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Val Glitsch, Architect

Texas Architect Mar/Apr 1984
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NEW VIEWS OF THE TEXAS LANDSCAPE

LETTERS

ABOUT THIS ISSUE

IN THE NEWS

The Wortham Theater Center opens in Houston; a research center at the University of Houston gets $3 million from a Japanese foundation; and three architecture schools name new deans.

PRACTICE

More school boards are pushing architects to "supervise" construction, posting new hazards for architects.

LIGHT AND FOG IN SAN ANTONIO

Emilio Ambasz & Associates goes underground at the soon-to-be-completed Lucile Halsell Conservatory.

JELLICOE FLATS

Frances Chamberlain talked to Sir Geoffrey Jellicoe, acknowledged leader among landscape architects worldwide, about his work on the planned Moody Gardens, which Jellicoe calls the culmination of his life's work.

A MODERN SCULPTURE GARDEN

The challenges of Isamu Noguchi's Hugh Roy Cullen Sculpture Garden are assessed by architect Jamie Lofgren.

TWO DALLAS TOWERS

High-rise designers have long promised to make downtown plazas into "people places." Two new Dallas towers succeed.

READING AUSTIN'S SKYLINE

Architect and author Wayne Attoe deciphered the mixed signals and missed opportunities in the skyline of the state capital.

IS CAD WORTH IT?

Texas CAD users describe how they get the most from their systems for this special advertising section.

BOOKS

HOWARD BARNSTONE: IN MEMORIAM

ON THE COVER: The Lucile Halsell Conservatory in San Antonio embodies a challenging new vision of the Texas landscape. Photograph by Michael Lyon, Austin.
EDITOR: You finally recognized El Paso as a Texas city, and decided to practically dedicate the majority of the March/April issue to us. When first hearing of this decision I was quite pleased, but after reviewing the issue I was very disappointed in the way you chose to portray the architecture of our fast-growing city.

The photographs that your staff chose were distorted, angularly bad, and somewhat misleading. My biggest complaint is the treatment of Carson Consultants' American Bank of Commerce, designed by Morris Brown. Anyone not familiar with the project would have no concept of what the building actually looks like.

Among all the bad photos chosen, there were several of insignificant projects that should never have been published.

It was nice to have an article on Trost and Trost, but El Paso doesn't need to fall back on the past. There are plenty of new buildings and additions worth publishing. I could not believe that the Westin Hotel downtown was not in this issue.

The article on Oscar Sanchez Cordero, the Juarez modernist, was nice, but once again it portrays the region as falling back on the past.

Publishing some of El Paso's architecture regularly would be nice, instead of ignoring us all year, then lumping it into one sloppy issue. These views are my own personal opinion.

Michael Walker
Associate member
El Paso Chapter/AIA

EDITOR: I found Dave Braden's "Musings" in the May/June 1987 issue to be among his most amusing recent efforts. But I also found it to be one of the most offensive.

It has been obvious for some time that these musings are directed to the "Good Ol' Boy League of Architects," but I still can find humor in them. I can overlook the sexist comment about Fawn Hall. I found the "Bright Side" example of the 1952 condom, however, to be in poor taste. For one thing, there are many of us practicing architects who were either infants in 1952 or had yet to make our debut into the world, so we have no condoms dating from that time. Also, my guess is that very few women carry condoms. You might tell Mr. Braden that there are women architects, too.

Sue-Ann Pemberton
Pemberton-Haugh Architects
San Antonio

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NEW POSSIBILITIES

We had planned for this issue of Texas Architect to focus not on landscape but on relatively new buildings that are being re-skinned to make them more marketable. The economic and technical aspects of the topic, not to mention the design questions it presents, are fascinating. In particular, we had been following the progress of Renaissance Tower. Once known as Interfirst II, a perfectly serviceable tower designed by Harwood K. Smith and Partners, Dallas, and finished in 1975, this building has been getting a new glass skin and a new street-level appearance courtesy of Skidmore, Owings and Merrill, Houston.

But a funny thing happened. What looked like a growing trend a year ago, when we chose our issue themes for this year, turned out to be a more-or-less isolated instance. We began considering other possibilities.

Then we heard about two upcoming events—Sir Geoffrey Jellicoe’s lecture in Houston, sponsored by the Rice Design Alliance, and the dedication of the Lucile Halsell Conservatory in San Antonio. We found ourselves with the opportunity to explore a much more vital and welcome trend: a new attention to integrating the built environment with the Texas landscape.

The main landscape projects we show in this issue—the Lucile Halsell Botanical Garden in San Antonio, the Moody Gardens historical area project in Galveston, and Isamu Noguchi’s Lillie and Hugh Roy Cullen Sculpture Garden at the Houston Museum of Fine Arts—are so different as to seem almost incompatible. As our stories show, however, these projects are in fact united by a shared intention: to reinvest the common ground of the Texas landscape with its lost connectedness across time, through space, and within the human spirit. They are attempts to reclaim the things that are denied under the rubric of “real estate,” when the deal displaces the real.

Then in Dallas there are the Allied Bank Tower, completed in 1986, and the almost-finished Texas Commerce Tower. These projects represent a new attitude toward downtown space. In them, the developers, architects, and landscape architects are no longer paying lip service to the lessons learned from William Whyte, J.B. Jackson, and Jane Jacobs. At last, they are delivering. As a result, downtown Dallas is turning, by increments, into a place where suburbanites take their kids on weekends. One hopes that the success of these projects will spell the end of the windswept downtown plaza in Texas.

Finally, on a different but related tack, writer and architect Wayne Attoe considers recent changes in the Austin skyline, changes that point up the connections that still need to be made for the city to fulfill the promise of its unique site.

Working on this issue has left me wishing for two things.

First, that we could have published new, large-scale residential work displaying the same new interest in landscape—projects showing that Texas can have housing developments as successfully integrated with place as, for example, Radburn, New Jersey. Perhaps that will come later.

My second wish is that we never will get to use the theme originally planned for this issue. Sure, there are developers stuck with outmoded office towers that could be re-skinned to make them better skyline icons. Some almost-new buildings simply need replacements for problem curtainwalls. But what if the developers and their architects focused first, not on the skyline, but on making those buildings work better on and with the landscape?

—Joel Warren Barna
WORTHAM THEATER NEWEST HOUSTON ARTS CENTER

The country’s most important new performing-arts center in a decade. A home that will lift Houston’s top arts organizations to world-class stature. A monument to self-help whipping hard times.

That’s what publications and wire services ranging from the Corpus Christi Caller to Agence France Pnse called the Gus S. Wortham Theater Center, the new performing arts complex at the western edge of downtown designed by Houston-based Morris/Architects (formerly Morris/Aubry Architects).

To the home folks, the Wortham Center is that and more—it symbolizes hopes that the city can diversify beyond a battered, energy-based economy. With ambitious local companies already well established, the performing arts are central to dreams for Houston’s redevelopment, and the Wortham represents a significant step toward realizing those dreams.

The 437,000-square-foot, twin-theater center, built for about $72 million on two blocks between Smith Street and Buffalo Bayou, is said to be the largest undertaking of its kind built entirely with private contributions. The Wortham, Cullen, and Brown foundations together chipped in $33.5 million, with other foundations, corporations, and individuals contributing the rest.

The city of Houston, which donated the site, will own and operate the center. The Houston Grand Opera and the Houston Ballet will be the major tenants.

The Wortham contains two theaters, both in the European-style horseshoe configuration. The 2,178-seat Alice and George Brown Theater, painted a dark red, contains stage machinery that allows rapid scenery changes, unmatched this side of New York. The Lillie and Roy Cullen Theater, painted lighter grays and mauves, seats 1,101.

Jones Hall, designed by Caudill, Rowlett and Scott and finished in 1966, drew national attention as home of the Houston Symphony Orchestra. By the early 1970s, however, partisans of the opera, ballet, and other groups competing with the symphony for space at Jones Hall began pushing for a new facility that would have more flexible staging capabilities and more intimate auditorium space. The Lyric (later Wortham) Theater Foundation in 1977 sponsored a study and a preliminary design for the new theater by Philip Johnson and John Burgee Architects, but it was rejected as too expensive.

Morris/Aubry Architects, chosen to design the center, produced five major schemes and 21 variations as budget requirements became progressively tighter.

When the final scheme was unveiled in 1983, it met considerable criticism. Houston Chronicle critic Ann Holmes called it “a crazy salad of disappointments,” excoriating the exterior as blank and anturban. Cite, the magazine of the Rice Design Alliance, called on the sponsors to scrap the project and start over.

Significant changes were made to the design before construction started in 1984, however. Windows, balconies, and rondels were added, along with dark horizontal bands that gave the exterior a pleasing “brickly” strength and substantiality. Difficulties of budget and site, which spans Prairie Street, might not have been triumphed over, but they were dealt with efficiently and effectively.

As opening night approached, Holmes wrote: “While it could not be called architecturally innovative, the Wortham Theater Center is awesome in size and grandeur. In this sense it is not unlike its sister ships in New York and Washington. Oddly, few of those won architectural kudos. But the theaters and the public areas are what attract the people—and who remembers how Ada Huxtable lambasted Edward Stone’s Kennedy Center?”

Even Cite contributors who were once implacable foes of the Wortham have been heard to admit that the architects have created an important civic building and a plaza where none had existed before.

The criticisms of the building that remain focus on the interior. Holmes proclaimed it “glamorous” and “Piranesian.” The public entry sequence, with its escalator ride under a high coffered vault behind the facade’s 90-foot-tall glassed-in Romanesque arch, is very striking. The escalators run between tall, colorful sculptures, which reach out into the huge space beyond. Designed by Albert Paley, the sculptures suggest torches, rockets, flags in a Dr. Seuss cartoon, enlarged jeweler’s tools, even—unfortunately—the bundled rods (usually with an axe) called fascines in Latin. The processional force of the entry, however, fizzles in the “grand foyer,” a lake of carpet under a brassied heaven, surrounded by a near-featureless envelope of plaster. Big enough to handle crowds from both theaters at once, the foyer has none of the spatial layering that remains the best feature of Jones Hall. Paintings or other decorations would help the high, bland walls. The aisles to the theaters from the foyer, by comparison, seem uncomfortably crowded with architectural incident.

The theaters make one forget such com-

Edited by Charles E. Gallatin
The dramatic 90-foot coffered vault towers over sculpture by Albert Paley.

Given its size, the Alice and George Brown Theater is surprisingly intimate.

A dramatic romanesque arch dominates the exterior.

Sections, (left) through the Grand Foyer and Alice and George Brown Theater, and (right) through the Lillie and Roy Cullen theater.
Several Texas architects have been featured in the June “Young Architects” issue of Progressive Architecture. Included were Joe Mashburn of Mashburn-Maffei Architects in Bryan for the long, linear house he designed for his family (See TA, March-April '86); Craig Wakefield Grund of Austin for homes he designed for the Blackshear neighborhood in Austin; Irby Hightower, Michael Lanford, Billy Lawrence, and Bobby McGlone of Alamo Architects in San Antonio for restoration of the Fairmount Hotel (See TA, Jan-Feb '87); and Carlos Jimenez of Carlos Jimenez Architectural Design Studio of Houston for his own studio and the Houston Fine Arts Press building.

The Dallas office of Sasaki Associates, Inc., has been named recipient of the New Mexico Governor’s Award of Honor for Historic Preservation for the successful restoration of the Sanbusco compound in Santa Fe’s historic district. Sasaki Associates master-planned and designed the 100-year-old compound to include retail and office space.

Jorge Pardo, principal in the Austin firm Barbee-Pardo Architects, has won a nation-wide competition to create Austin’s first Art in Public Places Program artwork. The hand-painted ceramic tile mural will be installed at the East Austin Senior Activity Center.

Texas Architect has been selected the winner of a prestigious Maggie award from the Western Publications Association. The WPA judges entries from the 14 western states of the U.S. TA was selected the winner from six finalists in the Special Interest/Trade category, and was also a finalist in the Special Theme Issue/Trade category. This is the first year that Texas Architect has entered the annual competition.

Two Texas projects by architects have won regional awards in the Spectrum ‘87 competition sponsored by the Ceramic Tile Distributors Association. Winning projects were Oak Lawn Fairmount Building in Dallas, by Marc E. Sullivan and Frank T. Kelley; and Chris Harwell Elementary School in Lubbock, by McClarty Smith Meyer Architects, of Lubbock.

F&S Partners Incorporated received a Special Mention from the Architectural Precast Association for their project, St. Joseph Catholic Church in Richardson. The award recognizes excellence in architectural design and precast manufacturing. Judges praised the imagery, use of natural light, and choice of textures.

Austin architect David Hoffman has been elected president of the Heritage Society of Austin for 1987-88. He is the third architect to serve as president in the Society’s thirty-five year history. Others were Philip D. Creer, FAIA, in 1964; and J. Roy White, from 1972 to 1974.
plaints, however. Both are surprisingly intimate. No seat in the larger Brown Theater is more than 138 feet from the stage, some 50 feet closer than its Jones Hall equivalent. David Gockley, head of the Houston Grand Opera, says “You can see the performers’ faces” from every seat, making it ideal for opera. The Cullen Theater is smaller-scaled, for chamber music and drama. Acoustics in both halls have received rave reviews.

