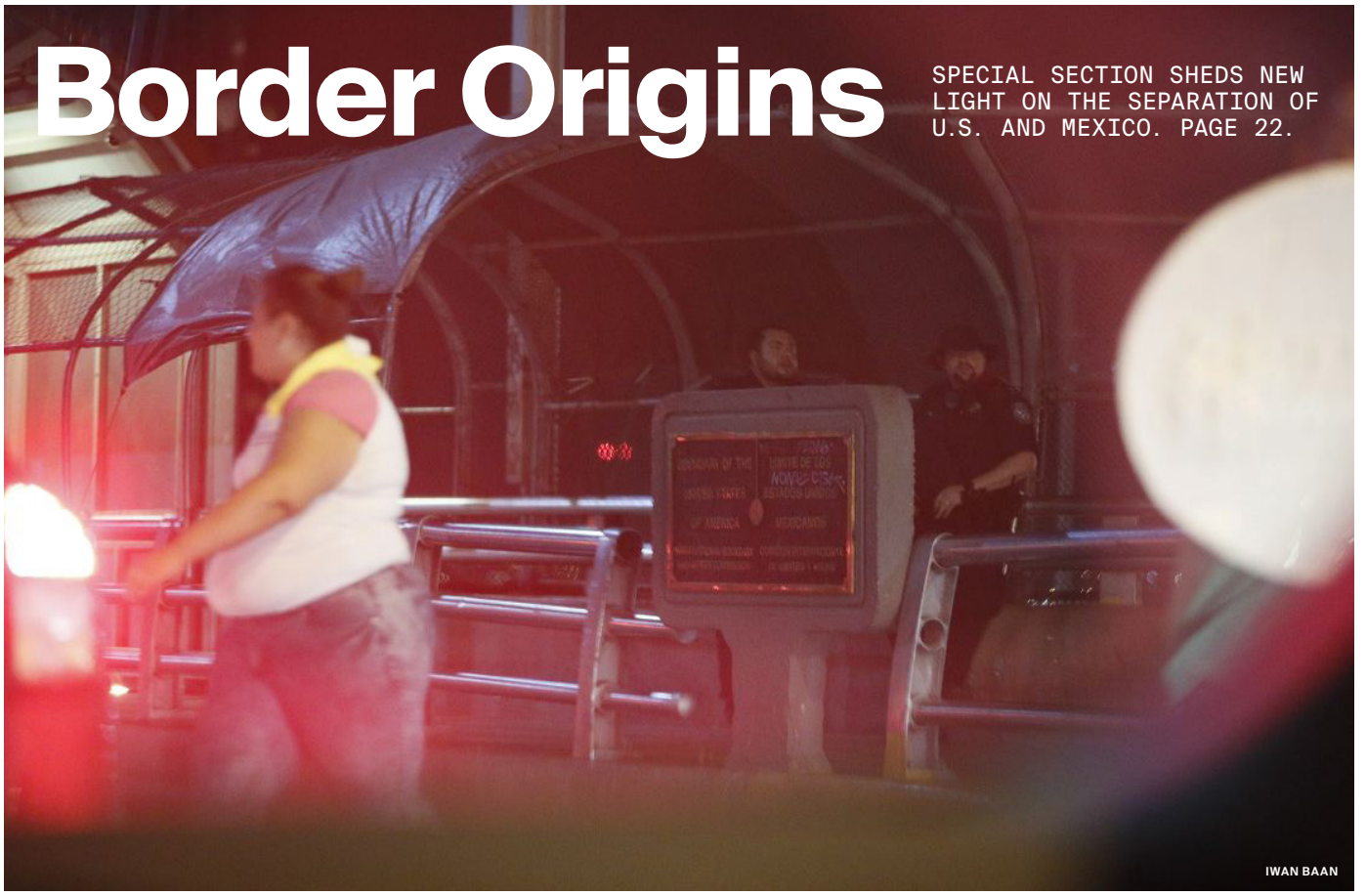
THE ARCHITECT'S NEWSPAPER

★The Texas Issue★

THE ARCHITECT'S NEWSPAPER JULY & AUGUST 2018 $3.95

Border Origins

SPECIAL SECTION SHEDS NEW LIGHT ON THE SEPARATION OF U.S. AND MEXICO. PAGE 22.



IWAN BAAN

This image was taken from a car on the Mexico side of the Paso Del Norte International Bridge border crossing where U.S. immigration officials are reportedly turning away migrants before they get to the checkpoint at the U.S. border.

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The Beaver Is Watching

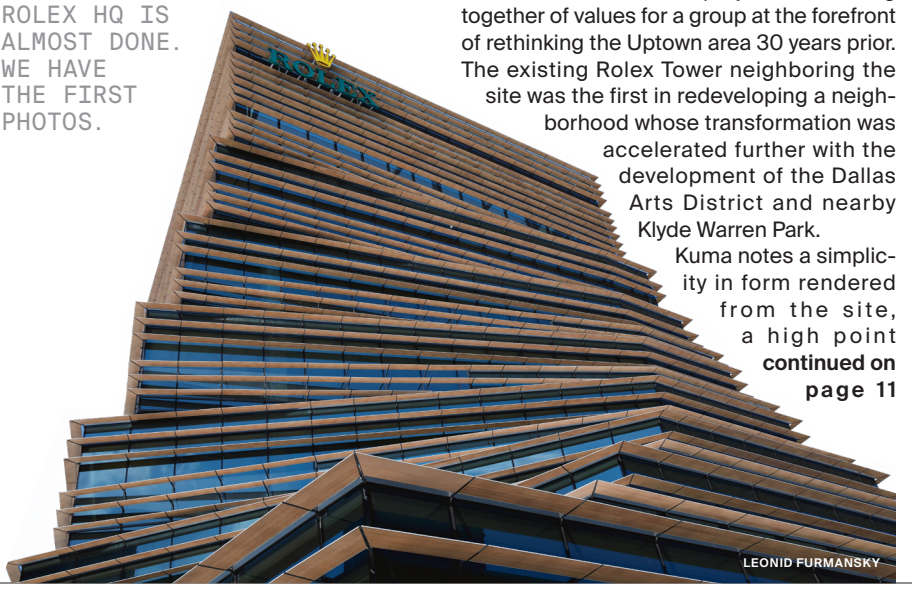
GAS STATIONS ON STEROIDS IS THE ONLY WAY TO DESCRIBE THE TOTALLY TEXAS CHAIN BUC-EE'S.

Here are some things for sale at Buc-ee's: dozens of varieties of beef jerky, jalapeño pepper jelly, fudge, yoga pants, gun cases, faux rusticated wood accoutrements, faux rhinestone belts, cowboy art, meaty kolaches, deer corn, American Hunter game feeders, artisan soap, camo tote bags, sports memorabilia, gummy worms, brisket, BBQ smokers, and just about anything else one could possibly want emblazoned with the portrait of the store's mascot, a cartoon beaver.

For the uninitiated, Buc-ee's is a Texas gas station chain and so much more. Started in Lake Jackson, outside of Houston, by Arch "Beaver" Aplin III in 1982, the chain now has 33 locations throughout the eastern half of the **continued on page 10**

Ha Kuma Matata

KENGO KUMA'S ROLEX HQ IS ALMOST DONE. WE HAVE THE FIRST PHOTOS.



LEONID FURMANSKY

A new home for Rolex within Dallas's Harwood District will mark the first project completed by Kengo Kuma in the southern United States. For Gabriel Barbier Mueller, founder of the Harwood District and one of the largest private collectors of Japanese armor and artifacts, the project is a coming together of values for a group at the forefront of rethinking the Uptown area 30 years prior. The existing Rolex Tower neighboring the site was the first in redeveloping a neighborhood whose transformation was accelerated further with the development of the Dallas Arts District and nearby Klyde Warren Park.

Kuma notes a simplicity in form rendered from the site, a high point **continued on page 11**

Another Kind of Bullet

$15 BILLION BULLET TRAIN BETWEEN DALLAS AND HOUSTON TO ROLL OUT NEXT YEAR.

It's no hyperloop, but construction of a 200-mile-per-hour bullet train from Houston to Dallas could begin as early as next year. Add in the recently announced Amtrak partnership that will cover last-mile trips and tie into the rail company's established interstate network, and Texas is looking at a major mass transit expansion.

Developers Texas Central Partners (TCP) will be privately financing the $15 billion, 240-mile-long high-speed rail line, and have been on a public outreach spree as they attempt to drum up support and garner feedback for their proposal. TCP argues that the Texas Bullet Train will bring in $3 billion in state and local tax revenue through 2040, in addition to the $36 billion in direct spending and tens **continued on page 13**

Reconsidering Houston and San Antonio

See page 30



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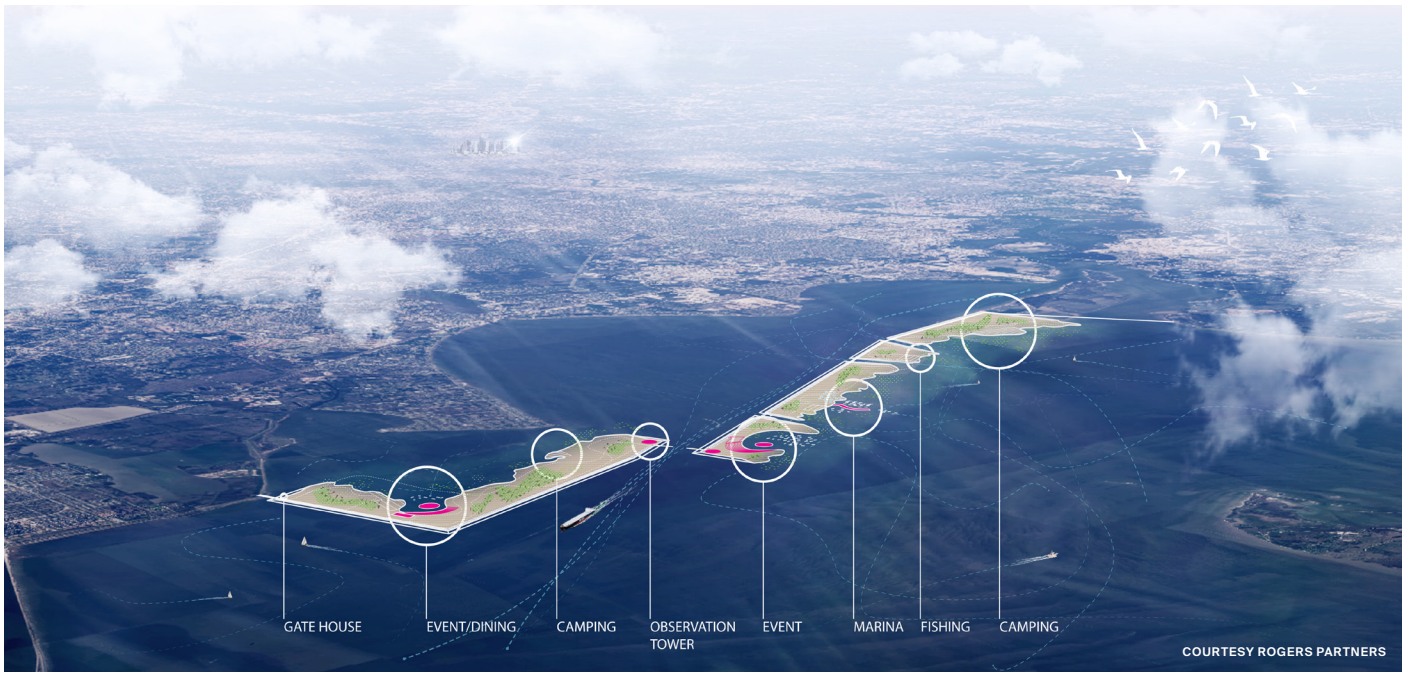
Scaling up, Texas Style



Rogers Partners' proposal for Galveston Bay would protect it from a future superstorm.

When *AN* started its Southwest edition in November 2013, editor Aaron Seward set out to apply to Texas the *AN* methodology of examining a place through the built environment. As he stated at the time, "Texas—the home base of the Southwest edition, as well as the native land of its editor and publisher—is undergoing its most phenomenal period of growth and transformation since the 1970s."

Much like the great state of Texas itself, here at *AN* we have also gone through growth and transformation, and one of the main changes is our new and improved national format. Instead of regional issues that ship locally to the four areas—East, West, Midwest, and Southwest—we feature all those places in one edition that goes out monthly.

While this is great for spreading Texas news across the nation, we miss the intense focus that the regional issue provided. Building on our all-Florida issue from April 2017, we are now excited to present our all-Texas issue.

Seward's observation is as true now as it was then. We have seen massive urban projects such as Houston's Bayou Greenway, Dallas's Trinity River Corridor Project, and Austin's Seaholm Intake redevelopment make huge strides toward completion.

Five years later, the reurbanization of cities like Austin, Dallas, Houston, and many others around the U.S. is underway. However, the suburban and rural areas are also thriving. Whether in the suburbs of Houston or the hinterlands of Midland and Odessa, there is design in some of the farther reaches of Texas that has caught our eye.

Houston and the surrounding areas are still figuring out how to prepare for the next big storm that might hit. Some particularly interesting work is being done at Rice University. Rogers Architects, along with Houston-based engineering firm Walter P Moore (of Astrodome fame) have been working with the Severe Storm Prediction, Education, and Evacuation from Disasters (SSPEED) Center at Rice to develop strategies for a potential surge protection system that would protect Galveston Bay, the Houston Ship Channel, and thus vital components of the world's seventh-largest economy (Texas). It is a massive scale project that would include building a series of protective islands in the bay.

Also in this issue, we take a look at both the high-profile design projects underway, such as David Adjaye's Ruby City, where a custom red concrete was developed in Mexico just for the project, as well as smaller projects like Houston's new honkytonk Goodnight Charlie's by CONTENT and Gin Design Group, where modern meets traditional. We are also excited about the new bullet train between Dallas and Houston.

We took a look at some off-the-radar places as well, such as the resource extraction infrastructures of West Texas, where photographer Leonid Furmansky risked life and limb to get incredible drone shots. In Alliance, Texas, shipping and logistics are king, and a city has popped up around them. And how could we make a Texas issue without looking at the U.S.–Mexico border? El Paso–based firm AGENCY, which has been sending in Border Dispatches for the last year, has curated a special news section on the topic with six fresh essays from contributors around the country.

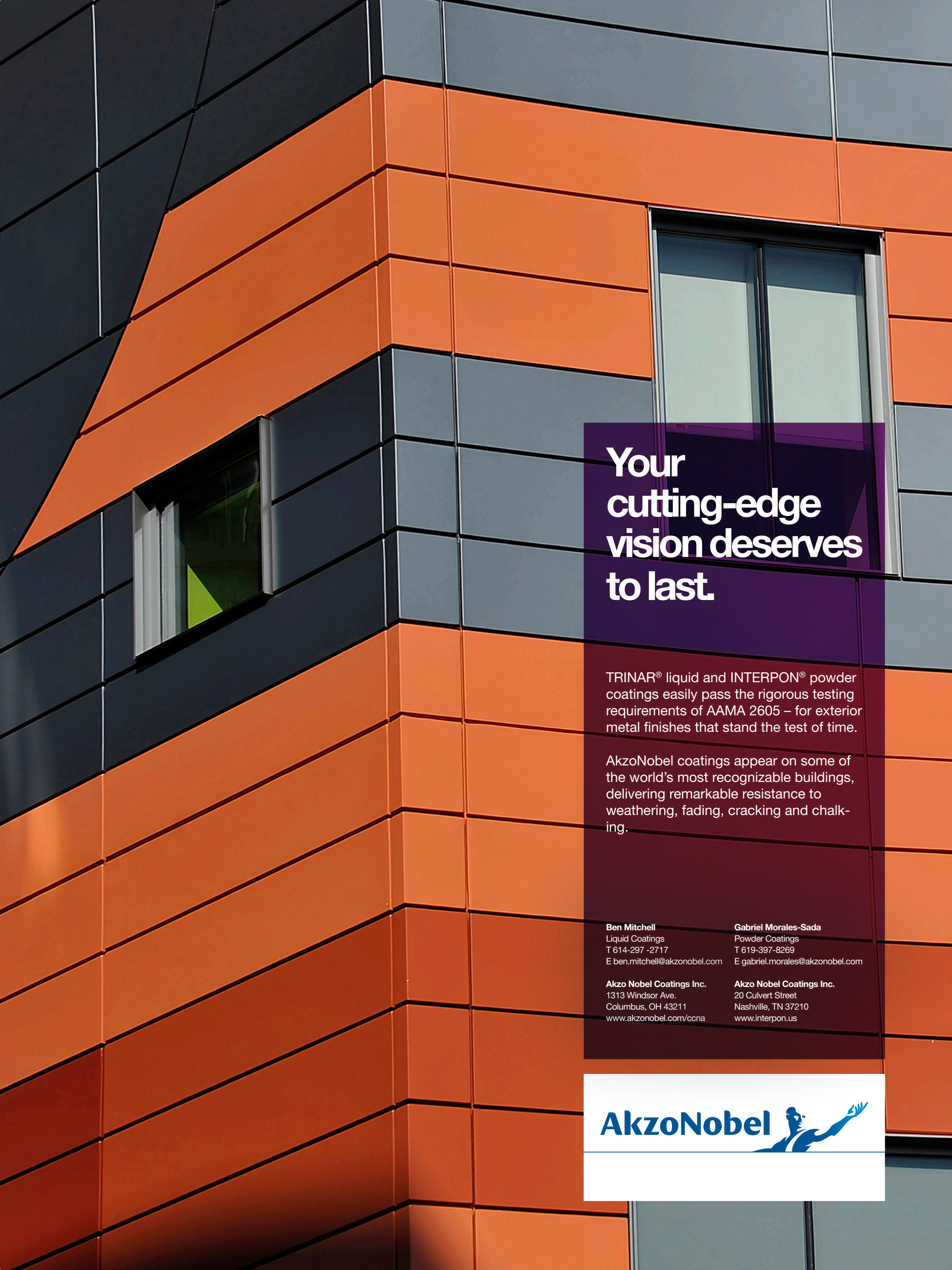
You may remember the old Pace Picante commercials where the cowboys complain that another salsa is "Made in New York Ceeity?" It is our mission to not elicit that reaction when people read the *Architect's Newspaper* Southwest edition, so we have solicited the support of a bevy of Texas sources, including Seward and Houston-based contributor Jack Murphy, both of whom supplied immeasurable support for this project. **Matt Shaw**

Dear Editors,

I was stunned to read in the June issue that the Museum of Contemporary Art San Diego (MCASD) is planning to demolish part of Robert Venturi and Denise Scott Brown's 1996 additions to the museum in La Jolla. When VSBA's design was completed, architectural critic Paul Goldberger wrote, "This is an exquisite project, overflowing with those qualities that make Mr. Venturi a designer of extraordinary gifts." Don't stop the (over)flow! Images of the proposed changes on MCASD's website seem to call for the demolition of VSBA's urbane colonnade and pergola—a central feature of this exuberant jewel of postmodern architecture.

Venturi and Scott Brown are world-historical figures whose buildings, books, and teaching careers changed the course of contemporary architecture. Their built work should be treated with conscientious stewardship, not piecemeal dismantling. The current director of MCASD might be interested to know that Historic England—Britain's public body responsible for preserving historic buildings—has recently "listed" (that is, protected from demolition) Venturi and Scott Brown's 1991 extension to the National Gallery in London, which the British characterize as a building "of exceptional interest" by "internationally important architects and theorists, generally considered the founders of Post-Modernism." The intelligence and clarity of Historic England's approach to VSBA's London gallery could serve as an exemplar for MCASD La Jolla. During a moment in which the whole world is watching, does the Museum of Contemporary Art really wish to proceed with what appears to be an act of cultural vandalism?

Richard Hayes
New York, NY



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In Case You Missed It…

We corralled the top architecture and design stories from Texas buzzing about the internet over the past year—check out the highlights below.

For the full text and images for all of these stories, visit archpaper.com/tag/ICYMI.

Austin is getting its own "smart" street

Austin CityUP Consortium—an alliance of businesses, government agencies, non-profits, and other organizations—is behind the Smart 2nd Street Living Lab, an effort to bring a smart city network to five blocks of Austin's 2nd Street. This system will collect and analyze data to make the street safer to navigate.

Ellsworth Kelly's "chapel" of colored light is realized at UT Austin [1]

The Blanton Museum of Art at The University of Texas at Austin has finished *Austin*, the last Ellsworth Kelly project realized before his death in 2015. *Austin* is Kelly's first built piece of architecture, and the T-shaped, secular sanctuary is flooded with multicolored light.



COURTESY BLANTON MUSEUM OF ART

Two Ai Weiwei sculptures come to Texas

Bike Austin currently boasts approximately 13,000 members—more than 1 percent of Austin's population. So a sculpture titled *Forever Bicycles* has found the right home. The large-scale work from artist Ai Weiwei is part of The Contemporary Austin's Museum Without Walls program and can be found adjacent to the Waller Creek Boathouse at 74 Trinity Street.

The Architecture Center Houston reveals designs for its new home

The Architecture Center Houston has opened its new location: the 1906 B.A. Riesner Building, located at 902 Commerce Street in the heart of the city's original downtown area. Houston firm Murphy Mears Architects led the building's renovation, but the center is currently closed due to flooding from Hurricane Harvey.

Morphosis tapped for Texas Tech expansion master plan

Morphosis is developing a master plan for the 40,000 square-foot expansion of the Museum of Texas Tech University, complete with new gallery space, a laboratory, and collection storage facilities. The "Universiteum" will showcase and reflect the school's scope of research and creativity across the STEM disciplines, health sciences, humanities, and the arts.

North America's largest eSports stadium is headed for Texas

Arlington has released plans to build the country's largest eSports stadium, announcing the move in a joint statement with global architecture studio Populous and Esports Venues, LLC. The Arlington Convention Center will be converted into the 100,000-square-foot, eSports-exclusive arena and rebranded as Esports Stadium Arlington.



COURTESY SANTIAGO CALATRAVA

Santiago Calatrava's second Dallas bridge faces engineering questions [2]

The eastern bike and pedestrian lanes of the Margaret McDermott Bridge in Dallas remain closed after concerns came to light over the 1,200-foot-long, Calatrava-designed suspension arches. The bridge's main span is self-supporting, and the arches hold up the eastern lanes.

After Calatrava initially proposed a $200 million bridge with four arches, the city was only able to wrangle $92 million, knocking the two interior archways off the bridge. The cost soon ballooned to $115 million, which the city promised to make up for through donations and value engineering. Engineers and the city of Dallas agreed to skip stress testing the arch's cables over Calatrava's protests, and combined with value engineering of the bridge's adjustment rods, the cables have been vibrating wildly in the wind. Now those decisions may end up costing the city even more.

Seven months after the problem was spotted, engineers are still swapping emails with the city and haven't given the bridge a go-ahead to open.

Houston unveils post-Harvey downtown master plan

Downtown Houston released an ambitious master plan after Hurricane Harvey, following 18 months of work and input from hundreds of stakeholders. Creating walkable streets, a 5-mile green loop around the city's core, new design guidelines, and more, the 20-year plan puts an emphasis on sustainable, resilient development.

Johnston Marklee's Menil Drawing Institute to open this November [3]

Houston's Menil Drawing Institute will open to the public on November 3 and showcase the drawings of master artists from all over the world. Los Angeles's Johnston Marklee designed the Drawing Institute's home, while Michael Van Valkenburgh Associates will knit the building together with the existing structures.



Austin's new public library reflects the city's transformation

Austin's new Central Public Library, designed by Lake|Flato with Shepley Bulfinch, opened last October. After some delays, the library, with a $125 million price tag, arrives as a major addition to downtown's cultural landscape.

This review originally appeared in our February 2018 issue.

First look at Michael Maltzan's Moody Center for the Arts in Houston

The Moody Center for the Arts, designed by Los Angeles–based Michael Maltzan Architecture (MMA), is now complete. The 50,000-square-foot, $30 million facility at Rice University serves the campus and the general public as an experimental platform for making and showcasing works across disciplines.

Four mega-developments near Dallas make up the Five Billion Dollar Mile

With the recent wave of corporate office growth, Frisco, a city at the intersection of the Dallas North Tollway and State Highway 121, has seen a number of large developments take shape over the past five years. But the $2 billion Wade Park project has been on the brink of foreclosure four times.

Border wall documents show path of destruction through Texas homes, wildlife preserves

Newly released records have cast light on the Army Corps of Engineers' assessment of border wall plans in South Texas. Spanning 33 miles across the Rio Grande Valley, the 15 proposed walls would tear through wildlife habitats and RV parks, and involve costly legal battles.

Mezzanines coming to Philip Johnson and John Burgee's atrium in Houston tower

The owners of the Johnson/Burgee-designed Bank of America Center in Houston, a 56-story postmodern tower with a soaring atrium, want to glass in the lower level to create mezzanines that, while more low-slung, are infinitely more leasable.

Chicago mocks Houston's new Anish Kapoor sculpture, and a battle of words ensues

The Museum of Fine Arts, Houston installed a sculpture, *Cloud Column*, by Anish Kapoor, the same artist behind Chicago's *Cloud Gate* (aka The Bean). The two works are remarkably similar, and writers in both cities took to the pages of their respective papers to throw serious shade and defend their hometown sculptures.

The Contemporary Austin addition wins 2017 Best of Design Awards for Adaptive Reuse

Lewis.Tsurumaki.Lewis Architects renovated The Contemporary Austin, a museum formed from the merging of Arthouse and the Austin Museum of Art. The firm's sensitive renovation was honored with *AN*'s 2017 Best of Design Award for Adaptive Reuse in December.

Steven Holl–designed Glassell School of Art opens at the Museum of Fine Arts, Houston

On May 20, the Museum of Fine Arts, Houston opened the Glassell School of Art, designed by Steven Holl Architects. The building is the first of three to be realized in the museum's $450 million expansion of its Susan and Fayez S. Sarofim Campus.

Halprin's Heritage Park Plaza in Texas will receive complete restoration [4]

Landscape architect Lawrence Halprin's postmodern Heritage Park Plaza in Fort Worth was closed to the public in 2007 due to deterioration, but that should soon change with the help of Studio Outside and the architects at Bennett Benner Partners.

This article originally appeared in our October 2017 issue.



BIG unveils Austin's first pro sports stadium

Austin Sports & Entertainment, with New York–based Bjarke Ingels Group (BIG) and STG Design, has released plans for a 1.3-million-square-foot, checkered collection of interlinked stadiums. The new East Austin District bills itself as Austin's first pro-sports stadium and will host workspaces, convention space, retail, and a huge music arena.

OPEN> GROCERY STORE



Mueller H-E-B
Architect: Lake|Flato Architects
Associate Architects: Selser Schaefer Architects

1801 E. 51st Street
Austin, TX
512-474-2199

Imagine shopping for groceries in a LEED Gold–certified building on a site once occupied by Austin's airport, and you can picture the Mueller H-E-B structure designed by Lake|Flato Architects. The glass-clad building is one of the many collaborations between the Texas supermarket chain and the San Antonio–based Lake|Flato. Triangular steel trusses support a soaring, curved roof made of corrugated metal.

The H-E-B Market's design responds to Austin's highly variable humidity with a vestibule that transports and expels heat out the top. The building is also a testing ground for many sustainable concepts, such as a rain garden that doubles as a water filtration system, rooftop sensors that monitor how much daylight the building gets, and smart air-conditioning—all aimed at reducing energy use and improving the interior environment for shoppers. In 2016, it was awarded the AIA Committee on the Environment Top Ten Award, recognizing the architects for their commitment to sustainability. **Alex Wong**

OPEN> RESEARCH CENTER



Engineering Education and Research Center (EERC)
Architect: Ennead Architects

2501 Speedway
Austin, TX
512-232-2147

"Working by calculation, engineers employ geometrical forms, satisfying our eyes by their geometry...their work is on the direct line of good art," Le Corbusier described the engineer's aesthetic. This kind of engineering expressionism is employed to interesting ends by Ennead Architects at the Engineering Education and Research Center (EERC) at the University of Texas at Austin's Cockrell School of Engineering. The building features a dramatic glass-enclosed atrium that connects disciplines on a monumental staircase and provides sightlines into working laboratories, arranged like a page of comic book panels. A glass ceiling spans the 80-foot-wide space, and two towers on either side contain multidisciplinary research labs and electrical and computer engineering research spaces, respectively. The unification of disciplines in the atrium is expressed through a series of expressive parts: A trusslike bridge, a bespoke waterjet-cut spiral staircase, and slanted columns below the mezzanine level all show off the aesthetic of an engineer rather than one seamless whole. This honesty is a direct appeal to the students and engineering community who will inevitably congregate in the atrium. **MS**

OPEN> RESTAURANT



Goodnight Charlie's
Architect: CONTENT Architecture
Interior Design: Gin Design Group

2531 Kuester Street
Houston
832-986-5151

The materials are still offgassing at Goodnight Charlie's, but every great pair of cowboy boots was new at one point, right? Houston's newest (and Montrose's only) honky-tonk is more barn than Bauhaus, but don't get it twisted, the design elements have a great rhythm.

Texas is right here, so says CONTENT Architecture, with its take on the vernacular form both old and new. The rectangular structure, clad in rough cedar, provides a generous cut for the recessed entrance that is as welcoming as an East Texas shotgun house. The cedar is evocative of fenceposts that dot the countryside. Louvers run front to back and then up to the gable over the patio—the de facto front porch. Hefty posts carry the weight vertically, like the jacked-up beach houses of Galveston. Gin Design Group worked some boot-scootin' inside, creating a glowing crescent moon for the stage and cheeky Alamo print wallpaper for the restrooms. **Elizabeth Blasius**

EAVESDROP

Another Holl in the Wall

Steven Holl's famed Stretto House, which was completed in 1991, is getting an update. When the home's new owners found themselves in need of more space for their family than the original 2-bedroom residence provided, they tapped Dallas-based Max Levy Architects to design an addition that respected the iconic building without being devoid of personality. The new extension recedes from the original structure (which Levy also renovated), connecting to the original Holl house by way of a long gallery. Levy's addition is a series of bedrooms and screened porches that continue Holl's material language while taking on a new shape.

