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Cite

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The Rice Design Alliance seeks to provide an opportunity for community leaders, interested citizens, design and planning professionals and students to increase their awareness of various aspects of the physical environment. Lectures, tours, symposia, exhibits and publications are forums for debate and interactions among people concerned with architecture, public policy and environmental design.

The opinions expressed in *Cite* do not necessarily represent the views of the Board of Directors of the Rice Design Alliance.

Cite welcomes unsolicited manuscripts. Authors take full responsibility for securing required consents and releases and for the authenticity of their articles. All manuscripts will be considered by the Editorial Board. Suggestions for topics are also welcome. Address correspondence to: Managing Editor, *Cite*, Rice Design Alliance, P.O. Box 1982, Houston, Texas 77251.

Typesetting by Professional Typographers

It is traditional to introduce a new publication with a statement of purpose. *Cite* is the first ongoing publication of The Rice Design Alliance. Its goals are very much those behind the establishment of the organization itself. The RDA was formed in 1972 as a community outreach organization of the School of Architecture at Rice. The purpose of the organization was and is to provide a public forum for the presentation and discussion of design ideas at both the architectural and urban scale. The RDA has over 500 members including architects, designers, planners, and other representatives of the building industry. The largest single group of members is, however, individuals not associated with the design professions. This group has been active in informing themselves and other members of the general public about urban design and architectural issues, especially those inherent in the development of the Houston area. The real hallmark of the RDA has been this unique alliance between individuals of different background, interested in understanding and improving the social and visual aspects of the environment.

Throughout the past ten years the RDA has sponsored a number of lecturers, forums, tours, and exhibits. Many well-known historians, architects and designers have participated in these series including Robert Venturi, Michael Graves, Ian McHarg, William Jordy, Colin Rowe, Robert Stern, Paul Goldberger and others. The lecture series have been especially successful at providing images of current and historical trends in urban design, architecture, and landscape design that may be appropriate to the Houston environment. Few of these, however, have focused specifically on the problems and possibilities inherent in Houston's own growth. Consequently, in addition to providing a vehicle for the presentation of design ideas, it is our hope that *Cite* can become a forum for the presentation and criticism of issues unique to the developing city.

Cite will be published on a regular basis. Though the focus will be the Houston area or design issues that can be related directly to the Houston area, we hope to encourage participation of regional contributors

as well. The publication will ultimately be structured around central features or topics, with criticism from both the national and local points of view.

Finally, we are very much aware of the contribution made by regional publications to the awareness of design issues on the part of the general public. It is our hope to continue and expand this tradition by providing critical commentary as well as awareness of issues pertinent to a growing metropolitan area. In this way we feel the issues addressed in *Cite* may be relevant to a much larger audience.

Gordon G. Wittenberg



Public Bath House, 3-H Community Center, Bordersville. John Zemanek, architect. 1975

New Water Mains, Mall Come To Bordersville

The work of installing city water mains in Bordersville should be completed by the end of the summer. A five-mile square section northeast of Houston Intercontinental Airport near the intersection of I-59 and FM 1960, Bordersville has long been recognized as one of Space City's poorest and most underserved communities. Installation of the water mains comes some 17 years after Bordersville was annexed by the City of Houston.

Although community leaders and the area's estimated 600 residents are eager to see running water in Bordersville for the first time, some say that the predominantly black population will not have long to enjoy this or other city services promised for the future. Construction of the new Deerbrook Mall, a project of Homart Development, is expected to begin in July 1982, and be completed spring 1984. Sandwiched between the new mall to the east and the rapidly developing FM 1960 area on the west, Bordersville residents are experiencing an unprecedented increase in their property values—one which may drive them out of their homes before all the streets in the area are paved or city sewer service is connected.

"It's an interesting contradiction," says Dave Knotts of Houston Metropolitan Ministries which along with the Bordersville Neighborhood Council worked with city officials to arrange the federal funding that paid for the newly installed water mains. "In Bordersville you have some of the poorest people in Houston, many living in substandard housing, but sitting on property that is in the path of commercial and residential development."

That development may not be beneficial to the Bordersville community, according to A. W. Jones, who has headed efforts to bring city services to Bordersville since the early 1960's. Jones is the executive director of the Bordersville Neighborhood Council and president of the Aldine Independent School District, as well as the owner of two of the few locally-owned businesses, Betty's Barbeque and A. W. Auto Sales.

"Some of the houses our older residents live in have been here since the 1930's. They have outhouses instead of sewer connections, and they probably wouldn't meet the city code if they were inspected," Jones explains. "They would be almost impossible to sell. But the property tax assessments have risen quite a bit. The elderly people will be protected somewhat by the senior citizens' residential property tax exemption. In five or 10 years the taxes will drive the young people such as myself out. We'll have to sell."

In 1927, according to Equila Jackson, a longtime Bordersville resident, "the black people were pushed out of Humble and moved over here to where there was a sawmill," one operated by Edgar Borders, who provided employment and living quarters around the sawmill for many of the families who moved into the area. The sawmill closed in 1941 when Borders died, but the area retained his name, and many of the residents stayed. "There was yard work and domestic work, and not much else," says A. W. Jones.

John Zemanek, writing in the July/August 1978 issue of *Texas Architect*, maintained that when the City of Houston incorporated part of Bordersville in 1965, "to make way for construction of the new intercontinental airport—180 Bordersville families were included in the annexation, and 40 were not. When city tax notices came, the new Houston residents inquired about the city services and utilities to which their tax dollars would entitle them. None would be forthcoming, the city said, since only newly annexed communities of 200 or more families were eligible."

Four years of effort to get federal funds for new water lines began to pay off in 1981, when the Houston City Council authorized the use of \$412,000 in federal Community Development funds. An estimated \$40,000 more must be authorized by city council to install "tap and meter lines" connecting most of the houses in the area to the new mains. Such lines normally cost between \$600 and \$800, according to A. W. Jones. In an effort to help Bordersville residents unable to pay these charges, the community organized a "Gift Of Water For Christmas" drive in 1981 that raised \$104,000. Federal officials have ruled that the city cannot charge residents the regular fees for these lines, however, and Jones says the charity money will be spent on other improvements to some 80 houses in the Bordersville area. **JWB**

Citelines



RepublicBank ignored Graves' "unfeasible" alternative. Photograph © Express-News Corporation

Bank Rejects Graves Plan, Starts Demolition of Texas Theater

The struggle between RepublicBank of San Antonio and the San Antonio Conservation Association (SACS) ended in early July, when bank officials rejected a plan put together to save the historic Texas Theater from demolition.

The 3,000-seat Spanish Revival style theater, built in the 1920's, was designed by Robert Otto Boller (1887-1962) of Kansas City. It is one of 127 theaters designed by the architectural firm of Boller Brothers and one of a number of spectacular "movie palaces" in San Antonio.

RepublicBank of San Antonio, owner of the property, is demolishing the theater (while preserving its facade) to make way for a three-building complex around a plaza opening onto the adjacent San Antonio Riverwalk. The design for the proposed complex was prepared by the San Antonio firm Ford, Powell and Carson.

The SACS obtained a restraining order from a federal district court in San Antonio, staying demolition of the theater while the group prepared studies to show the bank how the theater could be saved. Alex Caragone of the San Antonio firm of Reyna Caragone put together a team which prepared an alternate plan for bank manage-

ment, including the engineering firm of Espey, Huston, financial analysts Shlaes and Company of Chicago, and architect Michael Graves.

The plan they put together was intended to show RepublicBank that "we want the bank downtown and we want the theater," according to Mary Fenstermaker, a spokesperson for SACS. Fenstermaker said that the group's primary goal was to preserve the theater by creating "a design that is financially attractive to the bank for their operations." The court-ordered agreement between the bank and SACS expired on July 12, however, without any change by bank officials.

Michael Graves presented drawings and models to bank officials on July 8, and made another presentation to the board of SACS and others later that day. The plan was made public on July 9, but that same day RepublicBank announced at a separate press conference that it was rejecting the plan as "economically unfeasible." The SACS then announced its offer to buy the entire site from the bank for \$12.2 million. The bank also rejected this offer.

Mary Fenstermaker says that the bank had installed demolition barricades and begun to remove interior fixtures before the agreement ran out at midnight July 12. The marquee from the west side of the theater was removed by mid-July, but structural demolition had not begun as this story went to press. **JWB**

O'Neil Ford 1905-1982

O'Neil Ford, the well-known San Antonio architect, died on Tuesday, 20 July, after suffering a heart attack. He was seventy-six years old. Ford was born 3 December 1905 at Pink Hill, Texas. Although he was a student for two years at North Texas State Teachers' College in Denton, Ford received no academic training in architecture other than an International Correspondence School course of study. Instead, from 1926 until 1930 he worked for the Dallas architect David R. Williams. Apprenticeship turned into collaboration and together Williams and Ford invented the Texas regional school of architecture based upon their extensive surveys of indigenous nineteenth century buildings in Texas, Louisiana and northern Mexico.

Ford spent the entire length of his career promoting the values of this responsive architecture. He opposed the historical eclecticism of the 1920s and 1930s as strongly as the "machine style" late Modern architecture of the post-World War II era, denouncing both for being obsessed with the issue of style to the exclusion of all other considerations. Ford wrote little, but he talked a great deal. Conversations—and public addresses—tended to become polemics on the inexhaustible lessons to be learned from vernacular buildings, the beauty of handicraft in architecture, the mendaciousness of the architectural profession and the need to build thoughtfully, considerably and humanely.

After working in several federal New Deal reconstruction programs, Ford worked on the rehabilitation of La Villita in San Antonio. This led to his pioneering involvement with historic preservation and urban conservation in Texas. It also led to his marriage to Wanda Graham in 1941 and his decision to remain in San Antonio.

During World War II Ford served as a civilian flying

instructor in the U.S. Army Air Force. From 1940 until 1953 he practiced in association with Jerry Rogers and in the later 1950s maintained an office in Denver with Carl F. Groos, Jr. In 1967 the firm of O'Neil Ford and Associates was reorganized as Ford, Powell and Carson, admitting Boone Powell and Chris Carson to partnership. Out-spoken and non-conformist, Ford nonetheless managed to win the patronage of the luminaries of the Texas establishment and he and his associates have designed buildings in almost every city in Texas.

Ford was honored as one of the "People's Architects" by Rice University in 1963. He was Thomas Jefferson Memorial Professor at the University of Virginia in 1967, he received the National Council on the Arts Presidential Award in 1968 and had the unusual distinction of being declared a National Landmark by the Council in 1974. In 1980 the University of Texas created the O'Neil Ford Chair of Architecture and completed funding for the endowment in 1982. Despite his intermittent anti-academic grumblings, Ford was very proud of this honor but modestly declined to be named the first O'Neil Ford Professor of Architecture at the university.

It was generally conceded that Ford's personality was his most compelling design, attaining a level to which most of the rest of his architecture never quite reached. Yet for better or worse he achieved what he and Dave Williams had set out to do over a half-century ago: he created a Texas school of architecture of which he managed to be, in his own inimitable fashion, prize pupil, head master and chairman of the board of trustees.

Funeral services for O'Neil Ford were held on Friday, 23 July, at the Parker Chapel at Trinity University.

Stephen Fox

Texas Monthly and "The Architects"

Drafting for Dollars

Jeffrey Karl Ochsner

In the April 1982 issue of *Texas Monthly*, Nicholas Lemann's "The Architects" presents the history of the largest architectural firms in Houston and the history of involvement by outside architects, most notably Philip Johnson, in the design of some of the city's largest buildings. Beginning in 1949, Lemann discusses the impact of modern architecture in Houston, the growth of local firms such as CRS, 3D/I, Morris*Aubry and Lloyd, Jones, Brewer, the power of local developers, the inroads of outside firms, the expansion of Houston firms into the Middle East, and the design of buildings such as Tenneco, One Shell Plaza, Pennzoil Place, First International Plaza, Texas Commerce Tower, Allied Bank Tower and RepublicBank Center. For the uninitiated there are pictures of the skyline with all the major buildings indicated and diagrams showing how modern office buildings are put together. Overall, the article makes good reading and is a publicity bonanza for those firms fortunate enough to be featured. But, *Texas Monthly's* spotlighting of what is often an almost anonymous profession is not entirely positive. Within Lemann's presentation are a series of implicit assumptions and explicit statements which may lead the unaware to a view of architects and architecture which would question the compatibility of business-like operations, artistic integrity and professional standards and ethics.

Architects and Lawyers

The last time *Texas Monthly* chose to focus on a single profession in the largest Texas city was in November 1973 in an article titled "Empires of Paper" which dealt with legal practice in Houston. That article spotlighted some of the nation's largest law firms just as the recent article spotlighted some of the nation's largest architectural firms. A comparison between these two articles and between the firms on which they focused reveals a tremendous amount about each of these two professions, the way each is practiced and their relative standing in the community.

The recent article focuses on Houston's four largest architectural firms and ignores for the most part the other 320 firms listed in the 1981 *Houston Chapter AIA Directory*. While the 1973 article on attorneys also focused on the largest law firms, a "floorplan" of Houston legal practice was introduced and many smaller firms with specialties such as patents, personal injury, admiralty and criminal practice were mentioned. In contrast, the casual reader of the *Texas Monthly* architects article might be led to believe that the "glamour" architecture of the Houston skyline is all that concerns local firms (and that CRS, 3D/I, Morris*Aubry and Lloyd, Jones, Brewer are all there is): by implication, the business practices, attitudes and goals of the largest firms are apparently to be taken as representative of the profession. The many competent smaller firms which design schools, hospitals, homes and churches, and which may have entirely different practices and goals are simply written out of existence.

This is a significant omission for several reasons. First, although most people probably never deal professionally with an architect during their lives, those who do, as members of a school board, or building committee or of a family building a summer home, almost certainly will deal with one of the 320 other firms, not with one of the big four. What they will encounter will most likely not resemble the practices discussed in the article. Second, the omission of all but the big four suggests that they are the only firms doing "important" work. Perhaps in size of commissions this is true, but in terms of design significance, this may be doubtful. The origins of the Modern Movement in architecture in the 1920's can be traced to small firms and individual practitioners as can the move toward post-modernism in the 1970's and 1980's. Indeed, the history of architectural advances has been one of individual creativity. Large firms, inevitably bureaucratic and therefore conservative by nature, have generally followed design trends, not set them. (The few exceptions can always be traced to a creative individual operating against his own bureaucracy.) In Texas the majority of winners of the design awards given annually by the Texas Society of Architects have, over the last five years, been firms with fewer than 35 persons. The large firms are important, but they are not all there is to architecture.

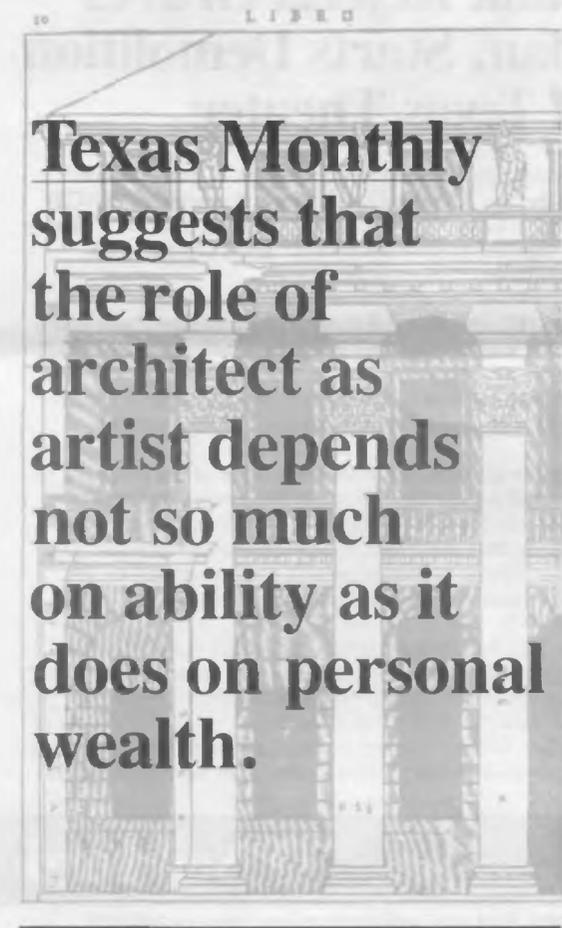
The Trouble with Architects

An attorney tells me that the trouble with architects is that they do not know who they are or what they want to be. Simultaneously they must play the roles of artist, of businessman and of professional. This is a difficult mix and historically in most firms one facet has always seemed to dominate the other two.

Nicholas Lemann never directly confronts the struggle between the estates of artistry and business, but this is

the main theme underlying the entire article. The clear impression conveyed is that the roles of artist and businessman are virtually incompatible. Thus, the practical, businesslike "local boys" are contrasted with the out-of-town "artists." Even within the Houston firms profiled, according to Lemann, designers are "the dispensable ones." The conclusion, "... in Houston, as in most places, the business-getters dominated the practice of architecture."

Not only does *Texas Monthly* convey this opposition, but it also suggests that the role of architect as artist depends not so much on ability as it does on personal financial wealth. Thus, Philip Johnson is an impractical artist as long as the Alcoa stock holds out—once it is gone he becomes "more practical." In fact, Lemann notices there is that "... odd little similarity between the Houston (businessman) architects and him. His business was... still a business."