What could be considered the center’s weaknesses are in fact strengths: the Wortham was shaped primarily by the companies that will be its users, not notions of architectural monumentality or glamor. “The emphasis has always been on the back of the house,” says Fred Jenkins of Gerald Hines Interests, project manager for the Wortham. A sizable chunk of the Wortham’s space and budget went into high-powered equipment and backstage amenities, from sound isolation of the theaters to the five rehearsal halls and the built-in television connections. Most theatergoers will never see them, but such features will make the Wortham a much better place for performers than anything Houston has had before.

But those improvements have not come cheaply. Ticket prices have skyrocketed. In addition, as other arts groups have been complaining for some time, the push to complete the Wortham soaked up most of Houston’s arts funding. Now even Gockley and Ben Stevenson, Artistic Director of the Houston Ballet, say they worry that contributions for operating expenses will be harder to locate.

Nevertheless, as Ann Holmes told the New York Times, local arts fans and supporters are hoping the Wortham means that, “If there is a recovery, this city will be riding high in the arts by the end of the century.”

—Joel Warren Barna

UNIVERSITY OF HOUSTON RECEIVES $3-MILLION SPACE RESEARCH GRANT

The University of Houston College of Architecture has received a $3-million gift from the Japan Shipbuilding Industry Foundation (JSIF) for an international center to develop peaceful uses of space. The university has already received $1 million and will receive two additional payments of $1 million each over the next two years.

The $3 million donation is the largest foreign gift ever received by the university and was one of the largest grants funded outside of Japan by the JSIF. The organization’s generosity stems from beliefs held by chairman Ryoichi Sasakawa, a former Japanese government
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Bell says he met Sasakawa four years ago and told the philanthropist that the advancement of peaceful goals in space was diminishing since only the world's military organizations could afford the increasing cost of research. Bell believes it made a difference: the University of Texas has changed the name of the Center for Experimental Architecture, founded to study space and experimental architecture in 1978, to the Sasakawa International Center for Space Architecture (SICSA) in honor of the chairman.

Bell says he met Sasakawa four years ago and told the philanthropist that the advancement of peaceful goals in space was diminishing since only the world's military organizations could afford the increasing cost of research. Bell believes it made a difference: the University of Texas has changed the name of the Center for Experimental Architecture, founded to study space and experimental architecture in 1978, to the Sasakawa International Center for Space Architecture (SICSA) in honor of the chairman.

The director says another reason for the gift is that the Center has an established reputation in the field of space architecture. "We're not just scratching our heads wondering what to do; we've got a whole plateful of projects and this just helps us do them a whole lot faster and better." Even so, the million-a-year basis for giving the money is unspoken incentive to show results. "I think we're going to have to demonstrate that we are going to produce," he says.

Bell intends to produce, and he uses words like "aggressive," "entrepreneurial," and "very active" to describe the Center's stance. "We're not just interested in playing the game of space architecture, we're interested in helping the game move along a little faster—in space development," he states. The director believes that while the future of space is currently "blurred" due to the Challenger tragedy, the goal of developing space is more important than ever—too important to wait on the government, he says.

"There need to be some people working to help make things happen, to build the international bridges, to work with others without waiting for government money to be appropriated," says Bell. One goal the JSIF gift will enable the Center to achieve is organizing international workshops among interested corporations, institutions, and even governments from around the globe. Bell stressed the peaceful goals, international scope, and "hands-on" aspect of these meetings. "We contemplate workshops emphasizing progress instead of size, where people come

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**THREE NEW ARCHITECTURAL DEANS COME TO TEXAS**

In one fell swoop, three architectural schools in Texas are installing new deans: Texas A&M, Texas Tech University, and the University of Texas at Arlington.

Dr. Michael Martin McCarthy is the new dean of the College of Architecture and Environmental Design at Texas A&M. He has spent the last four years in Australia, serving as the associate dean in the Faculty of Architecture and Planning at the University of Melbourne. A native of Oshkosh, Wisconsin, McCarthy received his Ph.D. from the University of Wisconsin in 1973, with a concentration in landscape architecture. He is a co-partner in his own design consulting firm, McCarthy and McCarthy, and is a member of the Australian Institute of Landscape Architects and the American Society of Landscape Architects. He serves on the editorial boards of Landscape Journal (USA), Landscape Australia (AUS.), and Landscape and Urban Planning (Europe).

McCarthy says that although A&M is larger, the primary difference between the
two schools is cultural. The University of Melbourne is run "much more like England than America," he says, with faculty committees rather than individuals making decisions.

McCarthy says three educational objectives he believes in are, "A commitment to excellence in the pursuit of research," "A major emphasis on technological literacy," and "a commitment to international awareness." Because of teaching and research obligations to the University of Melbourne, McCarthy will start his new position in January of 1988. Professor Don Sweeney will remain interim dean until McCarthy's arrival.

R. Wayne Drummond is the new dean of the newly formed College of Architecture at Texas Tech University. Drummond previously served as professor and chairman of the Department of Architecture at Auburn University in Auburn, Alabama. A native of Baton Rouge, Louisiana, he received his undergraduate degree from Louisiana State University, which included a year of study at the Fountainbleau School of Music and Fine Arts in France. He received his Master's in Architecture from Rice University.

Drummond says he will be working with the faculty to develop goals for the college in the coming year. "In general, a strong balance of professional programs, graduate programs, scholarly work, community service, continuing education, and research is necessary in order to reinforce the quality of the overall program."

At the request of school officials he will be paying particular attention to development of the graduate program, and hopes to strengthen ties to other schools, alumni, and the profession.

Edward M. Baum joins the University of Texas at Arlington as the new Dean of the School of Architecture and Environmental Design. He is originally from Evansville, Indiana, and received his undergraduate and Master's degrees in Architecture from Harvard University. He has spent the last 10 years as an associate professor of architecture at the Washington University School of Architecture in St. Louis. He also taught for 10 years at Harvard in the Graduate School of Design. He has been principal of his own design firm since 1978, and has had work published in Progressive Architecture and Architectural Record.

Like Drummond, Baum says he will spend time evaluating the program before making recommendations—"otherwise you would be selling your preconceptions, which isn't fair to anybody. Schools and administrators get to be good together. I don't believe in the person on the white horse."

Baum wants to develop the strong points of the university, one of which is the graduate program. "I would like to focus considerable attention on the graduate component of the curriculum. I think the school is unique in being [located] in the largest metropolitan area of the state. I'd like to build stronger relations with the professionals in the Dallas/Fort Worth area," Baum says he is impressed with the administration's commitment to the school. "The commitment is stronger than any I've seen in a university toward a school of architecture. That's one of the reasons I came," he says.

Baum and Drummond will be at their respective posts for the fall semester.

—CEG

Mission Concepción, 1936, from the Phelps Vesper photo collection, donated by Raford Stripling.
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PUSHING "SUPERVISION"

The relationship between most Texas school boards and Texas architects has remained relatively amicable, even in today's litigious climate. But many architects specializing in school design fear that tight budgets and a changing construction market threaten to make that relationship increasingly adversarial.

According to Jerry Clement of Dallas-based EDI Architects, chairman of TSA's Architecture for Education committee, more and more Texas school boards are trying to force architects to take on responsibilities for supervising construction, in addition to the normal architectural functions of programming and design.

Houston architect Allen G. Weymouth traces the trend to recommendations from attorneys with the Texas Association of School Boards (TASB), summarized in late 1986 in the TASB magazine, Lone Star.

In the article, TASB attorney John Aldridge says that the standard AIA A201 contract forms covering architectural and construction services "are written for architects and generally are not overly protective of school districts' interests."

Aldridge recommends that school boards consider making 12 changes to the AIA contract. Some of the changes are not strictly contractual—for example, Aldridge recommends that school boards find out about a firm's pending jobs and bids, not just its past experience, before awarding a contract. Some suggested changes would be less welcome, architects say. For example, Aldridge recommends deleting the A201's binding arbitration clause. "Binding arbitration of contract disputes cuts down on litigation and attorneys' fees. You'd expect an attorney to suggest that," says Weymouth.

But most controversial is the suggestion that school boards delete language requiring an architect to "familiarize himself generally with the progress and quality of the work and determine in general if the work is proceeding in accordance with the contract documents." Instead, the contract should "place a direct responsibility on the architect for supervising the job. This may require negotiation and an additional cost, but it is essential to ensure that the work is being completed properly."

Most architects would argue, however, that such a change is not essential or even workable.

Architect and attorney Hollye Fisk of Dallas says that agreeing to supervise construction, even if required as a condition of obtaining a contract to design a school building project, would be "very dangerous" for the typical architecture firm.

The problem lies in the meaning of supervision, which has proved a slippery concept in past court cases. Fisk says that Texas courts could hold an architect involved in supervising construction liable not only for defects in construction work performed by others, but for the safety of workers at the job site. Such liability exposure, Fisk warns, would make an architect all but uninsurable.

The problem, Fisk argues, is that requiring architects to supervise construction confuses the roles of the architect, the contractor, and the school board. "The school can write a contract with the architect that requires the architect to supervise. But that doesn't make the contractor into an employee of the architect, and it doesn't change the responsibility of the subcontractors."

"It gives the architect all the responsibility, but without the authority," says Weymouth.

"The school boards are trying to get out of their responsibility as owner to see that the obligations of the contractor are fulfilled. But there's no way the architect can do that for them," says Jerry Clement.

Architects from other firms say they are encountering demands for supervision more frequently. "It has come up on three of the last five jobs we interviewed for. We were able to offer a full-time construction observer as part of our construction administration services, for an additional fee," says K. Patrick Renfro of the Dallas office of CRSS, Inc. According to Renfro, the school market has become more competitive recently, driving some experienced contractors into other markets, and making school boards feel that additional construction observation will guarantee the performance of less-experienced contractors. This arrangement, according to Renfro, may help protect owners against defects in the work, but school boards should not treat it as a guarantee by the architect of the contractor's performance.

For most Texas firms, however, offering construction supervision could mean a big jump in the fee required or a threat to the profitability of a school project. One thing is certain, architects agree: it means liability-insurance problems, which no firm wants.

"We're working with statewide school-board officials to make our concerns clear," says TSA committee head Clement. But in the near future, he predicts, architecture for education has a new challenge to overcome.

Joel Warren Barna
everybody knows how it is in the heart of Texas. The prairie sky is wide and high. The stars at night are big and bright. But Emilio Ambasz wants Texans to forget these and a number of other simple verities, at least for the time it takes to visit the new Lucile Halsell Conservatory of the San Antonio Botanical Center.

The 90,000-square-foot, $6.7-million conservatory project will anchor a corner of the 33-acre San Antonio Botanical Gardens (located on the site of a former water works and reservoir deeded to the city by George W. Brackenridge in 1899). Other—more conventional—features of the Botanical Center include a native Texas area, with several reconstructed historic houses; formal gardens; xeriscape; and an endangered-species area.

The conservatory is still a work in progress. Designed between 1982 and 1987, the conservatory was officially dedicated as Texas Architect went to press, but it will not be completed until late in 1987. Most of the conservatory building itself is done and awaits only the painstaking work of planting to be finished. Even at this stage, it is plain that the architects have changed the way Texans traditionally look at landscape, and in doing so have attempted nothing less than re-investing the landscape with mystery, even sacredness.

The Lucile Halsell Conservatory is, surprisingly, the first project that has been built to Ambasz's designs. (For contractual reasons, JonesKell Architects of San Antonio is the architect of record for the project, with Emilio Ambasz & Associates as design consultant, but all parties agree that it is Ambasz's work, with JonesKell in the associated architect's role.) The Argentine-born architect, who maintains offices in New York and the Italian city of Bologna, and who has served both as professor of architecture at Princeton and curator of design at the Museum of Modern Art in New York, has had an extraordinarily high profile internationally throughout the 1980s for a designer with only a handful of interiors commissions completed.

**GOING UNDERGROUND**

Human settlement in Texas is relatively recent. "Midland Minnie," the first known inhabitant of the state, whose skull was found in West Texas in 1953, lived approximately 10,000 years ago—perhaps 30,000 years later than the stone-age hunters who painted the great murals at Altamira, Lascaux, and a score of other sites in southern Europe. Until the last 100 years, additionally, settlement here was unusually sparse. Even today, with more than 15 million people in the state, wide stretches of West Texas remain practically empty.

Despite sharp border clashes early on, the immigrants who settled Texas in the last hundred years were able to take possession of the land almost unimpeded. Psychologically, they came into raw territory, but they projected onto it many qualities of the intensely cultivated old country. Today, we have been shaped by that complex of expectations and projections into the landscape.

We, like our ancestors, tend to see order all around us: moral order in heaven, scientific order in the stars and the workings of nature, political order (more or less) in human society. To us, as to our grandparents, the mastery and cultivation of the landscape is the chief way to make these different realms of order connect into a sustaining meta-order. It is this aspect that makes landscape architecture rival architecture in manifesting the fullness and complexity of human culture.

But we also carry with us a memory of an earlier time, the thousands of ice-age years before the invention of agriculture, culminating in the age of the paleolithic cave paintings. During these millennia, as Sir Geoffrey Jellicoe says in *The Landscape of Man*, people "conceived a god to be within all objects, whether animate or inanimate." The plants and animals that sustained human life were not viewed as *phenomena* to be controlled but *numina* to be communed with.

