, Pirsson & Hoddick, p. 63.
50. Peter Eisenman, "From Golden Lane to Robin Hood Gardens; or, If You Follow the Yellow Brick Road, It May Not Lead to Golders Green," *Oppositions 1* (September 1973): 27–56.
51. Charles Jencks, *The Language of Post-Modern Architecture* (New York: Rizzoli, 1977), pp. 21–25.
52. "New York Apartment Houses," *Architectural Record* 11 (July 1901): 476–508; Charles H. Israels, "The Metropolitan Apartment House and Hotel," *Real Estate Record and Guide* 73 (June 11, 1904): 1464–73; Alpern, pp. 26–27; *AIA Guide*, p. 272.
53. "The Apthorp," *American Architect and Building News* 91 (January 5, 1907): plates; "What A Tenant Gets for $6000 A Year," *Real Estate Record and Guide* 82 (July 4, 1908): 20–21; "The Apthorp," *Architects' and Builders' Magazine*, n.s. 9 (September 1908): 531–33; "Apthorp," *American Architect* 98 (January 19, 1919): plates; Hawes, pp. 1, 4; Alpern, pp. 52–53; *AIA Guide*, pp. 192–93.
54. "Astor Court," *Architecture and Building* 49 (March 1916): pls. 26–29; "Astor Court Apartments," *Architecture* 34 (September 1916): pls. 134–45; "The Latest High Class Apartment House" (advertisement), *Real Estate Record and Guide* 98 (September 16, 1916): 395; "The Development of the Apartment House," *American Architect* 110 (November 29, 1916): 331–36; "A Half Century of Progress in the Development of Distinctive Types of Buildings in the United States," *American Architect* 129 (January 5, 1926): 73–95; Hawes, pp. 1, 4.
55. "Astor Concourse Apartments," *Architecture and Building* 58 (October 1926): 117, pls. 199–200; "New York's Prize Winning Apartment Houses for 1927," *Architecture* 57 (May 1928): 253–56.
56. "The Belnord To Have Interesting Features," *Real Estate Record and Guide* 132 (November 7, 1908): 873–75; "The Belnord," *Real Estate Record and Guide* 82 (December 19, 1908): 1215; "Apartment Houses of Duplex and Studio Plan," pp. 248–49; "The Belnord Apartment House," *Architects' and Builders' Magazine* 42 (November 1909): 111–13; "Three Typical Buildings in Manhattan and How They Might Be Rebuilt," *Real Estate Record and Guide* 97 (April 29, 1916): 651.
57. "270 Park Avenue: The Largest of Apartment Houses," *Architecture* 37 (May 1918): 143, plates; Werner Hegeman and Elbert Peets, *Civic Art* (New York: Architecture Book Publishing Co., 1922), pp. 194–95.
58. "Apartment House, 277 Park Avenue," *Architecture and Building* 57 (January 1925): 4, 10, pls. 22–24.
59. "An Apartment House, 1185 Park Avenue, New York City," *Architecture and Building* 64 (January 1932): 23–24, pl. 31; Hawes, pp. 1, 4; Alpern, pp. 116–17.
60. "London Terrace Apartments, New York City," *Architecture and Building* 62 (July 1930): 194, pls. 205–8; "Recent Apartment Houses in New York," *Architectural Forum* 53 (September 1930): 283–84; Alpern, pp. 124–25; *AIA Guide*, p. 109.
61. "Knickerbocker Village Housing Project," *Architectural Record* 75 (February 1934): 122–23; "Budget of Cost, Financing, and Operating Knickerbocker Village," *Architectural Forum* 61 (December 1934): 224–26; Albert Mayer, "A Critique of Knickerbocker Village," *Architecture* 71 (January 1935): 5–10; *AIA Guide*, p. 37.
62. Brian Danforth and Donald Sullivan, *Bronx Art Deco Architecture: An Exposition* (New York: Hunter College, 1976), pp. 14–19; Judy Klemesrud, "Money Coming to Restore A Lived in Art Form in the Bronx," *New York Times*, August 20, 1976, p. B-1; *AIA Guide*, p. 333.
63. Danforth, p. 15.
64. Danforth, pp. 17–18; quoted from rental brochure.
65. "Apartment Houses at Bay Ridge, Brooklyn, N.Y.," *Architectural Forum* 66 (May 1937): 414–15; *AIA Guide*, p. 479.
66. "Celtic Park Apartments," *Architectural Record* 71 (March 1932): 167–68.
67. Pink, pp. 154–56. A good statement of Thomas's philosophy is provided in Andrew J. Thomas, *Industrial Housing* (Bayonne, N.J.: Bayonne Housing Corp., 1925), passim.
68. "American Architecture Today," *Architectural Record* 58 (April–June 1928): 181–204.
69. John Taylor Boyd, Jr., "Garden Apartments in Cities," *Architectural Record* 48—Part I (July 1920): 53–74, Part II (August 1920): 121–35; Frank Chouteau Brown, "Tendencies in Apartment House Design: Part XI, The Unit Apartment Building and Its Grouping," *Architectural Record* 51 (May 1922): 435–46; A. E. MacDougall, "New Features in Apartment House Building," *Architectural Forum* 43

(September 1925): 153–60.

70. Not only were there historical precedents for the garden apartment, but there were also contemporary examples in Europe that influenced Thomas and the officers of the Queensboro Corporation as well, who were particularly impressed by their use in the new suburbs of the German cities, especially the Charlottenburg section of Berlin. See Boyd, "Garden Apartments," Part II, p. 122. Boyd points out that the inspiration for the details was also found elsewhere: "The idea of the court, of course, is as old as architecture. The 'open stair' in apartments is a London device, and was found reproduced in Brooklyn years ago. Mr. Thomas developed the idea of using Loggias, though this practice is many years old in Chicago. Planning apartments two rooms deep had long been a characteristic of apartments for the rich, though Mr. Thomas was one of the first to employ it in wage-earner's housing. Even that arrangement of plan, of having separate entrances for each apartment and eliminating both public and private corridors—which Mr. Thomas has so well worked out in apartments—is old in college dormitories, going back even to the cloisters of Oxford, though naturally on account of the greater number of rooms and kitchens, it is a much more difficult matter to introduce into apartments." What, Boyd exclaims, are "American university dormitories arranged around a yard or campus . . . but garden apartments!" (pp. 122–23). Also see "The Apartment Houses of New York: With An Example From Berlin in Comparison," pp. 645–46. An interesting anticipation of the courtyard type at the garden apartment scale is the proposal for "patio tenements" by Mary N. Gannon and Alice J. Hands in 1898. See James Ford, *Slums and Housing* (Cambridge, Mass.: Harvard University Press, 1936), p. 681, 885, figs. 118b–c, pl. 7G.
71. Boyd, "Garden Apartments," Part II, p. 131.
72. "Cambridge Court, Jackson Heights, Queens, Long Island," *Architecture* 48 (September 1923): 309–10; "The Garden Homes at Jackson Heights, Long Island," *Architecture and Building* 56 (June 1924): 55–56, pls. 123–24. Another project by Wells at Jackson Heights is discussed and illustrated in C. Stanley Taylor's "Recent Progress in Developing Co-Operative Apartment Buildings," *Architectural Forum* 37 (November 1922): 219–24. A contemporaneous garden apartment which partially but unsuccessfully broke the perimeter wall by making light courts was James Meehan's "Theodore Roosevelt Apartment House, Grand Concourse and 171st Street, New York City," *Architecture and Building* 55 (February 1923): pls. 22–24. See also, "Apartment Building at Jackson Heights," *Real Estate Record and Guide* 100 (July 7, 1917): 6 11–12, which discusses the garden-apartment idea and illustrates an apartment house by an unidentified architect.
73. Boyd, "Garden Apartments," Part II, p. 134.
74. "New Garden Apartments, Queens County, New York City: A Group of Buildings Now Under Construction Showing Economy of Plan and New Principles of Land Development," *Architectural Forum* 30 (June 1919): 187–91; "Garden Apartment Buildings for the Quensboro Corp., Jackson Heights, Queens, New York," *Architecture* 62 (September 1920): pls. 128–30; "Revolutionizing the Apartment House," *House Beautiful* 49 (March 1921): 186–87; Clarence S. Stein, "Amsterdam—Old and New: Queensboro Heights, N.Y., Jackson Heights, N.Y., Andrew J. Thomas, architect," *AIA Journal* 10 (1922): 310–28. Thomas's study for an "improved development of five-story tenements" for a New York City block is similar to Operation No. 8; see Boyd, "Garden Apartments," Part I, diagram G. See also "Designs for Model Tenement," *Architecture* 41 (April 1920): 117.
75. "The Button-Control Elevator in a New Type of Moderate Price Apartment Building at Jackson Heights, New York City," *Architectural Record* 51 (June 1922): 486–90; "The Chateau Apartments, Jackson Heights, N.Y.," *Architecture and Building* 55 (February 1923), pls. 22–26; "The Chateau Apartments," *Architecture* 48 (September 1923): 310–14; "The Garden Homes at Jackson Heights," pl. 121; Sexton (1926), pp. 87–88, pls. 10, 18, 31.
76. "The Towers, Jackson Heights, L.I.," *The Architect* 2 (July 1924): pls. 87–88, plans; "The Garden Homes at Jackson Heights," pp. 56–57, pl. 120; Sexton (1926), pp. 201–2, pls. 36, 39, 45.
77. Sexton (1926), pp. 203–4.
78. Sexton (1926), pp. 205–6.
79. John Taylor Boyd, Jr., "A Departure in Housing Finance: The Metropolitan Life to Build Four Blocks of Apartments in New York City," *Architectural Record* 52 (August 1922): 133–42; "The Metropolitan Houses in Long Island City, N.Y.," *Architecture and Building* 56 (May 1924): 42–44, pls. 99–104, plan; Frank Chouteau Brown, "The Low-Rental Apartment—An Economic Fallacy," *Architectural Record* 55 (May 1924): 405–15. For a comparison by Henry Wright of Thomas's Metropolitan Life and Paul Lawrence Dunbar Houses with Clarence Stein's Monroe Court at Sunnyside Gardens, see Wright's "The Modern Apartment House," *Architectural Record* 65 (March 1929): 213–88. Wright was Stein's partner and a frequent contributor to *Architecture* and *Architectural Record,* particularly the latter's March apartment issues. He was a trenchant critic who had a profound influence on a generation of critics including Charles Abrams and Charles Ascher; see Charles Ascher, letter to the editor, *New York Times,* October 20, 1977, p. 24.
80. "Paul Lawrence Dunbar Garden Apartment, New York City," *Architectural Record* 63 (March 1928): 272–75; Sexton (1929), pp. 90–94; John Taylor Boyd, Jr., "Opportunity in the Garden Apartment," *Architectural Forum* 53 (September 1930): 353–64. See also "New York's Prize Winning Apartment Houses of 1927," p. 255. Another prize-winning apartment house designed by Thomas and built by Rockefeller in Manhattan, although not for socially or economically disadvantaged tenantry, was 115 East 67th Street, 116 East 68th Street; see "Prize Winning Apartments in New York," *Architectural Record* 71 (March 1932): 199–208. For other Manhattan apartment houses by Thomas see "Apartment House at Avenue A (York Avenue) and 65th St., New York City," in Sexton (1926), pp. 87–88; "49 East 61st Street, New York City," in Sexton (1926), pp. 89–90.
81. *Model City and Suburban Homes* (New York: City and Suburban Homes Co., 1905); Boyd, "Garden Apartments," Part I, pp. 59–65.
82. Brown, "Tendencies in Apartment House Design: Part XI," pp. 442–46; "Hayes Court, Jackson Heights, Long Island," *Architecture* 48 (September 1923): 305; "Hayes Court Apartments, Jackson Heights, New York," *The Architect* 1 (October 1923): pl. 27. Thomas built an apartment house with a similar plan in the

Bronx; see "Apartment House, Concourse and 183rd Street, Bronx, New York," *Architectural Forum* 33 (September 1920): pl. 46.

83. Sexton (1929), p. 103; Boyd, "Opportunity in the Garden Apartment," p. 359.
84. *Thomas Garden Apartments* (New York: Thomas Garden Apartments Inc., n.d.); "Thomas Garden Apartments, New York City," *Architecture and Building* 59 (April 1927): 111–12, pls. 76–77; "Garden Apartment Building, East 158th Street, New York City," *Architectural Record* 63 (March 1928): 273; Boyd, "Opportunity in the Garden Apartment," pp. 353–54.
85. Henry Wright, "The Place of the Apartment House in the Modern Community," *Architectural Record* 68 (March 1930): 207–60; Wright, "The Modern Apartment House: A Review and Forecast," *Architectural Record* 69 (March 1931): 187–224; A. T. North, "Cooperative Plan, One Answer to the Low Cost Housing Problem: The Grand Street Apartments, New York City," *Architectural Forum* 54 (February 1931): 241–46; Talbot Hamlin, "The Prize Winning Buildings of 1931," *Architectural Record* 71 (January 1932): 10–36; Wood, pp. 183–84; *AIA Guide*, pp. 56–57.
86. *New Day in Housing*, p. 183. See also Sexton (1926), pp. 106–7; Wood, pp. 180–83; Calvin Trillin, "U.S. Journal. The Bronx. The Coops," *New Yorker*, 53 (August 1, 1977): 49–54.
87. Sexton (1929), pp. 162–63.
88. Boyd, "Garden Apartments," Part I, pp. 69–74.
89. "Garden Apartments," Part I, p. 70.
90. I. Rosenfield, "Phipps Garden Apartments, Long Island City, New York," *Architectural Forum* 53 (September 1930): 353–60; "Phipps Garden Apartments," *Architectural Record* 71 (March 1932): 201–7; Stein, *New Towns in America*, rev. ed. (New York: Reinhold, 1957), pp. 87–92, 109–13; *AIA Guide*, p. 507.
91. *New Day in Housing*, p. 86.
92. Stein, *New Towns in America*, p. 89. Stein's rather stodgy nature is evident in his statement that "the vari-colored brick was attractive, but my puritanical sense of economy has since led me back to our local common Hudson brick."
93. Stein, *New Towns in America*, pp. 89–90.
94. Mumford shares this view. For forty years or more he has argued against the "skyscraper apartment" which he characterized as a "naive modernism that was new way back in 1880." His analysis finds this type of dwelling accommodation wanting from the point of view of family life as well as from the point of view of developmental and maintenance costs. The tall apartment house not only requires great capital investment at the outset but also considerable ongoing maintenance costs as a result of the considerable amount of internal public space (corridors, elevators, fire stairs) and the amount of sophisticated mechanical equipment necessary to run the building. See "East End Urbanity" (Ch. 2, pp. 26–34) and "The Marseille 'Folly' " (Ch. 6, pp. 68–81) Mumford, *The Highway and the City* (New York: Harcourt, Brace & World, 1963).
95. Clarence S. Stein, "Hillside Homes," *American Architect* 148 (February 1936): 17–33; Stein, *New Towns in America*, pp. 93–108; *AIA Guide*, p. 359.
96. Stein, *New Towns in America*, p. 93.
97. Talbot F. Hamlin, "New York Housing, Harlem River Homes and Williamsburg Houses," *Pencil Points* 19 (May 1938): 281–92; Paul Goldberger, "Design Notebook," *New York Times*, May 12, 1977, p. C-12; *AIA Guide*, p. 285.
98. Lewis Mumford, "The Sky Line. The New Order," *New Yorker* 41 (February 26, 1938): 42–44.
99. Hamlin, "New York Housing," passim; "Williamsburg House, Brooklyn," *Architectural Forum* 68 (May 1938): 356–59; Mumford, "The Sky Line," passim; *AIA Guide*, p. 467.
100. "The most obvious thing in the plan illustration of Williamsburg is the placing of the buildings on an angle with the street layout. Strangely enough, this fact, so important in the plan, in the actual group is not apparent except in a few places; so great is the number of buildings, and so large the area they cover, that the impression, as one crosses the two streets that divide the whole into three major blocks, is merely a fleeting wonder as to why the *streets* were laid out crooked. . . . The reasons for this change of angle are obscure. Good orientation is an obvious rationalization, for following the street pattern would have given as much actual sun in the rooms; and the present layout converts the courts into perfect channels for our most vicious northwest winds, and blocks off the southwest winds that are so important in summer" (New York Housing," p. 286).
101. "San Remo Apartment House, 74th Street and Central Park West, New York City," *Architecture and Building* 62 (October 1930): 283, pls. 163–64; *AIA Guide*, p. 201.
102. "River House, New York," *Arts and Decoration* 36 (January 1932): 30–32; "River House, A Cooperative Apartment," *Architectural Forum* 56 (May 1932): 431–40; "River House," *Architecture and Building* 64 (March 1932): pls. 9–10; Alpern, pp. 126–27; *AIA Guide*, p. 160.
103. Alpern, pp. 128–29; *AIA Guide*, p. 200.
104. "Century Apartments," *Architectural Record* 81 (March 1932): pp. 190–91; Alpern, pp. 130–31; *AIA Guide*, p. 197.
105. "240 Central Park South," *Architectural Forum* 74 (May 1941): 311–19; Goldberger, "The City's Top Ten Apartment Buildings," *New York Times*, October 6, 1977, Section C, pp. 1–2; *AIA Guide*, p. 172. The Rockefeller Apartments, built in 1936 by Harrison and Fonilhoux at 17 West 54th Street, are like 240 Central Park South, in that they are admirable but a trivialization of the courtyard idea. See "The Rockefeller Apartments," *Architectural Forum* 66 (January 1937): pp. 4–12; *AIA Guide*, p. 167.
106. "Manhattan House Replaces Old Car Barns," *Architectural Record* 105 (May 1949): 106–7; "Manhattan House, a Full Block of Swank New York Apartments," *Architectural Forum* 97 (July 1952): 140–51; *AIA Guide*, pp. 246–47.
107. "Washington Square Village, New York," *Architecture d'Aujourd'hui* 89 (April–May 1960): 296–98, *AIA Guide*, p. 70.
108. "Variety and Open Space for New York," *Architectural Record* 124 (July 1958): 175; "Cast-in-place Technique Restudied," *Progressive Architecture* 41 (October 1960): 158–75; Walter McQuade, "Pei's Apartments Round the Corner," *Architectural Forum* 115 (August 1961): 106–14; James Marston Fitch, "Housing in New York, Washington, Chicago and Philadelphia," *Architectural Review* 134 (September 1963): 192–200; Alpern, pp. 140–41; *AIA*

Guide, p. 127.
109. Le Corbusier, *The City of Tomorrow and its Planning*, trans. Frederick Etchells (Cambridge, Mass.: The MIT Press, 1971), p. x.
110. "The Glass House for America," *Architectural Record* 117 (January 1930): 1–4.
111. Wright, "The Place of the Apartment House," pp. 211–12; Edward Teitalman and Richard Longstreth, *Architecture in Philadelphia: A Guide* (Cambridge, Mass.: The MIT Press, 1974), p. 229.
112. Landmarks Commission of Kansas City, *Kansas City: A Place In Time* (Kansas City, Mo.: Landmarks Commission, 1977), p. 249.
113. "Some Recent Apartment Buildings," p. 262.
114. "Stuyvesant Town, Metropolitan's Newest Housing Giant is Nearing Completion Despite Material and Labor Shortages," *Architectural Forum* 86 (April 1947): 74–75; "Stuyvesant Town, Rebuilding A Blighted City Area," *Engineering News Record* 140 (February 5, 1948): 73–96; "They Live in Stuyvesant Town," *House and Garden* 94 (September 1948): pp. 118–21; *AIA Guide*, p. 124.
115. *AIA Guide*, p. 36.
116. Stephen A. Kurtz, "Toward an Urban Vernacular," *Progressive Architecture* 51 (July 1970): pp. 100–105; *AIA Guide*, p. 109.
117. Denise Scott Brown and Robert Venturi, "Co-Op City: Learning to Like It," *Progressive Architecture 51* (February 1970): 64–73; *AIA Guide*, p. 358.
118. Douglas Haskell, "Ten Buildings that Climax An Era," *Fortune* 74 (December 1966): 156–62; "A.I.A. Honors 20 Buildings in National Awards Program," *Architectural Record* 141 (June 1967): 50–55; Alpern, pp. 150–51; *AIA Guide*, p. 70.
119. "The Evolving Urban Architecture of Davis, Brody and Associates," *Architectural Record* 152 (August 1972): 97–106; Robert A. M. Stern, *New Directions in American Archtiecture*, rev. ed., (New York: Braziller, 1977), pp. 94–97, 133; *AIA Guide*, p. 284.
120. Arthur Stanley George Butler, with the collaboration of George Stewart and Christopher Hussey, *The Architecture of Sir Edwin Lutyens*, vol. 3, (London: Country Life; New York: Scribner's, 1950), p. 34, pl. 61, figs. 86–88.
121. "Breakthrough on the River," *Progressive Architecture* 48 (February 1967): 146–49; "The Evolving Urban Architecture of Davis, Brody and Associates," pp. 98–99; Stern, pp. 40–41; *AIA Guide*, p. 126.
122. "Urban Housing: A Comprehensive Approach to Quality. Building Types Study 392," *Architectural Record* 145 (January 1969): 97–118; "The Evolving Urban Architecture of Davis, Brody and Associates," pp. 97–98; Stern, p. 94; *AIA Guide*, p. 125.
123. "Urban Housing," pp. 104–5; *AIA Guide*, p. 456.
124. "Urban Housing," pp. 108–9; Stern, p. 102; *AIA Guide*, pp. 54–56.
125. Lawrence Halprin, "New York, New York: A Study Of the Quality, Character, and Meaning of Open Spaces in Urban Design," A proposal for the City of New York, March 1968.
126. See "In Luxury Sinking," editorial, *New York Times*, January 29, 1977, p. 24; Dee Wedemeyer, "Luxury Languishes in Era of Cost Cutting: Now $2000-a-Month Tenants, Too, Get Low Ceilings, Small Kitchens and Plasterboard," *New York Times*, December 17, 1978, section 8, pp. 1–2; Christopher S. Gray, "Latest in Luxury," letter to the editor, *New York Times*, January 14, 1979, section 8, p. 2.
127. "Apartment Houses in New York City by J.E.R. Carpenter, Architect," *American Architect* 121 (June 21, 1922): 514–16; Alpern, pp. 84–85.
128. Alpern, pp. 156–57.
129. "Butterfield House: New York Co-Op Packs Them In With Grace," *Architectural Forum* 118 (April 1963): 86–89; Christopher Gray, "Above It All: High Living In Manhattan Through the Decades," *Gentlemen's quarterly* 47 (November 1978): 132–35, 136–37; *AIA Guide*, pp. 76–77.
130. Bruce Allsopp, *Toward A Humane Architecture* (London: Muller, 1974), p. 81.

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Fig. 70. Gainsborough Studio. Charles Buckham. 1908. View.

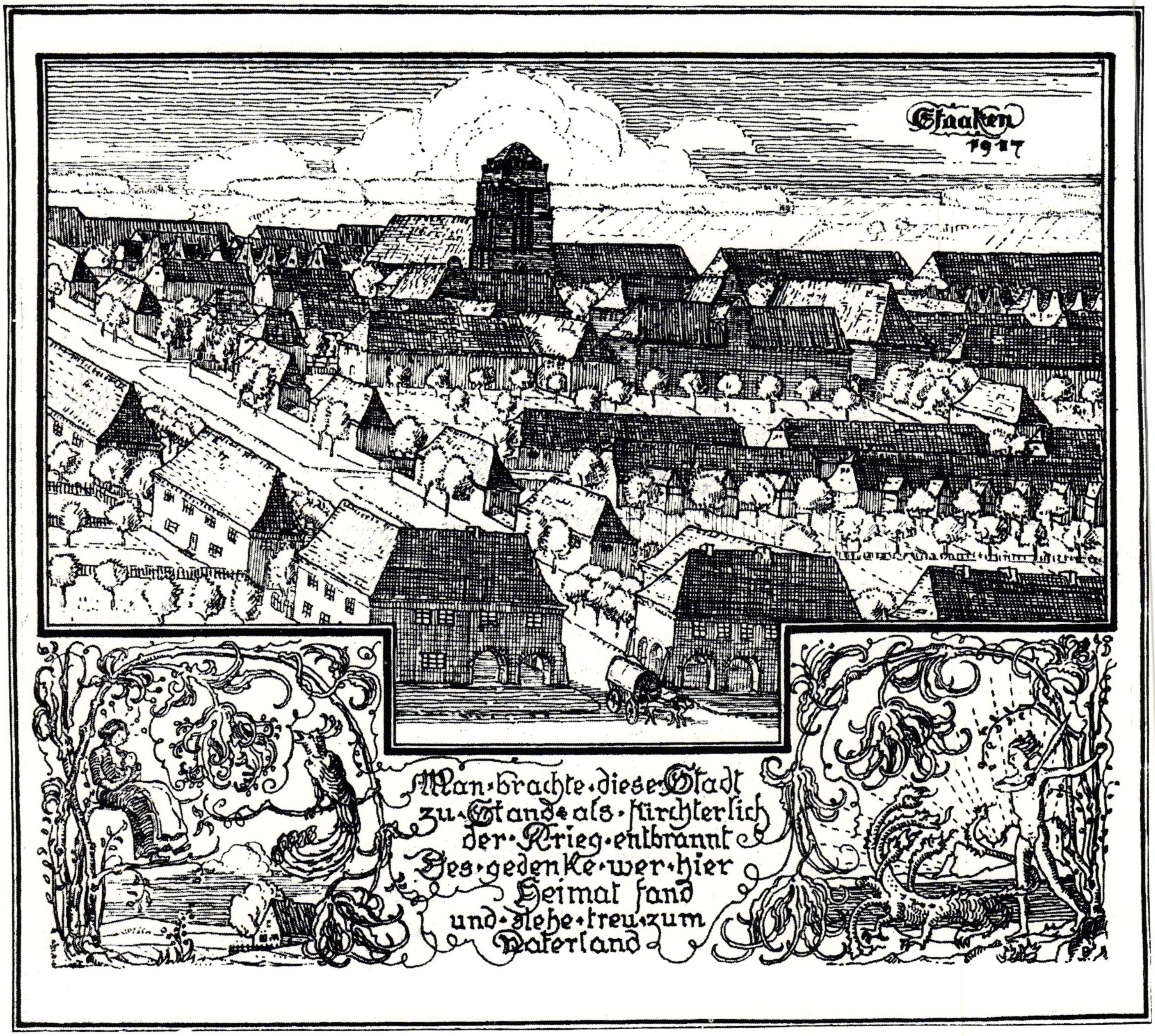

Fig. 1. Commemorative graphic representation of the Gartenstadt Staaken, Berlin, 1917. This garden settlement, conceived as a model community by the Ministry of the Interior and built during World War I, demonstrates that the concept of garden settlements for workers was already well developed before the demise of the imperial government. It also foretells the intimate linkage between social politics, social propaganda, and workers' housing during the 1920s. Roughly translated, the text reads:

This city was built at a time
When a terrible war was in progress.
This remember, those whose home it has become,
And stand true to the Fatherland.

WORKERS' HOUSING AS SOCIAL POLITICS

Ronald Wiedenhoeft

AMONG the problems of architecture, none has been so persistent or so difficult to solve as the problem of low-cost housing for workers. At least as far back as the beginning of the industrial age, there has been an acute problem of unhealthy, crowded, and oppressive accommodations for the working class in cities. Many countries have tried to attack this problem with a great variety of means, and the search for suitable building and planning schemes continues to the present day. Since Germany during the 1920s drew great international attention for its innovative and apparently successful approach to the problem, it is worth reconsidering the elements of that success. One of the conclusions deriving from such a consideration is that the achievement of workers' housing in Germany depended directly upon a concerted program of social politics.

A dire shortage of dwelling units, severe problems of sanitation and crowding, and generally miserable living conditions for the mass of people in cities was the condition that prevailed in Germany at the end of the First World War. This same description would fit equally as well for the conditions prevailing when the nation was unified under Prussia in 1871. The intervening forty-seven years between 1871 and 1918 saw a great amount of activity among social reformers at all levels of society, attempting to find means and promote legislation that could somehow improve the lot of the lowest income levels of society.

Dire warnings concerning the nation's morale and mortality—and a retrogressive development in population growth —caused grave concern. But it was not until conditions became desperately grave during the First World War that laws to protect tenants from excessive exploitation and to encourage homesteading were finally passed. At last, on March 28, 1918, shortly before the total collapse of the old order, the efforts of those struggling for housing reform came to fruition with the passage of the Prussian Housing Law.

Great hope and enthusiasm for a new social order were aroused by the socialist revolution of November 1918. The end of the disastrous war, collapse of the old order, assumption of leadership by Social Democrat Friedrich Ebert, and the language of social idealism incorporated in the Weimar constitution all gave rise to great expectations that the millenium was approaching. Architects were in the vanguard of those welcoming the spirit of a new era; and it was in the heady atmosphere of drastic political change that Bruno Taut composed his book on "dissolution of cities," advocating destruction of the oppressive urban environments and calling his revolutionary proposals a "parable on the third millenium."[1]

Referring to exploitative rental barracks of the cities, Taut wrote, "Let them collapse, those constructed meannesses," and showed the ideal alternative to be small garden settlements blossoming across the landscape (Figs. 2 and 3). This was by no means intended to be as utopian as his illustrations suggested, but was only a moderately idealized extrapolation of provisions for housing reform then in the process of being enacted through legislative and administrative steps of the newly formed Prussian Ministry of Social Welfare. Taut himself was to have the opportunity of putting these ideas to the test of reality as one of the principal agents of Berlin's public housing program for its working classes during the 1920s.

Fig. 2. Bruno Taut put an artist's curse on the overcrowded, unsanitary, antisocial living conditions in the speculative rental barracks of the big cities such as Berlin. "Let them collapse, those constructed meannesses," he said, and complained that houses of stone (meaning the rental barracks) were turning people's hearts to stone. The ideal alternative he envisioned consisted of various kinds of garden settlements for workers dispersed in the landscape. "Now our land can blossom forth." Auflosung, *plate 1.*

Architects and government agencies alike envisioned low-rise, low-density garden settlements as ideal means to achieve relief from the severe housing crisis. If the cities were not to be dissolved, at least their dense, unhealthy, concentrated fabric was to be loosened through decentralization. Such settlements on the periphery or in the vicinity of built-up urban areas would offer a sense of community, close association with nature in adjacent fields and forests, and healthful activity and subsistence through gardening and small-animal husbandry. Yet there would always be public transportation to the urban core and jobs. Such were the concrete proposals of the theorists, including Bruno Taut in his books, *Die Stadtkrone* (The City Crown) of 1919,[2] and *Auflosung der Stadte* (Dissolution of Cities) of 1920. By 1920 Taut had also realized his own prototype in the Siedlung Falkenberg near Berlin.

His vision of what ideal human settlements would someday become was formulated by the heritage of social

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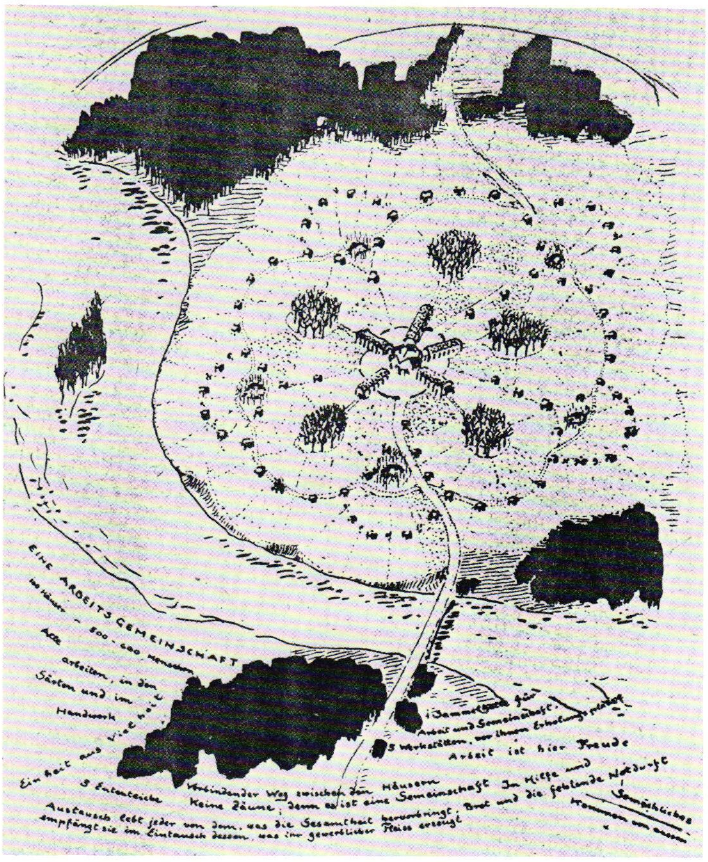

Fig. 3. The kind of ideal workers' commune envisioned by Taut in the immediate postwar year was to serve as a prototype for the low-density workers' settlements built in Berlin during the 1920s. Here it was described as follows: "100 houses, 500 to 600 people. All work in gardens as well as in various crafts. Unity in multiplicity. A communal hall for work and community activities. Five workshops with connected areas for recreation. Work here is pleasure. Paths link the houses. Five duckponds, no fences, since this is a cooperative community. In mutual help and cooperation, everyone lives from the total production of the group. Bread and other missing necessities are obtained through exchange for the products of their diligence." Auflosung, *plate 2.*

thought that had developed during the previous half century. Looking ahead to beyond the year 2000, he wrote:

> The huge spiders—the cities—are only remembrances of a past era, as are the states. City and State, one as much as the other, are dead. The concept of Homeland *(Heimat)* now replaces Fatherland; and everyone can find the Homeland everywhere, if he works. The distinctions of city and country, war and peace no longer exist. One no longer recognizes such abstractions, nor gives them power over life, work, happiness, and health. Common interests develop from a natural sense of communality, and these lead to the community's making its own arrangements for shelter, exchange, education, and further development.[3]

Self-help, communality, close association with nature, and other elements characteristic of social utopias were all present in his scheme. Yet, ironically, all of these elements that so characterized social progress and housing reform in the Weimar Republic were already present in nascent form in the old regime. One instance is an organization formed in Berlin in 1912 to promote the development of such low-rise, low-density satellite communities. This group, the Greater Berlin Association for Small Housing (Gross-Berliner Verein fur Kleinwohnungswesen), was formed on the initiative of the Prussian government and included high-ranking representatives from state and city government, from financial institutions, industry, and the building professions. Representatives of the latter groups in the original organization included Ernst von Borsig and Carl Friedrich von Siemens, from two of the largest manufacturing firms in the city, Borsig and Siemens, as well as the influential architect-planners, Joseph Stubben and Theodor Goecke.[4] Bruno Taut also later became a member.

