



FOOD

01

Cannupa Hanska Luger, Precious Okoyomon, and WangShui in Conversation  
 6:30–8:30 PM  
 New Museum Theater  
 235 Bowery



**THU 6/04/2026**

**Exhibition**

Crumbling Land  
 6 PM  
 Citygroup  
 104b Forsyth Street



**TUE 7/14/2026**

**Discussion**

Alternatives in a Time of Institutional Crisis  
 6–8 PM  
 National Academy of Design  
 519 W 26th Street, Floor 2



**THU 5/21/2026**

**Lecture**

After Hours:  
 Solid Objectives Idenburg Liu (SO–II)

6–8 PM  
 The Architectural League of New York at SO–II  
 46 Adelphi Street  
 Brooklyn



**WED 6/10/2026**

**Community**

CB6 Full Board Meeting  
 6:30 PM  
 Van Alen Institute  
 303 Bond Street  
 Brooklyn



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# CALENDAR

**FRI 5/15/2026**



**Exhibition**

School of Constructed Environments  
End of Year Exhibition 2026

6 PM  
Parsons School of Design

E200 & E300 Studios:  
25 E 13th Street, Floors 2 & 3  
JJ Studio:  
39 W 13th Street, Floor 2

**THU 5/28/2026**

**Conversation**

On AI, Labor, and Power: Hito Steyerl  
and Trevor Paglen in Conversation

6:30–8 PM  
New Museum  
235 Bowery

**WED 6/10/2026**



**Exhibition**

clinamen—an installation by  
Céleste Boursier-Mougenot

12 PM  
Park Avenue Armory  
643 Park Avenue



**SAT 5/30/2026**

**Workshop**

A Lil of Abstracción Queer Sudaca

2–4 PM  
National Academy of Design  
519 W 26th Street, Floor 2

**THU 6/18/2026**

**Conversation**

On Prosthetics: Berenice Olmedo and  
David Gissen in Conversation

6:30–8 PM  
New Museum Theater  
235 Bowery



**WED 5/20/2026**

**Conversation**

Architecture x Architecture:  
A Dialectic

6–7:45 PM  
Rizzoli Bookstore  
1133 Broadway at W 26th Street

**WED 6/03/2026**

**Festival**

NEW INC: DEMO2026  
Festival of art, design, and technology

11 AM–6 PM  
New Museum  
235 Bowery

**SAT 6/27/2026**

**Community**

Sci-Fi Book Club: The Alienated Body

3–4:30 PM  
New Museum Forum  
235 Bowery

**THU 5/21/2026**

**Film Festival**

Truth Be Told 18th Annual  
Documentary Film Festival

6–8:30 PM  
The New School  
Tishman Auditorium  
63 Fifth Ave



**THU 6/04/2026**

**Community**

Bond Street Bash 2026

7–10 PM  
Van Alen Institute  
303 Bond Street  
Brooklyn



**SUN 7/05/2026**

**Exhibition**

Architects of Liberation:  
Modernism in Western Africa

The Museum of Modern Art  
11 W 53rd Street



## EDITOR'S NOTES

With the support of our new dean, Michael Young, the inaugural issue of *Foundation* was released during the School of Architecture's spring 2026 community dinner. Issue 00 proved that a student-led architecture publication at The Cooper Union was achievable, and *Foundation's* advisors and editorial board are excited to present Issue 01.

Amplifying the voices, interests, and opinions of students at Cooper is central to the mission of *Foundation*. As we work to find a structure for the publication that ensures its longevity and enduring legacy at The Cooper Union, we have learned much from Issue 00. Balancing a structured approach with free-form work has been central to the project's development. In issue 01 we are excited to include more content from more writers, across a broader range of topics.

Issue 01 is composed of student submissions and commissioned pieces that delve into undergraduate thesis projects, one of which examines New York City's architectural staple: the fire escape, as well as an interview with Steven Hillyer about recent renovations to the Arthur A. Houghton Jr. Gallery, the near-bankruptcy of New York City in the 1970s, commentary on experiences of homelessness that are not always evident, a new show at the Cooper Hewitt, and more.

*Foundation's* future issues will continue to be open to submissions. Issue 02 will be released at the beginning of the 2026–2027 school year.

## HELP WANTED

Looking for people interested in contributing to *Foundation*, Issue 02

(alumni, students of all schools, emerging writers, aquatic dancers, high school drop outs, ect...  
NO EXPERIENCE NECESSARY)

Contact [abraham.marx@cooper.edu](mailto:abraham.marx@cooper.edu)

## COOPER UNION END OF YEAR SHOW

Foundation Building & 41 Cooper  
Square at 7th Street and  
3rd Avenue

Exhibition Hours:

May 29–June 14, 2026

Tuesday thru Sunday, 12 to 7pm

Opens  
May 27  
from  
5 to 8pm

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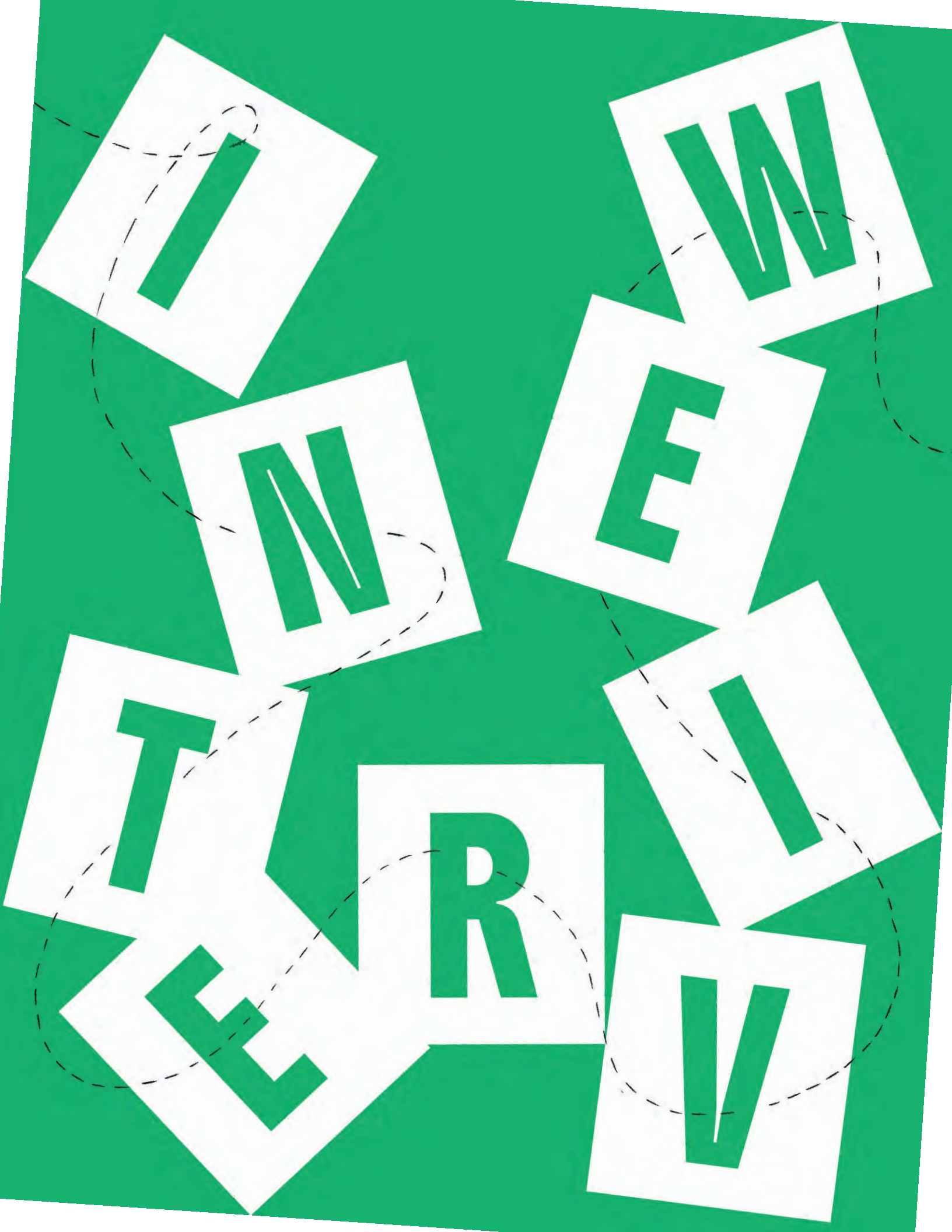
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# Getting the Picture with Sean Suchara

## Lee Caulfield

■ Sean Suchara is an illustrator, designer, and visual artist based in New York who has worked with *The New York Times*, the Center for Urban Pedagogy, Apple, and the Facebook Analog Research Lab. He is currently the primary illustrator for the *New York Review of Architecture*.