It is this state that Emilio Ambasz recalls in the Lucile Halsell Conservatory.
Like many of Ambasz's house designs, the project comprises a series of rooms almost completely submerged in earthen berm, arranged around a courtyard, and surmounted by a techy-looking superstructure of glass. The superstructure at the Halsell Conservatory has a particular raciness: it consists of an aluminum space frame covered in mullionless butt-joined glass. Never used in this country before, the glass is held together only by its silicon sealant. Mechanically operated cloth shades and huge fans will cool the rooms, aided by the earth covering much of the surface. The glass roofs, with their conical and pyramidal shapes, expose only the minimum surface area, and are oriented to admit the least possible sunlight in summer. Turf, lapping at the edges of the glass, hides and dematerializes the concrete structure underneath. Instead of a grid structure dominating the landscape, the project appears to be dissolving into the ground. The earth's primacy is celebrated, not humankind's.

Entering the conservatory through an undulating stone wall in the turf bank, the visitor goes from the surface to just below it. Originally, the small circular courtyard inside the entrance was to hold a bronze tree sculpture, later cut from the budget and replaced by a live tree.

Ambasz is often quoted as having said: "America's returning myth is Arcadia, the eternal beginning. While the traditional vision of Arcadia is that of a humanistic garden, America's Arcadia has turned into a man-made nature, a forest of artificial trees and mental shadows." Does he regret the loss of this artificial tree? "No. You are blessed there with trees that can remain green all year round," Ambasz said in a recent interview. "That is better than bronze in Texas."

Beyond the open court is a glassed-in exhibition room, and from it one enters the central open courtyard with its irregularly shaped lily pond, encountering columns and other vaguely classical elements that knit together a series of plant rooms in a vaguely zoomorphic plan. Each of the rooms displays plants from a different habitat—alpine meadow, rain forest, and desert, among others. Each of them is also structurally a discrete unit; because of unstable soil, the original design had to be re-engineered to allow the rooms, along with chunks of the courtyard and entry wall, to float independently. (This, and problems with a glass supplier, reportedly contributed to construction delays.)

Approaching each display, one looks from the shadows at plants lighted from above, recreating the feeling of forest and cave. The "fern room" is perhaps the most evocative part of the project. In it the visitor stands in a glass-roofed "cave" (made of sculpted fiber glass-impregnated concrete rocks) among giant ferns at the foot of an "underground" waterfall, while mist billows into the air, keeping the ferns alive and the air relatively cool.

**TOP: Original floor plan:**

1. Entry hall
2. Office
3. Ticket Counter
4. Coat room
5. Storage
6. Temporary exhibition room
7. Men's room
8. Ladies room
9. Loading dock
10. Food preparation
11. Lily pond
12. Orangery
13. Arcade
14. Desert room
15. Head house
16. Succulent room
17. Hot tropical room
18. Fern room
19. Fossil display
20. Palm house

**Diagram:**

- Section through fern room and orangery
Ambasz acknowledges that he is interested in this mist, which will be used in several plant rooms, more for its psychological than its horticultural effects. Fog machines, like earth-sheltered construction and glass superstructure, have appeared in previous unbuilt projects. But, while they might have seemed little more than operatic gestures in proposals for a park in Houston's central business district, at the Halsell Conservatory they also make perfect sense. Horticulturist Eric Tschanz, director of the Botanical Center of which the new conservatory is part, says that the design is expected to keep the plant rooms 10 or more degrees cooler than the outside air even in the depths of summer.

Dwight Ashdown, project architect for the Halsell Conservatory with Ambasz Associates, points out that "the idea of using buildings around an arcaded courtyard to respond to climate is not exactly original with this project—it's part of a long tradition in San Antonio."

But Ambasz himself rejects other more explicit notions of contextualism in relation to the project. This, he says, is why his presentation drawings and models have depicted the conservatory in a landscape as bare and peaceful as the golf course of paradise, without even a tree on the horizon to disturb its rolling regularity. The project is in fact surrounded, with botanical gardens on three sides and a dense block of modest-looking two story houses on the other.

"I see no reason to try to respond to the context there. I want to create an image of what the future will become, not perpetuate the present," says Ambasz. "Contextualism is a surrogate for ideas: if you have nothing to say, then echo. What would you think of a conservatory in sideboards? If we have patience we may see the context change through the power of these buildings."

The last step will be rebuilding an existing gazebo, adding six columns shaped like those in the conservatory courtyard. The top will be planted with trailing plants, and the inside, with its own fog machinery, would house carnivorous plants. "It is the highest point, and from it you could look at the rest of San Antonio," according to Ambasz. It would be a reminder that even the earliest memories of humankind are fraught with anxiety.

"After all, there was a serpent in Eden," he says. "It is my wish that the children of San Antonio can see that."

**PROJECT:** Lucile Halsell Conservatory  
**CLIENT:** San Antonio Botanical Center Society  
**DESIGNER:** Emilio Ambasz & Associates, New York: Emilio Ambasz, partner in charge; Dwight Ashdown, project director; Alan Henschel, project development; Erik Hensel, glazing consultant; Frank Venning, Mark Yoes, Sun Hung, design team  
**LOCAL ARCHITECT OF RECORD:** Jones Kell Architects, San Antonio: John Kell, Jr.; Dan Wigodsky  
**GENERAL CONTRACTOR:** Guido Brothers Construction  
**CONSULTANTS:** Lev Zetlin Consultants, New York (structural); Ambrosino, DePinto & Schneider, New York (mechanical); Papé-Dawson, San Antonio (civil); Space Structures, Plainview, NY (space frames); Regency Architectural Metals, Hamden, CT (glazing)
MOODY GARDENS AND THE WORLD ACCORDING TO JELLIHOE

by Frances F. Chamberlain

A most unlikely spot for a botanical garden. The site of the Moody Foundation’s Moody Gardens comprises some 250 acres of bayou, marsh, and wetlands between the Galveston municipal airport and the bayside Galveston island inlet called Offatts Bayou. It is half-submerged, and what stands above the brackish water is prey to a climate of harsh extremes: unpredictable flooding, constant salt-laden breezes, heat, humidity, and hurricanes.

On it, British architect and landscape architect Sir Geoffrey Jellicoe has planned a landscape for Moody Gardens that may one day rank with the wonders of the world.

Jellicoe is best known for his 1975 book, The Landscape of Man (co-written with his late wife), and the modern gardens at Sutton Place, a 16th-century manor in England. At 87, he is the doyen of British landscape architecture and one of the most respected landscape architects in...
the world, the designer of works that use landscape with unrivaled power to shape space in the exploration of the human psyche. When realized over the next 16 years, his plan for the Moody Gardens will be, he says, the pinnacle of his mature work, his testament in space and time.

Jellicoe’s work in Galveston is only part—a massive part—of an almost heroically ambitious masterplan, which will employ many architects and landscape architects and scores of construction crews well into the next century. It is based on the commitment of the Moody Foundation, which has promised $118 million to the project over the next 20 years.

The masterplan calls for preserving part of the site as wetlands and reclaiming other parts for use in making the site into a self-sustaining multi-use center for tourism, botanical research, and rehabilitative medical therapy. In 1985, Hope Arena, the first part of the project, opened. It is a center of hippotherapy—literally therapy involving horses—to help people recover from severe head injuries.

Phase one of the masterplan, already completed, consisted of improvements to Hope Arena (including creation of The Garden of Life, designed by the Houston-based landscape architecture firm Smith, Locke, Asakura, which won a national landscape design award in 1987). Phase two, set to begin in 1987, will include building of an animal-contact-therapy center (by Morris/Architects, Houston), construction of a dock for a popular Galveston paddle-wheeled boat ride, and further landscaping by Smith, Locke, Asakura. Eventually, plans call for hotels and convention facilities, along with, in phase five, Jellicoe’s Gardens, to be completed in the year 2003.

Peter Atkins, Director of Horticulture of the Moody Gardens, met Jellicoe at Sutton Place in February 1983, determined to convince him to design a botanical garden for Galveston. Jellicoe, Atkins says, turned down the commission. His initial visit to the site in 1984 made him think the client was “crackers.” Yet the very hopelessness of the site led him to accept the commission. It was a chance to work with “Nature before Man, the Cosmos,” he says: raw, violent, terrifying, and beautiful. He had already designed two famous landscape projects for the Italian cities of Modena and Brescia based on interpretations of Roman poetry of the Augustan age. In Galveston, he says, he was inspired by the Augustan poet Lucretius, who in De Rerum Natura, wrote of “human power ground to dust” by natural forces. Jellicoe’s first proposal for the botanical garden, presented in April 1984, which he calls “the grandest scheme ever,” celebrated “the terrifying forces of nature... and the work of man to preserve this life.” It was rejected as too impractical.

Sir Geoffrey was then asked to design a “history of gardens.” Once again he balked.

“I don’t do historical gardens,” he said in a recent interview. “I don’t believe you can do them. I think they are impossible. All historical gardens I’ve seen seem to be rubbish. Because you are [not] involved with the site and the detailing doesn’t work. All phony. [But] the
more I thought about it, [the more] I thought this is a wonderful opportunity—I will compromise by designing 'The History of the Place of a Plant in the Civilizations of the World.' And this still remains a botanical garden. I didn't come here to do a 'historical' garden.

Jellicoe says the question was: could he create The Landscape of Man in three dimensions? Answering it, Jellicoe says he feels, without hesitation, that the best scheme has evolved.

In Jellicoe's solution, completed in June, 1985, the site is divided into three major areas: the wetlands; a walled-in area devoted to the historical gardens; and the "campus," a complex of buildings and glass houses for plants and people. The portion of the site to remain wetlands will be developed as both fresh-water and salt-water marshes with their respective native flora and fauna, and will feature a system of triangular walkways that provide non-intrusive paths through a fragile ecosystem. Jellicoe says the shapes were inspired by the painter Joan...
Miro, and that, with the amorphous pools dancing across the marshy landscape, they represent "the gods at play in the cosmos."

The historical gardens, east of the wetlands area, are the heart of Moody Gardens—both as landscape vision and as tourist attraction. In them, Jellicoe interprets not only the historical development of gardens in east and west, but the relationship of the conscious to the unconscious mind—a topic that interests Jellicoe as a student of the works of C.G. Jung.

Visitors will enter the historical gardens by boat from the "campus," proceeding from the Primeval Forest to the Garden of Eden. There they encounter a huge apple, 16 feet in diameter and completely covered by moss, flanked by apple trees and a sinister rock formation—the head of a serpentine earthwork. Visitors next arrive at the main court, a sequence of classical gardens: ancient Egypt, classical Rome, 14th-century Islam, Medieval Europe, Renaissance Italy, Baroque France, and Victorian England.
A "prehistoric monster" is suggested by the plan of the mountains separating European landscapes from the Asian area.

The gardens are outdoor rooms, protected by a large wall to the south (it recalls the Galveston Seawall protecting the island). They get gradually larger, reflecting the progressive domination of the landscape by human artifice. The rooms are separated by walls, topped by water-spouting gargoyles that punctuate the boat canal. The sequence is unified by a colonnade on the canal side, each increment architecturally detailed to represent a historical era.

The canal turns north at the end of Victorian England, and at this point Jellicoe calls for water-spouting sculptures of Poseidon, ruler of the seas, and Demeter, goddess of corn; they peer over the wall from their cosmic playground in the wetlands at the strange creatures passing by and their curious, beautiful little work, civilization.

After the lineal sequence of gardens dominated by the rational, Jellicoe's plan turns to an irregular, winding ride through the irrational. It starts by jumping back a step to the 18th-century, when the contemplation of "the sublime" developed, and leads through English, French, and Russian romantic landscape gardens, their broad, sweeping lawns dotted with follies, clumps of trees, and the references to China so popular in the era. The sublime is recalled when the boat passes near a giant cascade—close enough to feel the spray.

A "mountain range" separates the western world from the eastern world, shaped in plan like a "prehistoric monster." The boat travels through a dark tunnel to emerge amid the splendors of Asia. The perceptual climax of the gardens, Jellicoe says, is provided by the Buddha sitting at the northernmost bend of the canal. But the subliminal climax lies beyond, at the Zen garden and the primeval forest.

Although at first glance the historical gardens may appear too literal, even caricature-like, they are in fact complex interpretations, brilliant syntheses of a vast subject matter in a small space.
Sir Geoffrey has sought to distill the essence of each historical garden not through quotation, but through interpretation. His work offers the potential of a natural poetic unparalleled in 20th-century landscape design.

In a recent interview, Jellicoe mentioned that he was re-reading Shakespeare’s late play, The Tempest, and it is tempting to see parallels to the play in his design for the Moody Gardens. Both works contrast the visible and the invisible, brutish Caliban and airborne Ariel. Jellicoe says Shakespeare’s “simple, trivial story has withstood the test of time…captured men’s minds” because it is a fairyland, a magic island where Shakespeare penetrated the depths of the unconscious. The Moody Gardens will present the viewer with a “magic island” in a hostile environment. Alongside the visible, tangible delights of the garden, Jellicoe also delves into the invisible world of human beings, the unconscious. There is the abstract sinister snake in the Garden of Eden and the abstracted shape in the mountain range. What is the bare rock on top of the mountain range that Sir Geoffrey calls “The Magic Mountain?” According to Jellicoe, while the conscious mind will merely know that something is up, the unconscious will absorb the deeper messages inherent in these images: uneasiness in the presence of the mountain and calm while embraced by the Buddha.

