62 : Fall 2004 $5.00

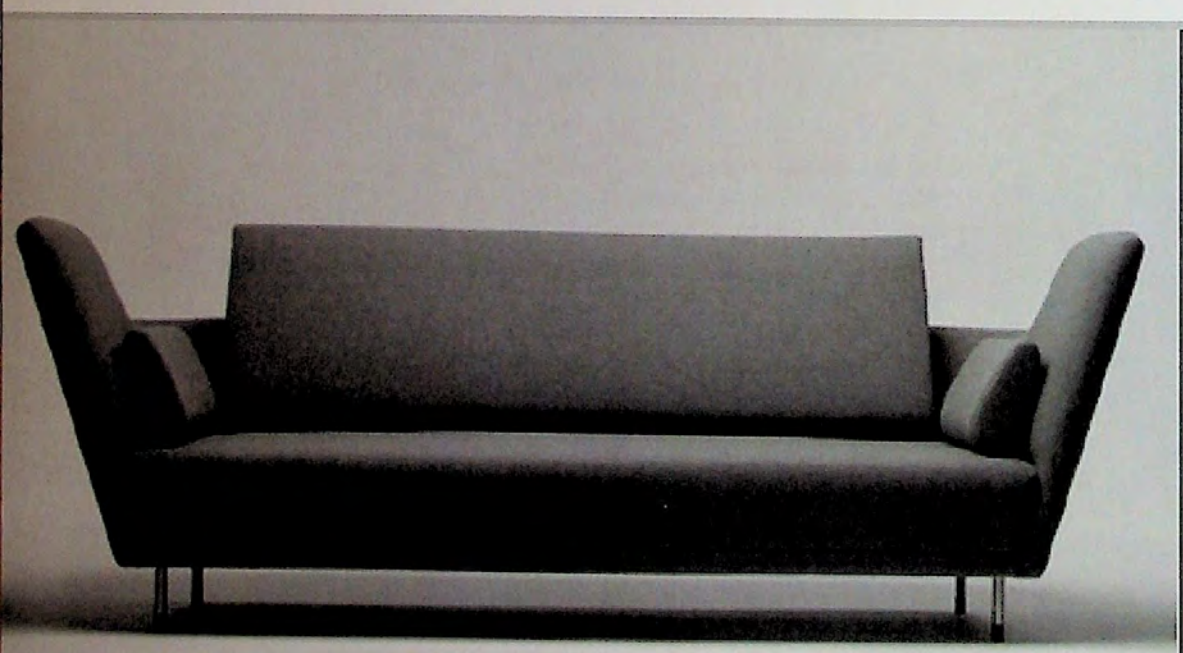
Cite

THE ARCHITECTURE and DESIGN REVIEW of HOUSTON

62 >

0 74470 93169 0

A comfortable
work environment
promotes creativity.

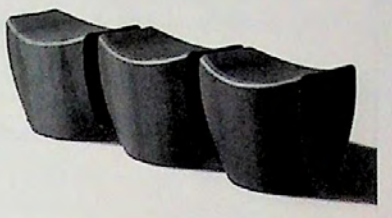


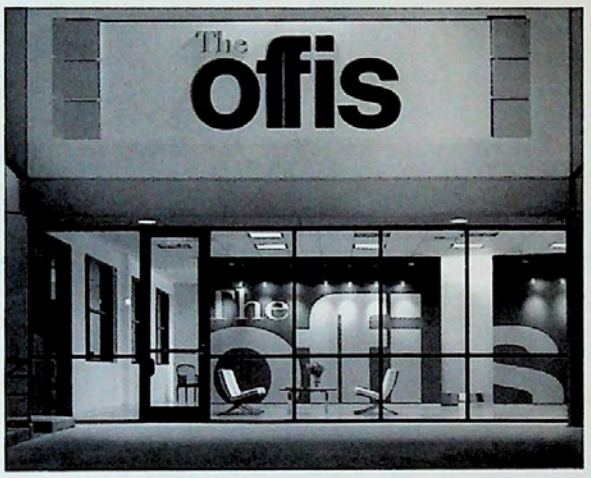
Let us inspire
your space.

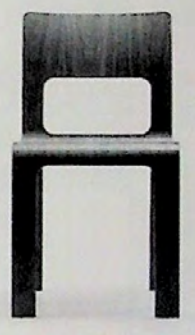
Visit our website @ www.mccoyinc.com or
call 713.862.4600, for more information.

McCOY
workplace
solutions
AUTHORIZED STEELCASE DEALER

Collectible Classics
Timeless…Together for the first time







DUNBAR™

Knoll

HighTower

Exclusively from

The offis

713-629-5599

www.theofis.com

Larry Albert is an architect at Murphy Mears Architects and a visiting critic at the Rice University School of Architecture.

Terrence Doody is a professor in the English Department at Rice University.

David Hay's stories on art and architecture have appeared in *The New York Times*, *Architectural Record*, and *Metropolis*. A playwright, he lives in New York.

Paul Hester is a principal of the photography firm Hester+Hardaway and teaches photography in the Department of Visual Arts, Rice University.

Kelly Klaasmeyer is an artist and art critic living in Houston.

Barry Moore is an architect at Gensler. He is also an adjunct professor in the University of Houston's Gerald D. Hines College of Architecture, and directs its Workshop for Historic Architecture.

Gerald Moorhead practices with Bailey Architects and is the editor-photographer of the forthcoming *Buildings of Texas*, published by the Society of Architectural Historians.

Danny Marc Samuels is a partnet at Taft Architects, visiting Smith Professor at Rice University, and director of the Rice Building Workshop.

Barrie Scardino is the executive director of AIA Houston and the Houston Architecture Foundation and co-editor of *Ephemeral City*, published by the University of Texas Press.

Mitchell J. Shields is a freelance writer in Houston. From 1998 to 2001 he was managing editor of *Cite*.

Steven R. Strom is the corporate historian for The Aerospace Corporation in Los Angeles, California.

Rives T. Taylor is a consultant and the Kirksey Faculty Fellow in the University of Houston's Gerald D. Hines College of Architecture.

Cite

The Architecture and Design Review of Houston

A Publication of the Rice Design Alliance

62: Fall 2004

Cite (ISSN: 8755-0415) is published quarterly by the Rice Design Alliance, Rice University, 6100 Main Street, Houston, Texas 77005-1892. Individual subscriptions: U.S. and its possessions: $15 for one year, $25 for two years. Foreign: $30 for one year, $50 for two years.

Cite is indexed in the Avery Index to Architectural Periodicals.

 Publication of this issue is supported in part by grants from the Susan Vaughan Foundation, the City of Houston through the Cultural Arts Council of Houston/Harris County, and the Texas Commission for the Arts.

The Rice Design Alliance, established in 1972, is a nonprofit educational organization dedicated to the advancement of architecture and design.

WebCite: www.rda.rice.edu

Cite

special section

contents

Cover: John Smallwood of Smallwood Photo with black and white skyline by Paul Hester

RDA NEWS

RDA's Civic Forum—Earth, Fire and Wind

On September 22, RDA's second Civic Forum in the series "Earth, Fire and Wind" assembled Joe Adams, chairman's special representative, Union Pacific Railroad Company; James T. Edmonds, chairman, Port Commission, Port of Houston Authority; Lee Hogan, chairman of the Mayor's Taskforce on Economic Development; and Andrew F. Icken, executive vice president, Texas Medical Center, to speak to the current economic engines driving Houston.

These fundamental engines not only drive our economy but also directly impact the growth and form of our city. The panelists set the stage for our discussion with background relating to their specific fields. Some of the interesting data follows. Adams: Rail carries only 33 percent of the heavy freight, while the trucking industry carries the remainder. Edmunds: While Houston is the second-largest port in the U.S. and first in foreign tonnage, 86 percent of the container tonnage stays in Texas. Hogan: In 1983, Houston's economy was 86 percent dependent upon oil. In 2003, it was only 48 percent dependent. Our gross regional production is $250 billion—rivaling that of some small countries. The working list of drivers is best represented by the taskforces that make up the economic development group he leads: energy, biotechnology, aerospace, Latin America, and information technology. Icken: In a unique Federal Reserve study, the TMC has a $13 billion impact on our economy, accommodates 25,000 students, has 30 million square feet of non-hospital building space, and represents 70 percent of the health care provided over the eight-county region.

The presentations were followed by questions from the audience. Our first question focused on how to establish the region mind-set. The responses varied: the need to create a structure that would allow the individual agencies to somehow share services, therefore creating economy for all; dealing with the sheer volume and multiplicity of agencies, governments, etc.; the need to establish management and planning protocols to deal with traffic flows (vehicular, freight, etc.); the need to support regional research competition plus the issue of terrorism; the need for a larger arsenal of incentives to attract research, industry, and development; and last, the need to accommodate and support commuter rail. Other questions included how to accommodate growth. Long-range planning and coordination are seriously needed at both the local and regional levels. Also, How do we handle community issues? The answers revolved around how each agency is still learning how to do that very thing but that it is absolutely important to work with the community.

Our third and final Civic Forum was held Wednesday, December 1. Our topic: The larger forces coalescing that will ultimately reconfigure our region, including economic, environmental, and social conditions. — *Joe Douglas Webb, AIA, for the Civic Forums Committee*

Crossing Over: RDA to Visit Mexico City and Seattle/Victoria

Over the past four years RDA travelers have visited a variety of cities in the United States as part of the RDA Hometown Tours. In response to the many requests to expand our program, we are offering two international destinations in 2005: Mexico City and Seattle/Victoria.

Mexico City: Metropolitan Life and Private Space

March 16–20, 2005; $1,900 pp/dbl (add $340 for single occupancy)

In 1519, when Hernan Cortes first arrived, Mexico City was already larger than any contemporary European city. It has remained the political, cultural, and social center of Mexico, and has been an architectural showcase for the better part of the millennium.

Our tour will include a survey of the city's Aztec and Spanish colonial heritages and its modern landmarks, as well as visits to a remarkable collection of homes and projects by architects such as Luis Barragan, Juan O'Gorman, Agustin Hernandez, Teodoro Gonzalez de Leun, Ricardo Legorreta, Enrique Norten, and Alberto Kalach.

We will be staying in Legorreta's masterpiece, the Camino Real Hotel, and complementing our architectural visits with a sample of the richest cuisine on the continent.

Courtesy PGAL

Gala night: Downtown Transit Center, 1900 Main Street (PGAL, 2004), welcomed RDA revelers on November 13.

Seattle/Victoria: Soak It Up!

June 15–19, 2005; $1,900 pp/dbl (add $430 for single occupancy)

Seattle, founded in 1851, occupies a hilly isthmus between Puget Sound and Lake Washington. With a population of 3.7 million, Seattle is home to such icons of contemporaneity as Microsoft, Amazon.com, and Starbucks.

Architecturally, Seattle is extraordinarily rich. Such new landmarks as the Seattle Public Library by Rem Koolhaas and OMA and Frank Gehry's Experience Music Project are complemented by the Seattle Art Museum by Venturi & Scott Brown (with a new addition by Allied Works of Portland) and Steven Holl's St. Ignatius Chapel at Seattle University.

We will be staying at the Hotel Alexis, a quiet boutique hotel located two blocks from the waterfront. To conclude our visit to the Pacific Northwest, we will travel by Clipper vessel to spend a day in Victoria, Canada, where we will have a private tour of Butchart Gardens and a walking tour of downtown and Parliament.

Through the vast RDA network, our tours provide the rare opportunity to meet local architects, preservationists, and historians; visit private homes; and enjoy behind-the-scenes tours of public spaces. Please contact Lynn Kelly (713-256-3244) or the RDA office (713-348-4876) for additional information about either trip.

RDA Gala: Man in Motion Honorees: METRO and Ed Wulfe

The new METRO Administration Building, designed by PGAL, was the venue for the annual RDA Gala on November 13. Gala chairs Anita and Gerald Smith greeted nearly one thousand guests, many of whom arrived at the party via Houston's new light rail system. The RDA honored METRO and developer Ed Wulfe. Wulfe helmed the effort that resulted in the successful passage of the referendum in favor of Houston's light rail development. Wulfe serves as chairman of the Main Street Coalition and has led the redevelopment of Houston's Main Street Corridor.

The new building, located at the Downtown Transit Center at 1900 Main Street, will open for business in January 2005. Look for party pictures in *Cite 63*.

Cite

The Architecture and Design Review of Houston

Subscription
One year: $15 Two years: $25

Name

Address

City/State Zip

❑ Check for $ _____ enclosed.
❑ Gift subscription

The Rice Design Alliance
The Rice Design Alliance, established in 1972, is a not-for-profit organization dedicated to the advancement of architecture, urban design, and the built environment in the Houston region through educational programs; the publication of *Cite*, a quarterly review of architecture and design; and active programs to initiate physical improvements. Membership in the RDA is open to the general public.

Individual Membership $35
Ticket discounts for all RDA programs
Free subscription to *Cite: The Architecture and Design Review of Houston*
Invitations to "members only" events
Participation in the annual membership meeting and event
Participation in the annual architecture tour

Student Membership $15
All of the above benefits

Family Membership $50
All of the above benefits for your family

Sponsor Membership $125
All of the benefits accorded to Family Members
Courtesy tickets to two selected RDA programs

Patron Membership $250
All of the benefits accorded to Sponsor Members
Courtesy tickets to three selected RDA programs

Sustaining Membership $500
All of the benefits accorded to Patron Members
Courtesy tickets to all RDA programs

Corporate Membership $1000
All of the benefits accorded to Sustaining Members
Recognition in the RDA journal *Cite* and at all RDA programs
Link to your website from RDA's website

Corporate Sponsorship $1500
All of the benefits accorded to Corporate Members
Sponsorship of a selected RDA program
Special recognition on 5,000 announcements, at the program, and in *Cite*

Membership Application

Name

Address

City/State Zip

Telephone

E-mail

Occupation

Membership Category

Amount enclosed $

Checks should be sent to Rice University,
Rice Design Alliance – MS 51,
PO Box 1892
Houston, Texas 77251-1892.
Telephone: 713.348.4876
www.rda.rice.edu

CALENDAR

RDA CIVIC FORUM "EARTH, FIRE, AND WIND: PART III"
Wednesday, December 1, 7 p.m.
Brown Auditorium,
The Museum of Fine Arts, Houston
713.348.4876 or www.rda.rice.edu

This season, RDA's civic forums will focus on the Houston region's self-assessment at the beginning of a new century. The first civic forum, "Earth," addressed the successes and challenges in shaping the face of our residential life through various neighborhood organizations and activists. "Fire" focused on the current economic engines and their impact on the city form. The final forum in the series, "Wind" will address the larger forces beginning to coalesce that will reconfigure our region, including economic, environmental, and social conditions.

UNIVERSITY OF HOUSTON GERALD D. HINES COLLEGE OF ARCHITECTURE EXHIBIT
"Doug Michels: Beyond the Ant Farm"
January 14–March 6
College of Architecture Gallery
713.743.2400 or www.arch.uh.edu/news

Concurrent with "The Ant Farm" at UH Blaffer Gallery, January 14–March 6.

RDA SPRING 2005 LECTURE SERIES "BUILT BRAZIL"
Brown Auditorium,
The Museum of Fine Arts, Houston
713.348.4876 or www.rda.rice.edu

Since the 1930s, when a group of young Brazilian architects requested the help of Le Corbusier in designing the Ministry of Education and Health, Brazil has been an exemplar of superlative modern architecture. This tradition of audacious and exquisite architecture—best illustrated by the building of the city of Brasilia—will be explored in this lecture series.

Wednesday, January 12, 7 p.m.
Film: *The Line—Lucio Costa and the Modern Utopia*
Wednesday, January 19, 7 p.m.
Lauro Cavalcanti
Wednesday, January 26, 7 p.m.
Márcio Kogan
Wednesday, February 2, 7 p.m.
Ciro Pirondi
Wednesday, February 9, 7 p.m.
Thiago Bernardes

UNIVERSITY OF HOUSTON GERALD D. HINES COLLEGE OF ARCHITECTURE LECTURES
Architecture Theater,
Room 150 of the Architecture Building
713.743.2400 or www.arch.uh.edu/news

Monday, March 7, 6 p.m.
Louise Harpman, Specht Harpman, NYC

Monday, March 28, 6 p.m.
Laurie Hawkinson,
Smith-Miller + Hawkinson, NYC

RDA HOMETOWN TOURS
RDA'S Hometown Tour program began in 2000 and in the past four years RDA travelers have visited a variety of cities in the United States. In response to the many requests to expand our program, we are offering two exciting international destinations in 2005:

Mexico City: Metropolitan Life and Private Space
March 16–20, $1900 pp/dbl
Seattle/Victoria: Soak It Up!
June 15–19, $1900 pp/dbl

Through our vast network, RDA's tours provide rare opportunities to meet local architects, preservationists, and historians; visit private homes; and enjoy behind-the-scenes tours of public spaces. Please contact Lynn Kelly (713.256.3244) or the RDA office (713.348.4876) for additional information about either trip.

RICE SCHOOL OF ARCHITECTURE: THE PAUL A. KENNON MEMORIAL SYMPOSIUM "MODULATIONS, SESSION II: CULTURING NATURES"
Friday, April 1, 9 a.m.–5 p.m.
Farish Gallery, Rice School of Architecture
www.arch.rice.edu

Modulations, the fourth Kennon Symposium, brings together an international and multi-disciplinary roster of scientists, designers, theorists, and engineers as a "trading zone" to reassess the history of the module and explore its revitalization in current design practice. If in the past modularization led to homogeneity and standardization, today components are systematically varied and modulated to produce emergent organizations of space, program, material, and even practice.

Speakers: Manuel Delanda, Evan Douglis, Keller Easterling, Ulrika Karlsson, Sean Lally, John Maeda, Chris Perry, Michael Speaks, Bruce Sterling, Mark Yim, J. Meejin Yoon.

RDA ANNUAL ARCHITECTURE TOUR
Saturday and Sunday, April 2 and 3, 1–5 p.m.
713.348.4876 or www.rda.rice.edu

For its 28th annual architecture tour, RDA will collaborate with Houston Mod to highlight the buildings and architects that were on the forefront of Houston's modern architecture movement in the 1950s and '60s.

SALLY WALSH LECTURE
Thomas Phifer,
Thomas Phifer and Partners, NYC
Wednesday, April 6, 7 p.m.
Brown Auditorium,
The Museum of Fine Arts, Houston
713.348.4876 or www.rda.rice.edu

A collaborative lecture with the Rice Design Alliance; The Houston Architecture Foundation; and the American Institute of Architects, Houston; this lecture is dedicated to the memory of one of Houston's most distinguished interior designers.

GULF COAST GREEN 2005 SYMPOSIUM ON BUILDING
April 29, 7:30 a.m.–6 p.m.
George R. Brown Convention Center
713.426.7473 or www.gulfcoastgreen.org

Featuring both local and national speakers, this one day symposium explores environmentally sensitive or "green" building in the Texas Gulf Coast Region. Speakers include both commercial and residential architects, contractors, engineers, and owner/operators involved with green building. Exhibitor area will feature the latest in green building products, services, and technologies. 7.5 HSW CEUs.

Here and Gone: Saving Settegast

Just shy of historic and just past the reach of Midtown, the 1938 Settegast Estate Building (Moore & Lloyd) may find itself in the wrong place at the wrong time.

It is, says David Bush with a note of wry resignation, one of the major frustrations of historic preservation. You think a building is saved, and then bang, it's gone.

Actually, the building to which Bush, the director of programs and information at the Greater Houston Preservation Alliance, was referring isn't gone quite yet. The Settegast Estate Building, a speculative strip shopping center built in 1938 and designed by the architectural firm of Moore & Lloyd in a distinctive Art Deco motif, still sits behind a wire fence on the 200 block of West Gray, empty but intact. But because it anchors the southern edge of a seven-acre tract put together by the Houston Independent School District as the proposed home of a new High School for the Performing and Visual Arts as well as the Gregory Lincoln Education Center, how long it will remain there is unknown. HISD would like to open the new HSPVA and Gregory Lincoln in 2006, which means construction on those schools would need to begin sometime in 2005. And that could mean the Settegast Building might have at best a year of life remaining.

