

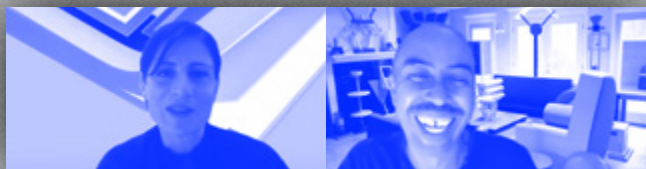
Abstract 2021

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# Columbia GSAPP

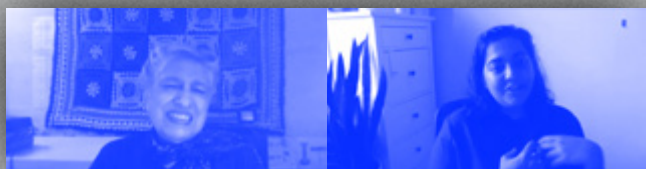
# Abstract 2021



(1) Amale Andraos,  
Stephen Burks

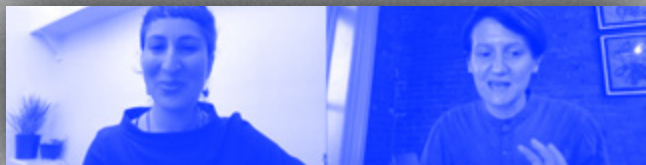


(2) Bryan C. Lee Jr.,  
Lee Altman

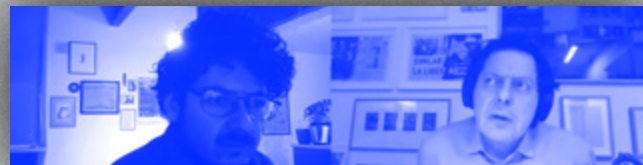


(6) Yasmeen Lari,  
Ateya Khorakiwala

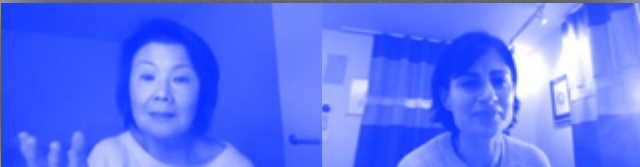
(8) Lola Ben-Alon,  
Lucia Allais



(9) David Barragán,  
Juan Herreros







(3) Toshiko Mori, Amale Andraos



(4) Tatiana Bilbao, Enrique Walker

(5) Sekou Cooke, Caitlyn Campbell, V. Mitch McEwen, Germane Barnes, Charlette Caldwell, Ife Vanable, Emanuel Admassu, Amanda Williams, Brian Turner, Felecia Davis, Yolande Daniels, Olalekan Jeyifous, Mario Gooden



(7) Amale Andraos, Ziad Jamaledine, Makram el Kadi



(10) J. Phillip Thompson, Weiping Wu



(11) Majora Carter, Mario Gooden













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## Dean's Statement

### Amale Andraos

On the occasion of the seventh volume in this series, I am honored to be able to reflect on the past few years and all that has changed, and so profoundly, thanks to the indefatigable efforts of our community.

Since its launch in 1988, *Abstract* has served as an always incomplete and yet indispensable cross-section through Columbia GSAPP, an opportunity to register evolution and change by acknowledging and archiving the incredibly diverse production that happens across the School's multiple platforms, programs, research centers, initiatives, events, exhibitions, publications and more. As a capsule in time, and a tool for recognition and reflection, *Abstract* invites us to observe, understand, and begin to articulate the School's vibrant mix of continuity and change.

Summer 2020 brought with it new hopes and new fears, and together we rode the waves of possibility, tragedy, grief, and joy. We began to see how resilient our community was, and how dedicated we were to using our unique skills—drawing, thinking, writing, planning, imagining, and more—in service of all that we could, and all that was needed. Together, we adapted to not seeing each other and also, in many cases, to seeing each other, and so much else, more clearly.

We were proud to support so many thinkers here who have worked in various ways on the front lines of institutional racism, battling white supremacy in all its forms. Over the summer and moving

into the fall of 2020 we began to work on an Anti-Racism Action Plan, in many ways buttressed and supported by the indelible efforts of our students, who assiduously held faculty and administration accountable for the ways in which GSAPP needed to change, and to change faster, and to amplify with greater intensity its commitment to supporting under-represented voices, histories, and practices. We came together in meetings, over letters, and on committees, and we began to reorient ourselves, acknowledging past and present institutional harm and shortcomings while also embracing the possibility of change, growth, and joy. We saw the ways in which the built environment was complicit in upholding social and racial inequities across all of its dimensions, while also engaging with pedagogical projects, discussions, publications, and events that re-inscribed the ways in which those inequities could start to be undone, through our own disciplines and practices.

It was challenging to do this within the context of a pandemic, which impacted all of us in different ways and also made so ruthlessly clear the inequities across cities and geographies, near and far, from our immediate neighbors to vulnerable communities around the world. And yet we were all still able to come together, online and gradually in person to register how the distance we were experiencing reminded us of the breadth of the built environment, about how the fields we study here—across architecture, planning, preservation,

urban design, and real estate development—can, when held with the right care and the right attunement, begin to shift how the world is understood, experienced, shaped, and lived in.

Like many, I experienced COVID-19 as both an acceleration and a stand-still, where time took a different turn simultaneously leaving us in the same place and transporting us to a different space, an estranged dimension. And yet, many of us recognized this dimension—our world of entangled crisis, of climate crisis in particular, now so clearly tangible and felt across multiple scales and contexts. The uncertainty we have long talked about is, today, no longer abstract—no longer removed in space or time. It is now what is shared most across our daily lives and experiences, however different they may be. And this existential uncertainty may be our only hope to revive a shared humanity that aspires for a more just, equitable, and sustainable planet.

On November 12, 2021, reflecting on how artists should confront the climate crisis, novelist and poet Ben Okri called for a “new existentialism,” writing: “Not the existentialism of Camus and Jean-Paul Sartre, negative and stoical in spirit, but a brave and visionary existentialism, where as artists we dedicate our lives to nothing short of re-dreaming society. We have to be strong dreamers. We have to ask unthinkable questions.” It is this kind of “existential creativity” and “visionary existentialism” that is needed right now, “to serve the unavoidable truth of our times, and...to serve the future that we must bring about from the brink of our environmental catastrophe.”

There is no other intellectual community—of the most outstanding

mentors and colleagues, of inspiring students and teachers, of incredible scholars and practitioners, and of talented and tireless administrators—that I would have liked to share the past seven and a half years with, striving together to center climate change as ground zero for conversation and to open up new territories for the imagining and practice of more meaningful architecture and more equitable cities. I launched my tenure as dean with these two ambitions and I am proud of what we have accomplished and honored and humbled to have served the School in one of its most challenging and, in many ways, rewarding moments in history.

My deepest thanks and admiration goes to all I have had the pleasure to serve and know in this time, and I look forward to the School’s ongoing and inspiring unstoppable “feistiness” as we continue to search for new and better ways to serve the built environment through our disciplines and practices.



## Editor's Note

*Abstract 2021* documents a historical first: an entire year of hybrid learning at Columbia GSAPP in response to unprecedented social distancing restrictions. Despite the physical limitations, the engagement of the GSAPP community in today's most pressing issues persisted with unwavering diligence.

The advanced architecture studio Reconnecting Beirut led by Professor Richard Plunz and Adjunct Associate Professor Victor Body-Lawson collaborated with UN-Habitat to ideate design solutions in response to the catastrophic explosions in a Beirut port on August 4, 2020. Among the proposals is a series of tactical micro-interventions for mending urban fabric by Gabriela Junqueira Franco '21 MSAAD and Mia Mulic '21 MSAAD (70).

Camila Nuñez '21 MSAAD and Skylar Royal's '21 MARCH project titled "Performing History" comprises a walk and performance from Wall Street to St. Mark's Church in-the-Bowery informed by the history of slavery in the Lower East Side and modern protests. The advanced architecture studio Protocols of Care: Bodies of Assembly led by Professor Mabel Wilson took as a starting point the mapping of Black Lives Matter protests in New York City (98).

The visual studies elective course Power Tools led by Adjunct Assistant Professors Lexi Tsien and Jelisa Blumberg encouraged students to challenge hierarchical structures through DIY knowledge building. Students organized, designed, and developed antiracist content that was disseminated through pop-ups, pamphlets, and a website.

A project by Ishita Ghosh '21 MSAUD, Chen Liu '21 MSAUD, and Chinedu Adiele '21 MSAUD for the Water Urbanism Studio: Envisioning the Mississippi as a Living River coordinated by Professor Kate Orff aimed to support the existing practices of the Chippewa tribe of Minnesota. Their proposal not only preserved the headwater streams but also introduced economic opportunities for the tribe (325).

The urban planning studio A Resilient Governors Island led by faculty Adjunct Associate Professors Stefan Al and Purnima Kapur developed a waterfront resilience program for Governors Island in New York Harbor. After simulating different flooding scenarios, students identified areas for fortification to protect historic structures.

The Onera Prize-winning thesis by Katlyn Marie Foster's '21 MSHP outlines geospatial analysis techniques for examining historic districts in relation to historic boundaries of redlining to contextualize preservation in historic and contemporary spatial privilege and disprivilege.

Like its precursors, *Abstract 2021* continues to spotlight the most exceptional student-authored work at Columbia GSAPP. This snapshot of the 2020–2021 academic year moreover documents the students' extraordinary inventiveness and imagination amid the new normal. The dedication of assistant editor Cheng Ju Lee '21 MSAUD, Paige Haskett '23 MARCH and photographer Adela Locsin '21 MARCH was critical in documenting this exceptional moment in time.

—Shannon Werle



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# *Master of Architecture*

## Amale Andraos, Dean and Program Director

The Master of Architecture program is a three-year accredited professional degree program and is regularly ranked as one of the top architecture graduate programs in the country. At GSAPP, architecture is understood as a form of knowledge inextricably linked to a broader context of environmental and global action—one that is oriented not towards what architecture *is* but towards what it *could be*. Today, the Master of Architecture program pushes this understanding of architectural experimentation and re-invention forward, with faculty and students weaving together critical discourse with technological skill, disciplinary expertise with expanded modes of practices, and design speculation with engagement in the issues of our time. The program finds its strength in the diversity of its faculty and their approaches to architecture. Its pedagogy is, simultaneously, rigorously structured and constantly re-examined to respond to ever-changing contexts—welcoming the openness, inquisitiveness, and intellectual generosity that enable and foster new avenues for individual development and collective directions for the field.

The Master of Architecture program is centered on the Architecture Design Studio and the three curricular sequences that orbit it: History and Theory, Visual Studies, and Technology. While the sequences run in parallel, they are also designed to be brought together at critical junctures: through the

intersection of specific exercises and through broader project integration. Supplementing these main pedagogical tracks is an Elective sequence and a required Professional Practice course.

The Architecture Design Studio sequence is divided between Core and Advanced Studios. The Core Studios consist of the first three semesters. They are structured to build knowledge on the fundamentals of architectural design through the theme of “Architecture and the City” and through an inclusive and expansive understanding of history, cities, typology, and performance. Core I focuses on acquiring analytical and drawing skills; Core II tackles the design of an institutional building; Core III concludes the sequence with the Housing Studio.

Advanced Studios consist of the last three semesters, with the last two composed of nearly eighteen studios that together explore new instruments, techniques, and formats of design across a multiplicity of existing realities. The studios function as laboratories for discussion, where students and critics practice new ways of mobilizing architectural concepts, programs, tools, and methods to intervene on specific layers of the everyday. The sequence encourages a focus on “Architecture and Environment” as a fundamental question for the field.

The History and Theory curriculum stresses a broad social and cultural approach to architectural history, with

particular attention to emerging global concerns. Architectural history is seen in terms of a rich matrix of parameters—political, economic, artistic, technological, and discursive—that have had a role in shaping the discipline. Students are introduced to a range of subjects broadly distributed in both space (geography) and time (chronology), and are encouraged to think and work across categorical East-West and North-South distinctions and the asymmetries these binaries often reproduce, and to consider both continuity and change across 1800 as the threshold that marks the end of the European Enlightenment and the beginning of worldwide industrialization.

The Visual Studies curriculum registers how the visual in design has multiplied exponentially, especially by way of computation, and invites students and faculty to rethink how it intersects with pedagogy, projects, and practices. Through a careful survey of drawing's new temporal nature, students discover methods to harness the potential of drawing, engage with today's visual diversity, and communicate extraordinary visions. The sequence offers a wide range of tools and techniques designed to expose students to the potentials and limits of these tools and techniques and is divided into three broad sets of workshops: analysis/representation, design environments, and fabrication. This variety of possible trajectories promotes individual approaches to visualization and fosters invention.

The Technology curriculum is founded on the belief that the realities of building technology are integral to design exploration and experimentation, especially as computational power and data have become ubiquitous, and changes in

manufacturing, materials, and information technologies are shaping new modes of thinking and making. Recognizing how performance—its measurement and verification—has become not only a primary function of architectural “solutions,” but also a generator of architectural concepts, the sequence aims to encourage critical and creative approaches to data and measurement and the discovery of new design opportunities and paradigms.





# *Advanced Architecture Studio VI*

## Mario Gooden, Sequence Director

The Advanced Studios build on the ideas and skills developed in the Core Studios, and bring together students in the MArch and MSAAD programs. These studios, which take place during the students' final two semesters at the School, have always explored the future of architecture in a diversity of ways.

In the spring 2021 semester, the 18 studios of the Advanced Architecture Studio VI course addressed an ambitious scope of concerns, considered in relation to architecture's social, material, environmental, and political potentials, with projects ranging from communal kitchens for co-housing apartment buildings, to adaptations of an abandoned factory as civic infrastructure, to pavilions for a prison-based educational institution. In contrast to previous semesters, many of the studios considered sites in New York City and the surrounding region, with projects located throughout the city's neighborhoods: the North Bronx, Edgemere and Jackson Heights in Queens, Crown Heights and Sunset Park in Brooklyn, and Washington Heights in Manhattan, and from Morningside Park, just steps from Avery Hall, to the larger region, with projects sited in Patterson, New Jersey and the Hudson River Valley.

While prompted by limitations imposed by the COVID-19 pandemic, this rapprochement with New York and its environs allowed students and faculty to engage the social and political conditions of the city, with studios addressing urban migrations and displacements, care and belonging, and the claiming and

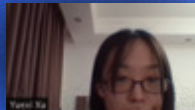
contesting of space through monuments, institutions, and infrastructures. Many studios took advantage of the geographic proximity, often combined with remote forms of communication, to develop dialogues with local community-based organizations, while other studios used the shift to virtual encounters, necessitated by the pandemic, to assemble an international network of collaborators.

Tracing a through-line across the various studios, sites, and approaches, students and faculty developed a shared conversation in the series "Unlearning Whiteness," with a group of distinguished guest speakers that included theorist Jack Halberstam, designer Mary Ping, artist Mel Chin, and political scientist Achilles Kallergis. These sessions considered the political and ethical imperatives of architecture and urbanism as they intersect with questions of subjectivity, labor, ecology, and migration.

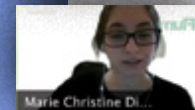
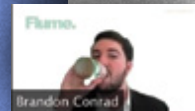
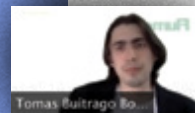
Throughout the semester, students and faculty navigated the ever-shifting effects of the global pandemic, which required agile approaches to the collective work of each studio and to the sites, actors, and programs considered in their designs. In the context of the pandemic, the studios affirmed the potentials of architecture as a sociopolitical project, one that is committed to the city and its communities yet remains open to uncertain futures.



# Advanced Architect

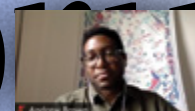
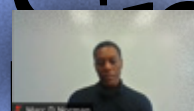
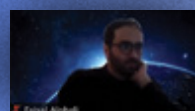
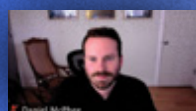
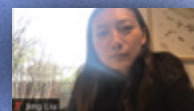
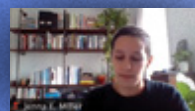
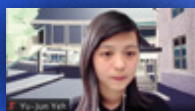


Ife Vanable (Studio Critic),  
Julian Glover, Yuexi Xu '21 MSAAD,  
Rick Lowe, Amanda Williams  
(Studio Critic), Kimberly Dowdell,  
Todd Palmer, Milton Curry.



Hajir Saleh Al Khusaibi '21 MSAAD, Christoph Kumpusch  
(Studio Critic), Victor Body-Lawson (Studio Critic),  
Gamynne Guilotte, Spyro Jacobsen '21 MSRED,  
Mike Kolodesh '21 MArch, William Lee,  
Thomas Abreu '21 MSRED, Nicholas Karytinis,  
Tomas Buitrago Botero '21 MSRED, Brandon Conrad  
'21 MSRED, Kate Ascher (Studio Critic),  
Marie Christine Dimitri, Shamkhal Hasanli '21 MSRED,  
Aaron Schiller, Todd Brown; Work by Tomas Buitrago,  
Brandon Conrad, Marie Christine Dimitri.

Chen Yang '21 MSAAD, Yu-Jun Yeh '21 MSAAD,  
Taylor Urbshott '21 MArch, Jenna Miller,  
Jing Liu (Studio Critic), Cyra Levenson,  
Daniel McPhee, Faisal Alohalil '21 MSAAD,  
Marc Norman, Andrew Brown.

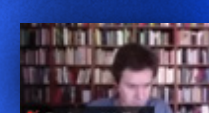
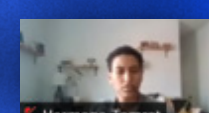
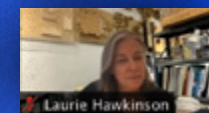
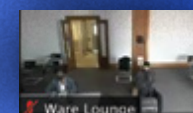
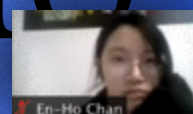
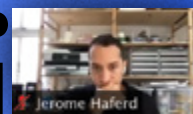
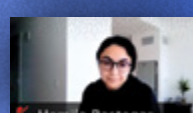
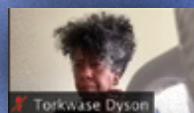
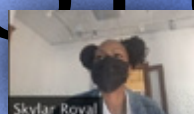
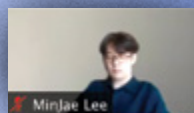
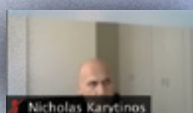
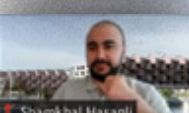
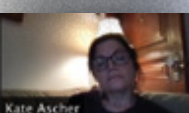
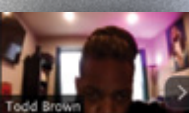
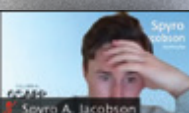
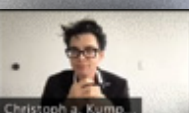
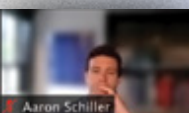


# Spring

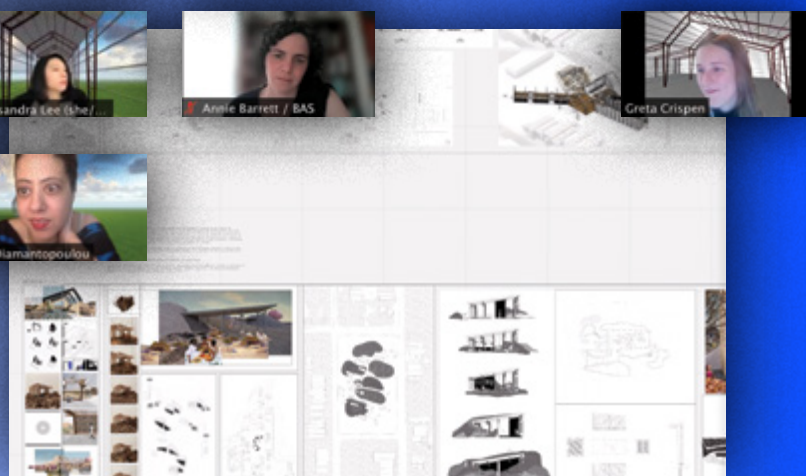
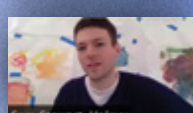
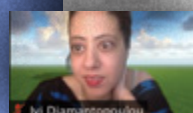
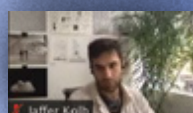
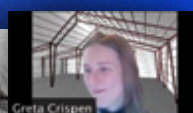
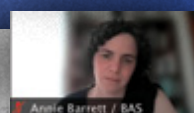
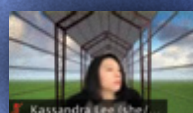
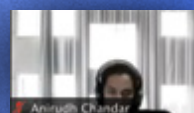


# Lecture Studio VI

21



Hemila Rastegar-Aria '21 MSAAD, Skylar Royal '21 MArch, Abdelrahman Albakri '21 MSAAD, En-Ho Chan '21 MSAAD, MinJae Lee '21 MArch, Torkwase Dyson (Studio Critic), Mabel Wilson, Zachary Fabri, Laurie Hawkinson, Jerome Haferd, Juan Herreros, Enrique Walker, Hermona Tamrat, Mario Gooden (Studio Critic).

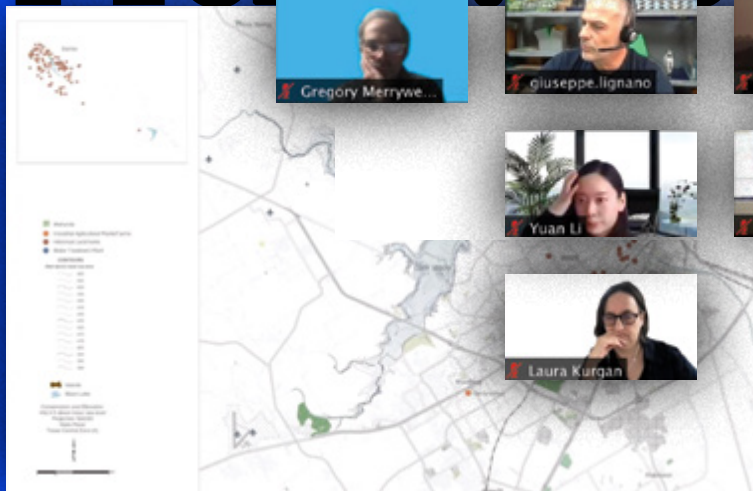


Jaffer Kolb (Studio Critic), Kassandra Lee '21 MArch, Ivi Diamantopoulou (Studio Critic), Greta Crispen '21 MArch, Adela Locsin '21 MArch, Jess Myers, Ellie Abrons, Samuel Stewart-Halevy, Kyle Miller, Annie Barrett, Anirudh Chandar '21 MArch; Work by Greta Crispen.

# 2021

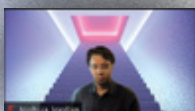
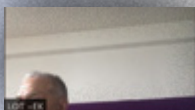
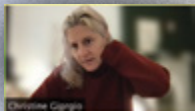
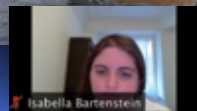
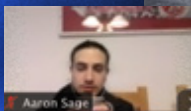
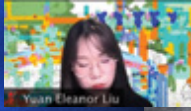
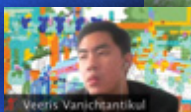
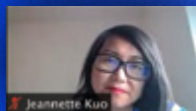
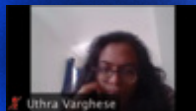
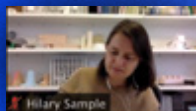


# Advanced Architect



Galia Solomonoff (Studio Critic), Yue Sarah Shi '21 March, Laura Kurgan, Camille Brustlein '21 March, Giuseppe Lignano, Udit Goel, Benjamin Cadena, Gregory Merryweather, Amber Shen '21 March, Joey Xu '21 March, Patrice Derrington, Yuan Li '21 MSAAD; Work by Amber Shen.

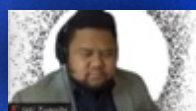
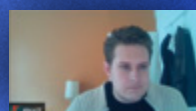
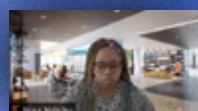
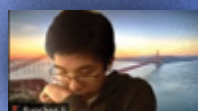
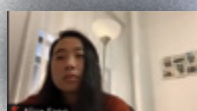
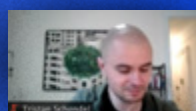
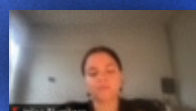
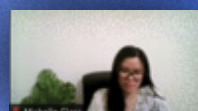
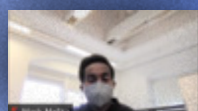
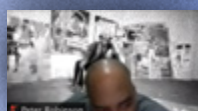
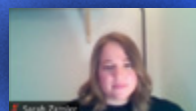
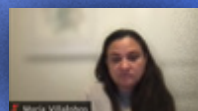
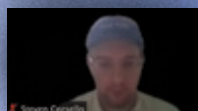
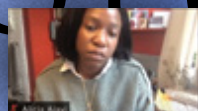
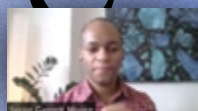
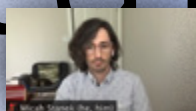
Hilary Sample, Isabella Bartenstein '21 MArch, Veeris Vanichtantikul '21 MSAAD, Angela Sun '21 March, Benjamin Cadena, Benjy Akhavan '21 MSAAD, Reinhold Martin, Veronica Liu, Mimi Hoang, Uthra Varghese, Joel McCullough '21 MSAAD, Yuan Eleanor Liu '21 MSAAD, Jeannette Kuo, Aaron Sage '21 MArch; Work by Joel McCullough and Angela Sun.



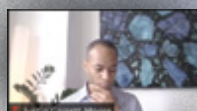
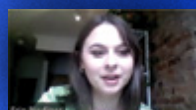
# Spring



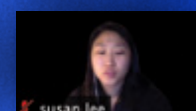
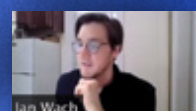
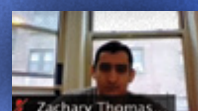
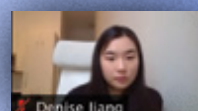
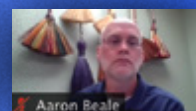
# Lecture Studio VI



Tristan Schendel '21 MARCH, Mark Melita Kantai '21 MSAAD, Michelle Clara '21 MSAAD, Jelisa Blumberg, Justin Garrett Moore (Studio Critic), Peter Robinson, Jati Zunaibi, Ruochen Ji '21 MSAAD, Nina Ndichu '21 MSAUD, Matthew Brubaker '21 MARCH, Chat Travieso, Alicia Olushola Ajayi (Studio Critic), Shalini Agrawal '21 MARCH, Jennifer Tello '21 MSAAD, Micah Staneck, Steven Corsello '21 MARCH, Ada Tolla, Maria Altagracia Villalobos Hernandez, Sarah Zamler '21 MARCH.



Ada Tolla (Studio Critic), Giuseppe Lignano (Studio Critic), Oliver Bradley '21 MARCH, Thomas de Monchaux, Cam Fullmer, Mario Gooden, Josh Jordan, Justin Garrett Moore, Alicia Olushola Ajayi, Christine Giorgio, Enrique Walker, Emily Ruopp '21 MSAAD, Gordon Kipping, Jonathan Foy '21 MARCH, Alice Fang '21 MARCH.



# 2021



Aaron Beale, Denise Jiang '21 MSAAD, Chia Jung Andy Wen '21 MSAAD, Zachary Thomas Bundy '21 MARCH, Ian Wach '21 MARCH, Susan Lee '21 MSAAD, Noah Schwarz, Felix Burrichter, Stephen Burks (Studio Critic), Jasmine Jalinous, Abhinav Gupta '21 MARCH, Glenn Adamson.

## &lt;REIMAGINING THE INDUSTRIAL WATERFRONT: UTICA'S HARBOR POINT&gt;

Kate Ascher, Christoph Kumpusch

Students developed components of a vision for a new mixed-use community on a remediated 100-acre waterfront site located alongside the historic harbor in Utica, New York, a once-booming industrial city located 95 miles west of Albany. The client, Harbor Point Development Corporation, is an entity that was created ↗

Qianyue Ma,  
Keon Hee Lee

By providing 69,000 square feet of waterfront open space, Mohawk Landing creates a lively community and provides the residents with an interactive lifestyle for all seasons.

Shamkhal Hasanli,  
Jindian Fu

Throughout the planning stage, we focused on increasing pedestrian foot traffic to Harbor Point, developing affordable residential complexes with Utica prices, developing public spaces attractive for residents, and starting economic activity in Harbor Point.





by the government to facilitate development by issuing design guidelines, oversee the competitive procurement process, and craft the public-private partnership to unlock value at this formerly industrial waterfront site. The students' work served as a foundation and inspiration for the development guidelines moving forward.



## Spyro Jacobson, Wanqi Sun

This proposed site development not only to fulfill housing needs but also embarks on a new urban dimension for Utica's historic Harbor Point.

## Thomas Abreu, Michael Kolodesh

Social equity was a crucial part of the development, so we defined many of the programs around helping the large refugee population in Utica by setting aside affordable units, housing local nonprofits in community facilities, and setting aside market stalls.



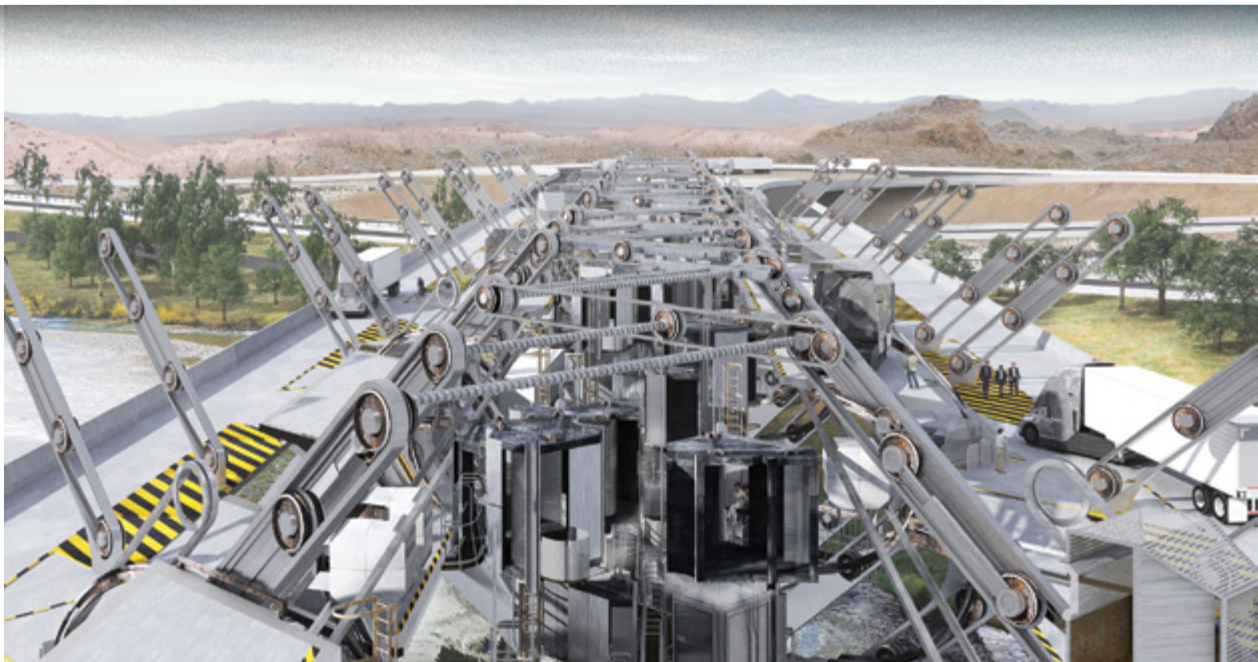
## &lt;EVERYTHING MUST SCALE (5): THE LAST TRUCK STOP&gt; Michael Bell

Everything Must Scale has been a working title organizing a series of studios that have explored a realm where architectural design is enacted at scale—in the economic sense of the term where commodities or services or even architecture are replicated over entire territories and as construction blocks of commerce and social organization. Some of these components are changing already; as a

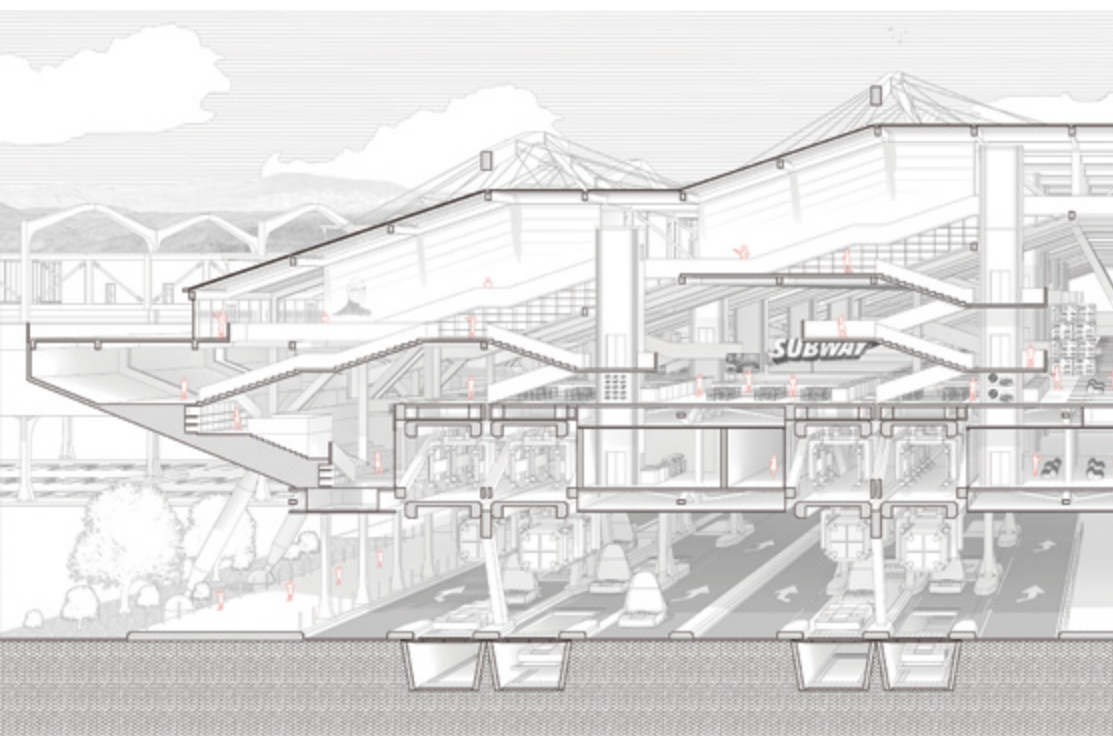


## Jacob Hu

SYNC Construct is a 1500-foot-long truck stop that is implanted onto the continuum of the highway system. The machine merges synchrony with procession and bridges the structuralist impression of the static with the dynamism and rhythm found in the mechanics of today's vast logistical network.



## Liwei Guo

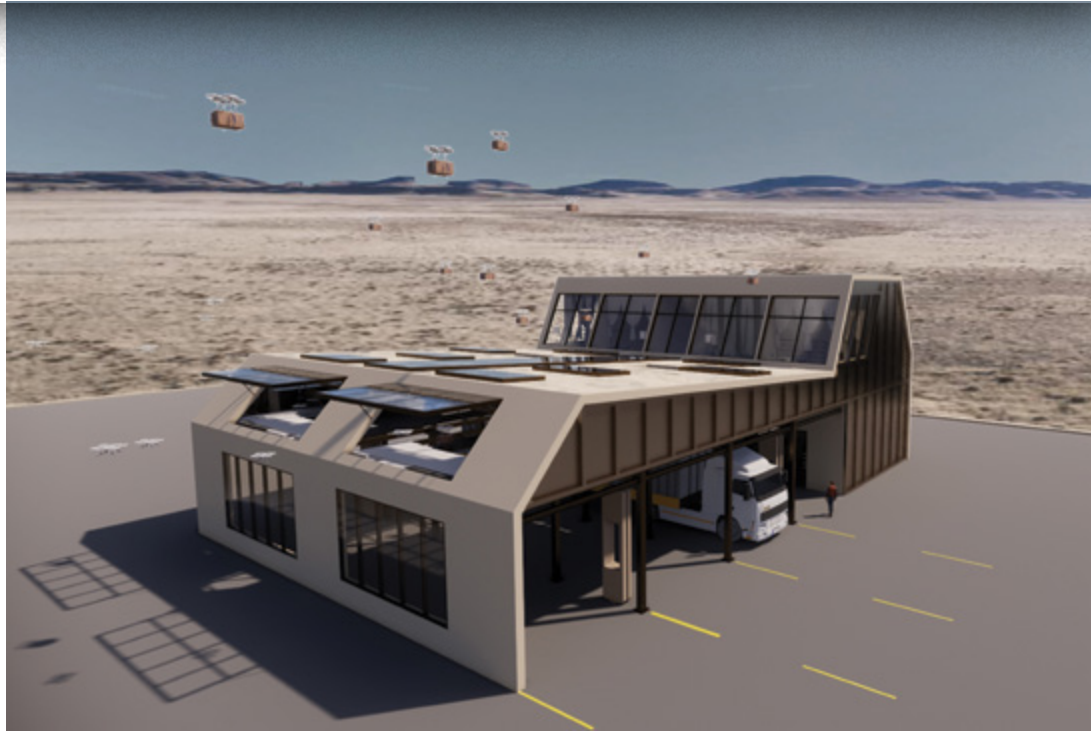




kind of precipice agent, they are a promise of more change. Perhaps the actual change—eventual and more meaningful—is only possible with a chaotic, still unclear ensemble of propellants. This studio explored one of these items with an eye towards how architecture can act as an enzyme to affect the wider field it participates in.

## Zihan Xiao

*Droneport Truck Stop* combines a compact truck stop and a drone delivery center. The latter provides services for the post office and delivery companies in the community.



## Ziyi Wang



## &lt;A PLIABLE PLACE&gt; Stephen Burks

Products, furniture, and interiors all have the capacity for creating a sense of place and give meaning to the gathering of our communities. Although they are not architecture, they are, in fact, architectural in their contribution to the definition of our lives, homes, neighborhoods, and cities. This studio presented the challenge of fabricating our built environment using traditional craft

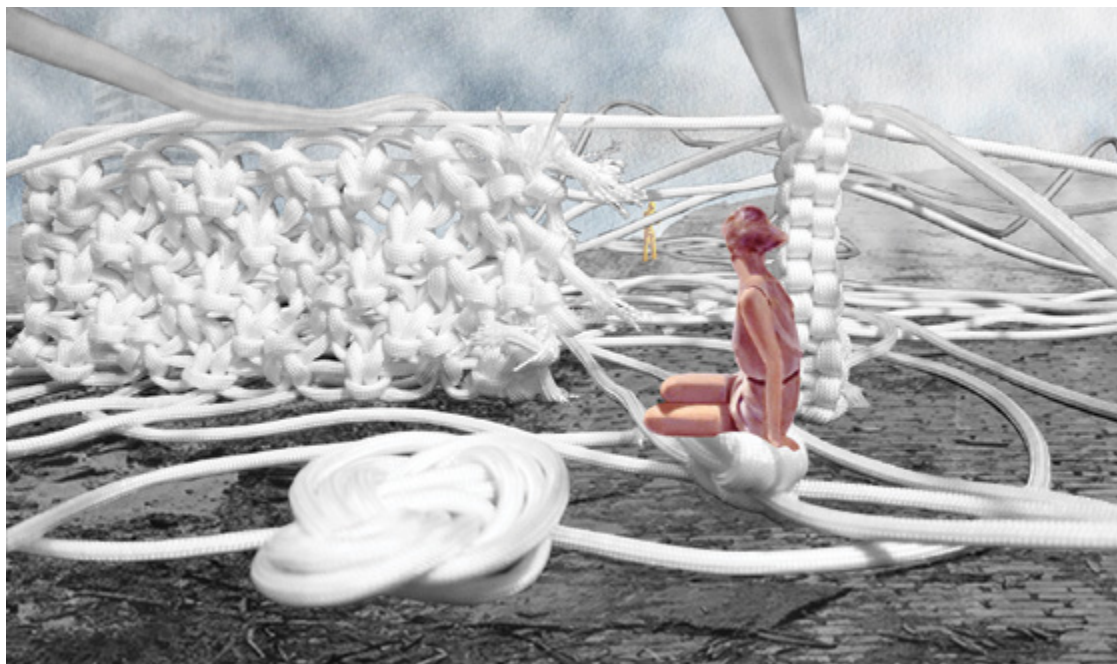


Abhinav Gupta



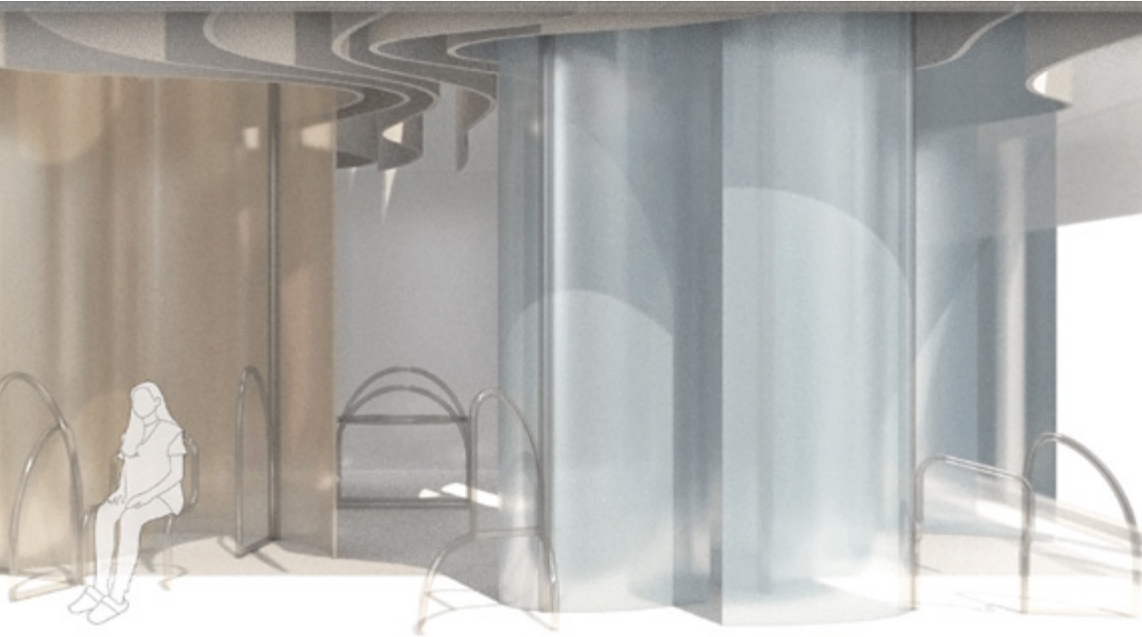
## Ian Wach

Starting from Anni Albers' *Knot* (1947), I focused on exploring the gradient of the relationships between the three strings that form the work's tangled composition. As I attempted various methods of studying the painting, I drew parallels between the work and types of networks.





techniques as inspiration that allows for a more pliable definition of surface, structure, and enclosure. Through the exploration of three universal objects as architecture—a basket, a hut, and a village—students developed new approaches to making. Particular emphasis was placed on learning and sharing hands-on cross-cultural fabrication techniques to be as inclusive as possible of all global perspectives when considering architecture and the identities it serves.

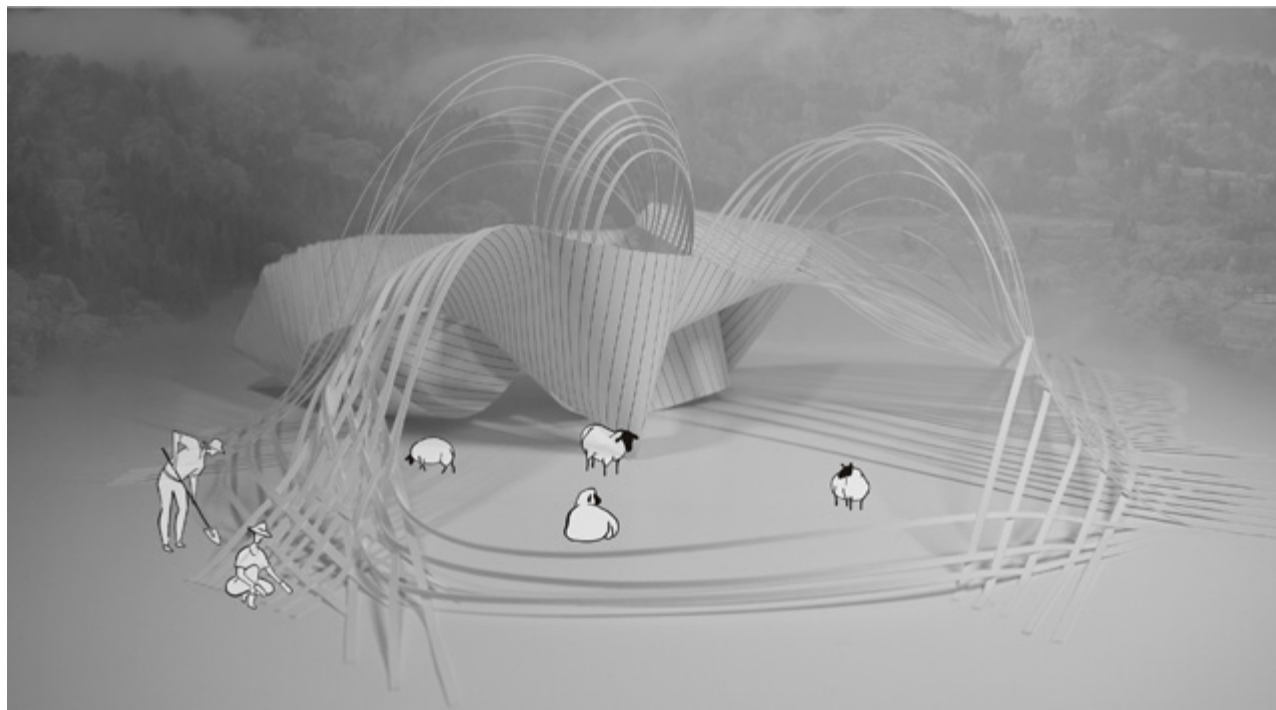


## Zhenting Denise Jiang

*A Letter* is inspired by Anni Albers' weaving artwork titled *Open Letter* (1958). Analyzing and interpreting Albers' work, the project evolved from a weaving sample to a vessel, partition, and interior space. The design allows for different readings of a "letter" through flexible configurations and layers of interactions.

## Chia Jung Wen

This project starts from an exploration of Anni Albers' *Pasture* (1958) ... a micro-architectural structure of woven and interlocking spaces creates various rooms that serve multiple individual and collective uses.





## &lt;TAKING UP SPACE, MAKING PLACE: BRONX EDITION&gt; Nina Cooke John

If, according to Eric Klinenberg in *Palaces for the People*, social infrastructure fosters a supportive community, rescuing residents when hard infrastructure fails and promoting a sense of belonging, community pride and, ultimately, civic engagement, and if, according to the *NYC Street Design*, programming public space supports local businesses, connects residents with resources, builds community ↗

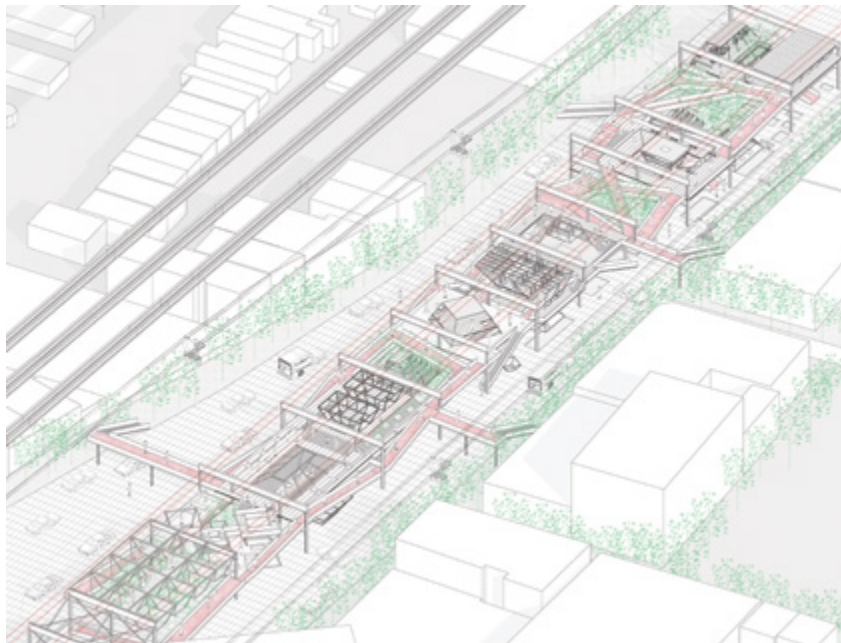
## Angel Castillo

*Williamsbridge Workshop* is a community-centered initiative where underserved young adults access paid hands-on training and education in trades and skills from local master workers. The workshop bridges trans-generational divides through knowledge exchange, which gives young adults the skills necessary for economic mobility.



## Zhijian Sun

Circulation spaces and human-scale, pyramid-shaped volumes with different scales, programs, facades, and forms organize the pedestrian system. Negative space between volumes, gardens, and ramps provide public space for residents to participate and communicate with the community.



## Yueyang Wang





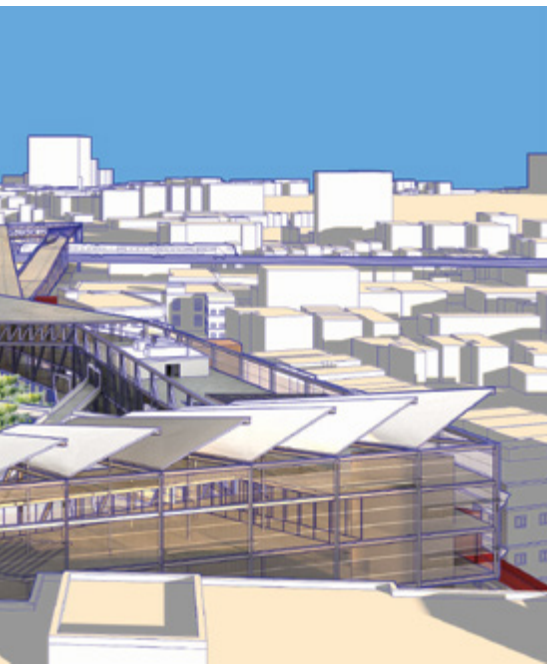
and “encourages local ownership of the public spaces in which they occur,” how can we create public space that anchors Black immigrants to the Bronx? This studio walked the Bronx, engaged residents and local business owners, and imagined different urban futures that challenge ideas of inside and outside while creating event spaces in the streets that support the layered history of the place and the people.

## Urechi Oguguo

*A Saturday Morning Ritual: A Space for Re-Membering* focuses on centering and celebrating black hair, the art of hair-braiding, and the rituals that it entails. It does this while expanding on the efforts of local art programs such as the Bronx-based art organization BxArts Factory.

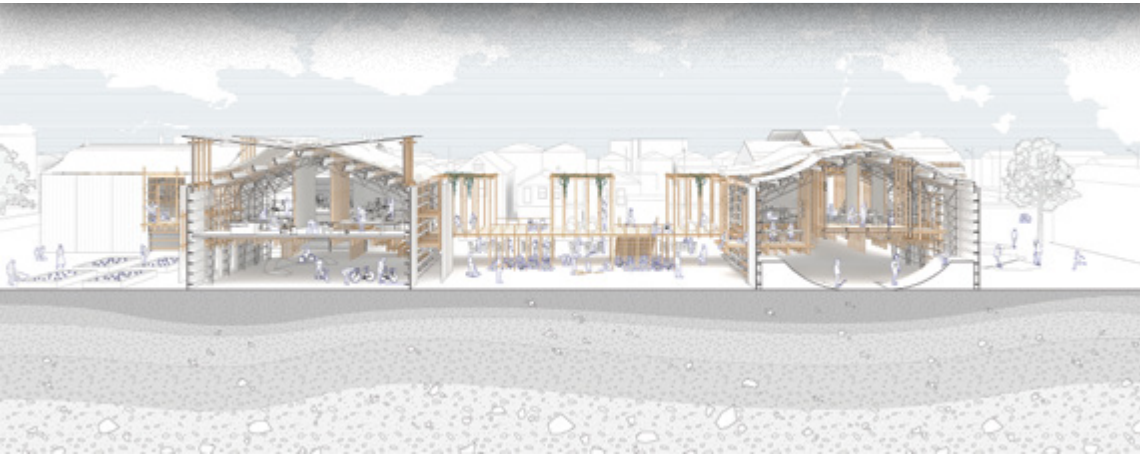


## Jiayue Xu



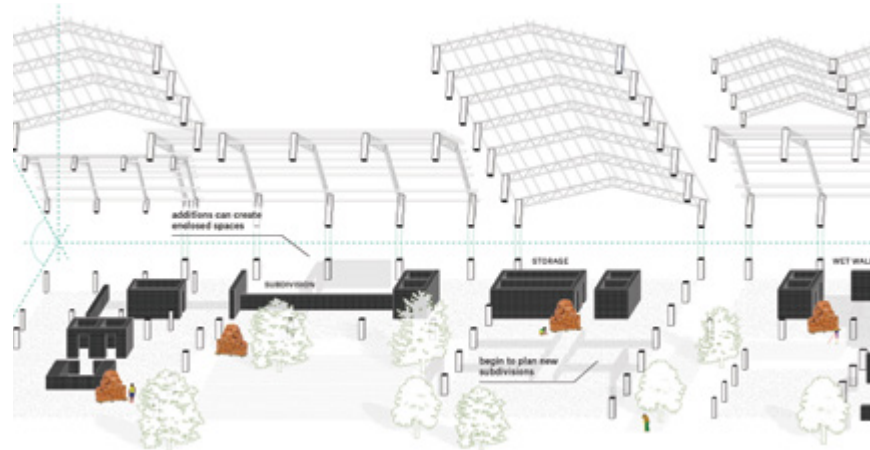
## &lt;ONE BARN FIVE OBSTRUCTIONS&gt; Ivi Diamantopoulou, Jaffer Kolb

This studio investigated the architectural potential of pre-engineered buildings as a new civic magnet in the seaside neighborhood of Edgemere, Queens. Students worked to explore how architects might respond to a host of needs brought to the fore in the last year—bending a disciplinary tool around our unique socio-political situation while working through detailing and assembly. The studio engaged ↗



## Charlotte Sie Wing Ho

Due to ease of assembly and disassembly, these wooden, flexible spaces can be altered and designed by the community on their own, fostering a sense of agency and ownership.



## Shuang Bi

By including water into our everyday domain, this design disrupts normality and disorients lives. The ground is no longer solid, uniform, and stable; it fluctuates with the changing wetness in the environment.

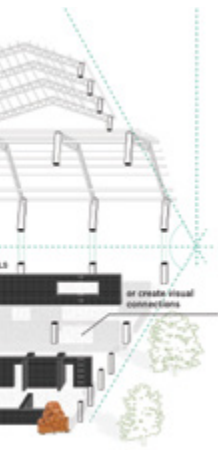


a real site, building system, community and consultants to explore the intersections between architecture and public agency.



Anirudh Chandar

This project operates under the banner of a Resilience School hoping to increase the social and environmental resilience of the at-risk community in Edgemere, Queens.



Adela Locsin

Built incrementally with waste bricks made from construction and demolition waste, spaces are organized around an infrastructural spine that delineates access to water and gas on site. While the spine is meant to provide the most basic access and utilities, residents and community members are encouraged to graft onto the spine and reconfigure spaces as their needs change.

Reem Yassin



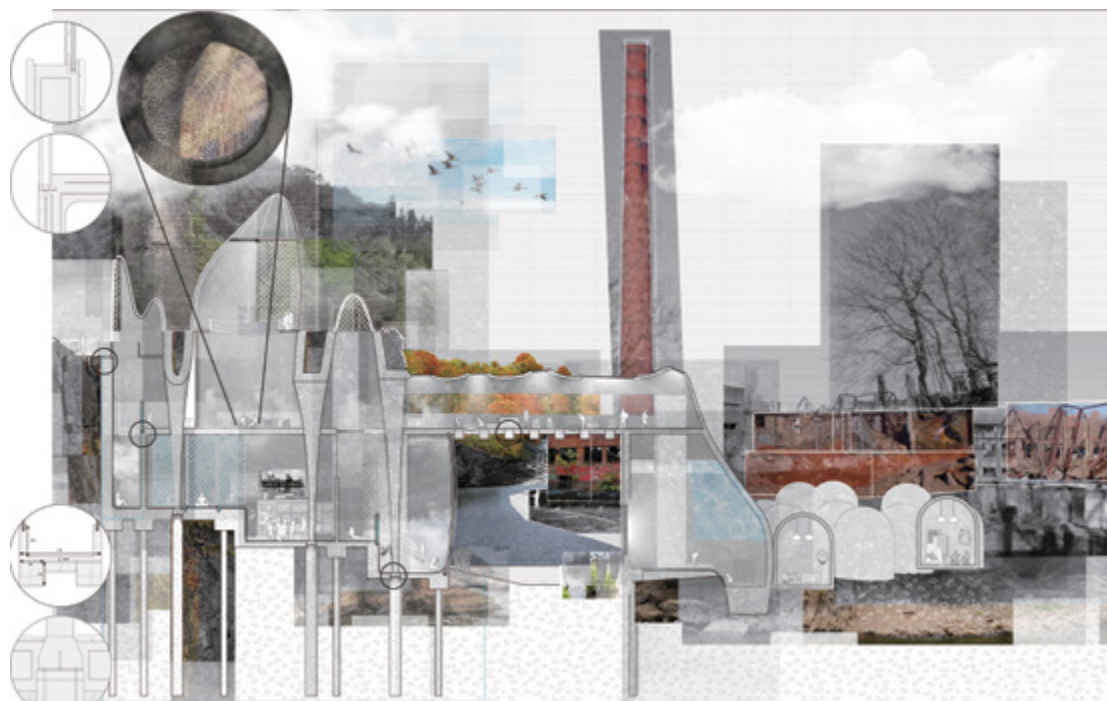
## &lt;MIGRATIONS: BODIES IN MOVEMENT&gt; Torkwase Dyson, Mario Gooden

This studio was informed by the history of radical thinking about 20th-century architecture yet looks beyond to the manner of space-making by Indigenous Peoples and Black bodies throughout the diaspora who have creatively appropriated various aspects of the landscape and built environment to invent new uses, programs, and forms of visibility. Each student conducted preliminary research ↗



## Skylar Royal

*(em)powermist* analyzes the intersection of water, technology, and race and their migration at the molecular scale to provide information and create layered spaces of education and liberation to return to at the environmental scale.



## En-Ho Chan



about the migration of different species (human, animal, insects) induced by climate change; the search for freedom and spatial justice; or biological responses to changes in ecological systems. Each student then proposed a design intervention at the site of the historic Hinchliffe Stadium in Paterson, New Jersey on the escarpment above Paterson's National Historic Great Falls to consider a project for environmental liberation.

## Abdelrahman Albakri

A journey through this project allows for the unexpected discovery of diverse spaces with doors and corridors leading to unknown havens. Textures, materials, light, and sound creates a sense of stillness to generate a contemplative environment. Natural and artificial light filters into each space differently through rectangular slots in the roof.



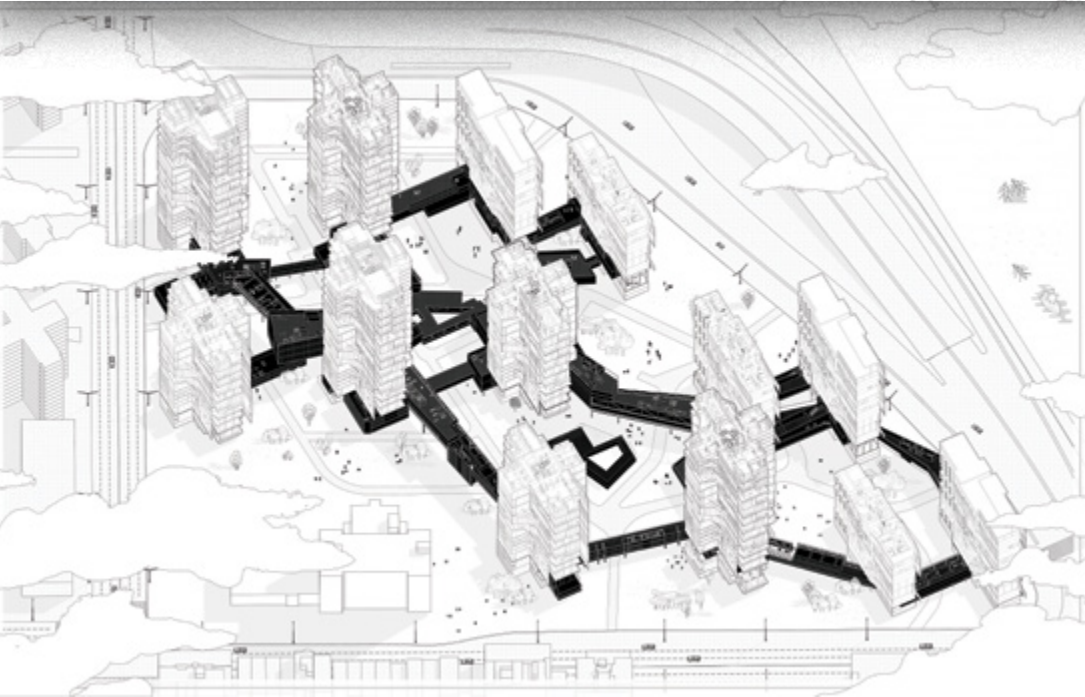
## Hemila Rastegar-Aria





## &lt;HYBRID RESIDENTIAL INFRASTRUCTURES IN HARLEM FOR LIVING TOGETHER&gt; Juan Herreros

Beyond the usual operating from scratch, or refurbishing buildings by preserving their core and shell, the management of existing structures and the built environment at large arises as a great battlefield of the future of the (existing) city. This agenda, a design problem in itself, demanded going beyond conventional architectural strategies to develop more comprehensive, integrated, and open ↗



## Brian Turner, Nanjia Jiang, Fan Liu

The new Wagner Houses integrate industrial and domestic realms with experimental live-work-learn co-ops to address isolation, unemployment, and unaffordable housing. The Houses allow residents to earn wages and build creative businesses as they build efficient collective homes.

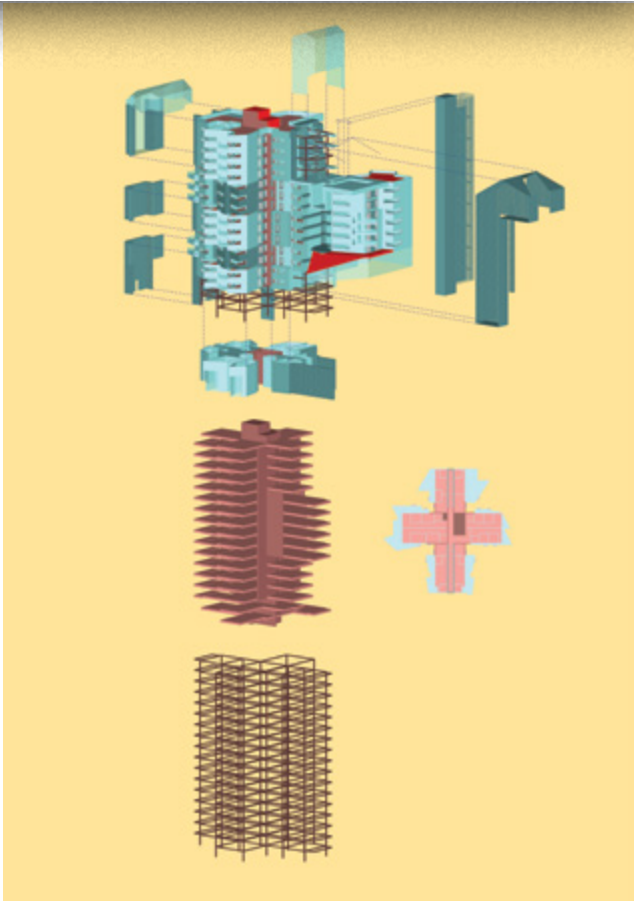
## Maxwell Chen

Through the typological correction, both private and common spaces are activated with increased visibility and diversity, inviting families, residents, and the neighborhood to find meaningful connections in this new housing complex.



big-scale approaches. Previous studios, under the umbrella of “Typological Corrections,” have explored case studies located in central and consolidated areas of the city that are either in a bad condition, underutilized, or significantly vacant, to offer them a second chance. This studio focused on social housing developments commonly referred to as the Projects in Harlem, NYC.

Mia Mulic



Gabriela Junqueira Franco

A new CLT structure restores and activates an unused ground floor, allowing the Wagner Houses to grow and expand serving through housing, retail, and hydroponic cultivation along with training facilities.



## &lt;FACTORY&gt; Mimi Hoang

This studio reconsidered the entire Bush Terminal complex, located on the Brooklyn waterfront in Sunset Park, and envisioned a new future for it as a center for new industries. Students designed an urban factory complex or infrastructure that creates collective spatial structures for the manufacturing of artifacts and the shaping of exchanges. The work required critical engagement



## Yuan Janice Chen, Charlotte Ziye Yu

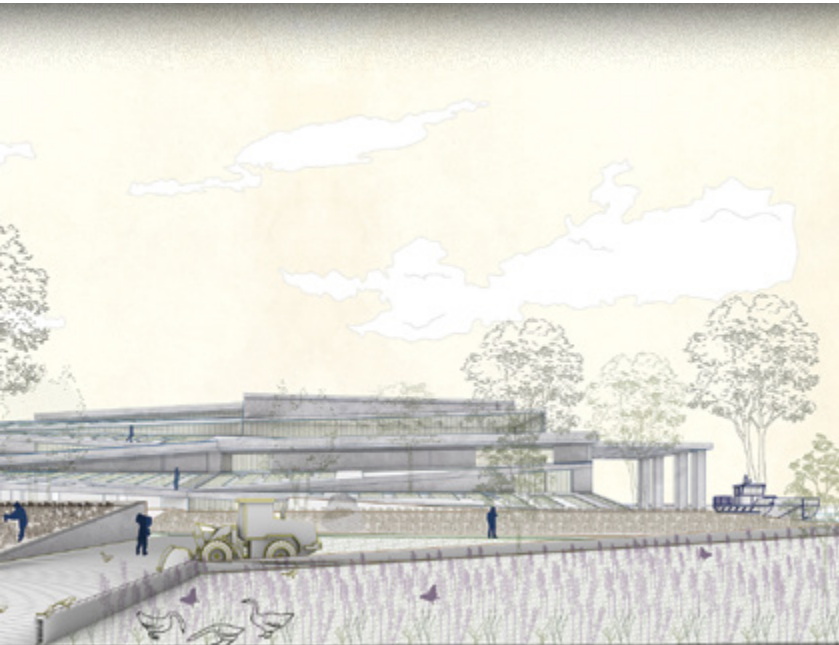
*REFAB Factory* in Bush Terminal adopts a circular “Take, Make, Reuse” attitude. The factory gathers pre- and post-consumer waste; creates jobs through mending, artisanal upcycling, natural dyeing, and material-tracking; and gives the garments a second life as respun fabric for local designers, recycled insulation for adjacent warehouses.



## Eunjin Yoo



with the many historical, social, economic, and technological contexts surrounding labor issues and influencing the design of factories. Students conducted critical research and re-framed these conditions as innovative spatial formats for manufacture in their architecture.

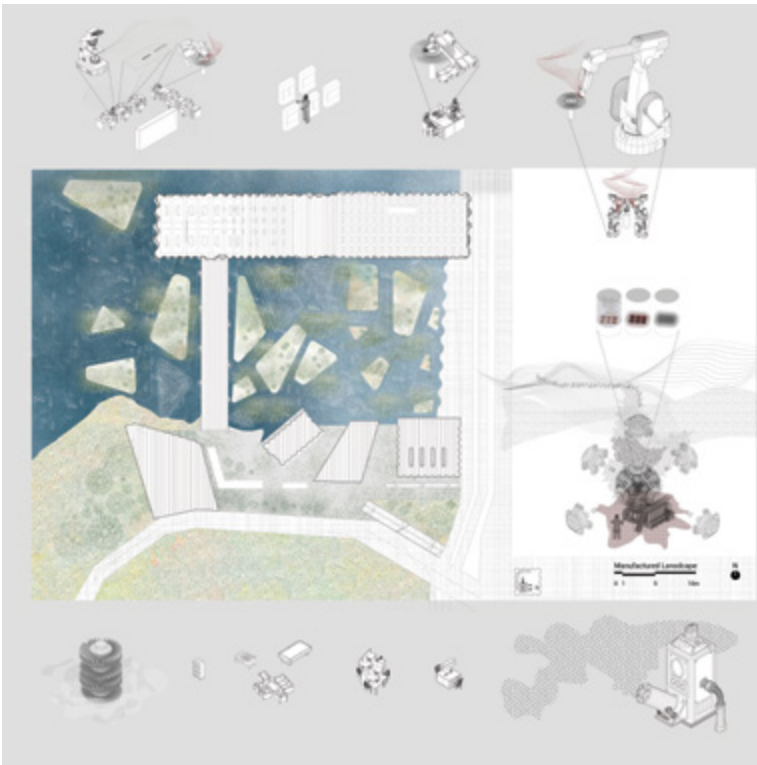


Yasmin Ben Ltaifa,  
Ali El Sinbawy



Konstantina  
Marinaki,  
Magdalena Paz  
Valdevenito

*Manufactured Landscape* opposes all processes related to the diamond industry, and inverts the vertical and secretive diamond district into a landscape that, instead of eroding the earth, contributes to building its natural habitat and making visible the craftsmanship and technology behind its sourcing.



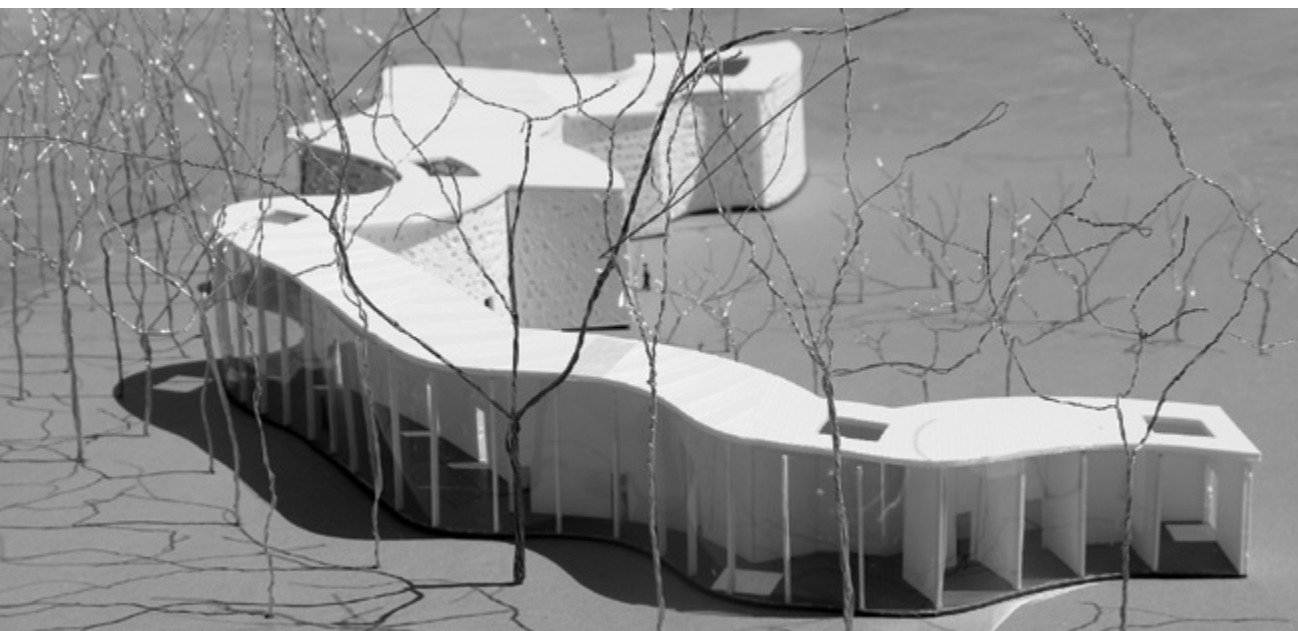
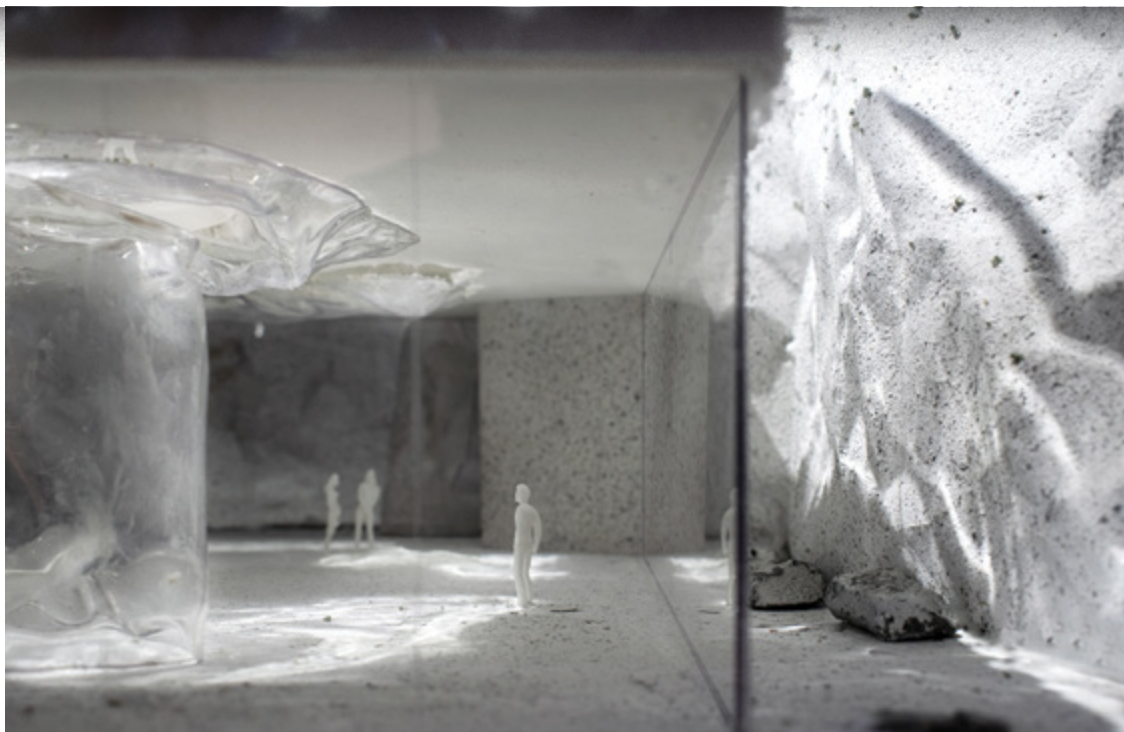


## &lt;PAVILION FOR THE BARD PRISON INITIATIVE&gt; Steven Holl, Dimitra Tsachrelia

In this studio, students designed a 12,000-square-foot pavilion to house the offices of the Bard Prison Initiative (BPI) Program in the Hudson Valley for a staff of 30, as well as an exhibition space with high ceilings and natural light. The BPI portion of the program is 5,000 square feet of offices, conference, and meeting room spaces, while the exhibition portion of the program (7,000 square

Guoyu Cris Liu,  
Hao Chang

*Weight of Light* is an underground building with a walkable green roof. Several embedded, acrylic-cast “weights of light” reflect, refract, and pass light through their uneven surfaces to create a unique atmosphere.

Melissa Chervin,  
Vera Montare  
Savory

*Tree Trace* is defined by a façade system of cracked glass with a structure inspired by the branches in a forest.

feet) is open and flexible for future uses. The Hudson River School painters Thomas Cole and Frederic Church were cited by the client, Bard College, as an inspiration for the ideals of the exhibition spaces.

Frank  
Shengmian Wang,  
Xianghui Kong

*Architecture as Canvas for BPI*  
captures the essence of the  
surrounding environment on  
its exterior façade, allowing the  
environment to speak for itself.



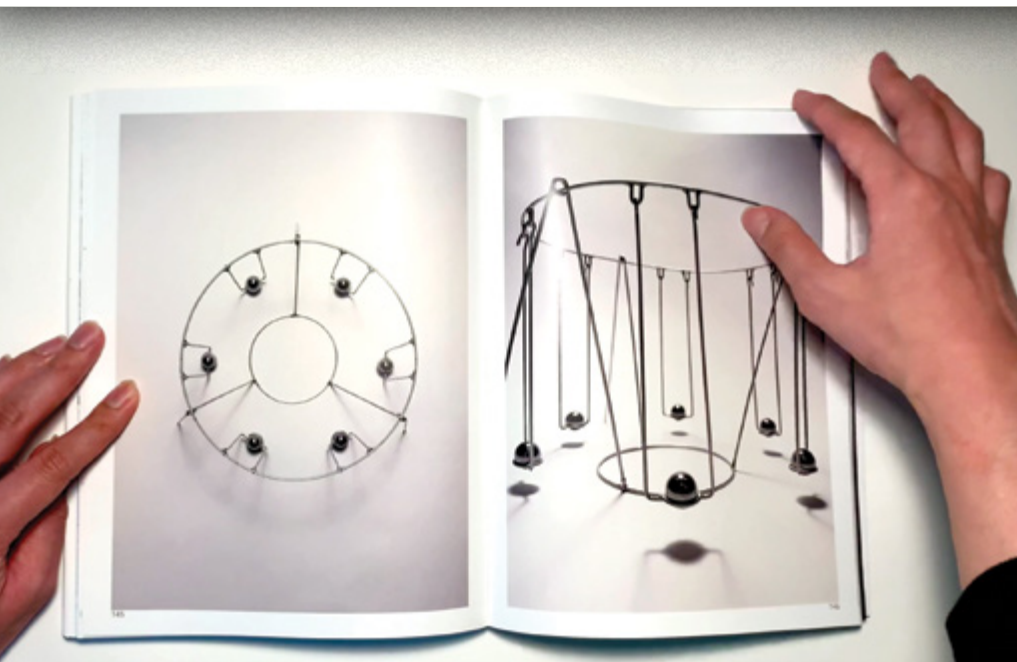
Yuedong Lin,  
Tian Yao

This project silently implies  
the immense presence of  
light through measured  
spaces of illumination,  
although small in size.

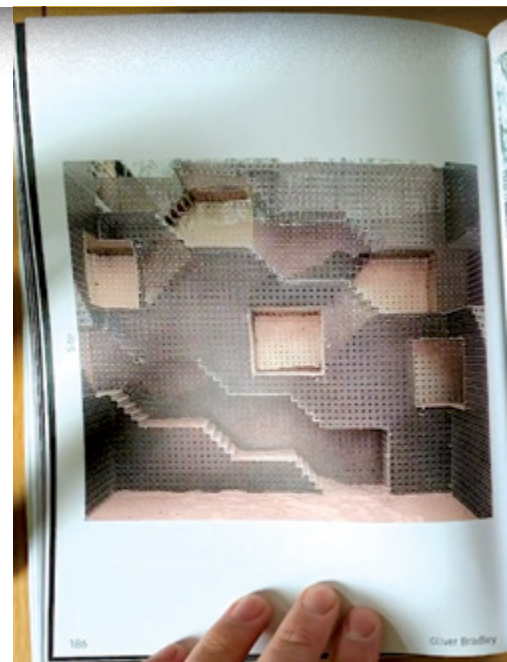


<MAKERGRAPH> Giuseppe Lignano, Ada Tolla

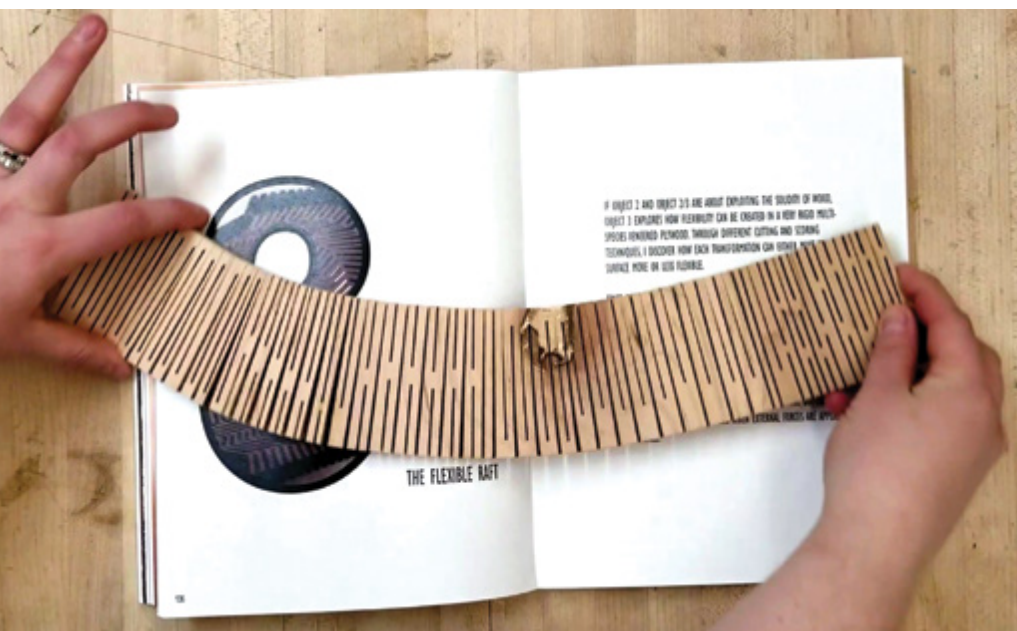
Although it is not a thesis, this studio adopted a thesis-like sensibility in a committed sequence of highly-structured, sequentially-contingent, iterative, accumulative, and transformative assignments. In parallel and mutual influence with those assignments, students created a visual, material, and verbal archive/feed of obsessions and preoccupations from their own life experiences beyond



Liang-Yu Lin



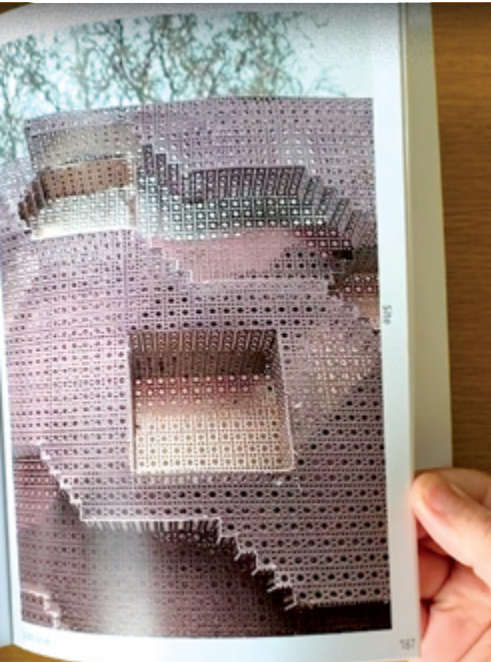
Oliver Bradley



Emily Ruopp

This project exposes how the scars from drilling and dynamite activity, the massive elevation change that symbolizes the socioeconomic differences between Columbia University and Harlem, the danger of abandoning a construction site, and the use of gates, fences, and boundaries to divide and control communities of color can leave a void, an imprint, that persists through time and space.

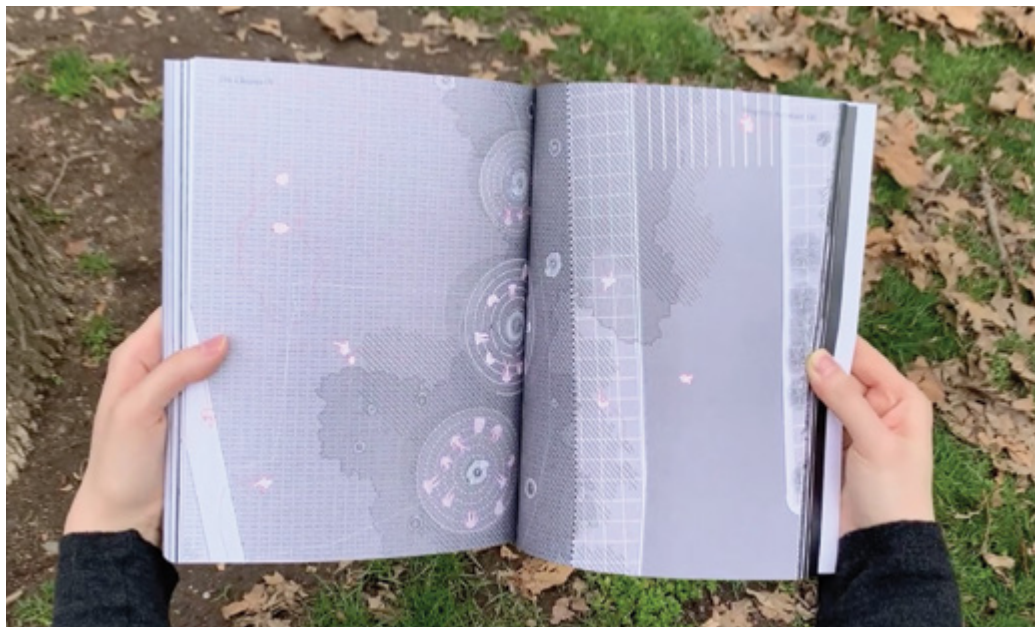
the design world. This required and inspired radical authenticity and creative courage.



Cameron Fullmer

## Alice Fang

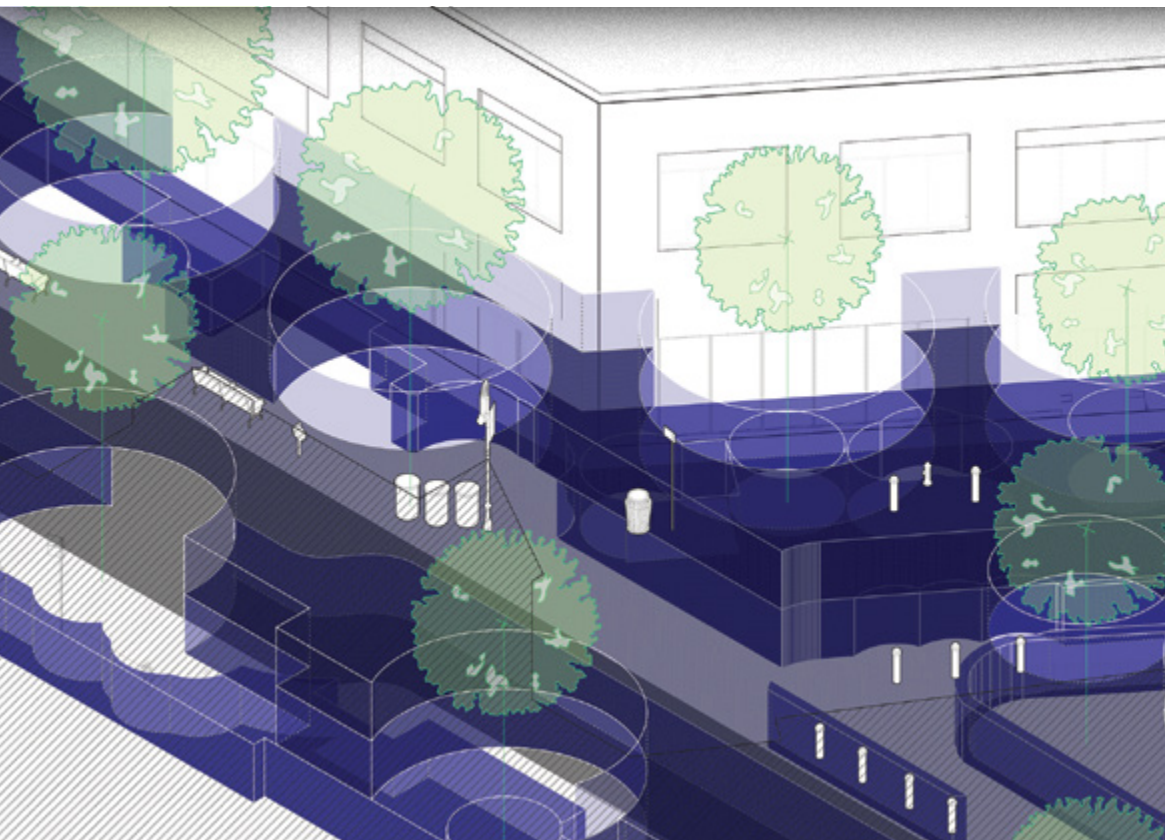
The memory of Columbia University's gymnasium proposal is physically ingrained in the excavation of a liminal space between Harlem and Morningside Heights. My installation *Hope Rope* unveils this history that is otherwise forgotten or unknown. It hopes to avoid history erasure by subverting oppression into positivity and togetherness.





## &lt;THE STREET STUDIO&gt; Jing Liu

This studio researched new actors in the street, rediscovered past projects that might still offer relevance, and experimented with new technologies and typologies that can be constitutive of contemporary discourse. Following previous “Street Studios” on Fulton Mall in downtown Brooklyn and DVRC in Hong Kong, this edition took place in the Jackson Heights neighborhood of Queens, where the



## Faisal Alohali, Audrey Dandenault, Lu Liu, Tung Nguyen

The *Festival Street* focuses on objects, deployed along a railing system that weaves through 82nd Street in Queens, New York. Our proposal engages with the existing urban fabric, revealing the unspoken social contracts of public space.



streets are vibrant with life, and the ravage of the pandemic is viscerally felt. The studio was divided into three distinct projects: Festival Street, Virtual Street, and the Infrastreet.

Chen Yang,  
Yu-Jun Yeh,  
Taylor Urbshott



Chengliang Li,  
Jessie Park,  
Tianyuan Deng,  
Yuanming Ma

At the local level, we propose a social space between the street and the sidewalk to improve the efficiency of garbage collection and separation processes. If this metabolic process of consumption and waste operates more locally and is rooted in our daily life, the current global waste loop would shrink.





neglect. The studio sought the liberation of life and people and stewardship of the environment by seeking an ethics of care in our fields of practice. Participants used their time and imagination together to generate conversations, questions, ideas, images, and projects to grow their capacity and power as architects and designers to make positive change for people, places, and the planet.

Sarah Zamler

*Marktown Futures* seeks justice for a community at the intersection of environmental and economic displacement. The project is strategy, not solution, based and aims to facilitate the power of choice in a community that is currently running out of options.

Matthew  
Brubaker

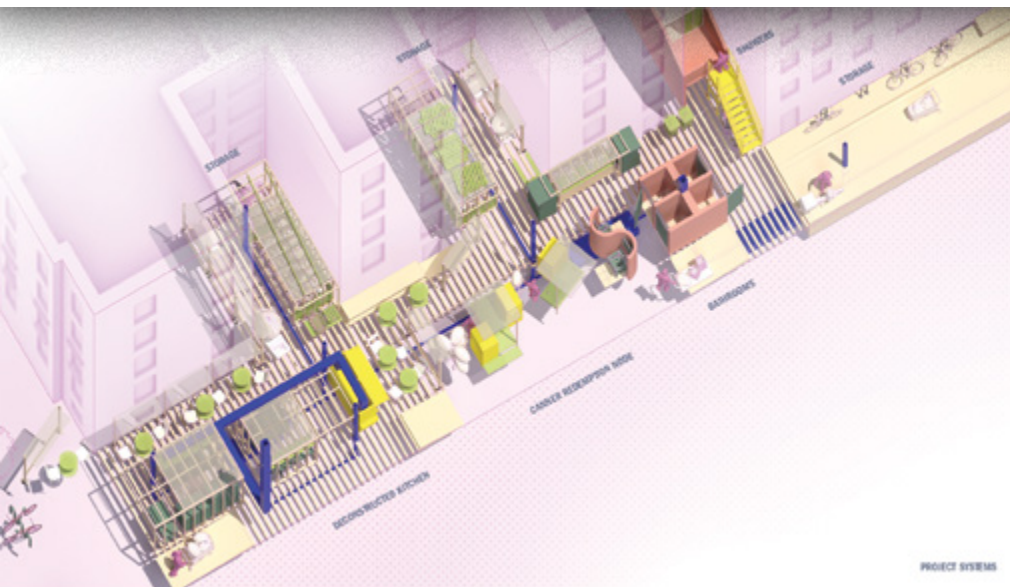
The site of this project is the Lewis Family Homestead which was recently lost to a loophole in heirs property law after being held in the family for 125 years. This contemporary form of erasure can only be combated by reconceptualizing how members of the Black and rural community can securely and powerfully form a relationship with land in a post-reparation America by tackling another “final frontier” of the American diaspora, “The New Homestead”.



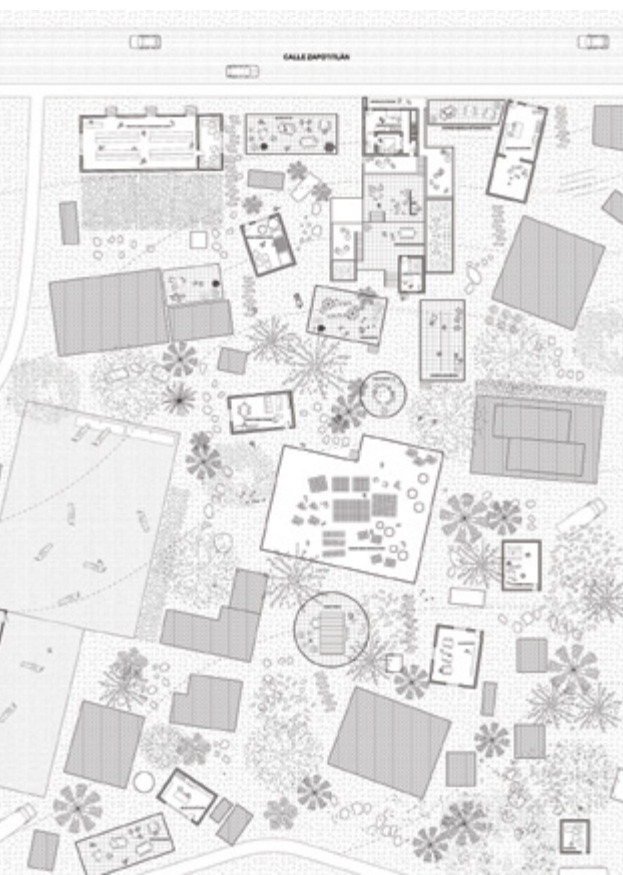


## &lt;KITCHENLESS STORIES&gt; Anna Puigjaner

This studio analyzed how domestic architectures have empowered social and gender asymmetries, and speculated about possible spaces of resistance. The studio started by looking at Comedores Comunitarios from Mexico City, a city-backed kitchen network that has helped to break down heteropatriarchal biases. These urban kitchens served as references to start imagining possible architectural

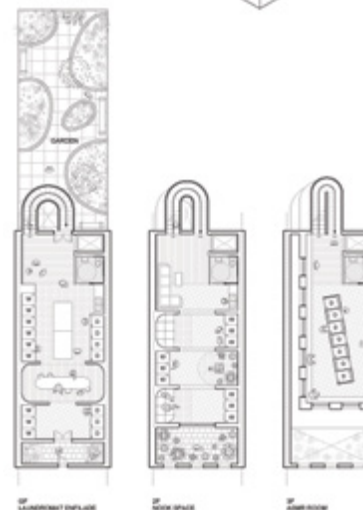


Alina Abouelenin,  
Maria Pérez  
Benavides



Luis Miguel  
Pizano,  
Tianyu Yang

The project departs from a mapping exercise that visualizes the patterns and tactics of three local labor groups: street vendors, canners, and delivery workers.





translations within the Mexican community in the Sunset Park neighborhood of Brooklyn, New York.

Pabla Amigo,  
Camila Nuñez

*Common Ground* is a network of spaces that serve the increasing migrant women community of Sunset Park, where they experience a lack of domestic space, job opportunities, and public infrastructure to support them.



Mark-Henry  
Decrausaz,  
Jared Payne

*Queer Civic Infrastructure* acknowledges the diverse protagonists in Sunset Park and proposes that queering the material and urban reality of the neighborhood can provoke new agency for its people.



## &lt;AS LITTLE AS POSSIBLE, EXERCISES IN OPEN LIVING&gt; Hilary Sample

What role does the design of a small open space play in the contemporary city? In this studio, students reimagined McKenna Square Park located in Washington Heights. It is neither a square nor a park. Described as a triangular plaza on the NYC Parks Department website yet dedicated in 1985 under the purview of NYC HPD's Bureau of Open Space Design, the park includes a pavilion, a gate, a



## Benjamin Akhavan, Hao-Yeh Lu, Cong Diao

In the spirit of "as little as possible," *Infrastructure Playscape* uses only four elements: the fire hydrant, play sculptures, hoses, and sandbags to create an infrastructure of play in the park.



## Isabella Bartenstein, Aaron Sage, Liza Tedeschi

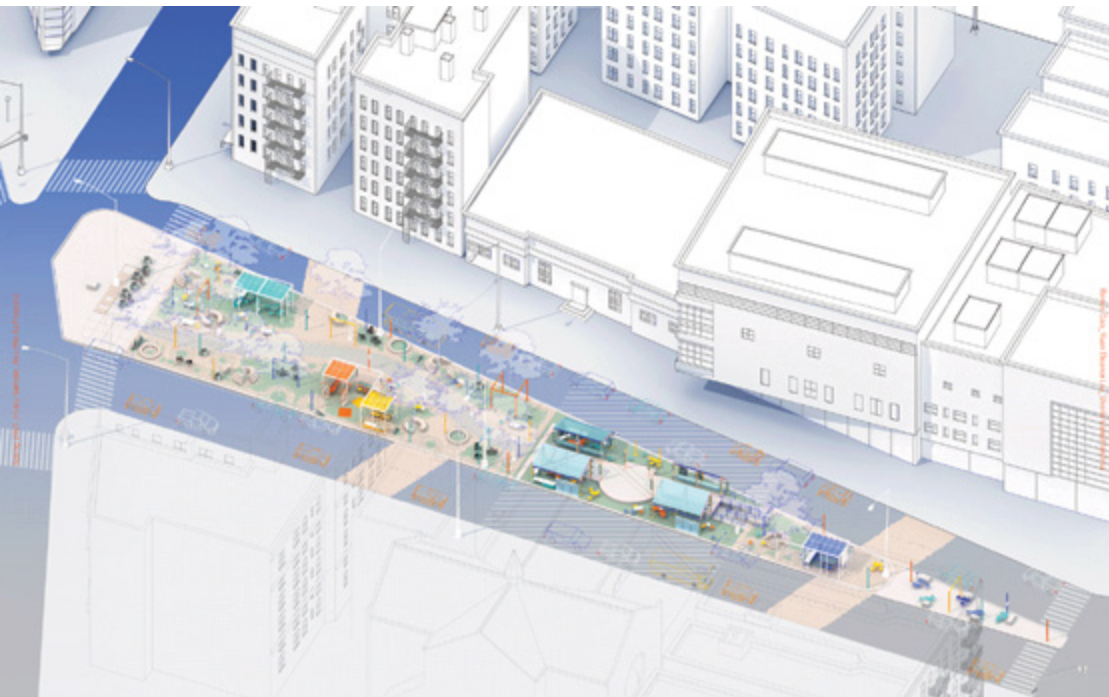
We utilized McKenna Square Park's assets to re-imagine an existing sculptural pavilion as a greenhouse nursery, reuse current seating to create new flexible seats, and add additional landscaping to the park.



staircase, seating, and trees functioning as an open-air living room that expands the program of living beyond public housing. With little funding, its design and construction is maintained through contracts with the neighbors; its history is valuable for a multitude of reasons, not only for its final form. The studio proposals adopt the philosophical approach of doing as little as possible.

## Joel McCullough, Angela Sun

*Neighborhood, Maintenance, Jacket, Activism, Care* questions the traditional framework of care, by redefining the role of the “maintenance worker” and rethinking modes of community engagement.



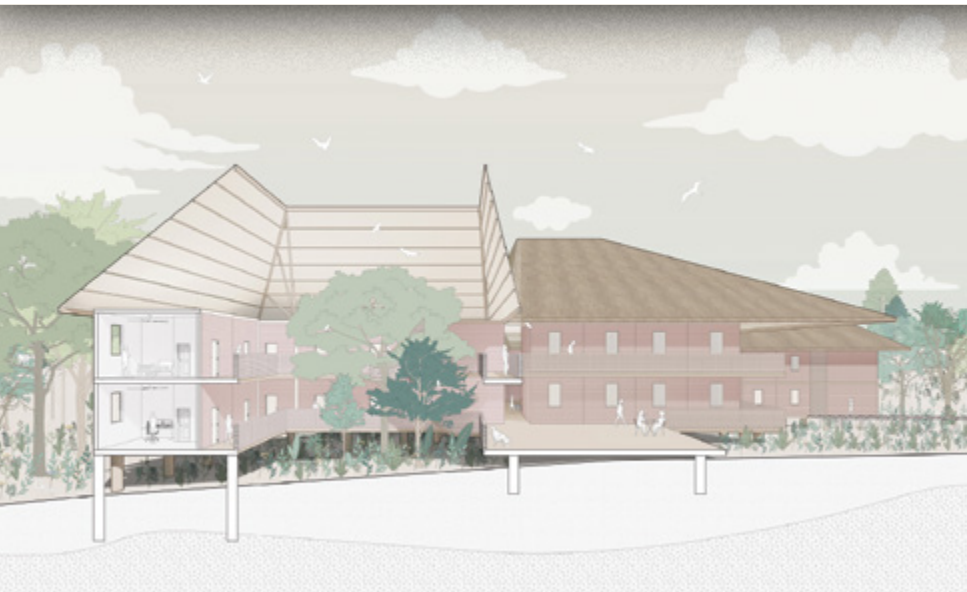
## Renee Gao, Veeris Vanichtantikul, Yuan Eleanor Liu

*Unbuilding Site, Remaking Place* reimagines the park through the idea of the outdoor living room, extending the programmatic needs of the existing community into the spaces of the park.



## &lt;SOMETHING OF VALUE, NGO HEADQUARTERS&gt; Galia Solomonoff

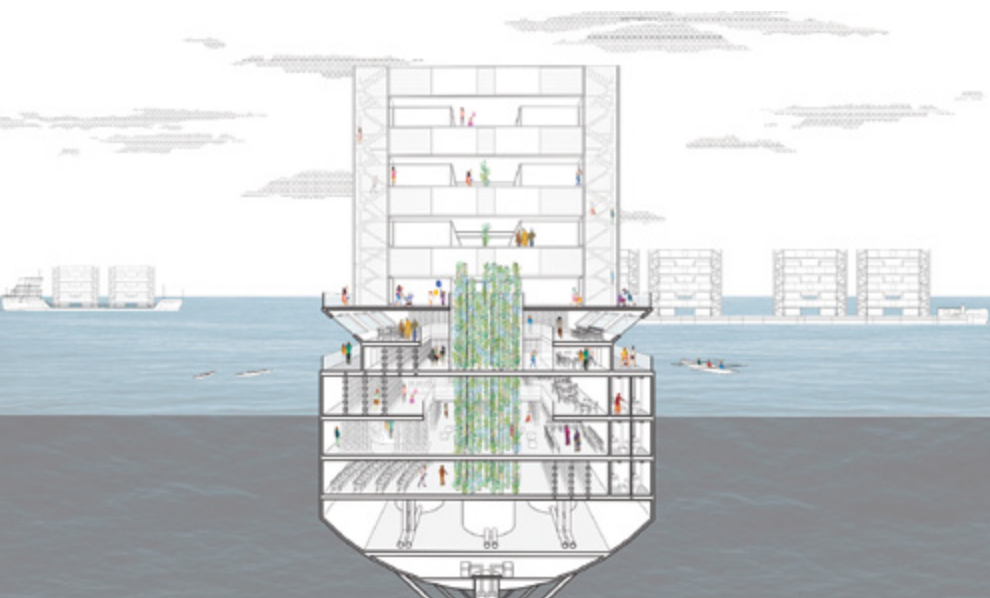
In this studio, students designed for an assumed client, a tech-sector company, that is endowing a new NGO of global reach to address and help solve a global issue defined by each student team. The brief was to design the NGO headquarters that the given tech company has endowed for 100 years. The building is part of the endowment and needs to be “something of value” in itself. The site was



## Eva Yi Jiang

*WWF 2.0* relocates the World Wildlife Foundation headquarters into the center of an oil palm plantation to aid the reforestation of the Bornean Rainforest.

## Joey Xu



## Camille Brustlein

By upcycling commercial ships left to rot on beaches in India and Bangladesh, this headquarters for Amnesty International proposes to occupy an interstitial territory on international waters as a neutral temporary home for refugees and Amnesty workers.

determined by each team but located in a city that connects to issues addressed by the NGO. The NGO headquarters could either use the entire site or be part of more extensive development.



## Yue Sarah Shi

The design proposes a headquarters for the Soil Foundation, a new NGO that advocates for sustainable organic farming practices.



## Yuan Li

This project proposes replacing a cement mill, which has polluted the irrigation water of neighboring farmland, with a new headquarters for the NGO Rikolto following a phytoremediation process.

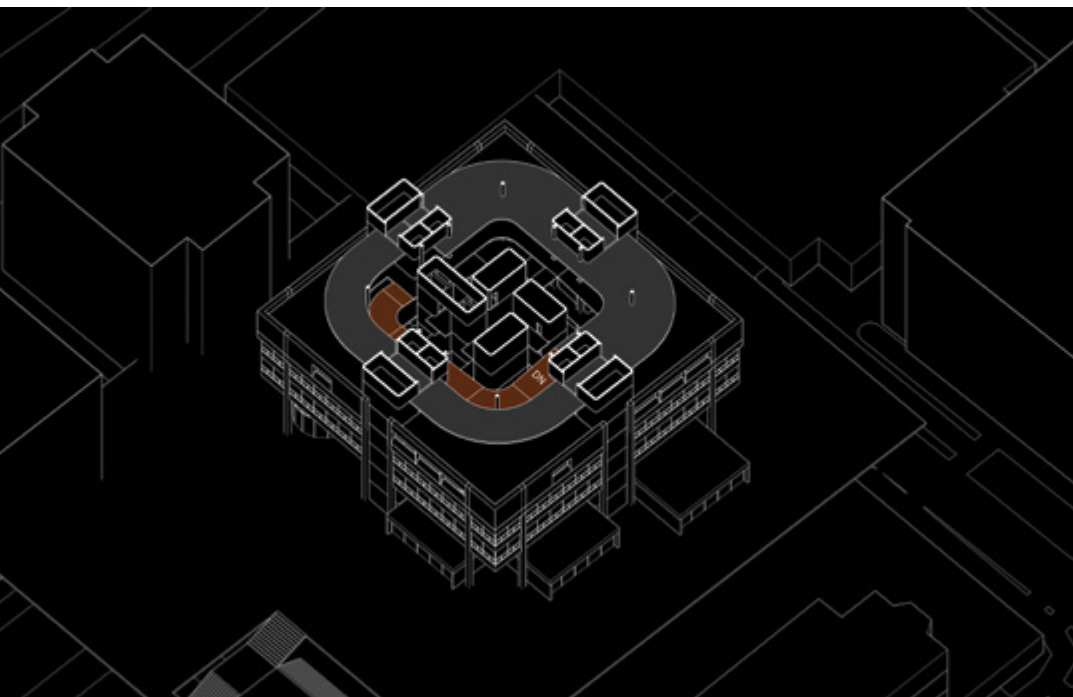
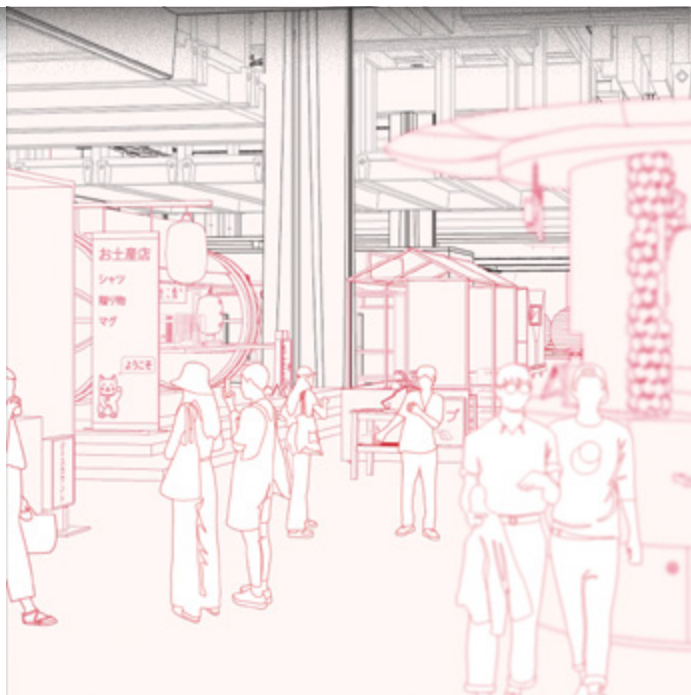
## &lt;OPEN WORK&gt; Enrique Walker

This studio addressed three open-ended buildings in Japan, namely: Kiyonori Kikutake's Miyakonojo Civic Center, Fumihiko Maki's Senri Civic Center, and Masato Otaka's Tochigi Prefectural Hall. The studio brief was simple. Students joined a team, were assigned a building, and were asked to double its surface.

Do you endorse openness, and observe, refine, or redefine the original script? ↗

## Chenxi Dong, Tianran Li, Jishan Duan

This intervention proposes doubling the volume of the pour-in-place portion of the Masato Otaka-designed Tochigi Civic Center to make the solid volume lighter so that it becomes a ring that surrounds the "heavy void" and floats above the site.

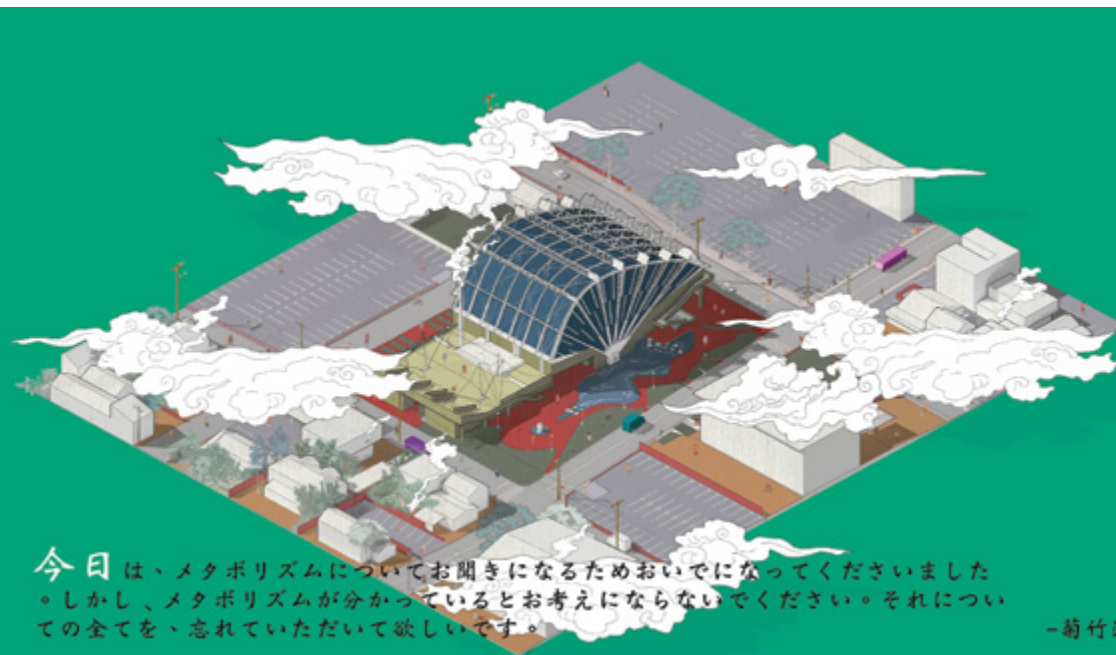
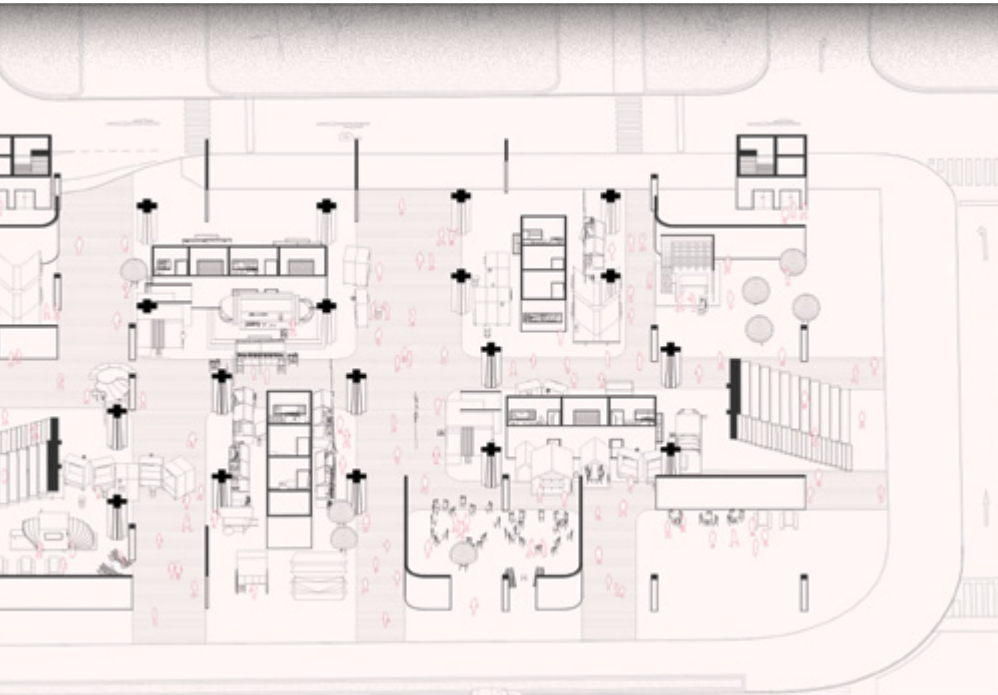


## Ran Ma, Chuyang Zhou, Mandi Hu

Our doubling strategy for the Fumihiko Maki-designed Senri Civic Center consists of three phases: emptying the original building to create a new void—a large urban room; inserting similarly shaped cores to Maki's group form; duplicating the vertical dimension of the original building.



Do you argue against it, and monumentalize? What is at stake is to design in conversation with, and take a position on, a building and the arguments it advanced, and to tackle a longstanding question within the field, again, half a century later.

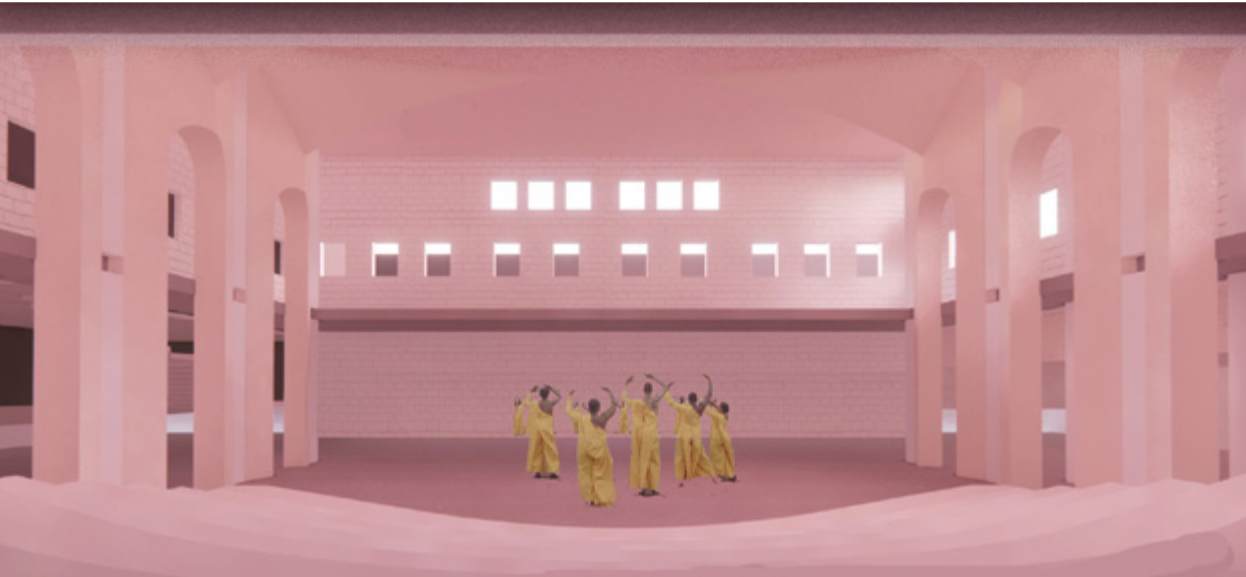


Timlok Li,  
Marcell Sandor,  
Fengyi Zhang,  
Jerry Zhao

In approaching the task of doubling the Kiyonori Kikutake-designed Miyakonojo civic center, we asked: How does one double something that no longer exists? How does one define civic space today?

## &lt;GUNS AND BUTTER&gt; Amanda Williams, Ife Vanable

This studio worked beyond modes of architectural production that propose some ill-defined unity and instead champions particularization, radical specificity, and delineation. It cultivated uncommon politics of naming, forging cultural practices of complexity, and sustained contradiction. Students confronted very particular architectural types, engaging programmatic specificity, as a way to

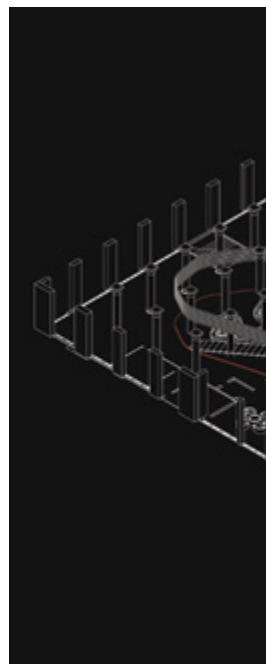


Ashley Esparza



Thom Chiu

*Reclaiming Schulze Baking Co.* is an architectural negotiation of ownership and access to the historic Schulze Baking Company Factory, which confronts the exploitative nature of the development.





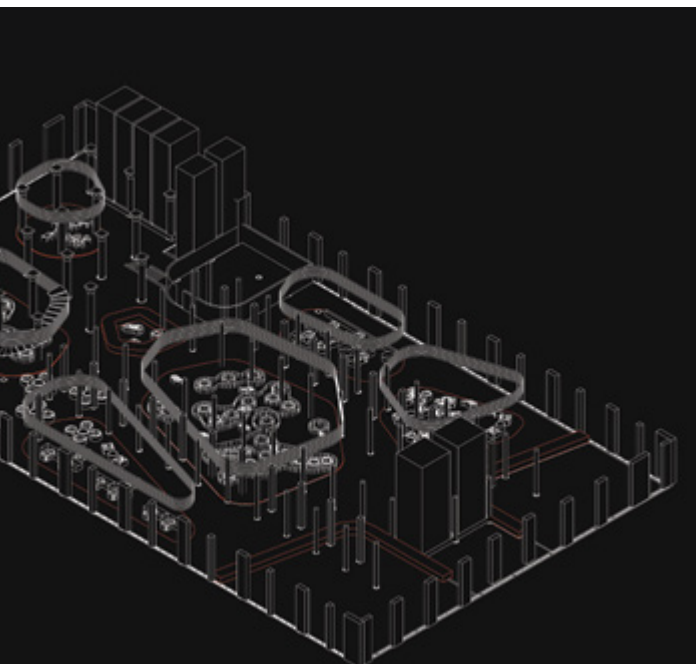
engage Blackness, capital, labor, pleasure, interiority, value, and liberation. The studio focused on types of architecture that unsettle and perhaps totally eschew proprietary rights and facilitate shared forms of service and production; architectures—more specifically programs—that are both defensive (perhaps protective), sustaining, generous, and provide certain pleasures in a range of ways.

## Alek Tomich

*The House of Butter* leverages and expands upon House and Ballroom Culture's existing human and social capital to establish a new system of care, protection, kinship, and space for Black and Queer youth fighting HIV/AIDS within the historic Schulze Baking Company Plant in the South Side of Chicago.



## Miles Tianheng Xu



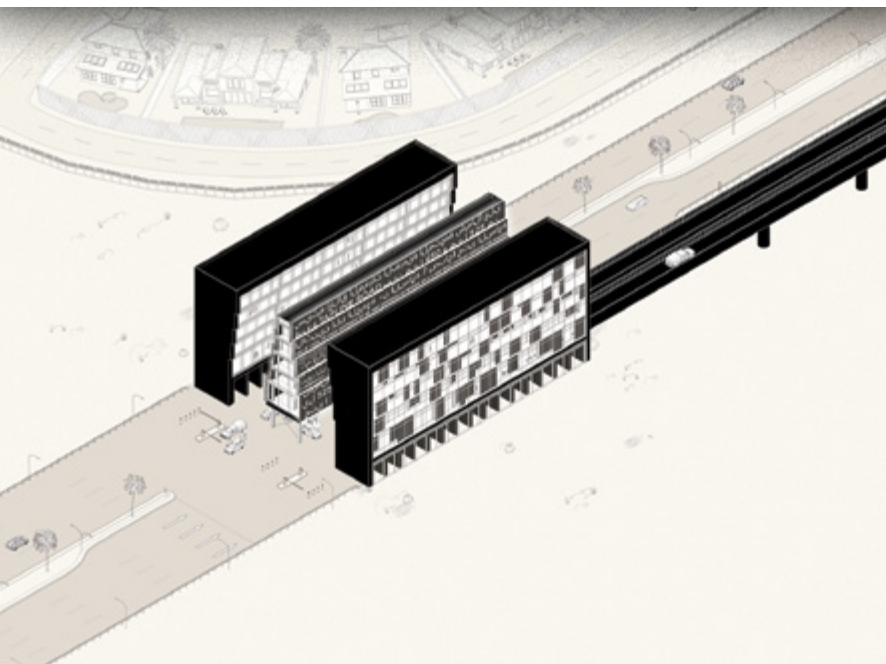
## Yuexi Xu, Jinxia Lou





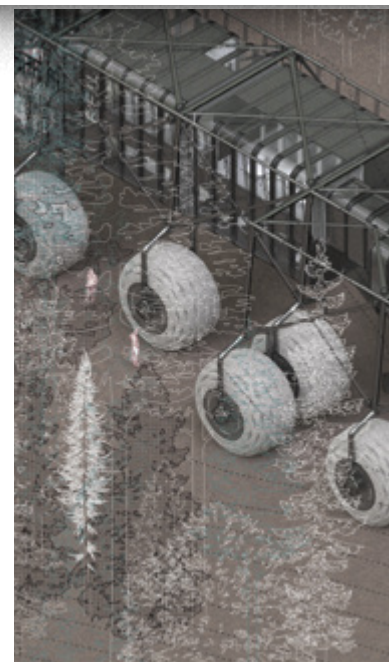
<DETOX USA> Mark Wasuiuta

This studio built on and extended the research initiative Collecting Architecture Territories, which follows the hypothesis that the growth of private collecting allows us to glimpse something of the emerging cultural logic of the early 21st century. With the intertwining of culture and environment at stake, this studio replaced collection with concentration. Through concentration, the studio



## Florencia Yalale, Genevieve Mateyko

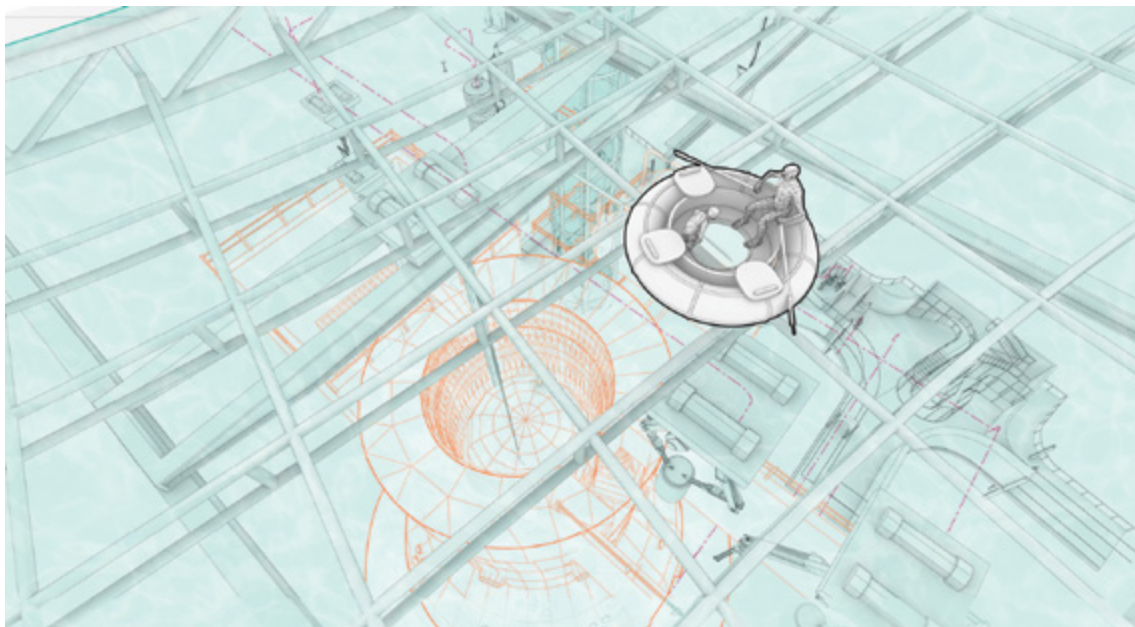
*Road Trip to Aramco: Three Stops along the Saudi Arabian Oil Superhighway* aims to amplify three key moments in Saudi Arabia's history of oil, revealing the ways in which power has been produced by the kingdom through a set of interventions designed as viewing devices for these moments.



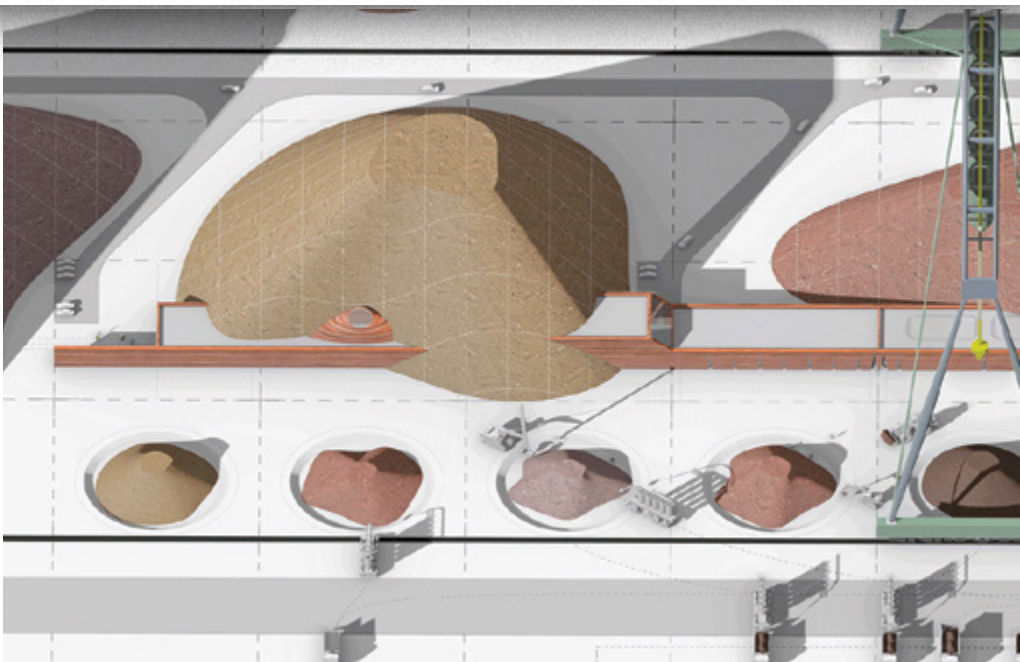
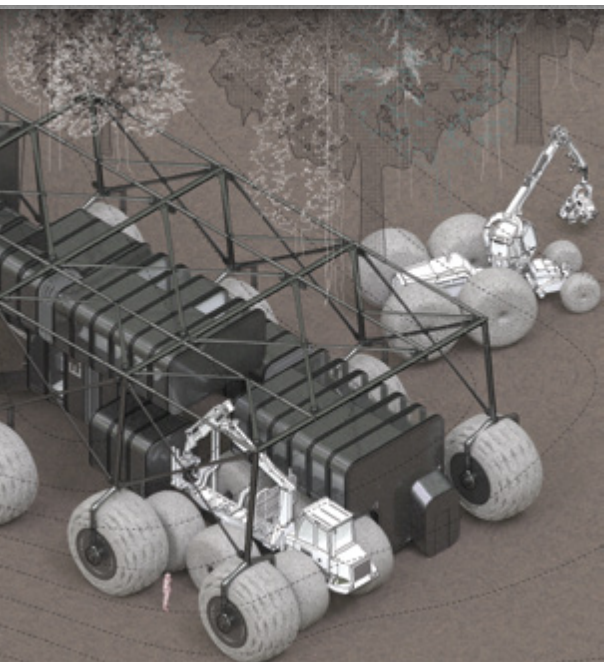
Lauren Scott

## Jun Ito

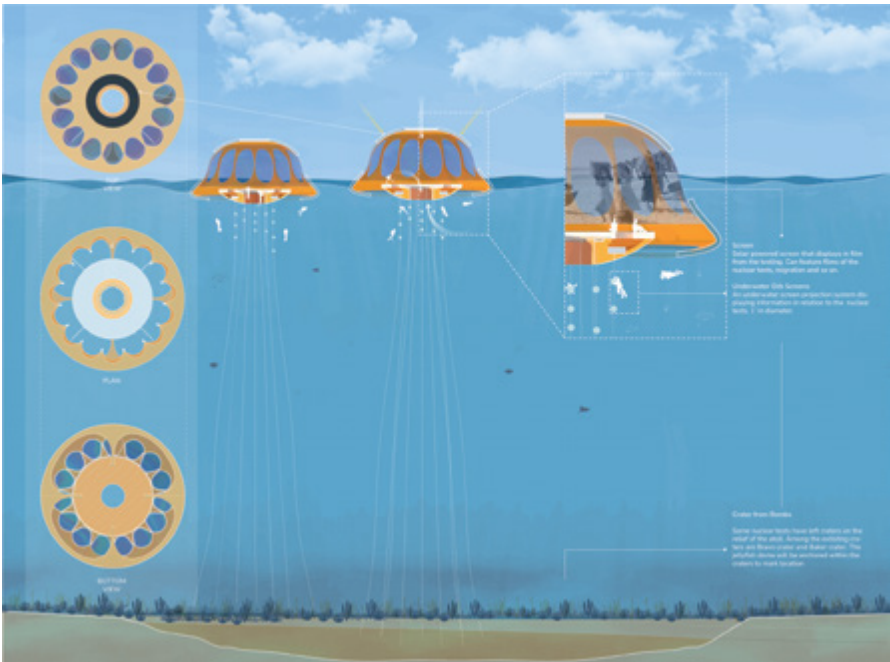
*Decommissioning Safari* offers the public an opportunity to jump into Fukushima's forbidden zone, exposing live labor as a cultural object to be seen.



studied, reconceived, and redesigned architectures and spaces of chemical modernity. Concentration served as a marker of environmentally altered sites, political chemical histories, cultural institutions, and systems of extraction and circulation. It is also used as a critical, spatial device that allows a complex and unobserved relation between architecture, environment, chemicals, and artifacts to appear.



Farah Alkhoury



Ochuko Okor

*Markers of Nuclear Legacies* responds to chemical modernity by investigating and highlighting the spatial, geopolitical, and cultural implications of nuclear tests by the U.S. in the Marshall Islands.





# *Advanced Architecture Studio V*

## David Benjamin, Sequence Director

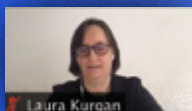
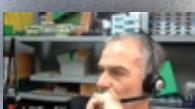
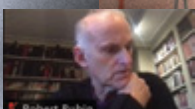
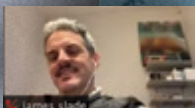
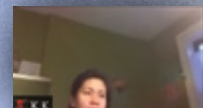
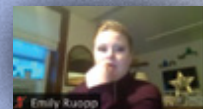
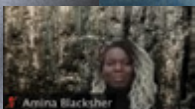
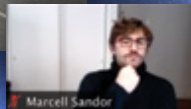
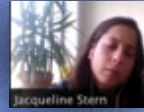
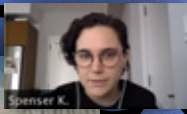
Advanced Architecture V Studios build on the ideas and skills developed in the Core Studios and bring together students in the MArch and MSAAD programs. These studios, which take place during the students' final two semesters at the School, have always explored the future of architecture in a diversity of ways. Each studio creates its own world—with its own intersection of social, cultural, formal, material, economic, and environmental concerns—and students have almost 20 worlds to choose from. After selecting a studio, students conduct experiments and develop projects through concepts and massings, programs and forms, drawings and models, materials and atmospheres, metrics, and narratives.

At the same time, the various students and faculty of the Advanced Architecture V Studios engage in a shared discussion about the most interesting research, practice, ideas, and design of the built environment. They address the theme of “Architecture and Environment” and fortify the hypothesis that climate change is ground zero for a shared discussion about architecture's engagement with the world. Responding to climate change requires attending not only to technical matters like energy consumption and carbon footprint but also to social and political issues, such as inequality and public policy. In this context, the Advanced Architecture V studios are framed as a unique and multifaceted opportunity to tackle

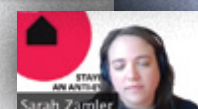
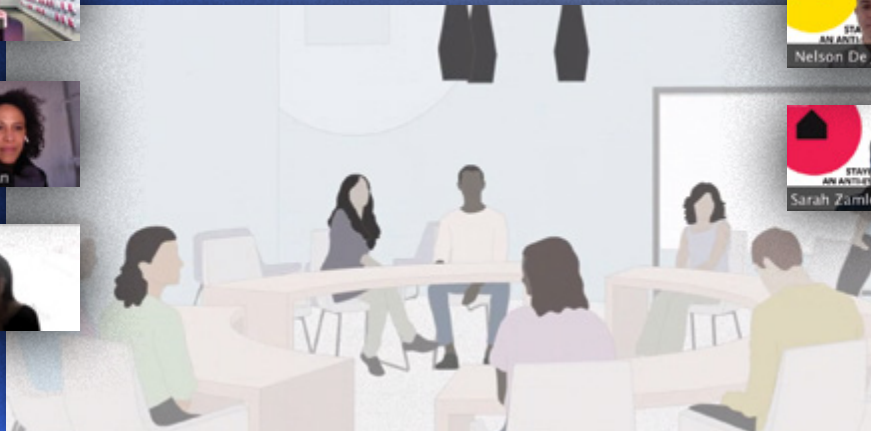
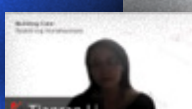
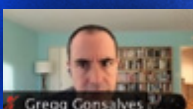
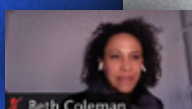
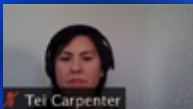
climate change at the scale of the building and to address climate change through design.



Sulan Kolatan, Jaqueline Stern,  
Spenser Krut '21 March '22 MSCCP,  
Rahul Gupta '21 March, Lise Anne Couture,  
Nanjia Jiang '21 March, Marcell Sandor  
'21 March, Mario Gooden; Work by  
Spenser Krut.



Laura Kurgan (Studio Critic), Tianran Li  
'21 March, Tei Carpenter, Leah Meisterlin,  
Keller Easterling, Nelson De Jesus Ubri  
'21 March, Gregg Gonsavles, Sarah Zamler  
'21 March, Mabel O. Wilson, Beth Coleman;  
Work by Nelson De Jesus Ubri and Sarah Zamler.



Fall



# Architecture

# Studio

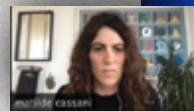
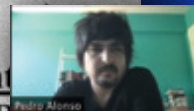
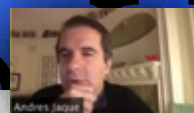


## The Anti-Clearance Studio

Undoing the notion of “site” as an architectural tool for social removal, racializing segregation and environmental vulnerability: THE RIGHT TO RETURN

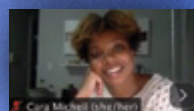
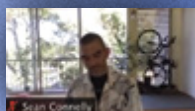
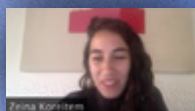
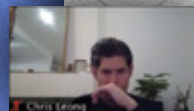
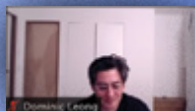
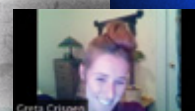
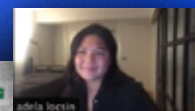
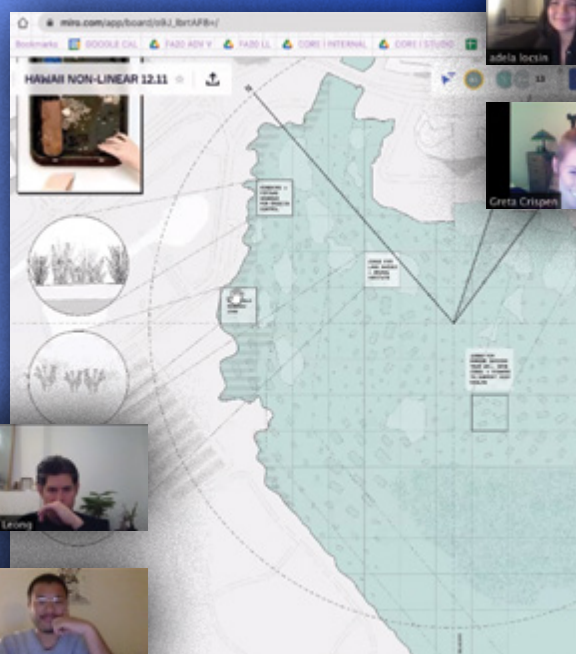
Instructor: Andrés Jaque  
Columbia University GSAPP, Fall 2020

This studio is a collaboration between GSAPP and Avery Library's Drawing and Archives



Andrés Jaque (Studio Critic),  
Ziad Jamleddine, Pedro Ignacio Alonso,  
Matilde Cassani.

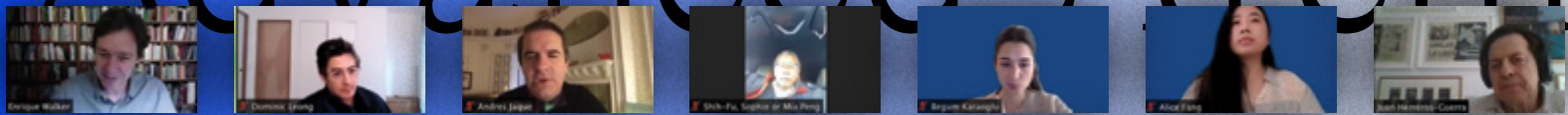
Gordon Kipping (Studio Critic),  
Nora Fadil '21 MSAAD, Emily Ruopp  
'21 MSAAD, Amina Blacksher,  
Matthew Bremer, Duo Zhang  
'21 MSAAD, Kelly Koh, James Slade,  
Giuseppe Lignano, Robert Rubin;  
Work by Duo Zhang.



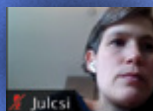
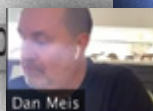
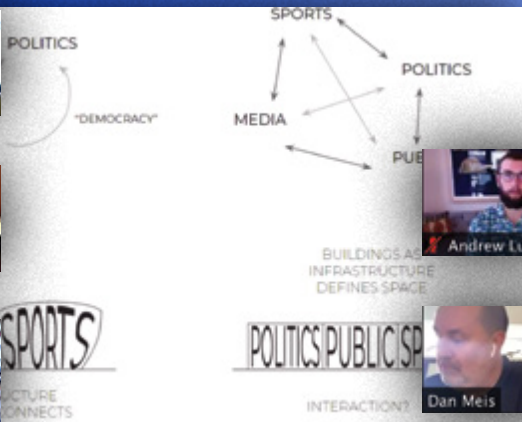
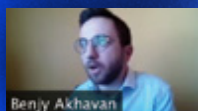
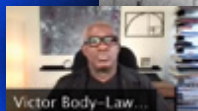
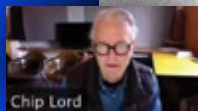
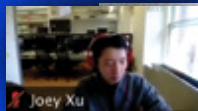
Adela Locsin '21 MARCH,  
Dominic Leong (Studio Critic),  
Christopher Leong (Studio Critic),  
Greta Crispin '21 March,  
Dong-Ping Wong, Zeina Koreitem,  
Reinhold Martin, Sean Connelly  
(Studio Critic), Cara Michell;  
Work by Greta Crispin  
and Adela Locsin.

# 2020

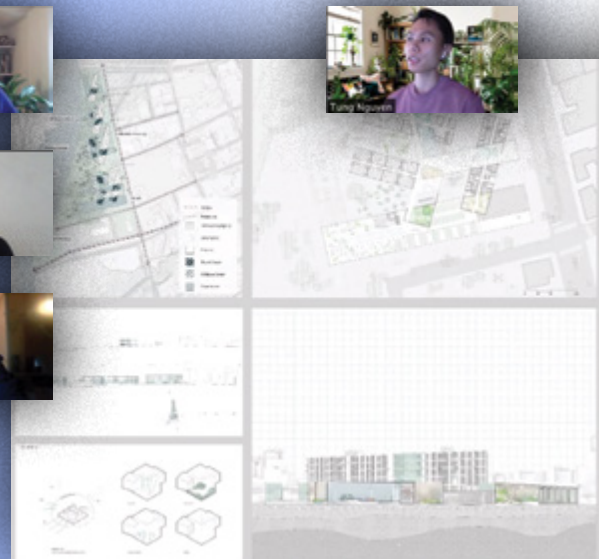
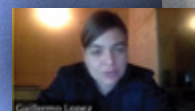
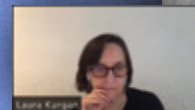




Enrique Walker (Studio Critic),  
 Dominic Leong, Andrés Jaque, Shih-Fu Peng,  
 Begum Karaoglu '21 MArch, '21 MSRED,  
 Alice Fang '21 MArch, Juan Herreros,  
 Chengliang Li '21 MArch, Zhijian Sun '21 MSAAD,  
 Emanuel Admassu, Oliver Bradley '21 MArch,  
 Joel McCullough '21 MSAAD, Véronique Patteeuw,  
 Jinxia Lou '21 MSAAD.



Dan Wood (Studio Critic), Andrew Luck,  
 Joey Xu '21 MArch, Dan Meis, Chip Lord,  
 Kenseth Armstead, Victor Body-Lawson,  
 Julcsi Futom, Benjy Akhavan '21 MSAAD,  
 Hao-Yeh Lu '21 MSAAD; Work by Benjy Akhavan.

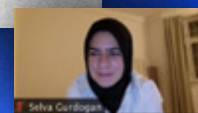
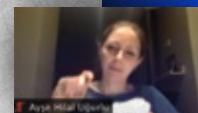
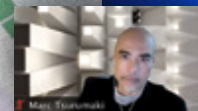
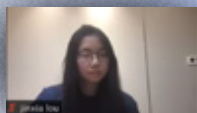


Tung Nguyen '21 MArch, Bryony Roberts  
 (Studio Critic), Laura Kurgan,  
 Anna Puigjaner; Work by Tung Nguyen.

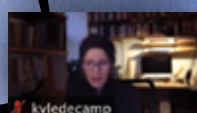
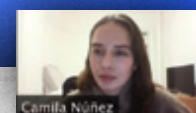
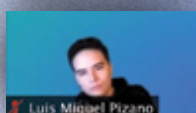
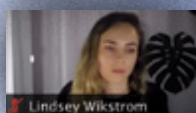
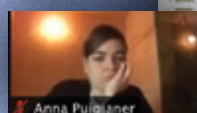
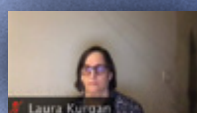
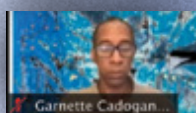
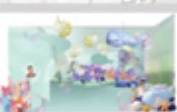
# Fall



# Architecture Studio V



Ziad Jamaledine (Studio Critic),  
Marc Tsurumaki, Iheb Guerhazi,  
Ayşe Hilal Uğurlu, Selva Gurdogan;  
Work by Marie Christine Dimitri.



Jordan Carver, Cynthia Copeland,  
Garnette Cadogan, Laura Kurgan, Camila Nuñez  
'21 March, Anna Puigjaner, Lindsey Wikstrom,  
Samita Sinha, Luis Miguel Pizano '21 March '21 MSRED,  
Skylar Royal '21 March, Mario Gooden, Bryony Roberts,  
Mabel Wilson (Studio Critic), Kyle deCamp,  
Andrés Jaque; Work by Camila Nuñez and Skylar Royal.

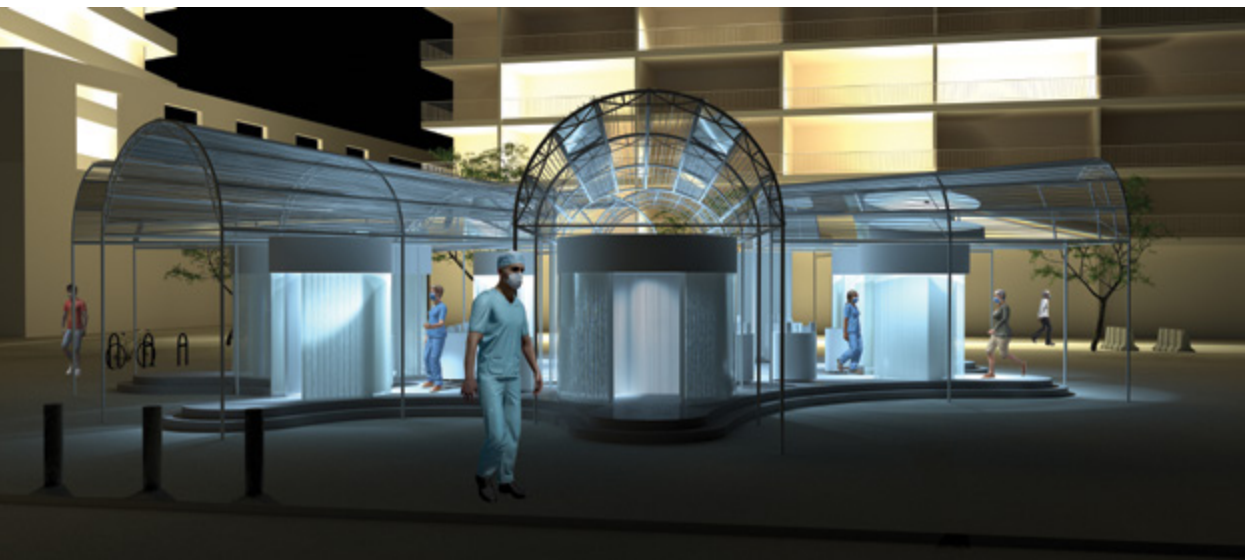
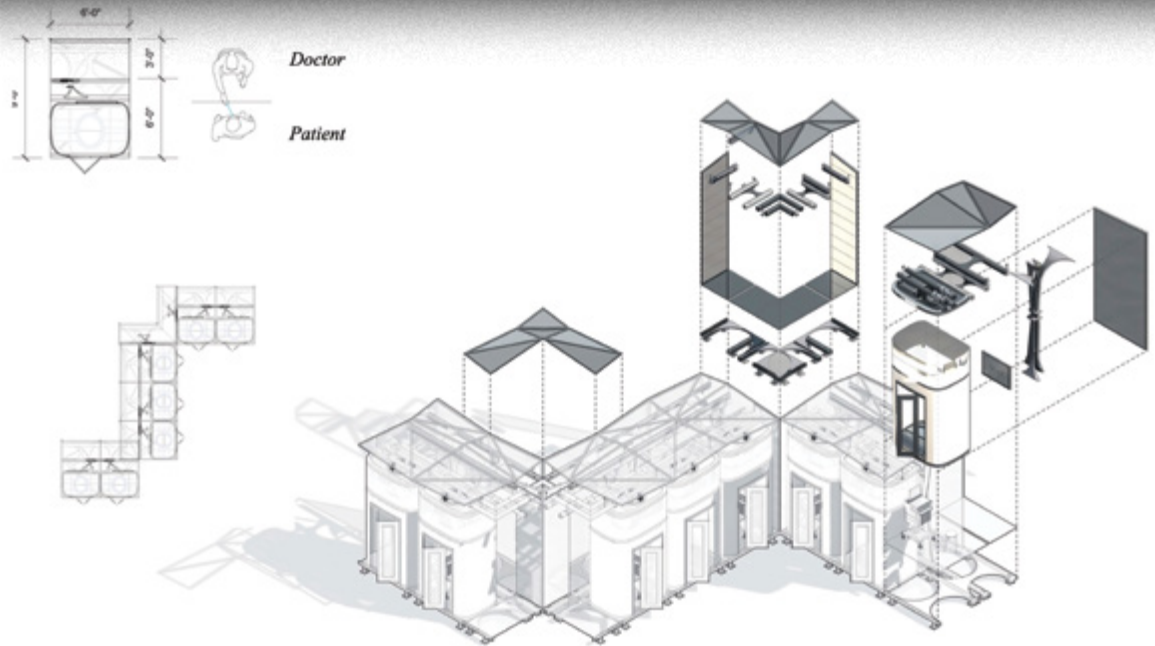
# 2020

## &lt;SHAPE EVADING SHAPES: A RAPIDLY DEPLOYABLE EPIDEMIOLOGY CLINIC&gt; Michael Bell

The clinic is a specific program with exacting needs; one of those needs is to both address the COVID-19 virus; another is to remain safe and resist becoming a transmitter of the virus. It must embrace the ill and defend against its own user—its own subject. It must also host several subjects; clinical actors/front line workers trained in medicine and patients and the general public if need be ↗

## Fan Liu

This monocoque-based system, which enables loads to be supported by an external skin rather than a frame, creates a more lightweight structure and facilitates fast assembly for the epidemiology clinic.