Three's Company

Texas is about to get some more young talent in the academic world, as three new faces are headed to Texas A+M this fall to begin work there. *AN* has confirmed the three. Native Texan James Michael Tate has spent time in New York, Los Angeles, and Ann Arbor, at the University of Michigan. He tells *AN* he has been visited by the ghosts of Rowe, Hamilton-Harris, Slutzsky, and Hejduk in the past month. Marcelo Lopez-Dinardi comes from the Critical Curatorial Conceptual Practices (CCCP) program at Columbia University, and has recently taught at Barnard and Columbia, as well as New Jersey Institute of Technology. Andrew Tripp is currently at Mississippi State and has previously been at Cooper Union and Penn, and has been researching modernity in the Deep South. The trio should provide some fresh perspectives on the rural Texan landscape and its diverse building culture.

Making a Run for the Border

During the spring of 2018, 13 architecture studios in Mexico and the U.S. undertook an ambitious shared project to examine U.S.-Mexico topics in architecture. The studios investigate the many ways that the two countries perform as a region with shared economies, infrastructures, languages, and histories. The exhibition focuses on student work from the 13 studios along with photographic documentation of the studios' sites by Iwan Baan, divided into five topic areas: territorial economies, migration, housing and cities, tourism, and creative industries and production. Conceived by Tatiana Bilbao and designed by NILE, the exhibition provides an opportunity to spatially redefine a region so often distorted by politics. *Two Sides of the Border* will be on view at the Yale School of Architecture Gallery from November 29, 2018–February 9, 2019.

Send tenure applications and studio syllabi to eavesdrop@archpaper.com.



The city decided not to renew the lease for Lions Municipal Golf Course in 2011.

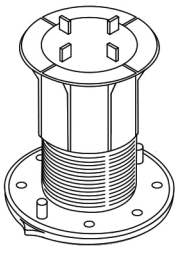
When nine-year-old African American caddie Alvin Propps was arrested for playing golf at the newly desegregated Lions Municipal Golf Course in Austin, Texas, in 1950, it set off a firestorm that eventually made its way to the mayor's office. As the first peacefully desegregated golf course in the former Confederate South during the Jim Crow era, the course became the center of controversy. But when the mayor's office decided to drop the charges, it set a precedent, and Lions Municipal became open to African Americans from that day forward.

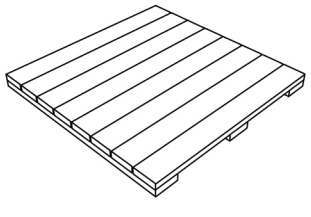
However, the course is now threatened by private development, after the City of Austin decided in 2011 not to renew the lease on the 1924 course just two miles west of the Texas state capitol. In 2019, it could be handed over to developers.

In a post by the Cultural Landscape Foundation, Glenda Gilmore, the Peter V. and C. Vann Woodward Professor of History at Yale University, said, "Historians searching for the impetus of the 'classical phase of the Civil Rights Movement,' preceding Brown v. Board in 1954 and the Montgomery Bus Boycott in 1955, have posited a 'long civil rights movement' that preceded those iconic struggles. In other words, Lions Municipal Golf Course is representative of the 'birth of the civil rights movement.'" The city has floated the idea of preserving the clubhouse, but not the course. However, many critics say that because the structure wasn't part of the site when the desegregation happened, preserving the clubhouse alone is not enough. The Congressional Black Caucus has voiced support for measures to protect the course, and the Texas House of Representatives, the City of Austin, and Travis County, Texas, have all passed resolutions acknowledging the historic importance of the site. **MS**



project: Partners Healthcare Administrative Campus (Boston, MA) | architect: Gensler | landscape architect: OJB Landscape Architecture | photographer: Kyle J Caldwell





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LEONID FURMANSKY



In New Braunfels, Texas, near San Antonio, is the world's largest gas station, which includes 60 gas pumps, 1,000 parking spots, and a a 67,000 square-foot convenience store with 80 soda fountain dispensers.

The Beaver Is Watching continued from front page state. Like a watering hole on the suburban savannah, these mega-size mini-marts serve as a social condenser: They provide a place where the diverse populations of Texas can graze together.

To generate anticipation, Buc-ee's maintains billboards hundreds of miles out from its stores, inducing in travelers' minds a yearning for a bathroom break and a bag of "Buc-ee's nug-ees" before they know their desires themselves. The ads are meme-worthy and infectious: "OMG! It's a beaver! LOL!," "My overbite is sexy," "The Top Two Reasons to Stop at Buc-ee's: Number 1 and Number 2," and "Only 262 miles to Buc-ee's. You can hold it." They lodge in the brain much like the chain's corn nug-ees stick in one's teeth.

Buc-ee's are big. Full-size versions of the store sport over 100 gas pumps. They are truck stop–scaled attractions with no trucks, as big rigs are not allowed at the chain. The number of pumps makes for an absurdly long shade canopy, as if the plan of a normal gas station was enlarged in one dimension prior to construction. It is a gesture of logistical horizontality, and the form embodies the engulfing flatness of a state that takes 12 hours to cross diagonally. The structure captures the state's vitality and artificiality; architecturally, Buc-ee's inspires the same synthetic blend of patriotism and awkwardness as a stretch Hummer.

Some locations include car washes, built with the same strip mall vocabulary as the main building. At the recently opened Buc-ee's in Katy, the conveyor belt apparatus is 255 feet long, and officially set the Guinness World Record for the world's longest car wash. But there's an ecological reason for this. According to Aplin, quoted in the *Houston Chronicle*, the car wash's length and the number of brushes involved means that it uses less water than smaller operations: "You're not trying to do it in 50 feet. You have more time...It's very eco-friendly."

Inside, the store's most valuable amenity is its clean restrooms. The bathrooms are immaculately maintained and generously sized, with fully enclosed toilet rooms that are finished, as Kevin Bacon's character from *Tremors* might describe it, in tile that goes "all the way up." After heeding the call of nature, one is immersed in the overwhelming expanse of the retail floor. It feels like a to-go Cracker Barrel on steroids with fewer rocking chairs and more truck nuts. As in a casino, disorientation and interiority dominate the senses. Typically, drink coolers and snack racks are to the right, prepared and fresh food kiosks are in the middle, and hard and soft goods are to the left. Flagship locations are larger than grocery stores, although beyond jams and spices, the stores don't really sell raw food materials. Square beige tile covers the floors and walls everywhere. Above, the 2x4 pattern of fluorescent lights is a relentless perspectival companion, the grid against which the goods are seen and reflected on every individually packaged unit of merchandise.

Buc-ee's is big business for its owners and a decent job for its employees. A sign advertises wages for cashiers starting at $14/hour, nearly the $15/hour rate recommended by some progressives as a baseline minimum wage. Municipalities, knowing the chain's popularity, shell out to land new locations. This year, a Buc-ee's will open in Denton, where the city agreed to $8.1 million in sales tax reimbursements in exchange for the new 38-acre development. The appeal is legitimate, as each location attracts scores of motorists and generates up to 200 jobs, all contributing to the state's strong economy.

Buc-ee's bustles at all hours in its performance of consumer culture. Here, people from all walks of life, about to partake in all kinds of activities, arrive in hot pursuit of sustenance and supplies. Much as Buc-ee's creates its own network of road trip destinations today, in the early 1970s the Truckstop Network, a project by the briefly Houston-based Ant Farm, reimagined the American freeway system as an infrastructure for "media nomads." They proposed a set of support modules that would provide essential services for travelers, as well as communication services to allow for the broadcast of original content directly to the public. But now that unlimited streaming is the norm, the mediatized aspect of Ant Farm's dream feels outdated. What endures are the creature comforts that still spur us to pull over and join the masses in search of junk food and cheap fountain drinks.

In the deserted expanses of roadside America, it is a welcome surprise to suddenly be lost in an air-conditioned crowd as it circulates around a Buc-ee's interior, swirled along by the currents of individual appetites, only to quickly return to one's vehicle, as there are no places to sit down, inside or outside. This dance is overseen by the gaze of the eponymous beaver, a ubiquitous character in the store that oscillates between appearing cheery and creepy, depending on one's mood. The creature's unblinking eyes peer out from every piece of branded product, its buck-toothed mouth frozen open. If able to speak, what would Buc-ee say?

Despite the store's appearance of American monoculture, culinary diversity sneaks in; the New Braunfels location offers 37 varieties of jerky, including "bohemian garlic, cherry maple, and ghost pepper," according to NPR. Like a ten-year high school reunion or an acid trip, Buc-ee's triggers many surprises about one's self and the world. As a lovesick essayist wisely observed, "You go to Buc-ee's for the same reason you break up with someone: to pursue possibility, that narcotic promise of more."

In *Content*, OMA described a "social condenser" as a "programmatic layering upon vacant terrain to encourage dynamic coexistence of activities and to generate, through their interference, unprecedented events." This matches the chaos of Buc-ee's. It's not a socialist Narkomfin, where workers might promenade in productive collision after their collective labors, but a capitalist terrain where citizens can stock up on sugared nuts, psychedelic beaver socks, and signs that read, "The most important kitchen utensil is the corkscrew." Buc-ee's may not be the social condenser we need, but it's the social condenser that shows us everything we didn't know we always wanted. **Jack Murphy**





Top: The Rolex headquarters in Dallas features wood fins and a stepped profile.
Bottom: The shifted form creates outdoor terraces.

Ha Kuma Matata **continued from front page** within the Harwood District near the location where street grids in Dallas shift. With nods to the Japanese castle metaphor of reaching toward the sky, Kuma and landscape architect Sadafumi Uchiyama turned to the 15th-generation stonemason Suminori Awata to construct a plinth upon which the seven-story volume would sit prominently among its nondescript neighbors. Awata implemented traditional techniques to design and construct a wall without the help of technical drawings. “Since there are no plans drawn for walls,” Awata explains, “I go to a quarry where I spend a day or two to walk around, memorizing the characteristics of each stone and figuring out where each stone will be set.” Though unintended, the stone wall is a highlight that is in harmony with the building, yet through clear delineation and craft commands its own measure of respect.

Kuma’s office and Harwood’s internal group—Harwood Design Factory—collaborated closely from inception to the construction of the project. The result is a twisting abstraction of Japanese architectural tradition set against a reflective glass backdrop. The form is clear, and the structure carries the intention of form upward from the stone plinth toward the sky. The details, however, appear challenging, as there are multiple points where the fins fail to negotiate the form cleanly. Reflections during the day obscure an interior volume that at night reveals more to be desired, primarily consisting of lab spaces that have been finished for function rather than aesthetics.

The interior comes into one with the exterior form at the lobby level, where the texture of the exterior is scaled down into more detailed wood fins, stone, and glass. The landscape is ever present, with views toward reflecting pools and native plantings. Uchiyama’s gardens pair with labs on alternating floors where the form torques, providing green space evocative of the Harwood District’s commitment to the fifth facade as a design element. The penthouse is capped with a double-height gathering space for employees behind the continuous screen of the facade. Finishes carry over from the base of the building, and a series of furnishings custom-designed by Kuma specifically for the project accentuate the space.

In many ways the Rolex Building is the anti-Dallas, through its modest size and contextual design. As architecture, the composition is clear and to the point, commanding one to discover details and intricacies. Not all of these discoveries are deeply satisfying, but they still manage to provoke thoughts and conversations often absent from similar projects in the region. But on the whole, the Rolex Building is a welcome addition to Dallas that is worthy of a visit, and an example that developers should internalize. **Michael Friebele**



Page
Turner

Queens’ new **Elmhurst Community Library** serves one of the most diverse and vibrant communities in New York. Designed by **Marpillero Pollak Architects**, the LEED Silver-rated facility features two structural glass-encased reading rooms that allow light to flood in during the day and offer glimpses of the state-of-the-art library setting at night. Erected by **W&W Glass**, its glazed features have become beacons for the community, drawing its knowledge-hungry members to the wealth of information within. Read more about it in **Metals in Construction** online.

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UNVEILED> BOTANIC GARDEN







Architect/Landscape architect:
West 8 Urban Design & Landscape Architecture

Client: Houston Botanic Garden
Location: Houston
Expected completion: 2020

Renderings have been revealed for the forthcoming Houston Botanic Garden. The 120-acre garden will be separated into tropical, subtropical, arid, and Mediterranean climates, and will include a variety of zones such as a Glade and Events Garden, an Edible Garden filled with a diverse array of plants, and a 4-acre Global Collection Garden. The project is being overseen by the Dutch firm West 8 Urban Design and Architecture, which has worked on projects such as New York's Governor's Island master plan.

Visitors will enter the garden by crossing a bridge over the Sims Island oxbow onto the tree-lined Botanic Boulevard. Shading structures, described as "living alcoves," will populate the garden, giving visitors a reprieve from the Texan sun. Framing the more formal interior are natural ecosystem gardens that run along the boundary bayous and display the diversity of flora within Houston. The Houston Botanic Garden plans to open its first phase, fittingly titled "Botanic Beginnings," to the public in 2020. **Drew Zeiba**

UNVEILED> OFFICE



Architect: Neil M. Denari Architects
Client/Developer: Sotoak Realty

Location: El Paso, TX
Expected completion: 2020

Los Angeles–based Neil M. Denari Architects (NDMA) has unveiled plans for a 10,000-square-foot office and gallery addition slated for the Sotoak Realty company in the Union Plaza District of El Paso.

The adaptive-reuse project aims to add a sculptural rooftop pavilion to an existing three-story red brick warehouse. The proposed addition cantilevers 18 feet over an adjacent street, and features a red aluminum panel soffit designed in homage to the region's clay-rich soils.

For the project, the designers have created a north-facing window wall that will capture daylight, a feature that compliments an interior light well connecting a rooftop terrace with the building's main stairs and a lower level gallery. Renderings for the project depict a bright open office area flanking a cluster of executive suites, with perforated metal panel window walls lining the eastern-facing portions of the space. The project is currently entering the construction documents phase, according to the Texas-born Neil M. Denari, principal at NMDA.

The project is expected to be completed in 2020. **Antonio Pacheco**

UNVEILED> BALLPARK



Architect: HKS
Client: Texas Rangers/City of Arlington

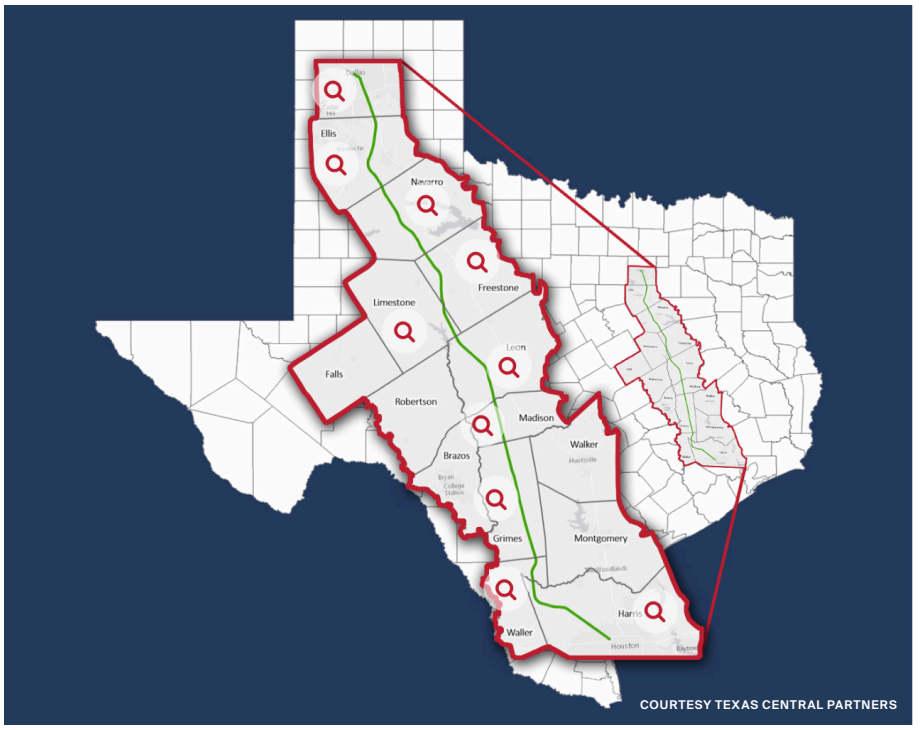
Location: Houston
Expected completion: 2020

The Texas Rangers will move to a "game-changing" HKS-designed stadium in Arlington by 2020. The 1.7 million-square-foot ballpark will hold 41,000 seats, and will be home to games ranging from high school and college-level sport tournaments to international events.

The $1.1 billion baseball park broke ground in September 2017 and is now under construction. When completed, Globe Life Field will join the Texas Live! entertainment district as a new destination for entertainment tours.

HKS took into consideration the hot climate of the Metroplex. The massive retractable roof is one of the examples of climate-controlling infrastructure in the stadium designed to improve the experience of watching games.

The design of a large plaza and level-changing landscape outside the stadium was inspired by Texas farmhouse porches. The project also borrowed elements from other ballparks; for example, the 18 arches in the north wall were a tribute to the old Globe Life Park, located just a few hundred yards away. **Alex Wong**





Top: The Texas Bullet Train's preferred route has already been mapped out by the DEIS.
Bottom: Rendering of the train traveling on a repurposed viaduct.

Another Kind of Bullet **continued from front page** of thousands of projected construction jobs.

TCP is still hashing out the exact station locations, but planning to build the 60-acre Dallas stop south of the Kay Bailey Hutchinson Convention Center, with a footbridge from the station to the convention center. On the other side of the 90-minute trip in Houston, TCP has chosen the city's Northwest Mall as the preferred location for its station. The mall site will give way to a 45-acre, multilevel train complex with easy access to I-610 and U.S. 290. Additional stops between the two cities, such as in the city of Bryan/College Station, have already been confirmed.

Still, not everyone is on board with the rail plan, and landowners along the proposed route have fought and lobbied their state legislators over the company's possible use of eminent domain to acquire their property. TCP has outlined its process for picking up the required properties, including offering market value for parcels in the Bullet Train's path and pledging to minimize the impact on landowners. That hasn't stopped the opposition from filing a flurry of bullet train bills in the state senate, though only two of the proposed 20 measures managed to pass. As a result, the state will not use taxpayer funds for the project, a move that TCP did not oppose.

The free-market funding requirement hasn't slowed down the Bullet Train's progress, and the Federal Railroad Administration (FRA), a subsection of the United States Department of Transportation, has given the draft environmental impact statement (DEIS) the green light. The FRA also proposed an optimal route that would disrupt the least amount of people, and engineering and construction firms WSP, Fluor, Bechtel, and Lane Construction are now all helping to lay the groundwork for the project's eventual construction.

The Amtrak tie-in certainly won't hurt the project's chances, but high-speed rail remains notoriously expensive. Although high-speed rail has historically floundered in the U.S.—such as the $77 billion north-south bullet train currently under construction in California—TCP's business plan, and the use of private funds, combined with the high level of government support, has helped the project avoid the hurdles plaguing similar projects. **Jonathan Hilburg**



Shaking Bad

In New York, passing subways can shake entire buildings, but that wasn't an option for Columbia University's new **Jerome L. Greene Science Center**. Home to sensitive laboratory and imaging equipment requiring exceptional stability, the design by **Renzo Piano Building Workshop** relies on a steel structure to reduce floor vibrations to a miniscule 2,000 mips. Even as the elevated No. 1 train roars past, this helps ensure that nothing distracts from the scientific advances being made within the center's unshakable walls. Read more about it in **Metals in Construction** online.

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Volleybar Ball

HOUSTON IS NOT NECESSARILY KNOWN FOR URBAN PLACES: CAN A VOLLEYBALL BAR FILL THAT ROLE?


KRIS KELVIN


COURTESY SIDEOUT VOLLEYBAR

Above: The bar and the beach volleyball courts meet as onlookers relax under a simple *brise-soliel.*

Right: Sideout is located in an up-and-coming neighborhood. Across the bayou to the north can be seen Raven Tower Bar, a renovated metal shop and the former owner's apartment tower that has been turned into a bar.

Houston is a city that revels in the intersection of event and space—it certainly has an abundance of both. Adjacent to one of Houston's meandering and often overflowing bayous in what was once an empty lot turned parking lot, Sideout Volleybar responds to the city's social pressures and urban conditions. This volleyball social club opened in the Northside neighborhood in June 2017 and combines casual sports, bright lights, and beer.

AN contributor Jack Murphy and I decided to do a bit of participant observation on a recent Wednesday and headed over for burgers and beer. Sideout has three courts lined on two sides by a covered observation porch along with a bar house, a bean bag toss court, a dog area, and a food truck parked outside. "It's like an athletic Ice House," Jack observed, referring to the open-air beer joints that have long dotted the city.

The comparison to the classic Houston outdoor bar is apt in that everything feels so provisional, as if the wood-framed decks could quickly be dismantled and the carpet of sand rolled up if business got too slow. The bar itself is not much more than a converted bungalow with a slab of wood in the space once occupied by the living room sofa. There was an effort to cover every surface with some choice of bright yellow, millennial pink, or a color I can only describe as greenish. The lighting is simply the parking lot pylons poking out of the sandy courts, which were installed on top of the parking lot surface, like a Houston version of "*Sous les pavés, la plage!* "

This particular evening was both a trivia night and a league night, so the jarring patter of trivia questions layered over the chatter of various teams on the courts, all atop the soundtrack of greatest hits from the early 1990's. The music of 311 was on heavy rotation. It was a ball. Sideout is a bar for beach volleyball and this seemed simple enough. The venue calls itself a "volleybar," but the place is alive with activity: What we discovered was a veritable volleybar ball.

"I think we are in the 1 percent of people not wearing an obnoxious league shirt," Jack comments. The team players wear generic loose fitting league T-shirts, distributed by Houston Sports & Social Club. For expediency, the graphics on every shirt are the same, so the 20-odd teams are differentiated by a range of colors that evokes a middle-school summer day camp. What is illustrative to the architect in this situation is that what is happening is really an event-based urban choreography. Houston is a city of unparalleled diversity with very few circumstances that allow for the public to appear together—but here, people come in droves. By our rough count, there must have been nearly 200 players at any given time in the complex: trivia sharks, volleyball players, dog-walkers, and even a few just plain barflies. I can't help but imagine the league T-shirts as some type of Situationist uniform à la Constant's *Homo Ludens*.

Will Thomas, one of Sideout's owners and a local musician, cited many of the Tex-Mex establishments of his youth and their "organic informality" as his inspiration for the place. Thomas is a partner in W2 Development, a company responsible for many of the recent commercial developments in the neighborhood.

Nearby, there is a new metro light rail stop, the White Oak Music Hall, designed by Schaum/Shieh (see page 28), a dramatic bridge over a river (a bayou, upscaled), and a hike and bike trail in the works, all set in a loose assemblage that doesn't quite amount to an urban system until you see it activated through its events. Whether it's an outdoor concert, a cinema screening, or, of course, league night at the Volleybar, each time you visit, you might find yourself in what feels like a different city.

If you don't mind the sartorial constraints of the league T-shirt and would enjoy the feeling of standing at the center of a sociality you can't quite perceive the edges of, then come over to the Sideout Volleybar. If bumping, setting, or spiking isn't your thing, then at least you will find a unique place to imbibe and watch the sun set against the Houston skyline. **Kris Kelvin**



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Home of the LA Lakers

Architect:
ROSSETTI, Perkins+Will

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IN DETAIL

Petal Power

A SCULPTURAL CONCRETE CANOPY MADE WITH DIGITALLY DESIGNED AND FABRICATED FORMWORK CREATES SHADE AND CAPTURES RAINWATER IN A SAN ANTONIO PUBLIC PARK.



CASEY DUNN

As implied by its name, Confluence Park overlooks the meeting of San Pedro Creek and the San Antonio River. Located about three miles south of downtown, the park acts as a gateway for the historic Mission Reach section of the San Antonio River. The $13.7 million project includes an education center and extensive landscaping that illustrates the diverse biomes of Texas.

But what most visitors will remember about the 3.5-acre park are the nearly 30-foot-tall concrete petals that emerge from the ground to form a sprawling overhead canopy. Twenty-two of these sculptural panels are clustered together to form a single, large, open-air pavilion. Another six are paired together to form three smaller gathering areas. In addition to providing relief from the South Texas sun, these panels are shaped so that when it rains, they channel water into an integrated system of rainwater collection, filtration, and dispersal.

All of this reinforces the stated mission of the park, which is to act as a destination for recreation while teaching important lessons about environmental science and sustainability. To that end, the design team sought to create a composition of architectural and landscape elements that used the same kind of logic found in nature. Ball-Nogues Studio, a Los Angeles–based design practice, established the park's conceptual master plan. From there, the design was developed in close collaboration with the landscape architect Rialto Studio, Lake|Flato Architects, and Matsys, a San Francisco–based design practice that specializes in the development of new approaches to architectural design and fabrication. That particular skill set was critical in the development of the park's concrete. Given the structural gymnastics involved, the project's structural engineer, Architectural Engineers Collaborative (AEC), became an integral part of the design team as well.

Although petals of steel, fabric, and wood were all considered during the design process, concrete was ultimately selected for its durability and permanence. Even though the majority of funding for the project came from private donations, Confluence Park functions as a public park, and so vandalism and long-term resiliency were key considerations.

Despite the apparent complexity of the assembled petals, the design only required three unique petal shapes. These three forms were refined digitally using Grasshopper and Rhino. The resulting computer files were then provided to Kreysler & Associates and fed to their large 5-axis CNC router at their factory in California. The resulting Styrofoam "positives" were then used to manufacture the fiberglass "negatives" that were shipped to San Antonio to be used as formwork for the petals.

Each of the park's 28 petals was cast on-site but not in place. Given their complex geometry, a portion of the petal had to be exposed during the pour. This resulted in two contrasting concrete textures: a smooth finish where the concrete was poured into the fiberglass form, and a broom finish where the concrete was left exposed. As with many other aspects of the project, a custom solution was required here, too. A special eight-inch broom was used to apply the finish consistently to the petal's curved form and to emulate the flow of water down the petals.

After the concrete had cured for several days, the petals were lifted into their final positions. As with any tilt-up concrete structure, this was the moment when the highest stresses would be placed upon the petals. Adding to the complexity of the erection process was the fact that the petals had to be assembled in pairs: neighboring petals were joined to one another with two steel pin connections to form a determinant structure.

The result of all this effort is a unique landmark on the south side of San Antonio. Despite the weight of the concrete petals—individual petals weigh between 15 and 20 tons each—the resulting structure feels remarkably light. The space between individual petals contributes to this feeling of weightlessness, while acrylic lenses embedded in the concrete add a bit of playfulness to the overall composition.

In addition to illustrating the possibilities of contemporary concrete construction, Confluence Park demonstrates what is possible when a highly collaborative interdisciplinary design team works with an educated client to create something truly unique. It is only fitting that a park built to celebrate the confluence of diverse bodies of water be created by a confluence of diverse design professionals. **Brantley Hightower**

This article originally appeared in the July/August issue of Texas Architect *magazine.*


COURTESY LAKE | FLATO



COURTESY LAKE | FLATO


CASEY DUNN


CASEY DUNN

Counter-clockwise from upper left: Styrofoam molds were milled by Kreysler & Associates on their 5-axis CNC router in California. These were used to make fiberglass molds to form tilt-up concrete units. Neighboring petals were joined to one another with two steel pin connections. The finished structure has two finishes—a smooth finish where the concrete was poured into the fiberglass form, and a broom finish where the concrete was left exposed.

Opposite: 30-foot-tall concrete petals soar above the 3.5-acre park.

Resources

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Architectural Eng. Collaborative

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CNG Engineering, PLLC

Lighting Designer
Mazzetti

Energy Consultants
Positive Energy

Waterproofing Consultant
Acton Partners


MICHAEL VAHRENWALD

Roadside Spectacular

A BIG BROTHERS BIG SISTERS RISES IN DOWNTOWN HOUSTON WITH AN APPEAL TO THE STREET.

New York–based studio Agency–Agency recently completed a new, light-filled headquarters for Big Brothers Big Sisters (BBBS) Lone Star in downtown Houston. Designed alongside local firm Method Architecture, the 20,000-square-foot structure increases the visibility of the national nonprofit and connects it with its core demographic of volunteers and lower-income families nearby.

Featuring a pentagonal plan, the muted, beige-gray building sits three stories tall and includes massive windows that cut through the facade, unveiling activity within. A full-height, yellow-walled atrium invites visitors into the facility while pops of coral and teal are painted throughout, adding to the interior's playful atmosphere.

"An old idea of nonprofits is to lean heavily toward modesty and frugality to show philanthropists a greater sense of need," Pierce Bush, CEO of BBBS Lone Star, told Texas Architect. "Here, the decision was made to go bold."

BBBS Lone Star services Greater Houston, Dallas, and Tarrant counties, as well as West Central Texas. Agency–Agency wanted the design to speak to the organization's leadership and influence across half the state. Creating dynamic views in and out of the facility was an important feature of the project. The interior program houses community spaces on the first floor, offices on the second floor, and a flexible event and activity space on the third along with an outdoor terrace.

"The scale of the building responds to the need to be visible in that part of the city," said Tei Carpenter, director of Agency–Agency, to *Texas Architect*. "It's meant to be seen at the speed of traffic." **Sydney Frankin**

Alliance for A New Urbanism

ALLIANCE, TEXAS IS A MASTER PLANNED COMMUNITY ANCHORED BY AN INLAND LOGISTICS HUB.


GOOGLE MAPS

Intermodal distribution centers, like this one in Alliance, Texas, create an interface between multiple modes of transportation, including tractor trailers and freight trains.

If you fly into the Fort Worth Alliance Airport (AFW), it is likely that you are some kind of cargo. You might be arriving from any number of foreign points of origin and, upon touching down, you would then be transferred to a distribution center that would facilitate your delivery to an awaiting train car or tractor-trailer. While all of this is happening, you still have not yet officially entered the U.S., at least for import duty purposes. You've entered the Alliance Global Logistics Hub, notable because it is both original and exemplary. It remains categorically significant for its size and configuration: More than just an airport and intermodal distribution facility, Alliance is, in fact, a privately owned and managed master-planned community that includes housing developments, community centers, and other civic infrastructures. Alliance is also designated Foreign Trade Zone #196 and bills itself as the first exclusively industrial airport in the U.S.

