

VICTORIA SHAY

M.S. ADVANCED ARCHITECTURAL DESIGN 2023
COLUMBIA UNIVERSITY GSAPP PORTFOLIO

CONTENTS

GSAPP ADVANCED ARCHITECTURE STUDIO VI

The Echo 04

GSAPP ADVANCED ARCHITECTURE STUDIO IV

(Un)Fortify 28

RESEARCH POSITION PAPER: BODIES + PUBLIC SPACES

For Women, By Women 42

GSAPP COMMON CIRCLE: LEXICON PUBLICATION

Place of Belonging 56

GSAPP ADVANCED ARCHITECTURE STUDIO V

East New York:
Community Agro-Puncture 18

ARCHITECTURAL PHOTOGRAPHY: FROM MODELS TO BUILT WORLD

Image Making 38

RESEARCH ART INSTALLATION: IF BUILDINGS COULD TALK...

Shattering The Bridge 48

STRATEGIZING STOREFRONT FOR ART AND ARCHITECTURE:

Strategizing Storefront's Next Decade of Design 58

01 The Echo: Deconstructing the Nonexistent Brooklyn Museum

Studio VI: The Institutions We Need II
Decolonizing the Museums (of New York)

Semester 3 | Spring 2023

Site: Brooklyn Museum

Brooklyn, New York

Instructor: Juan Herreros

Team: Victoria Shay, Eleanor Birle, Cemre Tokat

The Echo rethinks and redesigns the Brooklyn Museum in response to current concerns. Embracing a radical transformation of its current museographical program in an effort to localize the institute in its time and place. Our site, The Brooklyn Museum, is situated amidst Brooklyn's dense greenery and intersects the vibrant residential and culturally diverse Prospect Heights and Crown Heights neighborhoods. The museum along with the public library and the botanic gardens are all situated within Prospect Park creating a civic hub of cultural programs intended to serve the surrounding community.

The proposed museum challenges the current building form and existing mission statement, which prides itself on showcasing, engaging, and including local Brooklyn... raising the question: what makes the Brooklyn Museum, THE Brooklyn Museum.

The Echo deconstructs the unbuilt historic plan, creating a new structural framework to hold a variety of spaces and removing the contemporary entry pavilion and ground floor, which allows for a fluid entryway from the neighborhood to the park. The structural verticality of the historic plan becomes a new framework system, maintaining the axial entry of the proposed building. This framework nests a series of walkways and platforms for interaction with both art and nature. The proposal emphasizes the Brooklyn Museum as an opportunistic intersection between Prospect Heights neighborhood and Prospect Park/Botanical Garden to rewrite the historical construction systems and reimagine the traditional museum experience.

Completing the fragment of the historic building through lightweight and accessible construction methods and increased integration with the natural and localized surroundings dissolves the formerly impermeable and monumental building, creating an exchange between the surroundings and the museum.



Position Drawing completing fragment of the historic building through lightweight and accessible construction methods that increases integration with natural and localized surroundings

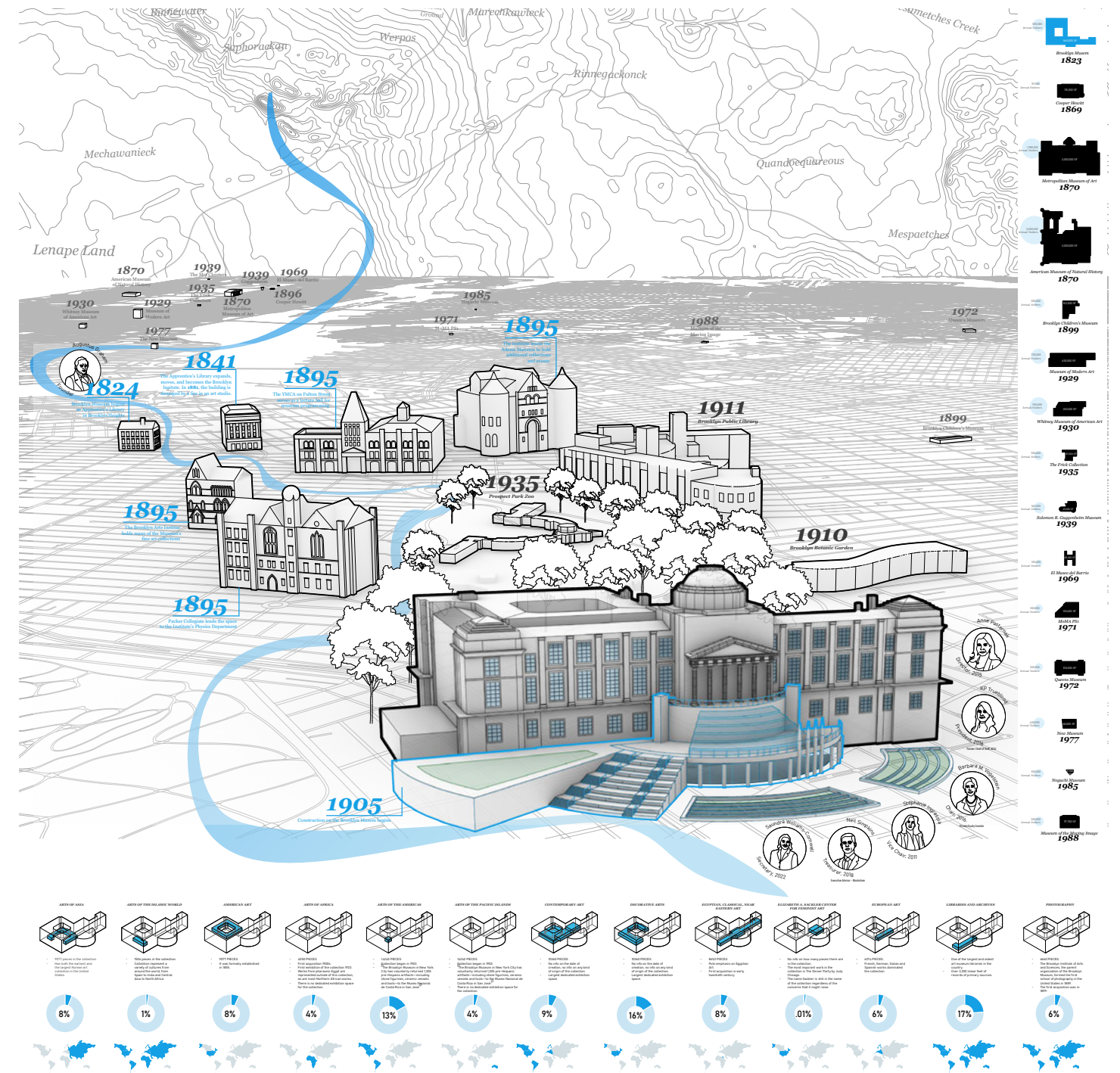


Right: Axon exhibits the framework that nests a series of walkways and platforms for interaction with both art and nature.

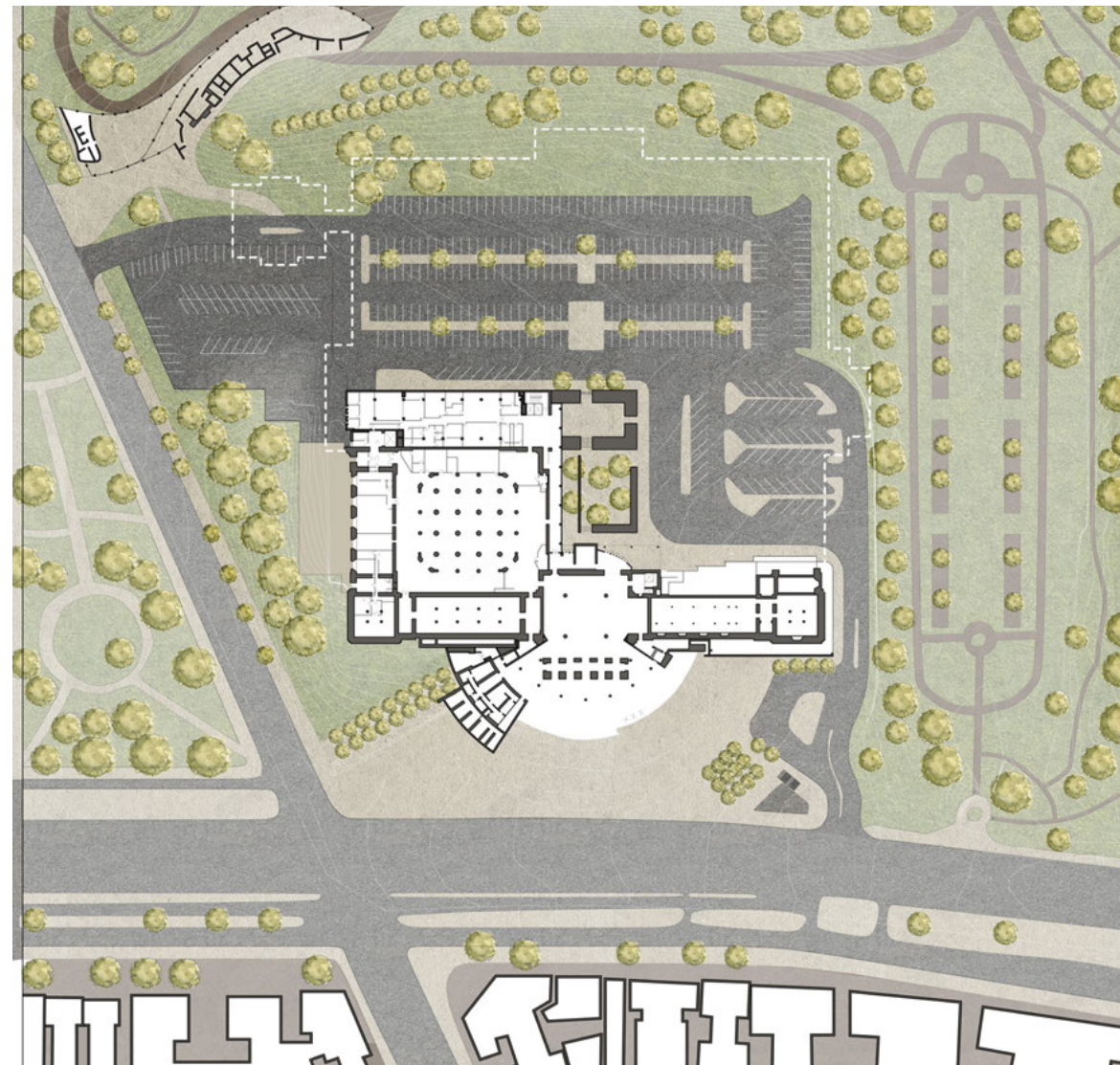
Our proposal emphasizes the Brooklyn Museum as an opportunistic inter-section between Prospect Heights neighborhood and Prospect Park/Botanical Garden to rewrite the historical construction systems and reimagine the traditional museum experience. The building will act as a door to the park that aesthetically and programmatically represents the people, the history, the nature, and the creativity of Brooklyn... making the museum THE Brooklyn Museum that is localized.