The threat to the Settegast almost slipped past the notice of Houston's preservation community. Originally filled with neighborhood service shops such as shoe stores, cleaners, and the like, the building later became home to Houston's Orange Crush bottling plant; the faint remnant of a sign for the soda can still be seen on one exterior wall. But as the area around the Settegast went into decline, the center fell into disuse. After being empty for years, the Settegast was bought and rehabbed in the late 1990s by Randall Davis, the local developer best known for his work on the Rice Hotel. Perhaps encouraged by the growth of businesses farther down West Gray near Midtown, Davis reworked the building to return it to its retailing roots, with eight storefronts that could be used for shops or restaurants. "Because substantial sums had been poured into the renovation, which was done quite well, the general idea was that the building had been saved," Bush says. "So it fell off the preservation radar."

Indeed, as Bush later found out, many area residents weren't even aware that the Settegast Building site was part of the land that HISD took by eminent domain in 2001 and 2002 to prepare the way for the two new school buildings. The assumption was that it was simply waiting for tenants, or for the growth from Midtown along West Gray to reach it.

This wasn't the first time that the Settegast Building had flown under the radar of attention. Though it sits at the entrance to Freedmen's Town, it wasn't included when that area was designated a National Register Historic District. The reason is that the survey for the National Register was done in 1982, and a building needs to be at least 50 years old to qualify for a listing on the register. The Settegast Building was a few years shy of 50 in 1982, so it failed to make the list.

What finally prompted awareness that the Settegast Building might be in danger was a rumor of graves on another section of the HISD tract. Anthony Pizzitola, who owned a house that also had been taken by HISD through eminent domain, filed suit contesting the loss of his property, and in the process of the court battle the claim emerged that the proposed construction site contained a lost Civil War graveyard filled with the remains of African-Americans who had fought for the Union. The claim, which has yet to be proved or disproved, galvanized the interest of local politicians as well as the Texas Historical Commission.

Though news reports and public meetings on the conflict focused on the issue of how the planned school buildings would affect possible graves and the Freedmen's Town District, they also drew attention to the Settegast Building. Larry Oakes, executive director of the THC, says that it wasn't until August of this year that his organization became aware of the threat to the Settegast; the THC has since sent a letter to HISD encouraging the preservation of the structure.

Similarly, the North Montrose Civic Association has contacted HISD, opposing demolition of the Settegast Building and suggesting the structure be incorporated into the design of the new HSPVA. "While we're concerned with what may be below the ground," says North Montrose Civic Association president Alan Euckert in regard to the rumored graves, "we know for certain that on top of the ground there's a piece of history staring us in the face. And we don't want to lose that."

Perhaps most involved has been the GHPA, which put the Settegast Building at the top of the list of endangered buildings highlighted on its Web site (www.ghpa.org/endangered) and has met with representatives of HISD to discuss the Settegast's future. "If Houston really does intend to do things differently and develop urban, pedestrian-oriented neighborhoods with retail space at street level, then the Settegast Estate Building is exactly the type of structure we should be preserving," notes the GHPA's Bush. One suggestion made by the GHPA was that the Settegast Building could serve as a neighborhood police storefront. But the plan in early 2004, says Bush, was for HISD to use the Settegast Building as a construction office while the new HSPVA was being built, then tear it down and replace it with a parking lot.

Still, HISD insists that no firm decision has been made on the future of the Settegast Building. Lisa Bunse, a spokesperson for the district, says the question of what to do with the Settegast is still under evaluation. And in what may be an indication of HISD's concern with public opinion, a rendering of the proposed new HSPVA, which HISD earlier had shown to community groups, is no longer being circulated because it doesn't include the Settegast Building.

For the moment, then, the future of the Settegast Estate Building remains in limbo. The talk of graves has allowed the preservation drive more time to rally support. But given the lateness of that drive, and Houston's less-than-stellar history of saving its older buildings, the Settegast still could be headed toward demolition. As a result, even if there turn out to be no human remains on the HISD property, it might still end up a cemetery of sorts, an architectural one this time, haunted by the ghost of the Settegast. — *Mitchell J. Shields*

Courtesy Nonya Grenader

Rice Building Workshop and Project Row Houses in a planning session. The collaboration was recognized in 2004 with an award by NCARB.

Rice Building Workshop Winner of 2004 NCARB Prize

The National Council of Architectural Registration Boards recently honored the Rice Building Workshop as a 2004 NCARB Prize winner. "BW + RH (Rice Building Workshop + Project Row Houses)" was entered into competition by workshop director Danny Marc Samuels, FAIA, and associate director Nonya Grenader, FAIA.

The NCARB Prize is awarded each year to educational initiatives that creatively pair the classroom with the professional environment. The Rice Building Workshop, in its eight-year partnership with local non-profit Project Row Houses, has allowed students to participate in the revitalization of Houston's traditionally African-American Third Ward neighborhood, and to undergo a complete real-world design/build process while still in school. The workshop carefully mimics the office dynamic in the design and planning phases, introducing students to the give-and-take involved in working with clients.

NCARB Prize jurors were impressed with the flexibility the workshop offers students. Following the first year of their education, architecture students may join the workshop for consecutive or non-consecutive semesters, as their schedules allow. Jurors also commented positively on the workshop's longevity and its grounding in both the university and the community. The $7,500 prize was awarded to the Rice Building Workshop in late June.

UH Students Build Outdoor Stage for Arts Magnet Elementary School

A public magnet school in the Southgate neighborhood of Houston now has an outdoor performing arts stage designed and built by graduate students in the University of Houston's Gerald D. Hines College of Architecture. Oran M. Roberts Elementary draws students from all over HISD who are gifted in the arts and has one of the most ethnically and culturally diverse student bodies in the city.

The UH Graduate Design/Build Studio offers architecture students the opportunity to participate in all stages of a building project. Eighteen Master of Architecture students spent the months of July and August constructing the Roberts concrete stage and steel trellis frame. The project is integrated into the surrounding live oak canopy—a feature that takes advantage of the studio's years of experience in erecting outdoor classrooms and multipurpose shade structures.

The performance environment also blends in artist Fletcher Makey's painted tiles, which cover the school's entry and gardens. A long bench near the stage incorporates the tiles, which were painted by Roberts students and their families.

Former UH Band Annex to Become LEED-Certified Architectural Workshop

The new Burdette Keeland Jr. Design Exploration Center, which opens its doors to University of Houston College of Architecture students in Fall 2005, will be more than a much-needed space for hands-on projects—it will also be the university's first LEED-certified structure.

The galvanized metal building began its life at Camp Wallace in Galveston and was moved to the UH campus after World War II. There it served as a vocational auto body shop for returning veterans and later a print shop before being turned into a marching band rehearsal hall in 1970—all without much remodeling. When the structure was abandoned by the band in 1998, the architecture school set its sights on it (easy enough, since the structure sits just outside the school's main Philip Johnson-designed building).

Using generous donations of money, labor, and materials, the building is expected to come in at a quarter of the cost of building new. The interior will stay mostly open: 10,000 square feet of floor space and a hangar-like ceiling will provide ample space for student projects. The exterior will feature banks of new windows, cladding, and the slanted green roof that will help qualify the building for LEED certification.

The workshop is named for former UH professor of architecture Burdette Keeland Jr., who was known to say, as the flyer for the September 9 roof raising proclaimed, "Teach 'em to do, not just to draw."

Citizens' Transportation Coalition

For Citizens' Transportation Coalition, the Future Is Now

Quality of life, at least in cities, has a lot to do with transportation. Transportation influences a city's air quality, aesthetics, and real estate values, not to mention the time it takes to get from A to B. Citizens groups often have formed to address one of these specific issues—or to address general transportation issues in a particular corridor—and have met with varying degrees of success. But a new group, the Citizens' Transportation Coalition, is starting with an advantage: By bringing together members of groups with targeted aims, such as the Katy Corridor Coalition, the Sierra Club, Mothers for Clean Air, and the Gulf Coast Institute, the CTC is joining forces to address members' common concerns cooperatively.

Taking its cue from Mayor Bill White's comment to City Council that concerned citizens need to start looking at projects planned for five and ten years out—and members' own experiences trying to oppose the passage of the Houston-Galveston Area Council's draft 2025 Regional Transportation Plan—the CTC is taking the long view. "We learned the hard way that the only way communities can meaningfully affect transportation planning is by becoming involved long before plans are officially opened up for comment," writes CTC steering committee co-chair Robin Holzer by email. Despite significant public opposition, the draft 2025 RTP was approved with few changes. "The CTC intends to ensure future plans are better," continues Holzer, "by helping involve communities from the beginning and emphasizing alternatives over 'roads only.'"

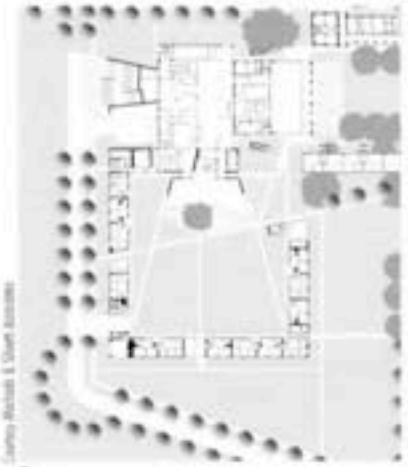
Community involvement is a big part of what the CTC is going for. The coalition hopes to, in the words of its mission statement, "identify neighborhood aspirations and the best transportation options to achieve them." So while the inhabitants of one neighborhood may long for density (and the sidewalks, buses, and rail routes that support it), in another they may aspire to a sleek fleet of park-and-ride buses. And who better to make those choices than the people who will have to live with them? Writes Holzer: "The idea is to help community leaders jump start the conversation about how transportation choices relate to their community. Communities were not considered, much less consulted, in the development of the [draft 2025 RTP]." And the members of the CTC know now that they have to get communities to the table early in order to make a difference. As Holzer notes, "The flawed plan was allowed to pass because it was too late to fix it."

1

2

3

4



5

6

Evolution of Form

Wiess and Martel colleges honor their forebears

BY GERALD MOORHEAD

Two recent projects on the Rice University campus, far from the academic quadrangles where the showy architectural action has been in recent years, are adding new words to the Rice vocabulary of form, space, and material. Wiess and Hanszen colleges (Machado and Silvetti Associates, Design Architects; Kirksey, Executive Architect) and Martel, Jones, and Brown colleges (Michael Graves & Associates, Design Architect; PGAL, Executive Architect) interpret the university's architectural traditions in a way that leaves behind the bombast and historic mimicry of recent academic buildings. Returning to the late-modern precedent set by Alice Pratt Brown Hall (Ricardo Bofill, 1991) and Dell Butcher Hall (Antoine Predock, 1997), Wiess and Martel colleges reawaken the potential for architecture at Rice to build upon its rich context while developing new concepts.

The Rice campus boasts complex spatial relationships and a vocabulary of forms and materials that have evolved from Ralph Adams Cram's General Plan and the first generation of buildings. New designs must acknowledge these traditions in order to be good neighbors. But which approach to take? Copy the early buildings, or find a sympathetic transformation of older designs?

Although never adopted as an official "master plan," Ralph Adams Cram's General Plan has been the physical armature and the conceptual soul of the Rice campus since the plan's inception in 1910. A blend of Beaux-Arts and City Beautiful axial planning gives a strong sense of place to the irregular 277-acre campus and a feeling of calm order amid Houston's unzoned cacophony.

The ordering geometry of major and minor axes is developed into sequences of dynamic spaces defined by building façades and ends. Long, thin buildings, responsive to the ventilation needs of Houston's subtropical climate, form the quadrangles and axial vistas. A loose, "ventilated" placement of freestanding buildings connected by arcades allows space and air to breathe out of the open corners of the quadrangles.

Around the main quadrangle, thin buildings are arrayed in staggered layers, again for air circulation but also to set up a hierarchy of use and style. Primary buildings facing the quadrangle are richly designed with brick, limestone, marble, and tile façades. As buildings step away


7


8


9

1. New Brown College Commons with "detached" porch facing Lovett Hall on diagonal axis; 2. Martel College entry pylon with Sallyport, also aligning diagonally to Lovett; 3. Brown College Commons interior—a glass tree house; 4. Site Plan: Martel College (left), Jones College (center), Brown College (right); 5. Site Plan: Wiess College—two wings of Hanszen (upper right) bracketing new Hanszen Commons; 6. Wiess College Commons interior; 7. Wiess College courtyard, commons to left; 8. Martel College entry pylon, courtyard beyond; Jones College wing to right; 9. Martel College, single-loaded arcades around courtyard.

from the quad, materials and ornament become increasingly simplified. Lovett Hall exhibits the full complement of materials, appropriate to its signature image and the Sallyport that announces one's arrival into the academic precinct. Farther away, terminating the view of a cross-axis, the Mechanical Lab and Campanile (the other signature form on campus) are pared down to brick. Farther yet from the academic quads, Baker and Hanszen colleges simplify the forms even further by substituting stucco for stone in most of their façades. Using this hierarchy of materials, Cram (and his alter ego, William Ward Watkin) were able to create nearly endless variety.

Cram collaged elements of Venetian Gothic, Syrian, and Byzantine styles into a new expression he felt appropriate for the bright sun of the Texas Gulf Coast. Using the soft tones of blended Buffalo Bayou brick, Texas Lueders limestone, glazed tiles, and red tile roofing, Cram's refined eclecticism has inspired, misled, and stymied campus architects over the succeeding decades. Buildings of the 1950s and '60s achieved continuity with the guidelines of the General Plan and used the material palette to define a compatible modernity. Recent projects, however, compete with Cram's harmony by copying historic details, by using too many materials and too much detailing, and by imposing inappropriate grand archways. It's not right to compete with Lovett Hall. Fortunately, no one has yet tried to build another campanile.

> > >

The "new" Wiess and Martel colleges look less "like Rice" than any recent campus buildings. Yet, paradoxically, they make more meaningful connections to Cram's vision of spatial order and material appropriateness.

On the far-north edge of campus, where Cram originally planned a subdivision of 20 faculty houses, the original women's residences of Margaret Root Brown (Brown & Root, 1965) and Mary Gibbs Jones (Lloyd & Morgan, 1957) colleges always felt disconnected from the Rice order. With the addition of new residential wings, commons, servery, and the new Martel College, Michael Graves & Associates has reorganized this district and created a new diagonal axis that connects it to the rest of the campus.

"We thought the use of single-loaded corridors opening onto common courtyards was especially important…to foster a sense of accessibility and community," notes Tom Rowe of Graves's office. The Martel courtyard plan offers a new type of spatial arrangement for the residential areas. In the past, long buildings of double-loaded corridors have loosely defined the space of the college precinct, with rooms having little connection to the outdoors. The courts of Baker, Will Rice, and Hanszen are extensions of the formal axial composition. In contrast, the Martel court is a casual backyard kind of space, with a single big oak tree and picnic tables, and continual activity in the open-air passages. It is also a tightly enclosed space, the first of its kind on campus. (The university set a requirement for the new colleges that each room be behind at least two locked doors. Thus, rooms cannot open directly onto the sidewalk as they did in the old Wiess and still do in the 1950s colleges. That restriction posed a real challenge to the architects as they tried to return to the older forms without being able to handle circulation in the same way.)

The reorientation of this part of campus is largely accomplished with a templelike frontispiece, set astride a new diagonal axis that leads to the north end of Lovett Hall. This visually freestanding block is pierced with a tall portal faced in a soft blue-gray Cippolino marble that, while coming close to being another pseudo-Sallyport, has ample scale to address the long vista south to Lovett Hall.

The projecting bays that march along the outer perimeter of Martel College are reminiscent of the wood bay window on Baker College. The persistent expression of the floor-slab edge creates a layering of horizontal lines that relate to a similar feature on the nearby wings of Jones College. While incorporating these Rice references, Martel is a distinctively Gravesian design, with stout cylindrical columns on the ground level, brick patterning to imply overscaled rustication, and an almost childlike playfulness that is refreshing in contrast to the stiff historicist posturing of recent academic structures on campus.

The most dramatic addition to the three-college complex is the new Brown Commons. Placed as a divider between the wooded lawn of Brown and the tiered garden of Jones (with its now transplanted Carl Miles fountain), the commons is a steel-and-glass pavilion rising within a brick arcade. The broad overhangs of its roof plane are supported by large steel braces that angle up from the brick base, giving the roof a floating appearance. A tall, narrow porch with slender columns stands free of the glass pavilion like a false front, an overscaled gesture aimed down the vista to Lovett Hall.

While each college is distinct and self-contained, Brown, Jones, and Martel share the newest feature of the Rice landscape: a food servery. Under the guidance of Mark Dittman, director of Housing and Dining, campus-wide food service is charting new menus. The dreaded central kitchen has reheated its last mystery meat. Food is prepared fresh daily in each servery under the direction of its own chef and general manager. The choice is astonishing, the quality great. Preparing 2,000 meals a day provides the economy of scale that makes this tasty fea(s)t possible. Loosely modeled after a mall food court, the North Servery also handles all catering on campus.

The South Servery connects the new Hanszen Commons with the new Wiess College and Commons. Eventually, another college (where the old Wiess used to stand) will share this servery. Like the north colleges by Graves, this new complex by Machado and Silvetti Associates breaks new ground, apparently picking up a Modernist response where the George Pierce-Abel B. Pierce Earth Sciences group (1958-67) left off. The project began with the disadvantage of a site that has no connection to the axial structure of the south residential group. By turning the wings of Wiess in on themselves to form a large open square, Machado and Silvetti formed a new kind of space, similar to the court at Martel but with a much stronger sense of protective enclosure. The single-loaded corridors, protected by only metal railings and mesh screens, are more open to the space than the masonry screened walks at Martel. With the constant activity of students on the walks, the court has the bustle of a Mediterranean tenement; colorful laundry hanging from the rails would not be out of place.

Viewed from Main Street and the playing fields to the south, Wiess is a sternly rigid block. Subtle patterns of offset window alignments and vertical-slot breezeways are set within the crisp edges and flat planes of the large mass. In contrast to the boldly scaled outer bays that make Graves's Martel wings two-sided, Wiess is protectively enclosed and inwardly focused. Future buildings in this precinct will have a challenging task: to face these taut walls and make spatial connections to the inner court.

Pinched in place by the north ends of the court, the glass-walled commons feels pleasantly like an enclosed porch projecting into the court. From within, the space of the commons and the court are one. Big horizontal louvers shade the south-facing glass, casting film-noir shadows across the floor and walls.

The new Hanszen Commons, sharing the South Servery with Wiess, is as understatedly contextual as the Wiess Commons is brashly original. Its flat brick columns form a templelike termination of the shady court between the east and west wings of Hanszen. The brick and stone bands of the wings wrap across the columns, making a clear connection between college and commons.

Above the South Servery, another unique space helps to reconnect Wiess to the campus. A rooftop terrace looks across the trees and campus roofscape to the stadium. A broad cascade of stairs forms a mini-stadium overlooking the playing fields behind the gym. Although unintended at the time of its design, this staircase will tie Wiess to the new academic quadrangle proposed in Michael Graves's campus plan: a quad that will extend from the Baker Institute to Main Street in a major new cross-axis addressing the Medical Center (see "The Profit Zone," page 24).

> > >

The Martel and Wiess college projects have made a strong break with the recent rash of historicist Cram wannabes. These two new colleges display an informed and creative response to the Rice milieu inspired by the spirit of Cram's plan and materials rather than a plagiarism of his unique style. As campus development becomes denser and buildings larger, maintaining a sense of spatial order will be ever more critical. Campuses such as those of the University of Texas and the University of Houston, also originally planned around axes and quadrangles, have lost all sense of order as buildings are placed by expediency rather than by design. The ability of the Rice campus to accommodate compatible new planning approaches within the spirit of the General Plan will save it from joining the ranks of these nonplaces. ■

The Recycled City

We put it up, we take it down, we put it up again

In this issue of *Cite*, we have taken a look at the mortality of buildings—a deviation from our more customary architectural birth announcements.

Buildings, like people, age—some better than others, some more quickly than others. Eventually most of them die, and disappear. Or they can be born again.

