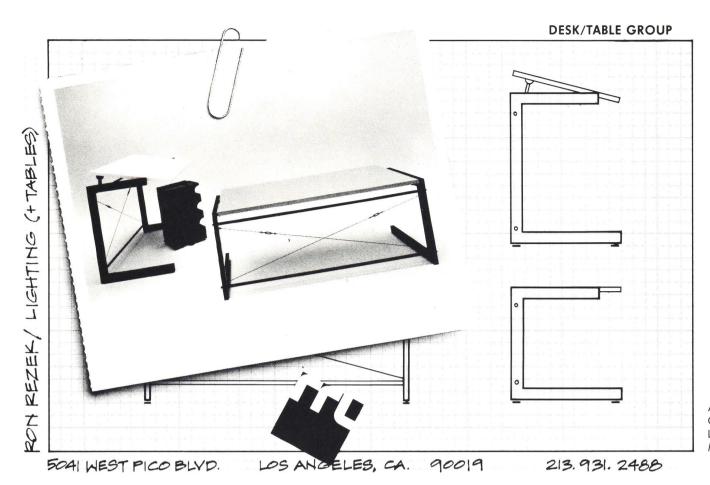
# ARCHETYPE

The Magazine of Architecture and other Arts





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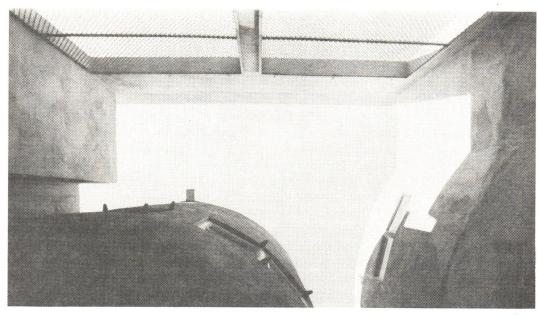
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# **ARCHETYPE**



Gagosian Gallery straight up: by Craig Hodgetts and Robert Mangurian.

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**Cover:** Palazzo Gagosian the interior court and pulpit-stairs. Photo by Robert Mangurian.

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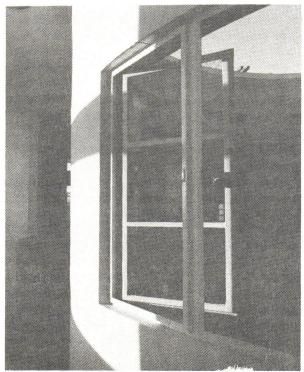
A Note on the Type

Archetype is set in Plantin types by Laura Gest Winder of Gestype. Plantin was released in 1914 by the Monotype Corporation and is named after the famous Antwerp printer, Christopher Plantin. Although Plantin never seems to have used these types they belong to his generation, being found at Frankfurt and at Basle about 1570.

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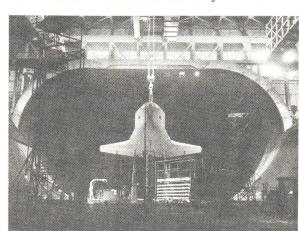
Having taken a time-out for a special issue devoted to the San Francisco version of the Venice Biennale, we are now back on track with our relentless critique of second-rate building and art and architecture making. This issue examines some facets of modernism (historically and retrospectively) with an interview with Alberto Sartoris, an examination of a purely practical type of building—a NASA wind tunnel, and a fascinating look at the aging of modern buildings (part one of a two-part series).

American Homes, Neighborhoods and Cities by Dolores Hayden



Interior of the Gagosian Gallery.

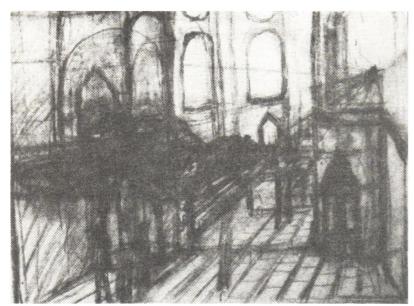
The two buildings featured in this issue are very much a part of late-modernist architecture—austere, minimal, and very fresh. By now both have been published widely, but here the architects responsible have a chance to elucidate. Curiously both were



Scale model of the Space Shuttle in NASA Wind Tunnel.

published prematurely, in an unfinished state. This is now commonplace with journals tugging at architects for their latest work at any stage. Lutyens would only allow *Country Life* to photograph and publish his buildings after a decent interval had passed—to let things mature and settle in—say at least five years. *Archetype* publishes the Gagosian Gallery finished!

Our next issue will feature the Outhouse Competition, now judged and assimilated, and we hope to end our irregular schedule as support for our effort grows. We appreciate your patience and confidence and strive to maintain a non-New York view of the architectural world.



Louis I. Kahn, Mikveh Israel Synagogue, Philadelphia, PA,

#### NEWS AND REVIEWS

#### Louis I. Kahn

This small exhibition of Louis Kahn's work was like a series of puzzle pieces offering only fragmentary views of the projects and the man who made them. Twenty-one drawings hung in two alcoves flanking a central atrium, along with three models and four photographs of Kahn's buildings. There was also a photograph of the architect by Cartier-Bresson and two honorary degrees from Yale and the University of Pennsylvania.

The degrees were there because the show was conceived as much to promote fund drives (for a Kahn chair at the Yale School of Architecture and for his archives at Penn) as to expose the general public to work by one of America's greatest architects. While the show may have helped raise money, it did little to broaden our knowledge of Kahn's buildings, methods, and beliefs. Instead, it was more of a teaser to stimulate questions among visitors unfamiliar with Kahn's work or to refresh the memories of those who already know it well.

At the center of the exhibit stood a structural model of the Richards Medical Laboratories. In this building, Kahn developed his use of exposed service ducts and prefabricated structural members. The building offered a creative solution to the often mundane task of designing work spaces by separating the flow of contaminated and fresh air, and also by providing communal and private spaces for scientists to gather or contemplate in solitude. The model offers the show's most obvious bow to Kahn's integrative approach to structure, space and light. It is the essence of Kahn's architecture as Vincent Scully described it, "Reality in architecture, for him, resided in two things: in structure and in function, which comes down to structure and space."1 By extension, it also illustrates Kahn's ideal of architecture, as he wrote, "Structure is the maker of light."2

The selection and arrangement of the drawings, which constituted the bulk of the show, was somewhat perplexing. A site plan of the Palazzo dei Congressi hung in one alcove while a structural study of the same project hung in the other. The show's curator, Marc Goldstein of San Francisco Skidmore, Owings & Merrill, chose the works solely on the basis of their artistic merit. "Like any work of art, they're there," he told me. "If you're predisposed to that kind of art then you'll respond. I hoped to convey the intensity, the power, the quality of Kahn as a great artist and also to show the range of his expression." Yet this approach, which divorced the individual works from their context and offered them as autonomous works of art, demanded a lot from the viewer. We all know that plans, elevations, and perspectives are only partial views of a greater whole.

There were seven site plans in all, but only a single interior perspective. How then could visitors learn something of Kahn's theory of generating light in space? It all goes back to Kahn's Beaux-Arts education. For him, drawing was an act of shaping light. Lines on paper were like walls or columns in a building. "To an architect," he wrote in 1931, "the plan is a sheet of paper on which

appears the order of the structure of spaces in their light." From the plan, his buildings assumed their form in response to the demands of the materials he used: bricks formed arches, triangles formed tetrahedrons. Many of these shapes came indirectly from Kahn's travels to ancient ruins. Unfortunately, none of his travel sketches are in the show, but these early studies would have offered even more insight into the man behind the buildings. Certain lessons from his ruin studies do run through the drawings on display, though, and among these are evidence of his primal, stately designs, free of the excess frills and ornament which pollute the buildings of today's semiotically-inclined architects. As Kahn wrote, "If we were to train ourselves to draw as we build, from the bottom up, when we do, stopping our pencil to make a mark at the joints of pouring or erecting, ornament would grow of our love for the expression of method."4

From the drawings we have the most intimate view of Kahn. We saw his smudges, his strong and hectic lines in vine charcoal on yellow trace, the scrawled notes where he questioned each step of the design process. Drawing is the beginning of architecture, and beginnings had a special significance for Kahn. As he stated in his typically enthusiastic manner, "I love beginnings. I marvel at beginnings. I think it is beginning that confirms continuation. If it did not—nothing could be or would be." 5

This show marked another sort of beginning. It is the Museum's first exhibit dedicated to an architect's sketches. Perhaps it will mark a turning point in the Museum's program, where architecture and design will assume their rightful place beside painting and sculpture within the building's halls. The show is also a prelude to a comprehensive Kahn exhibition with a major catalogue now in preparation for Arata Isozaki's new Los Angeles Museum of Contemporary Art.

Even with its many flaws, this show inspired interested visitors to take a deeper look at what Kahn and his works were all about. It did not provide a clear story, but Kahn might have preferred it like that since it left each visitor the option of forming his own opinion. As he wrote:

We can never think clearly in terms of another's reactions; we must learn to see things for ourselves

in order to develop a language of self-expression. The capacity to see comes from analyzing our reactions to what we look at and their significance as far as we are concerned. The more one looks the more one will come to see.<sup>6</sup>

—John Gittelsohn

#### NOTES:

<sup>1</sup>Scully, Vincent, "The Works of Louis I. Kahn and His Method," *Silence and Light*, Tokyo, 1975, p. 286.

<sup>2</sup>Kahn, "Architecture: Silence and Light," essay in *On the Future of Art*, A.J. Toynbee et al. New York, 1970, p. 30.

<sup>3</sup>*Ibid.*, p. 31.

<sup>4</sup>Wurman, Richard Saul and Eugene Feldman (Eds.), *The Notebooks and Drawings of Louis I. Kahn*, Cambridge, MA 1973, p. 30

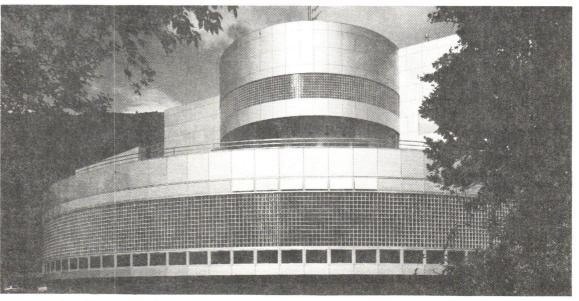
<sup>5</sup>Kahn, "I Love Beginnings," Silence and Light, Op. Cit, p. 278.

<sup>6</sup>Kahn, "The Value and Aim in Sketching," T-Square Club Journal, Philadelphia, May 1931, Vol. 1 No. 6, p. 20.

#### 6×6 International Architects

Six renowned architects from all over the world were participants in the third annual architecture lecture series, co-sponsored by the San Francisco Museum of Modern Art and the American Institute of Architects of San Francisco. This series, "6 × 6: International Architects," which began on October 6, has featured Ricardo Legoretta of Mexico, Richard Rogers of Great Britain, Arata Isozaki of Japan, Anna Bofill of Spain, Cesar Pelli of the U.S.A. and Eberhard Zeidler of Canada. The architects were selected because of their important contributions to architectural design and thought.

Ricardo Legoretta of Mexico is one of the architects credited with reintroducing the traditional wall culture into contemporary Mexican architecture after a long hiatus in which most Mexican architects followed the International Style. In his lecture on October 6, Legoretta began by showing the sources of his inspiration—Mexico's vernacular architecture with its joyous color and massive walls looking inward on courtyards. Legoretta's own buildings, including his much admired Camino Real hotels, are "minimal" but in the Mexican tradition, and



Isosaki, Kamioka Town Hall, 1978

show his concern for the solid rather than the void, the wall rather than the column; color of course is never forgotten.

Legorreta's solid wall construction contrasts markedly with the buildings by Cesar Pelli of the U.S.A. who is known for his "glass skin" structures, especially the "Blue Whale," i.e. the Pacific Design Center in Los Angeles. Pelli's "skins" deny the idea of "wall." He has said, "that architecture that enhances life accents perception, lightness and change. . .For too long architecture has been absorbed with its death-defying qualities." It has been said of Pelli that, more than anyone else of his generation, he is an architect's architect.

Richard Rogers of Great Britain is known as the master of "hi-tech" architecture. His ability to get his extremely technical designs built can be attributed to his skill as a manager and his thorough knowledge of the design process. With his partner Renzo Piano, Rogers designed the ultimate statement in "hi-tech" architecture, the Centre Pompidou—a museum of the arts—in the Beaubourg quarter of Paris. Though Rogers' work has stressed clarity of structure and utility of function, he feels that technology should serve human needs. Rogers' lecture on October 13 emphasized his concern for the steady diminution of public spaces since the 18th century, and the way in which his recent projects try to counteract the trend by preserving or increasing public spaces on the ground floors of private buildings. He has said: "Technology cannot be an end in itself but must aim at solving longterm social and ecological problems."

Like Rogers, Arata Isozaki of Japan, who spoke on October 27, has been involved with museum designs and was recently selected to design the Los Angeles Museum of Contemporary Art. Unlike Rogers, Isozaki stresses simple techniques and simple forms such as the cube, cylinder, and pyramid. He states: "I attempt to use the simplest possible techniques to embody my methods because I feel that without the intermediary of what I call the traces of human hands, the method itself will be more effective and the range greater." Isozaki's slides, especially those of his building interiors show the greatness of his range—a simple barrel vault with diffuse light coming in at the end achieves a spirituality that is universal. Isozaki's method, or as he calls it "maniere (=maniera)," incorporates many quotes or excerpts from earlier architectural solutions—Greek temples, Shinto shrines, and Buddhist temples—as well as technological images in general.

Anna Bofill of Spain has until recently been associated with the Taller de Arquitectura, a unique design collective founded by her brother Ricardo Bofill. The Taller's design approach is inherently and consciously multi-disciplinary as its members include a sociologist, an economist and a poet. Anna Bofill is herself a serious composer of electronic music. Unlike Isozaki, the Taller has been concerned with architecture as an expression of society—with the ambience of the common public spaces, the humanization of the high-rise apartment complex as an evolved form of the vernacular Spanish barrio, and an expressionistic shaping of environment to create a sense of place.

Eberhard Zeidler of Canada, whose approach, in his concern for the total man-made environment, is similar to that of the Taller's, utilizes high-tech structures; cables, tent forms and domes. Much like "expo" architecture, the joyful aspects of human existence are allowed to predominate. He has said: "Ultimately the Pleasure of Form and Space which is architecture, transcend words and become the poetry of the subconscious."

#### **Fantasy and Reality**

The 36th Annual Convention of the California Council of the American Institute of Architects was held October 22 to 25 at the newly refurbished Biltmore Hotel in downtown Los Angeles. Entitled "Los Angeles 200/California 2000: Reality and Fantasy," the convention was held in L.A. in honor of the city's 200th birthday. Neon birthday cakes done by Eric Zimmerman graced the grand promenade of the hotel and appeared at home in the exquisitely restored Spanish/Moorish/Eclectic

interior. Although advance celebration of California's arrival at the next millenium seems more a matter of fantasy, participants in the convention attempted to address the paradoxical issues of Reality and Fantasy.

The keynote speaker, Professor Robert Winter of Occidental College, asked "How can you talk about Los Angeles without talking about fantasy?. . . In L.A. we continuously build the new and turn the old into parking lots." Winter went on to describe the architectural landmarks of L.A., and implied that the fantasy that "the facade has nothing to do with the reality of what's inside at all—which is so essential to post modernism," originated in L.A. In contrast, he illustrated the vanishing vernacular of self-advertising roadside architecture parlance: hot dog stands in the shape of hot dogs, orange juice stands as giant oranges, and so on. With roots in Hollywood movie sets, art deco, the Watts Towers and roadside attractions, "the reality of L.A. did not need Andy Warhol to show it pop art."

Not surprisingly, questions of reality and fantasy pervaded most convention activities. Among the many exhibits and professional seminars, the most popular were the Computer Aided Design (CAD) graphic systems, which were portrayed as bridging the technological gap between fantasy and reality. The office of Albert C. Martin hosted a dazzling presentation of CAD virtuosity, and demonstrated the systems they use for approximately half of their working drawings. It is now possible to perform virtually all of the functions required for analytical presentation and contract drawings on computer systems. One observer remarked, "When information systems have taken everything over in five years, you won't be able to distinguish between fantasy and reality." Murray Fellman, director of the Pacific Design Center, remarked during the interiors seminar: "It is easy to hide behind the reality that computers are expensive." But if crowds are the avatar of the future, the most popular single machine was the popcorn machine at the Association of Building Contractor's booth where the popcorn was free.

Throughout the seminars, the theme of the material world being reality and the world of ideas being fantasy emerged in numerous variations: Building codes = Reality, Design = Fantasy; Engineering = Reality, Architecture = Fantasy; Less = Reality, More = Fantasy; Automobile = Reality, Public Transportation = Fantasy; History = Reality, Future = Fantasy. Perhaps the most effulgent comparison was the one in which L.A. history is personified by the fantasy of Gloria Swanson walking through the Biltmore Hotel with two pet cheetahs on a leash, and the future of L.A. as a grim, polluted reality. Appropriately, a mild earthquake interrupted the proceedings of the California State Board of Architectural Examiners on the morning of the 22nd.

The schism between the two concepts was stated most flatly by Brendan Gill of *New Yorker Magazine*: "Architecture is fantasy. Money is reality. And folly is fantasy that has failed." Gill cited William Randolph Hearst and Julia Morgan's San Simeon as, "the supreme architectural folly in California," and the Mellon Foundation and I.M. Pei's East Wing addition to the National Art Gallery with its \$40 million cost overrun as, "the supreme architectural folly of our time." He elaborated, "To use money to turn fantasy into reality an architect must have the eloquence of a snake oil salesman."

Thus from the primary split of fantasy and reality, a set of secondary fractures emerged. Fantasy was portrayed both as the freedom to imagine, to create and to inspire and as the architect's license to deceive himself, his clients and the public. Reality was portrayed in a parallel duality, both as the positive freedom to build, to solve problems and to transform the environment and as the negative freedom to constrain the liberties of fantasy.

The last panel discussion featuring Rodney Friedman (Fisher-Friedman), Frank Gehry and Anthony Lumsden (DMJM) addressed some of the problems that arise from the conflict between fantasy and reality. Gehry and Lumsden agreed that, as teachers, a major problem they come up against is the fantasies of "Michael Graves clones in schools throughout the East." For the young practitioner, Gehry observed that, "the biggest

problem is working for firms that make them cynical." Gehry advised that it might be better to start out doing garage additions on one's own than lose faith, imagination and fantasy. Finally, Bernard Zimmerman presented a large model of a highrise office building in the guise of a Crackerjack box and distributed 400 boxes of Cracker Jacks to the audience. The Cracker Jacks were real.

-Marc M. Cohen

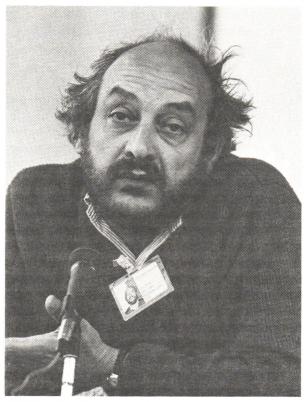
# Aspen International Design Conference

With its customary denominational elusiveness, the International Design Conference in Aspen named this year's event "The Italian Idea." A title like this cannot fail to provoke some long-winded talk about the national mystique, couched in political, cultural and socio-economic generalizations. Such winds were occasionally heard to rustle the tent flaps at the June proceedings.

A more direct approach might hold that an Italian design idea is something to be found in the mind of an Italian designer. Like any creative idea, it occurs in that privileged moment when a formal solution begins to take shape out of the murk of random cogitation. Although this crystalization is unlikely to happen in public at a conference, with luck the audience might catch a glimpse of the mental processes that give rise to such ideas.

Some lucky glimpses at Aspen:

Mario Bellini, producer of instant classics in office equipment for Olivetti and furniture for Cassina, demonstrated that the designer's standard retrospective slide show can turn into something more penetrating. He mixed photographs of his elegant, sculptural works with images that hinted at biomorphic and anthropological sources for his visual imagination. The curves of a shark's body dissolved into the curves of a typewriter body. The skin of a Bedouin tent was stretched like the skin of a computer terminal. The cutting edge of a carpenter's chisel mimicked the wedge shape of a calculator. Stonehenge became a dining table.



Gaetano Pesce at the Aspen International Design Conference, June 1981.

Giorgetto Giugiaro, prodigy of contemporary Italian automotive design, whose small Turin shop seems to have created the prototypes of half the European cars now on the road (including all the prettiest ones) and is rapidly gaining ascendancy in Japan, gave a lesson in audacity. Tuesday night, at center stage in the main tent, armed with an overhead projector, a grease pencil and an interpreter, Giugiaro showed 1600 assembled professional colleagues how he thinks through the design of an automobile: He starts inside and works outward. The available human space of the car is defined by the extension from the driver's foot on the control pedals to the back of the rear seat passenger's head. The architecture of this mobile space is the crux of Giugiaro's approach to design. The rest of the car

follows from it, with transforming results.

Gaetano Pesce, radical product designer, conceptual architect, dialectician and lecturer, whose work has been exhibited in museums from MOMA to the Louvre, and whose teaching takes him from Strasbourg to Pittsburgh, showed how architecture can raise questions and how questioning can produce architecture of uncommon philosophical dimensions. Pesce's unbuilt projects appear as masterful, large scale models, installations and drawings. His entry in the Pahlavi National Library competition in Tehran embodies a complex and contentious allegory of the agonies of contemporary Iranian history. He has proposed an unnerving "Church of Solitude" for the parking lot next to New York's Roseland Dance Hall. Pesce's verbal presentation proceeded by an intense, Socratic mode of inquiry which was less a commentary on his work than an extension of it.

In addition to such illuminations, Aspen provided many other informative, entertaining and variously satisfying moments. On the scorecard of this conscientious conference trotter, out of roughly a dozen and a half events that could be fit into the week, not counting numerous films, more than two-thirds were "worth a journey." One might single out Alberto Arbasino's elegant literary exordium; Roman Vlad's lively musical diversion; two treatments of recent developments in Milan: Emilio Ambasz' poetically parabolic, Franco Raggi's jauntily journalistic; and Bernardo Bertolucci's laid-back conversation with Wendy Keys.

But scorecards don't address questions of balance and representation. It was hard to understand some of the emphases and gaps in the program. Numerous independent Italian women designers were absent. The better known young Milanese radicals, though much discussed, both applauded and derided, were not present to speak for themselves. No form of graphic design was on the agenda. Architecture and urban planning were hardly given a chance. All this in an atmosphere redolent of the merchandizing of \$50,000 sports cars and \$800 sweaters, the only designed objects on hand for our contemplation.

Indeed, despite the rhetoric of its title, the general atmosphere of the conference was not really receptive to "ideas" as things to be scrutinized, debated or taken very seriously. When Moshe Safdie used the panel he chaired as a forum to direct grave doubts towards recent trends in Italian architecture, the prevailing mood was shattered. The available resources—human, professional and visual—were unable to give his questions the response they deserved.

