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Make No Small Plans

Cities can only be saved through regional planning shared by city and suburb.

This month’s focus on urbanism reminds me how low my own city, Washington, D.C., has sunk. Today, D.C. should stand for Dysfunctional City. Since 1990, 45,000 people have fled the city, 13,000 over the past year alone. Businesses have moved to the suburbs, taking tax revenues with them. City services have deteriorated, crime has increased, schools are failing. Meanwhile, the D.C. government is on the verge of fiscal collapse, while the mayor, Congress, and a new financial control board bicker over ways to shore it up. The city is in such dire straits that some have proposed returning Washington to Maryland, from whence it came 205 years ago.

Emblematic of the city’s problems is a newly released plan for its monumental core. Prepared by the National Capital Planning Commission, a government agency responsible for managing the federal presence in D.C., the 28-page document ignores Washington’s pressing social and political problems, exacerbating the city’s division between federal and nonfederal.

As its title, “Extending the Legacy,” suggests, the plan recommends physical improvements based on the urbanism of L’Enfant and McMillan. Highways, railroad tracks, and bridges should be removed or replaced. Streets, waterfront, and transportation systems should be upgraded. The report, however, does not suggest how to pay for these improvements, or the museums and federal offices that would extend into Washington’s neighborhoods and presumably help the local economy. And no mention of jobs, schools, services, and urban flight. The plan addresses Washington’s monumental core as if it existed in a vacuum.

The $1.7 million spent on this glossy report would have been better invested in a meaningful regional plan for Washington in relation to its edge cities and suburbs in Maryland and Virginia. The federal government should encourage the National Capital Planning Commission to join forces with local authorities such as the Metropolitan Washington Council of Governments, which has already taken small steps to address regional land use and transportation.

Washington might well take a lesson from New York City’s Regional Plan Association, which just released its third regional plan after five years of study. Called “A Region at Risk,” the 245-page document forcefully outlines the daunting problems confronting the aging New York-New Jersey-Connecticut metropolitan area, and proposes ambitious solutions to improve its economic competitiveness and quality of life. These solutions range from new commuter rail services and urban parks to school finance reform and literacy programs. The plan also suggests ways of governing and financing improvements, such as a tri-state infrastructure bank to direct taxes toward transportation investments throughout the region.

The New York plan frankly warns that if immediate action isn’t taken, one of this country’s most historic and diverse urban areas will suffer “a long, slow, potentially irreversible and tragic decline.” In the 1980s, it points out, the metropolitan areas that grew the most rapidly had central cities that also expanded. Today, suburb, edge city, and downtown form an interdependent network that shares a regional economy. Ignore the decline of the inner city, the report warns, and the suburbs will inevitably decline, too.

Few North American cities have successfully established long-range plans to cope with large-scale urban problems. Portland, Oregon; Seattle; and Toronto have, and it’s not surprising that their downtowns are healthy and hospitable. They wisely recognize that municipalities, counties, and states must cooperate to ensure the future of urban economies and environments. Make no small plans, they argue, so that cities remain vital.

—Deborah K. Dietz
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Letters

AIA break
Your break with the AIA will benefit your readers, who are the true patrons of architecture. Perhaps ARCHITECTURE can now examine the AIA from arm's length and level the same balanced criticism at the AIA as is currently directed toward the subjects of your articles.

George H. Schaef er, AIA
Horsham, Pennsylvania

Gold medal outrage
It is outrageous that the AIA has decided not to award a gold medal for this year, and your matter-of-fact mention of this is equally astonishing (ARCHITECTURE, January 1996, page 31). Are we to believe that no architect alive or deceased was worthy of this honor? If so, what is the state of our profession?
The most obvious recipient, the most gifted of 20th-century architects currently practicing, was bypassed yet again—Paul Rudolph. His career spans decades of innovation, creativity, and education. Rudolph has designed and built every conceivable building type and invented a few along the way. His manipulation of interior space and light is legendary and beyond the reach of most professionals. He is celebrated worldwide. To not have recognized Rudolph is one thing, but to skip a year and name no recipient of this honor even among the finalists is shameful. When will this wrong be righted?

Preston T. Phillips, AIA
Bridgehampton, New York

Federal grandiosity
Perhaps the AIA's greatest failing is its relentless effort to improve the welfare of architects by lobbying for government handouts in the form of over-bloated public works projects. In an era of soaring government deficits and record-high taxes for corporations and families alike, the promotion of grandiose, $300-per-square-foot federal architecture is fiscally and civically irresponsible. Furthermore, the fact that most federal commissions are awarded to well-known architects, in a shameless effort to avoid public resistance and keep the gravy train flowing, is morally and ethically repugnant.
The AIA would better serve its members by promoting the government's fiscal responsibility, thereby avoiding the national economic collapse that is imminent if current trends in spending continue. Such a collapse would definitely halt all private-sector capital improvement, where the vast majority of architects earn their living.

Daniel S. Kirby, AIA
Foster City, California

Peer imbalance
"Federal Review" (January 1996, pages 123-127) covertly reinforced the old saying "The more things change, the more they stay the same." Our of the 16 architects selected for the "peer" review group, only one of them is female. Is this ratio consistent with the issue's theme, "Federal Architecture: A New Era"? If so, are female professionals to be included? Why was Margaret McCurry the lone woman?

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Circle 17 on information card
chosen as peer, and what does this say to females interested in pursuing a career in architecture? Statistics aside, the group photograph also conveys an unsettling message, with McCurry distanced from the camaraderie of the good ol' boys club.

David Anthone
U.S. Department of the Interior
New York City

Selection criteria
As your issue on federal architecture indicated, selecting architects for important commissions has become one of the privileges and responsibilities of a dean of a college of architecture. What guides us in the selection process?

There are four criteria: command of the building type, professional trustworthiness, grasp of the context, and ability to create culturally significant artifacts. Each may be the dominant concern of different members of the committee.

The user—judge, librarian, or curator—will want an architect who is intimately familiar with the best current practice, and will often prefer someone who has actually designed an example of the building type. The owner, or agent, will want an architect who will finish on time, on budget, and without litigation.

The community representative will want a building appropriate to the cultural context and climate. And the spokesperson for architecture—often the role of the dean—will want someone who can be trusted to create a contribution to the culture of our time.

These criteria must be addressed in the response to the RFQ, and in the interview (if you are lucky enough to get that far). One of the questions you raised was how can new, younger designers break into the circle of those regularly selected for these commissions. I write the above in an effort to open the door a little wider.

John Meunier
Dean, College of Architecture & Environmental Design
Arizona State University
Tempe, Arizona

Historic courthouse
I am sending this photo of an even earlier courthouse than the 1735 one in your courthouse chronology (ARCHITECTURE, January 1996, pages 66-67). The Old Chester Courthouse in Chester, Pennsylvania, has been in continuous use since its construction in 1724, making it America's oldest public building still in use. While our commission has restored its appearance to 1790, this view shows much of what it looked like in 1724.

Gina M. Daoey
Pennsylvania Historical and Museum Commission
Harrisburg, Pennsylvania

Corrections
Kevin Spence, of the State Department’s Office of Foreign Buildings Operations (FBO), is only one of the project architects responsible for the more than 280 foreign residential projects of the FBO (ARCHITECTURE, January 1996, pages 115-117). Former FBO director Leland King created the Architectural Advisory Board (AAB), not panel; the AAB was honored with a Federal Design Achievement Award, not a Presidential Design Award.


Bern, not Basel, is the capital of Switzerland (ARCHITECTURE, February 1996, page 136).
Exhibitions

CHICAGO. "Contemporary British Architects," through May 5 at the Art Institute of Chicago. Contact: (312) 443-3600.


JACKSON, MISSISSIPPI. "The Palaces of St. Petersburg," through August 31 at the Mississippi Arts Pavilion. Contact: (601) 960-9900.

LOS ANGELES. "Franklin D. Israel," through May 26 at the Museum of Contemporary Art. Contact: (213) 626-6222.


"Lilly Reich, Designer and Architect," through May 7 at the Museum of Modern Art. Contact: (212) 708-9500.

Recent work of Dutch landscape architect Adriaan Geuze and Rotterdam's West 8, May 15-July 1 at StoreFront for Art and Architecture. Contact: (212) 431-5795.


"Building the Ballyhoo: Architectural Photography by the Wurts Brothers Company," through August 18 at the National Building Museum. Contact: (202) 272-2448.

Conferences

ANAHEIM. "A/E/C Systems" computer technology for the design and construction industry, June 17-20. Contact: (800) 451-1196.

ASPEN. International Design Conference, June 5-9. Contact: (970) 925-2257.


Cleveland. Fundamentals of commercial and industrial lighting, April 29-May 3, sponsored by GE Lighting. Contact: (800) 255-1200.

Denver. Construction Specifications Institute convention, June 28-30. Contact: (800) 689-2900, ext. 772.


Minneapolis. AIA National Convention and Exposition, May 10-13, at the Minneapolis Convention Center. Contact: (617) 859-4475.

New York. Interior Design Week, May 3-11, sponsored by ASID. Contact: (800) 338-4411.


St. Louis. Society of Architectural Historians annual meeting, April 17-21. Contact: (312) 573-1365.


Santa Barbara. "Green Building Now," June 7-8, cosponsored by AIA and the Sustainability Project. Contact: (805) 963-0583.


Competitions

Glenwood, Illinois, village hall and town square design competition. Registration due April 30. Contact: (708) 758-8038.

Houston historical marker design competition, sponsored by the Rice Design Alliance and the Greater Houston Preservation Alliance. Registration due May 1. Contact: (713) 524-6297.

James Marion Fitch Charitable Trust research grants. Deadline May 1. Contact: (212) 777-7800.

National Preservation Honor Awards, sponsored by the National Trust for Historic Preservation. Nominations due May 1. Contact: (202) 673-4039.

American Society of Landscape Architects annual awards. Deadline May 3. Contact: (202) 686-2752.


"Escape to Create," fellowships sponsored by the Seaside Institute. Deadline June 1. Contact: (904) 231-2421.


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The Ballpark at Arlington, home of the Texas Rangers, built with Vulcraft composite deck.
Design Unveiled for U.S. Embassy in Moscow

The beleaguered U.S. Embassy in Moscow is gaining new life with a renovation by Hellmuth, Obata & Kassabaum (HOK), unveiled by the Department of State last month. The original eight-story brick office block, designed by Skidmore, Owings & Merrill (SOM), was nearly completed in 1985 when it was discovered that Soviet workers had installed electronic sensors throughout the $23 million building. Construction was stopped on the office block, which anchors the southern end of a 10-acre compound.

HOK is incorporating the foundation, columns, and first six floors of the SOM building, and adding four new floors, gatehouses, an entry court, a winter garden, and a sculpture court. Unlike the introverted SOM scheme, the new embassy’s curved, west-facing facade gestures toward official Russian buildings on the Moscow River, and its glass curtain wall overlooks the Russian parliament. The building will be clad in light-colored limestone. Materials and construction workers will be imported from the U.S.

The project’s $240 million price tag is surprisingly cheaper than tearing down the 1980s structure, which will house “nonsensitive” offices. Scheduled to begin construction this summer, the embassy will be completed in 1999.—Heidi Landecker

Chicago Passes New Landmarks Law

Chicago’s abysmal record of preserving its world-renowned architectural heritage took a further nosedive when the city’s landmarks legislation was radically revised last month. The first casualty of these legal maneuvers was a 19th-century Queen Anne coach house, part of Chicago’s Hawthorne Place district, whose protection apparently lapsed for just a few hours on March 6. The house fell through bureaucratic cracks and was razed the next day.

At fault is the byzantine process for landmark designation. Only 110 districts or buildings in America’s first city of architecture have been accorded landmark status; 29 others enjoyed de facto protection while their official designations languished before a city council committee.

Until the city council passed a “house-cleaning” resolution in May 1995, the Commission on Chicago Landmarks recommended landmark candidates to the city council’s Committee on Landmark Preservation, which could approve, reject, or table the recommendation. Tabling would halt the process, but meanwhile the property enjoyed full protection until the city council voted on the recommendation.

The city council’s May resolution removed all pending legislation, voiding the tabled candidates’ prior protection. On March 6, the city council passed a new ordinance requiring the committee to vote on pending landmark designations within one year of the commission’s recommendation. If the committee votes for designation, the city council has one year to vote on final designation: if it fails to vote within the one-year time limit, designation is denied and all protection lost.

Harry Weese, whose 1973 efforts to save the Stock Exchange Building began Chicago’s preservation movement, once said, “Every building is a landmark until proven otherwise.” It remains to be seen whether Chicago’s elected officials can muster the courage to preserve its unique architectural legacy.—Edward Keegan
L.A. Exhibition Explores Transit's Urban Potential

The ongoing furor over the Metro Rail subway in Los Angeles, including shoddy construction and alleged mismanagement, has distracted most local residents from the project’s positive potential: high-density, mixed-use development that could make public transit serve as the catalyst for vital, pedestrian-oriented neighborhoods.

Six teams of architects have attempted to keep the dream of transit-based development alive in “Living in Los Angeles: Transit-Based Designs for Pedestrian-Oriented Neighborhoods,” an exhibition held at the Los Angeles Municipal Art Gallery from February 14 to April 7. The design teams include Steve Johnson and James Favaro; Judith Sheine and Luis Hoyos; Roger Sherman; Frank Shih and Dianna Wong; William Williams; and AZ Architecture Studio. The conceptual proposals are notable for a refreshing willingness to be more practical than visionary, and to acknowledge the character and scale of existing neighborhoods. The frustration is that these stimulating schemes will not go further than the gallery walls.—Morris Newman

Austrian-sponsored Exhibits at Schindler House

The Schindler House has been a center of L.A.’s architectural community since it was built in 1922. The Austrian-born architect Rudolph Schindler lived here until his death in 1953, and at different times, the Modernist landmark has been the L.A. base of historian Charles Jencks, composer John Cage, and photographer Edward Weston. The latest inhabitant is the MAK Center for Art and Architecture, an arm of the Austrian Museum of Applied Arts in Vienna. An artists-and-architects-in-residence program is one of the center’s first programs.

Selected through a design competition, the first group arrived in L.A. last October to live in Schindler’s Pearl Mackey Apartment Building (1939), which MAK acquired last year. This month, the MAK Center will mount four installations in the Mackey’s garage spaces, as well as host the first of the architectural exhibitions planned for the Schindler House, “Again Architecture: The Havana House,” featuring proposals for the Cuban capital by Coop Himmelblau, Lebbeus Woods, Eric Owen Moss, Thom Mayne, Carme Pinos, and CPPN.—M.N.
Israel Retrospective at Los Angeles MoCA

“Franklin D. Israel: Out of Order,” on view through May 26 at the Los Angeles Museum of Contemporary Art (MoCA), is more than a retrospective: the show is effectively a new work by the 50-year-old Los Angeles designer. Israel has created a 4,000-square-foot installation of dramatically sloped, sharply angled walls which define a Z-shaped passageway. In contrast to most architectural retrospectives, which rely on text and two-dimensional images, Israel trusts forms and spaces to tell his story.

Much of what is notable in his work is immediately available to museumgoers in this stunning installation. The show is a rich and subtle essay in architectural space that grows steadily more impressive the longer one takes it all in. Although Israel wisely avoids recreating earlier designs, we find the basic themes of his work echoed here: Sloping walls create a moody, enigmatic atmosphere, as they do in the Bright & Associates lobby in Venice, California. Walls fold down to become ceilings, as in the Jupiter House in Florida and the Hague I House in the Netherlands. At certain places, the wall cantilevers out and becomes a low ceiling reminiscent of the awninglike projections above the doorways at Virgin Records in Beverly Hills.

The biggest surprise—and subtlest lesson—of this collection of jagged walls and knife-edge corners is the intimacy and habitability of its space. An installation that, at first glance, seems to be a flamboyant, formalist exercise turns out to be a quiet polemic about architecture as a means to humanize space rather than create sculpture.

The show concludes in an atmospherically lit back room, where models of key projects are set into niches within openwork stud walls. Photographs of the same projects are displayed on a horizontal light table. A minor complaint is that the installation is all corridor: Israel has not provided the kind of “destination” space where visitors can sit on a bench and soak it all in.

Instead, viewers tend to walk quickly through the installation and huddle in the back room to examine the displays. They should be encouraged to spend more time looking at the Israel building around them, rather than pore over representations. That quibble notwithstanding, Israel has not merely designed a showcase for his own work, but has reconceived the very notion of how to exhibit architecture in a museum setting.

To kick off the retrospective, a group of journalists, academics, and architects gathered at UCLA’s Fowler Museum for a February symposium on Israel. UCLA Assistant Professor Sylvia Lavín, the symposium’s organizer, described the designer as eclectic, able to combine “things that one would not think would go together.” Architect Jacqueline Robertson praised his ability to organize “normative and highly idiosyncratic” elements in “exactly the right balance,” while New York Times critic Herbert Muschamp lauded Israel’s “ruthlessness,” both in criticism of design and in self-criticism. UCLA Professor Richard Weinstein provided the most critical characterization of Israel’s work as “emanating from appetite and experience...rather than ideas.”—M.N.
British Architecture Displayed in Chicago

British architecture has been conveniently categorized for the past decade as two sides of a rather well-worn coin. On one side is Norman Foster, whose elegantly wrought compositions insist on expensive materials and clever detailing. The Prince of Wales inhabits the opposing side, flogging a watercolored traditional style as quaint as his hereditary position in British society.

Arguing for a broader and more nuanced understanding is the exhibition "Contemporary British Architects: Recent Projects from the Architecture Section of the Royal Academy Summer Exhibition," on view in the Kisho Kurokawa Gallery of Architecture at the Art Institute of Chicago through May 5.

The show is culled from three years' worth of work shown originally in the Architecture Room at London's Royal Academy of Arts. Fifty architects are represented by a collection of 80 drawings, models, photographs that offers a compelling view of a surprisingly vibrant British architectural scene.

Highlights of the exhibition include Nicholas Hare Architects' Islamic Arts Centre at the University of London, Colin St. John Wilson's new British Library, and Richard Horden Associates' Wing Tower in Zurich. Hare's work cleverly combines Mario Botta's residential work, Colin Rowe's urban investigations, and the traditional London townhouse form, suggesting that city buildings can be at once dynamic, interesting, and restrained.

St. John Wilson's monumental, Modern library is strikingly presented in a sectional model that demonstrates an intriguing series of soaring spaces. Horden's Zurich tower, a 100-meter-tall steel-and-aluminum construction, is represented by a gleaming and dazzlingly sensual model of aerodynamically derived forms.

