The Architect's Newspaper

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67 Highlights

Off-Ramping It

A retooling of an aging Marcel Breuer showstopper takes the high road.



In the late 1960s, buildings by Marcel Breuer were being constructed up and down America's East Coast like billboards for a Brutalist future. These hulking concrete structures, akin to dispersed relations, were untethered but for the interstate highway. Now, a particularly zealous archiphile need only hop on I-95 to get a fill of Breuer, be it IBM's "Big Blue" corporate office in Boca Raton, the Housing and Urban Development headquarters in Washington, D.C., the Whitney Museum of American Art in Manhattan, or the Armstrong Rubber Company headquarters in

Of this brutish bunch, the latter, known as the Pirelli Building, is the most candid about its relation to the highway: Its stacked massing, completely open at the midriff, encourages rubbernecking. This formal daring may explain why, in the estimation of local architect-developer Bruce Redman Becker, the building is "one of the best-known works of midcentury modern architecture in New England."

Becker is in the final phases of redeveloping the former office complex into a boutique destination. When it opens at the end of 2021, the 110,000-square-foot Hotel Marcel will in all likelihood be the country's first **continued on page 7**

Hashim Sarkis discusses what to expect from the 17th Venice Architecture Biennale.

ARCHITECTURAL AMBASSADORS

An embassy building boom reveals a turn away from symbolism to



Slip of the Pen

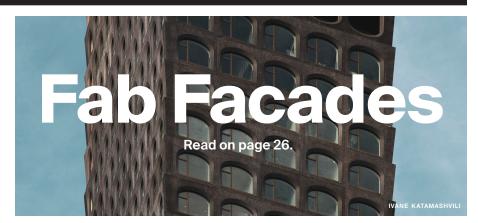
A new book about architecture and capitalism inadvertently points up the problem with today's more credulous mode of criticism.



There's a specter haunting the Left critique of architecture: the specter of boredom. For decades, a cavalcade of scholarly stars-Peggy Deamer, Mike Davis, Fredric Jameson, Manfredo Tafuri, pick your fighter—has turned in thrilling critical performances on Marxist themes, giving us essential and often startling insights into the built environment. But there's a problem, one particularly evident among a rising generation of architectural thinkers as it grapples valiantly with the world that 21st-century capital hath wrought. It's a sort of Wittgensteinian dilemma: If capitalism is now "all that is the case," what particular facts can be deduced about this condition that aren't merely restatements of the overall premise? That architecture is always and already an instrument of power, economic and otherwise, is a point that certainly bears repeating. Yet just as capital has become increasingly pervasive in shaping buildings and cities, criticism (both academic and, increasingly, journalistic) has resorted more and more to different versions of the same rote response: "It's the exploitative system of social relations, stupid.'

Onto this intellectual merry-go-round comes *Icebergs, Zombies, and the Ultra Thin: Architecture and Capitalism in the Twenty-First Century* (Princeton Architectural Press, 2021). The book, by designer and University of British Columbia professor Matthew Soules, is a whirlwind tour of the outrageous physical distortions, urban warp zones, and typological mutants wreaked upon the global landscape by the international finance industry. **continued on page 72**

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The Architect's Newspaper

Editor's Note Masthead Info

A World of Inquiry



Kenyan photographer Osborne Macharia's work will feature at this year's Architecture Biennale.

When, in September of last year, we set AN's 2021 editorial agenda, we were hoping for a few things to materialize—primarily, the speedy deployment of vaccines from which everything would flow. At the time we were only just beginning to hear about trials—the names Moderna and Pfizer had little to none of the cultural currency they now do—but they got us looking ahead. Perhaps travel would return by the start of the year, we thought. Maybe industry events would ramp up again in the late winter. Come June, we'd probably find ourselves in Philadelphia for the 2021 AIA National Convention.

Well, we got the biggest item on our list. By late April, more than half of eligible Americans (the lowest age threshold being 16) had been at least partially vaccinated. Earlier in the month, the AIA, after holding out for as long as possible, announced the production would be digital-only; it also tweaked the format, with four nonconsecutive days sprinkled throughout the summer. I don't wish to exaggerate the importance of the national conference to my personal life, but simply to set the stakes for this issue, which would have gone to the colloquy.

To that end, we had earmarked space for a "city focus" that would have foregrounded developments in and around Philadelphia (much the same way that the January 2021 issue of the paper centered on Washington, D.C.). Foreseeing the AIA's change of venue, we pulled back on some features and slotted in more news stories. I spoke to the literary editor-turned-design writer-turned Pennsylvania state senator Niki Saval (page 12) about his improbable resume and the social, cultural, and, yes, architectural issues currently preoccupying him. He makes connections between the everyday concerns of his constituents and macro problems like climate change. Pulling from the same activist playbook, a new generation of housing advocates are working to shift policy conversations away from vague affordability claims to entitlements (page 10). This lot, which includes researchers from the University of Pennsylvania's Socio-Spatial Climate Collaborative, would see the retrofitting of the

country's existing stock, as well as the construction of millions upon millions of new public housing units.

These sorts of big ideas are exactly what visitors to the 17th Venice Architecture Biennale can expect to see-if they manage to travel to La Serenissima, that is. As of late April, the State Department had yet to lift Italy from its travel advisory list, so it's unclear just how Americans will find their way to the city. The Biennale has insisted it is open to all guests, but some national pavilions have exerted more caution, electing to skip the Vernissage or opening week ceremonies. Is the Biennale really the Biennale without the Vernissage? I didn't put the question to curator Hashim Sarkis when we spoke, because it seemed slightly frivolous. Our conversation (page 20) darts from one topic to the next, mirroring the loose thematic structure of Sarkis's display, which spans improbable scales to ask questions about subjectivity, collectivity, and sociality.

This issue's other feature is more grounded on terra firma. Observing the boom in embassy—technically, *chancery*—building of the past decade, writer A.J. Artemel explores the architectural commonalities that tie together projects in Beirut and Beijing, Guadalajara and N'Djamena. Whereas in a bygone age, transparent glass walls could pass for a durable metaphor for democratic values, today's rubrics of security and sustainability are harder to render in architectural form. (Appealing architectural form, anyway.)

I could shoehorn several more stories into this capsule, ironically globally minded, overview. But I will restrict myself to just one more—Ian Volner's savvy critique of criticism's current proclivities (page 68). He uses a book about architecture and capitalism, which concerns itself with the coursing of capital through splashy developments in downtown Miami to Chinese ghost cities, as a springboard for a lithe discussion on agency, design values, and more. We're a long way from Philadelphia. Samuel Medina

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Corrections

The Oregon State University College of Forestry case study on pages 24 and 25 of the Winter 2021 Mass Timber issue incorrectly stated that Portland, Oregon-based firm Equilibrium Engineers worked on the project. It should have said that Vancouver, Canada-based Equilibrium Consulting worked on the project.

The article about Neumann Monson Architects' 111 East Grand building in the April issue contained the following errors. The building is not the first DLT structure in North America; it is the first DLT office structure in North America. StructureCraft should have been listed as the engineer of record for the timber superstructure, and Raker Rhodes Engineering should have been listed as the base building engineer.





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4 In Case You Missed It...

We corralled the top architecture and design stories buzzing about the internet.

Safdie Architects reveals a major Crystal Bridges Museum of American Art expansion

The Crystal Bridges Museum of American Art in northwestern Arkansas has revealed that the core team behind the design of the landmark museum—Safdie Architects and Buro Happold—will return for a major expansion that will add nearly 100,000 square feet of new space to the 200,000-square-foot arts and culture hub.

Atelier Van Lieshout is designing a neighborhood for artists in Rotter-dam

Dutch artist and designer Joep van Lieshout of Atelier Van Lieshout is known for his provocative sculptures and anticapitalist views, which frequently show up in his work. Now Lieshout has partnered with developer RED Company to design a Brutalist-inspired neighborhood in Rotterdam.

RIOS to lead \$1.25 billion revamp of L.A.'s landmark Television City

Hackman Capital Partners, the owner of the CBS Television City studio complex in the Fairfax District, has announced that the 25-acre campus—a city-designated Historic-Cultural Monument since 2018—will be the object of a major expansion and modernization project headed by the L.A.-based multidisciplinary design practice RIOS.

Brooklyn's cove-side towers are still moving forward, get a redesign

Two Trees Management is moving ahead with its plans for a pair of Bjarke Ingels Group and James Corner Field Operations-designed towers at the edge of Williamsburg, Brooklyn. Two Trees is attempting to get permission to break ground before the end of Mayor Bill de Blasio's final term in office later this year.

Lucas Museum opening delayed to 2023 due to COVID-19 slowdowns

MAD Architects and Stantec's swooping Lucas Museum of Narrative Art was supposed to be a 2022 triumph. After relocating from Chicago to Los Angeles in 2016 because of on-theground pushback, the museum was on track to hit major construction milestones later this year. Now the opening has been postponed to 2023 owing to pandemic-related delays.

Work on Snøhetta's first-in-theworld tunnel for ships will soon begin in Norway

The world's first tunnel for large ships has been approved and will soon begin looking for contractors. Construction on the Snøhetta-designed tunnel, which will punch a mile-long hole through Norway's Stad peninsula, is expected to begin in 2022. The 120-foot-tall, 87-foot-wide portal will allow ships to avoid a particularly exposed area along the coast.

Demolition of Paul Rudolph's Delray Beach home takes city officials by surprise

A 1955 Paul Rudolph-designed home in Delray Beach, Florida, was listed on the city's register of historic places in 2005. Then, on March 12, news broke that the current residents had demolished the home last summer (ostensibly to rebuild it to Rudolph's specifications), which came as a shock to the Paul Rudolph Heritage Foundation and the city.

Centuries-old oaks are coming down for the Notre Dame restoration

The rebuilding of Paris's Notre-Dame Cathedral is continuing, but new conservation concerns are being raised over the ancient oak trees, as many as 1,500 of them, needed to build a replica of Eugène Viollet-le-Duc's 300-foot-tall spire and the cathedral's roof.

The plan to charge drivers entering Manhattan's central business district was hailed as a major step in repairing New York City's beleaguered transit system. Although the U.S. Department of Transportation has now allowed the program to progress to a review process, drivers into the city won't need to pull out their wallets just yet.

COURTESY TWO TREES MANAGEMEN

The plan to charge drivers entering Man-

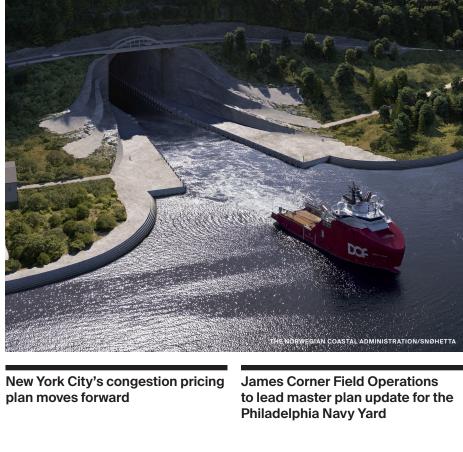
James Corner Field Operations has been selected to lead an update and expansion of the Philadelphia Navy Yard master plan. The initial plan for the 1,200-acre, mixed-use campus, located at a centuries-old naval shipyard in South Philadelphia, was developed in 2004 by Robert A.M. Stern Architects.

Selldorf Architects among six shortlisted firms for National Gallery revamp in London

Selldorf Architects is the sole North American firm in the running to lead the upgrade of the Sainsbury Wing at London's National Gallery. Completed in 1991, the Venturi, Scott Brown and Associates–designed wing is a main entrance to the museum and will be subject to an expansive revamp.

Biden administration mulls resuming border wall construction

Despite slashing all new federal funding for former president Donald Trump's high-priced and ecologically harmful wall at the United States–Mexico border, the Biden administration is considering resuming construction to fill in "gaps" left behind when the project was essentially abandoned.





5 ICYMI

Letters to the Editor

Cruise liners are banned from Venice, but a new port could take years to build

Cruise ships over 40,000 tons and cargo ships are now verboten from entering the Venetian Lagoon following a years-long effort by local heritage and environmental campaigners and international conservation organizations, including UNESCO, to stop perilously large vessels from entering the waterway.

The February Architecture Billings Index (ABI) hit a whopping 53.3, the first time the metric has risen above 50 since February 2020. An

Architecture Billings Index breaks

50 for the first time early in the

pandemic

has risen above 50 since February 2020. An ABI value above 50 indicates that billings have increased, so the news suggests that demand for architectural services has emerged from its slump.

The National Building Museum reopens

Washington, D.C.'s National Building Museum is open again, with new shows (one of which can be found in the Highlights section of this issue on page 63). The museum had been closed since December 2019 to accommodate renovations and was expected to reopen in March of last year but was stymied by the pandemic.

Potential demise of Chicago's Thompson Center inches closer with proposed zoning change

Brendan Reilly, alderman of Chicago's 42nd Ward, announced a proposed rezoning ordinance that could help spur the sale of the state-owned site at 100 West Randolph Street. The State of Illinois has been considering selling the property for years.

The first virtual house NFT sells for more than \$500,000

Toronto-based artist Krista Kim has sold a virtual home, Mars House, for 288 Ether (the equivalent of \$500,000 in cryptocurrency) via the nonfungible token (NFT) marketplace SuperRare, but Argentinean 3D modeler Mateo Sanz Pedemonte claims to have created the project after Kim commissioned him to render

KOO-designed SURGE esports arena gets the go-ahead for Chicago's South Side

Chicago's city council has green-lit a 108,000-square-foot, \$30 million esports and virtual reality arena for a site along South Wabash Avenue that's close to McCormick Place, the largest convention center in North America, on Chicago's South Side.

Cambodian government blocks resort development near Angkor

PARTISANS and BDP Quadrangle propose tower for downtown Toronto

Plans to build a 187.5-acre resort complex next to Cambodia's sacred Angkor archaeological site have been rejected by the country's Ministry of Culture and Fine Arts. The \$350 million Angkor Lake of Wonder, designed by Gensler and Steelman Partners, would have risen about 1,600 feet outside the site's protected zone.

A proposed 66-story, mixed-use tower has been attracting significant attention online. The tower, 55 Yonge, which would rise in downtown Toronto's Financial District, is a collaboration between developer H&R Real Estate Investment Trust and architecture studios PARTISANS and BDP Quadrangle.

Deborah Berke Partners and Miller Boskus Lack will restore the Fine Arts Center at the University of Arkansas

The University of Arkansas has announced that Deborah Berke Partners and local firm Miller Boskus Lack will head a \$38 million refresh of the Fine Arts Center, an International Style building designed by Edward Durell Stone for the school's Fayetteville campus.

Millions in repairs required for Seattle's historic drawbridges

As the city faces a \$72 million bill to rehabilitate its West Seattle Bridge, transportation officials in Seattle have revealed that three of the city's centenarian bascule bridges, along with a newer movable bridge, also require urgent maintenance costing \$7.8 million.

Indecent Exposure

This article [on Berlin's Humboldt Forum] raised my curiosity, as I have been following this project for the past few years. As a long-time resident of Berlin (1959–1973), I was vehemently opposed to its realization, which at that time, was certainly in contradiction to postwar Berlin's reputation as a center of architectural innovation. When last in Berlin, I had a chance to see the almost-completed Forum, designed by the architect Franco Stella. As Emily Pugh states in her article, three sides of the building are in the

Baroque style of the old Castle, while the eastern facade is "modern." Well, it is modern in the sense that it is a close replica of those Mussolini 1930s-era buildings found in Rome's EUR quarter. Now we have Mussolini on the Spree, strangely almost directly across the Marx/Engels statues on the opposite bank. I'm sure this never occurred to the architect.

G. Stanley Collyer, editor in chief of Competitions, on "Uncritical Reconstruction" (April 2021)

Savvy maneuvers

I am very inspired by Fala Atelier's success in using their low-tech methods of preliminary investigation so savvily (especially loved seeing David Hockney's Christopher Scott given a dog to walk in their 101 House of Cards project). As well as by their success in stuffing architecture into a project whether it was requested or not. When they come to

America—and I hope and expect they will—I'll root for them to be just as defiant and give us something just as "real" as anything their "fakeness" prepared them for in Porto.

Benjamin R. Marcus, AIA, on "From Paper to Porto: Architectural concepts inform Fala Atelier's extensive collages" (April 2021)

Eavesdrop

More Boring News

Gizmodo compiled some of the information that came out of the Boring Company's preview of its transit tunnel beneath the Las Vegas Convention Center. Initial renderings of the Elon Musk pet project showed futuristic Tron-esque autonomous vehicles capable of carrying 16 people below ground, but videos from the event showed apparently

conventional Tesla cars driving along subterranean pathways more reminiscent of the Holland Tunnel than a brave new future. The \$52 million underground system, dubbed The Loop, connects three stops in the convention center and may be open in time for the World of Concrete convention in June. Buckle up!

Read more at archpaper.com

6 Open

. . .

The Broad



Shuttered for more than a year, The Broad in downtown Los Angeles is reopening to the public on May 26 with new single-artist presentations held in the Diller Scofidio + Renfrodesigned museum's third-floor galleries and a group exhibition in the first-floor galleries. The former will include all of the 13 works by Jean-Michel Basquiat in the museum's collection, including three on view for the first time; a mini-survey of Roy Lichtenstein, with roughly half of the works on display for the first time; 10 works by Kara Walker, including three new acquisitions; and a 26-work mini-survey of Andy Warhol, featuring a major new acquisition. In the first-floor galleries will be *Invisible*

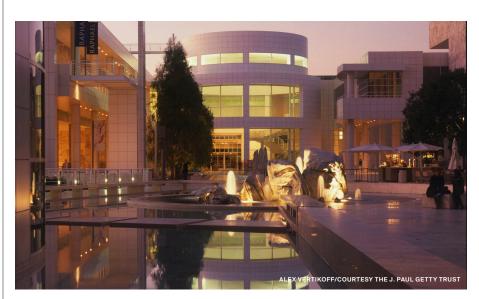
Sun, a special exhibition featuring works from The Broad's collection that "resonate with our unprecedented period of rupture and collective desire for healing and recovery," according to a press release. In the lead-up to the May 26 reopening, the museum will host two preview weekends for healthcare workers and community organizers. And worth noting: The Yayoi Kusama Infinity Mirrored Room will remain temporarily closed. Matt Hickman

221 South Grand Avenue Los Angeles

213-232-6250

Mod

The Getty Center and the Getty Villa Museum



The Getty Villa Museum in Pacific Palisades, California, home to a trove of Roman and Greek antiquities, reopened on April 21, and the Getty Museum's beloved (and, in normal times, highly trafficked) flagship hilltop campus, the Getty Center, is scheduled to reopen in late May with limited capacity and other health and safety protocols in place. When it does reopen, planned exhibitions there include Power, Justice, and Tyranny in the Middle Ages, Photo Flux: Unshuttering LA, Artists as Collectors, and Silk & Swan

Feathers: A Luxurious 18th-Century Armchair. At the Getty Villa, Mesopotamia: Civilization Begins runs through August 16. MH

1200 Getty Center Drive Los Angeles

17985 Pacific Coast Highway Pacific Palisades, California

310-440-7300

East

Glenstone



Although the main gallery at Maryland's Glenstone contemporary art museum has been open on a limited-capacity basis since April 8 for an international traveling exhibition of the works of Faith Ringgold (with the museum's idyllic grounds having reopened before that in early March), the Thomas Phifer-designed Pavilions have remained closed to the public for most of the past year save for a stretch of several months that started in early July. The museum is set to welcome more visitors again starting May 6 with a large-scale hanging neon work by Glenn Ligon, Warm Broad Glow

II, and monumental chalkboard drawings by Tacita Dean, which were installed just before the museum closed in November. Works by Cy Twombly, Lorna Simpson, Roni Horn, On Kawara, Robert Gober, and others will once again be on view as part of the May 6 reopening of the Pavilions. MH

12100 Glen Road Potomac, Maryland

301-983-5001

East

Museum of Design Atlanta



The Museum of Design Atlanta (MODA) swung back into action for "private, socially distanced, safe" visits on April 22 with a show titled *Bike to the Future*. Jointly developed by Design Museum Gent and the IMF Foundation, the exhibition showcases the latest in bicycle design from across the world. It also includes examples of forward-thinking international bike infrastructure, including 15 projects that were part of the 2019–2020 Bicycle Architecture Biennale along with local initiatives such as the Atlanta City Studio's Peachtree Shared Street, Midtown Alliance's bicycle infra-

structure projects, and the Peachtree Creek Greenway. A virtual exhibition will launch in the weeks following its physical debut. MODA also has a slew of complementary programming lined up through May and June that's sure to please design lovers, cycling enthusiasts, and proponents of people-powered transportation. MH

1315 Peachtree Street NE Atlanta

404-979-6455

Off-Ramping It

A retooling of an aging Marcel Breuer showstopper takes the high road.

continued from front page Passive House hotel, generating its own electricity, heat, and hot water through solar panel arrays backed up with batteries. Unlike the polluting cars out front, it will operate utterly independently of fossil fuels—a happy fate for a building that is no stranger to trauma.

Completed in 1970, the property fell into disrepair after Italian manufacturer Pirelli acquired Armstrong and vacated its flamboyant digs. IKEA took possession of the Pirelli Building in 2003 and, desiring more surface parking for its adjacent store, took a hacksaw to the two-story podium; to cap off the ignominy, it draped the five-story tower in a massive blue-and-yellow banner. But then in January 2020, IKEA sold the deed to Westport, Connecticut-based Becker and Becker Associates, which hoped to capitalize on the site (it is listed on the State Register of Historic Places) and Brutalism's enhanced cultural prestige.

"Brutalism celebrates the inherent qualities of material," Becker said. "And so we are also celebrating things for what they are." At the 165-room Hotel Marcel, this

means an adaptive reuse that leaves the facade's 525 precast concrete panels mostly unchanged. (A few dozen rounds of power washing removed highway exhaust while retaining some of the surface patina.) Inside, Becker and project architect Violette de La Selle sought to restore the aura of the longgone original features. For example, during their research the pair uncovered photos of the executive offices on the eighth floor, where full-height wood veneer panels once framed views of New Haven Harbor. "We refashioned them into special suites," Becker said, "using the same spline-textured acoustical ceiling system with 1-by-4 lay-in fixtures." That system now illuminates new walnut takes on the erstwhile paneling. Walnut also appears in case goods and other interior elements, for which the Becker team collaborated with Dutch East Design and the New Traditionalists.

Local maple was used to line the 525 windows, which Breuer recessed to "offer shadow in the summer when the sun is high, but let the sun penetrate in winter," explained Becker. The renovation amps up efficien-

cy, swapping out the original glass for triple-glazed windows. "It took us a year to have them approved with exactly the same profile," he recalled. "We had to send glass samples to D.C. I believe this is the first time that the National Parks Service has approved triple-glazed windows for a historic site."

"They are very particular in terms of what you can and can't do, which became one of the challenges and stimulants of the project," said de La Selle. "But we got very close to where we started from, with an updated window unit that not only has great thermal insulation but better sound—which is great, considering the neighboring highway."

That highway noise (and the wild wind off the harbor) means the void will stay empty. This suits Becker just fine: "It frames the view of the city from the highway and demonstrates the acrobatic quality of the structure. For me, it would be heresy to fill it in." With deference to Breuer, he and de La Selle have designated it an event and social space. Elsewhere, exigencies of the conversion forced their hands; they inserted light wells that pierce the 85-foot-wide floor

plates, twice as deep as is typical for hotels.

These interventions, however, are few and far between. Instead of changing how the building looks, the Hotel Marcel hopes to change how people feel about it. Brutalism's currency may rank high among architects and aesthetes, but locals have yet to warm up to the Pirelli Building's charms; in 2018, readers of Business Insider voted it Connecticut's ugliest building. "In my opinion, the biggest problem is just to invite people back into the building so they will experience it not just from the highway but through the lobby, the ground-floor restaurant," said de La Selle. "They can understand how it can be an intimate space."

And they can approach Breuer's work in new ways, turning off the highway for a coffee while their electric vehicles charge, or ditching the old ways altogether and arriving via a trio of bicycle paths that weave up and down the Eastern Seaboard in greener iterations of the old highways. The Brutalist future that was once promised is, it seems, coming into its own. Jesse Dorris









Top left: The conversion of the Pirelli Building into a boutique hotel entailed the installation of new triple-glazed windows. **Top right:** The acoustic tiles and embedded light fixtures in the reception lobby will be re-installed. **Left and above:** The original wood veneers in the top-floor executive suites are being refurbished. The project is on target to achieve historic rehabilitation certification.

Long Time Coming

The nation's capital welcomes its newest memorial, dedicated to American troops who served in World War I.



The World War I Memorial in Washington, D.C. will feature a bombastic 60-foot-long sculpture.

Washington, D.C., boasts an array of memorials, from vaunted white marble presidential *tempietti* to the more subdued Titanic Memorial and Temperance Fountain. Lying somewhere in between is the World War I Memorial, which opened in mid-April, completing a set of sites marking U.S. involvement in the last century's four major wars.

"The Great War touched almost every American family," said President Joe Biden in a video recording that was played at the opening ceremony. "For too long, that nationwide service has not been fully commemorated here in the nation's capital."

Unlike its counterparts (those honoring the fallen in World War II and the Korean and Vietnam Wars), the World War I Memorial is not situated on or along the National Mall. Rather, it is located a few blocks northeast in Pershing Park, a stone's throw from the White House. The \$42 million project entailed reconfiguring the park, originally designed by M. Paul Friedberg and home to a popular ice-skating rink.

The country already has an official National World War I Memorial, located in Kansas City, Missouri, which was completed in 1926; an accompanying museum opened in 2006. Washington, too, has an extant 1931 memorial to citizens of the district who died in the war, in addition to Pershing Park, so named for WWI General John J. Pershing. Featuring an intricate stepped landscape, the park incorporates the American Expeditionary Forces Memorial, notable for its reddish granite walls and statue of Pershing himself. Visitors can be forgiven for overlooking the memorial, however; in the decades following its opening in 1981, Pershing Park sank into disrepair.

In 2007, the last surviving U.S. veteran of World War I, Frank Buckles, expressed dismay at the lack of a dedicated memorial in Washington. His comments prompted political efforts to either establish a new WWI memorial on the National Mall or rededicate the D.C. War Memorial as the National WWI Memorial. Disputes ensued until Congress finally settled on a third option to rehabilitate Pershing Park.

