

LATIFA ALFALAH
***KNOTS
& TIES***
S E L E C T E D
W O R K S



CONTENT

This portfolio follows threads.

Some are stitched into fabric.

Some into cities.

Some into memory, labor, movement, and touch.

Threads travel through garments, buildings, conversations, rituals, waste streams, weather systems, and hands. They knot themselves into places and people, carrying traces of where they have been and what they have held.

Knots appear where things pull, hold, fray, repair, or refuse to come apart.

Across these projects, textiles become maps, facades, scaffolds, archives, infrastructures, and spatial tools. The work moves between softness and structure — tracing connections between fabric and architecture, craft and industry, body and building, permanence and decay.

Some ties are physical.

Some inherited.

Some still unraveling.

A knot can bind individual threads into something larger.

It can hold tension.

Mark an ending.

Repair a tear.

Leave behind evidence that something was once connected.

This portfolio maps those tensions and ties: layered systems of material, memory, culture, and place. It looks at the ways fabrics carry histories across city scales — through craftsmanship, overconsumption, discard, adaptation, and reuse. Soft materials become records of movement, pressure, care, and time.

Threads rarely move in straight lines.

Neither do cities.

Neither do people.

At the end of a thread, there is often a knot — a way to hold something together before it slips away. This portfolio exists somewhere in that space: between beginnings, middles, loose ends, and the ties that remain.



1.
BENEATH
THE
PALMS



2.
MADA



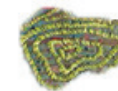
3.
THINGS
HELD
TOGETHER



4. FABRIC
COMMONS
LAB-
ORATORY



5.
FABRIC
MIGRATIONS



6.
Perform,
Reflect,
Enact



7.
SEA
CODED



8.
FOUND
BAG

1. BENEATH THE PALMS

installation | climates ↔ models ↔ images |
summer 2025

The Tighmert oasis in southern Morocco represents a living archive of desert ecologies shaped by centuries of khattara irrigation, cultivation, and the careful management of scarce water resources. Today, these systems face increasing pressures from climate change and environmental degradation, raising urgent questions about their future. This project re-frames the oasis not as a static site of human subsistence but as a dynamic, multi-species landscape shaped by water flows, climatic rhythms, and daily practices of care. Using weaving as a method of sensing and mapping, decades of precipitation data were translated into layered textiles, interlaced with shifting patterns of cultivation and movement across the seasons. Embroidered mappings of river channels, farmlands, and vegetation patterns reveal the negotiations that define oasis life, while cartographic drawings situate the site within broader climatic and historical shifts. Material explorations with palm fibers, wool, and earth speculate on infrastructures that might sustain fragile ecologies rather than erase them. Together with photographic and botanical studies, these works trace the textures of soils and palms as records of environmental fragility. Installed as a suspended, room-scale archive of textiles, drawings, and materials, the project offers a spatial and tactile reading of the oasis, holding together data, material, and care to foreground the interdependencies that define its survival under climate change.

project partner | Fion Li
instructors | Elise Misao Hunchuck
| Marco Ferrari

Latifa Alfalah



Beneath the Palms

Columbia GSAPP

Climates ↔ Models ↔ Images

2025-2026



Mosaic of Date Palm Tree,
6th century C.E.
(Photo by Brooklyn Museum)

Embroidery sampler Saïe, 1800.
(The Cleveland Museum of Art
via Internet Archive)

Caravan of camels loaded
with wheat Tafilalet region,
1945.

Mustapha, Responsible for
Water Distribution, 2021.
(Photo by Seif Koussate)

Three Weavers Make Crochet Caps Fez,
1950.

Tailor Mohamed,
Shows his latest curtains, 2020.
(Photo by People of Tighmert)

Women singing while
they worked, Tighmert, 2017.
(Heidi Vogels / Gilles Aubry
via Caravane Tighmert)

Embroidery sampler Saïe, 1800.
(The Cleveland Museum of Art
/ Latifa Alfalah+Flon Li)



Latifa Alfalah

Beneath the Palms

Columbia GSAPP

Climates ↔ Models ↔ Images

2025-2026



Latifa Alfalah

Beneath the Palms



Columbia GSAPP



Climates ↔ Models ↔ Images

2025-2026

2. THINGS HELD TOGETHER

totem | 1:1 fabrication | spring 2026

This project explores furniture as an act of spatial labor, a continuous process of adjustment, interpretation, and occupation. Constructed from a perforated plywood system based on the dimensions of an L-bracket, the piece operates as an adaptable framework rather than a fixed object. A field of holes allows shelves, supports, and rope elements to be continuously reconfigured, transforming the bench into a shifting landscape of storage, seating, and display. The perforation pattern draws from traditions of weaving and embroidery, where repetition, threading, and tension generate structure through accumulation. The holes act as a spatial textile system: a stitched framework that allows objects, ropes, and supports to weave themselves into the surface over time. The project translates textile logic into furniture scale, merging soft systems of making with rigid construction methods. At the rear, the perforated wall supports adjustable shelving systems, while the front integrates threaded rope compartments that hold everyday objects such as notebooks, pens, and personal tools. The project treats organization as movement — an ongoing negotiation between the body, objects, and space.

Designed around a specific body and its habits, the bench becomes a physical record of process and change. Its modular condition reflects the labor of understanding oneself through making: testing positions, rearranging functions, and spatializing thought. The piece remains intentionally unfinished rather than resolving into a final form—always capable of adapting, expanding, and shifting alongside its occupant.