The show is densely hung, recalling the mannered displays of late-19th-century salons. The work is literally "off the wall"—the office of Nicholas Grimshaw designed large gridded metal screens that are suspended from the ceiling in front of the gallery's curved outside wall. The screens are a potentially neat conceit, but they tend to fragment the graceful curve of the gallery in awkward and clumsy ways. Given the quantity and quality of the work shown, and considering the curator's carefully composed compositions, the viewer can easily envision a more successful installation that could have been achieved simply by removing Grimshaw's creaky constructions.

This selection of projects from the Royal Academy Summer Exhibition is a brightly optimistic show, pointing toward a highly creative period of work in contemporary Britain. However, the exhibition has a distinctly American feel in displaying architecture of so many styles—such unexpected diversity isn't supposed to characterize Britain. Perhaps this invigorating shot of compelling, nondoctrinaire work will inspire our own.—Edward Keegan
CURVING GALLERY: Constructed by Nicholas Grimshaw's gridded screens.

JONES AND DIXON: Venice bus station.

NORMAN FOSTER: Canopy over Berlin's Reichstag.

RICHARD ROGERS: Tokyo tower.

If they could have called Cold Spring, they would have saved Face.
News

MOTEL: Breakfast, but no Braille.

Feds Charge Hotel Chain In Violation of ADA

The Justice Department has filed its first suit against a business whose new buildings fail to comply with the 1990 Americans with Disabilities Act. An 18-month investigation of the Days Inn of America chain found 28 newly built hotels in violation of the law. Of these, 23 have agreed to resolve the disputes out of court: in February, the department filed five suits against the holdouts.

The hotels cited for violations are located in Champaign, Illinois; Evansville, Indiana; Hazard, Kentucky; Wall, South Dakota; and Willows, California. Construction on each began after the January 1993 compliance deadline. Their offenses include insufficient visual fire alarms for the hearing impaired; unsafe ramps; inadequate bathroom facilities; no Braille or raised-character signage for visually impaired guests; non-wheelchair-accessible closets; and inadequate parking.

The Justice Department could potentially order Days Inn of America, its parent company Hospitality Franchise Systems, as well as each hotel’s individual franchise, architect, and general contractor, to pay a civil penalty of up to $50,000 for the first offense. Architects named in the suit are Brian J. Pape of Columbia, Missouri; John Heard Associates of Cumming, Georgia; J. Douglas Kidd of Xenia, Ohio; David Bauman of Fargo, North Dakota; and Iyer & Associates of San Francisco.

The Aalto Vase, a 20th Century Icon.

Alvar Aalto’s original drawings of the Aalto vase won first prize at the 1936 Paris World Exhibition and was prominently displayed at the Paris World’s Fair the following year. To commemorate Aalto’s 60th anniversary, iittala is producing a special “Rio Brown” jubilee vase. This anniversary edition, 5 ⅞" Aalto vase is engraved with “Alvar Aalto iittala 1936-1996,” and comes in a unique gift box. The Jubilee vase is likely to become a most sought after item among collectors.

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Heiress Pillories Ledoux Château

Accusations of “cultural rape” have nearly halted the purchasing and dismantling of buildings in Europe for reassembly elsewhere, a practice to which the U.S. owes such major landmarks as the Cloisters in New York and California’s San Simeon. However, a Japanese heiress is picking up where William Randolph Hearst left off, motivating the French government to consider establishing a preservation foundation comparable to Britain’s National Trust. Kiko Nakahara has purchased 15 castles across Europe, intending to convert them into luxury hotels. But when funds for the scheme dried up, Nakahara sold the castles’ furnishings and interiors.

Among the pillaged properties was the 18th-century Chateau de Louveciennes, built near Versailles by Louis XV for his mistress Madame Du Barry. The castle is a rare surviving work of Enlightenment architect Claude-Nicolas Ledoux.

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Architects Design Golf Exhibit in Kansas City

"Purr-Modernism," an exhibition at Kansas City's Kemper Museum of Contemporary Art and Design, has transformed galleries into an 18-hole miniature golf course through April 21. Architects Michael Graves and John Diebboll, and artists Mel Chin, Sandy Skoglund, Pat Oleszko, and Cindy Sherman each created a hole on the par-49 course.

Golf balls bear artist Jenny Holzer's truisms such as "Raise boys and girls the same way," and "Protect me from what I want."

Awards Program and Recent Honors

ARCHITECTURE, AIA Research, and the AIA's Academy of Architecture for Health announce the 1996 Awards Program in Health Facilities Research. Submissions are due September 2. Contact AIA Research at (202) 626-7445 for information.

The International Union of Architects has named Spanish architect Rafael Moneo the recipient of its 1996 Gold Medal.

In March, the Museum of the City of New York presented former New York Times architecture critic Ada Louise Huxtable with its $24 Award, named for the value of goods that the Dutch exchanged with Native Americans for Manhattan. Huxtable was honored for her contributions to the enhancement of the quality of life in New York.

Harvard's Graduate School of Design awarded its Veronica Rudge Green Prize in Urban Design for restorations of Mexico City's historic center and Xochimilco district.

The National Building Museum will present its 1996 Honor Award to Cindy and Jay Pritzker, founders of the Pritzker Architecture Prize.

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Photography Exhibitions in Washington, D.C.

A trio of exhibitions at the National Building Museum provide an eclectic sampling of 20th-century architectural photography. "Building the Ballyhoo: Architectural Photographs by the Wurts Brothers Company" presents images from the museum's archives taken by the major New York commercial architectural photography firm, the predecessor of contemporary companies such as Esto Photographics and Hedrich-Blessing. From 1894 to 1979, the Wurts Brothers Company used major commissions from architectural firms, developers, and building products manufacturers to define the role of architectural photography. For instance, photographs of 1950s Modernist high-rises promoted the curtain wall to architectural firms and their corporate clients, while photographs of postwar housing developments made home ownership attractive to young families by constructing an artificial vision of the suburbs.

An exhibition in an adjacent gallery, "A Recent View of Architecture: Photographs by Paul Warchol," brings the history of commercial architectural photography up to the present day with glossy photographs of buildings by firms such as Smith-Miller + Hawkinson, Agrest and Gandelsonas, and Steven Holl.

Warchol's seductive, sophisticated work sharply contrasts with the photographs of Camilo José Vergara on display in the next gallery. "The New American Ghetto" documents the depressed urban neighborhoods of Detroit, Chicago, Newark, Brooklyn, and the South Bronx from 1977 to the present. Vergara's photographs do not present abandoned buildings as romantically decayed ruins, but instead are like mug shots from the city morgue, providing factual evidence of the physical decline of our cities.

Viñoly's Tokyo Forum On View at Harvard GSD

The Tokyo International Forum has been hailed by critic Kenneth Frampton as "a 20th-century res publicae on a scale that is comparable to Raymond Hood's Rockefeller..."
Center.” A February exhibition at the Harvard University Graduate School of Design’s Gund Hall Gallery shows why, through models, drawings, and photographs of Rafael Viñoly’s structurally exuberant design, now under construction.

Viñoly won a competition to design the 1.5 million-square-foot building in 1989, beating out 395 firms from across the globe. The Tokyo Metropolitan Government vacated its city hall, freeing up a valuable site in the heart of the city’s business district, adjacent to the gardens of the Imperial Palace and the main railroad and subway station.

The Forum, a complex of theaters, galleries, conference halls, and offices, is organized around a vast, elliptical atrium and topped by an undulating, trussed glass roof. The 700-foot-long, 200-foot-high public space is unprecedented in crowded downtown Tokyo. The building is scheduled to open in January 1997.

British Magazines Destroyed and Revived

The February 9th IRA bombing of London’s South Quay destroyed the offices of the Royal Institute of British Architects Journal, and most of its pending March issue. The editorial and sales staff have moved to temporary quarters, where they managed to generate a replacement issue in little over a week.

Former editor of A.D. (Art & Design) Andreas Papadakis is launching another review, New Architecture, out of London. Papadakis is currently looking for backers for the first issue, scheduled to appear this fall. Under Papadakis’ leadership in the 1980s, A.D. became a major international forum for Postmodernism. And the new magazine’s focus? Papadakis maintains that “the theme that concerns me is architecture today, not looking at the past.”
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U.C. Berkeley Settles Architect’s Lawsuit

The University of California, Berkeley, has awarded $1 million to San Francisco architect Marcy Li Wong. Wong was an assistant professor of architecture at Berkeley from 1979 until being denied tenure in 1986 and 1988, allegedly because of her race and gender. After a seven-year internal grievance filed by Wong against the School of Architecture, and three subsequent years of pretrial negotiations, U.C. Berkeley settled out of court. Wong was not reinstated as a result of the case.

New Commissions

Nine teams were shortlisted last month in the competition for the San Diego library. They include designers Moshe Safdie, Antoine Predock, Cesar Pelli, Hardy Holzman Pfeiffer Associates, Rob Wellington Quigley, Arata Isozaki, Gunnar Brikerts, Pei Cobb Freed & Partners, and William P. Bruder. Notably eliminated were Michael Graves and Ricardo Legorreta. A second list of three to five finalists will be announced this month.

Sushi, anyone? Benjamin Wood and Carlos Zapata, of the newly established firm Wood and Zapata, are working on a 73,000-square-foot restaurant and retail center, to include the world’s largest sushi bar, in Hiroshima, Japan. The University of California in San Diego has commissioned Antoine Predock to design a 14,000-square-foot dance studio to the east of his 1991 Weiss Pavilion theater. Dworsky Associates is designing a 114,000-square-foot police, fire, and emergency operations station in downtown Santa Monica. William McDonough, dean of the School of Architecture at the University of Virginia, has been tapped to design a $2.5 million environmental study center for Oberlin College in Ohio. In the wake of the media blitz for his new book S,M,L,XL, Rem Koolhaas has been commissioned by entertainment conglomerate MCA to plan its 415-acre Universal City complex in Los Angeles. The project is Koolhaas’s first in the U.S.; he replaces The Jerde Partnership, designer of City Walk and a 1991 master plan for Universal City.

Obituaries

Architectural historian David Gebhard died on March 3 at the age of 68. A professor at the University of California in Santa Barbara, Gebhard wrote definitive guidebooks on California architecture and the seminal monograph Rudolf Schindler: Architect. He curated more than 25 exhibitions in California museums and was an active preservationist.

Esther I. Kahn, the 90-year-old widow of Louis I. Kahn, died on February 24. A neuropathologist educated at the University of Pennsylvania, Kahn was actively involved in preserving many of her husband’s buildings, including the Kimbell Museum and the Salk Institute.
Roberta Washington, AIA, NOMA. Innovator and renovator of neglected buildings. Specifier of DuPont Antron carpet fiber.
A three-dimensional star commemorates 50 years of Air Force service.

Yet another memorial is being designed for Washington, D.C. In honor of its 50th anniversary, the Air Force has commissioned Pei Cobb Freed & Partners to design a memorial to be located north of Arlington National Cemetery, across the Potomac from the Lincoln Memorial, and on axis with the Washington Monument and U.S. Capitol. The new memorial will share the site with the 1954 Marine Corps memorial, and the 1960 Netherlands Carillon donated by the Dutch to commemorate Holland’s liberation.

Inspired by the Air Force insignia, the 50-foot-high memorial is designed by James Ingo Freed. Its angular metal shell balances on five razor-sharp points resting on a massive granite base, and tapers to an enormous pentagon open to the sky.

Financed with private funds, the $25 million memorial will include a 15,000-square-foot exhibition hall housed beneath the granite platform, and a sculpture to the west depicting four uniformed airmen.

In markedly uncontroversial proceedings, the Commission of Fine Arts approved the scheme in mid-February, and the National Capital Planning Commission followed suit three weeks later. The memorial is scheduled to be completed by 2000.—Ann C. Sullivan
On the Boards

Global buildings reveal the Modernist design direction of Kohn Pedersen Fox Associates’ London office.

With the Institute for American Studies, KPF will create a new quadrangle on Oxford University’s campus between Mansfield College and Rhodes House. The 21,500-square-foot building will house academic offices, classrooms, common rooms, and a research library. Ground-floor classrooms open up to adjacent gardens; above, a glazed reading room shaded by wooden louvers fronts a block of stacks and offices clad in traditional Bath stone. Construction will begin next spring.

House of Representatives
Nicosia, Cyprus

Kohn Pedersen Fox (KPF) is raising its international profile with projects in Asia and Europe. Most prominent is the House of Representatives Building in Nicosia, Cyprus (left and above). Principal David Leventhal designed the 140,000-square-foot building as a contemporary agora on a low hill between the old city and the presidential palace. The main assembly hall, housed in an alabaster-clad drum (above), is inserted into a wedge-shaped volume housing lobbies and smaller meeting rooms; projecting wings contain offices. An overhanging roof and evaporative cooling system reduce heat gain by day; natural ventilation cools the building at night. Construction is scheduled to begin in early 1997.
Wave Tower
Bangkok, Thailand

Wave Tower (right), a 27-story office building located in Bangkok’s central business district, will rise from a plaza landscaped with trees and rills. A two-story wing to the east of the main tower will house retail and a banking center; the tower’s lobby will contain a café. The elliptical 527,000-square-foot tower is sheared into two offset parts: the gap between the halves of the reinforced concrete tower will house vents to receive fresh air (far right). The two curving sections of the aluminum-and-glass curtain wall are articulated in contrasting expressions. At the building’s top, the curtain wall spirals upwards in a wavelike form to expose the reinforced concrete structure. The Wave Tower is scheduled to be completed in 1998.

Dae lim Tower
Seoul, Korea

KPF’s competition entry for the Dae lim Tower in Seoul proposes four discrete structures: A low block houses condos and a sports facility; 500- and 750-foot-high towers, sandwiching a 640-foot-high atrium, contain Dae lim Industrial’s corporate offices. The atrium and two office towers are articulated as separate but adjacent buildings, each with a distinct sloping roof. Glass elevators and bridges in an open steel framework (left) line the atrium’s western wall. The competition will be decided this fall.—N.C.

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—Richard Green
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Protest

A vulgar office building clashes with its historic neighbors in Miami Beach.

KRAMER'S FOLLY: Priapic tower and garish colors alienate new project from historic Art Deco district nearby.

Miami Vice

A new eight-story office building in chic Miami Beach is too big and too brightly colored for its surroundings, but that's not what makes it so peculiar. The building sports a lipstick-red tubular tower that rises 130 feet in the air. Its glass-block shaft is lit from within at night, pulsating with changing colors; the top, which tapers into a stepped-back cone, completes the phallic symbol. The tower, which contains no habitable space, is pure icon.

The building is the very personal statement of Thomas Kramer, a wealthy German financier who, as it happens, has faced more than one allegation of unwanted sexual advances. (He is currently being sued in Dade District Court.)

Containing a restaurant on the ground floor and 44,000 square feet of offices above, Kramer's building is an interpretation of Pueblo Deco as dictated by the developer, who was apparently charmed by the Southwestern style. The Miami firm Bermello, Ajamil & Partners was hired to design his fancy.

The first drawings of the project called for a considerably different—and less phallic—design. The office block was smaller, better proportioned, and painted in tamer colors. There was a circular corner tower, but it did not glow at night and lacked the oppressive height of the edifice that has come to fruition.

The original design was topped by a Neo-Gaudiesque metal sculpture. Unfortunately, "Kramer thought the sculpture really wasn't ostentatious enough," recalls designer Juan Carlos Menendez, who has since left the firm. "It was playful and elegant, but that's not the way it was built."

What has been built is a brightly colored, eight-story hulk that dwarfs its surroundings, mainly two-story pastel buildings. The project looks out of place for other reasons. The Pueblo Deco intentions, expressed in part with American Indian ornament, clash with the nearby structures of Miami Beach's historic Art Deco district. Moreover, Kramer's building is blocky and overbearing, with an expanse of stern-looking square windows on the parking floors that have led passersby to liken it to a Spanish dungeon.

Some preservationists are howling over its insensitivity: architecture historian Vincent Scully, who teaches at the University of Miami, has compared the tower to a primitive circumcision. But the new building passed muster with official design reviewers; ironically, it now lies within the new Ocean Beach historic district, established in late February presumably to prevent more projects like this one.—Peter Whoriskey

Peter Whoriskey is an architecture writer for The Miami Herald.
ANDERSEN COMPLEMENTS THE ARCHITECTURE OF A CLASS

Architects: Reese, Lower, Patrick & Scott
Lancaster, Pennsylvania
Project Architect: Randy Sovich, AIA
Detroit is Everywhere

Downtown Detroit's continuing decline epitomizes the current devolution of the American city. Detroit, Michigan, offers valuable lessons in urbanism at the end of the 20th century. During the Cold War, the city achieved almost mythic status as the source of our cultural icons related to automobiles and music, and was at the center of the “American way of life.” Then, Detroit fell, its demise symbolized by the race riots of 1967. And though some might regard its demise as the antithesis of waste. The nation had to be deurbanized, and the key to this dispersal was the automobile.

The resulting physical and cultural deurbanization of the United States has been a highly directed, intensive, and long-term process that began in the 1930s with highways created by the Works Progress Administration and the single-family cottage subsidies funded by the Federal Housing Administration. Simultaneously, the flailing industrial giants experimented with their consumer products, readying themselves for the eventual recompense that came after the interregnum of World War II. And the war itself created the requisite empire that could mortgage the future for the immediate gratification of American consumption. The essential catalyst was cheap gasoline, which today remains the lifeblood of the strategy.

Detroit’s growth mirrored the success of the new America. But even as it reached its pinnacle, Detroit was undermined by its machines. While the city was still needed to produce the automobile, the automobile’s effect on the motor city was destructive. In Detroit, this process was abetted by General Motors in 1955 when it removed Detroit’s trolleys because workers could afford cars. The city became the archetype of consumerist urbanism. As such, Detroit fulfills

FIGURE/GROUND OF DOWNTOWN DETROIT

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1950

1960

1994
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Opinion

DOWNTOWN DECAY: A suburb of its suburbs, Detroit is characterized by derelict buildings and vacant lots.

the hypothesis of the French cultural theorist Guy Debord in his *Society of the Spectacle* (1967), in which the city of consumption ultimately consumes itself.

Today, trolleys manufactured in Detroit run in Mexico City, while Detroit itself offers virtually no public transportation. General Motors followed the same strategy in scores of United States cities. The force of this corporate power and self-assumed omnipotence was harshly revealed in General Motors President Charles Wilson’s famous reflection in 1952 that “what was good for our country was good for General Motors, and vice versa.”

Now, in its own backyard, General Motors might be expected to face the urban consequences of its long consumerist odyssey—but when Detroit became useless to its makers, the companies that created it also abandoned it. The capital became globalized beyond the spatial city. General Motors’ factories were left behind for cheaper labor and fewer controls elsewhere, frequently in the so-called “developing” world.

