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 bulking concrete structures, akin to dispersed relations, were unethered 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 New Haven.

Of this brutish bunch, the latter, known as the Pirelli Building, is the most can did 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

Architecture Ambassadors
An embassy building boom reveals a turn away from symbolism to technocratic competence. Read on page 18.

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

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

Hashim Sarkis discusses what to expect from the 17th Venice Architecture Biennale. Read on page 22.
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. But simply to set the stakes for this issue, it’s clear 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. Ar temasel 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 democracy, 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 mind-ed, 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 courting of capital through splashy developments in downtown Miami to Chinese ghost cities, as a springboard for a little discussion on agency, design values, and more. We’re a long way from Philadelphia. Samuel Medina

When 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 Van-couver, Canada-based Equilibrium Consulting worked on the project.

The article about Neumann Monson Ar- chitects’ 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.
Engineered for strength, Hanover's GRIDLOC™ System opens up a world of possibilities for architects and designers. GRIDLOC™ is a lightweight structural support underlayment that creates a continuous fully supported, monolithic floor surface.
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 northwest 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.

**Work on Snøhetta's first-in-the-world 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.

**Atelier Van Lieshout is designing a neighborhood for artists in Rotterdam**

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.

**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.

**New York City's congestion pricing plan moves forward**

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.

**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-the-ground pushback, the museum was on track to hit major construction milestones this year. Now the opening has been postponed to 2023 owing to pandemic-related delays.

**James Corner Field Operations among six shortlisted firms for National Gallery revamp in London**

Selldorf Architects has been selected to lead an update and expansion of the National Gallery 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.

**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

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 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.

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 Argentinian 3D modeler Mateo Sanz Pedemonte claims to have created the project after Kim commissioned him to render it.

Cambodian government blocks resort development near Angkor

Plans to build a 167.5-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.

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.

Architecture Billings Index breaks 50 for the first time early in the pandemic

The February Architecture Billings Index (ABI) hit a whopping 53.3, the first time the metric 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.

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.

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.

PARTISANS and BDP Quadrangle propose tower for downtown Toronto

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.

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 $78 million.

Letters to the Editor

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—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

GZmodo 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
The Architect's Newspaper

6 Open

West
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 + Renfro–designed 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

MIKE KELLEY/COURTESY THE BROAD

1200 Getty Center Drive
Los Angeles
310-440-7300

221 South Grand Avenue
Los Angeles
213-232-6250

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

101 South Grand Avenue
Los Angeles
213-624-4720

17985 Pacific Coast Highway
Pacific Palisades, California
310-440-7300

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

22100 Glen Road
Potomac, Maryland
301-983-5001

ALEX SANTIANO/COURTESY THE GETTY TRUST

1200 Getty Center Drive
Los Angeles
310-440-7300

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 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

MIKE KELLEY/COURTESY THE BROAD

IWAN BAAN/COURTESY THE GLENSTONE MUSEUM

SUSAN SANDERS

ALEX VERTIKOFF/COURTESY THE J. PAUL GETTY TRUST

MH
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 the new ownership, Primo Development, purchased the 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 longtime 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 re-fashioned 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 efficiency, 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 coming into its own. 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 so 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
The nation’s capital welcomes its newest memorial, dedicated to American troops who served in World War I.

Washington, D.C., boasts an array of memorials, from vaunted white marble presidential temples 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. Friedberg’s large water feature—an urban oasis sheltered by berm and a stone step wall—was used for ice-skating in winter months following its opening, but lack of upkeep brought about its eventual deterioration and subsequent disuse. Weisshaar and Ezell 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,” Weisshaar 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 statuesque 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.

Two years ago, during a time of great personal difficulty, I was in Soho and remembered visiting De Maria’s The New York Earth Room, which I’d visited maybe ten years 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.

You can come back during different times and lighting conditions and seasons, so that the subtlety of how you might change over time, or the ambient condition 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 Dia itself. Its reputation as a protector of light—of a deep, loamy, weighty earth. It struck me so strongly and so acutely that I started sobbing.

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 during different times and lighting conditions and seasons, so that the subtlety of how you might change over time, or the ambient condition 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.

The Architect's Newspaper
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 Neighbourhood—(Re)forming communities.

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 collaboration with Norway’s National Museum of Art, Architecture, and Design; establishing a Nordic Network of Neighbourhood 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 “test-bed areas” of Oslo to be explored with development partners.

“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) and_OUT, a leading creative platform for architecture, design, 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, unfoldable network of relations,” said Pagh of Jacobs’s seminal 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.”

MISSION NEIGHBOURHOOD

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 Neighbourhood—(Re)forming communities.

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 collaboration with Norway’s National Museum of Art, Architecture, and Design; establishing a Nordic Network of Neighbourhood 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 “test-bed areas” of Oslo to be explored with development partners.