Nolli Plan of Brooklyn Museum site contextualized to Prospect Park, Botanical Garden, and residential neighborhoods of Prospect Heights and Crown Heights



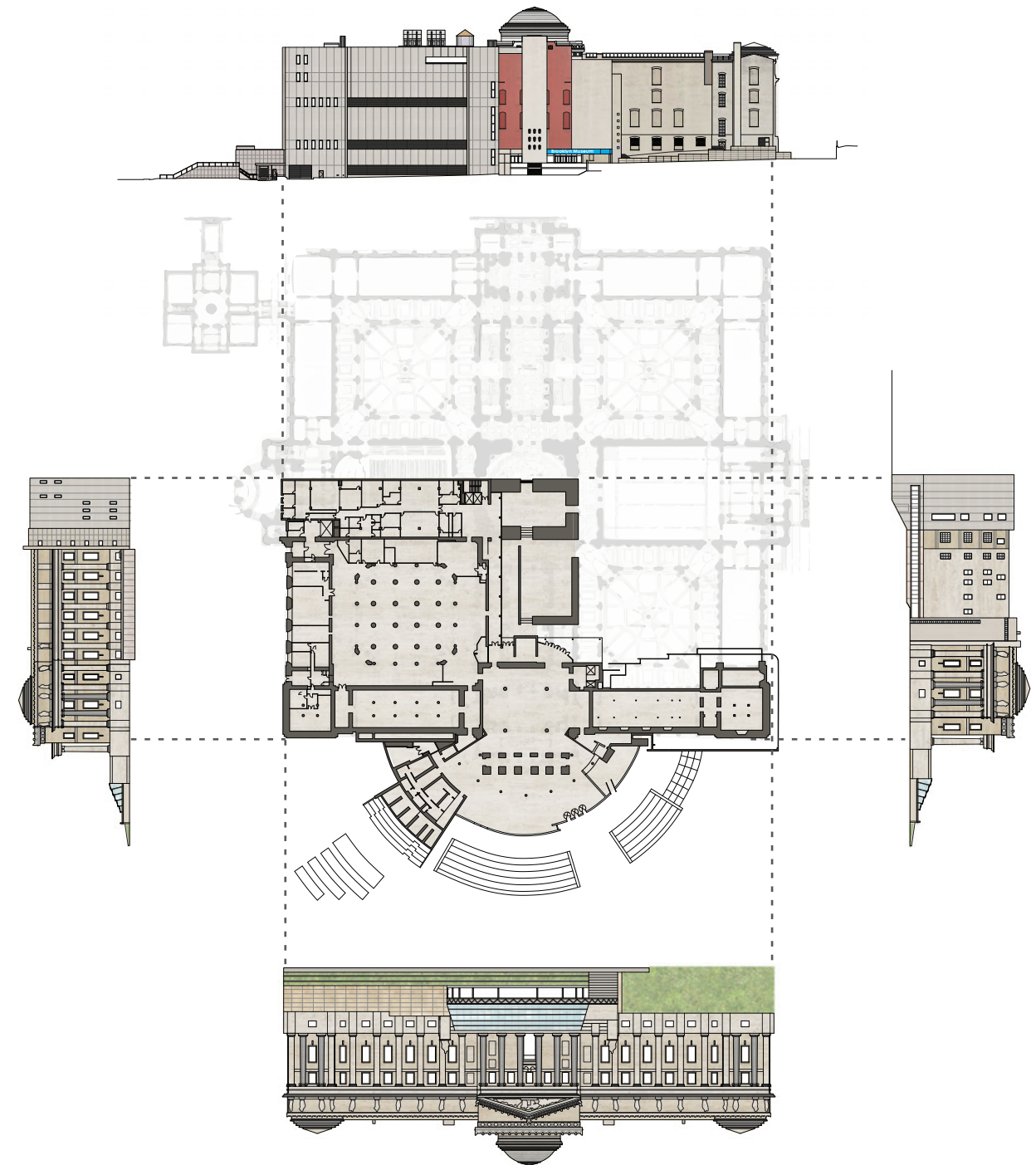
The building's formal evolution, localized history, exhibited collection information and global relationship, leadership, and comparative museum building size



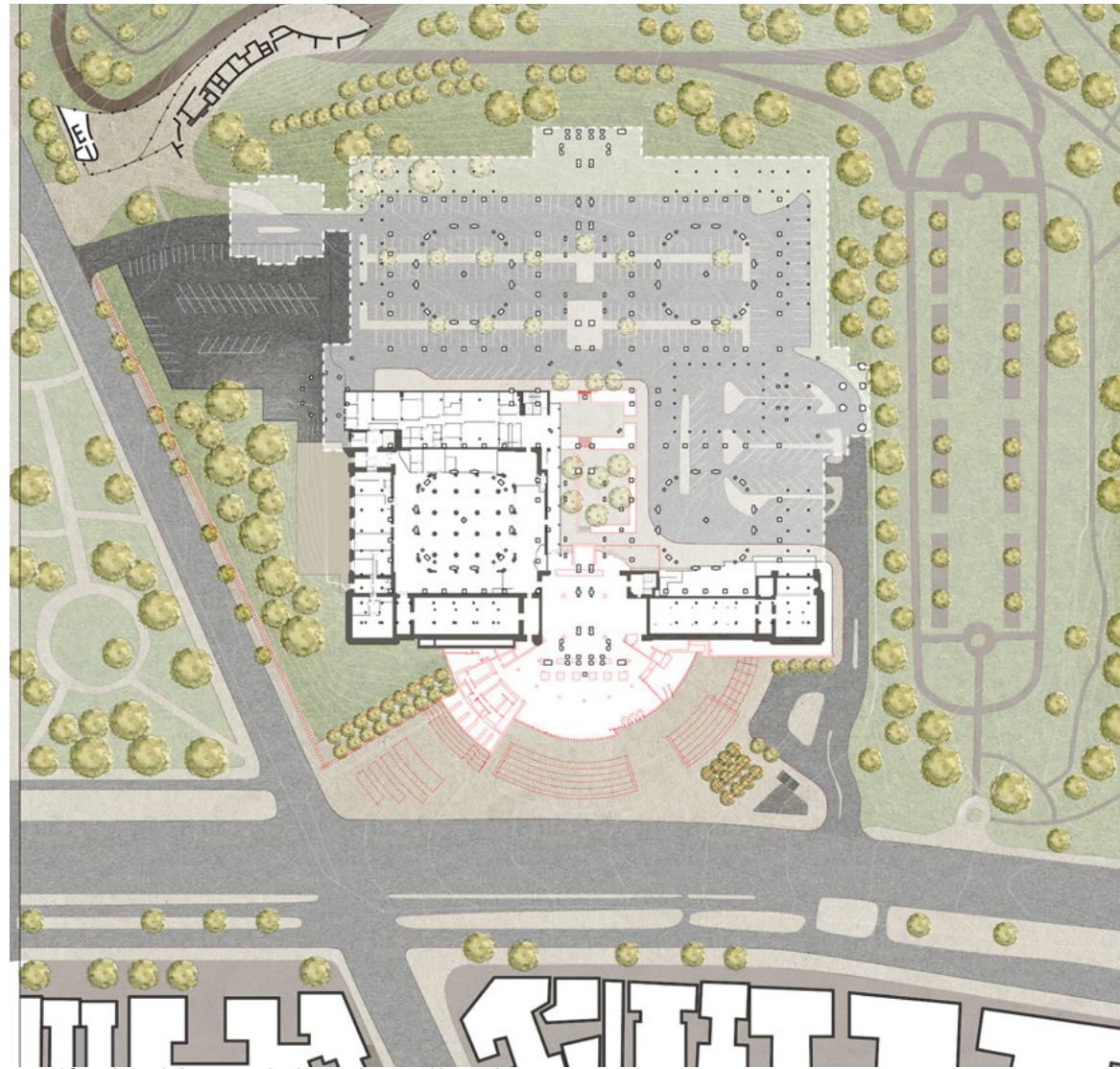
Existing ground floor plan emphasizes museum's disconnect from community



Existing transversal section indicates building situated between two expanses of asphalt, eastern parkway and a large parking lot



The unfinished nature of the footprint is legible in the existing facades. The back and side of the building are left unfinished, with bricked-over windows and a solid appearance. Over time, fire stairs and freight elevators have been stuck onto the back facade which faces the park, creating an increasingly opaque and impermeable facade



Ground floor plan with demonstrated architectural moves addressing historic unconstructed plan, existing building form, and contemporary front addition

The unfinished nature of the footprint is legible in the existing facades. The back and side of the building are left unfinished, with bricked-over windows and a solid appearance. Over time, fire stairs and freight elevators have been stuck onto the back facade which faces the park, creating an increasingly opaque and impermeable facade

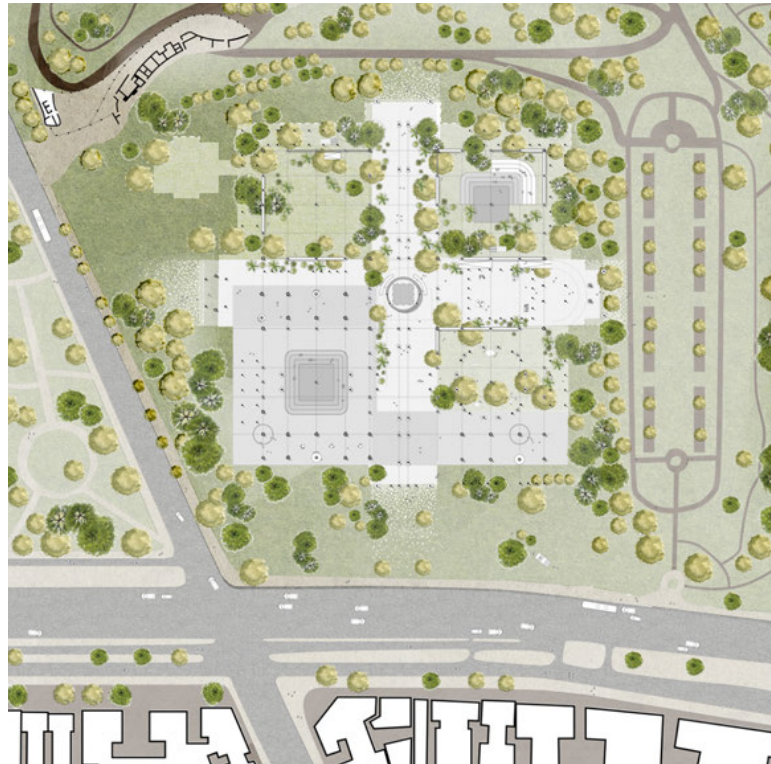


The Echo syntax perspective showing the nature of our proposal's architectural language

Developed a design language from our architectural critic of the existing conditions and boundaries. The historic understanding of the structural composition rewrites the programmatic contextual relationship and spatial form to create unexpected sectional experiences. The syntax introduces nature, art, and contemporary geometries into the unbuilt building's classical grid plan, dissolving the monumentality of the historic facade to create a balance of the natural and the artificial.



Proposed roof plan; series of platforms, walkways, stairs and ramps echo the multiple domes proposed for the unbuilt building, and structural form of the original grid plan



Proposed ground floor plan; long axial walkways, multiple entrances facing park and neighborhood, and changes to the ground plane echo of the footprint of the unbuilt building



Compiled collage; spaces house selective pieces from the museum's collection and storage, becoming a living archive. Spaces for performance, play, observatories, and cafes are nested between structure, circulation, and nature.



