

BY PAUL RUDOLPH

In his address before the best-attended session of AIA's recent Boston convention, an eminent young designer, critic and instructor sets a course for his fellow architects through the next transition:

THE CHANGING PHILOSOPHY OF ARCHITECTURE

The unique element in architecture is, to quote Dudok, "this serious and beautiful game of space." This has nothing whatsoever to do with the allotment of so many square feet to this and that function, important as that may be, but with the creation of living, breathing, dynamic spaces of infinite variety, capable of helping man forget something of his troubles.

Modern architecture's range of expression is today from A to B. We build isolated buildings with no regard to the space between them, monotonous and endless streets, too many gold-fish bowls, too few caves. We tend to build merely diagrams of buildings. The diagram consists of regularly spaced bays, with the long sides filled with glass and the end walls filled with some opaque material. If we raise it on a *pilotis* we might even snare an important prize—as in the recent Ottawa Competition. We need creativity as well as unity.

Modern architecture is tragically lacking in eloquent space concepts partially because we are constantly bombarded with various specialists in architecture who do not relate their worthy findings to the whole:

▶ First on the list of specialists are the new functionalists who apparently think of architecture as an assemblage of workable parts without regard to proportion, scale and composition. The masters of the twenties were never functionalists in this sense. One does not understand why the sensitive, traditional architect who "goes modern"—to use that detestable and revealing phrase—usually forgets all principles of architecture, which indeed do not change.

▶ Second, we have the climate controlists with their extreme distortions of form in the name of the pseudoscientific and their naïve contentions about orientation—as if they had discovered the compass.

▶ Third, we have the structural exhibitionists. Exciting as Buckminster Fuller's domes may be or the latest space frames,



N. B. Dreyer

they are merely a means to an end and not architecture. Of course, such devices can be used to produce great architecture.

▶ Then we have too many site planners who are concerned only with ratios of people to land and "how quickly one can get there"—never "how to get there."

▶ Most tragic of all, we have Robert Moses, who is forming the most important building of the decade, the Coliseum in New York.

The list of dissectors is endless.

Facades finished in wallpaper

Architectural space is related to a room and to a city. The characteristic space created in the typical American city is the endless street leading "on, on, on" with advertisements shouting "stop, stop, stop." They suggest "I'm a bird in passage," as Gordon Cullen so aptly describes it. We abound in technical progress but our cities are incoherent assemblies of structures, each crying for as much attention as possible. The alignment of buildings alongside our endless streets suggests large rolls of wallpaper pasted on. Sometimes the wallpaper appears as if it is about to crumple and fall. We need desperately to relearn the art of disposing of buildings to create different kinds of space: the quiet, enclosed, isolated, shaded space; the hustling, bustling, space, pungent with vitality; the paved, dignified, vast, sumptuous, even awe-inspiring space; the mysterious space; the transition space which defines, separates and yet joins juxtaposed spaces of contrasting character.

We need sequences of space which arouse one's curiosity, give a sense of anticipation, which beckon and impel us to rush forward to find that releasing space which dominates, which climaxes and acts as a magnet, and gives direction. For instance, the Duomo in Florence is a magnet which dominates the whole city and orientates one. In Manhattan we are reduced to the Third Ave. elevated to perform this vital function. Most important of all we need those outer spaces which encourage social contact.

I have just returned from Europe and the Middle East and one realizes again more forcibly than ever that man accomplished these things in other cultures. He used piazzas, courtyards, squares, freestanding sculptures, manipulating the approaches, and sequences of space. However, we must realize that the motor-car has rendered the traditional solutions invalid. At the same time it has given us a new scale, for now we must perceive our environment from a quickly moving vehicle as well as on foot. We must find our own solutions.

Down with the tyranny of endless streets

The superblock derived from the gridiron plan of the majority of our cities, has tremendous potentiality. However, the superblock still leaves us with endless streets rushing forward to apparently nothing. Formerly the building, the fountain, the statue, the arch, the picturesque grouping of buildings acted as a focal point and indeed they have given delight for centuries. Why do buildings always have to flank the street? Why can they not sometimes be placed over the street, thereby forming an enclosure and a focal point? Perhaps the area left alongside the street might then become a plaza, thereby starting a whole new sequence of spaces. We desperately need more imagination in the siting of our buildings. The tyranny of the endless street must end.

The Grand Central complex in New York which bisects Park

Ave. is perhaps unsurpassed in this country. Buildings which respect each other, flanking Park Ave. and defining its space, form a valid concept, especially when the avenue acts as a great processional to one of the major gateways to the city. This means that sometimes we still have need of facades, buildings of uniform height, to define outer space. Park Ave., along with many other avenues and squares, is being destroyed.

Just as a row of FLLW houses would be abominable, a row of some of our most admired buildings would result in utter chaos.

Our difficulty is that we think too much in terms of individual buildings. In our search for light and air we tend to design freestanding buildings often unrelated to their neighbors or the spaces formed between them. Actually, our cities are indeed strange expressions of a democracy, for each building seems to say to its neighbor: "You stink, so keep your distance."

Lessons from Rome and Japan

We still have many lessons to learn from Rome. If one wants to create more human outer spaces, one gives thought to siting. Camillo Sitte, in *The Art of Building Cities*, writes: "Of the 255 churches in Rome, 41 are set back with one side against other buildings; 96 with two sides against other buildings; 110 with three sides against other buildings. Only six stand free."

The lessons from Rome also indicate that it is possible to design a building which is complete in itself but is also related to its neighbors. Indeed we are coming to realize that our architecture is much more akin to Renaissance architecture than we formerly thought. The "skin and bones" concept led us to see readily its relationship to Gothic architecture, although actually the "skin and bones" advocates are relying more and more on symbols of construction rather than on the actual structure. This principle is again beautifully illustrated by the Japanese house in the Museum of Modern Art's garden where the actual structure is hidden and we are presented with a system of *symbols of structure*.

We tend to admire nowadays those buildings which have a single generating idea behind them and even the centralized space idea of the Renaissance. For instance, we are leaving behind the house of the forties as a confused one which tried to express what went on behind each bay. Thus the living-room bay could be filled with glass which went to the floor, but the bedroom bay had to have the glass stop at the 2'-6" height to provide privacy (I never quite understood that one because we so seldom crawl in our bedrooms). The kitchen bay had its windows a few inches higher still, making a series of steps. Today we are more interested in the total expression.

The "keep your distance" theory obtains in suburban areas, too. The no-man's land between single-family houses caused by our setback rulings has no meaning whatsoever. The individual house has received tremendous attention but its relationship to its neighbors and the forming of coherent, usable outer spaces, are almost completely neglected. Our setback restrictions hinder manipulation of the small amount of land available. Our great architects have shown us how to house people in multistored buildings, but we as architects have not contributed much to the question of what to do about the single-family house which must be repeated many times for economic reasons. All too often we merely criticize the speculative builder. The key to this problem undoubtedly lies in restudying our setback restrictions. No

society has ever before worked under such stupid restrictions. We plant our orchards more intelligently than our houses.

I mentioned earlier that our buildings aligned along a street often have the appearance of strips of wallpaper pasted on. The manufacturers have observed this tendency toward wallpaper architecture and now one sees advertisements of systems of windows, mullions, spandrels, etc., which may be bought by the yard. This is a natural expression of the industrialization of structure and could be used to good advantage if these elements were so arranged as to create coherent inner and outer space. The important thing about these glass-sheathed, taut buildings, as Mies van der Rohe pointed out long ago, is their reflective quality and not alone the effect of light and shadow viewed from outside. Glass in most lights appears opaque. The isolated building reflecting the sky, trees, and distant building is one thing, but a group of glass-sheathed buildings, one reflecting the other, will provide multiple images which need to be controlled. The light screen wall is here to stay, but its esthetics have not been completely solved.

One can say that the present tendency to reduce everything to a system of rectangles, both in plan and elevation, is an outgrowth of the modular concept and machine processes. We accept this discipline but we still long innately for the old play of light and shadow, for something curved. The work of Le Corbusier is still conceived in terms of light and shadow and not so much in terms of reflections. In his building at Marseilles the shaping of the *pilotis* and elements of mechanical equipment is a satisfying foil for his rigid geometry. For many years now he has exploited the visual delights inherent in the forms of mechanical equipment. For instance, why shouldn't ductwork be a veritable tree inside, or a vine climbing over the facade? If we are to spend up to 60% of our budget on mechanical equipment we should derive more than physical comfort from it. Visual exploitation of it may become the sculpture of our time.

The prime ingredient: visual delight

Yes, the architect's prime responsibility is to give visual delight and the treatment of space is the prime determinant and the most important architectural measure of a culture. The public is confused as never before about the exact function of an architect, for we have gone through a long period where the specialist talked only of social responsibility, techniques, economy, "the architect as a coordinator." We have apologized for being concerned with visual design and indeed there has been little discussion of it even in our schools. This fact is demonstrated again by the difference between a drawing, a model or a photograph, and the actual appearance of so many of our buildings. The conception is constantly discussed, but seldom visually perceived. An architect should be concerned with a building's looks in the rain, or on a summer's day, its profile on a misty day, the different treatment required for that which is close at hand vs. that which is 20 stories removed; with angles of vision, symbolism and content. We are in a transition stage and our ideals of beauty are in a state of flux. We cannot agree on this or that specific treatment but each can study and relate his efforts to principles which do not change.

An architect is not merely a beautifier, but our profession should and will die unless we produce that which meets man's highest aspirations.

CONVERSATIONS WITH ARCHITECTS

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PAUL RUDOLPH
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MORRIS LAPIDUS
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JC: In American architecture today, symmetry is no longer considered anti-modern. In relation to the architecture of men like Kahn, Johnson, and Stone, your buildings display a lack of symmetry. What happens to the "axis"?

PR: I am not interested in symmetry or asymmetry, per se. One characteristic of the twentieth century is that nothing is ever completed, nothing is ever fixed. We don't think of things as being complete within themselves. A building can only be thought

of in relationship to a changing setting, and at a point in time. Therefore, the design suggests the past and the future. So the whole idea of the uncompleted building which is going to be expanded in unknown ways is an obsession. I have now lived long enough to know that buildings get torn down, they get burned, they get added on to, their uses get changed, etc., so for me the temple in the park, or aligning a great avenue organized around an axis, is meaningless.

JC: Now, when you propose a project as large as the Stafford Harbor project [Fig. 3-1], do you conceive of that as a totality?

PR: Oh, never.

JC: Expandable?

PR: Absolutely. It is only intended to outline a three-dimensional—not two-dimensional—system of organizations which is to be augmented, changed, built upon, elaborated, diverted, etc. The elements which *cannot* be changed are the site and the human needs to be accommodated.

JC: In the drawings of the Southeastern Massachusetts Technological Institute [SMTI; Fig. 3-2], there seems to be a fairly complete program around the piazza, focused onto the lake. There is, in the design idea, a completed program.