Lee Caulfield

Sean Suchara

■ Thank you for taking the time to sit down and chat with me about your practice. Can you tell me a little bit about how you got started as an illustrator?

■ I grew up in an artistically supportive household, and in middle and high school I became the artsy kid. We don't need to talk about the weeaboo phase, when I was learning from *How to Draw Mango* books. I went to FIT for graphic design because I thought that if you want to make money, that's what you should do. I made a lot of great friends, met a lot of people in the graphic design department, and started steering myself back towards drawing and illustration. I was constantly bouncing back and forth between the two during my internships, and it caused an overall disenchantment with the design world. That disenchantment led me to pursue independent drawing projects. A lot of things in my career have come from people giving me permission to accept the title of artist, graphic designer, or illustrator, and from that acceptance, I've landed in a very vague image-maker space.

I still do graphic design, but I'm caught in the in-between space. I have fun on the technical side and find myself working on a lot of books. Lately, I've been working with Conveyor Studios, an independent art book publisher, on design and production.

■ So, how do you choose your clients? What values or qualities are important to you when you're looking at potential collaborators?

■ It can be tough and complicated to find clients who strike the right balance between scale and trust, but I have the ability to be very scrappy and amorphous with my work. I do find myself becoming more confident in being an illustrator and slowly letting go of the title of designer. I have a lot of people who get to know me through social media and want to learn more. Then I ask: Do I believe in what they're doing? Is there going to be some kind of impact? Does this line

up with my morals and values? Initially, I thought the coffee table book world would be interesting, but the atmosphere was very stressful, and there wasn't a lot of room for appreciating the work once it was done. I asked myself: Who is this for? We're making these art objects that celebrate gorgeous buildings, but what about the people who live in them? What's the impact of these things?

■ You're responsible for the incredible illustrations that grace the cover and pages of the *New York Review of Architecture* (NYRA) every few months. How did that partnership come about?

■ Graphic designers have always had a symbiotic relationship with the architecture world. Design studios are consistently working with architecture firms, designing books or exhibitions. For NYRA, I saw an Instagram call for illustrators and applied.

There were only supposed to be six issues in the beginning, but the voice we created with the illustrations became ingrained in the publication after the re-brand, and I've been collaborating with them on every issue since then.

■ Tell me more about the infamous NYRA rat. He's become such an iconic character for the publication.

■ Coming up with a mascot was fun. The character development of the rat evolved through trial and error from being more rat-like and chubby to eventually becoming more human-like. The rat is supposed to represent the average New Yorker, and he's always presented with some sort of danger that he is oblivious to. The nose has to be long, ears short, tail chaotic. Some of the design choices were influenced by the tools I used. I started with a brush pen and ended up with a pencil, which helps keep things consistent. All of this developed over the span of several issues. That's what I love about having the opportunity to work with a consistent client: it kind of takes you back to the school incubator space.

■ What does the workflow for a typical issue look like?

■ When we get close to printing, NYRA's team lets me know a list of all the things they need illustrations for, and then I have free rein from there. The editors give me a general idea, but it's totally up to me to figure out how that idea is going to work. I go through a few small sketches, but because of the timeline, I'm forced

to be confident. Sometimes pushbacks happen, but usually I only have two to three weeks to do all the illustrations for one issue, as well as the front and back cover, the spotlight section, reviews, and lots of little spots throughout. On average, I have to do fifteen illustrations per issue. That's where the trust from them comes in. We're not constantly going back and forth, saying, "Can you try this, can you try that?"—if there are any edits, they're usually small.

■ **Do you have a favorite cover?**

■ The pointillism one based on Seurat's *A Sunday on La Grande Jatte* is my favorite, although that might be purely out of Stockholm Syndrome. I literally stood up after working on it for hours and had a vertigo moment where I got dizzy. The New York City Ballet cover is a favorite as well; it was a turning point in terms of the illustration style. It's humorous, with lots of little references hidden throughout.

■ **You said you discovered the NYRA opportunity through an open call on Instagram. I have a complicated relationship with social media as a creator. It feels like a double-edged sword. You can make so many connections, but it also flattens your work. How do you feel about it?**

■ I think it's tough for me to say at the moment because social media has changed a lot over time. Sheer volume in terms of posting is what did so much for me originally, but I do feel like there are more strategic ways to take advantage of everything Instagram can offer. When I was hoping to get an illustration agent, the advice I was given was to stop worrying about numbers. When people find your page, all they want to see is that you're still making stuff and that you're still interested in what you're making. It's frustrating when you put so much work into things, and then the algorithm hides what you do, but doing the work of being on social media is finding what works for you. If you wanna be viral, go for it, but for me, I just want to share my work. Using Instagram sustainably for my health and mental well-being is the main priority. In that respect, it also feels like a good outlet to shout into the void when things like AI piss me off.

■ **What advice would you give to a student interested in a career in illustration or graphic design?**

■ I had a lot of grievances at and after FIT, and I'm not afraid to talk shit about it. My advice? Engage with the world as much as possible. The best education I got was when I put myself outside the classroom walls. Don't be afraid to use school to make examples of the things you want to be doing in the real world. In the assignments where you can have more freedom, investigate the things you love and care about. Use the school's resources to explore! When you go out with an inquisitive mindset, and people see the things you're excited about, they respond to that excitement. The topics I explored in my college thesis are still things I'm thinking about years later.

■ **What was your thesis about?**

■ I was exploring the origins of animism and its cultural and historical occurrences throughout the

world. The genesis of my thesis was a very distinct memory of being at an Old Navy as a child and feeling bad for separating two t-shirts. I thought, "They're best friends, I can't do that." I tried to press them together so that their souls could live in the one shirt I bought. I was curious why a child would be so driven to personify and anthropomorphize objects. That line of inquiry led me to look at tsukumogami, Japanese spirits formed from household items that gain sentience.

■ **That's such a profoundly empathetic thought for a child to have about a t-shirt.**

■ It's extremely important to remember you are a person first, and you're part of both human and non-human communities. Not out of grief or guilt, you have a responsibility to foster other people's well-being. How can you connect with people? How can you make a village by being a villager? My vocation is to be someone who talks and shares stories.

School was so competition-driven. We were driven so hard to view each other as competitors that it strained our relationships, and it was hard to stay in contact with each other after graduation. Every gig I've ever had was because of a relationship or a friendship, even if it was a friendship that started on Instagram. I also reached out to people whose work I liked, and I found that being nice in a world that's so fucking stressful goes a long way.

# Renovating Houghton with Steven Hillyer

## Ilea Wunder

The renovation of the Arthur A. Houghton Jr. Gallery on the second floor of the Foundation Building is complete after nearly a year of planning and construction. Steven Hillyer, the Architecture Archive's director, envisioned and oversaw the project, designed by longtime faculty member and Cooper alumni Sam Anderson of Samuel Anderson Architects. On April 16, the renovation opened to much fanfare with a retrospective of the late Alexandra Kiss, an architect and artist who graduated from The Irwin S. Chanin School of Architecture in 2005.

Ilea Wunder

Steven Hillyer

### ■ How did the renovation come about?

■ We've known for a long time that the gallery was getting run down. It's been fifty-two years since the interior renovation. Although there were modest renovations over the years, I think the last one was in the 1990s when they replaced the walls because they were so heavily used. It was really taking a beating, and without temperature and humidity control, things sag and fall off the walls when it's rainy and humid.

The Cooper Union's annual budget has a capital expenditures program. We were able to do this because it is a rotating budget and it was architecture's turn.