The Association for Small Housing was only one example of a great variety of still relatively uncoordinated efforts of various housing-reform groups to advance the cause of outlying garden settlements for workers during the decades of the late nineteenth and early twentieth centuries. A major goal was the passage of appropriate legislation; and, after some thirty years of effort, this goal was finally realized in the Prussian Housing Law of March 1918 and similar provisions incorporated into the Weimar constitution of August 1919. One of the most important provisions—giving government the power to circumvent speculation and control land development for low-income housing—was thus finally anchored in law. It was an accomplishment of enormous significance. Without it, the exemplary German settlements of the 1920s would not have been possible.

Berlin serves as an excellent example of how problems of housing and environmental quality were solved in the Weimar Republic through a program of strong social politics, including control of the land. A long period of preparation came to fruition in 1920, when Greater Berlin finally was incorporated by the merger of some ninety-three separate jurisdictions, thus expanding the total area controlled by the city to thirteen times its previous size and bringing the total population to over four million. Of the new area incorporated, some 10,000 hectares (circa 25,000 acres) were immediately reserved as permanent forest lands. This practical implementation of garden-city and green-belt concepts, then very much stressed in the young discipline of city planning, was achieved in all German cities around that time. Down to the present day these major percentages of total surface area—some as high as 35 percent—devoted to forest preserves and other open land permanently reserved for vegetation are a major factor contributing to the environmental quality of German cities (Figs. 4 and 5).

A crucial figure in the socialization of housing and the planning and execution of the public housing program in Berlin during the 1920s was Dr. Martin Wagner, who wrote his dissertation in 1915 at the Technische Hochschule in Charlottenburg on public green spaces, in 1916 was the first to suggest that financing for new, low-cost housing developments could be generated by a tax on the value of existing dwellings, and in the late 'teens was instrumental in organizing the socialized building cooperatives *(Bauhutten)* that were responsible for much of the actual construction of public housing projects during the 1920s. Serving as planning director of the borough of Schoneberg from 1919 on, Wagner in 1926 became planning director for all of Greater Berlin. He was also a director of the Gehag, the housing cooperative of the blue-collar labor unions, about which more will be said below.

Crucial to the character of the housing to which Wagner contributed so actively was the development of a new model building code for Prussia mandating low-density development on all building land in previously undeveloped peripheral areas. The model was first issued in April 1919; and, although it was not enacted as law until November 1925, its provisions were enforced through control over disbursement of public housing money by the Housing Welfare Office *(Wohnungsfursorgegesellschaft)*.[6]

The new code strictly regulated utilization of building land and delineated five basic classifications of development, ranging from two full stories with one-tenth site coverage (floor/area ratio, or FAR, equals 0.2 equals total area of floors divided by total area of site) to a maximum of five full stories and a site coverage of six-tenths (FAR equals 3.0).[7] This concept, which has been used in all urban land-use plans in Germany since then, was to establish a stepped differentiation from relatively tall and dense development in central urban areas and nodal points down in various stages to low-density, low-rise garden settlements in peripheral areas.

Clearly, no one expected to be able to turn the rental barracks areas of inner Berlin into garden suburbs. Nonetheless, a very potent instrument had been devised that assured far more open space and exposure to sun and fresh air in all subsequent housing developments, even in the central areas. In fact, a vast majority—some 85 to 90 percent—of advanced social housing produced in Berlin during the 1920s was not in the famous low-density types, but in the middle and higher building classification ranges, i.e., three, four, or five stories, and floor/area ratios of 0.6 to 2.5. Little attention has been paid to this fact in the international literature, and hence a very distorted picture of what actually was accomplished results. Furthermore, the applicability of these policies and experiences to urban situations elsewhere thus is generally overlooked.

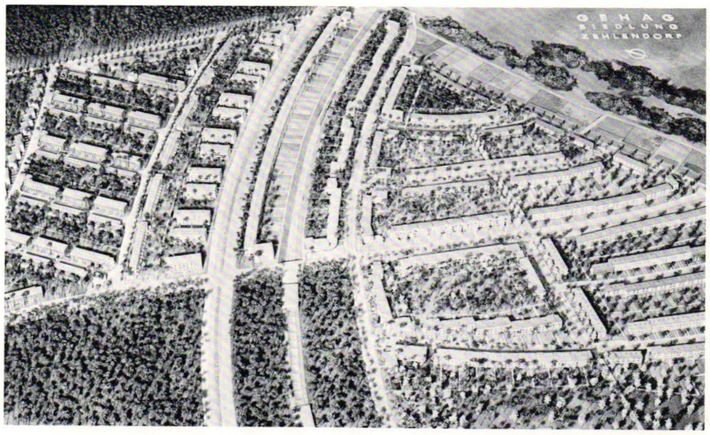

Fig. 4. Model of the Gehag Siedlung Zehlendorf in Berlin, now usually called the Siedlung Onkel Toms Hutte, which was built on the edge of the Grunewald permanent forest in the late 1920s. Although portions of the land in the foreground and at the left were also developed in a similar manner, the model demonstrates very sensitive planning to retain as many trees on the site as possible. The two-and three-story buildings are a combination of apartments and rowhouses. The open-trench subway line leading to the urban core is visible at the center. Photo Arthur Koster.

Fig. 5. Detail of a communal space between dwellings in the Siedlung Onkel Toms Hutte, 1926–1931. Martin Wagner, planner; Bruno Taut, architect (buildings in other portions of the settlement designed by Hugo Haring and O. R. Salvisberg). This view, taken during construction, demonstrates the great sensitivity to sight planning and care in retaining trees. It is all the more remarkable when one realizes that this was part of a government-financed public housing program for low-income workers. Photo Arthur Koster.

German settlements receiving greatest attention from outside observers, such as the Weissenhof Siedlung in Stuttgart, are not necessarily the best representatives of important German housing achievements of the 1920s. Even Bruno Taut's Berlin Siedlungen (settlements or housing developments) in Britz and Zehlendorf, and Ernst May's in the Frankfurt suburb of Praunheim, should be considered atypical because of their minimal floor/area ratios of 0.2. Such extremely generous provision of open land designed into these settlements makes them highly unusual as low-cost workers' housing . . . for any time and in any place. Providing so much open land per person in a government-sponsored housing program required high idealism and strong political decisions to allocate major resources of land and public funds for radical improvements of general living conditions.

The new land-use plan for Greater Berlin was symptomatic of major improvements in social welfare through political and administrative means. All outlying undeveloped land planned for future housing was restricted to floor/area ratios of 0.2 or 0.4 (depending on relation to main streets). A decision of such magnitude was bound to have a great impact on all subsequent development, particularly since many of these building sites, subsequently used for workers' housing developments, were directly adjacent to permanent forest or other open-land preserves. The combination of low density with beautiful surroundings of parks, forests, allotment gardens, or landscaped cemeteries makes it frequently difficult today to recognize these settlements for what they were: low-cost housing for workers. It is eminently obvious that these highly desirable sites could never have been used for this purpose had they not been owned by the government and made available for the purpose at very low lease rates. In fact, it was the city of Berlin itself that provided most of this land on long-term lease to public-benefit building corporations after the public housing program got underway in 1924.

Cheap use of the land was an extremely important factor in the successful program to provide good housing at low cost to the low-income segment of society. Cheap money was another; and here, too, social policies of the government provided the solution. The source was a special tax conceived to distribute equably the benefits and losses in real property that had resulted from the great inflation of 1923. Since outstanding payments on all mortgages had been wiped out by the tremendous devaluation of money, house owners had received property value unjustly. A flexible tax on all existing buildings was thus conceived to redress this inequity and provide funds for construction of new housing.

This tax was called the *Hauszinssteuer*, or house equity tax. Very cheap second mortgages—only 1 percent as compared to 10 percent or more on the open market—derived from the fund were called *Hauszinssteuerhypotheken*. Such low-cost government financing of 40 to 50 percent of construction costs was crucial to the maintenance of low rents in the projects of the public housing program. The siphoning away of these funds into general revenue for other government expenditures at the end of the decade led directly to curtailment of the housing program.[8] It is with good reason that the period of greatest housing construction is referred to in German as the *Hauszinssteuer* era.

While Martin Wagner was credited with the original idea of generating funds for social housing by taxing existing structures, he was also instrumental in organizing the socialized building trades in Berlin. Building production cooperatives were a logical outgrowth of the general socialization movement in Germany in the years 1918 to 1920. The acute housing shortage affected the building trades as much as it did others, so that the concept of self-help played a major role; but the production cooperatives were also seen as a means of achieving better employment security and better quality housing at a lower cost.

It can be seen, then, that very soon after the November Revolution of 1918 concrete steps had been taken to prepare the way for a vast government-sponsored social housing program. It only remained to be determined who would commission the buildings, that is, who would take care of the planning, organization, application for building permits and government funds, and general administration. Here, too, no new forms had to be invented, since they already existed on a small scale. The essence lay in *gemeinnutzige Bautatigkeit*, literally building activity in the common interest.

Before the war there had been many small groups organized as cooperatives or limited-dividend, public-benefit building corporations, but their production had been very limited and had counted for less than 10 percent of prewar housing.[9] The difference in the 1920s was a major change in degree. Political deliberations saw in this organizational form the best answer to providing urgently needed housing in large quantities, despite a severely depressed economy. As a result of political decisions, building in the common interest was transformed into the predominant force for construction of housing during the Weimar era.

To accomplish the social goal of alleviating the housing crisis for low- and moderate-income people, the profit motive was blocked out of the government-sponsored program. Capital for the purpose was relieved of its market function of multiplying itself, so that it could be applied most directly to solving the problems at hand. Any dividends realized were limited to 5 percent, and capital paid in to a public-benefit corporation was not allowed to increase in value at all. Even if a *gemeinnutzige* organization were dissolved, the law required that shares could pay out no more than had been paid in. Anyone who bought a house from such a public-benefit organization could not sell it on the open market, but had only the two options of staying in or selling back to the organization for exactly the same price he had originally paid.

Thus, problems of unearned increment, disruption of planning through speculation, and methods for recouping values generated by public development—every one of which were still issues for heated discussion at the 1976 United Nations Conference on Human Settlements—were effectively solved in Germany of the 1920s. That these socialist measures could be applied so rigorously for housing within an otherwise thoroughly capitalist economy makes the accomplishment all the more remarkable.

The self-help building cooperatives of the prewar era were not the only organizations that had set an example. There also had been exemplary nonprofit company housing, of which the Krupp settlements in Essen were perhaps the best known. Major employers in the public sector, however, had also erected housing for their employees. These institutions included state and local governments, the national railroad, the postal department, and the public transit companies. After the war, when they invested substantially more capital for housing, the units were no longer exclusively for their own employees, and the greatly increased burdens of administration were no longer done in-house, but were given over to public-benefit corporations set up for the purpose.

There were a great many of these limited-dividend corporations established in the 1920s. Since the names under which they are known are usually acronyms, for example Degewo, Gagfah, Gehag, Gewobag, and GSW, it is easy to overlook—or even difficult to determine—the nature of the founding organization. Even the names spelled out don't say much more.

Degewo = Deutsche Gesellschaft zur Forderung des Wohnungsbaues gemeinnutzige Aktiengesellschaft (German Company for the Advancement of Housing Construction, Public-Benefit Corporation)

Gagfah = Gemeinnutzige Aktiengesellschaft fur Angestellten-Heimstatten (Public-Benefit Corporation for Salaried Employees' Homesteads)

Gehag = Gemeinnutzige Heimstatten-Aktiengesellschaft (Public-Benefit Homestead Corporation)

Gewobag = Gemeinnutzige Wohnungsbau-Aktiengesellschaft Gross-Berlin (Public-Benefit Housing Construction Corporation for Greater Berlin)

GSW = Gemeinnutzige Siedlungs- und Wohnungsbaugesellschaft Berlin m.b.H. (Public-Benefit Settlement and Housing Construction Corporation, Berlin)

In other words, they were all formed in the public interest; therefore, they had severe restrictions on profits and were thus qualified to receive government support in the form of cheap land and cheap money.

The basic capital for these organizations came from a variety of sources, including the labor unions, the associations of salaried employees, and the associations of tenured government bureaucrats. What is less well-known is the tremendous amount of capital supplied directly by the governments of the Reich, of the Prussian state, and of Greater Berlin. It was reported that, at the height of building activities in the 1920s, the city of Berlin was a sponsor for more than twenty of the major building corporations and cooperatives.

It becomes apparent that the workers' settlements in Berlin in the 1920s were the result of a social housing program in which the government was involved at every stage, even though nonprofit corporations set up by the labor unions or other organizations acted as the parties commissioning the projects and as their owners. In West Berlin these organizations continue to function as owners and administrators of the buildings to the present day. Among them are several organizations in which the municipal or national government holds the entire corporate stock.

Gartenstadt Staaken

In view of the above background, it should not come as a surprise that the first of the large garden settlements for workers was already planned and carried out at government initiative under the old regime during the war. The Gartenstadt Staaken (actually not at all a garden city but a garden community at the far northwestern fringe of Greater Berlin) serves to demonstrate that the groundwork for social housing in Germany was well laid before the advent of the republic. It also underlines the importance of political decisions and government involvement throughout.

Staaken had been a tiny farming community surrounded by fields, but it lay on the main railroad line northwest of Spandau, where a major army supply and munitions factory was located. The settlement was conceived by the Interior Ministry as a model community of one thousand dwelling units at a density of sixteen units per acre and a site coverage of only 10 percent. Government workers in the Spandau plant were the intended clientele, and commutation was provided to Spandau and to the center of Berlin by the suburban railway *(S-Bahn)* that stopped at the site.

A public-benefit building corporation was set up for the purpose of building and administering the settlement. Architect of the project was Paul Schmitthenner, who designed the buildings in a distinct *Heimatstil* (style of the homeland)

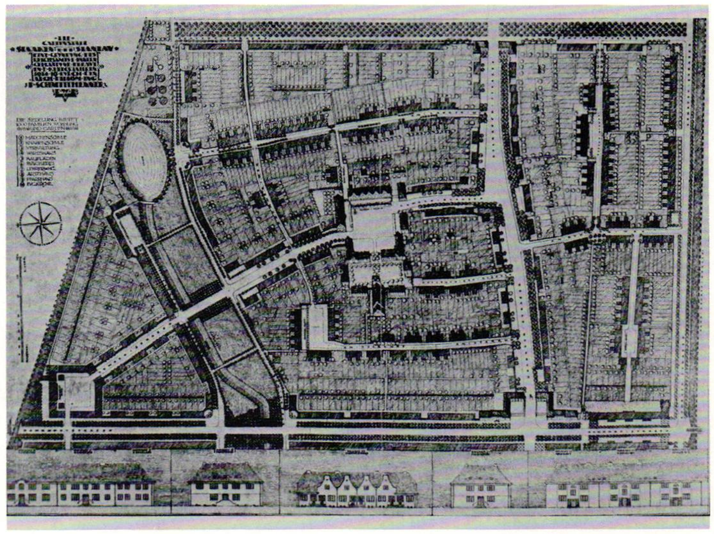

Fig. 6. Plan of the Gartenstadt Staaken, ca. 1918 (also illustrated in the rendering of Figure 1, which is a view from the southeast). The site is planned to provide large spaces for allotment gardens, while the buildings are arranged to create a strong sense of identity and community in the neighborhoods as well as around the community center.

vernacular that adhered to traditional forms and materials, including gables, pitched roofs, brickwork, wood, and stucco. Dwellings were small units in a combination of one-and-a-half story rowhouses and two-story apartment buildings, each unit having its own allotment garden and the rowhouses each having an attached shed for small-animal husbandry (Figs. 1 and 6).

The planning concepts represented advanced city planning principles then being taught at the Technische Hochschule in Charlottenburg (Charlottenburg became part of Berlin in 1920) and were quite prophetic of subsequent developments of the 1920s. The taller, more bulky apartment buildings were used to define the perimeter of the settlement, the two main intersecting roads within, and the market square. Identifiability was further enhanced by taller buildings that formed gateways at the entrances to the settlement, while the market square and adjacent schoolyard formed the community center, with the church, school, and shops all located there. Street axes were bent and carefully arranged to provide interesting vistas and continually changing, angled views of gables and façades. Slight street widenings at various points, achieved through building setbacks, provided small community spaces. The footpaths arranged through the garden areas made these open green spaces enjoyable by all and encouraged strolling by providing linkages with a park, the market square, the sports areas, and the fields beyond.

It is this pervasive sense of an interesting sequence of spaces and of subtle linkages to foster physical coherence that gives Staaken an appealing quality, despite the great stringency under which it was built. Sensitive site planning coupled with a great amount of open space and generous use of trees made it a pleasant place to live and nurtured a sense of community and identity from the start. Not only did the Gartenstadt Staaken fulfill housing needs at a time when almost nothing else was being built, it did so in such a way that this wartime public housing still has great appeal today. It served as an important model for further developments during the 1920s.

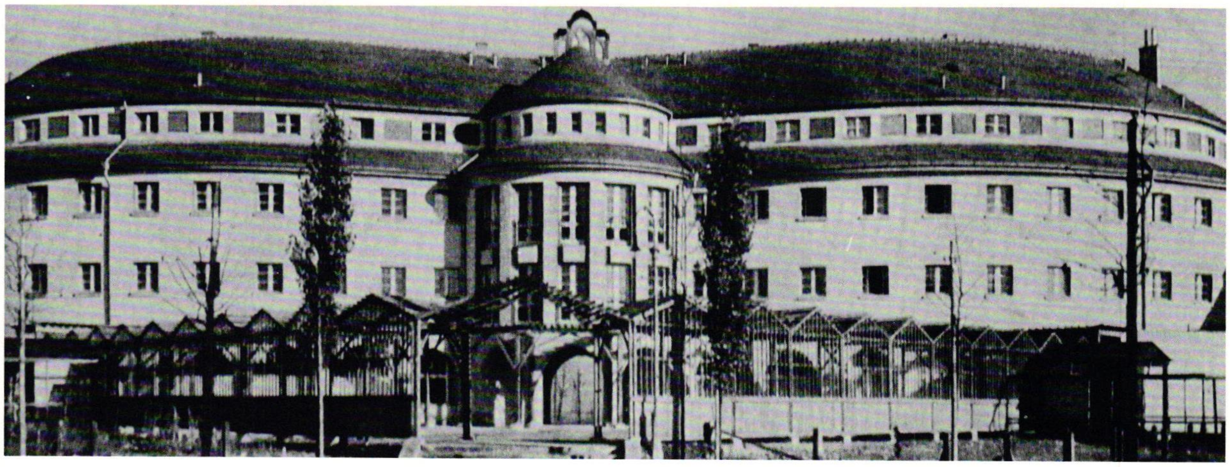

Fig. 7. Bachelors' Billet of the Siedlung Lindenhof by Bruno Taut.Berlin-Schoneberg,1920–1921. The provision of this type of housing in a community-sponsored settlement was in response to a serious social need. It shows Bruno Taut in a period of transition, still using monumental form language from the past.

Siedlung Lindenhof

Another early garden settlement marking a turning point in the willingness of government at all levels to finance non-profit housing on a large scale was the Siedlung Lindenhof in what was shortly to become the Berlin borough of Schoneberg. Here it was Martin Wagner, at the time Stadtbaurat (building and planning director) of Schoneberg (then still an independent community), who managed to convince his city counsellors during the period of turmoil in December 1918 to approve construction of a garden settlement similar to that in Staaken. Work was begun immediately and a public-benefit corporation formed, to which the city turned over the land and the buildings.

There were 492 dwelling units in the first portion of the settlement, plus 112 rooms in the Ledigenheim, or "Bachelors' Billet," designed for the site by Bruno Taut. Keeping in mind the great social problems that had been caused by the widespread practice of families renting the part-time or shared use of beds to single men, this accommodation should be recognized as a significant expansion of communal facilities provided in a housing development and also representative of a belief in integrating various groups in one development rather than creating segregated facilities. This was the first instance of Martin Wagner and Bruno Taut working together as a team. While Taut designed the prominent bachelors' building at the northeast corner of the site that also served as a community center with restaurant, shops, and a meeting hall, Wagner undertook the site planning, design of the family units, and the creation of another nodal point with shops and a cafe, plus a school and a day-care center, at the center of the development. The complex grew to about one thousand units (Figs. 7 and 8).[11]

Aerial views of Lindenhof demonstrate the same planning principles evident at Staaken: a strong sense of containment along with a subtle arrangement of spaces to emphasize relationships within the community and an interesting sequence of visual experiences. Again, all of this was accomplished under conditions of extreme economic stringency. The site in this case was especially attractive, since it included a pond and a stand of large linden trees, but paths through the garden areas created important linkages, to form an overall system of green community spaces separate from the roads. As at Staaken, many new trees were planted to supplement the old; and, similar to Staaken, a station of the *S-Bahn* providing rapid transit to the central city was nearby.

An outlying site; public transit linkage to the urban center; a clear, identifiable image and sense of containment; shops, meeting rooms, day-care centers, and other facilities; subtle arrangements of buildings and streets to create outdoor community areas and nodal points; concentration of dwellings on one-tenth of the site; and a careful integration of trees, gardens, and other landscape features to encourage active contact with nature . . . all of these features are common to the settlements at Staaken and Lindenhof. Because they were considered to fulfill important social needs, these amenities of site planning and community development were incorporated into these low-cost public housing developments, despite the crippling financial problems of the time.

It clearly was not considered to be a matter of merely satisfying utilitarian needs in the most economical manner feasible. Rather, a new ethos was developing. Through political decisions to provide the necessary means (and to guard against abuses) and design decisions to provide a responsive and intimately scaled ambience, a new ethos of healthy and enjoyable community life for families of modest income in low-cost but pleasant surroundings was successfully wrought. This is the all-important message of workers' housing in Berlin, not any particular esthetic message about flat or pitched roofs, white stucco, red brick, or any particular combination of colors.

Naturally, there were differences in taste, as one would expect, just as there were differences in degree of how much one expected society to change. This did not alter the conviction of a very broad segment of society that social welfare in housing was to be preferred to exploitation and deprivation. The architectural and planning means with which that welfare was provided were very similar, whether the particular groups being served were blue-collar labor unions of the political left, more conservative associations of salaried employees *(angestellten)*, or the arch-conservative associations of government bureaucrats *(beamten)*.

A major period of building housing settlements began in Berlin in 1924 with the passage of the Hauszinssteuer (house-equity tax) law that provided funds for massive government financing of social housing. It is highly appropriate to think of this era of public housing in terms of this tax, since the unprecedented boom in construction—including the garland of garden settlements in the low-density areas of Berlin—never could have taken place without it. Appropriate to a program of great magnitude, new high-volume, public-benefit building corporations needed to be formed. With government encouragement and in keeping with practices pioneered in the nineteenth century, such self-help organizations were set up under the sponsorship of various labor unions and employees' associations.

Difficult as it usually is to distinguish the character of the sponsoring group by the acronym identifying each building corporation, it is possible to link three of the largest directly to the three distinct social groups mentioned above. Gehag derived from the federation of blue-collar trade unions and was thus most left-leaning; Gagfah came from the associations of salaried employees and was thus more conservative; Degewo was formed by the most conservative group of all, the associations of tenured government bureaucrats (the *beamten*). The distinction between the socialist spirit of Gehag and the conservative tendencies of Degewo was sharply apparent in the different exterior treatment each organization used for its buildings, as will be discussed below in the case of the Gross-Siedlung Britz.

Because of the difference of exterior appearances, it would be easy to overlook the fact that in the 1920s site plans, buildings, dwelling plans, and community facilities were fundamentally similar for the various groups. The reasons were that municipal governments, through the Housing Welfare Offices, had the power to enforce new housing standards through the dispensing of government funds in the form of Hauszinssteuer-mortgages—typically covering 50 percent of building costs—and the provision of public building land at very low lease rates. The stipulations covered not only provisions for density and site planning, but design and amenities of dwelling units as well.

Standard sizes of rooms and heights of ceilings were established. Every apartment or rowhouse had to have at least one room that was fully exposed to the sun; and normally only two units could open from one stair landing, in order to assure cross-ventilation. For every twenty cubic meters of volume, at least one square meter of window had to be provided. Another basic change was the requirement for greater openness and exposure, achieved first by stipulating peripheral building—leaving the centers of blocks open. This was subsequently modified to preference for parallel rows; yet, in both types, essentially all new housing, regardless of how low or how tall, was thus only two rooms deep, with one room fully exposed to light, air, and open space on one side, and the other room fully exposed to light, air, and open space on the other side. It was a radical change from what had been (Figs. 9 and 10).

Furthermore, other major changes from the existing oppressive housing norm required that every new dwelling unit was to have its own water closet and its own bathtub, and that many would have their own balconies or loggias. In planning a housing complex, particular attention was paid to the inclusion of community facilities, such as district heating, centralized laundry rooms with washing machines (a great luxury for the time, see Fig. 11), kindergartens, meeting rooms, and other facilities designed to free women from household drudgery and to encourage social interaction. Previously such advanced features had been achieved only by small cooperatives building for themselves; now they were officially mandated and were realized on a very large scale.

Architects had little influence on dwelling plans. The combined effect of rigorous economic stringency and the requirements of Housing Welfare Offices resulted in apartments standardized for maximum use in minimum space. For couples, one-room efficiency apartments with bath had no more than four hundred to five hundred square feet. For a family with one or two small children the standard was one and a half rooms plus kitchen or kitchen-alcove for a total of 510 to 650 square feet. Individual units were conceived for

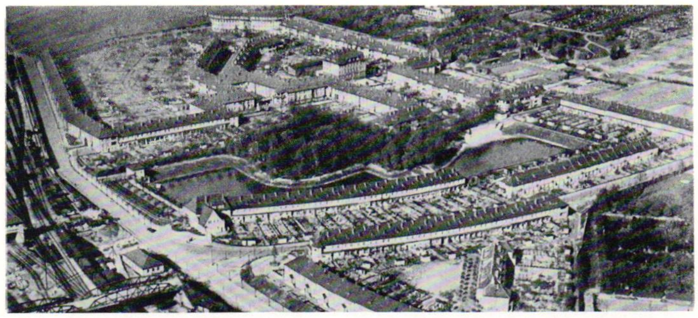

Fig. 8. Aerial views of the Siedlung Lindenhof by Martin Wagner in Berlin-Schoneberg, 1919–1920, with Bruno Taut's Bachelors' Billet in the northeast corner of the site. This was the beginning of a long and fruitful cooperation between the two men that was to last until the early 1930s.

Fig. 9. A modern kitchen in the Siedlung Onkel Toms Hutte, the Gehag Siedlung in Zehlendorf, by Bruno Taut, with Martin Wagner, O. R. Salvisberg, and Hugo Haring. Fundamental changes had taken place in establishing new standards for health and well-being in low-cost workers' housing. Photo Arthur Koster.

Fig. 10. Typical parents' bedroom in the Siedlung Onkel Toms Hutte in Zehlendorf by Bruno Taut. Great stringencies were in effect in the program to alleviate the dire housing crisis, but lack of size of dwelling units was compensated for by lightness, openness, and sensitive site planning to make the outdoors useful extensions of the living environment. Photo Arthur Koster.

Fig. 11. Centralized laundry facilities. The example is from the Gross-Siedlung Siemensstadt, Berlin, 1929–1931. Part of the program to radically improve workers' housing and the quality of life was to make major changes in residential infrastructure, beginning with toilets and bathtubs in each unit and including a range of community facilities, such as district heating and laundry facilities within the settlement. Photo Arthur Koster.

utmost economy and efficiency. Compensation for lack of square footage included contact with nature in the form of gardens, forests, or other green open spaces, community spaces designed to serve as extensions of the dwelling units, and other attractive qualities of site design and infrastructure.

Enforced provisions for housing welfare assured that these standards were met in all new housing in all classes of the building code, including those of higher density. Because of their more radical departure from the oppressive rental-barracks norm, low-rise, low-density garden settlements were considered an ideal solution. Yet, with their minimal floor-area ratios of only 0.2, they never accounted for more than 27 percent of all new housing in Berlin (in 1925 and 1926); and the percentage declined to ever lower levels after that peak. Nonetheless, quality and quantity of new, healthful, social dwellings were more important goals than merely achieving lowest possible density. These goals were met to a remarkable degree. During the period of the Hauszinssteuer-mortgages (1924 to 1931), the total numbers of new dwelling units constructed in Berlin were as follows (including those not financed by public funds):[12]

1925	8,439	1928	19,457	1931	31,026
1926	14,576	1929	24,079		
1927	19,571	1930	43,854		

These figures reflect inertia in starting a major public program and also the inertia that kept production high—even after the financial crash—with projects already in the pipeline.

The Hufeisen Siedlung

Social housing in Berlin of the 1920s thus took many forms, among which garden settlements were clearly a minority. Yet one garden settlement came to represent progressive Berlin to the rest of the world. It was that portion of the Gross-Siedlung Britz designed by Bruno Taut and Martin Wagner. It was named the Hufeisen Siedlung for the horseshoe shape of its central apartment complex. The reason for the notoriety was not that this was either the first or the largest of its kind or that it employed new construction techniques or new dwelling plans. It didn't. In fact, the Taut and Wagner portion of the Gross-Siedlung, although built in quite a different style, was quite similar in planning and function to the other half by Engelmann and Fangmeyer. Both followed the prototypes established at Staaken and Lindenhof, combining rowhouses and slightly taller apartment buildings, all in structures only two rooms deep.

Fame came to the Hufeisen Siedlung partly because of the strong recognizability of the horseshoe form and partly because of the large amount of open space it encloses. The great stir, however, was brought on by the revolutionary imagery expressed in the exteriors of the buildings. Other settlements, including Wagner's own at Lindenhof, had used the new legislation and policies to create equally good social housing environments. The difference was that they had done so with pitched roofs, traditional forms, and subdued colors. The Hufeisen, in contrast made a dogmatic visual statement: "This is socialism!" (Fig. 12)

The means used to convey this political pronouncement visually were flat roofs (on the apartment buildings), crisp cubistic geometry, and striking oppositions of shapes and colors. In case one might miss the message, Bruno Taut spelled it out: "These are the unmistakable signs of truly collective building."[13]

Taut liked to be dogmatic on the matter of improving society. He was much admired by his friends (and heartily disliked by others) for the verve with which he espoused a new social order and the major role that architecture would play in achieving it. Like other architectural zealots, he felt it imperative that traditional forms be cast off, because of their associations with the old social order. As was to be expected, many members of the working class did not follow him in this line of thinking, since their idea of success still was the achievement of middle-class possessions and status symbols.

But for Taut it was axiomatic that the new life under a better social order would be uncluttered and enlightened and that the best symbols for achieving this were trim, crisp forms, strong primary colors, and white . . . pure white. One can sense his joy in piercing a wall with a perfectly square hole, his delight in capping a doorway or a roofline with a perfectly horizontal cantilever—and no transitional forms to soften the contrast, no compromises. The band of apartments that confronted the Engelmann and Fangmeyer buildings to the east was the most uncompromisingly geometric of all, almost fortresslike, and painted a deep red. The message—"Red Front!"—required as little interpretation as the raised fist salute of the communists (Fig. 13).

The reasons for all of this overt symbolism, by no means lost on contemporaries, were of course political. Throughout the 1920s there was a continuous struggle between left-wing and right-wing political factions and all the various shadings in between. In the case of the Hufeisen, a strong socialist convergence of planner, architect, building corporation, and construction firm was overtly stated. It was clearly calculated to stir vigorous response, from friend as well as foe.