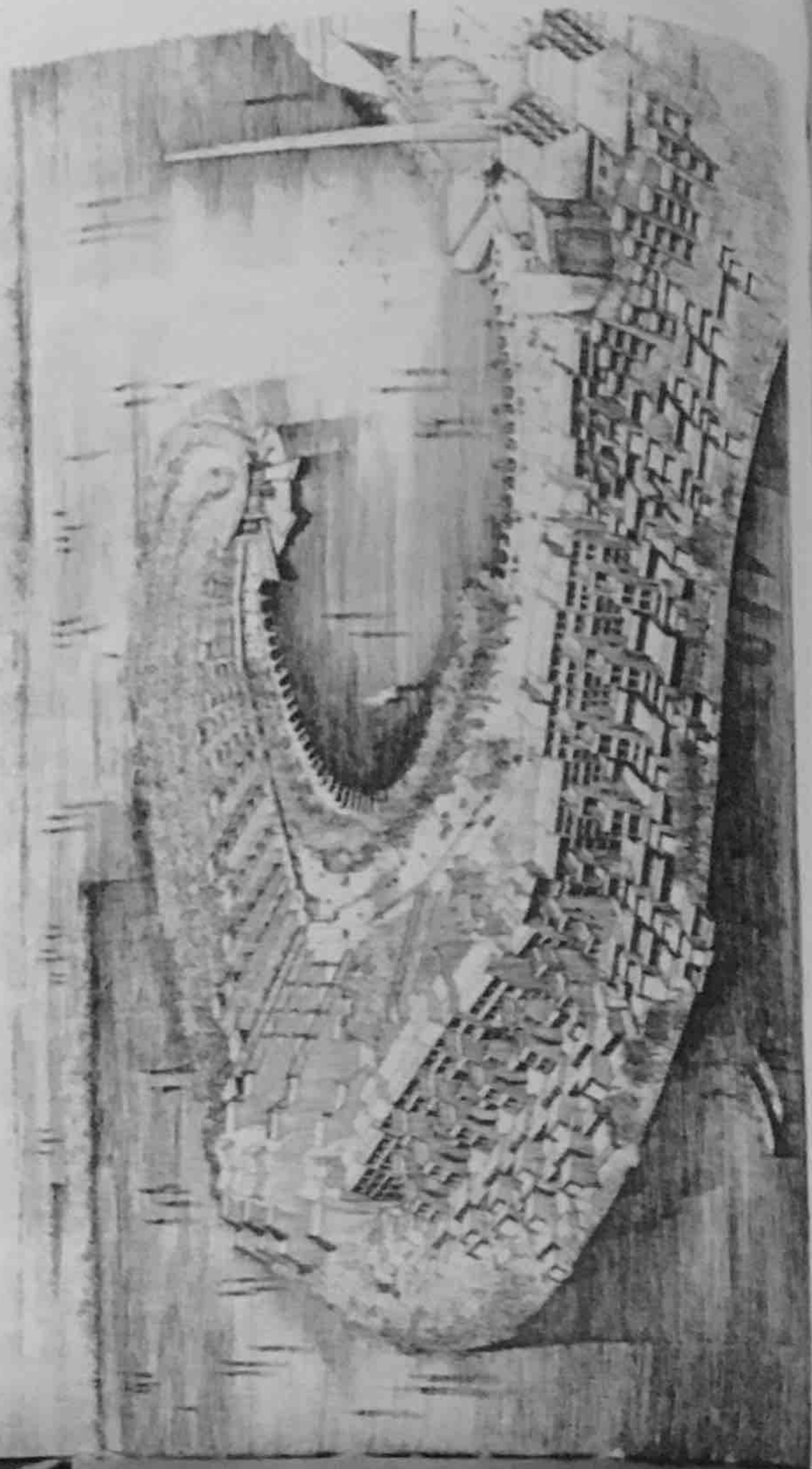
PR: You call the space defined at the center a "piazza." I would call that a spiraling mall, but I'm being picayune. It is not a piazza at all. It's quite a different kind of space. The usual definition of a piazza would not be encompassing enough to organize a campus of this magnitude. The spiraling mall concept is much looser; it could have an additional spiral or two, be terminated or extended or contracted,

whereas a piazza, by its very definition, is fixed and belongs more to the Renaissance.

The central organization of this campus is purposely a moving, or dynamic, one. That's the very nature of what is needed, as I see it. When one gets beyond the spiraling mall, with its defining buildings, walks, terraces, planting, etc., then other architects will take over, and indeed they already have. In that sense, I've thought of it as similar to Thomas Jefferson's University of Virginia, wherein he made a fixed, well-defined, marvelous central core for the campus. But, beyond the core, other architects took over, building very inferior structures. The idea, the central core, must be strong enough as a center of the campus, and other architects will add on to that. But the cohesiveness of the center remains intact.

JC: Transferring that idea to the Art and Architecture Building at Yale University [Fig. 3-3], you again designed it for expansion. There was to be another building next to it which would be similar, if not the same. Now if, in fact, that second building is never built, is the A and A Building incomplete?

3-1. Town of Stafford Harbor, Stafford Harbor, Virginia, 1966, Project.





3-2. Southeastern Massachusetts Technological Institute. North Dartmouth, Mass. 1963. Paul Rudolph; Desmond and Lord. Site plan.

PR: Whether the A and A Building is incomplete or satisfying is for others to judge. It is *intended* to be expanded, but I don't think of it as being expanded only toward the north, but in all directions. It might be expanded as bridges over Chapel and York streets. The pinwheel motion of the upper floors suggests expansion across the streets. The service core is placed on the north next to two derelict buildings, which would facilitate expansion in that direction. I'd much rather see it expanded across the streets as bridges.

HK: We noticed that not only in the plan of the A and A Building [Fig. 3-4], but in *all* your ground plans, you avoid symmetry. You keep the open ground plan of a Bauhaus type, whereas here in the States there is a very definite tendency toward a rigid, symmetrical order. Think of Stone's university plan at Albany [New York] or his Kennedy Center in Washington. There are hundreds of other examples one could mention. To me, it is interesting that only in Russia does one find such a Beaux Arts symmetry, for instance, in the

new University of Leningrad. Outside the U.S. and Russia, this is not the case, I wonder about the political implications. Could it be that this tendency toward a symmetry reflects a political desire to establish order, imperial order?

PR: I'm not much interested in trends or fashions, but in what is most appropriate. Symmetry as an orienting device may be most appropriately used where large crowds are involved, such as in an airport, but even there the sun refuses to give its light symmetrically. The open-ended quality of twentieth-century architecture renders mere symmetry impotent in most cases. Well, some of the "major" architects just do not interest me.

HK: Who? Or do you ever criticize other architects?

PR: Well, I'm too old for that. I used to, but I have to be polite now, you see.

HK: Because you belong to the Establishment?

PR: I don't want to belong to the Establishment.

HK: Can you control that?

PR: Since leaving Yale,* I can afford the luxury of being a maverick. Anyway, the Art and Architecture Building is asymmetrical because its site is asymmetrical. It is at the corner of two streets. Why in the world would anyone want to organize the thing symmetrically? It's conceived from the viewpoint of urban design. It turns the corner. I cannot imagine a symmetrical building placed on a corner.