Following a 2015 competition garnering more than 350 submissions, the World

War I Centennial Commission selected five finalist proposals, eventually whittling these down to "The Weight of Sacrifice" in January 2016. The proposal, designed by architect Joe Weishaar with sculptor Sabin Howard, grew into a collaboration with architects of record GWWO and the Philadelphia-based David Rubin Land Collective as landscape architect, resulting in the new memorial after years of iterative agency review and adjustment. The partnership also yielded a more empathetic approach to the site and its visitors, harmonizing the new memorial with the existing park while distinguishing programmatic elements within each.

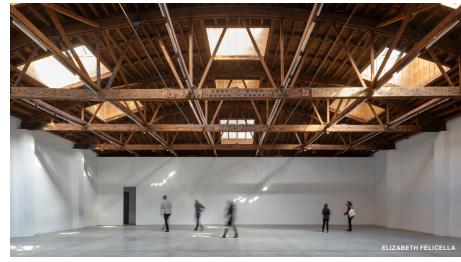
Friedberg's large water feature—an urban oasis sheltered by berms and a stone step well—was used for ice-skating in winter months following its opening, but lack of upkeep brought about its eventual deterioration and subsequent disuse. Weishaar et al. have partially filled it in with a viewing platform but retained many aspects of the original site plan. "We want to recapture some of the energy the park had when it was first completed," Weishaar told *AN* in 2019. (Friedberg nonetheless voiced opposition to the changes during the review process.)

A giant 60-foot-long frieze has taken the place of a former pump room on the site's western edge, though its dramatic statuary figures have yet to be installed. (A canvas stands in to give visitors a sense of the work, which will be completed in 2024.) Pathways have been widened for accessibility and handrails replaced. The circular footprint of Friedberg's kiosk has been retained in a belvedere with didactic information about the memorial, offering a slightly elevated outlook over the rest of the park. A depleted tree canopy has been fleshed out into a fuller plant palette, especially on the site's southern and western sides to offer a better buffer between city and memorial.

Perhaps most crucially, the team has also outlined a maintenance plan with the National Park Service, ensuring that this iteration of Pershing Park gets the necessary upkeep to endure. **Deane Madsen**

Back on the Block

With help from ARO, the vaunted Dia Art Foundation reasserts its presence in Manhattan.



Bowstring trusses offer an exhilarating contrast to a gallery at Dia Chelsea.

Two years ago, during a time of great personal difficulty, I was in Soho and remembered that Walter De Maria's The New York Earth Room, which I'd visited maybe ten vears earlier and found a sort of fun, cool lark, was also in Soho. Somehow, magically, it was open, and somehow, magically, I could just go in. This was in the before times, of course, when we didn't need timed tickets or masks, which is why, when I went in, I was hit full force with the smell—of a deep, loamy, weighty earth. It struck me so strongly and so acutely that I started sobbing. The gallery attendant, probably having seen this before, was kind enough to give me time and space. I spent ten minutes just standing next to the mound of dirt, just crying.

Earth Room has been on view since 1977, expertly and gently maintained by the Dia Art Foundation. "What distinguishes Dia is that they do long-term installations of work," architect Kim Yao of ARO told me on the phone during a discussion about her firm's recent renovation of Dia's Chelsea digs, which just opened. "You can come back under different times and lighting conditions and seasons, so that the subtlety of how you might change over time, or the ambient conditions change over time, is something that engages your senses in a very deep way." I hadn't mentioned my Soho experience to her, but her explanation suddenly tracked. Earth Room, during one period of my life, was fun. During another, it was transformative.

You might say something similar about Dia itself. Its reputation as a protector of a certain type of art—namely large, temporally unbound, conceptual, and often land-based works—rests on several significant shows Dia mounted in Soho in the 1970s and 1980s and, a little later, at its West 22nd Street outpost. But then on the eve of the millennium, the foundation underwent a transformation and mostly absconded to an old Nabisco factory in Beacon in upstate New York while maintaining a network of sites across the United States. It continued to maintain a foothold in the city, though, in a jumble of two single-story buildings and a six-story office block in the heart of Chelsea.

ARO has reworked this disconnected set into an ensemble whose continuity is signaled by the unified exteriors, where crisp, mostly homogeneous brick on the two low-lying buildings gives way to a var-

iegated pattern on the office block. Emphasizing the interiors, co-principal Adam Yarinsky likens the project to a series of surgical interventions that work in "deference to the visions of the artists." For Yao and Yarinsky, creating spaces that sublimate the institutional presence to the character and patina of the existing architecture fits the Dia ethos, one in which the art is always foregrounded.

Now reconfigured, the architecture offers mechanisms of support for whatever long-term projects Dia wants to produce. In the office annex, a crisp concrete-columned lobby leads into an event space with seating for 150 guests and up to a set of administrative offices as well as a high-ceilinged glass-walled library/media space slated for specialized programming. The one-story buildings, meanwhile, offer contrasting gallery settings: one features a glass wall, inviting daylight in, while the other sports a metal door that, when closed, renders the internal light environment completely controllable. "They're not white cubes," Yarinsky said. "They're spaces that have a kind of authentic character."

The opening show, comprising two pieces by the artist Lucy Raven, is a perfect demonstration of the flexibility built into these otherwise seemingly neutral spaces. The glass-fronted, white-walled, and skylit West Gallery supports *Ready Mix*, a video tracking the production of concrete. As for the brick-walled East Gallery, it is, even with its skylights, mostly dark except when artificially lit, which it is now by *Casters X-2 + Casters X-3*, a piece that uses two customized moving spotlights.

"The architecture, with a capital A, is quiet," Yao said. "A lot of the effort, besides what you see on the facade, is in existing materials brought back to show their best light." The original skylights were retained and updated with insulated glass; interior bowstring trusses in the glass-walled gallery add tension and exhilaration; and a cutout portal between the two galleries draws attention to their original separation.

Overall, the architecture offers a quiet and contemplative antidote to so much of the theme-park starchitecture that somehow continues to proliferate on this stretch of the West Side. Still, Dia, which for so long was relegated to smaller spaces in Soho and of course the repurposed biscuit factory in Beacon, is, as Yao said, "reasserting its presence on the block." Eva Hagberg

Private Lives, Public Spaces

Oslo Architecture Triennale announces its 2022 theme.



A neighborhood in Oslo

During a virtual launch event held the morning of April 21, Christian Pagh, an urbanist, author, and educator serving as director and chief curator of the 2022 Oslo Architecture Triennale (OAT), announced the theme for the eighth edition of the international architecture festival: Mission Neigh-

The announcement arrives as communities reemerge from the pandemic with new perspectives and reevaluated priorities. Over the next 18 months, Pagh will lead a period of research, cross-city collaboration, and partnership building. An international open call soliciting visions for specific development areas in the Norwegian capital city will also be announced this fall. This will all lead to the formal opening of OAT, which will be held September 21 to 25, 2022, with programming across several yet-to-be-announced Oslo neighborhoods over ten weeks.

As detailed to AN by Pagh, "lab activities" planned for the next year and a half include initiating research and an exhibition exploring Oslo's neighborhoods in collabora-

tion with Norway's National Museum of Art, Architecture, and Design; establishing a Nordic Network of Neighbour hood Culture in partnership with design institutions and the chief municipal architects of cities across Norway, Denmark, Sweden, and Finland; organizing forums and debates; publishing a "neighborhood thinking catalogue" that will include best practices, inspiration from across the globe, and case studies; and, as mentioned, launching a series of open calls for both neighborhood-specific Triennale exhibitions and transformative design proposals for "testbed areas" of Oslo to be explored with development part-

"This is just the beginning," Pagh told AN. "We don't have all the answers we're looking for-and we're really eager to get input from different collaborators." He explained that in addition to the initiatives structured by OAT and outlined in the theme announcement, the curatorial team is seeking "input and inspiration from the global $\,$ community of creative thinkers."

'We can learn from each other because we're similar but also have different types of living," he added about the vast potential for international collaboration within the aforementioned Nordic Network of Neighbourhood Culture. All participating parties are expected to converge this fall for a summit in Oslo.

OAT was first established in 2000 by Norske arkitekters landsforbund (the National Association of Norwegian Architects). Pagh, a founding partner and culture director of the Copenhagen-based cross-disciplinary strategic design office Urgent.Agency who now serves as a special adviser with the practice, replaces former head curator Hanna Dencik Petersson; the latter oversaw exhibitions that tackled pressing, if sometimes provocative, issues, including degrowth and migration.

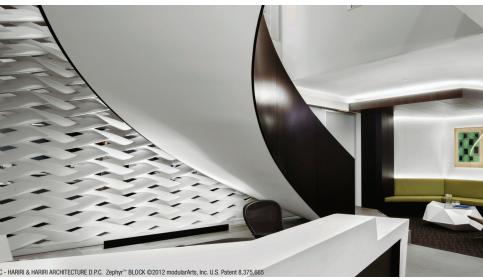
The Danish-born Pagh, a student of philosophy and modern culture who has worked with clients including BIG, the City of Copenhagen, Volkswagen, and Microsoft in his role at Urgent.Agency, is still a bit new to the neighborhood himself, you could say. Not, of course, to the explorations proposed by Mission Neighbourhood—he's built a career within the intersection of architecture, property development, urban planning, and culture—but to the city of Oslo, where the "self-made designer and urban planner," as he describes himself, moved in 2008 with his wife, the architect and artist Frida Hultberg, and their young son. Their neighborhood is Grünerløkka, a former riverfront industrial district in Oslo's East End.

It's rather fortuitous that Pagh and his family landed in Grünerløkka, a self-contained neighborhood defined by its bohemian vibe and bustling street life often drawing comparisons to Greenwich Village. Speaking to AN, Pagh invoked Jane Jacobs, beloved resident of that New York City enclave, as someone who forever changed how we think about neighborhoods.

"It's unbeatable in terms of its power of understanding what a neighborhood is all about—a totally rich, unfolding network of relations," said Pagh of Jacobs's seminal $\it The$ Death and Life of Great American Cities.

As for the pandemic, the curatorial team describes it as a shared global event that has not only prompted a "reset of life-work boundaries" but also "clarified the importance of neighborhood, as well as significant inequalities when it comes to access to neighborhood qualities." As the curatorial statement reads: "The Triennale aims to add insight, ideas and proposals for action that can help build more quality neighborhoods for the many."

'There's a feeling of dependency and a longing—a longing of being with other people physically," said Pagh. There's all this talk about the digital revolution and how everything will be online. And I think the pandemic reminded us that, yes, we can do many things online. But we still miss real life, real streets, real people." MH

















Seeing Green

Advocates of public housing are pushing for a rebrand that draws connections to the tenets of a Green New Deal.



Rendering of Sendero Verde in Harlem

Late last month, Representative Alexandria Ocasio-Cortez of New York and Senator Bernie Sanders of Vermont unveiled the Green New Deal for Public Housing Act, which aims to mend the country's crumbling public housing stock of close to one million units. Budgeted at \$172 billion, the legislation proposes retrofitting measures that would increase energy efficiency and improve health, safety, and comfort for nearly two million people.

According to Daniel Aldana Cohen, who headed research for the bill, this represents just a portion of the work that needs to be done to tackle the affordable housing crisis. He advocates the construction of 12 million new units of "social green housing" within the next decade, which would ostensibly be funded by the \$2 trillion infrastructure package the Biden administration teased back in April. (In addition to climate considerations, Ocasio-Cortez and Sanders's plan seeks to stimulate American job growth while also upholding high labor standards.) Such an undertaking would present an opportunity, Aldana Cohen said, to "make the United States work more like the best [housing] models around the world."

For Aldana Cohen, who also directs the Socio-Spatial Climate Collaborative, or (SC)2—a hub for critical social science research on the climate crisis at the University of Pennsylvania—Vienna's social housing program stands out as a particularly admirable prototype. In an (SC)2-sponsored event in mid-April, he invited the former deputy director of the Vienna Housing Fund to discuss the progressive agenda that has surely contributed to the city's rank as the most livable in the world. There, 77 percent

of housing is rental, and 60 percent of all residents live in social housing. Public procurement is a boon for the architecture, a rich interlace of imaginative forms, pleasant colors, and patches of greenery. Made possible by generous subsidies, active government planning, and strong public influence on the private sector, these housing blocks show what state-sponsored design competitions can yield when they prioritize social inclusion.

Something akin to this model is not out of the grasp of the United States. A related event hosted by (SC)2 and the Pratt Institute in New York had only to look uptown to find a Viennese analog. Located in the Bronx's Melrose Commons neighborhood, Via Verde has 222 units of low- and middle-income housing along with accessible green roofs, a vegetable garden, and community spaces, including a shared courtvard. Developed by the Phipps Houses Group and Jonathan Rose Companies, and designed by New York-based Dattner Architects and the global studio Grimshaw Architects, the LEED Gold-certified building is the result of a 2006 competition cosponsored by AIA New York and the New York City Department of Housing Preservation and Development, and organized by an independent interdisciplinary committee. According to Karen Kubey, a visiting professor at Pratt who was involved in orchestrating the competition, an ethical procurement process opened the door for architects from around the world to submit truly inventive designs. "We wanted to make sure we were not exploiting labor," said Kubey, "so compensating designers for their work was critical. Too often firms spend thousands of dollars on designs that will never be used." A robust federal grant program, she noted, would make more competitions like this possible, creating quality green social housing at scale.

Aldana Cohen suggests that the embrace of the term "green social housing" among advocates, policy makers, and designers alike signals a shift in thinking. He defines public housing as "mixed-use and mixed-income housing that is integrated within the fabric of communities across whole urban and rural regions." The label also indicates the inextricable link between the housing and climate crises: Home energy use contributes nearly one-sixth of the country's heat-trapping greenhouse gas emissions.

Contemporary projects in Europe such as a Stirling Prize-winning Norwich council estate, a Passivhaus development by Mikhail Riches, and the work of Anne Lacaton and Jean-Philippe Vassal, the Pritzker Prize's most recent recipients, for instance—provide inspiring examples of what green social housing could be in the United States. Sendero Verde, a sequel of sorts to Via Verde also spearheaded by Jonathan Rose Companies, promises to bring that European sensibility to East Harlem; when completed, it will be the largest Passive House-certified development in the country. But as Aldana Cohen points out, it will take a lot more than designing beautiful buildings to create change. "If architects really want agency, they will have to get in the trenches and join with people in other walks of life," he said. "Organizing makes a huge difference." Alex Klimoski

Guiding Spirit

Frank Gehry's transformation of the Philadelphia Museum of Art takes its cues from features of the existing Greek Revival building.





Top: The Vaulted Walkway reopened to the public in 2019. Bottom: The revamped North Entrance

The Philadelphia Museum of Art is set to unveil an exhaustive modernization and reimagining of its historic 1928 main building. Led by Frank Gehry, the effort has yielded a total of 90,000 square feet of new exhibition and event space within the stair-famous museum at the foot of the Benjamin Franklin Parkway. It also marks the conclusion of a painstaking four-year construction period prefigured by years of design and planning approvals.

Those expecting any of the Los Angeles architect's signature formal hijinks may be disappointed, however. Aside from a staircase or two, a sense of continuity pervades the so-called Core Project.

"The value of Frank Gehry's brilliant plan for the renewal and improvement of this great building will be clear for everyone to see and appreciate," said Timothy Rub, the George D. Widener Director and chief executive officer of the Philadelphia Museum of Art, in a statement. "It both honors the past, respecting the character of this great building, and at the same time offers a compelling vision of the future."

As noted by the museum, Gehry Partners was "determined to honor the building's original architectural language and materials," including the Minnesota quarry-sourced Kasota limestone used in the construction of the sprawling Greek Revival building 93-odd years ago. The museum's original architects were Zantzinger, Borie & Medary, a major Philadelphia firm during the first half of the 20th century,

along with Gilded Age giant Horace Trumbauer and his chief designer, Julian Abele, who was the first Black architect to graduate from the University of Pennsylvania's Department of Architecture (now the Stuart Weitzman School of Design) and was credited for many of the landmark structure's signature classical flourishes.

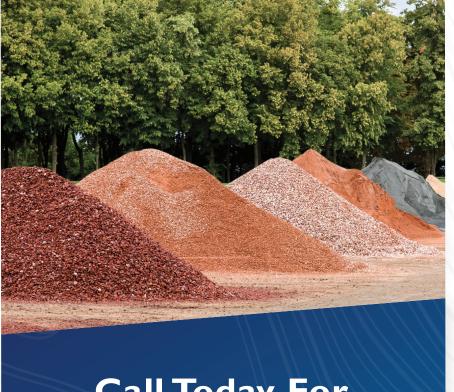
Said Gehry, who turned 92 in March: "The goal in all of our work at the Philadelphia Museum of Art has been to let the museum guide our hand. The brilliant architects who came before us created a strong and intelligent design that we have tried to respect and in some cases accentuate. Our overarching goal has been to create spaces for art and for people."

The \$33 million Core Project focused on upgrading the museum's aging infrastructure, improving accessibility, and creating new spaces within the footprint of the existing main building. It is the first in a multiphase Facilities Master Plan to be completed; future phases will entail, among other things, construction of a new auditorium beneath the Toll Terrace, expanding the museum's educational facilities, and transforming the attic of the museum's main pavilion into a multifaceted public space.

The Core Project will open on May 7.
The Philadelphia Museum of Art is still very much operating in pandemic mode with a timed-ticketing entry system, mask requirements, visitor temperature checks, social distancing guidelines, and other health and safety measures in place. MH



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Villanova Takes Center Stage (Literally)

A university famous for sports expands the playing field with a new performing arts hub.

Villanova University, an Augustinian private research university situated in the heart of the Philadelphia Main Line, is best known for its prowess on the field—or, more precisely, on the basketball court. Meanwhile, the school's prowess on the stage and in the rehearsal room, while strong, has been historically overshadowed by its Division I basketball team.

Villanova's creative community, however, can now say that it scored big with the new \$60 million John and Joan Mullen Center for the Performing Arts. Breaking ground in January 2018 at a site previously populated by a surface parking lot, the 85,000-square-foot campus cultural hub featuring myriad performing and learning spaces was completed earlier this year well ahead of the fall/winter performance season. (The Mullen Center, as of this writing, is closed to the public, owing to the COVID-19 pandemic.)

The completion of the Mullen Center—designed in collaboration between New York City-based Robert A.M. Stern Architects (RAMSA) and multidisciplinary Philadelphia firm Voith and Mactavish Architects (VMA), which served as architect of record and designer of the building's trinity of theater ven-

ues—concluded a series of capital projects that kicked off, naturally, with an athletic facility. In 2017, the university commenced a \$65 million face-lift led by EwingCole at the beloved but aging Finneran Pavilion, home to the Wildcats basketball teams.

Aside from the expansive renovation of Finneran Pavilion and the revamp of a popular recreational field, the remainder of the campus transformation has largely focused on an area opposite the main campus along busy Route 30 East, or Lancaster Avenue. The Commons, a six-building cluster of residential halls and student amenities, also designed by RAMSA and VMA, debuted in August 2019. With athletics and housing accounted for-and a new Lancaster Avenuespanning pedestrian bridge linking the main campus with the Commons—the completion of the Mullen Center served as both a dramatic finale and a demonstration of Villanova's commitment to fostering the arts.

"To be part of a building project that does so much for an educational institution is incredibly meaningful," said Daniela Holt Voith, founding principal of VMA, noting that Villanova's decision to invest in a new performing arts center, instead of focusing wholly on sports facilities, is evidence of a

university recalibrating its priorities to better accommodate a diverse student body.

"It's so important to recognize that buildings like this don't happen without passionate leadership," Voith said. "What a transformative moment it is for an institution like Villanova to now have a flagship building that's probably the best theater on the Main Line."

The performing arts at Villanova are no longer relegated to the bench, so to speak.

Like the Commons, the masonry panelclad Mullen Center offers a contemporary take on the Collegiate Gothic style that defines and dominates Villanova's leafy Radnor Township campus, where the most iconic—and tallest—structures are the dual Gothic Revival spires of an 1887 Roman Catholic church. (The Mullen Center subtly, artfully incorporates a cross, a feature of all Villanova buildings, into its facade.)

"It's really a pretty spare aesthetic,"
Voith noted of the "Villanova Gothic" style.
"It's not nearly as exuberant as Cope and
Stewardson's Collegiate Gothic at the University of Pennsylvania or even the predecessor to that, which was their work done at
Bryn Mawr College."

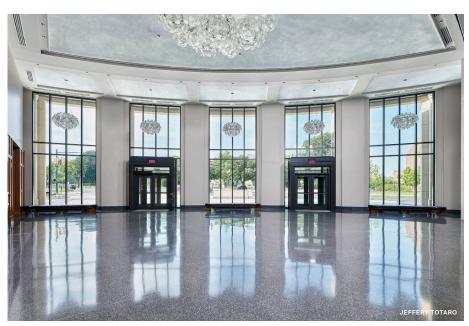
Taking an all-under-one-roof approach

pioneered by campus arts hubs like Wallace K. Harrison's (soon-to-be-revamped) Hopkins Center at Dartmouth College, the Mullen Center includes a 200-seat black-box theater and the 75-seat Performance Lab along with classrooms, rehearsal studios, and support spaces spread throughout its upper floors. The building's signature social space is a stately, sinuous shared lobby illuminated by full-height windows and, at night, custom chandeliers. As for the center's largest venue, a 400-seat proscenium theater, Voith emphasized how "incredibly intimate it is," adding that "the curved balconies help with that, but they're also a structural feat to carry off—they're both curving and sloping."

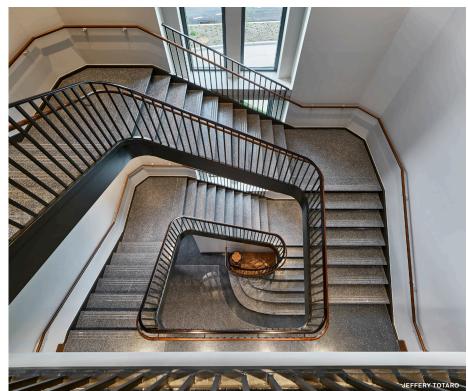
While the hottest seats on this Big East campus likely remain the courtside ones, the Mullen Center is set to open new proverbial doors for Villanova's arts community, and all in one unified, world-class location.

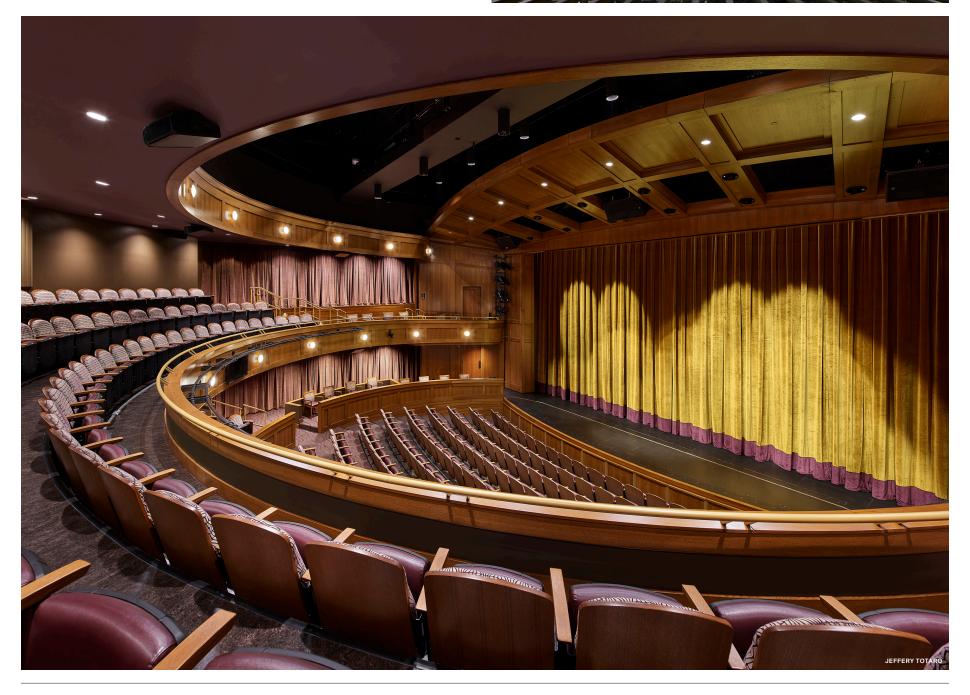
"I think this will allow Villanova to expand further into the arts and do things they've never done before," Voith said. "They can take the talent of their faculty and students and really showcase it. And it will be a great addition to the community as well." MH





Top left: The 85,000-square-foot arts center is a contemporary twist on Villanova's distinctive Collegiate Gothic style. **Top right:** A central stairwell at the Mullen Center. **Bottom left:** The grand shared lobby is outfitted with custom chandeliers. **Bottom right:** Inside the Voith and Mactavish Architects-designed proscenium theater.





14 Q&A

Design Scribe



Nikil Saval, design writer and Pennsylvania state senator

In mid-April, the Philadelphia-based writer Nikil Saval was getting a tour of the state capitol in Harrisburg. Months had elapsed since he was elected to represent Pennsylvania's First Senate District, capping off a socially distanced campaign season. "It was awesome to be there in person," he said. "It's a great feeling. We have an office and it's not my basement."

Saval is a democratic socialist, with experience in labor organizing. Outside of politics, he has built a profile as a design writer, despite a background in literature. (He was previously the editor of the literary magazine *n+1*.) It was his 2013 book *Cubed:* A Secret History of the Workplace that pushed Saval toward architecture and design writing. He spoke to *AN* executive editor Samuel Medina about his outsider status, the Green New Deal, and why "everything is architecture."

Samuel Medina: I had just started as an editor at an architecture magazine when *Cubed* came out. When the review copy arrived at the magazine's office, it prompted a lot of chatter, much of which revolved around the identity of the author. Did you feel like an interloper when you began researching and writing the book?

Nikil Saval: The answer is yes. [Laughs.]

The funny thing is that, even several years after the book came out, I was still being called an "office guru," which is really bizarre. When I had the impulse to write *Cubed*, I had no idea how much of a design book it would turn out to be. My initial interest in the history of the office was in the history of office work, and in answering that old question, why are some people called white-collar and others called

blue-collar? Why is white-collar office work often seen both by the people who do it and those on the outside as distinct from blue-collar work? And why don't office workers in the private sector organize unions to the degree that they have historically in the public sector, or as workers in manufacturing and construction have?