### ■ And then the architecture school decided this was the thing.

■ Yes, I had been speaking with Natalie Brooks about this for some time. Trying to become museum quality in this one-hundred-sixty-something year-old building is a challenge and this was the way that we could finally do it. There's also an intention to make the library archives temperature and humidity controlled. And when they do that, because we're directly above them, the same thing will happen for the archive. So, I learned a lot about what it takes to get to that point. A number of times over the years we tried to borrow works for exhibitions, and we couldn't because we didn't have museum-quality standards. In 2001 we mounted the exhibition *Wall House 2: John Hejduk* and I approached The Museum of Modern Art for two drawings they had in their collection, and they said no. The interesting thing about it was that those drawings, before they were acquired by the museum, used to live in the library archive space just below us, because that's where John kept all of his work. So it

was kind of hilarious to me that they couldn't come back to where they had been.

### ■ Yes. Do you remember when it was officially decided that the renovation would take place?

■ It was sometime in early 2025, I believe.

### ■ Can you talk about the process of choosing the architect who would lead the renovation?

■ Yes. A request for proposals was put forth by the facilities office and Cooper Union's owner's rep—I think we received five or six proposals. Each architect was then invited to make a presentation, and those presentations were winnowed down to two, and Sam Anderson was one of them. Sam Anderson Architects was chosen. They've done restoration work in the Peter Cooper Suite in the 2000s, a light upgrading in The Great Hall, and they designed the AACE Lab on the fourth floor.

It's John Hejduk's interior; that's a huge deal. But time marches on, and you need to do things in buildings. And some of the work that's been done in this building hasn't been so great, but Sam has been respectful to Hejduk's interior renovation. I advocated for him because I think it's better to have one architect making several upgrades and interventions than having ten architects making wildly different ones. It just feels like it's more cohesive.

### ■ Yes. And him being a Cooper grad makes it feel all the more ...happy. And in the right hands

■ Yes, and I don't know if you know this, but there are three people working on this from his office—Sam himself and then Eddie Gormley. Eddie was my Cooper Union classmate. We've known each other forever. And then the third person working on this is Danny Smith, also a Cooper grad. So, it's nice that it's all in the family.

### ■ Could you talk about how the process has been so far? Renovating while still operating the archive?

■ The trick of this project is that they had to replace two separate air handlers and then reconfigure all the ductwork in the hallways and into the gallery itself. Also, to have temperature and humidity control, you need a chiller and a heat pump, both of which had to go up on the roof. The heat pump required hydronic piping, which runs through a shaftway in one of the bathrooms from the second to the seventh floor. It was

a Herculean effort, and we were lucky to have Jeff Nash, an incredible lighting designer help.

■ Buildings can be unpredictable and unruly. I'm sure it's a relief to have this closed loop independence, especially even just in the past few weeks with flooding, fires...

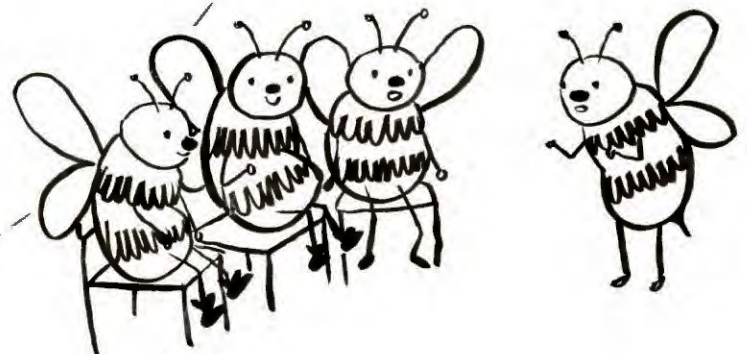
■ They can be very unpredictable and unruly. In the summer, when we're not in the building, they don't have the air conditioner as cool. In the winter, probably the same thing—not as warm. Now that's no longer going to affect the gallery. The gallery will be its own quiet little loop minding its own business.

■ I know you're planning a soft launch of the gallery this April.

■ Yes, with an exhibition featuring the work of Alexandra Kiss, a 2005 Cooper architecture grad. Alex was an incredibly talented artist when she came to Cooper Union, and she was mentored by Sue Gussow, who included her in *Architects Draw*, her 2008 book. In 2018, Kiss shifted her focus from architecture to her art. Her work looks at growth through drawings of tree bark, and also decay, through decayed leaves that she found in her walks through the forest. She spent a lot of time walking in the forest. And there's a small group of drawings of "nurse logs", which are fallen, decaying logs that feed the forest. She also made drawings of her daughter, Sophie. It's all incredibly, incredibly beautiful work. Alex passed away in September of last year, so we wanted to honor her and her work. I have a personal attachment to all of this because Alex was a friend. I just really want to honor her and celebrate her work.

■ What other things would you say the archive and the gallery is excited for with this humidity and temperature control? If there are any others.

■ I think it just opens up a ton of possibilities for us that we wouldn't have been able to consider before. As an example, we're putting together a retrospective of Raimund Abraham's work that's coming to us from Germany in the fall. I think the earliest project in the exhibition dates to 1955. The curator of the show came to New York and we met; it sounded really exciting and he sent me imagery and it was really amazing stuff. And then I got an email from Martino Stierli from MoMA, who was encouraging Cooper Union to take this exhibition because it was so important—and since Raimund taught here, it was the perfect venue. It was nice to get that kind of outreach saying this could be important for you to do. And there's a few other exhibitions that I'm conjuring further down the line: one from the collection of the New York Botanical Garden, and another from the Roberto Burle Marx Archive in Brazil. And those are things that I would not have been able to ponder previously at all.



This section features reviews of exhibitions, building openings, lectures, or other historical events you most likely attended (or should have). The writings are meditations and speculations about how these events contribute to Cooper's community as well as the broader practice and theorization of art/architecture in New York City.



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The title 'CULTURE' is rendered in large, white, sans-serif capital letters. Each letter is contained within a white rectangular box that is slightly tilted. The boxes are arranged in a staggered, overlapping pattern across the page. A series of dashed white lines connects the corners of these boxes, forming a continuous, irregular path that weaves through the letters. The entire composition is set against a solid, vibrant green background.

# Avant-Garde in Flight Above Future Cities

Eric Honghao Zhao



■ Anicka Yi's *In Love With The World* consists of two alien-like flying machines that hover astonishingly above the top floor of the New Museum as part of the exhibition *New Humans: Memories of the Future*. The flying machines resemble organic squid- or spore-like creatures, suspended between biology and machinery. Each form has four soft, dangling legs and a mechanical device embedded at its center. The two differently-colored aerobes are activated in turn by staff nearby. As they move through the air, their soft limbs lightly brush against the museum's walls, producing a strange, delicate, almost sentient choreography.

What makes the installation even more compelling is the relationship between these floating machines and the architectural works displayed below them. Beneath Yi's aerobes are three architectural projects: *Ghost Town* by Bodys Isek Kingelez, a vibrant city of colorful paper models that imagines an optimistic future; *Electric Labyrinth* by Arata Isozaki, installed on the wall, where utopian architectural imagery is projected onto the ruins of Hiroshima; and *New Babylon* by Constant Nieuwenhuys, which proposes a nomadic and anti-capitalist mode of life through a vision of floating, continuously transformable space.

Together, the flying machines and the architectural models form a powerful critique of how the future has been imagined. The flying machines reimagine technology as uncanny organic life forms drifting above the gallery, while the architectural works below present larger human systems of construction, speculation, and control, thus creating tension between two different ways of imagining the future: one through quasi-organic machines, and the other through architectural systems of human organization.

*New Humans: Memories of the Future* is ongoing.

# Art of Noise

Kyle Ku



■ Spread across the entire third-floor gallery of the Cooper Hewitt, *Art of Noise* traces a century of music design through concert posters, mid-century album covers, jukeboxes, transistor radios, and the Sony Walkman sitting beside an Apple iPod like estranged relatives who agree on everything. The exhibition arrives at the Cooper Hewitt having already proven itself at SFMOMA, and New York has made it its own.

Teenage Engineering—a Swedish electronics company—has designed the exhibition environment itself. The furniture, the interactive playback device, the seating are as considered as the exhibition content, and the whole thing hums with a Scandinavian conviction that good design is simply the correct way to exist.