The Detroit scenario has been played out in scores of other cities large and small, albeit in less cataclysmic terms. With the new global configuration of capital, the days of local urban patronage are gone. Gone is the era of reinvesting in cities the wealth that they have created: capital no longer has such localized obligations. And apparently, the popular consensus is “fair enough,” at least if one can trust our politicians to represent public sentiment accurately.

The national project for deurbanization culminated in the 1990 census, which recorded a suburban majority for the first time in this nation’s history. This new condition is a far cry from 1930, when the majority of the population was urban. American cities have been under siege ever since, the final coup de grâce coming with the intolerant
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Reagan revolution of the 1980s. Political power has shifted to the posturbanites and they are using it. Detroit’s visibility is especially important now, because it so completely epitomizes the consequence of the suburban condition.

For the suburbanites, Detroit might as well stay exactly as it is. This sensibility is underlined by the racial dimension of the question. The city has the largest proportion of African-Americans of any in the United States. Detroit openly exposes the American apartheid: whites reside safely in the suburbs, while poor minorities live in the city—economic captives and inhabitants of a legacy which they cannot maintain or defend. We find this configuration in every other large city, but nowhere is it so brutal as in Detroit. The posturbanites have colonized the city: Detroit has become a suburb of its suburbs.

By 1990, Detroit housed only one half of its 1950 population of 1.8 million. And within its tri-county region, its share of the population has declined from more than 60 percent in 1950, to about 25 percent. Its urban automobile factories have been replaced by suburban distribution factories for the service industry, the purveyors of consumer culture. Detroit’s residents must flow out of the city in search of work and goods, only to return to their own Soweto, a situation aligning Detroit more and more with post-colonial attributes of the Third World.

Detroit is more Los Angeles than Los Angeles: no Metro, expressways with no exits, suburbs with no city, streets with no houses. There are crossroads “towns” at the center and “border crossings” at the periphery. Still, Detroit’s urbanism somehow survives, but it is a new urbanity. There are new infrastructures of itinerant paths; obsolete infrastructures of expressways with new meanings; new topographies of old houses. Already the new Detroit urbanism is evolving to a higher level of organism than simple erasure.

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abandoned skyscrapers in downtown Detroit, the world’s first such phenomenon. And there are the accretive transformations: for example, a parking garage housed in the lush, rococo auditorium of the Michigan Theater achieves a poesis beyond the banality of its expedience. In this, the poststructuralist theory of the past decade might do well to look at Detroit for its validation.

In understanding Detroit, we must finally shed our expansionist illusions. Urban entropy is more important to current architectural theory and practice than is urban “growth.” If history itself is an urban construct, what survives in Detroit must challenge our idea of the city in history. The city offers a strange amalgam of proximity and emptiness, isolated pieces in proximity but without propinquity.

Although one is reminded of the ebb and flow of medieval contractions, here the medieval has been speeded up to an instant in history. Perhaps it is true that we are at the end of history. In this regard, we have yet to understand even whether or not the city as we have come to know it since the Renaissance is still operative, or even whether the city will remain the natural habitat of humans, as history has recorded it.

One suspects, however, that in spite of suburban majorities, the city is still the incubator of our economy and culture, and we cannot afford to discard our cities just yet. Just as we arrived at a “consumer” society, we will also arrive at a “postconsumer” society. In this regard, we can be certain of one thing: as goes the price of gasoline, so goes our cities. Mobil Oil recently advertised that gasoline is “America’s best bargain.” If so, it is a bargain that comes with enormous subsidy, and with an enormous real price in urbanistic terms, as the example of Detroit represents all too well.—Richard A. Plunz

R. Plunz is the director of the urban design program at Columbia University and author of A History of Housing in New York City.
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Contemporary urbanism follows no single path. Traditional city planning is exported to the suburbs, suburban patterns are imported to inner cities. New developments are melded with historic preservation, resorts gain civic seriousness, and working downtowns are transformed into entertainment meccas. As contradictory as these methods sound, they are helping to stem the tide of urban decay and suburban estrangement. Las Vegas is coping with runaway growth by building a new civic infrastructure beside its casinos. Miami Beach is enjoying a renewed vitality by capitalizing on its historic assets. Indianapolis is attracting people downtown by burying a suburban shopping mall within its urban grid. Other cities and suburbs are attempting to reinstitute small-town traditions through an architect-led crusade called NEW URBANISM. This mix of pedestrian-oriented streets, houses with porches, parks, and corner stores is promoted as an alternative to suburban sprawl, but is applied most successfully to urban neighborhoods. It’s hard to change the patterns of OLD URBANISM, but the experiments shown in this issue offer potent ingredients.
New Urbanism, the concept of traditionally planned towns, has grown into a movement. Yearly conferences are devoted to it, the media popularizes its nostalgic imagery, and even the government has embraced it as a resource-efficient development strategy.

With its own version of the Ten Commandments (the cryptically named "Ahwahnee Principles for Resource-Efficient Communities"), a bible (The New Urbanism: Toward an Architecture of Community, by San Francisco-based design consultant Peter Katz), and prophets, including architects Peter Calthorne in Berkeley and Elizabeth Plater-Zyberk and Andres Duany in Miami, some might even call it a religion.

Like the Modernists before them, New Urbanists believe they can change human behavior through design. Postwar car-dependent suburbs, once regarded as the realization of the American Dream, are to New Urbanists the roots of an alienated, wasteful, isolated society. Give Americans a traditional neighborhood to live in, New Urbanists reason, and they will behave like neighbors. Give two-income, two-car families a walkable grid of narrow streets, sidewalks, and corner stores, and they will rid themselves of one car. Give suburbanites a mix of housing types, from condominiums to rowhouses to detached houses, and a mix of people will occupy them. Give homeowners front porches, and they will eschew the TV, the air-conditioning, and the Internet, and talk to each other.

A vanguard effort in the 1980s, when towns like Seaside, Florida, designed by Duany and Plater-Zyberk (DPZ), first attracted attention, New Urbanism now governs more than 125 developments in the United States, with exports to Canada and Europe (page 79). The 500 members of the Congress for a New Urbanism (CNU) include more than 120 of the country's best urban designers and architects: Victor Dover of Dover, Kohl & Partners in Miami; Raymond Gindroz of UDA in Pittsburgh; and Boris Dramov of ROMA Design Group in San Francisco all call themselves New Urbanists, although they were applying traditional urban forms and planning strategies long before the name was coined. The fact that architects and planners such as these have joined the CNU lends it power and importance. Significantly, for the first time in the postwar era, a popular planning movement has been conceived, perpetuated, and proselytized by architects.

But does it work? And if it does, is New Urbanism good for America?

To try to answer this question, I recently visited eight New Urbanist developments around the United States. Because applying traditional urban strategies to urban sites seems logical to me, I did not visit urban neighborhoods like UDA's Crawford Square in Pittsburgh or Dover, Kohl's Paramore Heritage district in Orlando, where New Urbanist strokes appear to be strengthening inner-city areas. To me, New Urbanism is most intriguing where it is applied to the suburbs, to repair and densify 30-year-old failed shopping centers or industrial sites, or to develop "greenfields" where it is touted as an environmentally sound alternative to typical suburban sprawl.

What I discovered is that New Urbanism, like religion, encompasses both good and evil. While the movement's good deeds—resort towns like Seaside and inner-city improvements (pages 74-76)—are obvious and have been documented, its failures are not as well known. Its drawbacks center on transportation, the slow realization of commercial and civic centers, and the possibility that, despite their mix of housing types, these throwback developments will ultimately attract a single class of buyers.

New Urbanists eschew auto-oriented suburban sprawl; a futuristic armature of light or heavy rail underlies many of their plans. They are not opposed to cars, but as Peter Calthorne explains, "Transportation costs the average American household 20 percent of its income." Since Calthorne believes the middle class is falling in wealth and security, he argues, "Americans will be forced to be more frugal. If families can own one less car, they may save $8,000 a year." Calthorne's schemes are thus transit-oriented: The Crossings, a compact subdivision on the site of a failed shopping center in Mountain View, California, promises a rail link to San Francisco next year. His fanciful, never-to-be-built scheme for Clackamas Town Center (page 73) is similarly founded on light rail.

Even DPZ's East Coast communities outside Washington, D.C., are "transit-oriented in their internal organization," says Plater-Zyberk. But transportation planners argue that rail is too costly, too rigid, and fails to catch most passengers. Melvin Webber, director of the University of California Transit Center in Berkeley, advocates that communities—like the suburbs—should be organized around small electric vans and buses that can transport people quickly. "Architects think rail is a sign of modernity," admonishes Webber. "But it's 19th-century
Good for America?
New Urbanist places strive to promote community, but they deny difference.
We are imposing a synthetic history, a time when choices were not so diverse.” In describing Newpoint, a 54-acre development in South Carolina, Savannah architect Gerald Cowart epitomizes New Urbanism’s search for a simple identity for today’s complicated communities.

Partners Robert Turner and Vince Graham arranged Newpoint’s narrow streets and sidewalks to recall neighborhoods of Savannah, Charleston, and nearby Beaufort. A design code ensures that each new house designed by Cowart and other regional architects strengthens Newpoint’s antebellum character. “Community standards” govern building height and placement, outbuildings, porch sizes, and landscaping; architectural standards specify cladding materials, proportions of arches and piers, and hardware.

Nearly 60 houses are completed or under construction within the 128-lot development, where lots range in price from $30,000 to $250,000 on the waterfront, and houses sell for between $185,000 to $850,000. Prime lots wrap the Green, a common waterfront park; smaller parks are shared by all residents.

No more than four years old, the ensemble of houses looks as if it were built in the 1840s. Although the antebellum era was hardly America’s finest hour, Newpoint residents appear to love living in this historic-looking place. “Some New Urbanists are interested in transportation and the environment,” explains Graham. “I’m more concerned with the social aspects of these communities.”

Wyndcrest, in rural Sandy Spring, Maryland, was planned by Duany and Plater-Zyberk and is being developed by Kentlands developer Joseph Alfandre. Even with only 26 units, Wyndcrest offers a wider range of housing types: $80,000 townhouses are cheek by jowl with $250,000 single-family houses (above). Served by rear alleys, the enclave is located within walking distance of an existing post office and shopping center, and includes a live/work building and a restored farmhouse. In return for creating the moderately priced townhouses, the county gave Alfandre permission to build narrower streets and arrange the houses around an English-style close.
New Urbanist Suburbs

Laguna West, outside Sacramento, California

Laguna West town center

Lakeshore houses at Laguna West

Mt. Pleasant, outside Charleston, South Carolina

Mt. Pleasant apartments
New Urbanism on “greenfield” sites purports to offer villagelike alternatives to suburban sprawl by combining walkable retail and civic precincts with workplaces and dense residential areas. But is the quality of life in these settlements any better than in a typical suburb?

Laguna West, for example, appears to have incorporated density and monotony—the worst aspects of city and village life—in a large, remote suburb (facing page, top). It is designed by Peter Calthorpe to include a 65-acre lake (facing page, center left), a civic complex with a town hall, and 3,200 residential units, of which 500 are built.

A sea of poorly detailed neotraditional houses with tiny porches packed in lookalike clusters are intended to emulate a village’s sense of community, but they strain the metaphor. Admits Calthorpe, “We care more about the urban design than the architecture.” Even in Calthorpe’s own office the development has earned the moniker “Laguna Worst.”

On a 243-acre tract near Charleston, South Carolina, Newpoint developer Vince Graham wants to construct 1,240 units in a similarly dense new town designed by Duany and Plater-Zyberk and Dover, Kohl & Partners (facing page, bottom). Although approved by the local planning board, the project was defeated by the Mount Pleasant Town Council last December. Homeowners in Mount Pleasant and the rural areas adjacent to the tract opposed the plan, which was to include a grocery, garden store, and video store, 5 acres for a school, single-family houses, and 439 apartments in buildings based on Charleston side-yard houses (facing page, left drawing). Currently developing a modified plan, Graham hopes to present it to the town council again next year.

Portland, Oregon’s urban growth boundary was established in 1973 as an elastic line that could be moved for future expansion. As development approached the boundary line in the early 1990s, the Portland area’s regional government commissioned Peter Calthorpe to study ways to accommodate projected growth.

Calthorpe examined three possibilities: adjusting the line so that development could continue as it has for 20 years; creating satellite communities beyond the line; and redeveloping existing communities within the established boundary. His scheme for the suburb of Clackamas is an example of redirecting investment into existing developments—in this case, two auto-dominated regional malls (site plan, above).

Calthorpe’s scheme, intended only to help citizens visualize the redirected growth, envisions community and mixed-use buildings served by light rail (top). In December 1994, Portland area residents approved the plan to redirect growth inside the boundary, and even voted payroll and gas taxes to pay for necessary public transit and infrastructure.
New Urbanist Infill

Parramore Heritage housing

Crawford Square, Pittsburgh, Pennsylvania

Parramore Heritage, Orlando, Florida

Crawford Square housing
The most successful New Urbanist projects are infill developments that apply traditional forms and patterns to revive urban neighborhoods. Raymond Gindroz of UDA in Pittsburgh, for example, repaired Pittsburgh’s Hill district with traditionally arranged, mixed-income housing aimed at catalyzing an ailing commercial area. Once a thriving jazz district, the area was cleared in the name of urban renewal in the 1950s to make room for a highway and sports arena.

The city’s Urban Redevelopment Authority, in partnership with developer McCormack Baron, hired UDA in 1991 to plan 18-acre Crawford Square for 500 units of mixed-income housing (top plan). UDA focused its scheme on arranging apartments, townhouses, and single-family houses around a grid of existing streets, new parks, and St. Benedict the Moor, an historic Catholic church. The soon-to-be-completed housing comprises two- and three-story buildings with front and back yards and porches (right).

The Parramore Heritage district (facing page, top plan) in Orlando was similarly eroded by postwar urban renewal. Divided by highways, its urban fabric ruptured by government buildings and office blocks, the area suffered as middle-class residents fled for the suburbs. However, the neighborhood contains traditional residential and commercial architecture and an existing mature tree canopy that could make it more desirable than farther-flung suburban areas. Miami architect Dover, Kohl & Partners prepared a master plan to restore the existing housing stock, repair the neighborhood with residential infill, and enliven commercial streets with new retail, trees, and sidewalks.

When carefully applied, New Urbanist strategies also benefit existing suburbs. Dover, Kohl’s Village at Port Royal incorporates 41 affordable houses arranged on a new grid in an old suburb (top plan), within walking distance of an existing elementary school. A local theater company operates out of an old neighborhood church. Developer Robert Turner envisions a new main street of art galleries, antique stores, and restaurants along what is now an empty two-block stretch culminating in a town hall. The...
Village's houses are well built and simply designed (previous page, inset): 8-foot-wide, usable porches and honest, aluminum-frame windows afford this small development the promise of becoming a real place.

The Crossings, a Don Solomon and Calthorpe-planned project in Mountain View, California (previous page, bottom plan), is less successful. Tiny porches too small to support a chair, two-car garages flanking sidewalks, and overscaled windows with fake muntins perpetuate the village conceit.

Calthorpe's plan for a "village center" in North Boulder, Colorado, is a scheme to develop an existing suburb with a 12-acre mixed-use complex. Anchored by a 55,000-square-foot Safeway (bottom center of plan), the complex is arranged around a parking court. Small shops and restaurants are aligned on the perimeter and face a corner plaza and major streets (drawing, below); second and third stories house professional offices (bottom elevation).

The project also includes live/work apartments, a village green (center drawing), a day-care center, and a civic building.

The Safeway supermarket, located at the rear of the complex, is invisible from the street, and a third of the parking is located at the back. In front of the Safeway, the tree-lined court accommodates parking at peak hours and a farmer's market at other times.

The project, however, has encountered opposition from neighbors who fear its density, and would prefer an organic grocery store instead of a supermarket. Whether or not the project succeeds, Calthorpe deserves praise for encouraging Safeway to alter its standard-issue box. If New Urbanism can create communities around supermarkets or other "big-box" corporations, it may be good for America after all. Boulder's city council will decide whether to grant approval for the complex this spring.
New Urbanism has become an export commodity, with American architects planning neotraditional towns for Far Eastern industrial sites, European villages, and Canadian greenfields. For the 97-acre site of an old Subaru factory being developed by Fujita, Peter Calthorpe is planning a prototype sustainable mixed-use complex. The site, located 20 miles northwest of Tokyo in Omiya, Japan, will incorporate retail and community functions grouped around a linear east-west park, which culminates in a proposed transit stop at a civic center. The park is flanked to the north and south by 800 units arranged as three- to eight-story townhouses and apartments. Because Fujita specializes in sustainable research, Calthorpe’s scheme accommodates infrastructure for sophisticated recycling systems.

UDA of Pittsburgh is designing a walkable town center for St. Mard, a French village of 3,000 people located 20 minutes north of Paris's Charles de Gaulle Airport. Although the modest village never had a town square, a large empty block is now being developed by a public-private corporation, which retained UDA with the French development consultant firm ERASME.

The project, which begins construction this year, includes a new central square containing a post office, to be surrounded by apartments, a day-care center, and shops. Based on the village's traditional architectural vocabulary, buildings are arranged along two axes to form a series of public spaces (plan, right). The north-south axis, incorporating

Omiya, Japan

St. Mard, France

McKenzie Towne, Inverness Square
Calgary, Alberta

McKenzie Towne housing
The Other

The capital of casinos is becoming a real city, with new schools,
Las Vegas

libraries, and civic buildings.
Runaway growth has created an accidental metropolis.

But unlike Phoenix, Las Vegas has largely been a one-industry town. Founded officially in 1905, it remained a dusty depot until its 1950s emergence as America's gaming mecca. As the casino industry mushroomed, so did the city's population. In 1970, 275,000 people resided in its metropolitan area. Twenty-five years later, more than 1 million people call it home, most drawn by the lure of gaming-related employment, a benign climate, and romantic notions of the West as the country's last true frontier—an unfettered land of opportunity. This massive, messy influx has created an accidental metropolis whose resources are strained to the breaking point, and whose community leaders are struggling to transform a dispersed and fragmented population center into a coherent urban entity. Working in the city's favor are relatively low land and development costs, its gridiron plan, and energetic optimism. Arrayed against Las Vegas are uncontrolled growth, limited water, and a byzantine web of city and county governments that exacerbates weaknesses in its urban structure.

Las Vegas is a 360-square-mile urban island in 7,910-square-mile Clark County. The county also owns land within the city limits and controls some of the area's most valuable assets, including the airport and, most importantly, the Strip. These assets provide the county with revenues that rival the entire state of Nevada. Current growth in Las Vegas is concentrated along its perimeter, largely in Clark County.

The City of Las Vegas is left with a fixed land base of about 93 square miles and limited growth potential, as its annexation efforts have been rebuffed by both the county and the state. Its population is generally less affluent than suburban county residents, and its infrastructure is older and more heavily utilized. Lower taxation rates and land costs in the county have encouraged leapfrog development across the valley, leaving the city with large, undeveloped holes in its fabric.