Proposed transversal section; completes the fragment by removing hierarchy from the one remaining entrance of the historic building and becomes a transitional space between park, neighborhood, and museum



Proposed longitudinal section; allows people and nature to move through space freely, encouraging chance encounters that blurs the boundary between museum, neighborhood, and park.



Moment 3; Dissolves traditional gallery spaces with material gradient between historic building and park to introduce contemporary lightness, delicacy, and fragility



Moment 2; embraces experimental wayfinding, decentralizing the visit that allows natural relationships between neighbors and art



Moment 1; sunken courtyard space houses art and nature while acting as a meeting and performance space

02 East New York: Community Agro-Puncture

Studio V: Accessibility

Semester 2 | Fall 2022

Site: Vacant Lots of East New York

East New York, NY

Instructor: Laura Gonzalez Fierro

Team: Victoria Shay and Thanapon Wongsanguan

East New York Community Agro-Puncture designs a network of care as an urban initiative to revitalize this industrial neighborhood. The network is driven by the Accessibility Index principles – culture, public services, and nature. It's centered around how fresh local food and the activities around it bring people together and support a community.

The project proposes to blur the boundary between residential and industrial zones through a localized network of 40 lots throughout East New York. These sites include community gardens, vacant lots, and school bus parking lots. The different nature of these sites enable designed systems that respond to each site zone with a different level of care through a series of permanent, semi-permanent, and temporary architectural prototypes. It's a network of food production, celebration, and consumption where urban agriculture and public space intersect.

Permanent: reinvent existing community gardens; vertical growing facilities of passive and low-tech aquaponic systems that produce food year-round.

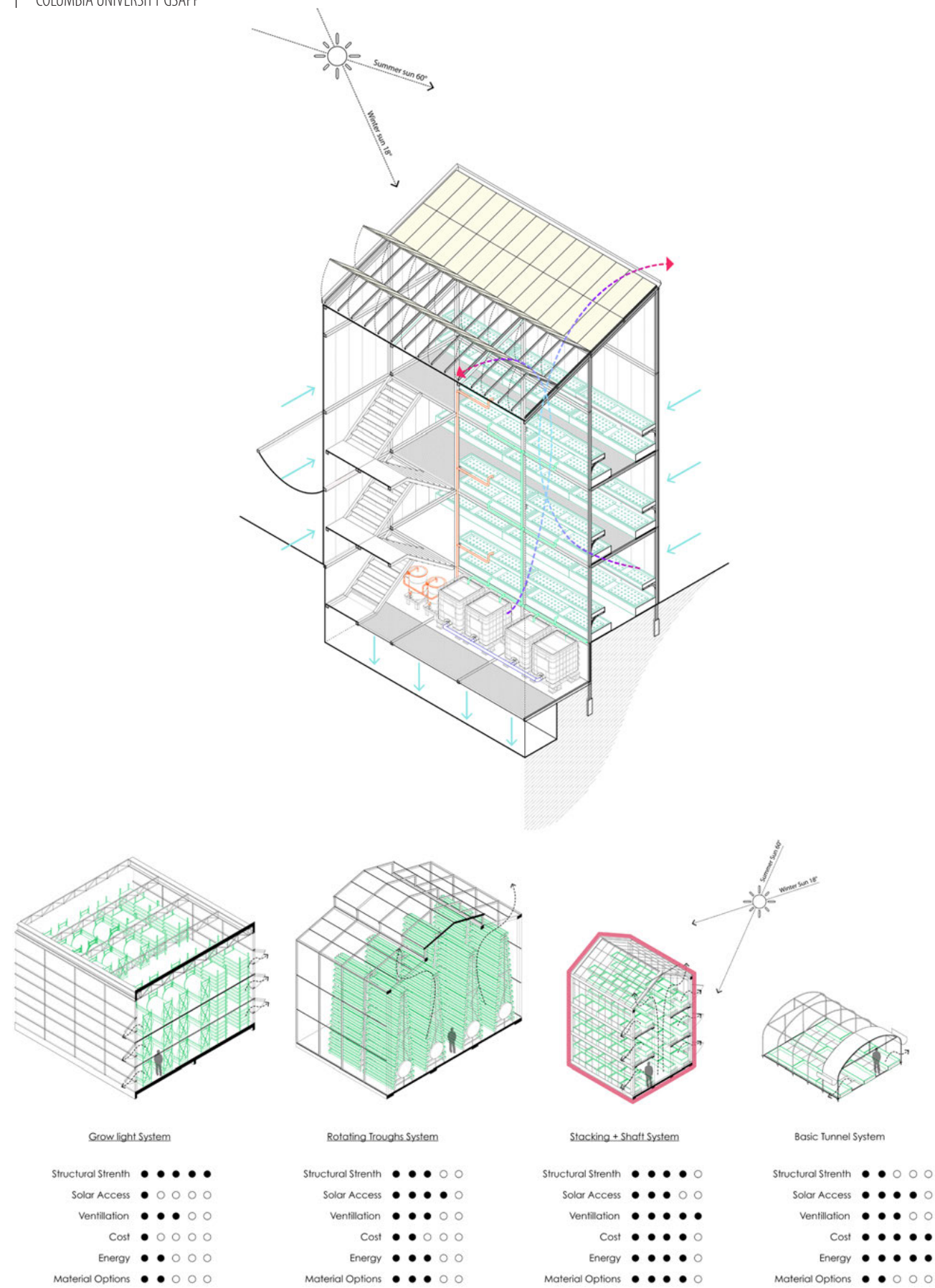
Semi-Permanent: redevelop existing vacant lots; cultural spaces, entertainment, and seed banks to improve the streetscape and community relations.

Temporary: revitalize large vacant school bus parking lots during the day; twice a week market to improve local fresh food options for the industrial zone workers and incentivize local economy.

Agro-puncture is about the community— for the people, by the people of East New York!



Temporary architectural prototype: temporary day markets intervention of school bus parking lot vacant lot

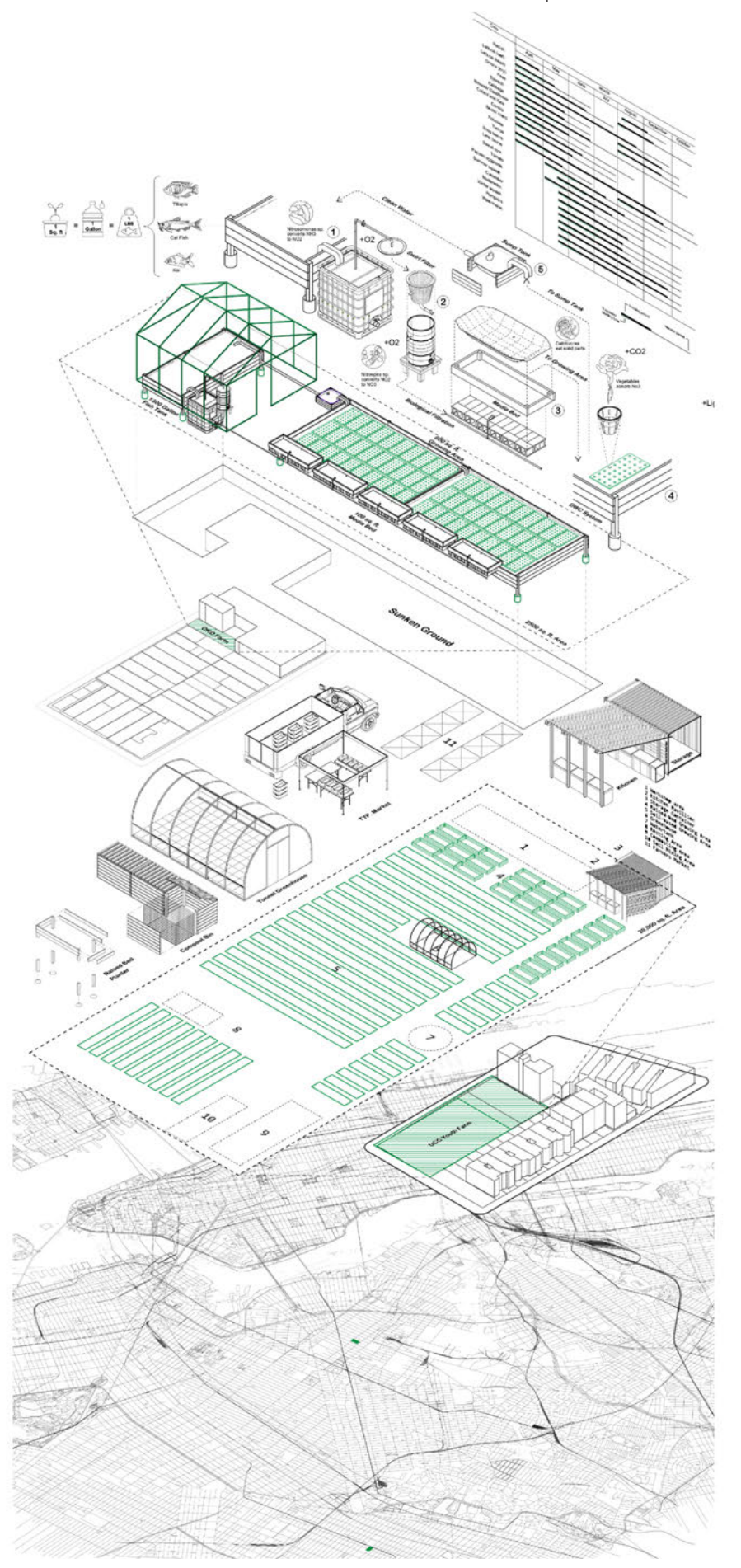


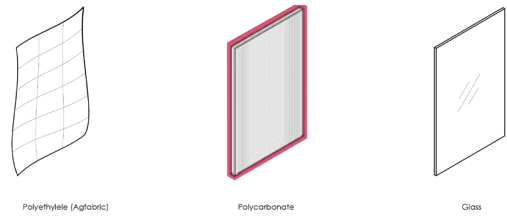
Typological exploration of common vertical farming greenhouse from active high-tech system to the more passive and more affordable options.

Precedent urban farming research diagram analysis.

Oko Farm is the largest aquaponic farm in ENY -- use low-tech approach towards system designs with standardized low-cost and accessible materials. Also utilize passive systems with soil as natural insulation against colder temperature by having some portion of the tanks and planters sunken below ground level. This is built by a small group of volunteers and Oko also offers workshops for the public during the day.

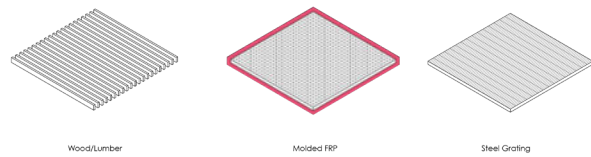
UCC Farm is the largest agricultural site in ENY -- traditional soil-based system that requires vast horizontal site, which has large workshop and community kitchen and organizes weekly farmers markets that extend along the street right next to the site.