“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) and_OUT, a leading creative platform for architecture, design, 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, unfoldable network of relations,” said Pagh of Jacobs’s seminal 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.”
of housing is rental, and 60 percent of all residents live in social housing. Public procurement is a boon for the architecture, a rich interface of imaginative forms, pleasant contexts, and patches of greenery. Made possible by generous subsidies, active government planning, and strong public influence on the private sector, these housing blocks also enable large-scale state-sponsored competitions and 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 upown 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 courtyard. 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 the work that was critical. Too often firms spend hundreds 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 aligns signals a shift in thinking. He defines public housing as “mixed-use and onetime manipulations” or “green social housing,” and compared to the public 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

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 famed museum at the foot of Benjamin Franklin Parkway. It also marks the conclusion of a painstaking four-year construction period premised 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 stair-case 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 and intelligent design that we have tried to preserve, and at the same time brings in the future. 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.
No Matter The Project, We Make It Easy To Get The Job Done.

34 Locations Across Arizona & Colorado

Introducing Pioneer Exclusive Artificial Turf!
Pet Safe • Kid Safe • Made in USA

- Bulk Rock, Sand, Mulch & Soil
- Pavers, Block & Flagstone
- Artificial Grass
- Landscape Tools & Accessories
- Commercial Applications
- Pioneer Operated Quarries & Transportation

Call Today For A Custom Quote!
(866) 863-3901
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 venues—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 Avenue–spanning 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.

“The performing arts at Villanova are no longer relegated to the bench, so to speak. Like the Commons, the masonry panel-clad 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
The 85,000-square-foot arts center is a contemporary twist on Villanova's distinctive Collegiate Gothic style. A central stairwell at the Mullen Center. The grand shared lobby is outfitted with custom chandeliers. Inside the Voith and Mactavish Architects–designed proscenium theater.
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?

NS: 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 delineate 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 address to 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 and in some cases 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 are promising today are 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 in a little bit more than 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 hatred 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 Bessemmer, 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 quite strong 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 go away. 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 address to 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 and in some cases the creator of the Action Office, had an interest in a person being able to fashion their own space.
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 work- ers. He did that in a specific way, and attitude, towards that work. And that just makes it harder for people to feel solidarity with each other because if you’re trying 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 been in, and you were giving a lecture to architecture students at the Harvard Graduate School of Design (GSD). That confluence of events—of sociocultural, specifi- cally—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 imaginatively. But I would say that my contribution to telling this history is a small one. Real- ly, 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 pro- file 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 suc- ceed [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 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 profession- al side of architecture, is pretty com- plicit 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 in- vestments, in housing, in wraparound services for that housing. That’s not to say that architects are uniquely respon- sible for that decline. Or that they can’t be involved in processes that begin to attend to the root causes of exclusion. Part of that is that these other sectors are not necessarily built for doing that. You need more active, grassroots forms of organization to address exclu- sion.

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 policy rarely go beyond the rubric of “affordability.” How do you communicate, both in your writing and in your current projects, 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 dramati- cally declined over decades. And there are all these limits on public housing, what public housing can be construct- ed, and how many people it serves. But basically, you have to frame housing as a right. But right even, 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 Guarant- eer, which would effectively decom- modify housing.

Architects are probably very familiar with the Low-Income Housing Tax Credit (LIHTC) program. That’s the main way that people probably inter- face with the whole notion of afford- able housing. Tax credits are problem- atic, 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 how far we can try to change existing programs like LHITC to a grant-making program. So if you’re an architect and you’re familiar with LIHTC, it becomes a little more con- ceivable 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.

NS: Actually, while it does come from Hollein, my particular reference is to Charles Eames, who redeployed the phrase to say, “Every object 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 indus- trial design, individual people began interacting with objects, forms of commu- nication, 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 few and far between. 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 pat- terns 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 pursue. As I looked into Buckminster Fuller’s archives in California, it was astonish- ing to see firsthand how 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 polyphasic figure who was always on the edge of bullshit to some degree. He really was. [Laughs.] But [the compre- hensive designer] is an important form of identification.

SM: Frank Gehry’s renovation of the Phila- delphia 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 ex- tent that the Gehry project is revealing aspects of the original structure, it’s great. Those parts of it are really good.
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 projects—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 woody 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, pointing 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.”

Samuel Medina
**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**

2021

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 load-bearing 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**

2021

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.
An embassy building boom reveals a turn away from symbolism to technocratic competence.
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 superpower, 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 (Brasilia) 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 out 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 of 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 sustainable?”

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 Durrell 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 anti-social 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 fortress- es designed to meet security specifications in one of four sizes—small, medium, large and extra-large, epitomized by our super-sized 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 legisla-
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 transparency 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 Durrell 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 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 acciai limbos 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 proliferously 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 senuous 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 held out 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...
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 Merida, Mexico, and the new London embassy, which is covered in translucent louver over glass facades. However, in London, too, security outweighs 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 some 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 meta-language existing on the campus and pulling in a nod to Le Corbusier’s formal plasticity of weaving together architecture and culture, or 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 reimagined 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 chanter, continuing the high-modernist language existing on the campus and pulling forward the ideas in Le Corbusier’s formal plasticity at Chandigarh through large concrete pylons. Other embassy designs make do to design for smaller diplomatic missions; renderings of Miller Hull’s Guatemala City effort show a well-proportioned glazed box wrapped in a modernist skin, 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—paradigm 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
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 themes 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. Actually, 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—that would 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 Arsenal [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.
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 Arseneal. 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 planet’s 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 af

finity. 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 not to make a statement but ask a question. How will we live together? In many ways, 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, “civics” 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 civics, 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 “civics” 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...
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, ratified, 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 converging dimension. It’s at once metaphoric and literal. In relation to the other forms of artistic 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 Latin 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 together.