To a large degree, what the article conveys has been widely accepted by many architects and their clients to the detriment of the profession. The inability of "artistic" architects to make money and their impracticality in matters of budgets and construction are taken for granted. The stories of architects' extravagance with their clients' money are legendary. Perhaps the most famous case is that of McKim, Mead, and White, the leading American eclectic architects of the 1890s. The final cost of their redecoration of the new Fifth Avenue mansion of Payne Whitney, nephew of Colonel Oliver H. Payne of Standard Oil, exceeded the estimates by over one hundred thousand dollars, at the time a staggering sum. Of course, few architects have dared so to exceed their estimates, but stories are often heard about arguments between client and architect, architects' impracticalities in the name of artistry, and the relative stubbornness of many architects. In his article, Lemann gives the example of Philip Johnson's design for a six piece doorjamb for a closet interior in the Houston Menil residence. No one would ever see it so the local associate architect allowed the contractor to substitute a considerably less expensive three piece doorjamb which would look "exactly the same," but cost much less. According to Lemann, Johnson was furious and never again dealt with that local architect.

Historically architects have been trained to see themselves as artists and, they have often disdained those who dealt with practical matters. Particularly for the generation of architects trained between 1940 and 1970, the business side of the profession was usually presented as dirty-work—something one minimized if one dealt with it at all.

It should now be clear that such an attitude is not only

self-defeating but demonstrably wrong-headed. In fact, some firms with acknowledged design reputations at the national level—Hardy Holtzmann Pfeiffer, Mitchell/Giurgola, Murphy/Jahn, Gwathmey and Siegal, Gunnar Birkerts, to name just a few—have had practices which were and are successful as businesses. But, if it is argued that this is a rare occurrence, is it any surprise that many practitioners have handled the business side of their practices so poorly when they were trained to see themselves as somehow "above all that"? And, given the disdain in which the business of architecture was held, is it surprising that those architects who channeled their talents into the business side of the profession were often forced by their colleagues to leave the artistic aspect entirely? Indeed, what often happened was that many architects, led to believe that practical business concerns were "beneath them," found themselves dominated and restricted by those very concerns.

Texas Monthly may have been accurate in portraying the difficulty some architects have in dealing with both sides of their profession, but the implication that this situation is inevitable is simply false. Whether the next generation of Houston architects will do better at harmonizing these aspects remains to be seen, but other questions remain: even if they are successful, will they receive major commissions or will these continue to go to the out-of-towners?

The Out-of-towners

In this area, the contrast between the big law firms, discussed in "Empires of Paper" in 1973, and the big architecture firms could not be more dramatic. The major architecture firms in Houston, CRS, Morris*Aubry, 3D/I, and Lloyd, Jones, Brewer, like the big law firms, are among the largest in the nation. And like their legal brethren, they are involved with the biggest corporations and the largest commissions in the city. Unlike the lawyers, the architects do not have total control over what they do. For many of the largest buildings, local firms have no responsibility for the design—they do not control how the building looks. The local firms are responsible for seeing that the building is properly detailed and constructed, but they are not trusted with the design—that responsibility is often given to out-of-town architects from New York, Chicago, or San Francisco. A comparable situation in law would be for local firms to develop all the pre-trial research and to handle procedural matters, but allow the courtroom presentation to be handled only by an attorney from another city. This seems absurd in law, but it happens every day in architecture.

The reasons for this situation are complex and only touched on in *Texas Monthly*. In some cases, *Texas Monthly* makes clear, Houston firms have been forced to defer to outsiders by outside financiers—New York investors favoring New York architects. The accusation that local firms have excelled in business at the expense of artistry may have some merit, but whether this is the result of lack of opportunity or natural tendencies is unclear. It is true that local firms have not, as *Texas Monthly* emphasizes, been dominated by designers.

The fact that New York is the major media and cultural center in the country has also been important—witness the media attention given to Pennzoil Place and succeeding Johnson buildings. Some would argue that Houston has always been a colonial culture—importing its art from elsewhere or otherwise copying fashion originating elsewhere. In this context, Houston architects have not received attention because Houston and Texas have not been recognized until recently as having any culture worthy of consideration. Chicago, New York, San Francisco and Los Angeles developed traditions and are recognized as particular places having particular things to say in histories of American architecture simply because they were there when that history was made. Houston has only recently achieved sufficient wealth and population to enter national consciousness as a place. Is it any surprise, therefore, that local designers have no national reputations? This may be changing with the attention given by recent publications such as the Texas issue of *Architectural Review* in 1978 and the Texas issue of *Arts + Architecture* in 1981, but it will take time. There will be a day when Houston's designers will have national reputations and will control the form of their city.

Change in the Profession

Although Houston firms have not yet emerged as avant-garde architects, according to *Texas Monthly* they are "... trying to change the way the profession is practiced. In this area, the article explicitly states the underlying tension: "... either of architecture's becoming a real business or of the cheapening of a gentlemen's profession." The tension between business and profession,

Piano's New Museum For The Menil Collection

A Clapboard Treasure House

Stephen Fox

like the tension between business and art, has been a concern in architecture for a long time. Some of the explosive ethics debates of the 1970s and the emerging business-oriented firms appear clearly foreshadowed in Frank Lloyd Wright's comments published in *American Architect* in 1930:

"We know who runs the business but, unless unpopularly curious, we no longer know who makes the designs... Promotion, Financing, Operating, Building here are four departments of modern architectural practice unknown to yesterday's architect, who devoted his mind and extended his powers in the direction of making plans and writing specifications for a real building that he himself expected faithfully to superintend."

The tension between business and profession cannot be erased. It has been part of the practice of all professions since the rise of industrial capitalism. Even Roscoe Pound's famous definition of what makes a professional indicates this:

"The term (professional) refers to a group of men (and women) pursuing a learned art as a common calling in a spirit of public service—no less a public service because it is incidentally a means of livelihood."

Service and livelihood—profession and business—it is the balance between these two which led to the consumer challenges and the court cases in the 1970s.

Until the 1970's the profession of architecture was protected or constrained (depending on one's point of view) by ethical standards regarding advertising, marketing practices, supplanting other architects, offering free services and minimum fee schedules. In the 1970s, anti-trust litigation led to court decisions that many of the standards were illegal "restraints of trade." As a result, the American Institute of Architects in 1978 lifted its ban on advertising, abolished minimum fee schedules and suspended the Canons of Ethics. New "voluntary" ethics, in conformance with the court decisions have since been adopted by the AIA, but these are considerably less restrictive in many areas of business operations. Among other things, this new freedom has led to the series of full page ads for Morris★Aubry in the popular press including *Time*, *Newsweek*, and *Texas Monthly*.

The fact that architectural firms often had archaic business practices went unnoticed as long as the ethical standards restrained open competition. Once the courts removed those non-competitive agreements firms were free to adopt aggressive business postures. Those that have modernized their business approaches have done well in the marketplace. Indeed, some modernization was clearly warranted, but the balance between the business and professional aspects remains in doubt.

In an October 1978 article in *Harper's*, "The Professions Under Siege," Jacques Barzun noted dangers in the growing tendency of the professions to become just like other businesses:

"...the modern professions have enjoyed their monopoly for so long that they have forgotten that it is a privilege given in exchange for a public benefit... Occasional complaints are interpreted as envy or misunderstanding instead of what they have turned out to be—suspicion, resentment at breach of faith, contempt for complacency."

Texas Monthly's 1973 article on attorneys directly posed the question of whether the large law firms would ever distinguish between their own interests and those of society or whether they should offer leadership in the reform of law, in the improvement of the judiciary or in the elevation of the tone of public life. In 1982, *Texas Monthly* failed to raise comparable issues for architects.

Historically, the professionals in any society have been the carriers and defenders of civilization. They have stood for the quality of the life of any society. It may be said by some that architects have no involvement in such concerns—that they have no public role. But, if architects are unwilling to speak to the quality of our urban places, who will? Who else will address issues such as construction which prevents street improvements, the lack of night-life or of multiple uses in the downtown, the barrenness of our urban streetscapes, the lack of sufficient parks, the problems of flooding, of sewerage and of transportation in the region?

This is not to say that these issues are not being confronted or that any of the glamour firms of Houston have failed. It is only to suggest that architects, as they become even more sophisticated in business, must also become even more vigilant about their profession—both its privileges and its responsibilities.

On 2 December 1981 at a public presentation held at Hamman Hall on the Rice University campus, Mrs. John de Menil announced the planned construction of a seventy-thousand-square-foot museum and art storage building to contain the Menil Foundation's extensive collection of art and anthropological artifacts. The museum, to be known as The Menil Collection, will be located on Branard Street between Mandell and Mulberry, to the west of the Rothko Chapel and the University of St. Thomas. The museum will consist of a two-story-and-basement range along Branard containing office, storage, curatorial and mechanical zones, and a one-story range to the north of this containing public exhibition spaces. It is estimated that construction will cost \$10,000,000. The museum is scheduled for completion in 1984. The building will be of steel-frame construction. External wall panels are to be made of wood clapboarding. The roof system will integrate structure, natural and artificial illumination and environmental controls. The architects of The Menil Collection Museum are Renzo Piano of Genoa and Richard Fitzgerald and Partners of Houston. Tom Barker and Peter Rice of Ove Arup and Partners of London are structural and mechanical engineers, respectively.

There is a perceptible retreat from the hyperbolic spectacle of Beaubourg ... Piano seems less interested in rhetorical iconography than in investing space with quality.

Like previous work by the architect Renzo Piano, the proposed Menil Collection museum is volumetrically uncomplicated, its supporting structure is exposed and its roof consists of a systematic integration of structure, mechanical services, and artificial and natural illumination.

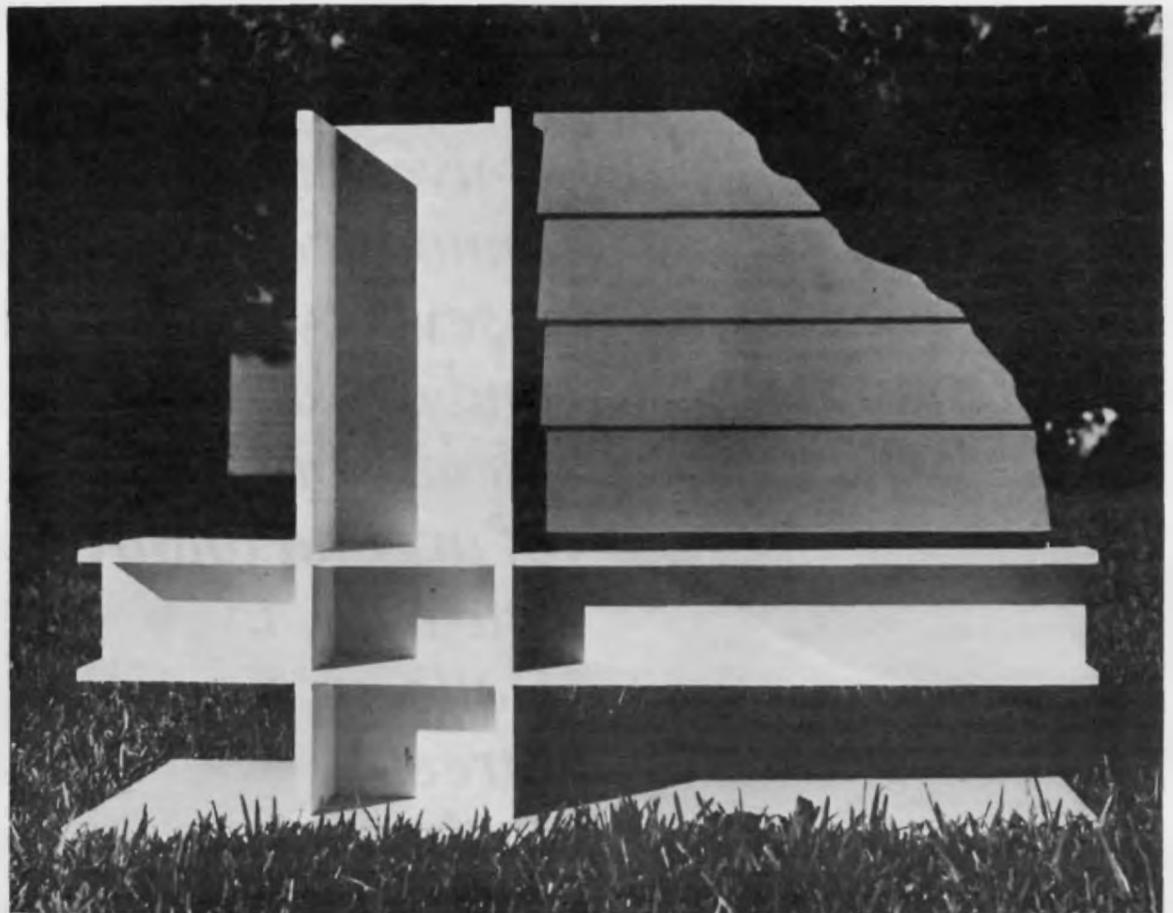
Yet when the proposed museum is compared to some often-published examples of this earlier work—for instance, the laboratory building at Genoa of 1968, Piano and Rogers's B & B Italia Building at Novedrate, Como of 1973, and the celebrated Centre Pompidou in the Beaubourg section of Paris of 1977—differences are apparent. These differences betoken a conservatism not apparent in the earlier work.

The structural schema is a trabeated grid rather than a triangulated field. Structure informs space rather than simply modulating it. Elements of structural support and mechanical servicing no longer constitute the primary zone of architectural intervention. And, in compliance with the client's wish, a concerted effort has been made to acknowledge the special character of the neighborhood in which the museum will be constructed and conform to it, rather than using it as a foil to set off the new building.

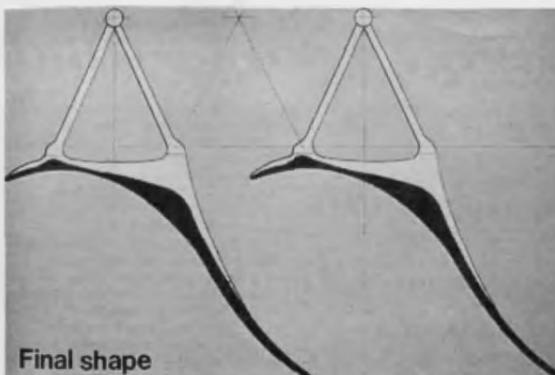
A survey of Piano's work, both prior to and during his association with Richard Rogers, reveals a preference for simple spatial volumes clear-spanned by light-weight, visually autonomous structural systems and served by expressively articulated mechanical devices.¹ Mechanical and structural engineering elements consistently tended to be picked out (often with color) and featured against a neutral backdrop provided by modular, panelized wall enclosure systems. Tenuous diagonal networks were used in the development of steel frame structures, instead of trabeated grids. Internally, programs for these buildings seemed to place a premium on the ability to alter spatial divisions in ways which could not be anticipated initially. Consequently, the interiors (even in instances of multistory buildings) were conceived as lofts, minimally impeded by fixed elements. Photographs communicate an impression of refined proportions but do not imply that spaces were imbued with any strong characteristics other than those derived from the *finesse* of engineering detail, such as the Genoa laboratory, or views out, as at the UOP Fragrances building of 1974 at Tadworth, Surrey, by Piano and Rogers. Depending upon a contrast between "active" support systems and the "passive" container, the aesthetic of these buildings was one of precision and economy, leavened with wit. Wittiness was an especially important ingredient. Manifest in the use of color and the avoidance of solemnity and heaviness in favor of openness, lightness and flexibility, it endowed the aggressively systematic and utilitarian elements of Piano's architecture with a sense of gaiety, buoyancy and spontaneity.

The reason for The Menil Collection museum's departure from most of these traits (i.e. clear-span roof structures, articulated mechanical servicing, steel space frames and loft-like internal spaces) may be traced to programmatic differences. That is, there seems to have been no desire for the sort of infinitely flexible space required in industrial, research and commercial projects (and required as well in the Centre Pompidou). Instead, strong divisions will exist in the museum between zones of general access and restricted access, and between zones of curatorial work and scholarly work. Additional subdivisions occur within the publically accessible exhibition zone, which is partitioned into a number of distinct gallery spaces. It is also desired that the new museum be inserted as unobtrusively as possible into the neighborhood of cottages and apartments in Lancaster Place owned by the Menil Foundation and slyly known as "Doville." This too is at variance with Piano's earlier work, which tended to be built on exurban sites or in dense, old urban centers; the former condition offered no built context and the latter condition suggested an aesthetic of contrast, as at the Centre Pompidou. Piano's more recent work for UNESCO in Italian towns has involved adaptive reuse and demountable construction rather than the insertion of new building into historic urban fabrics.

These two programmatic requirements—function specific planning and contextual harmonization—have elicited a somewhat contradictory response from Piano and his associates. Piano achieves a *parti* of expressive clarity and precision by resorting to a strategy of functional zoning. The three major use areas—public (exhibition galleries), staff (curatorial work rooms) and visiting scholars and administration (art storage and study)—take form as linearly extruded volumes in parallel alignment: galleries to the north and curatorial space to the south of the publicly accessible promenade, a cross-axial circulation route which bisects the museum from



The Menil Collection. Piano and Fitzgerald, architects. 1981. Mock-up of steel framing system and clapboard infill panel.