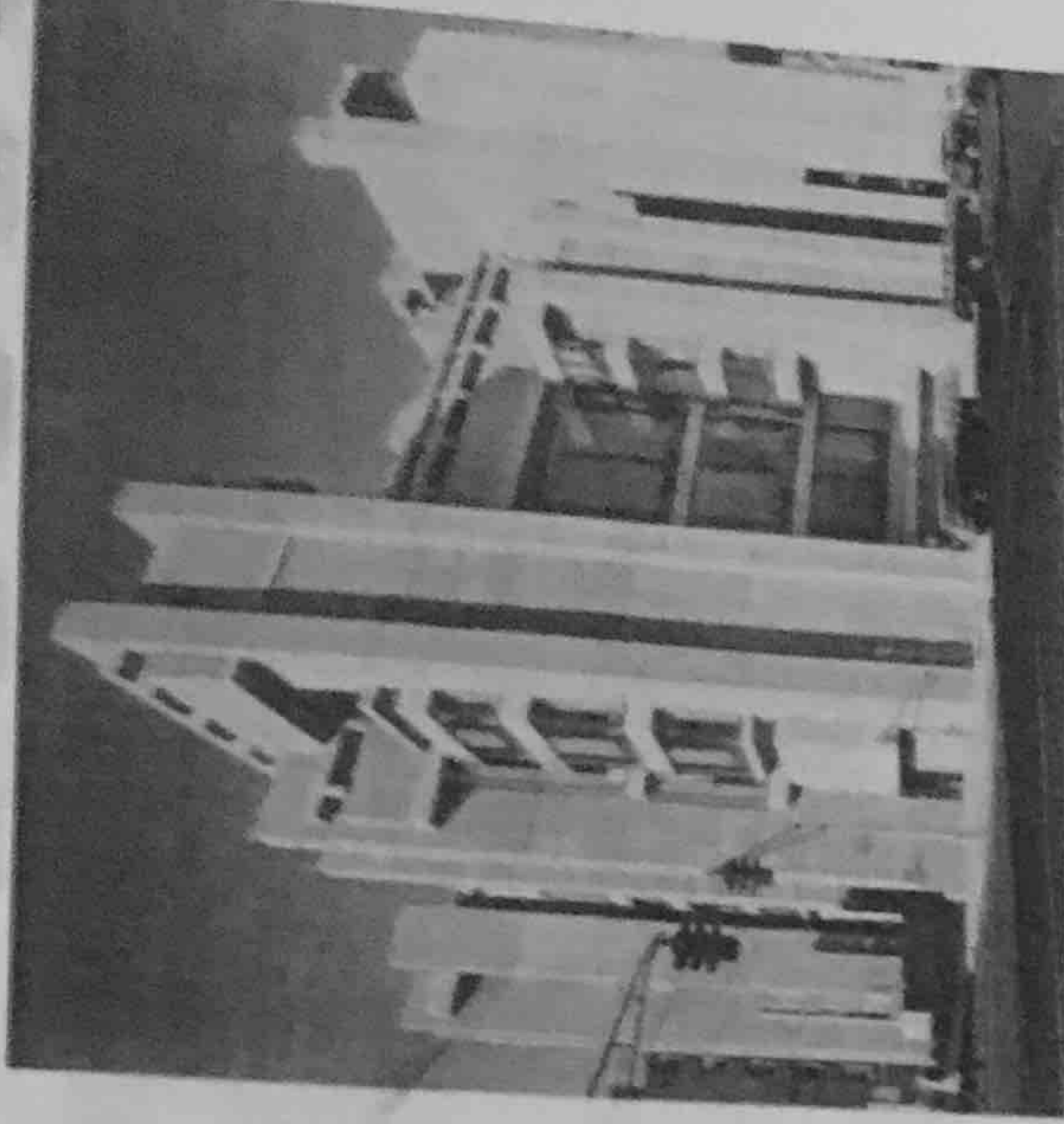
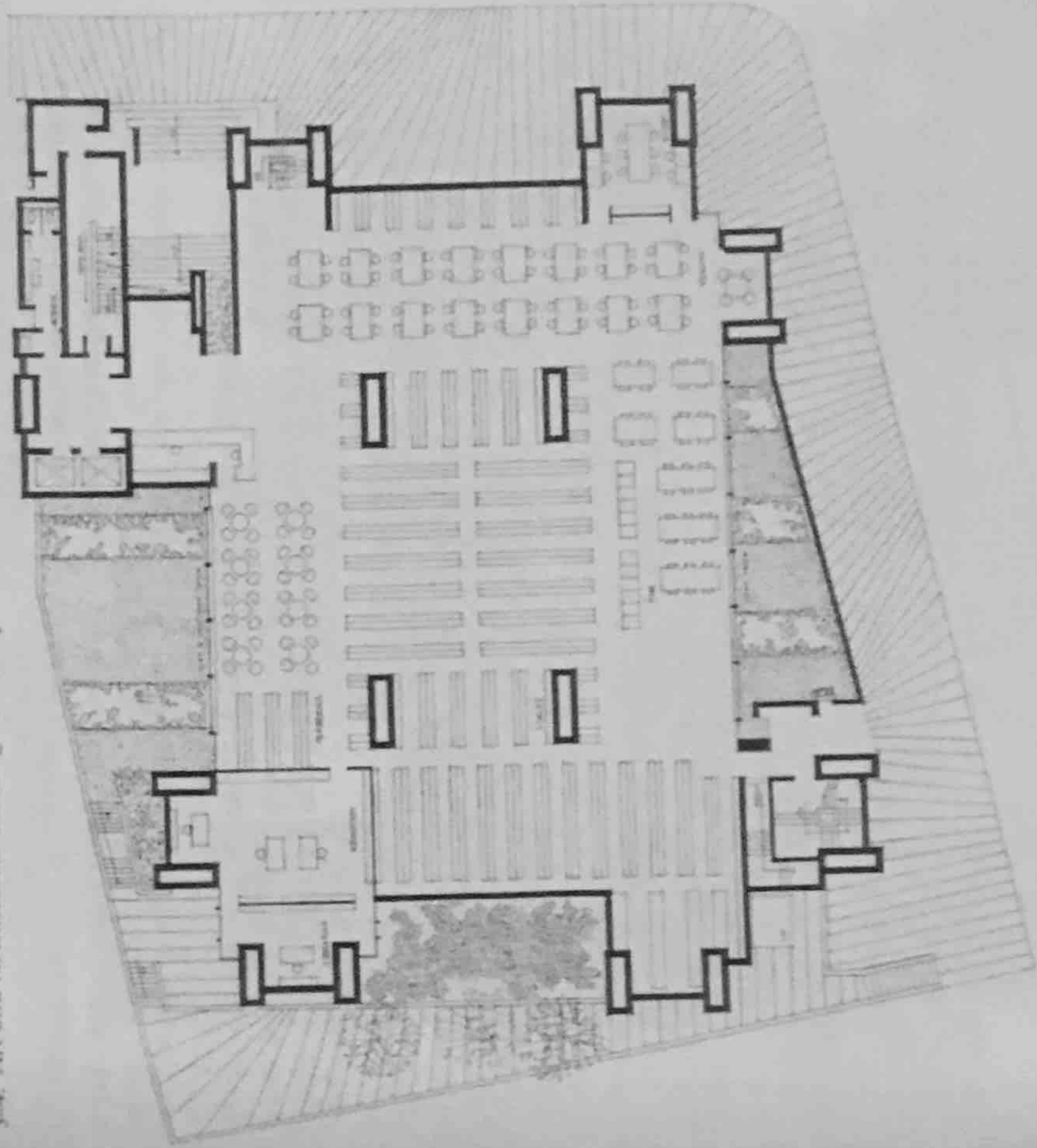
HK: But it happens.

PR: I don't care what happens. I only care what I want to do.

JC: In terms of the A and A Building...

* Rudolph was Chairman of the Department of Architecture at Yale University from 1958 to 1965.

3-4. Art and Architecture Building. Ground plan.



3-3. Art and Architecture Building. Yale University, New Haven, Conn. 1962-63. Paul Rudolph.



3-5. Mary Cooper Jewett Arts Center, Wellesley College, Wellesley, Mass. 1955-58. Paul Rudolph; Anderson, Beckwith & Haible.

PR: It's really painful for me to talk about it.

HK: Do you always hate the buildings you have done?

PR: No, I don't hate them, but I'm never very satisfied with them. I want to change them. I'm much more interested in the present than I am in the past. I don't really want to talk—I never want to answer critics. I really don't. I only want to be positive. The criticism, finally, never bothers me.

HK: The Art and Architecture Building introduces a new style of building in the United States, a building which stands on the borderline of a whole historical development after Mies and after the International Style. Apparently, you designed it much earlier—in 1958. It was finished in 1963. It is always quoted as being from the year 1963. The original idea, however, goes back to 1958.

JC: There was very little in American architecture at that time which had moved away from the Miesian vocabulary.

PR: Well, for a long time I have felt that Mies was best when building beautiful temples in parks or designing his maximum package fitted to the speculator's site.

Cities cannot, finally, be made of temples or packages. The Sengram Building is a beautiful temple to liquor, but unrelated to the building of cities [see Fig. 1-2].

JC: In your A and A Building, there is a new massiveness, a new texture, new floating spaces. The rectangular box and the flat surface are broken.

PR: Yes.

HK: It would be very interesting to go back to this originating moment, when you broke with all the forms you used before.

PR: It did not begin with the Art and Architecture Building, from my point of view. When I first started, I made guest houses because no one would trust me with the main house. The guest houses were essentially derived from the International Style and adapted to the Florida climate.

The Jewett Arts Center at Wellesley College [Fig. 3-5] addressed itself to the problem of adding a twentieth-century building to a pseudo-Gothic environment. Architecturally, it is lacking; environmentally, it is relatively successful. Wellesley shook me, and I returned to the International Style in my next building, the first Sarasota High School. The second Sara-

sota High School [Fig. 3-6], in 1958, marked the beginning of a more personal and relevant search.

HK: In which respect was it, for you, a new beginning?

PR: If you discount my building for Wellesley, then I would say that the early houses were organized basically on clear structure, simplicity of form, articulation of each part, and what's commonly called "functionalism." The second Sarasota High School was a move from clear form, from clear structure, from linear structural elements defining space, to the organization of planes in space. It depends much more on the space and handling of light, which really meant planes rather than linear elements, which in turn commenced my investigations of scale.

HK: Also volumes, not only planes.

PR: Right. And, therefore, that building, for me, was more important. But let's face it. All this comes from Corbusier. He, of course, did it all much earlier and much better.

HK: Were you looking around, were you looking for . . .

PR: Always, always. I'm affected by everything I see. I make no bones about it. I haven't invented anything in my life. For instance, the entrance to the Sarasota High School can be traced directly to Corbusier's High Court Building in Chandigarh.

JC: Do you see periods of development in your own work? Is it possible to distinguish stylistic changes from the Sarasota High School Building to your most recent building? I realize that any definition of style is an abstraction that we make, not the architect.

PR: Well, there are certain notions which I can't always explain which are very much a part of what I try to do, and they recur in varying forms. It's been said of me that I don't really know what I want to do, and, therefore, I do many different things, all quite eclectic. That isn't so, and I think I can really demonstrate it.

JC: Can you define some of those notions?

PR: Gropius, my teacher, was a very powerful, but not a very good, architect. He made clear the principles of the International Style, which I adapted to Florida.

3-6. Sarasota Senior High School, Sarasota, Florida. 1958-59. Paul Rudolph. Photo: Ezra Stoller © ESDO.



As time passed, I became increasingly unhappy with the limitations of the International Style, especially with regard to urban design and cities. That is of crucial importance. I have now designed many kinds of buildings, from New England to Florida and as far west as Illinois, and including East Pakistan, Saudi Arabia, and Lebanon. The programmatic and site requirements are very different, technically, climatically, psychologically, etc. I start with the site and environment. However, this can lead to a new eclecticism: a new pseudo-Gothic architecture for a given campus, or a new neo-Georgian for a city hall, etc. Is it any more than movie set making?

Secondarily, the space, interior and exterior, and its psychological effect, is of the utmost importance. The structure is only a means to an end, although each material has its own unique possibilities. In Miesian architecture, the structure is too often an end in itself. No layman has ever said to me, "I want the structure exposed; I want it to be clearly articulated." However, laymen have described very eloquently what space meant to them. I happen to be very interested in what things mean to people, and the symbolism involved. In a nutshell, the principles on which the International Style were based were valid up to a certain point, but they didn't go far enough and didn't face enough different kinds of problems. Two of those problems have to do with the psychology of space and the art of urban design, the ability to add to a city.

HK: That means you are not satisfied with building just for needs.

PR: No, never.

HK: You are not satisfied with just exhibiting pure structure for its own sake?

PR: Never.

HK: Beyond the concerns for structure and needs, you want to make a building exciting.

PR: I want buildings to move people.

HK: Do you think an architect has to be an artist?

PR: If an architect isn't an artist, he should not be called an architect.

HK: Sometimes a building might even look more like a work of art than like a building.

PR: You mean sometimes buildings become so sculptural?

HK: They become sculptures instead of buildings.

PR: In such cases, the emphasis is wrong. That would be inappropriate, because sculpture is never architecture and architecture is never sculpture. There has to be a balance. Buildings have to be used. One of the definitions of architecture is certainly that a building must fulfill a use.

HK: Nowadays, we respond to the functionalism of the Bauhaus negatively. The tendency is to go too far in the opposite direction. The problem to consider here is that one could neglect the needs while emphasizing design and excitement.

PR: I'm sorry. I don't mean to emphasize excitement per se, because it sounds as if I think architecture can be a substitute for something else. There are certain types of building which need to rise above functionalism.

As far as functionalism is concerned, what works for one doesn't necessarily work for another. The traditional Japanese house worked beautifully for the Japanese. It doesn't even work for the Japanese now. And it certainly doesn't work for Europeans or Americans. Functionalism is a very complicated thing.

JC: It can be a crutch, as Philip Johnson would say.

PR: I'm all for buildings that work. It's a question of *what* works.

JC: Walking up Chapel Street in New Haven toward the Art and Architecture Building, one sees that it gives the town another visual emphasis. It is a very self-conscious building. It strikes one as a huge piece of sculpture, and one wonders if it fulfills its everyday needs.

PR: The relationship between everyday needs and spiritual needs is very complex

and they are often at war with each other. Mere functionalism is never enough.