That was the initial interest, but then it just became clear that these two things [office work and office design] were intertwined. For example, the history of the word office, in American English usage, is closely tied to the history of the word downtown. The notion is that white-collar neighborhoods and districts and buildings-especially, in the late 19th century and early 20th century, skyscrapers—are part of the separation of what Marx would call mental and manual labor. but what we know as office work and blue-collar work. You start to see a spatial separation. The big spatial constraints—those of cities and buildings and the architectural envelope—led me to the interiors of offices, which were separated and stratified themselves. I started to see how design facilitated and expressed that stratification and differentials in power. So, I couldn't tell the story of one without telling the story of the other. I was just getting into these different fields. I'm not a historian. I studied literature; I edited a magazine. I had done labor organizing.

- SM: So when you stumbled into this world, how were you made to feel?
- The thing that makes architecture distinct—really makes you feel it, in a way-is how highly professionalized an industry it is. Historically it's been skeptical of people who are not trained in the profession, such as critics. And I understand that. I can't design a building for you. I can't design an office. I don't know AutoCAD. In a certain sense, I can't speak authoritatively about architecture in the way that an architect can. But what I have learned to do over time is speak to someone like me, who is outside the field and interested in it. What was, and is, important to me is speaking to the relationship between work and architecture, between cities and capitalism. That's always been my interest. To get back to your initial question, I still feel like [an interloper] years after I began writing professionally about architecture.
- SM: I wouldn't feel too bad. I'd wager that the majority of architectural journalists can't design a building either.

 [Laughs.] In *Cubed*, and in some of your work since, you tend to single out the vision of designers over [that of] architects and even give them the benefit of the doubt when their designs inevitably go awry. What accounts for that preference?
- NS: I think I was harsher on architects like Le Corbusier when I was writing *Cubed* than I am now. Perhaps to some degree that was unwarranted. But I always

admired the ideas of interior designers and planners, partly because I recognized [in them] an impetus to address a basic discontent with work. Maybe they didn't identify the sources of this discontent in the way that I or others would, but they nevertheless tried to increase the freedom of office workers overall. People like Robert Propst, the creator of the Action Office, had an interest in a person being able to fashion their own space.

- SM: The kinds of freedom designers like
 Propst were promising are today
 viewed as shibboleths, at least among
 a certain set of the workforce. Just
 think about claims of "self-fulfillment"
 and "flexibility," which we've heard
 so much about during the pandemic.
 From an organizing perspective—and a
 lot of activity in labor we're seeing now
 is happening in the white-collar professions, for good and bad—can these be
 incorporated into labor messaging and
 demands?
- NS: I tried in Cubed, and am certainly trying to do this more now, to make a connection between the particular kind of freedom designers promised historically to greater forms of freedom. I would also say that there is often too much of a disconnect between design and especially urbanism and the Left. Maybe that's changing, but we [the Left] should reclaim that language of freedom. Our lives should be better. Any socialist or social democratic worldview should be able to see that an office that is designed from the point of view of a human is good! [Laughs.] You can see this a little bit when you compare Anglo-American offices and those in Northern European countries. Historically, in social democratic economies there were higher degrees of worker participation in design. There were requirements about air and light in offices. That's not insignificant.
- SM: You're, of course, based in Philadelphia, as was one of the 20th-century office's major protagonists—or villains—Frederick Winslow Taylor. What's so grim about Taylor's methods for time saving, piecework, and surveillance—all hated in their own time—is how they have all been immeasurably enhanced by workplaces like Amazon. That brings me to the recent, failed union drive in Bessemer, Alabama. Do you have any takeaways from that result?
- NS: I'm sorry to say this, but I wasn't surprised and, for that reason, was not overly disappointed by that result. Its potential struck me as overinflated because there were all these warning signs early on that showed it wasn't going to succeed. Which is not to say that it can't succeed. I would just say that it's very difficult to organize a union anywhere, in any workplace. There are very sophisticated tools of union busting that companies employ. Anyone looking at the Bessemer Amazon warehouse and wondering why the

15 Q&A

union drive failed there should look at their own work. And if they don't have a union, they should wonder why they don't

What Frederick Taylor was trying to do was make organizing a union difficult by creating stratification and competition among blue-collar workers and to create a managerial class, or attitude, towards that work. And that just makes it harder for people to feel solidarity with each other because if you're trying to compete to do your work better than someone else, or to complete it in a certain time frame, you're less likely to identify with that person next to you because you're competing with them. And that was true then and that remains true now.

- SM: You won your election in early November. The week prior, Walter Wallace Jr. had just been killed by police, the National Guard had moved in, and you were giving a lecture to architecture students at the Harvard Graduate School of Design [GSD]. That confluence of events—of social unrest, specifically—has typically given architects the impetus, or license, to dream up their most utopian proposals.
- NS: That's a great point. My talk at the GSD was about a visionary, albeit unbuilt plan, for Harlem after the 1964 uprising. But the difference is—and this is apropos of the beginning of our discussion-this was a plan designed by June Jordan, not exactly a trained architect, and Buckminster Fuller, who was also not exactly a trained architect although more integrated into the canon of design, however uneasily. But I would say that my contribution to telling this history is a small one. Really, I'm dependent on the work of Black scholars and designers-for example, the Black Reconstruction Collective. Before I stopped writing for The New Yorker, I was trying to nail down a profile of the artist Amanda Williams; one of her major works is Color(ed) Theory, where she painted abandoned houses in Chicago in reference to redlining. But in preparing for that GSD talk, I was starting to pick up this history of Black cultural figures participating in the design of public housing projects in the late '60s. I looked at the Kawaida Towers housing project that Amiri Baraka was helping to spearhead in Newark, New Jersey. That didn't succeed [at the time], but it was just one example of what was happening at the time. A lot of people are doing work about this period, but there's still a historical blindness, or myopia, in the profession, as well as a very present, but related, racist exclusion.
- **SM:** Why do you think that is?
- NS: Architecture, especially the professional side of architecture, is pretty complicit in practices that prevent us from attending the root causes of exclusion. I think about insecure housing, which overwhelmingly affects Black and Brown and low-income people across

the United States. Since the 1960s there's been a decline in public investments, in housing, in wraparound services for that housing. That's not to say that architects are uniquely responsible for that decline. Or that they can't be involved in processes that begin to attend to the root causes of exclusion. Part of it is that these professional societies are not necessarily built for doing that. You need more active, grassroots forms of organization to address exclusion.

- SM: On the topic of housing, you recently gave remarks at an event sponsored by the Center for Architecture and UPenn about "green social housing." That seems a leap from where we currently are. Discussions about housing within architecture and politics rarely go beyond the rubric of "affordability." How do you communicate, both in your writing and to your constituents, the need to reposition housing as a social good? And do you see a role for architects in repositioning that?
- NS: Despite my comments just now about architecture, I know how difficult it can be. We are operating in a difficult framework, in which the amount of subsidies, or just direct government investment in housing, has dramatically declined over decades. And there are all these limits on public housing, what public housing can be constructed, and how many people it serves. But basically, you have to frame housing as a right. But even then, I'm hesitant to speak about it in those terms. We often talk about rights-for example, human rights—only when they are being betrayed. So I would instead say that housing is something that we should be guaranteeing. I'm someone who supports the idea of a Homes Guarantee, which would effectively decommodify housing.

Architects are probably very familiar with the Low-Income Housing Tax Credit [LIHTC] program. That's the main way that people probably interface with the whole notion of affordable housing. Tax credits are problematic, and the program itself creates a very paltry amount of housing.

- **SM:** You're never going to build a social good off the back of tax credits.
- NS: That's why one of the things we're exploring is to what extent we can try to change existing programs like LIHTC to a grant-making program. So if you're an architect and you're familiar with LIHTC, it becomes a little more conceivable as to how you can intervene. Because we want to create variety in low-income housing. We want to be able to have big design variability and initiative.

Actually, in Pennsylvania you're more likely to be awarded credits if you have a Passive House designation or if you have another kind of green initiative. Can we tweak that model by substituting grants for credits? Can we expand it further to include land trusts

and other forms of nonprofit development? This actually is not that distinct from how things get built in Vienna, which is one of the premier venues for social housing. It's something we're exploring right now and trying to develop some policy papers on it.

- SM: You've been very public about your support for a Green New Deal. The opinion within the trades is somewhat mixed, and the Biden administration won't speak its name. Why do you feel it's a useful framework?
- **NS:** I think the virtue of the Green New Deal is twofold. One is that it anchors our fight against climate change, and the environmental crisis more generally, in investment and in job creation. Historically, I think, people have viewed the environmental movement as a retreat, in a way, from public life and also from a certain quality of life. But we're saying, no, it's in our housing, it's in our transit, it's in our schools, it's in the spaces you see and pass through every day. These are all places where we need a Green New Deal. These are all places that we need to protect at once.

And then the second part of that is that our lives are going to be immeasurably better as a result. For example, there are the energy burdens that people face in their homes, to the extent that they are able to stay in their homes. In Philadelphia there's so much utility debt. Low-income residents have to pay over 23 percent of their income on utilities—that's not even including rent. Many people have gas lines in their homes and as a result have higher rates of asthma. And low-income homeowners can't afford to weatherize or retrofit their homes. Your-and I'm speaking from a Philadelphia perspective now—your schools have unremediated lead and exposed asbestos. Your house is making you sick. You can't get to work without taking five different buses. Why is that the case? We should invest in the things that would make lives better. Those are green initiatives. You would see those changes in daily life. Otherwise, climate change can feel very distant.

- SM: You're currently at work on your next book, *Everything Is Architecture*. That's of course a reference to Hans Hollein.
- NS: Actually, while it does come from Hollein, my particular reference is to Charles Eames, who redeployed the phrase to say,"Eventually everything connects—people, ideas, objects." It's a history about design and how, as soon as it became professionalized, it suddenly was perceived to have to encompass everything. Through industrial design, individual people began interacting with objects, forms of communication, etc., in a more intimate way than they ever did with a building envelope. Anyway, it's told through a set of figures—so far the Eameses and also Buckminster Fuller—but it's meant to be a little more global than

- that American portrait. These are figures who were not quite architects but who expanded the role of design to include aspects of everyday life, and how that had an initial social utopian impulse and then changed over the course of the 20th and 21st centuries.
- SM: Fuller talked about a "comprehensive designer" capable of recognizing patterns in media, industry, technology, all these emerging developments in the 1960s. It's an enticing idea, but also one that's difficult to envision operating as a social force in the world. Does that get at why you're interested in outsider figures like him?
- NS: That's a good way of putting it. The notion that design had social potential is something I want to pull out. As I looked into Buckminster Fuller's archives in California, it was astonishing to see firsthand how many people were creating geodesic domes in the 1960s. And how many people wrote to him to ask for the instructions to how to do one. I want to say thousands of individuals, who were just so animated by this idea of a personal capacity to create shelter from this elemental form of structure and to reimagine their own environments in a context in which people more and more understood the connection between environmental and social crises. I know some of that is well-known, but I thought it was extraordinary. Fuller himself was this polymathic figure who was always on the edge of bullshit to some degree. He really was. [Laughs.] But [the comprehensive designer] is an important form of identification.
- SM: Frank Gehry's renovation of the Philadelphia Museum of Art is set to open in early May. Have you been able to get a peek at the project, and if so, what do you make of it?
- NS: When I visited, I was pleasantly surprised by how relatively surgical it was. So far, the main experience is the current entrance, which involves you walking through this tiled hallway under a [Guastavino] tiled ceiling. That wasn't really revealed before. To the extent that the Gehry project is revealing aspects of the original structure, it's great. Those parts of it are really good.

16 Studio Visit

DIGSAU

The clue is in the name. The Philadelphia-based architecture firm DIGSAU (think "dig" and "saw") creates buildings that feel handmade. There is an overt concern for variation and texture, often expressed on the enclosures of proiects-at a facility for a Delaware vocational school, for instance, that sports what seems to be an improvisatory rainscreen of mismatched wooden planks. Meanwhile, the outer faces of a woodsy villa are purposefully roughed up to match the coarse, flecked bark of the surrounding trees. And charred cedar and weathered steel complement the otherwise clean lines of a Philadelphia bird sanctuary.

But for all this affected ruggedness, the buildings betray a keen knowledge of industrial materials

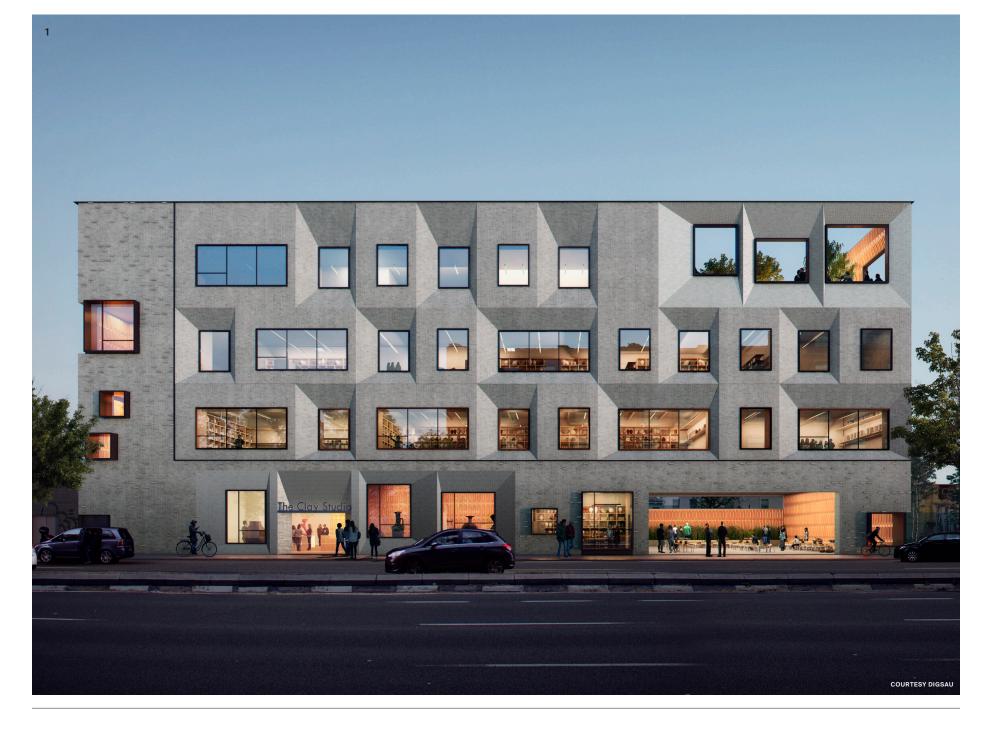
and how to use them. For every rubble stone facade in the DIGSAU catalog, there is a cunning yet still economical display of precast concrete. As the firm has scaled up-it has several projects in the works at the Philadelphia Navy Yard mega-development-the moments of intense surface texture have grown less profuse, if not curtailed altogether. "We're very conscious about where we spend money on projects," said DIGSAU's Mark Sanderson. "We don't equally spread the money over the entire project. We are very deliberate about spending more money on specific places where it's going to be recognized."

Profile and massing are just as key to the firm's work. A spa and amenities complex at a Philadelphia condo development finds Sanderson and his co-principals Jules Dingle, Jeff Goldstein, and Jamie Unkefer at their most exuberant. Giant shardlike wedges, containing sunken pools and changing rooms, rise up from the hardscape in a showy, yet still grounded, gesture, and the light reflecting off the pool water and porcelain tile cladding is more evocative of Portugal than Philly.

All of DIGSAU's founders were at one time on the payroll of Philadelphia powerhouse KieranTimberlake before striking out on their own. They started up shop in the auspicious year of 2007 and were only able to ride out the recession by "looking afield and moving outside of our comfort zone and wheelhouse," said Unkefer, point-

ing to a pair of breweries they designed. "We've made the analogy to the craft brew movement, where you suddenly had a consciousness of ingredients and tying into traditions that are less industrialized."

Philadelphia's excellent restaurant and drinking scene is part of what's driven the city's image change of the past decade. DIGSAU's portfolio reflects that change, perhaps to an uneasy degree. "A working-class mentality permeates the city that we wouldn't want to lose," said Sanderson. "It's certainly embedded in the way we think and work. Our work is a little messy for a reason."



17 Studio Visit

1 Clay Studio

2021

Work is underway on The Clay Studio, a 34,000-square-foot ceramic facility in Philly's South Kensington neighborhood. Grayish bricks are used on the building's outer walls, while public spaces and a roof garden are lined with sculpted clay tiles. For Unkefer, who was a professional potter before pivoting to architecture, the project "offered an opportunity to connect my interest in ceramics to the city's incredible tradition of brick masonry."



2 Iovance Life Science Headquarters

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This 135,000-square-foot lab-and-research facility is DIGSAU's fifth project at the Philadelphia Navy Yard, a multiphase effort to redevelop a centuries-old naval shipyard in South Philadelphia. The public-private venture, which is entering its next, \$2.5 billion phase, features hulking offices and landscapes, the latter designed by James Corner Field Operations. Sitting at the edge of the central lawn, the Life Science Headquarters presents a striking architectural identity that helps set off its program. On the three-story main building, spindly steel fins surround glazed units; the same rhythmic pattern is picked up in the adjacent, one-story loadbearing concrete structure. "The two really weave together," said Sanderson. "The team searched for ways to amplify what that precast could do."

3 Frances M. Maguire Art Museum

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In 2012, the famed Alfred C. Barnes Collection was relocated from a nearby suburb and meticulously restaged in a new downtown facility designed by Tod Williams Billie Tsien Architects. As stipulated by the crotchety Barnes, artworks and gallery walls could never be parted; so off they went, leaving behind "this really beloved old building," said Unkefer. DIGSAU is in the process of renovating the galleries, which will be taken over by Saint Joseph's University. "It's a mindbender," Sanderson added. "It's a ghost building, a kind of an echo of the past." The whitewashed interiors are the most marked change, but the architects will also be enhancing handicap accessibility and clarifying gallery circulation routes.

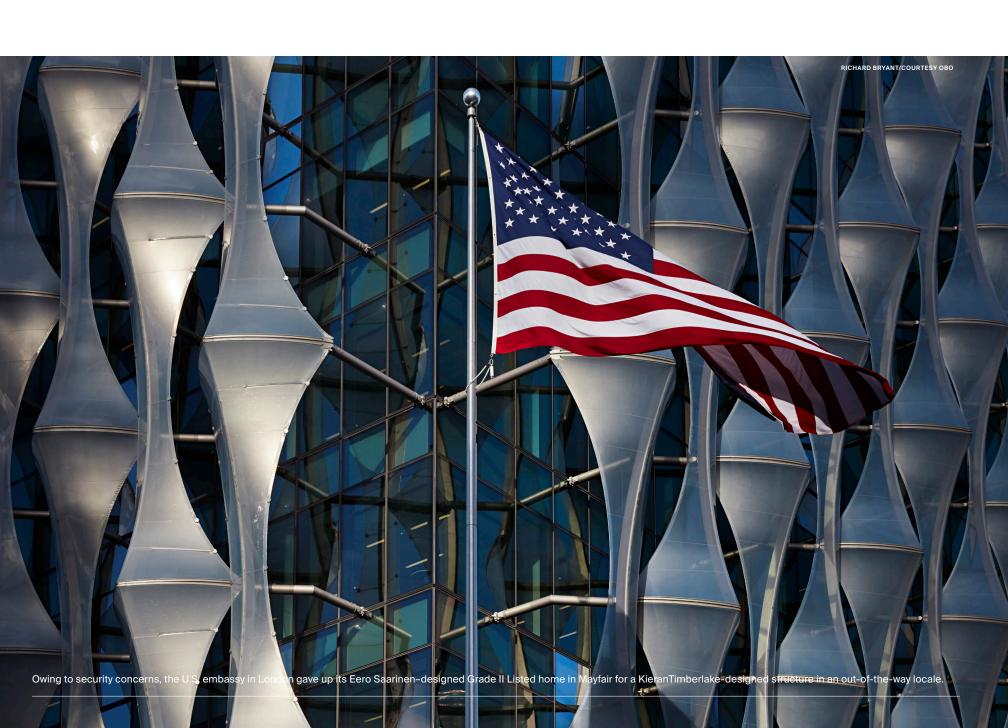




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ARCHITECTURAL AMBASSADORS

An embassy building boom reveals a turn away from symbolism to technocratic competence.



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When it was announced in 2013, Tod Williams Billie Tsien Architects' project for the U.S. chancery in Mexico City signaled the new turn in embassy design.

America's stock in the world has depreciated considerably since the start of the millennium. The reasons will be agreed upon only in hindsight, but the national post-9/11 paranoia that spawned a series of criminal military interventions overseas and calls for "securitizing" democracy worldwide could not have helped. Nor could the election of Donald Trump to the presidency of the reigning global super-power, his "America First" rhetoric, and his jettisoning of the country's commitments to the Paris climate agreement. But all the while, the construction of new U.S. embassy projects continued at an unheard-of pace—a total of 167 new diplomatic facilities since 1999.

The vast majority of these buildings replaced aging embassies through the Capital Security Construction Program, which was implemented following the 1998 embassy bombings in Nairobi and Dar es Salaam and which determined that 180 out of 260 diplomatic posts worldwide needed to be updated. Overseen by the State Department's Bureau of Overseas Buildings Operations (OBO) since 2001 (and before that by its predecessor, the Foreign Building Office), the program has enlisted the services of notable American architecture firms in cities across the world, including Studio

Gang (Brasília) and Morphosis (Beirut) to KieranTimberlake (London) and Weiss/ Manfredi (New Delhi). With so many projects coming online, these new diplomatic facilities offer a useful lens for reading the psychological and ideological currents operative in the U.S. today. Through built form, they point up the values underlying the country's self-presentation and reveal where these same values come into contradiction. For the architects of these projects, the challenge lies in representing American values while implementing increasingly technocratic and high-security design regulations. The dilemma is perhaps most clearly posed in KieranTimberlake's description for its London embassy, which opened in late 2017: "How can we build an embassy that reflects the core values of democracy $transparency, openness, and \ equality--and$ is welcoming, secure, and highly sustain-

The current building boom follows a long process of debate and adjustments in methodology as America experimented with its image abroad, with varying degrees of confidence. The purchase of land for the construction of chanceries (the technical designation for embassy buildings, with the metonymic "embassy" referring to the group of people who conduct diplomacy)

was authorized by Congress only in 1911. American diplomatic buildings opened gradually, often occupying ready-made domestic structures; it was only after WWII and the initiation of the Cold War that high-modernist structures by architects including Gordon Bunshaft, Harry Weese, Walter Gropius, and Edward Durell Stone began to proliferate in opposition to Soviet socialist realism. But just as quickly, embassy construction slowed to a crawl, even after the 1979 occupations of embassies in Tehran and Islamabad. It would take a series of terrorist acts to kick embassy design back into high gear. The 1983 bombing of the American embassy in Beirut led to new scrutiny of security, a focus redoubled in the aftermath of the twin embassy bombings in Kenya and Tanzania in 1998. The ensuing Capital Security Construction Program implemented stringent requirements for newly constructed diplomatic buildings while also setting forth OBO's ambitious construction schedule. The latter agency introduced Standard Embassy Design for the post-9/11 era with the 2001 Kampala, Uganda, embassy, a formula for the production of buildings that tightly adhered to security guidelines while also optimized for cost and lead times. This formula quickly began to appear around the

world in the early 2000s, producing boxy, defensive structures, alienated from their surrounding contexts and usually perched inaccessibly far from city centers. This antisocial approach came under increasing criticism from the Obama administration. A 2010 CNN.com op-ed penned by then-senator John Kerry and former senator William Cohen made these points clear. "Unique architectural wonders built to last were replaced by a standardized 'embassy in a box," they wrote. "They are uniform in appearance and quickly assembled fortresses designed to meet security specifications in one of four sizes—small, medium, large and extra-large, epitomized by our supersized embassy in Baghdad." Aside from the symbolism, the standard design often implemented ventilation systems inadequate for particular climates and rote building massings sitting at odds with topography on certain sites. They alienated allies and traveling U.S. tourists alike.

Kerry authored the 2010 Embassy Design and Security Act and later, as secretary of state, succeeded in steering OBO away from standardized design altogether. OBO had already adopted the Excellence in Diplomatic Facilities Initiative, based in part on a 2009 AIA report, but the Kerry legislation placed welcoming exteriors and public

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Top left: Morphosis's design for a new embassy outside of Beirut deploys sinuous form to distract from an imposingly high perimeter wall.

Left: Miller Hull is among the most prolific embassy architects working today. The firm's design for an embassy complex in Guadalajara, Mexico, features shading devices that resemble local hut dwellings.

Above: Elsewhere in Latin America, Miller Hull has designed a sprawling embassy compound for a suburban site just outside of Guatemala City.

spaces within facilities on par with stringent security requirements. It also opened embassy commissions to a wider array of architecture firms, such as Tod Williams Billie Tsien Architects, whose 2013 project for the U.S. embassy in Mexico City (now under construction) inaugurated the new program.

The definition of the "excellence" promised by the new legislation is not immediately apparent, though the bureau's self-description offers some hints. According to its website, "OBO provides safe, secure, functional, and resilient facilities that represent the U.S. government to the host nation and support the Department's achievement of U.S. foreign policy objectives abroad." Moreover, these self-same facilities "represent American values and the best in American architecture, design, engineering, technology, sustainability, art, culture, and construction execution." Beyond pragmatic concerns (security, sustainability, and construction execution), there is an aspiration to operate on the symbolic register—to "represent American values" and, indeed, this was the impetus behind the move away from standard designs. According to OBO director of external affairs Christine Foushee, the agency "evaluates each diplomatic design on the success of its security, functionality, resiliency, and spatial flexibility"—on the side of functionality—"while representing dignity, stability, innovation and openness." But it is difficult to find the link to physical implementation of these abstract concepts in OBO's documents or in project descriptions written by the commissioned architecture firms.