But this leads inexorably towards consideration of the Aspen Design Conference as an institution: the Aspen structure, the Aspen philosophy, the Aspen formula, the Aspen ambience. Everything, in fact, that might make for a fascinating conference to be called, "The Aspen Idea."

-Morgan Thomas

#### Leonardo Exhibition at Berkeley

Tucked among the ramps and wedges of the University Art Museum, Berkeley, is a small, stunning exhibition that is really several shows in one. It features the first examples of Leonardo's work to be seen in his birthplace of Vinci in over four centuries. That occasion last year marked the reorganization of the Leonardo Library and Museum in Vinci. Plans were made then by the exhibition's organizers to bring it here for an inaugural showing at Berkeley before it travels to six other American cities.

The work on view consists of four early drapery studies in tempera and a late oil painting from the private Leonard Collection of the Comtesse de Behague in Paris. These pieces, representing very different expressions of the master's genius, are joined by illustrations from two manuscripts that further reveal the nature of his influence upon others. One manuscript contains drawings after those made by Nicholas Poussin for the first published edition of Leonardo's *Treatise on Painting*; the other, *Theory of the Human Figure*, includes a transcription of the notebook kept by a youthful Peter Paul Rubens during his travels in Italy.



Leonardo da Vinci (1452-1519), drapery study, c. 1480, tempera on linen,  $28\times17.5$  cm. Comtesse de Behague Collection.

Added to the whole is a thick but appropriate overlay of art historical scholarship that manages on balance to enhance, not confound, one's experience of the work. The exhibition is in fact an unusually successful example of how objects and ideas can be combined.

And yet the work also stands on its own. The quiet array of drapery studies, small black and white "miracles" on dark gray linen, owe much of their power to a simplicity that Leonardo described in his notes:

How one ought not to give drapery a confusion of many folds, but only make them where it is held by the hands or arms, and the rest may be suffered to fall simply where nature draws it: and do not let the contours of the figure be broken by too many lines or interrupted folds. . .

With that simplicity is a record of "process." Our eye can trace the development of each study from the first quick strokes that positioned it with the flat of the brush to the fine edges and delicacy of its finished elements. Rather than simply observe, we are pulled into the piece and participate as it evolves from initial suggestion to completeness.

The oil painting a few feet away is another matter. A portrait of Christ with one hand holding an orb and the other raised in benediction, it has an instantly arresting effect. The frontal, flat, and seemingly static quality of the picture, and its surprisingly bright colors against a dark field, are startling. But the longer one looks, the more the smokey pink translucence of the flesh tones comes alive. It takes a moment or two for the subtlety of the work to take hold, but it soon becomes enormously compelling for its very restraint.

In all, the exhibition has the feel of something intimate and special. The content invites appreciation at various levels, and its understated presentation by museum staff is particularly well done. It is a rare opportunity to linger up close with Leonardo's work. The show continues through December 13, and then travels to Houston, Los Angeles, San Diego, Santa Barbara, Seattle, and Salt Lake City.

-Todd S. Phillips

#### Visions of the Polycentric City Portoghesi's Citta Vallo di Diano

Summer in San Francisco was enriched this year by a presentation of the work of Paolo Portoghesi organized by the Italian Cultural Institute of San Francisco at the Museo Italo Americano. Though the exhibit included various works, its focus was

Portoghesi's ongoing exploration, unveiled a year before in Padula's book, *Il Progetto della citta Vallo di Diano*.

Through the aggregation of the nineteen communities which comprise the Vallo di Diano, an idea first proposed in the 1960s, Portoghesi envisions the creation of a new administrative reality severed from the bureaucracy of the province of Salerno. The establishment of this city/territory with its associated centralized administration is intended to give the Vallo di Diano a strong, unified voice with which to address larger governing bodies, as well as to provide efficient management of the anticipated increase in power. Though the idea of the "Citta Vallo di Diano" was ostensibly the produce of the inhabitants and administrators of the Vallo, and was based on a perceived commonality springing from the Vallo as a discernible geographic entity, one must wonder if the sensitively rendered drawings might not veil the suddenness and severity of the proposed changes.

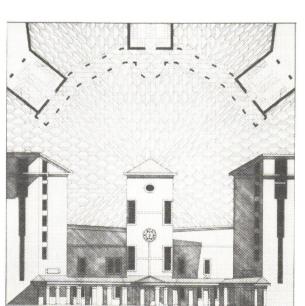
The proposal, if realized, would ultimately exclude the individual from the decision making process by initiating a system of representative ward counsels which would convene in a new administrative center planned for the uninhabited lowlands of the mid-plateau. The abolition of direct participation by the inhabitants of the communities would, in the words of Gerardo Ritorto, produce "less influenced" and "more correct" choices in the election of directors. The move toward a centralized representative government is meant to create a more pluralistic political base in the Vallo, yet I wonder if somewhere in the glow of perceived homogeneity the precious sense of self determination might not be lost.

In contrast to the social planning, the architectural transformation of the Vallo scarcely touches the existing communities. Portoghesi proposes a pervasive net of arrow-straight highways to connect the towns to each other as well as to new administrative and commercial centers. Though more accessible than that of other Portoghesi projects, the imagery of the proposed centers raises important questions. The architecture of the centers sways between a contextually informed vocabulary and an image of imperial intrusion. Though individual buildings suggest Maderno's villa Aldobrandini, the overall plan harkens back to idealized walled cities such as Sforzinda. It seems worth noting that such star-shaped plans have proven to be better adapted for reflecting cannonfire than for radiating the light of beneficent administrators. A delicate flower protected by the surrounding communities might exemplify a better functional relationship than this rather prickly implant. At best, the messages are

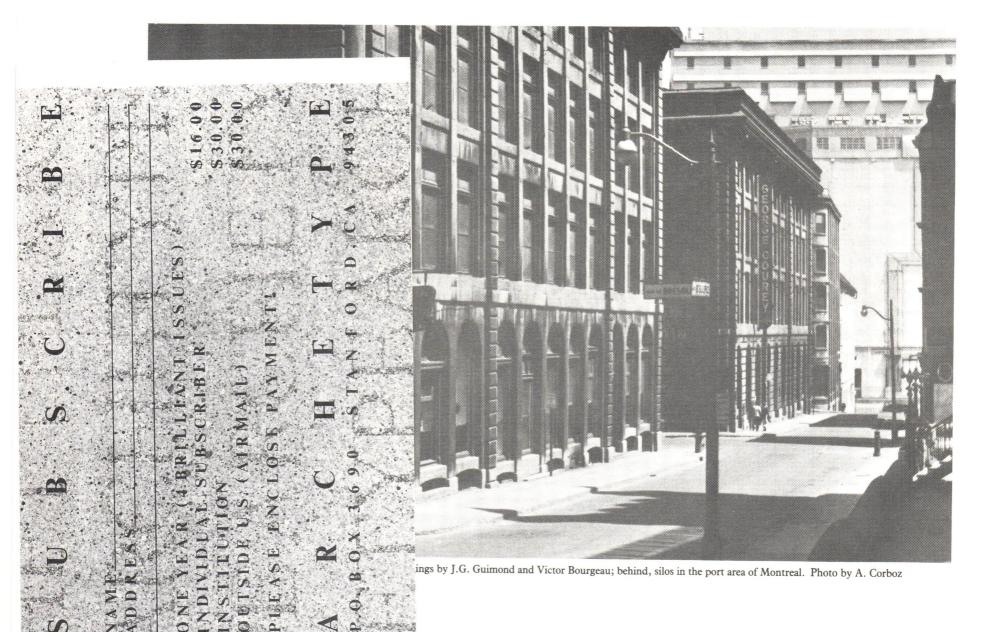
A careful ethnographic study would go far toward clarifying key relationships between the people of the Vallo, the land they inhabit, and the respectful distance the communities maintain. One hopes that the care evident in the presentation will continue to nurture the project's underlying objective: the improvement of life in the Vallo di Diano.

The Italian Cultural Institute, responsible for bringing both the exhibit and Paolo Portoghesi to San Francisco, will continue its support of the arts by bringing the Biennale di Venezia to Fort Mason in 1982 under the auspices of the consul general of Italy, Alessandro Vattani.

—Gary Parsons



Paolo Portoghesi, "Citta Vallo di Diano".



# treal

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pz and Richard Bisson

complexes of commercial buildings to the middle of the second half of ry still stand in Montreal's Old ite the fact that these architectural of notable interest in many respects, eitherto been studied. By outlining in al contours the initial results of gress at the Faculty of Environmental Jniversity of Montreal, it is our hope ally unknown episode in the archiof this continent to the attention of ers.

se in question began in 1861 as mmenced in the heart of Montreal's one side of the Notre Dame ada's first neo-Gothic church (1824-Donnell architect). The area is now Saint-Sulpice, Rue Saint-Paul, Rue d Rue de Bresoles. A second phase 1871 and ended in 1876 (fig. 1). To f this site and near the port of er construction project developed nd 1876, in thec zone of Rue Saintonville, and Rue McGill (all of s that lead out beyond the former ne Pointe a Calliere peninsula) eginning of the 20th century the Rue McGill gave way to an nment building.

ch mark the beginning and end of impaigns are highly revealing. In Secession began, ushering in a lly intense economic activity in this period of growth came to a year economic crisis followed. of factors contributed in 1860 to an g, and not least among them was the transportation network.

come by this time one of the key

importation centers on the American continent, and despite being open to traffic only seven months a year, it was second only to New York by the end of the century. Having become an international port in 1837, Montreal received its first transatlantic steam-

ship in 1853. The port's stone piers, built in 1830 and extended periodically, had reached a total length of four miles by 1877. Furthermore, with the opening in 1822 of the Lachine canal—the Saint Lawrence seaway's modest precursor—Montreal became a prominent transhipment port. The canal was repeatedly widened due to everincreasing traffic, and the Saint Lawrence was dredged so as to accommodate ships with larger draughts.

Montreal's role as a commercial hub was further reinforced by the growth and development of the railway system. The enormous Victoria bridge (a faithful replica of the Britannia bridge, 1845-50, also designed by the engineer Robert Stevenson), was completed in 1860 and permitted a direct link between Montreal and New York City. Railway connections to Portland, Maine, the northern-most ice-free port, had already been established in 1853. To the West, a link by rail with Toronto was achieved in 1856, finally reaching Vancouver in 1887.

To our overall picture of Montreal's economic infrastructure we must add: the establishment of a permanent industrial exhibition in 1859, the construction of the first grain elevator in 1861, and the rapidly increasing number of banks in the city during the period from 1866 to 1873. The demographic situation in the city was parallel: from a population of only 58,000 in 1851, Montreal grew to 91,000 in 1861, 100,000 in 1867, 120,000 in 1874, reaching 140,000 in 1881.

The increased demand for storage and office space during these years is understandable enough in the general context we have described so far, especially when we take into consideration the additional needs of construction industries. A number of more concrete factors, however, are also relevant and shed particular light on the shift to industrial and commercial usage of the areas that concern us here. Following an already well-established pattern, the economic growth of Montreal was accompanied by an equally significant growth in the developed surface area of the city. As

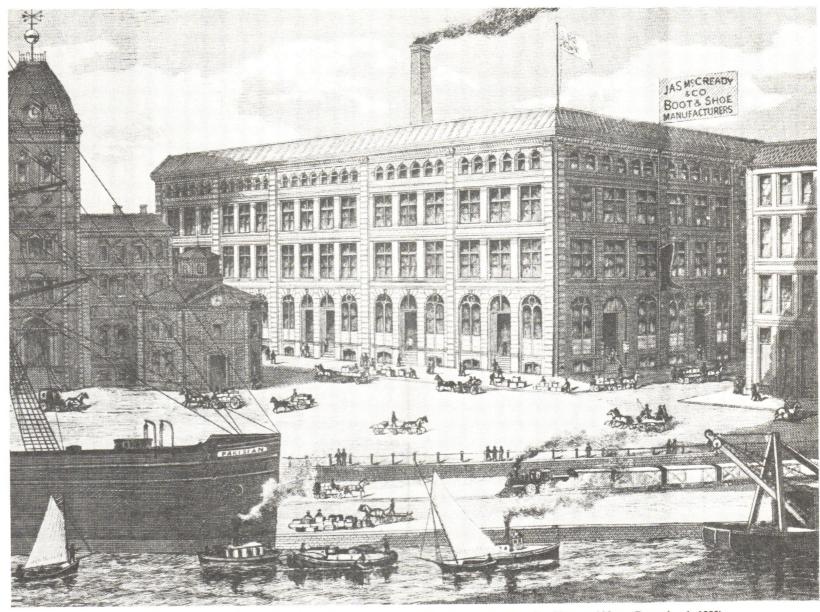


Figure 3. Michel Laurent and Victor Bourgeau, factory, Rue D'Yonville, on the corner of Saint-Pierre, 1874 (Canadian Illustrated News, December 1, 1883)

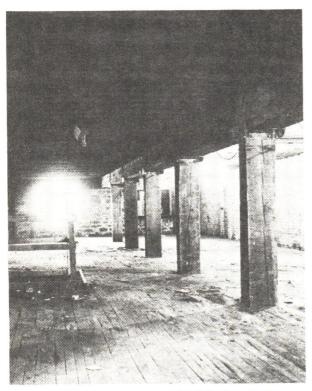


Figure 5. J.G. Guimond, commercial building between Rue Le Royer and Rue de Bresoles, 1872; typical locale (actual state in February, 1980), elevator door on the left. Photo by M. La Plante

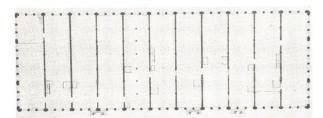


Figure 4. J.G. Guimond, a commercial building located between the Rue Le Royer and the Rue de Bresoles, 1872; plan for 3rd floor (current state)

early as 1804-1817, for instance, the implementation of the so-called "Commissioners' Plan" had resulted in the destruction of the city's old fortifications. By the middle of the second half of the 19th century, the city extended far to the north of its original site, reaching the slopes of Mount Royal. Since religion still played a decisive role in French Canadian society at the time, it is hardly surprising that the convents and hospitals operated by religious orders moved out into the new neighborhoods to keep up with the city's development.

In 1861, the Charitable Sisters of Saint Joseph, who had occupied a number of buildings in the downtown area ever since the founding of Montreal in the mid-17th century, moved to a new hospital building on the Avenue des Pins. To pay for its construction they found it necessary to have the first of the warehouses built on a piece of property they owned at the corner of the Rue Saint-Paul and the Rue Saint-Sulpice. The Sisters of Charity followed suit in 1869. Moving into new quarters on Dorchester Boulevard, they left behind their old neighborhood which, entirely transformed by the expansion of the port, was by now uninhabitable; they too relocated themselves near the new residential quarters. They also followed the lead of the Charitable Sisters of Saint Joseph in arranging the funding of their construction project (fig. 3).

Both religious orders chose to retain ownership of their warehouse properties, and to raise money simply by renting out the facilities they had constructed to commercial enterprises and manufacturing concerns. Nothing today remains of the original Hotel-Dieu (city hospital) opened in 1650. A battered fragment of the 1694 Charron brothers' General Hospital which Marguerite D'Yonville established as the founding convent of the Sisters of Charity does remain, and is currently being restored.

Documents preserved in the archives of the two congregations, in particular a complete series of cross-section drawings, make it possible to study the profit-making methods in question and to reconstruct the successive uses which these structures served. It now appears clear that the first warehouse, available in May of 1862, served originally as a barracks of English troops sent to Montreal during the War of Secession. After seven years of military use it was apparently left in a sorry state. Somewhat later, we find a wide range of activities taking place in the diverse buildings, including the manufacture of dry goods (hardware, brooms, dishes, shoes,

etc.) and of liquids (chemical products, varnish, vinegar, beef bouillon).

The buildings that were to serve such diversified purposes were designed as a number of superimposed floors in the tradition of 18th century English functionalism. 1 The great simplicity that characterizes their allocation of space, their structural clarity and vigorous architectural vocabulary make them particularly distinctive. The plans are all quite similar, consisting of an elongated rectangle subdivided laterally into three or four units (fig. 4). It seems that each tenant was leased one or more vertical sections of the building; the vertical sections, made up of superimposed units, were more or less identical. Each of these vertical divisions was given an identifying number by the city, a makeshift solution that reminds one of the parcelling out of land in the new medieval cities into long and narrow lots abutting at both ends on a city thoroughfare.

An especially sturdy mixed construction method is characteristic of the architecture of these warehouses. It is evident that they were designed not only to withstand considerable weights, but also (since the vertical sections form discreet enclosed units) to permit widely heterogeneous activities. External stone walls served as structural supports; strong brick partition walls divide the floor into individual units, each of which is in turn subdivided into two naves by a row of pillars that further reinforce the entire structure and eliminate sagging (fig. 5). Although nearly all of the original pillars were eventually replaced, it appears that they were made of wood in the earliest warehouses and of cast iron in the others (fig. 6); I-shaped columns and U-shaped double pillars joined with cross-bars were subsequently added, and these were made of steel. The original wood plank floors remain in place to this day.

A section-by-section analysis of the warehouses on the Rue Saint Pierre was carried out in 1904, and offers us a look at how well they were holding up after almost three decades of wear and tear. The lessees, with the agreement of the proprietors, had altered the buildings over the years in a number of significant ways, for example, creating new partitioned areas, and installing extra roof-supports so as to permit the storage of heavy machinery. In some cases, these alterations were carried out by the landowners for the prospective client before the lease had even begun.

One of the least resolved issues at this stage of

our research concerns the question of elevators. Although it is known that one of the structures on the Rue Saint-Pierre had an elevator from the very beginning (and as a matter of fact, old industrial hoists are found in all of the buildings to this day), the exact nature and kind of equipment is unknown. In February of 1980, an odd-looking mechanical hoist (a set of metallic prongs attached to two parallel and vertical chains), found in one of the warehouses between Le Royer and de Bresoles streets, was destroyed. Roughly at the same time, a number of industrial "platform" hoists were also destroyed. These consisted of an unenclosed platform designed to pass vertically through a series of doors built into the floor. In any case it would appear that the original equipment was drawn by a pulley system. The first elevator with an automatic braking system dates back to 1853; the first passenger elevator with an automatic braking system dates back to 1853; the first passenger elevator was steampowered and was installed in New York city in 1857, while the first hydraulic elevator, built in 1870, was put into service in Chicago.<sup>2</sup> In Montreal, the first passenger elevator powered by electricity was installed only in 1890, in the Sun Life Insurance Co. Building (the city's earliest fireproof steelstructured skyscraper).

The facades of all of the warehouses, apart from

the earliest of them (fig. 8), show a marked preponderance of glass (figs. 9 and 10): a distinctly "modern" characteristic that, it is interesting to note, originates in functional and not aesthetic considerations. This feature clearly suggests that their design attempts to take advantage of natural light as much as possible. The de Bresoles warehouses are fine examples here, although the buildings that stand at the end of each block, since they are exposed on three sides, receive even more sunlight. Towards 1885, as the use of electric lighting became widespread, architects returned once again to heavy closed-in facades with restricted window areas: the interest in the permeable wall effect was evidently only a makeshift solution.

Our ongoing research will perhaps eventually offer an explanation of one particular fact: the strong preference evinced by Montreal's architects for stone (and not cast-iron) facades, which runs counter to the extraordinary boom in cast-iron factories, warehouses, and office buildings which had overrun New York under the impulse of James Bogardus.<sup>3</sup> There were a number of buildings with cast-iron facades in Montreal, yet they remained somewhat exceptional. As indicated earlier, cast-iron was nevertheless employed as a construction material. Perhaps it was too expensive to import, or stone construction was competitive in price, or

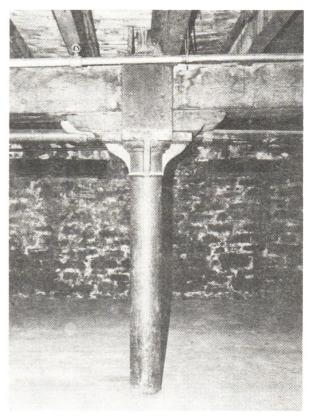


Figure 6. Commercial building between Le Royer and de Bresoles: cornice in basement; cast-iron and wood (1894) Photo by M. La Plante

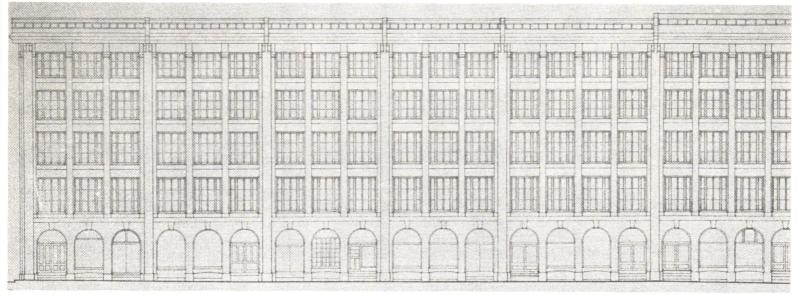


Figure 8. Henri-Maurice Perrault, commercial building on de Bresoles, 1874.

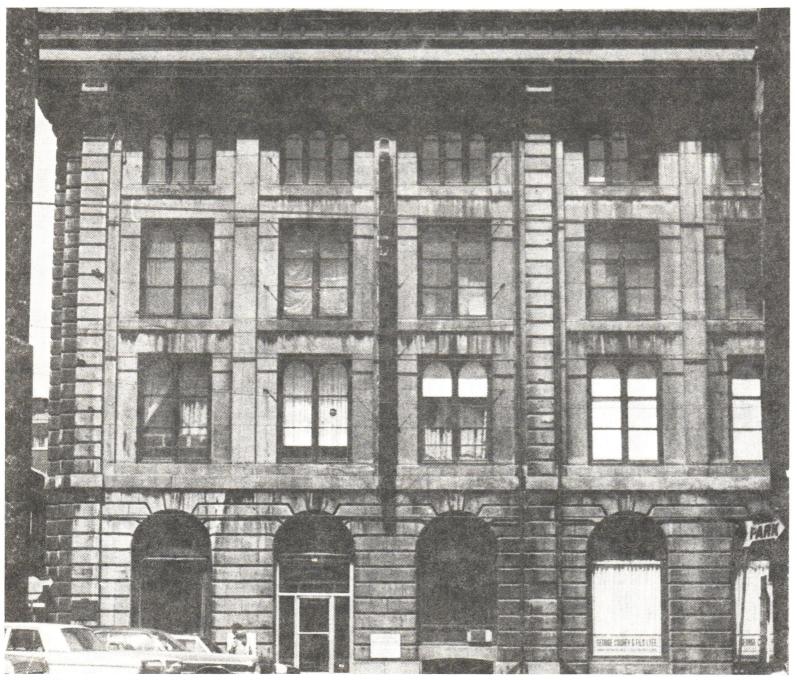


Figure 7. Victor Bourgeau, facade of the building on Saint-Sulpice, between Le Royer and Saint-Paul streets, 1861. Photo by A. Corboz

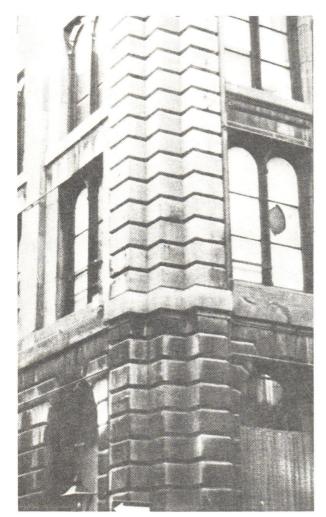
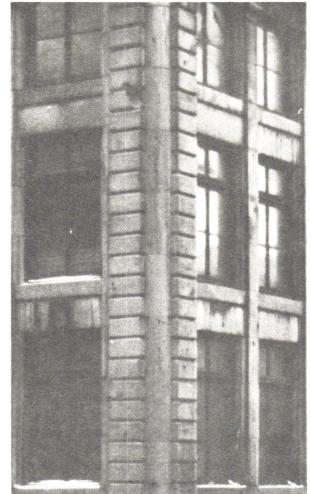


Figure 11. Corner Rue Saint-Paul and Rue Saint-Sulpice (V. Bourgeau, 1861) Photo by L. Hogue

Old Montreal has not been subjected to an American style "renovation" by bulldozer, so the warehouses and other buildings mentioned here survive today.