Section of structural baffles.



Scale model of structural baffle system.

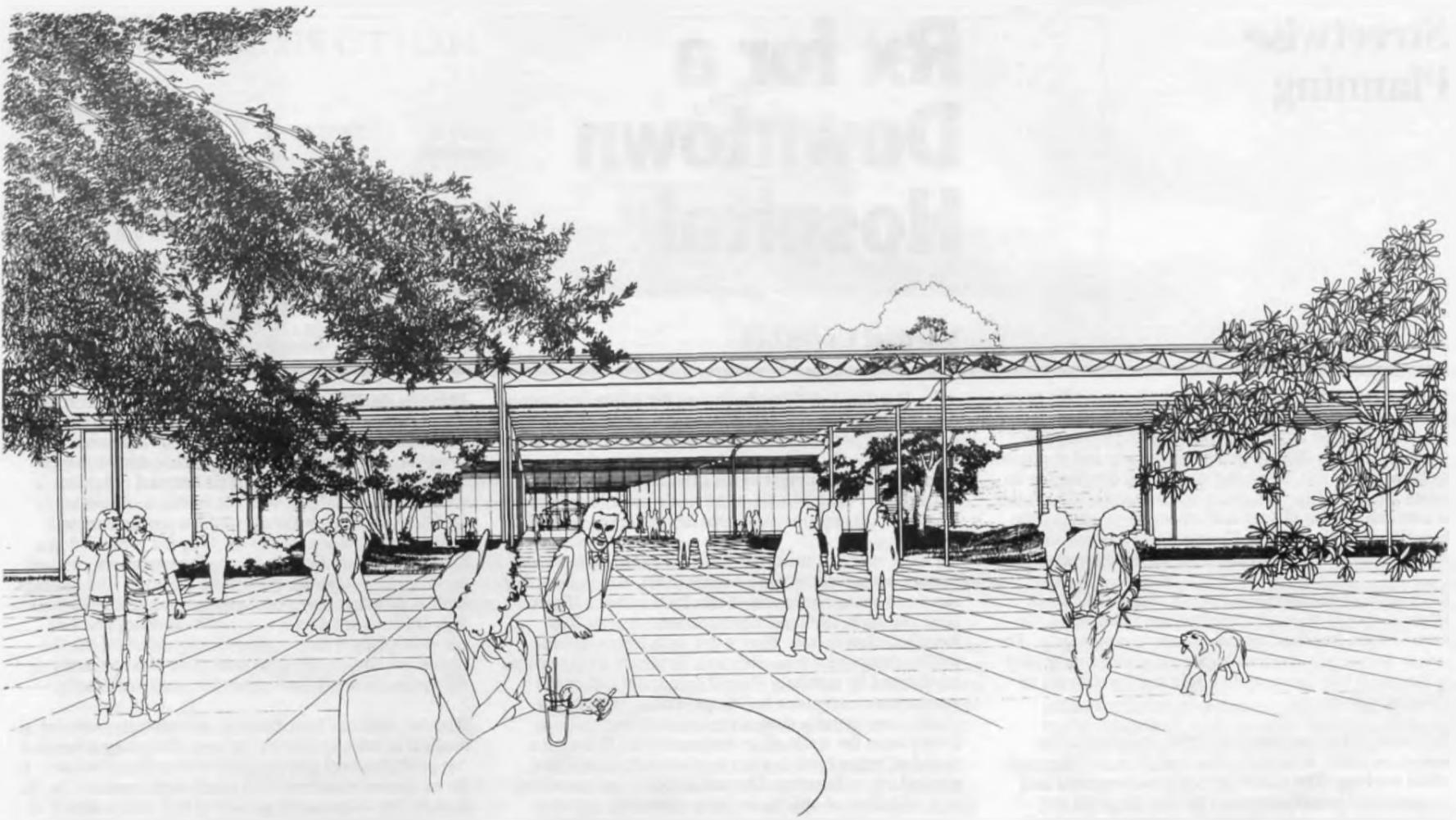
east to west, storage and study relegated to an elevated "Treasure House" which rides a half-story above the roof of the curatorial zone. The ground coverage of The Menil Collection museum is approximately five hundred feet in length and one hundred sixty feet in width. The size of the building will require that the entire south half of Block 4 in Lancaster Place (the 1500 block front of Branard, north side) be cleared to permit construction. Additional demolition will be necessary to construct a public parking lot in the 1500 block of West Alabama, the landscaped pathway which will connect the parking lot and the museum, and the museum's mechanical plant which will be located on the south side of Branard.

Earlier projects commissioned by Mrs. de Menil also involved extensive alterations to the existing neighborhood fabric. Louis I. Kahn's proposals of 1973-1974 called for the clearance of nearly eight blocks between Sul Ross, Mandell, Branard and Graustark, leaving only Guinan Hall and the Rothko Chapel, which were to be surrounded by a "virtual City of Art."² Kahn's drawings showed the museum itself located on the east side of Mulberry between Sul Ross and Branard. This is now a vacant tract designated for a park site. The final one of several proposals which Howard Barnstone prepared between 1975 and 1979 called for the museum to be located on the west side of Mulberry between Sul Ross and Branard. This design was based on space requirements of the same magnitude as those incorporated in the Piano proposal. But Barnstone minimized the impact of a building of this size upon the neighborhood by compactly clustering it around a central garden court which also served to differentiate the areas of general and restricted access. In contrast, Piano's design appears to maximize its impact upon the neighborhood.

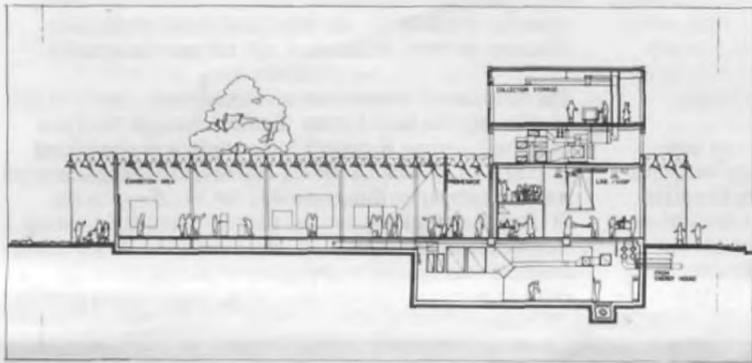
It is here that the element of contradiction asserts itself. For the museum was not supposed to obtrude upon its

environment. Mrs. de Menil stipulated that it was not to be a monument. Clearly, given the spatial requirements for the building, unobtrusiveness was impossible. But had Piano not employed a linear, zoned plan type—re-emphasized by the massing—a more discreet configuration might have been arrived at, even without compromising the optimal daylighting conditions achieved because the galleries obtain a uniform orientation. It is ironic that in devising a function specific *parti*, Piano should resort to this vintage mode of industrial space organization, especially since his own industrial projects have been service intensive and spatially flexible.

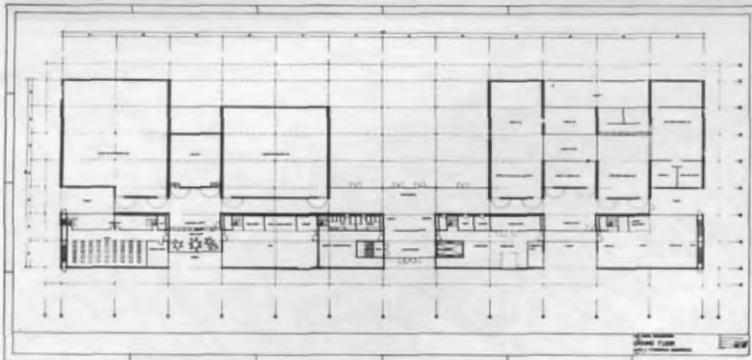
To ameliorate the impact of the new building, Piano audaciously proposes to clad the wall panels with wood clapboarding painted the same gray-green color that Howard Barnstone employed in 1974 to unify the houses of Doville. But oddly this goodwill gesture seems only to heighten the possibility of contradiction, despite its evident rigor in comparison, say, to neo-vernacular pastiche. The insertion of so small and intensely linear and repetitive a pattern as clapboarding within forty-foot long bays, combined with the treatment of window and door openings as glazed voids rather than framed penetrations of the wall, threaten to imbue the new museum (and especially the Branard elevation) with that sense of scalelessness—semi-big, bland and impersonal—so characteristic of many modern American buildings, of which Guinan Hall and Crooker Center at St. Thomas may serve as convenient examples. Heretofore, when affirming the context, public buildings in the neighborhood have responded to Philip Johnson's three initial buildings at the University of St. Thomas rather than to the vestiges of 1920's-through-1950's suburbia. And although the rhythmic articulation of supporting structure in Piano's museum design returns to a theme first sounded at St. Thomas, the bay dimension along the principal street elevation is nearly twice that of John-



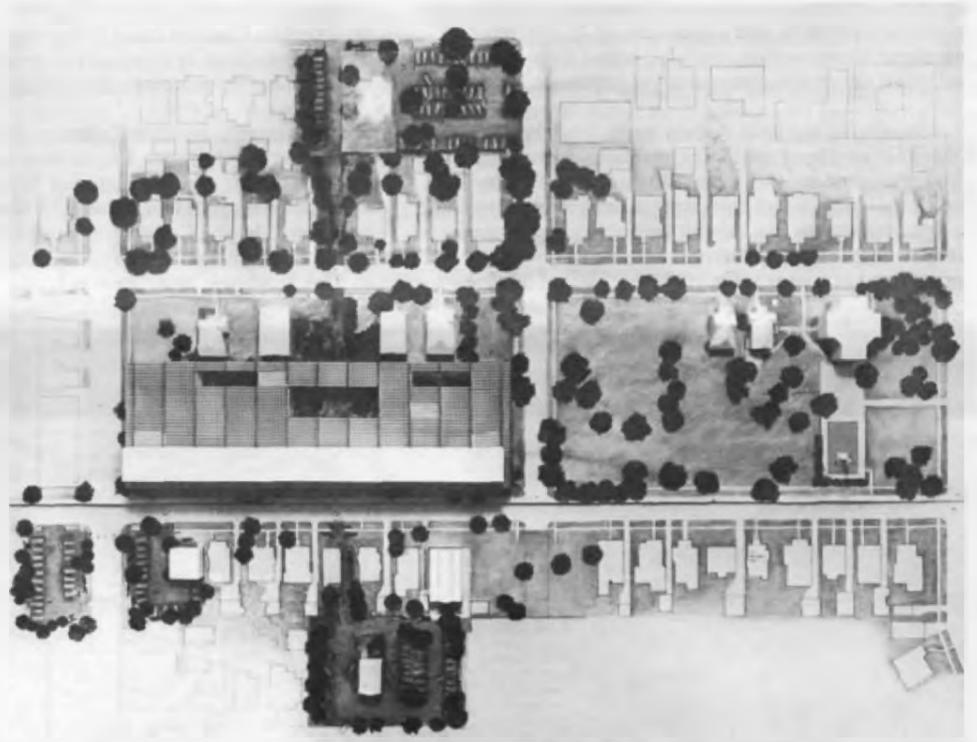
The Menil Collection. Perspective drawing of north entry court.



Cross section.



Ground floor plan.



Site plan drawing of Menil Collection (left), park (center right) and Rothko Chapel (far right).

son's. The Menil museum could easily turn out to be overwhelmingly non-monumental.

Piano's other divergences from past practice do not provoke the concern that his involvement with functional planning and contextual propriety elicit. The elegant roofing and lighting system, which is extended like a canopy across the entire ground floor level and actually projects beyond the periphery of the museum on all sides, is less overtly mechanized than previous roof systems that Piano and his associates have developed. Indeed in the treatment of structure and mechanical services, there is a perceptible retreat from the hyperbolic spectacle of Beaubourg.

Inasmuch as a long-span roof structure was not required, the diagonal network of space trussing familiar from past projects has been displaced by a trabeated grid of beams upheld by the columns visible on the exterior, into which the structural-environmental assembly of baffle-joist monitors that comprises the roof canopy is dropped. External wall panels and internal partitions are, for the most part, stationed along column lines. These planning decisions result in a series of particularized spaces which vary, at least in conception, from the universal space of the passive container. In the dialectics of recent architectural history, the use of structure to define space, rather than to modulate it, represents a conservative tendency, as Colin Rowe observed in his essay on Mies van der Rohe and Louis I. Kahn in the 1950s.³ In relation to Renzo Piano's previous work, the design of the Menil museum appears to confirm Rowe's hypothesis.

Piano does not reject modernism but he seems less interested in the rhetorical iconography of modernist polemics than in investing space with quality.⁴ The internal spaces of the museum promise to express a consistent

attitude about the character of the interior: rooms are high ceilinged and simply finished; occasional window openings appropriate views of the out-of-doors. The chief qualities of spaces will derive from the subtle filtering of natural illumination and the works of art they are to contain.

Although the aesthetic tone of the project is light, it is not exuberant in the way that earlier Piano and Piano and Rogers work tended to be. It is purposeful, conscientious and modestly resourceful, as if Piano sought to incorporate into his architecture the quiet, steady, consoling rhythm emanating from that utopia which Reyner Banham called the well-ordered environment. Filtered air and filtered light, secluded views, sheltered gardens and an aura of repose are the constituents of this refuge from the everyday life of Houston.

In fact, among those who attended the architects' presentation at Rice, there seemed to be a slight feeling of disappointment that the design was so modest, as if in Houston this attribute was not contextually appropriate. Of course, as Mimi Crossley noted in her review of the project in the *Houston Post*, a sense of reticence has historically characterized the benefactions of Mrs. de Menil.⁵ Yet in two other recent instances where celebrated out-of-town architects have taken local climate and context into account, unostentatious works of architecture have resulted: Stirling and Wilford's addition to Anderson Hall at Rice University, and Roche, Dinkeloo and Associates' Conoco office complex on the Katy Freeway. Moreover, the three jurors for the *Architecture in Houston Since 1945* show, held at Rice in September 1981, were moved by like sentiments. For they attempted to construct a local tradition of environmentally and contextually responsive design with the buildings and projects selected for exhibition. This incited no small degree of consternation within the local architectural

establishment, committed as it is to following, however grudgingly, the preceptorship of Philip Johnson, in order to prove its currency. Whether the museum of The Menil Collection, in conjunction with these other efforts, presages the future of architecture in Houston remains to be seen.

1 On Piano's earlier work see: "Architecture and Technology," *AAQ/Architectural Association Quarterly*, 2(July 1970)32-43; "Piano + Rogers," *Architectural Design*, 45(May 1975)275-311; "Piano e Rogers Quattro Progetti," *Domus*, 570(May 1977)17-24; and "Renzo Piano, Architetto, Costruttore," *L'Architecture d'aujourd'hui*, 219(February 1982)1-53.

2 Several of Kahn's drawings for this project were exhibited in the Rice Design Alliance's show *Civic Art in Houston Since 1900*, held at the Sewall Gallery in 1979.

3 See Colin Rowe's essay "Neo-classicism and Modern Architecture," *Oppositions* 1. (September 1973)1-26. Reyner Banham also touched upon the issue in his critique of the Centre Pompidou. See "Enigma of the Rue du Renard," *The Architectural Review*, 161(May 1977)278. See also Charles Jencks's essay on architectural dialectics: "Polar Attitudes in Architecture," *Connection* 7. (May 1964)5-11.

4 Alison Smithson and Peter Smithson, *Without Rhetoric: An Architectural Aesthetic, 1955-1972*. London: Latimer/New Directions, 1973.

5 Mimi Crossley, "City's 'culture zone' gaining village of art," *The Houston Post*, 6 December 1981.

Streetwise Planning

Rx for a Downtown Hospital

Michael Underhill



The central business district in Houston continues to enjoy the benefits of private investment while many cities are being drained of vitality. Downtown Houston has grown rapidly in density in the last decade and continues to grow today. But it is doing so without developing an urban intelligibility. The justly celebrated building boom is concentrated on private and corporate works, rarely benefitting public spaces. Houston's downtown streets and related open spaces have little form or sense of place.

Even such an automobile-oriented, dispersed city as Houston should have more pedestrian amenities downtown—trees, benches, plazas, places to congregate. The streets themselves have an important social role to play in the city's life. Ignoring that role has contributed to Houston's problems.

Downtown Houston, more than the centers of other American cities, is perceived as a place to avoid except while working. The streets are seen as congested and inconvenient to move through by day, deserted and crime-ridden by night. Economic interests, developer dreams and institutional needs pressure the city for larger and larger parcels of land for development—land without restriction on its use. The resulting building forms—tunnels, bridges and air-rights buildings that cover public streets, and combinations of city blocks into super blocks—threaten what urban form there is and make the streets even more inhospitable.