The show's argument is made convincingly upstairs. It is proven, definitively, downstairs, where Devon Turnbull's *HiFi Pursuit Listening Room Dream No. 3* occupies the Carnegie Library and does not ask for your attention so much as simply receive it. Two Denon motor turntables with Groove Master tone arms feed through a step-up transformer (for the moving coil cartridge) into an amp rack housing a DSP unit alongside a 200-watt and a 1,200-watt amplifier. All of this for an experience provided by a Studer CD player. The speakers do the rest: fifteen-cell dispersion horns, mid-range woofers, a super tweeter, and Faustec super-sub subs resolve frequencies felt before they are heard.

*Art of Noise* runs through August 16, 2026.



# Viollet-le-Duc: Drawing Worlds

Eric Honghao Zhao



■ The exhibition on the French architect and draftsman Eugène Viollet-le-Duc, currently on view at the Bard Graduate Center in Manhattan, unfolds across four floors. It traces his trajectory from his early travels to his role in the restoration of Notre-Dame de Paris, and later investigations into castles and mountains.

As a young traveler in Italy and France, Viollet-le-Duc did not simply document ruins. He drew them as if they were both present and already reconstructed. His drawings operate somewhere between self-observation and the projection of imagination. His later work on Notre-Dame de Paris is often understood as restoration, but it is equally a form of interpretation. Treating Gothic architecture as an organic system rich in natural ornament and complex curves, he extended the Gothic spirit—sometimes beyond historical accuracy—through new elements and materials such as iron. The building becomes a site where history and imagination overlap.

The exhibition's final section introduces contemporary media, including VR experiences of Viollet-le-Duc's home and digital reconstructions of Notre-Dame de Paris in the game *Assassin's Creed Unity*.

Seen this way, Viollet-le-Duc's drawings are not just a means of communication. They suggest an early form of a broader condition—one in which reality is continuously mediated, reconstructed, and made visible through images.

*Viollet-le-Duc: Drawing Worlds* is open through May 24, 2026.

# New New Museum

Violet Caleca



■ Slightly unfinished and sharp around the edges, the New Museum recently opened a new, OMA-designed extension to their existing gallery space, originally designed by SANAA. The extension was met with some criticism (although it is important to note that most people on this earth don't concern themselves with such trivial obsessions). I biked down the Bowery to inspect the scene—did the extension really ruin the purity of SANAA's work?

The seven-story equivalent of a Cybertruck has found parking between a stack of minimalist boxes and a homeless shelter. Across the street you can buy wholesale commercial kitchen appliances from an Italian restaurant depot. The public space in front of the building was walled off, not that you would necessarily want to congregate there anyway. The triangle of space consists of nothing but bare concrete; it feels cold and sad. OMA cannot be accused of designing anti-homeless architecture; they simply designed anti-human architecture. A gutter yet to be installed sat alone at the center of the triangular plaza with "New Museum 2" written on its side. I entered the museum (you can get in for free by presenting a physical press pass card and asking for a press ticket) and went straight to the staircase. There was something about it that felt a lot like a fire escape, if a fire escape was wearing an iPad and not perceived as potentially life threatening. The exposed structure sits lightly masked by a not-so-nice-to-touch perforated metal sheathing, edges left unsanded. The abutting wall to the museum, left as raw concrete blocks, is painted with metallic silver paint just like every architecture model I see around the studio (including my own).

The verdict: Have you walked down the Bowery in the middle of summer and felt the heat warp your brain's electro-chemistry? The new New Museum will be pumped with cold, dehumidified air, and when you walk inside to escape the suffocating hellscape of the Bowery, your neurotransmitters will return to business as usual. The OMA extension stumbled into the museum, just like you, with its own clever heat induced hallucinations in a sweaty and smelly physical state. Nonetheless, the museum has returned to its normative (and improved) intellectual function.

# Drop Dead City: A Commentary

Belinda Lin



■ *Drop Dead City*, a 2024 documentary directed by Michael Rohatyn and Peter Yost, reconstructs New York City's near bankruptcy in 1975 as both a technical financial collapse and a deeper urban crisis. It implicitly shows that the fiscal crisis was the breaking point of a particular model of the modern metropolis.

Under Governor Nelson Rockefeller, New York had built a generous urban welfare state even if it couldn't afford to do so. Projects were continuously funded through Tax Anticipation Notes or Bond Anticipation Notes, which are short-term municipal debt instruments issued to bridge cash flow gaps before tax revenue or a long-term bond is collected. This fiscal system of "just trust me, bro" completely collapsed in 1975 when the banks realized that there was no money backing the notes and stopped lending to the city.

While the money movers and political figures went around blaming each other for the crisis, images showing labor strikes, deindustrialization, dilapidated neighborhoods, and garbage-strewn streets pop up alongside lively music, adding just enough humor to remind us that New York does survive this, in the most New York way it can. After all, the 70s were defined by punk rock, hip hop, and disco—vibrant and gritty and loud.

This juxtaposition between financial breakdown and a creative cultural renaissance is exactly what excited Rem Koolhaas. He saw the metropolis as a world of extremes, and one therefore open to every kind of human experience. *Delirious New York*, written between 1972 and 1978, challenges the notion of the city as a "hopeless case." *Drop Dead City* similarly frames the crisis as a story of urban resilience and invites us to reflect on how that same spirit persists today.

The film's constant cuts between bureaucracy and street life showcase New York as a city of fragments, a city of organized complexity. Precisely because it is spread across overlapping systems, neighborhoods, and cultures, the city can absorb shocks unevenly, allowing some parts to fail while others adapt, improvise, and keep the whole in motion. As Mayor Abe Beame put it, the city is "too big to fail."

# Antiseptic Shock

Lee Caulfield



■ Is the Whitney Biennial still a relevant cultural event? The 2017 and 2019 editions were mired in controversy. Most notably, the inclusion in 2017 of Dana Schutz's semi-abstract painting of Emmett Till sparked protests against the "Black Death Spectacle," and two years later, eight artists withdrew their work from the exhibition over a museum board member's ties to tear gas manufacturing. Now, the Whitney has managed to produce a controversy-free Biennial with an antiseptic show that asks little of its viewers. The didactics explicitly celebrate the "voiding [of] clear ideological declarations," and that void is deeply felt.

Per the Whitney's press release, "The works on view explore how intimacy and power are braided together through forms of care, contestation, and improvisation, and through the social, institutional, technological, and ecological infrastructures that shape society." If this sounds incredibly broad, it's because it is. Fifty-six artists, duos, and collectives are featured in the show, but the lack of a clear curatorial framework prevents the works themselves from responding to each other. It instead creates a jumble of works that are tenuously connected through wall text and not much else.

The most affecting work was created by former Cooper Union alumna Emilie Louise Gossiaux, who was blinded after being struck by a car outside Cooper. Her work centers around the deeply intimate relationship she had with her guide dog, London, who passed away in September 2025. Gossiaux honors her in the Biennial with dozens of hand-sculpted recreations of the dog's favorite chew toy, as well as pencil drawings of the two merging bodies. Its tenderness manages to stir some genuine emotion, despite the sterility of context it is presented in.

The Whitney Biennial is open through August 23, 2026.

As of this writing, finals are ramping up for the semester and the stress in the air creates a dense fog in the thesis studios where it stays until final presentations. Unlike the fall semester, the first-year students are no longer the most frantic. Now, the fifth-year class feels the pressure while they prepare to finish their theses and to fight over the best and brightest corners of the third-floor lobby for their last review and showcase.

As thesis students approach graduation and their education at The Cooper Union comes to an end, they must prove that they gleaned something from their time here.

What follows is a brief selection of thesis texts from The Irwin S. Chanin School of Architecture's class of 2026. Each piece is written by a thesis student about their own work.



# Superlong Across the Supertalls

Yudi Luo

■ In the United States, residential property is the primary vehicle of capital accumulation for the wealthiest households, while many others own no property at all. Nowhere is this contradiction more visible than in New York City, where a flourishing luxury real estate market coexists with an escalating housing crisis. Supertall residential towers continue to rise not as homes, but as financial instruments: exchangeable property calibrated to global capital. In this system, architecture becomes both a product and an instrument of accumulation.

At the urban scale, zoning and air rights transfers enable the extreme verticality of supertall buildings. Height is assembled through legal and financial transactions, as floor area ratio (FAR) is bought, transferred, and aggregated across parcels to secure a more profitable envelope. Verticality itself becomes a commodity. At the architectural scale, the penthouse embodies the absurdity of the asset/home: an empty vault for invisible wealth, where exchange value decisively exceeds use value. These rooms are not designed to be lived in so much as stored, traded, and held.