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 resolutions. 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—

HS: The only way we can live together [today] is to think through the planetary. As many cosmetician 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.
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
Less green. For less green.

Find affordable clarity in the Solarban® Acuity™ low-e glass series.

Introducing Acuity™ low-iron glass—which is 60 percent less green than ordinary clear glass. The new Solarban® Acuity™ series by Vitro Architectural Glass provides the truly clear look you want with the outstanding performance of the full range of Solarban® solar control low-e coatings.

Upgrading a low-e coated clear insulating glass unit to Solarban® Acuity™ glass will typically increase the total installed curtainwall cost by only $1–2 per square foot.

Give a little, get it all. Request your samples at vitroglazings.com/acuity

*Solarban® Starphire® glass, Solarban® Acuity™ glass delivers a distinctive, highly transparent low-iron aesthetic.
West Hollywood Sunset Spectacular

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 billboard 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.

At 67 feet tall, the West Hollywood Sunset Spectacular is somewhere between a billboard 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 frame-and-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

Architect: Tom Wiscombe Architecture
Location: West Hollywood, California

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

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.
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

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.
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 Initiative.
Top 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.
ALPOLIC® metal composite material is backed by one of the strongest finish warranties in the business thanks to an easily overlooked Latin phrase, *in situ*. In the event you ever have to execute a warranty claim, *in situ* provides protection against replacement costs for more than just the materials.™ We invite you to contact us or use our online calculator to estimate the value of our warranty for your next project.

alpolic-americas.com/warrantycalculator  |  800.422.7270
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 cast-in-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 wilful composition but the natural consequence of a tectonic decision.”

Matthew Marani

Top left and right: The panels, which have embedded 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.
BRAND NEW TO NORTH AMERICA: Swisspearl Clinar + Clinar Clip, the facade panel offers unlimited creativity and enables efficient installation.
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.
alpolic-americas.com

EnFold Façade
BÖK Modern

EnFold Façade is a division of BÖK Modern specializing in rainscreen systems. Its panelized products integrate hardware, eliminating the need for on-site welding and reducing the time needed for installation. These nonflammable, solid-sheet metal panels are precision formed, which ensures structural rigidity.
bokmodern.com

Anodized Aluminum
Dri-Design

Dri-Design’s metal wall panels come in a variety of colors, materials, finishes, and textures. The new Anodized Aluminum finish comes in many shades and complements the rest of the Dri-Design system.
dri-design.com

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.
rigidized.com
We are DAS. Beyond basic.

We specialize in custom, laser-cut Decorative Architectural Screens. As a subsidiary of iWorks, LLC, our screens boast a wide range of applications; suitable for both interior and exterior spaces.
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 headress. 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.
Introducing advanced technology with sustainability at its core.

Set your sights on the superior insulated metal panel system designed to reduce your project’s carbon footprint while delivering unrivaled thermal performance, exceptional fire protection and unmatched health and wellness certification.

Learn more at QuadCore.kingspanpanels.us/horizon
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

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-foot-long 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. Ali Oriaku
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.

- No sealants, gaskets or butyl tape means no streaking and no maintenance for owners.
- Not laminated or a composite material, so panels will never delaminate.
- At Dri-Design, we have a strict policy of recycling and creating products that the world can live with.
- Fully tested to exceed ASTM standards and the latest AAMA 508-07.
- Available in a variety of materials and colors.
- Non-combustible and NFPA-285 compliant.
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 roof covered with translucent ETFE and perforated triangular metal panels
Facade metal panels: Zahner
ETFE: PFEIFER

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 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: Permasteeleisa Group
General contractor: Tishman Construction
Security consultant: G4S
Steel distributor: Rigidized Metals Corporation
Steel manufacturer: Tsukiboshi Art
Stainless steel: Starlight 7J

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 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 materiality and detailing of its facade.

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

COURTESY JGMA

HALKIN/MASON PHOTOGRAPHY

COURTESY SKIDMORE, OWINGS & MERRILL

COURTESY JGMA

COURTESY MHLA
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.
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

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, GammaStone 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
Redefining Surfaces. Redefining Projects.

Because of its design possibilities and technical features, Dekton® was the ideal surfacing product for this façade project in Chicago.

Ventilated Façade
444 N Orleans St.
Chicago, Illinois
fabricated by Stone Systems of Chicago

Project
Studio 444 N Orleans St, Chicago, Illinois
Dekton Surface 2553 sq. ft
Installation Ventilated Façade
Stone Systems of Chicago Aura Bookmatch 2cm thickness

25 Year Warranty.

Find more projects, technical info and inspiration at cosentino.com

COSENTINO NORTH AMERICA 355 Alhambra Ctr Suite 1000, Coral Gables, FL 33134 / 786.686.5060 Follow Us 🌐 🐝 @CosentinoUSA
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 ziggurat. (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 craftsman ship 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.
Today’s LEDs may last up to 50,000 hours, but Kalwall will continue harvesting sunlight into museum-quality daylighting™ for a lot longer than that. The fact that it eliminates glare and minimizes solar gain, while insulating more like a wall than a window, is just a nice bonus.