JC: The building is very flexible. It allows the things that have been put in afterward, without destroying it.

PR: The test of any building is how well it can withstand well-intended, and sometimes not so well-intended, changes. The question is: Is this building powerful enough on the inside to withstand all that has happened to it? For instance, plugging up the central exhibition space is alien to the building's organization and indicates contempt.

HK: What was the use of that space?

PR: It varies. The main floor is intended for exhibitions; the fourth floor for architectural drafting; the sixth floor for painting.

HK: The center core of the building is an open, unifying space.

PR: Yes.

HK: The primary need is to have enough working area. Now the students complain that there is not enough space to work but too much space to exhibit.

PR: Well, there is no reason why the exhibition space should not be used as work space.

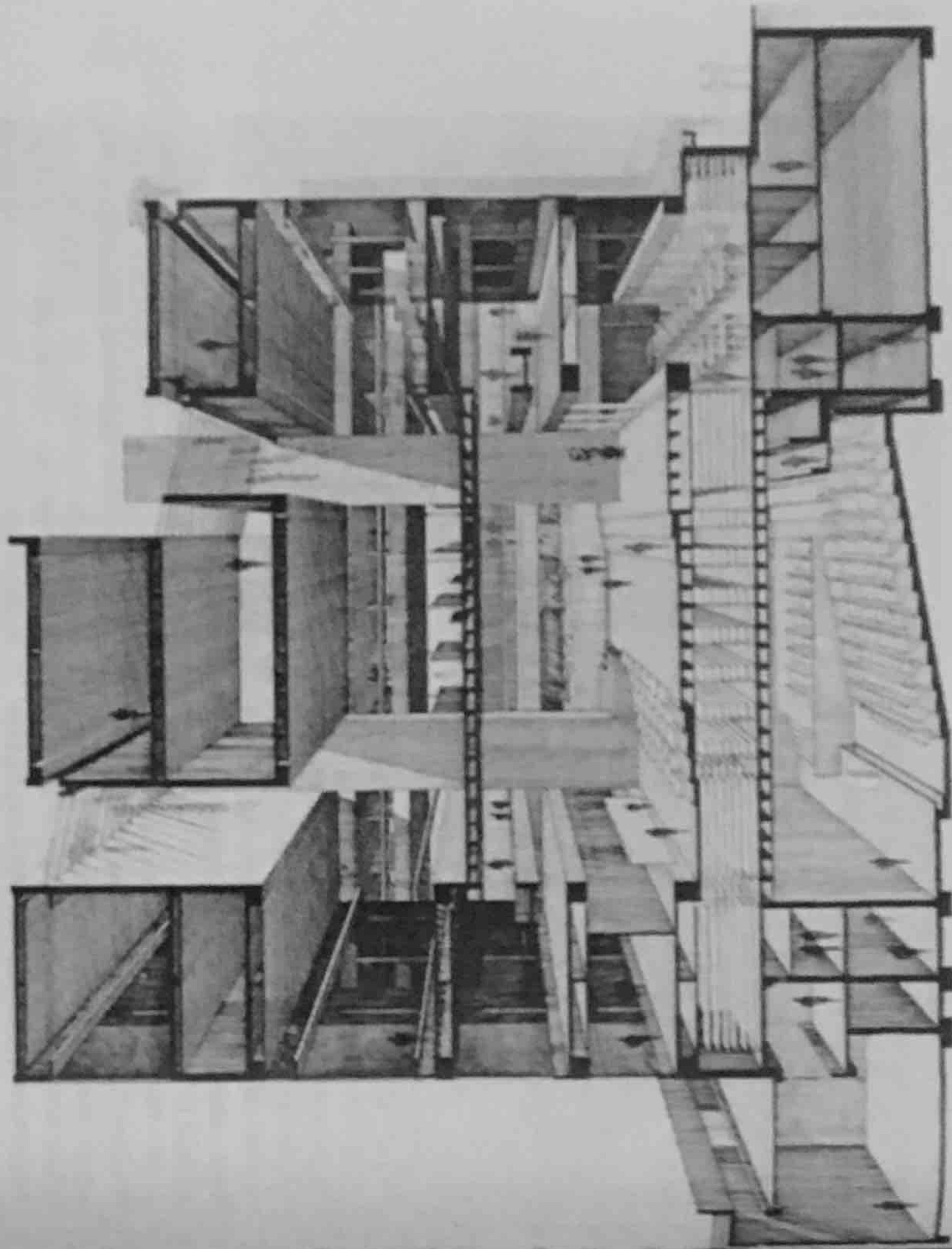
HK: But then it loses its grandness, the very spatial quality you insist upon.

PR: Does it? Well, I could certainly imagine partitions separating the central volume, which might be retained as exhibition space, from the perimeter space, which might be used for work.

JC: How do you intend to "move" people with your buildings?

PR: I mean it in several different ways. I mean moving emotionally or psychologically. Maybe "moving" is too strong a word. What I really mean is that I regard architecture as important. It changes our lives or modifies them. I feel that one

1-7. Art and Architecture Building. Section drawing.



should be aware of *where one is*. The population and communication explosions have made it difficult to know whether you are in Hong Kong or in New York City.

JC: Do you mean that mass population produces anonymous architecture?

PR: Yes, so I want the environment to have character which is related to the varying needs of people as they differ over the globe.

JC: In order to move people emotionally, it seems that for you space is more important than the structure itself.

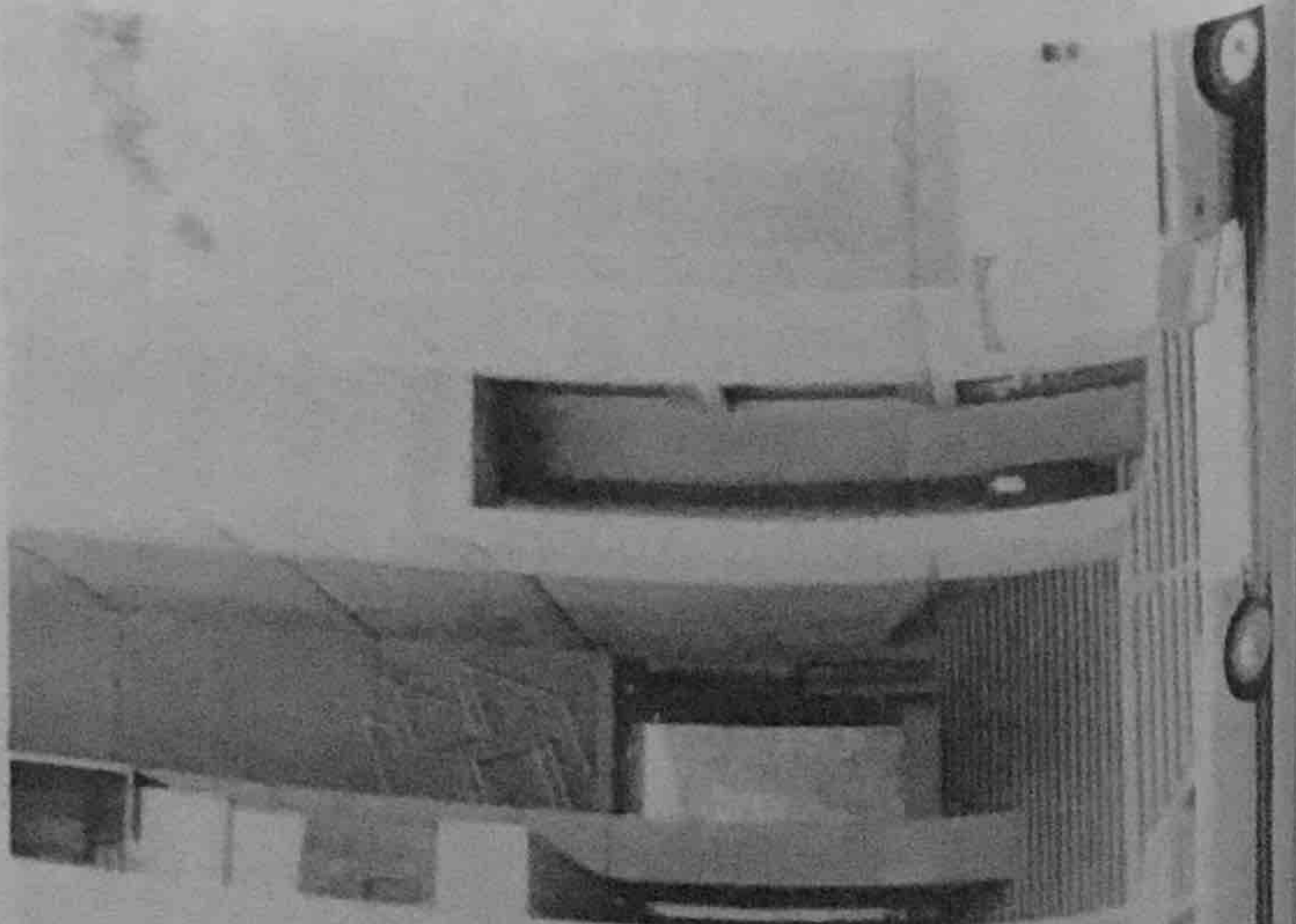
PR: Oh yes, always. I'm most interested and concerned with the space, but what *définies* that space, of course, varies. Sometimes it is a mass; sometimes it's a plane. Sometimes it's transparent . . .

JC: Aren't you also concerned with the *outside* space?

PR: Oh, yes. When I talk about space, I don't mean merely interior space. It includes the whole urban setting.

JC: The Art and Architecture Building

3-8. Art and Architecture Building. View of front steps.



introduces that special quality of organizing exterior spaces with masses.

PR: I'm also interested in space which has a thrust horizontally and vertically [Fig. 3-7]. I'm fascinated with the interaction of one thrust of space with another. For example, the A and A Building consists of many wings. Each wing has a strong horizontal thrust around a vertical thrust. So you have a pinwheel. All these spatial thrusts are fascinating for me. You'll find that a recurring thing in my work.

HK: In that space it is exciting to discover the many possibilities to move around. It becomes an adventure to explore the space. But, on the other hand, a stranger can get completely lost. It can be very confusing.

PR: But it's *not* a *public* building! When that building first opened, there were literally thousands of people who came to see it, but it was never intended for that. It was intended for a few students who, presumably, soon learn the purposely secret labyrinthlike circulation system.

HK: When I came to this country, I stepped out of the plane, came to Yale, walked up Chapel Street, and there it was: a concrete mirage. I walked around it and tried to understand it and was spellbound. There were many entrances, but which was the right one? The large entrance space seemed to demand a festival procession on a special occasion; too important for the daily routine, and the small entrances scattered around seemed to lead to closets rather than to the library. I ended up in the basement and was lost for three days. However, back to my point. One can have lots of associations which are very individual. Many responses are possible.

PR: Sure.