Meanwhile, the city's response to its housing crisis relies on the opposite end of the market: the insertion of affordable units within luxury developments via tax abatements and zoning benefits. This Trojan horse model enlists private developers to produce affordability but often results in segregation by design. One Riverside Park employs separate addresses and circulation, producing the infamous "poor door." One Manhattan Square divides residents into distinct buildings on the same tax lot: a glass tower for luxury units and a low-rise structure for affordable housing. Fifteen Hudson Yards occupies a legal gray area in which entrances are nominally connected yet functionally segregated.

The city needs more housing, yet architecture serves those who pay for it. The current model produces spatial inequality, isolation, and exclusion as architectural form. In response, my thesis proposes a countertower: a one-kilometer superlong building that cuts across existing supertalls and inserts hundreds of affordable housing units at height. By occupying the airspace of Billionaires' Row, the project disrupts the manufactured scarcity of elevated living, challenges the vertical hierarchy of luxury development, and reclaims amenity space as shared social infrastructure. Knowing one project would not address the housing crisis, this thesis positions architecture between *détournement* and a plausible alternative: if Manhattan's grid can no longer accommodate megablocks for affordable housing, then this project superimposes one above the ground, above the towers, and above the urban order that produced them.

# Civic Wilderness: Blackfoot City

Natalia Naugle

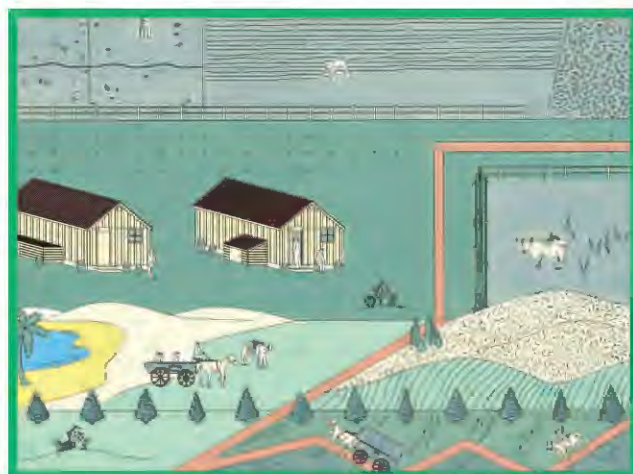
■ This thesis sits within the discourse of wilderness. What is imagined in the American West—vastness or place? The answer shifts depending on position: local or passer-through.

In Montana, vastness is encountered as an operative condition. Landscape is structured by repetition and distance, and organized through linear thresholds—FENCE, COW, MOUNTAIN. Lives are present but dispersed, read from the car as a serial field of perception punctuated by limited architectural reference.

Against this condition, a civic hall is proposed not as a singular object but as a distributed system of components. Rooms that hold time differently: indexing the past, occupying the present, and making space for the future. Framing becomes the primary architectural act—an instrument for arresting, isolating, and re-situating fragments of landscape and history.

Blackfoot Cemetery operates as an archive of the now abandoned Blackfoot City, holding both the buried and the unburied. The field of the former city becomes a civic ground where a post office, meeting halls, and the archive of Blackfoot City's Chinatown are reconstituted as public infrastructure. Along Ophir Creek, a rock wall is extended into a site of intellectual accumulation: a library embedded within a condition of continuous influx, set against a retaining structure that holds both material and unspoken histories.

Vastness is no longer treated as emptiness. It is read as a constructed surface—made legible through repetition and made active through acts of framing.



# Room(s) to be Outside

Ilea Wunder



■ The Natural Start Alliance, an organization that promotes high-quality and accessible nature-based education, defines outdoor, nature-based preschools as programs that a) center environmental literacy, b) use nature as their organizing framework, c) spend most or all instructional time outdoors, d) adopt child-led, play-based teaching, and e) embrace healthy risk-taking.

Since the Cedarsong Nature School opened the first American forest kindergarten in 2007—inspired by the German Waldkindergarten model—outdoor, nature-based schools in the US have been on the rise. Since the COVID-19 pandemic, there has been another significant uptick paralleled by a national shift towards understanding the importance of free, risky, outdoor play in early childhood development.

However, as outdoor preschools expand in the US, they continue to grapple with the outdated, indoor-reliant licensure requirements that prevent them from receiving adequate support. Without access to government funding, preschools are left extremely tuition reliant and accessible to only a select few who have, in most cases, two parents, with two streams of income, who can afford to pay up to \$50,000 in tuition per year.

The rigidity of the classroom, which has generally stayed the same since the industrial revolution, is due for change, but it is fighting against inertia. If many of us can intuit the value of the outdoors—with abundant research substantiating this intuition—what are the mental and bureaucratic hurdles that are standing in the way of offering this access to our youngest, and therefore most impressionable, learners?

My thesis currently sits between the indoor and the outdoor. What does a licensable interior room for an outdoor preschool look like? How do you design a building that is inhabited for only a fraction of the year, if at all? And, ultimately, how do we make room (or rooms) to be outside?



# Breaking the Wall: Learning from the Fire Escape

Gain Meemongkol

■ The fire escape is one of the architectural emblems of New York City's urban landscape. A perfunctory invention of necessity, its reiteration throughout the city's contemporary history, spanning over a century, solidifies its status as a sociocultural symbol. Yet, the romanticization of the fire escape in media and culture has diluted its potential as a space. Given the ongoing housing crisis amidst the proliferation of luxury residential glass boxes, the space of the fire escape as a mediated threshold offers an alternative perspective on how the domestic realm could relate to the public beyond the walls of one's apartment.

New York City is entering a new era with the election of Mayor Zohran Mamdani. With a record-low vacancy rate of 1.4%, the city is transitioning during an all-too-well-known housing crisis. While Mamdani pledged housing reform during his campaign and has already signed executive orders to facilitate housing developments, architects are notably absent from this endeavor.

Housing, an inherently architectural problem, has been rendered a domain largely devoid of architectural workers. As C.G. Beck, a licensed architect and organizer who formed the first private-sector architecture union in the US, noted, "We shouldn't be surprised that architects were left out, but we should be concerned." This absence raises a fundamental question: What has architecture ceded in its withdrawal from housing as a social and civic task?

Despite this decline in housing, recent decades have seen the upsurge of setback high-rise residential glass towers. These buildings, which writer Francis Northwood describes as blighting much of new construction, and which social media influencer Ben McClintock mockingly dubs "Temu Towers," have come to dominate the contemporary skyline. Clad in reflective, floor-to-ceiling windows, these pristine luxury towers stand as a material testament to the divisive socioeconomic inequalities between those who can afford them and those who cannot. Their surfaces are materially transparent yet visually opaque; the window becomes a wall. In this way, the façade establishes an us-and-them dynamic, transforming the building envelope into not merely a physical barrier but a social one. Matthew Soules, in his critique of Rafael Viñoly's 432 Park Avenue, observes how such towers operate less as housing for actual inhabitation than as monuments to capital. When residential architecture is shaped in the image of finance capital, inhabitation becomes secondary, if not incidental. In light of this, the ar-

chitecture of housing ought to be rethought.

Rather than further pursuing novel construction technologies or reducing façade design to an optimization exercise, we turn toward an overlooked yet deeply embedded architectural element: the fire escape. Long dismissed as a romantic regulatory appendage, the fire escape that has defined New York City's urbanity may offer an alternative model for thinking about housing and its relationship to the public realm.