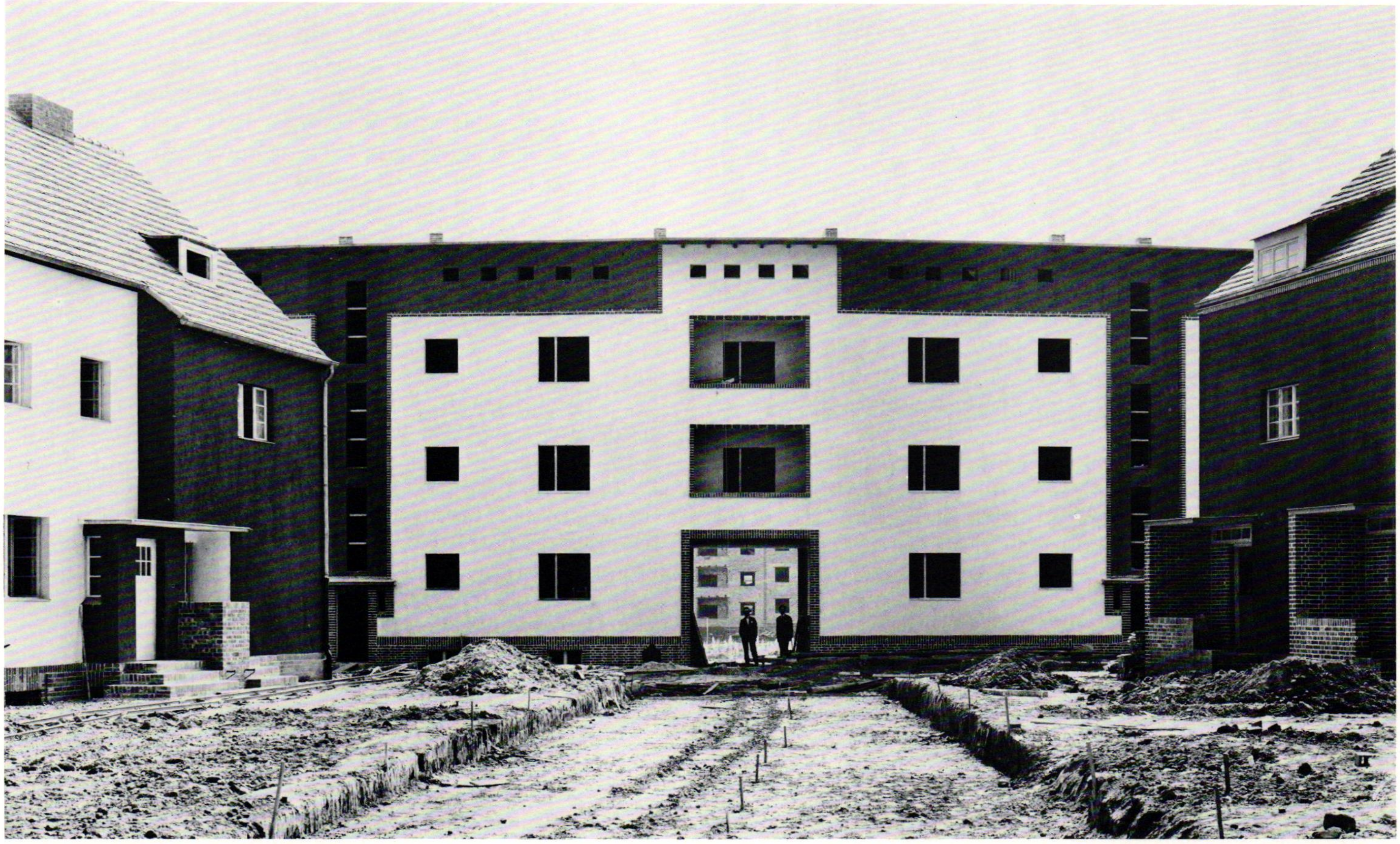

Fig. 12. "This is socialism!" Dogmatic visual statement used to stress social goals in the Hufeisen Siedlung by Bruno Taut and Martin Wagner. Dramatic geometry and striking contrasts of bold primary colors and white were used to draw attention to a new order. Photo Arthur Koster.

This was the first major project of some one thousand dwelling units undertaken by Gehag, the major public-benefit building corporation sponsored by the federation of blue-collar trade unions. Martin Wagner was one of the founders and directors of Gehag. He also had played a founding role in the corporation of socialized building trades (Verband sozialer Baubetriebe) and its subsidiary Deutsche Bauhutte Berlin, which served as the building contractor for Gehag. In 1926, while the Hufeisen was under construction, Wagner became Stadtbaurat, or building and planning commissioner, for all of Greater Berlin. There is therefore good reason for reading the Hufeisen as an attempt of the young Social Democratic establishment—through its principal architectural activists, Martin Wagner and Bruno Taut—to put its unmistakable mark on the government housing program.

Degewo Portion of the Gross-Siedlung Britz

Degewo, as mentioned above, was a public-benefit housing corporation set up to serve the needs of the government bureaucrats (the *beamten*). Although such organizations were not able to assure that only their members got into the settlements they sponsored, nonetheless Degewo was a conservative organization building mainly for a conservative clientele and therefore preferred architectural forms emphasizing tradition and continuity. Perhaps it is more to the point to recognize that the Degewo buildings were more *normal* than they were reactionary or unusually conservative. Even Bruno Taut himself, designing for Gehag at the settlement in Eichkamp just prior to this, had designed buildings in an established vernacular, including

Fig. 13. Construction view of Bruno Taut's provocative "Red Front!" of the Hufeisen Siedlung in Berlin-Britz. It was intended to confront the conservative forms of the contemporary Degewo portion of the Gross-Siedlung Britz by Engelmann & Fangmeyer. Photo Arthur Koster.

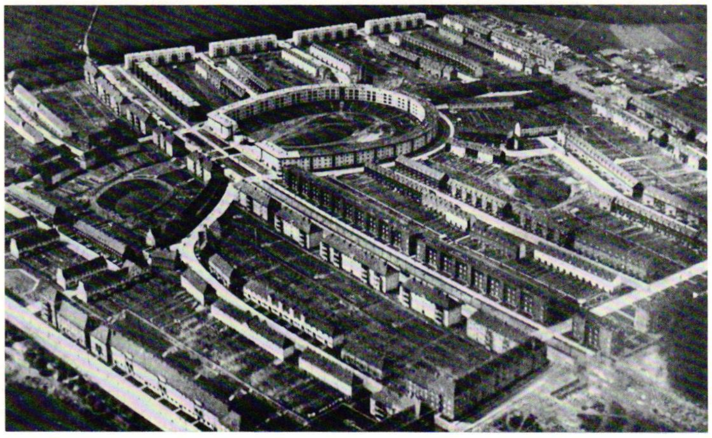

Fig. 14. Aerial view from the northeast of the Degewo (lower left) and Gehab (upper right) portions of the Gross-Siedlung Britz in Berlin, 1925–1926. Site planning in both is based on advanced planning principles taught since before the war at the Technische Hochschule in Charlottenburg.

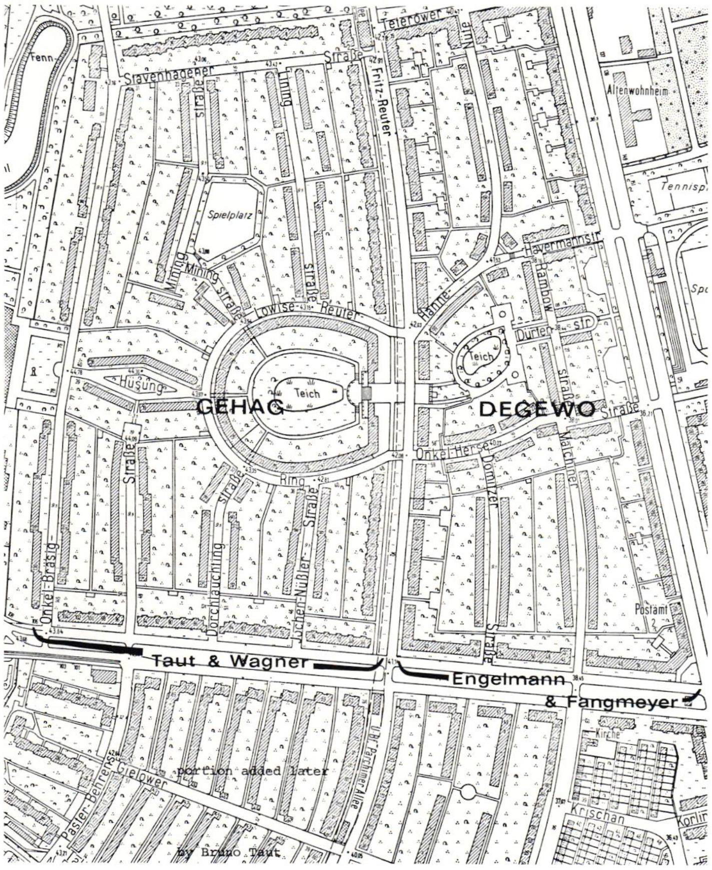

Fig. 15. Official site plan from the 1970s showing the relationship and planning similarities of the Gehag and Degewo portions of the Gross-Siedlung Britz, 1925–1926, in Berlin.

pitched roofs, that resembled the Degewo houses more than those of the Hufeisen. And in the Hufeisen settlement, after all, the rowhouses by Taut also had pitched roofs. The flat roofs and the precise geometry without moldings, in other words, were the deviant forms that were chosen for polemical reasons. This socialist architecture, however, was purchased at a price, since water seepage caused problems with the roofs and walls even during the first year.

Pitched roofs and rain gutters are an easier and cheaper way of keeping buildings dry, as Engelmann and Fangmeyer knew. For residents of a settlement, such practical measures are of some importance, as are matters of open space, defined by site planning, street alignment, and building arrangements. A comparison of the plans of the Degewo and Gehag portions of the Gross-Siedlung Britz reveals that they are really more similar than surface esthetics would suggest (Figs. 14 and 15). An interesting variety of street layout and building arrangement is seen in both. Aside from the rather sovereign gesture of the horseshoe form, both halves of the Gross-Siedlung Britz demonstrate sensitive site planning that responds to the natural features of the site, creates contained street spaces, and provides sequences of interesting vistas. Since the buildings had to be very spartan and economical in the use of a few basic types, variety achieved through imaginative site planning was one of the most important amenities that could be offered.[14]

Gradation is used in both parts of the settlement: using taller buildings to create a sense of containment for smaller rowhouses. Streets are curved and buildings offset to create variety of visual experience, and the natural depression with pond is used as a central park space in both cases. The large amount of land kept open for individual allotment gardens as well as for public open space—and the linkage of these spaces by footpaths—shows no difference in approach.

Why, then, one wonders, did Bruno Taut feel so antagonistic toward the work of his colleagues to the east that he took the unusual step of crossing it out on aerial photos of the area in his book *Bauen: der neue Wohnbau* (Building: New Housing Construction)? Why would he want to consign the Degewo buildings to oblivion, when they differed so little in basic design and function from his own buildings across the street? Why this vituperative outburst? (Fig. 16)

The answer can only lie in politics. Housing of the type provided in both halves of this large garden settlement could never have come into being on this scale for so many people of low income without a strong change in government policies toward socialism in housing. The Social Democrats then running the national, state, and local government were justifiably proud of major accomplishments that had become possible only through their concerted actions in legislation and administration. It must have been extremely frustrating to see the forces of conservative reaction taking every benefit from unprecedented housing reform, while simultaneously railing against the politics that brought it into being as "the red scourge."

Social Democrats were trying to create not only new housing, but a new society as well. Their hope was for a strong sense of cooperative community action in all aspects of life, starting with the environment at home. Tangible evidence of this can be seen in early photos of Gehag settlements (and many others originating with the political left) that show the shops incorporated at nodal points identified as Konsum-Genossenschaft Berlin und Umgegend, or Consumers' Cooperative for Berlin and Surroundings (Fig. 17). All benefits—financial, environmental, social—were to accrue to the individual through solidarity with the collective, a concept well summarized in the word *Genossenschaft*.[15] "Comradeship" is actually a better translation than merely "cooperative" (*Genosse* is the German word for "comrade" in the socialist and communist spheres), and the idea was an integral part of the development of self-help garden settlements for workers from the beginning.

There was, of course, vigorous opposition to all such tendencies, which were virulently attacked as "Bolshevism." A broad section of the populace—merchants, contractors, their employees, salaried people, and the bureaucrats—were mobilized politically to oppose the dangers of collectivism; and the *Genossenschaft* movement was systematically undermined by such tactics as, for example, housing bureaucrats assigning tenants unsympathetic or hostile to the movement into Gehag settlements.[16]

Architectural forms employed by Bruno Taut in Berlin to express the idea of social collective were paralleled by those of other progressive architects in other cities governed by the Social Democrats, including Otto Haesler in Celle, Walter Gropius in Dessau, and Ernst May in Frankfurt. Everywhere—including at the exhibition settlement of the Deutscher Werkbund at Stuttgart-Weissenhof under the direction of Mies van der Rohe in 1927—this architecture of a programmatic modernism was recognized as making a political statement and was attacked by the right as "cultural Bolshevism," "the new Jerusalem," or worse. It would be inaccurate to assume that these architectural forms, labeled "International Style" by Hitchcock and Johnson in the 1932 exhibition at New York's Museum of

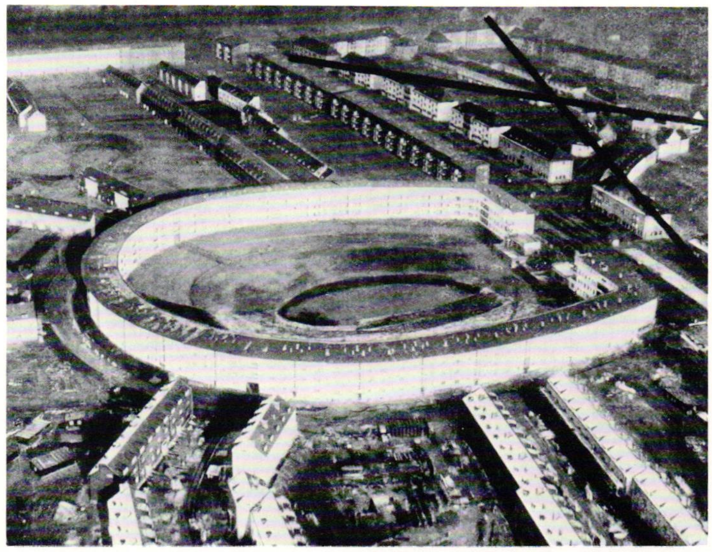

Fig. 16. A rarity in architectural publication: Bruno Taut's visual vituperative outburst published as Figure 155 in his book, Bauen: der neue Wohnbau, in which he consigns Engelmann & Fangmeyer's Degewo portion of the Gross-Siedlung Britz into oblivion.

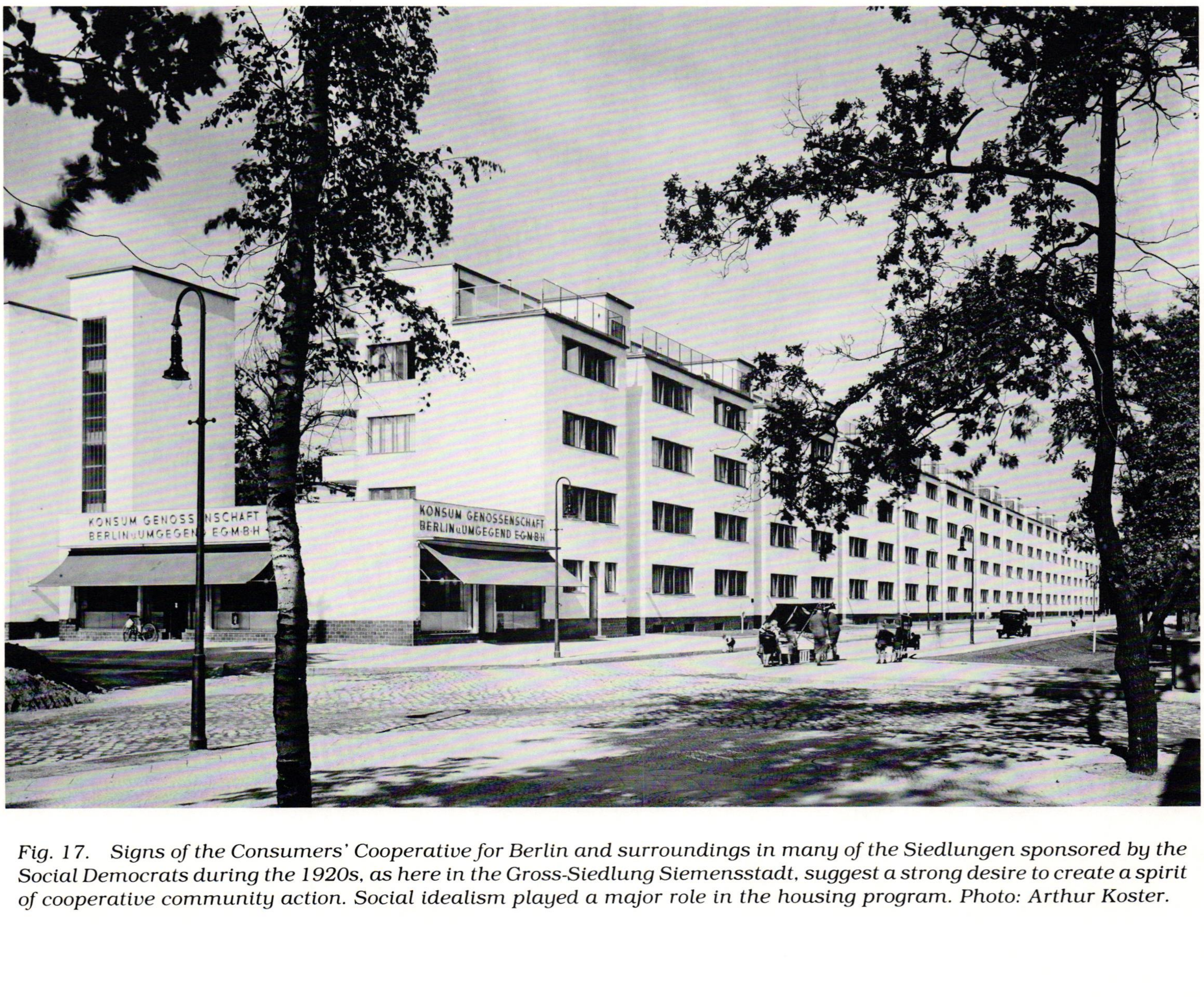

Fig. 17. Signs of the Consumers' Cooperative for Berlin and surroundings in many of the Siedlungen sponsored by the Social Democrats during the 1920s, as here in the Gross-Siedlung Siemensstadt, suggest a strong desire to create a spirit of cooperative community action. Social idealism played a major role in the housing program. Photo: Arthur Koster.

Modern Art, ever enjoyed much popularity among the German populace during the 1920s. The "international" aspect was considered "un-German" and was associated with the Socialist International, not a widely popular association, even among those who voted Social Democratic.

The question of style in twentieth-century architecture is ripe for thorough reconsideration. Looking at Berlin in the 1920s—whence so many important influences came—suggests that two major problems have contributed to a somewhat distorted historical view. One problem is that the International Style was stripped of all its associations with socialism, sanitized into an avant-garde art form for polite society by the Museum of Modern Art—the Rockefellers' cultural institution in New York—and transformed into a pragmatic tool for big capital. It proved particularly useful when applied to the building of skyscrapers, which may be considered to be the ultimate expression of social and economic goals *opposed* to those of public-benefit housing of the 1920s.

A second problem contributed to a strange shift in architectural values after the Second World War: the problem of guilt by association applied to architectural styles other than "modern." Apparently, a widespread attitude was that whatever was linked to the scourge of Nazism must have represented—as one recent author would have it—xenophobic patriotism at best, oppressive regimentation and inhumanity at worst. If Hitler liked it, it had to be bad. Thus, in architecture, the *Heimatstil* (style of the homeland), which emphasized traditional materials, continuity with the past, and maintenance of established scale and form relationships, has been much maligned since the 1920s because of its "reactionary" opposition to "progressive modernism." Yet, strangely, in the intervening decades the "Fascist" style of stripped-bare, scaleless white classicism was amalgamated with the International Style to become the favored mode for barren cultural centers and scaleless high-rise buildings the world over.

However, disenchantment with the Modern Movement is now widespread. The charms and virtues of red brick, wood, pitched roofs, overt historical associations, and intimate scale have been rediscovered and embraced in the 1970s, as architects and planners have apparently returned to a more populist esthetic. Perhaps now is the time to remove the blinders of technological determinism and to stop measuring all architecture of the 1920s and 1930s according to how well it fit stereotypes of the City of the Future. There were and continue to be other branches of the family than the genealogical line leading from Bauhaus to Lever "House."

Fig. 18. This 1920s photo of a family enjoying the benefits of Taut and Wagner's Hufeisen Siedlung in Berlin suggests that there were issues more important than exteriors expressive of radical modernism. Workers' housing was and continues to be first and foremost a matter of social politics. Photo Arthur Koster.

Now that ubiquitous High-Rise, Low-Density Freeway City has demonstrated the failure of Progressive Modernism to solve all architectural problems in all places, we are coming to realize that this style choice was simply that: a *style choice.* No longer is Modernism seen as the immutable march of manifest destiny, as some proponents had suggested. Nor does it any longer symbolize the coming of a new social order, as architectural optimists once had hoped.

Other style choices of the 1920s and 1930s, including in particular the *Heimatstil* and its corollary conservation of the natural and built environment, look more and more attractive as time goes by. It is worthwhile to reflect on whether the rejection of the flat roof at that time and in that context was as foolish and parochial as many of us have thought. Certainly in the field of housing careful consideration of developments in Berlin suggests that there were other more important issues—both architectural and political—than exteriors expressive of an adamant radical modernism (Fig. 18).

Perhaps the main lesson of Berlin's garden settlements for workers in the 1920s is that the politics of style *is* a separable issue from the politics of housing. Between the two of them, the politics of housing—with its fundamental decisions concerning land-use allocation, provision of amenities, reduction of costs, and curbs on speculation—is clearly the more important issue. One wonders whether fixation on style has distracted us far too long from some of Germany's most significant accomplishments of the 1920s. Achieving quality living environments in low-cost workers' housing—then as now—is first and foremost a matter of social politics.

NOTES

1. Bruno Taut, *Die Auflosung der Stadte* (Hagen: Folkwang Verlag), 1920. Bruno Taut (1880–1938), architect and visionary, provided major stimulus for utopian correspondence and design in the period immediately after the First World War and was a major force in the planning and design of workers' housing in Berlin in the 1920s. He emigrated under the pressure of Nazism in the early 1930s, spent three years in Japan, followed by the last three years of his life as professor and government architect in Istanbul. A monograph has appeared in East Berlin: Kurt Junghans, *Bruno Taut, 1880–1938* (Berlin: Deutsche Bauakademie), 1970.
2. Bruno Taut, *Die Stadtkrone* (Jena: Eugen Diederichs), 1919.
3. Taut, *Auflosung, op. cit.*, plate 12.
4. Joseph Stubben (1845–1936) was a figure of great international importance in the development of city planning as a discipline. The three editions of his influential book, *Der Stadtebau,* were published in 1890, 1907, and 1924. Theodor Goecke (1850–1919) also played a major role in the prewar development of city planning, both as a professor at the Technische Hochschule in Charlottenburg (Berlin) and as editor of the first major periodical on city planning, *Der Stadtebau,* from 1904 until his death.
5. Martin Wagner (1885–1957) is one of the most versatile and interesting figures of the 1920s in Berlin architecture. A dissertation analyzing his writings was submitted at the Technische Universitat Berlin: Jochen Kempmann, *Das Ideengut Martin Wagners* (Berlin: Technische Universitat), 1968. Wagner emigrated during the 1930s and, like Walter Gropius, became a professor of architecture and planning at Harvard University.
6. For an early report on the work of this agency, see Jacob Schallenberger and Hans Kraffert, *Berliner Wohnungsbauten aus offentlichen Mitteln* (Berlin: Bauwelt Verlag), 1926.
7. For a graphic presentation of the height, area, and bulk regulations in the Berlin Building Code of 1925, see Albert Gut, *Der Wohnungsbau in Deutschland nach dem Weltkriege* (Munich: Verlag F. Bruckmann), 1928, p. 95.
8. One comment on the catastrophic situation threatening at the beginning of the 1930s is provided in Fritz Beuster and Erich Leyser, *Wohnungspolitik von Gestern und Morgen* (Berlin: privately printed), 1931.
9. The best history of the self-help building cooperatives is Verband Berliner Wohnungsbaugenossenschaften und gesellschaften e. V., *Geschichte der gemeinnutzigen Wohnungswirtschaft in Berlin* (Berlin: privately printed), 1957.
10. The Gartenstadt Staaken, a unique exemplar in a period when very little construction of housing was taking place, received considerable attention in the press, including an extensive photographic analysis in *Wasmuths Monatshefte fur Baukunst* 3 (1918/19): pp. 137–197. This presentation includes the rendering of Figure 5, the aerial view of Figure 6, as well as a detailed site plan.
11. Of the settlements severely damaged during the Second World War, that at Lindenhof was not rebuilt entirely as it had been. Taut's *Ledigenheim* was not rebuilt at all, and a major portion of the west part of the settlement was redeveloped with buildings in a different configuration.
12. Verband Berliner Wohnungsbaugenossenschaften, *op. cit.*, p. 102.
13. Bruno Taut, *Bauen: der neue Wohnbau* (Leipzig and Berlin: Verlag Klinkhardt & Biermann), 1927, p. 47.
14. The planning principles involved were directly derived from the teachings of the Austrian, Camillo Sitte, the Englishman, Raymond Unwin, and their German colleagues teaching at the Technische Hochschule in Charlottenburg (which became a part of Berlin in 1920), Joseph Brix, Felix Genzmer, and Theodor Goecke. Camillo Sitte's ideas were articulated in his *Der Stadte-Bau nach seinen kunstlerischen Grundsatzen* (Vienna: Verlag von Carl Grabner), 1889, while Raymond Unwin's practical textbook of 1909, *Town Planning in Practice,* had appeared in German by 1910 as *Grundlagen des Stadtebaues* (Berlin: Otto Baumgartel), 1910. A second edition of Unwin's book was published in Berlin in 1922. The city planning lectures of the Technische Hochschule had been published by Brix and Genzmer as *Stadtebauliche Vortrage* (Berlin: Wilhelm Ernst & Sohn), 1909 and later years, while the results of the first major international exhibition on city planning, in Berlin and Dusseldorf in 1910 and 1912, had been published by Werner Hegemann as *Der Stadtebau* (Berlin: Ernst Wasmuth), 1911 and 1913.
15. A history of the cooperative organization in Berlin and its predecessors was published on the occasion of its twenty-fifth anniversary in 1924. Paul Lange, *Die Konsum-Genossenschaft Berlin und Umgegend und ihre Vorlaufer* (Berlin: Verlag Konsum-Genossenschaft Berlin und Umgegend), 1924.
16. For a comment on this see Gemeinnutzige Heimstatten-Aktiengesellschaft, *GEHAG, 1924–1957: Entstehung und Entwicklung eines gewerkschaftlichen Wohnungsunternehmens* (Berlin: privately printed), 1957, p. 21.

Three Fountains Garden Apartment Complex. Houston, Texas.

MAGNIFICENT FOUNTAINS, BEAUTIFUL COURTYARDS: GARDEN APARTMENT HOUSING IN HOUSTON

Peter C. Papademetriou

I think the society is beginning to break up, the patterns are breaking up. . . . And so the society is breaking down and renting because more and more of, less of a fixed type situation. . . . We've noticed in the rental patterns here in Houston, for example, almost 100 percent turnover in rental projects on an annual basis. . . . And transient type people always create unrest amongst people who tend to be more stable. So I think there's a social thing. You know, that the other guy's got to be somebody to watch a little bit because he is going to pick up in the middle of the night and steal away.[1]

URBAN form may be viewed as a symbol for social values. In traditional cities of homogenous cultures, these symbols are exhibited with nearly diagrammatic clarity in the structure of the urban form. The later cities of Ancient Greece express the concept of *polis*, with suppression of a background grid and development of the civic space in the *agora*. Medieval cities articulate the domination of religious life. Certain ideal cities of the Renaissance also demonstrate a concern for military fortification that developed from new technologies, and the Imperial City of Peking illustrates both a central authority and an emperor who is hierarchically accessible.

Housing form has also reinforced an understanding of social values contained in urban form. In the court houses of Ancient Greece, the spatial concept, a suite of open rooms, was analogous to the spatial organization of the city. Uniformity of general dimension was a statement of equality among citizens. In the row houses of Philadelphia and Baltimore one finds a corresponding fit between two sides. In the contemporary context, it has been suggested by cultural anthropologist Constance Perin that "American land-use classifications, definitions and standards . . . name cultural and social categories and define what are believed to be the correct relationships among them."[2] Spatial relationships may be seen still as being ". . . value-laden, that is, moral."[3] Forms of housing, and their relationship to one another, tell us about social values in the built environment.

Among the new evolving cities in the American Southwest, Houston, Texas, is unique because of its size, rate of growth, and relative newness in comparison to other urban areas. In 1950, it could be observed that "now some 500 square miles can be reasonably considered as Houston's urban area;"[4] while twenty-five years later this prediction was actually true in terms of the city's incorporated limits.

As a diagram, the plan of Houston exhibits the classic "wagon wheel" pattern, a radially concentric form whose development was facilitated through early and rather wholesale commitment to the private automobile. Such a nonfixed mode of transportation implicitly generated a system for uniform distribution. Added to this is the fact that Houston remains—while fifth in size nationally—the only city without land-use zoning. Consequently, the potential for a dispersed structure reinforces the concept behind such a diagram.

Taking census tract data as abstractions of this sociocultural milieu permits a comparative and simultaneous examination of the urban form diagram and the actual circumstances it has presented (Fig. 2). Certain basic factors, such as the major transportation system and density, tend to reinforce the notion of uniform distribution. Others, such as percentages of owner-occupied housing and households with children under eighteen, produce a picture of the typical American city with an inner area surrounded by suburbs. However, the addition of further factors illustrates that there begins to be a lack of correspondence between the basic diagram and the actual cultural milieu it supports. Factors such as air pollution concentration or ethnic distribution indicate that this urban form can be as differentiated as traditional cities and that it is good for some, not so good for others.

In the last two decades, the most intensely developed section of the city has been an area known as Southwest Houston. This section clearly shows in the unveiling of census data as the area of greatest income, best education, and highest values, both in owner-occupied and rental housing. The center of gravity for the uniform diagram is, therefore, significantly displaced. It is in this area of the city that the abstracted "typical Houstonian" resides.

Southwest Houston has generally developed since 1960, and with its development has evolved a form of housing at once responsive to this new "typical Houstonian" and new to the city as a whole. This housing form became known as the "garden apartment" and is generally a phenomenon of the last several decades, one which has kept pace with population increases during this period (Fig. 3). A final overlay on the census map of the locations of these garden apartments specifically selected for inclusion in this study substantiates this as the new form in suburban housing, and it dominates the Southwest quadrant of Houston.

As Amos Rapoport has suggested, "Within the middle-class culture itself, dwelling forms change to accommodate people outside the 'standard family' through new types of popular housing. . . . the vernacular today may be one of *type* rather than form."[5] In Houston, nearly one-third of the multifamily housing is of the garden apartment variety, and nearly 80 percent of this has been built in the last fifteen years. Houston contains nearly 85 percent of the Harris County total of garden apartments, and over one-half of these are in the Southwest quadrant.[6] In terms of housing production, this has amounted to over 20,000 units of housing a year, with some 25,000 scheduled for 1978. A current rule of thumb has some 1000 people per week immigrating to Houston, a substantial share of the 2.5 million people who left the industrial North for the South and West between 1970 and 1975.[7] Garden apartments play ". . . a very important role in one of the most significant social movements of our time: the great relocation of America . . . a here-today-gone-tomorrow-land where people mingle more than meld and permanent friendships tend to last at least a week . . . one of the first stops on the new interstate highway to the old American dream."[8]

Sociologically, the renter has traditionally been a second-class citizen in America. Perin observes, "Renters are described as transient, unstable, not thrifty, without pride, immature, lower class, not full-fledged citizens, indifferent to property maintenance . . . . ,"[9] people who should be in the process of adopting the American Dream: single-family home ownership. In a speech delivered before the American Bar Association in August 1975, Carla Hills stated, "Home-

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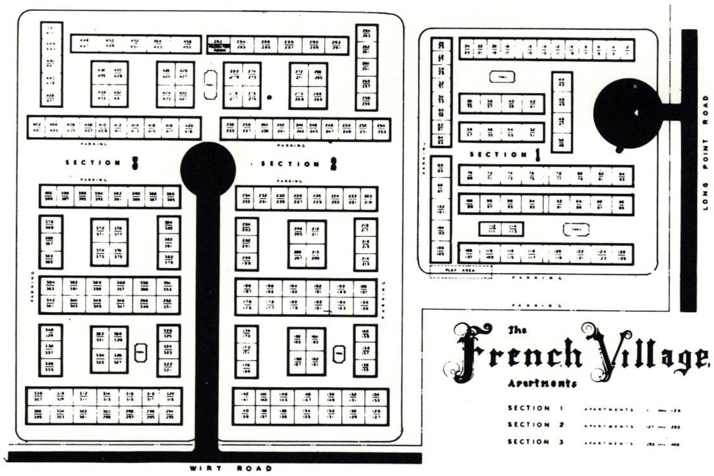


Fig. 1a. French Village. Site Plan.