The approach of ruination accelerates when buildings can no longer accommodate an economic viability, or when they cannot adapt to new functions, or when their health problems discourage any hope of a wealthy suitor. Then the wrecking ball and bulldozers come out, the buildings come down, and the scraped site is ready for a new cycle of construction.

Some of our great buildings disappeared before there was a preservation movement to help save them, like the 1904 City Hall in Market Square (see "The Grandeur of Adaptive Reuse," page 15). Others deservedly vanished early, to be replaced by something much better, such as the 1910 City Auditorium, forgotten in the elegant shadow of Jones Hall (see "Good Riddance," page 15).

Exfoliation can bring about architecture's slow death; Houston has seen a lot of that lately, as the architectural skin and its attachments rot off of 40- to 50-year-old buildings, exacerbated by irresponsible building maintenance programs and budgets (See "The Heartbreak of Building Psoriasis," page 16; "The High Cost of Low Maintenance," page 40).

Must all of this be so? Time, water, ultraviolet light, and electrolysis aren't going away. But smarter design can save more buildings by an ethic that builds in more flexibility, so that buildings can adapt better to new owners and new uses (see "The Disposable (?) City," page 22).

Houston, all recognize, has a skimpy inventory of really old buildings. On the other hand, this self-proclaimed city of the future has built an enviable collection of historic modern architecture of the '40s, '50s, '60s, and '70s—Houston's golden age. Those venerable buildings are probably our greatest preservation challenge, and our best opportunity to create a legacy of historic preservation—and in so doing, perfect a practice in architectural geriatrics. — *Barry Moore, Guest Editor*

Courtesy Barry Moore

Good Riddance

Sometimes our cities are better off without important historic structures of the past. Not often, but sometimes. The Municipal Auditorium is Houston's best case in point.

Designed in 1910 by St. Louis architects Mauran & Russell (they would stick around to design the Rice Hotel two years later), the city auditorium could seat 7,000 comfortably, or 10,000 not so comfortably. There was also a huge banquet hall with a commercial kitchen seating 1,000. The elegant main façade that faced west on Louisiana was composed of truncated arched openings at the sidewalk with large Romanesque windows above, all under a heavy Greek revival cornice. The ramped exit towers marked each corner of the big space within.

By 1914 Houston was seriously into the convention business, boasting seven modern hotels—six of them recently completed—plus the cavernous auditorium. In its 50 years of service to the citizens of Houston, the auditorium hosted the touring Metropolitan Opera, the fledgling Houston Symphony Orchestra, wrestling, boxing, concerts, scout jamborees, shows, and conventions of every description.

So what was not to like? Well, to begin with, it was just too big to accommodate all those events well. The sight lines were terrible, with many "obstructed view" seats, and the acoustics were even worse. It was hideously hot in the summer and drafty and cold in the winter—not surprising given the technology of 1910. The large windows, necessary for what ventilation there was, wiped out the possibility of dramatic effects during matinee performances.

When the Music Hall and Coliseum opened in 1928 on the site of the 1928 Democratic National Convention Hall (and now of the Hobby Center), the majors switched their allegiances, leaving B-list attractions to the old auditorium. A notable exception was the 1951 national touring production of South Pacific, presumably because the management expected to sell more seats—not better, just more.

One of the last rentals, in the spring of 1961, was the Rice Architectural Society's annual Archi-Arts Ball. The theme of "Evil" seemed appropriate for the big, dirty, dark auditorium. Within months the wrecking ball knocked, clearing the site for the Jones Hall for the Performing Arts.

Jones Hall was one of the most successful and handsome of the multipurpose performing arts centers built in the 1960s and '70s, and its architects, Caudill Rowlett Scott, collected an American Institute of Architects Honor Award for their success. Considering what Houston now has standing on Louisiana between Texas and Capitol, it is a blessing that Houston's preservation community was spared the burden of trying to save the old, unlovely and unloved white elephant.

If only architecture were so well served every time an old one comes down and a new one goes up. It can happen, but we should never count on it. — *Barry Moore*

Library Collection, Houston Metropolitan Research Center, Houston Public Library

The Grandeur of Adaptive Reuse

For over 100 years Market Square (bounded by Preston and Congress avenues and Travis and Milam streets) was the center of commercial and public life in Houston because four successive city halls and city markets were located there. The fourth and last of these was this handsome Victorian Romanesque building designed by the accomplished Houston architect George E. Dickey. Even though it was stylistically outdated by the time it was constructed in 1904, the Dickey City Hall and Market House remained a beloved Houston landmark until it was demolished in 1960. When the current City Hall was completed in 1939, the old City Hall and Market was leased to the Bowen Bus Center, which occupied most of the ground floor with small shops in the remainder of the building. The landscaped grounds were paved and a large awning was constructed. This photograph, circa 1942, shows the building as it was adapted for the bus station. The only remaining artifacts are the 1904 four-face clock and the 1878 City Fire Bell, now incorporated into the Friedman Clock Tower across the street (designed by Barry Moore in 1998). — *Barrie Scardino*

The Heartbreak of Building Psoriasis

Restorative engineers are giving local buildings much needed makeovers

Courtesy Sue Lynn Rosen

BY RIVES TAYLOR

HOUSTONIANS have become accustomed to seeing their architectural monuments shrouded in scaffolding, especially following a tropical pounding. But heavy weather isn't always the culprit. Our façades are starting to exhibit cladding malfunctions common to the early-20th-century skyscrapers of New York and Chicago. While our large buildings use newer materials such as stainless steel to fasten their curtain walls to buildings' structural frames, the method of hanging the face of a building—a mechanical gravity fastening system—has remained essentially unchanged for a century. And therein lies the problem.

Cladding failures have occurred at Jones Hall and the Lyric Centre office tower downtown, the Medical School Building at the University of Texas Health Science Center at Houston, and at the San Jacinto Monument. Each was clad in limestone, travertine, or Texas sandstone, just like the older buildings of the University of Houston and the newer buildings of Rice University. Forensic and restorative engineering firms are now in Houston working to learn from our recent incidents. One of these firms—Wiss, Janney, Elstner Associates, Inc. (WJE)—is experienced in diagnosing exterior wall failures and repairing the problematic designs, having participated in a massive cladding cleanup in Chicago in the 1990s.

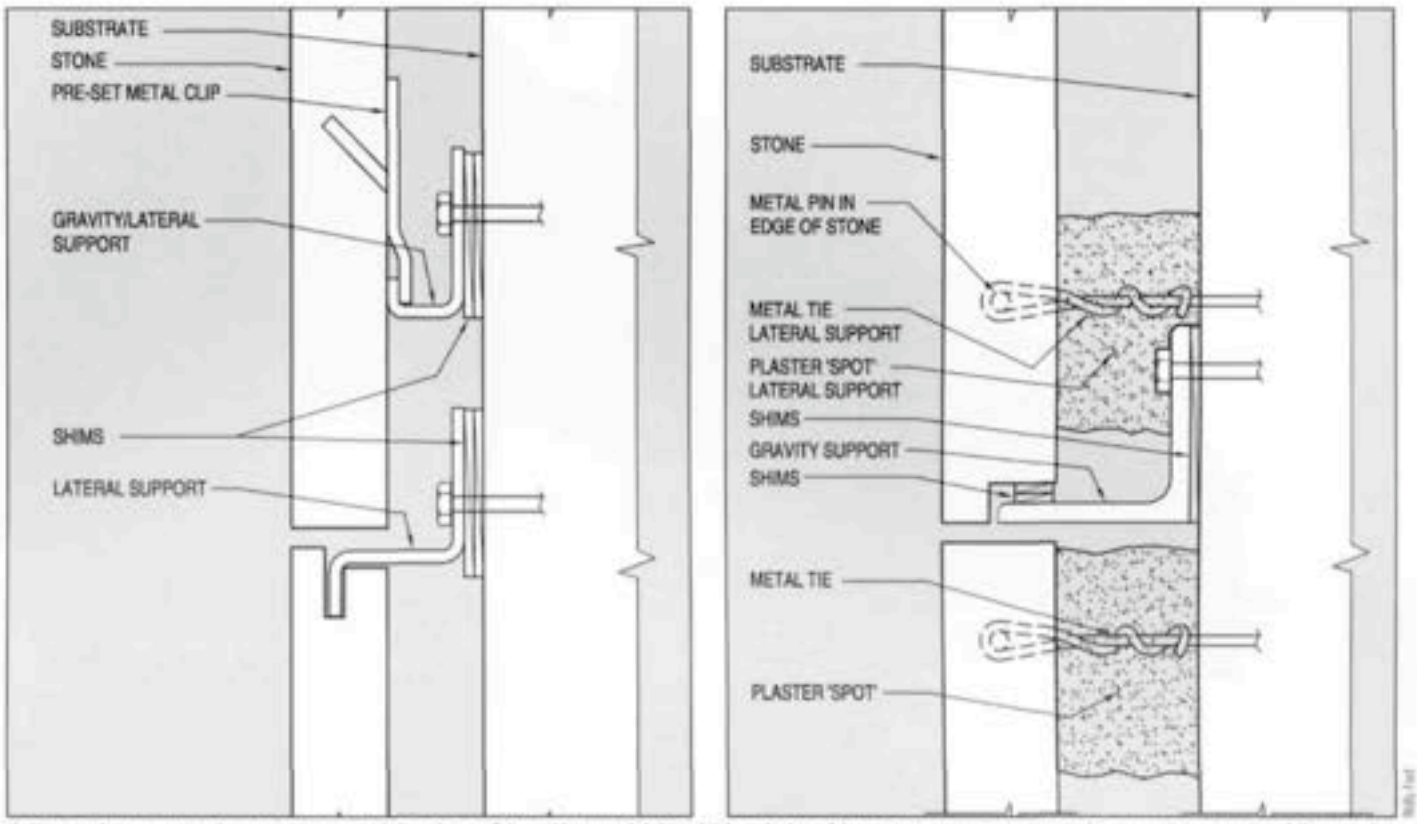
>>>

Skyscrapers that were erected at the turn of the last century were clad in small bricklike pieces of porous stone or terra cotta. Corrosive rain and air, together with the freeze-thaw action of the northern-city climates, caused the stone to crack. Moisture seeped in and attacked the often-untreated iron hangers that held the small stones.

The architectural pioneers of the Chicago School moved away from the use of small stones and toward the elemental curtain wall—preassembled large panels of thin stone, terra-cotta, or metal and glass. Often the panels' size had as much to do with architectural detailing—as in the ornate terra-cotta of Louis Sullivan—as it did with the availability of technology to lift and affix the panels. (Later, the Empire State Building reverted to the use of smaller brick units resting on steel sills, in part because of the availability of masons in the New York area, and in part to avoid lifting heavy panels over crowded New York streets.) In addition to architectural aesthetics, the march of progress pushed for larger panels, too. Post-World War II industrial culture encouraged large factory-built panels over individual masonry piecework.

The panels were designed to be fairly light and easy to fasten to the quickly erected steel skeleton of the new high-rise. Hooks bolted to the building superstructure were aligned with metal stays integrally cast into the man-made stone or concrete panels. The skeleton was utilized both to hold individual panels' weight and to resist the buffeting lateral loads of wind caught by the panels. Redundancy of connection between building and panels helped to contain the shifting and multidirectional loads and avoid disastrous shearing of those metal linkages. In turn, the panels could move somewhat independently on the pin connections to expand and contract with surface temperature variations, protecting the steel skeleton behind from temperature swings and damaging moisture.

But the technologies that proved indispensable to curtain wall success were the external metal flashing and interpanel seals. High-rise curtain wall engineers foresaw that water running down both faces of the panels would cause deterioration of both the panel material and those metal hooks. Seals produced the needed waterproof envelope. Tar eventually gave way to rubber and silicone, but all



Cladding attachment systems (above); opposite page: A hole at the top of the world: Pieces of cladding fell from the face of the San Jacinto Monument in 1992. The monument has since been fully restored.

sealants required regular inspection and maintenance, as weathering led to their inevitable failure. Rarely were skyscraper owners prepared for the challenge and cost of this maintenance.

While builders of skyscrapers embraced sleeker and more homogenous curtain walls framed by aluminum or stainless-steel mullions, the battle to keep the destructive corrosion brought about by moisture within the wall continued. Designers looked to advanced glass-to-window-frame gasketing and water-shedding mechanical fastenings. New materials and state-of-the-art approaches were tried and then discarded as less than optimal—after dozens of façades were hung and left to survive on their own. The 2001 restoration of the Lever House in New York City uncovered not only the failure of the sun-baked rubber gaskets but also corrosion due to moisture within the otherwise sealed wall.

The postwar era saw the reintroduction of increasingly lighter stone or concrete panels with ever-thinner layers of masonry on aluminum backing. This thinness imparted a more solid appearance to the curtain wall, as can be seen right here at home: For all its massive masonry appearance, Jones Hall is a steel building covered in large thin travertine stone panels supported by concrete masonry unit walls, concrete columns, or steel frames.

> > >

Those earlier façade failures in northern cities, similar to what was discovered at the San Jacinto Monument prior to its restoration in the late 1990s, were due to the degradation of the metal ties and anchors that held terra-cotta to terra-cotta or stone to stone. When steel suffers repeated exposure to acid rain, it faces two possible ends: simple corrosion or outright rust. Over the longer term, weakening of connections also came about through unforeseen galvanic action. (The nature of electrolytic interactions between ferrous metals, or between metal and stone or concrete, is often discovered only years after the original erection. For example, a number of precast concrete panels hung on local structures made use of an admix of sodium chloride to achieve a faster cure time. When exposed to moisture, this salt in the concrete can corrode embedded ferrous steel.)

Thin travertine cladding poses a different challenge. "What we have seen on several local projects," says Mark Hopmann, P.E., branch manager of the local WJE office, "is how problematic travertine is as a thin cladding material, particularly on buildings with historically low maintenance." Hopmann notes that travertine's problems stem from its veining and porousness, which make it a weaker stone facing than most. In fact, WJE does not recommend the use of travertine as exterior cladding. But when travertine is used, proper support connections and material thickness are imperative. WJE also advocates that the surface be smoothed and sealed ("parged") with a special mortar mix that not only helps repel water but also keeps the panels cleaner by allowing them to shed water more quickly. Of course, this treatment costs more initially but can add years to the material's life and good looks. However, a parged surface still requires regular maintenance to be effective in the long term.

> > >

Hanging panels on the structural skeleton has proved to be an effective and first-cost sensible approach; however, the vagaries of the construction process, long-term wear and tear, and substandard maintenance are not accounted for in design. In design, panels are often encumbered by attachments such as soffits or ledges that introduce still more metal connectors. These also can corrode, and act as metal wedges in the stone panels, ultimately forcing away ("spawling") pieces of the stone.

Finally, the failure of the chemical seal around the ever-shifting panels can lead to water infiltration into the curtain wall cavity, especially on increasingly maintenance-challenged public buildings. Power-washing, often mistakenly used to keep a building clean and "maintained," can blow apart what is left of the aging sealants as well as open further cracks in the outer stone face. Repeated high-pressure water treatments, with or without chemical solvents, have been found to degrade even the metal finish protecting the host panel. The high-pressure attack on the stone or metal panel thus operates on both faces.

> > >

Hopmann reports that his company has been asked by the cities of Chicago and Milwaukee to assist in creating ordinances for both new and restorative design processes that address cladding failure. These ordinances, as well as those of other cities that enforce tough standards of façade performance (such as New York, Boston, Detroit, Columbus, St. Louis, and Pittsburgh) are posted on the Web site facecordinance.com. U.S. materials testing agencies also will be addressing façade issues, possibly requiring that all fastener material be made of more expensive but durable stainless steel, a nonferrous (and therefore nonreactive) material.

Another available approach to curtain wall durability is the weather screen. This system recognizes that the outer skin can do little but shade the inner building from the weathering impacts of our climate—especially the sun's ultraviolet rays, which ultimately damage all materials. Since the cladding in this instance is a simple shade, a breathing sunscreen, no interpanel sealing is required; the more important and delicate insulation against water and vapor is located within a second, protected skin. While the outer panels can manifest the aesthetic of any number of materials, the inner skin is as functional and sealed as possible. The light outer panels, hung on stainless-steel or aluminum assemblies, can expand and contract on the same fastener mechanisms as on earlier skyscrapers, but with substantially less worry about weight or the durability of interpanel seals.

Cladding decay (and the professional focus it brings) has been the engine of great technological innovation, in both new construction and repairs. However, the financial squeeze on the owners of older, cladding-challenged buildings does not bode well for use of this new knowledge. If owners skimp on retrofitted mechanical connections or on maintenance, we will only face another round of buildings with skin problems in the future. And as every actor, model, or television anchor knows, if you don't take care of your skin, your career could soon be over. ■

Remains of the Day : the town that demolition built

BY LARRY ALBERT

By the time the demolition crew arrived at the Astrohall, the building was already in poor shape. "It was built with a flat roof, and then they added that high roof because it was holding water," John Angelina explains. Years of boat shows and rodeos had taken their toll, and sections had been shored up. "Guys would go through with their forklifts, hit a column, and loosen it. We didn't know this," Angelina says. "But we sure found out the first day."

Angelina's company, D.H. Griffin of Texas, had won the bidding to tear down the 36-year-old structure that stood next to the Astrodome, on land that's now parking for Reliant Center. One of the firm's machines, he says, grabbed hold of a concrete beam. Twenty bays collapsed.

"Looking at it, you don't see that the structure's ready to fall apart. But then we find they've had trouble at the Astrohall for years." The company's precautions ensured no one was hurt. "We start a job—nobody's in that building." Angelina pauses, sharpening his gaze. "Nobody. I don't care what the building is."

Angelina and Griffin's safety director, Willie Smith, are telling me war stories in Angelina's office at D.H. Griffin's southeast Houston headquarters. "Every job is different," Smith tells me. "There may be two six-story buildings side by side—"

"And be built the same day, the same time," Angelina continues for him. "We treat them individually."

To Smith and Angelina, each demolition is a battle against an uncertain enemy. To defeat a building, they must study it—and be prepared for surprises. Nobody hands them sets of blueprints. "You've got to understand the building to get it down," Angelina says. Often, as with the Astrohall, destroying a building means reliving its history.

Framed photos along the hallway outside Angelina's office provide a farewell tour of former Houston landmarks. There's an image of a partially denuded Sam Houston Coliseum and Music Hall, downtown skyscrapers looming in the background. And a still frame, taken mid-collapse, of the Jefferson Davis Hospital implosion on Allen Parkway.

"I see Houston as a new city," Angelina says. "In the '80s, they pretty much took down all of Houston and rebuilt it. I mean, really.

"Oh, we missed a lot," he says to me in the hallway, describing what must have been Houston's golden age of demolition.

Demolition has reshaped Houston, but cataloging its effects is not a straightforward task. In some instances, demolition makes evident large-scale changes in the local economic landscape, as when the

Leon Zuñiga and excavator, ready for battle with the mirrored dome (left); moments later, the beginning of a smashing end for the former Blue Planet (above).

old American Rice silos on Studewood Street—remnants of an agricultural economy—were toppled less than a decade ago to make way for suburban-style apartment compounds and strip centers in the thick of the city. Other times the effects of demolition are subtler. Carving away neighboring buildings to create more parking leaves surviving structures with that Houston look: isolated buildings surrounded by small stretches of open land.

Demolition means different things to different people. To owners, it's how you dispose of buildings in the way of new construction. Passersby see a more mysterious process, controlled by unseen decision-makers: One day a building is standing and the next it's gone. Often it's difficult to remember what used to be there. But to the people who tear down buildings every day, demolition is the heart of a strange urban ecology.

> > > 2

As Tuesday morning's Richmond Strip traffic zips by, Leon Zúñiga, operator for Cherry Demolition, raises the thumbless claw of his excavator and briskly brushes a mirrored dome off its bearings with a smooth backhand whack.

Stuart Kensinger, president of Kensinger & Company, says he thinks the dome used to be a globe, part of the sign for the Blue Planet nightclub. Since then the globe must have been cut in half, covered with small mirrors, and placed over the building's entrance. Now it's a shiny, crushed mass.