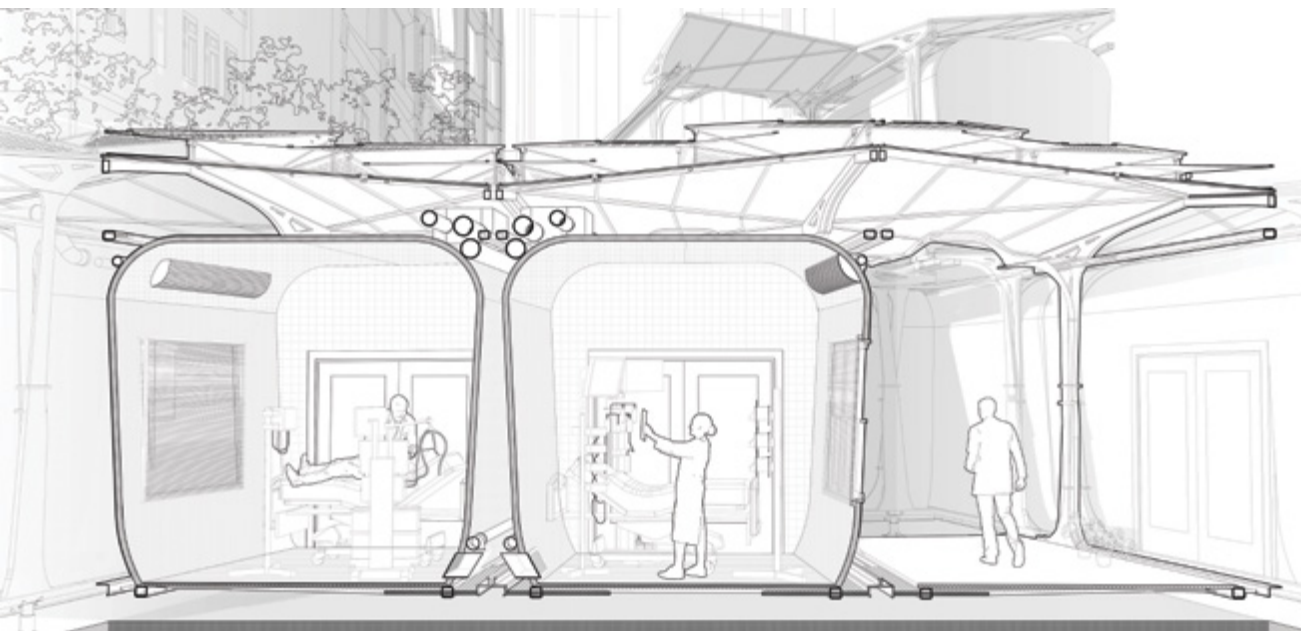
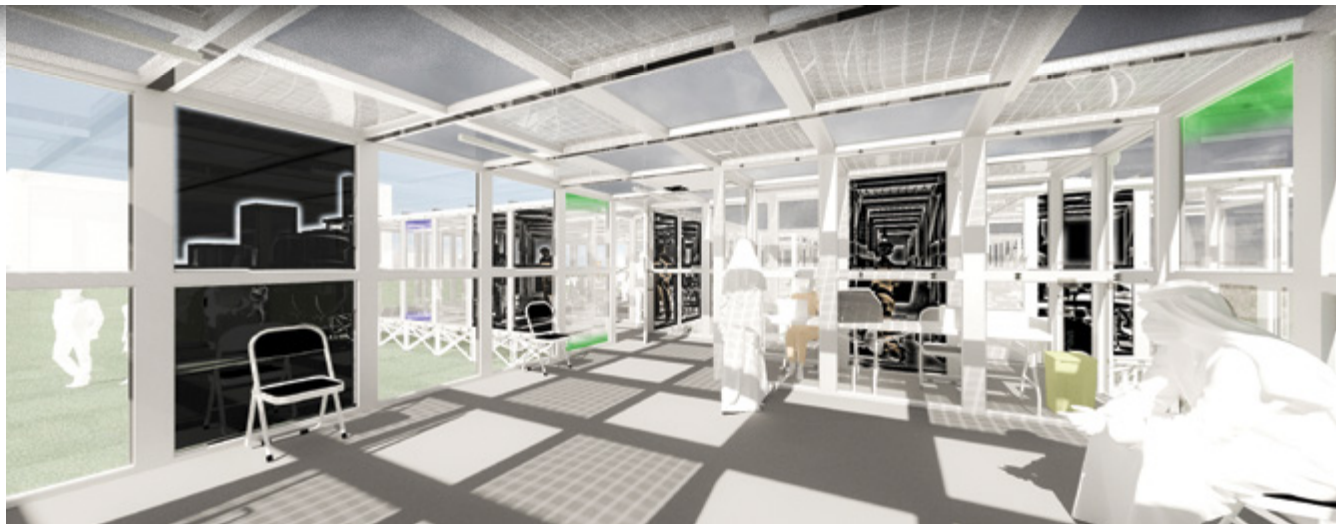
## Isabella Bartenstein

Testing pods are housed in a lightweight steel structure and protected by a weighted plastic tarp stretched across steel members. The form appears to reach out yet remains forcibly combined, echoing the contrasting human desires for isolation and gathering during the pandemic.



for broad testing. Working with the Re-Connecting Beirut studio, the programming for this studio came from consultations with the WHO. This studio initially led on the design and engineering aspects of the clinic and the Re-Connecting Beirut studio led siting and urban design.

MinJae Lee

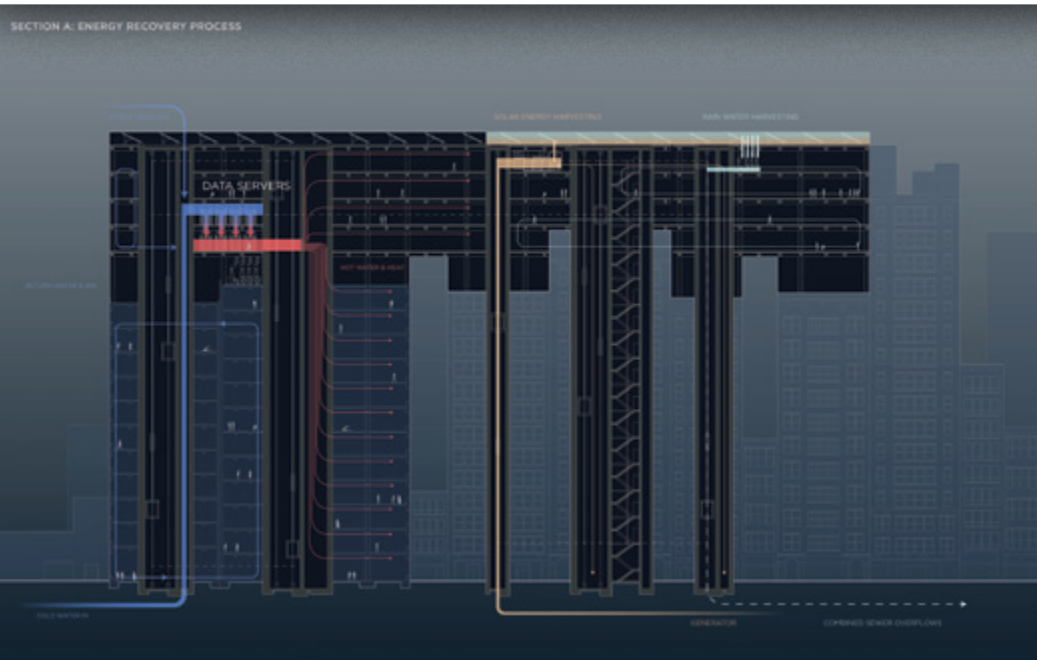


Haoran Xu

The design for this rapidly deployable clinic scales down a conventional clinic to maintain the minimum amount of space necessary for an emergency.

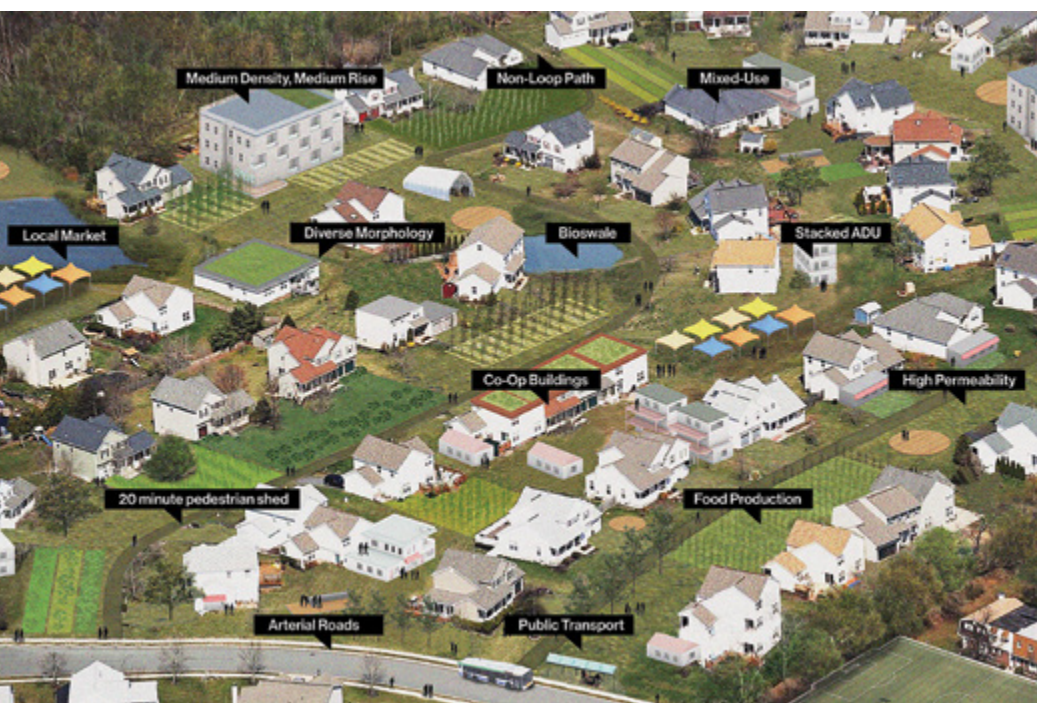
## &lt;CLIMATE DESIGN CORPS: ARCHITECTURE FOR ENVIRONMENTAL JUSTICE&gt; David Benjamin

The studio explored the connected crises of public health, racial justice, and climate change through the lens of the Green New Deal in the U.S., and it also considered the application of its findings to other places and countries. The studio was part of the Green New Deal Superstudio, a collaboration that allowed it to exchange resources, ideas, and critiques with a diverse network. It also



## Frank Shengmian Wang

Although the initial project covers a 1-block span in midtown Manhattan, over time, the *Green New City* has the potential to create affordable and accessible living environments for those who have been historically affected by systematic racial housing inequality.



## Maria Pérez Benavides

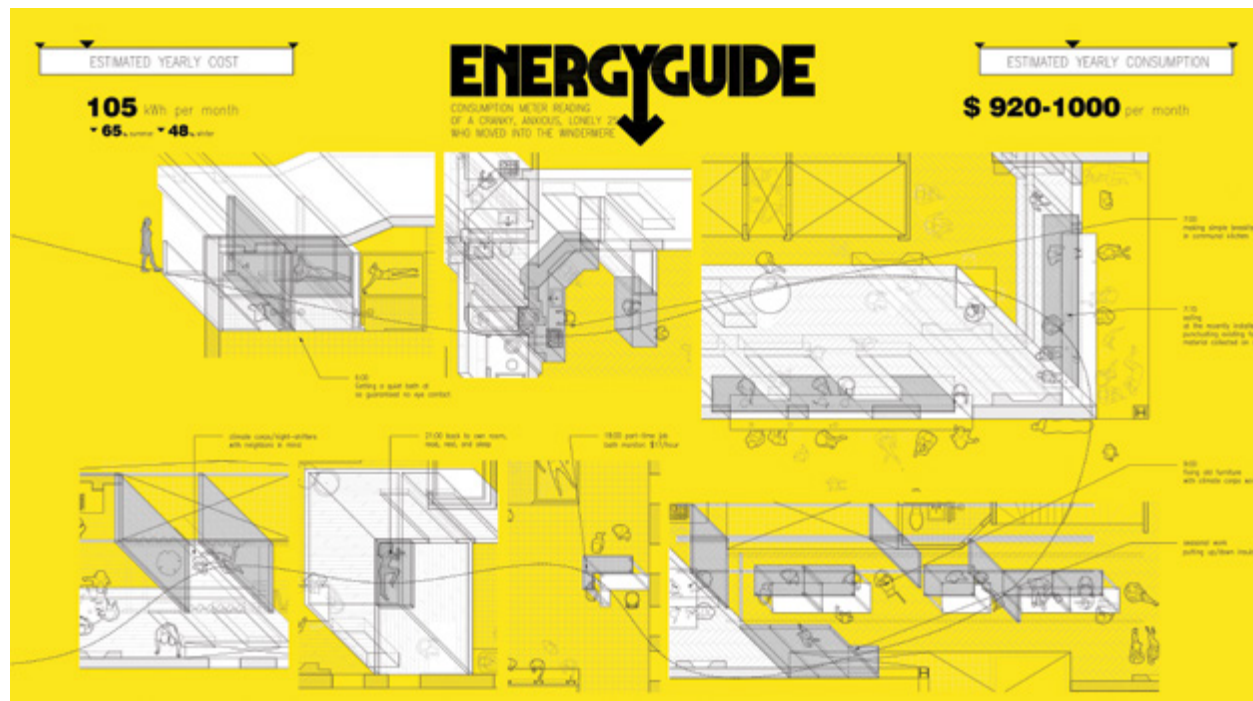


gave students the opportunity to share their work with a broad audience and contribute to a publication that aims to influence both policy-makers and practicing architects. The studio engaged the Green New Deal Superstudio as a real-time experiment in collective thinking, collective design, and collective action.

Maxwell  
Chun-Wei Chen

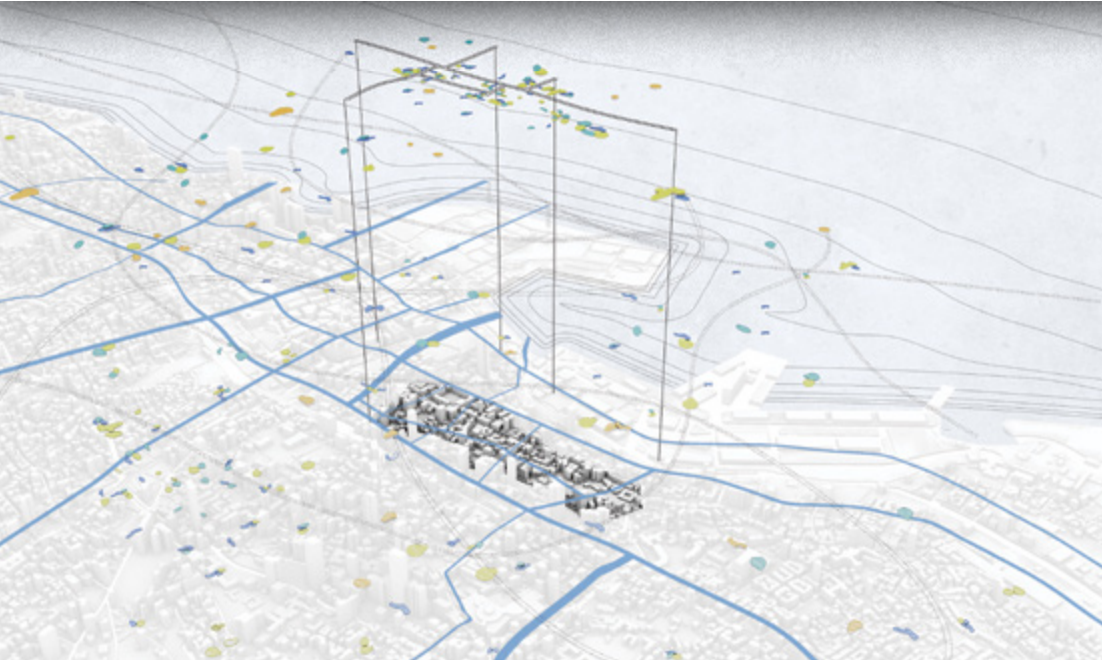
## Sixuan Liu

*Constant Varies* challenges the benchmark for analyzing the energy performance of buildings. Taking care of an ever-changing building leads its residents to less energy-intensive activities, better health, and more resiliency towards uncertainty.



## &lt;RE-CONNECTING BEIRUT: IN THE AFTERMATH&gt; Richard Plunz, Victor Body-Lawson

In coordination with UN-Habitat, this studio addressed design issues related to rebuilding Beirut following the devastating explosions on August 4, 2020. Apart from a focus on rebuilding options for Gemmayze, the task was to connect this opportunity to rethinking the urban infrastructure of the city, to address many of the issues that were present before the present calamity, from



Ali ElSinbawy,  
Yasmin Ben  
Ltaifa,  
Junyong Park

*Interstitial Agency* is a new form of urban micro-infrastructure. It serves as a programmatic host and generator to rebuild Beirut by activating its currently untapped interstitial tissue.

Fahad Al  
Dughaish,  
Cheng Shen,  
Aaron Sage

Following the blast and pandemic, Beirutians suffer from inadequate access to basic resources such as water, energy, and food. *Seed* is a deployable architecture that not only hosts activities but also provides resources necessary for their deployment.





infrastructural inadequacy to social disjunction. The studio was engaged with considerations of building strategies inclusive of the role of public space but with broader considerations. It proposed a new kind of urban node deploying considerations that serves to inform the development of prototypes applicable elsewhere in the city and region, as well as other global cities.

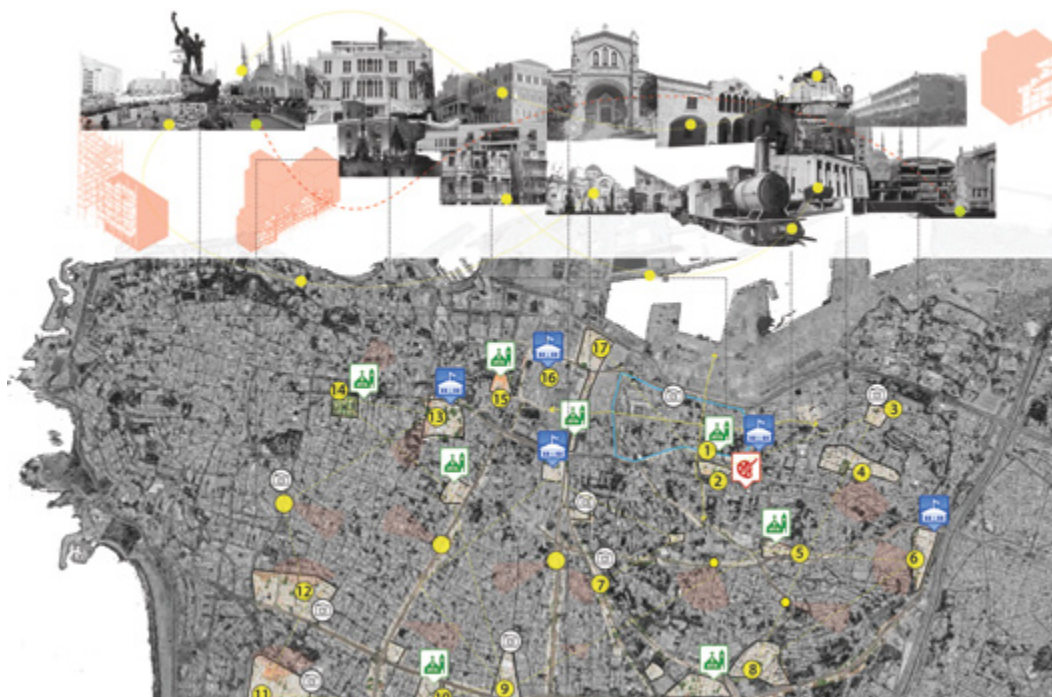


Gabriela  
Junqueira Franco,  
Mia Mulic

*Transscalar Connectivity* seeks to mend the urban fabric separation in Gemmayze through tactical micro-interventions from street scale to city scale.

Xian Wu,  
Zihan Xiao,  
Ziang Tang

*Reconstructive Memory* proposes a memorial park in Beirut's port and adding cultural functions through a scaffolding concept that engages cultural venues within Gemmayzeh.



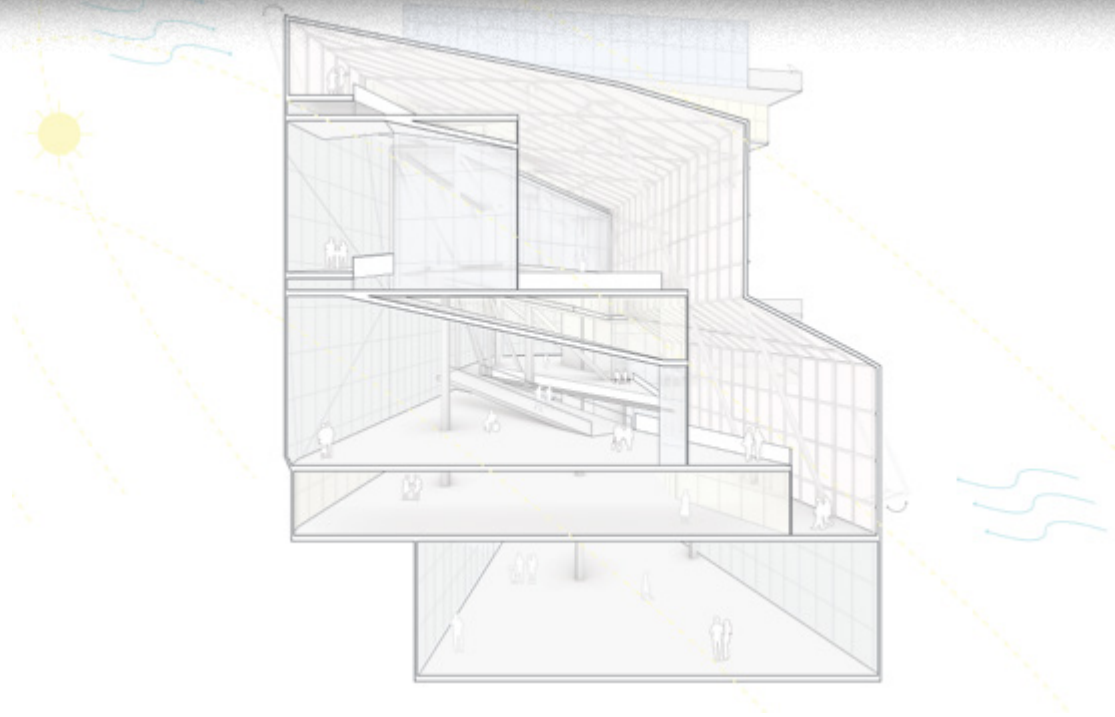
## &lt;CLIMATE CHANGE STUDIO&gt; Laurie Hawkinson

For this studio, students designed a new Climate School for Columbia University. It speculated on ways in which the new Climate School can possess a new architecture in every sense of the term. The intention was to explore and reimagine that architecture, and its role in shaping knowledge now and in the future. The studio was aimed at informed speculation and conceptual risk-taking at



## Spenser Krut

The manifesto for this project is: First, Columbia University does not need another school. Second, the world does not need further evidence of climate change. Third, the University will provide space for the instruction of applied ethics. Climate will be the first theme adopted.



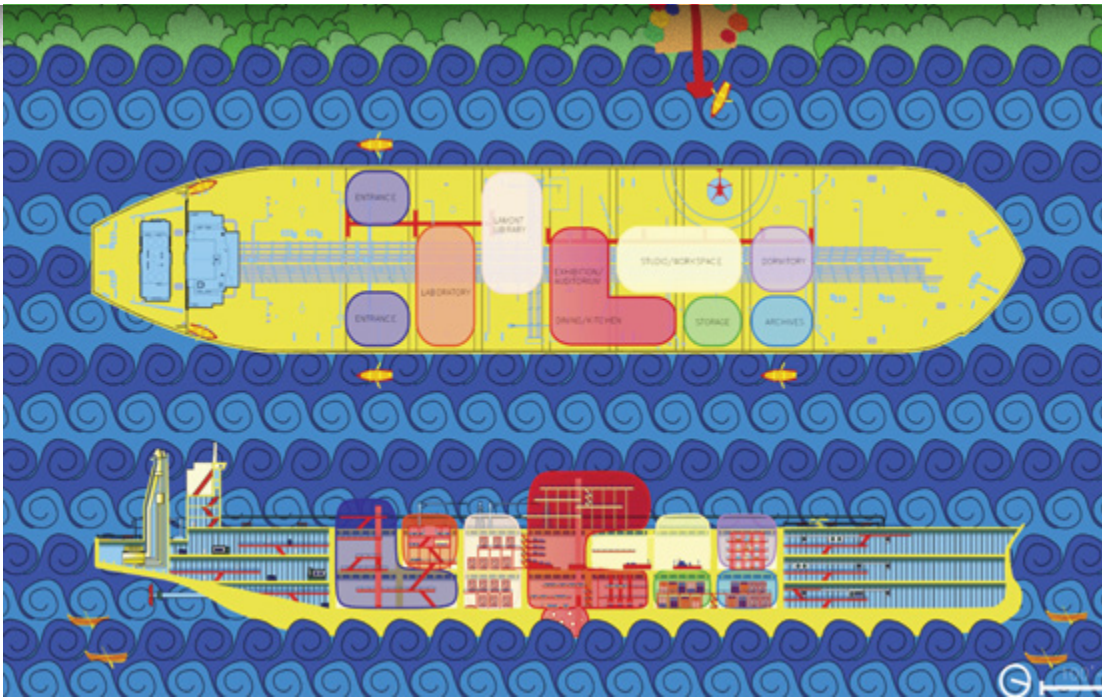
## Rahul Gupta

The Climate School on Governor's Island will be a catalyst for breaking silos between disciplines and a collaborative platform for knowledge sharing and innovation.

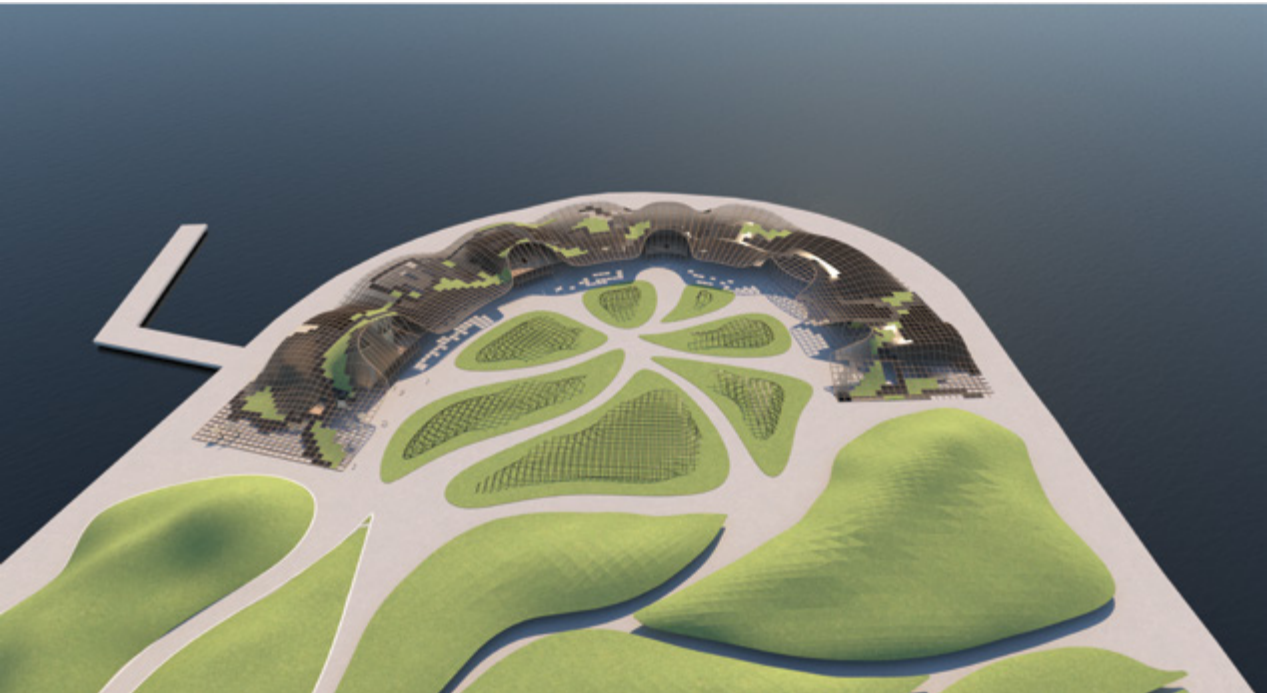


a moment in history that has already witnessed vast changes in the educational, institutional, social, political and physical landscape. It used the frame of architecture to both re-conceptualize and re-invent a new school.

Vera Montare  
Savory



Behruz Hairullaev



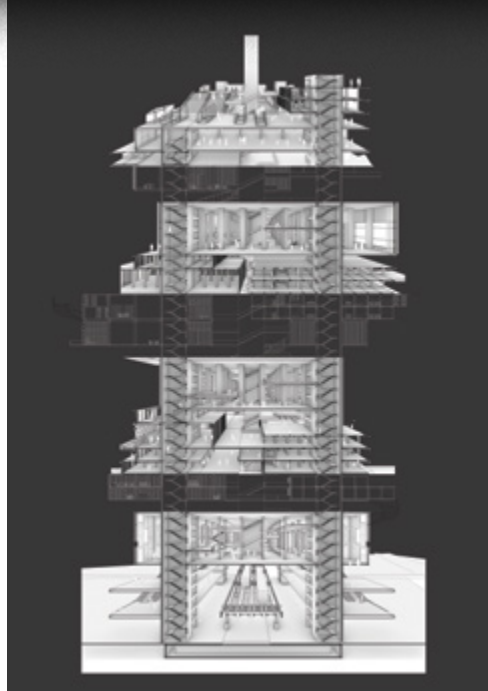
## &lt;FORMAL/INFORMAL: MIGRATING CLIMATES IN THE IMMIGRANT CITY&gt; Phu Hoang

The studio engaged with immigrant communities to understand their everyday appropriations and adaptations to formal systems. Nearly half of the residents of Queens are foreign-born. Students learned from those who have migrated to the U.S. and live in communities predominantly from Latin America, Asia, and the Caribbean. Studio sites were selected from the Jackson Heights, Elmhurst,



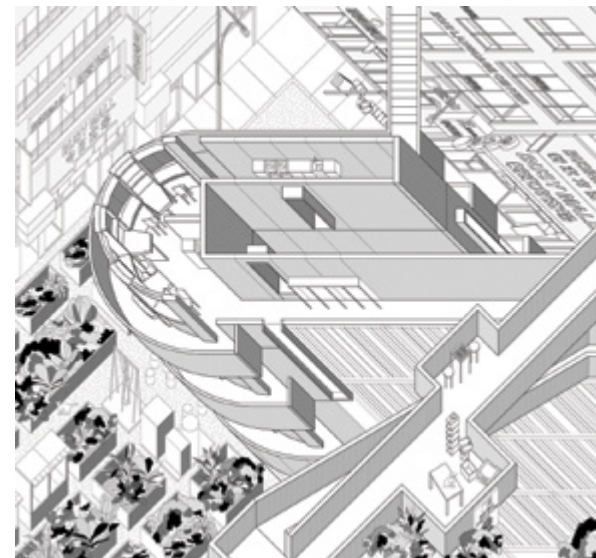
## Michelle Clara, Renee Gao, Devansh Mehta

Balancing unpredictability and architectural authorship, *Open Tower* reframes the conventional high-rise as a heterogeneous and non-hierarchical vertical city. The project democratizes the space, allowing its occupants to control informality and programming public agoras along the entirety of the tower, generating a new ground for immigrants displaced by climate change.



## Yue Sarah Shi, Wan-Hsuan Kung

*Reciprocity* explores reciprocal relationships in affordable housing for senior Chinese immigrants in Flushing. An interface between the private and communal life of seniors, kitchens are paired with informal programs of gardening, small business activities, and childcare to serve as a social infrastructure that connects seniors with the larger community.

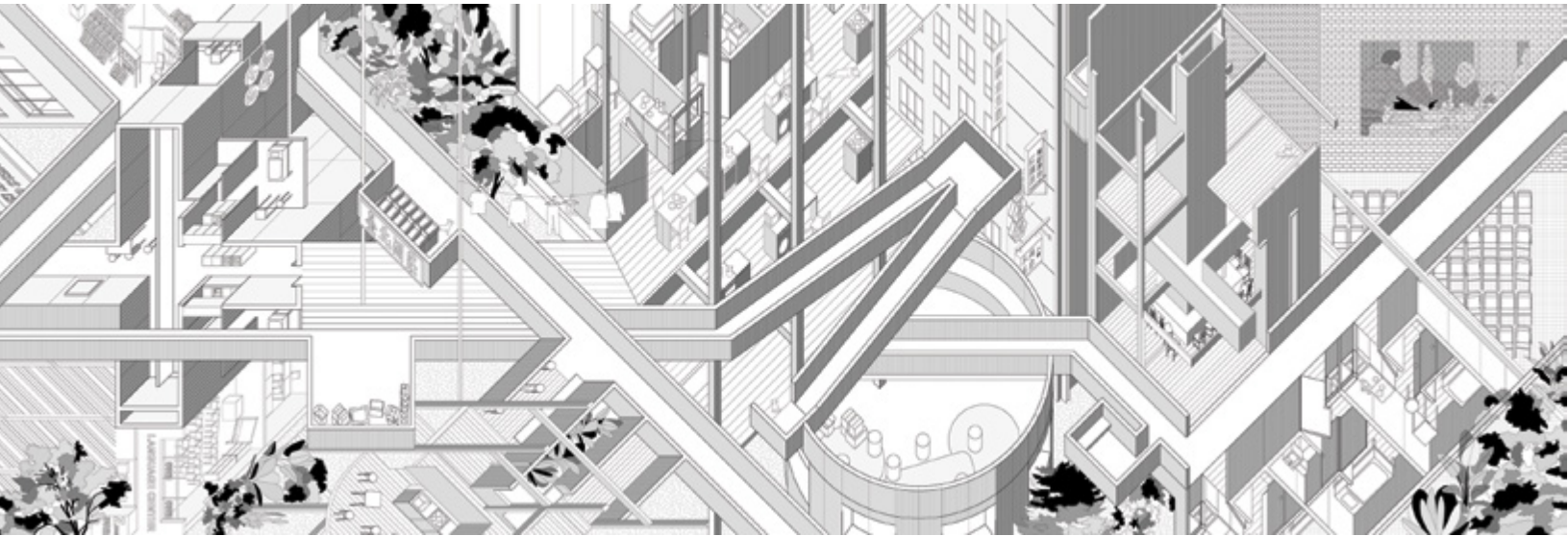
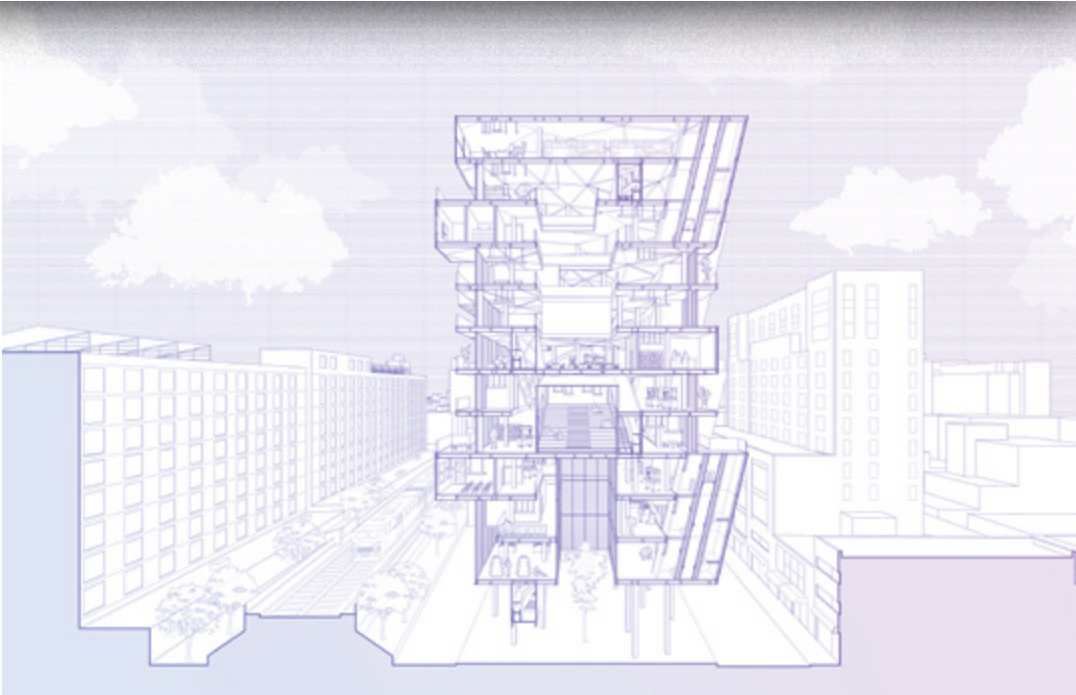




and Corona neighborhoods. The design methodology included case study research of non-Western architecture, urbanism, and visual forms of representation. The ambition was to design architecture or infrastructure that supports the front-line communities most at risk from the global health crisis, racial inequality, and the climate crisis.

Yuan  
Eleanor Liu,  
Liwei Guo,  
En-ho Chan

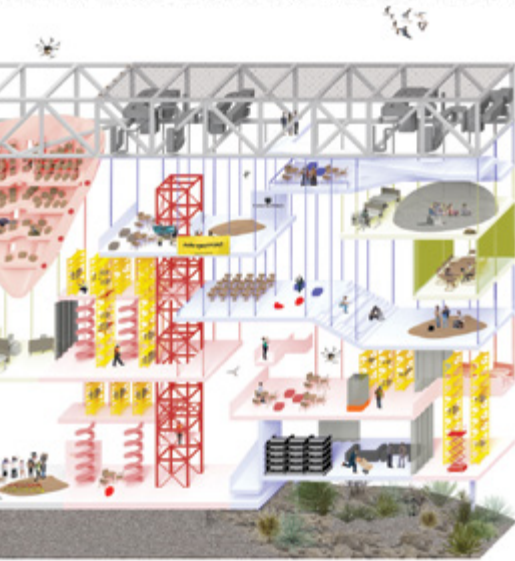
*Heterogeneous Transit* attempts to help Chinese immigrants face the climate crisis in 2100 by creating a mixed-use produce market and community center, reducing the carbon footprint by reducing the long-distance to Miami, and creating a railway system that transports vegetables to the project site.





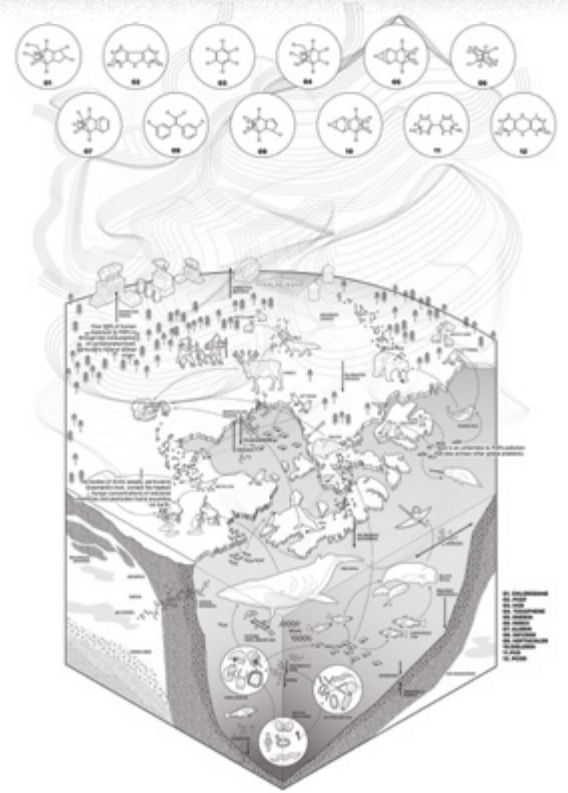


the enclosures and lines produced elsewhere. Air forges “black snows” of sugar canes on the streets of Pahokee, FL, and morphs into tears, smoke, and mirrors, at the squares and borders across the globe. Recognizing air as an elusive yet critical spatial medium, the studio engaged air and the variegated materialities and ideologies of “plein/open air” as shared prompts for this semester’s exploration.



## Alek Tomich, Audrey Dandenault

*Materializing Arctic Air: An Infrastructural Network of POPs Research and Care* introduces environmental remediation through the conversion of abandoned Distant Early Warning (DEW) line sites into a research and care system targeting Persistent Organic Pollutants concentrated in the Arctic atmosphere.



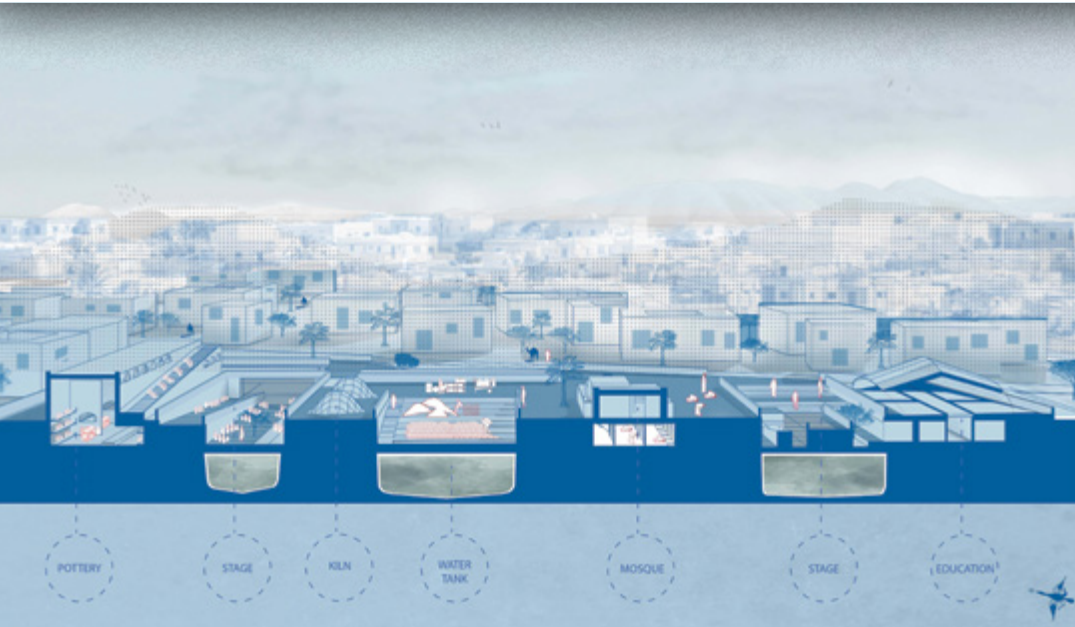
## Anirudh Chandar

*Pneuma: Infrastructure for Air Accountability* brings public visibility to issues of air pollution affecting marginalized communities by creating replicable interventions hosting pedagogical spaces that combine new public domains with knowledge production within hostile infrastructural landscapes.

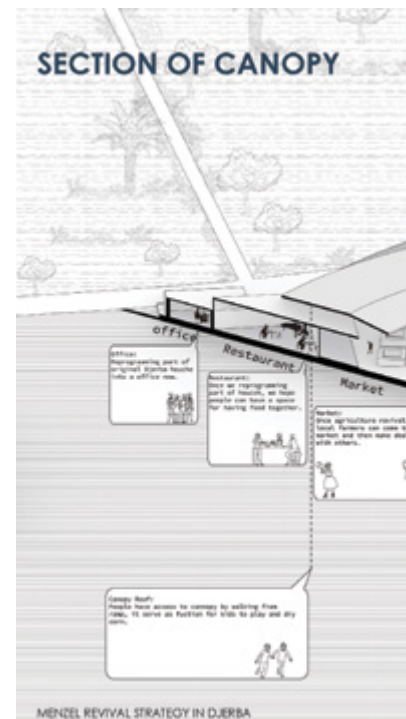
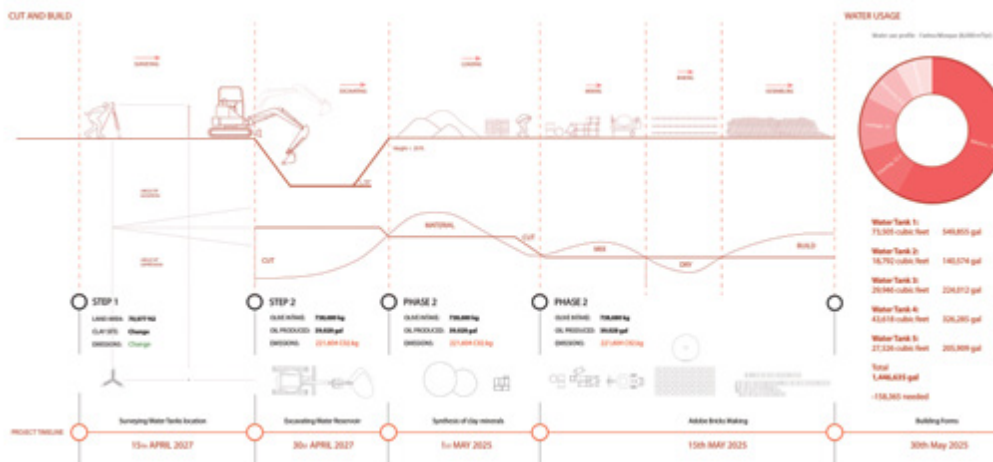


## &lt;THE COSMOSQUE: GLOBAL ARCHITECTURE OF BENEVOLENCE&gt; Ziad Jamaledine

This studio investigated the reconceptualization of religious architecture, namely the mosque, as a means through which to engage social welfare programs—a critical undertaking at a time when, under the weight of the pandemic and other economic and environmental challenges, societies across the world are experiencing unprecedented levels of the lack of access to public services.



Abdelrahman Albakri,  
Faisal Alohal

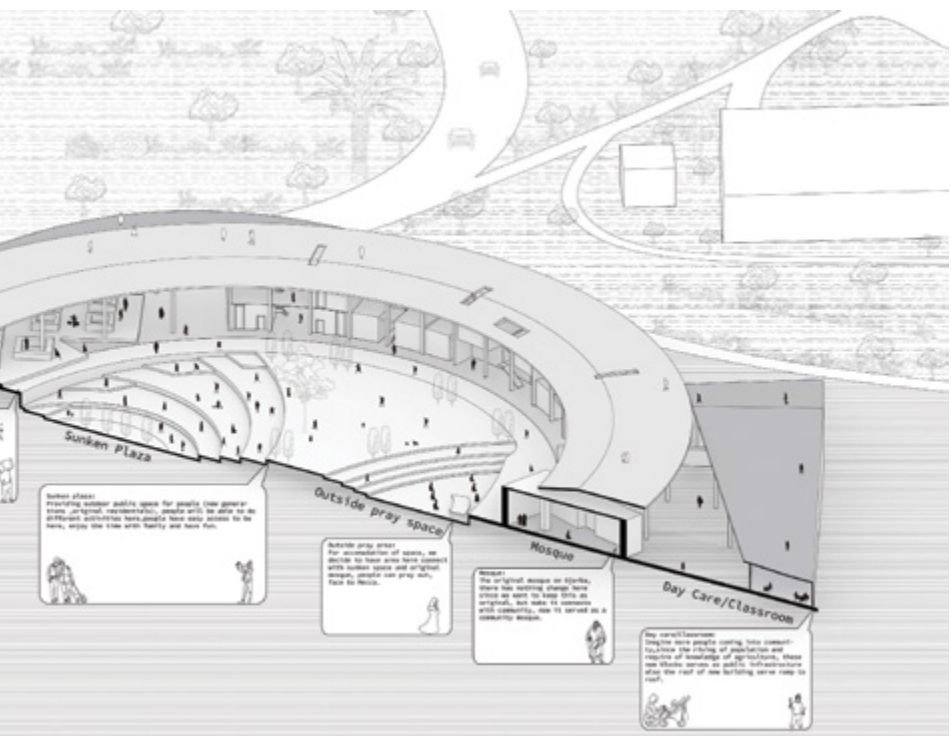




*Cosmosque* proposed to shift away from the limited understanding of the architecture of the mosque that focuses on the construction of timeless monumental masterpieces and the celebration of a fictive ‘unity’ of Islamic architecture across time and geography. Instead, it aimed to construct an alternate dynamic narrative of development, one that looks at the mosque as a hybrid and evolving building type, characterized by a rich historical tradition of constant negotiation, transformation, and alteration.

Jasmine Jalinous,  
Marie Christine  
Dimitri

Through our lightweight scaffolding system encasing *Fatih Mosque*, a canal system intervenes throughout the city and an agricultural system divides the imperial and mosque gardens.



Chao Chang,  
Wanqi Sun,  
Xianghui Kong

## &lt;THE ANTI-CLEARANCE STUDIO&gt; Andrés Jaque

This studio focused on the replacement of the notion of “site” (often characterized as an empty patch of muddy land void of presence and history) to the notion of “terrain” (as the relational systems that support entangled and diverse forms of life). It looked at processes of eviction, displacement, destruction, dispossession, and social and ecological disarticulation as crucial phases in which



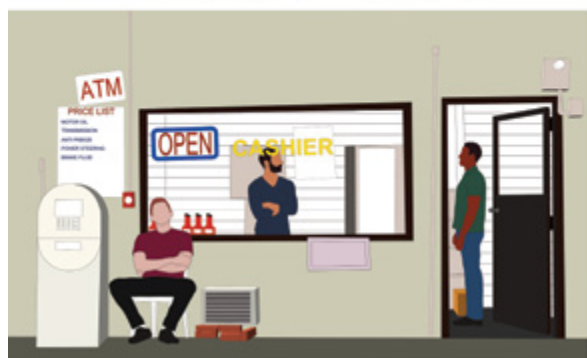
## Cris Liu

The project explores how three places in Rockaway, Queens will look in 100 years through utopian and dystopian lenses. It asks: How will social, political, and environmental futures impact architecture and humans?



## Kassandra Lee, Ian Wach

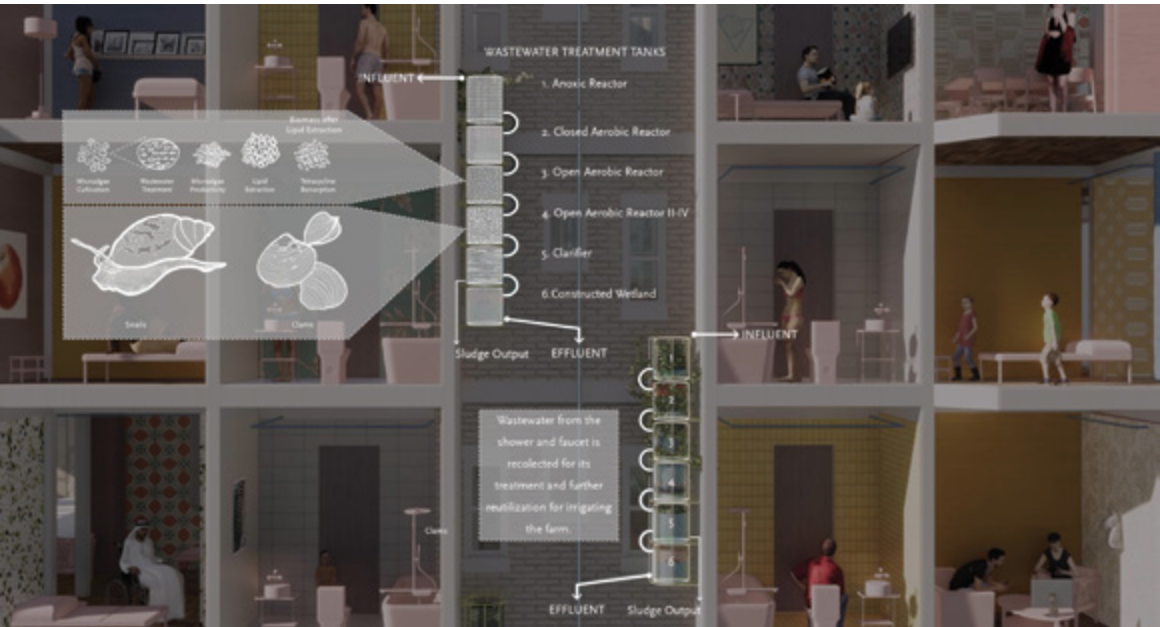
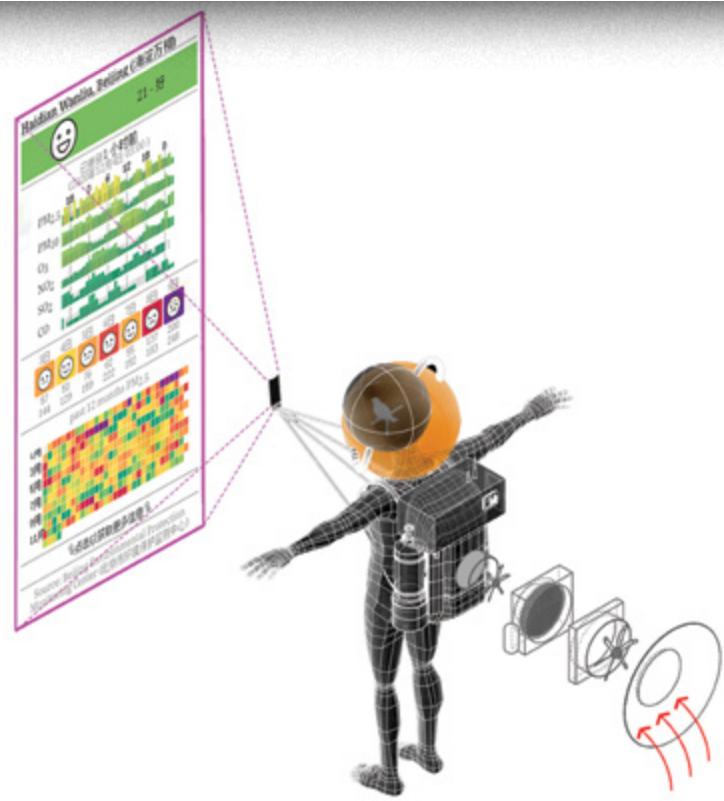
By examining the Manhattanville redevelopment proposal through the lens of Columbia University's historic pattern of displacement and gentrification, we aimed to shed light on the urban fabric and social networks that existed in West Harlem before they were eradicated by Columbia, and the systemic inequities that allowed this erasure to happen.





architecture operates as a force for segregation, inequality, and uneven exposure to environmental vulnerability. Studio participants worked with experts from different fields and communities affected by slum clearance and relocation to define architectural lines of action intended to undo, compensate, provide reparation, and exceed the structural and the particular damages site-making produced in New York and worldwide.

Jerry Zhao, Mandi Hu



Pabla Amigo,  
Farah Alkhoury,  
Magdalena  
Valdevenito

*Life Support Ecosystem* caters to those who have been excluded from real estate hegemony in Manhattan or unwilling to participate in it. Five main spatial transformations has been tested in Cooper Square to nurture the soil, grow food, collect and treat the water, compost and establish various degrees of sharing.

## &lt;THE ARCHITECTURE OF ACTIVISM&gt; Gordon Kipping

The performance of architecture is crafting space with intentionality. Architecture produces constructed objects and spaces which choreograph our interactions with our environments and one another. Architecture can play an activist role in combating social, economic, political and environmental disorders but it has been mostly spared from the conversation and action. This studio



## Nora Fadil

Deeming social media the perfect propaganda machine, *A Mouthful of Propaganda* questions whether architecture has more of a place within social media and activism.



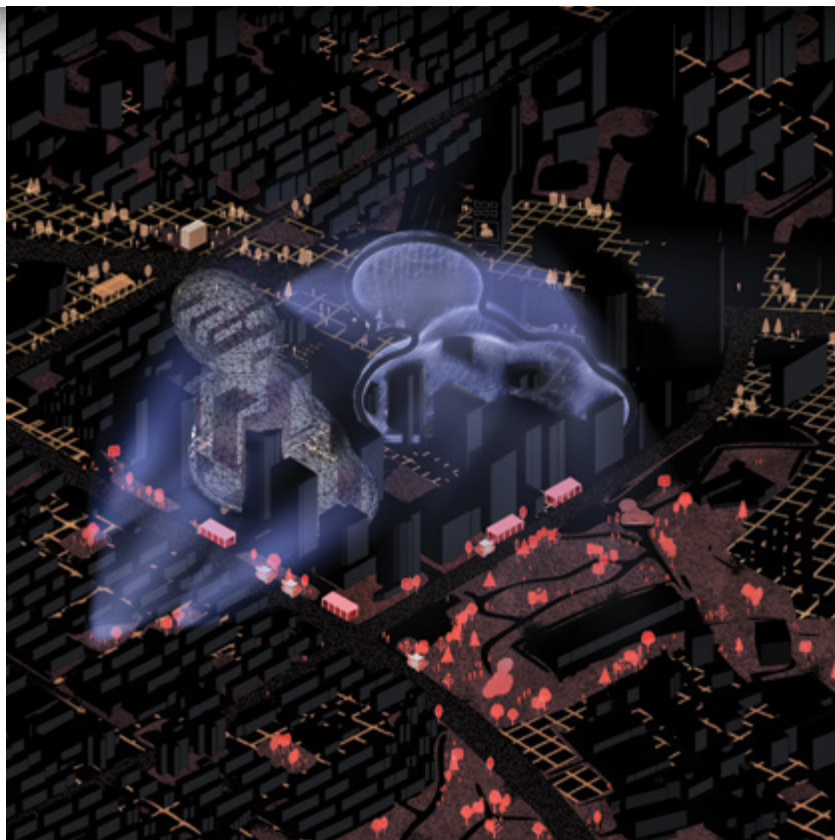
## Emily Ruopp

*Energy Tower in the Park* creates an architectural activism that mitigates income inequality, climate vulnerability, and social vulnerability. Through building alterations and additions, it makes existing public housing become net-positive while also mobilizing a community to participate in the emerging sustainable economy but focusing on the most vulnerable populations first.

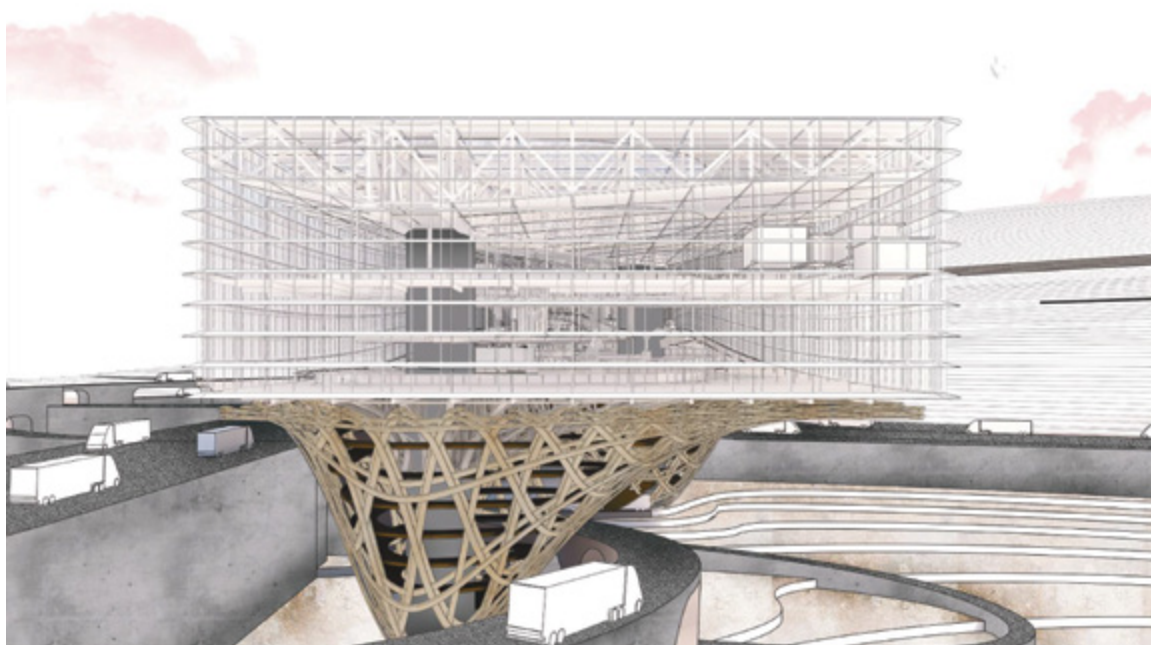


addressed this absence with the design and construction of architectural interventions to effectively mediate the interaction between an activism movement and the territory in which it operates.

Duo Zhang



Seonggeun Hur



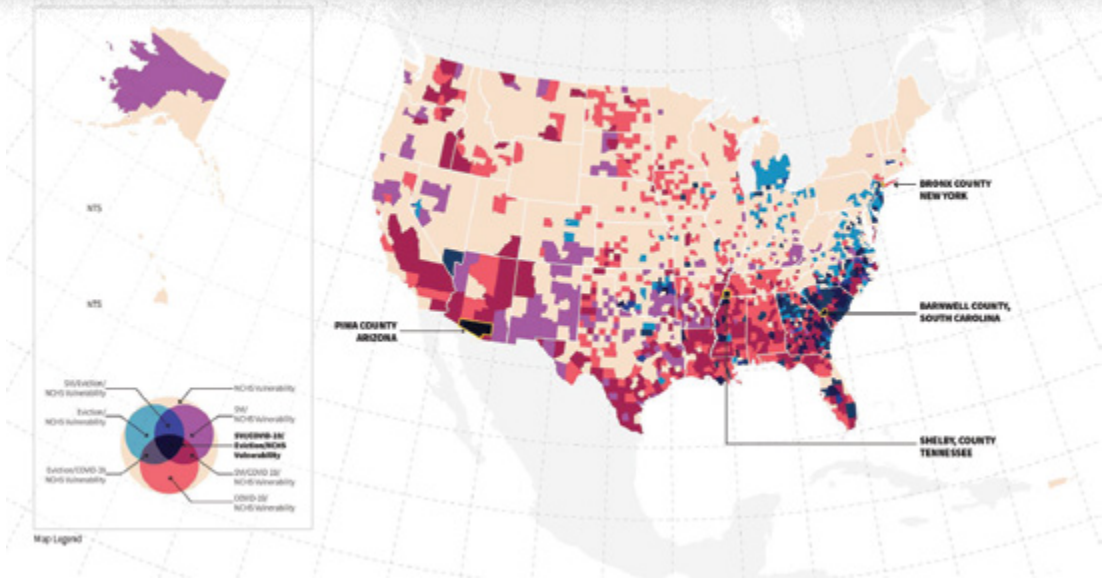




vulnerabilities, use their diagnoses to create a speculative toolkit for a care network, and then put their toolkits to work (into action) by creating an active link with a local site to develop a design proposal.

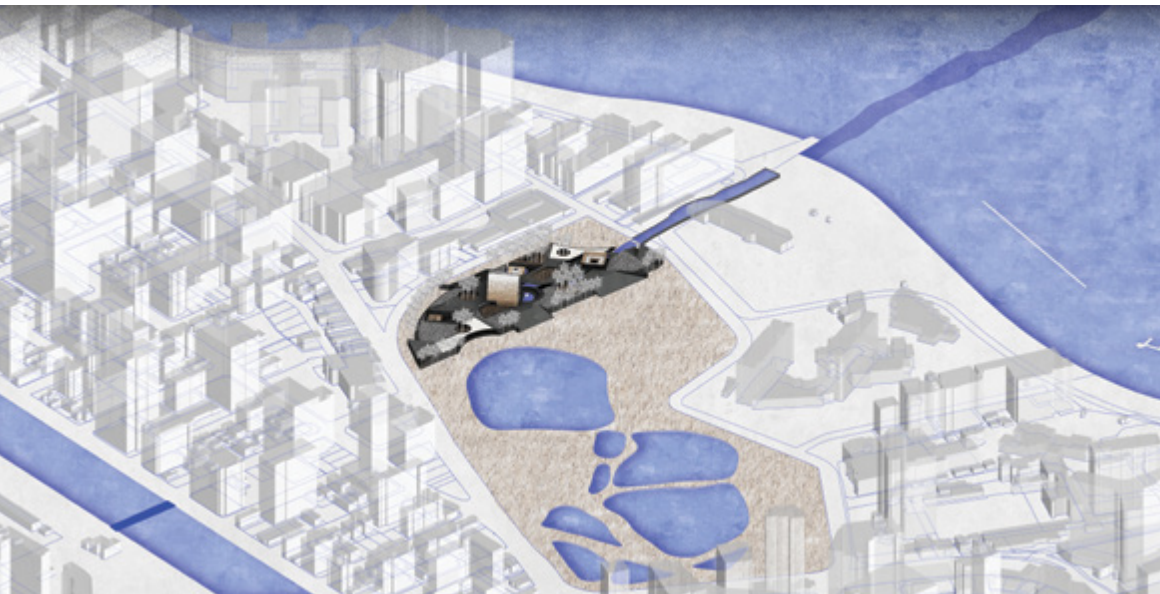
Nelson De Jesus  
Ubri, Sarah  
Zamler

*Staying Power* is a toolkit of research and strategies aimed at fostering a network of care in response to evictions. The project analyzes systems of eviction both before and during the COVID-19 pandemic to understand how to empower tenants. A set of four interconnected proposals addresses each point of intervention.



<WAIKĪKĪ 2121: AN ACADEMY FOR A HAWAI'I FUTURE> Christopher Leong, Dominic Leong  
in collaboration with Sean Connolly

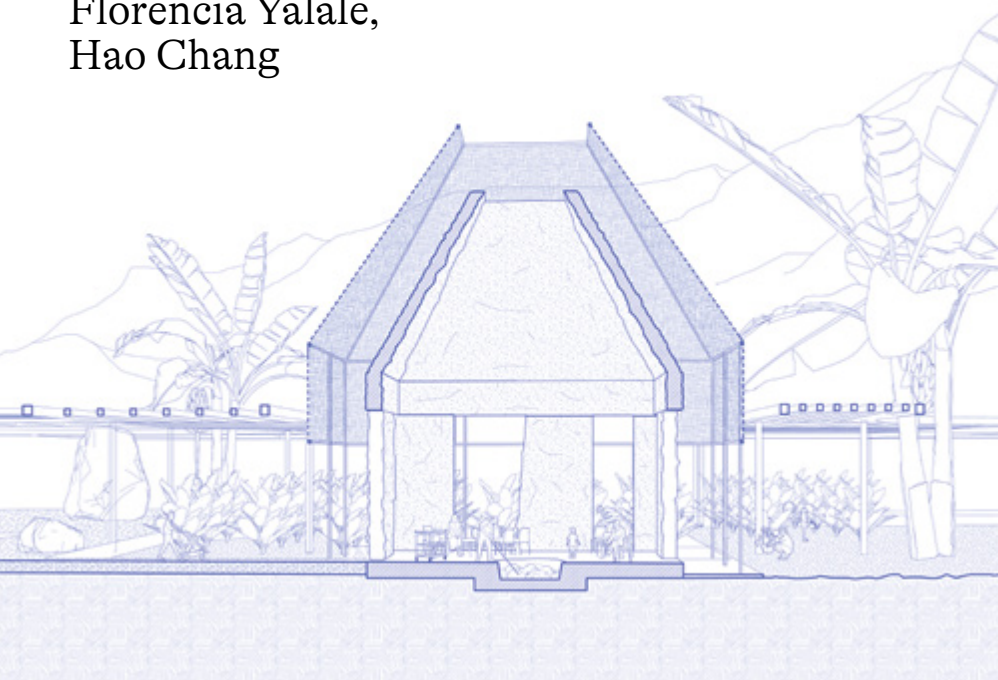
This studio is part of a two-year project to radically re-imagine the urbanism of Honolulu, Hawai'i, the most remote island in the world on the frontier of the COVID-19 and climate crisis. The studio explored a trans-scalar and intersectional approach to interrupt existing U.S. urbanism through a network of pedagogical ↗



## Veeris Vanichtantikul, Lu Liu

*The Academy of Healing and Resolution* is designed as a gateway to link people from the upland (Makau) and the plain (Kula) to the sea (Makai) and a bridge to connect people from Waikiki city to the fishponds.

## Florencia Yalale, Hao Chang





sites (hālau) for indigenous knowledge (‘ike) at an architectural scale. The Academy for a Hawai‘i Future aims to empower indigenous Hawaiian knowledge, and the local ecologies of guardianship in a way that Mary Pukui described as “utilizing the resources of sustenance to a maximum.”



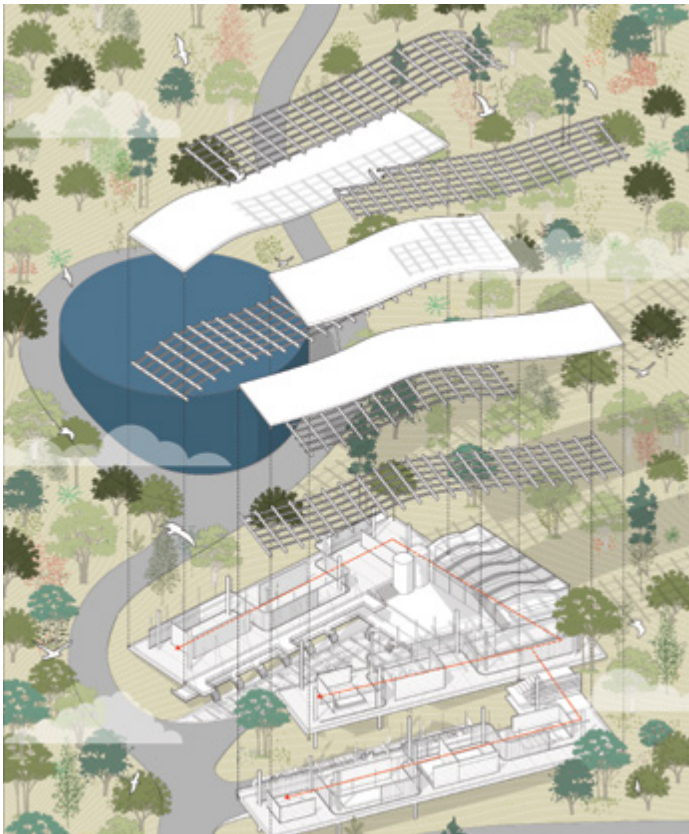
Jacob Hu,  
Charlotte Sie Wing Ho



Greta Crispen,  
Adela Locsin

*The Academy of Aquatic Regeneration* positions non-human ecological actors, humans, and the built environment in a mutualism of ahu pua’a guardianship. This process includes reterritorializing the Ala Wai Small Boat Harbor as a marine estuary and coral reef over 100 years.

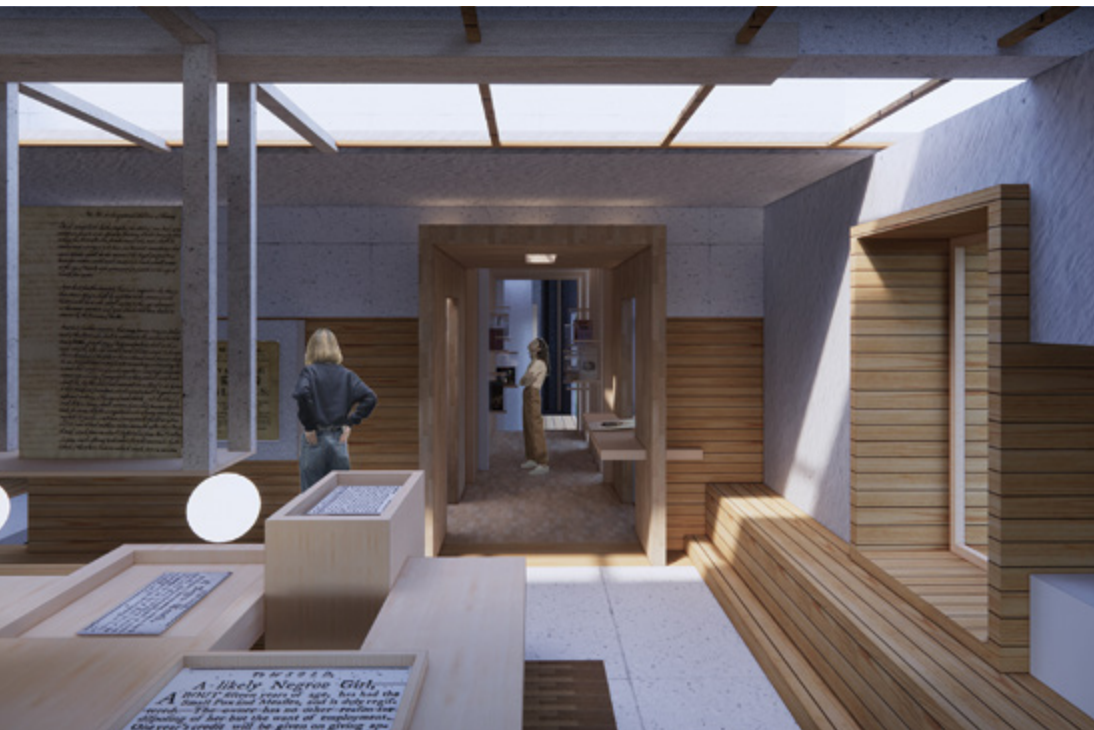
Timlok Li,  
Jihae Park



## &lt;JOINT ARCHITECTURE AND HISTORIC PRESERVATION STUDIO: RADICAL RECONSTRUCTION&gt;

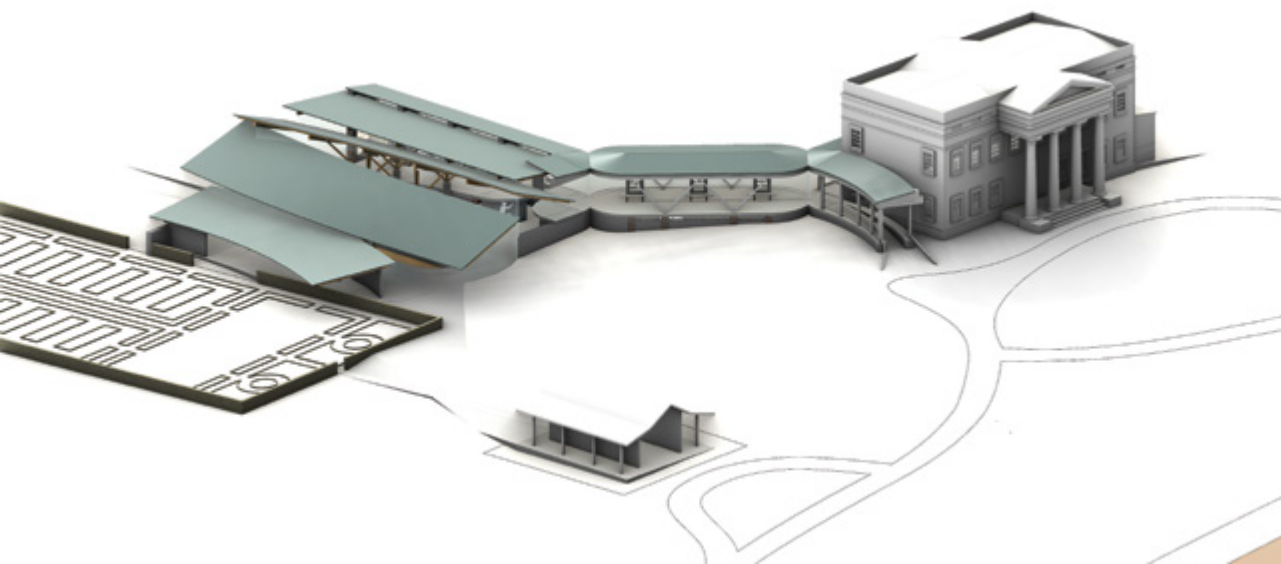
Jorge Otero-Pailos, Mark Rakatansky

This studio, “Radical Re-construction: Materializing Social Justice at the Estate of John Jay, a Founder of American Democracy,” proposed the design of a new interpretative education center, and a series of reconstructions of missing buildings associated with under-represented narratives at the John Jay Heritage



## Tianyuan Deng

*Walking Inside The Wall* integrates historical documentation and archeological objects into the spatial narrative to expose the complex contradictions, and create an educational experience.



## Abhinav Gupta

*The Jay Center for American Democracy* aims to critically comprehend the legacy of the Jay Family, specifically John Jay's legacy of reconciling the site's twin narratives: the narrative of enslaved people in the colonies, and the narrative of being colonies, in and of itself.



site, engaging the crucial need today to expose and materialize the space of political, psychological, and social exclusions and inclusions at the root of the foundations of American democracy. The architectural and preservation question of the studio was how to materialize the matter of these entangled lives in their complex historical and current interrelations—how to reconstruct what is hidden or under-represented.

Zach Bundy

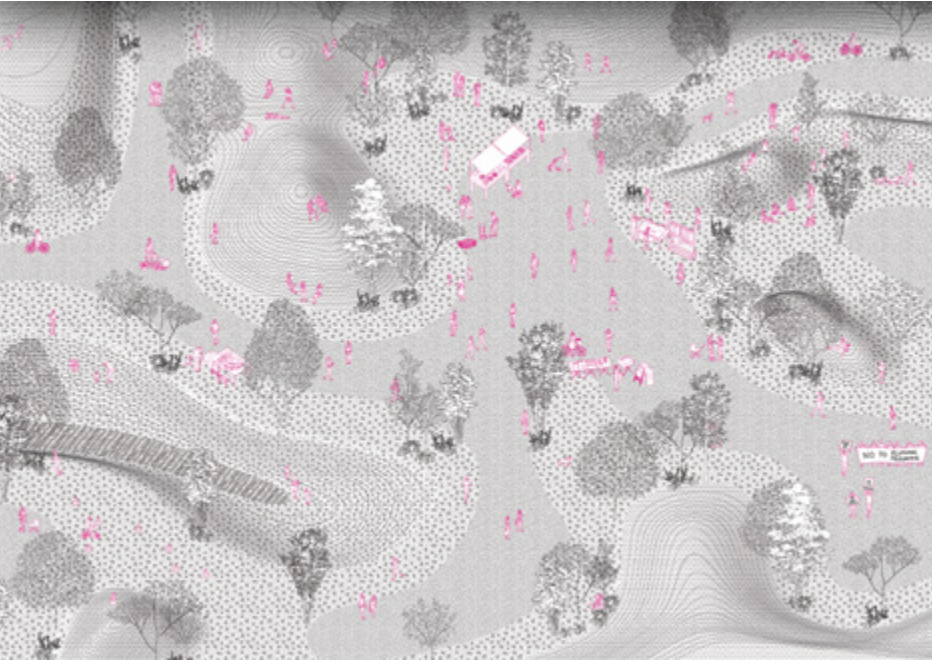


Yuedong Lin

*Under the Roofs* reconfigures rooftops into a series of spaces that accommodate exhibitions and programming.

## &lt;A CITY FOR CHILD CARE&gt; Bryony Roberts

The studio examined how child care is entangled with the politics of gender, race, and labor. Addressing child care as both an architectural and social issue, it addressed a space of care holistically, imagining how a new child care center could support three intertwined populations: children, parental figures, and care workers. Working at the scales of both architecture and urban design,



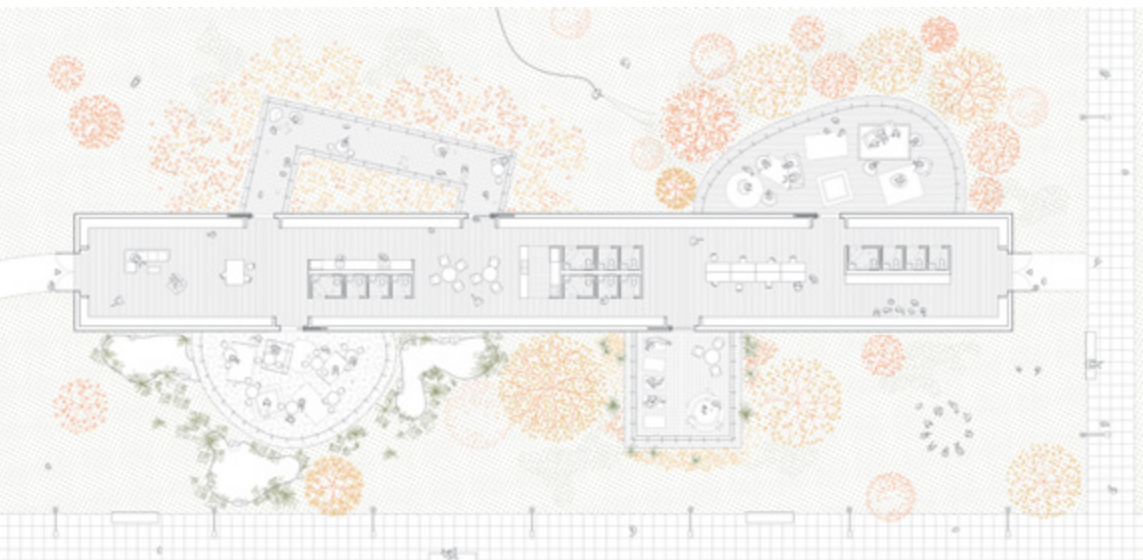
## Camille Brustlein

*Landscape of Care* aims to provide a network of support to the existing informal systems of care in Flushing, Queens.



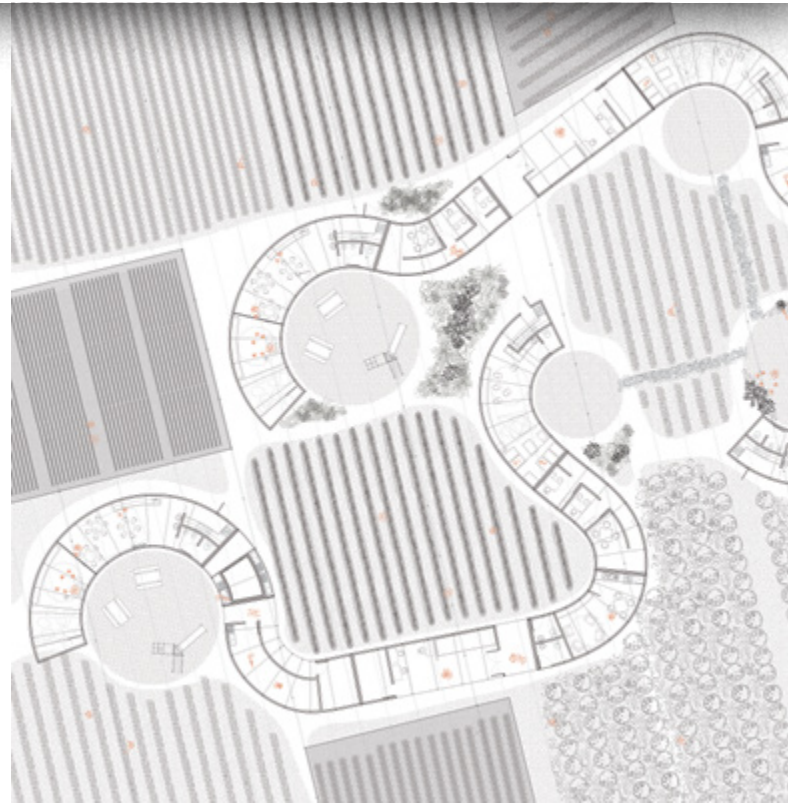
## Eunjin Yoo

## Mark-Henry Decrausaz





students explored the design of child care from the material realization of an individual building to the larger scale of its surrounding urban context. Students imagined a child care center at the heart of a Community Land Trust—a form of land stewardship that supports long-term affordability and counters gentrification—along Flushing Creek in Queens.



## Lauren Scott

*Productivity at Play* embeds, overlaps, and intertwines productive agricultural labor and reproductive childcare labor to address the unequal valuation of labor.

## Ruijing Sun, Cherry Xinyi Qu

*A City for Childcare* leverages fabric production as a mechanism for fostering a community in the realm of cultural identity, economic benefit, and environmental sustainability.



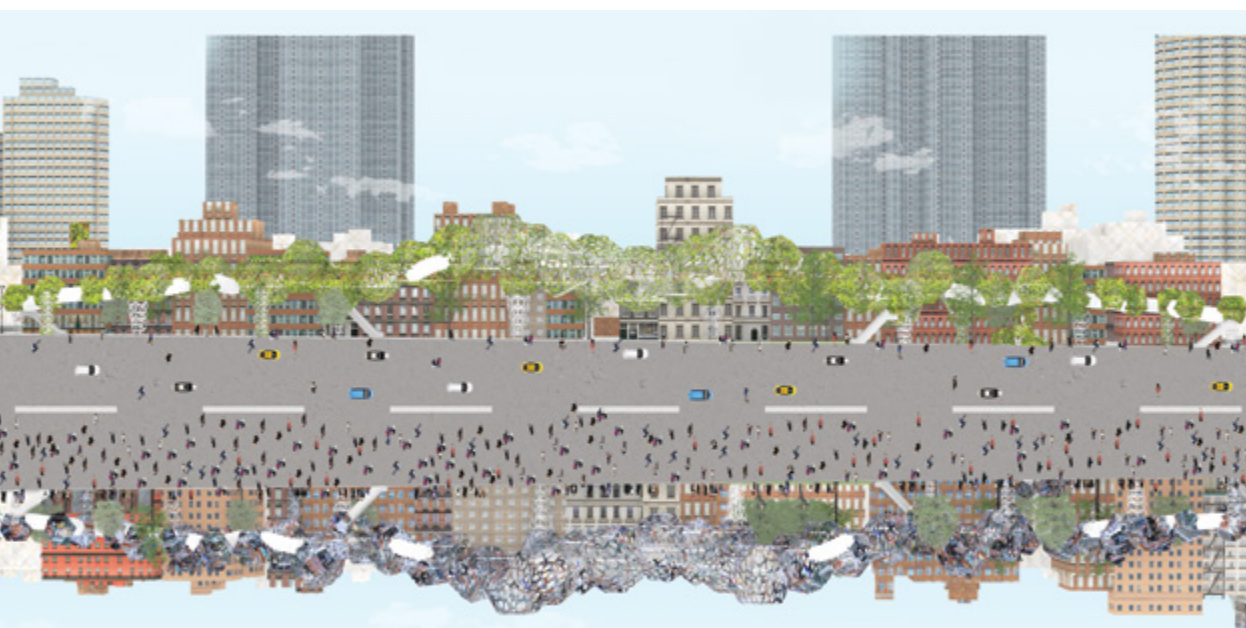
## &lt;STREETS OF PANDEMONIUM&gt; Bernard Tschumi

The studio reversed expectations, in exploring what no one considers the proper approach. It questioned the dictionary of received ideas and played devil's advocate. It addressed problems upside-down and the wrong way around. It believed creativity often begins with the unacceptable. The strategy was to propose an unusual hypothesis, whether social, programmatic or technological, and see if ↗



Hemila  
Rastegar-Aria,  
Yuexi Xu,  
Sarah  
Abouelkhair

Equity is achieved through the reversal of social hierarchies in the form of a "Coup d'Social": an urban safe space to provoke a paradigm shift that aims to push the limiting beliefs of the socially discriminated groups towards a more empowering belief system.





it can lead to an unexpected architecture or urbanism, to demonstrate the validity of the original hypothesis. Or alternatively, to define an unusual architectural or urban hypothesis, and then investigate whether it could help resolve a social, programmatic or technological issue.



Jun Ito,  
Chia Jung Wen,  
Tianyu Yang

*Climate Bypass* evolutionary structure grows and supports everyday life in the city under the shifting climate change conditions over the next 100 years and beyond.



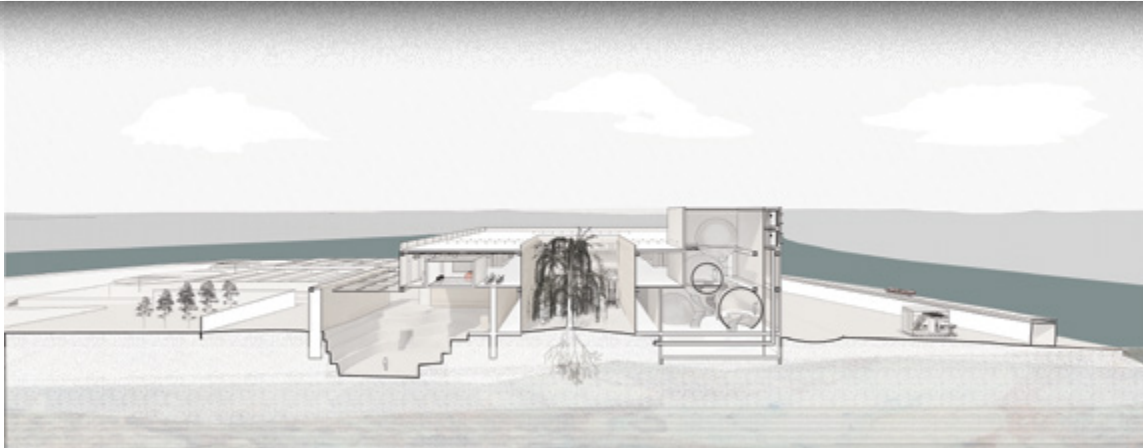
<PRODUCTIVE UNCERTAINTY: INDETERMINACY, IMPERMANENCE, AND THE ARCHITECTURAL IMAGINATION> Marc Tsurumaki

This studio asked how the material conditions of architecture might engage the increasing volatility that characterizes our collective relationship to emergent environmental, climatological, biological, political, and social conditions. Extending beyond the immediate crises, it sought to interrogate architecture's



## Camille Lanier

*Remedy-Labs'* second-floor is a plug-in modular laboratory supported by four exhibition rooms that magnify toxic micro-systems, each categorized by associated element: soil, water, air, material waste.



## Janice Yuan Chen



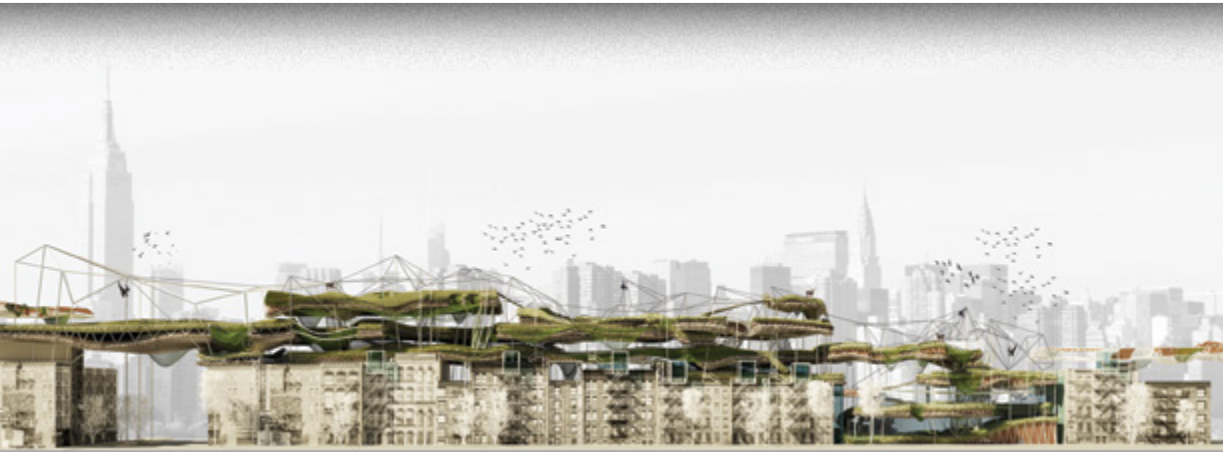
## Eva Yi Jiang, Amber Shen

*Atlas* proposes a replicable system of architecture that attempts to explore the relationship between architecture and recycled materials—especially construction and demolition materials—in response to the overall theme of productive uncertainty.



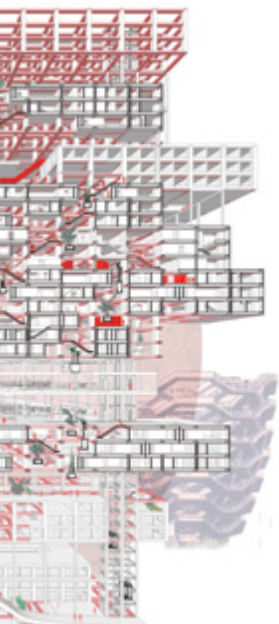


intersection with notions of adaptability, transience, and transformation. It asked: How do we navigate the impossibility of future-proofing on the one hand and the inevitability of obsolescence on the other? How do we avoid the trap of designing for the last crisis while allowing for the emergence of the unforeseeable?



## Kshama Daftary

*Terrapolis* creates a habitat where all species (humans, animals, insects, plants, etc.) co-exist in a system of mutual respect, understanding, and exchange similar to Manhattan in 1600.



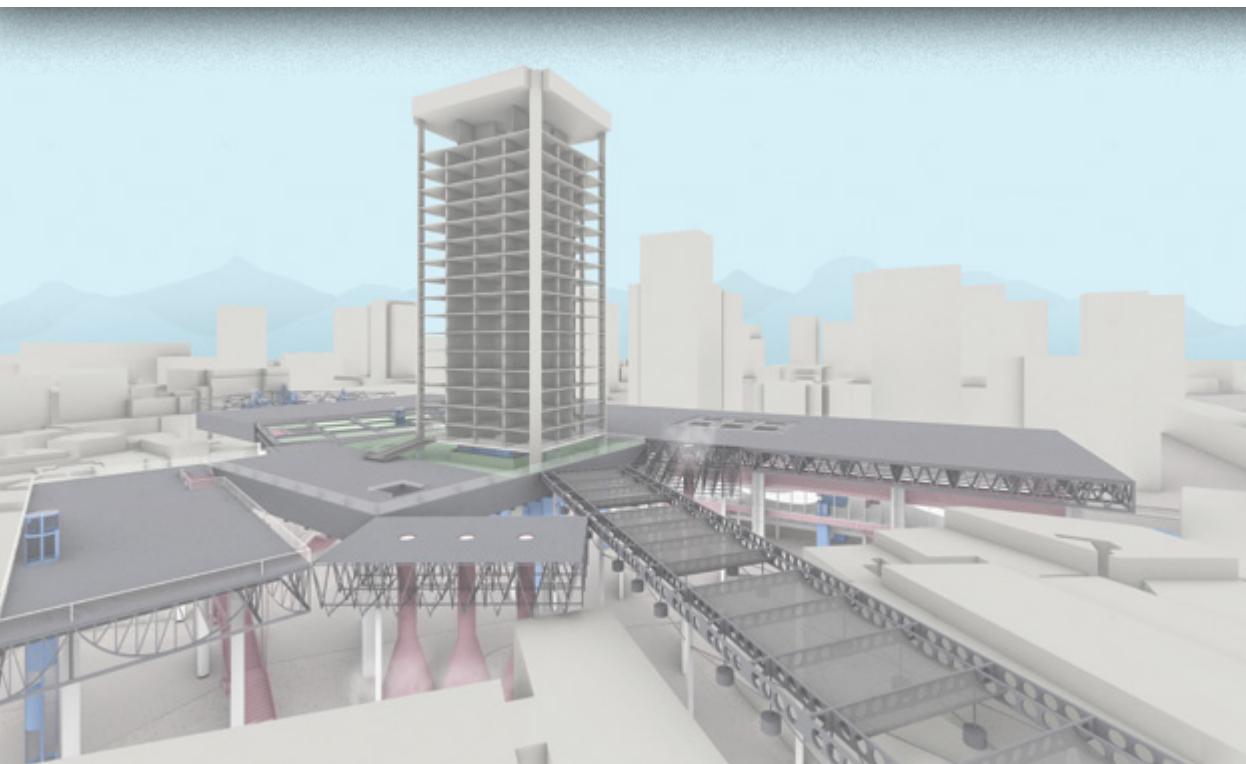
## Chen Yang

*Migrate the City* explores the possibility of metabolism in architectural programs, tectonic interchangeability, and the adaptive reuse of Penn Station.



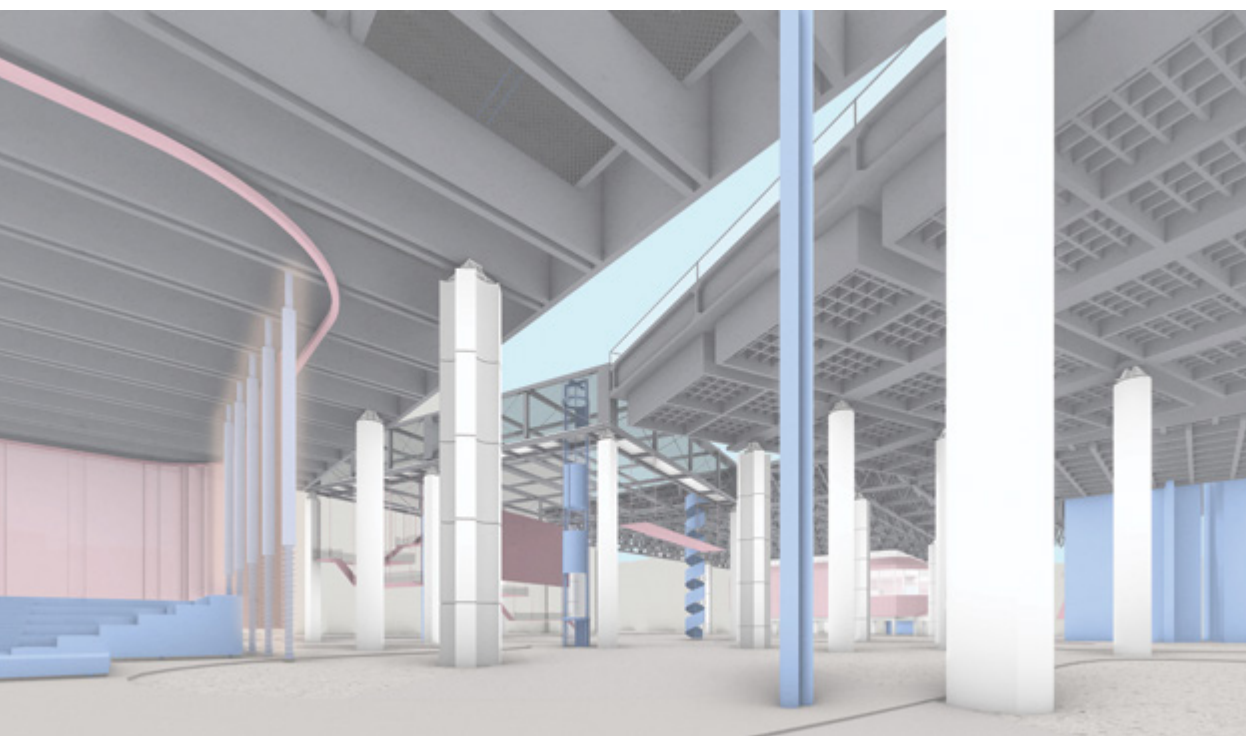
## &lt;OPEN WORK&gt; Enrique Walker

This studio collectively addressed two buildings in South America that intersect the debate on open-endedness, namely: the MASP (1957-1968) in São Paulo by Lina Bo Bardi, and the UNCTAD III (1971-1972) in Santiago by José Covacevic, Juan Echeñique, Hugo Gaggero, Sergio González, and José Medina. The studio brief was to join a team, and either double the surface, or halve the program of the



Chengliang Li,  
Oliver Bradley,  
Begum Karaoglu,  
Alice Fang,  
Joel McCullough

*Table-City* extends beyond the site of UNCTAD in Santiago, Chile, and reuses what is left to create a new cultural institution in conversation with its history. By freeing the ground and allowing for crisscrossing, the site becomes a ground for cultural exchanges allowing for friction with the city. Is this a roof, a block, a building, or the city?

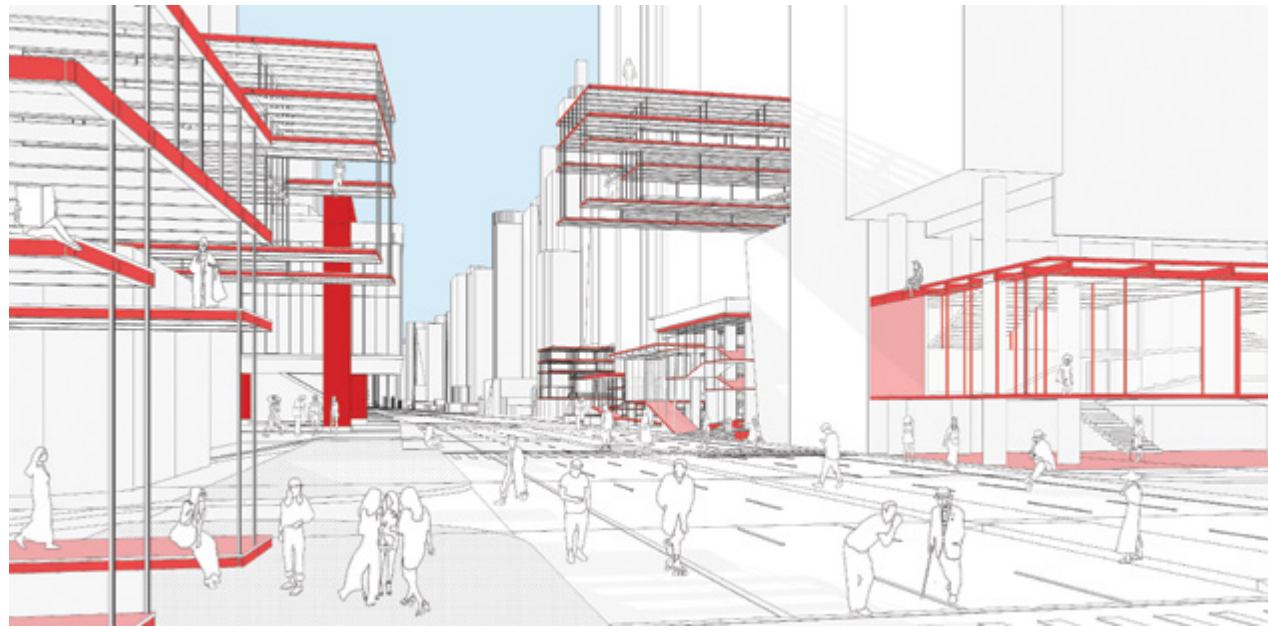
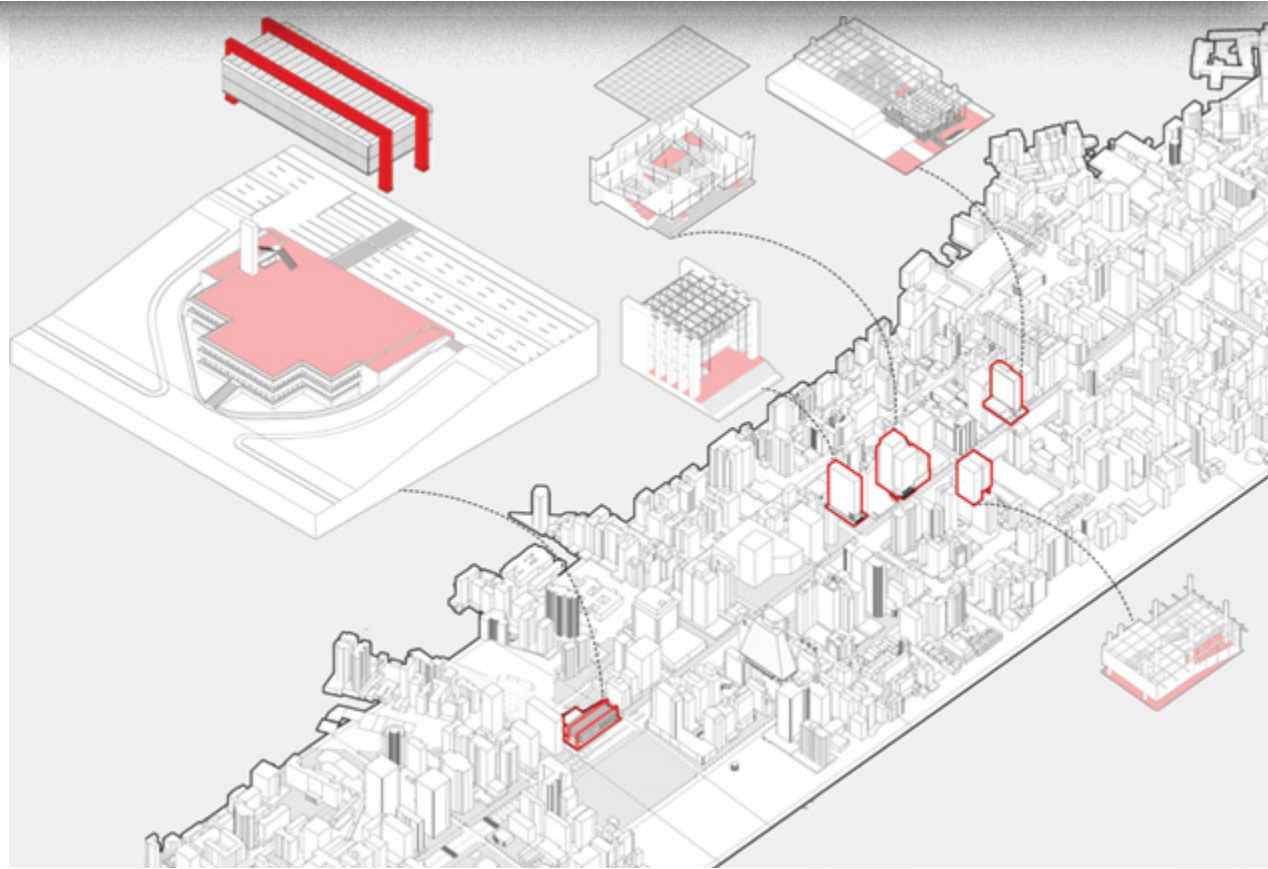




buildings. The studio question was to design in conversation with, and take position on, a building and the arguments it advanced, and to tackle a long-standing question within the field, again, half a century later.

Tamim Abedin,  
Jinxia Lou,  
Kai Wang,  
Zhijian Sun,  
Patrick Lin

The Lina Bo Bardi-designed MASP could be viewed as a writer's text from the perspective of Roland Barthes, so we would reread open works and open-ended spaces from MASP to contemporary architecture, as well as from the dimensions of Bo Bardi's work, Sao Paulo's urban context, the culture of Paulista Avenue, and the ontology of MASP.



## &lt;PROTOCOLS OF CARE: BODIES OF ASSEMBLY&gt; Mabel O. Wilson

This studio examined radical care practices in art and performance to imagine new protocols for an architecture of care. The studio evolved through two re-research projects and a design project sited in Lower Manhattan. To begin the studio, Mobile Assemblies maps and animates the time/space of recent BLM protests that erupted across NYC to better understand the dynamic urban/

Reem Yassin,  
Ashley Esparza

*Landscape of Grief and Care* looks to the performance of religious, spiritual, and cultural grief rituals as an entry point for analysis of spaces used to care for the dead and the bereaved.



## Mark Melita Kantai



architectural choreography collective assembly. Through notating kinaesthetic and urban movement, the studio explored the cadences of an individual body as it walks through a city by filming how the pandemic has reconfigured everyday interactions. These explorations of collective assembly and the body contributed to the design of “protocols of care.”

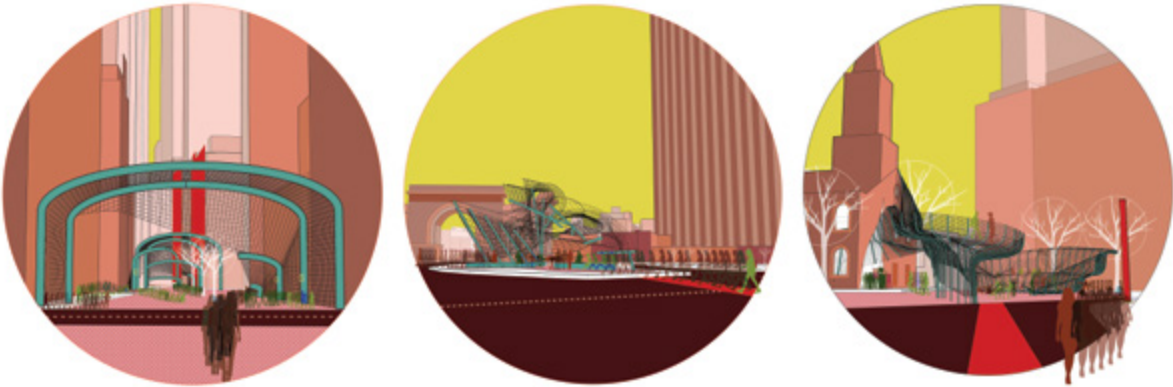
Luis Miguel Pizano

The proposal for a *Sanctuary Network at St. Mark's* generates a community-minded platform for recent migrants, which extends the protective infrastructure of church, site, and community through a series of user-oriented program tiers. Each tier is coordinated around a set of primary services, including temporary housing, collective kitchens for resident and community use, and service “pods” that house legal counsel, advocacy, and small-scale market spaces.



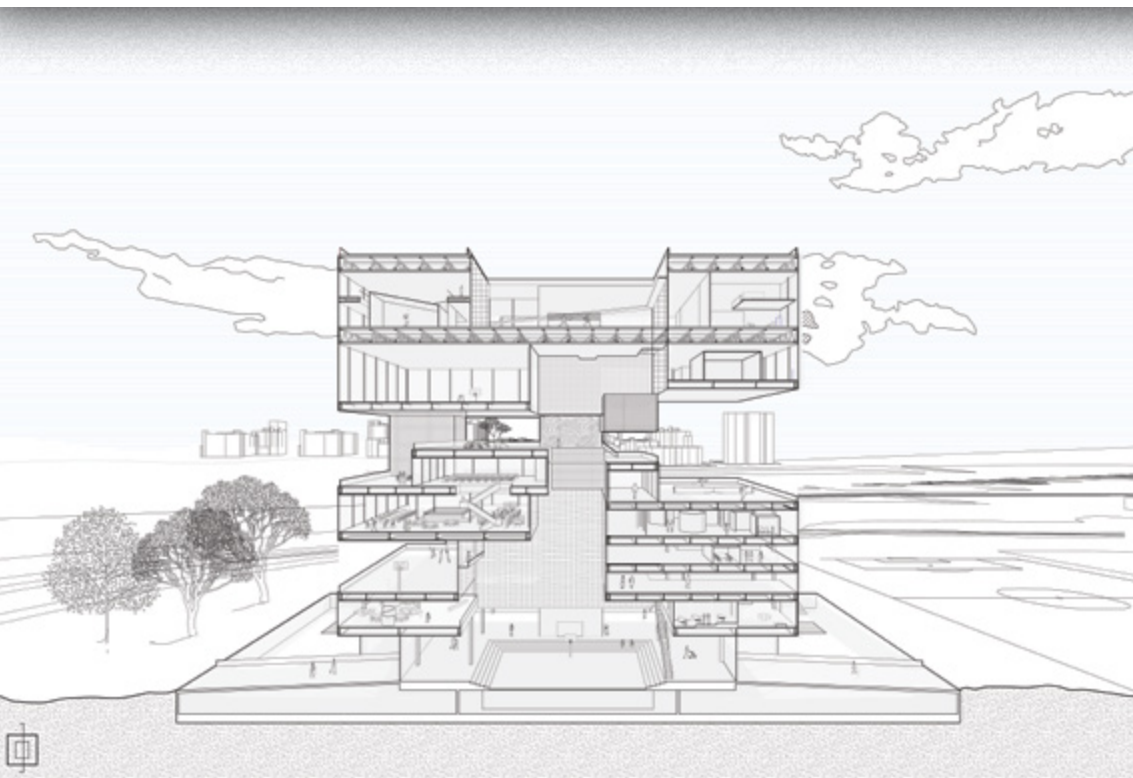
Camila Nuñez,  
Skylar Royal

*Performing History* is a historical walk and performance from Wall Street to St. Marks Church in the Bowery inspired by historically significant locations, the history of slavery in the Lower East Side, and modern protesting methods.



## &lt;A CENTER FOR SPORTS DIPLOMACY&gt; Dan Wood

As we enter the uncharted future post-climate change, post-COVID, and either post-Trump or post-Democracy, we have the opportunity to define new typologies that can better address the contemporary condition, both in the U.S. and around the world. For this studio, students interrogated, investigated, envisioned and created a new institutional typology: the Center for Sports Diplomacy,



## Alina Abouelenin

At its core, the *Embassy of X* challenges the question: Where does sports end and politics begin?

## Joey Xu

*Sports for Climate* is a sports center for climate action in Randall's Island. It raises community awareness of climate change and finds possible solutions through collective action.





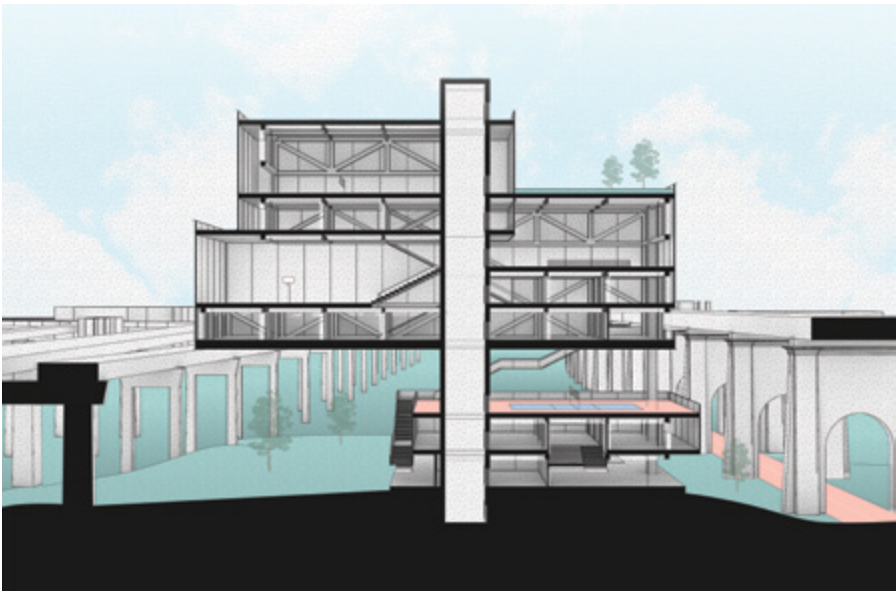
which acknowledges the increasingly important role that sports plays in advocating social and racial justice, reform and the advancement of a progressive view of society, both nationally and internationally. A combination of diplomatic mission, media zone, wellness center, production studio, training facility and community hub, the studio together worked to define this new typology and give it resonance.

Melissa Chervin

*The Center for Women's Sports and Advocacy* is an inclusive facility that aims to promote gender equality and women's and girl's empowerment by offering support, space, and programs for female athletes, professionals, activists, and community members.



Yirmiyahu Gilbert







# *M.S. Advanced Architectural Design*

## Andrés Jaque, Program Director

The Master of Science in Advanced Architectural Design (MSAAD) degree at Columbia GSAPP is a three-term program consisting of summer, fall, and spring semesters. It provides an ecosystem where leading voices in the field of architectural practice and outstanding young professionals—who hold a Bachelor of Architecture or Master of Architecture degree—together explore architecture as a crucial player in the evolution of major contemporary modes of defiance.

The program has long been a site for architects from around the globe to test concepts and confront changes that affect architecture, cities, and territories worldwide. Utilizing an environmental paradigm, the program serves as a cauldron for rigorously-curated pluralism, where faculty and students work together on six areas of knowledge and action:

1. Rendering technological systems accountable.
2. The architecture of the climate crisis.
3. Modes of environmental engagement.
4. Materiality as a territorial practice.
5. Interspecies relationships and non-anthropocentric otherness.
6. Design for social inclusivity.
7. The articulation of offline and online interaction.
8. Decolonizing geopolitical design.

The program pairs a set of required studios with elective courses that are shared with other programs in the School, promoting interdisciplinary transferences and collaborations. Furthermore, by extending beyond the Columbia University campus into the urban matrix, New York City becomes the milieu where the MSAAD is installed, making the program a learning experience that not only uses New York as its principal case study, but is enacted in direct participation with the rich network of laboratories, research centers, design agencies, organizations, and independent practices that the city concentrates together.

## &lt;THE ART OF POETIC ENVIRONMENTAL ARCHITECTURE&gt; Yussef Agbo-Ola

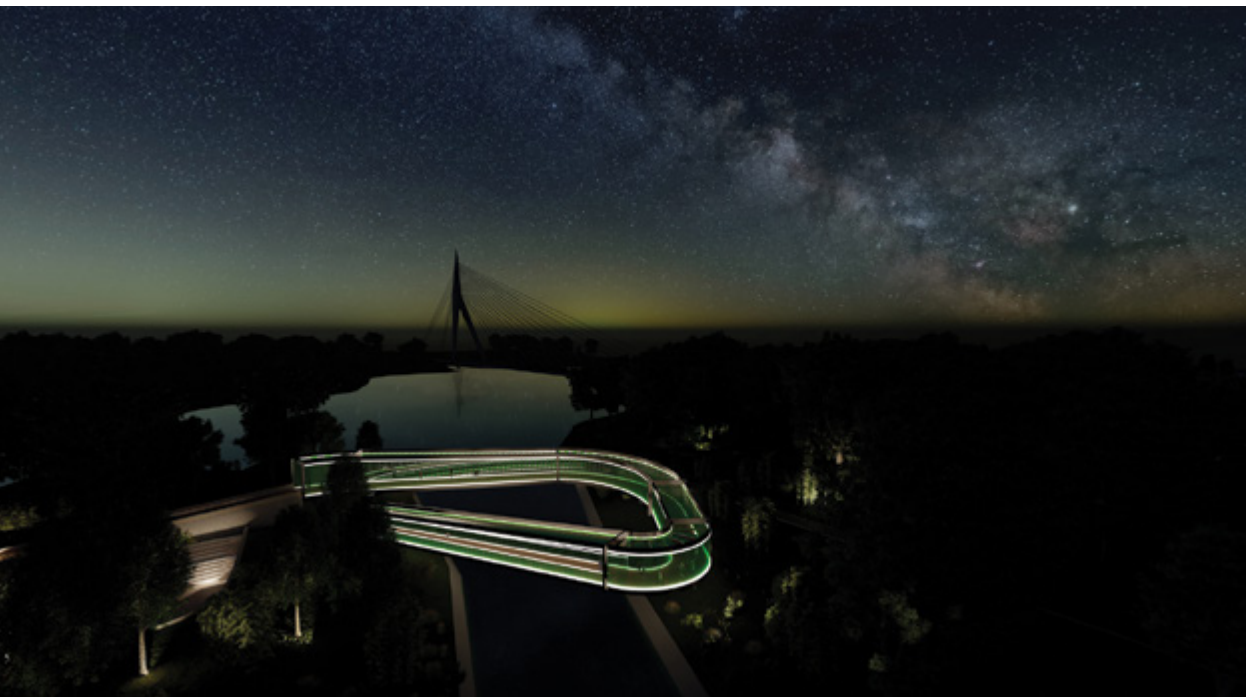
This course aimed to design poetic architectural public structures that stimulate environmental awareness through perceptual and environmental sensations. It questioned what architecture is and how it can be considered through silence (to observe) and decay (to transform). Based on the current state of our climatic and geological weather conditions, the course examined new ways of understanding ↗



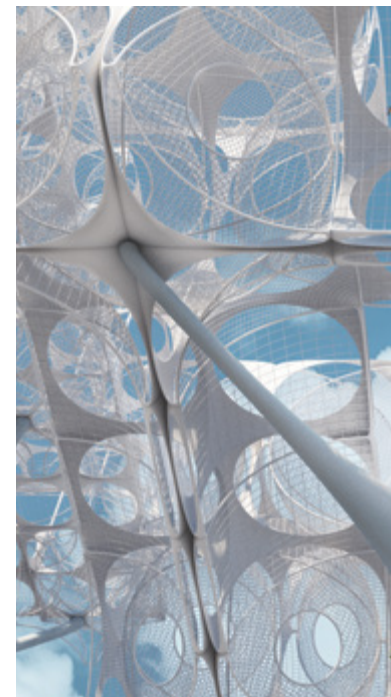
## Chia Jung Wen

Water is an indispensable element for nurturing life. From a microscopic internal perspective, it exists in each of our cells; from a macroscopic external perspective, it is the lifeblood of human settlements and the natural environment. This project uses water as a medium to find a course of healing and symbiosis between the human body, the community, and the environment.

## Vinay Agrawal



## Juno Lee





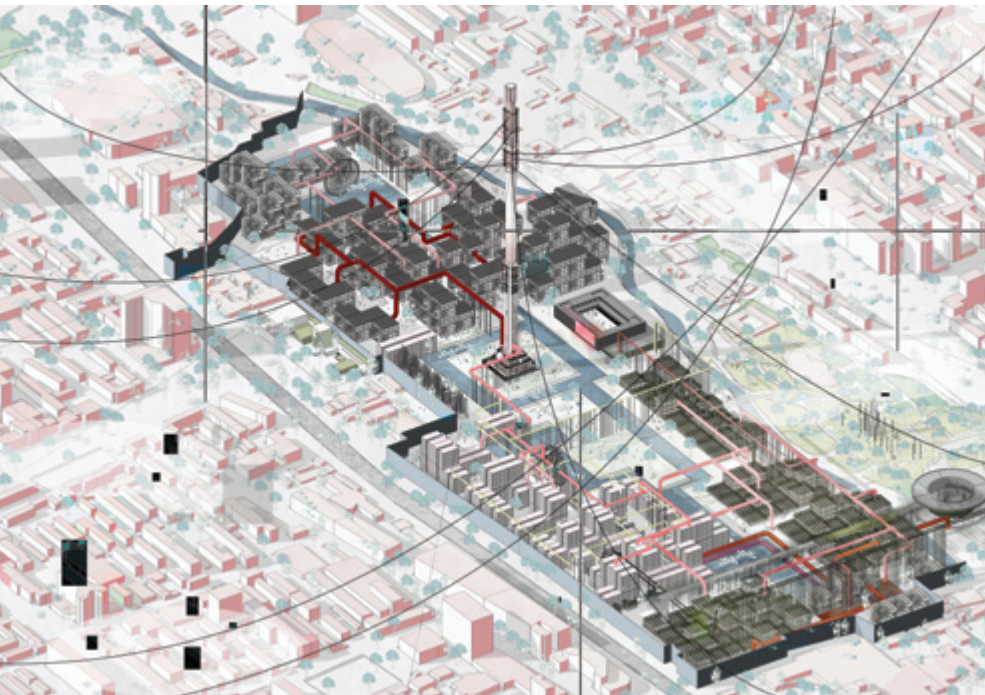
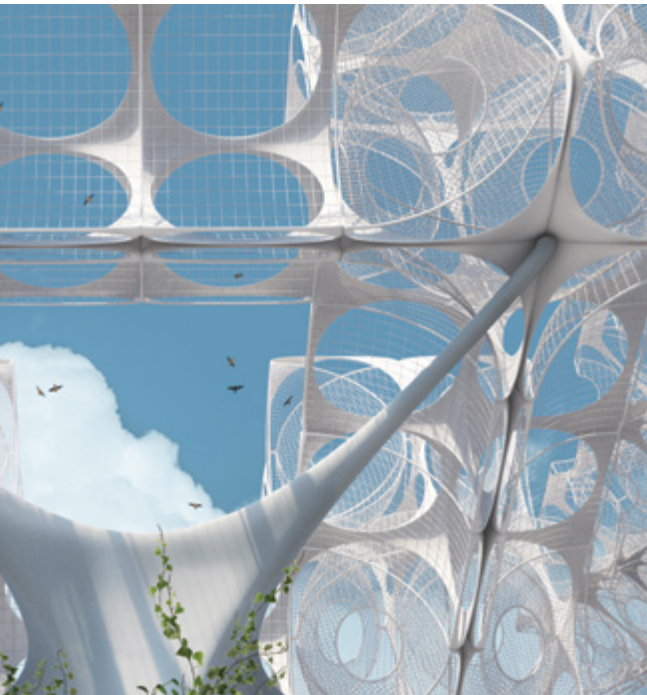
the role of the architect, and spatial poetics that rethink our environmental relationships. The aim was to expand the mental ecology in relation to environmental poetics and conceptual or symbolic design, while questioning the importance of this as a collective.

# Yiruo Li

In response to the heavy pollution of the East River, *Breath of The Isle: Anatomy of Environmental Recycling* engages exhibition spaces with the water treatment process.



# Yutong Deng



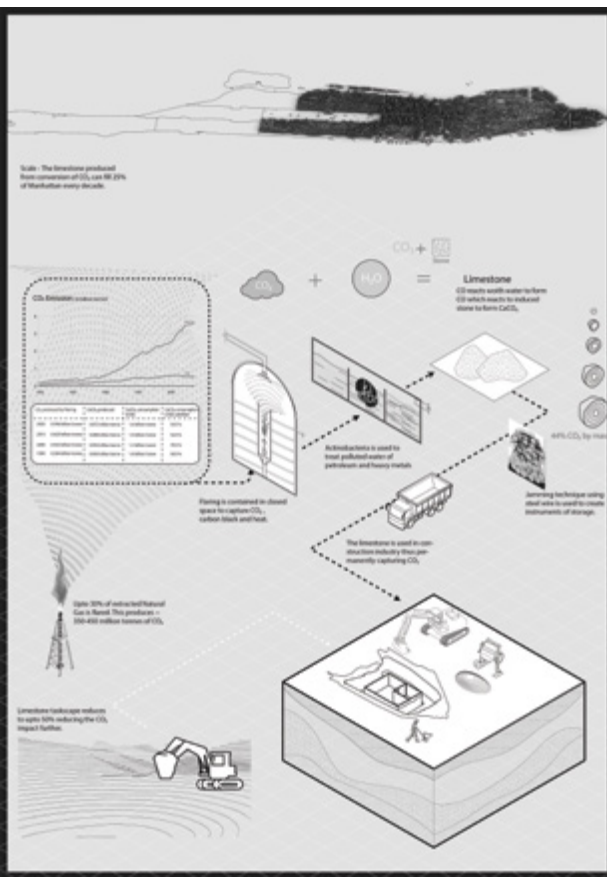
## &lt;EXTRACTIVE TASKSCAPES&gt; Jorge Ambrosi, Gabriela Etchegaray

This studio began with an investigation on mineral extraction activities whose outputs included visuals such as atlases and cartographic models, analytic assemblages, image and textual premises that explore the territory, its actors, the processes, and routes that are undertaken in the abstraction to ore products. Students then identified hyper-instruments whose outputs included the

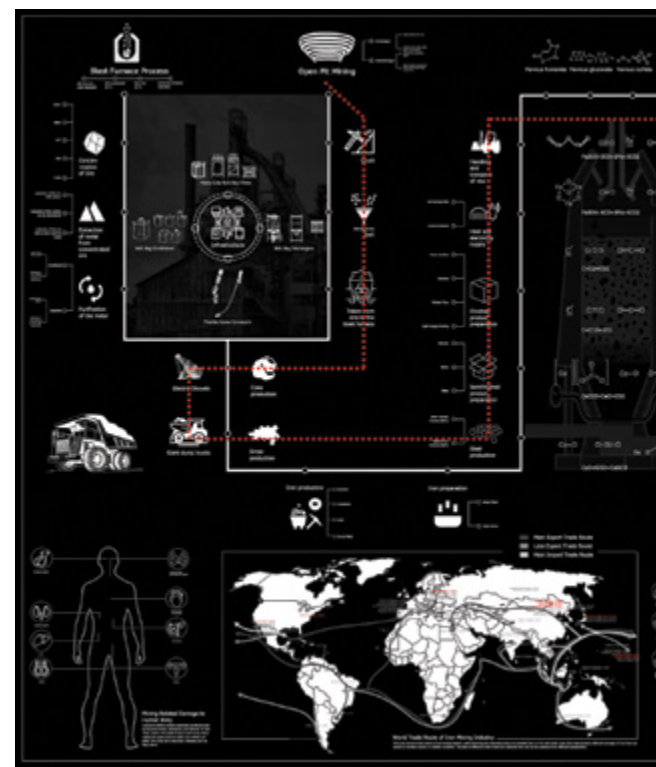


Gloria Zhu,  
Risa Mimura

Devansh Mehta

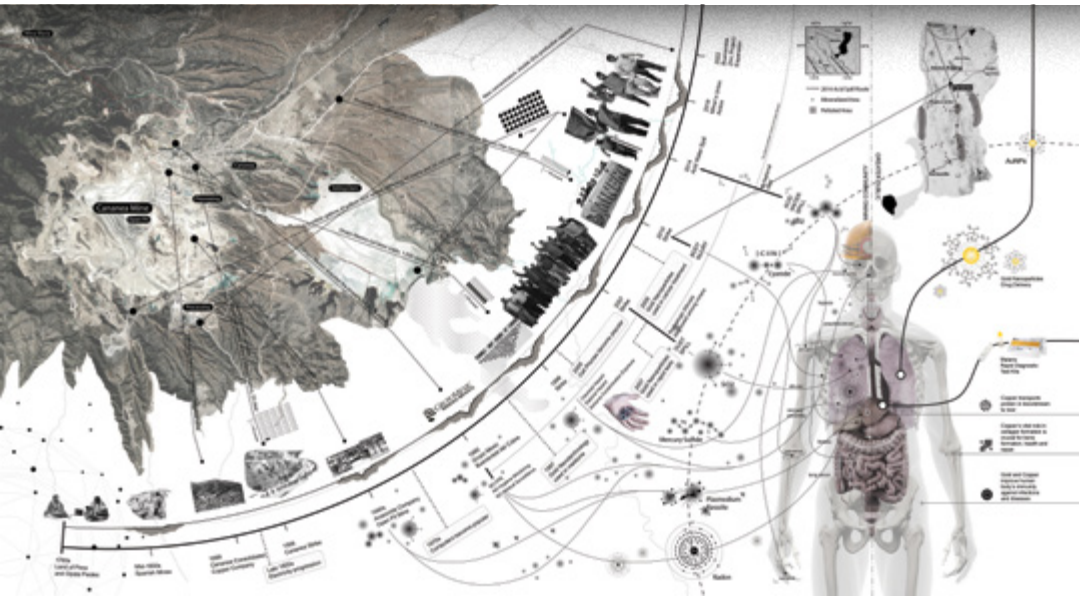


Qing Xie



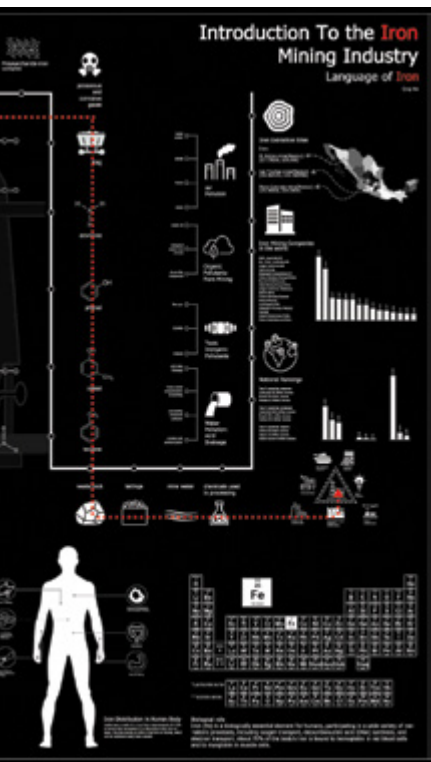


development of catalogues, drawings, timelines, and physical props that trace the manifestation of the agendas and intentions that fuel the aforementioned processes as a curatorial experiment with clear proposal and topic that delimited the investigation. Finally, students assessed and designed mediums with which to model and manipulate the territories and processes of extraction.

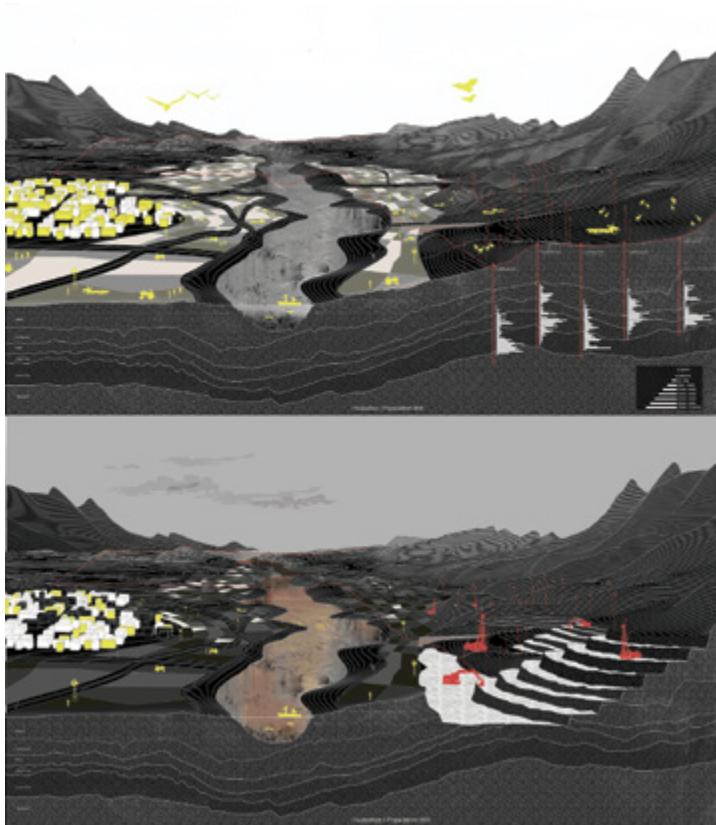


Janice  
Yuan Chen,  
Denise  
Zhenting Jiang

*Health at the Cost of Health* envisions an oxygen bar that returns mineral products and their advanced uses to miners and their families' daily lives, through activities such as breathing, eating, and socializing.



Irmak Turanli,  
Yani Gao,  
Zihan Sun



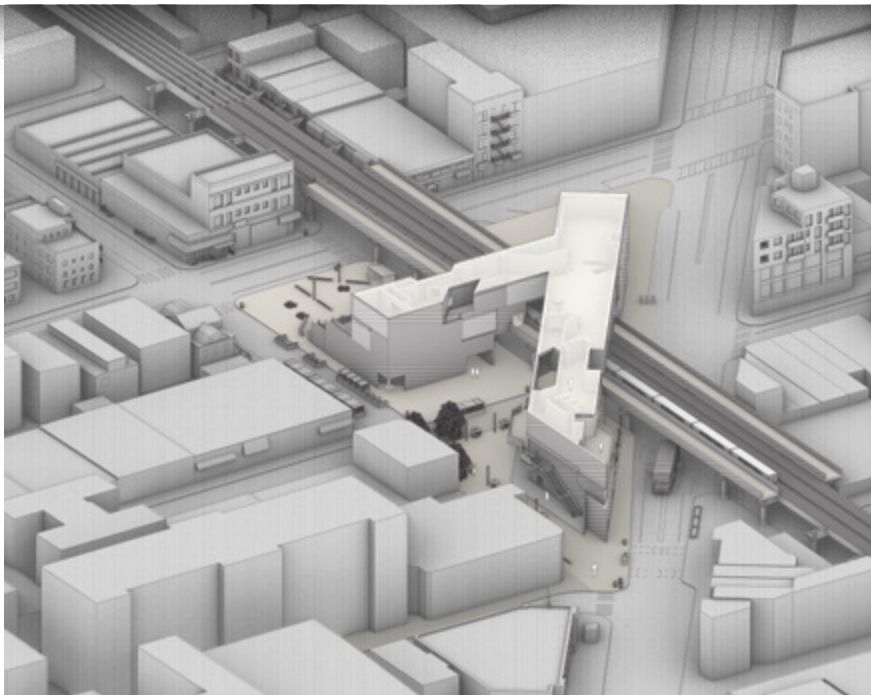
<REMIX> Eric Bunge, Mimi Hoang

For this studio, students developed work that aimed to transform a charged site in Jackson Heights, Queens into a 50/50 mix of building and public open space, serving an under-served community heavily impacted by COVID-19. They drew inspiration from art practices to intervene within an existing fabric, by looking curiously and very carefully at what's already there—and who is already

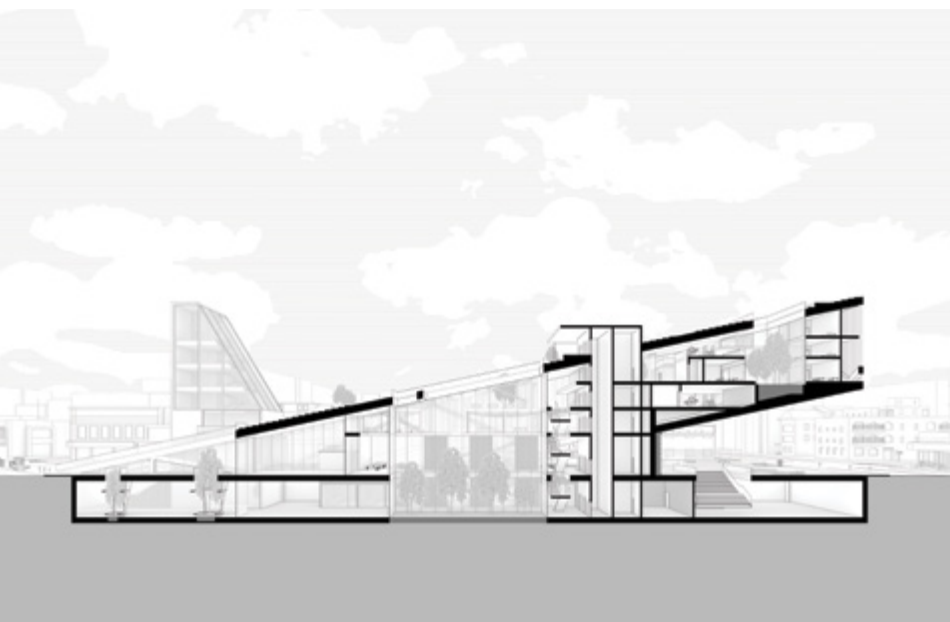


## Ece Cetin, Jason Young Kim

Bridging over and connecting to the existing elevated railway at platform level, *Circulation* aim to immerse the passer-by into the Jackson Heights Academy as a potential learner. It rethinks highly specialized, inaccessible education systems and instead proposes a support system through the proximity and interconnectedness of transportation and education programs.

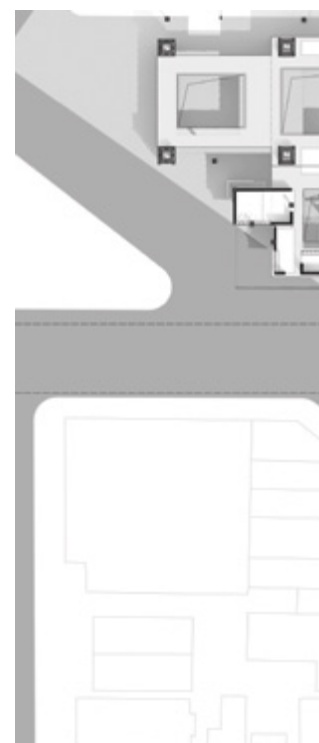


## Junyong Park, Kyoungwha Lee



## Tianyuan Deng

This project, located at the traffic junction, wishes to be the armature for multiple activities, both indoor and outdoor, private and public.

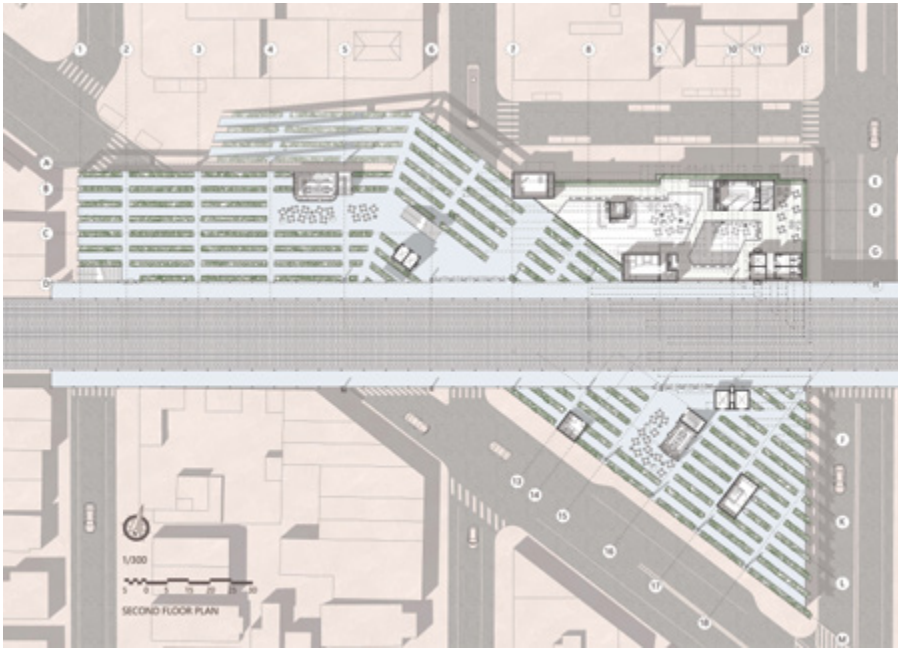




there—and intervening in a nimble and yet profoundly impactful way, both on the social and physical aspects of the site. The studio approached design as a “re-mix”—a playful and yet serious practice that samples, entangles, and interferes with both existing conditions and wider contexts. At the beginning of the semester, the studio made several field trips within NYC.

Yusuf Urlu,  
Fang Wan

*Foodropolis* proposes a mixture of whole food ecology and multi-functional urban spaces by expanding the existing transportation infrastructure into green infrastructure.



## &lt;(A)CLIMATIZING NATURES OR HOW TO INTERVENE WITH/IN THEM&gt; Nerea Calvillo

How is nature adapting to climate change? Which species are acclimatizing, migrating, or disappearing in these changing conditions? The studio explored climate/s as situated weather conditions with their natural, social, political, and cultural entanglements; and explored critical vocabularies around climate change. It considered Nature (capitalized) a social construct, and explored how each

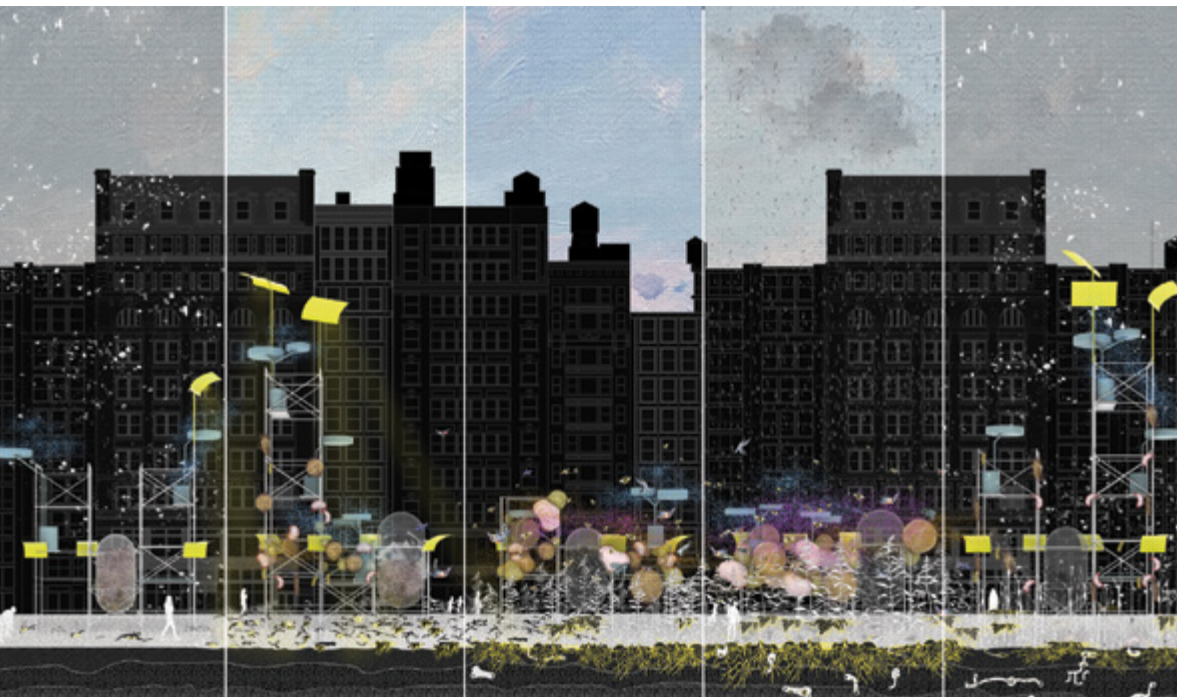


## Cheng Shen, Jinxia Lou, Jialu Deng

*Oxygenating the Underworld* activates invasive species: alligator weed, ramie, and rumex found in the Oxygen Bar, Nanjing, China to intervene in the underworld environment and oxygenate it.



## Kshama Daftary

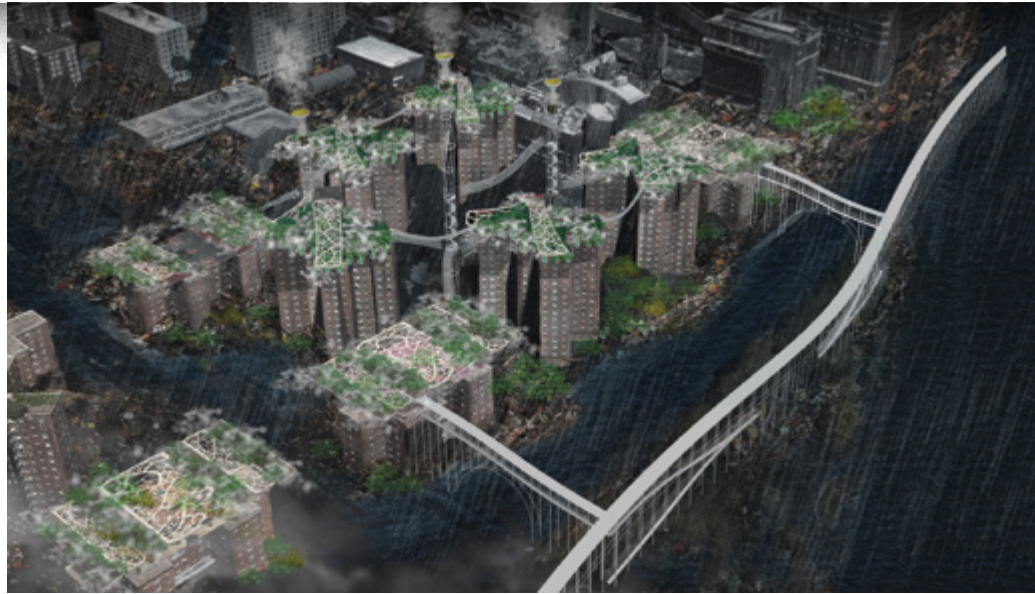


## Gabriela Junqueira Franco, Pabla Amigo

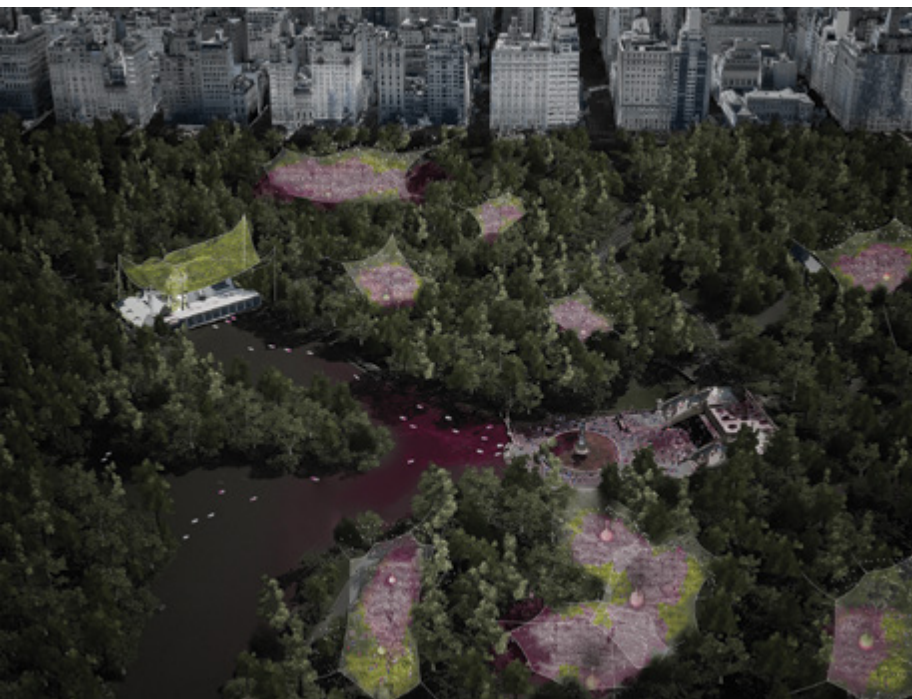
Delving into the contradictions of how Edison, Firestone, and Ford experienced nature in a series of camping trips while promoting the automobile as the main facilitator for human interaction with wildlife, *Unlocking Wildness* liberates the Edisoniana—the hybridized goldenrod plant named after Edison, to undo the effects of the car industry by creating a scenario that provides conditions to increase non-human habitat in the city.



construct informs specific forms of action; as well as the potential of living with/in specific natures (uncapitalized and multiple). In this context the studio focused on who and what migrates because of environmental or social climates, and who has the capacity, the favourable climate/s or the chance to acclimatize to changing conditions.