For midcentury architects the equation was straightforward. As historian Jane C. Loeffler writes in her essay "Embassy Architecture as Politics and Symbol," Bunshaft and other modernists used "the transpar-

ency of the International Style as a metaphor for the openness of America's political system," which was "a stark contrast to the ponderous classicism of typical Soviet structures." Frank Lloyd Wright in assessing Edward Durell Stone's chancery building in New Delhi-a breezy colonnade backed by a light stone screen-noted that it was the "only embassy that does credit to the United States." This direct translation between the literal transparency of glass and screens on the one hand and the metaphorical transparency of a democratic system on the other has only been strengthened in the years following the collapse of the Soviet Union, with buildings like Norman Foster's Reichstag making an explicit link between the two and the high-tech glass and steel of contemporary finance headquarters linking transparency to the liberal flows of globalized capital, free to land where investment opportunities beckon. But in recent embassy buildings—with notable exceptions such as KieranTimberlake's London embassy and SHoP's effort in Tegucigalpa, Honduras-this metaphorical association is noticeably downplayed. Rather, the values advertised are of a more pragmatic nature: sustainability and respect for vernacular styles and local cultures.

For many of the firms involved, the building traditions of a given context, as well as the material culture it has historically sustained, offer creative stimulus. "Cues are taken from endemic regional forms and materials like sand, concrete, and red metal oxide primer; a series of screens and canopies evocative of traditionally used acacia limbs shield buildings from the intense West African sun," said Miller Hull partner Sian Roberts in a prepared statement about the new embassy in Niamey, Niger. Roberts would go on to remark that the firm's embassy work (Miller Hull is also developing

a facility in Guatemala City) forms "a clear representation of the United States and our values," but these are difficult to make out in the designs themselves. This pattern carries over to Moore Ruble Yudell's chancery in The Hague, which was relocated in 2019 from an iconic Marcel Breuer building downtown to the city outskirts. "The buildings, while American in character, reflect sensibilities that are Dutch," reads the project statement, somewhat ambiguously. "The most important aspect of this is the use of brick for the building facades, which is prolifically used as a facade material in the Netherlands." However, both projects use transparency as a subtle but successful part of a visual and metaphorical repertoire: in Niamey, a sensuous and lush glazed brick wall crosses from exterior to interior, while at The Hague framing plays with phenomenal transparency in ways that would satisfy American postmodernists as well as de Stijl painters.

But as embassies grow larger, their designers have expanded their vision to include geographical formations and clusters of landscapes. Somewhat improbably, these supra-architectural features have become go-to justifications for design decisions. Parts of Ennead's new Ankara, Turkey, embassy are "inspired by the Oak-Juniper-Black Pine forests of central Anatolia"; SOM's Beijing campus layout takes inspiration from Suzhou gardens; and SHoP's Tegucigalpa embassy gestures at "the mountainous local landscape." Operating at the opposite end of the scale, embassy and consulate projects in Casablanca, Hyderabad, and Delhi draw on local textile arts to inform individual building components like screens and shades. Generally speaking, the invocation of vernacular is more than just rhetorical, as it offers concrete benefits. Locally cultivated materials and

methods cost less, are easier for workers to install, and, per the description of Moore Ruble Yudell's building in N'Djamena, Chad, "provide economic approaches to construction" in rural contexts.

Similarly, sustainability—a major theme of OBO's briefs in the Obama era and beyond—plays a double role. This aspirational green diplomacy is defined in OBO's governing documents like the Foreign Affairs Manual and appears in almost every description of a new embassy building, the outcome of a series of regulations and project metrics. Said Foushee, "A LEED Silver certification achieves most of these requirements and is standard on OBO's major capital projects." But here again, what appears to be a technocratic imperative to tackle climate change actually covers for a very practical concern. In N'Djamena, Niamey, and Guadalajara (in yet another design by Miller Hull), solar power along with on-site wastewater treatment provides chanceries with the ability to go off the grid in times of danger or scarcity. Designs for locales as disparate as Lagos, Nogales (both Ennead), and Pristina (Davis Brody Bond) integrate rainwater harvesting systems, with the latter achieving "net zero water."

This blurring of aspirational and hard, pragmatic language would seem to suggest subterfuge. Yet the primacy of security concerns to OBO's conception of these projects is extremely overt across multiple aspects of design, many of which seem to be holdouts from a turn-of-the-millennium era of embassy design. Most of the new buildings have been sited on sprawling campuses on the outskirts of cities: this remove from city centers provides necessary space for off-the-grid utilities and blast-attenuating buffer zones and also aims to prevent crowding surrounding neighborhoods with visitor traffic. Some of the new buildings anchor

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Left: Moore Ruble Yudell's N'Djamena, Niger, campus makes judicious use of material and color.

Above left: Ornamental screens are a common throughline. The facade detailing of Miller Hull's Casablanca embassy design is among the more subtle demonstrations.

Above right: Deep courtyards are also a constant, despite security imperatives.

fledgling municipalities and newfangled districts, as in Casablanca (Miller Hull) and Beijing (SOM), resulting in American-style suburban development and the unsustainable transit patterns that accompany it.

Most importantly, an embassy's siting determines requirements for other, less easily hidden security measures, like Beirut's high walls or the moats around the center-city locations of the London and Beijing embassies, the latter explained by SOM as a traditional Chinese garden feature. Almost all the new embassy designs feature louvered or screened facades, justified with recourse to sustainability (shading from solar gain), vernacular forms (textile patterns), and transparency (in contrast to the pointillist facades common among early-2000s designs). Of course, the old use of transparency as a metaphor for openness and freedom still persists in many locations, as in Miller Hull's consulate in Mérida, Mexico, and the new London embassy, which is covered in translucent louvers over glass facades. However, in London, too, security overwhelms values: embassy workers can see out, while Londoners' views into this extremely public site are occluded.

Pragmatism governs embassy design in other ways as well. The scope of the Port Moresby, Papua New Guinea, embassy was increased to add Marine barracks and classified facilities after hydrocarbon deposits were discovered nearby. And one of the major programmatic demands for embassy construction is for visa processing for aspiring visitors to the U.S.; embassies around the world have increased the numbers of service windows available and made accommodations for lines and separate offices just for this purpose. The new consulate in Hyderabad (Richard Kennedy) will boast the space (and presumably the personnel) to process upwards of 2,500 applicants daily. Additionally, embassies host trade delegations, academic collaborations, parties for international bureaucrats, art exhibitions, and industrial showcase events. They must deal with large flows of people without compromising security.

Perhaps more than anything else, the performance of diplomacy requires decorum and flexibility; stridently declared values can easily become liabilities with a change in geopolitical winds or in the course of an election—presidential terms are far shorter than the time lines of most embassy projects. Values baked into a building can become sore points with host governments, whereas high performance is unassailable. The architects of the new embassy in Guatemala City note that it "marks a \$100 million investment in the economy of Guatemala" and forecast that its construction will create roughly 2,600 jobs. Who could have a problem with a building that does that?

And so rather than going out on a limb to present a coherent, inspirational symbolic vision of American values, the projects in OBO's growing portfolio display a quiet diligence, pragmatism, and unobtrusiveness. None attempt to found a new metaphorical design vision for the country. Perhaps their diplomat clients prefer to let the private sector take up the mantle, substituting Coke products and superhero movies for the nebulous concept of transparent democracy. Or if they do harbor a desire to cultivate a quintessentially American virtue, then it is surely technocratic competence.

Architecture firms are seemingly undeterred by the absence of any symbolic afflatus and have come up with some compelling designs, even after accommodating OBO's thick book of specifications that surely limited the designers' formal and material options. The Mexico City embas-

sy by Tod Williams Billie Tsien Architects and Davis Brody Bond renders the seemingly OBO-obligatory window screening into a geometric brass array of carefully calibrated apertures, an intentional ornament rather than the visual prophylactic typical of the genre. Warm sandstone welcomes rather than deters, and generous courtyards bring life deep into what could easily be a forbidding compound. Clearly, the architects wanted to make the building transcend its role as a node in the American diplomatic network to become its own nexus of inter-nation-state meaning. According to the project statement, "The design and materials will speak to the materials and architectural traditions of Mexico in ways that recognize a sense of this place and the long and interlocking histories of the American and Mexican peoples.

Weiss/Manfredi makes a similar appeal to combining American vibes with local cultures at its embassy expansion in New Delhi. "Inspired by India's enduring tradition of weaving together architecture and landscape, a series of cast stone screens, canopies, and garden walls introduce a resilient integrated design language that brings the campus into the twenty-first century," the project statement reads. "The rejuvenated embassy compound expresses the symbolic values of American diplomacy through environmental stewardship and gives measure to America's democratic presence in India." Beyond what's present in the words, the renderings of the project show a worthy extension of Stone's chancery, continuing the high-modernist language existing on the campus and pulling in a nod to Le Corbusier's formal plasticity at Chandigarh through large concrete py-

Other embassy designs make do to design for smaller diplomatic missions; ren-

derings of Miller Hull's Guatemala City effort show a well-proportioned glazed box wrapped in a modernist screen, while more critical regionalist efforts like Moore Ruble Yudell's N'Djamena campus make judicious use of material and color. Ennead has envisioned a string of projecting boxes clad in screens in Nassau, Chiang Mai, Lagos, Ankara, and elsewhere, all of which deliver on the modernist legacy while implementing defensive security requirements with varying degrees of elegance. But the drive toward security can threaten to overwhelm other, larger efforts. The squiggly buildings Morphosis designed for Beirut attempt to pull visual focus away from a high perimeter wall.

In the end, given the inflexible design requirements, it's a miracle that architects have been able to push embassy design so far beyond the embarrassing Bush-era defense contractor fortresses. OBO, too, is in a difficult position, given the logical incompatibility between democracy and a unified aesthetic representation of plural voices. Not to mention the alternation in American government, which produces wildly varying—one might say erratic—foreign policy. Perhaps security requirements are the only constant in all of America's internal confusion, its cacophony of culture war and inequality—paranoid outgrowths for a country addicted to guns and policing. Or perhaps the difficulty in representing values stems from the unique position America finds itself in the first quarter of the 21st century (though probably not for long): a global hegemon no longer in need of selling itself or convincing others. Rather, embassies now need only assume the role of administrative offices processing visas and business agreements, the DMVs of a globalized world. A.J. Artemel

PAN SCAN



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Facing page: Life Beyond Earth, SOM's contribution to this year's Venice Architecture Biennale, contemplates the viability of lunar living.

This page: How will we live together?, the Biennale's central exhibition, will look at emerging technologically enabled communities, such as this after-school tech hub.

The 17th Venice Architecture Biennale operates on several different registers, requiring the visitor to keep pace with thematic leaps and intellectual vaults, analytical flybys and prescriptive tunneling. Asking the question "How will we live together?" it presents innumerable responses that are likely to be as stimulating as they are self-canceling (as tends to be the case for omnibus exhibitions like a biennial).

The exhibition, curated by Hashim Sarkis, an architect and dean of MIT's School of Architecture and Planning, was delayed a year by a global pandemic that appears to be receding. Owing to the touch-and-go circumstances surrounding the production, it is tempting to find an improvisatory impetus at work in this biennial. Sarkis, however, sticks to his guns: The thematics and, indeed, problematics he aims to foreground in Venice have not changed since he first formulated them nearly two years ago. In mid-April he spoke to AN executive editor Samuel Medina about his curatorial agenda, postpandemic life, and the architecture of the cosmos.

Samuel Medina: The Biennale has been twice postponed. The Vernissage has been fixed, finally, to May 20. However, Italy and other Western European countries were very recently under lockdown. So I have to ask, can we expect the Vernissage to go ahead?

Hashim Sarkis: We believe that we are ready to open in May, and the Biennale team in Venice—as well as the participants and the national curators—has done everything they can to figure out how to install the exhibits either remotely or with the help of local partners. There is a regulation in Italy about when they can start the installation process, and we are very close to the 50-day window right now [mid-April]. So, we're just starting, and that is not unusual. Ac-

tually, it's the norm to be just starting around this time.

SM: You don't foresee any hiccups in travel or the shipping of materials?

HS: I can tell you that some participants are already there [in Venice]. They got their paperwork through the Biennale, which will help clear anyone's paperwork to travel, if they're willing and able to do so. It's true that shipping is also going through some delays and that some packages might be arriving late as a result. But so far, we haven't heard anything that makes us feel like we're not going to be up and ready by late May.

SM: You have maintained the relevance of the original framing of your exhibition despite the disruption brought about by the pandemic. But given the exigencies of the moment, it seems some adjustments to the exhibition displays and programming are in order. What has been done?

HS: Let's start with the more practical, logistical concerns. As I mentioned, we have to abide by Italian regulations, which change from region to region. They outline how you can organize an exhibition, where the entrances and exits are, how far apart visitors are, what processes of public health and hygiene you plan to have in place. All of that we have to abide by. But to get back to your question, I would say in a few cases projects have had to adjust the scale [of their displays] in order to allow for circulation flows. Some have had to make compromises about the installations themselves when they aren't able to ship certain pieces or [have had to] see if they could replicate [them] in Italy. In other cases, where

exhibitors had planned to have books on display for visitors to flip through, they have [had] to rethink those plans. And because of the distances people are expected to maintain, the sizes of display screens—and the text and images on them—have [had] to be adjusted. But I have to say, all these changes have helped in simplifying, clarifying, and making many of the displays more accessible. We all know the exhibition is not a book and there is less of that at this Biennale.

SM: You mentioned the time window with regard to the installation start date. It's also true that you've had a year longer than you had expected. Were you able to use that additional time for programming?

HS: A big part of this past year [the Biennale] participants were worrying about their own health and how to get by, and what to do with their offices when everything was shut down. We only pressed "restart" earlier this year, and when we did, I felt like people had already revisited their projects in terms of refining them. However, it was a luxury—I hate to use that word "luxury" in the context of a pandemic—but one that few Biennales past could afford.

You know, with a Biennale you rush, rush, rush, you send your piece, it's installed, and then when you look at it, you always say to yourself, "If I had a little bit more time—perhaps a few more months—what would I have done differently?" Well, we had those few more months, and I feel like many people benefited from them. It allowed them to go deeper into the essence of their display and make it more accessible in terms of a show. It strengthened their designs and design thinking.

SM: A moment ago you restated a familiar criticism of [architecture] biennials—that their contents are more suited to an exhibition catalog than an exhibition display. Is that something you tried avoiding from the very beginning, even before the pandemic pause?

HS: I remember serving as the president of the jury of the Biennale in 2016 and one of the recurring—how do you say-"challenges" for us as a jury walking into a project space was when it required us to read it, rather than to experience it. That stayed with me as I began planning this Biennale and began contacting the participants. I told them, "Please emphasize the experience, emphasize the installation. Don't make it a book!" How architecture presents itself to the world is very important. There are certain aspects of architecture that you can display as one-to-one, but many you can't. By the time you get to the scale of the city or even outer space—as we do in this Biennale—it becomes very difficult to convey that. That dimension is something I really wanted to challenge with this exhibition.

SM: Can you expand on that? Your curatorial statement foregrounds five such scales.

HS: Let's begin with the scale of the body, which is actually one-to-one. In Venice there are two main galleries.

SM: In the Arsenale [the main exhibition hall used by the Venice Biennale]?

HS: Yes, that's right. These rooms will address this scale of the body. Here, as a visitor you will be in contact with furniture, with clothing, with mannequins, with objects that are at your scale. So

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Left: Architect Hashim Sarkis is the director of the 17th edition of the Venice Architecture Biennale. **Above:** Sarkis's Biennale aims to address the relation between humans and animals, things, entire ecosystems. This design for a bird habitat by Rotterdam-based Studio Ossidiana seeks to reframe how humans view their feathered friends.

you feel like you are confronting the reality of the display itself. It's not an installation, it's not a mock-up, it's the thing itself. That is not something that we're used to in architectural exhibitions. We usually have a piece of the thing itself, or even less, a representation of the piece of the thing itself.

Then there is the scale of the house-I have to say, we managed to have a lot of one-to-one displays in the Arsenale. So not only will you be able to] inhabit a room but [you will] also experience the domesticity, the sense of intimacy, that that room creates. From there we jump up to the scale of the community but down in terms of the displays. That is the experience of this Biennale—as the theme scales up, the display scales down. This happens with the final two scales—of borders and of the planet-which use conventional models and images in unconventional ways. For example, there is a model of the planets' relation to each other. That is just not a scale that we're used to [dealing with] in architecture.

- SM: It's funny, I thought I heard you say the phrase "the thing in itself." I suppose I had another phrase from your statement on my mind—the "spatial contract." Both are, of course, very evocative of the Romantic school of thought.
- HS: I know what you mean. When I talk about these scales, I don't simply mean physical scales. What the exhibition does is translate these into emotive scales. You will see that the projects tend to go, thematically, from empathy to love to affinity. There are projects about curiosity and hospitality, and projects about universality. In all of these the notion of care is very present. I would even say that love is a very important presence.
- SM: Again, there's that Rousseauian echo. I

wonder if, whether [in any of your classes] at MIT or in working with the various participants, you encountered any pushback on this point. I imagine that the thematic underpinnings of the show could be construed as Eurocentric.

- HS: When the Biennale announced that I was the curator for the 17th Architecture Biennale, the headlines in the Italian newspapers said, "Lebanese architect Hashim Sarkis is named director of Biennale." Of course, I am Lebanese, but I would not have expected them to put that in the headlines. I have to say, I felt a sense of national pride at that, even though I'm not a nationalist at all. But it also came with a responsibility, which is exactly along the lines of what you're saying. This is the first time that the Architecture Biennale is going beyond the Global North, not just in terms of selecting a director but also in terms of representing the rest of the world. I think that Alejandro Aravena [director of the 2016 Venice Architecture Biennale] had already started that [shift] by changing the perception of the Biennale as an event where the whole world comes to see what the Western avant-garde is doing. A stronger dialogue about this very issue began to take shape.
- **SM:** Speaking of dialogues, you've been very careful to cast your curatorial theme as a question.
- HS: With this Biennale, it was important for me to not make a statement but ask a question: How will we live together? Because there are so many reasons for asking that question—increased political polarization, climate change, the big divide between rich and poor, between rural and urban, the changing perceptions of our bodies and our

relationships with others, differences in ethnicities. Of course, asking the question forced me to look for answers from [prospective] participants. That led me to unexpected answers and unexpected places, and ultimately to expand the geographic scope of the Biennale way beyond Europe. So there's a high representation of people from Africa, from South America, from Asia, from the Middle East. But I also have to say I was very pleasantly surprised that the national curators themselves started thinking beyond their national boundaries and pavilions and began coordinating with others. There have already been some collaborative symposia online, and we hope that will continue well into the Biennale. To go back to your question from earlier, the extra year gave us the momentum and the space to do that.

- **SM:** You've said elsewhere that the pandemic is not an explicit concern of the exhibition. Why did you feel the need to skirt the issue?
- HS: While we may not be addressing the pandemic directly in the exhibition, or in the individual projects, we are addressing the underlying reasons that led us to a global pandemic. There are many questions about what life will be like after the pandemic, but they are very hard to answer; more than that, I feel it's too soon to answer them. We have seen this year how everyone has needed to have an immediate reaction to the pandemic, but I think we will very soon see the opposite—we'll be asked to forget the pandemic as quickly as possible. We will find ourselves in a kind of euphoric amnesia in the months to come.
- **SM:** The slant of the question How will we

- live together? is slightly dispiriting. Reading your curatorial statement, which was released ahead of the pandemic, I sensed a concern on your part for the health, or direction, of civil society. Do you think that's a fair interpretation?
- HS: I'm glad that you used the term "civil society." It's everywhere in this Biennale. In fact, "civicness" is one of the lenses I was looking at when I began organizing the exhibition. The disposition of the individual toward others this is the first gesture of civicness, right? Following this thought I began to expand the notion of the Other to take account of changing subjectivities, not just human subjectivity but also [that of] animals, nature, even cyborgs. From there, I wanted to question the nuclear family and domesticity and see how collectives are formed around the world. I wanted to find architectural and urban forms of collective living to put on display as a way of saying, "It could be otherwise." Because we can live otherwise, it doesn't have to be this kind of adversarial relationship to one's neighbor. Expanding out again, I began to look at the scale of the community, where you'll find the most evidence for what civil society is.
- SM: The "civicness" you describe leads us back to a social contract and to your spatial contract. How would you define the latter?
- HS: In a social contract, you're giving up some of your personal freedom because you're [aware] that what you're gaining collectively is more important. We do that in political discussions, policy statements, and laws, and we do that when we design spaces. That's a spatial contract. We try in the Biennale

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A still from a video by the architecture firm Rural Urban Framework. The installation will investigate Chinese exurbs to pull on connections between the rural and the territory.

to make a connection between architecture and politics, where architecture is the administration of the political rather than a constitutive dimension of the political. I go back to Aristotle, who was the first, I think, to ask that question. And his answer to that question was another question—"Even though we're in the framework of politics, where's the city?" He could not imagine an ideal community without the organization—the context and shape and form and hierarchies—of the city.

Consider the dimension of space in helping rehearse, anticipate, ratify, and then overcome the social contract. It's very important! We seem to somehow [downplay] that. We always want architecture to be a demonstration of an ideal in politics. But architecture doesn't always do that. It's slippery that way. And unlike a political statement or a legal manifestation of a social contract, a spatial contract is open. It's open to multiplicities and simultaneities in a way that a kind of linear interpretation of the law is not.

- SM: Relatedly, in your statement you write, "Architects are conveners. This is inherent to what architects do." At the same time, the way you describe this movement across scales would seem to give architects license to "intervene" at any number of points. Do you mean to set up an opposition between "intervene" and "convene"?
- HS: Maybe we should have a whole symposium about that! I never thought about them as [being] different, but it's actually a very beautiful observation. I would think about it much more. But let me just describe to you very specifically about the convening dimension. It's at once metaphoric and literal. In relation to the other forms of artis-

tic expression, architecture has always been that of the host. Among muses, the architect was the one [who] was the framework, the containment, and the enabler. The one [who] gave a surface for the painter; the one [who] gave the podium at the bottom of the step for the sculptor; the one [who] created the Lenten or the Latin script to appear on the brick

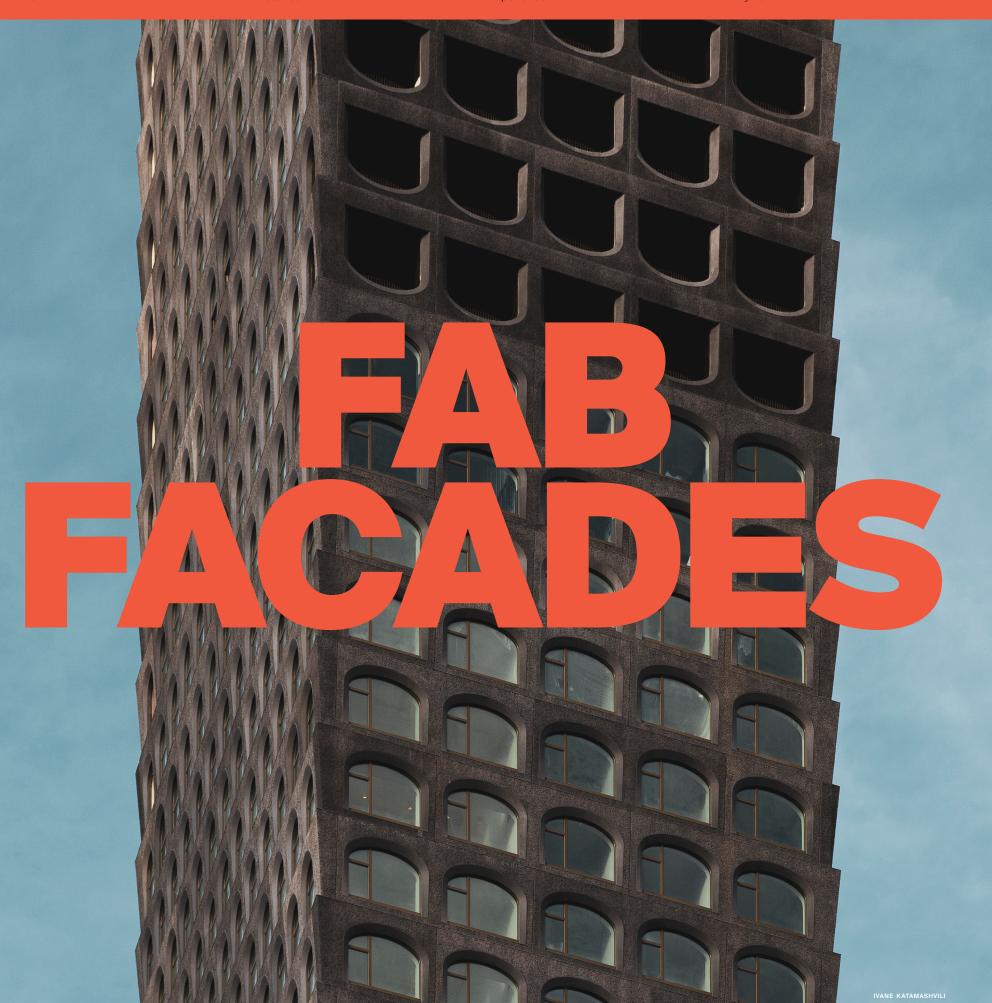
But in a more literal sense, we [architects] have a strength in us to synthesize, to connect, to enable because we think projectively. We think with the project. Therefore, the idea that you convene in order to synthesize is very important. And with the growing complexity of problems that we, the architect and nonarchitect, are facing today, there's a growing interest in the architectural methodology in other fields—whether it's biotech, public health, law, corporate business schools-to teach them design thinking. That has a lot to do with [our] ability to be able to [gather] input from a variety of sources and interdisciplinary approaches to addressing complex problems and [then] to come up with a project, with an idea, with a solution, rather than to stop at the analysis. We do that very, very well, and yet we have forgotten about that, or we don't articulate that very well, we have taken it for granted too much. So if you take the question of living together to mean the spaces in which we live together, then it becomes clear that we [architects] have a responsibility to bring minds to-

- **SM:** A criticism of previous Biennales, and of architects more widely, is that they fixate on solutions.
- HS: I strongly believe that as architects, we don't bring solutions, we bring resolu-

tions. Meaning that, out of particular circumstances and factors of context and contingencies and clients and possibilities, we come up with a resolution, which, by the way, is why every contract is different. It's not about the what or the how, but about what if...? It takes a particular set of skills to respond in that way. And in this Biennale, we are responding to global problems by asking, "What if it could be otherwise?"