Under Zúñiga's command, the excavator has a brutal grace: a few sweeps, a push, then a stab. Once debris starts to fall, the back of the claw will open a nest in the refuse, to catch the next wall or bit of roof. The machine's swift movements resemble a ballet with a lifeless partner.

The building at 6367 Richmond, near Chimney Rock, was known for a while as The Rose, then Blue Planet, then Shock, then Blink (all nightclubs), but began its life in the late '70s as a Rusty Scupper restaurant. Inside, a few harsh beams of light shine on an abandoned bar strewn with empty bottles of off-brand liquor. One three-quarters-full bottle of Melone liqueur wears an empty sno-cone cup as a party hat.

For months, Kensinger had worked with architect David Robinson and a local medical practice to convert the building, which Kensinger's company owns, into a doctors' office. "It had some good bones to it," Kensinger says. But the medical practice decided not to relocate, killing the deal. Tearing down the building was a difficult decision, Kensinger tells me. But it would be a fresh start.

The simple truth, he says, is that tearing down buildings often makes properties more marketable. "It was difficult for people to see beyond the use as a nightclub," he says. "We did not want to have another nightclub."

Two other factors made the choice easier: "The city, it seems to me, has a kind of a backwards incentive for renovation. You pay a pretty significant tax on your materials when you renovate a building versus building new," says Kensinger. And knocking down a building knocks down property taxes significantly, too. Just a year or two of reduced taxes would pay for the cost of demolition.

Kensinger says he also could have covered the cost of demolition if he had taken the time to sell off all of the building's equipment and materials. But instead, after unloading a few higher-value items, he offered much of it to some of his other tenants.

"And then after those two tranches of value, we just kind of let people in there. When you don't have any doors or windows, it's difficult to keep people from coming in. It's either going away in the back of a dump truck or some guy's going to find some value for it," Kensinger says. "I don't begrudge anybody taking anything they want at that point."

Until the first strike of the excavator, everybody's a scavenger. At the former Blue Planet, men on ladders work furiously to remove a sound system from the ceiling; later a man who says he's starting his own nightclub nearby walks over and asks me if any tables and chairs are left. I watch as two sweaty men try to hustle a pair of heavy stainless-steel sinks out the back door before Cherry's supervisor catches them halfway and confronts them. "That's my stainless!" the supervisor yells. "You said you were just taking some countertops."

On other jobs, excavator operators stop their machines to retrieve blowers from fallen air-conditioning units. Another supervisor collects doomed palm trees for his backyard. "I've got a garage full of stuff," one demolition estimator tells me. For some, scavenging is a way to make money, but for others the lure of leftovers that would otherwise get carted to the dump is irresistible.

> > > 3

"We're the biggest bunch of pack rats you've ever seen in the world, okay?" Leonard Cherry tells me. He's talking about his family. We're in his office, one of several portable structures arrayed around raised wooden decks in a light-industrial district a few miles west of Hobby Airport. It seems fitting that the

Dramatic final minutes for a garage apartment on Shady Vale Lane (above); Cherry puts soggy homes out to pasture (right).

headquarters of Cherry Demolition is fashioned from movable buildings that might never need to be demolished.

From the company's founding, Cherry has helped its customers address a question that rarely haunts developers and property owners here: What do we do with the building that's in the way of our plans? The growth of the family-owned company and its expansion into a series of connected businesses has paralleled Houston's own astonishing growth. Carl Cherry, Leonard's father, founded the Cherry House Moving Company in 1952 to tote underappreciated bungalows off lots in West University, where newcomers were eager to construct larger, air-conditioned homes. As the city has spread, Cherry has changed its methods, finding increasingly sophisticated and aggressive techniques to clear sites. The company also has found ways to carve old buildings into smaller and smaller pieces, squeezing more profit from the process.

Cherry bought its first demolition equipment in the late '70s, to help clear vacated residential lots. "We couldn't find a contractor that would perform the work quickly enough," says Leonard Cherry, who took over the business with his three brothers when their father retired in 1985. The company expanded to residential and commercial demolition in the late '80s, from there to industrial demolition in 1992, and finally to interior demolition in 1994. In 1996 it opened its first concrete-crushing facility. In 2001 it opened its Stabilized division, to process finer concrete particles. And last year it established a Roll-Off division, to handle concrete waste generated during the construction process.

"When Dad retired in '85, we were doing a half a million a year," Cherry says, leaning back slightly in his chair. "This year we'll break 40 million. So business has grown, nicely."

Cherry's business also has grown in scope—from simply removing buildings to recycling some of their parts. But comprehensive recycling of building materials is an unfulfilled promise so far. There are markets for most used building components—just not in Houston, not yet. Steel is recyclable almost everywhere. Recycling practices for other materials differ by region—in large part because of huge variations in disposal costs.

It's not cost-effective in Texas for demolition companies to recycle general construction and demolition debris, Cherry says—or even to pulverize it so it takes up less space in landfills—because processing it costs more than simply dumping it.

To recycle components of a house, for example, several different markets would need to develop locally. There would have to be facilities willing to pay for ground wood waste (which can be used to cover landfills daily, or for fuel), for composition shingles (which could be added to asphalt), and for drywall (which Cherry thinks someday could be crushed and added to fertilizer). And demand for the finished products would have to overcome the cost of separating these materials, either before or after demolition. For now, though—with the exception of the copper piping and wood flooring commonly pilfered from doomed houses—these materials usually get dumped into landfills.

But not the foundation.

> > > 4

It's one of Houston's great ironies: the city is home to a great concentration of geologists, but there's no stone here.

Geologically, it's too young. The fine particles of sediment piled on each other in this former ocean bottom haven't had time to congeal into anything so solid or permanent. To scientists and developers alike, Houston is new land.

In low-lying Houston, maintaining the tenuous separation of land and water is a continual and painstaking task, but our ability to function as a city depends on it. Otherwise, our streets and sidewalks would devolve into an undifferentiated, uninhabitable mess, tires and feet sinking deep into mucky gumbo soil. Here paving is like civilization itself: thin, built-up layers that allow a city to grow in a swamp. The histories of each record our progress in imposing stability on uncertain terrain. We look for something hard and permanent—anything to separate us from an unstable surface that shrinks and swells with the seasons and occasionally reminds us how close we are to being under water. Early Houstonians used wood; later shells and brick. Today we live our lives on asphalt and concrete.

Concrete seems an appropriate material for a fast-growing city seeking permanence. Before it's brought to a site, it's formless. It's poured in place, it hardens, and then it's rock-solid.

But finding aggregate for concrete mixes is a problem for a rockless town. We've depleted deposits of seashells near Galveston Bay and exhausted what supplies of stone were relatively close. As the nearer quarries have been dug out, suppliers have had to travel farther and farther from Houston to bring the material in.

With nature's stocks receding, Houston has found something manmade to mine: its own history. Having taken a big bite out of the area's natural resources, we're now devouring what is available in great quantities: demolished buildings. Since 1987, when the state of Texas established specifications for the use of recycled concrete in road-building, Houston's hunger for the new has raised the value of construction leftovers, resulting in one of the world's largest markets for recycled concrete.

It's a regional phenomenon: In Austin and San Antonio, both of which have easier access to natural aggregate, concrete from demolition sites is still buried in

sand pits. In Houston that rarely happens anymore. It's now cheaper to stabilize paved surfaces with pieces of ground-up old buildings than it is to transport crushed limestone by rail from the Hill Country or by barge from the Yucatán.

"The goal of concrete recycling is to save the premium aggregates for building construction," says Jim Miller, general manager of Southern Crushed Concrete, the largest local recycler. Southern processes about three million tons of concrete a year, far more than Cherry Crushed Concrete, its closest competitor. But Cherry is the only local company with mobile crushers, able to go to where the concrete is and grind it up into the makings of pavement. This saves transportation costs, especially for clients who have both a large amount of concrete to crush and a use for the end product.

Recycled concrete generally isn't strong or consistent enough to be reused in concrete construction, but it's a useful replacement for crushed stone in applications where the strength of the aggregate is not critical. And those applications just happen to coincide with the basic needs of a swamp city trying to stay dry and civilized: keeping water and dirt separated and stabilizing the land.

The largest chunks of old concrete are sold as riprap, which is used on embankments and the edges of ditches for flood control—anywhere a change in elevation requires protection from erosion. Gabion stone and bullrock, the next largest grades, are laid on the ground at entrance and exit points of construction sites, so heavy equipment doesn't sink into the mud or track it onto city streets. They're also used as road material in landfills.

But most recycled concrete is crushed to the smallest grade, flexbase, and used like gravel: on its own on dusty county roads, or as a base material under asphalt, either on its own or stabilized, which means blended with water and cement. Stabilized flexbase is as hard as rock.

"The majority of parking lots that you see being installed in the greater Houston area," Cherry says, "have recycled flexbase, or recycled stabilized base under that asphalt." An even greater quantity of flexbase is used under new and reconstructed roads. And here state, county, and municipal governments (the largest customers for recycled concrete) have found themselves a bargain: Recycled concrete is 30 percent cheaper than natural stone. By tearing down old buildings and salvaging the materials, we've made building new roads and parking lots a lot less expensive.

Demolition companies and their customers get a bargain too: The demand for recycled concrete has lowered disposal costs, making it that much cheaper to get rid of old buildings. From here, the local ecology of building demolition only gets stranger.

Most recycled concrete is used on the city's outskirts, because that's where the roads and parking lots are being built. Although much of the material comes from old highway surfaces, the greatest source of concrete recovered from buildings is the inner city, because that's where most of the demolition takes place—where property values are highest. All the demolition has made room for more construction, but it also fuels another engine: We tear down buildings at the center of town, and use that material to track wide and low across our marshy coastal plain, distributing evidence of our civilization—and a hardy road base—as far as we can. It's hard to imagine a more literal description of a city feeding on itself, devouring its own history to spread paths for future growth.

When I pull out of the Cherry parking lot, I try to picture bits of uprooted foundations, ground up and laid underneath the road ahead: old schools, old office buildings, slabs from old homes mashed and crushed, then run over again and again by cars. They are remnants of the old heart of a young city, I imagine, broken and spread over an expanding region. One day, maybe, they'll be dug up by anthropologists looking for concrete evidence of how a civilization spreads.

> > > 5

Having turned the house on Shady Vale Lane into a pile of rubble, Lesly Cadena Garza advances his machine up the driveway to the garage, which has a full-story apartment above it. A few clawed swipes from the excavator arm draw down the garage door and the front wall above it like a crumpling curtain.

Ahead of him, on the second story, a little stage set appears: a home office with a desk and chair, a small credenza to one side, a trash can. A half-open door leads to another room beyond. For a moment, the chair teeters on one leg at the downstage edge. I half expect to catch a few surprised characters scurrying across the set, fleeing the revelation and imminent destruction of their secret performance space. The scene is strangely thrilling.

A building being torn down provides moments of great illumination and beauty. Here is a building section made real, a live cutaway view of a home's interior—though it lasts only a minute or two. With each successive clawing, the line of the cut moves deeper into the room. Then the back wall topples too, and soon there is nothing left standing. When else do we get such a privileged view?

Three more houses will be coming down today in Woodland Trails West, a northwest Houston neighborhood with the misfortune of being downstream of rampant development near White Oak Bayou. In its own peculiar version of a "three strikes" rule, the Harris County Flood Control District has been buying up homes that have repeatedly flooded. For the last two years, Cherry has been supervising demolitions in the area, now at the rate of about 30 a month.

The floods have decimated this subdivision and others near it, but the demolitions will have the most dramatic effect on the landscape. Already, newly vacant lots have appeared on each street, while a few brave houses sport for-sale signs on their front lawns: flags of hope. As adjacent homes vanish, remaining structures begin to look like grander estates—true ranch houses, perhaps, fronting eerie, outsized expanses of green.

Some angel of death, armed with a sledgehammer and a can of spray paint, has marked the entrances of several houses. Street numbers have been sprayed in orange and big gashes torn in the front walls, as if an intruder had landed a few wild blows, then decided breaking in wasn't worth the effort. When Cherry gets around to these houses, it will take about 20 minutes for the excavator to work most of its magic. The remaining time will be spent carting away the debris. A house is gone in a day.

Acting ahead of nature, or cleaning up after it, we might be rehearsing for some future devastation. On terrain subject to storms, floods, and the trials of daily weathering, Houston replenishes its supply of blank slates on its own. Our town is subject to the whims of nature, but when we tear down a building we maintain our own authority.

A supervisor from Cherry leads me past a house that's doomed and vacant, then another that looks like it's still being lived in. Behind it is a plot covered with grass, a stately live oak shading each side. The curb has been patched, and there's a spray of fresh soil where the driveway used to be, but to the untrained eye it might be land that's never been lived on. "This is our work," the supervisor says to me, pointing to the empty lot. ■

The Disposable (?) City

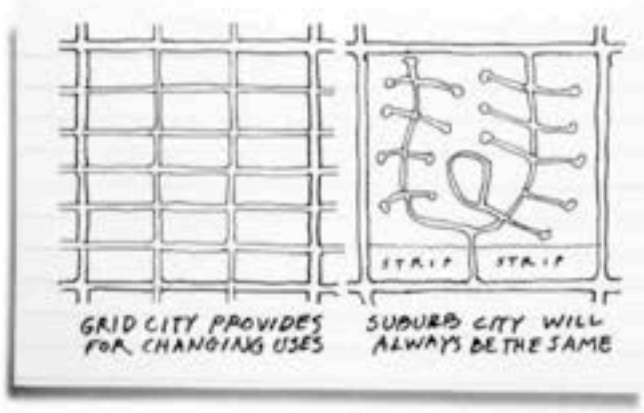
If you want your buildings to last, build them to change

BY DANNY MARC SAMUELS

HOW OFTEN have you driven down a familiar street and found predatory machines looming over a dusty pile of debris where a favorite bungalow once stood? And you realize another site is being cleared for three three-story townhouses that will cast long shadows over the traditional building scale of the neighborhood. In Houston's rapidly changing urbanscape, buildings that are here today can literally be gone tomorrow. This is particularly true of inner city neighborhoods where the demand for housing outstrips the supply of developable land. As a result the city has become denser, with more building bulk and more building units per lot. Increased density is what urbanophiles have been longing for. But is this the best way to get it?

The social cost of commuting from the suburbs has brought people back to the inner city and the older, gridded areas of town, where most sites already have dedicated uses. Streets and neighborhoods have acquired character, with mature trees and an established landscape to create a settled background. The limited supply of available land causes its value to go up, often to the point where its market value as a site overwhelms the value of existing buildings, rendering them disposable for the sake of more townhouses, a larger office building, or a condominium tower.

Land value can be seen as a measure of its potential for given uses. A great townhouse lot will have little value as a retail site. It is "location," but for a specific use. Even in a city with no zoning, this creates virtual zoning—commercial uses seek traffic, residential uses prefer residential neighbors. Further, the gridded and fine-grain nature of established close-in neighborhoods makes the land usable for diverse purposes, whereas suburban residential lots in discontinuous street patterns will never be anything but residential. This logic tends to set land value expectations, which are calibrated to the anticipated use. But in the absence of legislated zoning, an adventurous townhouse developer can foil expectations of use, and build townhouses in an industrial area, or a high-rise condominium in a quiet residential neighborhood. This dynamic can create upward land price pressures in unlikely locations, and lead to the demise of otherwise useful but economically noncompetitive structures.



Beyond this market driven virtual zoning, there are plenty of other land use controls at work in Houston that mitigate the otherwise "highest and best use" of a property. Most important among them are residential deed restrictions. These may have originated 70 or 80 years ago, but deed restrictions are a remarkably persistent and effective means for protecting the character of those mostly up-scale neighborhoods that aggressively enforce them. Such restrictions put certain residential neighborhoods completely out of play for other uses, but don't prevent the replacement of small-scale housing stock with mega-mansions.

The city ordinances governing land development—in particular the infamous Chapter 42—that stipulate rules for property division and subdivision, set-backs, off-street parking, landscaping, and the regulations for utility availability and storm water control, have had a powerful effect on the shape of the city, setting limits on density, and essentially assuring a modicum of suburban character even in the center of the city.

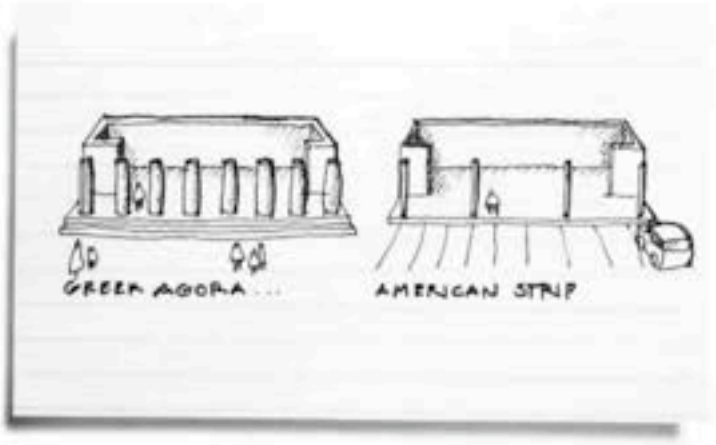
And oddly enough, in a city with a notorious indifference to its rare historic buildings, a de facto preservation ethic has grown out of the new marketability of older structures that can be turned into trendy restaurants, urban lofts, or boutique hotels. This includes both buildings of acknowledged architectural merit as well as more ordinary, background buildings that are place holders in the city's environmental history. Some of the finest spaces in Houston have been fashioned from structures of little architectural interest—just think of your favorite shop or restaurant.

> > >

Life cycle expectations for buildings are set according to their uses. Buildings intended for commercial uses (including apartments, which are more commercial in nature than residential) are built to produce an income stream during the life of the building by leasing space to various occupants. The building follows a pro forma: Income minus expenses equals profit, so the incentive is to keep the project cost down in order to increase the profit margin. This means that decisions about quality of construction, and even architects' fees, are often made with a bottom-line mentality with little incentive to provide more than the minimum acceptable. The building is viewed as a depreciating asset that must be paid for during the life of its loan, and need last only that long.

The developer provides a choice location (or the best one he can find) with access to traffic flow. He provides the required parking (as prescribed by the city) and the necessary services. He also provides the "shell," which generally consists of a pad, a steel structure, a roof, some or all of the enclosing walls, and air conditioning and other services. In the case of an office building, elevators, stairs, corridors, bathrooms, and a lobby are also included. Each tenant then "builds out" his or her space to accommodate their requirements—the store front and entry, the interior finishes, lighting, etc. Usually, the build-out will only last for the five- or ten-year life of the lease, if that, and then be completely changed out. The buildings must be able to adapt rapidly to changing and often unpredictable market conditions.

The strip center, another developer archetype, is a narrow rectangular building open along one of its long sides that faces a parking lot. Merchants rent as much length as they want, and personalize their frontage with color, design, and signage. In modern Houston the strip center and other strip buildings are the most ubiquitous commercial building types, cheap to construct, architecturally nondescript, and therefore easily adaptable to the changing needs of a succession of various tenants.



Buildings for chain operators are a little different. The buildings are owned by the chain and located on sites selected for their competitive advantage. Building designs, parking, and operations are substantially standardized. These market-scale formulations developed in the suburbs, and there is no allegiance to any urban character or local particularities that a site might offer. At the end of its useful economic life, or more likely, upon the operator's market consolidation, buyout, or bankruptcy, the building is readily sold, abandoned, or torn down, and written off as a bad investment.

A residential owner has a completely different take on her/his/their building. Here the primary goal is to provide shelter for the family, usually for a longer rather than shorter period of time. The house is also a major personal investment for the owner/occupant who expects the house to appreciate in value or at least hold its own against inflation. Potential resale is a major consideration. The changes that the structure will need to accommodate are slow and somewhat predictable. The structure must be durable and easily maintained and should readily accommodate modifications and additions. The wood frame system easily meets these requirements.