Not surprisingly, the city and the county are locked in an ongoing sibling rivalry—even when they are cooperating. For instance, at the city's behest, the county built its dramatic new government office building on city-deeded land at the edge of downtown. Then, just as the new facility opened, county commissioners turned around and lowered property taxes, increasing the already marked disparity between county and city rates. However, Clark County Board of Commissioners Chair Yvonne Gates argues that the county "provides vital support for the city through infrastructure improvements, social services, and other benefits available to all citizens," regardless of their address.

"This war has been going on for 20 years," sighs Mayor of Las Vegas Jan Laverty Jones, who believes the disparate property-tax rates should be equalized, and that gaming revenues from both the city and county should be commingled and targeted directly to education, the police, and other public-sector needs. Jones also proposes streamlining the overlapping city and county bureaucracies, a move she would like to bring before the public as a voter referendum, in order to engender more efficient government, more even development across the valley, and more equitable funding of public services.

Added to the city-county battles is the constant presence of the casinos. Las Vegas exists because of them, and with more than 60 percent of the local population either directly or indirectly under their employ, both the city and county are always at pains to keep the gaming chieftains happy. Thus, if a rapid-transit system fails to garner casino approval, it doesn't get built. If casino mogul Steve Wynn envisions downtown Las Vegas as the next Venice, his outrageous canal plan proceeds far enough to prove it won't hold water.

Despite the divisions, Las Vegas is making progress. Over the last five years, a dozen new libraries and more than 30 new schools have opened. The state, the county, and numerous government agencies have built new offices. UNLV and the Community College of Southern Nevada have greatly expanded their programs and facilities.

And in an age of voter parsimony, necessity has yielded cooperative invention among public agencies. Since the city can't afford art museums or theaters, each new public library doubles as a cultural center with performance venues, art museums, and multipurpose spaces. The underfunded Office of Parks and Leisure Activities works with the school district to program gymnasiums and athletic fields on weekends and after school. Even the casinos are chipping in, albeit in a somewhat self-serving fashion, by underwriting most of the improvements to downtown's once-decaying Fremont Street. An ethic of shared financial burdens is beginning to create a missing civic structure as well as new planning and funding paradigms.

An unusual—and uneasy—alliance between the city and county is translating this ethic into a project they hope will give Las Vegas a coherent center. Based on urban design studies completed by both governments and enshrined in a 1995 EDAW plan (supplemented by a design charrette hosted last year by UNLV's College of Architecture), Las Vegas has decided to create a downtown. The first tangible result of the effort is the Fremont Street Experience (page 88), an arcaded renovation of the city's original casino center, with retail and entertainment to follow. Located immediately south of the Fremont Street redevelopment is a regional justice center now in the planning stages, with a new federal courthouse already in schematic design. The city would like to supplement these improvements with an office core south of the justice center, and possibly an arts district just north of downtown. It is an ambitious plan, but one Mayor Jones hopes "will create a place that belongs to our local population." In other words, a new center for the other Las Vegas.—Reed Kroloff
New Schools

Schools are perhaps the best measure of runaway growth in Las Vegas. The student numbers have propelled the area from obscurity in 1970 to the nation’s 10th largest school district in 1995. Within five years, it will be seventh. As Fred Smith, assistant superintendent of facilities and transportation services for the Clark County School District, explains, “This year, we’ll add 10,000 new students and hire 800 to 900 new teachers. That’s the size of most school districts in this country—and we’ve averaged those numbers for three years.”

Over the last 10 years, the district has sold $1.2 billion dollars in bonds and constructed more than 60 new schools, opening 18 in 1991 alone. Twenty-five more are on the drawing board or under construction, and 40 percent of the district’s older properties have been completely renovated. Even at this ferocious pace, demand still far outstrips supply, and many elementary and middle schools are operating on a 12-month calendar to accommodate enrollment.

In this context, it is little wonder the district has turned to prototype schools as a design solution. The impetus for that decision was not determined entirely by efficiency: Statewide curricular structure drove a more uniform approach to design, as did parent-teacher advice. Educators decided classrooms in grades one through five should be clustered in “pods” intended to facilitate teacher collaboration and student interaction, rather than in more traditional linear arrangements. The public was also suspicious of “architects building monuments to themselves,” Smith relates. Adds architect Dale Scheideman, director of facilities planning for the district, “A small, but very vocal, group of citizens questioned why we needed multiple designs.”

Although esthetically timid, the prototype schools are engendering programmatic solutions that resonate beyond their educational functions. In Summerlin, a sprawling edge city developing to the west of Las Vegas, the prototype high school will share its site with an outpost of the Community College of Southern Nevada. The site’s playing fields and some of its public spaces will be occupied by the city’s Department of Parks and Leisure Activities during non-school hours. Designed by local architect Tate & Snyder, the complex will take on a mixed-use character that transcends its educational mission.

“By pulling together the resources of two educational groups, we are able to provide a great opportunity for the community,” exclaims Partner William Snyder—the chance to create true civic space in a place which has almost none. The Las Vegas experiment is an educational model that offers valuable lessons for other cities.

Prototype Middle School
Welles-Pugsley Architects

Prototype High School
Tate & Snyder Architects

Prototype Elementary School
JMA Architects, Domingo Cambeiro Corporation Architects, Welles-Pugsley Architects
New Libraries

If there is a bright spot in the architectural firmament of Las Vegas, it is the Las Vegas-Clark County Library District. No single entity has done more to change the face of architecture in this city. In the last eight years, the district has built or substantially remodeled all 12 of its city facilities, and constructed 11 more in Clark County. According to Library Director Darrell Batson, quality design was a priority throughout the process: “We wanted national renown. We brought in the likes of Morphosis, William Turnbull, and Thomas Beeby. And we got stunning facilities.”

None of those architects ended up securing a commission. However, Antoine Predock, Michael Graves, and Meyer Scherer & Rockcastle did, each designing one of the library system’s three largest branches, which average about 120,000 square feet. These regional libraries, spread across the city, substitute for a single main branch. The regional libraries in turn each support four locally designed neighborhood libraries, smaller facilities averaging 25,000 square feet.

The library district’s desire for signature architecture has created a diverse and energetic body of design, among the best in the city. Public response to the architecture has been largely positive. Ask anybody what to see in the other Las Vegas, and the libraries top their list.

The wide distribution of the buildings allows disparate architectural languages to coexist comfortably: the traditional formalism of Graves seems just as reasonable here as the sculptural abstraction of Predock. But the libraries attract attention as much for their programs as for their profiles. They are more than just book repositories—from the outset, these buildings were intended to be significant civic centers for a city that has almost none.

The new buildings are the brainchild of former Library Director Charles Hunsberger and his progressive staff and library board, who deployed the city’s lack of public arts and performance spaces almost as much as its need for an improved library system. Hunsberger’s solution was a visionary synthesis: the libraries would incorporate community spaces such as theaters or art galleries. He also saw to it that the new facilities and their resources would be distributed throughout the city, rather than concentrated in one centralized location.

Thus, the Graves-designed Clark County Library has two theaters and several conference rooms; across town, Predock’s Las Vegas Library houses three meeting rooms and a children’s museum. Together, the new libraries include one amphitheater, four performance theaters, one auditorium, one lecture hall, one music hall, two museums, an astounding 13 art galleries, and space for more than 2 million books—all at a cost of under $100 million, less than the cost of downtown Chicago’s Harold Washington Public Library.

“These are our Carnegies,” asserts Batson, and he is right. Those early 20th-century libraries were also centers of learning and points of civic pride. However, they were the result of a single individual’s largesse. While the Las Vegas library system may be primarily the product of Charles Hunsberger’s foresight and dedication, it was delivered through public money—and at least some of the taxpayers were incensed that the library system had assumed the role of cultural arbiter in building, programming, and underwriting non-library spaces, particularly in a city believed to have significant short-ages in its library collections.

Despite the clarity of his vision, Hunsberger came in for harsh criticism about the arts enrichment expenditures, and ultimately departed. Batson, his successor, is trying to maintain the spirit of Hunsberger’s initiatives, but in a fashion more palatable to his constituency: the library now concentrates on building its circulating and research collections, and serves only as a coordinator, rather than an underwriter or director, in booking arts, performance, or public-use facilities.

Now, instead of being the only library in the nation with its own chamber orchestra, the district simply makes its facilities available to interested local groups.

The new libraries create civic structure in Las Vegas, and they do so in a fashion appropriate to this sprawling city. Like other cities in the postwar American West, Las Vegas is a thin urban scree d thrown carelessly across its blasted landscape, and trying to impress that landscape with a traditional vision of concentrated cultural resources is futile. These cities need linkages, points of civic recognition in the grid. That is exactly what the new hybrid libraries provide: Most Las Vegasans recognize that each time they visit a library, their experience will be richer than a simple exchange of printed or digital information.
New Civic Buildings

Since the 1940s and 1950s, Fremont Street and the Strip have served as the de facto civic centers of Las Vegas. These casino concentrations are the city's raison d'être, representing greater resources than its government could ever hope to counter. Learning From Las Vegas notwithstanding, the dazzling mediocrity of the gaming centers was never intended to serve as an architectural exemplar for the civic realm, and it hasn't: this is a city which has long been short on quality public architecture.

Like everything else in Las Vegas, though, change comes quickly. In the last few years, both the city and county have moved decisively to promote meaningful civic architecture. By far the single most prominent result of this new attitude is the Clark County Government Center (following pages), an ambitious monument at the western edge of downtown, which will soon be followed by a new federal courthouse and a regional justice center.

The architectural selection process for these civic structures has changed as well, with the Clark County complex the result of an invited competition, and the courthouse part of the U.S. General Services Administration's Federal Design Excellence Program (ARCHITECTURE, January 1996, pages 60-63).

The most significant new projects are concentrated near to the Fremont Street redevelopment downtown (page 88, this issue), as part of the city's effort to revitalize that sector. The plan also envisions extensive landscaping along major thoroughfares and the creation of public open spaces—currently all but nonexistent. Other projects, such as new fire stations and a new office for the Department of Motor Vehicles and Public Safety, are being built in high-growth areas.

The quality of the work varies tremendously, from the awkward Grant Sawyer State Office Building to the architectonic McCarran Airport expansion. But in each case, whether through references to the regional landscape or allusions to the freewheeling casino culture, the new buildings reflect an interest in placemaking previously missing here.

There is even discussion about addressing the city's long-neglected cultural arts infrastructure. "We've never had a major bond issue for cultural projects here," laments Joanne Nivison, manager of the city's Office of Cultural and Community Affairs. Adds Las Vegas native and Office Supervisor Nancy Deaneer, "The casinos were unwilling to support anything that might entice people away from the gaming floor."

Casino owners now recognize that non-gaming-related tourism can be to their benefit and are taking a somewhat more enlightened view of cultural attractions. However, their interest can still make or break almost any major proposal in town.

Deaneer points out that the city is "achieving the critical mass necessary to generate demand for cultural opportunities." The private sector has stepped in where public funds are short, and proposals are now moving forward to build a performing arts center and an arena. In short, while the Strip may still dominate civic culture here, it is no longer the only game in town.
Clark County Government Center

Clark County Government Center
C.W. Fentress J.H. Bradburn and Associates, Architect

View to northeast and Fremont Street
We had a clear choice in designing the Clark County Government Center," explains Denver architect Curt Fentress. "We could look to Las Vegas and the Strip for inspiration, or to the broader landscape of Clark County. We found the natural setting to be more compelling." To say nothing of the interests of the architect’s powerful client: Clark County is the biggest and wealthiest political entity in the state of Nevada. In 1994, more than 60 percent of Nevadans lived in the county, and its revenues from gaming alone topped $5 billion.

Situated on a denuded no-man’s-land bounded by freeways on two sides and a railroad track on the other, the Clark County Government Center is a 38-acre extravaganza of red rock and revisionist history at the edge of Las Vegas’s traditional downtown. There's no missing it from any of the major arteries—the circular complex sits in its dustbowl like a fortified camp, rotated away from the city's central core and gesturing openly to the majestic mountains on the southwestern horizon. It is a powerful image, one that draws a clear line in the sand between the county’s $68 million offices and the city’s beleaguered downtown across the tracks.

The government center is the first sizable example of architecture with a capital A in Las Vegas. At 375,000 square feet, it establishes a monumental civic presence in a place unaccustomed to such public grandeur. The iconographic complex is also more cerebral than its neighbors. Pyramids and amphitheaters suggest timeless images of architectural abstraction; repetitive blocks of office windows, combined with acres of surface parking, indicate temporal reflections of modern culture. The composition is unified by a consistent material palette of sandstone and stucco, surrounded by native desert landscaping.

C.W. Fentress J.H. Bradburn and Associates, in association with local architect Domingo Cambeiro, won a three-stage national design competition in 1992, besting Antoine Predock and Venturi, Scott Brown and Associates in the final round. Their building opened last May and has been a sensation ever since. Public reaction has been favorable; one candidate for county commissioner who painted the building as a waste of taxpayer dollars was defeated.

Unfortunately, inconsistencies plague the project. It is inconceivable that a building that purports to educate visitors about desert living would orient itself toward the relentless sun of the south and west. The pyramid pulled ceremoniously out from the central mass does not hold the county council chambers, but a cafeteria. And despite beautiful detailing of exterior stonework, the interiors feature fake rock slabs and painted sky ceilings obviously borrowed from the Strip’s popular Caesar’s Palace Forum Shops.

But it is the government center’s connection to the Strip that is most intriguing and fundamentally appropriate. Fentress recognized early on that “we could not do a significant building here without it being themed,” and that is what he has done, drawing upon local architectural and environmental imagery instead of importing something more exotic. Fentress doesn’t ignore the theater of the Strip; he appropriates and legitimizes it with a higher function. The Clark County Government Center is a thoroughly Las Vegas building after all.
Fremont Street is the once and future Las Vegas. Reaching its architectural apogee in the 1940s and '50s, the four-block fantasy of lights and licentiousness was the city's original gaming center. However, as casinos toward the south end of the Strip grew ever larger and more extravagant in the 1980s, "Glitter Gulch" started to fade. Alarmed, downtown casino owners joined with the city in 1992 to create an ambitious plan for saving the landmark area.

Los Angeles-based Jerde Partnership was retained to convert Fremont Street into a canopy-covered pedestrian mall. The barrel-vaulted, steel-framed canopy, 90 feet high and 1,400 feet long, forms an armature for the 2.1 million lights and 540,000-watt sound system that unleash an hourly multimedia program. The structure rests on 16 columns spaced 200 feet on center.

Heralded as the Fremont Street Experience, the project marks the first time casinos have willingly invested in the urban renewal of Las Vegas. The city plans to capitalize on the new mall as the cornerstone of its downtown development.
Architects may be uncomfortable with the notion that a shopping mall could be an antidote to urban problems. But the Circle Centre Mall in Indianapolis, Indiana, is not just any mall. Located a block away from Monument Circle, the city's urban heart, this three-story shopping and entertainment complex is strategically placed to attract office workers, sports enthusiasts, and conventioneers. In fact, the 800,000-square-foot colossus has shown early signs of emerging as the magnet that city boosters hoped it would be—of the $315 million Circle Centre, which was slow in the making. As long ago as 1979, Indianapolis was proposing a downtown mall built on a bulldozed site. "The idea was to put in a building with no windows and no apertures on the street," explains Reid Williamson, president of the Historic Landmarks Foundation of Indiana, which dogged the project from day one. "That was a gruesome and forbidding start."

The Circle Centre project finally got on track with the arrival of Stanton Eckstut, principal of Ehrenkrantz & Eckstut Architects of New York City. Eckstut, a noted urban designer, felt it was important to preserve the turn-of-the-century brick and stone facades that lined the sidewalks along the mall's site. These facades—some applied to the mall, others part of intact buildings—successfully minimize the scale of the monolithic structure behind them.

For all the trouble of salvaging the historic artifacts, many of the facades offer no access to shops. And while they suggest the memory of a lively street life, they are mere vestiges of such a time, because the shopping mall by its nature is introverted. The location of the parking lots beneath the complex further encourages shoppers to enter by car, conduct their business, and leave without ever engaging the city.

Eckstut attempted to counter that inward focus with the mall's centerpiece—a cascading glass Artsgarden for public exhibits and small performances. Hovering over the busy intersection of Washington and Illinois streets, the bulky pavilion is a prominent element of the cityscape from all directions. But at street level, it creates an imposing no-man's-land for pedestrians. Its $12 million price tag was underwritten by the local Lilly Endowment, which has contributed some $165 million to downtown's redevelopment.

Now that the mall is open and producing encouraging sales, eyes are turning toward the riverfront and the 250-acre White River State Park carved out of the city's former industrial zone. In the mid-1980s, the $64 million Indianapolis Zoo relocated into the park, followed by the Eiteljorg Museum of American Indian and Western Art, which was built in 1987 when the city hosted the Pan American Games.

Several new park initiatives are heating up: This summer, the Triple-A Indianapolis Indians will move...
into a new 13,000-seat baseball stadium, designed by HOK Sports Facilities Group, in the southeast corner of the park. Ground will be broken this spring on a new $10 million IMAX theater, to adjoin the $35 million Indiana State Museum now on the boards. Work also begins this year on a proposed plaza linking the historic Central Canal and the White River. “We want to create an urban park surrounded by important institutions that draw the public,” explains White River Park Director John Kish.

Citywide, Mayor Goldsmith has advocated better housing opportunities by launching a $529 million program of infrastructure improvements. On the west side of downtown, $130 million has been spent to rehabilitate a 10-block section of the once-blighted Central Canal, creating a paved walk along which businesses and housing are being built. New residential projects there include 59 units at Watermark, a mix of Neotraditional single-family houses and condominiums that will strengthen the definition of the canal, as well as Canal Court, 250 suburban-style apartments that, with their disregard for the canal’s edge, weaken the overall plan.

City backers are quick to say that the investments are paying off fast. USA Group, an administrator of student loans headquartered in the suburbs, is spending $20 million to carve offices

from part of the old L.S. Ayres Department Store, which is attached to Circle Centre. Just northwest of the mall, a national retailer is moving into another abandoned department store. And a 15,000-square-foot microbrewery is taking over an existing building across from the mall on Washington Street.