instructor | Zachary E. Mulitauaopele
Latifa Alfalah

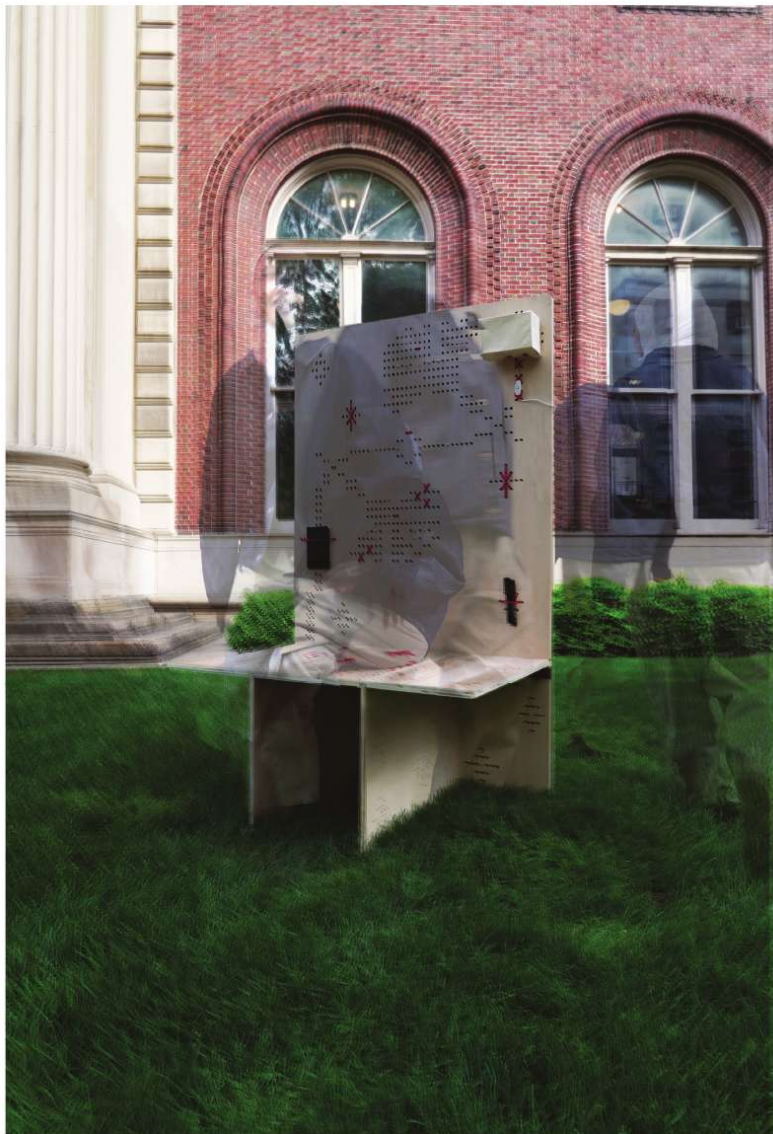


Things Held Together

Columbia GSAPP

1:1 Fabrication

2025-2026

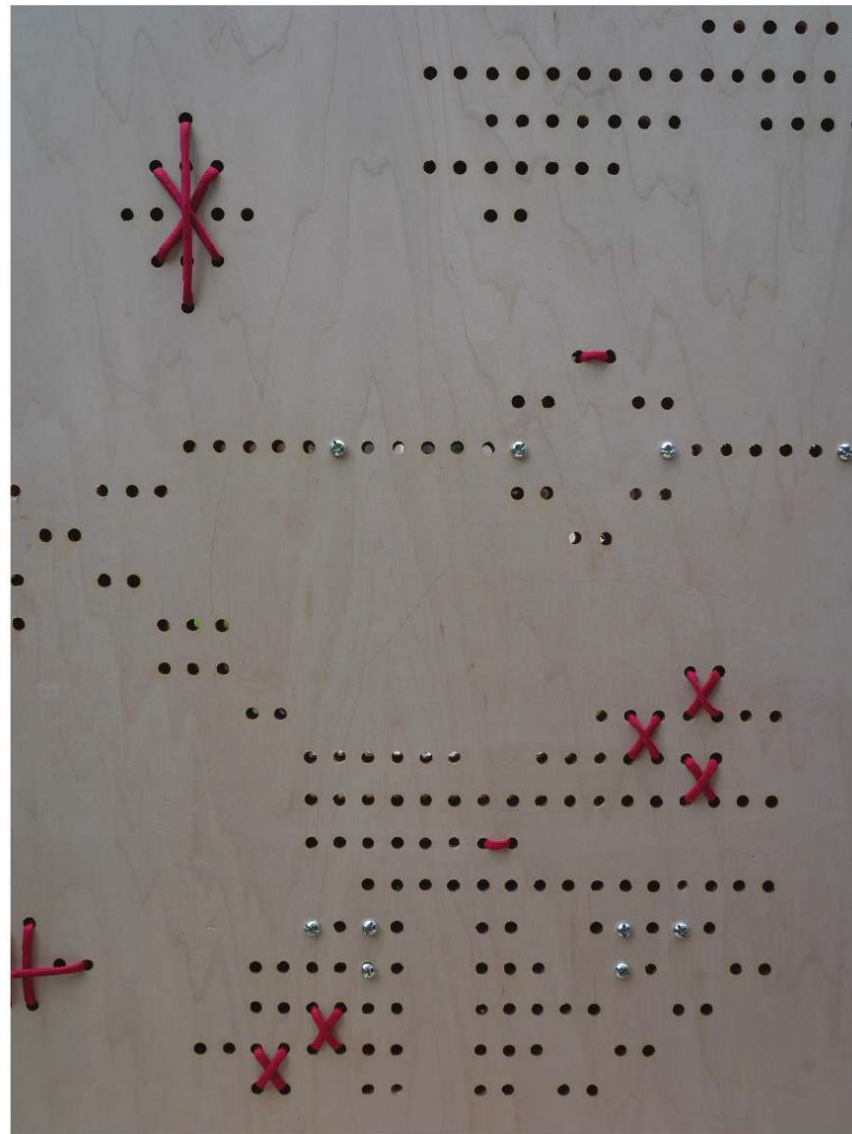


Latifa Alfalah

Things Held Together

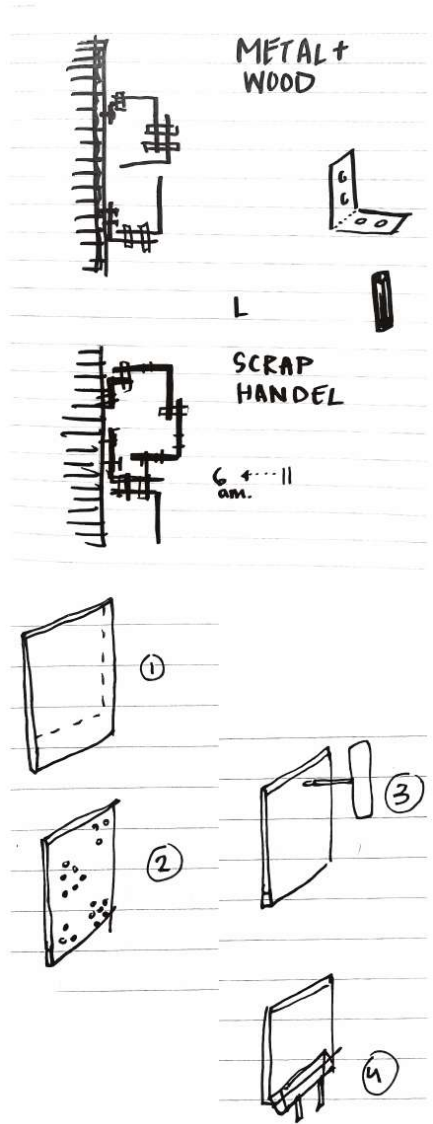


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1:1 Fabrication

2025-2026

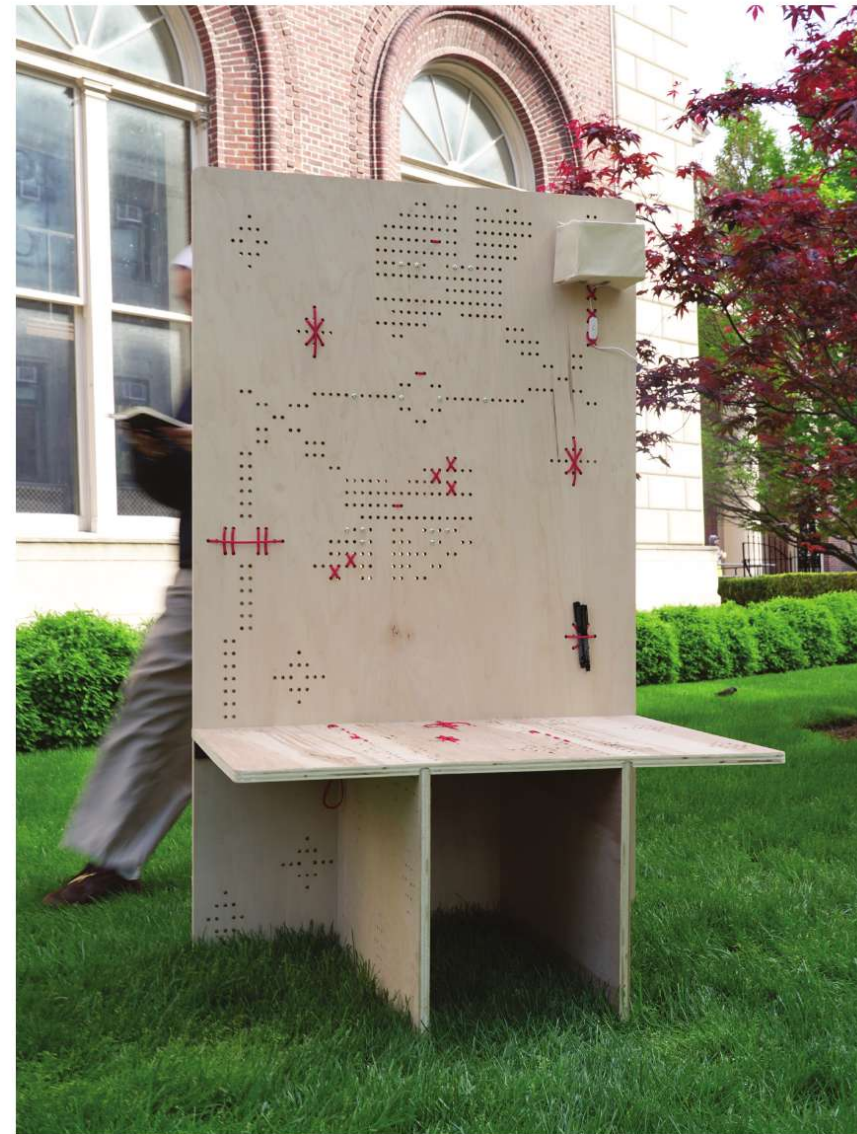


Latifa Alfalah



Things Held Together

Columbia GSAPP



1:1 Fabrication

2025-2026

3. MADA

semi-preservation | Arab
American Museum of New York |
fall 2025

MADA translates to horizon, reach, extension, the distance between origin and possibility. The museum is dedicated to Arab American culture and draws from the legacy of Little Syria, the first major Arab immigrant neighborhood in the United States — once a center of newspapers, bookstores, and early feminist writing. As much of that district has disappeared, the project imagines the museum as a contemporary extension of its creative horizon.

The design begins with a structural grid, universal, rational, and adaptable. This grid references the metrical system of classical Arabic poetry, organized by rhythm and repetition. Just as modern Arab and Arab American poets stretch inherited forms to express migration and change, the architecture allows the grid to shift as programmatic needs evolve.

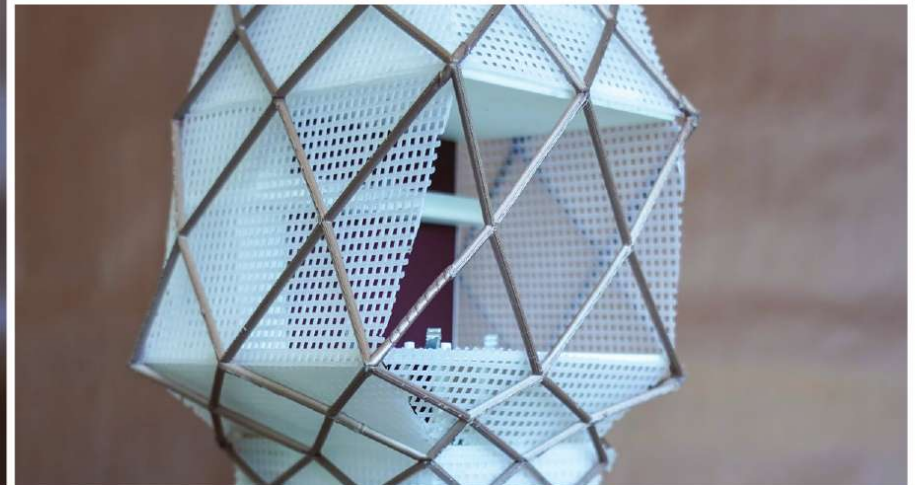
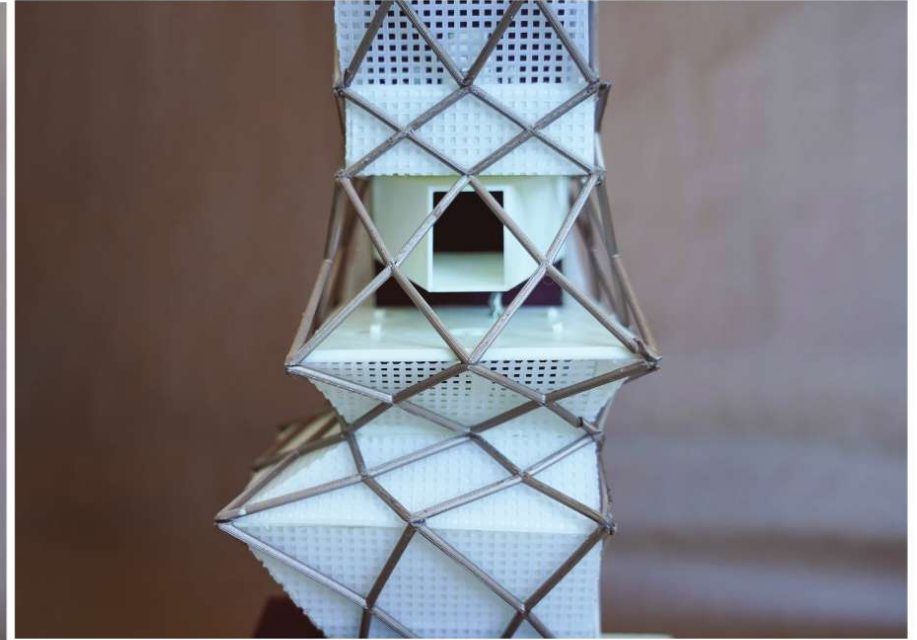
As archive, gallery, performance space, library, and garden stack vertically, floor plates extend, compress, and displace. Openings, bridges, and voids emerge through these adjustments. The building does not reject structure; it transforms it, embodying diaspora as continuity reinterpreted rather than erased.

instructor | Amale Andros
Latifa Alfalah



Mada

Columbia GSAPP

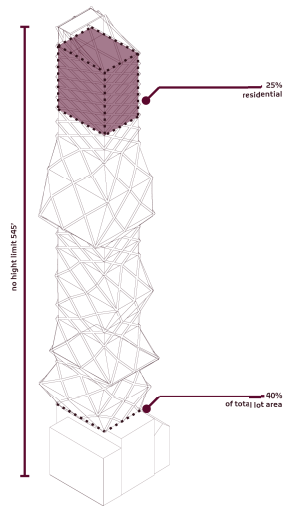


Arab American Museum of New York

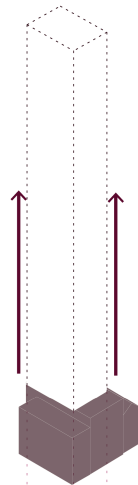
2025-2026



program diagram

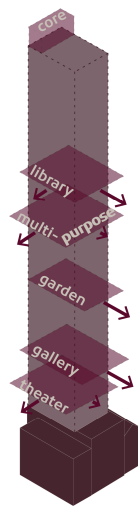


zoning C6-9 | tower rules



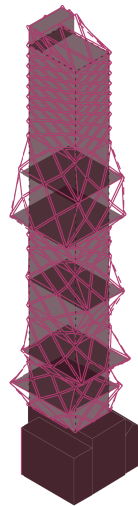
poem | the form

A vertical poem emerges from the preserved buildings, giving the tower a shared cultural spine rooted in Arab language and identity.