Jellicoe wants to prick the visitor’s awareness with these little messages subliminally, subtly. Though the boat ride will remind some of Disneyland, the allegories presented delve much deeper—this is not popular entertainment.

According to Jellicoe, landscape architecture and architecture too often are concerned merely with the visual, and art should appeal to a sense of the unknown. “You get more than what you see,” Jellicoe says.

“The artist is groping his way toward a great idea,” Jellicoe adds, one that goes beyond visual representation. In his recent works, he has attempted to “lift landscape architecture onto a plane of the great arts. In time [when we] get an artist in this profession who will have that stature, then we can say we have arrived as a profession.”

In the Moody Gardens, Jellicoe is not solving technical problems. He is presenting more challenging ones: What is humanity’s relationship to the cosmos, to nature, to God?

Whether Sir Geoffrey Jellicoe will accomplish his goals—create out of waste, tell two stories at the same time, connect the visible and the invisible, raise landscape architecture to the level of the fine arts, build The Landscape of Man—will not be seen in this century. Yet this is indeed a rare work, undertaken in a most unlikely place, in what promises to be, as Ferdinand says in The Tempest, “…a most majestic vision, and Harmoniously charming.”

Frances F. Chamberlain received her Master of Landscape Architecture degree in 1980 from the University of Virginia.

For assistance with this article she thanks Peter Atkins, Director of Horticulture for the Moody Gardens; Mary Eileen Dobson, Director of the Carl G. Jung Center in Houston; and Stephen Fox.
SEEING HOUSTON WITH A SCULPTOR'S EYE

by Jamie Lofgren

The latest addition to the Museum of Fine Arts in Houston, the Lillie and Hugh Roy Cullen Sculpture Garden, has met with mixed reviews since opening in April of 1986. Designed by Isamu Noguchi, the garden's indigenous planting, fragmented walls, and grassy berms shelter works by 20th- and late-19th-century artists including Matisse, Rodin, Calder, Giacometti, and Ellsworth Kelly. The sculpture garden is located across from the Brown Pavilion addition (Mies van der Rohe, 1972) at the corner of Montrose and Bissonnet, on an acre of park land owned by the City of Houston.

Noguchi was commissioned to design the space in 1978, after one of the museum's trustees visited his Billy Rose Sculpture Garden in Jerusalem (1960-65). A distinguished Japanese-American artist, now 82 years old, Noguchi is well known as a sculptor, although he has also designed many real and imaginary landscapes, as well as stage sets, furniture, industrial objects, and the 1986 American Pavilion at the Venice Biennale. Associated architect Shoji Suda of Fuller and Suda, New York, worked with Noguchi on this project and has worked with him on several others.

The idea of a sculpture garden for the museum goes back at least 30 years, beginning with a scheme, developed by Mies van der Rohe's office, to pave most of the triangle south of the building. With the completion of Mies's Cullinan Hall in 1958 and the Brown Pavilion in 1972, the museum's main entrance was shifted to the north; the present site of the sculpture garden was explored in many variations. Plans prepared in the 1970s by M. Paul Friedberg & Partners, New York, called for extending the present site along Bissonnet with a strip of landscaping to screen the parking lot and provide a continuous streetscape opposite...
the full length of the new "front." The museum's board also considered incorporating the adjacent parking lot into the site, but abandoned the idea as impractical.

The site of the Noguchi sculpture garden, although enlarged by closing off two minor streets, remains limited in size. The garden now connects the Museum of Fine Arts, whose front door is nearly directly across the street from the main garden entrance, to the Museum's Glassell School, where another entrance fronts on Montrose. Unfortunately, the sculpture-garden enclosure turns a mostly blank wall to its nearest significant neighbor, the Contemporary Arts Museum (Gunnar Birkerts & Associates, 1972) directly across Montrose.

The existing wall-and-berm scheme was arrived at after several years and much modification. Noguchi's first idea for the garden was an island—inspired, he says, by an early trip to Houston during a flood. A related scheme called for a sunken garden, but it was also rejected. Noguchi's first walled-enclosure design was far more contained than its current form. The design was made public in 1979, and due in part to unfavorable community and professional reaction, was put on hold for several years.

In 1982 the new museum director, Dr. Peter Marzio, asked Noguchi to make some modifications, and in 1983 the redesigned garden scheme was unveiled. The major changes made were in the height and expression of the walls. Originally 16 feet high at some points, they were lowered by several feet and their configuration changed to become more varied. In addition, the interaction between berms and walls in the revised scheme emphasized a more dynamic composition. The main corner at Montrose and Bissonnet was changed significantly. Its walls were lowered and replaced at the critical junction by a grassy planted berm that penetrates to the interior of the space. The revamped design was agreed to in 1984 and ground was broken in 1985.

Geometric shapes within the natural environment emphasize the conflict between formal space and open landscape.
A POTESTY O F FLATNESS
AND ISOLATION

The garden itself is a sophisticated sculptural work, and a study in contrasts. There is no specific path: Noguchi instead presents a series of visual episodes within a continuously flowing space modulated by fragmented walls of varying heights. Within the space he juxtaposes natural with man-made, curves with angles, hills with flatness, the smooth with the rough. The geometric shapes of the concrete and granite-clad walls play off the curved and angled forms of the artfully manipulated ground plane, which is composed of planted earth mounds, gravel beds, and heavily rusticated red granite paving.

The abstract architectural elements that populate the space are at the same time bold and delicate, the forms nonspecific, open to personal interpretation and subconscious suggestion. Some materials, such as the poured concrete of the walls, are raw, yet beautifully detailed and crafted. The glossy, polished finish of the concrete is contrasted with the rusticated, almost crudely detailed paving, whose thick red grout lines create a powerful pattern independent of the curves and angles that form its perimeter.

Noguchi’s life-long fascination with primitive art, mythic landscapes, and surrealism is apparent in the design. The contrast of geometric shapes within the “natural” environment emphasizes the conflict between the garden as a formal walled space and an open, flowing, natural landscape. The presence of primitive “feminine” and “masculine” symbols, common in Noguchi’s art and here represented most visibly by earth mounds and the projecting triangular monolith, gives the garden a mysterious, mythical quality.

The sense of disorientation caused by the artist’s sculptural manipulations and radical juxtapositions is not entirely comfortable. Instead of a quiet retreat, Noguchi has created a jarringly complex composition reminiscent of urban life. The garden intensifies the experience of the local environment, and could be seen as a poetic interpretation of the Houston landscape. The powerful sense of flatness (emphasized by the addition of rounded berms and vertical projections) and infinite horizontal extension reflects the mega-scale quality of the Texas plains—bounded yet edgeless.

Despite well-intentioned efforts to make the garden more responsive to its context, it remains isolated and self-contained. Compromises made during the design process seem to have been more damaging than helpful. The main result is that the space seems leaky and ill-defined from the inside, without resolving its lack of openness to the street. The modified wall neither lets the city in nor keeps it out, but holds it at a distance, unsure of whether to consider it a contribution or a distraction.

From the street the sculpture garden is an enigmatic presence, a low-keyed expression that barely hints at what happens beyond the concrete walls. The most visible corner, along Bissonnet and Montrose, is weakly defined and dominated by the tree-planted berm added during the last set of design changes. This corner is unfortunately the only point where art can...
be seen from outside the sculpture garden. The upper portion of Giacometti's "Large Standing Woman I" (1960) can just be glimpsed over the grassy mound, silhouetted against one of the garden's tallest walls. As an urban space, located at the center of Houston's loosely defined "arts district," the garden fails to bind the various institutions or the area together. Its walls remain imposing, their contents hidden, and the diagonal path imposed by the two major entrances makes it inconvenient to walk through the space from the Museum of Fine Arts to the neighboring Contemporary Arts Museum. The connection would have been such a simple gesture that its absence seems almost an affront.

The unusual nature of the garden's design has again brought up the issue of the appropriate setting for the display of art. Other than the Billy Rose sculpture garden, this is the only space designed by Noguchi that is intended for the display of work by other artists. This space is itself a sculpture, and the animated nature of the elements does not always provide a flattering backdrop for the art works. The interior walls, while interesting in themselves, fail to define the space sufficiently, offering at times too many views, too much confusion.

The most successfully displayed sculptures are the large, bold pieces (often placed against walls) that can somehow hold their own in Noguchi's world. The most recent additions, Giacometti's "Standing Woman I," and Ellsworth Kelly's "Houston Triptych" (1986), are two of the most dramatically displayed works. Along with the Matisse "backs" series, created between 1909 and 1930, they make a special "episode" that is probably the most clearly defined in the garden.

Too many objects—benches, trash containers, empty pedestals, and lighting elements—crowd the space and add to the cluttered, disjointed feeling. The trees, in their present immature state, are small and fussy, and their protective gratings read with greater graphic power than some of the art. The more delicate sculptures are often overwhelmed by the architectural elements or simply lost in the trees, so removed from the pedestrian as to go virtually unnoticed. Other works seem to be scattered randomly along the path, left placeless and uncomfortable. The trees, the strong paving pattern, the city outside and the objects inside crowding the small site, combined with walls too low to define or screen, all contribute to a visually and psychologically distracting environment for viewing art.

In time, of course, the trees will grow to soften the austere quality of the architecture and provide much needed shade. Sculpture will be added and moved around, and the museum will learn how to make the most effective use of its space. The garden will change, and perhaps the citizens of Houston will learn to appreciate its unique, if somewhat difficult qualities. As Noguchi said in an interview published in the Museum's bulletin: "I hope that time will also play with this garden as it grows older. Of course, the walls and sculptures are impervious to the transient seasons, but all gardens change. This is part of the dialogue... I cannot imagine a landscape or a sculpture that is mute."
Important new landscape features can be found at two projects marking the eastern and western edges of Dallas's Ross Avenue high-rise zone.

Ross Avenue in Dallas has become what Louisiana Street in Houston was throughout the late 1970s and early 1980s—a gallery of some of the city's most identifiable new office towers. Ross Avenue also forms one edge of the emerging Dallas Arts District, which centers a block north on Flora Street.

Among its beneficial effects, this developing arts/cultural zone within the central business district has stimulated more attention to the ground-level amenities of office towers in the area. The public sculpture garden of the Dallas Museum of Art, a formal, contemplative enclosure with a powerful fountain-wall, opened in 1984. An even more welcoming garden area can be found at Southwest Life Insurance—the building was designed by George L. Dahl and completed in 1964. Its oak grove shows what a generation of growth can do to help a stand of trees soften a downtown. The 1984 LTV Center (by SOM Houston, with landscaping by Myrick, Newman, Dahlberg) brought a barrage of sculpture to a tightly landscaped site. The 1986 Lincoln Plaza (designed by Harwood K. Smith and Partners, also with landscaping by Myrick, Newman, Dahlberg) features a low grove of oaks that one Dallas architect has called "luscinious.

But the most interesting streetscape features can be found at two projects that mark the eastern and western edges of the Ross Avenue high-rise zone.

The Texas Commerce Tower at 2200 Ross

The Texas Commerce Tower at 2200 Ross is a 55-story, 1.2-million-square-foot tower designed by Skidmore, Owings & Merrill of Houston, for the Trammell Crow Company. Construction is scheduled for completion in August 1987. Besides having the most identifiable top of any tower north of the Nils Esperson Building in Houston, Texas Commerce Tower will have one of the most vigorously landscaped plazas in the state. Whereas many buildings in the western end of downtown Dallas have not only street entrances and connections to the underground tunnels, Texas Commerce Tower will add a third element of pedestrian traffic: skyways connecting to two neighboring buildings. In most buildings such connections are isolated or linked casually by a series of escalators or elevators somewhere inside the building, hidden from the street and its people. SOM has chosen instead to make the links explicitly public and inviting, by putting them half inside and half outside the building. The 1.5-acre plaza between Ross and the tower has a strongly marked entry and two escalator ramps linking the street with both skyways and, eventually, tunnels. In the plaza, topiary gardens with 12-foot-tall hedges are carved by paths and seating areas, and a grass lawn slopes toward an 11-foot-high, 50-foot-long waterwall. At the southwestern corner is a 17,000-square-foot domed rotunda, planned for a restaurant.

Allied Bank Tower

The prismatic shape of the Allied Bank Tower in downtown Dallas, designed by I.M. Pei and Partners, is well known nationally, but the extraordinary waterscape at the base of the tower is gaining a strong local reputation as a place to cool off a hot afternoon.

"It was a simple project to design," says Dan Kiley, head of the Charlotte, Vermont, landscape architecture firm The Office of Dan Kiley. He adds that while many projects require detailed study before a landscape concept is decided on, the idea for Allied Bank Tower came to him at once, the first time he visited the site with architects Harry Weese and Harry Cobb of I.M. Pei and Partners.

"I looked around and said, 'It shall be all water,'" says Kiley. "I saw right away that I wanted it to be a place where people would walk on the water and be a part of the design, instead of just looking at water."

The idea came after Kiley thought about what he calls the "hardness" of Dallas. Before visiting the site he had considered using paving...
with groups of trees. But he recalled, he says, the heat of a Dallas summer and “all those plazas throughout the country that are covered in paving.” And he decided that “since basically American cities are too hard, with the roads, the glass buildings reflecting heat, the reflectivity of the automobiles, and the stone buildings that absorb heat in the day and give it off at night,” he would use as much water as possible.