But don’t expect Indianapolis to rest on its laurels. The city is anxious to lure a 600-room hotel to the remaining open site between the Artsgarden and Monument Circle, reports John Klipsch, who manages the city’s public improvement bonds. The carrot the city government is dangling: expansion of the nearby convention center. Proposals are meanwhile being sought for Union Station, a struggling festival marketplace located a block south of Circle Centre Mall. Finally, Mayor Goldsmith is determining the city’s need for a new performing arts facility and examining the fate of Market Square Arena, the 25-year-old home of the NBA’s Indiana Pacers. Eager to stay competitive, the birthplace of the Indy 500 keeps racing at full throttle.—Vernon Mays
New interest in housing, cultural institutions, and sports facilities is sparking activity on the fringes of downtown Indianapolis. In the early 1990s, the city began financing improvements to the Central Canal, a glorified ditch that has been deepened and lined with a paved walk, and is now a popular spot for joggers.

In 1991, the Historic Landmarks Foundation of Indiana was among the first to stake a claim along the canal. The foundation moved the 1879 Kuhn House to the site and hired Ratio Architects of Indianapolis to renovate the building for its new state headquarters. "We were taking a risk, but it was advantageous because we could show an adaptive reuse," says Foundation President Reid Williamson.

Recession stymied development, but now several housing projects are in the works, and a new Canal Stakeholder's Association is developing design guidelines for new buildings. Infill housing continues to crop up east of downtown in the historic neighborhoods of Chatham Arch and Lockerbie, which includes six Neotraditional houses in Vermont Row designed by Looney Ricks Kiss Architects (above).

Multi-million-dollar investments are improving White River State Park, where a new $18 million ballpark designed by HOK Sport is set to open in July. Construction begins this spring on a 36,000-square-foot IMAX theater designed by E. Verner Johnson and Associates and CSO Architects. The team is also designing a 238,000-square-foot Indiana State Museum for a later phase of the same project.

Plans for the state park by Sasaki Associates outline immediate construction of a fountain plaza near the site of the city's first settlement; rehabilitation of an historic 1916 bridge as a pedestrian link to the Indianapolis Zoo; and future construction of walking paths and picnic pavilions along the riverbank.

Other park proposals include conversion of the former Acme Evans Mills Superintendent's Building into the Freetown Village Living History Museum, devoted to the region's African-American heritage.
Preserving the texture of downtown Indianapolis was as great a priority as the design of the new two-block-long Circle Centre Mall. Simon Property Group, the Indianapolis-based developer that helped realize the Mall of America near Minneapolis, was a major player in a 19-member consortium of local corporations that provided $70 million in private backing for Circle Centre. Of particular concern was the mall's effect on Meridian Street, a major axis which divides the city—and the entire state—into east and west.

"It's a premier address, both for commercial businesses and, in one upscale section of the city, for residential addresses," explains Reid Williamson, president of the Historic Landmarks Foundation of Indiana. To avoid the daunting presence of a monolith along the city's prime avenue, architect Ehrenkrantz & Eckstut recycled the facades of surviving late-19th-century mercantile buildings. Some remained on original sites; others were moved to new locations: ultimately, nine facades were worked into the mall's street wall, including the cast-iron front of the 1872 Vajen Exchange Block. Both the L.S. Ayres Department Store (part of which is now a store; the remainder is to be converted into offices) and Canterbury Hotel were saved.

Working with associate firms Browning Day Mullins Dierdorf and CSO Architects, Ehrenkrantz & Eckstut was recruited for its urban design expertise. Principal Stanton Eckstut says his key objective was to enhance the street without upstaging the city's most historic views. Tempering that urge for restraint was his belief that overhead bridges were needed to link the two parts of the multilevel mall, which is bisected by Maryland Street. Bridges also make direct, though often clumsy, connections to five adjacent hotels.

Overall, the project succeeds at encouraging street-oriented pedestrian traffic, screening service bays, and providing easy access to the underground garage. Inside, the mall is conceived as an urban street. While its clear, vaulted ceiling and strong vertical proportions are reminiscent of European arcades, Eckstut insists he was more mindful of the retail traditions of cities such as his native Philadelphia. With a central concourse 22 feet wide instead of the conventional 40 feet, Circle Centre has a spatial sense unique to contemporary American malls.
Artsgarden

View of Artsgarden from Washington Street

Circle Centre Artsgarden
Ehrenkrantz & Eckstut and
Blackburn Associates, Architects

View of hotel entrance on southwest corner
The latest addition to the Indianapolis streetscape is an elevated glass pavilion with concentric arches rising 95 feet high, created to promote diverse arts and cultural programs. "The Artsgarden is a dramatic departure for a retail mall because it is the focus of City Centre, not the retail," asserts Stanton Eckstut, who collaborated on the public project with Blackburn Associates of Indianapolis.

The Artsgarden is an important pedestrian connection to the two-block-large Circle Centre Mall and an anticipated third block facing Monument Circle. The new skybridges also lend scale and closure to the wide-open city grid.

Donated by the Lilly Endowment to the Arts Council of Indianapolis, the bright, airy space is supported on a 120-foot-diameter steel undercarriage spanning the intersection of Illinois and Washington streets. The main level, finished in German limestone, holds an audience of 400. A broad stair leads to the balcony level, which provides access to the mall's third floor.
Miami Beach
No one believed Miami preservationist Barbara Baer Capitman when she foretold that chic cafés would one day line Ocean Drive. In the 1970s, Miami Beach was far from chic: South Beach, the island’s southernmost portion, had deteriorated from the glamorous resort town of the 1930s and ’40s into “Wrinkle Row,” a shabby haven for poor retirees. Crime skyrocketed following the arrival of Cuban refugees from the Mariel Boatinf in 1980, and many residents fled. The state targeted Miami Beach as one of the most economically depressed cities in Florida.

But the Modernist hotels and apartments of Miami Beach had already caught the eye of architect Denise Scott Brown, who had proposed the creation of an Art Deco historic district in 1973—three years before Capitman’s preservation efforts began in earnest with the founding of the Miami Design Preservation League in 1976.

South Beach began gaining national exposure when the notorious television series “Miami Vice” began filming there in the mid-1980s, taking advantage of the ragged yet photogenic Art Deco streetscape as a backdrop. The modeling and fashion photography industries also found a ruinous beauty beneath the crumbling exteriors of Deco buildings, and set up shop in South Beach in the late 1980s. By 1989, several upscale outdoor eateries were established in renovated hotels along Ocean Drive—and Capitman’s prediction had come true.

Today, the transformation of South Beach is nearly complete. The median age of Miami Beach’s 93,000 residents dropped from 65.3 in 1980 to 44.5 in 1990, and now is actually closer to 30 in the South Beach district. Most historic Deco and Streamline landmarks have been restored or renovated, raising property values by as much as 400 percent since 1980, and the city is once again a glamorous international destination for tourists from the U.S., Latin America, and Europe. As Miami Beach Mayor Seymour Gelber claims, “It’s an entirely new city.”

The city is also emerging from the shadow of neighboring Miami and its 360,000 residents. Expanding its economic base beyond tourism and developing a strong year-round population, Miami Beach is forging its own distinct identity. Along with the fashion industry, Hollywood is rediscovering South Beach. According to the Greater Miami Convention and Visitors Bureau, the Miami area is now the third largest film, television, and print production center in the country. Entertainment giants Sony Music and MTV have opened new headquarters for their Latin divisions; Warner Records is reportedly planning a similar move to South Beach.

Although it began as a vacation resort, Miami Beach feels more urban than the Los Angeles-style sprawl that characterizes Miami and many of its mainland boroughs. “Most of the people who live in South Beach don’t own automobiles,” observes Benjamin Wood, formerly of Cambridge-based Thompson and Wood, which is renovating the Lincoln Road pedestrian mall (pages 104-105). “In that sense, it’s probably the most urban environment in the whole South.”

Protecting the city’s dense urban character and preserving its early 20th-century landmarks were Capitman’s goals when she successfully listed the Art Deco district on the National Register of Historic Places in 1979. The first historic area on the National Register to comprise 20th-century buildings, the district covers one square mile extending roughly from Ocean Drive west to Lenox Avenue, and from Sixth Street north to Lincoln Road. This relatively small area contains an astounding density of Deco, Streamline, and Moderne landmarks: 800 of the 1,200 structures are listed as historically significant.

However, the southern tip of the island known as South Pointe had been earmarked by the city and state as a redevelopment zone, and was omitted from the historic district. Having escaped the stringent preservation guidelines governing the rest of the Art Deco National Historic District, the area has given rise to outlandish and controversial projects, including the South Pointe Tower (ARCHITECTURE, October 1994, page 47) and the new Portofino Tower (page 51, this issue).

After years of debate, the Miami Beach City Council unanimously approved a plan in late February to designate South Pointe as the new Ocean Beach Historic District, thereby ensuring the preservation of the entire island south of Lincoln Road. The new designation will prohibit the demolition of existing historic buildings, make the design review process more rigorous, and introduce new criteria for evaluating new buildings based on compatibility with their surroundings.

What’s next for Miami Beach? The latest wave of development is bringing big-name chain retailers and hotels—to some, a signal of South Beach’s maturity as an urban center, but ultimately a threat to the survival of quirky small-scale shops, cafés, and hotels that were central to the city’s early success.

Mayor Gelber, however, is encouraged by new hotel development proposed further north on Miami Beach, as well as by the continued stream of international investors with plans for more shops, hotels, restaurants, and condos: “It’s amazing the people who are coming here to invest large sums of money in the future of this city,” he marvels. The 76-year-old mayor confides that sometimes his city’s older residents aren’t as enthusiastic about Miami Beach’s ongoing building activity as its younger denizens. “But most people here, even the retirees, are still excited about living in such a dynamic city,” he adds. “I know I am.”—Raul A. Barreneche
Miami-based Arquitectonica made a splash in the early 1980s with brilliantly hued high-rise condos that captured the spirit of a decade of excess. In 1994, principals Bernardo Fort-Brescia and Laurinda Spear moved their offices from the staid, red-tiled suburb of Coral Gables to a playful new four-story stucco building they designed in South Beach (above).

The move makes Arquitectonica one of several cutting-edge firms that have relocated to the beach in the past few years, including the young Modernist Carlos Zapata, the former Ellerbe Becker designer, who recently teamed up with Benjamin Wood to create a new firm, Wood & Zapata.

Arquitectonica’s four-story office building—the first project the firm completed in South Beach—lacks the bold colors and heroic forms of its earlier work. But funky cutouts of sea life punctuate the sculptural elevator tower, and mosaic panels inspired by Seminole Indian patterns enliven ribbon windows. A curved, glazed rooftop conference room offers sweeping views.

Although Arquitectonica plans to move to new offices in downtown Miami this summer, it has played a key role in the transformation of South Beach. The firm recently renovated two floors of offices for MTV’s Latin operations on newly resurgent Lincoln Road (below). Only two blocks east, the firm just completed a $1 million renovation of an office building whose tenants include Sony Music’s Latin division. A sober departure from its flashier work, the straightforward renovation of the existing 1936 building includes a new rooftop pavilion, and a minuscule lobby designed by Carlos Zapata.
Some of the most memorable new oceanfront buildings in South Beach are also the smallest. Local architect William Lane designed 27 new lifeguard stations, 8 of them customized (left), to replace the standard-issue shelters destroyed by Hurricane Andrew in 1992. The simple wood-and-aluminum structures were designed pro bono and constructed by the city.

Lane’s Sherbet-colored stands incorporate Deco details of the 1920s and ‘30s, while also recalling 1950s and ‘60s pop culture imagery. Lane, who has worked for such unlikely mentors as I.M. Pei and Rem Koolhaas, alludes to the small-scale structures depicted in Mask of Medusa, by Lane’s former Cooper Union professor John Hejduk. “But they’re sweeter and more optimistic,” asserts the 40-year-old architect.

While Lane’s lifeguard stands look to past incarnations of Miami Beach, Parisian architect Philippe Starck’s $20 million renovation of the 1947 Delano Hotel portends a more sober, subdued vision of South Beach (facing page, top). The white-on-white color scheme includes cool, dark lobby interiors inspired by the old resorts of Cuba, Brazil, and the South Pacific. “There is less to see, more to feel,” Starck pronounces. But despite spartan, minimal moments, there is still plenty to see: dramatic 30-foot-high curtains and mismatched Modern chairs fill the lobby.

Two blocks south of the Delano, Michael Graves’s new $25 million beachfront condominium (facing page, bottom) is drawing fire for both its oversized architecture and its media campaign. Larger-than-life photos of Graves adorn billboards throughout metro Miami, urging viewers to “own a Michael Graves original.” The 15-story residential, office, and retail complex will terminate dense, beachfront Ocean Drive with an acontextual Classical exclamation. Opening in 1998, the project will incorporate new retail in the historic Bancroft Hotel, an Art Deco landmark, and add a new residential tower to the east.

Both the Delano and Graves’s complex import strong new imagery to a place already rich in its own. More importantly, they are drawing tourism and new development further north, and again focusing attention on the beachfront strip where the South Beach renaissance began a decade ago.
New beachfront projects import strong imagery to a place already rich in its own.
One of the most ambitious projects under way in South Beach is the $16 million transformation of Lincoln Road, an 8-block-long pedestrian mall originally designed by Miami Modernist Morris Lapidus, which is scheduled to be finished in November. The Cambridge firm Thompson and Wood was selected by the city in 1993 to orchestrate a master plan. Instead of homogenizing the mall with continuous storefronts and overdesigned street furniture, the firm sought to revive and preserve the street’s Modern character and decidedly spontaneous atmosphere.

Infrastructure improvements were funded by the city, with some federal money. Expansion of sidewalks and construction of new structures was paid for by the city and the Lincoln Road Partnership, local property owners who agreed to a self-imposed tax increase.

Lincoln Road was fitted in 1959 with a Lapidus-designed scheme of paving patterns, shade structures, and fountains. By the early 1970s, many of the original stores had closed, and the once-glamorous “Fifth Avenue of the South” was transformed into a ghost town of empty storefronts and crumbling fountains—populated not by shoppers, but by the homeless.

Thompson and Wood finished restoring the original Lapidus streetscape, upgraded the deteriorated infrastructure, and added new street signs. Landscape designer Martha Schwartz was tapped to design new paving patterns (below left), and Tokyo architect Hiroshi Hara and local designer Carlos Zapata created new shade structures at the mall’s east and west ends (center left). Schwartz adds a colorful spin to Lapidus’s funky streetscape with oversized sidewalk patterns (bottom left) ranging from red and yellow donuts (facing page, top right) to free-form orange flowers.

The street is fast becoming the social hub of South Beach life. Already, a farmer’s market is held on weekends, and a free public tram is running. A 24-screen cinema and retail complex proposed by local architect Bernard Zyscovich, currently on hold, promises to contribute to the mix of activities (top left).

Principal Benjamin Wood hopes the intervention remains invisible: “Five years from now, people might believe Lapidus did it all—and I would be absolutely honored.”
Lincoln Road streetscape

New sidewalk paving patterns
Martha Schwartz, Landscape Designer

Morris Lapidus fountain

Morris Lapidus shade structures
Ironically, the artists responsible for the revival of South Beach in the 1980s have begun emigrating to North Miami, attracted by its lower rents and growing artistic community, of which the new Museum of Contemporary Art (MOCA) is a key part (facing page). The city’s suburban landscape of strip malls, fast-food joints, and tile-roofed bungalows eventually gives way to a small civic and retail district, where MOCA opened in February. Designed by Gwathmey Siegel & Associates and local architect José Gelabert-Navia, the museum anchors a large public plaza that links a five-story city hall with a new police headquarters building in a somewhat disjointed expression of *ars civitas*.

The modest single-story museum, which cost less than $100 per square foot, is organized around a barrel-vaulted, 10,000-square-foot flexible gallery. Administrative and curatorial spaces are housed in separate stucco-clad volumes. The main plaza, overlaid with a grid of 38 date palms and a large, circular reflecting pool, will be used for public activities as well as museum openings.

Surprisingly, the $3.75 million museum and plaza was funded mostly by a $2.5 million grant from the U.S. Department of Housing and Urban Development. This special-purpose, downtown-revitalization grant was secured by former U.S. Representative William D. Lehman (D-Miami). A $1 million capital development grant was also awarded by the State of Florida Fine Arts Council, with the remainder funded by the Dade County Cultural Affairs Council and the City of North Miami. “It’s amazing, but no private money was used at all,” reports Partner Charles Gwathmey.

In contrast to the publicly funded MOCA, the new $12 million Wolfsonian Museum in South Beach (left) was paid for by local art collector Mitchell B. Wolfson, Jr. Miami-based architect Mark Hampton and designer William Kearsn renovated a 1927 fortresslike, Mediterranean-inspired warehouse, reconfiguring the existing five-story structure and creating two new floors of galleries in a penthouse addition.

While not among the most elegant or inventive buildings in South Beach, Wolfson’s museum brings to light an important collection of design-related objects, providing further evidence of Miami Beach’s growing cultural maturity.
Museum of Contemporary Art
Gwathmey Siegel & Associates and Gehry & Navia Architects

Reflecting pool

Museum entrance flanking plaza
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Economical, versatile, and familiar, concrete block and wood are staples of the building industry. This month’s Technology & Practice section explores new applications of these conventional materials, with an emphasis on detailing and product development. Our technology feature traces concrete masonry’s evolution from basic blocks for backup walls to specialty units for cladding. Behind the esthetic improvements lie more resilient concrete and better installation methods. We also single out seven winners of this year’s Wood Design Awards, sponsored by the Wood Council of the American Forest & Paper Association to encourage innovative wood design and construction.

Another design competition, for the United States embassy in Germany, poses urbanistic challenges in the heart of Berlin. The jury reportedly chose Moore Ruble Yudell, but the winner has yet to be officially announced by the U.S. Department of State.

For architects seeking to limit exposure to malpractice claims, help has arrived. Two new types of business entities now available in most states, the limited liability partnership and the limited liability company, are gaining popularity among architects. Our practice article explains how these organizational choices can reduce partners’ personal risk while preserving tax benefits.

Architects are always trying to boost productivity, often with the help of CAD. This month we review MicroStation 95, the latest release from one of the design software industry’s front-runners, Bentley Systems.
Cherry. Maple. Oak. We've always used these fine woods for cabinetry and moldings. Now thanks to Weather Shield, we can complement that look in windows and doors, too. Our firm builds unique, hand-crafted log homes, ranging from $200,000 to $1 million. Our clients don't want something straight out of a catalog—they expect something different. That's where Weather Shield's Hardwood Series is a perfect fit.

"We've had cherry cabinets in the


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Why we've
Concrete Block’s New Face

No longer a behind-the-scenes material, concrete masonry units move up front as an inexpensive, efficient cladding alternative to stone, brick, and stucco.

A n economical, fire-resistant, and load-bearing material, concrete block has spawned a generation of prisons, schools, and public housing—but often buried behind a veneer, such as brick or stucco, and visible only from the interior. And in commercial buildings, concrete masonry units (CMUs) are relegated to out-of-sight spots such as basements and elevator shafts. As a result, CMU has traditionally been burdened with the stigma of low-budget design. Now, an influx of new colors, textures, and sizes and a more consistent structural performance are leading architects to embrace concrete block as a legitimate finishing material for public and commercial buildings across the country.