Ralph Cheng, Sunghyun Kim,  
Sujin Shim



Rocio Crosetto  
Brizzio,  
Ana Paola  
Hernández

*The Declaration of Independence of "The Toxic": Transfusions for an Interspecies Alliance between Pokeweed and People Living with HIV and COVID-19*  
Viruses is a pokeweed acclimatizer, which brings together two species—Pokeweeds and Humans—to collaborate and help each other through transfusions of their chemical body fluids.





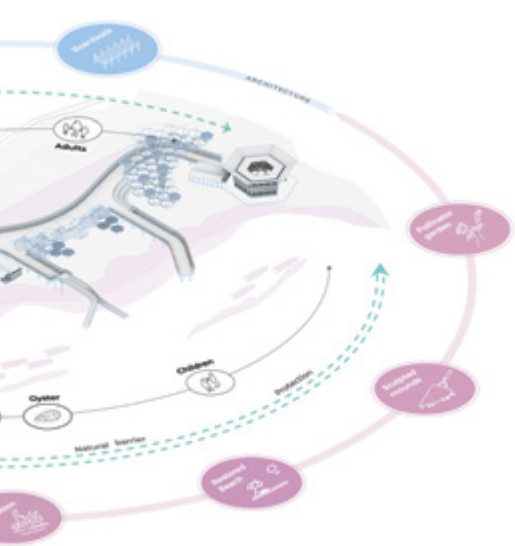
framework that foregrounds care, maintenance and education about climate adaptation and cultural resiliency. The studio engaged with issues of access, climate and social justice, and empowerment for the local community which was severely inundated by Superstorm Sandy in 2012 and continues to experience the storm's economic and ecological impact.

Qiwei Sun,  
Zhichen Gong

*Land Buoy* proposes the “eating cycle” as a method of revitalization, transforming the community from a food desert into an attractive destination. The eating cycle consists of four stages: foraging, cooking, eating, digesting. Each includes various activities that occur on-site.



Veeris Vanichtantikul, Liang-Yu Lin

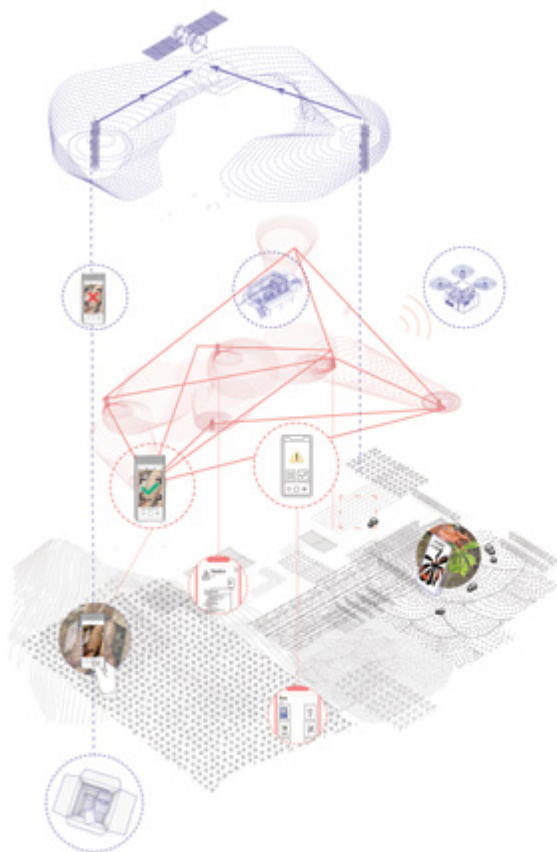


<FORD FOUNDATION FUNDED: INSTITUTIONAL OPERATIONS IN A DEVELOPABLE WORLD> Rosana Elkhatib, Gabrielle Printz

Students engaged in collaborative research and mixed representational methods to track the circulations of philanthropic capital through the complex organizational forms of institutions like the Ford Foundation and into the so-called “developing world.” The work of the studio consisted in bifocal analysis of the ↗



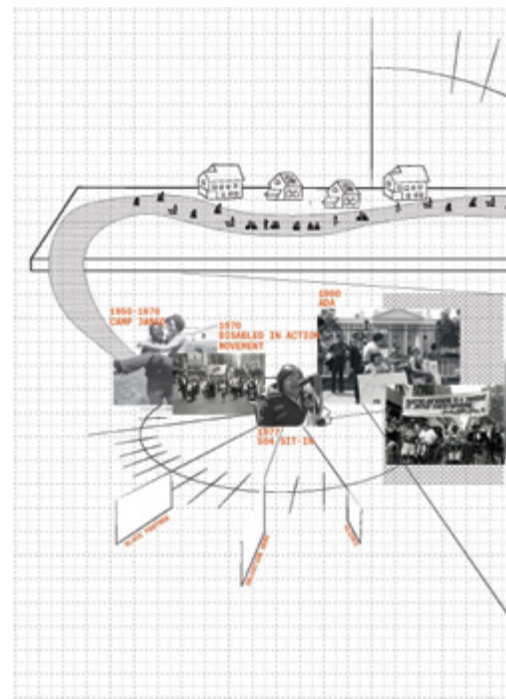
Fan Liu,  
Qingfan Wu



Konstantina  
Marinaki

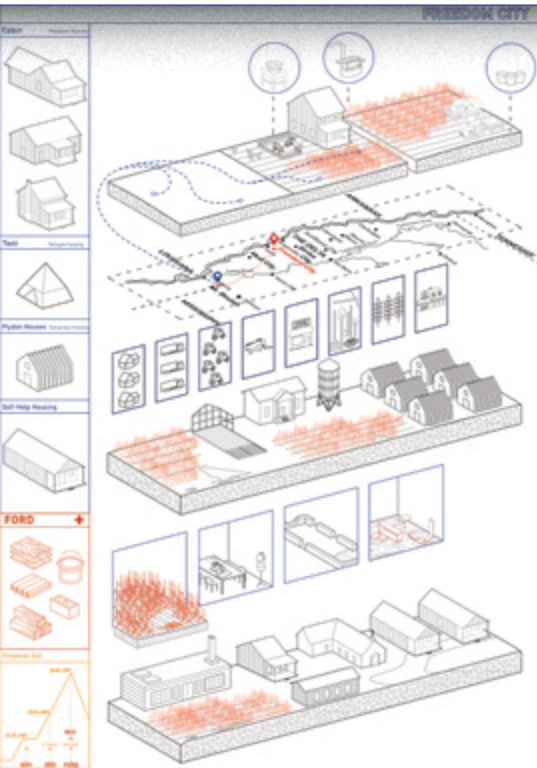
*Hacking Philantropy* explores the role of Ford Foundation and its trustees in the so-called “developing world” and, more specifically, in Nigeria after the country’s independence with the creation and funding of the International Institute of Tropical Agriculture (IITA).

Refan Abed





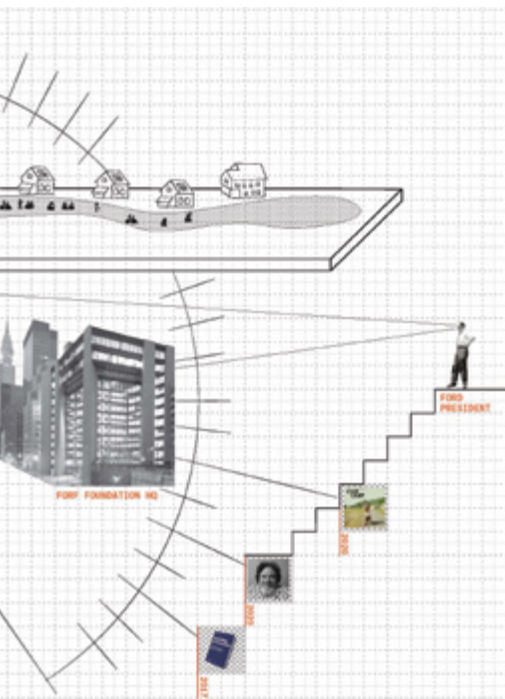
private foundation at-large and its spaces of influence through careful study of a selected Ford-funded project, historical or contemporary. Through this process, the studio identified opportunities for multiscalar interventions that can address or disrupt the interplay between benefactor and beneficiary, American wealth and global poverty, private and public, social problems and their technical solutions.



Malvina Mathioudaki

This project proposes a renegotiation of Freedom City, a self-help housing project funded by the Ford Foundation, along with other institutions and organizations.

Bisheng Hong



## &lt;A NEW AMERICAN INDEX&gt; Marco Ferrari

This studio focused on the mapping of large-scale infrastructures across North America as a way to expose the relationships between the managerial view on ecologies, the climate crisis, and practices of dispossession towards indigenous people, rural and urban marginalised communities, and future generations. A series of individual atlases was produced, forming a collective, hyper-accurate ↗

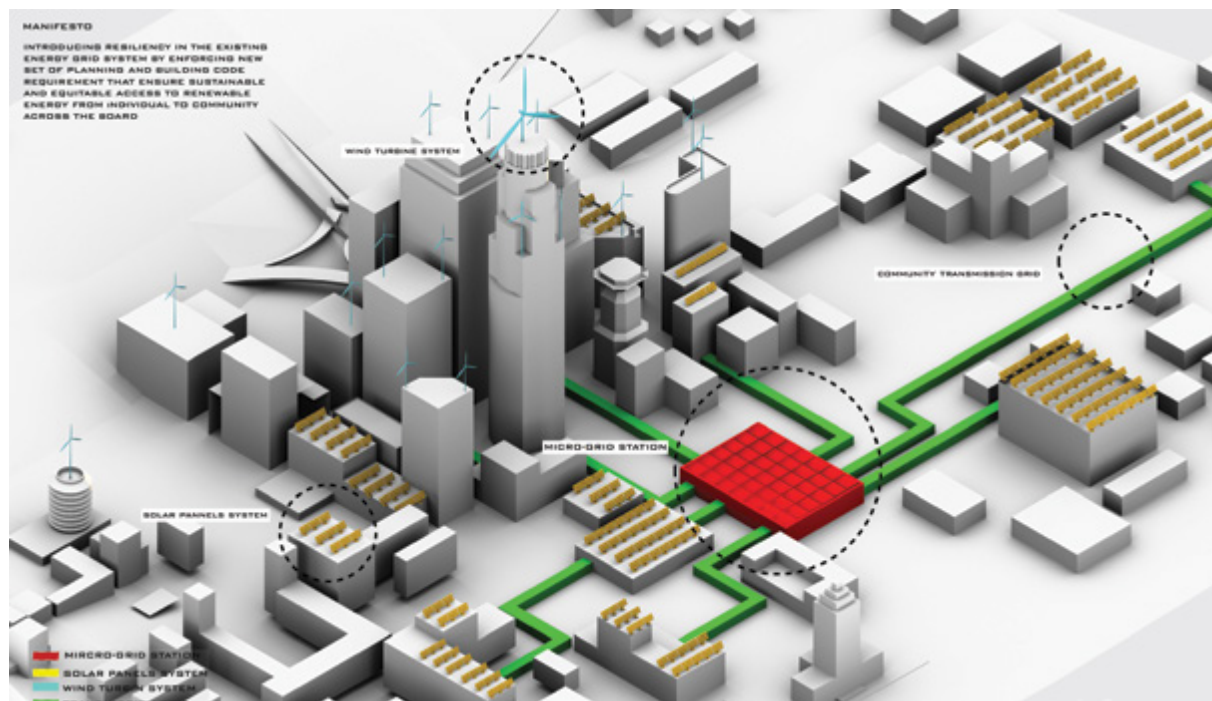


## Hyuein Song

*Negative By-product Systems* takes a closer look into how municipal solid waste (MSW) is sealed from our senses and displaced territorially.

## Faisal Alohal

*The Sustainability of Sustainable Development* explores possible paths towards the net-zero carbon emissions goal set for the United States by President Biden and the Department of Energy.

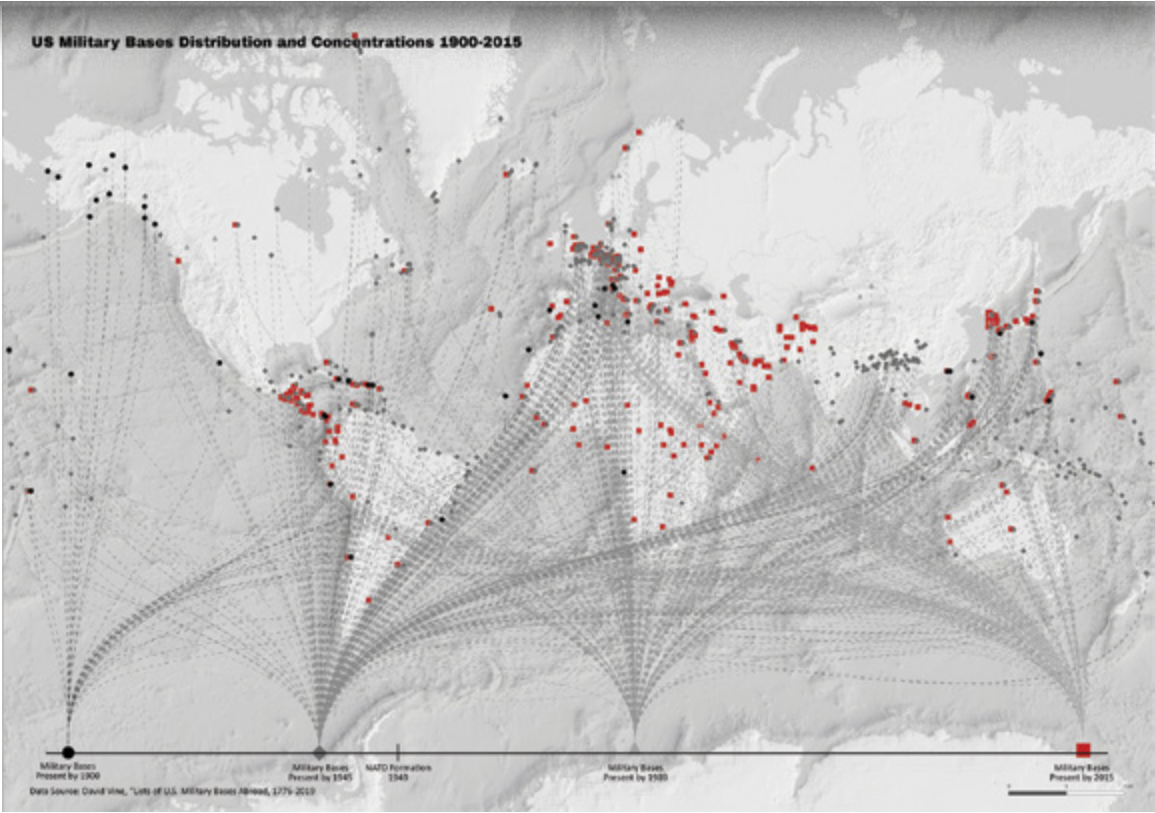




portrait of the current state of North-American territory, that mediated the understanding of how material and immaterial systems of extraction have been reconfiguring natural ecosystems over the course of the past century.

Farah Alkhoury

*Archipelago of US Borders* interrogates the infrastructure of the U.S. Defense Industrial Base in order to expose the contemporary scale of its military operations and the environments it occupies and co-produces.



## &lt;HOUSING INFRASTRUCTURES FOR THE COUNTERCOLLAPSE&gt; Ignacio G. Galán

This studio aimed to contribute to the development of modes of architecture practice that respond to the collapse of the welfare state in the U.S. Rather than operating in the ruins left behind by the increasing dismantling of assistance programs and support networks, it designed the infrastructures for a counter-collapse. In the past, states pursued the well-being of society through



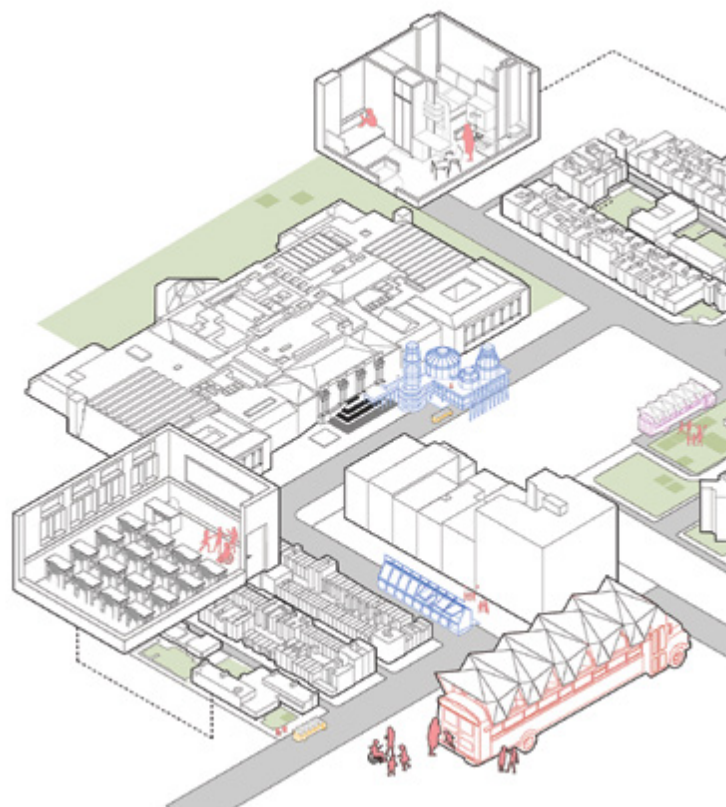
Abriannah  
Aiken,  
Ruben Dario  
Gomez Ganan,  
Shikang Ding

Through upending hierarchical healthcare structures, the expansion of spaces of commoning, and the mobilization of care, we visualize a future with equitable access to networks of normalized assistance for all people.



Daniela Beraún

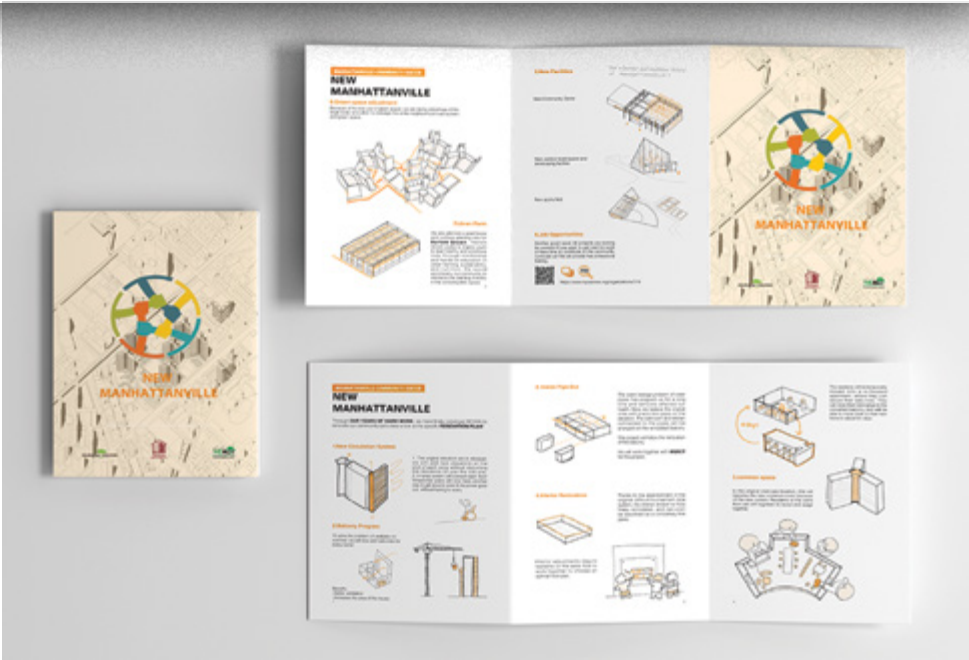
*NY-City Camps* connects organizations' afternoon programming throughout the city in a network accessible to kids regardless of where they attend school.





institutions that excluded many populations from the community—institutions housing collectives that were deemed in need of repair, rehabilitation, supervision, or isolation. Countering those exclusions, the studio explored modes of coexistence, care, and assistance within the community, amplifying feminist, queer, anti-racist, and anti-ableist sensibilities.

Xiangru Zhao,  
Xumin Chen,  
Zheng Yin



<A GREAT LOUDREADING IS IN THE MAKING. BUT NO ONE HAS NOTICED.> Cruz García,  
Nathalie Frankowski

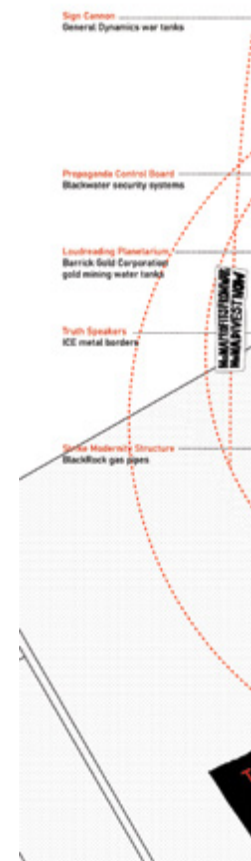
This studio focused on the construction of a series of animated Narrative Architectures (storyboards, comic strips, animations, manifestos) that explore the great Loudreading events boiling inside the cauldrons of capitalist production and accumulation before they are about to spill back into the streets. ↗



## León Duval

*Columbia University.  
In the City of New York?*  
displays the relation between  
slavery, colonialism,  
human exploitation, and  
gentrification committed  
by Columbia University  
toward the city of New York,  
especially to the Harlem  
community throughout  
history.

## Chao Chang

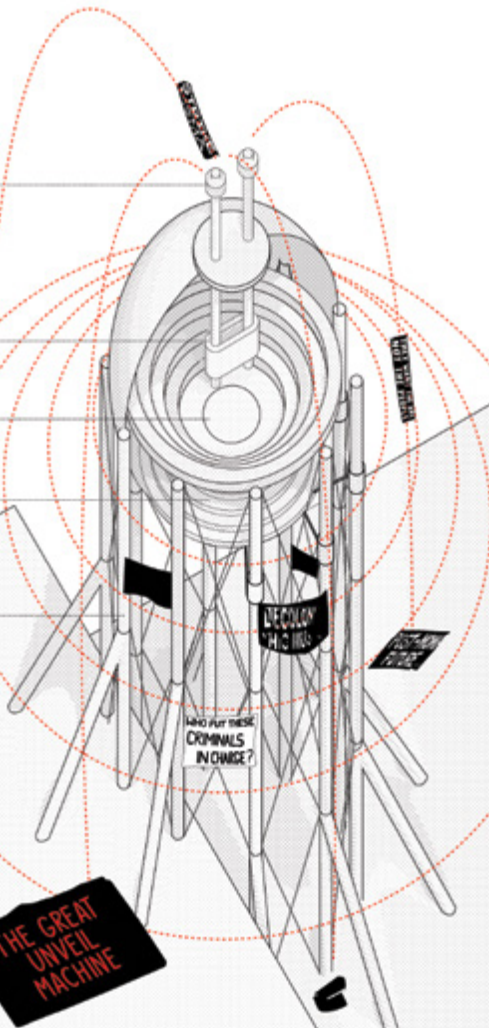




These moments of solidarity and tension capture in the speculative imagination many alternative models of education and how they relate to the construction of an architecture of rebellious emancipation at different scales.

## Magdalena Valdevenito

An estimation of the colonial footprint of the Metropolitan Museum of Art in NYC is calculated by the recollection of stolen objects that are hoarded by this cultural institution, tracing back their origins and histories.



## Ningyuan Deng



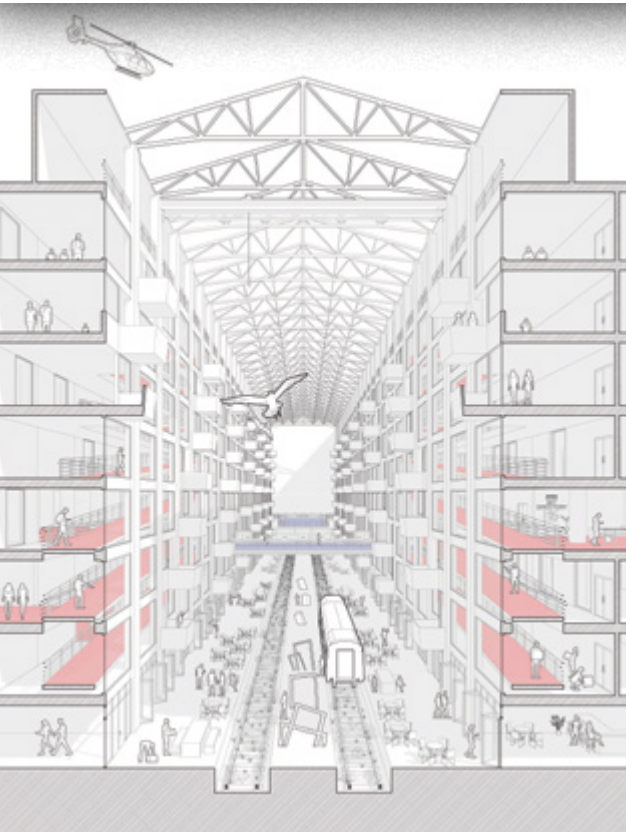
## Sarah Hejazin

*Commoditized Warfare* is a loud reading event of dissidence and emancipation that exposes MoMA's ties to war, racist prison and border enforcement systems, vulture fund exploitation, gentrification and displacement of the poor, extractivism and environmental degradation, and patriarchal forms of violence.



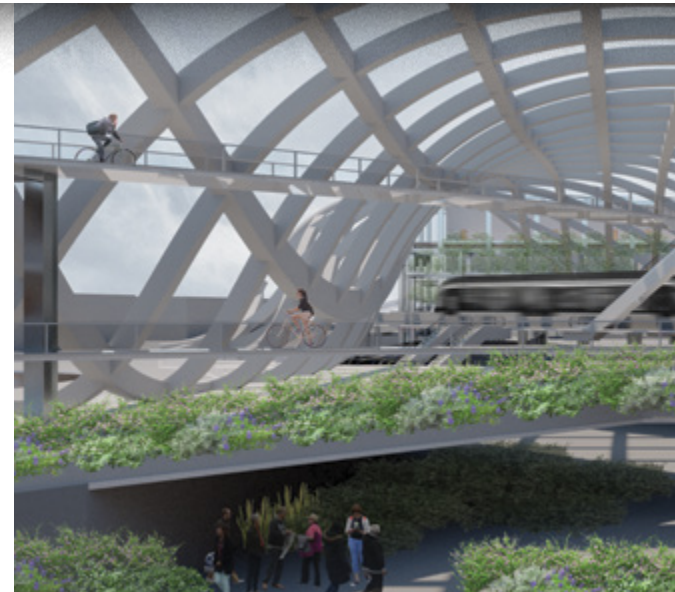
## &lt;ACCESSIBILITY&gt; Laura González Fierro

The studio provided a space to re-think the concept of accessibility. It investigated ways of dealing with limits, divisions, and ruptures within the urban fabric of Sunset Park Waterfront and to transform the environment of the Brooklyn Army Terminal—using design as a way to transform conditions of exclusion into possibilities of building community. What are the strategies to reach wider, ↗



## Ata Gün Aksu

*Streets of BAT* proposes three streets to connect the urban fabric to the waterfront while passing through buildings and improving access to the atrium.



## Yuchen Huang

## Han Kuo





multicultural, and multilingual audiences in the immediate neighborhoods? How is this ideal of accessibility implemented in the Brooklyn Army Terminal? How do we build a community that resonates and thrives from this local manufacturing hub?



Yining Lai

## Radha Devang Kamdar

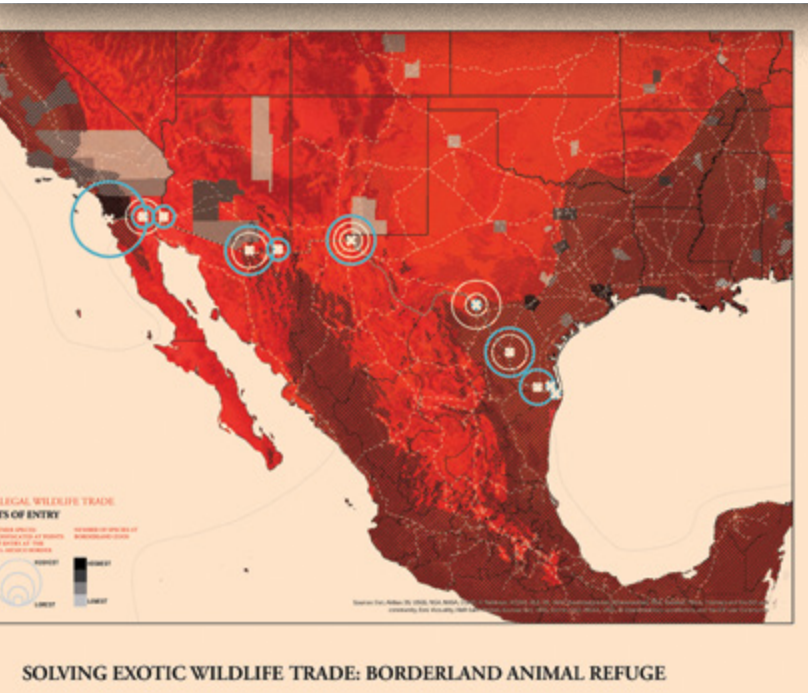
The design plugs into the existing Brooklyn Army Terminal site and preserves its historical importance while making the spaces more active and livelier.



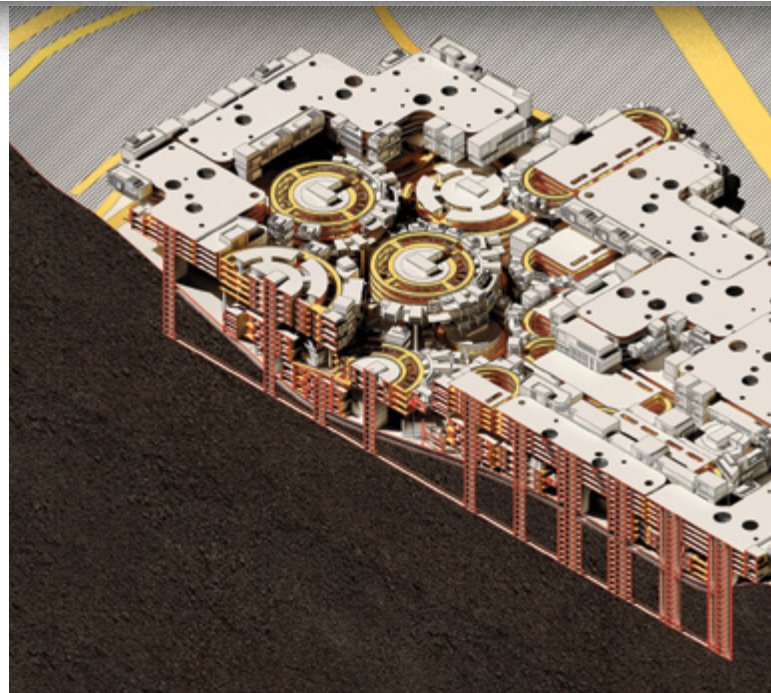


## &lt;BORDERLAND BIOSTRUCTURES&gt; Ersela Kripa, Stephen Mueller

The studio addressed the impact of the biosecurity regime in the production of (trans)national identities, architectural space, and technosocial realities at the U.S.-Mexico border. At the border, public, private, and military actors are enlisted in coordinated biosecurity efforts in the name of the preservation of public health and biopolitical sovereignty. Everyday travel across the



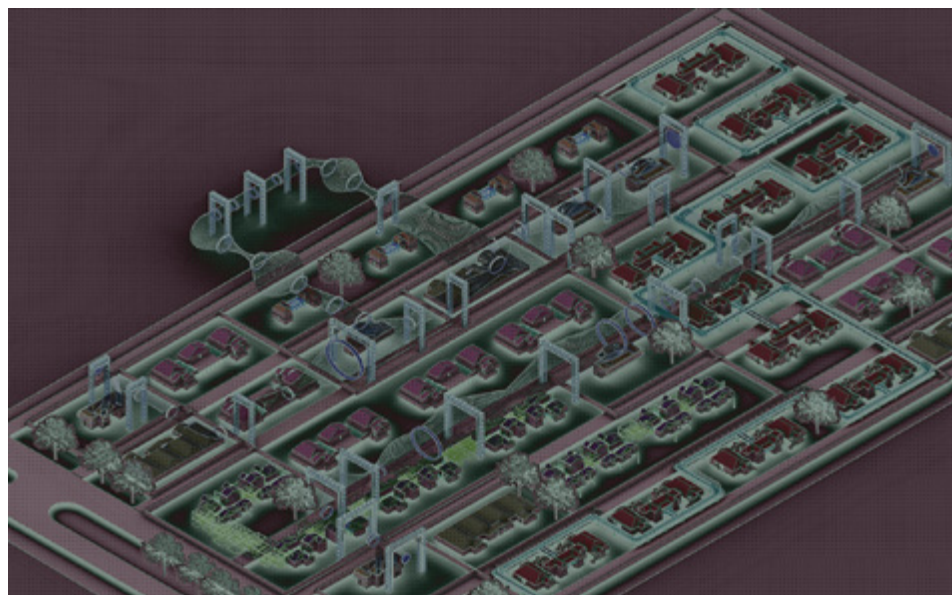
Angel Castillo



Qingyang Yu, Shulong Ren

## Dhruva Lakshminarayanan

*Welcome to Coddle  
Critter Crest* asks: Given  
the inherent reality of  
backyard exoticism In  
U.S. suburbia, and the  
capitalism that ensues,  
how can a future where  
animals live less like status  
symbols and more for  
themselves be facilitated?



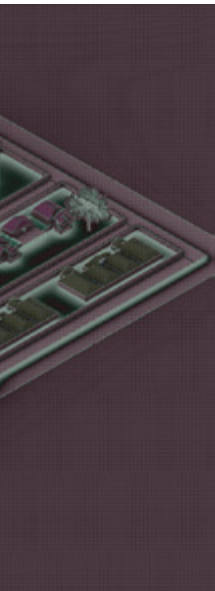


international boundary subjects bodies to invasive inspection and dangerous decontamination procedures. The studio interrogated the borderland biosecurity regime at three scales: the territories of transnational biosecurity; the infrastructures of borderland bioengineering; and the technologies of biosurveillance.



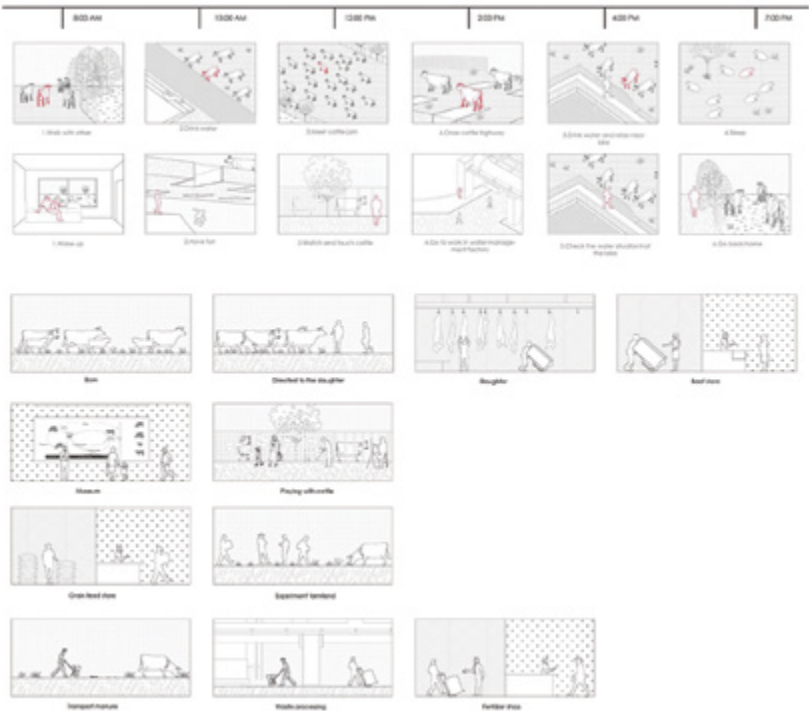
Zhijian Sun

This infrastructure, sited in the U.S.-Mexico borderland, enables jaguars to act as a political media and coordinates the relationship among water resources, forest fires, jaguars, ranches, livestock, farmers, agriculture, and related government offices.



Wanqi Jiang,  
Can Yang

The U.S. buys calves from Mexico at low prices and sells them back at higher prices after raising them. This approach leads to a fragile relationship, especially together with policy or climate issues. The project aims to increase the value of cattle while treating them as equals.

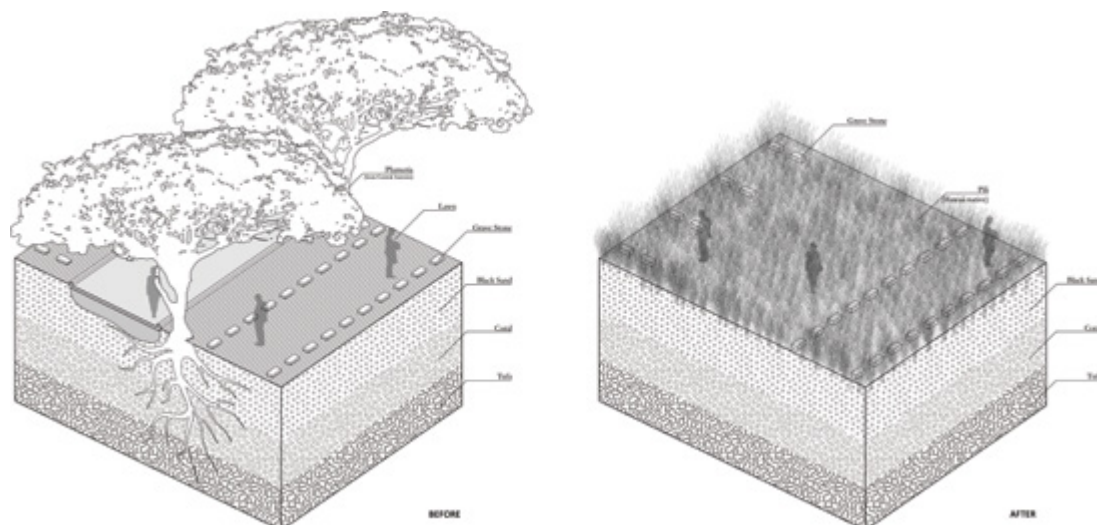


## &lt;HAWAI'I NON-LINEAR: AT SEA&gt; Dominic Leong, Sean Connelly

This studio is part of an ongoing project to radically re-imagine the future for architecture in Hawai'i. It explores a trans-scalar and trans-temporal approach to understand an indigenous concept of ground ('āina) as the basis to interrupt existing U.S. urbanism through a network of pedagogical sites (hālau) for indigenous knowledge ('ike) at an architectural scale. It aims to empower indigenous



Francesca  
Doumet,  
Iris Hong,  
Nanjia Jiang

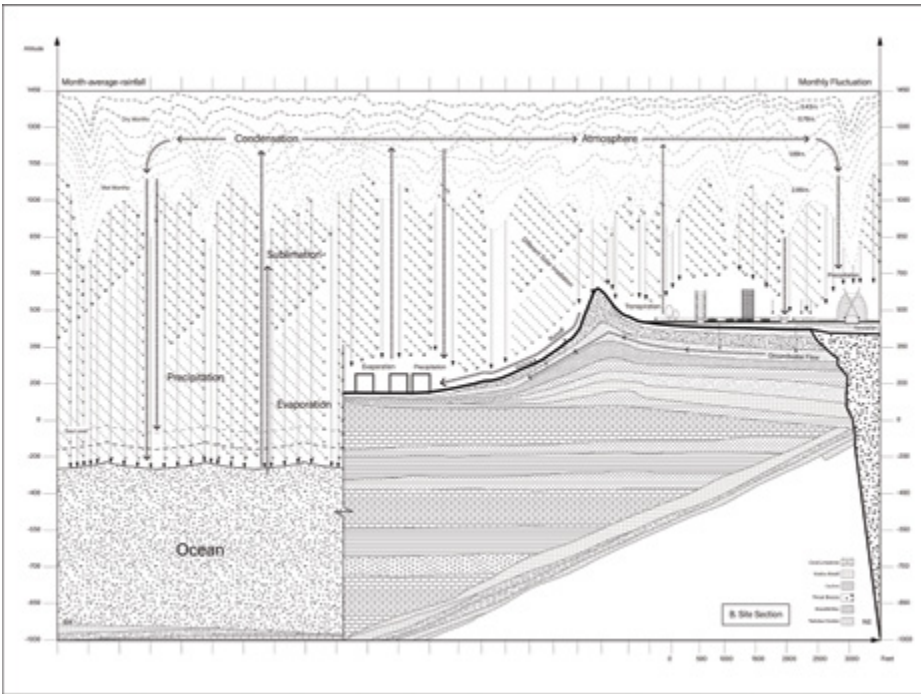
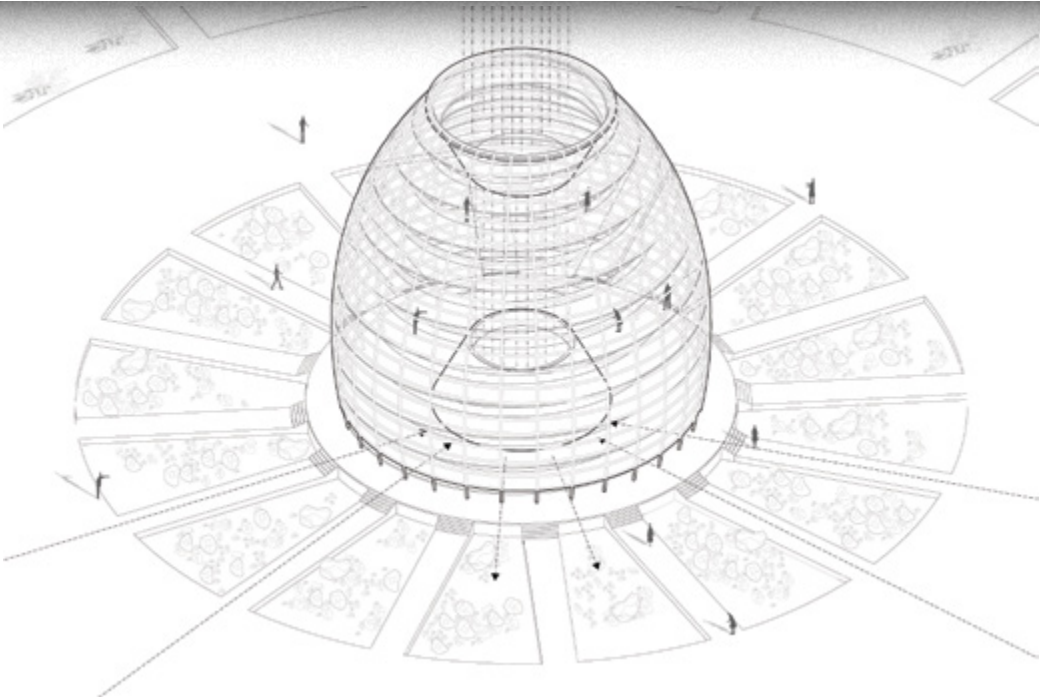




Hawaiian knowledge and the local ecologies of guardianship (ahupua'a) in a way that Mary Pukui described as “utilizing the resources of sustenance to a maximum.” Following research on Hawaiian culture, social justice issues, and indigenous knowledge, the studio designed a “living memorial” operating among a constellation of pedagogical sites, or “academies for ahupua'a recovery.”

Siye Huang,  
Kan Lin,  
Yunha Choi

This project opposes American urbanism and reconstructs Hawaiian spirit and identity by taking measures for repatriation.



<FEMINIST TECHNOSCIENCE: DESIGN FOR REPRODUCTION, MOTHERHOOD, AND GENDER  
EQUITABLE FUTURES> Ani Liu

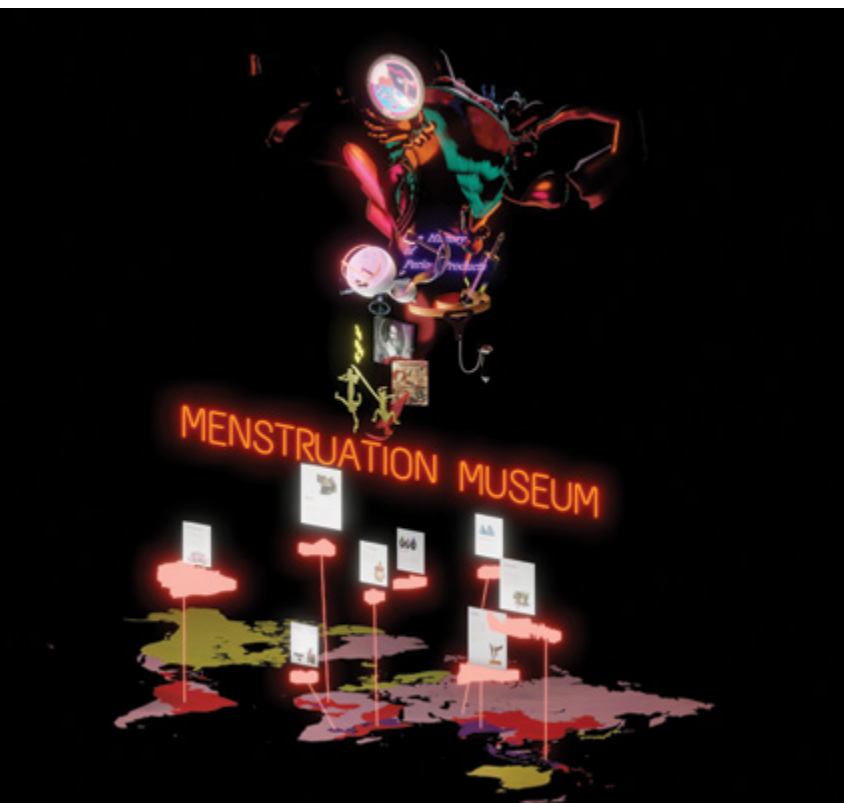
What is the role of design in creating more gender equitable futures? How is sexism propagated through technological media, and how does scientific research produce and reinforce concepts of gender? This studio investigated how scientific and technological media shape culture and society, particularly through the ↗

## Camila Nuñez

*Wearable Chest Pump* is a wearable vest or bra that uses a vacuum forming system to adapt its surface to multiple and diverse topographies.



## Jiayue Xu



## Eunjin Yoo





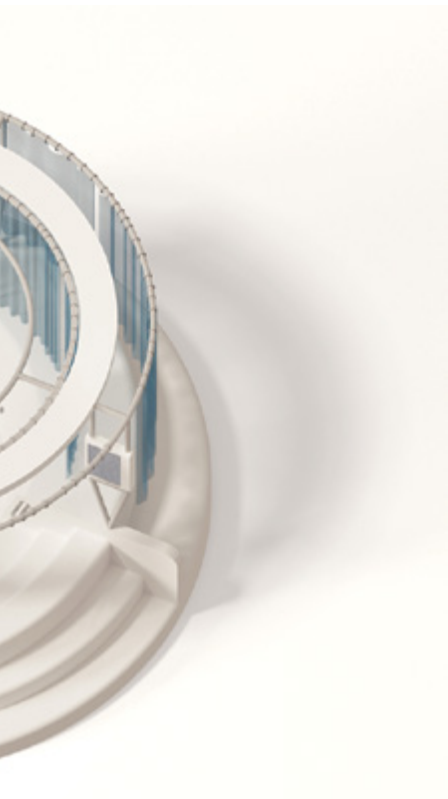
lens of gender and sexuality. Engaging in interdisciplinary design, this course used various technological media to reflect on the social, political, and ethical domains of technoscientific feminism. It redesigned certain iconic objects including but not limited to: the breast pump, pregnancy test, birthing rooms, lactation rooms, chest feeding kits, menstruation products, birth control, artificial wombs, maternity wear, car seats, incubators.



Doménica Velasco



Jiahua Cai



<GO WILD> Michael Loverich, Antonio Torres

With exuberance, the studio conflated multiple threads of research to propose wild ecosystems for a NYC block. While an urban block could be considered an ecosystem, its strict order, rules, and organization prevent it from being self-sustaining and it is a far cry from being wild. We see the wild as an emerging trend for healthy bodies, ecosystems, and the planet. To apply these



Noor Begum

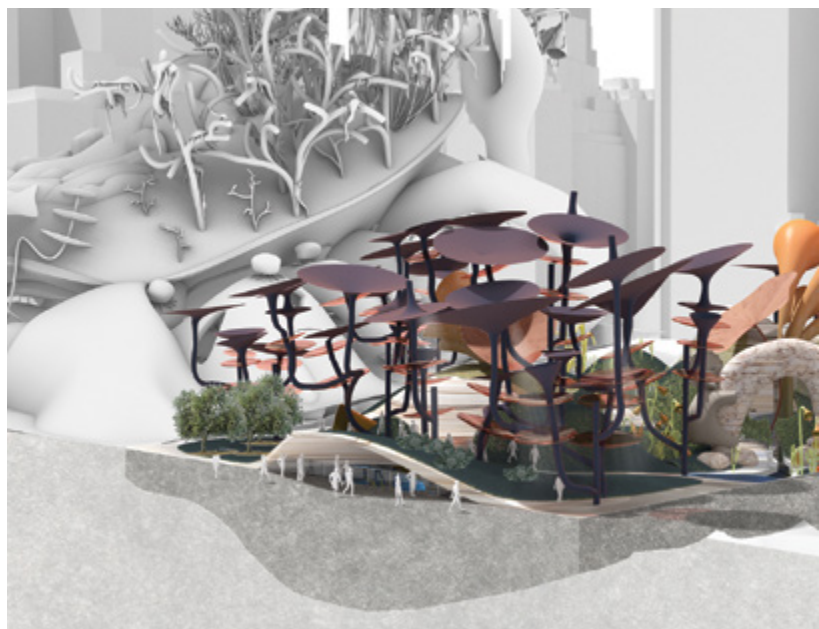
## Adrianna Frasz

The interior topography of the *Mega-Corallimorph* includes pools that function as the city's public pool, a place to relax and cool off on hot, humid days.



## Enfeng Xie

*Urban Food Forest* creates agricultural experiences and educational opportunities for children and adults who never or rarely experience planting.

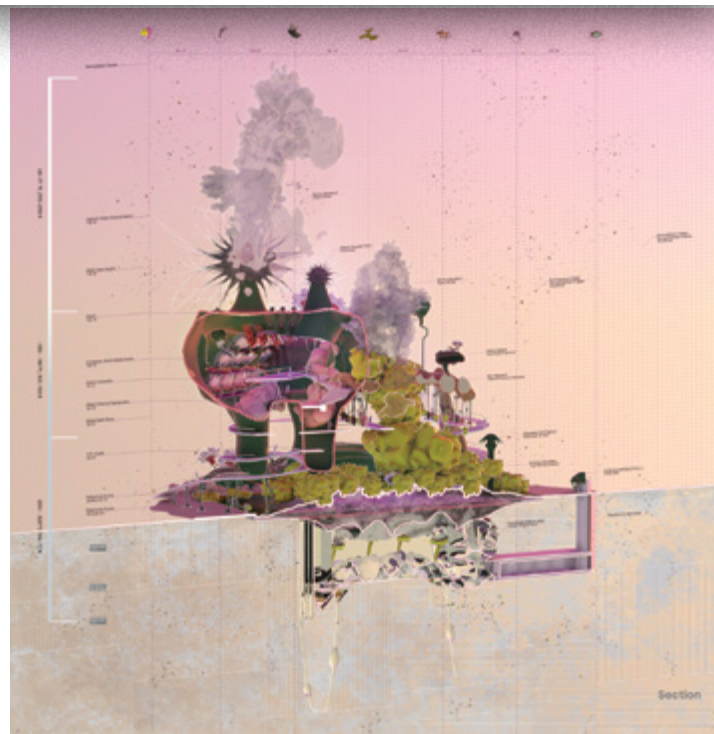




concepts architecturally, the studio analyzed the relationship between ecosystems and cities and the types of representation that have shaped their aesthetics and management. By working with theories of rewilding and permaculture, the studio entangled this history while walking on the wild side of architectural ideas.



Nora Fadil

Kennedy  
Van Trump

## &lt;SPECULATIVE CITY: FLUSHING CORONA MEADOWS (POST-20)&gt; David Eugin Moon

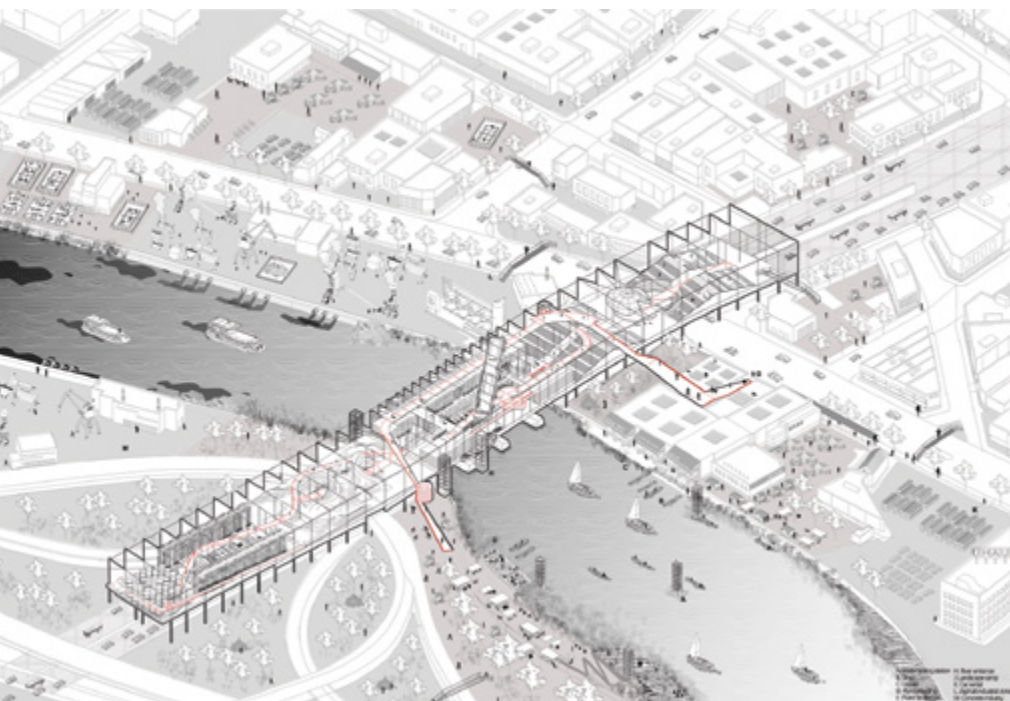
The studio outlined changes in the discourse and practice of architecture following the seminal events of 2020 and their influences on speculative architecture and urbanism. The years leading up to 2020 were compounded by disrupted economies, contested political grounds, and increasing realizations in climate change that culminated in social and political turmoil—instigated in part by a



## Renee Gao, Mu Dong Jung

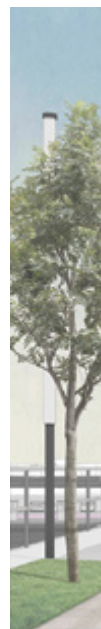
Sited in Corona Flushing Meadows Park, *Multi-Climate Futures* reclaims vast green spaces as a large-scale farming system using climatized pavilions to house a diverse array of fruit and vegetable species that otherwise cannot grow in the sub-tropical climate of New York.

## An Wang, Mark Melita Kantai



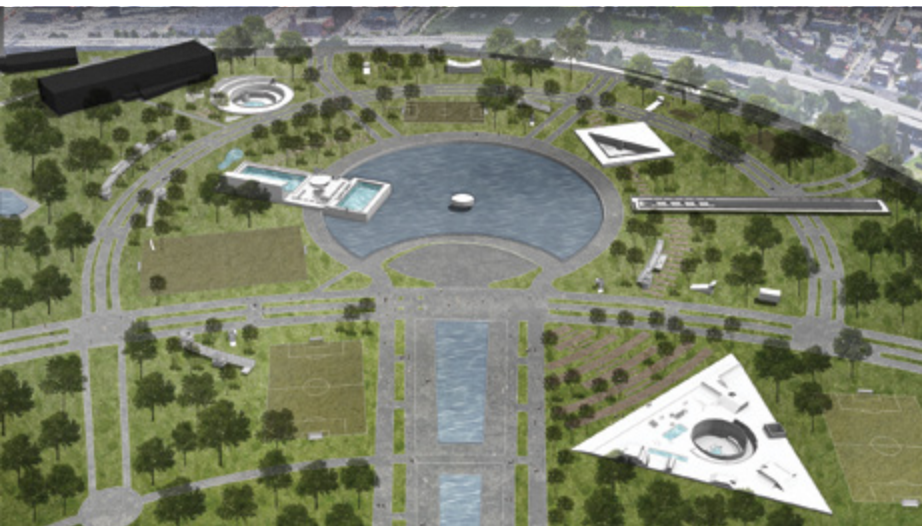
## Jiafeng Gu, Danlei Yang

*The Interim City* offers an alternative development and acts as an informal land-use and economic framework for development for the neighborhood. It empowers the neighborhood to become a developer of its housing stock.

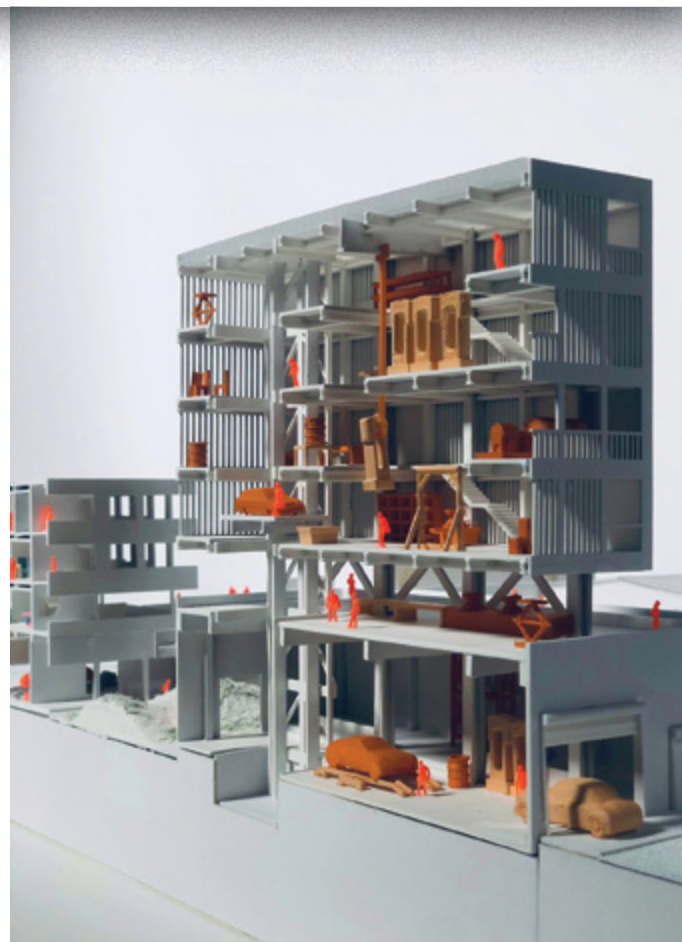




global pandemic and racial injustices. As a point of inflection, the studio studied architecture in the wake of these seminal moments as an opportunity for transformation in the typical processes in architecture and urbanism, and questioned equity in public and shared realms, top-down and bottom-up social hierarchies, and other norms.



Jishan Duan, Mandi Hu



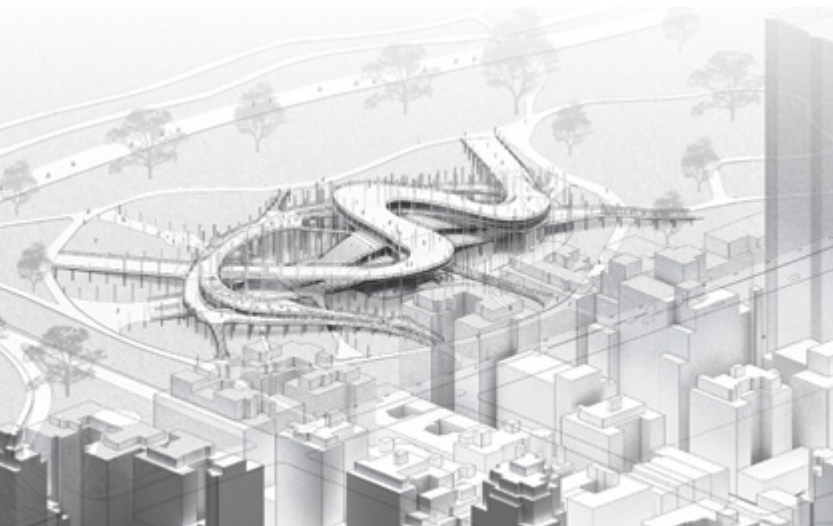
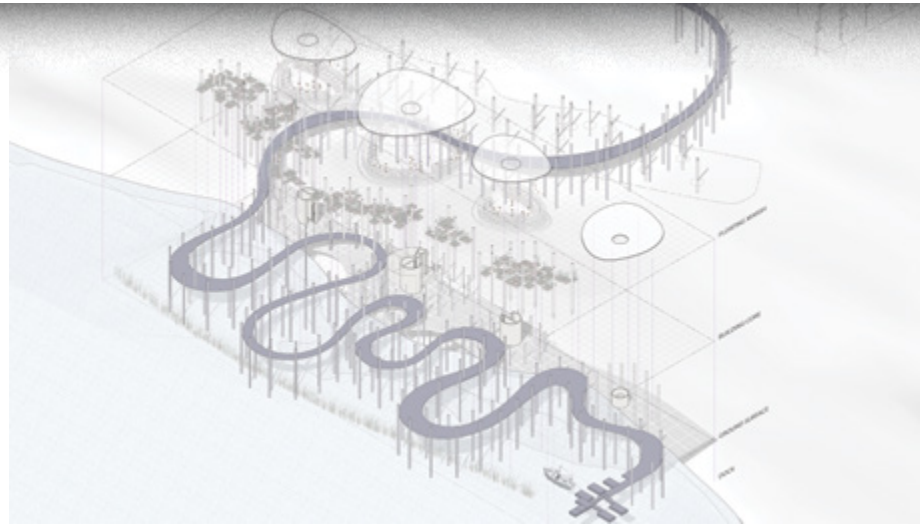
Malavika Madhuraj,  
Keon Hee Lee



## &lt;CIVIC-SACRED COEXISTENCE AS DESIGN ACTIVISM&gt; Karla Rothstein

In cities and in landscapes, building, growth, erasure, and reconstruction are continually unfolding and reshaping the environment. Palimpsests delete and accrue, with uneven layers of time, memories, technologies, politics, and social agency contouring and recontouring the environment. Death makes palpable our relationships to the past and the future. Each remembrance is reconstructed in ↗

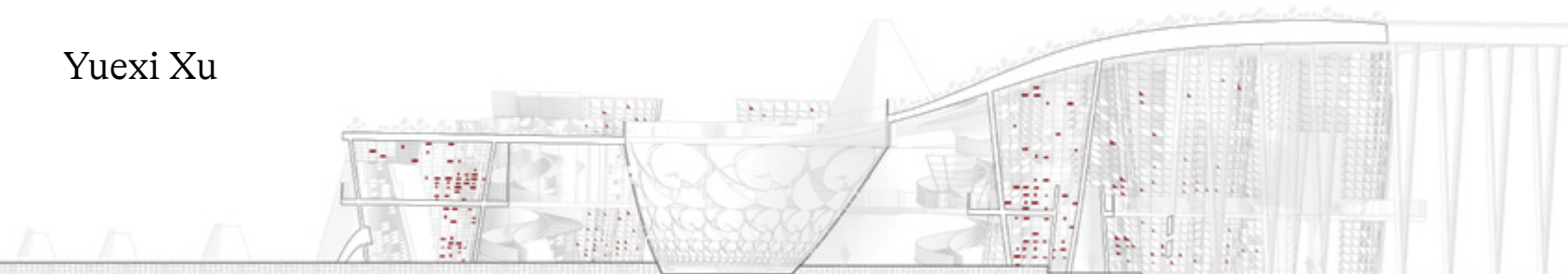
Jindian Fu,  
Yuanming Ma,  
Tian Yao



Jiyong Chun,  
Sungmin Kim

*Death: A Social Experiment*  
commemorates death  
with new perspectives and  
eventually helps people  
coexist in a diverse, urban  
environment.

Yuexi Xu

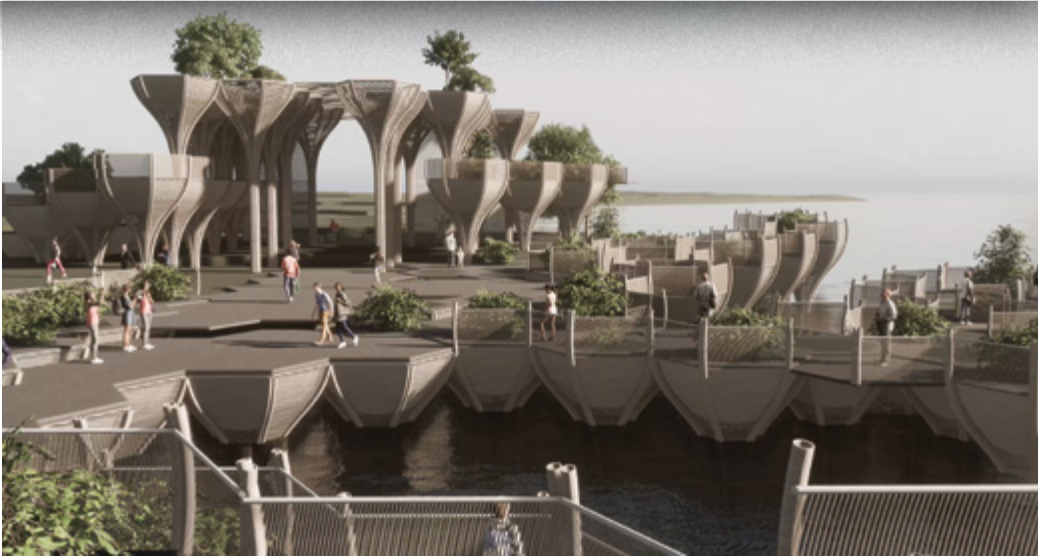




the present, rewriting histories and intertwining place with memory. As opposed to cementing memorials, or edifying power, remembrance is evanescent, evolving with time and perspective. Now is a time for reevaluation and transformative intervention. This studio engaged the city with optimistic, multi-scalar attention, scaffolding spaces where humans and other species thrive.

Yuedong Lin,  
Frank Shengmian  
Wang,  
Hyosil Yang

*Harmony Grounds* seeks to transform traditional spaces of death and grieving into spaces of life and reflection by integrating remains into a soft modular infrastructure system to generate a revitalized landscape.

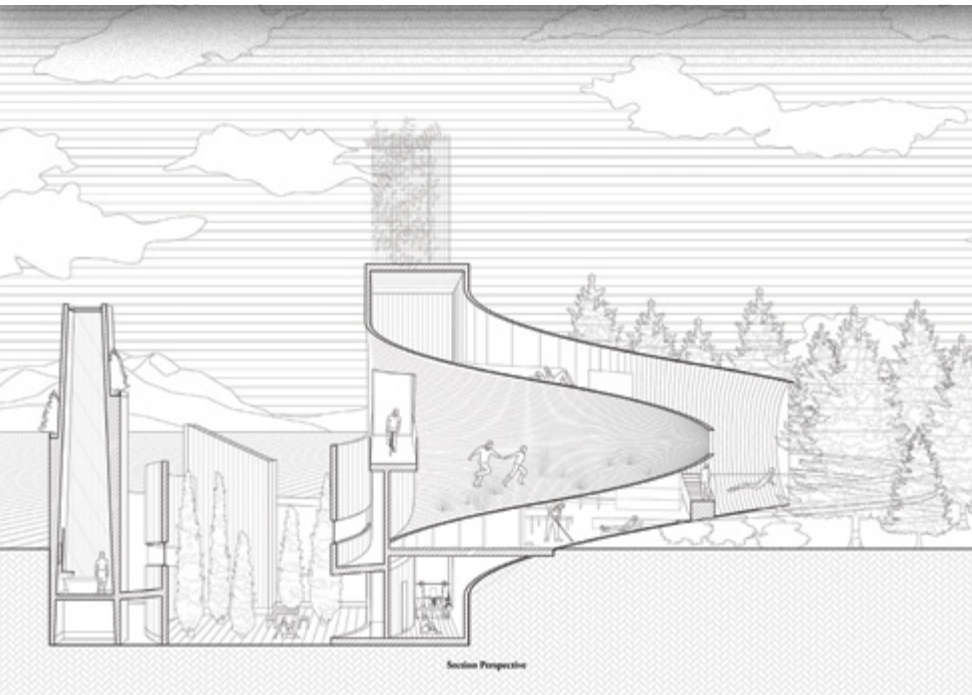


Seonggeun Hur



<HOUSEFAIL> Dan Wood, Nuar Alsadir, Maurizio Mattioli

This studio utilized techniques of looking inward to unlock creative potential in the design of a private house. It is an experimental house that attempts to move beyond the “dream house” to one that embodies a broader range of subconscious actions, desires, emotions, gestures, elements. Students embarked on a journey that may have failed. Indeed, the studio embraced failure as a distinct



## Siyu Xiao

The basic geometry of the *House Distracted* represents a wall-like, linear shape that intensifies this emotion.



Chen Yang



## Yuening Jiang

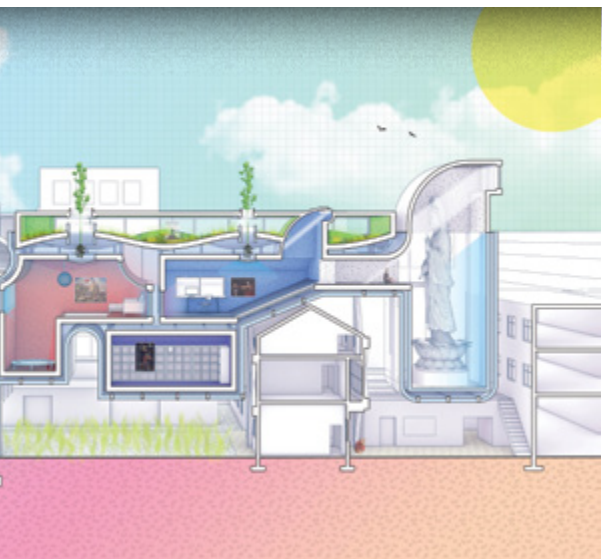
This is a place where two personalities meet. The house is built on a cliff on the black-sand beach of Iceland, with one side open to the sea and one side embedded in the rock of the mountain.

En-ho Chan





possibility. It explored the essence of the creative act, with its origins in the often hidden “inner child” who is not afraid to do or say things that might be considered ugly or unconventional or even foolish. As Chekhov wrote, “Don’t be afraid to show yourself foolish; we must have freedom of thinking, and only he is an emancipated thinker who is not afraid to write [design] foolish things.”

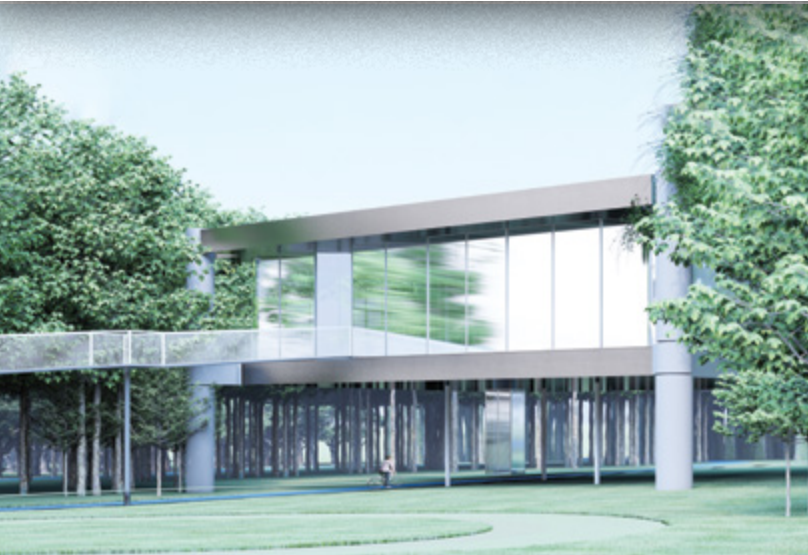


Mingxun Zou



## &lt;THE LEAST WE CAN DO&gt; Emmett Zeifman

The studio began from a loose, and intuitive, analogy. As the late-19th and early-20th century architecture of the industrial economy was to the culture and urbanism of late capitalism, so will the late 20th century architecture of the service economy be to whatever comes next. If formerly industrial “lofts” were at the heart of the “revival” of urban centers in recent decades, first as sites



## Cong Diao, Susan Lee

The concept is to obscure the boundary between interior and exterior. The fillet of the corner, the translucent materiality of the ground level, and the screen on the second story help achieve this.



## Terry Tang, Xian Wu, Fengyi Zhang

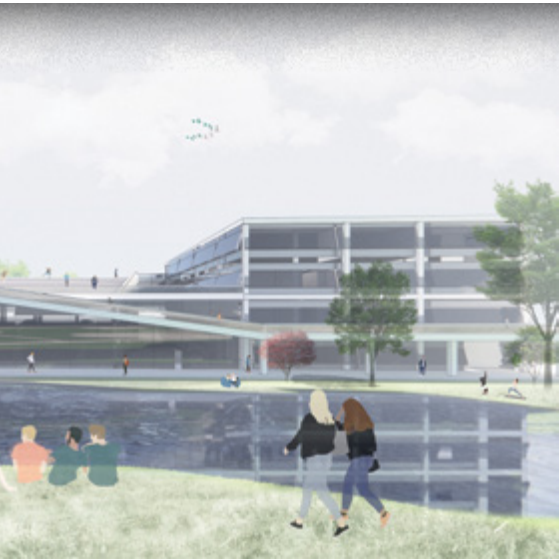
## Zihan Xiao, Timlok Li

*Suburban Intimacy* proposes a new housing typology that provides a more urban and collective organization in the site.





of cultural experimentation, and then as vectors of commodification and gentrification, office parks and other suburban and exurban architectural types will be at the center of the inevitable transformation of the vast areas surrounding those urban centers. In their programmatic afterlife, what possibilities might emerge from the spatial and material framework that this architecture provides?



Weiwei Wang, Liwei Guo, Yuan Liu

Studio







# *Advanced Architecture Studio IV*

## Ziad Jamaledine, Sequence Coordinator

The Advanced Architecture Studio IV framework looks at the varied scales of the environment through the lens of a specific geographic context. During the spring 2021 semester all studios, with the exception of Caribbean Reconnections studio, focused on the “rural” geography of upstate New York, unpacking its environmental and religious history and its relationship to the city of New York.

Each of the eight studios defined a unique set of territorial boundaries and sites, resulting in a range of investigations that reconsidered the relationship between architecture and “nature.” The studios examined and speculated on: agriculture and food production sites; extractive, infrastructural, and logistical sites; lumber forests; state and national parks; man-made and natural bodies of water; Native American reservations; and settlements formed by intentional communities.

This year, the Advanced Architecture Studio IV also addressed the questions of religiosity in the construction of the rural/urban divide by critically unpacking the history of the territorial distribution, self-organization, and settlement patterns of early European religious communities in the Northeastern United States. This framework offered the studios the opportunity to uncover and advance the rituals and spatial practices of ‘indigenous’ populations and other minority groups as potential models of

resistance to an increasingly commodified and fragmented countryside.

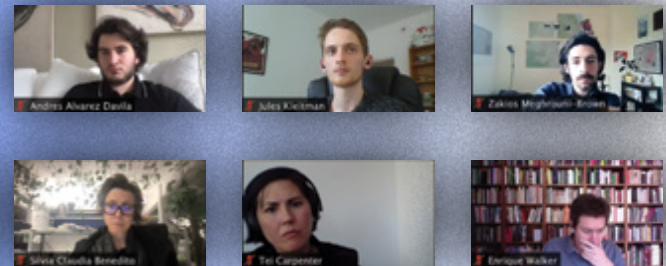
Students engaged in rigorous quantitative and qualitative research, while also engaging directly with the representatives of several minority communities throughout the semester. This research entailed mapping exercises, experimentation with renewable materials and construction methods, testing innovative remediation strategies, manipulating topographic terrain, exploring water flows and water holdings strategies, studying the impact of seasonal cycles on built forms, and challenged students to pursue design strategies that operated at multiple scales. A concurrently held lecture series hosted a wide range of experts, including representatives of and scholars from Native American tribes, to complement the students’ body of knowledge.

Despite the strenuous circumstances of COVID-19 and their impact on the students and faculty, the work continued to be rigorous, intelligent, and daring. Touching on issues of social organization, biocultural heritage, environmental racism, and questions of the sacred and the profane, the ‘rural’ became an incubator for communal spiritual formation and care, and for environmental stewardship.

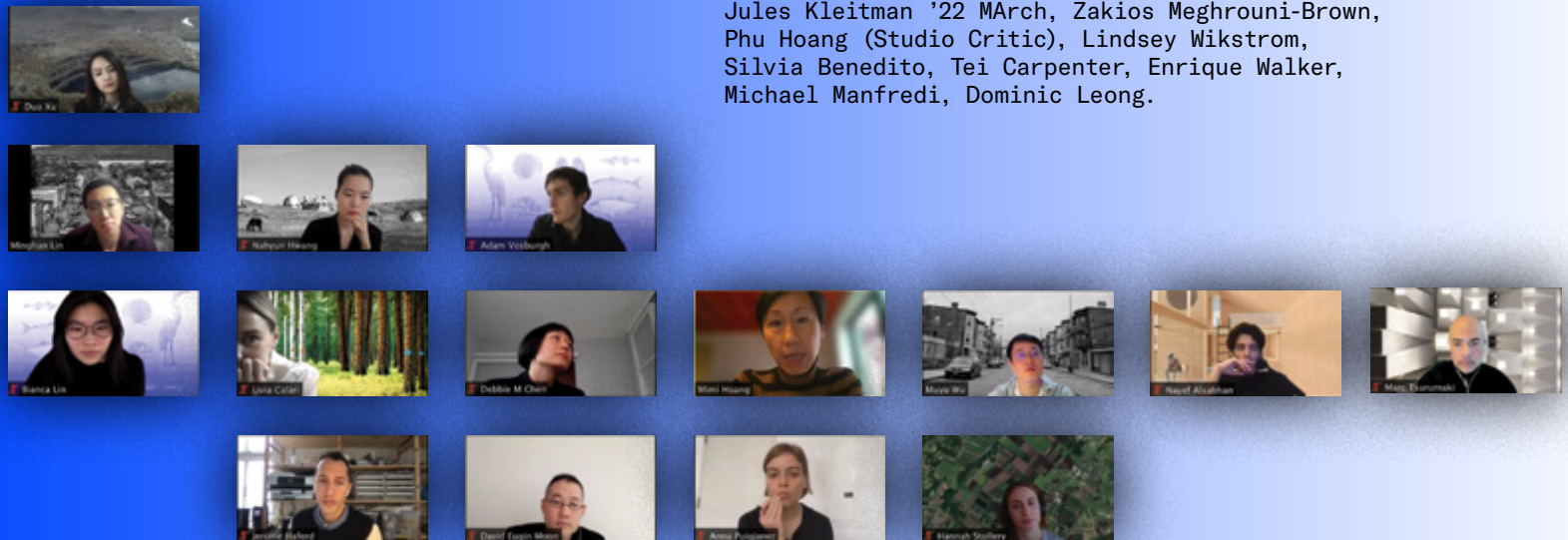
# Advanced Architect



Richard Plunz (Studio Critic), Lorena Bello Gomez, Jeroen Stevens, Maxim Kolbowski-Frampton '22 MArch, Nicolás Gómez Andújar, Sybil Wa, Gloria Serra Coch, Brent Ryan, Mari Carmen Carbonell, Ryan Hansen '22 MArch, Tyrene Calvesbert, Douglas Woodward (Studio Critic).



Andres Alvarez-Davila '22 MArch MSHP, Jules Kleitman '22 MArch, Zakios Meghrouni-Brown, Phu Hoang (Studio Critic), Lindsey Wikstrom, Silvia Benedito, Tei Carpenter, Enrique Walker, Michael Manfredi, Dominic Leong.

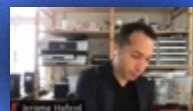
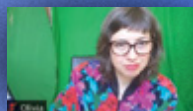
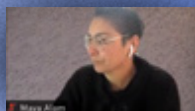
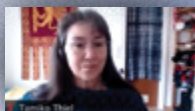
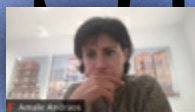
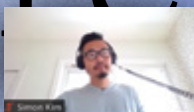


Minghan Lin '22 MArch, Nahyun Hwang (Studio Critic), Adam Vosburgh '22 MArch, Duo Scarlett Xu '22 MArch, Nayef Alsabhan '22 MArch, Bianca Lin '22 MArch, Livia Calari '22 MArch, Debbie Chen, Mimi Hoang, Muyu Wu '22 MArch, Marc Tsurumaki, Jerome Haferd, David Eugin Moon, Anna Puigjaner, Hannah Stollery '22 MArch.

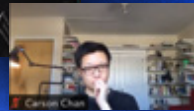
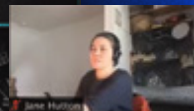
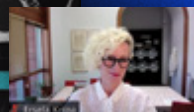
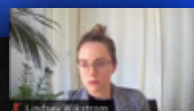
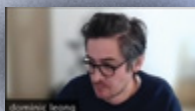
# Spring



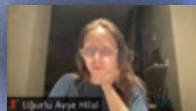
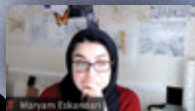
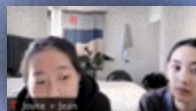
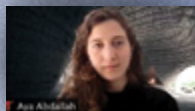
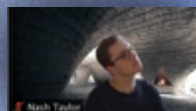
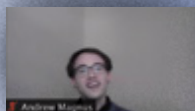
# Lecture Studio IV



Sachem Hawk Storm, Vanessa Keith (Studio Critic), Jo Hee Lee '22 MARCH, Simon Kim, Amale Andraos, Tamiko Thiel, Jin Noh, Maya Alam, Olivia Mc Gilchrist, Jerome Haferd.



Lindsey Wikstrom (Studio Critic), Ersela Kripa, Phu Hoang, Jane Hutton, Carson Chan; Work by Gene Han.



Ziad Jamaledine (Studio Critic), Anna Puigjaner, Andrew Magnus '22 MARCH, Nash Taylor '22 MARCH MSRED, Aya Abdallah '22 MARCH, Joyce Zhou '22 MARCH, Jean Kim '22 MARCH, Maryam Eskandari, Hilal Ugurlu, Alessandro Orsini, David Eugin Moon.

# 2021



## &lt;DARK RURALITY: BLACKNESS, SACREDNESS, AND LANDEDNESS IN THE HUDSON VALLEY&gt;

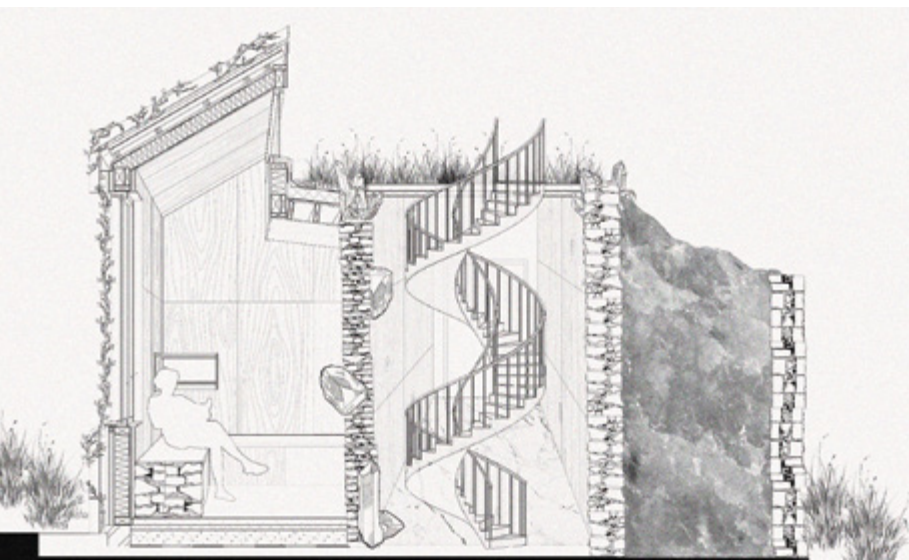
Jerome Haferd

This studio interrogated the African American presence in the Hudson Valley both past, present, and future as an inspiration and impetus for developing new spatial, aesthetic, and communal practices. Students' work engaged Blackness not only as a racial group or identity but as the aesthetics of, attitude, and



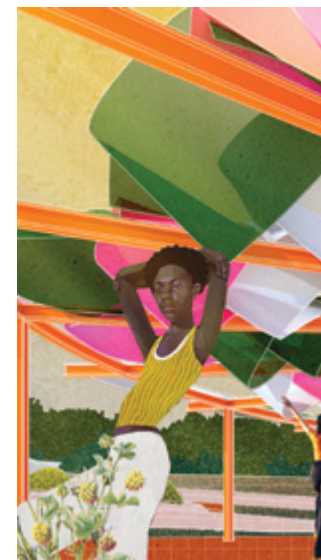
## Danielle Nir, Takashi Honzawa, Agnes Anggada

*The Continuum of Farming, Stewardship, and Spirituality* is a sequence of multi-purpose spaces along a 1.5-mile circular path connecting four farms, a monastery, and a community center in the Hudson Valley of New York. The project seeks to provide a platform on which the three programs can hybridize to bring about a spatial and institutional model that introduces new modes of practice between existing stakeholders.



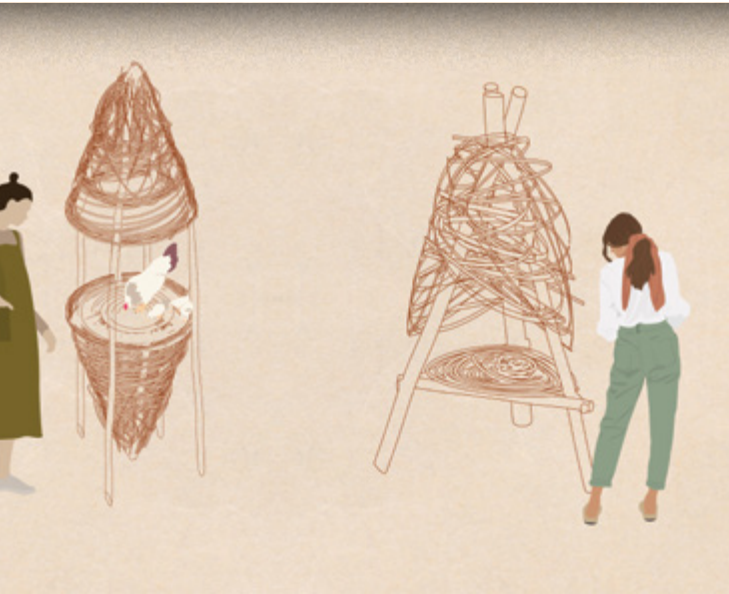
## Charul Punia

*Reconstructed Feminine* presents a new architectural imaginary of a correctional facility located outside Hudson, NY. A radical, intersectional feminist occupation of this site that follows ancestral practices—jewelry making, stonework, and masonry—forges a new trajectory of occupation that directly challenges the planning and gentrification of Hudson.





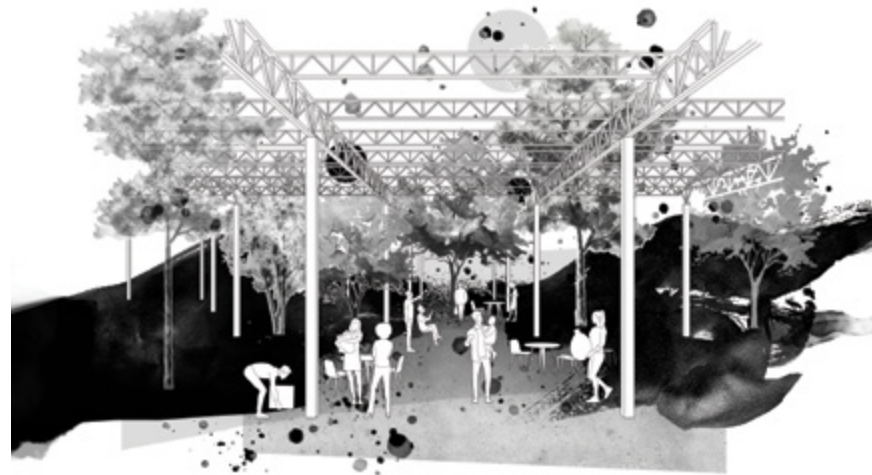
positionality towards Land/Landedness, grounded in practices and traditions which conflate the sacred and the everyday. This agitating of the sacred and everyday binary opened up new approaches to form, program, and modes of practice.



## Keneilwe Ramaphosa

*The Everyday Sacred* is an approach to the creation of sacred spaces for ancestral devotion through the development of an aesthetic practice using bovine leather as a liberation device and a means to redress the colonization of Bantu people and their spiritual practices.

## Lucia Song



## Kylie Walker, Stephanie McMorran

*Another Americana* centers around three core considerations as it approaches a new imaginary through the lens of dark rurality: Black movement, re-association with the land, and the sacredness of Black joy.

## &lt;DESIGN FOR OBSOLESCENCE: DUAL FUTURES OF PARKING DECKS, PRISONS, ZOOS&gt; Phu Hoang

This studio explored the concept of dual futures that require designing for two building types that transform from one to another. In our societies of continual change, an intended program is often outlasted by the building itself, raising questions about how we define architectural completion. Can designing for a state of continuous incompleteness become a final architectural act? In our



## Jules Kleitman, Zak Meghrouni- Brown, Andres Alvarez Davila

*Cannabis Commune* calls for an expansive process of vaccination, remediation, construction, cultivation, and rewilding—an alternative to current modes of production, including those in the nascent cannabis industry, which has largely followed existing paradigms in big pharma.



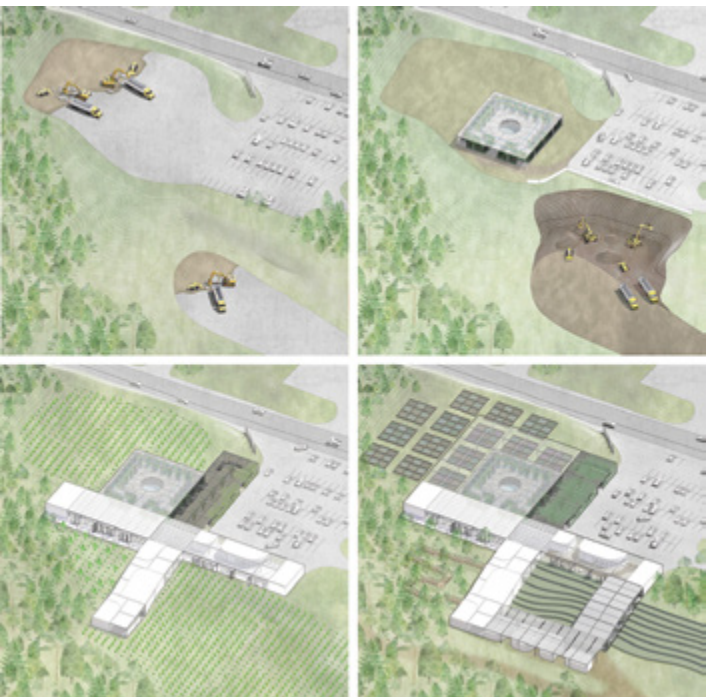
## Gizem Karagoz, Karan Matta



societies of change—with climate, programs, and even sites—when is architecture ever truly “complete”? The studio’s near futures involved building types that are common today but are hypothesized to become obsolete in the future. The distant futures required adapting the original types to a future program of education.



Karen Chen,  
Alexis Zheng



Hao Zhong,  
Peicong Zhang

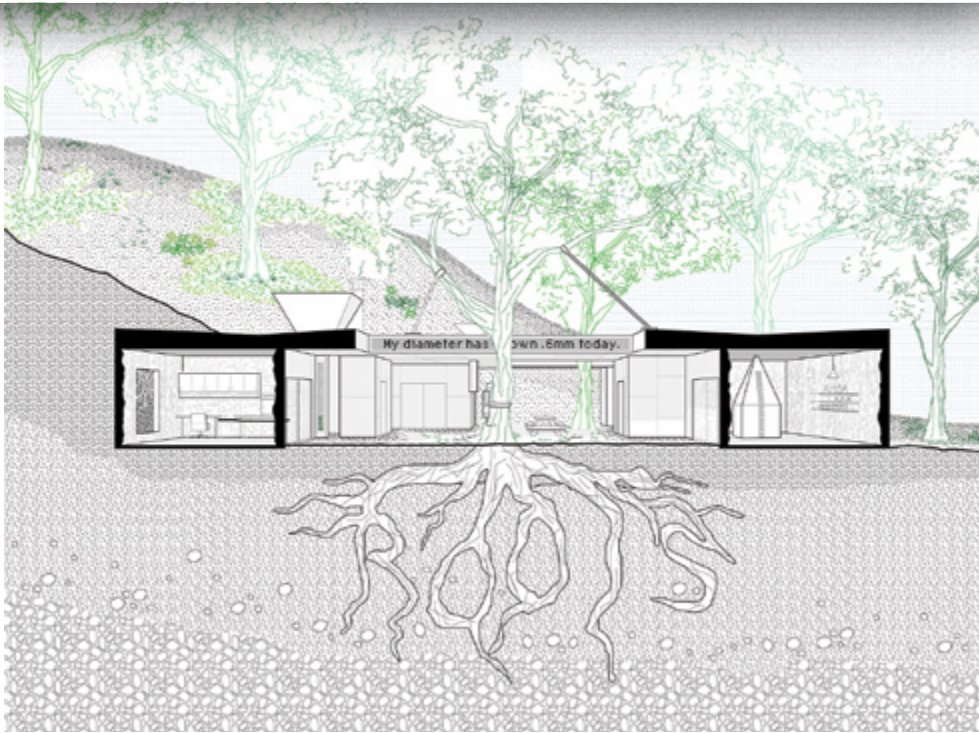
Through an integrated variation of climate, landscape, and activities, *Trellis* attempts to trigger people’s sense of respective interdependencies and encourage people’s engagement in seed diversity and food security.





bucolic (or alternatively newly sublimed “hyper-cartesian”) hinterland and the endlessly growing vertical city. Engaging the concept of “r/urban” as a conceptual framework, the studio explored the often inscrutable yet crucial territories of spectra, of in-betweens, overlaps, and intersections.

Minghan Lin,  
Muyu Wu



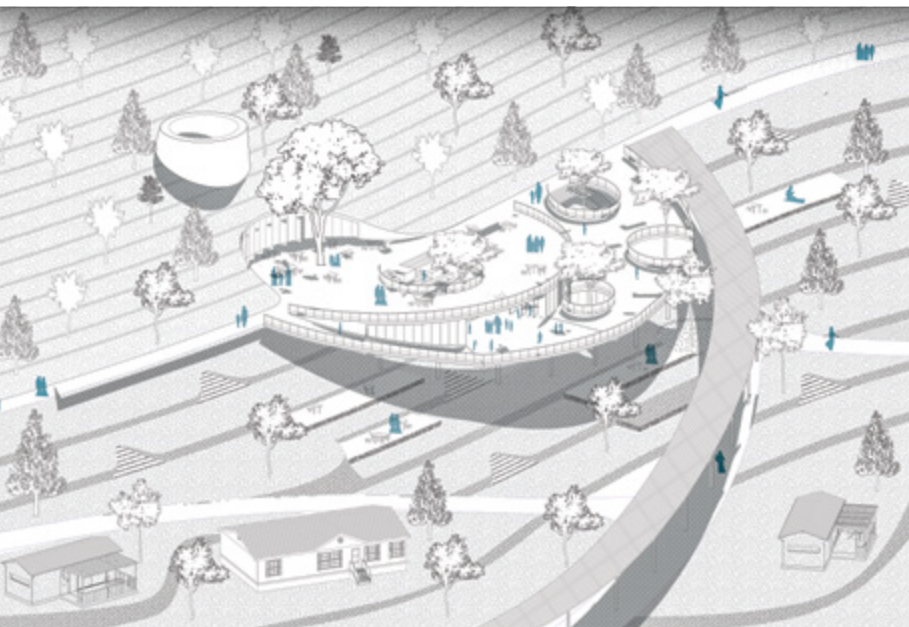
Ryan Alexander,  
Livia Calari

Land in the Hudson Valley has oscillated between being commodified as timber forests and farms, used for either monoculture crop production or clearcut logging. *Kingston Agroforestry* overlaps the conditions of forest and farm to create a biodiverse, mixed-use landscape.

## &lt;IN THE NAME OF GOD: AN INVESTIGATION INTO A RURAL RELIGIOUS SETTLEMENT, NY&gt;

Ziad Jamaledine

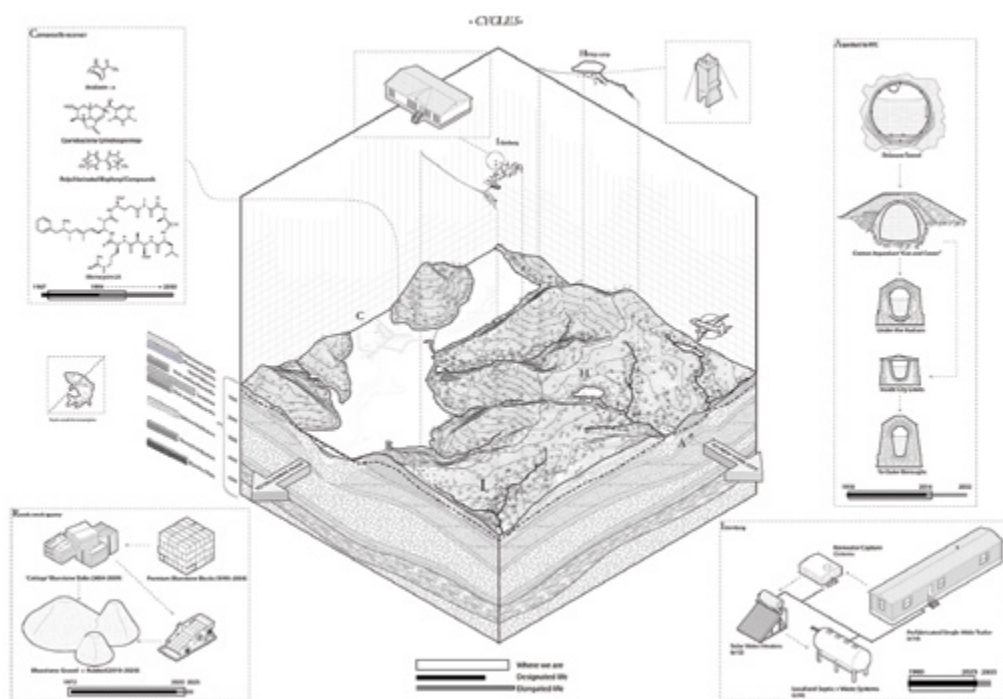
The studio scope consisted of an investigation of the architectural and programmatic capacity of the forms of rural settlement developed by religious communities in Upstate New York. The aim was twofold: First, to map and study the physical architectural and territorial typologies of rural religious settlements,



Alexa Greene,  
Chuqi Huang

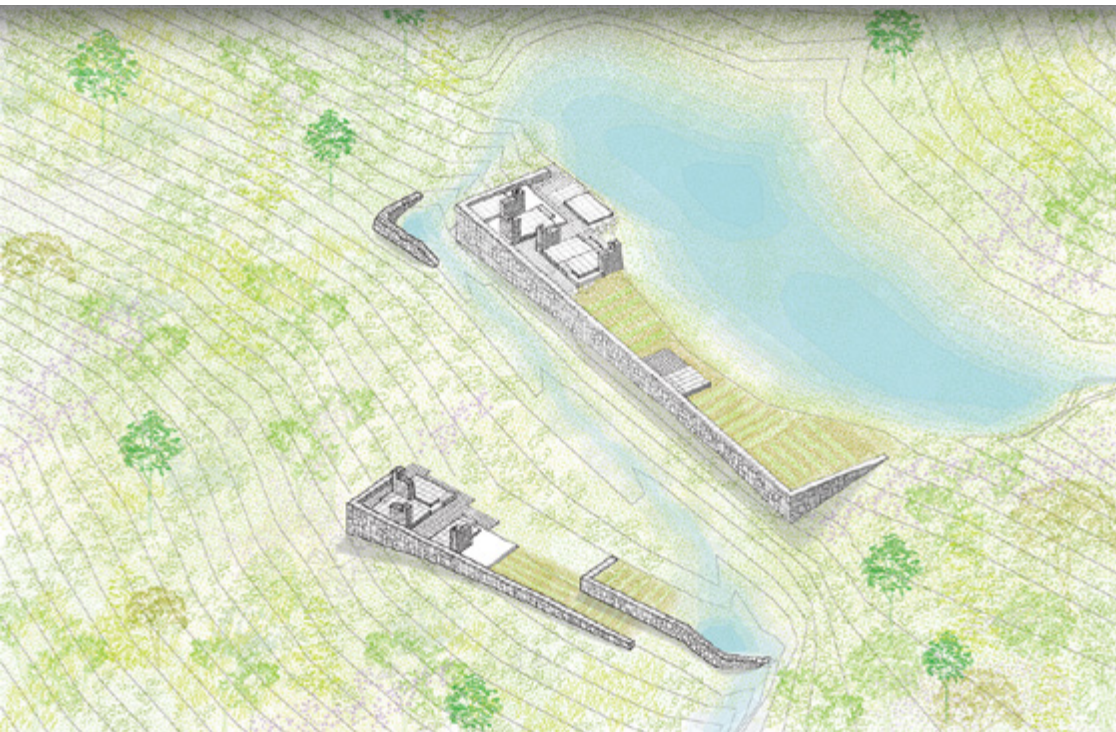
Andrew  
Magnus,  
Yi Liang

*Rebuilding Water Autonomy* aims to transform the micro-watershed in Islamberg, a rural Muslim settlement, through incremental deconstruction and rebuilding of local housing.





understood as exemplars of a type of “intentional community” and as offering a potential form of resistance to the increasingly commodified and fragmented territories of the countryside. Second, to identify and propose physical interventions (alter, transform, expand, re-program, etc.) for Islamberg, a specific religious Muslim community hamlet located in upstate New York.



Joyce Zhou,  
Jean Kim

## Max Goldner

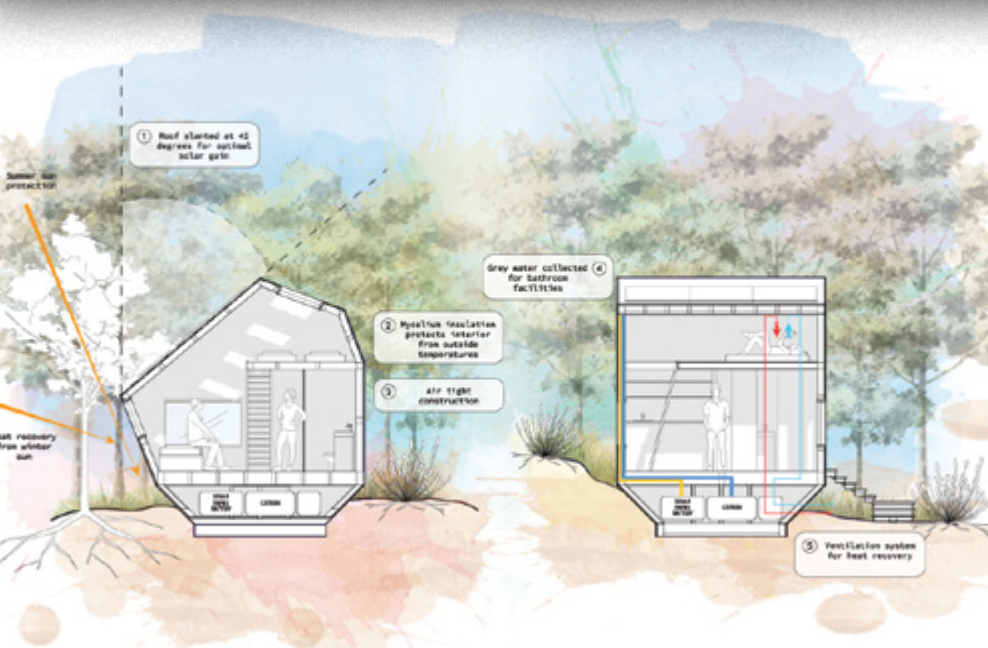
Through a process rooted in undoing the ground and fortifying existing institutions, ecologies, and activities, *A Rural, Religious Front Street* explores the limits of subtlety in an architectural intervention.



## &lt;FUTURECURRENT: IMAGINING INDIGENOUS FUTURISMS AND NASCENT ECOLOGIES&gt;

Vanessa Keith

This studio pushed the boundaries of existing paradigms of sustainability to envision new models for life on this planet rooted in practices that are both ancient and cutting edge. It worked at the intersection of the urban and architectural scales and developed visionary proposals for the site in the present



Alyna  
Henderson,  
Kaeli Streeter

*Beneath our Feet* asks us to think about the geological and fungal histories and networks that lay below ground, visible on the surface only when we're willing to give time and energy to understanding the delicate systems and geologies below.

Thanapon Wongsanguan,  
Johane Clermont



Cohaul Guohao  
Chen





day, as well as generations into the future. It considers the deeper impacts of the climate crisis on Indigenous communities, as well as looks at ways in which to adapt, mitigate, and even roll back the effects of climate change through innovative and time-honored traditional practices, technologies, techniques, and emergent strategies.

# Qing Hou

Focusing on a Native American ancestral and sacred area, my project aims to function as a light plug-in that could potentially expand in the future without causing any danger to the site. The building's mechanics support infrastructure to store water above-ground during wet summers and redistribute it during dry spring seasons, preparing for future changes in the climate.



# Ethan Davis, Ben Fox

Our project seeks to aid in establishing an alternative path forward for Indigenous communities through infrastructure and sustainable strategies that can enable these populations to become self-reliant, producing food and resources needed on-site through innovative and ecological strategies.



## &lt;SPLIT ROCK: A MUSEUM PORTAL TO THE SPIRIT WORLD&gt; Robert Marino

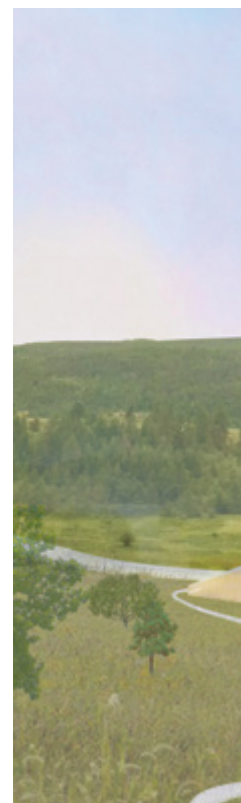
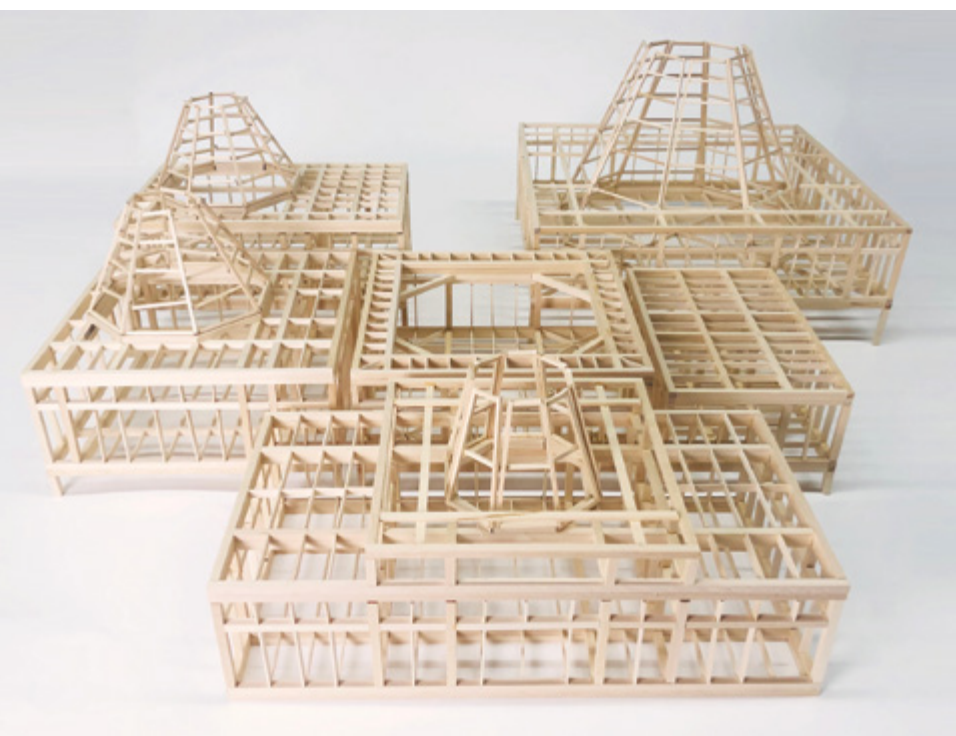
The Lenape Ramapough Tribe is proposing the possibility of a small museum adjacent to the sacred territory of Split Rock, a very rural, solid granite ridge near the town of Millburn, New York. The project is intended as a physical symbol of the tribe's presence, its history, and its traditions. The goal of this studio was to make the museum a portal, an entry point of transcendence, a



Sonny Han,  
Asher  
McGlothlin,  
Cara DePippo

*Split Rock Museum* includes four structures: "The Marker," which marks the sacred site and presence of the Ramapough Lenape; "Shelter of the Physical," which holds historic everyday tribe artifacts; "Shelter of the Spiritual," which holds the ceremonial objects and artifacts, and "Shelter of the Sacred," which holds sacred objects that only certain tribe members can access.

Yongyeob Kim





gateway to the spirit world.

Mickaella  
Pharaon,  
Nikolas Bentel

*Granite, Brick, Concrete*  
takes a hands-on approach  
to create a museum and  
cultural center for the  
Ramapough tribe of  
the Lenape Nation. The  
goal is to ensure that  
manufacturing methods  
were realistic, materials  
could be sourced on-site,  
and the local tribe could  
participate in the building  
process.



Yiheng Lin

*Museum as a Spiritual Portal*  
is a physical symbol of the  
tribe's presence, an entry  
point of transcendence,  
and a gateway to the spirit  
world.

<CARIBBEAN RECONNECTIONS: FROM PLAN TO IMPLEMENTATION IN PUERTO RICO> Richard Plunz, Douglas Woodward

Building on the work of previous studios and courses on Culebra and Vieques and the relationships developed over time with the local communities, this studio used the interdisciplinary approach of the “joint studio” format to develop designs and planning strategies in response to issues of food, energy, and water ↗

## Teonna Cooksey, Ryan Hansen

Culebra faces unique challenges in affordable housing due to the tourism-fueled Airbnb market, the high cost of importing building materials, and the inconsistent ferry service. *Sovereign Living* proposes establishing a Community Land Trust to initiate a building process that is adaptive and responsive to local material streams and community needs.



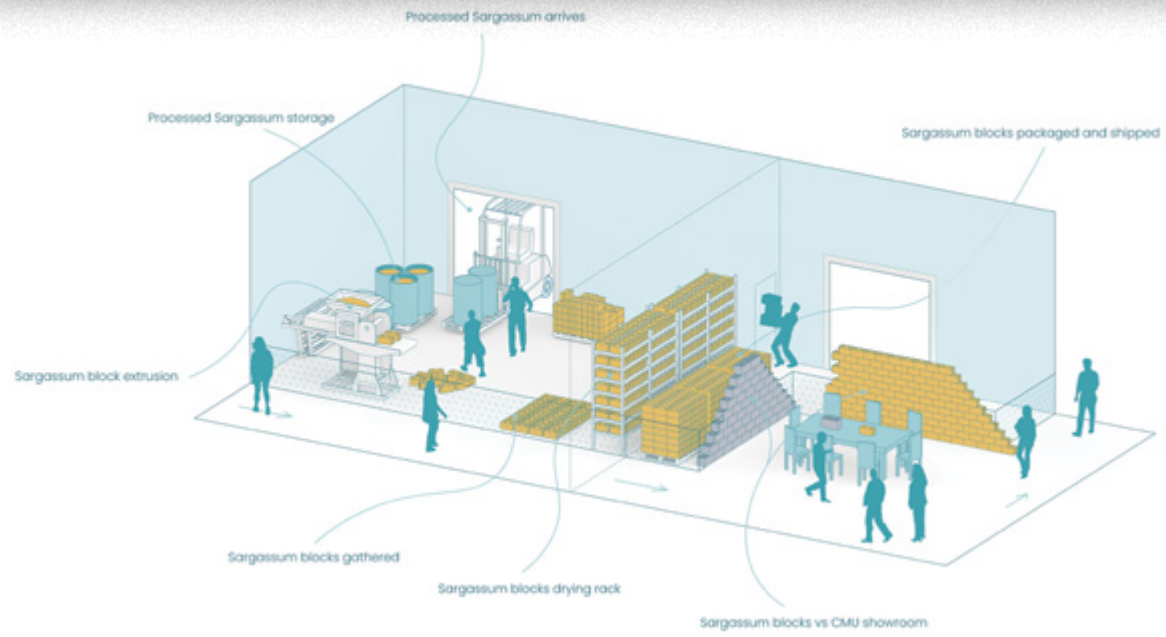
## Estefania Serrano, Zhaoxiang Yun

*Ecological Research Center* proposes a strategy for the reoccupation of an abandoned factory building and its surrounding landscape in Culebra. The project serves as a development engine for the island through promoting ecological tourism, improving its education system, and functioning as a pivot for a more diversified and sustainable local economy.



sovereignty, waste disposal, resiliency, disaster management, education, job creation, and public space, among others. A particular focus was on water as the nexus for the above issues. The studio also focused on implementation considerations for both this current studio's plans as well as projects developed previously, in close collaboration with our principal client, the Mujeres de Islas in Culebra.

Daniel  
Vanderhorst,  
Hanyin Zhang



Will Cao,  
Jiageng Guo,  
Maxim  
Kolbowski-  
Frampton

This project for a food waste upcycling plant and adjoining plant nursery is both an endeavor to revitalize the island's soil and to reclaim violated land, where traces of unexploded ordnance and soil contamination dot an island from decades of U.S. Naval occupation.



## &lt;FRINGE TIMBER II: A CENTER FOR ETHICS&gt; Lindsey Wikstrom

Students designed a satellite location for the Center for Earth Ethics beyond its headquarters at Union Theological Seminary, applying the values of the Northeast Farmers of Color Land Trust and using CLT as the primary building material. First, they constructed a graphic narrative of Equivalents to establish values for their project. Then, each team choose a site, and through an analysis of



## Novak Djogo

*The Mountainarium* is a vertical town in the Adirondack Mountains whose inhabitants fish, hike, grow crops, and work in a lumber mill.



## Jonathan Chester

*Last Resort* is a place of healing where climate refugees are welcomed and explore the methods of reversing desertification so that they can return home, if they choose, and save the land.



occupation and stewardship, students proposed rituals for ways of life on the site, establishing an ideal rate of change and programmatic purpose. Students then designed a tower (between 8 and 18 stories) and an enclosure (between 1 acre and 1 square mile). The architecture supports the cadence and scale of rituals, and actively participates in the generation of carbon equivalent values; it directly rejects racism in its response to resources and celebrates species-driven CLT.



## Claire Chen, Yuchen Qiu

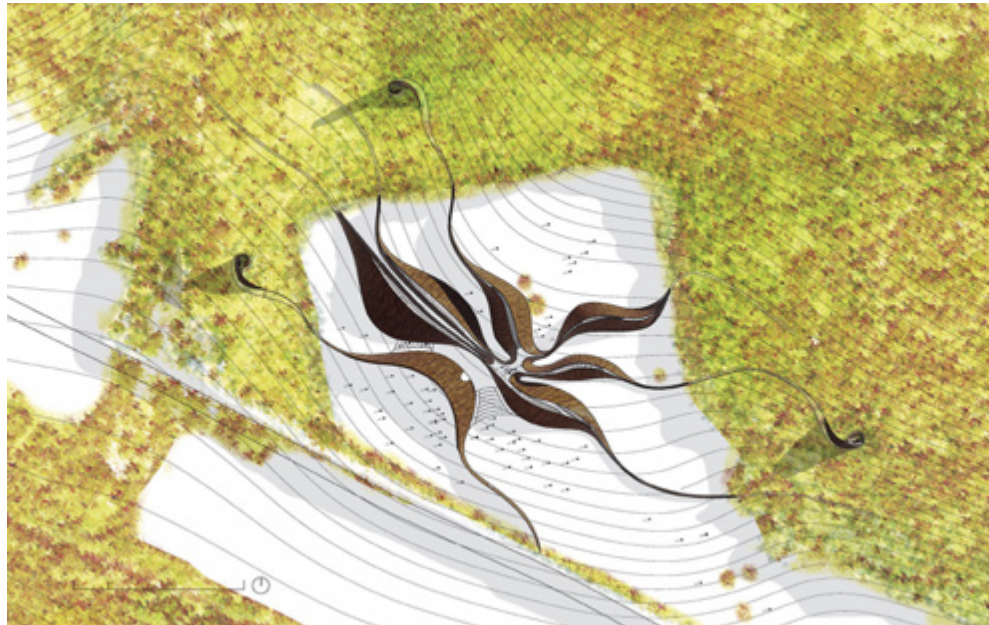
The monetary value system has long reigned the way the world has operated. *Carbon Island* aims to explore other forms of value systems that could address the environmental value that has been neglected in the traditional monetary system.



## Gene Han

## Sierra Heckman, Yumeng Liu

*Building the Unbuilt* aims to propose a new way of living to achieve collaborative survival in a more-than-human Anthropocene. We intend to invite humans and the federally endangered Indiana bats as two of our main clients because of their reversed and mirrored living patterns.







## *Core Architecture Studio III*

### Hilary Sample, Sequence Director

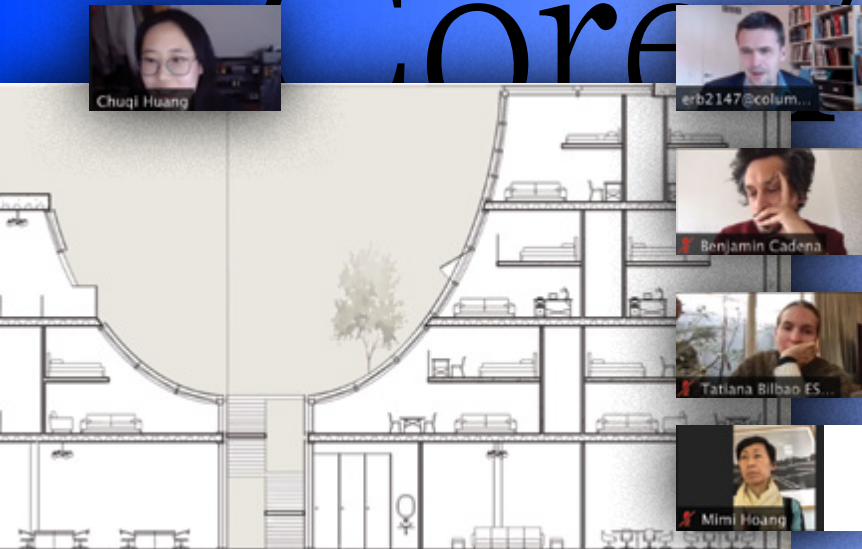
#### *States of Housing*

Housing, as a design studio, is the last semester within the required series of Core Studios. It serves as a conclusion to the core sequence, as well as a transition to the Advanced Studios and specifically building up to the Advanced Studio IV: Scales of Environment. While the studio is structured to present knowledge about the fundamentals of architecture as it applies to designing housing projects, the studio aims to inspire a shift in thinking about architecture in relation to the world at large. There is perhaps nowhere better to study housing than at Columbia GSAPP with its nearly 40-year history of offering housing studios focused on the deeply rich history of New York City. So, while this term, the studio focused on a select site within the Bronx, the studio continually thinks beyond the familiar—reaching globally, never out of touch with the Advanced Studios. While the Core Studios are structured sequentially, housing, because of its unique placement within the sequence, is also situated to absorb and be influenced by research in the advanced studios, while at the same serving to produce serious thinkers and designers about design through the problem of housing types.

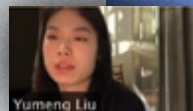
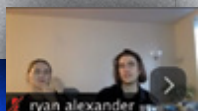
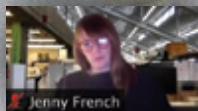
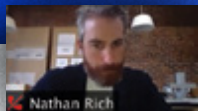
The fall 2020 studio was structured through four assignments: documentation of a lived experience, policy research, urban and typological analysis of a residential building, and the design of a New York City-based housing project. The studio focused on the many different states of housing that architects typically

encounter in practice. It was organized through two principal means: research/analysis and an architectural proposition. The studio operated as a laboratory for exploring new possibilities for urban living in the South Bronx's Melrose neighborhood. Throughout the term, each student examined the significance of collective housing and approached design through four lenses: health, race, social, and environmental justice. This work recognized systemic injustices and their intersection with design practices in housing and associated public spaces and proposed new futures. Developed through teams, the proposals creatively challenge the status quo and assumptions about housing. The work highlighted below is relentlessly empathetic and imaginative in creating artistic, healthy housing.

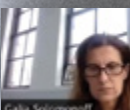
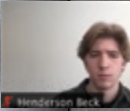
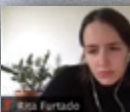
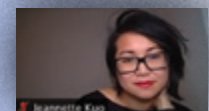
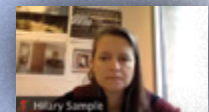
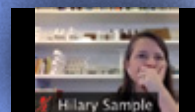
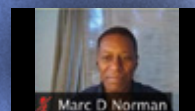
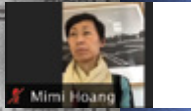
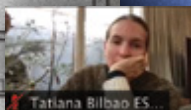
# Core Architect



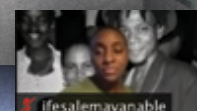
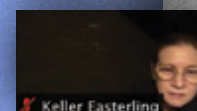
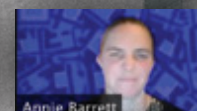
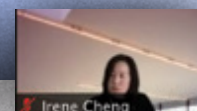
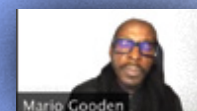
Eric Bunge (Studio Critic), Chuqi Huang '22 MArch, Mimi Hoang, Benjamin Cadena, Adam Frampton, Marc Norman, Tatiana Bilbao, Juan Herreros, Hilary Sample; Work by Chuqi Huang and Duo Scarlett Xu '22 MArch.



Adam Frampton (Studio Critic), Nathan Rich, Jenny French, Jörg Leiser, Yumeng Liu '22 MArch, Livia Calari '22 MArch, Ryan Alexander '22 MArch; Work by Nayef Alsabhan '22 MArch and Yumeng Liu.



Mario Gooden (Studio Critic), Jean Kim '22 MArch, Maxim Kolbowski-Frampton '22 MArch, Irene Cheng, Charles Davis II, Catherine Ingraham, Mark Wigley, Annie Barrett, Keller Easterling, Ife Vanable; Work by Maxim Kolbowski-Frampton and Jean Kim.



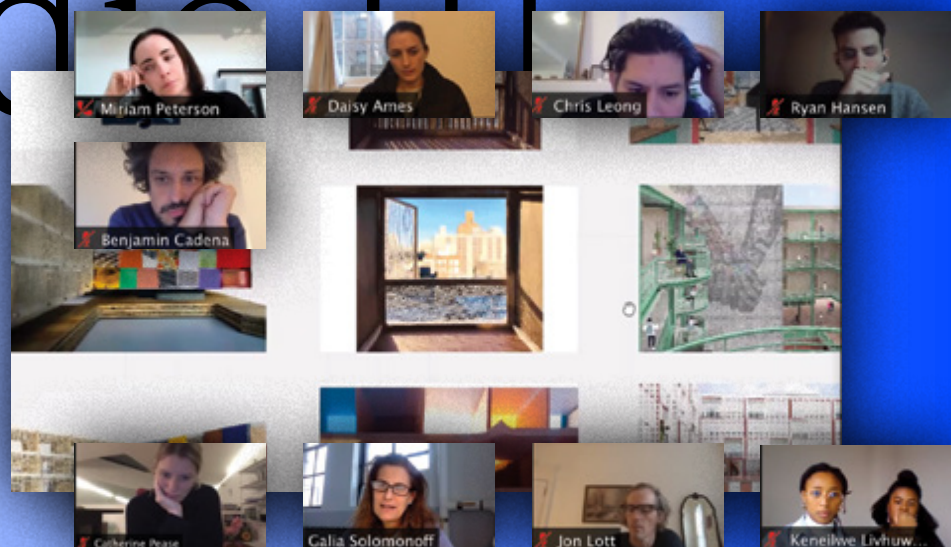
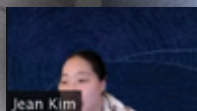
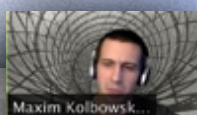
# Fall



# ure Studio III



Hilary Sample (Studio Critic), Rita Furtado, Max Goldner '22 MARCH, Curry Hackett, Adeline Chum '22 MARCH, Henderson Beck '22 MARCH, Brigitte Shim, Mario Gooden, Galia Solomonoff; Work by Max Goldner and Adeline Chum.



Benjamin Cadena (Studio Critic), Miriam Peterson, Daisy Ames, Chris Leong, Ryan Hansen '22 MARCH, Catherine Pease, Galia Solomonoff, Jon Lott, Keneilwe Ramaphosa '22 MARCH, Meissane Aude Kouassi '22 MARCH; Work by Keneilwe Ramaphosa and Meissane Aude Kouassi.



Eric Bunge, Henry Black '22 MARCH, Jane Lea, Marc Tsurumaki, Annie Barrett (Studio Critic), DK Osseo-Asare; Work by Yang Lu '22 MARCH and Alexis Zheng '22 MARCH.

# 2020







an imagined future that offers something more than our present. Working collaboratively in pairs, experimentally between fact and fiction, plan and section, present and future, and iteratively through drawings and both digital and physical models, students developed spatially and conceptually robust and provocative architectural proposals for collective housing.



Nash Taylor, Camille Newton

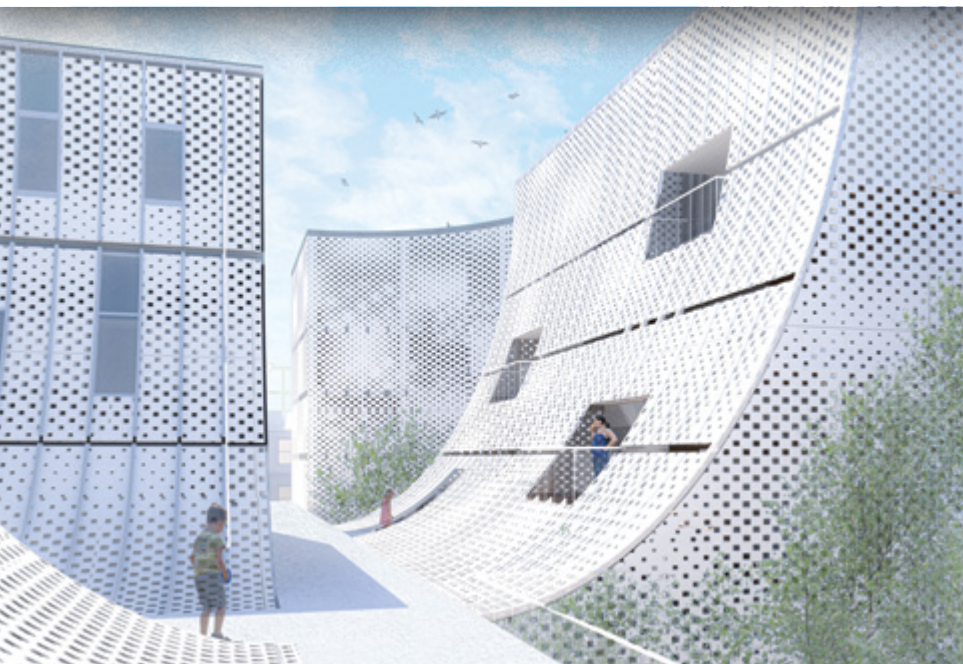
## Lucia Song, Gizem Karagoz

*A Micro-Macro Community* challenges existing metrics of housing value to introduce a holistic framework—encompassing environmental, social, and economic resilience—to generate new forms of capital for a rent-to-own model supporting low-income residents.



## &lt;LIVING ARMATURES, LIVING ROOMS&gt; Eric Bunge

This studio grounded a broad and heterogeneous notion of housing as everything within a constrained architectural focus on two interrelated components of housing: rooms and armatures. Following two previous studios dedicated to the room as a physical and social construct, students mined its potential to produce new forms of domesticity and collectivities in architecture. As a corollary to the



## Chui Huang, Duo Scarlett Xu

In *Sharing as Armature*, co-living housing units are designed to help relatively vulnerable single-mother families experiencing financial problems.



## Novak Djogo, Joyce Zhou

Divided into two main components, work and living spaces in *Branched Housing* are vertically stacked, enabling residents to descend from living into a layer where there are work opportunities.



room, they also focused on armatures, here defined as frameworks that structure physical and non-physical relationships. Through this dual focus on rooms and armatures, they bypassed the apartment as housing's irreducible "unit." After initial studies, students ultimately choose to focus on one or the other.



## Sixuan Chen, Jiafeng Li

Through both carving in and aggregating out, this project seeks duality of difference versus consistency, diversity versus efficiency, variation versus repetition.



## Yi Liang, Peicong Zhang

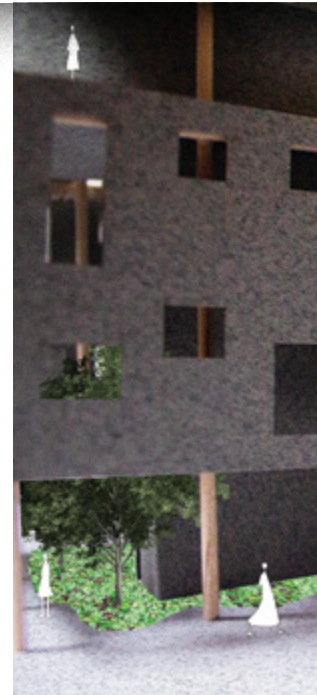
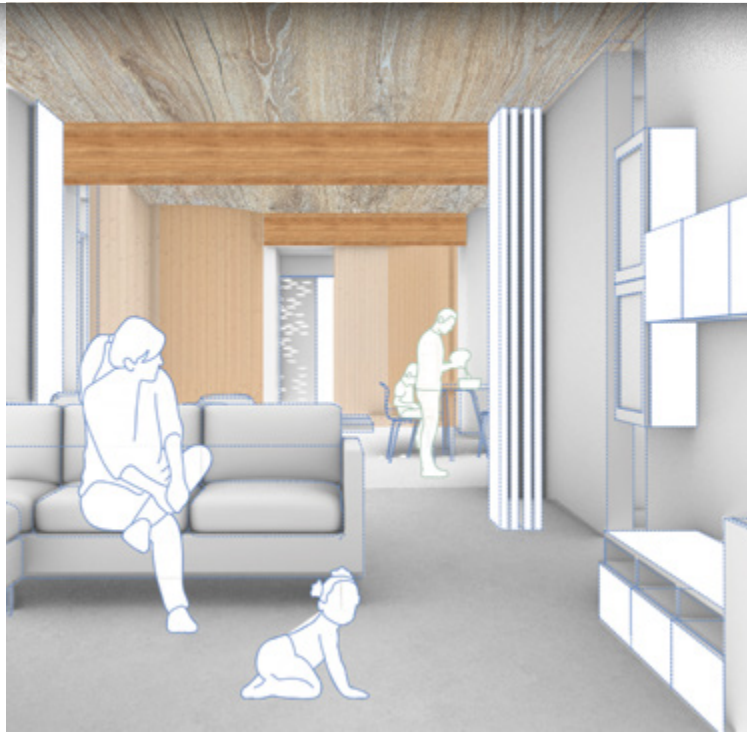
## &lt;THE HOME UNBOUND&gt; Benjamin Cadena

The idea of home has changed. The separation between home, work, and play has dissolved into an undifferentiated continuum not seen since preindustrial times. Embracing this collapse of boundaries and definitions, the studio explored the spaces where the city ends and the home begins. A new territory of the domestic where we can rethink, reconsider and reimagine what the home is, what housing



## Anays M González

*Symbiosis* is a housing project conceived as a support system for two vulnerable populations: single parents and the elderly. Through intergenerational living, both communities can experience a mutualistic relationship to address their needs.



Alya Abourezk,  
Gustavo Lopez Mendoza



can be, and how we live in cities. The studio asked students to design housing for an expanded home life that offers new possibilities for living in the spaces between some contradictions that arise.

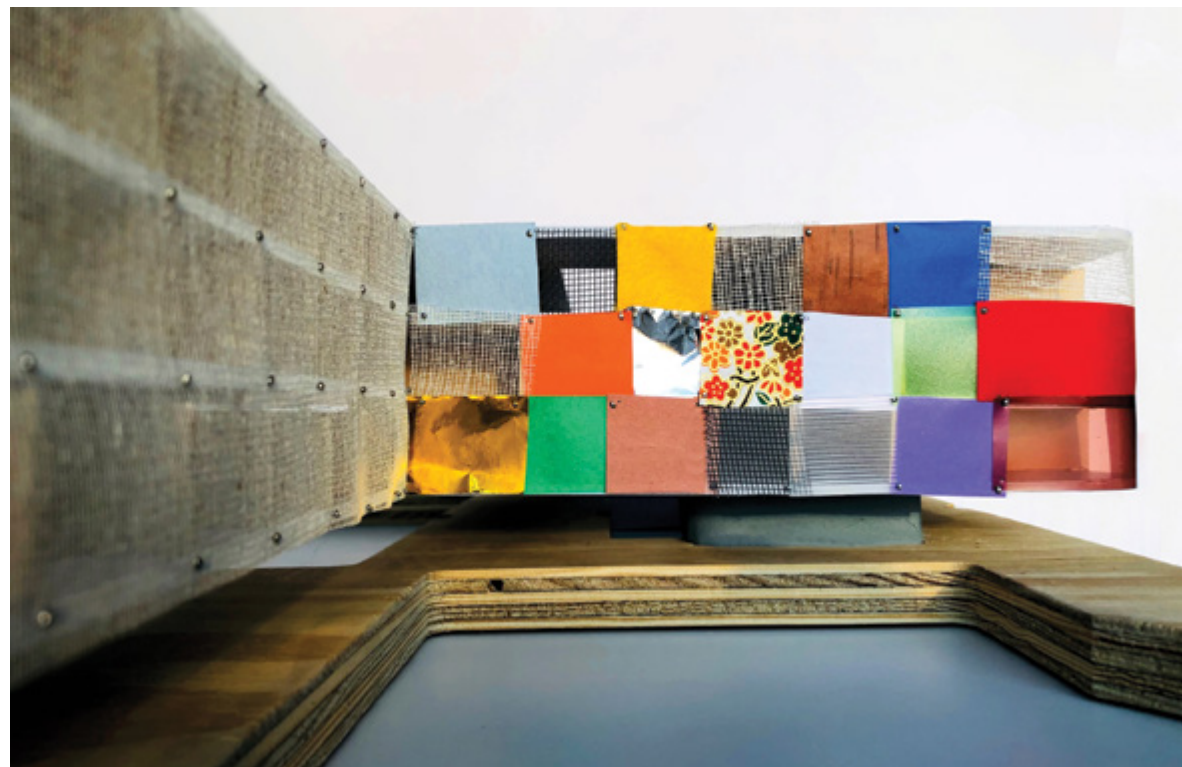


Johane  
Clermont,  
Ryan Hansen,  
Stephanie  
McMorran

The Melrose community faces challenges such as fresh food scarcity and the impacts of industrial pollution on health, yet it also exhibits a vibrant culture on its sidewalks. *Collected Stories* aims to use small spaces and relationships to address these problems and celebrate a connected community.

Keneilwe  
Ramaphosa,  
Meissane  
Kouassi

*The Podium* is inspired by the hip-hop cultural movement and aims to amplify its spirit as an art form created in diametric response to architectural failures in planning and housing practices in the Bronx.

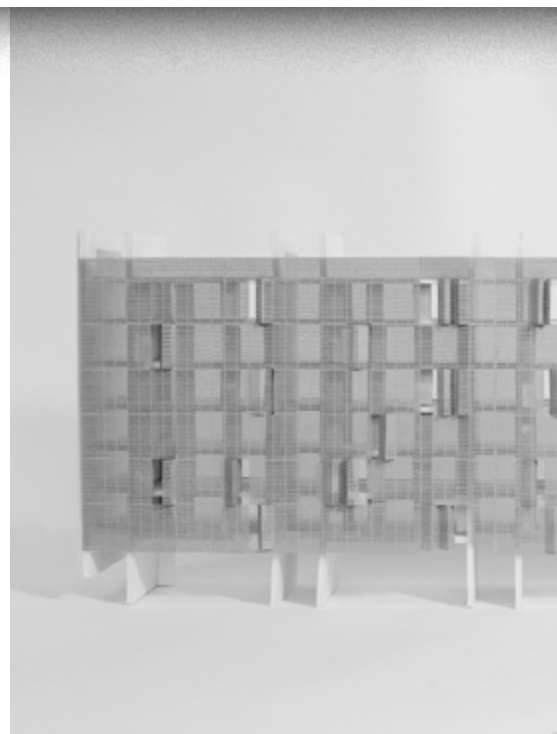


## &lt;HOUSING, COMPLETE AND INCOMPLETE&gt; Adam Frampton

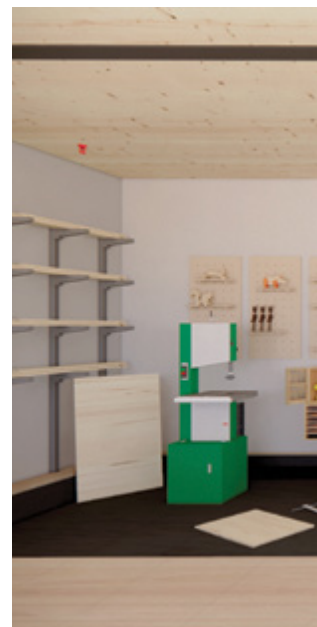
The future of the home (and urban housing) is uncertain. This uncertainty, coupled with a historical understanding of how housing has changed, begs the question, what are the essential components of housing? Although regulations and codes define minimum standards for elements such as daylight, ventilation, space, energy performance, other elements that we often take for granted, like ↗

Livia Calari,  
Ryan Alexander

By providing an empty apartment shell that is built out by residents to fit their unique lifestyles, *Melrose Mews* challenges conventional models that come with a fixed number of bedrooms and reinforce normative household structures.

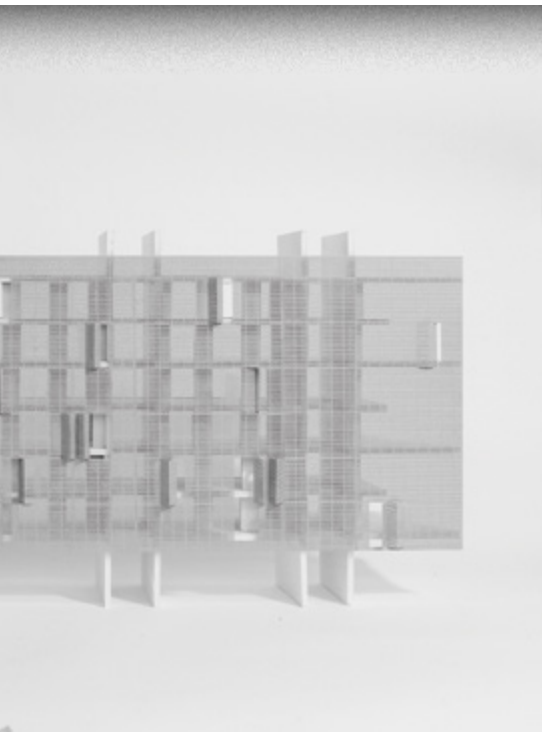
Adam  
Vosburgh,  
Aditi Shetye

Each unit in Home/Work consists of a thickened floor assembly consisting of an agglomeration of expanded mechanical systems, resolved in a series of skinny towers with housing units where living and working can coalesce.





closets, are not necessarily mandated. During the pandemic of 2020, our domestic spaces have taken on new obligations and roles, acting more and more as the simultaneous realm of work, schooling, and childcare. This studio also investigated contemporary models of “incomplete” housing that provide open frameworks for residents to modify and adapt their own domestic environments.



## Nayef Alsabhan, Yumeng Liu

*Narrow Housing* explores the potential of the hallway, often a space determined by efficiency, to house communal activity.



Nik Bentel, Sonny Han



<BREEZE : WAY> Erica Goetz

This studio engaged natural ventilation strategies and site forces to shape building massing, unitization, fenestration, and materiality. It took inspiration from the hall, where social interaction and shared programs foster a sense of community, and from the loggia as a mediating space between inside and outside, public and private. Students thought deeply about the “service” spaces of a



## Hao Zhong, Yuchen Qiu

Responding to the lack of access to fresh air and inadequate public resources in the Melrose neighborhood, which causes a significantly higher rate of respiratory illness and substandard living conditions, *The Loop* rethinks the concept of air/void and uses it as the central organizational device and a public resource carrier in residential design.



## Zakios Meghrouni-Brown, Andres Alvarez Davila

*Melrose Carve* introduces a sculptural carved-out space into the fabric of the city block that mediates between the domestic and urban scales by inviting the neighborhood into the park and performance venues at the heart of the building.



building, where circulation occurs and where air is distributed, questioning how such spaces may be rethought via environment and health. Students choose to amplify, reestablish, or disintegrate the corridor, but in any case, the space of air shaped each proposal.



Bisher Tabbaa, Allison Shahidi



Yongyeob Kim, Karan Matta

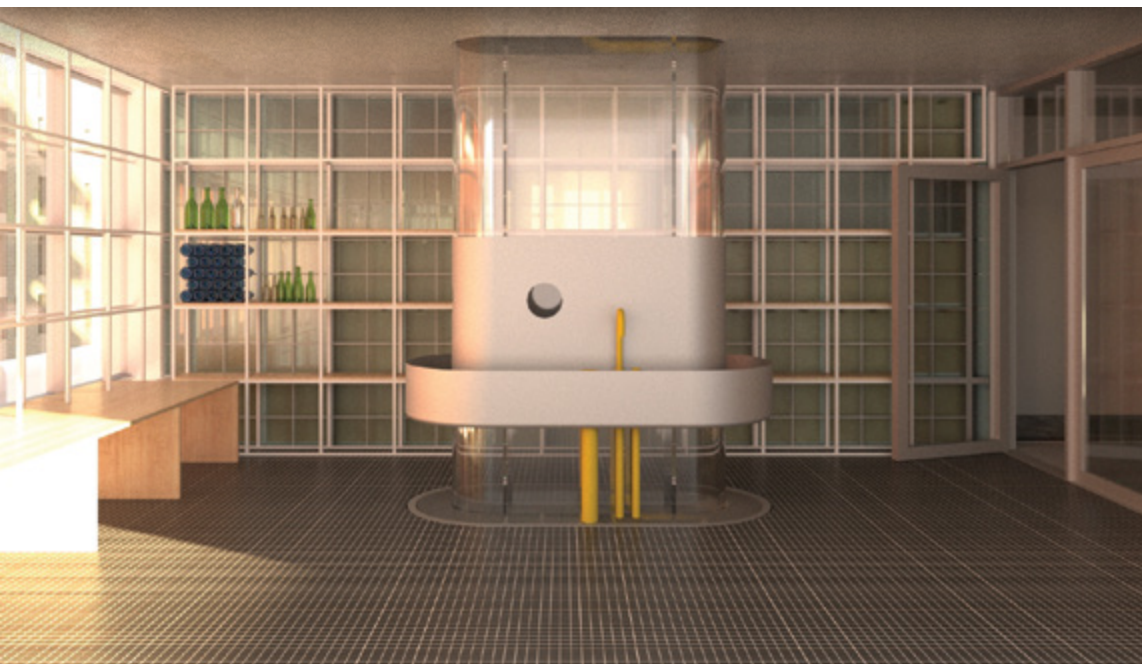
### Qing Hou, Farouk Kwaning

This housing scheme confronts severe air pollution in the South Bronx Melrose community by imagining a habitable forest which filters air contaminated with allergens, pollutants, carbon, and nitrogen dioxide.



## &lt;WHITE WALLS, WHITE FORMS, FORMS OF WHITENESS&gt; Mario Gooden

The studio investigated forms of whiteness within the design of modernist housing and uncovered liberatory spatial practices in consideration of “domestic situations” and the performance of domesticity. For, the design of housing is much more than the enactment of social legislation, policy and equally more than the disciplining of rules of order and typologies intended to make other-wise ↗



Jean Kim,  
Maxim  
Kolbowski-Frampton



Oswaldo Delbrey,  
Gene Han

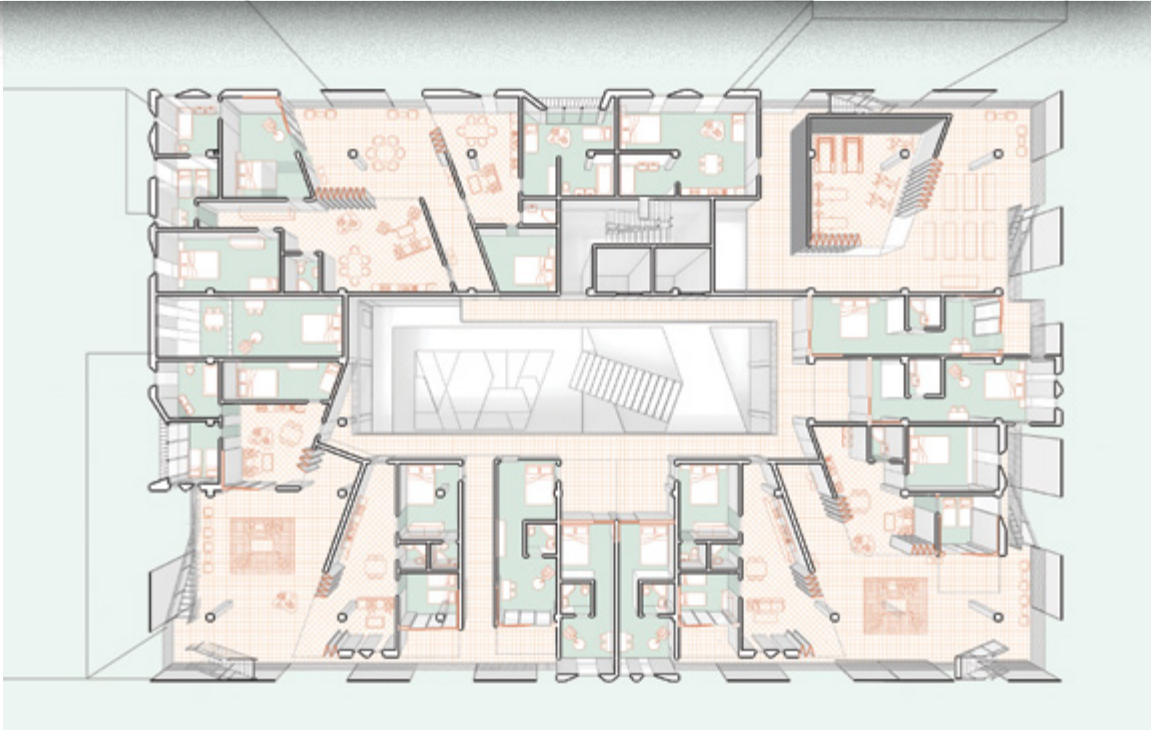
*Inhabiting the Grey* imbricates the presence of the unseen/unacknowledged/unrepresented—Modernism’s non-ideal subject—in space and time.



errant and disobedient subjectivities and identities. The studio considered the places and spaces where these bodies dwell to consider the movement and physicality as well as its functions, constructs, and identity in its socio-political, cultural, and technological contexts.

Karen Chen,  
Shuhan Liu

*Intermediate Dwelling* is designed with domestic scenarios (units) that function with movable walls and façade to allow flexibility of household sizes and freedom of activities.







thoughtful to individuals, the environment, and through form and materials creating artistic and healthy housing.

Hannah Stollery,  
Henderson Beck



Daniel  
Vanderhorst,  
Jonathan  
Chester

*Mosaic City* investigates  
stoop culture in the Bronx  
and aims to bring elements  
of that life into the project's  
public spaces.