The Alliance Global Logistics Hub, as well as the larger community into which it is integrated, might be read as the product of a purer logistical vision. The hub's promotional material highlights the frictionless intermodal transfer of inventory from air to train or tractor trailer. Indeed, intermodality is the dream of the logistician—a world in which any misalignment or discontinuity has been anticipated and smoothed. It allows the material in transit to operate as information to be managed more than as material to be handled. This same impulse characterizes the ways in which Alliance explains its location: not in terms of relative distance, but in delivery times and access to populations. In two hours, an airplane can be in Chicago or Mexico City, and in 1,000 miles, a truck can be within reach of 153 million U.S. residents.

Hillwood Properties, belonging to Ross Perot Jr., initiated Alliance, Texas, through a combination of well-timed land acquisitions and clever leveraging that anticipated both the growth of the region and the growth of the logistics sector. For example, as the Fort Worth airport's capacity was at its limits, the Alliance Airport was there to absorb the extra traffic, but only in certain conditions that included future tax abatements and operating rights. This was the beginning of the partnership between Hillwood and the City of Fort Worth that, when manifested in urban form, can blur the distinctions between public and private investment and oversight.

The irony that the scion of one of America's most ardent protectionists would find his fortune through international logistics, transshipment hubs, and free trade regulations is not lost on the coverage of Alliance. Perot Jr. has signaled his willingness to "keep building big logistics parks for American firms supplying U.S. jobs." The logistics hub is indeed the anchor of Alliance, both financially and in terms of employment. However, for all the emphasis on how the Alliance logistics hub can obviate boundaries, promotional literature for Alliance's residential sectors emphasizes locality, belonging, and inclusiveness, citing its "integrated housing solutions," entertainment, and employment support services. But neither does Alliance appear to be a monoculture, with a nearby mosque, temple, church, and even a replica of Stonehenge made with segments of oil pipelines. **Jesse LeCavalier**



106 7th Ave Lobby, NYC
Aaron Scott Kirsten Interior Design
Walls: Neolith Estatuario



Cafeteria Y Heladeria Xoco, Spain
Floors, Walls, Countertops: Neolith Calacatta



HG STONES

The Dunhill Lobby, NYC
Walls: Neolith Iron Corten



Hotel SH Valencia Palace, Spain
Walls: Neolith Estatuario



Enigma Restaurant, Spain
RCR Arquiitectes
Floors, Countertops, Walls: Custom Neolith

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IN CONSTRUCTION

Ruby City

In 2007 the late artist and philanthropist Linda Pace—of Pace jarred salsa fame—had a vision of a ruby-tinted arts city come to her in a dream. The city, as Pace dreamed it, would become a rough outline for the 14,000-square-foot Adjaye Associates–designed museum complex that will house her foundation's art collection in San Antonio. Pace passed away in 2007; more than ten years later, her vision is being brought to life bit by bit, an endeavor that is currently in full swing ahead of the building's projected 2019 opening date.

The $16 million dream is being translated into reality by architect David Adjaye and an international network of local architects, contractors, and fabricators who have made plans for a precast concrete panel citadel situated on the Texas plain. There, folded concrete surfaces and expanses of brut walls will house the 800 or so artworks collected by Pace and her namesake foundation. The pink complex is built out of a special concrete and aggregate mix crafted by fabricators across the border in Mexico that will result in a gleaming, rosy edifice.

As explained by Mike McGlone, principal at Alamo Architects, the executive architect for the project, most colored concrete starts out in either gray, beige, or white tones, with pigments added incrementally to tint the mixture to the desired color. But ruby red pigment is a particularly difficult hue to achieve. For one, pigment can only be added little by little, resulting in a blended appearance that can appear muddled when combined with cement's natural coloring. The process is made more difficult by the inherent structural requirements of the materials involved—the more pigment is added, the less resilient the final product—so while Pace's dream called for a vibrant, beet juice–colored edifice, tests using traditional methods yielded less spectacular results. That was the case until designers began looking south of the border, where concrete fabricators Pretecsa can produce concrete panels made with red rock aggregate and red sand taken from local quarries. There, instead of starting with beige or gray bases, the fabricators begin with white concrete and add colored materials and tints to change the hue of the mix from inside-out. The fabricators include materials such as recycled red glass and mica in the mix to boost coloration, while also creating a glittering finished surface that will reflect sunlight throughout the day.

Adjaye's designs call for a collection of open galleries topped by a pair of sculptural light cannons that will bring light into the building. The complex will make use of several different concrete panel types, including rough surfaces that will line the upper sections of the building to better reflect the sun.

Lower sections will be smooth to the touch, with a three-sided forecourt wrapping a sculpture terrace that features sandblasted surfaces. The folded concrete panel structure will also use cementitious panels along its roof, a system that will be supported below by a secondary weather-proof roofing system located directly below the outermost concrete layer.

The complex is expected to be completed in late 2018 and will open to the public in 2019. **AP**



CAN VU BUI/ADJAYE ASSOCIATES



MIKE MCGLONE



MIKE MCGLONE

Top: Construction photo showing the Ruby City complex, which is topped by a pair of sculptural "lanterns" that bring light into the precast concrete panel building.

Middle: Pretecsa-produced concrete panel samples for the project showing (left to right): An exposed light-colored aggregate mix tile, an exposed ruby-red aggregate mix tile, a polished finish tile, and an acid-washed finish tile.

Bottom: View of a triangular concrete panel being finished at Pretecsa's concrete manufacturing plant outside Mexico City, Mexico.



This dirt road will one day be underwater because it is in the future lakebed of the Lower Bois d'Arc Creek Reservoir outside Dallas.

As I drive down into the future lakebed, the terrain on either side of the gravel road becomes haggard and unkempt. Signs of the area's past as farm and ranchland are evident, but shrubs and gnarled trees have grown high to create a deserted, post-apocalyptic landscape. This is the future site of Lower Bois d'Arc Creek Reservoir, a 16,600-acre lake soon to be constructed in rural Fannin County that will provide water to the North Texas Municipal Water District (NTMWD), serving Dallas suburbs in Collin, Dallas, Kaufman, Rockwall, and Hunt Counties. This lake recently received its permit from the U.S. Army Corps of Engineers, making it the first major reservoir in Texas since Lake Gilmer was constructed in 1999.

Reservoirs provide the majority of Texas's drinking water. Texas has been building reservoirs since 1893 (Lake Austin), with the majority created in the 1940s through the 1960s. There are currently 188 in the state, according to the Texas State Historical Association. In the Dallas area, with the limited availability of river water and an aquifer too low to be practical on a large scale, reservoirs have been the main strategy for providing water to a growing region.

During a recent visit to Bonham, the Fannin County seat and nearest town to the proposed lake, a passive acceptance of the forthcoming project was evident among a number of residents. There are those who oppose it, most notably the landowners whose land will soon be flooded. However, in rural unincorporated areas, there are few options for organized resistance when a powerful water authority decides to plant a reservoir in your backyard. Yet the impact on Fannin County extends beyond the boundaries of the lake itself. The NTMWD is required to mitigate the habitat destruction caused by the new reservoir by creating new habitat nearby. Thus, an area slightly larger than the reservoir has been purchased to this end. In total, 33,441 acres of private land has been appropriated from local landowners (5 percent of Fannin County).

This situation in Fannin County magnifies a common but overlooked tension in the field. Despite the extreme impact, large-scale water infrastructure is strangely absent from the architectural conversation. Architects employ water conservation and collect stormwater at a building scale, but, like most, take the availability of water for granted. They know their project simply has to tap into the existing water main in the adjacent street. Yet the construction of buildings is an extremely water-intensive process, regardless of the water-efficient fixtures they specify. A significant amount of water is used during the production of concrete, with yet more added at the building site. To complete the curing process, concrete requires approximately one pound of water for every three pounds of concrete. Unfortunately, little data is available for water use in construction sites in the U.S.

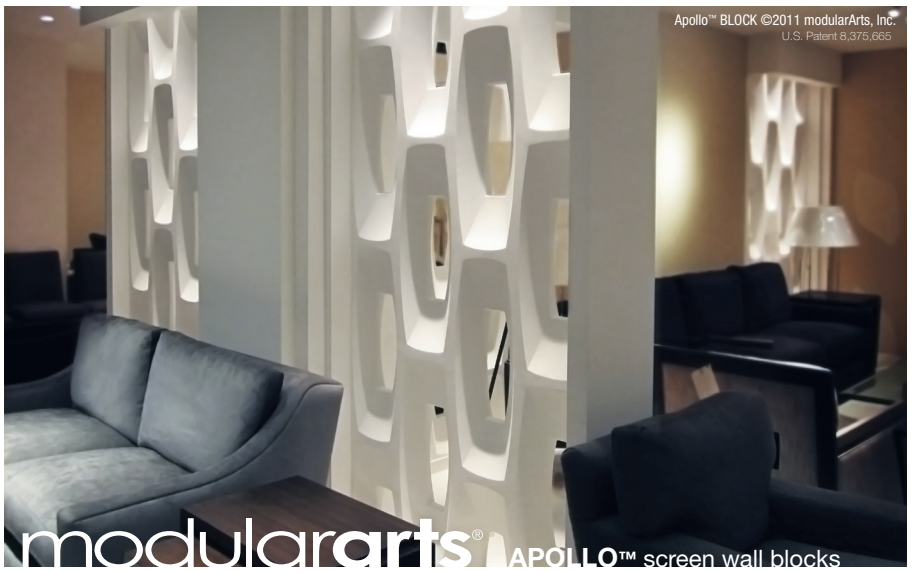
Furthermore, under current infrastructural constraints, cities have no capacity to provide the resources for their own sustenance. Most cities do not generate power or harvest their drinking water within their boundaries. In light of this, cities can be seen as having a parasitic relationship with their surrounding rural areas. The ugly and unpleasant realities of power generation are located far out of sight of the cities themselves, and the inundation of private land for drinking water is undertaken in rural areas because, after all, they have plenty of land. This leaching of resources from the countryside enables cities to exist, but it is a reality that the design profession should begin to address.

In February 2018, the residents of the NTMWD used an average of just under 3,000 gallons per capita. A few months earlier, in August 2017, the water use was approximately 6,200 gallons per capita, which equates to 200 gallons per day per resident. Watering St. Augustine lawns accounts for much of that summertime use in this suburban water district.

While the NTMWD champions the new reservoir as critical to its supplies, it will only meet the demand for the year 2022 through 2040, a span of 18 years. At that point, additional reservoirs will be required. While Texas is a large state, land is still a finite resource, and new prime reservoir locations are very limited. Climate change also poses problems for the continued reliance on reservoirs. Record-breaking drought in 2011 meant nearly all the reservoirs were significantly below capacity, with some municipalities enacting mandatory water conservation measures. Future droughts will be harsher, posing severe challenges to water provision.

As architects strive to address the challenges of building in our current environment, a knowledge of the complex and connected relationship of water to development and construction is important. Architects and planners, water officials, and more will need to be creative in solving the complex problem of providing water to future populations. While American cities have not yet had to deal with the scale of catastrophic water shortage that occurred in Cape Town, South Africa, it should give us all pause as a similar situation in North Texas is quite possible. **Andrew Barnes**







Border Origins

The following essays offer perspectives on property, landscape, material, and infrastructure that shape the U.S.-Mexico border imaginary. The authors illuminate critical spatial practices which destabilize assumptions about the border and the seeming simplicity of its binary divisions and exclusionary logics. These perspectives argue instead for constructive transgressions of this destructive border myth, as it is being implemented to advance political agendas. These articles are offered as *origin stories* of a land, a people, and a space whose origins are routinely questioned and defied, entrenched and overcome.

The fluidity of borderspace—as we have seen in past weeks—can abruptly change course: Its infrastructures can mineralize political whims into seemingly permanent institutions and protocols. The border is a place where the abnormal and unimaginable routinely slip into normalcy. But it can also be, as we hope the following demonstrates, a cauldron where positive, alternative futures are forged.

Special News Section, guest edited by AGENCY

The Future/Past on a Monorail

These days the conversation about the United States–Mexico border is dominated by the implications of building a wall between the U.S. and Mexico. But back in the mid-1960s, there were concerted binational efforts to build a monorail to further connect the commercial districts of two cities conceived as part of one binational community. A 1965 document outlining the proposal for a Juárez-El Paso Monorail System invoked the common origins of both cities. The river was referred to as an obstacle to be overcome: "No other metropolitan community of equal size has been so restricted and contained by so relatively a small item as a channelized river." Recently, the idea for a monorail has surfaced again, but this time riding on top of a 2,000-mile border wall promoted by an American president to further separate the U.S. and Mexico.

The 1960s were a period when ideas for urban planning boomed in the Juárez/El Paso border area. This was the context of the 1965 proposal for a transportation project designed to move passengers back and forth across the border. Although the idea did not come to fruition, it gives a glimpse of how certain sectors viewed the future of Juárez/El Paso as an integrated border metroplex. A prototype of the monorail can be seen in the 1967 film adaptation of Ray Bradbury's novel *Fahrenheit 451* by Francois Truffaut. It was built on the outskirts of Paris as a demonstration facility by SAFEGE, the company chosen to install the El Paso/Juárez monorail. Guy Montag, the main character, enjoys a smooth ride between the city and the suburban neighborhood where he lives. The suspended train featured in the movie is the same as that in the photomontages published in the booklet that circulated in the Juárez/El Paso area two years earlier. It was estimated that the nonstop ride between stations would transport commuters between the San Jacinto Plaza and the Juárez bullring in less than three minutes. Both cultural and aesthetic considerations were made, along with technical, commercial, and other economic aspects of the interaction between the two cities. The project was proposed not just to satisfy a growing demand for a rapid transit system that would minimize crossing time, but also as a potential tourist attraction. It anticipated that visitors from all over the world would visit "to witness the most advanced form of mass transit functioning commercially in a modern community." It would have been an invitation to take a glimpse into a science fiction future, one where limitations imposed by geopolitical borders were meant to be overcome.



Juárez/El Paso Monorail System terminal design.

The design considered how to implement inspection of passengers by Mexican and American immigration and customs officials, and proposed that this process would take place upon arrival at either station rather than at traditional border checkpoints. The document stressed that authorities considered this viable. But did this pitch really correspond with the sociopolitical context of the epoch? Or was this early globalization, pro-trade discourse merely boosting rhetoric aimed at gaining sympathizers for a binational entrepreneurial group trying to get a piece of the border transportation business? At first glance, the mid-1960s were a promising time for a project that gave the impression that Juárez/El Paso were twin cities living in harmony. But in fact, these notions were contrary to national border control policies that produced the infamous Operation Wetback, which resulted in numerous human rights violations and the deportation of over a million people.

More recently, Donald Trump has been reviewing prototypes for a different kind of border project: the construction of an "unscalable" and "unpenetrable" wall. His idea has prompted architects and builders from both countries to make proposals. Earlier this year *The New York Times* ran an article posing the question, "Is Donald Trump, wall-builder-in-chief, a conceptual artist?" It was a report about Christoph Büchel, himself a conceptual artist who circulated a provocative petition seeking to save the prototypes—built with $3.3 million in federal funds—from demolition by invoking the Antiquities Act of 1906. According to Büchel, the set of textured slabs, which can be seen from across the border, was "a major land art exhibition of significant cultural value." Not surprisingly, the petition created an uproar in the art world.

Although some proposals were made in jest and did not reach the prototype stage, there have been numerous bids that attempt to subvert Trump's purpose to isolate and supposedly protect the United States from the perils of contact with its southern neighbors. *The New York Times* reviewed a dystopian parody consisting of a 2,000-mile pink wall housing seemingly disparate facilities like a detention center and a mall. This was a collaborative effort by Estudio 3.14, a design group in Guadalajara, Mexico, and the Mamertine Group, a design lab at the University of Connecticut. The designers used minimalist concepts and colors reminiscent of the style of influential Mexican architect Luis Barragán: "It is a prison where 11 million undocumented people will be processed, classified, indoctrinated, and/or deported." The project also contemplates the wall housing a mall with a Macy's in the Tijuana section.

The San Diego Union-Tribune accounted for an apparently serious plan presented by a Southern California firm named National Consulting Service that envisioned a wall topped by a monorail serving both countries. The train would run along the border and would feature "voice analysis technology to detect different emotional states of riders to possibly assist law enforcement." According to the firm, the system was designed to keep Americans safe, but also to improve and revitalize sister cities along the border.

The future is still in the past.

Willivaldo Delgadillo is a novelist and a UC Mexus postdoctoral fellow based in Juárez.

The Remittance House

In discussions of the U.S.-Mexico boundary region, what often gets lost is a full exploration of the geographic and social networks produced by the lives that span it. Taking in the meaning of the U.S.-Mexico border region, the largest migration corridor in the world, requires an understanding of both ends of the journey as well as what lies in between. One way to do this is to follow the money—in this case, migrant dollars earned in various locations throughout the U.S. that are channeled back to households in Mexico. The economic term for this capital flow is *remittances*, typically used by political scientists, demographers, and NGOs that investigate, among other things, how and if remittances alleviate poverty in receiving regions. I follow this capital flow to its material conclusions as manifested in migrant hometowns. The "remittance house," a term I use to describe houses built in Mexico by workers performing unskilled or semiskilled wage labor (or migrants "from below") in the U.S., reveals Mexican pueblos as distant hinterlands of American cities and as critical nodes in our understanding of the U.S.-Mexico borderlands at large.

I first became interested in the remittance house through the stories of my co-workers, Mexican male migrants who lived and worked in Berkeley, California, while investing a portion of their earnings into new homes in Guanajuato, Mexico. The Central Bajío state of Guanajuato and its neighboring state of Jalisco have historically high rates of both emigration and remitting. Economist Paul S. Taylor documented migrants using dollars to build or remodel homes in Jalisco as early as the 1930s. Jalisco is an epicenter of remittance construction that includes homes as well as communally funded public projects like rodeo arenas and cultural centers. Today, Mexico ranks as the world's fourth-largest remittance economy after China, India, and the Philippines, receiving approximately $20 billion dollars annually, and new construction financed by remittance dollars is evident across Mexico's 32 states.

Formally and materially, the remittance house has become a source of curiosity both for people who live in Mexican towns as well as for those peering in from afar. This has to do with the houses' heavily articulated facades that present a dizzying array of representational strategies. Fluted columns, zigzagging concrete cornices, and repetitious pediment-shaped window frames grace facades topped with false fronts that represent gable roofs or brick battlements. These eclectic arrangements clash with the built fabric of small towns composed of adobe or fired brick buildings with teja tiled roofs—towns once marked by uniformity and homogeneity.

In the remittance house, architectural style carries great symbolic weight, as design ideas are pulled from various corners of migrant experiences and journeys. Homes with recessed yards, metal fences, carports, and picture windows are referred to as "*estilo Californiano*," or "California style." Yet they are hybrid forms, where the image of wooden stick-frame construction is translated into local masonry traditions, supported by migrants' desire to have homes "built to last." New migrant homes have created a maelstrom of commentary throughout small towns. A local architect in Jalisco described the migrant building style as "*garigoleado*," or excessively adorned, pointing out a lack of rhythm, proportion, and pattern in the use of generic classical ornamentation, while some neighbors described migrant homes as distinctly modern. Whatever their stylistic attribute, the homes, as defined by artist Walterio Iraheta, are *autorretratos*—or self-portraits—of their makers. They are a material transformation of the built environment directly linked to the interior world of the self.


SARAH LOPEZ



Top: Abandoned remittance house, Jalisco, Mexico.
Above: Pink remittance house, Jalisco, Mexico.

But the remittance house is not primarily an opportunity for migrants' personal expressions; it is the material manifestation of the specific political and social conditions under which contemporary social mobility and immobility for migrants takes place. Structural inequality, an absence of access to legal documentation in the U.S., and diminishing opportunities for economic and social mobility in the U.S. and Mexico have produced the spaces in which the remittance house becomes a viable, albeit imperfect, option.

To understand these newly constructed homes as imperfect is to ask about the costs and consequences of binational building from below, building a dream home in one place while living and working in another. In order to remit, nuclear families are often separated or fragmented across geographies. For example, mothers and daughters live in a remittance house in Mexico, while fathers and sons work in and send money from the U.S. Meanwhile, elderly parents live in a home built with dollars on a street mostly abandoned or empty due to what neighbors refer to as "the floating population" abroad. Families split by gender or generation incur social and psychological costs as bodies are replaced by dollars, and living at a distance from one's immediate family is normalized.

The project of building a remittance house—of attempting to secure and invest in a future for one's family—is also susceptible to the complexities of living life as a migrant in the U.S. Both documented and undocumented migrants might lose their jobs, build new relationships in the U.S. while attempting to maintain marriages or relationships in Mexico, become responsible for their ill parents in Mexico, or become ill themselves. Undocumented migrants are especially vulnerable as they live under the terror of apprehension, incarceration, and deportation, and are generally unable to return home without incurring great risk. For any number of reasons, homes may be incomplete or abandoned altogether.

Ultimately, the remittance house teaches non-migrants important lessons. They are evidence of migrants' strengths, the discipline required to achieve personal goals. They are evidence of complex social patterns and costs for families fragmented by global capital, and for whom remitting has become a way of life. Scaling up, they are also evidence of the Mexican and U.S. governments' unwillingness to enact binational protections and opportunities for a flexible and exploited labor force that the U.S. economy has depended on for over 100 years. Understanding the remittance house in its messy complexity can cultivate the public's awareness of the extended and complicated spaces that "migrants" are enmeshed in and co-constituting. If Mexican migrants in the U.S. were collectively supported, the term "remittance house" would become obsolete. With the capacity to choose where to live and work, and with the ability to travel, those who built homes in Mexico would join the millions of elite Americans and Mexicans who have second homes or vacation homes. For now, the remittance house captivates, and its meaning reverberates within Mexico and across the Rio Grande.

Sarah Lopez, an architectural historian and migration scholar, is an assistant professor in the School of Architecture at the University of Texas at Austin.

Concrete Politics

In the border metropolis of El Paso-Ciudad Juárez, the power relations of international negotiation are not only performed through the apparatus of control over the movement of bodies, but are also embodied in a concrete architecture that exposes the calculus of separation and asymmetrical infrastructural development between the two countries. In the borderland, the control of water—as territory, commodity, and reproductive agent—produces its physical spaces. While the shared waters of the river and the underground aquifers contribute to the reproductive capacity of land within the desert climate, the infrastructures of water supply and sanitation are material evidence of the socio-spatial injustices and imbalances that structure and reproduce social relations within the border cities.

Negotiation

The geopolitical history of the river as a border and of the partitioning of its waters is inscribed within the built environment as a thick constructed zone. The international border between the United States and Mexico was defined by the 1848 and 1884 Treaties, which delineated that the border follow the Rio Grande (Rio Bravo del Norte) from El Paso to the Gulf of Mexico. This rendered the border an unstable condition, as its line needed to be redefined by the International Boundary Commission each time floods caused the river to relocate. A treaty in 1933 attempted to "fix" the river by engineering it into a constructed channel. However, this location left several hundred acres of disputed Mexican territory to the north of the river—the result of a violent change in course in 1864. The 1963 Chamizal Agreement relocated the river and the international boundary once again, moving the Rio Grande back to its 1852 survey location. In this highly publicized moment of international diplomacy, the disputed land was "returned" to Mexico, and a new channel was constructed to reroute the Rio Grande north so that both river and international border aligned. The division between the two countries was now emphasized, further asserted by the open lands of the former riverbed on the Juárez side and a new elevated border highway on the U.S. side of the channel.

Management

The colonization of the U.S. would not have been possible without the massive campaign of dam projects in the early 20th century that commodified the waters of the West and irrigated the farms and settlements of homesteaders. Four dams manage and distribute the Rio Grande waters in the El Paso-Juárez region: Elephant Butte, Caballo, American Diversion, and the International Diversion Dam. Water is distributed according to the 1944 Water Treaty, drawn up when the population of Juárez was less than one-tenth its current size. In 1965, the binational Border Industrialization Program enabled maquiladoras, foreign-owned manufacturing plants, to be located within Mexico's border zones, and to move materials and products with reduced tariffs and trade barriers. This propelled an influx of new residents who arrived to work in the Juárez border zone maquilas. The treaty, which retains the majority of the river water in the U.S., has not been revised since, and contains no provisions for sharing the rapidly depleting Mesilla and Hueco Bolson aquifer waters, which traverse the binational region underground.







Top: Thick infrastructural zone of negotiation and control at the El Paso-Ciudad Juárez border.
Middle: Children in Juárez play in the space of the former channel of the Rio Grande.
Bottom: Playgrounds now occupy the former channel of the Rio Grande in Ciudad Juárez.

The division of the river water produces politically charged urban spaces. The U.S. Franklin Canal materializes as a physical barrier within the U.S. border zone, flowing deeply and rapidly in a concrete channel alongside the Rio Grande. In Juárez, the diverted water flows along the Acequia Madre, which takes a diagonal course, traversing some of the city's main public spaces. This once green irrigation channel and common space is now largely neglected and has deteriorated into a toxic line of sewage and trash.

Biopolitics

Water is not only scarce in the desert city of Juárez—it is also dangerous. The paper worlds of politics materialize as realities on the ground and in the tissues of bodies. Due to the explosive population growth of Juárez, large portions of the city have been rapidly and often informally constructed, typically without proper municipal sewage or drinking water services. The residents of these informal settlements, known as *colonias*, rely primarily on truck-supplied water, which has a much higher likelihood of being contaminated and results in high rates of water-borne diseases. Only about a third of the city's sewage is actually treated. Some colonias have additionally encroached on the city's drainage gullies and arroyos, putting residents at further risk during flash flood events.

In July 2010, the United Nations General Assembly "explicitly recognized the right to clean drinking water and sanitation as essential to the realization of all human rights." If this mandate is taken seriously by the binational region of El Paso-Ciudad Juárez, new treaties and agreements will need to be negotiated that address not only the scarcity and distribution of its shared waters, but also the shared responsibility of water rights to citizens on both sides of the border. What remains to be seen is not only what shape these take in terms of political agreements, but also how they will reshape the physical urban spaces of the paired cities.

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Boundary Maintenance

The 1896 Heavyweight Championship in boxing was staged in an improbable location: on a sandbar in the middle of the Rio Grande River. Robert James Fitzsimmons knocked out Peter Maher in a fight that lasted 95 seconds and took advantage of the ambiguous administrative and enforcement conditions of the river boundary. Boxing, you see, was illegal in both Texas and Mexico at the time. After a series of territorial shifts and classic Texas wrangling, the fight promoters decided to stage the fight some 16 hours journey south of El Paso in a remote section of the river away from easy enforcement by Mexican police. In a fight attended by 182 people enclosed inside a canvas tarp fence, Fitzsimmons led with his left, and a minute-and-a-half later, "Maher measured his length on the floor."

And it is indeed this figurative floor, this once and future bed of the river where the fight was held, that was both the legal loophole that allowed this spectacle to take place as well as the ongoing challenge to bright-line models of international territoriality. In the contemporary media environment where border walls and military buildup occupy our imagination of the boundary, it is easy to forget that well over half of the length of this border is defined by the fluvial boundary of the Rio Bravo del Norte (Rio Grande). Article V of the 1848 Treaty of Guadalupe Hidalgo reads, "The Boundary line between the two Republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande…from thence, up the middle of that river, following the deepest channel…to the point where it strikes the Southern Boundary of New Mexico." Yet, as this and the dozens of subsequent treaties, commissions, and surveys attest, this very definition of the boundary is subject to the fundamentally dynamic and unsettled nature of the Rio Grande River.

In general, water law recognizes two categories of boundary change brought about by the changing forces of water: one gradual and slow, the other abrupt and discontinuous. The first, known as *accretion*, is defined as the gradual and imperceptible deposition of material along the bank of a body of water and the lands formed by this process. Its inverse, *reliction*, is the gradual uncovering of land caused by the recession of a body of water. In both of these cases, the morphology of ownership maps onto the morphology of the river—with alluvial accretions or relictions belonging to the owners of the coterminous land.

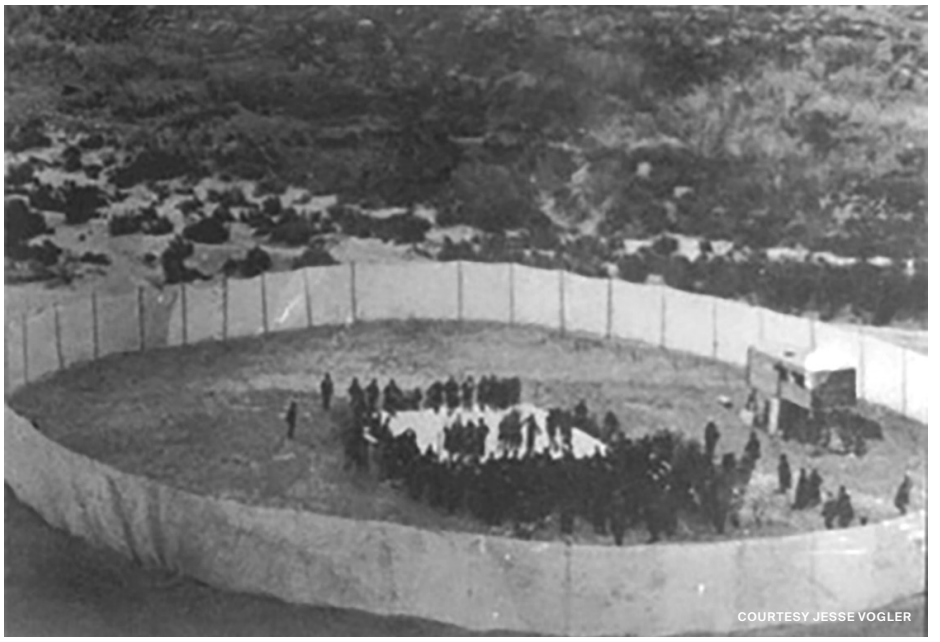
The second category, known as *avulsion*, is defined as the sudden and rapid change of a channel of a boundary stream. Such wholesale shifts in the river channel are quite common in rivers such as the Rio Grande that experience wide fluctuations in flow across the year, where oxbows and meanders are cut off regularly during the spring freshets. In these cases, the changes brought about by such large shifts do not easily map onto adjacent property and ownership structures, resulting in the potential for pockets of alternating ownership—and in the case of the Rio Grande, of citizenship—existing across the river boundary.