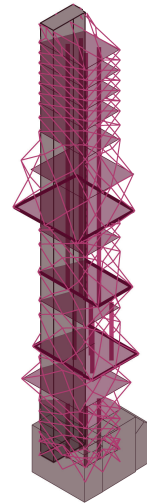
stanzas | floor shifts

Each floor shifts as a stanza, expanding for gathering or tightening for quiet, creating a living rhythm through the tower.



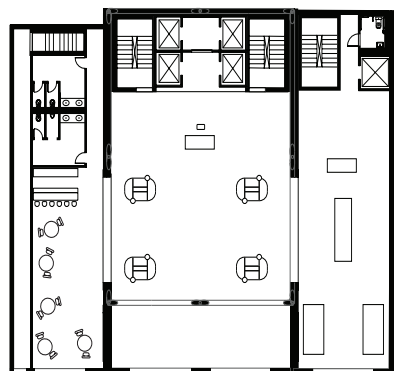
metric | the diagrid

The diagrid sets the metric: a clear structural pattern that holds the shifting stanzas together and reveals the tower's inner order.



structural logic

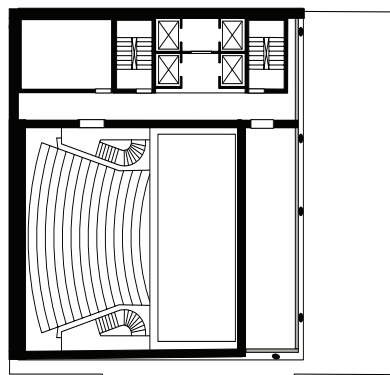
- outer diagrid
- interior columns
- transfer beams
- core



welcome space | lobby



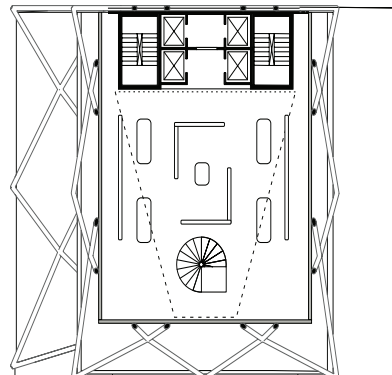
Latifa Alfalah



black box theater



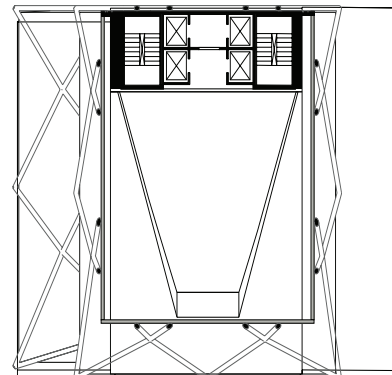
Mada



gallery A



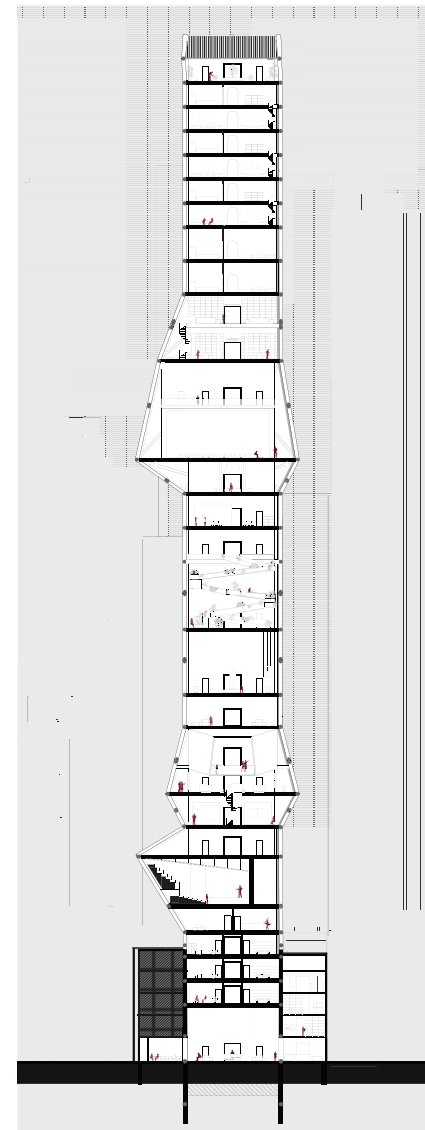
Columbia GSAPP



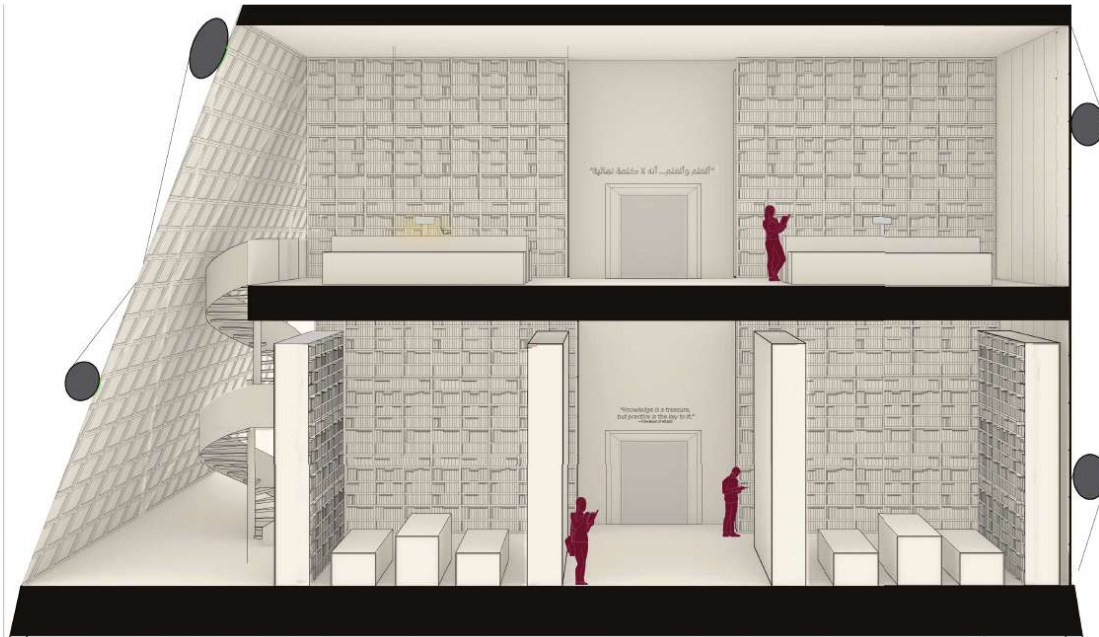
gallery B (within A)