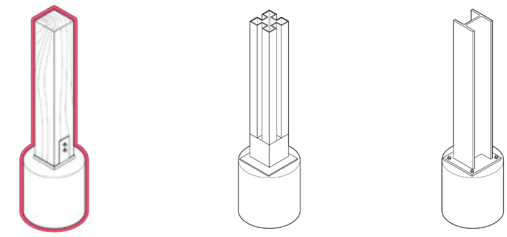
Material	Cost Efficiency	Weight	Strength	Durability	Recyclability	Light Permeability
Polyethylene (Agfabric)	●●●●●	○●○○○	●●○○○	●●○○○	●●○○○	●●●●●
Polycarbonate	●●●●○	●●○○○	●●●●○	●●●●○	●●○○○	●●●●○
Glass	●●○○○	○●○○○	●●●●●	●●●●●	●●○○○	○●○○○

Covering — efficient thermal envelop, Polycarbonate is a balanced option between polyethylene fabric and glass that also provides a yearly and regulating thermal envelop and visually permeable wall



Material	Cost Efficiency	Weight	Strength	Durability	Recyclability	Light Permeability
Wood/Lumber	●●●●●	○●○○○	●●○○○	●●○○○	●●○○○	●●●●●
Molded FRP	●●●●○	○●○○○	●●●●○	●●●●○	●●○○○	●●●●○
Steel Grating	●●●●○	○●○○○	●●●●●	●●●●●	●●○○○	○●○○○

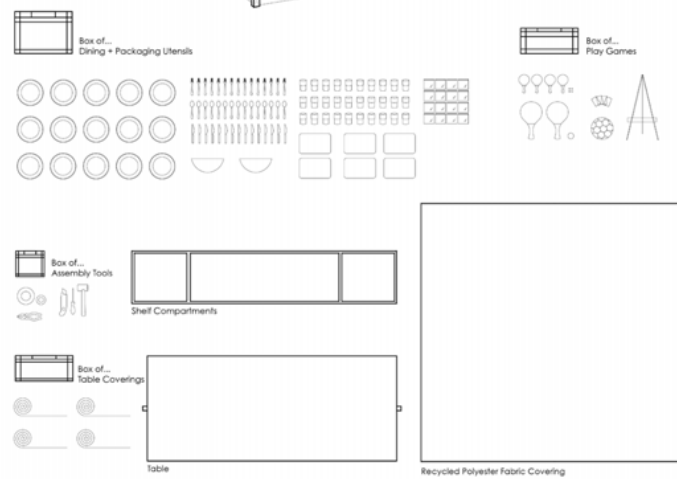
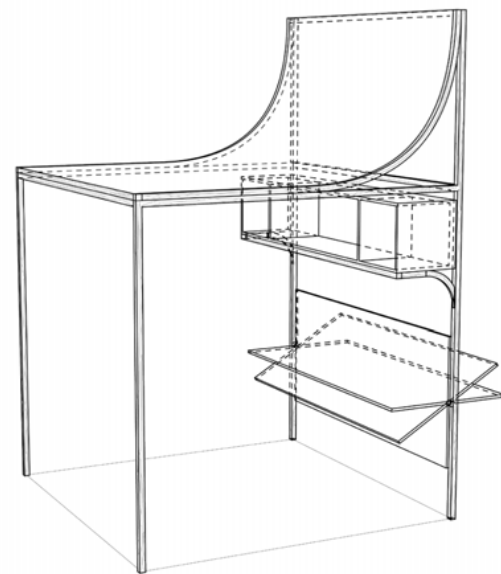
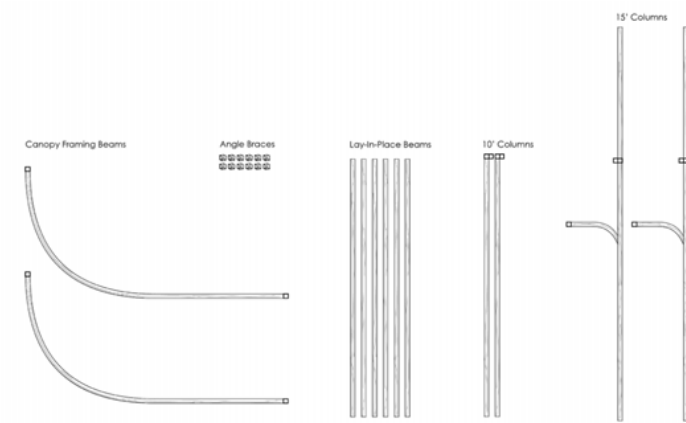
Decking — FRP plastic polymer decking is much lighter but still providing all the advantages of steel and allow light to access, especially when it comes to stacking vertical growing and production spaces in a compact area



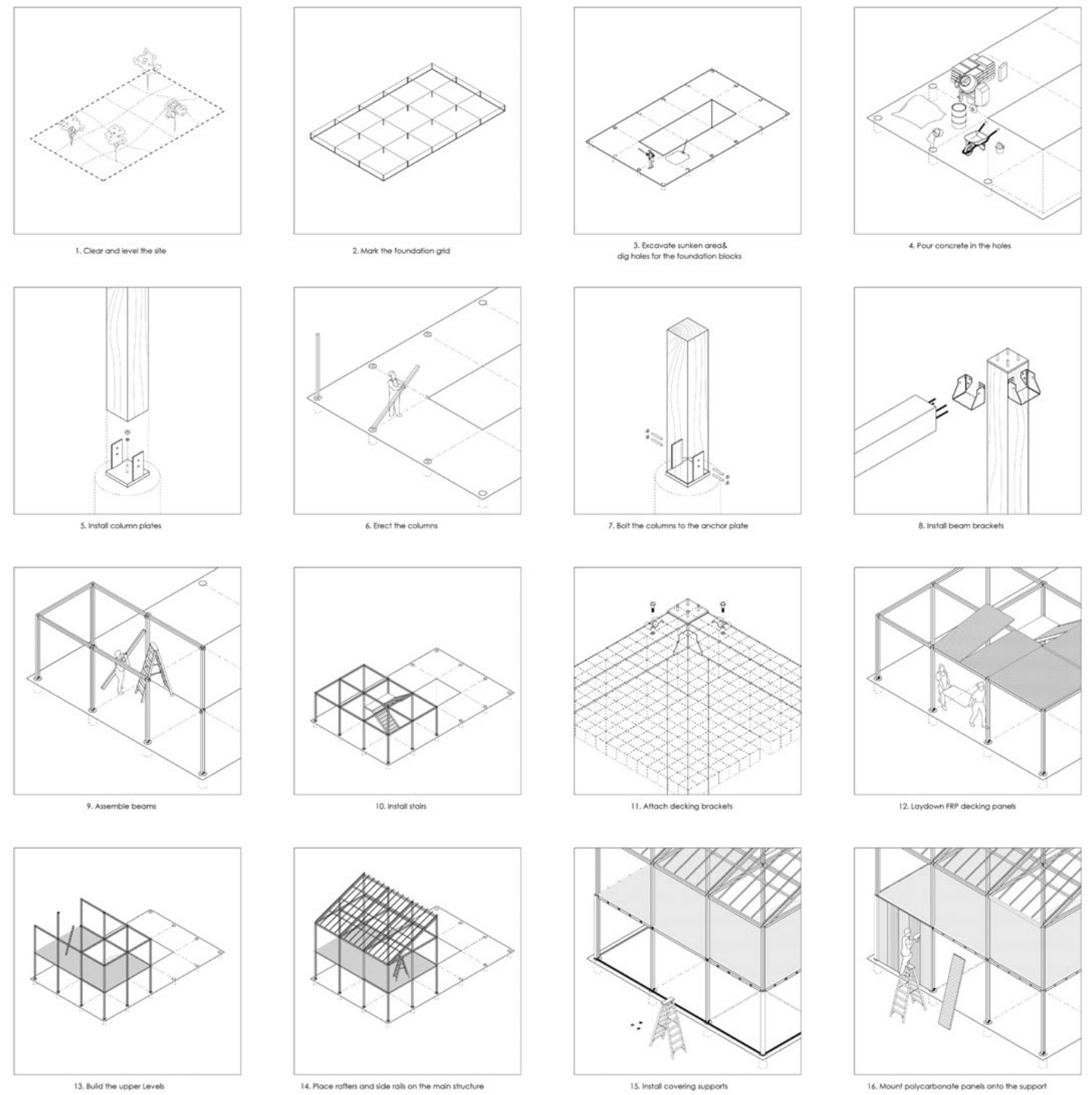
Material	Cost Efficiency	Weight	Strength	Durability	Recyclability
Wood/Lumber	●●●●●	○●○○○	●●○○○	●●○○○	●●○○○
Extruded Aluminum	●●●●○	○●○○○	●●●●○	●●●●○	●●○○○
Galvanized Steel	●●●●○	○●○○○	●●●●●	●●●●●	●●○○○

Structure — scaffolding typology, Wood is the most cost effective, durable, and manageable weight that also relates to the surrounding urban context and values.

Material Research: material comparisons for the context of ENY- in terms of cost efficiency, weight, durability, and affordability

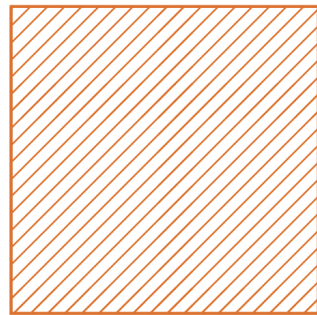


Parts of Kit assembly of the temporary markets

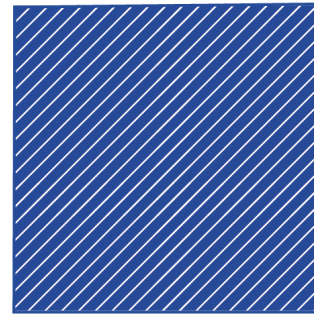


Assembly guide of the structure to show how it could be built by the community volunteers

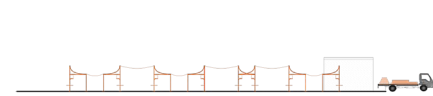
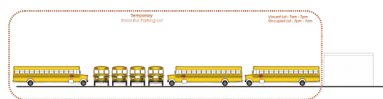
TEMPORARY ARCHITECTURE