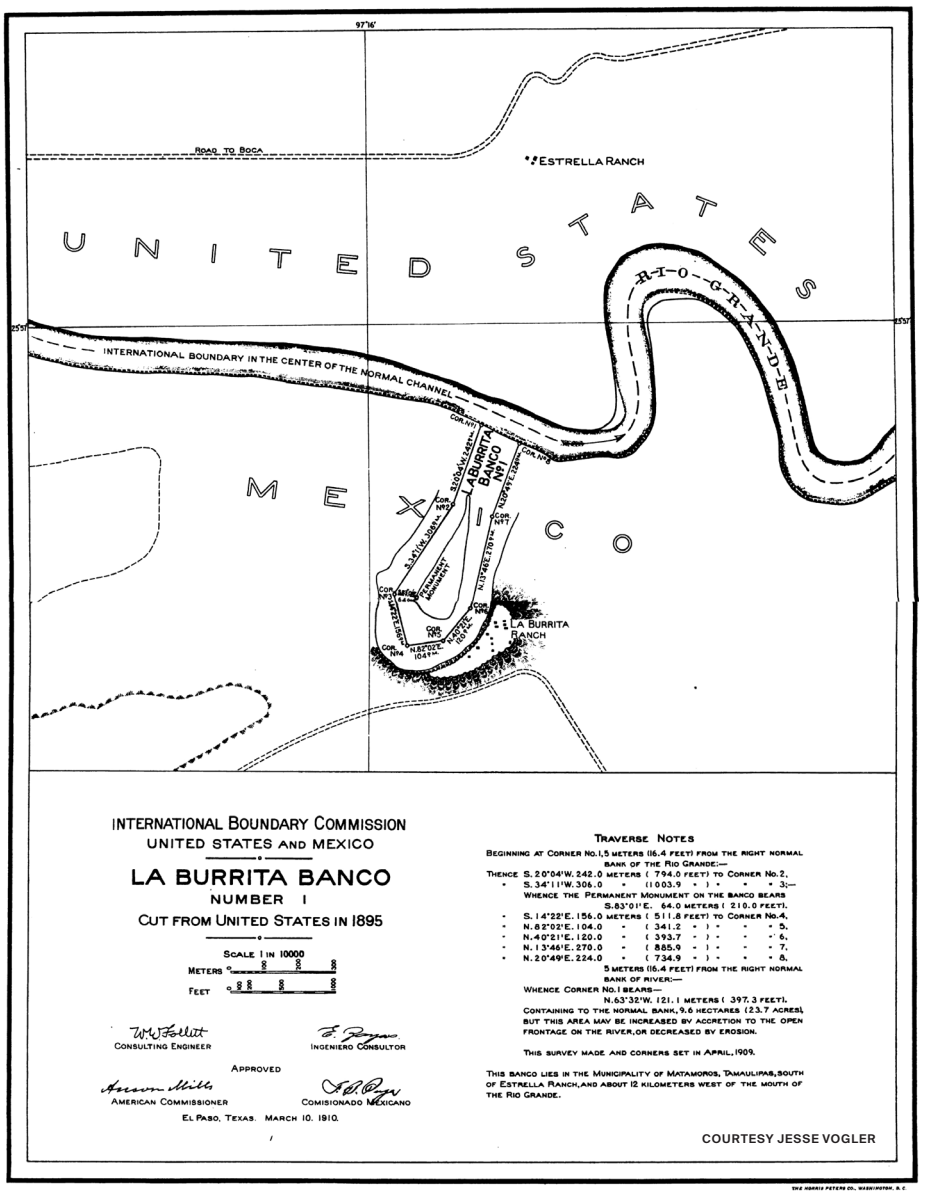
At the heart of these attempts to tame the river through surveyed lines and legal words is a fundamental irreconcilability of language and landscape—an irretrievable misfit between the map and the territory. Writing in his 1857 *Report on the United States and Mexican Boundary Survey*, surveyor general Major William H. Emory highlights this gap when he explains: "The [river] does not always run in the same bed; whenever it changes, the boundary must change, and no survey nor anything else can keep it from changing. A survey of that river, therefore, as it fixes nothing, determines nothing, is of minor importance. It forms of itself a more apparent and enduring monument of the boundary than any that can be made by art."

Against Major Emory's advice, the International Water and Boundary Commission set out in the early 20th century to "rectify"—or straighten—the natural meanders of the Rio Grande in a futile attempt to make the world out there approximate the bright-lines of boundary law. These so-called Banco Conventions, named after the riverbanks cut away by river avulsion, carried the additional political dimension of citizenship: where those who opted to remain on their original land could either preserve title and rights of citizenship of the county to which said banco formerly belonged or acquire the nationality of the country to which the territory would belong in the future.

Yet the engineer's channelization of the Rio Grande could no more make the river act like the surveyor's line on the plat than it could erase the fundamentally dynamic and relational qualities of being and belonging that mark this border region. Language and law, boundaries and territory, citizenship and rights—these are only a few of the fundamental correspondences that the fluvial geomorphology of the Rio Grande River both narrate and problematize.

Jesse Vogler is an artist and architect based in Tbilisi and St. Louis, and is an assistant professor of landscape architecture at Washington University in St. Louis.





Top: Photograph of the 1896 heavyweight prize fight in boxing, taken from the escarpment above the bed of the Rio Grande River where the fight was staged.
Above: 1910 International Boundary Commission Survey of La Burrita Banco—cut from the U.S. in the Rio Grande River avulsion of 1895. At the time of the survey, La Burrita, formerly U.S. territory, was fully incorporated into the territory of the Mexican State of Tamaulipas.

Prada Marfa: Immigrant Architecture?

Political Context
Prada Marfa is a building born out of the political tensions arising in post-9/11 America, in which Afghanistan, Iraq, and Mexico become scapegoats. In 2003, a United States–led coalition invaded Iraq, beginning an eight-year war, and in 2005, Duncan Hunter, who at the time was chairman of the House Armed Services Committee, called for the construction of a wall along the entire border between the U.S. and Mexico. This led to his amendment to the Border Protection, Antiterrorism, and Illegal Immigration Control Act of 2005, which called for 698 miles of wall along the U.S.-Mexico border. This paved the way for the Secure Fence Act of 2006, which President George W. Bush signed to "help protect the American people" from several purported threats, but primarily terrorism, which was the the major focus of the era's political rhetoric.

Borderlands Architecture
Prada Marfa is constructed out of traditional adobe bricks which have long been used in the region but are frequently perceived as an inferior material despite their ecological and climatological responsiveness. Adobe bricks provide the foundation for the oldest extant buildings in the region, as well as many of the area's most important cultural and heritage sites, including artist Donald Judd's own Block compound in Marfa. Directly referencing Judd and the military building traditions he emulated, the adobe bricks are intentionally set in a cement-based mortar. Judd recognized that this was the technique employed in the construction of barracks, hangars, and forts in the region, and Prada Marfa is constructed to reflect this mistrust of local traditions that the militaristic architecture that secures the border displays. Adobe brick was validated as a construction material, but not adobe mortar, which is more likely to be used on the humble houses of Mexicans and Mexican Americans on both sides of the contemporary border.

Material Lineage
While the adobe walls of Prada Marfa are indigenous, they are not perceived to be native to the United States, as the tradition is a spoil of the Mexican-American war. The form of the building recalls a West Texas vernacular, which is influenced by the melding of many cultures at the border. The artists Elmgreen and Dragset are from Denmark and Norway, respectively. The details of the interior come from Italy. The specifications for the shelves, the typography (a variation of a type popular with American engravers and typefounders in the last third of the 19th century), the color of paint for the interior walls, the lighting, and the carpet were directly sampled from Prada's own architectural details for retail outlets in Milan. The inspiration for the facade is sampled from German photographer Andreas Gursky's photograph *Prada II*. The building is sprayed with an elastomeric white latex coating to reflect the powerful rays of the sun and withstand the extreme expansion and contraction of the building's structure in the fluctuating desert temperatures.

Xenophobia and Cultural Assimilation
Prada Marfa was a very new kind of work. Unlike the reserved and apolitical work of Judd—who in Marfa had already laid claim to art and what it should be—Prada Marfa blurs the boundaries between architecture, art, politics, and culture. The very same night that Prada Marfa opened, xenophobes attacked the work, stealing the shoes and purses, destroying the building's facade, and spray painting "dum" [sic] and "dumb" on the inside and outside of the building. Prada Marfa represented a very new kind of artistic expression that was unfamiliar in the region and challenged conservative artistic sensibilities, calling into question the juxtapositions between wealth and poverty, the U.S. and Mexico, anglo and Mejicano, of the region that the building highlighted.

Since Prada Marfa's construction, it has had to evolve to survive in the political and environmental climate of both art and the borderlands. Since the first attack on the building, it has been vandalized several times—the glass windows were shoddily replaced by scratch-resistant and shatterproof acrylic to withstand bullets and the continual "peeling out" of cars in front of the building, which kicks up rocks and debris onto the facade. The fabric awnings had to be replaced due to smokers continually burning holes in the cloth with their cigarettes, and the font size of PRADA was increased to almost match the size of the letters on the black metal signs above, suggesting that the delicate typography on the original awnings may not have been good enough in a state where "everything is bigger."

Many other forms of vandalism have taken place. Men's underwear was shoved into the drain pipes, causing the roof to flood and inundate the interior, which required the shelving to be rebuilt and repainted and the carpet to be replaced. Most dramatically, an artist by the name of Joe Magnano was found guilty of two counts of misdemeanor criminal mischief and required to pay Ballroom Marfa, the caretaker of Prada Marfa, $10,700 and a $1,000 fine for attempting to paint the building blue and pasting TOMS, the logo of a shoe brand founded by Texan Blake Mycoskie, on it, perhaps in an inadvertent attempt to make a structure perceived to be "not from around these parts" more Texan. The vandals who destroyed the building after it first opened, however, have never come forward, although it has been suggested that the borderland surveillance systems used to monitor immigrants traveling in the desert may be able to reveal these criminals.


JAMES EVANS


RONALD RAEL

Top: The Fall 2005 line of Prada shoes and bags are on display.
Above: The adobes used to build Prada Marfa are set in cement mortar like the walls of Judd's compound in Marfa.

Hajj
Prada Marfa has become a pilgrimage site where those making the journey to visit the building have left mementos as part of what has become a kind of hajj to this art Mecca. The various offerings at the Prada Marfa site have included visitors leaving one used shoe, placed around the building or atop the fencing surrounding the building. Perhaps this references the single shoe found in the faux shoe shelves of the store, or maybe the worn-out shoes of immigrants who journey by foot to the U.S. from Mexico until the soles of their shoes wear away, before being picked up in the landscape surrounding Prada Marfa.

Not unlike the Jewish mitzvah where visitors to a grave leave small pebbles on a gravestone, visitors have also left small rocks, holding down a piece of paper with a name, message, or a business card, on the narrow ledge that surrounds Prada Marfa. This act reminds us of the harsh reality of a landscape where countless die in the desert, just as the wall has pushed people to greater extremes on their journey north.

The shoes and the pebbles left by art pilgrims were systematically removed as they were also perceived as a form of vandalism—a crime, rather than a new tradition—and a fence was constructed around the building made of welded wire mesh, reminiscent of the transformation of the U.S.–Mexico border from a barbed wire fence to stretches of welded steel. The construction of the fence surrounding Prada Marfa, however, has prompted another tradition of offering at the site. While called Prada Marfa, the building is technically just outside the small town of Valentine, Texas. Despite a population of 217, the town is inundated with over 1,000 people on Valentine's Day, as well as hundreds of Valentine's Day cards that are sent through the local post office, which has been known as a "love station." Today, "love locks," padlocks used by sweethearts to symbolize their love, are attached to the new fence surrounding Prada Marfa, and the keys are thrown away. Perhaps this, too, symbolizes the time we live in, mired in a national struggle between the fences that divide and the love that could bring us together in the borderlands.

Ronald Rael holds the Eva Li Memorial Chair in Architecture at the University of California, Berkeley, and his architectural practice, Rael San Fratello, was the designer of Prada Marfa. He is the author of *Borderwall as Architecture: A Manifesto for the U.S.-Mexico Boundary.*

Texas Instruments: Detention Prototypes in a Border State

"So much of what is built on the border is to contain, restrain, detain, constrain, restrict, wall off, fence up. When there is so much natural beauty there—the river, the desert, the mountains to enjoy and celebrate. So many families who want to be together, so many people who just want to be. I wish that we were building more bridges (flat, easier to cross and connect), tearing down the walls that we have; wish that we had immigration and asylum laws that matched our values and our interests so that we weren't locking so many people up. Wish that there were no more private prison companies so that there wasn't a profit motive to do that."

—Beto O'Rourke, El Paso native, U.S. Representative for Texas's 16th congressional district, and the 2018 Democratic candidate for U.S. Senate in Texas



IWAN BAAN


COURTESY AGENCY

Top: This image was taken from a car on the Mexico side of the Paso Del Norte International Bridge border crossing where U.S. immigration officials are reportedly turning away migrants before they get to the checkpoint at the U.S. border.
Above: The U.S.–Mexico international boundary line at the Paso Del Norte International Bridge.

Texas, the state with the longest continuous land border with Mexico, has been uniquely formative in the construction of spaces and narratives that define national dialogue in the borderland. The state is home to more ports of entry than any other state. These entry points are legible crucibles of biopolitical power, routinely collapsing spaces of speculative commerce, incarceration, and the projection of national identity.

Assessments for constructing a new border crossing, connecting Tornillo, Texas, with Guadalupe, Chihuahua, began in 2001. A new bridge, a 2,000-acre industrial park, and 300 acres of "border facilities" were initially meant to bring economic development to the remote area and improve regional health, reducing pollution from idling traffic at congested bridges in El Paso. A presidential permit was issued for the bridge in 2005, but its construction would be stalled, and its purposes changed.

In 2008, the Juarez Valley, a remote collection of agricultural communities in Mexico south of Tornillo, saw one of the highest murder rates in the world, gaining it the reputation as the "Valley of Death." Victims of the violence would increasingly flee to Tornillo to seek asylum. Some speculate that the rampant violence was a scheme sponsored by the Mexican government to evacuate residents in the area in preparation for, and to expedite construction of, the bridge. In 2010, modular detention facilities in nearby Fabens, Texas, built to accommodate the flow, were over capacity. Violence in the valley eventually stabilized, and plans for the new crossing were rekindled.

The Tornillo-Guadalupe International Bridge opened in 2016, and was hailed as an achievement in cross-border infrastructure. The adjoining U.S. checkpoint exemplifies an architecture designed to manage, block, and process bodies, an outpost at the edge of empire. The architects of the LEED Gold facility describe the materials and performance as specially suited to the site's desert context, with integrated technologies promoting the efficient monitoring of populations, noting that the design "inspires the spirit of place." The optimism for the port to rapidly realize a future characterized by collaborative binational security efforts was captured in its christening. It was named for Marcelino Serna, the most decorated U.S. soldier from Texas to serve in WWI, who happened to be an undocumented migrant.

The anticipated traffic never came. Less than a year after its opening, U.S. Customs and Border Protection (CBP) had shut down the only lane dedicated for northbound commercial traffic. Without the economic engine to support the new complex, the overbuilt site quickly found new use in a growing economy of detention. Tornillo opened a temporary overflow center in 2016, typical of an increasingly common ephemeral incarceration infrastructure. These pop-up sites are rapidly installed and disassembled by specialist companies who navigate remote terrain in far-flung locales as easily as their practices navigate the constraints imposed on such facilities by case law. Tornillo continues to be an ideal site for such installations, far from the public eye yet enmeshed in the infrastructure of detention. In June 2018, Tornillo would be home to its most notorious tent city.

The Tornillo checkpoint currently holds over 300 minors in tents just south of the bridge. As the Trump administration's "zero tolerance" policy has separated families across the country, the Tornillo site grows as a center of life for the unwanted, the detained, and the displaced. For a few days, however, a contrasting occupation resisted the isolation, anonymity, and placelessness of the remote facility. On Father's Day 2018 and the following Sunday, floods of protesters descended upon the border checkpoint, appropriating the isolated node as a center of active resistance.

The site joins a growing host of detention sites in the border state, which index nationwide trends in detention. Taken collectively, the sites represent a growing impact of private speculation and profit models impacting the construction of detention facilities, all of which are adapting—and therefore helping to realize—a near future in which the remote, prolonged detention of families and children is commonplace. Since 2006, Texas has been home to the much-maligned T. Don Hutto Residential Facility, which, at the time it was built, was the only privately run facility used to detain families. The largest detention site in the U.S., the South Texas Family Residential Center in Dilley, Texas, can house up to 2,400 women and children. The site is part of a constellation of for-profit, superscaled sites on a stretch of interstate highway between Laredo and San Antonio dubbed "detention alley." A new contract seeks a 1,000-bed center nearby—similar to a 1,000-bed facility built outside of Houston last year—which will be the eighth in the South Texas area. As military advisers advocate for detention centers on military bases to create even more "austere" and "temporary" environments, Texas leads the charge here as well. Lackland Air Force Base in San Antonio housed migrant children in 2014, repurposing a dormitory once used for recruits. El Paso's Fort Bliss housed 500 unaccompanied Central American children in 2016. A June announcement revealed that two Texas military installations—Fort Bliss and Goodfellow Air Force Base—would be among the select sites to continue the trend. Other sites in the state, such as the now infamous former Walmart in Brownsville, signal a shift toward speculative investment in detention trickling down to private properties and actors.

At the Paso Del Norte International Bridge, connecting downtown Ciudad Juárez with downtown El Paso, CBP is pushing the edge of U.S. jurisdiction beyond the spatial limits of the bridge. Although due process of asylum claims is guaranteed within the port of entry, agents have ventured onto—and reportedly across—the bridge to deny access to the port. Uniformed border agents ask for documents on the bridge to identify and turn away Central Americans seeking asylum, a few hundred feet from their destination. On June 27, CBP confirmed to El Paso immigration rights advocacy groups that this prescreening and advance rejection has become official policy borderwide. Without access to the legal framework enabled by the ports, many asylum seekers cross in unsanctioned locations. Those caught crossing outside the ports, some with otherwise credible asylum claims, face criminal charges and deportation. By denying a space for lawful entry, the policy artificially amplifies the numbers of illegal crossings and a myth of increased illegitimate entry. The port thus transforms from a site capable of processing identities to an instrument which actively constructs and deconstructs citizenship.

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White Oak Music Hall



PETER MOLICK

STUDIO VISIT

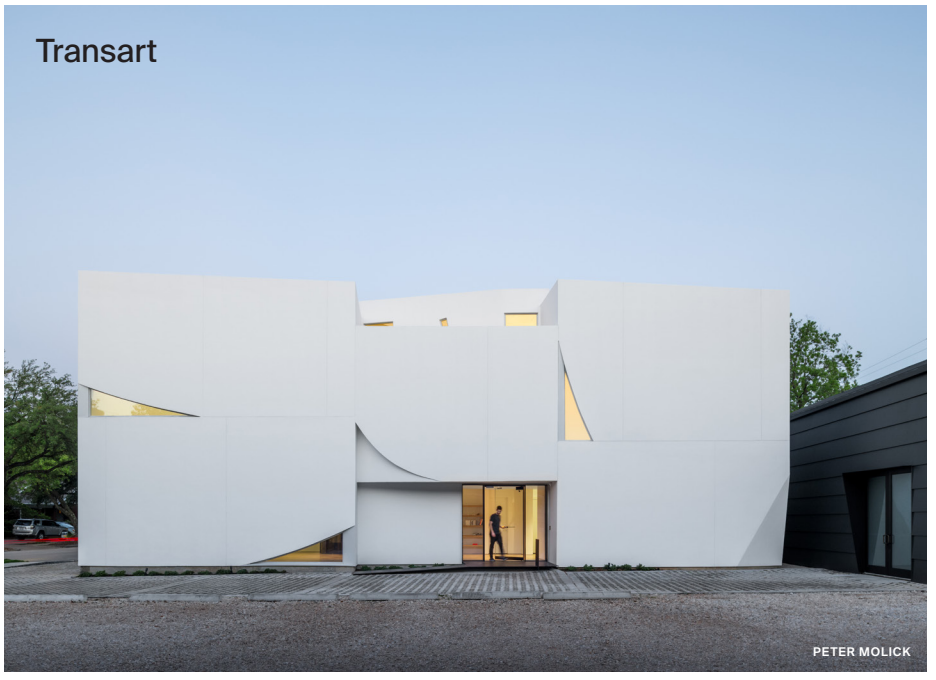
Schaum/Shieh

Houston—and New York City—based Schaum/Shieh strive for architecture that falls "between normative and surprising."

Like many of the most exciting young firms currently practicing across the United States, Schaum/Shieh, based in New York City and Houston, owes its existence to the financial crisis of 2008. In the immediate aftermath of the meltdown, Schaum/Shieh principals Rosalyne Shieh and Troy Schaum found themselves working as collaborators on speculative urban projects while attending graduate school at Princeton, where the pair shared studio space. Attempting to figure out "what happens when you ask a question no one tells you to ask," according to Shieh, the pair was driven toward the "protected space" of academic work by prestigious fellowships—Shieh at Taubman College in Michigan and Schaum at Rice University in Texas—in an effort to bolster professional experiences that included stints at Abalos & Herreros and OMA, respectively.

After becoming licensed and spending their fellowship years incubating their practice, the pair fortuitously landed a spot exhibiting a project in the 2012 Venice Architecture Biennale, a platform that propelled their budding firm into the realm of client-based work. In the intervening years, a mix of bespoke design and meditative restoration work for institutional clients like the Donald Judd and Chinati Foundations—as well as commercially driven work for private clients—has kept the firm busy exploring multiple facets of architectural production. Driven by an intense curiosity and interest in the blend between high and low architectural culture, Schaum/Shieh continues to build its ever-elusive catalogue of offbeat work. Over time, the two architects have learned when to hold back. Schaum explains: "Restraint is [a] remarkable lesson for young architects to learn. [You realize] there are moments when we need to step back and not do certain things." **AP**







White Oak Music Hall

One of the firm's largest commissions to date is the White Oak Music Hall in Houston, along Little White Oak Bayou north of the city's downtown. Completed in phases between 2016 and 2017, the multistage music and event center features a pair of indoor stages that can house a combined 1,400 spectators, and an 3,800 capacity outdoor amphitheater built into the natural topography along the Bayou. The bar-shaped clapboard and wood plank–wrapped structure spans across the edge of its urban infill site, and features balconies and open-roof decks that face toward the Houston skyline. An on-site industrial metal warehouse and steel tower were recently converted into a small music venue and bar as well.

Transart

The architects recently completed work on the 3,000-square-foot Transart Foundation for Art and Anthropology in Houston's museum district, a complex that seeks to treat the "white box gallery as a problem" by introducing softness of form and visual instability to the otherwise staid building type. The private arts foundation and gallery is spread out across two structures, including a new three-story edifice crafted out of super-size stucco panels. The building's stucco walls feature clipped corners and upturned edges that reveal triangular windows designed to bring direct light into the galleries and support spaces. The new structure is buttressed by a 1,200-square-foot studio and apartment located within an existing structure that was re-skinned with cement panels and a standing seam roof.

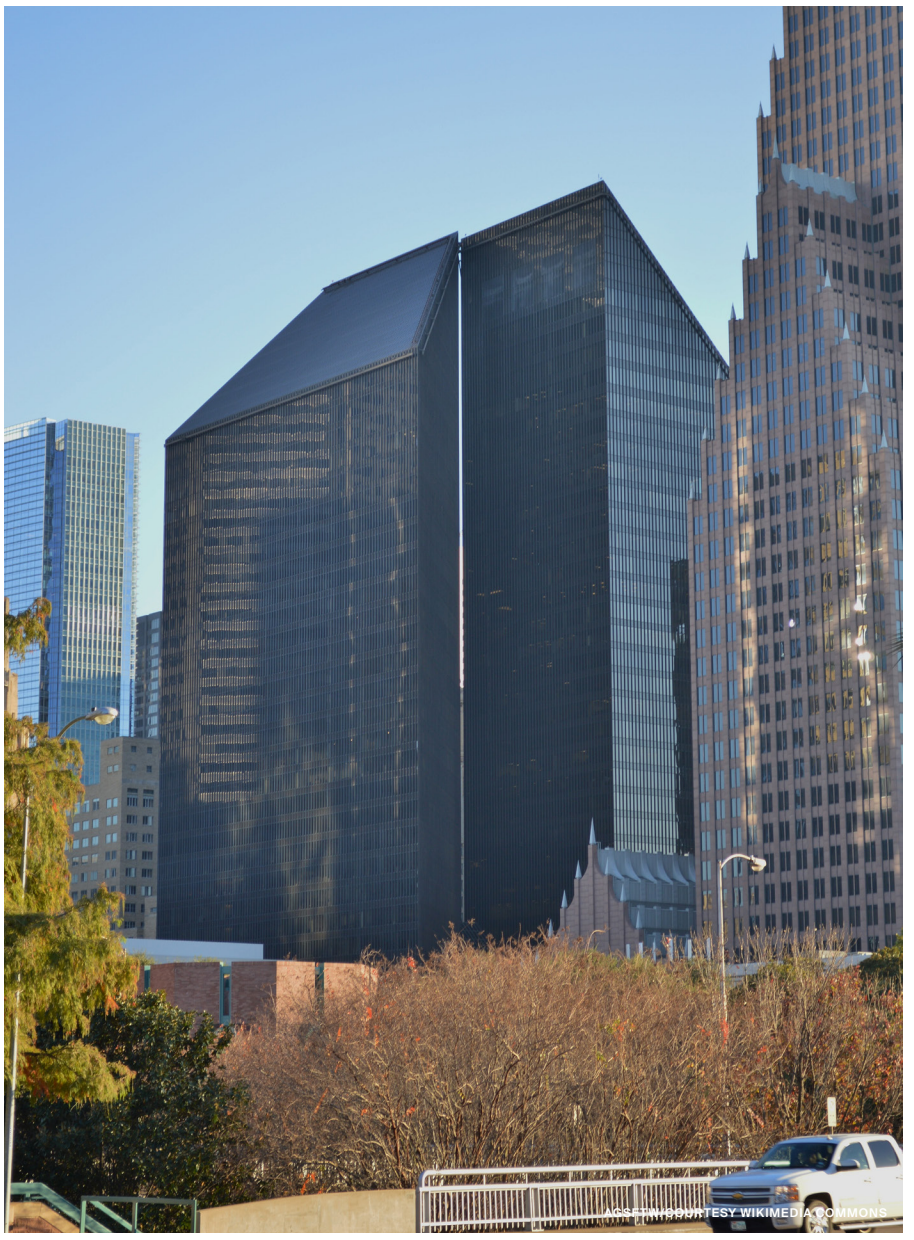
Judd Foundation

The multifaceted firm has worked for several years on collaborative projects involving the restoration and rehabilitation of several of Donald Judd's studios and installed spaces in Marfa. What started as an effort to "responsibly finish and maintain" Judd's architecture studio quickly morphed into a wide-ranging collection of restorations and long-term planning efforts led by Judd Foundation for more than a dozen buildings in the town. Over time, the high-profile, low-visibility restoration and conservation-focused work became an "invisible exercise that led to a conversation you can't ever see," according to Schaum. The architects sought to create a "Texas model" for restoration that was flexible enough to include off-the-shelf components as well as innovative solutions that stand apart from prototypical, white-glove restoration work.

420 20th Street

Always eager to take on diverse projects, the firm has also tried its hand at updating the ubiquitous strip mall. Their project at 420 20th Street in Houston aims for an understated refresh by converting an abandoned 1950s washateria into a collection of bespoke storefronts. For Shieh and Schaum—both children of American suburban landscapes—the discarded 5,200-square-foot laundromat represents a type of "common" architecture that many architects are too often happy to avoid. Instead, Shieh views strip malls like this one as "a type that can be transformed, developed, and worked with," part of an amorphous urbanism that runs counter to "traditional urban legibility," but in a good way. For the project, the team opted to replace the building's storefronts with new components, including custom steel and wooden door handle elements. New planters were also embedded in each of the building's exterior columns, while the structure's historic brick detailing was brought out with new paint and a mural. Inside, each of the serially arranged shops is separated from the others by expanses of clear factory windows that allow views through the entire structure.

Late Arrivals: Initial Notes on Houston After Theory



Johnson/Burgee's Pennzoil Place (1976) and RepublicBank Center (1984) reflect the stylistic transition from late-modern mirror glass to postmodern eclecticism that marked Houston's downtown office towers.

"Houston is a different planet."
—Lars Lerup, "Stim & Dross: Rethinking the Metropolis" (1994)

By Michael Kubo

1

We landed in Houston two weeks before the storm. For newcomers to Texas, Hurricane Harvey provided a terrifying crash course in the geography and hydrology of the city, its micro-differences in topography and macro-differences in resources across the city's communities. We were told that after the water receded, nothing would be the same, that the magnitude and destruction of the storm would simply be too hard to ignore. Yet less than a year later, as rebuilding continues on the verge of another hurricane season, it is hard to see how much—if anything—has changed for the better. Money was spent reconstructing homes on their original sites, and large-scale infrastructures that were designed to flood, like Buffalo Bayou Park, have performed admirably well as examples for designing resilient landscapes in Houston and elsewhere. A slew of well-intentioned policy reports were issued in the wake of Harvey, many reiterating similar proposals that preceded the storm, seemingly to little avail. The heuristic measures of the so-called 500-year event were questioned in light of a new reality in which such mega-storms will now be separated by years, not centuries. And then the city went back, it seems, to the combination of development and dread that has apparently become the new normal.



JONNU SINGLETON/ COURTESY SWA GROUP

Buffalo Bayou Park (SWA Group and Page, 2015) provides a model for designing resilient landscape infrastructures for a changing climate. In the background, the skyline reflects the city's growth during the petro-capital boom of the 1970s and 1980s.