Arab American Museum of New York

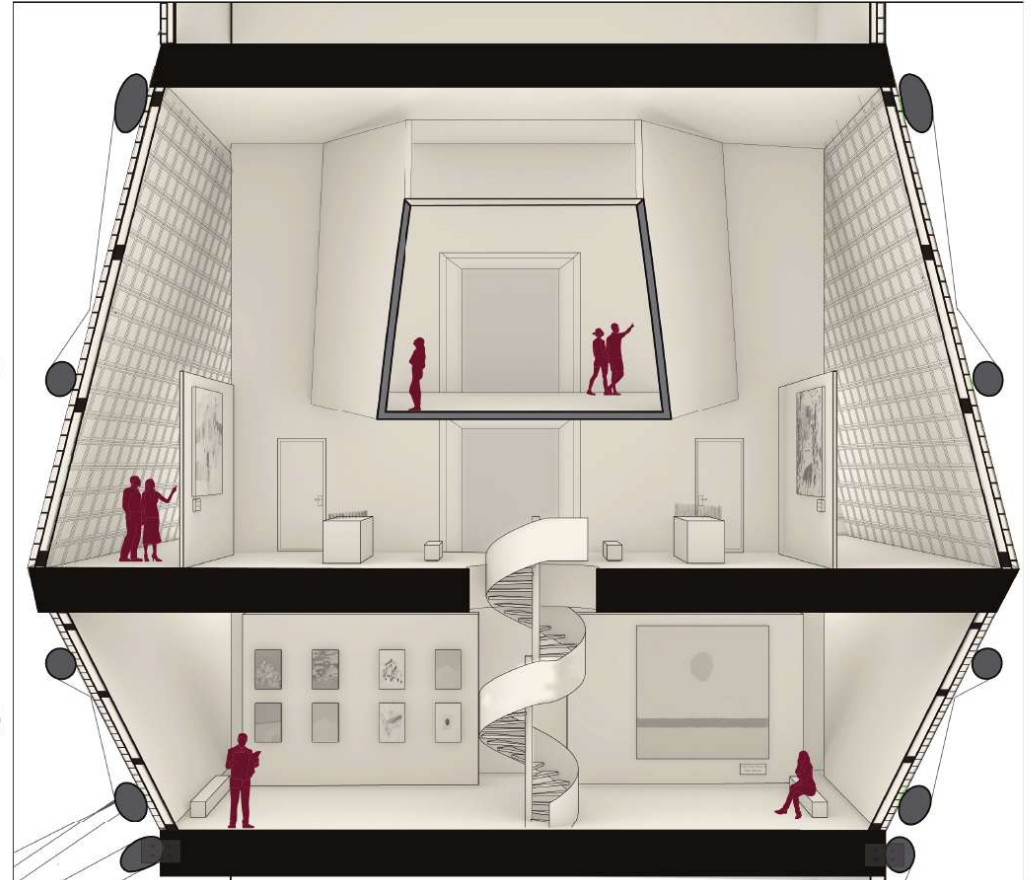


2025-2026



Library | Research center

Grid Break + Cultural Exchange Space



Main Gallery | Three-Level Exhibition Path

Floor Plate Expands+ Nested Journeys

4. **FABRIC COMMONS LABORATORY:**
AFTERLIFE SYSTEMS

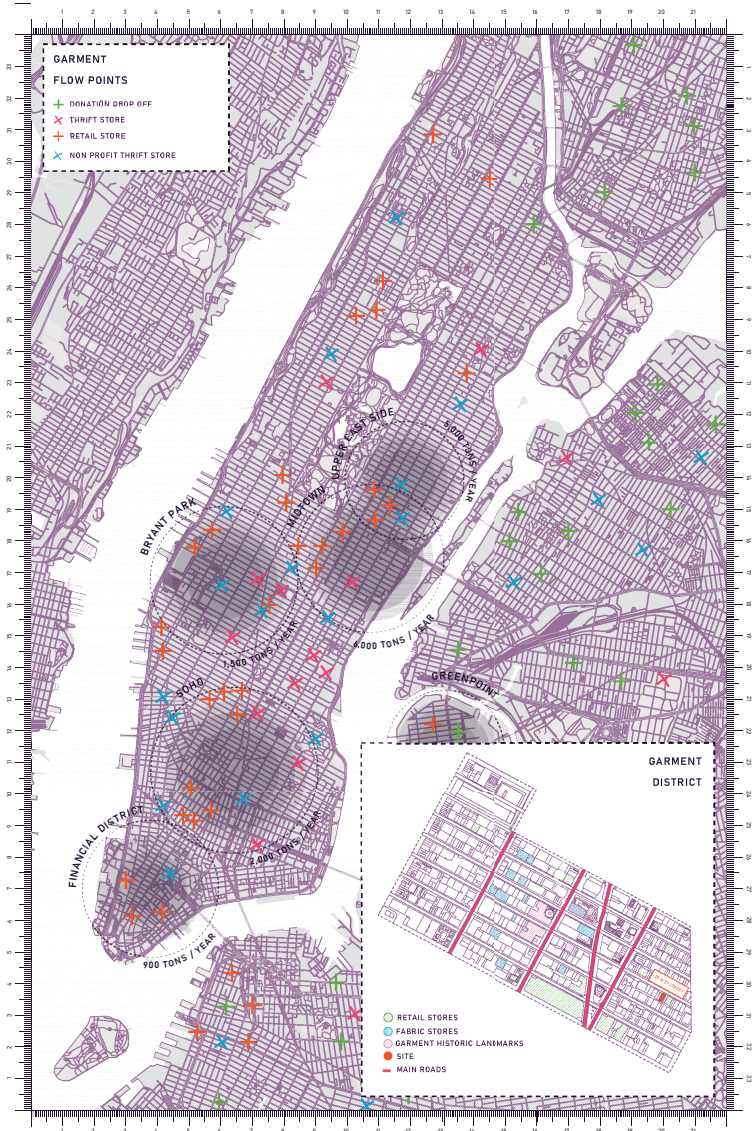
public commons | Vital Assemblages:
Biogenic Assemblies and Resurgence in the
Altered Landscape | spring 2026

This project investigates the architectural afterlife of textile waste within New York City's Garment District. Beginning with the question of what happens to fabric after it is discarded, the proposal re-frames waste not as an endpoint, but as a continuously transformable material resource embedded with thermal, structural, and spatial potential.

Situated within an underutilized existing building, the project transforms dormant infrastructure into a vertical system for collection, sorting, fabrication, and redistribution. Rather than inserting a fixed program, the building operates as an adaptive framework where textile waste is intercepted and redirected through cycles of processing and reuse. The architecture is organized through layered systems of structure, circulation, and envelope that work together as part of a broader urban ecology. Material flows through the building as an active participant in these systems, moving from soft, flexible states toward rigid structural applications and back again. At the facade, this transformation becomes visible through an evolving assembly of textile curtains, track systems, and fabric composite panels. Inspired by traditions of stitching, smocking, and textile construction, soft materials are manipulated into spatial and performative systems capable of regulating light, airflow, insulation, and thermal buffering. Movable fabric layers slide, gather, and expand in response to seasonal and environmental conditions, allowing the building to continuously adjust rather than remain static. Material experimentation played a central role in the project's development. Reclaimed fibers were compressed into shoddy composite units, while stitched and starched textiles explored how discarded fabrics could gain rigidity, thickness, and architectural definition. Through these transformations, textile waste shifts between soft and hard, temporary and structural.

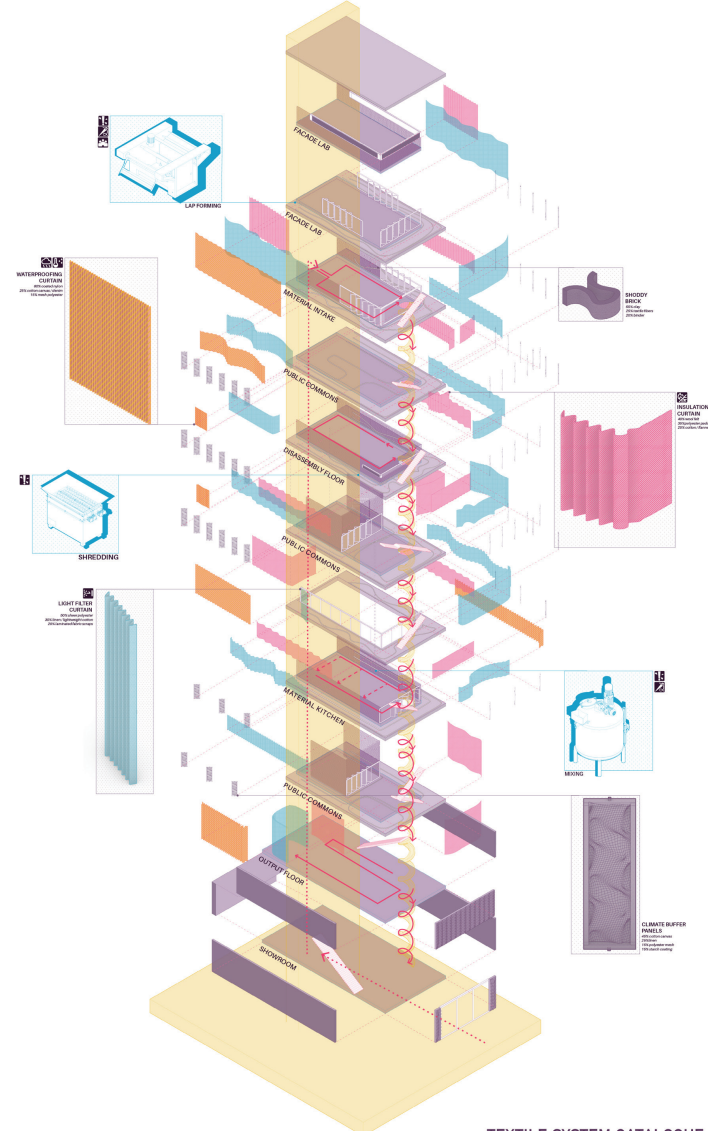
The building ultimately operates like a dressed body — layering, adapting, and reconfiguring itself over time. In this way, architecture is understood not as a final form, but as part of an ongoing material afterlife: a system that absorbs, evolves, and participates within larger cycles of urban waste and reuse.

project partner | Nicole Kertzus
instructor | Marc Tsurumaki
Latifa Alfalah



Fabric Commons Laboratory

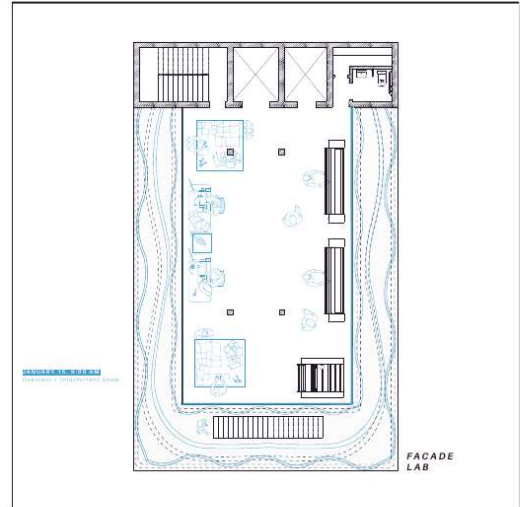
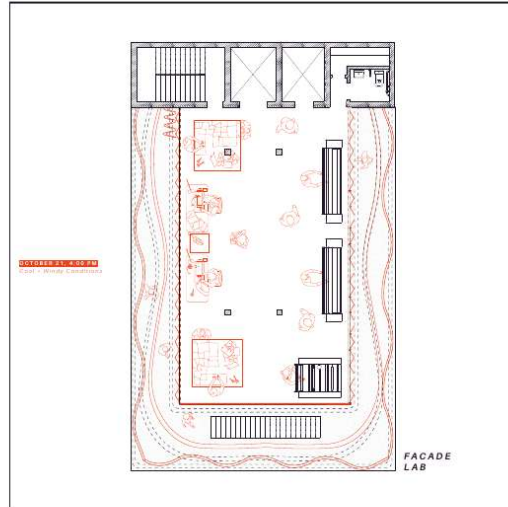
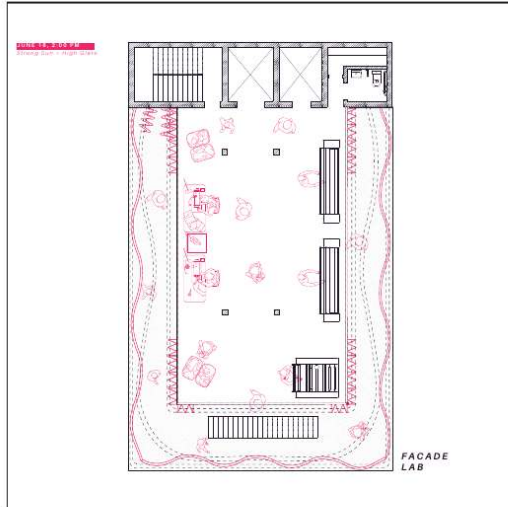
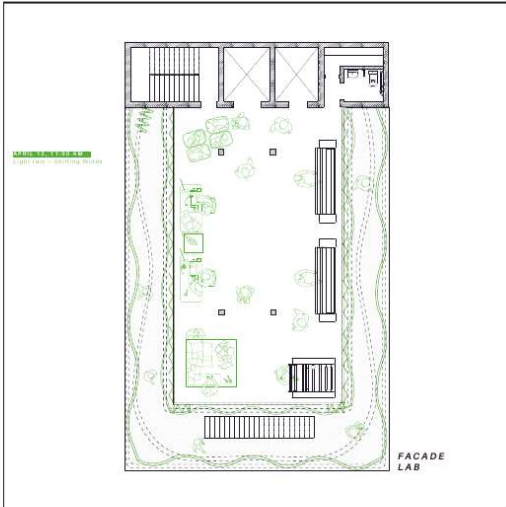
Columbia GSAPP



Vital Assemblages

TEXTILE SYSTEM CATALOGUE

2025-2026





5. FABRIC MIGRATIONS

magazine | waste/works | spring 2026

This project takes the form of a speculative magazine and textile tapestry constructed from reclaimed fabric waste collected collaboratively over time. Made through stitched scraps, layered textiles, and hanging fragments, the publication operates as both archive and material study, where each fabric flap reveals different narratives surrounding systems of textile production, consumption, disposal, and reuse. The magazine becomes a tactile landscape of accumulated waste that must be unfolded, lifted, and physically navigated. The material itself becomes inseparable from the content it communicates. Seams, stains, tags, and frayed edges act as records of circulation, embedding the publication within the same systems it critiques.

Set within a near-future reality where textiles have become as environmentally persistent as plastic, the project re-frames fabric as a global infrastructural material tied to architecture, domestic life, logistics, and ecological systems. Through speculative articles such as *Diary of a Bale*, *Do I Need This or Do I Need to Be Seen Needing This?*, and *So What's After Fashion?*, the publication examines the emotional, political, and logistical dimensions of textile waste and overconsumption.