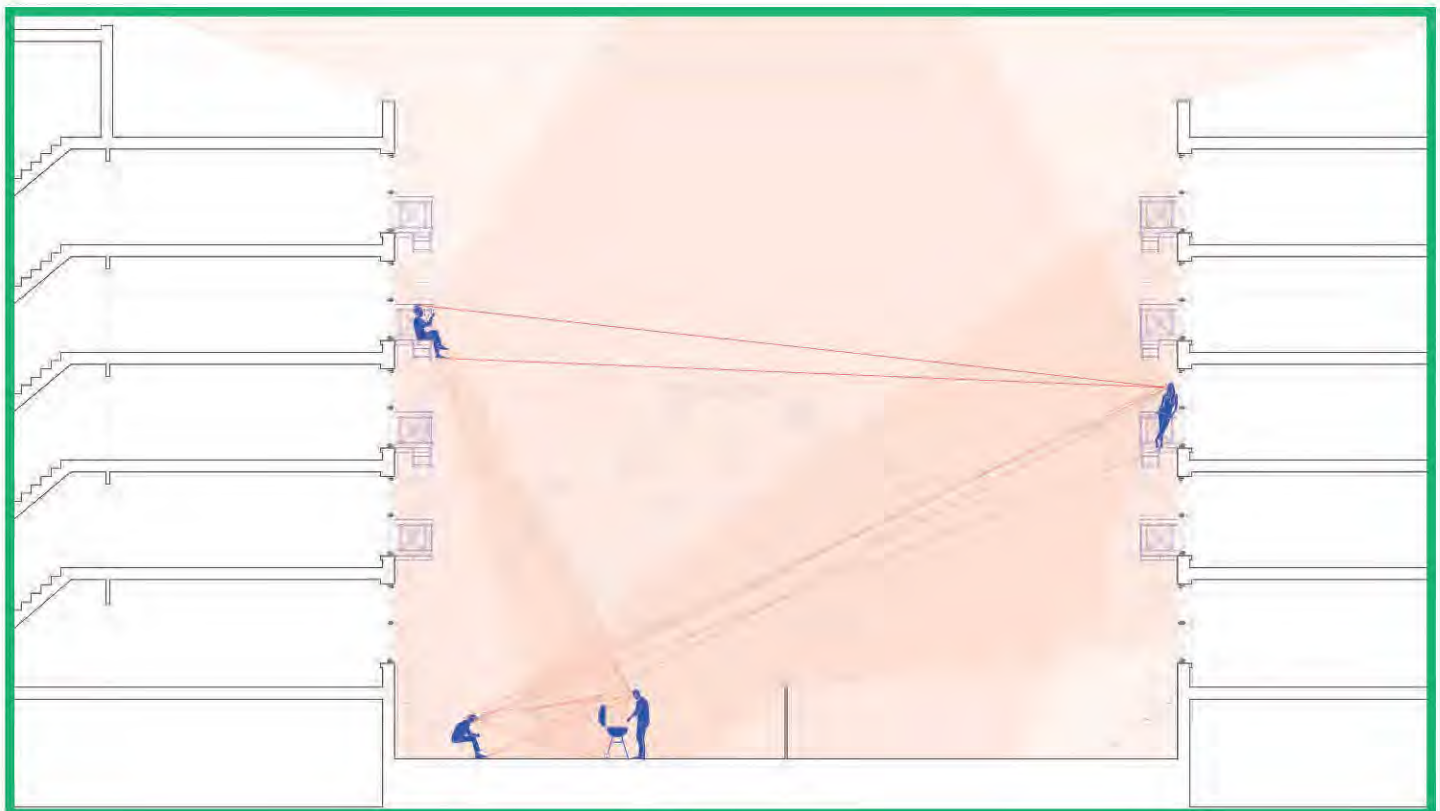
Installed on countless nineteenth and twentieth-century apartment buildings, the fire escape represents the iconic cityscape of New York City, its image synonymous with the city itself. Conceived as a legally mandated second means of egress from 1867 to 1968, the fire escape nevertheless evokes nostalgia and romanticism, a socio-cultural allure reinforced through decades of representation in photography, film, and literature. Although the law restricts its use to emergencies, New Yorkers have continuously appropriated this space as an extension of their dwellings, co-opting it as an outdoor living room, laundry space, or simply as a site for transient activities such as smoking or people-watching.

Beyond its cultural indispensability, the fire escape produces an ambiguous spatial condition that fundamentally alters the building façade. It operates as a semi-public space, like the vernacular suburban American porch, while being suspended in a dense urban context. In so doing, it breaches the exterior wall that unambiguously demarcates a rigid boundary between the domestic interior and the public exterior. Through its embedded stairs, the fire escape enables neighbors within the same building to reach one another, creating the potential for close physical interaction. This semi-publicness both connects

and separates, allowing the façade to be simultaneously occupied, viewed, and traversed. The fire escape thus becomes communicatively effective and emotionally affective, offering a site of sociality absent from contemporary glass towers.

Through its ambiguities and contradictions, the fire escape behaves as a second façade, one that equips inhabitants with an additional domestic space that encroaches upon the public realm. It activates the space beyond the exterior wall, permitting the fenestration to be not only an aperture through which occupants can look but also an inhabitable, traversable threshold. Through its tectonic porosity and public-private ambiguity, the fire escape operates as a connective ligament, bridging the domestic life and the public realm beyond the boundary of one's apartment. Hollie Marnitz likens the fire escape to a theater, one that acts out a play of sociality: "it offers a stage upon which social encounters can be enacted and viewed."

Because community is fundamentally interdependent with housing, the fire escape's capacity to make neighbors within a building and across the street, and to make passersby mutually visible, carries political weight. By allowing occupants to acknowledge one another beyond the opaque façade, the fire escape undermines the wall's function as a device of exclusion. In this urban microcosm, distinctions between inside and outside, private and public, us and them, are destabilized. As New York City moves toward a new political era, the fire escape suggests that architectural futures might be found not only in innovation but also in reexamining the spatial capacity embedded in the city's past.



# Solids & Voids

For one of my design classes, I am fabricating a beautiful birch credenza with aluminum inlay. My professor tells me it can go in my apartment when I'm done, and I don't have the heart to tell him I've been homeless for three months. I go to school, I go to work. I make small talk in the elevator, turn in my assignments, and go out to drinks with my friends. When the night dies down, everyone else makes their way home, and I pretend to, too.

In Brian Goldstone's 2025 book *There Is No Place for Us: Working and Homeless in America*, he notes the results of a 1986 poll conducted by CBS News and *The New York Times*, in which random participants were asked what they believed caused homelessness. 32% of respondents said it was caused by alcohol, drugs, or psychological problems; 20% said an unwillingness to work; 19% cited bad luck; 24% cited a combination of each of these; and 5% had no opinion. Nobody mentioned housing.<sup>1</sup> Not much has changed in the intervening forty years; the general public still operates under the regressive delusion that homeless people exist as a separate class of inferior people. In reality, the majority of Americans are only one missed paycheck away from experiencing

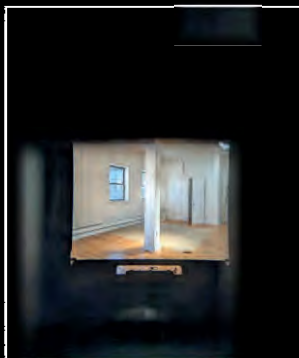
homelessness, and 3.6 million evictions are filed in the United States every year.<sup>2</sup>

A year ago, I was on solid ground. I had an enviable one-bedroom on the waterfront in Williamsburg. Things destabilized in the span of a few short months. After separating from my partner of five years, the building I lived in was demolished, and I was forced to flee a provisional living arrangement after an episode of domestic violence. Now I live on a futon in a friend's living room, or a hostel on Bowery, or

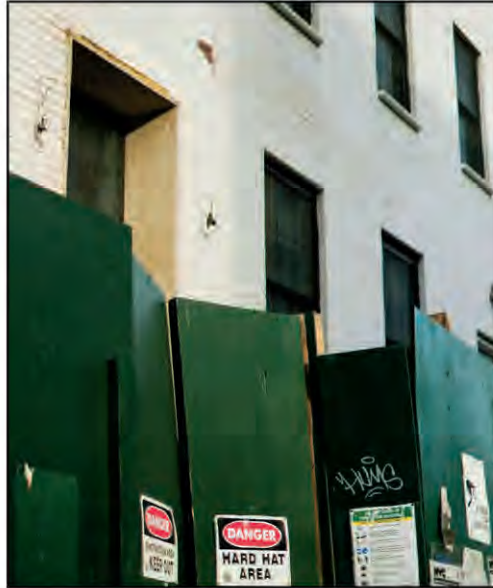
an air mattress in a closet, depending on the day. I shower at the Y, do my hair and makeup in the cloistered 7th-floor bathroom at school, and rely on the hospitality and generosity of my friends at every turn. Despite all attempts to regain my footing, I am ultimately fighting against systemic deprivation that is designed to prevent upward mobility.