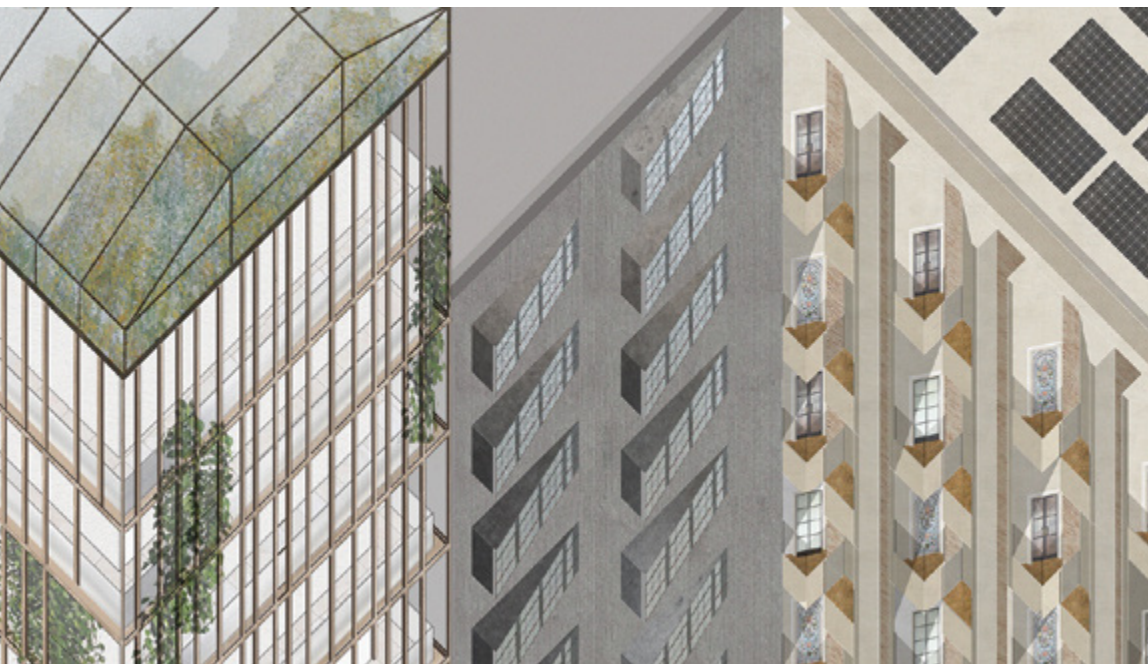


## &lt;HOUSING SHARING AGAIN&gt; Galia Solomonoff

Before COVID-19, we started to shift from printed money and into codified transactions, away from industrial production and into web-economies. Yet, pulling resources, holding arms, taking to the streets remain the way to overcome together what cannot be accomplished alone. This studio viewed extreme inequality as an obstacle to a forward society. Our housing aimed at new hybrids that

Agnes Anggada,  
Sierra Heckman

*Living Cores* is a medium-density mass timber housing project that aims to provide pleasant and efficient homes for the community with ample light and ventilation while encouraging engagement among neighbors through shared spaces.

Charul Punia,  
Kaeli Streeter



negotiated landscape and interiority with access to natural light, cross-ventilation, and outdoor space. We aimed for medium-density, low-rise, environmentally-sound, and financially sustainable developments knowing that these qualities are hard to balance.



## Danielle Nir, Takashi Honzawa

Four standardized housing unit types are stacked strategically to provide private terraces, while courtyards are carved out of the building's mass, allowing for shared outdoor spaces.

## Cohaul Guohao Chen, Hazel Villena







# Core Architecture Studio II

## Erica Goetz, Sequence Coordinator

### *Environment as the Third Teacher*

A school is more than just its students, teachers, and textbooks; it also includes a building, which is essential to a child's education and personal growth. Loris Malaguzzi, founder of the Reggio-Emilia educational philosophy in the early twentieth century, called the environment the "third teacher," together with a student's parents and teachers. In its full manifestation, the multidimensional school environment inspires and nurtures children by activating all of their senses—a position that Core Architecture Studio II explored this semester.

All eight Core II studios focused on the design of a K-8 public school on the site of P.S. 64, located on the Lower East Side of Manhattan. Designed by C.B.J. Snyder in 1906, P.S. 64 served as a New York City public school for seventy years before it was shuttered. Today, the building remains abandoned. As part of the research for their design projects, Core II students visited the vacant building, studied its history, and evaluated its current condition in order to envision ways to revitalize the site as a contemporary school.

How can a building both react to and affect pedagogy? When a child feels safe and supported, they will take risks and embrace challenges. How do we design spaces that nurture and inspire individual children so they can reach their fullest potential? At the same time, how does a school, as a civic institution, connect to its community and promote fruitful interactions between the

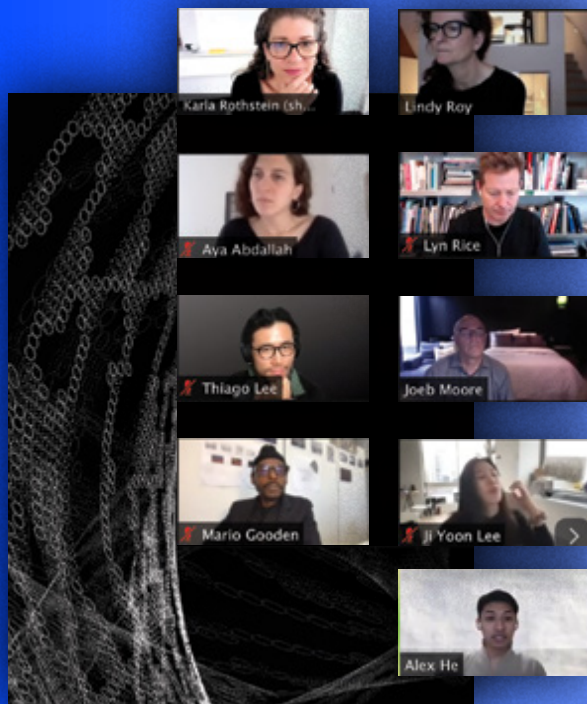
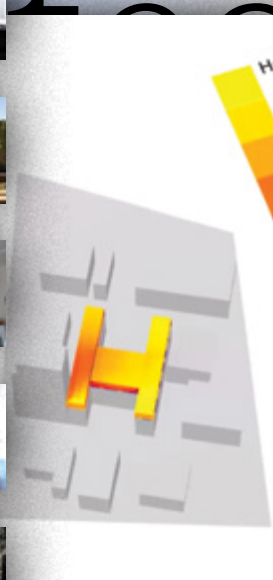
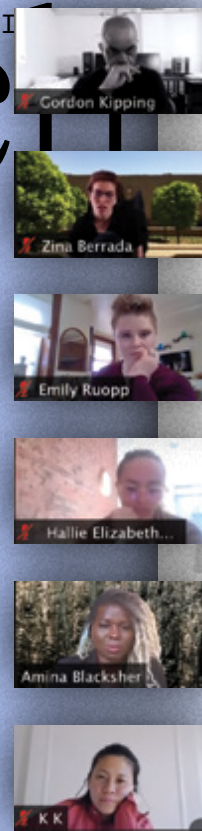
students and the community? How do our schools reflect our cultural values and prepare children for their own futures (not just our present)? How do we build a school today that will serve not only this generation of children, but also the next?

Through many scales of engagement—from the site in general to the detail of a brick—students devised careful interventions in the existing structure. An essential aspect of the curriculum prompted students to emphasize low-embodied carbon structural design. In response, projects reused the existing building or elements of it, integrating new materials with low-embodied carbon footprints and thoroughly considering the future use and lifespan of the structure.

The 2021 spring semester proved to be a transformative one, as we dispersed from our own learning environment—notably, our studio spaces in Avery Hall—to many corners of the globe. But remarkably, we created a new environment across the filigree of the ether: a "fourth teacher" that emerged in the form of a virtual forum in which those key tenants of community, cooperation, and life folded together into a tactile space of our own.

# Core Arch

Emmett Zeifman (Studio Critic), Tamar Zinguer, Benjamin Cadena, Enrique Walker, Jonah Rowen, Alfie Koetter, Mario Gooden, Stephen Zimmerer '23 MARCH, Alek Tomich '21 MARCH, Maxine Gao '23 MARCH



Karla Rothstein (Studio Critic), Alex He '23 MARCH, Aya Abdallah '23 MARCH, Lindy Roy, Thiago Lee '23 MARCH, Lyn Rice, Joeb Moore, Mario Gooden, Ji Yoon Lee '23 MARCH; Work by Alex He '23 MARCH.

Amina Blacksher (Studio Critic), Chi Chi Wakabayashi '23 MARCH, Joan Du '23 MARCH, Alice Fang '21 MARCH, Zixiao Zhu '23 MARCH, Daniel Chang '23 MARCH, Anya Ray '23 MARCH, Qingning Cao '23 MARCH, Jackie Pothier '23 MARCH, Norma Barbacci, Gordon Kipping, Tiara Hughes, Enrique Walker, Khadija Tarver '23 MARCH, Jennifer Newsom.



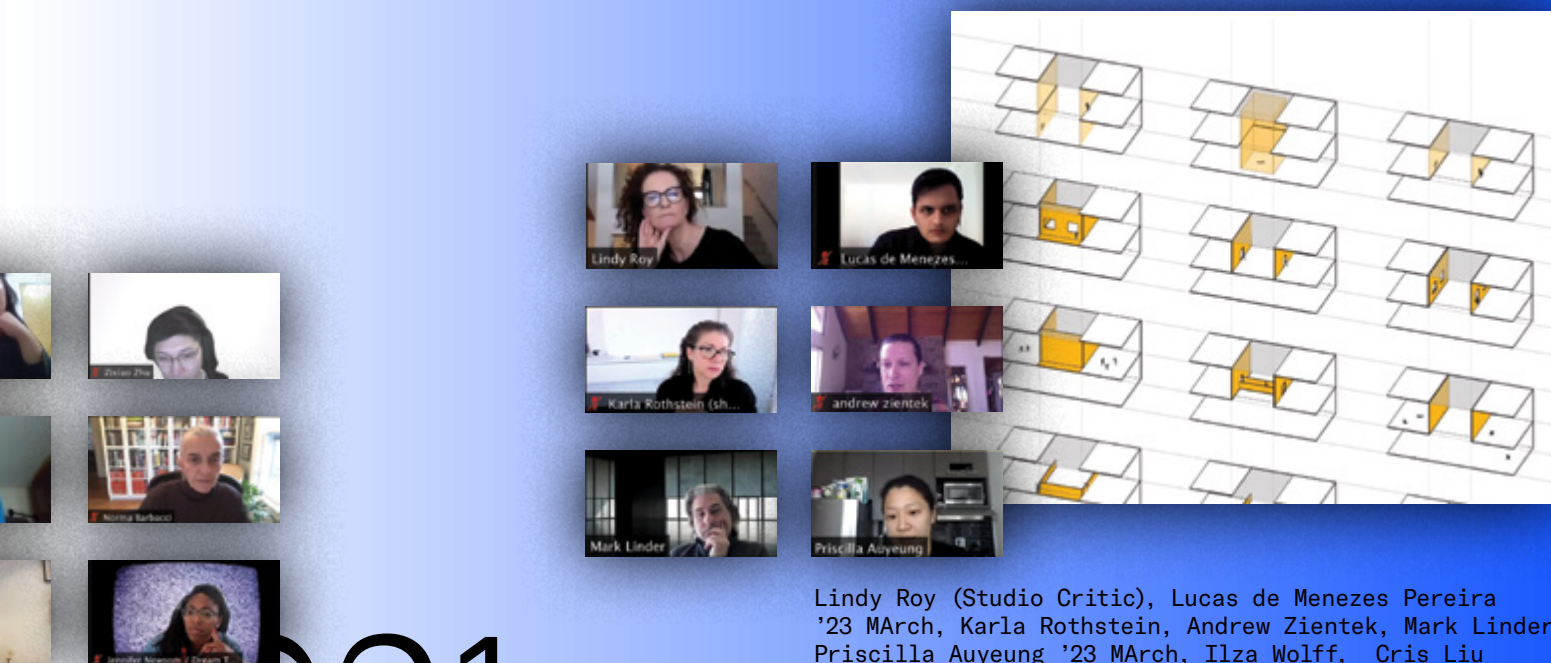
# Spring





Gordon Kipping (Studio Critic),  
Zina Berrada '23 MArch, Emily Ruopp  
'21 MSAAD, Hallie Chuba '23 MArch,  
Amina Blacksher, Kelly Koh,  
Darin Johnstone, Dan Wood, Amale Andraos;  
Work by Kerol Kaskaviqi '23 MArch.

Blake Kem '23 MArch, Jonghoon Park '23 MArch,  
Yiyi Gao '23 MArch, Benjamin Cadena (Studio Critic),  
Owen Nichols, Saba Ardeshiri '23 MArch, Zoe Su '23  
MArch, Karen Tong Wang '22 MArch, Emmett Zeifman,  
Matthew Brubaker '21 MArch, Dong-Ping Wong, Anna  
Puigjaner, Laura Blaszcak '23 MArch, Anda French;  
Work by Yiyi Gao '23 MArch.



Lindy Roy (Studio Critic), Lucas de Menezes Pereira  
'23 MArch, Karla Rothstein, Andrew Zientek, Mark Linder,  
Priscilla Auyeung '23 MArch, Ilza Wolff, Cris Liu  
'21 MArch; Work by Priscilla Auyeung '23 MArch.

## &lt;KINETIC INTELLIGENCE&gt; Amina Blacksher

If the purpose of education is to unlock the full potential of the student, what then are key contributors to that end? Toward the articulation of a school design, the studio employed two primary filters. Students dove into the Space of Learning, speculating critically between conducive postures, spatial configurations, and sensory stimulation that use existing data to reimagine an optimal



## Jacqueline Pothier

The school enables spontaneity in its non-prescribed interstitial spaces. Similar to how skateboarding focuses on balance and spontaneity, the school intends to provide informal and curious learning opportunities for students.

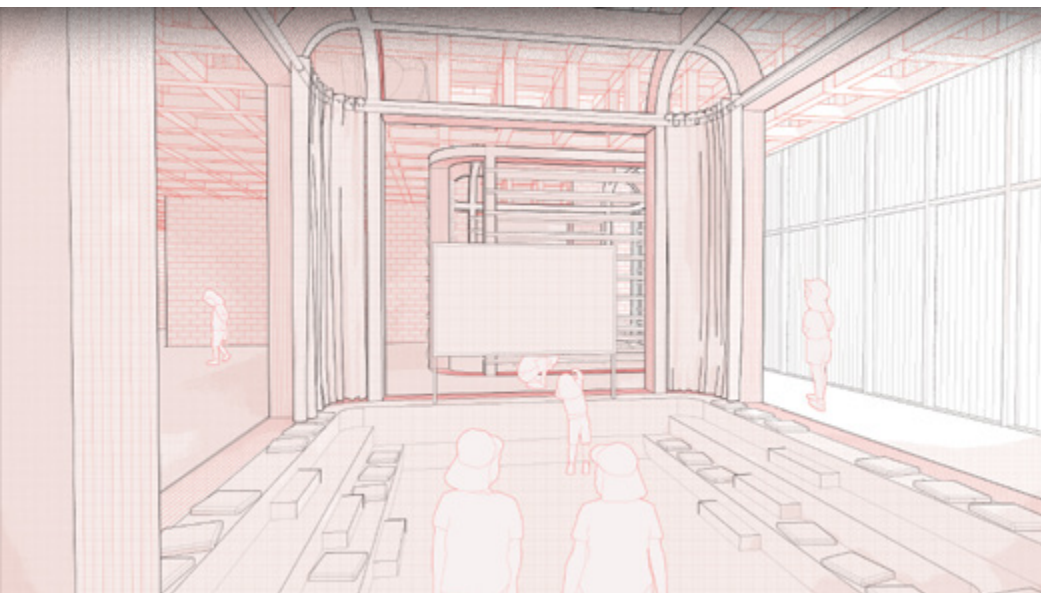


## Khadija Tarver

This school extends intuitive dance as a teaching pedagogy and suggests that movement, dance, performance, and trust at the center of the design of a school can foster academic, emotional, physical, and spiritual well-being in the student body.



learning environment. As much as the body participates in the act of learning, so does the building participate in the learning environment. Studio participants identified the realm of learning.



Daniel Chang



Ruonan Du



Zixiao Zhu

*Momentum Liberation*  
takes inspiration from the  
movement of bike coasting,  
which involves the constant  
charge and release of energy.

## &lt;MORE SCHOOL&gt; Benjamin Cadena

Integrating school, life and city, this studio focused on designing for a new type of educational facility that extends its program to double as a community hub for the neighborhood. Given their critical role and physical presence in cities, schools have the unique potential to evolve from isolated educational silos into platforms to interact, learn, and generate meaningful connections



## Jonghoon Park

The P.S. 64 structure and the surrounding community gardens have been symbolic centers of local efforts to restore and invest in the public spaces of the Lower East Side neighborhood. *Timber Conservatory* aims to continue on that legacy by providing public gardens and communal kitchens at its core.



## Kaixi Tu

*School of Exploration* explores a potential methodology to transition the outdated learning environments by activating volumetric space and introducing new geometries.



for all. In, out, and around, this studio explored how schools can be more, do more, and effectively become more integrated and lively components of the public realm.



Saba Ardeshiri

## Zoona Aamir

The coiled walkway functions as a threshold between the static operation of the wings and the dynamic and compelling events of the central floors, pushing a Montessori educational method where learning outside the classroom is encouraged.



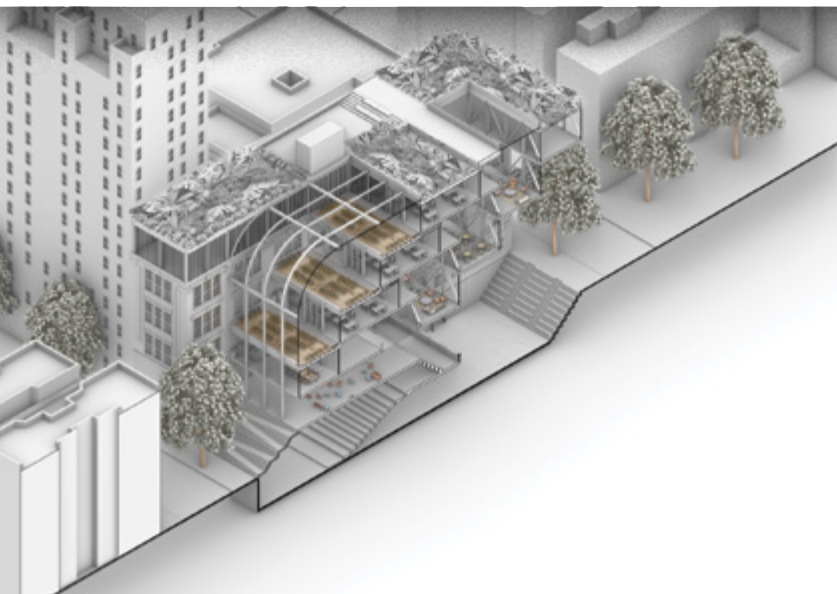
## Yiyi Gao

From individualized and permeable learning zones, tactile way-finding systems, to a netted playground for active exploration, the design aims to create an accessible environment where differently enabled students and the larger community can learn and explore through diverse sensory experiences.



## &lt;POST-CARBON SCHOOL&gt; Miku Dixit

To design any building in the present is to imagine its future and ways it might shape the surrounding environment. School design and the creation of spaces for children, however, demand more considered and complex forms of projection and speculation. The school as a building type presents an added responsibility for the designer: you must not only imagine possible futures but also create

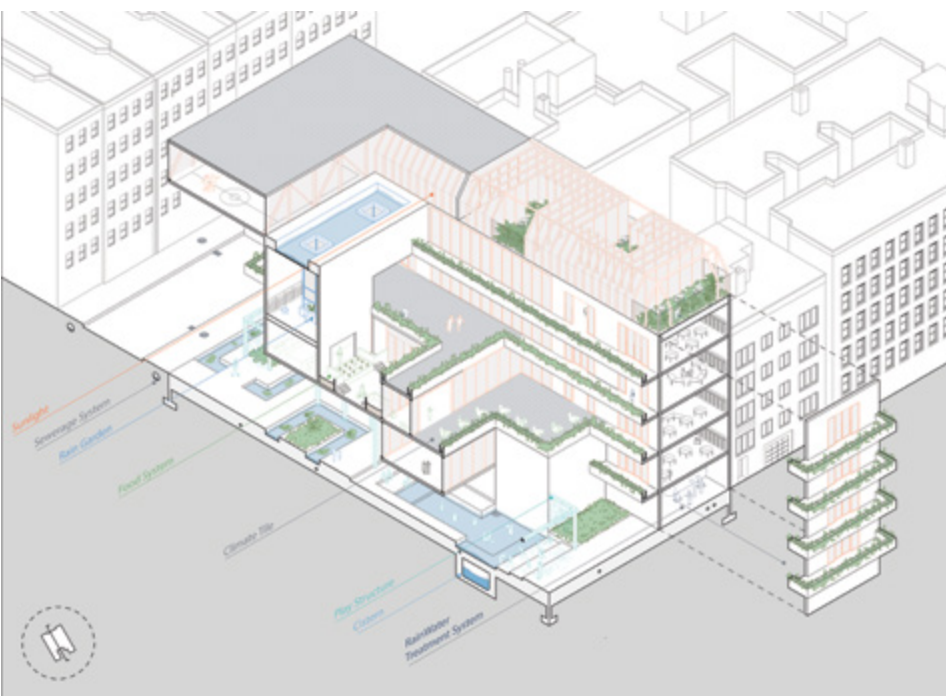


## Nararya Radinal

Mindful of the rising demand for food, this School looks towards ideas for growing sustainably in our cities while maintaining a responsible attitude towards food waste.



## Anne Freeman



## Yingxi Dong

Using water as the primary media, *Liquid Lab+* is intended to be an instrument that quantifies and visualizes the neglected forces that exist in our surroundings.





environments that can activate the minds of children in unexpected and spontaneous ways—both experientially and intellectually.

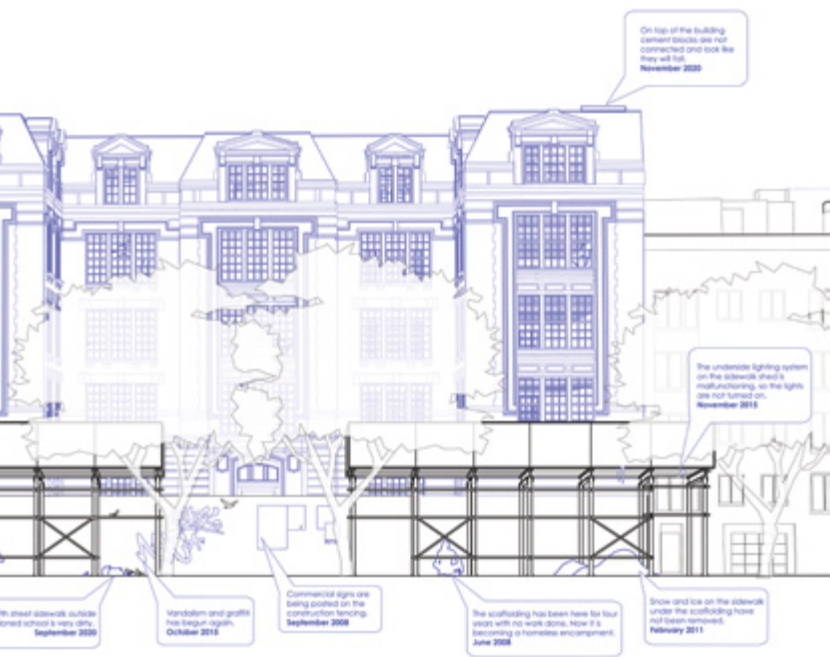


Charlie Liu

The original mass is perforated and reconfigured with inserted volumes and voids. A steel frame structure is imposed as a way of façade retrofit that both reinforces the existing shell and creates a new infrastructural system that promotes spatial diversity.

Eleanor Birle

The new P.S. 64 lends pieces of the physical masonry building—informed by close consideration of the historical buildup and construction methods—back to the neighborhood to create stand-alone pieces of the program made from reconstituted masonry that can operate individually after hours, or together during the school day to create a community campus.



## &lt;GROUNDS FOR PLAY&gt; Erica Goetz

In the context of a NYC school today, where open space is at a premium, the available space and time for play is limited. The footprint of a school's property may allow for a ground-level or rooftop playground, and the daily schedule may allow for a meager 20-minute recess period—the minimum required by the Department of Education. Given the known benefits of play on childhood



## Jean Tzeng

*Curving In* is a school where everyone can find a corner to inhabit, yet no one will be left out or isolated.



## Christopher Scheu



## Shuyang Huang

A ground-level wetland and green roof absorb and collect rainwater runoff and floodwater. The building transforms harvested water into water-based features embedded in its infrastructure.



development and well-being, can we build schools that incorporate more integral spaces and opportunities for play? Learning from the playgrounds and play objects that we study, how can a building inspire wonder by engaging children in their environment?

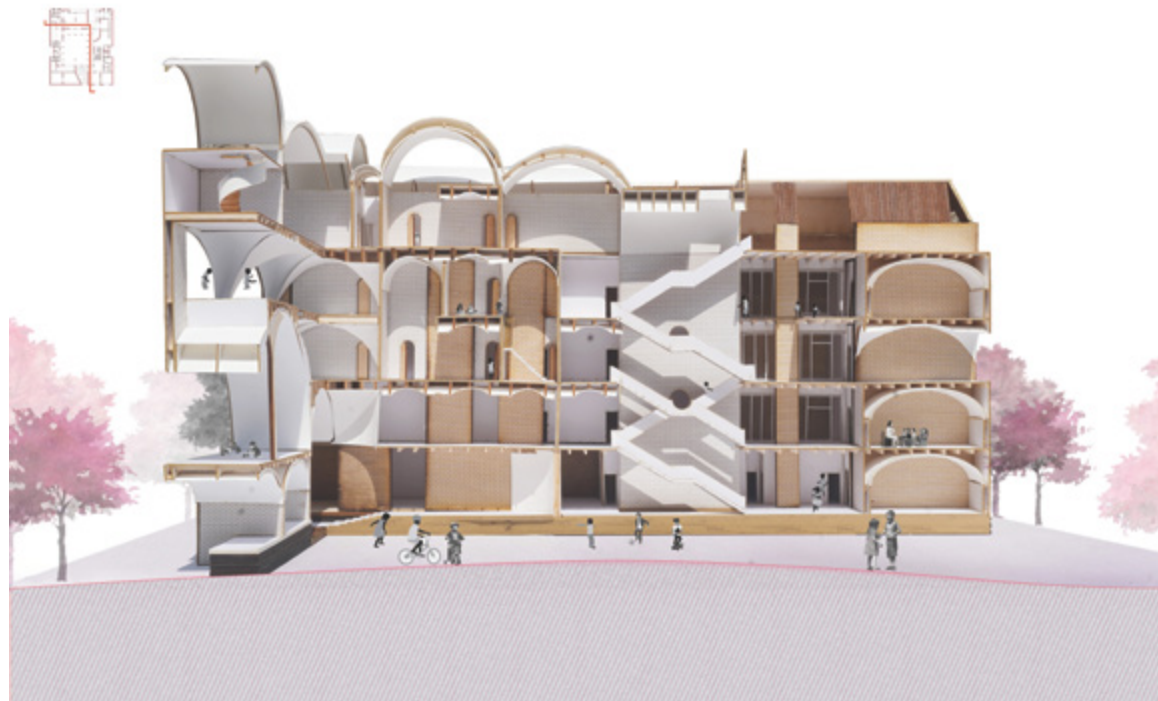


## Phoenix Yang

*30 Degree* tries to identify the triangular relationship between students, local artists, and the community, translating them spatially into a hybrid complex.



Myungju Ko



## &lt;THE XR SCHOOL&gt; Gordon Kipping

It is the education of the next generation of people that will eliminate the pending disaster and establish a climate neutral planet. In 2018, the Extinction Rebellion was formed by a group of academics. Extinction Rebellion or XR is a loosely networked, decentralized, grassroots global environmental movement with the stated aim of using nonviolent civil disobedience to compel government



Tianyun Zhang



Younjae Choi



action on climate change. This studio designed The XR School, a NYC public elementary school with a curricular focus on climate change—its causes and the paths to stabilize it.



# Will Rose

Food grown in the greenhouse and on the rooftop farms, watered by filtered rainwater collected below, is used for healthy, sustainable lunches for kids and faculty.



Rebecca Faris

# Megan Dang

The core component to foster intergenerational practices in the project is guided by the existing vibrancy of the East Village art scene and Extinction Rebellion's activism through performative protest and public art.



## &lt;BETWEEN INDETERMINACY AND OPTIMISM&gt; Karla Rothstein

In unprecedented and unsettled times, creativity and innovation are essential. Change that seems unimaginable is often the most necessary—and in the year 2021, our current collective realities require impeccable vision to help shape future communities. Human lives are intertwined with one another and the planet. Almost a year into various forms of isolation we are each more poignantly aware of what ↗

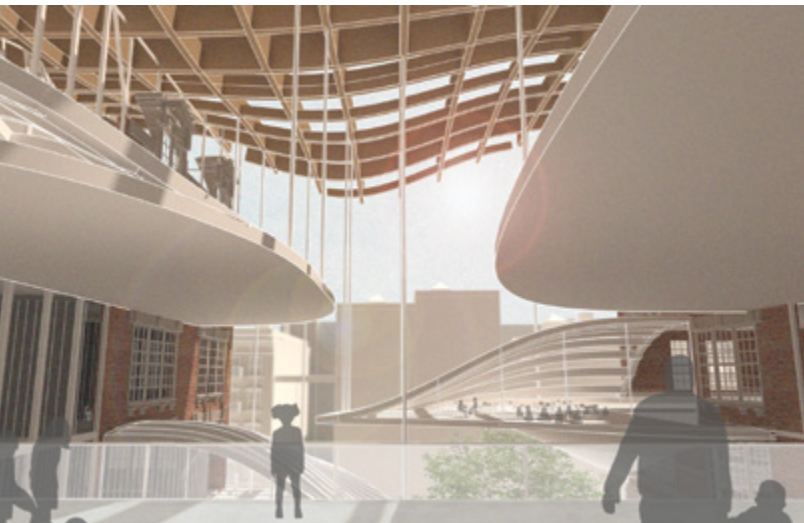
## Emma Sumrow

Daily deposits of student-produced works and small-scale performance pieces are aggregated into basins where building users can observe new additions in this everchanging, gallery-like exhibition space.



## Alex He

A structural grid-shell roof spans the two wings and supports public programs in spatial and underlying sociopolitical tension.

Maclane  
Regan

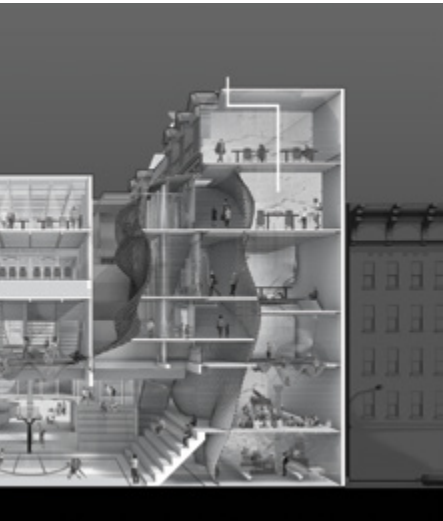
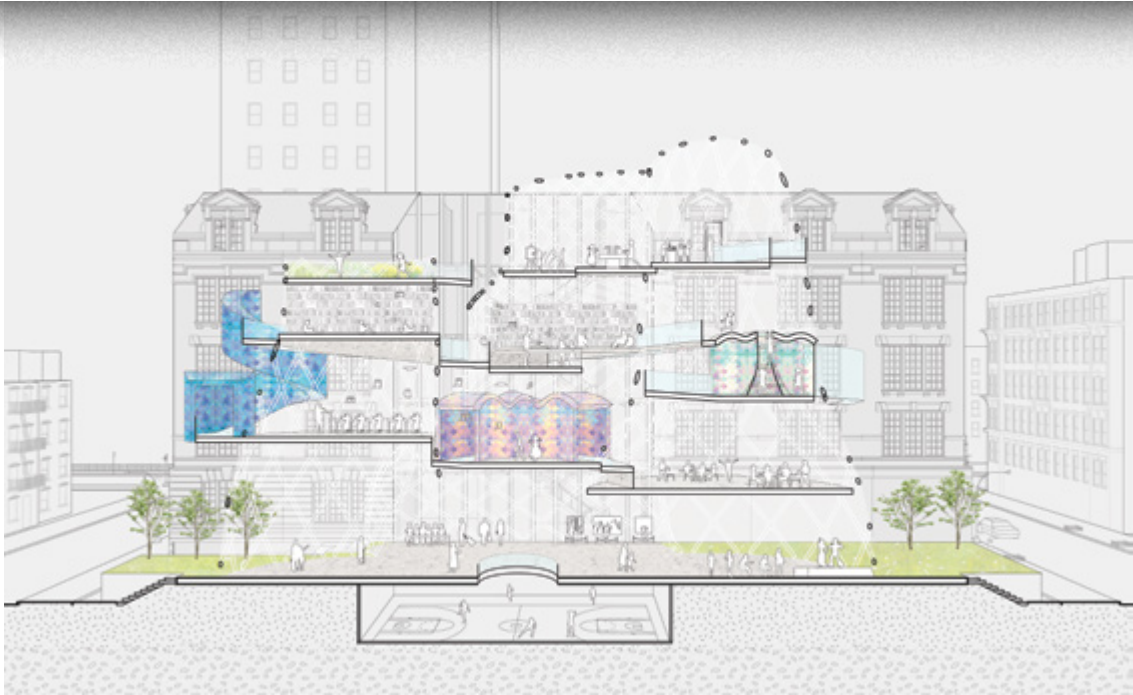
The building becomes a space where sights, sounds, smells, and substances infiltrate through wall, floor, and facade in a system of exposure and diffusion that produces warps, impressions, and interstitial space for new forms of occupancy and interaction between programmatic conditions.





we value. With optimism and grace, values served as guidelines and concepts to scaffold this semester. We honored and refined our engagement with light, space, and awesomeness and simultaneously designed social infrastructures that are resilient to the unstable and unpredictable contexts of our time.

Ji Yoon Kelly Lee



Elaine  
Shuoning Yu

Formally, the school is organized around various stages of plant growth and verticality.

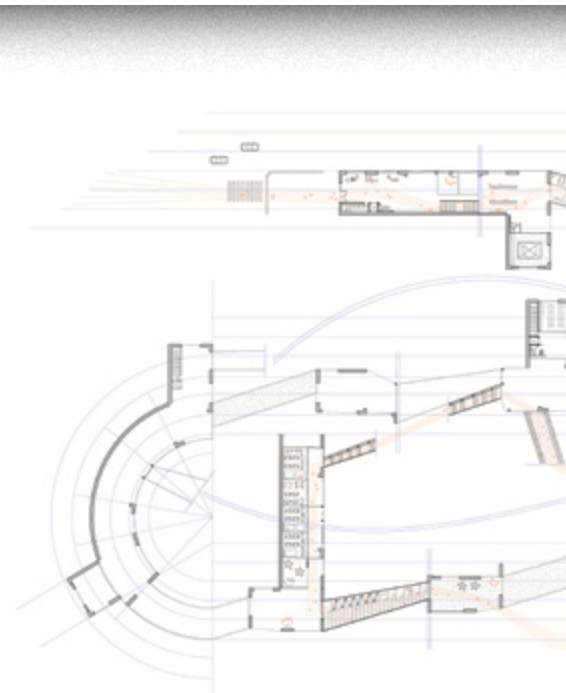


## &lt;NEURODIVERSITY&gt; Lindy Roy

Neurodiversity is the idea that neurological differences such as ADHD, dyslexia, and autism are not errors of nature or products of a toxic modern world but are instead, the result of natural variation in the human genome. Neurodiversity advocates reject pathologizing difference and call on society to regard neurodivergence as a valuable part of humanity's genetic legacy while ameliorating the

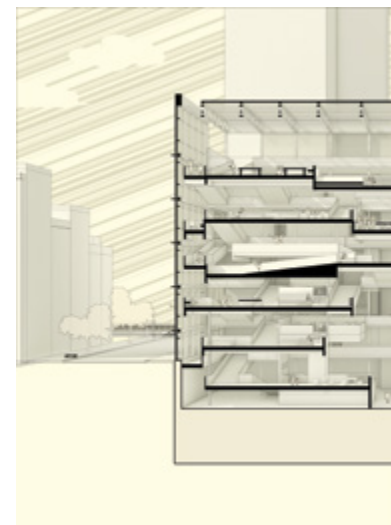


Lucas de Menezes Pereira



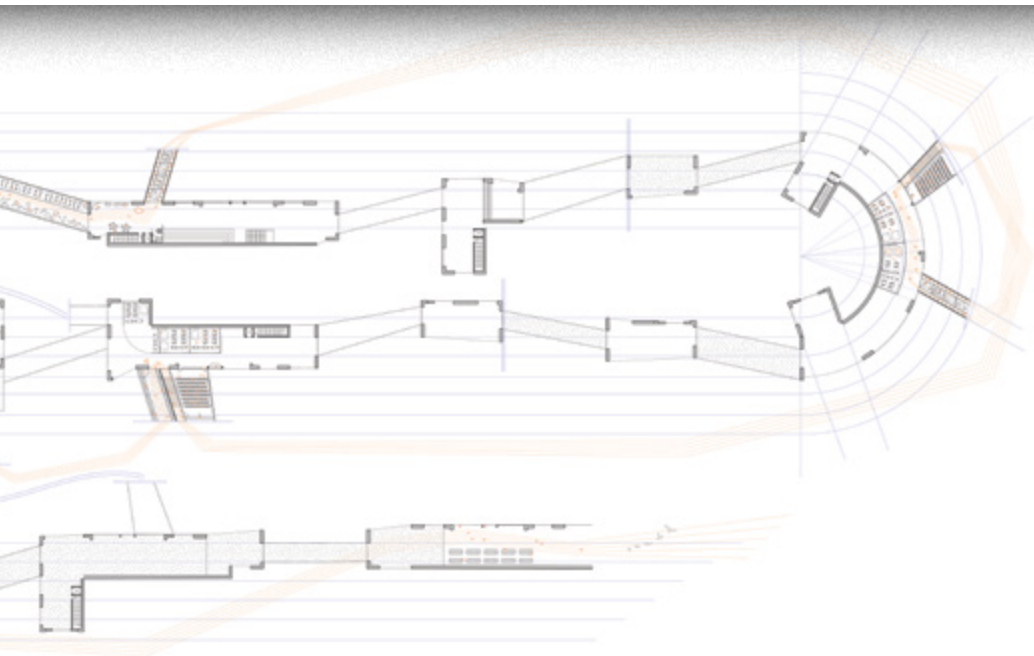
## Aaron Smolar

*Transmissions from Spaceship Earth* seeks to unearth P.S. 64 as the locus for an architectural and historical project of care, expressed in the diverse ideologies of Buckminster Fuller, Charles B.J. Snyder, and the CHARAS group—entities implicated within the school's history.





severely disabling aspects. This studio took on Loris Malaguzzi’s prompt “the environment as the third teacher” through the lens of neurodiversity recognizing that different nervous systems experience environments very differently. Students designed a school that integrates both neuro-typical and neuro-diverse students and explored the potentials of multivalent space.

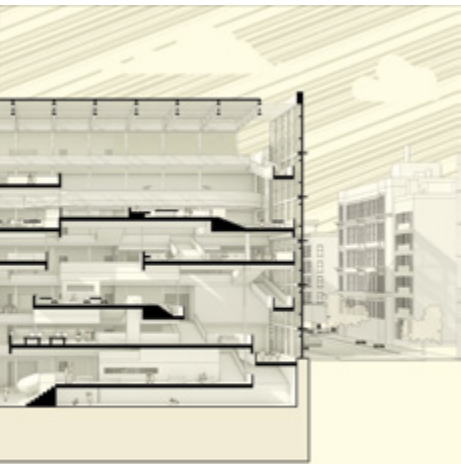


## Shining Hong

This school performs like a cat’s cradle game where the two existing bars act as the hands, holding most of the typical classrooms and labs. The connecting bridges are like the strings, creating endless interesting experiences and interactions.

## Justin Hager

The *Flipped School* is a place for active and social modes of learning—it hopes to produce “street smart” kids.



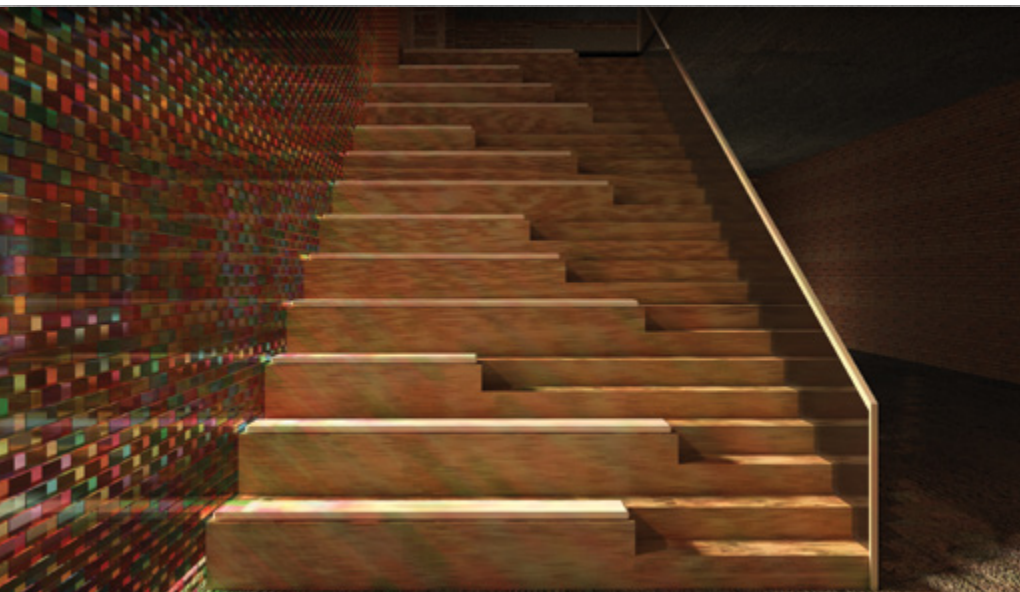
## Ari Nadrich

Light is modulated via two infrastructural strategies: conical light wells injected through the school’s floor slabs that bring light into the core of the building and a facade of thin frosted acrylic tubes that regulate light along the perimeter.



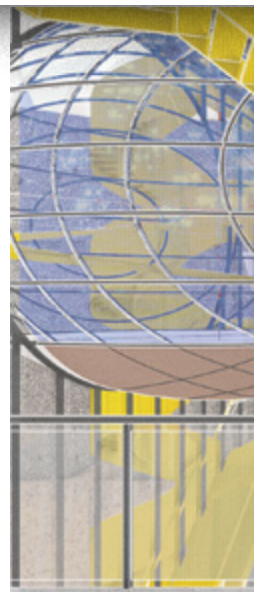
## &lt;CHILD'S PLAY&gt; Emmett Zeifman

Today, we see the use of both readymade objects and readymade sites as a means of drawing attention to historical and continuing systems of power and forms of exploitation, for instance in the work of Cameron Rowland, which includes architectural elements produced by prison laborers and land dispossessed from freed Black slaves. Today, architects are called upon to question what role an



## Cemre Tokat

*P.S. 64 Reimagined* transforms the building into a massive toy, and reconfigures the “found object”—in this case the brick façade of the existing landmarked structure—to better fit the needs of the contemporary student.



## Wenjing Tu



## Mingyue Zhang

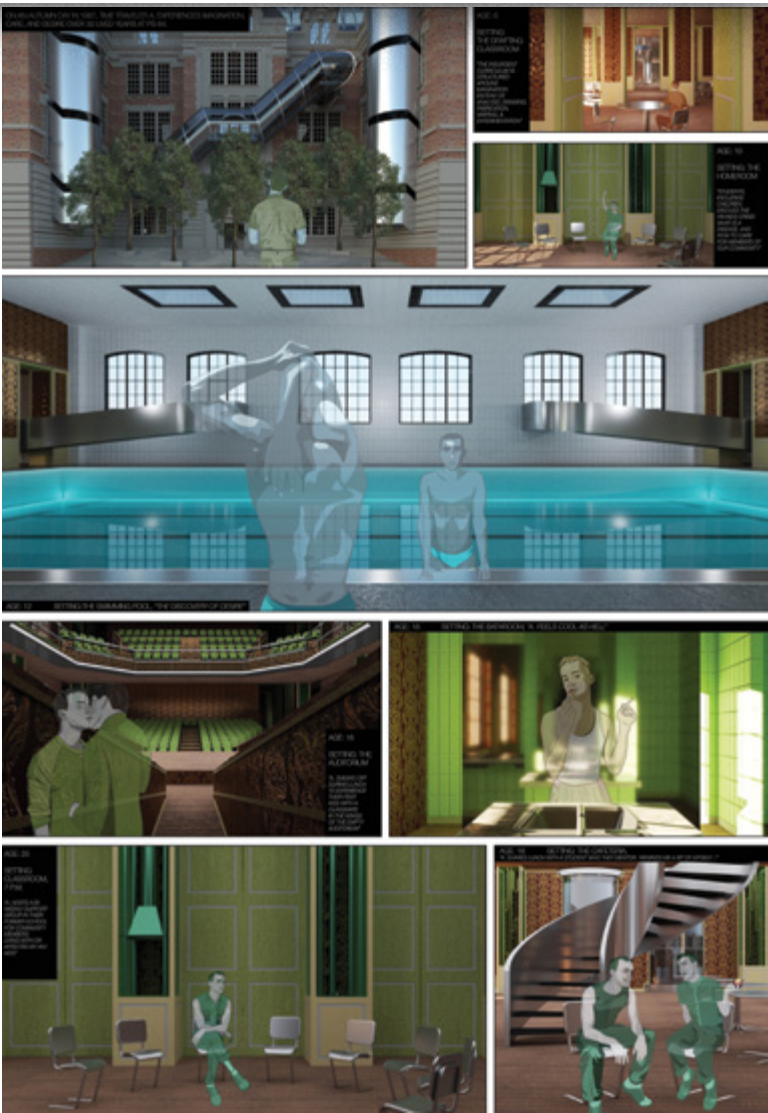




architectural project can or cannot play in responding to the inequities of a racialized society, and the interrelated crises of climate change and broad social and economic inequality. Insofar as we propose to work with readymade objects, and a readymade site, what can we, or should we, learn from these types of critical/didactic practices?



Maxine Gao



Stephen Zimmerer





# Core Architecture Studio I

## Anna Puigjaner, Sequence Coordinator

### *The Grand Interior*

Today, digital technologies are undeniably modifying the way we use and live in the city. Due to the actual cyber reality, the classic dichotomies between public-private, collective-individual, night-day spaces that characterized a great part of the architectural discourse of the twentieth century have lost their connotation. Today, architecture cannot be understood as detached from an interconnected reality, where buildings, more than isolated entities, are part of a larger system of common spaces and services that link the micro with the macro and have consequences on the social, the economic, and the environment at large.

The increasing mix among public and private spheres allows us to think of the world as a continuous interior or following Peter Sloterdijk's image of a "grand interior," an endless domestic landscape defined by spaces, objects, and technologies where the public space is being redefined, moving from the archetype of the street—as the paradigm of the common—to a more complex situation where public and private merge all along with the city. In this scenario, the home is also becoming part of this public realm.

This new public condition might be an opening to rethink preset architectural limits and urban classifications that were used to assure benefit in detriment of social rights. Architecture has been traditionally used as a tool to define and perpetuate colonial processes. It is an effective agent of restraint able to assure

the power of certain social sectors over others. It is not neutral and might consequently be perceived as such. The division of public and private has not only been a driving force for the development of biased social structures but also other urban planning and building processes.

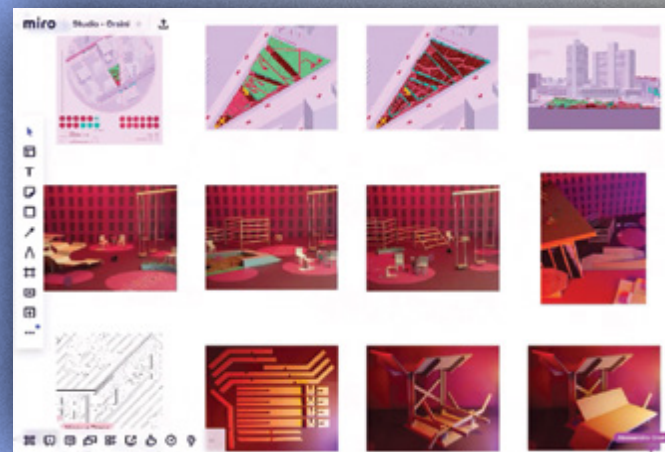
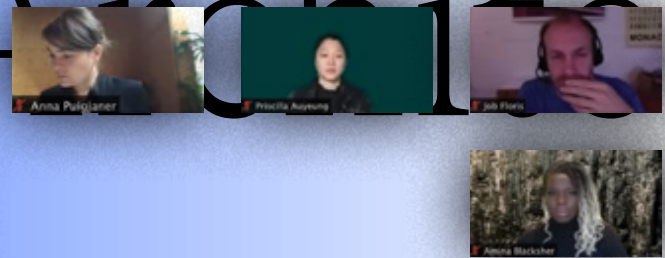
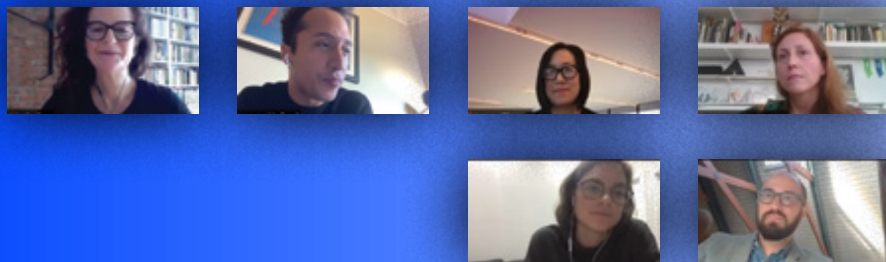
In Core I, we understand the shift of public space as an invitation to redefine social structures for the better common welfare. We address the course looking to our actual and close reality, taking the everyday life of Broadway Avenue, Manhattan, as a starting point and base for an architectural proposal. We look at buildings and their urban context, understanding the quotidian as a platform for deeper research that allows us to comprehend the complexity of the built realm, its actual functioning, and requirements concerning economic, climatic, environmental, social, and political issues. And we design architectures that answer to those realities: transgressing, empowering, complementing—existing networked spaces. We produce architecture from the urban towards the detail, from the drawing towards the construction, and during that path, we always foster graphic, formal, and material experimentation as an intrinsic part of the design process.

# Core Architecture



Gabriela de Matos, Amina Blacksher (Studio Critic), Amale Andraos, Miku Dixit, Natou Fall, Anna Puigjaner, Sumayya Vally, Enrique Walker, David Eugin Moon; Work by Shining Hong '23 MArch.

Lindy Roy (Studio Critic), Jerome Haferd, Irene Cheng, Eva Perez de Vega, Eleanor Birle '23 MArch, Matthew McMahon, Michael Bell, Stephanie Lin.

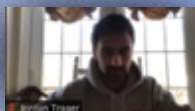


Lindsey Wikstrom, Thiago Lee '23 MArch, Alessandro Orsini (Studio Critic), Justin Hager '23 MArch, Ziad Jamaledine, Emanuel Admassu, Ersela Kripa, Megan Panzano; Work by Thiago Lee '23 MArch.

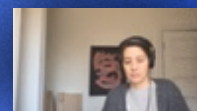
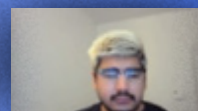
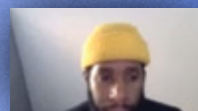
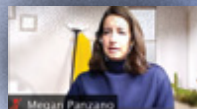
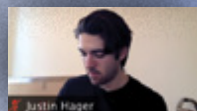
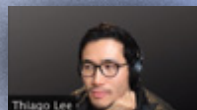
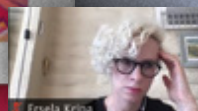
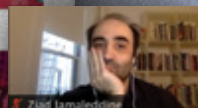
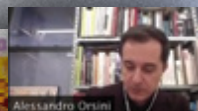
# Fall



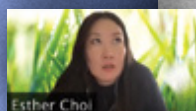
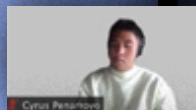
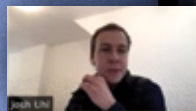
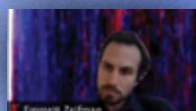
# ature Studio I



Anna Puigjaner (Studio Critic), Priscilla Auyeung '23 MARCH, Job Floris, Ethel Baraona Pohl, Amina Blacksher, Enrique Walker, Mabel O. Wilson, Jordan Trager '23 MARCH.



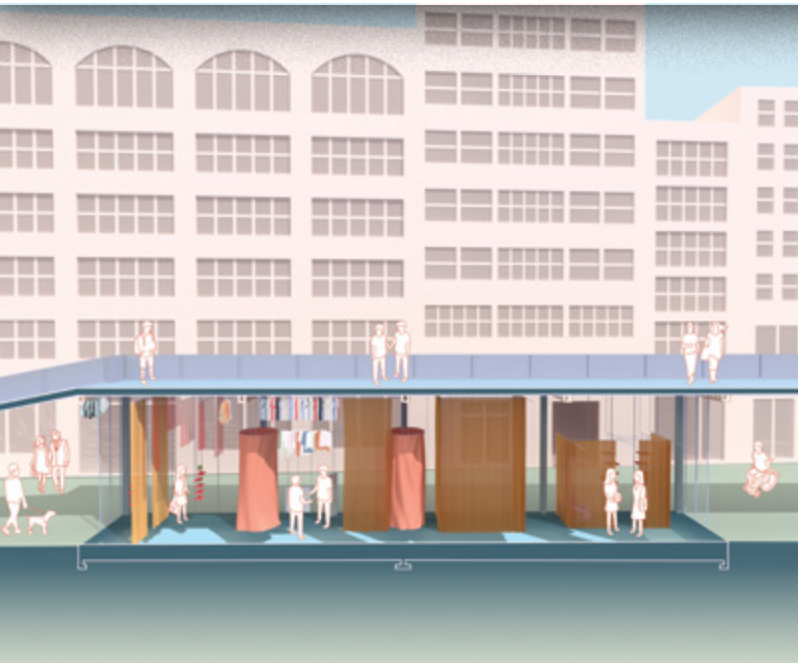
Ivi Diamantopoulou, Roman Karki '23 MARCH, Hanyu Liu '23 MARCH, Franca Trubiano, Lindsey Wikstrom (Studio Critic), Hallie Chuba '23 MARCH, Adela Locsin '21 MARCH, Karen Polanco '23 MARCH, Jane Hutton, Jonathan Jackson.



Emmett Zeifman (Studio Critic), Josh Uhl, Cyrus Peñarroyo, Esther Choi, Lexi Tsien; Work by Daniel Chang '23 MARCH.

# 2020

Amina Blacksher



## Sam Velasquez

*Constellating Queer Space* envisions a gathering space specifically for queer youth through programming that includes a swapping space, a resource and event space, and an indoor greenhouse with reduced-cost food.



## Kelly Ji Yoon Lee

Inspired by the history of African Grove Theater and how the theater manifests through anchoring in the community of artists who did not have easy access to theater space, *Serendipity P* anchors itself on Lafayette Street to provide a public space that is accessible to street performers of dance, music, and theater for simultaneous, spontaneous productions.

## Shining Hong

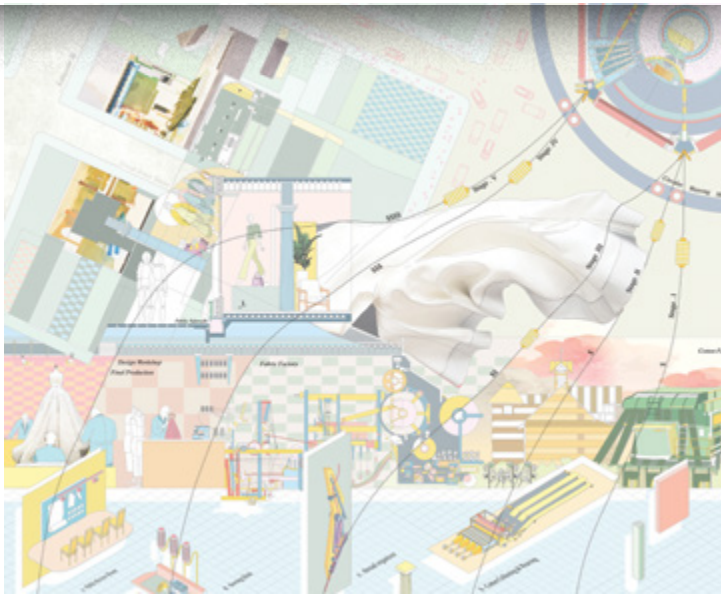






Elaine Yu

*Rugged City* opens up the ground-floor commercial space of a building in downtown New York and converts it into an open-air market for pop-up stores and co-working space for the entrepreneurs and makers, who have been facing pressure from the pandemic.



Phoenix Yang



Jixuan Li

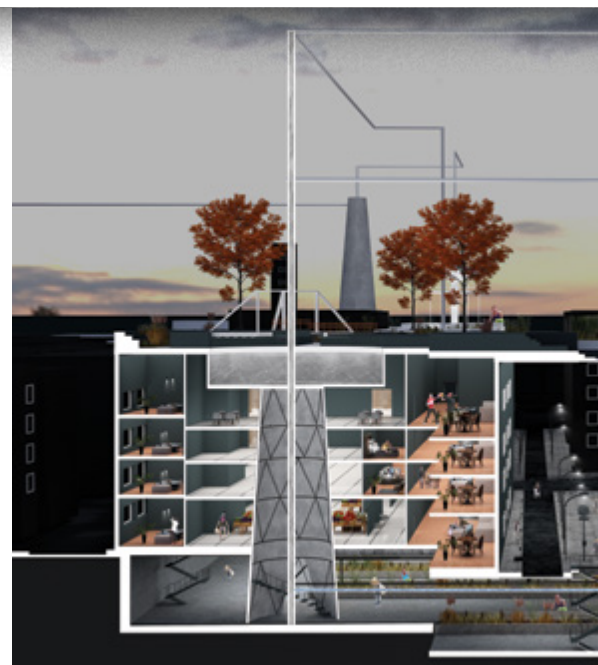


Jerome Haferd



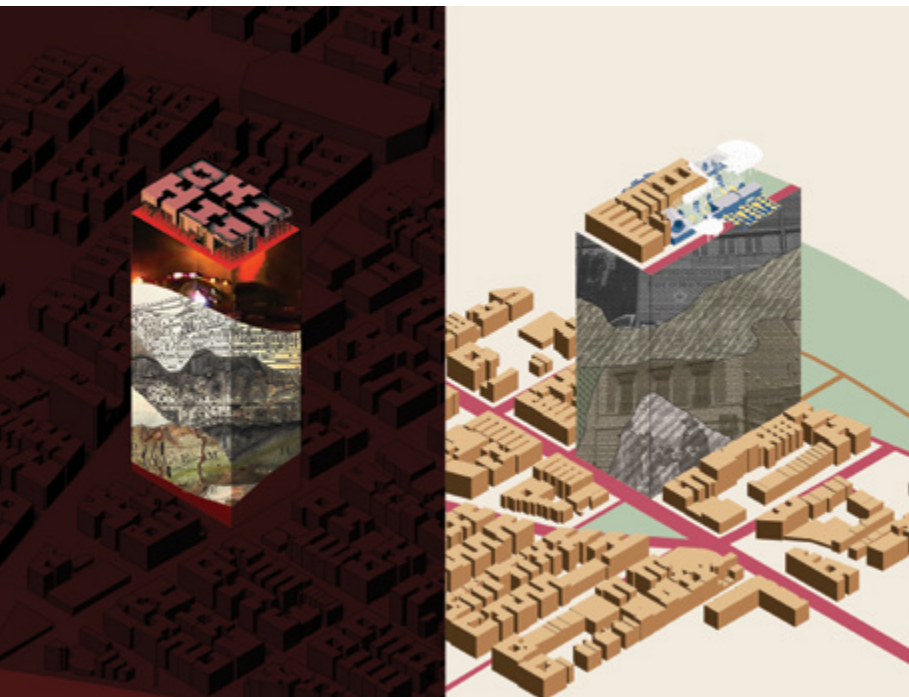
## Amina Amer

I aimed to create a new typology—a new fugitive architecture—producing a spatial condition in which people could create a liberating space outside of surveillance and the white gaze.



Kaixi Tu

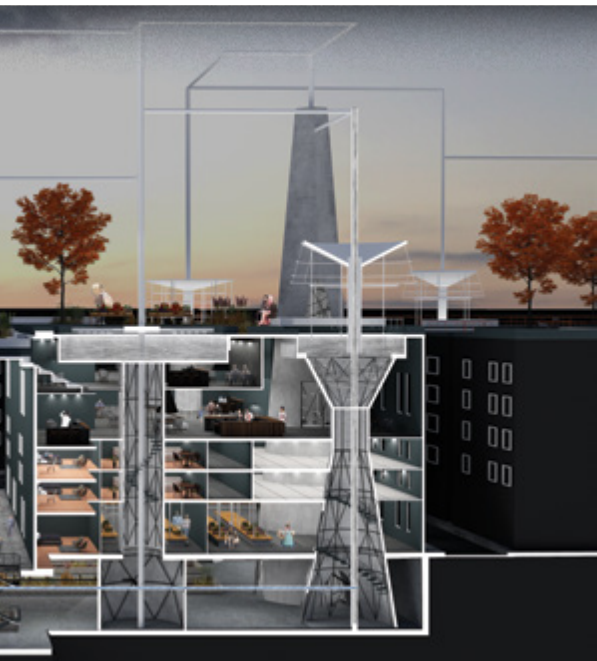
Aaron Smolar, Isaac Khouzam



Chi Chi Wakabayashi







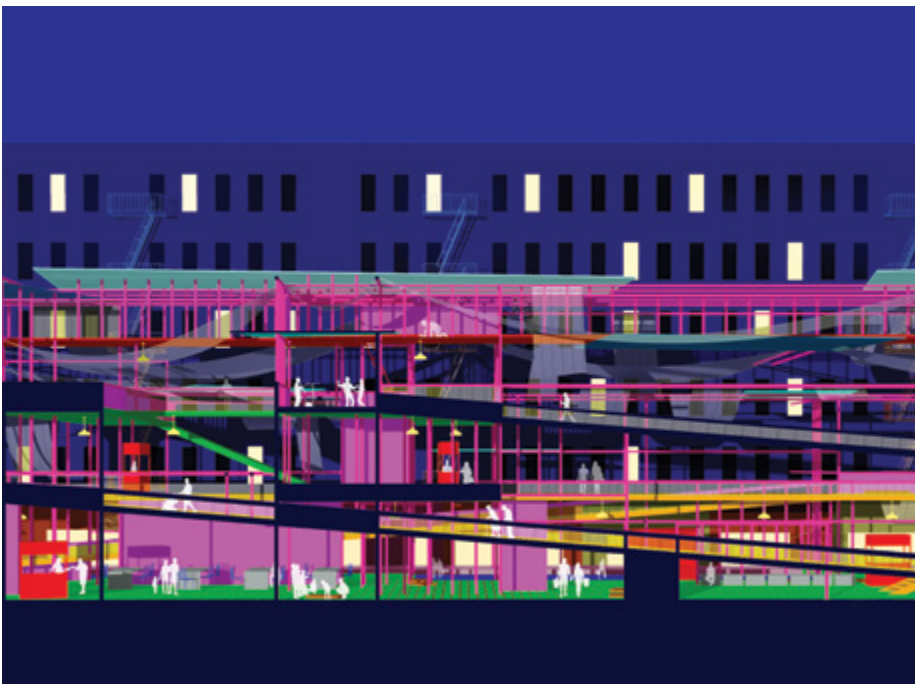
# Isaac Khouzam

My project imagines the city as geology, subject to erosion and sedimentation: urban forms out of the past drive subtraction of the lower levels, which are then deposited above, allowing for a recontextualization of the relationship between private and public space.

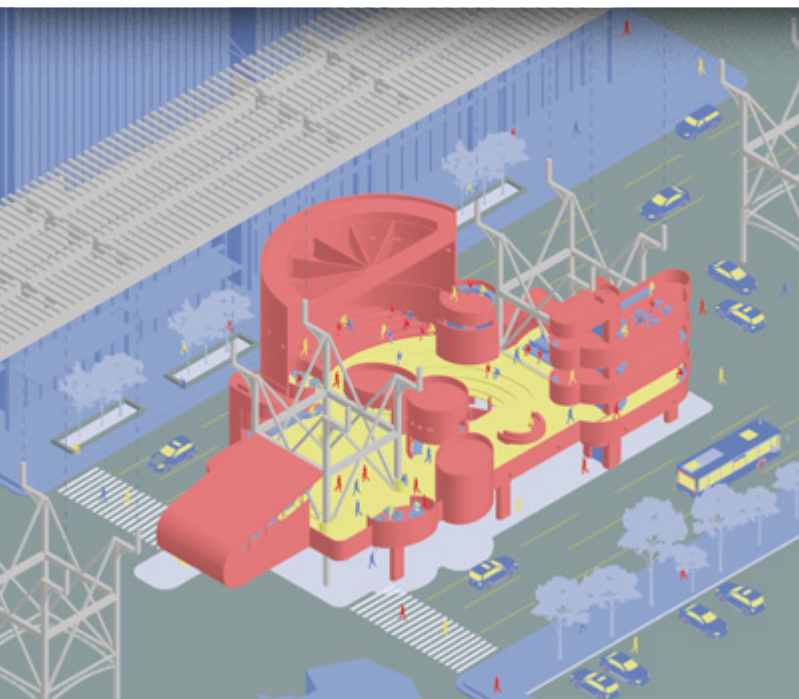


# Yiyi Gao

*Woven* creates a bottom-up system consisting of small spaces for informal economies to occupy the center of the road. Layer by layer, piece by piece, it divides and modifies the current spatial structure.

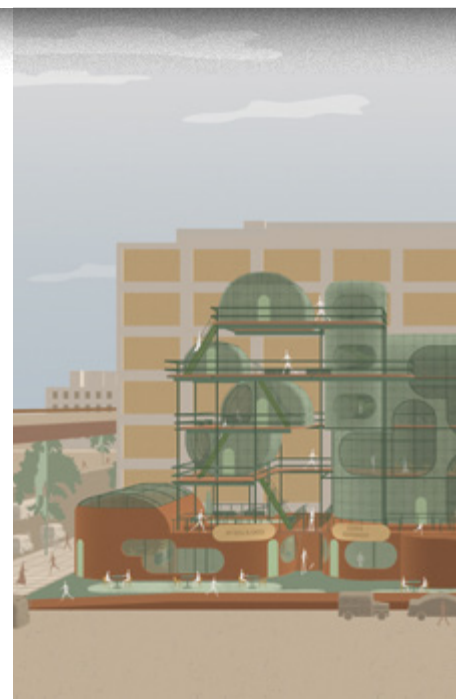


Alessandro Orsini



## Justin Hager

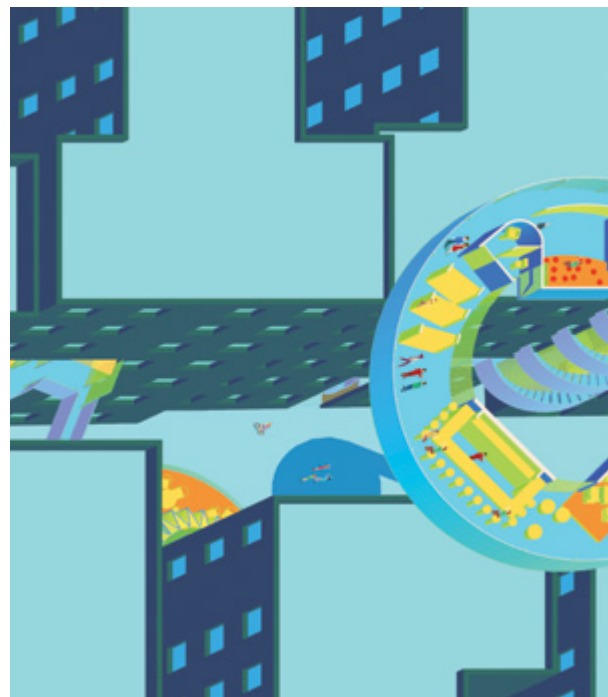
The concrete and steel structure reclaims the Avenue acting as both a new focal point for the local community and a symbol of permanence against continual displacement and the threat of gentrification in Manhattanville.



## Stephen Zimmerer

Architectural components travel on tracks through the three wings, evoking the ubiquitous assembly line. They converge around the dining room, where togetherness is performed through breaking bread between friends and strangers.

## Ruonan Du







# Megan Dang

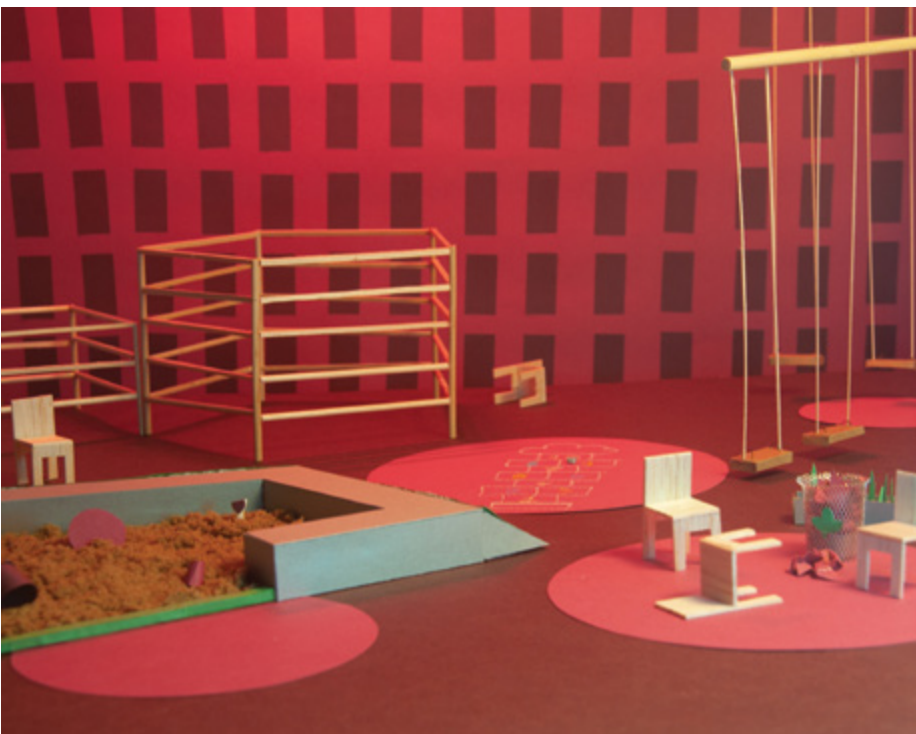
*Harlem Business Alliance Center* attaches itself to the existing Columbia Nash building; scaffolding acts as an architectural response to the disturbance of Columbia's campus expansion plan.

# Samuel Bager

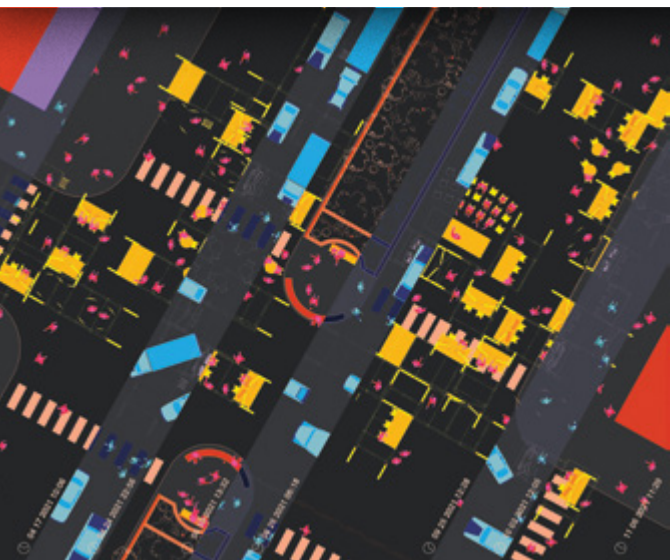
These community-owned, operated, and used spaces address the needs of the ever-marginalized Black and Brown community members in West Harlem by creating architectural interventions within the urban voids above corner lots at Broadway and 145th St.



# Thiago Lee



Anna Puigjaner



## Emma Sumrow

*The NYC Media Collaborative Pop-Up*, where locals can exert their own agency, re-negotiates what advertisements broadcast.



## Jinghan Wang

By designing a new system of covered streets, landscape islands, and containers around Amsterdam Houses, new permeable public spaces with different gradients of privacy are generated.



## Jordan Trager

The geodesic dome structure allows for maximum solar exposure to each apartment without casting a shadow onto itself.

## Lucas de Menezes Pereira







Yuli Wang

Priscilla Auyeung

*Jazz at Lincoln Square* is a network of artist lofts, workshop studios, and exhibition spaces that aims to re-establish ties between creatives of color and Manhattan's creative economy.

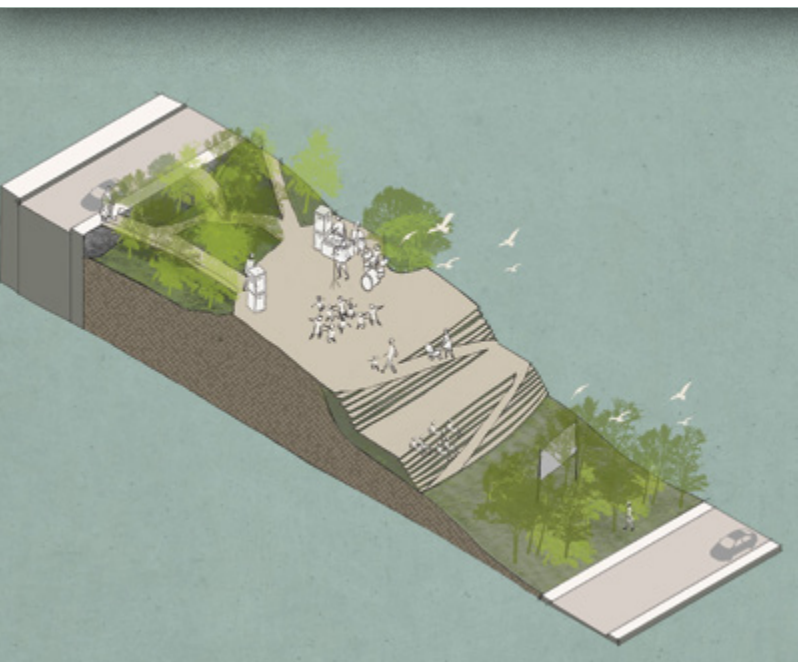


Michael Lau

Resident-run studios and pockets of common spaces built with recycled bricks of former barrier walls introduce social services and the local circulation of capital while interconnected terraces extend domestic space and foster a sense of collectivity.



Lindy Roy



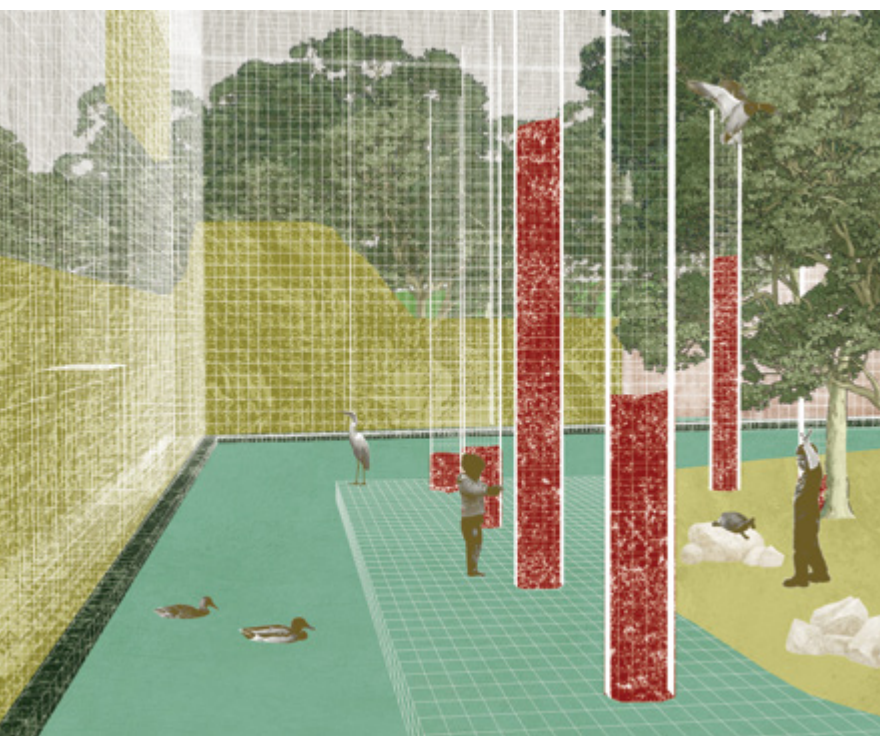
## Zina Berrada

*Gradual Social Scape* blurs the boundary between Morningside Heights and Harlem. It addresses the park's accessibility and provides environments that enable social interactions and empower local communities to take ownership of the park.

## Maclane Regan

An activated network of digital activism infringes upon the jurisdictional fabric of the institution. Collective activation of this multi-scalar scheme becomes a feedback loop with the user, engaging the public with trans-geographical digital protest.

## Joachym Joab



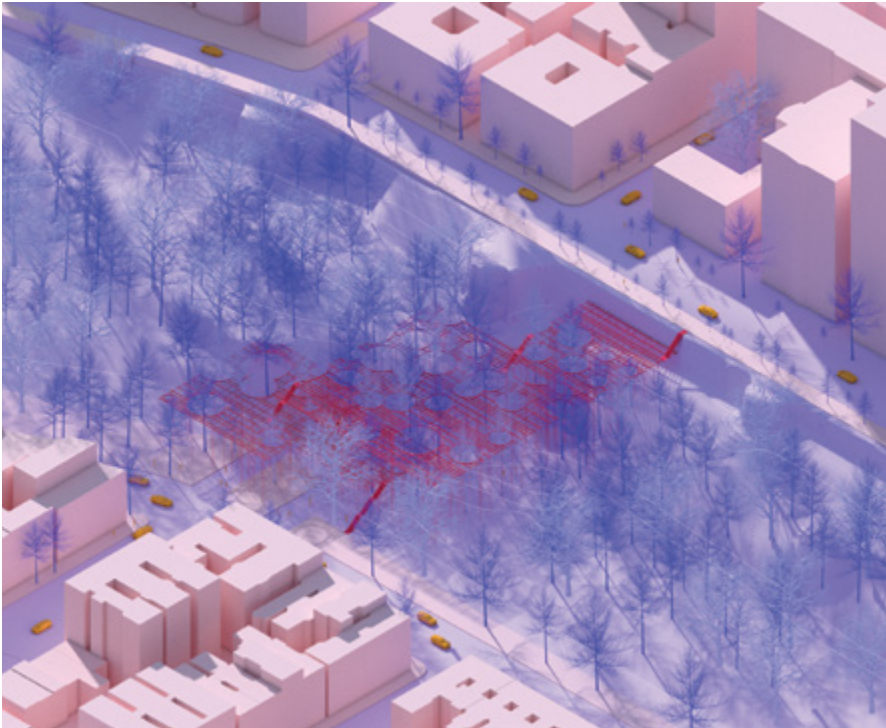


# Maxine Gao

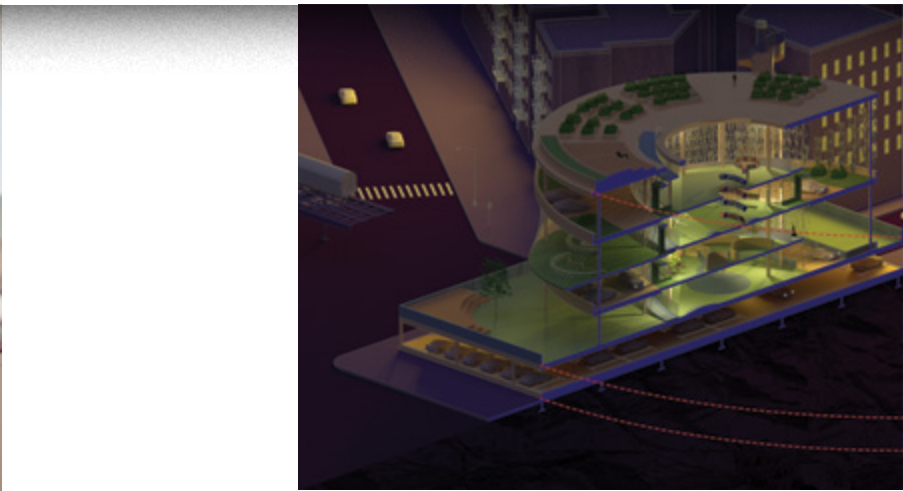
Taking advantage of the transportable and flexible possibilities that a helium structure offers, this lightweight canopy explores different interpretations of spatial experience without changing the local landscape.



# Wenjing Tu



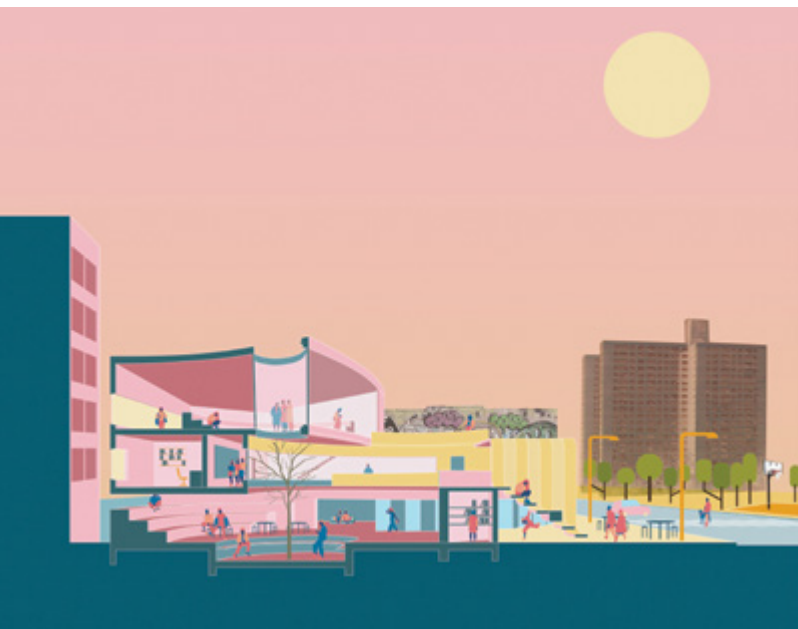
Josh Uhl



## Jonghoon Park

*The New Public Podium* is a typological intervention that resists the impending eradication of culture and affordability due to the upzoning of Inwood.

Charlie Liu



## Linru Wang

Using a system of arcs that weave together experiences of light and performance, this project creates a network of spaces for information exchange and for people to celebrate their cultures.







Shuyang Huang

The project integrates children's playgrounds with parking lots, aiming to provide a solution to the public school playground shortage in the neighborhood of Inwood.



Cecile Kim

By pairing the MTA Arts and Design program with the existing arts program in Inwood, the proposal aims to link people to places with art that echoes the cultural history and community context of the stations.

Nara Radinal

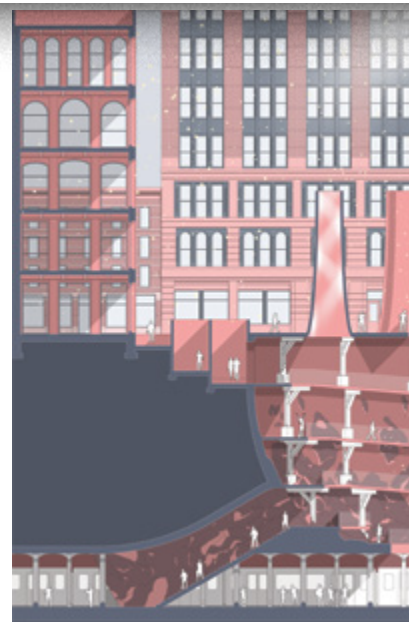


Lindsey Wikstrom



## Blake Kem

Terracotta is removed from the building's exterior, creating space for an intervention characterized by those same cladding units. They are rotated and stacked on the building's interior, conceptualizing a much more expressive, ephemeral, and organic poché.



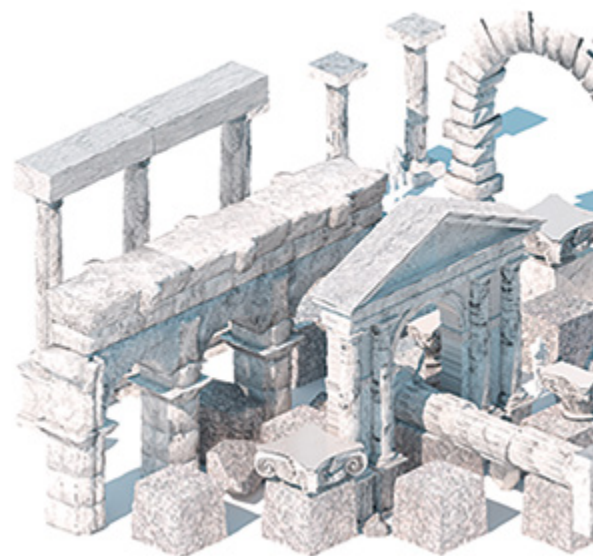
Min Soo Jeon

Renka Wang



## Chiao Yang

This project dismantles the obsolete granite stone facade of wall street financial education to construct a new space of "public offering," making visible market volatility and facilitating public surveillance.

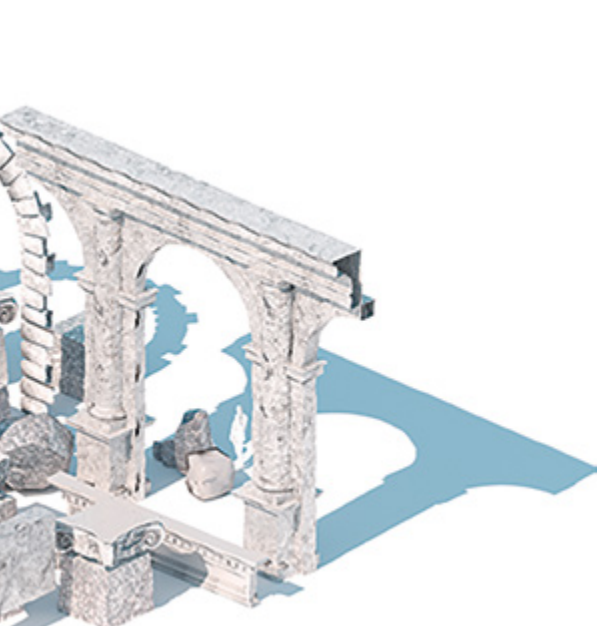






# Karen Polanco

A cast-iron façade is removed and recast as a steel space frame that supports recreational, cultural, and academic development. The project serves as a community center and exhibition space that hosts after-school and childcare services to the families of commuting downtown workers.

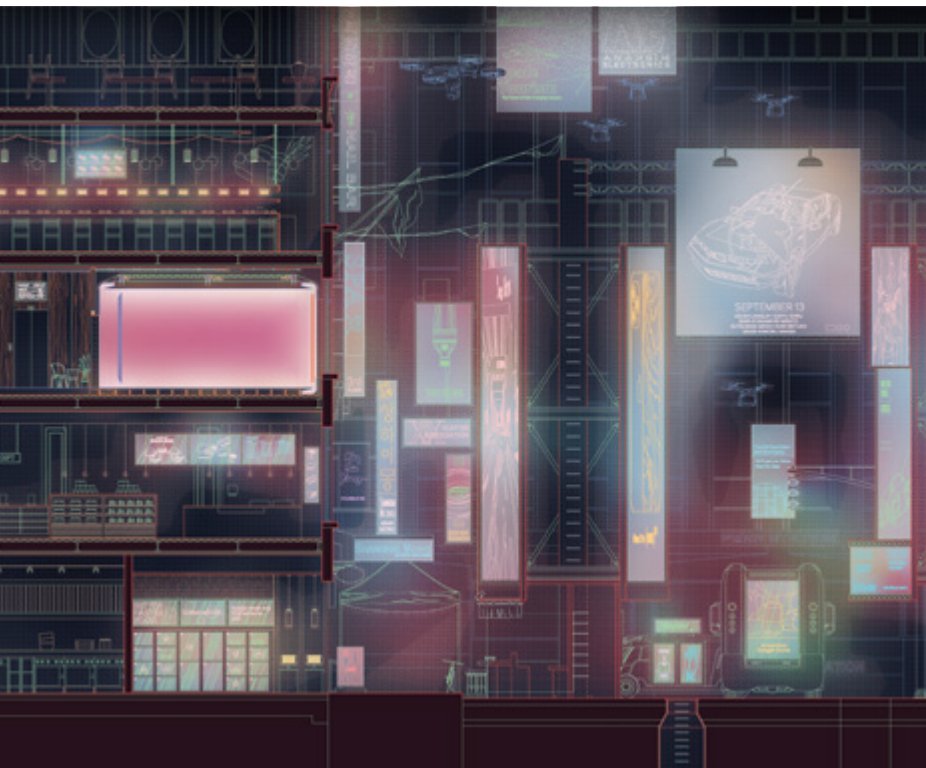


# Cemre Tokat

Introducing a new type of program for the ephemeral and ubiquitous scaffoldings of New York City, *Morphon* breaks the hierarchy among the people by allowing the pedestrians to reclaim the verticality of the city.



Emmett Zeifman



## Daniel Chang

*Digital Refuge* is a shelter from the hyper saturation of imagery as daily life becomes a constant form of labor while traversing the omnipresent advertising of a digital world.

Zixiao Zhu



Wei Xiao





Yifei Yuan

*Times Square Billboard Garden* proposes a vertical garden as a projection and image in the interior of a utopian world where billboards overflow spaces in-between buildings, occupy the public realm, and eventually become building façades.



Will Rose







223 Visual Studies

Laura Kurgan,  
Sequence Director

255 Building Science  
and Technology

Lola Ben-Alon,  
Sequence Director

287 History and Theory

Reinhold Martin,  
Sequence Director

301 Interdisciplinary

Amale Andraos,  
Dean





## *Visual Studies*

Laura Kurgan, Sequence Director

Josh Uhl, Sequence Coordinator

The Visual Studies sequence brings together a series of courses which link computational design, data analysis, and visualization, with a series of tools, methods and media for design and the built environment across a range of scales. Uses of computation in design—like data visualization, sensors and data analysis, simulation, optimization, procedural modeling, rendering, app design, Geographic Information Systems (GIS), Building Information Management (BIM)—are embedded in much of what architects, urbanists, and designers do. Yet simply training students to use and think with these technologies is insufficient. From the scale of the project to that of the planet, the uses of computational design methods and tools are most successful when their limits and their contexts—technical, social, political, aesthetic, and ethical—are confronted and surpassed to show us new ways of imagining and creating space. The tools, data, and technology we deploy in the design process are never neutral. Faculty in the sequence take on discrete parts of this array and expose students to technical, critical, and creative ways to transform and develop their processes of design.

The courses and workshops are divided into three broad sets of methods in visualization: quantitative, qualitative, and translational (hybrid). The variety of trajectories possible within the sequence of classes—required and

elective—promotes an individual exploration of visualization, fostering innovation and creative methods. Teaching generally follows a “flipped classroom” format with students acquiring skills in tutorials outside of class and devoting class work to methodological and creative discussions exploring the limits and underlying concepts which guide those techniques.

## &lt;ARCHITECTURAL DRAWING AND REPRESENTATION II&gt;

[Spring 2021] Dan Taeyoung (Coordinator), Andrew Heumann, Violet Whitney, Lexi Tsien

What is the role of architectural drawing and representation in relation to our built environment? What are the tools that are used to draw and represent? How are they shaping the way we draw and design architecture? How can we find ways of drawing that can enable us to be thoughtful and exploratory designers? The ultimate goal of ADR II is to incubate students' personal relationships with drawing, representation, and architecture by considering drawing as a practice. Students develop their own style and invent their own drawing tools and representational processes.

## &lt;ARCHITECTURAL DRAWING AND REPRESENTATION I&gt;

[Fall 2020] Josh Uhl (Coordinator), Farzin Lotfi-Jam, Lexi Tsien, Zachary White

ADR I investigates the current concepts, techniques, and working methods of computer-aided drawings in architecture. The focus is the construction of architectural representations. However, rather than just experimenting with technique, the course encourages one to define how these new operative techniques are changing the role of drawing in architecture.

## &lt;TOPICS IN VIZ TECH: LOCATION INTELLIGENCE&gt;

[Spring 2021] Carlo Bailey

This course investigates the use of machine learning and statistical modeling to explore the complex systems that underlie place. Going beyond predefined notions of location, students deconstruct location into arbitrarily defined geographies, using techniques borrowed from remote sensing, recommender systems, clustering, and predictive modeling to surface novel insights. Students bring a critical eye to the algorithms and underlying data. They attempt to disrupt the surplus maximizing ambitions of machine learning models and ask how the technology can be used to foster equitable or altruistic outcomes.

## &lt;VIRTUAL ARCHITECTURE: WORLD BUILDING AND VIRTUAL REALITY WORKSHOP&gt;

[Spring 2021] Nitzan Bartov

This workshop borrows tools and workflows from the gaming and virtual reality industries, to explore architectural production through the lens of speculative physics, causality, and interaction.

## &lt;POWER TOOLS&gt;

[Spring 2021] Lexi Tsien, Jelisa Blumberg

This course leverages collective and DIY knowledge building as a representational technique and a tool of power. Architects and contributors to the built environment must challenge hierarchical structures, the canonization of the discipline, and the efficacy of architectural institutions. Emergent networks allow participants to evaluate and retool their education and environment. It follows a tripartite structure of research, design, and implementation.



Students look at a diverse array of historical and contemporary DIY formats and then use visual representation techniques to organize, design, and develop antiracist content. Finally, they work in groups to design physical and/or digital delivery methods for their chosen campus or community.

#### <METHODS IN SPATIAL RESEARCH>

[Spring 2021] Dare Brawley

This course provides an introduction to the critical use of geographic information systems (GIS) and spatial methods for urban humanities research. Students are introduced to a range of approaches for creating and manipulating spatial data with a focus on the forms of authorship, design, subjectivity embedded in spatial data, and its uses. In a series of one-week assignments students: creatively repurpose existing spatial datasets; collect data about a spatial phenomenon in their everyday surroundings; selectively digitize historical maps to produce alternative narratives; map change over time with Landsat satellite imagery; and use aerial photographs to tell a story through repetition.

#### <TECHNIQUES OF THE ULTRAREAL>

[Fall 2020, Spring 2021] Joseph Brennan, Phillip Crupi

The use of perspective and rendering is often an afterthought within the design process. The abundance of 3D modeling software and the ability to see every angle of a project instantaneously has confined these techniques to be a last-minute tool for representation—a required byproduct of the expectations of architectural presentation. This class challenges the participants to not only think of rendering and perspective as a method of presentation, but also as a tool for design, implemented early and often within the design process. In addition to learning techniques for creating photorealistic renderings, we teach a workflow that encourages early exploration.

#### <GRAPHIC ARCHITECTURE PROJECT I: DESIGN AND TYPOGRAPHY>

[Spring 2021] Yoonjai Choi

The Graphic Architecture Project is a way of thinking about the intersection of the flat and the deep. In this class, we examine the visual rhetoric employed to convey design concepts. Typography is fundamentally the procedure of arranging type but it can also be the particular art of traversing meaning with form. In addition to developing a general typographic fluency, we consider the visual tone of how messages are conveyed and explore ways to appropriately control and manipulate that tone through typography.

#### <RE-THINKING BIM>

[Fall 2020, Spring 2021] Jared Friedman

This course puts forth the challenge for students to develop robust data-driven methodologies and computational frameworks for creative iteration and validating design solutions through analysis, automation, simulation, optimization, representation, and so forth. The

course is intended to provide foundational knowledge of relevant modeling software and visual programming interfaces, while also discussing contemporary applications of these tools in the industry. This course is cross-listed in the Building Science and Technology Sequence.

#### <MAPPING FOR ARCHITECTURE URBANISM AND HUMANITIES>

[Spring 2021] Emily Fuhrman

This hybrid theory/practice course provides an introduction to critical mapping discourse and geographic information systems tools. It examines both historical and contemporary questions with reference to the technology of mapping. Additionally, through the use of open source GIS software (QGIS), browser-based technologies (Mapbox), and open data (OpenStreetMap), students learn how to critically use mapping tools and geographic data for spatial analysis and representation.

#### <NYC: TYPOLOGICAL CORRECTIONS FOR LIVING TOGETHER>

[Fall 2020] Juan Herreros

This seminar works on the typological correction of three existing paradigmatic building prototypes of the city of New York—social housing blocks, luxury condos, and office headquarters—to adapt their physical fabrics to the new sensitivities and demands of the “stay at home” and “living together” to address their current stigmatization and lack of real urban-social-environmental integration. Dealing with the characteristics of the current structures, their relations, and their underlying potentials, student groups activate processes of reprogramming—re-densifying, re-scaling, re-signifying, etc.—the building types as new urban dense residential typologies.

#### <LINES NOT SPLINES: DRAWING AS INVENTION>

[Fall 2020] Christoph Kumpusch

This course is rooted in three propositions: that drawing is as much a way of seeing as it is a means of representation; that drawing is not bound to digital versus analog categorizations; and that drawing remains the primary vehicle to record, communicate, and create architecture. We review the “Top Twenty Great Architectural Drawings” as a series of case studies linked to a film project on the drawing process. We attempt drawings of one line and drawings of 1,000 lines in the same spans of time. We draw what we see, what we cannot see, what we want, and what we wish we could achieve. The word “rendering” has NO place in this seminar.

#### <PUBLIC INTEREST TECHNOLOGY: CITIES, DESIGN, CODE, REPORTING>

[Fall 2020] Laura Kurgan, Lydia Chilton, Mark Hansen, Celeste Layne

In this seminar, students tested a variety of design methods from a multidisciplinary perspective—engaging computer science, architecture, and journalism—to best define the emerging field of public interest technology. To investigate this broad topic, we focused on research, design, and prototyping technology that would benefit Public Libraries and their many missions. The course framed Public Libraries as good



examples of Public Interest Technology. Historically and today, libraries link information systems, information delivery, and public space. What can we learn from public libraries, and how can we engage with them to prototype Public Interest Technologies and expand their purpose?

<POINTS UNKNOWN: CARTOGRAPHIC NARRATIVES>

[Spring 2021] Michael Krisch, Juan Saldarriaga

This course is designed and taught as a bridge between disciplines—journalism and architecture. It provides students an opportunity to explore new forms of site analysis. Students propose a site in the U.S. to investigate from a set of site topics identified for their timeliness and relevance, their centrality to demographic populations, and their environmental impact—COVID-19, climate change, the census, and the urban/rural divide. Students work in groups under the direction of a practicing journalist who serves as editor to help groups explore and report on their site, spending the semester researching and constructing a geospatial narrative.

<CODING FOR SPATIAL PRACTICES>

[Spring 2021] Celeste Layne

This course introduces students to web design and development as a means of representation, speculation, and communication. Students learn the foundational, front-end languages HTML, CSS, and JavaScript to create work for the web browser. To guide our study, students explore questions such as: What is the relationship between architecture and the World Wide Web? What parallels can be drawn between the development process and our own design processes?

<MAKE>

[Fall 2020] Giuseppe Lignano, Ada Tolla

The premise of this workshop is to produce work that is experimental, personal, difficult, ugly, dirty, weird, and investigative—rather than definitive in presenting evidence and conclusions. The workshop is about making, and the work is physical, produced within the precise constraint of a 12"x12"x12" volume through the UPCYCLING of 5 materials: concrete, plastic, metal, wood, and fabric. We search for materials in their closest environment—the materials we dispose of in our own housing, the ones discarded in our own neighborhood, on our street's sidewalk, along our daily paths. We engage directly with domestic leftovers. We reflect on the potential of waste and reframe its visual and cultural significance. Through making, we explore and question, discover and invent, follow and drive, command and listen.

<GENERATIVE DESIGN I>

[Fall 2020, Spring 2021] Danil Nagy

This class explores how new technology can be used to leverage nature's design methods to create new design workflows. Instead of designing objects, students learn to design systems that encode the full range of possibilities of a particular design concept. They then learn

methods for measuring and quantifying the performance of these systems so that each design can be evaluated automatically by the computer. Finally, they create automated evolutionary processes which allow the computer to search through our design systems to find novel and high-performing designs. This course is cross-listed in the Building Science and Technology Sequence.

#### <GRAPHIC ARCHITECTURE PROJECT III: DESIGN SEMINAR>

[Fall 2020] Michael Rock, Whitney Dow

Narrative is derived from the late Latin *narrativus*: telling a story. This class focuses on the imposition and implication of narrative in explaining and presenting architectural projects. It looks at both synchronic and diachronic aspects of narrative and considers the effect of media on a story. Through short projects, participants consider the implication and meaning of graphic imagery and language without overlooking formal issues such as color, balance, sequence, and composition.

#### <METATOOL I>

[Fall 2020] Dan Taeyoung

We are aliens from another solar system, observing a group of architects. These architects seem to be thinking about a location in space that they call a site. Armed with an arsenal of tools, they visit the location, talk to people, take photographs, sketch, model, look at the computer. Let us ask: Where do their tools come from? What do they want to do with the tool, and what does the tool want them to do? How do their tools change how they think? What new tools could they create? The core thesis of Metatool is: to design critically, intentionally, intelligently, and playfully, designers must have the ability to design new critical/experimental/playful design tools.

#### <SEMINAR OF SECTION>

[Spring 2021] Marc Tsurumaki

While most commonly deployed as a retroactive tool to describe constructional requirements or (in the context of the contemporary design studio) an automatic side effect of the digital model, this seminar re-conceives the section as an instrumental and projective device. The goal is to provide students with techniques through which they can develop their own approaches to section as a vital analytical and design tool. The seminar also investigates the section to raise broader questions regarding the representational techniques that architects deploy and the complex interrelationship between delineation, ideation, and materialization.

#### <ARCHITECTURAL PHOTOGRAPHY: FROM THE MODELS TO THE BUILT WORLD>

[Fall 2020, Spring 2021] Michael Vahrenwald

The first segment of the class looks at various ways of photographing architectural models from standard depictions in which the images are meant to closely resemble a full-scale construction to alternate approaches that play with what the architectural model can communicate.



It attempts to address themes beyond the presentation of a finished building or a rendering. The second half focuses on photographing various constructed spaces, both exterior and interior. The class discusses approaches to photography from “objective” to “ expressive” and explores notions of the iconic, the narrative, and digression in architectural photography.

<X INFORMATION MODELING I>

[Fall 2020] Luc Wilson

[Spring 2021] Luc Wilson, Snoweria Zhang

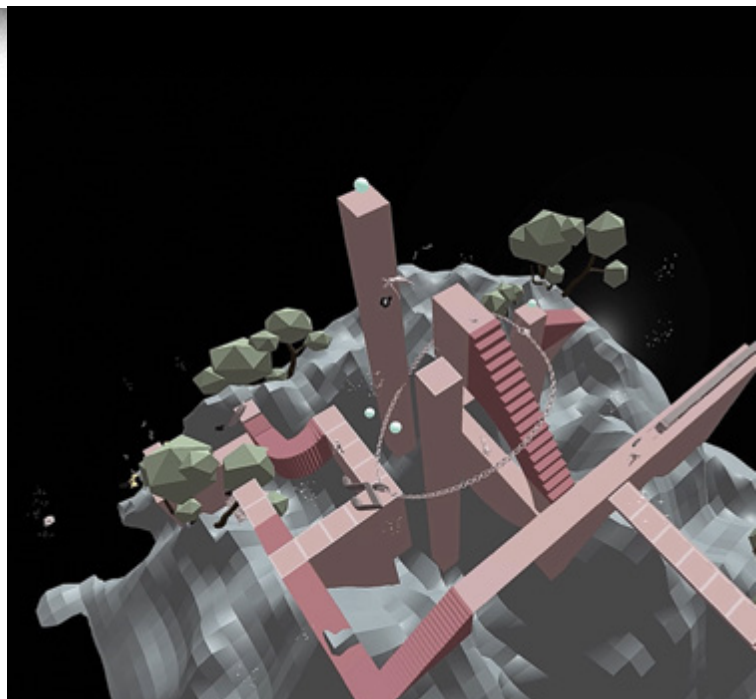
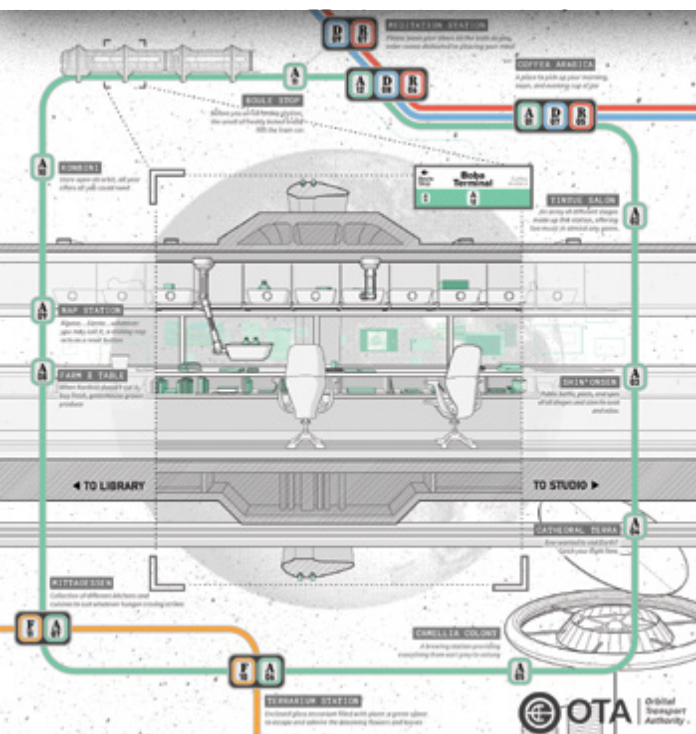
For this course, students work with and generate geo-spatial data at multiple scales: city, neighborhood, and buildings. They integrate urban data exploration, environmental performance, and derive their own data within a computational design workflow. This course is cross-listed in the Building Science and Technology Sequence.

<DATA VISUALIZATION FOR ARCHITECTURE, URBANISM AND THE HUMANITIES>

[Fall 2020] Jia Zhang

This class introduces students to key concepts in the design of information visualization (and interactivity). Students put theory to practice in discussions that critically engage with the visualizations. They also produce visualizations by hand and by code that are interactive, public-facing, and live on the web. Specifically, they learn and use the javascript library D3.

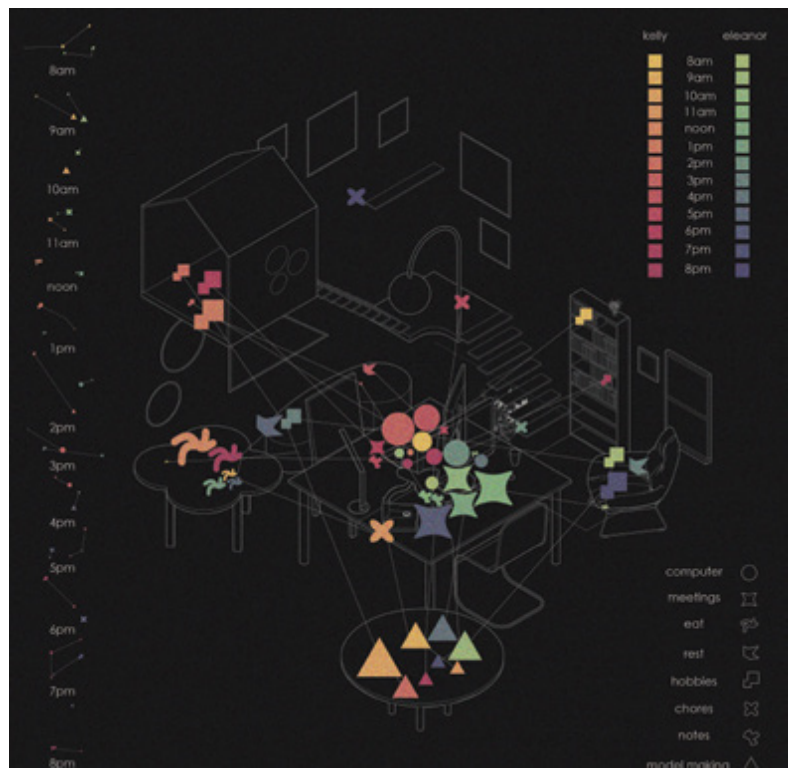
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Daniel Chang, Kristen Fitzpatrick

Jean Tseng

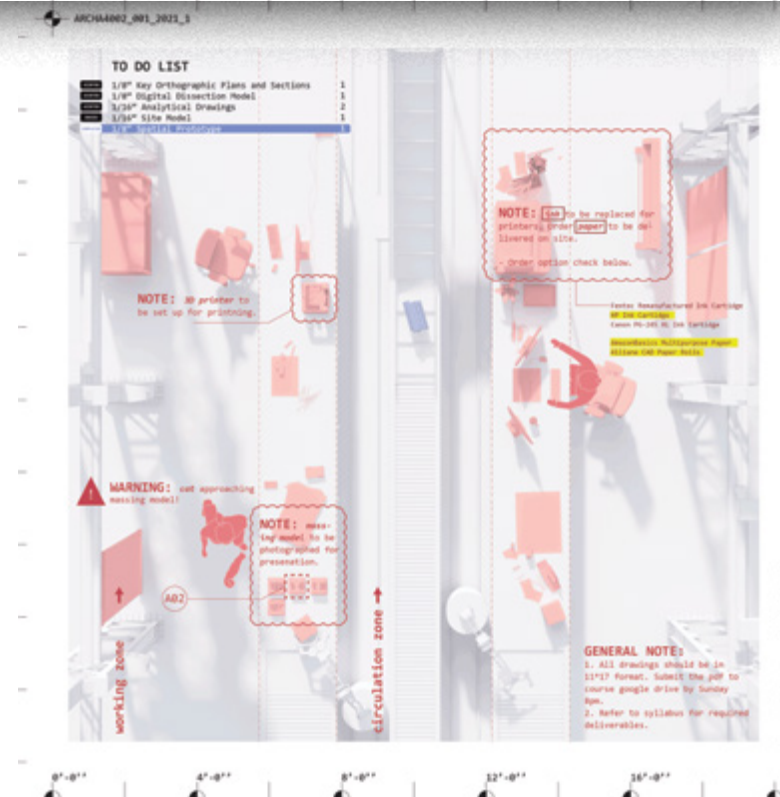
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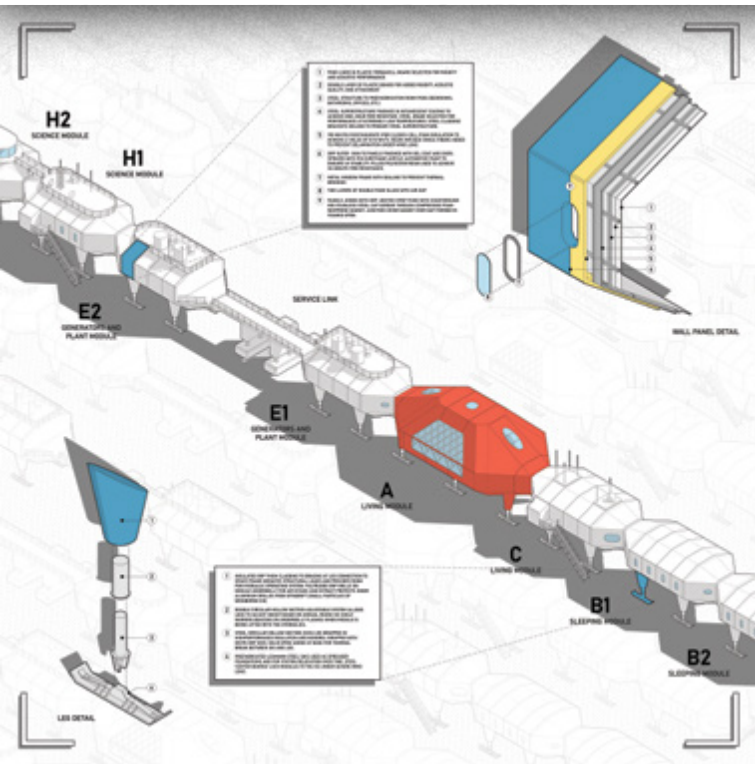


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Jennah Jones,  
Camilla Lancaster,  
Kim Langat, Hanyu Liu,  
Kaixi Tu, Wenjing Tu,  
Yuli Wang

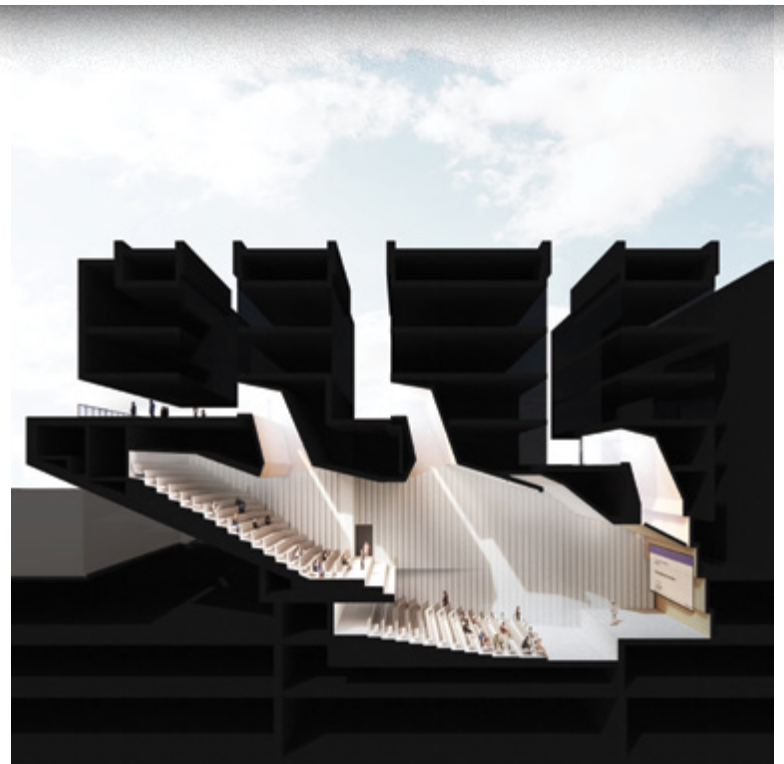
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Wei Xiao



<ARCHITECTURAL DRAWING AND REPRESENTATION I> Josh Uhl (Coordinator), Farzin Lotfi-Jam, Lexi Tsien, Zachary White



Blake Kem



Wei Xiao

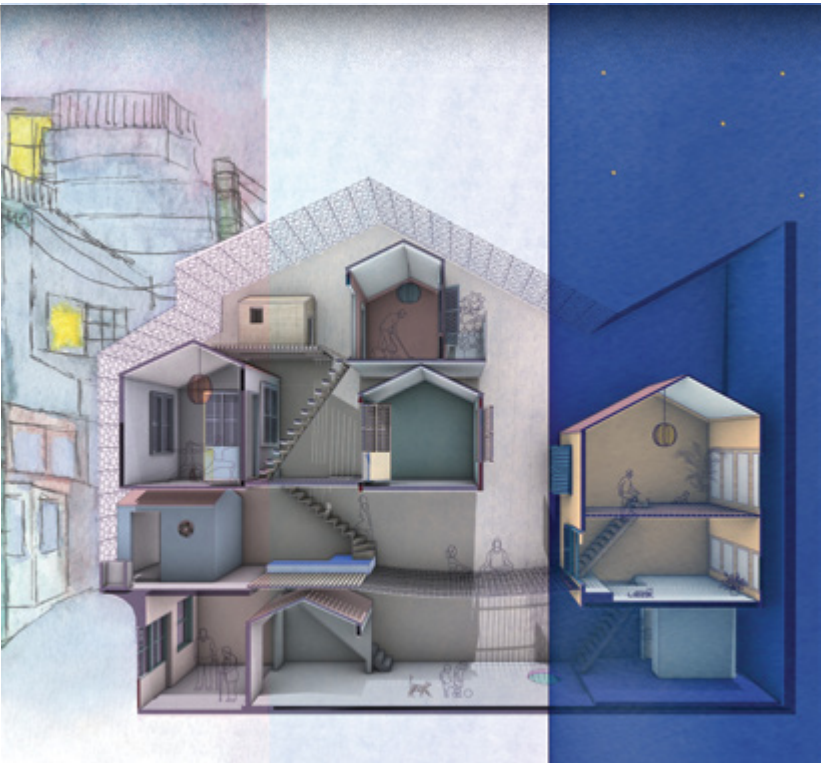
Stephen Zimmerer



Daniel Chang



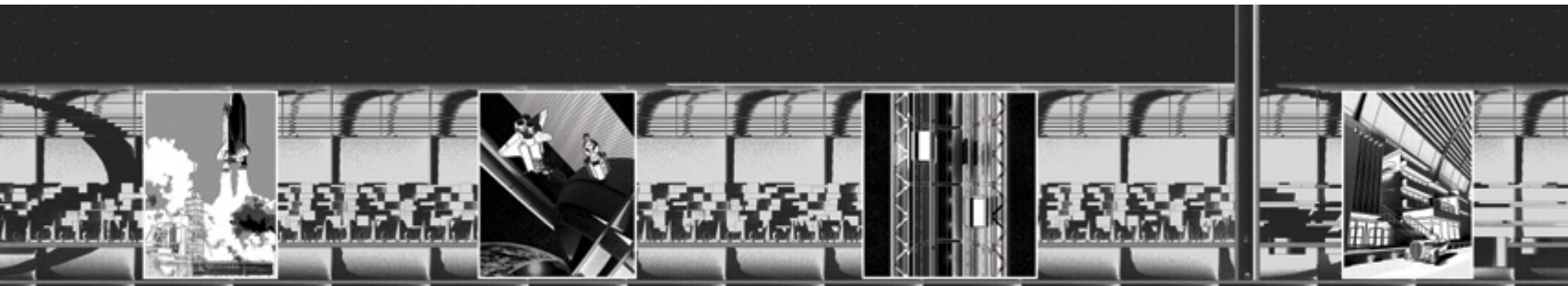




Elaine Yu



Yifei Yuan

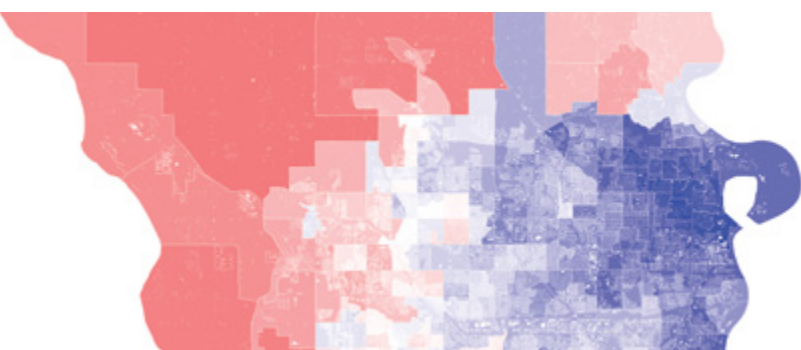
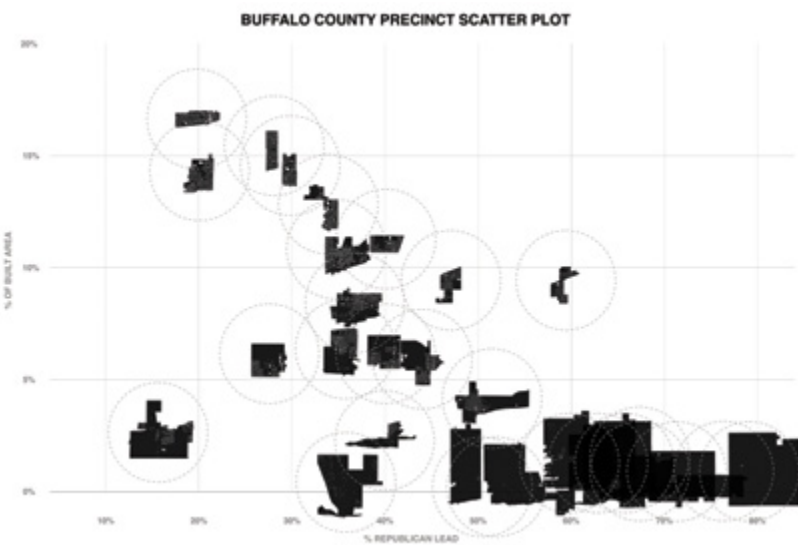


<TOPICS IN VIZ TECH: LOCATION INTELLIGENCE> Carlo Bailey

Marcell Sandor



Takashi Honzawa





VIRTUAL ARCHITECTURE: WORLD BUILDING AND VIRTUAL REALITY WORKSHOP> Nitzan Bartov

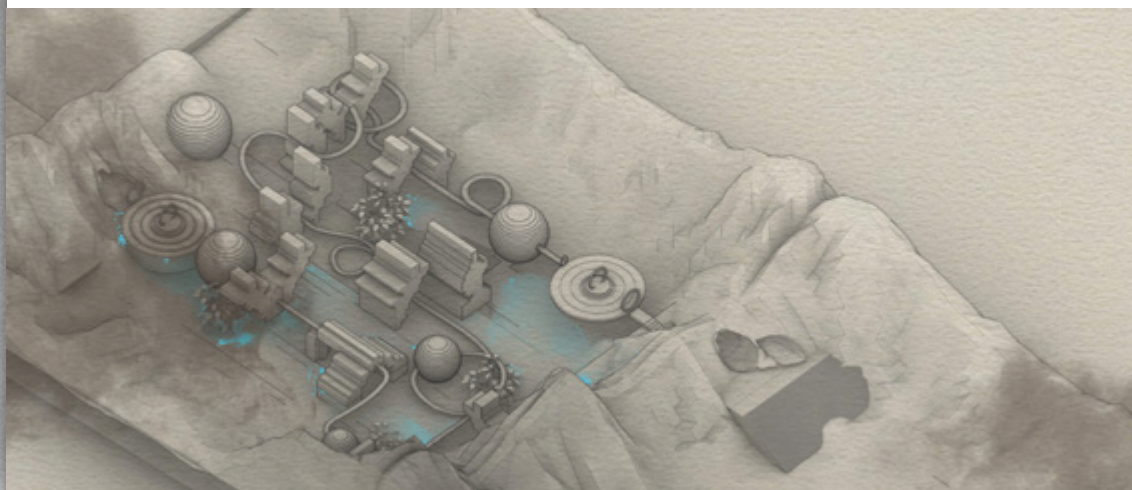
Hemila Rastegar-Aria



Cheng Ju Lee



Kshama Daftary

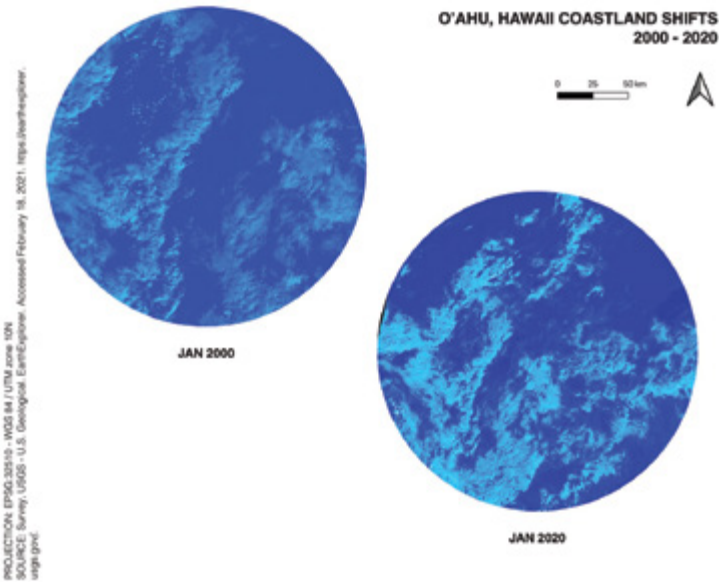






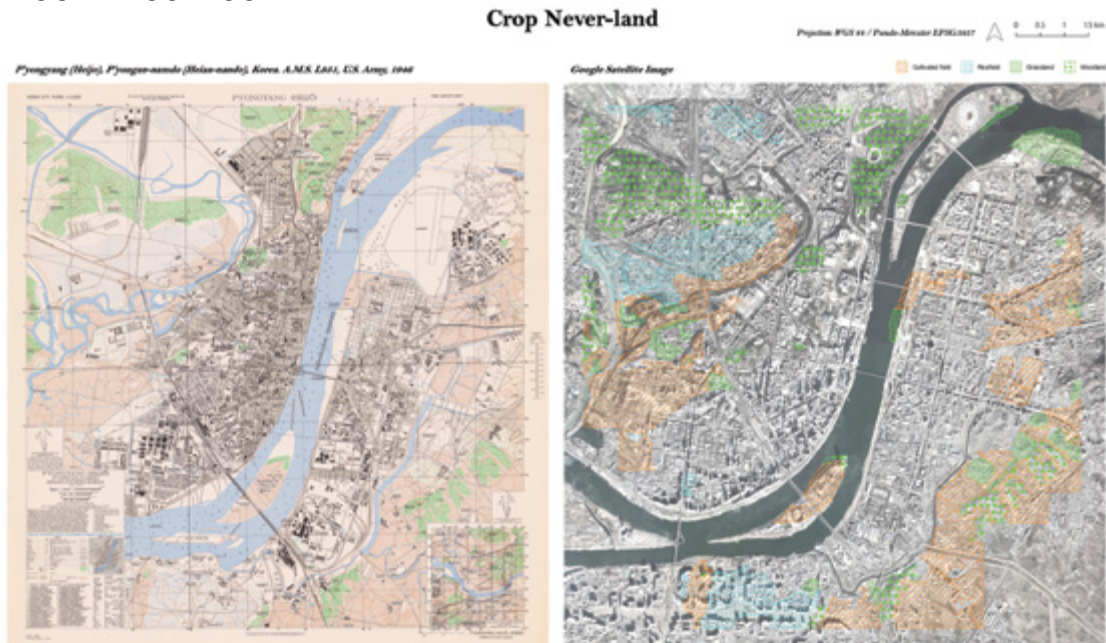


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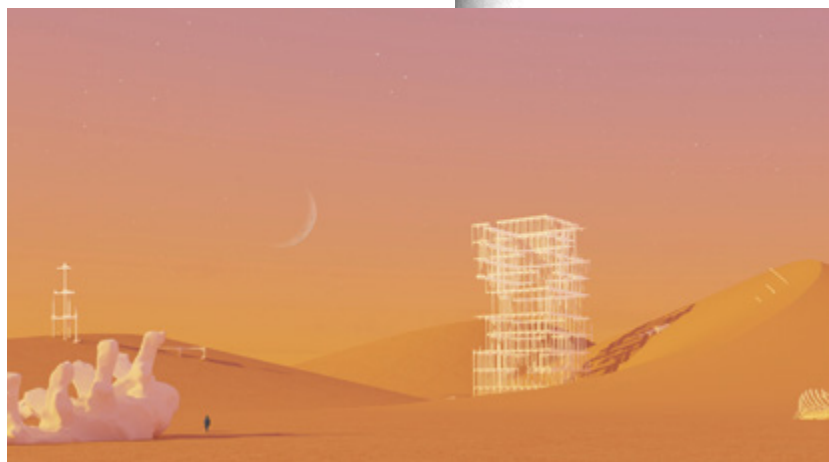
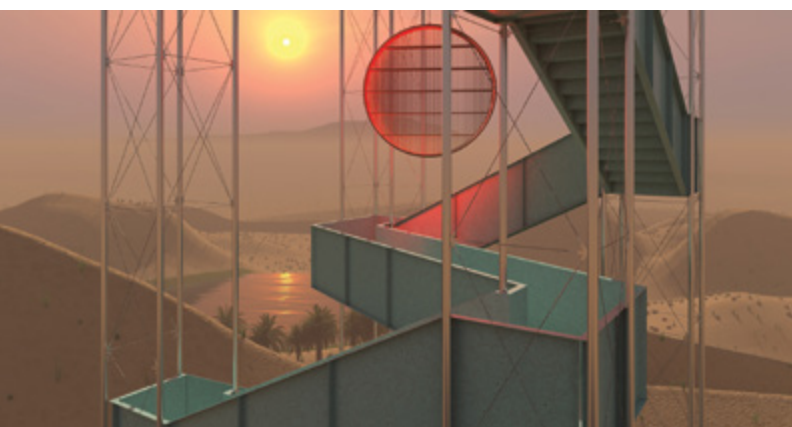
Adela Locsin

Keon Hee Lee



<TECHNIQUES OF THE ULTRAREAL> Joseph Brennan, Phillip Crupi

Adeline Chum, Asher McGlothlin,  
Benjamin Diller-Schatz,  
Henry Black



Novak Djogo,  
Daniel Vanderhorst,  
Karan Matta,  
Ethan Davis

Zakios Meghrouni-Brown,  
Johane Clermont



Timlok Li,  
Renee Gao



<GRAPHIC ARCHITECTURE PROJECT I: DESIGN AND TYPOGRAPHY> Yoonjai Choi

Tung Nguyen



Angel Castillo



Veeris Vanichtantikul

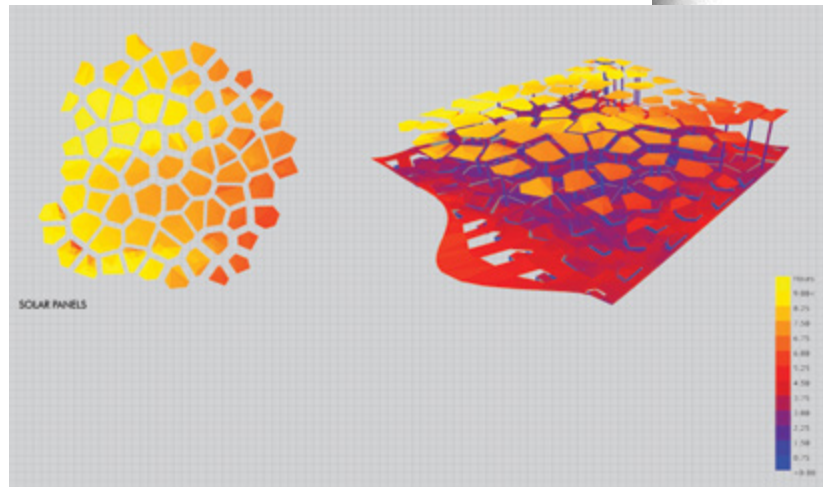


Camille Newton



<RE-THINKING BIM> Jared Friedman

Mariami Maghlakelidze



Ziyi Wang, Haoran Xu

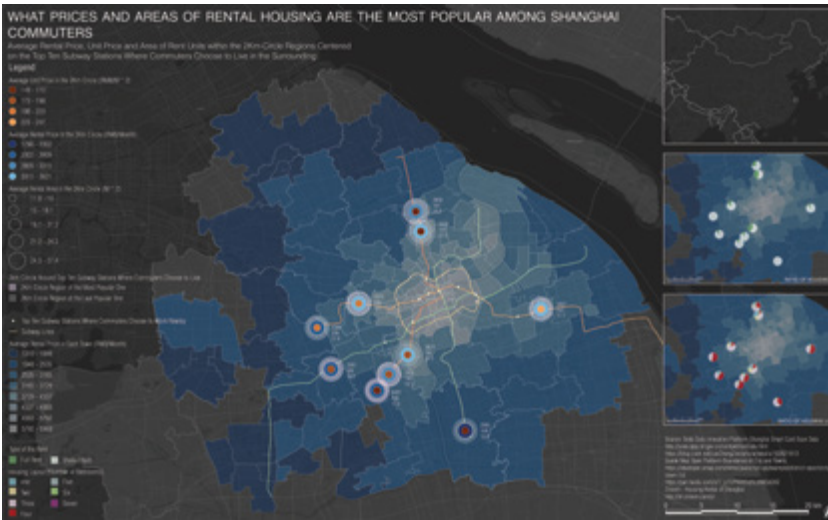


Timlok Li,  
Kshama Daftary





Chenxi Dong

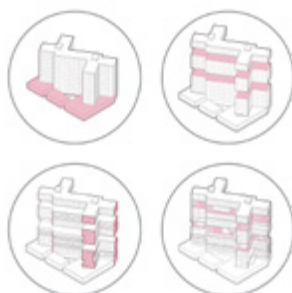
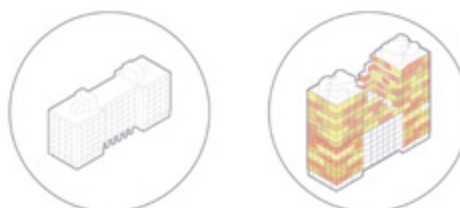


## &lt;NYC: TYPOLOGICAL CORRECTIONS FOR LIVING TOGETHER&gt; Juan Herreros

**CHELSEA ELLIOT HOUSING**  
LIVING TOGETHER



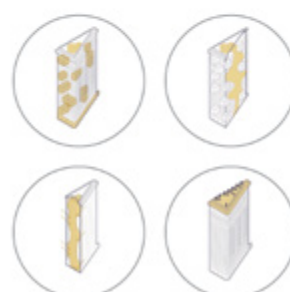
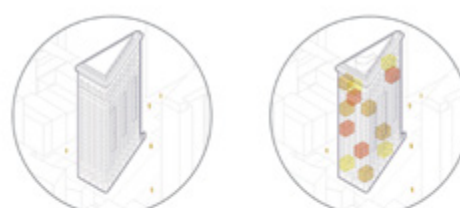
**ROBERT FULTON HOUSES**  
FOOD MACHINE



**100 ELEVENTH AVENUE**  
LIVING TOGETHER



**FLATIRON BUILDING**  
ENTREPRENEURIAL LAB



Alina Abouelenin,  
Joud Al Shdaifat,  
Maria Pérez Benavides

Pabla Amigo,  
Benjamin Akhavan




<PUBLIC INTEREST TECHNOLOGY: CITIES, DESIGN, CODE, REPORTING> Laura Kurgan, Lydia Chilton, Mark Hansen, Celeste Layne

# PORTABLE NETWORK KIT

## CONSTRAINTS


- Threat of privacy to new users
- Limited reception area
- Cost of building new infrastructure to serve the community
- Software limitations



## OPPORTUNITIES

- Low costs per kit
- PNKs can operate alone or form a local mesh network
- Can be owned and driven by the community
- Community retains ownership of their data


Regina Alacazar, Zuzanna Jarzyńska, Yuanyang Teng, Ian Wach




QUEENS PUBLIC LIBRARY  
CULTURE BUDDIES

[Log In](#)


# WELCOME TO CULTURE BUDDIES!



Attend a QPL event



Meet your buddy



Get the assistance you need

Through this program, you can find a **buddy** at cultural events at the Queens Public Library to help you with anything language-related, or you can **volunteer to become a buddy** to help members of your community with language-related tasks!

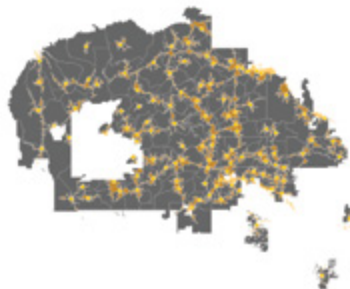
Ready to start?

FIND AN EVENT

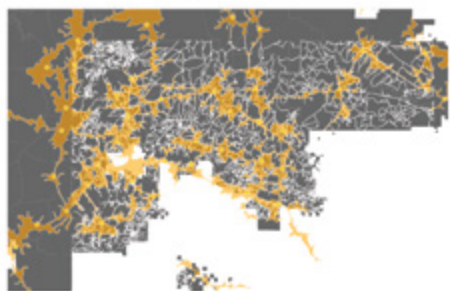
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<POINTS UNKNOWN: CARTOGRAPHIC NARRATIVES> Michael Krisch, Juan Saldarriaga

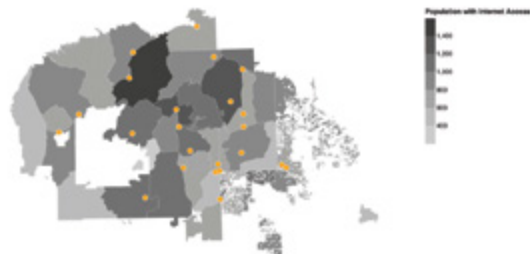
Chapter House Location relative to the chapter boundary with one-hour driving range



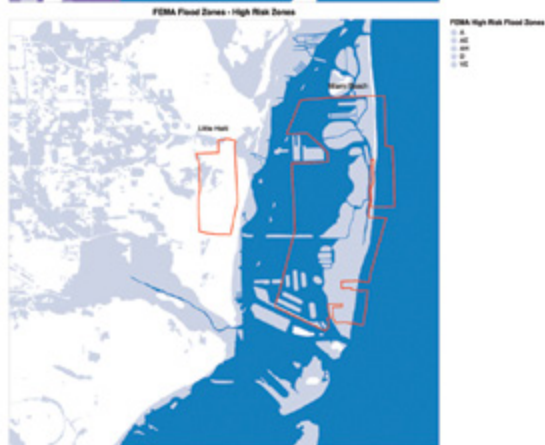
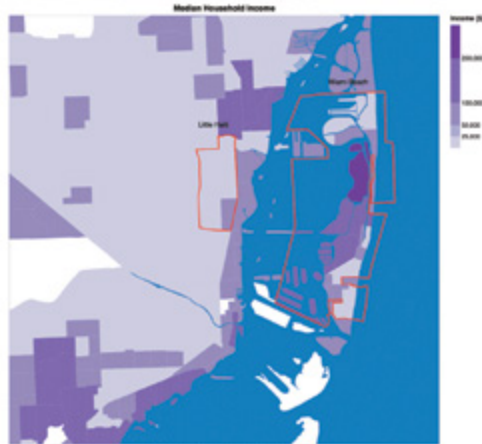
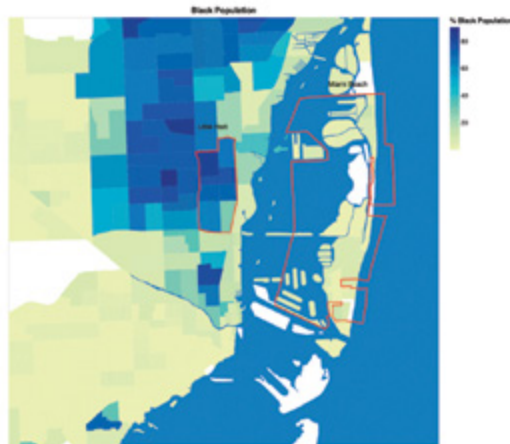
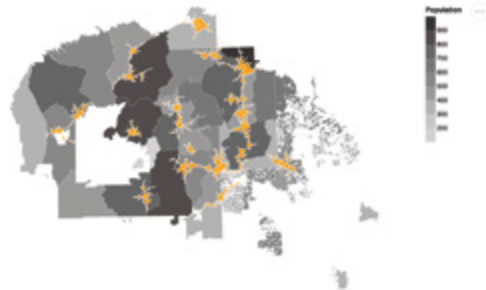
A close-up look at McKinley county



A majority of the Navajo Nation doesn't have internet



USPS Post Office Locations relative to the tribal tract with one-hour driving isochrones

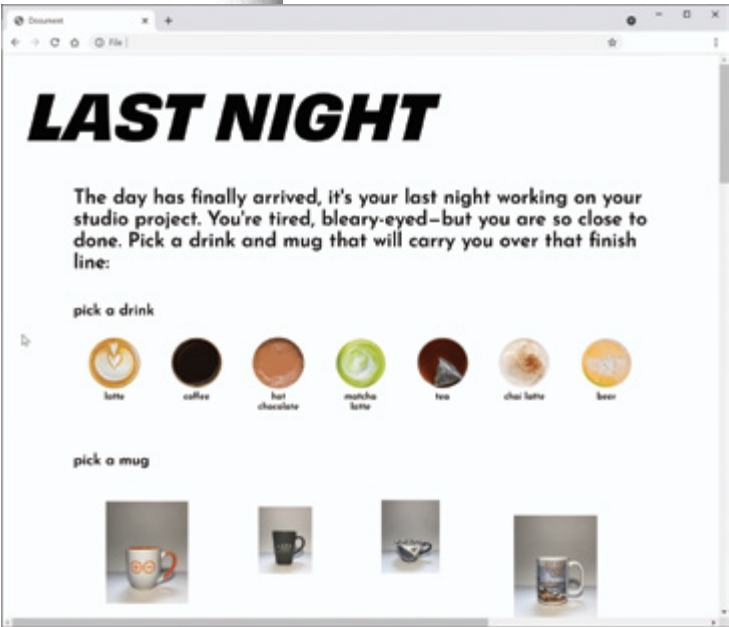


Chrysothemis Kouloumentas,  
Yuanming Ma, Jil Shah,  
Dhanias Yasmin

Yoo Jin Lee, Tina Marinaki,  
Clelia Simpson



Sarah Zamler



Ian Wach

Urechi Oguguo



<MAKE> Giuseppe Lignano, Ada Tolla



Inejomaira Cuevas-Gonzales



Marisa Kefalidis



Timothee Mercier

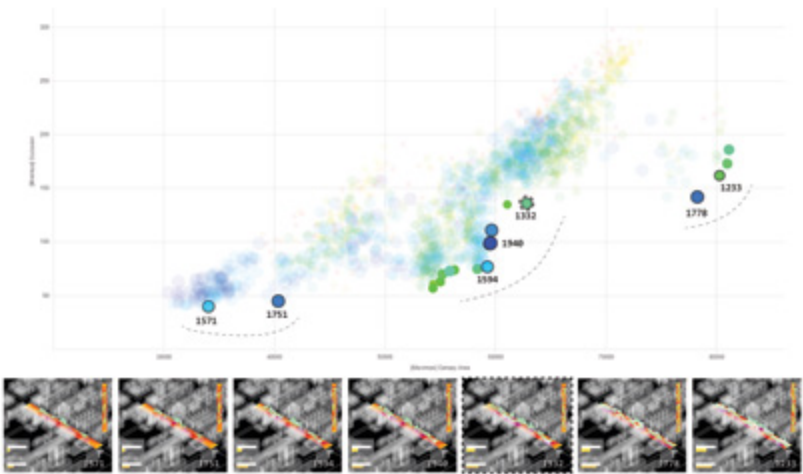
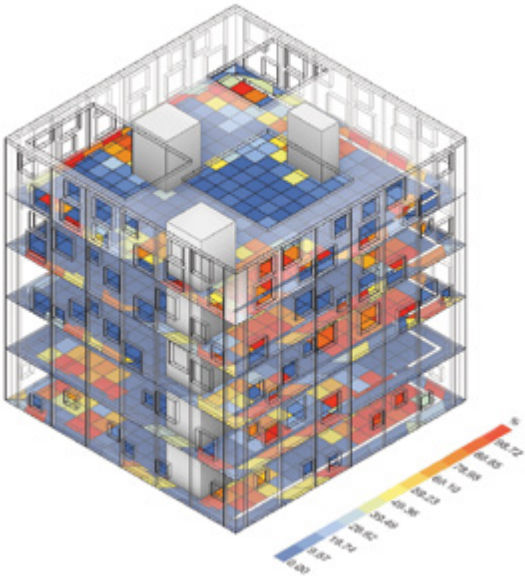


William Anderson



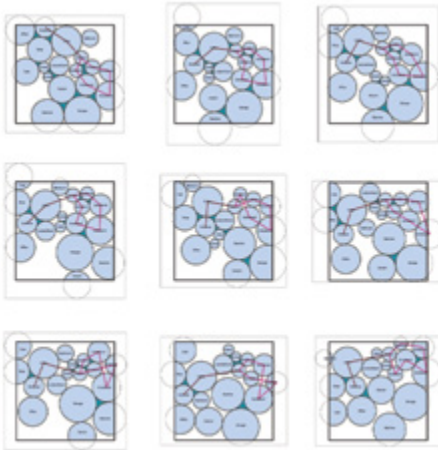
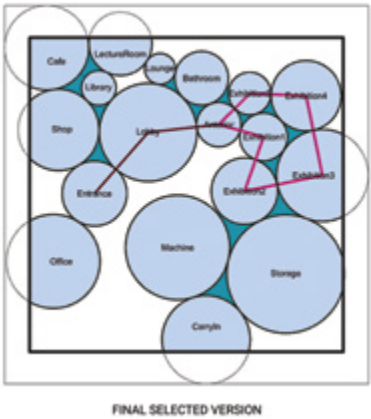
<GENERATIVE DESIGN I> Danil Nagy

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Jules Kleitman, Mickaella  
Pharaon, Ryan Hansen



Brian Turner, Chia Jung Wen,  
Daniel Vanderhorst, Hao-Yeh Lu,  
Jonathan Chester

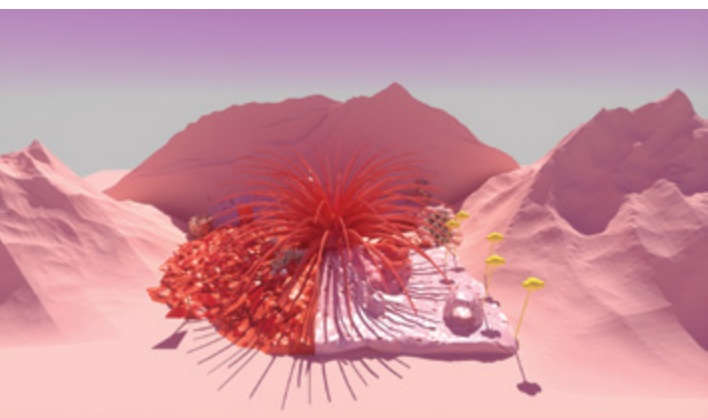
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Yuqi Tian



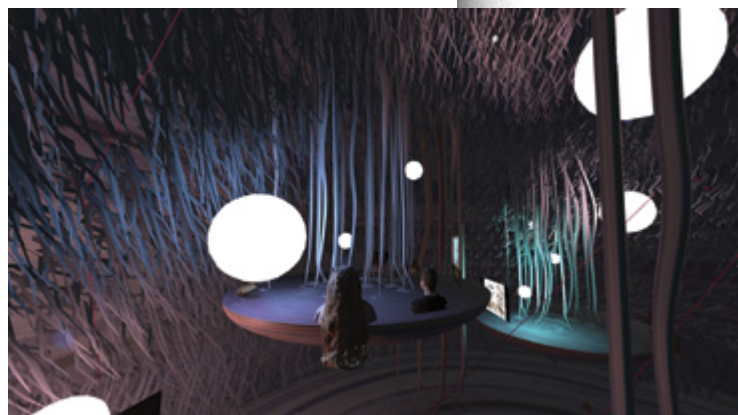
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Alina Abouelenin



Nora Fadil



Farah Alkhoury



Refan Abed

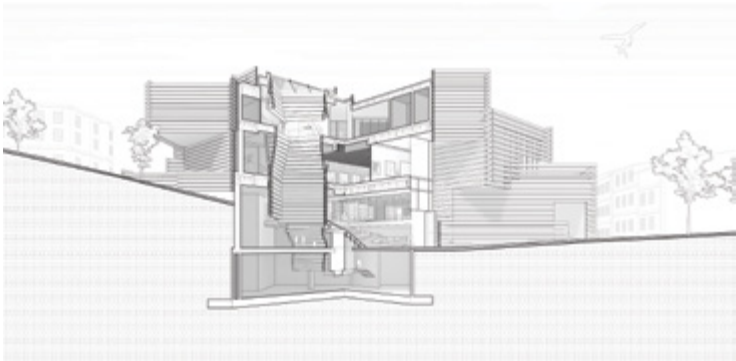


Zuzanna Jarzyńska



<SEMINAR OF SECTION> Marc Tsurumaki

Xinran Amber Shen



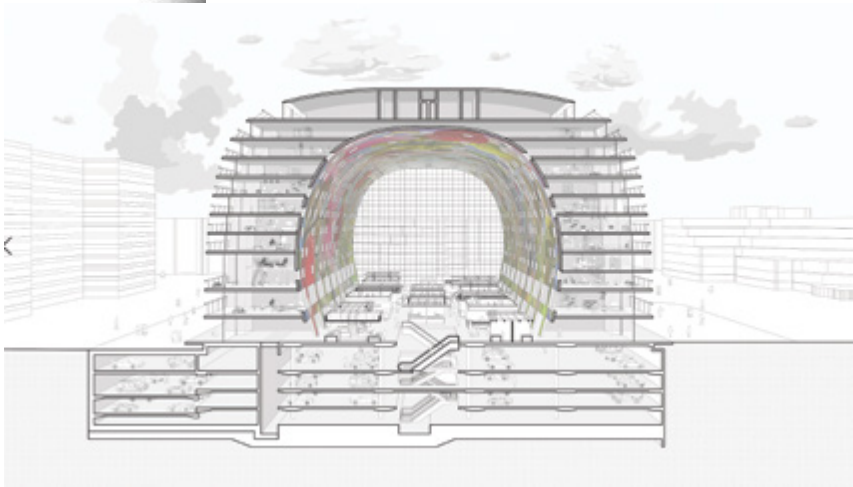
Alice Fang



Chenxi Dong



Tianran Li



<ARCHITECTURAL PHOTOGRAPHY: FROM THE MODELS TO THE BUILT WORLD>  
Michael Vahrenwald



Jun Ito



Pabla Amigo

Wanqi Sun

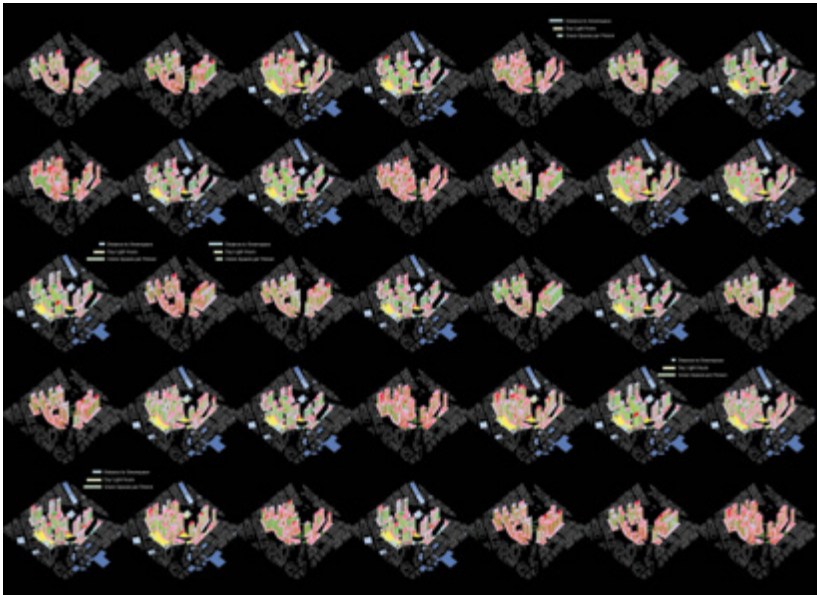
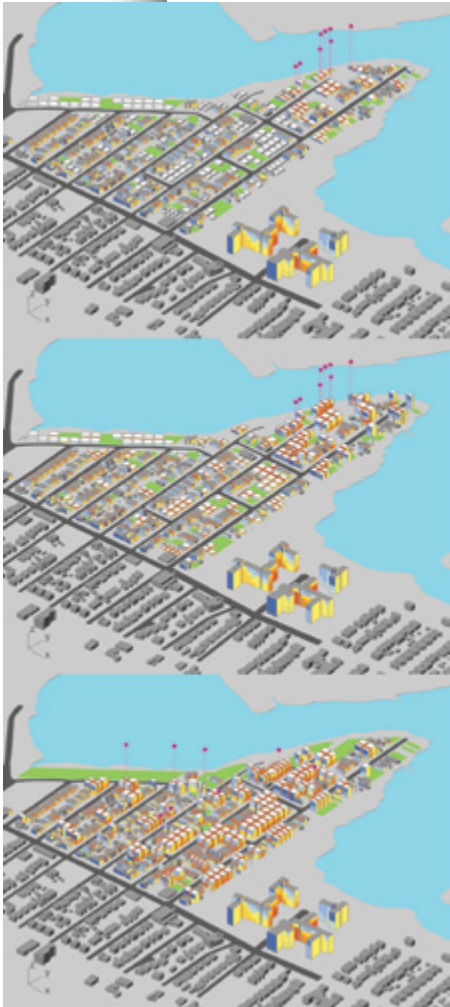


Yipeng Liu



<X INFORMATION MODELING I> Luc Wilson, Snoweria Zhang

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Yuan Li,  
David Musa

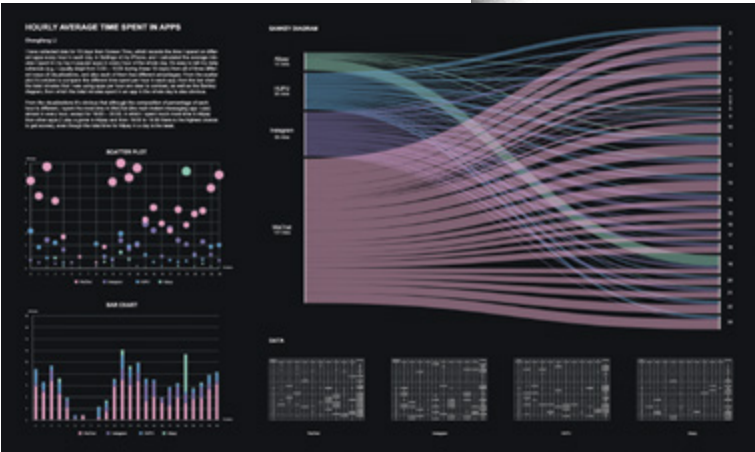


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Wanting Sun

Gun Young Jang, Jiyong Chun



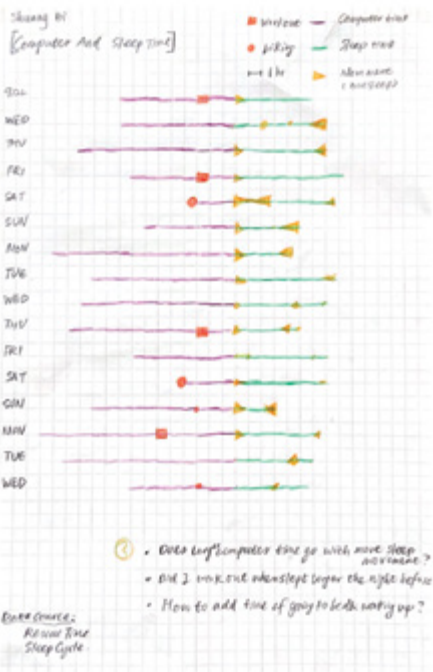
<DATA VISUALIZATION FOR ARCHITECTURE, URBANISM, AND THE HUMANITIES> Jia Zhang



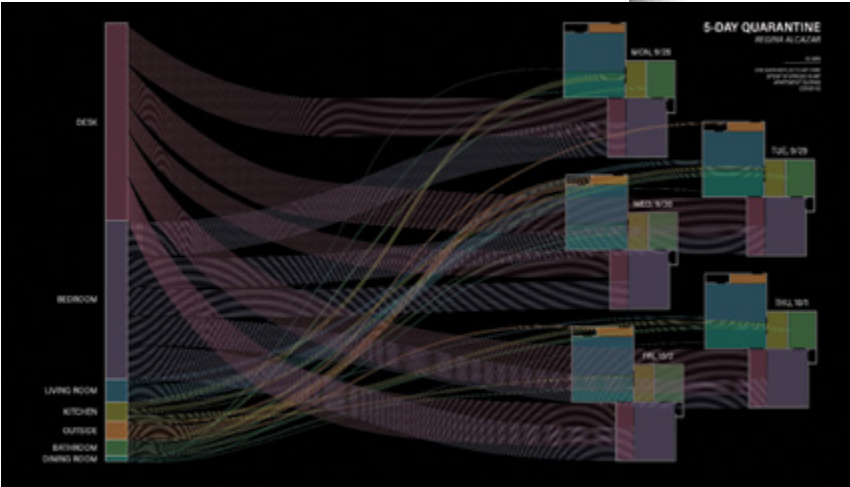
Chengliang Li

Adam Vosburgh, Adeline Chum,  
Jonathan Chester

Shuang Bi



Regina Joy Alcazar











# *Building Science and Technology*

## Lola Ben-Alon, Sequence Director

The act of creating and evaluating the architectural spaces in which we spend more than 90% of our lives is a mixture of design and science. With emerging global challenges of social and environmental equity that arise from resource scarcity and public health emergencies, novel approaches to making buildings more resource-efficient, comfortable, and affordable for all, are critical.