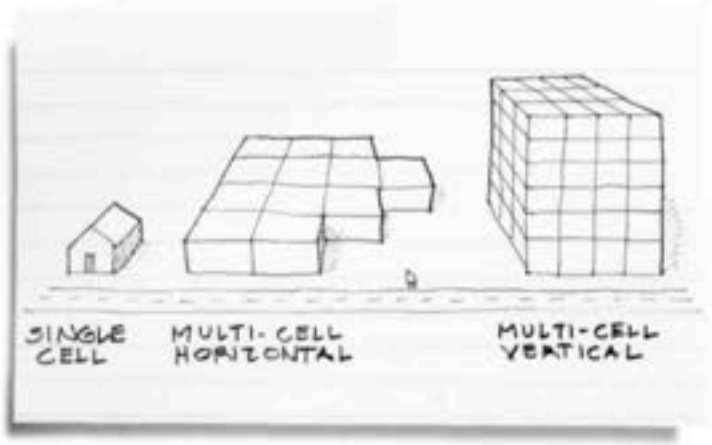
Institutional owners—schools, churches, libraries, public and governmental buildings, hospitals—build with aspirations to the long-view, expecting that the institution and its building will be around for long time. Change is slow and reluctant. Of course, the building should retain its usable value to the owner. The image that the building projects is important to the owner, and more attention is paid to its design.

Such buildings grow with the institution, and are replaced only through obsolesence, when they no longer fulfill their function. In the case of public buildings, however, funding is derived from taxpayer bases, and is often minimal or even inadequate for construction, let alone continuing maintenance. There must be no perception of extravagance at the taxpayers' expense.

> > >

The typical American building systems, wood frame and steel frame, are ubiquitous in Houston. Both systems have long histories and are fit, flexible evolutionary survivors that continue to adapt well to their environments. Though often perceived as less firm and reliable than traditional bearing-wall systems, they are in fact strong, light-weight systems that can be easily and quickly erected from readily available components using simple tools and small work crews. And if periodically maintained and protected from water and oxidation (slow or rapid), they make indefinitely durable frameworks for buildings. Most importantly, these indigenous building systems are versatile, adjusting easily to changing uses.

In modular combinations—single cell, multi-cells extending horizontally or vertically—frame systems can be used for all our basic building stock—the wood-frame house, the convenience store and strip center, the office building, school, library, church, the mall, or the big-box retailer. All of these are frame structures defining cellular spaces of different sizes and permutations.



Stewart Brand, polymath, inventor/designer and founder, in the '60s, of The Whole Earth Catalog, has turned his attention to buildings (to the likely chagrin of most architects). In his book, *How Buildings Learn: What Happens After They're Built*, Brand looks at the processes that define buildings: their design, financing, construction, occupation by the users, energy exchange with the environment, adaptation to evolving circumstances, maintenance, addition, renovation, and reuse.

Brand sees buildings in terms of layers—"site, structure, skin, services, space plan, stuff"—that progress from most permanent and static to most temporary and changeable. The site endures. Once virtually and legally inscribed on the surface of the land, the property and its supporting rights-of-way are difficult to alter. These facts on the ground set the stage for the building, suggesting (or dictating in the case of zoned cities) by location, size, and cost the possible uses for that property.

The structure sketches the general shape and size of the building and provides the strength needed to resist forces of gravity, wind, flood, or earthquake. The structural steel, concrete, and wood are meant to be there for the life of the building. The skin is a protective membrane that separates the inside from the outside, and assures that the occupants can enjoy a comfortable life within regardless of what conditions exist outside. Less permanent than the structure, the skin may be replaced or expanded several times during the life of the building.

Modern buildings are served by extensive and largely invisible technical networks that provide water, sewer, electricity, gas, air conditioning, security, telephone, television, internet. These systems devolve at different rates, but as a system becomes obsolete, it must be able to be changed out—hopefully without much damage to the more permanent elements.

The space plan—basically the interior walls and surfaces—is changed with great frequency to fit new requirements and new occupants. This should be considered as flexible as possible. Usually gypsum board—a cheap and easily-worked material consisting of one-half inch of chalk bonded to two outer layers of paper—is the primary material for interiors in all types of buildings. Finally, in Brand's taxonomy, the stuff—furniture, plants, equipment, possessions, and everything else that fills the interior—is the most loose and flexible.

Brand's main point is that buildings are not fixed and static entities, but dynamic, living things that evolve progressively. Over time, through the cumulative actions of their occupants, buildings "learn" how to be—how to adapt to their environments and uses, and thus become important, long term constituents of the city.

> > >

Everything falls apart. So says the Second Law of Thermodynamics, and it doesn't get much more basic than that. Formulated by Sadi Carnot in the 19th century to describe the limits of energy availability in steam engines, the Second Law has since been seen to describe ever more basic properties of our universe. Everything runs down, cools off, loses energy, encounters friction, and otherwise dissipates and disintegrates. Entropy increases, order decreases.

But there is a loophole. Even though the Second Law dictates the eventual unwinding of all systems, it does not preclude the opposite in certain circumstances. When energy is applied to a system, order can increase locally and temporarily. It is this fortunate loophole through which all creation squeezes, life exists, and our dreams are possible.

Buildings and cities are made by a considerable investment of energy in the form of intention, capital, labor, resources, and time. The sheer effort of such creation is astounding, no matter how often you have been through it: months and years of planning and designing, documenting, permitting, construction in all its particulars, occupation. The money required to stoke this anti-entropy engine is always staggeringly high. All buildings are expensive, regardless of their budgets.

Before a building is even finished, entropic forces begin wearing it down. Water is the primary demon, and in this regard, Houston's environment is particularly wicked. Changes in moisture content cause Houston's clay soils to expand and contract, heaving the building's foundations. Floods occasionally wreak special havoc on the lower portions of buildings. Airborne water (rain) and vapor (humidity) are always trying to leak, siphon, condense, blow, suck, or otherwise infiltrate the weathering membrane, to settle into the internal structure, where it can cause rot, corrosion and rust, and nurture destructive insects and moulds. If there is a way water can get in, it will. There is also the subtle deterioration caused by cycles of heat and cold, which expand and contract the building fabric. Or ultraviolet radiation that degrades the roof or the caulk that is supposed to seal everything up. Or just the long term wear and tear from normal everyday use.

To counter the steady effects of entropy and maintain the building in an ordered state requires the continual application of energy in the form of maintenance. For buildings that are cheaply built, life cycle costs for maintenance and repair can be a problem, especially as the building ages. In the end, it may fall apart by the time it is paid off. Usually it's not the developer who has to worry about these costs, but later owners and occupants who will need to put up with the never-ending chores of repairing and replacing.

Buildings that don't fall apart can become obsolete for other reasons. Sometimes a neighborhood changes in use or in character to the extent that that a building's original value is negated. Sometimes the original use or function built into the building may no longer be viable. Sometimes hazardous materials such as asbestos or on-site toxicity may render a building and its site unusable without costly remediation. And older buildings may not be able to measure up to modern energy standards. Sometimes new owners can be found to modify such buildings for new uses, but often they are abandoned, razed or otherwise disposed of.

> > >

If we are to build cities that last, we must build buildings that last. They must be both durable and flexible. They must hold up against the destructive force of entropy. They must accept, anticipate, and even invite change.

Long-lived buildings are built well in ways that count. The parts that must last the longest—the foundation, the structure, the weathering membrane—are built to the highest standards. The building keeps the water out. The foundation does not move and the roof does not leak. Materials and the joints between them are protected from the elements. Surfaces resist the wear-and-tear of daily usage. But long-lived buildings also need to be adaptable and capable of accommodating changes—including modifications to utilities to accommodate new interior arrangements. Finally, such buildings should be designed for easy maintenance and repair.

Buildings that last can expect a long lifetime of change. Every building is a long-term contribution to the city. For a few singular and significant buildings, design exuberance is warranted. But as building blocks of the city, most buildings should be content to remain in the background as part of a well-built framework of continuity that can accommodate change. ■

Texas Medical Center, looking north. Main Street (left) will look more like Fannin (right) following construction of ten new buildings.

The Profit Zone

Things at the Texas Medical Center are looking up, up, up

"Historically, the corridor bounded by Main and Fannin is not part of the original land covenant set aside for the Texas Medical Center, where non-profit activities of research, education, and health care take place. We call this area of the Medical Center the 'profit zone' because it has typically been built up by developers with tenants engaged in for-profit business."

Paul Sanders, Vice President for Architecture and Planning, Texas Medical Center

BY BARRIE SCARDINO

RUMORS ABOUT THE NEAR FUTURE of South Main Street along the Texas Medical Center and Rice University are being whispered in every nearby Starbucks: *Can you believe five gigantic buildings are going up on South Main? Did you know that Rice is conspiring with the Medical Center to build a high-rise with more retail than the Galleria? Have you heard that "they" are planning to take out all the live oaks along Main in the Medical Center? The Shamrock was only the first—historic buildings all along South Main are going to be demolished. UT is buying up all the property between Main and Fannin across from Rice to build a new hospital...*

Rather than take the grapevine at its word, let's examine the facts:

FACT: Ten new buildings are on the drawing board or under construction in the Rice/TMC area along South Main.

FACT: Rice recently renewed its contract with TMC, becoming the 43rd member of the TMC Institute. As part of its new Master Plan, Rice is planning a multi-story Collaborative Research Center with a relatively small retail component on the old Tidelands site (at the southwest corner of University and Main).

FACT: "They" are the developers of the Memorial Hermann Ambulatory Care Center on the southeast corner of Main and North MacGregor (across from Rice entrance No. 3). A number of live oaks have been removed, with a promise

to replant. There are no other plans to remove trees on South Main.

Fact: The only two historic buildings along the Main/Fannin strip between North MacGregor and Holcombe are the Hermann Professional Building (1948, 1958; Kenneth Franzheim with Hedrick & Lindsey, architects) and the Medical Towers Building (1959; Golemon & Rolfe with Skidmore, Owings & Merrill, architects). The Hermann Professional Building was completely refurbished following Tropical Storm Allison in 2001 by Willis, Bricker & Cannady and is in good condition. There are no plans to alter or demolish this building, its garage, or the Medical Towers Building—at least for a while.

Fact: In September 2004 the UT Health Science Center bought the Hermann Professional Building and its garage. Memorial Hermann has retained ownership of the land, giving UT a 99-year lease. There is no new hospital; Hermann Professional Building tenants will stay but write their rising rent checks to UT instead of Memorial Hermann.

> > >

The construction boomlet on South Main is a sign of prosperity and will provide new state-of-the-art facilities for the practice of medicine. That is good news. But with so much new construction along the western edge of TMC, concern about the ecological and aesthetic future of this area is appropriate. What will these new buildings and concomitant traffic do to one of the most beautiful tree-lined stretches in Houston? How will Rice University and Hermann Park be affected? Will there be enough parking (see "Med Center Mobility," page 29)? Is care being taken to ensure that another Allison-level flood will not devastate the Medical Center?

Profit Zone

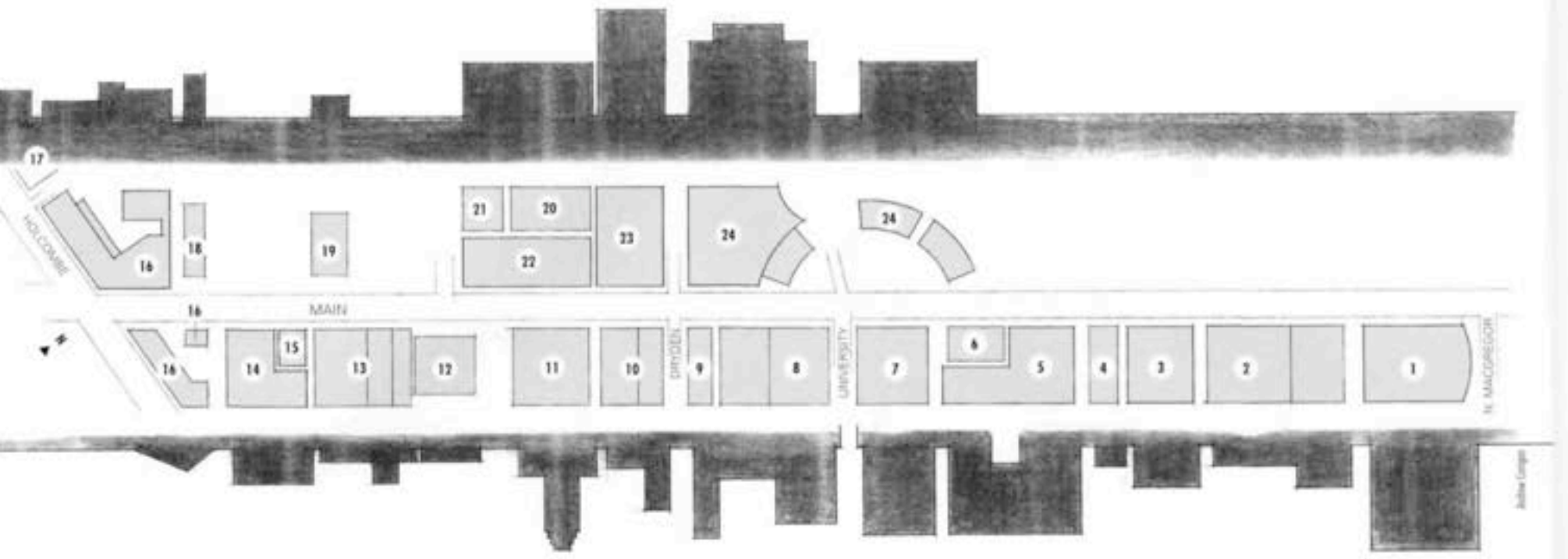
Both Rice and the Medical Center have long turned their backs to Main Street. Rice has hidden itself behind hedges, and worse, most buildings on the TMC side of the street face Fannin—their unsightly (or, at best, humdrum) parking structures line South Main. New construction generally adheres to this established pattern. The new Memorial Hermann Ambulatory Care Center and Hermann Eye Center at North MacGregor and Main Street will be, by its location, the Main Street "entrance" to the Medical Center. With it, Mischer Development and Kirksey Architects have lost an opportunity to engage Main Street or even acknowledge the venerable Hermann Hospital (1925; Berlin & Swern and Alfred C. Finn, architects) across Fannin.[1] Memorial Hermann's building will be a 30-story, glass-skinned skyscraper, built out to the street. (The City of Houston granted a setback waiver allowing construction to the lot lines because pre-ordinance buildings along this strip were built out to the street.) A slightly curving façade will look across North MacGregor to the historic Palmer Memorial Episcopal Church complex. The first two floors will contain retail space, and an office tower will rise over the parking garage, which will contain a whopping 2,500 spaces. The building is expected to be completed sometime in 2006.

The Memorial Hermann Building will literally overshadow the pleasant, 15-story Moderne Hermann Professional Building. Houston Mod, take note: One can only guess that it is a matter of time before UT plans something new on this site. South of the Hermann Garage the next new building on the east side of Main nears completion: the Prairie View A&M University College of Nursing (see rendering, this page). The project architect, Mark Green of Watkins Hamilton Ross, confirms that eight stories of parking will face Main; the Fannin Street façade rises to 12 stories (four for the nursing school on top of the eight-story garage).

"Part of the program for Fannin Street dictated that the entire 12 stories appear to be the nursing college and not garage," says Green. Renderings show an architectural delineation between the nursing school and the garage, but the parking section is not obviously a garage. The glassed circulation towers facing Fannin at the corners of the building may eventually feature Turrellesque colored lights. An image of the Main Street façade is not available, but Green reports that it will be clad with aluminum louvers flanked by precast concrete. Foundations for this building allow for another 12 stories to be added in the future.

The most prominent landlord along this stretch of Main/Fannin, the profit zone, is Methodist Hospital. Methodist is planning the largest structure going up in the next few years. Its West Pavilion Professional Building will be demolished

Top: Texas Women's University Institute of Health Sciences, Fannin Street façade, scheduled for completion 2006; Prairie View A&M University College of Nursing, Fannin Street façade, under construction (above).




Jon Jerde and Jean Nouvel's Tokyo Shiodome. Inspiration for Holcombe Square?

next summer for an 820,000-square-foot, L-shaped building that will wrap around the Methodist Diagnostic Hospital (which will remain on the site). A team from Watkins Hamilton Ross Architects is in the design phase for this new outpatient center and research institute, which is scheduled for completion in 2008. The first two stories (as in other new buildings) will be devoted to retail; a parking garage will occupy the next ten stories. The Methodist Research Institute, with an address and entrance on Main, will occupy the next five floors with a two-floor shell above for expansion. The Outpatient Center, entered from Fannin, will fill the rest of the tower, and the top floor will have a state-of-the-art conference center with 25th-floor views of the Rice campus and TMC.

The most interesting part of this project—and most daunting for the architects—is Methodist's desire to open John Freeman Boulevard through to Main Street. This will help traffic congestion on Fannin and could include a grand sallyport, which would create a meaningful cross-axis entrance into the heart of the Medical Center. The City of Houston and the Texas Medical Center understandably are enthusiastic about this concession. Methodist should be lauded for its attempt to reach beyond its own agenda for the good of the community.[2]

The last project on the east side of Main about to break ground is the Texas Woman's University Institute of Health Sciences, designed by Kirksey. It will be located on vacant Methodist Hospital-owned property just south of the Crowne Plaza Hotel. Construction documents are nearly finished, anticipating a January 2005 groundbreaking. The project is expected to be complete in April or May 2006. The precast concrete building with curtain wall will be L-shaped and built around an 11-level garage constructed by Methodist (see rendering, previous page). The garage, which will face Main, is a design-build project with Vaughn Construction and Morris Architects. The TWU building will house offices and research facilities in addition to student services and classrooms for nursing, physical therapy, and occupational therapy students. In this building, Kirksey has another opportunity to address a gateway into the Medical Center at Main and Holcombe, where the most creative new project is being studied: Holcombe Square.

Holcombe Square

The Holcombe Square idea grew out of the Main Street Revitalization Project, sponsored by the City of Houston and the Main Street Coalition. A Main Street Corridor Master Plan developed by Ehrenkrantz Eckstut & Kuhn Architects of Los Angeles (August 2000) identified several distinct districts along Main, including the Texas Medical Center. In part the master plan recommends, "At the southern edge of the Medical Center, a new 'Gateway Plaza' is proposed at Holcombe by eliminating the grade-separated intersections at Fannin and Main with new development opportunities for adjacent properties. This new civic plaza will establish a more favorable first impression for the Medical Center and create a new gathering place for outdoor activities."[3]

Gensler has been commissioned to do a nine-month study, out of which will come specific recommendations. The project is being undertaken through a public-private partnership, which includes the South Main Center Association, Main Street Coalition, the Texas Medical Center, the Texas Medical Center Transportation Management Organization, METRO, and private property owners, particularly Norvin Partners of New York, which owns the Bank of America Building and the triangle of land between Old Main and Holcombe, where the Bank of America drive-in bank is now located. Phase I is being funded by a Federal Highway Administration Transportation and Community Systems Preservation grant.

Dan Brents of Gensler is leading this study. He is an experienced architect and planner who formerly worked for Euro-Disney, so an imaginative solution may result. Brents says the preliminary studies are complete, but circulation diagrams, land use maps, and proposal sketches are not available at this time. Brents notes that the plans do incorporate the Bank of America triangle and the Pizza Hut-Burger King site on the northwest corner of Main and Holcombe. He envisions a new multi-level plaza and/or building, which will have a variety of functions, including a food court.[4] So don't fret, BK and Pizza Hut will not disappear.