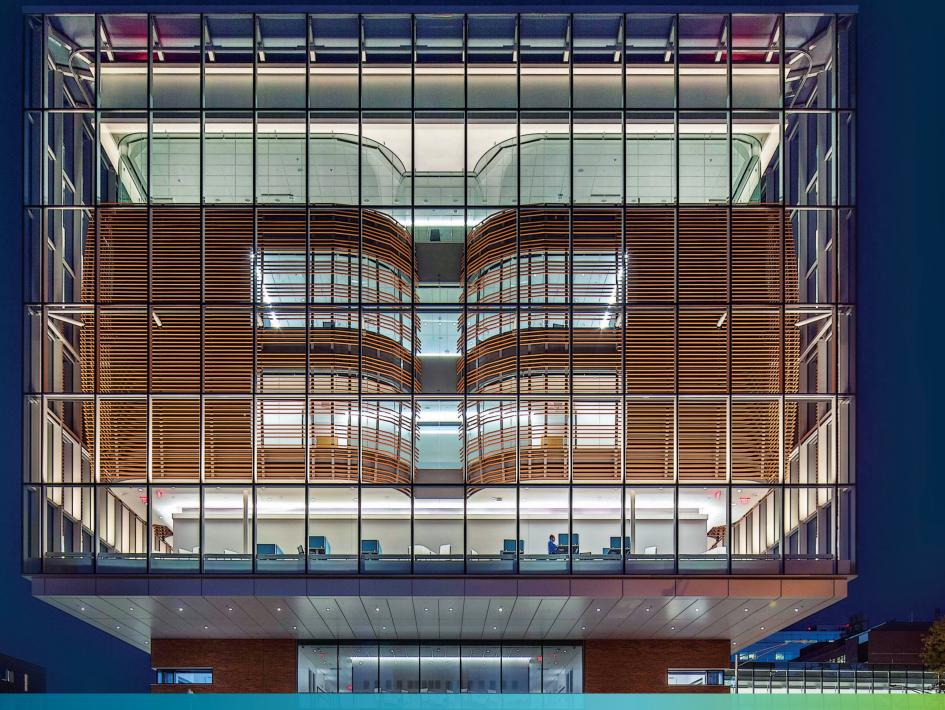
- **SM:** It seems you are more optimistic about things than I had initially thought!
- HS: It's true. If I have been selective in one way in organizing this Biennale, it was that I did not go after critical projects—that is, projects that are just there to undo or to highlight the problems and negativities of our society. I have pushed for optimism. I have pushed for possibility.
- **SM:** On that note of possibility, I want to end as I presume the exhibition will—with the planetary scale. It's a theme you previously explored in the edited volume *The World as an Architectural Project*. What is your interest in this "supra-architectural" inquiry?
- HS: The only way we can live together [today] is to think through the planetary. As many cosmopolitan philosophers now argue, the only philosophy, the only politics, and, I would argue, maybe the only architecture, is the planetary architecture. We cannot anymore afford to say architecture is only about the locality. Architecture is about the cosmos. And we have to contend with that scale and all its positive, negative, and challenging implications. But that does require different instruments than the ones we are used to.

6 Special Section May 2021



Saying that we know a thing or two about facades at *The Architect's Newspaper* is an understatement. Our expertise in this richly varied field has spawned the Facades+ editorial platform and robust conference series over the past few years. We're always searching for the latest innovations and closely reporting on the evolution of this growing industry. By studying experimentation with form, texture, and groundbreaking applications within North America and abroad, we can pinpoint the latest trends and profile the innovators pushing the limits of this architectural element. Recently completed case studies in this special section represent the best of this exploratory energy, undeterred by the global pandemic. We also highlight an abundance of new and improved products. A return to ceramics in a range of panelized and unitized applications reveals the long-overlooked strength of this ancient material, while refreshed and reengineered composites provide new flexibility. Dynamic metal and glass solutions appear in the latest curtain wall and rainscreen systems, and updated barrier and coating products are meeting the demand for better insulation and durability. By Adrian Madlener

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West Hollywood Sunset Spectacular



Architect: Tom Wiscombe Architecture **Location:** West Hollywood, California

Structural engineer: Walter P Moore
Electrical engineer: Glumac
Media designer and engineer: Display De-

Construction manager and client: Orange Barrel Media

General contractor: Arbib Construction Steel fabricator: Northern Manufacturing Steel detailer: DBM Vircon

Electrical subcontractor: Bauer Electric Services

Custom plate steel modules Custom LED video screens

Los Angeles's Sunset Strip is a charming hodgepodge where buildings old and new jostle for space with palm trees and rotating billboards. Adding to this riotous scene is a new urban marker every bit as attention-grabbing as Hollywood blockbusters and architectural kitsch.

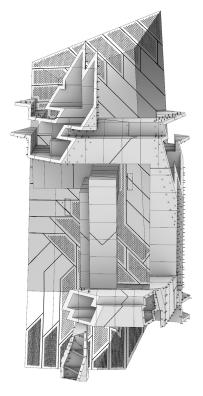
At 67 feet tall, the West Hollywood Sunset Spectacular is somewhere between a bill-board and a Transformer. Massive multimedia displays beam out advertisements every few seconds, while oversize stainless-steel modules give the impression that the shardlike obelisk could suddenly click into gear.

Local firm Tom Wiscombe Architecture (TWA) developed the project alongside Orange Barrel Media for a 2016 city-sponsored competition, fending off stiff challenges from the likes of Zaha Hadid Architects and Gensler. In the several exploded diagrams that TWA prepared for its submission entry, the assembly of the individual building pieces mirrors that of a model set. "It's really the only kind of architectural representation that I trust," said founder Tom Wiscombe.

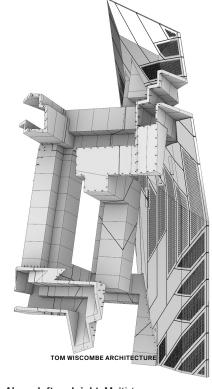
That playfulness, however, belies the unorthodox construction techniques, advanced design-assist processes, and complex systems integration marshaled for the project's realization.

Early on, structural engineering firm Walter P Moore determined that a standard frameand-skin enclosure system would be too expensive and instead suggested welding TWA's componentry together in a process akin to aircraft construction. Its fabrication fell to Northern Manufacturing, an Ohio-based maker of industrial equipment, with construction modeling firm DBM Vircon acting as a go-between. (Project detailing was key to avoiding errors in prefabrication that could prevent the components, each one entirely unique, from aligning on-site.) The Los Angeles office of MEP engineers Glumac devised an intensive electrical system capable of powering 1,500 square feet of digital tile, three high-powered laser video projectors, and multiple sound systems.

The entire enterprise breached the boundaries of the architectural, passing into the infrastructural: Altogether, 100 tons of stainless steel went into the construction. The components—or, per Wiscombe, "superstructure chunks"—were loaded onto 770-foot-long super-load lowrider trailers for the 2,300-mile



Top: West Hollywood Sunset Spectacular is a public-private partnership between Orange Barrel Media and the City of West Hollywood and seeks to establish a new form of billboard for the 21st century.



Above left and right: Multi-ton super components compose the project's structure and facade, The individual components were welded together following the principals of monocoque fabrication.

29 Facades Case Study May 2021



trek west. Each piece arrived on-site in West Hollywood with a loose back panel that allowed them to be bolted together on their perimeter faces. (That connection was subsequently concealed.) A 90-foot-tall industrial crane hoisted the "chunks" into place; arranged in three towering panels, they form a cocoon around a pedestrian-accessible central void. Suspended overhead is a sculptural entity that appears to stabilize the heaving mass.

For Wiscombe, the project forcefully challenged industry paradigms. "It is time that we really take apart how we build, what kinds of elements are used to build, who builds it, and how we document it," he said. "One thing that I'm really proud of on this project is that we didn't accept anything that was given on any of those fronts, we are kind of working as skunkworks, and there is a bit of mystery shrouding what is being done. I view that as a mode of innovation." Matthew Marani



TOM WISCOMBE ARCHITECTURE

Top and above: Tom Wiscombe Architects conceived of the design as a model kit. Three-dimensional clusters, or "superstructural chunks," were configured to create the project's shape-shifting form. Mechanical and electrical systems run through chases embedded within the plate steel modules and carry enough voltage to power the multimedia display.

30 Facades Case Study The Architect's Newspaper

MIT Site 4



Architect: NADAAA Location: Cambridge, Massachusetts

Architect of record: Perkins&Will Structural engineer: Odeh Engineers Facade consultant: Studio NYL MEP engineer: Arup

General contractor & construction manager: Turner Construction

Facade fabricator: Island Exterior Fabricators
Facade manufacturers: Wausau Window
panel windows, Construction Specialties
architectural louvers, Ipswich Bay Glass
storefront system, Kawneer curtain wall
system, Alpolic aluminum composite
panels

From the beginning, MIT Site 4, a new 29-story graduate residential tower in Cambridge, Massachusetts, was conceived by its architects as an icon. But not just any icon, said Nader Tehrani of the architecture firm NADAAA; the project, one of several being developed concurrently by MIT in the Kendall Square neighborhood, needed to both anchor this inchoate skyline and be "more stealth, almost inconspicuous."

Contemplating this paradoxical aim, Tehrani reached for an old bit of sleight of hand. Because the lozenge-shaped tower was oriented east to west, its broad sides would be

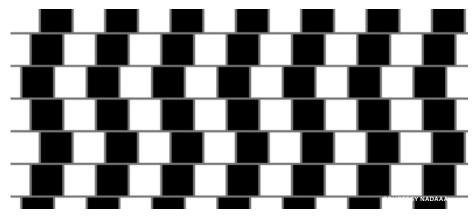
visible up and down Main Street—the opposite of inconspicuous. Breaking up those exteriors into alternating bands of glass and anodized aluminum unitized panels would give the eye more to do, but staggering them, the NADAAA team discovered, would trigger a sensation akin to the café wall illusion. Color gradations in the paneling and their concave depressions, which produce subtle shadowing, reinforce the feeling of variability.

As it takes on increasingly bigger commissions, Boston-based NADAAA has reconciled craft-forward thinking with the economies of scale expected of most large job sites. At Site 4, the aluminum panels are enormous—each is 10 feet tall, anywhere between 15 and 29 feet wide, and weighs 4,200 pounds—yet they are arranged like courses of masonry. Pushing the comparison further, they dagger at the tower corners like coppery quoins.

Tehrani likens the scale of the panel segments to that of triple-deckers, the distinctive three-story houses that dot Cambridge. But a more literal rootedness in history and context occurs at Site 4. Its bronze trunk rises from the shell of a 19th-century brick warehouse whose envelope needed to be stabilized after its internal structure was blown out. Next followed a feat of structural ingenuity; half of MIT's six Kendall Square projects rest atop a common subterranean **continued on page 30**







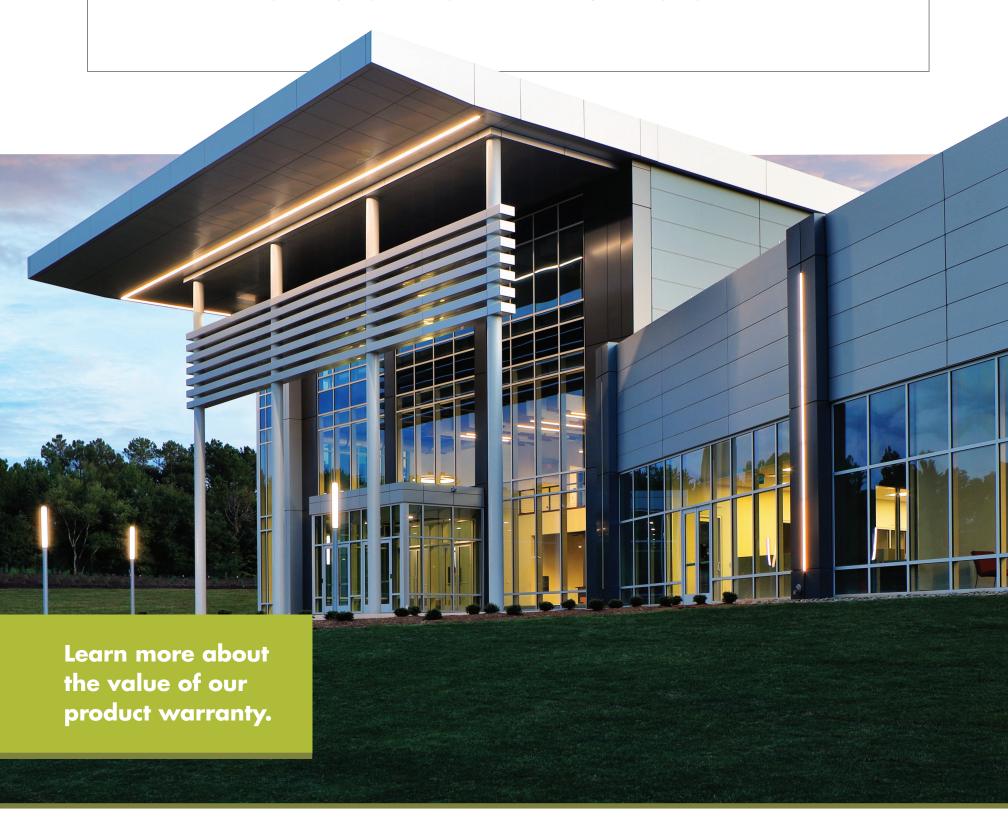
Top left: The tower is one of several large developments MIT is building through the Kendall Square IniTop right: The north and south elevations cantilever up to 50 feet from the street-level podium.

Middle and bottom: The panel arrangement is inspired by the café wall illusion, where staggered rows are arranged so as to appear sloped.



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32 Facades Case Study The Architect's Newspaper

MIT Site 4 continued



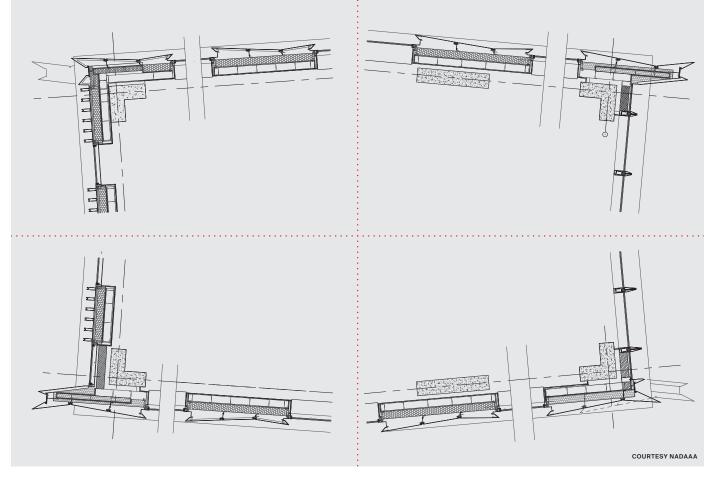


base, so a concrete slab was poured at grade during excavation to allow for the simultaneous construction of the tower above. At the fifth story, a hybrid system of concrete and steel trusses cantilevers to the north and south and supports an orthogonal grid of castin-place floor plates and columns.

Initially, NADAAA specified three-story-tall panels for Site 4's facade, but feedback from fabricator Island Exterior Fabricators and facade consultant Studio NYL prompted a change of tack. Instead of vertically oriented panels, horizontally stacked panels would ease both transport (they readily fit on a flatbed truck) and installation, noted Studio NYL founding principal Chris O'Hara. The horizontal panels, he explained, "were installed at a pace of one floor per week and were mounted at the head and hung from the floor above using a J-hook assembly that was developed to permit adjustability of 1 inch in each direction."

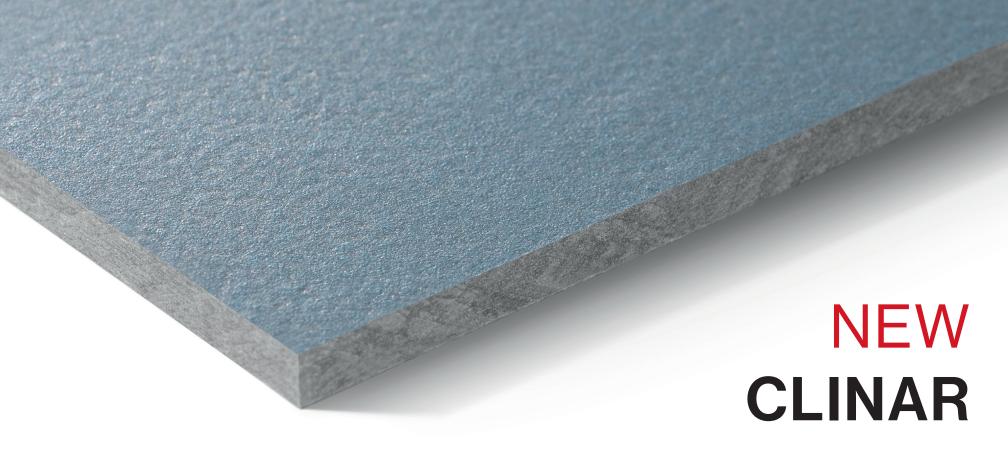
The result is an icon that resists the label, magnetic in its pull but not smothering. This is so, Tehrani suggests, because "the building presents a silhouette that is not so much the result of a willful composition but the natural consequence of a tectonic decision."

Matthew Marani



Top left and right: The panels, which have embeded waterproofing and insulation, were prefabricated by Island Exterior Fabricators.

Above: The tower follows a lozenge-shaped plan that bulges toward its center to accommodate mechanical services.



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34 Facades Products The Architect's Newspaper

Metal

Sturdy and long-lasting, metal cladding can protect a building from the elements while also reinforcing its structural stability. These latest products champion easy application, customization, and aesthetic nuance without skimping on strength and durability. By Adrian Madlener



Frost Anodized MCM ALPOLIC

The new Frost Anodized collection by ALPOLIC introduces a smooth and low-gloss finish to the manufacturer's broad offering of indoor and outdoor metal surface products. This new range offers designers the look of chrome without the cost typically involved.

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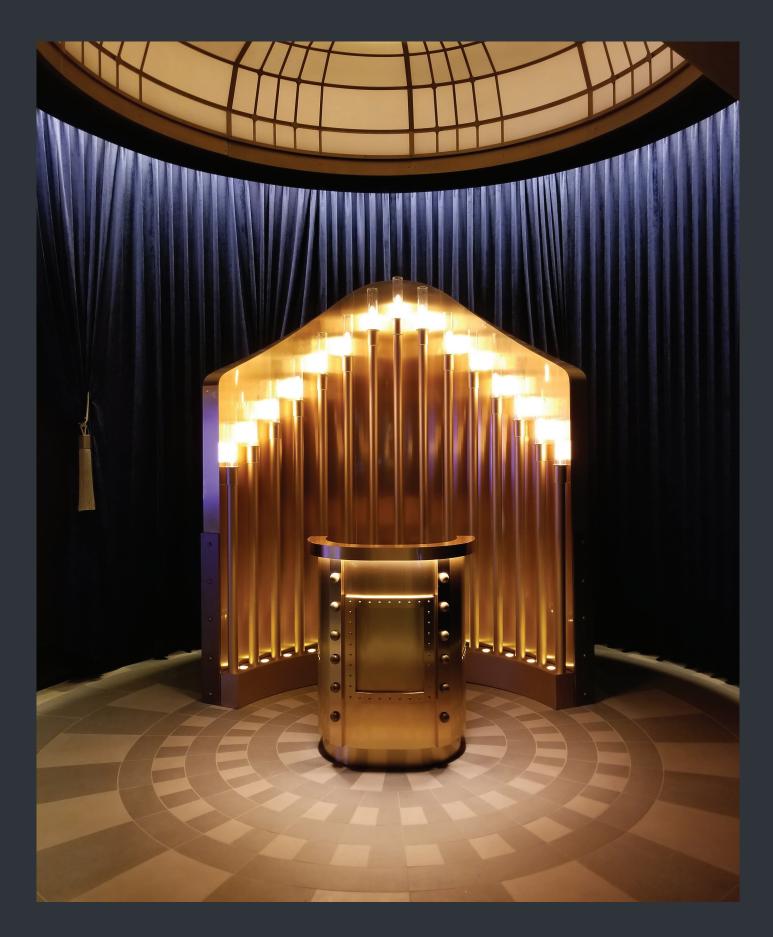
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6WL Rigidized Metals

The new patterned and perforated 6WL panel by Rigidized Metals is engineered with deep-relief textures to enhance durability and meet different aesthetic requirements. Its proprietary manufacturing technology can be used to apply almost any motif to metals like stainless steel, carbon steel, aluminum, copper, brass, and titanium.

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Racades Case Study The Architect's Newspaper

One Hundred

Architect of record: Studio Gang Location: St. Louis

Interior design: Mac Development
Facade consultant: Studio NYL
Structural engineer: Magnusson Klemencic
Associates

Design/build electrical engineer: Charles E. Jarrell Contracting Co., Sachs Electric Company, DeLuca Plumbing

Design/build mechanical engineer: Architectural Windows

Civil engineer: Stock & Associates Consulting Engineers

Lighting consultant: Morlights

Aluminum supplier: Lorin Industries Aluminum fabricator: Kalkreuth Aluminum panels: Morin Rainscreen: Kingspan

Curtain walls: Ventana Design-Build Systems **Glazing:** Tianjin SYP Engineering Glass Co.

EIFS & ACM: Sto Corp. Moisture barrier: CETCO Doors: YKK AP, Ventana, CMI Though it's been open for less than a year, One Hundred, a 36-story residential tower in St. Louis's Central West End neighborhood, carries itself like a city landmark. Designed by celebrated Chicago architecture firm Studio Gang, the building peacocks along Kingshighway Boulevard, its tiered, faceted profile evoking a giant crystalline headdress. There are echoes of the art deco stylings of the nearby Park Plaza Tower, and in the late-afternoon light, the glass-and-metal envelope—a combination of curtain walls and corrugated anodized aluminum cladding—takes on a gold hue.

But for all its extroverted tendencies, the tower was conceived "from the inside out," said Juliane Wolf, a design principal at Studio Gang. She traces the project's form to the early conceptual design phase, when firm founder Jeanne Gang sketched out the plan of a single unit, rotated on its side. Repeating and mirroring the shape (and leaving space in the middle for an elevator core) resulted in a plan that is reminiscent of an oak leaf—fitting, as One Hundred borders St. Louis's Forest Park.

With the majority of the 316 condominiums

oriented east to west, residents enjoy expansive views of the vast parkland and, looking eastward, the Gateway Arch. The sawtooth slab creates opportunities for wraparound views in every unit. Grouped into four- and five-floor tiers, the floor plates grow incrementally wider as they move up in the building, before snapping back to the narrowest width and repeating the pattern again. The building employs a unique structural system of "wallums"—wall-and-column hybrids whose thickness ranges from 4 to 9½ inches—"to capture the floor plates as they are growing outward," Wolf said.

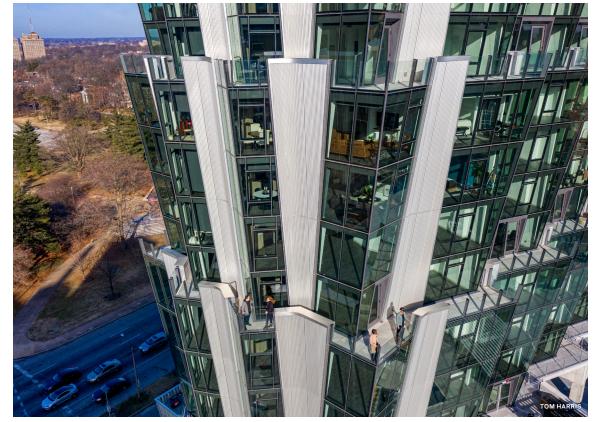
At their longest, the cantilevers span nearly six feet, which becomes the width of the outdoor terraces that terminate the glazed tiers. These mostly private balconies are hemmed in by glass railings and aluminum elements of the facade; consultants Studio NYL ensured thermal breaks in between, so these safety features wouldn't become hot to the touch during summer.

The canted unitized curtain wall system incorporates argon-filled insulated units with

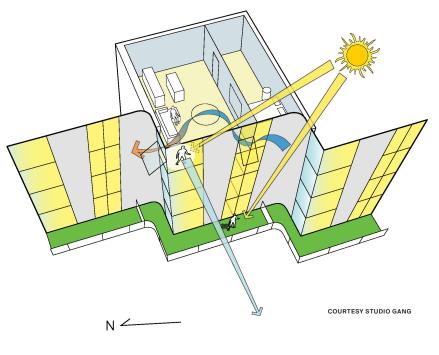
a low-e coating and standard elements including operable awning windows and glass doors. The latter required more detailed articulation to ensure geometric compatibility with the wider panel system. "There's always this dynamism and changing edge-of-floor condition that the angled facade needs to meet," said Christopher O'Hara of Studio NYL. "That was the biggest challenge of the project."

The sharp diamond edges of the glass tiers are complemented by the curved bands of anodized aluminum. (The same aluminum was used to fabricate the Z-purlins that clad the tower podium.) Wolf chose the metal because of the way it "changes throughout the day [and] picks up the color of the sky," she said. The ability to reflect light expressively, demonstrated daily by the Gateway Arch's sunset winks and shimmers, may yet give St. Louisans outside One Hundred's confines something to look back at. Zach Mortice









Far left top: One Hundred's plan and profile were designed to maximize views.

Above: The unitized curtain wall system features argon-filled insulated units with a low-e coating. The glass is interspersed with clear anodized aluminum panels.

Far left bottom: The same aluminum was used in the podium rainscreen, which comprises custom-made Z-shaped purlins.

Left: The units are grouped in four-to-five story tiers, with the walls slanted less than 13 degrees off vertical. The facade also incorporates standard operable windows.

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38 Case Studies The Architect's Newspaper

Case Studies in Brief

Rocket Mortgage FieldHouse

Architect: Gensler Location: Cleveland

General contractor: Whiting-Turner

Design, engineering, and fabrication partner: Eventscape

Local installation partner: Forest City Erectors

In 2019, Gensler partnered with the Cavaliers to renovate Cleveland's Rocket Mortgage FieldHouse, more than tripling the arena's event space, improving its functionality and delivering an enhanced visitor experience to both sports fans and concertgoers. The designers added an expansive, 65,000-square-foot curtain wall that curves around three sides of the arena within the building's glass facade. The design and pattern of the interior facade optimizes views out of the building while nodding to the traditional herringbone

wood floors of basketball courts.