SEMI-PERMANENT ARCHITECTURE



PERMANENT ARCHITECTURE



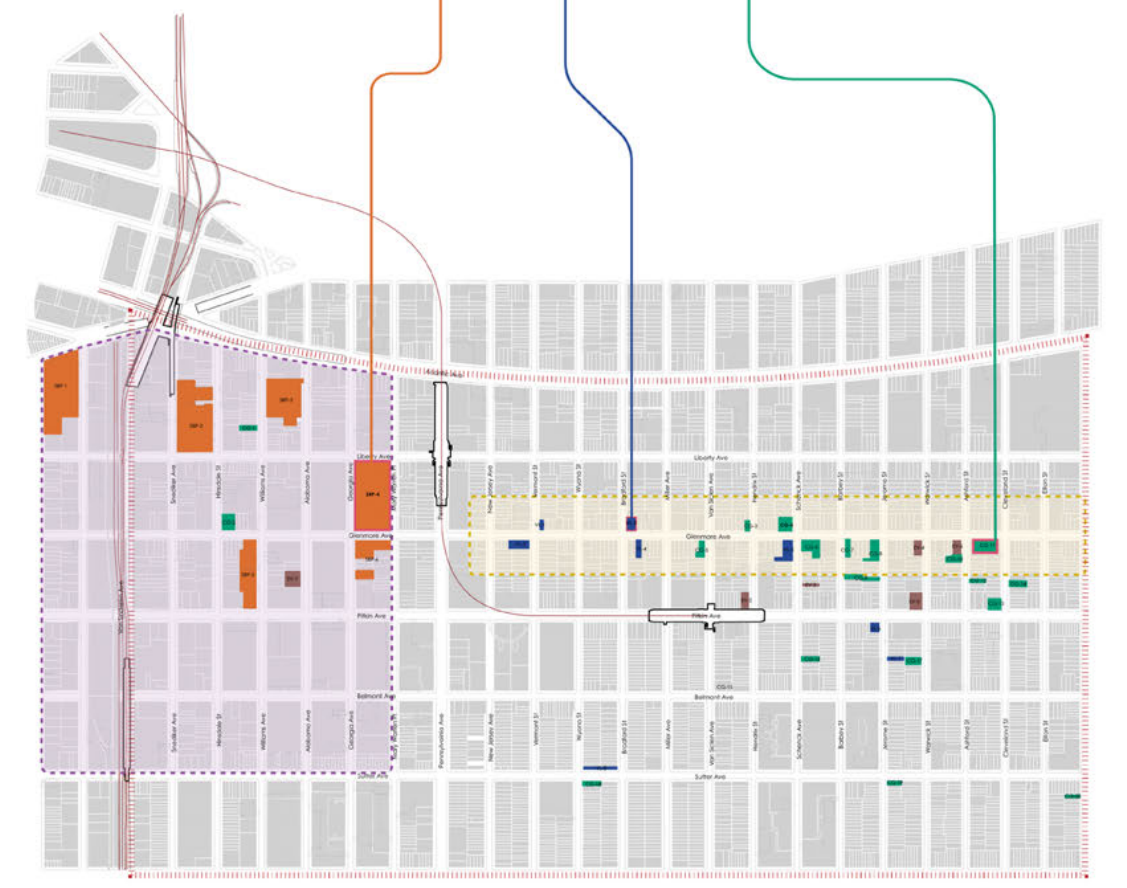
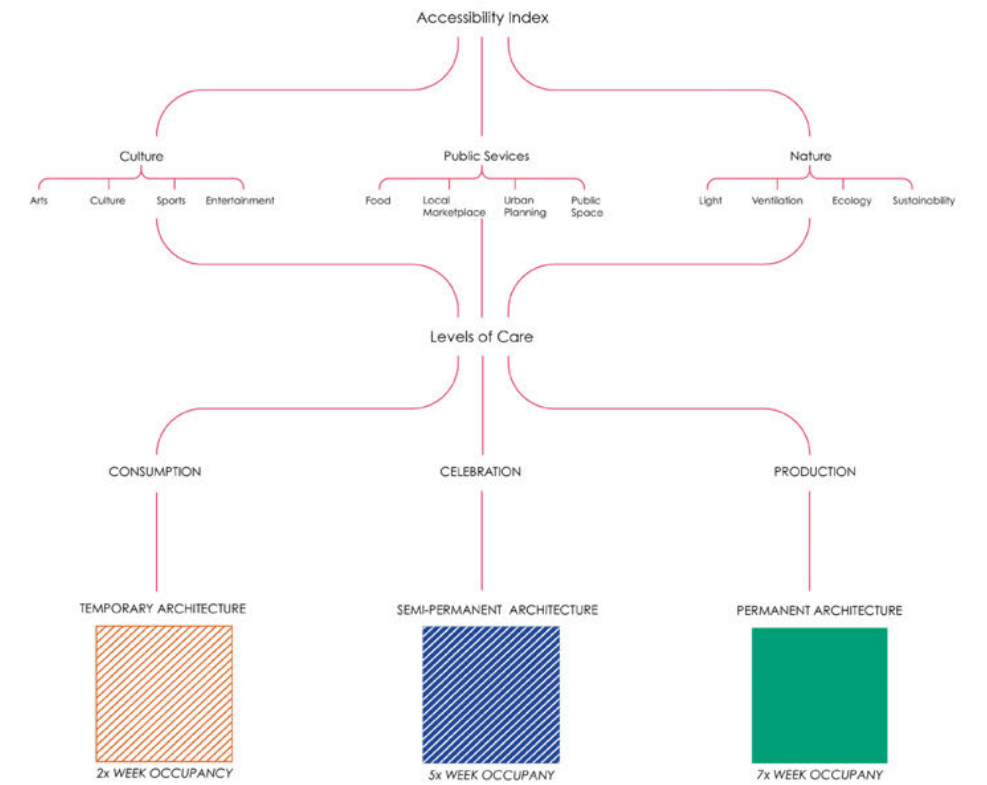
Temporary Architecture Prototype Physical Model



Semi-Permanent Architecture Prototype Physical Model



Permanent Architecture Prototype Physical Model



- East New York City Limit
- Industrial Business Zone
- Residential Zone
- Subway
- School Bus Parking Lots
- Vacant Lots
- Extra Vacant Lots
- Community Gardens
- Network of Care: ENY Agro-Puncture Sites



Permanent rendered reinvigorated community garden vertical urban farming



Semi-Permanent rendered activated spaces that reengages the street scape and community relations



Unfolded drawing of ENY Agro-Puncture network of care

03 (Un)Fortify

Studio IV: And(Also)

Semester 1 | Summer 2022

Site: Pier 57 and St. John's Terminal

Chelsea, New York

Instructor: Karla Rothstein

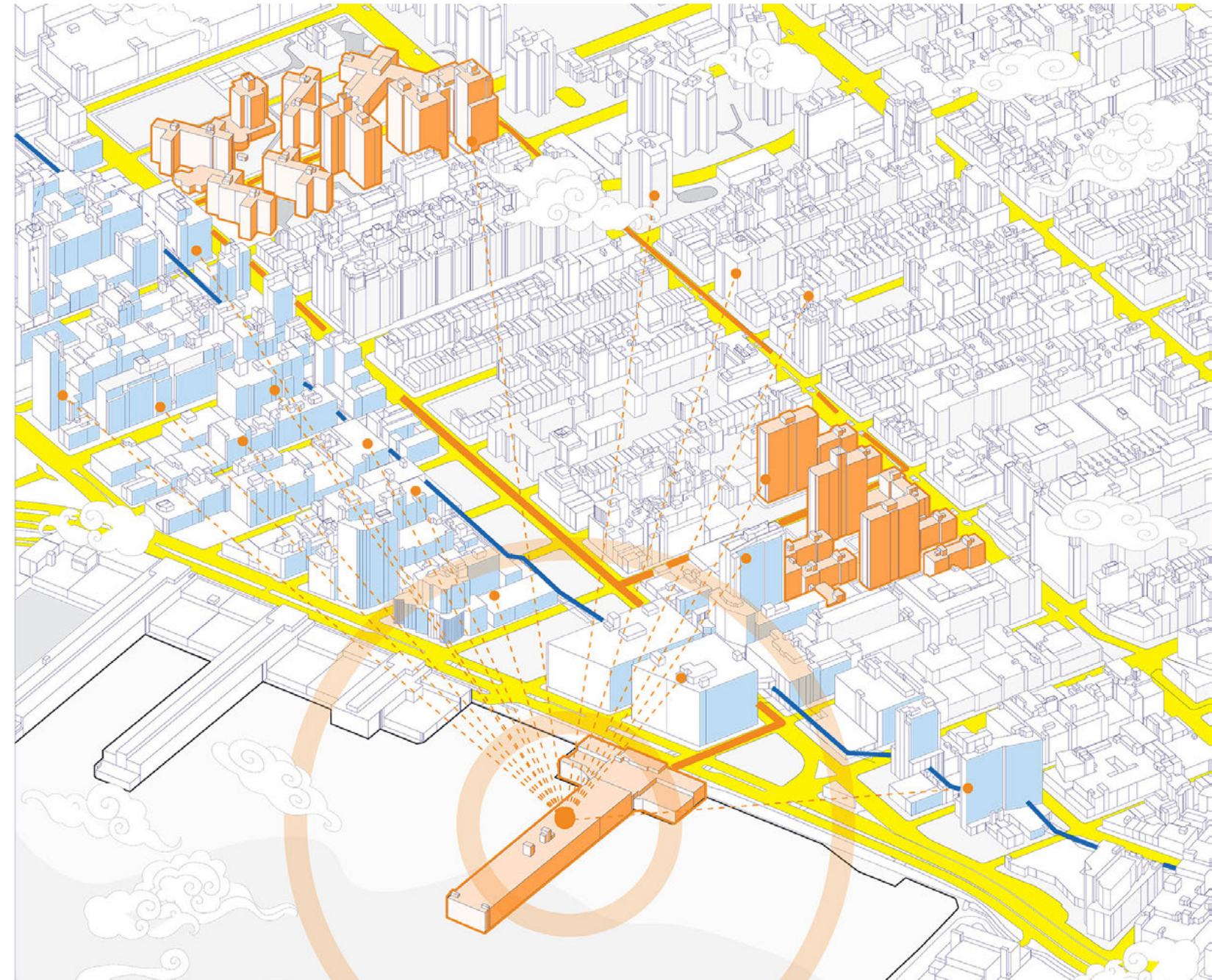
Team: Victoria Shay, Zhikang Liu, Syed Haseeb Amjad

Segregation among Chelsea neighborhood residents, caused by gentrification over the last decade, is particularly evident for the inhabitants of Chelsea-Elliott and Fulton public housing. Contemporary developments like the Highline and luxury residential buildings have catalyzed the widening of the income gap. The cost of living is increasing and the environment is becoming nearly exclusively higher income.