**Figure 12.** Corner Rue de Bresoles and Rue Saint-Sulpice (J.G. Guimond, 1872) Photo by L. Hogue

perhaps it was considered undignified to have exteriors in cast-iron for buildings which were in the public eye.

Whatever the case, the architects' long-term acquaintance with grey stone, Montreal's traditional building material, is very much apparent in their treatment of facades. In conformity with the regnant eclecticism, they looked to the various historical styles for their ideas, relying most heavily on the architectural vocabulary of the Renaissance, as the widespread use of chain bond for the structural reinforcement of walls, of flat decorative bossing, arcades of semicircular arches, false keystones, and so forth, abundantly demonstrate. In fact, the subsequent addition of a diversity of wood pillars, forming double and triple arcades, does very little to temper the apparent purism of these enormous stone cages.

Moreover, what seems interesting to us is not so much the simple presence of these elements as their actual use in these buildings, for the overall effort to achieve an honest, vigorous and powerfully rhythmic structure overwhelms the academic character of the individual stylistic components. There remains one building in particular, located on the Place D'Yonville near the Rue Saint-Pierre, whose facade (unfortunately undated) takes this

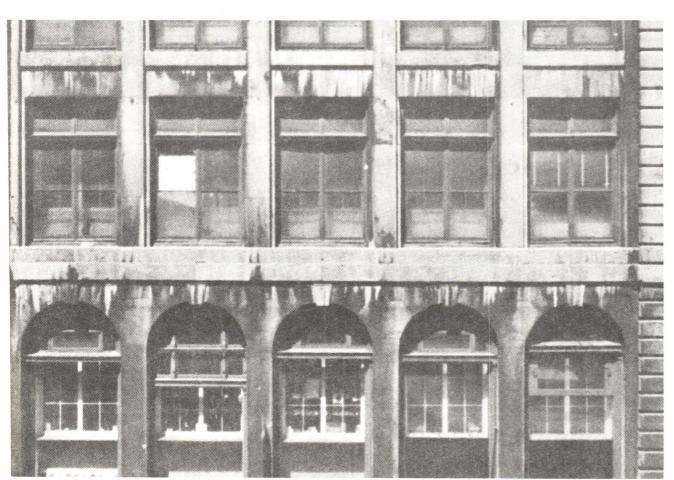


Figure 9. J.G. Guimond, commercial building, facade on Rue Saint-Sulpice. Photo by A. Corboz



Figure 13. Corner Place D'Yonville and Rue Saint-Pierre (M. Laurent, 1872) Photo by L. Hogue

impulse towards monumental simplification to its extreme. Here there are no vestiges of the classical vocabulary (with the exception of the first floor), and while there are traces of the theme of the colonnade, no more than is true of Walter Gropius' 1911 Fagus factories. Other, and possibly earlier, examples of extreme formal simplification may be found to one side of this building, and on the Rue des Recollets. There can be no doubt whatever that what underlies the works in question is nothing other than a pre-Loosian execration of the ornamental, and a pre-Miesian passion for the elimination of elements superfluous to the construction of the building itself. If indeed we were to look into the ancestry of these buildings, we would have to call to mind the industrial architecture of classical Rome (the oil-work at de Brisgane in Algeria, for example), or the pandocheia of Christian Syria.

We find in Montreal the adoption of a system of trilithons, dual vertical members linked with an architrave, for both the partition walls and the separation of floors (fig. 9). Further, the use of recessed windows in these buildings opens up to the viewer a cross-sectional view of the supporting members. As a result, the surface of our buildings' facades is far from two-dimensional: it is, on the contrary, highly plastic, setting up a strong interplay of surface and depth (fig. 10). The articulation of window ledge angles especially reinforces this effect; the oldest building makes use of a series of separate right-angled frames, while the others employ rounded ones (figs. 11-13).

It is important at this point to address two questions: that of the sources of these architectural solutions, and that of the identity of the architects of the buildings we have been considering. Initially, it would seem easy enough to establish certain analogies between our structures and their contemporaries and/or later counterparts in New York and in London.4 Yet there exists no evidence whatsoever that they are simple copies; their architectural statement appears to be an independent one. This is almost certainly due to the training of the architects in question, of whom we regrettably know very little. As for the warehouse dating from 1861, the most probable candidate is Victor Bourgeau (1809-1888) who with Michel Laurent (1833/4-1891) completed the entire Rue Saint-Pierre complex. Bourgeau worked in particular for the religious institutions of Montreal, and his ventures into secular architecture were few and far between. Laurent, on the other hand, is known to have had strong affiliations with the business community, but beyond this we know almost nothing of him. The situation is hardly better with such figures as Henri-Maurice Perrault (who designed the de Bresoles and Saint-Dizier-Ouest warehouses),

Albert Menard (architect of Saint-Dizier-Sud warehouse), and above all, J.G. Guimond (designer of the warehouse between Le Royer and de Bresoles streets).

While a formal analysis will here bring to light certain common features, it will also allow us to differentiate the individual architects. If we focus our attention for a moment on the use of certain construction systems in these buildings and on their structural blueprints, the overall rationality and consistency of their design is striking. If, on the contrary, we subject the buildings themselves to a detailed examination, we find that the great diversity of solutions underlines the fact that the rigor of design did not extend to the individual elements and components. The peculiar uses to which Y-shaped columns and upright pillars are put would seem to confirm this view. Since each discreet unit on every floor of these warehouses has three windows and is internally subdivided into two naves, it was necessary to make use of Y-shaped columns (fig. 14) to anchor the ceiling (supported by upright members) in the outside wall. Furthermore, without even the slightest alteration of the overall spatial arrangement, the upright columns themselves support both transversal and longitudinal beams. The pragmatism of these solutions would seem to indicate that it is precisely a certain informality and offhandedness that characterizes the proto-rationalist approach to problems: industrial elements and traditional architectural elements freely intermingle yet do not lead to the formulation of a new concept of design.

The Old Quarter of Montreal is at present largely uninhabited, and ever since construction began on a new downtown area to the northwest of its borders (1962-66, Place Ville-Marie, I.M. Pei), the pace of activities in the old city has slowed considerably. The completion of the Ville-Marie freeway, which extends along its northern edge, has physically severed it from the downtown, a fact that has generated a certain amount of local resentment. Nevertheless, despite the loss of many of the older buildings due to fires (of more or less suspicious origin), demolition (to make way for parking garages), Old Montreal has not been subjected to an American style "renovation" by bulldozer, so the warehouses and other buildings mentioned here survive today. Their counterparts, which in American city centers once presented an image of quasi-Florentine regularity, were much less fortunate in this respect, and one must hunt hard to find the occasional traces of this architecture in American metropoli.

At present, these buildings are no longer threatened. Montreal's Expo 67 and later the 1976 Olympic Games both contributed to the role of the Old Quarter as a tourist center. Towards 1975, however, a renewed interest in Quebec's folklore and an upsurge in nationalist sentiment did endanger the buildings on the Rue Saint-Pierre when a project for the reconstruction of the General Hospital of the Sisters of Charity was proposed that included the destruction of Bourgeau's and Laurent's works; eventually this proposal was scrapped. At the same time, the very concept of "restoration" began to evolve under the influence, at least in part, of the European contributions to the events surrounding the city's Architectural Heritage Year (1975).

The two sets of buildings under consideration here may very well be some of the most extensive remaining architectural groups in North America that prefigure the work of the Chicago school. If this is indeed the case, Montreal possesses one of the few proto-rationalist ensembles of the late 19th century to have withstood the powerful ideological tides of urban renewal. Only in recent years, in the wake of their research into the archaeology of industry, have architectural historians become interested in this architecture of great spaces and modest intentions.

In the early 1940s, however, Sigfried Giedion did study several examples of this sort of architecture, and in this he stands as a lone exception. Yet when Space, Time, and Architecture was being written, urban renewal had already ravaged the North American cityscape, so although the buildings he refers to in Boston, Concord, and Saint Louis are quite striking, they are also exceedingly isolated. If Giedion had been aware of the warehouses of the

Rue Le Royer, he might have found something more substantial to chew on.

Even in Montreal itself these buildings have not (for various reasons) received the attention they deserve. The tremendous upsurge of national consciousness in Quebec during the last twenty-five years has led principally to an emphasis on the traditional home. The notion that Quebec's national patrimony is all-inclusive, that it does not exclude that which belongs to the period of English dominion, is still alien to the nationalist movement. When certain fundamental political issues are re-



Figure 15. Michel Laurent, side-view of Rue Saint-Pierre, Laurent's own design.

solved, it shall perhaps be possible actually to see the architecture that followed the demise of the French regime in 1760 without demeaning or condemning it. The aim of this study is to bring to light the national and international significance, as well as the cultural importance, of the commercial development of Montreal in the 19th century. It is our sincere hope that this re-evaluation will lead to a widening of certain horizons that have hitherto been too narrowly defined.<sup>5</sup>

#### NOTES

<sup>1</sup>J.M. Richards, *The Functional Tradition in Early Industrial Buildings* (London 1958).

 $^2 S.$  Giedion, Space, Time and Architecture, 5th ed. (Cambridge, MA, 1967), p. 208.

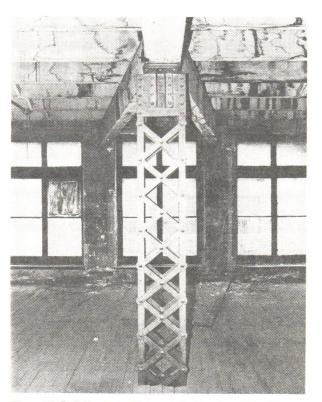
<sup>3</sup>See The Origins of Cast Iron Architecture in America (New York, 1970); M. Gayle, E.V. Gillon, Jr., Cast-iron Architecture in New York. A Photographic Survey (New York, 1974); W. Weisman, Commercial Palaces of New York: 1845-1875, The Art Bulletin, XXXVI, December, 1954, pp. 285-302; according to H.R. Hitchcock in Architecture: Nineteenth and Twentieth Centuries (Harmondsworth, 1969), p. 328, the model for these kinds of commercial row houses are those on North Market St. in Boston (Alexander Parris, 1823), near the Quincy Market, which have been recently restored. If this is the case, this architectural idea preceded the advent of cast-iron architecture by almost a quarter of a century.

<sup>4</sup>See, for example, in Gayle and Gillon, pp. 97 (1870), 72 (1881), 120 (1882-92), 112 (1889); for London see N. Pevsner, A History of Building Types (Princeton, 1976), p. 215 (c. 1845). Also: J.C. Marsan, Montreal en evolution (Montreal 1974), ch. 9 (Commercial Architecture), for a general consideration, and an earlier article by M. Charney, "The Old Montreal No One Wants to Preserve," The Montrealer, 38, No. 12, December, 1964, p. 22.

<sup>5</sup>Research group members: Michele Giroux, Louise Hogue, Jacques Lachapelle, Louis-Paul Lemieux, Michel Plante, Maude Theriault, Sylvie Tremblay.

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**Figure 14.** Building located between de Bresoles and Le Royer streets, Y-shaped columns with cross-beam supports (later). Photo by M. La Plante



Figure 4 Casa del Fascio, San Giorgio Delle Pertiche, Pavia, Italy. Collection, Diane Ghirardo

# The Immaculate Conception

Aging and the Modernist Building



Figure 1 Giuseppe Nicolosi, Low Cost Housing, Latina, Italy, 1936. Photo by Diane Ghirardo.

 by Alice Jurow

It is a commonplace of our thought, a widespread, ill-defined feeling, that modern architecture does not age well. Or, in particular, that buildings employing the vocabulary of the mainstream Modern Movement—the smooth-finished, crisp forms of the International Style or the machine esthetic—have not aged well.

In this notion, the issue is not primarily whether modern buildings have been built well. Often they have not; but the ideas and esthetics of modernism cannot be held entirely responsible for the complex conditions which have led to a general decline in the quality of building materials, in craftsmanship in the building trades, and in commitment to building maintenance. Built under equally economically-pinched conditions, an International Style villa is not likely to fall apart any faster than its mock-Tudor, neo-Colonial or Bay Region counterpart.

Nonetheless, a modern building which has lost its impeccable newness does tend to be seen as shabby and shoddy, rather than weathered, picturesque or simply older. Why do we sense betrayal, defacement—a once-virginal building ravished by time?

We perceive, logically or not, a failure of modern buildings to age well. This failure can occur on three levels. First, there may be actual failure, where a building has employed newly introduced materials or untried techniques which simply have failed to withstand the test of time. This is, to some extent, a necessary consequence of experiment; the failures of other ages are not around any more for comparison.

Second, from a *visual* point of view we find the aging of modern buildings unsatisfactory, perhaps because we have no traditional visual frame of reference with which to regard old modern buildings. A style dependent on visual novelty and on rejecting historical vocabulary has no precedent for aging. Our sensibilities have had two millennia to become accustomed to time-worn surfaces of heavily-articulated stone, but flat planar surfaces of time-worn tile or metal plating or stucco are still a shocking sight.

Third, and most interesting, the failure of modern buildings to age well is a *conceptual* failure, a symbolic breach of contract. A modern building represents a break with the past—the old, familiar, dirty, ramshackle, picturesque, history-ridden past. It was to be the antithesis of the "old and rotting buildings that form our snailshell." It was to be new, clean, purified in its formal vocabulary, built of modern, synthetic materials with "fixed characteristics," perfected by mechanization. But, having broken with the past, the modern building has an uneasy relation to the future. Committed to being

unlike anything old, a modern building cannot afford to grow old without betraying something of it original promise.

We can find attitudes and assumptions in the original thought of the Modern Movement which correspond with the aspects of this three-fold failure. We can trace actual failures to an unprecedented optimism about new materials and technology, visual failure to the desire for a visual tabula rasa, conceptual failure to an esthetic of radically purified form. But in these ideas and in their theoretical roots, what conscious intentions were expressed regarding the problem of buildings in time?

The following brief survey attempts to document such statements of intention, articulated by architects and architectural writers during the early modern period, and to place them in their ideological contexts.

## a. The Tradition of Craftsmanship and the Ascendancy of Form

The existence of two basic approaches to the building as a physical object can perhaps be traced to a basic duality, of long standing, in the architectural profession itself. In the role of masterbuilder and craftsman, the architect is concerned with sound construction, detailing and the inherent beauty of materials. In the role of academic artist and intellectual, the architect is concerned with planning and with formal values and ideals which may exist independent of the building's physical reality. There is evidence that, for a number of key figures of the Modern Movement, the formal, conceptual side of architecture took at least temporary precedence over the craft of building.

In the early years of the twentieth century, the masterbuilder tradition, represented by men like H.P. Berlage, influenced ideas like "truth of materials" and "structural integrity" which were to be important modernist precepts. However, the craftsman tradition has been largely discredited through association with the anti-modernism of the Arts and Crafts movement and the romantic willfulness of the various art nouveau schools. And so, by about 1910, the craftsman approach had begun to seem distinctly old-fashioned, while the intellectuals of the profession were in the vanguard of the more progressive trends.

The Deutscher Werkbund, founded in 1907 under the direction of Hermann Muthesius, typified the shift of emphasis from craftsmanship to ideas. While the earlier Deutscher Werkstatten at Hellerau

adhered to the "Arts and Crafts tradition of not distinguishing between visual and material quality in products, of believing them to be automatically related," Muthesius, in an address to the Werkbund's Congress of 1911, "introduced. . . the idea that aesthetics could be independent of material quality." This speech, whose audience included Mies van der Rohe, Walter Gropius, Bruno Taut and Charles Jeanneret, also "introduced the idea of standardisation as a virtue, and of abstract form as the basis of the aesthetics of product design" and "tressed the idea of Form as a spiritual value:

Up till now, considerations of quality stood in the forefront of our activities and we can now be sure that in Germany a sense of good materials and methods has gained a swift ascendancy; but by that very token it follows that the work of the Werkbund is not completed. Far higher than the material is the spiritual; far higher than function, material and technique stands Form. These three

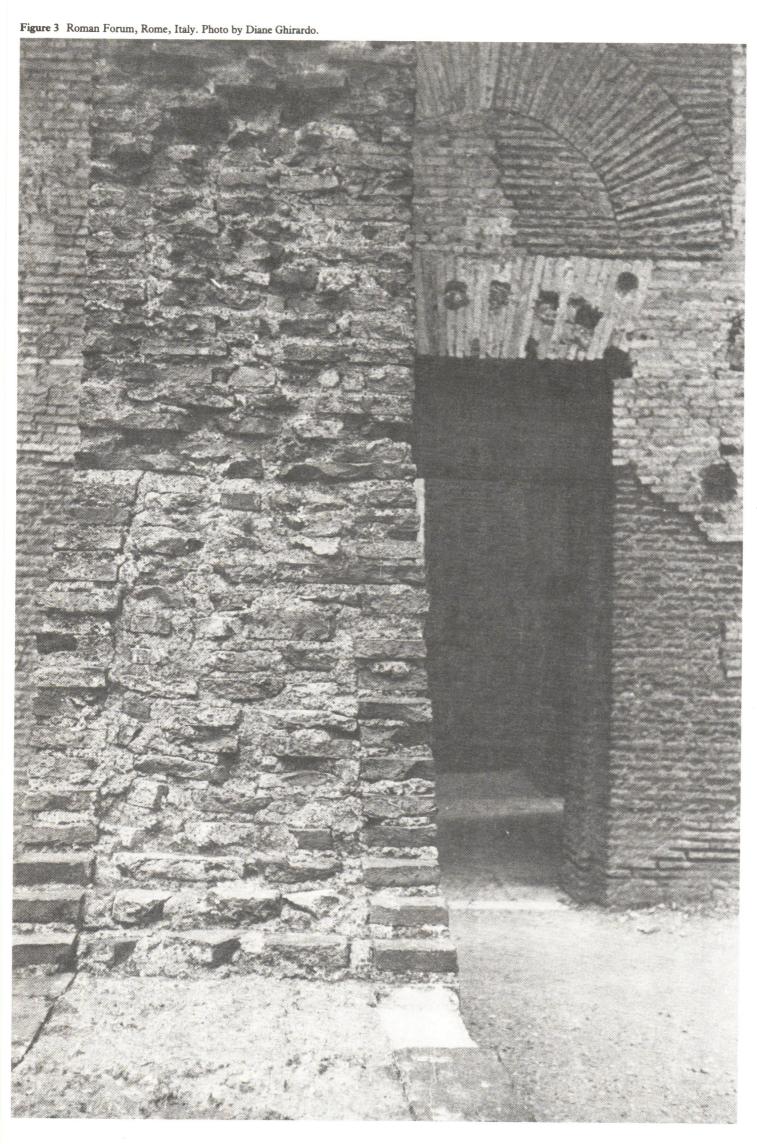
material aspects might be impeccably handled but—if Form were not—we would still be living in a merely brutish world.<sup>7</sup>

Form, in the Muthesian canon, having gained ascendancy over function, material and technique, the stage is set for the almost Platonic conception of objects and buildings which was to develop over the next two decades. Theo van Doesberg rephrased this distinction between the spiritual and the material in a 1922 manifesto: "Culture in its widest sense means independence of Nature."

Despite the prevalence of such transcendent ideologies, emphasizing the formal conceptual aspects of architecture, the craftsmanly approach was to remain important to some modern practitioners. Mies, notably, "was the only modern architect to use brick at this time (1925-29). His contemporaries, still under the influence of the machine esthetic, refused to do so because of its handcraft connotations, rough texture and sugges-

tion of mass rather than surface. Mies, with his Berlagian approach. . .enjoyed the craftsmanship involved in the coursing and bonding." In addition, the Wendingen school, the expressionist branch of the Dutch avant-garde, showed a "tendency to use commonplace materials, like brick, tile-hanging and wood, in a manner that shows genuine affection." Peter Behrens was attached to "simple but substantial material" and in 1925 made the craftsmanlike statement, "neither structurally nor in the choice of materials is extravagance permissible; but. . .what is there to prevent the devotion of adequate care and thoughtful spiritual labor so that artistic worth may be born and developed?" 12

Gropius' position on craftsmanship will be discussed below and, of course, Wright, like Aalto, is essentially outside the mainstream development of European modernism in his continuing devotion to the "nature of materials." It was exciting new theories, not careful craft, that had captured the imagination of the profession.



Having broken with the past, the modern building has an uneasy relation to the future. Committed to being unlike anything old, a modern building cannot afford to grow old without betraying something of its original promise.