HK: So one cannot pin it down. One of the positive qualities of the building is that it provides a variety of experiences. But it was January when I arrived, and the wind blew through that entrance [Fig. 3-8]. It's a great hole opening toward the sky, and it creates a frame for those run-down build-

ings beyond. You have this great view, but there is nothing to see, and the cold wind blows you into the backyard. Did you have something else in mind when you built that great entrance-way?

PR: Oh, yes. You see, I intend for that entrance to lead to a courtyard. The courtyard isn't really formed because the "run-down buildings" next door have not yet been rebuilt. If the next architect is at all sensitive, he will complete the courtyard, thereby adding immeasurably to the whole. Implications in architecture are a twentieth-century must.

HK: It is very significant in American urban architecture that side walls, huge blank surfaces, are left for future additions. The street is marked with blank walls waiting for the building next door. We are always thinking of the next step, and nothing is finished.

PR: Hasn't it always been like that, to a degree? And is it more satisfying when people build their little temples complete within themselves? Things are constantly being rebuilt. I would like to think that, as time goes on, existing buildings would be better understood and, in essence, the basic idea would be carried out. But maybe I'm wrong. I don't know.

JC: In other words, you count on the next generation.

PR: Well, I don't count on anybody, to be quite frank about it. I just hope. We are most limited in what we can do.

JC: If you are that uncertain, then why design with an open-ended attitude? Under the circumstances, one would expect you to work for a totally complete concept.

PR: No, I'd rather imply what *might* be done. The environment constantly changes, as history shows. We are present for a short moment in time and must suggest what is to come.

JC: Yet, one perceives the Art and Architecture Building as a finished product. It is much too unique and self-confident to imagine that it anticipates anything else.

PR: But there are *implications* in the building of what might come.

HK: For instance, there is the implication in the entrance-way to lead into a courtyard that may never be built.

PR: One must think of more than one generation. It is important for architects to think on multiple levels, and for buildings to be read on multiple levels. You can read that building as a thing within itself, but that's not the beginning and the end of it. I could give you a hundred implications for the future in any of my buildings, but I don't really know if any will be recognized. The entrance-way on a cold winter's day can be unpleasant, but the venturi action during warm weather is a plus; so if I were to do it again, I would retain the main entrance as it is, for the important thing to me is to have an entrance of that scale the year round.

HK: If, for instance, you want to get to the library, you are led up that grand stairway to the second floor. This is a "moving" experience, but you have been led in the wrong direction for the library so you have to squeeze into an elevator and go back down. However, one may end up in the subbasement. Next time, you don't try the grand stairway but discover the door to the fire stairs, and then you make it.

PR: This building is for the people who are going to *make* things, if you will. It is not so much for people using the library. They are temperamentally very, very different. Everybody who is going to use that library learns how you get in. But I wanted a *ground* entrance for people who . . .

JC and HK: Create?

PR: Who are going to make things.

JC: Like the painters and architects . . .

HK: The other ones, the scholars, can get lost.

PR: There are people who gave me such a hard time that this was *purposefully* done.

HK: Congratulations.

PR: Oh, I think buildings should have a sense of humor about them.

JC: There's certainly a lot of humor in the whole building.



3-9. Art and Architecture Building. Alcove window at library corner.

PR: Isn't that clear?

HK: For instance, there is that little alcove window at the corner [Fig. 3-9] . . .

JC: In the midst of those masses of concrete.

PR: Yes, yes.

HK: That certainly is a witty, ironical remark. It contradicts that mighty corner.

PR: Yes, yes.

JC: From inside, it makes a very friendly corner. The light there breaks open the box.

PR: I know.

JC: Mr. Rudolph, some of the best of modern architecture has been built for campuses. You have certainly contributed to that scene. The A and A Building at Yale University is one contribution, and, as mentioned earlier, you have planned a whole campus for Southeastern Massachusetts Technological Institute [Fig. 3-2].

PR: Yes. The student union and the various buildings around the center are now all under construction, and then I will say goodbye to that campus.

JC: And other architects will step in?

PR: Yes, you see, one has to understand the forces in society. As an architect,

you have very little control, and you have to be able to sense what will probably happen. Time is a more important factor in building than the materials used in construction.

HK: To plan and build a campus of a city all by yourself is a very desirable enterprise. However, how can one architect guarantee variety? Wouldn't it be better if many architects joined in building a city, so that it would not have the imprint of one individual, in order to avoid monotony?

PR: In the twentieth century, I do not know of a single example where many architects have participated in a given group of buildings where it has ended up being anything viable at all.

HK: Even a small complex like Lincoln Center has indicated that [see Fig. 1-22].

PR: The Lincoln Center? Neofascism!

HK: What about the Boston Government Center? Apparently, there exists a general plan by I. M. Pei. Then, many different architects were called in to do different parts. You also have been involved.

PR: The Boston Government Center is beyond the Pei plan.

HK: Kallmann, McKinnell, and Knowles stepped in. Gropius and his group stepped in. Finally, it is difficult to recognize the unity of such a given plan.

PR: There is not much unity, but that is a dilemma of twentieth-century architecture.

JC: But, within the plan, there are some important buildings. You yourself have said that Kallmann's City Hall is one of the most exciting buildings of this century [Fig. 3-10].

PR: It's a very good building.

JC: Would you also call this neofascism?

PR: Well, what is a fascist building?

JC: You're the one who brought it up, but let's say "one which dominates."

PR: The Boston City Hall is a magnet, and appropriately so, since its use is at the top of the hierarchy of building types. The superhuman scale and siting insure that it will remain a focal point.

JC: How does the treatment of the surface of concrete affect all of this?

HK: It's your signature, Mr. Rudolph, your dramatic exterior surfaces.

PR: No. We have built of brick, wood, steel, and plastics.

HK: No, you know what I mean. Have you forgotten the Art and Architecture Building? You are talking about your earlier buildings.

PR: They are wood and concrete block.

HK: All right. All right. But what's happening at the Art and Architecture Building?

PR: The aggregate of the concrete is exposed.

HK: Yes, exposed and striated! And you continued to use it. Think of the Endo Laboratories or the Christian Science Center, for example.

PR: Poured-in-place concrete buildings are becoming more expensive, but also I want buildings to be lighter in feeling. I can't explain this completely.

HK: The new Government Center in Boston?

PR: Well, that was designed five or more years ago.

HK: But it is now being built, and it still has that signature.

PR: Yes, that's true, but seriously . . .

HK: You are now getting away from it?

PR: Yes.

JC: Do you oppose that signature?

3-10. Boston City Hall, Boston, Mass., 1963. Kallmann, McKinnell, and Knowles.





3-11. John W. Chorley Elementary School, Middletown, New York, 1964-69. Paul Rudolph and Peter Barbone, associate architects.

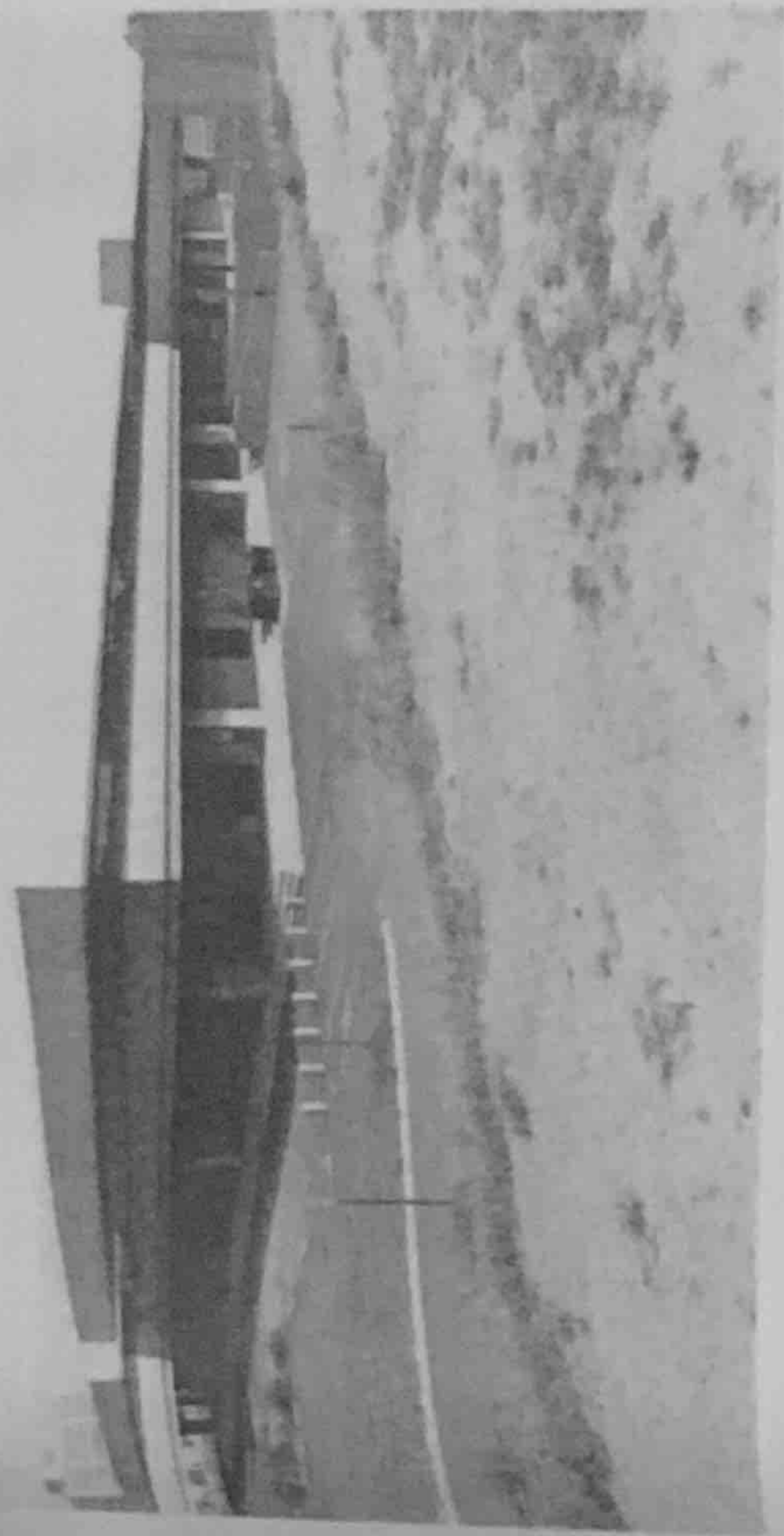
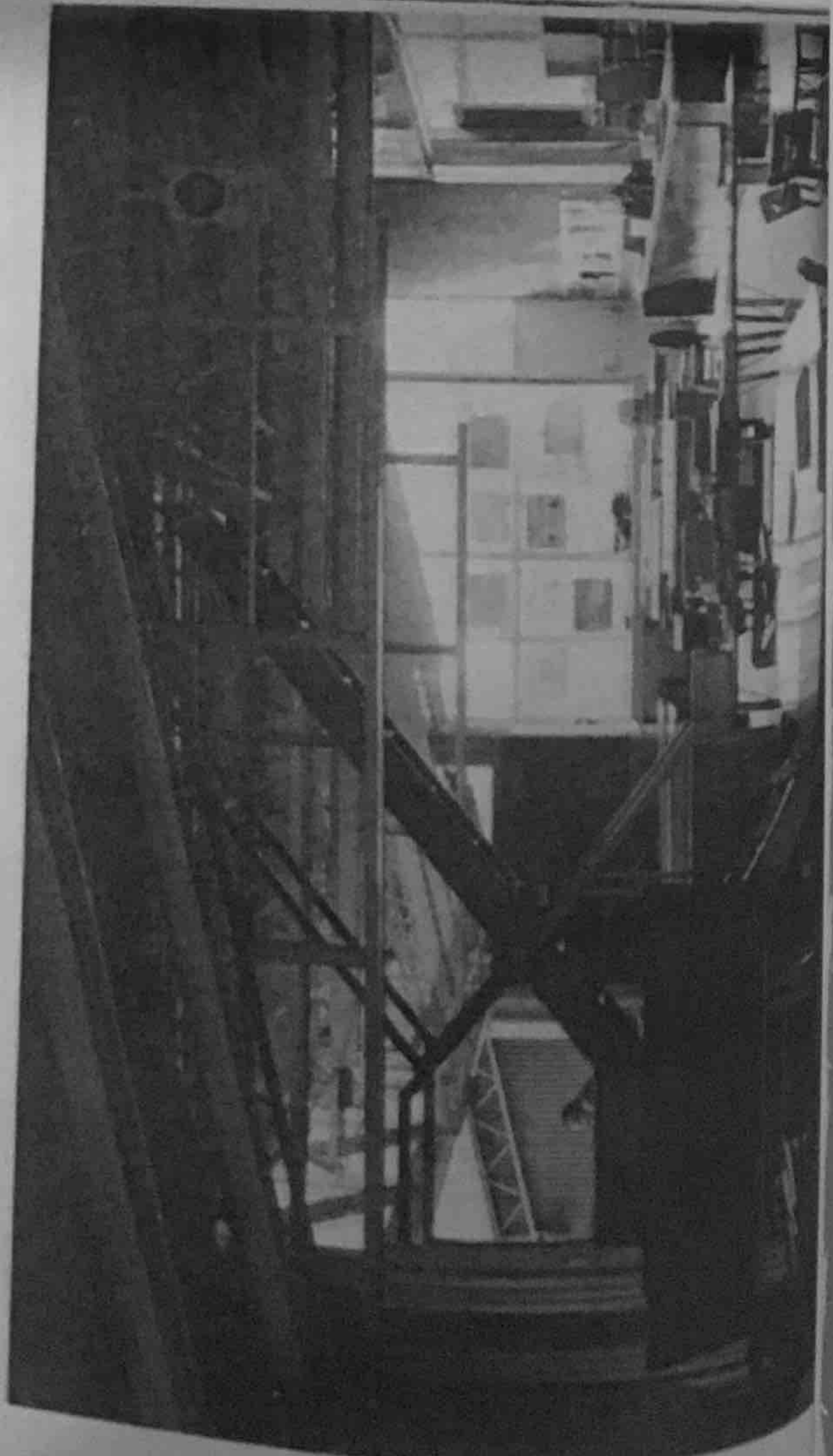
PR: I don't oppose it . . .