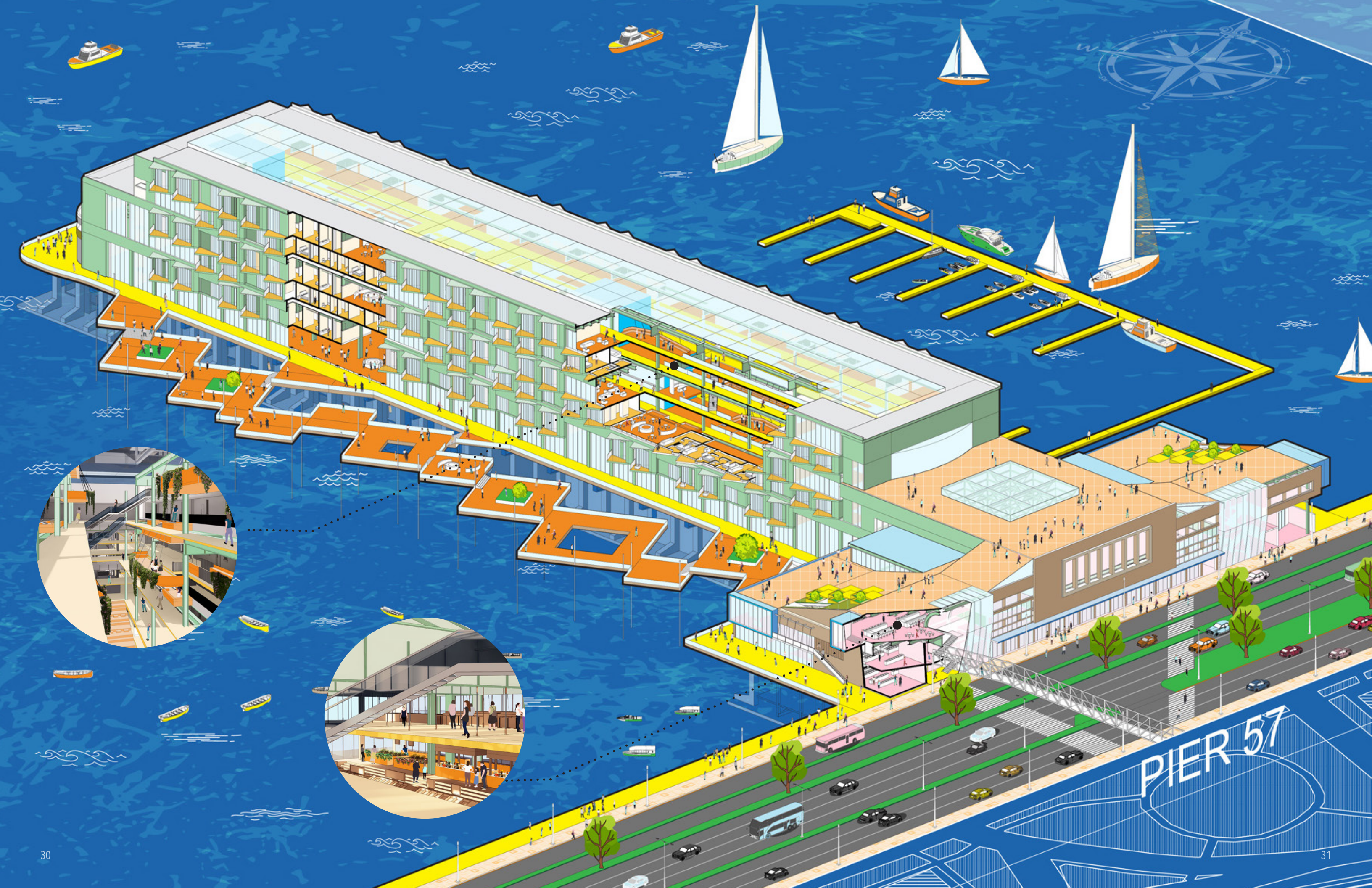
Before urban renewal, West Chelsea was home to immigrants and middle-class working families. While around 255,000 New York families are currently on NYCHA's waitlist, major tech companies such as Google own premium real estate in lower Manhattan, of which 18% currently lies vacant. With the shift to remote working, this significant empty space can be repurposed to create public housing and help resolve the city's growing housing crisis.

Pier 57, currently occupied by Google, stands in isolation from the rest of the city with internalized operations that provide neither inclusive dialogue with the environment nor the public.

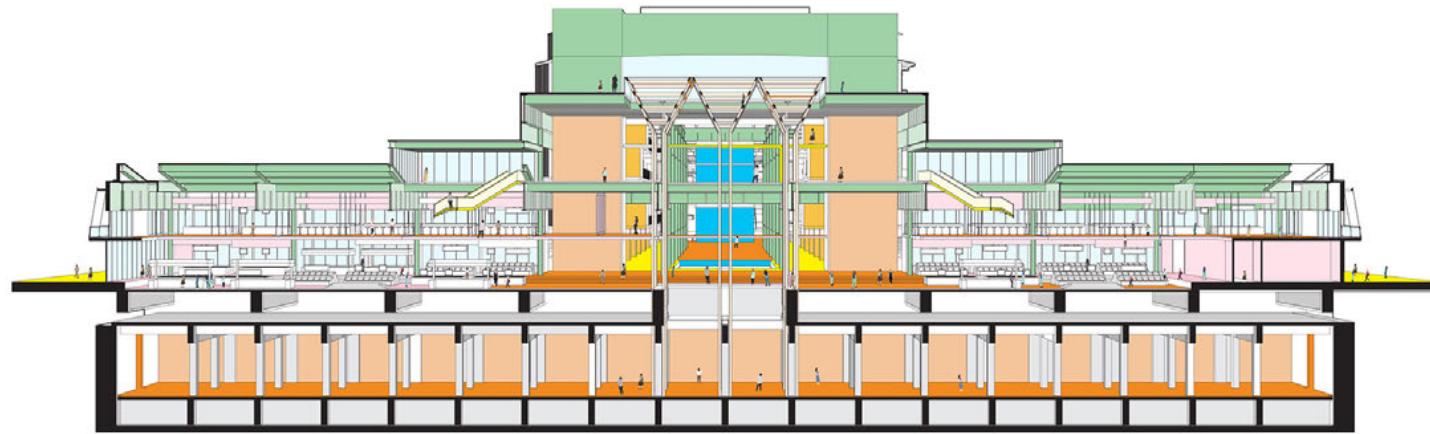
This situation requires reimagining the pier as the site for new affordable social housing that relieves the housing deficit through radical intervention. A dynamic network of public amenities, housing, and gathering spaces with curated visual and physical connections will add more civility to the neighborhood.



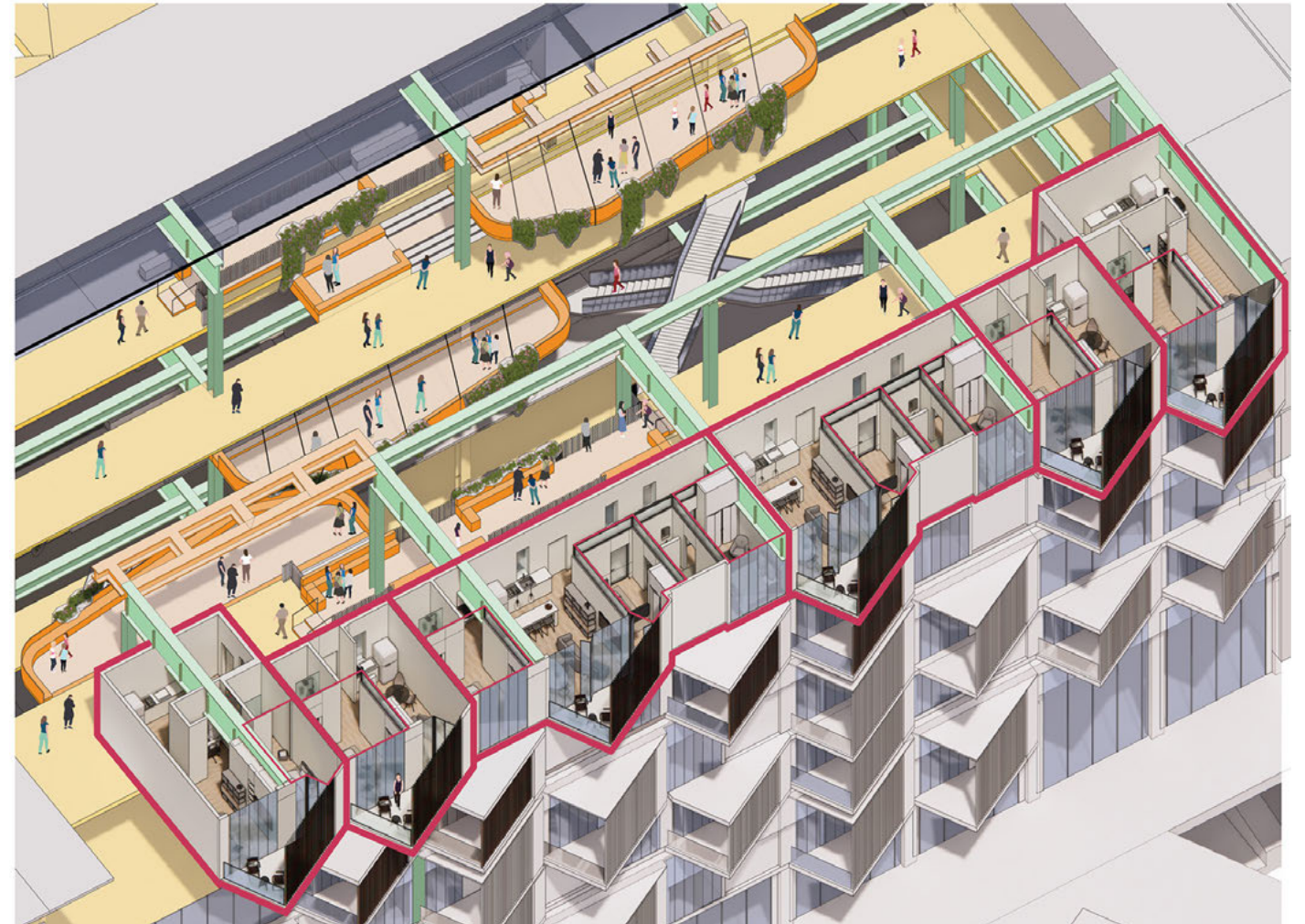
Position Drawing of Chelsea gentrification issue linked to New York real estate



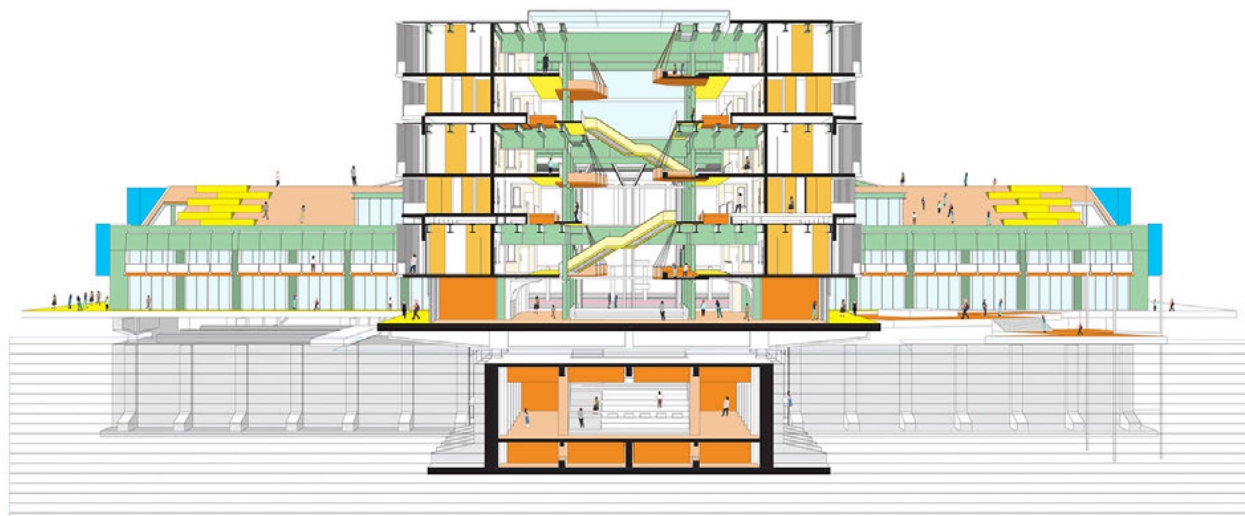
Eligible Income Levels by Household size



Longitudinal section showing public amenities and interior-exterior connections that renegotiate boundaries