2

I came to Houston expecting to tap into a rich body of urban writing from the late 1970s to the 2000s that placed the city firmly at the center of broader attempts to theorize the contemporary metropolis. These formed part of what Joel Warren Barna described as "a long American tradition of minority reports" in which the social, political, economic, and psychological dimensions of architecture and the city were probed. Houston's horizontal field provided an ideal environment for such speculations. For Joe Feagin, it offered the example par excellence of the "free enterprise city," a case study of the unceasing urban transformations wrought by capitalist development unburdened by zoning. For Doug Milburn, Houston was "the last American city," characterized by its ever-unfinished status as process rather than product. For Lars Lerup, its diffuse ecology of mega-shapes and micro-stimuli heralded the demise of the traditional city: a fluid condition of natural and artificial strata, a metastasizing field of events and affects punctuated by moments of *stim* and *dross*. At its peak, metropolitan Houston served as a radical testing ground for new ways of understanding the relentless permutations of 20th-century urbanism at large.

Far from finding new extensions of these threads of writing the metropolis, probing their limits, or harnessing their potential for new speculations, instead, I encountered a city that seemed to have little nostalgia not just for its architecture, but also for its own prior theorizations. While cities like New York and Los Angeles capitalize on the major authors of their urban histories, Houston by comparison has largely fallen out of the center of contemporary discussions of urbanism and its possible futures. The most significant attempts to characterize Houston ultimately left a shrinking footprint on the contemporary urban scene, perhaps condemned by their avoidance of fixed definitions in relation to a metropolis endlessly in becoming.

3

Perhaps the major characteristic of Houston in the age of its most provocative theorizations was its lateness. An economy centered on petro-capital meant that its cycles of boom and bust happened a full decade out of step with urban development elsewhere in the U.S., with its peak following the spike in crude oil prices in the 1970s at the same time that the rest of the nation suffered from a deep recession. The city was similarly subject to the end of the oil boom in dramatic fashion, as plans to build the world's tallest tower in Houston ran aground as prices crashed after 1983. The city's authors reinforced the sense of Houston as late: for Milburn, the "last" truly American city in its combination of frenetic pace and untimely development; for Lerup, a model for what comes "after" the conventional city.

Inevitably, Houston became a capital of late modernism and its manifestations. These included lapidary icons of petro-development, like the faceted, symmetrical towers of Pennzoil Place (Johnson/Burgee, 1976), along with local masterpieces like Four Allen Center (Lloyd, Morgan & Jones, 1984), which MoMA curator Arthur Drexler praised as "absolutely staggering" in its mirrored-glass effects. Houston's later corporate development encapsulated its seamless, stylistic transition to postmodernism in buildings often designed by the same architects, like Johnson/Burgee's RepublicBank Center of 1984, just across the street from Pennzoil Place. Houston's theorizations provided valuable frameworks for understanding these economic and aesthetic cycles together, from the city's boom to the period that Joel Warren Barna called the "see-through years" in homage to the hollow, abandoned development projects that littered the city's landscape in the 1980s, begun a decade too late.



New recreation and community facilities mark the expansion and renovation of Emancipation Park (Phil Freelon/Perkins + Will, 2017), established in 1872 to commemorate the Emancipation Proclamation and for decades the only municipal park available to African Americans in a segregated Houston.

4

Houston has emerged as ground zero for what architecture and the city have become—for good or evil—in the midst of our national politics. The genuine multiculturalism of the country's fourth-largest city—its greatest resource—offers conflicting signals with regard to architecture's complicity with, or resistance to, the rise of xenophobia, racism, and nationalism in the U.S. This year provided welcome news of an international competition to design the country's first official Ismaili Center, sponsored by the Aga Khan, with the hope of producing a distinguished building worthy of serving the nation's largest community of Ismaili Muslims. Emancipation Park, established in 1872 as the first municipal park for African Americans in a segregated Houston—but long fallen into disrepair since the 1970s amid the decline of the historically underserved Third Ward—reopened last year to much fanfare following an extensive program of renovation and new construction by a team of designers led by Phil Freelon.

Such initiatives are tempered by the news that Southwest Key Programs, a Texas nonprofit, plans to repurpose a warehouse near Houston's downtown—which previously housed families displaced by Harvey—as a detention center for "tender age" immigrant children under the age of 12 who were forcibly separated from their parents by ICE.

Meanwhile, the first federal contract for an immigrant detention center under the Trump administration was awarded in April 2017 to GEO Group, a private prison company, to build a $110 million, 1,000-bed facility in Conroe, a city just north of Houston. Such cruelties underscore the presence of the vast prison-industrial complex that underlies much of the financial landscape of the city's politics, in parallel with the multinational conglomerates centered here—such as Halliburton—that have tied the city's petrochemical industries to the construction of military detention facilities abroad.

5

What lessons can we learn from Houston today, from its dissonant combination of the hopeful and the horrifying amidst the city's current urban transformations? How can new thinking emerge from the multiculturalism of an expanding city? Perhaps Houston's lateness can be redeployed in its favor: While it may be behind the beat in offering responses to climate change, urban development, and cultural conflict, Houston's apparent condition of being out-of-time can be reclaimed as a mode of resistance, a slowness in relation to contemporary politics. In this context, what can we do differently, and what must we think anew?

For one, future criticism and speculation on the city will have to become more intersectional, no longer centered around a dominant—white, male—set of voices. (Look again at the list of authors on the previous page.) New ideas will have to come from beyond the domain of the academy, from the full spectrum of actors, interests, and constituencies that together represent Houston's enviable diversity.

The way forward might be indicated by the remarkable success of Project Row Houses, established in 1994 by artist Rick Lowe as a residency program for artists, architects, and writers—primarily women and people of color—to create and exhibit work in a series of restored shotgun houses in the Third Ward. The project's model, based on a commitment to public art and an alternative model of community development—one that includes dedicated residences for young, single mothers—offers a true praxis for how cultural identity and community work can intersect in rethinking and remaking the city. Another lesson in joint urban practice can be found in the recently announced initiative by the University of Houston and the International Center for the Arts of the Americas at the Museum of Fine Arts, Houston to create a partnership focused on Latino and Latin American art and culture. In seeking to connect students to the culture and heritage of Latino communities that make up some 43 percent of the urban population, this initiative suggests how architecture and design can respond more fully to a deeply multicultural city.

Such examples offer the hope of a new Houston urbanism to come, one that expands the range of those who can participate in interpreting its transformations and reclaiming its prior theorizations toward new, untimely, and more humane futures.

This is San Antonio

Alamo City has a bright future that is illuminated by its past.

By Enrique Ramirez



Emilio Ambasz's Lucile Halsell Conservatory continues to point to new directions for San Antonio architecture.



NEONWATER

Ricardo Legorreta's Central Library, with its familiar "enchilada red" exteriors, is one of San Antonio's most visually distinctive buildings.

When it comes to notable architecture in Texas, it would seem strange to place San Antonio on par with Houston or Dallas. As the second-largest city in the state, San Antonio seems to only mimic the kind of architectural largesse seen in Houston and Dallas. There are plenty of jewel-like late modern skyscrapers and austere civic buildings by Skidmore, Owings and Merrill, Caudill Rowlett Scott, and Marmon Mok in the city, but these are not the kinds of projects one would mention in the same breath as Houston landmarks like Johnson/Burgee's Pennzoil Plaza and Williams Tower, Renzo Piano's sublime Menil Collection, or Dallas's iconic Kimbell Art Museum by Louis Kahn.

A selective itinerary of San Antonio's past and future architectural projects reveals a steady commitment to buildings with bold, expressive forms that reference the city's unique environment, history, and culture. Alamo City warmed up to these compelling architectural additions as it expanded during the late 1940s and early '50s, and became a home to energy and utility companies during the 1970s and '80s. Funded by philanthropic organizations and influxes of oil cash, many of these buildings are now hidden by giant, swooping highway overpasses, corporate plazas, and other developer-driven projects. Despite the earlier innovative and controversial projects, San Antonio remains overlooked. This will soon change. Newly appointed mayor Ronald Nirenberg has reenergized discussions about creating new housing, battling gentrification, and committing to more public art. This will certainly place a spotlight on San Antonio's rich architectural offerings while reminding us of how these and other past projects have embodied this city's distinctive topography, Latino heritage, and dry, arid environment.

Emilio Ambasz's Lucile Halsell Conservatory, completed in 1988 at the San Antonio Botanical Gardens, is a good starting point. Located on the city's northeast side, Ambasz's scheme took advantage of the sunken site with a series of prismlike canopies that appear to rise out of the bermed earth like upturned shards of glass. Each canopy creates its own kind of climate and features particular plant ecologies—architecture designed, as Paul Goldberger observed in 1987, for the interaction between plants and humans. The project is notable for its combination of building, landscape, and infrastructure into a seamless whole. The Lucile Halsell Conservatory accommodated some very particular environmental and topographical conditions, and did so with a formal and technological expressiveness unlike anything that had been built in San Antonio.

Mexican architect Ricardo Legorreta's San Antonio Central Library, completed in 1995, continues in this vein. Here, cubic volumes are stacked at various angles, creating a series of triangular-shaped courtyards intended to be outdoor reading rooms. Legorreta's debt to Mexican architect Luis Barragán's minimalist polychromy is clear. Working with the painter Mathias Goéritz, Barragán created spaces framed by walls and surfaces doused in highly saturated reds, blues, yellows, oranges, magentas, and pinks. At his Central Library, Legorreta appears to invert Barragán with a simple, playful interplay of volumes that seem to be wrought from its own color palette as well. The reddish-brown colored cubes appear gutted in some places, revealing inner planes of yellow, blue, and purple. When viewed from the air, the Central Library appears otherworldly, framing circular plazas made from grass and limestone and located on a triangular-shaped site near the geographical center of the city, as if something from another time had arrived here.

That a Mexican architect was chosen for this project is important. As the seventh-largest city in the United States, San Antonio





COURTESY MUÑOZ & COMPANY

Opened in May, the San Pedro Creek Cultural Park offers residents an alternative to the crowded Riverwalk and pays homage to the Alamo City's Latino heritage.

has one of the biggest Spanish-speaking populations. Over 62 percent of its residents are of Latino origin. The appeal of Legorreta's Central Library stemmed as much from the need for more public libraries as it did from the desire to reflect the city's heritage. Though this was the first building in San Antonio designed specifically to reflect the city's Mexican-American heritage, there are older buildings that expressed the cultural richness so important to the city. The Alamo and the four Spanish Missions (recently designated as UNESCO World Heritage Sites) all combine Spanish and Catholic influences while referring to the rituals and structures of indigenous peoples. This is to say that San Antonio's architecture continues to find a way to embody its venerable cultural geography.

It also incorporates its distinct environmental geography. San Antonio is a city hewn from mesquite-dappled hills, limestone quarries, and deep-set aquifers. Lake|Flato continues to be the standard-bearer among the city's firms for a kind of tectonic and environmental sensitivity that is immediately recognizable for its ingenious references to these conditions. Imagine a version of John Lautner's spacious geometric forms where large cornices made from corrugated metal peer over meticulous compositions of glass, limestone, slats, and brise-soleil made from local woods, all culminating in views that privilege the rolling, arid mesquite and persimmon landscapes of the Texas Hill Country. This would not do justice to Lake|Flato's work, but perhaps it is as close as we can get to a kind of South Texas regionalism.

Yet some of Lake|Flato's current work points to something altogether different. Their recently completed pavilion at Confluence Park connects the joining of the San Antonio River and San Pedro Creek, to nearby Mission Concepción, an 18th-century basilica. This is a highly-charged site in predominantly Spanish-speaking South San Antonio. The most visually arresting parts of Lake|Flato's project are the concrete "petals" that reference the local flora while reminding the most architecturally astute observer of Spanish-born Mexican engineer Felix Candela's sweeping hyperboloid structures, like Los Manantiales Restaurant (1958) in Mexico City's Xochimilco Park, or the Chapel Lomas de Cuernavaca (also 1958) in Cuernavaca.

Confluence Park is also part of the larger San Pedro Creek Cultural Park. This scheme is projected to transform a once-neglected 2.2-mile-long drainage spur into a cultural attraction with water features, public art, and areas dedicated to the preservation of local grasses and wildlife. In a nod to its aspirations, lead architect Henry R. Muñoz and others have embraced this project's more common nickname— the "Latino High Line"— which may say more about Diller Scofidio + Renfro/Field Operation's celebrated scheme than the actual goal of the project, which is to create a version of the Riverwalk devoid of its tourist traffic while celebrating Latino heritage.

Urban designers are finding new ways to move San Antonio forward while referring to curious artifacts from the history of American cities. Architect Antonio Petrov, who teaches at the University of Texas at San Antonio and is the founder of Urban Future Lab, is one of the most outspoken voices when it comes to redevelopment in the city. He is a proponent of bringing back skyrides, which were already used during HemisFair '68 as a means of connecting the city's downtown with San Antonio International Airport. Petrov's proposal, though evocative of pie-in-the-sky urban transportation schemes, is to be taken seriously. Similar proposals were actually in use at the 1932 Century of Progress Exhibition in Chicago as well as in Disneyland and Disney World (which were, in a sense, attempts to



COURTESY MARMON MOK ARCHITECTURE

Marmon Mok's Confluence Theater was one of the American pavilions built originally for the 1968 World's Fair, or HemisFair. It is now the John H. Wood Jr. United States District Courthouse.

envision cities of the future.)

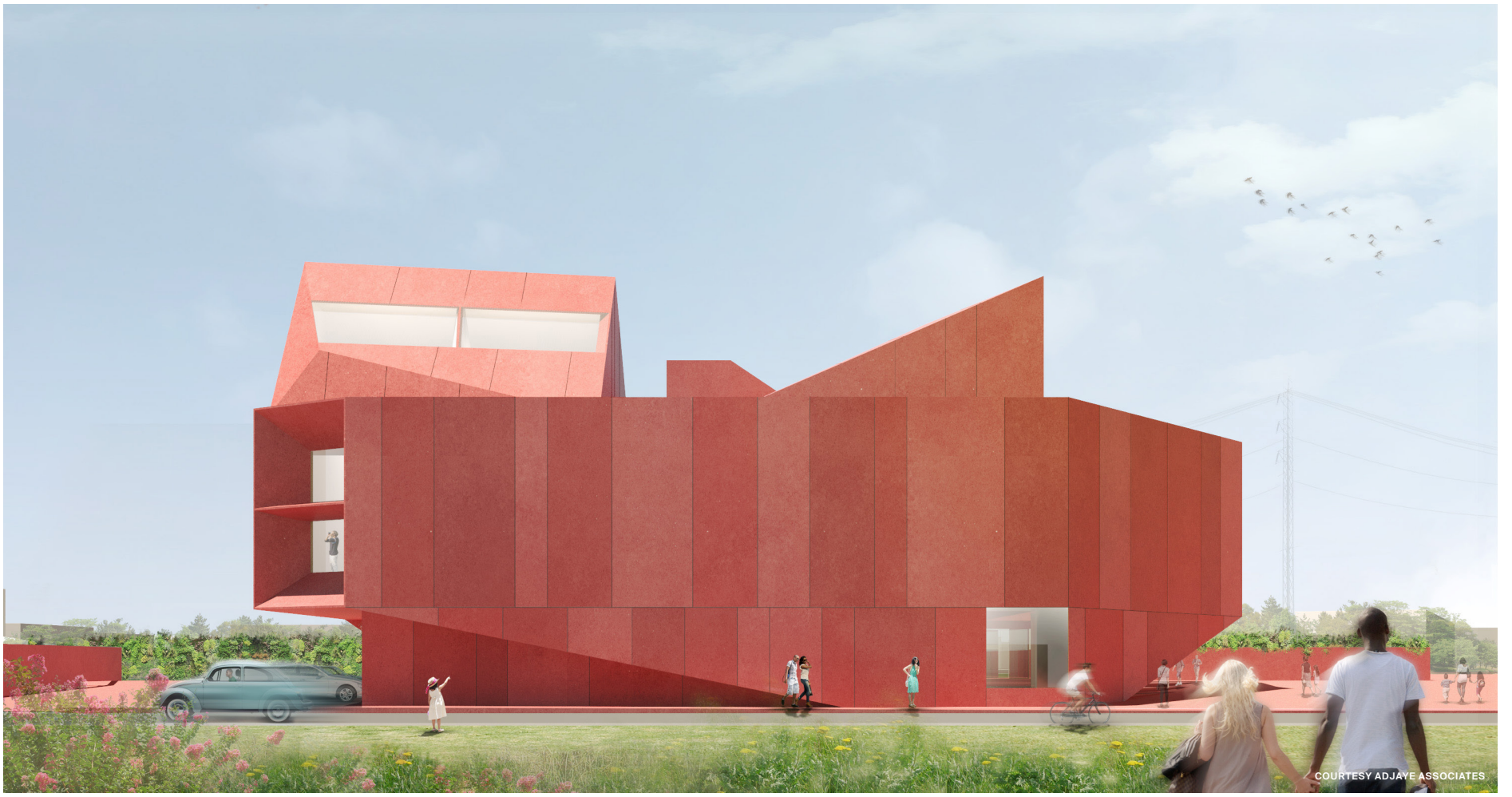
Other schemes, though funded by corporate dollars and serious placemaking advocacy firms, are barely more pragmatic in their approach. A case in point is the proposed Alamo Plaza Redevelopment. Philadelphia-based Preservation Design Partnership authored one of the first master plans, a scheme that caused controversy when it called for relocating many of the businesses surrounding the Alamo and converting them to privately run cultural attractions. Current versions of the plan have done little to improve on the previous proposal. For example, the recent Alamo Comprehensive Interpretive Plan—spearheaded by St. Louis–based "placemaking" firm Peckham Guyton Albers & Viets; the heritage consulting firm Cultural Innovations; and landscape architects Reed Hilderbrand—still hinges on the creation of a pedestrian-friendly "Alamo District" designed to turn this historically charged site into an open-air museum. A previous scheme took this idea a step further by encircling the Alamo with a glass wall, as if preserving this architectural artifact in a kind of amber.

There are plenty of other projects that are reenergizing the architectural scene in San Antonio. The city is in a bit of a gut-rehab frenzy, as landmarks like the Pearl and Lone Star Breweries have been renovated as pricey hotels and higher-end restaurants, all with the end goal of molding San Antonio into a destination for design-savvy millennials with money to burn, in hopes they will ditch an Airbnb in the picturesque King William District in favor of the Hotel Emma's posh industrial-chic.

It is in this milieu that Adjaye Associates' Ruby City arrives as one of the most exciting projects to break ground in the Alamo City. This 14,000-square-foot gallery and contemporary arts center—scheduled to open later this year near the city's burgeoning arts district—appears as a strange hybrid, part OMA Casa da Musica, part Legorreta Central Library. Adjaye's building appears as a literal jewel, a faceted brick-red form whose speckled, punctured surfaces make it seem fleeting and otherworldly. But it is anything but that, for this building, which sits precariously on the edge of the one-acre CHRISpark in downtown San Antonio, will anchor the San Pedro Creek redevelopment scheme, and provide the Linda Pace Foundation's extensive collection of modern and contemporary art with a bold, exciting home. Adjaye is still earning accolades for his groundbreaking National Museum of African American History and Culture in Washington, D.C., and with Ruby City soon to be completed, this will be the most significant architectural gesture for San Antonio—one that will hopefully inspire an influx of more commissions and projects of a similar caliber.

How should we look at San Antonio's architectural legacies and gestures? It is tempting to stack them up against those in Houston or Dallas, but in doing so, we would risk ignoring how one of the fastest-growing cities in the United States is busy generating its own architectural identity. Don't call it haphazard, however. The pace of architectural developments in San Antonio may appear slow, but like the city, its architecture is humming busily from what once was an undetectable purr to something greater. This sleepy South Texas city is anything but, and its architecture will demonstrate how this is the case.

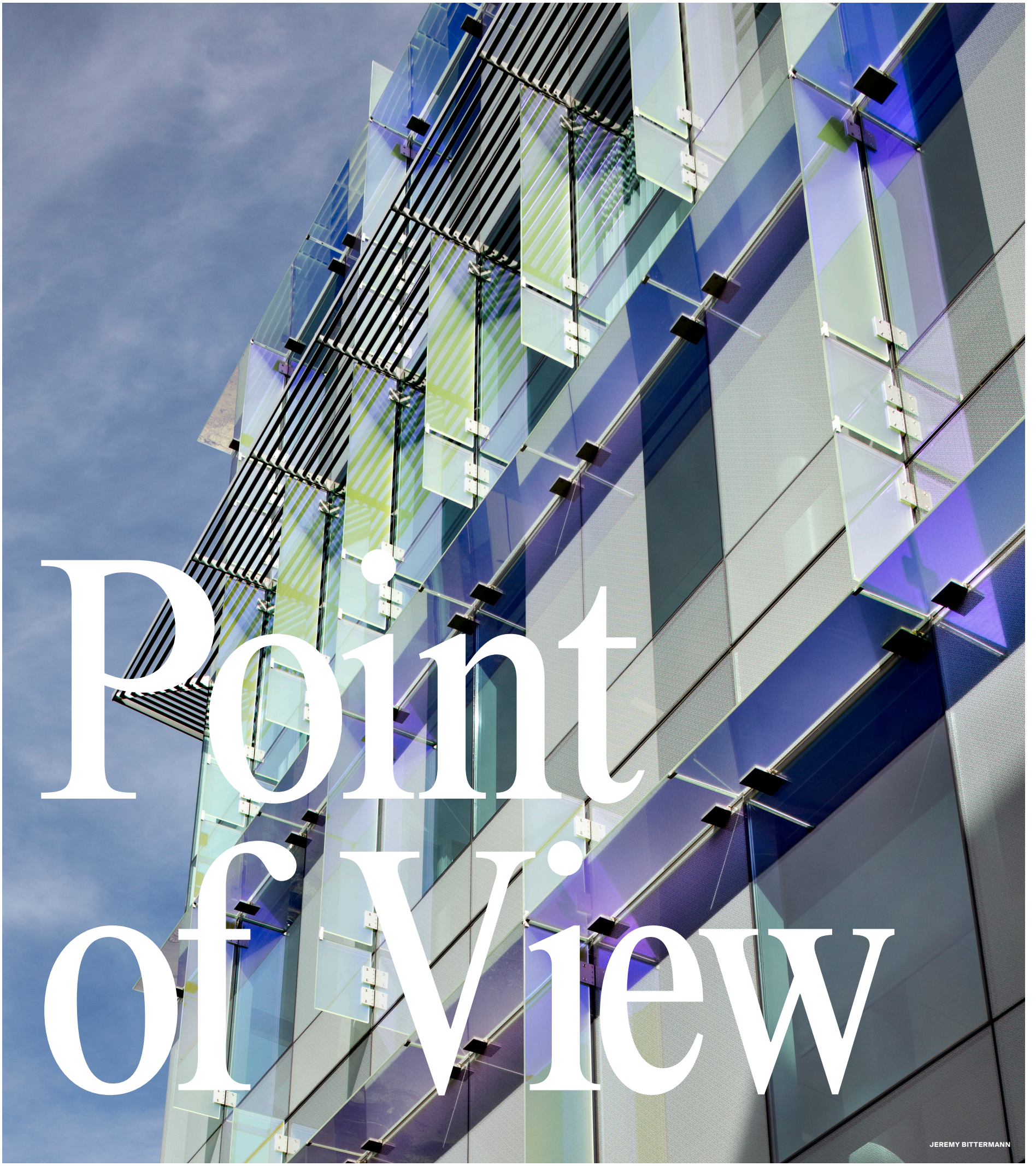




Top: The Alamo Plaza redevelopment proposal envisions San Antonio's most iconic and important building as part of a reenergized center with more space for pedestrian traffic and cultural programming.

Above: Adjaye Associates' Ruby City will be the latest and boldest architectural gesture for Alamo City. Located near other arts attractions, this 10,000-square-foot gallery and contemporary art center will call attention to San Antonio's burgeoning art scene.

Point of View



In this special section we share the latest glass products—from windows to decorative and performance applications—that debuted at the AIA A'18 Expo, NAHB International Builders' Show, Greenbuild International, and GlassBuild America. Furthermore, we explore how architects are employing these new glass typologies in a series of case studies, including a passive tower with a folded glass facade for Shenzhen Energy Company's new headquarters (see page 40) and a dichroic glass facade for the Nano-Bio-Energy Technologies building at Carnegie Mellon University (see page 42). **By Gabrielle Golenda**



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THE ARCHITECT'S NEWSPAPER JULY & AUGUST 2018

Shenzhen International Energy Mansion

Location	Shenzhen, China
Architect	Bjarke Ingels Group
Consulting Architect	SADI Shenzhen Architecture and Design Institute
Contractor	CSCEC
Engineer	Arup
Facade Consultants	Front, Inc. and Aurecon
Facade Contractor	Fangda Group
Sustainability Consultant	Transsolar
Glass Manufacturer, Supplier, Glazing	Shanghai Yaohua Pilkington Glass Group Co., Ltd
Windows	Aumüller
Exterior Cladding Panels	Xingfa Aluminum

Long after the golden era of corporate modernist skyscrapers (think Mies van der Rohe's Seagram Building, SOM's Lever House, and so on), many contemporary office skyscrapers are still designed with traditional glass curtain walls that have low insulation and cause overheating from unnecessary direct sunlight. Bjarke Ingels Group (BIG) conjured an otherworldly passive alternative for Shenzhen International Energy Mansion: a sawtooth, zigzagging curtain wall comprising glass panels and powder-coated aluminum that blocks direct sunlight, thereby reducing solar gain by up to 30 percent.

The 1-million-square-foot structure is composed of two towers and a nine-story connecting block complete with a shared cafeteria, conference rooms, and various retail shops: The uppermost 13 floors of the 42-story north tower houses the Shenzhen Energy Mansion headquarters. As a starting point, BIG considered the subtropical climate in Shenzhen, gauging how they could create comfortable working spaces in hot and humid conditions while at the same time reducing energy consumption. The solution? A passive facade. "Our proposal for Shenzhen Energy Mansion enhances the sustainable performance of the building drastically by only focusing on its envelope, the facade," said Andreas Klok Pedersen, partner and design director at BIG.

Collaborating with Transsolar, the design studio dedicated to addressing climate change, the firm employed various solutions to reduce solar-derived heat and glare without relying on machines or heavy glass coating (which would make views out seem gray and bleak). The building has achieved two out of three stars with the Chinese Green Building Evaulation Label and a LEED Gold rating. BIG and Transsolar developed a multifaceted passive program with a facade folded in an origami-like shape consisting of closed and open subsections. The closed sections provide high insulation values by blocking direct sunlight.

"With solid facade panels on the southeast and southwest side for shading, the glazed facade facing northwest and northeast is able to achieve high sustainability requirements with more clarity and less coating," said Pedersen. All in all, the effect enhances the environmentally sustainable performance of the building and creates an office mise-en-scène bathed in soft light reflected from the direct sunlight diffused between interior panels.

Meanwhile, the double glazing applied to the low-e tempered Super Energy-Saving Insulated Glass Units (IGU) by Shanghai Yaohua Pilkington Glass on the folded facade provides open views through the clear glass in one direction via a series of simple deformations in the geometry that allows for larger openings. These interjecting pockets of glass create cavernous folds that interrupt the smooth facade in various interior areas, including lobbies, recreational areas, and meeting areas.

This seemingly precarious arrangement of views is made possible by the aluminum claddings comprising full-height extruded panels that form a meandering profile. The setup enables the panel system to interlock smoothly, creating a uniform surface with almost seamless joints. A profile of twists and turns accentuates the reflections of light. In effect, these solid facade panels located on the southeast and southwest sides directly obstruct solar penetration. "The amount of insulation used in the curtain wall is a result of optimization between visibility and sustainability," said Pedersen.



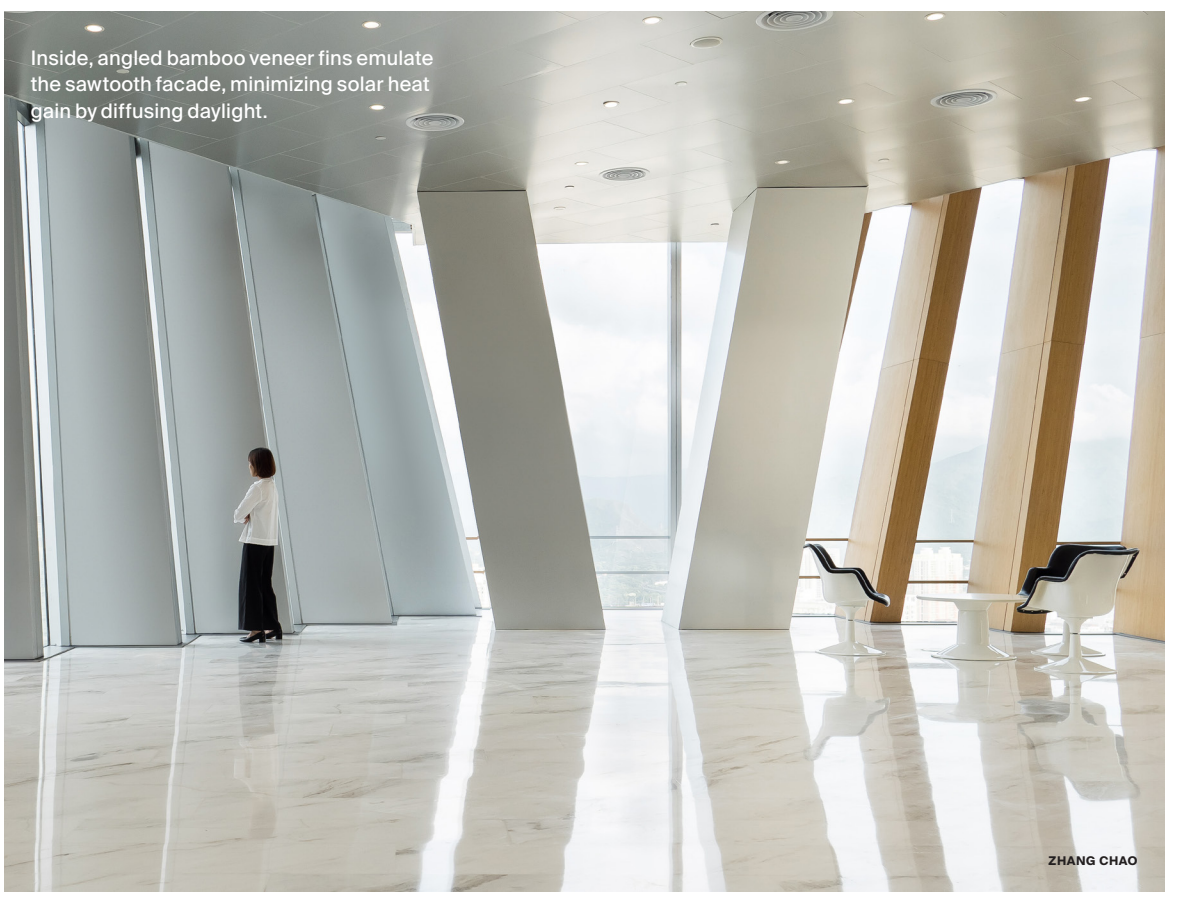
The zigzagging curtain wall extends across the two-tower complex.