Jane Jacobs, in her well-known book, *The Death and Life of Great American Cities*, provides an excellent argument against super-blocks. Downtowns, Jacobs says, need small blocks and more streets scaled and appointed so that pedestrians can inhabit and occasionally lay claim to them. Once inhabited, she argues, public space appears and *becomes* safer, more useful and more enjoy-

able. Houston's context challenges the urban designer to turn the grid of streets into meaningful public territory, and to work with the existing urban structure as a framework for growth. It is certainly important to encourage large scale development in the central business district, but arguably the CBD has to be made more hospitable to its citizens in order to make that development possible.

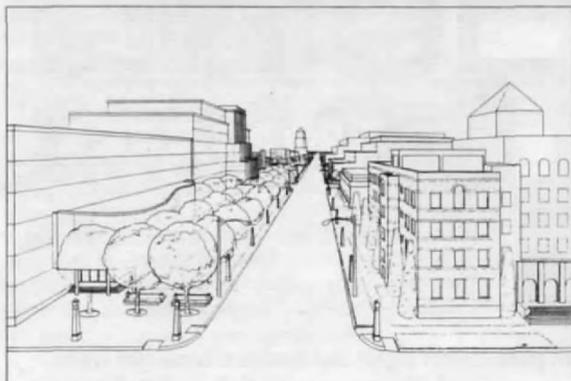
We must attend to the urban fabric we already have and nurture our streets as public spaces. Yet, American urban designers seem fascinated of late by the idea of European city form and recent publications such as Rob Krier's *Urban Space*. They work with figure/ground studies depicting urban situations in which public spaces are defined by carefully shaped facades of otherwise anonymous contiguous buildings. This approach has merit—one literally shapes the fronts of buildings as if they were the walls of an outdoor room. But such a model of urban form is alien to most American cities, particularly to Houston. Our urban fabric has grown up as a collection of objects in space served by a grid of streets. The object/buildings are built by independent owners over a period of time, rather than as elements of a grand design. Indeed, Houston's entrepreneurs have historically bridled at the suggestion of a plan that would impinge upon their freedom of action. Therefore, urban designers in Houston must find a way to make streets habitable without destroying the streets' function as an armature for the incremental addition of buildings.

First while with the Rice Center and later as an independent urban designer, I have been working on such a problem for the administration of St. Joseph Hospital. St. Joseph Hospital is a growing downtown institution, established by the Congregation of Sisters of Charity of the Incarnate Word in 1887. They built the first building in 1905 in what is now the Southern corner of downtown

Houston. In 1958, after the hospital had expanded, the administration was offered a nine-acre tract in the Texas Medical Center. After long and serious deliberation, however, the Sisters decided to remain downtown to better serve the community. The hospital expanded in the 1960's and 1970's, with the addition of five major buildings and the up-dating of most patient care and laboratory facilities. Today the hospital is housed in a collection of buildings covering four entire blocks and parts of three more blocks. There are some 13 buildings, built at different times by different architects. Six buildings are connected by an air-rights building and two enclosed bridges that cross over city streets. Like the rest of the city, the hospital will grow incrementally in the future, in ways that cannot be predicted exactly.

Hospital facilities have become increasingly complex as medical science improves. Anyone designing a hospital can easily become preoccupied with internal function to the exclusion of exterior and contextual concerns. At St. Joseph, the incremental growth of the 1960's and 1970's occurred without an adequate master plan, and the hospital administration found itself confronting growing problems of isolation and the fear of crime, both for employees and the hospital's users. Several city streets serve the multi block complex, and these streets, like others in downtown Houston, are not very hospitable.

The hospital administration commissioned a study of the problem by the Rice Center. Entitled "Image Analysis and Site Planning Research", the study was completed in 1981, and included a survey that revealed people reacted most negatively to things outside the buildings in the St. Joseph complex—access, parking, security, lighting, sidewalks, street furnishings, doorways, etc. It was plain from the survey that organization of access, parking and entry to hospital facilities should be improved to prevent

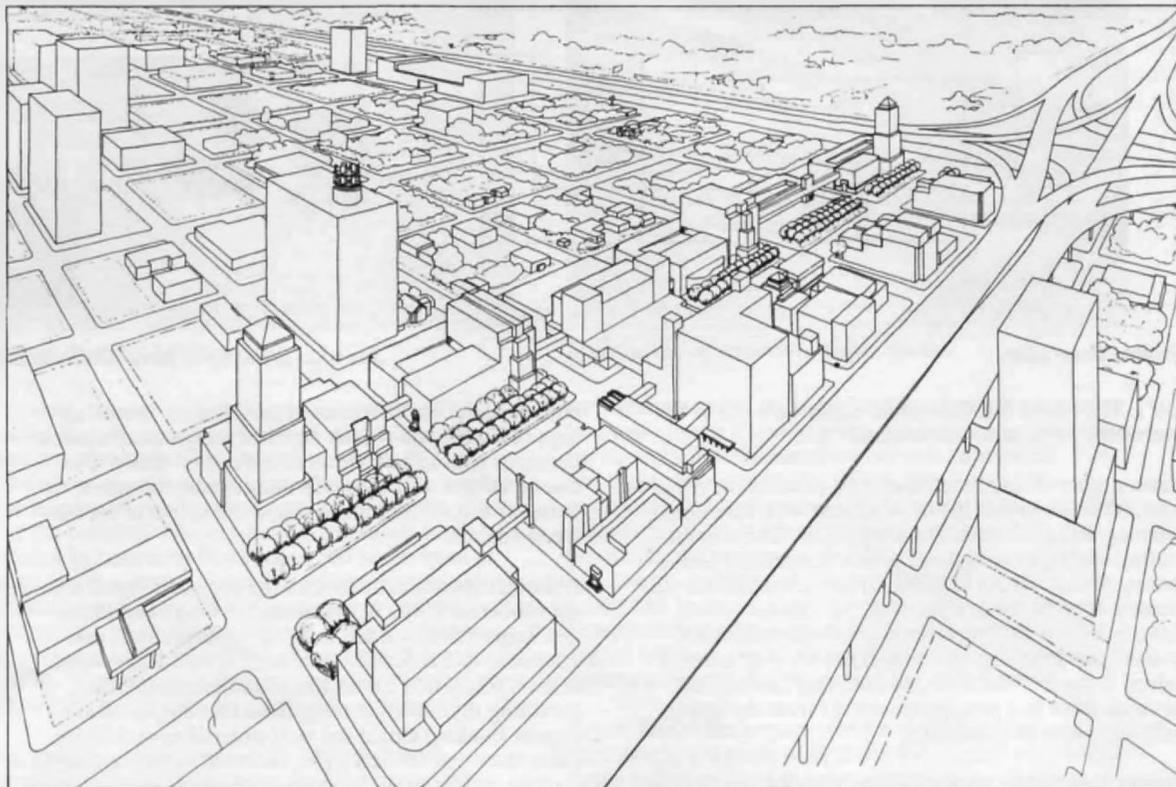


Top of page: Entrance to the Women's Building (formerly the Maternity and Children's Building) designed by I.E. Loveless, an architect from Beverly Hills, California, in 1936.

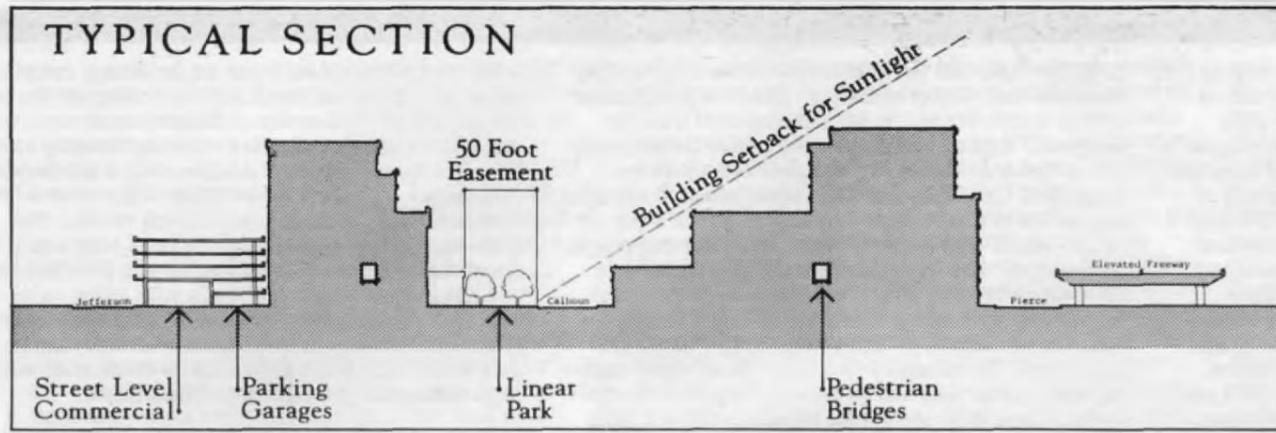
Above: View of the proposed central spine. At Crawford Street looking southeast along Calhoun Street.

Right: Bird's-eye view of the proposal showing a 12 block district formed around a central spine.

Below: Two typical views along Calhoun Street at St. Joseph. The tower that guarded a staff parking lot has been removed since the Rice Center study.



TYPICAL SECTION



the erosion of the hospital's public image.

I was asked to develop a site plan that would (1) coordinate buildings for easy orientation and access by hospital users, (2) provide for incremental growth, and (3) give the complex an identity within the urban context and a positive visual image.

For an urban designer working in Houston's context, the obvious answer is to respect the existing grid, improve the public streets, and then use this framework to organize old and new hospital buildings for access and legibility. To test the feasibility of this idea, we undertook two activities. Analytical diagrams of existing conditions were prepared for study: site availability, building stock, growth projections, vehicular access, parking, pedestrian circulation, vegetation, lighting, building facades, building entrances, building massing and urban form. Simultaneously we discussed six abstract organizational models with the hospital's administrators. Each model pictured an alternative concept of form for the complex and its relation to the urban context. We tried to uncover program implications inherent in each abstraction, and to understand the image each would convey. The following goal was quickly established: to form a well defined complex of buildings over a rectangular 12 block area with clear edges and an attractive, open central spine. The central spine will be Calhoun Avenue, transformed into a tree lined boulevard which can provide pedestrian accommodations, orient hospital users, and stand as a memorable place within the city fabric.

The components of the plan that evolved:

1. Seek to exchange or purchase land in order to control a compact group of 12 urban blocks—two blocks wide by six blocks long.

2. Establish the central street of the complex—Calhoun Avenue—as a linear park by:

- a) respecting a 50 foot easement along the northern side of the street, and
- b) arranging a raked building setback along the south side of the street for sunlight, and
- c) planting a double row of trees along the street with appropriate treatment of the ground surface for pedestrians.

3. Improve sidewalks and street corners of the five cross streets in the complex with special paving, lighting, benches, and other appropriate street furniture.

4. Line the northern edge of the complex with parking garages that form a clear system of access and parking and a readable edge for the complex. The first floor of these garages should be converted to commercial use when the adjacent neighborhood changes so that the edge does not become a boundary.

5. Limit construction over public streets. Organize thin bridges (not broad air-rights buildings) parallel to Calhoun. This will provide necessary accessibility while further defining Calhoun as a central spine.

6. Locate landmark towers at the ends of the central spine.

7. Organize building entrances, especially public entrances, on or near Calhoun. Avoid building entrances that face Pierce or Jefferson—streets parallel to the central street. And keep service access off the central street.

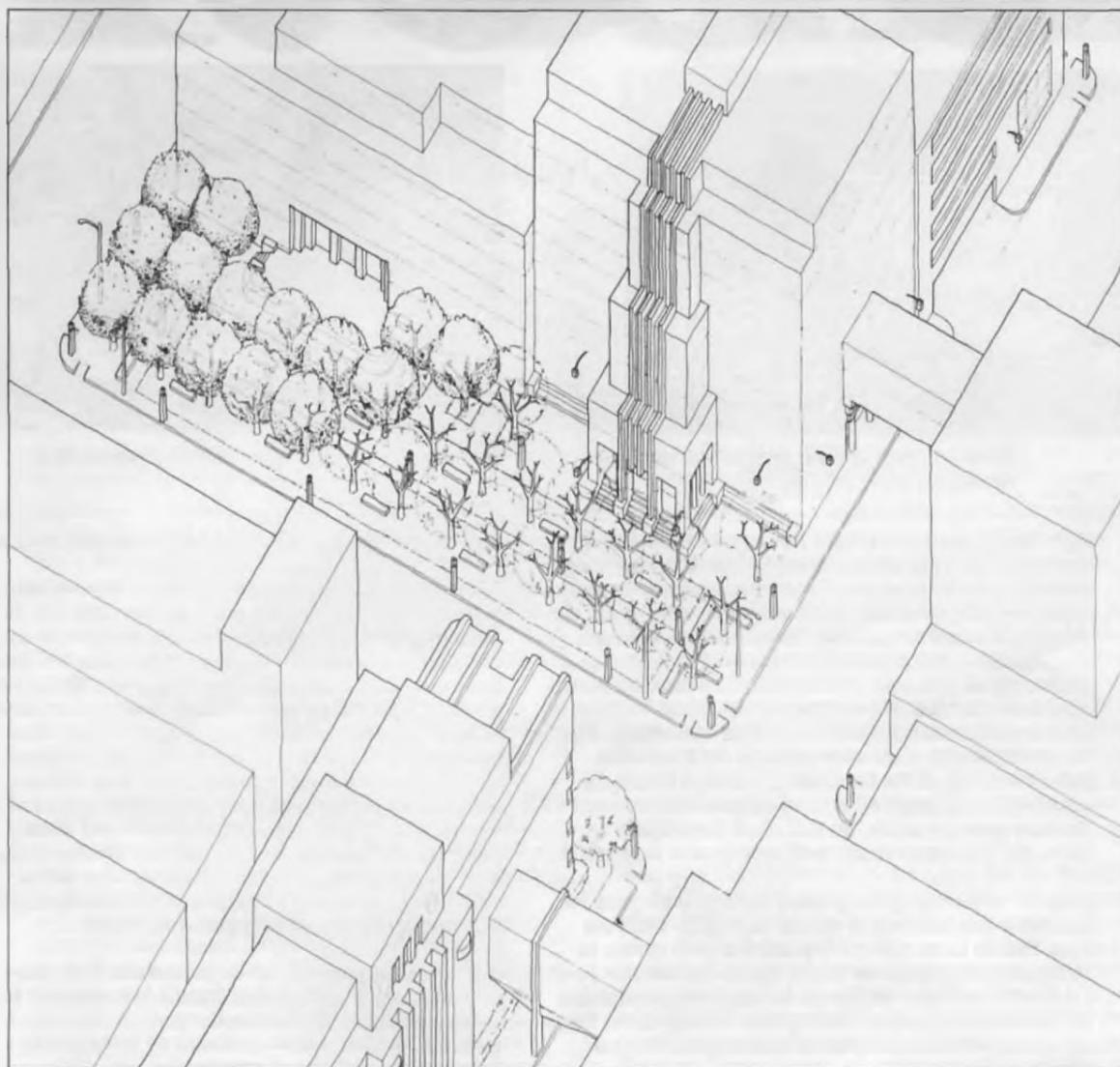
8. Place all central, public, or other special buildings or facilities (for example: a cafeteria, daycare center, or chapel) in the center of the complex along the linear park.

The people surveyed in the Rice Center study said that the physical appearance of St. Joseph was an existing asset. Analysis demonstrated that a major component of the hospital's appearance is the regular use of certain

colors and materials (buff, yellow, pink, red; stone, stucco, brick). One mirrored-glass or metallic building would ruin this effect. Building entrances are also important. The hospital's newer main entry unfortunately resembles its service entries. Entrances to the older buildings represent a more dignified approach for hospital users.

These observations will form a component of the plan as architectural guidelines. To implement the urban components of the plan I hope to prepare documents that illustrate potential results together with a handbook of explanations and suggestions for future hospital architects. The plan is a set of ideas rather than a fixed stylistic view for St. Joseph. Variety in building design and unknown future programmatic needs will serve to enhance rather than spoil the plan. Incremental growth will be a natural component since the plan is based on the use of existing urban structure.

In conclusion, if the administration of St. Joseph implements these site planning ideas, the hospital will read as a special district and will be an integral part of the urban fabric. Houston citizens travelling through downtown will know when they have entered the hospital complex, but will not feel they are trespassing. The complex will read more as a zone than a compound. Certain downtown streets will acquire a strong public image while better serving the hospital. The urban grid can organize movement within the complex and provide for future growth. St. Joseph will have improved the central business district making a public gesture equal to their decision in 1958 to remain downtown. The plan is really nothing more than an extension of the symbiotic relationship between public and private interests that urbanism represents.



Top of page: Cross section through the central spine.

Above: Entrances to the Main Building at St. Joseph, the primary public entrance above and the service and emergency entrance below.

Below: Four of the six alternative abstract organization models we considered. The tower and boundary park schemes have a defensive image. The central park scheme is difficult to adapt to St. Joseph's present configuration. Our proposal is a variation on the linear park scheme.