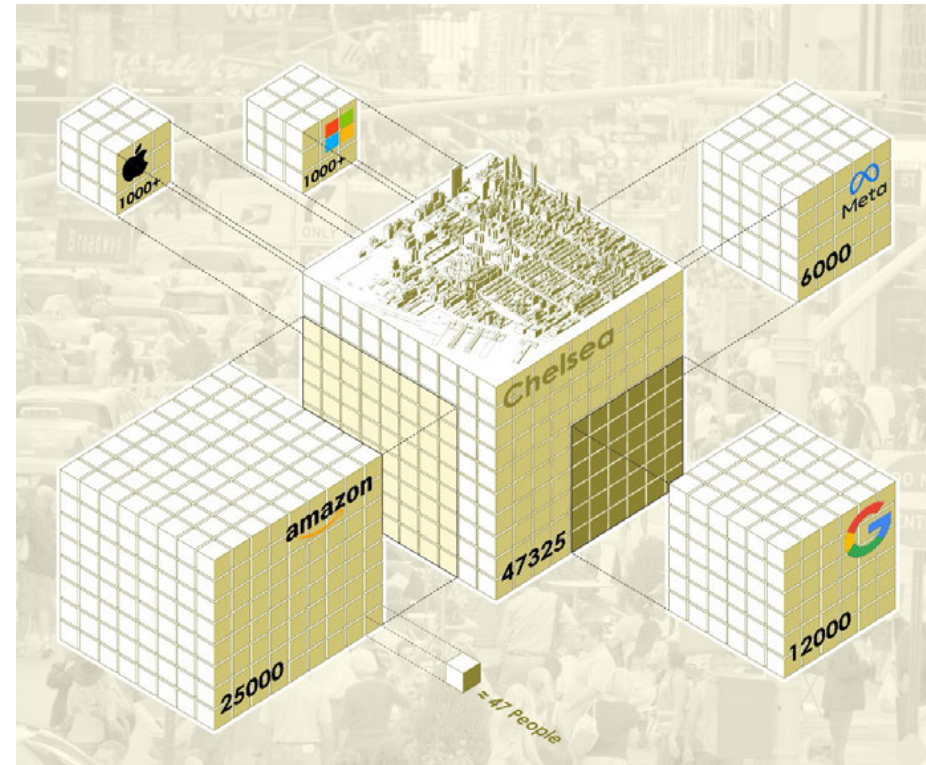
Residential apartments private spaces to public "stooping" spaces



Transversal section showing levels of private to public residential space, diverse modes of accessibility, and visual connections



Residential apartment conditions



During Epidemic,
Big Techs Lease 1.25 Million sq ft
= 1 Columbia University
Morningside Campus

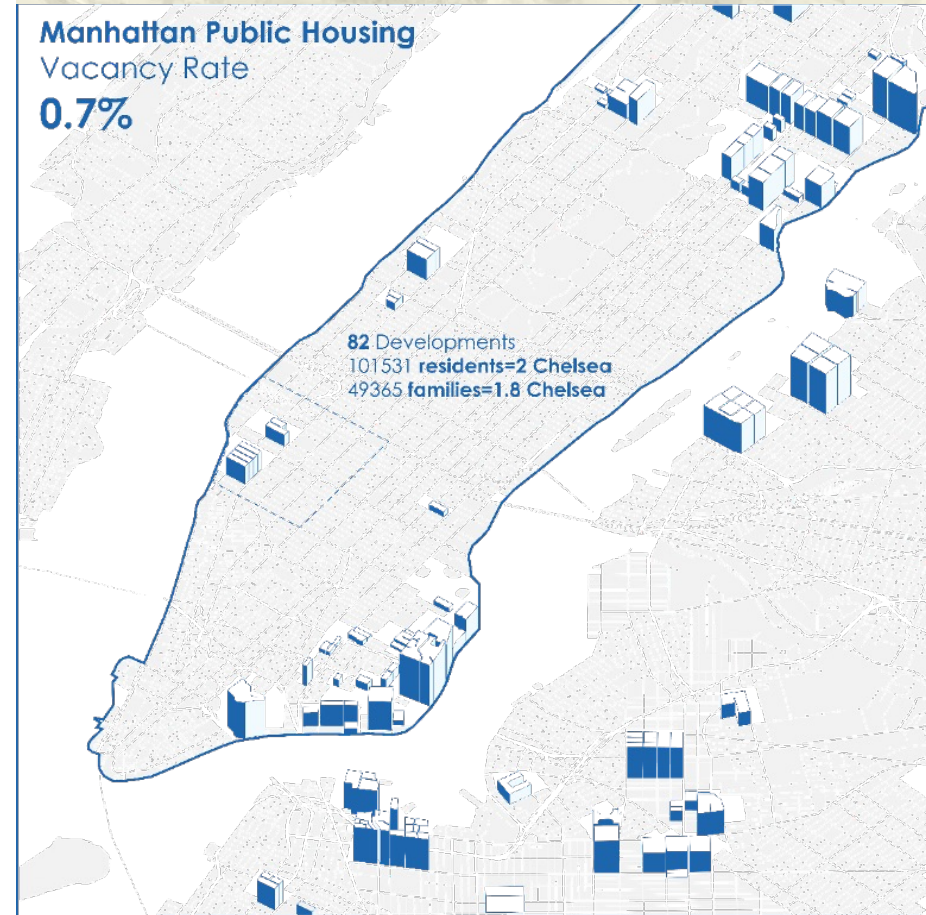
=Queensbridge Public
Houses (Largest housing develop-
ment in North America)

=1604 Apartments
=3204 Residents

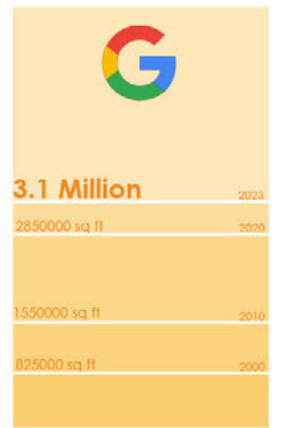
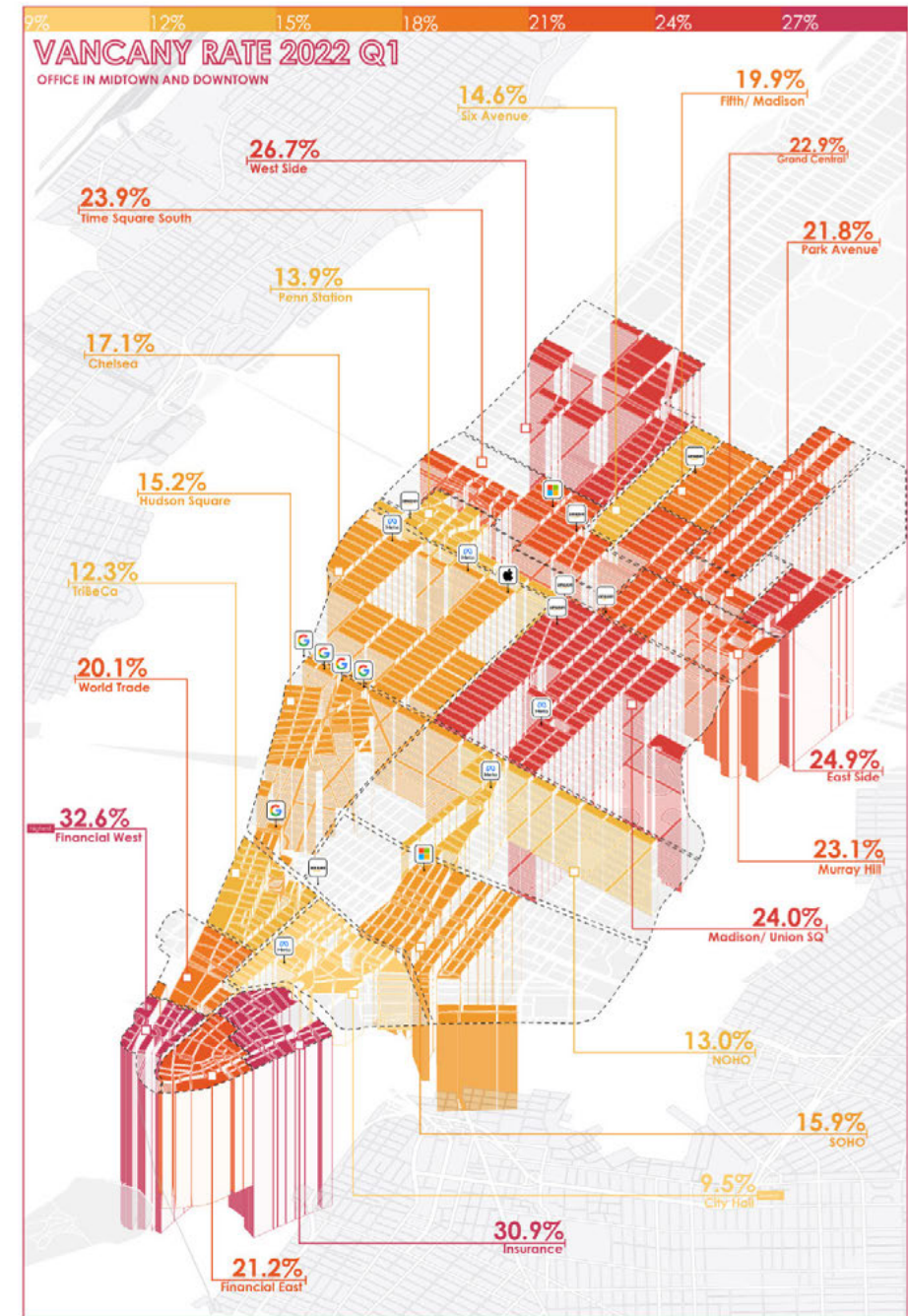
Who Own the Office

Finance	1990	48.8%
	2010	39.6%
	2020	35.6%
TAMI	1990	16.7%
	2010	18.5%
	2020	25.1%
Professional and Business	1990	14.1%
	2010	18.5%
	2020	15.5%
All Others	1990	20.4%
	2010	23.4%
	2020	23.8%

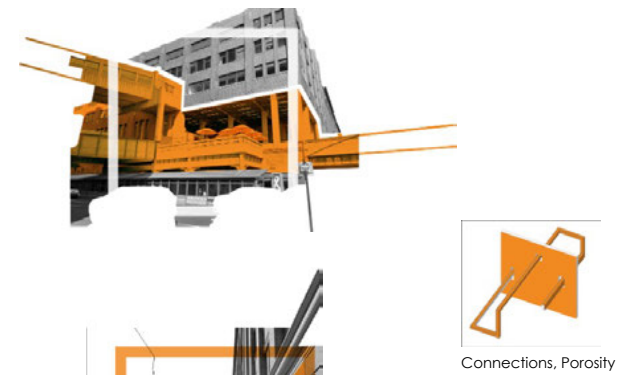
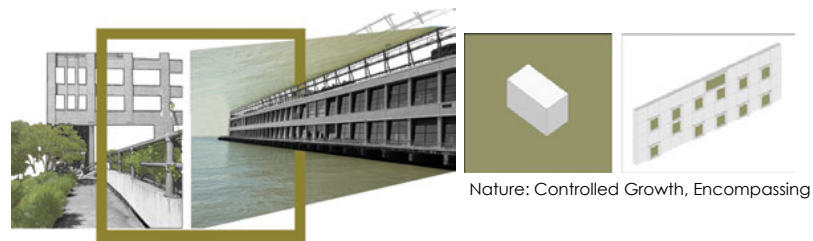
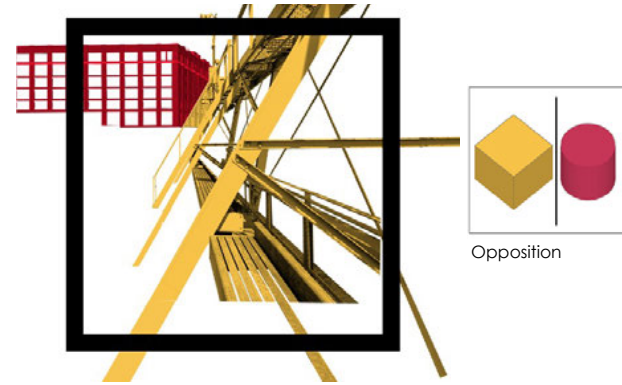
TAMI: Technology, Advertising, Media and Information