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.

Pilkington Energy Advantage™
The 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 (hand-bent) 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 ablations and touch-ups. Concluding the process, a sealer was applied that, according to McCuaude, 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 McCuaude. “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 artisanal 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 protrude at an angle and so double as integrated shading devices.
SLENDERWALL DELIVERS, AGAIN

Hamilton Cove, Weehawken, NJ
Owner: Hartz Mountain Industries
Architect: Marchetto Higgins Stevie
General Contractor: Katerra

SLENDERWALL®
Building Envelopes for the 22nd Century

BETTER THERMAL PERFORMANCE | QUALITY | VERSATILITY | RESILIENCE | RETURN ON INVESTMENT

LEARN MORE AT SLENDERWALL.COM - LICENSED FOR MANUFACTURE BY EASI-SET WORLDWIDE, A SMITH-MIDLAND COMPANY. SMID IS PUBLICLY TRADED.
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

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 Etch
Guardian 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
Expansive Views

Achieve grand scale and elegance with remarkable simplicity

The CRL Palisades™ S100 Sliding Door features ultra-slim, large scale panels that create expansive views while delivering exceptional structural and thermal performance.

- Slim 1-5/16” rails and stiles
- 13’ maximum frame height
- 7’ maximum panel width
- Frictionless sliding system
- CW40 Performance Grade rating

For more information on our entire Palisades™ collection
800.458.7535 • crl-arch.com
abd@crlaurence.com
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

ALL IMAGES COURTESY THE RESPECTIVE MANUFACTURERS UNLESS OTHERWISE NOTED
We bring your projects to life

Complete portfolio of services and products for extrusion coatings

Our Services
- Quick & accurate color matching
- Technical services
- Quality color and trends
- Digital tools

Our Products
TRINAR® ULTRA
- 70% Polyvinylidene Fluoride (PVDF)
- Superior durability
- AAMA 2605 certified
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.

[terrealina.com](http://terrealina.com)

**TerraClad**
Boston 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](http://bostonvalley.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](http://shildan.com)

**ABKSTONE**
Ceramics 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](http://ceramica.info)
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.

www.shildan.com
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 wood-stud 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

**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

**Krystal Waterstop System**
Kryton

Krystal 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 Krystal Waterstop Grout, Krystal 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

**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
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.
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 Nybel 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.”

Katie Angen

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.

PICKING HARDWARE IS HARD. PICKING PRECAST IS EASY.

Speed, thermal performance & versatility make structural precast the obvious choice.

Why is it so easy to work with Fabcon Precast? Because we’ve been perfecting the process for 50 years. Our structural precast panels are designed, manufactured and installed by people who live, breathe and sleep precast. Over the last five decades, we’ve obsessed over every detail—from aggregate colors and formliners to R-values and sequential deliveries.

Bottom line, building envelopes don’t get any easier than Fabcon Precast.

See us in action at THINKFABCON.COM

©2021 Fabcon Precast
formparts.fab

| Sustainable glassfibre reinforced concrete
| Sharp edges with a chamfer of 1/8"
| Various colors and textures
| Non-combustible (ASTM fire rating)

Rieder North America
888-573-8069 (toll free) | sales.usa@rieder.cc | www.rieder.cc/us
UPCOMING EVENTS IN 2021

Facades+ Online Southeast: Breaking The Georgian Mold
June 24

Great Lakes (VIRTUAL)
July 15

Dallas (AM)
July 22

New York City (2-DAY HYBRID)
August 5-6

Portland (AM)
September 15

Washington DC (AM)
September 21

Denver (1-DAY)
September 30

Chicago (1-DAY)
October 8

Boston (1-DAY)
October 26

Los Angeles (2-DAY)
November 4-5

Seattle (1-DAY)
December 3

Follow facadesplus.com for upcoming event schedules
Resources

Barriers & Sealants

- NBK
  nbkterracotta.com
- Porcelanosa
  porcelanosa-usa.com
- Ludowici-terreal
  ludowici.com
- Rieder
  rieder.cc
- Shildan
  shildan.com
- SwissPearl
  swisspearl.com

Coatings

- AkzoNobel
  akzonobel.com
- Axalta
  axalta.com
- Behr
  behr.com
- Benjamin Moore
  benjaminmoore.com
- Minerals Technologies (CETCO)
  mineralstech.com
- Eastman
  eastman.com
- Fabcon
  fabconprecast.com
- PPG
  ppg.com
- Sherwin-Williams
  sherwin-williams.com
- Valspar
  valspar.com

Concrete

- Fabcon
  fabconprecast.com
- Gate Precast
  gateprecast.com
- High Concrete
  highconcrete.com
- TAKTL
  taktl-llc.com

Composites

- Abet Laminati
  abellaminati.com
- Corian
  corian.com
- FunderMax
  fundermax.at
- James Hardie
  jameshardie.com
- Neolith
  neolith.com
- Northern Facades
  northernfacades.com
- Sound Solutions
  soundsolutionsinc.com
- STENI
  steni.com
- SwissPearl
  swisspearl.com
- TerraCORE Panels
  terracorepanels.com