Gensler is using three benchmark references in planning Holcombe Square: First is Tokyo's Shiodome, a multi-level development over streets with innovative linkages to surrounding buildings (see image, this page). The planning ideal behind the Shiodome project was to build in harmony with nature and to combine living and working functions in its new skyscrapers. Designed by American archi-

	BUILDING	#STORIES	#SQUARE FEET	#PARKING SPACES
1	Memorial Hermann Ambulatory Care Center 6400 Fannin Kirksey; 2004-2006	30	511,000	2,500
2	Hermann Professional Building and Garage 6410 and 6414 Fannin K. Franzheim with Hedrick & Lindsley 1949, 1958 addition	15	361,000	1,250
3	Prairie View A&M College of Nursing 6436 Fannin Watkins, Hamilton, Ross; 2005	12	120,000	1,000
4	Kindred Hospital 6441 Main architect unknown; 1971	6	168,000	118
5	Methodist Hospital Outpatient Center and Research Tower 6448 Fannin Watkins, Hamilton, Ross; 2005-2008	25	820,000	1,200
6	Methodist Diagnostic Hospital 6450 Fannin	12	192,000	0
7	Smith Tower and Garage 6500 Fannin Lloyd, Jones, Fillpot; 1989	25	430,000	1340
8	Scurlock Tower and Garage 6560 Fannin S. I. Morris; 1980	22	480,000	1660
9	Houston Marriott Medical Center 6580 Fannin Sikes, Jennings, Kelly; 1984	26		0
10	Medical Towers Building 1709 Dryden Golemon & Rolfe with SOM; 1959	18	160,000	1,200
11	St. Luke's Medical Tower 6724 Fannin Cesar Pelli and Kendall/Heaton; 1991	29	386,000	1,219
12	Wells Fargo Bank 6631 Main Street	4	40,000	43
13	Crowne Plaza Hotel and Garage 6701 South Main Street	10		
14	Texas Womens University Institute of Health Sciences 6800 Fannin Kirksey; 2006	10	200,000	0
15	Methodist Hospital Garage 6801 Main Morris Architects; 2006	11	n/a	1,050
16	Holcombe Square Project Main-Holcombe intersection Gensler; 2006-	? –3	?	?
17	Life Sciences Plaza 2130 West Holcombe Street 2006	11	210,000	
18	Holiday Inn and Suites 6800 Main Street	12		
19	Best Western Plaza Hotel 6700 Main	6	125 rooms	125
20	Hilton Houston Plaza Hotel 6633 Travis	18		0
21	Houston Medical Center Building 6655 Travis	9	129,000	400
22	St. Lukes Parking Garage 6620 Main Street Kirksey; 2004	15	180,000	1,450
23	Baylor Outpatient Center 6600 Main Street ?	? –30	?	?
24	Rice University Collaborative Research Center corner University and Main ?	? –25	400,000	?

Rice University Master Plan (Michael Graves & Associates) showing new Rice entrance at University Boulevard and Main Street, with Rice's plan for its Main Street face across from the Texas Medical Center.

Vacant land on the west side of Main Street, soon to be developed.

tect Jon Jerde and French architect Jean Nouvel, Shiodome's multi-level plaza has specific implications for Holcombe Square, including ample landscaping.

The second project from which Gensler hopes to learn is also in Japan. The Roppongi Hills residential office project outside Tokyo, developed by Minoru Mori, opened to international acclaim in the summer of 2003. Kohn Pederson Fox of New York with the Jerde Partnership designed the complex. The walks, gardens and waterwalls are built over parking decks, also a possibility at Holcombe Square.

The third project under study is another Jean Nouvel creation: the redevelopment of Les Halles in Paris. Here redevelopment entailed a central park as a roofscape over the completed Paris Metro station and several below-grade levels of retail. This type of grand design would have been wonderful in Houston had it been implemented before so many parking garages were built. Such a scheme may be a pipe dream now, but another roundabout with a substantial fountain at this end of South Main echoing the Mecom Fountain circle would be Parisian, too. What we can reasonably hope for is a very green and blue plaza with pedestrian connections to METRORail, the Medical Center, and on through to Rice.

Rice University

At the north end of this corridor, another grand idea is being implemented. At Rice there seems to be a new spirit of concern for the community beyond the hedges. Rice Provost Eugene Levy several years ago began exploring the notion that the corner of University Boulevard and Main Street could be a hub of collaboration between Rice and TMC institutions. Instead of envisioning university expansion to the west toward Rice Village, Levy began to look at the future of Rice in intellectual terms. His premise that biomedical science will play a role in the 21st century (analogous to the role played by electronics, computation, and communication in the 20th) received wide support at Rice. Consequently, the desire to strengthen the academic partnership between Rice (with engineering, physical science, computation, and nanotechnology) and the TMC institutions (with clinical research, biology, and biomedicine) led Rice to commission Michael Graves to produce a new campus Master Plan, with the

Top: The wall of parking garages on Main Street; Fannin Street in the Texas Medical Center area has effectively become Main Street (above).

specific directive that the campus should physically reach out toward the Medical Center and Main Street (see image, previous page).[5]

The Graves plan proposes a new north-south axis defined by a second academic court terminating at the University-Main corner. Although a good deal of the land to be redeveloped along this new axis is vacant, some buildings will be demolished, and the track stadium will be moved to the west end of campus near other athletic facilities. This new entrance plaza to Rice will be flanked by structures that are planned to curve, enfolding a pedestrian-only entrance and completing a semi-circular configuration that continues across University to the new Collaborative Research Center, which will be built on the 2.8-acre Tidelands site. This building, which Levy calls the "driver" of the Graves Master Plan, will be designed during the coming year with groundbreaking expected in early 2006. Several design teams are now being interviewed, but an architect has not been chosen. Barbara White Bryson says this will be a high-rise building of approximately 400,000 square feet. The building will include parking and a two-level mall with a large academic bookstore (for both Rice and TMC) as well as cafes and retail stores. Above, academic floors will contain high-tech wet labs and research facilities for, according to Levy, "joint complementary programs and expertise at the nexus of biomedical science, nanotechnology, computation, bioengineering and physical science and engineering."

West Side

Baylor College of Medicine is constructing its new outpatient center at Main and Dryden next to St. Luke's new parking garage. An architect has not been chosen. Lori Williams, director of communications at Baylor, was unable at the time of this writing to supply details about the building. It will most certainly be a high-rise and by its location will be forced to confront Main Street. The Baylor outpatient building also will have to include parking and probably will be physically connected to the St. Luke's garage next door, which was designed by Kirksey and opened in 2004. The 15-story St. Luke's garage building has approximately 1,450 parking spaces below four floors of doctors' offices. Its most noticeable feature is the green glass skywalk—the first to cross Main Street—connecting it to St. Luke's Medical

Tower, which unlike the Methodist buildings actually has a Main Street façade. Designed by Cesar Pelli & Associates with Kendall/Heaton Associates, this striking building was completed in 1991. In many ways it is the jewel of the Medical Center. This twin-domed tower was planned as a six-pack with clones on either side of the first. As good as the building is, it would have been overwhelming in triplicate. Wells Fargo Bank and The Medical Towers, both of which would have been demolished, are safe for the time being.

Hidden behind St. Luke's garage are the first two Medical Center buildings to be constructed across Main from the Medical Center. The Southgate Neighborhood Association lost its battle to protect its Travis Street boundary when the Houston Medical Center Building and adjacent Hilton Houston Plaza Hotel were constructed in the early '80s. Across Southgate Boulevard, where the Best Western and Holiday Inn are strung out amid a good deal of vacant property, a long strip is ripe for development. Various interests are holding this land with no immediate plans. Already, though, one new building has been announced. Behind Pizza Hut and Burger King, the Metrontario Group is developing Life Sciences Plaza, a medical office building with parking garage. Stay tuned.

Where Is Main Street?

Interestingly, Fannin has become the "main street" through the Medical Center. This stretch is perhaps the most urban streetscape in Houston, one block away from speeding traffic on Main. A constant stream of pedestrians, patients, and TMC workers flows from one building to another, or to restaurants, banks, parking, and other "urban" amenities along the street. All Fannin needs is some flower shops, little delis, and a dry cleaner to start looking like New York. The bustle of the METRORail adds to the urban feel of this stretch. So, where Main Street has become the back door and lost its mainness, Fannin has usurped it, which might be all for the best if Main Street can somehow regain its dignity.

Main Street from Mecom Fountain to the Holcombe Square site is now virtually a six-lane highway. Perhaps all or some of those lanes could be submerged, creating below-grade through-traffic with underground access to parking garages. Or a public parking facility could be built under Main Street, making it possible to demolish some of the older garages in favor of open space.

Main Street should be a safe and pleasant crossing from the westside medical buildings and Rice University to TMC's east side, extending safe access to public transportation at the numerous METRORail stops along Fannin and just beyond the Holcombe Square site at the TMC Transit Center station. But can underground facilities be made safe from flooding?

According to Paul Sanders of TMC, codes established in 2002 have new, more stringent requirements for below-grade construction that should prevent catastrophic flooding in the future. A long-range plan is being developed by the Corps of Engineers using FEMA money to look at both the Rice area and TMC. The City of Houston is installing new storm lines down North MacGregor to Brays Bayou. TMC institutions have all upgraded storm protection procedures and equipment in older buildings, sealing their basements against floodwaters. Sanders says that TMC is coordinating underground utilities for new construction and noted that Memorial Hermann is building new power substations in anticipation of the Ambulatory Care Center/Eye Center and the Heart Center, now in the planning stages.

So, as usual, the circulating rumors contain at least half-truths. But there is indeed a surge of new construction activity, new ideas, and new energy infusing this part of Houston. And floodwaters apparently won't be allowed to dampen them. ■

1 Shockingly, Memorial Hermann is planning to build a huge Heart Center in front of Hermann Hospital (now called the Cullen Building).

2 Interview with Richard C. Gremillion, Vice President Facilities, Planning and Development, The Methodist Hospital and Madeline B. Wicker, Director of Leasing and Marketing for The Methodist Hospital Office Buildings. Smith Tower, August 31, 2004.

3 "Main Street Corridor Master Plan: Design Concepts for Main Street," Ehrenkrantz Eckstut & Kuhn Architects. August 2000, p. 76. Also interview with Susan Young, Executive Director, South Main Center, August 24, 2004.

4 Telephone interview with Dan Brents, Gensler. August 25,2004.

5 Interview with Eugene H. Levy, Provost, and Barbara White Bryson, Associate Vice President of Facilities, Engineering and Planning, Rice University, August 30, 2004. See also *Cite 59*, page 8.

Med Center Mobility

The traffic stops here

BY RIVES TAYLOR

Moving people and their cars around the Texas Medical Center represents a major challenge for planners. Scale is part of the problem. TMC has:

- 740-plus acres with more than 100 permanent buildings
- 20 miles of private and public streets and roadways
- 42,430-plus parking spaces

(Nine thousand of those parking spaces are located in the one-block-wide profit zone, with at least 5,700 more planned within the next three to five years.)

Considerations at work in this dense urban area include:

- Getting the employees, visitors, students, and patients into the area via highway exits and city streets (and back out again);
- Encouraging commuters and visitors to use vanpools, METRORail, and buses (the latter two of which restrict traffic flow);
- Strategically locating full-day commuter parking versus hourly visitor parking;
- Offering directional signs to help unfamiliarized visitors find their destinations; and
- Expanding roadways and intersections to handle all of the current and projected traffic.

In its off-street parking ordinances, the City of Houston mandates a parking count based on the size of the building served. This corridor has about the right average of three-and-a-half spots for every 1,000 square feet of professional or medical office building. However, the one-size-fits-all ordinance does not take into account the corridor's proximity to mass transit, the high cost of the real estate for surface or garage parking (including the cost premiums for stacking these garages over eight levels), or the unfortunate reality of gridlock.

It is this last reality that has the planners within TMC emphasizing a mobility strategy learned from other urban areas with large health care centers. Rather than encourage parking close by for those other than visitors and physicians, the plan is to position mass transit or shuttles to force staff members to park at the periphery—often with monthly parking fees. This strategy reduces the number of parking spots on valuable and expensive land and also minimizes the traffic load on the streets. Additionally, the planners are developing integrated way-finding that will minimize the lost number of visitors who slow traffic, as well as limit the general confusion of urban driving.

This area has the extra challenge of being sandwiched between a street that has had its traffic flow reduced (Fannin, with the rail line) and another street that will see only more development of parking structures in the future (Main). For years Houstonians have used primarily Main and Fannin as the means of access into the health science complex. With the increase of projects and their parking requirements, traffic on these streets will only worsen.

No major highways offer easy access to TMC. It is almost equidistant from U.S. 59, Loop 610 South, and Texas 288. From any direction city boulevards carry traffic to and from these highways, often through quiet residential neighborhoods or already congested commercial districts. Recognizing this emerging problem early in the 1990s, TMC realigned its strategy to encourage greater access from the east and south while working with local governments to improve or create new access from the highways.

In the corridor along Main and Fannin, however, the superloading of so many new parking entrances and exits with the existing parking areas will necessitate either: 1) more traffic control points (e.g., signals); or 2) a cadre of traffic police during rush hour (whenever that really is for the Medical Center). In a highly competitive health care market with multiple venues of clinics throughout the region, the keys to success for outpatient health care delivery are easy access and parking for the paying patients. It would seem that these keys are out of reach for this corridor just by the limitations of the existing arteries (and veins).

The success of these large projected patient care developments in the profit zone hinges on a strategy that might have to dramatically limit parking spaces, with the few remaining reserved for the outpatient visitor alone. At the same time, the medical staff would have to switch to some form of mass transit to get to the heart of the Texas Medical Center. In the car-centric city of Houston, where even recruitment for hospital staff hinges on inexpensive and nearby parking, this necessary good seems hard to fathom. ■

1

2

Modernism for the Masses

Foley's Department Store gave average Houstonians a window on the wider postwar world

BY STEVEN R. STROM

Writing in Paris during the 1930s, the German-Jewish social philosopher Walter Benjamin began work on a massive project to document the city's 19th-century material culture. Benjamin maintained that an examination of the already decrepit Parisian Arcades, the ür-shopping malls of Western culture, and of the products and goods sold to shoppers in the Arcades would reveal virtually everything about the material life of Paris in the 1800s. While the "Arcades Project," as it has come to be known, was never completed—Benjamin committed suicide in 1940 after the German invasion of France—Benjamin's ideas ultimately helped to inspire the study of material culture as an entirely separate discipline. In today's fashionable intellectual parlance, the discipline is increasingly referred to as the study of "things."

An enormous amount of information about the material, social, and cultural life of Houston in the mid-20th century is revealed by the goods, services, and civic activities provided by downtown Houston's Foley's department store, designed by architect Kenneth Franzheim and completed in 1947. Foley's became intimately intertwined with the lives of tens of thousands of Houstonians from the late 1940s through the early '60s, when population growth and suburbanization eventually combined to limit the influence that any single store could have in the city. During that economically expansive era, Foley's virtually defined for many what it meant to be a middle-class Houstonian. From the styles and colors of appliances that went into local kitchens, to the rows of some of the first television sets ever sold in the city, to the dreamlike conception of what constituted Christmas in hot, muggy Houston, Foley's was the arbiter of middle-class consumers' expectations and desires. For many years after the store's opening, its window displays were practically tourist attractions in their own right, particularly during the holiday season, when long lines of cars would slowly circle the block so passengers could view the store's show windows. Indeed, visits to Foley's made lasting impressions on postwar baby boomers lucky enough to accompany their parents on downtown shopping expeditions.

And it was not merely the sale and display of consumer goods that helped Foley's make such an indelible mark on Houston's social history. If any single building fit the mood of prosperous, post-World War II Houston in an architectural and design sense, this was it. Franzheim's modernistic exterior never would have made the impact it did without the accompanying interiors by famed industrial designer Raymond Loewy, but the combined efforts of the two men made nationwide headlines when the store opened in October 1947. Because of its many design innovations, Foley's looms large in Houston's technological history. Foley's quickly became a nationally known symbol of architectural modernity, intertwined at every level with the latest standards of industrial efficiency. In many ways, Foley's was one of the earliest antecedents of the wave of technological futurism that swept the United States after World War II. In the postwar popular mind, technology was good and more technology was better. Although the past is in many ways—to use historian David Lowenthal's phrase—a "foreign country," Foley's in those first years after the store's opening offers us a doorway to Houston's past and makes that past a great deal less

3

1. Architect Kenneth Franzheim (right) at the 1946 unveiling of the model of his proposed design for the new Foley's department store. Looking on from left to right are Federated Department Stores officials Maurice Lazarus, Max Levine, Robert Ewing, and George Cohen. With the construction of Foley's in 1947, Franzheim began a decade of outstanding architectural achievements in Houston, including the Prudential Building (1952) and the Bank of the Southwest building (1956). *Photo courtesy Houston Metropolitan Research Center, Houston Public Library.*

2. This shot of Foley's was taken the weekend before the store's grand opening, which took place on Monday, October 20, 1947. The store's six and one-half floors and basement covered slightly more than 11 acres in total area. During the opening ceremonies, Max Levine, the president of Foley's, announced to the waiting crowds that Foley's was "the finest department store that architectural skill and engineering genius could devise." *Photo courtesy Houston Metropolitan Research Center, Houston Public Library.*

3. Rendering of Foley's Main Street entrance show window, known as the vista window, which had a span of 105 feet and featured many spectacular theme displays through the 1960s. The delineator of this 1946 rendering was a young Thomas Greacen, who would go on to become a well-known Houston architect in his own right during the 1950s and 1960s after leaving Franzheim's office and beginning his own practice. *Photo courtesy Houston Metropolitan Research Center, Houston Public Library.*

4. Foley's garage on the store's opening day, with a line of cars waiting to park in the new structure. With space for 500 automobiles, the garage played an integral part in what the *Saturday Evening Post* dubbed "the super-duper mechanization" of the store, particularly with its mechanized conveyor belts that delivered goods from the garage to the store and customers' packages from the store to the garage. The parking garage also housed the store's heating and air-conditioning plants. *Photo courtesy Houston Photographic and Architectural Trust, Bob Bailey Studios Photographic Archive, Center for American History, UT-Austin.*

strange and remote. And for that matter, the store's history offers us a window into our present.

The last time a feature article about Foley's appeared in the pages of *Cite* ("The Incredible Shrinking Store," *Cite 23*, Fall 1989), author Bruce Webb's tone was decidedly downbeat, and with good reason. Foley's seemed to be emblematic of a declining downtown, or as Webb succinctly pointed out, "Main Street is mainly history." Today, however, Foley's finds itself in the position of being the last surviving major downtown department store, poised now to take advantage of downtown's revitalization and rebirth.

Following the end of World War II, Houston's department stores had an enormous spurt of growth, even though the slowing down in sales of consumer goods during wartime had scarcely impacted the booming Houston economy. In fact, from 1939 to 1949 Houston ranked No. 1 in the country in percentage gain for retail sales for cities of more than 500,000 people. Much of this gain was accounted for during 1945 to 1949, when pent-up consumer demands were finally met by factory owners who were now able to convert from the production of war-related items to the manufacture of consumer goods. In the context of the nationwide postwar economic boom, Houston's vibrant sales figures made the city a prime spot for retailers seeking to expand their mercantile empires.

In 1945, Foley Brothers Store—founded in 1900 by two nephews of William A. Foley, known as the dean of Houston dry goods merchants—was sold to Federated Department Stores of Cincinnati for $3.5 million. By the time Fred Lazarus, Jr., the head of Federated, visited Houston in 1945, Foley's had been the city's leading department store in sales since the 1920s. Lazarus was so excited by the possibilities for Houston's growth in the postwar economy that in May 1945, the same month that he purchased Foley's, he announced his plans to build a new $6 million store that would occupy the entire block bounded by Main, Travis, Lamar, and Dallas.

The new Foley's store soon came to symbolize all that was modern and futuristic in the popular American imagination, a role that Houston would play many times in the coming decades. The store was among the first large-scale, postwar construction projects and the first entirely new large department store to be built in the United States since 1929. Houston and the nation followed the development of the new store through newspaper and magazine accounts, which reported the progress of the massive six-story building. Stories of the construction were carried in periodicals as varied as *Business Week*, *Life*, *Progressive Architecture*, and *The New Yorker*. To many observers, the national interest in the project meant that Houston had finally arrived as a legitimate player among America's cities. And the timing of the new Foley's store could not have been better. As the World War II alliance between the United States and the Soviet Union quickly degenerated into a cold war, consumerism was increasingly represented as the best defense against Stalinism and communism.