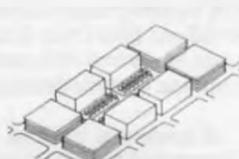
Tower



Boundary Park



Central Park



Linear Park



Cesar Pelli was born in Tucumán, Argentina in 1926. He received his architectural training at the University of Tucumán and at the University of Illinois. From 1954 until 1964 he was associated with Eero Saarinen and with the firm of Eero Saarinen and Associates. Pelli was director of design for Daniel, Mann,

Johnson and Mendenhall of Los Angeles from 1964 until 1968 and partner-in-charge of design at Gruen Associates, also of Los Angeles, from 1968 until 1977. Since 1977 he has been Dean of the School of Architecture at Yale University as well as head of the firm of Cesar Pelli and Associates Architects of New Haven.

Mr. Pelli lectured in Houston under the auspices of the Rice Design Alliance in 1981, and was interviewed by Cite on 12 May 1982.

Cite: Mr. Pelli you have at least four projects currently underway in Houston: Four Leaf Towers; Four Oaks Place; the Pin Oak project, and Herring Hall for the Jones Graduate School of Administration at Rice. In addition you have participated in two design competitions: one for the Texas Commerce Tower, and one for the Hermann Park Towers, which you won. What changes within your approach to architecture are contained in this series of

to the live oaks that are so common on the campus. The Hermann Park project benefits a little from the character of Rice University and its surroundings and from the park itself. And the buildings we did there are definitely part of that area, the area of beautiful old homes between Rice University and Main street called Shadyside. One senses in that area that one is working in a city or neighborhood with an architectural character that people are aware of, that they perceive and enjoy. Pin Oak is the most different of all problems because we are dealing not only with ninety-five acres of empty land but these are surrounded by many other acres that are also fairly empty. In the ninety-five acres we are really starting with a clean slate and so the most important things we have done there are not the buildings which I think are going to be beautiful but the urban concept that we are using as a base and structure for the architecture to come. The most important decision was to start by defining a public place, and to make this place at Pin Oak the park, and around the park the buildings. The buildings are all being designed to support that space primarily, and secondarily to express their own identity in a number of ways. So that the circumstances of each project, each area, each different need of the project area, are different: to design a corporate headquarters, then the housing, or the school of business, those are very different problems. And primarily the sub-areas in Houston (which are much more different than anybody outside of Houston imagines or that I imagined before coming here) have led us to put greater emphasis on different aspects of architecture in the diverse projects.

Cite: Are you saying that it is possible for architects in Houston to be contextually responsive?

when the building is built you are building a complex of rooms with highly differentiated functions, and the units themselves are each under a different ownership. And that affects, and should affect, what the building looks like. Of course it has been possible, and many buildings have been built, where those highly differentiated functions are subsumed in an even-looking exterior. But these are highly differentiated functions with highly differentiated exterior needs. If you are in a high building, you like to have large windows in your living room because you could enjoy the view. You don't need such large windows in your bedroom and certainly not in your bathrooms. But it is possible to do them all with large windows and then obscure them inside.

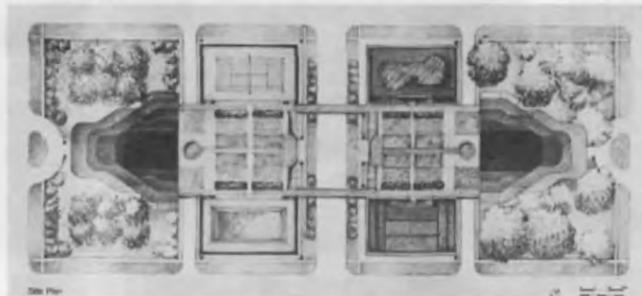
An office building is a very different matter. Offices, represent layers of space, horizontal layers of space, that are built to be for uses not determined before the buildings are built. You don't know when or where there is going to be a conference room and where there is going to be somebody's private office or a secretarial pool. And even after the building is built those functions keep on shifting and changing. In some ways an office building is more like a mechanism of production.

Also offices in our society are part of our production system. Wealth is being created in those spaces and the value of the space and the kind of space is related to that production system. So it is therefore a bit like designing factories, only it is more than factory space and you have to be able to move the present-day machinery, which may be desks, word processors or computers, around. So therefore that horizontal layering of space is a critical and dominant characteristic of an office build-

An Interview with Cesar



Four Leaf Towers.



Project: Hermann Park Towers. 1979. Cesar Pelli and Associates, architects. Site plan of two towers.



Hermann Park Towers, perspective view from Hermann Park.



Model of Four Oaks Place. 1980 (in construction).

building designs?

CP: What a difficult question. Let's see, the designs have all been done through a period in my career in architecture that I find very rich; a period of exploration—not wild exploration, trying to get out of the jungle, but very rich, fruitful exploration—for more appropriate and responsive forms and attitudes about architecture and what makes architecture. What is interesting is that all of those six projects are more conditioned by specific circumstances in each project than by those tendencies or interests that could be in me. For example, the location of the Four Leaf Towers in Houston is very interesting because there are very well defined subzones of context: downtown Houston is very much a cosmopolitan, vigorous, growing metropolis, like Manhattan, Chicago, Denver or San Francisco, with great emphasis and dominance by financial institutions and corporations. The Post Oak Boulevard zone represents the Houston that people outside of Houston imagine—growing very rapidly, a bit trashy, full of energy, optimism, and a bit disjointed; where each building or group of buildings tends to stand on its own because of the magnitude of the parcels, and because the buildings need to be surrounded by parking lots or parking structures that tend to pull them apart. The buildings we designed there—the Four Leaf and the Four Oaks groups—are therefore designed to fit in this environment.

Rice University, on the other hand, is a delightful, mature campus. It's one of the most beautiful campuses I know. At least in the older parts it has a great architectural coherence and even the newer parts are gentle in their scale, and the whole thing comes together thanks

CP: I think you have to be. I think that even buildings that appear to be non-contextually responsive, buildings that appear to be more concerned with themselves and—let me not talk about my own building, but let us say the Post Oak Central towers that Philip Johnson did—are responding to the contextual pressures or opportunities, or the lack of pressures, that exist in the Post Oak Boulevard area. And the other extreme is of course working in such a strongly defined context as Rice University. That's the most difficult contextual problem we have. And indeed working in the Post Oak Boulevard area is the easiest from the point of view of context—that's where the least pressure exists. So that of all the projects we have, the two extremes are both represented in Houston.

Cite: A very striking thing about both your projects for Interfin is the detailing of the curtain walls. The Four Leaf Towers seem obviously related to your earlier exploration at the Museum Tower. Given the fact that Four Leaf and Four Oaks are for the same developer and that the sites are contiguous, what would you say about the difference between the exterior treatment of the two groups of buildings?

CP: The primary difference is that Four Leaf is residential and Four Oaks is commercial—offices—and these are really two different building types with different effects on their external appearance and image.

A residential building is made up of residential apartment and condominium units, and the units are in themselves subdivided into components like living rooms, bedrooms, kitchens, bathrooms. The units, and the most critical elements of each unit, are part of the design. So

ing, and the lack of differentiation is also very critical.

Also it has to do with the perception of what residential buildings are like, the fact that this is private. On the other hand offices, although they are also private in an economic sense, have a certain public character. Anybody can come to an office building, enter the elevators, punch a floor and go and visit somebody and try to sell something. They are buildings of ready access during business hours and they also have that very important quality, typical during business hours: they will open at 8 o'clock or 8:30 or whatever time offices open and they will close at 5:30 or 6:00, and they have that diurnal function. The apartments will function the day long and they are continuously occupied and are very private. You will have to go through a doorman and usually explain why you are there and who you want to see.

But the two groups of buildings are built in the same way. Practically all high rise buildings built today have a structure either of steel or concrete—in this case it is concrete, in both cases—enclosed by some sort of a light-weight enclosure for protection, or curtain wall. In both of these cases we are using an all-glass curtain wall with vision glass in the windows and color spandrel in the closed areas. What gives very strong differences are the glazing systems. In an apartment, where the views out in the evening are very important you need tinted glass because [reflective glass wouldn't work and] clear glass results in too much glare. It's very inefficient and very wasteful in terms of energy consumption. So you are really left with only one choice: to use some form of tinted glass. Even if you have very deep overhangs you still have the problem of glare with clear glass. So that

in an apartment, up in the air, you have to use tinted glass for the windows. In an office building reflective glass is much better, because during the day it does not obscure the landscape any more than tinted glass—sometimes less—and is much more efficient in terms of shielding the energies of the sun, particularly in such a hot climate as Houston. The reflective coat to the glass is very, very efficient, almost a mandatory requirement. Both glasses of course are insulated glass.

We have chosen to differentiate the two sets of buildings. To make them look different we are working with warm, if you wish, "residential" colors for Four Leaf, and with "cold" blues (which are beautiful colors but not necessarily residential) in Four Oaks. The Four Leaf tops, although they can be seen as single pieces of carved glass, like a glass-covered pylon, can also be seen as roofs, as pitched, tile-covered roofs. On the Four Oaks, because they are office buildings, the representation of these more residential roofs would have been inappropriate. The buildings, although they step up, end up in a flat top, although they have a gesture toward the sky. But the technology is the same, and in both cases we are doing something that I don't believe anybody has done before and certainly very different from what you see in The Museum of Modern Art.

In The Museum of Modern Art, what we have is a grid of black mullions with colors floating in the grid and these are, in very general terms, the compositional principles of a Mondrian painting, where the colors play with each other in a compositional way within a black grid. Of course as the building is very large and this repeats many times, we have too many lines and the

(1969) it already has started to change to a more uniform grid that ceases to represent structure and floors. And in The Museum of Modern Art Tower, the grid has ceased to be regular so it's not Mies van der Rohe, but it comes from there. Here it's gone. The grid is gone. The surface is dominant and the grids of color are there to support the fields of color in the surface. And by the changes in the color of the mullions, the interruptions are made stronger. We are doing these in both cases to two different effects. In Four Leaf, the changes in colors of the mullions is to support the fields. In Four Oaks, the changes of colors in the mullions will be to support the horizontality of the functions. In Four Oaks, all of the vertical mullions are dark and painted in fluorocarbon. The horizontal mullions are all bright aluminum so that the whole building is going to be held in a set of bright horizontal lines. As you can see, the attitudes towards technology and the technology itself are identical in both sets of buildings, although used a little differently, and also the attitudes and the principles about the use of colors and fields and mullions are also the same in both sets of buildings.

Cite: You seem to have adopted a quite different representational strategy in the design of the Hermann Park Towers. One wonders, were you inspired by any sort of historic precedent in that instance?

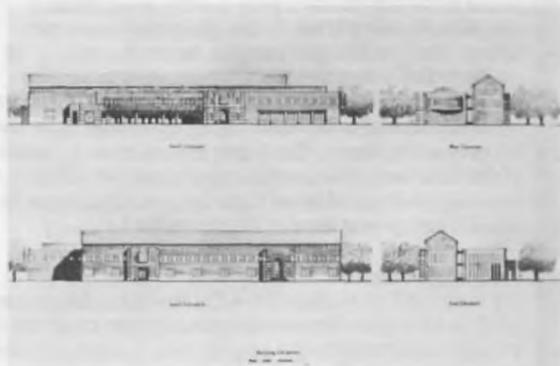
CP: Directly, no. Clearly no. I was concerned with Shadyside. I was very interested subliminally in the character of those buildings, and the only thing that led us to was to propose a painted brick structure. No, what I was interested in was the qualities of two things. Some ideas had to do with the specifics of the problem; some

apartments in the front end up facing the park, and all the units that don't [face the park] face inwards. They are different from Four Leaf, where the organization of plans was given, and we were really not involved in the development of the basic conceptual *parti*. Here we tried to make basic changes in traditional attitudes towards the development of residential places. We were also very concerned with the creation of place, which is the same thing as Pin Oak, and in both cases we had to be able to develop a place. And the external place is very definitely created between the two towers in Hermann Park.

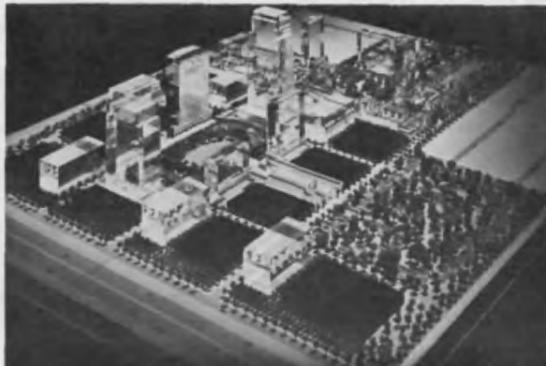
Cite: The way that you have chosen to make a place at the Hermann Park Towers and also at Pin Oak is by using axuality and frontality. I came across a statement you had made in 1976 in which you said you preferred not to use frontality because it seemed to you authoritarian. I wonder now, in Houston, what evokes the desire to create very formal spaces, (although I notice that you also use the same thing in the Cleveland Clinic)? Is this an implicit criticism of the way that space is organized in Houston?

CP: No. Not necessarily a criticism, but I believe it is definitely moving in a different direction, trying to bring to Houston something that Houston has little of, which is formal space. I don't remember the statement that you read to me—I am sure that I made it. That's definitely a change of mind. The formality of the face—and indeed I was concerned before with the authoritarian character—I feel now is a basic responsibility that buildings have to assume. They do bring with themselves, unquestionably, a certain sense of perception of power which may or may not be authority. But I do believe, that in order to

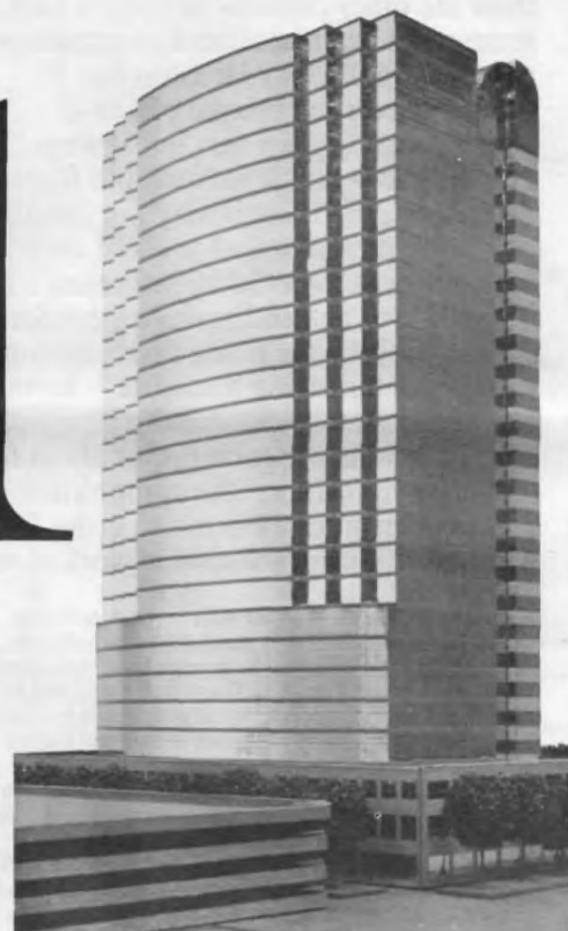
Pelli



Herring Hall, Rice University. 1982 (in design). Rendered elevation drawings.



Model of Pin Oak. 1979 (in construction). Photograph by Wolfgang Hoyt, ESTO.



Model of Pin Oak Office Building. In design. East elevation.

building is symmetrical, it's nothing like a Mondrian. But it definitely comes from that attitude about how you place colors on a field. It could also be seen as related to colored glass windows, vitreous [panels] where each was an entire piece of colored glass, which I think Mondrian also had in mind. So they all come back to similar sources.

In the Four Leaf and Four Oaks what we are doing is something different. The buildings are organized in color patterns and the color patterns are coded, used very consistently to represent certain functional or structural realities. In Four Leaf, all of the vertical columns have the dark brown color. The light beige color always represents a window sill, or a horizontal slab, and separates one apartment from the next. And the medium color is always a panel enclosing a space. The code is very clear and consistent and is repeated formally throughout the building. We have three bays between columns and always in the center bay we have a window. So that repeats consistently, as opposed to The Museum of Modern Art, which is more freely composed. The most important thing is that the mullions change color, and although one would think that the change in color of the very thin lines is unimportant, it really provokes substantial changes in the reading of the facades. Because, instead of being a single plane held by black lines, where the colors float rather freely, that cage of lines disappears. In some ways in my buildings, the cage of lines has come from the first one we did (that was the Century City Medical Plaza in Los Angeles of 1965), which would be a subsumed Mies van der Rohe structure, where only the lines remain so that the surface becomes important. In the San Bernardino City Hall

ideas had to do with interests of mine. Some of the specifics of the problem were that we had to do two structures in two blocks, in each block of different height. One of the blocks faces Hermann Park and the other is behind the first. So you start with two blocks and if you treat them the same, one ends up as favored because it's in front of the park and it's bigger. Very critical for us was how we could deal with the problem so that the identity of the project is more important than each one of the two parts; so that the buildings are designed as two halves of one total. And if they are built there will clearly be an identity of importance in the two buildings.

Also they were reversed, in the sense that the buildings have a formal side and an informal side. What is particularly delightful for me here is that in Houston, which is a city that is so informally organized and where most buildings take an informal attitude towards city form, the external part of these buildings is informal and the internal part is formal. This is the reverse of what you would expect in a European city but very appropriate in Houston. They do play, of course, a more complex role because the internal part of the inner building, which is the formal face, is the one which faces the park. And on the building that is on the park-side block, the formal face really is facing inward toward the city, so that those qualities tend to balance the two buildings and to make them into one unit.