ZHANG CHAO



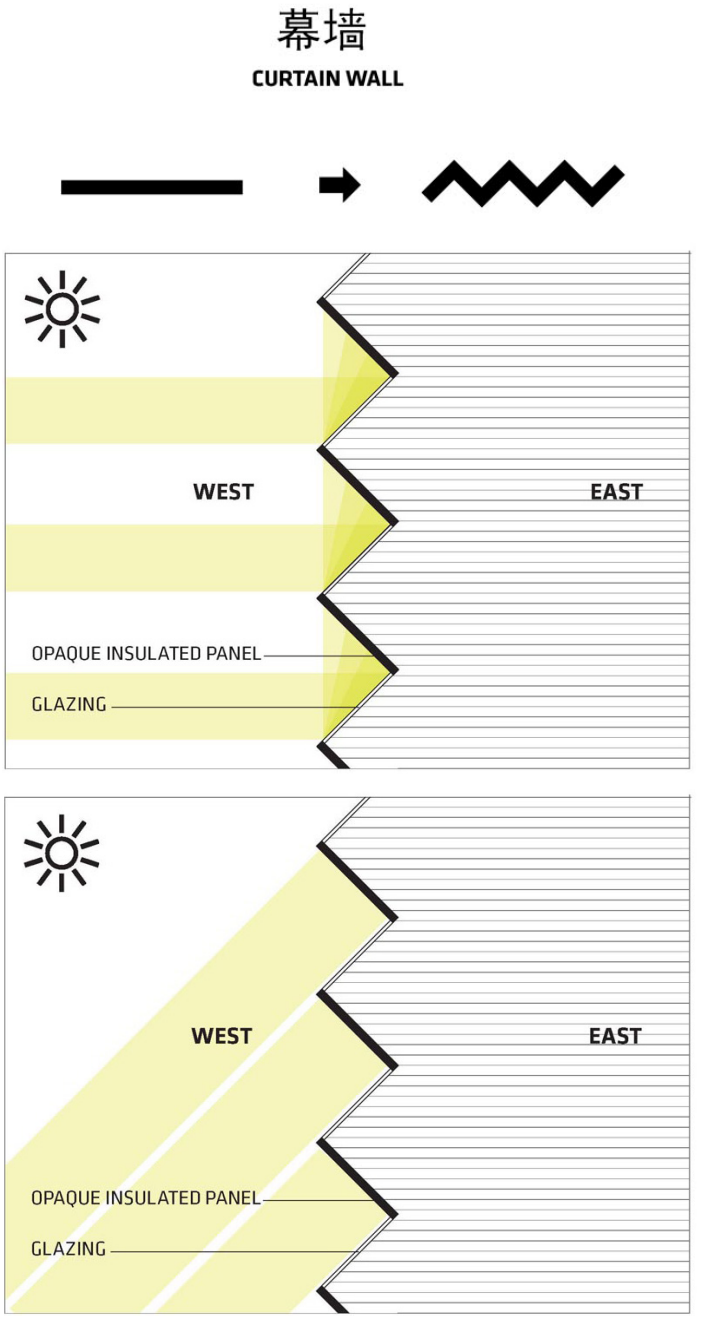
The vertical folds are fashioned from alternating panels of glass and powder-coated aluminum.

LAURIAN GHINITOIU



Inside, angled bamboo veneer fins emulate the sawtooth facade, minimizing solar heat gain by diffusing daylight.

ZHANG CHAO

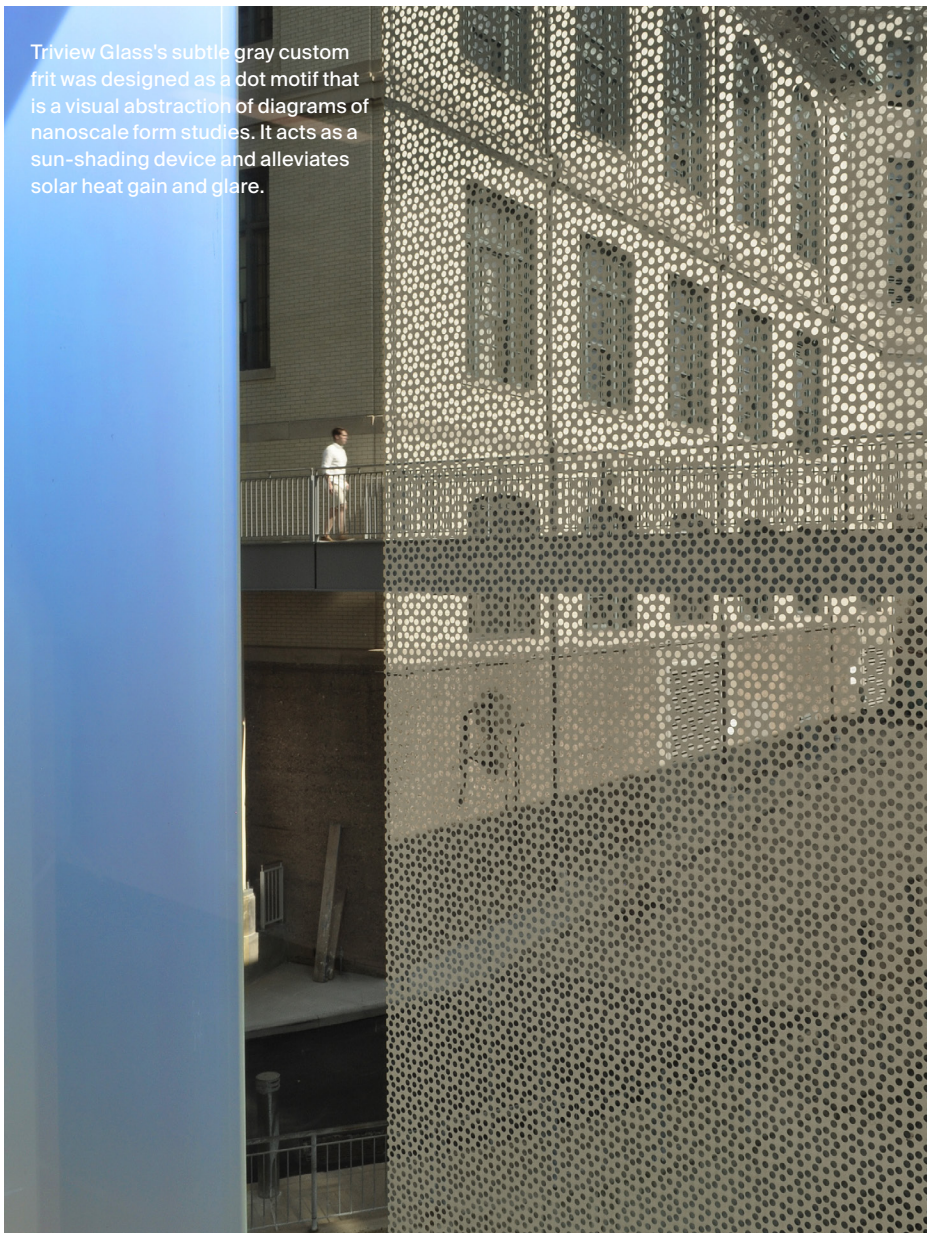


Top: The facade is composed of full height extruded aluminum panels and glass panes that form a miniature zigzag profile.

Above middle: When the sun comes directly from the east or west, the solar rays are reflected off the glass due to the flat angle of the windows.

Above: The glazed element of the folded facade provides a view through clear glass in one direction while allowing for simple deformations to create larger openings.

Scott Hall at Carnegie Mellon



Triview Glass's subtle gray custom frit was designed as a dot motif that is a visual abstraction of diagrams of nanoscale form studies. It acts as a sun-shading device and alleviates solar heat gain and glare.



The dichroic glass manufacturing process produces a film thirty millionths of an inch thick via a nanoscience-derived dip-coating technology developed by NASA in the 1950s. This causes the transmitted color to be different from the reflected color because only certain light wavelengths can pass through the metal oxides in the film.

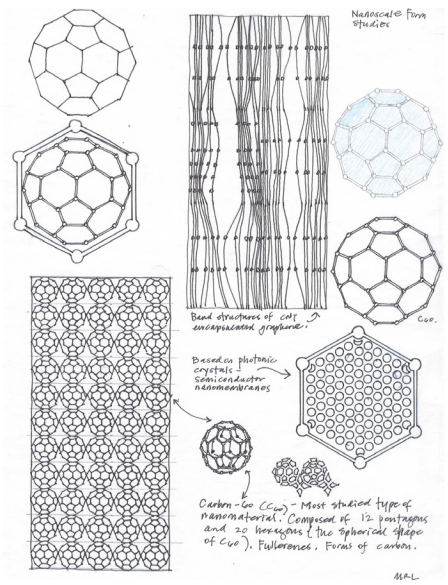
JEREMY BITTERMAN

Architect	OFFICE 52 Architecture
Location	Pittsburgh
Architect of Record	Stantec
Structural/MEP	Arup
LEED Consultant	evolveEA
Curtain Wall Glass Manufacturer	Viracon
Curtain Wall	United Architectural Metals
Dichroic glass fins	Schott AG
Fabricator	Triview Glass
Installer	D-M Products, Inc.
Insulated glass units fabricator and manufacturer	Viracon

Portland-based studio OFFICE 52 Architecture designed the new 109,000-square-foot interdisciplinary Nano-Bio-Energy Technologies Building at Carnegie Mellon University with an apropos glass facade inspired by form, texture, and color. Materializing as a study of diachronic light, the skin that lines the 11,000-square-foot research "clean room" in the Sherman and Joyce Bowie Scott Hall wing features a facade comprising two interlocking geometric forms and a vibrant curtain wall. This combination of clear and frosted glass layers includes some with a micro-thin layer of metal oxide created by a process that echoes the nanotechnology work taking place in the facility. "It all has to do with protons, which is essentially light. We wanted to give the building a timeless quality in terms of the custom nanotechnology-inspired frit motif juxtaposed by the dichroic glass," said Michelle LaFoe, principal of OFFICE 52.

In effect, Scott Hall's curtain wall creates spaces that glow with saturated light that passes through the glass layers and diffuses into a plethora of colors—from warm amber to cool grape to saturated cyan—depending on the wavelength of the light beam. Lending the building an aura of luminance, a rainbow of color changes transpires throughout the day according to the angle the sun moves through the glass. These qualities are created by Schott AG fins—vertical in Narima Orange and horizontal in Narima Blue|Gold. Both are laminated between Vitro Starphire low-iron glass using DuPont's SentryGlas laminate, a clever combination paired with the bird-friendly custom frit that employs a tetrachromatic visual system that creates heightened color perception.

The structure is one of the first research-grade clean facilities in the country certified LEED Gold, a feat that both partners attribute to the collaborating engineers and fabricators: "Innovation was most easily achieved when we worked together to fabricate custom fins. Collaborating with the engineers (Arup) and the dichroic glass manufacturer (Schott AG) is an example of collaboration to get the best use of the best products," said Isaac Campbell, principal at OFFICE 52.



The custom glass frit motif is inspired by studies of nano-scale forms, including the carbon pentagon and hexagonal volumes pictured above. The pattern alludes to the activities taking place within the lab. At the same time, it functionally creates sun-shading.



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THE ARCHITECT'S NEWSPAPER JULY & AUGUST 2018

Amazon Spheres

Architect	NBBJ
Location	Seattle
Structural Engineer	Magnusson Klemencic Associates
Glass Manufacturer	Vitro Architectural Glass
Glass Fabricator	Northwestern Industries, Inc.
Glazing Contractor	Enclos

NBBJ designed a trio of connected glass orbs with living walls at the new headquarters for online retail giant Amazon. According to an announcement on Amazon's blog, the spherical design—a project seven years in the making—was "chosen due to its natural occurrence in nature and as a nod to historic conservatories, like Kew Gardens." This atypical meeting place away from the typical office towers provides a treehouse-like environment for employees, complete with terraces, water features, soaring staircases, and wooden decking.

The construction required more than 620 tons of steel supported by a burly concrete base to buttress the triangular insulated glass units fashioned from modularized Vitro glass. The open floor plan comprised three spherical units enveloped in Ultra-clear Vitro Starphire low-iron glass, which allows for higher visible light transmission, heightening views from multiple angles. "Iron is what makes glass appear green. Low iron Starphire glass eliminates the 'green' hue of traditional clear glass so the only green that you see is from the 300 species of tropical plants inside of the Amazon Spheres," said Andre Kenstowicz, Vitro Glass manager on the project. There are around 40,000 plants in the project.

Like all three domes, the largest is glazed by the contractor Enclos with Vitro's Solarban Solar Control 60 Low-E coating in double laminate, measuring approximately 90 feet tall and 130 feet wide. All 2,643 panels of glass achieve 73 percent visible light transmittance and a solar heat gain coefficient of 0.40 across the visibly sinuous surface. This film beneath the surface limits the amount of radiation entering and consequently helps the interior to remain a stable, cool temperature.

NBBJ designed this biophilic environment to "inspire creativity and even improve brain function," according to the company's blog. Luckily the public also has year-round access to the stimulating habitat at the base of the garden in the visitor center. There, in the thick of it, Seattleites can experience biodiversity in the heart of the city.



Folds of glass create a geometric pattern derived from a Catalan solid, a naturally occurring shape found in nature.

BRUCE DAMONTE



Unconventional work areas span five interconnected floors, including tree-house meeting rooms, waterfall and river features, and a four-story living plant wall.

SEAN AIRHART

620 tons of steel support the weight of over 2,600 panels of glass arranged as five-sided pentagonal hexecontahedron.

SEAN AIRHART





SEAN AIRHART

The glass-enclosed environment houses 40-foot trees and more than 400 species of plants from five continents and 50 countries.

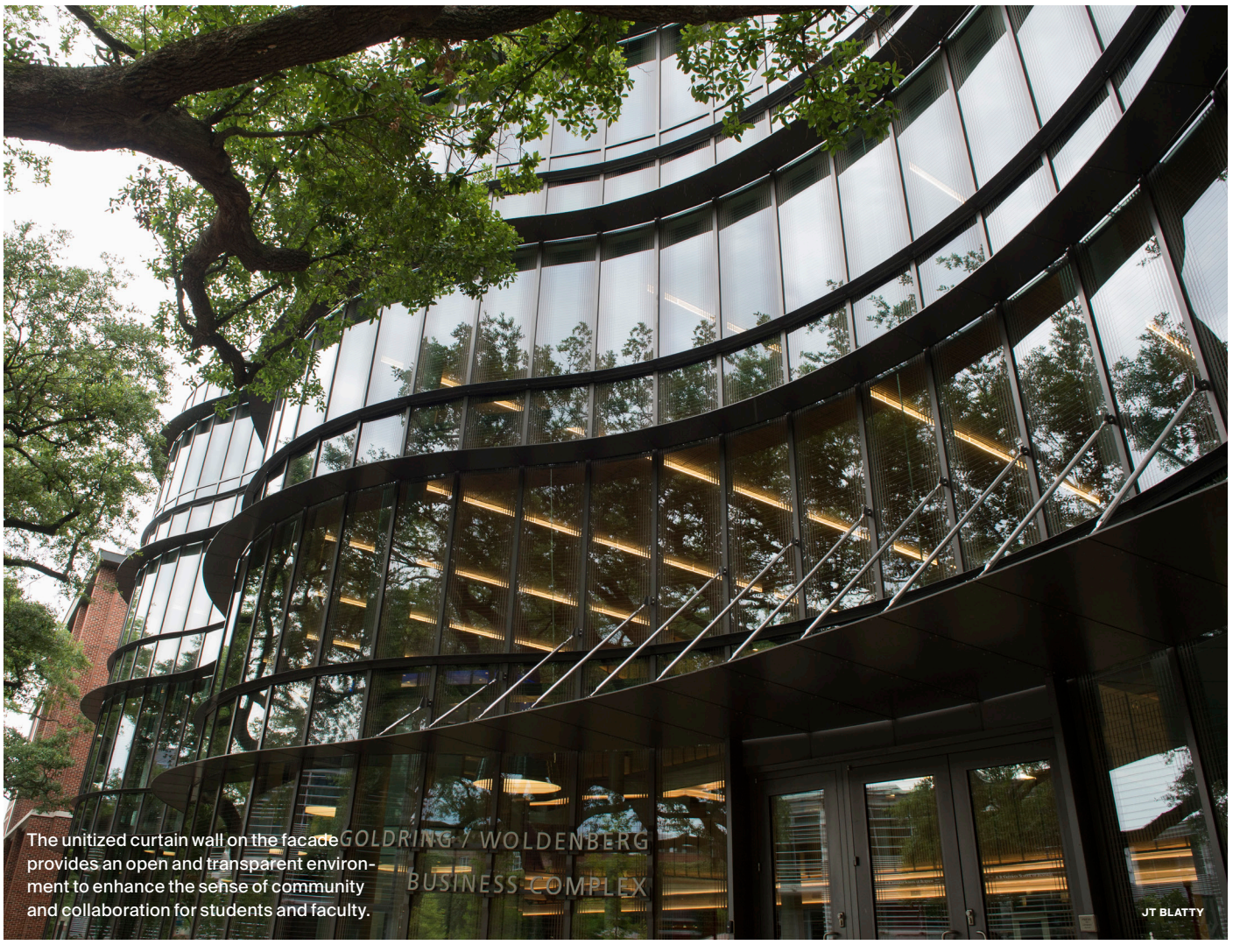


BRUCE DAMONTE

A tightrope-like footbridge winds around the upper level, leading to a benched work area surrounded by a nest-like wall. Below, another refuge is outfitted with various cozy outdoor seating and surfaces.

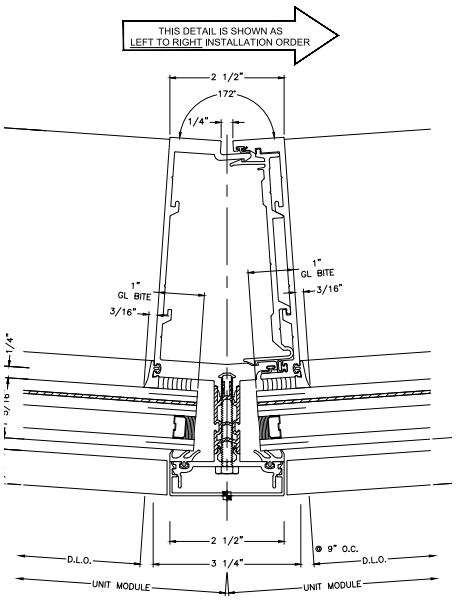
THE ARCHITECT'S NEWSPAPER JULY & AUGUST 2018

Goldring/Woldenberg Business Complex at Tulane University



The unitized curtain wall on the facade provides an open and transparent environment to enhance the sense of community and collaboration for students and faculty.

JT BLATTY



YUW 750 XTH
172° CONVEX MULLION

The thermal performance of the custom YKK AP YUW 750 XT curtain wall fitted with Viracon glass is enhanced by the design of the custom frit pattern—all factors that contribute to the ability to achieve LEED Gold certification.

Architect	Pelli Clarke Pelli Architects
Location	New Orleans
Architect of Record	Manning Architects
General Contractor	Broadmoor LLC
Glass Fabricator	DeGeorge Glass Company
Glass Manufacturer	Viracon
Framing Systems	YKK AP America Inc.
Panel Work, Sun Shades, and Fins	Performance Architectural Inc.

Pelli Clarke Pelli Architects (PCPA) connected two preexisting buildings at the A.B. Freeman School of Business at Tulane University in New Orleans with a 46,000-square-foot addition. The overhaul also included the renovation of a classroom, two auditoriums, and two lecture halls, joining the complete sum of 85,000 square feet with the sweeping curves of a serpentine curtain wall that weaves around century-old oak trees and also loosely references the university's team mascot, Tulane Green Wave, an angry-faced cartoon wave holding a megaphone. Bathed in natural light, the distinctive skin provides transparency and openness to enhance the sense of community and collaboration in the new and existing spaces throughout, including the classrooms, an incubator space for student startups, breakout stations, a new financial analysis lab, and administrative offices. Designed to meet LEED Gold criteria and withstand local weather conditions, especially hurricane impact, the unitized, hurricane-resistant YKK AP YUW 750 XT curtain wall and the Viracon glass hybrid system were fashioned in factory-controlled conditions so as to mitigate risks relating to quality control. YKK's thermal sunshades and light shelves were assembled as complete curtain wall system units, allowing for a climate-controlled environment that eliminates interior moisture and thermal transfer. The glazed exterior also features a custom frit pattern by Viracon that maximizes the visibility of the structure for birds.

Achieving the associated performance standards and sinuous construction was not an easy feat. The design, development, and construction process was a multiphase project. Beginning with the layout, the serpentine steel curtain wall was preassembled in CAD while the structural steel beams and concrete were put in place on-site. This separate undertaking proved to be problematic, as areas in the curtain wall that didn't line up with the prescribed 90-degree angle of the field layout had to be adjusted before fabrication. Speaking of shape, the whirly glass wall required an intricate five mullion support system composed of two convex and two concave structural supports. This then necessitated the sunshades and solar fins to be correctly positioned at various angles along the multifaceted surface, calling for many custom permutations of anchor brackets machined for specific locations. Other customization was necessary for the sunshades and fins, which had to be miter-cut due to the ever-changing nature of the undulating configuration, resulting in massive variation opening-to-opening.

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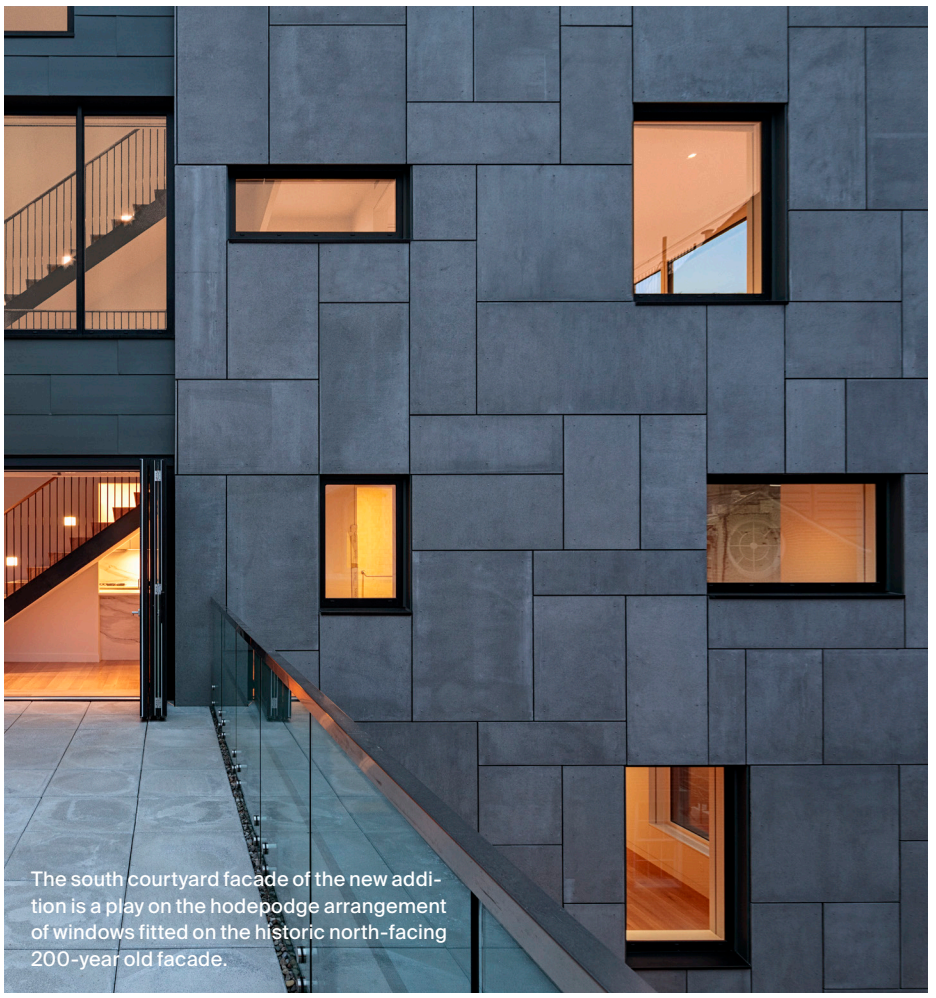
The Residences at Prince



Custom-size expanses of glazing and thermally broken window systems by Schüco poetically line the historic north courtyard facade.



The south courtyard facade of the new addition is a play on the hodepodge arrangement of windows fitted on the historic north-facing 200-year old facade.

Architect	Marvel Architects
Location	New York City
Codevelopers	Hamlin Ventures and Time Equities
Contractor and Fabricator	TRU Architectural
Historic Preservation Consultant	Higgins Quasebarth & Partners
Facade Windows	Kolbe Windows & Doors
Courtyard Glazing System	Guardian Glass
Courtyard Glass and Window Systems	Schüco

This Federalist-style four-story building across the street from the Basilica of St. Patrick's Old Cathedral was the church's former school and convent for nearly 200 years. Built in 1826 to replace an orphanage and parochial school founded in 1822, Old St. Patrick's Cathedral School educated generations of locals and immigrants (including Martin Scorsese; according to a *New York Times* article he "struggled under the merciless ministrations of the Sisters of Mercy") before closing in 2010. In 2014, the archdiocese sold it to Hamlin Ventures and Time Equities, who hired Marvel Architects to design the Residences at Prince, a seven-unit condo attached to a 6,100-square-foot space still retained by the church for its offices and community space.

Because the structure is a landmark, the exterior elements—namely the windows—were restored. "Integrating glass into historic facade, we supported the architect to update the aesthetic," said Spencer Culhane, building envelope specialist at Schüco.

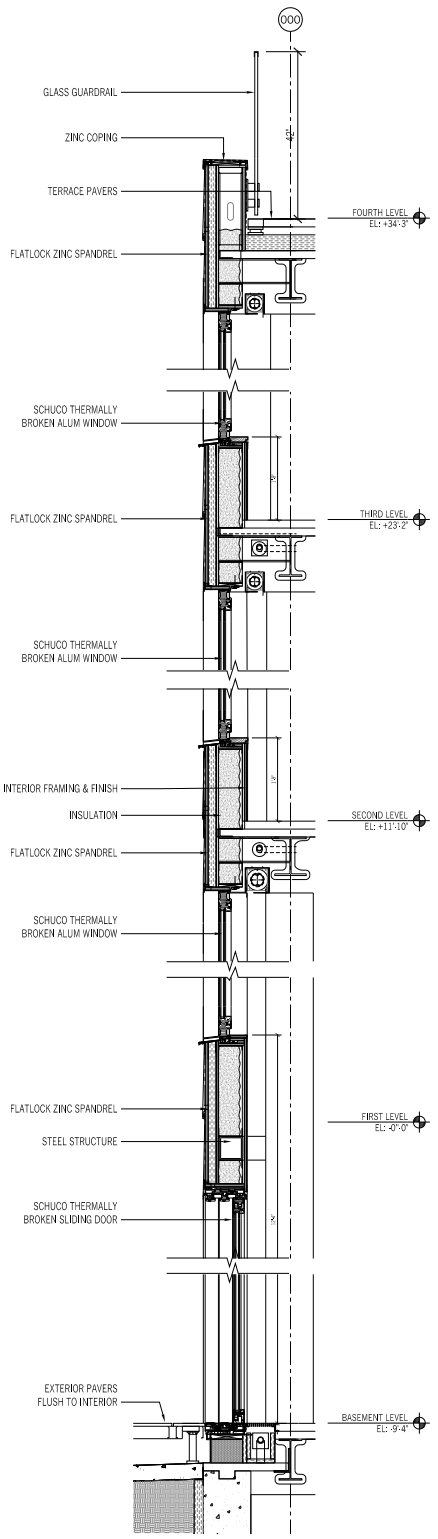
Preservation consultant Higgins Quasebarth & Partners and Marvel completed the restoration using two styles of windows, since the building was built in two different time periods. "The new wood window sashes are shop painted with a durable finish to provide a long-term protected finish," said Nebil Gokcebay, associate at the firm.

In the interior courtyard, new expanses of glaze and thermally broken windows were installed. Having undergone numerous revisions, the south-facing 200-year old facade is patched up by bricks fill up what were previously windows. This playful window arrangement (lower level windows occupied by the church are opaque) inspired the new north facade. A similar asymmetrical composition was made with Schüco's AWS windows throughout. "Between the design starting point and in contrast to the historic double-hung windows in a pre–Civil War wall, we developed an all-glass vocabulary," said Jonathan J. Marvel, principal at Marvel.



To complete the restoration of the windows on the historic facade, Marvel researched vintage photos with Historic Preservation Consultant Higgins Quasebarth & Partners and found remnants of the existing frames and configurations on-site.

AARON THOMPSON



03 WALL SECTION @ LIVINGROOM WINDOW
SCALE: 3/4" = 1'-0"

Schüco's AWS window system fitted on the historic north courtyard facade is also used throughout the addition and penthouse. In this diagram of the penthouse windows, custom extra large windows are thermally broken by insulation and zinc spandrels.