To this end, the Core and Elective courses in the Building Science and Technology sequence provide students with thinking tools and strategies for actualizing their design ideas. The sequence covers a range of topics, from fabrication technologies and innovative healthy assemblies, through supply chain analysis of low-carbon and readily available building materials, to energy modeling and environmental simulations. The sequence not only provides tools for performance analysis, but also crafts new ways of understanding and imagining socially equitable and environmentally sound futures. It supports the current approaches of student-based pedagogy by converging scientific knowledge on building materials, envelope systems, and fabrication technologies, with the complex act of design.

The Building Science and Technology Sequence proudly equips the next generation of GSAPP graduates with critical skill sets for the field. This work represents the explorative, experimental, yet pragmatic nature of the sequence. It recognizes that grand design

should be rationalized and actualized within an interdisciplinary and collaborative discourse.

## &lt;ARCHITECTURAL TECHNOLOGY V: URBAN SYSTEMS INTEGRATION&gt;

[Spring 2021] Lola Ben-Alon

This course takes a deep dive into the urban technical systems that operate outside building walls and beyond the site of a building. Beginning at the city and regional scale, students consider the flow of substances, waste, energy, and occupants around the city and into the site. Through their final projects, students critically investigate the integration of alternative transportation, renewable energy, water management, food production, and environmental systems, in both an inventive and comprehensively realistic manner, while showing before-and-after scenarios, value tradeoffs, and technical instrumentation of their proposed systems.

## &lt;ARCHITECTURAL TECHNOLOGY IV: BUILDING SYSTEMS INTEGRATION&gt;

[Fall 2020] Sarrah Khan

This capstone course asks students to develop a design proposal with integrated technical systems. Structural form, environmental systems, materials, construction methods, and fire protection elements are developed systematically and integrated with one another. It brings together key areas of study from environmental systems, structural systems, and enclosures. Concepts and principles learned in previous courses are applied to the comprehensive design of a fully detailed building, and student deliverables include the comprehensive schematic design, design development, and construction document drawing sets.

## &lt;ARCHITECTURAL TECHNOLOGY III: ENVELOPES&gt;

[Fall 2020] Gabrielle Brainard

This course introduces students to the technical design of building envelopes. It covers the tools and methods of facade design, starting with system typologies and design principles and moving on to performance criteria, documentation methods, and project execution strategies. During the schematic design phase, the focus is on understanding and defining façade types and materials. During the design development phase, performance criteria are introduced with a focus on structural and thermal performance requirements. During the construction documentation phase, students review the enclosure design and construction process and consider the relationship between design and cost.

## &lt;ARCHITECTURAL TECHNOLOGY II: STRUCTURES IN ARCHITECTURE&gt;

[Spring 2021] Zak Kostura

This course provides students with an understanding of what structural design means and how it's carried out. Students gain familiarity with basic elemental forms, structural assemblies and systems, and new and emerging materials. Through project-based and hands-on work, students gain an understanding of the structure, empowering them to integrate their newfound technical knowledge including load-resisting systems into architectural concepts.



## &lt;ARCHITECTURAL TECHNOLOGY I: ENVIRONMENTS IN ARCHITECTURE&gt;

[Fall 2020] Lola Ben-Alon

This course introduces building technology responses for energy conservation and natural conditioning, human comfort, and the site-specific dynamics of climate and environments. To illuminate the interrelations between architectural design decision-making and climatic, environmental, and occupancy forces, students explored design specifications and modifications through scaffolded manual and computational analysis assignments. The final presentation consists of a communication video, analyzing energy measures from building massing and orientation, space organization, enclosure detailing, opening control, to passive system integration and management.

## &lt;INDEPENDENT TECH RESEARCH&gt;

[Spring 2021] Lola Ben-Alon

This course is a research thesis preparation seminar. Students build upon known architecture research methodologies and develop an individual research demonstration in an area of their interest related to architecture technology and sustainable design. The students engage with scholarly material and form a potential thesis proposal that constitutes the intellectual interests and practical positions relevant to their design and practice. As a final deliverable, students demonstrate the methodology of their research, offering a novel contribution to the fields of architectural and environmental technologies.

## &lt;FOOTPRINT: CARBON AND DESIGN&gt;

[Fall 2020] David Benjamin

This course explores carbon and design through the dual formats of seminar and workshop. The seminar format involves a close study of the history of environmental measurement, and it includes guest presentations by leading figures on the topic of carbon footprint in architecture. Students review case studies and engage in critical analysis of concepts and applications. They gain experience measuring the carbon footprint of architecture, and at the same time, they explore the complexities of designing with this kind of metric. They engage related issues such as labor, social equity, environmental justice, biodiversity, and species extinction. And they develop a position about designing the footprint of architecture, rather than merely measuring it.

## &lt;MEASURING THE GREAT INDOORS&gt;

[Fall 2020] Gabrielle Brainard, Violet Whitney

This course explores techniques for working with data from the physical world, with the aim of understanding and manipulating dynamic, interactive environments. Students use hardware (sensors, microprocessors, computer vision cameras), software (IFTTT and Processing), and their own powers of observation to characterize and design phenomenological aspects of “the great indoors.”

## &lt;SUPER-TALL&gt;

[Spring 2021] Nicole Dosso

The class follows an analytical approach by dissecting individual Super Tall building components and their interrelationships to each other to build a comprehensive understanding of how these buildings behave using NYC as a laboratory. Student teams are assigned one of the following categories: vertical circulation, enclosure and building maintenance; superstructure; building services including mechanical, electrical, and plumbing; fire and life safety; and construction logistics. Each team develops a series of three-dimensional infographics that visually represent the categorical fundamental building blocks of the Super-Tall.

## &lt;RE-THINKING BIM&gt;

[Fall 2020, Spring 2021] Jared Friedman

This course puts forth the challenge for students to develop robust data-driven methodologies and computational frameworks for creative iteration and validating design solutions through analysis, automation, simulation, optimization, representation, and so forth. The course is intended to provide foundational knowledge of relevant modeling software and visual programming interfaces, while also discussing contemporary applications of these tools in the industry. This course is cross-listed in the Visual Studies Sequence.

## &lt;MAN, MACHINE AND THE INDUSTRIAL LANDSCAPE: RE-IMAGINING THE RELATIONSHIP BETWEEN INDUSTRIAL AND PUBLIC TERRITORIES&gt;

[Fall 2020] Sean Gallagher

This course examines past, present, and future strategies for meeting the growing industrial and infrastructural demands of our urban environments. The intent of the semester is to explore the emerging post-industrial relationships between the public, local ecology, and industrial activities in order to begin to define how human civilization can thrive locally and sustain globally within the planet's biospheric constraints.

## &lt;THE OUTSIDE-IN SEMINAR&gt;

[Spring 2021] Laurie Hawkinson, Galia Solomonoff

This design-build seminar is a collaborative initiative to design, build, and program a temporary pavilion structure that was erected by the students in the area between Avery, Fayerweather, and Schermerhorn Halls.

## &lt;TRANSITIONAL GEOMETRIES&gt;

[Fall 2020] Joshua Jordan

This course investigates tiling and modular fabrications, from two simultaneous motivations. First, to explore the organizational, experiential, and aesthetic performance of units and repetition in architectural composition. Second, to develop the skill sets involved fabricating the units: through mold-making, casting substances, and other shop-based materials and methods. This course trajectory looks at the



mold-making craft as an analog to construction logics writ large, efficiencies and economies of modular fabrication, and the development of fabrication systems that apply the lessons of the first trajectory in new and innovative ways.

<TENSILE/COMPRESSION SURFACES IN ARCHITECTURE: TACTILE METHODS FOR ARCHITECTS>

[Fall 2020] Robert Marino

The architectural history of tension and compression surfaces is the beginning point for the course Tensile/Compression Surfaces in Architecture: Tactile Methods for Architects. Research is conducted through continuous analogous modeling methods. Surfaces are determined through the interactions of forces and materials and a methodology for surface generation is determined. The semester research project proposes a shell structure re-covering the transept of Santa Maria del Fiore, the Cathedral of Florence, as a modern-day response to Brunelleschi's famed dome.

<HEALTHY BUILDING MATERIALS>

[Spring 2021] Catherine Murphy

This course addresses how to overcome the negative health outcomes that are caused by toxins in building products. Students explore the relationships between building materials, chemical toxicity, and environmental exposures and how they directly impact human health and particularly vulnerable populations. We look at current practice to see how leading firms are designing and constructing healthier buildings using these lessons learned to inform design decisions and develop methodologies to select healthier products. The goal is to empower students to transform architectural practice with the knowledge that healthier buildings lead to healthier lives.

<GENERATIVE DESIGN I>

[Fall 2020, Spring 2021] Danil Nagy

This class explores how new technology can be used to leverage nature's design methods to create new design workflows. Instead of designing objects, students learn to design systems that encode the full range of possibilities of a particular design concept. They then learn methods for measuring and quantifying the performance of these systems so that each design can be evaluated automatically by the computer. Finally, they create automated evolutionary processes which allow the computer to search through our design systems to find novel and high-performing designs. This course is cross-listed in the Visual Studies Sequence.

<SUSTAINABLE DESIGN>

[Fall 2020] Davidson Norris

For this course, students design a High School of Environmental Design in Central Park but transposed to one of four typical climates. Sustainable strategies and techniques covered include principles of bioclimatic design, bioclimatic site design, sustainable water, and waste treatment, regional bio-climates, and related building types,

building as thermal skin, passive heating, passive cooling, natural ventilation, daylighting, sustainable building systems, advanced sustainable technologies, sustainable materials, products, indoor air quality, and environment.

#### <ARCHITECTURAL DAYLIGHTING>

[Spring 2021] Davidson Norris

Daylight has played a key role in the perception, aesthetics, and function of the built environment from its inception. The masterful play of light depends on the designer's grasp of both the technical requirements and spatial opportunities of natural light. This course provides instruction in both. Topics include daylight and health: energy and productivity; daylight and perception; daylight in the atmosphere; daylight and the site; daylight and the section; architectural shading; calculating the daylight factor graphically; calculating daylight luminance and illuminance digitally using Rhino/Diva. Students build physical models and put them out in the sun to test and demonstrate an architectural daylighting phenomenon.

#### <FAÇADE DETAILING: A MATERIAL UNDERSTANDING>

[Spring 2021] Kevin Schorn

This course explores the detailed design of building cladding through an understanding of materials and their physical properties. There is an emphasis on sketching details at large scales (often 1:1) by hand to facilitate a proper understanding of everything involved at the interface between the interior and exterior environments and the other necessary building systems. Students develop a deep understanding of many different cladding materials and what it takes to remain in command of the entire building process from design concept to built work.

#### <X INFORMATION MODELING I>

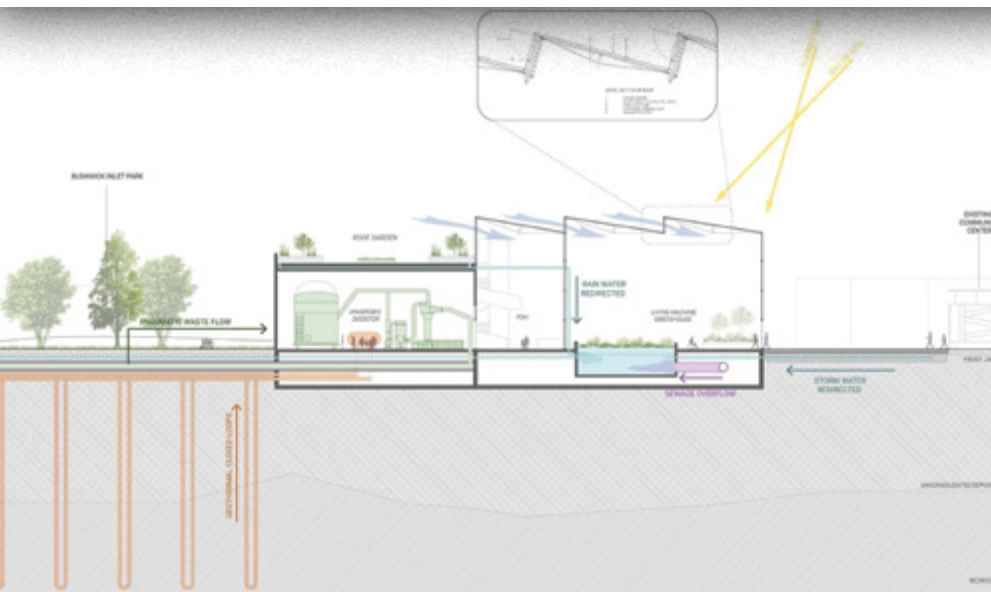
[Fall 2020] Luc Wilson, [Spring 2021] Luc Wilson, Snoweria Zhang

For this course, students work with and generate geo-spatial data at multiple scales: city, neighborhood, and buildings. They integrate urban data exploration, environmental performance, and derive their own data within a computational design workflow. This course is cross-listed in the Visual Studies Sequence.

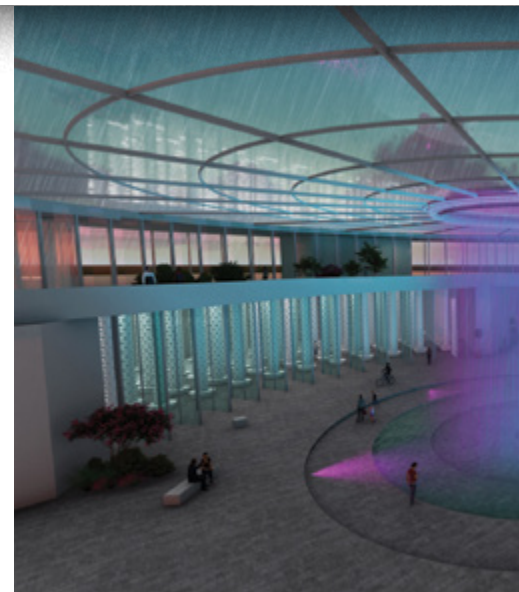




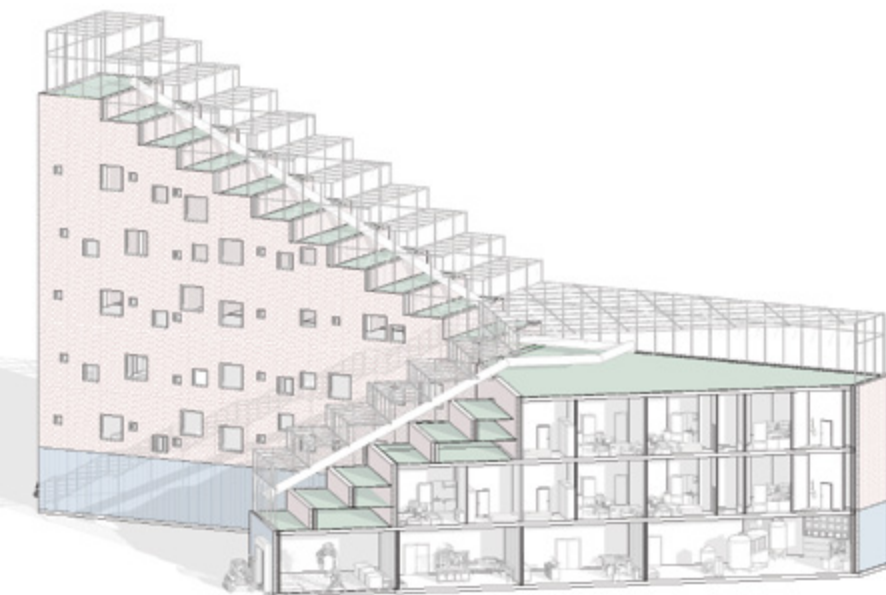
## &lt;ARCHITECTURAL TECHNOLOGY V: URBAN SYSTEMS INTEGRATION&gt; Lola Ben-Alon



Adam Vosburgh, Adeline Chum,  
Aditi Shetye, Max Goldner

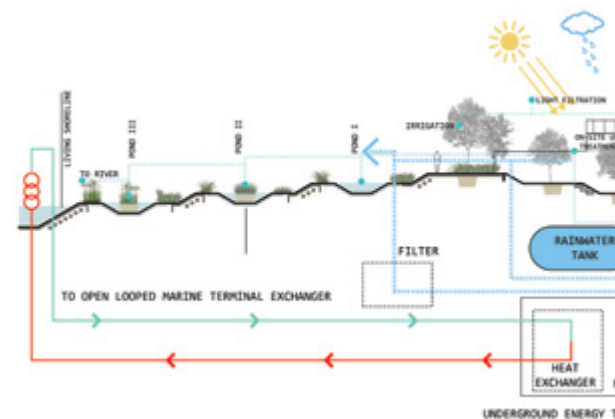


Agnes Anggada,  
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Meissane Aude Kouassi,  
Hazel Villena

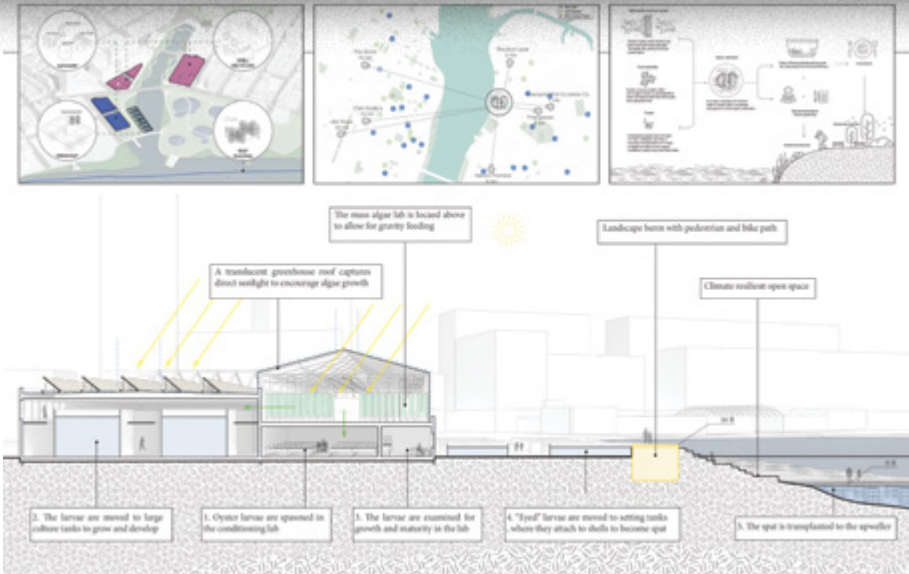


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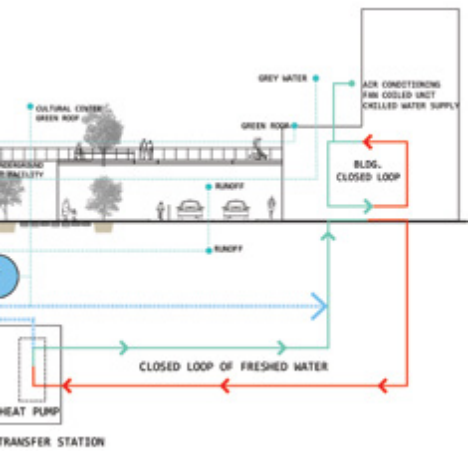
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Thanapon Wongsanguan,  
Muyu Wu, Alexis Hao Zheng





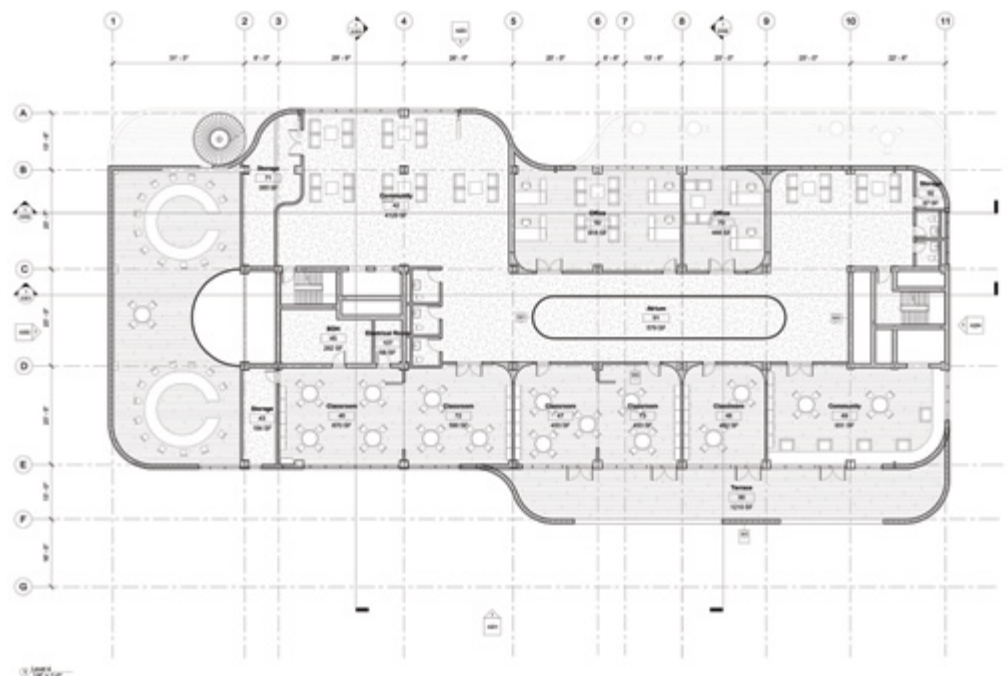
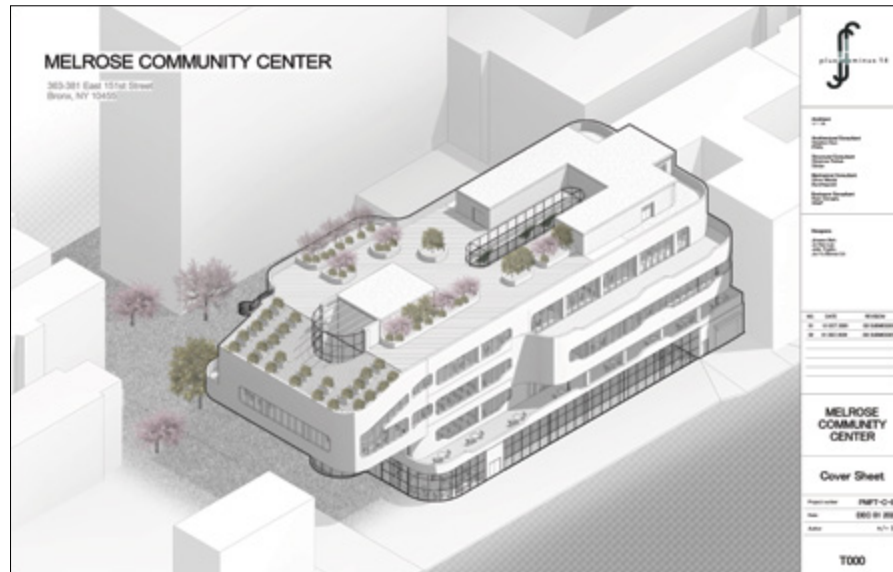


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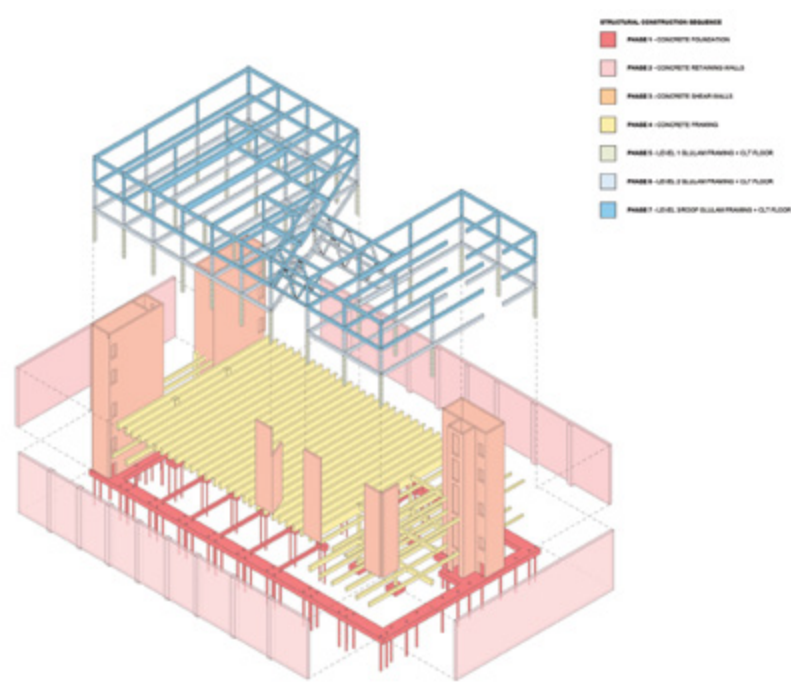
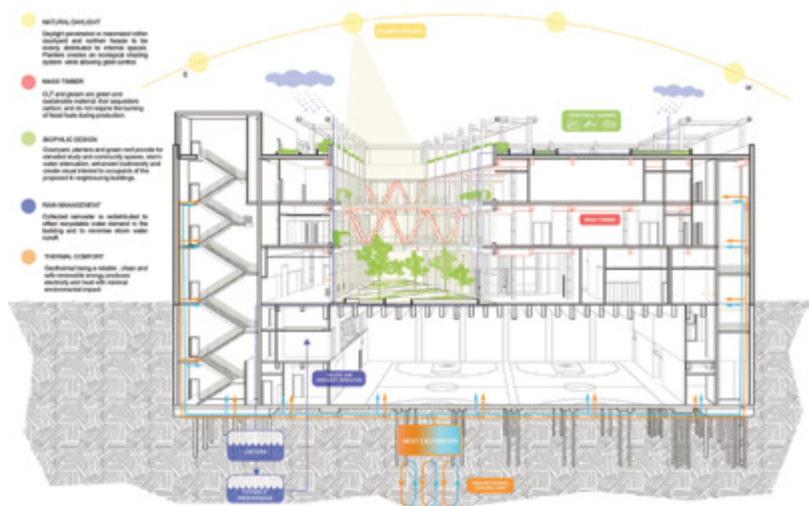
<ARCHITECTURAL TECHNOLOGY IV: BUILDING SYSTEMS INTEGRATION> Sarrah Khan

Jo Hee Lee, John Trujillo, Jinseon Noh, Bianca Lin



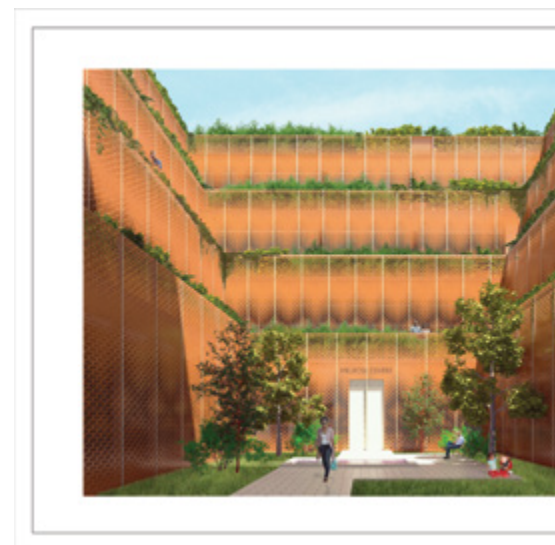
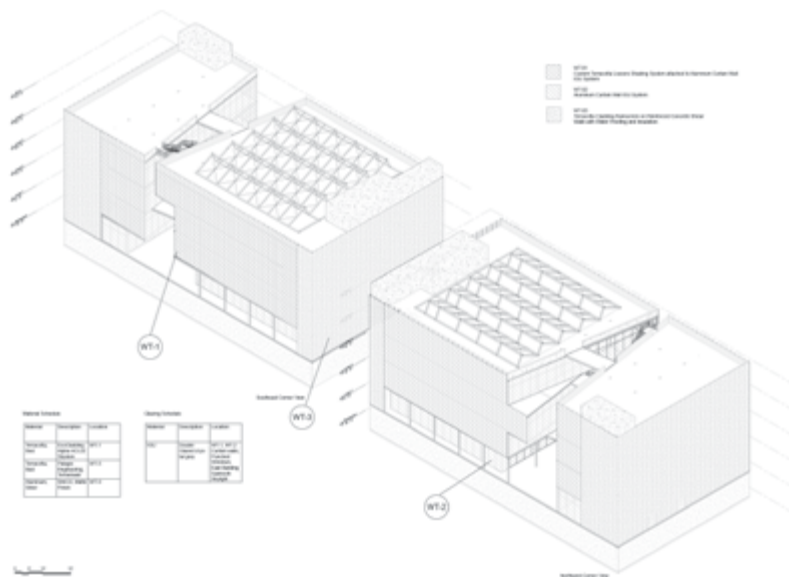
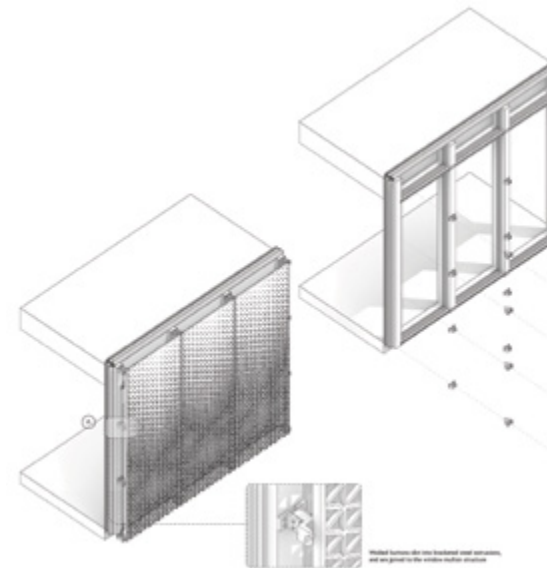
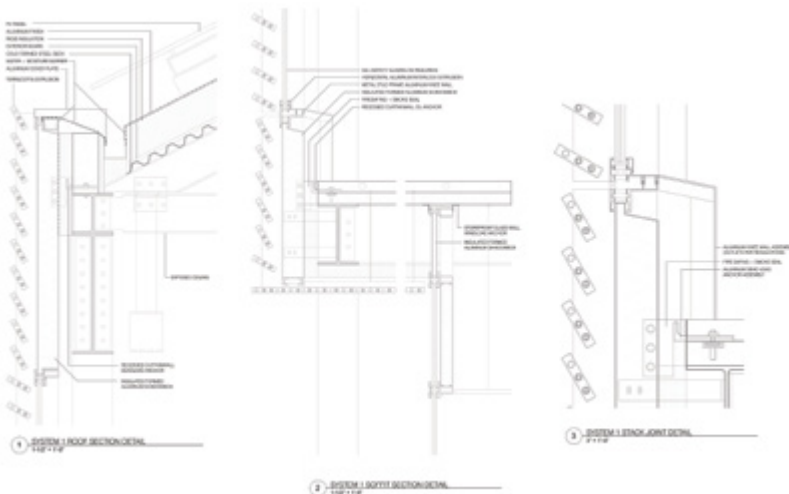


Kylie Walker, Lucia Song,  
Meissane Kouassi, Sierra Heckman



## &lt;ARCHITECTURAL TECHNOLOGY III: ENVELOPES&gt; Gabrielle Brainard

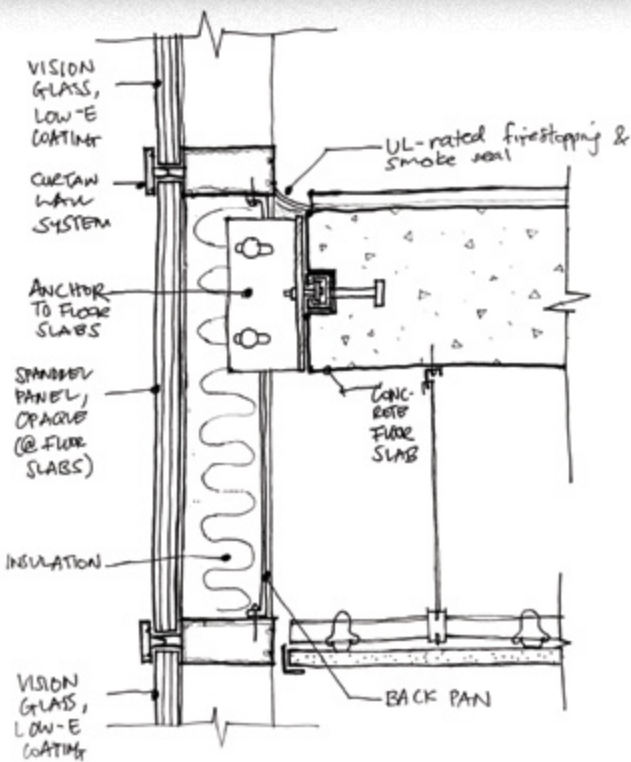
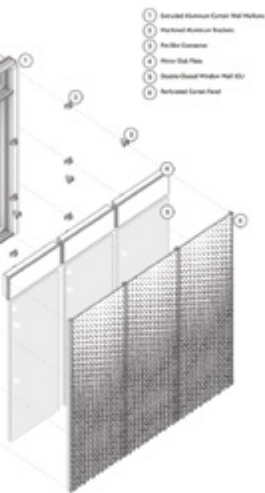
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Hannah Stollery



Alya Abourezk, Osvaldo Delbrey,  
Max Goldner, Sonny Han



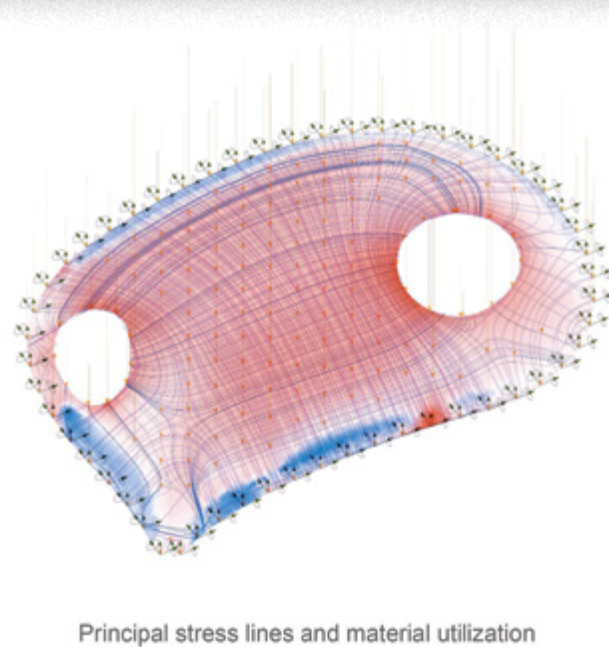
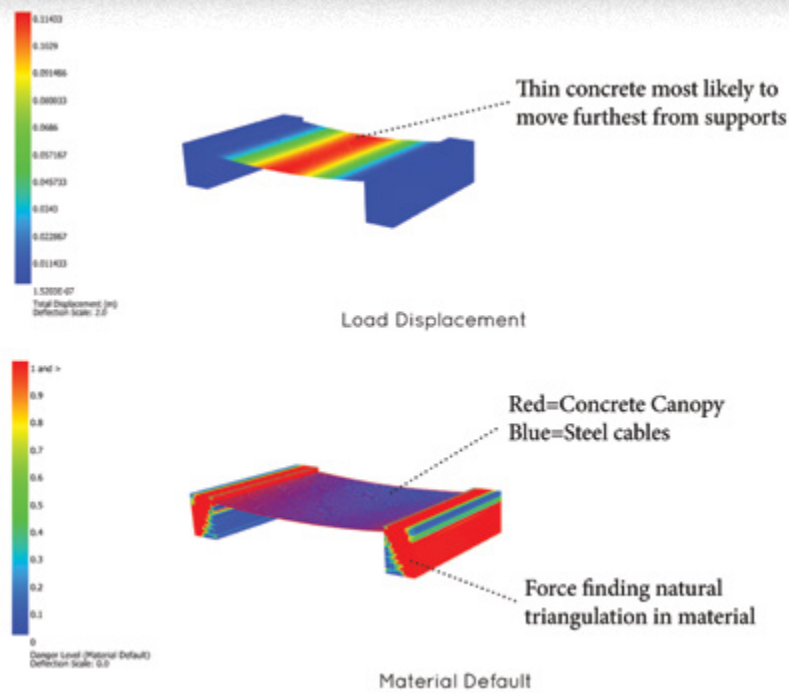
Lucia Song



Xuanyi Chen, Qing Hou, Minghan Lin, Shuhan Liu, Yuchen Qiu



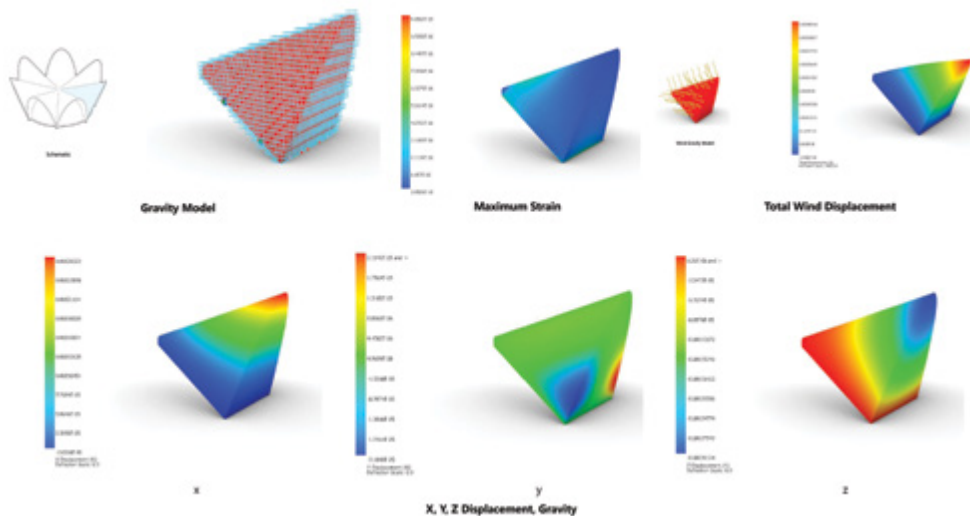
<ARCHITECTURAL TECHNOLOGY II: STRUCTURES IN ARCHITECTURE> Zak Kostura



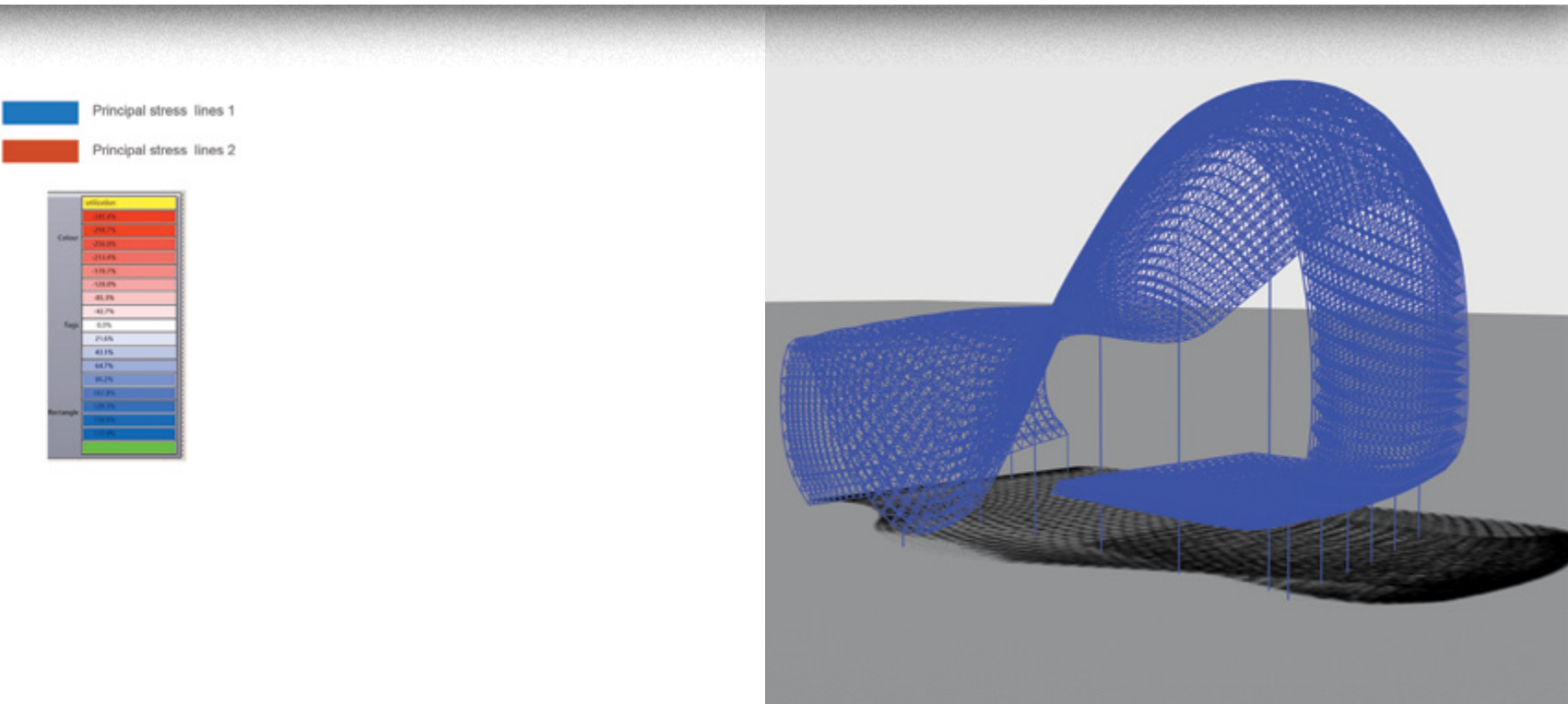
Daniel Chang, Rebecca Faris,  
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Pineda, Cemre Tokat

Maxine Gao, Yiyi Gao,  
Hanyu Liu, Kaixi Tu,  
Wenjing Tu

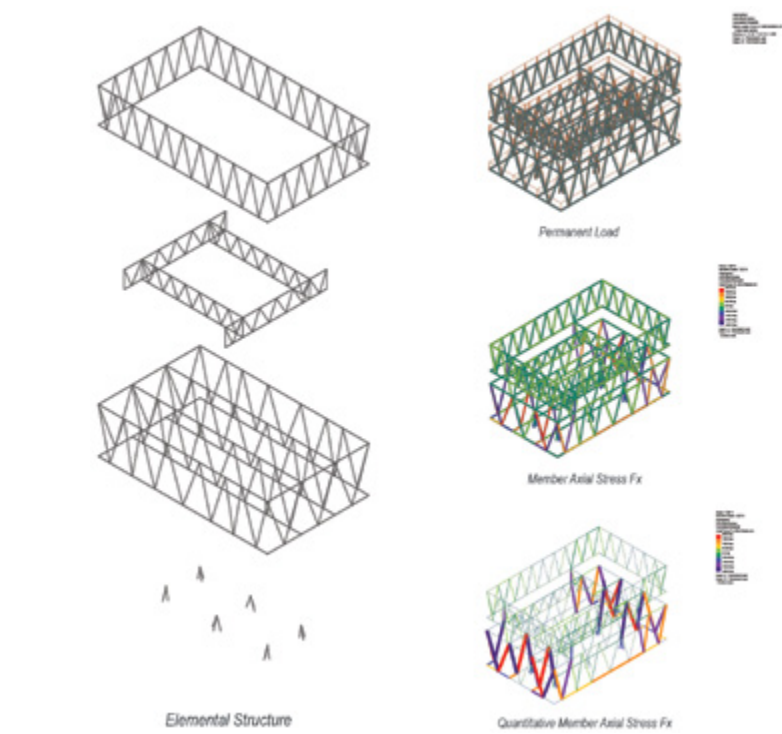
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Jordan Trager, Renka Wang,  
Rose Zhang



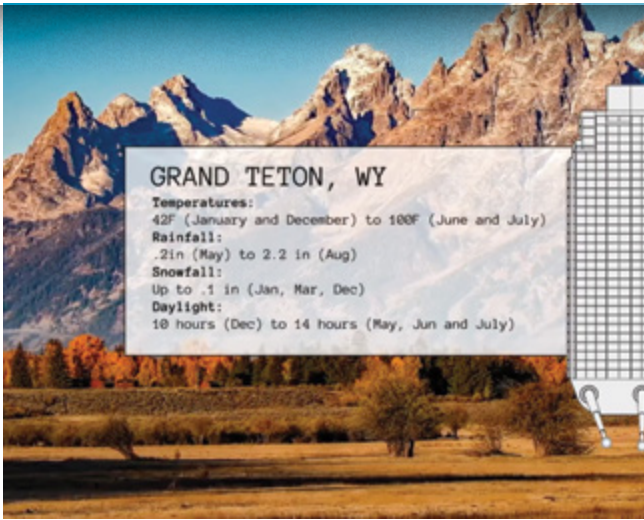




Min Soo Jeon, Roman Karki,  
William Rose, Dongxiao Yang,  
Elaine Yu



Ruonan Du, Seung Ho Shin,  
Jinghan Wang, Mingyue Zhang,  
Zixiao Zhu



The three options for WWR are 40%, 65%, and 80%.

We are selecting for the largest WWR, without significant cooling effects.

The differences in energy use and energy use intensity (EUI) were negligible between the three options.

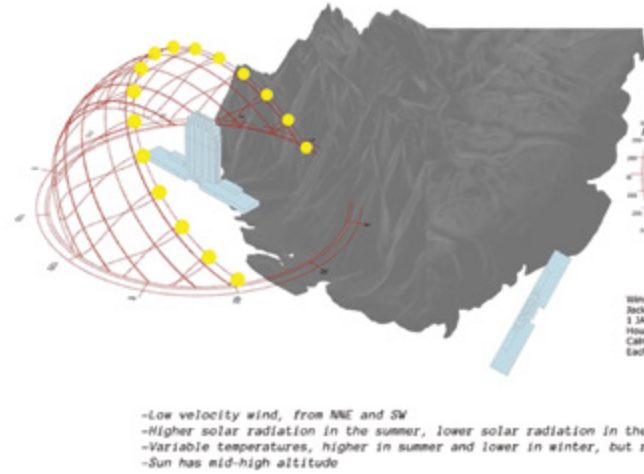


The three options for WWR are 40%, 65%, and 80%.

We are selecting for the largest WWR, without significant cooling effects.

The differences in energy use and energy use intensity (EUI) were negligible between the three options.

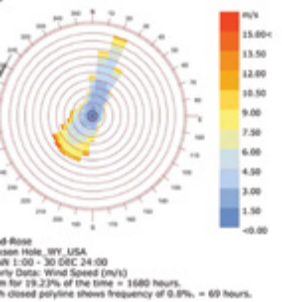
80% WWR is the best option to increase sunlight.



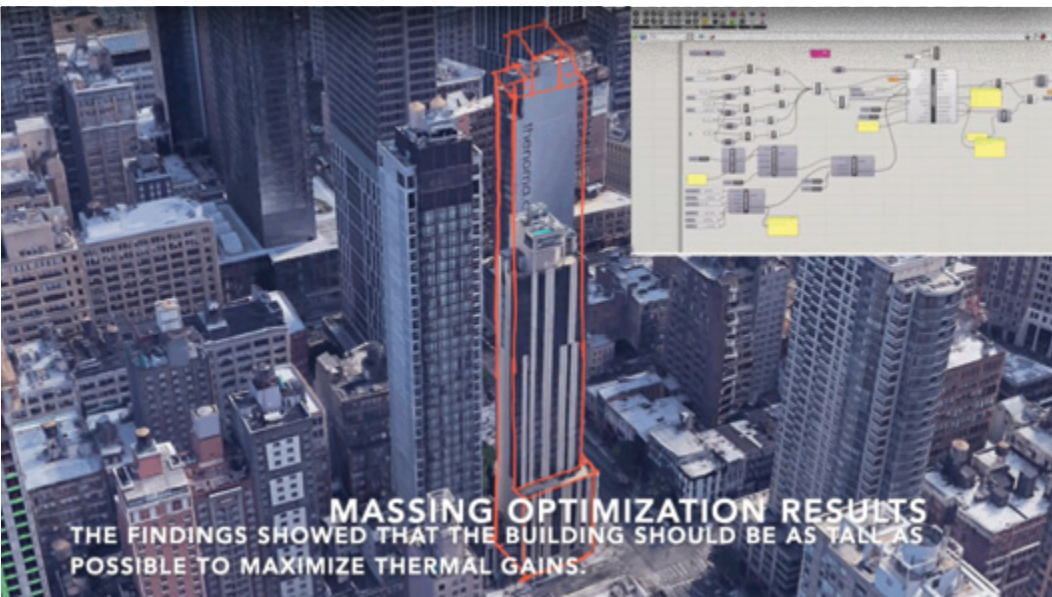
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Daniel Chang, Rebecca Faris

Lucas de Menezes Pereira,  
Khadija ann Tarver, Ali Ahmed

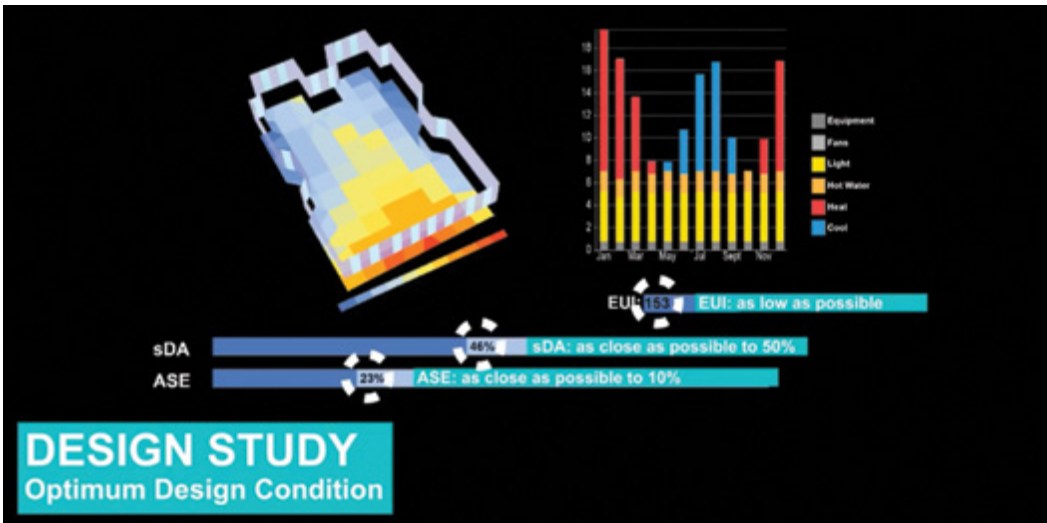




Winter  
relatively cold year round



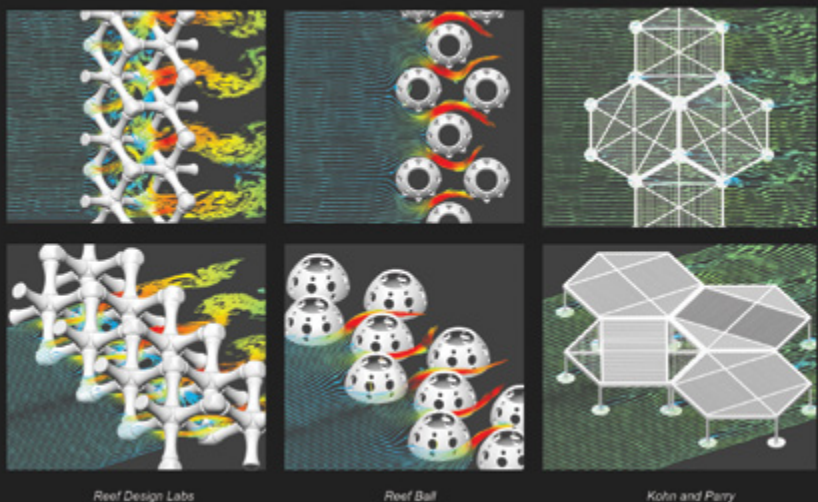
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Kortney Hinden



Stephen Zimmerer, Zoe Yueyue Su

<INDEPENDENT TECH RESEARCH> Lola Ben-Alon

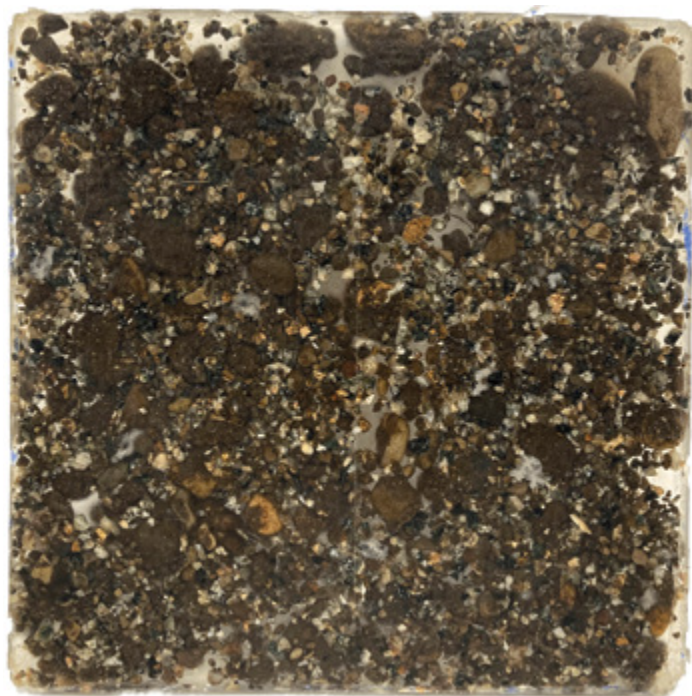
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Timlok Li



Jonathan Foy



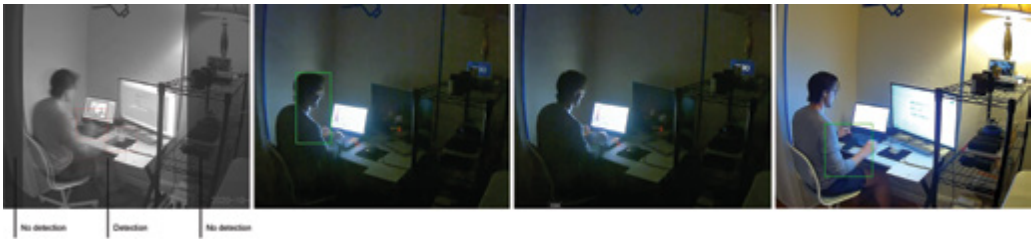
Rahul Gupta



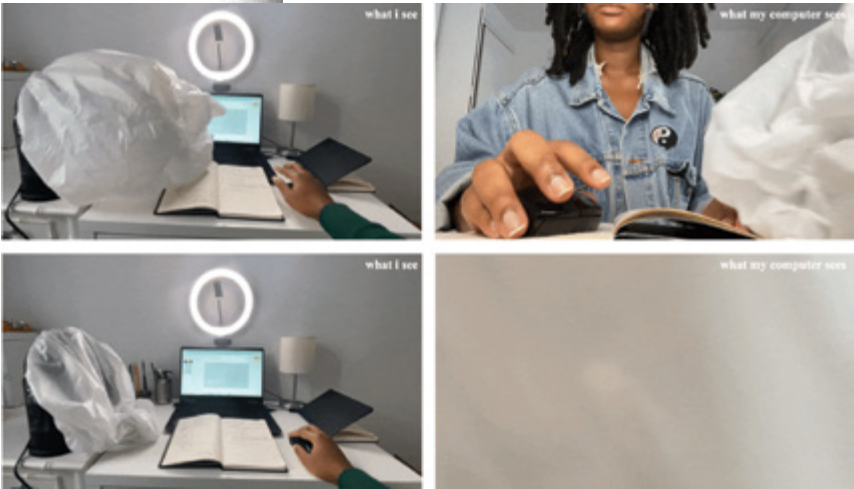


<MEASURING THE GREAT INDOOR> Gabrielle Brainard, Violet Whitney

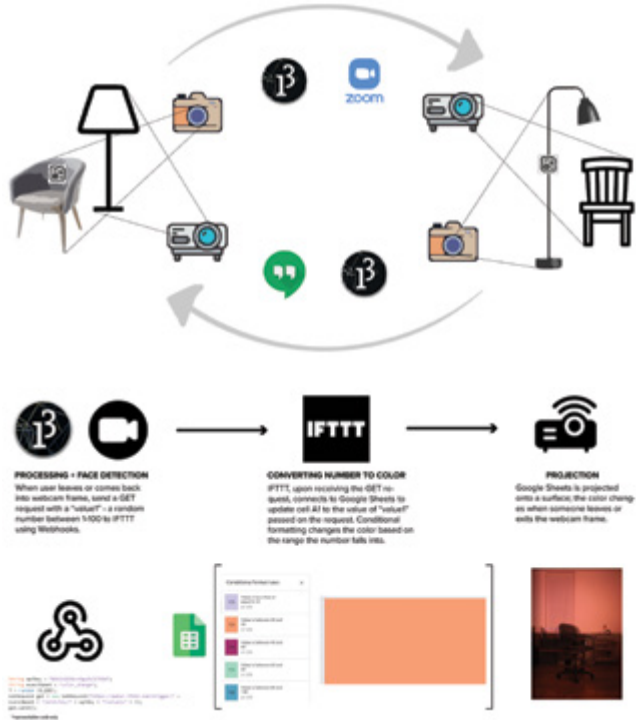
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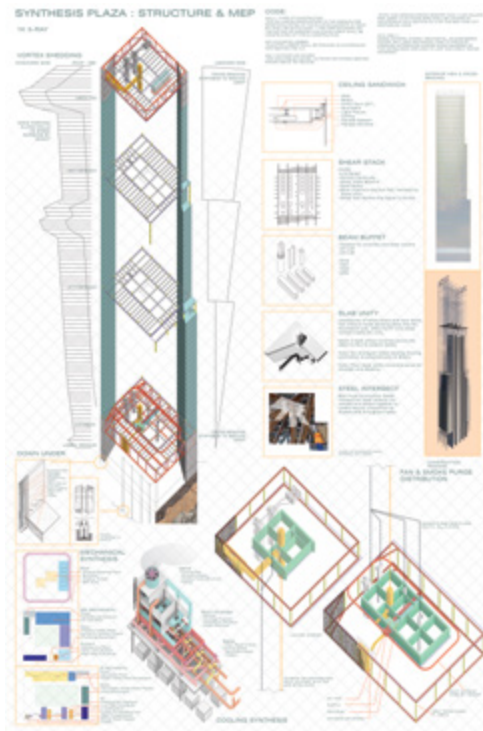
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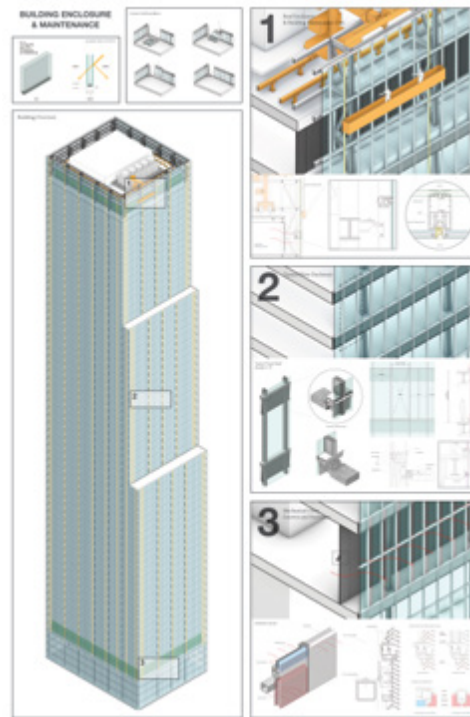
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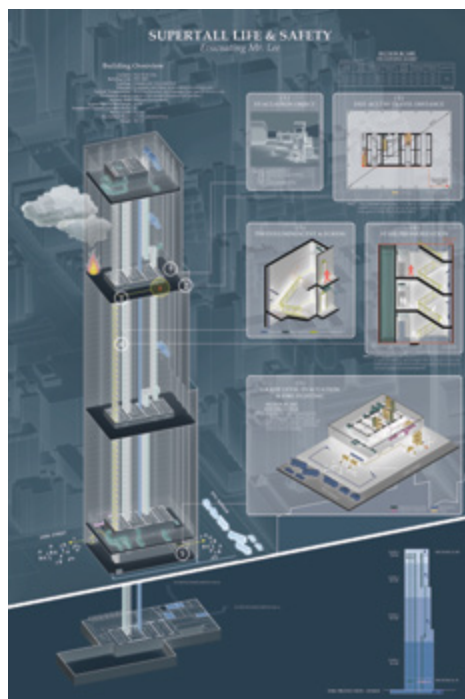
<SUPER-TALL> Nicole Dosso



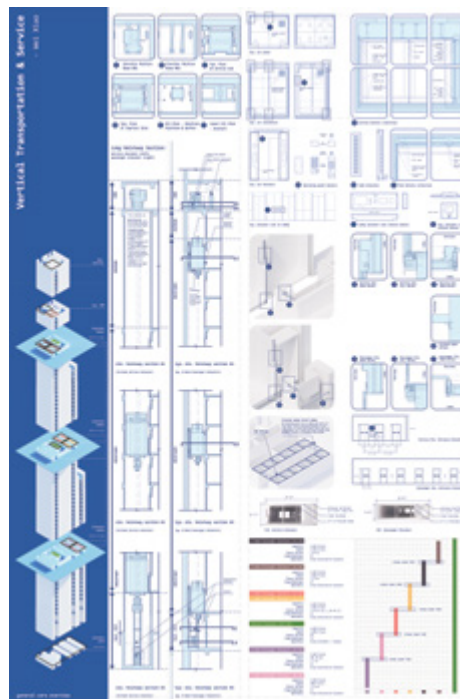
Brian Turner



Hao Zhong



Keon Hee Lee

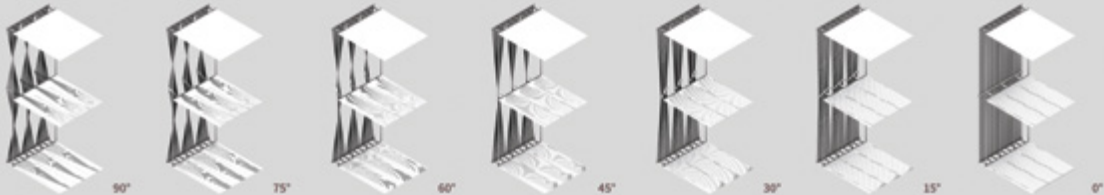
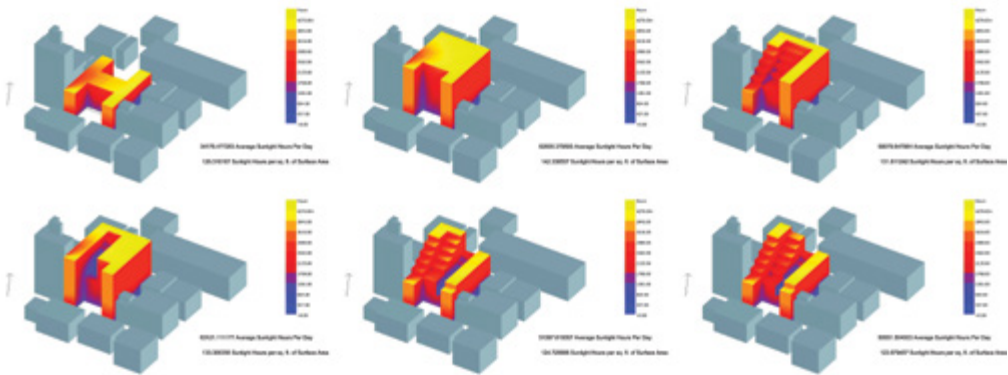


Wei Xiao



<RE-THINKING BIM> Jared Friedman

Sky Zhang



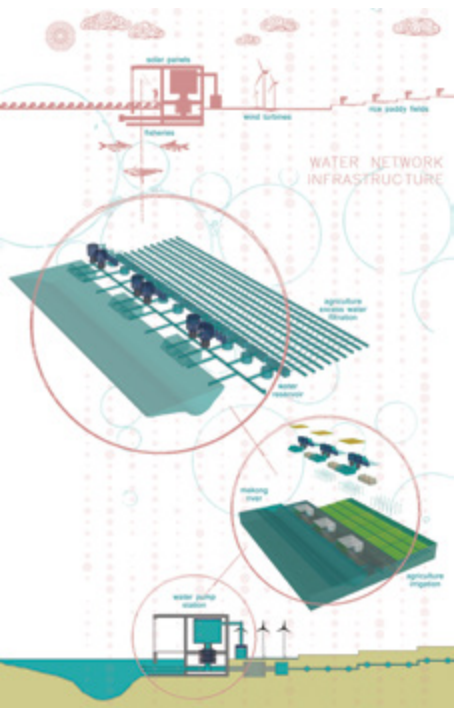
Xinran Amber Shen,  
Maxwell Chen

Xuanyi Chen,  
Yi Liang



<MAN, MACHINE, AND THE INDUSTRIAL LANDSCAPE: RE-IMAGING THE RELATIONSHIP BETWEEN INDUSTRIAL AND PUBLIC TERRITORIES> Sean Gallagher

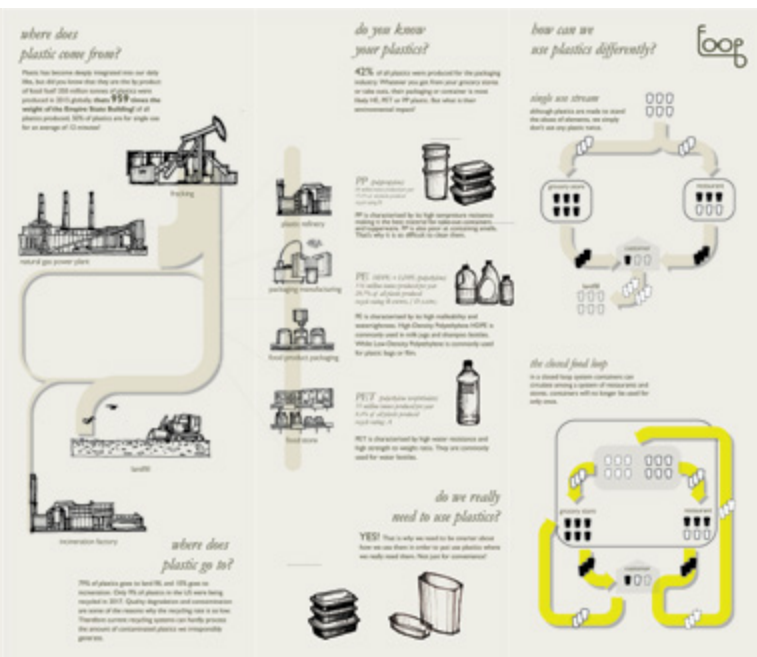
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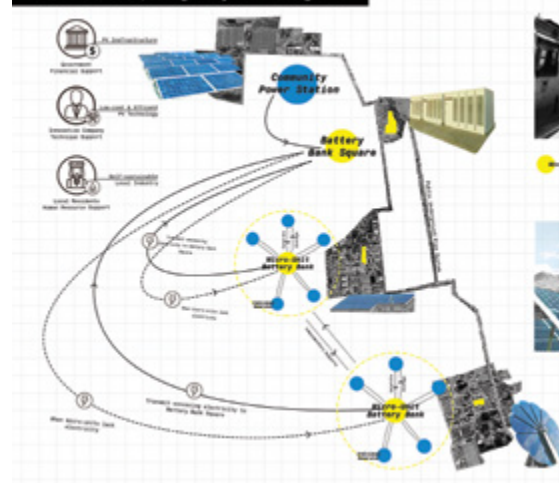
Joel McCullough



Thom Chiu



Re-calibration/ Off-grid System in Shigatse



Yuehui Du



<THE OUTSIDE-IN SEMINAR> Laurie Hawkinson, Galia Solomonoff



<TRANSITIONAL GEOMETRIES> Joshua Jordan

Joel McCullough



Alice Fang



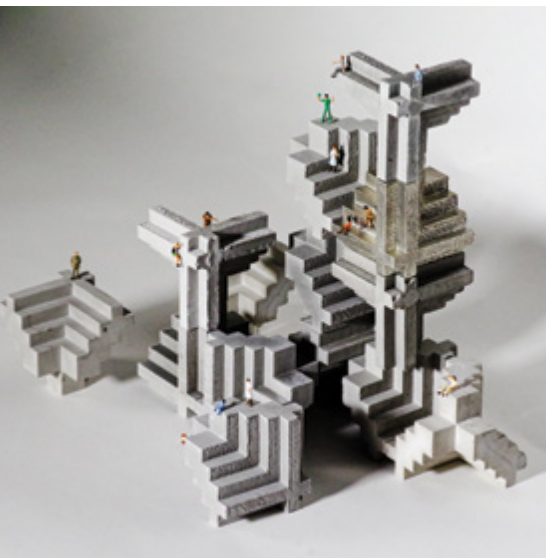
Adeline Chum



Rory Macfarlane



Angel Castillo



Geneveive Mateyko





<TENSILE/COMPRESSION SURFACES IN ARCHITECTURE: TACTILE METHODS FOR ARCHITECTS>  
Robert Marino

Isabella Bartenstein



Yirmiyahu Gilbert



Jacqueline Pothier

Zach Bundy



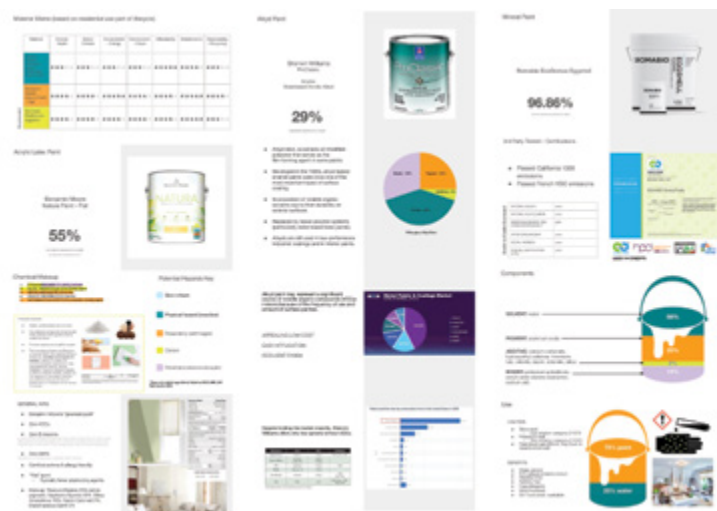
## &lt;HEALTHY BUILDING MATERIALS&gt; Catherine Murphy



Gizem Karagoz,  
Mark-Henry Decrausaz,  
Reem Makkawi



Michael Kolodesh,  
Minghan Lin, Lu Liu

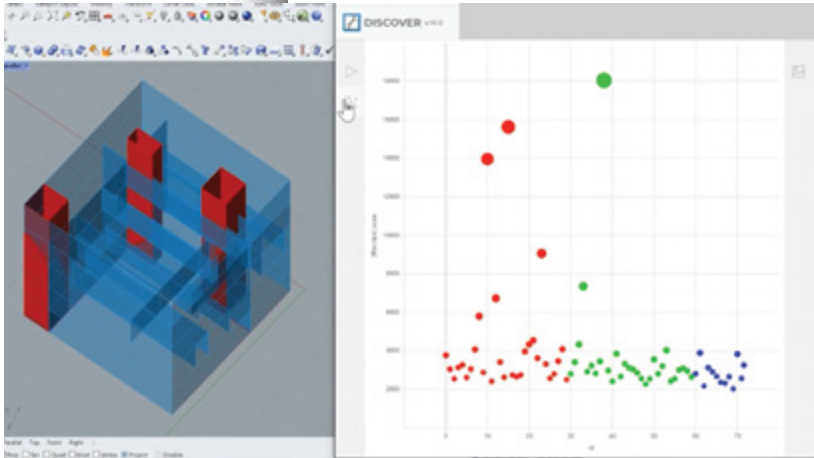
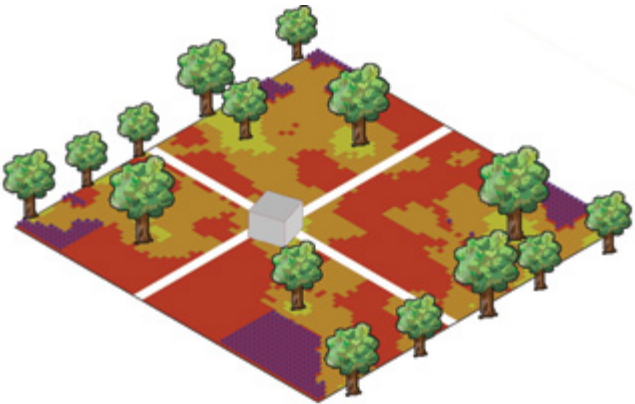


Skylar Royal,  
Sierra Heckman,  
Anirudh Chandar

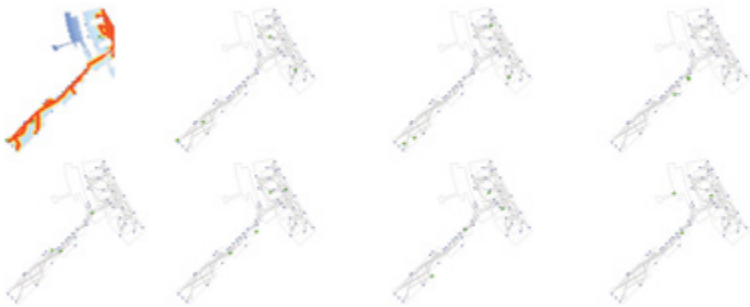


<GENERATIVE DESIGN I> Danil Nagy

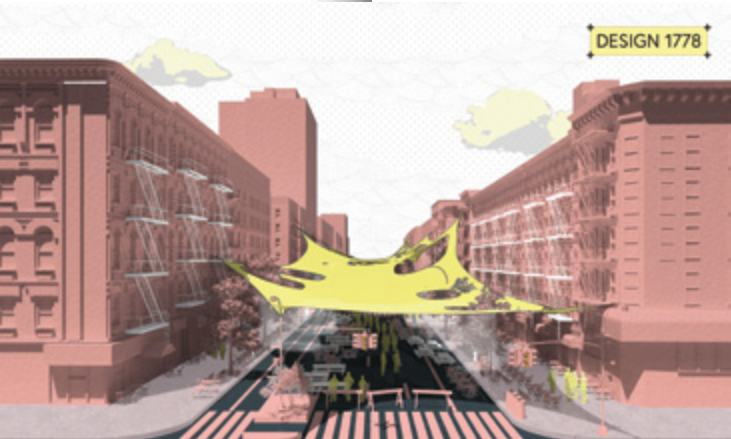
Benjamin Diller-Schatz,  
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Yuchen Qiu, Yueyang Wang



Brian Turner, Chia Jung Wen,  
Daniel Vanderhorst,  
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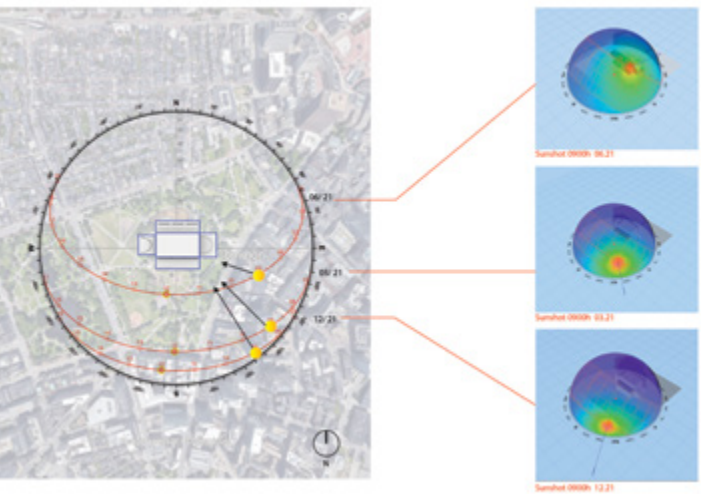
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Luis Miguel Pizano, Mike Kolodesh,  
Rasam Aminzadeh



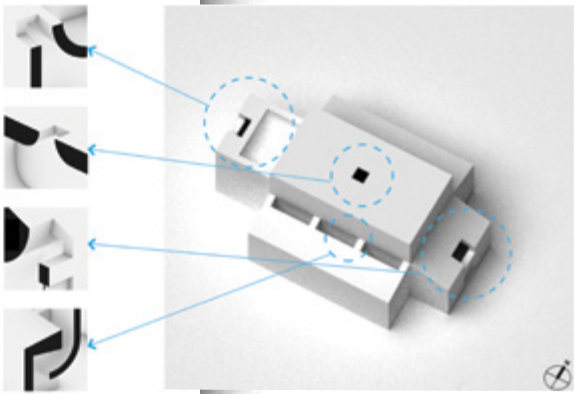
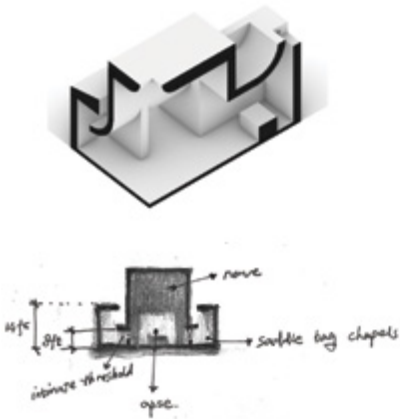
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Jules Kleitman, Mickaella  
Pharaon, Ryan Hansen

<ARCHITECTURAL DAYLIGHTING> Davidson Norris

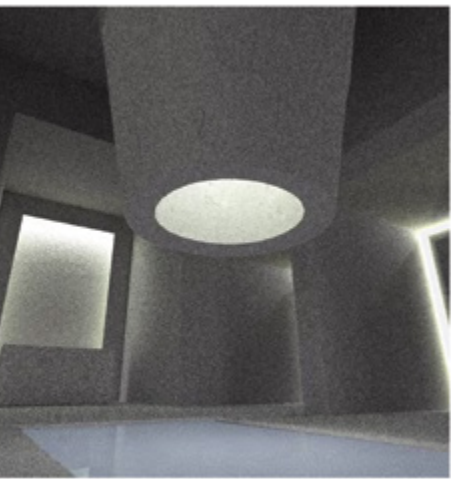
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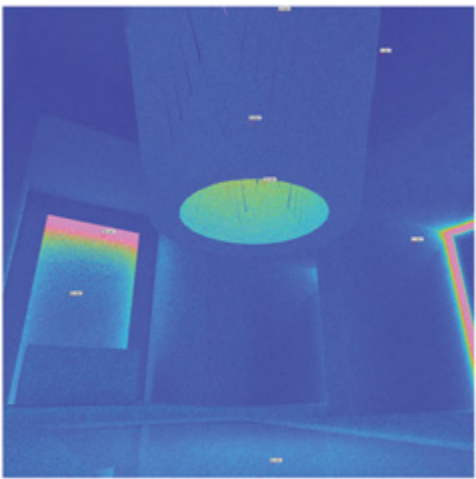
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Samuel Bader



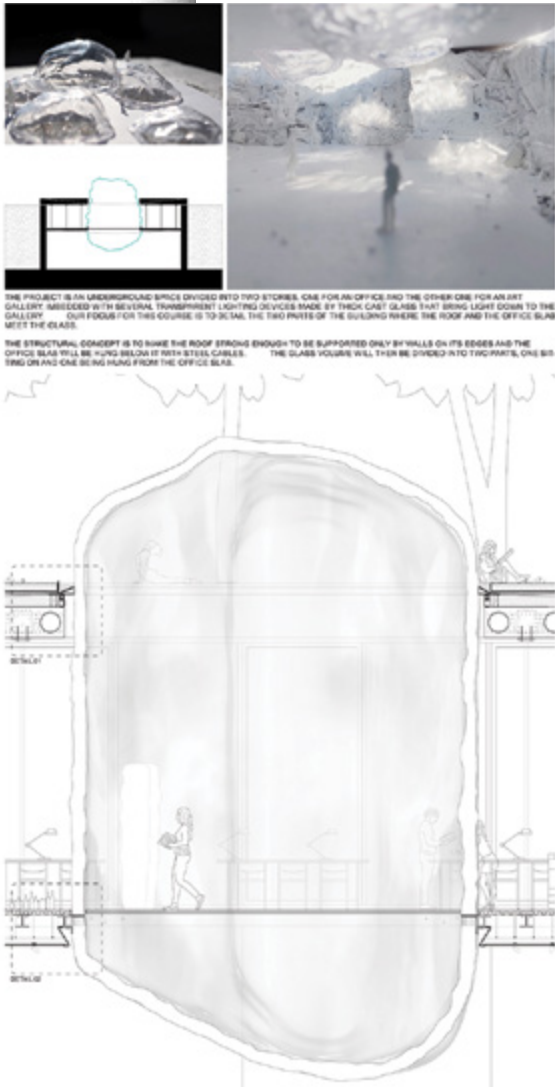
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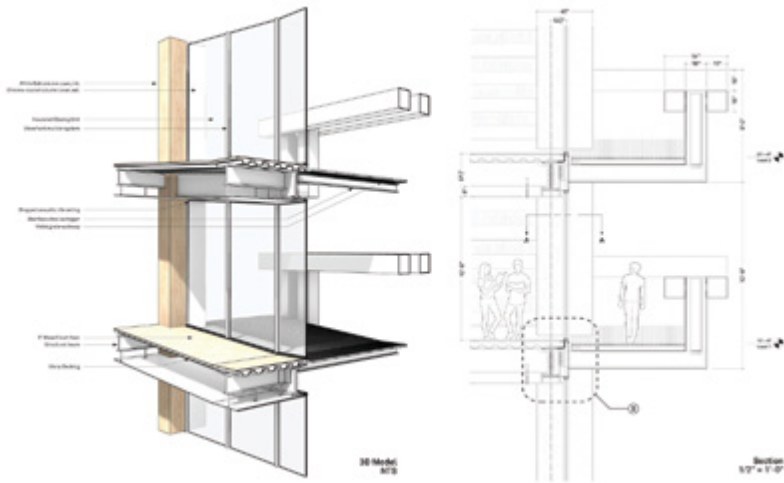


<FAÇADE DETAILING: A MATERIAL UNDERSTANDING> Kevin Schorn

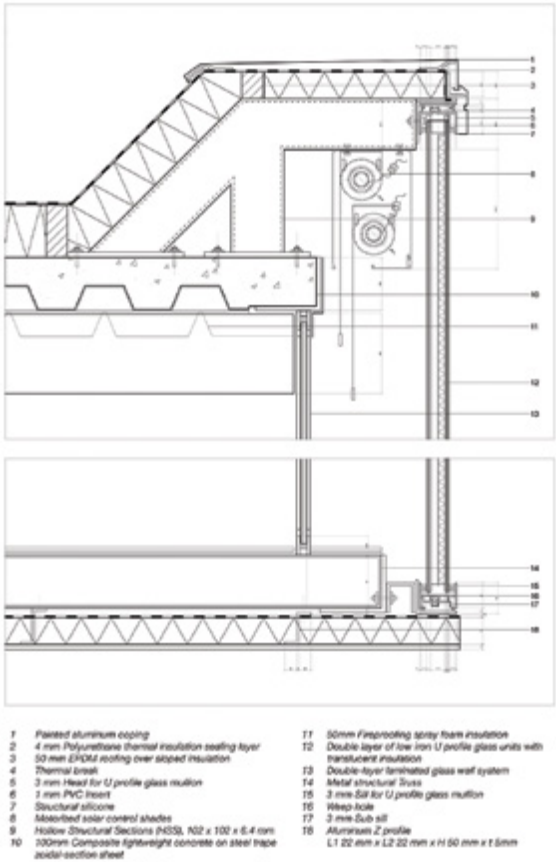
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Cris Liu



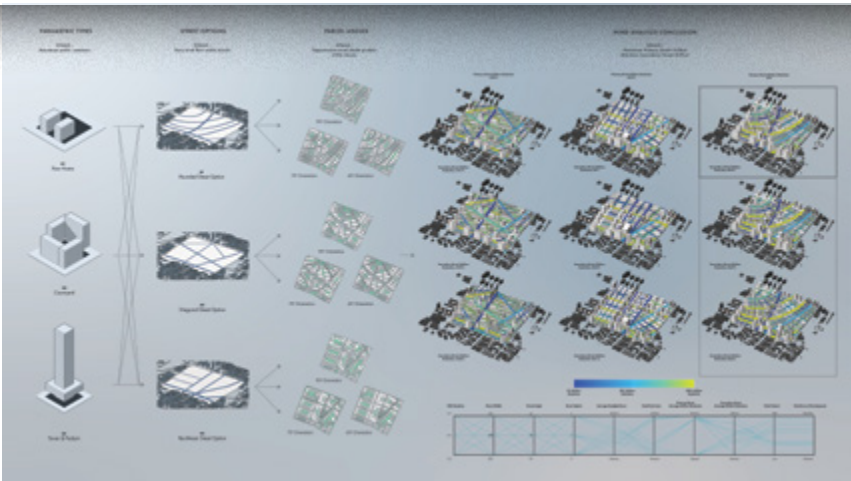
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Genevieve Mateyko



Sumi Li, Eunjin Yoo



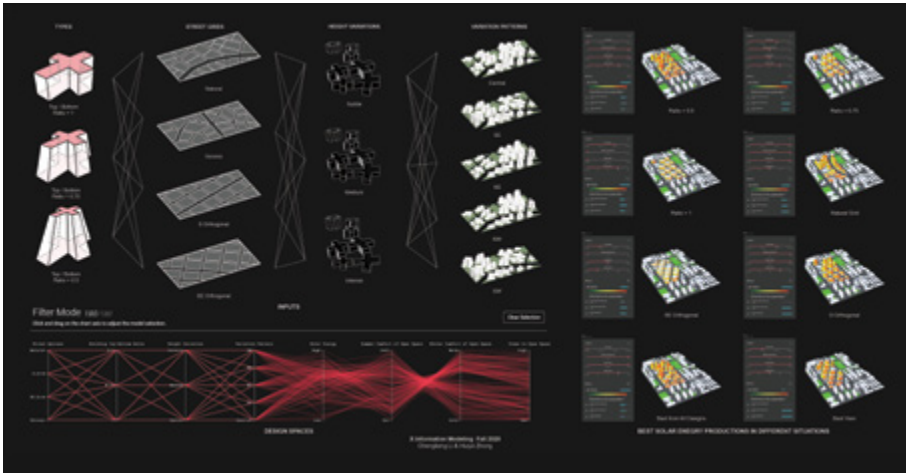
<X INFORMATION MODELING I> Luc Wilson, Snoweria Zhang



Anirudh Chandar, Camila Nunez,  
Luis Miguel Pizano

Cheng Ju Lee, Jonathan Chester

Chengliang Li, Huiya Zhong

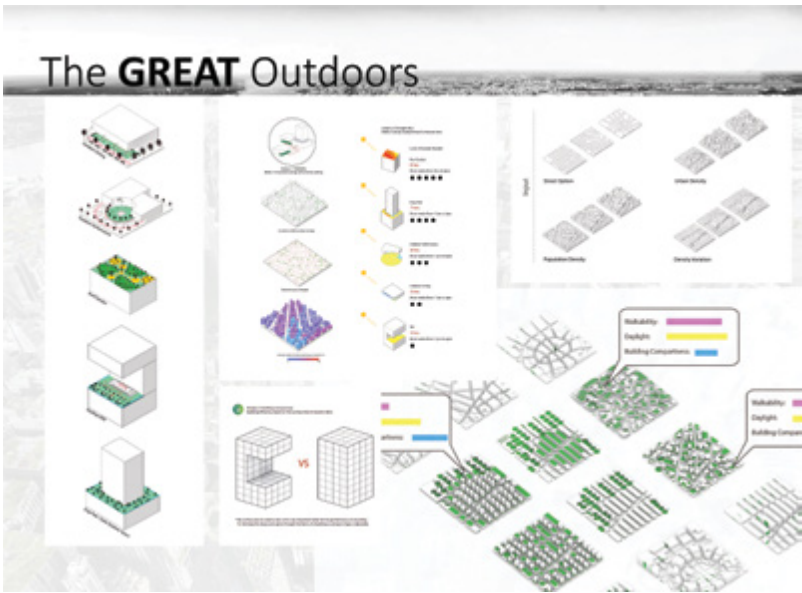






Zach Bundy, Abhinav Gupta

Chen Yuan, Ziang Tang,  
Xian Wu, Jiajie Zhao







## *History and Theory*

### Reinhold Martin, Sequence Director

The History and Theory of Architecture curriculum at Columbia GSAPP aims to develop a critical, historical consciousness among students preparing for diverse forms of architectural practice. Central to this is a worldly understanding, in depth and in breadth, of a complex cultural, social, ecological, and technological past. The bearing of that past on contemporary debates and practices is an important focus, as is the relation of architectural history to other disciplines. From the outset, the curriculum equips students with questions suited to ongoing inquiry into “global” or planetary history, with an emphasis on both continuity and change.

The process of critical inquiry begins in the first year, with the two-semester core sequence, “Questions in Architectural History,” focused on the interaction of architecture and modernity across two centuries and taught by a group of senior history and theory faculty. In addition to introducing students to key examples, themes, and relationships, the course asks whose history is being studied, how, and why. The sequence continues into the second and third years with a series of distribution requirements that allow students to pursue selected topics in greater depth, while ensuring exposure to a range of geographically, culturally, and historically diverse contexts and subject matter. Students may also take related courses in humanities departments across the University to meet or supplement these requirements.

## &lt;QUESTIONS IN ARCHITECTURAL HISTORY I AND II&gt;

[Fall 2020] Lucia Allais, Reinhold Martin, Mabel O. Wilson

[Fall 2020] Mark Wigley, Felicity Scott, Ateya Khorakiwala

This two-semester introductory course is organized around selected questions and problems that have, over the course of the past two centuries, helped to define architecture's modernity. The course treats the history of architectural modernity as a contested, geographically and culturally uncertain category, for which periodization is both necessary and contingent. The fall semester begins with the apotheosis of the European Enlightenment and the early phases of the industrial revolution in the late 18th century. From there, it proceeds in a rough chronology through the "long" 19th century. Developments in Europe and North America are situated in relation to worldwide processes including trade, imperialism, nationalism, and industrialization. Sequentially, the course considers specific questions and problems that form around differences that are also connections, antitheses that are also interdependencies, and conflicts that are also alliances. The resulting tensions animated architectural discourse and practice throughout the period, and continue to shape our present.

## &lt;ARCHITECTURE'S EMPIRE: A GLOBAL ATLAS OF MODERN ARCHITECTURE&gt;

[Spring 2021] Lucia Allais

This course investigates the historical and geographic interconnections between the global triumph of modern architecture and the dissolution of the European colonial system after 1919. If the spread of modernism coincided with the demise of colonialism, what new connections did modern architects help create to replace old imperial networks? In the wake of World War I and throughout the massive geopolitical reorganization that followed, what kinds of ruptures did architecture enable, and what continuities did it help sustain? Can we hypothesize, with Frederic Cooper, that like many other agents of supposed global modernity, modern architects in the 20th Century owed their success abroad in part to their ability to "think like an empire"?

## &lt;MATERIALS, MATERIALITY, MATERIALISMS: TECHNICAL LESSONS FROM THE HISTORY OF ARCHITECTURE, ART, AND MEDIA&gt;

[Spring 2021] Lucia Allais

This course revisits episodes in the history of materialist thinking in the West, with particular attention to theories since Aristotle that have leveraged empirical discoveries about the physical world to undermine idealist conceptions of architecture, art, and science. Our main assumption is that physical "matter" must be transformed to become useful human "material," and that materialisms emerge when these transformations are discussed, visualized, and formalized. Our focus is on architecture and the building stuff it requires.



## &lt;HOUSING AFTER SCARCITY: POLICY, ENERGY, SETTLEMENT&gt;

[Spring 2021] Michael Bell

The seminar traces histories of scarcity and how scarcity is constructed and sustained over nearly a century of U.S. housing policy. From 19th century poor houses to federal/state/city public housing; to mortgage-backed private housing and mobility. We use themes of scarcity and its manifestation in housing to investigate if renewable energy portends a future where scarcity is made untenable by the very consistency of solar and other forms of renewable energy.

## &lt;EPHEMERAL ARCHITECTURE AND FALSIFIED CITIES: UTOPIAN VISIONS FOR LATIN AMERICA&gt;

[Fall 2020] Luis E. Carranza

This research seminar sets out to study utopias/utopian communities conceived and planned throughout Latin America primarily in the 19th and 20th centuries. We look in depth at the different forms proposed, the manifestos of their designers, and the context that engendered them and to which they responded including Faustino Sarmiento's Argirópolis, the Estridentistas' Estridentopolis, José Vasconcelos' Universo Polis, Dr. Atl's Olinka, Francisco Mujica's Neo-American City, Sergio Bernardes' Rio de Janeiro of the Future, Valparaíso's Ciudad Abierta, Amancio Williams' Ciudad en el Espacio, Albert C. Owen's Topolobampo, and others.

## &lt;(UN) MODERN: EX-CENTRIC LATIN@/X SPATIAL PRACTICES&gt;

[Spring 2021] Luis Carranza

The focus of this seminar is to investigate and interrogate the production of architecture and space associated with the Latin@/x community in the U.S. For this, we reconsider the impact and reach of works, ideas, and movements in Latin America to the development of new critical practices centered on the complex understandings of identity, history, and culture within North America. Discussions center on the intersections between race and ethnicity as drivers and definers of society as well as on the complex negotiations-transcultural, de/reterritorialized, hybrid, and antropofagistic-of "peripheral" practices with the canon, the "centric," or "normative," in their theorized and built forms.

## &lt;TRADITIONAL AMERICAN ARCHITECTURE&gt;

[Fall 2020] Andrew Dolkart

This class explores the architecture of the U.S. from the first buildings erected by Europeans in the early 17th century through the architecture of the late 19th century. We examine the iconic architectural monuments erected during this period, ranging from surviving colonial homes to the works of amateur and professional architects such as Peter Harrison, Charles Bulfinch, Thomas Jefferson, Benjamin Henry Latrobe, John Mills, A. J. Davis, Richard Upjohn, Frank Furness, and Henry Hobson Richardson. We also explore lesser-known and vernacular buildings and the spread of architectural ideas from centers of innovation into small towns and rural landscapes. We review the evolving forms and styles of architecture and forces behind developments in

American design, discussing the impact of the ideas of such designers and theoreticians as Frederick Law Olmsted, Andrew Jackson Downing, and Richard Morris Hunt.

<A TALE OF TWO CITIES: NYC AND JOHANNESBURG>

[Spring 2021] Ifeoma Ebo

Historical narratives embedded in American and South African urban infrastructure and policy have served to both segregate communities of color and engender within them an identity of invisibility. That the legacies of racism continue to structure and inform the built environment of global cities is a gaping wound that can only be healed through urban alchemy—the reparation or reconstruction of the intentional, codified ways in which the urban landscape has been used to promote the subjugation of people based on their race. This seminar focuses on the critical analysis of the architecture and urbanism of NYC and Johannesburg through the lens of values and principles for Design Justice. The course also explores Black empowerment movements and their manifestation in art, architecture, and shaping of the urban experience.

<ARAB MODERNISM(S): EXPERIMENTS IN HOUSING, 1945-PRESENT>

[Spring 2021] Yasser Elsheshtawy

The seminar is not intended to be a survey of housing in the region. Rather a set of representative cities have been selected following a classification that groups cities into two broad categories: established/old cities (Cairo, Algiers) and emerging cities (Kuwait; Dubai/ Abu Dhabi). Arguably such a division can seem simplistic but it is useful for analytic purposes. Overall, the seminar aims at enabling a nuanced understanding of Arab cities—i.e. a comprehension that there were multiple forms of modernisms; appreciating the extent to which housing remains a salient issue impacting policy and urban development across the Arab world.

<DARK SPACE: ARCHITECTURE REPRESENTATION AND BLACK IDENTITY>

[Spring 2021] Mario Gooden

The seminar examines the spaces of exclusion of Black and African American histories from architectural discourse and the ways in which modernist architecture participates in racial hierarchies in terms of representation. Furthermore, the seminar recovers the narratives of Black subjectivity and African American architectural production with regards to architectural theory to reveal liberation is a spatial practice.

<HISTORIES OF AMERICAN CITIES>

[Spring 2021] Jennifer Gray

This course surveys urbanism in the U.S. from the colonial era to the present. During these years, industrialization, urbanization, and mass migrations, all fueled by an expanding market economy, transformed the built environment. We learn about ambitious urban plans, exceptional architects, and iconic buildings, but also about everyday spaces, such



as shopping malls, suburbs, and highways. Questions about race, gender, inequality, and militarism as they relate to urban space are explored. We unpack the meaning of terms such as modernism, democracy, and American and consider them in a global context, especially the geopolitical relationship between North and South America. We also engage topics in critical preservation, such as ecological conservation and curatorial practices.

<ADVANCED PROFESSIONAL PRACTICE>

[Spring 2021] Robert Herrmann

The class investigates a range of design, legal, and construction problems. A number of the classes involve students assuming the roles of the various parties involved in the construction process.

<ARCHITECTURE AND DEVELOPMENT>

[Fall 2020] Ateya Khorakiwala

This course considers the political economy of the post-WW2 Global South to investigate the landscapes and built environments transformed by new governmental projects of demographics, statistics, and logistics and by the crisis of subjectivity engendered by technocratic ideas of modernization. What were the effects of these theories on land tenure, infrastructure, housing, institution building, and village and town planning? Who were the experts who determined policy in new nation-states? And how did architects enter into this crowded fray to remake their field?

<FEASTING AND FASTING>

[Fall 2020] Ateya Khorakiwala

This course considers the bodily politics and the body politic that resulted from regimes of eating in colonial and postcolonial worlds. How did “taste,” both gustatory and aesthetic, shape networks of empire? And how do these colonial and imperial networks continue to drive architectural and urban form today? Ranging from the kitchen to the street, the field to the abattoir, we discuss the various ways in which ideas of consumption shape bodies and commodities. We read, among other things, cookbooks written by women living in slums and how they dovetail into art festivals and the histories of sugar and their plantations and how this commodity came to saturate our public spaces and lives. Lastly, each week, we look at art and architectural practices that have playfully and perversely taken food as their subject.

<CONFLICT URBANISM>

[Spring 2021] Laura Kurgan

This seminar looks at the ways in which cities have long been arenas of friction, difference, and dissidence, as well as the ways in which their irreducibly conflictual character manifests itself in everything from neighborhood borders, to differences of opinion and status, to ordinary encounters on the street. Student work takes place through a single city or by comparing a series of cities. They examine the role conflicts of all sorts play in the making and remaking of cities

around the world. Conflicts can (and should) be investigated with maps and data, but they often turn out to be propelled or propagated by them as well. Bringing humanistic inquiry together with spatial data and basic mapping techniques allow us to produce powerful representations as well as challenge conventional narratives of cities and conflict today. Cities are “seen” through a number of lenses including mass incarceration, infrapolitics, urbanization of war, language ecology, migration (political, economic, and climate), debt, algorithms, and surveillance.

#### <CHINA 1368-1912: SHIFTING STRUCTURES OF THE MING AND QING>

[Fall 2020] Amy Lelyveld

This seminar proposes to investigate experiments in Chinese building run across China’s last two dynasties—the Ming(1368-1644) and Qing(1644-1912). Students mine this long span of time ending in the 20th century for the distinct mindsets and innovations of each dynasty, how they were reimagining, representing, and radicalizing Chinese architecture and China itself.

#### <GREATS: CHINA’S BIG PROJECTS 1949-1980>

[Spring 2021] Amy Lelyveld

This course focuses on the large-scale experiments in new Chinese building run under the gaze of Mao Zedong from the decade preceding the 1949 inauguration of the People’s Republic of China through Mao’s death in 1976. Over this roughly 40-year time span, many sites and fundamental notions of daily life—language, expression, family, education, countryside, and city—were redefined and radically tested. The mass campaigns used to inculcate such new conceptions represented often sharply distinct—sometimes opposed—mindsets but through all of them, fundamental Chinese “sites” and the structure of China itself were starkly reimagined.

#### <METROPOLITAN SUBLIMES>

[Fall 2020] Sandro Marpillero

This seminar uses the process of formation of New York as a metropolis in relation to the development of the Hudson Valley, to explore the persistence of the aesthetic category of the Sublime, as addressed by Francois Lyotard. Through analysis of readings and artworks, we trace the evolution of the sublime from philosophy to the Hudson River School of painting, whose representation of landscape and technology played a significant role in establishing the city’s rhetorical constructs and focus on architectural super-objects. The goal is to reconceive architecture not so much for its inevitable consistency as a built object, but as an environmental apparatus operating at multiple scales through the engagement of a complex circuitry of actors, through the reciprocal exchanges between participants in an aesthetic experience and the multiplicity of techniques structuring that experience.



## &lt;ARCHITECTURE, ENGINEERING, AND POLITICAL ECOLOGY&gt;

[Fall 2020] Reinhold Martin

This course studies the political ecology of engineering design and architecture in the 20th century and into the present, in a comparative fashion using the methods of media history and theory. The public works paradigm central to the American New Deal (1933-1939)—with its sources in labor activism, economic planning, environmental management, and a biopolitics of race—is our baseline case. We follow that paradigm's fate across the Second World War, into the postwar decades, and through the end of the Cold War, tracking the rise and fall of the U.S. public sector as a planner and a patron by comparison with similar cases around the world. We also consider the consolidation during these years of an overwhelmingly white “professional managerial class” of which architecture and engineering were representative as a beneficiary of what has since been called the “wages of whiteness,” and a manager of economic growth and environmental risk.

## &lt;CLIMATE, TECHNOLOGY, AND SOCIETY&gt;

[Spring 2021] Reinhold Martin

This course locates that change at the intersection of nature, technology, and society. We take as our historical baseline the famous “Keeling curve,” begun by Charles Keeling in 1958, which charts the annual increase in atmospheric carbon dioxide. Correlating this sharp upward curve with other anthropogenic proxies, climate scientists sometimes refer to the period it covers as the Great Acceleration. This course uses the global built environment as one such proxy, considering what has changed and what has not during this period, to more clearly understand the corresponding crisis.

## &lt;POLITICS OF SPACE: CITIES, INSTITUTIONS, EVENTS&gt;

[Fall 2020] Mary McLeod

This seminar explores the relationship between space, power, and politics in the urban environment from the Enlightenment period to the present. In contrast to some Marxist approaches that see architecture primarily as an ideological reflection of dominant economic forces, this seminar investigates how power is actually produced and embodied in the physical environment. In other words, space and architecture are seen as active participants in the structuring of our daily lives and relations, not merely as passive reflections of political and economic institutions. Two theorists are critical to this exploration: the philosopher and sociologist Henri Lefebvre and the philosopher/historian Michael Foucault.

## &lt;RADICAL DOMESTICITIES&gt;

[Spring 2021] Mary McLeod

This class explores alternative visions of domestic life from the mid-19th century to the present in both literature and architecture. The phrase “radical domesticity” might seem like an oxymoron. Domesticity is often associated with sentimentality, coziness and

comfort—the antithesis of the word “radical” or even common understandings of the word “modernism.” However, there is a rich history of experiments and visions of alternative forms of living that challenge the stereotypes of home life. These challenges may be social or aesthetic, involve new models of collectivity or isolation; blur boundaries between private and public life; merge work and child care; and embrace—or reject—new technologies. They often enable different forms of intimacy and sexuality and are designed with that goal in mind.

#### <STRUCTURAL DARING AND THE SUBLIME IN PRE-MODERN ARCHITECTURE>

[Spring 2021] Rory O'Neill

Many works of pre-modern architecture are daring, poised at the very edge of structural stability. Others are well-supported but strive to give an illusion of precariousness or even of levitation. This seminar invites students to explore the sublime effects of precarious architecture through visual and literary representations, as well as simulation models that examine the dynamic behavior of ancient and medieval monuments. Discussion topics include the a priori and culturally specific aspects of daring architecture; the ancient and medieval sense of the sublime and aesthetics; environmental psychology; and strategies for reading architectural forms.

#### <RECOMBINANT RENAISSANCE>

[Fall 2020] Mark Rakatansky

Exploring the work of some of the most noted figures in Italian architecture in the 16th century, this course investigates the multiple combinative authorships—the various authors and authorities—at play in any given architectural figure and any of their works. We also take the occasion this semester to consider how so many of the most significant buildings, chapels, frescos, paintings, sculptures, urban reorganizations, and the development of new socially engaged institutions in Italy were initiated as creative responses to the many instances of pandemics in Italy through the centuries. Engaging the media of our own time, we explore new forms of investigation in the digital humanities, to which the digital visualization techniques of architecture can make a fundamental contribution by evolving beyond merely documenting a building to provide innovative modes of critical and historical analysis.

#### <MEDIA AS METHOD, PROGRAM AS POLITICS>

[Spring 2021] Mark Rakatansky

This seminar explores how architecture, its representation, and associated media have been interrelatedly engaged during crucial historical moments of cultural and political conflict. With regard to the crises of our own time, we find a range of such moments from the early-modern period of the fifteenth and sixteenth centuries to the eighteenth century: antagonisms between religious ideology and imagery, banking crises instigating transformations in institutional form, charges of “barbarism” and “civility” marshalled in colonial narratives



and their visualization, environmental debates regarding flood control, pandemics responses as forms of urban organization, prison reform, and social media utilized to develop distributed networks of propaganda.

#### <MILITARY URBANISM IN THE EARLY MODERN ERA>

[Fall 2020] Victoria Sanger

The technology of gunpowder artillery caused a military revolution in Early Modern Europe (ca. 1450–1800). Innovations in warfare created a new type of fortification, bastioned, more geometrical and solid, dense and efficient infrastructure and building typologies, and shifted and vastly expanded Europe's border networks. At the end of the course, students make spatial and philosophical comparisons with forms of current urban design, warfare, and surveillance, such as the use of drones and cyber warfare. Throughout, participants make trans-historical comparisons and discover how the past impacts the present while trying to understand the specific character of this period.

#### <OPEN WORK>

[Spring 2021] Enrique Walker

This seminar addresses the ways in which the architecture field theorized openness, from the 1960s to the 1980s, both as a design question about unfinished structures and a cross-disciplinary question about unstable content. The seminar is structured around a series of projects and buildings; each session interrogates a pair and scrutinizes the design questions they raised, the arguments they advanced, the critiques they entailed, the design techniques they mobilized, and the notions of authorship they implied. Ultimately, the seminar traces the trajectories of openness as a design question.

#### <SPECTACULAR PEDAGOGIES>

[Fall 2020] Mark Wasiuta

This seminar scrutinizes the state of contemporary visual learning, its history, and its evolution since the Second World War. With readings from architecture, media studies, pedagogical theory, and the history of science and technology, the seminar examines the evolution and formation of contemporary visual attention, the role of audiovisual instruction, and the educational undercurrent of postwar experimental media across a range of spatial and visual disciplines. Paying particular attention to the targeting of reading skills in the second world war and in the following decades, the seminar examines how audiovisual instruction was formulated as a response and a remedy to uneven education in America. Among other issues, the seminar assesses the terms and conditions through which audiovisual learning entered and influenced debates on class, race, structural poverty, and educational disenfranchisement. It also examines how a related media-infused, pedagogical paternalism manifest internationally.

## &lt;THE HISTORY OF ARCHITECTURE THEORY&gt;

[Fall 2020] Mark Wigley

Architecture emerges out of a passionate and unending debate. Every design involves theory. Indeed, architects talk as much as they draw. This class explores the way that theory is produced and deployed at every level of architectural discourse from formal written arguments to the seemingly casual discussions in the design studio. A series of case studies, from Vitruvius through to social media, from ancient treatises on parchment to flickering web pages and tweets, are used to show how the debate keeps adapting itself to new conditions while preserving some relentless obsessions. Architectural discourse is understood as a wide array of interlocking institutions, each of which has multiple histories and unique effects. How and why these various institutions were put in place is established and then their historical transformations up until the present are traced to see which claims about architecture have been preserved and which have changed.

## &lt;EXTREME DESIGN&gt;

[Fall 2020] Mark Wigley

This seminar recovers and explores the thinking and designs of the architects and artists who thought about the anti-architecture of TV, from Ivan Leonidov and Buckminster Fuller in the 1920s to Konrad Wachsmann, Cedric Price, Ugo de la Pietra, Francois Dallegret, Hans Hollein, Takes Zenetos, Archigram, Ant-Farm, Denise Scott-Brown and Robert Venturi in the '60s and '70s, along with artists like Dan Graham and Walter Pichler. The idea is to build up a kind of catalog of architectural thinking about TV over the last century to start thinking more precisely about the architecture we inhabit today.

## &lt;TOWARDS A TRANS-SPECIES ARCHITECTURE—RETHINKING LINA BO BARDI&gt;

[Spring 2021] Mark Wigley

This class considers the responsibility to resist normative assumptions about buildings. It treats architecture as trans-species hospitality where species includes humans, other animals, insects, plants, bacteria, and technologies. After the introduction, each session analyzes one or two Bo projects from the point of view of trans-species hospitality through intense investigation of all aspects of the design. The central focus is on building design but attention is also given to related aspects of Bo's writing, editing, drawing, curating, teaching, furniture, stage set, and exhibition design. The class is polemically traditional in its insistence on a single architect and on building design but the question of trans-species hospitality is understood to include and provoke post-binary and post-extractive considerations of gender, sexuality, race, class, slavery, and colonial settlement.



## &lt;EUROPEAN URBAN CARTOGRAPHY 16TH-19TH CENTURY&gt;

[Spring 2021] Victoria Sanger

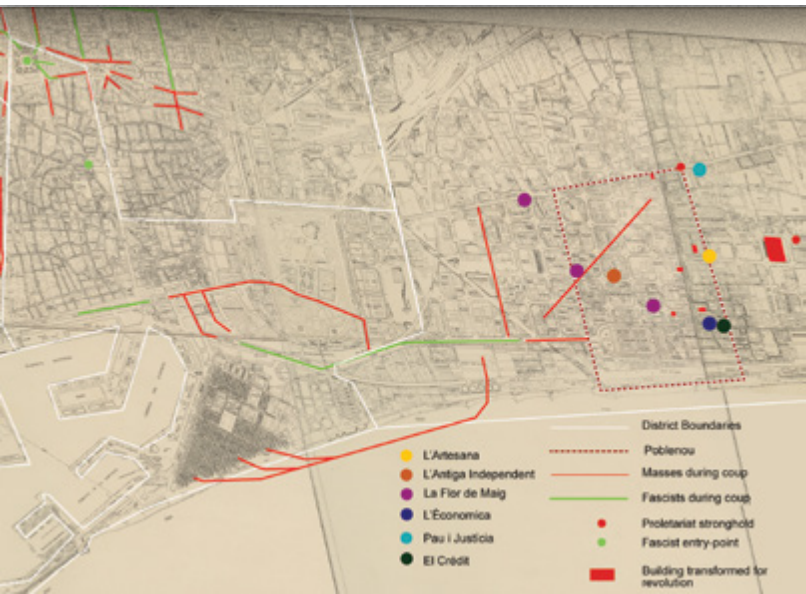
The 16th through the 19th century witnessed expansion and mechanization of cities and their maps evolving from the Age of Discovery and the invention of the printing press to the Industrial Revolution. Maps are not objective vehicles of data. They are tools combining planning, documenting, and governing while also being artistic and symbolic form in their own right. The first half of the semester covers different techniques of cartography and the major cartographers of the period across countries. The second half focuses on case study cities and their most famous maps (Rome, Paris, London, New York).

## &lt;ENVIRONMENTS OF GOVERNANCE&gt;

[Spring 2021] Felicity Scott

This seminar investigates discourses and techniques of environmental governance addressed to the so-called "Third World," those seeking to regulate not only economic production but spatial arrangements, social reproduction, and forms of subjectivity in the decades after World War II. It does so through interrogating the intersection and co-constitutive realms of architecture, media, and development aid. What role, we ask, did architects and other experts play not just in the design, construction and management of rural and urban environments but also in the emergence of a global governing apparatus during this historical moment, a period marked by the transition from late-colonial rule to neocolonial counterparts informed by legacies of violence? How were the discipline, profession, and discourse of architecture reconfigured during encounters with media platforms and development or modernization programs? How, that is, did architecture participate in and how was it conditioned by economic, techno-scientific, political, and geopolitical strategies operating in the service of capital, and attempting to institute systematized, rationalized, and regulated forms of life and of subjectivity throughout the Global South? What were some of the key sites, operations, institutions, epistemologies, communication strategies, and media-technical systems through which architecture came to do so?

<CONFLICT URBANISM> Laura Kurgan



Claire Goldberg

*Visualizing the History of Cooperativism in Barcelona's Poble Nou Neighborhood.*



Matthew Brubaker,  
Cameron Fullmer,  
Adela Locsin,  
Alek Tomich

*Infrapolitics of Waste in Five Cities of the Urban South.*  
Data: Google. (n.d.). [Map of Historic Tigra Territory]. Retrieved April 17, 2021. Overlay data from Native Land Digital.

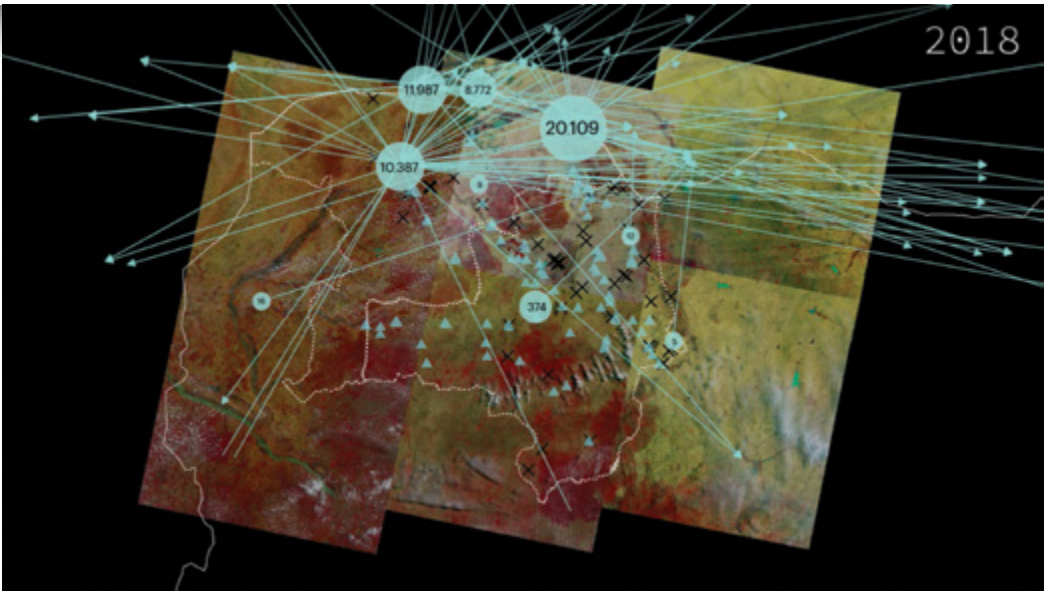
Johane Clermont,  
Juan Sebastián Moreno,  
Keneilwe Ramaphosa,  
Zeineb Sellami,  
Magdalena Valdevenito

*Infrapolitics of Waste in Five Cities of the Urban South.*



Sherry Aine C. Te,  
Zuzanna Jarzyńska,  
Andrea Molina

*Beyond the Origins and  
Destinations: Spatializing  
the issue of climate refugees:  
Case Study on Sokoto-Zamfara,  
North West Africa.*



BOGOTA

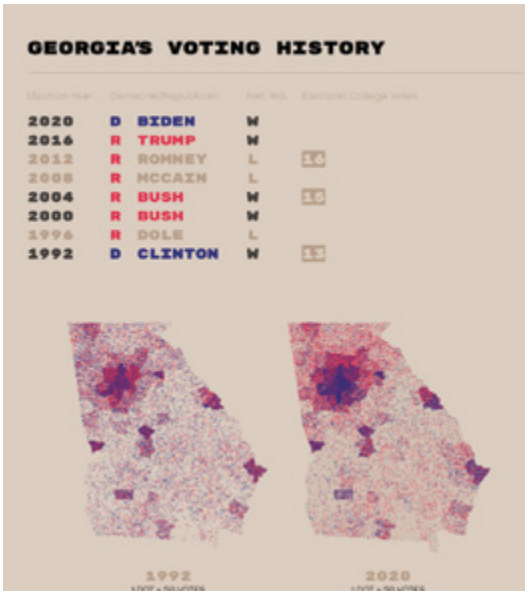
TUNIS



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Rousol Aribi,  
Will Cao,  
Ian Wach

*Black, White, Red, & Blue:  
Representing the Black  
Electorate of Georgia,  
After Dubois.*







# *Interdisciplinary*

## Amale Andraos, Dean

Today, we understand technology as constantly and rapidly changing. Recognizing the limitations of traditional track-based programs to keep pace with these changes and foster further exploration, curriculums at GSAPP are instead predicated on this evolution. They move towards hybridization, blurring the boundaries of each sequence and program to create new possibilities for intersections but also entirely new types and formats for teaching and learning. Informed by perspectives from different fields, these interdisciplinary studios and courses not only expand the space between the material, architectural, and urban scales but also invite an ongoing critical perspective—always pushing the boundaries of each curriculum and the nature of the curriculum itself to become something else. We might not know what the “else” is yet, but we can already begin to recognize it in the faculty syllabi and in the work of the students. These classes encourage this evolution as seeds for engaging the future.

## &lt;REIMAGINING THE INDUSTRIAL WATERFRONT: UTICA'S HARBOR POINT&gt;

[Spring 2021] Kate Ascher, Christoph Kumpusch

Students developed components of a vision for a new mixed-use community on a remediated 100-acre waterfront site located alongside the historic harbor in Utica, New York, a once-booming industrial city located 95 miles west of Albany. The client is the Harbor Point Development Corporation, an entity created by the government to facilitate development by issuing design guidelines, overseeing a competitive procurement process, and crafting the public-private partnership that will unlock value at this formerly industrial waterfront site. The students' work served as a foundation and inspiration for the development guidelines moving forward.

## &lt;JOINT ARCHITECTURE AND HISTORIC PRESERVATION STUDIO: RADICAL RE-CONSTRUCTION&gt;

[Fall 2020] Jorge Otero-Pailos, Mark Rakatansky

This studio, "Radical Re-construction: Materializing Social Justice at the Estate of John Jay, a Founder of American Democracy," proposed the design of a new interpretative education center, and a series of re-constructions of missing buildings associated with under-represented narratives at the John Jay Heritage site, engaging the crucial need today to expose and materialize the space of political, psychological, and social exclusions and inclusions at the root of the foundations of American democracy. The architectural and preservation question of the studio was how to materialize the matter of these entangled lives in their complex historical and current interrelations—how to reconstruct what is hidden or under-represented.

## &lt;JOINT ARCHITECTURE AND URBAN PLANNING STUDIO: CARIBBEAN RECONNECTIONS&gt;

[Spring 2021] Richard Plunz, Douglas Woodward

Building on the work of previous studios and courses on Culebra and Vieques and the relationships developed over time with the local communities, the studio "Caribbean Reconnections: From Plan to Implementation in Puerto Rico" used the interdisciplinary approach of the joint studio format to develop designs and planning strategies in response to issues of food, energy, and water sovereignty, waste disposal, resiliency, disaster management, education, job creation, and public space, among others. A particular focus was on water as the nexus for the above issues. The studio also focused on implementation considerations for both this current studio's plans as well as projects developed previously, in close collaboration with our principal client, the Mujeres de Islas in Culebra.

## &lt;METHODS IN SPATIAL RESEARCH&gt;

[Spring 2021] Dare Brawley

This course introduces the critical use of geographic information systems (GIS) and spatial methods for urban humanities research. Students explore a range of approaches for creating and manipulating spatial data with a focus on the forms of authorship, design, subjectivity embedded in spatial data, and its uses. In a series of one-week assignments students creatively repurpose existing spatial datasets,



collect data about a spatial phenomenon in their everyday surroundings, selectively digitize historical maps to produce alternative narratives, map change over time with Landsat satellite imagery, and use aerial photographs to tell a story through repetition.

<MAPPING FOR ARCHITECTURE URBANISM AND HUMANITIES>

[Spring 2021] Emily Fuhrman

This hybrid theory/practice course introduces critical mapping discourse and geographic information systems tools. Of particular interest to humanities students, it examines both historical and contemporary questions about the technology of mapping. Additionally, through the use of open-source GIS software (QGIS), browser-based technologies (Mapbox), and open data (OpenStreetMap), students learn how to critically use mapping tools and geographic data for spatial analysis and representation. Each class has two parts: in the first half of each meeting we will discuss weekly readings, while the second half serves as a flipped-classroom to address technical and conceptual issues arising from take-home GIS tutorials. The final weeks of the semester are devoted to developing students' critical cartographic research.

<ARCHITECTURE APROPOS ART>

[Fall 2020, Spring 2021] Steven Holl, Dimitra Tsachrelia

"The End of Painting" predicted by many at the center of the movement of conceptual art in the 1960s and 1970s was perhaps the last gasp of a grand narrative for the art of our time. The development of painting continues today in strong works by Brice Marden, Gary Stephan, and Susan Francon, to name a few. Likewise, the field of sculpture has developed new territory in work by Carol Bove, Olafur Eliasson, and Oscar Tuazon; while video art and performance art grow from their dimensions. In terms of growth, the blurry territory between art and architecture is particularly exciting today. As part of the seminar, historic examples and recently built museums and art schools are presented in deep detail.

<POINTS UNKNOWN: CARTOGRAPHIC NARRATIVES>

[Spring 2021] Michael Krisch, Juan Saldarriaga

This course is designed and taught as a bridge between journalism and architecture. It provides students an opportunity to explore new forms of site analysis. Students propose a site to investigate from a set of site topics identified for their timeliness and relevance, their centrality to demographic populations, and their environmental impact—COVID-19, climate change, the census, and the urban/rural divide. Students work in groups under the direction of a practicing journalist who serves as editor to help groups explore and report on their site, spending the semester researching and constructing a geospatial narrative. Students conduct research, interviews, perform exploratory and advanced data analysis, and learn various geospatial visualization techniques to produce a comprehensive narrative.

## &lt;METROPOLITAN SUBLIMES&gt;

[Fall 2020] Sandro Marpillero

This seminar uses the process of formation of New York as a metropolis in relation with the development of the Hudson Valley, to explore the persistence of the aesthetic category of the Sublime, as addressed by Francois Lyotard. Through analysis of readings and art works participants trace the evolution of the sublime from philosophy to the Hudson River School of painting, whose representation of landscape and technology played a significant role in establishing the city's rhetorical constructs and focus on architectural super-objects. The goal is to reconceive architecture not so much for its inevitable consistency as built object, but as an environmental apparatus operating at multiple scales through the engagement of a complex circuitry of actors, through the reciprocal exchanges between participants in an aesthetic experience and the multiplicity of techniques structuring that experience.

## &lt;KITCHENLESS STORIES&gt;

[Fall 2020] Anna Puigjaner

Historically, the idea of home has mirrored a faithful image of society's deeper social structures. Consequently, housing (and in particular the kitchen) has often been used as an effective tool for the ideological construction of power relations. Albeit traditionally thought of in the west as a protective apparatus against externalities, by serving as a vehicle for the capitalist division of productive and reproductive labor, the archetype of the home has played a central role in the creation of gendered relationships within domestic and social spheres. This seminar has the objective to explore and unveil capitalist hetero-patriarchal asymmetries that have been empowered through domestic architectures.

## &lt;SICK CITY&gt;

[Spring 2021] Hilary Sample

The design research seminar investigates the complex intersection between architecture, design, public health and the representation of the human body, in buildings around the world. Through a select set of case studies—scale figures, design objects, architectural typologies, urban contexts, policies, and related infrastructures—students learn about episodes of illness, repair, maintenance, and wellness. As a direct result of public health concerns and crises, cities form through the programmatic development of their public spaces and architecture is intertwined. This seminar approaches the history of design, architecture, and technology through a close reading of propositions for cities, urban infrastructures, manifestos, and policies associated with general health and wellness. At the heart of the seminar, the aim is to encourage students to reflect upon contemporary issues across small and large scales of the built environment, reread the city, and speculate on the future of it through building types associated with health.

## &lt;DATA VISUALIZATION FOR ARCHITECTURE, URBANISM AND THE HUMANITIES&gt;

[Fall 2020] Jia Zhang

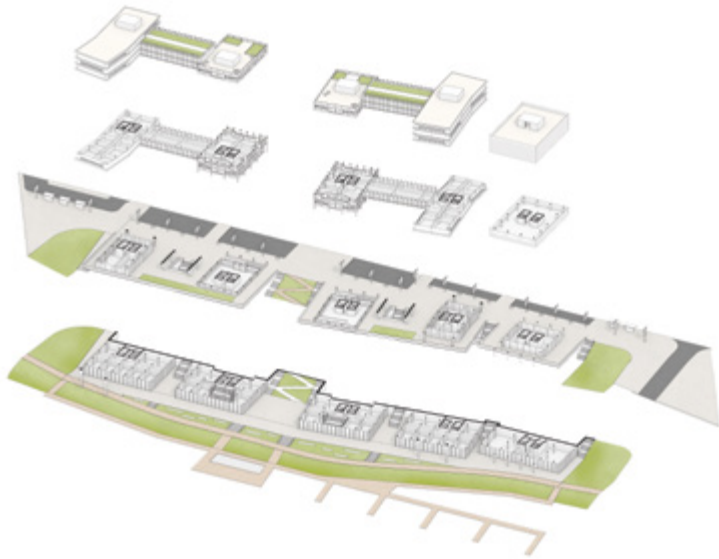
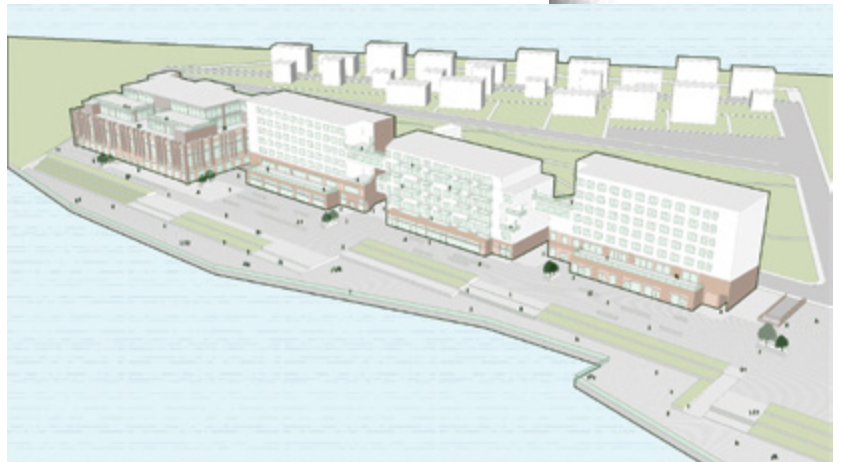
This class introduces students to key concepts in the design of information visualization (and interactivity). Students put theory to practice in discussions that critically engage with the visualizations. They also produce visualizations by hand and by code that are interactive, public-facing, and live on the web. Specifically, they learn and use the javascript library D3.



## &lt;REIMAGINING THE INDUSTRIAL WATERFRONT: UTICA'S HARBOR POINT&gt;

Kate Ascher, Christoph Kumpusch

Qianyue Ma, Keon Hee Lee

Marie Christine Dimitri,  
Brandon Conrad,  
Tomas Buitrago

Spyro Jacobson, Wanqi Sun



<JOINT ARCHITECTURE AND HISTORIC PRESERVATION STUDIO: RADICAL RE-CONSTRUCTION>  
Jorge Otero-Pailos, Mark Rakatansky

Chiun Heng Chou



Tianyuan Deng



Yanan Zhou

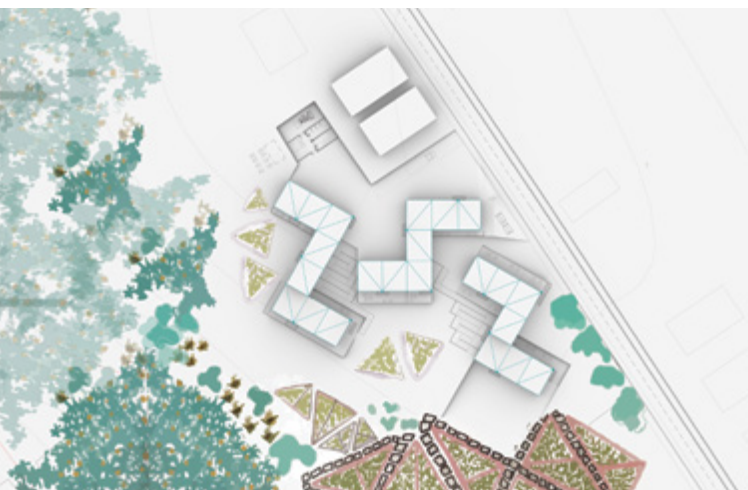


## &lt;JOINT ARCHITECTURE AND URBAN PLANNING STUDIO: CARIBBEAN RECONNECTIONS&gt;

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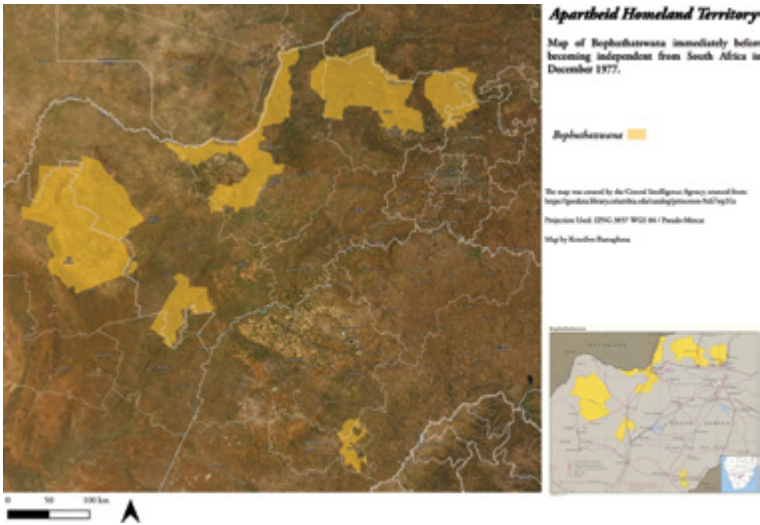
Will Cao, Jiageng Guo,  
Max Kolbowski-FramptonEstefania Serrano,  
Zhaoxiang Yun

Anays M. Gonzalez, Katherin Sibel

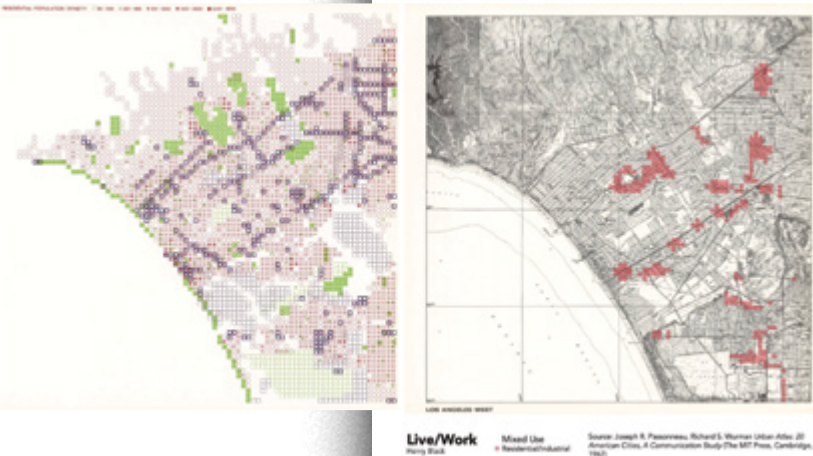




Keneilwe Ramaphosa

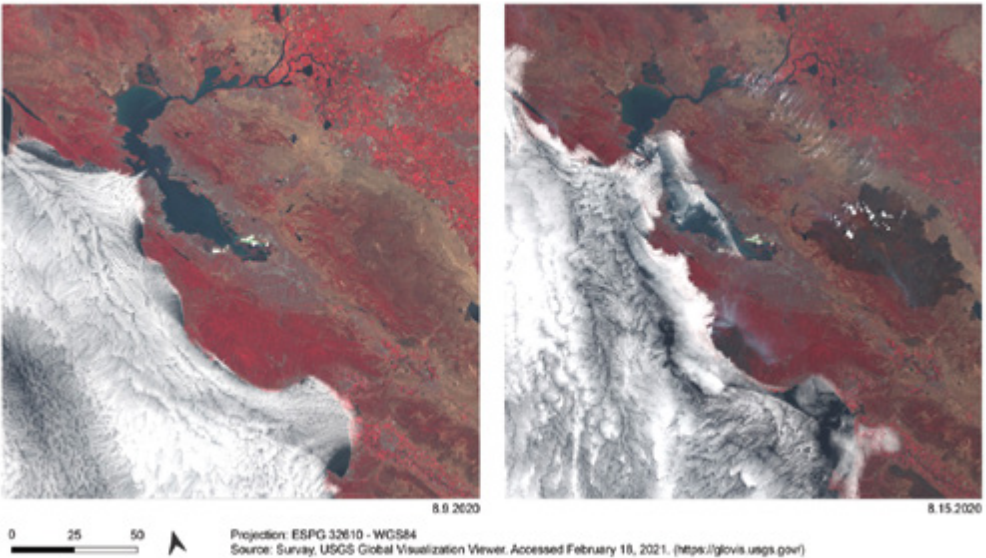


Henry Black



Takashi Honzawa

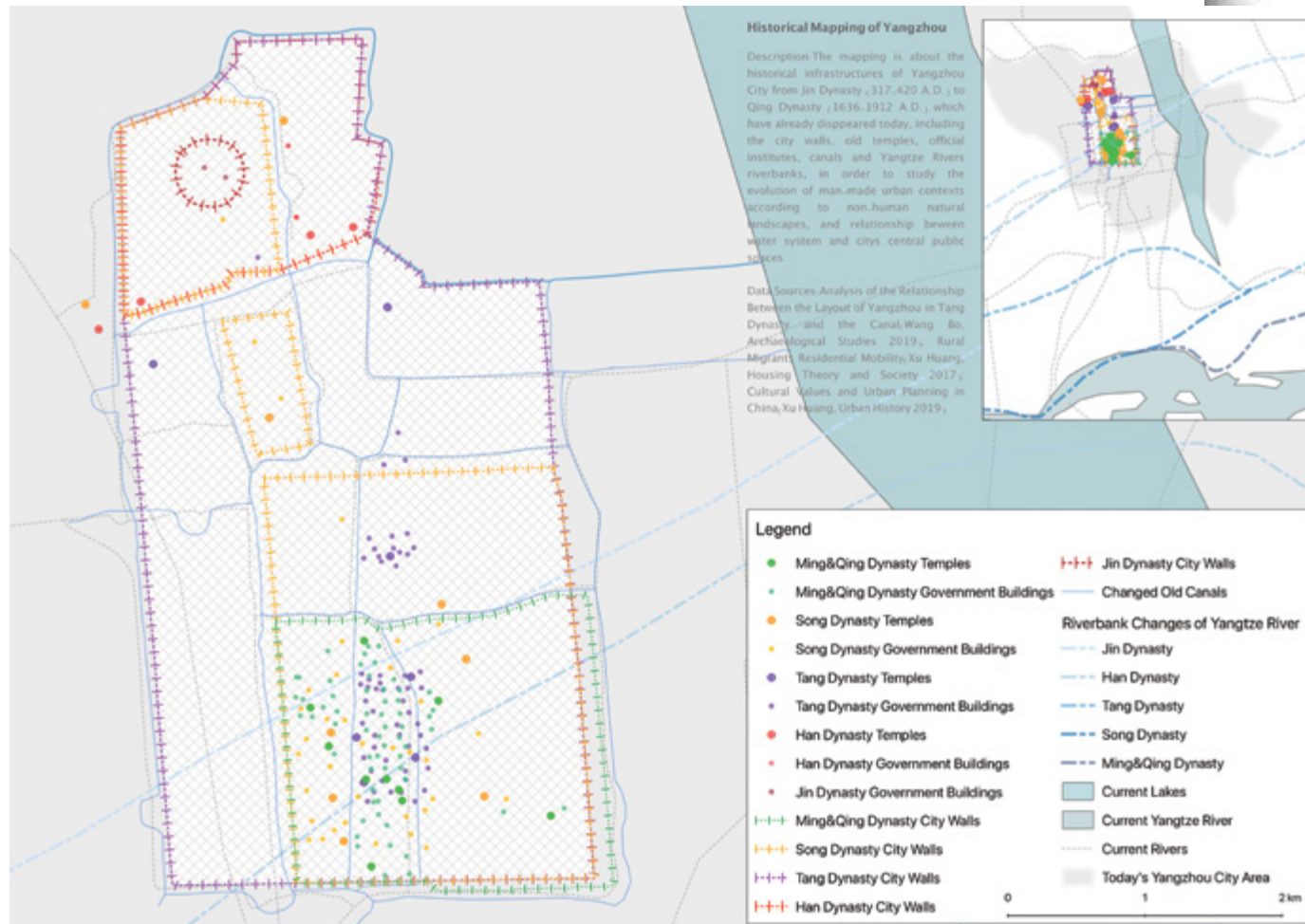
2020 Wildfire Northern California



## &lt;MAPPING FOR ARCHITECTURE URBANISM AND HUMANITIES&gt;

Emily Fuhrman

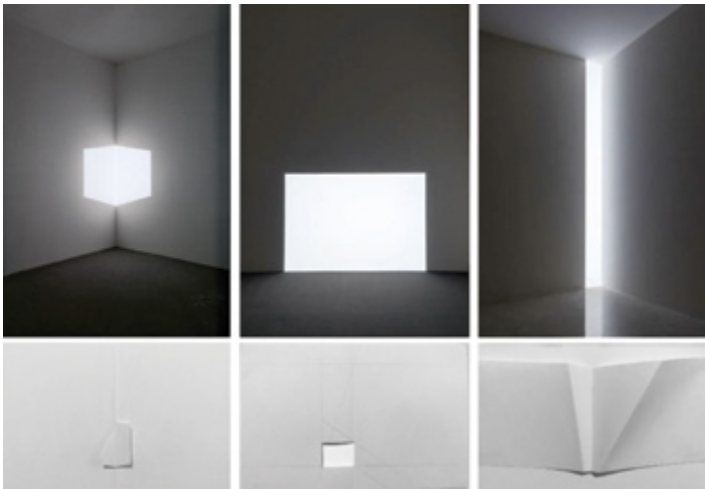
Zhijian Sun



<ARCHITECTURE APROPOS ART> Steven Holl, Dimitra Tsachrelia

Jun Ito

*Re-interpretation of Aldo Rossi.*



Chia Jung Andy Wen

*Re-interpretation of James Turrell.*

Wei Xiao

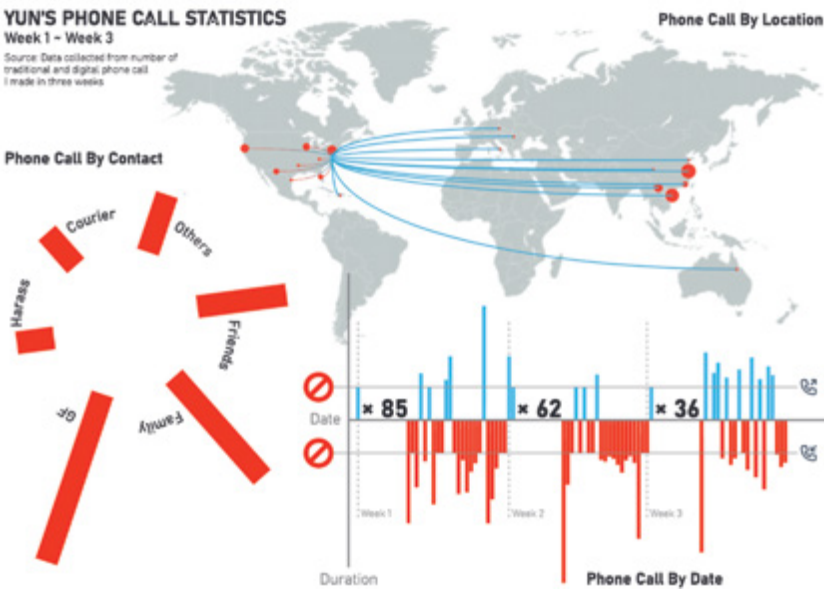
*Interior Re-interpretation of  
E-1027 by Eileen Gray.*



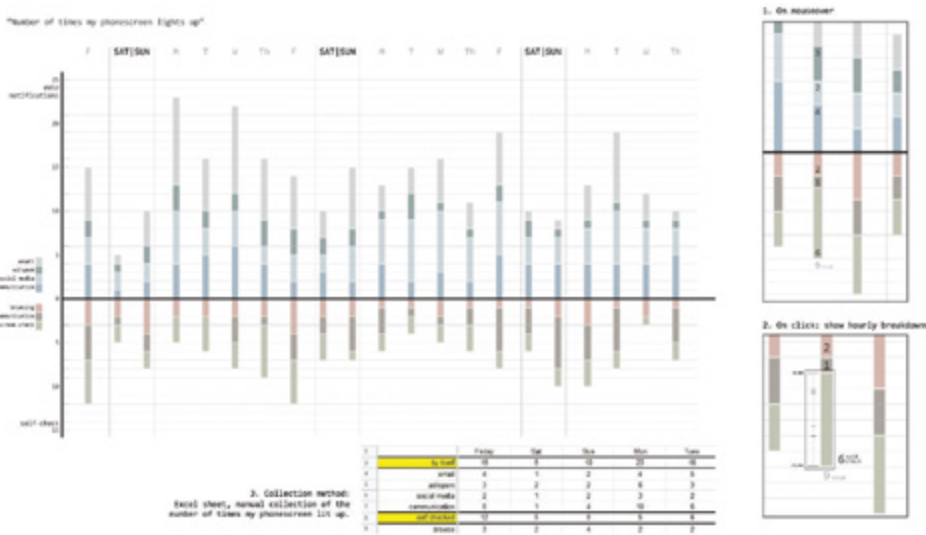


<DATA VISUALIZATION FOR ARCHITECTURE, URBANISM AND THE HUMANITIES>  
Jia Zhang

Zhaoxiang Yun



Jacob Hu









<SECTION C>

317 M.S. Architecture  
and Urban Design

Kate Orff,  
Program Director

339 M.S. Urban Planning

Weiping Wu,  
Program Director

385 M.S. Historic Preservation

Jorge Otero-Pailos,  
Program Director

407 M.S. Real Estate Development

Patrice Derrington,  
Program Director

429 New York–Paris

Danielle Smoller,  
Program Director

433 Introduction to Architecture

Danielle Smoller,  
Program Director



# *M.S. Architecture and Urban Design*

## Kate Orff, Program Director

## David Smiley, Assistant Director

The Urban Design Program at Columbia GSAPP consists of a one-year postgraduate degree that engages the complex processes of global urbanization amid the emerging stresses of the climate crisis. Ways of living in cities and landscapes around the world are increasingly untenable and now require new forms of research and attention. What is the agency of design in these rapidly shifting conditions? The program frames the city not as a fixed, delineated territory but instead as a gradient of landscapes supported by networks of energy, resources, culture, mobility, people, and capital. It addresses near and long-term threats to local, regional, and global ecosystems, positioning design as both an inclusive, activist, tools-based project for specific sites and communities, and as a critical project examining urban form, process, and knowledge.

Students and faculty work together across three intensive semesters to weave multi-scalar analyses of urban-regional fabrics and infrastructures with on-the-ground, detailed scenarios for real places and lived conditions. New York City serves as the first site for urban design advocacy and methodology. The scope expands in the second semester to regional research and innovation in New York's Hudson River Valley and concludes in the final semester with investigations into how habitat and floodplain restoration, climate mitigation, and economic recovery combine across the

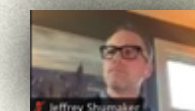
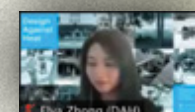
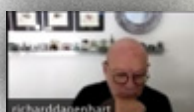
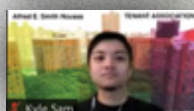
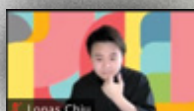
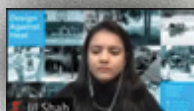
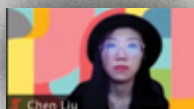
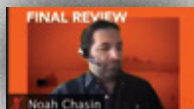
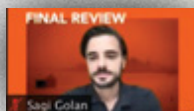
Mississippi River system at different sites and scales.