For the last 40 years, the CMU industry has focused on refining the engineering properties of concrete block, explains architect Robb Jolly of the National Concrete Masonry Association. Today’s CMU features greater dimensional stability and stronger, crack-resistant composition. Aggregates, which make up 90 percent of a concrete block’s ingredients, can be manipulated to increase fire resistance and regulate thermal conductivity. Air entrainment admixtures produce denser units and reduce breakage of newly cast blocks, while accelerators such as calcium chloride speed up the hardening of units in cold weather.

Water has always posed the greatest threat to concrete block construction. The watertightness and structural behavior of CMU have significantly improved in recent decades, thanks to stronger adhesives, more reliable sealants, and integral water repellents that purportedly reduce units’ rate of absorption and capillarity (movement of water in pores due to surface tension).

One of the more subtle innovations in concrete block construction is not in composition, but in assembly. Better flashing details and materials aid waterproofness, claims Charmaine Tenwinkel, product manager of W.R. Grace & Company. Refined insulation methods increase thermal efficiency, and reinforcing methods such as posttensioning produce taller, more slender CMU walls.
As a result of these advances, block manufacturers have shifted their emphasis from engineering units to promoting architectural variety through new colors, textures, and sizes. Lightweight aggregates such as pumice or expanded shale enable manufacturers to produce units as large as 16 by 24 inches. Custom shapes include beveled units for cornices, window sills, and wall bases, as well as bullnosed sections for window and door jamb, piers, and pilasters.

Scored, fluted, and ribbed decorative blocks are created with special aggregates and mixes. For a rusticated look, split-face CMU is fabricated from raw blocks cast as double size and split with a guillotinelike blade. Designed to resemble stone, ground-face CMU incorporates colored aggregates—"the poor man's granite," quips Andrea Leers, principal of Leers, Weinzapfel Associates.

Custom-colored blocks boast a new level of consistency unheard of five years ago. Powdered dyes have been abandoned for precisely metered liquid pigments, measured with a sonogram to ensure continuity from batch to batch. Graffiti-resistant glazed units, introduced in the 1970s and now enjoying renewed popularity, offer an affordable alternative to nonstructural tiles. The recent addition of ultraviolet inhibitors and chemical stabilizers, devised to restrict movement of pigments within the glazing's polyester matrix, has greatly reduced the blocks' tendency to fade from prolonged exposure to sunlight.

Manufacturers have also increased the glazing's ductility to allow the concrete to expand and contract without cracking the face.

The response to these new products has been positive. Over the last decade, sales of what manufacturers term "architectural" concrete block—colored, textured, and oversized CMU—have steadily climbed. In 1986, standard gray block accounted for 80 percent of purchases industrywide; by 1994, it had dropped to only 59 percent. Architectural block, meanwhile, rose from 10 percent in 1986 to 18 percent in 1994. Increasingly, architects are specifying CMU for cladding as well as the backup material in double-wythe cavity walls. At Trenwthy Industries, sales of 2- and 4-inch-thick nonloadbearing units
jumped from 25 percent of the company's total sales in 1991 to 43 percent in 1995.

Timing is an important factor in concrete masonry's resurgence. A nationwide belt-tightening in the early 1990s forced architects to take a second look at CMU, which doesn't require highly skilled labor to erect and involves little maintenance. Greater attention to project delivery and what Jolly identifies as a design shift to a "systems integration platform"—only one material for the structure, cladding, and interior face of perimeter walls, instead of multiple components—have also contributed to the material's popularity.

This single-substance trend is supported by technical as well as esthetic reasons. If a cavity wall uses concrete block as the backup wall and brick for the facing, the brick has a tendency to expand but the block will contract. If both the facing and the backup are built of CMU, then the problem of differential movement between the surface material and its support is eliminated.

Concrete masonry's greatest attributes are still its economy, fire resistance, sound absorption, and energy efficiency; likewise, its critical threats remain water infiltration, cracking, spalling, and efflorescence. What has changed is that CMU is now better received and better detailed by architects, who have begun specifying the material for courthouses, schools, and churches. This quiet revolution is being waged—and won—in the department of design.—Ann C. Sullivan
Holophane’s new PoleStar system of lighting is as new as Polaris is old.
Unlike its namesake, Holophane’s PoleStar draws very little attention to itself.
Here’s why: With the PoleStar system, architects can choose from two sizes, three luminaire shapes, three lighting patterns and three mounting styles. This makes it easy to make outdoor lighting blend with the surroundings.

Engineers like PoleStar, too. It can’t be beaten for price and performance. It offers 6:1 spacing (which neatly fits a parking lot grid). And, because PoleStar combines durable cast aluminum with automotive grade ABS,
It's no surprise that the majority of the 1995 Wood Design Awards, held annually by the Wood Council of the American Forest & Paper Association to encourage the use of wood in architecture, were designed and built in the Pacific Northwest and Canada, primary centers of the timber industry. The winning projects preserve and expand upon regional traditions of timber-frame construction through vernacular references and skillful detailing.

Restoration projects in Northern California, Oregon, and Washington exemplify the appreciation of the vernacular. An 1880 Bay Area bungalow updated by Lahn Architects reuses the house's original timbers and recycles wood from demolished buildings. Fletcher Farr Ayotte seismically upgrades a 1915 lodge in Oregon's Crater Lake National Park. And MENG Architects transform cedar-clad cabins at Washington's Camp Waskowitz, built in 1935 by the Civilian Conservation Corps to emulate the local vernacular, into an environmental education center.

Winners also draw from regional precedents. Architect Robert Luchetti's house for his parents reflects the same balloon-frame construction as nearby barns. A coastal Maine guest house designed by Sheila Narusawa wedds Japanese and nautical joinery, while Katz Webster Clancy Associates' day-care center for the Algonquin First Nation echoes the forms of Native American canoes.

Those projects built outside of major timber centers focus on new techniques. For a Swiss housing complex, Bellmann + Pedroni Architects developed a system of wood beams nailed together to form a slab capable of spanning 40 feet. Thompson and Rose Architects employed wind scoops to cool the Atlantic Center for the Arts in Florida.

The jury that selected the 13 winning projects from more than 268 entries comprised Frances Halsband of R.M. Kliment & Frances Halsband; Laura Hartman of Fernau & Hartman; and John Webster, dean of the School of Architecture at the University of Tasmania in Australia.—Ned Cramer

Honoring Wood

This year's design awards from the American Wood Council reinterpret regional traditions.
A pair of nearby barns provided the inspiration for the 4,200-square-foot house that Robert Luchetti designed for his parents and their extended family on a 600-acre Northern California cattle ranch. "We were drawn to the big, tectonic envelopes of the barns, so light in scale," explains Luchetti.

Oriented along an east-west axis to capture prevailing breezes, the house consists of a linear block containing the living area, four bedroom suites with private baths and decks, and sleeping and study lofts. Trusses running the length of the block support a roof framed with exposed rafters. The double-height volume of the living area, where the balloon-frame structure is most visible, is divided by a freestanding two-sided fireplace into spaces for dining and sitting.

The kitchen, porches, hallways, and service areas project out from the main volume, providing shade and alleviating the house's bulk and height. The seemingly ramshackle arrangement of these add-ons, implying addition over time, belies sophisticated geometric alignments with landscape views: a terrace defined by the house, a wooden pergola, and an outdoor brick oven lines up with the cardinal points of the compass.

Most structural joints are nailed rather than bolted, reflecting construction details of the nearby barns. Exterior materials, including galvanized steel roofs and plywood cladding, further reference farm buildings. The striped cladding of the kitchen and other areas consists of stained, 1⅛-inch-thick redwood-plywood sheets, which are applied over continuous bands of prebent metal flashing strips and ⅛-inch-thick plywood sheathing.

Inside, open wood framing and galvanized steel cables in the staircase mimic the detailing of a nearby windmill, and ladders lead to open platforms in the rafters which recall hay lofts. The exposed interior structure, floor, and ceiling are stained to reflect the colors of the California landscape outside.

Jurors praised Luchetti's design for its simple organization and inventive detailing. "A strong and clear exterior form belies the explosive interiors of exposed structural members," they maintained. "By rigorously adhering to light, 2-inch-nominal-thick dimension lumber, conventional framing was employed in an unconventional way."
Coastal Maine Guest House
Tenants Harbor, Maine
Sheila Narusawa Architects

This guest house is sited on a 6-acre site in Tenants Harbor, Maine, overlooking a tidal cove which leads to the St. George River. Newton, Massachusetts-based architect Sheila Narusawa built the house on temporary foundations so it can be moved when a larger, main house is constructed on the site.

The 950-square-foot cabin's typical wood-frame structure, cedar shingles, and pitched roof evoke traditional coastal New England buildings. On the interior, Narusawa called upon years spent designing for a firm in Japan to maximize the tiny square footage. She designed built-in cabinets, beds, and seating in the spirit of traditional Japanese architecture to free up valuable floor space. Sliding doors on three sides of the living area, inspired by shoji screens, eliminate space-consuming swings. Local cabinetmakers crafted all the interior paneling, cabinetry, and built-in furniture from unfinished Port Orford cedar.

A double-height living, dining, and kitchen space occupies the house's western half; the stacked master bedroom and loft are positioned in the eastern half.

Paulk House
Seabeck, Washington
James Cutler Architects

The mannered wood frame construction of James Cutler Architects' Paulk House (ARCHITECTURE, May 1995, pages 88-91), overlooking the Hood Canal in Washington state, translates the local tradition of mountain cabins into a contemporary esthetic. Elevated on cross-braced posts resting on rough concrete foundations, the 2,500-square-foot house is accessible only by a pair of footbridges leading from the guest entrance and garage. The bridge leading to the guest entrance passes through the house to a deck overlooking the canal, and divides the interior into living and sleeping areas.

Extensive cross bracing inside and outside the house, although haphazard in appearance, plays a structural role. Irregularly spaced rafters project from overhangs in uneven lengths; columns meet the floor at odd angles. The pine-paneled ceiling stops just short of the wall, revealing the joists above it. In sharp contrast to these structural members is the simple, refined joinery—corner trim, cabinetry, and window and door surrounds—that articulates interior and exterior surfaces.
Gilamont Village
Vevey, Switzerland
Bellmann + Pedrolini Architects

An ingenious prefabricated system of wood and concrete distinguishes the Gilamont Village apartment complex in Vevey, Switzerland, designed by Montreux, Switzerland-based architects Gilles Bellmann and Michel Pedrolini. Nine bays, three of which are still under construction, house 6 duplex apartments each.

Fan-shaped in plan, each five-story volume rests upon a concrete base housing a garage. A continuous, glazed corridor on the northeast side of the complex gives access to the southwest-facing apartments.

Floors are composed of pine beams laid side by side and nailed together to form a continuous slab (above), covered with a nonstructural layer of concrete for acoustic dampening and fire protection. The wood and concrete are joined with flat-headed metal rods imbedded in the wood slab. The slabs, capable of spanning distances of up to 45 feet, are left exposed to form the apartments’ ceilings. The system is also used to form the loadbearing walls between units: each wall is composed of a pair of wooden slabs sandwiching a layer of concrete.

Prefabricated House Prototype
Fox Island, Washington
Anderson Anderson Architects

Le Corbusier’s Maison Citrohan is updated for the contemporary Pacific Northwest in Anderson Anderson Architects’ prefabricated house prototype in Fox Island, Washington. However, this “highly rational mass-producible house” substitutes the domino structural system of pilotis and concrete slabs with a balloon frame of standard-dimension lumber.

The main living space and bedroom are separated by a staircase and entrance hall. Above the living room, a sleeping loft floats on I-beams that span the full width of the 1,200-square-foot house. A deck extends over the garage.

Materials were chosen for their economy, availability, and ease of transport. The structure consists of 8-foot-wide individual sections of 2x6 framing sheathed in 1/2-inch-thick plywood (above). The sections are clad in inexpensive overlapping strips of granulated-asphalt roofing with sheet-metal expansion joints; the curved roof is clad in galvanized steel. Standard aluminum-frame windows are bolted to the outside of the wood frames, rather than recessed into them.
Greenhouse Prototype
Launceton, Tasmania, Australia
Department of Architecture, University of Tasmania

The oldest wooden conservatory in the Southern Hemisphere inspired architecture students at the University of Tasmania in Australia, where juror John Webster is the dean of architecture, to design their own modular prototype. Intended for light commercial and residential markets, the greenhouse demonstrates the structural potential of the island’s major export, timber. The passive solar greenhouse can be built as a freestanding structure, or one half can be utilized as a lean-to against an existing building. Several greenhouses can be placed end to end to create a larger conservatory.

The students avoided an overtly industrial aesthetic by using a simple three-pin arch composed of plantation pine members with a triangular cross-section. The frame rests on a galvanized metal frame foundation set into a gravel floor, which helps the structure retain heat and allows for drainage. Wooden louvers at each end provide ventilation. Students tested the pine arch system and engaged in a design/build process to ensure materials’ strength and the structure’s feasibility.

104 Terrace Avenue
Bolinas, California
Lahn Architects

Lahn Architects renovated an 1880 wood-frame bungalow in Bolinas, California, using mostly recycled redwood framing and cladding. The 1,500-square-foot house’s siding was stripped, sanded, and reinstalled. Inside, 1-inch-thick paneling was remilled to a 3/4-inch thickness and replaced. Existing 2x4 rafters, which no longer meet local codes, were supplemented with 2x6 rafters painted to distinguish them from the unfinished originals.

Joinery from various portions of the house was also reused: siding from an original bathroom was transformed into kitchen cabinetry; a kitchen window was relocated to the wall between the front hall and living room; and kitchen floorboards became a bedroom door.

All the wood used in the construction that was not recycled from the house was salvaged from demolished buildings in the surrounding Bay Area. The French doors in the library have a particularly distinguished provenance, hailing from a Bernard Maybeck house in San Jose: their pivoting windows inspired similar custom-made windows for the kitchen.
From Driveway to Highway

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Design partnerships, like their counterparts in law and accounting, expose their partners to unlimited personal liability for malpractice claims. In recent years, many partnerships have converted into professional corporations to shield their members from such liability. But these corporations lack the tax benefits of general partnerships, forcing owners to pay taxes on both profits and paid-out dividends while subjecting the firm to the organizational formalities of corporate status. What architects have long needed is a new business entity that combines a partnership's tax benefits with a corporation's limited liability.

Over the last three years, 47 states and the District of Columbia have helped to fill that need by enacting laws to create two new types of business entities: the limited liability partnership (LLP) and the limited liability company (LLC). The primary attraction of LLPs and LLCs is that both offer owners a combination of the limited personal liability for all business obligations, and the flow-through tax advantage enjoyed by general partnerships. But transforming an existing partnership into an LLC is far more complex than converting one to an LLP. Different laws apply, and a complete reorganization is necessary: the existing partnership must be dissolved and an entirely new entity formed. For that reason, partnerships interested in curbing their unlimited liability are better suited to become LLPs.

The state of Texas gave birth to the LLP in August 1991, largely in response to the savings and loan crisis of the late 1980s. Currently, 36 states possess some form of an LLP statute. An LLP can best be defined as a partnership whose partners are statutorily relieved of all or part of their personal liability for obligations, liabilities, and debts of the partnership. It must be stressed that LLP statutes vary widely among states, and an LLP partner's liabilities depend exclusively on the specific language of each state's law.

Limiting Your Liability

Two new ways to structure a firm combine the legal protection and management flexibility of a corporation with the tax incentives of a partnership.

normally reserved for corporate shareholders and the single level of federal income taxation characteristic of a general partnership.

Many of the architectural firms that have converted to LLPs are more concerned with limiting personal liability than with tax benefits. "For too long we found ourselves under pressures that others in the design industry did not have to bear," contends Partner Richard S. Hayden of Swanke Hayden Connell Architects, which became an LLP last year. "Architects have never had the same liability protection that interior designers practicing as corporations have enjoyed."

Other firms, such as Peter L. Gluck and Partners, have decided against registering as an LLP, believing such a safeguard to be unnecessary. "We look at ourselves as partners as that term is recognized in its purest sense," explains Peter Gluck, the firm's founder. "We're a tight-knit group and maintain close relationships with our clients."

LLCs offer a viable business form for firms not currently organized as partnerships by providing the corporate benefit of limited liability for all business obligations, and the flow-through tax advantage enjoyed by general partnerships. For example, LLP statutes established in Texas and Delaware only shield a partner from malpractice claims resulting from the negligence of a copartner, or from a representative of the LLP not working under the supervision or direction of the partner. Innocent partners remain personally liable for all ordinary business obligations and may have to contribute to the LLP to discharge those obligations. Negligent partners remain personally liable for malpractice claims as well as ordinary business obligations. In contrast, more recent LLP laws in New York, Pennsylvania, and Minnesota eliminate innocent partners' liability for all partnership obligations, including contract and tort claims.

LLPs are formed by filing a registration statement pursuant to the particular state's law. An existing partnership trying to become an LLP need not create a new partnership or enter into a new partnership agreement. The partners may amend their current partnership agreement to reflect the likely change in partners' shares of the LLP's risks and obligations.
Typically, states require that the name of the LLP include the words “limited liability partnership” or the abbreviation “LLP.” After registration, all official stationery should be changed. Several LLP statutes, including Pennsylvania, Virginia, Georgia, and the District of Columbia, require that an LLP carry a minimum amount of professional liability insurance or maintain an escrow account to cover amounts for which partners are no longer personally liable.

For firms working outside their home state, an issue arises over the applicability of one state’s LLP laws to another state. State LLP statutes vary on important issues such as the level of personal involvement required to incur personal liability, the necessity of maintaining professional liability insurance or escrow accounts, and the types of businesses that may register as LLPs. LLP partners, with the assistance of counsel, should carefully research the laws of “foreign” states to determine their potential liability. Even in the worst-case scenario, where every partner is held personally liable for the negligence of another, the liability is no different than that facing members in a general partnership. Converting to an LLP can therefore only decrease the risk of personal liability.

LLPs get high marks when compared with other business structures (chart, facing page). Until recently, most architects structured their firms as either general partnerships or professional corporations, but by registering as an LLP, the firm can maintain the partnership’s traditional business form while benefiting from the corporation’s limited liability.

Although a limited partnership, which comprises a general partner and limited partners, enjoys tax incentives and provides limited liability to its limited partners, those partners cannot take part in any management or control functions within the business. Only the general partner may do so. But LLP partners, while retaining the tax and liability benefits of limited partners, need not sacrifice their right to engage in the management and control of the business. Moreover, the general partner of a limited partnership remains liable for all partnership obligations.