Ultimately, the project positions design as a tool for revealing hidden material afterlives, transforming discarded fabric into an evolving archive that exists somewhere between publication, installation, and textile landscape.

project partners | Andrea Hernandez |
Fion Li
instructor | Amelyn Ng

Latifa Alfalah



Fabric Migrations

Columbia GSAPP

Waste / Works

2025-2026



Latifa Alfalah

Fabric Migrations



Columbia GSAPP

Waste / Works

2025-2026



Latifa Alfalah

Fabric Migrations

SO ...
WHAT'S AFTER FASHION ???

News Flash:
Fashion is the shortest part of a garment's life.

THE LOOK?

THE POST?

THE MOMENT?

That's the easy part.
What comes *after* is where it gets messy.
Because once you're done with it, the shirt doesn't just disappear. It stretches out. Breaks down. Travels. Lingers.

Places like FABSCRAP deal with what's left behind—sorting fabrics that were never designed to be taken apart. Cotton blended with plastic. Fibers that don't fully go away, just get smaller.

Enter: Microplastics.

So what exactly are we buying?
Not just outfits—but outcomes.
Because right now, fashion is really good at starting things. And really bad at finishing them.
After fashion is everything no one posts: the sorting, the shredding, the second life, the slow breakdown. The part that lasts longer than the trend ever did.



DAY 17, BALE 42
8:10 AM — another one of us arrives. Wrapped tight, taped up, no labels you can trust.
Inside? Could be gold. Could be garbage.
At Kantamanto Market in Accra, every bale is a gamble, and someone already paid for it.

9:00 AM — Cut it open. Fast. Hands in first win.
Branded tees. Clean denim. Anything wearable disappears in minutes.
That's the profit window, and it's small.

11:30 AM — What's left gets negotiated. Loose seams? Fixable. Outdated? Maybe not here. Everything gets a second look.

2:00 PM — The pile shifts. Less "clothes," more "problem."
Stains. Tears. Fabrics that won't survive another wear. Still not trash, but getting closer.

5:00 PM — The leftovers don't leave. They just move.
Resold. Recut. Repurposed. Or dumped.

According to The OR Foundation, millions of garments pass through here every week.
Nothing shows up as waste. That part happens later.

Diary of a Bale

Columbia GSAPP

Waste / Works

2025-2026

6.

Perform, Reflect, Enact: Three Architectures of Speculative Futurity

research paper | transscalarities | summer
2025

This paper compares three architectural case studies—The Line (Saudi Arabia, 2022–ongoing), Douglas Darden’s Oxygen House (1993), and Anna Heringer’s METI School (Bangladesh, 2005)—to examine how architecture constructs speculative futures through different approaches to authorship, cultural identity, and scale. The Line, a mirrored mega-project, presents itself as a utopian answer to ecological crises through high-tech urbanism. Oxygen House, a fictional yet intensely grounded proposal by Darden, uses narrative architecture to explore mortality and the body. METI School, Heringer’s first built project, offers a realized, quiet countermodel rooted in community, local knowledge, and sustainable materials.

Informed by postcolonial and critical futurist theory, particularly the work of Kodwo Eshun and Mark Rifkin, this paper argues that futurity is never neutral. Architecture becomes a tool through which power is either asserted or challenged. The Line performs futurity; Oxygen House reflects on it; METI enacts it. By placing these three case studies in discourse, the paper asks: *whose future is being imagined, who is excluded from it, and what pasts are erased to build it?*

instructor | Nur Jabarin

Latifa Alfalah

Perform, Reflect, Enact

Columbia GSAPP

Transscalarities

2025-2026

This paper draws on postcolonial and critical futurist frameworks, particularly Kodwo Eshun’s critique of the “futures industry”¹ and Mark Rifkin’s concept of “settler time,” to explore the temporal and political assumptions embedded in these projects. A close visual and textual analysis, contributes to understanding how each case study imagines a different kind of future; The Line asserts a top-down, state-authored vision of futurity; Oxygen House explores an introspective, bodily future shaped by ritual and mortality; and METI School offers a participatory, community-led vision rooted in lived knowledge and care.

Each case study proposes a radically different kind of future. The Line imagines a future authored from above, authored by the state and global elite. The project is driven by political ambition, economic spectacle, and global visibility. With architecture firms like Morphosis, OMA, and BIG behind it, The Line represents an outsourced vision of utopia. Its promotional imagery presents a mirrored mega-wall stretching 170 kilometers across the desert (Figure 1). It promises “zero-carbon” living, vertical agriculture, and AI-run logistics, yet its rendering reveals no signs of history, ecology, or context. The project aims for a clean slate, both visually and culturally. As the NEOM website declares, “The Line will reshape the traditional concept of urban development and create a model for nature preservation.”² This logic, however, depends on erasing what is already there, reflecting the ambitions of the state rather than the lived realities of its people. Kodwo Eshun describes the “futures industry” as a system that projects “plausible alternative tomorrows” in order to manage uncertainty through control.³ The Line fits this perfectly: it is not just a design, but a product of predictive modeling, corporate branding, and environmental crisis capitalism. It does not ask what the future needs but rather decides it.

¹ Futures industry: an expanded field that intersects industries of technoscience, fictional media, technological projection, and market perfection.

² NEOM, “The Line: World-Class Quality of Life,” 2022. <https://www.neom.com/en-us/regions/theline>.

³ Kodwo Eshun, “Further Considerations on Afrofuturism,” in *The New Centennial Review* 3, no. 2 (2003): 293–304.



Figure 1 “A promotional image of Saudi Arabia’s Neom shows the design plan for the parallel structures, known collectively as the Line.” Photograph: NEOM/AFP/Getty Images



Figure 2. Sectional drawing of Oxygen House, showing transformation from oxygen tent to burial chamber. Douglas Darden, from *Condemned Building: An Architect’s Pre-Text* (New York: Princeton Architectural Press, 1993)

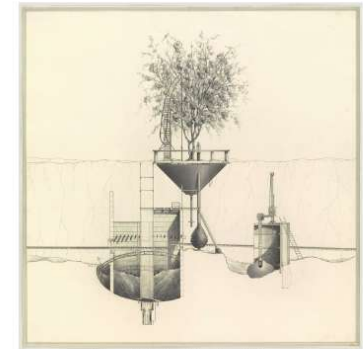


Figure 3. Sectional drawing of Oxygen House, designed by Douglas Darden in 1988. (*Museum of Modern Art, New York, Douglas Darden. Oxygen House Project (Section, elevation), 1988.*)

By contrast, Oxygen House, a fictional 1993 project by Douglas Darden⁴, offers a future at the scale of a single breath—intensely personal and unresolved. The house is imagined for Burnden Abraham, a former train signalman with a collapsed lung, who commissions a house on the site of the accident that injured him. He plans to live and be buried there. As Jean LaMarche notes, Darden’s work “does not aspire to solve a problem but to tell a story” rooted in human frailty and meaning-making, the building stages death not as the end, but as transformation.⁵ A sectional drawing of the house shows a lift platform that lowers Abraham’s body into a shaft, where a willow tree is eventually planted above his tomb (Figure 2,3). The building’s systems are metaphors: oxygen becomes breath, membrane, tent, and shroud. Darden’s futurity is about death, not escape from it.

METI School, built in 2005 in Rudrapur, Bangladesh, proposes a very different kind of future that is real, collective, and embedded in place. Designed by Anna Heringer⁶ as her thesis project, the school was constructed with local villagers and children using traditional methods and materials: mud, straw, bamboo, pigment.⁷ Heringer had lived in Rudrapur prior to the project and collaborated closely with the Bangladeshi NGO Dipshikha, which supports rural development through education and sustainability. Rudrapur is a village located in the northwest

of Bangladesh, where earthen construction and community labor are deeply rooted in daily life. These cultural and environmental contexts shaped every part of the METI School’s design. There was no top-down authorship, no imported vision of progress. “Architecture,” Heringer writes, “is a tool to improve lives.”⁸ In contrast to the sleek renderings of The Line, the school’s process was messy, tactile, and joyful. Photographs of its frayed walls and sunlit rooms reveal a building that belongs to its people and its land (Figure 4,5). The school is not a projection of distant ideals but a continuation of existing knowledge. The building breathes, ages, and belongs. The future it imagines is not imported but cultivated.



Figure 4. Students gathered at METI School, Rudrapur, Bangladesh. The building was constructed by local craftsmen and students using mud and bamboo. Photo by © BASEhabitat, 2006. (*BASEhabitat – METI Schule Handgemacht*, <https://www.baschabitat.org/en/projects/meti-schule-handgemacht/>)



Figure 5. View of construction at METI School in Rudrapur, Bangladesh. Photo by Kurt Hoerbst. (*Small Scale, Big Change: New Architectures of Social Engagement*, Museum of Modern Art. https://www.moma.org/interactives/exhibitions/2010/small_scale_big_change/projects/meti_handmade_school.html)

⁴ Douglas Darden was an American architect, writer, and educator based in Denver, Colorado. Best known for his speculative and narrative-driven projects, his work often blended mythology, fiction and architectural drawings to critique modernist ideas.

⁵ Jean LaMarche, “The Life and Work of Douglas Darden: A Brief Encomium,” *Utopian Studies* 9, no. 2 (1998): 163.

⁶ Anna Heringer is an architect and honorary professor of the UNESCO Chair of Earthen Architecture, Building Cultures, and Sustainable Development, with a practice focused on the use of natural and local building materials in community-led design.

⁷ Anna Heringer, “Building METI School in Bangladesh,” YouTube, July 9, 2012, https://www.youtube.com/watch?v=8zC3B8_bBH0.

⁸ Michael Bell and Barry Bergdoll, “METI School,” in *Small Scale, Big Change: New Architectures of Social Engagement* (New York: MoMA, 2010), 25.