Architect Kenneth Franzheim had made a name for himself in New York, Washington, D.C., and Houston as an exponent of Modernism, and he was highly attuned to the economic possibilities for architects in the postwar period, making him a perfect fit for the massive Foley's

4

5

6

project. Franzheim published an oversized book in 1946 titled *Post-War Planning: Houston*, which contained renderings of projects, both completed and proposed, to show future clients the crisp, clean architectural look that his firm was capable of achieving. Similarly, New York-based Raymond Loewy was the perfect designer for Foley's, as he was also well attuned to the enormous possibilities presented by postwar architecture. Loewy had read a 1944 study by William Snaith, his fellow designer and future partner, titled *The Store of Tomorrow*, prepared for the Associated Merchandising Corporation. Snaith, who would later serve as a Foley's design consultant, demonstrated that by maximizing mechanization, any store could cut costs. However, almost all existing stores were prevented from achieving this potential because of their inherent design flaws. Snaith maintained that a newly built store could maximize efficiency and profits by means of a utilitarian design scheme. Loewy was excited by the prospect of designing a new store and was certain that the functional utility of Foley's would "produce entirely new architectural forms."

In Franzheim's completed plans, the most abrupt departure from traditional department store architecture was the total lack of windows above the first floor, although massive plate-glass show windows ringed the store at street level. The store's exterior was faced with buff-colored Minnesota stone and matching brick. But beyond Franzheim's sleek exterior, it was Loewy's interior design contributions that did the most to establish Foley's reputation as a bulwark of functional Modernism.

Great care was taken to harmonize all of the store's color schemes, and Loewy insisted that every fixture in the store meet his standards. There were 5,619 different types of lighting fixtures scattered through the store. Escalators were specially made by Westinghouse to be 48 inches wide, giving customers a feeling of expansiveness, not to mention allowing them to carry more packages as they rode. Ceilings were dropped to a height of 14 feet on the first floor and ten feet nine inches on the remaining floors (much lower than usual) to allow for economical heating, lighting, and air conditioning. The lack of windows above the first floor kept out the harsh Houston sunlight and also contributed significantly to heating and cooling efficiency.

Sales departments were arranged to fan out from the escalators toward the perimeter of the building with related merchandise grouped in logical arrangements, an innovation that shoppers take for granted today. Supporting columns were spaced 35 feet apart, which gave greater flexibility in the arrangement of sales departments. In many instances, the wide spacing of the columns meant that entire departments were unbroken by a single column, contributing to the orderly lines of sales counters and display cabinets. Another unique sales aspect for the time was the grouping of all women's accessories on the first floor, which was laid with pink marble. Every aspect of the store's floor plans maximized the efficiency of crowd movement, while simultaneously plying customers' senses with the wonderful delights of consumerism.

One of Foley's most novel features was its six-story, enclosed, companion parking garage, located across the street from the Travis entrance, for few American buildings of any type had separate parking facilities at the time. In many ways, the garage was the cornerstone of the Foley's efficiency spree, since it played a pivotal role in the moving of merchandise and shoppers. In older cities, department stores were often scenes of great traffic congestion, with delivery trucks trying to unload merchandise and cars jamming adjacent streets in an attempt to find parking spaces.

The Foley's parking garage eliminated much of this potential problem by providing 500 parking spaces, and shoppers could avoid the street and the weather by traveling directly to the store through a pedestrian tunnel, one of the first in the city. Goods were delivered to the parking garage, and a conveyor belt took them to Foley's, where they then traveled by elevator to the appropriate department. Conversely, shoppers could place their purchases on another conveyor belt, sending them to the parking garage and their waiting cars.

It was only 19 months and 19 days from the Foley's groundbreaking ceremony on March 1, 1946, to the grand opening on October 20, 1947, and some of the construction statistics are still staggering. The store's price tag had ballooned to $13 million, the equivalent of more than $100 million today. The six-story building, along with its basement and parking garage, covered an area of more than 11 acres. More than 22,000 cubic yards of concrete; 3,500,000 bricks; and 1,500 tons of reinforcing steel were used for the store's construction. The electrical system comprised 225 miles of wire, which powered enough electricity to serve the needs of a city of 15,000 people. The air-conditioning system's 16 miles of ductwork conveyed 600,000 cubic feet of air per minute into the store, and the air was completely recycled every five minutes.

On October 19, 1947, the night before the grand opening, an elaborate dinner was held for such dignitaries as Jesse Jones and William O'Dwyer, the mayor of New York City, who reportedly referred to Foley's as "the store of tomorrow." This quote was widely reprinted in the press, which gave the new store's architecture and design rapturous reviews. After the formal ribbon-cutting the next day by Mayor Oscar Holcombe, carried live by several local radio stations, some 8,000 people poured into Foley's each hour on that opening day, and they were greeted by the store's 2,000 employees. Few Houston shoppers were prepared for what they saw, since almost all Houstonians were used to crowded, nonfunctional department stores offering a jumble of goods and limited selections. Model rooms with furnishings, three model kitchens, a tea room that served 200 people, a fully stocked drug store, a beauty salon with 75 hair dryers, an enormous soda fountain, a men-only restaurant accessible from the men's clothing department—the list of firsts for a Houston department store went

7

on and on. There were 135 separate fitting rooms for women on the third floor alone. From tropical fish to Top 40 records, the downtown Foley's carried practically everything.

Soon after the opening, the store was integrated into Houston's civic and social fabric. Red Cross, Community Chest, and cancer drives; scouting functions; and patriotic crusades all took place at Foley's. In 1950, as the cold war gradually intensified, a Crusade for Freedom display was mounted on the first floor, where visitors could sign a Freedom Scroll "to lift the iron curtain," and then view a replica of the Liberty Bell. Thousands of Houstonians signed the scroll during the first week of the display.

Not all of the activities sponsored by Foley's were so serious. The store regularly featured fashion shows and sponsored sports events, and in 1951 the first Foley's Thanksgiving parade (now sponsored by Washington Mutual) was held. This parade became a Houston tradition, drawing huge crowds to a downtown that customarily had been deserted on Thanksgiving Day. Foley's was also one of the largest sponsors of major civic events, including the Houston Symphony and the Fat Stock Show. And no holiday was complete for many Houstonians without a trip to Foley's, not only to shop but also to see the displays, exhibits, and decorated windows. Many thousands of Houston- and Gulf Coast-area children had their first glimpse of Santa Claus in Foley's elaborate Christmas village, which was usually followed by a trip to the adjacent Toyland.

The year 1950 marked Foley's 50th anniversary. Fittingly, that same year the American Institute of Architects awarded Foley's its national award for commercial architecture. The award was presented to Max Levine, president of Foley's, and Kenneth Franzheim. Throughout the 1950s and early '60s, Foley's continued to expand along with Houston. In 1955, four more stories were added to complete the store's current height, and Foley's continued to add updated products and sales departments to keep pace with increasingly sophisticated consumers. But as Houston grew and Foley's began to expand to suburban branches, the "store of tomorrow" was gradually subsumed by the "city of tomorrow," as Houston increasingly came to be identified with the Space Age. By Houston standards, where the past was almost always an unwelcome intrusion, a store designed in 1947 was hopelessly antiquated by the 1960s.

But it was Foley's that led Houston into the heady Modernism of the post-World War II years, and then was the first store to expose many Houstonians to the goods and services provided by modernity's industrial efficiency. Its functional beauty made it a beacon of Modernism for many years after its opening and a well-loved Houston landmark. Today, although Foley's is firmly anchored in a revived downtown and accessible to travelers on the METRORail, the store no longer occupies such a prominent place in the lives of many Houstonians. But unlike the Parisian Arcades, which were supplanted by the newly emerging department stores, Foley's survives as a viable commercial entity, providing all of us with a window into Houston's past, present, and future. ■

References:

Buck-Morss, Susan. *The Dialectics of Seeing: Walter Benjamin and the Arcades Project*. (Cambridge, Mass: MIT Press, 1989).

Ferry, John William. *A History of the Department Store*. (New York: Macmillan Company, 1960).

Franzheim, Kenneth. *Post-War Planning: Houston* (1946). American Institute of Architects Archives, RG 803, Box 213A, Folder 31.

Lancaster, Bill. *The Department Store: A Social History*. (London: Leicester University Press, 1995).

Leach, William. *Land of Desire: Merchants, Power, and the Rise of a New American Culture*. (New York: Pantheon Books, 1993).

McNair, Malcolm, P. and May, Eleanor G. *The American Department Store, 1920-1960*. (Cambridge, Mass.: Harvard University Graduate School of Business Administration, 1963).

Schomberger, Angela, ed. *Raymond Loewy: Pioneer of American Industrial Design*. (Munich, Germany: Prestel, 1990).

Webb, Bruce. "The Incredible Shrinking Store," *Cite 23*, Fall 1989.

5. Glistening new television sets portend the technological future in this 1949 photo. Foley's was the first Houston store to sell television sets in mass quantities, and many Houstonians saw their first television program while shopping at downtown Foley's. Station KLEE-TV (later KPRC-TV) went on the air on New Year's Day, 1949, so the birth of television in Houston virtually coincided with the opening of the new Foley's store. Large crowds would congregate around the flickering, black-and-white sets in Foley's radio and television department to catch a glimpse of the new technology during the medium's early years. After the commercial production of color television sets began in 1954, crowds gathered once again around the Foley's color TV displays hoping to catch a glimpse of Perry Como or Milton Berle in "living color." *Photo courtesy Houston Photographic and Architectural Trust, Bob Bailey Studios Photographic Archive, Center for American History, UT-Austin.*

6. Nighttime shot of Main Street display windows and storefront decorations at Christmas 1948. Foley's lavish window displays, which became a local sightseeing attraction in their own right each Christmas season, were the midcentury product of highly refined theories of department store window decorating that were first developed during the 1890s to 1910s. One of the principal theorists behind display windows in the United States was L. Frank Baum, author of *The Wizard of Oz*. Baum edited the influential trade journal *The Show Window* from 1897 to 1902 and founded the National Association of Window Trimmers. The rise of department store window displays coincided with the availability of electric lighting, which, combined with large glass windows and the use of vivid colors, showcased consumer goods to their best advantage. Foley's was well known for carrying its window displays to the level of an art form. The prediction by *Houston Magazine* before the store's completion that Foley's would be "the brightest eye-catcher in downtown Houston during the Christmas shopping season" proved to be highly accurate. *Photo courtesy Houston Photographic and Architectural Trust, Bob Bailey Studios Photographic Archive, Center for American History, UT-Austin.*

7. This photo of the women's handbags section on the first floor of Foley's, taken during the 1947 Christmas season, shows Raymond Loewy's original interior design scheme. Counters and displays could be reconfigured in many parts of the store for Easter, back-to-school, and other pivotal highlights in the retail sales calendar. At the far left, the down escalator from the second floor is visible. The store's escalators, manufactured especially for Foley's by Westinghouse, were the widest in the world when the store opened, and were specifically designed to enable women shoppers to carry larger and wider packages. Today, the escalators are one of the few Loewy design contributions still extant. In another notable innovation, the glass cases visible in this shot enabled shoppers to look directly at the merchandise. Traditionally, when department store customers asked a sales attendant for goods, the salesperson would pull the requested item from an enclosed drawer. *Photo courtesy Houston Photographic and Architectural Trust, Bob Bailey Studios Photographic Archive, Center for American History, UT-Austin.*

Planning and Chance

Great Fortune: The Epic of Rockefeller Center
by Daniel Okrent. Published by Viking, 2003. 544 pp., $29.95

Reviewed by Terrence Doody

When the financier Otto Kahn wanted an elegant new house for his great love, the Metropolitan Opera, he gathered a group of investors that included John D. Rockefeller II, and their eyes fell on a piece of midtown Manhattan owned by Columbia University. Columbia president Nicholas Murray Butler was eager to sell the property in order to finance a new campus in Morningside Heights. Butler got Columbia's new house, Kahn didn't get the Met's, and Rockefeller wound up with the center that would bear his family's famous name. The account of how planning and chance work (and don't work) together is the big story Daniel Okrent tells in *Great Fortune: The Epic of Rockefeller Center*. Okrent's book offers many other stories, including the history of the center's architecture, the mysteries of real estate, the power of money, and the even greater power of personality, all of which surface in his accounts of the characters who people this epic narrative. Some of these are truly great characters; Okrent is a powerful storyteller, and this is a terrific book.

John D. Rockefeller II is the most important figure in the book, and certainly the most interesting. H.L. Mencken called him John the Baptist—he was a teetotaler and Sunday school teacher—but everyone else called him Junior (which is almost all we need to know to guess what he was like). The burden of his father's imperial success made Junior timid, ill at ease, eager to lose himself in the million details, and brilliant at delegating responsibility to powerful men who knew their places in the Rockefeller cosmology.

Just as compelling a character, though perhaps simpler, is the architect Raymond Hood. Working for the son of the novelist William Dean Howells, Hood did the winning design for the Tribune Tower in Chicago in 1922. John M. Howells took most of the prize money, but he did give Hood his share of the credit. Hood did even better: He knew Eliel Saarinen's second-place design was superior to his own, so he learned all he could from it, and applied the lessons to later projects such as the American Radiator Building (New York, 1924) and the Daily News Building (New York, 1930). Okrent has the highest praise for these two works (but no pictures of them, and not enough pictures of anything he writes about) and makes them his primary evidence that Hood was not by temperament a maestro but a thorough pragmatist. He believed that "Utility produces beauty" and would have been perfectly comfortable with the formulation "Form follows finance." He was a great architect who had almost no ego and absolutely no theories. And although Philip Johnson included Hood's McGraw Hill Building (New York, 1930) in the Museum of Modern Art show that defined the International Style, Hood was as unimpressed and unconcerned as he was by Lewis Mumford's performance. Okrent calls Mumford a Savonarola because he hated Rockefeller Center as it was going up (as almost everyone else did) then recanted and decided he liked it (again, as almost everyone else did), but without explaining or apparently remembering his earlier views. In one of the book's best asides, Okrent reports how much Le Corbusier, who hated New York City, loved Rockefeller Center—so much that he endowed it with "that most precious gift for ambitious architects: a theory."

Although Hood was the lead designer, many other prominent architects worked on the huge project team, and often later took full credit. Okrent, however, gives a large share of responsibility for the center's success to the developer John R. Todd, the project's CEO and enabling visionary. Todd was as brilliant as Hood and a much more imperious personage. When Junior asked how much of his time he was willing to devote to the project, Todd said, "All of my time. One-half on the job and one-half as far away as trains and steamers can carry me, to places where I can get the hair out of my eyes and a clearer and better view of things." Todd's authority was responsible for every aspect of the building's realization, from the start through to its completion and then to the way in which clients were strong-armed into tenancy. The project was massive in every respect; the Depression made it more significant; and the early failure of its rival, the Empire State Building, made its success a fable whose moral was how to do things right. The details of the process are endless, and Okrent keeps us turning the pages for news of every one of them.

The matter of the second half of the book, however, is not quite as compelling. Stories of filling the building and turning it on are not as interesting as tales of the project's growth out of a "six-year charrette." Hood's realization that this skyscraper was not going to have a single street-side façade and his understanding of how to use setback laws to shape volume seem of more lasting value than solving the problem of the Sixth Avenue El. And the star characters of the book's second phase are of a lesser magnitude. Donald Deskey's elegant, influential Art Deco interiors are beautiful, but not as historically important as the center's setting and function. And while Samuel Lionel Rothapfel, like the Swiss hotelier Cesar Ritz, became a brand name himself—he was called Roxy, and Okrent calls him the Johnny Appleseed of movie theaters—the catastrophe that defined the grand opening of his Radio City Music Hall is this epic's moment of farce. But there's another angle here. If Hood and Todd were perfect partners, Roxy and Junior may have been dark twins. Though he was a teetotaler, Junior wasn't entirely abstemious: His summer place in Seal Harbor, Maine, had 107 rooms, 44 fireplaces, and 22 bathrooms, and Okrent hints that Riverside Church, one of Junior's great philanthropic ventures, is a Roxy-like cathedral.

Junior's philanthropy is important to his personal story; it is his conscious reparation for his father's ruthlessness. He funded, in addition to Riverside Church, the rebuilding of the cathedral at Rheims, Colonial Williamsburg, the Cloisters, and (through his wife, Abby) MoMA. Building Rockefeller Center also created a huge number of Depression jobs, and Junior was as sympathetic to labor as a Rockefeller could be. However, the need to fill the center led to practices that Okrent says come right from the Standard Oil playbook, such as buying other buildings, evicting their tenants, and forcing them to rent in Rockefeller Center.

Great Fortune is in part a family biography. Second son Nelson Rockefeller receives a lot of attention as the story moves on; after all, he is the one responsible for realizing the center as the family's flagship. But Okrent's best story about him is not exactly to his credit. Nelson and his mother both loved the work of the great Mexican muralist Diego Rivera, and they commissioned him to create murals in the center's lobby. Rivera, as every other schoolboy knew, was a Socialist and saw this project as an opportunity to place a critique in this temple of capitalism. The Rockefellers sold tickets to the public to watch Rivera paint! But when he wouldn't remove Lenin's face from the allegory, they paid him off and tore down the wall. The question remains: Who was more naive in all of this than whom? Did the Rockefellers think their money could buy everything? Did Rivera think that art will always triumph? It is fun for the rest of us to contemplate how great a space such naiveté occupies in egos of this magnitude.

Okrent has two final statements about the meaning of Rockefeller Center. The first has to do with its relation to Junior. "If Junior ever saw [it] as his own triumph," Okrent writes, "he never said so. His natural diffidence would not have allowed him to brag. His self-image would have made him reluctant to exalt the success of an endeavor that may have begun with a socially beneficent objective [a new Opera house] but, through two decades of great fortune, had concluded in a thoroughly commercial success." After its completion, Junior said, "I really belong in Williamsburg."

In his second and more important conclusion, Okrent writes, "Why had none of the scores of office or cultural complexes all over the country, every one of them inspired by Rockefeller Center, even approached the original's aesthetic, commercial and—there's no other word for it—emotional success?...a point vividly illustrated barely a mile uptown, amid the desolate daytime expanses of Lincoln Center," the home that Otto Kahn originally wanted for his beloved Met. "Rockefeller Center's placement, right in the heart of...the city's grid, made it real in a way that, say, a development never could be." It is more than another building or destination; it is, Okrent writes, "organically, the city itself."

Great Fortune wasn't built in a day, but it suggests on every page that Okrent, despite the effort spent researching and shaping his story, enjoyed himself immensely, and his pleasure is now ours. Moreover, as we watch the World Trade Center being rebuilt, with all the conflicting demands as to what it is to be and do, this is a good book to have in hand to think with.