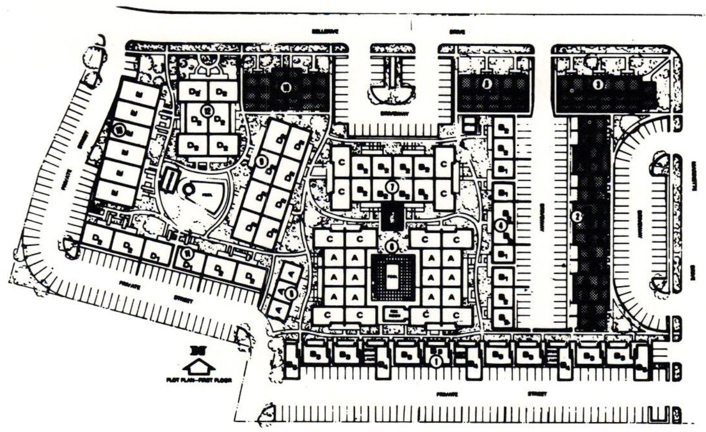


Fig. 1b. Natchez House. Site Plan.

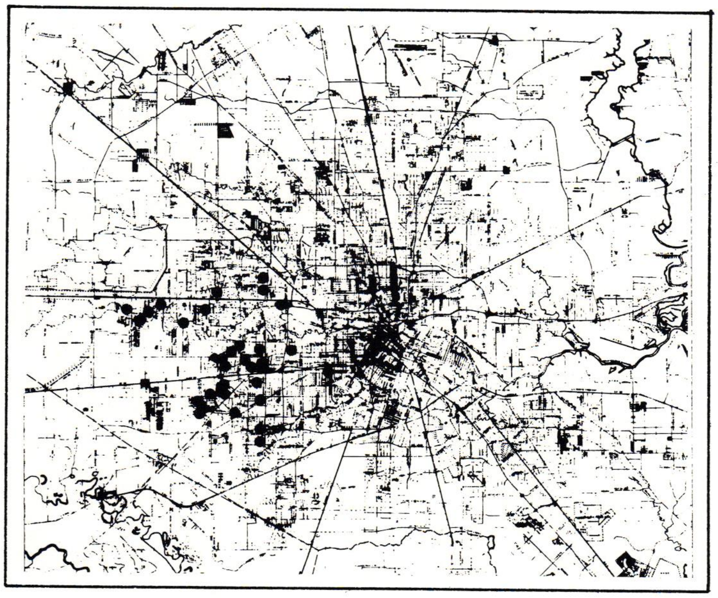


Fig. 2. Houston 1978: The Wagon Wheel Pattern. Dots indicate location of garden apartments in this survey.

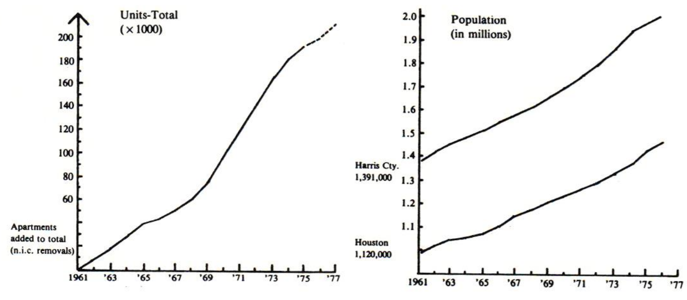


Fig. 3. Housing and population growth in Houston, 1961–1977; comparative charts.

ownership provides a sense of identity, of roots and of security, which is the stuff from which neighborhoods are made of and which protects against social alienation."[10] In 1968, the Kerner Commission on Civil Disorders stated this ideal in its recommendation, "The ambition to own one's house is shared by virtually all Americans, and we believe it is in the interests of the nation to permit all who share such a goal to realize it."[11] Renters are socially marginal, in these terms, because "...they might never cease being renters."[12]

Yet, alternative lifestyles have emerged since the 1960s, and these have challenged the dream of the single-family house. Among these alternatives is the emerging respectability of single living. A nationwide survey conducted by the Census in 1976 found that the number of persons between ages 25 and 34 who had never married had risen about 50 percent since 1970.[13] Among these are apartment renters whose lifestyle is emerging with priorities of a different nature. Occupancy rates in Houston's garden apartments have been in the range of 97 percent, while the average rate of turnover has been 80 percent.[14] Clearly, a range from pure transients to an evolving "hard-core" population is emerging, the dynamics of which involve change within apartment living as well as beyond. There is no singular form of garden apartment, and complex combinations of location, amenities, unit design, unit type mix, restrictions, and benefits create a diverse housing form, perhaps harder to describe generically than single-family, detached housing.[15]

Fluidity and change clearly mark any demographic analysis of apartment renters. Market articulation and servicing are geared to a "plug-in" system, in which one can select from a catalog offered by organizations such as Landmark Management, which maintains a stable of nearly forty complexes. Landmark has consolidated consistent management of a product with marketing and thereby cut through an additional service industry, the apartment locator, the renter's equivalent of a real estate agent. Houston's market is so large that Landmark has opened The Apartment Store, literally a shopping center for housing.

Culturally, even this form of merchandising housing maintains a careful distance from the renter. As Perin has observed, "The secondary status of tenants is perpetuated in various anachronisms of real property law, especially in terms of landlords' minimal obligations and tenants' maximum liabilities."[16] Rental housing is a complex industry, one in which the tenant is both catered to and carefully watched. Collecting rents, cutting off utilities, evictions, maintaining strict rules: these are the continuing concerns of members of the Houston Apartment Association, an

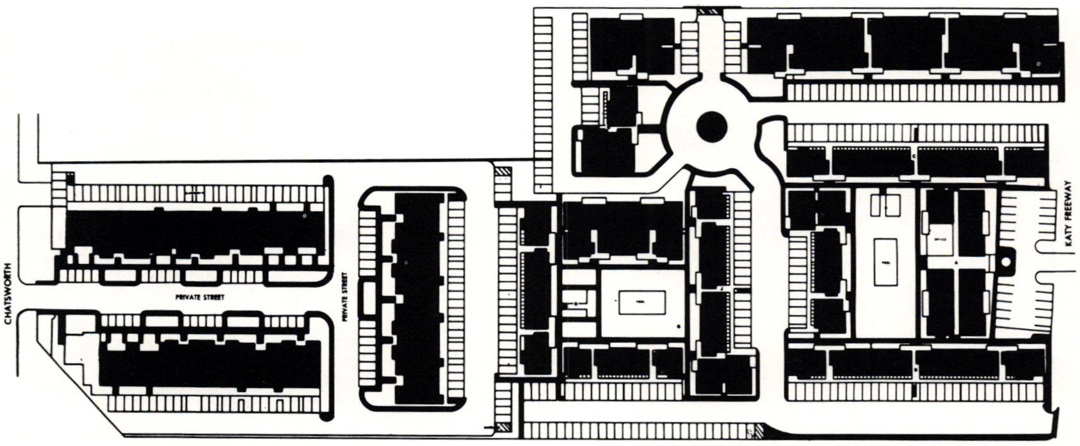


Fig. 1c. Bayou Woods. Site Plan.

organization founded in 1960 on the theory of self-policing then to avoid government intervention at a later date.[17]

The output of this process is a product which, while it has a diverse range of components, nonetheless has a fairly narrow range of real variation. The only real variable is rent, the profit margin which can distinguish and elaborate one set of factors from others. In order to clarify the apparent differences and thereby clearly capture the proper market, the resultant formal feature of garden apartments has been that of the "enclave." At the lowest end of the market, the cutting edge for tenants may simply be the rent, such that some complexes have a yearly turnover rate of 164 percent.[18] The upper end of the market develops amenities and provides a nearly self-contained community form, commanding longer tenure. The oddest amenity is "a radiation shelter with a capacity of 100 persons" contained in a brochure for Pyne Hall.

In Houston, this urban pattern, while based essentially upon a marketing strategy, has altered the urban structure by producing the cluster-enclave. Even when adjacent to one another, the garden apartments are discontinuous; it is not uncommon to encounter two parking areas back to back and completely inaccessible to each other.

Often the initial image is that of a group-form, further underscored by a "theme" element placed at the entrance to articulate the entire complex. Sometimes this takes the form of the "large house," in which individual units are subordinated to the statement of totality, characterized by Peter Smithson as "little Versailles."[19]

While undoubtedly primarily an image to facilitate marketing and identity, the enclave idea may also be viewed as an alternative to the overall and seemingly undifferentiated scale of the surrounding context. With the enclave, a progressive scale is broken down into more easily perceptible pieces. Within the enclave, this scale is further articulated, in some cases reading down to individual units or some variant, such as a "quadplex."

One of the dominant features in this progression of scales is, of course, the garden courtyard, which lends its name to the building type. These courts stand in contrast to the general severity of the surrounding urban context and provide a setting which is ordered and well-landscaped, with "magnificent fountains, beautiful courtyards." These courts are in essence an attempt to disguise the size of the complex, which is often several thousand units organized into blocks with all one unit type and into sections that house all one user group. The public spaces are the most heavily developed; actual private spaces are nearly symbolic by comparison.

An organization of site plans illustrates the three basic variants on the enclave. The Transitional Complex recognizes both the street and a garden court (see site plans of Natchez House, Wilcrest, Fig. 1). The Courtyard Apartment Complex has its form turned inward, with no street gesture and parking around the perimeter, using strong stylistic gestures to establish image (see site plans of French Village, Bayou Woods, Pin Oak, Fig. 1). The Subdivision Apartment Complex has a basic unit of 4 to 8 apartments, repeated in subdivided areas, with parking and drives inside, between clusters. The garden court is nearly phased out except in a definite community area which one can drive up to (see site plan of Ravenwood, Fig. 1). Due to a variety of circumstances, there may be combinations or transformations of these basic prototypes (see Memorial Orleans, Fig. 1, which combines the Transitional with Subdivision, partly because of an irregular lot configuration and a dominant street frontage).

Within the character of space there is often that of traditional, solid city form. That is, buildings actually define spaces, while the enclave itself is often perceived as being an object in space. Densities range from 15 to 40 units per acre, which would be greater if parking could be excluded. In many cases, the spaces between buildings are tighter than one would find even in traditional urban form.

Organizationally, these site plans clearly have a greater affinity with the doctrines of CIAM than the traditional antecedents to which they allude. Abstracted from their surface images and considered as site plans, the garden apartments exhibit the rational layouts of what we might consider "modern" mass housing. In three dimensions the stylistic overlay often confuses this perception, although the apartments may often be "an unremarkable combination of brick facades, iron balconies, wood fenced patios, imitation mansard roofs and nonfunctional white chimneys euphemistically advertised as 'New Orleans French.'"[20]

The rationality of layout is often best seen in the handling of service areas, such as parking areas. Generally covered by a canopy and rarely incorporated into the cross-section of the units, parking areas often represent the longest and dreariest expanses and vistas, giving a true reading of complex size.

Within the unit designs, it becomes clear that garden apartments are aiming for a fairly regular market sector, with one-bedroom and two-bedroom units generally defining 80 percent of the composition of a complex. The lower end of the market usually contains a larger mix on one-bedroom, while the upper end contains two-bedroom in greater percentages.

Fig. 1d. Pin Oak. Site Plan.

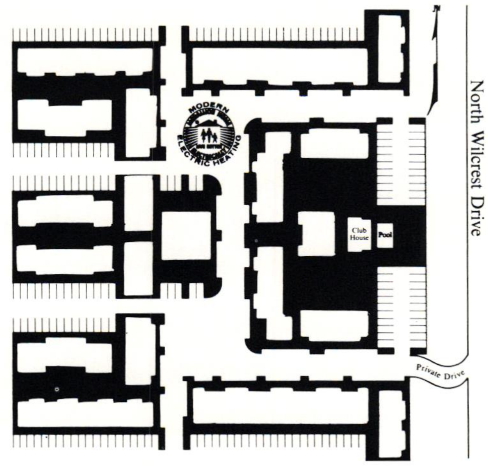


Fig. 1e. Wilcrest. Site Plan.

Rents are within a narrow spectrum, fairly closely matched, such that the effective differentiation between complexes centers around minor adjustments within plan types, the ability to provide a selection within a narrow range, or an appropriate mix of types to alter the "character" of a complex.

As Rapoport has observed, "Forces and pressures are also much more complex, and the links among form, culture and behavior are more tenuous, or possibly just more difficult to trace and establish."[21] In fact, the garden apartment is not unlike many other consumer objects, which are designed *for* popular taste, not *by* it. An analogy might reasonably be made to the automobile industry, where, in a fairly narrow range of choice, enough seeming options are created to establish the impression of variety—a rose by any other name, as it were.

Careful categorization of the taxonomy of unit plan types (Fig. 4) reveals both this truth and fallacy. What separates the best from the not-so-good may be a dominance of units with greater amenity, but these amenities are derived from a narrow range. Within all the variations of plan type, nearly 80 percent of the kitchens (which are the heaviest concentration of investment in appliances and cabinet work) are exactly the same. Consequently, while both the combinations of unit plan types and percentage of composition may characterize, to a large extent, the qualities of a complex, the entire system is one of narrowly differentiated choice (Fig. 4). In effect, the housing provision embraces a modest variation. Other factors that are not architectural features enter into the ultimate differentiation, such as security patrol services, all-electric kitchens, and a variety of pools, clubs, and so forth. It is the combination, reflected in the ultimate rental rate as well, which sets one complex apart from another. Architectural expression appears to have little to do with the development of the complex as housing. Generally, the more radical instances of stylistic expression may share both overall site plan organization and unit plan types with instances of a more routine order. Style, in fact, is a separate issue from the functional considerations, somewhat at variance with the modern dictum that the external form should reflect the interior arrangement. Style is another consideration having to do with marketing strategy—the creation of an "image."

In attempting to categorize the apartment complexes stylistically, the distinction was made between "hot" images like Olde Englishe or Spanishesque and other "hot" images like Creole Palladian or Southern Colonel Colonial, which were really variations on "cooler" images, such as Chateau Motel or Systems Georgian. The blandest of all was a modern variant Contempo. Generally speaking, the dominant stylistic images are in the "cold" range, not overtly referential and hence more adaptable to "readings" by potential users. This allows for the conversion of a complex into a "new" image, usually with a mere change of name, since the visual associations cut across a range of traditional references. In this way, response to changing markets can be facilitated without the necessity of drastic architectural modification.

Of further interest in attempting to articulate distinctions of style is the number of elements, and particularly materials, which freely cross over between the styles of garden apartments. Brick is by far the dominant material, and it can function at virtually any level. Shutters are popular as well. In establishing a unique image, the overtures must be decidedly heavy-handed in order to make the point in a sea of sameness.

As with architectural elements, key words in advertising are rather cavalierly assigned a variety of meanings. Most words are chosen either to mediate the second-class status of renters or to appeal directly to the basic user groups—"swingles," all-adult, family, or mixed (usually in two phases, separated as all-family or all-adult). Some of these key words are *group socializing*, *no maintenance*, *security*, *schools in the area*, *child care*, *playgrounds*, and *convenient location*. When a unique market is sought, again a certain degree of heavy-handedness is needed in advertising. Correspondence with any architectural styling image is generally coincidental; some of the most blatantly "hot" styling may be both for swingles and families, or it may be incidental to other considerations such as location or child care facilities. Advertising might also center on stylistic identity at the same time, to implant the specific "differences" offered by the complex or to instill a sharp image for the potential renter.

A recent trend in multihousing indicates that the garden apartment has in fact become culturally accepted, even to the extent of being a new model in the housing market. Within the last five years, condominium conversions have entered the scene, many of them garden apartments which have simply been renovated.[22] The previous Pine Hollow, for example, is now being marketed as The Pines, and the same is true of other garden apartments. One 275-unit development was even recently bought out from the developer for a direct conversion. Within the lexicon of housing choices, a generation of users has emerged whose lifestyle preferences have been so directly associated with this form of housing

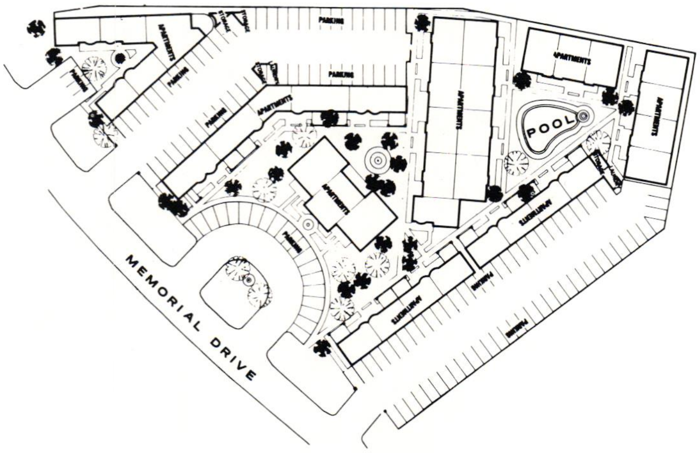


Fig. 1f. Memorial Orleans. Site Plan.

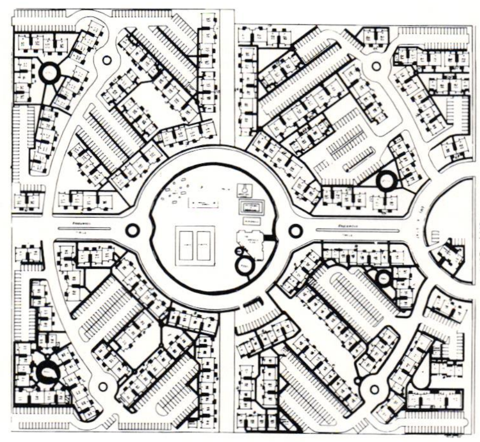


Fig. 1g. Ravenwood. Site Plan.

that the garden apartment is becoming the measure for new forms of permanent home ownership. The American Dream, in other words, is undergoing a transformation and redefinition in a new form of housing.

Consequently, any assessment of the garden apartment as a housing form or its user groups' position within society will have to undergo reexamination. As this form becomes institutionalized as a new model, its formal and social aspects will need greater attention. Insofar as urban form derives inevitably from the interrelationships between building types and not merely from sociocultural abstractions, the emergence of the enclave-cluster and its transformations and interactions in urban structure will condition our perceptions of the symbolic statement of new social values. Within our own culture, this is a product of only two decades of evolution, and the position of the garden apartment enclave within the taxonomy of urban housing types remains yet to be fully explored.

". . . In the ancient city the organization of space was a symbolic re-creation of a supposed cosmic order. It had an ideological purpose. Created space in the modern city has an equivalent ideological purpose. In part it reflects the prevailing ideology of the ruling groups and institutions in society. In part it is fashioned by the dynamics of market forces. . . . Neither the activity of space created nor the final product of created space appear to be within our individual or collective control but are fashioned by forces alien to us. We scarcely know how to grapple, either in reality or in the mind, with the implications of created space."[23]

NOTES

1. "Goss Group" in Constance Perin *Everything in its Place: Social Order and Land Use in America* (Princeton, NJ: Princeton University Press) 1977 pp. 42–43.
2. Perin, op. cit., p. 3.
3. Perin, op. cit., p. 3.
4. *Land-Population-Growth*, report of Houston City Planning Commission, 1951, p. 29.
5. Amos Rapoport, *House Form and Culture* (Englewood Cliffs, NJ: Prentice-Hall, Inc.), 1969, p. 131.
6. *Population, Households and Dwelling Units in Harris County Census Tracts*, report of Research Division, Houston Chamber of Commerce, 1976.
7. "Sunbelt," *Time* magazine, March 15, 1976.
8. Harry Hurt III, "Brave New Vacancies," *Texas Monthly*, July 1978, p. 102.
9. Perin, op. cit., p. 51.
10. Perin, op. cit., p. 78.
11. Perin, op. cit., p. 61.
12. Perin, op. cit., p. 61.
13. Shelby Hodge, "The Single-Minded," Houston *Post*, June 27, 1977.
14. *Occupancy and Rental Survey*. Houston Apartment Association, Fall 1975.
15. Carl Norcross and John Hysom, *Apartment Communities—The Next Big Market*, Urban Land Institute Technical Bulletin, 1968, p. 61.
16. Perin, op. cit., p. 62.
17. See continuing articles in *Abode*, official publication of HAA, or "Overlooking Houston" column in the Sunday *Total Living* section of the Houston *Post*: see particularly "The Creeping Cancer of Rent Control," *Abode*, September 1977.
18. *Occupancy and Rental Survey*, op. cit.
19. Peter Smithson, "Interactions and Transformation: Urban Structure and Urban Form," *Architectural Design*, January 1974, p. 38.
20. Hurt III, op. cit., p. 101.
21. Rapoport, op. cit., p. 126.
22. Shirley Pfister, "You Must Vacate By . . .", Houston *Chronicle*, December 5, 1976; Susan Bischoff, "Time Ripe for Condominium Conversion?" Houston *Chronicle*, April 3, 1977; Ellen Middlebrook, "Changing Lifestyles Push Home-Buyers Toward Condominiums," Houston *Post*, November 27, 1977; Barbara Stokes, "Condominium Conversions Making Successful Headway in Houston Housing Market," *Houston* magazine, March 1978.
23. David Harvey, *Social Justice and the City* (Baltimore: The Johns Hopkins Press), 1973, quoted in Perin, op. cit., p. 216.

ACKNOWLEDGMENTS

The author wishes to thank Deborah Poodry for conducting an initial survey of fifty apartment complexes and William Lukes for followup photography. Particular thanks to Alex Engart, who helped make some sense of the data, laboriously delineated the unit plan types, and printed the photographs for this article.

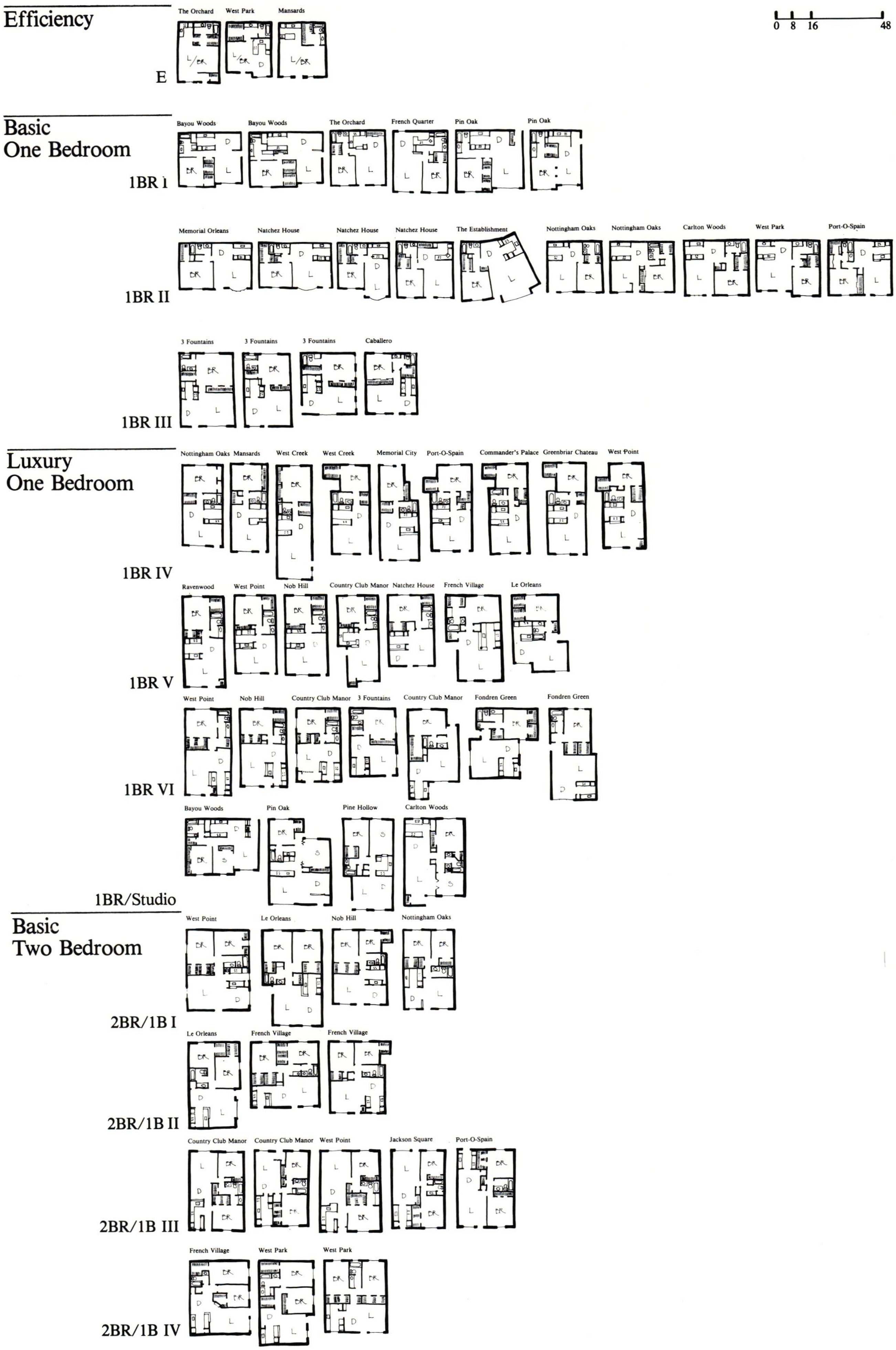


Fig. 4. Taxonomy of Unit Plan Types, Analysis Charts.

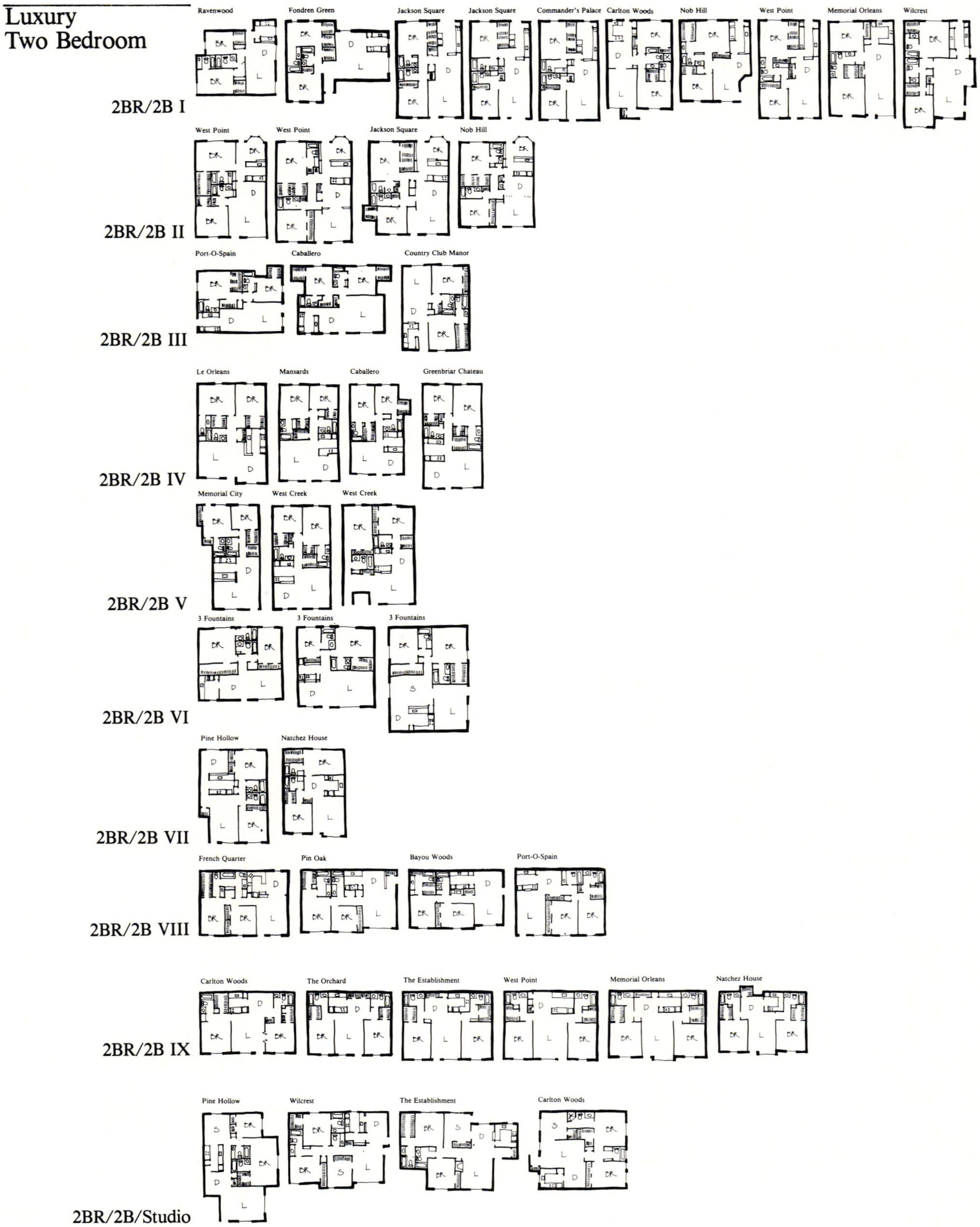
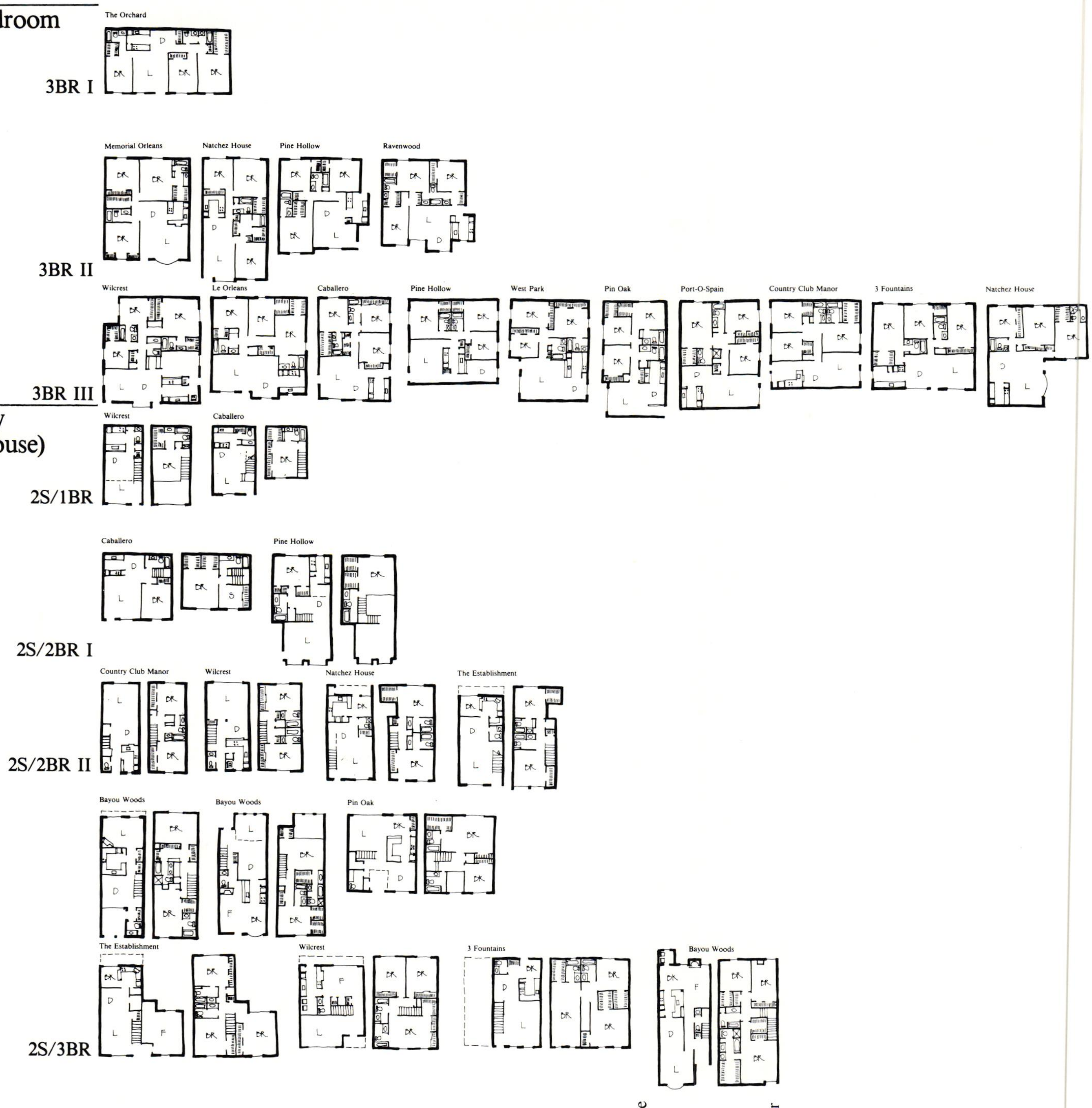


Fig. 4. Taxonomy of Unit Plan Types continued.