In imagining the future, each project reveals its exclusions: *The Line* erases both community and ecology; *Oxygen House* acknowledges mortality but centers one imagined subject; *METI School* resists exclusion by making building a collective, inclusive act. The Line excludes not only the community but the land itself. It simplifies geography, ignoring the ecological and cultural systems of the desert in favor of technological mastery. Its reflective facade hides labor, resources, and the violence of displacement. Although it promises unity and sustainability, its very construction contradicts those values. There is no trace of Bedouin communities, desert flora and fauna, or informal settlements historically tied to this land. As Mark Rifkin writes in *Beyond Settler Time*, settler futurity depends on rendering Indigenous (or preexisting) presence invisible in order to clear the ground for new claims.⁹ A 2022 risk analysis of the NEOM project identified sociocultural risks, like language and cultural conflicts, as amongst the most severe risks.¹⁰ The project also required the forced displacement of the Huwaitat tribe whose ancestral lands are in direct path to The Line and its associated developments. While NEOM's narratives emphasize unity with nature and progressive future, its utopian vision rests on a similar erasure—it reclaims the desert not through preservation but displacement.¹¹

Oxygen House, while fictional, centers one person's dying process. However, this focus allows for a deeper reflection on how architecture can embody human experience. Through the lens of futurism as defined by Kodwo Eshun and Mark Rifkin, Oxygen House engages a different kind of future, one rooted not in technological mastery or progress, but in symbolic

ritual. Eshun argues that dominant futurisms are often "preemptively owned" by Western technocratic systems that imagine futures as sites of control and prediction.¹² In contrast, Darden's speculative design works in the imaginary: a portrayed space where time loops through memory, grief, and transformation. Rifkin's critique of settler time—linear, goal-driven, and extractive—helps frame Oxygen House as a rejection of that trajectory.¹³ Instead of moving forward, the project turns inward. The house was never built, but the drawings show an enclosed, tightly choreographed experience of illness, death, and burial. The house transforms as Abraham does: his oxygen tent becomes a burial shroud; the lift becomes a grave. But there's no clear role for others—family, community, caregivers. Even the tree, meant to symbolize rebirth, is mechanically lifted and "planted" into the tomb.¹⁴ Darden turns death into ritual, but it's solitary. The architecture is not about healing others, but memorializing one.

METI challenges architectural authorship by involving local builders, many of whom had never constructed before. Unlike The Line, it doesn't rely on imported knowledge. Unlike Oxygen House, it isn't speculative. It exists because of shared effort and care. What is excluded is the need for perfection, control, or spectacle. Its aesthetic wasn't imported or imposed, but evolved with its users. As Heringer explains, "The design grew out of the process itself," involving teachers, children, and craftspeople.¹⁵ The project doesn't seek to replace traditions,

⁹ Mark Rifkin, *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination* (Durham: Duke University Press, 2017), 11–13.

¹⁰ Areej Almunzi, "Exploring the Most Significant Risks of NEOM Mega Project," *Journal of Risk and Financial Management* 15, no. 9 (2022): 12, <https://www.mdpi.com/1911-8074/15/9/381>.

¹¹ Sulaiman Althubaiti, "The Effect of Future Foresight on Educational Administration: NEOM Project as a Model," *World Journal of Education* 11, no. 6 (2021): 45, <https://www.sciedupress.com/journal/index.php/wje/article/view/18717>.

¹² Eshun, "Further Considerations on Afrofuturism," 287–302.

¹³ Rifkin, *Beyond Settler Time*.

¹⁴ Darden, *Condemned Building*, 122–125.

¹⁵ Heringer, "Building METI School."

but to reinforce and reinterpret them (Figure 6). It includes the future by honoring the past.



Figure 6. Construction of the METI School using community labor (no crane to lift trusses); windows are plastered with a sand-and-lime mixture. Photo by Kurt Hoerbst. (Anna Heringer | *METI School, Bangladesh* (n.d.), <https://www.anna-heringer.com/projects/meti-school-bangladesh/>)

Futurity often requires erasure, but each project handles the past differently: *The Line* overwrites cultural and ecological histories to create a blank canvas for its spectacle; *Oxygen House* memorializes loss and incorporates the past into its narrative sequence; *METI School* builds upon inherited material and social knowledge without attempting to transcend or sanitize it.

The Line relies on historical erasure to function. Its desert site is presented as a blank, empty landscape waiting for innovation. But the Hijaz region has deep ecological, cultural, and tribal histories. The project's mirrored wall literally reflects the desert back on itself, suggesting that nothing behind the glass needs to be remembered. This is the violence Rifkin describes: settler futurity as an erasure of land and time. This erasure is also evident in the project's renderings, populated with generic figures and minimal human interaction; the scenes feel

foreign and disconnected from the local context (Figure 7). Even its sustainability rhetoric is undercut by the massive environmental damage that would be required to build and maintain the structure.¹⁶What is billed as a climate solution is, in effect, a high-tech displacement of desert ecosystems.



Figure 7 "World-Class Quality of Life": (NEOM) (*The Line*), (2022). (<https://www.neom.com/en-us/regions/theline>)

In *Oxygen House*, the past is not erased, it's ritualized. Darden's design stages a life cycle in architectural form: the house responds to injury, illness, and death. The planting of the tree is symbolic, but also haunting. Why lift a tree, an object of life and growth, into a burial site? The act suggests a desire to domesticate the natural world, to contain it even in death. It is a strange reversal where a house becomes a grave and a tree becomes an architectural detail. It questions how architecture manages memory, and whether ritual can compensate for loss.

¹⁶ NEOM, "The Line."

In *METI School*, the past isn't managed or hidden but acts as the foundation and grounded in continuity. Local building techniques like cob construction, bamboo framing, and mud plastering aren't seen as outdated, but essential. The school resists the global narrative that equates modernity with new materials and sleek forms. This aligns with Mark Rifkin's critique of settler time, where dominant conceptions of futurity depend on breaking with the past in order to justify imposed development.¹⁷ METI does the opposite: it builds the future from inherited knowledge, not in spite of it. Similarly, Kodwo Eshun writes that dominant futurisms "preemptively own the future" by imagining it as a clean break.¹⁸ But METI's future is not owned or imposed; it is grown collaboratively and contextually. Its imperfections: cracks, patches, textures, are not flaws but signs of life (Figure 6). Unlike *The Line*, which treats nature and culture as aesthetic surfaces, *METI* builds with them.¹⁹ The school proposes a future that doesn't require forgetting and one that is built from what already exists.

This paper has argued that architecture's relationship to the future depends less on form than on who imagines it and how. *The Line* presents futurity as a performance of power, authored by many but rooted in none. Oxygen House turns inward, reflecting on the fragility of life and the rituals of loss. METI enacts a grounded alternative, rooted in local knowledge and shared labor. In examining these projects side by side, we see that futurity is always political. It can erase or remember. It can dominate or nurture. Whether speculative, monumental, or modest, the future is always made in the present and how we build reveals who we believe that future belongs to.

¹⁷ Rifkin, *Beyond Settler Time*.

¹⁸ Eshun, "Further Considerations on Afrofuturism," 289

¹⁹ Bell and Bergdoll, "METI School," 25.

Primary Sources:

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Secondary Sources:

Bell, Michael, and Barry Bergdoll. "METI School." In *Small Scale, Big Change: New Architectures of Social Engagement*, 23–29. New York: Museum of Modern Art, 2010.

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Heringer, Anna. *METI School, Bangladesh*. Project description. Photo galleries. Website of Anna Heringer. <https://www.anna-heringer.com/projects/meti-school-bangladesh/>.

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7.

Sea-Coded: A parametric breakwater design tool

digital fabrication | generative design | fall
2025

SEA-CODED is a parametric Grasshopper-based design tool developed for adaptive coastal protection in high-risk flood zones. Intended for architects, urban designers, planners, and public agencies, the workflow enables the rapid generation and testing of porous breakwater systems that can be exported for computational fluid dynamics (CFD) analysis.

The project operates as a flexible framework for exploring breakwater geometry, density, porosity, and placement in response to site-specific coastal conditions. Using user-defined inputs, the tool generates heterogeneous breakwater forms through a Voronoi-based system that allows designers to quickly test varying levels of permeability and structural mass.

The research responds to increasing flood vulnerability and sea level rise, particularly along coastlines such as Staten Island, where future FEMA flood projections indicate significant inundation risk. At both urban and architectural scales, the workflow supports iterative testing of coastal protection strategies while integrating ecologically enhanced concrete systems designed to encourage marine growth and habitat formation.

By linking parametric design with CFD-ready outputs, SEA-CODED positions coastal infrastructure as an adaptive and evolving system rather than a static barrier.

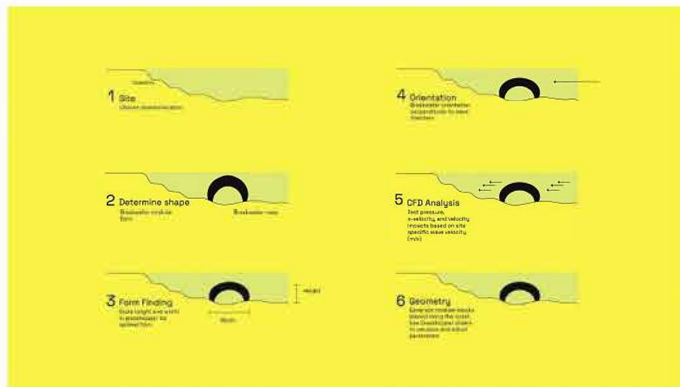
project partners | Ambika Kannusami |
Elsa Paas | Samantha Nowak
instructor | Danil Nagy

Latifa Alfalah

Overview

This project culminates in a parametric Grasshopper-based breakwater design tool intended for use by urban designers, architects, planners, and public agencies working in high-risk coastal flood zones. The tool enables rapid generation, testing, and comparison of context-responsive breakwater geometries that can be exported for computational fluid dynamics (CFD) analysis.

Rather than producing a single fixed solution, the tool functions as a design framework that supports iterative exploration of breakwater placement, scale, and porosity in response to site-specific conditions.



Concept diagram

Purpose of the Tool

The tool is designed to address the increasing urgency of coastal flooding, particularly in regions such as Staten Island, where FEMA's 2100 Flood Hazard projections indicate that large portions of the borough are expected to be underwater. In this context, traditional static infrastructure solutions are insufficient.

This parametric workflow allows designers and decision-makers to:

- Test multiple breakwater configurations efficiently
- Adjust porosity and massing to balance wave attenuation and water flow
- Generate geometry optimized for downstream CFD simulation



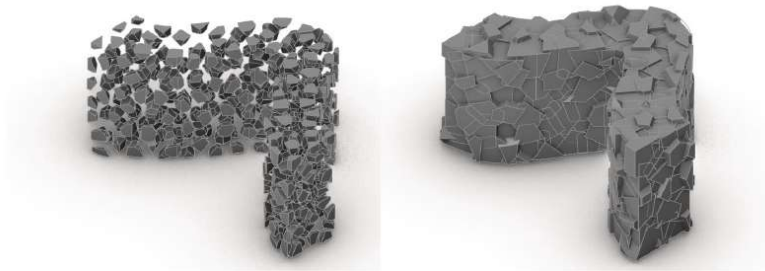
2100 FEMA Flood Hazard Map

Tool Description

At its core, the tool generates a porous breakwater system whose form, density, and spatial logic are driven by user-defined parameters.

The workflow begins with a site curve defining the breakwater alignment. This curve is scaled and extruded to establish the base volume of the breakwater. Within this volume, a 3D Voronoi field is generated and selectively intersected with the base mass to create a heterogeneous, porous structure.

By controlling the scale and intersection of the Voronoi cells, users can modulate the openness, density, and internal structure of the breakwater, allowing for performance-driven design iterations.



Parametric control of breakwater porosity through Voronoi scaling. Adjusting a single parameter allows designers to test varying degrees of permeability while maintaining a consistent overall mass.

Expected Inputs

The tool is intended for experienced Grasshopper users and assumes familiarity with parametric workflows.