Executed by the custom fabrication company Eventscape, the sculptural wall also guides visitors within the venue along a clear and well-defined path, eliminating previous circulation challenges and encouraging opportunities for community interaction. Upgrades in technology, signage, and lighting further connect the superstructure to the city, as interior lights are visible from the street and act as a wayfinding tool for locals and visiting fans. Ali Oriaku



Center for Medical Education Innovation

Executive architect: Helix Architecture + Design

Design architect: CO Architects **Location:** Kansas City, Missouri

Facade mesh: GKD Metal Fabrics General contractor: J.E. Dunn Construction Glass curtain wall: 8G Solutions

(formerly JPI Glass)
Facade installer: Standard Sheet Metal

Structural engineer: JEI Structural

Engineering

Interior glass railings: C.R. Laurence

The design for Kansas City University's Center for Medical Education Innovation supports the school's commitment to reach beyond the borders of its campus to the broader community. Designed through a partnership between Helix Architecture + Design and CO Architects, the building's glass facade symbolizes the importance of transparency and highlights the technology-rich teaching labs within. Also visible from the exterior is a multilevel lobby space where stadium seating creates a forum

for social gatherings and conferences.

The design team added GKD Omega 1520 metal fabric panels to the west facade of the building, as it had the best views but was overly exposed to the sun. Each 42-footlong metal mesh panel was perpendicularly anchored to the building using ultrathin cable rails. The panels act like vertical blinds. The metal fabric was an ideal solution for its ability to create shading while being transparent and durable. Ali Oriaku



UPCycle

Architect: Gensler
Location: Austin. Texas

Glazing contractors: CRL, Arrow Glass

Facade products: CRL U.S. Aluminum Series 451, CRL IT451 Center Glazed Storefront Systems, CRL U.S. Aluminum Series 3250 Curtain Wall System

UPCycle is a creative office space in Austin, Texas, featuring 80,000 square feet of conference rooms, workstations, and amenities, including a coffee bar, a kitchen, a fitness center, graffitied lounges, and outdoor patios.

Once the site of a derelict warehouse and recycling center, the new UPCycle office repurposes 95 percent of the building's existing framework and materials, preserving its historical character and celebrating its industrial roots.

High-performance glazing systems from

CRL, including the 3250 Series Curtain Wall and the IT451 Center Glazed Storefront, were added to the facade to boost the building's efficiency and functionality. Both glazing systems are manufactured using recyclable aluminum extrusions and help mitigate heat transfer, reducing the use of air-conditioning and thus diminishing the building's energy consumption. The glazing is also designed to allow natural light into the building, decreasing the need for electricity.





Dri-Design Metal Wall Panels are available in a nearly unlimited palette of colors, materials, finishes and textures, making them a unique offering among other facades. However, what makes Dri-Design distinct, is that it provides this unique range of design options, in a system that installs and performs even better than it looks. A combination of form and function that is truly distinct.

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- · Available in a variety of materials and colors.
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616.355.2970 // DRI-DESIGN.COM

Case Studies in Brief continued

SoFi Stadium

Architect: HKS

Location: Inglewood, California

Facade consultant and engineer:

Walter P Moore

Metal panels facade installer: Crown Corr Facade system: Steel truss compression ring supporting a double-grid, cable-net

The open-air SoFi Stadium, designed by global firm HKS, brings an innovative enclosure to the Southern Californian city of Inglewood and sets a new standard for NFL stadiums nationwide. The new stadium covering is a fixed, translucent ethylene tetrafluoroethylene (ETFE) roof with orthogonal grid steel trussing. The metal canopy covers 3.1 million square feet, making SoFi one of the largest indoor-outdoor stadiums in the world.

The ETFE film features a 65 percent frit pattern that shelters guests from direct sun

roof covered with translucent ETFE and perforated triangular metal panels Facade metal panels: Zahner ETFE: PFEIFER

and reduces solar gain into the venue. Exactly 34,789 perforated anodized aluminum exterior panels, manufactured by Zahner, are fixed to the lattice support system. As a whole, the exterior envelope is independently supported from the seating bowl. The roof also features a series of operable panels distributed around the perimeter of the ETFE surface that can open and close, depending on climatic conditions, to promote airflow in the stadium and a comfortable environment for fans. Katie Angen



International Gem Tower

Architect: Skidmore, Owings & Merrill Location: New York City

Developer: Extell Development Facade consultant: Permasteelisa Group General contractor: Tishman Construction Security consultant: G4S

The International Gem Tower in New York
City is a commercial skyscraper dedicated to
the jewelry trade. The facade of the building,
designed by Skidmore, Owings & Merrill,
was inspired by the nearby Diamond District,
its folded glass curtain wall resembling the
faceted surface of a crystal. The sculptural
facade is composed of three distinct elements. Opaque spandrel glass conceals the
building's structural components, vision glass
provides tenants with 360-degree views of

Steel distributor: Rigidized Metals Corporation

Steel manufacturer: Tsukiboshi Art Stainless steel: Starlight 7J

Manhattan, and hexagonal panels made of Starlight 7J stainless steel give the tower a glistening appearance. The base of the building is wrapped in fritted glass, linking the public lobby, retail, and dining spaces to the surrounding neighborhood. Ali Oriaku



Lake Huron

Lead designer: SAOTA

Architect of record: Matter Architectural Studio

Location: Ontario, Canada

Bespoke furniture: OKHA

Electrical engineer: Capson Electrical General contractor: MCI Design-Build Corporation

Interior designer: ARRCC

Landscaping: MHLA

Lighting designers: SAOTA, Lux Populi

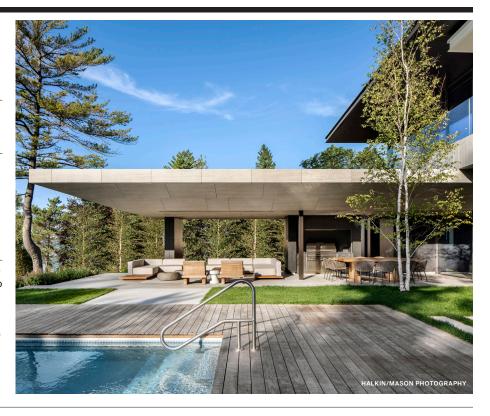
A summer house composed of stacked rectangular boxes sits on the shore of Lake Huron in a small town outside London, Ontario. Designed by Cape Town-based architecture firm SAOTA, the house attempts to connect with nature through

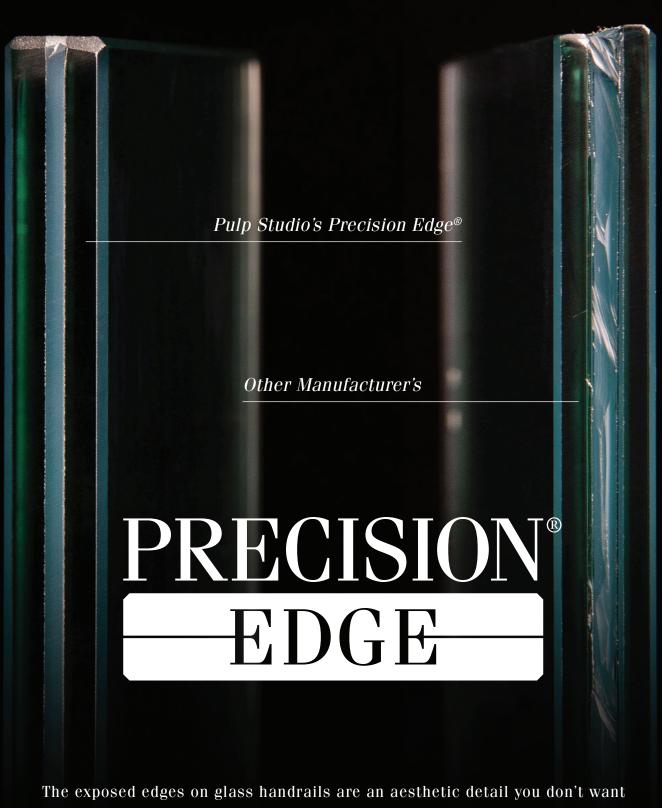
The project uses a hybrid construction system, with a concrete lower level and steel-

the materiality and detailing of its facade.

Structural engineer: Concentric Engineering
Facade system: Neolith ceramic panel
system with Neolith Krater, Neolith Nero
Zimbabwe, Neolith Strata Argentum
Doors: Reynaers Aluminum

framed upper floors. SAOTA used natural materials with tactile qualities to visually link each tier to the surrounding site. Because of Canada's harsh climate, the design team opted for a Neolith ceramic panel facade system for its durability. Lighter stone matches the beach sand in front of the property, while darker panels reference the tree bark of the neighboring forest. Ali Oriaku





The exposed edges on glass handrails are an aesthetic detail you don't want to overlook. Codes only require that handrail glass be laminated, but high-quality edgework is imperative for the integrity of the design. Never feel pressured to accept a pre-polished laminate product when you have better options.

Precision Edge® complements the design by providing a high-quality, zero-tolerance finish, with perfect alignment for both tempered and annealed laminated glass.



42 Facades Products The Architect's Newspaper

Composites

Blending materials to harness the best attributes of each allows manufacturers to create dynamic products. Precision-engineered composite cladding provides the AEC design community with flexibility and room for customization. The following selection demonstrates how the qualities of natural stone and cement can be combined with synthetic elements to achieve new levels of durability and aesthetic cohesion. By Adrian Madlener



HardiePlank Lap Siding James Hardie

James Hardie's flagship HardiePlank Lap Siding demonstrates the best aspects of its fiber cement technology. This product captures the tradition and timelessness of timber lap siding and infuses the facade with performance and durability. HardiePlank Lap Siding comes in a range of colors and finishes that imitate materials like wood and stone.

jameshardie.com



Six-S Neolith

Inspired by nature and the ongoing fight against COVID-19, the new Six-S collection by Neolith showcases the company's decoration technology and finishing techniques. Available in six variants, these sintered-stone tiles are detailed enough to feature prominently within interiors and durable enough to withstand the elements as facade components.

neolith.com



Accumet Northern Facades

Northern Facades' dry joint back-vented Accumet rainscreen panel is produced using aluminum composite. It is available in a variety of sizes, custom shapes, and colors. Accumet is SB-10 and ASHRAE 90.1 compliant with the inclusion of Northern Facades' ISO Clip.

northernfacades.com



StonewoodFiberesin Industries

Stonewood by Fiberesin Industries is a solid, phenolic architectural panel that is as aesthetically pleasing as it is durable. With a high strength-to-weight ratio, this product is ideal for either horizontal or vertical surfaces and can be used in rainscreens and direct applications.

fiberesin.com



Steni Vision Steni

Produced using stone composite material, Steni Vision versatile rainscreen panels combine a wide range of colors, patterns, and finishes. The precut, unconventionally shaped components are inexpensive, easy to install, impact resistant, and helpful in reducing a building's carbon footprint.

steni.net



GammaStone TerraCORE Panels

An innovative alternative to traditional stone cladding, Gamma-Stone veneer panels are lightweight. This TerraCORE Panels product is manufactured using a stainless-steel backing, fiberglass, and a variety of nature-inspired veneers.

terracorepanels.com

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130 William

Design architect: Adjaye Associates **Location:** New York City

Architect of record: Hill West Architects
Facade consultant: Gilsanz Murray Steficek
(GMS)

Structural engineers: McNamara Salvia
Civil engineer: AKRF Engineering PC
Construction manager: Gilbane
Electrical engineer: AKRF Engineering PC
Lighting consultant: Brian Orter Lighting,
Design (BOLD)

Mechanical/plumbing engineer: Ventrop EGC Precast: Artex Systems Windows: Architectural Windows

More than a century ago, urban reformers warning of the perils of congestion and unregulated development pointed to Lower Manhattan as Exhibit A. That the great monuments of the era—notably, the Woolworth Building—appeared to stand aloof from this cacophony even as they contributed to it only hardened calls for change. Later developments attest to the consequences: Skyscrapers, once defiantly individualistic and preening, subsequently subject to zoning mandates and standardized building componentry, entered a phase of disenchantment.

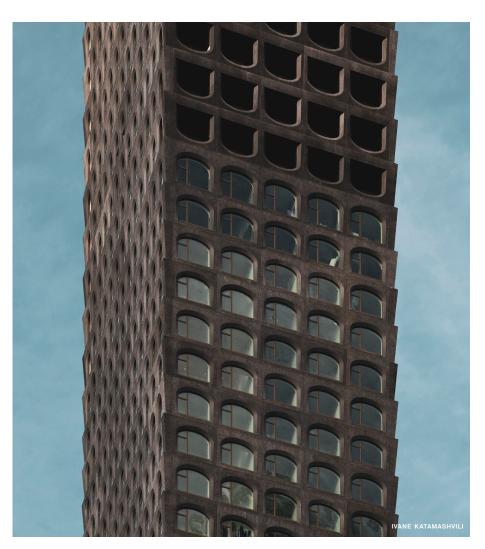
With 130 William, a 66-story residential tower in the financial district, Ghanaian British architect David Adjaye wants to re-enchant downtown's skyline. The structure, darkly glamorous, pays homage to a bygone age of vertiginous dreams. Sensibly set back from William Street, the skyscraper is clad in richly textured precast concrete panels; tilted and tiered, they give the building a serrated profile and, from some angles, the bearing of a ziggu-

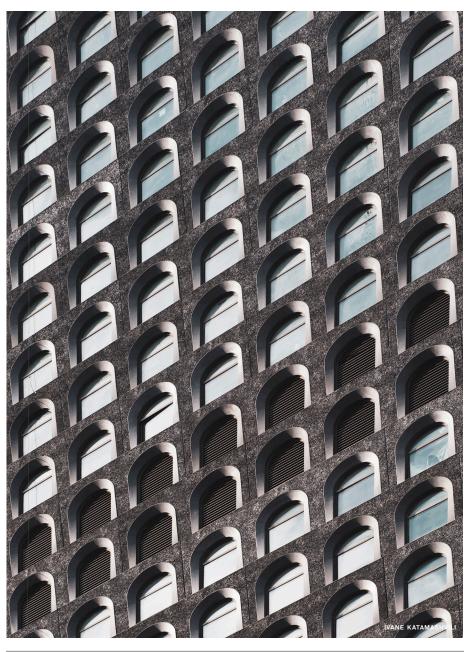
rat. (Early skyscraper builders keenly cultivated Babylonian imagery through their designs.) Arched windows and loggias, faint echoes of the Woolworth's Gothic flourishes, break with today's prevailing fashion for crisp grids, sharp diagonals, and other anodyne geometries.

Said Adjaye, "I was thinking about the evolution of towers in the city and wanted to find a language that could counterbalance recent interventions in the New York skyline." The arches motif, he explains, goes back even further than the turn of the century, recalling the large, vaulted maritime warehouses that once operated on the site.

Adjaye also toyed with the tripartite divisions that Cass Gilbert and his ilk swore by. He inverted the bottom and middle orders, detailing the tower base in polished cast-in-place concrete and "rusticating" the shaft through the use of the precast panels. (The uppermost order-the crown-he kept; crews are currently at work assembling its bronze carapace.) More than a sly reversal, the displacement of the tactile upward restores a craftsmanship to sky-high construction, suggests Marc McQuade, an associate principal at Adjaye Associates. "We wanted to invoke that Gotham experience, which you don't get so much from the ground but from neighboring buildings," he said. "Sometimes the best terra-cotta ornament of those classic New York towers doesn't start until the 27th floor."

Each of the 30-foot-wide-by-12-foot-tall panels was precast at a plant in Ontario, following an involved process that began with custom formwork "made by master cabinetry makers," said McQuade. With input from Adjaye Associates' New York office and a tight division of labor, the continued on page 44





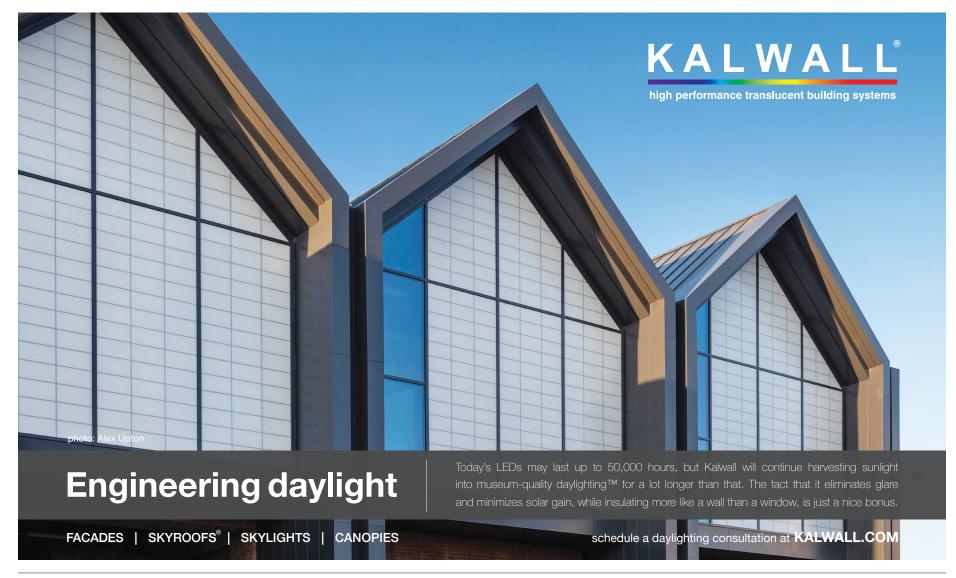


Left: Seemingly endless rows of arches distinguish 130 William from its contemporaries

Above: Titled precast panels, stacked horizontally, give the tower its serrated profile.

Top: Approaching the crown, the arches change orientation, pointing downward. At this penthouse level,

the glass recedes to create loggias.





Durability is critical for coatings applied to the 4th surface of an IGU. Pilkington **Energy Advantage™** is a proven durable, pyrolitic coating that is ideal for improving U-factor when applied to the 4th surface.





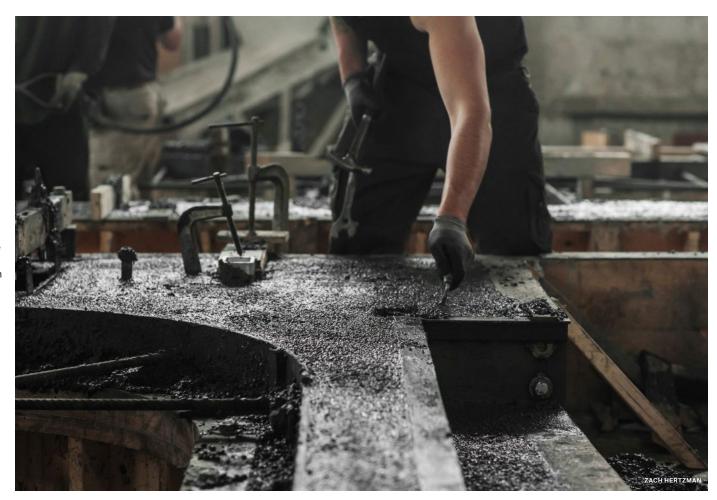
Facades Case Study The Architect's Newspaper

130 William continued

precast team prepared the molds for the pour. Fabricators smoothed over the arch elements, which protrude from the formwork backing, and laid the metal reinforcements and (handbent) rebar in the negative space around the voids. A handful of workers were assigned to pour, vibrate, and trowel the concrete-containing a pigment and black stones and granite chips for aggregate—at which point it was left to cure overnight. Unmolded the following morning, the panels were stood upright and subjected to ensuing rounds of ablutions and touch-ups. Concluding the process, a sealer was applied that, according to McQuade, helps with efflorescence and doesn't need to be reapplied.

The rounded windows, manufactured in Pennsylvania and then shipped up north to the precast plant, were fitted into the 1,100 panels before the integrated units were whisked down to William Street. "I'm really happy we did that," said McQuade. "Try caulking windows 700 feet up in the air. You might do the first 20 of them right, but as you approach your 100th the quality drops off pretty quickly."

In isolation, the panels exude a smoky lugubriousness, but in situ, under the late-afternoon sun, they become suffused with shades of ocher. An added benefit of the color? Unlike its forebears, 130 William will not easily succumb to the muck and grime circulating in the New York air. In fact, they may very well enhance it. Samuel Medina





Top: The tower's precast panels were fabricated at a Canadian plant in a process akin to artisinal manufactory that began with custom wooden molds. Following the instruction of the architects, precasters smoothed over the arch element and hand-troweled the backing wall; a two-inch formliner delineates the two textures. Above: The arches slightly protude at an angle and so double as integrated shading devices.



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Facades Products The Architect's Newspaper

Curtain Walls

Reducing the need for additional insulation, these curtain wall systems achieve thermal efficiency while keeping out air and water and reducing building sway. The following products showcase materials that can be used to pursue various aesthetics. By Adrian Madlener



Solarban R77 Vitro

The new Solarban R77 neutral-reflective glass features a subtle but impactful silver-blue tone and code-friendly solar controls. Applicable in Vitro curtain wall systems, this product has low emissivity while reflecting the sky above.

vitroglazings.com



Series 4500 Curtain Wall C.R. Laurence

Integrating C.R. Laurence's proprietary UNIflash, a system that sweeps infiltrated water to the exterior, the new stick and panel-type Series 4500 Curtain Wall system incorporates pressure-relieved horizontals. Nonconductive injection-molded thermoplastic connectors ensure total thermal insulation.

crlaurence.com



2500 UT Unitwall System Kawneer

Implementing continuous polyamide vertical and horizontal breaks, the new unitized Kawneer 2500 UT Unitwall System offers optimal thermal performance for many climates and locations. This cost-effective solution eliminates pressure plates and fasteners, reduces the need for metal, and cuts down on time required for assembly.

kawneer.com



high performance design concept from ${\bf Azon}$

MLP Azon

Azon specializes in top-of-the-line machinery and technology for aluminum facade manufacturers. The new MLP (mechanical lock profile) system was developed for commercial aluminum curtain walls, storefronts, and openings. It incorporates concealed and encapsulated components and is energy efficient.

azonintl.com



Bird1st EtchGuardian Glass

Designed to protect birds and from all-too-common problem of collisions, the new Bird1st Etch glass product by Guardian Glass provides designers flexibility without compromising on aesthetics. Available in four different and conducive to a variety of facade applications, Bird1st Etch incorporates products like SunGuard and low-e coating variants.