Rent in New York City is 149% higher than the national average,<sup>3</sup> and most landlords are looking for tenants whose gross annual income is 40x the monthly rent. Working full-

time while managing a fifteen to nineteen credit-hour course load is by no means impossible, but mentally



taxing even if you can find a well-paying job willing to take you. Where does that leave a student in need? The dormitories are reserved for freshmen, resident advisors, and a few lucky lottery winners, and even then you'll have to find another place in the offseason. You go through the usual channels of Zillow, StreetEasy, RentHop, Listings Project, Leasebreak, and Craigslist. No luck. Maybe you think you'll try your luck with a Section 8 voucher, but in 2005 the Department of Housing and Urban Development ruled that students in higher education were ineligible.<sup>4</sup> This sought to prevent affordable housing from being used as ad-hoc dormitories, but it means you can rule out government assistance. Next is the shelter. Anyone who justifies that kind of place as a roof and four walls in the winter has no idea how bad it can



get. In a study of 394 homeless adults, 20.6% of participants reported victimization since moving to the shelter, and 55.7% of participants reported witnessing violence over the past month.<sup>5</sup> Regardless of conditions, these places need you for a bed check at 6 pm sharp, and you can't leave after that. No time for night class, late shifts, or studio work. College always comes first. It's supposed to be your way out of this. That's what you remind yourself when things get really bad: it's a privilege to be in college. There are two options left now, couch surfing and hostels. You can throw your stuff in four IKEA bags and bounce between places until something works out. Something has to work out. And that's how you end up living your life.

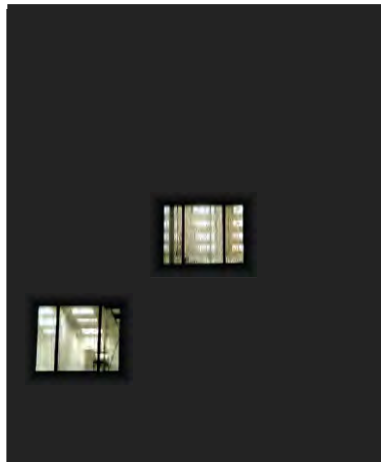
The boundaries between security and insecurity are much more porous than we are willing to admit, and many people float back and forth over time. It's especially easy to end up on the street as a student. In a survey of ninety-one institutions in 2023–2024, Temple University found that 59% of students in higher education programs experienced at least one form of basic needs insecurity (41% experience food insecurity, 48% experience housing insecurity, and 14% of undergraduate students experience homelessness).<sup>6</sup> It was an open secret at my last university that many students were living out of their cars. However, this was a school with 24/7 building access, a full-service gym with showers, a comprehensive meal plan, full-size lockers, and a parking lot where you could sleep day or night. No such amenities are available at The Cooper Union.

When it comes to aiding students in crisis, Cooper's administration has been impotent. I have been provided academic accommodations worded in graciously vague terms (“[Student] is currently working through some personal mat-

ters that have impacted their overall ability to engage with their academics...”), and not much else. I have been forwarded homeshare options from Student Affairs (always with the disclaimer that the service has not been vetted by The Cooper Union), and I have been on Zoom calls with counselors to try to resolve my situation, to no avail. I'm far from the only student dealing with these issues, and I won't be the last. One student told me he had been scammed by a fake realtor and was forced to live in a hostel for a month. Another was living in a ground-level apartment so infested with bugs that they couldn't cook without cockroaches ending up in the food. One lived in an apartment without a kitchen or bathroom. And yet another told me they were living illegally in a windowless bedroom, which they paid for through Venmo. All freshmen and resident advisors are unceremoniously ejected from the dorms the day after finals, which places many students in a tough position. This punishes architecture students in particular, as move-out occurs on May 16th, and the end-of-year show opens ten days later. Despite the issue being raised ad nauseam, the

administration claims it is essential that students vacate the dorms on the 16th so that the spaces may be cleaned. It seems obvious that the stress of apartment searching, packing, and moving adds an undue burden to students during the already fraught final weeks of the semester.

At school, the third-year housing students are pinning up their work in the lobby. The floor plans on the wall approach housing so clinically that for a moment, I consider why I've developed an intense desire around the fantasy of having a home. There's more to it than safety and financial stability; it's psychological stability as well. Home gives you the ability to relax in a place where you are not a burden, the solid ground to develop social relationships, and the evidence that you, as a person, are worthy of living in tolerable conditions. Everyone else believes the future holds bright things, and I pretend to, too.



1. Brian Goldstone, *There Is No Place for Us: Working and Homeless in America* (New York: Crown Publishing Group, 2025), 295.
2. Ashley Gromis et al., “Estimating Eviction Prevalence across the United States,” *Proceedings of the National Academy of Sciences* (PNAS), March 18, 2022.
3. “Average Rent in New York, NY – Latest Rent Prices by Neighborhood,” *Apartments.com*, April 2026.
4. U.S. Department of Housing and Urban Development, “Eligibility of

Students for Assisted Housing under Section 8 of the U.S. Housing Act of 1937: Supplementary Guidance,” *Federal Register*.

5. Pooja Agrawal et al., “Exposure to Violence and Sleep Inadequacies among Men and Women Living in a Shelter Setting,” *PubMed Central*, U.S. National Library of Medicine, October 2019.
6. The Hope Center for Student Basic Needs, “2023–2024 Student Basic Needs Survey Report,” Temple University, February 26, 2025.

Towards a



esolation

That is

wellness

In the schools

Jayne Miller

**F**or a block of so much construct, one would assume the florists had not turned shanty, grown pickets. One would not expect brick-filled windows atop photos of rolled barbecue meat in commercial nuance. One would expect to see luxury in the form of a cyan sign, or the close proximity of a Whole Foods, but what lay inside the (former) East River Savings Bank is not riches but the rags of Broadway publicity and run-off. One of the dingier CVS pharmacies where the gray carpeting makes a starry night of lint and the largest section of the store is sparkly greeting cards paired with envelopes in reds and blacks. Ibuprofen and bandages will be low in stock and only bottled diet coke is sold.

Children at Famiglia watch the grease ooze from their pizza in a position parallel on the prime meridian to the children of Madison, who glare at you through a Starbucks window, and next to them their fathers will be caffeinating. The kids at Famiglia drag wheeled backpacks and tug collars of their bright orange shirts. And being of a famiglia they commit to school by dress and attendance, but being of a familiar sight that is hurling towards bridges, they're craning their necks over single slice pizza boxes they have not yet opened. Not out of refusal but out of forgetting, of prolonging a return to famiglia, and the Famiglia, and that familiar start of school the next day. Not out of willing to not consume, but by abruptions and the shared flashiness of digital moving pictures. Such a time of day would be a time of release if they were not to return home and put off dinner in the same manner, over the flashiness of digital moving pictures. But Wednesdays are long ones, and Thursdays come on like the uncoiling of silicone chess mats into flat battlegrounds for eggshell soldiers. Yellowing plastic pieces rotting in the pockets of Chess in the Schools and botching the essence of strategy by the fat hands of elementary-aged children.

What emerges from luxury merges with the campaign for wellness in the schools. They push for the children to learn nutrition and the proper way of cutting fruit. They are to instruct the children on how to make couscous in clear PET cups and salty watermelon salad. The children will watch demonstrations within the crockpot on the blacktop science counter, remembering the recipe for vegetarian chili to make at home. They should be inspired to copy over the recipes on receipt backs for family friends who only possess Bic pens, running out of ink. They should acquire the ability to copy over from memory. It will result in the disregard of measurements in cups and teaspoons. And the phonetic misspelling of words like cumin as "cuemen." And the domestic refusal to purchase seasonings and garnishes besides 2-in-1 salt and pepper and capers will result in the elimination of such spices.

When the schools begin to tell children about HIV/AIDS, they will talk as if sharing needles is common knowledge to a child emerging from luxury on a cyan sign. As to avoid the mention of sex, they will leave out any means of "protection." Later, they will define vehicles of transmission through a song and hand gestures. The children will repeat the terms to the children in lower grades and tell them to shake imaginary salt into their mouth. Some will strain for definitions, others reside in unknowns and avoid hugging the opposite sex. The visiting sexual education program will sell T-shirts when the trimester is over and the few sensually enlightened will acquire one and abash the jokers and the sexually immature.