Geometry Inputs

- **Base Curve (Curve):**
Defines the alignment and position of the breakwater relative to the coastline or site boundary.

Scalar Inputs (Sliders)

- **Length (Float):**
Controls the longitudinal extent of the breakwater.
- **Height (Float):**
Defines the vertical profile of the structure.
- **Width (Float):**
Determines the depth of the breakwater mass.
- **Voronoi Density / Scale Factor (Float):**
Controls the size and overlap of Voronoi cells prior to solid intersection, directly affecting porosity and material density.

Outputs

The tool produces the following outputs:

- **Porous Breakwater Brep Geometry:**
A clean, closed Brep suitable for export to CFD software or further geometric refinement.
- **Iterative Design Variants:**
By adjusting scalar inputs, multiple configurations can be generated and compared within the same definition.
- **Visualization-Ready Geometry:**
Outputs can be color-coded or layered to communicate density and structure to non-technical stakeholders.

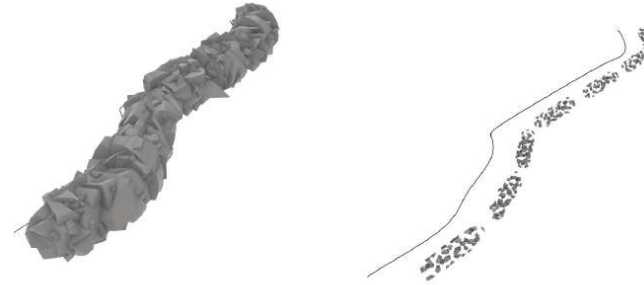
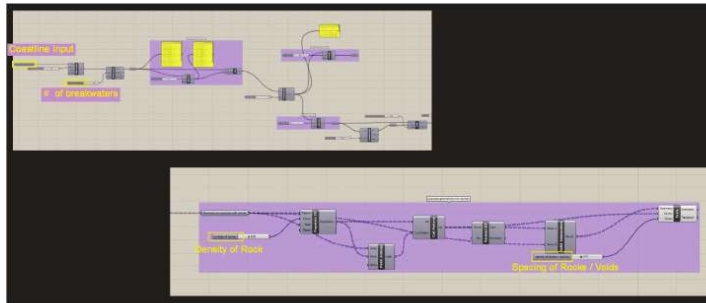
Example Use Cases

The breakwaters are made of rock piles with a stone core, a base layer that protects against erosion, and outer layers of armor stones and ecologically enhanced concrete units. These concrete units are placed in the intertidal and subtidal zones and are designed to support marine life. They promote biological activity through a specialized concrete mix and textured surfaces that encourage marine species to settle and grow.

1. Adaptive Coastline Inputs - large scale



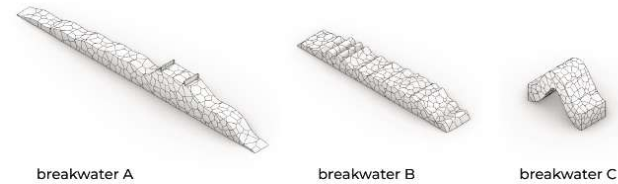
We developed a parametric Grasshopper script that takes any input coastline geometry and generates responsive breakwater configurations along it. The system operates on an offset curve that is subdivided into segments, allowing control over the number of breakwaters, their total volume, and their distribution along the shoreline. Key parameters, such as available width, individual breakwater length, and spacing between elements, can be varied to test multiple spatial and structural scenarios. The output is a flexible framework for rapidly evaluating different coastal protection strategies under consistent geometric logic. In a subsequent script, each breakwater is further discretized into modular components, enabling the assessment of alternative module geometries and their associated habitat performance.



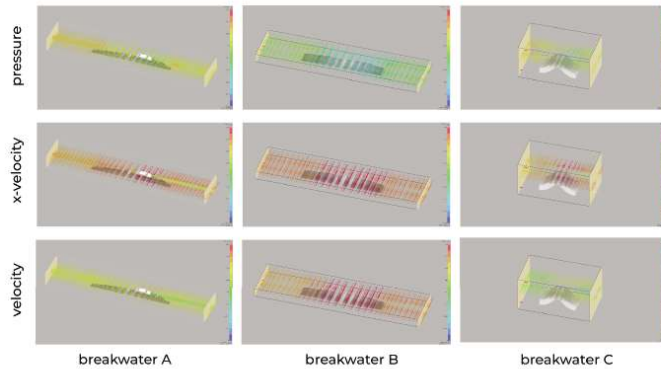
2. Early-Stage Coastal Design

Designers can quickly test different breakwater placements and sizes along vulnerable coastlines to assess spatial impact and feasibility.

Different Breakwater Iterations - small scale

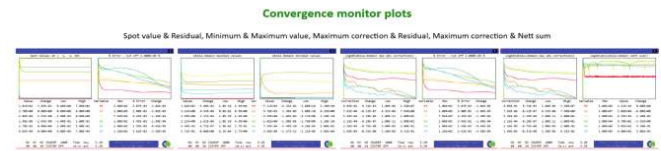


3. Performance Testing with CFD



CFD analysis

Generated geometries can be exported directly for CFD analysis to evaluate wave attenuation, flow patterns, and efficiency across multiple iterations.



4. Comparative Scenario Studies

Urban planners and agencies can compare porous versus dense breakwater strategies to understand trade-offs between protection, cost, and environmental impact.

Conclusion

SEA-COADED demonstrates how parametric design can support more adaptive and responsive approaches to coastal protection in the face of accelerating flood risk. Rather than proposing a single solution, the tool functions as a flexible design framework that enables rapid testing of breakwater geometry, porosity, and placement based on site-specific conditions. By linking geometric iteration with CFD-ready outputs, the workflow bridges early-stage design and performance evaluation, supporting more informed decision-making.



Looking ahead, SEA-COADED establishes a strong foundation for future development. Integrating live CFD feedback, material optimization, and ecological performance metrics could further enhance the tool's capacity to guide resilient, environmentally responsive coastal infrastructure.

8. Found Bag

speculative archive | arguments | summer
2025

I began with a simple premise: What if the only archive left of an architect's life was a bag? Not a model, not a manifesto, not a finished building — but a personal bag discovered 100 years in the future, filled with the things they carried every day. The objects inside — a tie, safety glasses, a napkin, a notebook, photographs, receipts, fragments of paper — are not symbolic stand-ins for larger ideas. They are ordinary, physical remnants, and that ordinariness is precisely the point. These are the kinds of artifacts architecture often overlooks or erases in favor of polished drawings, completed forms, and singular authorship. Yet embedded within these objects are traces of labor, routine, movement, aspiration, and contradiction.

The project treats the bag as an alternative architectural archive: one that records the informal and deeply personal conditions surrounding design practice rather than its finalized outcomes. Through the accumulation of small objects, the work begins to reconstruct a life — not through monuments, but through residue. Smudges, folds, wear, and material decay become forms of evidence, revealing how architecture is shaped not only through buildings, but through the everyday systems, tools, and habits that support them.

Rather than documenting architecture as a static object, the project focuses on what is carried alongside it. In doing so, it asks what histories are preserved, what forms of labor remain invisible, and whether the future might understand architecture less through its finished products and more through the traces people leave behind.

instructor | Marie de Testa

Latifa Alfalah

This project critiques the way architecture centers images and spectacle, often ignoring the embedded conditions of labor, care, and collapse. Cheng and Zhan's work on hydro-infrastructure and displacement helped me think about how built environments mask the extraction and violence beneath their surfaces. Liam Young's notion of the "background" — the invisible networks, workers, and materials that make our world function shaped my decision to treat these mundane items as meaningful on their own terms.

So this is not a design of what architecture should become, but a trace of what it leaves behind — fragmented, unfinished, personal. If buildings are archives, then so are bags like this. This one doesn't offer a solution. It offers a rupture. And that, I think, is where responsibility begins.

The object is not singular, because my argument can't be singular: it is fragments of all these lectures, all these ideas and perspectives that I have collected and developed. My own interpretation of so far my argument, the object is objects. The object engages with the "reader" in a one-to-one level: it's a personal item. That buildings like this bag are archives. The bag reveals the networks of people and materials that make it what it is. However, the bag is a personal item, with personal thoughts lost in time essentially so being displayed for all to see is a node to the dehumanisation of people where its though time or through cultural differences like the refugee camp exploitation and surveillance not only by the by-products of humans like AI but also human behavior itself.

This personal bag was discovered approximately one century after it was lost, near what was once Columbia University's architecture school. Believed to have belonged to a student or young architect, the bag contains fragments of daily life offering rare insight into the pedagogical, emotional, and infrastructural landscape of architectural education during this period.

The contents of the bag includes a tie, safety glasses, small notebook with rare handwritten notes, and a napkin. The notebook inside contains reflections, doubts, and critiques that suggest the author was engaged in questions of labor, power, surveillance, and care. Of particular interest is two analog images (possibly a Polaroid) labeled only with a question mark. They depict a faucet and signs of water damage, perhaps part of a forgotten inspection or unnoticed collapse.



Please handle archive objects with care
Always wear hand gloves provided

Found Bag

Columbia GSAPP

Arguments

2025-2026



Object ARC-02: Safety Glasses
Estimated Use: 2020-2025
Recovered From: Bag of unknown architectural student, Catalog Entry 4317-A
Material: Polycarbonate plastic
Condition: Slightly scratched lenses, intact case
Notes from Reconstruction Team:
While these glasses appear utilitarian, their inclusion in the archive aligns with a moment when visual mediation became central to architectural thinking. Not purely for protection, they reflect concerns about the limits of perception—both in the physical and metaphorical sense.
Interpretive Entry:
These glasses, like the tie, studio work, or perhaps gloves? These lenses filter reality—just as architectural renderings once filtered complexity into legibility. They scrutinize, suggest friction: between seeing and overlooking, between presence and absence.
"Clarity is a filter, and filters are choices."
- Notebook Entry
Related themes: Perception, Surveillance, Infrastructure, Maintenance



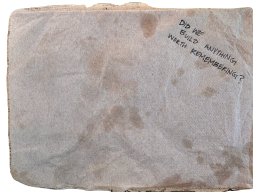
Object ARC-01: Notebook
Estimated Use: 2020-2025
Recovered From: Bag of unknown architectural student, Catalog Entry 4317-A
Material: Faux leather cover, lined paper, black and blue ink
Condition: Slightly worn; minimal surface scratching
Notes from Reconstruction Team:
This notebook contains handwritten reflections, definitions, and observations about the architectural world during a pivotal moment in the early 21st century. The entries combine personal anecdotes with unfiltered critical thought, likely from a student or architect of the period. Pages are disconcertingly supple, either an unfinished work or a document assembled over time without a fixed order.
Its contents appear to serve as a guide for interpreting the other objects in the bag, while the correlations between entries and artifacts remain speculative, they may reveal patterns in the owner's daily life, professional training, and ideological concerns.
Interpretive Entry:
The object appears trivial, yet its preservation suggests otherwise. In the early 21st century, such plastic loops were ubiquitous in offices, postal systems, and domestic life—holding together that which was never designed to stay together. In this sense, the bag becomes a microcosm of the architectural condition described in the notebook: structures bound by temporary solutions, endlessly repaired yet never acknowledged. Some scholars have speculated that its circular form, combined with its tendency to stretch over time, served as a personal talisman—a vehicle of the inevitability of entropy. Others have suggested it could have been a teaching aid, an impromptu model for thinking about tension, adaptability, or "field" conditions described in contemporary architectural discourse.
"We frame what we want people to notice and blur what's inconvenient. The clearer things look, the more I wonder what I'm missing."
- Notebook entry
Related themes: Repair, improvisation, adaptability, care.