HK: It's not interesting any more.

PR: Every material has its own intrinsic values and uses. And I'm interested in every material, not just one. It's wrong to think that I'm only interested in concrete. Yes, I built some buildings in concrete and probably will build some more. Today, I'm working on twenty projects, and I think only three of them are concrete. I might add that there is also another aspect to be

considered. I'm fascinated with the idea of how to make a building a *dominant* in the city scale. I used to think that it could best be accomplished by making it relatively heavy and solid. I now explore ways to make it very light in terms of steel construction and still make it dominant. I happen to be working on a new government center for New Haven. And it is very, very different in feeling from the Boston Government Center. Poured-in-place concrete

3-12. John W. Chorley Elementary School.



3-13. Richard C. Lee High School, New Haven, Conn., 1966. Kevin Roche, John Dinkeloo, and Associates.

is a continuous material; it is a plastic. That's the essence of it. But a steel frame is the exact opposite. I haven't worked with steel frames so much, but I'm beginning to. So please don't think of me as just a concrete architect.

HK: Why do you want to make a building dominant? Why should it stand out? Why shouldn't it stay modest?

PR: There are certain buildings that *should* stay modest. For instance, I did a school. I hate that school.

JC: Now, wait a minute! We're talking about the Chorley Elementary School building [Fig. 3-11]. It is marvelous.

PR: You're too gentle with that building.

HK: Now you are your own worst enemy.

JC: Your school is not dominant. It stays within the scale of the landscape. It does not reflect adult wishes but adjusts to the play world of the child. It allows freedom and does not restrict the child to one place. It is light and inviting [Fig. 3-12]. Why shouldn't an elementary school be more like a kindergarten than a detention home? How can you hate it?

PR: I don't really hate it, I . . .

HK: Do you know the high school by Kevin Roche at New Haven [Fig. 3-13]?
PR: Yes.

HK: It is the opposite of the Chorley School.

PR: I know.

HK: It impresses the child coming to the school out of the slums. It wants to impress. It creates a very authoritarian environment. In some ways, it implies that every child in it is a vandal. Your school treats the child in a rather friendly manner.

PR: He feels at home.

HK: So why do you hate it?

PR: Well, it's appropriate, and it accomplishes what I intended. I don't think every building needs to be dominant, but a city hall needs to be dominant.

HK: Why can't you like the Chorley School, even if it is not dominant?

PR: Too sweet. Too sentimental.

HK: You really want to impress people!

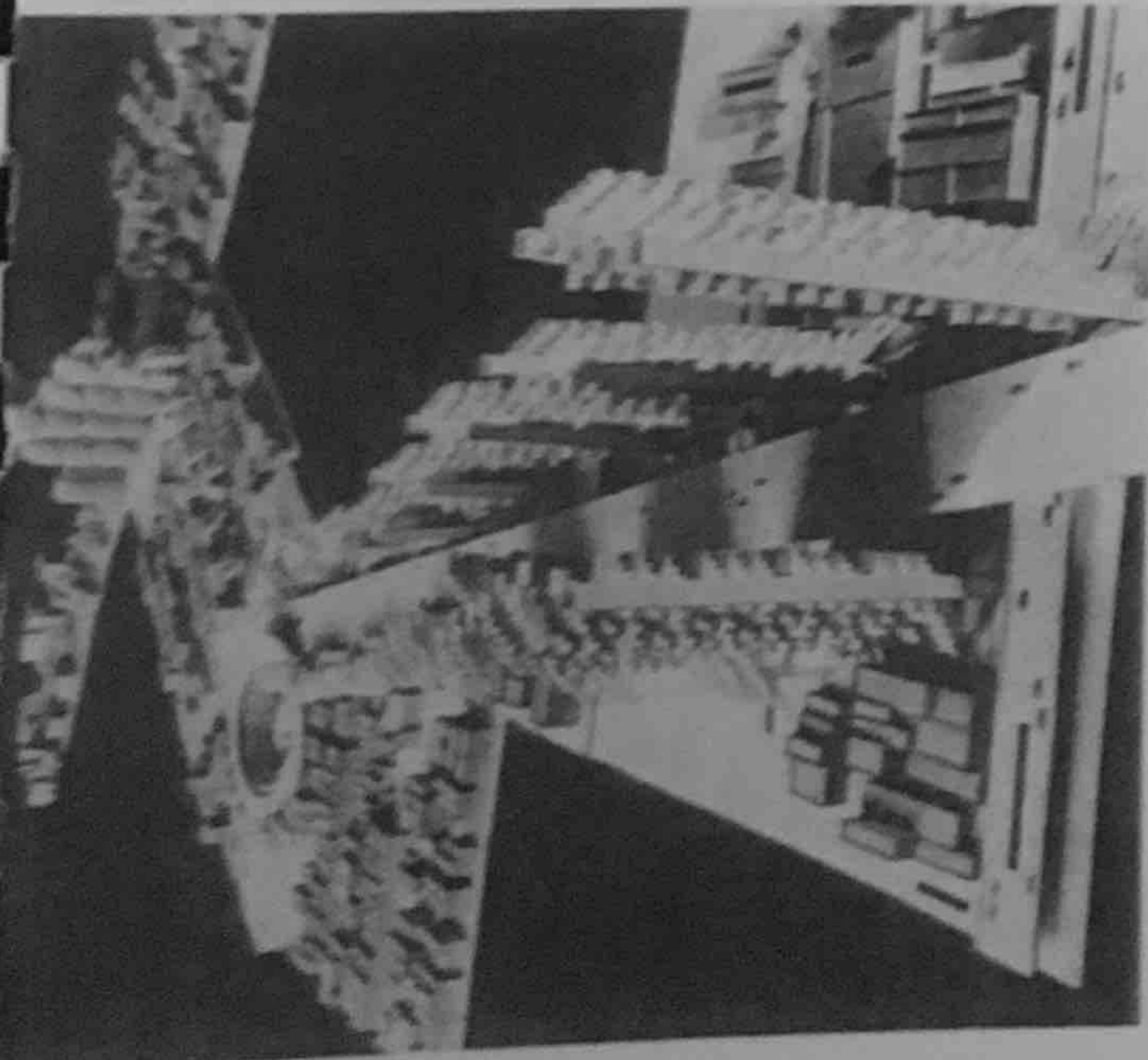
PR: No, I want what is appropriate.

HK: But that is an excuse. Every architect wants to be appropriate.

PR: I know.

HK: Everybody says, "I am appropriate," and then they go on building what

It was my intention to have each segment of the ceiling painted a different color, but for economic reasons we had to paint it all white. That hurts it. I wanted it to be like an Arabian tent. I wanted it to be very festive and to transport the child into another world.



3-14. Model for Lower Manhattan Expressway New York, 1967. Paul Rudolph.

they want. In your case, you want to impress, to create dominant architecture.

PR: Let me put it differently. There are certain building types which I feel more sympathetic to than to others.

HK: In other words, you would rather build a city hall than a school?

PR: Yes. That's all I really mean. I guess . . . well, I would like to think that there are ways of making a building like the Chorley School sympathetic to the child, without reverting to forms which become by their associations so sentimental. I think I relied there too much on associative values.

JC: Why would it be sentimental?

PR: Well, all those pitched roofs. Isn't it picturesque?

JC: Why not let a building be picturesque? However, there is a photograph which makes it look like something after an earthquake [Fig. 3-11].