## b. Futurism, Purism and the Rejection of the Picturesque

"We insist that a masterpiece must be burned with the corpse of its author. . .against the conception of the immortal and the imperishable we set up the art of the becoming, the perishable, the transitory and the expendable," 13 F.T. Marinetti wrote in 1911. Four years earlier, in the "Foundation Manifesto of Futurism," he had urged the burning of libraries, the flooding of museums, and other violent manifestations of expendability: "Seize pick-axes and hammers! Sap the foundations of the venerable



Figure 2 Farmhouse, Lambardy. Photo by Kurt Forster.

cities! The oldest among us are thirty; we have, therefore, ten years at least to accomplish our task. When we are forty, let others, younger and more valiant, throw us into the wastepaper basket like useless manuscripts. . ."<sup>14</sup>

These were some of the more extreme statements of an extremist movement which, through the charismatic Marinetti's energetic promotion, swept across Europe and pervaded avant-garde thought throughout the pre-War years. Futurism was a grand design for Marinetti, a poet and the chief polemicist of the movement, and he was eager to recruit the visionary architect Antonio Sant'Elia to his cause. Although architecture hardly lends itself to an ideal of "perishable" art, Sant'Elia's "Manifesto of Futurist Architecture" not only embraces the positive aspects of Futurism, such as acceptance of "the special conditions of modern life" and enthusiasm for "every benefit of science and technology," but also concludes "in disfavor of. . . use of materials that are massive, bulky, durable and expensive, all opposed to the complexity of Modern culture and Modern experience."15 Finally a statement "almost certainly added by Marinetti"16 makes explicit the official Futurist attitude to building: "The houses will last for less time than we do. Each generation will have to build its own city."17

Obviously the Futurist manifestoes are intentionally provocative and shocking, and the ideal of impermanence could not have been taken literally. 18 Nevertheless, Futurist ideas were a powerful influence on contemporary architectural thinking (most notably, on the Russian Constructivists). As Reyner Banham points out, 19 Le Corbusier's *Vers Une Architecture* (1923) is pervaded by a distinctly Futurist tone:

. . .We throw the out-of-date tool on the scrapheap: the carbine, the culverin, the growler and the old locomotive. This action is a manifestation of health, of moral health, of morale also; it is not right. . .that we should waste our energy, our health and our courage because of a bad tool; it

must be thrown away and replaced.

But men live in old houses and they have not yet thought of building houses adapted to themselves. . .civilizations change and religions tumble to dust. . .The house will also fall to dust (pp. 17-18).

. . .let us purge our houses, give your help that we may reconstruct our towns. . .(p. 24). A house will no longer be this solidly-built thing which sets out to defy time and decay, and which is an expensive luxury by which wealth can be shown; it will be a tool as the motor-car is becoming a tool. The house will no longer be an archaic entity, heavily rooted in the soil by deep foundations, built 'firm and strong,' the object of the devotion on which the cult of the family and the race has so long been concentrated (pp. 219 and 245):<sup>20</sup>

Along with the dynamic ideology of Futurism, the static esthetics of Cubism, with its emphasis on the three-dimensional reality of objects, helped to shape Le Corbusier's (and the Modern Movement's) development.<sup>21</sup> Corbusier and Ozenfant's particular brand of Cubo-Futurism—le Purisme—is infused with the "vaguely Platonic" classicism prevalent in the early twenties. Muthesius' spiritualized Form is to have a pure expression: "The work of art must not be accidental, exceptional, impressionist, inorganic, protestatory, picturesque, but, on the contrary, generalized, static, expressive of the invariant." Again, the objet-type, the banal utensil perfected by necessity and mass-production is "an absolute object. . .beyond the reach of the accidents of personality, perspective or time."22

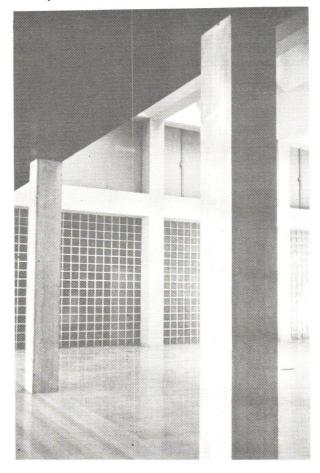
J.J.P. Oud showed a similar concern for a classical purity of essence in architecture and described in detail the "accidental" and "picturesque" conditions that were to be avoided:

. . .In place of the natural attractions of uncultivated materials, the broken hues in glass, the irregularity of finishes, the paleness of colour, the clouding of glazes, the weathering of walls, etc. an architecture of today would unfold the stimulating qualities of sophisticated materials, the limpidity of glass, the shine and roundness of finishes, lustrous and shining colours, the glitter of steel, and so forth.

Thus, the development of the art of building goes toward an architecture more bound to matter than ever before in essence, but *in appearance rising clear of material considerations;* free from all Impressionistic creation of atmosphere, in the fullness of light, brought to purity of proportion and colour, organic clarity of form; an architecture that, in its freedom from inessentialism could surpass even Classical purity.<sup>23</sup>

Thus "handicraft materials are decried for an entirely fresh set of reasons. . .they are too nuance

Figure 5 Giuseppe Terragni, Casa del Fascio, Como, 1932-36. Photo by Diane Ghirardo.



and atmospheric in hue. . .and worse still, their hues changed under weathering."<sup>24</sup> By 1932 this anti-picturesque bias was made canonical in Johnson and Hitchcock's *International Style:* "The use of brick tends to give a picturesqueness which is at variance with the fundamental character of the modern style."<sup>25</sup>

Statements like these typify the anti-picturesque, Purist stance that is at the heart of the "immaculate conception" of buildings. With, on one hand, Futurism demanding that art be impermanent, and, on the other, Purism stating that it must be invariant; with the idea that weathering tended to produce picturesque effects incompatible with modern esthetics, it is not surprising if the physical realities of buildings in time remained somewhat problematic in the Modern Movement. The Purist esthetic demands an architecture "in appearance rising clear of material considerations," but this, as recent critics have pointed out "remains, to this day, an impossible dream. Impossible, for the simple reason that the facts of building in the real outdoor world —the facts of such mundane problems as weathering and maintenance—make it virtually impossible to attain the ideal of a flawless architecture of pure geometric forms."26

## c. Artistic Permanence and New, Improved Durability

Futurist-influenced images of transience have retained some currency throughout the century, surfacing periodically, as in the image of the "kleenex house" in the fifties. However, with the increasing seriousness of the Modern Movement in the late twenties and thirties, and its self-association with classicism, the idea of buildings as enduring artistic creations easily re-established itself. In interesting contrast to the Futurist tendencies of Vers Une Architecture, Le Corbusier devotes a whole chapter of his Urbanisme (1926) to permanence (Perennite). His thesis here is that the products of technology are continually altered or discarded as they become outmoded, but Art endures. And architecture is firmly aligned with Art: "It is the city's business to make itself permanent, and this depends on considerations other than those of calculation. And it is only Architecture which can give all the things that go beyond calculation."<sup>27</sup>

More generally, Hitchcock and Johnson note, "The idea of permanence has always been associated with architecture. Many problems of building are best solved temporarily. But temporary constructions are seldom as architectural in character as those built to endure."<sup>28</sup>

Furthermore, classical purity makes for "psychological permanence": "The earlier use of bright color had value in attracting attention to the new style, but it could not long remain pleasing. It ceased to startle and began to bore; its mechanical sharpness and freshness became rapidly tawdry. If architecture is not to resemble billboards, color should be both technically and psychologically permanent."<sup>29</sup>

As the Modern Movement matured in both theory and practice, pragmatic advice began to supplement the early polemics. Where durability, maintenance and permanence were touched on in the literature, the assumptions were made that (1) durability and unchanging appearance are desirable in buildings and (2) modern materials and techniques are superior to traditional ones, because of greater standardization and reliability.

Corbusier makes the latter point in *Vers Une Architecture:* "the massive timbers, as thick as you please and heavy for all eternity. . .will still spring and split if placed near a radiator, whilst a patent board 1/8-inch thick will remain intact. . ." Further, he connects the industrialization of the building process with the achievement of "invariant" qualities: "The prime consequences of the industrial evolution in 'building' show themselves in this first stage; the replacing of natural materials by artificial ones, of heterogeneous and doubtful materials by homogeneous and artificial ones. . .Natural materials, which are infinitely variable in composition, must be replaced by fixed ones." 30

Corbusier also justified the flat roof, with internal drainage, on the grounds of its having greater durability (in cold climates) than the traditional pitched roof with external gutters; his famous roof-

gardens, in turn, were intended to mitigate temperature changes in the concrete roof:

Le Corbusier employs this method; his roofs are concave, and the water. . .eventually reaches a downpipe that passes through the centre of the house. Many years of use have proved this method satisfactory, both as a weather resistant and as insulation against expansion and contraction. Of the roof-garden Le Corbusier has said, 'Ferro-concrete normally provides a roof surface that is flat, watertight and homogeneous. . Expansion is the great enemy of ferro-concrete and metal construction. The establishment of gardens on the roof successfully combats expansion. . .""<sup>31</sup>

Corbusier, like other modern architects, obviously had honorable intentions about producing durable buildings, but such confidence in newly-invented techniques often seems to have been unjustified. A correctly-constructed Corbusian concrete roof, with garden, may indeed be quite satisfactory (the extensively surveyed residents at Pessac do not seem to complain of leaks, though some did add gables anyway to make their dwellings homier), but the esthetic preference for the flat roof, which led to its indiscriminate use, has become a source of ongoing technical problems.

Hitchcock and Johnson devoted a whole chapter of the *International Style* to another important technical problem—"Surface Material." It is a chapter concerned, almost obsessed, with the problem of finding finish materials which can achieve the principle of continuous wall surface with minimal interference from the "flaws that come with time."

Turning, in their classicizing way, to "the architecture of the past," the authors find that "the finest materials for wall surfacing are stones, granites and marbles." Used in large units of plate sheathing, these materials are permanent and esthetically satisfactory.32 Such sheathing is, of course, expensive; in the more moderate pricerange, tile is the all-round favorite. "The texture is smooth and permanent; the color possibilities are wide."33 The texture of tile certainly is smooth and permanent, but since 1932 time has shown that tile (especially in the favored light colors) is not immune to disfigurement by staining and cracking. With the discoloration of the grout it can become particularly unattractive, as well as losing its "continuity of surface." Moreover, a tile surface is less easily renewed than a painted one; both color choice and discoloration are often more permanent than one might wish.

The last of the sophisticated materials discussed by Hitchcock and Johnson are glass bricks and translucent glass plates. They note, interestingly, that "in certain buildings various panes of transparent, translucent and opaque glass have been combined together for entire walls. The effect is rich and harmonious but perhaps too fragile for permanent architecture."<sup>34</sup>

Of the traditional materials, wood sheathing is "not as durable as stone or brick, yet. . .it can well outlast a century if it is kept painted. . .admirable in the special case of modern construction in wood."<sup>35</sup>

Concrete block is rapidly dismissed as being "more suggestive of traditional masonry than even the commonest brickwork." As for brick, though it is criticized for a tendency to picturesque appearance, and although "from an aesthetic point of view, brick is undoubtedly less satisfactory than other materials," it is granted that "brick is permanent in color and not subject to cracking and streaking," and "it is in the long run actually superior aesthetically to stucco for largescale constructions."<sup>36</sup>

And what about stucco?

The ubiquitous stucco, which still serves as the hall-mark of the contemporary style, has the aesthetic advantage of forming a continuous even covering. But. . . all stucco, rough or smooth, is subject to cracking and streaking; if painted, it is even less likely to preserve its original surface and color. Stucco, like exposed concrete. . .must be considered inferior to more solid sheathing except where the large scale of the construction makes the flaws that come with time relatively inconspicuous. A material like stucco

but elastic and with a wide color range, which could be laid over various bases, would be ideal.<sup>37</sup>

As Peter Blake says, "unless such a new material were found, (Hitchcock and Johnson) implied, the Modern Movement would be in trouble." and so it has been, with plaster falling off, stucco streaking and tile growing drab on International Style buildings around the world.

Why did modernists look to the promise of new materials? Because they hoped if not to abandon the craft of building, to transform it through industrialization. Mies wrote in 1924:

The industrialization of building methods is the key problem for architects and builders. . . Our first consideration must be to find a new building material. Our technologies must and will succeed in inventing a material which can be industrially manufactured and processed and which will be waterproof, soundproof and insulating. It must be a light material which not only permits but requires industrial production. . . <sup>39</sup>

(Part I of two parts)

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#### NOTES:

A somewhat different form of this essay has appeared in the Michigan Quarterly Review.

I would like to thank Donald E. Olsen, F.A.I.A., who provided the initial impetus and encouragement for this work. (Works included in the bibliography will be given in the first reference with author and title, and in subsequent references by

<sup>1</sup>Pessac resident quoted in Philippe Boudon (transl. Gerald Onn), *Lived-In Architecture: Le Corbusier's Pessac Revisited* (Cambridge, Mass., 1972), pp. 103-104.

<sup>2</sup>Le Corbusier, Towards a New Architecture, p. 256.

<sup>3</sup>Le Corbusier, p. 214.

author's last name only.)

<sup>4</sup>Reyner Banham, Theory and Design in the First Machine Age, p. 71.

<sup>5</sup>Banham, p. 72.

<sup>17</sup>Antonio Sant'Elia quoted in Rye, p. 107.

<sup>18</sup>Sant'Elia was killed in action in 1915, having joined a battalion of volunteer cyclists along with several other Futurists. None of his projects was ever executed; Marinetti, however, did not have his designs burnt but was, instead, instrumental in publishing them and in establishing Sant'Elia's reputation.

<sup>19</sup>Banham, pp. 241-244.

<sup>20</sup>Le Corbusier, pp. 17-18.

<sup>21</sup>See Banham's convincing description of the impact of the Cubist-Futurist marriage, in Banham, pp. 202-213.

<sup>22</sup>Banham, pp. 207-208.

<sup>23</sup>J.J.P. Oud quoted in Banham, pp. 161-162 (emphases mine).

<sup>24</sup>Banham, pp. 161-162.

<sup>25</sup>Henry-Russell Hitchcock and Philip Johnson, *The International Style*, pp. 52-53.

<sup>26</sup>Peter Blake, Form Follows Fiasco (Boston, Toronto, 1974), p. 41.

<sup>27</sup>Le Corbusier quoted in Banham, pp. 250-252.

<sup>28</sup>Hitchcock and Johnson, p. 82.

<sup>29</sup>Hitchcock and Johnson, p. 76.

<sup>30</sup>Le Corbusier, pp. 214-215.

<sup>31</sup>F.R.S. Yorke, "Today" (summary of his book *The Modern House*), *Architectural Review*, 76 (July, 1934), pp. 9-16.

<sup>32</sup>Hitchcock and Johnson, p. 50. Once again there is a warning against picturesque effects: "Graining. . .should be so disposed as to emphasize the continuity of the whole wall and not, as in the past, to produce symmetrical patterns. It is also important that the surface remain a plane without convexities and concavities. Otherwise the effect becomes picturesque and the sense of equal tension in all directions is destroyed." (p. 51).

<sup>33</sup>Hitchcock and Johnson, pp. 53-54.

<sup>34</sup>Hitchcock and Johnson, p. 54.

<sup>35</sup>Hitchcock and Johnson, pp. 50-51.

<sup>36</sup>Hitchcock and Johnson, pp. 52-53.

<sup>37</sup>Hitchcock and Johnson, p. 50. Note that, while admitting that painting makes the surface less durable, they recommend on p. 76: "In surfaces of stucco, white or off-white *even where it is obtained with paint* is felt to constitute the natural color." (emphases mine).

<sup>38</sup>Blake, p. 41.

<sup>39</sup>Mies van der Rohe quoted in Blake, p. 48.



Figure 6 Ettore Sotsass and Alfi Guaitoli, Sea Colony, Marina di Massa, 1937. Photo by Diane Ghirardo.

<sup>6</sup>Banham, p. 72.

<sup>7</sup>Hermann Muthesius quoted in Banham, p. 73.

<sup>8</sup>Theo van Doesberg quoted in Banham, pp. 187-188.

<sup>9</sup>Philip Johnson, Mies van der Rohe (New York, 1947), p. 35.

<sup>10</sup>Banham, p. 164.

<sup>11</sup>Peter Behrens, "Administrative Buildings for Industrial Plants," *American Architect*, 128: 2479 (26 August 1925), pp. 167-174.

<sup>12</sup>Peter Behrens, "Seeking Aesthetic Worth in Industrial Buildings," *American Architect.* 128: 2486 (5 December 1925), pp. 475-479.

<sup>13</sup>F.T. Marinetti quoted in Jane Rye, Futurism, p. 107.

<sup>14</sup>F.T. Marinetti quoted in Rye, p. 9.

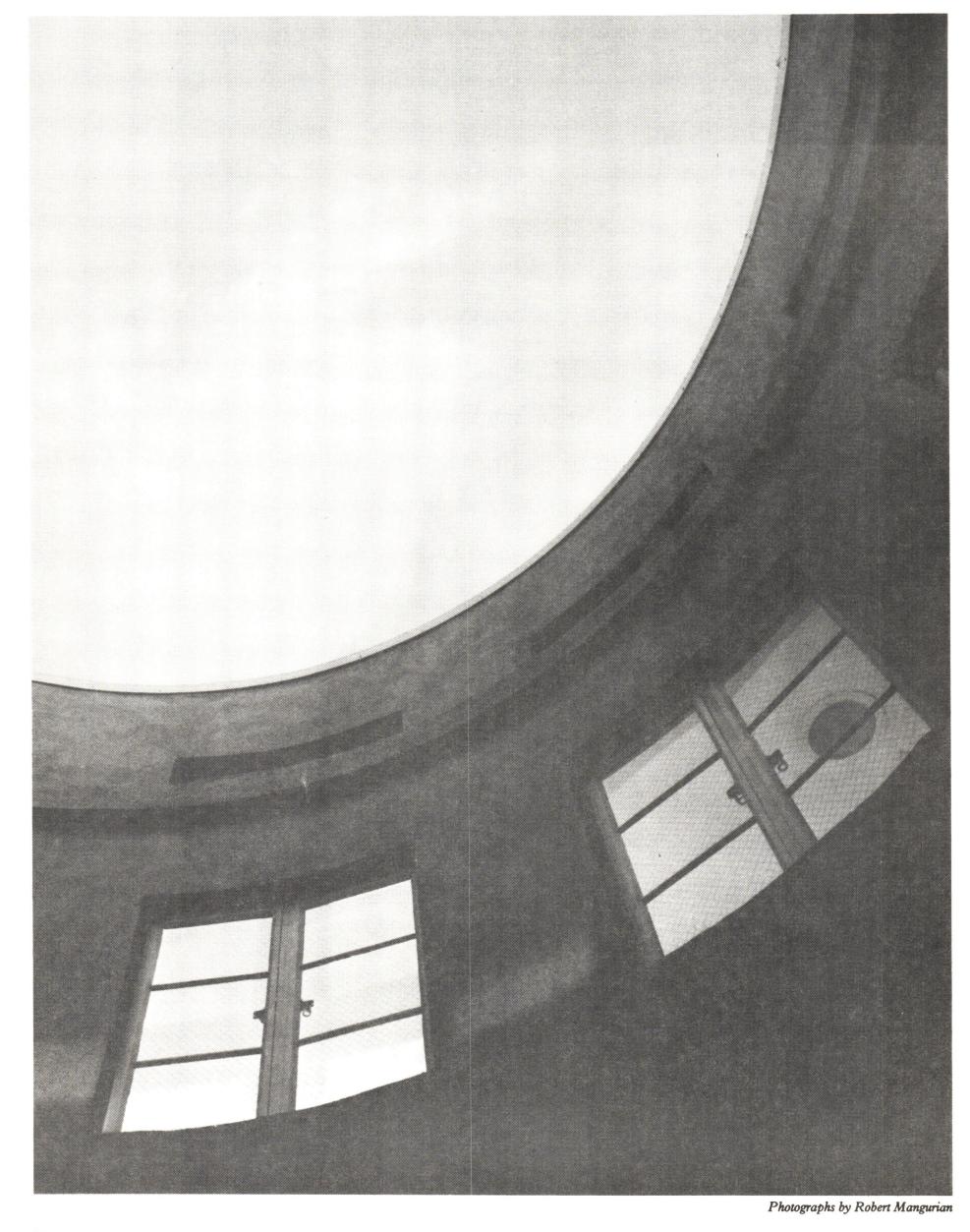
<sup>15</sup>Antonio Sant'Elia quoted in Banham, pp. 128-129.

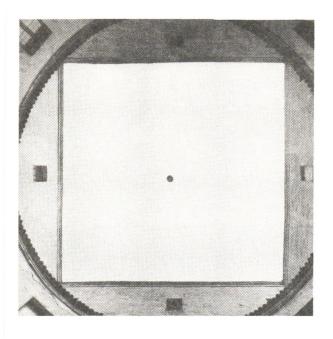
<sup>16</sup>Rye, p. 107.

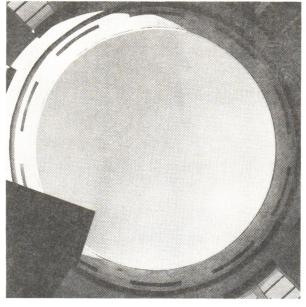
When a Modernist building grows old ( $Fig.\ 1$ ), as in the case of this low-cost housing unit in Latina, Italy, the weathered stucco and chipped cement merely bespeak the poverty of the tenants and the precipitous decline of a formerly crisply photogenic structure. By contrast, the courtyard of this ancient Lombard farm—which is also chipped and weathered—inevitably recalls numerous scenes sketched of Italian rural settings during the eighteenth and nineteenth centuries ( $Fig.\ 2$ ), and which are always associated with a picturesque and even quaint process of aging

The dramatic differences between our perceptions of recent and ancient architecture with respect to their signs of age perhaps in some respects depends upon our recognition that the decay of the Roman Forum (Fig. 3) took 2000 years to arrive at this point, while a building constructed in 1932 (Fig. 4) already needed major repairs by 1939. Brick and rubble simply last longer than stucco and thinly veneered surfaces. But careful maintenance can stall off the effects of premature aging (Fig. 5), at least for a time. While neglect and disuse leaves a building which is barely 40 years old (Fig. 6) looking as if it is in imminent danger of collapse.

# Palazzo Gagosian







Far left: Mantegna's house, Mantua, late 15th century.

### BUILDING OF THE QUARTER

by Craig Hodgetts

A Palazzo! On a neglected, strictly linear side street in a West Side version of Venice, in the reactionary hush of the eighties. Where today runs deeper than yesterday.

An art gallery. Uniquely defined by the uses of the past. A genuine antique.

Neither hanging pictures nor looking at pictures has needed to change. The technology and perception are genuine holdovers from another age—before Telstar and ITT. Before the so-called "Age of Information" reduced the genuine to computer enhanced types and colored them any color you wished as long as it was rainbow.

The building has a sister in the real Venice. The old Venice. Another palazzo only this time on the Grand Canal. With stone steps plunging into the water for tradesmen's deliveries, and a close quartet of marble columns supporting the vaulted cellar.