In most states, architects practicing in a general partnership are personally liable for the debts and obligations of the partnership to the extent that they cannot be satisfied from the partnership’s assets. Practitioners in a conventional partnership are also usually subject to joint and several liability: each partner, particularly those with deep pockets, can potentially face personal liability for the entire cost of a malpractice judgment.

Architects who practice as shareholders in a professional corporation, meanwhile, are not exposed to personal liability for a fellow shareholder’s negligent acts. The trade-off is that shareholders are subject to double taxation—the corporation pays tax on its profits, then the shareholders pay tax on the dividends they receive from the corporation. At first glance, the S corporation option, which offers limited liability and partnership status for tax purposes, would seem to equal the advantages of an LLP. But to qualify for S corporation status, a business must have 35 or fewer shareholders, possess only one class of stock, and be owned solely by U.S. residents.

LLPs have no such membership restrictions, making them much more flexible. LLPs may also have a competitive advantage in recruitment of new, established partners. Because of the LLP’s limited liability, personal financial exposure of new partners would be limited to their own negligence, removing any worry about personal responsibility for another partner’s negligence.

Since each partner in an LLP would no longer be personally liable for a large malpractice award resulting from another partner’s negligence, some partnerships may choose to retain some form of pro-rata sharing of liability. Otherwise, partners who handle the larger, more complex design projects—with greater possible risks of malpractice suits—may find themselves solely responsible for huge liability judgments.

One way to alleviate concern among the partners is to amend the partnership agreement so that all partners must contribute to or indemnify the responsible partner(s). These provisions, called contribution agreements or cross-indemnification agreements, usually require the otherwise innocent partners to contribute an amount proportional to the pro-rata share of their partnership interests. However, if not carefully drafted, the agreement can be attacked legally. The document should also specify that the contribution provision not be triggered until after a final judgment has been entered or a settlement reached by the actively negligent partner, in order to prevent negligent partners from failing to defend against the claim as zealously as they might if their personal assets were at stake.

In some states, contribution provisions could create an enforceable contractual right for third-party claimants. If a third-party beneficiary right is recognized, and the judgment can be recovered from all of the partners, not just the negligent one, the third party might be able to exact a larger settlement. The partnership agreement may be amended to expressly prohibit third-party rights, thus precluding plaintiffs from enforcing such a status under the agreement.

LLPs, while advantageously combining tax benefits, management flexibility, and limited liability, remain a relatively new and legally untested business form. Before registering as an LLP, be sure that LLP legislation has been adopted in your state, and carefully determine whether the LLP form will serve your firm’s particular needs.—Barry B. LePatner, Timothy F. Hegarty, and Jeffrey A. Hill

Barry LePatner is the founder of New York-based Barry B. LePatner and Associates, a law firm devoted to advising architects. T.F. Hegarty and J.A. Hill are associates of the firm.

In limited liability partnerships, personal financial exposure of new firm members is limited to their own negligence.
## Comparison of Limited Liability Partnerships, Limited Partnerships, and Corporations

<table>
<thead>
<tr>
<th>LEGAL CONCERN</th>
<th>LIMITED LIABILITY PARTNERSHIP</th>
<th>LIMITED PARTNERSHIP</th>
<th>C CORPORATION</th>
<th>S CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability limitation</td>
<td>Limited liability for partners even if they participate in management.</td>
<td>Limited liability only for limited partners who do not engage in management; general partner has unlimited liability.</td>
<td>Limited liability for shareholders even if they participate in management.</td>
<td>Limited liability for shareholders even if they participate in management.</td>
</tr>
<tr>
<td>Management</td>
<td>Management by all members is allowed, unless other modality is chosen.</td>
<td>Management by general manager only.</td>
<td>Management by board of directors is allowed, except in a statutory close corporation.</td>
<td>Management by board of directors is allowed, except in a statutory close corporation.</td>
</tr>
<tr>
<td>Number of members</td>
<td>No maximum.</td>
<td>No maximum.</td>
<td>No maximum.</td>
<td>Maximum of 35.</td>
</tr>
<tr>
<td>Types of owners allowed</td>
<td>No restrictions.</td>
<td>No restrictions.</td>
<td>No restrictions.</td>
<td>Ownership not allowable by corporations, pension plans, partnerships, limited liability companies, nonresident aliens, or trusts (except voting trusts and S corporation trusts).</td>
</tr>
<tr>
<td>Are various classes of ownership interests recruited?</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Except for differences in voting rights, only one class of ownership permitted.</td>
</tr>
<tr>
<td>When are basis adjustments available?</td>
<td>Upon death of a member or sale of a member’s interest (Internal Revenue Code 754).</td>
<td>Upon death of a member or sale of a member’s interest (Internal Revenue Code 754).</td>
<td>Never.</td>
<td>Never.</td>
</tr>
<tr>
<td>Can life of organization continue indefinitely?</td>
<td>Yes, but company must still avoid at least two other “corporate” characteristics (i.e., centralization of management and free transfer of interests).</td>
<td>Yes, but company must still avoid at least two other “corporate” characteristics (i.e., centralization of management and free transferability of interests).</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Are interests freely transferable?</td>
<td>Yes, but company must still avoid at least two other “corporate” characteristics (i.e., centralization of management and continuity of life). Typically both are avoided.</td>
<td>Yes, but company must still avoid at least two other “corporate” characteristics (i.e., centralization of management and continuity of life).</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Do owners have flexibility in structuring retirement buyouts?</td>
<td>Yes, in the context of LLPs engaged in providing professional services.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>How are insolvency exceptions determined for discharging of debt?</td>
<td>Determined at level of investor.</td>
<td>Determined at level of investor.</td>
<td>Determined at corporate level.</td>
<td>Determined at corporate level.</td>
</tr>
<tr>
<td>Is liability limited in all states?</td>
<td>Members must cross-check statutes of states in which they operate.</td>
<td>Yes, but only to the extent previously noted.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Are losses deductible by owners?</td>
<td>Members may deduct their allocable share of the LLP’s losses to the extent of their tax basis in their LLP interest, which includes their share of LLP debt. Thus, they will have basis with respect to loans to their LLP that they have guaranteed.</td>
<td>Partners may deduct their share of the limited partnership’s losses to the extent of their tax basis in their partnership interest, which includes their allocable share of partnership debt. Thus, they will have basis with respect to loans to the partnership that they have guaranteed.</td>
<td>No.</td>
<td>Shareholders may deduct their share of the S corporation’s losses only to the extent of their tax basis, S corporation shares which they own, and their basis in loans they have made to the S corporation. They need no basis for loans to the S corporation that they have personally guaranteed.</td>
</tr>
<tr>
<td>Can company apply the cash method of accounting?</td>
<td>Probably always.</td>
<td>Not unless limited partnership is primarily providing a personal service.</td>
<td>Not unless corporation is primarily providing a personal service.</td>
<td>Not unless corporation is primarily providing a personal service.</td>
</tr>
</tbody>
</table>
Speed is King!

In the early days of microCAD, Autodesk® used to say that there were just three things users were looking for in a good CAD application... speed, speed and speed.

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4000E-II Engineering Document Plotter
Competition

As of late March, six months after adjourning the selection panel and spending more than $1 million in public money, the U.S. Department of State has yet to announce the architect of the new U.S. Embassy in Berlin. This year's federal budget impasse is to blame, contends a State Department source. Yet while State delays disclosing the choice of architect and the cost of the embassy to antagonistic lawmakers, the foreign press reports that Moore Ruble Yudell Architects of Los Angeles has won.

The competition focuses on not only the architecture of the embassy, but also the urban design of Berlin's Pariser Platz, the square fronting the famed Brandenburg Gate (below). The U.S. Embassy once stood on the southwest corner, before being shelled during World War II. The remnants of both the embassy and the square subsequently disappeared behind the Berlin Wall.

When the Wall came down in 1989, Pariser Platz became whole again, a tangible symbol of Germany's reunification. The State Department announced in late 1994 that it would erect an 18,600-square-meter facility on its reclaimed Pariser Platz site to show support for the new Germany's decision to restore Berlin as its capital. Significantly, the government staged a design competition for the building—the first for an embassy since Eero Saarinen won the U.S. Embassy commission for London in 1955.

Pariser Platz is now being rebuilt, and will include commercial and institutional tenants. New urban design codes restrict building height, mass, materials, and fenestration. Their aim is to restore, if not exactly recreate, the plaza's historic character. The embassy's site is critical: it faces not only the plaza to the north, but also the Tiergarten to the west and the proposed memorial to Jewish victims of Nazi genocide on the south. The State Department also placed high priority on building security in the tight urban location.

The competition brief, developed by the State Department's Office of Foreign Buildings Operations (FBO), specified ceremonial rooms, and a large complement of office space for a variety of government agencies.

The FBO published its request for qualifications in The Commerce Business Daily in August 1994, and selected six finalists from the 70 who responded. The FBO also retained a competition advisor, Portland, Ore-

A New Embassy in Berlin

A competition for the new American embassy in Germany was premiated last fall, but the State Department has yet to announce the winner. Their aim is to restore, if not exactly recreate, the plaza's historic character. The embassy's site is critical: it faces not only the plaza to the north, but also the Tiergarten to the west and the proposed memorial to Jewish victims of Nazi genocide on the south. The State Department also placed high priority on building security in the tight urban location.

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MOORE RUBLE YUDELL

Purportedly the winner of the competition, Moore Ruble Yudell (MRY), in association with Gruen Associates, proposed the most picturesque of all the solutions. The MRY scheme is replete with familiar architectural images, ranging from a formal rotunda in the entry hall to traditional paired porch columns along the ambassador's balcony.

Most whimsical is the stone "lodge" anchoring the central courtyard. Conceived as a dining hall and social center for visitors and embassy staff, the pitched-roof pavilion recalls both the single-family house—an American cultural icon—and the legacy of the National Park Service.

"We were striving for a sense of community," says Partner John Ruble.

MRY splits the building's consular and embassy functions, grouping ceremonial spaces near Pariser Platz and creating a second entrance for the consular offices at the southwest corner of the site. Graphics incised at each entry quote German and American writers on democracy. The embassy is sheathed in limestone and plaster along the exterior, with accents of copper.

Jury Comments: "Artful massing treats each surface and corner with great care and clarity. Material, color, and texture contribute to the somber Platz, and the embassy portrays an open face to the Tiergarten and from Potsdamer Platz to the south."
From flaglike red-and-blue stripes on the building's white limestone skin, to an incised précis of the Gettysburg Address above the entrance, the scheme by Venturi, Scott Brown and Einhorn Yaffee Prescott focuses on American cultural symbols. "The design conforms to a tradition of combining iconography with generic architecture," Principal Robert Venturi explains. The most arresting device is an outsized, outdoor LED screen, which would broadcast kaleidoscopic images of American culture from symphony performances to baseball games.

Venturi's entrance breaks the facade line of Pariser Platz's southern wall with a "garden gate," offering glimpses of the LED board and an internal courtyard beyond. Facades range from abstracted Classicism on the Pariser Platz to a more Modern office block along the Tiergarten. Ceremonial functions are divided between the official embassy entrance off Pariser Platz and the consular section, which is entered at the complex's southwest corner.

**Jury Comments:** "The design displays a clear vision—functional space without fanfare. The architect's position is an antithesis of...sculptural architecture with inherent symbolic meaning. The building becomes a screen on which the architect projects imagery."
An abstraction of the American landscape is the locus of the design by Bohlin Cywinski Jackson and Sverdrup. The architects pull the building to the property's western edge to create a garden extending from the north to the south end of the site. With a grove of trees and a metallic "cloud" above, the grass-covered garden rises to the south, directing visitors' views to the sky. "It creates an American counterpoint to the traditional closed German courtyard," explains Principal Peter Bohlin.

The exposed concrete and metal-clad buildings are tiered away from Pariser Platz to the north, paralleling the inclined garden. Ceremonially important, but smaller, blocks of public space are concentrated near the plaza, while the more secure, space-consuming embassy offices are clustered to the south.

The building's three office blocks are linked by atria and glazed circulation spines. An array of solar reflectors, water-recirculating devices, and additional landscaping measures all enhance energy management, in keeping with competition design guidelines and strict German building standards.

**Jury Comments:** "Energy conservation, ideally located representational spaces, [and] the 'forever view' of the garden ... are important attributes of the design."
Drawing on both Le Corbusier and Schinkel, the proposed embassy by Kevin Roche John Dinkeloo and Associates is by far the most Modern of the competition. It posits a monumental concrete screen wall surrounding the site, inside of which three seemingly independent building masses float in a garden court.

Slotted and broken to reduce its apparent mass, the embassy is actually one building that engages the screen wall extending along the southern and western frontages of the site. In other sections, including the Pariser Platz exposure, the building steps back, opening the screen wall to admit sunlight and views into the court.

Embassy and ceremonial functions take place in a canted tower, clearly visible from Pariser Platz, that is pulled out from the northernmost part of the building. Consular spaces are entered from the southern edge of the site.

Within the courtyard, the skylit buildings are trimmed in yellow stucco with gridded, copper-plated accents and Classical detailing. The screen wall eschews overt Classicism in favor of a geometry of simple punched openings.

Jury Comments: “The plan creates an internal environment where people would feel they were in smaller buildings bathed in natural light.”
ROBERT A.M. STERN ARCHITECTS

The overtly Classical skin of Robert A.M. Stern's proposal pays homage to the embassy's historic context. "We tried to connect the embassy to the Classicism that had always been part of Pariser Platz," Stern explains. Indiana limestone facades are articulated with base, middle, and attic stories, with grouped divided-light windows. With slight variations at each of three entrances, the elevations are essentially uniform across the building, giving it a stately, formal air.

Office bays line the perimeter of the site, leaving the center open for a decidedly more contemporary element: an elliptical, glass-and-steel-wrapped atrium. The building's major circulation and informal social areas open onto this dramatic four-story space. A smaller, intersecting elliptical volume houses a staircase, and an adjacent terrace garden fills the residual space within the building's center.

Stern locates most of the prominent embassy functions adjacent to Pariser Platz on the north. Consular facilities are reached through their own entrance on the southwest corner of the site.

Jury Comments: "The elevation of Ebertstrasse reflects the historic texture of the buildings prior to the war. The interior assemblage reinforces the idea of community for embassy staff."
Figural spaces and their linkages imbue Kallman McKinnell & Wood's design with the dignified professional quality of statesmanship. From Pariser Platz, visitors pass through an apsidal porch, then a double-height, vaulted entry hall. Important public rooms face the Platz, each differentiated in section. Visa seekers and others with consular business enter the building from the Tiergarten side, through another double-height, skylit hall carved out of a cleft in the stonesurfaced building. Interior circulation spaces are generous, particularly the grand sequence of vaulted, full-height trapezoidal volumes leading from the Pariser Platz entrance to a glass-walled courtyard. This garden court anchors the building's center, around which most of the informal meeting spaces are organized, and pulls light deep into the interlocking L-shaped office bars that define the perimeter of the site. In contrast to the Classical Pariser Platz facade, the office block elevations are articulated as an expressed continuous frame.

Jury Comments: “Breaking the mass into a traditional palazzo form results in a variety of interior and exterior spaces with natural light and garden spaces. The spatial requirements are ingeniously assembled to create evocative, memorable views within and without.”
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MicroStation is a personal computer system with a mainframe lineage. In 1986, Bentley Systems imported Intergraph’s VAX-based IDGS CAD application to the personal computer (PC) platform of its main offering, MicroStation. This transfer marked a CAD milestone by introducing 16 years’ worth of advanced drafting capabilities to the PC environment, including networking, distributive databases, and file referencing. Since then, MicroStation has built a reputation as a fully integrated design application able to produce construction documents, perform design analysis, and manage databases.

With MicroStation 95, which first shipped to retailers last December, Bentley offers an arsenal of new and enhanced capabilities for increasing productivity. These include a streamlined graphical user interface, AccuDraw for precision drawing, and visualization tools for photorealistic rendering, animation, and free-form or NURBS (non-uniform rational B-spline) surface modeling.

MicroStation’s CAD engine remains relatively unchanged; what this latest release offers is a better exchange of data and improved compatibility with Windows.

**Improved interface and compatibility**

With MicroStation 95, Bentley has deemphasized its well-known key-in method of drafting and moved toward a more graphical, point-and-click approach. This new interface is intuitive, user-friendly, and easily customized. Tool boxes can be docked into the top, bottom, and sides of the screen’s workspace; when undocked, they can be resized and easily modified to meet individual needs. In addition, each tool/icon has fly-over help to identify its function. These features make it much easier for designers to be productive with MicroStation 95 right out of the box.

Parallel to this new icon-driven interface, which takes cues from Microsoft Office, is MicroStation’s improved operability with Windows. Previous versions only emulated the Microsoft Windows format in a DOS-based application, but with its latest release, Bentley has made its software perform like a true Windows application. MicroStation 95 is intelligent enough to discern what operating system it is being run on, so it can execute design tasks specific to Windows 95 or to Windows NT. To enable the 32-bit MicroStation application to run on Windows 3.1x, a 16-bit operating system, Microsoft’s Win 32s subsystem, is utilized. Additional Windows functions added in MicroStation 95 include Multiprocessor Enabled, which lets the user open more than one application at a time; Long File Name, which permits a 24-character file name; and Universal Naming Convention, which ensures file names are recognized on multiple platforms.

MicroStation’s Windows compatibility is a welcomed improvement, as many design firms already use Windows for office tasks such as spreadsheet analysis, marketing presentations, specification writing, and e-mail.

**ABOVE LEFT:** Bentley’s animation software Masterpiece adds high-end rendering tools to MicroStation 95.

**ABOVE:** Gensler used MicroStation to model Biola University’s library in La Mirada, California.
Flexible workspaces

MicroStation’s flexible workspaces enable architects to display the most frequently used tools and to conceal those rarely needed. Updated from project to project, these customized interfaces decrease the amount of time operators spend searching through pull-down menus, drawing tools, and dialog boxes for a particular tool.

For multidisciplinary firms that juggle architectural, civil, and mechanical design, MicroStation offers preconfigured workspaces that display only those commands appropriate for each discipline. In a drafting workspace, there is no need to clutter the screen with unnecessary mechanical design items such as duct or grille design tools.

MicroStation 95 also targets CAD operators with varying levels of experience. A new-user workspace omits the more advanced tools to keep the interface simple and clear. For the recent AutoCAD convert, MicroStation 95 offers an interface that mimics the look and command structure of AutoCAD.

Callison Partnership in Seattle, for example, integrates MicroStation 95’s custom workspaces into three levels of its work, explains Brian Ware, CAD systems manager. First, Callison locks in set-up variables that the office regards as standard. Some of these include a default path for drawing files and license pooling, a feature that allows architects who may not need access to MicroStation all day to share copies of the software.