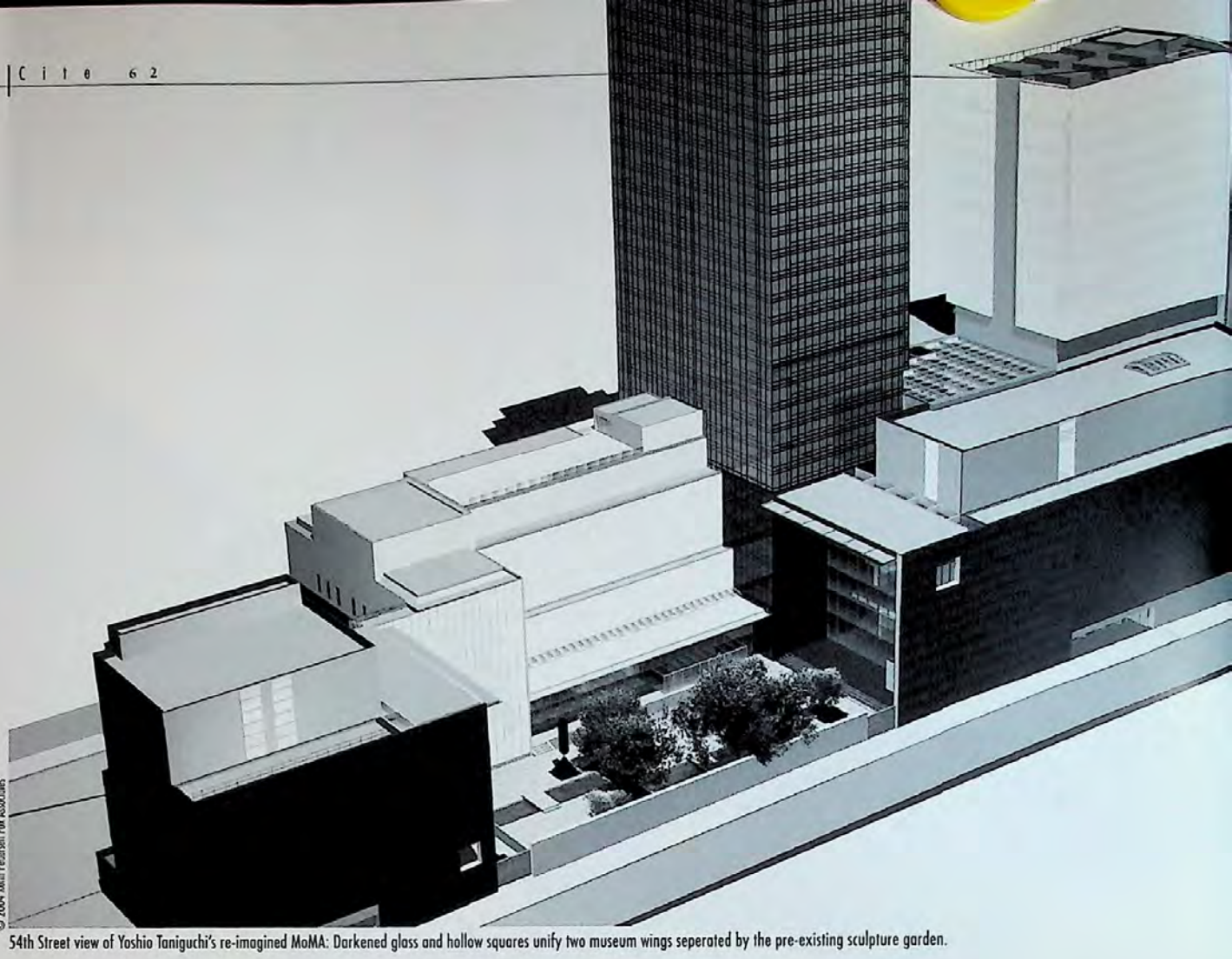
Womb Chair and Ottoman, Eero Saarinen, 1948

The Shock of the New MoMA

Taniguchi: Nine Museums, essay by Terence Riley. Published by Distributed Art Publishers, 2004. 204 pp., $60

The Architecture of Yoshio Taniguchi by Yoshio Taniguchi. Published by Harry N. Abrams, 1999. 282 pp., $125

Reviewed by David Hay



54th Street view of Yoshio Taniguchi's re-imagined MoMA: Darkened glass and hollow squares unify two museum wings seperated by the pre-existing sculpture garden.

Harried New Yorkers, looking for a short-cut between 53rd and 54th streets, may well head for a walkway that doubles as the lobby of Yoshio Taniguchi's newly conceived Museum of Modern Art. If they do, they'll be surprised midway through to discover a light-filled atrium, seven stories high. A multistory glass façade to the east will then draw their eyes toward the museum's famous sculpture garden. And they will run head on into some very contemporary art. Many of the treasures that belong here—for example, Cézanne's The Bather—are now in galleries on the upper floors. What is deemed to be cutting-edge "modern" sits right above the lobby, with some works visible from below. The shock of the new—if any—confronts the visitor right away. Even the unwitting pedestrian seeking a shortcut.

This heightened interaction with the city—windows in the architecture and photography galleries afford views of nearby skyscrapers—exemplifies an urbanist stance that is a throwback to a period of optimism in architecture. Indeed, Taniguchi's sophisticated design is a conservative reworking of Modernism, and it helps explain why he was chosen for the project. This is a museum that came of age at a time when Modernist architecture was at its apex. Now, with Modernism in danger of becoming merely a historical style, the museum found in Taniguchi a practitioner who has advanced this design strategy's reach in formal, even sculptural terms, playing with mass and material, but who firmly rejects the whimsy of contemporary fads.

But to judge Taniguchi solely from his work on the new MoMA, a commission that involved making a workable museum out of a group of existing buildings, would be grossly unfair. Which is why two books on the architect, one five years old and another just released, are highly significant. *The Architecture of Yoshio Taniguchi*, with a forward by his Japanese contemporary Fumihiko Maki, provides a handsome overview of his major projects in Japan. *Nine Museums*, with an introduction by Terence Riley, the curator of the Department of Architecture and Design at the museum, concentrates on the architect's justifiably famous designs in this area.

In *Nine Museums* Riley describes the major influences on the architect. He plays down, perhaps too forcefully, Taniguchi's introduction to Modernism at Harvard's Graduate School of Design since, he argues, the architect's time there coincided with a decline in Modernism's cachet. Taniguchi was the son of a powerful architect, Yoshiro Taniguchi, whose own design sensibility owed much to his love affair with construction. (He insisted his son train as a carpenter.) There is also the architect's fealty to the traditional Japanese conception of museums as places of quiet repose and respect for art. Finally, Riley argues that Taniguchi's passion for expressing materiality in his forms gives him a direct affinity to Mies van der Rohe.

Fumihiko Maki's much less scholarly take in the older volume—he's been a friend of Taniguchi's for years—allows him access to the architect's mind. In his discussion of Taniguchi's skill in balancing centripetal and centrifugal elements, Maki contends that seeing structures as forms in motion is vital to understanding any Taniguchi building.

Although both texts hint at how Taniguchi applies this mix of ideas, it is left to the photos, particularly in *Nine Museums*, to show us exactly how he articulates spaces.

Taniguchi likes to use both light and the massing of heavy materials, including such favorites as dark green Vermont slate, to create a sense of tranquillity in his museums. (He uses this slate on the entry staircase at MoMA.) The greater the solidity, the more heightened the sense of interior quiet. He uses screens—for example, a long granite partition that serves as a lakeside façade and courtyard wall at the Ken Domon Museum; and the glorious screen that hangs over the front of his Gallery of Horyuji Treasures at the Tokyo National Museum—to add a depth perspective to his forms, as well as to provide diffuse light for the galleries inside. His almost playful use of planes, both vertical and horizontal, serves to bring some of these heavy masses together. Indeed, the 54th Street façades of the new MoMA, each sheathed with darkened glass and containing a hollow square, work to forge a unity between two wings separated by the sculpture garden.

Taniguchi's effort to "sculpt" his strict forms is often expressed through juxtaposition. His Shiseido Art Museum joins a circular form to a square structure; inside he reverses them by placing a circular gallery inside the square section of the museum and putting the rectangular galleries in the adjoining circular element.

Nine Museums briefly describes how this design sensibility was brought to his plan for MoMA. Here Taniguchi had to work with the original Philip Goodwin and Edward Durrell Stone structure built in 1939, and the sculpture garden from 1953 and the 1964 east wing, both designed by Philip Johnson. Sitting in the middle of the site—the Drake Hotel to the west was bought and demolished—was a large impediment, Cesar Pelli's 1984 Museum Tower.

Taniguchi decided that engaging the surrounding skyline, including the Pelli tower, offered a way of unifying the interior experience. (The galleries run through all the structures except the education wing.) So he added numerous windows throughout. Knowing that New York City is all around reminds visitors, no matter which wing they are in, that they share the same space.

The light pouring in affords a sense of peace that is a Taniguchi trademark. By opening up the spaces, and with such gestures as the flowing staircase between the fourth and fifth floors, the enclosed "forced march" aspect of the earlier remodels is gone. On a smaller scale, Taniguchi has floated the display walls of his new exhibition galleries away from the museum walls, adding yet another plane.

But in many ways, the MoMA redesign remains a limited expression of Taniguchi's sensibility. There is only so much an architect can do to unite a set of relatively disparate structures. When he starts from scratch, Taniguchi's ability to balance forms in order to create a sense of serenity is unparalleled. Thanks to these two large volumes on the architect, this legacy is now readily accessible.

Practical, progressive items for the home, circa 1950. Foreground: Eero Saarinen's Womb chair.

The Simple Life

Mid-Century Modern Revisited: Design 1943–1953
Brazos Projects
September 24–November 28, 2004

Reviewed by Kelly Klaasmeyer

In the 1955 movie *The Tender Trap*, Debbie Reynolds plays a young actress whose overriding goal in life is to find a husband. As her character puts it, "A career is just fine, but it's no substitute for marriage."

But this retrograde, cliché-ridden character has decidedly progressive taste in furniture. In the movie, Reynolds visits "The American Home Show," featuring "exciting innovations in homemaking." She's planning for her married life with an as-yet-undiscovered groom. Standing in the middle of an ultramodern model living room, Reynolds drafts a series of men to sit in and try out an Eero Saarinen Womb chair. When her agent (Frank Sinatra) arrives to fetch her, she enlists him as well. Sinatra, a man she had previously dismissed, becomes her intended matrimonial target when he sits in the Saarinen chair. Reynolds cocks her head to the side with a stunned look on her face. Suddenly, sitting in the high-design white chair, Sinatra looks like her version of a husband.

Today it seems odd—the traditional values Reynolds espouses manifesting themselves in the decidedly more up-to-date Saarinen Womb chair. Aside from the chair's motherly moniker, Reynolds's objectives seem better suited to the wing-back armchair from *Father Knows Best*. But the lust for the modern wasn't a Hollywood fabrication. The scene is revealing because it shows how modern furniture had inserted itself into the popular culture of the 1950s. Modern furniture had stopped being suspect and avant-garde, and instead was being seen as practical and progressive, befitting an era that looked to science and technology to eventually solve everything. If a Womb chair didn't exactly make it into every family's home, modern-influenced designs did appear in more accessible (read: inexpensive) lines such as Heywood-Wakefield and managed to turn up even in remote Midwestern hamlets (if my grandparents' living room was anything to go by).

"Mid-Century Modern Revisited: Design 1943-1953" at Brazos Projects presents choice objects from the early years of mid-century modernism. The practical, low-cost design origins of many of the pieces can be traced to an elegant but enigmatic molded plywood object hung on the wall in the midst of chairs, coffee tables, and ceramics: a leg splint.

The splint was included in the show because of its pedigree; Charles and Ray Eames designed it. A precursor to the Eameses' famed molded plywood furnishings, the splint was developed during World War II to address wartime metal shortages. In devising their solution to the problem, the Eameses also developed a technique for mass-producing molded plywood furniture.

Modern design at mid-century found the beauty and efficiency in low-cost and un-exotic materials. Feeding growing postwar consumer appetite, the pared-down forms fit neatly into the pared-down, low-slung 1950s houses being put up at an astonishing rate. While the Bauhaus movement, with its goals of integrating art and technology, is an obvious precursor, modernism at mid-century leaned toward warm, curving, human-conscious forms. The way the splint was designed to cradle the leg is mimicked in the way the Eameses' 1945 molded plywood dining chair gently curves to the back—and the backside.

The Eameses' 1946 screen is a virtuoso display of molded plywood. The beautifully, organically undulating narrow panels have a warm wood grain and are held together by unobtrusive fabric hinges. The wood mimics the folds of a curtain, and the whole thing can collapse neatly together. In the show, the screen serves as a backdrop for another wonderfully organic object, the black version of Eero Saarinen's enveloping Womb chair, complete with ottoman. It still looks marvelously contemporary almost 60 years later.

In the exhibit's living room vignette, the chair is partnered with George Nelson's glowing, podlike Bubble lamp and the curves of a rare, early, natural wood version of Isamu Noguchi's iconic coffee table. The glass that rests on the crosspiece and point of the base has a satisfying slablike feel to its softly rounded angles. The thick edge is a deep emerald green that plays beautifully off the reddish tones of the wood.

Especially seductive is the exhibition's selection of everyday objects. Russell Wright's tableware brought modern design into millions of American homes—I'm certain Debbie Reynolds's character would have listed it on her bridal registry. Wright's ruby-red Pinch tumbler (c. 1953) has a rounded bottom and sides indented as though someone had pressed a thumb into the molten glass. Looking at it in the display case you can imagine the satisfyingly smooth weight of it in your hand. Farther down in the case, a pale earthy green china carafe has a delicate little rounded spout at the base of a smooth columnar neck that doubles as a handle. It's part of Wright's c. 1946 Casual Dinnerware. One wants to caress all of them, especially the charcoal-gray covered vegetable dish. When was the last time you felt that way about tableware?

But Wright was by no means the only one creating organically inspired forms for the table. Eva Zeisel's syrup pitcher has sensual curves. Who knew a syrup pitcher had that kind of potential? The vessel's tuliped edge is perfectly designed to fold over the juncture between your thumb and forefinger, allowing for a precisely molded grip. Zeisel's salt and pepper shakers are almost animated; they have seal-like bodies, with hefty rounded bases sprouting necks ending in smooth heads. The smaller green shaker snuggles into the curve of the larger black shaker. It's a decidedly empathetic collection of tableware.

The exhibit's economical and sensitive presentation of a choice selection of objects brings home the appeal of mid-century design. You can even—almost—understand Reynolds's crazed zeal for housewifedom. Surely, in a home filled with this furniture and these objects, life would be simple, elegant, and beautiful.

© Houston Chronicle

Classes were not yet in session when the cafeteria roof collapsed at Houston Gardens Elementary School in 1996, just two months after a bond issue to pay for its repair was defeated by voters.

The High Cost of Low Maintenance

BY RIVES TAYLOR

What is the cost of our public infrastructure? Is it measured solely in capital—in design, construction, and furnishing costs? Or does it also include the cost of interest and real estate? Does it include the cost of operations and energy over the lifetimes of the buildings? Does it include the costs of neglect?

Only after the most visible disasters befall our public edifices is the tax-paying public reminded that our range of public works is aging rapidly. Observers of Houston's underground water network, the locks and dams of the Mississippi, and the roads and bridges of the federal highway system regularly report severe damage to these structures. In our own community less than ten years ago, the Houston Independent School District's building inventory was collapsing around students and faculty (see image). These dramatic failures led to a volunteer effort on the part of local architecture and engineering professional associations, followed by an emergency bond issue and a rapid renovation-and-rebuilding campaign. Harris County Judge Robert Eckels recently was reported to be investigating the condition of county facilities (which in some cases is far better than those of the state, city, or federal edifices). The problem all around is inadequate funding to maintain buildings, compounded by a lack of planning to handle the inevitable results of such deferred maintenance.

What is this deferred maintenance problem? For any road or building, public or private, as soon as capital dollars are fully expended on construction, other operational dollars (often more difficult to obtain) need to be spent to energize, cool, housekeep, secure, and (too often minimally) maintain it. But whether the money is there or not, nothing halts the march of time—or the weather, or the results of normal wear and tear.

Most older institutional buildings were solidly constructed for at least 50 years of life, some even more. Still, some components of those buildings, particularly roofs, wall systems, and mechanical systems, cannot last that long. So, as the countrywide 1960s and 1970s building stock ages, either the lives of individual buildings come to an end while they are still in heavy use, or increasing attention (and money) must be paid where public agencies did not plan for expenditures before. The public realm also includes a host of more recent low-bid constructed projects whose life span is much less robust—say, ten years or less before major failures occur. There have been some reports in the national press that at the state level across the country, we have in excess of $100 billion of critically problematic buildings.

In the meantime, facility operation teams make do. This maintenance style becomes complicated when the failure of one system (e.g., a water leak in a pipe, roof, or window) damages another part of the facility (e.g., mold and mildew in the wall below the leak). Public facilities also face the evolution and changing uses that all organizations must confront—once again this need to adapt is often put off or partially, and often hastily, completed. (True-life example: Office space is converted to laboratory space, and files, desks, and office workers are relocated to a closet.) Finally, public buildings can be grandfathered for only so long—life-safety systems, such as fire suppression and exits, eventually must come up to code. This interrelated mix of facility shortcomings increases with a building's age, and is made more problematic when facilities are poorly designed in the first place.

The deplorable condition of our community's buildings is daunting, if not terrifying. One snapshot shows the depth of the problem: A 2002 report gathered by the Texas Higher Education Coordinating Board noted that 4 percent of the total value of all university and college buildings has major deferred maintenance issues (http://www.thecb.state.tx.us/CampusPlanning, see reports). In other words, the state of Texas in 2002 contained $14.4 billion of higher education facility assets, and $542 million in repairs were needed to maintain their functionality and safety. That figure is roughly equivalent to the cost of rebuilding the University of Houston Central Campus every year. The true rude awakening, however, is the fact that in 2002 the state of Texas found only $105 million, or 20 percent of the funds, to fix these issues.

Where can that remediation money come from? In most public institutions, unless disaster strikes (attracting legislative attention and funding), the money comes from internal facility funding sources, usually only 8 to 10 percent of an institution's budget. In Texas, as in so many states hit by recent financial setbacks, the directed state money just to maintain and operate facilities—much less to repair aging and unsafe situations—has seen major budget reductions. Furthermore, these same dollars have to meet staff and energy costs, which have also risen. This comes at a time in Texas when the huge quantity of mid-20th-century public buildings needs even closer attention.

The real calamity is that deferred maintenance costs increase exponentially over time, yet tend to be ignored in favor of visible cosmetic repairs. National facility associations target a conservative annual expenditure of 8 percent of appraised value as the minimum necessary to maintain a real estate asset. When a house owner looks to maintain a $100,000 home, will he spend $8,000 per year, every year, to maintain the value of the building? If the owner will spend that figure, will he choose a new kitchen or a new roof for the expenditure? We often choose to maintain what we see and touch every day over the unseen infrastructure, whose failure could bring the whole house down. With the constant ravages of time and weather, and a continually deferred response to repair, failure multiplies with failure. The first year $8,000 should be spent; if it is not, the second year and each year thereafter will be even more expensive. The owner who waits three years before investing in maintenance might require $10,000 a year, every year. Both the behavior and the unintended consequences scale easily to the public realm, often with numerous owners or stakeholders involved.

The snowballing price of all that deferred maintenance for the entire retinue of local, state, and federal structures is compounded by new building practices as much as by operational practices. Public buildings often do not receive thorough, high-quality design attention. The mantra of fast and cheap construction, and the attendant low fees for design, spell doom for longevity. Our growing problem first needs to be recognized for what it is: a progressive decay that requires funding to be reversed. Finally, the public realm needs to place value on life-cycle cost thinking—that is, what is spent on the building, its staff and its operations over 50 years—as opposed to fixating on low first or construction costs delivered at breakneck speed. ■

TURNER CONSTRUCTION COMPANY OF TEXAS

SEYFARTH SHAW

Size - 23,000 SF
Schedule - 12 Weeks
Completion - February 2004

LEHMAN BROTHERS

Size - 22,000 SF
Schedule - 10 Weeks
Completion - March 2004

CONOCOPHILLIPS AVIATION

Size - 5,200 SF
Schedule - 14 Weeks
Completion - August 2004

SPENCER STUART

Size - 11,500 SF
Schedule - 10 Weeks
Completion - December 2004

Thanks to our clients and partners in the Houston community for making 2004 a success!
Gensler, Jones Lang LaSalle, PBK Architects, Spencer Stuart, Seyfarth Shaw, Lehman Brothers, ConocoPhillips, PDR Architects, Environments Group, WEMED, Kelman Technologies, AETNA, Continental Airlines, Brooks Brothers, Schoenfield Securities, Ernst & Young, Wachovia, Hines, Houston Convention Center Hotel Corporation, Sam Houston State University, Cypress Fairbanks Independent School District, University of Texas Medical Branch - Galveston, Montgomery County, Hellmuth, Obata + Kassabaum, Kendall Heaton, Coca Cola, 5th Ward Church of Christ, DMJM/Rottet, Trammel Crow, Simon Property Group, Lockwood, Andrews & Newnam, F&S Partners, PGAL, RWS Architects, Galleria, Permasteelisa, Marriott Sugarland Hotel, Kenneth Park Architects, John Borrelli Architects, The Woodlands Operating Company, Equity Offices, and Northwestern Mutual.

Turner ≡ Interiors

4263 Dacoma Street
Houston, Texas 77092
Chris Beck, Branch Manager

713.840.8441
www.turnerconstruction.com/houston
Jim Barrett, Business Development Manager

Rice University
Rice Design Alliance - MS 51
P.O. Box 1892
Houston, Texas 77251-1892

T20-229**********5-DIGIT 77025
MR. DAVID J. FITTS
2802 LINKWOOD DR
HOUSTON TX 77025-3810