But as you can see now I am dealing with the primary issues in Hermann Park, issues of basic *parti*, of scheme decision, with the organization of plans being secondary, although they make for very good plans because all

have informal qualities in a city, or in any urban context, you need formal ones to refer to. In Hermann Park the reference is immediate because each building possesses both, but you may have it in a city where some buildings are very formal and therefore allow for the informality of other areas. Also, as I have been confronted with the creation of space that I was not dealing with before, the spaces cannot be held together without this formality. I guess you need that power in order to keep that space from dissipating or floating away. I would not see this today as being necessarily authoritarian, although that possibility is always there.

Cite: A final question. Given your visits to Houston over the past several years, are there any specific architectural measures that you can see which would improve the quality of the urban environment?

CP: Get rid of the cars. I don't know how you would do it. Cars are the problem in Houston. I don't have an answer in my pocket. It's an incredibly difficult problem. But definitely the automobiles that are giving form to Houston and are also giving Houston tremendous mobility, are contributing to immobilizing it and to creating barriers between buildings. They are not allowing for an urban form to take place in many cases. The automobile is the most serious problem I think Houston has in terms of urban form or development.

Cite: So we just don't need more beautiful parking garages and freeways?

CP: No. Certainly not.

William H. Anderson
and William O. Neuhaus, III

Trading

The Subterranean

People who drive Houston's freeways are all too familiar with the effect circulation patterns have had on the way Houston has developed. But there are other concrete arteries which, some say, have had almost as important an effect on the way Houston has sprawled over the coastal plains—arteries carrying not cars but sewage. People who work downtown but live in Bear Creek or Tomball may not know it but development at both ends of their daily trip was fostered by sewers as well as roads. Sewage and sewage treatment are not subjects for polite conversation, so it is not surprising that little is known and less is publicly said about Houston's sewage treatment problems, or about the "sewer moratorium," the compromise that has permitted Houston to grow while a long-term solution is worked out.

It became plain soon after the start of the post-World-War-II boom that Houston's phenomenal growth was outstripping the capacity of its sewage treatment plants; those plants handled all the effluent they could and let the rest pass, untreated, into the bayous and bays leading to the Gulf of Mexico. By the early 1960's the City of Houston, through its waste-water treatment facilities, had become the single worst source of water pollution in the Gulf coast region—a distinction it still holds. The situation had gotten so thoroughly out of hand by the early 1970's that federal and state officials, under provisions of what was then new anti-pollution legislation, instituted legal action against the city, allowing no further growth until pollution was cleaned up.

The fact that the city has enjoyed continued growth in the face of such a challenge is testament to the ingenuity of a number of local leaders and developers who worked out a compromise with federal and state officials. The sewer moratorium, as the compromise came to be called (city officials prefer "sewer permit restrictions"), controlled development within the 610 Loop while allowing downtown Houston and the newly developed areas ringing the city outside the loop to grow almost without restriction. In the areas covered by the moratorium, new development was allowed only when the demand on the existing sewer system of a given neighborhood or service area, usually measured in numbers of toilets, could be kept roughly the same as it had been. The administration of this compromise solution fell to the City of Houston's Public Works Department. The policies of Public Works raised questions in some quarters. Developers who cannot afford to keep up with changes in policy and people with small ventures, it has been said, are squeezed out while local big developers get all the available sewer rights. But such allegations have yet to be substantiated, and on the whole most people involved in development in restricted areas agree that Public Works has done the best that can be done.

What is clear about the sewer moratorium is that the good news about continued development is also the bad news: although Houston was not shut down in the early 1970's, the city's problems were not dealt with effectively either. In fact, postponing them for a decade may make the eventual creation of a workable sewer system for Houston harder to achieve in the long run. The sewer moratorium was developed as a short-term strategy, but it looks as if it will be in force for the foreseeable future. That fact has profound implications for Houston's future. There are lessons to be learned from the way our systems

of private and public development have responded to or ignored the waste water rivers flowing under our feet—some grim, and some surprisingly hopeful.

Houston: Water Polluter #1

In 1974 the Texas Water Quality Board, (now called the Texas Department of Water Resources) the state agency that oversees enforcement of federal and state anti-pollution statutes in Texas waterways, ordered the City of Houston to start complying with the limits set in its waste-water facility permits and to stop its chronic violation of water quality standards derived from the 1969 federal Water Pollution Control Act. The city did not respond to the state's satisfaction, however: all Houston's waste water treatment facilities were functioning at capacity, and the only way to improve overall water quality was to embark on an extremely costly and politically unpopular program of building new facilities. Later that year, then-Attorney General John Hill filed suit and won a judgement forcing the city to establish a timetable for specific improvements. That judgement, along with TDWR Order Number 74-0122-1, required the city to improve its collection, treatment and management facilities. At the same time, because of its inadequate treatment capacity, the city was forced to impose growth restrictions on approximately 70 percent of its incorporated area.

Currently, the city operates 44 waste water treatment plants, with over 4,000 miles of sanitary sewer pipe, some 350,000 connections, and 250 pump stations. The sewage treatment plants vary in capacity. The smallest handles an estimated 250,000 gallons of wastewater per day. The largest treatment plant, the Northside facility, has a 55 million gallon per day capacity. Altogether, the city can process an average of 233 million gallons per day of wastewater. The improvement program projects that the city will abandon 10 of the existing plants, and replace them with larger facilities to achieve higher capacity, improved efficiency and greater flexibility for expansion.

Although state regulators have focused on the quality of the effluent leaving Houston's sewage treatment facilities, problems with sewer capacity don't stop there. There are also inadequacies in portions of the city's lines and pump stations. At the same time three factors work against improving the quality of the system. First, the population grows yearly at accelerating rates, and this growth places additional demands on an already overburdened system. Second, federal and state effluent standards have become stricter since 1969. Third, inflation and rising costs have seriously decreased the public sector's buying power. The funds available for any improvements are increasingly limited, and the City of Houston would be forced either to increase taxes or lose its Triple-A bond rating to come up with the estimated billion-plus dollars needed to bring the total system up to par. As a result, timetables for the necessary improvements have slipped backward year by year. The annual operating budget for the city's waste water treatment division has risen from \$20 million in 1975 to a projected \$100 million in 1982. But still the magnitude of the problem outstrips any hope of a near term solution. Permit restrictions will remain in effect indefinitely, and serious overflows will continue to pollute our bayous and bays.

Averting A Shutdown

With federal and state officials pressing them for a solution to the city's waste water problems, Houston's decision makers held a series of meetings in 1974, searching for a way to maintain the city's unprecedented growth and at the same time mollify the regulators breathing down their necks. A series of meetings reportedly took place at which then-Mayor Fred Hofheinz, William Cape and Charles Williams of the City Public Works Department, and a representative of the City Attorney's office put together and worked out the solution. William Cape, the brilliant former head of Public Works, legendary for the independence and power he asserted in the department while mayors came and went, is credited with coming up with the compromise.

The answer worked out in these closed-door sessions was to restrict building in almost 70 percent of the city, and to require a review of each new building permit request to determine that there would be adequate sewer capacity to serve it. At the same time, the city would undertake to improve the entire system, lifting restrictions on different areas within the city as adequate capacity became available. The \$175 million upgrading plan (\$100 million to come from increased sewer rates and \$75 million from federal funds) poured more money into improvements per year than had been expended in the entire 10-year period from 1964 to 1974. Federal EPA officials were reportedly opposed to the plan—noting that it left development in downtown Houston relatively unrestricted. In fact this was the most brilliant stroke of Cape's solution—artificially stimulating growth in Houston while other downtowns withered. Houston architect/developer Burdette Keeland, then and still a member of City of Houston Planning Commission, recalls that then-Public Works Director William Cape argued that immediate improvements to the San Jacinto lift station and continued routing of sewage to the Northside treatment plant would allow enough leeway for commercial and office-space expansion through the decade. Cape's compromise was accepted. As it stands now downtown is unrestricted for office and commercial development, but restricted for highrise residential buildings with their much more intense demands on sewer capacity. The residential development restrictions are supposed to be lifted when the Sixty-Ninth Street treatment facility, now several years behind schedule, is completed. Some observers have questioned whether this will happen, however, noting for example that when the Sims Bayou plant (also years later than scheduled) was completed in 1981, development restrictions were lifted in the neartown Binz area for only a few days—the highly touted excess capacity of the new facility was taken up almost immediately by backlogged demand from high-rise condominiums and other development around Hermann Park.

Administering The Moratorium

For restricted areas, the city's Public Works Department worked out a development threshold correlating use and location to determine the point at which formal review of an application for new construction would be required. The limits set are: for commercial development, 15,000 square feet per acre; for multi-family residential use, seven dwelling units per acre; for single-family residential use, five dwelling units per acre. For any application for a project of this size or greater, the city must automatically review treatment plant and sewage carrying line capacities in the project's service area to make sure that the system can handle the additional effluent from the proposed project.

As a matter of course when a development is envisioned, the developer is required to submit a formal request to the city's Waste Water Treatment Division for a sewer connection. After a review is conducted, the request is either granted or denied, by means of a letter signed by the Director of Public Works. Connection permits, once granted, are valid for a period of one year, and usually can be renewed at least once. When permit applications are denied, the requests are kept on file in the order in which they were received against the possibility that capacity will become available to grant the request.

But there is opportunity for confusion in this process. Connection permits are often granted on one parcel and denied on another in the same sewer service area—there have been cases in which the two parcels are around the corner from each other or even adjacent. This has happened often in the Montrose area, observers say, where sewer mains are also overburdened. Developer Burdette Keeland recalls a not uncommon condition for approval; the city requests that a given developer replace a lateral line connecting his property to a larger sewer main several blocks away. In the case Keeland cites, the cost of such a line overburdened the project and made it financially impossible. Large projects often have a better chance of absorbing the shock of such additional costs.

Toilets!

Zoning of Houston

Trading Toilets

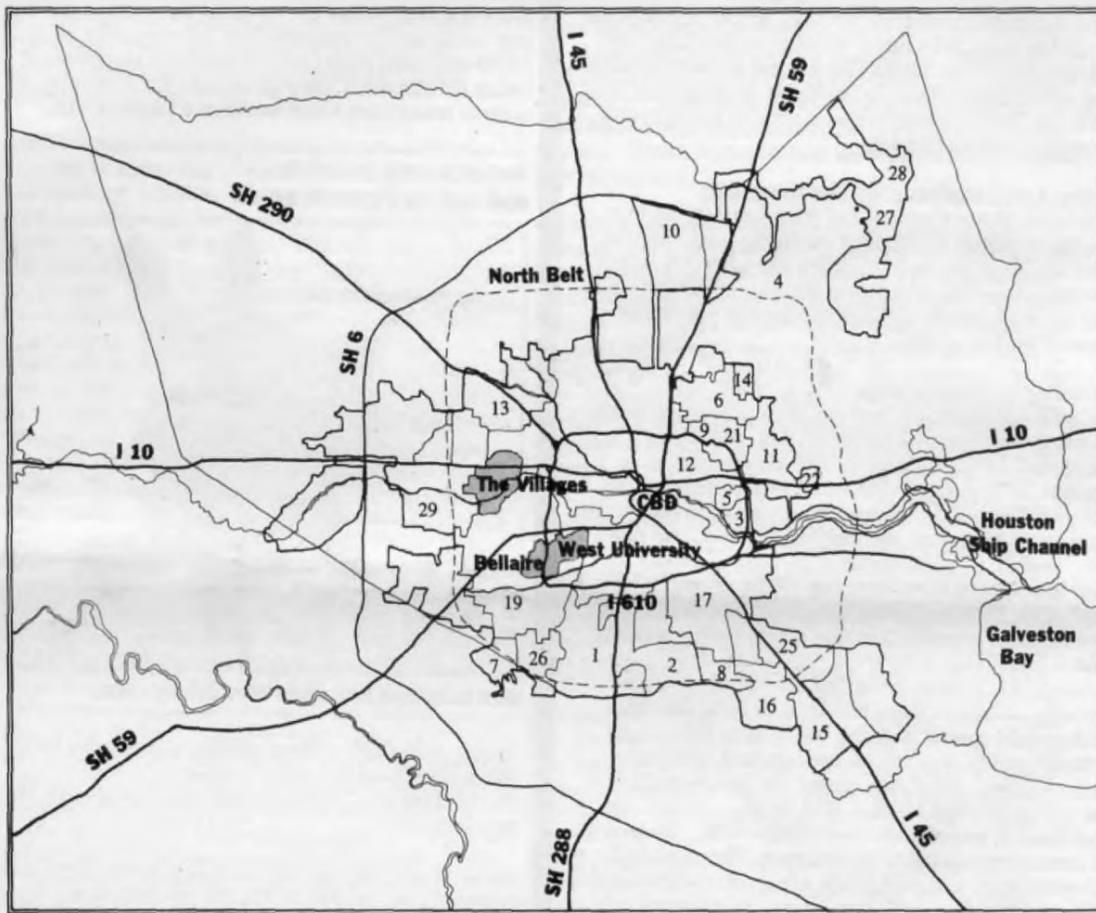
In cases where a project exceeds the development threshold and additional sewer capacity cannot be granted by the city—a situation which has existed in most near-town neighborhoods for the past five or six years—there has developed a somewhat more controversial way of building in restricted areas—trading sewer rights.

"Obtaining sewer rights is nothing more than brokering commodes," says one Houston architect. "The process is really quite simple. If there are many properties in the area that are vacant or underutilized—that is, use less by way of sewer connections than they did in the past—the developer can either buy these properties, or buy the sewer rights to the properties from the owners. There are rumors that sewer rights from football stadiums, parking lots and cemeteries have been sold. Then the developer can submit these additional sewer rights as belonging to the property he wants to develop." The other properties then cannot be developed until further capacity is added or sewer rights from other properties can be obtained, the architect explains. "This maintains homeostasis in the general area, while allowing at least some projects to go ahead."

Eyebrows have been raised over some of the aspects of this type of arrangement, however. Perhaps the most important thing it has done is put a strange backspin on property value, adding a new component to the old saw about the three principles of real estate development ("Location, location and location"). A parcel of land in a great location with five water closets permitted is more valuable under this system than a parcel with none, but is less valuable than a parcel in an inferior location with a permit for 150 water closets. This is one of the reasons that some developments of significant intensity are showing up in unpredictable locations. For example, The Huntington, a 40-story condominium on Kirby near San Felipe is in a restricted residential area to the south of River Oaks. Its location seems strange from the traditional developer's standpoint—the building is *not* near a major freeway, and it doesn't have the visibility such projects are thought to demand to be profitable. However, the building's promoters were able to secure a connection permit for development far beyond the original plan making the land extremely valuable—"Valuable enough to warrant a 40-story building in a questionable location," says one local architect.

It seems foolish to some observers to sell or trade away sewer rights on land you own in a restricted area—would that not preclude its future development? Land is restricted not just by sewage treatment plant capacity. Insufficient line and lift station capacity also must be addressed in many areas, particularly the Montrose, scene of some of the hottest trading. Solving all of these problems may take many more years. People who have traded away sewer rights may hope to recover them as new capacity is added for the area. As the area served by the Sims Bayou treatment plant has shown, however, the window in time available for regaining sewer rights opens and closes quickly. Nevertheless, particularly astute landowners and developers have made speculating in sewer rights a profitable business in its own way, trading sewer rights to the same property more than once, within weeks or even days, by being aware of the schedule of waste water service improvements.

Some observers wonder privately if such trades are or should be legal. Many times in the interviews conducted for this story—developers, none of whom wanted to have their names used, since they will have to continue to work with the city bureaucracy they were criticizing—called the system unconstitutional, accused the city of illegally using its police powers and denying due process of law—charged that small local developers and most out-of-town companies were placed in a competitive disadvantage, and said the sewer moratorium amounted to *de facto* zoning to the detriment of the city inside the loop.



The system as it works today has no checks and balances; it's administered solely at the discretion of the Public Works Department. That makes it potentially abusable, critics say. The only basis of legal or procedural legitimacy for the whole system seems to be a provision within the city's ordinances which establishes the right of the Director of Public Works to review and approve or deny plans for development. Critics say that a court challenge could show that provision should not extend to the present system.

"Why is there no written policy on the permitting process for the public to see," asks one developer with extensive interests north of downtown Houston. "The city's policy is a moving target," says another.

In a recent conversation James Sullivan, Deputy Director of Public Works, indicated that the city will no longer allow trading of sewer rights. Within the last year, Sullivan said, requests for permits mushroomed and the city has been forced to put a stop to open and free trading. In the future, excess capacity will be transferrable from one property to another only if the properties are in close proximity, and the applicant owns both properties.

Several suits have reportedly been threatened against the city, but to date none have been filed. No city official has ever been charged with colluding with any particular set of interests; rumors about the improper handling of certain projects have never been substantiated.

In fact, the consensus within the development community is that, as PIC Realty's Jeff Toia says, "The system is workable, development is continuing, and nobody wants to rock the boat." Architect-developer John Spear says, "EPA could shut us down, but at least the system is manageable as it is."