The following presentation of student work from the 2020-2021 academic year illustrates the critical and creative ambitions that students brought to a variety of sites and engages a national audience for Green New Deal policy and practice. Students combined multi-scalar analyses of urban-regional fabrics and infrastructures together with on-site interactions, communities engagements, and local conditions.

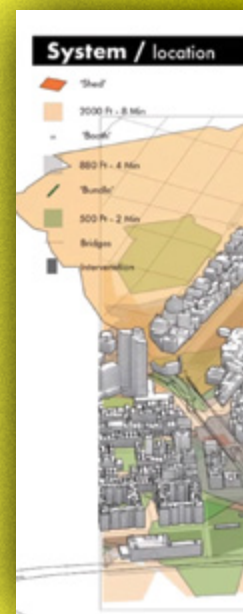


# Architecture and Urban Design

# Urban Design



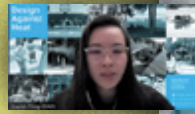
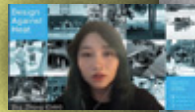
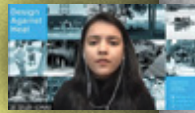
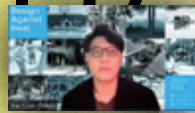
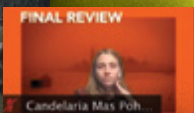
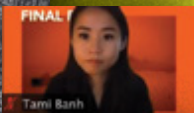
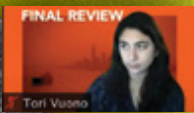
Nans Voron (Studio Coordinator),  
Victoria Vuono, Tami Banh (Studio Critic),  
Candelaria Mas Pohmajevic,  
Austin Sakong (Studio Critic)



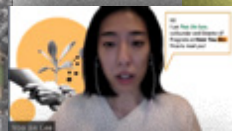
Sagi Golan (Studio Critic), Kate Orff (Program Director),  
Noah Chasin (Studio Critic), Dilip Da Cunha, Chen Liu '21 MSAUD,  
Scott Streeb, Jil Shah '21 MSAUD, Zheng Yin '21 MSAUD, Lonas Chiu  
'21 MSAUD, Elva Zhong '21 MSAUD, Benjamin Peterson, YouJin Hwang  
'21 MSAUD, Kyle Sam '21 MSAUD, Jeffrey Shumaker '21 MSAUD,  
Richard Dagenhart '21 MSAUD

# Fall

# Design Studio



"A Declaration Against Heat" by Kai Guo '21 MSAUD, Jil Shah '21 MSAUD, Scarlet Tong '21 MSAUD, Huiya Zhong '21 MSAUD

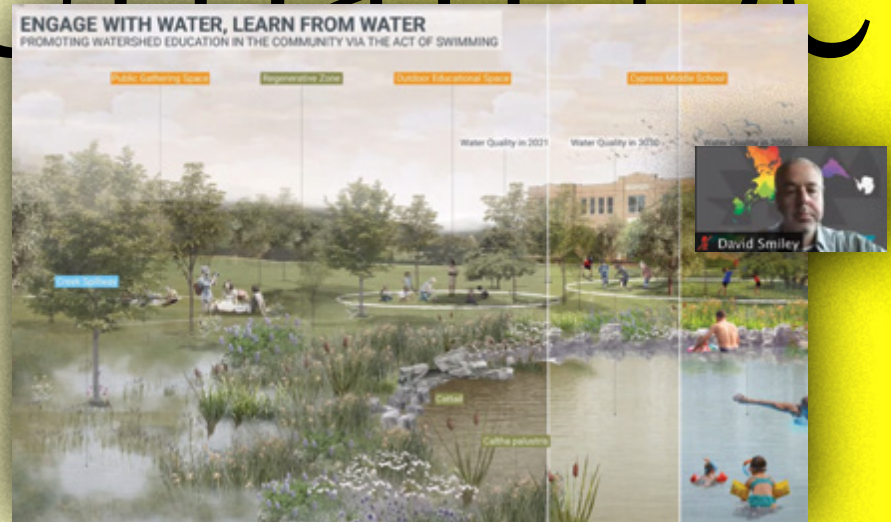


"How you Bin" by Ahmed Al Yaseen '21 MSAUD, Yiyang Cai '21 MSAUD, Xiaofei Sun '21 MSAUD, You Jin Lee '21 MSAUD

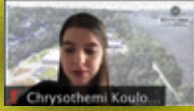
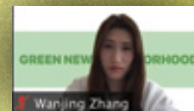
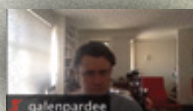
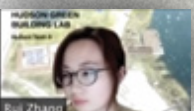
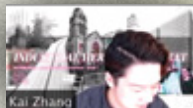
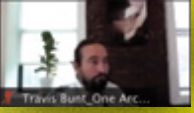
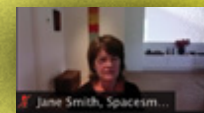
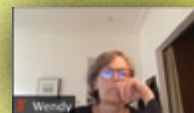
# 2020



# Urban Design



You Jin Lee '21 MSAUD, Kai Zhang '21 MSAUD, Lee Altman (Studio Critic), Huiya Zhong '21 MSAUD, Zarith Pineda, Yi Shang '21 MSAUD, Carlos Salinas Weber, Zheng Yin '21 MSAUD, Galen Pardee, Yong Zhuang '21 MSAUD, Yuehui Du '21 MSAUD, Wanjing Zhang '21 MSAUD, Stefania Staniscia, Chrysothemis Kouloumentas '21 MSAUD, Lijing Yu '21 MSAUD, Ray Gastil, Chao Li '21 MSAUD, Zuzanna Jarzyńska '21 MSAUD, Xiaofei Sun '21 MSAUD, Scarlet Tong '21 MSAUD, Billy Fleming, Yunpeng Wu '21 MSAUD, Anna Dietzsch (Studio Critic), Victor Lo '21 MSAUD, Rui Zhang '21 MSAUD, Gail Wittwer, Thaddeus Pawloski (Studio Critic), Travis Bunt, Wendy Andringa, Jane Smith, Tori Vuono, Yuhui Si '21 MSAUD. Work by Yuehui Du, Kai Zhang, Huiya Zhong, Yong Zhuang (Spring 2021 Urban Design Studio II: The Climate Crisis).



# Spring and

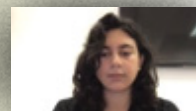
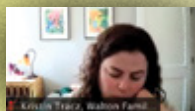
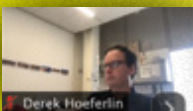


Abstract 2021

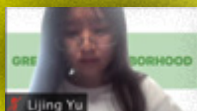
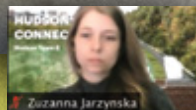
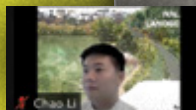
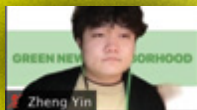
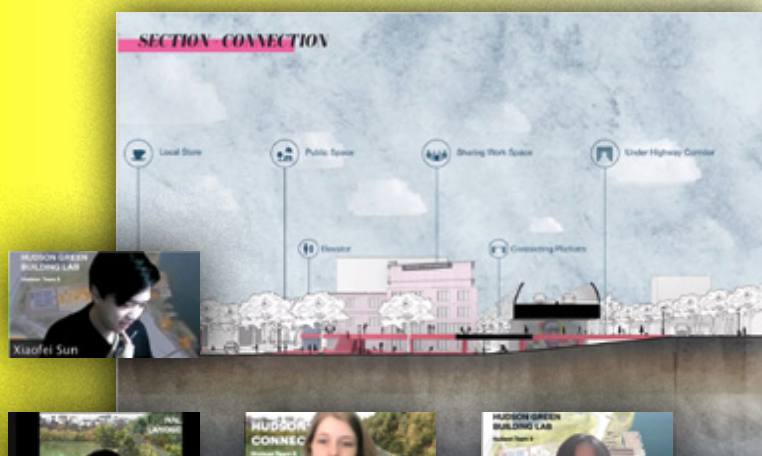
SECTION C>

# Design Studio

321



David Smiley, Derek Hoferlin, Dirk Sijmons, Dilip da Cunha (Studio Critic), Kristin Tracz, David Muth, Victoria Vuono (Summer 2021 Urban Design Studio III: Envisioning the Mississippi as a Living River).



# Summer 2021

## &lt;STUDIO III: WATER URBANISM, ENVISIONING THE MISSISSIPPI AS A LIVING RIVER&gt;

[Summer 2021] Kate Orff (Coordinator), Geeta Mehta, Justine Holtzman, Dilip Da Cunha, Adriana Chavez

The goal of this studio was to explore how habitat and floodplain restoration, climate mitigation, and economic recovery can combine across the Mississippi River system at different sites and scales. With key national climate legislation under consideration in Congress, the time to advance joint nature-based infrastructure projects that foreground social justice in the Mississippi basin is now. Each project from the Headwaters in Minnesota to South Pass in Louisiana put forward positive, regenerative visions for key towns, cities, and farms that could add up to reduce catastrophic flooding, enhance biodiversity, expand regenerative agriculture, and deploy unique financing models.

## &lt;STUDIO II: THE CLIMATE CRISIS, DESIGNING A JUST TRANSITION IN SMALL CITIES&gt;

[Spring 2021] Kaja Kühl (Coordinator), Lee Altman, Anna Dietzsch, Shachi Pandey, Thaddeus Pawlowski

For this studio, students worked in two regions, both examples of landscapes and cities shaped by late 19th-century industrialization and subsequent patterns of urbanization: the Hudson Valley and the Eastern Ohio River Valley. This studio explored the regions' rural/urban socio-spatial ecosystems as a site for intervention to address the global climate crisis. As part of a nationwide initiative, the Green New Deal Superstudio, students explored various layers of social and physical infrastructure and worked closely with local stakeholders, elected officials, organizations, non-profits, community groups, and planning and design professionals to envision just and equitable pathways towards decarbonizing the region and a just transition towards a regenerative economy.

## &lt;STUDIO I: HARLEM RIVER AND THREE BRIDGES&gt;

[Fall 2020] Nans Voron (Coordinator), Tami Banh, Noah Chasin, Ifeoma Ebo, Sagi Golan, Austin Sakong

This studio was an immersive and intensive city-making laboratory where students developed tools for designing resilient, equitable, vibrant, and healthy environments in NYC while focusing on the scale of the neighborhood. The neighborhood was explored as both a social construct and as a physical territory, central to popular, journalistic, political, and design discourses. Working in today's post-industrial, socially inequitable, and climate-stressed conditions, the students critically interrogated and redefined the many layers of existing urban fabrics and infrastructures to address the challenges faced by current and future inhabitants. This year, the studio focused on two sites, one at the southern tip of Manhattan (Three Bridges), the other at the northern tip (Harlem River)—each a neighborhood undergoing change and challenge.

## &lt;GLOBAL RESILIENCE MOVEMENT: THEORY AND PRACTICE&gt;

[Summer 2021] Samuel Carter

This seminar traces the origins of this global resilience movement, with the evolution of resilience as a term through engineering, psychological, and ecological discourse, and illuminates moments and projects that have helped define the practice through key texts and discussions with leaders in the field from around the globe. Students explore the roughly-defined edges of the field (including the interplay of inequality and systemic collapse, new governance models, resilience measurement, and innovative finance for resilience project implementation) and put forward their own ideas on how the work should advance going forward.

## &lt;URBAN THEORY AND DESIGN IN POST-INDUSTRIAL AGE&gt;

[Summer 2021] Noah Chasin

This seminar presents an introduction to the historiographical, theoretical, critical, and formal vocabularies of postwar urbanism—as regarded through a global perspective. We discuss the deployment of new urban design strategies against the backdrop of rapidly proliferating discursive and technological advances—learning how the development of the urban design discipline is intimately tied to transformations both material and intellectual. We measure the merits of various urban paradigms (and their critiques) against one another to initiate an understanding of the interdisciplinary processes that generate conditions for the structures and infrastructures of built environments across the globe. The course moves toward the present with an aim to measure the ever-increasing conditions of inequity in metropolitan locations, along with the increased importance of ecological threats to the world's urbanized areas.

## &lt;DIGITAL TECHNIQUES&gt;

[Summer 2021] Richard Chou, Paul Kamuf, Eric Huntley

DTEQ introduces representational techniques, skills, and software for urban designers. In conjunction with the studio, students learn to use digital media as part of the design process, weaving together software platforms, research agendas, and design strategies into smooth, interoperable, and collaborative workflows.

## &lt;HOUSING AND EQUITY IN THE U.S.&gt;

[Summer 2021] Karen Kubey

This course examines issues of race, gender, culture, disability, sexuality, age, health, economics, and climate in the domestic realm. It asserts that housing design is political. Design is never neutral but always communicates cultural, social, and economic values. This student-driven seminar investigates exemplary multi-family housing case studies and explores ways to visualize housing equity in the U.S. We draw from multidisciplinary sources including design theory, oral history, and public health research.



## &lt;DIFFERENCE AND DESIGN&gt;

[Fall 2020] Justin Garrett Moore

This course explores the following key questions: How has the built environment been shaped by difference? How do we make a difference in the design of our spaces, places, and cities? How do you want to make a difference through your practice as a designer? The format of the course included readings, presentations, conversations, and counter-stories in the first half of the semester. The second half focuses on the development of students' research and design for place-based or issue-based design projects or on developing independent research papers focused on difference and design in the built environment.

## &lt;RESILIENT LANDSCAPES&gt;

[Spring 2021] Kate Orff

This course explores urban design practice of the future by considering perhaps the most wicked challenge facing small towns and cities around the world in the future—climate breakdown, sea-level rise, and coastal variability that threatens lives, livelihoods, towns, and cities in the era of climate change. What is urban design for climate-changed landscapes? How do we reconsider design expertise to be co-creators with people on the ground and truly understand stories and places in need? We explore the potential of ecological and social systems to build resilience and to find meaningful pathways forward for tidal communities facing these existential challenges.

## &lt;CONTESTED SIGHTS: URBAN DESIGN IN THE WILD&gt;

[Summer 2021] Damon Rich

How does urban design become a subject of public controversy? How do spaces, buildings, urban visions mediate power struggles? How can designers learn from conflicts around architecture and urban planning? This course examines sites in NYC where urban design has become a contested subject of public disagreement. By visiting neighborhoods, interviewing interested parties, writing, photographing, walking, and drawing, we explore how the disciplinary activities of designers, architects, and planners intertwine with the political life of the city. Working in teams, students study a single contested site for the duration of the semester, produce research and analysis, lead a performative walking tour with visual aids and guest speakers, and create a popular education poster.

## &lt;RECOMBINANT URBANISM&gt;

[Spring 2020] David Grahame Shane

The course objective is to develop a visual and verbal language for the discussion of how cities develop over time. The emphasis is on the rules and systems that generate the initial growth, creating urban elements, and on how they are transformed in later iterations, innovations, or repetitions. A major focus is on the relations between these urban elements and public space in different growth patterns and systems in the city and the shifting/changing relations between these growth centers. The seminar attempts to draw out how these

relationships develop over time and what the impacts of these changes have on specified areas of the city, their life, and its built form, public space, or fabric.

<READING NY URBANISM>

[Fall 2020] Cassim Shepard

This course introduces NYC as a laboratory of historical experiments in both designing and understanding the urban environment. The goal is to arm students with the observational and representational tools to read the city and the multiple forces that influence its physical form and social experience and to represent these forces in short documentary videos. The class delves into specific places throughout the City's five boroughs and analyzes how different actors have interpreted, represented, or intervened in these sites over time.

<PUBLIC SPACE: RHETORICS AND PRACTICES>

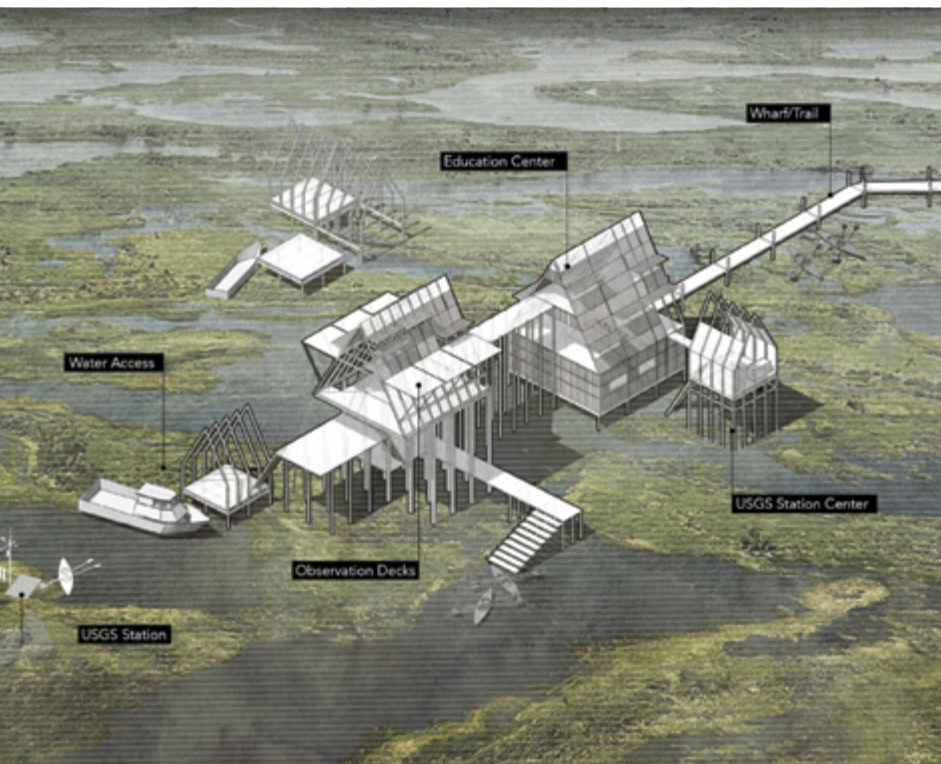
[Spring 2021] David Smiley

For the design disciplines to have any legitimate claim to the term public, we must ask harder questions: How is public space entangled with the processes and discourses of urbanization? What is participation? How, for whom, and by whom are public spaces planned, designed, built, paid for, and managed? How do different people experience exclusion or inclusion (or something else)? Working through examples and histories from the USA and globally, the class charts an array of urban design practices and examines how projects in or about public space have been discussed and legitimated. The class focuses on daily life, professional practices, and theoretical framings. The goal is to create a loose framework to critically inform students' design work and, inescapably, our politics.

## &lt;STUDIO III: WATER URBANISM, ENVISIONING THE MISSISSIPPI AS A LIVING RIVER&gt;

Kate Orff (Coordinator), Geeta Mehta, Justine Holtzman, Dilip Da Cunha, Adriana Chavez

The goal of this studio was to explore how habitat and floodplain restoration, climate mitigation, and economic recovery can combine across the Mississippi River system at different sites and scales. With key national climate legislation ↗



Aruna Ananta Das,  
Cheng Ju Lee,  
Thanawat  
Phituksithkasem,  
Zuzanna Jarzyńska

*Wetland Literacy Initiative*  
manages research and  
attract visitors, including  
nature enthusiasts and  
students seeking unique field  
experience.

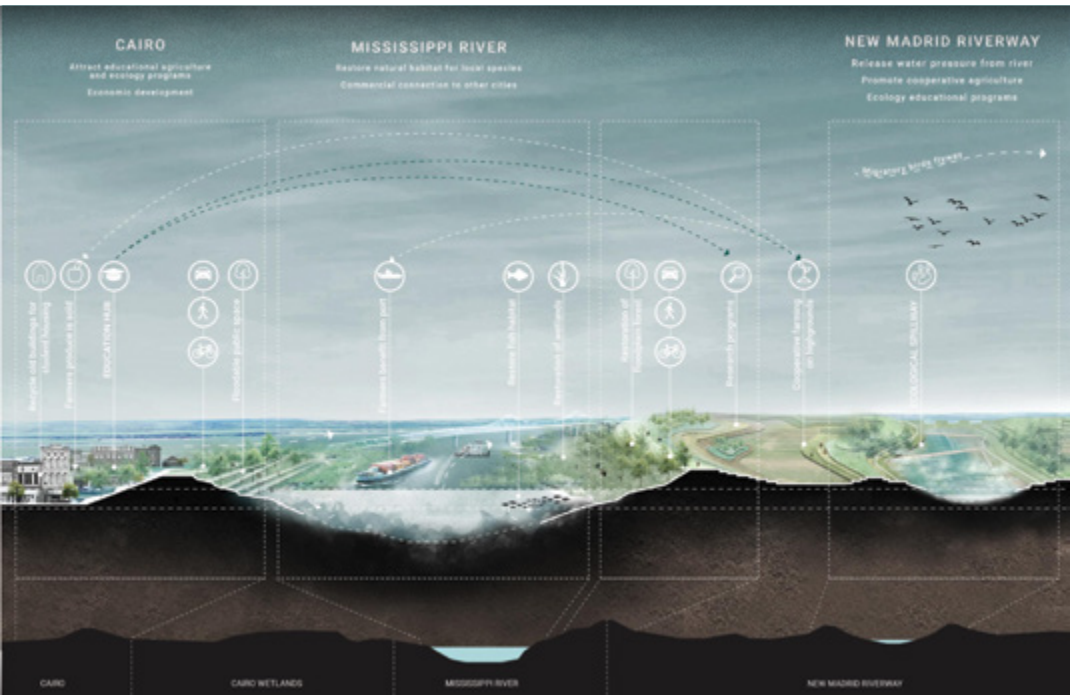


Chao Li, Kyle Sam,  
Lingbei Chen,  
Xindi Wang

We propose the concept of *New Meander Urbanism* inland east of East St. Louis, to provide residents with new opportunities and a better lifestyle. Our design envisions a wetland holding system combining the footprints of former Mississippi meanders that have been cut off from each other by hard infrastructure.



under consideration in Congress, the time to advance joint nature-based infrastructure projects that foreground social justice in the Mississippi basin is now. Each project from the Headwaters in Minnesota to South Pass in Louisiana put forward positive, regenerative visions for key towns, cities, and farms that could add up to reduce catastrophic flooding, enhance biodiversity, expand regenerative agriculture, and deploy unique financing models.



Corina Fuenmayor,  
Mariana Majima,  
You Jin Hwang,  
Victor Lo

*A Nature-Inspired Spillway and Vision for Cairo utilizes the existing levees as armatures for design operations that empower frontline communities, restore lost floodplains, and connect people through education.*

Ishita Ghosh,  
Chen Liu,  
Chinedu Adiele

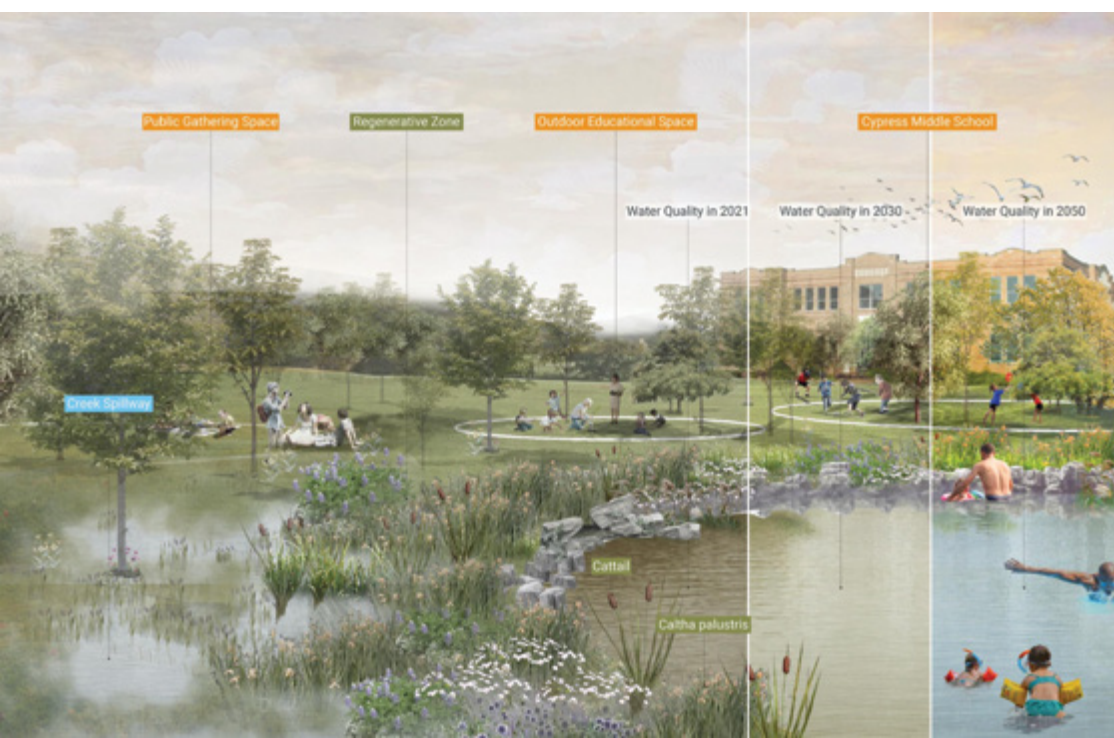
The project focuses on supporting the indigenous forest and water management practices of the Chippewa tribe of Minnesota to preserve the vitality of the Mississippi River's Headwaters and enhance economic opportunities for the Chippewa people.



## &lt;STUDIO III: WATER URBANISM, ENVISIONING THE MISSISSIPPI AS A LIVING RIVER&gt;

Xiaofei Sun,  
Yuqi Tian,  
Kai Zhang,  
Wanjing Zhang

We envision a new course for Mississippi River that maintains navigability via the shortest and most direct route, coupled with the decommissioning of Southwest Pass to accelerate land-building processes.



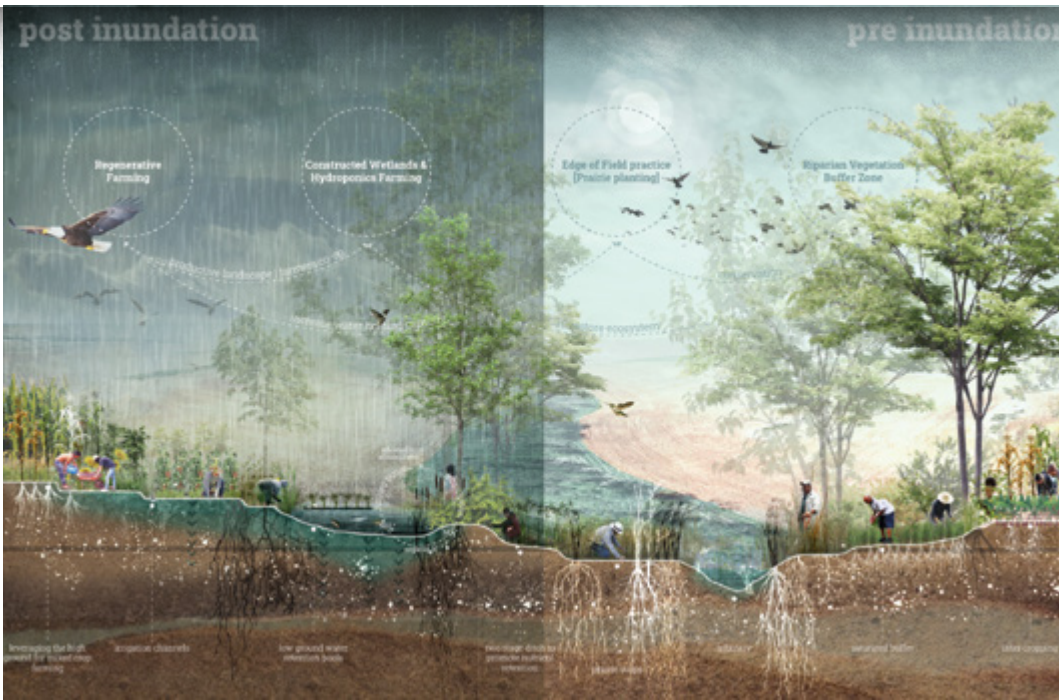
Yifei Luo,  
Kai Guo,  
Nupur Roy,  
Venkat Anirudh

*SWIM* envisions a new public realm in Memphis to create room for the river within the city and aid in flood mitigation efforts in the Mississippi watershed.



Chrysothemis  
Kouloumentas,  
Yoo Jin Lee,  
Jil Shah,  
Dhanias Yasmin

Drawing inspiration from the resilient operative notions of this native landscape, our project aims to build resilience and tackle the challenges of flooding disasters, water pollution, and degraded soil health, starting with the Quad Cities. We propose site-specific interventions along the Duck Creek, a natural transect that traverses diverse conditions of agriculture fields, urban and suburban fabric and waterfronts in Scott County.



Yuehui Du,  
Luchen Liu,  
Yi Shang,  
Huiya Zhong

*Plaquemine Lock* repurposes the historic navigational Lock as an ecological structure to revitalize the disconnected Basin and initiate a significant eco-economy.





## &lt;STUDIO II: THE CLIMATE CRISIS, DESIGNING A JUST TRANSITION IN SMALL CITIES&gt;

Kaja Kühn (Coordinator), Lee Altman, Anna Dietzsch, Shachi Pandey, Thaddeus Pawlowski

For this studio, students worked in two regions, both examples of landscapes and cities shaped by late 19th-century industrialization and subsequent patterns of urbanization: the Hudson Valley and the Eastern Ohio River Valley. This studio



## Chinedu Adiele, Chen Liu, Luchen Liu

*Beans, Not Burgers* proposes to build on this community resilience and design a new food system for Kingston that would better serve the city's residents and especially its school children.

## Corina Fuenmayor Herrero, Chrysothemis Kouloumentas, Yoo Jin Lee, Nupur Roy

Route Zero is a new transit typology that aims to heal the trauma left behind by what was once called urban renewal.



explored the regions' rural/urban socio-spatial ecosystems as a site for intervention to address the global climate crisis. As part of a nationwide initiative, the Green New Deal Superstudio, students explored various layers of social and physical infrastructure and worked closely with local stakeholders, elected officials, organizations, non-profits, community groups, and planning and design professionals to envision just and equitable pathways towards decarbonizing the region and a just transition towards a regenerative economy.



Thanawat  
Phituksithkasem,  
Jil Shah,  
Mariana Majima,  
Ahmed Al Yaseen

*KONBIT* is a cooperative labor model of regenerative farming which will increase social resilience and mitigate climate change through less carbon intensive agricultural practices in Kingston and its region.

Yuehui Du,  
Kai Zhang,  
Huiya Zhong,  
Yong Zhuang

Industrial Heritage Habitat imagine an alternative, habitable future in Chateau, Pittsburgh, an underutilized industrial neighborhood filled with warehouses and parking lots.





## &lt;STUDIO II: THE CLIMATE CRISIS, DESIGNING A JUST TRANSITION IN SMALL CITIES&gt;

Chao Li,  
Scarlet Tong,  
Victor Lo,  
Zuzanna  
Jarzyńska

HudsonConnect demonstrates a shift away from allocating “roads and bridges” to privately owned cars, in order to improve public health, equity, and safety - generating cities meant for all.



Yiyang Cai,  
Kai Guo,  
Lingbei Chen,  
Wenyi Peng

By proposing new affordable housing models, *(E)CO-Living* is not only exploring new housing typologies but also proposing the idea of more efficient and resilient communities.



Rui Zhang,  
Xiaofei Sun,  
Yuhui Si,  
Yunpeng Wu

The Hudson Green Building Lab aims to develop a new economy for green construction techniques and materials in Hudson to start this movement of retrofitting millions of buildings cost-effectively, develop new skills and businesses, and create well-paying jobs for residents in the Hudson Valley.



Anirudh Venkat,  
Cheng Ju Lee,  
Dhanias Yasmin,  
Yifei Luo

*Reprogramming Autoscap*  
retrofits underutilized spaces that enable a fossil fuel intensive lifestyle, into people centric spaces, catering to the needs of the community.



## &lt;STUDIO I: HARLEM RIVER AND THREE BRIDGES&gt;

Nans Voron (Coordinator), Tami Banh, Noah Chasin, Ifeoma Ebo, Sagi Golan, Austin Sakong

This studio was an immersive and intensive city-making laboratory where students developed tools for designing resilient, equitable, vibrant, and healthy environments in NYC while focusing on the scale of the neighborhood. The neighborhood was explored as both a social construct and as a physical territory, central to ↗



Aruna Das,  
Yuehui Du,  
Cheng Ju Lee,  
Lijing Yu

The project aims to use the algae energy industry to encourage the community to participate and learn about energy production. It liberates the industrial waterfront while also provides NYC a cleaner future.

Lonas Chiu,  
Chen Liu,  
Yi Shang,  
Zheng Yin





popular, journalistic, political, and design discourses. Working in today's post-industrial, socially inequitable, and climate-stressed conditions, the students critically interrogated and redefined the many layers of existing urban fabrics and infrastructures to address the challenges faced by current and future inhabitants. This year, the studio focused on two sites, one at the southern tip of Manhattan (Three Bridges), the other at the northern tip (Harlem River)—each a neighborhood undergoing change and challenge.

Chao Li,  
Yifei Luo,  
Nupur Roy  
Chaudhury,  
Yong Zhuang



Ahmed Al Yaseen,  
Yiyang Cai,  
Yoo Jin Lee,  
Xiaofei Sun

*How You Bin?* is a participatory waste management system, which takes advantage of social capital to achieve a new healthy, sustainable, and equitable waste system.





## &lt;STUDIO I: HARLEM RIVER AND THREE BRIDGES&gt;



Alya Abourezk,  
Gustavo Lopez  
Mendoza

The project focuses along the Sherman Creek Waterfront in Inwood, Manhattan as fertile ground to be transformed into a cooling region for the neighborhood.

Corina  
Fuenmayor,  
You Jin Hwang,  
Victor Lo,  
Mariana Majima

*Public Food* integrates  
urban agriculture and  
food consumption  
with public schools in  
the Lower East Side.



Lingbei Chen,  
Zuzanna  
Jarzynska,  
Wenyi Peng,  
Kyle Sam

With a site between the  
Lower East Side, Chinatown  
and the Financial District,  
*Smith Voices* forms an agora  
at the heart of NYCHA  
Alfred E. Smith Houses to  
complement the existing  
repository and legacy of  
social and political activism  
in the community.







## *M.S. Urban Planning*

### Weiping Wu, Program Director

The Master of Science in Urban Planning (MSUP) is an accredited two-year professional degree program. It takes a comparative, global perspective to urban planning, centering social justice and critical practice. The program connects the study of the urban built environment with grounded analysis of socioeconomic and political conditions to inform planning practice and praxis toward social, racial, and climate justice. We prepare students to confront and break down structures and practices of oppression rooted in class inequality, racism, and sexism. By studying the impact of global processes (such as immigration, climate change, and public health) on cities, neighborhoods, and communities—across the Global North and Global South—the program aims to foster new, creative planning and policy approaches that will improve processes and outcomes in cities around the world. Students are required to choose at least one concentration area among four options:

#### *Built Environment*

This concentration prepares students to work with stakeholders to guide public and private development processes in ways that ensure an adequate supply of land and resources to meet people's present and future needs, while complying with environmental and fiscal requirements.

#### *Community and Economic Development*

This concentration prepares students to undertake community and neighborhood planning and decision-making, local

economic development, and/or housing and redevelopment activities. Students examine resource, institutional, and socioeconomic issues at various spatial scales, paying particular attention to disadvantaged populations and communities.

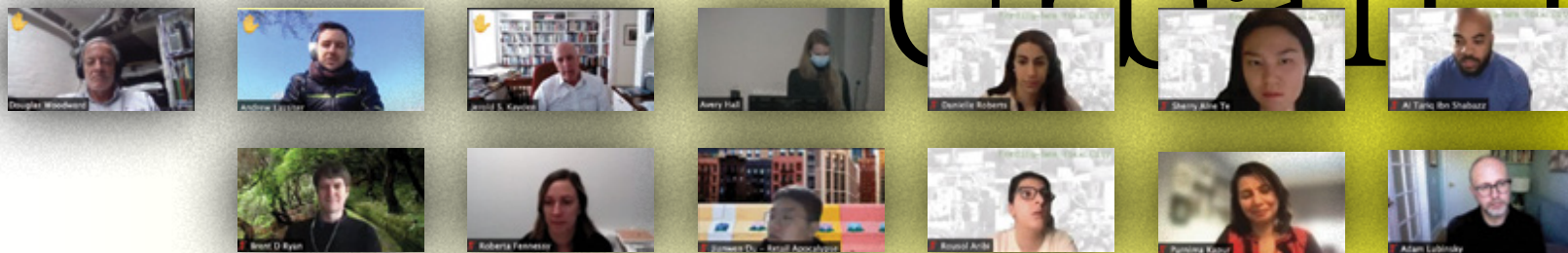
#### *International Planning and Development*

This concentration prepares students to work with governments, NGOs, consulting firms, and international development agencies around the world. Students receive multidisciplinary training to understand the impact of global flows as well as local conditions on cities and communities in various world regions and to think creatively about planning approaches in developing countries.

#### *Urban Analytics*

This concentration prepares students to engage and assess the increasing abundance and availability of data to address urban problems, collaborate on design projects for the built environment, and inform planning efforts within a variety of contexts and practices. Students explore data science and visualization, spatial and statistical analysis, and research design with stakeholder engagement.

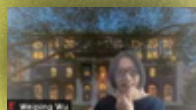
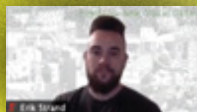
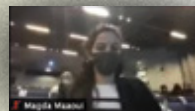
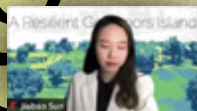
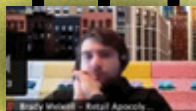
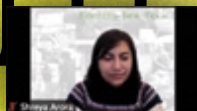
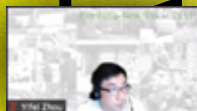
This selection of work shows how MSUP students have prepared to become visionary thinkers and change-makers. Faced with uncertainties that COVID-19 brings, they embraced the professional challenges and responsibilities with sensitivity and courage.



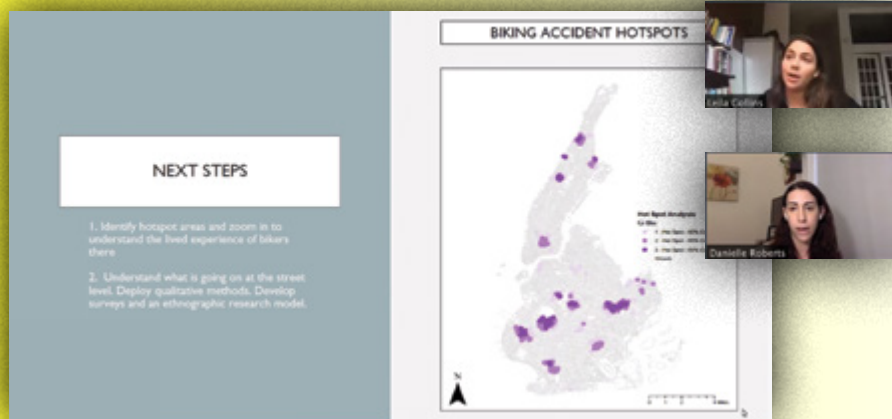
Richard Plunz (Studio Critic), Lorena Bello Gomez, Jeroen Stevens, Maxim Kolbowski-Frampton '22 MArch, Nico Gomez, Sybil Wa, Gloria Serra Coch, Brent Ryan, MariCarmen Carbonell, Ryan Hansen '22 MArch, Willy Pan Cao MSUP MArch '24, Jiageng Guo '22 MArch, Tyrene Calvesbert, Douglas Woodward (Studio Critic). (Caribbean Reconnections in Culebra: Plan to Implementation, Spring 2021)

Spring and S

# Planning



Douglas Woodward, Andrew Lassiter, Jerold Kayden, Emily Junker, Danielle Roberts '22 MSUP, Sherry Aine Te '22 MSUP, Al Tariq Ibn Shabazz '22 MSUP, Yifei Zhou '22 MSUP, Shreya Arora '22 MSUP, Brady Meixell '22 MSUP, Jiabao Sun '22 MSUP, Anthony Borelli (Studio Critic), Magda Maaoui, Jackson Fordham Jianwen Du, Weiping Wu (Program Director), Brent Ryan, Roberta Fennessy, Jianwen Du '22 MSUP, Rousol Aribi '22 MSUP, Purnima Kapur, Adam Lubinsky, Graham Trelstad, Erik Strand '21 MSUP, Tamim Abedin '22 MSUP.



Work by Leila Collins '22 MSUP MBA and Danielle Roberts '22 MSUP for the Fall 2021 GIS course led by Leah Meisterlin.

# Summer 2021



## &lt;STUDIO: A RESILIENT GOVERNORS ISLAND&gt;

[Spring 2021] Stefan Al, Purnima Kapur

NYC has proposed redeveloping the southern portion of Governors Island into a climate change “laboratory,” focused on the research and production of climate-resilient strategies, as well as the policy-making of climate change adaptation. The goal of this studio was to create a plan for the Northern subdistrict, which is developed with several historic buildings that formed the former Naval Base on Governors Island. Deliverables for the northern district plan included a site plan for different flooding scenarios, resilient waterfront typologies, adaptive reuse strategies, and flood resilience strategies for historic buildings that consider the accessibility of Governors Island and its place as a unique public asset to NYC in the New York Harbor.

## &lt;STUDIO RETAIL APOCALYPSE: STRATEGIES FOR LOCAL COMMUNITIES&gt;

[Spring 2021] Anthony Borelli, Sybil Wa

Two reasons are often given for the retail apocalypse: the overextension of suburban malls and the rise of e-commerce. But the two are one in the same. The mall was a simulation of a vibrant public realm where none actually existed, and e-commerce arose to fill that void. Similarly, Hudson Yards is a simulation of urban space that castles away from the surrounding city. It crashes into Hell’s Kitchen South, a streetscape that the Lincoln Tunnel fractured and evicted of public life long ago. In both of these neighborhoods today, storefront vacancies are epidemic. This studio sought to provide its client, the Hudson Yards Hell’s Kitchen Alliance, with a path to revive retail in the district by restoring the public realm.

## &lt;STUDIO: REGIONAL SOLUTIONS FOR EQUITABLE URBAN FOOD SYSTEMS&gt;

[Spring 2021] Graham Trelstad, Roberta Fennessy

In NYC, the South Bronx is an area where the inequities of the food system are most clearly manifested. Even though Hunt’s Point Cooperative Market, the City’s largest food distribution facility, is located in the South Bronx, the fact that the area continues to have the worst food insecurity in the city is nothing short of food apartheid. This studio aimed to design a conceptual framework for a food hub located in the South Bronx of NYC. A neighborhood food hub is a community-led institution that provides missing infrastructure, such as a kitchen, storage, and community space, to support food security in communities. The client for this studio was the City Council’s Land Use Committee.

## &lt;JOINT ARCHITECTURE AND URBAN PLANNING STUDIO: CARIBBEAN RECONNECTIONS IN CULEBRA, PLAN TO IMPLEMENTATION&gt;

[Spring 2021] Richard Plunz, Douglas Woodward

Building on the work of previous studios and courses on Culebra and Vieques and the relationships developed over time with the local communities, this studio used an interdisciplinary approach to develop designs and planning strategies in response to issues of food, energy, water sovereignty, waste disposal, resiliency, disaster management,

education, job creation, and public space, among others. A particular focus is on water as the nexus for those issues. The studio also focused on implementation considerations for both this current studio's plans as well as projects developed previously, in close collaboration with our principal client, the Mujeres de Islas in Culebra.

#### <URBAN DESIGN FOR PLANNERS>

[Spring 2021] Stefan Al

This course helps students acquire the principles that can inform urban design practice. It has three major pedagogical objectives. First, it helps students understand the contemporary city through a series of urban design tools. Second, it covers both historical and modern urban design principles. Finally, it includes all the scales in which urban designers operate, ranging from the fundamentals of social interaction in public space to the environmental sustainability of a region.

#### <ON SPATIAL EXCLUSION AND PLANNING>

[Spring 2021] Hiba Bou Akar

This course investigates the idea of geographies of exclusion through a multi-disciplinary inquiry that locates spatial production and planning practice at its center. The course cross-thinks issues of spatial exclusion and social justice across cities in the Global North and the Global South. What are geographies of exclusion? Who gets excluded, why, by whom, and how? What are some of the legal, spatial, socio-economical, moral, and political apparatuses that get articulated in producing segregated spaces of poverty and lavishness, violence and fear, connectedness and confinement? What are the roles of state agencies and "experts" such as planners, architects, and policymakers in producing such geographies, and how are these practices reproduced in the everyday? To that end, we examine the mechanisms through which certain populations in our cities are left "outside" (through gated communities, "mean" streets, policing, security barriers, segregated parks, etc.), or kept "inside" (prisoners, refugees in camps, locked-in domestic workers, etc.).

#### <CITIES IN CRISIS: PLANNING IN COMPARATIVE PERSPECTIVES>

[Spring 2021] Hiba Bou Akar

This seminar focuses on the role of planning in cities facing crises such as hurricanes, earthquakes, explosions, economic crises, violence of war, racism, and displacements. The course explores the use of the controversial term "crisis" and critiques of the term. Students discuss what it means to be a "city in crisis" or declare an event as a crisis, examining what the labeling of a moment, an event, or geography as crisis reveal about power, policy, the economy, profit, structural forces, and histories of injustice and dispossession. Thinking comparatively across cities in the global north and south, students review case studies both recent and historical, considering what happened in the event, what planning interventions followed, and what the implications—or repercussions—of those interventions may be.

## &lt;HISTORY AND THEORY OF PLANNING&gt;

[Fall 2020] Hiba Buo Akar

This course provides a survey of key historical moments and contemporary theoretical debates that have shaped the field of urban planning. It emphasizes how the profession has been shaped simultaneously by local socio-economic, political, and spatial processes as well as transnational and global circulations of capital, commodities, services, and people. The course has three objectives. First, it introduces students to key paradigms in planning thoughts and provides insights into the struggles and complexities that have shaped the field. It focuses on how planning practices have been implemented, negotiated, transformed across cities of the Global North and Global South. Second, the course enables students an in-depth understanding of how spaces are developed, governed, lived, and contested, by foregrounding debates on spatial justice that have been central to planning practice. Third, it invites students to reflect on the role of the planner-practitioner by examining the various spatial formations that planners aim to professionally engage and transform and the ethical implications of planning interventions.

## &lt;PRACTICUM: RESIDENTIAL PLANNING IN GLOBAL CITIES&gt;

[Spring 2021] Katherine Dunham

As the world's urban population grows towards six and a half billion by 2050, cities all over the world are resorting to the mass-production of residential super-blocks to address new urban housing demands. But is this model appropriate for all cities, regardless of their environmental, social, political, and economic differences? This seminar provides students with a hands-on opportunity to understand how planning code regulations—specifically residential codes—can shape the design and functioning of future neighborhoods in our rapidly urbanizing age. In this course, students explore case studies from around the world, learn about different planning models, and have a chance to develop their ideas of how to use zoning as a tool to better address challenges facing cities today.

## &lt;CLIMATE ADAPTATION IN CITIES&gt;

[Spring 2021] Adam Freed

Cities are on the frontlines of climate change both in terms of experiencing its impacts (e.g., nearly two-thirds of cities are coastal) and responding to it. This course discusses the current and future climate risks facing cities, drivers of major risks, actions cities can take to reduce these risks (including planning, policy, design), and strategies to scale these actions. Case studies are drawn from cities that are reshaping their streets, buildings, waterfronts, natural systems, and resource sheds to protect their residents and economies from climate risks. Focus is placed on the inequitable distribution of climate risks and impacts, particularly on communities of color and lower-income residents, and solutions to address this.



## &lt;QUANTITATIVE METHODS&gt;

[Spring 2021] Lance Freeman

This course introduces students to the concepts, techniques, and reasoning skills necessary to understand and undertake quantitative research. Students learn and hone their skills through a combination of attending weekly class meetings, participating in weekly labs, completing written assignments, and writing a research paper that tests a hypothesis using quantitative techniques. In addition to the lecture, students attend a weekly two-hour lab session.

## &lt;COMMUNITY DEVELOPMENT PLANNING&gt;

[Fall 2020] Lance Freeman

The objective of the course is to prepare students to develop strategies for revitalizing forlorn inner-city neighborhoods. By the end of the course, students understand the various theories of neighborhood change, be able to use these theories to inform the development of revitalization strategies and be familiar with techniques for analyzing and diagnosing neighborhood trends relevant to community development.

## &lt;PUBLIC FINANCING OF URBAN DEVELOPMENT&gt;

[Spring 2021] Richard Froehlich

This course is an introduction to how public entities (cities, states, public benefit corporations) finance urban development on a pay-as-you-go budget basis and by issuing public securities. By examining different kinds of financial tools we review how investment is made in mass transit, health care facilities, schools, public utilities, airports, and housing. The class also delves into rating agency requirements, security disclosure rules, current market dynamics, and the mechanics of offering bonds for public sale.

## &lt;PLANNING, POLITICS, AND POWER&gt;

[Spring 2021] Maxine Griffith

The planning and development process exists at the intersection of policy, politics, and geography and is neither linear nor one-dimensional. The course considers the interplay of relationships among the government, its citizenry, and other key stakeholders. Students gain knowledge and understanding of the ways that politics, community action, and governmental procedure influence the planning process and how to develop a successful plan adoption strategy informed by these influences and by critical analysis and reasoning. The course is guided by a set of lectures, readings, case studies, and discussions with knowledgeable stakeholders and planning practitioners.

## &lt;URBAN DATA AND INFORMATICS I&gt;

[Fall 2020] Boyeong Hong

Data analytics and data-driven processes are used to make urban planning decisions and improve related city service operations. This course provides an introduction to the technical, theoretical, and practice-based dimensions of urban analytics. It is centered around

data acquisition, numerical analysis, spatialization, visualization, interaction, and civic technologies. Students learn concepts, software tools, and analytical techniques to extract meaningful information from various data sources and analytical practices. The course engages the role of technologies and computational methods in the planning process. The main objective is to familiarize students with modern computational techniques and demonstrate their application to real-world problems alongside the planning perspectives.

#### <EXPLORING URBAN DATA WITH MACHINE LEARNING>

[Spring 2021] Boyeong Hong

This course engages the role of technologies and quantitative methods in the planning process. The main objective is to familiarize students with modern machine learning techniques and demonstrate their application to urban data and real-world problems alongside the planning perspectives. Students learn to apply the skills and techniques necessary to understand the motivation behind different machine learning methods and their applicability in a given practical context; implement and develop a methodological framework; model algorithms; interpret and evaluate results appropriately; deliver insights concerning urban planning perspectives and real-world problems.

#### <PLANNING METHODS>

[Fall 2020] Malo Hutson, Boyeong Hong

This is an introductory course designed to help prepare students for common analysis methods used in planning practice. Common methods of analysis are covered using publicly available data sets and data collected through assignments. Through weekly readings, lectures and lab sessions students gain a basic understanding of the tools and skills required in planning practice.

#### <GLOBAL HEALTHY CITIES>

[Spring 2021] Malo Hutson

The majority of the world's population now resides in cities and this presents a set of challenges and opportunities for urban planners and public health practitioners (and others) concerned about protecting and promoting the health and well-being of their residents. The Global Healthy Cities course explores the common origins of urban planning and public health, from why and how the fields separated and strategies to reconnect them, to addressing urban health inequities. Specifically, this course discusses the influences of urban population health, analyzes the determinants of health, and the roles that city planning and public health-related agencies and organizations play at both the local and global levels.

#### <GENESIS AND DEVELOPMENT OF ZONING>

[Fall 2020] Douglas Woodward, Purnima Kapur

This course provides a comprehensive introduction to the history, theory, and practice of zoning with a particular emphasis on the use of zoning as a planning and regulatory tool in dense urban

environments like NYC. Topics include the early development of Euclidean zoning; the NYC planning process (ULURP, as-of-right development, the framework of the NYC Zoning Resolution); regulatory alternatives to zoning (e.g., master-planning and local development plans); zoning tools in other U.S. and world cities; form-based codes, traditional neighborhood development (TND), transit-oriented development (TOD), transfer of development rights (TDR), and innovative practices and programs like mandatory inclusionary housing and zoning for quality and affordability. The goal is to provide students with both a thorough grounding in the theory of zoning and the practical tools needed to work with zoning regulations in the urban planning context.

<PROJECT MANAGEMENT: FROM IDEA TO EXECUTION>

[Fall 2020, Spring 2021] Rebecca Karp

This course is an introduction to how public entities (cities, states, public benefit corporations) finance urban development on a pay-as-you-go budget basis and by issuing public securities. By examining different kinds of financial tools we review how investment is made in mass transit, health care facilities, schools, public utilities, airports, and housing. The class also delves into rating agency requirements, security disclosure rules, current market dynamics, and the mechanics of offering bonds for public sale.

<PRACTICUM: PLANNING MEGA PROJECTS IN GLOBAL CITIES>

[Spring 2021] Adam Lubinsky

As cities struggle to pay for new infrastructure and services and seek to attract visitors and residents, they have increasingly turned toward partnerships with private developers to create large mixed-use districts. With the availability of global capital searching for investment opportunities and new financing mechanisms, a paradigm of privately-led mega-projects has emerged. This practicum analyzes and compares the programmatic structure of these developments, their designs for urban spectacle, the planning procedures that have facilitated their creation, and their potential to evolve in a post-COVID global city.

<PLANNING FOR URBAN ENERGY SYSTEMS>

[Spring 2021] Peter Marcotullio

This class explores planning for urban energy systems. The first section examines the history of energy use in cities. The second section examines the components of contemporary urban energy systems from primary energy supply to end-use. The third section examines the consequences of urban energy use in cities including local to global environmental and health impacts as well as vulnerabilities. In the final section, we examine the politics and planning of these systems, paying particular attention to mitigation efforts.

<ENVIRONMENTAL DATA ANALYSIS IN CONTEXT OF CLIMATE CHANGE>

[Fall 2020] Peter Marcotullio, Kaz Sakamoto

Planners are increasingly in need of analyzing environmental data to curb and anticipate the effects that come with climate change for



adaptation and mitigation. This course introduces methods of environmental data analysis across varying geographic scales and underlying planning issues in the context of climate change. The structure of the course is defined through four modules (global, national, regional, and city), to introduce students to the variety of environmental data and analyses for different geographies. Each module underscores planning approaches to climate change, including addressing rising temperatures and urban heatwaves, energy supply vulnerability, and the challenge of mitigating greenhouse gas emissions through compact city simulation and planning for urban heat island adaptation. Students master different skills including spatial suitability, data management, scenario development, and machine learning to answer scale-specific research questions. The course uses analytics that propel planners into the world of big data and help model the complexities of climate change-related environmental processes.

#### <TRANSFORMATIONAL PLANNING FRAMEWORKS FOR EQUITABLE CLIMATE ACTION>

[Fall 2020] Ariella Maron

This course situates climate action in a local planning context, exploring different approaches and tools to help planners address the twin challenges of climate change and inequality. We focus on three broad topic clusters: equitable greenhouse gas mitigation policy, collaborative governance structures to scale equitable climate action, and community planning. Course materials are drawn from policy documents and analyses; non-governmental organizations including environmental justice, social movement, climate action groups; and mass media.

#### <LAND USE PLANNING>

[Spring 2021] Jonathan Martin

This course presents the nuts and bolts of land use planning as practiced in the U.S. today and allows students to develop/design a land-use plan for a small hypothetical city. Students are exposed to contemporary land-use planning issues (including urbanization and urban growth trends, ethics, quality of life indicators, ecological land-use planning, and inner-city revitalization).

#### <ADVANCED SPATIAL ANALYSIS>

[Spring 2021] Leah Meisterlin

This advanced seminar examines and develops techniques of spatial analysis and representation specific to urban contexts. The course centers around key methodologies—including advanced spatial statistics, spatial decision support systems, feature recognition, and interpolation—interrogating their use and applicability to different contexts in research and practice. Through case studies, students learn several new methods, comparing distinct approaches to similar questions and considering the implications (ethical and otherwise) of spatial analysis and cartography.

## &lt;GEOGRAPHIC INFORMATION SYSTEMS&gt;

[Fall 2020] Leah Meisterlin with Kazuki Sakamoto, Anna Stokes

This course introduces core concepts of GIS and GIScience, as well as technical skills crucial for working within urban environments. Students learn critical approaches to spatial analysis and visualization and embed these techniques within larger design workflows. By creating and analyzing diverse types of spatial data—and layering those within complex maps—students are challenged to build arguments and construct geospatial narratives.

## &lt;PLANNING LAW&gt;

[Spring 2021] Moira O'Neill

A core course designed to give students a working knowledge of the history and legal foundations of land use regulation in the U.S., including zoning, historic preservation, and environmental review. Through a review of judicial opinions, municipal zoning ordinances, and secondary sources, the course explores the regulatory techniques used by governments to regulate land use and the legal and policy issues they present. Case studies focus on NYC examples.

## &lt;INTRODUCTION TO INTERNATIONAL PLANNING&gt;

[Fall 2020] Kate Owens

This course is designed to introduce students to theoretical approaches and practical tools for planning in an international context. It uses theories, concepts, and case examples drawn mostly from the global South as vehicles to explore challenges and new directions for the field of planning generally. At the same time, it provides students with practical tools and knowledge to operate as informed practitioners in the sphere of international planning. Students use an in-depth examination of specific case studies to explore questions such as: Who plans? How does planning take place? In whose interest? Students are expected to critically compare and discuss the nuanced differences across planning environments, assess the level of effectiveness and results of planning approaches, and envision better planning practices in the attainment of more just cities.

## &lt;INFRASTRUCTURE PLANNING AND PRACTICE IN DEVELOPING COUNTRIES&gt;

[Spring 2021] Kate Owens

This course covers cross-cutting themes in three types of economic infrastructure—water supply, electricity, and transportation—with a special focus on developing countries. The first two lectures outline the importance and difficulties of infrastructure service delivery by reviewing old and new theories of infrastructure and its links to economic development, as well as addressing the 'right' to basic services and the politics of infrastructure provision. It then introduces students to the practice of designing and delivering infrastructure services, exploring the demand for infrastructure from firms and households; infrastructure delivery structures; options for financing services; governance considerations including management and incentives, and thoughts on the infrastructure planning process. Drawing on international case studies, the

course offers an overview of infrastructure in the developing world context, with an emphasis on helping students develop an understanding of the political economy and practice of planning, designing, and implementing infrastructure policies and services.

#### <RESILIENCE, REPARATIONS AND THE GREEN NEW DEAL: CLIMATE JUSTICE IN OUR OWN BACKYARD>

[Fall 2020] Thaddeus Pawlowski

In this practicum, students learn about the impacts of environmental racism and climate change in the neighborhoods surrounding Columbia University. They also learned from Dr. Sharon Egretta Sutton's "When Ivory Towers Were Black" about Columbia GSAPP's early experiments with community-driven design and planning and engaged in a critical and proactive discourse on how students and faculty of GSAPP today can better promote climate justice in our backyard.

#### <PROTOTYPING FOR URBAN POLICY AND DECISION MAKING>

[Spring 2021] Kaz Sakamoto

This course teaches how to prototype for a contemporary urban issue, with an emphasis on how to use open data for evidence-based policy making. We cover how to apply design-thinking and other strategic frameworks to break down urban issues, which are highly complex and entail multiple stakeholders, into defined solutions. First half focuses on strategic thinking, problem definition and prototype ideation. Second half consolidates from those proposals and dive into feasibility assessment and technical implementation of a minimally viable product (MVP) which should allow for functioning user interaction and analysis workflows. The end assignment is a demo of that prototyped solution alongside a how-to guide.

#### <DELIVERING URBAN PUBLIC INFRASTRUCTURE: PRACTICUM ON INDUSTRIALIZED CITIES>

[Fall 2020] Jamie Torres Springer

Many industrialized and post-industrialized cities find themselves with severe infrastructure challenges. This practicum examines key approaches to addressing these challenges, positioning the emerging professional to lead or work within multidisciplinary efforts to plan and deliver infrastructure in the modern industrial/post-industrial city. It includes a practical study of the planning, regulatory and legal environment for public infrastructure delivery, and examines case studies, such as NYC's coastal resiliency projects, the expansions of transit and transit-oriented development in London and LA, the planned investment by Sidewalk Labs in the Toronto waterfront, and the rollout of broadband and wireless technology.

#### <SITE PLANNING AND SUPPORT SYSTEMS FOR DEVELOPMENT>

[Fall 2020] Graham Trelstad

Human settlements are created and communities structured mostly by private individuals or firms constructing buildings on parcels—as long as the sites are accessible, somehow related to nodes of other urban activity, and equipped with support services. In the U.S., this practice has been called "site planning" or "subdivision" and has created millions of



houses and thousands of commercial centers around all American metropolitan areas and cities since World War II. The results have been roundly criticized from an urbanistic point of view; however, the public preference is still strongly in favor of this type of development. We should be able to do this job well and seek methods through which a better environment, at affordable costs, can be built. Within this course, the specific techniques that planners and developers can employ toward achieving good site development are discussed, and a reasonable degree of skill in the application is expected to be obtained by the students. To take specific physical actions alone is not enough—they also need to be understood in terms of their effectiveness and sustainability.

#### <INTRODUCTION TO TRANSPORTATION PLANNING>

[Fall 2020] Rachel Weinberger

This course explores how planners understand transportation by viewing transportation in its historical context. We examine the theoretical underpinnings of the transportation/land use relationship, how transportation supports or undermines the economy, how it affects health and the environment, and finally how transportation planning is practiced. Topics include travel forecasting, travel behavior and demand management, the auto/highway system, public transit, livery, and transportation networked companies, sharing (cars, bikes, scooters), equity and environmental justice, mobility pricing, and freight.

#### <BUILT ENVIRONMENT DISRUPTION: PARTNERSHIPS AND URBAN TECHNOLOGY>

[Spring 2021] Kate Wittels, Adam Tanaka

This course relies on a series of cases to illustrate and explore how cities—and planning—have changed with the acceleration of entrepreneurial activity across sectors in recent decades. Students are exposed to both academic thinking on important questions of ownership and public responsibility, as well as best practices in planning and policy designed to encourage successful integration of new technology and business models to improve how we live, work, consume and play in cities today and into the future.

#### <METROPOLITAN PLANNING>

[Fall 2020] Tom Wright

This course explores strategies for planning metropolitan regions, focusing on the institutions and issues that transcend local political boundaries, including transportation, resilience, housing, and governance. Drawing on the experiences of the Regional Plan Association's four landmark plans for the New York region and national and international case studies, the course examines the success and failure of various strategies for protecting open space, addressing the challenges of climate change, supporting economic development and affordable housing, and investing in transportation infrastructure. What models have been most successful in addressing these challenges? What new structures will be needed in the face of economic and technological changes? And how will we pay for the investments necessary to create fair, sustainable, and prosperous metropolitan regions in the future?

## &lt;URBAN PLANNING THESIS/CAPSTONE II&gt;

[Spring 2021] Weiping Wu

The second semester of a six-credit two-semester thesis is an essential part of the planning curriculum. It is an individual study or investigation of the student's own choice, but it is closely supervised by a full-time faculty member of the Urban Planning Program. Students write and defend their thesis research during the term and submit a digital copy of their final thesis.

## &lt;ADVANCED RESEARCH II&gt;

[Spring 2021] Weiping Wu

The student plans a course of self-study and inquiry and seeks an advisor who reviews and grades the work. The student must submit to the UP office a one-page description of the project, including methodology, goals, and final product, as well as the advisor's name and the number of credits before the end of the add-drop period.

## &lt;CHINESE URBANISM IN GLOBAL CONTEXT&gt;

[Fall 2020] Weiping Wu

While urbanizing China is undergoing socioeconomic and spatial transformation resembling patterns seen elsewhere in the world, parts of its trajectory push the limits of contemporary urban and planning theories and experience. This course situates Chinese urbanism in the global context, exploring the institutional settings, policy interventions, and urban realities. We focus on four broad topic clusters and explicitly compare them with practices in other countries: China's urbanization path and growth patterns, migration and socio-spatial inequalities, land management and financing of urban development, and the role and practice of planning.

## &lt;THESIS/CAPSTONE WORKSHOP&gt;

[Fall 2020] Weiping Wu

A six-credit two-semester thesis or professional capstone is an individual study or investigation of the student's own choice that is closely supervised by a full-time faculty member of the Urban Planning Program. It is intended to demonstrate the student's ability to structure an argument surrounding an issue or problem significant to planning practice, planning theory, and/or the profession itself.

## &lt;ADVANCED RESEARCH AND INDEPENDENT STUDY&gt;

[Fall 2020] Weiping Wu

The student plans a course of self-study and inquiry and seeks an advisor who reviews and grades the work. The student must submit to the UP office a one-page description of the project, including methodology, goals, and final product, as well as the advisor's name and the number of credits before the end of the add-drop period.





## &lt;STUDIO: A RESILIENT GOVERNORS ISLAND&gt; Stefan Al, Purnima Kapur

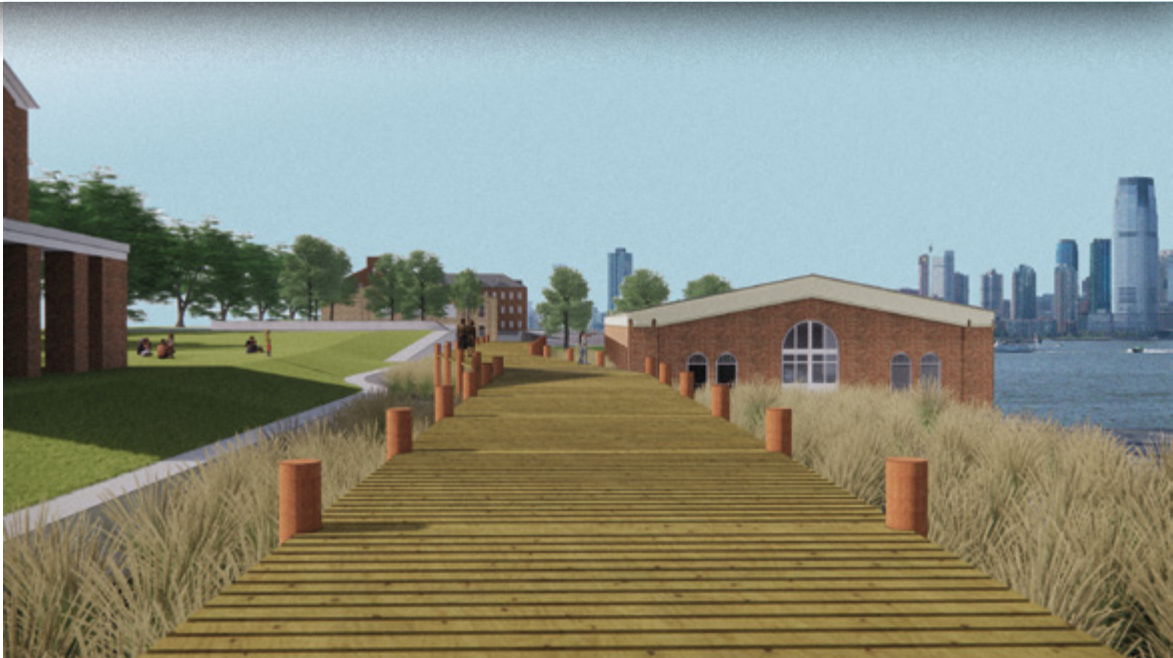
NYC has proposed redeveloping the southern portion of Governors Island into a climate change “laboratory”, focused on the research and production of climate-resilient strategies, as well as the policy-making of climate change adaptation. The goal of this studio was to create a plan for the Northern subdistrict, which is developed with several historic buildings that formed the former Naval Base on



The waterfront strategy identifies areas along the waterfront where it would be feasible to fortify and raise the existing sea wall and waterfront esplanade that would have the most impact on protecting historic buildings on the island. By providing fortification, the interventions also provide opportunities for beautiful public space and amenities. Our recommendation is to fortify the East and West waterfronts while utilizing existing typologies of the island along the north that protects inland walls and elevation. This fortification would be accompanied by rain gardens to prevent the pooling of stormwater from the raised fortifications.



Governors Island. Deliverables for the northern district plan included a site plan for different flooding scenarios, resilient waterfront typologies, adaptive reuse strategies, and flood resilience strategies for historic buildings that consider the accessibility of Governors Island and its place as a unique public asset to NYC in the New York Harbor. Studio participants included Leila Collins, Sori Han, Nile Meridian Johnson, Moses Narayan Levich, Moheng Ma, Jonathan Marty, David McNamara, Mauricio Enrique Rada Orellana, Yuanyuan Shen, Jiabao Sun, and Shen Xin.





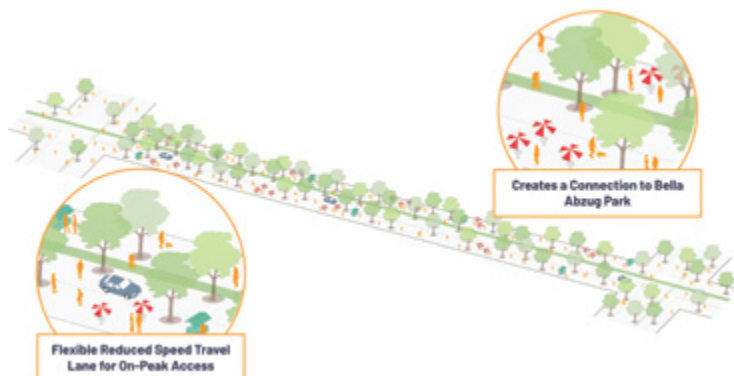
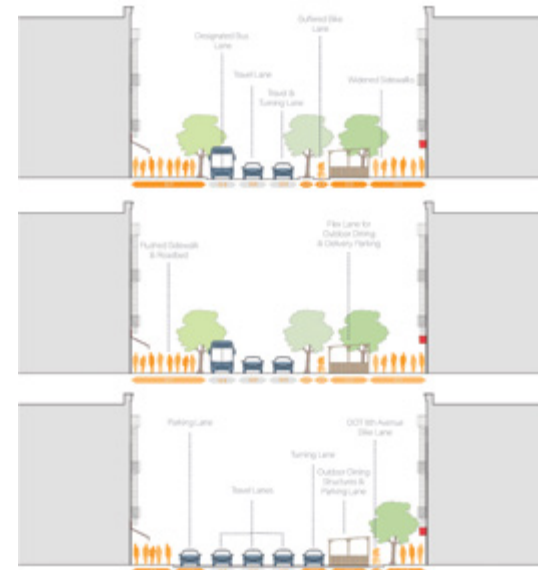
<STUDIO RETAIL APOCALYPSE: STRATEGIES FOR LOCAL COMMUNITIES> Anthony Borelli, Sybil Wa

Two reasons are often given for the retail apocalypse: the overextension of suburban malls and the rise of e-commerce. But the two are one in the same. The mall was a simulation of a vibrant public realm where none actually existed, and e-commerce arose to fill that void. Similarly, Hudson Yards is a simulation of urban space that castles away from the surrounding city. It crashes into Hell's Kitchen South, a streetscape that the Lincoln Tunnel fractured and evicted of public life long ago. In both of these neighborhoods today, storefront vacancies are epidemic. This studio sought to provide its client, the Hudson Yards Hell's Kitchen Alliance, with a path to revive retail in the district by restoring the public realm. Studio participants included Derek Brennan, Jianwen Du, Eryn Michelle Halvey, Hanbo Lei, Danqing Ma, Sarah Ann Mawdsley, Brady Meixell, Yixuan Ouyang, Eve Deena Passman, Sebastian Salas, Tiffany Vien, and Yue Wei.

A shared street approach on 10th Avenue would create new and inviting public spaces on a relatively inactive corridor by incentivizing more ground floor retail.



The transformation of 9th Ave as an auto-dominated transit corridor to a pedestrian centric shared street will make the street safer and improve pedestrian flow.

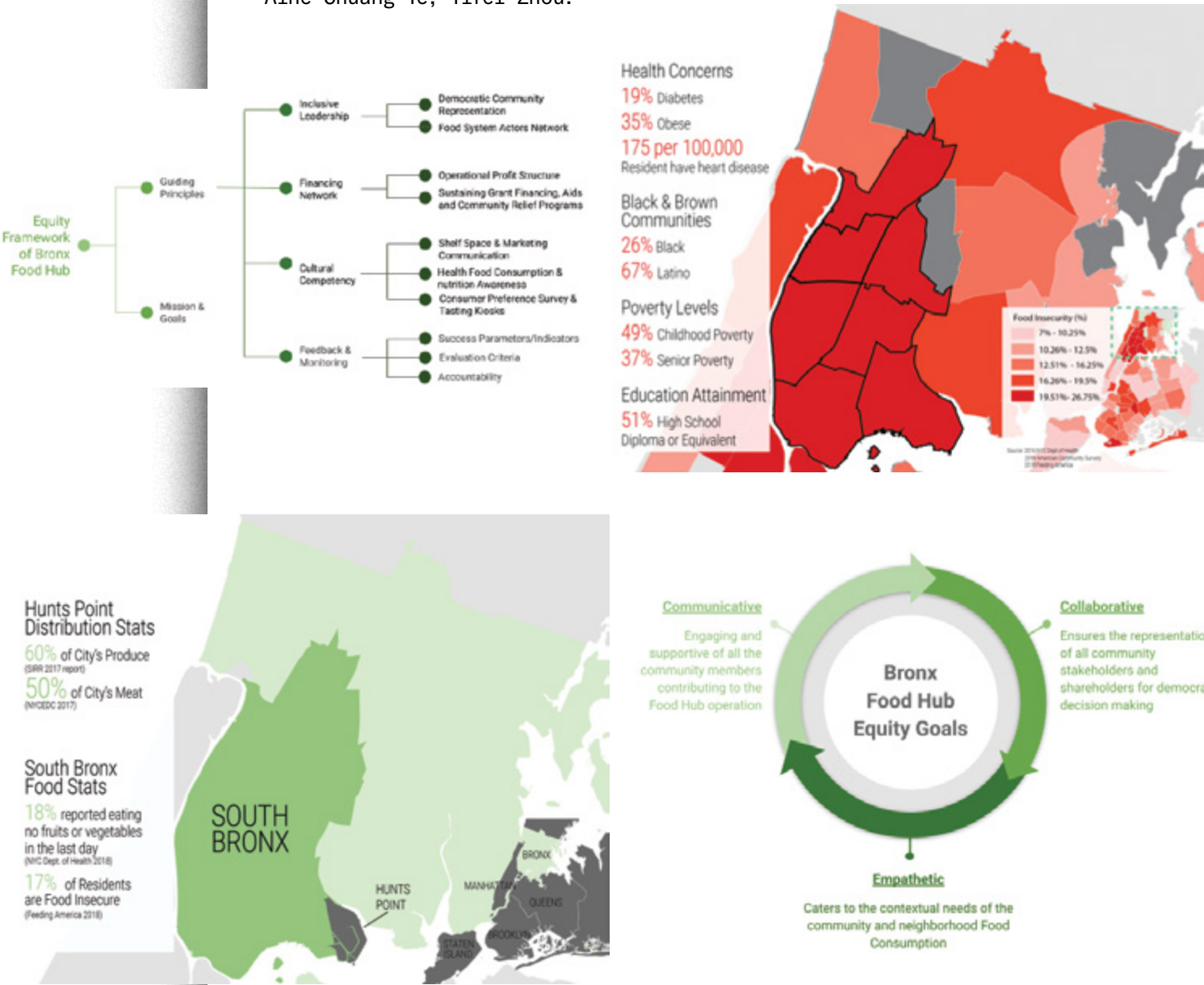


Recreational Open Streets on 33rd, 37th, 38th, and 39th streets would be exclusive to pedestrians, but flexible to allow reduced speed traffic as needed during peak commuting hours and for emergency access. On nights and weekends they would feature community programming and events.



<STUDIO: REGIONAL SOLUTIONS FOR EQUITABLE URBAN FOOD SYSTEMS> Graham Trelstad, Roberta Fennesy

In NYC, the South Bronx is an area where the inequities of the food system are most clearly manifested. Even though Hunt’s Point Cooperative Market, the City’s largest food distribution facility, is located in the South Bronx, the fact that the area continues to have the worst food insecurity in the city is nothing short of food apartheid. This studio aimed to design a conceptual framework for a food hub located in the South Bronx of NYC. A neighborhood food hub is a community-led institution that provides missing infrastructure, such as a kitchen, storage, and community space, to support food security in communities. The client for this studio was the City Council’s Land Use Committee. Studio participants included Tamim Abedin, Rousol Aribi, Shreya Arora, Boyang Dan, Jackson Pierce Fordham, Danielle M Roberts, Al Tariq Ibn Shabazz, Yining Shen, Erik Ryan Strand, Sherry Aine Chuang Te, Yifei Zhou.



<JOINT ARCHITECTURE AND URBAN PLANNING STUDIO: CARIBBEAN RECONNECTIONS IN CULEBRA, PLAN TO IMPLEMENTATION> Richard Plunz, Douglas Woodward

Building on the work of previous studios and courses on Culebra and Vieques and the relationships developed over time with the local communities, this studio used an interdisciplinary approach to develop designs and planning strategies in response to issues of food, energy, and water sovereignty, waste disposal,



Anays M González,  
Katherin Sibel



Daniel Vanderhorst,  
Hanyin Zhang



Estefania Serrano,  
Zhaoxiang Yun



resiliency, disaster management, education, job creation, and public space, among others. A particular focus is on water as the nexus for those issues. The studio also focused on implementation considerations for both this current studio's plans as well as projects developed previously, in close collaboration with our principal client, the Mujeres de Islas in Culebra.



Teonna Cooksey,  
Ryan Hansen

Will Cao, Jiageng Guo,  
Maxim Kolbowski-  
Frampton

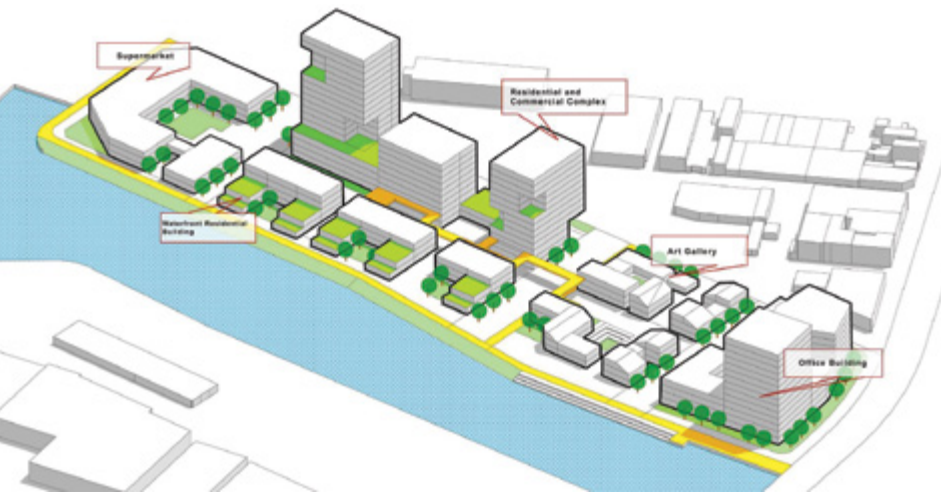




<URBAN DESIGN FOR PLANNERS> Stefan AI



Claire Douglas,  
HK Dunston



Haoran Zhang,  
Jiabao Sun



Jiuyu Wang,  
Lily Li

<ON SPATIAL EXCLUSION AND PLANNING> Hiba Bou Akar

Hayes Buchanan



Sebastian Andersson

2020 BEIRUT EXPLOSION: POLITICAL CRISIS AS AN INSTIGATOR AND CONSEQUENCE

IF CORRUPTION LED TO ECONOMIC + SOCIAL CRISIS + THE BLAST, HOW IS SIDELINING OF THE STATE AFFECTING LONG-TERM STATE VIABILITY?

THE LINK TO MY RESEARCH

During the research for my thesis - which deals with the modern heritage after the blast - especially during interviews I conducted with agents and NGO representatives, the view of the state as largely absent in the recovery process was often expressed. In addition, the Army's involvement was described as marginalised and out of touch with the urban reality of Beirut.



AUGUST 4, 2020

A warehouse in the port of Beirut explodes, sending shockwaves across the city, killing over 200 and leading to widespread destruction. Nearly 3,000 tonnes of ammonium nitrate had been stored in the warehouse, representing a failure of public safety and public trust.



NGOs, INGOs + ACTIVISTS AND THE ANTI-STATE RHETORIC

Mona Fawaz and Mona Hani write in October 2019 that activist movement, NGOs and INGOs involved with reconstruction efforts following the explosion are happening within a discourse of sidelining the state. This anti-state rhetoric exists in a context of a devastating financial meltdown generated by the deep corruption of Lebanon's ruling elite, with the explosion coming to 'virescence' [i.e. a war waged against Lebanese citizens by the country's political class].

This reluctance to mix with the state in the context of the reconstruction efforts made me think of the following question:

HOW CAN WE THINK OF THEORIES OF FRAGILE + FAILING STATES IN RELATION TO THIS HUMAN-MADE CRISIS?



WEBER AND THE FUNCTIONS OF THE STATE

Max Weber (1864-1920) highlights among other things the basic functions of the state as including 'the protection of person and property and public order', as well as the cultivation of religion, education, social welfare, and other cultural aspects. If we consider on the one hand, the economic crisis that has hit the country, deepening rates of poverty, as well as a political dysfunction that led to the port explosion, and on the other hand the non-willingness of NGOs and INGOs to work with the state despite its capacities, are we perhaps in a situation of the factor and perceived state failure that contributes to an amorphous combination?



THE OCCIDENTAL + CAPITALIST TINT OF TERMINOLOGIES

Political scientist David Held traces the genealogy of the terms 'fragile' and 'failing' states in a 2013 article. The former emerged in a post-Cold War context by foreign policy analysts, and has since 9/11 been widely disseminated by US administrations and policy analysts; the latter has gained international traction among donors, technical agencies and some governments, including by the OECD and the World Bank. Thus, does the mere usage of these terms automatically put any inquiry into an analytical framework that is distinctly Western and developmentalist, or is there a way to frame them differently?

Zeineb Sellami





## &lt;PRACTICUM: RESIDENTIAL PLANNING IN GLOBAL CITIES&gt; Katherine Dunham

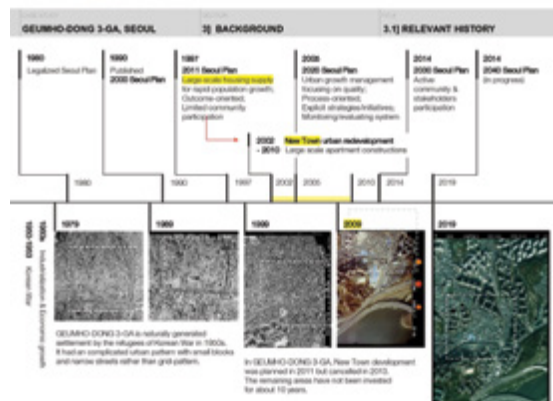
Hanzhang Yang,  
Priska Marianne



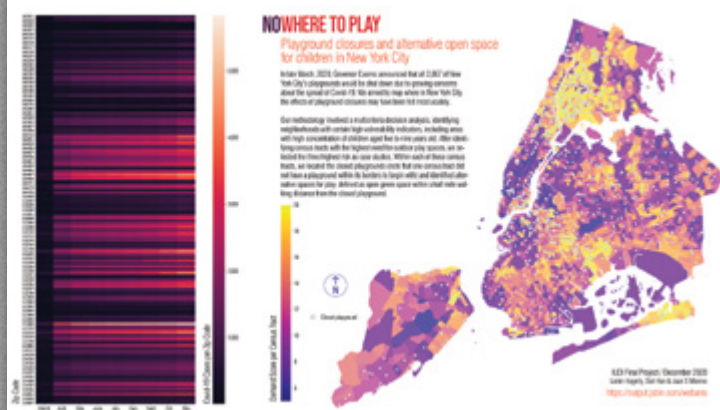
Joey Xu,  
Vicky Zhou



Soyeon Kim,  
Yiyi Jiang



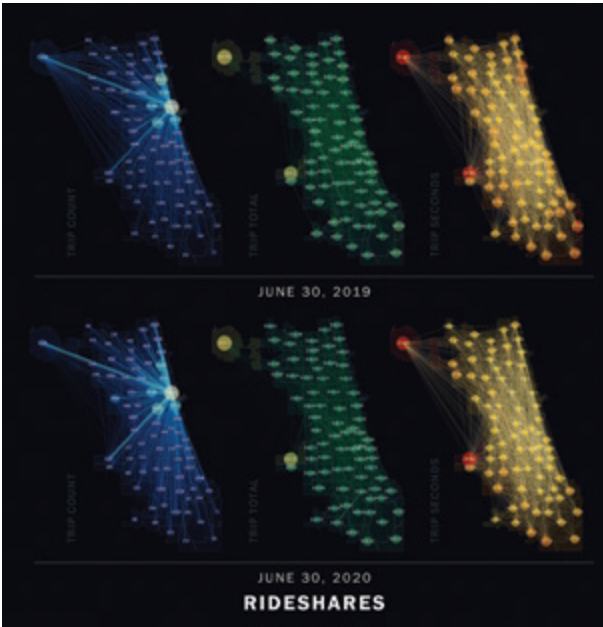
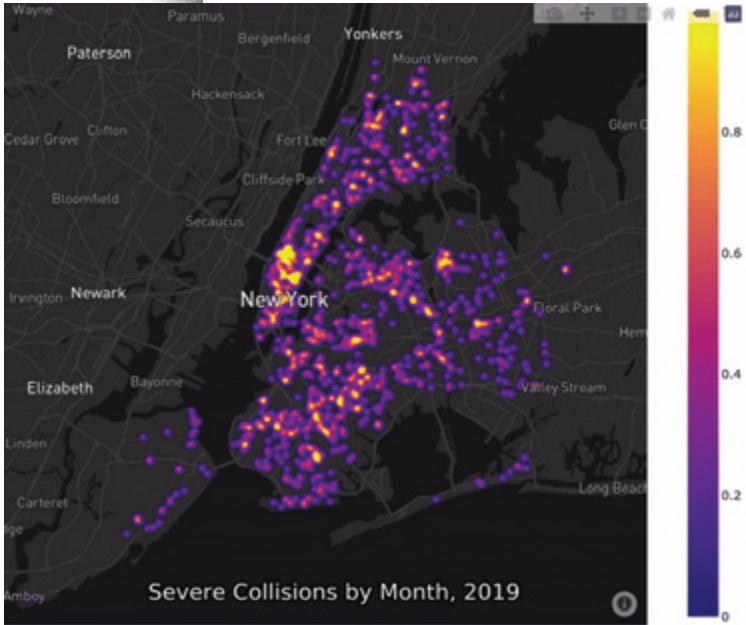




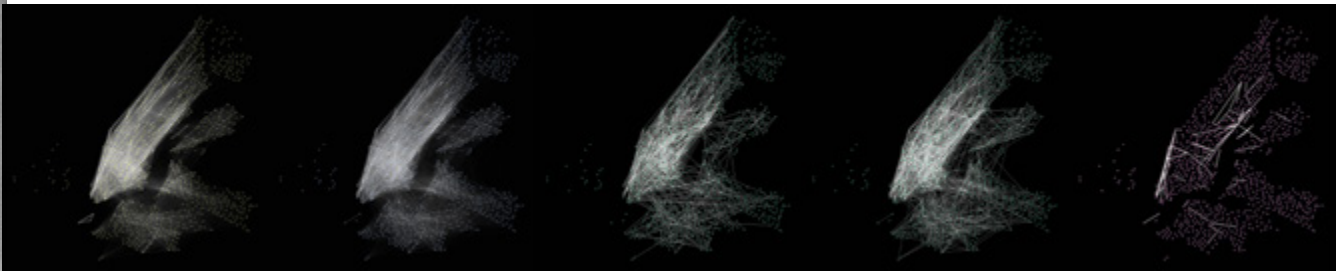
Sori Han, Juan Moreno, Lanier Hagerty

Hanzhang Yang, Shen Xin, Yuanyuan Shen

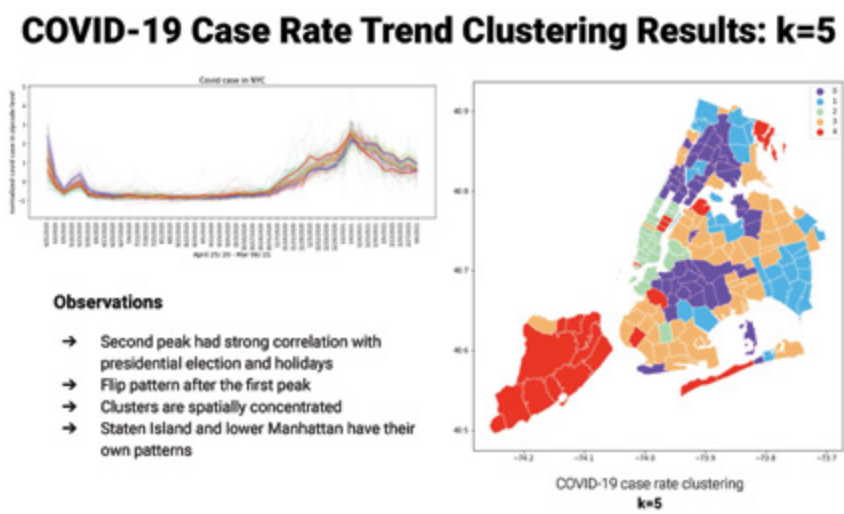
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Jade Watkins

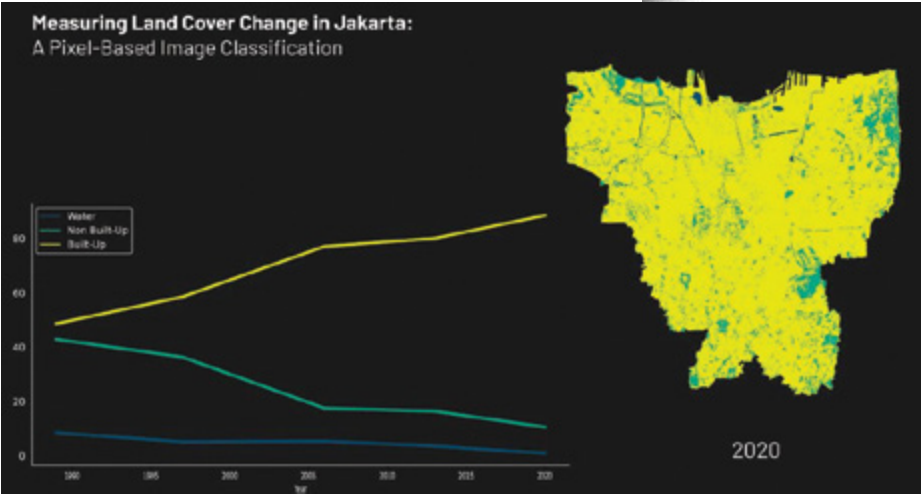


<EXPLORING URBAN DATA WITH MACHINE LEARNING> Boyeong Hong

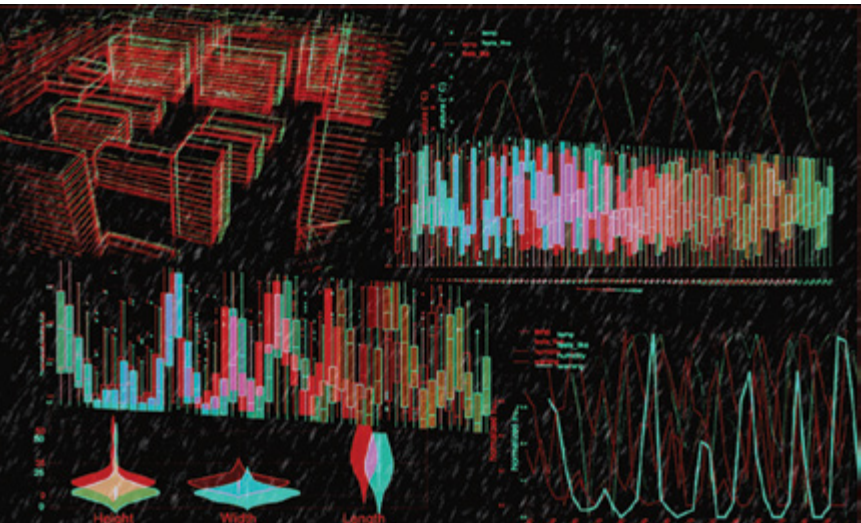


Helena Rong, Chengliang Li,  
Jiabao Sun

Priska Marianne



Qi David Lin



<ENVIRONMENTAL DATA ANALYSIS IN CONTEXT OF CLIMATE CHANGE> Peter Marcotullio,  
Kaz Sakamoto

Jin Hong Kim, Justin Barton



Will Cao



Priska Marianne



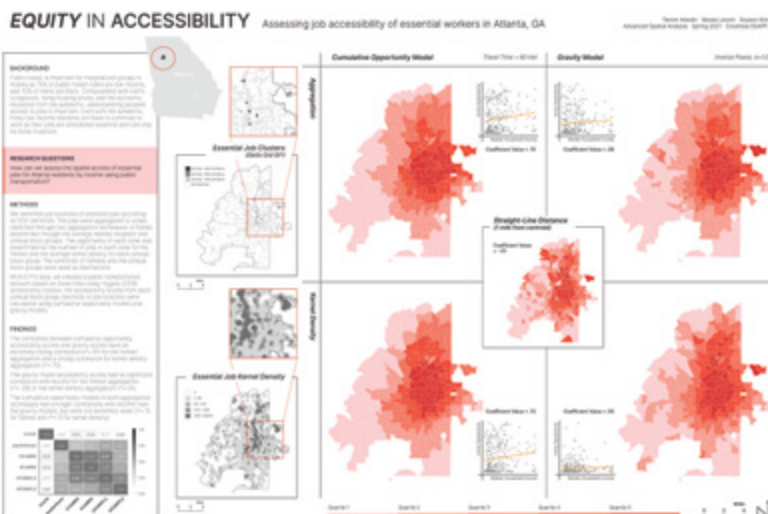
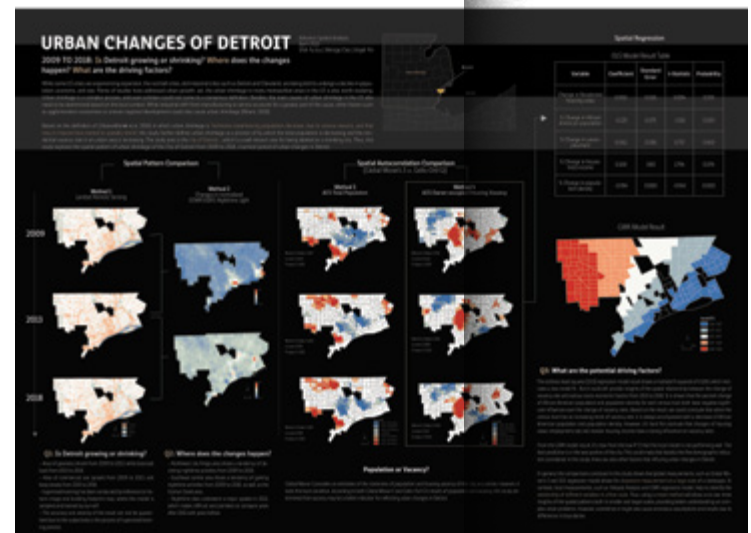


<ADVANCED SPATIAL ANALYSIS> Leah Meisterlin



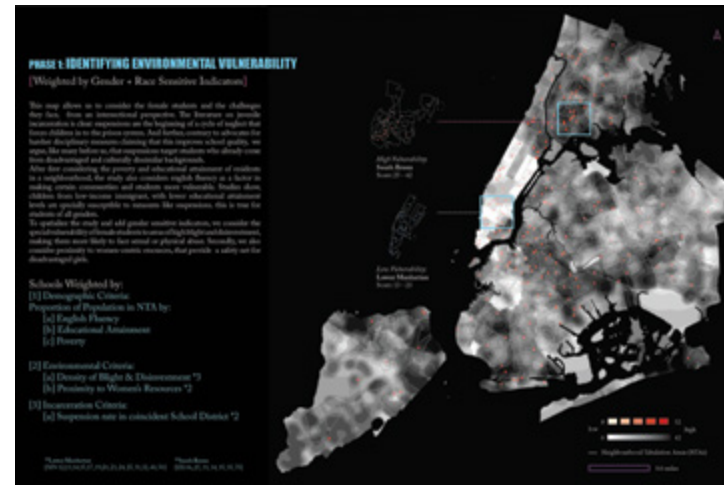
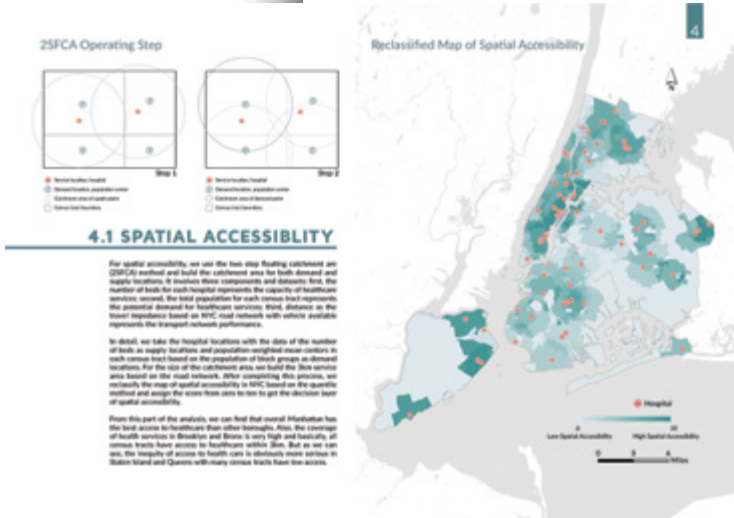
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Spenser Krut

Mengqi Cao,  
Gina Liu, Angel Yin

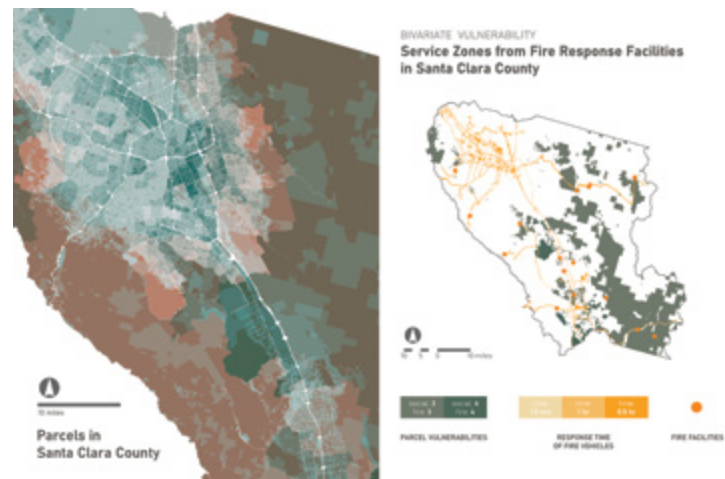


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Soyeon Kim,  
Moses Levich

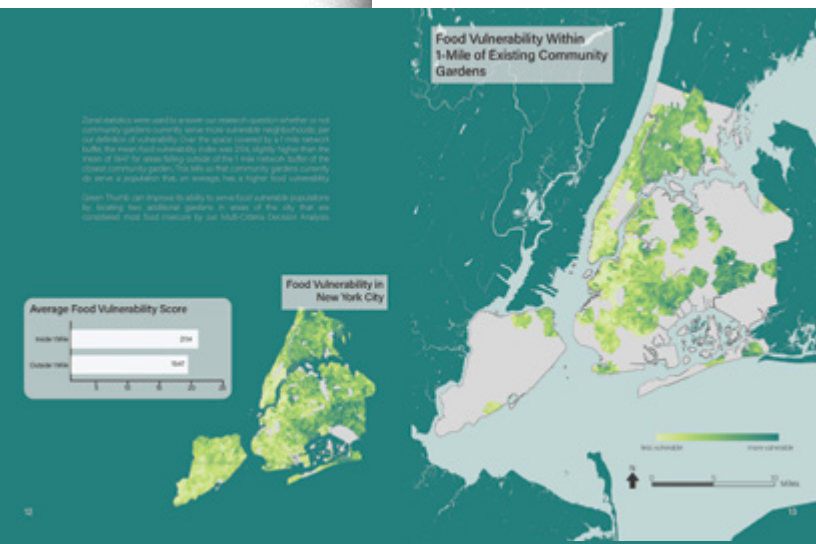
Jianwen Du, Hanbo Lei,  
Yixuan Ouyang



Ranjani Srinivasan, Nile Johnson



Sarah Mawdsley,  
David McNamara



Will Cao, Sherry Te, Sori Han







## &lt;THESES&gt;

**Myles Agudelo**

*Luring Investment Through Higher Taxes:  
Evaluating the Impact of New York City  
Business Improvement Districts on Property  
Development*

Moirá O'Neill, Advisor

Business improvement districts (BID) are a widely used tool intended to address quality of life concerns and promote economic development. While BIDs have been shown to provide a variety of positive impacts to their districts, it is less clear whether these impacts translate into increased levels of commercial property development within the district. There is also a question of whether any observed increases in development are a result of existing economic resources that have been shifted from surrounding districts. This thesis attempts to quantify the impact of NYC's BIDs on commercial property development both within BIDs and their surrounding neighborhoods. To evaluate a BIDs role as an economic development tool, this thesis uses a difference-in-differences approach to compare the number of construction permits both in and around three Manhattan BIDs before and after the BIDs were established. Results show that BIDs do not play a significant role in increasing levels of commercial property development within their districts and neighborhoods surrounding BIDs do not experience a decline in commercial property development after a nearby BID is established. These results call into question a BIDs role as a major economic development tool, especially as the number of BIDs in NYC continues to grow. ■

**Regina Alcazar**

*Sandbox: Evaluating Smart City Technologies*  
Leah Meisterlin, Advisor

The social, political, and economic implications of technologies are extensions of the agendas set by the agencies that deploy them and the environments that shape them. The sandbox, whether managed by private or public agents, applies its ideologies, principles, and convictions within the technology itself. When the sandbox scales to the city, region, or other areas, so do the intentions in ways that can perpetuate inclusivity and engagement or exclusion and invasion. This study will contribute to the developing discourse on urban planning and the development processes of smart city initiatives to understand how advancements and disservices of urban technologies are distributed in communities. Unlike the majority of research in this sphere that attempts to quantify innovation or the technology itself as a metric for the success of a smart city program, this research examines the process of how the technology is instrumentalized—by whom and for whom.

To evaluate the effectiveness of smart city initiatives and to understand the social, political, and economic implications of the implementation process, two distinct case studies of smart city technologies implemented in the past decade are reviewed through a mixed-methods approach: (1) Las Vegas' transportation networks technologies deployed within their Downtown Innovation District, and (2) Chicago's environmental sensors project called the Array of Things, installed across the city. The two case studies represent differing approaches that are prevalent in current smart city endeavors, corresponding with intentions of economic development and civic empowerment. This critical analysis evaluates the context and intentions of smart city initiatives as a product design process and as a planning tool for allocating resources. ■

**Sebastian Andersson**

*Preserving Modernism in Post-Explosion Beirut*  
Hiba Bou Akar, Advisor

This thesis assesses how the reconstruction efforts following the 2020 Beirut port explosion are affecting the modern built heritage in the city, and analyzes how perceptions of the modern heritage are changing through this process. Grounded in the existing literature on the modern heritage in Lebanon, this thesis summarizes and offers a critical view on the totality of this literature. Analyzing the history of architectural modernism in Lebanon, this work seeks to place it in a wider context of Lebanese vernacular architecture and to question and complicate the idea of the 'modern'. Likewise, it aims to analyze the notion of a Lebanese or Beirut built heritage in light of current and past heritage efforts.

The contribution of this thesis is a series of in-depth interviews with experts, academics, and NGO representatives on the place of the modern within the idea of heritage in Beirut today, as well as a photographic survey of reconstruction efforts on El Khazinien Street in the Beirut neighborhood of Geitawi. Developed in collaboration with a co-mapper in Beirut, this thesis also adds to the conversation around international research in the age of COVID-19. The findings indicate that changed views on modern architecture are surfacing during the reconstruction efforts. These changes represent an initial apogee of an effort twenty years in the making to increase the knowledge of the modern heritage in the city. They are mirrored in current efforts to safeguard, document, and revalorize the modern heritage in the city, both on an institutional and a popular level, thus representing the beginning of a wider shift in the view on architectural heritage in the city. ▼

## Natalie Baldacci

*Examining Affordable Housing Policy Impacts on Local Development Trends in California*

Moira O'Neill, Advisor

This Professional Capstone assists Professors Moira O'Neill and Eric Biber in their Comprehensive Assessment of Land Use Entitlements Study (CALES) to answer questions about whether and how land use regulation shapes housing development patterns in California, with a particular focus on affordable housing development, in high-cost areas. The lack of affordable housing is one of California's most pressing planning issues. Since the 1970s, California's state housing framework, the Housing Element, has addressed housing shortage issues by requiring local governments to accommodate their fair share of regionally needed housing. However, these efforts have historically failed as 97% of local governments have never met their production requirements every housing cycle. Recently, the California Legislature passed two packages of bills, the 2017/2018 Housing Package, to address the ongoing housing shortage and systematic issues of the Housing Element. Notably, this package aims to hold jurisdictions accountable for non-compliance and accelerate residential development, specifically affordable housing production. This Professional Capstone Project explores trends in changes to a local law that regulates planning in response to these recent state legislative reforms. To date, the CALES team has completed research and analysis of land use regulation and collected approval-related data in 20 California Cities and Counties. This Professional Capstone assists this process by adding to existing planning code summaries within CALES. It also examines how recent state legislation and local ordinances potentially support increasing the affordable housing supply. This capstone then provides analysis of local changes to planning and zoning ordinances between 2018-2021 in CALES jurisdictions, finding that some jurisdictions revised the following: (1) establishing new inclusionary zoning ordinances and/or strengthening existing affordable housing policy initiatives; (2) establishing new zoning districts encouraging infill development, enacting new development standards promoting compact development, and/or loosening exist-

ing regulatory measures; (3) establishing new development approval procedures and/or revising existing approval measures that may ease barriers to residential development.►

## Justin Barton

*Municipal Annexation, Race, and Local Power: Evidence from Four U.S. Cities*

Leah Meisterlin, Advisor

While the topic of municipal annexation, the process of the expansion of municipal government boundaries to include previously unincorporated areas, has been examined by sociologists, legal scholars, and public administrators, it has received little attention from urban planning researchers in spite of its clear implications for issues that urban planners have historically focused on, such as the provision of services, education, power in the planning process, etc.

This thesis spatially analyzes annexations from 1970 to 2010 in Little Rock, Shreveport, Baton Rouge, and Memphis and examines annexation in these cities during this period. Presenting evidence that race was a contributing factor in these annexations, it follows other studies which have argued that the overall white proportion of a city was an important factor in annexation. Examining the history of annexation in the South and Midwest could provide another lens for understanding the hyper-localization of racial power and could further the understanding of power in the planning processes. Thus, it argues further research into annexation, concerning race and local power is needed.■



## &lt;THESES&gt;

**C. Hayes Buchanan**

*Performative Democracy: Participatory Planning, Co-optation and the Laundering of State Power in the South Bronx*

Hiba Bou Akar, Advisor

This research evaluates the role of participatory planning mechanisms such as Community Boards (CBs) and public hearings through two case studies involving environmental justice advocacy in the South Bronx. By tracing the theoretical and political underpinnings of the Postreform era of planning I contend that the results of the movement to democratize the planning process as encoded in the 1975 and 1989 charter reforms were severely flawed because it did not meaningfully devolve power to citizens—an observation often overlooked by contemporary academics. In the intervening years, the agency afforded to communities by these processes has developed unevenly: while some wealthy neighborhoods have wielded their CB to effectively achieve their goals, others like those in the South Bronx have found their priorities repeatedly ignored, overridden, or watered down. Through a thorough examination of the economic development deal which resulted in FreshDirect moving their headquarters to a site in Port Morris and the Sheridan Expressway redesign, I develop a theory of co-optation that instrumentalizes participation to launder state power to private interests, signaled by a retreat by activists from the official venues of the planning process in favor of ad-hoc advocacy groups. ■

**Tihana Bulut**

*Resilience Planning as a Means for Disaster Risk Reduction, Recovery, and Preparedness in the Rockaways: Insights from Hurricane Sandy & COVID-19*

Leah Meisterlin, Advisor

Resilience planning has emerged as a recently popularized phenomenon in the field of urban planning, having the potential to reduce urban disaster risk while also enhancing disaster recovery and preparedness. Current urban planning literature fails to consider resilience planning as a continuous process that integrates conditions of the pre- and post-disaster landscape. Planners practice resilience through phases, organizing after a disaster to plan and rebuild, largely ignoring the time before the disaster despite its potential for ensuring long-term community resilience. In a context where disasters are becoming more frequent, this time before needs to be considered when planning for resilience. This study attempts to reframe resilience in the field of urban planning by analyzing how resilience is practiced on the ground at the community level.

This study argues that resilience planning needs to consider dynamics across temporal space by studying the time in between disasters. In NYC, this refers to the near-decade separating Hurricane Sandy and COVID-19. This framework is applied and informed by a case study analysis in Rockaway, NYC, a community that has been disproportionately impacted by both Hurricane Sandy and COVID-19. The methods in this study include a series of qualitative semi-structured interviews with city agency representatives and community organizers. Findings conclude that in Rockaway, the practice and implementation of resilience planning within the last decade has contributed to issues of distrust, trauma, and burnout, negatively impacting COVID-19 recovery thus far. These findings emphasize the need for resilience to be practiced continuously as the recontextualization of everyday risk can help reduce community distrust, trauma, and burnout that have emerged as a result of the resilience planning cycle. ■

**Riley Burchell**

*Between Essentialisms: An Exploration of Non-binary Racial Identity and Place-making*

Leah Meisterlin, Advisor

Over the past forty years, the practice of transracial adoption has become an increasingly pervasive occurrence, specifically as it relates to the extraction of infants and children from East Asian countries to the United States. While this increase in prevalence has been noted and corroborated by state and country data as well as academic research conducted on the topic, little has been pursued that establishes its significance in terms of individual, community, and place-based identity development. This research aims to evaluate the effect of place on East Asian transracial adoptee identity development in these multiple contexts. Specifically, it focuses on the experience of East Asian transracial adoptees in NYC and how members of this community employ spatial, social, and cultural place-making practices in their efforts to create landscapes of belonging reflective of their unique identities. Informed by a review of pertinent literature across the disciplines of sociology, psychology, geography, and urban planning, survey responses from East Asian transracial adoptees, and interviews with place-making and adoptee community development professionals and East Asian transracial adoptees in the NYC area, this thesis proposes a new conception of place-making that addresses the liminal experience of the East Asian transracial adoptee identity and carries implications for place-making for other non-binary identities. ■

## Mengqi Cao

*How NGO Benefits their Local Communities: a Stakeholder Analysis and Evaluation of Dayu's Role in the Regeneration Process of Old Residential Compound in Shanghai*  
Weiping Wu, Advisor

Shifting from a phase of rapid growth in urbanization into a moderate-paced stage, China has faced many complicated problems during the urban regeneration period. To deal with complex urban problems, urban regeneration often requires integrated and coordinated strategies involving a wide range of stakeholders. Hence, a deeper understanding of the stakeholders is an essential step towards sustainable urban regeneration. Besides, many NGOs have emerged to try to provide a smooth communication platform for all parties. Therefore, this thesis would like to explore the interaction between various stakeholders and the role NGOs play in the regeneration process of old residential compounds in Shanghai through case studies. It will include a case study of the Hongxian Residential Compound Regeneration Project and rely on interviews and observations to help understand stakeholders in a more in-depth way. The method of stakeholder analysis will be employed to identify, prioritize, analyze the stakeholders and their roles.

The result shows that the government occupies an absolutely dominant position in the power structure, while NGOs have also been empowered to take a lead. Residents and other participants have few to say during the regeneration process. Meanwhile, the NGO would serve as both a key mediator and an organizer and provider of community cultural services in the different stages. Therefore, the author calls for policy support for NGOs' involvement, the empowerment of different stakeholders, and the encouragement of public participation in the future.▼

## Xiyu Chen

*Exploring Private Capital's Approach in the Renovation of Old Urban Residential Areas in China: A Case Study of Jinsongbei Community*  
Moira O'Neill, Advisor

Old Urban Residential Areas (OURA) refers to residential communities built early in the urban area, with low maintenance and management, inadequate municipal supporting facilities, and insufficient community service facilities, where residents have a strong desire to renovate. OURA renovation is a rather popular concept in China from 2020, marked by its being included in the central government's work focus in the next five years and national fever of renovation projects. However, facing the problems such as shortage of funds and weak operating capabilities, governments turn to introducing private capital.

This study strengthens knowledge of the private capital's approaches in OURA renovation by selecting Jinsongbei Community as a case study to analyze its renovation process. Investigations are made through talks, governmental files, and online resources, which help summarize and analyze the community background, renovation process, and organizational relationship. The results show that the private-led renovation is featured by administrative impact and relational contracting. The private capital has promoted efficient resource allocation and inspired public participation in community planning. However, Jinsong's model has potential flaws. In the last, the author recommends approaches to protect and promote the private-led OURA renovation's sustainability through organizational structure, implementation, and payment mechanism.►

## Ashley Esparza

*Housing Freedom: Navigating Access and Affordability in Search of Home: A Survey of Housing Policy in NYC, 1934 - present*  
Leah Meisterlin, Advisor

This research takes a survey of housing policy at the city, state, and federal levels towards evaluating the material impacts and outcomes that shape the living conditions of low-income communities within NYC. It sets out to define the idea of Housing Freedom to point to a set of qualities for dignified housing as a framework within which we can assess the goals and outcomes of policy. Briefly, Housing Freedom encircles access to adequate housing regardless of socioeconomic status, secure tenure, and the flexibility of the housing stock to allow for movement and growth without endangering the former. The focus of this paper on NYC stems from the multitude of affordable housing programs at work, historically and concurrently, across multiple scales of government, that allow for a better understanding of the current crisis towards new realms of possibility and programs for action. Synthesizing raw data from surveys, housing development reports, and tax records to examine the nature of the housing landscape in NYC over the last 20 years, along with examinations of the parameters of each program and analyses from other housing researchers, this work seeks to excavate the conditions and nature of housing as experienced by residents. Focusing on the dimensions of Housing Freedom, the analysis looks at the landscape of the housing stock and aspects of supply and demand, affordability and accessibility of housing, and stability and the realities of displacement against the relative success of residents' ability to stay in their homes for each program.■

## &lt;THESES&gt;

**Camille Esquivel***Responsibly Powering the Philippine Islands with Geothermal Energy*

Hiba Bou Akar, Advisor

**Lanier Hagerty***Small Town, Global City: The Changing Landscape in Muscatine, Iowa from 2010 to 2020*

Leah Meisterlin, Advisor

**Colin Hancock***Enchanting Practices: the Mescalero Apache Nation's Story of Planning in the State of New Mexico*

Moira O'Neill, Advisor

The research conducted in this thesis interrogates the impact of geothermal energy infrastructure in the Philippines and highlights the risks associated with any future development. Through a deep dive into historic literature and multimedia review, the study lays the foundation of the worsening energy crisis in the Philippines, and outline where aid has been received to fund resiliency and environmental conservation projects in this disaster-prone country. Through the case study of one of the largest geothermal energy plants in the world, the Tiwi Geothermal Complex in Albay, Bicol, policies, laws, and social movements are reviewed to better understand how the presence of the state and NGOs has shaped life and development in the region. By understanding the drivers of development and decision-making in the region, the potential of geothermal energy infrastructure to be a catalyst for resilient development that adequately improves the conditions and quality of life for local people, centering the struggles of indigenous peoples and subsistence farmers in defending their lands. The current scale of implementation and management of geothermal energy is challenged to re-prioritize the needs of people at the smallest administrative division, the 'barangay'. ■

On February 15, 2012, Xi Jinping, then vice president of China, visited Muscatine, Iowa, a small town on the banks of the Mississippi River with a population of just under 24,000. Though the visit lasted just one hour, it would shape the trajectory of Muscatine for the next decade. In the years that followed, Muscatine was the recipient of significant Chinese political, social and financial capital investment.

Muscatine's story is a story of global exchange, diplomacy, and strategic political partnerships, phenomena that shape some of the world's biggest cities. This thesis seeks to understand the nuances of these power networks in Muscatine's context and the tradeoffs for the community that has resulted from Xi Jinping's visit in 2012. This research can be divided into two distinct lines of inquiry: (1) Where is Muscatine positioned in a network of county, state, national and international global capital flows? (2) What implications has the influx of foreign capital spurred by Xi's visit had on the Muscatine community?

Results suggest that while Muscatine is a conduit through which Iowa and China have conducted their relationship, the small town has leveraged its position in a way that has ensured its benefit and protected against its exploitation. Muscatine's role as a node in major networks of international trade, foreign direct investment, and cultural diplomacy turns conventional frameworks of urban scalar dynamics inside out. ■

This thesis will convey the story of the Mescalero Apache tribe's historic and contemporary approaches to planning in their homelands in Southern New Mexico. Conveying this story means many things: a holistic understanding of the context of the Mescalero Apache people's traditional and contemporary planning practices; better understanding of indigenous planning practices in North America, and the world; and an improved understanding of a non-White approach to planning that can better inform contemporary and future planning practices. Indeed, the lessons learned in this thesis prove not only the significance of understanding indigenous planning practices but also that many of the lessons it teaches are ones that non-indigenous planners have been striving to incorporate.

Through an in-depth literature review, as well as findings outlining cultural, religious, public health, and economic indicators, readers will be provided with a comprehensive outline of the planning practices of the Mescalero Apache. I hope that with the conclusion of this study will come one more missing piece of that puzzle, taking planners one step closer to a more rounded methodology and approach to the field, as well as a more inclusive one. Though it cannot right the wrongs of past generations of planners, it can change planning's future course. ■



## Sanjukta Hazarika

*On Reclaiming the Streets for the People': Understanding Equity in Public Space Planning Strategies Through an Analysis of the Open Streets Program in New York City*  
Hiba Bou Akar, Advisor

Streets are a vital part of the public realm. They no longer simply exist for mobility but as a way to act out democracy. As NYC garnered global attention in becoming an epicenter of the COVID-19 pandemic, city officials looked to streets to provide outdoor respite from months of indoor isolation for New Yorkers. This came as a response to the 'new normal' that unfolded as a result of the pandemic; New Yorkers were spending time outdoors and taking to the streets for everyday activities while being able to safely follow social distancing protocols. Open Streets were a lifeline for the city's recovery. The pandemic allowed urban planners and policymakers to rethink our streets for a more climate-resilient, less car-dependent future. If these Open Streets bring social, economic, and environmental benefits, it is only fair that all New Yorkers have the same level of access to it. The approach will have to begin with justice. It would be the most reasonable to have Open Streets for those that need it the most—the neighborhoods hit the hardest by COVID-19, the ones with the least access to quality public open spaces, and the communities with the least mobility options. This thesis explores the meaning behind equity in this program. However, the rise of community organizing surrounding the program has given rise to some of the city's best Open Streets. Equity, with regards to this program, then calls for a more nuanced definition—it is about understanding and responding to the needs of each community.

The thesis looks into the genesis of the Open Streets program in NYC and analyzes its implementation. Through a case study analysis, it evaluates Open Streets in Williamsburg and Bedford-Stuyvesant in Brooklyn and Jackson Heights in Queens. In comparing how different communities across the city experience this program, this research aims to explore what has and hasn't been successful, in considering a more robust, permanent model for the future.▼

## Elaine Hsieh

*Enhance: Assessing the structure and efficacy of public-sector community engagement in New York City*  
Leah Meisterlin, Advisor

The purpose of this research is to contribute to a growing community of planners and active community members that believe in a future of fair, accessible, and empowering engagement. This research included questioning the role of planners and a stance on defining principles that should be recognized along with those currently recommended by the American Planning Association. The research is followed by a comparative analysis of the community engagement process of four case study projects in NYC and is supported by an additional in-depth discussion with planners and community organizations. Several implications were offered as a critique of the evaluation process of community engagement. First, despite having the necessary structures and democratic practices in place, the community engagement process of NYC is insufficient. Second, the time frame in which community engagement processes are open to the public limits the weight of community concerns in the decision-making process. Third, development projects often use tactics such as elongating processes which ultimately leads to community burnout and distrust in city governance.►

## YiYi Jiang

*Market Analysis of Rural Tourism in China's Urbanizing Suburbs: A Case Study of Chengdu SanSheng Hua Village*  
Weiping Wu, Advisor

With the rapid growth of urbanization, more and more people seek short relief in rural areas during their free time. Rural tourism is developing with the increasing need and requirement of urban residents. This study selects SanSheng Hua Villages as a case study to analyze the supply, demand, and strategies of the rural tourism market. This thesis utilizes Analytic hierarchy process-Fuzzy synthetic evaluation model and SWOT (Strengths, Weaknesses, Opportunities, and Threats) model to explore the present situation and tourists' attitudes toward SanSheng Hua Xiang. The result shows that the rural tourism market has the problems of homogenization, deficient infrastructure, messy and unprofessional management. The author thus recommends increasing characteristics, creativity, and unified management in SanSheng Hua Village for the future.■

## &lt;THESES&gt;

**Jin Hong Kim**

*Public-Private Partnership in Equitable Urban Tech Delivery: LinkNYC*

Weiping Wu, Advisor

When LinkNYC first launched in 2016, NYC initiated the largest municipal wireless network project in the world. The advertisement revenue from its digital kiosks would subsidize the cost of the city's fiber network build-out while providing free Wi-Fi throughout NYC at zero cost to the taxpayer—it was widely seen as a strategy for the city to address its digital divide that prevailed especially in outer-borough communities. Fast forward to today, the city is over 4,000 kiosks short of the 7,500 promised and significantly lacking services in outer boroughs where reliable internet access has been a dire need, especially in the recent global pandemic.

This thesis asks what key measures key partners have taken and its effectiveness in the LinkNYC initiative to ensure equitable distribution of broadband to underserved communities. More specifically, this research looks at the broader discussion of broadband provision through public-private partnerships, like LinkNYC, and takes it as a case study in the different approaches municipalities take on to provide universal broadband for all.■

**Geon Woo Lee**

*Crossing Borders: Policy Transfer of Slum Upgrading Practices in Southeast Asia*

Weiping Wu, Advisor

Throughout history, urban planners and international organizations have implemented urban slum upgrading projects across different periods and geographies. This process, known as policy transfer, happens frequently in urban planning, yet planning is inherently about responding to the local context. Thus, understanding of policy transfer of planning practices, such as urban slum upgrading, is crucial. Using two recent slum upgrading projects (Vietnam Urban Upgrading Project and the Indonesia National Slum Upgrading Project) in Southeast Asia as case studies, this thesis seeks to understand how the World Bank adjusts the implementation of urban slum upgrading according to different local conditions. An evaluation matrix assessing the priorities of measurable objectives of the two projects with qualitative analysis of local conditions is performed to support the findings.■

**Hongseog Lee**

*Implementation of smart mobility policy for metropolitan and medium-sized cities in South Korea*

Moira O'Neill and Douglas Woodward, Advisors

The Korean central government's "Third Smart City Comprehensive Plan 2019-2023" and smart city master plans from 29 local governments are the main scope for this study. Among the number of characteristics attributed to a smart city, smart mobility policies are the focus of this thesis. Thus, the main research question is "How have smart mobility projects been implemented in metropolitan and medium-sized cities in Korea?" To answer the research question, this paper proceeded with comparative analysis, case studies, and statistical assessment.

The analysis yielded the following conclusions. First, smart mobility projects applied to medium-sized cities were very uniform, and the projects applied previously on metropolitan cities are similarly implemented in medium-sized cities. In the case of metropolitan cities, the level of smart mobility infrastructure seems to be one step further than that of medium-sized cities. Second, the smart mobility and smart city budget of metropolitan cities is higher than that of medium-sized cities. In addition, the budget for smart cities per population was much larger in medium-sized cities than in metropolitan cities, and the result of dividing the smart mobility budget by the city area was larger in metropolitan cities than in medium-sized cities. Third, private investment in smart mobility projects in mid-sized cities is small. Fourth, the performance of shared bicycle use in cities with smart mobility projects based on the smart city plan has increased significantly compared to those that do not.■

## Caili Li

*A Framework for Sustainability Assessment of Urban Regeneration: The Case of Battery Park City*

Weiping Wu, Advisor

Sustainability has gained growing importance in today's urban development. In a highly urbanized context, to meet growing population needs, development, or equity goals, additional social, economic, or environmental benefits are created through urban regeneration projects within a city. This paper explores the concept of urban regeneration and sustainable regeneration and its assessment methods. A sustainability assessment framework integrating three pillars—social, environmental, and economic—aspects will be developed, and the assessment will be performed using the case of Battery Park City, an often-appraised waterfront urban regeneration project in NYC. The processes and results of the development are examined to provide insights on the critical factors and approach to deliver sustainable urban regeneration. In addition, this paper also seeks to contribute to sustainability assessment approaches. As sustainability assessments often focus on one aspect of the three pillars, the developed framework integrating all three pillars could be referenced for scholars that seek to assess comprehensively.

The paper finds that Battery Park City has meaningfully achieved sustainability in terms of deriving social, economic, and environmental benefits. Nevertheless, the assessment finds that Battery Park City could have incorporated a sustainability initiative in an earlier stage. It is revealed that tradeoffs between the three aspects and stakeholders are key characters in the result and development processes.▼

## Qingyuan Li

*How Population Size and Density Affect the Spread of COVID-19 A Quantitative Study of the United States at the County Level*

Weiping Wu, Advisor

The scholarly debate about the influence of population density on COVID-19 spread points to a question: whether it is a larger population density or a larger size of the population, that actually accelerates the spread of the virus. To figure out an answer in the US context, proper considerations should be taken to deal with three highly-influential determinants of the shape of a COVID-19 curve: the timeline of policy interventions, the metro and non-metro division, and the phase of the pandemic. To safely unmask the effect of population size and density at the county level, I introduce a group of “seasonal surges” and “COVID-19 policy reaction” variables, which measure to what extent a pandemic surge happened in a season, and whether the surge was followed by effective policy intervention within the season. Besides, a group of interaction variables based on the division of metro and non-metro counties is added to address some socio-cultural differences.

To generally interpret the results, population density positively correlates with COVID-19 spread, while population negatively correlates with COVID-19 spread. However, in the early phase of the pandemic, density had a negative impact only in metro counties, although in later phases the effect of density no longer differed between metro and non-metro counties. The negative impact of population on COVID-19 cases is most observable in non-metro counties, while its coefficient for metro counties was evidently smaller.►

## Qi David Lin

*Urban Building Energy Prediction at Community Scale: A Case Study Using Data-Driven Methods in Jianhu City, China*

Malo Hutson, Advisor

Predictive models for urban building energy use have been the focus of much research in recent years, especially using data-driven techniques. However, these models still need to address recognized challenges, such as employing sufficient energy use data in spatial and temporal scales and accounting for interbuilding effects. In this regard, several typical data-driven predictive models for urban building energy use were proposed in this capstone to reduce the large data requirements and improve the prediction accuracy. Using a dataset of four years of electricity consumption by public buildings in Jianhu City, a county-level city in Jiangsu Province, China, and data on the corresponding building morphological parameters, this project compares the predictive performance of these models under different algorithms. The results suggest that a building network based on building morphological similarity can improve the overall performance of energy consumption prediction models for individual buildings in an urban context. This building network can also obtain relatively reliable energy consumption prediction results in the absence of historical energy consumption data of the target building. The project also reveals that the data-driven models can accurately predict total building consumption in a region when the historical energy consumption of some buildings is not available. This study provides more comprehensive references and improved accuracy and robustness of urban building energy demand prediction, resulting in potential solutions that reduced data requirements of urban energy models.■



## &lt;THESES&gt;

## Hui Lui

*The Collaboration Models of Practices of Aging in Place in Different Contexts*

Leah Meisterlin, Advisor

## Priska Marianne

*The Land-Water Nexus in a Sinking City: The Case of Jakarta*

Hiba Bou Akar, Advisor

## Jason Mencher

*Renter Protections against Eviction: Identifying and Analyzing Laws, Policies, and Procedures in Chicago, Houston, Los Angeles, and New York City*

Weiping Wu, Advisor

With the aging of the population and the change in the way people choose to support their old age, it has become a popular way to enjoy aging life in a familiar environment. To study the practice mode of this senior care demand and the operating principle behind it, this study is devoted to studying the practice of Aging in Community in Shanghai and New York, and the effectiveness generated by the different cooperation modes formed among the government, the private sector and non-profit organizations. In this study, a comparative study was conducted in the way of document analysis and semi-structured interviews to study and analyze the practice in the Shanghai embedded community-based senior care program and New York naturally occurring retirement community-supportive service program. Effectiveness was evaluated from three perspectives: innovation and its sustainability, comprehensiveness, and community integration. After analysis, it found that the Shanghai case mainly adopts the practice of the government-led model, which is a centralized model that can provide a set of continuous innovation, comprehensive but less integrated practice, while New York adopts shared responsibility model, which is a more distributed model that provides a less sustainably innovative and comprehensive but more for the community and integration solution. ■

Coastal cities around the world are increasingly facing inundation hazards as urban expansion and population growth changes hydrologic systems in the floodplains and compounding impacts of climate events accelerate and exacerbate these risks. The land and water dynamics in these shifting landscapes intersect with biophysical and sociopolitical dimensions that shape uneven flood vulnerability. This thesis explores the ways in which differential vulnerability to floods in Jakarta has been produced since the colonial rule and reproduced throughout major urban development phases in postcolonial Jakarta. Applying the framework of political ecology, this thesis investigates the three interconnected elements that are at play in the production of uneven flood risks: the changes in land cover associated with rapid urbanization, the constant need to make room for water, and the inclination to turn to engineering solutions that are not context-specific during moments of crisis. With the analysis of remotely-sensed data, this thesis explores a method to detect the land cover change and their implications for modifying urban hydrology. Using two case studies of flood mitigation infrastructure, this thesis examines the ways Jakarta has navigated the tension between making room for water and maintaining space for people. It further introduces the concept of co-production in developing solutions to flooding mitigation and climate adaptation actions, in the context of existing unequal power relations and the North-South divide. Finally, this thesis puts forward the importance of understanding and challenging the colonial legacy of fragmented water infrastructure and the ways they shape the production of uneven flood vulnerability and perpetuate socio-spatial segmentation in Jakarta. ■

For the roughly one-third of Americans who rent their homes, eviction is an ever-present threat. Noting the negative effects of eviction including poor health, education, employment, and social outcomes, in response, cities have enacted renter protections against the eviction of urban tenants. Such protections take the form of landlord-tenant laws, rent regulations (price controls), access to legal counsel, and specific legal procedures required to obtain an eviction judgment. Over the past year, in response to impacts of the Covid-19 Pandemic, local, state, and even the Federal government have taken unprecedented steps to further protect renters by issuing expansive, but temporary, eviction moratoriums. While existing literature examines the causes and impacts of evictions, there have been few attempts to aggregate, compare and understand the different legal and policy protections against eviction in U.S. cities. This research focuses on doing so for the four largest renter cities in the United States: Chicago, Houston, Los Angeles, and NYC. The identification of such protections by this thesis, and their compilation into a matrix, can serve as a roadmap for planners from any city to gather relevant eviction protections in their respective locales and better advocate for housing policy changes and stronger protections for tenants. ■

## Juan Sebastian Moreno

*The Urban, Social, and Environmental Impact of Centralized Waste Systems A Study on Segregation and Local Alternatives for the Doña Juana Landfill in Bogotá, Colombia*  
Hiba Bou Akar, Advisor

Waste has been concealed and misallocated as a consequence of urban growth. While many residents of cities rarely think about refuse beyond a quotidian scale, the spatial consequences of waste management systems are disproportionately dire for the neighbors of landfills—often, the urban poor. In Latin American cities, the entanglement of waste and urban informality is a driving force behind peripheral urbanization, a process in which the margins of cities are contested and appropriated by those who have nowhere else to go. This thesis explores the consequences of centralizing waste in Bogotá, Colombia. The Doña Juana landfill, the only facility serving the city, has operated since 1988 and has radically changed the social dynamics and the landscape of its environment. As more land gets devoured to bury trash, contamination and informality spread at a similar pace, creating opportunities for increased peripheral development and reinforcing patterns of segregation. Placing centralized landfills, such as Doña Juana, is equivalent to discarding pieces of cities, marking them as disposable. To repair the urban fabrics ruptured by waste, urban planners need to create strategies that account for the spatial inequities of landfills, but also to understand the role of these pieces of infrastructure in the expansion of informal development.▼

## Madeline Peña

*Investing in the Inner City Through Urban Public Schools: Evaluating California's Equitable Education Finance Policy*  
Moirá O'Neill, Advisor

High-need students are the fastest-growing sector of children in the United States today, and California, which serves one in every eight public school students in the US, serves the vast majority of them. With its sheer size and breadth of diversity, California sits in a unique position to touch the lives of a significant portion of disadvantaged youth in the US. Recognizing this role, California is spearheading reforms that aim to create an equitable public education system for all students. In 2013, the state overhauled its school finance system, a categorical method of funding that was used in the state for 40 years. Former Governor, Jerry Brown, adopted the system, called the Local Control Funding Formula (LCFF), which directs increased funds to the most high-need students and restores local control over how money is spent at schools. This mixed-methods study will employ a case study approach to better understand how the implementation of the LCFF and its community engagement process, the Local Control Accountability Plan (LCAP) work in practice. This case study of the Los Angeles Unified School District (LAUSD) will focus on the East Los Angeles neighborhood of Boyle Heights, to illustrate how the additional LCFF funds are dispersed locally to target the needs of high-need groups, how the community is engaged to ensure their immediate needs are met, and what opportunities and challenges to an equitable education system arise following the post-implementation of the LCFF.►

## Nicholas Lincoln Perry

*Retrofitting "Edge City": Lessons From Perimeter Center, Georgia*  
Weiping Wu, Advisor

The growth of metropolitan areas in the American Southeast has placed additional strain on the aging auto-oriented infrastructure of edge cities, the suburban pseudo-downtowns of the late 20th century. Area stakeholders in Perimeter Center outside Atlanta (namely, the Perimeter Community Improvement Districts) cite a housing shortage, crippling traffic congestion, and changing consumer preferences among their reasons to embrace suburban retrofitting strategies under the Atlanta Regional Council's Livable Centers Initiative—in theory molding the edge city into a form of a traditional urban downtown. This thesis determines the effectiveness and legacy of such strategies by employing a two-part methodology—first, by engaging in a discussion of the evolution of notable recent plans through the lens of characteristics of urban downtowns and secondly, through a field study of completed improvements and developments. Ultimately, the plans succeeded in providing a skeletal civic realm for Perimeter Center's urban future. Yet, what has emerged atop it is a sort of extreme "hybrid urbanism", pitting asynchronous architectures, densities, and development types against one another in an arrangement that is nearly as disjointed in practice as its sparse, automobile-scaled past.■

## &lt;THESES&gt;

**Zeineb Sellami**

*Youth-driven action, participatory planning, and the attainment of Sustainable Development Goals in Tunisian cities*

Hiba Bou Akar, Advisor  
Youssef Cherif, Reader

The purpose of this research is to evaluate how youth-driven initiatives and participatory planning within municipalities affect the attainment of the United Nations Sustainable Development Goals for 2030 at the grassroots, municipal, and national levels. The research focuses on post-revolution Tunisia and the changes that have occurred since the Arab Spring transformed the MENA region in 2011. It begins by exploring the SDGs as global frameworks, where attainment is measured at the national level but whose goals are prescribed in more localized contexts, with cities playing a key role. The study then questions the effectiveness of post-revolution decentralization policies on municipal projects and participatory mechanisms. Finally, this thesis explores the advent of multiplying youth-driven grassroots initiatives that, deliberately or unknowingly, align with global sustainability goals.

In addition to archival research on the SDGs and Tunisian municipal structures, the research employs semi-structured interviews allowing for a more in-depth view of the situation at the local level. Interviewees include experts from the UNDP, private sector, international organizations, municipal decision-makers, and youth leaders that spearhead initiatives across their neighborhoods. The aim is to shed light on the rarely discussed role of youth at the intersection of local and global planning frameworks through this Tunisian case study. Where most research studies focus on a single one of the aforementioned topics, this thesis brings together three levels of inquiry: the global, the national, and the local to shed light on the complex dynamics that spur and determine planning outcomes in Tunisia's post-revolutionary context. ■

**Xifan Wang**

*The Two Tales of a New Retail Ecosystem: Analyzing How E-commerce Reshapes the Urban Retail Landscape through a Case Study in Shanghai, China*

Leah Meisterlin, Advisor

During the last two decades, Information and Communications Technology (ICT) has been recognized as one of the fast-growing urban technology and with ICT, a drastic increase in e-commerce transactions have been observed, threatening the traditional physical retail industry, changing its current network based on distance, and restructuring the existing retail ecosystem. As vast changes due to the new technologies have been observed in China, this study chooses one of the biggest and new technology-adapted cities, Shanghai, as a case study and focuses on its local impact induced by e-commerce. This study, positioned in the middle of this change, is thus framed as "the two tales of a new retail ecosystem."

By analyzing brick-and-mortar (B&M) retail and e-retail, this research aims to have a holistic understanding of the new retail ecosystem in downtown Shanghai. E-commerce trends are examined through local context and relevant reports. Changes in the geographic distribution of retail stores over a year are examined through spatial analysis, Kernel Density Estimation (KDE), on point of interest (POI) datasets of retail stores in Shanghai. Shopping behavior changes due to the emergence of e-commerce as an option are examined by surveys collected at two selected neighborhoods. The survey analysis also implies the potential influence of e-commerce on the conventional retail landscape and links the e-commerce trend and the change in physical retail networks. Convenience goods and comparison goods are categorized to understand the different impacts.

The findings suggest that instead of a one-way effect by e-commerce on the physical retail sector, a mutual relationship exists between the two, leading to a deeply integrated new retail ecosystem, as well as distinct effects on comparison and convenience retail. Being aware of this new system is essential for planners to reconsider the commercial planning for cities. This study proposes a new planning paradigm and other recommendations to address the issue. ■

**Jiuyu Wang**

*Earlier-built Danwei Communities: Are They Working Well for the Elderly? An Analysis of Bajiaolu Community, Beijing*

Maira O'Neill, Advisor

The transformation of communities that were built before 2000 has aroused national attention with the pressing problems caused by China's aging society. Due to limited building technology and poor management, the outside living environments of earlier-built communities have gradually degraded, compared to those of newly-built communities. Danwei communities, commonly built during the planned economy era, are typical earlier-built communities with degraded outside living environments. There is also a large segment of the elderly population in Danwei communities. In 2017, China piloted 15 cities to help earlier-built communities better adapt to the needs of the aging society. Beijing, in recent years, pioneered its "Jinsong Model" with a comprehensive transformation tool including physical environment renovation, social cohesion enhancement, and financial support. Other earlier-built communities in China have gradually become the objects of community renovation projects. Among them, a worse living condition is found in the communities that had been originally built as Danwei communities. This thesis study analyzes the existing problems of the outside environment of the Bajiaolu community, one former Danwei community constructed by Shougang Enterprise. The conclusions of this study are based on observations of the physical environment of this community and the daily outdoor behavioral characteristics of senior residents. My results show the needs of the elderly for better living environments and behavioral requirements on the living environment to be more convenient. By comparing the needs of the residents and the existing physical environments of their community, this study finds that the Bajiaolu community is far from offering good service for the elderly. Based on the findings of this study, I recommend three strategies to improve the outdoor shared spaces to improve the quality of life of residents in earlier-built Danwei communities in China: differentiate community outdoor spaces, enrich the functions of these outdoor space, and ensure that comfort is included as an important element in the design of the spaces now and in the future. ■



## Hanzhang Yang

*Outdoor Dining during COVID? Analyzing the Impact of New York City's Open Restaurants Program*

Hiba Bou Akar, Advisor

The purpose of this research is to understand better the conflicts developed by NYC's Open Restaurants program, which intends to help the city's hospitality industry rebound during the COVID-19 pandemic. This research proposed that the Open Restaurants program's predecessor will be the Sidewalk Cafes program. Still, its state of exception nature eliminates the community governing process, encourages the future privatization of public space, and creates conflicts on the access to sidewalks. Through historical and theoretical research on urban planning, government policy, and urban studies, the research argued that the Open Restaurants program was a faux revival of the falling public life when it failed to create or resume connection between users of the street. The author also gave recommendations to the Open Restaurants program to protect equitable access to sidewalks and strengthen community autonomy.▼

## Angel Yin

*Envision Spring Creek: Resilience Assessment and Recommendations for Addressing Layered Risks*

Moirra O'Neill, Advisor

NYC and many other cities around the world are experiencing increased risks to climate change and its related climate problems. Hurricane Sandy exposed the vulnerability of NYC's communities with devastating consequences, many of which are will come back in the future. Meanwhile, affordable housing, as an important component for both the community and city, needs to respond to various urban needs and the increasing risks of climate change. As the city looks to be a global leader in fighting against climate change while striving to provide affordable housings to more New Yorkers, it is imperative that city agencies work with communities to plan for a resilient and affordable future.

Spring Creek is a waterfront neighborhood in the East New York portion of Brooklyn in NYC, within Brooklyn Community District 5. It is named after Spring Creek, a creek that runs through the area and goes into Jamaica Bay. Like many other communities in NYC, Spring Creek experienced various kinds of climate and environmental hazards in the last few decades. For example, Industrial activities and lack of tree canopies worsen the Urban Heat Island (UHI) effect and outdoor air pollution. However, similar to all out-lying communities in NYC, Spring Creek is physically isolated from most central city resources. This physical isolation exacerbates residents' ability to cope with climate hazards if happening, as well as highlights the challenge of limited access to resilient and affordable services and amenities such as housing and healthcare.

Partnering with HPD, this capstone project conducted a comprehensive analysis on the level of resilience of an identified study area in the neighborhood of Spring Creek, Brooklyn. By conducting an initial study and an indicator-based resiliency assessment, the project identifies existing risks and hazards prone to the neighborhood and provides a concept plan with recommended mitigation measures that would help increase the level of resiliency. The purpose of this project is to help HPD envision a livable, sustainable, and affordable future for Spring Creek.►

## Shinichi Yoshihara

*Rebuilding a Historic City: Post-Disaster Housing Reconstruction in Bhaktapur, Nepal*

Hiba Bou Akar, Advisor

A crisis can turn into an opportunity to change. The larger the crisis is, the motivation for a change becomes more significant. A devastating earthquake in 2015 motivated Nepal to build more resilient housings nationwide that would not collapse by future earthquakes. With the Build Back Better concept in mind, the national housing reconstruction program helped disaster-affected people rebuild their earthquake-resistant homes. However, existing studies suggest that historic settlements in Kathmandu Valley are losing their historic values due to the earthquake damage itself and the recovery interventions.

Through a single case study with archival research, my thesis investigates how the post-disaster planning interventions, specifically the national housing reconstruction program, have impacted Bhaktapur's old town. The result shows that the housing reconstruction program brought about a long-lasting transformation of the old town. The overall assumption of the program was based on rural areas, which does not necessarily address the complexities of urban settlements. One of the reasons behind this is the spatial preference of the international institutions and other development partners that selected rural areas as their targeted sites. This created an unintended new set of vulnerable populations in urban areas and de-densification of the old town. Furthermore, the narrowly defined Build Back Better recovery accelerated the change of the old town instead of conserving it. The brick masonry with earthen mortar, historically used in Newari settlements, could not be practically applied to three- or four-story urban housing reconstruction because of the structural requirements of the National Building Code.■

## &lt;THESES&gt;

**Haochen Zhang**

*ESG Disclosure and Sustainability Performance of Residential REITs: Empirical Study on Development Projects in New York City*

Weiping Wu, Advisor

In addition to archival research on the SDGs and Tunisian municipal structures, the research employs semi-structured interviews allowing for a more in-depth view of the situation at the local level. Interviewees include experts from the UNDP, private sector, international organizations, municipal decision-makers, and youth leaders that spearhead initiatives across their neighborhoods. The aim is to shed light on the rarely discussed role of youth at the intersection of local and global planning frameworks through this Tunisian case study. Where most research studies focus on a single one of the aforementioned topics, this thesis brings together three levels of inquiry: the global, the national, and the local to shed light on the complex dynamics that spur and determine planning outcomes in Tunisia's post-revolutionary context.

The regression outcomes indicate that residential projects with ESG disclosure tend to have better environmental performance, while citywide regulation is the dominant factor in energy consumption. And the projects are more likely to have a higher portion of affordable housing programs and fewer resident complaints. Finally, recommendations for enhancing sustainability performance via the promotion of ESG disclosure are offered for regulatory departments, industry associations, planners, and developers. ■

**Haoran Zhang**

*The Child-Friendly City, Planning Analysis in Beijing: The Case Study of Beijing Shuangjing Community*

Malo Hutson, Advisor

Child-friendly City is quite a new planning concept in China that did not arise until the 2010s. In recent years, many Chinese cities released their Child-friendly City Strategic Planning which highlighted children's rights, growth, and opportunities, and started to apply the concept into practice in planning projects. This study illustrates knowledge of child-friendly city planning by discussing the current child-friendly planning policies in Beijing and using Shuangjing Community as a case study to analyze children's participation in the planning process. Interviews are made with different stakeholders, which help identify the community engagement plan involved, examine children's roles and positions, and investigate their interactions. Finally, a couple of recommendations are proposed for a better child-friendly Beijing. ■







## *Historic Preservation*

### Jorge Otero-Pailos, Program Director

The Historic Preservation Program at Columbia GSAPP offers a two-year Master of Science in Historic Preservation (MSHP) and a five-year PhD in Historic Preservation. The program frames preservation both as an experimental form of creative expression and as a critical form of collective action guided by philosophical, ethical, and critical thinking, supported by evidence of its benefits to society, and enabled by emerging technologies and policy tools. A dedicated Preservation Technology Laboratory supports student and faculty research. The program boasts a world-class faculty whose professional practices and scholarship are internationally recognized as setting the standard in the field of historic preservation since James Marston Fitch founded it in 1964 as the first such program in the U.S.

The student work presented in *Abstract 2021* demonstrates the diverse intellectual interests, critical historical questions, technological experiments, policy research, and design innovations that have energized our conversations and collective learning this past academic year. In the studios, students engaged in real-world, hands-on projects in architectural heritage sites in New York, focusing on how preservation can be a force for social justice. First-year students focused on Harlem, and the sites associated with the Harlem Renaissance. Second-year students developed radical reconstructions of missing structures at the John Jay heritage site associated with under-represented social groups,

engaging the crucial need today to expose and materialize the space of political, psychological, and social exclusions and inclusions at the root of the foundations of American democracy. Students applied experimental preservation methods to not only extend the physical life of these heritage sites, but more importantly to help improve the societies that use them. Taken together, the studios explored preservation as a way to help societies to remember the justices and injustices of the past, and showed a deep commitment to imagining a better future.

Such forward-thinking commitment is also evident in the year-long theses that each graduating student completed. These scholarly works made original contributions to the discipline of historic preservation: they unearthed how discriminatory spatial policies such as redlining affected preservation; imagined how video games can enhance visitor engagement at heritage sites; developed testing protocols for protective coatings on bronze; proposed new methods for assessing the decolonization of heritage policies; documented the commemoration of Holocaust refugees in Washington Heights; and envisioned improvements to children's education at heritage sites, among many other innovative research projects.

In this work, preservation appears as an experimental practice testing the limits of what architectural heritage can do to spark society's collective memory and imagination.

## &lt;STUDIO II&gt;

[Spring 2021] Erica Avrami, Morgan O'Hara

A core aim of this studio was to promote an understanding of cultural heritage and preservation practices using a context-oriented lens. It explored the multifaceted legacy of the Harlem Renaissance, its significance in anti-Black racism histories and activism, and its place-based associations in northern Manhattan. It asked: What stories, events, works, organizations and entities, and individuals characterize and/or represent the Harlem Renaissance? What geographies and places were/are associated with the Harlem Renaissance? What factors influenced their location and development? How are they spatially encountered and/or experienced today? How are they valued and by whom? How can the preservation enterprise—through community-engaged research, policy, physical intervention, interpretation, creative expression, etc.—instrumentalize the heritage of the Harlem Renaissance as a tool for anti-racism and social justice?

## &lt;JOINT HISTORIC PRESERVATION AND ARCHITECTURE STUDIO: RADICAL RECONSTRUCTION&gt;

[Fall 2020] Jorge Otero-Pailos, Mark Rakatansky

This studio, "Radical Re-construction: Materializing Social Justice at the Estate of John Jay, a Founder of American Democracy," proposed the design of a new interpretative education center, and a series of reconstructions of missing buildings associated with under-represented narratives at the John Jay Heritage site, engaging the crucial need today to expose and materialize the space of political, psychological, and social exclusions and inclusions at the root of the foundations of American democracy. The architectural and preservation question of the studio was how to materialize the matter of these entangled lives in their complex historical and current interrelations—how to reconstruct what is hidden or under-represented.

## &lt;STUDIO I&gt;

[Fall 2020] Andrew Dolkart, Kate Reggev

Studio I is the central focus of the first semester of the Historic Preservation program and a foundational course within the program. It engages students in questions of preservation and its role in the context of the built environment and its larger cultural manifestations. The course focused on developing skills primarily using NYC as its classroom. Specifically, the study area for much of the semester was in Central Harlem. The studio encouraged students to think about existing preservation tools, work with a variety of methods for exploring the field, and develop the ability to assess what has been learned in order to come to a conclusion about significance. It offered models for approaching preservation questions and for considering the diverse roles of the preservationist in contemporary practice.