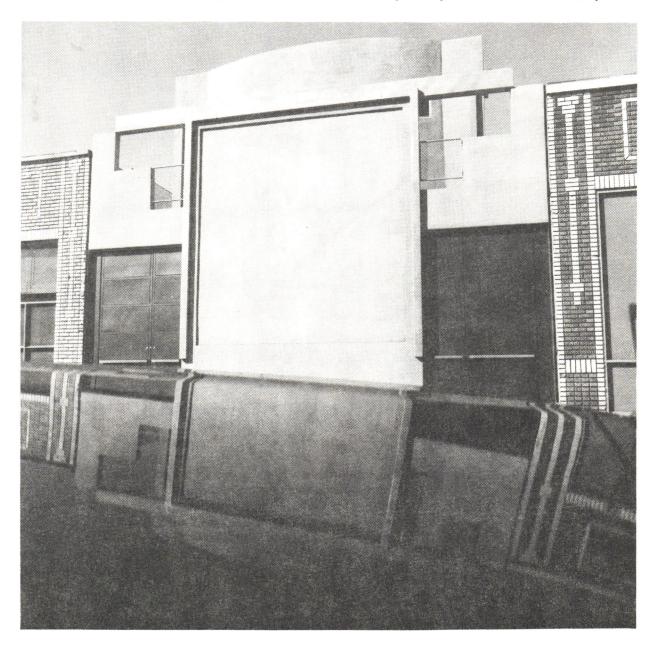
A fading rock star occupied the penthouse,

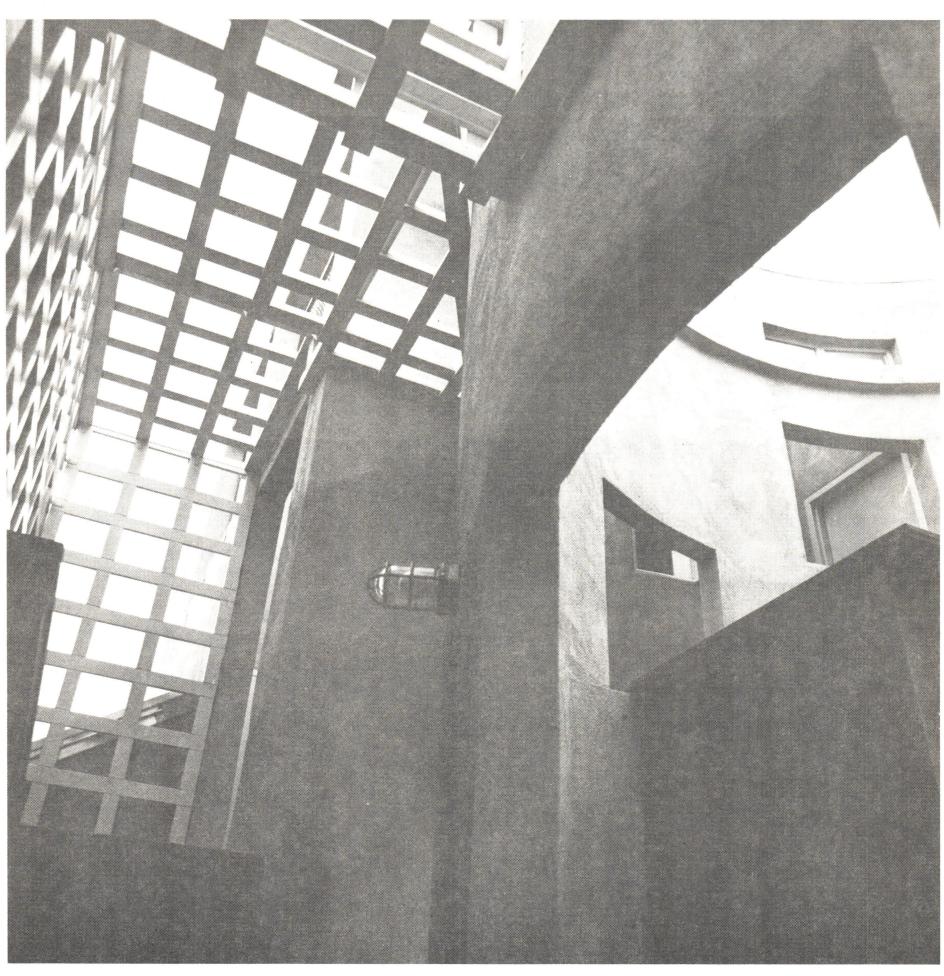
unable to afford the whole spread any longer, so the rest was swathed in cobwebs and muslin. There were few lights. Dust swirled about the feet of those who made the pilgrimmage. Yet, through the obligatory aroma—beyond the dusty gold records propped in cracked frames on carved marble—one could imagine that noble and austere structure in finer times.

The roller skates rush by. Eveyone wears earphones. The cast-iron stumps of a forgotten arcade march down Market Street to the Pacific Ocean. It's not the Grand Canal but it will have to do.

There was no Walkman in Venice of America, maybe no sensimilla in old Venezia. Things change. Black dudes with good definition didn't roll by with slim blondes on flourescent polyurethane wheels when this palazzo took shape. So now they stream past as though its always been there, failing to notice a symmetry more than a little like early

An art gallery.
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by the uses of the
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Corb. Or was it Palladio? The artificial thickness of the three-eights inch stucco is silent. The doors are always closed.

Beyond, in the passage, murky light filters in from a glass-block aperture. In the diminishing perspective, a visitor can just see a barred portal, make out various niches. To the right, a steel staircase for the resident butts up to a hole in the wall above. Light might stream down. Then, through twin alcoves, a sliver of sunlight cants across a wall. Subterranean echoes swirl from a broad, high room. Like a tomb.

It is possible by now to imagine that this place is below the ground. It is time to put away memories of the surface. Of the inevitable discotheques and motels. Neat squares and rectangles, draped muslin, great sheets of figured paper line the walls. The single opening frames the visitor. Notes his presence. The footsteps recede.

Then the cold steel rail of a staircase leans upward. Again to a hole in the wall. Again for the resident.

Bare metal gleams through worn paint. Above, a luminous antechamber grids the space as the visitor ascends.

Overhead, intersecting jet streams fade across a sky criss-crossed by kites and clouds. A perforated wall beats a crusty rhythm around the edge. Windows like slits and squares glint down. One expects a green tinge from ancient algae, a ghost metaphor from Euclid, a star-map—putti at the very least.

The sound of bongos on the beach seeps over the rim. It's 1981. The Madrigal is no longer in fashion.

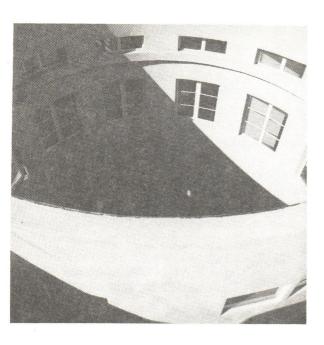
Even if one steps over the ribbon of water to the gray marble disc at the center, the bongos do not similarly evolve. The sudden Platonic alignment of the solar plexus with some celestial axis fails to rend

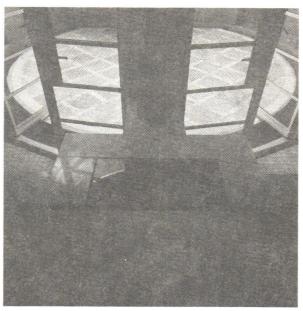
reality. There is no music of the spheres. No Romeo climbs to the tiny porch which interrupts the perfect radius.

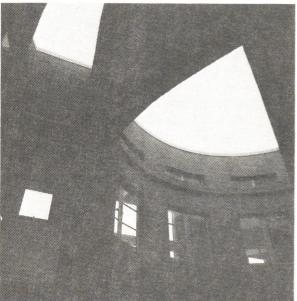
The elipse of the sun's shadow crawls around the circumference. Two feet per hour at solstice. Less than an inch as one mounts the jigsaw steps to the little porch, wondering if there is any need to say anything. Wondering if an elegy is required. Staring at the gridded gray surface below, veined and mottled like a mysterious planet, and understanding at the same time that its been cut and fitted by ordinary labor. As it has for millenia.

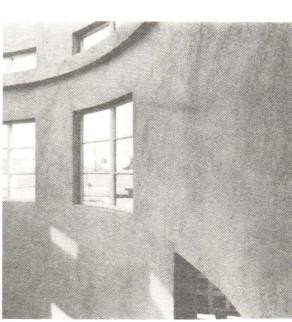
A presumptuous resident might feed on the contrast. Might ogle that round blue cookie like a kid in a commercial, looking for the label, never realizing its been there all the time.

That the clouds and the kites and the stars are enough.

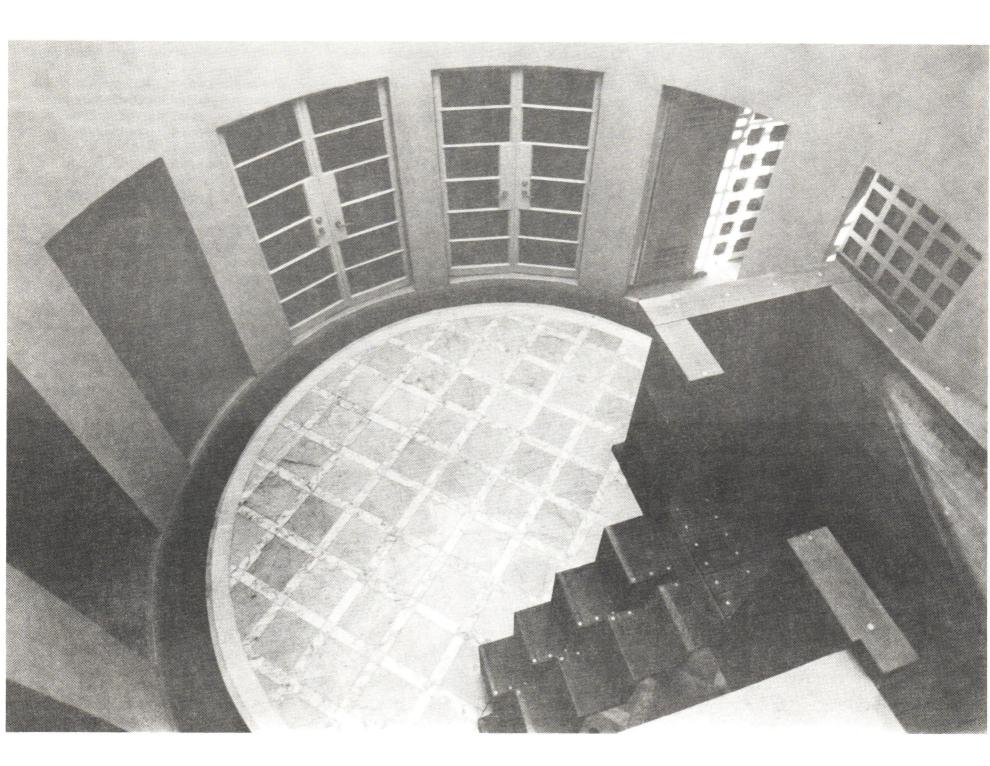


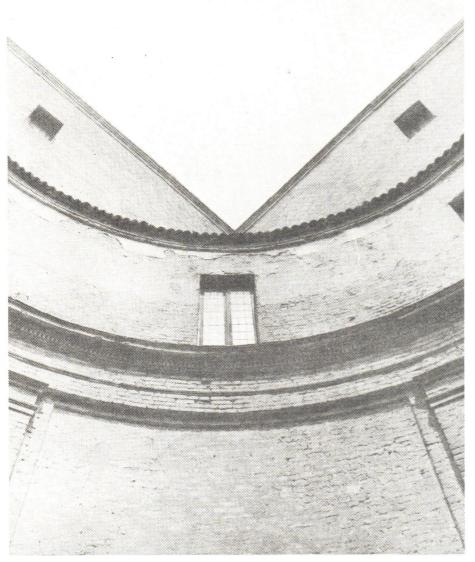




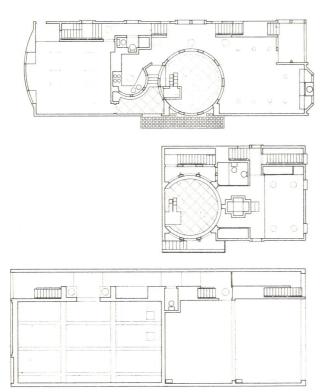


A presumptuous resident might feed on the contrast.
Might ogle that round blue cookie like a kid in a commercial, looking for the label, never realizing its been there all the time.





Mantegna's house, Mantua, late 15th century.



#### by Andrew Batey

We've chosen the Gagosian Gallery in Venice by Craig Hodgetts and Robert Mangurian (Studio Works) as the Building of the Quarter because it is simply one of the best buildings to be built in the last few years, and has been published (often1) in an abbreviated and unfinished state. In an era of confusion and proliferation of styles and theories, a consistant, progressive, appropriate, artful, intelligent and romantic piece of architecture is hard to come by — some of these things have been drawn, but few built. This is a building without jokes, without rhetoric, without hype, but not without precedent. The Architects' statements speak of a sister Palazzo in Venice, but the real sister — or better, Mother, is the painter Mantegna's house in Mantua.

Mantegna's house, possibly by him and/or Alberti, and most probably designed and built by Luca Fancelli, the Superintendant of Building for the Gonzaga, the patrons of Mantua, is an internalized Villa Rotunda. It is a building with a whacking great hole in the middle of it. The Mantegna house functioned as a dwelling and storage house for works of art, much like a contemporary studio and gallery and therefore quite similar to the Gagosian functions. The 15th Century saw Francesco di Giorgio designing similar Ideal Villas to the centralized negative rotunda, but since then this plan type has been little used. Charles V's Palace Yard in Granada, and the Kampmann and Rafn Copenhagen Police Station of 1918 are good examples of this planimetric typology, as are Johanson's Stockholm Wine & Spirit Central House of 1923, and the Public Pension Building of 1932 by Lewerentz. Recently James Stirling has turned to the internal rotunda in his German Museums, notably the Staatsgalerie in Stuttgart, the Wallraf Richartz in Cologne, and the Northrine — Westphalia in Dusseldorf. The sobre classical sensibility of the Scandinavian work mentioned is what Dimitri Porphyrios calls Scandinavian Doricism. It is a merging of Vernacular straightforward construction and Classicist stereometry, and it seems to aptly describe the Hodgetts and Mangurian building.<sup>2</sup>

The gap between drawing and construction is widening. The disappointment with the actual

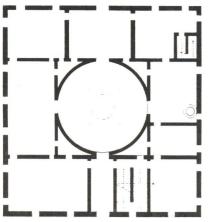
product is all the greater when we have been so tantalized and seduced by wonderful drawings. Moss, Kupper, Gordon-Smith, Taft, Graves all come to mind. One of the major achievements of the Gagosian house, as well as the Columbus Southside Settlement by the same Architects, is that the execution is so meticulous and consistent. The built form outperforms the expectation of the drawings and models. There is somewhat a sense of crudity in the detailing, but this is intended, much like Frank Gehry's deliberate slovenliness. Like Gehry, it is a confident and masterful knowledge of construction in Southern California in the 1980's and is exactly appropriate.

The allusions to antiquity are made in the fabric not the form, and one hopes that this might be the antidote to reckless use of representation in contemporary architecture. Here representation is implicit not explicit. The fortress-like blank street facade reminds one of the silent Italian City Palazzos, always opposed to welcome, and here reinforced by trickery, as one set of entry doors is false. Everything at this public face reinforces shutting out, from the plinth formed of patterned steel to the stucco tabula-rasa which dominates street elevation, and the balcony balusters of chain link, the new California street-tough vernacular. The back side, or alley elevation is a sort-of funky, Charles Moorish composition which is much less successful. The designers have offered a series of sketches to explain the process, but what ever led to the assumptions in the beginning remains a mystery, and this inexplicable lapse is happily on the alley.

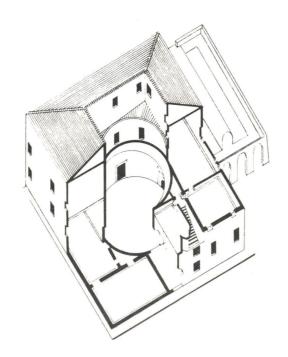
The interiors are cool and relaxed, devoid of decoration and thus, cliche. Gagosian himself inhabits the space in a laid-back, throwaway fashion, leaning pictures against the wall instead of hanging them about and discarding clothing and shoes around the bedroom as if only a temporary dweller. It remains pristine and arty, which is probably what the Architects had in mind.

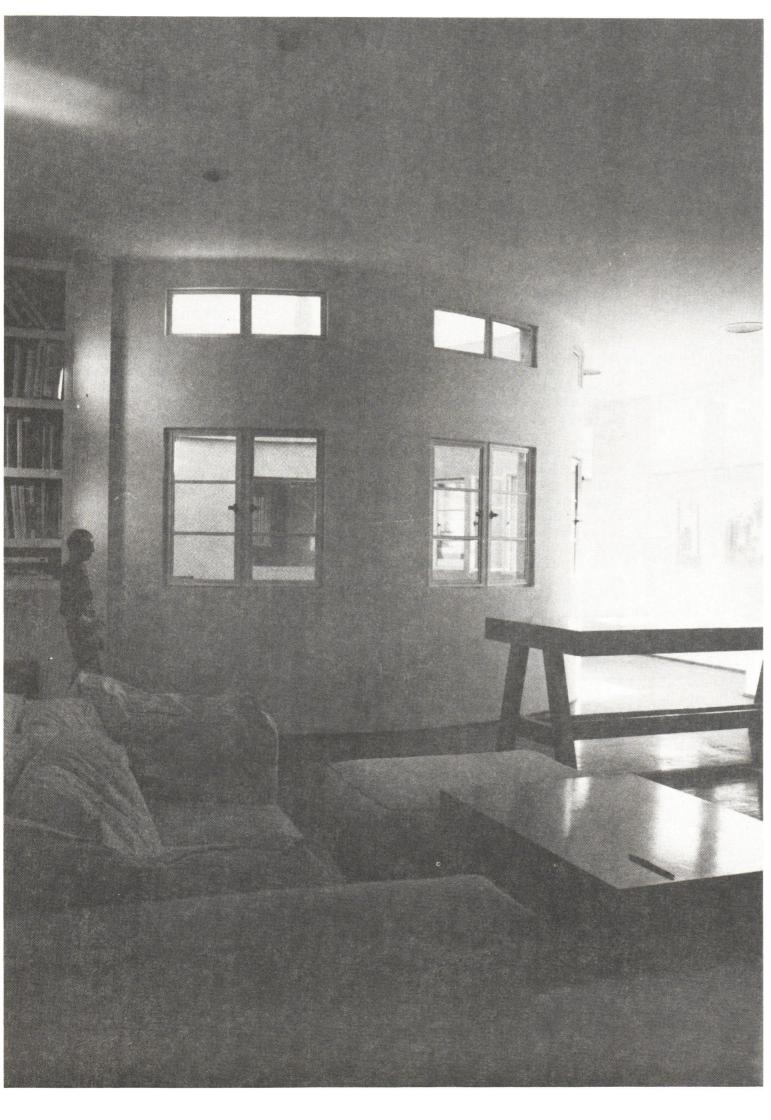
#### NOTES

Progressive Architecture, Feb., 1981, p. 86; GA Houses 9, 1981, p. 136; House & Garden, Feb., 1982, p. 131.
 Lotus 16, Sept., 1977, Dimitri Porphyrios, Reversible Faces, p. 35-41.

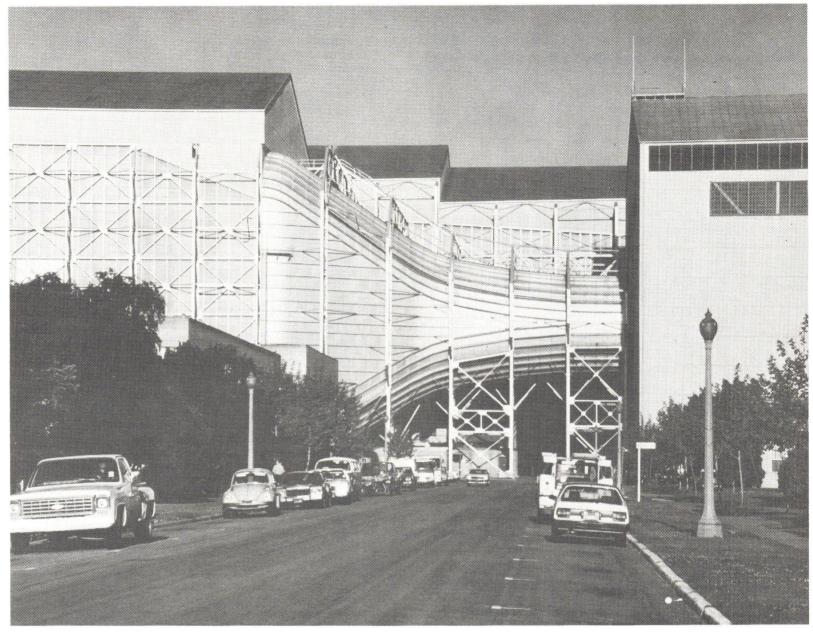


**Above:** Plan of Mantegna's house. **Right:** Axonometric of Mantegna's house.





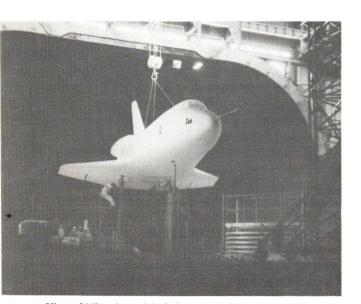
This is a building without jokes, without rhetoric, without hype, but not without precedent.



East view of 12 foot pressure tunnel.

# Housing the Wind

by Marc M. Cohen



View of 1/3 scale model of space shuttle being mounted on fairings in the  $40 \times 80$  foot test section. Note open overhead doors. 1975.

Framed in a double lattice of steel, coated silver with aluminum paint, the wind tunnel glints from any angle. Towering more than 160 feet above the flat baylands and tidal estuaries of south San Francisco Bay, from the distance it appears to be a barn with a triple peaked roof. A closer view reveals the walls to be a glistening veil of steel struts enclosing a grey envelope. Early morning commuters on nearby highway U.S. 101 see the exoskeleton catch the sun's low rays in a rosy glow. The sunrise reveals the entrance nozzle to the test section as a funnel turned on its side, bound in a pleated steel corset and forty feet high at its narrow end.

This structure is the "40 by 80 Foot" Wind Tunnel at the N.A.S.A. Ames Research Center in Mountain View, California. The 40 × 80 is one of about eighteen wind tunnel configurations at Ames. A wind tunnel is an aerodynamic test facility where aircraft and aerodynamic models are tested by blowing a stream of air around the models at various velocities. More than fifty percent of the aircraft flying today in the United States were tested at Ames during research and development.

The wind tunnel is a special building type, free of most conventional constraints of architecture; it is designed neither for speculation nor for profit, neither for prestige nor for monumentality. The design criteria are purely functional: aerodynamic testing capability is the primary concern. Support functions such as control rooms, offices and workshops have secondary importance. Design of the building type accommodates future modifications to adapt to new tasks. A wind tunnel is never finished. Nonetheless, wind tunnels are provocative and fascinating forms which call into question the notion that buildings designed to meet purely functional criteria have no positive visual or aesthetic value.