The solution was to turn the site into a water garden, with 440 bald cypress trees and 440 fountains. (During a presentation to a gathering of financial backers of the building, a project of Criswell Development, Kiley says he noted that in the Genesis account, the river flowing from Eden split into four parts. In Dallas, he promised, “we will split it into 440 parts.”)

In addition, a waterfall was planned to run from the Ross Avenue sidewalk down the 12-foot drop in elevation to the bottom of the plaza. “We did the waterfall all in geometry. I didn’t want to try faking Yellowstone—it’s a pure man-made idea, geometry on the land,” Kiley says.

Focus of the plaza is a fountain designed by WETS Enterprises, a square of water jets set into the plaza floor. The jets are controlled by a
Children play in the computer-activated plaza fountain, ABOVE and FACING PAGE.

Fountains step down the grade to the plaza

computer, which activates them in rhythmic, but unpredictable, geometrical patterns, delighting children who dance through the spray.

Only one of Allied Bank’s two planned office towers and about 65 percent of the site have been developed so far, however. So only 220 of the planned trees and fountains have been installed. It is a tribute to the strength of Kiley’s conception that, even cut in half, it works so well.

A NEW SENSIBILITY

While earlier projects on Ross Avenue, such as LTV Center and Lincoln Plaza, showed developers and architects moving away from the paved, windswept plaza that used to typify downtown office buildings throughout the state, Texas Commerce Tower at 2200 Ross and Allied Bank Tower mark the full-blown arrival of a new sensibility. The impetus to build such amenities, in most cases, has come as designers and developers took a post-modern turn in their careers, reacting to the urban sterility inherited from the modern movement. Ironically, however, a city of such high rises, with their gardens overlapping, would provide a humane fulfillment of Le Corbusier’s vision of modern urban spaces—the tower in the park.

Allied Bank: the original plan called for two towers and twice the landscaping. The circular court became a square plaza fountain.
Austín's skyline has changed dramatically over the last two years. New buildings just south of the State Capitol have introduced a fashionable peaked silhouette, the high-rise core has filled in a bit and new high-rises have appeared on the city's periphery. Before discussing the effects of this building boom on the skyline, it would be useful to recall the history of thinking about skylines and to outline some of the semantic structures people read into them.

As a rule since the late 19th century, when steel, elevators, and other new building technologies made taller commercial structures possible, skylines have elicited controversy only when something of value is threatened. In most cities where there is no distinctive or valued skyline, almost any new structure will be welcomed. But where earlier religious and civic symbols and their subtler aesthetic compositions might be obliterated, citizens often respond with proposals for skyline control.

The possibility of control and the fact that responses to skylines can take several forms suggest that several scenarios or attitudes can be identified as ways to think about the skyline of a city—in this case, Austin.

Laissez-faire
In this scenario, people let “nature,” in the form of costs, marketing advantages, and tax rules shape the skyline without concerted aesthetic interference. The skyline is regarded as a book recording changing market forces and architectural styles. People later “read” such a skyline, just as we see family rivalry in the skyline of San Gimignano and commercial one-upmanship in Manhattan and Chicago. But laissez-faire attitudes do not always produce distinctive urban silhouettes, as Milwaukee, Atlanta, and countless other American cities show.

Gallery of Famous Architects
Another approach holds that the skyline should showcase the best efforts of a collection of architects “speaking” about architecture as art. Manhattan is an example, (although not as a deliberate program) given the decades in which builders have tried to “buy the best” as a competitive device. Dallas and Houston have made modest beginnings in this direction. Philip Johnson is the best-known sculptor of gallery-skyline artifacts in the U.S.

Civic Symbol
In certain cities skyline ingredients become unique symbols. Washington, D.C.'s Capitol and Monument are recognizable and immediately associated with the city; importantly, views of them have been protected for decades. Several state capitol buildings, such as that in Lincoln, Nebraska, create identifiable skylines. Even some with the typical dome/base configuration are identifiable: The Wisconsin Capitol in Madison, standing high on an isthmus, would not be confused with the copper-covered downtown Capitol in Sacramento, California. The Texas Capitol, working with the UT Tower, makes Austin's skyline unique.

Corporate-Civic Symbol
Sometimes buildings that logically should not be civic symbols take on that public role. San Francisco's Transamerica Pyramid shape was chosen to help create an identity for a corporation, in fact it also has become a symbol for San Francisco. The Empire State Building for many years stood for New York. In Phoenix, where the problem of city identity and identifiability is a current concern, a recent proposal to build the world's tallest building, a spike-like affair, would have solved the problem. Such a structure would have been identifiable, even if it said little about the city.

The Well-Tempered City
Instead of beginning with skyline image, another approach is to deal incrementally and rationally with issues such as land use, building height, the carrying capacity of streets and public transit, the cost of land or energy, historic preservation, conserving resources, and how sunlight penetrates to sidewalks and office interiors. An incremental approach, like
San Francisco's recent Downtown Plan, would portray a sense of what constitutes a "good" downtown.

**Forceful Exemplar**

Skylines can develop when a person or group has things built specifically to influence other designs. Many Manhattan towers show a commitment to forceful design. In some cities, a development corporation can lobby for good design. In San Francisco, a public planning agency insists on design quality and controlled symbolism.

**Lessons for Austin**

What is Austin's situation? In Austin, where the laissez-faire option rules, a memorable skyline is being overwhelmed by the commonplace. The new buildings downtown are simply not exceptional, either in design, construction or in terms of urban impact. They are not even notorious in the way the Transamerica Building was or the "Tallest Building in the World" in Phoenix might be.

The new buildings in Austin do speak, of course—about speculation and boomtown economics and architectural fashions (in contrast to architectural convictions.) Even this effort lacks the bravado of boomtown Dallas and Houston. Austin's distinctive skyline is sitting up with a characterless stuff.

Given Austin's unique qualities, one wonders why the city can't control its destiny. Already there are height limits in Austin, along with "corridors" protecting views of the Capitol, but the aesthetic effect is marginal. Given existing controls and practices, whatever is distinctive today will eventually be lost. A radical alternative would be total preservation, but such control would be reactive—it wouldn't work for good development.

Another possible approach exists that would not limit, but would guide. San Francisco has worked in this direction for more than a decade, and its recent Downtown Plan specifies not only height and bulk, but also sculptural character. The shape of the skyline also is determined by goals relating to the quality of life: light, open space, public transport, even day care.

Another option is to develop design leadership, an ethical imperative to build well and sensitively. In theory, the State of Texas and its agencies, with no interest in real estate speculation, ought to be able to help shape the capital city, to influence decisions on urban design, to act as a "forceful exemplar." Yet most state buildings suggest neither commitment to design ideals nor an effort to demonstrate new ideas. (The State of California, by comparison, has built several projects demonstrating ways to conserve energy or improve workplace quality.)

One bright light in this regard is far from the Capitol, and too small to change the skyline; still it offers hope. The Texas Commission for the Blind Building by Austin-based Black, Atkinson, Vernoy Architects and Planners is clearly the work of architects who think of people as people and not as units in a work force. If other state agencies chose architectural and urban-design excellence or experimentation, Austin could have a different future skyline.

Another kind of approach could be based on J. Irwin Miller's program in Columbus, Indiana, where the difference between fees for "unknown" architects and "name" architects has been paid by a foundation. As a consequence, Columbus is a "gallery" of schools, firehouses, public buildings and even commercial developments designed by gifted (or at least famous) architects. Since architectural fame is probably not a key concern for Austin, a variation might support deference to the Capitol and UT Tower or sensitivity to values such as the quality of streets, mix of uses, housing downtown, technological experimentation, etc.

Three options confront Austin. One is to simply let things be; the result will be a silted-up, characterless, conviction-free skyline. Another option is aggressive management in the form of incentives and limits. Tension between planners and developers with conflicting values makes this a troublesome option unless compelling incentives are offered. A third option is for a third force—benefactors, a development corporation, or a consortium of investment interests, perhaps—to set a higher standard, to cajole, to infuse development in Austin with a sense of mission, to indicate that Austin's future isn't going to just happen to it, but that the city cares enough to shape its urban image as a reflection of its distinctive values.

Wayne Atlee is the author of Skylines: Understanding and Molding Urban Silhouettes (John Wiley and Sons), and co-author of a forthcoming book, Catalytic Architecture: An American Approach to Urban Design (University of California). He is Adjunct Professor of Architecture at UT Austin.
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CAD'S PRODUCTIVITY REVOLUTION

Is computer-aided design an expensive, risky toy, or does the new technology pay for itself in increased productivity and other benefits to architects? What are the problems new and experienced users encounter most often? How should CAD be used and managed to achieve the best results?

These are questions 7A asked practitioners from around the state, architects working in the largest multilevel A/E firms and those running single-person practices. What we found is an emerging consensus that microcomputer-based CAD, along with the mainframe computer systems used in the largest firms, has finally begun to fulfill the promise it has held out through the 1980s: it now offers architects a competitively priced means not only to increase efficiency but to offer new services to clients. Partially this is due to changes in hardware: those desktop computers can do things that designers only dreamed about a decade ago, and hardware prices have gone down almost as fast as computer power has gone up.

But which system to chose? How to get the most from hardware and software? The architects we talked to offered differing opinions and strategies on this point. Here's what we heard.

Architect Richard Buday of the Houston firm Buday Wells Architects, who has written widely on CAD-related topics, points out that only five percent of potential architect/engineer CAD users have made the plunge. But that is about to change, according to Buday.

"Once upon a time (six years ago) the notion of drawing on a computer was greeted with a healthy mixture of excitement and skepticism," Buday says. "The validity of the concept was unproven...and there was concern about the computer's effect on the creative process of design." His own firm has weathered such concerns, Buday reports, and firm members regard their transition from a traditional pencil-drawing method to the use of IBM PC-based AutoCad software "as a success." He adds: "I'm not sure how we ever got along without it. I can't remember the last time a drawing was done with a pencil."

His experience has shown him, Buday says, that, without the proper emphasis on managing CAD to get the most of it for the firm, "CAD turns out to be not just another tool, but a confusing way of life." Buday points out, for example, that plotting time for CAD drawings can take days, and that firms switching to CAD can no longer tear drawings off the boards for blueprinting an hour before a project deadline. CAD requires extra attention to standardizing drafting procedures and guidelines, he says, and forces many firms to change the way that senior architects check on the quality and accuracy of others in the firm. The good news, according to Buday, is that with the attention to customizing required by these challenges, his firm has found their CAD system transformed "from a simple toolbox to what is really an 'intelligent' system: a rule-based design and drawing system."

Clifford Carlin of Source Architects, Inc., Houston, also emphasizes the management aspects of CAD use. His firm, he says, uses both microcomputers running AutoCad software and a Sigma Design system with
several workstations. The experience he says, has made a CAD evangelist out of him. "Using CAD involves a mindset that we as architects weren't trained to handle," Carlin says, adding, "This is getting to be a more and more competitive field, and every day you're not using the most advanced techniques you're that much closer to going out of business."

Most architects try to teach themselves to use CAD the hard way, by on-the-job training—putting current projects on the system as a way of 'eating into the system,'" according to Carlin. But "eating into it" only leads to confusion and frustration, he says. Starting with training and well-trained operators at his office, Carlin says, "We jumped in and never looked back." As a result, he says, "We paid for our machines on our first job." And he adds that "the key to productivity is to get drawing on the system as early as possible."

Firm members are constantly working on updating their equipment and expertise, Carlin says: they attend trade shows monthly, and have been through five sets of hardware and software in five years. The approach has been cost-effective: last year, his firm produced work matching the output of a 35-to-40 member firm working conventionally, he estimates.

Hans Kraus of the Dallas office of 3D/International swears by his Integraph, a mainframe-computer-based CAD system that Kraus calls "the Rolls Royce of CAD."

"The computer forces you to make decisions early on about things you could sort of guess at in conventional drawing," Kraus says. "You have no choice but to draw accurately, so you have to make the decisions earlier than you would in conventional design. Until designers are brought up through the system thinking that way, they're not going to realize the full capacity of the system."
The “Architecture Productivity and Design Package” software running on the Intergraph, Kraus says, not only has a powerful three-dimensional modeling capability, it allows designers to keep track of materials used in a project and automatically output them to a database as the project proceeds. "It's here that the benefit is obvious: you don't have to go through the drawings and count each window or door or the linear feet of wall," he says.

His firm’s biggest snag: Plotting time. Kraus says: careful management is required to prevent bottlenecks.

Hugo Bazan, CAD manager for Austin architects Maxey & Riffle, says his firm, which specializes in designing correctional facilities, has been using Cadvance software on an IBM AT computer since February of 1986. He chose the software "after a long process of evaluation, including information from the AIA," Bazan says, and finds it "very user-friendly—that's a most important consideration." Productivity with the system is relatively low early in the learning curve, he says, but now he thinks he is producing as much as 10 times the output possible using conventional techniques. "It has brought the modern age to small firms," says Bazan.

"Doing an existing building is harder to put on the machine," but even so, the CAD system offers significant improvements in productivity as changes and corrections are made in the design. When his firm presented a project to the Texas Jail Standards Commission recently, he says, the group demanded changes in the design that would have taken a week to redraw by hand; they were able to finish them by early that evening. "We're using it for everything, even bubble diagrams," says Bazan.