## &lt;CONSERVATION OF BRICK, TERRA COTTA, AND STONE&gt;

[Fall 2020] Daniel Allen, Norman Weiss

This course explores a complex group of traditional masonry materials: brick, terra cotta and stone. The goals are to provide: an historical



overview of the manufacturing and sourcing of these architectural materials with a focus on the 18th century to the present; an understanding of some fundamental material properties concerning their use and deterioration in a range of masonry construction systems; and an exploration of state-of-the-art means and methods of their repair, maintenance, and conservation.

<PRESERVATION PLANNING AND POLICY>

[Fall 2020] Erica Avrami

This course provides a broad-ranging introduction to preservation planning and policy, and examines how historic preservation intersects with broader issues of justice and equity, community development, land use planning, real estate, climate change, and civil society. Key questions include: How do we decide what is heritage? How do we manage heritage and incentivize its preservation? How do we evaluate preservation planning and policy outcomes?

<INTERNATIONAL ISSUES IN PRESERVATION>

[Fall 2020] Erica Avrami

This course examines international policies and processes in the preservation of place-based cultural heritage, as well as their political underpinnings. Primary aims include: promoting critical thinking about how transnational institutions and policies approach preservation; examining how cultural and racial hegemonies and power relationships within and beyond the heritage enterprise influence structural conditions and decision-making, and exploring the dialectic between international norms and discourse and more localized policies, planning, and practices.

<THESIS I AND II>

[Fall 2020, Spring 2021] Paul Bentel

During the fall semester, students articulate and refine their thesis topic and begin research to answer the thesis question. They are assigned faculty advisors who provide support and feedback through meetings and presentations. During the spring semester, students work on their theses, select readers among faculty and practitioners, and present their work to advisors for feedback. The semester culminates in a series of thesis juries, during which students defend their theses before their advisor and readers.

<ARCHITECTURE AND DEVELOPMENT OF NYC>

[Spring 2021] Andrew Dolkart

This course traces the development of NYC through its architecture and examines the history of architecture as it is reflected in the buildings of the city. We look at the architectural styles popular in New York from the time the city was a minor colonial settlement to its development as a great commercial and institutional center in the 19th century, through the 20th century when New York became one of the great cities of the world, and into the 21st century, as the city continues to evolve.

## &lt;HISTORICAL NARRATIVES FROM ARCHITECTURE IN AND OF PUBLIC SPACES&gt;

[Spring 2021] Shelby Green

This master class was led by Shelby Green, Professor of Law at Elisabeth Haub School of Law at Pace University and co-author, with Professor Nicholas A. Robinson, of *Historic Preservation, Law and Culture* (2018) and *Historic Preservation: Stories and Laws* (2020).

## &lt;DIGITAL HERITAGE DOCUMENTATION&gt;

[Spring 2021] Bilge Kose

This course offers information about different techniques and tools in heritage recording and information management in different contexts and cases according to a place's scale, accessibility, and required outcome. The first core focuses on the digital documentation and information management of heritage places at a site and urban scale. The second core focuses on the documentation and information management of heritage places in site, building, and feature scales. Heritage surveying and recording techniques like photogrammetry 3D laser scanning are introduced.

## &lt;POWER AND PRESERVATION&gt;

[Fall 2020] Brent Leggs

Most of our parliament buildings, congresses, senates, court houses and city halls i.a. are designed according to very specific ideas on how power should be manifested in public, often holding prominent positions in the city and given certain symbolic properties. The seminar investigates how these spaces are being affected by today's political situations, if they are still relevant and create meaningful environments for a living democracy.

## &lt;TRADITIONAL BUILDING TECHNOLOGY&gt;

[Fall 2020] Tim Michiels

This course provided an overview of traditional building materials and systems, and equipped students to identify these materials and systems in the built environment regardless of geographic location and construction date. The class situates materials (such as earth, brick, stone, tile, mortar, wood, terra cotta, metals and concrete) in a historic, geographic, and economic context and provides the necessary sourcing and production information to help understand their physical behavior.

## &lt;HISTORIC PRESERVATION THEORY AND PRACTICE&gt;

[Fall 2020] Jorge Otero-Pailos

This lecture course is an introduction to historic preservation theory and practice, as it developed in Western cultures, from the Enlightenment to the present moment of globalization. We focus especially on how preservation theories and experimental practices helped to redefine and advance new conceptions of architecture, cities, and landscapes. Finally, we ask questions about how theory and practice relate to one another, and how a solid grasp of the discipline's history can help us articulate new ways of thinking and doing historic preservation.

## &lt;MODERN AMERICAN ARCHITECTURE&gt;

[Spring 2021] Jorge Otero-Pailos

This course is a survey of architecture built in the U.S. and its territories from 1876, the country's first centennial, to the present. It is designed to help develop your competence in identifying, understanding, and analyzing historic structures, their significance, types, and styles. The intention is to make students proficient in the use of the methodological, historiographical, visual, and intellectual tools necessary to fully grasp the meanings of historic buildings in their various contexts.

## &lt;ADAPTATION TECHNOLOGIES&gt;

[Spring 2021] Jorge Otero-Pailos

Why do people adapt technological objects, such as old buildings, to fit new purposes when they could build new ones? The reasons are not simply financial or environmental. They are also emotional and aesthetic, intimately personal and publicly cultural; that is to say, existential. Through close readings and guided discussions of seminal books, students in this seminar examine questions concerning the purposes of adaptation (the question of why), in relation to the technological means to achieve them (the question of how). We study the manner in which these two questions, the why and the how, are mutually constitutive of various kinds of adaptation technologies. The seminar introduces students to an expanding cannon of theories and methods for understanding the nature and purposes of adaptation technologies.

## &lt;CONSERVATION OF ARCHITECTURAL METALS&gt;

[Fall 2020] Richard Pieper

This seminar reviews the structural and decorative uses of metals in buildings and monuments. The metals to be reviewed include iron and steel; copper and copper alloys including bronze and brass; lead; tin; zinc; aluminum; nickel and chromium. The seminar examines the history of manufacture and use; mechanisms of deterioration and corrosion; and cleaning, repair, and conservation.

## &lt;MODERN BUILDING TECHNOLOGY&gt;

[Spring 2021] Theodore Prudon

This course analyzes changes in building technology in the context of the history of modern architecture. It examines how these changes and advancements in material technologies influence design capabilities ranging from glass and glazing technologies, reflected in better performance, to improvements in concrete design and use culminating in brutalist architecture. It also focuses on the emergence and development of systems such as ventilation, plumbing, fire protection, and prefabrication.

## &lt;INVESTIGATIVE TECHNIQUES&gt;

[Spring 2021] Amanda Thomas Trienens, Norman Weiss

The tools and techniques of building investigation in use today are numerous and vary widely from low to high tech approaches, providing practitioners an array of options to study their structures. Students



can learn several of these techniques in the Preservation Technology Lab: X-ray fluorescence (XRF), infrared (IR) imaging, splitting tensile strength, microchemical spot testing, and adhesion pull-off testing. Additional techniques learned were ground penetrating radar (GPR), impact echo, rebound hammer, scanning electron microscopy, and many more.

<CONSERVATION OF CONCRETE, CAST STONE, AND MORTAR>

[Spring 2021] Norman Weiss, John Walsh

Use of mortar and stucco originates in the Neolithic period. The Romans expanded this technology with the development of cast-in-place concrete construction. The course discusses the growing importance of these materials and techniques during the Industrial Revolution, reviewing discoveries that led to the development of novel lime-and cement-based compositions from the late 18th century to the present. By the 20th century, advances in technology transformed concrete and precast from functional engineering media into the most expressive and sculptural substances of modernism.



<STUDIO II HARLEM RENAISSANCE: PRESERVATION, SPATIAL ENCOUNTER, AND ANTI-RACISM>  
Erica Avrami, Morgan O'Hara

A core aim of this studio was to promote an understanding of cultural heritage and preservation practices using a context-oriented lens. It explored the multifaceted legacy of the Harlem Renaissance, its significance in anti-Black racism histories and activism, and its place-based associations in northern Manhattan.



HARLEM'S DEMOGRAPHY + POLITICAL ACTIVISM + BUSINESSES



- Density of Black businesses
- Blocks with communities opposing "Black encroachment"
- Black population / community growth
- Parades

KEY ISSUES & ANALYSES - HISTORICAL / 17

LOSS AND SURVIVAL

From today's vantage point, changes in Harlem did not only happen in the social and demographic realm. Multiple spatial modifications in urban, street, and building scales contributed to multi-layered and multi-faceted conditions of loss and survival, as did historic policies and key community institutions.

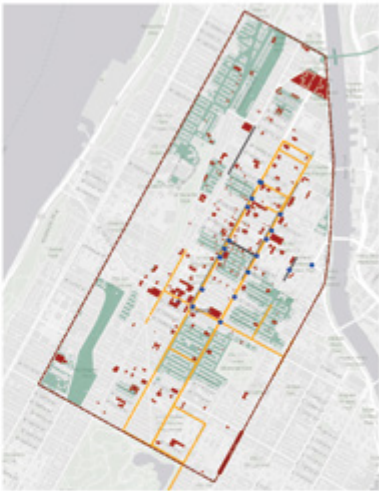
A collective identification and mapping of historic assets serves as the basis for analyzing the loss and survival of urban forms between the Harlem Renaissance and Harlem today, and for examining how different political contexts may have contributed to disparities among such loss and survival.

Due to the format of this studio, each of the fourteen colleagues identified social-spatially significant building assets and open spaces in the historic streetscape of Harlem under their assigned theme of historic context study. Assets were then registered into a spreadsheet incorporating fields of geographical information, social-spatial relevance, physical existence, segregation, and ownership by race. This information was then processed by the studio's spatial analysis group into a GIS database, which produced subsequent mapping products of spatial findings, navigating the team into further analyses of building asset loss and urban form change.

Identified historic assets were categorized into three typologies: building assets, open spaces, and designated areas. Echoing the theme of the studio - Preservation, Spatial Encounter and Anti-Racism - the team first looked beyond architectural merits and next extended the traditional architecture-focused scope of historic preservation to study the social-spatial connections and possibilities for revitalizing such connections. As a result, many intimate and ephemeral places of social-spatial interactions - such as parade routes, soapbox locations, playgrounds, and neighborhood businesses - are mapped as core assets of the Harlem Renaissance, with the intention to more carefully understand the legacies of the Harlem Renaissance and the barriers to preserving them in today's urban landscape.

HISTORIC ASSETS OVERVIEW

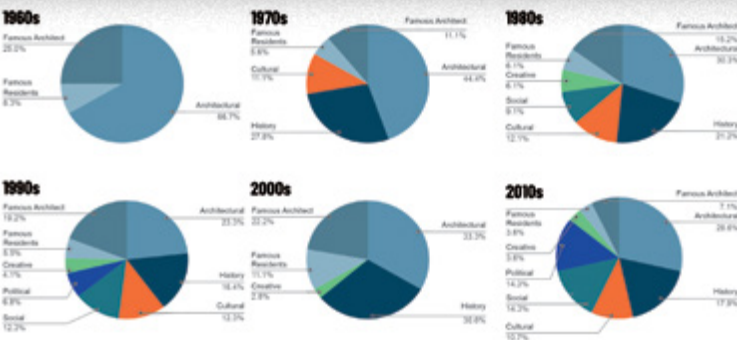
Shown here is the overall map of historic assets consisting of the three components of spatial inquiry: building assets, open spaces, and designation. The designation map reflects the existing preservation narrative about Harlem



- BUILDING ASSETS**
  - ALL BUILDING ASSETS
- OPEN SPACES**
  - SOAPBOX LOCATIONS
  - NBA PROTESTS & NOS UPRISING
  - STREETS OF ECONOMIC / ENTERTAINMENT SIGNIFICANCE
  - OTHER OPEN SPACE ASSETS
- DESIGNATION**
  - AREAS WITH ANY LPC / NR DESIGNATION (INCLUDING NR ELIGIBLE)



Studio participants included Teerat Chaiyatham, Jonathan Clemente, Christine Hotz, Jesse Kling, Chris Kumaradjaja, Steph LeBlanc, Isabella Libassi, Ziyu Liu, Lindsay Papke, Valerie Smith, Meghan Vonden Steinen, Ziming Wang, Jianing Wei, Luxi Yang.



Diversity in the areas of significance in LPC designation reports, 1969-2020.

utter scandal that the incredible architectural and cultural heritages can be destroyed when we have a law in place to protect it. But it is being used in an inequitable way." This kind of preservation advocacy was not new in Harlem. In fact, before the 1980s, there were two organizations advocating for the preservation of Harlem's physical heritage - the Emanuel Pieterston Historical Society and the Upper Manhattan Society for Progress Through Preservation. They put pressure on the LPC to designate the 269th Regiment Armory and the Harlem River Houses, which were successfully landmarked in 1995 and 1975, respectively. Thus, there had been bottom-up efforts in Harlem too, not just top-down efforts.

Unlike the LPC, the National Register listings in Harlem were concentrated in the early 1970s to mid-1980s. Listed typologies around this time ranged from residential, like Langston Hughes' house, to religious structures, like St. Andrew Church, and commercial venues, represented by the Apollo Theater.

RESEARCHER'S ANALYSIS | CONTEMPORARY

PRESERVATION NARRATIVES OF NYC LANDMARKS DESIGNATION

Since 1966, when the first structure was designated in Harlem, the significance narratives in LPC designation reports have become more diverse throughout the decades. In the 1960s, the reports were only about architecture, architects, and famous residents. Slowly, they came to incorporate other themes. By the 2010s, history and cultural, social, creative, and political value have emerged in designation reports as keywords.

Harlem has been the capital of Black America since the Harlem Renaissance, which has resulted in Black history appearing in nearly half of the designation reports. Many reports discussed how Harlem transformed into the most major Black neighborhood in New York City. However, the Harlem Renaissance is only discussed in about 9% of the LPC reports. The narratives representing the

ADAPTIVE REUSE OF  
LANGSTON HUGHES  
HOUSE

Jonathan Clemente, Jianing Wei

This proposal aims to create interactive space and improve community well-being through education in gardening, African American literature, and art. The proposed programs also aim to foster creative expression via literature and art, and provide a case for counternarrating the heritage of African American residences in Harlem. The house would remain a private residence with public activities for both the Harlem community and other visitors. This proposal relies on a multi-organization collaboration and includes a writers' and artists' residency, public programming and workshops, and a community gardening initiative.



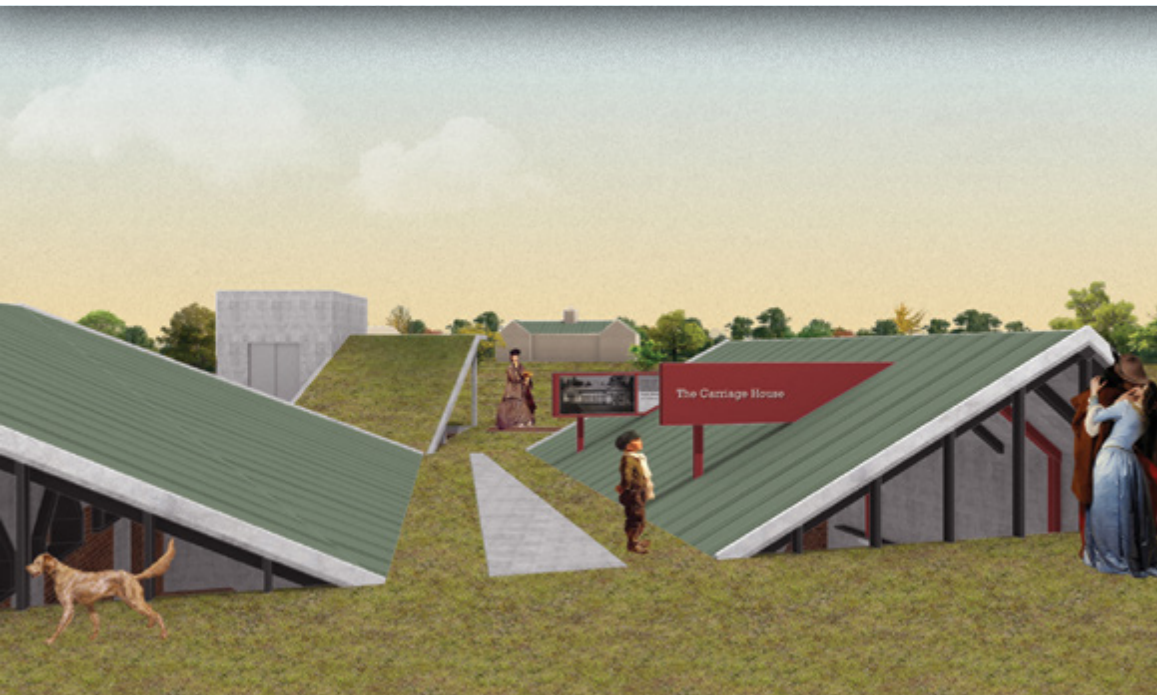
Orthostyle of Langston Hughes House, 2D scanning survey from Spring 2021 Digital Heritage Documentation class, annotated by Jianing Wei.

KEY ISSUES ADDRESSED

- POLICIES AND PRACTICES OF EXCLUSION
- CLAIMING GEOGRAPHIES
- CONTROLLING PROPERTY AND ASSETS
- DESIGNING SPACES
- > CREATING INTERACTIVE SPACE
- POLITICAL ACTIVISM
- > FORMING PROSPERITY AND COMMUNITY WELL-BEING
- > ARTISTIC EXPRESSION
- > COUNTERNARRATING
- CONFRONTING DIVIDES
- CHANGING AND UNDERREPRESENTED PUBLICS
- LOSS AND SURVIVAL
- > INTERGENERATIONAL TRANSFER OF HERITAGE
- > REDEFINING AGENCY AND CONNECTIONS
- TRADITIONAL TOOLS OF PRESERVATION

<JOINT HISTORIC PRESERVATION AND ARCHITECTURE STUDIO: RADICAL RECONSTRUCTION>  
Jorge Otero-Pailos, Mark Rakatansky

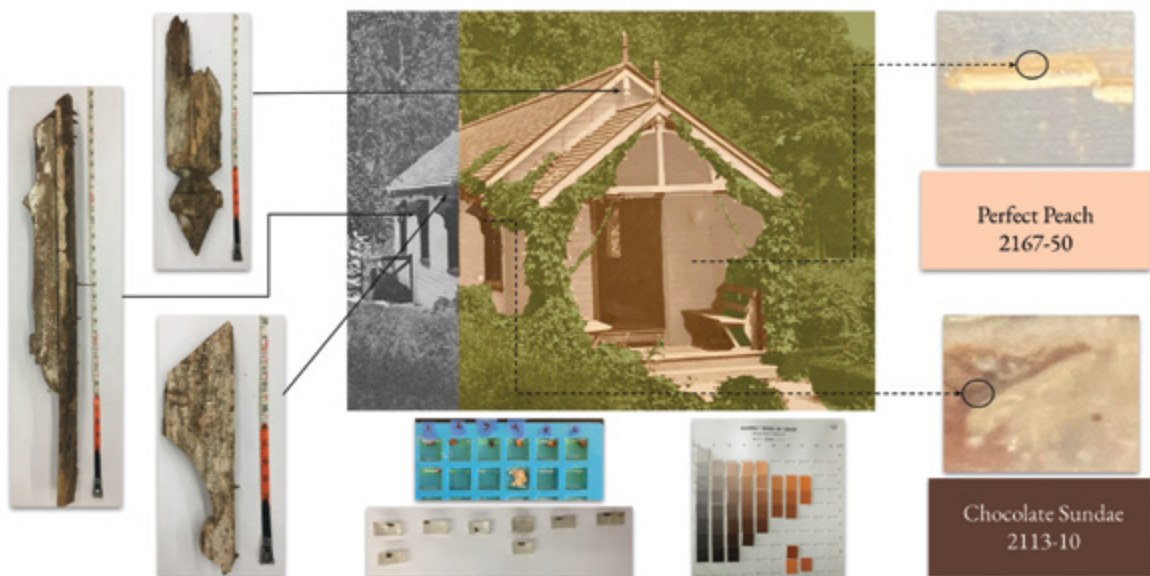
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Yuedong Lin

Rachel Ericksen

Color Reconstruction of Demolished Bowling Alley at Jay Heritage Center

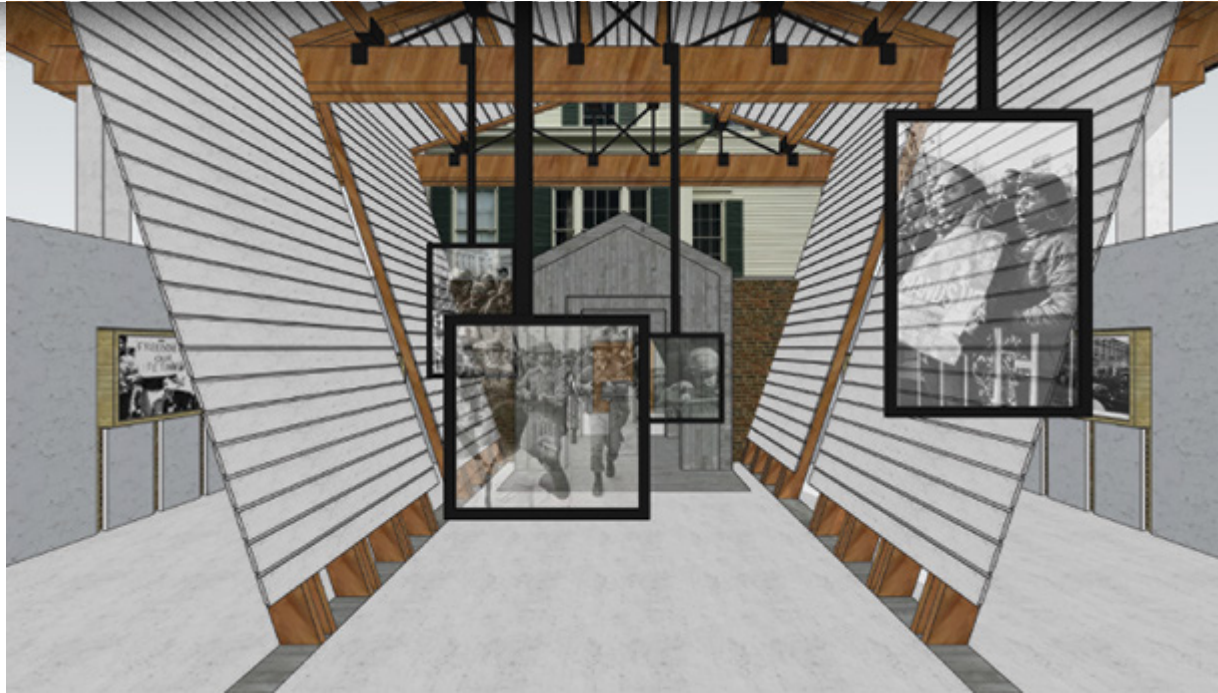




engaging the crucial need today to expose and materialize the space of political, psychological, and social exclusions and inclusions at the root of the foundations of American democracy. The architectural and preservation question of the studio was how to materialize the matter of these entangled lives in their complex historical and current interrelations—how to reconstruct what is hidden or under-represented.

## Chiun Heng Chou

Tourists can see or feel the workers behind the scenes from the cracks, openings, and extended structures, such as the historical exhibition hall and archives, the hall and office, the dining room and the kitchen, etc.



## Thomas Hong Yu Chiu

*Apparatus of Projection* houses a three-part exhibit examining the legacy of John Jay, the New York Manumission Society, and New York African Free School in the early 19th century through the display of archival documents, literature, and artifacts.

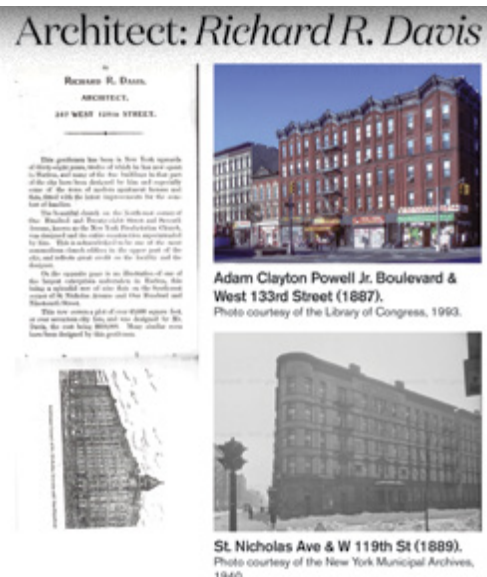




## &lt;STUDIO I&gt;

Andrew Dolkart, Kate Reggev

Studio I is the central focus of the first semester of the Historic Preservation program and a foundational course within the program. It engages students in questions of preservation and its role in the context of the built environment and its larger cultural manifestations. The course focuses on developing skills

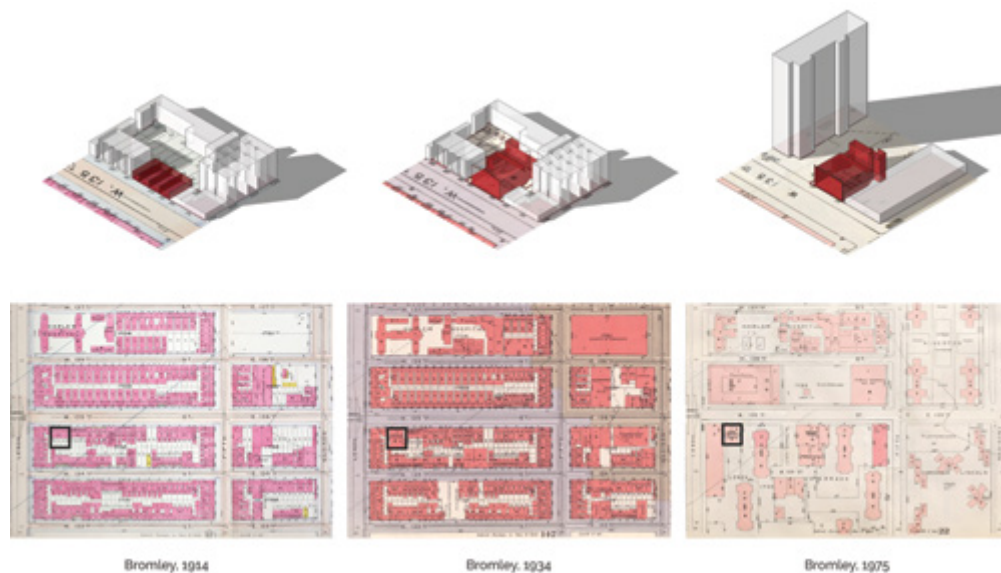


Chris Kumaradjaja

Jesse Kling

Ziming Wang

Ziyu Liu



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Amsterdam Avenue & West 98th Street (1890).  
Photo courtesy of Tom Miller, Claytonian in Manhattan, 2020.



Metropolitan Baptist Church (former New York Presbyterian Church),  
completed by Richard R. Davis 1889-90.  
Photo by Camilo Vergara, courtesy of the Library of Congress, 1988.



1910s  
New York City



Architectural Record Magazine, 1904



1904 design, Beaux-Arts Style  
2018 Restored

It could be noticed from various perspectives around the corner. The building is the unique Beaux-Arts style vista in the neighborhood, contributing to the historic identity of Central Harlem.

Aesthetic Significance

1900s

1910s

1920s

1930s

1940s

1950s

1960s

1970s

1980s

1990s

2000s

2010s

2020



2020  
Tanner Chapel



2020  
Google map

Jianing Wei

Valerie Smith



Architectural drawing of a building facade with dimensions.



Architectural drawing of a building facade with dimensions.



Architectural drawing of a building facade with dimensions.



VENUE



VENUE



VENUE



VENUE



## &lt;DIGITAL HERITAGE DOCUMENTATION&gt;

Bilge Kose

Course participants included Teerat Chaiyatham, Jonathan Clemente, Rachel Ericksen, Isabella Libassi, Ziyu Liu, Will McCallum, Lindsay Papke, Valerie Smith, Ziming Wang, Jianing Wei, Luxi Yang



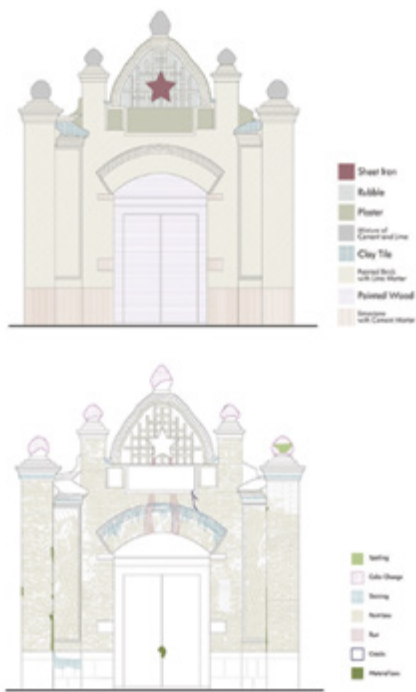
Ziming Wang

Jianing Wei





Lindsay Papke



Parade & Protest Routes  
Harlem Renaissance

Isabella Libassi, Luxi Yang, Preme  
Chaiyatham, Ziming Wang



<TRADITIONAL BUILDING TECHNOLOGY> Tim Michiels

## Elie Zeinoun



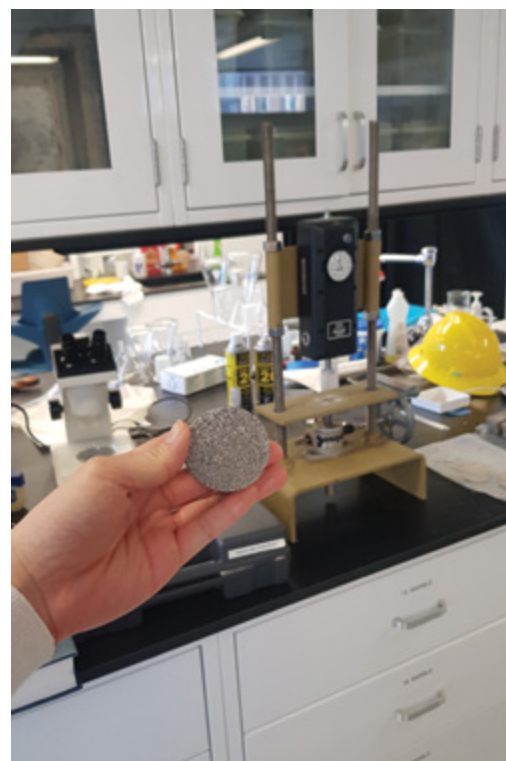
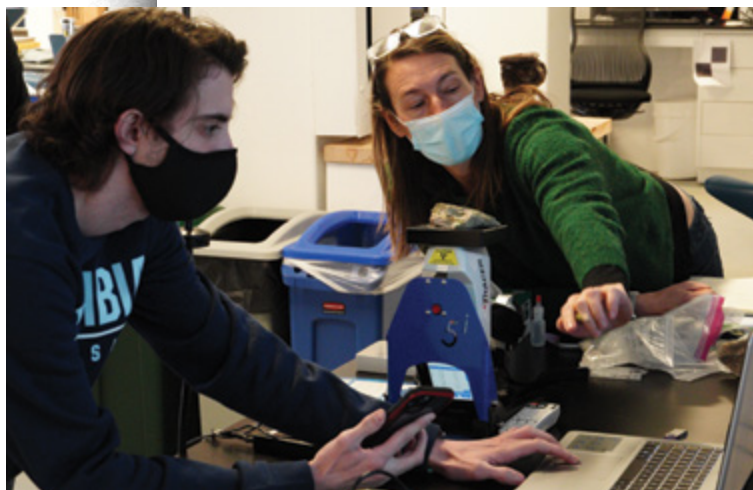
## Ian Lee





<INVESTIGATIVE TECHNIQUES> Amanda Thomas Trienens, Norman Weiss

Course participants included Teerat Chaiyatham, Jonathan Clemente, Rachel Ericksen, Lai Ma, Caroline Peters, and Meghan Vonden Steinen.





## &lt;THESES&gt;

**Bruno Elias**

*Towards Best Practices For Historic Retrofits: Tradeoffs For Historic Buildings' Operating Energy Retrofits*

Erica Avrami, Advisor

Eleonora Andreeva and Denise Ferris, Readers

**Rachel Ericksen**

*Assessing the Decolonization of Cultural Heritage Policy in Belize through the Analysis of Narratives Presented at Colonial Sites*

Jorge-Otero Pailos, Advisor

Carolina Castellanos and Erica Avrami, Readers

**Katlyn M. Foster**

*Redlining History: The Geographies of Historic Preservation*

Erica Avrami, Advisor

Carol Clark and Jennifer Most, Readers

The acute character of the current environmental and climate crisis underpins the urgency in considering the role the existing built stock has in this challenge of the twenty-first century. Historic properties, as part of this group, are in the unique position to capitalize on their qualitative properties and achieve verified high performances in environmental sustainability. In order to enforce change in the scale required to at least mitigate these climate challenges, regulation and policy will target historic properties' energy performance, and energy retrofits will become commonplace.

Given that a building-by-building approach to solving this performance deficit has been insufficient to produce results at scale and buildings listed - or eligible for listing - in the United States National Register of Historic Buildings have been exempted from energy codes, this research asks: (1) What is the current trend in policymaking towards building performance? (2) How historic properties have been retrofitted both individually (unit) and as a group (region)? (3) What parameters or performance indicators have achieved better performance outcomes in this technology? (4) What can be a viable methodology towards improving historic building's performance indicators through a more systemic approach, where previous outcomes inform new retrofit projects?

The thesis explores the energy regulatory contexts of the United States, Brazil, and Scotland, and connects the energy regulation to a set of case studies, with a more complete analysis of the New York County Supreme Court, the Ford Foundation Building, and a Scottish tenement building in Glasgow. From the interpretation of the outcomes from these retrofit projects, the set of actions for policymakers and practitioners is suggested, along with the consequences of this suggested approach for historic properties at large. ▀

In 1981, after three centuries of colonial dominance, the country of Belize officially became a sovereign nation. Almost 40 years later the country is still working to overcome the lingering effects of colonialism. This is evident in Belize's focus on creating a new national identity for the country. They seek to achieve this through the development of their cultural heritage, as expressed in their 2016 National Cultural Policy. When cultural policy is decolonized, free of the influence of the colonizer, the values of Belizeans will drive the creation of a national identity. Decolonization occurs politically, when an official act separates the colonized from the colonizer. It also occurs intellectually, when a peoples' thoughts, ideas, and values are detangled from those of the colonizer and are free from the colonizer's influence.

This thesis will assess the extent to which Belize has intellectually decolonized its cultural heritage policy. This task will be accomplished by tracing Belize's history from the colonial era to the present day to grasp the full range of its heritage and what an inclusive heritage should look like. Then, Belize's cultural heritage policies are reviewed and analyzed to understand their development and to observe shifts towards decolonization. Finally, colonial heritage site narratives are interpreted. Interpretation involves a discourse analysis where the plain words and images of the narratives are broken down to understand the narrative's purposes and effects and the extent to which it reflects a decolonized cultural heritage policy. These individual site narratives contribute to the larger heritage story in Belize and thus will provide a basis for understanding how heritage, policy, and decolonization play out in the wider Belizean heritage realm and how far Belize has come in reclaiming its identity. ▀

Social, economic, and environmental benefits of landmark district designation are often cited in support of municipal preservation practices, but limited research has been done to support those claims. Where research has been done, it is often generalized across cities, disregarding the ways in which histories of inequitable urban policies have impacted communities and how they might influence preservation efforts and impacts. This thesis examines the boundaries of designated historic districts in relationship to historic boundaries of redlining in order to contextualize preservation within historic and contemporary patterns of spatial privilege and disprivilege.

Using geospatial analysis techniques, the question of whether preservation designation, and its impacts and benefits, are distributed equitably among people and spaces is quantitatively examined. An initial analysis compares the proportionality of the percentage of redlined land areas in six cities to the percentage of designated land area within those redlining boundaries. An expanded analysis in two cities examined social and economic metrics – including population density, racial demographics, employment, and housing values – in historic districts in relationship to their encompassing geographies of privilege or disprivilege. In the case study cities, these analyses found that preservation designations are not achieving equitable representation of social groups, racially, economically, or spatially, and quantified those disparities over time.

This research highlighted the importance of new tools, used at the municipal level, to improve equity in preservation. The methodology developed and geospatial tools used present a potential means through which preservation agencies can examine the effects of their current policies and tools, supporting or challenging the claims made about preservation's effects. It also suggests how this tool can be used to plan for more equitable future work. ▼

## Emily Kahn

*Beyond Memorialization: Washington Heights as Case Study for Commemorating Holocaust Refugees*

Andrew Dolkart, Advisor

Rebecca Kobrin and Mika Tal, Readers

## Marisa Kefalidis

*Children's Heritage Education at Historic Sites: Evaluating Resiliency in Place-based Education in the Absence of Place*

Paul Bentel, Advisor

Chris Neville and Suzanne Clary, Readers

Holocaust commemoration worldwide has produced diverse and profound tributes to victims. From simple plaques to historicist or abstract sculptures to tours of concentration camps to national museums, existing Holocaust commemoration is varied in form but common in intent: to warn against the horrors of genocide, to honor victims, to encourage tolerance, and to combat anti-Semitism. These memorials and museums, as well as the ideas they portray, are critical. According to Holocaust survivor and Nobel laureate Elie Wiesel, "If we forget, the dead will be killed a second time, and then they are today's victims." What tangible Holocaust commemoration has not produced is a celebration of the lives survivors and refugees lived in spite of their trauma. A fundamental disconnect exists within Holocaust commemoration. Whereas there has been and continues to be an abundance of memoirs, books, films, and oral histories which document the individual stories of Holocaust victims, survivors and, sometimes, refugees, there have been almost no efforts to collectively and publicly commemorate Holocaust survivors or refugees.

Based on oral history interviews with child and second-generation Holocaust refugees, this Master's thesis argues and presents proposals for expanding Holocaust commemoration to include celebration of the lives of survivors and refugees. Through the lens of Washington Heights, New York City, once one of the largest communities of Holocaust refugees in the world, this thesis highlights how these refugees rebuilt their lives and culture in the United States in order to advocate for moving beyond victimology in commemoration. Proposals include a historic district and monument that could set a national or global precedent for honoring a long-term community of Holocaust refugees. Celebrating and preserving the stories and heritage of this community will add a new layer of understanding to the Holocaust and how refugees and survivors persevered in their new homes. ►

'Heritage education' is an increasingly popular phrase in both formal and non-formal educational settings. Contemporary heritage education is a teaching lens for the study of cultural heritage. In recent decades, research examining children's heritage education has underscored the many benefits of the practice to a student's personal and academic development, with support for place-based education driving an increase in children's heritage education at historic sites. Harnessing immersive, on-site engagements to create 'authentic' and 'active' learning environments, heritage education at historic sites takes on myriad forms (exhibits, tours, performances, fine and dramatic art projects, etc.). In a moment in which heritage education and place-based education have become well respected and mainstream educational practices, heritage educational programs at historic sites are diversifying, rethinking, and improving their children's programming, integrating technologically driven experiences to improve site accessibility, and increase diversity of narrative.

This project aims to address the current state and future direction of children's heritage education at historic sites, by examining the impact of the Covid-19 pandemic on educational practices. First, the project will contextualize contemporary children's heritage education within the broader histories of heritage education in the United States, and educational theory guiding place and nature based learning methodologies. From here, the thesis addresses the question: how will heritage education at historic sites rise to the challenge of remote site engagement? And, how will these adaptations impact future practices?

Conclusions drawn suggest that heritage sites which emphasized heritage education prior to the pandemic, have demonstrated creativity and flexibility in the development of remote and socially distanced site engagements. In doing so, sites have discovered their wider geographic reach, with many sites planning to continue the development of virtual and remote programming in the future. Some sites cite the

pandemic as having pushed them to design new engagement strategies and alternative methods of educational enrichment for remote and distanced students. However, as evidence points to the return of field trips and site visits in the near term (and place-based learning at historic sites), these new approaches could also take on additional purpose; enrichment materials strengthen a site's overall programming by establishing a subject continuum for pre-visit, on-site experience, and post-visit education, bolstering lesson retention and intellectual curiosity. ■

## &lt;THESES&gt;

## Lai Ma

*Video Game as an Immersive Interactive Virtual Interpretation of Historic Heritages, Taking Assassin's Creed as an Example*

Jorge Otero-Pailos, Advisor

Carolina Castellanos, Bilge Kose, and Claudia Kavenagh, Readers

## William McCallum

*New York City Housing Authority Postwar Projects: If New Buildings are Necessary, Can they be Made to Support the Sites' Significance?*

Francoise Bollack, Advisor

Theodore Prudon and Carol Clark, Readers

## Caroline Peters

*Life Among the Dead: Case Studies of Public Outreach at Green-Wood and Laurel Hill Cemeteries*

Norman Weiss, Advisor

Andrew Dolkart and Christopher Neville, Readers

Assassin's Creed series is a good combination of immersive, interactive virtual experiences of historic content, especially historic heritages. While many of the traditional physical interpretation programs of historic heritages facing serious challenges of accessibility, sustainability, and the value of preservation, the video games represented by the Assassin's Creed series could provide a very good alternation. Through the systematic review of the game contents, especially the historic content, we could get the following conclusions. It shows significant potential for the use of new technologies for presenting historic content in an attractive way. It provides various types of interactive methods for players to experience the virtual historic environment. It also provides convenient means for players to save and share their virtual experience in the game, and compare it with the experience which they could get in the real world. The review also reveals a series of problems that make the game unqualified as an interpretation method of historic heritages so far. Many of the problems are very likely caused by the entertainment-oriented developing attitude. Trying to solve the problem and provide a more educational virtual experience of historic content, the producing team started to release a new game mode named Discovery Tour with every new edition of the game series. This game mode successfully provided a new game experience compared with the original mode, but caused new problems such as the lack of interactive experience. As a general conclusion, Assassin's Creed series shows great potential in becoming a new interpretation method of historic heritages. The historic preservation and relative fields shall pay close attention to the future development of this field, learn from the experience of this game development, or participate in the development of the same type of games with a more active attitude.■

The goal of this thesis is to develop a set of design criteria that can be used to evaluate new housing interventions on Tower in the Park public housing sites in New York City. Three projects have been completed in the last ten years, where affordable housing has been built in the place of existing "underutilized" parking lots. With the rising deterioration of housing stock due to several decades without adequate funding the city is encouraging market-rate and affordable housing development within the footprint of existing NYCHA sites. At the same time, the need for senior housing in the city has grown, and several new developments have been built within the existing NYCHA sites to house seniors. These sites have great architectural and social significance, and many interventions fail to engage the historic fabric in a meaningful way. My goal is to determine whether these three additions were supportive of the significance of the site and look at alternate siting possibilities based on analyses of the site that value existing patterns. Millbrook, Van Dyke, and Ingersoll are similar in site plan, density, height, facade material, program, and date of completion, and so are most useful in determining strategies for future development on high-rise public housing sites. I believe that there are on-site alternatives and off-site alternatives that better support the significance of these sites.■

In recent years, public programming and outreach have become increasingly crucial pieces of historic site management, particularly as a means of gaining both visibility and financial stability. In the cases of Laurel Hill Cemetery, located in Philadelphia, Pennsylvania, and The Green-Wood Cemetery in Brooklyn, New York, programming has been embraced as a means of helping to manage their aging sites. Both are examples of the rural cemetery type, featuring planned, manicured landscapes, eye-catching monuments, and winding paths, all intended to encourage 19th-century visitors to leisurely stroll their grounds as places of open public space. As time has moved forward, Laurel Hill and Green-Wood have again been able to encourage visitors to see their grounds as a place of both leisure and reverence, harking back to their founding principles. Through a series of interviews with experts at each cemetery, along with historic research and analysis, this thesis examines the role of public outreach and programming in these cemeteries. Our experts give us insight into the decision-making process that makes the running of their cemetery programming possible, as well as some of the challenges that come with balancing such a complex, stakeholder-heavy site. This thesis highlights issues that historic cemeteries across the world share, and how other sites may hope to use the examples of Laurel Hill and Green-Wood's public efforts as a guide to facing the future.❖



## Thomas Rice

*The Modern Arch: An Analysis of the Preservation of Early Reinforced Concrete Arch Bridges in the United States*

Tim Michiels, Advisor  
Norman Weiss, Theodore Prudon,  
and Zach Rice, Readers

Reinforced concrete arch bridges came into use in the United States at the end of the 19th century, and quickly developed in scale and complexity to become a standard bridge type found across the country. The earliest examples of these bridges are significant because they illustrate the development of reinforced concrete technology and contemporary design trends.

However, despite a patchwork of regulatory frameworks, many of these structures are under-recognized for their significance and are demolished. This thesis aims to illustrate the significance of these bridges, and the preservation challenges they face.

This thesis details the development of early concrete arch bridges, discusses the existing policies governing their preservation and analyzes the effectiveness of these policies through case studies in Connecticut, New York, and New Jersey. These case study bridges vary in design, condition of preservation, ownership, and significance, yet each bridge provides insights regarding the process of preservation and its challenges. In the analysis of these case studies, it is found that many early reinforced concrete arch bridges are not properly recognized for their significance, and may be destroyed or suffer a loss of integrity as a result.

As many of these earliest reinforced concrete arch bridges are approaching their 120th anniversary, this thesis can provide both guidance and insights to help both professionals and the general public evaluate other examples of this bridge type.●

## Tucker M. Simmons

*Testing Protective Coatings and their Removal for Outdoor Bronze Statuary*

Amanda Trienens, Advisor  
Readers: Norman Weiss and Richard Pieper,  
Readers

This research studied new coatings for their use on bronze statuary and evaluated removal using low-powered lasers. This testing was intended to add new coating materials to a conservator's repertoire, to improve the protection of outdoor bronze sculpture, and extend the time between maintenance cycles. This would, in turn, allow owners to better care for their statues and lower long-term maintenance costs. The most commonly used approach for coating outdoor bronze involves the use of wax and/or lacquer; both are considered to be easily reversible. Wax can be successfully removed with heat and water, while lacquers can be easily removed with standard solvents. Both wax and lacquer coatings' life cycles are relatively short, with wax-coated bronze usually needing annual or biennial maintenance and lacquer coatings lifespan in the field lasting roughly three to five years. This reversibility, long considered to be important in the conservation community, has been a challenge with respect to long-term coating durability for works exhibited outdoors. Three coatings were chosen for testing in this project. All three were urethane-based clear-coats that are either applied to lacquer or directly to the patinated bronze. A patina was applied to cast bronze coupons prior to the coatings. These samples were then subjected to accelerated weathering testing in a QUV chamber. After QUV testing, three procedures—based on ASTM standards—were conducted to assess the durability of the artificially weathered coatings. After the ASTM tests were concluded, removal of the surviving coatings was carried out using a 100-watt, 1064nm Class four laser. From these tests, it was determined that the urethane coating, Ecothane, produced by G. J. Nikolas & Co., is a possible replacement for the commonly used wax and lacquers.▲

## Madison Story

*Strategies for Heritage Valuation on Adaptively Reused Transportation Corridors: An Examination of Rail Trails in Central Indiana*

Carol Clark, Advisor  
Lisa Dunaway and Paul Bentel, Readers

As the infrastructure that dramatically reshaped the landscape and development of the United States, railroads are important heritage corridors that, once abandoned, are often preserved as heritage railroads or rail trails. To evaluate the heritage effects of adaptive reuse of railroad corridors, this thesis looks at two rail trails converted from abandoned Monon Railroad rights-of-way in Indiana. The central question of this research asks how the adaptive reuse of historic transportation corridors affects the visibility and consequent valuation of heritage?

Through historic research, fieldwork, surveys taken by trail users, and interviews conducted with preservation and trail advocates and professionals, this thesis aims to explore the rail trails' history as lines of the Monon railroad, understand what the rail meant to communities historically and what the trail means to contemporary communities, how the rails' conversion and representation of history are reflective of political and cultural intention for the corridor, and how continued development of the trail serves to reinforce those political and cultural intentions.

My findings indicate that the governing body's goals for the rail trail affect the preservation strategies applied to the trail itself as well as surrounding neighborhoods. These strategies in turn affect how residents and trail users value the rail trail – whether as a recreational, transportation, or heritage resource (or some combination thereof) – and how they understand the rail's historic role in the community. Further, the presence of historic features does not necessarily reflect political and/or cultural intention, but their continued existence may have a significant impact upon community valuation of rail heritage. Overall, this research suggests that a variety of preservation methods (such as adaptive reuse, branding, and interpretive signage), regardless of the amount of and existing interpretation of extant heritage, may be most successful at encouraging community valuation and understanding of heritage on rail trails.■



## *M.S. Real Estate Development*

### Patrice Derrington, Program Director

The Master of Science in Real Estate Development program is a three-semester degree that combines the fundamental skills of professional real estate with a holistic approach to urban development as a creative act. The program is cross-disciplinary, drawing on its proximity to other modes of practice at the school, and is grounded in the three core tenets of global urban real estate development: the financial, the physical, and the social. It attracts future business leaders looking for an alternative to an MBA and committed architects hoping to run their own design/build firm. The program's strength lies in its ability to weave current knowledge and best practices from the industry together with rigorous theoretical learning, incisive critical analysis, and immersive real-world case studies.

The Real Estate Development program is structured to provide a comprehensive understanding of finance and investment, project management, predevelopment analysis, zoning and planning, acquisition underwriting, and the value of design in real estate practices. In recent years, the program has greatly expanded its emphasis on financial investment and strengthened its relevancy in terms of real estate markets, introducing a new real estate technology sequence to the curriculum and increasing the availability of technology resources for research. The curriculum builds its foundational knowledge incrementally over the three terms: the first semester

is dedicated to developing solid, core competencies and the majority of classes are required; the second, grants more space to focus on the development of specific industry interests; and the third consists mostly of deep-dive electives offered across GSAPP, Columbia Business School, Columbia School of International and Public Affairs, and Columbia Law School. The program culminates in a final Capstone project.

The program's Capstone class begins with initial group work as students learn about five different active real estate case-study sites, and ends with individual Capstone projects. Students must create their own personalized Capstone "deal-book" (with all the relevant financial information, design proposals, and market analysis data), as well as deliver a presentation and defend their project to an audience of peers, alumni, and faculty.



## &lt;PROPTech: NOTHING VENTURED, NOTHING GAINED&gt;

[Fall 2020] Zachary Aarons

This course explores how technology venture capitalists analyze potential investments in the proptech ecosystem. Tracing the history of proptech development from the rise of the first Enterprise Resource Planning programs in the 1970s to the explosive wave of industry technology today, we analyze which companies have succeeded and failed. Students learn about the myriad companies currently raising venture capital and how proptech-focused venture funds attempt to spot trends. The course provides information on how venture capitalists source, evaluate, conduct due diligence, and ultimately invest in companies within the proptech landscape.

## &lt;THE DEAL MAKING PROCESS: DEBT, EQUITY AND THE ART OF NEGOTIATION&gt;

[Fall 2020] Mitchell Adelstein

This elective teaches practical methods and techniques used by investors, lenders, and equity investors: how to underwrite value-add opportunistic income-producing real estate, finance positions in real estate using various debt facilities and/or equity vehicles, and understand the transaction process through group participation in a mock transaction case study. Students learn how to demonstrate capabilities and knowledge through case study and understand the roles of each key player in the transaction process; learn best practices in sourcing debt and equity capital; construct various debt and equity underwriting models; learn the art of negotiation by participation in a mock transaction.

## &lt;CAPITAL MARKETS: DEBT&gt;

[Summer 2021] Ed Adler

This course covers various CRE debt instruments and financing techniques: balance sheet direct lending, syndications, bridge, and mezzanine structures, and the process of underwriting for CMBS, warehouse, and Repo financing. In parallel, the students participate in a course on the Capital Markets: Equity Transactions in which they examine M&A, REITs, Private Equity, and Sponsor Waterfalls. Each class is case-based and offers an understanding of the lender's point of view regarding the application and use of various capital market's based debt products to finance commercial real estate.

## &lt;NEW YORK RISING: HOW REAL ESTATE SHAPES A CITY&gt;

[Spring 2021] Kate Ascher

New York Rising offers a thoughtful reflection on the last two centuries of real estate development in New York City, with a primary focus on Manhattan. The course blends fascinating historical material collected by Seymour Durst, with lectures, relevant readings, and in-person tours of the neighborhoods and subjects of our study. The focus is on the physical evolution of Manhattan, from the origins of its street grid in the Plan of 1811 through the evolution of its commercial districts, unique building typologies, and transportation infrastructure.

## &lt;DEVELOPMENT ANALYSIS: URBAN PLANNING&gt;

[Fall 2020] Kate Ascher

Real estate development is largely an urban phenomenon. Understanding the fundamental urban planning issues, opportunities, and risks associated with a given project is critical to successful development. These include a range of government regulations, powers, and incentives, including those associated with land use, zoning, sustainability, building safety, historic preservation, and the environment. They also include broader issues associated with gentrification, public space, and community participation.

## &lt;PREDEVELOPMENT ANALYSIS&gt;

[Fall 2020] Kate Ascher

As students of real estate development, it is important to understand two key sides of the real estate equation: investment in and development of the asset. Key to assessing the opportunity for development at a particular place and time are three sets of research: analyzing the macro conditions—economic, civic, and political—and the associated real estate supply and demand, understanding local rules and regulations associated with various types of development, and having an incisive knowledge of relevant site conditions, community context and neighborhood concerns. This course uses relevant case studies and projects to highlight the various concepts that are fundamental to development.

## &lt;RESHAPING THE URBAN CORE: DEVELOPMENT CHALLENGES IN POST-INDUSTRIAL CITIES&gt;

[Spring 2021] Kate Ascher, Cecily King

This class uses the Rust Belt and upstate New York cities as the laboratory for examining a variety of unique strategies and tools being used today by private, public, and non-profit-sectors to reset the trajectory of places that have struggled to redefine their place in the world—cities like Detroit, Pittsburgh, and Buffalo among many others.

## &lt;JOINT STUDIO: REIMAGINING THE INDUSTRIAL WATERFRONT: UTICA'S HARBOR POINT&gt;

[Spring 2021] Kate Ascher, Christoph Kumpusch

This is the second in a series of cross-disciplinary studios, designed to bring together architectural and real estate thinking to address a real-world development opportunity. Six architecture and six real estate students develop components of a vision for a new mixed-use community on a remediated 100-acre waterfront site located alongside the historic harbor in Utica New York, a once-booming industrial city located 95 miles west of Albany. The client for the studio is the Harbor Point Development Corporation, an entity created by the government to facilitate development by issuing design guidelines, overseeing a competitive procurement process, and crafting the public-private partnership that can unlock value at this formerly industrial waterfront site. The work serves as a foundation for the development guidelines moving forward.

## &lt;VALUE OF DESIGN&gt;

[Spring 2021] Forth Bagley, Bruce Fisher, Jamie von Klemperer

Addressing the financial objectives of the developer, this course presents an understanding of the importance of design in optimizing those objectives. Reviewing case studies of significant development projects by the renowned architectural firm KPF, the design process, and the timing of critical and collaborative decision-making are investigated. Students are challenged to formulate the value proposition of design alternatives and seek to estimate the financial consequences of design decisions.

## &lt;REAL ESTATE ENTREPRENEURIALISM FOR ARCHITECTS, BUILDERS, DEVELOPERS, BUYERS, AND SELLERS&gt;

[Fall 2020] Hank Bell

This course is led by one of the first practitioner academics to define the independent discipline of development. Lectures fill in the gaps with practical knowledge and hard lessons learned from generations of practitioners. Students are provided with the know-how of materializing their visions at the entrepreneurial scale.

## &lt;REAL ESTATE TRANSACTIONS LAW&gt;

[Spring 2021] Nathalia Bernardo, Robert Wertheimer

This course provides students with practical knowledge and a critical skillset for understanding how real estate transactions proceed from deal-making to closure. Taught within the context of real estate and contract law, this course surveys a variety of instruments and provisions that are both standardized and the subject of negotiation. The format of the course follows the timeline of a series of exemplar transactions, as manifested in a variety of instruments including land and building purchase and sale agreements, equipment contracts and leases, mortgages and UCC-1 security agreements, loan agreements, partnership agreements, and development agreements.

## &lt;ENTREPRENEURSHIP IN BUYING REAL ESTATE ASSETS&gt;

[Summer 2021] Masood Bhatti

This course provides an additional, specialized focus for entrepreneurial students who wish to pursue a career in buying value-add real estate assets. Value-add is defined whereby generally there is no foundation/ground-up work involved but the asset needs to be repositioned or upgraded. By walking students through the process of underwriting a small transaction and structuring the capital and incentives and putting together their pitch, students become prepared to actively look for properties and to reach out to lenders and equity investors with their proposals in pursuit of their entrepreneurial ventures.

## &lt;ENVIRONMENTAL SUSTAINABILITY FOR REAL ESTATE DEVELOPMENT&gt;

[Summer 2021] Stuart Brodsky

Students study the drivers, goals, and market's progress in the evolution of green real estate development, investment, and operations. By acknowledging society's environmental priorities and real estate's



financial prerequisites, this course teaches students to adopt a critical and value-enhancing approach to the use of the tools and strategies the industry is deploying to transform real estate markets to sustainability. Through this course, students distinguish between the tangible and intangible benefits—from financial and environmental perspectives—of green buildings. They learn how the widely adopted global and regional approaches to building green are evolving, and how a next-generation of innovative practices are advancing sustainability in real estate in the U.S. and around the world.

<DESIGN BY DEVELOPMENT>

[Spring 2021] Eran Chen

This course explores the design/development dynamic, understands the complexity of competing objectives, interrogates the typical processes of resolution, critically examines various projects as outcomes, and contemplates potential modifications and improvements. Recent and current development projects are utilized in this learning exercise, and students engage in rigorous analysis.

<FUNDS MANAGEMENT AND CAPITAL RAISING>

[Spring 2021] Michael Clark, Marc Weidner

This course exposes students to the fundamentals of real estate fund management, capital raising, investment philosophy, the basic terms and language, major players in the industry, and an introduction to legal and financial aspects of the private equity real estate market. The class focuses on alignment of interest, decision-making process, current fundraising issues as well as on the structuring of private funds and transactions.

<THE REAL ESTATE ENTREPRENEUR'S PROCESS>

[Spring 2021] Sean Cohane

This course provides an introductory insight into the complex and exciting activities of the real estate developer. Students learn about the on-the-ground processes that the entrepreneurial real estate professional, working for their investment portfolio, and leading their deals through to completion, go through. The course proceeds through the stages of defining a market area of interest, creating a development thesis, and implementing a prospecting strategy.

<TAX ISSUES IN ACQUISITIONS AND DEVELOPMENTS>

[Spring 2021] Dan Crowley

This course provides an overview of the relevant income tax rules applicable to real estate. It introduces planning techniques commonly used by individuals and business entities to minimize tax on real estate projects. Students evaluate how strategy, asset type, and choice of investment vehicle can change after-tax results.

## &lt;REAL ESTATE FINANCE&gt;

[Fall 2020] Patrice Derrington

## &lt;REAL ESTATE MODELING TUTORIAL II&gt;

[Fall 2020] Johnny Din

## &lt;REAL ESTATE FINANCIAL CONCEPTS&gt;

[Fall 2020] Chok Lei

The objective is for the student to develop a robust working competency with the tools and methods of financial analysis used by real estate developers, lenders, and investors. Students solidify and expand their knowledge of the various concepts inherent in the financial analysis of real estate investments, apply these concepts to making critical analyses of various real estate investment proposals, and build upon these tools in formulating the capital structure of debt and equity for real estate transactions.

## &lt;CAPSTONE: DEVELOPMENT CASE STUDIES&gt;

[Summer 2021] Patrice Derrington, Brian Loughlin, Paul Weech, Ernst Valery, Andy Golubitsky, Gabe Randall, Sean Cohane

The objective is for the student to develop a robust working competency with the tools and methods of financial analysis used by real estate developers, lenders, and investors. Students solidify and expand their knowledge of the various concepts inherent in the financial analysis of real estate investments, apply these concepts to making critical analyses of various real estate investment proposals, and build upon these tools in formulating the capital structure of debt and equity for real estate transactions.

## &lt;REAL ESTATE FINANCE II&gt;

[Spring 2021] Patrice Derrington

## &lt;REAL ESTATE MODELING TUTORIAL II&gt;

[Spring 2021] Johnny Din

## &lt;REAL ESTATE FINANCIAL CONCEPTS II&gt;

[Spring 2021] Chok Lei

Building on the fundamental analytical tools and methods of Real Estate Finance I, this course extends the investigation to the financial aspects of the development and construction phase, and the equity investment structures and returns for real estate deals. The development and construction phase comprises the following analytical processes: quick Back-of-the-Envelope analysis, evaluating Highest and Best Use, establishing sources and uses for the project, formulating the construction loan and repayment, valuation of the completed project, and project returns.

## &lt;MARKET ANALYSIS&gt;

[Fall 2020] Patrice Derrington, Jonathan Miller

This course introduces students to the methods used in analyzing real estate markets, considering the perspective of decision-makers who are considering potential development, investment, or financing decisions. The course focuses on the thought processes and mechanics of producing a market analysis report and is framed around the various methodologies

of performing market analysis for each real estate asset class: residential, commercial office, retail, industrial, and hospitality.

<HOTEL DEVELOPMENT AND INVESTMENT ANALYSIS>

[Spring 2021] Adam Feil

The course covers the complete financial cycle of hotel investment analysis including development; lending; operations; investment analysis; renovation decisions; and acquisition or disposition. Real estate valuation principles and procedures are explored with emphasis on the replacement cost, sales comparison, and income capitalization approaches.

<HOTEL TRANSACTIONSS>

[Summer 2021] Todd Fieldston, Rick Kirkbride

This course integrates market and transactional perspectives in advancing a practical understanding of the global hospitality industry. At the heart of the industry is a unique accounting and transactional process that requires specialized training in the management agreements, operating agreements, design (FFE) and development agreements, and flag agreements that define not just real estate development but day-to-day operations. Students are exposed to a variety of special topics ranging from boutique hotels to distressed repositioning of legacy assets.

<INTRODUCTION TO CAPITAL MARKETS>

[Fall 2020] Merrie Frankel

This survey of Real Estate Capital Markets touches on all facets of public and private capital providers, as well as investors, with a particular focus on commercial real estate in the public markets, the recent history of securitized real estate debt, and equity, and other deal formats. Current events permeate all classes as it's a fluid subject, thus, the cause and effect of the recession/capital markets crisis are discussed and its result.

<REAL ESTATE FINANCE III: CAPITAL MARKETS>

[Summer 2021] Merrie Frankel, Chris Munsell

The course touches on all facets of public and private capital providers, as well as investors, with a particular focus on commercial real estate in the public markets: the recent history of securitized real estate debt and equity; the structure of CMBS and roles of the major participants; the growth, structure, valuation and performance measurements of real estate investment trusts (REITs); and other deal formats. Current events permeate all classes as capital markets are a fluid subject. The general topics include real estate industry trends past and present; overview of real estate capital markets and participants; alternative investments (CMBS, REITs, high yield, syndications); financial and ownership structures; rating methodology; bankruptcy; capital markets instruments.



## &lt;PROPTech: THE REAL ESTATE DEVELOPMENT PROCESS&gt;

[Spring 2021] Kurt Franz

This course explores sustainability in proptech. Students investigate the key motivations and barriers among real estate firms that influence the implementation of deep energy retrofits, and leave the course with a strong understanding of the key decision-makers and influential actors within these organizations who plan, finance, and execute these projects.

## &lt;AFFORDABLE HOUSING FINANCE TECHNIQUES&gt;

[Fall 2020] Richard Froehlich

This course presents a detailed review of the techniques for financing affordable housing. In combination with the focus on financing techniques, the course also looks at the development issues associated with this complex area and the policy focus of governmental programs. Incentives, public-private partnerships, the use of tax-exempt bonds, the securitization of debt are all techniques initially developed for use in residential finance and the financing of affordable housing.

## &lt;IN THE FIELD&gt;

[Summer 2021] Robert Garneau

The course gives an introduction to development through individual exposure to prominent local real estate professionals including the developer, architect, financier, contractor, and broker, to better understand the multifaceted field of real estate development. These hosts not only present their views and experience on the topic at hand but also interact in a question-and-answer format. Course topics include partnership, acquisition, zoning, financing, designing, construction, selling, and other challenges of building developments.

## &lt;PRIVATE EQUITY DEVELOPMENT: HOSPITALITY FOCUS&gt;

[Summer 2021] Rani Gharbie

This course discusses the rapidly evolving real estate investment and development industry and addresses various approaches to capital markets. The course primarily covers major facets of creating a private equity development business while focusing on the hospitality industry. The course also discusses the rise of independent lifestyle hotels, the shifting development strategies of large lodging players, and the growing movement around the next generation of travelers. There is a focus on key industry disruptors that have been triggered by the rise of technology and the sharing economy.

## &lt;ADVANCED COMMERCIAL LEASING: STRATEGIES AND NEGOTIATIONS&gt;

[Summer 2021] Marty Gold, Mitchell Nelson

This course delves into issues between landlord and tenant and the negotiation of language in the lease; provides insight into protecting cash flow and returns over the length of the lease; explores the many ways that sophisticated modern leases contain hidden profit centers and control features that can be a boon for landlords and a black hole for tenants; discovers the need for, and the limits of, trying to write in

flexibility; and analyzes the mindset of landlords and tenants to help students be able to work with lawyers when negotiating a lease, or when handling leases on their own.

<BUILDING ADAPTATION AND REUSE>

[Spring 2021] Andy Golubitsky, Gabe Randall

Drawing from the expertise and experience of the faculty and guest speakers, this course introduces students to the design and development issues in the redevelopment and repositioning of existing buildings. Students learn of some significant land use and zoning regulations, taxation incentives, and social and economic drivers that have contributed to the current increase in urban redevelopment activity whereby existing buildings are reused often for new and different programmatic functions. Furthermore, the class covers the physical due diligence and constraints associated with redevelopment and the acquisition and financing process.

<PROPERTY TECHNOLOGY SEMINAR>

[Summer 2021] Brian Groudan

This course is a dialogue on the relationships between people and their assets, across public and private spaces. The seminar culminates in Demo Day, an art exhibition that focuses on how we might design an experience with property that is more equitable, adaptable, and sustainable. We start by reframing proptech problems as problems of access. Through this new lens, we can better identify territories, often neglected, and rooted in both the built and digital environments, that are ripe for disruption via proptech.

<REAL ESTATE IN THE SHARING ECONOMY: COWORKING/COHOUSING/"CO-EVERYTHING">

[Summer 2021] Josh Kahr

This class explores the rise of the sharing economy and how it has affected the commercial real estate industry. Over the last decade, the sharing economy has started the long-term transformation of relatively moribund product types into something new. This transformation has been extended to all product types albeit some more than others and with varying amounts of penetration and success. Valuation of the underlying real estate and to what extent the "co-everything" model creates additional value is examined and valued. Traditional lease structures and the lack thereof in most shared real estate are examined. Alternative methods to assess the credit quality and the long-term tenancy of tenants are discussed.

<GLOBAL REAL ESTATE INVESTING>

[Spring 2021] Sonny Kalsi

Global Markets focus on the relative opportunities presented for investors considering an investment in leading cities around the world. The class focuses on investment themes, risks, opportunities, and real-life case studies.

## &lt;THE DEVELOPMENT PROCESS&gt;

[Spring 2021] Cecily King

This course walks students through the development process putting them in the shoes of a real estate developer and guiding them through the iterative phases and decisions required for due diligence, acquisition, design, construction, and financing. Students select a specific development site for the duration of this course, and, by applying a new phase of the development process each week, build an investment strategy for their site resulting in a complete deal book as a final course deliverable.

## &lt;REAL ESTATE MEDIA AND MARKETING&gt;

[Spring 2021] Amir Korangy

In this course, students examine the important role media, data, and information technology play in real estate and why these components are essential to the marketing of a successful real estate project. As with other major industries, real estate is covered closely by a variety of media outlets and analysts who document market cycles and trends vital to the final goal of development. Students learn about the dynamic, often intricate relationship between developers and other real estate professionals and the array of media channels that impact each of them.

## &lt;CAPITAL MARKETS: REIT ANALYSIS&gt;

[Spring 2021] David Kruth

This course commences with the history, description, and benefits of the REIT corporate structure particularly as it relates to the publicly listed vehicles. It then covers the determination of the specific stock valuation of companies utilizing various methodologies such as Net Asset Value, price to FFO, and Price to Cash Flow. The various property sectors are evaluated and compared in terms of economic cycles, revenue structures, capital structure, risk profiles, and valuation.

## &lt;INTERNATIONAL REITS&gt;

[Summer 2021] David Kruth

Building on the fundamental REIT analytical methods, this course investigates the international variations of REIT structures: the history of the emergence of REITs in various countries, the respective structural differences, and the proportional presence of this corporate form in the local real estate investment markets. Students perform in-depth financial analyses of publicly-traded REITs in various countries and propose a cross-border merger/acquisition opportunity.

## &lt;CONSTRUCTION MANAGEMENT II&gt;

[Summer 2021] Richard Lambeck

This course bridges the physical disciplines with the regulation and financial complexities of modern development. The course provides an overview of construction technologies, the construction process, and construction management. Course topics include cost estimating; value engineering; scheduling and management methods; contract documentation and administration (AIA); RFP/bidding; insurance; labor relations; civil



and mechanical engineering; and, delivery systems design and implementation.

<REAL ESTATE PRIVATE EQUITY-ACQUISITION ANALYSIS>

[Summer 2021] Jiho Lee

This course covers topics related to real estate acquisitions in the five major asset classes (multifamily, office, retail, industrial, and hospitality) in the U.S. The emphasis is on reviewing value-add/opportunistic real estate investment opportunities as a joint venture equity provider. Key concepts in fund structuring and joint venture structuring are discussed. In addition, desk-top underwriting methods are demonstrated along with highlights of each asset class.

<LEGAL ELEMENTS OF THE DEVELOPMENT PROCESS>

[Fall 2020] Richard Leland

This course examines development and investment issues as they interface with property, zoning, contract, securities, and tax law. It provides an opportunity to actively engage legal professionals in mitigating and resolving contractual and regulatory risks.

<CAPITAL AND PARTNERSHIP STRUCTURING WITH ADVANCED EXCEL MODELING>

[Summer 2021] Jose Lievano

This course advances the student's knowledge and technical skills with Excel financial modeling and covers the more complex construction of the DCF Proforma around various capital structures of partnership equity waterfalls, preferred equity, mezzanine debt, and securitized debt. By completion, students build complex financial models from scratch.

<THE ART OF THE DEVELOPMENT PROPOSAL>

[Summer 2021] Brian Loughlin

This course introduces how to create a development proposal, and provides an overview of the process including the integration of finance, marketing, spatial programming, architectural design, and urban planning. Using the request for proposals (RFP) as a framework, students analyze an RFP, evaluate the real estate opportunity it presents, craft a vision that meets the demands of the market and the needs of the community, maximize value for the municipality and the developer, and prepare a professional development proposal.

<CONSTRUCTION MANAGEMENT>

[Spring 2021] John Lyons

This course is mandatory for students without direct experience in construction or project management.

<THE ARCHITECTURE OF DEVELOPMENT>

[Fall 2020] Brooks McDaniel

This course explores the development process for site selection, design, construction, value, and risk. Students learn the role of the full development team, case studies, and a framework for decision-making during the development process.

## &lt;DEVELOPMENT ANALYSIS: URBAN PLANNING ZONING LAB&gt;

[Fall 2020] Adam Meagher

This semester-long introduction to urban planning uses NYC and other cities as canvasses for student work and learning in all of these areas. The course consists of four units: foundations of urban planning; the city today; Urban infrastructure; Shaping development in the urban context.

## &lt;MACHINE LEARNING IN PYTHON&gt;

[Fall 2020] Uday Menon

This course covers various statistical and machine learning concepts including but not limited to linear regression, trees, advanced hypothesis testing, and advanced descriptive statistics.

## &lt;DATA ANALYTICS FOR REAL ESTATE&gt;

[Spring 2021] Uday Menon

This course focuses on Python for statistical analysis, decision optimization, and visualization of high-dimensional data with a focus on analytics applications in the Real Estate domain.

## &lt;ADVANCED CASE STUDIES IN REAL ESTATE ANALYSIS&gt;

[Spring 2021] Chris Munsell

Students learn to analyze, capitalize, and negotiate various types of real estate transactions, including in the more complex partnership, family company, and funds management situations. The course requires critical thinking and analysis, deep investigation and resolution of case studies, and active engagement in discussion and debate.

## &lt;REAL ESTATE DEBT&gt;

[Fall 2020] Chris Munsell

This course builds upon the major topics from the core curriculum and takes a deeper dive into the fundamentals of real estate debt. Students also gain exposure to mortgage products and industry vernacular as well as the major loan conditions and features that are utilized across all types of lenders in various markets.

## &lt;UNDERWRITING&gt;

[Summer 2021] Chris Munsell

The course covers all major facets of underwriting income-producing commercial real estate from a lending perspective. Students learn how to effectively underwrite stabilized office, retail, industrial, multi-family, and hotel properties. Emphasis is placed on credit evaluation, cash flow analysis, break-even analysis, market analysis, sponsorship, and loan structure. Exit strategies including securitization and loan sales are also examined.

## &lt;REAL ESTATE INVESTMENT FUNDAMENTALS&gt;

[Fall 2020] Chris Munsell, Clarence Radin

Real estate is an industry where experience is the ultimate edge: the intricacies and trade-offs of investment decisions are learned by

working through the situations and challenges. Students are exposed to an enormous variety of commercial real estate activities.

<LEGAL PRINCIPLES OF REAL ESTATE>

[Fall 2020] Mitchell Nelson

The purpose of this course is to provide a foundation for understanding the basic legal principles that serve owners, financiers, operators, and experts in the real estate industry. As such, it is a broad survey of relevant basic aspects of the application of law to real estate.

<PUBLIC-PRIVATE PARTNERSHIPS IN REAL ESTATE DEVELOPMENT>

[Spring 2021] Mehul Patel

This course explores public-sector involvement in real estate development and is designed to impart a set of skills necessary to manage the complex medley of governmental actors with conflicting goals and agendas in public/private development. NYC case studies provide an opportunity to examine the motivations, powers, and constraints of public agencies, as well as the approaches to planning projects, soliciting support, sustaining momentum, and structuring public/private partnerships.

<AFFORDABLE HOUSING, DEVELOPMENT, AND POLICY>

[Spring 2021] Ed Poteat

This course uses affordable housing techniques to design and plan an actual affordable housing development. Besides utilizing affordable housing techniques such as tax credit and tax-exempt bond financing, the course looks at the other aspects of affordable housing development such as design and constructability elements, community involvement, and political considerations.

<LEASE ANALYSIS AND FINANCIAL METRICS>

[Spring 2021] Sara Queen

Students undertake a detailed analysis of real estate leases, the core components, key conditions, and the implications for the financial performance of a property. Covering all major property types and scalable for buildings of differing sizes, students achieve competency in extracting critical financial information from leases, structuring the key components of a lease, and evaluating a given lease for negotiation.

<ASSET MANAGEMENT>

[Summer 2021] Sara Queen

This course studies the issues that impact an asset from initial investment through disposition, with a particular focus on leasing, repositioning strategies, hold-sell analysis, and operations. The focus is on demonstrating how effective asset management works with property management, leasing, construction/development, and accounting to maximize financial performance. Overall, the class emphasizes real-world issues and examples through the life cycle of an asset.



## &lt;REAL ESTATE INVESTMENT FUNDAMENTALS&gt;

[Fall 2020] Clarence Radin

This class introduces traditional financial and investment concepts and how they are applied to real estate. It covers the basics of analysis for various property types by tying together the finance, research, and development lessons taught in the core curriculum through the case method.

## &lt;INTRODUCTION TO PYTHON FOR MACHINE LEARNING&gt;

[Fall 2020] Eric Schles

This course covers a subset of Python programming geared towards machine learning.

## &lt;REAL ESTATE NEGOTIATION&gt;

[Summer 2021] Daniel Serviansky

The goal of this course is to provide students with the opportunity to develop their negotiation skills through in-class simulations and the study of negotiation theory. Students compare collaborative and competitive techniques, considering the risks and rewards of each in various contexts. Looking at both deals and conflicts, topics include game theory, strategy, persuasion, ADR, conflict coaching, cognitive bias, behavioral economics, active listening, and the role of the built environment.

## &lt;PIONEERING PROPTech&gt;

[Summer 2021] Ryan Severino

PropTech has become one of the hottest components of the commercial real estate industry in recent years. But what is it? In this class, we discuss the origins of PropTech, what constitutes PropTech, and ways that it is being utilized to glean insights into commercial real estate. We also discuss potential future uses and applications of PropTech. Students build a basic PropTech application as an end-of-semester project utilizing a sample data set to apply what they have learned.

## &lt;RISK AND INVESTMENT MANAGEMENT&gt;

[Summer 2021] Ryan Severino

This course offers a foundation in portfolio and risk management as it applies to individual real estate investments, multiple investments, and portfolios of mixed real estate assets and real estate assets (including securities) as a component of institutional portfolios.

## &lt;THE BUSINESS OF DEVELOPMENT&gt;

[Fall 2020] Shai Shamir

This course provides an immersive understanding of the development world from the point of view of a real estate developer. The students learn the fundamentals and principles of the development theory using basic analytical tools and learn how to develop a successful business plan.

## &lt;ALTERNATIVE AND DISTRESSED INVESTMENT STRATEGIES&gt;

[Spring 2021] Donald Sheets

This course introduces students to the basic framework of commercial real estate investment through the lens of distressed and distorted assets and markets. Basic elements of bankruptcy procedure and valuation are discussed, along with a specific concentration on those issues most pertinent to workout situations. Common characteristics and factors that lead to distress are addressed.

## &lt;PROPTECH: BUILDINGS OPERATION AND MANAGEMENT&gt;

[Spring 2021] Adrian Silver

This course explores sustainability in proptech. Students investigate the key motivations and barriers among real estate firms that influence the implementation of deep energy retrofits, and leave the course with a strong understanding of the key decision-makers and influential actors within these organizations who plan, finance, and execute these projects.

## &lt;JOINT STUDIO: REIMAGINING THE INDUSTRIAL WATERFRONT: UTICA'S HARBOR POINT&gt;

Kate Ascher, Christoph Kumpusch

In this studio, students develop components of a vision for a new mixed-use community on a remediated 100-acre waterfront site located alongside the historic harbor in Utica, New York, a once-booming industrial city located 95 miles west of Albany. The “client” is the Harbor Point Development Corporation, an entity created by the

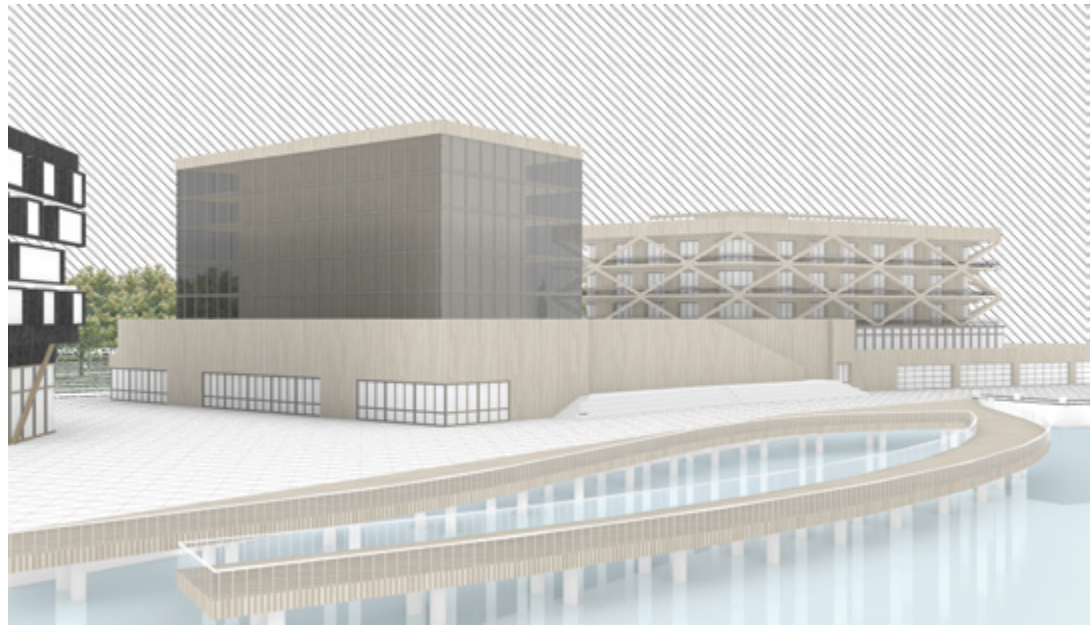


Marie Christine Dimitri,  
Brandon Conrad, Tomas Buitrago



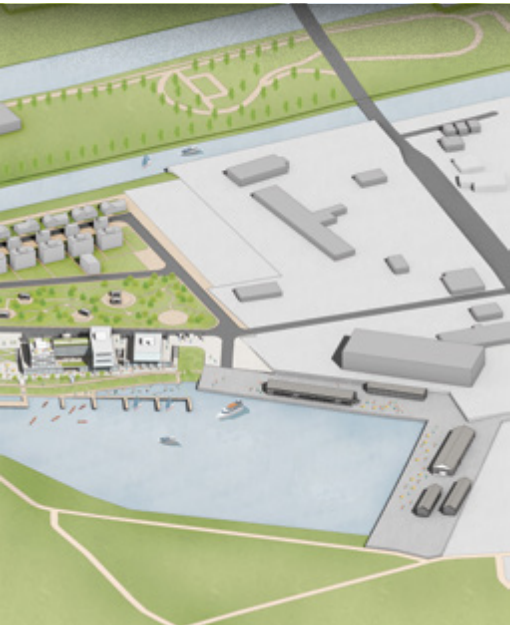
Qianyue Ma,  
Keon Hee Lee

Thomas Abreu,  
Michael Kolodesh





government to facilitate development by issuing design guidelines, overseeing a competitive procurement process, and crafting the public-private partnership that will unlock value at this formerly industrial waterfront site. The students' work is expected to serve as a foundation and inspiration for the development guidelines moving forward. The site offers challenges and opportunities. Areas around Harbor Point suffer from chronic flooding due to its location in a Mohawk River floodplain; students considered ways to address this resilience issue as part of their work.



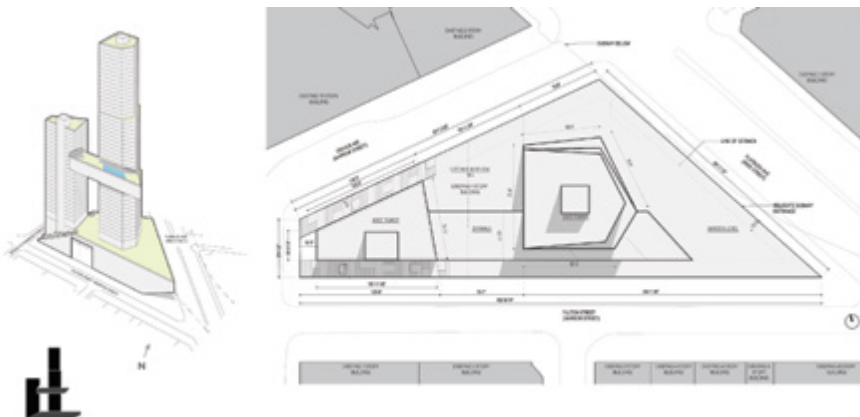
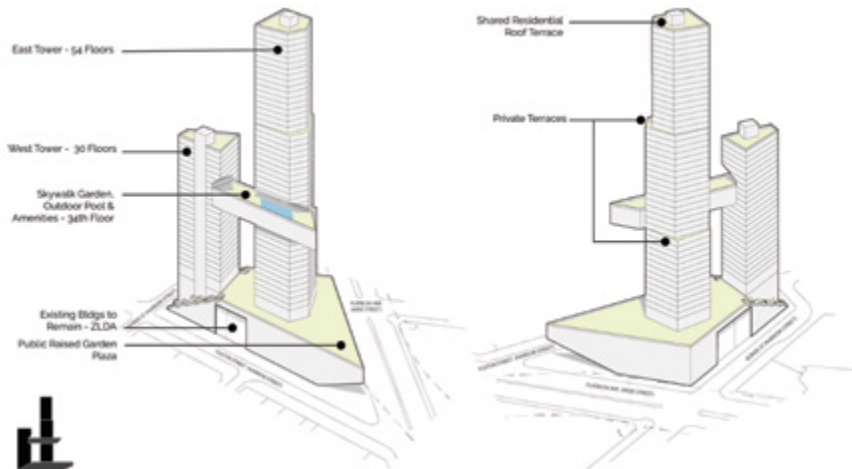
Shamkhal Hasanli, Jindian Fu

Spyro Jacobson, Wanqi Sun

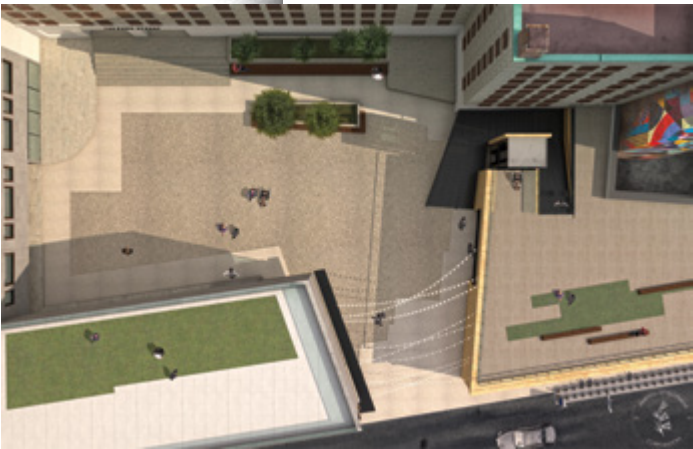


<DESIGN BY DEVELOPMENT> Eran Chen

Brendan Cavender, Alexander Cutrona, Mustafa Kamil,  
Eshan Mehta, Elliot Shahery



<THE ART OF THE DEVELOPMENT PROPOSAL> Brian Loughlin



Michael Adelstein, Hajir Al Khusaibi, Maria Figueira, Nicholas Laffin



Brandon Conrad, Brianna Friedman, Alfonso Larrain, Olivia McCaughey

Tom Bourne, Sebastian Salas, Charlotte Yu







Cherry Xinyi Qu

EXECUTIVE SUMMARY

The Seventh Development proudly present the vibrant tech-oriented community Greenpointech Incubator (GI) for this incredible equity investment opportunity. With various programs right by the waterfront captured to the existing neighborhood and the great potential of the future, it is for Greenpoint, Brooklyn and New York City. Our previous award-winning new-industry developments reflect our sharp and forward-looking vision, which would be joined by the transformative GI in 2021.



| 1,466,788 SF

- Tech Incubator 304,445 SF
- Rental Apartment 994 Units
- Affordable Housing 209 Units
- Waterfront Public Park 288,000 SF

| 5 Years

- Design & ULURP 1 Year
- Construction 2 Year
- Lease-up 1 Year

| Sources

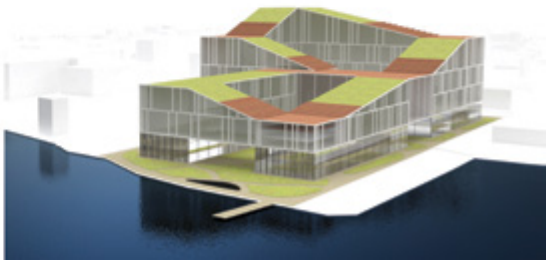
- Acquisition Loan 22% \$386,023,582
- Construction Loan 34% \$434,755,845
- GP Equity 4% \$57,586,081
- LP Equity 40% \$518,374,731

Total \$1,296,640,238

| Uses

- Land Acquisition 44% \$572,047,164
- Construction 43% \$557,379,288
- Soft Costs 13% \$167,213,786

Total \$1,296,640,238



Business Plan

| Greenpointech Incubator with 8 well-thought elements would be further explained in the deal book.



| CAPITAL OPPORTUNITY

Sitting in New York City where numerous venture capital opportunities are provided, the project with the Tech Incubator component would be sufficiently funded and supported.



| AFFORDABLE WORKING SPACE

With still low acquisition price for the land, more affordable working space can be offered. Booming tech industry with non-stop growing demand, more spaces are needed to make the land affordable too.



| STEM WORKSHOP

Beyond working in Tech industry, education is a very important element for the government of NYC and also the project. Incubator space during night and weekends would be used for



| TAILORED SMARTHOME LIVING

Not just working but the whole living style is included in the project with smarthome apartments from studio to 3 bedrooms. The hubs for tech should be tailored with living.



| AUTHENTIC LIFESTYLE

The neighborhood of Greenpoint has an authentic lifestyle to offer with numerous cafes, cute stores, bars and other music venues on top of the peaceful waterfront access.



| FLOOD MITIGATION

Sitting in the flood zone for the whole site, flood mitigation is fully considered by designing the waterfront park with flood walls and landscape.



| OPEN SPACES

The project adds great size of public park on the ground and rooftop garden and theater for the tenants and the public. A playground and a dog park would also be offered for the community.



| AFFORDABLE HOUSING

As top one need for the community, 20% affordable housing for 60% - 80% of AMI is provided to help the community.

GREENPOINTECH  
INCUBATOR

Incubator for Nature, Business, and Lifestyles





## *New York—Paris* Danielle Smoller, Program Director

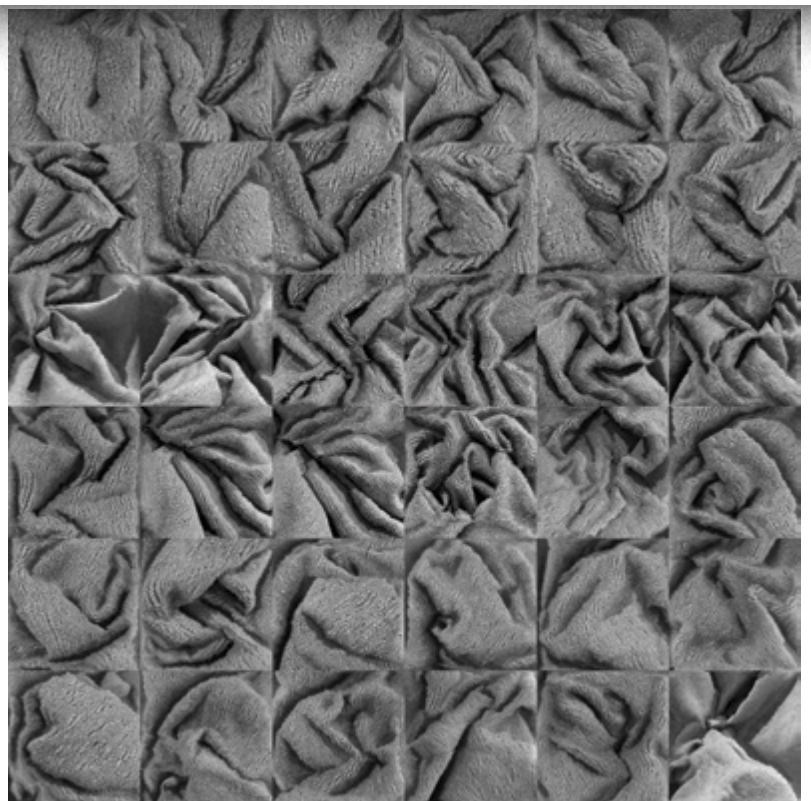
The Shape of Two Cities: New York/Paris Program is designed to develop a student's critical appreciation of urban forms, from genesis through development, and the role of architecture, preservation, and planning in the spatial, social, and cultural creation of the contemporary urban environment. As a one-year intensive liberal arts program with a strong studio component, the curriculum focuses on both design issues and the urban history and theory of these two cities. In addition, the program provides a thorough introduction to the disciplines of architecture, urban studies, and planning for highly-motivated undergraduates who have completed at least two years of study at their home institutions, or for post-baccalaureate students interested in preparing for graduate studies. Previous study in these disciplines is not required for admission to the program, allowing students from a broad range of academic and professional backgrounds to participate. The program's curriculum is designed to provide students with a better understanding of the design and urban studies disciplines as they are practiced in both New York and Paris, offering a unique context that engages students as well as critics and instructors from architecture, urban studies, and other fields with a critical dialogue across cultures using two of the world's great cities. New York and Paris are significant global cities, each a case study and legacy of urban development, and each a historical cultural, financial,

and political capital. For students, these two cities offer an ideal opportunity to explore the historical, social, and political development of urban form; and to clarify the roles of architects, planners, and preservationists upon it.

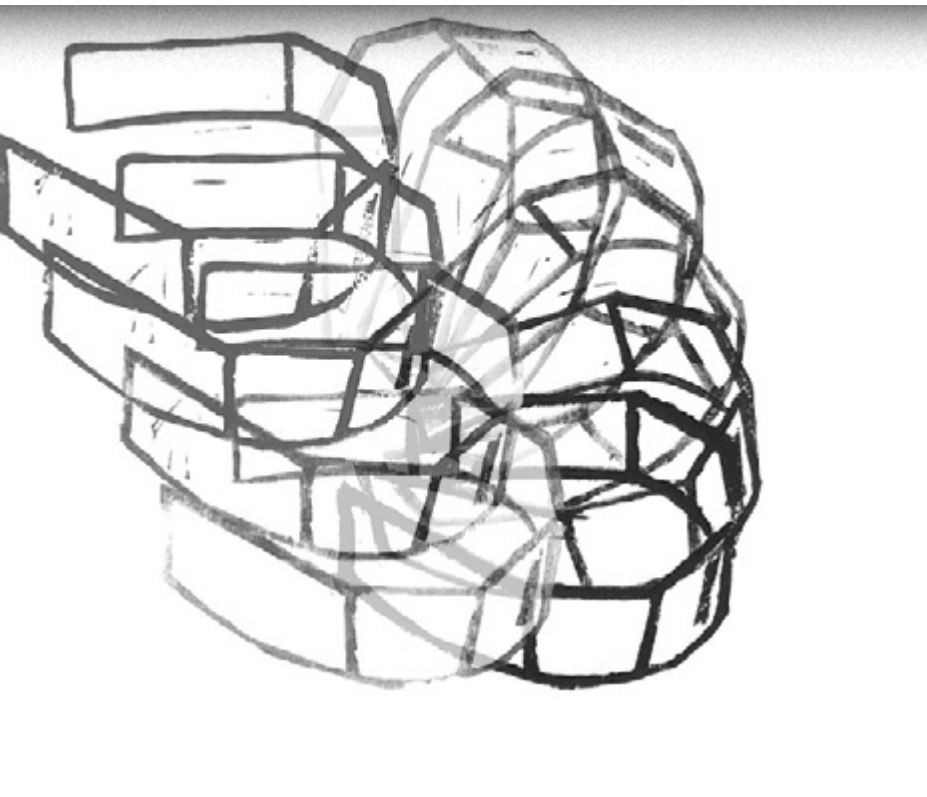
<DESIGN STUDIO> Thomas de Monchaux



Yining Wang



Yilun Jin



Isabel Sung



Emily Taw





# *Introduction to Architecture*

## Danielle Smoller, Program Director

This five-week intensive design studio, hosted virtually for the first time during the Summer 2020 semester, presents a comprehensive and intensive experience in architectural design. In the mornings, students are invited to participate in optional lectures and discussions on making, technology, the environment, faculty firms, and portfolio workshops. In the afternoon or evening, students are required to attend the 3-credit design studio—an educational method unique to architecture—where they are given intensive training in the skills and critical thinking involved in architectural design. Students work in small groups directly with one studio instructor, toward studio goals.

In this digital realm, an architect acts as a translator between virtual and physical environments. This negotiation requires the architect to engage standing questions: How do we merge the physical with the virtual, and how are our definitions of those changing? What is the role of making in a non-physical workshop? How do communities emerge around virtual design? And with new emphasis, how does the solitary creative act merge with the need for a collective effort and audience?

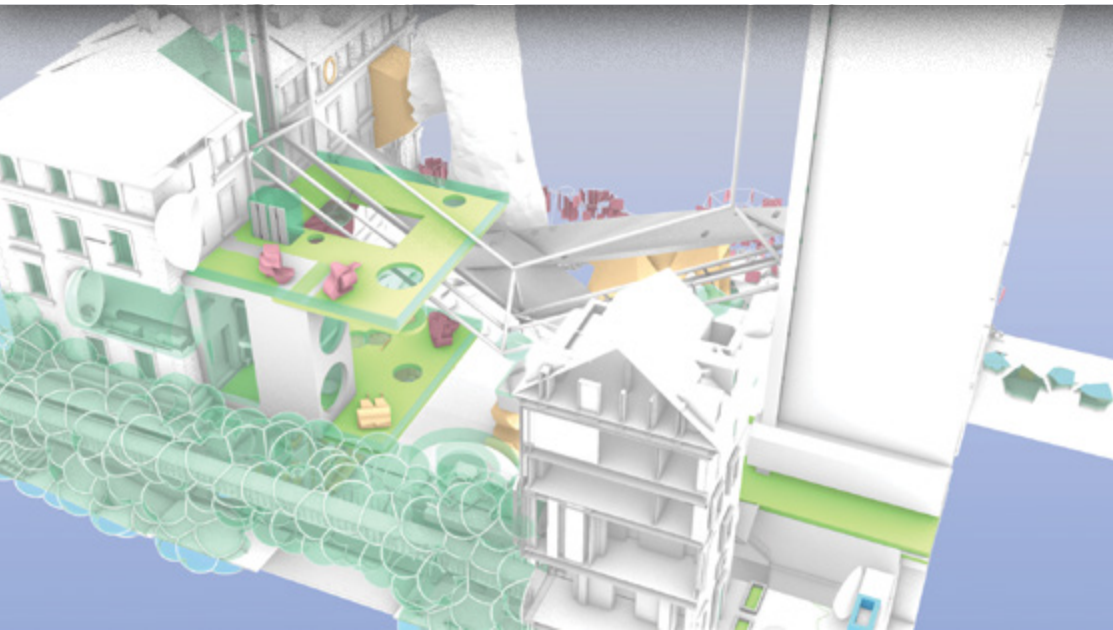
In the studio, students engage with the means and methods of architecture that are made possible and essential by dwelling online. Here they will interrogate concepts of placemaking, the production of space, and the creation of community—with a virtual embodiment.

They learn about the role of the architect as a facilitator of connections between people, and as interpreter of the spaces both physical and nonphysical.

Design work, teaching, and reviews occur in platforms conducive to live sharing and feedback—some established, some experimental. These forums provide an opportunity for students to receive comments and criticism from invited architects, design professionals, and professors. Together, the studio, workshops, and lectures present an introduction to architecture as a venue for new forms, new places, and new approaches to our contemporary critical culture.

Design Studio Faculty  
Thomas de Monchaux  
Joshua Jordan  
Bika Rebek  
Joshua Uhl

<DESIGN STUDIO> Thomas de Monchaux, Joshua Jordan, Bika Rebek, Joshua Uhl

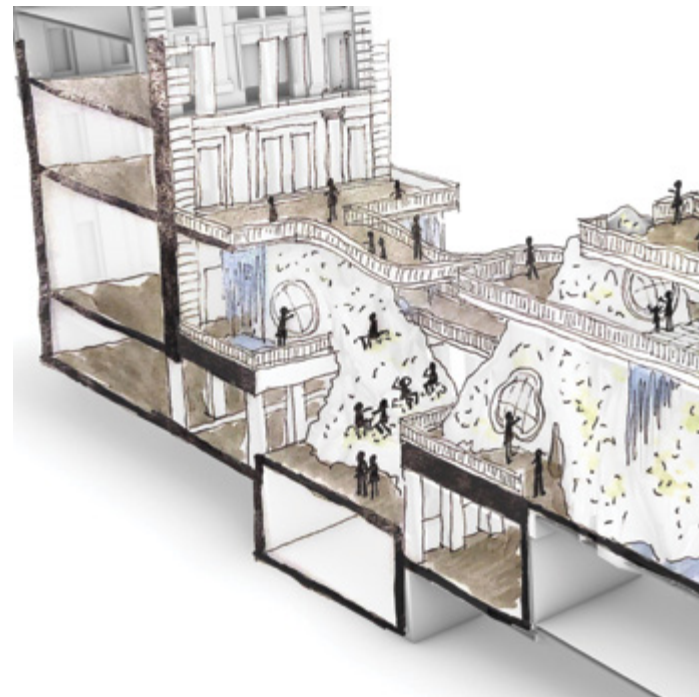


Studio

Aaryn Ijames



Ali Kamal





Lily Liebes



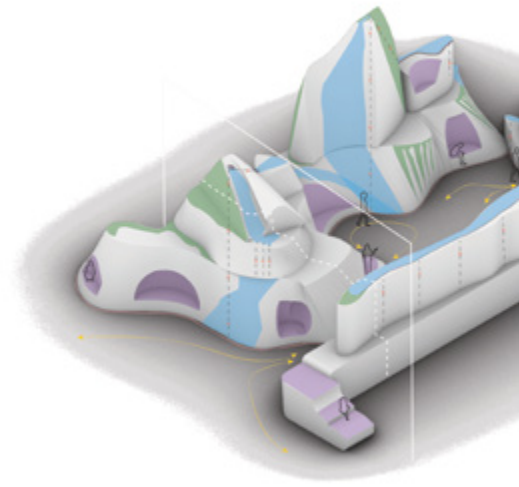
Chris Martinovic



<DESIGN STUDIO> Thomas de Monchaux, Joshua Jordan, Bika Rebek, Joshua Uhl

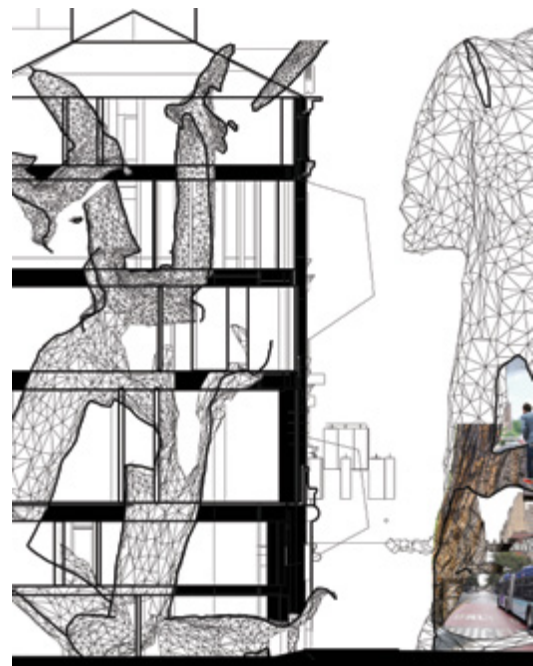
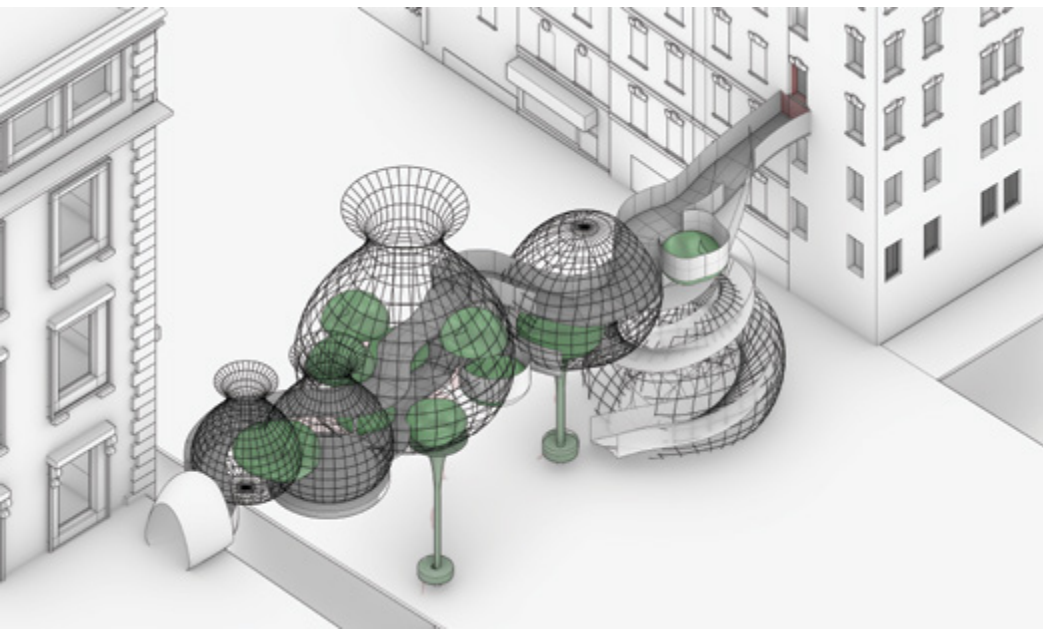


Jane Cole

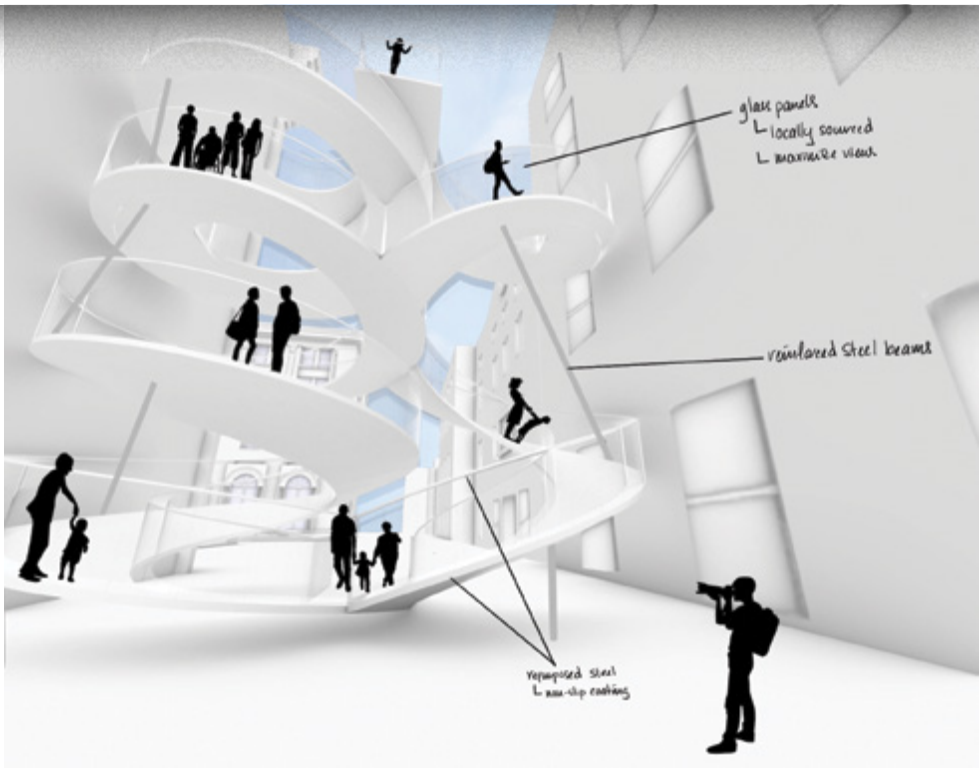


Alice Cork

Jordan Maia Shanel





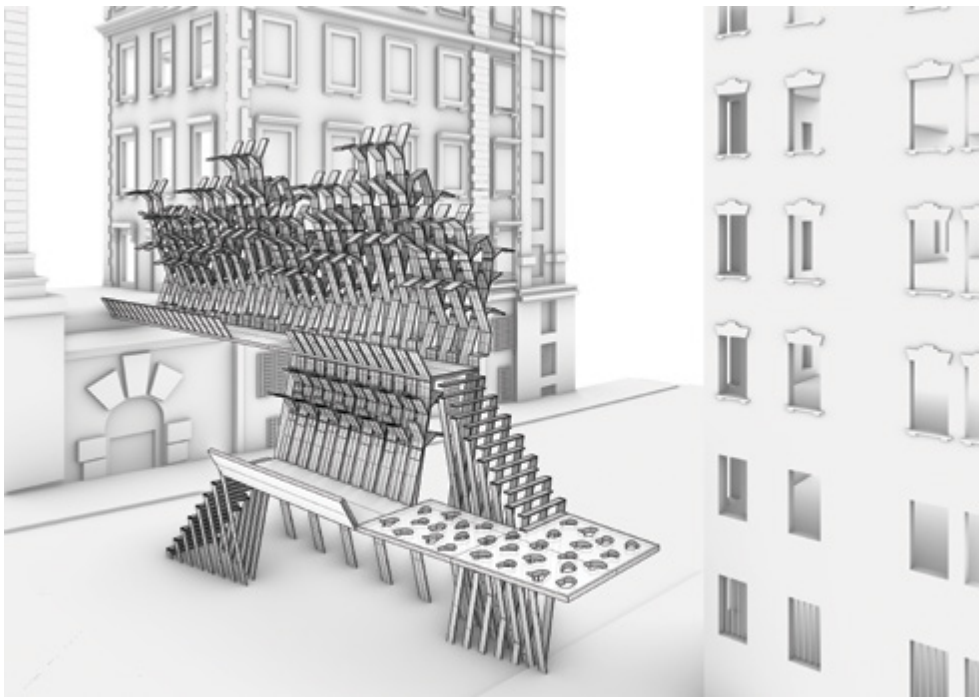


Eileen Mendez

Jacob Stuart Shichman



Ali Kamal







<SECTION D>

- 441 Ph.D. Architecture  
Felicity D. Scott,  
Program Director
- 445 Ph.D. Urban Planning  
Malo A. Hutson,  
Program Director
- 451 M.S. Critical, Curatorial,  
and Conceptual Practices  
Felicity D. Scott  
and Mark Wasiuta,  
Program Co-Directors





# *Ph.D. Architecture*

## Felicity D. Scott, Program Director

The Ph.D. Program in Architecture is oriented toward the training of scholars in the field of architectural history and theory. Its structure reflects a dual understanding of the scholar's role in the academy: as a teacher and as a researcher making an original contribution to the field, with an emphasis on expanding and reinterpreting disciplinary knowledge in a broad intellectual arena. Course requirements give entering students a solid foundation in historical knowledge and theoretical discourse, with sufficient flexibility to allow the initiation and pursuit of individual research agendas. The program's focus is on the history and theory of modern and contemporary architecture and urbanism in an international and cross-cultural context, from the mid-18th century to the present. Within this, a wide range of research is supported through the expertise of the faculty and through strong relationships with other departments throughout the University and beyond.

Ph.D. Committee:  
Lucia Allais  
Barry Bergdoll  
Ateya Khorakiwala  
Reinhold Martin  
Mary McLeod  
Felicity D. Scott  
Mark Wigley  
Mabel O. Wilson

Courses:  
Ph.D. Colloquium  
Mary McLeod  
Spring 2021

Ph.D. Colloquium  
Ateya Khorakiwala  
Spring 2021

Ph.D. Colloquium I  
Felicity D. Scott  
Fall 2020

## &lt;DISSERTATIONS&gt;

## Addison Godel

*Metropolitan Equipment: Architecture and Infrastructural Politics in Twentieth-Century New York City*

Felicity D. Scott, Advisor

This dissertation explores architectural building types as critical components of, and unique points of interface with, three infrastructural systems, built or re-built in New York City in the decades after World War II. While contemporary infrastructure is enmeshed in regional and global networks far beyond the administrative bounds of the five boroughs, an architectural focus reveals these systems as inescapably local, tied to political struggles surrounding the siting, design, and construction of buildings; to socio-technical imperatives of density; to material consequences like traffic and air pollution; and to aesthetic effects like beauty, monotony, and monumentality. Three case studies—in food distribution, telephone service, and sewage treatment—explore different spatial techniques involved in the management of commodities, information, and waste. Reading each through the social history of technology, as well as the disciplinary tools of architectural history, brings to light unique aspects of architecture's participation in the political, social, and technological landscapes of the contemporary city.

This dissertation looks closely at the prewar roots and postwar creation of New York's present-day systems: the adoption of the infrastructural buildings we see today, and the rejection of alternatives in design, values, and policies. It argues that the city's vital systems, and their architectural manifestations, were largely designed according to the needs of various elite groups, in ways that supported the long-term deindustrialization and stratification of urban existence, though not according to a consistent or coherent plan. Well-studied postwar phenomena such as decentralization, automation, demographic change, and "urban crisis" take on different casts as familiar characters like politicians, property owners and architects are joined by monopoly corporations, technicians, and neighborhood organizers. Granular study of the processes that led to the adoption of particular plans, and the rejection of alternatives, reveals the city's visual and functional landscape as one shaped by a wide—though far from democratic—range of actors.

Today, these same infrastructures, physically durable even as their social use has been redi-

rected or transformed, continue to participate in an ostensibly postindustrial and rapidly gentrifying city. By reexamining the narratives of these systems' design and construction, the study of infrastructural architecture illuminates this inequitable history, while revealing moments of resistance and supporting calls for the further democratization of urban life by those whose needs have been discounted.■

## Alexander Wood

*Building the Metropolis: Architecture, Building, and Labor in New York City, 1880–1935*

Reinhold Martin, Advisors

The growth of New York City between the 1880s and the 1930s produced a remarkable building boom that reshaped the landscape of the city. In these years the city acquired its modern skyline, many of its civic monuments, and much of the housing its residents live in today. The development of new architectural styles, building materials, and construction methods in this period also introduced profound changes in the way buildings were produced. The soaring demand for new construction stimulated the rise of new kinds of architecture, building, and contracting firms, revitalized the building trades, and transformed the city's building industry.

This dissertation explores the building of the city from the perspective of those who were engaged in its production to shed new light on the history of the city. Focusing on the creation of some of the city's most important buildings, it traces the efforts of architects, builders, and workers to shape the building process as it became increasingly industrialized. While architects, general contracting companies, and subcontractors exercised growing authority within the building industry, construction ultimately depended upon skilled building craftsmen. Thanks to their collective action, workers successfully fought to maintain the integrity of their trades and exert control over their work. Over time, architects, building employers, and workers established cooperative agreements which helped to stabilize a volatile industry.

This study contains five chapters that examine the work of leading New York architects as a window onto the transformation of building practice over half a century. Using the records of architecture firms, building trade publications, and municipal records, it documents the changing character of the building industry in a period of rapid urban growth, technological change, and industrial conflict. By looking at the making of buildings as a form of production, it reframes architectural history around the conflicts that shaped the building process between the late nineteenth century and the Great Depression.◆







*Ph.D. Urban Planning*  
Malo A. Hutson, Program Director

The Ph.D. Program in Urban Planning prepares students to become scholars in the field of urban and regional planning. Students apply the methods and theories of social science to answer questions that are pertinent to planning practitioners, scholars, and other urbanists. The substantive foci of students' scholarship include: affordable housing policy, infrastructure planning, energy policy, environmental planning, citizen participation in planning processes, the role of expertise in shaping economic development policy, transportation, among others.

Although grounded in the social sciences, students often draw on the more design-oriented disciplines of architecture, preservation, and urban design to inform their research and motivate their research questions. The program takes an ecumenical approach to research methodologies with students employment myriad methods including archival research, content analysis, interviews, participant observation, and statistical analyses.

The diversity of the program is also reflected in the range of places that are the subject of student inquiry. Students have examined development policy in Africa, land tenancy in rural Japan, recovery and rebuilding Haiti. and transportation planning in the UK.

A common theme uniting the myriad interests of the students is a focus on the role of space and of collective action, as well as normative concerns related to social justice and democracy.

Core Faculty

Hiba Bou Akar  
Lance Freeman  
Malo A. Hutson  
Weiping Wu

Courses

Advanced Research I  
Weiping Wu  
Fall 2020

Ph.D. Colloquium I  
Malo Hutson  
Fall 2020

Ph.D. Colloquium III  
Malo Hutson  
Fall 2020

Advanced Planning History  
Spring 2021  
Elliot Sclar

Doctoral Colloquium II  
Weiping Wu  
Spring 2021

Doctoral Colloquium IV  
Weiping Wu  
Spring 2021

## &lt;DISSERTATIONS&gt;

## Jonathan English

*The Better Way: Transit Service and Demand in Metropolitan Toronto, 1953–1990*

Elliott Sclar, Advisor

## Tyler Hauptert

*Racial and Spatial Disparities in Fintech Mortgage Lending in the United States*

Lance Freeman, Advisor

This dissertation contends that the decision of the Municipality of Metropolitan Toronto and the Toronto Transit Commission to introduce a grid of frequent, all-day bus service on arterial roads in newly built, low-density suburban neighbourhoods is responsible for Toronto's unique ability to attract suburbanites to transit. Toronto's approach is in stark contrast with the that followed in most North American urban regions, where auto-oriented suburban built form is considered to make transit unviable, and therefore transit service outside the urban core is typically very limited. The Ontario government's establishment of metropolitan government in the Toronto region in 1953, at a time when transit remained a popular mode of transportation, encouraged and empowered suburban politicians to pressure the TTC to expand service to their constituencies. In response, the TTC developed a plan for suburban bus service that succeeded, in terms of ridership and financial performance, far beyond its expectations. This success, in turn, encouraged further service improvements and government support for transit, producing a virtuous spiral of service increases, ridership gains, and government funding increases, which stood in sharp contrast with the vicious spiral of ridership declines, service cuts, and fare hikes that plagued transit systems in most North American cities. This dissertation is the product of archival research in Canada and the United States, as well as a series of interviews with policymakers, planners, and activists who were engaged during the period. The Toronto model offers valuable lessons for transportation planning across North America. It demonstrates that it is possible to achieve high transit mode share, even in areas that are not designed as explicitly transit-oriented communities. This means that it is possible to shift trips away from the automobile without needing to entirely rebuild the suburban neighbourhoods where most North Americans reside, an unachievable goal on the timeline required to avert catastrophic climate change. It also demonstrates that the benefits of large capital investments in rapid transit and rail projects will only be maximized when paired with operating funding to ensure that the new infrastructure is embedded in a broader network of frequent local transit service.▼

Despite being governed by several laws aimed at preventing racial inequality in access to housing and credit resources, the mortgage lending market remains a contributor to racial and place-based disparities in homeownership rates, wealth, and access to high-quality community resources. Scholarship has identified persistent disparities in mortgage loan approval rates and subprime lending between white borrowers and those from other racial and ethnic groups, and between white neighborhoods and neighborhoods with high levels of non-white residents. Against this backdrop, the mortgage lending industry is undergoing rapid, technology-driven changes in risk assessment and application processing. Traditional borrower risk-assessment methods including face-to-face discussions between lenders and applicants and the prominent use of FICO credit scores have been replaced or supplemented by automated decision-making tools at a new generation of institutions known as fintech lenders.

Little is known about the relationship between lenders using these new tools and the racial and spatial disparities that have long defined the wider mortgage market. Given the well-documented history of discrimination in lending along with findings of technology-driven racial inequality in other economic sectors, fintech lending's potential for racial discrimination warrants increased scrutiny. This dissertation compares the lending outcomes of traditional and fintech mortgage lenders in the United States depending on applicant and neighborhood racial characteristics. Using data from the Home Mortgage Disclosure Act, an original dataset classifying lenders as fintech or traditional, and an array of complimentary administrative data sources, it provides an assessment of the salience of race and place in the rates at which mortgage loans from each lender type are approved and assigned subprime terms. Results from a series of regression-based quantitative analyses suggest fintech mortgage lenders, like traditional mortgage lenders, approve and deny loans and distribute subprime credit at disparate rates to white borrowers and neighborhoods relative to nonwhite borrowers and neighborhoods. Findings suggest that policy-

makers and regulators must increase their oversight of fintech lenders, ensuring that further advances in lending technology do not concretize longstanding racial and spatial disparities.►



## Sophonie Milande Joseph

*Urbanisme in Ayiti: Diffusion, Decentralization & Disaster*

Clara Irazabal Zurita, Advisor

The development conflict between the social justice and environmental vertices of the planner's triangle is inadequately addressed within existing literature and practice. To actualize sustainable development planning, I use a black feminist lens to re-frame analysis of the never-ending cycle of resolving conflicts at the intersection of economic, environmental and equity needs. The purpose of this dissertation study is to describe three cases of delayed decentralization planning, the post-disaster aid context, and energy justice cases for planning and policy implications. The methods for data collection include: semi-structured interviews, statistical analysis, archival research and participant-observation. The conclusions are the urbanism regulatory framework continues to be used to delay decentralization planning, post-disaster sustainability planning is limited by both natural and human disaster factors, and energy access needs to be reframed as a human right instead of a commodity. ■

## Elizabeth Marie Marcello

*State Public Authorities, Local Politics, and Democratic Planning: New York's Empire State Development Corporation*

Robert Beauregard, Advisor

Public authorities supplement routine government functions by building infrastructure, maintaining bridges, building stadiums and convention centers, managing public housing, and running mass transit systems. These special purpose governments are a fixture of urban development and service delivery. Drawing on a framework informed by theories of public authorities and intergovernmental politics, this study examines how statewide public authorities interact with localities and what the implications are for intergovernmental politics and local democratic planning. This research focuses on a state public authority in New York State responsible for economic development: the Empire State Development Corporation. Through archival analysis, interviews, legislative review, and document and project analysis, I show that when a public authority carries out economic development, it can facilitate local economic development planning by overcoming local political inertia, or it can hinder a locality's planning efforts by substituting statewide economic development interests for local interests. In both cases, there is a negative effect on local democratic processes. By overriding local laws, acting in isolation from the public and the legislature, and allowing the businesses community special access to the public authority, the public authority subverts deliberative and inclusive democratic processes. This study concludes by suggesting ways that public authorities can take up democratic planning principles. ◆

## Jung Eun Park

*Cost Overruns and Schedule Delays of Major Projects: Why We Need Reference Class Forecasting*

Lance Freeman, Advisor

Major projects around the world have long been notorious for cost overruns and schedule delays. In response to the cost overruns, the U.S. Department of Transportation established a task force and took a range of steps to strengthen the stewardship, management, and oversight of major projects at the beginning of the 21st century. Through a classical test of hypotheses, this study first investigates the prevalence and magnitude of the cost overruns of the major infrastructure projects in the U.S. before and after the reform. The before and after comparison finds that the projects experiencing cost overrun have been reduced from 77% to 45% following the reform. Results revealed that the U.S. Department of Transportation has developed measurable outcomes but their success may be limited. To address the cost overruns, conversely, the U.K. adopted Kahneman's Nobel Prize-winning theory to challenge biases in human judgment and mandated reference class forecasting for major projects at the beginning of the 21st century. Through before-and-after and with-and-without comparisons of major infrastructure projects, this empirical study then examines the practical relevance of reference class forecasting for infrastructure investments. A before-and-after comparison reveals that the average cost overrun declined from 50% to 5% following the introduction of reference class forecasting. A with-and-without comparison also demonstrates that the U.K. surpassed its targeted probability of completing projects within budget by 12% using reference class forecasting, whereas the U.S. underperformed by 23%. Thus, reference class forecasting has engendered notable improvements in estimation in the U.K.

Although schedule delays not only result in significant financial implications to project sponsors but also lead to substantial social costs to the public, scant attention has been dedicated to schedule delays. Therefore, this study further investigates the frequency, magnitude, and characteristics of schedule delays occurring during the construction of major infrastructure projects built in the U.S. and the U.K. between 1999 and 2018. A multivariate regression analysis confirms that length of implementation

## &lt;DISSERTATIONS&gt;

**Danielle Lucia Petretta**

*The Political Economy of Value Capture: How the Financialization of Hudson Yards Created a Private Rail Line for the Rich*

Elliott Sclar, Advisor

phase and project type plays the most important role in project schedule performance. During extensive efforts were made to project controls in the U.S. and the U.K. over the last two decades, this study also finds, project performance has not improved at all from a schedule perspective. In order to address the issue, this study suggests reference class forecasting to develop more realistic and reliable schedule estimates.

This empirical study demonstrates the benefits of supplementing or replacing the current forecasting method. The findings can be used to reduce substantial financial risks for the government as well as social and economic welfare losses for society.▲

The theory of value capture is simple to understand and easy to sell, promising self-fulfilling virtuous cycles of value generation, capture, and redistribution. Countless studies document value creation attributable to public interventions, providing guidance on the type and extent of potential benefits. Scholars too have set forth parameters for optimal value capture conditions and caution against common pitfalls to keep in mind when designing value capture plans. But even when utilizing the best advice, equitable redistribution of benefits rarely occurs in neoliberal economies, leaving municipalities struggling to meet the myriad of social needs and provide basic services for all their inhabitants. Invariably, capitalistic real estate states seek to financialize public assets for private gain. Nowhere is this more apparent in New York City today than in the outcomes thus far of one of the largest public-private developments in New York history at Hudson Yards.

This dissertation documents the failure of the value capture scheme put in place at Hudson Yards which neither captured fair market value for the public, nor extracted much public benefit. The scheme aimed to leverage vast tracts of publicly-owned land above operational rail yards at the Far West Side of Manhattan. Instead, public action under the guise of public purpose catalyzed the private financialization of a finite public asset, through the seemingly benign but inherently complex public policy tool of value capture finance. In particular, this dissertation tells the detailed development story of Hudson Yards, where developers reap huge rewards for their risks while the public still waits for what was promised—an all too familiar story.●

**Rosalie Singerman Ray**

*Multi-scalar Deliberative Transportation Planning: How London and Paris Made Way for Buses*

Elliott Sclar, Advisor

This dissertation asks how activists, planners, and politicians reshaped transport institutions to prioritize buses over cars in London and Paris. The policy studied in both cities is the creation of a network of bus priority, known as the Red Routes and London Bus Priority Network in London and the Mobilien network in Paris. Using media analysis, archival research, and 30 interviews across the two cities, it traces the process of change in both cities and maps the deliberative system, the actors engaged in the decision-making process. It finds that empowered but not autonomous local governments—the boroughs in the case of London and the city of Paris in the case of Paris—were major actors in the change process, putting forth alternatives and deliberating with regional bodies to shape policies that took into account a variety of competing needs. It also finds that public conversation, debate, and conflict were essential to the process of institutional change, through which road governance was decentralized and local actors were empowered to control their own streets. These findings follow Iris Marion Young's proposal that empowered but not autonomous local actors, subject to regional governments, is the most just model of urban governance.♥

## Valerie Elise Stahl

*Housing Publics: Contested Approaches to Public Housing Redevelopment in New York City*

Lance M. Freeman, Advisor

Housing approximately half a million residents, the New York City Housing Authority (NYCHA) has long been cast as the exception to the rule of ‘demolish and replace’ models of public housing in the United States. Yet as NYCHA faces a dire fiscal and administrative crisis, it has proposed a suite of privatization efforts that threaten its successful reputation. With a focus on NYCHA’s effort to allow private developers to construct mixed-income ‘infill’ projects on existing ‘underutilized’ public housing land through the NextGeneration NYCHA and NYCHA 2.0 plans, in this dissertation, I ask: how do various stakeholders, including residents, the housing authority, private developers, elected officials, and non-profit and advocacy stakeholders justify, react to, and resist NYCHA’s plans for redevelopment? While most studies consider the impacts of mixed-income housing on residents after lease up of a development, interpreting it as either a de facto beneficial policy or as a tool for state-led gentrification, this work differs in its focus on the range of viewpoints about the plan prior to construction. In so doing, it straddles the literature on mixed-income housing and urban planning processes through the lens of pragmatism.

A pragmatic approach centers those most impacted in planmaking and considers how diverse stakeholder experiences co-exist and contrast in public deliberation processes. In other words, this dissertation considers how the housing authority’s various publics have reacted differently to the plans for its transformation with the goal of informing how to craft more restorative, equitable, and deliberative planning processes.

Using data from over a year and a half of participant observation, interviews, and media and policy sources, I craft a qualitative narrative case of the deliberations surrounding NYCHA’s first five years of redevelopment from a variety of stakeholder perspectives. Using narrative and framework analysis, I organize this dissertation around three empirical chapters: 1) an anatomy of the formal and dialogical channels of engagement between speakers and NYCHA officials at 10 public meetings following the NextGeneration NYCHA plan’s release; 2) an account of the housing authority’s stop-and-start approach to

pursuing infill set amidst its various crises, including an analysis of the viewpoints of public officials and a private developer selected for a pilot infill site; and 3) a description of residents’ opposition to the plan, which includes descriptions of spaces of contestation citywide and at a specific pilot infill development on the Upper East Side of Manhattan.

I find that while multiple stakeholders agree on the end goal of repairing existing public housing, actors promote a series of contradictions in their means to fix it, shaping a hotly contested landscape that has eroded public trust and further delayed action. Despite critiquing the housing authority for their management practices, residents launched a campaign to keep their homes publicly-operated that extended beyond the walls of their developments to citywide and even national progressive issues.

This dissertation contributes to the housing policy and urban planning literature in three ways. First, it proposes an understanding of mixed-income housing that eschews past binary approaches and shows its perceived benefits and risks as highly dependent on the values and goals of the stakeholder. Second, it looks at conflicting attitudes to planmaking outside of a traditional consensus-based models, inviting a contextual understanding of power dynamics while also placing value on the experiences and actions of the majority Black and Latinx public housing residents who are the most impacted by the infill plans. Lastly, this dissertation also serves to profile pragmatism’s power—and limits— for theorizing more equitable redevelopment processes in planning.✚





# *M.S. Critical, Curatorial, and Conceptual Practices*

Felicity D. Scott and Mark Wasiuta,  
Program Co-Directors

The M.S. in Critical, Curatorial, and Conceptual Practices in Architecture (MSCCCP) offers advanced training in the fields of architectural criticism, publishing, curating, exhibiting, writing, and research through a two-year, full-time course of intensive academic study and independent research. The program recognizes that architectural production is multi-faceted and diverse and that careers in architecture often extend beyond traditional modes of professional practice and academic scholarship, while at the same time reflecting and building upon them.

The program is structured to reflect this heterogeneity and the multiple sites and formats of exchange through which the field of architecture operates while at the same time sponsoring the ongoing critical development and interaction of such a matrix of practices and institutions. The program's emphasis is thus on forging new critical, theoretical, and historical tools, and producing new and rigorous concepts and strategies for researching, presenting, displaying, and disseminating modern and contemporary architecture and closely related fields. The program is aimed primarily (but not exclusively) at those with a background in architecture who wish to advance and expand their critical and research skills in order to pursue professional and leadership careers as architectural

critics, theorists, journalists, historians, editors, publishers, curators, gallerists, institute staff and directors, teachers, and research-based practitioners.

Students might be seeking further academic training or specialization after a professional degree or years of teaching, or even at mid-career. They might also have worked in a related field and be seeking an academic forum to develop additional specializations in architecture. The program also provides the highest level of preparatory training for application to Ph.D. programs in architectural history and theory.

Colloquium I

Mark Wasiuta

Spring 2021

Colloquium II

Felicity D. Scott

Fall 2020

Thesis Seminar

Alexandra Quantrill

Fall 2020, Spring 2021

## &lt;THESES&gt;

## Caitlyn M.S. Campbell

*Tracing the Carceral Experience in America*

Noah Chasin, Advisor



Wedging Forward Project Launch, Photo by Caitlyn Campbell, 2020.

Upon the first recorded forced transverse of Black slaves across the Atlantic Ocean to the Americas, the exchange of these bodies and future generations to the Environment was fundamentally upturned and exploited. From the holds of the slave ships to the cells of modern prisons, this pattern of inequity, loss, and slow violence persists today as millions of men, women, and children of color sit in jail cells coast to coast.

Akin to the study of geological stratigraphy, the stratum of carcerality in America's history that has led us to the state of mass incarceration can be read through lines of systematized racism, inequality, and myriad forms of injustice. These oppressive systems are not only upheld but, they are built of, upon, and through them.

This thesis begins to unearth this compounded material through the development of an expansive prison abolition framework which executes a tracing of Black Bodies in America from its Middle Passage origins, to its legacies of incarceration lived at Angola, Louisiana's State Penitentiary, during the Covid-19 pandemic, to the creation of an active, community-based clay arts program for formerly incarcerated persons in Brooklyn, New York under the title *Wedging Forward*.

The project is defined by how secondary, non-hegemonic, Bodies have been produced through centuries of subjugation, systems of containment, and different forms of enslavement lived in the wake of a collective history of unknowing and fragmented ways of being. Equally underpinned in theories of criminal (in) justice and racial justice, this work sheds light

on the complex, entrenched relationship of carcerality to race and discrimination in the United States over time, through a curatorial perspective.

Spanning chronologies and geographies, the three distinct carceral moments visited in this work constructs a collective model to investigate the praxis of prison abolitionism in America today in response to the residues of slavery and inter-generational injustices of incarceration which have long-defined the Nation, producing a lens to understand the historical legacies of being locked in, on the outside of society. This conceptual document is positioned within a larger discourse of knowledge that directly works to construct alternative narratives surrounding marginalized, vulnerable, and forcibly confined people through new forms of critical engagement and creative encounters. ▀

## Nadine Fattaleh

*Documentary Image Drift*

Felicity Scott, Advisor



Stereo View of Palestine, Keystone View Company, c. 1900.

My thesis formulates a documentary image drift theory told from the perspective of the Arab World. Image drift tries to deal with the rapidity with which images are produced in our contemporary world through juxtaposition with earlier forms of documentary practices. The drift displaces the temporal pace and speed through which images and their informational traces move and spread towards predetermined destinations, leaking outside these confines in the process. Drift carries with it a sense of the constitutive relationship between photography and travel, indeed many of the stories I tell are of documentary images that simulate the itineraries and sensations of voyaging. But drifting can be dangerous and destabilizing. Ideas and discourses drift beyond their intended epistemic horizons, producing collusions and coincidences that disrupt boundaries between different forms of knowledge and exchange. The drift is not confined to material photographs and their digital reproductions. Aesthetic codes, cultural values, page layouts, viewing instruments, organizational principles, and image interfaces also travel outside of their prescribed spaces and form the infrastructural substrate for other types of perceptible flow. Drift is not just the nature of spatial and temporal circulation of material, it is also my performative way of seeing the syncopated construction and appropriation of the documentary gaze from and about the *Arab world*. ▀



Lucia Galaretto

*Techniques of Restoration, Traces of Resistance*  
Felicity Scott, Advisor

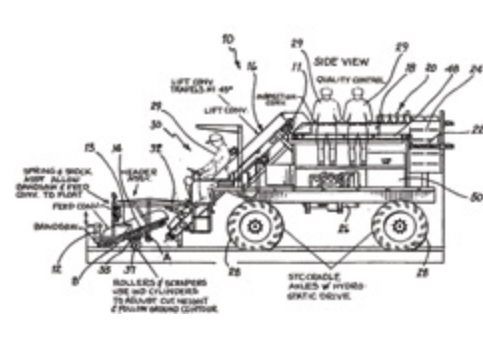


“Banana Division: What makes it Tick?” *Unifruitco*, 1948.

This thesis addresses the entanglements between mid-20th century techniques of documentation and preservation of ancient cultural artifacts in Central America, and how these techniques touched down upon two sites: the Mayan murals at Bonampak in Mexico and the Mayan ruins of Zaculeu in Guatemala. The transformations involved in the excavation, reconstruction, and display of these sites were at once distinctly material in nature and caught up in a larger media apparatus serving the operations of the United Fruit Company in the area. To tell this story the thesis traces a range of actors, institutions, forms of expertise, and media systems: from photographers, artists, archaeologists, and preservationists, through agricultural infrastructures and corporate magazines, to UNESCO training manuals and conservation centers in the region. By attending to the frictions the various mediation processes encountered on the ground, the thesis will argue for an understanding of heritage as an unstable site for contested epistemologies and worldviews.■

Benjamin Goldner

*Total Recall: Retracing the Steps of Romaine Lettuce*



Garnett, Chris; Maconachy, Frank; and Offerdahl, David. *Lettuce harvesting apparatus and method therefor*, 2003. U.S. Patent 7062899B2.

By focusing on food recalls—the moment where a process meant to seemingly flow endlessly in one direction is suddenly (and voluntarily) tasked to reverse course—this thesis will explore how within such a phenomenon our food transforms: it becomes news, it becomes trash, it becomes corporate risk. Our food becomes the record of overproduction, monopolization, and exploitation. These are more than just media moments, however, as with each recall one is compelled to look in the fridge to see what was recently bought and from where. Has my food suddenly become non-food? Food recalls remind us that we exist at one end of a chain of mass production that is not only prone to fail but is often, in fact, expected to. This thesis will focus on the specific mechanisms surrounding recalls of romaine lettuce. Within a package of romaine lettuce, traces of an entire agri-industrial chain can be excavated. A recall allows us to follow that chain backwards, stopping at each station of production along the way as we search for the culprit of the product’s contamination. At the same time, through its exploration of romaine lettuce, this thesis will act reflexively in an attempt to understand a recall as a methodology in itself. In other words, by referring to the thesis itself as a recall, issues of memory and circularity, for instance, will be evaluated as critical tools of exploration.■

Hilary Huckins-Weidner

*Toxic Residues of NASA’s Apollo Program*  
Mark Wasiuta, Advisor



July 16, 1969 lift-off of Apollo 11 in Cape Canaveral, Florida, USA. Image courtesy of NASA.

This thesis considers the complex histories and environments of NASA’s spaceflight program by examining mediatic and material-rich episodes from along the trajectory of the Apollo 11 mission. Looking closely at the rocket launch, moon-landing, lunar sample collecting and handling, as well as the splashdown and subsequent anti-contamination architectures of the event, this project offers insight into how NASA has historically, and perhaps continues to, conceive of and design their dialogue around contamination. The moments collected in this publication exhibit how NASA has employed media for the construction of this dialogue, and also how media has served the public in understanding their formulation and deployment of contamination and toxicity. The Toxic Residues of NASA’s Apollo Program further puts forward that the highly spectacularized nature of the Apollo 11 mission, including its theatrics of protecting against possible toxic lunar materials, worked to obfuscate NASA’s technological residues and toxic agents.●

<THESES>

Ricky Ruihong Li

*Waters Irresolved*

Mark Wasiuta, Advisor



Georges Cuvier and Alexandre Brongniart, *Description Géologique des Environs de Paris*, 1835.

The early twenty-first century has witnessed heightened conflict of territorial claims in the South China Sea, a stretch of waters known to be half-enclosed by an auditorium of sovereign lands: the south shore of China, Malay and Indochinese Peninsulas, Taiwan, the Philippines, and Bangka Belitung Islands, among many others. On July 12, 2016, the arbitral tribunal at Hague concluded the tedious dispute between China and the Philippines in hope of settling belligerence in the Spratly Islands. Under the auspices of the United Nations Convention of the Law of Sea (UNCLOS), the final award ruled in favor of the Philippines, refuting China's unilaterally claimed historic rights to the water regions encircled by the “nine-dash line.” Even though the tribunal was a compulsory instrument authorized by the UNCLOS, of which China was a ratifying member, Beijing refused the arbitral process which jeopardizes its sovereign pretense. The case remains unresolved.

Setting sail from the juridical unsettlement of the South China Sea, this thesis proposes to read this maritime zone as a space of irresolution, for not only the persistent agitation of its jurisdiction but also the ever-profound unsettlement and displacement of the hydro-ecologies indigenous to the Austronesian waters. Accounting a history of technologies and media, it argues that the development of seismological exploration in the early twentieth century ushered into being the seismic aesthetics, a sensibility of the sedimentary which was brought to proliferation by the industry of offshore drilling after World War II. This thesis contends that the arrival of the seismic aesthetics has exacerbated the prolonged process

of the territorialization, if not terrestrialization, of the ocean, which was manifested in the Truman Proclamation of the Continental Shelf in 1945 and codified by the United Nations in 1982.■

Emmanuel Olunkwa

*Notes on Slave Play: Metonyms, Blackness,*

*Ecology, and Architecture*

Mabel O. Wilson, Advisor

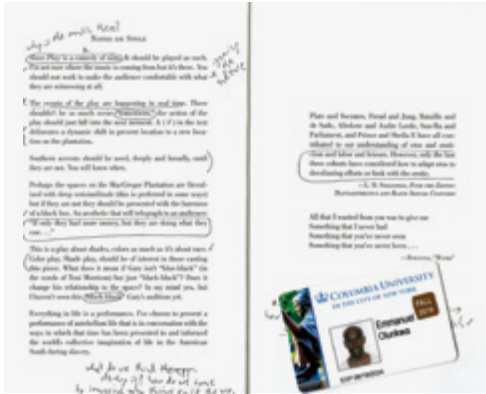


Image by Emmanuel Olunkwa.

“How do we create an alternative future by living both the future we want to see, while inhabiting its potential foreclosure at the same time?”  
“Listening to Images.”

—Tina Campt

“While questioning such received notions as the organic unity, autonomy, and purity of the modernist work of art, the Duchampian paradigm—inserting a readymade object within an art context—exposed the legitimizing function of the institution, its crucial role in the definition of what should be considered as art. At the same time, it also revealed its own discursive limitations, since the significance of the readymade was entirely dependent upon the institution as a context.

“Michael Asher and the Transformation of “Situational Aesthetics.”

—Claude Gintz

The task at hand for my project was to be less recursive. I’m not interested in the more contemporaneous stagings of Blackness or the banal politics and the “discourse” and performance of what we have come to know as “representation” over the past three decades. My thesis specifically names and deals with challenging the presupposition of what the performance of race (Blackness) should look like conceptually, linguistically, and visually in an institutional context. For my project, I wanted to displace (remove) the body and body the material. I’m trying to deal with the philosophical

## Marco Piscitelli

*Ultra-Clean: Architectures  
of Contamination Control*

Mark Wasiuta, Advisor



John Charnley's body exhaust garment, filter debris,  
c. 1961. John Charnley, "Clean Air in the Operating  
Room," Clean Air Symposium, *Cleveland Clinic  
Quarterly*, 1973.

aesthetics of architecture which permeate and manifest in the form of language, in visual material, the archive, documents, and performance and better understand our relationship to it. I wanted to think through the production of knowledge and the varying infrastructures that further produce and recontextualize the possibilities and beingness of a person. Architecture to me isn't about the past necessarily (and our understanding of it, which we know as History) but is about a commitment to practicing a presence/present and produce scholarship and criticism that's reflective of our time. Knowledge shouldn't be exclusively produced in a canon or a specific field, it should be engaged cross-field and culture, and move past occasionally self-permitting itself to look upon a past and engage itself in a staging of the performance of criticality. I wanted to live in and further expand this hypothetical third space that utilizes what I know, what I've learned, and where I'm going by melding it into something that can serve as a tool or tunnel to further siphon someone else's desires, that challenge the legibility of a prescribed selfhood and the performance or enclosure of it. I wanted to search for a freedom and I'm close to finding it.◆

This thesis centers contamination control as an overlooked and underdiagnosed element in architecture history to develop the invisible connection between building technologies and the body. This embodied subject is constructed through regimes of indoor air management which find their apex in the architecture of the cleanroom, a controlled environment where microscopic airborne particulates like bacteria, skin cells, and aerosols are filtered out to produce the cleanest space possible. As the fullness of the air drifts into view, techniques for imaging the invisible become critical; epistemic models frame the application of a microenvironmentality, a biopolitical milieu through which operate apparatus of control. The prosaics of filtration standards and best practices which shape the cleanroom conceal these disciplinary technologies which order relations between a simultaneously vulnerable, mutable, and contaminated subject, and a historically contingent, artificial airscape. Cleanroom Architecture, the spatial-material locus for these ordering operations of filtering, ventilating, and regulating, is a distinct type which nevertheless emerges without form. To locate an aesthetics of the Ultra-Clean, this thesis investigates the sprawling media economy of trade literature, generic HVAC systems, tyvek bunny-suits, and scientific visualizations which explicate the microscopic entanglement of air, bodies, and machines.◆







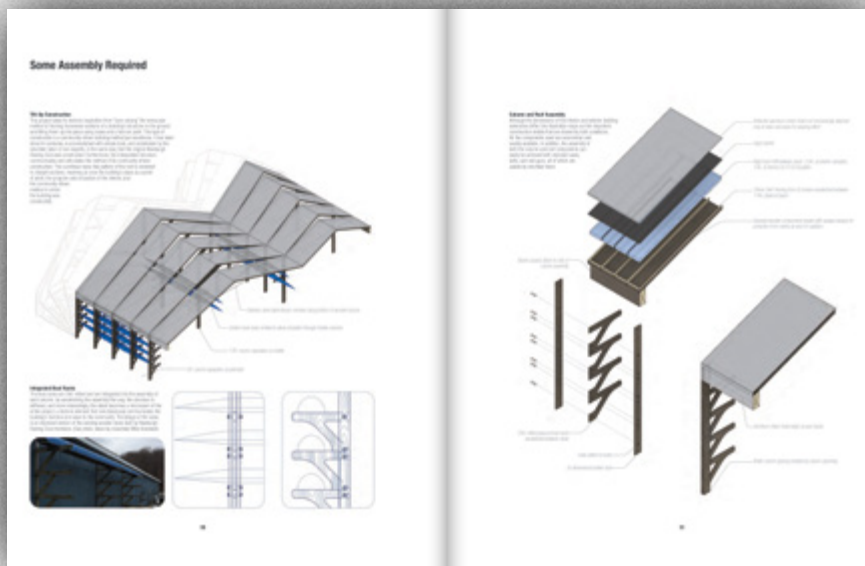
Alina Abouelenin  
'21 M.Arch

Where does sports begin and politics end?  
Can a walled off space ever truly be public?  
How much of the building does the facade  
reveal? What stories does architecture  
write? Where do religion, water politics  
and ruralism intersect? Does housing lead to  
segregation? How does migration challenge  
our definitions of family?