Fabric

- Bemo
  bemousa.com
- Birdair
  birdair.com

Ceramics & Stone

- Agrob Buchtal
  agrob-buchtal.de/en
- Boston Valley
  bostonvalley.com
- Ceramics of Italy
  ceramica.info
- Eastern Exterior Wall Systems
  eews.com
- FunderMax
  fundermax.at
- James Hardie
  jameshardie.com
- Neolith
  neolith.com
- Northern Facades
  northernfacades.com
- Sound Solutions
  soundsolutionsinc.com
- STENI
  steni.com
- SwissPearl
  swisspearl.com
- TerraCORE Panels
  terracorepanels.com

Conveyors, Consultants, and Fabricators

- AKRF Engineering
  akrf.com
- Arbib Construction
  arbibconstruction.com
- Benson Industries
  bensonglobal.com
- Enclos
  enclos.com
- Eventscape
  eventscape.com
- Gilsanz Murray Steficek
  gmslip.com
- Harmon
  harmoninc.com
- Island Exterior Fabricators
  islandef.com
- MG McGrath
  mgmcgrath.com
- Permasteelisa Group
  permasteelisagroup.com
- Petersen Tegl
  en.petersen-tegl.dk
- Roschmann Group
  roschmann.group
- RWDI
  rwdi.com
- Studio NYL
  studiocaly.com
- Walter P. Moore
  walterpmoore.com
- Walters & Wolf
  waltersandwolf.com
- W&L Glass
  wlglass.com

Fabric

- Bemo
  bemousa.com
- Birdair
  birdair.com

- 3M
  3m.com
- 475 High Performance Building Supply
  foursevenfive.com
- Dörken
  dorken.com
- DuPont
  dupont.com
- Georgia-Pacific
  gp.com
- Henry
  henry.com
- Huber Engineered Woods
  huberwood.com
- Johns Manville
  jm.com
- Kryton
  kryton.com
- LP Building Solutions
  lpcorp.com
- Poly Wall
  poly-wall.com
- Rockwool
  rockwool.com
- Sika
  usa.sika.com
- Sto Corp.
  stocorp.com
- Tremco
  tremcosealants.com
- USG
  usg.com
- Abet Laminati
  abellaminati.com
- Corian
  corian.com
- FunderMax
  fundermax.at
- James Hardie
  jameshardie.com
- Neolith
  neolith.com
- Northern Facades
  northernfacades.com
- Sound Solutions
  soundsolutionsinc.com
- STENI
  steni.com
- SwissPearl
  swisspearl.com
- TerraCORE Panels
  terracorepanels.com

Concrete

- Fabcon
  fabconprecast.com
- Gate Precast
  gateprecast.com
- High Concrete
  highconcrete.com
- TAKTL
  taktl-llc.com

Conveyors, Consultants, and Fabricators

- AKRF Engineering
  akrf.com
- Arbib Construction
  arbibconstruction.com
- Benson Industries
  bensonglobal.com
- Enclos
  enclos.com
- Eventscape
  eventscape.com
- Gilsanz Murray Steficek
  gmslip.com
- Harmon
  harmoninc.com
- Island Exterior Fabricators
  islandef.com
- MG McGrath
  mgmcgrath.com
- Permasteelisa Group
  permasteelisagroup.com
- Petersen Tegl
  en.petersen-tegl.dk
- Roschmann Group
  roschmann.group
- RWDI
  rwdi.com
- Studio NYL
  studiocaly.com
- Walter P. Moore
  walterpmoore.com
- Walters & Wolf
  waltersandwolf.com
- W&L Glass
  wlglass.com

Fabric

- Bemo
  bemousa.com
- Birdair
  birdair.com
solid compact everlasting
## Glass and Curtain Walls

<table>
<thead>
<tr>
<th>Company</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGNORA</td>
<td>agnora.com</td>
</tr>
<tr>
<td>Azon</td>
<td>azonintl.com</td>
</tr>
<tr>
<td>Bendheim</td>
<td>bendheim.com</td>
</tr>
<tr>
<td>C.R. Laurence</td>
<td>crlaurence.com</td>
</tr>
<tr>
<td>Erie Architectural Products</td>
<td>erieap.com</td>
</tr>
<tr>
<td>GAMCO</td>
<td>gamcocorp.com</td>
</tr>
<tr>
<td>General Glass International (GGI)</td>
<td>generalglass.com</td>
</tr>
<tr>
<td>Glasswerks</td>
<td>glasswerks.com</td>
</tr>
<tr>
<td>Graham Architectural Products</td>
<td>grahamwindows.com</td>
</tr>
<tr>
<td>Guardian Glass</td>
<td>guardiango.com</td>
</tr>
<tr>
<td>Ipswich Bay Glass</td>
<td>ibglass.com</td>
</tr>
<tr>
<td>J.E. Berkowitz</td>
<td>jebekowitz.com</td>
</tr>
<tr>
<td>Kawneer</td>
<td>kawneer.com</td>
</tr>
<tr>
<td>Kinestral</td>
<td>kinestral.com</td>
</tr>
<tr>
<td>NorthGlass</td>
<td>northglass.global</td>
</tr>
<tr>
<td>Old Castle BuildingEnvelope</td>
<td>oce.com</td>
</tr>
<tr>
<td>Pilkington</td>
<td>pilkington.com</td>
</tr>
<tr>
<td>Pulp Studio</td>
<td>pulpstudio.com</td>
</tr>
<tr>
<td>Safi First</td>
<td>safi.com</td>
</tr>
<tr>
<td>SageGlass</td>
<td>sageglass.com</td>
</tr>
<tr>
<td>Saint-Gobain</td>
<td>saint-gobain-northamerica.com</td>
</tr>
<tr>
<td>Schüco</td>
<td>schueco.com</td>
</tr>
<tr>
<td>sedak</td>
<td>sedak.com</td>
</tr>
<tr>
<td>TecnoGlass</td>
<td>tecnoGlass.com</td>
</tr>
<tr>
<td>TroSifol</td>
<td>trosifol.com</td>
</tr>
<tr>
<td>Tubelite</td>
<td>tubeliteinc.com</td>
</tr>
<tr>
<td>Ventana</td>
<td>ventana.vc</td>
</tr>
<tr>
<td>View</td>
<td>view.com</td>
</tr>
<tr>
<td>Viracon</td>
<td>viracon.com</td>
</tr>
<tr>
<td>Vitro</td>
<td>vitro.com</td>
</tr>
<tr>
<td>YKK AP</td>
<td>ykkap.com</td>
</tr>
</tbody>
</table>