Three Bedroom

Two-Story (Proto-House)



		The Orchard	Mansards	Bayou Woods	French Quarter	Pin Oak	Memorial Orleans	Natchez House	The Establishment	Nottingham Oaks	Carlton Woods	Westpark	Port-O-Spain	3 Fountains	Caballero	Westcreek	Memorial City	Commander's Palace	Greenbriar Chateau	West Point	Nob Hill	Country Club Manor	French Village	Le Orleans	Ravenwood	Fondren Green	Pine Hollow	Carlton Woods	Jackson Square	Wilcrest
Composition	% 3 BR+	5%		10%		25%	35%	10%	10%	20%		5%	15%	30%	10%							15%	5%	5%	20%		30%			
	% 2 BR	30%	40%	40%	66%	25%	40%	45%	45%	20%	40%	30%	20%	40%	40%	50%	40%	50%	34%	50%	70%	60%	80%	75%	65%	25%	50%	70%	100%	40%
	% 1 BR	50%	45%	50%	34%	40%	25%	45%	45%	60%	60%	60%	65%	30%	50%	50%	60%	50%	66%	50%	30%	25%	15%	20%	25%	75%	20%	30%		60%
	% Efficiency	15%	15%			10%						5%																		
Imagery ('Hot' ↑)	Olde Englishe									●																				
	Spanishesque												●		●															
	Creole Palladian			●			●		●																				●	
	Southern Colonel Colonial							●												●										●
	Systems Georgian										●			●			●				●	●						●		
	Chateau Motel	●	●		●	●						●				●		●	●				●	●						
Imagery ('Cold' ↓)	Contempo																								●	●	●			

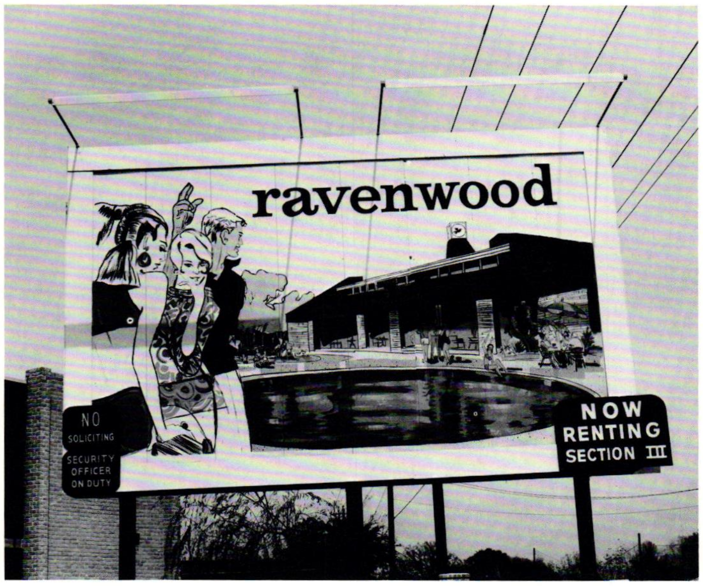
Chart by Peter Papademetriou

Fig. 4. Taxonomy of Unit Plan Types continued.

MAGNIFICENT FOUNTAINS, BEAUTIFUL COURTYARDS:

A Photographic Essay

Peter C. Papademetriou



Ravenwood

Natchez House

BILLBOARDS

It should be of little surprise that the developers of Garden Apartments are often the same as those who develop motels, the closest analogous form of housing. One might even argue that without the cultural acceptance of the motel, Garden Aparrtments might never have come into being.

Natchez House

Nottingham Oaks

THE 'BIG HOUSE'

Housing choice is somewhat affected by a strong, clear identity or "image." Often, the formal image is a statement of group-form, underscoring the essential enclave concept of Garden Apartments. This image of "home," because it is the image of a collective, frequently finds expression as the 'Big House,' where the individual unit is subsumed within the ideal of a total environment.

Le Orleans

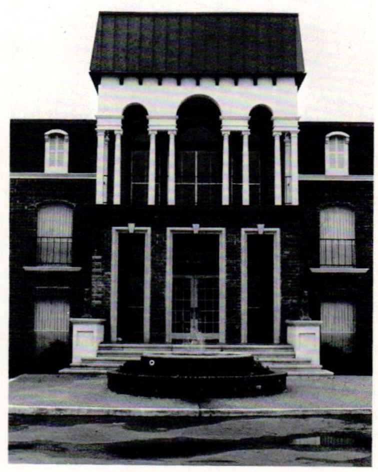
Natchez House

ARTICULATION OF INDIVIDUAL UNITS I

Garden Apartments are true megastructures. Economics of construction and rigorous zoning of market groups tend to cluster units of like design within the same block, and similar blocks into the same section of the complex. Consequently, surface modulation is introduced in order to articulate individual units. This is often done at a scale in relation to the entire block; since articulation of single small units would be out of scale, the basic unit of articulation is either the two-story ''townhouse'' unit or the duplex or quad. Occasionally this consists of a facade variation (in front of the same plan), but more typically it occurs in combination with an articulated roof profile.

Nottingham Oaks

Natchez House



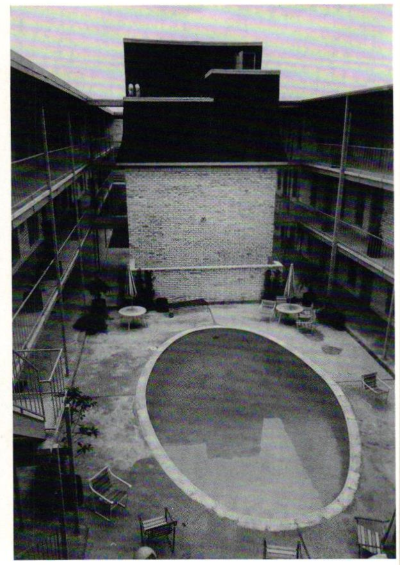
Bayou Woods

ARTICULATION OF INDIVIDUAL UNITS II

Articulation of individual units is often concentrated at entrances to the unit. The normal pattern is a repetition of similar units within the block form, and an arrangement of mirror-image or stacked plans to concentrate utility areas. Also, site planning, to create a variety of garden courts or to mix units while maintaining them within discreet blocks, often clusters similar unit types in multiples of two or four. Ironically, this results in a representation of a traditional apartment form from the 1920's, the duplex or quadplex.

French Village

Three Fountains



The Mansards

POOLS

A pervasive amenity is the swimming pool; it is impossible to conceive of a Garden Apartment without at least one. These pools are a variation on maintenance-free landscaping, as well as providing at least a symbolic setting for communal activities. As "meeting places," pools are among the most active stage sets.

Port-O-Spain

The Establishment

ENTRANCES

The "front door" for most users of the Garden Apartment consists of an articulation of some sort in the parking area. Rarely a spatial event, even less so a gratifying aesthetic experience, the entry is generally a modulation of the exterior surface to be read across the expanse of parked cars. Such entries are systematic and repetitive, in order to be predictable. Architectural treatment of such entry conditions is often at best gratuitous.

West Park

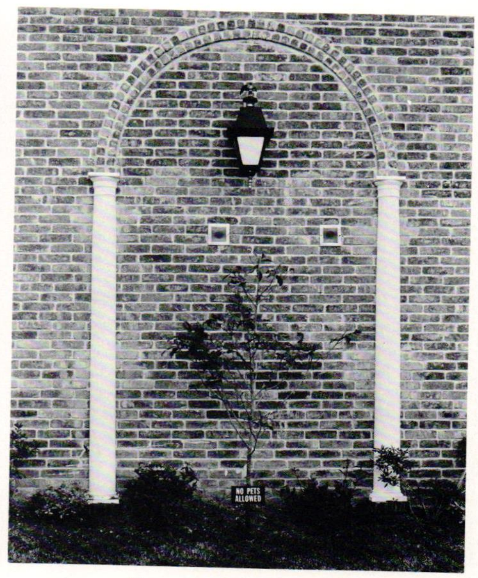
Westcreek

GARDEN COURTS

Interior courtyards contrast sharply with the exterior approaches; it is due to this environmental feature that the housing form derives its name. Such interiors form a kind of "oasis" in comparison to the urban context in which most apartments are located. Such landscaping is, of course, maintenance-free and a principal attraction of this form of housing.

Three Fountains

Three Fountains



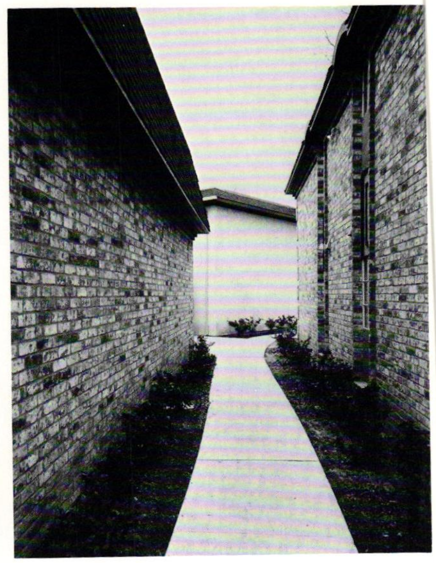
Country Club Manor

ORNAMENTATION

In most aspects, Garden Apartments exhibit a great affinity with modern notions of housing design. The presence of articulated ornamentation both on buildings and in the design of open space illuminate several dilemmas of contemporary design—the inability to develop a language of form which introduces variety and modification within standard types, and the failure of the modern movement to handle exterior space.

Le Orleans

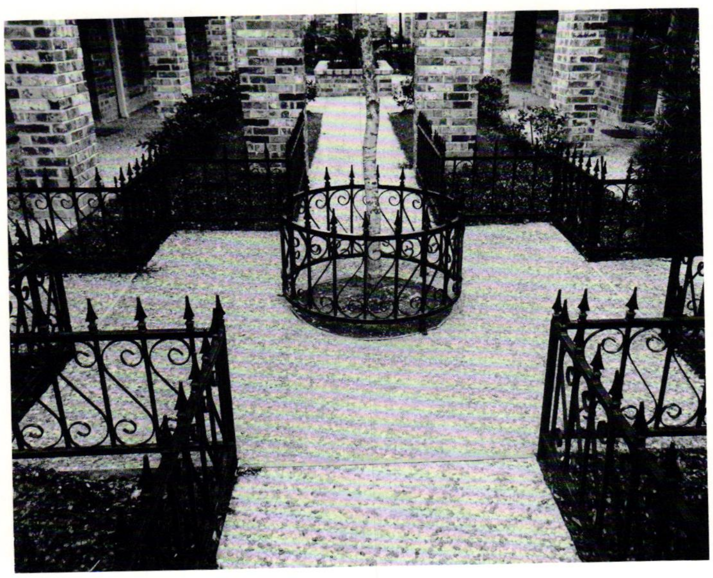
Nob Hill



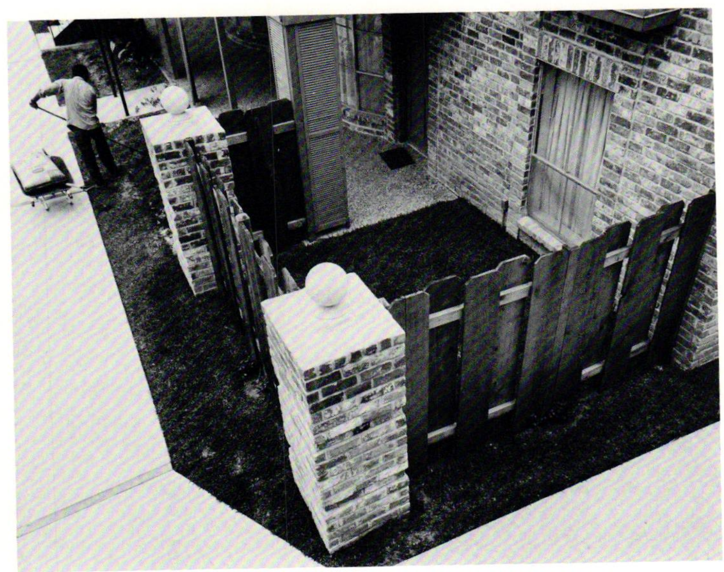
Le Orleans

ALLEYS AND PASSAGES

Garden Apartments, although generally two stories in height, are quite dense. In the areaways between buildings, the spatial character is that of the solid city, the alleys and passages of traditional urban form. This is not, however, to suggest that there is street life; even where they are "treated," these spaces are residual in nature.



Nob Hill



Memorial Orleans

PUBLIC SPACES/PRIVATE SPACES

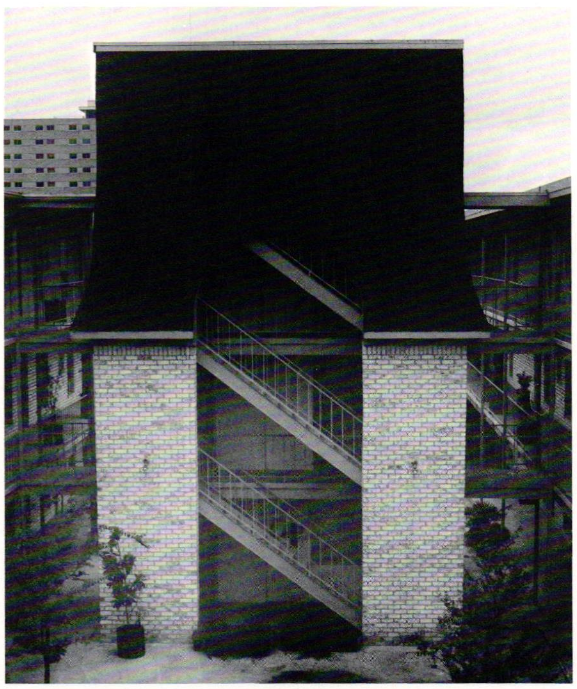
Garden Apartments offer an extreme contrast between the dominance of communal space and a token gesture toward "a place of one's own," either a "balcony" or an enclosed "patio." These private spaces, reduced to the probable minimum, are often the only transition between realms, and serve more as a layer than as a truly usable space. Generally, one is reduced to being either a private (inside) or public (outside) person.

Pin Oak

Ravenwood

PARKING

It is in the relationship between individual units and parking provision that the analogy between the Garden Apartment and the motel becomes most evident. There is generally no accommodation of parking within the architecture, and no correspondence between vehicles and their location with respect to individual units.



The Mansards

Jackson Square

SERVICE ELEMENTS

Fragmentary consistency—one has to applaud the dead-pan irony through which associative styling is applied to elements such as staircases (fire escapes) and laundry or mail rooms. By being given quasi-architectural status, these mini-buildings create a locus within the repetitive layouts of the housing blocks.

Country Club Manor

Greenbriar Chateau

EDGE CONDITIONS—CONTEXT

The available land for large tracts of housing in the renter market occupies a context containing a patchwork of uses primarily commercial but also industrial. The enclave appears as another object in the environment at a scale large enough to effectively compete visually. The sum effect is generally something less than "residential."

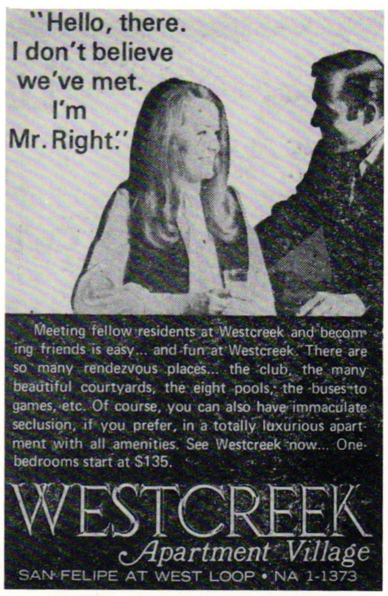
Country Club Manor

EDGE CONDITIONS—TRANSITIONS

Front and back—an exterior veneer of architectural ornament in a domestic vocabulary. Behind, in the parking approaches (the point through which most owners come "home"), the buildings become more functional and repetitive.

Newspaper Ad for The Orchards

Newspaper Ad for The Orchards



Newspaper Ads for Westcreek

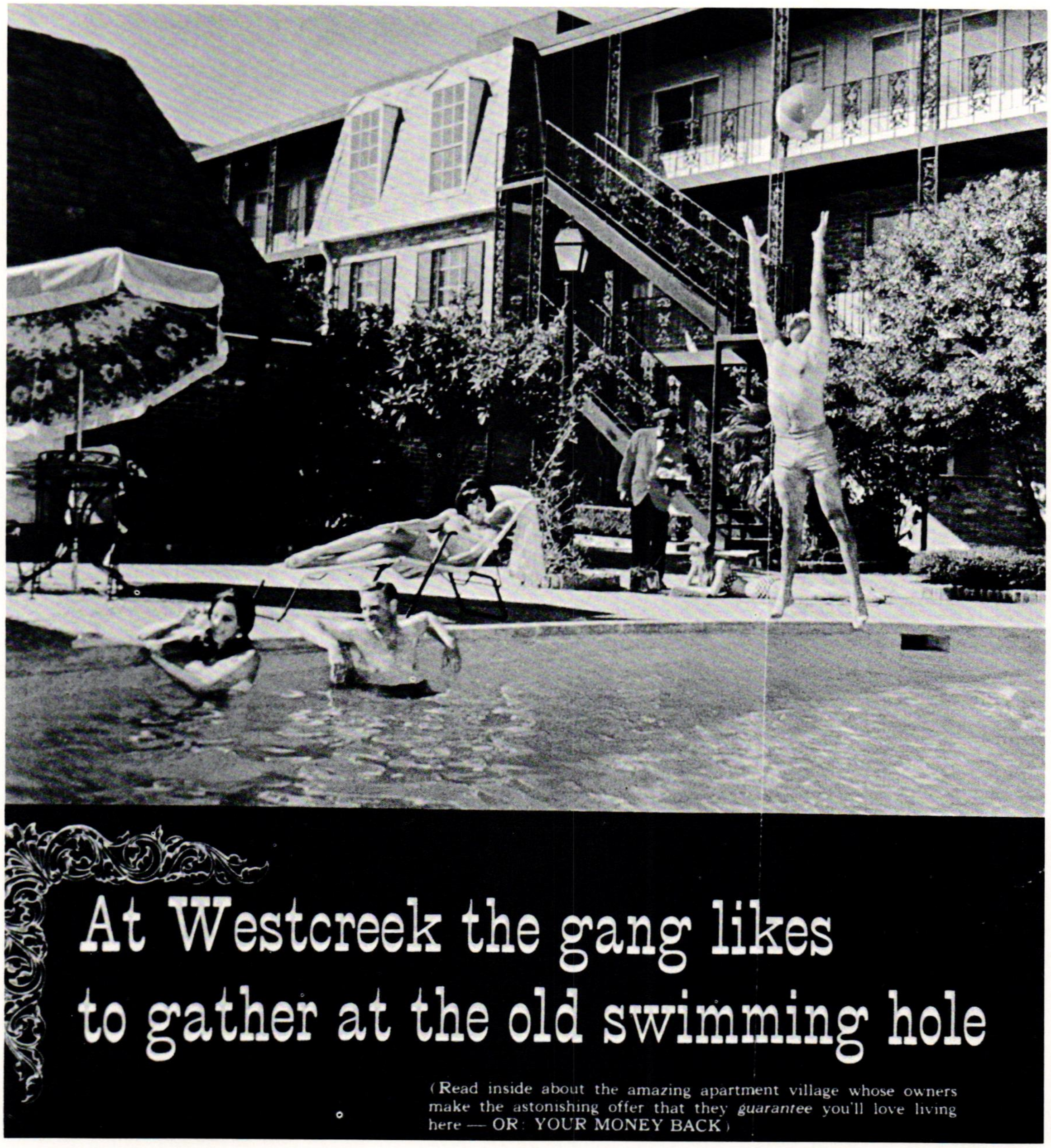
"PLUG-IN" LIFESTYLE

Housing choice is facilitated by an entire industry. The relative security of choice is assured through competent management, although the options might be correspondingly narrowed through the very efficiency of the delivery system. Whether it be the specialized apartment locators whose fees are paid by owners, the management firm maintaining a stable of similar packages, or the successful developer with his own complexes, all offer the "no-fuss, no-bother" approach to housing, which narrows the ultimate spectrum of diversity.

Newspaper Ad for Caballero Apartments

HOUSING, AS ADVERTISED

As with any consumer produce having comparable qualities within a restricted, competitive market, the "differences" between complexes are touted in advertising. It is essential that these differences be carefully bound within a predictable package; not *too* different from what is expected, only different enough. Appeals are made to a general range of expected services and amenities, within an anticipated rental range. Other ads offer the unexpected—clubs, saunas, group activities, day care, etc. There are ads geared to no-fuss/no-bother living (maintenance-free, security) as well as the concerns of special groups, such as families. Hard sell and the possibility of at least superficial romantic encounters runs through ads marked for the swinging-single, or "swingle." Occasional atmosphere generated through architectural treatment plays out the formal—living in New Orleans is gracious, this looks like New Orleans, living here is gracious. Conversion into condominiums intensifies the apparent desirability and exclusiveness of a complex, where the message becomes considerably lower key and conservative in order to create the illusion of a greater degree of tenure in what may have once been merely a stopping-off place.



Promotional Brochure for West Creek

Louvain-la-Neuve, Belgium. 1975.

THE BUILT ENVIRONMENT AND SOCIAL BEHAVIOR: ARCHITECTURAL DETERMINISM REEXAMINED

Jon Lang

THE physical design professions have been widely criticized during the last decade for basing much of their philosophy on a belief in *architectural determinism*—the belief that the layout of the environment is a major determinant of human social behavior. This criticism has not, however, been accompanied by a clarification of the relationship between designed environment and human behavior, nor by major changes in architectural philosophy or pedagogy. The objective of this paper is to reexamine the belief in architectural determinism and to introduce a number of concepts regarding the person-environment relationship which can help to clarify the task of designing environments for social behavior and social change.

There are many written expressions of the profound meaningfulness of the inanimate environment to human life. Anyone who has hung a colorful poster on a barren apartment or office wall, or who walks down one street rather than another simply because it is cheerier, or who selects a home in one neighborhood rather than another because it is more attractive, knows that the quality of the built environment affects one's perceptions of the quality of personal life. It is tempting to exaggerate these impacts—to suggest that the physical environment determines behavior—and not to see these impacts as part of the whole sociophysical system of which we are a part.

Our environment can be defined as those things which affect us and those things which are affected by us (Ashby, 1954). It can be thought to consist of a terrestrial or geographic component; an animate component, which is a source of social stimulus; and a cultural component, which consists of a nonmaterial or symbolic element in terms of language and art, plus a material element in terms of the tools we have shaped and the buildings we have erected. Man has control, for good or bad, over large portions of the environment—terrestrial, social, and cultural. We change the environment so that it better meets what we perceive our needs to be—sometimes with unexpected and nasty side effects. We restructure the physical environment. We transform elements of the natural world into artificial elements which can better serve our purposes. We use these artificial elements to reorganize the surfaces of the world to provide better shelter, better layouts for social intercourse, and more desirable symbols.

Originally, these changes were made in an unselfconscious way. Our abilities to intervene in natural processes were limited, our societies were characterized by a low division of labor (Alexander, 1964). Everybody was a designer. Prototypical solutions evolved over long periods of time in response to the needs of our activities within the constraints of our terrestrial and cultural environments, which in turn affected our activities. Now the situation is different. We have a wide variety of resources available to us, a greater range of lifestyles, and a high division of labor. Design has become a more self-conscious process. Yet the goals of design remain essentially unchanged, although our demands on how well they are met have become more severe.

The concerns of design identified by Vitruvius serve us well today. Sir Henry Wotton, the British humanist, paraphrased Virtruvius in saying that the concern of architecture is to build well on the dimensions of "commodite, firmness and delight" (Lipman, 1974). In modern architectural terms "commodity" has been thought of as the functional goal of design; "firmness," the technical and technological goal; and "delight," the aesthetic goal. It might be appropriate now to end the arbitrary distinction between function and aesthetics and to think of architecture as providing for the spatial and social characteristics of activity systems, the physiological needs that accompany these, and the psychological needs of its inhabitants within the framework of a sociophysical system, consisting of a terrestrial, animate, and cultural component.

Needs have their basis in the physiological, sociological, anthropological, and psychological aspects of behavior. A framework by which human motivations and need satisfaction can be viewed is offered by psychologist Abraham Maslow (1954). He suggests that human needs can be arranged in hierarchical fashion, the strongest level needs taking precedence. His hierarchy, in descending order, is as follows: *physiological* needs, such as hunger or thirst; *safety* needs, such as security and protection from physical and psychological harm; *belonging* or *love* needs, which concern the relationship of responsive, or affectionate, and authoritative needs; *esteem* needs, or those needs of an individual to be held in high esteem by others; *actualization* needs, representing the desire to fulfill one's total capacities; and *cognitive* and *aesthetic* needs, such as the thirst for knowledge or the desire for beauty for its own sake. We have restructured our whole habitat so that it better meets aspects of all these needs. It seems that the layout of the environment is a fundamental contribution to need fulfillment. How easy it is to fall into the trap of believing that changing the layout of the environment will cause these needs to be fulfilled. Before attempting to clarify the nature of the effect of the architectural environment on human behavior, it is worthwhile to provide some background on the somewhat tangled issues of environmental determinism.

Environmental Determinism, Architectural Determinism, and Physical Determinism

Determinism has been defined as the "doctrine that all events are the inevitable result of antecedent conditions and that the human being in acts of apparent choice is the mechanical expression of his heredity and environment" (Durant, 1926, p. 399). The terms *environmental determinism, physical determinism,* and *architectural determinism* have been used synonomously in architectural literature. In this sense they all refer to the belief that changing the layout of the environment somewhat mechanistically leads to a change in social behavior. In order to clarify the issues facing the design professions, it seems important to differentiate levels and types of determinism. This can be done by using the terms *environmental, physical,* and *architectural* less loosely.

Environmental determinism should not be taken to mean determinism by the physical environment, as it so often is, but rather to reflect the belief that it is nurture rather than nature that shapes our abilities, values, and behavior. The nature-nurture controversy has been largely dormant in psychology, although recently it has been an issue within social biology. The question being asked in psychology today is not whether behavior is genetically or environmentally based, but what aspects of behavior are traceable to one source and what aspects are traceable to the other.

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Physical determinism refers to the effect of the physical environment on behavior. *Physical* is a somewhat ambiguous term. Physical determinism can best be regarded as the belief that human behavior is determined or can be determined by the nature of the terrestrial environment as amended by people at a particular place. Culture and climate are without doubt interrelated, but the physical determinist would take an even stronger position on the effect of the natural and man-made environment on human behavior. Herbert Gans (1968) uses the term *physical environment* in a narrower way, as a synonym for the structure of our artificial habitat. This might be more appropriately called the *architectural* environment. Architectural determinism is thus the belief that changes in the layout of the three-dimensional, built environment and/or the human-manicured natural environment will result in changes in human behavior, particularly social behavior.

If one accepts the definitions given here, we have a hierarchy of beliefs about the impact of the environment on behavior. Environmental determinism is the belief that the whole terrestrial, animate, and cultural environment shapes behavior. Physical determinism is the belief that the terrestrial environment shapes behavior, and architectural determinism is the belief that changes in "built-form" will result in changes in social behavior. Given the natural endowment of an individual, the first position seems reasonable, although it cannot account for all interpersonal differences. The second, physical determinism, is not a direct cause despite the strong correlation between culture and environment (Vayda, 1969). There are many cultural differences between peoples who live in very similar terrestrial environments, and this is reflected in their architecture (Rapoport, 1969). Thus, while it is a basic source of cultural and social behavioral differences, the physical environment is not the only source of influences on social behavior. Architectural determinism, the subject of this paper, requires some further exploration before such simple summary statements can be dared.

Architectural Determinism

A belief about the deterministic relationship between the built environment and human behavior is deeply imbedded in the writings of modern architects, as content analysis of their books and articles have shown (Broady, 1966; Boughey, 1968; Lipman, 1974; Brolin, 1976). The degree to which this belief has been held by twentieth-century architects is clear from even a cursory glance through their programs and manifestos (Conrads, 1970). The urban and architectural design philosophies of people like Ebenezer Howard (1902), Le Corbusier (1947), Richard Neutra (1954), Alison and Peter Smithson and fellow Team-10 member Jakob Bakema (Smithson, 1968), and Frank Lloyd Wright (1958) are all heavily predicated on a belief in architectural determinism. It is not difficult to suggest why this belief arose. During the nineteenth century, with the coming of the Industrial Revolution and the mass migration to cities, many people became aware of the strong correlation between the unpleasant physical conditions in which people lived and their social and psychological conditions. It was easy to conclude that changing the architectural environment would change the lifestyles as well as the living conditions of the people involved. The whole social and philanthropic movement of the latter part of the nineteenth century, which culminated in the new towns movement under Ebenezer Howard and the settlement house schemes, was imbued with the spirit of architectural determinism. In the nineteen-thirties and -forties, the principles of housing and residential environment design generated by successive CIAM meetings were based on a series of assumptions about the impact of the architectural environment on human behavior. The earlier conferences were concerned with the impact of the architectural environment on the lowest order needs identified by Maslow. The later conferences (e.g. Otterloo, 1959) were concerned with the higher order cognitive and aesthetic needs. Team-10, in particular, was concerned with showing how the architectural environment could lead to these needs being fulfilled. All of these conferences professed a belief in architectural determinism. Architects' beliefs have frequently been reinforced by the work of sociologists and psychologists. This is particularly so because of the lack of clarity in the specification of the relationship between environment and behavior in most of this work, at either an urban or architectural scale.

In the United States the concept of the neighborhood unit emerged from the work of sociologists associated with the University of Chicago between the world wars. Based on the earlier work of Cooley (1909), Clarence Perry (1927) proposed a neighborhood layout that has become a prototype for a series of new developments from Radburn, N.J., to the British new towns and new towns such as Columbia, Maryland, in this country (Brooks, 1974). Although Perry was cautious in his claims for the concept, it was believed that the localization of facilities, particularly the elementary school, would lead to greater face-to-face contact between people, greater local participation in community affairs, and hence less anomie and a more democratic society than that found in the hearts of major cities. This belief is still very prevalent (Sternberg and Sternberg, 1971, for example).

The belief in architectural determinism has been further reinforced by too simplistic an analysis by designers of the work of other social scientists such as Leon Festinger, William White, and Leo Kuper and, more recently, by some of the work coming out of the environmental psychology program at the City University of New York. While it is easy to fault designers, it must be recognized that the relationship between design and behavior is seldom clearly spelt out in these studies. In their post-World War II study of housing at M.I.T., psychologists Leon Festinger and his colleagues (1950) concluded that the factor most clearly influencing friendship formation in that setting was the physical distance between the front doors of housing units. Friendship, they found, also affected the shaping of opinions. Whyte (1956) drew similar conclusions in his study of a suburb and in his study of the spread of word of mouth in a rowhouse district of Philadelphia (1954). Kuper (1953) also found that the spatial proximity created by the strategic placement of doors led to intense relationships, both positive and negative. Other studies (Roscow, 1961; Adams, 1968; Gans, 1961) have shown that increasing physical distance is a powerful factor in reducing both face-to-face and telephone contact.

There have been a number of studies that focus on the smaller scale architectural environment—buildings and interior layout—and human behavior. A number of these have considered the relationship between ward layout, interaction patterns, and attitudinal changes of patients in psychiatric wards (Osmond, 1966; Ittelson et al., 1970; Holahan and Saegert, 1973, for instance). They conclude that where people have more clear-cut territories and opportunities to personalize them and "sociopetal" rather than "sociofugal" communal settings, more interaction does occur. The terms *sociopetal* and *sociofugal* were introduced by Humphrey Osmond when he was Superintendent of Saskatchewan Hospital to denote those layouts which "brought" people together and those which "forced" them apart. Back-to-back benches are an example of sociofugal layout, and the old-fashioned drugstore booth is an example of a sociopetal one (Hall, 1974). This research goes under the name of "small-group ecology."

Small-group ecology is concerned with the interactions of people and stresses the importance of their relative spatial locations in understanding interaction patterns. Anthropologist Edward T. Hall (1966) has coined the term *proxemics* for the study of behavior in space. He has noted that the formality of a conversation is correlated with the distance the people in the behavioral loop are apart and that culture plays a major part in defining the relationship. Psychologist Robert Sommer has also done considerable work in this area and at one time (1969) thought that personal space was the behavioral basis of design. He has shown that the shape of a table has a strong impact on the interaction patterns of the people around it. Similarly, he has demonstrated that the architectural layouts which can be personalized without damage are positively correlated with personal satisfaction of their inhabitants, particularly in institutional settings (1974).

Paralleling this work has been that of another psychologist, Roger Barker, and his colleagues at the University of Kansas. Barker (1966) has coined the term *behavior setting* to describe a functional unit of environmental analysis. A behavior setting consists of a *standing* or recurrent pattern of behavior and a *milieu* or layout component. The two components are said to be in a *synomorphic* relationship. *Synomorphic* means "similar in form," although what this means is by no means obvious. The concept of behavior setting is nevertheless a major contribution to architectural thought because it links behavior and environment into a single unit. It has been adopted and adapted by a number of architects (Deasy, 1974, for example). Perhaps the most encouraging aspect of Barker's work for designers is the acknowledgment of the layout of the environment as an integral part of human behavior. What is needed now is some clarification of the relationship between environment and behavior.

From this brief review, there would seem to be substantial support for the hypothesis that the layout of the environment is an important factor in human behavior and group processes. Few will deny this. However, the assumption that the relationship between environment and behavior is a deterministic one is not generally accepted, despite its prevalence in architectural philosophy. The concept has fallen into disrepute, as William Michelson (1970) has pointed out. It is necessary to understand the nature of the criticism to understand why.