PR: That I would like much better. It would have been better if the hill had been steeper so that the villagelike aspect could have been grasped from one point of view.

the fact. Thus, the Washington Monument is associated with the "Father of our Country" after it was built, not before. Religious buildings are probably the most difficult of all, because religion itself is being thought of in so many different ways. In any event, one cannot make everything bland. The richness and variety of life must be celebrated.

HK: How would you build a police station? What value would you emphasize in their building?

PR: I would hide the police within my megastructure.

HK: Like the post office?

PR: The post office is still a social entity where people often go. My real point is that blandness and uniformity are creeping in on all sides, and there's no character left.

JC: But when you try to establish character or symbolism, you must call forth some standards. Do you look back into history for models of how the church, how the post office, should look? What vocabulary do you use?

PR: The principles of architecture don't change. It's only the means of carrying them out which change. The idea of scale and emphasis hasn't really changed. The human eye hasn't really changed. The reaction of the human being does change because of connotations. You cannot get away from the fact that we are born with images in our minds.

HK: But attitudes change. Around 1900, Mr. Vanderbilt and Mr. Frick wanted to have palaces in the middle of New York. Today, a millionaire hides himself in an apartment building. He doesn't want to be identified. In the same way, the attitude toward the government might change.

PR: It's true. One agrees with that, and my own feeling that differences should be emphasized and made more apparent is perhaps an overreaction to the uniformity which is around us. However, the idea of flexibility and anticipation of the future

leads to blandness. One cannot escape one's time, but if a building has true vitality varying uses can often be accommodated. The result is a rich juxtaposition of the new and the once-new building. This "double reading" of an environment is very clear in great European cities.

HK: Your primary concern is to get character and variety back into the city.

PR: That is right. This may be so counter to the times that it ends up being merely picturesqueness.

HK: In this respect, Philip Johnson is one of the best examples. He was the closest disciple of Mies, but then he discarded the uniformity of the Miesian box, seeking a new variety and expressiveness. The result is an eclectic traditionalism. Take, for instance, the colonnade of the Kline Biology Tower [see Fig. 1-4] or the temple front of the New York State Theater [see Fig. 1-23]. He uses an architectural vocabulary of past times, which is worn out.

The architect, nowadays, is in a very new situation, where the identity between meaning and form must be reexamined. Do you know what happened in New Haven when the atomic alarm went off accidentally? People rushed into Kevin Roche's high school building, recognizing it as a shelter. Today, we are in a situation where architectural language is ambiguous and garbled.

JC: When you talk about giving the city back its character, doesn't that really mean that you want to dominate the city with your buildings? You said you want your buildings to dominate.

PR: Did I say I wanted to dominate?

JC: Yes.

PR: Dominate what?

JC: You mentioned that you want to relate your buildings to others, and yet you intend for yours to be dominant.

PR: Well, I didn't say quite what I meant then, because there should be background buildings.

HK: Yes, you did differentiate between

background and foreground buildings. However, you would rather build a foreground building.

PR: Yes. It's easier.

HK: Do you mean that building background buildings, that is, to remain modest, is difficult?

PR: Yes, it really is. No doubt about it. But I'm sorry if I conveyed the notion that I always want to dominate the situation. It's been said of the parking garage in New Haven [Fig. 3-21] that it should be very far down in the hierarchy of building types. After all, "it's just a parking garage." My response to that is, "Yes, it does dominate what is there." I would admit that. But if they would let me build on the other side of the street, I could very quickly and easily dominate that parking garage, I assure you. It's a question of which key one chooses to play in.

HK: You mean that, instead of that parking garage, you could have built just another boring building, and it wouldn't dominate. It could have been entirely overlooked.

PR: When the New Haven parking garage was being constructed, the remainder of the buildings in the adjacent blocks was not determined. They should have been de-

signed to dominate the parking garage, but I don't see that they were.

JC: Your parking garage is certainly not an anonymous service building, which normally destroys the character of cities. Yours adds to the character of the city and plays an important role within the organization of the urban center. You have achieved that vitality by giving it plasticity, unusual proportions, stretched segmental arches, and dramatic balustrades. A rhythmic relief of alternating panels catches the eye.

PR: The parking garage is a peculiar twentieth-century phenomenon. The one in New Haven comes from the design of thoroughways. Most parking garages are merely skeletal structures which didn't get any walls. They are just office building structures with the glass left out. I wanted to make a building which said it dealt with cars and movement. I wanted there to be no doubt that this is a parking garage.

HK: Giving character to a building means more than meeting the functional demands. The treatment of your balustrades becomes "ornamental." One could call that a kind of aesthetic formalism.

PR: Well, let's face it. There's always a formal aesthetic involved.

HK: That's what I want to hear. Why

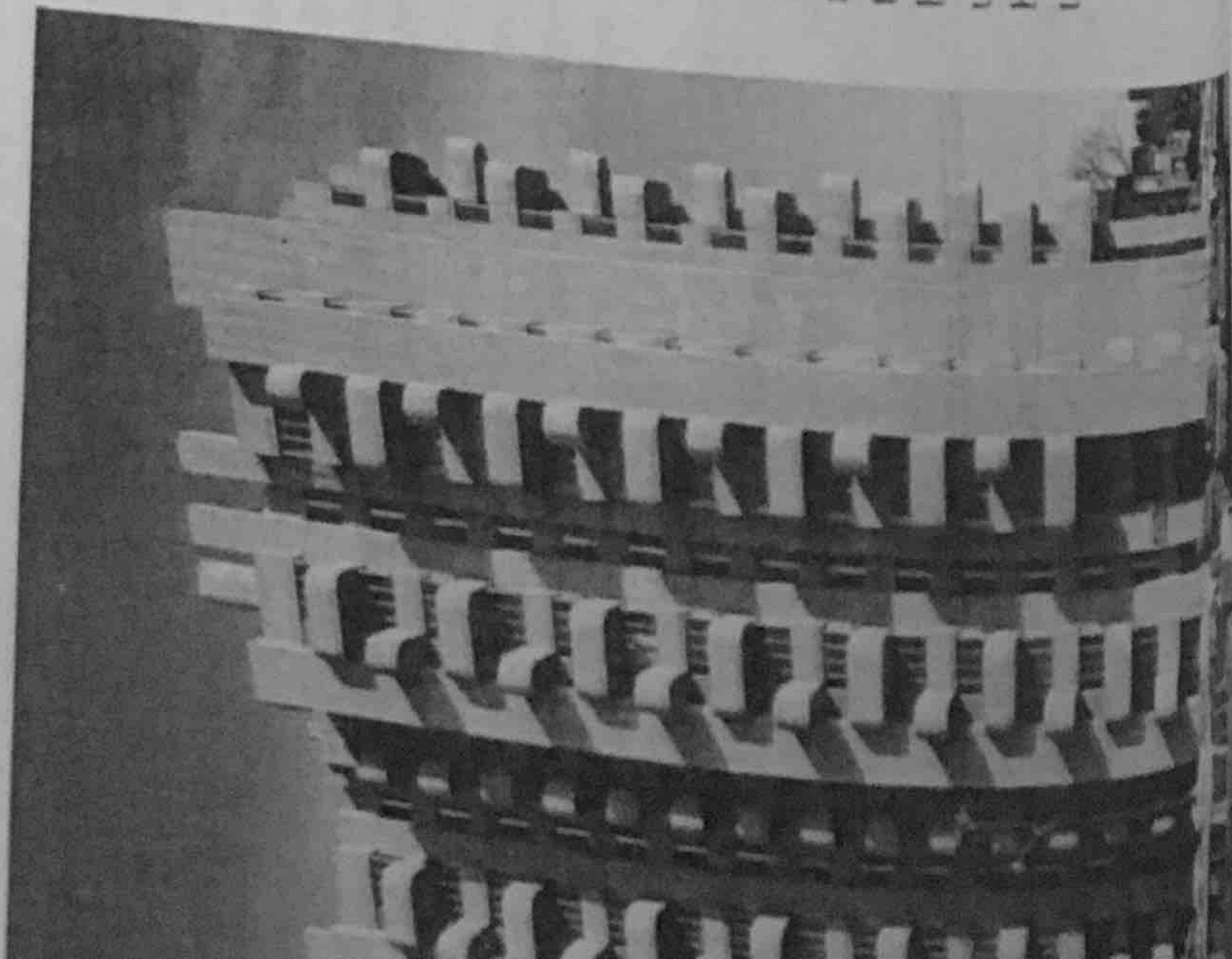
3-21. Temple Street Parking Garage, New Haven, Conn. 1962. Paul Rudolph.



do architects always deny it? They are still under the influence of the Bauhaus tradition. Everyone claims to do the "appropriate," just as you did earlier in this interview. In modern architecture, being "appropriate" means being "functional." However, how do you achieve "character"? You achieve character through the treatment of the façade. For instance, those balustrades serve a need, but they are arranged in such an interesting way that they become an ornament at the same time.

PR: I would use the word "ornament" differently. For me, the word "formalism" probably is a better one. There are certain formal characteristics in every project I work on. It is the intuitive at work. I would never say that it was sheer functionalism. It is nonsense to say that architecture is all based on engineering or program. It is also an art. Now, how do you arrive at the formalism involved? I'm not sure I can answer

3-22. Crawford Manor, Housing for the Elderly, New Haven, Conn. 1962-66. Paul Rudolph.