The actual design of wind tunnels is carried out by large and diverse design teams combining many engineering and architectural disciplines. The design team leaders are NASA-Ames employees who must produce facilities that will meet stringent research requirements, which has led to an unusually close cooperation between designers, operators, and users of the wind tunnels. Ideas are exchanged

repeatedly between groups, with dozens of options and alternatives examined for each problem. Through this system of iteration, design solutions evolve that are more sophisticated and unified than the initial rudimentary ideas of the individual parties. This teamwork contributes to producing facilities with a high degree of versatility, reliability, and singularity.

#### **Ames Research Center**

Ames was founded at a critical moment in history. Ground was broken in December 1939, two months after the invasion of Poland. At that time the Germans led the world in aerodynamic research; by comparison, facilities in the United States were meager. The site in Mountain View was selected for a new N.A.C.A. (NASA's predecessor) research center because of the temperate climate and excellent flying conditions. Ames is adjacent to Moffett Naval Air Station and uses its flight line for experimental and research aircraft. The founding of Ames represents a transition from "seat of your pants" flight testing to a more rigorous approach to flight testing and aeronautical research. A dedication plaque at Ames bears the signatures of Orville Wright and Charles Lindburgh.

The early staff at Ames labored with an urgent sense of purpose. Before the attack on Pearl Harbor, two 7 × 10 Foot Wind Tunnels were completed and in operation. During the 1940s, several additional wind tunnels were completed: a 40 × 80 Full Scale Wind Tunnel, a 12 Foot Pressure Wind Tunnel, and a 6 × 6 Foot Supersonic Wind Tunnel. Two aircraft hangars and numerous support and laboratory buildings also

were erected during this period.

Today, Ames is one of a dozen field centers operated by NASA. Areas of research at Ames now include astronautics, space science, gas dynamics, polymer chemistry, life sciences, biomedicine, extraterrestrial biology and aeronautical human factors. Despite this diversification, aeronautical research remains the dominant program at Ames, conducted not only in the wind tunnels but with a variety of flight simulators, experimental aircraft and by computer simulation. However, wind tunnels remain the dominant method of aeronautical research and architectural feature at Ames.

#### The Purpose of Wind Tunnels

Wind tunnels are used to test aircraft and aerodynamic structures as scale or full-size models. Various wind tunnels perform tests at different velocities and pressures and special capabilities. Characteristically, wind tunnels are named by the dimensions of their test sections (40 feet high by 80 feet wide, for example), and are further designated by velocity. Subsonic tunnels (less than Mach 1, the speed of sound) are used for testing take-off and landing for all aircraft and for all rotorcraft maneuvers. Transonic wind tunnels are used to study the phenomenon of breaking the sound barrier. Supersonic tunnels (Mach 1 to 5) are used to study flight at greater than the speed of sound, particularly for high performance jet aircraft. Hypersonic tunnels (Mach 5 and above) are used to simulate and study re-entry of spacecraft into the atmosphere with associated thermal protection problems.

#### Wind Tunnel as Building Type

The subsonic wind tunnels were the first at Ames, establishing a prototype that has been repeated with minor variations for most of the subsequent tunnels. This prototype consists of six basic components: office block, test chamber, test section with data acquisition system, air flow channel (the "wind tunnel" itself) drive system, and auxiliary systems. The relations between these components vary according to the specialization of each tunnel.

In front of most tunnels stands a small office building, usually of heavy concrete poured in place. The office blocks are commonly two stories high as are most office and laboratory buildings at Ames, and are oriented to the street in front.

Behind the office block stands the test chamber building, a high bay of structural steel sheathed in corrugated transite or steel panels with metal factory sash windows. The test chamber shelters a wide variety of functions: the test section, balance frame and scales, data acquisition system, control room, computer rooms, model preparation areas and technicians' shops. An overhead bridge crane lifts models into place in the test section, and stairs and sometimes elevators give access to the various floor levels in the test chamber. A curious separation of vertical movement systems occurs in most tunnels; models are lifted up in front and over the top of the test section while people first pass under the test section and then up the stairs or elevators in back.

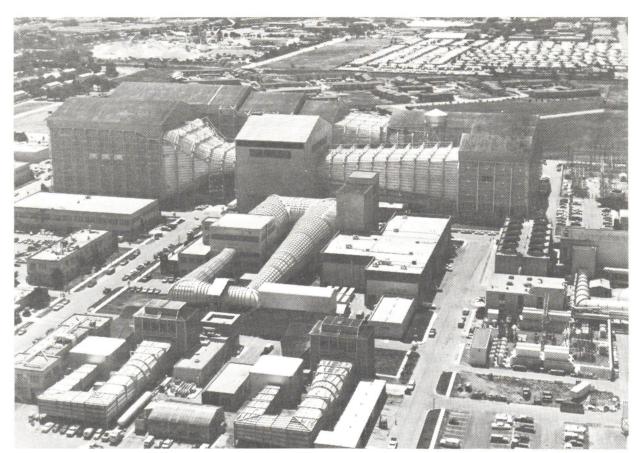
The actual testing of aircraft models occurs in the *test section*. The models are lifted into the test section through large doors that open either at the top or the side. The model mounts onto a support structure

which connects to the balance and scales. Air blows through the test section, inducing forces and stresses on the model which the scales measure. Other forces may be induced by propulsion systems in the models. Photographic, video, laser, acoustical, and strain gauge methods can record a wide range of additional aerodynamic data.

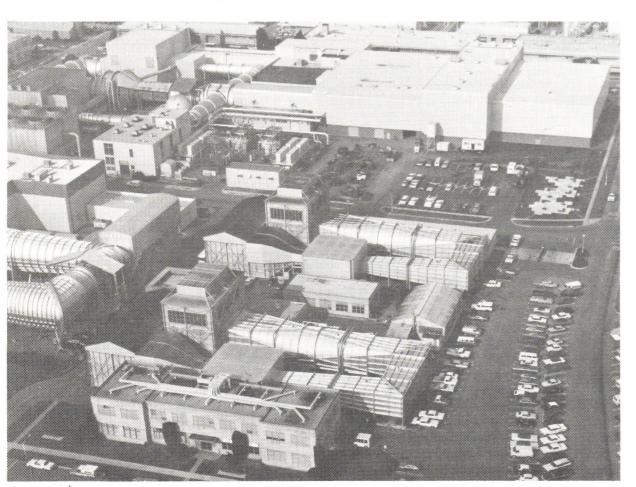
The "wind tunnel" directs the air flow through the test section. This air flow channel is designed from the inside out to create a smooth aerodynamic surface. Starting from the drive section, the air flows by convention counterclockwise (looking down the loop) in subsonic tunnels. The drive system imparts a small degree of turbulance into the air which is attenuated by distance of flow, laminar turning vanes at the corners, screen filters (in some tunnels), and finally, a large settling chamber. Then the air passes through the entrance contraction nozzle where it accelerates into the test section. which occupies only a small portion of the wind tunnel loop. After the air enters the long, outward tapering diffuser nozzle, which helps draw it smoothly through with a venturi effect, the air passes through more turning vanes back around to the drive section, to be driven again through

The *drive system* consists of one or more fans or compressors powered by electric motors. This equipment occurs in a diversity of configurations but the basic purpose is to push and pull the air

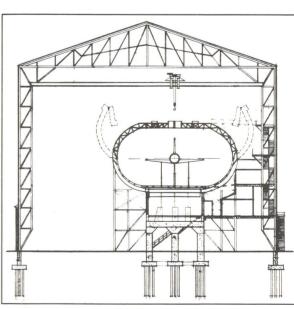
Wind tunnels are provocative and fascinating forms which call into question the notion that buildings designed to meet purely functional criteria have no positive visual or aesthetic value.



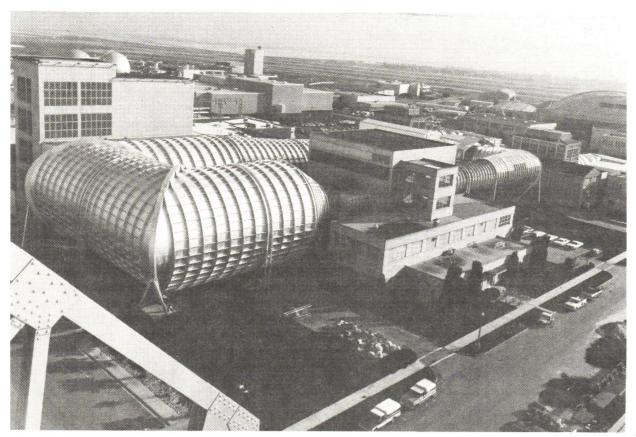
Aerial view of four early wind tunnel. 1977. Foreground: two  $7 \times 10$  foot subsonic tunnels. Middle: 14 foot transonic tunnel. Back:  $40 \times 80$  foot subsonic wind tunnel.



South aerial view of the two  $7 \times 10$  foot subsonic wind tunnels with office blocks in front, smooth steel plate test chambers, entrance nozzles, cooling tower/drive sections. To left, note drive section of the 14 foot transonic wind tunnel. 1977.



Section through housing and test chamber



South-West view of 14 foot transonic tunnel from top of 40 × 80 entrance nozzle. 1976.

through the wind tunnel loop. The drive system is supported by a massive concrete or steel structure that typically is engineered to a 400% factor of safety.

Auxiliary systems congregate behind, to the side, or underneath the wind tunnel loop. These systems include electrical transformers, motor generator sets and other switchgear to serve the drive system motors. Some tunnels have compressors for pressurizing the tunnel and associated controls. Others have pumps, heat exchangers and cooling towers to cool the circulating air.

#### Wind Tunnel Case Studies

Two case studies of subsonic wind tunnels will illustrate some salient points about wind tunnel design and operation.

#### 7 × 10 Foot Wind Tunnels

As the first tunnels constructed at Ames, the  $7 \times$ 10s provided the prototype as described above with one difference: the test chamber as a pressure vessel. When a wind tunnel runs, a pressure differential is created between the interior of the test section and the outside atmosphere. To handle this difference, the scales and balance frame are enclosed in a pressure vessel which is maintained at the same air pressure as the test section where the air flow forces are measured. The  $7 \times 10$ s have the entire test chamber building sealed as a pressure vessel with a skin of half-inch steel plate, continuously welded at all joints. The actual pressure inside is about 1.2 to 1.4 pounds per square inch less than the 15 psi atmosphere pressure at sea level outside. One psi equals 144 pounds per square foot, so the load acting inward on the walls and roof of the test chamber approaches 200 psf. People enter the test chamber through an air lock, which during

tunnel operation takes several minutes. The great advantage of this pressure vessel design is that the tunnel can be run with the test section in "open throat mode," conveniently allowing researchers to enter while a test is in progress. But it proved unnecessary and impractical to accommodate all the workshop, storage, and staging areas within the pressure vessel. In all subsequent test chambers at Ames, only the test section and balance house (and in supersonic tunnels in plenum) are pressurized, a small portion of the total volume. A design is in progress to expand the  $7 \times 10~\text{\#1}$  test chamber to accommodate a larger control room.

#### 40 × 80 Foot Wind Tunnel

The  $40 \times 80$  is famous for its capacity to test full scale aircraft under low speed conditions similar to landing and take-off. The data acquisition scale system plays an essential role in these tests. In the  $40 \times 80$  test section, the floor contains a circular turntable which rides on the balance frame. Three support fairings rise from the turntable and balance frame, two of which adjust manually and one that adjusts by remote control, while a test is in progress. The wings of an aircraft model usually are mounted on the two manual fairings, and the nose or tail on the third fairing. With this nose or tail fairing, researchers can adjust the model vertically to various "angles of attack." Combined with 360° on the two manual strut fairings, and the nose or tail on the third strut fairing. With this nose or tail fairing, researchers can adjust the model vertically to various "angles of attack." Combined with 360° turntable rotation, researchers can put the model through a full series of simulated motions such as roll, pitch and yaw. Models in the  $40 \times 80$  often incorporate propulsion systems such as rotors, propellers or jet engines which can be powered by electricity, gasoline, jet fuel or compressed air.

Wind and propulsion forces acting on the model are translated through the fairings and balance frame to the scales. Current test standards demand a high order of accuracy in the six new digital scales: they can measure a load of twenty pounds acting on a total load of 200,000 pounds (the weight of the balance frame plus a 70,000 pound model). This accuracy of 1/10,000 surpasses most Mettler laboratory balances, and under special conditions 1/100,000 can be achieved.

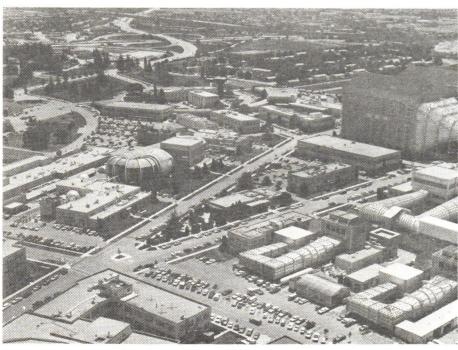
The  $40 \times 80$  Foot Wind Tunnel displays an astonishing variety of structural steel details. Perhaps the most visible element is the vertical truss system that supports the high exterior walls of the tunnel. These trusses resist the lateral forces against the sides of the tunnel and support the roof and wall framing. With no intermediate floors, there are no horizontal beams to provide lateral stiffness. Instead, this stiffness is provided by the truss configuration, where the wide flange column against the wall acts as the compression member and the continuous double angle braced out from the column acts as the tension member. Extensive diagonal cross bridging between the trusses creates the lattice-like appearance. This vertical truss system, completed in 1944, offers a comparison to the "gerberette" vertical truss system used at the Pompidou Center (Place Beaubourg) in Paris, designed by Richard Rodgers and completed in

At present, the  $40 \times 80$  is undergoing a major modification to add a second full scale test section 80 feet high by 120 feet wide (three times the area of the original test section) in a new "non-return" leg. The new leg will intersect the existing tunnel loop at the northwest corner in a complex joint dubbed "the golden triangle," where two sets of swivelling vertical louvers will channel the air flow in one of two operating modes. As these louvers replace former vertical trusses, they must incorporate the world's only rotating structural column/ trusses. The capitals and pedestals of these columns are hexagonal hinges that also house the electric swivel motors.

#### Wind Tunnels as Living Systems

As test requirements for wind tunnels arise, the facilities frequently are modified to provide new capabilities. No wind tunnel can ever be considered truly completed and rarely has one been retired. A major new project in the early planning stages is a new Aerodynamics Research Laboratory that will combine three small wind tunnels having supersonic, transonic and subsonic test sections sharing a common drive system. A water tunnel and laser laboratory will also be included. This laboratory will be the first in which laser velocimetry is employed as the principal method of data acquisition. At present the conceptual design is undergoing the review cycle by planners, designers, engineers, users, operators, and technicians; it will become another unique facility at Ames Research Center.

Marc M. Cohen is an architect and works for N.A.S.A. at the Ames Research Center in Mountainview, California.



South-East aerial view of Ames Research Center 12 foot pressure tunnel at center. 1977.



North-West view of early phase of construction of  $80 \times 120$  foot non-return leg concrete has been poured for the entrance apron and new balance house (right).

# **Bodypictures**



#### bodytechture:

anatomy of design, architectonics of flesh; arms of steel, graceful pillars; from the pinnacle of the head to the solid foundation piles of the toes—a feat of engineering; from the cerebral memories of the attic to the dark scatology of the basement—an organism: the bedrooms of desire, the aesophagal kitchen, the belly-living room, bloated by the gluttony of consumption; well-built; stacked; skeletal support; bridge work; marble breasts; iron lung; body building, Schwarzenegger (Austrian influence).

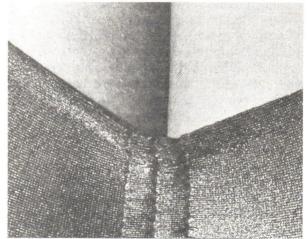
#### bodytexture:

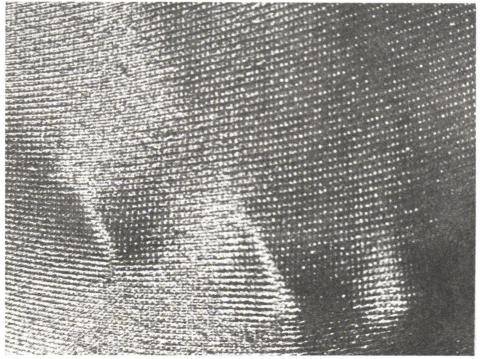
fits like a glove; jump out of your skin; skinned alive; removes dead skin; surface as carapace; clothing as defense: a suit of armor, a bullet proof vest, a three piece tweed; porousness and permeability; oozing in and out, a building of window screen to exist and enter; sieve; sifter; holds together and lets dissolve; surface texture; superficiality; ornamentation; post-modernism; pre-modernism; baroque splendor (Austrian influence).

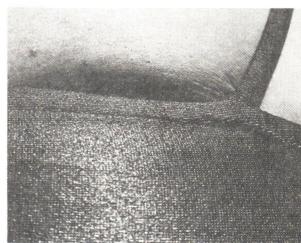
#### bodytext:

body of the text; unblemished prose; the juicy parts; reader as carnivore; words for body functions; words for body parts; from the handbook of bodygrammar: heart flutters-incorrect punctuation; amputation-incomplete sentence; premature aging-wrong tense; syphilis-misplaced participle; body as the urtext; tatoos; palmistry; a sound text in a sound body (Californian influence).

— Doris Berman







Doris Boris Berman is an Austrian photographer. Her works have been widely exhibited in galleries in San Francisco, Seattle, New York, Boston, Berlin and Salzburg.



# ALBERTO SARTORIS

#### INTERVIEW

No other mode of architectural representation has incorporated the ideology and perception of the modern era as vigorously emblematically as the axonometric drawing. Alberto Satoris could be called the master of the Axonometric, despite his relatively minor place in standing in the annals of traditional architectural history.

Typically, Kenneth Frampton chose Sartoris's axonometric drawing of the church of Notre Dame du Phare as the cover illustration for his recent book Modern Architecture: A Critical History, even though he fails to mention Sartoris in his text. The axonometric became the symbol of Modernism, the rhetorical reality of a new ideology. While Post-Modernism wallows in facades and perspectives to assume a reality (a reality with neither ideology nor future), Modernism relied on axonometry as a symbol for scientific consciousness (K. Wachsmann), a rational-social ideology (P. Hilbersheimer) and new artistic compositional values (T. con Doesburg). Axonometry recorded a process of designing and of thinking in space, in three dimensions. This Spacearchitecture (Raumarchitectur) assumes new dimensions as intellectual process for the elite as well as for any modern man. From layman to artist the representation seems to express space in the ultimate matchbox view. The abbreviated reality suspended objectively on the universal tabletop of social-cultural equality.

While cubism set the stage for the artistic proliferation of axonometry, de Chirico was shattering the window of Renaissance perspective. With a geometric stillness collapsed real space and created magic dimensions, Sartoris's constructions of imaginary space are alchemistic processes with corporeal scale, like dream windows into a real future.

No wonder that with so much lineage the axonometric has become an empty formula rather than a fitting process when the ideology, value and politics of architecture have changed. The death of the axonometric came about by overstimulation on an empty body, in the early seventies when five New York architects served as pallbearers for the ideological coffin of Modernism and slowly dropped the power of axonometry into the Graves of formalism.

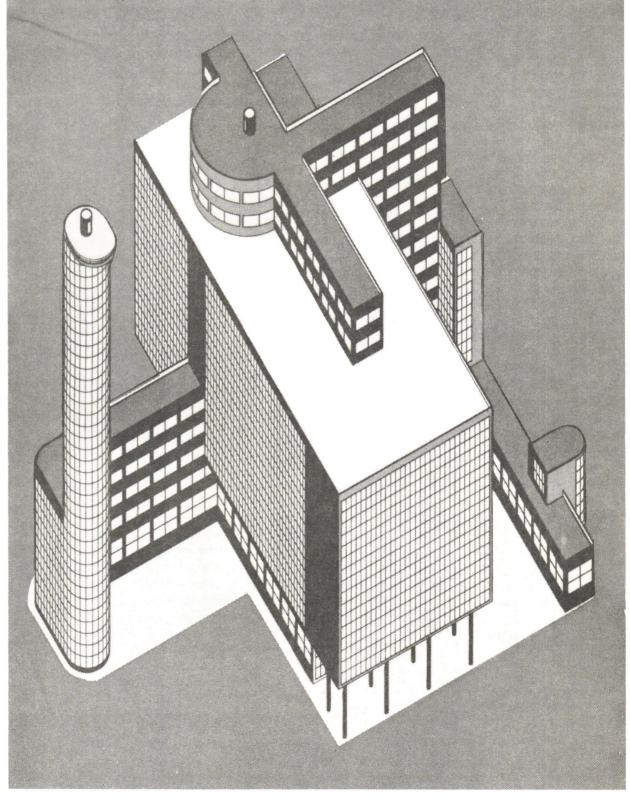
There are still some who draw axonometric; students, architects in the midwest (not Michael Graves anymore) and those with a commitment to the modern ideology (Steve Holl), new sobriety (Rem Koohlhaas) and primitive functionalism (Hodgetts/Mangurian). All look to Alberto Sartoris and admire the times where Form and Function attempted to join hands and heart for an unmourned future.

The following conversation with Alberto Sartoris took place in Stabio, Switzerland, on 28 July 1981. Participants included Carla Prina, Mario Botta, Steven Holl, and Paola Iaccuci.

**SH:** Have you seen the cover of Kenneth Frampton's book on modern architecture with your drawing on the cover?

AS: Yes, I have seen it.

SH: There is currently a split and an intensive



dialogue about theories of architecture, and this book is an important part of one side of the debate. Do you know about this conflict?

AS: Yes, I have heard of this Postmodernism. To me it seems to be a current, and nothing more. SH: Do you know Venturi?

AS: Yes, I met him at a lecture, the La Sarraz 50 year anniversary of CIAM. I was there, and Mercadal was there. We are the only members of the original CIAM left, and Mercadal is deaf!

PI: Did you speak with Venturi?

**As:** Yes. He said that he remembered my books. He said they were given by his teachers to learn about structure! (*laughing*) It was very crowded at the conference and difficult to speak with anyone. I do remember that Venturi's lecture gave me

indigestion. Venturi himself gave a nice lecture, but his wife gave a very belligerent one. We don't care about restricting architectural vocabulary; we are intransigent, but not intolerant. I am not impressed with a column that supports nothing. You can put these columns on the roof! Here it is obvious they support nothing. . .(laughing). . .I think they are better below the structure.

MB: There is an old story that everyone from CIAM made the meetings only because of Madam Mandrot: she first started conferences with musicians, but when she learned that architects were more lively, talking and drinking, she started to invite them instead. Is the story true that CIAM met only to visit Madam Mandrot?

AS: (laughing) No. . . . I remember taking part

in the very early CIAM meetings; one time I was the 'fiance' of Le Corbusier. . .(laughing). . .I slept with him in the same room! I am the only architect who has seen Le Corbusier's backside—all the others look only at his face!

**SH:** We have the catalogue of you work with an essay by Bruno Reichlin. My friend William Stout owns a bookstore in San Francisco, and he sells many of these fine little catalogues.