## Green Solutions

<table>
<thead>
<tr>
<th>Company</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>greenscreen</td>
<td>greenscreen.com</td>
</tr>
<tr>
<td>GSky</td>
<td>gskycom</td>
</tr>
<tr>
<td>Jakob Rope Systems</td>
<td>jakob-usa.com</td>
</tr>
<tr>
<td>Omni Ecosystems</td>
<td>omniecosystems.com</td>
</tr>
</tbody>
</table>

## Metals

<table>
<thead>
<tr>
<th>Company</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoa</td>
<td>alcoa.com</td>
</tr>
<tr>
<td>ALPOLIC</td>
<td>alpolic-america.com</td>
</tr>
<tr>
<td>ALUCOIL</td>
<td>alucoc.com</td>
</tr>
<tr>
<td>Alumflam</td>
<td>alumflam-usa.com</td>
</tr>
<tr>
<td>Alumil</td>
<td>alumil.com</td>
</tr>
<tr>
<td>Bunting Architectural Metals</td>
<td>buntingarchitecturalmetals.com</td>
</tr>
<tr>
<td>Cambridge Architectural</td>
<td>cambridgearchitectural.com</td>
</tr>
<tr>
<td>Cascade Architectural</td>
<td>cascade-architectural.com</td>
</tr>
<tr>
<td>CENTRIA</td>
<td>centria.com</td>
</tr>
<tr>
<td>CL-Talon</td>
<td>citalon.com</td>
</tr>
<tr>
<td>Crown Corr</td>
<td>crowncorr.com</td>
</tr>
<tr>
<td>DBM Vircon</td>
<td>dbmvircon.com</td>
</tr>
<tr>
<td>Dri-Design</td>
<td>dri-design.com</td>
</tr>
<tr>
<td>GKD Metal Fabrics</td>
<td>gkdmetalfabrics.com</td>
</tr>
<tr>
<td>HAVER &amp; BOECKER</td>
<td>haverusa.com</td>
</tr>
<tr>
<td>Kingspan</td>
<td>kingspan.com</td>
</tr>
<tr>
<td>KME</td>
<td>kme.com</td>
</tr>
<tr>
<td>Lorin</td>
<td>lorin.com</td>
</tr>
<tr>
<td>Metaworks</td>
<td>metalwerksusa.com</td>
</tr>
<tr>
<td>Metl-Span</td>
<td>metlspan.com</td>
</tr>
<tr>
<td>Moz</td>
<td>mozdesigns.com</td>
</tr>
<tr>
<td>Northern Facades</td>
<td>northernfacades.com</td>
</tr>
<tr>
<td>Northern Manufacturing</td>
<td>northernmlg.com</td>
</tr>
<tr>
<td>POHL</td>
<td>pohl-facades.com</td>
</tr>
<tr>
<td>Pure + Freeform</td>
<td>purefreeform.com</td>
</tr>
<tr>
<td>Renson</td>
<td>rensen-outdoor.com</td>
</tr>
<tr>
<td>Rigidized Metals</td>
<td>rigidized.com</td>
</tr>
<tr>
<td>Sapa</td>
<td>sapabuildingsystem.com</td>
</tr>
<tr>
<td>Spectrum Metal Finishing</td>
<td>spectrummetal.com</td>
</tr>
<tr>
<td>Zahner</td>
<td>zahner.com</td>
</tr>
</tbody>
</table>