The Criticism of the Belief in Architectural Determinism

Criticism of the belief in architectural determinism has come from sociologists such as Broady (1966), Gans (1961, 1962, 1968, 1975), and Michelson (1970) and architects such as Alan Lipman (1974) and Brent Brolin (1976). Most of this criticism and the research on which it is based suggests that, while the physical environment is a factor in group function and process, it is not the determining factor. These and other scholars (Abu-Lughod, 1968; Caplow and Forman, 1955; Durant, 1926; Keller, 1968) have emphasized social rather than spatial variables in determining social patterns. Gans' study of Levittown (1967), for instance, repudiates the notion of a strict determinism of friendship patterns by the propinquity of neighbors, based on positioning of front doors, as demonstrated in the Festinger et al. (1950) and Kuper (1953) studies. Rather, friendship formation seems to have been based more on the perceived homogeneity of the people involved and their need for mutual assistance. The dimensions along which homogeneity is important are socioeconomic status and stage in life cycle, as well as factors such as similarity in values regarding child raising, leisure time interests, and general cultural preferences. Spatial proximity based on the position of doors may determine interaction patterns, but this only occurs if the population concerned is of real or perceived homogeneity or where there is a need for mutual aid (Michelson, 1970, p. 190). Similarly, Gans points out that where a change in lifestyle has accompanied the move from city to suburbia, there was a predisposition to change and the layout of the environment simply afforded this change.

Jane Jacobs, in the study of the use of neighborhood parks in New York, notes that simply providing parks does not mean people will use them (1961). Powell Lawton, a clinical psychologist at the Philadelphia Geriatric Center, intrigued by the concepts of sociopetal and sociofugal space, incorporated sociopetal spaces in a new facility, only to find them disused because, he now concludes, they were not located in areas where people wanted to be. In Columbia, Maryland, the facilities provided at the neighborhood level are much underused. This brings into doubt the use of facilities to generate neighborhood feeling (Brooks, 1974). While Greenwich Village is a delight to Jane Jacobs (and to me for that matter), when given the option, most people in the United States would choose an environment with very different characteristics (Michelson, 1968). The original winning scheme in the architectural competition for the East River project in Harlem was based on the insights of Jacobs. The redesign of the project by the same architects to the users' specifications has resulted in a very different layout (Lang and Burnette, 1974). It is highly speculative to suggest that one design can lead to greater interaction than another without taking into consideration the motivations of the people involved. If there is no desire, either manifest or latent, for interaction, then the behavior is unlikely to occur unless it is reinforced by changes in the social and administrative environment.

As Brent Brolin (1976) writes: "[Architectural determinism] is a classic example of the simplistic cause and effect relationship between behavior and environment that still dominates planning and architecture and that lulled modern architects into believing that they could change the way people live by modifying their physical surroundings." Sociologist Maurice Broady (1966) notes, "We are all inclined to see the whole world through our own professional spectacles, and thus see it distortedly." Gutman (1972) adds that architects hope that certain social outcomes will result from their designs and they then tend to expect that those outcomes will happen. Lipman (1974) contends that changes in the architect's role resulting from the growth of ethnological, organizational, and managerial pressures and responsibilities have led to a deemphasis of the aesthetic and narrow functional goals of design. As a result, architects have emphasized their social engineering claims in attempts to boost their self-images. The image enhances the profession's perception of its social importance. The criticism of architectural determinism as a valid belief has, at least partially, reversed this self-perception.

Broady (1966) and Gans (1968) wrote their articles over a decade ago, and Lipman's paper (1974) was originally published in 1969. The thinking represented in these papers has had a limited and mixed impact on architectural theory. Many architects are either unaware of the criticism or have dismissed it. Others have retreated from a position of social concern to a concern with more esoteric formal and symbolic issues on the grounds that architecture has no social impact. There has been very little effort to develop a more realistic understanding of the relationship between the designed environment and human behavior, and, as a result, a more realistic understanding of the contribution architecture can make to social change.

The reasons for this are diverse. It seems plausible that some architects have dismissed the criticism because it comes from people who are perceived to have an ideological (and professional) commitment to architecture not being a major determining factor in human behavior. Others perceive architecture to be a fine art in which questions of social purpose are irrelevant. Probably the most fundamental reason is, however, that the critics themselves have not introduced to designers a conceptually clear alternative description of the impact of the designed environment on human behavior. Architects are confused by the seemingly paradoxical criticism of many social scientists. Herbert Gans in the introduction to Claire Cooper's *Easter Hill Village* (1975) reminds the reader of the fallacy of architectural determinism, but then goes on to note how the facilities and layout of the project and units affect behavior negatively. There is a dire need for a clarification of the relationship between designed environment and human behavior.

Architectural Environment and Behavior

The above discussion illustrates the interplay of social and physical variables in determining behavior. Physical proximity, for instance, fosters social interaction among people, provided they are socially homogeneous. How then do we isolate the role of the architectural environment? It is postulated here that the concept of *affordance* (which is not unlike Louis Kahn's concept of *availability*), borrowed from the perception theory of James J. Gibson (1966; forthcoming) is a fundamental key to this understanding. Further, one can consider the environment as consisting of a set of *behavior settings*, in which the layout affords behavior in relatively consistent ways in particular contexts. To further understand the impact of environment on behavior, one has to differentiate between the *potential environment*, which consists of the sum of the affordances provided by the environment, and the *effective environment*, which consists of the affordances that a particular person or group of people perceive and use. The effective environment is a function not only of the needs of a person or people but also of their *competence* level and the importance of their goals.

The architectural environment consists of the artificial arrangement of surfaces of different substances with different properties, textures, and pigmentations. The composition of surfaces at any place affords a variety of things to a potential user. The list can be almost endless, but a preliminary list which focuses attention on the range of affordance can be developed. At the simplest level and depending on their layout, the surfaces of the physical environment directly afford locomotion, collision, shelter, views, concealment, places to get together, and so on; they can, if constituted in particular ways to form specific objects, afford use in the sense of toys, tools, and machines; they can afford, indirectly through learnt associations, values, emotions, and meanings in human displays, such as signs and symbols. Thus the *affordances* of a particular composition of surfaces of particular materials, textures, and colors is a property of the composition itself, with reference to the competence level of an organism—in the case of architectural designs, except zoos, farms, racetracks, and stables, perhaps, this means a person or group of people. In terms of the more concrete meanings, the competence level is a function of the biological nature of the species; at the symbolic level this is a function of understanding different social conventions. Not all people perceive the affordances of the environment in the same way, nor will they necessarily behave in a particular way given the set of affordances an environment provides. Nevertheless, there are what might be called *behavior settings*, using Barker's term, everywhere. The interpretation of these should be somewhat different from Barker's. Instead of thinking of a *synomorphic* relationship between standing patterns of behavior and milieu, we should think of the quality of the affordance provided for the patterns of behavior of people with particular motivations, values, and *competence* levels. Affordances are properties of the layout of the environment and competencies are properties of the population concerned.

Competence is a function of many things—the physiological characteristics of the person or people, in terms of the state of the perceptual systems and the health and dexterity of the individual; mental abilities, in terms of education, intelligence, understanding, and basic cognitive abilities; and resource capabilities, in terms of such things as finances. In some instances, particularly in terms of aesthetic appreciation, it would extend, as Santayana (1896) recognized, to an understanding of an arbitrary "theory" of the creator of an art work. These competencies do not necessarily go hand in hand. It is quite possible to be able to perceive the affordances of the environment and not have the physical and resource capabilities to avail oneself of them. The lower an individual's competency, however, the more the effective environment becomes restricted, because the affordances are greatly reduced. This can lead to higher rates of physical and mental illness (Klee et al., 1967). In contrast, however, it has been hypothesized (Nahemow and Lawton, 1973) that if the environment is less demanding than one is competent to deal with, it can lead to atrophy, because it is too comfortable. The result, particularly in institutions, is a lack of sharing, deindividuation, loss of competency, and other forms of institutionalized behavior.

Even the fact that an environment affords a particular set of behaviors does not mean that those behaviors will take place. On the other hand, if the affordances are not there, the behavior cannot take place unless the environment can be adapted. Alternatively, an individual's objectives might be met by another set of behaviors which the environment does afford. In this case we have adaptive or coping behavior. If this change involves so much physiological or psychological stress or effort that it impedes the attainment of other goals on the part of the population concerned, then a program requiring physical design solutions exists. Thus the role of the architectural environment in affording patterns of behavior is accommodative, not deterministic, except in the negative sense—if the affordances are not there, the behavior cannot take place. What then causes behavior and behavioral changes? This is more difficult to answer.

Human behavior, both spatial and mental, is some complex function of our intentions and habits as well as the affordances of the physical and social environment. Intentions themselves are some complex function of the desirability of a behavior and its perceived consequences and the social pressures one is under. It thus becomes clear that trying to explain or determine behavior in terms of the affordances of the physical environment is very naive. While one can predict the likelihood that a set of affordances will be used with a degree of probability, because the behavior is not random, there is no guarantee that, if a set of affordances exists, it would indeed be used. The layout of the environment is thus relevant to behavior, insofar as the affordances provided by it affect the set of behavior settings which constitute the social system of the people involved, or insofar as it is taken up into their social system, as Gans (1968) argued in a somewhat different way a decade ago.

If one compares the results of urban renewal efforts of the fifties and sixties with what was there before, one certainly perceives, in most instances, a neater environment but one less rich in the variety of the *behavior settings*. There are fewer affordances for varied experiences. Children have fewer opportunities to see adults working; there is less for them to explore and more opportunities for them to conflict with others. Does that mean that children are being short-changed? Urie Bronfenbrenner would believe so (1966). Certainly the dullness of the behavior settings of institutionalized babies has a very negative effect on them (Spitz, 1945) because they afford few experiences. Are these results inevitable? Is it because of the change in scale of economic activity or the increasing introversion of the population? Have the segregative concepts of land-use zoning ordinances anything to do with it? What effect do these changes have on people? What should planning policies be?

Present city planning ideology, as represented by the content of the courses of instruction at what are generally accepted to be the major Departments of City and Regional Planning in universities across the country, rely very heavily on the microeconomic approach to urban analysis, which emphasizes market and marketplace failure and policy and policy slippage—an approach which imagines that the solitary source of social benefits is the marketplace transactions of the private or public sectors. With this approach it is impossible to answer questions such as those posed above. Indeed, such questions appear to be of little concern.

Such questions can only be answered by studying social and psychological values, processes, and requirements and by embodying the results in both social and physical design. This raises the ethical dilemma facing the designer. Does the designer/planner strive to design environments which people say they want, given the resources available? If he does so, he is following an eminently pragmatic approach which assumes that the role of the designer/planner is simply one of a midwife overseeing the process and providing technical assistance where necessary.

An environment congruent with the inhabitants' mental image of what they will enjoy may, however, be very different from one that is behaviorally congruent—one that is used and enjoyed by people after it is built. An ideal environment would presumably be one in which people avail themselves of the affordances that they need and enjoy. It is surely then the role of the designer to make people aware of alternatives of which they were previously unaware and of the costs and benefits of these. How far can the architect/planner go in striving for change? Surely he runs into the danger of urging facilities or symbols on a population that perceives, rightly or wrongly, that it has little desire for them. In addition, it has been stated above that simply because an affordance for a behavior is there does not mean that people will carry out the behavior. Unless there is some overriding coercive force, as under an authoritarian dictatorship, a predisposition for a new behavior pattern has to be present in people before they will avail themselves of new opportunities. Similarly, they must be able to recognize the affordances provided by the new environment. Changes in social behavior result from changes in the social environment. This means a social plan must come first and a means to ensure its acceptability and implementability within the socioeconomic and political environment must be ensured before the designer can start thinking of the affordances that the layout of the environment has to provide in order for those changes to take place.

The conclusion is, thus, that the architectural design can only indirectly affect social change. First the social environment for change must be identified and translated into a behavioral system of activities and symbols. This is largely a social planning activity accomplished through political action. Then the designer can start thinking of the characteristics of the layout of the environment which would provide the affordances for this change. To do this he needs to know much more about the processes of perception, cognition, and spatial behavior than he does at present. Even if the designer is armed with such theoretical understanding and an understanding of how the affordances of the environment are perceived and understood by different people, the question of how tight a *fit* to design between environment and behavior has to be faced. How enduring will the behavior be, how enduring the symbols? An acceptable level also depends on the rewards and costs of being in a particular situation (Helmreich, 1974). What are these in the situation being considered? These questions are difficult to deal with in a scientific way because they involve advocative positions. They have to be argued through. Thus the profession needs an attitude toward the process of designing and to the client-professional relationship to accompany an understanding of human behavior in the physical environment.

Although it has been suggested here that the social design must precede the physical design, the process is not simply a linear one. The implications of the social program as far as design is concerned need to be understood by those involved in the social design—an understanding and concern that they generally do not have. Ideally, the design team should contain both social and physical planners and be concerned with the design of a system of behavior settings. In any situation, to the extent that the existing layout of the environment concerned possesses the physical components required for these behavior settings, the design problem remains one of social design; to the extent that there is a lack of affordances in the layout of the environment for the behavior required for social change, it is a physical design problem.

Summary

Architectural determinism is the assertion that the three-dimensional layout of the environment has a direct and determinate effect on the way people behave—the activities they carry out, their moods and level of enjoyment. It implies a simple behaviorist model of environment-person relationship, with the layout being the independent variable and behavior the dependent. Thus it implies that people are shaped by the design provided by architects and planners. Given the fantastic diversity of behavior in similar environments—such as the gridiron city plan—this belief patently overestimates the effect of the layout of the environment on behavior.

While this belief has been largely rejected, no conceptually clear statement of how the physical environment does, in fact, affect behavior has been offered in its stead. It has been hypothesized here that the environment can be considered to be a set of behavior settings in which the layout provides affordances for physical comfort, activities, and aesthetic appreciation. The designer creates a potential environment for behavior. If the affordances are perceived and there is a predisposition and competence enough to use them among the population concerned, then it becomes an effective environment. If the affordances are not there, frustration and stress will result until some sort of adaptation, either behavioral or architectural, takes place. Thus the design of the environment affects behavior through the affordances that it does and does not provide and the desire of the people to use or not use them or even to change them to better serve their purposes.

It cannot be assumed that simply because the environment contains the affordances that the designer/planner wants people to use or hopes that people will use that they will, indeed, be used. Social change results largely from changes in the economic and social environment. Providing the physical and symbolic affordances for these changes through changes in the built environment will enhance the process of social change and, if the direction of change is a positive one, the quality of life of the people concerned. To be able to effectively participate in this process, the designer needs to understand the way in which the layout of the environment affords behavior and how people perceive these affordances or can be educated to perceive them. If the designer can do this, and there is considerable evidence that he can, then the design process begins to be more rational than one that is based on a belief in architectural determinism.

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Fig. 1. Symposium panel members Adolph Placzek, Anatole Kopp and Hans Harms.

SYMPOSIUM ON POLITICS AND ARCHITECTURE
George R. Collins and Adolph K. Placzek, Co-chairmen

AT the suggestion of James H. Fraser, Director of the Friendship Library of Fairleigh Dickinson University, a symposium was organized by himself, the two co-chairmen, and Ursula Sommer, also of the University, to take place there on 19 October 1974. It consisted of two sessions in which rather formal presentations were made and to which individuals in the audience, as members of the symposium, were asked to respond with questions and comments—which they did vociferously. For this publication of the proceedings, the speakers were invited to edit their contributions, and the comments from the floor were considerably edited. The reader will see that the symposium expressed considerable skepticism as to whether the architect, as designer and builder, can be an effective force for social amelioration—in contrast to the rather visionary idealism that had marked much of the architectural profession in the decade of the 1960s.

The moderator suggested at one point that because of its theme the symposium could well have been dedicated to the recent memory of Sibyl Mohly-Nagy and Donald Drew Egbert, for reason of their well-known concerns with and publications on the subject, and to that of George Wittenborn who had died the week before.

COLLINS:* Welcome, one and all! We shall consider this matter of politicization from two aspects: an historical one in the morning and a contemporary one in the afternoon. This morning we are putting the question: "Why have progressive, reformist, avant-garde architectural movements failed to maintain themselves in the twentieth century?" We have picked a study of the Soviet experience and another, of the Weimar experience, with which to examine this question. In the afternoon, there are general topics: "Can the architect in our day be an agent of social progress? Is there any evidence that the profession is moving in such a direction? Can architecture be at the same time socially meaningful and aesthetically exciting?" These problems of the contemporary scene will be dealt with by people who have been concerned with achieving a perspective on them.

There are other problems that we presumed would come under discussion in connection with the general topics. Without taking a stand on any of them, I think there are points that should be raised. The first one is: "Can building, through its forms, express an ideology? If so, why have radically different political stances adopted similar architectural forms?" Second: "The forms and structures of buildings are abstract. Are they, therefore, capable of communicating a relatively complex message, such as the particularities of a political dogma, unless it be by decorative elements, for example, frescoes, graphics, and sculpture, which are different art media?" Third: "Because of the necessity for large patronage funds, is the political expression of architecture tilted toward elitism, whether the patron be an individual, a corporate group, or a governmental or political body?" The fourth question: "How can architects effect social changes when their profession is responsible for such a small fraction of the structures built?" And finally: "What is meant by revolutionary architecture? By avant-garde architecture?"

Before we start, there are a number of people in the audience whom I should like to recognize, for we have a rather interesting interdisciplinary group here: Stanford Anderson; Rosemarie Bletter; Peter Collins; Percy Goodman; Henry-Russell Hitchcock; Anthony Jackson; Michael Klare; John Maass; Christian Otto; Richard Pommer; Cervin Robinson; Denise Scott Brown; Susanna Torre. When the time for discussion comes, we will be taking questions from the floor.

The first presentation has to do with what we have, in a very oversimplified way, called an "authoritarian model," as opposed to what we would call the "libertarian model" of the Weimar Republic. Our first speaker is Paul Willen, an architect with Gruzen and Partners, who has also worked with Marcel Breuer. He has been an architect for many years, but he had a previous incarnation as a graduate student in history at Columbia University, at which time he wrote a little-known but I think remarkably interesting Master's thesis on "Soviet Architecture in Transformation: A Study in Ideological Manipulation." From my knowledge of the field, this is the best study of the beginnings of what we call the "crunch" in the Soviet Union. I have asked Paul to look back into his past and give us some ideas about the Soviet situation in connection with the theme that we are dealing with here.

WILLEN: The subject of politics and architecture in relationship to the Soviet Union is actually, in my view, a splendid topic, but a somewhat unnatural one, because to many architects politics is a rather ugly word; they hate to talk about it. I don t mean politics in the elevated sense of the architect's strivings to serve the higher interests of humanity and to fulfill a great social mission—a desire that many of us are imbued with—but I mean politics in the raw sense: the intervention of the political machine into the workings of architecture, not always with a benign purpose. Getting votes, getting paid off, organizing cadres, making deals, getting on the right side of the right people, getting commissions, getting paid, and so forth—that is all part of our profession. We like to talk about the social needs that we are satisfying; all of us believe ours is a calling, and we are interested in expressing the higher social purposes when solving problems. We are very quick to blame the client for failure when we fail, but I think it is a much more complicated matter than that, particularly if you evaluate the experience of the Soviet Union between 1917 and 1935.

That was a period when within a space of thirteen years there were two revolutions, one in 1917 and one in the early 1930s, providing an extraordinarily rich field for investigation as to how architects respond to social pressure and, in turn, create it. Politics and architecture merged and reemerged together. I am sure that all of you are familiar with the rough outlines of that period, so it is not necessary for me to summarize the quick shifts in design. During the revolution and the counterrevolution, the visual norms of society were being changed to a degree almost without parallel in history. It was the period of the collapse of styles and the emergence of an engineer-based architecture. An intensive debate was going on throughout the world between groups that were seemingly worlds apart, and in the middle of this mounting debate came the Russian Revolution. Then, thirteen years later, there came a reevaluation of the meaning of that revolution in terms of architecture and a resultant change almost as severe—maybe more so.

*Unless otherwise indicated, "COLLINS" is George Collins, the moderator.

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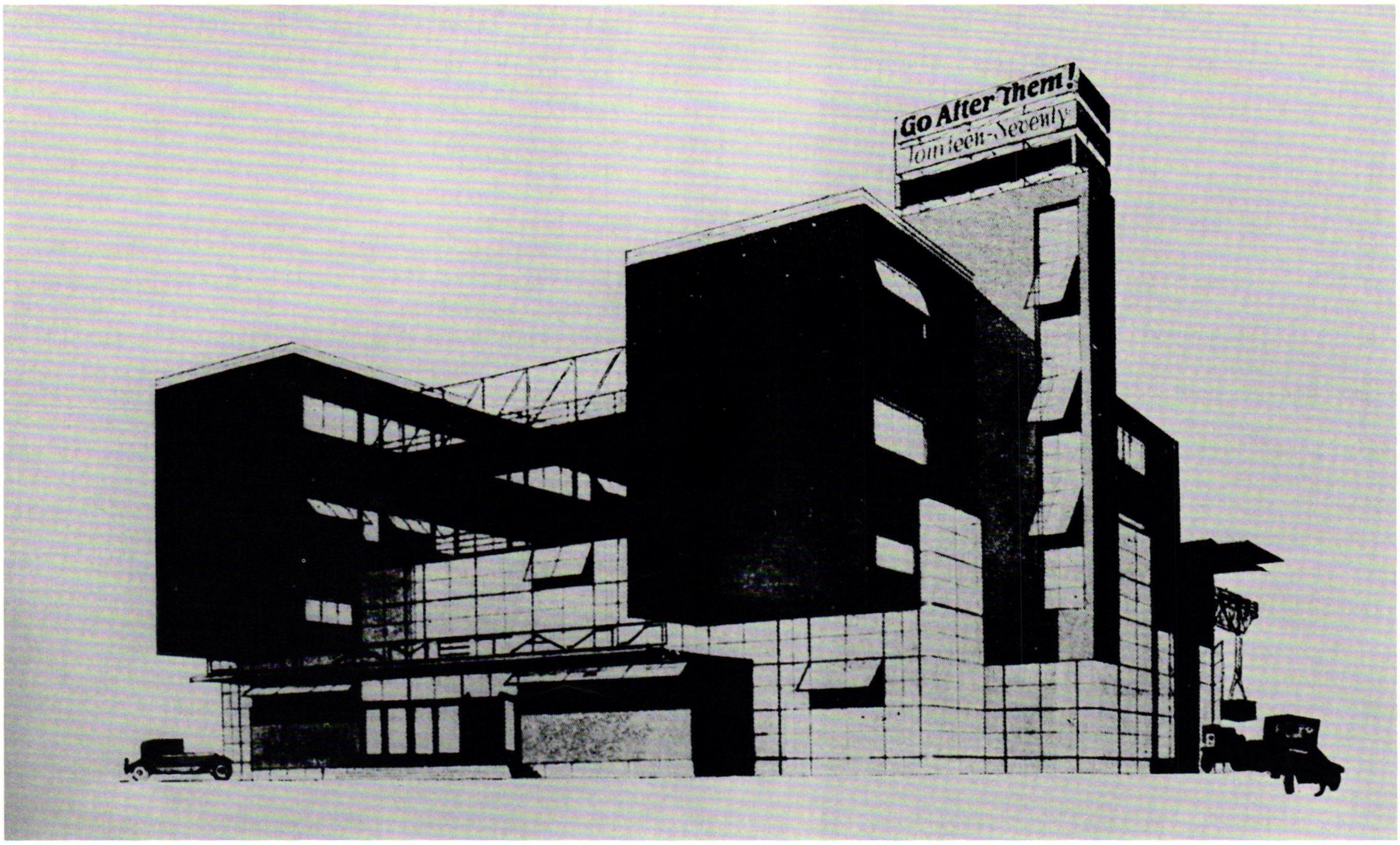

Fig. 2. Orgametals Building. Competition. Moisei Ginzburg. 1926–27. Drawing.

I grew up in the wake of those two revolutions. The first one was a time of great hope, and the second was one of great despair for many people. The conflict and the discussions about the meaning of those two revolutions were things that I remember from my childhood very profoundly and very strongly. Many people on the left defined themselves by their attitudes to these two revolutions.

In the 1920s Russian architects, like most architects, thought that the issues were social and aesthetic; they talked about the new life, the fulfilling of housing needs, and the different kinds of communities that were developing. What they really meant, as always, was a new freedom for architects. As it turned out, however, the real issue was power, and how these architects might express the power system in their buildings. They didn't realize it, but the system that actually prevailed in the 1920s was probably best characterized by an absence of direct power or direct force: the destruction of the czarist state, of the landlord, and of the military establishment. Modern design was meant to express, at least in part, a freedom from states and, for a time, freedom from clients—or even something better, the architect as his own client. Russian architects in the 1920s thought that this victory—in particular, the emergence in 1928 and 1929 of modern design as the dominant design force—was a victory for them, their work, and the logic of their ideas. But the victory was shortlived.

Many writers have written about the failure of modern Soviet architecture in the second revolution, as though it reflected some kind of failure on the part of the architects. Two of the criticisms that have been leveled at the architects of that period are insufficient recognition of technological problems in an underdeveloped nation, and a too-abstract approach. But I do not believe these criticisms are justified. In both cases, the architects were responding to two political-social cataclysms. One enabled them to take power, so to speak, and to occupy prominent positions in the Russian architectural organizations and magazines, but the second one destroyed them. In the chaos of the 1920s, at first there was no client, and then a client emerged—to the everlasting regret of the architects. They talked about everything—how to remake the villages, how to design a communal kitchen—but never about how decisions are made, who controlled the construction industry, who would give commissions, and who, in fact, was the client. That was the issue, not how to house the masses—though that was a very important and exciting question—nor the linear city or the deurbanized city. In Russia of the 1920s, the great issue was who controlled society.

Let's be practical. You have to have a client, and there wasn't one in the 1920s, partly because nothing was getting built, and partly because there wasn't much decision-making authority anyway. So, in a sense, the architect was his own client. That made for brilliant designs; that made Constructivism one of the glories of the twentieth century. But it also led to some confusion. Moisei Ginzburg, a leading theorist and architect of the period, and editor of *Sovremennaia Arkhitektura*, the foremost magazine of the late 1920s, thought that the proletariat was his client. That was easy to say, because the client never actually showed up for conferences. Ginzburg said: "One special circumstance that will be particularly significant in furthering the work of modern architects in Russia is the emergence of a new group of clients—the working masses, free of prejudices as far as taste is concerned, and not bound by tradition—factors that have, in the past, exerted a decisive, dominant influence on the thinking of the petty bourgeoisie. Because of bare economic necessity, the millions of workers have no love for the ornamental junk, the holy pictures, icons of course, and all the thousands of useless articles that usually clutter up middle-class homes. These millions of workers [and this is the most beautiful statement of all, and I'm not quoting him satirically, because I don't for a moment doubt his sincerity] these millions of workers must unquestionably be considered supporters of modern architecture."

This reminds me of an observation that we made in my office several years ago when we were doing a lot of work for the Urban Development Corporation in New York. As you know, that is Ed Logue's outfit, and most of the work they do is in subsidized housing in New York State. Ed Logue was hiring many excellent architects, including my own firm, and we did a lot of work with a pretty free hand (he was another one of those marvelous clients who let the architect have a free hand). We noticed something rather strange about what we were doing: the best housing work was being done for the very poor, the low-income housing where, of course, there were huge state subsidies involved. The work we were doing in middle-income housing wasn't quite so good and not quite so daring. And the work we were doing for the rich, conventionally financed, was mediocre. We puzzled about this and then realized it was quite simple. The poor had no choice. They had to take what the architects wanted, because they had no economic leverage, which is to say, the state had all the leverage and was giving them buildings at such bargain prices that they never thought to question what they were getting.

I'm oversimplifying this, of course. There are community groups, and all that has developed in the last five or ten years, but the situation hasn't changed much. The middle-income housing had to be sold on the market, and, even though it was subsidized, this was not a sufficient guarantee that apartments would be rented at the necessary prices, so you had to take a little more account of exactly what you were giving the client. For people who were paying their own way, however, unless they had good taste (which, as we know, is not all that common), you had to supply the market with exactly what the owner—that is, your builder—perceived the well-to-do client would want. And that, in a sense, is the problem with Ginzburg's formulation in 1925 about the role of the proletariat, or the working masses, in the design of housing.

One of the reasons why so much brilliant work was being done, or at least projected, in Russia in the 1920s was that there really was no active client. Then, between January and July of 1930, a new client emerged, the new socialist state. And what a client! He had no hesitation about expressing himself. The architecture of the ensuing period, far from concealing the new socialist reality, as some have contended, expressed as well as it could its values—power, symmetry, hierarchy, order, and a phony kind of joy. It is considered bad manners to dwell unduly on politics in this bad sense of arm-twisting, pork-barreling, Stalinism, and purges, so writers slide into the 1930s without really telling what happened. They gloss over who assumed power, and how the great Bolshevik leaders, Bukharin and Trotsky, were done away with by the same men who staged the 1932 competition for the Palace of the Soviets. They don't describe how the Commissar of Culture, Anatolii Lunacharskii, explained to the architects, who couldn't talk back by that time, why pseudo-Greek monumentality best reflected the spirit of socialism in 1932. They don't mention Politburo Member Lazar Kaganovich, one of Stalin's chief henchmen and leader of the construction industry, and how he worked out the bylaws for the Union of Soviet Architects, founded in 1932 in order to discipline and organize the unruly architects, who during the 1920s had grown accustomed to thinking of themselves as enjoying a freedom of choice in their associations. Socialism had become authoritarian, hierarchical, and reactionary, and it needed a design system to match. In later years, the authorities would come to regret that decision, but that was hindsight; and no one can say today that they could have achieved such a rigid social system, one that has lasted these many years, if they had not gone through that bad period. Indeed, to treat the thirty-year period of eclecticism as a temporary aberration of socialism is indefensible. To assume that it was contrary to the spirit of the Stalinist Age defies the facts of Russian life as we know them.

The rejection of modern design was accompanied, as we know, by a similar repudiation of modern culture in the fields of literature, painting, music, scientific theory, international law, film, and sex relations. The architectural organizations of the 1920s were dissolved in 1932 in accordance with a broad decree governing literary groups, which concluded that similar steps should be taken in respect to all the arts. Of course, as a result of that experience with the state as the exclusive and all-powerful client, we have come to appreciate a little more the traditional type of client, who represents a more fragmented but more stable set of relationships. The man who hired Mies van der Rohe to do a house in Chicago in 1939 would presumably be around to have him do another one in 1949; this gave the architect a sense of continuity and independence. The capitalist client actually had a longer life expectancy. This proves something that was not altogether clear, perhaps, to the Russian architects of the 1920s—that the design aesthetic they were evolving was not tied precisely to socialism per se, but rather it was related in a broader sense to the nature of modern life, to our lifestyle, to a free and open life, casual, democratic, and unpretentious.

In this sense, architecture and politics were closely linked, not by ideology, but rather by the social changes that an ideology and a regime that expounds it can sometimes accelerate or retard. But the design itself comes from the architect, not from the ideology, not from the politics. In that respect, I've always felt that the reason that archaeologists have never been able to come up with an adequate explanation for the building of the Egyptian pyramids is that there was none that could be clearly articulated in ideological terms. Many rationales and justifications having to do with their ideology may have been offered by the Pharaohs' architects, but in the final analysis, it was a great internal vision that impelled them to that concept. They wanted to see monumental structures built, and they had the means to do so. Surely Tatlin, when he designed his fabulously ambitious and witty Monument for the Third International, owed more to the tower built by his predecessor, the French engineer Eiffel, than he did to Marx or Lenin or Mayakovsky. But, of course, he gave it a 1920s socialist title, one of those marvelous verbal accompaniments that are the envy of lesser artists—"the line of the socialist international in its ascendancy," or something of that sort. A model of it was made and carted all over Russia to a hundred local fairs. Who would have picked up the tab otherwise?

I hope nobody thinks I'm demeaning the architect-designer if I suggest that he's capable of such an adaptation. I think, on the contrary, it is all to his credit; in a way, that's how he uses the client, and that's what the client is there for—to be fooled a little. I have no reason to doubt that Tatlin was a fervent believer in the revolution, but I think the vision for his tower came from within *him*, not from the pages of *Pravda*. It was to his own concepts that Tatlin was looking when he designed that great double spiral, whose dynamism he declared was the best expression of the revolution's spirit. He might have designed it for another client, if there had been another one around. I say this from my own experience as an architect and from seeing what goes on around me. I sense the eagerness to match the design ambition with social need, to find the right slot for the right

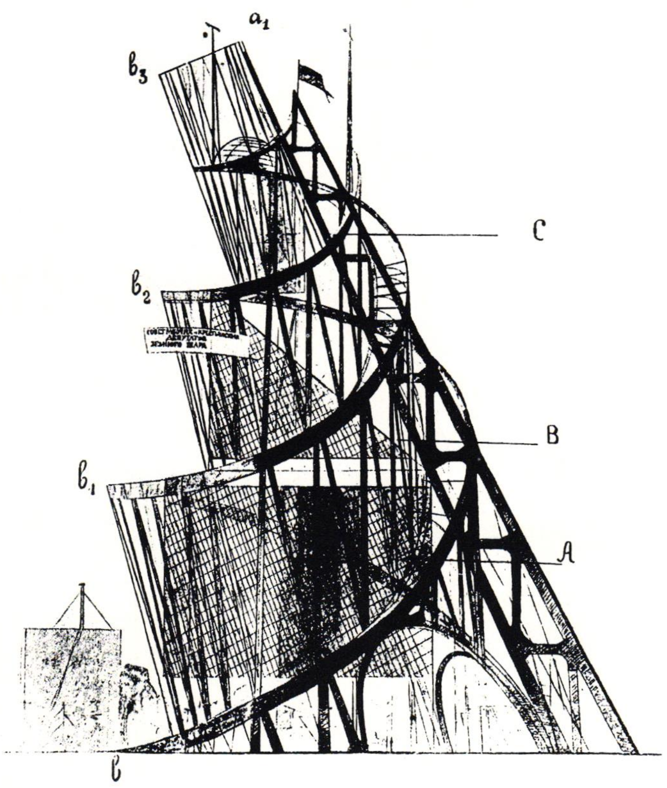

Fig. 3. Monument to the Third International. Project. Vladmir Tatlin. 1919.

new idea; in today's terms, for a young architect to address himself in 1974 to the inner city or to ecological problems. That's where the excitement is. The challenge is to adapt an aesthetic to a rising need, in the same way that a physicist dips into the evolving arsenal of mathematical models to find one that somehow describes the physical formation he is trying to get a handle on. But the model preceded the problem, and that is the point; it could possibly be applied to some other problem.