For each project, Callison has established red-line, manager, and demonstration interfaces. However, users can override these default settings in their own workspaces and add individualized settings, which can be accessed from any station on the network.

Smarter tools and associative functions

Bentley’s new drawing feature, called AccuDraw, represents a significant departure from keystroke drafting. AccuDraw combines the interactive benefits of sketching with the precision of a keyboard. Rather than entering such elements as line length, direction, and weight through keystrokes, which require memorizing multiple commands, the operator manipulates a mouse to indicate the origin and direction of a line and then uses a keyboard only to type in the precise numeric distance of the line. With a single command, AccuDraw allows the architect to shift from a Cartesian to a polar coordinate system when designing a dome, for example.

Once activated, AccuDraw cooperates with tools such as SmartLine. A composite drawing tool for placing various linear architectural elements, SmartLine gives the operator the ability to control segment type (line or arc), vertex type (sharp, chamfered, or rounded) and radius through a floating dialog box. “SmartLine enables you to add vertex choices to lines and arcs, and eliminates the need for additional fillet and chamfer editing,” Ware explains.

In MicroStation 95, custom lines can be specified with a stroke of the mouse. Attributes such as name, dash and gap pattern, width, offset, point symbol, and scale can be defined and saved in a library for future projects. These lines represent both design elements, such as batt insulation, and a variety of drafting indicators, such as boundary lines, break lines, center lines, and section cuts.

Automating these tasks significantly increases efficiency by reducing the size of design files. However, for an architect who works with many outside consultants, con-
File referencing allows users to display up to 255 vector and raster files simultaneously.

Continually updating the custom line styles to meet the needs of specific projects can take a lot of time. Also, in many instances it is quite difficult to translate custom lines to other programs such as AutoCAD.

With associative hatching and patterning, Bentley has devised a better way to distinguish portions of a plan. The task is still accomplished by entering data points anywhere within the desired area, which is then flooded with the hatching pattern. But when an element has been assigned a pattern and the size of the element changes, the pattern is automatically updated.

File referencing, one of MicroStation’s pioneering features, is the foundation of these associative tools. File referencing allows multiple users to access drawings simultaneously. In MicroStation 95, architectural revisions to a floor plan are now immediately visible on a copy that an interior designer is referencing for a furniture layout. With this feature, architects can analyze design modifications made by employees and consultants, minimizing error and duplication of work.

In addition, MicroStation 95 now allows users to reference raster images as well as traditional vector drawings: an aerial photoraph scanned into the system could be referenced and a master plan sketched in over the photo. Vector productivity enhancements allow the operator to control the display order of vector- and raster-based files.

Enhanced presentation
MicroStation 95’s refinements extend to three-dimensional visualization tools, including significant movie generation/playback and image-modification abilities. A new animation tool supports key-framing methods and runs existing parametric-motion scripts built into MicroStation’s supplemental animation product, Masterpiece.

MicroStation’s new modeling, rendering, and animation tools can also be applied to study the geography of a proposed site. The NURBS tool, which creates land forms, and the section tool, which reveals interior soil conditions, were previously available only in expensive civil-engineering applications. These tools are now built into MicroStation, helping architects to generate geometrical solutions for complex sites, and to uncover potential problems with the placement of a structure early in the design process.

But MicroStation 95 lacks tools that could be contained in the application rather than sold as third-party add-ons. These add-ons include Masterpiece and TriForma, a package announced in March that will extract two-dimensional plans and sections from a three-dimensional schematic model.

To become a truly integrated program, MicroStation must directly link two-dimensional drafting, three-dimensional modeling, the building materials library, and databases. For example, Graphisoft’s ArchiCAD allows an architect to produce construction documents while simultaneously assigning three-dimensional attributes to design elements, meaning that changes made in two-dimensional drawings are automatically shifted to the perspective studies. MicroStation’s inherent file-referencing capabilities suggest that such integration would be a logical next step in the product’s development.—Curtis B. Charles and Karen M. Brown

Curtis B. Charles and Karen M. Brown are principals of Miami-based C4 Studio, a firm specializing in electronic multimedia.
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Marvin Windows & Doors

Marvin Windows’ Residential Catalog—complete 151 page catalog details Marvin’s complete line of made-to-order wood and clad wood windows and doors. Includes over 350 beautiful color photographs and information on Marvin’s 11,000 standard products as well as the company’s newest innovations and extensive custom capabilities. Easy-to-read construction details and standard sizes were included for each product.
Circle 137.

NRCA

The NRCA Roofing and Waterproofing Manual—Fourth Edition—The Manual contains 158 pages of comprehensive, in-depth technical roofing information concerning the design and installation of quality roof assemblies. It includes detailed specification plates, more than 300 details in both isotropic and section views, and high quality illustrations. Sections include low- and steep-slope roofing texts, low-slope specifications, construction details, metal roofing, sprayed polyurethane foam-based roofing, waterproofing and dampproofing, energy and a glossary. Call 800-323-9545.
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Products

Sleek new fixtures reflect and diffuse light through glass, fabric, and metal.

TOP: The Claremont wall sconce is part of a collection of lighting fixtures designed by Barbara Barry for Boyd Lighting. Barry's sconce features patterned, sand-etched glass which evokes early 20th-century cut-glass patterns. A mirrored chrome backplate reflects a disk of light through the diffuser. Available in 10- and 13-inch-diameter models with polished brass or nickel finishes, the sconce projects up to 3 inches from wall surfaces. Circle 401 on information card.

ABOVE: Mantis Design's Shams Well pendant lamp diffuses light through stretched Lycra fabric. The flame-retardant material hangs in two taut, concentric cones from a metal hoop weighted down by a stainless steel ball. The fabric can be specified in four colors: light green, gold, gray, and white (pictured); cords can be specified in white or black. The mouth of the 53-inch-high fixture measures 15½ inches in diameter. Circle 402 on information card.

TOP RIGHT: Chicago-based New Metal Crafts now manufactures fixtures designed by Kohn Pedersen Fox Associates for the Mellon Bank Center in Philadelphia, and by Perkins & Will for the Time Life Building in Chicago (pictured). The 6-foot-long, 4-foot-wide Perkins & Will-designed fixture features opposing bronze arcs that reflect light from two incandescent lamps. New Metal Crafts maintains an archive of fixture designs dating back 60 years, making it a valuable resource for preservation projects. Circle 403 on information card.

TOP CENTER: Roméo Moon is the latest lighting fixture designed by Parisian architect Philippe Starck for Flos. The pendant lamp features a molded, ribbed glass shade hung from three steel wires, with an inner etched-glass diffuser that accommodates 150- or 100-watt incandescent bulbs. The 9-inch-high shade can be hung as low as 13 feet from the ceiling. Circle 404 on information card.

ABOVE CENTER: Vulcanos, a wall bracket fixture from Hinson, filters light downward from a halogen source through a tempered glass diffuser etched with cross and diamond patterns. Projecting 9 inches from the wall and measuring 12 inches high, the fixture is available in a metallic graphite finish. Hinson also manufactures floor and table lamps. Circle 405 on information card.

ABOVE: Luceplan's Titania suspension lamp by Alberto Meda and Paolo Rizzatto has now been redesigned in floor and desk lamp models. Each fixture's elliptical reflector incorporates polycarbonate color filters that change the hue of the reflected light cast from 150- or 250-watt halogen bulbs; the filters are available in violet, yellow, red, green, and blue. The winglike housing of the desk lamp (pictured), which has an overall height of 27 inches, has a clear aluminum finish; the stem is finished in silver lacquer. Circle 406 on information card.
New lighting fixtures utilize fiber optics and streamlined housings.

Table lamps
The new 3x2 series of light fixtures from Fire & Water, a New York-based architecture and design company, offers table and pendant lamps with three swiveling stems. Each stem of the triple-headed table lamp is topped by a metallic diffuser (above), with layers of copper and brass mesh over the bulb to direct light downward for reading. Fire & Water also manufactures candelabra, floor lamps, ceiling- and wall-mounted fixtures, and furniture. Circle 407 on information card.

Outdoor fixtures
Fibersstar's FiberScape fiber optic series includes FiberStix, one-piece acrylic-rod fixtures (above) for illuminating garden elements. FiberStix are available in 5-, 9- and 12-inch heights. Fiberscape's illuminators and tubing, housed in weather-resistant fixtures, purportedly reduce maintenance problems since relamping occurs at only one location. The FiberScape series comprises six above-ground, in-ground, and building-mounted models. Circle 408 on information card.

Incandescent wallwashers
Edison Price's Spredlite series of incandescent wallwashers, mounted in architectural light coves, can be locked in place for precise, uniform illumination of walls. They purportedly produce no reflections on highly polished surfaces such as marble or granite. Spredlite PV and DL are appropriate for wall heights of 25 feet or less; Spredlite 20 (above), a smaller fixture designed for a narrower cove, is suitable for lower ceiling heights of 15 feet or less. Circle 409 on information card.

Architectural Design Consultant — DUTIES: Will serve as the primary Consultant and liaison between an architectural corporation and its clients. Will consult with the client in order to determine the functional and special requirements of new structures or renovations, and prepare information, both in English and in Spanish, for the client's review regarding design, specifications, materials, color, equipment, estimated costs, and construction time. Will plan the layout of the project and integrate engineering elements into a unified design for presentation to the client for discussion with the client regarding modifications, changes, and client approval. Will assist in the preparation of scale drawings and contract documents for building contractors, reviewing the scale drawings and the documents with the clients for purposes of clarification and interpretation. Will interpret blueprints and specifications for clients and discuss with the management any deviations from specified construction procedures.

REQUIREMENTS: Bachelor's Degree, with major field of study in Architecture, plus three (3) years of experience in the job offered. Must hold a Bachelor's Degree, with a major field of study in Architecture, or the equivalent, as determined by an approved academic evaluation service. Must be fluent in Spanish, as determined by a recognized, language training expert. SALARY: $23,575 per year. HOURS: 40 hours per week (Monday-Friday, 9:00AM to 5:00PM). CONTACT: Interested applicants, please submit resume only to: Department of Labor/Bureau of Operations, 1320 EXEC. CENTER DRIVE, ATKINS ROOM 244, TALLAHASSEE, FLORIDA 32399-0667. Reference: Job Order Number FL-1394763.
Truss lighting
The Lightruss modular lighting system from SPI features indirect light modules uniformly spaced in a continuous truss system, anchored by die-cast bulkheads, which can accommodate several reflector systems. Lightruss 2 is designed for large areas such as airport terminals, athletic facilities, and shopping malls; its all-aluminum components resist corrosion. Lightruss 1 is designed for smaller areas such as retail spaces, cafeterias, and corridors. 
Circle 410 on information card.

Fiber optic lighting
The LS1 Fiber Optic Lighting system from Lighting Services (above) eliminates ultraviolet and infrared wavelengths of light, making it ideal for illuminating heat- or light-sensitive museum displays or retail objects. The system's components—a remote light source, bundles of glass optical fiber, and light bars and fixtures—permit the light source to be remotely located and adjusted for installation in problematic wiring spaces such as niches and shelving. 
Circle 411 on information card.

Energy-saving fixtures
SuperTrim from Halo Lighting (above), a subsidiary of Cooper Lighting, prevents drafts, wasted heat or air conditioning, mildew, and dampness by eliminating air leakage into and out of the fixture's housing. Designed to accept torsion springs in place of coil springs, SuperTrims can be installed in any standard insulated-ceiling recessed-lighting fixtures. The trim is available in black or white baffles with reflectors in gold or clear. 
Circle 412 on information card.

Hinged diffusers
The Pantarei line of luminaires designed by Ernesto Gismondi for Artemide comprises the 190 series, measuring 7 1/2 inches wide and 3 1/4 inches deep, and the 300 series, 11 3/4 inches wide and 4 inches deep. The luminaires can be installed in wet locations, and feature six front-concealed, hinged diffusers that allow quick relamping. Depending on size, models can accommodate incandescent, halogen, and compact fluorescent lamps. 
Circle 413 on information card.

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The closing date for receipt of completed applications is Thursday, 16 May 1996.

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Awards for
Architectural Research

ARCHITECTURE, in collaboration with the American Institute for Architectural Research, announces its first awards program for architectural research.

AIA Research supports architectural research and design excellence by identifying the architectural discipline’s research needs, by encouraging research activities to meet those needs, and by disseminating results that aid the design and construction of inspiring buildings and sustainable communities. The purpose of this awards competition is to recognize outstanding research in architecture and urban design, and to publicize it for use by the profession.

Awards and citations will be designated by a jury drawn from academia and the profession. Decisions will be based on the study’s overall excellence, innovation, rigor, and usefulness to the practice of architecture and urban design. The jury will consider the degree to which the research addresses compelling social needs, extends traditional architectural expertise, demonstrates ways to integrate research and design, or utilizes multidisciplinary problem solving.

Research methodology appropriate to the nature of the inquiry should be made explicit, as should the application or applicability of the research. Doctoral dissertations and applied research are welcome.

Entrants will be judged in one of three broad categories of research: Energy and Sustainable Design, Behavioral and Social Science, or Technology and Materials. Entrants should interpret the call for outstanding research as broadly as possible to include the subdisciplines of architecture as well as diverse modes of inquiry. See reverse for entry form and rules.

Jury

Martha Welborne, FAIA (Chair)
Associate Partner
Skidmore, Owings and Merrill
Los Angeles

William J. Mitchell, FRAIA
Dean, School of Architecture and Planning
Massachusetts Institute of Technology
Cambridge

Sherry Ahrentzen, Ph.D.
Professor of Architecture
Department of Architecture
University of Wisconsin
Milwaukee
Entry Form: Awards for Architectural Research

Please complete and submit all parts intact with each entry (see paragraph 9 of instructions). Photocopies of this form may be used.

ENTRANT:
ADDRESS:

CREDIT(S) FOR PUBLICATION (attach additional sheet if necessary):

ENTRANT PHONE NUMBER:
ENTRANT FAX NUMBER:
PROJECT:
CLIENT OR FUNDING AGENCY:
CLIENT PHONE NUMBER:
CATEGORY:

ENTRANT:
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I certify that the submitted research was done by the parties credited and meets all eligibility requirements. I understand that any entry that fails to meet submission guidelines may be disqualified. Signer must be authorized to represent those credited.

SIGNATURE:
NAME (typed or printed):
FEES: $110 per entry

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PROJECT:
Your submission has been received and assigned number _________.
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Eligibility

1 WHO CAN ENTER: Architects, environmental design professionals, academics, and students conducting research and working in the U.S., Mexico, or Canada may enter one or more submissions. Research may be focused on any location, but the work must have been directed and substantially executed in the U.S., Mexico, or Canada not more than five years ago.

2 SUBSTANTIVE PROJECTS: Entries may include funded research, reports accepted by clients for implementation, or studies undertaken by entrants who have marketed or applied their results. Applied research, in which existing research findings are used or tested in the field (resulting in new knowledge gained from application) and doctoral dissertations are also eligible. Basis of eligibility as well as the date of the study should be explained in the submission. ARCHITECTURE may contact any of the parties involved to verify eligibility.

Publication Agreement

3 PROVIDING ADDITIONAL MATERIALS: If the submission should win, the entrant agrees to make available further information and graphic material as needed by ARCHITECTURE.

4 PUBLICATION: ARCHITECTURE is granted the first opportunity among U.S. architecture magazines for first publication of the study. Prior publication does not affect eligibility. AIA Research reserves the right to publish entries not selected for the November 1996 issue of ARCHITECTURE.

Submission Requirements

5 PROJECT FACTS PAGE: To ensure the jury’s clear understanding, each entry must contain a page that lists, in English, the research project facts under the following headings: Project Title; Research Category; Client or Source of Funding; Budget; Start and Finish Dates; Name and Location of Client; Research Setting; Form of Final Products; Basis of Eligibility; Bibliographic References. Ten copies of this page must be submitted.

6 NARRATIVE: Entries must contain a three- to five-page synopsis of the project that includes the following section headings: Purpose/Objectives of the Project; Research Design and Methods Used in Research; Data and Analysis Procedures; Major Findings and Results; Significance and Uses of Results. Ten copies of the narrative must be submitted.

7 ADDITIONAL MATERIALS: One copy of supplementary graphic or written material may be submitted, in 8 1/2-inch by 11-inch format and firmly bound in binders. No slides, original drawings, videotapes, or unbound materials will be reviewed.

8 ANONYMITY: To ensure anonymity in judging, no names of entrants or collaborators may appear on any part of the submission except on entry forms. Credits may be concealed by tape.

9 ENTRY FORMS: Each submission must be accompanied by a signed entry form, to be found on this page. Reproductions of the form are acceptable. Fill out the entry form and insert it intact into an unsealed envelope labeled “Entry Form” to be included with the submission.

10 ENTRY FEES: Entry fees must accompany each submission. Fee is $110. Make check or money order payable to ARCHITECTURE. Canadian and Mexican entrants must send drafts in U.S. dollars. Fee must be inserted in an unsealed envelope with entry form (see 9 above).

11 ENTRY RECEIPTS: ARCHITECTURE will send a receipt by July 15, which will indicate an entry number to save for your reference.

12 RETURN OF ENTRIES: Entrants wishing return of submission materials should include a self-addressed, stamped envelope. Copies of project facts and narratives may not be returned.

13 ENTRY DEADLINE: Deadline for sending entries is July 1, 1996. All entries must show a postage mark as evidence of being in the carrier’s hands by that date. Hand-delivered entries must arrive at ARCHITECTURE’s offices by 5 p.m., July 1. To ensure timely arrival, ARCHITECTURE recommends using a carrier that guarantees delivery within a specified number of days.

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-Vers Une Architecture-
Le Corbusier, 1923

SCHEDULE
- Registration open: September 1, 1995
- Registration closes: April 15, 1996
- Submissions due: April 30, 1996

ELIGIBILITY
All registered full-time or part-time students of architecture, landscape architecture, interior design, urban planning, or an allied discipline. All interns who have graduated from a school of architecture within the past five years.

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To create the canopy that envelopes a four-block, casino-lined stretch of Fremont Street in Las Vegas (pages 78-89), the Jerde Partnership collaborated with Los Angeles-based Peter Jon Pearce, who devised a triangulated space frame, and engineer John A. Martin & Associates, developers of the column structure.

The 1,400-foot-long, 125-foot-wide, and 90-foot-high arcade is supported by 14 steel-clad concrete columns arranged in pairs and spaced 240 feet apart. Six 1-foot-diameter steel members extend from steel plates bolted to the top of each 45-foot column, and branch off into $4\frac{1}{2}$-inch-diameter struts that support the space frame. Boasting 2.1 million 5-watt fixtures, a steel lighting trellis detailed by Young Electric Sign Company is bolted to the space frame's underside. —A.C.S.
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