One particularly useful feature of the system, he adds, is database extraction capacity, which can produce data for a bill of materials and cost estimates.

Dohn LaBiche of Steinman/Eide Architects, Beaumont, points to the growing usefulness of add-on software developed by product manufacturers. The Pella window company led the way, he says, and Andersen has followed with extremely easy-to-use software. Both packages draw and catalogue windows chosen by a CAD user. "We use either package, depending on client needs and the design. Both save a lot of time and guesswork," LaBiche says. "It's important that manufacturers realize they should release this kind of software—it makes products more accessible."

Robert Anderson, the Robert Anderson Architect, Austin, has a three-person practice specializing in space planning and tenant-finish lease work. The business, he says, operates entirely from two Macintosh computers running MacDraft, MacDraw, and MiniCad software. "You
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can become expert on the Macintosh and its software much faster and with less training time than in a PC or mainframe environment," Anderson says. "This system pays for itself once a month. You can never get that degree of payback with a larger, more expensive system."

Kennedy Whiteley of Ausland Architects in Austin has been running Versacad Designer software on an IBM PC AT for almost two years. Whiteley says the choice has been an excellent one for his firm, which has "used it as a specialized tool for one client, a fast-food chain that requires a good deal of repetitive work." Working with the CAD system, even on projects in which many elements are repeated, still requires early, systematic planning, he says: "Basically you've got to have your ideas worked out in advance." Nevertheless, the value of the system is apparent. "If you just drew and never changed anything, you wouldn't need CAD. But the first time you have to make a change in a drawing, no person can keep up with it," says Whiteley. Plans to expand use of the system will mean adding several more work stations and a spooler for the plotter, which
Whiteley calls "the major bottleneck."

David Demarest of Demarest Architects in Fort Worth has used IBM-compatible NEC computers running Datacad by Microtecture software since late 1986. The decision to computerize the office—before then they didn't even use a computer for word processing—came, paradoxically, after the work load of the office decreased and the firm was forced to lay off several people. Now, according to Demarest, two architects are handling work that would have taken nine working conventionally. "We had a job, a 120-unit student housing project, come in right after we got the equipment. We threw away our parallel bars and never looked back," says Demarest.

The project, involving repetition of units, was a good introduction to CAD's strengths. A condominium that had to be redone after construction started was redrawn in three months—less than half the time it would have taken before, Demarest estimates. The firm has begun to grow again, and Demarest says he is hiring architects with as much as 10 years experience "and putting them behind a computer. You get three-fold the work and accuracy from them that you would using inexperienced people." Plotting time remains a problem, he says. Future plans call for dedicating one of the work stations to plotting, freeing up time at other terminals. Finally, the ability to provide clients with a bill of materials has allowed the firm to generate extra revenue. "Integration of architects, contractors, and clients by computer is the wave of the future," says Demarest.

Ed Rickter is CAD director of the architectural division of CRSS in Houston, but he likes to talk about the IBM PC AT-based system he bought for his own use. It runs Pointline CAD software, a package he chose after reading about it in an Architectural Technology magazine "shootout."

Rickter says the CAD system is "very affordable, but with a high functionality for architects." The system converts information from two to three dimensions easily, and it is fast enough to allow "almost instantaneous walk-through" views. In addition, Rickter says, whereas most CAD systems use a "layering" technique for tying drawings together, Pointline CAD features a full-scale "overlay" system that provides powerful cross-referencing capabilities. The ability to generate a bill of materials automatically is also a strong point. Rickter says he has avoided plotting-time problems by using the new-generation dot matrix printer offered with the Pointline CAD system. "In functionality, speed, and cost, this package gets a high ranking across the board—it does things that other systems couldn't do for two or three times the cost."
The Texas Landscape, 1900-1986
by Susie Kalil
Houston, The Museum of Fine Arts (distributed through the University of Texas Press) 1986
96 pages, 30 color, 37 black and white illustrations.

Reviewed by Kenneth Hafertepe

Texas is large enough to have most other states for lunch and still have Rhode Island for dessert. It is diverse geographically and culturally, with a long and proud Spanish heritage and an incessant flow of immigrants from the U.S., Britain, France, Germany, Eastern Europe, Southeast Asia, and Mexico. But Texas, so broad and diverse, is not half as broad as the criteria for the selection of art for The Texas Landscape, 1900-1986.

This was the title of a Sesquicentennial exhibition at the Museum of Fine Arts, Houston, and of a catalogue with an essay by the exhibit's curator, Susie Kalil. The show was, and the catalogue is, only nominally about the Texas landscape, because any painting with a background was considered a landscape, as was any outdoor sculpture or earthwork. As a result, a wide variety of art--much of it good--was included, but the responsibility to define the topic was abdicated.

Consider a typical digression: Theodore Gentil's Camel and Rider, an exotic slice of San Antonio life. The author explains that in 1856 U.S. Secretary of War Jefferson Davis ordered that camels be used to carry supplies through West Texas; she comments on the painting's "vigorously, loose brushwork." She doesn't explain, however, what the historical anecdote or the formalistic analysis have to do with the Texas landscape. Indeed, the only "landscape" in the entire canvas is the sketchily painted foreground. Gentil's paintings are rich in incident, but Kalil fails to explain why we should consider them landscapes.

The rationale for these and the many other works which are only marginally concerned with the landscape is provided by an invocation of the seemingly ubiquitous J.B. Jackson, quoted to the effect that the landscape is "a concrete, three dimensional reality, a space shared by a group of people" (or, in the example above, shared by a man and a camel). An essay that took seriously Jackson's definition, that attempted to write a cultural history of Texas landscape art--of perceptions and values shared (or not shared) by artists, by writers, by patrons, by society at large--would be an invaluable contribution to the study of the state. The present effort, however, falls far short.

The introductory section comes closest to meeting this goal, for here Kalil begins to outline the various factors which shaped Texas culture: the variety of the landforms, the diversity of ethnic groups, the romance of the frontier and of the cowboy, the reality of modern, urban Texas. These broad-based themes, rising above the often rarefied abstractions of contemporary art criticism, are the things which could tie such an essay together. Alas, here they do not.

Instead, the heart of the essay is comprised of analysis of individual artists, arranged in chronological order, taking into account the history of the state and the evolution of artistic styles. Here we are treated to art that is often brilliant, but the connections are underdeveloped. Kalil shows us how Georgia O'Keeffe's fascination with the evening sky was translated into bold strokes of color. She shows how Alexandre Hogue's work could range from the agonized depiction of a drought-stricken Mother Earth Laid Bare to the surreallyistically serene Oil in the Sandhills. And she characterizes Robert Smithson's Amarillo Ramp, a huge earthen spiral built in 1973, as "an ongoing dialectic with the Texas landscape." Unfortunately, Kalil is not privy to the dialogue between Smithson and the landscape, or neglects to tell us what it is all about.

And one wonders why, given the willingness to consider practically any artwork a landscape, only artists of this century were included. Several artists featured in the exhibit did most of their work in the 19th century--among them Gentilz, Robert Onderdonk, and Frederic Remington--which makes the cut-off date of 1900 seem especially arbitrary. The addition of just a few more painters, particularly the Central Texas landscape painter Herman Lungkwist, would have resulted in a more comprehensive and better focused survey. Many of the works shown demonstrate that there is greatness in Texas art; as for the exhibition and its accompanying catalogue, they could have done much more.

The Danteum
A Study in the Architecture of Literature
by Thomas L. Schumacher
Princeton Architectural Press, 1985
$25, clothbound

Reviewed by Gerald Moorhead

Approaching a book on Giuseppe Terragni (1903-1943) can be a little intimidating. His admittedly symbolic and self-referential work has been the subject of too much obscure polemical commentary. It is thus refreshing to have Schumacher's clearly written and comprehensible new book. Unlike other writers who have shaped Terragni's work to fit a preconceived argument, Schumacher describes and explicates this complex project on the basis of comprehensible evidence—the ex-
isting drawings, Terragni's written interpretation of the project, and the architect's other writings and buildings.

The Danteum project is little-known but worthy of study at this time because it is an architectural work intentionally conceived and developed as an analogy to a work of literature, the Divine Comedy by Dante Alighieri, greatest of Italian poets. Each physical element of the architectural plan and construction has a symbolic or literal reference to an idea or place in Dante's allegory of the stages of a soul's redemption. Even the choice of Dante as a reference had more than cultural importance. The poet's dream of a unified Italy inspired Mussolini centuries later. Terragni's work and thought, throughout his short career, were deeply immersed in Italian Fascist ideals. Despite this, the Danteum project is important because it proves that an architectural program rich in symbol and meaning can create an architectural work that stands on its own in purely architectural terms.

In 1938, the Milan lawyer Rino Valdameri, president of his own Dante society, proposed to Mussolini the construction of a building on the new Via dell'Impero in Rome that would celebrate Dante's works and "suggest and aid those initiatives that foster and attest to the character of Imperial Fascist Italy." Intended as a symbol of Dante's political aspiration for Italy, the Danteum was to resemble any number of nationalistic monuments, "glorifying the arts before politics, but ultimately tying together the two." Terragni's partner Pietro Lingeri was a longtime friend of Valdameri's and the pair had done several previous projects for him. The architects were actually already working on the project when Valdameri made his proposal in October of 1938.

The scheme was presented to Mussolini, but all did not go well. Schumacher quotes Lingeri's wife, who recalled that he stepped on the Duce's foot during the presentation. "Characteristically, Mussolini shrugged it off in good humor and high spirits," she said. Further audiences were not forthcoming, however, and by September 1939, Hitler had invaded Poland, Mussolini's attentions were not on cultural matters, and the project was dead. In an appendix, Schumacher includes the existing correspondence on the project, which "suggests the character of patronage under fascism: a constant 'bowing and scraping,' offerings of presents, aid, and contributions to the regime."

As Schumacher shows, throughout his artistic career, Terragni depended upon received images of various kinds—he was accused of plagiarism more than once. But if he began with direct imitation, Terragni soon moved to adapting plan and parti and including 'found objects'; finally he developed "geometric ordering systems unrelated to human activity or static structural systems." At the same time, Terragni was developing symbolic content, which Schumacher says "emerged as the creation of architectural metaphors of modern materials and techniques in imitation of the new architecture of northern Europe; it then shifted (circa 1932) to the display of fascist ideas of various kinds, and ultimately turned to a more general cultural-historical-literary mode of expression."

Using a number of Terragni's projects, Schumacher details with specific examples which sources and references are being transposed. The Palazzo Littorio competition entry of 1934 is considered in some depth, as it has many parallels with the Danteum project. Both were designed for the same site on the Via dell'Impero, facing the Roman Basilica of Maxentius, and played on fascist imagery. The drawings for the Palazzo Littorio competition were collaged with plans and views of ancient buildings and written descriptions of how the scheme incorporated historical principles and concepts. The Danteum drawings as well were accompanied by the Relazione, a report explaining "the connection between the plastic-architectonic expression and the abstraction and symbolism of the theme of the building."

Thus considerable background is given before the design of the Danteum is presented. From the earliest sketches, the importance of geometry is evident, supported by numerical correspondences with the Divine Comedy. The Danteum's geometry was generated from two figures: a golden-section rectangle (the long side of which equals the short side of the Basilica of Maxentius) and two overlapping squares. Says Schumacher: "The golden-section rectangle is Terragni's tie to the ancients. It was also his assurance that the 'value of absolute geometric beauty (would be imprinted) onto the entire structure of the monument.'" Schumacher also cites Terragni's Casa del Floricoltore and Corb's Villa Stein as possible sources. Watercolor drawings, plans, perspectives, and details are all illustrated (though they are a trifle small) alongside the text. Terragni wrote to explain the project, the Relazione.

The Relazione, though portions are lost, is a remarkably direct explanation of the building's development in relation to the decomposition of the golden rectangle and variations on the numbers 1, 3, 7, and 10, drawn from the structure of the Divine Comedy. Much of Schumacher's work has been to expand and further explain the use of geometry, the meaning of mathematical symbols, and the correlation to the Divine Comedy that are already presented in this report.

The final chapter investigates Terragni's obsession with Dante. His friendship with Massimo Bomemelli and knowledge of the work of Benedetto Croce, both prominent literary figures, expanded his understanding of Dante to include an interpretation that separated the form from the content of the poem. The discussion of the literary parallels between the Divine Comedy and the Relazione brings out the concept of the abstraction process, whereby, according to Schumacher, architecture project and poem "both possess a structure and a harmonic rule that can allow them to confront each other." Though unbuilt, it has earned respect ever since. Schumacher relates a story about Le Corbusier, who opened a Terragni retrospective in Como in 1949, six years after Terragni's death. Touring the show, Corbusier stopped only once, in front of the Danteum panels. Says Schumacher, "[Although he] knew nothing of the commission, the Relazione, or the context of the work, he was moved to exclaim, 'This is the work of an Architect.'"
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environment in Texas, is seeking photographs, drawings, maps, correspondence, and objects to start its collection. The built environment includes historic structures, construction technology, engineering, the designed and natural landscape, and urban and rural development.