Manageable though it may be, Houston's system is not the only one possible, and based on the experience of other cities, is neither the fairest nor the most workable one available. As it is, the system relies largely on the resourcefulness of the individual developer. In other American and European cities facing similar kinds of

Table of Plant Restrictions

Plant	Restrictions to be Continuing	Restrictions to be Initiated	No Restrictions
1. Almeda Sims			X
2. Chocolate Bayou	X		
3. Clinton Park			X
4. Eastex Oaks	X		
5. F.W.S.D. #17			X
6. F.W.S.D. #23			X
7. F.W.S.D. #34			X
8. Gulf Meadows	X		
9. Homestead	X		
10. Intercontinental Airport			X
11. Northeast		X	
12. Northside	X		
13. Northwest	X		
14. Red Gully	X		
15. Sagemont	X		
16. Sherwood Oaks	X		
17. Sims Bayou		X	
18. Southeast			X
19. Southwest			X
20. Turkey Creek	X		
21. W.C.I.D. #20	X		
22. W.C.I.D. #32	X		
23. W.C.I.D. #44-1	X		
24. W.C.I.D. #44-3	X		
25. W.C.I.D. #47			X
26. W.C.I.D. #51			X
27. W.C.I.D. #73	X		
28. W.C.I.D. #82	X		
29. West District			X

Because of permit restrictions inside the loop, developers are forced to perpetuate Houston's urban sprawl.

growth management problems, a formal system known as Transfer of Development Rights (TDR) has been employed with some success. Most often utilized for historic preservation in the U.S. and the preservation of agricultural land in Europe, the TDR system involves a public body with jurisdiction overseeing and assigning development rights increments, which can then be traded as a commodity in full view of the public. In Houston, such a system modified to handle sewer rights could serve several purposes. It would be possible to quantify the amount of sewer rights available at present and project them into the future as far as possible. It could fix a price for each right increment, on which a tax or percentage of the fee could go to the city to contribute to wastewater improvement funds, with the view of eventually lifting restrictions entirely. The TDR system would bring public scrutiny and equal access to sewer rights. Such steps would remove the process from suspicion of abuse and allow smaller developers with fewer resources at their disposal to obtain development rights without incurring the costs involved in constantly monitoring service area improvements.

"The real problem with the process in Houston is that it lacks any public constituency," says Architect-developer Milton McGinty. Like many developers, McGinty says he thinks the Public Works Department is doing a fairly good job of administering a shaky set of guidelines, and that he prefers the present system with its faults to any possibly worse alternative.

Sewers And Leapfrogging The Inner City

Developers Bruce Conway and Rick Lundell say that, because of permit restrictions inside the loop, "developers are being forced to abandon the inner city where densities should be increasing. Instead, to survive, they must develop outside the city and further perpetuate Houston's urban sprawl."

According to Conway and Lundell, "Infill housing (building on vacant and underutilized properties within already developed areas) is important, and it's only accomplished by the little guys. The way things are in Houston, little guys are fast becoming an endangered species." The sort of residential restructuring that is taking place in Montrose, the Heights, the Binz and other older close-in neighborhoods is performed mostly by small developers, they point out. These areas are also some of the most restricted in the city. The restrictions prevent major reinvestment and restructuring in such areas which could make them once again solid neighborhoods that provide good and accessible in-town housing—although many residents of these neighborhoods would quarrel with the implication that neighborhood vitality depends on the presence of highrise condominiums. What they mean, the developers say, is that the small home builder, if he or she is to survive, must build in remote suburban subdivisions, increasing the commuting distance for residents. This contributes to the outward growth of the city, which exacerbates such problems as traffic, pollution, and over-taxing of city and county service networks.

Most of Houston's growth since 1974 has occurred outside the 610 Loop and in downtown, and the area inside the loop has been, by comparison, in a kind of peaceful slumber. The relative calm of Montrose or the Heights in the swirl of the 1970's is easily explained by the moratorium: these and other inner-city neighborhoods are served by the oldest and most overloaded sewage treatment plants, and this makes new development permits extremely difficult to obtain. But the boom outside the city's corporate limits could not have happened if what was then called the Texas Water Rights Commission had not been empowered by the Texas Legislature to create Municipal Utility Districts—MUD's for short.

MUD's allow a developer to create a new water and waste water district with its own taxing powers, empowered to issue bonds so that city services can be installed and maintained in areas beyond the reach of existing city or county systems, until those areas are annexed by the city. Although this legislation had been in effect for several years prior to 1974, it was only after sewer permit restrictions went into effect that MUD's came into their own as a means to facilitate development outside the boundaries of Houston. Without MUD's and sewer rights trading, growth would have come to a standstill in Houston.

"MUD's shift the costs of utilities to those who benefit from them," says Kevin Cavanaugh of the Rice Center.

But MUD's have not brought with them unmixed blessings, as people sitting in traffic on I-45 or I-10 or I-59, commuting to and from their relatively low density outlying suburbs, to and from their downtown jobs.

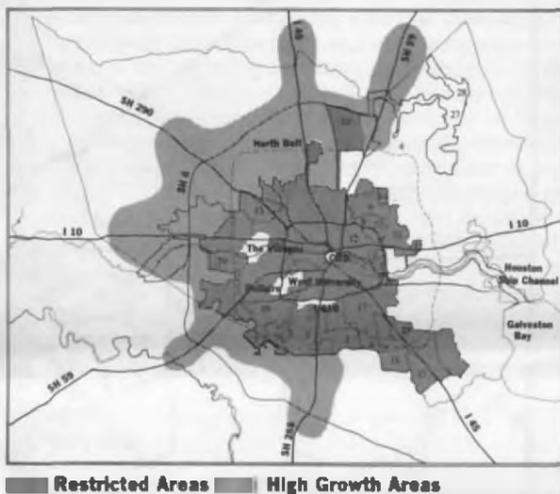
"My problems with MUD's have nothing to do with water quality and everything to do with environmental quality," says Jim Blackburn, environmentalist and professor at Rice University. Says University of Houston professor John Mixon, "Municipal Utility Districts promote leap-frog development." Cities normally develop outward along their major roadways, both say, but MUD's have encouraged poorly placed and designed

subdivisions far beyond the city's limits, contributing to more traffic congestion, air pollution, flooding, ground water recharge problems, strip commercial development and other forms of general decline in regional environmental quality.

For example, high rise buildings can be seen along I-10 west of Dairy-Ashford and along FM 1960-Highway 6 in northwest Harris County. Large residential projects are found in remote areas between FM 1960 and Katy. These buildings are 25 miles or more from downtown. Without MUD's these projects would not exist in such locations, as they would be beyond the reach of Houston's utility network. The result of such leap-frog growth is large tracts of passed over vacant and unserved land. Such development further perpetuates the outward growth of the city, but at very low densities—in a word, sprawl.

In addition to fostering sprawl, MUD's create new problems for the city after they are annexed. Where older MUD's are in place, the city often faces inadequate line and plant capacities in the sewage treatment facilities. In effect, the city is reduplicating on its borders the same problems that caused the sewer moratorium in the inner city—only on a catastrophically greater scale. Even when MUD treatment plants are adequate for all projected future development, they go against the economies of scale in maintenance and workforce requirements.

Sewer permit restriction and outward growth areas



"Large centralized sewage treatment plants are better than a multiplicity of small temporary plants," says Charles Williams, formerly with the city's Public Works Department.

Not all agree. The city has worked hard in recent years to improve the quality of MUD's planned within its extraterritorial jurisdiction, says James Sullivan, Deputy Director of Public Works. "Now what is annexed is usually cheaper to operate than equipment within the city limits." He points to Friendswood's Copperfield development on Highway 6 as a good example of a cost-effective MUD. But other city workers admit that many MUD's will develop into serious headaches for the city in the next decade.

Houston will arguably find it necessary to impose the same kind of restrictions on its outer reaches as now hamper its inner core when these problems surface—except that by then the problems will be much larger.

There is a new twist to development in the Houston area that goes along with MUD's and the sewer moratorium—growth along the bayous. Normally the degree of intensity in an area's development is directly related to both its accessibility and its visibility. However, as a result of the Harris County Flood Control District's control of the bayous, and its ability to license the use of "package" waste water treatment plants, residential development kept out of the logical growth corridors in Houston has begun to move along the bayous and some observers predict that eventually they will multiply like so many thickets of elephant ears.

There are, for example, Charles Leyendecker's The Park at White Oak Condominium on White Oak Bayou and Campeau Homes of Texas, Inc.'s Bayou Bend Tower. Both projects are inside the 610 Loop, and thus in highly restricted areas. However they both utilize self-contained "package" sewage treatment plants which resemble regular full scale city treatment plants but process the sewage from their projects only and then discharge the effluent directly into the adjacent bayous. When capacity in their service areas is available (it is hoped within the next several years, sources say) both these projects will be connected to City of Houston sewer lines and the package plants will be removed. Insiders predict a wave of high intensity development along Houston bayous in the near future.

New sewer treatment systems making more such development possible have sparked considerable interest

in the Houston real estate community. These systems are based on the use of enzymes and other natural decomposition compounds first developed for the U.S. Navy over 20 years ago. Such units, installed directly in the building being served, produce a high quality sewage that is even potable, manufacturers claim. However the system produces a sludge that needs to be removed each year by tank truck. By recycling purified waste water and using one-gallon-per-flush toilets (most need five gallons) the amount of liquid effluent released is also reduced by 50 to 90 percent, it is claimed, which means that such plants could be hooked into existing lines with a proportionally small demand on both line and plant capacity.

Houston's Waste Water Treatment Division has recently approved several such units. The impact could be significant. Plants, lines and pumping stations would not have to be expanded as rapidly or as much to accommodate development utilizing such systems. Some question remains as to whether such plants will be cost effective for the developers who use them and whether they will perform as promised. But should they live up to expectations, such plants could be the key to development inside the loop, decreasing the city's need for more and more land to sprawl into.

It appears that Houston's population will continue to grow for the foreseeable future and that large portions of the city will remain under restrictions for sewer use. Although the city's sewage treatment capacity will be greatly enhanced by the Northside/Sixty-Ninth Street and Almeda/Sims Bayou plants when they are completed, the permit applications already on file for the Almeda/Sims Bayou plant exceed its planned capacity. Developers may have nowhere else to turn but to the package plants.

"Developers would rather contribute money to plant improvement costs than wait while paying taxes and 18 percent interest (on money they've borrowed to purchase and improve) raw land," says James Sullivan of the Public Works Department. In an effort to maintain its Triple-A bond rating, Houston has traditionally issued public improvement bonds in approximately \$50 million increments. With most sewer treatment facility costs running into the hundreds of millions of dollars, the road to a final publicly financed solution looks very long indeed. The only way out may be to increase revenues and develop a method to allow private contributions by service area, as James Sullivan suggests above.

Lessons From The Moratorium: Houston Needs Development Controls

No discussion of growth patterns in Houston would be complete without taking note of the fact that Houston is the only major city in the country without zoning.

Houstonians are proud in their belief that this city remains a pure expression of the free enterprise system, and that land owners are free to use their land as they please, without the encroaching controls of government. The reality underlying this belief is somewhat different, however. Most residential and many commercial subdivisions are protected by deed restrictions and protective covenants. All buildings are subject to rigorous city building codes. Height restrictions are dictated by the Federal Aviation Administration. Various lending institutions have their own requirements.

And then, of course, there is the sewer permit system. The list of restrictions, although short of zoning, adds up to a significant degree of control over land development in the *laissez faire* city—with the difference that the controls are uncoordinated and often seem to work at cross purposes. If Houston's land use, locational and growth patterns were compared to those of most other cities in the U.S., few differences would be found. However, one critical difference is immediately apparent.

The difference is that Houstonians have voted down efforts to force public control of the city's own destiny—its government reacts but does not direct. Traditional forms of zoning are not the answer for Houston. But given the amount of controls already in place in the city, it is now time to face up to the fact that unless the city, through open public process, sets some goals for such things as environmental quality and mobility, the city will continue to deteriorate. Houston does not need to be out of control. There are tools for shaping development at hand, as the sewer moratorium, with all its unforeseen consequences, has shown. The city has the right to review all plans for building, subdividing and engineering within its corporate limits and its five mile extraterritorial jurisdiction. The city can construct water and waste water facilities to direct growth and development. All that's missing is a sense of direction. The sewer moratorium represents an important lesson to the city—Houston can and has exercised control over itself to achieve a goal. Unless such a commitment is made to the future, there is little hope that the problems already visible on the horizon will not overwhelm its residents in the decades to come. Setting such goals will require an extraordinarily broad base in the private sector and other institutions. A plan developed by public officials alone would likely go nowhere. The sewer moratorium has shown that the same people who are most in favor of continued growth and vigorous development can benefit from coordination and planning. Developers are the natural constituency for planning in Houston.

The authors would like to thank Steven Gendler, Pam Hanson and Sharon McGinnis for their research contribution.



Charles Simonds, (Untitled), Downtown Houston, 1982.

Clay Castles: Recent Work by Charles Simonds

William F. Stern

Works of artist Charles Simonds, including the piece entitled "Circles and Towers Growing" are on view through August at the Contemporary Arts Museum in Houston. The exhibition, organized by John Neff of the Museum of Contemporary Art, Chicago, is traveling around the country and will be seen finally in March, 1983, at the Guggenheim Museum in New York.

"Circles and Towers Growing" consists of 12 clay tablets. Each sits on a plywood base and measures 30 by 30 inches; other materials used are sand, pebbles, bones and shells. The 12 parts are like stills from a movie: numbers one through three show times before and during the genesis of two imaginary civilizations which Simonds has named Circles and Towers; parts four through 12 continue the saga as each of the civilizations goes through a complete cycle from conception through life to death. Though the pieces in the show can be read in order, they were not made in sequence. For Simonds, progression in time is circular rather than linear, and the lines between built environment, growing things, the earth, and the forms of human sexuality are blurred to the point of obliteration. Shapes grow from cracks in the earth, are built upon and recapitulated in constructed forms, and themselves give birth to seemingly living structures. The span between each of the frames in "Circles and Towers Growing" might be eons or years, or it might be only a day. Simonds relies on our imaginations to fill in the missing time.



Charles Simonds, Number 5 (Observatory), 1978.



Charles Simonds, Number 7 (Untitled), 1978.

The art of Charles Simonds speaks to a primal urge of humankind to create, destroy and recreate civilization. As sculpture, the work is to be viewed as abstract object. As literary chronicle, it is to be read as vignette within a larger story or myth. As architecture, it is a miniaturized record of human building brought into an archaeological present.

"Circles and Towers Growing," made in 1978, documents an aspect of the artist's work, but comprises only a small portion of his entire *oeuvre*. Since 1971, Simonds has been concentrating on a series called "Dwellings," over 300 pieces constructed of tiny unfired clay bricks, built into the cracks and crevices of walls from the Lower East Side of New York to sites in Europe, Africa and China. "Dwellings" traces the migrations of an imaginary race of Little People. Simonds attempts to capture their social structure, culture and religion by building their miniscule villages. Simonds has installed two "Dwellings" in Houston. One can be found six feet above street level at the Paul Building, 1018 Preston Building, near the corner of Preston and Fannin. Another is 10 feet above ground in a wall of the Cross Auto Garage building on Main Street between Jefferson and Calhoun. A third is still in the planning stage. The "Dwellings" link Houston and the Little People to other cities and places around the world. Critic John Beardsley has written of these installations:

Reviews

Skin Deep



The Skyscraper. Paul Goldberger. New York: Alfred A. Knopf, Inc., 1981. 180 pp. Left: detail from *American Radiator*, Georgia O'Keeffe, 1927.

Reviewed by Bruce C. Webb

Paul Goldberger begins this entertaining history of the skyscraper with a paradox: "The skyscraper," he writes, "is at once the triumphant symbol and the unwelcome intruder in the American City." The paradox is never resolved. In the concluding sentence describing the present situation in architecture he leaves with a similar quandary: "It is a time of excess but also a time of promise." In between, Goldberger, architectural critic for the *New York Times*, has assembled a fast-paced and extensively-illustrated review of America's most distinctive building type.

Goldberger's concern here is primarily for the aesthetics of the skyscraper rather than for the technology which made tall buildings possible. He is unabashedly attracted to architectural theatrics, which is why he prefers the flamboyant eclecticism of the New York skyscraper to the "more intellectually rigorous skyscrapers of Chicago." Both the innocent pre-modern historical revivals of the early twentieth century and the not so innocent post-modern decorations of Philip Johnson and Michael Graves interest him much more than the ubiquitous examples of the high rise computer aesthetics of the fifties and sixties. Understandably so. But the attraction appears to be literally only skin deep. The book rarely takes us inside any of the buildings, thus creating the impression that skyscraper architecture is essentially the costuming of formula buildings or wrappings around floor efficiency ratios. A reasonable understanding for a developer, perhaps, but not for a critic.