## Timber

<table>
<thead>
<tr>
<th>Company</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accoya</td>
<td>accoya.com</td>
</tr>
<tr>
<td>binderholz</td>
<td>binderholz.com/en-us/</td>
</tr>
<tr>
<td>Delta Millworks</td>
<td>deltamilworks.com</td>
</tr>
<tr>
<td>Kebony</td>
<td>us.kebony.com</td>
</tr>
<tr>
<td>KLH</td>
<td>klh.at</td>
</tr>
<tr>
<td>Lunawood</td>
<td>lunawood.com</td>
</tr>
<tr>
<td>Montana Timber Products</td>
<td>montanatimberproducts.com</td>
</tr>
<tr>
<td>Nakamoto Forestry</td>
<td>nakamotoforestry.com</td>
</tr>
<tr>
<td>Prodemna</td>
<td>prodemna.com</td>
</tr>
<tr>
<td>reSAWN TIMBER co.</td>
<td>resawn timberco.com</td>
</tr>
<tr>
<td>Rosboro</td>
<td>rosboro.com</td>
</tr>
<tr>
<td>Sierra Pacific Industries</td>
<td>sp-ind.com</td>
</tr>
<tr>
<td>Technowood</td>
<td>mytechnowood.com</td>
</tr>
<tr>
<td>Thermory</td>
<td>thermoryusa.com</td>
</tr>
</tbody>
</table>
Branch Technology is a design-focused construction technology company that specializes in large-scale 3D printed next-generation wall systems.

Branch developed Cellular Fabrication (C-Fab®), a revolutionary technology that combines industrial robotics, powerful algorithms, and a novel “Freeform” extrusion technology that allows material to solidify in free space without dimensional restrictions or support structures. Fundamentally different from other existing 3D printing techniques, C-Fab® creates volumetric geometries using 20X less material than traditional layered-deposition methods.

This lattice structure is printed with fiber-reinforced polymers that are strong, rigid, and durable. The lightweight open-air structure enables combining complementary materials with the Freeform framework to create composite assemblies with improved functionality. As an entirely direct-from-digital workflow, the possibilities for on-demand construction and manufacturing agility are endless.

Signature Facades, 3D Printed

www.branch.technology
64 Marketplace

Esto
Photography of the Built Environment
esto.com

Hiring is tough.

That’s why we’re relaunching the A’N Job Board.

Connecting AEC firms with job seekers.

Photography of the Built Environment
esto.com

Brooklyn Navy Yard, New Lab, Brooklyn NY, Marvel Architects
Photo: © David Sundberg/Esto

VanDeel
EDITIONS
FINE ART PRINT PUBLISHERS

October 21 & 22
TIMBERCON.ARCHPAPER.COM

COMPANY PAGE

YOUR CITY

VISIT LIBRARY.ARCHPAPER.COM

YOUR RESOURCES

YOUR SCHEDULE

COMPANY PAGE

AkzoNobel akzonobel.com .................................................. 47
Alpolic Materials alpolic-americas.com .................................. 27
Cosentino cosentino.com .................................................. 39
CR Laurence crlaurence.com ............................................. 45
Decorative Architectural Screens dasus.com ......................... 31
Dri-Design dri-design.com .................................................. 35
Fabcon fabcon.com .......................................................... 55
Hanover Architectural hanoverpavers.com ......................... 3
Kalwall kalwall.com .......................................................... 41
Kingspan kingspan.com ................................................... 13
Modular Arts modulararts.com ........................................... 41
Pilkington pilkington.com/na ........................................... 41
Pulp Studio pulpstudio.com ............................................. 37
Rieder nederco/us ............................................................ 56
Sciame sciame.com .......................................................... 53
Shildan shildan.com .......................................................... 43
SlenderWall slenderwall.com ............................................ 49
Swisspearl swisspearl.com .................................................. 29
Vitro vitroglazings.com ...................................................... 25
YKK ykkap.com ............................................................... Back Cover

www.pulpstudio.com

© David Sundberg/Esto
Our CE|Strong workshops are curated according to region within the Continental United States. On-hand instructors will respond to the application of their materials and software tools to local conditions: such as proper insulation to avoid thermal bridging in regions prone to harsh winters and efficient UV protection for glazed facades. Attendees will leave with a greater understanding of efficient material uses which blend with overall design approaches.

Pacific Northwest  
May 19

Mid-Atlantic  
June 16

Southeast  
June 30

Southwest  
July 21

Midwest  
August 18

To register go to [cestrong.com](http://cestrong.com)

TECH+ Virtual

Harnessing Technology for Future Practice

**May 20, 2021**

Register at [techplus.co/vc21](http://techplus.co/vc21)

Sponsorships: Diana Darling  ddarling@archpaper.com | 212 966-0630
A'N 2021 Products Awards

Best of Products

Launch: April 29, 2021
Deadline: July 22, 2021

Subscribe to emails to stay informed about Best of Products Awards archpaper.com/subscribe
67 Highlights

West

Gun Violence Memorial Project

National Building Museum
401 F Street NW
Washington, D.C.

Until September 25, 2022

MAG 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

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 Baird/Balliet. 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

East

Niki de Saint Phalle: Structures for Life

MoMA PS1
22-25 Jackson Avenue
Queens, New York

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

Akeem Smith: No Gyal Can Test

Red Bull Arts Detroit
1551 Winder Street
Detroit

Through July 30

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 Baird/Balliet. 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

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

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
Avant-Garde as Method: Vkhutemas and the Pedagogy of Space, 1920–1930

Anna Bokov | Park Books | $65

The Bauhaus is often credited with developing a design methodology. However, many of the pedagogical exercises and frameworks that Gropius and others developed at the famed German school had their antecedents in Soviet Russia. Avant-Garde as Method (left) uncovers the history of the Higher Art and Technical Studios in Moscow, more commonly known as Vkhutemas. Swept up by the revolutionary mood of the times, the school’s instructors rewired the spatial and craft arts along radical lines. Wider educational reforms changed student demographics, allowing many working-class pupils (above) to study design for the first time.