Archivist Joan Rabins, the new director of the repository, says the Center is particularly interested in reaching architects. "We're trying to track down who the pack rats are, who knows who the pack rats are, and where the stuff we would love to [document at the Center] is tucked away," she says.

"We feel we can really offer contributors a service. We'll process a donation and eliminate the unnecessary materials, then put it in folders, catalogue it, and store it in a controlled environment," says Rabins. The Center will be permanently located at A&M, where directors hope to move back one of the historic structures that had been on campus for renovation and use as a display area, research facility, and office.

The new organization was approved by A&M's Board of Regents last fall. According to a university release, its goals are education, research, coordination of historic preservation efforts, and serving as a repository of historic materials. Rabins says the Center will take a more public role than other organizations of this type, with displays of significant holdings, and archives open to students, private developers interested in restoration, and the general public in addition to scholars.

The Center has also staked out a role in the economic arena. According to school officials, from 1982 to 1984 over $1.4 billion was spent in Texas on historic preservation, generating $90 million in local, state, and federal taxes. The Center for Historic Resources hopes to encourage more of that kind of activity, and in the process also boost tourism and conventions, two other big money-makers for the state.

Texas A&M leaves no doubt that it is making for the academic high ground in historic preservation. In addition to creating and funding the Center, regents also created a separate but closely related Endowed Chair in Historic Preservation. According to university literature, the chair is the first in historic preservation at any university in the nation, with the primary purpose of the chairholder described as incorporating "nationally and internationally renowned scholars into the program for historic preservation, thereby enriching the academic community of Texas A&M University and increasing the capabilities of the center."

Architects and others wishing to make contributions to the new repository can contact Joan Rabins at 409/845-0384.

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**DALLAS CHAPTER NAMES DESIGN AWARDS WINNERS**

Twelve projects, selected from over 130 entries, have been honored for design excellence in the Dallas Chapter/AIA's 1987 Design Awards Program. Jurors for the competition were F.W. Clark, Jr., a founding partner of Cesar Pelli & Associates; Boone Powell, FAIA, chairman of the board of Ford, Powell & Carson of San Antonio; and John Morris Dixon, FAIA, editor of *Progressive Architecture*.

Projects ranged from historic restoration to residential remodeling, commercial architecture, and interiors. Jurors said architects "are under a tremendous intellectual pressure to enrich buildings," and that "Restraint, discipline, and a sense of appropriateness [were] evident in the winning projects." Awards were presented in three categories: honor awards, merit awards, and citations.

**Honor Awards:**
- Roberdeau Residential Additions, Dallas, by Lionel Morrison, AIA
- 3908/3910 Edgewater Duplex Apartments, Dallas
AN ARCHITECTURAL SPRING
IN HOUSTON

It has been something of an architectural spring in Houston, although the re-birth/growth metaphor does not refer to building activity. The allusion, instead, is to a certain freshness, a charge from the usual. The causes of this re-freshment have been a series of architectural exhibits and lectures coming from beyond the usual tired (mostly eastern) sources, bypassing the linguistic jargon and stylistic post-isms of the usual fare.

From the cool thin air of Ticino came Mario Botta, with an elegant exhibit (Farish Gallery, Rice School of Architecture) and a noble lecture admirably translated by Richard Ingersoll. The almost moral purity of Botta's geometry, while highly tectonic, is founded upon a deep perception of regionalism that makes the common understanding of that term quite simplistic. Botta's cubic masses are set against the mountains; their sharp masonry edges and crisp coursings are nature's materials translated by man's hand to the needs of man's mind. The inhaling openings are caves, offering protection in a harsh environment. The forms, though symbolic, do not mimic nature. Botta sees architecture as a contrast to nature, with a need "to establish a dialectic between man and environment."

The strongest test to Botta's approach has been his recent large-scale work in urban contexts. While his concepts are strongly colored, both formally and linguistically, by Kahn, they are not compromised by the multitude of conflicts almost implicit in a city context. Since "light is the true generator of space," Botta's geometry serves to "give form to light."

CEG
Botta compared urban history to light: just as shifting light reveals architectural form, he said, so historical change reveals the multiple forms inherent in cities. The role of architecture is to change the historical fabric—to "transform reality," and to "create a tension between the new and existing."

A very different interpretation of creating tension was displayed in an exhibit of and by Frank Gehry (Contemporary Arts Museum). The architect designed exhibits within which to display his works, creating a massive corrugated fortress to protect his Easy Edges chairs, three exquisite pavilions (one rosewood-stained Finnish plywood, one with copper wall panels over pine studs, one with galvanized wall panels), and a lead-scaled laminated wood-ribbed walk-through fish body with Color Core fish and snake lamps glowing within. Gehry's method of composition is inherently cubist, using fractures, collisions and break-up to join and disjoin architectural elements.

His most recent projects leave behind the slice-and-reshuffle method in favor of the more simpler goal of creating an individual architectural element or form for each function or image of a program. The project for a house for a filmmaker (L.A. 1981), for example, strews unconnected structures down a sloping site: a long narrow "Hall" parallels a longer narrow "Pool"; behind the "Living Room" pavilion is a large, open air, drive-in-like movie screen, visible from all buildings of the home. The stated objectives are as simple as the garage-like forms: "to create one-room buildings" and to be "able to walk outside between rooms."

Gehry's developing work seems to be less sculpted and willful than earlier tests of the artist's strength against plywood, chain link, and other sophisticated (!) building materials. A purist's need to re-create the basic typologies of form (cube, rectangle, pyramid, sphere) is strangely combined with a tantrum-like scattering of the Froebel blocks upon the floor.

Sir Geoffrey Jellicoe, architect, town planner, and renowned poet with landscape, has designed a new project for the Moody Gardens in Galveston. Now in his mid-80's, Sir Geoffrey has the energy to out-run many of his juniors and an imagination about gardens that may prove to be much more than Moody Gardens can hope to realize. The design is a Disney-like river boat ride through natural landscapes and man-made gardens from all periods of Western and Eastern history. (See feature, page 32)

Richard Payne's duplication of Eugene Aiger's photo, "Saint-Cloud, June 1926."

Just back from Paris (France that is, not Texas), and other more obscure locales, Richard Payne exhibited photos at INNOVA in May. The exquisitely rich

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black and white images of marble nymphs, bronze satyrs, gothic saints, and
garden landscapes intensely recall the
19th century photographic greats who
worked the same subject matter. The
gothic cathedrals of Frederick Evans
and the mystical vapors of Paris
carried over by Eugene Atget were
certainly ever-present as Payne sought his subjects.
"Photography is one of the finest methods
for rendering atmosphere and light and
shade in all the subtleties of nature's
gradation," wrote Evans in 1900,
and Payne's sensitive expression of his own
perceptions of these classic subjects
places his art firmly within the honored
traditions of these early geniuses. In a
series of small oval-framed vistas, Payne
actually seeks out the position from
which Atget made the same shots in the
garden of St. Cloud.

But somehow this reverent emulation
does not demean either the master or the
pupil, as too frequently is the case. The
photos are still beautiful and moving;
luminous foliage, detailed shadows and
blank sky transport the viewer beyond the
medium of photography into a world of
pure light, with rows of trees and an
occasional urn the only hint of man's
existence in a landscape without litter.

—Gerald Moorhead

EL PASO CHAPTER HONORS
SIX PROJECTS

Six projects have been honored with
awards in the 1986 El Paso Chapter/AIA
Design Awards Program. Jurors for the
competition were professor George
Ansellevicius, FAIA, dean of the School
of Architecture and Planning at the
University of New Mexico; professor
Don Schlegel, FAIA; professor Robert
Cohimeyer; associate professor Edie
Cherry, FAIA; and associate professor
Robert Walters (all UNM).

Three Honor Awards and three Merit
Awards were named. All of the firms and
projects are located in El Paso.

Winning Honor Awards were: Booth
Keirsey Mijares for the Richard Robins
Law Office, a historical preservation/
restoration project. Garland & Hilles AIA
Architects won for the Yarbrough Medical
Plaza, a medium commercial project.
And Carroll, Dusang and Rand, along
with J. L. Mijares as project architect,
won for the Queen of Peace Catholic
Church.

Winning Merit Awards were Advicrez
and Associates for the Zaragoza Plaza
Retail Center; Garland & Hilles for the El
Paso Federal Building and Parking
Facility; and Garland & Hilles for the
Suzi and David Hilles Residence.

HOUSTON ENVIRONMENTAL
IMPROVEMENT AWARDS
ANNOUNCED

Fifteen winners have been selected in
Houston's 1987 Environmental Improve­
ment Awards program, sponsored by the
Houston Chapter/AIA, Houston Munici­
pal Art Commission, and the Gulf Coast
chapter of the American Society of Land­
scape Architects. The awards recognize
events or projects accessible to the public
that enhance the environment.

Queen of Peace Catholic Church, El Paso

Suzi and David Hilles Residence, El Paso

El Paso Federal Building/Parking Facility

Zaragoza Plaza Retail Center, El Paso

Yarbrough Medical Plaza, El Paso
Jurors for the competition were Henri Gadbois, artist; Milton Howe, president, Houston Studio; Caroline Huber, DiverseWorks; Nicolas Kanellos, Arte Publico Press; Lane Marshall, Department of Landscape Architecture, Texas A&M University; Kelly Thompson-Frater, principal with Thompson-Frater Associates; and Bill Sadler, River Cafe. Project winners were:

- Adopt an Esplanade Project of the Houston Chamber of Commerce for beautifying public streets;
- Armand Bayou Nature Center for an

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**FIRST PLACE REGIONAL AWARD**

**MAGGIE COMPETITION**

Special Interest/Trade Western Publications Association

Texas Architect magazine has been selected as the winner of a prestigious Maggie award from the Western Publications Association. “Maggie” is the industry nickname for the WPA award, which recognizes publishing excellence in magazines, tabloids, or newsletters published in the 14 western states of the U.S. (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming). This is the first year that TSA has submitted an issue of the magazine to be judged in the competition, which included 1,300 plus entries in over 60 categories. The May/June 1986 Sesquiennial issue of Texas Architect was selected as the winner out of six finalists in the Special Interest/Trade category. That issue was also one of six finalists in the Special Theme Issue/Trade category, for which the organization will receive a certificate.

**CITATION OF MERIT**

**ANSON JONES AWARDS PROGRAM**

Texas Medical Association

The Texas Medical Association has awarded Texas Architect a citation of merit in the association and trade publication category of the prestigious Anson Jones Awards. Each year the TMA seeks to recognize editors, reporters, and writers who have done an outstanding job of informing the public of health and medical issues. Texas Architect received this recognition for the January/February 1986 issue, an Architecture for Health.

**FIRST PLACE NATIONAL AWARD**

**ASAE GOLD CIRCLE TROPHY**

American Society of Agricultural and Biological Engineers

Texas Architect won the only 1986 ASAE Gold Circle trophy in the “magnetics” category, Section A (for publications with 15 or fewer staff members). The Austin-based regional architecture magazine was one of only 29 trophy winners chosen from among 840 entries in all categories of the competition. The ASAE Gold Circle award is particularly significant considering that the competition is comprised of hundreds of associations nationwide.

**FIRST PLACE REGIONAL AWARD**

**THE BEST OF AUSTIN**

**SILVER ADDY FOR PROMOTION/ PACKAGE DESIGN**

Austin Advertising Federation

Texas Architect's Southwest DesignPac won an award from the Austin Advertising Federation in Austin, Texas. A Silver Addy in the Sales Promotion category was awarded for package design. No Gold Addies, the highest honor, were awarded in the category. Designers, advertising agencies, and advertising departments throughout the Austin area compete in the annual contest. TAS's Southwest DesignPac, a direct response postcard packet, was designed by professionals in a four state area, is mailed twice yearly to design professionals.

**REGIONAL AWARD**

**ONE SECOND AWARD FOR PACKAGE DESIGN**

**SOLAR PRESS**

Texas Architect’s Southwest DesignPac also received the One Second Award from Solar Press, the printer. Every month Solar Press judges all card packs it produces in a competition for package design excellence. A group of direct mail designers selects the pack that best succeeds in captivating the interest of the reader in the one second it has to be evaluated. Winners receive a plaque and appear on the front cover of the company's newsletter.

**REGATIONAL AWARD**

**SILVER ADDY SALES PROMOTION/ PACKAGE DESIGN**

**REGIONAL AWARD**

**ONE SECOND AWARD FOR PACKAGE DESIGN**

**SOLAR PRESS**

Texas Architect's Southwest DesignPac also received the One Second Award from Solar Press, the printer. Every month Solar Press judges all card packs it produces in a competition for package design excellence. A group of direct mail designers selects the pack that best succeeds in captivating the interest of the reader in the one second it has to be evaluated. Winners receive a plaque and appear on the front cover of the company's newsletter.

**FIRST PLACE REGIONAL AWARD**

**PUBLISHING EXCELLENCE 1996**

**INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS**

The November/December 1986 issue of Texas Architect was Best of Category in its category, "magazines published more than yearly." Judging was based on registration, color reproduction, and consistency of quality in several areas.