The Russian theorists were very concerned about the problem of communal living. According to socialist doctrine, life could no longer be private and exclusively family-oriented. They saw ahead to child care, day camps, women's liberation, even communal kitchens, and, of course, socialism was accelerating the processes. But, as we all know, these ideas hit us, too, without socialism, and Le Corbusier and others dealt with communal lifestyles in many projects. Architecture traditionally has a benign face, and people have confidence in the good intentions of architects, rightly suspecting that anyone in such a calling will be glad to be compensated in prestige rather than in money. Perhaps that is why, after the elimination of modern design and the destruction of the architects' own organization, the Stalinist regime never punished the leading architects by exile or slave labor camps, or by the more usual sentence of that period—which was death by work. The architects simply were not embroiled in politics; somehow this was grasped, and even Ginzburg, to whom we referred before, who knew by heart the latest figures on grain production in the Crimea, was not really in politics either. He was probably a fervent Communist, but he was too sincere an architect to get involved in the bad way that I referred to before. So the architects were allowed to continue to work, quietly, mostly without any commissions, although they could work in other ateliers; perhaps, to borrow an unfortunate phrase from President Ford, it was considered that they had already suffered enough by being barred from construction.

It was a tragedy that this great flowering of architectural genius was cut off so early. Rereading the story in preparation for this conference, especially the month-by-month account of how they were cut down, and the last marvelous issue of the annual, *Sovremennaia Arkhitektura* (1930), full of such hopes and such indignation, reminded me of the full horror of what happened in this debacle of human creativity. Yet now I see it in perhaps a less conspiratorial light. I see both the architects' downfall and their success. They depended too heavily on politics to begin with. These men, after all, might not have seen the light of day had the revolution not given them their chance. As modern architects, they would have had to wait another twenty or thirty years for their first major commissions in France or Italy or Britain. Their sudden prominence in the 1920s, then, came as something of a freak chance. They'd been thrust up too fast, and they would go down equally fast. They had not had time to train a generation of bourgeois homeowners or apartment dwellers to love good furniture, to collect good things, to hire designers instead of contractors. They needed a permanent audience beyond their own little group. The Russian intelligentsia, though not backward, numbered too few to be effective.

Those excellent-mannered 1920 buildings that we love so much meant absolutely nothing to the young managers of that period, men like Nikita Khruschev, who was coming to power at that very time. They were Communist administrators out of the great Russian populist, anti-intellectural tradition, to whom these buildings spelled art, equality, and direct, casual relations; whereas they were trying to put together a strong central authority in which everyone knew his place. They wanted to attract more young men like themselves, men for whom the revolution meant that the formal trappings of wealth they associated with the old aristocracy would now be shared by everyone in the victory of Communism. Only the old guard still felt that the revolution actually meant that there would be no such trappings of wealth, and that this was conveyed by modern design, which was sparse and simple and relied on forms, not on decoration. For the new leaders, however, as for a *nouveau riche* anywhere, the great ambition was to inherit the old mantle, even if it only meant sharing a summer rest home that looked like the home of the landlord.

To make matters worse, architecture in 1930 was still in its heroic stage, and it had not yet learned how to be warm, cozy, family-like, national, personal. The style was international and abstract and gigantic—and how brilliant it was! But of course, that didn't make the going easier. Constructivism was Russian, and that meant that it was even more brutal and more bold. Today that brutality appeals to us, but in those days it looked like social upheaval. For the Russians there was no Russian Mies van der Rohe, elegant and sparse, not a Russian Marcel Breuer, with warm colors and soft-toned textures, nor a land-hugging, earth-worshiping Frank Lloyd Wright. It was mostly abstract design, using steel, concrete, and great forms and systems, with an interest in the pure design that also appeals to us today. The Five-Year Plan was designed not by economists but by brilliant graphic designers, who put out marvelous bold graphs and charts. The modern architects were highly skilled natural propagandists, and some of them must have seen architecture partly as a form of propaganda for a new way of life. Certainly we responded to it in that way in the 1930s, as I remember very well, even though I was then only a small boy. For us, the association of modern design and socialism was absolute and unequivocal. I still remember my thrill when, as a boy, I visited the Tennessee Valley Authority dams, superbly designed powerhouses, the design-engineering symbols of that era, set against 500-foot-high expanses of well-jointed concrete. I said to myself, "That dam, that is socialism." And to this day, I'm not sure whether I meant that with good design you finally find your way to socialism, or the opposite—that when we get to socialism we will find the kind of design solutions we deserve.

COLLINS: Thank you, Paul, for a brilliant and moving performance. Now we will have questions from the floor. I see Fred Starr's hand. Professor S. Frederick Starr, of the Princeton University Department of History, is assembling a monumental study of Konstantin Melnikov, and has produced numerous studies of Russian architecture.

STARR: I am very interested in the remarks made, and I find myself agreeing with many of them. There is one point, though, that I should like to question, and that is whether Soviet architects had clients in the 1920s. It's my impression that they did indeed have clients, but of a very particular type. They were building a great deal—more, it turns out, than we've appreciated until recently. They were building various structures, largely for the cooperatives, or in many cases, for city governments and city councils, particularly in Moscow. Both categories of clients were staffed, at least at the top levels, by well-educated, sophisticated folk who shared the architectural prejudices and inclinations of the modernist and, were, as you say, quite glad to let him build as he pleased. So, in a sense, this enabled them to be in their way intensely political in the 1920s.

Yet just by virtue of having that kind of client, I wonder if the architects weren't put in the position—to generalize about an obviously very diverse group of people—of realizing by the end of the 1920s, that although they had a client, they didn't have a public. What they were building delighted and titillated their official sponsors, in many cases, but the public for whom these structures were being built was appalled. Even before the end of the 1920s, there were cartoons about how awful it was to live in these new places; plaster was falling, and people thought they were cold and austere. And so by the 1930s, the choice confronting them was whether to keep on with the same clients or really to make an effort to establish contact with this much broader public, the "proletariat" that they'd talked about so much before. It's my impression that to a large measure, the profound reorientation that took place, and that you've described so well, was voluntary and not just forced down the architects' throats. There was a brutal realization that the political world they had inhabited in the 1920s was a very particular one, very isolated in its way. Realizing this, there was, even on the part of the architects themselves, and even as they were being encouraged to retool, a desire to make contact with this much broader public, this proletariat, with its rather backward-looking taste. Many statements, such as "the proletariat also has a right to columns," were not cynical but, on the contrary, manifested a desire to substitute for the politics of having a client something much more secure in the long run, namely, having a public.

WILLEN: I agree with part of what you have said, but I must say that from my own reading, I see no evidence whatsoever to indicate that during the period when the modern architects were out of touch with the Russian public, their change in attitude was in any way remotely voluntary. I do not believe that the architects gave an inch without being pushed. As far as falling plaster is concerned, nothing that happened in the 1930s stopped that or led to a solution of the problem. The point is that from what we know of the written accounts of that period by architects, I have never found one of them who recanted in a way that I would consider a reappraisal.

COLLINS: Anatole Kopp, who will be one of our speakers this afternoon.

KOPP: I have shared many of Paul Willen's interests in Soviet architecture. I too looked at Soviet architectural production as the built expression of a "new world;" when I was a student in this country, I too visited the T.V.A. projects and thought them a step forward toward this new world. On one point, however, I disagree with your analysis. Was there a client in the 1920s, or not? One must recall a particularly important fact concerning the 1920s, not related specifically to architecture but to society as a whole. The issue at stake at that time was what was called in Russian *perestroika byta*, which means, roughly, "reconstruction of the way of life." What was projected was not an architectural but a global-social goal, one that humanity had been dreaming of for centuries. The utopian-socialists sketched it out; the Marxists had shown the way in which it could be achieved; and after the revolution, the problem was then to build an entirely new society. I think that the Constructivists felt themselves to be coworkers in this enterprise; their problem was not so much to invent forms that would speak, that would explain this society, as it was to create forms in which this society could live, expand, and develop. They believed they were building the shell of a new socialist society, free from exploitation. Notions like the traditional family disappeared. Alexandra Kollontai, who was one of the first leaders of the Party, wrote a lot about that, saying that if the family were to disappear, the traditional notion of housing—the traditional notion of an apartment—must also disappear; that is why one had to invent these *domkommunas*, these "house communes," and so forth. The program, the idea of the *domkommunas*, was not an architect's invention but an architectural solution to a social and political problem. In the same way, the workers' clubs, the new factories, etc., can be explained in social and political terms.

The counterrevolution of the 1930s was not, perhaps, a revolution but a far more gradual process, which began much earlier, grew up slowly, and appeared clearly in 1935. One can speak of it as being a revolution, however, in the sense that the project of reconstructing a whole way of life was abandoned at that point.

And it is at that point that we can go back to the problem of the nonexistent client. The client existed, but he was not the same one in 1935 as in 1925. The client in 1925 was the class that had made the revolution and expressed itself through the Bolshevik Party. This client promoted the "new way of life." But the processes of industrialization and administration, and the dilution of the original revolutionary class by a larger working class essentially made up of peasants, progressively brought a new ruling class to power. This has been fully explained by Leon Trotsky in *Revolution Betrayed*. It is the key to the Stalinist architecture of the 1930s, which was no longer the architecture of a socialist society. Instead, the new ruling group appropriated the forms of the ruling groups that had preceded them, because most people can't imagine forms other than the ones they're used to. Thus one might call Stalin a democrat in the field of architecture, because he said that what had been good for the aristocracy and the bourgeoisie before the revolution was good for everyone after the revolution.

COLLINS: Denise, would you like to say something? Denise Scott Brown, planner, writer, and partner of Venturi and Rauch.

SCOTT BROWN: What Mr. Kopp said was moving to me, because it's the kind of situation that we're all in over and over again. And Mr. Willen has brought up the issues beautifully. I think he might take a different side from the one I would take, that is to say, I think the architects should have listened to what the people wanted. It might have given them a very difficult problem, but they should have confronted that problem rather than retreating to their

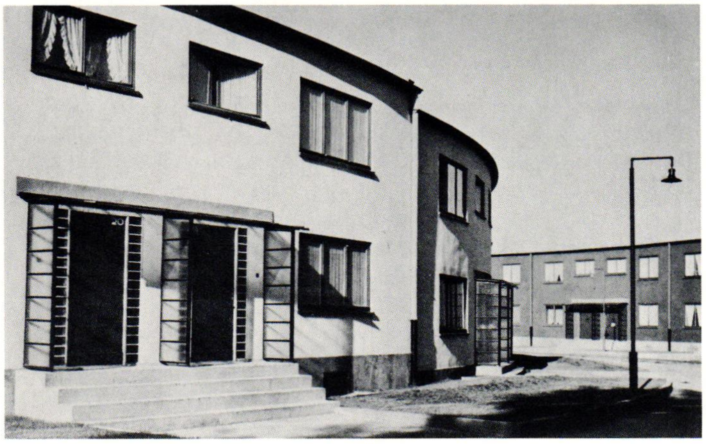

Fig. 4. Siedlung Romerstadt. Frankfurt-am-Main. Ernst May. 1928–30.

narrower client. We recently had a debate with the Italian Communist architect Aldo Rossi, which showed the situation up again, because we were saying, "You have to look at Levittown." Levittown is where you could say the proletariat is (though in an American situation, you have to talk about multicultures and pluralism). In any case, you'd have to say that a large segment of the market really has lost most architects, because they don't want to talk about a market, about what a large section of the market wants. But we ought to learn about that and find out to what extent we can satisfy it and try hard to do so. From my experience of working with low-income people as their advocate, they want that. They will want Levittown, and they will want the symbolism of powerful groups; and when they have the power, they will want that. And Rossi was, therefore, calling us "fascists." On the other hand, he was saying, "I'm a committed architect," and I couldn't understand how he could produce what I call elitist architecture, which looks to me like what is happening in East Hampton—you know, the Le Corbusier revival. And there he is, and he's producing that for workers' groups and Communist party local headquarters, and it's very funny that we each call one another "fascist," and that each thinks he represents the liberal side, while we take these opposite stands.

COLLINS: We will now proceed with the next presentation. Professor Barbara Miller Lane is a professor of history at Bryn Mawr and is in charge of the Committee on the Growth and Structure of Cities. I suspect that everyone in this audience knows that she wrote the book *Architecture and Politics in Germany, 1918 to 1945,* published by the Harvard University Press in 1968 and an outgrowth of her dissertation on that general area. She is currently involved in assembling an anthology of Nazi ideology from documents, and she's going to talk about housing in the Weimar Republic.

LANE: I will be going over some of the same ground as Mr. Willen, by talking about the development of the "new architecture" in Germany, and more specifically in German housing. I'm going to attempt to explore what kind of ideology was implicit in German housing of the 1920s. I'll then address the question of the relative fragility of progressive, reformist, avant-garde architectural movements.

I'd like to begin by reminding you of the extent of public housing under the Weimar Republic. In Frankfurt-am-Main, Berlin, Hannover, Cologne, Breslau, Magdeburg, Hamburg, Dusseldorf, and many other urban centers, many thousands of dwelling units were erected with the support of public funds between 1925 and 1933. And increasingly after 1925, this housing, erected within *Siedlungen* or housing developments, bore all the earmarks of the new architecture, the so-called International Style: apartment buildings and row houses with flat roofs, large glass areas banded together in asymmetrical patterns, bare, undecorated stucco surfaces, as well as other features which I'll enumerate in a moment. In 1933, the Nazis stopped the construction of such buildings. New architectural policies were initiated which produced, to be sure, some public housing, but public housing of a wholly different appearance: *Siedlungen* made up of single-family dwellings with steeply pitched shingle roofs and phony half-timbering. So for eight years, under the auspices of the Weimar government, one kind of public housing was constructed, and then for twelve years, under the auspices of the Nazi government, another dramatically different kind of housing.

Before turning to the ideological significance of this change, I'd like to consider the question of who the client was during the Weimar Republic. I think it was Mr. Starr who remarked that in the U.S.S.R., public housing was funded by a combination of cooperative building societies, municipal governments, and at a much farther remove, the national or federal government. In Germany, these three kinds of agencies worked together in financing housing and in encouraging that it be built. It is very hard to put a political label on this phenomenon, because the officials of these agencies shared only a sense of being part of a revolutionary political regime. They were not monarchists; they were not imperialists; but beyond that, they were extremely diverse. Some were democrats; some were nationalists; some were socialists of various stripes (and of course there were many kinds of socialists in Weimar Germany); and some were Communists. So we can't find the original impetus for Weimar public housing in any particular party platform.

The initial impetus came instead from the perception, across a very wide political spectrum, of severe social need. Rapid urbanization during the First World War, combined with a slowdown in the building of new housing during the same period, had produced a critical shortage of housing. Low-income groups and recent migrants to the larger cities were especially affected. The first reaction, among both patrons and architects, was to seek methods by which to build as many units as fast as possible. Hence a great deal of discussion among architects and city planners centered on how to build apartment buildings containing the maximum number of dwelling units, which in turn led to considerations of how to design the smallest livable space: What is the "minimal dwelling"? Many of the space-saving devices of this period—built-in furniture, furniture convertible for more than one use, the multipurpose living room, the modular kitchens and bathrooms, even the "open plan" itself—can be seen as responses to the need for minimal dwelling, even though these devices came to be integrated almost simultaneously into the new aesthetic.

Thus, a social need was being addressed: to provide good housing for low-income groups, inexpensively, quickly, and as minimally as possible, in order to use space well but also to keep costs down. I should remark here that, as has so often been the case in twentieth-century public housing, most of the housing units that were erected proved to be far more expensive than the architects and planners had hoped. But for the authors of Weimar's new housing much more was involved than simply responding to a social need. If we look more carefully at Weimar housing developments of the period 1925–1933, a series of ideological inspirations becomes apparent. To begin with, most of the *Siedlungen* emphasized the creation of some kind of new community. In Taut and Wagner's Hufeisen *Siedlung* in Berlin-Britz, in Ernst May's Bruchfeldstrasse *Siedlung,* and in many, many others, there is an emphasis on a communal focus and shared community facilities: common shops, recreational facilities, even, in a few cases, common dining rooms and laundry. May's Romerstadt *Siedlung* also offered a day-care center for its residents. The implications of these kinds of community services were not spelled out by German architects, nor were they carried to their logical conclusions. No one proposed a completely communal situation in which there was no privacy of any sort. But there was a good deal of self-congratulation about creating a new kind of community focus, one which would meet modern needs by freeing both men and women to work in equality.

Another aspect of the thought of German architects and planners during this period which has perhaps not been sufficiently noticed is their attitude toward nature, and their insistence, as much as possible, on setting these new housing developments in what might sometimes seem an excessively rural context. The architectural journals of the time are full of discussions of the importance of sunlight and fresh air to health; much of the technical literature deals with planning for optimum ventilation and light. But I'm convinced that there was more to it than that. Architects like May, Gropius, Wagner, Taut, really remained within the traditions of the garden-city movement. They disliked the old smoky, dirty, crowded industrial city of the turn of the century, and of the wartime period too. Many of their works imply that the residents of the new communities should relate closely to the soil. For example, contemporary views of the Romerstadt and Paunheim *Siedlungen* in Frankfurt, published in *Das Neue Frankfurt,* stress the rustic surroundings of these communities. They stretch out along the pretty Nidda River, surrounded by open space and rural paths; in one picture, sheep graze in the Romerstadt *Siedlung.* Moreover, each row house in these developments had its own garden, and the pictures imply that these were serious gardens, used for raising vegetables. In Berlin and many other cities, land was too expensive and space too scarce to achieve the garden-city atmosphere of Romerstadt and Praunheim. Here the *Siedlungen* were more likely to consist of apartment dwellings without attached gardens. But even in Berlin the architects provided for many trees and winding walks; usually there were also allotment gardens at some distance from the dwelling units. We have long tended to think of this kind of architecture, with its bare surfaces and almost machine-tooled appearance, as very urban and "modern," particularly suited to, and perhaps expressive of, the great urban complexes of late industrialism. But in the 1920s, a strong "back-to-the-soil" inspiration was at work.

Beyond these elements, though, there was a new aesthetics. There is no question that public housing in Germany, as well as other kinds of architecture, had strong formal interests. Many histories and monographs have stressed these formal qualities, and some are very familiar: the rejection of ornamentation; the combination of very flat surfaces (usually stucco, but sometimes concrete) with large glass areas; the emphasis on horizontality and asymmetry; the insistence on the flat roof; and, in the interior, on the open plan. You are, I am sure, familiar with these formal elements, which in combination came to be characterized as the International Style, and also know that they derive from many sources: not only from the work of the Bauhaus, but also from Le Corbusier, from the De Stijl movement in Holland, from Russian Constructivism. But it is worth emphasizing again how austere and bizarre these forms looked when they first appeared, none the less because they were often combined with strong color patterns. At Romerstadt and Praunheim, for example, whole rows of houses were purple, green, or bright red; the overall composition of

Fig. 5. Siedlung Hedderheim. Frankfurt-am-Main. Franz Hufnagel, ca. 1939.

the entire community was integrated by this strange color scheme. From the individual pieces of furniture and tableware inside to the street layout and massing of the buildings, the whole *Siedlung* was seen as a work of art. This was a totalist aesthetics.

So we have, as a part of the new housing, a new aesthetics that is all-embracing. At this point we should reflect on why this new aesthetics should have focused so strongly on the house. Certainly radical architects in Germany, as elsewhere, built many other kinds of buildings—factories, department stores, office blocks, theaters, to name just a few. But the energy of aesthetic debate focused on the house, on what Bruno Taut and Ludwig Mies van der Rohe called "the new dwelling," a phrase which, at the time, had a rather revolutionary sound. The dwelling, to state the obvious, is where people most profoundly live—this is where their private lives are conducted. A good deal of the public discussion of these new forms had to do with how people live when they're not in the public eye. Taut and Mies, among others, argued that the creation of the "new man" should begin, as it were, at home—that the "new dwelling" would dissolve older social forms and liberate the spirit, forming the basis for a new and better humanity. So in one sense the dwelling was seen as the starting point for social change. On the other hand, given the totalist aesthetics, the dwelling was a microcosm of the larger community. Such issues were discussed repeatedly in the architectural journals of the time and were set before the public by a series of government-sponsored housing exhibitions. The Weissenhof *Siedlung,* built in Stuttgart for the 1927 Deutscher Werkbund exhibition, attracted visitors from all over the world and made people aware of the extent to which, in Germany at least, the "new architecture" and the "new dwelling" were seen to be synonymous.

Ironically, the dwellings erected in the housing developments sponsored as permanent exhibits by the federal gov-

Fig. 6. Zeppelinfeld. Nuremberg. Albert Speer. 1934.

ernment tended to be rather luxurious and expensive. As an example of what the "new dwelling" looked like at its most luxurious, we might turn to Mies van der Rohe's Tugendhat House, because, though it is a private dwelling and built in Czechoslovakia rather than in Germany, it is very familiar to all of us. It enables us to recall what have come to be thought of as Mies's design trademarks (which also characterized his work in such projects as the Weissenhof *Siedlung*): the extreme openness of the interior, in which one can move around so easily; the placement of the dividing walls so that they themselves constitute formal design elements; the play of highly polished surfaces as a further element in the composition; and finally the large glass areas overlooking the decks that extend toward the natural environment. We remember, too, that the furniture itself forms part of the overall design—the chairs, rugs, and table balancing against one another in a manner similar to the juxtaposition of planes and curves of the walls and the structural grid. Here, then, at its most expensive and luxurious, is that very austere aesthetics which develops almost from the start, with its many-faceted connections with German thought. Obviously this sort of thing could not be afforded for minimal dwellings, but it was aspired to throughout German housing at this time.

I should like to stress that, in the long run, this was an authoritarian aesthetics. If you insist, as so many of these architects and planners did, that all forms and all objects of use in the house or the building, because they reflect or engender a revolutionary new way of life, have to be tied together in a formal aesthetics, then it is just a short step to Mies's insistence to the Tugendhats that no furniture could be moved. A really totalist aesthetics, such as this was, quickly gets you into a kind of power politics with the client that many of you might find reprehensible.

These, then, are some of the elements in the ideology that lay behind the new architecture in Germany. Obviously this is not a political kind of ideology, but as Mr. Kopp so eloquently said, a set of ideas that looked ahead to a new man, a new way of life, a new kind of family structure, and new social relations. These were extremely utopian ideas, but by no means merely socialist.

I began this talk by remarking that the new architecture, the International Style, was prohibited in Germany from 1933 to 1945, and I pointed out that during that time it was supplanted by something quite different—not only by a different kind of housing, but also by an official architecture that was diverse, in which housing was not the microcosm for the whole. Nazi architecture has in turn been supplanted, but the totalism of the 1920s architecture has never been revived. The forms have survived without their original social content. The insistence on uniformity, the idea of the dwelling and its contents as the microcosm for everything, have not been accepted by people. Perhaps because the 1920 architecture was suppressed by another kind of totalism, all totalism became suspect.

In conclusion, I should like to turn for a moment to the more monumental form of Nazi architecture. If we look at the Nuremberg Party Arena, for example, we can see a considerable resemblance to the sort of thing Mr. Willen was talking about. And, in fact, this kind of monumental public building has analogues during the Depression in Italy, France, England, and the United States, as well as in Russia. Its monumentality, its apparent strength, its vaguely antique associations, crop up from Albany to Kansas City to Madison, Wisconsin, under the patronage of the Public Works Administration. So we cannot argue that such buildings are specifically Nazi or Fascist or Stalinist. The reaction against the new style, which was at least partially politically inspired in Germany, took place elsewhere without that political impetus, presumably in response to people's need to feel that their governments were strong, dignified, and durable during a time of extreme social and political dislocation. And so perhaps we should turn the question around and ask how society affects architecture, rather than how architecture affects society.

COLLINS: A very interesting talk. I'm sure we'll get some response. Rosemarie Bletter, a colleague from Columbia.

BLETTER: As regards the contrast between the so-called modern housing of the 1920s and the quaint Nazi architecture: If you look at housing in Germany today, I think you could say that it's much closer to 1930s housing, even without the timber, and one would have to ask what were the modern architects doing? Did the public in the 1920s want individual houses? I think they did, because I know Taut and Martin Wagner fought many battles in putting up apartment houses around Berlin where the individual members of housing cooperatives wanted single houses, that being the middle-class model they had in mind; but Taut and other architects gave them what they thought was right for them. It's also interesting that before Taut had really begun to build housing, he felt that any public housing should be ruled on by committees consisting half of the proletariat and half of architects, and that decisions should be made in this fifty-fifty fashion. When he came to build, however, he was the head architect of the Berlin cooperatives, and he became authoritarian.

I think that the point you made about Mies and formalism was well taken. The same applies to Gropius and his Bauhaus work. The interiors for the staff housing at the Bauhaus are formal, stark, and ascetic, with few seating places except for dining-room chairs; there are no couches. Also, look at Bauhaus products; they did not design couches. I think they had a fear of lying down, of being casual. And this comes back to what Paul Willen said: that we assume that modern architecture is casual and democratic, whereas classical architecture is formal because it has centralized axes. But we have to ask: Are axes actually more formal, or is the asymmetrical composition of the 1920s really rigid in the long run, too? Does it become a new formality?

COLLINS: Denise Scott Brown said that she was fortunate to have been in the group that visited some of the Berlin housing this summer, and I warned her that I might call on her.

SCOTT BROWN: We had enchanting walks through those projects in Berlin. The sheep are not there anymore, but the foliage has grown. It's a very pleasant, nostalgic environment, occupied by middle-class people who seem very permanent. In a sense it's reminiscent of the "togetherness" apartments that are being built all over America because people can no longer afford single-family Levittowns anymore. But they must have townhouses surrounded by as much foliage as they can manage. The feeling of the garden city is there, of course, in both kinds of German housing. Something that interested us, for example at the horseshoe *Siedlung*, was to walk down one of the streets at the edge and find ourselves between two phases of housing. The two were the same building types, both walkups, with the same plans. But the right-wing housing had pitched roofs and hexagonal windows and vaguely classical doors; they were built by groups of government civil-workers' (bureaucrats') unions. The left-wing socialist housing was also very symbolic, and that's the point: architects were chucking out electicism to adopt a whole new set of symbol systems. What I had not realized adequately, or had forgotten, was how much the use of a flat roof stood for left-wing politics—the emotional issue of the flat roof standing for what I have to call not populism, but German "radical chic" of that time: that is to say, left-wing architecture by upper-class, educated architects for the people. So what was interesting from my point of view was the fact that they were *all* dealing with symbols, symbols of different groups, and that in the end the symbol systems may be what have distinguished the two kinds of architecture.

COLLINS: Thank you very much. Professor Anthony Jackson, Nova Scotia Technical.

JACKSON: It seems to me that the assumption in these talks is that "modern style" is good and that other stuff is bad, whatever that other stuff is. I would have hoped that the speaker would not have compared, say, the Weissenhof *Siedlung* with Nazi village architecture, but rather with Radburn and Greenbelt, Maryland, because it seems to me that it is quite clear that we're looking at relatively similar lifestyles, one with blank or primary-colored facades and the other with the standard everyday homes that we're used to. If style is just a question of this sort of superficial gloss, which I think is the chic style, it seems that we are getting away from the very fundamentals of architecture. I believe it was Herbert Hoover who said that Americans didn't want to live in apartments, because if they did, they would never have written songs like "My Little Gray Home in the West" and "Home Sweet Home." And I think there's a lot of truth in that. The truth is to be seen in the Sears catalogues and in every department-store furniture section. Someone mentioned before that most of us professionals are in the upper-tenth income group—then let's talk about the other nine-tenths of the world as clients. If we look at them, I wonder if they are so impressed by the box, the glass box; if my parents had been around when the Palace of the Soviets competition took place, they, too, would have chosen the wedding cake rather than the concrete boxes. When we talk about ideology and architecture, I think we should assume, just as a working hypothesis, that avant-garde in style doesn't necessarily relate to Bolshevism or the New Deal or any other particular avant-garde; there is no immediate correlation.

SCOTT BROWN: Long before the 1960s, Herb Gans was telling architects at Penn that they couldn't reform society. At that time he had written the *Urban Villager*, and he was living in Levittown. Paul Davidoff was developing a course on the theory of planning in reply to a critique of society on an "understanding of the existence of poverty." The trouble is that American architects who were being criticized by the planners, even the architects right there in the schools, weren't hearing the planners.

COLLINS: Thank you very much. One last comment: Susana Torre, from Argentina, has just completed a very interesting study on Cuba, in the current issue of *Progressive Architecture*, which I hope you will all read.

TORRE: I agree that possibly architecture can reform society, but on the other hand I think that architecture can be regressive; it can effectively prevent society from changing, precisely because it is a superstructural activity that has the capability of creating cultural symbols that are very persistent. As such, the symbols are inscribed within the context of historicity, that is, society's capability for reflecting on its own actions and materializing them or formulating them in terms of cultural formalizations. This process changes much more slowly than political activity itself, and that is why, on some occasions, radical changes can take place in a society while it is still adhering to old cultural models. For example, the traditional housing that Ms. Lane showed while discussing the Nazi *Siedlungen* is typical of a persistent housing model that effectively prevents change in the family structure, or in the role that the woman plays within that family's home. A housing model like that obviously perpetuates a model of bourgeois family mores. Therefore, I think that use of architectural models of that sort is fascist, because it prevents people from acquiring the kind of consciousness that will make them realize that what they think is really an illusion, a lie, and a substitute for something else.

AFTERNOON SESSION

COLLINS: The first speaker this afternoon is Anatole Kopp, who studied at the Ecole des Beaux-Arts and M.I.T. He has been active as an architect and planner in both Paris and Algeria; he wrote a book entitled *Town and Revolution*, and a doctoral dissertation called *Change Life, Change the City;* he was director of the Ecole Speciale d'Architecture from 1973 to 1975 and is now professor at the Institute of Urbanism in the University of Paris VII, Vincennes, which is the new radical French university.

KOPP: "Europe and the Third World" is a very broad subject, too broad to cover completely, so I'll try to reduce it to a size I can master. My only qualification to speak about this relationship is that I am a European architect who has worked in a third-world country, Algeria. I must say at the start that Algeria is not a typical third-world country, if indeed one exists. Algeria was a French colony for 122 years, from 1840 to 1962. This colonization almost completely eradicated Algerian culture, leaving little resemblance between today's Algeria and the Algeria of 150 years ago. Even the language has been reduced for most speakers to a dialect based on Arabic, French, and local dialects.

Algeria has been a rural and partially nomadic country; at the moment of independence in 1962, it was a country of *lumpenproletariat*, agricultural workers, peasants, and a small merchant class. There were also, of course, Europeans, but most of them departed, leaving behind them an unresolved country.

The experiments that have been made in third-world countries—I am thinking mainly of Latin America and black Africa—were often based on the notions of self-help or advocacy planning, notions that are not effective in Algeria. There is also a commonly held idea that local materials and local techniques are best suited to solving local problems. This idea was developed by the Egyptian architect Hassan Fathy in his book *Building with the People* and was based on the belief that before the Industrial Revolution touched the third world, an ideal situation had existed there. A type of equilibrium was held to have been disrupted, destroying what had been good before. But one must remember that things were *not* good before. All the figures—the infant mortality rates and so forth—prove this. Moreover, on the basis of my experience in Algeria, I think that the self-help techniques proposed by Fathy and others do not solve problems permanently but only alleviate them temporarily.

Obviously, if housing conditions in Algeria are similar to those in Latin America or African countries, it is not because there has been no self-planning, but because in all these countries there is speculation in land and in housing. The only way to liquidate a specific problem is to liquidate the causes behind the phenomenon, so that in the case of bad housing or planning, we must eliminate the exploitation of the many by the few.