The skyscraper certainly had some remarkable moments of artistic and even spiritual achievement. Some of these like the Chrysler Building, the Empire State Building or the Chicago buildings of Adler and Sullivan are well known. But there are also some entertaining side shows, like Frank Lloyd Wright's anti-city Mile High, or Theodore Starrett's 1906 proposal for a 100 story building that would have housed industry at the bottom, businesses above, housing above that and a hotel in the topmost region, with each vertical section separated by a public plaza. Then there are the marvelously witty entries to the Chicago Tribune building competition of 1922, together with the prophetic modern submittal to that same competition by Walter Gropius. Goldberger also presents the realization of new highrise urban prototypes, like Philip Johnson's IDS Center in Minneapolis, combining the abstract tower with the traditional concept of urban public space.

Goldberger contends that the high rise is making an artistic comeback in a new and more modestly sized version, one which transcends the rational lessons of modernism through a romantic interest in historical design principles. By fixing his attention on the best of the skyscrapers, he manages to maintain a spirited optimism.

Somewhere along the way, however, that optimism becomes more self-conscious, as Goldberger's scene shifts from the magnificent pioneering towers which gave the

urban skyline its animation to the menacing high rise stereotypes which have grown together to create the new city fabric. Goldberger treats the apocalyptic warnings of urban critics who saw the skyscraper as a monstrous threat to the historical city like good advice the old generation gives to the young—a combination of truths distorted by alarmist overstatement. The economic adventurism which viewed the tall building as a means for maximizing the development potential of valuable urban real estate through the stacking up of more and more rentable office space was clearly at odds with conventional notions of the city. A series of now famous zoning ordinances were passed, chiefly in New York, to give this essentially laissez-faire building type a conscience. Sadly these restrictions were less instruments for planning than for conformity. But it was that special American collaboration between economic entrepreneurship and technical ingenuity which gave shape to the skyscraper and which the skyscraper would come to symbolize. Francisco Mujica, in his 1929 *History of the Skyscraper*, saw the inexorable energy of this collaboration when he wrote, "Behind the skyscraper stands the leading parts of the nation. . . . Those who advocate its abolition will certainly have no success."

Contemporary interpretations of the high rise are never so innocent: in a very direct way the high rise has become a metaphor for the morbid regimentation and mind-numbing routines that it harbors. Romantics might long for those days when the race between William van Allen's Chrysler Building and his former partner, H. Craig Severance's 40 Wall Street, for supremacy of the New York City skyline was front page news. Today the triumphs of the latest big buildings are no longer much of a spectator sport and usually are exiled to the business section.

Houston figures briefly in Goldberger's book by way of Philip Johnson and John Burgee's two completed buildings in this city, Post Oak Central and Pennzoil, and their soon to be constructed RepublicBank Center and Transco Tower. All four come in for some high praise, particularly Pennzoil. This paradigmatic abstract compositional work is described as a just right symbol for Houston: "A place eager to make its mark yet desirous of appearing strong and stable at the same time." But I wonder how long it will be before the splendid view of that building's *pas de deux*, which is best seen from I-45 coming in from the airport, will be lost in the excesses of other less distinguished but more massive structures.

When I think of the skyscraper I am reminded of the story which Roland Barthes tells about Maupassant always lunching in the restaurant in the Eiffel Tower. The famous novelist said he didn't like the food, but it was the only place in the city where he didn't have to look at the thing. Then I think of the experience of going up to the Spindletop on the downtown Hyatt at two or three year intervals to show someone from out of town the view from the revolving restaurant. Each time the view is closed in a little more. Now nearly three-fourths of the trip around is spent watching maintenance workers in offices across the way. The point is that going up was always a trip away from the world, a kind of bridge between earth and sky. The best of the skyscrapers realized this and filled the upper regions with places for imaginable experiences and the bottoms with pieces of the street. When bottom, top and in-between are all the same there is no romance and no imagination, only the loss of the meaning of the tower to a matrix of numbing uniformity.

"This deliberate juxtaposition of indoors and out, private and public, forces the art audience to acknowledge that these works have an extraesthetic function: to draw us into contemplation of the physical environment and how we live in it."

The "Dwellings" can be viewed by most in the city only by chance, and they often do not survive the ravages of urban life, human and meteorological. "Circles and Towers Growing," on the other hand, makes a permanent record, amplifying the meaning of life and civilization according to Charles Simonds, as interpreted by a museum audience.

"I've always thought of my work as transsocial, transpolitical, transsexual and transparent(al)." Simonds has written. He has spoken and written extensively about his own interpretation of his pieces, and he has put together several performances—shamanistic enactments, really—to demonstrate them. One, a 1970 work called "Landscape→Body→Dwelling," was photographed: Simonds lies naked on a beach, partially covered with clay and sand, arranging the little bricks of his "Dwel-

lings" on his own body. Nothing is dead in Simonds' view, and nothing lasts. His civilizations are made and grow from the earth's materials and, when destroyed, crumble and recede back to the very soil from which they emerged.

However, Simonds acknowledges that his views are not the only ones possible, and in fact wants individual viewers to find their own meanings and associations in his work. Differences in countries and races make viewers see different things. Simonds' is an art that can be appreciated and understood by all cultures and ages of humankind, regardless of formal education. There is an engaging, magic quality about Simonds' work, and there is not a select or specified audience for it.

Simonds' art can be seen in a tradition that begins with Marcel Duchamp, who most emphatically stretched the nineteenth-century definition of art. Simonds captures the narrative aspect of art and gives audiences the latitude to explore and understand the work on their own terms.

On Tour

Morgan's Point: Once Bustling Bay Ridge Survives

Gordon Wittenberg

The Bay Ridge community, now a part of the city of Morgan's Point, was established in the 1890's. Thirteen families from the Houston area formed the Bay Ridge Association and purchased an approximately two-mile section of undeveloped waterfront at the north end of Galveston Bay for the construction of summer homes. The homes were originally built to be sleeping cottages, as all cooking and entertaining was done at a central clubhouse. The houses were designed to provide as much exposure as possible to the onshore breeze. They were characteristically one room deep, with an almost equal area of attached porch. More elaborate plans consisted of a narrow wing of service elements like bathrooms and kitchens extended from the living area to form a "T" shaped building.

The entire Morgan's Point area was originally part of the James Morgan plantation, Orange Grove, and later the

home of Commodore Charles Morgan who dug the first cut in what is now the Houston Ship Channel (Morgan's purpose was to stretch a chain across it and charge a toll). The summer bay houses became such a part of the way of life in Houston that by 1920 the Southern Pacific Lines had laid a spur to Morgan's Point and ran morning and evening trains for commuters.

At this time, just prior to the introduction of air conditioning, the development along Bay Ridge reached its final and most exotic phase. The Irvin family had a zoo constructed on the landward side of Bay Ridge with live bears and deer for the amusement of their guests. It was also in this period that future Texas Governor Ross Sterling constructed an extravagant house on four lots in Bay Ridge. Local lore has it that the house is a full-sized replica of the White House which came about when the architect supposedly asked Sterling for some direction

as to the appearance of the house. Sterling, so the story goes, produced a \$20 bill and told the architect to copy it. In fact the house, although grand, doesn't resemble the White House except in the positioning of one portico. Designed by architect A. C. Finn, it is probably derived from Gwinn by the architect Charles Adams Platt.

The Bay Ridge club house has been destroyed, but five of the original 13 homes remain, as well as several significant buildings which pre-date the organization of the Bay Ridge Association. The community contains the best remaining examples of the Texas bay house.



BAY ENTRY, HOFHEINZ HOUSE



HOFHEINZ HOUSE



STERLING HOUSE, A. C. FINN, ARCHT.



STERLING HOUSE



BAY RIDGE BEACH



BAY RIDGE FROM THE CLUB PIER, CIRCA 1918



FILSON HOUSE, SANGUINET & STAATS, ARCHTS



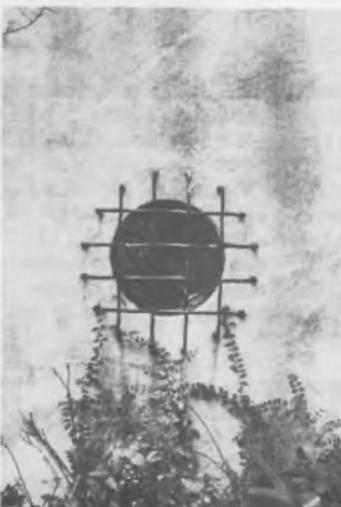
BARNETT HOUSE



PORCH, BARNETT HOUSE



BATH HOUSE



DETAIL, IRWIN HOUSE



IRWIN HOUSE, JOS. FINGER, ARCHT.



McELVOGUE HOUSE

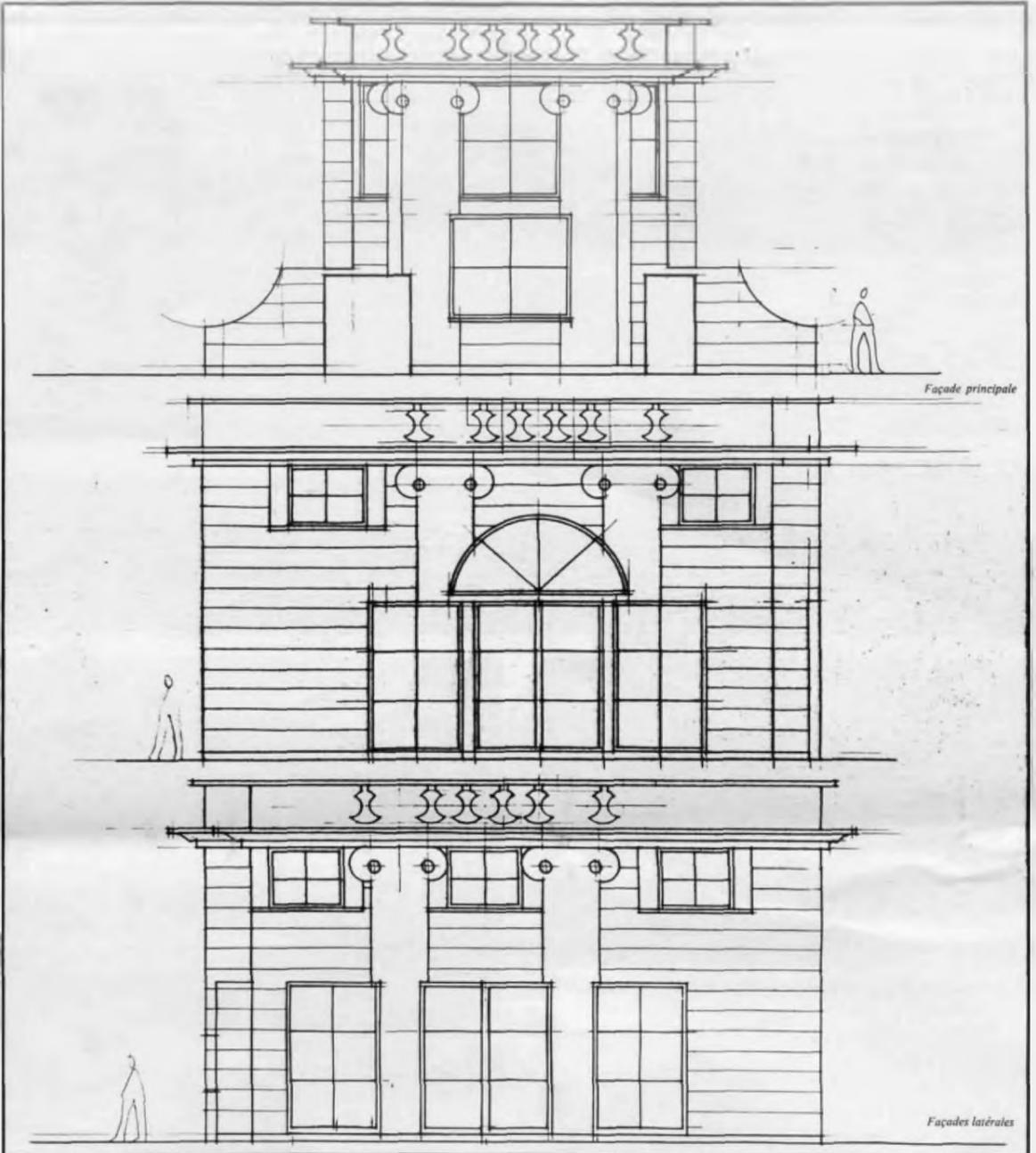


BULLOCK HOUSE, JOHN F. STAUB, ARCHT.



ENTRY, BULLOCK HOUSE

Calendar



Top—H. H. Richardson, *John Jacob Glessner House*, Chicago, 1885–1887. Side elevation study, pencil on tracing paper, 6 x 13 inches. H. H. Richardson Collection, Houghton Library, Harvard University. From the exhibition *H. H. Richardson: Domestic Projects, 1879–1886*, Farish Gallery, Rice University, October 27–November 28.

Upper left—Henry Howard, *Belle Grove Plantation*, White Chapel, Louisiana c. 1857. Detail of drawing room and bay. Photograph by Walker Evans, courtesy of the Estate of Walker Evans. *Classical Architecture in the South: Transformations of an Ideal* will be presented in six lectures at the Museum of Fine Arts, Houston, September 1–October 6.

Above left—Birdsall P. Briscoe, *E.L. Neville House*, 11 Courtlandt Place, 1914. Detail of north facade. The *Rice Design Alliance* tour of Courtlandt Place will be held October 9–10.

Above right—Venturi, Rauch and Scott Brown, *Project for a House in Abesecon*, New Jersey, 1977. Front and side elevations. From the exhibition *Speaking a New Classicism: American Architecture Now*, Farish Gallery, Rice University, September 13–October 20.

August

August 18: **Walking Tour**, Bart Truxillo of the Greater Houston Preservation Alliance leads walking tours of the remaining historic buildings in downtown Houston today and the third Wednesday of every month. The tours start at noon at the corner of Preston and Milam and take one hour. \$1 per person. 861-6236 or 223-8508 for information.

August 31: **Entry deadline** for the residential design competition sponsored by the Houston Chapter of the AIA and Houston Home and Garden Magazine. \$50 entry fee. Send submissions to 2003 West Gray, Houston TX 77019. 520-8125 for information.

September

September 1–October 6: **The Rice Design Alliance** will examine the styles of Southern Classicism and the meanings they symbolize in a series of six lectures, *Classical Architecture in the South: The Transformations of an Ideal*, presented by well-known architects, critics and historians at the Museum of Fine Arts, Brown Auditorium at 8:00 P.M. Tickets for the series will cost \$21 for members, \$30 for non-members and \$12 for students. For more information, please contact the Rice Design Alliance, P.O. Box 1892, Houston 77251. 527-4576 for information.

September 13: **The Classical Idea in Twentieth-Century American Architecture**, a symposium sponsored by Farish Gallery and the Rice Design Alliance. Presentations include: Robert A.M. Stern, "the Lost 'New' Classicism: Classical Themes in Art Deco;" Allan Greenberg, "Literal Phenomena: Classicism Redivivus;" and Neil Levine, "The Newest Classicism: Sources and Invention." There will be a panel on The Future of Classicism. 8 pm, Brown Gallery at the Museum of Fine Arts. 527-4876 for information.

September 13–17: **Charles Moore** is visiting critic at the University of Houston College of Architecture. 749-1187 for information.

September 13–October 20: **Speaking a New Classicism: American Architecture Now**, an exhibition organized by Smith College and circulated by the National Building Museum, supplemented with materials assembled by the Rice School of Architecture. Includes drawings and models of classically influenced projects by Alan Greenberg; Venturi, Rauch and Scott-Brown; Charles Moore; Michael Graves; Machado/Silvetti; Thomas Gordon Smith and others. 12–5 pm daily. Farish Gallery, School of Architecture, Rice University. 527-4870 for information.

September 20–24: **Ian McHarg** is visiting critic at the University of Houston College of Architecture. 749-1187 for information.

October

October 1: **Entry deadline** for the biannual interior architectural design competition sponsored by the Houston Chapter of the AIA. \$50 entry fee. Send submissions to 2003 West Gray, Houston, TX 77019. 520-8125 for information.

October 2–November 14: **Schemes and Dreams: Visions and Revisions for the Contemporary Arts Museum**: architectural drawings and models for visionary proposals for the expansion, renovation, rebuilding or conversion of the existing museum structure on the present site by Houston-based architectural firms.

October 8–10: **The Association of Collegiate Schools of Architecture** holds its regional meeting at The Woodlands. 749-1185 for information.

October 9–10: **Courtlandt Place Neighborhood Tour**, sponsored by the Rice Design Alliance. 527-4876 for information.

October 25–29: **Michael Graves** is visiting critic at the University of Houston College of Architecture. 749-1187 for information.

October 27: **H.H. Richardson: Domestic Projects/1879–86**, a lecture by Jeffrey Karl Ochsner, faculty member of the Rice School of Architecture and author of *H. H. Richardson, Complete Architectural Works*, to be published this fall by MIT Press. 8 pm, Brown Auditorium, Museum of Fine Arts. 527-4870 for information.

October 27–November 28: **H. H. Richardson: Domestic Projects, 1879–86**, an exhibition organized by the Rice School of Architecture, including nearly two hundred drawings from the collection of the Houghton Library, Harvard University and photographs from several sources. Extensive documentation of the Trinity Church Rectory, Hay-Adams Houses, Glessner House and fourteen other projects. 12–5 pm daily. Farish Gallery, School of Architecture, Rice University. 527-4870 for information.

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