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 Bauhausers, 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 branch 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. Rablaks, 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 Svomas 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 Inkukh, or the Institute of Artistic Culture. Zhisliptarkh, 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 Zhisliptarkh.

For Bokov, the theoretical debates among these artists and architects regarding the distinction 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 Krinsky, one of Vkhutemas’s star pupils, would move away from spatial compositions to combinatorial problems 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, Alekssei Babichew, and Anton Lavinsky handled volume; Aleksandr Rodchenko and Varvara Stepanova designed the graphics workshops; Nikolai Ladovsky, Vladimir Krisnysk, and Nikolai Dokuchaeve formulated the program for space. The famed Vkhutemas preparatory course is reconstructed by Bokov in meticulous detail, with its thematic units (конурсы). 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 pianometric 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 (OCA), led by Moisei Ginsburg and the Vesnin brothers, than Ladovsky’s rationalist Association of New Architects (ASNOVA). Krisnys, Dokuchaeve, and Ladovsky taught the basic
classes at Vkhutemas, while Ginzburg and the Vesnin 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 Akhytko, an assistant to Rodchenko, to showcase the interplay of materials and their arrangement (“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 (凡是) 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 Metlak, the metalworking department run by Rodchenko. Gustav Klutsis, a sometime 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 DSA, 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 Khichelev 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 Hinrich Scheper got a job at Vkhutemas (as it was renamed in 1929) after moving with his wife to Moscow. Lisitskaya 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. Interpersed throughout the text are translations of assorted documents, 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 (Искусство жизни) from 1925, the brochure for Konstantin Melnikov’s pavilion in Pans, 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 Stalization of the cultural realm led to the shuttering of the campus in 1930, as its comprehensive program was deemed inefficient. Vkhutemas 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 polemical courses of the Russian avant-garde as a universal artistic system.”

Ross Wolfe is a critic, historian, and educator living in New York City.
The Art Museum in Modern Times
Charles Saumarez Smith | Thames & Hudson | $40

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. Trusteess, administrators, and curators have done the most to alter the face of art institutions over the 80 or so years that make up Sauxarez Smith’s timeline. Throughout, the art historian and former director of the National Portrait Gallery in London attempts to clean, 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-coded ideology 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 fudging 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 1996, 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 keen-eyed 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 one capsule history to the next, yielding a cascading eulogy 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 Sauxarez 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 generation’s 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 sketch es, 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.

Lauren McQuistion is an architectural theorist, historian, and designer currently PhD-ing in Charlottesville, Virginia.
Subscribe

THE ARCHITECT’S NEWSPAPER
LATE EDITION NEWSLETTER
AN INTERIOR TRADING NOTES
OUTDOOR SPACES NEWSLETTER
TECH+ FACADES+ CE|STRONG
MONDAY MORNING NEWSLETTER
THE ARCHITECT’S NEWSPAPER
AN INTERIOR TRADING NOTES

archpaper.com/subscribe
Slip of the Pen

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

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 worrisome, Icebergs exposes a curious rhetorical catch in the application of some variant of negative dialectic to architecture. Occasionally, the fusillades launched against more garishly soulless enterprises—the titular underground “iceberg”—are underfire on more grandiose sores. 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-prof-it housing commissions as grandiose social-benefit schemes. Soules’s point here is well-taken; yet 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”—is as for the publicist, for the earnest online 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
times and be back in Agency-ville. The latter proposition (really only a modified take on the operarismo popular in some architectural circles circa 1968) at least represents a kind of synthesis, a program worth reconsidering; 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 clear-eyed 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 all—an 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.


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.

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 a 2011 talk explaining his reasons for launching TNA, Bridle confessed to "having 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—political, 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 timelines, 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 architecture, 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 millennium 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 (nameably, 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 ostensibly 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) 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 unpredictable 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 preferences of the client and currently a visiting critic at Syracuse University. Max Kuo is a partner of ALL THATISSOLID, a frequent design critic at the Harvard GSD, and currently a visiting critic at Syracuse University.

Meanwhile, the predictable enemy (bottom-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 unpredictable 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 preferences of the client and currently a visiting critic at Syracuse University. Max Kuo is a partner of ALLTHATISSOLID, a frequent design critic at the Harvard GSD, and currently a visiting critic at Syracuse University.
YKK AP America is a national manufacturer of commercial façade systems for specifiers and glazing contractors seeking smart design, quality engineering and exceptional customer support. With the support of our dedicated employees, we combine controlled manufacturing and thoughtful design to provide quality building solutions that will meet your performance, aesthetic and sustainability needs.

- **Field Technical Service**
  Phone and on-site consultation for product installation challenges.

- **Project Support**
  Estimating, design and management for large scale projects.

- **Engineering Consultation**
  Assistance with codes, system info, calculations and modifications.

- **Continuing Education**
  Fenestration and engineering courses that reward AIA CEU credit.

www.ykkap.com

**Thank You for 30 Years!**