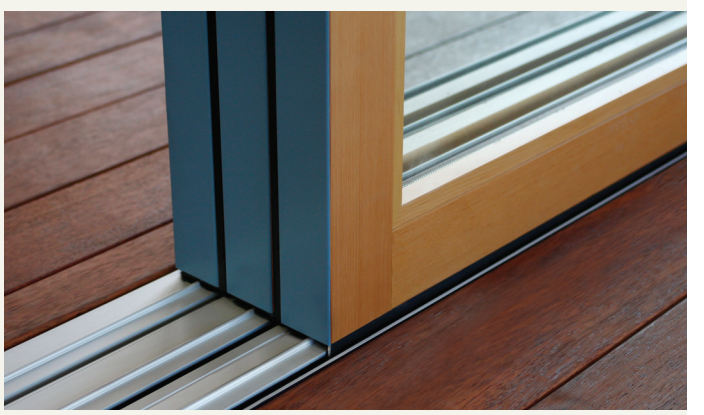
CONTEMPORARY CLAD | A MATTER OF STILE











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← **Vacuum IG**
Guardian Glass

Pictured here in a retrofit at Sherzer Hall at Eastern Michigan University, Vacuum IG is paired with Guardian's SunGuard coated glass to create a hybrid, low-e vacuum-insulated glass that provides thermal insulation and minimizes the amount of ultraviolet and infrared light passing through without compromising light transmission.

guardianglass.com



← **Fireframes TimberLine**
TPG

Looking good! FireFrames TimberLine has the aesthetic panache of wood with all the fire performance characteristics that steel brings. Pairing a burly steel frame with a real wood cap cover and Pilkington Pyrostop fire-rated glass, the system effectively works as a radiant and conductive heat barrier.

fireglass.com

PROJECT: 450 Alaskan - Seattle, WA
ARCHITECT: NBBJ
CERTIFICATION TARGET: LEED® Gold
SPECIFICATION: Entice® Thermal Entrance

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THERMAL ENTRANCE SYSTEM

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U.S. Patent 9,074,413

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↓ H3 FeelSafe Casement & Double Hung
Sierra Pacific

What do you have to do before a hurricane? You board up the windows! Made from extruded aluminum, vinyl, and solid wood, these windows may not eliminate the need for that altogether, but they do withstand Zone III or IV hurricane-force winds and water damage.

sierrapacificwindows.com

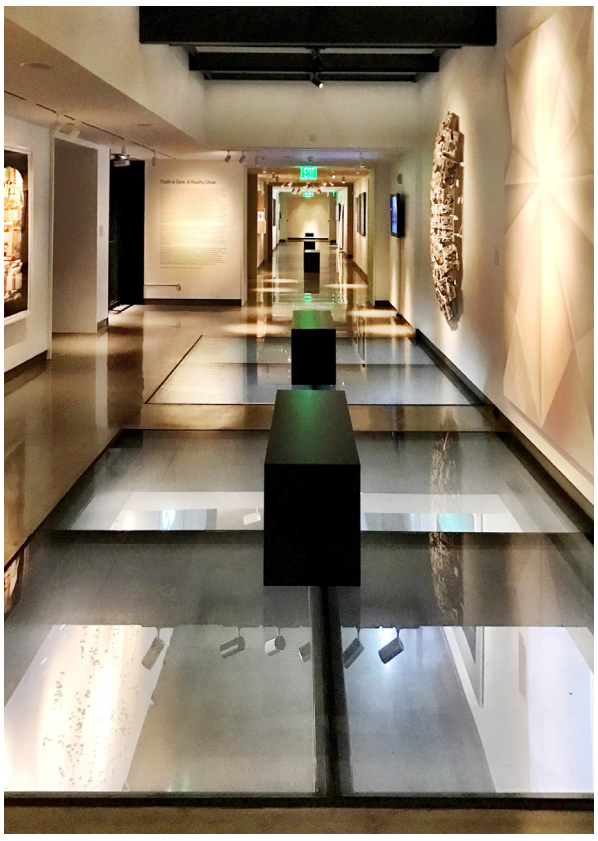


ALL IMAGES COURTESY RESPECTIVE MANUFACTURERS

↓ GPX FireFloor
Safti

Walk (safely) this way on a tempered, laminated surface supported by a structural steel frame. The fire-resistant flooring system is assembled with no air between the fire-rated glass and the laminate walking surface, alleviating concerns associated with condensation.

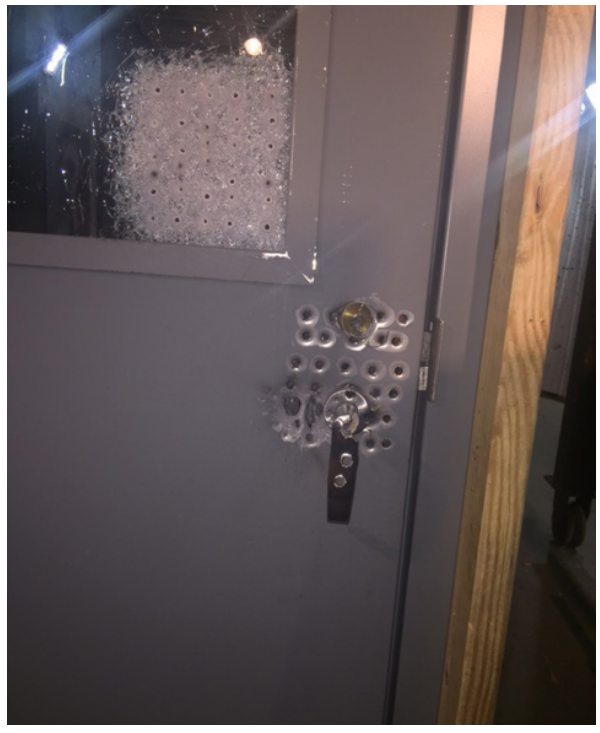
safti.com

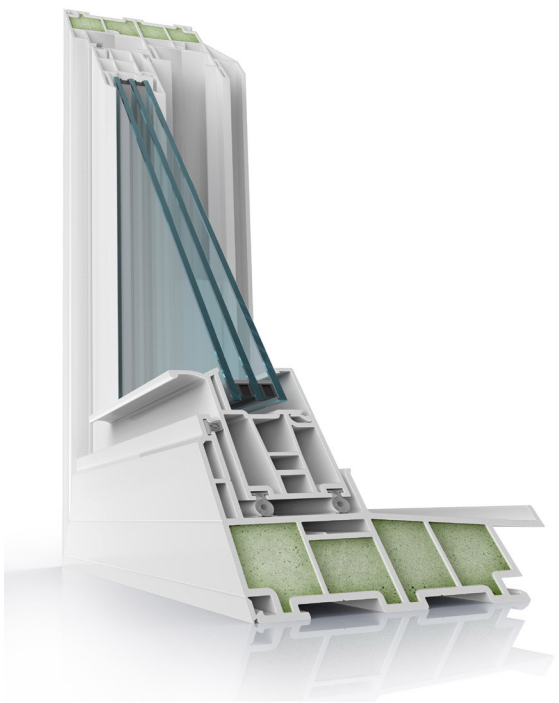


↓ Attack-Resistant Openings
School Guard Glass and Assa Abloy

Hardware manufacturer Assa Abloy and safety glass manufacturer School Guard Glass partnered to design an attack-resistant door for schools. When paired together, the Ceco Door with SG5 attack-resistant glazing survives the most brutal blows and even gunshots. Stronger and longer-lasting than a security film, the system is easy and affordable to retrofit to preexisting openings for increased security.

schoolguardglass.com
assaabloydss.com





← Krypton-enhanced glass
MI Windows and Doors

Replacing commonly used argon, new krypton-insulated glass effectively decreases the flow of heat from the outside in. The gas lives between two panes of glass, separated by a warm edge spacer system. It is available with MI's 1650 double-hung, 1650 fixed, and 1685 double-slider triple-pane windows.

miwindows.com

→ NX-300
Kawneer

Designed for historic window restorations, the NX-300 thermal window bestows an antiquated look that is updated to meet contemporary performance codes. It is available in a variety of casement outswing, awning, fixed, and fixed-over awning configurations.

kawneer.com



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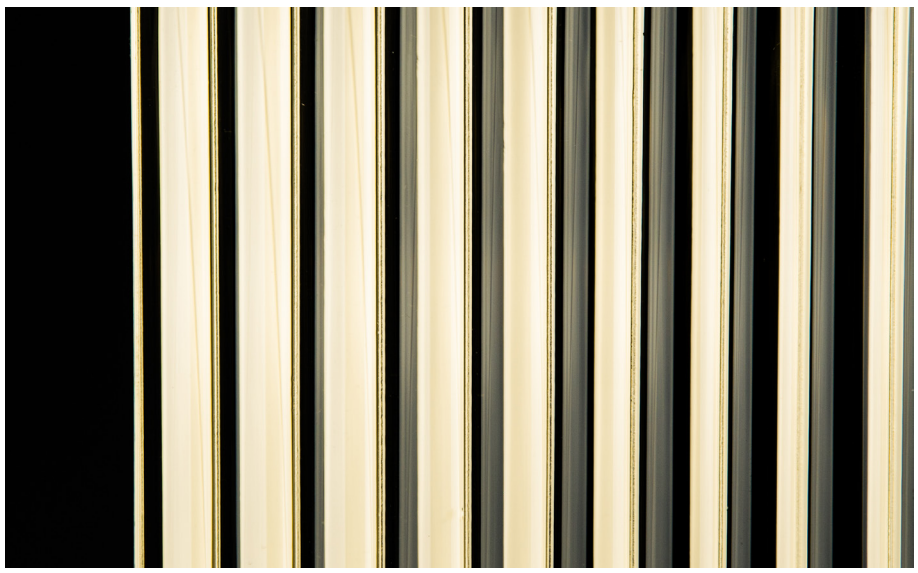
Classy Glassy

Not a solid, yet not a liquid; glass is somewhere in between. These decorative varieties accentuate the aesthetic qualities of the material, calling attention to its almost supernatural, amorphous condition—a state somewhere between those two states of matter.

↓ Channel Bronze
Nathan Allan Glass Studios

Convex partitions line the kiln-formed glass that is shaped like the movement of water. It is available in a maximum panel size of 6 by 10 feet and in six depth profiles.

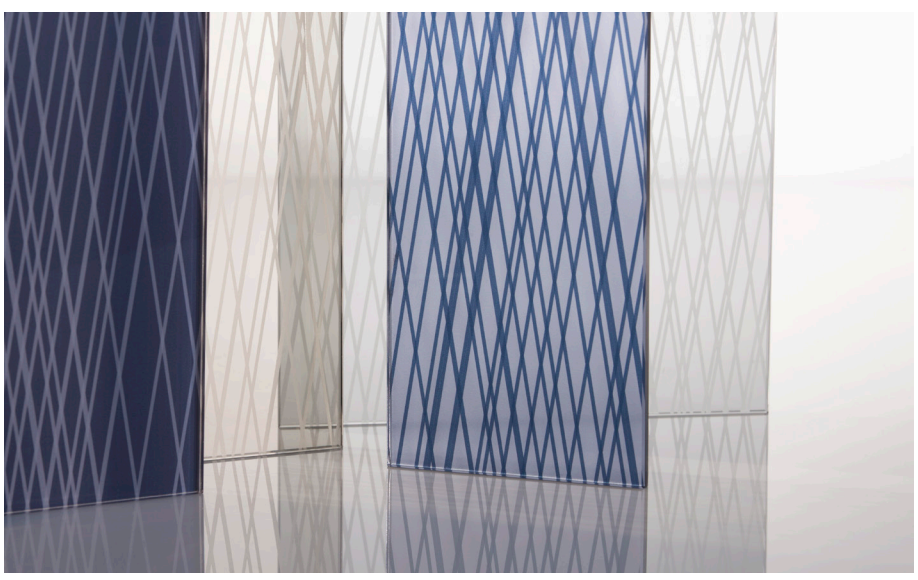
nathanallan.com



↓ Linework
Skyline Design

Exploring linework and XY-axis geometries, Gensler collaborated with Skyline to develop a collection of five glass patterns. Linework is available in four thicknesses, can be sized up to 72 inches by 144 inches, and is suitable for interiors and exteriors.

skydesign.com



↓ Rayures
Glas Italia

The French fraternal design duo, Ronan & Erwan Bouroullec, conjured a colorful crystalline modular screen with stratified hinged panels. The folds of transparent glass feature horizontal and vertical veins that light filters through in a wonderfully lucid way. Meanwhile, the individual panels vary in size, allowing for compositions that divide, but don't separate.

glasitalia.com

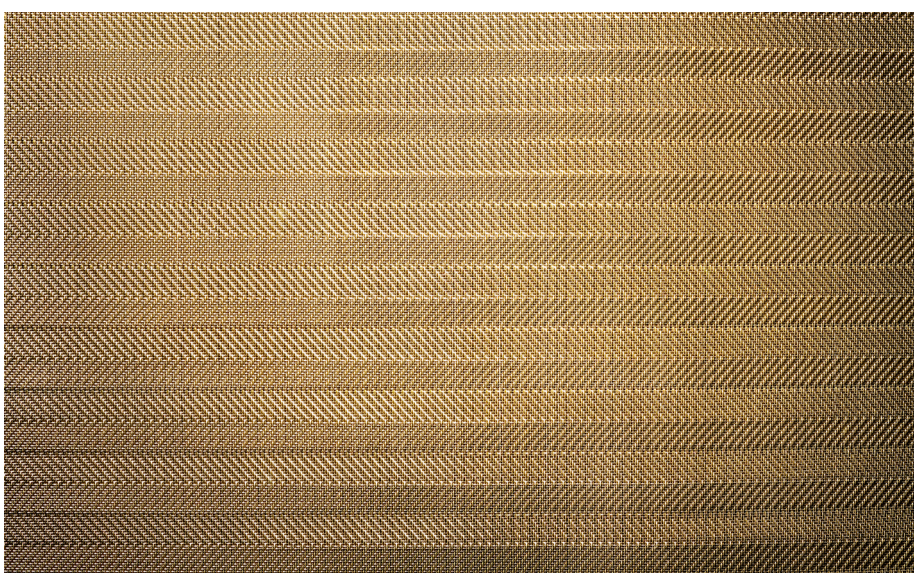


ALL IMAGES COURTESY RESPECTIVE MANUFACTURERS

↓ Metallic
Carvart

Woven metallic threads form a reflective herringbone wall cladding. The effect is created by laminating metal mesh between a mirror and a panel of glass. This mesh can be used for both exterior and interior applications, as well as for acoustic performance.

carvart.com





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↓ Clear Vision
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www.agc-yourglass.com



ALL IMAGES COURTESY RESPECTIVE MANUFACTURERS

↓ Modular Outswing
Goldbrecht-Systems

Bye-bye, big-framed eyesores! Goldbrecht, the U.S. manufacturer of Vitrocsa, released an outswing window with a sleek, thin profile. The new casement and awning system matches the slender sightlines of the sliding systems already offered by the manufacturer.

goldbrecht-systems.com



→ Insulated Glass
Atelier Domingue

Cut and fabricated for both commercial and residential typologies, each window is custom fabricated by metal artisans. The design features a low-profile steel frame to support the insulated glass panel.

atelierdomingue.com



↓ Direct Glaze Corner Window
Marvin

Look out of the corner! Sitting flush with the exterior, this window conveniently opens up two sides of the facade at the same time. Many applications are possible, with sizes made up to 76 inches by 146 inches in vertical or horizontal orientations.

marvin.com

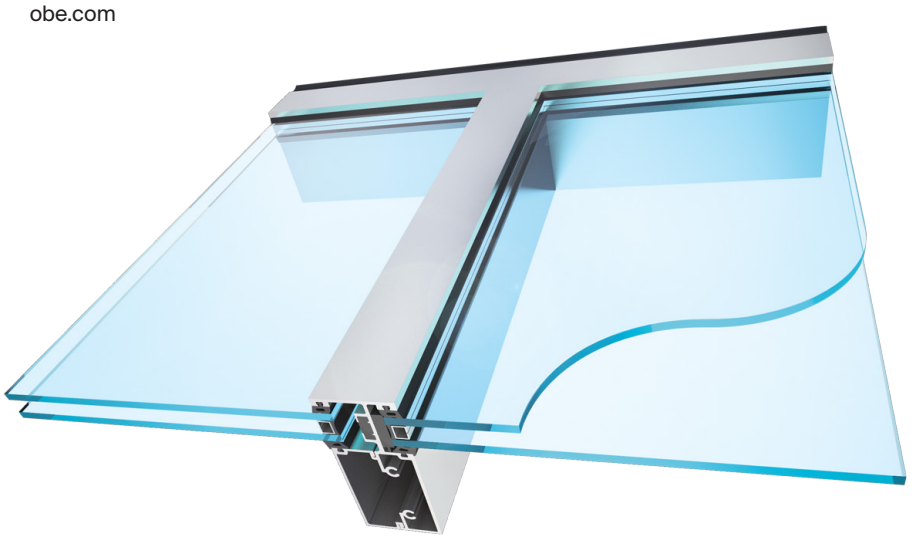




↓ OBE PDR-225 Window Wall
Oldcastle BuildingEnvelope

Prefab-ulous! This glazed window wall system is assembled and sealed in industrial-grade factory conditions, which minimizes labor costs and maintains quality control that might be compromised in on-site assembly. The assembly includes an oversize thermal break complete with an anodized finishing.

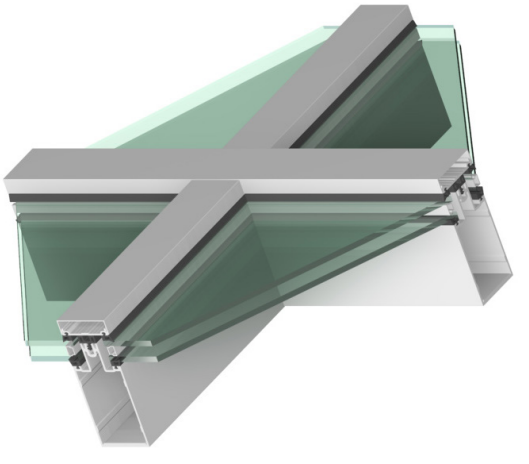
obe.com



↘ 400T Series Thermal Curtainwall
Tubelite

Looking to get LEED Gold? This thermally broken curtain wall is designed to meet the strictest energy codes. The expanded thermal break and thicker gasketing system reduces solar heat gain and condensation.

tubeliteinc.com



← Furniture-grade finishes
Weather Shield

Looking to add a bit of color? Weather Shield paired with Sherwin Williams to offer the entire selection of windows or doors in ten new furniture-grade hues for the Contemporary Collection, Premium Series, and Premium Coastal collections. The finish is factory-applied, preventing inconsistent or blotchy post-installation paint jobs.

weathershield.com

THE ARCHITECT'S NEWSPAPER JULY & AUGUST 2018

Top of the Glass

These are the applications that make use of glass in pleasantly unexpected configurations. While the glass itself is secondary to the space it occupies, it adds a certain panache or creates an ambience.

Warren Clinic of the Saint Francis Health System

Location	Tulsa, OK
Architect	CallisonRTKL
Installers	Rupe Helmer Group, Ross Group, and Cowen Construction
Manufacturer and Fabricator	3form
Glass	3form



JEFF SCROGGINS



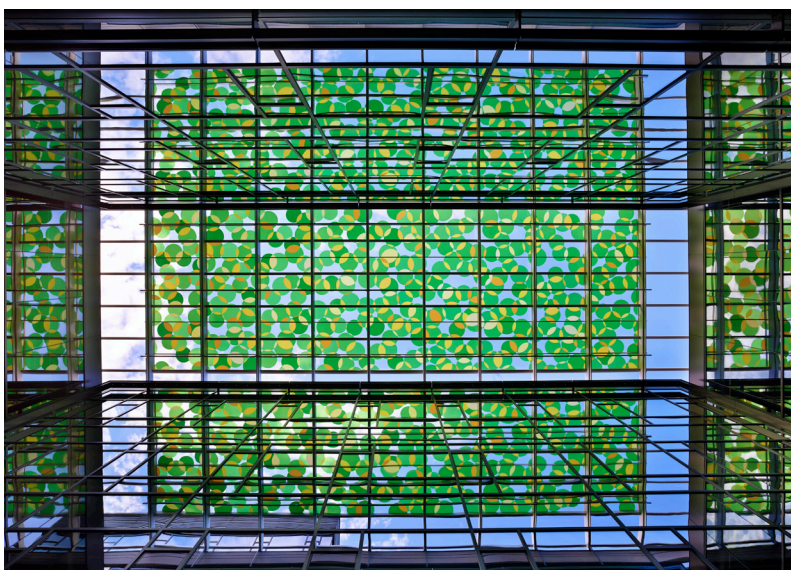

GEOFF CAPTAIN

Banc of California Stadium

Location	Los Angeles
Design	Gensler
Structural Engineer	Thornton Tomasetti
General Contractor	PCL Construction Services, Inc.
Glass	C.R. Laurence, Guardian Glass, Oldcastle BuildingEnvelope

Amazon Expanded Headquarters

Location	Seattle
Architect	ZGF Architects
Design	Spencer Finch
General Contractor	GLY Construction
Contract Glazier	Evergreen House
Glass Manufacturer	Vitro Architectural Glass
Glass Fabricator	Goldray Glass




COURTESY OF GOLDRAY GLASS

THE ARCHITECT'S NEWSPAPER
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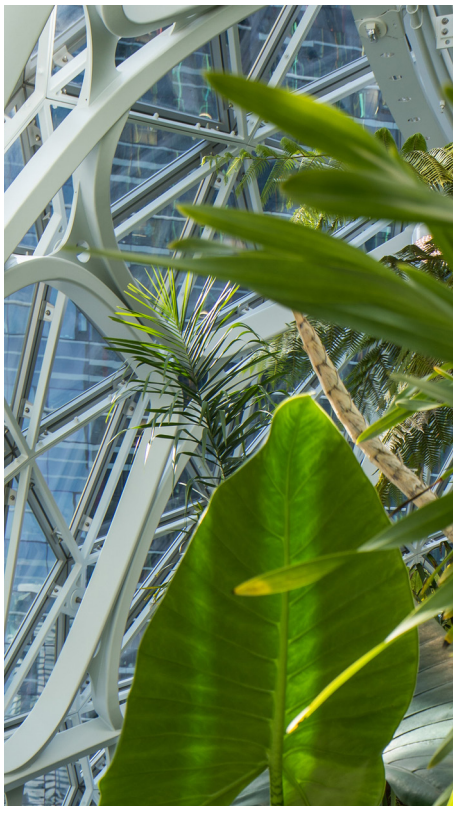
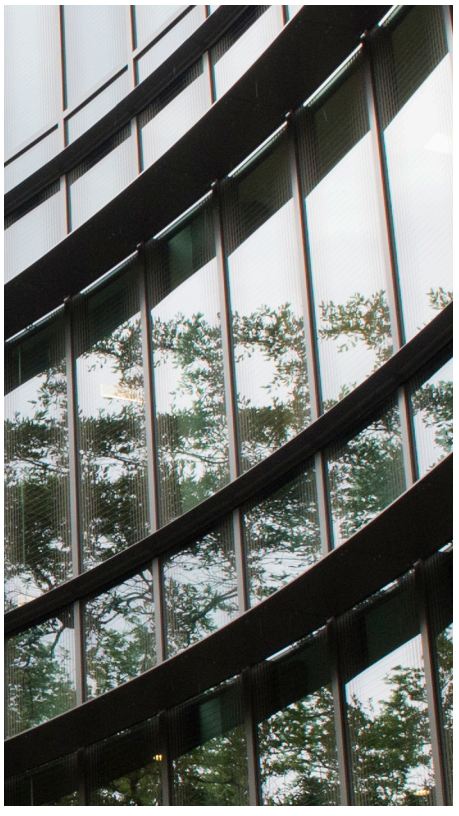
Mass MOCA, The Robert W. Wilson Building (Michael Moran)
2017 Building of the Year – Northeast

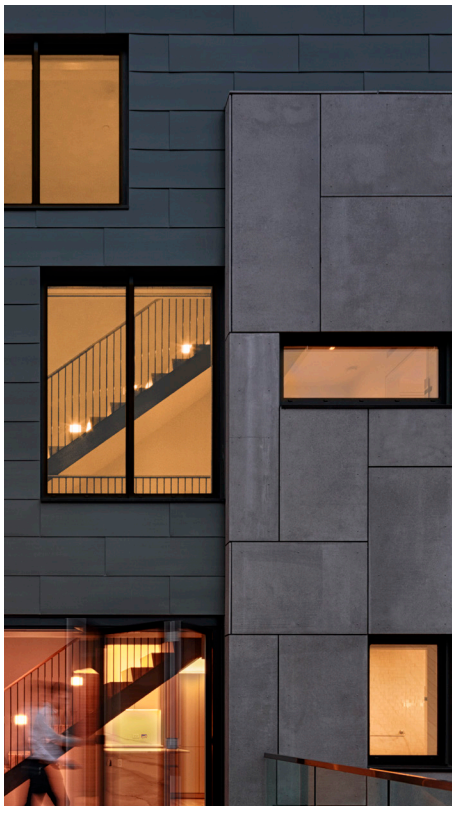
All winners will be featured in our December Best of Design Awards issue.

Resources









WINDOWS & WALLS

AGC Glass North America
agcglass.com

Atelier Domingue
atelierdomingue.com

Aumüller Aumatic GmbH
aumueller-gmbh.de

CRL-U.S. Aluminum
crlaurence.com

Crystal Window & Door Systems, Ltd.
crystalwindows.com

Extech Instruments
extechinc.com

Goldbrecht-Systems
goldbrecht-systems.com

Hirt USA
hirtusa.com

Kolbe Windows & Doors
kolbewindows.com

LaCantina Doors
lacantinadoors.com

Marvin Windows and Doors
marvin.com

MI Windows and Doors
miwindows.com

Schüco
schueco.com

Sierra Pacific Windows
sierrapacificwindows.com

Tubelite Inc.
tubeliteinc.com

Wausau Window and Wall Systems
wausauwindow.com

Weather Shield Doors and Windows
weathershield.com

Vitrocsa USA
vitrocsausa.com

YKK AP America Inc.
ykkap.com

PERFORMANCE GLASS

Assa Abloy
assaabloy.com

ESWindows
eswindows.com

Faour Glass Technologies
faourglass.com

Glasswerks
glasswerks.com

Guardian Glass
guardianglass.com

Innovative Glass Corporation
innovativeglasscorp.com

Kawneer
kawneer.com

Kinestral Technologies, Inc.
kinestral.com

Northwestern Industries, Inc.
nwiglass.com

Oldcastle BuildingEnvelope
obe.com

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pilkington.com

Pulp Studio, Inc.
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SAFTI FIRST
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Schott AG
schott.com

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sedak.com

Shanghai Yaohua Pilkington Glass Group Co., Ltd.
en.sypglass.com

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fireglass.com

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trivew-glass.squarespace.com

Viracon
viracon.com

Vitro Architectural Glass
vitro.com

Walker Glass Company Ltd.
walkerglass.com

DECORATIVE GLASS

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3-form.com

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galaxycustom.com

Glas Italia
glasitalia.com

Lunada Bay Tile
lunadabaytile.com

Marazzi
marazziusa.com

Nathan Allan Glass Studios
nathanallan.com

Skyline Design
skydesign.com

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FEBRUARY

SAN FRANCISCO
MARCH 8

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MARCH

NEW YORK CITY
APRIL 4 + 5

BOSTON
JUNE

MINNEAPOLIS
JULY

DENVER
SEPTEMBER

CHICAGO
SEPTEMBER

TORONTO
OCTOBER

LOS ANGELES
OCTOBER 24 + 25

PHILADELPHIA
NOVEMBER

SEATTLE
DECEMBER 6

STILL TO COME IN 2018

CHICAGO
SEPTEMBER 21

MIAMI
OCTOBER 4

LOS ANGELES
OCTOBER 25 + 26

BOSTON
NOVEMBER 9

SEATTLE
DECEMBER 7



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TEXAS CALENDAR

JULY

TUESDAY 31
FILM
Six Heart Princesses (6HP), Takashi Murakami
(Takashi Murakami, 2016)
44 min.
7:00 p.m.
Modern Art Museum
of Fort Worth
3200 Darnell Street
Fort Worth, TX
themodern.org

AUGUST

WEDNESDAY 1
EVENT
Mastering Brushwork with Guest Artist Soon Warren Wednesday Workshop
2:00 p.m.
Kimbell Art Museum
3333 Camp Bowie Boulevard
Fort Worth, TX
kimbellart.org

THURSDAY 2
EVENT
Credit Carnival: Efficiency AIA Dallas Springboard
9:00 a.m.
Dallas Center for Architecture
1909 Woodall Rodgers Fwy
Suite 100
Dallas
aiadallas.org

FRIDAY 3
EVENT
Drawing/Not Drawing Studio Five 90
5:00 p.m.
Kimbell Art Museum
3333 Camp Bowie Boulevard
Fort Worth, TX
kimbellart.org

FRIDAY 3
EVENT
Drink Local Art Market First Saturdays
4:00 p.m.
Under the Radar Brewery
1506 Truxillo Street
Houston
facebook.com/
undertheradarbrewery

FRIDAY 3
EVENT
AIA Shoot'N'Skoot
1:30 p.m.
AIA San Antonio
National Shooting Complex
5931 Roft Road
San Antonio
aiasa.org

THURSDAY 9
CONFERENCE
Real Architects Don't Starve 2018 Prosperity Conference
11:00 a.m.
The Price Center
222 W. San Antonio Street
San Marcos, TX
texasarchitects.org

TUESDAY 14
LECTURE
Visionary Voices: Thoughtbarn
6:00 p.m.
Texas Society of Architects
500 Chicon Street
Austin, TX
texasarchitects.org

SATURDAY 18
EVENT
Black Canvas Tour
6:00 p.m.
ARKA ART
4715 Main Street #E
Houston
visualpaint.com

THURSDAY 23
CONFERENCE
AIA Austin Summer Conference 2018
8:00 a.m.
AT&T Conference Center
1900 University Avenue
Austin, TX
aiaaustin.org

FRIDAY 24
FILM
David Hockney at the Royal Academy of Arts, London: "A Bigger Picture" & "82 Portraits and One Still Life"
(Phil Grabsky, 2017) 85 min.
3:00 p.m.
The Museum of Fine Arts,
Houston
1001 Bissonnet
Houston
mfah.org

FRIDAY 24
EVENT
Artful Reading: Leonardo da Vinci, by Walter Isaacson (2017)
5:30 p.m.
Kimbell Art Museum
3333 Camp Bowie Boulevard-
Fort Worth, TX
kimbellart.org

FRIDAY 24
EVENT
e4h Firm Crawl
6:00 p.m.
e4h Office
1201 8th Avenue
Fort Worth, TX
aiafw.org

WEDNESDAY 29
TOUR
TxA Visit and Tour! 2018 Summer Tour Series
5:30 p.m.
Connex Office Park
1201 Evans Ave
Fort Worth, TX
aiafw.org

SEPTEMBER

THURSDAY 13
TOUR
True Worth Tour 2018 Summer Tour Series
6:00 p.m.
True Worth Place
1513 East Presidio Street
Fort Worth, TX
aiafw.org

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Making Africa: A Continent of Contemporary Design
Blanton Museum of Art
200 E. Martin Luther King Jr. Boulevard
Austin, TX

October 14, 2018–January 6, 2019

Making Africa: A Continent of Contemporary Design shows work from over 120 African and Africa-based artists, entrepreneurs, and designers that addresses the economic, social, and political shifts within the continent and beyond. Through sculpture, fashion, graphics, and videography, the artists present designs that challenge the traditional limits between disciplines and generate new ways of representing the culture and happenings in the region. As Africa emerges as the newest nexus of experimentation in the global design industry, the exhibition will focus on how African design addresses worldwide issues. The exhibition is organized by the Vitra Design Museum and the Guggenheim Museum Bilbao, and will be on view in the Butler Gallery of Blanton.