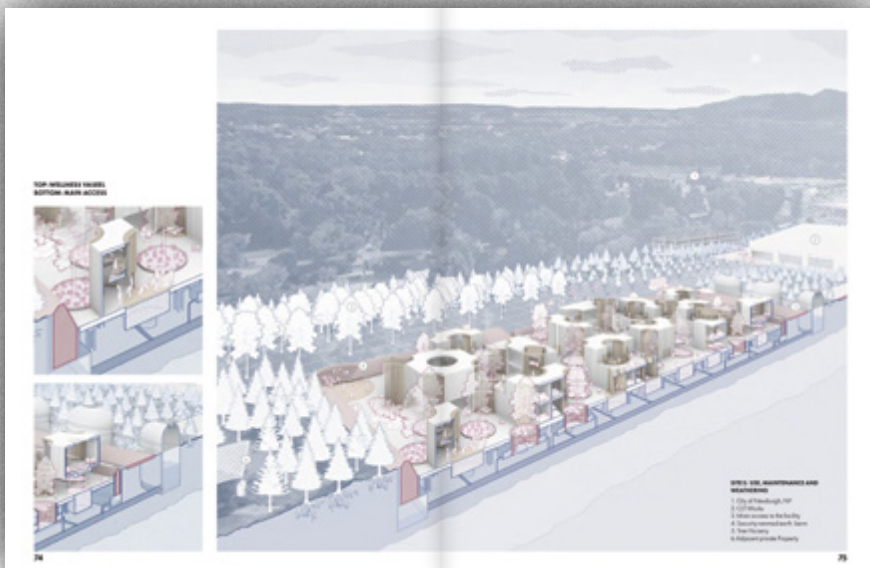


## Zachary Bundy '21 M.Arch



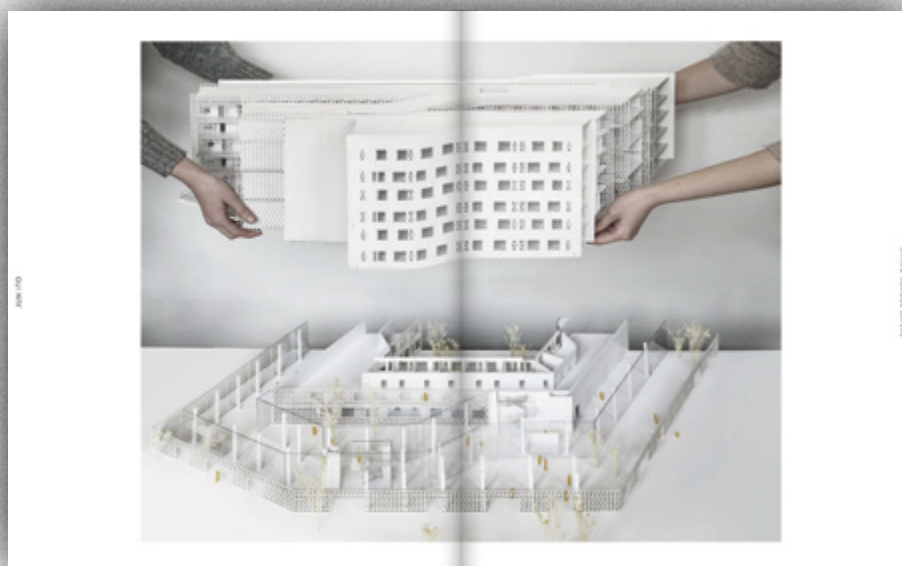
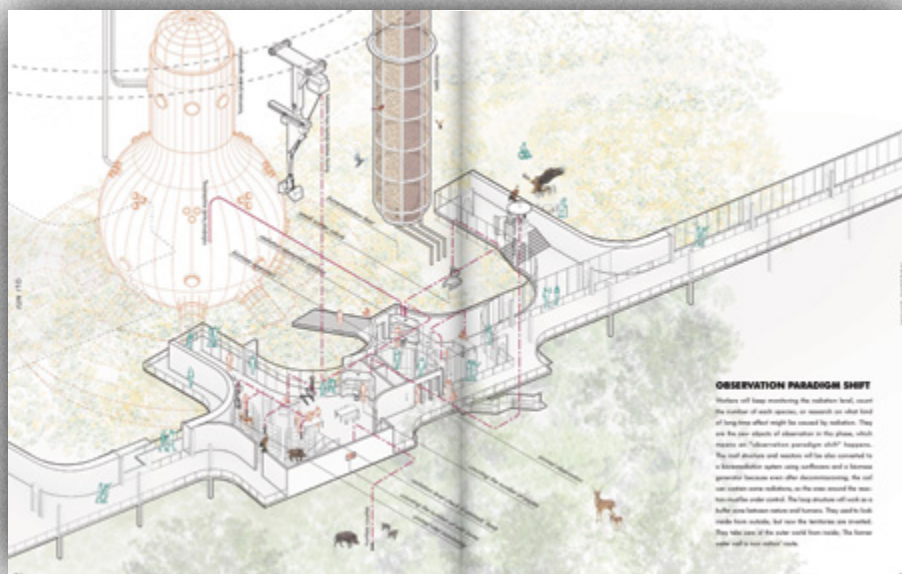


## Alice Fang '21 M.Arch





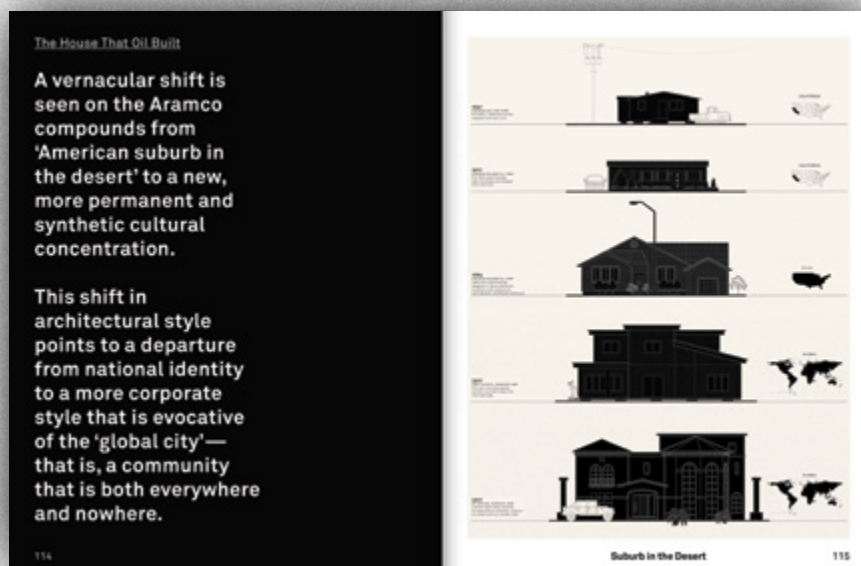
# Jun Ito '21 M.Arch



## Spenser A. Krut '21 M.Arch



## Genevieve Mateyko '21 M.Arch

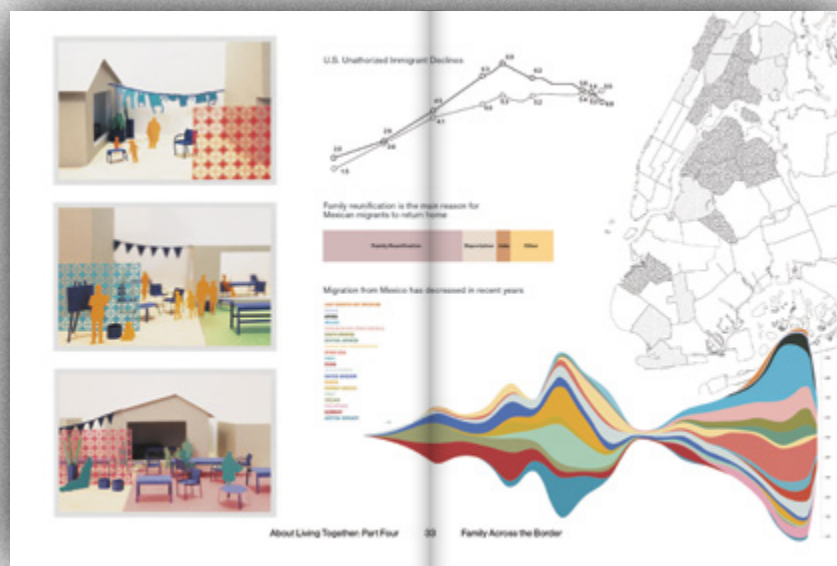




Urechi Oguguo  
'21 M.Arch

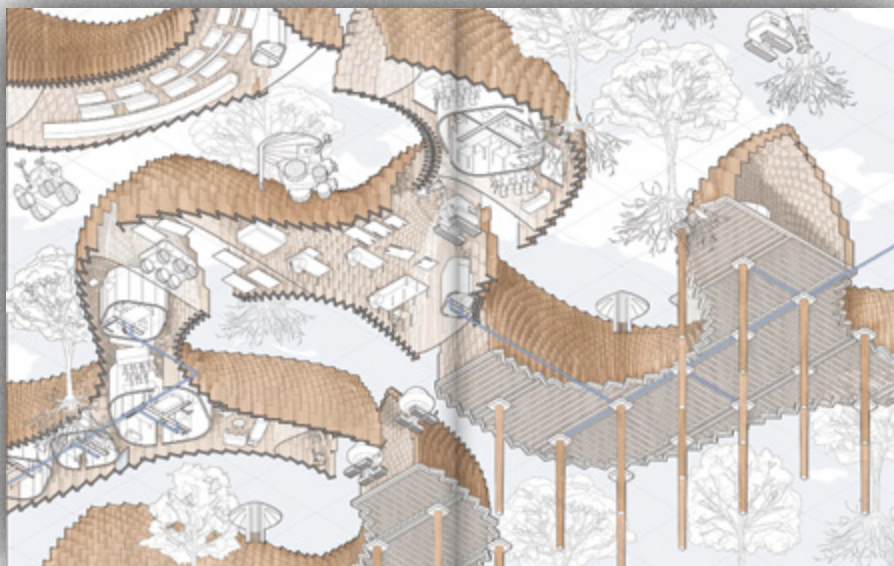


## Maru Perez Benavides '21 M.Arch



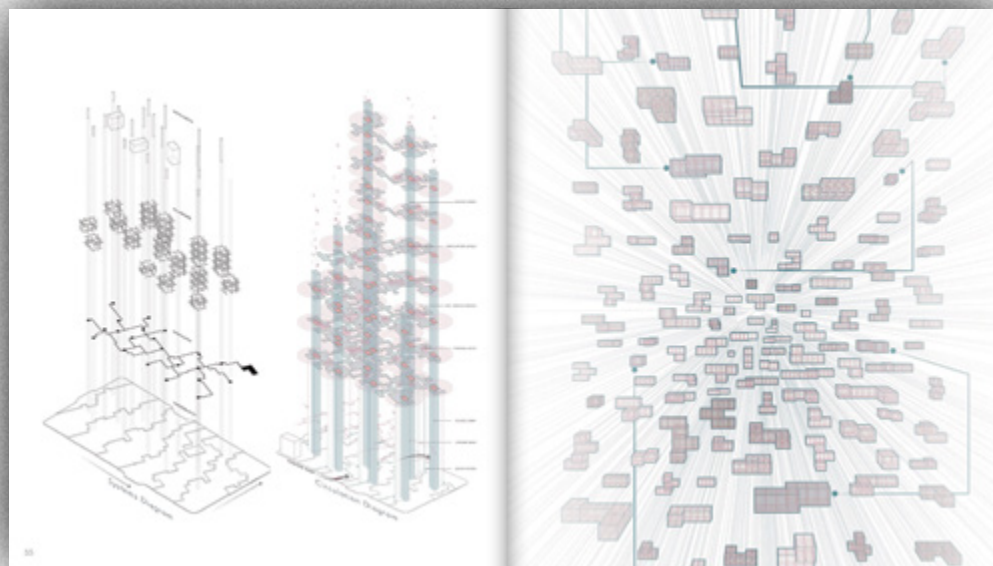
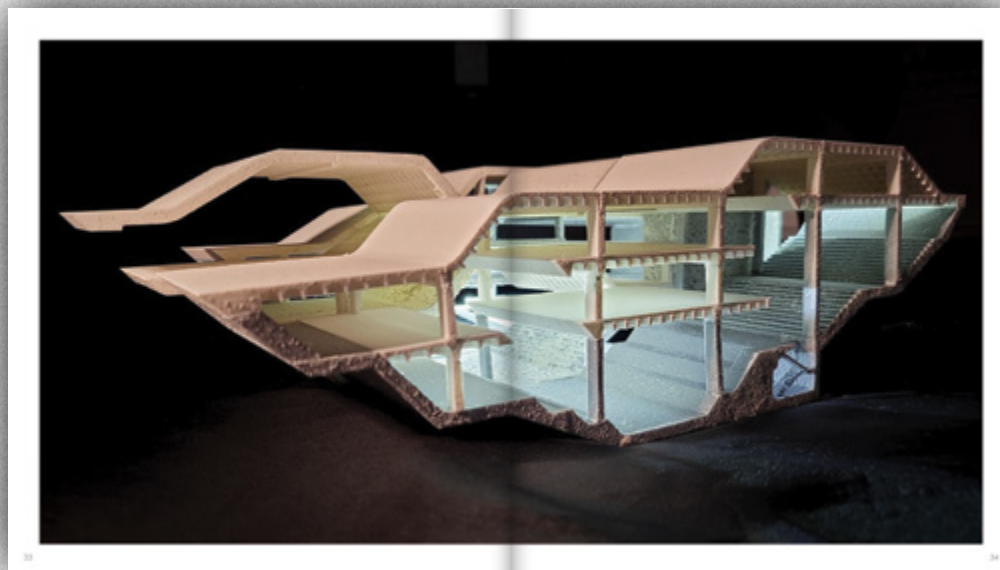


## Angela Sun '21 M.Arch

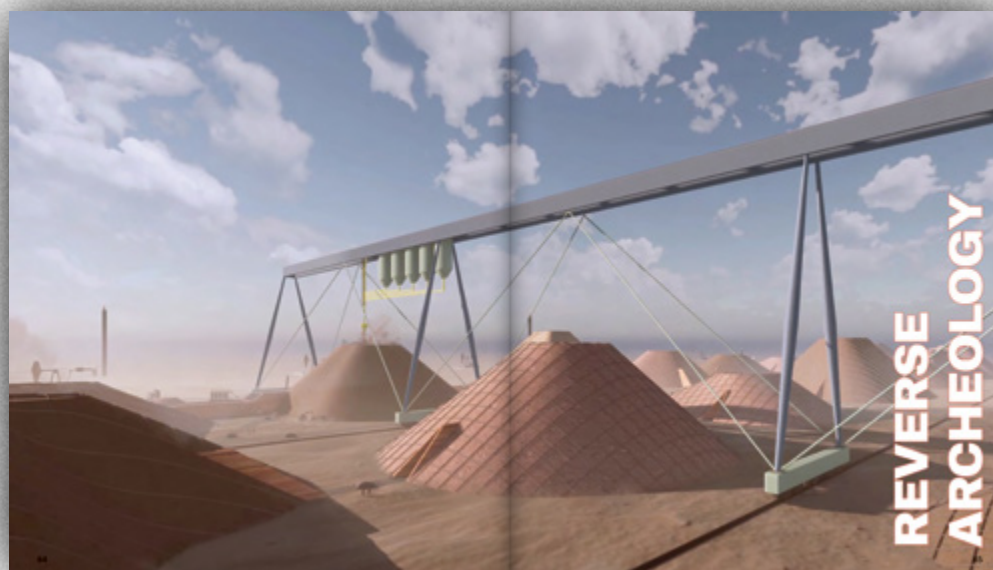
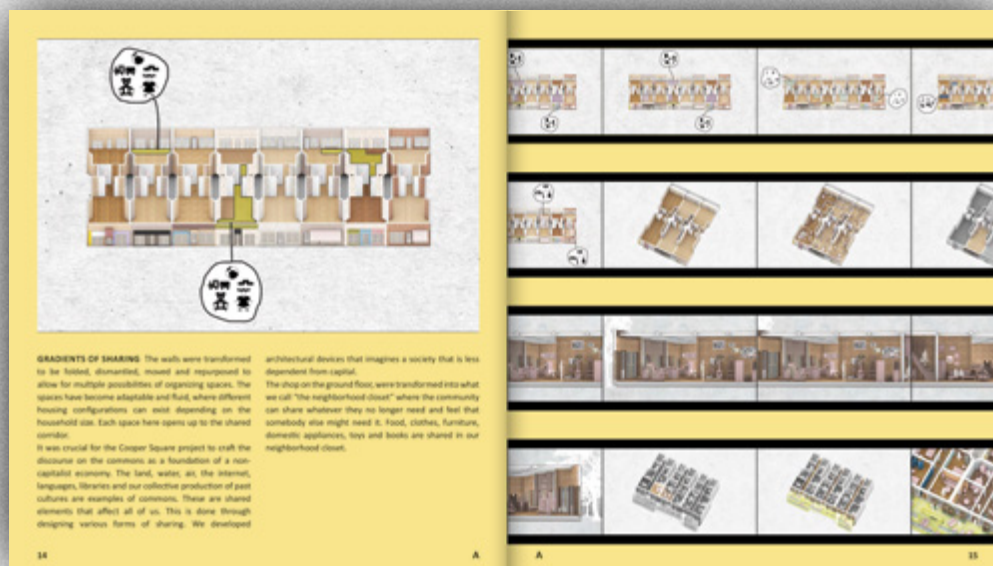




Elie Zeinoun  
'21 M.Arch

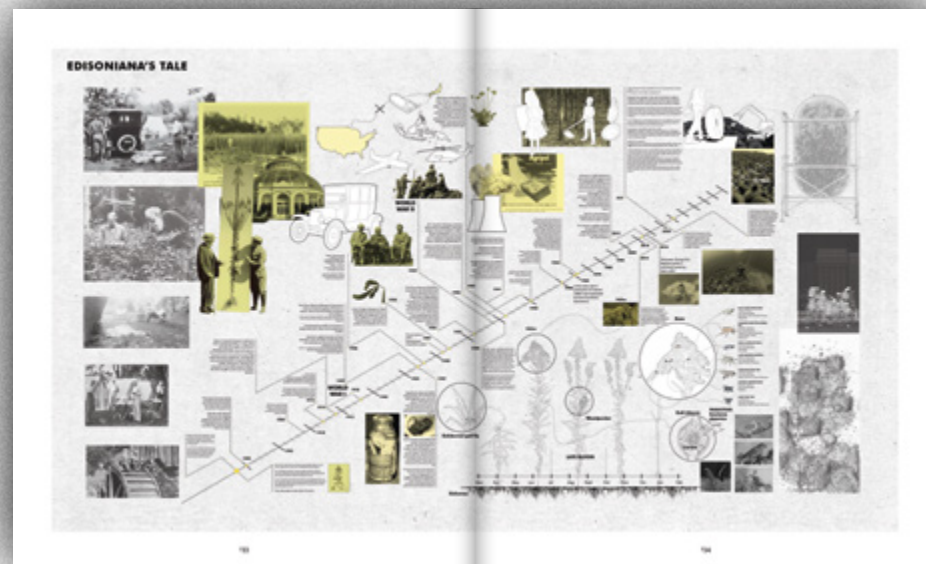
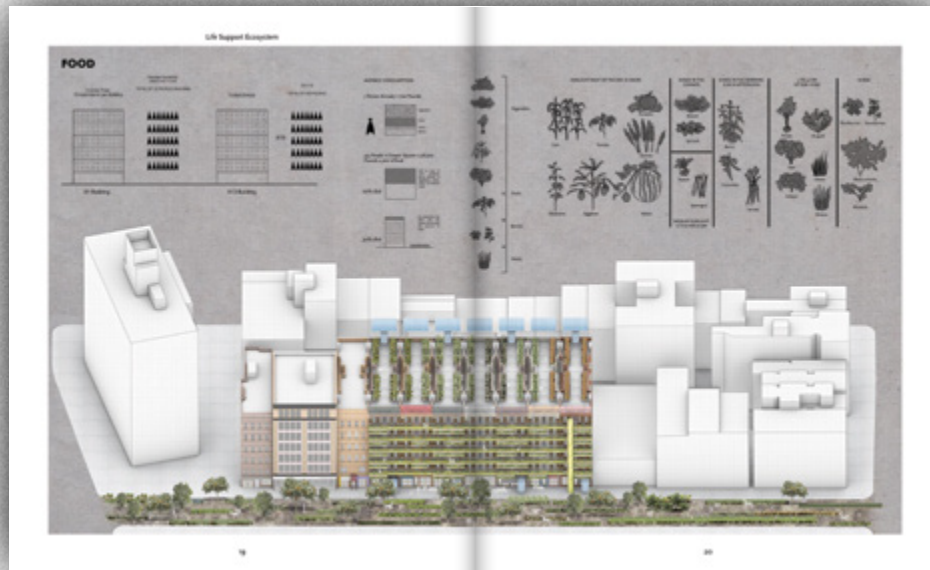


## Farah Alkhoury '21 M.S.AAD



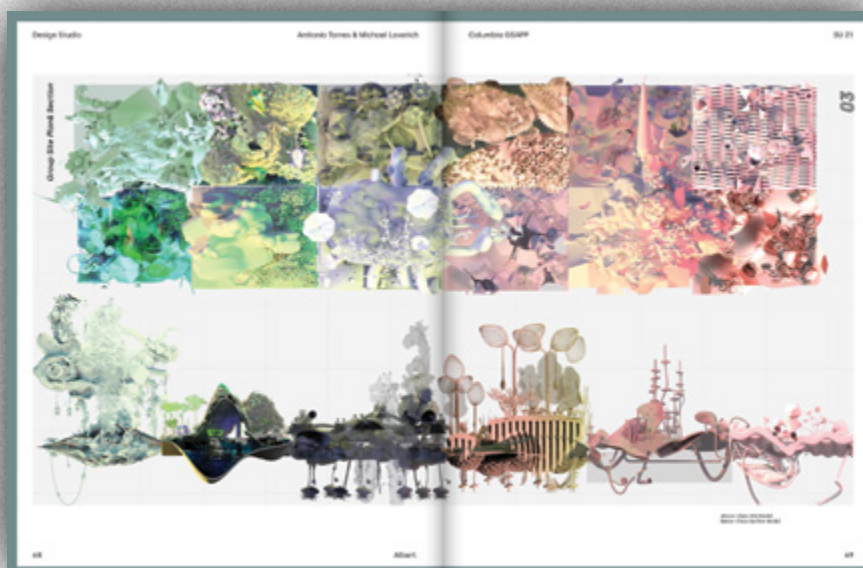


Pabla Amigo  
'21 M.S.AAD





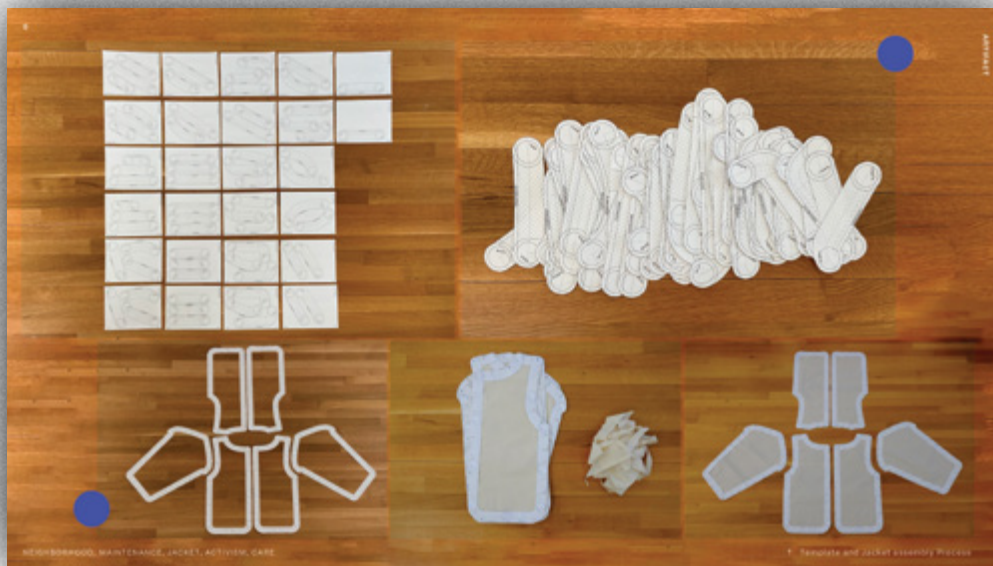
## Nora Fadil '21 M.S.AAD





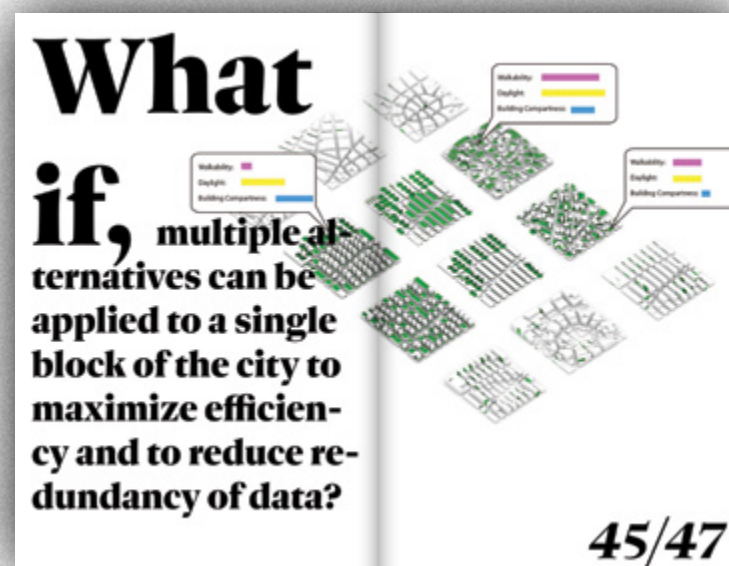


## Joel McCullough '21 M.S.AAD





## Jiajie Jerry Zhao '21 M.S.AAD



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THE HARBOR FISH FIELDS

THE CONCRETE HARBOUR

THE COMPLEXITY OF RIVER AND DRAIN

BEST NORTH FARM FROM TO TABLE

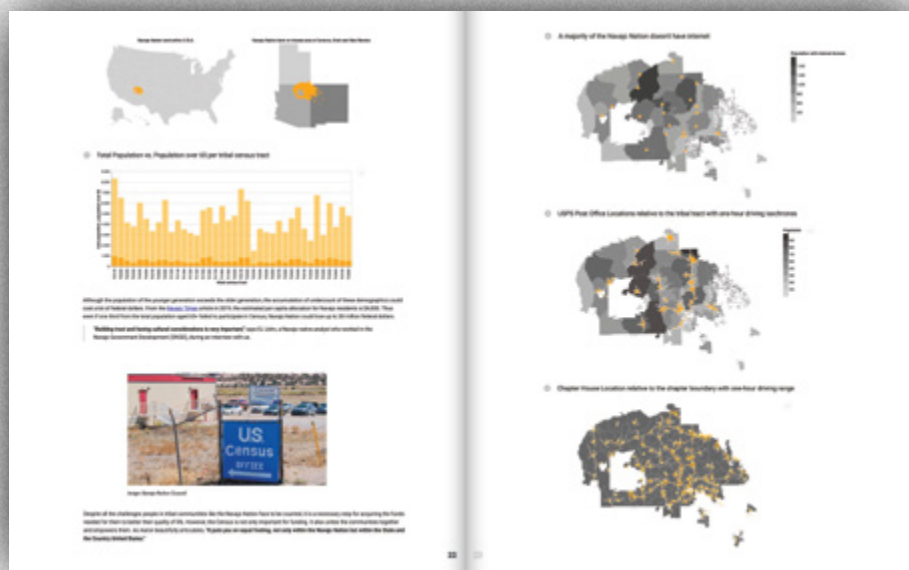
BEST NORTH FARM STORAGE

ADAPTORICE

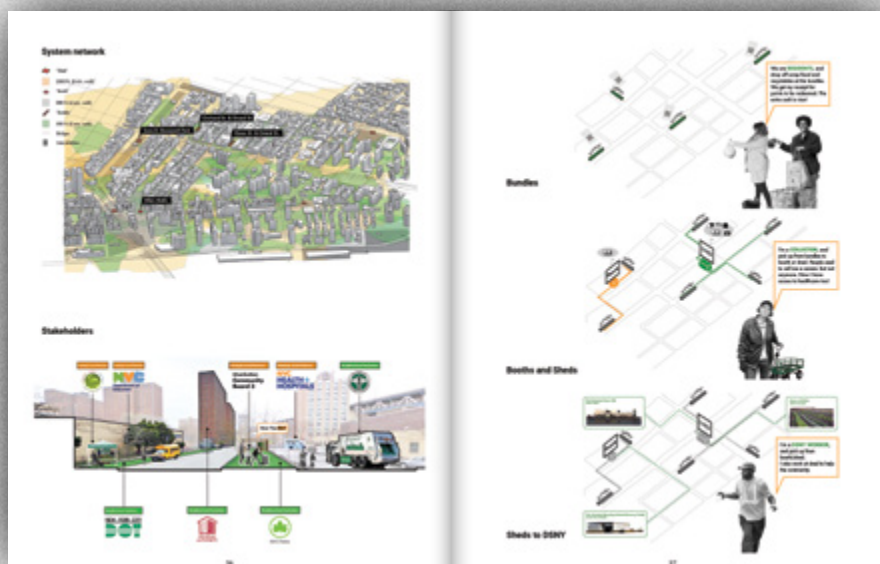
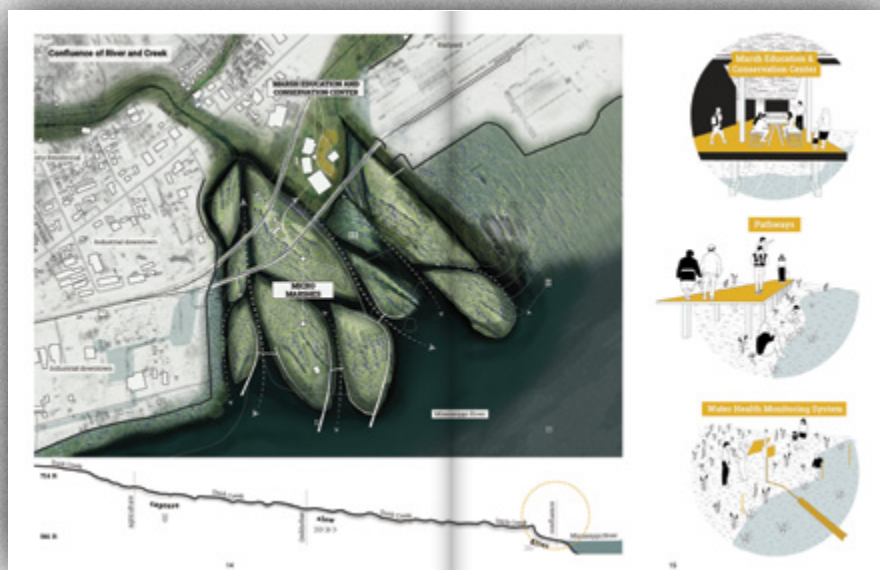
POST AND PRE INUNDATION SECTION OF THE ASSOCIATED FIELDS

PRE AND POST INUNDATION SECTION OF THE URBAN-GRASSLAND

PRE AND POST INUNDATION SECTION OF THE COMPLEXITY



Yoo Jin Lee  
'21 M.S.AUD

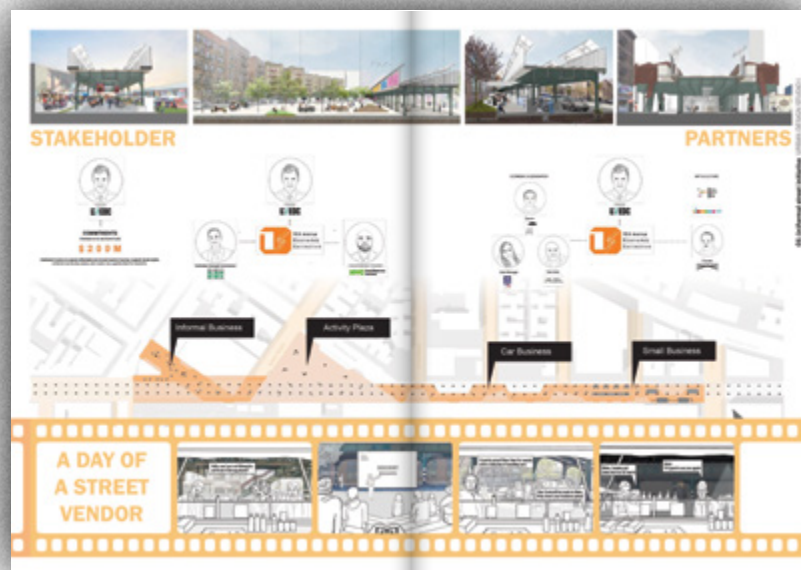




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## Dhania Yasmin '21 M.S.AUD



# Folios

Abstract 2021

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Temple Hoyne Buell  
Center for the Study of  
American Architecture  
Reinhold Martin  
Director  
Jacob Moore  
Associate Director  
Jordan Steingard  
Program Manager

Founded in 1982, the mission of this Center is to advance the interdisciplinary study of American architecture, urbanism, and landscape. A separately endowed entity within GSAPP, the Buell Center sponsors research, workshops, public programs, publications, and awards.

Center for Resilient  
Cities and Landscapes  
Kate Orff  
Faculty Director  
Thaddeus Pawlowski  
Director  
Johanna Lovecchio  
Associate Director  
Grga Basic  
Associate  
Research Scholar

Established in 2018, this Center uses planning and design to help communities and ecosystems adapt to the pressures of urbanization, inequality, and climate uncertainty.

Center for Spatial  
Research  
Laura Kurgan  
Director  
Dare Brawley  
Assistant Director

Grga Basic  
Associate  
Research Scholar  
Jia Zhang  
Associate  
Research Scholar  
Dan Miller  
Staff Associate

This Center was established in 2015 as a hub for urban research that links design, architecture, urbanism, the humanities, and data science.

Death Lab  
Karla Rothstein

Extraction Lab  
Christoph Kumpusch

Global Africa Lab  
Mabel Wilson  
Mario Gooden

Housing Lab  
Lance Freeman (Fall 2020)  
Mario Gooden  
Faculty Advisors

Maria (Maru) Perez  
Ian Wach  
Mariana Hinojosa  
Ericka Song  
Lab Project Associates

Juan Sebastian Moreno  
Johane Clermont  
Eric J. Iglesias  
Graduate Research  
Assistants

Bernadette Baird-Zars  
IDC Fellowship  
Recipient

Natural Materials Lab  
Lola Ben-Alon

Post Conflict Cities Lab  
Hiba Bou Akar

Urban Community  
and Health Equity Lab  
Malo Hutson  
Moirra O'Neill

Urban Design Lab  
Richard Plunz

Hudson Valley Initiative  
Kaja K hl

Embodied Energy Project  
David Benjamin

Urban Heritage,  
Sustainability, and Social  
Inclusion Initiative  
Erica Avrami

Embodied Energy Project  
David Benjamin

Avery Architectural  
and Fine Arts Library  
Hannah Bennett  
Director

Making Studio  
Joshua Jordan  
Director  
Yonah Elorza  
Manager

Preservation  
Technology Lab  
Jorge Otero-Pailos  
Director  
Mika Tal  
Manager

GSAPP Incubator Prize  
David Benjamin  
Director





Green Reconstruction Public Services  
Announcements released by the Buell Center.

### GREEN RECONSTRUCTION

The Temple Hoyne Buell Center for the Study of American Architecture launched a series of public service announcements (PSAs) during the fall 2020 semester that were distributed in social media and local newspapers across the U.S. As a guide to systemic change, the PSAs, designed by MTWTF, sought to sharpen public perceptions of hidden-in-plain-sight crises that define contemporary society and to prompt aspirations toward the solidarities that will be required to confront them. With a special focus on the intentionally weakened systems of care—housing, healthcare, and education—in everyday American life, each of the PSAs calls for reimagining these systems, and for their subsequent reconstruction.

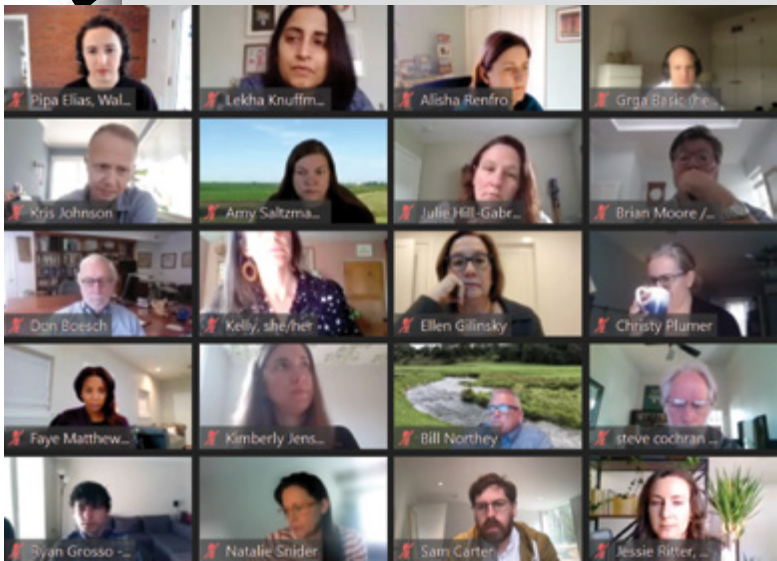
### 2021 BUELL CENTER DISSERTATION COLLOQUIUM

This biennial Dissertation Colloquium, hosted on April 23, 2021, brought together a select group of doctoral students from diverse institutional and disciplinary backgrounds working on dissertation topics related to the history, theory, and criticism of American architecture, urbanism, and landscape. Participants included Lucia Allais, Valeria Casali, Greg Castillo, Charles Davis, Nushelle de Silva, Maria Fernanda Ordóñez, Eliyahu Keller, Ateya Khorakiwala, Joy Knoblauch, Fernando Lara, Reinhold Martin, Jorge Otero-Pailos, Ana Ozaki, Vyta Pivo, Kathleen Powers Conti, David Sadighian, Nicole G. Sintetos, Meredith TenHoor, Desirée Valadares, Stathis G. Yeros, and Jia Yi Gu.

INTEGRANT

MISSISSIPPI AS LIVING RIVER

The Center for Resilient Cities and Landscapes partnered with the National Wildlife Foundation and the Walton Family Foundation on April 1, 2021, to host the “Mississippi as Living River” workshop. The event brought together scientists, policymakers, and NGOs across the Mississippi River Basin. It created a space to talk together to identify the biggest challenges facing the river system, identify levers for solutions, and highlight needs/next steps to get to a healthy, productive, and resilient Mississippi River in the future.



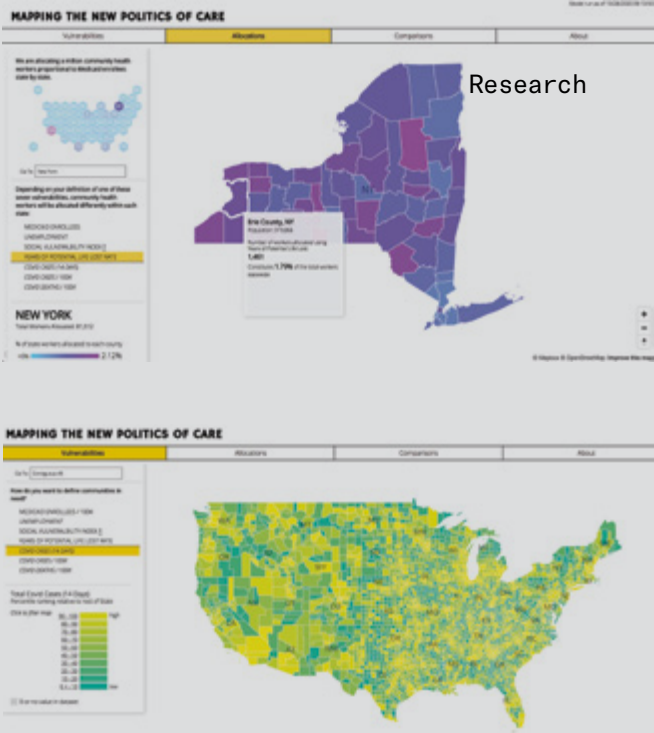
Attendees of the Mississippi as Living River workshop hosted by the Center for Resilient Cities and Landscapes on April 1, 2021.

ENVIRONMENTAL JUSTICE AND CLIMATE JUST CITIES NETWORK

During the fall 2020 semester, the Center for Resilient Cities and Landscapes partnered with the Goddard Space Flight Center Environmental Health Group, Barnard College, Riverkeeper, Mailman School of Public Health, Lamont Doherty, the Center for Sustainable and Urban Development at the Earth Institute, and the Sabin Center for Climate Change Law to organize efforts around the realization of a just future and the role of Columbia in supporting communities and this aspiration. As part of this three-year project funded by the Earth Institute, the network is reviewing existing environmental justice and climate justice work at Columbia University and in the community to create a directory of online resources for students and community members to inform the climate justice track at The Climate School as well as expand the network of community-based organizations involved in the network.

MAPPING THE NEW POLITICS OF CARE

The Center for Spatial Research at GSAPP and the Global Health Justice Partnership of the Yale Law School and Yale School of Public Health launched the website “Mapping the New Politics of Care” during the fall 2020 semester. The project aims to guide policymakers and the public in deploying health care workers to communities most affected by the COVID-19 pandemic. The interactive map shows that decisions about caring for those affected by the pandemic depend not just on surging or falling infection rates but instead on taking into account a range of pre-existing vulnerabilities in U.S. society. It reveals that the areas that appear most at risk within each state shift depending on how vulnerability is measured: from COVID-19 cases to unemployment rates, from COVID-19 deaths to formal metrics of health vulnerability such as Years of Potential Life Lost and the Centers for Disease Control and Prevention’s Social Vulnerability Index. The project also proposes a “New Deal for Public Health,” a national program to address acute needs of the pandemic response but also make a larger national commitment to protecting and improving the public’s health, and confront the legacy of vulnerabilities that existed before the emergence of SARS-CoV-2. Central to this is the establishment of a Community Health Corps – a national investment in one million community health workers to be deployed across the country to face off with the COVID-19 pandemic while also starting to address decades of health inequity across the country. Visit the project at: <https://newpoliticsofcare.net/>.



Mapping the New Politics of Care website created by the Center for Spatial Research at GSAPP together with the Global Health Justice Partnership of the Yale Law School and Yale School of Public Health.



DEATH LAB EXAMINES CARE AND DEATH AMID COVID-19

Karla Rothstein, who directs the Death Lab, co-authored “Living Death” with Christina Staudt for the February 2021 issue of *Architectural Review*. The essay explores how the COVID-19 pandemic is driving a more humane rethink on care at the end of life and after death. The trans-disciplinary Death Lab focuses on reconceiving how we live with death in the metropolis. The ambition of the lab is to develop design strategies that can be prototyped, built, and experienced by the public.



“Living Death” co-authored by Karla Rothstein and Christina Staudt for the February 2021 issue of *Architectural Review*.



*Reconstructions: Architecture and Blackness in America* exhibition catalog published by the Museum of Modern Art in New York.

GLOBAL AFRICA LAB CO-DIRECTORS PARTICIPATE IN RECONSTRUCTIONS AT MOMA

The exhibition “Reconstructions: Architecture and Blackness in America” at the Museum of Modern Art in New York (Feb 27-May 31, 2021) was curated by Global Africa Lab Co-Director Mabel O. Wilson together with Sean Anderson. The exhibition featured the work of Global Africa Lab Co-Director Mario Gooden together with works by Emanuel Admassu, Germane Barnes, Sekou Cooke, J. Yolande Daniels, Felecia Davis, Walter Hood, Olalekan Jeyifous, V. Mitch McEwen, Amanda Williams, and David Hartt. Through design methods and research aided by new technologies and media, Global Africa Lab at Columbia GSAPP explores the spatial topologies of the African continent and its diaspora.

## Deaths from Pandemics / Epidemics

New York City - Per 1,000 persons of Population

Cholera		Typhus		Smallpox		Influenza	
1832	50.6	1847	40.0	1804	27.5	1919	19.0
1834	43.6	1848	40.1	1824	32.5		
1849	43.9	1851	40.2	1834	43.6	9/11 Attack on WTC	
1854	52.3	1864	31.5	1835	24.5	2001	0.5
1866	34.9	1865	34.2	1848	40.1	Covid-19	
				1851	40.2	2020	2.8

### Sources

New York City Bureau of Vital Statistics, New York Times

Compiled from, "Density, Equity, and the History of Epidemics in New York City" by Richard Plunz, Andrea Alvarez-Davila

Still from the video "Density, Equity, and the History of Epidemics in New York City" produced by the Urban Design Lab.

## URBAN DESIGN LAB EXPLORES NYC'S PANDEMIC HISTORY

The Urban Design Lab produced a video of their research on "Density, Equity, and the History of Epidemics in New York City" in November 2020, which was based on a paper co-authored by Richard Plunz and Andres Alvarez-Davila '22 MARCH/MSHP. The Urban Design Lab works to find innovative solutions to the sustainable development issues confronting cities. It conducts multidisciplinary applied design research in collaboration with community-based organizations and other public and private interests.

Research

Columbia GSAPP

## HOUSING LAB HOSTS CONVERSATION SERIES

Throughout the Fall 2020 and Spring 2021 semesters, the Housing Lab hosted a series of informal and interdisciplinary open conversations on housing, race, racism, and whiteness. Guest speakers included Victor Body-Lawson, Shana Griffen, Tyler Haupt, Cecily King, Edwin Marshall, Esther Shin, Sam Stein, and Wenfei Xu. Founded in 2019, the Housing Lab brings together faculty and students from across the disciplines to leverage expertise around some of the most critical challenges facing urban housing today. Using a design approach, the Lab creates meaningful collaborations and practical opportunities for architects, developers, and planners to advance interdisciplinary work and promote creative methods and bold interventions for affordable, adaptive, and resilient housing.



Victor Body Lawson speaks about affordable housing with the GSAPP Housing Lab.



Shana Griffen speaks about climate change, feminism, and equity with the GSAPP Housing Lab.

INTERSECT



Jandug prototype designed by the Natural Materials Lab.

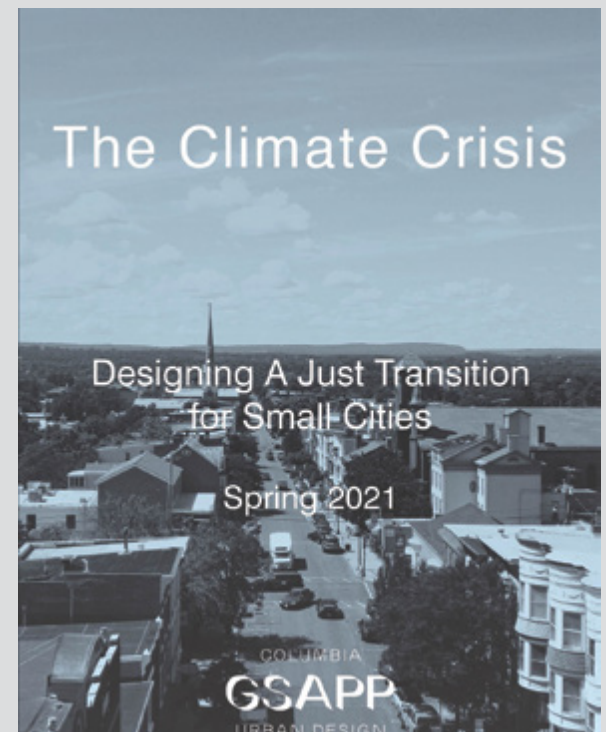
#### NATURAL MATERIALS LAB PRODUCES SCULPTURAL CHAIRS

During the summer 2021 semester, the Natural Materials Lab launched the Grounded Chairs project, an ongoing series of experiments that speculate traditional uses of clay and fibers. The project uses organic, biodegradable, and low-carbon materials to create seating sculptures. The first experimental iteration, Jandug (“body” in Aramaic), includes a bamboo skeleton integrated with light straw clay and cob. Sealed with clay and flaxseed oil, Jandug is water-resistant for outdoor use.

Lola Ben-Alon, who directs the Natural Materials Lab, hosted a podcast mini-series on natural and living building materials as part of the GSAPP Conversations podcast over the course of the fall 2020 semester. Natural materials—minimally processed, readily available, non-toxic, healthy, and engaging—are critically needed to reduce carbon emissions and extractive harmful impacts associated with conventional building materials. Guest speakers included Ginger Krieg Dosier, Chris Magwood, Elora Hardy, and Sigi Koko.

#### HUDSON VALLEY INITIATIVE SUPPORTS URBAN DESIGN STUDIO

The spring 2021 urban design studio “The Climate Crisis: Designing A Just Transition in Small Cities,” produced under the umbrella of the Hudson Valley Initiative, focused on the Hudson Valley and the Eastern Ohio River Valley. Specifically, it explored the regions’ rural/urban socio-spatial ecosystems as the site for intervention to address the global climate crisis. As part of a nationwide Green New Deal Superstudio initiative, students explored various layers of social and physical infrastructure and worked closely with local stakeholders, elected officials, organizations, non-profits, community groups, and planning and design professionals to envision just and equitable pathways towards decarbonizing the region and a just transition towards a regenerative economy.



“The Climate Crisis” studio report produced under the umbrella of the Hudson Valley Initiative.



# ISSUES IN PRESERVATION POLICY PUBLISHED BY COLUMBIA BOOKS ON ARCHITECTURE AND THE CITY

This collaborative project of the Center for Sustainable Urban Development, Columbia GSAPP, and The American Assembly examined historic preservation as a sustainable and socially-inclusive urban policy tool. The project, led by Erica Avrami, is generously funded by the New York Community Trust. It engages researchers, government officials, and practitioners in a series of three symposia and related publications, to advance the collaborative processes needed to inform the next generation of preservation policy.

## ISSUES IN PRESERVATION POLICY

- Preservation and the New Data Landscape
- Heritage Data and the Next Generation of Preservation Policy
- Institutionalizing Data
- Co-Producing Knowledge
- Building Evidence-Based Narratives
- Informing Policy Agendas
- Edited by Erica Avrami

## ISSUES IN PRESERVATION POLICY

- Preservation and Social Inclusion —
- Preservation's Reckoning
- Examining Questions of Exclusion —
- Shifting Policy Toward Inclusion
- Challenging and Redefining Narratives —
- Connecting to Community Development
- Edited by Erica Avrami

## ISSUES IN PRESERVATION POLICY

- Preservation, Sustainability, and Equity
- ▷ Preservation's New Horizon
- ▷ Confronting Adaptation and Relocation
- ▷ Reorienting toward Climate and Justice
- ▷ Addressing Equity in Place
- ▷ Reimagining Preservation's Purview
- ▷ Edited by Erica Avrami

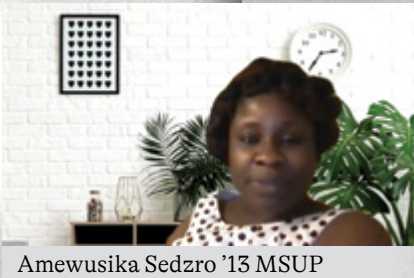
INVESTMENT



Zoe Kauder Nalebuff '20 MSCCCP



James Piacentini '20 MArch/MSUP



Amewusika Sedzro '13 MSUP



Eduardo Meneses '20 MARCH



Yile Xu '20 MSAUD



Einat Lubliner '20 MSAUD



Alexandra Tell '20 MSCCCP

Maider Llaguno-Munitxa  
'10 MSAAD

Sean Ansanelli '13 MSUP

Linda Schilling Cuellar '18  
MSAUD and Claudio AstudilloRafaela Olivares '20 MSAAD  
and Ernesto Silva '13 MSAAD

## 2020-2021 GSAPP INCUBATOR PRIZE

Dedicated to the topic of Climate, Health, and Cities, the GSAPP Incubator Prize offered direct financial support of \$10,000 each to GSAPP alumni who are developing projects that engage these pressing issues through a range of approaches spanning critical discourse, research, and active practice in architecture and its related fields. The Prize was established in 2019 as an extension of the GSAPP Incubator, a project that seeks to expand the territory between academia and the profession, and promotes new models of practice by supporting alumni in the development of a wide range of new ideas and projects about architecture, contemporary culture, and the future of the city. The cohort of Prize recipients met in workshops during the course of the year, and presented their projects at a public event on May 20, 2021. The recipients include Sean Ansanelli '13 MSUP; Carlo Bailey '15 MARCH; Zoe Kauder Nalebuff '20 MSCCCP; Palvasha Sophia Khan '20 MSAUD; Maider Llaguno-Munitxa '10 MSAAD; Einat Lubliner '20 MSAUD; Frank Mandell '20 MARCH; Kate McNamara '20 MARCH; Eduardo Meneses '20 MARCH; Rafaela Olivares '20 MSAAD; James Piacentini '20 MARCH, '20 MSUP; Linda Schilling Cuellar '18 MSAUD; Amewusika Sedzro '13 MSUP; Alexandra Tell '20 MSCCCP; Lorenzo Villaggi '15 MARCH; Yile Xu '20 MSAUD.

SEAN ANSANELLI '13 MSUP:  
MAKEITHAPPEN.CITY

The *makeithappen.city* platform strives to provide an end-to-end solution for more distributed and democratic urban planning—from initial visions to long-term reinvesting in communities. The COVID-19 crisis has shown us how many aspects of our system are under tremendous strain and deeply interwoven (particularly those of inequality, race/power, and health). This moment demands an extensive re-imagining of nearly every dimension of our cities and daily lived experiences, and *makeithappen.city* is designed specifically with this goal in mind.

CARLO BAILEY '15 MARCH  
AND LORENZO VILLAGGI: PLATEA

Platea is a platform that enables users to make better and more conscious decisions about where to live. By gathering data from thousands of sources, we are democratizing place data and providing rich insights to support sustainability, affordability, and equity in our cities. Choosing where to live is political, with far reaching consequences for the neighborhoods we inhabit. A neighborhood's tax base, rent, and house prices all rise and fall based on the residents that choose to live there; and as a result, funding for schools, upkeep of public services, and demographic diversity are all impacted. Platea, an open-source platform, aims to achieve multifaceted impact by: shifting the desirability of neighborhoods and apartments from affordable and good-looking to equitable, fair, and sustainable; enabling users to navigate conflicting trade-offs in an informed way; increasing awareness of the social, economic, and environmental implications of choosing where to live at the neighborhood and city scale.

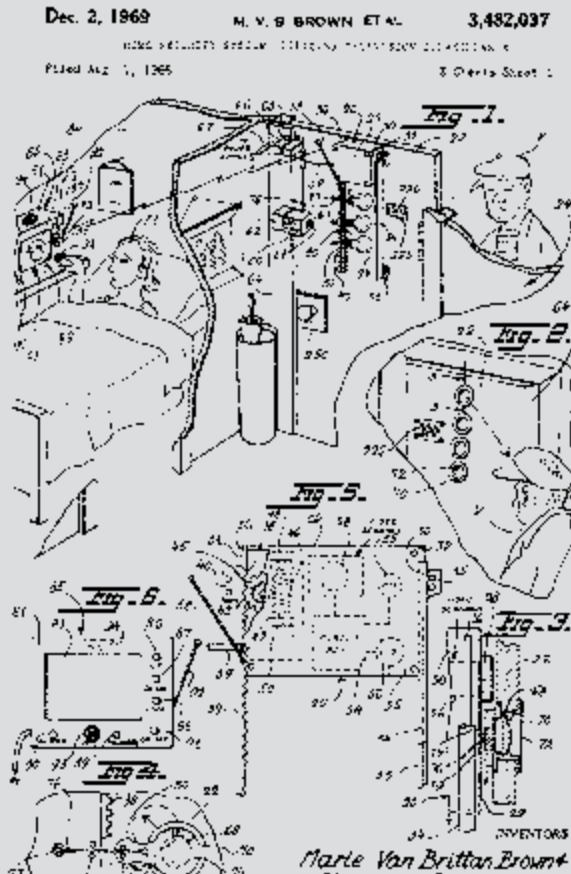


INTEGRANT



ZOE KAUDER NALEBUFF '20 MSCCCP  
AND ALEXANDRA TELL '20 MSCCCP:  
AMERICA-THE NEW DOMESTIC LANDSCAPE

America-The New Domestic Landscape is a research project about architecture's role in propagating a climate of fear for a city and its inhabitants. As cities confront both COVID and climate change, a looming culture of anxiety exacerbates the mental and physical health consequences of each crisis. We believe that architecture must prioritize affect as a framework for addressing health and climate. And that to do so requires historical understanding. Through archival material we consider architecture's relationship to historical anxieties about the postindustrial metropolis, the disintegration of the social safety net, and the media infatuation with danger which all precipitate the present. Inspired by the legacy of experimental filmmaking in architecture, we test documentary film as an expanded mode of practice. This allows us to critically unpack archival footage in its native media, point to the affective power of film, and make visible how the built environment—just like cinema—is a project of power and control. The Incubator Prize supports the production of a pilot episode introducing the home as a site where fear in and of the city takes hold.



Van Brittan Brown, Marie and Albert L. Brown. (1966). *Home security system utilizing television surveillance*. U.S. Patent No. 3482037A. U.S. Patent and Trademark Office.

PALVASHA SOPHIA KHAN '20 MSAUD, EINAT LUBLINER '20 MSAUD, AND YILE XU '20 MSAUD: LOTS OF PEOPLE

This project attempts to challenge the repeating pattern of unutilized lots in the city fabric, and address the shortage in public space that cities are facing due to massive developments and increases in population—all while addressing climate challenges such as flash floods, heat islands effect, and lack of shading. Introducing a smart model of “Borrowing Space Concept,” it addresses these gaps in the dense cities by encouraging public-private partnerships. Leveraging timeframes (scope) of vacant lots until they obtain permits, a sizable amount of temporary public spaces—pop-ups—could be allocated to benefit the needs of the community. These temporary community pop-up spaces would be designed on privately-owned lots and semi-permanent spaces on public lots. The project aims to explore this concept through design interventions, public engagement processes, policies, and implementation strategies in varying contexts and climate conditions worldwide. Using private entities for public good has the opportunity to provide quality public spaces, promote sustainable design, and give equal resources to the diverse communities in the city.

KATE MCNAMARA '20 MARCH AND FRANK MANDELL '20 MARCH: NATURE IS EVERYONE'S BUSINESS

Nature is Everyone's Business is a game of carbon emissions trading, offsetting, and corporate greenwashing. Engaging with the standards and strategies that compose the U.S. voluntary carbon market, players compete and collaborate for power and profit at the potential cost of the planet. It transforms a series of deliberately opaque policies into easily learnable rules that, through participation, reveal contemporary financial mechanisms to fund carbon sequestration projects and ineffective climate solutions. In a landscape where policy is inaccessible to the stakeholders made most vulnerable by changes, the game allows players to actively engage with the decisions made in corporate boardrooms and community board meetings, on the game board. Through a critical systemic legibility of the voluntary carbon market's neoliberal environmental transformations, Nature is Everyone's Business serves as a strategic platform for revealing and generating contemporary climate solutions.

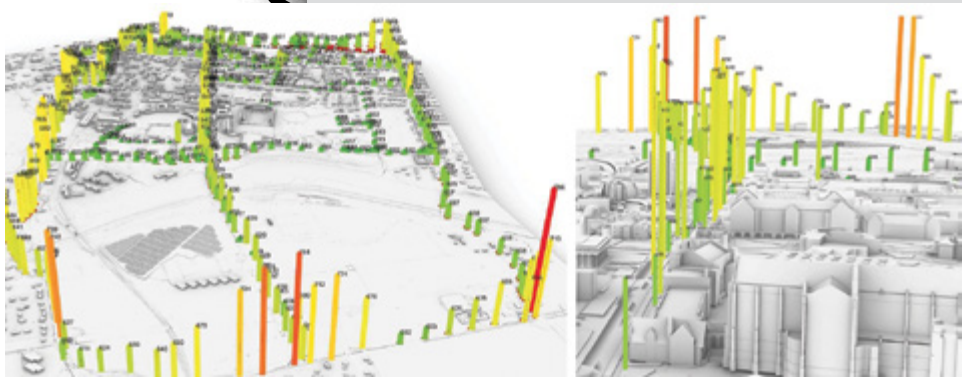


Lots of People by Palvasha Sophia Khan, Einat Lubliner, and Yile Xu

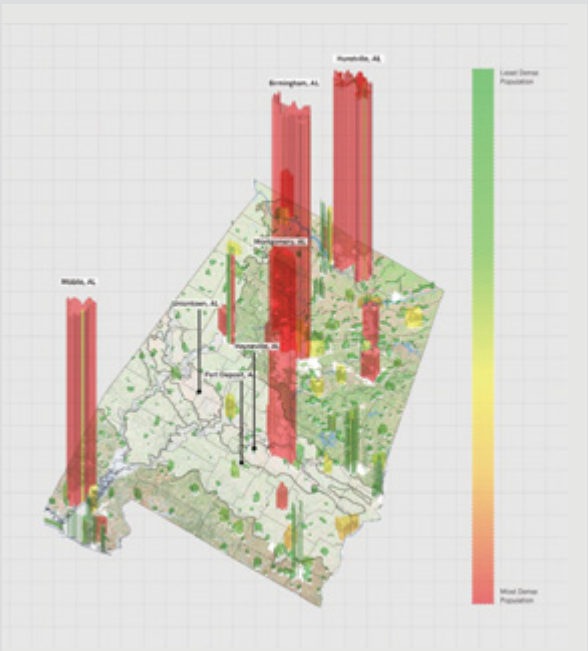
TRANSACT

MAIDER LLAGUNO-MUNITXA '10 MSAAD: URBAN MICROENVIRONMENTS

Environmental inequity is one of the most critical contemporary urban challenges. The death rates from the pathogenic respiratory disease SARS-CoV-2 virus have shown disconcerting spatial patterns disproportionately affecting low income neighborhoods which are often environmentally most disadvantageous. Through mobile urban sensing technologies, we have also recently learnt that within an urban block distance, the air quality conditions can get up to 8 times worse. Following our prior work on environmental neighborhoods where urban environmental health metrics were shown to be directly affected by local urban design parameters such as building heights or roof geometries, our ambition is to develop a methodology which correlates environmental conditions and architectural and urban design traits to generate a critical pathway for future scenario planning. Datasets on the physical attributes, socioeconomic metrics, and environmental parameters have been collected for various cities such as New York City, Los Angeles, Houston, or London, to develop a comparison of the areas with most compromised urban environmental health conditions.



Visualization of air quality by Maider Llaguno-Munitxa.



Visualization of population density in Alabama by Eduardo Meneses.

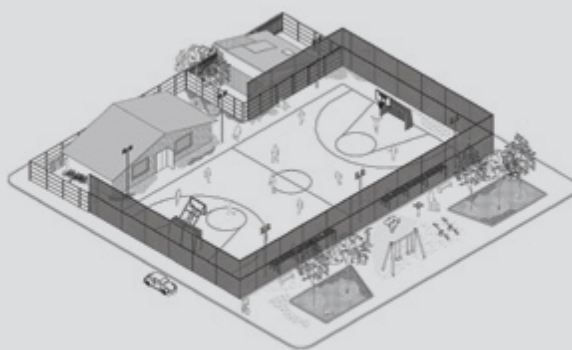
EDUARDO MENESES '20 MARCH: COUNTRY SEWERS FROM THE HOME TO THE TOWN

This research aims to rework failing wastewater and sewage infrastructures with the goal of documenting and developing prototypes of alternative wastewater solutions, at both the scale of the house and that of the city, for rural communities in Southern Alabama. The research builds from information and work being done by community organizations that are advocating to end the gross inequalities that overwhelm the U.S. While plumbing and sewage management is often thought of as guaranteed, for many in smaller communities, outdated systems have resulted in growing concerns for the health and well-being for many residents. In areas where septic tanks, retention ponds, and wastewater lagoons reign supreme, to update these systems is not just only a question of how to update, but how much it will cost to update. At its core, Country Sewers is an attempt to redistribute architectural energy and expand the discipline to better support a greater number of smaller communities.

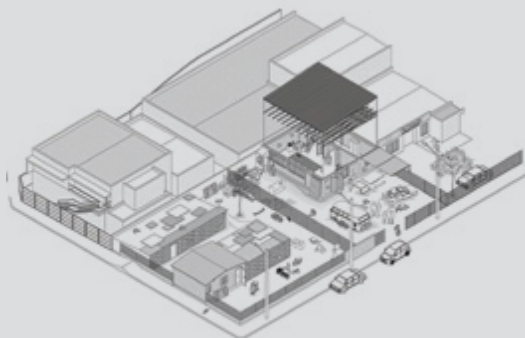


RAFAELA OLIVARES '20 MSAAD WITH  
ERNESTO SILVA '13 MSAAD: NON-TYOLOGY:  
OLLAS COMUNES

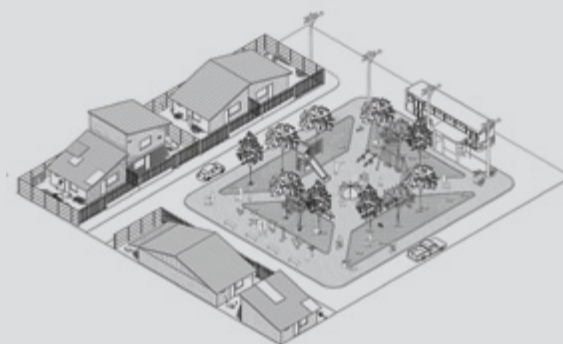
This project encompasses a catalog of all of the “ollas comunes” across the country in soccer fields, community centers, squares, or a hybridization among these. It documents the spatiality of the system, interactions, and diverse activities that take place around them. It aims to understand that the soccer field, community center and square are urban typological elements that have most conditioned public space in Chilean popular neighborhoods. This catalog is not an attempt to solve the spatiality of the “ollas comunes” but rather devises a way to define guidelines to generate an operating manual for creating new spaces for community interaction around cooking, eating, leisure, and meeting. The system created by the urban typologies and the layer of domestic activities questions the boundaries of the domestic and the public, creating a new space of cooperation that does not correspond with any known typology. It is a non-typology that not only arises as a crisis response but triggers permanent and new ways of domestic interaction in the public sphere.



soccer field



community center

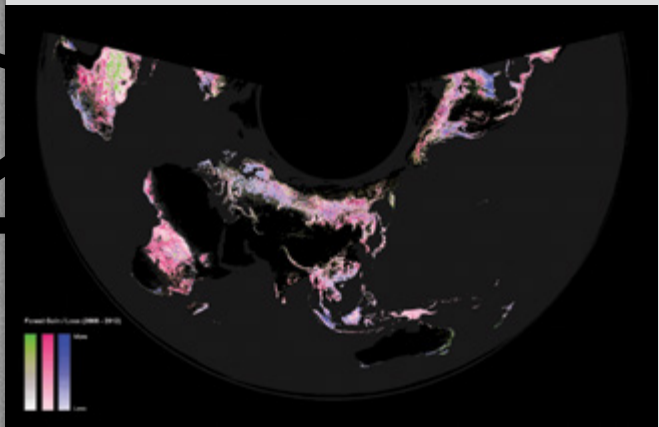


square

Illustration of “Ollas Comunes” by Rafaela Olivares  
and Ernesto Silva.

INTEGRANT

JAMES PIACENTINI '20 MARCH/MSUP AND ERIC PIETRASZKIEWICZ '18 MSUP: TREE.3  
TREE.3 [tree3.io] is an interactive, web-based data visualization platform aimed at providing architects, designers, developers, urbanists, and advocates up-to-date knowledge of the global distribution of mass timber construction and its impacts on forest-to-city and forest-to-forest carbon networks. Global climate networks are deeply connected to the health of cities, particularly in relation to the employment of emerging “sustainable” timber construction. The project asks and answers two fundamental questions underpinning the incredible growth of heavy timber: Where does our wood come from? What are the global impacts of our local interventions? TREE.3 provides a dynamic and controllable interface encouraging users to investigate the ecological pathways that underscore architectural production. The site provides users an inventive and dynamic modality to explore the cross-scalar relationships between the production of architectural and urban spaces, the carbon and climate networks that tie them to their natural forest sources, and the larger health and sustainability implications of these networks.



Visualization of global forest gain and loss from 2000–2012 by James Piacentini and Eric Pietraszkiwicz.



Los Vilos morning fog near a eucalyptus plantation, a co-opted nature-based strategy to deal with waste ware from the cooper sludge at the Los Pelambres mine in Chile. Photo by Linda Schilling Cuellar.

LINDA SCHILLING CUELLAR '18 MSAUD: (EXTRACTOPIA) AND THEN WHAT? NEW WORLD-MAKING STRATEGIES.

This project researches and enacts possibilities of new modes of living by repurposing the discrete extraction infrastructures atomized throughout the Chilean landscape. In our Climate Crisis age, the research has a departure point that sees these economies as obsolete. Their infrastructures are soon to be vestigial spatial arrangements that can be reclaimed by the communities it once enacted micro-aggressions on to. With case studies that look into cooper and avocados, the project tests the untapped potential of extractive economies loose ends with strategies that bring back agency and accelerate a paradigm shift in livelihoods and multispecies coexistence.

AMEWUSIKA “SIKA” SEDZRO '13 MSUP: CLIMHUB

This project creates a crowd-sourced cloud application that serves as a repository for tracking the economic and environmental impacts of climate change in Sub-Saharan African coastal cities. The pilot focuses specifically on the Ghanaian coastal cities of Aflao, Keta, Winneba, Accra, Sekondi-Takoradi, Axim, Cape Coast, and Elmina. In these cities, both lagoons and coastlines have been ravaged by climate change. This phase of the project focuses on identifying and testing two use cases for the first iteration of a cloud application. The Bit City Collective engages traders, physical planners, scientists, and climatologists to track tidal data, economic data, and changes to land cover.





At Columbia GSAPP, public programs play an integral role in fulfilling the School's responsibility to host a diverse and lively community where unwavering intellectual generosity and the desire to communicate and exchange are at the foundation of how students learn and grow together. In response to the unprecedented social distancing measures to prevent the spread of COVID-19, events were hosted virtually.

Associate Dean of Admissions  
and Outreach  
Steffen Boddeker

Director, Events and Public Programs  
Lyla Catellier

Student Events Crew  
Kaeli Alike Streeter  
Urechi Oguguo  
Abhinav Gupta

## Fall 2020 Lectures

Stephen Burks in conversation  
with Amale Andraos  
Bryan C. Lee, Jr.  
Yasmeen Lari  
Lola Ben-Alon  
Black Reconstruction Collective  
(Emanuel Admassu, Germane  
Barnes, Sekou Cooke, J. Yolande  
Daniels, Felecia Davis, Mario  
Gooden, Walter Hood, Olalekan  
Jeyifous, V. Mitch McEwen, and  
Amanda Williams)  
David Barragán, Al Borde  
J. Phillip Thompson  
Ziad Jamaledine  
and Makram El Kadi, L.E.FT  
Architects  
Majora Carter  
Tatiana Bilbao  
(Kenneth Frampton  
Endowed Lecture)  
Toshiko Mori

## Spring 2021 Lectures

Edward Mazria  
Cecilia Puga and Paula Velasco  
(The Paul S. Byard Memorial  
Lecture)  
Francis Kéré  
(The John Foerster '64 Lecture)  
Teddy Cruz and Fonna Forman  
Ana María León  
(The Detlef Mertins Lecture  
on the Histories of Modernity)  
Nader Tehrani, NADAAA  
Gabrielle Bullock  
Ekene Ijeoma  
Mabel O. Wilson

FALL 2020  
DISCUSSIONS

*Site and History: On the Question of Repair*

Erica Avrami, Mark Barksdale,  
Eric Foner, Mindy Fullilove,  
Galia Solomonoff

*Race and Modern Architecture*

Esra Akcan, Adrienne Brown,  
Luis E. Carranza, Jiat-Hwee Chang,  
Irene Cheng, Mark Crinson,  
Kenny Cupers, Charles L. Davis II,  
Addison Godel, Dianne Harris,  
Andrew Herscher, Reinhold Martin,  
Brian L. McLaren, Joanna Merwood-  
Salisbury, Peter Minosh,  
Adedoyin Teriba, Lisa Uddin,  
Mabel O. Wilson

*The Preservation of Disability*

David Gissen, Georgina Kleege,  
Rosemarie Garland-Thomson  
Rob Thomson, Sun Young Park,  
Wanda Katja Liebermann

*The Feminist City*

Jack Halberstam, Leslie Kern,  
Anna Puigjaner

*Memorial to Enslaved Laborers*

Gregg Bleam, Diane Brown Townes,  
Frank Dukes, Farah Jasmine Griffin,  
Eric Höweler, Eto Otitigbe,  
Mabel O. Wilson, J. Meejin Yoon

*Paths to Prison: On the Architectures  
of Carcerality*

Adrienne Brown, Stephen Dillon,  
Jarrett M. Drake, James Graham,  
Isabelle Kirkham-Lewitt, Leslie Lodwick,  
Dylan Rodríguez, Sable Elyse Smith,  
Anne Spice, Brett Story,  
Jasmine Syedullah, Mabel O. Wilson,  
Wendy L. Wright

*Health and the City*

Caitlin Blanchfield, Dare Brawley,  
Adeline Chum, Nadine Fattaleh, Gregg  
Gonsalves, Suzan Iloglu, Spenser A. Krut,  
Laura Kurgan, Thomas Thornhill, Nelson  
de Jesus Ubri, Adam Vosburgh, Jia Zhang

*Climate Justice and the City*

Génesis Abreu, Erica Avrami,  
Christian Braneon, Lisa Dale,  
Radley Horton, Arturo Garcia-Costas,  
Paul Gallay, Sonal Jessel, Jacqueline  
Klopp, Reinhold Martin, Kate Orff,  
Thaddeus Pawlowski, Laurie Schoeman,  
Mia Soto

EVENTS

SPRING 2021  
DISCUSSIONS

*Beverly Loraine Greene and Norma Merrick Sklarek: New Research in Black Women's History in Architecture*  
Mary McLeod, Patricia Morton,  
Victoria Rosner, Roberta Washington

*All We Can Save*  
Jaimey Bavishi, Kate Marvel, Kate Orff,  
Katharine Wilkinson

*Prefabrication in the Public Realm*  
Benjamin Busche, Laurie Hawkinson,  
Rebecca Macklis, Ronnie Markussen,  
Carlo Ratti, Ada Tolla

*Addressing Systemic Racism in Real Estate*  
Patrice Derrington, Ed Poteat

*Building Collaboration:  
On the Question of Repair*  
Flores A. Forbes, Malo Hutson,  
Akilah King

*Tidal Communities: The Experience  
of Underserved and Indigenous Rural  
Communities Along Changing Coastlines*  
Maurice Bailey, Whitney Barr, Robin  
Bronen, Dean Hardy, Radley Horton,  
Malgosia Madajewicz, Dorothy Peteet,  
Annauk Denise Olin, Kate Orff,  
Shavonne Smith, Aunnauruq Twyla  
Thurmond, Jazz Watts

*Narrative Change for the Green New Deal*  
Molly Crabapple, Keller Easterling, Billy  
Fleming, Janette Kim, Heather McGhee,  
Kate Orff, Rinku Sen, Cassim Shepard

*Planning Futures? On Decolonial,  
Postcolonial, and Abolitionist Planning*  
Hiba Bou Akar, Amale Andraos,  
Sai Balakrishnan, Teresa Caldeira,  
Mustafa Dikeç, Mona Fawaz, Kian Goh,  
Neema Kudva, Libby Porter,  
Andrea Roberts, Ananya Roy,  
Abdou Maliq Simone, Vanessa Watson,  
Delia Wendel, Oren Yiftachel,  
Malini Ranganathan, Katharine Rankin,  
Akira Rodriguez, Sheryl-Ann Simpson,  
Bjorn Sletto, James Spencer

*Infrastructures of Violence*  
Rebecca Brown, Swati Chattopadhyay,  
Ateya Khorakiwala, Avishek Ray

*Knowledge Worlds: Media, Materiality,  
and the Making of the Modern University*  
Lucia Allais, Weihong Bao, Zeynep Çelik  
Alexander, Reinhold Martin,  
Mabel O. Wilson

*The Right to Infrastructure*  
Catherine Fennell, Reinhold Martin,  
Danielle M. Purifoy, Louise Seamster

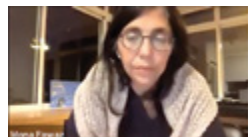
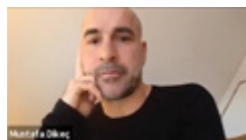
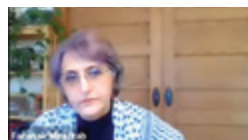


# *Planning Futures? On Decolonial, Postcolonial, and Abolitionist Planning Conference*

This one-day conference brought leading planning and urban scholars who are re-thinking the field of urban planning and policy from postcolonial, decolonial, and abolitionist perspectives. It asked the following two interrelated questions: What are the futures of the field of urban planning, and what futures we ought to plan for when the future that is imagined in most of the world is one of state violence, dispossession, exploitation, war and conflict, pandemics, and climate change?

March 12, 2021

Organized by Hiba Bou Akar, Assistant Professor at GSAPP, and the Post Conflict Cities Lab.

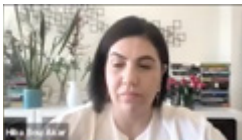
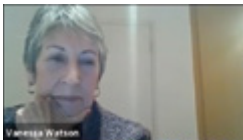
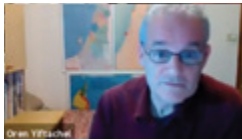
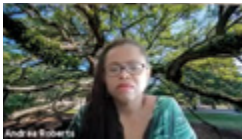
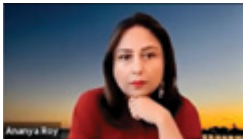


Panel 1  
Decentering Planning  
Faranak Miraftab  
Mustafa Dikeç  
AbdouMaliq Simone  
Mona Fawaz  
Moderator  
Sai Balakrishnan

Scholars in this panel asked us to re-think planning and its actors outside the normative planning box, by attending to spatial and temporal disjunctures, uprisings, political movements, displacements, mobilities, and everyday urban life. How can we understand the making of our cities by undocumented immigrants, formerly colonized populations, religious organizations, civil society movements, and the simple majority of people who produce, negotiate, contest, and transform cities? And how can the field of planning incorporate contested pasts and alternative futures into the planning process and its imaginations?

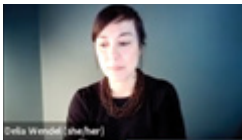
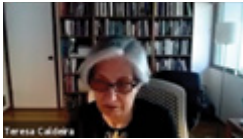
EVENTS

Panel 2  
Decolonizing Planning  
Ananya Roy  
Andrea Roberts  
Oren Yiftachel  
Vanessa Watson  
Moderator  
Hiba Bou Akar



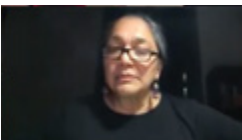
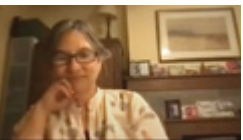
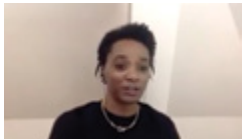
What does it mean to “decolonize planning,” both normatively and in practice? How do we learn from, theorize, practice, as well as differentiate between postcolonial, decolonial, and abolitionist planning while placing these movements in their proper and distinct historical and academic contexts? And given historical and ongoing realities of settler colonialism, white supremacy, economic precarity, and neoliberal inequality, and occupation, what role can and should planners play in engaging the field’s historical origins, and what future direction(s) represent possibility and potential for the field to envision and inscribe socially just and contextually suited interventions?

Panel 3  
Re-thinking Planning  
from the Margins  
Teresa Caldeira  
Akira Rodriguez  
James Spencer  
Libby Porter  
Moderator  
Delia Wendel



Margins—as geographies and positions of power, of excluded populations and neglected sites—can offer new insights to planning theory and practice. What new views of the center or the mainstream emerge when we foreground putatively marginalized perspectives?

Panel 4  
Frontiers and their  
Politics of Planning  
Katharine Rankin  
Neema Kudva  
Malini Ranganathan  
Bjorn Sletto  
Sheryl-Ann Simpson  
Moderator  
Kian Goh



This panel challenged planning and development through the concept of the “frontier”—both as physical and imagined geography of accumulation and dispossession and political transformation, as well as a conceptual framework of futures to be imagined and steered whether of climate change or social equity.

# *Site and History: On the Question of Repair*

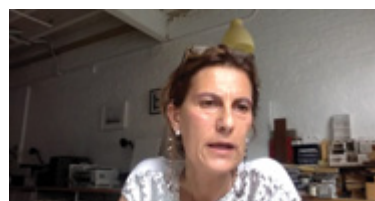
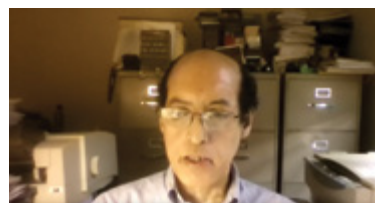
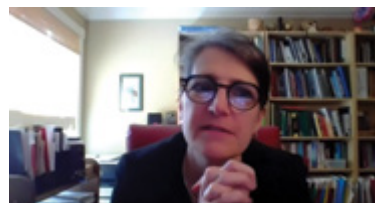
This one-day conference brought leading planning and urban scholars who are re-thinking the field of urban planning and policy from postcolonial, decolonial, and abolitionist perspectives. It asked the following two interrelated questions: What are the futures of the field of urban planning, and what futures we ought to plan for when the future that is imagined in most of the world is one of state violence, dispossession, exploitation, war and conflict, pandemics, and climate change?

September 11, 2020

## Speakers

Erica Avrami  
Mark Barksdale  
Eric Foner  
Mindy Fullilove  
Galia Solomonoff

Organized by  
Columbia GSAPP.



LECTURES



# Race and Modern Architecture

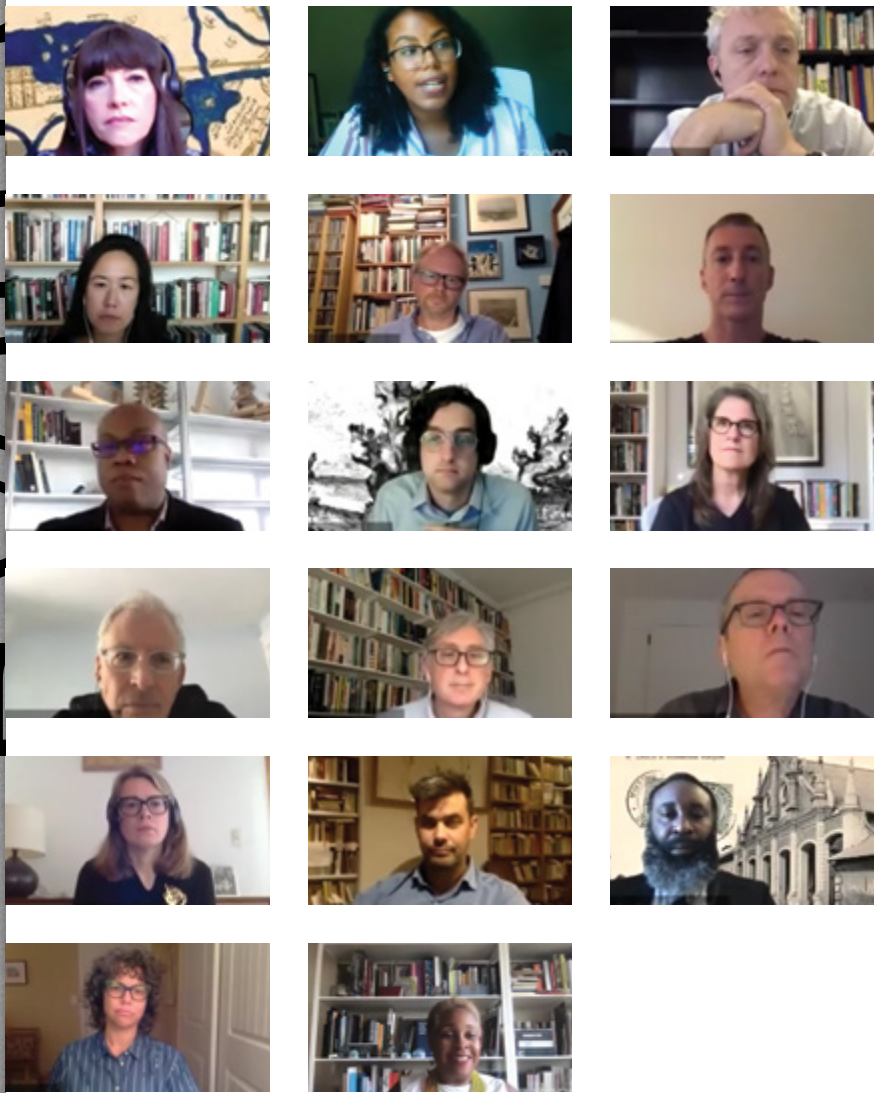
As media and design increasingly converge, this symposium asked how narrative strategies—of novelists, journalists, filmmakers, and activists—reflect design methodologies, from performing site analysis to evaluating success.

September 18, 2020

Speakers

- Esra Akcan
- Adrienne Brown
- Luis E. Carranza
- Irene Cheng
- Mark Crinson
- Kenny Cupers
- Charles L. Davis II
- Addison Godel
- Dianne Harris
- Andrew Herscher
- Reinhold Martin
- Brian L. McLaren
- Joanna Merwood-Salisbury
- Peter Minosh
- Adedoyin Teriba
- Lisa Uddin
- Mabel O. Wilson

Organized by  
Columbia GSAPP  
and co-presented by  
California College  
of the Arts and The  
University at Buffalo  
School of Architecture  
and Planning.



# Health and the City

The Center for Spatial Research (CSR) and collaborators from the Yale School of Public Health presented a recent interactive map project that guides policymakers and the public in deploying health care workers to communities most affected by the COVID-19 pandemic.

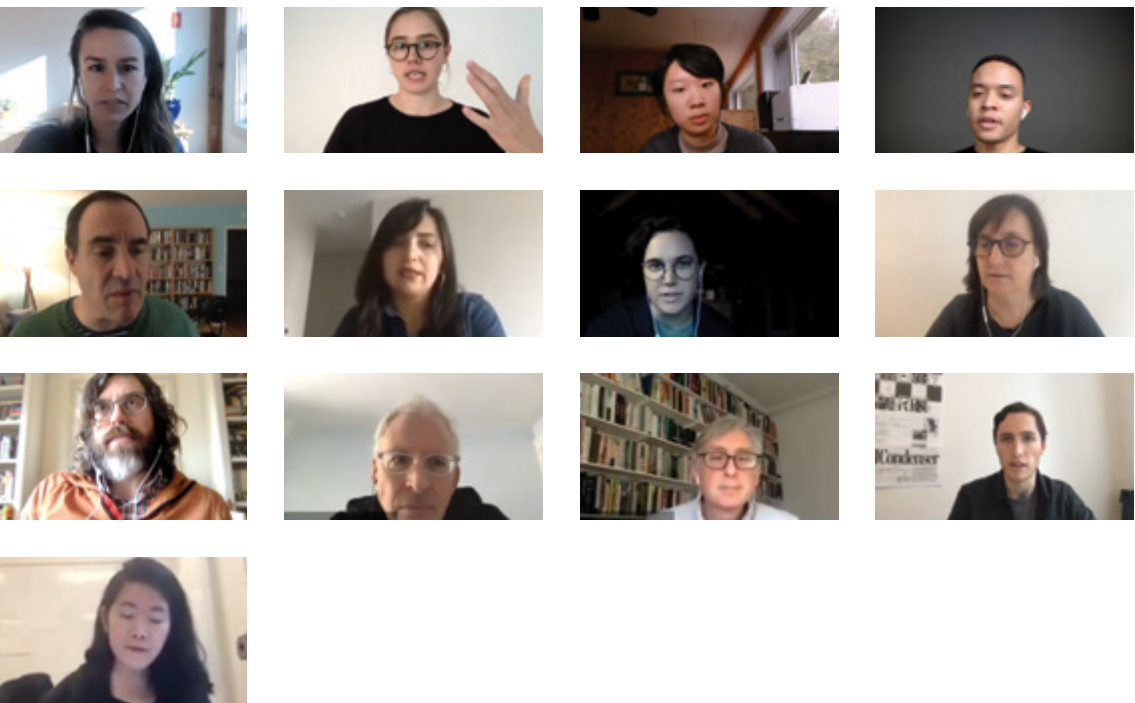
Graduate researchers at the CSR also discussed their investigation of patterns in the distribution of COVID-19 and critical questioning of the role of mapping and data visualization in understanding the pandemic. Their research sought to match the COVID-19 count data at the county level with various other datasets to spatially explore patterns and trends in the spread of the virus across multiple scales.

November 13, 2020

Speakers

- Caitlin Blanchfield
- Dare Brawley
- Adeline Chum
- Nelson de Jesus Ubri
- Nadine Fattaleh
- Gregg Gonsalves
- Suzan Iloglu
- Spenser A. Krut
- Laura Kurgan
- Thomas Thornhill
- Adam Vosburgh
- Jia Zhang

Organized by  
Columbia GSAPP.



LECTURES

# *Beverly L. Greene and Norma Merrick Sklarek: New Research in Black Women's History in Architecture*

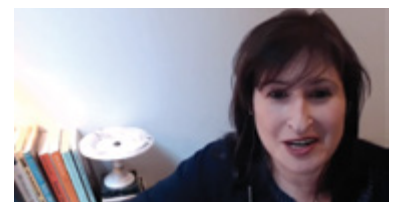
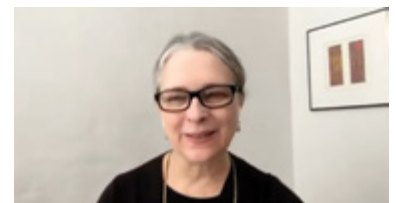
Beverly L. Greene '45 M.Arch (1915-57) was the first African American woman architect licensed to practice in the United States; Norma Merrick Sklarek '50 B.Arch (1926-2012) was the first African American woman to be made a Fellow of the American Institute of Architects. Both graduates of Columbia's University's architecture program, they went on to have distinguished careers working in prominent architectural firms—in the case of Sklarek, she co-founded the largest women-owned firm at the time. This panel explored Greene and Sklarek's significant contributions to the architecture profession, made at a time when the profession was almost exclusively white and male.

February 5, 2021

## Speakers

Mary McLeod  
Patricia Morton  
Victoria Rosner  
Roberta Washington

Organized by  
Columbia GSAPP.





# *Prefabrication in the Public Realm*

The discussion celebrated the launch of *Designing New York: Prefabrication in the Public Realm*, a publication that explores the viability of prefabrication in NYC, particularly in regards to the public realm and emergency pandemic-response applications.

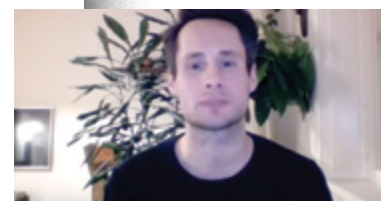
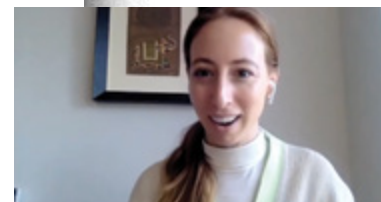
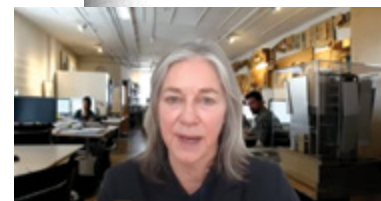
Research for the publication was initiated as part of Professor Laurie Hawkinson's seminar "Prefab, Modular, and Flatpack". Through a selection of 22 case studies, the book examines how prefabrication practices can be applied to small-scale urban infrastructure projects to have a large public-realm impact. It also highlights current best practices for prefabrication, and analyzes both technical and logistical nuances of these systems in order to further understand their viability in NYC.

January 28, 2021

## Speakers

Ben Busche  
Laurie Hawkinson  
Rebecca Macklis  
Ronnie Markussen  
Carlo Ratti  
Ada Tolla

Organized by  
Columbia GSAPP.



# Building Collaboration: On the Question of Repair

Malo Hutson, Professor and Director of the Ph.D. in Urban Planning program at GSAPP, moderated a discussion that explored partnerships through three lenses: that of a community partner, a university administrator, and a university faculty member. These perspectives were offered, respectively, by Akilah King, CEO of the nonprofit organization Room to Grow, Flores Forbes, associate vice president for community affairs at Columbia, and Hutson.

Hutson posed three questions: How can GSAPP and Columbia in collaboration with community partners more effectively address pressing social challenges? What is the University doing now to deal with previous actions that have caused harm in the local community? What opportunities exist to build long-lasting relationships with community partners that lead to real change?

January 15, 2021

Speakers

Flores Forbes  
Malo Hutson  
Akilah King

Organized by The Urban  
Community and Health  
Equity Lab.



# *Narrative Change for the Green New Deal*

The sixth annual urban design storytelling symposium gathered activists, artists, and writers to reflect on the potential—and the urgency—of narrative strategies to mobilize for a more equitable, decarbonized future. From the graphics of advocacy campaigns to the use of speculative fiction and data visualization in both environmental activism and design practice, multimedia storytelling is a necessary and powerful way to mobilize for a more equitable, decarbonized future. This symposium convened an interdisciplinary group of change agents whose work demonstrates that narrative change is essential to policy change.

March 8, 2021

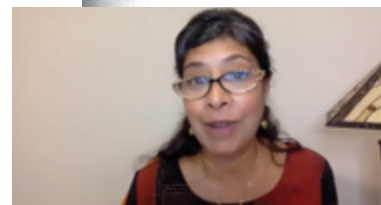
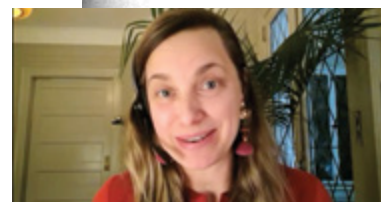
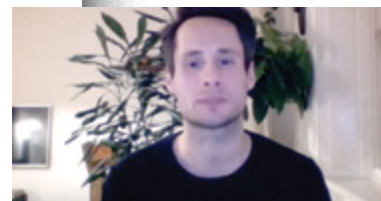
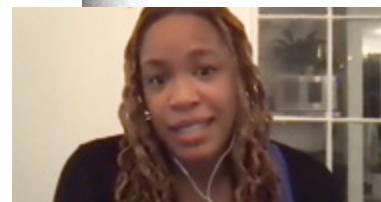
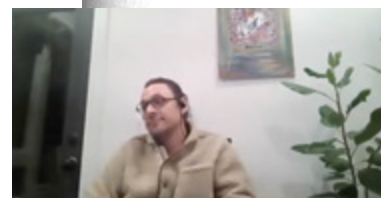
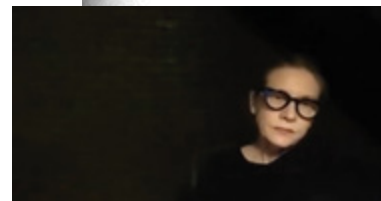
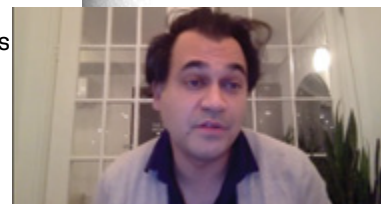
## Speakers

Molly Crabapple  
Keller Easterling  
Billy Fleming  
Janette Kim  
Heather McGhee  
Kate Orff  
Rinku Sen

## Moderator

Cassim Shepard

Organized by  
the MSAUD program  
at Columbia GSAPP.





# The Right to Infrastructure

Danielle M. Purifoy and Louise Seamster presented their conceptual framework for understanding black towns within extractive white space, highlighting questions of citizenship, extraction, and exclusion as they focus on how legal, spatial, racial, and economic systems structure black spaces’ access to infrastructure and facilitate environmental violence. Their work combines an environmental focus with data and frameworks from urban studies, fiscal sociology, geography, and law to show how these harms are not the result of discrete “racist” acts, but are written into the law itself, and are central to the functioning of racial capitalism.

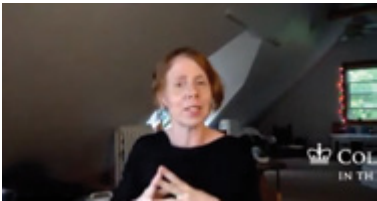
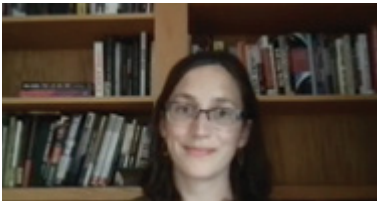
April 1, 2021

Speakers  
Danielle M. Purifoy  
Louise Seamster

Introduction  
Reinhold Martin

Moderator  
Catherine Fennell

Organized by the Temple  
Hoyne Buell Center for  
the Study of American  
Architecture at GSAP



# Public

# ations

Columbia Books on Architecture and the City aims to expand the ground of architectural discourse. Bringing together designers, scholars, planners, artists, theorists, and curators, often working outside of the expected formats of their fields, we focus on books that ask urgent questions about what architecture is and what it does. We hope to amplify new voices while reflecting on those who've shaped the field in vital ways, and to publish books that think deeply on the implications—whether political, ecological, cultural, or disciplinary—of architecture in its broadest sense.

Director of Publications  
Isabelle Kirkham-Lewitt

Associate Editor  
Joanna Joseph



# Public

## *Superpowers of Scale*

### Author

Andrés Jaque

### Design

Laura Coombs

### Specifications

512pp

Paperback

8 × 12"

### ISBN

978-1-941332-57-3



# ations

Greg and Donnie, and Maja Leonardsen and Corentine, form a home of two loving couples. Greg and Donnie collect books as part of the plan to open, in the future, an LGBTQIA+ oriented bookshop. Their kitchen is a place where they interact and share intimacy, forming something between a family and a group of roommates. It is also the place where they emerge as citizens committed to a position on public concerns and open controversies. Their home is an arena, from which their contributions to the commons are produced.

Mama Gianna remembers being raised in the kitchen of Manducatis, the restaurant her parents still own on Jackson Avenue. She now runs Manducatis Rustica, fewer than six minutes away. Her children spend most of their time in the restaurant playing and surfing the net on the computer she installed next to the kitchen, as well as talking to clients and staff after school. They refer to the restaurant as home, due to the amount of time they spend there. Her apartment, her parents' apartment, and the two restaurants compose a fragmented domesticity inserted within two city blocks. In their life there is no easy distinction between the intimate and the communal. Their domesticity is not an "independent republic" but an urbanism constructed out of scattered spaces that become connected by the way they are performed every day.



# Public

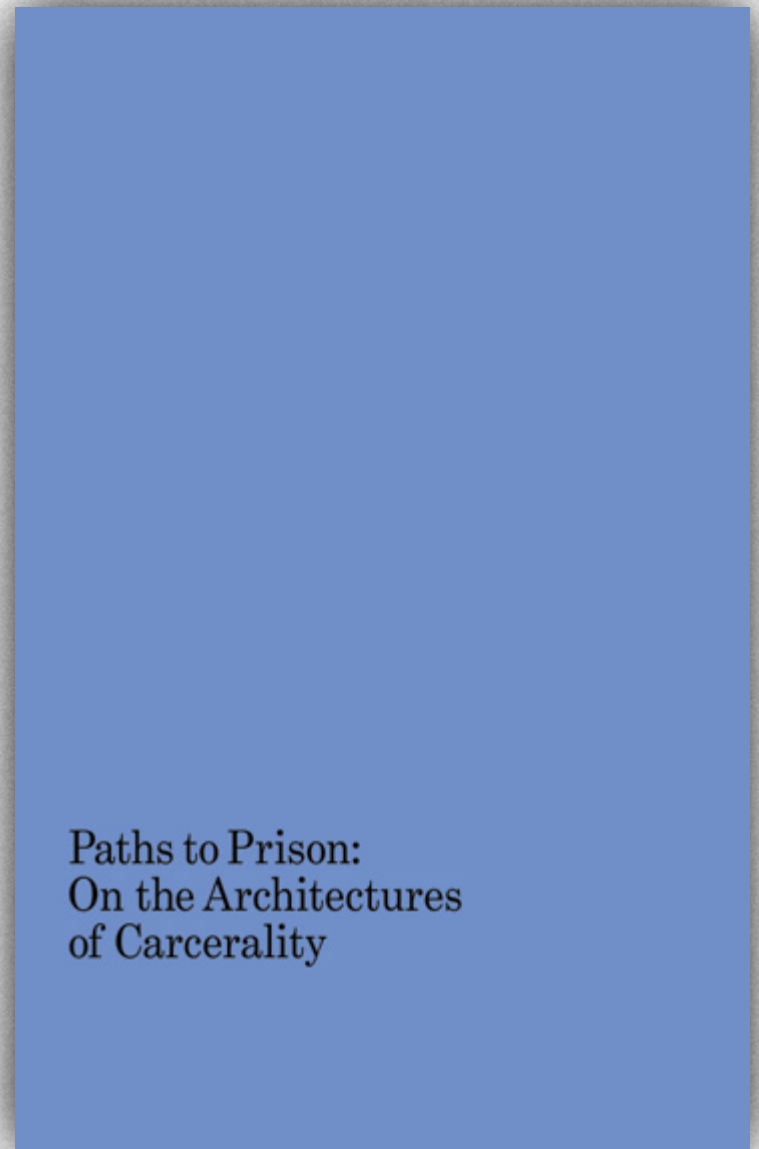
*Paths to Prison:  
On the Architectures  
of Carcerality*

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Design  
Laura Coombs

Specifications  
527pp  
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# ations



Sable Elyse Smith, *Coloring Book 13*, 2018. Screen printing ink, oil pastel, and oil stick on paper, 60.25 x 56 inches. Courtesy of the artist; JTT, New York; and Carlos/Ishikawa, London.

# Public

*Proxemics and the Architecture  
of Social Interaction*

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Larry D. Busbea

Design

Neil Donnelly

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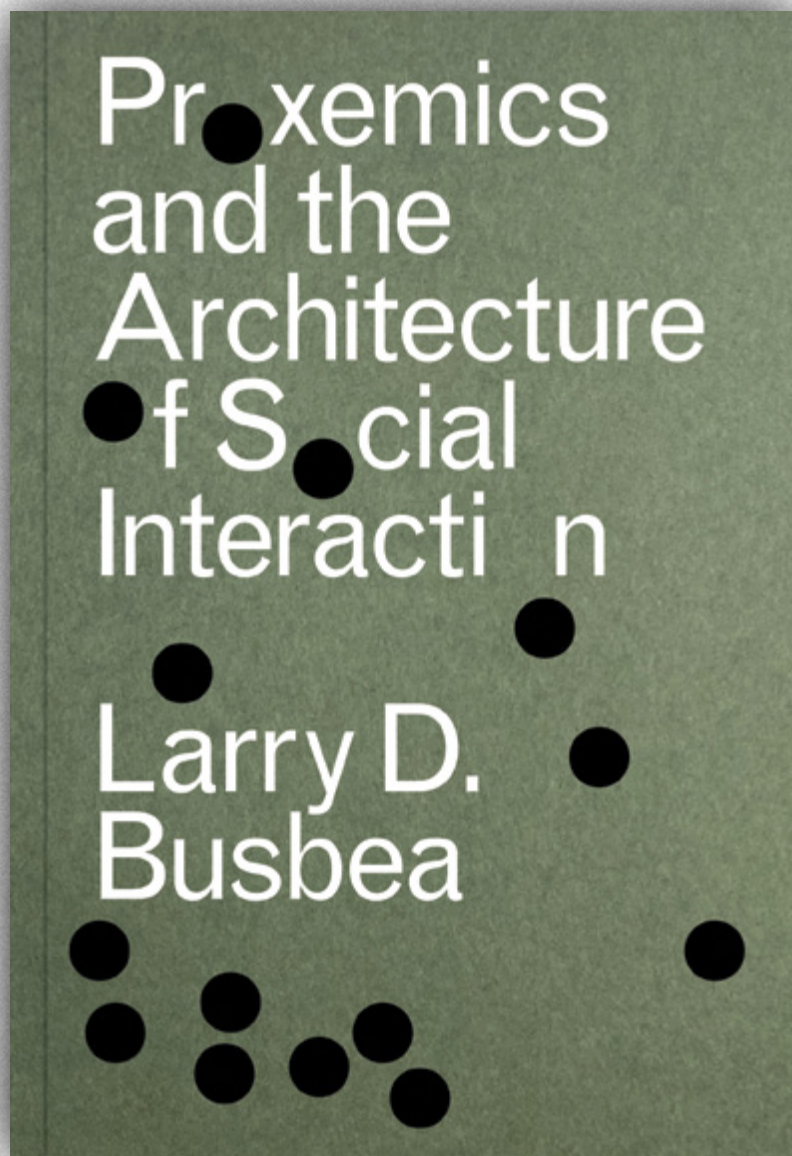
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# ations



These photos and tracings were taken at an academic conference Hall attended. The event provided many opportunities to observe interactions within the social and public ranges of distance. It is unclear from the comparisons exactly what the value of the tracings was for Hall. What did they potentially allow him to observe that the photos did not? Were they additions to the original images or subtractions?





# Public

*Nights of the Dispossessed:  
Riots Unbound*

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Niloufar Tajeri

Designer

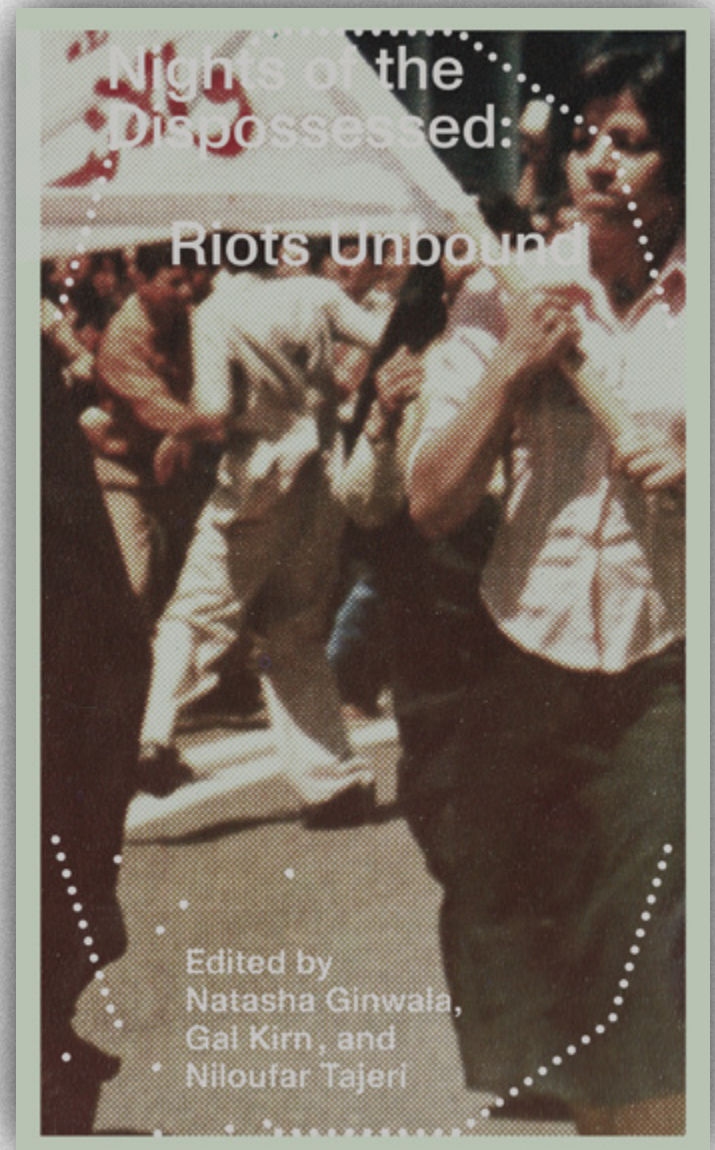
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432pp  
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# ations

GAL KIRN AND NILOUFAR TAHERI

The demolition of the first tower of Les Minguettes in Versailles in June 1983. Courtesy of the Bibliothèque municipale de Lyon.



unjust, was about to happen. For demolition and destruction have been inscribed in the history and memory of people of color in France, experiences from a colonial past translated easily into the French version of accumulation by dispossession since 2004: the PNRU. The €45 billion program rampaged through social housing between 2003 and 2013: 140,000 housing units were demolished in this period.<sup>28</sup> People lost their homes, their neighborhoods, and their social networks, nominally distracted by community outreach programs and workshops.<sup>29</sup>

Riot from Above, Cité de Balzac, 2012:  
"Il y a tous nos souvenirs d'enfance dedans"

- 28. "Rapport de l'ONZUS: Dix ans de PNRU," Agence nationale de la rénovation urbaine, May 13, 2013, <https://www.anru.fr/fr/Actualites/Evenements/Rapport-de-l-ONZUS-dix-ans-de-PNRU>.
- 29. David Giband, "Housing the Banlieue in Global Times: French Public Housing and Spaces between Neo-Liberalization and Hybridization," in *The Routledge Handbook on Spaces of Urban Politics*, ed. Kevin Ward, Andrew E. G. Jonas, Byron Miller, and David Wilson (New York: Routledge, 2018).



"Personally, I am troubled. Maybe others can adjust, but not me..." Watching the demolition of buildings in Les Minguettes, a resident voices her feelings of pain. Still from the Institut National de l'Audiovisuel's report "Destruction du quartier des Minguettes," October 11, 1984. Courtesy of the Institut National de l'Audiovisuel.



"It hurts, it really hurts. Because there are all our memories of childhood in there... and now everything fell down like all of a sudden." Still from the news report "La cité Balzac fait peu neuve," September 5, 2012, by Alejandra Magnasco and Elena Brunet.

Cité de Balzac, near Paris, was inaugurated in 1967. The first slab, ABC, was demolished in 2007; the second, DEF, followed in 2010, and the last one, GHJ, in 2012. Five hundred and four homes were lost within five years. Watching the last slab fall, many inhabitants were torn between excitement over the spectacle of violence and the feeling of loss. After soothing her crying sister, a teenage girl says, smiling, "It hurts, it really hurts. Because there are all our memories of childhood in there... and now everything fell down like all of a sudden."<sup>30</sup> David Giband has described the implementation of PNRU as "silent violence" against tenants by forcing them to move and leave their personal and social networks.<sup>31</sup>

Riot from Above, Heygate Estate, 2011–2014:  
"It's breaking us up"

The Heygate Estate, in South London, was designed by Tim Tinker and completed in 1974. Its demolition was decided already in the late 1990s, but its



"It's breaking us up." Former resident Liz Joseph revisits the Heygate Estate shortly before its demolition. Still from the film *Revisiting the Heygate* (July 2013).

- 30. "Ça fait mal, très mal. Parce qu'il y a tous nos souvenirs d'enfance dedans... tout est tombé comme ça d'un coup." Alejandra Magnasco and Elena Brunet, "La cité Balzac fait peu neuve," *Nouvel Observateur* (September 5, 2012), <https://alejandramagnasco.com/cite-balzac-vitry-veut-faire-peu-neuve>.
- 31. Giband, "Housing the Banlieue in Global Times."

198-199 BUILT TO BE TORN DOWN, FED TO BE STARVED, RESURRECTED TO BE DISPOSED OF: CAPITALISM IS A RIOT, A RIOT FROM ABOVE



### *Avery Review*

*The Avery Review* is an on-line journal dedicated to thinking about books, buildings, and other architectural media. We see the genres of the review and the critical essay as vital but still underutilized ways of exploring the ideas and problems that animate the field of architecture, and we hope to push these genres beyond their most familiar forms, whether journalistic or academic. Our aim is to explore the broader implications of a given object of discourse (whether text, film, exhibition, building, project, or urban environment), to expand the terrain of what we imagine architectural discourse to be, and to broaden the diversity of voices that our field typically hears from.

*The Avery Review* is committed to publishing a diverse range of voices, especially those contributing to the collective rewriting of a discipline that has long kept difference in its margins, to the benefit of dominant voices who have too long held the center. We welcome authors who illuminate architecture's

blind spots, who oppose its many complicities, who resist its production of norms and its participation in spatial violence—and who champion a more open, more equal built environment.

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Prison, Courthouse, and  
Disciplinary Enclosure

# Avery

“The Outside Project” seminar led by faculty Laurie Hawkinson and Galia Solomonoff was a collaborative initiative to design, build, and program a temporary pavilion structure that was erected in April 2021 by the students in the plaza between Avery, Fayerweather, and Schermerhorn Halls on Columbia University’s Morningside Heights Campus. The pavilion celebrated the reunion of students and faculty on campus during the April 29 and May 1, 2021 Columbia GSAPP commencement activities.

The 600-pound inflatable canopy above Avery Plaza was anchored by four steel beams in Avery and Fayerweather Halls and four anchor points, and was fabricated by areacubica. During construction, students installed LED lights within the inflatable to establish an omnipresent glow below the canopy at night. LEDs were powered via solar panels located at the base of the pavilion. The canopy used a rain chain to divert water from the platform and prevent water buildup and additional weight. The platform program featured social distancing circles organized in three colored arrangements to accommodate casual meetings, outdoor seminars, and formal lectures. A projector stand and large screens were built into the platform to accommodate hybrid events. To create a stark contrast with the artificial materiality of the inflatable, the ground component celebrated natural textures including four live-edge cedar benches.

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The project was supported by Dean Amale Andraos and led by Professor Laurie Hawkinson and Associate Professor of Professional Practice Galia Solomonoff, with additional support from Mark Taylor, Director of Facilities; Joshua Jordan, Making Studio Director; and Yonah Elorza, Making Studio Manager; among many others at Columbia GSAPP. Additional support and consulting were provided by Alex Mann, Sylvester Black from Silman Structural Engineers, and Astrid Sardinas from Buro Happold for Mechanical Engineering. Fabrication was done at the GSAPP Making Studio, areacubica, and Robert Rising of NY City Slab. Special thanks to Columbia University Assistant Professor of History Frank Guridy, whose office is occupied by a 300-pound steel structural brace.

Photography by







M.S. Critical, Curatorial,  
and Conceptual Practices  
in Architecture



# 2021 Columbia Commencement Celebration



M.S. Advanced Architectural Design



M.S. Real Estate Development





M.S. Architecture and Urban Design

# Georgia GSAPP Commencement Celebration



M.S. Urban Planning



Master of Architecture











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Meghan Taylor-Steshyn Associate	Victoria Vuono Associate	Elie Zeinoun Associate
Ada Tolla Adjunct Assistant Professor	Sybil Wa Adjunct Assistant Professor	Elizabeth Zevallos Associate
Antonio Torres Adjunct Assistant Professor	Paul Weech Adjunct Associate Professor	Yu Khun Zhang Adjunct Assistant Professor
Jamie Torres Springer Adjunct Associate Professor	Marc Weidner Adjunct Assistant Professor	
Graham Trelstad Adjunct Associate Professor	Marc Weidner Adjunct Assistant Professor	
Amanda Trienens Adjunct Assistant Professor	Rachel Weinberger Adjunct Associate Professor	
Dimitra Tsachrelia Adjunct Assistant Professor	Norman Weiss Adjunct Professor	
Lexi Tsien-Shiang Adjunct Assistant Professor	Robert Wertheimer Adjunct Professor	
Marc Tsurumaki Adjunct Associate Professor	Zachary White Adjunct Assistant Professor	
Seth Turner Associate	Violet Whitney Adjunct Assistant Professor	
Josh Uhl Adjunct Assistant Professor	Lindsey Wikstrom Adjunct Assistant Professor	
Benjamin Ulvevadet Associate	Amanda Williams Adjunct Associate Professor	
Michael Vahrenwald Adjunct Assistant Professor	Lucien Wilson Adjunct Assistant Professor	



Elizabeth Alicea Director, Human Resources	Alvaro Gamboa Assistant Director, Information Technology Operations	Sherly Orilas Coordinator, Output Shop
Rebecca Andersen Polimeda Associate Director, Career Services	Benjamin Goldie Director, Information Technology	Yesenia Ozoria-Urena Associate Director, Human Resources
Jillian Barsalou Kincaid Director, Development	James Graham Director, Print Publications	Diego Patino Toro Manager, Information Technology
Carlito Bayne Assistant Director, Output Shop	Kayla Heisler Administrative Assistant	Thaddeus Pawlowski Director, Center for Resilient Cities and Landscapes
Steffen Boddeker Associate Dean, Admissions and Outreach	Ashley Hoefly Director, Administration	Janet Reyes Senior Associate Dean, Administration and Faculty Affairs
Dare Brawley Assistant Director, Center for Spatial Research	Christopher Hou Systems Coordinator	Nicholas Roberts Associate Director, Faculty Affairs
Leigh E. Brown Secretary II, UP and HP Programs	Joshua Jordan Director, Making Studio	David Smiley Assistant Director, MSAUD
Meredith Brull Program Manager, HP Programs	Emily Junker Program Manager, UP Programs	Kevin Smith Director, Admissions and Financial Aid
Carla Call Assistant Director, Human Resources	Isabelle Kirkham-Lewitt Director, Print Publications	Danielle Smoller, Associate Dean, Student and Academic Affairs
Kristina Camaj Assistant Director, Administration	Joanna Joseph Associate Editor, Publications	Jordan Steingard Program Manager, Buell Center
Lyla Catellier Director, Events and Programs	Lucy Krebsbach Assistant Director, Communications and Events	Jessica Stockton King Associate Director, Academic Affairs
Xiaoxi Chen Program Manager, MSAAD	Leslie Kuo Associate Director, Development and Alumni Relations	JD Stogdill Assistant Director, Student Affairs
Maeve F. Cavadini Manager, AV Events	Johanna Lovecchio Associate Director, Center of Resilient Cities and Landscapes	Irene Sunwoo Director and Curator, Exhibitions
Rosana Shin Yueh Chang Assistant Director, Events	Caio Major Assistant Director, Administration and Faculty Affairs	Mika Tal Manager, Preservation Technology Lab
David Cohen Administrative Assistant, MSAUD	Roberto Marsach Jr. Systems Coordinator	Mark Taylor Director, Operations
Leah Cohen Associate Dean, Development and Alumni Relations	Sonya Marshall Assistant Dean, Faculty Affairs	Esther Turay Office Manager, Development
Matthew Colunga Administrative Assistant, Office of the Dean	Nicholas Martucci Systems Coordinator	Hannette Un Assistant Director, Information Technology
Karen R. Cover Assistant Director, Career Services, MSAUD, MARCH, and MSAAD	Alade McKen Assistant Dean, Recruitment, Diversity and Inclusion	Stephan Van Eeden Assistant Director, Accreditation
Christopher Day AV/IT Assistant	Jacob Moore Associate Director, Buell Center	Shannon Werle Manager, Communications
Yonah Elorza Manager, Making Studio	Cristian Orellana Manager, Information Technology	

M.S. ADVANCED ARCHITECTURAL DESIGN Refan Abed Benjamin Akhavan Fahad Al Dughaish Abdelrahman Ala Al-Bakri Farah Alkhoury Faisal Majed Alohalil Pabla Amigo Noor Jahan Begum Angel Castillo En-Ho Chan Chao Chang Janice Chen Ying Cheng Chiun Heng Chou Jiyong Chun Michelle Clara Kshama Dharman Daftary Tianyuan Deng Cong Diao Marie Christine Karim Dimitri Chenxi Dong Jishan Duan Ali Amr ElSinbawy Nora Fadil Gabriela Junqueira Franco Jindian Fu Renee Gao Liwei Guo Behruz Hairullaev Sarah Ibrahim Hejazin Man Hu Seonggeun Hur Jasmine Nicki Jalinous Gun Young Jang Ruochen Ji Nanjia Jiang Zhenting Jiang Mark Melita Kantai Sungmin Kim Xianghui Kong Wan-Hsuan Kung Keon Hee Lee Susan Soyoung Lee Su Li Tianran Li Timlok Li Liang-Yu Lin Yuedong Lin Fan Liu Yipeng Lui Yuan Liu Jinxia Lou Hao-Yeh Lu Yuanming Ma Mariami Maghlakelidze Konstantina Marinaki Joel McCullough Devansh Ajay Mehta Mia Mulic Camila Nuñez Junyong Park Hemila Rastegar-Aria Emily Grace Ruopp Cheng Shen Ruijing Sun Wanqi Sun Zhijian Sun Ziang Tang Jenifer Tello Magdalena Valdevenito Veeris Vanichtantikul Domenica Velasco Kai Wang Lewei Wang Shengmian Frank Wang Yueyang Wang Ziyi Wang Chia Jung Wen Xian Wu Zihan Xiao Jiayue Xu	Tianheng Xu Ye Xu Yuexi Xu Chen Yang Tian Yao Yu-Jun Yeh Xiaoliang Ying Eunjin Yoo Duo Zhang Fengyi Zhang Jerry Zhao Jingrou Zhao Zixiao Zhu  MASTER OF ARCHITECTURE Alina Abouelenin Rasam Aminzadeh Isabella Bartenstein Dylan Belfield Yasmin Ben Ltaifa Shuang Bi Erin Grace Biediger Oliver Oenslager Bradley Matthew A Brubaker Camille Brustlein Zachary Thomas Bundy Anirudh Chandar Hao Chang Chun-Wei Chen Melissa Chervin Thom Chiu Steven Corsello Greta Crone Crispen Inejamaira Cuevas Gonzalez Nelson De Jesus Ubri Mark-Henry Jean Decrausaz Ashley Reeb Esparza Camille Jayne Dayupay Esquivel Alice Fang Jonathan Foy Cameron Fullmer Yirmiyahu Moriel Gilbert Abhinav Gupta Rahul Gupta Charlotte Sie Wing Ho Lin Hou Jacob Hu Jun Ito Yi Yi Jiang Begum Karaoglu Marisa Kefalidis Mikhail Kolodesh Spenser A Krut Camille Lanier Kassandra Shuen Lee MinJae Lee Jacob Chengjie Li Chengliang Li Yuan Li Jiazhen Lin Guoyu Liu Lu Liu Sixuan Liu Adela Paterno Locsin Ran Ma Genevieve Mateyko David Irarimam Musa Tung Dinh Nguyen Urechi Oguguo Ogheneochuko Vanessa Okor Jihae Park Jared Robert Payne Maru Perez Benavides Luis Miguel Pizano Xinyi Qu Skylar Alexandra Royal Sage Aaron Marcell Aurel Sandor Vera Montare Savory Tristan Schendel	Lauren Scott Xinran Amber Shen Yue Shi Angela Sun Liza Tedeschi Alek Tomich Brian Jeremy Turner Taylor James Urbshott Ian Martin Wach Joey Xu Florescia Yalale Tianyu Yang Reem Yassin Charlotte Ziye Yu Sarah Bisignano Zamler Elie Zeinoun ChuyangZhou  PhD ARCHITECTURE Addison McMillan Godel Alexander Hilton Wood  M.S. ARCHITECTURE AND URBAN DESIGN Chinedu Obinna Adiele Ahmed Abdullah Al Yaseen Aruna Ananta Das Anirudh Venkat Bodempudi Yiyang Cai Lingbei Chen Lonas Chiu Yuehui Du Corina Fuenmayor Herrero Ishita Ghosh Kai Guo You Jin Hwang Zuzanna Zofia Jarzyńska Chrysotemi Kouloumentas Cheng Ju Lee Yoo Jin Lee Chao Li Wenjuan Li Chen Liu Luchen Liu Victor Lo Yifei Luo Mariana Majima Wenyi Peng Thanawat Phituksithkasem Nupur Roy Chaudhury Kyle Wilson Sam Jil Amish Shah Yi Shang Yuhui Si Xiaofei Sun Yuqi Tian Scarlet Nga Chin Tong Xindi Wang Yunpeng Wu Dhanias Yasmin Zheng Yin Lijing Yu Kai Zhang Rui Zhang Wanjing Zhang Huiya Zhong Yong Zhuang  M.S. URBAN PLANNING Tamim Abedin Myles Benjamin Agudelo Regina Joy Duque Alcazar Sebastian Anderson Natalie Louise Baldacci Justin Barton C. Hayes Buchanan Tihana Bulut Riley Kimarie Burchell Mengqi Cao Xiyu Chen	Hana Dunston Ashley Reeb Esparza Camille Jayne Dayupay Esquivel Ryan Eustace Yuning Feng Lanier Hagerty Colin Malik Hancock Sanjukta Kashyap Hazarika Mariana Hinojosa Ronquillo Elaine Mingsum Hsieh Yiyi Jiang Jin Hong Kim Soyeon Kim Geon Woo Lee Hongseog Lee Lisa Li Lily Li Qi Lin Gina (Shih Yu) Liu Hui Lu Priska Marianne Jason Scott Mencher Juan Sebastian Moreno Madeline Ariel Pena Nicholas Lincoln Perry Yuan Qin Zeineb Sellami Jiuyu Wang Xifan Wang Hanzhang Yang Angel Yin Shinichi Yoshihara Zixuan Zha Haochen Zhang Haoran Zhang Yueqi Zhou  PhD URBAN PLANNING Jonathan English Tyler David Hauptert Elizabeth Marie Marcello Jung Eun Park Danielle L Petretta Rosalie Singerman Ray Valerie Elise Stahl  M.S. HISTORIC PRESERVATION Bruno Elias Rachel Pietron Ericksen Katlyn Marie Foster Marisa Kefalidis Emily Rachel Kahn Lai Ma William Todd MacCullum Caroline Peters Thomas Briggs Rice Tucker McIntosh Simmons Madison Story  M.S. REAL ESTATE DEVELOPMENT Thomas Abreu Michael Adelstein Jeffrey David Adler Rasam Aminzadeh Hajir Saleh Al Khusaibi Andrew Carroll Allyn Kevin Phillip April Varudh Assakul Kyle Jeffrey Bacon Alexander Samuel Ball Mateo Bolivar Tom Bourne Oliver Oenslager Bradley Tomas Buitrago Brendan Cavender Zhirong Cen Chun-Wei Chen Duen-Chieh Chen Hong-Syuan Chen
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Patrick Chen	Svetlana Samandyk
Agnes Cheung	Oliver Schwalbe
David Raines Chillura	Rosario Giovanni Scumaci
Kelly Connelly	Robert Thomas Sears
Brandon Taylor Conrad	Elliot Michael Shahery
Steven Corsello	Keyuan Shan
Alexander Cutrona	Qi Shan
Harry Day-Reiss	Jingyi Shao
Mark-Henry Jean Decrausaz	Gregory Shin
Nelson De Jesus Ubri	Stephen James Steckel
Juan Carlos de la Garza	Chongshi Sun
Madero	Zheyue Sun
Han Deng	Yeshu Tan
Hongze Deng	Tianchun Tang
Danielle Dib	Jeremy Tenenbaum
Maxwell Charissa	Jonathan Torrey
Djakasaputra	Randy Wang
Han Du	Cecilia Wang
Elaine Feng	Weicheng Wang
Maria Eugenia Figueira	Xinyue Wang
Alexander Fraser	Yangziyan Wang
Brianna R. Friedman	Yu Wang
Sean Richard Siy Go	Yujia Wang
Joshua B Gonzalez	Jonathan Weinbaum
Reed Gordon	Jiwen Wu
Jake Greenberg	Yuheng Wu
Jungmoon Ham	Larry Xu
Shamkhal Hasanli	Wenshao Xu
Lauren Marie Haverlin	Ziwen Yan
James Ho	Siyuan Yin
David Holiner	Jii Yoo
Lin Hou	Chloe Yu
Yaolan Huang	Haochen Zhang
Yong Huang	SiQi Zhang
Lauren Hyland	Xiaobo Zhang
Eric Jared Iglesias	Bokai (Will) Zhao
Spyro Alexander Jacobson	Bowen Zheng
Mohan Jia	Jiafeng Zheng
Bradley Nicholas	Haolan Zhou
Hunley Jones	Ting (Tina) Zhou
Jinsu Joung	
Colin Joy	
Mustafa B. Kamil	M.S. CRITICAL,
Abdulaziz Kanoo	CURATORIAL, AND
Begum Karaoglu	CONCEPTUAL PRACTICES
Sarah Khalfoune Labou	Caitlyn Campbell
Ayoung Kim	Nadine Fattaleh
Keith Michael Kito	Lucia Galaretto
Jacob Takeshi Kurosaki	Benjamin Goldner
Nicholas Laffin	Hilary Huckins-Weidner
Angela Lai	Ricky Ruihong Li
Daanish Lalani Camille	Emmanuel K. Olunkwa
Lanier	Marco Piscitelli
Alfonso Larrain	
Kassandra Shuen Lee	
Hongyi (Sissi) Li	
Ququ Li	
George Liao	
Jiazhen Lin	
Mario A. Lio	
Thomas James Lord	
Zhixia Lu	
Alexander P Lynch	
Qianyu Ma	
Olivia Dionne McCaughey	
Eshan Mehta	
Daniel Millan	
Tsz Hing Ngai	
Cuong Le Dong Nguyen	
Maoyuan Ni	
Oliver O'Donnell	
Rohan P Parekh	
Gabriel Max Perl	
Nicholas Lincoln Perry	
Luis Miguel Pizano	
Jacob Polachek	
Kylie Mizuki Pond	
Xinyi Qu	
Marc Vance Raiman	
Thi Ratirattananont	
Miller Robinson	
Lavy Rosenthal	
Aaron Sage	



## SCHOOL-WIDE AWARDS

## GSAPP WRITING PRIZE

This prize is given for an outstanding essay, paper, or thesis on the history or theory of architecture written for a class during their time at GSAPP.

Ricky Ruihong Li (CCCCP)

## CAMPBELL AWARD

The University Trustees and the Board of the Columbia Alumni Association (CAA) established The Campbell Award, presented by the CAA to a graduating student at each School who shows exceptional leadership and Columbia spirit as exemplified by the late Bill Campbell, Chair Emeritus, University Trustees, outstanding alumnus, and CAA co-founder.

Caitlyn Campbell (CCCCP)

## GSAPP VISUALIZATION AWARD

This prize is given for innovative use of computing media in architectural or urban research, design, and fabrication.

Maru Perez Benavides (MARCH)

## WILLIAM KINNE FELLOWS TRAVELING PRIZE

These awards are granted on the merit of proposals submitted for travel abroad incorporating the study of architecture, including planning and other specialized aspects of architecture.

*Zaatari Camp & Housing Deterioration in Jordan*  
Abdelrahman Ala Albakri (AAD)

*The Ghostly Presence of Depleted Uranium: War as Waste Land*  
Farah Faris Alkhoury (AAD)

*Red Algae and the Salmon*  
Joel David McCullough (AAD)

*Who Owns the Air*  
Konstantina Marinaki (AAD)

*Equitable Space: Restorative Garden and Therapeutic Workshops for Kids with Cancer*  
Mariami Maghlakelidze (AAD)

*Landscapes of Water: Past, Present, and Future of Water Infrastructure in India*  
Devansh Ajay Mehta (AAD)

*Dhanushkodi: The Aesthetics of Dereliction*  
Anirudh Venkat Bodempudi (AUD)  
Nupur RoyChaudhury (AUD)

*Biopolitical Modernism at the Wholesale Market*  
Nadine Fattaleh (CCCCP)

*Araucaria Stories: On the Natural History of Memory Construction*  
Lucia Galaretto (CCCCP)

*Rethinking the Revolutionary History through New Materials: The Stone Carved Slogans in Bazhong, China*  
Lai Ma (HP)

*Venice Biennale: Time-Space-Existence Living Objects of Finance and Fetish*  
Kylie Mizuki Pond (RED)

*Patterns of Housing Stimulus*  
Mustafa B. Kamil (RED)  
Yeshu Tan (RED)

*Minority on the Border: Integration and Reconfiguration*  
Yuheng Wu (RED)

*Small Town, Global City: Muscatine, Iowa in China*  
Lanier Hagerty (UP)

*Holographic Epistemology: The Emergence of Post Colonial Typologies in Hawaii*  
Matthew A. Brubaker (MARCH)

*Practically Like Someone From the Family: Narratives that Trace Invisible Domestic Spaces in Sao Paulo*  
Alice Fang (MARCH)

*Labor, Leisure, and Wildlife in Fukushima Daiichi after the Nuclear Disaster*  
Jun Ito (MARCH)

*Flood Resilience in Vietnam: Prefabricated Floating Structure for Locals*  
Tung Dinh Nguyen (MARCH)  
Ogheneochuko Vanessa Okor (MARCH)

*Family Across the Border*  
Alina Abouelenin (MARCH)  
Maru Perez Benavides (MARCH)

*Territories of Exchange: Mexico City's Tepito & Barrio Chino*  
Luis Miguel Pizano (MARCH/RED)  
Tianyu Yang (MARCH)

*Let's Have a Kiki: A Social Infrastructure for Black and Queer Individuals Living Within the Margins of New York, Paris, and Cape Town*  
Aleks Tomich (MARCH)

## PRIZES OPEN TO MULTIPLE PROGRAMS

## PERCIVAL AND NAOMI GOODMAN FELLOWSHIP

The purpose of the Percival & Naomi Goodman Fellowship is to enable the recipient to carry out a project of social significance related to the interests of Percival Goodman.

*Toolkit for Resilient Agrarian Futures*  
Nadine Fattaleh (CCCCP)

## MASTER OF ARCHITECTURE

CHARLES McKIM PRIZE FOR EXCELLENCE IN DESIGN/ SAUL KAPLAN TRAVELING FELLOWSHIP

This prize recognizes the student whose work throughout the studios has been outstanding and is funded by a bequest from Saul Kaplan (MARCH '57).  
Jun Ito

AIA HENRY ADAMS MEDAL  
This prize is awarded to the student who has maintained the best general standard in all sequences during the professional course over the past 2-3 years in the School.  
Genevieve Mateyko

ALPHA RHO CHI MEDAL  
This prize is for the student who has shown ability in leadership over the past 2-3 years in the School and who gives promise of professional merit through their attitude and personality.  
Alice Fang

THE EVANS SIMPSON '88 MARCH PRIZE FOR EXCELLENCE IN DESIGN  
The prize is for high quality of work in the design studios during the student's program of studies at Columbia.  
Angela Sun

HONOR AWARD FOR EXCELLENCE IN DESIGN  
This award is for student engagement, leadership, and high academic attainment within design studios in the MARCH Program.  
Alina Abouelenin

HONOR AWARD FOR DESIGN AND TECHNOLOGY  
This prize is awarded to the student who most demonstrates an ability to incorporate building science and technologies into the issues of architectural design.  
Zachary Thomas Bundy

ALI JAWAD MALIK MEMORIAL HISTORY/THEORY HONOR AWARD  
This prize is given in recognition of high quality of work in the history/theory sequence.  
Spenser A. Krut

'EVERY 6' AWARDS  
This non-monetary, student-nominated prize is awarded to the graduating March student whose work questions the standards of architecture and promises to change the profession.  
Camille Jayne Dayupay Esquivel

This non-monetary, student-nominated prize is awarded to the graduating March student whose commitment within studio and the school at large has earned the respect of the student body.  
Elie Zeinoun

LUCILLE SMYSER LOWENFISH MEMORIAL PRIZE  
This award is for the most outstanding student(s) in the final semester design studios (open to the MARCH Program).  
Urechi Oguguo  
Advanced Architecture Studio VI  
Critic: Nina Cooke John

M.S. ADVANCED ARCHITECTURAL DESIGN

WILLIAM WARE PRIZE FOR EXCELLENCE IN DESIGN/ SAUL KAPLAN TRAVELING FELLOWSHIP  
This prize is awarded to recognize the student whose work in the studios has been outstanding and is funded by a bequest from Saul Kaplan (MARCH '57). The prize

is for travel and study following graduation.  
Pabla Amigo

HONOR AWARD FOR EXCELLENCE IN ADVANCED ARCHITECTURAL DESIGN  
This award is for student engagement, leadership, and high academic attainment within design studios in the AAD Program.  
Sarah Hejazin  
Farah Alkhoury

HONOR AWARD FOR ARGUMENTS IN DESIGN  
The prize is for a student whose work has been outstanding in the formulation of agendas and positions—that is, arguments and the way in which they take part in the advancement of architectural design.  
Jerry Zhao

LUCILLE SMYER LOWENFISH MEMORIAL PRIZE  
This award is for the most outstanding student(s) in the final semester design studios.  
Joel McCullough

HONOR AWARD FOR DESIGN AND VISUALIZATION  
This prize is given for innovative use of computing media in architectural or urban research, design, and fabrication.  
Nora Fadil

M.S. ARCHITECTURE AND URBAN DESIGN

GSAPP PRIZE FOR EXCELLENCE IN URBAN DESIGN  
This prize is intended to recognize the student whose work in the Urban Design Program has been most outstanding.  
Yoo Jin Lee

HONOR AWARD FOR EXCELLENCE IN URBAN DESIGN  
This award recognizes the students who have demonstrated significant leadership, service, and commitment to collaboration in the Urban Design Program.  
Zuzanna Jarzyńska  
Ahmed Abdullah Al Yaseen

LUCILLE SMYER LOWENFISH MEMORIAL PRIZE  
This award is for the most outstanding project in the final semester design studios.  
Deep Roots Urbanism

Dhanias Yasmin  
Jil Shah  
Chrysothemis Kouloumenta  
Yoo Jin Lee  
Urban Design Studio  
III: Envisioning the Mississippi as a Living River, Faculty: Kate Orff, Geeta Mehta, Dilip Da Cunha, Adriana Chávez, Justine Holzman

M.S. CRITICAL, CURATORIAL, AND CONCEPTUAL PRACTICES

CCCP PROGRAM AWARD  
This prize is for a significant contribution to the culture of research, practice, and the public sphere within the CCCP Program.  
Lucia Galaretto

HONOR AWARD FOR OUTSTANDING THESIS IN CCCP  
For the thesis that best demonstrates rigorous development of critical, curatorial, and conceptual practices, and the most complementary format or medium in its realization.

*Waters Irresolved*  
Ricky Ruihong Li  
Advisor: Mark Wasiuta

M.S. HISTORIC PRESERVATION

ONERA PRIZE IN HISTORIC PRESERVATION  
This is given to a graduating student from Columbia GSAPP's M.S. Program in Historic Preservation to conduct a project that tests new preservation theories in practice.

*Spatializing Preservation: A New Tool for Understanding Preservation's Role in Urban Histories and Uncertain Futures*  
Katlyn Marie Foster

HONOR AWARD FOR OUTSTANDING THESIS IN HISTORIC PRESERVATION  
For a master's thesis that best demonstrates excellence in the field of Historic Preservation.

*Testing Protective Coatings and their Removal for Outdoor Bronze Statuary*  
Tucker McIntosh Simmons  
Advisor: Amanda Trienens

*Beyond Memorialization: Washington Heights as Case Study for Commemorating Holocaust Refugees*  
Emily Rachel Kahn  
Advisor: Andrew Dolkart

PEER TO PEER AWARD  
This non-monetary, student-nominated award is given in recognition of outstanding service to classmates, faculty, and school.  
Rachel Pietron Ericksen

M.S. REAL ESTATE DEVELOPMENT

HANK BELL ENTREPRENEURIAL AWARD  
This award is for the student that best embodies Professor Emeritus Hank Bell's entrepreneurial spirit.  
Brendan Cavender

HONOR AWARD FOR EXCELLENCE IN REAL ESTATE DEVELOPMENT  
This award is for student participation, leadership, and high academic attainment within the Real Estate Development Program.  
Kelly Connelly  
Patrick Chen  
Kylie Pond  
Michael Adelstein

M.S. URBAN PLANNING

AMERICAN PLANNING ASSOCIATION OUTSTANDING STUDENT AWARD  
This prize is for outstanding attainment in the study of Urban Planning.  
Lanier Hagerty

NEW YORK CHAPTER OF THE AMERICAN PLANNING ASSOCIATION'S AWARD  
This award is for academic excellence and leadership in Urban Planning.  
Priska Marianne

CHARLES ABRAMS THESIS AWARD  
For a thesis that best exemplifies a commitment to social justice.  
*Performative Democracy: Participatory Planning, Co-Optation and the Laundering of State Power in the South Bronx*  
C. Hayes Buchanan  
Advisor: Hiba Bou Akar

HONOR AWARD FOR EXCELLENCE IN URBAN PLANNING  
This award is for student engagement, leadership, and high academic attainment within the Urban Planning Program.  
Geon Woo Lee  
Shinichi Yoshihara

PEER TO PEER AWARD  
This non-monetary, student-nominated award is given in recognition of outstanding service to classmates, faculty, and school.  
Elaine Mingsum Hsieh

The GSAPP Office of Development and Alumni Relations, established in 2005, is dedicated to building a strong framework for alumni communication, collaboration and networking, and to establishing a strong base of support for the school, its students, and its programs.

Leah Cohen  
Associate Dean,  
Development and Alumni  
Relations  
Jillian Barsalou Kincaid  
Director, Development  
Leslie Kuo  
Associate Director,  
Development and Alumni  
Relations  
Esther Turay  
Office Manager,  
Development

The Office of Development and Alumni Relations organizes a regular series of international events that bring together former students from across majors and class years. Highlights from the 2020-2021 academic year include:

#### TUESDAY TALKS

Ongoing  
The GSAPP Alumni Office launched Tuesday Talks in 2020 as a new opportunity for students to connect with the alumni community. The virtual event, hosted twice a month, invites alumni to speak informally with current students about career development.

#### ALUMNI CONVERSATIONS

Ongoing  
The ongoing Alumni Conversations series invites alumni professionals to speak about a current or recent project. The informal conversations are moderated by current students and take place in a small group format.

#### 2021 VIRTUAL REUNION RECEPTION

April 23, 2021  
Columbia GSAPP welcomed alumni from class years ending in '1 and '6 to celebrate their reunion on the Oh Yay! virtual environment. Attendees were invited to say hello and explore GSAPP spaces, including Avery, Buell, Fayerweather, and Schermerhorn Halls, through a digital format.



Left to Right, from Top Left: Rachely Rotem, Amir Kripper, Steven Morales, Roque Viejo and Nikoleta Grigoroudi, Jose Maria Capellán, Klaus Ransmayr, Pablo Baquero, Nancy Psaraki, and Ricardo Bastos at the Global Symposium.



Left to right from top left: Rajiv Fernandez, Aimee Chang, Chelsea Kim, Nasozi Kakembo at the Brand Management Workshop.



Michael K. Chen (left) in conversation with Nash Taylor on February 17, 2021.



## MSAAD CLASS OF 2006

## GLOBAL SYMPOSIUM

April 28, 2021

On the occasion of their 15 Year Reunion, alumni from eleven countries—Australia, Germany, Greece, Haiti, India, Mexico, Portugal, Spain, Taiwan, the United Arab Emirates, and the United States—presented their work during three sessions. Participants included Abdulla Alshamsi, Pablo Baquero, Ricardo Bastos Areias, Amy Campos, Johnny Chiu, Emilio Doporto, Nikoleta Grigoroudi, Adriana Jacir, Luz Jadal Leon, Amir Kripper, Jose Maria Capellán, Steven Morales, Nancy Psaraki, Klaus Ransmayr, Roberta Rojas Aboumrard, Rachely Rotem, Santhosh Shanmugam, Priyamwada Singh, Elliot Spring, Paula Tomisaki, Carmen Trudell, Roque Viejo, and Karl Wadia.

## AVERY WORKSHOP:

## BRAND MANAGEMENT

July 15, 2021

The Avery Workshops is a series of professional development programming that responds to the creative and professional practice of GSAPP graduates. The series is sponsored by the Alumni Programming and Professional Development Committee of the GSAPP Alumni Board. This workshop featured three alumni—Aimee Chang '06 MArch, Rajiv Fernandez '10 MArch, and Nasozi Kakembo '08 MSUP—who lead ventures. The presentations focused on brand management through the lens of cultural stewardship. The conversation was moderated by Chelsea Kim '22 BUS.

## 2020-2021

## GSAPP ALUMNI BOARD

The GSAPP Alumni Board serves as a vital link between GSAPP alumni, Columbia University, professional practice organizations, and current students. The Board's mission is to foster interaction within the entire GSAPP community, increase alumni participation and strengthen engagement, bridge alumni and students, and promote the GSAPP reputation.

Ruth Benjamin '10 MArch  
President

Jennifer Romeo '12 MArch  
Vice President

## BOARD MEMBERS

Hala Abukhodair

'20 MSAUD

Diane Branch

'86 MSHP

Barbara Campagna

'86 MSHP

Angela Cavaluzzi

'86 MSAUD

Cecily King

'15 MSRED

James Kolker

'86 MArch '84 CC

Dominic Leong

'03 MSAAD

Donald Matheson

'03 MSRED

Parul Sharma

'15 MSAUD

Andrea Sreshta

'11 MArch

Peter (Ned) Stoll

'77 MArch '74 CC

Rachel Villalta

'12 MArch

Michelle Young

'12 MSUP

GSAPP alumni are inspiring new directions in the fields of architecture, planning, preservation, urbanism, real estate development, curating, and more. This selection highlights some of their accomplishments during the 2020-2021 academic year.

May 25, 2021

Peter Cook '89 MArch and Faculty Justin Garrett Moore '04 MArch MSAUD appointed by President Biden to the Commission on Fine Arts.



May 7, 2021

Class of 2018 MArch Alumnae Andrea Chiney, Arianna Deane, and Ashley Kuo featured in Cultured Magazine's article "How Designers are Rethinking Spaces for Healing."

April 22, 2021

Professor Mabel O. Wilson '91 MArch elected to the American Academy of Arts and Sciences.

April 15, 2021

Hayes Buchanan '21 MSUP among 12 "Columbia Graduates Taking on the Climate Crisis" featured in *Columbia News*.

April 16, 2021

Faculty Justin Garrett Moore '04 MArch MSAUD and co-founders of AGENCY Ersela Kripa '06 MSAAD and Stephen Mueller '06 MSAAD among American Academy of Arts and Letters' 2021 Architecture Award Recipients.

April 12, 2021

Community Solutions, directed by Rosanne Haggerty '89 MSRED, awarded \$100 Million to end homelessness by the MacArthur Foundation.



April 7, 2021

Lindsey Wikstrom '16 MArch and Galen Pardee '16 MArch publish "100-Year Adaptation Zone" in *Urban Omnibus*.



April 4, 2021

Yasmin Ben Ltaifa '21 MArch, Sushmita Shekar '20 MSAUD, Guillermo Hevia Garcia '20 MSAUD, and Alek Tomich '21 MArch among *Metropolis Magazine's* "Future 100" feature.

April 1, 2021

Cecily King '15 MSRED and Curtis Doucette '12 MSRED featured in *The Washington Post's* article "Black developers call for reckoning in real estate."

March 5, 2021

Ruchika Modi '06 MArch profiled by *Cultured Magazine* in the article "Ruchika Modi is Leveling the Architecture Studio's Playing Field."

March 12, 2021

Faculty Emanuel Admassu '12 MSAAD '13 AAR and Amanda Williams, and Alumni J. Yolande Daniels '90 MArch and Mitch McEwen '06 MArch interviewed by Michael Kimmelman in *New York Times* article "How can Blackness Construct America?"



February, 2021  
"Reconstructions: Architecture and Blackness in America" on view the Museum of Modern Art features work and contributions by GSAPP alumni and faculty.

April 14, 2021  
GSAPP Faculty Bilge Kose and Lisa Kersavage '98 MSHP, Kate Lemos McHale '00 MSHP, Michael Caratzas '02 MSHP, and MaryNell Nolan-Wheatley '08 CC among the team that developed "Preserving Significant Places of Black History" website published by the New York City Landmarks Preservation Commission.



February 2, 2021  
Anacelle Bautista '20 MSRED named 2020 Rising Star by Real Estate Weekly.

February 22, 2021  
Professor Hilary Sample and alumni Karen Fairbanks '87 MARCH, Julie Hiromoto '04 MARCH, Aaron D. Neubert '97 MARCH, James Sanders '82 MARCH, and Pascale Sablan '07 MSAAD elevated to the AIA's 2021 College of Fellows.

January 27, 2021  
Heather Roiter '07 MSUP named Frederick O'Reilly Hayes Prize recipient.

January 26, 2021  
NOMA welcomes Jason Pugh '06 MSAUD as 2021-2022 President and Pascale Sablan '07 MSAAD as President-Elect for 2023-2024.

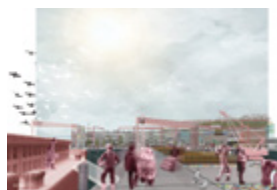
January 25, 2021  
Andrew McCarthy '14 MSRED and Abdo Allam '14 MSRED named "2021 Notable in Real Estate" in *Crain's New York*.



January 4, 2021  
Emma Leigh Macdonald '20 MSCCPC and MSCCPC/MARCH Student Ben Goldner publish "Softening Cultures" in *e-flux Architecture* as part of its Critical Cooking Show series.



December 29, 2020  
Anam Ahmed '20 MSAAD is featured among *Wallpaper Magazine's* "Next Generation 2021" outstanding graduates.



December 11, 2020  
MSAUD Class of 2020 graduates Antonia Medina Abell, Hugo Bovea, Sharvari Raje, and Tal Fuerst win the 2020 AIANY and ASLANY Transportation and Infrastructure Design Excellence Award.

December 11, 2020  
Emanuel Admassu '12 MSAAD, '13 AAR, architect and co-founder partner of AD-WO, appointed Assistant Professor at Columbia GSAPP.

December 10, 2020  
Pascale Sablan '07 MSAAD named 2021 Whitney M. Young Jr. Award.



December 6, 2020  
*PIN-UP Magazine's* Issue 29 includes a special feature on architecture and Blackness in America, featuring interviews with Assistant Professor Emanuel Admassu '12 MSAAD, '13 AAR; Associate Professor Mario Gooden '90 MARCH; Professor Mabel O. Wilson '91 M.Arch; and alumni J. Yolande Daniels '90 MARCH and V. Mitch McEwen '06 M.Arch.

December 3, 2020  
Faculty Justin Garrett Moore '04 MARCH MSAUD named inaugural Program Officer for The Andrew W. Mellon Foundation's effort to bring more voices into public spaces.

October 20, 2020  
Isabelle Kirkham-Lewitt '15 MARCH of CBAC interviewed by Columbia News on "How Architecture Affects the Path to Prison."

October 20, 2020  
Paul Moawad '06 MSRED launches BeBeirut Architects initiative.

October 19, 2020  
Jason Pugh '06 MSAUD is inducted as President of the National Organization of Minority Architects.

October 8, 2020  
Noam Franklin '14 MSRED selected for Globe St's "50 under 40" stars in commercial real estate.

October 5, 2020  
Chris Sharples '90 MARCH and Bill Sharples '94 MARCH interviewed in Fast Company's article about "looking at planes to construct buildings of the future."



September 21, 2020  
GSAPP Alumni Board announces the appointment of Ruth Benjamin '10 MARCH as President and Jennifer Romeo '12 MARCH as Vice President.

September 15, 2020  
Galen Pardee '16 MARCH opens the installation "The Great Lakes Architectural Expon" at OSU's Knowlton School of Architecture.

August 13, 2020  
Sweet Water Foundation, co-founded by Emmanuel Pratt '03 MSAUD, receives a grant from the National Trust for Historic Preservation's African American Cultural Heritage Action Fund for "The Commonwealth Planning Project."

July 30, 2020  
*Metropolis Magazine* features Atelier Office, a new venture by Faculty Amina Blacksher and V. Mitch McEwen '06 M.Arch.

July 28, 2020  
Johnny Din '14 MSRED, Noam Franklin '14 MSRED, Matt Hopkins '10 MSRED, and Olivia Moss '12 MSRED featured as "Rising Stars in Real Estate" in *Crain's New York*.

Columbia University GSAPP  
Abstract 2021

This book is typeset  
with fonts from the  
GT America and GT Alpina  
font families.

Abstract 2021 has been  
produced through the  
Office of the Dean,  
Amale Andraos. The  
student work archive,  
containing documentation  
of projects selected by  
faculty as the conclusion  
of each semester, is  
utilized in the making  
of Abstract.

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Published by the  
Graduate School of  
Architecture, Planning  
and Preservation  
Columbia University  
New York, NY 10027

Editor  
Shannon Werle

Assistant Editors  
Paige Chandler  
Cheng Ju Lee

Photographer  
Adela Locsin

Art Direction  
and Book Design  
Maricris Herrera  
Andrea Volcán  
@ Estudio Herrera

Printing  
die Keure, Belgium

ISBN  
978-1-941332-76-4

Specifications  
Edition of 1000

Dimensions  
450 × 255 mm

Materials & Ink

Paper  
Munken Print 100 g  
Creator Star 135 g  
Eural Offset 100 g  
Invercote G 200 g

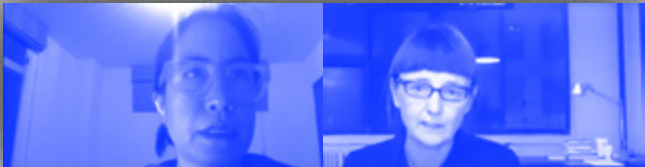
Ink  
Interior  
4/4 (CMYK)

Cover  
Foil 1/1 C

Shrink Wrap  
1/1 C







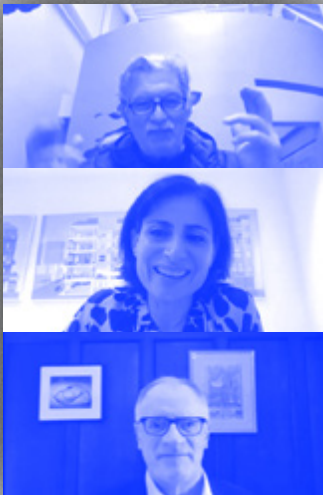
(12) Ana María León,  
Felicity Scott



(13) Amale Andraos,  
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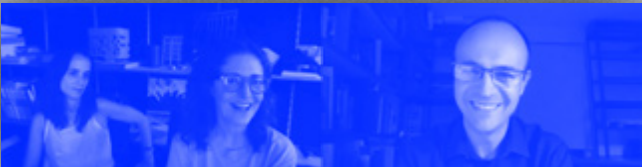
(16) Ekene Ijeoma,  
Amina Blacksher



(17) Edward Mazria,  
Amale Andraos,  
Alex Halliday

(18) Gabrielle Bullock,  
Juan Herreros





(14) Paula Velasco,  
Cecilia Puga,  
Jorge Otero-Pailos



(15) Francis Kéré,  
Amale Andraos



(19) Mabel O. Wilson,  
Amale Andraos



(20) Fonna Forman,  
Teddy Cruz,  
Lola Ben-Alon