Object ARC-03: Tie
Estimated Use: 2020-2025
Recovered From: Bag of unknown architectural student, Catalog Entry 4317-A
Material: Woven polyester
Condition: Knotless, creased, no label
Notes from Reconstruction Team:
This tie may have signaled affiliation with a past professional culture. Its wear suggests disuse—perhaps symbolic abandonment.
Interpretive Entry:
In the early 21st century, the tie was both uniform and signal: a complicity with institutional norms, an architecture of the self in dress.
Its inclusion here suggests its wearer might have been questioning the rules, or caught between roles—performer, student, architect.
"The clearest things look, the more I wonder what I'm missing."
- Notebook Entry
Related themes: Complicity, Performativity, Outdated Pasts

ARTIFACT DESCRIPTION — CATALOG ENTRY 4317-A
RECOVERED OBJECT: PERSONAL BAG OF UNKNOWN ARCHITECT
DATE OF ORIGIN: APPROX. EARLY 21ST CENTURY
EXCAVATED SITE: NEAR THE FORMER AVERY HALL, COLUMBIA UNIVERSITY
EXCAVATED BY: DRONE M29

THIS IS WHAT IS BELIEVED TO BE A PERSONAL BAG, DISCOVERED APPROXIMATELY ONE CENTURY AFTER IT WAS LOST, NEAR WHAT WAS ONCE COLUMBIA UNIVERSITY'S ARCHITECTURE SCHOOL. BELIEVED TO HAVE BELONGED TO A STUDENT OR YOUNG ARCHITECT, THE BAG CONTAINS FRAGMENTS OF DAILY LIFE OFFERING RARE INSIGHT INTO THE PEDAGOGICAL, EMOTIONAL, AND INFRASTRUCTURAL LANDSCAPE OF ARCHITECTURAL EDUCATION DURING THIS PERIOD. THE CONTENTS OF THE BAG INCLUDES A TIE, SAFETY GLASSES, SMALL NOTEBOOK WITH RARE HANDWRITTEN NOTES, AND A NAPKIN. THE NOTEBOOK INSIDE CONTAINS REFLECTIONS, DOUBTS, AND CRITIQUES THAT SUGGEST THE AUTHOR WAS ENGAGED IN QUESTIONS OF LABOR, POWER, SURVEILLANCE, AND CARE. OF PARTICULAR INTEREST IS AN ANALOG IMAGE (POSSIBLY A POLAROID). IT DEPICTS SIGNS OF WATER DAMAGE, PERHAPS PART OF A FORGOTTEN INSPECTION OR UNNOTICED COLLAPSE. THOUGH THESE OBJECTS, THE BAG SUGGESTS A MOMENT WHEN ARCHITECTS WERE RETHINKING THEIR ROLES — LESS AS FORM-MAKERS, AND MORE AS OBSERVERS, CARETAKERS, AND RECORDERS OF ENTANGLED SYSTEMS. ITS SURVIVAL OFFERS INSIGHT INTO A SHIFTING ARCHITECTURAL CONSCIOUSNESS, ONE CONCERNED NOT ONLY WITH BUILDINGS, BUT WITH THE MATERIALS, LABOR, AND NETWORKS THAT SHAPE THEM. THE CONTENTS — PRACTICAL, SYMBOLIC, AND SPECULATIVE — TRACE A MINDSET ATTENTIVE TO BOTH THE VISIBLE AND INVISIBLE FORCES STRUCTURING THE BUILT ENVIRONMENT. NOW PART OF A HISTORICAL ARCHIVE, THE BAG STANDS AS A QUIET RECORD OF A TIME WHEN ARCHITECTURE WAS ACTIVELY RENEGOTIATING ITS RESPONSIBILITIES.



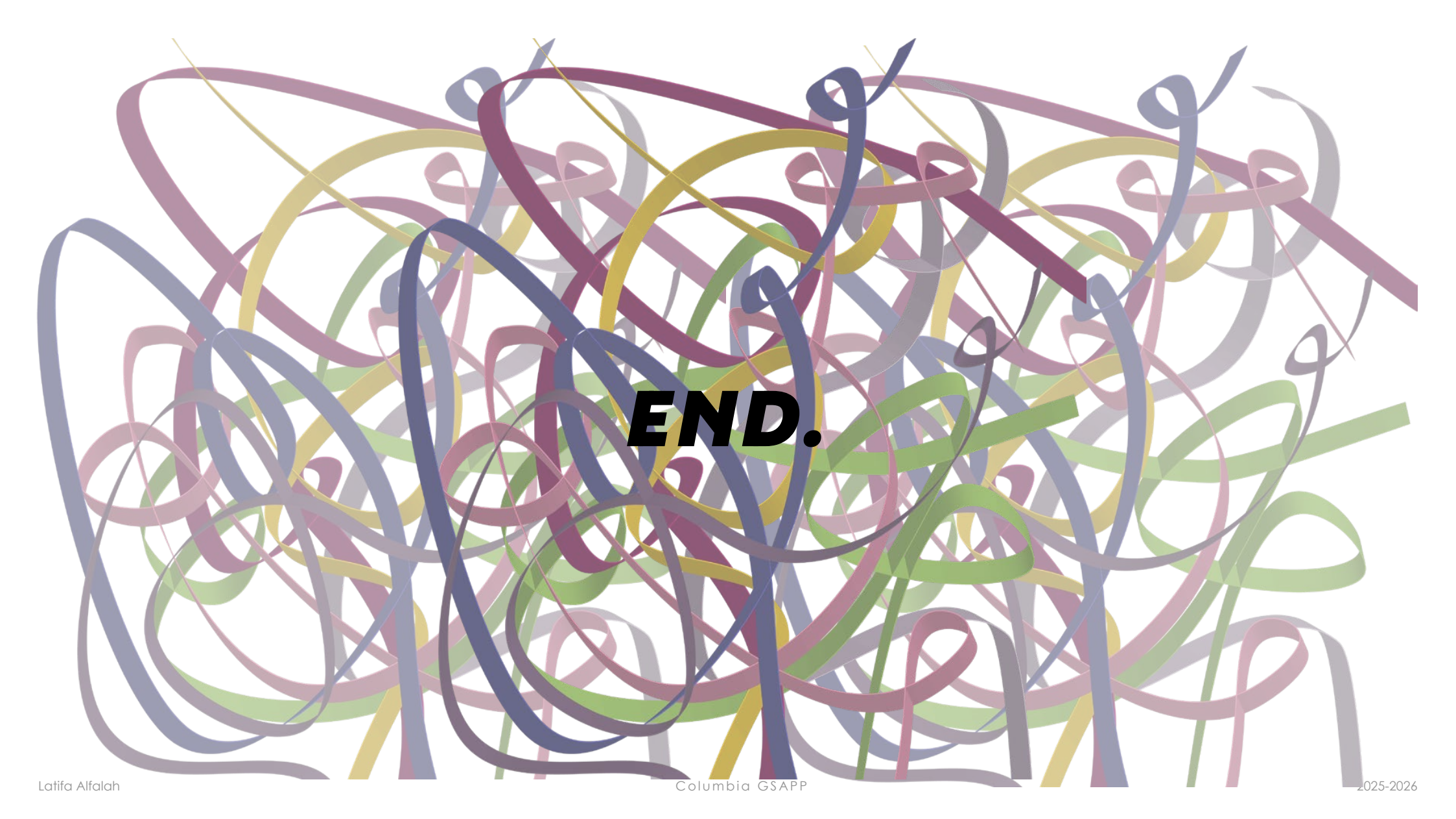
Object ARC-04: Napkin
Estimated Use: 2020-2025
Recovered From: Bag of unknown architectural student, Catalog Entry 4317-A
Material: Paper, ink handwriting in black pen
Condition: Creased, slight staining, edges frayed
Notes from Reconstruction Team:
Text on napkin reads: "did we build anything worth remembering?" likely a spontaneous note, content unknown. Ink matched that found in the notebook (ARC-01), suggesting same author. No date reference.
Interpretive Entry:
Given its portability, disposable nature, the napkin may reflect immediacy — a thought recorded when no other medium was available. The question aligns with recurring notebook passages on architectural legacy and erasure; it may have been a personal doubt, or an intended provocation for peers.
"Architecture leaves traces. But will ours deserve to be found?"
- Notebook Entry
Related themes: Legacy, doubt, temporality, authorship.



Object ARC-05: Photograph
Estimated Use: 2020-2025
Recovered From: Bag of unknown architectural student, Catalog Entry 4317-A
Material: Instant film photograph, glossy surface
Condition: Minor surface wear; images intact
Notes from Reconstruction Team:
Photograph captures an interior ceiling with visible water damage. While not a conventional form of documentation, its inclusion in this archive suggests personal significance. The choice to use a Polaroid — an analog, immediate, and physical medium — indicates a deliberate act of preservation. This may reflect an emotional or architectural observation deemed urgent at the time, whether intended as evidence, memory, or metaphor. The image invites wary interpretation.
Interpretive Entry:
Instant film photograph, glossy surface.
"Things that are left behind, that's what architecture is too."
- Notebook Entry
Related themes: Maintenance, failure, visibility, background.



Object ARC-06: Rubber Band
Estimated Use: 2020-2025
Recovered From: Bag of unknown architectural student, Catalog Entry 4317-A
Material: Natural rubber, latex
Condition: Elasticity still intact
Notes from Reconstruction Team:
This item was found loose in the bag. No direct reference in the notebook.
Interpretive Entry:
The object appears trivial, yet its preservation suggests otherwise. In the early 21st century, such elastic loops were ubiquitous in offices, postal systems, and domestic life—holding together that which was never designed to stay together. In this sense, the bag becomes a microcosm of the architectural condition described in the notebook: structures bound by temporary solutions, endlessly repaired yet never acknowledged. Some scholars have speculated that its circular form, combined with its tendency to stretch over time, served as a personal talisman — a vehicle of the inevitability of entropy. Others have suggested it could have been a teaching aid, an impromptu model for thinking about tension, adaptability, or "field" conditions described in contemporary architectural discourse.
"We frame what we want people to notice and blur what's inconvenient. The clearer things look, the more I wonder what I'm missing."
- Notebook entry
Related themes: Repair, improvisation, adaptability, care.



END.