AS: But there is a much larger one! They made it for my exhibit in Lisbon, Portugal. I will send it to you. This exhibit is very large, it fills several rooms. I made a small show for Antonia Jannone last year. While looking for one drawing I found three hundred! I have made seven hundred projects and have constructed less than fifty. In only two or three of them was I allowed to do what I wanted. Now, in my old age, I make more money from the work which never received commissions, by selling the drawings!

**SH:** Of your built work, which three projects most represent your ideas?

As: There is a villa. . . . a little villa. . . and the church. . . . the church was very difficult in the town when it was finished. The Bishop didn't want it. . . but I was supported by the townspeople: when it was finished, there was an article in the local paper which filled one entire page! The critic described it as a pig-house unfit for a church. He said I designed this building never having looked at a church. Some townspeople wrote him a letter saying that he wrote his article without having looked at the new church. . . and if he goes now to look at it he may never return!

Another critic wrote an article asking "Why do they give this church commission to a Greek?" (laughing): I wrote back, "I am not a Greek, nor even a Swiss; and you have made fifty-five grammatical errors in your article. I counted them!" SH: Have you seen the work of Leon Krier? AS: I saw some beautiful axonometric drawings in the gallery of Antonia Jannone in Milan. I did not have time to look at the relation of the plans. . . . SH: In America, some have said that construction and discussion of modern architecture is dead in Europe, and now it can go on only in new countries. MB: It is not true! It is just the reverse! We go on speaking and meeting.

**AS:** Botta has taken on architecture from where we left it. . . .

**MB:** I look again over your book *Encyclopedia of* New Architecture, and I see that there is not a single example chosen that is not correct.

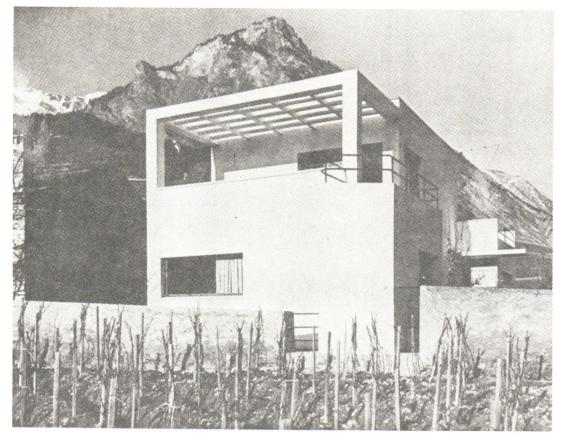
**AS:** Things are missing, but it was not possible to know them at the time.

**PI:** Did you have communication with the other architects for the book?

**AS:** They had very few good photographs. The book was very difficult to put together.

SH: When you were a very young architect, did you know of the work of Louis Sullivan?

AS: I never met him, but yet, I knew his work. We are continuing on. . .we proposed nothing new as much as the continuation of an essential way. You can't go back. It is the history of architecture we are talking about. . .an endless, timeless thing. . .



#### An Additional Note from Alberto Sartoris

The fact that I do not understand English well has led to a misunderstanding which I would like to correct.

During our conversation, I wanted to say of Venturi that his affirmations were ponderous but not undigested.

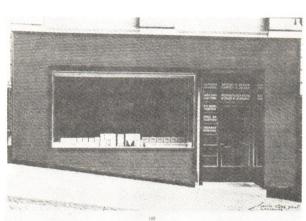
Even though I find myself on the other side of the barricade, I would be most unhappy to be disrespectful to someone who has every right to express himself as he chooses, just as I have the right to combat his views according to my principles.

To summarize my position, I will repeat what I think of post-modernism.

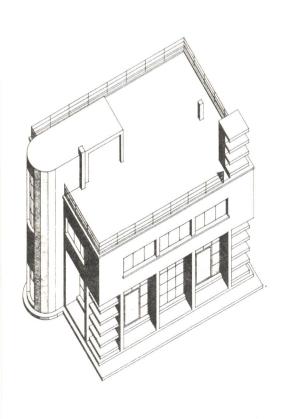
In general, post-modernism attempts an inorganic recovery of architectural schemes from a time which cannot return.

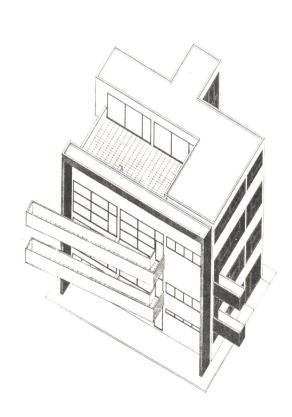
Post-modernism is not committed to the informing principle of architecture, which is that of creation.

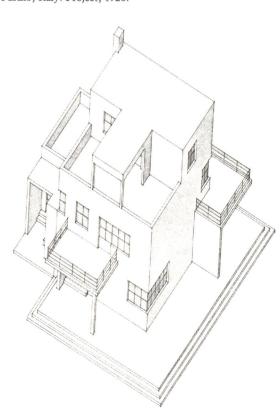
Post-modernism is a return without imagination, a squalid rhetoric, a conventionalism that mirrors a purely academic approach to culture.

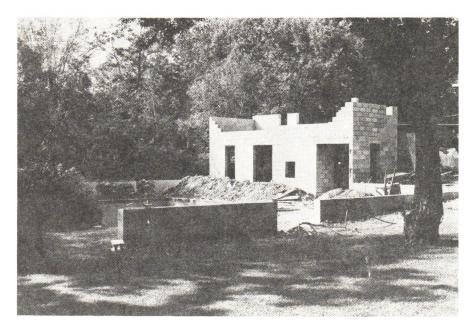


Left: Notre Dame du Phare Church and religious center, 1931.
Top right: The House of Morand Pasteur at Saillon, Valais,
Switzerland. Original state. View from the east, 1935-36. Right:
Shop window of the Selhofer bookstore in Lausanne, Switzerland,
1934. Below left: "la mia casa ideale," House of the Architect.
Project, 1942. Below center: Pavilion of Wood and Iron.
Reworking of the completed project, Turin, 1928. Below right:
House type for a family with "many children" on the outskirts of Turino, Italy. Project, 1928.





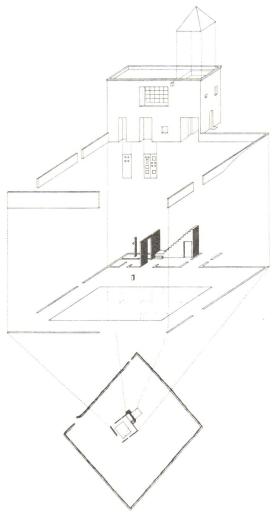




# Poolhouse

During construction, July 1981.

#### PROJECTS



#### Sculpture Studio/Bath House

by Steven Holl

A sculpture studio and bath house sited next to an existing swimming pool. The bath house provides both a changing and refreshment area near the pool. The sculpture studio is situated adjacent to the bath house to enable it to function occasionally as a guest room.

The site in Scarsdale, New York has a history which dates from the transference of property rights by King George in the early 18th century. The land is marked by stone walls which were used to define its boundaries at the time of its original transference.

New walls enclosing the existing pool form a courtyard recalling the ancient stone wall boundary around the site. On the north wall of the new court, the pool house and sculpture studio are combined into one pavilion. The sculpture studio on the upper level receives light from two major windows and a pyramid skylight which also marks the major axes on the site. The North-South axis defines the progression from the house through a portal emphasizing arrival in the courtyard. The East-West axis passes transversely through the pavilion at grade aligning a sculpture beneath a red maple on the east with a hammock stretched between two pines on the west.

The flat wall of the facade and the floor of the courtyard exchange properties. The rectangular opening of the pool reflects the facade like a huge

window. The door and window openings are in a descending harmonic ratio to the overall court. This exchange is underscored by a green marble pedestal on the courtyard floor and a gargoyle — like marble beam projecting from the facade.

There are no columns, no pediments, no arches in this essentially wall architecture. . .and yet, there is a direct relationship to history.

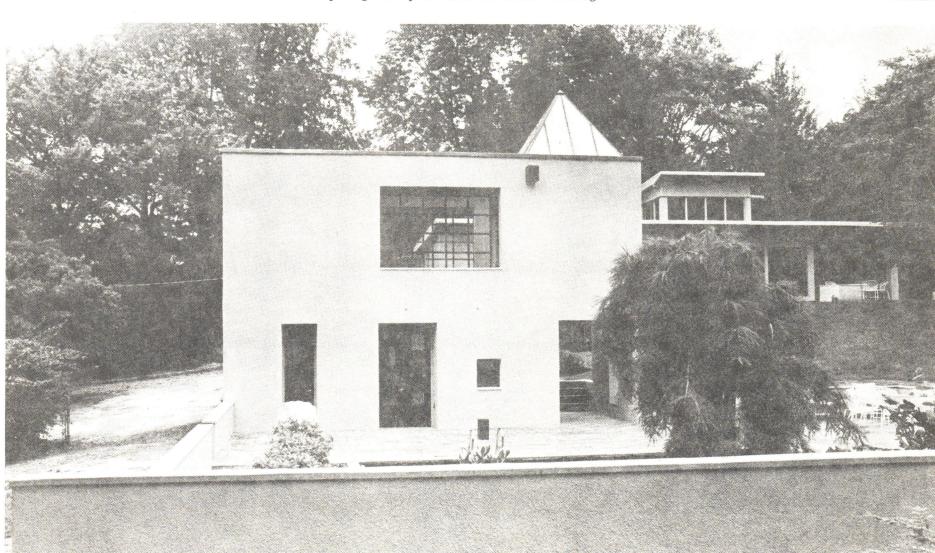
There are three types of light in the sculpture studio. A large north light, a south light for winter (equipped with a summer shade at the upper loggia), and a skylight in translucent white glass providing even, diffused light. A round window in the west and north walls of the pavilion align with the setting sun on the spring equinox.

Construction is of insulation-filled concrete block with plaster interiors and luminous grey stucco exteriors. Red integral color concrete pavers in the courtyard provide contrast with the dark green marble of the details and countertops. The floor of the bath house is flesh color marble. The white ceramic tile of the shower room is broken by a green marble water column with brass shower fixtures. Glass openings in the lower doors have sandblasted drawings carved in them in relation to the history of the site and the architectonic ideas.

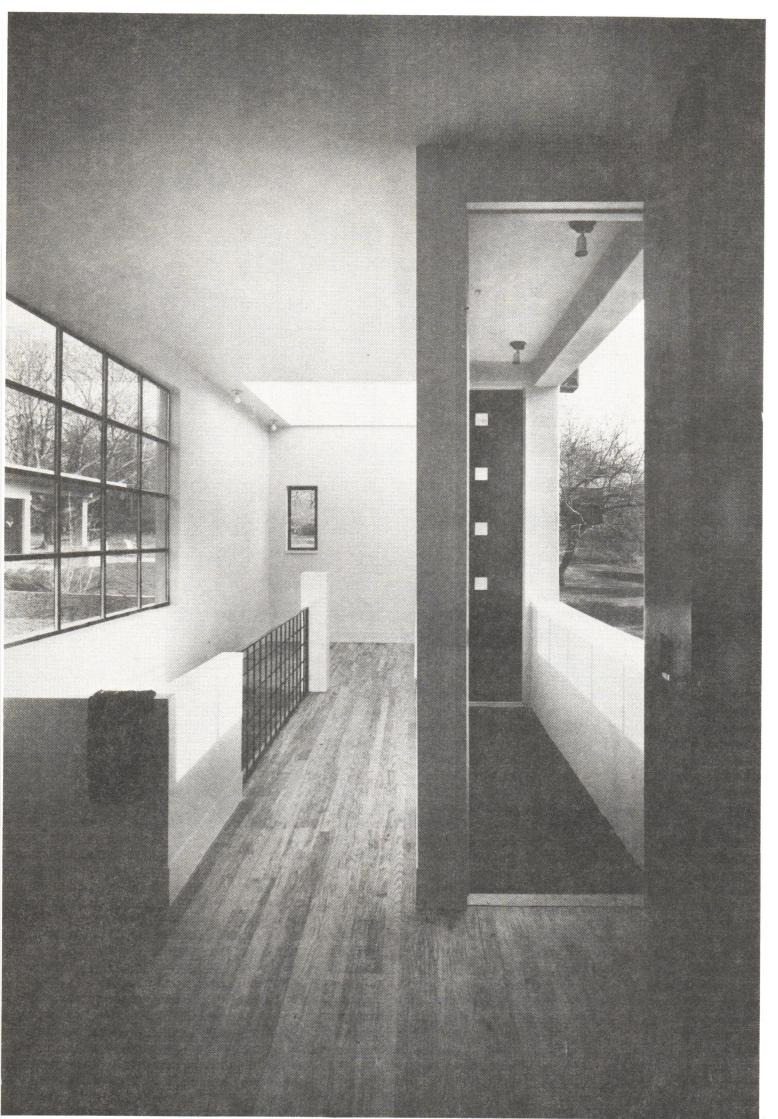
This project sustains a memory of the past without falling into the oblivion of copying its fragments.

The motto of this project — "There is no wall like an idea."

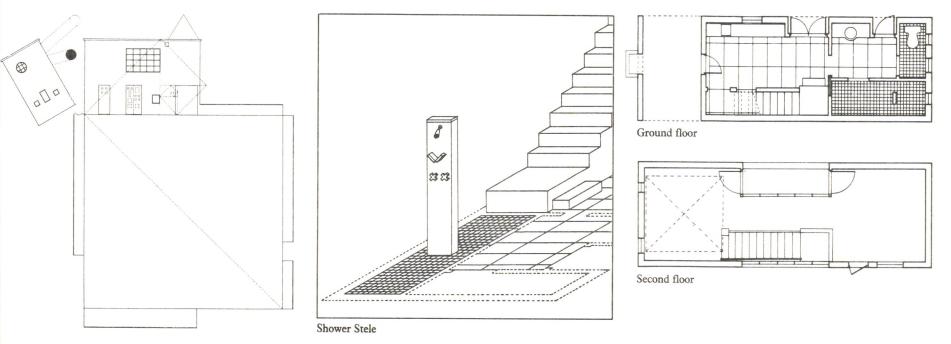
-Emerson

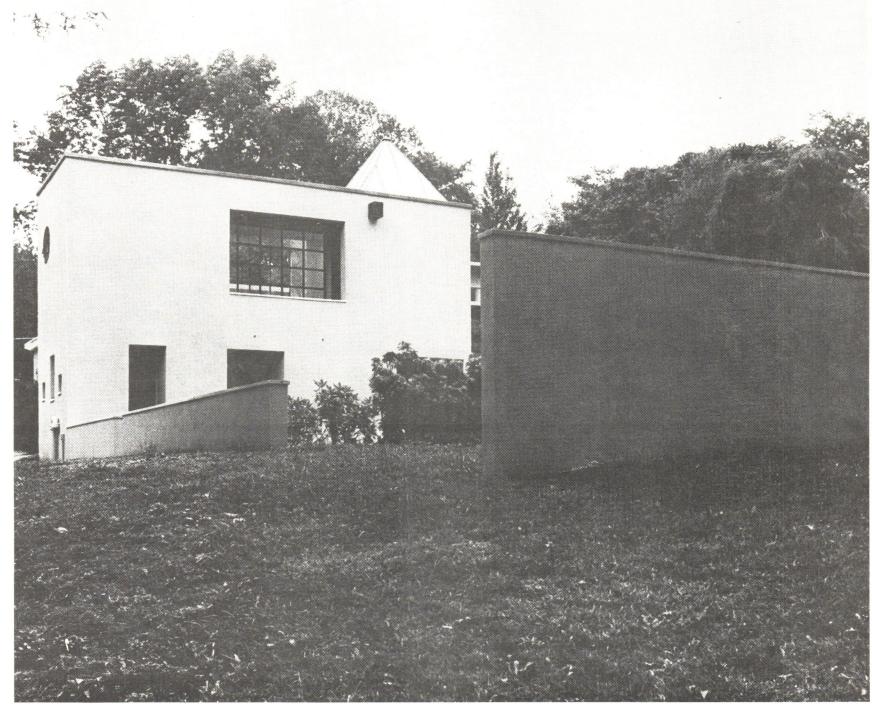


Sculpture Studio/Bath House, Scarsdale, N.Y., 1981.

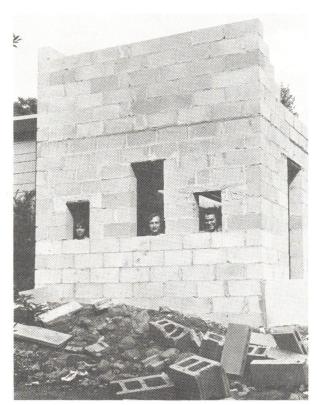


Interior view. Photo by Becket Logan.





Poolhouse from the southwest.



Poolhouse during construction: M. Janson, S. Holl, and J. Rosen.

#### Walls Within Walls

by Paola Iacucci

"Skies the gray of crystal. A bizarre design of bridges... and those figures recurring in other lighted circuits of the canal, but all so long and light that the banks, laden with domes, sink and shrink...

The water is gray and blue, wide as an arm of the sea. A white ray falling from high in the sky destroys this comedy."

A. Rimbaud, Illuminations

The theme of the building is that of a wall which defines architecture within another wall; a close wall inside a precinct wall; a distant but present memory of the gridded stone walls which defined the site's 18th century farm plots. The entire structure of the pavilion has in itself the presence of its double. The reflection of the building is not only on an ideal plane, there is also the reflection of the pavilion in the square space of the pool at its horizontal plane. Typologically the pavilion is also a structure within its double; the double height cell which can be read on the longitudinal axes has its double in the facing of the rear facade, which derives from the superimposition of the two walls along the transversal axes, and in the facing of the two parallel glass openings. But there is also a sudden withdrawal of the building from this typological definition. The double height cell is plotted on a constructional axes, which is underlined by the translucent glass pyramid, and by the opening of a round glass window which aligns with a similar window on the axes of the spring equinox. Possibly this is a sign of the primary and ancient roots of Steven Holl's architecture, but it also offers a sudden possibility of escape from settled rules, as

the opening of a door which on the equinox axes seems to lead nowhere.

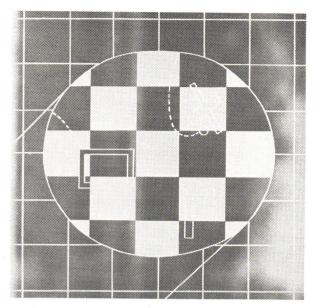
The double is also present in the glass openings which face each other and leave the transparency of the building, and also in the definition of its void space which project the outside inside and the inside outside. The idea of the double is also in the stairs, which provide a double partition of the inner space, horizontally and vertically; it is in the passage from the primitive stele in the ground floor, to the reflected light of the translucent glass pyramid. Not by chance, there are two doors which open on the upper covered space, and they mirror themselves through the square opening. But the definition which makes precise the reflection of the double is once again suddenly not attended.

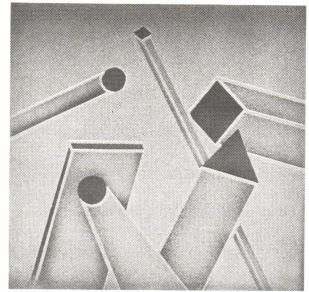
There are many entrances, and the sand blasted glass of the doors seem to develop a subtle tale over again the beginning and construction of architecture, the primary architectonic elements, the relation of the cube and the cylinder in a double possibility of construction, the construction of the golden section. Through these colorless glass drawings, the green of the water, the blue of the sky, and the red of the earth are magnified.

But the poetic is built with concrete weight, in a theme so difficult to define; the triple partition of the building, the concatenation of the void spaces and of the walls, which lead back to the most simple of references: the construction of architecture. It is still the story of architecture which, in some way, seems to rennovate itself in this building; it is among its old laws of dimensions, of proportions, of measure; in the reasons for its typological construction.

Paola Iacucci is a practicing architect in Milan, Italy.







Three details of sandblasted glass.



This project sustains a memory of the past without falling into the oblivion of copying its fragments.

Poolhouse in context. Photo by Jim Daddio.

From Bauhaus to Our House

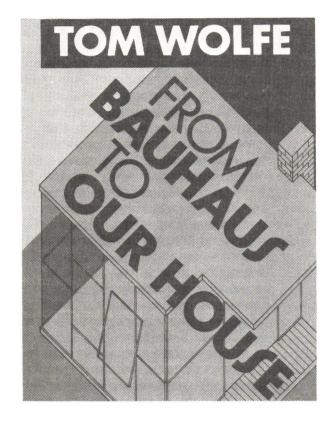
Guida di Roma Moderna dal 1870 ad oggi

Guida all'architettura moderna

The Grand Domestic Revolution

"Gideon's Ghost"

#### REVIEWS



# From Bauhaus to Our House Tom Wolfe

Harper's, 262, 1573 (June 1981): 33-54 and 1574 (July 1981): 40-59.

The Wolfe is at the door of architecture, and with a little huffing and puffing, he dares to blow the Haus down in "From Bauhaus to Our House." And a lot of wind is exactly what we get in this fast-paced, slick little jibe at the current state of architecture.

Indeed, the Wolfe may well wear Grandmother's bonnet, but he does not fool Little Red Riding Hood: Modernist buildings are not as impoverished as he thinks, and blow though he may, more have been constructed of brick than he might imagine. But debunking is a la mode. Rarely has it been so fashionable to belittle Those Who Take Themselves [and their work] Very Seriously. The exact corollary to the modishness is, of course, how very easy it all is. A few sorties through a survey or two, a rapid perusal of some of The Serious Statements, one might even have to take in a lecture or two, some professional meetings, plant smirk on mouth, adopt a lofty, contemptuous stance, spend a few days at the typewriter rewriting history so that it is Oh So Pretty, and so that the protagonists are spoiled children playing spoiled games—and viola! Harper's serializes it and a commercial press binds it, and you have "From Bauhaus to Our House." It is not only entertaining, it is profitable—and in this business, that is the bottom line.

Somewhere along the line, Tom Wolfe noticed that architecture and architects were making modest amounts of news, selling books and magazines, and keeping galleries, universities, and academies in business. Never one to miss capitalizing on such an opportunity, Wolfe set to work and brought forth this little text. Architects and architecture buffs raced out to buy their copies (two installments insure a larger audience not once but twice, hence

more lucrative). Many were indifferent as to how Wolfe presented them, as long as they were included. In a world where visibility is everything, a bad press is better than no press.