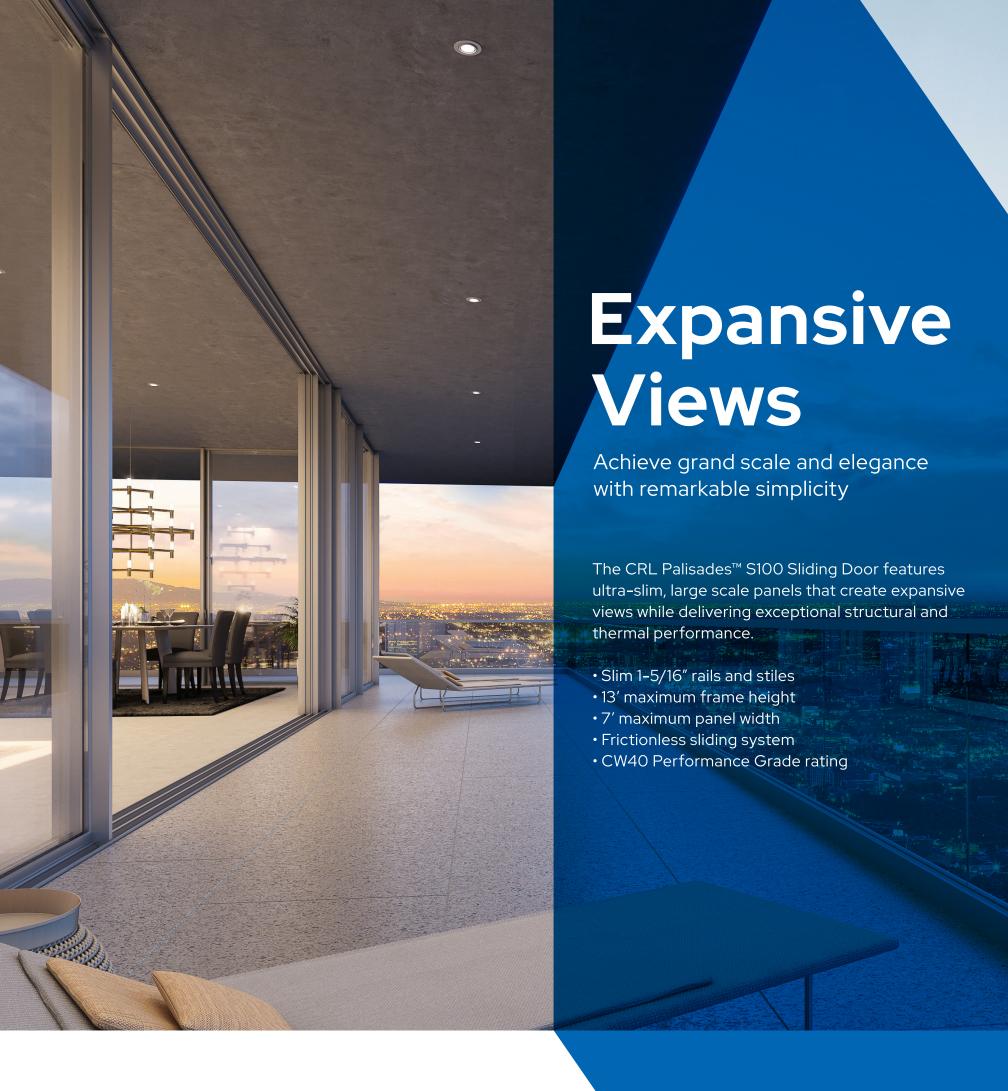
guardianglass.com



YHC 300 SSG Cassette YKK AP

The YHC 300 SSG Cassette system by YKK AP is a four-sided structural, silicone-glazed solution developed to withstand extreme conditions, especially hurricanes. While interlocking adapters anchor the cassettes, mullions toggle the vertical edges. The YHC 300 SSG Cassette system is available in multiple depths.

ykkapfacade.com



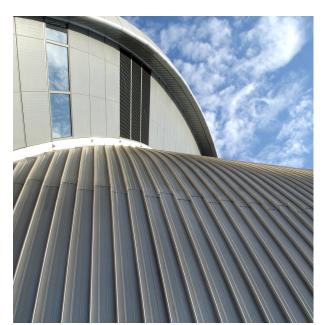


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50 Facades Products The Architect's Newspaper

Paints, Coatings, & Finishes

When updating a facade, one doesn't always have to rely on drastic interventions. A fresh coat of paint or a new finish can have as much effect as other solutions. These simple and often affordable alternatives can quickly transform outdated envelopes, introduce new colorways, and pair well with innovative cladding materials. By Adrian Madlener



TRINAR TC AkzoNobel

AkzoNobel's new TRINAR TC is a PFOA-free, PVDF-coil coating that protects metal surfaces from scratches, abrasions, and stains. Incorporating the manufacturer's latest resin and pigment formulation technology, the product renders any facade, roof, or other constructed element durable and weather resistant.

akzonobel.com



Fluropon Continuum Sherwin-Williams

Developed for both coil and extrusion applications, Sherwin-Williams's new Fluropon Continuum coating system is a mica-based, two-coat solution that can surpass the longevity and durability of comparable three-coat products. Fluropon Continuum is available in 120 standard colors.

sherwin-williams.com



Olympic ELITE Advanced Stain + Sealant in One PPG

Formulated to withstand the harmful effects of sunlight, water, mildew, and algae, PPG's new Olympic ELITE Advanced Stain + Sealant in One product comes in a rich palette of wood and natural tones. The stain is suited for deeply hued decking and shingle cladding.

ppg.com



Concrete finishes Fabcon Precast

Fabcon Precast's wall panels come in a variety of proprietary finishes such as exposed aggregates, imprints, and brick veneers, as well as increasingly popular steel variants. Although these options require the additional step of painting, they afford designers the possibility of freely using color however they see fit.

fabconprecast.com



Aura Exterior Paint Flat Benjamin Moore

Featuring Benjamin Moore's proprietary Color Lock technology, the Aura Exterior Paint Flat achieves an even and thick application with few coats. This fast-drying paint is exceptionally durable and resistant to mildew and harsh weather conditions.

benjaminmoore.com



MARQUEE Behr

Incorporating Behr's dirt- and fade-protection technology, MARQUEE is a stain-blocking paint and primer. The new product retains its color for long periods and can withstand severe weather. Its mildew-resistant finish ensures the safety of low-temperature applications as early as 60 minutes after a rainstorm.

behr.com

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52 Facades Products The Architect's Newspaper

Ceramics

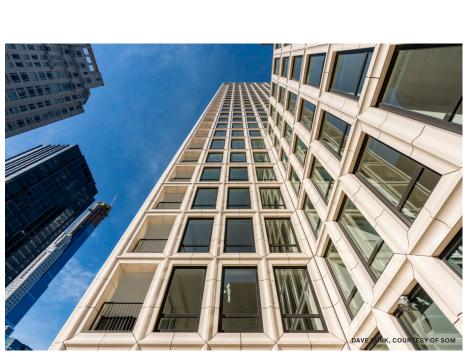
Increasingly stringent sustainability standards have helped push designers into working with more natural materials. This evolution has proved the viability of renewable resources like timber. A revived interest in ancient materials such as terra-cotta and porcelain has permeated the facades industry to a similar effect. By Adrian Madlener



NeXclad True Terreal North America

Designed to work with flush surface textures, the new NeXclad True terra-cotta cladding solution by Terreal North America is a small but durable module. The tile comes in 14- and 16-inch variants and a variety of colors and can be either applied directly to an exterior wall or integrated into a rainscreen system.

terrealna.com



Longoton Shildan Group

Ideal for either rainscreen or curtain wall applications, Shildan Group's Longoton 10-foot-long terra-cotta panels feature custom profiles and are available in an array of glazing options.

shildan.com





TerraCladBoston Valley Terra Cotta

Boston Valley Terra Cotta's flagship TerraClad rainscreen system offers a ship-lapped alternative to comparable products. Incorporated open joints help shield internal enclosures from wind-driven rain and snow while allowing an even, filtered airflow. The manufacturer's adjoining aluminum framing system reduces wind-induced rattling due to thermal expansion.

bostonvalley.com



ABKSTONECeramics of Italy

As one of the largest porcelain facade tiles available on the market, ABKSTONE comes in 5-by-10-foot panels. This Ceramics of Italy product is manufactured to withstand extreme weather through the use of a proprietary dry compaction technique and the latest generation of kilns. The slabs are available in a wide variety of styles that resemble marble, stone, concrete, metal, or wood.

ceramica.info



Park Loggia | 1865 Broadway, New York, NY | Architects: Skidmore, Owings & Merrill (SOM) | Photo: Field Condition

Design your Passion. Build with Ours.

Taking façade design to a whole new level with Shildan's highly engineered terracotta rainscreen and sunscreen products and systems.



Facades Products The Architect's Newspaper

Air and Weather Barriers

Sourcing the right air or weather barriers can make all the difference on projects large or small. The latest insulation and wrapping products have been reengineered to support a wide range of facade systems with simplicity, energy efficiency, and easy application. By Adrian Madlener



Thermax Wall System DuPont

Adhering to all IBC and ASHRAE requirements, DuPont's Thermax Wall System solution protects steel-frame and woodstud facades from excessive moisture and condensation. The product's streamlined design, reduced energy consumption, and low carbon footprint ensure its high performance.

dupont.com



Cavityrock ROCKWOOL

A semirigid insulation board developed for exterior cavity walls and rainscreens, Cavityrock by ROCKWOOL achieves exceptional thermal efficiency. Compatible with a variety of framing and cladding systems, the product is also fire resistant, maintains moisture control, and reaches a high level of acoustic performance.

rockwool.com



DensDeck StormX Prime Roof Board Georgia-Pacific

The first gypsum roof covering of its kind, the new DensDeck StormX Prime Roof Board by Georgia-Pacific protects large-scale commercial buildings from severe weather conditions. This premium product meets FM Global's Very Severe Hail Standard and a growing demand for puncture protection.

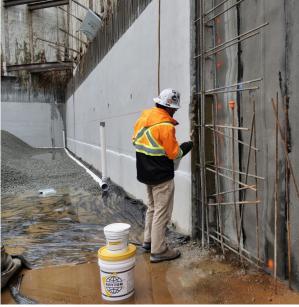
gp.com



Outsulation Plus MD Securock ExoAir 430 Tremco

The new MD Securock ExoAir 430 lining adds a second layer of air and weather protection to Tremco's tried-and-true Outsulation product. This innovation features adhesive channels to provide moisture drainage that works with system termination options.

dryvit.com



Krystol Waterstop System Kryton

Krystol Waterstop System by Kryton is one of the few solutions available for waterproofing concrete construction joints, penetrations, and tie-holes. This multifaceted system comprises the manufacturer's proprietary Krystol Waterstop Grout, Krystol Waterstop Treatment, Krytonite Swelling Waterstop, and Crack Inducing Waterstop products.

kryton.com



Sto RapidGuard Sto Corp.

Sto Corp.'s Sto RapidGuard helps expedite projects that would otherwise be delayed by excessive rain. This barrier product adheres to damp substrates without sweltering or requiring additional drying time. Sto RapidGuard seals cracks and seams and doesn't weaken preexisting barrier panels.

stocorp.com



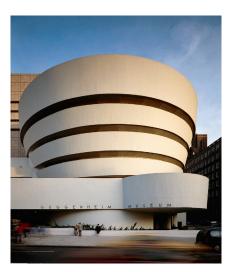
The Ronald O. Perelman Performing Arts Center at the World Trade Center Design Architect: REX Executive Architect: Davis Brody Bond



Franklin D. Roosevelt Four Freedoms Park Design Architect: Louis I. Kahn, FAIA Architect of Record: Mitchell Giurgola Architects Photograph © Paul Warchol



The Frick Collection Design Architect: Selldorf Architects Executive Architect: Beyer Blinder Belle



Guggenheim Museum Exterior Restoration / MEP Upgrade Architect: WASA

Engineer: Robert Silman Associates



Roy and Diana Vagelos Education Center **Columbia University Medical Center** Design Architect: Diller Scofidio + Renfro **Executive Architect: Gensler** Photograph: © Nic Lehoux



The Shed NYC Diller Scofidio + Renfro (Lead Architect) Rockwell Group (Collaborating Architect) Photograph: © Timothy Schenck



New Museum Expansion Design Architect: OMA Executive Architect: Cooper Robertson Rendering: OMA



of Science and Art -**New Academic Building** Architects: Morphosis Architects and Gruzen Samton Architects Photograph: © Iwan Baan



The Morgan Library & Museum Architects: Renzo Piano Building Workshop Beyer Blinder Belle



The Studio Museum in Harlem Architects: Adjaye Associates Cooper Robertson



Princeton University Andlinger Center for Energy and Environment Architect: Tod Williams Billie Tsien Architects Administrative Architect: Ballinger Architects Photograph: © Michael Moran Photography



Facades Case Study The Architect's Newspaper

180 East 88th Street

Architect/developer/construction manager: DDG

Location: New York City

Architect of record: H. Thomas O'Hara/HTO Architects

Consulting architect: FORM4 Design Studio Facade consultant: RWDI (Nova Scotia) Structural engineer: Silman

Construction consultant: Abadie Associates Facade installer: HDK Construction

Facade manufacturers: Petersen Tegl (brick),
Albertini (windows)

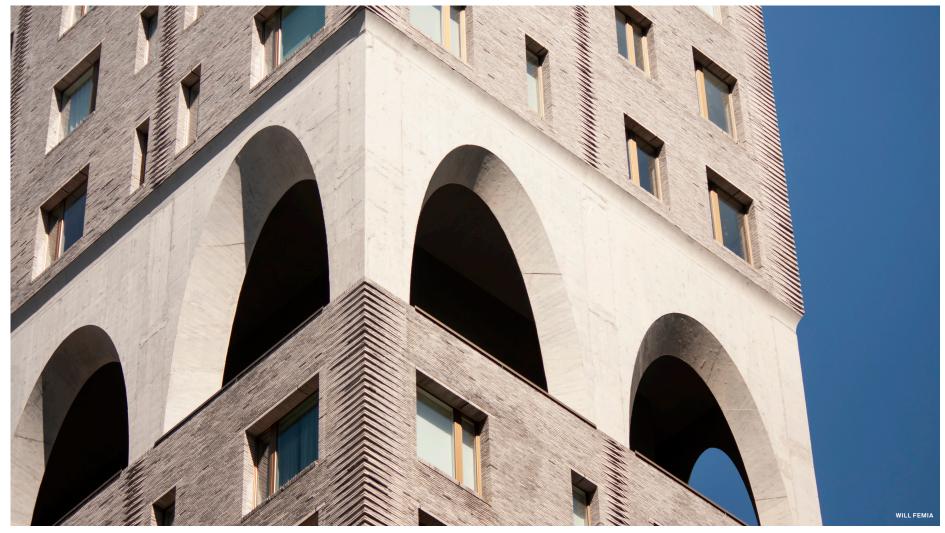
New York City's Upper East Side is home to an eclectic variety of building scales and styles thanks to its richly textured history. A few blocks from the marble and limestone chateaus on Park Avenue are brick and stone Neo-Federal and Neo-Georgian townhomes from the late 19th century. The area has some of the most expensive housing in Manhattan and the mayor's residence in Gracie Mansion, so it's no surprise that new developments continue to rise here.

Within the historic district of Carnegie Hill, one of the latest additions is the 50-story residential building at 180 East 88th Street designed and developed by DDG with architect of record HTO Architects and consulting architect FORM4 Design Studio. The textured facade celebrates traditional craftsmanship with a contemporary twist by featuring a gray waterfall of hand-laid brick from Danish family-owned manufacturer Petersen Tegl. Among the small gold accents from the punched window casings are two covered setbacks starting at the 15th and 48th floors that break up the facade with beveled arches and serve as garden outlooks for residents.

DDG was inspired by the boom in mid-rise masonry buildings that occurred in the 1920s, specifically the work of Ralph Thomas Walker. The designers at DDG wanted to recoup brick detailing traditions that have recently been lost as commoditized panel systems have become standard. On the north side of the build-







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ing a distinctive herringbone pattern marks a concrete sheer wall, an exit stairway, and an elevator core, and curved lines of bricks snake around the main entrances. Aggregate size and coloration mixes specified by DDG served as the palette for most of the 600,000 bricks that were individually hand-laid by masons from Petersen Tegl. Three shades of Kolumba brick, ranging from light gray to an ashy black, were used. A thumbprint from the brick mason who created it can be seen on each brick.

Every brick in 180 East 88th Street's facade is fired by hand with coal at the same brickworks in Nybøl Nor, Denmark, founded 230 years ago. "The brickmaking process," said DDG founder and CEO Joe McMillan, "is one that has changed many times over the past 1,000 years. There are very few brickmakers that still use the old process of wooden forming that includes molding the clay, pushing it into the form, pushing it out, firing it in the kiln the same way it was done generations ago."



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Left: The hand-laid brick facade of 180 East 88th Street seen from the southeast corner of 87th and 3rd Avenue.

Facing page top: Covered spaces create outdoor spaces for residents.

Facing page bottom: Corner details accentuate the bricks.



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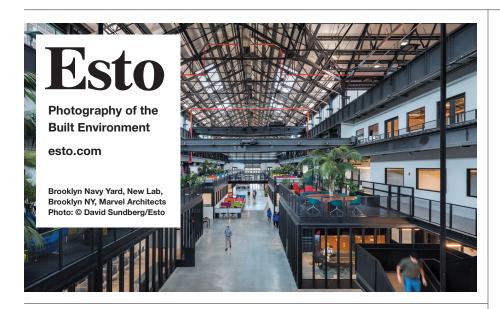
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67 Highlights

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Gun Violence Memorial Project

National Building Museum 401 F Street NW Washington, D.C. Until September 25, 2022



MASS Design Group, artist Hank Willis Thomas, and gun violence prevention organizations Purpose Over Pain and the Everytown for Gun Safety Support Fund have partnered to bring the Gun Violence Memorial Project to Washington, D.C.'s National Building Museum. The group created the memorial in honor of those who have lost their lives to gun violence in America, and this is its second showing after its debut at the 2019 Chicago Architecture Biennial. The work consists of four houses,

each built with 700 glass bricks containing remembrance objects. The number of bricks corresponds to the number of deaths per week from gun violence in the U.S. Accompanying the structural pieces are video excerpts from the documentary *Comes the Light*, produced by Caryn Capotosto and directed by Haroula Rose, which tells about the objects in the bricks. A selection of exhibition materials is also available for viewing online. **Keren Dillard**

East

Niki de Saint Phalle: Structures for Life

MoMA PS1 22-25 Jackson Avenue Until September 6



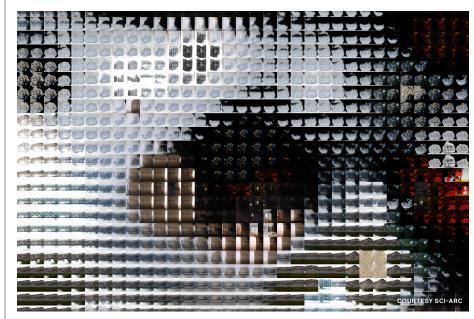
MoMA PS1, the Museum of Modern Art's satellite institution in Queens, New York, opened a wide-ranging exhibition focusing on French-American feminist artist Niki de Saint Phalle on March 11. Niki de Saint Phalle: Structures for Life is the first retrospective of the creator's drawings, prints, jewelry, sculptures, and architectural projects at a New York museum.

Born just west of Paris in 1930 and raised on the Upper East Side of New York City, Saint Phalle received no formal artistic training before developing an oeuvre defined by exuberant forms and vibrant colors. Beginning in the 1950s, her decades-long career saw her producing work on a variety of political and social themes, including the HIV/ AIDS epidemic and climate change. The PS1 exhibit will foreground her large-scale sculptural and architectural pieces, including photographs and models of her *Tarot Garden* outside Rome, for which Saint Phalle often collaborated with Swiss architect Mario Botta. **Aaron Smithson**

West

Architectural Bestia

SCI-Arc Online event archbestia.com Through August 31



This spring SCI-Arc is hosting Architectural Bestia, an online exhibition curated by Hernán Díaz Alonso and designed by M. Casey Rehm that features works from 20 practices, including Atelier Manferdini, Current Interests, Florencia Pita & Co., and BairBalliet. The exhibition aims to document design paradigm shifts in response to developments in technology and culture that have disrupted established orders. The show frames mutations in traditional practices as evolution, the result of cross-disciplinary

methods of design. Each body of work in the show uses this theme to reflect a form of authorship that, as described in the exhibition overview, "carve[s] a path through a jungle of aesthetic and conceptual similarities to provoke contamination." Operating between architecture, art, fashion, film, and music, the exhibition offers a critical examination of how shared technologies have tainted the purity of multiple disciplines and ultimately created a new beast. KD

Midwes

Akeem Smith: No Gyal Can Test

Red Bull Arts Detroit 1551 Winder Street Detroit Through July 30

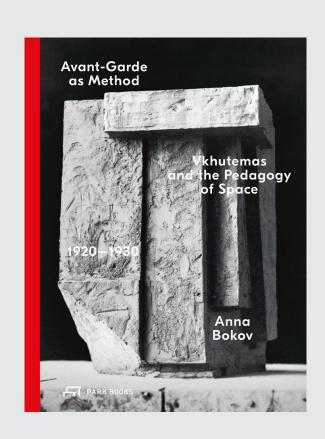


Akeem Smith: No Gyal Can Test is on view this spring at Red Bull Arts Detroit following its celebrated debut in New York last fall. The newly expanded exhibition will feature sculptures and site-specific audio and video installations relating to Smith's Jamaican American cultural roots and cross-regional personal history. As a way to reconstruct the past, the installation features remnants of demolished architectural forms salvaged from Smith's childhood neighborhood, the

Waterhouse district in Kingston, Jamaica. The show also highlights influential women in Smith's upbringing: those who raised him and those of dancehall. New York-based sculptor Jessi Reaves and British fashion designer Grace Wales Bonner collaborated on the exhibition, and original audio works for the show were created by musicians Total Freedom, Physical Therapy, and Alex Somers. KD

68 Review

Avant-Garde as Method: Vkhutemas and the Pedagogy of Space, 1920–1930 Anna Bokov | Park Books | \$65





PARK BOOKS

Just over a hundred years ago, the Higher Art and Technical Studios (Vkhutemas) opened its doors in Moscow. Often referred to as "the Soviet Bauhaus," the school was both larger and more diverse than its German counterpart. Yet Vkhutemas has received much less attention in Anglophone media, largely owing to the outsized influence of Mies and Gropius, the most famous of the Bauhauslers, in the United States. The Bauhaus centennial in 2019 occasioned a series of glowing retrospectives: some in architectural publications, others in the mainstream press, even one in a left-wing magazine. Vkhutemas, by contrast, has so far garnered only a single article looking back at its achievements over the brief decade it managed to remain in existence.

Part of this lack of recognition is perhaps due to the dearth of scholarly literature on the subject. Numerous books have been written about Soviet modernism in art and architecture, of course, but none have focused specifically on the place where so much of this movement came into being. Hugh Hudson devoted a chapter to it in his rather sensationalized 1994 account in Blueprints and Blood. but little else can be found apart from the odd mention here and there. Anna Bokov's Avant-Garde as Method: Vkhutemas and the Pedagogy of Space, released last November. goes a long way toward correcting this deficit. It is to date the only book-length study of the Moscow school available in English. Even more so, as the title suggests, it is the first serious inquiry into the Soviet avant-garde's unique approach to educating young artists and architects

Gorgeously illustrated, with more than a thousand images (the vast majority of them in color), the book is split into four chapters

following an introduction and a pair of forewords. Bokov begins by setting the stage for Vkhutemas's foundation against the revolutionary backdrop and education reforms of 1918. Many of its earliest students were from working-class or peasant backgrounds, and a number had served in the bloody civil war against the forces of counterrevolution. Rabfaks, or workers' faculties, were set up to train those who missed out on the chance to earn secondary degrees during these years. Quotas limiting non-Russian minorities were abolished, and tuition for poorer applicants defrayed. These initiatives had the desired effect, at least within the halls of Vkhutemas; not long after its founding, the school had made considerable gains toward democratizing its enrollment. Bokov breaks down the class composition of the 1929 student body: "24% workers, 20.6% peasants, 35.7% white-collar workers, and 19.7% intelligentsia."

She also outlines the institutional prehistory of the school, starting with the Free State Art Studios (Svomas) established in urban centers across the USSR shortly after the October Revolution. In the fall of 1920, the Moscow branch of Syomas merged the city's disbanded School of Painting, Sculpture, and Architecture with the Stroganov Academy of Applied Arts, consolidating itself as Vkhutemas. Other educational networks, some even with state support, were also established around this time. A few months earlier, Wassily Kandinsky-who would go on to teach at the Bauhaus-founded Inkhuk, or the Institute of Artistic Culture. Zhivskulptarkh, a collective of modernist painters, sculptors, and architects that included multiple future Vkhutemas professors, had already formed in 1919. Kandinsky was eventually forced out by members of the more left-wing

Working Group of Objective Analysis, several of whom belonged to Zhivskulptarkh.

For Bokov, the theoretical debates among these artists and architects regarding the dis tinction between "construction" (конструкция) and "composition" (композиция) were decisive to the pedagogical practices later implemented at Vkhutemas. By the former term they generally meant the organization of dynamic elements, whereas the latter signified the mere arrangement of static parts. Maria Gough has given an exhaustive treatment of this dichotomy in her 2005 book The Artist as Producer, but Bokov traces its educative effects. Georgy Krutikov, one of Vkhutemas's star pupils, would move away from spatial compositions to combinatorial problematics in architecture, while sculptural and graphical constructions would prove central to the laboratory class. Everywhere the constructivists' goal (цель) was to eliminate anything arbitrary, fanciful, or accidental from the finished product.

At any rate, the school's core curriculum was made up of the four elementary disciplines devised by fragments of the aforementioned Working Group of Objective Analysis: color, volume, graphics, and space. Lyubov Popova and Aleksandr Vesnin came up with the syllabus for color: Boris Korolev, Aleksei Babichev, and Anton Lavinsky handled volume; Aleksandr Rodchenko and Varvara Stepanova designed the graphics workshop: Nikolai Ladovsky, Vladimir Krinsky, and Nikolai Dokuchaev formulated the program for space. The famed Vkhutemas preparatory course is reconstructed by Bokov in meticulous detail, with its thematic units (концентры). In the second half of the book, she goes over some measures these figures introduced. Quite originally, students in the space class were

instructed to model in clay without sketching anything first. One advantage of this was "the a priori formlessness" of the medium, which allowed form to be expressed directly.

Chapter 2 covers the various theories that informed Vkhutemas's groundbreaking methodology. Bokov demonstrates that the professors at the school were widely read in the leading discourses of their day, be they art history (Wölfflin and Hildebrand), physics (Mach), or scientific management (Taylor, Münsterberg, and psychotechnics). El Lissitzky, a world-historic talent who acted as Soviet modernism's emissary during his travels to the West, shifted from planimetric to imaginary space by citing the mathematical ideas of Gauss, Lobachevsky, and Riemann. Wölfflin's notion of Formkraft as the inner force driving all matter to acquire shape influenced Ladovsky, suggests Bokov. Hildebrand's writings about experience and perception likewise left a mark, anticipating the rationalist emphasis on the kinesthetic articulation of form. Machism and Taylorism inspired the avant-garde insofar as they both stressed the importance of energy, economy, and efficiency.

Ladovsky emerges here as one of the two main protagonists of *Avant-Garde as Method*. Given the widespread neglect of his contributions to architectural education, this is a welcome development. The father of "rationalism," a tendency less stridently utilitarian than constructivism, Ladovsky instead emphasized the rationality of certain perceptual laws. More has been written about the constructivist Organization of Contemporary Architects (OSA), led by Moisei Ginzburg and the Vesnin brothers, than Ladovsky's rationalist Association of New Architects (ASNOVA). Krinsky, Dokuchaev, and Ladovsky taught the basic

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Vkhutemas's core curriculum comprised four elementary disciplines: color, volume, graphics, and space. Studios devoted to each derived their basis from physics, scientific management, and experimental discourses of the time. Left: A student (Nadezhda Kolpakova) design for the second-year Color course taught by Gustav Klutsis. Middle and right: Two designs developed during Nikolai Ladovsky's Space course.

classes at Vkhutemas, while Ginzburg and the Vesnins taught the advanced ones. "Despite their antagonistic rhetoric in the professional arena, the rival camps were more complementary than contradictory," Bokov explains. "Students would find themselves in the polemical crossfire, yet the formal solutions were often quite similar." Ultimately, though she defends many of Ladovsky's innovations—his psychotechnical lab, for example, aimed to gauge the aptitude of aspiring architects in terms of their responses to specialized questionnaires—Bokov concedes that the rationalists failed to turn his idiosyncratic pedagogy into an exact science.

Rodchenko, a much more familiar figure in the history of modernism, is the other hero of the book. His reputation as a photographer, graphic designer, and painter has eclipsed his role as an educator, Bokov argues. At Vkhutemas, Rodchenko's greatest legacy was the so-called initiative (инициатива), a battery of exercises that formed the centerpiece of the graphics course, in which three sets of assignments built upon one another, each increasing in complexity. First, students made compositions on a flat rectangular surface out of geometric shapes such as circles, triangles, and squares. Next, lines were added as components of the mix alongside rhomboid or elliptical frames. Once these two steps had been accomplished, the project moved into the third dimension with the addition of depth. Bokov has unearthed the portfolio of Anastasia Akhtyrko, an assistant to Rodchenko, to showcase the interplay of materials and their arrangement (or "scheme").