ALEX BARBER

Summer Studios 2018
Project Row Houses
2521 Holman Street
Houston

August 11–September 16

The Summer Studios residency at Project Row Houses (PRH) is a mentorship program for local emerging artists to work on art that engages with community. Art houses will be transformed into temporary, interactive studios for the winning college students. This year, the mentors are Regina Agu and Eyakem Gulilat, and the residents include students from Texas Southern University, University of St. Thomas, University of Houston, and Rice University. The open studio will be a showcase of their individual practices and ongoing work. As part of the scheme, students will spend six weeks in the summer visiting organizations within the city and studying readings and critiques to further develop their work.


EVAN JENKINS

Jessica Stockholder: Relational Aesthetics
The Contemporary Austin, Jones Center
700 Congress Avenue
Austin, TX

September 15, 2018–January 13, 2019

Relational Aesthetics is the solo exhibition of Chicago-based artist Jessica Stockholder, installed in both of the Contemporary Austin's venues. The show includes an indoor exhibition at Jones Center and an outdoor sculpture at Laguna Gloria sculpture park. Stockholder is known for blending painting, sculpture, and site through color and form, turning everyday objects into space-transforming pieces that challenge an audience's ways of seeing. *Relational Aesthetics* features a brilliantly colored, site-specific architectural installation, alongside recently completed sculptures created from electronic scraps. She also invited leading Haida art painter Robert Davidson to exhibit within her installation. The colorist's show will surely touch on diverse styles of abstract expressionism, color field painting, and minimalism.


SIRIO MAGNABOSCO

Big Bambú: This Thing Called Life
The Museum of Fine Arts, Houston
1001 Bissonnet
Houston

Through September 3, 2018

Big Bambú: This Thing Called Life is a monumental bamboo installation by Mike and Doug Starn that spans the floor of Cullinan Hall and the balcony of Upper Brown Pavilion in the Mies van der Rohe–designed galleries at the Museum of Fine Arts, Houston. The installation mimics the form of a cresting wave and is accompanied by large-format prints of previous *Big Bambú* iterations. This is the first indoor version of the series and visitors are invited to enter the structure via a bridge and experience "the architecture of nature," as the Starn brothers call it. The duo is known for their conceptual photographs and their public bamboo installations, which began with their 2010 commission at the Metropolitan Museum of Art.

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City, City Everywhere

The Continuous City:
Fourteen Essays on Architecture and Urbanization
Lars Lerup
Park Books, 2017
$39.00



COURTESY PARK BOOKS

The cover of Lars Lerup's *Continuous City* features René Magritte's painting *Panorama Populaire* (1926), with buildings, a forest, and a seashore stacked atop each other.

Lars Lerup has published a new book. *The Continuous City* (Park Books, 2017) presents the Swedish-American designer and writer's latest thoughts on architecture, cities, and the people who inhabit them by way of 14 disparate but interconnected essays. The handsome volume is bound in a matte cover featuring René Magritte's painting *Panorama Populaire* (1926), which depicts buildings, a forest, and a seashore stacked atop each other, the ground plane of each upper level sawed away to reveal the strata beneath. The picture turns out to be a perfect signpost for what lies within, as its suggestion that these (and other) seemingly discrete realms are inextricably linked is precisely the crux of Lerup's otherwise episodic inquiry.

Lerup's two previous titles—*One Million Acres & No Zoning* (Architectural Association Publications, 2011) and *After the City* (MIT Press, 2001)—took on the postindustrial car city as a subject of serious study. They look beyond the European-oriented urbanist's dismissal of such environments as merely "sprawl" to find and examine the often surreal juxtapositions embedded within that type of built fabric. Both books show Lerup's fascination with Houston, where he first moved in 1993 from Berkeley, California, to take the job of dean at the Rice School of Architecture, a position he held until 2009. He is currently a professor there. Houston was to architecture in the 1980s what Dubai is to the field today—a petro-capital spending big money on ambitious development projects without paying much attention to the rules. Lerup's championing of this subject matter in architectural academia (his has been one voice—there are others) has done much to save the discipline from self-inflicted obsolescence, an observation driven home by the fact that approximately 80 percent of currently existing global urban environments are designed and constructed around the automobile. His leadership also supported and propelled other academics who have done important work in this area, including Rice colleague Albert Pope, whose seminal volume, *Ladders* (Princeton Architectural Press, 1996), laid the groundwork for serious consideration of the postwar American city, and former Rice assistant professor Keith Krumwiede, whose latest book, *Atlas of Another America: An Architectural Fiction* (Park Books, 2016), explores speculative futures of suburbia.

Another of Lerup's preoccupations is subjectivity. In the 1970s, during a sabbatical from UC Berkeley, Peter Eisenman invited him to the Institute for Architecture and Urban Studies in New York (Rem Koolhaas was writing *Delirious New York* just down the hall). Lerup's design work exhibits ties to that lineage of formal exploration and defamiliarization, but where Eisenman seeks to liberate architecture from the user, Lerup's ambition has been to explore the problems of the urban inhabitant. For example, he did several years of research with the National Bureau of Standards in Washington, D.C., on how people in nursing homes panic and escape buildings that are on fire. The result was a series of publications compiled into *Learning from Fire: A Fire Protection Primer for Architects*, composed of a series of hand-drawn comic strips that depict nurses and patients reacting to infernos.

In *Continuous City*, Lerup says hello to the Anthropocene. Quoting from the introduction: "The Anthropocene brings with it the realization that we live in a new (catastrophic) geological era of our own making. This is no longer a squabble between liberty or community, but a need to avert disaster. Lacking easy answers, we now seek opportunities for change, skirting the dark side of the new city, which the earlier books dealt with, to find in architecture a device for positive movement forward." He argues that conceptual distinctions between urban and suburban, or urban and rural, are no longer productive. "The urban," he writes, "is inescapable. The city is everywhere."

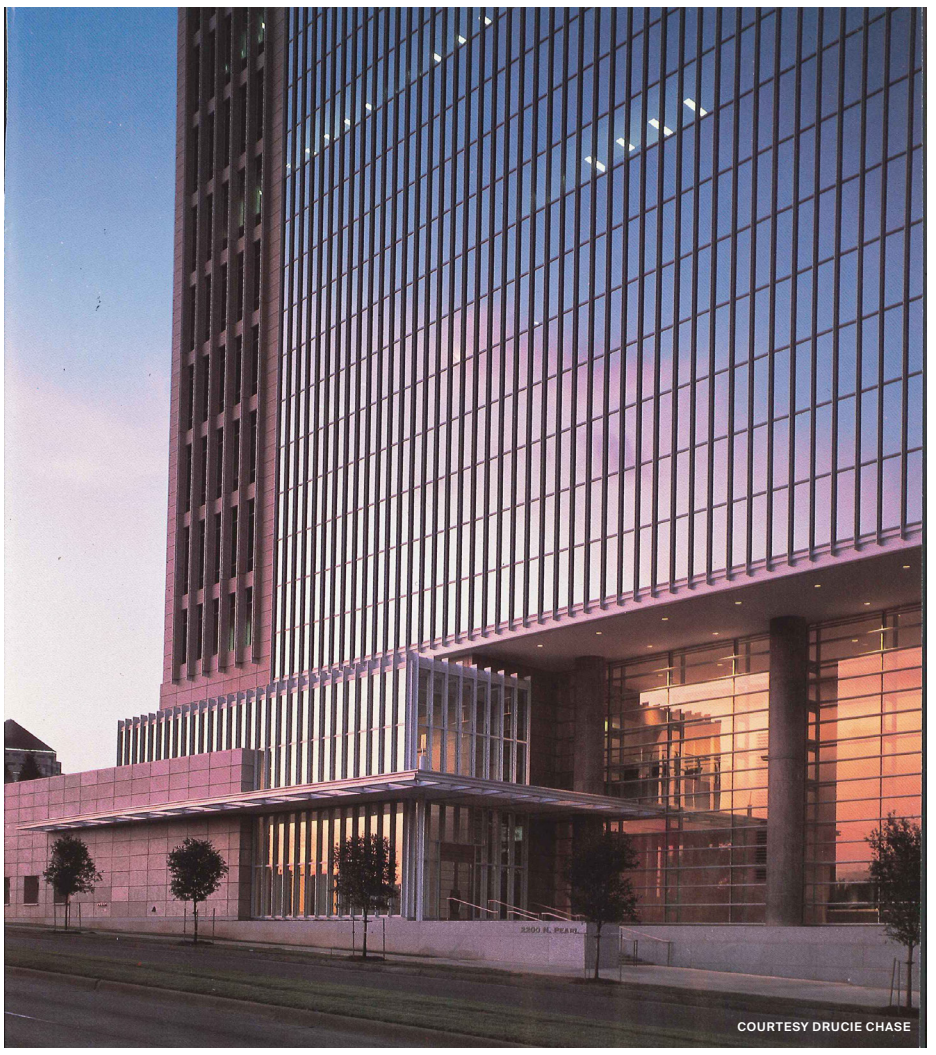
Lerup's hunt for constructive examples takes the reader on a journey that spans the globe and delves into the history of human settlement. He establishes links between the plan of Teotihuacán and OMA's Seattle library, investigates the coexistence of natural and built environments in the work of Roberto Burle Marx, considers the synergies of Herzog & de Meuron's Miami garage, and worries the uneasy relationship between users' topological experience and the planner's topographic approach. His findings are as revelatory as they are perturbing. If humankind is to survive the era of global warming (the Anthropocene's most threatening result), there remains much more work to be done.

Aaron Seward is editor of *Texas Architect* magazine and an *AN* contributing editor.

Chasing Perfection

Chasing Perfection:
The Work and Life of Architect John S. Chase
Houston Public Library
Julia Ideson Building

Chasing Perfection:
The Legacy of Architect John S. Chase
The African American Library at the Gregory School



This Federal Reserve building in Dallas was realized as a joint partnership with KPF. Many of Chase's projects in the later part of his career were joint partnerships with other offices. He also worked with Paul Rudolph on an administration building at Tuskegee Institute.



John S. Chase

John Saunders Chase, FAIA (1925–2012) was a Houston architect who realized a large body of work in the city, throughout the state of Texas, and around the United States. At its peak, his office had nearly fifty employees in four cities: Houston, Dallas, Austin, and Washington, D.C. Chase, an African American, achieved many historic firsts during his career. His life, as seen via his personal and professional achievements and the work of younger architects who passed through his office, was on display this spring in *Chasing Perfection*, a two-part exhibit produced by the Houston Public Library.

Born in Maryland, John Chase moved to Austin in the late 1940s after receiving initial architectural training at the Hampton Institute in Virginia and serving in the Army during World War II. He applied to graduate school at the University of Texas at Austin (UT Austin) School of Architecture after the *Sweatt v. Painter* Supreme Court decision in 1950 that fought the "separate but equal" policy of racial segregation in college education. After graduation, no firm would hire him, so Chase established his own practice in Houston, and in 1956, he became the first African American architect to be licensed in the state. Throughout his career, he designed churches, homes, union halls, libraries, high schools, fire stations, and institutional buildings, including much of the campus of Texas Southern University. He was a founding member of the National Organization of Minority Architects (NOMA) in 1970 and received his AIA Fellowship award in 1977. In 1980, Chase was selected by President Jimmy Carter to join the Commission of Fine Arts and was part of that committee during the contentious process of realizing Maya Lin's Vietnam Veteran's Memorial on the National Mall. He was the first African American to serve on this commission. During the 1980s, his office was part of a consortium of local architects responsible for the design of the George R. Brown Convention Center in Houston. Chase is survived by his wife, Drucie, and their three adult children.

According to Danielle Wilson, the exhibition's curator, discussions about the show began in 2009 with Chase's participation. At that time, his architectural archive had been donated to the Houston Metropolitan Research Center's Architectural Archives, and his personal archive was in the process of being donated to the African American Library at the Gregory School. Wilson's father grew up next to the Chases in Houston, so she was familiar with the family, and immediately knew that she wanted to work on a show about the architect when she joined the staff of the Gregory School. After Chase passed away, it took a number of years to assemble the parts for this successful exhibition.

On the second floor of the Julia Ideson Building in downtown Houston, letters, photographs, and artifacts were installed alongside photographs of built work, architectural drawings, and hand-drawn renderings. Seen together, Chase's life and work could be understood through the staging of these personal and professional artifacts, sequenced together to tell a holistic life story. Wilson said, "When I think about architects and their work, everything goes all together. I think it's great when you have that context of both. I think it makes works more powerful." The room also included a large-scale model and drawings of the George R. Brown Convention Center mounted on a drafting table.

At the Gregory School, the work of four architects who worked with Chase is on display and demonstrates the effect his mentorship had on a subsequent generation of African American architects. "When I was focusing on his work and life, it was hard to tell a comprehensive narrative without talking about these men," Wilson said. Daniel Bankhead, AIA; Darrell Fitzgerald, FAIA; James Harrison; and Wilbert Taylor all worked at various points with Chase, and went on to become professional and community leaders themselves. In February, the library hosted a discussion between these architects, in addition to a conversation with Mrs. Chase and her children.

Chasing Perfection offered a powerful portrait of a 20th-century American architect through Chase's life, work, and impact on the profession. Wall text for the exhibit was excerpted from a manuscript titled *The Life and Work of Architect John Saunders Chase: You Can Do More from the Inside,* by architectural historian Dr. Wesley Henderson with Andrea Lazar. Both worked for two years to conduct interviews with family members, colleagues, and former employees of John Chase. Henderson and Lazar believe that Chase's life story deserves to be more widely known since very few biographies of successful black architects have been published. They were very pleased to be able to contribute to the show at the Houston Public Library.

Chase's legacy continues to be explored and celebrated. In February, UT Austin announced that it had purchased one of Chase's early buildings in east Austin to renovate and use as a community engagement center. While *Chasing Perfection* closed in early June, Wilson says there are already discussions underway about touring the show at other institutions. She also said a brochure from Chase's firm and drawing supplies from his office were recently acquired by the National Museum of African American History and Culture (NMAAHC) in Washington, D.C. Wilson added that she and Mrs. Chase are "going to go through his personal archives to see what materials might go to the NMAAHC, and the rest will be housed at the African American Library at the Gregory School."

Chase is an important figure among the talented architects who practiced in Houston during the second half of the 20th century. His career opened the door for many architects of color to enter the profession, and he serves as an example of the countless ways in which an architect can effect positive change in the world.

Jack Murphy is a Master of Architecture candidate at Rice University and a regular contributor to *The Architect's Newspaper*.

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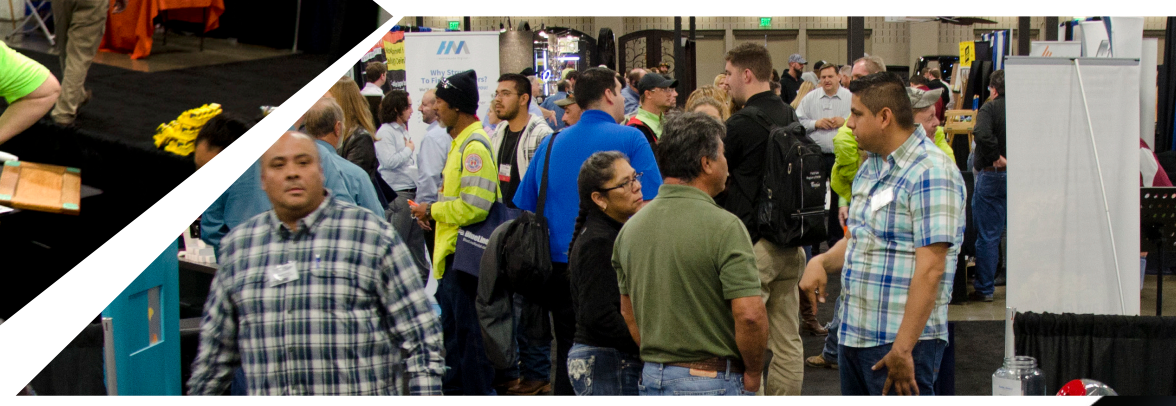

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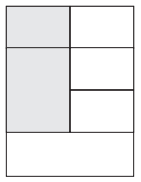

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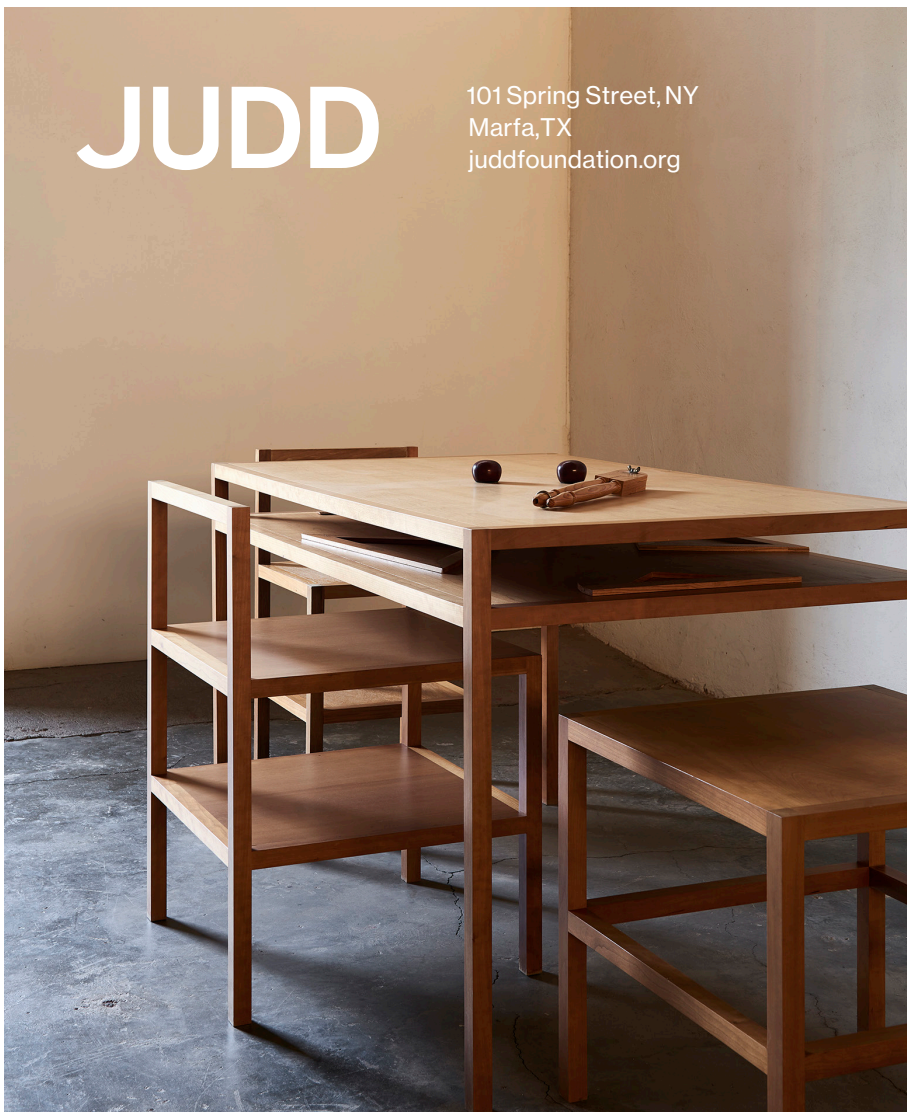

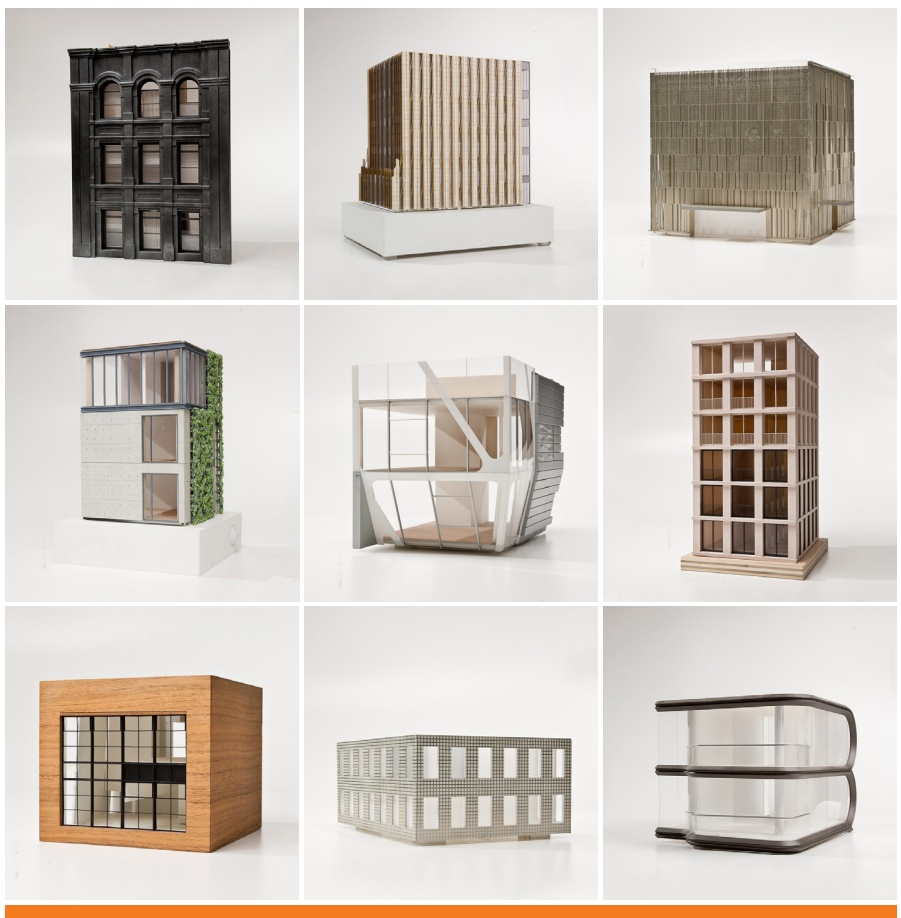

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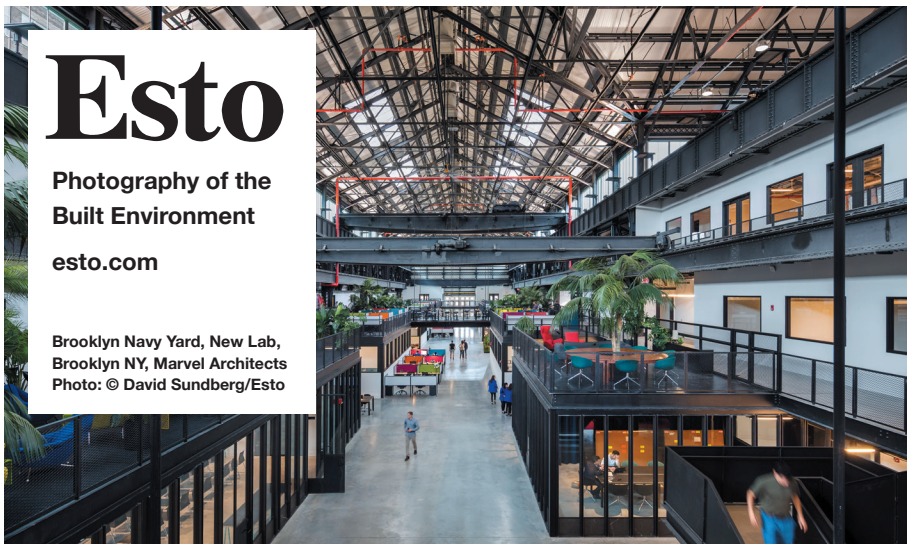

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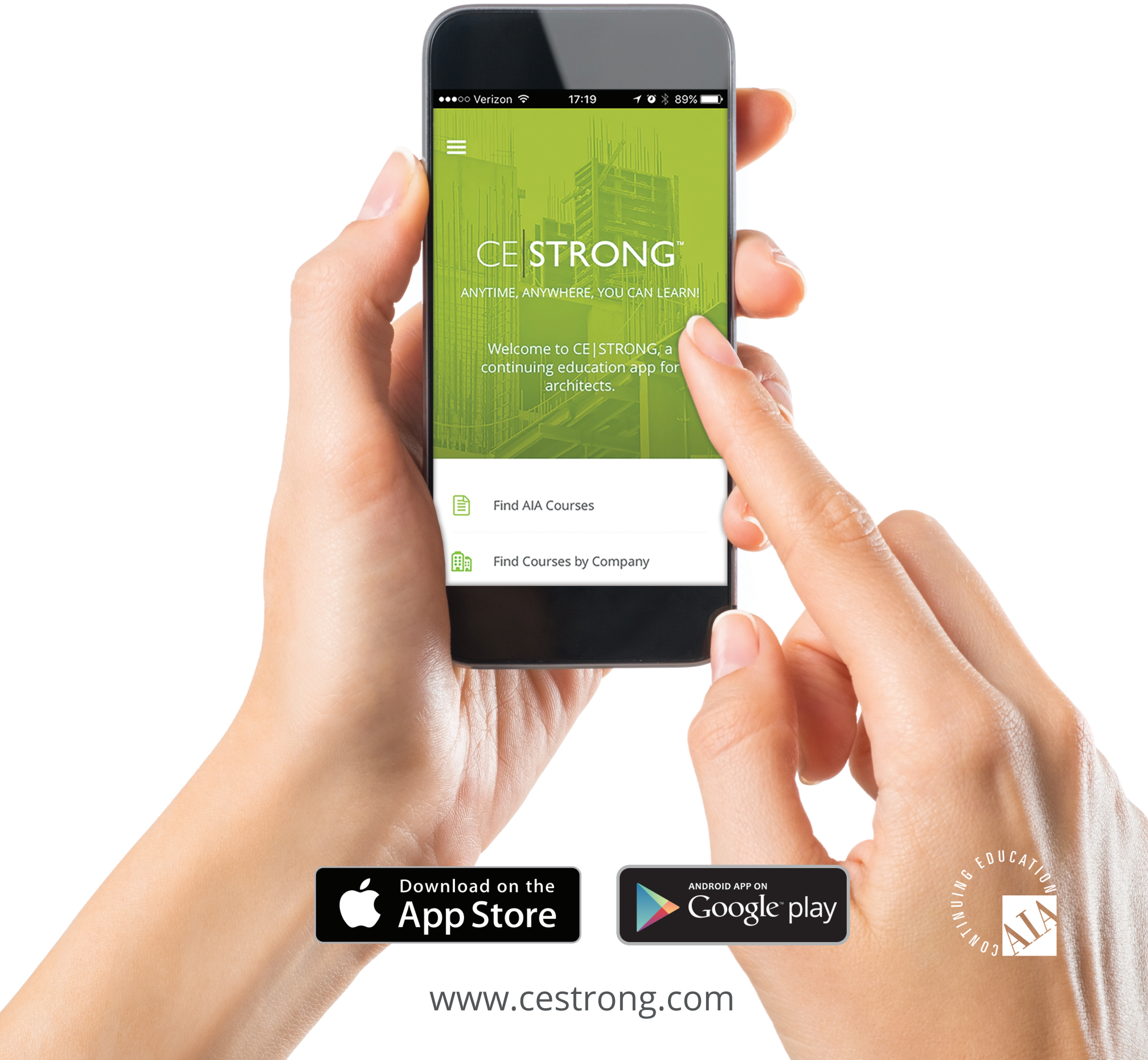

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THE ARCHITECT'S NEWSPAPER JULY & AUGUST 2018

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Text by **Aaron Seward**
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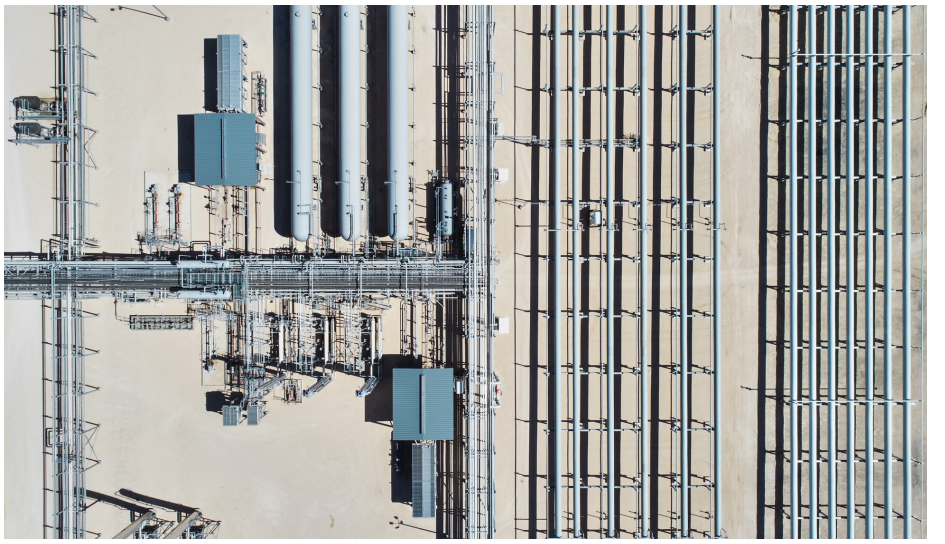







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