No one challenges the freeway even though it refuses to let people through. No one questions the placement of a freeway within a strip of park. No one questions the river as unswimmable. It is green by radiation and will bring any body within it to a slow death. By that it is desolate, but desolation is unmentioned in Riverside Park. Desolation is unmentioned, but one only goes there to feel the weight of how much the city upsets them. To travel along the greenway is to either be shadowed by the midtown cascade of urbane production or to chase the distant image of the George Washington Bridge and the getaway that seems to be the Palisades. You are ever approaching the consecrated tribute of interstate gap closing and you are aware that only one group has ever made it all the way there, only to be told that pedestrian access was prohibited because of the snow storm. School trips taken in boats have the children scream like New Year's Eve on crossing the underside of the bridge. There is no one to scream for beyond the mast but steel. A girl takes photographs of the bridge bottom with a disposable film camera. Her classmates make her take photos of them. A few other kids brought them too, parents handed them over on their way out the door, bought from the drugstore upon reading the permission slip ... disposable film cameras could and should be brought on the trip ... No one brought their film to get developed and all photos of the bridge trip exist in cameras buried in photo boxes or picnic baskets made craft storage or acrylic-coated book shelves, all photos reside undeveloped less the few which appear in the yearbook, taken by the parent chaperones. In these photos they realize they were screaming for more than mast and steel but for Edgewater docks and condominiums. For harbor and pinwheel bikes and Little Tikes Cozy Coupes in red and yellow bursts along the stone path to the Acropolis, which seems to be the Palisades. And there, harbor view apartments emerge from woody hills and townhouses and bicyclists fall into the river beyond unmoving barges.

"If this should be luxury, I say I don't mind."

"My dream is to sell the place for one on the waterfront. I check for listings everyday."

"I wanted the kids to have a place to swim. After seeing people swim in their shirts I had to stop taking them to the public pool. Oh, and Coney too."

Building by their own volition is slippery for builders; they will erect boutique buildings in places they do not belong. They will conspire against neoclassical and pre-war renderings for the sake of contemporary life. They do not believe that time should build vines, that rust is like effort. Making sense begins in curves making balconies. Extrusions are weightless but stone rests heavy on a facade. A frieze is like mash on gravy, gravy is stone. The front of the building will melt off by weight of stone, by melting off mash into the river and awning of Lucky Lotto. That melting goes unnoticed to the kids at Famiglia, and they have abandoned their taste in physical Pokémon cards for inventories of creatures made by the shared flashiness of digital moving pictures.

# TECHNICALITY:

The Diminishing Role of the Physical  
in Mediated Spatial Perception

ERIC HONGHAO ZHAO

In 2025, a research team proposed the presence of large-scale subsurface structures beneath the Giza pyramids. The proposed structure is described as a system of six vertically oriented helical voids—reportedly extending to depths of nearly 2,000 feet. The team, led by Filippo Biondi and Corrado Malanga, based its claims on Doppler-based tomography derived from satellite data.<sup>1</sup> These claims rely on Synthetic Aperture Radar (SAR), which operates through electromagnetic signals transmitted from satellites in low Earth orbit and records subtle variations in surface response. Rather than directly imaging underground space, the researchers interpret micro-vibrational data through Doppler tomography, computationally reconstructing hypothetical internal geometries. These interpretations have led to speculative suggestions that an “underground city” may lie beneath the pyramids, concealed for over 4,500 years. However, while similar sensing approaches have been applied in contexts such as volcanic monitoring, their translation to complex, heterogeneous stone structures remain highly uncertain. As a result, these claims have been widely questioned and lack validation within established archaeological and geophysical scholarship.<sup>2</sup>

Similarly, previously unknown internal space within the Great Pyramid of Giza has been more rigorously confirmed through advanced technical sensing.<sup>3</sup> A hidden corridor located above the northern entrance was verified by a research team through a combination of non-destructive testing (NDT) techniques, including ground-penetrating radar (GPR), ultrasonic testing (UST), and electrical resistivity tomography (ERT). These methods were used alongside earlier muon imaging and were ultimately corroborated through direct endoscopic observation, providing converging lines of empirical evidence. Unlike the speculative interpretations derived from SAR-based modeling, this

discovery is grounded in reproducible measurement and cross-validated sensing technologies.

Both cases surrounding the Giza pyramids can be understood as a dispute over the role of the technical sensorium in the production of spatial knowledge. Regardless of whether the subsurface structures are empirically verified or remain speculative, the spatial information perceived through these technologies has already begun to create a fissure within human perception. This raises a fundamental question: To what extent can technological mediation be trusted in the production of spatial knowledge?

A similar epistemological shift can be traced back to the invention of the telescope, before the emergence of contemporary technical sensorium. In the work of Galileo Galilei, the telescope first revealed phenomena that the human eye could not perceive directly.<sup>4</sup> It was not simply an auxiliary device that extended vision, but an instrument that challenged the limits of the human sensorium itself. More fundamentally, the telescope did not simply enhance vision; it reconstituted the sensorium. By translating distant and indistinct phenomena into measurable and observable data, it destabilized the traditional relationship between vision and touch, which classical epistemology had relied upon. What could be seen was no longer what could be directly experienced, but what could be reconstructed through an optical apparatus and interpreted within a theoretical framework.

This transformation was further articulated in the optical theories of Johannes Kepler, where vision began to be understood as a process mediated by instruments and images rather than a direct apprehension of truth.<sup>5</sup> As Svetlana Alpers suggests in *The Art of Describing*, perception is always entangled with its own conditions of representation, where sensory knowledge is inseparable from forms of visual deception.<sup>6</sup>

Returning to the present, the controversy surrounding the unverified “underground city” beneath the pyramids exemplifies this condition. The technical sensorium attempts to translate data into forms legible to human perception, yet at the same time introduces the risk of misinterpretation. A dilemma thus emerges: technology expands the limits of perception while simultaneously producing uncertainties that challenge the stability of spatial knowledge. In this sense, space is no longer something that exists solely within human binocular vision perception, but also something that is constructed through data in media—what may be understood as technical binocularity.

As a result, an important question is raised: What is architecture after mediation? Or, in other words, should we understand that the misunderstood or generated space produced by the technical sensorium has already formed a new kind of space—one that can be perceived by the human sensorium as another reality after mediation? From this perspective, the relationship between physical space and space in media has been critically reversed. We may need to reconsider the predominant authority of physical reality and instead confront a new technical sensorium that enables us to “see” a different world. We are now perceiving space through an “unreliable telescope”—one that has been extended into cellphones, computers, and the internet.

What exists in physical space seems less important today. As suggested by the proposal of the research team led by Filippo Biondi, excavation beneath the Giza pyramids would be required to verify the claims of underground cities. Yet the absence of such verification reveals a paradoxical situation: physical space may no longer serve as the primary epistemic ground of validation. Instead, we increasingly perceive space through media—not as it is, but as it is constructed for us to see.

1. Filippo Biondi and Corrado Malanga, “Synthetic Aperture Radar Doppler Tomography Reveals Details of Undiscovered High-Resolution Internal Structure of the Great Pyramid of Giza,” *arXiv preprint*, 2022.

2. “Claims regarding deep subsurface structures beneath the Giza pyramids, including reported depths of approximately 600 meters, are based on secondary interpretations and media reports rather

than peer-reviewed archaeological evidence,” see AFP Fact Check, “No Evidence of Vast Underground City beneath Egypt’s Pyramids,” 2025.

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# NOTATIONS

*Foundation* is a student-led publication that documents the intellectual and cultural life of The Irwin S. Chanin School of Architecture. As a platform for critiques of ongoing public programming, student work, local events, and New York City's built environment, *Foundation* expands dialogue beyond the classroom, recording the school's institutional memory and its evolving urban context.

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11 [left] *New Humans: Memories of the Future*, exhibition view (2026). Photo © Dario Lasagni. Courtesy of the New Museum.  
[right] *Model Thirty-Six* (2014). Tom Sachs Photo by Tom Sachs. Courtesy of Cooper Hewitt, Smithsonian Design Museum.  
12 [left] *View of the Antique Theater at Taormina, Restoration Project* (1840). Drawing by Eugène-Emmanuel Viollet-le-Duc. Courtesy of Bard Graduate Center.  
[right] *Detail, New New Museum* (2026). Photo by Violet Caleca.  
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