In the final chapter of *Avant-Garde as*Method Bokov explores the concept of "total design," by which she means the fashioning of

everything from individual pieces of furniture to entire cities. Everyday life (быт) had to be rebuilt from the ground up, in accordance with Bolshevik doctrine. Patterns for workers' uniforms, production clothing or прозодежда, were developed in Stepanova's textiles course. She intended such clothes "to be lived in, rather than worn merely for a specific activity," as Bokov puts it. Vladimir Mayakovsky's sister Lyudmila was responsible for a prizewinning fabrics entry at the 1925 Paris Exhibition. Chairs, tables, dressers, cabinets, tea sets, and lamps were also part of this effort to craft quotidian objects for the new reality. Many such objects were produced in Metfak, the metalworking department run by Rodchenko. Gustav Klutsis, a onetime Vkhutemas student-turned-professor, designed memorable propaganda posters as well as colorful installations along with his wife, Valentina Kulagina.

Urbanism was the highest expression of this drive toward total design, though, and here again Bokov spends some time looking at the rationalists. Ladovsky's plan for a parabolic reconstruction of Moscow, usually overshadowed by the urbanist-disurbanist controversy within OSA, gets a couple pages. Expanding northwest from the historical city center. Ladovsky split the difference between concentric and linear models for growth. Residential neighborhoods were to be wrapped by an industrial ribbon buffered by lush green zones. Yet city planning at Vkhutemas was not confined to pragmatic proposals, as more speculative designs were also encouraged. Krutikov imagined the possibility of a flying city for his 1928 diploma project, replete with towers anchored to dirigibles. Fellow student Lazar Khidekel similarly painted suprematist cityscapes, where planar constructions floated freely above the terrain. Within these proposed cities, new building typologies were conceived: workers' clubs, collective housing facilities, sanatoriums, and monumental structures.

The repeated references to the Bauhaus, constantly comparing their curricula and instructional styles, may well be unavoidable. Kenneth Frampton underscores the irony of the comparison in his foreword, since "large parts of the Weimar and Dessau Bauhaus teachings in graphics, furniture design, and even in architecture had their origins at Vkhutemas." Bokov catalogs the myriad exchanges that took place over the years between the two schools, charted along a time line. Personnel from each regularly traveled back and forth. A delegation of Vkhutemas representatives arrived at the iconic Dessau building for a brief stay in 1926, followed by a team of architects and engineers in 1927. Gunta Stölzl, Arieh Sharon, and Peer Bücking returned the favor a year later, and the master colorist Hinnerk Scheper got a job at Vkhutein (as it was renamed in 1929) after moving with his wife to Moscow. Lissitzky and his old teacher Kazimir Malevich also made visits to the Bauhaus, Significant methodological divergences existed as well; Frampton notes the schools' opposite orientation toward craftsmanship, particularly in the Bauhaus's Weimar phase.

Even leaving aside the beautiful illustrations and Bokov's impressive scholarship, Avant-Garde as Method is valuable for the access it provides to primary sources. Interspersed throughout the text are translations of assorted dossiers, newspaper articles, exhibition catalogues, lesson plans, and other materials from Russian, none of which have appeared in any prior publications. Highlights

include the pamphlet *Art in Life* (Искусстрво в быту) from 1925, the brochure for Konstantin Melnikov's pavilion in Paris, and a 1929 overview of the various departments' activities. Next to assignments for the graphics and space courses are digitally reproduced axonometric projections by Bokov herself, which serve to visualize the tasks students were being asked to perform. Sketches often accompanied the original manuscripts—plans, sections, elevations—but these renderings are a helpful addition. For nonspecialists, these documents grant a window into the rich discourse of Soviet modernism.

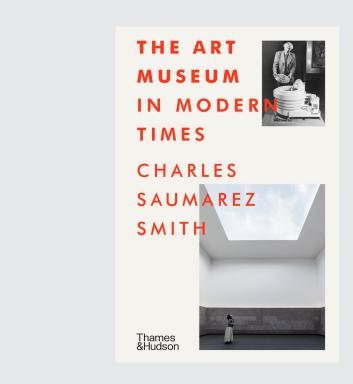
Bokov has thus written a book that fills in a major lacuna in the history of modern art and architecture, particularly in the field of education. While the Bauhaus is rightly acknowledged as a central hub of avant-garde aesthetics in the 20th century, Vkhutemas has for too long been relegated to the margins. The Stalinization of the cultural realm led to the shuttering of the campus in 1930, as its comprehensive program was deemed inefficient. Vkhutein was broken up into six separate institutions with greater specialization. Much like the Bauhaus shortly thereafter, it fell victim to the conservative tastes of an authoritarian regime. Unlike the German school. however. Vkhutemas would have to wait 90 years to be properly appreciated. Aleksandr Lavrentiev, the grandson of Rodchenko and Stepanova, summarizes Bokov's accomplishment well: "[she] reframes the major propaedeutic courses of the Russian avant-garde as a universal artistic system.'

Ross Wolfe is a critic, historian, and educator living in New York City.

70 Review

The Art Museum in Modern Times

Charles Saumarez Smith | Thames & Hudson | \$40



THAMES & HUDSON

Once the preserve of high culture, the museum has changed dramatically over the past century.

Is a museum defined by its collection? Or by its architecture? In The Art Museum in Modern Times, Charles Saumarez Smith suggests it is both and still something more. Trustees, administrators, and curators have done the most to alter the face of art institutions over the 80 or so years that make up Saumarez Smith's timeline. Throughout, the art historian and former director of the National Portrait Gallery in London attempts to glean, from built form, the "evolving aims, aspirations and beliefs" of these actors. Yet in his privileging of conciseness, he omits the complex balancing of interests and influences needed to realize any museum project. These, it should be noted, often extend well beyond museum leadership.

The book's structure is straightforward, comprising case studies that span public and private institutions, the canonical and the lesser known. More enigmatic is the periodization to which the title alludes. The 40-plus museum buildings that Saumarez Smith surveys are heterogeneous, stylistically evoking both modernism and postmodernism, as well as the yet-to-be-codified idiom of the "new millennium." It quickly becomes apparent, however, that the catchall signifier "modern" is a nod to the Museum of Modern Art (MoMA) in New York. Marking a break from the "traditional museum," Saumarez Smith's close reading of MoMA recounts the fledgling institution's efforts in the 1930s to seek a streamlined architecture to match its novel and unorthodox curatorial program. Although a predictable starting point, the museological template established by MoMA effectively captures the institutional histories that follow.

If modernist spatial logics linking form and function long determined the baseline for museum architecture, they have given way to something less cut-and-dried. Already in 1990, the art historian Rosalind Krauss identified a new consumerist logic at work in the spaces of the "late capitalist museum," a thesis further explored in Hal Foster's 2011

The Art-Architecture Complex and Claire Bishop's 2013 Radical Museology. Saumarez Smith makes mention of this development, whose repercussions are many: Today's museums are no longer preserves of high culture, nor do they espouse articles of faith in the public good. Rather, they find themselves forced to compete in an attention economy that revolves around individualized experiences and product placement. And if museums once relied on architecture for their mooring, the opposite is increasingly true. For instance, Marcel Breuer's 1966 Brutalist building on Manhattan's Upper East Side, home to the Whitney Museum until 2015, has become something more akin to a rotating, kunsthalle-style gallery, having played host to exhibitions from the Met's modern and contemporary holdings and recently reopened as the Frick Collection's temporary home.

A consummate industry insider, Saumarez Smith would seem a potentially compelling guide to navigate these changing priorities and dynamics. It's a shame, then, that The Art Museum in Modern Times doubles down on timeworn narrative devices. The chronological unfolding of the case studies is clear enough to follow—even for those unfamiliar with 20th-century art history-yet the more keyed-in reader is left wondering what more might have been gleaned if the museums had been organized thematically, i.e., according to type, context, or institutional focus. Though the book purports to be global in scope, it hews to a U.S. and European context and is premised on personal judgments. The sundry museums, renovations, and additions that make the cut are simply those the author "admire[s] or think[s] are important." Given this bias, and the current expansionist zeal of art-world institutions, it isn't surprising that the same handful of institutions (or brands) crop up more than once. The architectural analysis so proffered leaves unexplored the co-constitutive role art and architecture have in framing visitor experiences. Instead, the book progresses from



Marcel Breuer's Brutalist structure in Manhattan is currently without a permanent tenant.

one capsule history to the next, yielding a cavalcade of names, dates, and high-minded statements about the museums' place in civil society.

In the epilogue Saumarez Smith suggests that museums are now "under attack" from political, technological, and economic forces. He contemplates the changing nature of art displays, the financial constraints and pressures in an increasingly globalized world, and the demotion of art's status to a form of entertainment. Compounding these are the emergence of numerous, better-informed publics, whose concerns about the sources of donor wealth, demands for the repatriation of colonial artifacts, and calls to dismantle the canon threaten the institutions to which Saumarez Smith has devoted his life. (In addition to the National Portrait Gallery, he has occupied leadership positions at the National Gallery and the Royal Gallery.)

Though he raises the alarm, his closing sentiments amount to a predictable punting of responsibility. Reinvention might be inherent to the modern museum, yet it falls to "a new generation of architects, trustees, and museum directors [to react] to the changing demands of their publics," Saumarez Smith concludes. However, this generational approach to change is slow-moving. Museum commissions are beyond the reach of most firms, and those with the portfolios and profiles that typically warrant consideration tend to be older and whiter. Museum leadership, including trustees and directors, suffers from the same lack of diversity. Addressing the current challenges facing art museums will require fresh perspectives and

an openness to structural change.

The pandemic offered a glimpse into a future in which museums have become "disembodied," both from their host architecture and from their collections. Owing to enforced lockdown measures, institutions retooled exhibitions for digital formats, diversified their programming, and developed new platforms for outreach. For many, these changes will undoubtedly have lasting effects. Yet the opportunity still exists to go further; as museums reopen, they should reconsider architecture's utility not just in protecting the health of staff and visitors but also in welcoming those who have been traditionally shut out.

The Art Museum in Modern Times is filled with historical photographs, design sketches, architectural models, and portraits of museum patrons and architects. After a year of quarantine, travel restrictions, and shuttered doors, it will doubtlessly appeal to arts and culture enthusiasts, or anyone seeking vicarious thrills. But the past year has also made our woeful lack of support for cultural institutions and our society's failings at equity and inclusion all the more obvious. Can we continue to engage in a form of escapism that denies these very realities? Rather than pine for all that we have missed, we should keep the pressure on institutions to initiate much-needed change. As we begin the process of reentering and reengaging civic space, nothing is more vital.

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Slip of the Pen

A new book about architecture and capitalism inadvertently points up the problem with today's more credulous mode of criticism.



Zaha Hadid Architects' svelte One Thousand Museum stands amid a cluster of condominium towers in downtown Miami. The genre comes under fire in Icebergs, Zombies, and the Ultra Thin.

continued from the front page We are shown the ghost cities of China, left over from the pre-2008 boom, and the luxury condo compounds of Vancouver, where the wealthy live in splendid isolation atop amenity-packed pedestals. We are informed, and on good evidence, that these and other aberrant products of contemporary architecture are the fruits of a hypertrophied global banking sector that has become the cart pulling the real estate horse. This is to say—notwithstanding Soules's obvious depth of knowledge and occasional flashes of wit—that for 207 pages, we are mostly shown things we have already seen and told things we already knew. Until suddenly, unaccountably, Soules tells us something else.

While the author is traipsing through familiar terrain, he also brings along some very familiar guides. The above-listed luminaries all put in appearances (alongside Karl himself); this is not always to the book's benefit, as Soules's prose does not necessarily shine by comparison. More worrisomely, Icebergs exposes a curious rhetorical catch in the application of some varieties of negative dialectic to architecture. Over and over, Soules regales readers with stories of the investment-mat developments of Spain, "flowing over the Mediterranean landscape like lava," or of the vacant housing estates of Ireland, where "the carcasses of half-finished shopping malls hulk on the horizon." Then, inevitably, he proceeds to unpack these phenomena, usually in such

terms as "Asset urbanism needs to be understood in relation to both global and local parameters" or "Post-metropolitan islands are megadevelopments that are discrete and geographically separate." In each instance, the illustrations are fairly compelling, while the explanations are a bit of a drudge—the more Soules tries to debunk these bizarre excrescences of the free market, the more they gain the upper hand. Milton did something similar for Satan.

As far back as Jameson's celebrated account of the Bonaventure Hotel in Los Angeles, the spectacle of architecture under capitalism has always threatened to upstage any critic trying to take it down a peg. And Soules does not make life any easier for himself by taking on other, softer targets. Among the particular objects of his ire: Bjarke Ingels, the Danish designer who has become the preferred dunk-tank clown for a swath of the design commentariat. Comparing him to a "Houdini," *Icebergs* skewers the Scandinavian for disguising his big-profit housing commissions as grandiose social-benefit schemes. Soules's point here is well-taken; vet the now-widespread cult of Bjarke Bashing (full disclosure: I've taken a few shots myself) has grown somewhat tiresome. If bringing out the heavy theoretical artillery on more garishly soulless enterprises-the titular underground "iceberg" mansions of London, the never-completed housing tracts of Phoenix—results in the occasional backfire, the fusillades launched

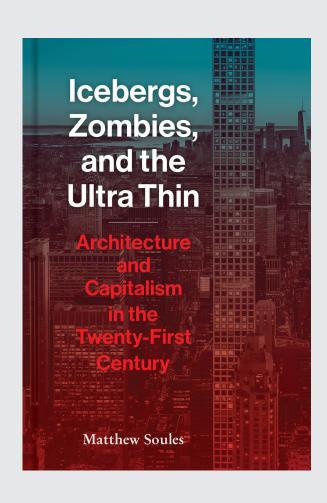
by Soules against a well-meaning if megalomaniacal technocrat like Ingels seem very much like overkill. Besides, haven't we moved beyond Bjarke?

This approaches the issue over which the book, and with it a whole critical tendency, suffers the most. For one thing, as the decisions of the last four or so Pritzker Prize committees should have made plain, the professional solar system no longer revolves around marquee names hawking signature formal tropes. The Age of the Starchitect is behind us; collaborative and social-minded offices are now in the ascendancy. For all that Patrik Schumacher-who also comes in for a pasting from Soules-can still peddle parametrics to impressionable billionaires, he is yesterday's man, and there is little to be gained from continuing to kick him, gratifying as it might feel at times. The discipline is in a very different place than it was ten years ago: for the design student as for the publicist, for the earnest online thought leader as for the cynical sloganeering developer, such things as technical innovation, philosophical import, or pure artistic aplomb—all evaluative criteria in good standing until fairly recently-now take a definite backseat to civic virtue. Yet you'd hardly know that to read Soules's book, or indeed a great deal of other writing on contemporary architecture (even some very good writing).

So why doesn't criticism get a new bag, training its sights on architecture's bud-

ding normative mode? Here we come to the heart of the matter. Imagine for an instant that Icebergs, Zombies, and the Ultra Thin were rewritten as, say, Shared Kitchens, Green Roofs, and the Half-a-House. In that case, the author would surely be obliged to point out the very real deficiencies and compromises intrinsic to even the most modest, most committed models of practice. This much could actually be pretty valuable—but again, if current trends hold, it is only too easy to see how this game might play out in the discourse at large. To some extent, it's doing so right now: blowing the last bridges between design and anything smacking of "solutionism," the critique starts to fold back on itself, collapsing into an impossibilism where everything that is good is bad; where architects and their buildings are devoid not just of autonomy (which, fair 'nuff') but of interest; and where criticism is reduced to the reflexive gainsaying of the latest press release or the latest tweet, rather than an attempt, as the late great Michael Sorkin once wrote, to figure out "how to simultaneously value artistic expression.. and to rail against a world going to hell in a handbasket."

From there—and this, too, is already in evidence—the only way out for critics is either to abandon their posts altogether or else embrace such dubious ideological contrivances as the belief that if architects and critics would but recognize their status as workers, they could click their heels three



PRINCETON ARCHITECTURAL PRESS

times and be back in Agency-ville. The latter proposition (really only a modified take on the *operaismo* popular in some architectural circles circa 1968) at least represents a kind of synthesis, a program worth (re)considering; Soules, at first, doesn't appear to get that far, trapped in a repetition of learned tautologies, capitalist architecture a result of capitalism, et cetera ad nauseam. But right at the end, something amazing happens.

Clues to it appear early on, in particular through the author's unusually cleareyed discussions of some of the immensely complex financial machinery involved in the real estate biz. (One minor note: Soules states that investors are drawn to high-end condos, like those at Manhattan's 432 Park, for their "liquidity." The very appeal of those units is they never have to be "liquidated," in the strict sense of a cash exchange; they can be sold for other assets of commensurate value.) In several instances, the author also name-checks Rem Koolhaas-not, as one might expect, to drag him for his globalist escapades, but to contrast the bustling "corporeal capitalism" of Koolhaas's metropolitan ideal with the unpeopled abstraction of 432 Park, cleverly compared by Soules to Aldo Rossi's Modena ossuary. And then, in a brief, remarkably personal epilogue, the author writes the following:

Architecture has long grappled with how to respond to the shortcomings of capitalism. But capitalism's rapacious capacity to absorb all manner of attack is legendary. Because architecture is now finance, an effective critical architect must practice a form of critical finance. This doesn't mean that architects should become bankers, but rather that architects might consider collaborating with financiers in a manner that is similar to how they currently work with engineers.

You read that right. Whether his exact prescription is sound or not, Soules winds up suggesting that there may be some "other" architecture out there after allan architecture that neither plays patsy for Wall Street nor pretends to some ascetic political remove it can never really achieve. By implication, he also makes the case that to complement this oppositional yet nimble architecture, we need a criticism of like character, one capable of playing on all keys while eschewing both cynicism and credulity, or the one masquerading as the other. To perform Sorkin's balancing act requires an anxious criticism and anxious critics. But it makes for a better show.

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Soules's book critiques the reigning architectural ideology of our times—form follows finance. Top: BIG's ultra-thin Vancouver House. Bottom: The basement pool of a London "iceberg home."

Networked Aesthetics

The postdigital turn has made the things around us into friends and enemies. Perhaps it's time to reevaluate our relationship to them.



Asked to design a faux-medieval urban center outside Kuala Lumpur, Malaysia, the Los Angeles-based firm ALLTHATISSOLID responded with a townscape that made serious fun of the premise.

In recent years, experiments in architecture have produced forms, moods, and effects that resist easy labeling. Still, some have tried putting a name to this diverse, variegated work: the "postdigital." The term was first popularized by the British architect Sam Jacobs, who considered postdigital drawing (often taking the form of collage) to be a meaningful critique of the digital positivism that proliferated in the 2000s. The historian Mario Carpo took the opposite tack, finding the return to collage to be both antidigital and repressed. Exploring a third way, architect Adam Fure suggested that the postdigital is, in actuality, "very digital" and all around us. For this reason, it no longer deserves its own special category.

If we accept Fure's expansion of the term, then we see that postdigital architecture cannot be reduced to any repertoire of formal styles and techniques, but rather represents a paradigmatic condition that is inescapable. In this brave new networked world, stable identities give way to indeterminate chimeras. The New Aesthetic (TNA),

a blog run by the artist-theorist James Bridle, is a running catalog of such oddities: Russian cows are outfitted with virtual reality goggles under the hypothesis that virtual blue skies and green pastures will lead to greater milk production. The Spanish fashion house Balenciaga deploys deepfake models for its latest collection launch. Smartphone cameras autocorrect the toxic orange haze from California wildfires as if in algorithmic denial of climate disaster. Like a techno-wolf in sheep's clothing, each of these strangely alluring yet off-putting sights is instructive, teaching us to distrust outward appearances while also underscoring the fact that networked imagery and objects are engineered to manipulate us.

In a 2011 talk explaining his reasons for launching TNA, Bridle confessed to "hav[ing] no idea what anything is or what it does anymore." Ten years on, the feeling has grown only more acute. Our sensory apparatuses are unsuited for navigating the networks in which we are enmeshed. Our attempts to make sense of conflicts—politi-

cal, aesthetic, and otherwise—or to predict outcomes easily come undone. Events and situations don't appear to add up, leading to a widespread feeling of alienation. Greater numbers of people fall back on conspiracy theories to cope.

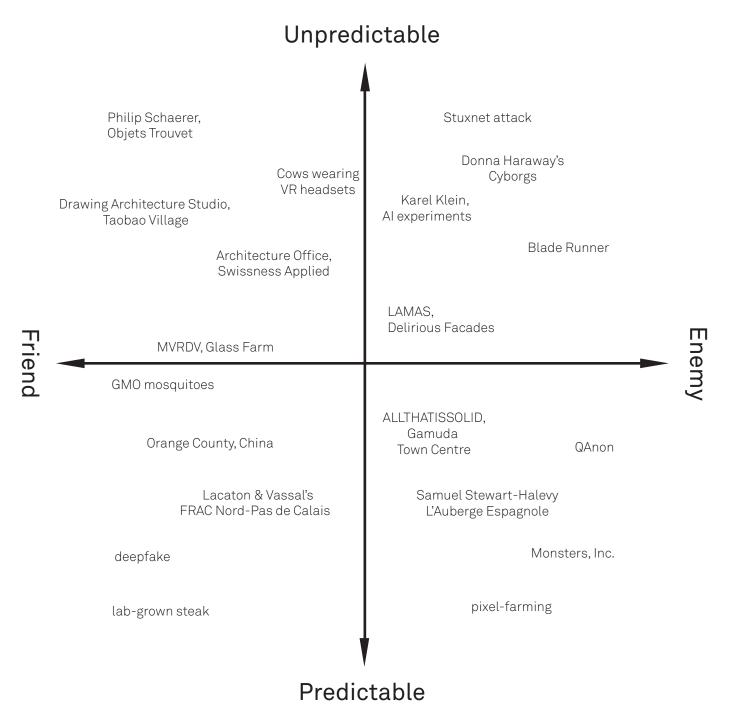
Any sense of a fixed spatiotemporal order—that of the pre- or early industrial past—has since been decimated, terraformed by invisible infrastructures of data. The internet of things, surveillance capitalism, social media—all have flattened perceptions of the world and scrambled time lines, discourses, and feedback loops. Friends and enemies, be they human or nonhuman, take on enigmatic guises signaling certain behaviors while at the same time subverting them. No one and no thing is quite what it seems.

This networked paradigm has decoupled identities and behaviors from the qualities typically associated with them. As a result, identity itself becomes denaturalized and queered, while seemingly incompatible dispositions fold into one another. Within ar-

chitecture, the old categories that long sorted disciplinary knowledge have ceased to apply. To persist, then, in drawing formalistic distinctions—postmodern collage versus digital fabrication, cartoonish millennial color palettes versus the rendered effects of subsurface scattering—is to deny the very basis of postdigital culture, i.e., the fungibility of appearances.

If the stable identities that space, time, and architecture once guaranteed now seem to elude us, then we have little choice but to recalibrate our analytical lens. By replacing space and time with new coefficients (namely, appearance and behavior) and reconceiving form as the sorting of informational ready-mades (the bizarre "creatures" that run amok on TNA and everywhere else), we can better grapple with our postdigital condition and discover the creative, liberatory potentials within.

Such a framework, I propose, can be represented in two dimensions, with a horizontal axis differentiated along a friend-enemy spectrum and a vertical axis encompass-



To organize the "eclecticism of everyday life," the author created a matrix that substitutes space and time coefficients with identities (friends, enemies) and behaviors (predictable, unpredictable).

ing a range of predictable and unpredictable behaviors. All manner of architectural and nonarchitectural species can be kettled into these four quadrants, attesting to wide-ranging and diverse sets of contemporary phenomena with which designers can productively engage. As we plot these ostensible friends and enemies, knowns and unknowns, we discover that such distinctions blur and are taken to change, depending on the standpoint of the observer.

The right side of the matrix is where perceived enemies dwell. The unpredictable enemy (top-right quadrant) is akin to the generative adversarial network (GAN) archi-

generative adversarial network (GAN) architects and educators like SCI-Arc instructor Karel Klein are beginning to experiment with. Klein's students generate stochastic and bestial imagery by feeding the GAN algorithm houseplants and other nonarchitectural information; what this predictive algorithm spits out is unpredictable and challenges conventional notions about what

can be called architecture.

Meanwhile, the predictable enemy (bot-

tom-right quadrant) behaves in reverse. Here we find funny, oddball creatures like those in Pixar's Monsters, Inc., a film that normalizes outwardly monstrous appearances. My own studio, ALLTHATISSOLID, has deployed techniques of the predictable enemy in order to perform otherwise ordinary architectural duties. Working at a sprawling exurban residential development outside Kuala Lumpur, Malaysia, we designed a dense, seven-acre mixed-use town center that, in keeping with the client's wishes, simulates a Disney-like townscape worthy of Instagram. Intrigued by this surreal, fake urbanism, we tried to point up the scalar paradox at work, where tightly knit "medieval" blocks exist in the middle of nowhere. By conforming to the risk-averse predictability of real estate spreadsheets and client demands, we discovered a truly authentic expression of monstrous contradictions.

On the other side of the matrix lies the unpredictable friend (top-left quadrant), where we find the Beijing-based Drawing Architecture Studio, among others. The atelier's magnificent, sprawling tableaux expose the infrastructures of contemporary life, but do so in beguiling ways. For instance, *TaoBao Village • Smallacre City* recontextualizes a Jeffersonian utopia—Frank Lloyd Wright's Broadacre City—in 21st-century China, where rural villages have been transformed into manufacturing hubs for e-retailers. The logic is as dizzying as the panoramic drawings themselves, but by making unusual historical connections, the architects discover new urban possibilities.

Lastly, there is the predictable friend (bottom-left quadrant), the most benign-sounding of all these postdigital creatures but also the most unnerving. Here we find lab-grown meat and AI-generated deepfakes, whose fidelity to original models grows more perfect over time. Architectural copies are just as prolific: Swiss red chalet roofs sweep through Israeli settlements, while in a Beijing exurb, neo-Italianate tract homes re-create the affectations of Orange County McMansions. But "critical" copying,

whereby the referent is consciously modified and acted upon, is much harder to come by.

Antagonistic algorithms, bashful monsters, Disney villages, "Orange County, China"—these are just my postdigital frenemies. Moreover, the matrix I propose merely offers one way to parse a diverse range of phenomena without recourse to conventional formal or methodological categories. In our postdigital times, the world is teeming with objects, creatures, and readymades that solicit our engagement. Only by becoming attuned to the malleability of appearance and behavior can we creatively intervene in systems and leverage them for maximal effects.

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