Texas Architect and DesignPac ... maintaining the high standards our readers and advertisers have come to expect.
entrance which preserves a natural wetland environment. Design by Tapley Lunow Architects;
- Allright Parking Lot for planting greenery and screening the parking lot. Owner is Century Development, landscape architect is SWA Group;
- The Campanile for an adaption and expansion that preserves and enhances Montrose Boulevard. Owner is John Hansen Investment Builder, architect is Ray Bailey Architects, with landscaping by SWA Group;
- SPARK, a program to build neighborhood parks on public school grounds. Initiated by Houston city council member Eleanor Tinsley;
- Franklin Elementary School SPARK Park for beautifying an inner city neighborhood and developing community ties;
- Highland Village for creating an urban shopping place with extensive landscaping. Owner is Harvey R. Houck, Jr., with Charles Hubbard of Morris*Architects as architect and McDugal Steele as landscape architect;
- Lanier Rose Beds at Jones Plaza for adding color and softness to the concrete of the city;
- Hope Arena at Moody Gardens in Galveston. Owner is the Moody Foundation and Smith Locke Asakura is the landscape architect;
- Hyde Park Substation for sensitively incorporating high technology into an old neighborhood. Architects for the project are Denny*Ray*Wines*Associates;
- Kaiser Pavilion in Marmon Park. John Martin Associates is architect;
- Trees for Downtown Houston for bringing shade and coolness to the urban center and encouraging pedestrian activity;
- Transco Park and Fountain for creating a genuine public space. Architects are John Burgee Architects with Philip Johnson, and Richard Fitzgerald and Partners, associated architects. SWA Group is landscape architect;
- University of Houston downtown campus, for painting the building and turning the parking lot into a plaza and bayou connection. Architect is Tapley Lunow Architects.
- An Uptown Holiday, a lighting project along Post Oak Boulevard during the 1986 holiday season. Designers included O. Jack Mitchell, FAIA; Randhir Sahni, Frank Douglas, FAIA; Joe Milton, Benjamin Brewer, FAIA; and John Cox.

--CEG

DALLAS ARCHITECT RIDES OUT WORK DROUGHT AS SOMMELIER

Dallas architect Paul Johnston saw the writing on the wall as work in the city has become increasingly sparse in the last few years, and decided he would rather switch than fight—to a position with a local restaurant as a sommelier, or wine steward.

"I welcomed the opportunity," Johnston says. "The Dallas economic climate meant cut-backs in the available work to architects and the (sommelier) position presented me with a new challenge."

The architect came to his new position well prepared, calling on years of fascination with the grape. He studied and sampled for five years after graduating from the University of Illinois before starting his own wine collection. As it grew, he designed and built his own house and had it equipped with a temperature-controlled cellar for what had become a 500-bottle collection.

Johnston also helped found Les Gourmets Elites in 1983, a group devoted to the finer aspects of food and wine. The people he met paved the way to his becoming a sommelier. "It made the transition from architect to sommelier easier," he says. "A lot of people knew me and they all helped me when I was starting."

He even likes the restaurant he works in, he says, describing it as "well thought out and well designed."

After working as an architect for more than seven years, Johnston is adjusting well to his new position. "It's great being able to work in a field you love—I've had that opportunity twice now," he says. And though he's keeping an eye on the architecture market looking for signs of life, "for now I'm rolling with it and loving every minute."

--CEG

NORTHEAST TEXAS CHAPTER NAMES DESIGN AWARDS WINNERS

Four projects were honored recently by the Northeast Texas Chapter in its 1986 Biennial Design Awards program. Three Dallas architects served as jurors: George C.T. Woo, principal of George C.T. Woo and Associates; James Wiley, FAIA, principal with The Oglesby Group; and George S. Wright, FAIA, Dean of the UT

Hazel Owens Elementary School, Tyler

Ritz Shopping Center, Tyler
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Sinclair and Wright Architects received an award of Design Excellence for The Ritz Shopping Center in Tyler, and an award of Design Merit for the Hazel Owens Elementary School, also in Tyler. Judges applauded the strong concept and good use of materials on the shopping center, and the clean, no-nonsense design and excellent site planning of the school.

The Allen/Buie Partnership won an award of Design Merit for the Dacus Residence; and the firm Potter + Meyers: Architecture also won an award of Design Merit for the Fredonia Street Office Building. Both firms and projects are located in Longview.

Seven architecture students with perfect 4.0 grade averages will graduate this spring from the University of Texas at Austin. They are Oscar Martin Cadenas of Mexico, Joseph Victor DeSousa of Colorado, Toby F. Greenbaum of Canada, Soochong Kim of Korea, James Ricky Lewis of Abilene, Susan Elizabeth McComb of Colorado, and Ann Kathryn Yoklavich of Hawaii. School officials say the number of 4.0 graduates is unusual, given the “challenging nature” of the architecture curriculum, and they noted especially the record of McComb, who maintained a straight-A average throughout five years of study.

The American Architectural Foundation of the American Institute of Architects has awarded scholarships totaling $264,000 to 291 students in the U.S. and Canada. Texas winners were: Rice University: Mark Burgess, $1,500; Deborah Moore, $500; Carolyn Ovaitt, $2,000; Jennifer Watson, $1,000; Heather Young, $1,000. Texas A&M University: André Brackens, $500; Robert Doane, $500; Mark Lam, $500; Kathryn Parak, $500. Texas Tech University: Cheryl Chamberlain, $500; Kyle Giddens, $500; Huy Nge, $500. University of Texas at Arlington: William Stevens, $500. University of Texas at Austin: Matthew Deersken, $1,000. Shawn Gorman, $1,000; Louis Kimball, certificate; Minh Nguyen, $1,500; René Quinlan, $2,000; David Thompson, $500; and Sheryl Tucker, $500.

**SCHOOLS**

Three Texas A&M University architecture instructors received a merit prize in the recent National Design Competition for Artist’s Live/Work Space in Boston. Kendra S. Smith, Albert C. Smith, and Yvonne K. Trombly were finalists with their design for 12 studio/housing units for artists in south Boston.

Gary Cunningham of Dallas has been named the Distinguished Architect for 1987 by the School of Architecture and Environmental Design at the University of Texas at Arlington. The annual award honors a Dallas/Fort Worth area professional whom the SAED considers to have made an outstanding contribution to the community and profession over a period of years.

**EVENTS**

A base camp with bags of lunar soil for protection

Ongoing: “Blueprints for the Future,” a new permanent display of space architecture and design at the Houston Museum of Natural Science, Arnold Hall of Space Science. The museum is open Sunday and Monday, noon-5 p.m., and Tuesday through Saturday, 9 a.m.-5 p.m. Admission is $2 for adults, $1 for children under 12.

July 9: “How to Get Published,” a Sack Lunch Seminar by Walton E. Brown, president and publisher of Designers West Magazine, at Decorative Center Houston. Cost of $5 per person includes sack lunch and seminar. Open to the first 100 callers at 713/961-9292.


Through August 30: More than 50 large color photographs of the ancient Cambodian (Khampucheian) Temple of Angkor Wat, on display at Jones Gallery of the Houston Museum of Natural Science. Considered one of the architectural wonders of the ancient world, the vast Angkor complex of stone temples rivals the grandeur of ancient Greece and Egypt. The museum is open Sunday and Monday, noon-5 p.m., and Tuesday through Saturday, 9 a.m.-5 p.m. Admission is $2 for adults, $1 for children under 12.

July 31: Deadline for entries in the 1987 Professional Design Awards Program of the Prestressed Concrete Institute. Open to all architects and engineers in the U.S. and Canada for structures using precast, prestressed concrete or architectural precast concrete. There is no entry fee. For more information call 312/786-0300.

August 10-28: One-man sculpture show by artist Dean M. Wallace Dean, associate AIA. Subjects range from geometric abstracts to life figures in welded steel, cast bronze, and fired ceramic. Thirty-two pieces representing 10 years work will be displayed, all available for sale. The artist’s public commissions include the Dallas-based Lomas & Nettleton “Family” sculpture: three 20-foot painted-
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steel abstract figures. Show will be on display in Dallas at Plaza of the Americas public gallery, level one, Monday through Friday from 10:30 a.m. to 5 p.m. Admission is free.

**August 13:** "User Analysis & Imaging in the Hotel/Restaurant Industry," a Sack Lunch Seminar by Maria T. Bordelon, ASID, principal of Bordelon & Associates, at Decorative Center Houston. Cost of $5 per person includes sack lunch and seminar. Open to the first 100 callers at 713/961-9292.

**September 1:** Deadline for entries in the "The Third Annual Classical America Competition in Architectural Design." Program is the entrance hall and interior staircase of a museum of art. First prize is $2,000; second, $1,250; third, $750; and four honorable mentions of $250 each. For more information contact Classical America, 227 East 50th St., New York, NY 10022.

**IN PROGRESS**

**ENGINEERING AND COMPUTER SCIENCE BUILDING, UT DALLAS; OMNIPLAN ARCHITECTS, DALLAS**

Design development documents have been completed for a new Engineering and Computer Science Building at the University of Texas at Dallas. This 150,000-square-foot, $16,000,000 facility, dedicated to research and teaching, will be located in the future engineering "quad" of the campus, near the terminus of a primary east-west pedestrian spine and one of two major campus parking areas. At this prominent location it will serve as an entry marker into the campus and form one edge of a pedestrian spine currently lined with two- and three-story structures.

Designed by Omniplan Architects of Dallas, the building will contain 30,000 square feet of research laboratories, a 12,000-square-foot class 1000 "clean room," four state-of-the-art video classrooms, a reading room, and office and administrative space for faculty and graduate students. The program for the project stresses future flexibility due to the rapidly changing fields of electronics and computers.
The architects have designed four functional modules around a daylit three-story lobby, with each module containing either laboratories, clean rooms, administrative areas, or classrooms. The three largest modules, each three stories high, are set back from the spine to minimize their mass and to provide a more secluded environment for the research functions within. The two-story classroom module is located along the spine, where it will relate appropriately to nearby two-story buildings and be more accessible to large numbers of students.

The shifting of modules creates two landscaped pedestrian entry plazas. The composition of modules is highlighted by a cylindrical reading room acting as a "hinge" between blocks, and by a curving wall accenting the lobby space within and tying the various modules together.

In keeping with the existing campus, materials will be predominantly precast concrete with accent panels of aluminum and crystallized glass. Glazed areas have been kept to a minimum while still allowing ample light and views for every office. South- and west-facing glazing will be shaded.

Construction is expected to begin in 1988 with completion in 1990.

—CEG

The new Radius Pipe & Junction system from USG Interior Systems uses factory-bent pipe to form a wide variety of open, curvilinear structures. The system assembles easily to form openings across which colorful fabric panels can be stretched. For more information circle number 32 on the reader inquiry card.

CorryHiebert introduces the Cygnus Series seating collection. Created by Bert England, it emphasizes a smooth, graceful appearance. The design is generous in scale to provide home comfort in the office or boardroom. For more information circle number 31 on the reader inquiry card.

A voice alarm for the Halon 1301 fire suppression system has been developed by Ansul Fire Protection. The alarm is intended for use in computer and control room areas where conventional fire alarms could be confusing. Voice messages also confirm activation, aborted operation, and recharge. For more information circle number 30 on the reader inquiry card.

The Du Pont Company has introduced "Silver Slicks," a reproduction system that offers the quality of silver films at about the same cost as diazo. Silver slick copies are clear, with crisp lines, sharp screens, and clean backgrounds. They will not fade, yellow, or smear. For more information circle number 33 on the reader inquiry card.

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HOWARD BARNSTONE, 1923-1987

Howard Barnstone, FAIA, died in his home in Houston in April. One of Houston’s best-known and most influential architects and educators, Barnstone was 64 years old at the time of his death.

A graduate of Yale, he joined the faculty of the College of Architecture at the University of Houston in 1948 and served as Professor of Architecture there since 1958.

Barnstone was the author of the 1966 book The Galveston That Was, credited with kindling interest in restoring the historic buildings of Galveston. His 1979 book, The Architecture of John F. Staub, Houston and the South, was widely acclaimed. Vincent Scully has called it: “one of the books that began to revise architectural history.”

A member of the AIA since 1949, Barnstone was named a Fellow of the Institute in 1968 for distinguished achievement in design, education, and literature. He worked in partnership with Preston M. Bolton, FAIA, from 1952 to 1961, and with Eugene Aubry, FAIA, from 1966 to 1969. At other times he headed his own firm. Barnstone’s work, including a number of well-known houses, was as influential as his writing and teaching. With an early strongly Miesian look, it later included explorations of increasingly wider architectural issues. In 1978, his DeMenil-Carpenter House in East Hampton, New York, won a AIA national award. His last major work, designed in joint venture with Robert Jackson Architects of Austin, is the Schlumberger Austin Systems Center (TA May/June ’87).

A fund in Barnstone’s memory has been established at the library of the UH.

Philip Johnson, FAIA, spoke for many in a recent interview, saying: “I worked with him directly and indirectly for more than 30 years on projects such as the Menil House, the Rothko Chapel, and the Art Museum of South Texas. He was a great ponderer, a very quiet man, devoted to his work. And he was a friend.”

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Exhibit Hall Luncheon 12:00 noon–2:00pm
Convocation/Reception for Newly Licensed Architects 3:30pm–6:00pm

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The exhibit hall is open to all area building and design professionals and their clients ... Architects, employees of architectural firms, engineers, contractors, interior designers, builders, landscape architects, and developers.

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Sam Houston’s signature, courtesy of Austin History Center, Austin Public Library.
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