But what does Wolfe have to say? On the whole, what he fails to say is more significant. A look at just a few of Mr. Wolfe's observations discloses how this garish garment has been woven of half-truths and egregiously facile thought. Basically, Wolfe's gripe is that the major Modernist and post-Modernist architects do nothing but talk with one another, play their own little in games, concoct architectural and prose languages which have meaning only within a narrow circle, and that they build boring, self-referential buildings to which clients docilely submit. One gathers from the opening paragraphs that the latter most raises Wolfe's dander, for he cannot understand why clients are not as they were in the good old days, when they dictated to architectural underlings exactly how cities and buildings should look. His examples are Napoleon, Napoleon III, Palmerston, and Alice Gwynne Vanderbilt, and their structures: the Arc de Triomphe, the Madeleine, the Paris Opera, new Louvre, British Foreign Office, and a Fifth Avenue copy of the Chateau de Blois. Wolfe conveniently overlooks the fact that dictators, emperors, and old time monarchs had a range of discretionary activity a good deal wider than contemporary American statesmen and corporate executives have when it comes to building and appointing palaces, monuments, and the like. That dictators engage in the notorious and—by civilized standards at least—disagreeable practice of forbidding opposition, frequently on pain of death, and that they lived in luxury—opulent luxury—by virtue of the squalor in which the workmen who built their palaces lived: such details might damage the symmetry of Wolfe's indictment, so he simply does not mention them. As for Alice Gywnne Vanderbilt and her Chateau de Blois: once again, Wolfe conveniently fails to mention the architectural achievement of a modern-day plutocrat, the J. Paul Getty Museum in Los Angeles. An ancient Roman villa, the Villa Papyri, rather than a French chateau, but the same principle nonetheless: Getty found an architect to do his bidding, as did the Mellons with the National Gallery during the 1930s and a host of other patrons. Modern day apostles of pop such as Wolfe hate it when the likes of the Shah of Iran build extravagant palaces and live in unbelievable luxury, but they lap up the extravagances of the direct ancestors of such conspicuous consumers, as if history acts only to neutralize tyrannical and even insane behavior in the past.

From selective misinformation it is a small jump to selective distortion, and Wolfe negotiates that leap with admirable and practiced ease. The Modern Movement, Wolfe seems to say, was simply a style, and Post-Modernism is just Modernism in drag. I will not quarrel with the second of these two propositions here, but clearly the most attractive feature of these proposals is the simplicity: with one stroke we cross off politics, ideology, cost and ecological issues, to name only four troublesome issues, since as far as Wolfe is concerned, politics is the way architects lobby for clients and ideology is

something Europeans discuss—forget about cost and ecological issues.

One need not be an architect to know that since the early 20th century, the cost of metropolitan land has skyrocketed, a fact that accounts in part for both suburban sprawl and skyscraper cities. Entrepreneurs quickly realized that low-rises were far too costly for urban stores and apartments, so once elevators and the rest of the technology became available, the buildings grew taller. Architects confronted the problem of developing acceptable designs which both kept costs at a minimum and yet were suitable for the new heights buildings could now reach. At the same time, people flooded into the cities in unprecedented numbers, and the problem of housing—adequate and sanitary became acute. Throughout Europe, but especially in Holland, Germany, and Switzerland, architects responded to the situation by seeking ways to cut costs. Their proposals included the elimination of ornament, the minimization of wasted space, the standardization of the entire building process, and the use of less expensive materials and new technologies for construction.

Did architects sometimes get carried away by their own rhetoric and sometimes even seem to promise a New Utopia through architecture? Did they sometimes build bland, uninteresting buildings? While the answer to both questions is yes, Modernist architects were neither the first nor the last to so err, and even that they did so hardly seems to merit Wolfe's venomous attack. Were there mistakes in particular buildings, especially the low-cost housing projects in St. Louis and New Haven mentioned by Wolfe? Yes-but was there an improvement over the tenements of late 19th and early 20th century New York, or over the sharecroppers' cabins in the deep south? Did some identify the new buildings solely in terms of style, especially in America, approaching such questions as that of low-cost housing strictly as a formal problem to be resolved on the facade of a building -as Wolfe and Jencks do?

Wolfe's failure to acknowledge the presence of political and ideological issues in the architecture he discusses is all of a piece with his insistence that Modernism was not indigenous and therefore had no place in America. We have seen this xenophobic reaction to things European before, with its curious and unstable compound of inferiority complex and braggadocio. 1 That such an attitude has any place in architectural or cultural criticism seems dubious at best, but worse, Wolfe never explains why Modernism—in its political, ideological, or formal dimensions—does not belong in America. Since this is, he claims, his central point, it is a rather significant omission. It is not sufficient to list "errors" or to provide a litany of anecdotes about certain protagonists—whatever the problems of modern architecture, and there are many, Wolfe has missed them entirely. Worse, he presents the most trivial kind of ad hominem approach to historical and cultural analysis. And in his world, since everything that happens can be attributed to some Major Person (Great Man, hero or devil), the rest of us can quietly fold up our tents and return home, since the only meaningful actions are those of the

architects whom Wolfe mentions.

Which brings us to the more general question of why Wolfe wrote this book. Bracketing for a moment the fact that it will Make Money, let us remember that Wolfe styles himself as something of a cultural critic gunning for the elites of the world of art. He correctly identifies the pretensions, arrogance, and opportunism of certain modern artistic and intellectual elites. Since this is certainly not an unfamiliar pattern in elite groups, be they present or past, political, intellectual, artistic, or corporate, we must look elsewhere for the special insight which Wolfe has to offer.

Has he written an article uniquely accessible to non-specialists which clarifies the issues? A far better, more thoughtful and provocative text has already appeared: Richard Pommer's article in the *Art Journal*.<sup>2</sup>

Where, then, is Wolfe's special contribution? The lacunae multiply.

There IS nothing else.

Read it fifty times (perish the thought), and all it yields is zippy prose, cocktail circuit anecdotes, and a species of facile outrage. This literary junk food will do to the brain what edible junk food does to the palate, and it is worse than its other equivalent, the television soap opera, because it promises more.

All is not lost, however. Wolfe and his text will be fodder for the architectural grist mill for some time to come, and may even supplant Michael Graves as the media darling. Already the publicity surrounding the excerpts in *Harper's* and the book are being exploited by architects, and so indeed it will continue.<sup>3</sup>

According to the dictates of some unknown but inexorable law, this text by Wolfe will live on, taking its place beside Hostess Twinkies, Wonder Bread, and Sugar Pops, in that special category reserved for this genre: durable ephemera.

—Diane Ghirardo

<sup>1</sup>Diane Ghirardo, "Archipuncture. Triple Masks: The New Disease of Patriotic Shingles," *Archetype* I, 1:24-25.

<sup>2</sup>Richard Pommer, "Some architectural ideologies after the fall," Art Journal, 40 (Fall/Winter 1980), 1/2:353-361.

<sup>3</sup>See Peter Eisenman's interview of Wolfe in *Skyline* (October 1981), 12-14.

#### Guida di Roma Moderna dal 1870 as oggi.

Irene de Guttry

Rome: De Lucca Editore, 1978. L. 5000. 132pp.

#### Milano: Guida all'architettura

Maurizio Grandi and Attilo Pracchi Bologna: Zanichelli, 1980. L. 24000. 437pp.

As a center of tourism for centuries, Italy has put out its share of guidebooks to cities and regions. Pilgrims were among the earliest beneficiaries, for coming as they did from throughout Europe, they needed something to steer them to the appropriate cult sites. When the Grand Tour was de rigeur for the youth of America's wealthy families, the guidebooks had expanded to include all the major religious and secular sites to be visited and venerated. In the 20th century, the little red books of the Touring Club Italiano (TCI), rich with details and maps, have been the best resources for visitors exploring Italy's history.

Precisely because Italy has more than 2000 years worth of architecture and other artifacts, most guidebooks have given short shrift to the architecture of the 20th century. And indeed, most tourists head for the Roman Forum and St. Peter's rather than Gaetano Minnucci's Casa della Gioventu Italiana at Monte Sacro or Pietro Aschieri's Casa di Lavoro dei Ciechi di Guerra on via Parenzo. Students of modern architecture have had to rely on luck or word of mouth to find Giuseppe Terragni's Giuliani-Frigerio House in Como and other masterpieces of modern design, or on maps such as the

one published in *Domus* [Fig. 1] in 1932.

In recent years several guidebooks have been published which reverse that trend, including Irene de Guttry's *Guida di Roma Moderna dal 1870 ad oggi* and Maurizio Grandi and Attilio Pracchi's *Milano: Guida all'architettura moderna*. De Guttry's

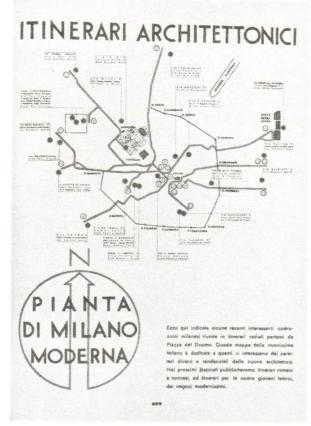


Figure 1. Plan of Modern Milan (Domus, 1932)

book is a handy portable size with a fold-out map inside the back cover and with a categorization of the works by period, building type, architect, and location. While not all buildings are illustrated, most of the Roman works by nearly 200 architects are listed with addresses in the biographical section. After a brief and general introduction, there is only minimal commentary, but the brief guide serves its purpose well in locating significant works of modern architecture in Rome.

The Milan guide is a far more ambitious undertaking. With a hard cover and four times as many pages as the Rome guide, the Milan book not only provides extensive coverage of architects, buildings, and bibliographies, it includes a full text in which the authors place the individual architectural fragments into the larger historical context. The chapters are divided chronologically and typologically, and accurately convey the substance of recent debates and scholarships; additionally, they manage to provide some hard-to-locate and little known details about individual architects and buildings.

The attempt to accommodate the demands of current scholarship as well as those of a guide presents significant problems which can only be resolved through a process of careful selection, reflection, and attention to detail. Grandi and Pracchi succeeded admirably on all counts; moreover, their text seems to have escaped the contemporary trend in Italian architectural circles to cloud their ideas in tortured, elusive, convoluted prose.

—Diane Ghirardo

#### The Grand Domestic Revolution: A History of Feminist Designs for American Homes

Dolores Hayden MIT Press, 1981. 367 pp., \$19.95

Yes this was his home. Here no harm could come to him. He smiled at the mere idea that any harm could come to him here. He avoided looking at the divan on which he slept. Every human creature needed a home, not a home of the kind understood by crude knock-you-down patriots, not a religion either, a mere insipid foretaste of a heavenly home: no a real home, in which space, work, friends, recreation, and the scope of a man's ideas came together into an orderly whole, into—so to speak—a personal cosmos.—Elias Canetti, AUTO-DA-FE

Kien, Canetti's scholar/protagonist, has recently married his housekeeper, Therese. The narrator allows us to see inside of Kien's musings as he returns home at the end of the day. His picture of home is a familiar one, albeit an ideal type. At first glance, nothing seems to mar the vision; so accustomed are we to thinking of home in these

terms—functionality and efficiency together with a Jonsonian conviviality—that we overlook the fact that this home is strictly man's domain. As Kien's narrator points out, every human creature needs a home, but what scrap of space, architectural or intellectual, is left for woman once "the scope of a man's ideas" has formed its "orderly whole"?

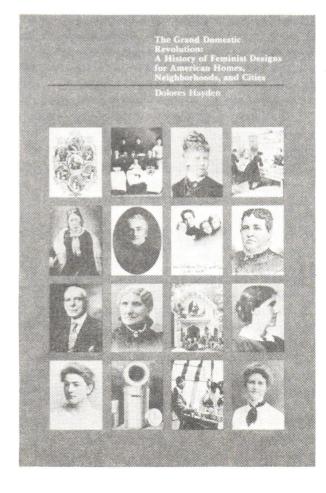
Woman's domestic labor is the invisible yet indispensable force that nurtures and maintains man's "personal cosmos." It is traditionally considered a built-in, non-detachable feature of home life, which is why we must peel away aged layers of precedent even to detect its presence in the above passage. By dusting Kien's massive library and preparing his meals for eight years, Therese shows such model subservience that Kien finally agrees to marry her. For men the workplace is distinct from the home, whereas for women, they are one and the same.

In The Grand Domestic Revolution (henceforth GDR), Dolores Hayden challenges the time-honored male view of the home by bringing to light the longhidden history of a feminist tradition which sought social change through intelligent redesign of the home. In response to the oppressive roles that late 19th century industrial capitalism was forcing upon women, a dedicated group of women activists, writers and architects, whom Hayden calls 'material feminists,' fought to establish alternative designs for housing and living. In Hayden's words, "Urban regions designed for inequality cannot be changed by new roles in the lives of individuals" (p. 28). Hayden chronicles the domestic schemes of the material feminists, which called for establishing facilities and programs for socialized cooking, housekeeping and child care. All along, capitalism had encouraged division among women, and finally under the Hoover administration, home-as-isolatedretreat turned into public policy in the form of antisocialist propaganda and incentives for builders to construct single-family homes. As long as the housewife is forced to toil in isolation, Hayden points out, her attempts to form alternatives or even communicate with other women are hampered or subverted. Material feminists believed that if women could gain economic independence, and also restructure the man-built environment, their condition would logically improve.

The best definition of a home was a library. It was wisest to keep women out of the home. Should the decision however be made to take in a woman, it was essential to assimilate her fully into the home, as he had done. For eight long, quiet, patient years the books had seen to the subjugation of this woman for him. He himself had not so much as lifted a finger. His friends (ie the books) had conquered the woman in his name.

-Canetti, AUTO-DA-FE

Perhaps the most pervasive problem that undermines feminist attempts to articulate other domestic possibilities is the fact that history, intellectual



history and language itself are inventions of a manmade world and tend to serve and reflect the values of that world. Even a coherent phrasing of the problem is itself a problem (Betty Friedan has called it "the problem without a name") because language does not yield a context in which subversive ideas such as domestic reform have meaning. In In no volume of Kien's vast library is there any mention of domestic reform. "The present enshrines the past—and in the past all history has been made by men," says Simone de Beauvoir [The Second Sex, from The Feminist Papers, p. 680]. This manmade history has effectively suppressed and overlooked what Hayden's research finally unearths: that women today have a rich architectural and intellectual heritage from which to draw perspective, strength and inspiration.

It is no surprise, then, that Hayden's bibliographical note at the end of the book is not the traditional enumeration of sources for further study in the field, though the comprehensive notes to each chapter indicate the breadth and depth of her research. Instead, the note concludes in a way no "conclusion" or bibliography could: by pointing out "the peculiar way in which academic fields, as they are now defined, have avoided coming to terms with domestic life and domestic work at all" (p. 306), Hayden draws into focus the true value of the history she has just recounted. What Hayden has done in GDR is groundbreaking stuff: no literature in any one academic field compares with it. Looking back at her first book, Seven American Utopias: The Architecture of Communitarian Socialism, 1790-1975 (MIT Press, 1978), one can see the beginnings of The Grand Domestic Revolution. "I am concerned with the changing, continuous relationship between lifestyle and life space," Hayden declares in the introduction to the first work. It is but one step from this general concern to a study of how the house, both as idea and structure, has shaped the role of women.

Hayden has an implicit faith that intellectual revolution is going to herald the feminist social revolution. In GDR her presumed audience is neither primarily architects seeking tangible designs, nor feminists hoping to fuel their anger, but rather a broad intellectual community able to draw connections between many disciplinesarchitecture, history, economics, and sociology. In Hayden's view, the ability to see the places where academic disciplines intersect is essential for an intelligent examination of feminism today. As she deftly sketches the subtle interpenetrations of the disciplines, one senses an element of danger: a stormy anarchical potential lies just beneath the surface of her cool historical narrative. She turns man-made language and historiographic techniques in on themselves to tell the story of their own oppressive strategies. The story places itself in between accepted modes of thought and is in this sense dangerous.

Yet no trace of emotion, either bitterness or joy, taints the historical distance she so carefully preserves. While Mary Daly's Gyn/Ecology (Beacon Press, 1978) does for the cross-cultural history of myth and ritual what GDR does for architecture and domestic life, Daly's radical neologisms and polemic are a defiant personal and passionate attempt to place herself outside of men's language. Hayden, on the other hand, tells at a well-modulated pace an epic story replete with names, dates, facts, and graphs, as she brings to light a progression of ideas, people, and design long hidden beneath patriarchical rules. The love and admiration she must feel for Charlotte Perkins Gilman or Susan B. Anthony does not allow Hayden to laud their achievement, only to put it into historical perspective, just as her obvious dislike for Mrs. Henry Ford or Christine Frederick (who in the late twenties helped to tell American women that, as housewives, consumption was their patriotic duty) forbids open condemnation. The ultimate strength of Hayden's position is in the way she tells a balanced, non-partisan history.

Yet the very detachment that is so crucial for a fair examination of events in the past is inappropriate for an assessment of the present. Detachment in the present means an unwillingness to name names, to engage in the polemics of the age. Hayden always seems to neutralize the force of the present by historicizing it with generalities and

vague language. For instance, she criticizes "many current feminist campaigns" for widening the division between housewives and employed women, but fails to drive home the assertion with specific names and cases. While one realizes that the historical matrix she has set up prevents her from engaging in an emotionally charged polemic, her timid treatment of current feminist thought still comes as a disappointment. In another instance, Hayden criticizes the "new feminists" for their lack of historical perspective: "But the new feminists, who tried to share childcare and housework with men, did not understand the history behind the domestic environment they inhabit. . ." (p. 289). Presumably those feminists who read GDR are going to free themselves from the state of ignorance; thus armed with the truth of a new history, they can approach the feminist agenda with a new wisdom. Hayden's modest claims that GDR is a handbook for contemporary action would have more credence if she took issue with contemporary

Now that she has laid the intellectual foundation, we look forward to her next book, one in which she builds from GDR and places the superstructure in the arena of the present.

-Kyle A. Thayer

A graduate of Reed College, Kyle A. Thayer is a writer and architect living in San Francisco.

#### Gideon's Ghost

In the last issue of Archetype I reviewed Kenneth Frampton's Modern Architecture: A Critical History. As one of the most recent attempts to survey modern architecture in book form, it has been and will continue to be reviewed extensively. Robert Stern gives his assessment in the debut issue of son of Skyline (October 1981, 22-25). On the whole, Stern is quite harsh on Frampton's text, which in itself is not particularly objectionable, since it is the reviewer's task to apply his/her standards to the work. Let us ask, then, what Stern's criteria are.

Given Stern's own work, it is hardly surprising that he berates Frampton for failing to define critical history, for failing to offer a "chronological definition of modern architecture" (whatever that is), and for failing to include books by authors whom Stern rates highly (including Scully, Jencks, and Stern himself—sour grapes?) in the bibliography. On the latter point, apart from texts which appeared too late to be added, I must say that Frampton exhibited a good deal more critical analysis than Stern does: no bibliography which entirely omits Charles Jencks can be all bad. But since Jencks too is enamored of periodization and categorization, it is no surprise that Stern objects to this omission.

Where else does he fault Frampton? Stern is disappointed that Frampton did not "set each new trend in place," nor did he perform the Giedionesque act of "identifying and influencing [modernism's] new course, canonizing its new priests, and either expunging or excoriating those in the flock who are wayward, or, those worse yet, who are non-believers." Apart from the fact that none of this needed doing because Wolfe was waiting in the wings to do his share and so was Charles Jencks (Post-Modern Classicism), judging by the company this would have had Frampton keeping, he was well advised not to do as Stern proposed.

And this is not the task Frampton set for himself precisely because his view of history is a good deal richer and more complex than the egregiously simplistic model Stern offers. It is as if to Stern (as to Wolfe and Jencks), the past is a gigantic puzzle: all of the pieces are jumbled in a box, heroes and devils, and we need only fit them in place starting with today's media heroes. Frampton is not a journalist giving bulletins on the "history of the recent past" but a historian: one who recognizes the diverse, complex, and often irreconcilable motifs of the past and refuses to force them into neat little categories.

Stern is not finished yet: Frampton "never helps us to sense what it feels like to approach [a building], to be inside it, to live in it." Thank God: we

would have a twenty volume encyclopedia on our hands if he did. This kind of criticism is idiotic: no book does everything, especially a survey, nor is it the job of one writing such a survey in which selectivity is the operating principle. For those who want to "share in the experience," there are always Scully, Hitchcock, and the many other historians who write on individual architects or buildings.

Which brings us to Stern's biggest gripe: Frampton, he claims, is committed to ideas over buildings; he is concerned with politics and ideology; he is uncomfortable with architecture as an artistic discipline. No one who has read the book or Frampton's essay on Mario Botta (Oppositions 14) will swallow Stern's charge. More than anything else, Stern here reveals his own discomfort with ideas, ideology, and politics: which may explain what we find missing in his buildings. An image of a huge compost heap looms up, into which the products of each architect's creative will are relentlessly shoveled, wilted Doric columns fertilizing new pseudo-Doric columns, style begetting style, on and on into infinity.

It smells.

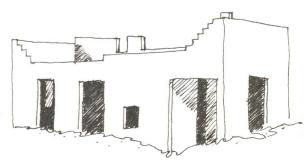
Architects do not work in a vacuum: they have to deal with clients, political choices, budgets, building codes, and public opinion, and aesthetic issues, to name only a few considerations. And when the clients are political bodies, architects grapple with political issues. The decision to build an armory rather than senior citizens' housing during a depression is inescapably a political one, and architects who want to do more than hop to a client's bidding get involved in more than aesthetic issues.

Along the same lines, Stern accuses Frampton of failing to give the reader a clear sense of the importance of the buildings as artifacts—meaning, says Stern, their aesthetic qualities. This may come as a surprise to archaeologists and historians who have tended to attribute some little significance to the historical and cultural contexts of artifacts and who have discovered how various societies or individuals lived through the artifacts which they have left behind. If the importance of a work resides solely in its aesthetic qualities, as Stern asserts, this leads to other problems: which aesthetic qualities? The Colosseum now vs. the Colosseum 2000 years ago? The structure in its original state (allowed to fall into picturesque ruin) or after renovation (will the real U.S. Pension Office please stand up?); the original work or a detailed replica? Perhaps Stern would argue that we need not go to Greece to see the Parthenon, we need only go to Tennessee to visit its 20th century replica.

The implicit monumentalization of "aesthetics" which lurks beneath Stern's criticism constitutes yet another mechanism to avoid confronting the real issues that face the world in the late twentieth century. There may be little that architects can do, but must they create entertaining and seductive diversions to help mask reality for the privileged glitterati? Stern argues for exactly this kind of exploitation—as indeed he is free to do—but when he does venture from his consoling cocoon, must we then suffer his assaults on those less willing to don rose-hued spectacles? Stern wants heroes and clear chronological definitions: but these are substitutes for thought, devices to avoid the prospect of unanswered questions and ambiguity.

Finally, Stern is critical of Frampton's "stuffy" prose. Before he does that, Stern better clean up his own grammar and learn the difference between "martial" (as in his sentence: "Nor does he martial significant arguments. . .") and the correct word, "marshal." "Martial" is how Stern wants his history: ordered with military precision and with all those messy little recruits and conscripts kept neatly in line and under the firm command of heroic historical marshals who will conduct them ceremoniously into the future.

—Diane Ghirardo



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