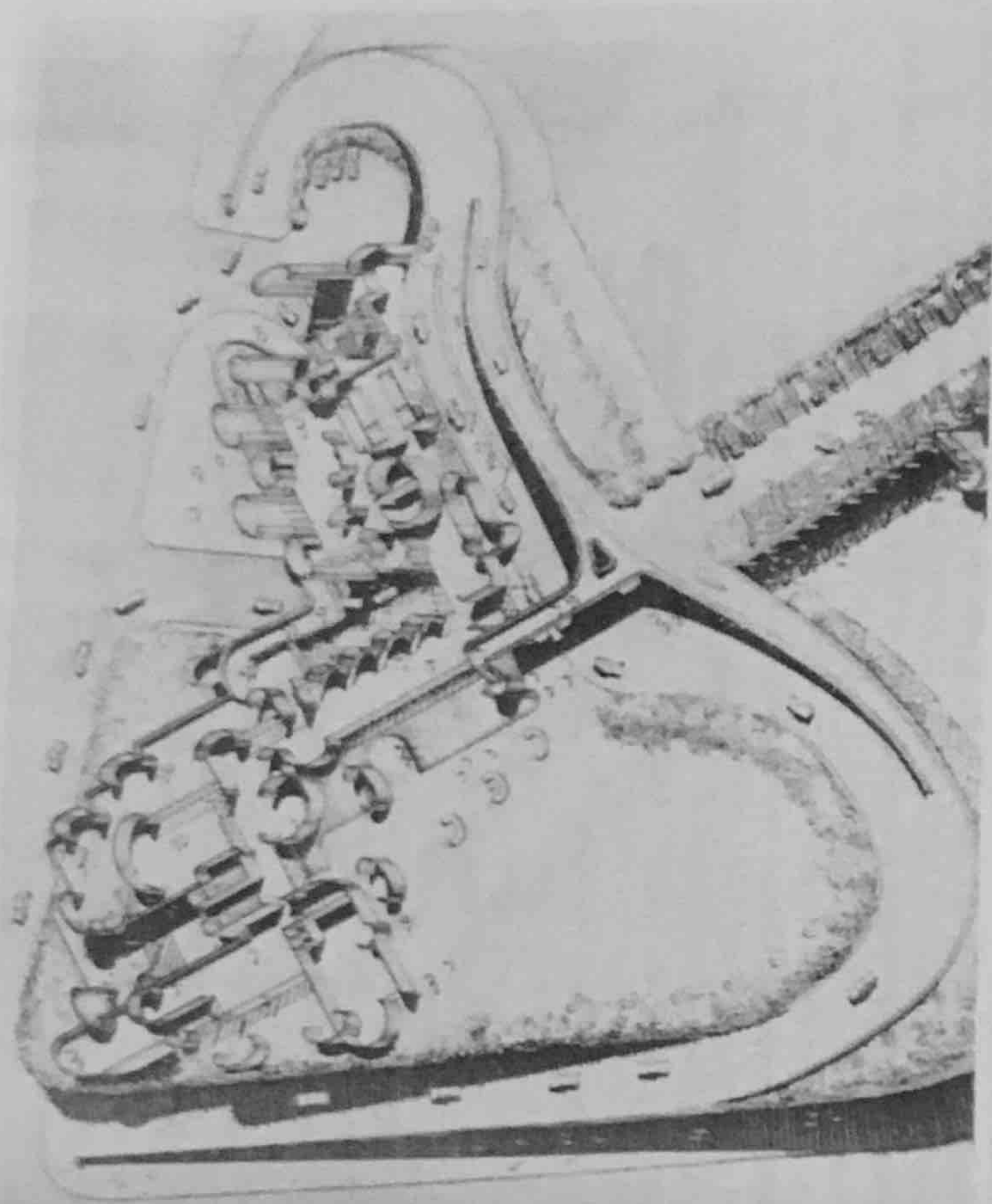
that. There are worlds which must be explored; one can never know.

JC: When one steps beyond sheer functionalism, he is in another realm of decision-making. At this level, results may appear arbitrary. It becomes a question of "designing." Your balustrades, for instance, could have been entirely different. Why did you design them this particular way?

PR: I could tell you that the design of the balustrades has to do with the nature of materials which, in this case, is poured-in-place concrete which, of course, is very plastic and can take any form. One of the fascinating things about poured-in-place concrete is the fact that its characteristics are modified by the material in which it is formed, in this case wood. The juxtaposition of these materials, where only one is shown and the other implied, has a peculiar fascination for me. For instance, wood can easily be used to form two-dimensional curves, but concrete will easily fill three-dimensional curves. In this case, the wood was the determinant. In other words, the balustrade design had to do with the nature of materials, but this is a simplistic answer.

JC: Then the question arises, the poured-in-place concrete balustrade could have been one long, unbroken, shooting wall, the full length of the structure.

PR: Yes, that is true. First of all, the reason for the offsets is that the expansion and contraction of the structure necessitated many joints. Secondly, the doubling of the columns allows them to read as a single column from a great distance, thereby "jumping the scale." The extension of the balustrades at the double columns emphasizes the vertical definition of space, so that when looking diagonally down the street, as one is forced to do because of the narrowness of the street, one doesn't just see the horizontal, sweeping down the street, but the eye is caught at every double column. In this way, the relationship of the horizontal to the vertical is emphasized. Is that arbitrary? The buildings on the other



3-23. Tracey Towers, Bronx, New York. 1967. Paul Rudolph. Plan.

side of the street are valid in function and scale. For my building to react in any way with them, I had to punctuate vertically the 800-foot-long balustrades. I could go on and on and give an explanation of why each element is as it is, but one could never, finally, arrive at the real truth, because that is on deeply subconscious multilevels, many of which I am not aware of myself. It is simply that which makes each man different.

JC: You take the technical requirements and achieve visual excitement.

PR: It is neither a purely engineering solution nor an arbitrary one.

JC: A similar question arises in respect to your Crawford Manor [Fig. 3-22] in New Haven, especially in relation to the balconies. They certainly are not purely functional; they create a lively sculptural silhouette.

PR: Those balconies in the Crawford

Manor are an alternation of thrusts, one out from the building and one parallel to it, in order to emphasize the essential organization of the building. If all of the balconies thrust forward, their result from a distant view would be a kind of shaft. But, by making the thrusts of the balconies oppose each other, one senses the cubicle nature of the interior.

HK: This raises the question about structure. The ground plan of Crawford Manor is very loosely organized, a grouping of shaft units. It reflects the organization of the A and A Building, but tightened up and stretched into the vertical. A similar planning method is carried on in the tower of the Boston Government Center [Fig. 3-19] and in your Tracey Towers [Fig. 3-23]. These three towers have a strong relationship to each other, referring back to some of the design principles in the Art and Architecture Building. This, by the

way, indicates the importance of the A and A Building in the whole development of your architectural language. In that process, the Crawford Manor still has those rectangular hard-edged shafts, although into that plan you introduce the rounded corners of the elevator and stairway cores. Finally, the Tracey Towers seem to consist entirely of curved walls. Looking at the ground plan, one gets the impression that they are self-bearing vertical shells. However, this result seems to have grown more out of formalistic concerns than any other.

PR: In Tracey Towers, the exterior walls are not curved for structural reasons at all, but because the site plan and traffic movement dictated an easing of the corners. They are also curved in order to lead the eye around the towers, thereby emphasizing their three-dimensionality. They are also curved because they give a heightened sense of security to the occupants of a very high building, and one looks out and sees these walls, which seem like huge columns, closely rising from the ground. However, they are not columns, but walls, but they are read as columns, which is as intended for psychological reasons.

The geometry of the car is curvilinear and is, in this case, related to the rectilinear organization of the building itself. It is the result of two dissimilar elements coming together.

JC: The movement of the car directly influences the shape of the walls.

PR: That's right.

JC: Mendelsohn's idea!

PR: Yes, I know. Nothing new. The tension between the automobile access and the building is fascinating. I am not terribly sympathetic with free-standing towers, which these, of course, are, but, to a large degree, the economics of the situation prevented us from building on the 1000-foot-long deck which covers the railroad tracks. These towers are placed at the end of the tracks in order to avoid them.

The owner wanted two round towers,

but I felt that the resultant pie-shaped rooms were unlivable and, therefore, joined the geometry of rectilinear rooms inside with the feeling of two round towers.

HK: And he wanted to have pie-shaped rooms?

PR: Well, that wasn't of primary interest to him, but he loved the idea of the round towers. One should not be defeated by such notions, so I said to myself, "It's ridiculous to have pie-shaped rooms. Who can live in them?"

HK: Why not?

PR: Because the human being wants to live in easily definable, safe forms and shapes.

HK: He needs the four corners?

PR: Well, too much irregularity would be unsettling in day-to-day living. One cannot comprehend the pie-shape so readily. I can't quite put my finger on it. You could say something like, "Well, new rugs don't come pie-shaped." Have them cut! It is somehow alien to an appropriate sense of space.

HK: Isn't it just that we are not used to them?

PR: That isn't it. That's part of it. It's not the whole thing. The only thing I can tell you is that instinctively I don't want to have pie-shaped rooms. Now I must think more about why.

HK: But you yourself don't build plain square rooms.

PR: I am very much interested in the free plan, of course.

HK: Well, when it comes to housing, how can you keep the free plan?

PR: The free plan is very difficult in housing because of the need for private space. It is easier to achieve free-flowing space vertically than horizontally.

HK: Here again, you emphasize the visual experience.

PR: Well, always. It can never be just the visual experience, but there are at least fifteen others. In this case, the formal organization is such that the solids always read as curved elements and the voids of

glass read as flat elements. Thus, the play of light between the round and the flat, and the different way the two materials catch the light, is brought together.

HK: The curved shell wall potentially could be a self-supporting structural element, as in Bertrand Goldberg's Hilliard Center [see Fig. 4-14].

PR: The curved shell concept would necessitate a poured-in-place concrete structural system which would have been much more expensive than the column with masonry infilling walls (in this case a special concrete block) which is, in fact, used.

HK: But aren't you wasting a possibility, a structural possibility?

PR: The central core takes all the wind loads, and the least expensive way to build apartment houses in the New York area is with a flat slab supported on relatively closely spaced columns.

HK: That means that the shape of the outer walls is independent from structural concerns.

PR: That is right.

HK: So you don't need the outer walls for the supporting of the building?

PR: You do not need the outer walls for supporting the building, but you need them vitally for psychological reasons of the inhabitants.

HK: Now, you are very different from Bertrand Goldberg. The Round Towers of the Hilliard Center at Chicago consist of curved shell walls which are self-bearing.

They are not only outer façades, but they are at the same time the structure. So there is no distinction any more between an inner core and outside supported walls. It is all one.

PR: I do not believe that is the way those Towers are built.

HK: Yes, they are "deformed" shells, which provide enormous strength. It's a new structural idea, and it saves a lot of money.

PR: The economics of what can be done in one area are different from what

can be done in another. We would not be building Tracey Towers today if it were based on the shell principle.

HK: So, you keep that freedom for the outer wall in order to play with a façade. Is that too strong?

JC: Are you frank enough to admit that you play with the façade? That would be of major importance.

PR: (Laughs) Only time will tell.

JC: We would be beyond the moralistic condemnation of the façade.

PR: I know, I know. Let's see how I can express this. The actual structural members of this tower are so small that they would never read from a distance. It is, therefore, necessary to introduce a wall joining two structural members which, therefore, symbolically suggest security. If you should expose the actual structural members, you would not have the *apparent* sense of structure, but only two small columns, which would not be reassuring enough.

JC: That means you exaggerate the support. You overdo it in order to make it visible.

PR: Exactly. The architectural problems of a tall building are unique, and we don't really know very much about them. You see, Mies knew all about this.

JC: Sullivan even more so. He exaggerated the supports by covering the skeleton with enormous pilasters.

PR: Yes, Sullivan also, Mies knew perfectly well that his thin columns would not give the sense of security necessary in a tall building, so he introduced as a symbol for the column his famous H mullions, which allowed the curtain wall to be so continuous that it finally read as a monolith.

JC: That is true, but his beam stays a beam. Nothing is added to it but the H profile. Is that decoration?

PR: You know it is. You can talk about the purity of Mies's structure till the cows come home. It's not pure. It rises far above that. Well, in my own way, I try to do the same thing.