In 1962 the situation made it possible to try to formulate a solution for these problems, and Algeria chose a path based on economic development, industrialization, and modernization of the economy's structures. They chose to make a modern country out of an old one, in the sense that they chose to bring running water, electricity, sewers, etc., to the people. As in the case of the Soviet situation, this was to be done in twenty years, and to be done within a socialist society. Now, one can debate the meaning of "socialist," but what I mean is that the Algerian authorities decided to take the means of production away from individuals for the sake of the collective good. There have been many socialist experiments that have been far from successful, Russia being one example, but there are necessary conditions for building a new type of society, and Algeria's rapid progress since the end of colonization has been exemplary. Much of this progress can be attributed to the transfer of the means of production to the collectives, even if it is through the government; the confiscation of land for the use of cooperative methods is but one example.

Algeria has gone through several stages since its independence. The first step was an adaptation of the notion of self-help. Two sections of two towns, Algiers and Oran, were chosen as models for future improvements. It was decided to transform these areas, places where there were only shacks, by creating sanitary equipment, schools, day-care centers, sewers, technical equipment, and so forth. The emphasis was on these facilities rather than on housing. The experiments proved successful, but they were only drops in the bucket. It quickly became evident that these apparently simple techniques actually required great numbers of technicians. It is much more difficult to build a sewer amid randomly scattered shacks than to build a sewer in a normal street, and Algeria did not have the technicians needed—when it became independent, Algeria had only one native architect. The same situation prevailed in all fields, so that there was a need to find techniques and solutions that did not call for numerous technicians.

From there on, the general development pattern roughly resembled the Soviet model. The first Four Year Plan was concerned with building up heavy and medium industry, which was expected to be the base for an important construction industry. The second Four Year Plan, which has just started, intends to use the industrial base already created to begin to solve certain housing and planning problems. Algeria decided to attempt to skip a certain number of technological steps that Western societies have gone through, and to proceed immediately to advanced technologies. Thus it is hoped to give work to everybody in a relatively short time, even to the peasants who still live as Algerians lived two hundred or three hundred years ago. If they become modern, they will work eight hours a day and will not have time to build their own houses, to make their own town plans, and so forth. But in place of this self-help will come housing and planning as a social service, for the government believes that individuals should not have to invest in their own houses. They consider it to be a public service in the same sense that mail and transportation are.

I now come back to the question: Will architecture in these conditions change society? Of course not; it's the other way around. This new society is changing architecture, not so much in its form or its ability for expression, but in the production of housing, the production of architecture.

I should like to give two examples. One is what Algerians call *la revolution agraire*—the agrarian revolution. The first step taken to solve rural problems after independence was the nationalization of all agricultural lands belonging to Europeans, an easy step to take once they had left. Cooperatives were organized that have worked ever since. The issue now concerns land owned by Algerians themselves. The process of distributing land formerly owned by the large land holders is under way, but it is not enough just to take that land, divide it in little parcels and distribute it. That would mean a step backward to a very primitive form of agriculture; so that at the same time that one creates a new form of exploitation of the land, one must create a lifestyle appropriate to it. Consequently, the Four Year Plan proposes a thousand "socialist villages," which will be the core of this new land pattern.

There is no model to copy, so how can one expect any of the peasants or anyone in the government to say what a socialist village must be? One can say it in economic terms, but only an architect can define the architectural expression. Even if the first users of the village could articulate their needs, it is their children or grandchildren who will be the true users, for these villages are to be built to last for a hundred or two hundred years, not ten or twenty. Therefore the architect has to take a risk, and in cooperation with the political and economic authorities invent something new.

One of the many questions under discussion here today is: Can the form of a building express an ideology? I don't know the form of the socialist villages we are going to build, and so I don't know whether they are going to express an ideology. Twenty or fifty years from now, perhaps people like you and me will be interested in Algerian architecture rather than Soviet architecture; they may study these villages and say we were wrong not to see this or that; but if you are an architect, the moment comes when you must start doing things. You can't wait until all the theoretical problems have been solved.

If a thousand new villages are built in areas where there were only shacks before, the ideological expression at the planning level will have changed. The more the scale decreases, i.e., if one takes a single building and looks at it, the less it will be obvious that it is part of a socialist village. But why should it be obvious; why should buildings express ideology? One can read architecture, and through architecture understand a society, but that is the *ex post facto* work of the historian. The work of those who build it is to respond to a program given by the authorities, to provide a technical solution to a problem. We are not building revolutionary architecture in Algeria. What makes architecture revolutionary is the activity that takes place inside it. After all, is socialist office space different from capitalist office space? I don't think so.

Now, all that I'm telling you about this experience is, of course, as I said, a very small part of third-world problems, but I think that if one were to look at each third-world country more closely, one would see that the problems are very different in each one. Does each political orientation have an effect on the architecture? As I said, I'm sure it has an effect on the production of architecture. It has an effect on how the architect understands his role in that general development. I don't think that it has had, so far, a direct effect on architectural forms.

In actual practice, of course, you can't hold up the whole process of planning or providing housing until you have arrived at the definitive solution. But the approaches chosen by individual countries such as Algeria solve partial and marginal problems only, and that's why I'm interested in the Soviet experience. I think they've been seeking global solutions to global problems, by attacking the causes and not the effects.

COLLINS: Thank you very much, Anatole. At least half a dozen are going to want to say something. Percy? Professor Goodman, recently retired from the Columbia School of Architecture and author with his brother Paul of a famous book, *Communitas*.

GOODMAN: I recently bought Mr. Kopp's beautiful book *Town and Revolution*. I would expect the author of this marvelous book (with wonderful quotations from Mayakovsky) to be able to predict what's going to happen in Algeria, where the situation is similar to that of the Soviet Union in the 1920s and 1930s. The Algerian Four Year Plans are like the Russian Five Year Plans; the notion of not using the people's ability to aid each other with their old skills, but forcing them to become industrial workers and await prefabricated houses, was also prevalent in the early Soviet Union. Mr. Kopp calls these global solutions. Now what has been wrong with the world, including the socialist world, has been the attempt to achieve global solutions rather than solving the problems in a simpler and more human way. Mr. Kopp, why doesn't an intelligent, competent man like yourself understand this?

COLLINS: Anatole. We have an ideological war underway here.

KOPP: I am conscious of the contradiction between what I have written in *Town and Revolution* and what I am doing in Algeria now. However, while I would not argue with your request to solve the problems in a simpler and more human way, what is that way? Where has it been applied? Where has it succeeded? I know only two realities, the western model of development (capitalism), and the unsuccessful socialist experiments. If I knew of a third way I would adopt it, but I don't. Moreover, I'm an optimist. Maybe this time something else will happen, and the system will be better than the one we're living in now.

GOODMAN: Mr. Kopp says he only knows two ways, but there is another way, anarchism. Anarchists believe that the enemy of civilization is neither communism nor capitalism, but the misdirected, misapplied technology that we find in both the communist and the capitalist nations. . . . When someone says the means of production belong to the collective, what does that mean? The collective was originally the people, but over the people there came to be the party, so that the means of production was in the hands of the party. But the party is the same as Standard Oil, or General Electric, or the idea of Fordism. This is where the problem is. When you said there is no difference between a socialist office building and a capitalist office building, Mr. Kopp, you were right.

You also said—and I would prefer to call you Anatole—you also said, Anatole, that you don't know the difference between a socialist window and a capitalist window, but there is a *socializing* window. When I attended the Ecole des Beaux-Arts, years ago, a student went to the public baths to take a bath. There were separate little cubicles, each one with a zinc tub in it. Between each cubicle was a little window that you could slide open or closed, so you could sit in your bathtub and open your window and talk to your neighbor. *That* was a "socializing" window!

COLLINS: Percy, you bring to mind your brother Paul. In the early days of our City Seminar at Columbia he used to fight this fight every night. Thank you very much. Peter Collins; Professor Peter Collins of the University of Montreal. We're not related, but we have many things in common.

P. COLLINS: While Mr. Kopp was talking, it occurred to me that there is a rather interesting comparison to what happened in late medieval France, because Mr. Kopp's main concern seemed to be whether or not what he is designing will really be successful, i.e., will be fulfilling its purpose in 200 years. In the 13th century, the Dordogne was colonized by a number of towns called *bastides*. Those *bastide* towns were not successful and did not grow, but because they have survived in more or less their original form they are the great tourist attraction of the region today. Therefore, Mr. Kopp can take some consolation from the irony that it may be the "unsuccessful" towns which bring the most money into the Algerian state in 200 years.

COLLINS: Thanks, Peter, I was hoping you'd contribute. I hope you'll say something also about whether or not society has the debt of housing its people. Susana Torre.

TORRE: I would like to comment on Cuba's handling of the issue of "self help," because they have an innovative solution there. To begin with, there are certain goals of production that Cuba has to achieve if the country is going to function and its level of living be raised. At the same time, Cuba needs schools. There was a literacy campaign, which accomplished much in only one year; whereas 50 percent of the population of the country had been unable to read or write, after a one year effort everybody was able to do so. But suddenly millions of people wanted to go to school, and there were not enough schools. So, Fidel Castro made a speech to the rest of the country to explain why housing construction would be stopped. He said that 500 schools were more important for the country than 10,000 housing units. The popular response was the creation of something called the "micro brigade," a group of workers, men and women, who take leave from their regular jobs and go onto the construction site. But they had no construction skills—the professional construction workers were building the schools, the clinics, and the industrial sites—and had to learn the skills on the site. For two years the brigades built housing for everyone else in their factories, but since the rate of production had to be maintained the people remaining in the factories took turns in voluntary shifts to cover for those who had left.

There are several interesting facts about that housing. When it is finished it doesn't go to the workers who built it, but to those who most need it, as decided by a workers' committee. Also, many decisions about the design of the housing are made on the site. The housing is pre-fabricated, as in Algeria, but the workers combine the elements in very interesting ways.

I would also like to comment on the socialist office building versus the capitalist office building. Their appearances might be the same, but what is not the same is the amount of space that the two societies allocate to them. Their relationship to the social fabric and the built environment is completely different.

SCOTT BROWN: I apologize for speaking so much, but I can't resist drawing an analogy to Levittown, where Mr. Levitt was faced with your position, Mr. Kopp, building in a situation that had no precedents. Right after the war he was building housing with government aid for many people who had never been homeowners—the returning soldiers. The houses were needed on a scale for which there was no model, so Mr. Levitt examined various small-scale, inexpensive suburban developments, and built a lot of housing in Pennsylvania on the basis of what he had seen. But he built it all the same, and couldn't sell it all because people wanted diversity, which made him realize he should give them a choice. Furthermore, Mr. Levitt crept around the model homes listening to what the people said, and then tried to incorporate their ideas in his new houses. That was a considerable innovation, and a worthwhile one. I think we could all benefit from working on such a contingency basis.

KOPP: It would take today and tomorrow to respond to all the questions, but I would like to answer some of the points raised. Algeria is following a policy of decentralization, as I think it must. As for the "socializing window," however, I disagree. It's probably a good idea to speak to somebody in the next bathtub, but it doesn't give more food, more work, or more of anything that is essential for survival.

As far as Cuba is concerned, many Algerians regret that Algeria is not Cuba, because the level of political consciousness—which is at the bottom of everything you told us about Cuba—is much lower in Algeria. Historical reasons, primarily the many years of colonization, are the cause of that problem.

Finally, I don't think that technology is an ideology. Technology is a tool; its worth depends on how well it is employed. It is true that there is an ideology of production common to both capitalism and socialism, but I don't think that it must be that way.

COLLINS: Thank you very much. The last person who is going to speak is Hans Harms. He has a very interesting background; he was born in Oldenburg, Germany; he studied in Dusseldorf and other places in Germany: and he's been teaching in this country for a number of years. He has been, I think, every place that I have happened to mention to him.

HARMS: What I'm mainly interested in talking about is the contradictions in architecture and in the practices of architects.

What is the role of the architect in society? Can the architect be an agent of social progress? That raises the question: What does social progress mean? Progress toward what? The relationship between architecture and social progress requires a critical reflection about the practice of architecture. In this country, as well as in Western Europe, there exists a widening gap between the self-image of the architect and the experience and image that other groups in society have of him and his work. Since the late 1950s and the early 1960s, some architects have been questioned about their elitist role and practice in society. Against a societal background of increasing economic concentration in the hands of fewer and bigger corporations, architects are confronted with the question: Whom does our practice serve? This is a political question about the relationship of professional practice to a political tendency or its implications. Quite often this question is not raised for ideological reasons. Bourgeois liberals do not accept the dialectic between practice and politics, because it takes the concept of professional practice outside the framework of value neutrality.

Architecture, or the practice of architects, usually serves the dominating institutions in society, whether we look at feudal times, when castles and houses for the aristocracy were built by architects (whereas for their houses, the common people were left to their own devices), or whether it is today, when office buildings, factories, bank buildings, and speculative housing are the main commissions given by society. A very large proportion of the average, ordinary people still has no access to architectural services. Although buildings are built *for* them, the architects generally deal with those who pay, the "sponsor clients;" they don't deal directly with the users.

A kind of technocratic planning goes on in capitalism, as well as in socialism, which does things for and to people, pretending to be in their best interests. It implies an elitist group that makes decisions regarding other people. Yet the people affected by these decisions, the users, have little say about the built environment in which they have to live. To build, one needs land, money, and political power, so the architects are, generally speaking, the hired hands of those who have the land, the money, or the power. And in addition to that, the clients and the architects or professionals in general have a similar class and cultural affiliation—the bourgeois culture of businessmen—and they have a similar educational background, which is removed from the masses of the working people, even if some individuals emerged from them. As elitist groups they have power over architecture, and most architects not only accept existing dominant institutions and power relations but even reinforce them through their architecture. Architecture more than other cultural artifacts also becomes an ideological means of domination.

I should like to give an example from New York State. Let me quote a few lines from Nelson Rockefeller's opening speech at the Albany Mall: "What has risen here is more than buildings to house the services of government. Empire State Plaza is a unique concentration of great architecture, great art, and of New York's great place in America's history. This is one of the most exciting and creative periods in the history of American architecture." Another quotation: "What we are recognizing in these buildings is that we have an aesthetic nature, that we have cultural values, and these

Fig. 7. The Gov. Nelson A. Rockefeller Empire State Plaza. Albany, N. Y. Harrison & Abramovitz. 1962–73.

values are what lifts us above the scurrying ant-heap of those absorbed only in survival and makes us a society touched with divine grace. Our architecture is one way in which mankind expresses its unique capacity to create. In Churchill's phrase, 'We are shaping ourselves as we shape these buildings.' We are creating a capital that expresses our faith in ourselves and our belief in the future, one that will fulfill us aesthetically as well as serve us practically, one that will speak of the dignity of man." But this is what it looks like. That may be an extreme case, but I don't think it's so far off. The vast majority of common people not only have no access to or control of architectural services, but they are affected by their consequences, and often they are the victims of the architect's work. Architecture of this sort is a vital part of the institutional structure and helps to perpetuate existing power relations.

I have some notes here on the Modern Movement which in Germany called itself *Neue Bauen* ("New Building") and was an attempt to build for a new way of life. When C.I.A.M. was founded, it aligned itself explicitly in its architecture and ideology with modern technology, with the machine, mass production, division of labor, and all that. With the terms "functionalism" and "constructivism," it claimed to identify and to build according to universal or international norms. Gropius, for instance, talked in rather techno-scientific language about making the new building mathematically demonstrable—to become part of the overall production process. Le Corbusier talked about the state being a fortress and said that the modern movement had to get into that fortress; he said: *"Il faut etendre les etats"*, or something like that. I think what he meant was to obtain the power of the state, because that would give architects the possibility of implementing their dreams. He also called for "architecture *or* revolution," as if to say that the revolution would be given up, if the architects got the opportunity to build the dream under the existing state. In their dream they had made themselves an image of what the people needed, without a dialogue *with* the people.

The Modern Movement, as a reaction against the conservative and eclectic bourgeois academy, developed its own code of aesthetics: an aesthetics of asceticism, purity, cleanliness, and with a certain morality attached to it. It did not have much to do with what the average people saw as pleasing. I think it was an aesthetic of the object-makers as opposed to an aesthetic of the users, by which I mean certain folk aesthetics, certain randomness, ornaments, with the social and historical associations that people have with lived-in environments. Architects seem to see the object as having a logic in itself rather than as being associated with something that people have experienced. People normally say, "This building looks like this," or "It reminds me of that," and they may like it or not. The building is not seen abstractly as an autonomous object but in its relationship to past and present experiences and to anticipated uses. For most people, certain communal memories and collective experiences in relation to places and buildings form a sense of identity and a consciousness of their place in time and history. This is very important in the process of aesthetic development and in common people's culture.

In the July 1974 issue of *Architecture Plus*, there is an article on an exhibition organized by Jan Wampler called "Imprint: People and the Places They've Built." It shows an aesthetics of individual self-expressions that probably would not be accepted collectively. But what are the roots of this "oddball" or "bricolage" aesthetics, that some people derogatively call "trivial" or "vulgar?" I am trying to say that there are different notions of aesthetics, and in the Modern Movement there was a very clear type of aesthetics that had very little to do with what average people felt. This was one of the reasons why in Russia under Stalin, as well as in Germany under the Nazis, it was fairly easy to brush the Modern Movement aside; it didn't have social roots. Personally, I don't think all the aesthetics of the 1920s were bad. Of course, in the 1930s the Nazis and Stalin sponsored and imposed another aesthetics, more tied to the conservative classicist academy, an aesthetics of monumentality and power to impress, not too different in its intent and expression from Rockefeller's statements.

Underlying the Modern Movement is something that is still promoted: the idea that there are universal norms based on biological needs and functions. This notion is really put into question when we talk about people in local areas making decisions about their environments, because then we don't have universal norms. There are a multiplicity of possibilities for housing, and it is very important to allow this possibility of diversity. Often it is assumed that modern mass production and technology do not allow this. That's a myth, because there are possibilities for using technology in building in ways that are not totally uniform.

I'd like to come back to the situation in the United States. The questioning of an established style that architects saw as the "correct" one began here in the 1950s. There was an article by Douglas Haskell in *Architectural Forum* in which he defended the common people against the accusation made by prestigious critics that they create infantile and hopeless environments. In 1964, Bernard Rudofsky had his exhibition "Architecture Without Architects," showing traditional vernacular buildings from all over the world. Then, Reyner Banham complained that The Museum of Modern Art's 1965 exhibition, "Modern Architecture U.S.A.," had excluded all the motels, supermarkets, filling stations, hot-dog stands, and so on, which were really more than 90 percent of the built environment. What sort of aesthetics is that? He called it "emotional engineering" geared to the "popular taste" and defying the "quality" of the architects' style. Are these buildings the exception, or are they the rule? And what, then, are the few things that are designed by architects? Then in 1972, Denise Scott Brown and Robert Venturi published their analysis of the Las Vegas strip and of Levittown. They, like Banham, showed there wasn't a "universal visual order," but looking to the common people, they found excitement in the "commercial vernacular." Yet they didn't go much further. In effect, they made the "commercial vernacular" respectable in the *Playboy* circles of the profession, because, as Alex Tzonis once said, they still saw the architectural object as a purely visual or stylistic phenomenon. They just added Las Vegas to the accepted architectural styles. What I think is needed instead is a new social base for design and a new theory and practice of "participatory architecture."

I think Las Vegas and Levittown really represent a commercial, consumption-oriented type of architecture, and commercial architecture is there to help make profits bigger. What Levitt built does prescribe a certain lifestyle. Individual houses, whether done by Nazis or by suburban builders here, all prescribe a certain lifestyle. They isolate people and help to sell consumer products to separate, nuclear families. They also tend to reinforce existing hierarchies and sexist separations. For instance, it does not help if a woman wants to work and the possibilities for babysitting arrangements are few and cumbersome. I'm not trying to say that one activity totally prevents another, but there *are* ways of building that facilitate something, and other ways that do not. One might say people want to live like this, or maybe they don't know any alternative, but again that raises the question: How can alternatives be found *with* the people?

In 1969, Philippe Boudon wrote his book on Pessac in France, where houses built by Le Corbusier have been changed tremendously by the people who live in them—they have really been transformed. In 1961, John Habraken in Holland wrote a book about support structures and in-fills, not meaning megastructures but structures that leave all kinds of possibilities. He proposed working with people on the site to do the small-scale things that may be changeable, fitting them into an overall structure built with a larger-scale technology. The in-fill could be built either with a larger-scale technology or with a self-made technology, or with any other technology, as long as it was agreed upon by the users. In 1963, Chester Hartmann wrote his first article on "Social Values and Housing Orientation," which questioned the notion of universal norms and contrasted middle-class values with working-class lifestyles. Around the same time, Davidoff coined the word "advocacy planning" and criticized the notion of a "general public good."

The imposition of universal norms in architecture or planning has been seen as an ideological device of technocratic planning to conceal a certain bias. Technocratic planners in government agencies or in large commercial organizations such as developers make decisions about the environment. They have to base them on criteria other than profit and "efficiency;" in order not to appear too arbitrary or biased, some "norm" in connection with the "public good" is established. It is not so coincidental that the functionalist ideology of Modern Movement architecture, especially its present reduced version, merged very well with the profit motive. Technocratic planning in this country or in Russia raises the question: To whom are the experts who do the planning accountable? Often they are not accountable to anybody. Sometimes they are less accountable to elected representatives than to lobbyists. Professional members of a city-planning agency stay longer than the politicians; the experts make the proposals to the politicians, so in reality the decisions are often prestructured or made by bureaucrats on behalf of economic interests. It's normally a coalition of elites who make these decisions—experts plus some politicians in Russia, and experts plus private developers for profit in this country.

There is another type of planning in which the responsibility of the architect and planner is directed toward the user; one could call it "participatory planning," or "democratic planning." Under the present system, it is often used for coopting, but it could be used in an emancipatory way for raising people's information, knowledge, and consciousness of their potentials. That was done in Cuba, China, and in Chile, where it started with experiments in "popular power." A type of work practice of an architect with local groups can be emancipatory—a two-way learning process—because people in local areas know a lot which we as architects don't, and we also know something that they don't. The point is that when an architect or planner goes into those areas with preconceived notions of his own power and imposes his own way of doing things, that is not an emancipatory process. There has to be a *dialogue*, in which the architect and the people work on the level of equals. This may also then lead toward something in which I'm very interested, a "nonalienating architecture." What is a nonalienating architecture? It is not alienating to the user nor to the architect.

COLLINS: Dolf, you asked for some time, can I ask you to comment now?

PLACZEK: Let me say first that I do not think there is any major statement on architecture that does not include an element of beauty, order, truth, or whatever one wants to call it. From Vitruvius on, the aesthetic element has always entered into the definition of architecture. Now, Mr. Harms has differentiated between architecture and building, which he calls *Neue Bauen* (of course in German one can also refer to *Baukunst*, the art of building), but he has also raised the question of whom the aesthetic element is aimed at. In the twentieth century, we do not have a common aesthetic denominator, but the question of aesthetic need remains.

When we formulated the question, "Can buildings reform society?" we could have put it more modestly by asking, "How do aesthetic elements affect society?" Very strongly, I would answer. Aesthetics will not keep the people of Dresden from becoming fascists, as Sibyl Moholy-Nagy observed, but I quote Sibyl on another point: there is a passage in *The Matrix of Man* that says, in effect, that urban blight, the slum, is quite as much aesthetic deprivation as material deprivation.

Another point: we often credit revolutionary formal innovation with a corresponding revolutionary political consciousness. But Ledoux, whom we always call a "revolutionary" architect, was a political reactionary. And a list of the ten greatest buildings of the twentieth century would have to include Terragni's *Casa di Fascio*. It was built for the Fascists, but the architecture was a great statement of truth and originality.

As for the "socializing window," windows are autonomous aesthetic elements in building. A favorite story of mine is one in which Mrs. Tugendhat describes how the Tugendhat House came into being. The Tugendhats found Mies surprisingly pliable. First they changed an entrance from their child's bedroom to their own, then they added a bathroom, and then this and that. All these changes were made without a murmur. But finally, someone talked Tugendhat into distrusting the size of the windows; they were to be autonomous elements, but he thought that unless Mies would cut them down a bit they would buckle. At this point, Mies said, "What? Change the size of the window? I won't build it." And that was the end of the windows; the autonomous window was maintained.

COLLINS: Thank you, Dolf. Do I see a hand? Sir, would you please identify yourself for us?

UNIDENTIFIED MEMBER OF THE AUDIENCE: I'm an architect practicing in Zurich. I think there's great confusion regarding the power that advertising has to delude people; that is, to convince people they want something that they really don't want and then selling it to them in order to make a profit. I once learned this very clearly when I saw a secret memorandum concerning supermarkets to be built in Caracas, an interest of Rockefeller's. There it was stated in the very first paragraph that the idea of a supermarket was to sell people what they did not want. Now I had always assumed it was to sell people what they *did* want, cheaply; but this, it seems, is not the case. And going on from that to the idea of Levittown, I don't know whether Denise Scott Brown is aware that in many cigarette factories the same cigarette is put into different packets, and then they are sold in competition with one another. People buy masses of one brand, and none of the other, and they don't know that the cigarettes are precisely the same. In other words, capitalism is using people, persuading them that they are making a choice, when, in fact, they are making none at all.

And I want to go on from that to say that I see modern architecture as being important in that it proposes a freedom of choice. I think that the interesting part of the philosophy of Le Corbusier and others is that they were proposing that people within their buildings would be free to question the status quo at various levels. As an example of that, I think architectural students or design students who work in the studios Max Biehl designed for Ulm have a greater possibility to free themselves of given ideas than, say, students working at Paul Rudolph's School of Architecture at Yale, where he imposes on them, or would like to impose on them, an aesthetics that sits on their head like a great big bird. And I would say the same thing for a programmatic cathedral as against a Quaker meetinghouse—which perhaps answers the problem of beauty. A cathedral is much more beautiful than a Quaker meetinghouse, but it does presuppose a kind of dogma that you have to submit to if you're going to use the building properly; whereas in a Quaker meetinghouse you can sit for two hours and meditate and may come out a better man.

Finally, I'll go on to say that I think buildings like, for example, the Boston City Hall, with their ramparts, their segregated bureaucrats, and their castlelike atmosphere can inhibit democracy and thus affect society. And that the kind of democratic schools that are built in Denmark, or the best ones in Switzerland, can encourage it, in that they are essentially democratic buildings in which people are free to think and decide for themselves.

WILLEN: I should like to make a few comments about the discussion as a whole. As I look back on it, I'm a little disturbed about some of the directions it's taken. It seems to me that the topic has broadened tremendously from that implied by the title of the symposium, which had to do with the politicizing of the arts and with the specfic relation of architecture to the political structure. True, this comprises a lot of questions, and there are a lot of problems therein, but what I'm afraid has happened is that we've branched out into the issue of the whole direction of society; and I think that's a pretty big load to place upon the architect alone. I feel that to add up all the problems of the modern world and say, "Now, what can the architect do about it?" is very strange, because we're citizens as well as architects, as well as art historians, as well as all kinds of other things. If we're concerned about the world, we probably have much greater impact as citizens than we do as architects—where our role is limited, and our field of expertise is even more limited.

Now, I don't mean to say that these issues aren't important. (By the way, I frequently view my relationship with a client as partly an adversary one, in the sense that I think I expect to ask more of him than he's probably willing to give, and he might ask more of me than I'm ready to give, so maybe we both push each other somewhat; and we push society, and I'm not rejecting that role.) As for the comments about buildings that were successful or not successful in terms of their adding to the sum total of community pleasure, or community ease, or community comfort—community satisfaction is also involved; and I don't think that the only measure of whether an architect has succeeded or not is whether he has helped solve certain social problems that we have defined for ourselves.

As a matter of fact, going back to my earlier comments about the Russian revolution, I went out of my way to state, and I now state it again, that even *there*, which was the classic example of the architect in a position of power in an extremely dynamic situation, I don't believe that the architects assumed that they had within their own right the capacity to do any of the numerous things that architects have been reproached for not doing at this meeting. They were part of a political organization; they expected the Bolshevik Party to carry part of the load in reforming Russian society. And I think that when comments are made here about what the architect can do, please tell me which party you want me to join; tell me to whom I should contribute money at the next election; tell me that I should quit being an architect and go out and join a certain campaign or a movement; but *don't* tell me to go back to my drafting board or my drawing board and achieve these things that you're talking about. I don't think that's fair.

I *do* think that an architect can exert influence, particularly today, since the architect is at the crossroads of a lot of very complicated social-political community decisions that have to be made. It's an extremely complicated position to be in—with a lot of other professionals and a lot of political forces making decisions about communities, and about scale, and about who should live together, and all kinds of things; and about height, and arcades, and circulation. These are extremely delicate, complicated questions, and in this situation the architect can play a very important role, along with all these other people. But for the *massive, fantastic* questions, let's be realistic; those are questions that have to do with power and the political structure, and when the time comes, or the time is right, that's where we should go. Instead of addressing them at a meeting like this (I think we're wasting our time), we should go out and get an audience of people who can really do something about it, instead of architects and art historians.

COLLINS: Bravo! Fred Starr.

STARR: I speak neither as an architect nor as an art historian, but as a humble historian who is here on a kind of tourist visa. And as a tourist, I've been astonished at the great pessimism that has permeated the better part of the discussions here today. We've heard from two speakers that, when all is said and done, architecture has more power to do evil than good. One said that it could *de*form and not *re*form. It's a very interesting notion, and Mr. Harms has gone far in the same direction. Now this may or may not be true. I'm not competent to judge. But the fact is, as Mr. Willen noted, that the belief that architecture can *re*form has underlain the activities of a great number of the architects who have been cited in the discussions today, and who still obviously provide the reference for the study and practice of architecture. And indeed—sorry, Paul Willen, I don't agree with you—this was true also with the Russians. They absolutely expected architecture itself to do the job. The slogan, "All Power to Architecture," a marvelous slogan, was coined by the director of the Russian super-Bauhaus.

Now, I wonder whether the ultimate politicization of architecture today may not be a feeling on the part of the architect that, as architect, he has no power anymore; that whatever power he has, either through his skill or his genius, is in fact very minor and is only granted to him on a very provisional basis by those people out there with the *real* power, the politicians. If that's the case, what we have is either an extreme *de*politicization of architecture, or a crisis of enormous proportions within the profession today.

P. COLLINS: I'd like to discuss the wording used today, especially with regard to such terms as "political," "ideological," "reform," and "progressive." It's apparently assumed that any kind of progress, any kind of reform, means something political. I began to be engrossed in architecture when I was very small, and I never had the slightest interest in politics; therefore, I'm puzzled by some of the talks. I feel very much in sympathy with many of the recent responses from the panel, which have emphasized that to change politics isn't essentially an architect's job. And I wonder why the opposite of "*re*form" is "*de*form," whereas "*con*form" is obviously something one mustn't use at all in a situation like this; because, clearly, to conform to the client's needs, to conform to the user's needs—those needs which give what Berenson called a "life-enhancing" quality—is apparently regarded as far less important than expressing progress, expressing reform, not in a technical sense, not in a sociological sense, but in a political sense.

COLLINS: Michael Klare. Michael is a student of art history, architecture, and political science. He served as researcher during the Columbia activities of 1968.

KLARE: I've had some difficulty following all of this. There's been a lot of confusion, and I think part of the confusion is that architecture and politics do not really fit together. Architecture is irrelevant to politics. Thinking about the Columbia strike in the 1960s it occurred to me that the really important things that went on were not what people are talking about today—the politics, the art, the reform of architecture, or whatever. The really fundamentally important thing that went on was a reorganization of life. There were two or three hundred people in these buildings who had to live differently for the moment. There was a certain amount of danger, and a certain amount of scarcity, and people rebuilt their lives inside those buildings; it was an extraordinarily liberating event. For the people that I'm in touch with in my generation what has become important is trying to maintain that feeling in their life afterwards. That has led to lots of experiments, communes and collectives. Some of those died out, and some of them still exist, but architecture is irrelevant to it all. At this time in history people want—maybe I'm jumping to conclusions—but I think people want a better way of life amongst themselves, a different kind of life that's not oppressive and exploitative and demeaning. That's going to require a different structure of society, and maybe architecture will follow at some point after that new society is created and will relate to that. But I think the struggle is to rebuild life, and buildings will come later.

COLLINS: Yes, Mike. I'd like now, after that, to recognize Christiane Collins, an art historian whom I can describe as someone who helped bring together an unlikely amalgam of community people—ladies from the Audubon Society, and radicals from SDS—to keep the gymnasium out of Morningside Park during the events at Columbia University to which Michael Klare has just referred.

C. COLLINS: In connection with Michael's comments it should be pointed out that the king-pin of the Columbia movement was an architectural project, so, in a sense, architecture changed the course of social events at Columbia, even if it did not change society as much as we hoped. The gymnasium in Morningside Park was actually the symbol for so many of the tendencies that have been mentioned here today that it should be noted: it stood for an integrated community participation in the planning process, a participation that contained as many blacks as whites and cut across all social and economic classes and alliances. It also stood for the newly emerging interest in ecology, so that we had the support of the ladies from the Audubon Society and some Sierra Club excursionists who appeared with their sleeping bags. For all these groups, the Columbia gymnasium signified the imperialist power; architecture as an oppressive tool, a private institutional tool which became an

instrument of the war issue, because the plans for the Columbia gymnasium incorporated a floor devoted to the ROTC with stored weapons and so forth.
COLLINS: Thank you both for your specific references to our recent past. And, in closing, let me thank Mr. Leverton and the Leverton Committee for allowing us to meet some of the people we've met here today. Symposia like these often form life-long friendships—like having served in the trenches together. Thank you all for coming!

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Fig. 8. Susana Torre and Denise Scott Brown.

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