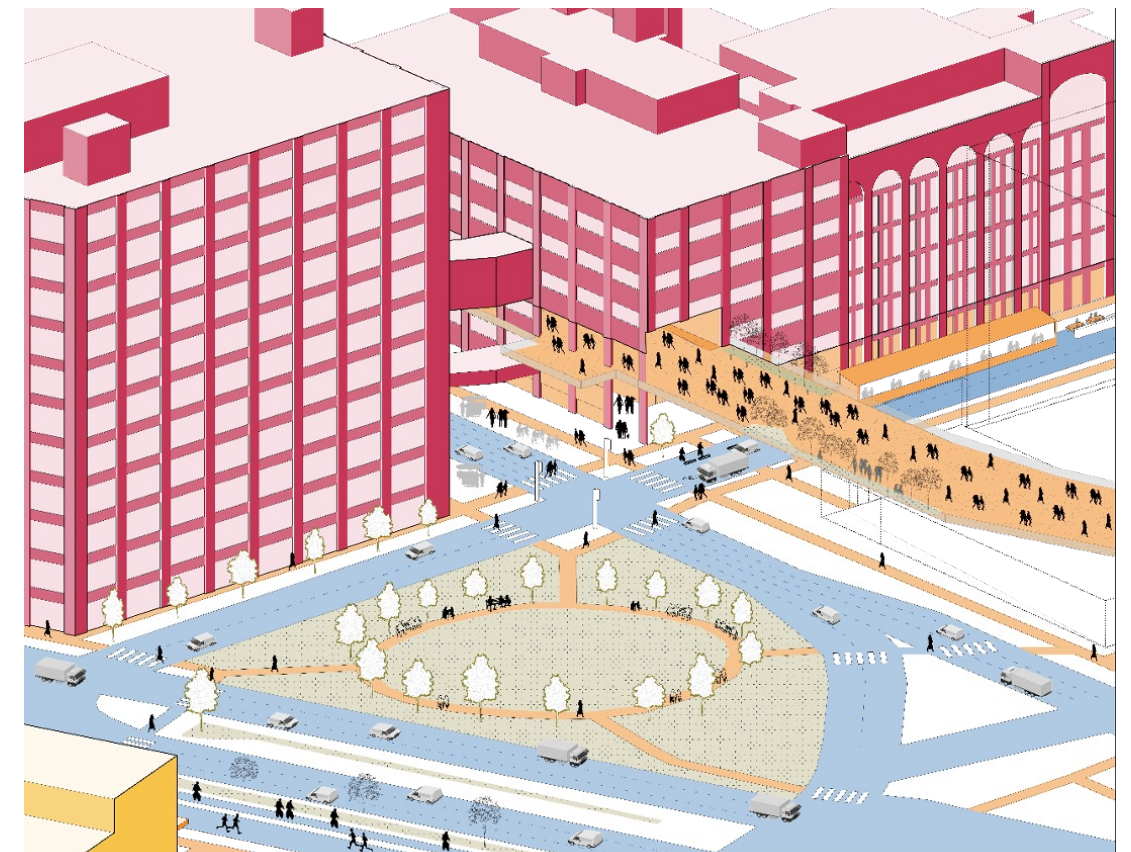
Big Tech, public housing, and vacancy rate graphic analysis scalable to lower Manhattan and Chelsea neighborhood



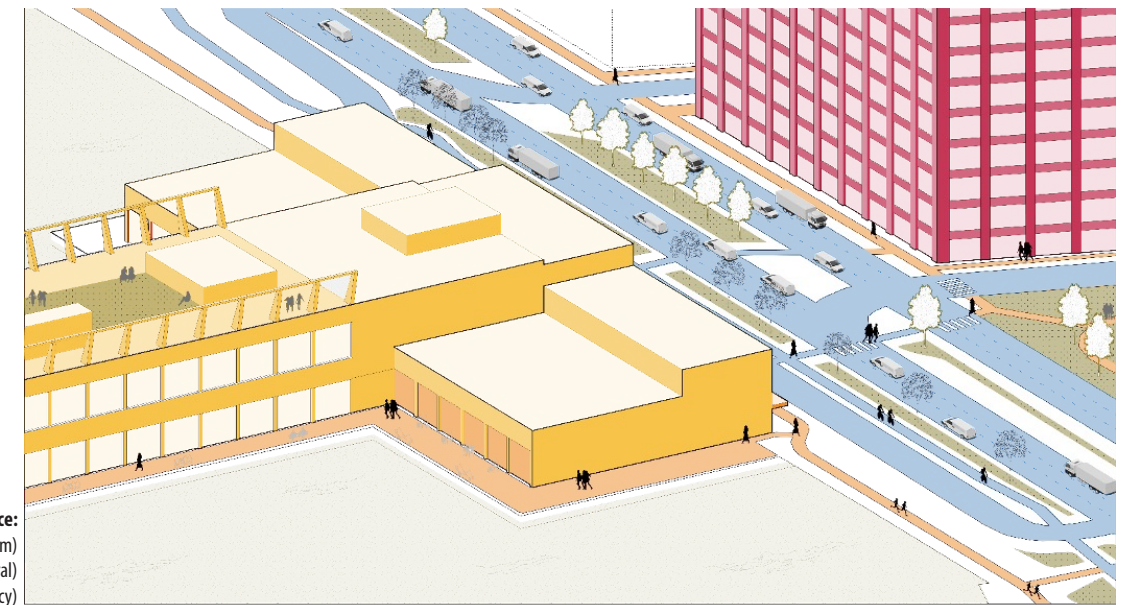
Vacancies and sited contextual social and political conditions provide opportunities to address the housing crisis



Applied architectural syntax as design tactics on Pier 57



■ Fortification
 ■ Connections
 ■ Opposition
 ■ Divisions
 ■ Nature



■ Fortification
 ■ Connections
 ■ Opposition
 ■ Divisions
 ■ Nature

Levels of interaction permanence:

- ▬ Long duration (related to existing program)
- ⬆ Mild duration (occasional occupancy and temporal)
- ⬇ Limited duration (transit occupancy)

Transcalar evaluation highlighting conditions of social contact around Google Hudson Square Campus

04 Image Making

Architecture and Urban Landscape photographs expressing a narrative of patterns and lines

Semester 2 | Fall 2022

Sites: Greater New York Metropolitan area

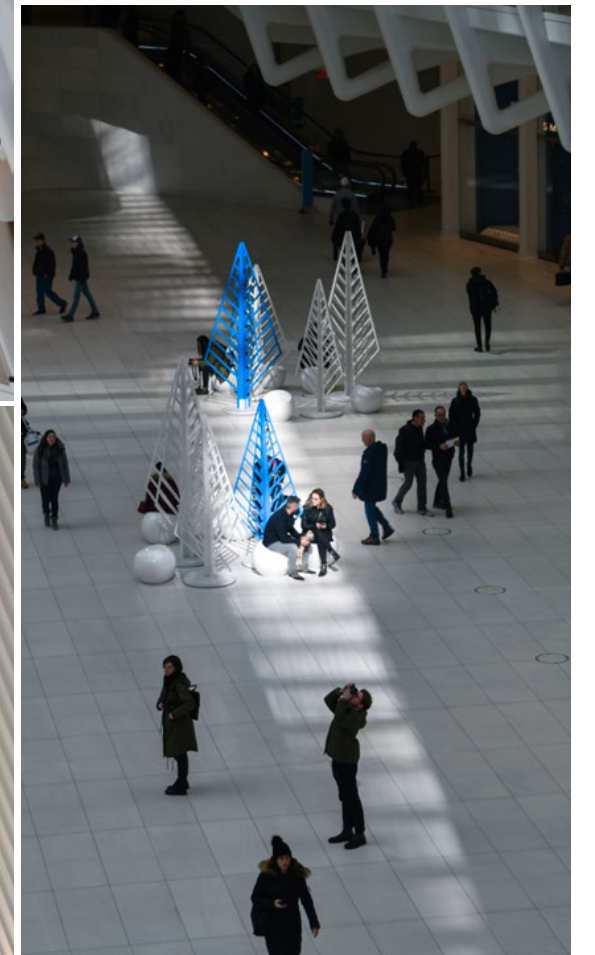
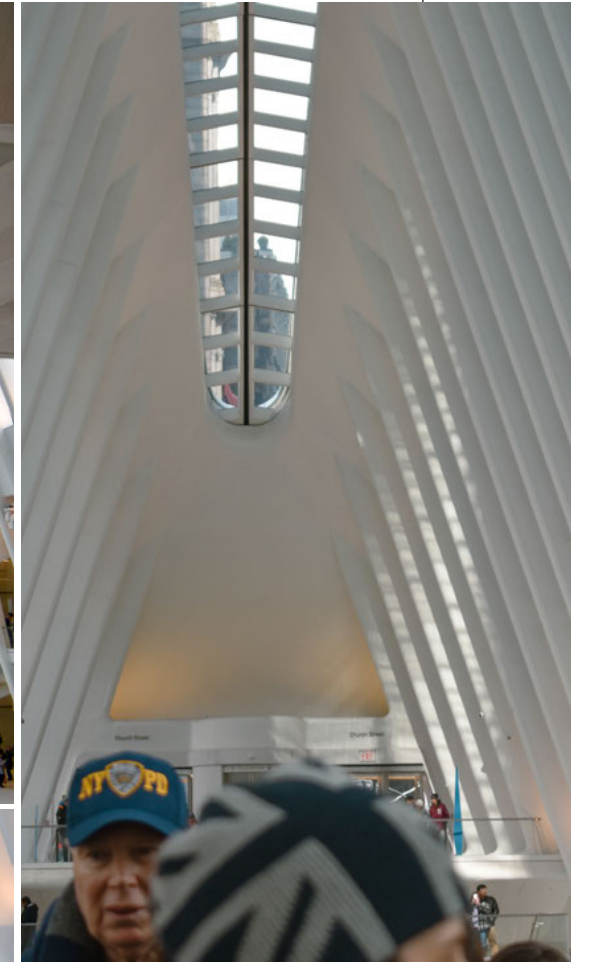
Instructor: Michael Vahrenwald

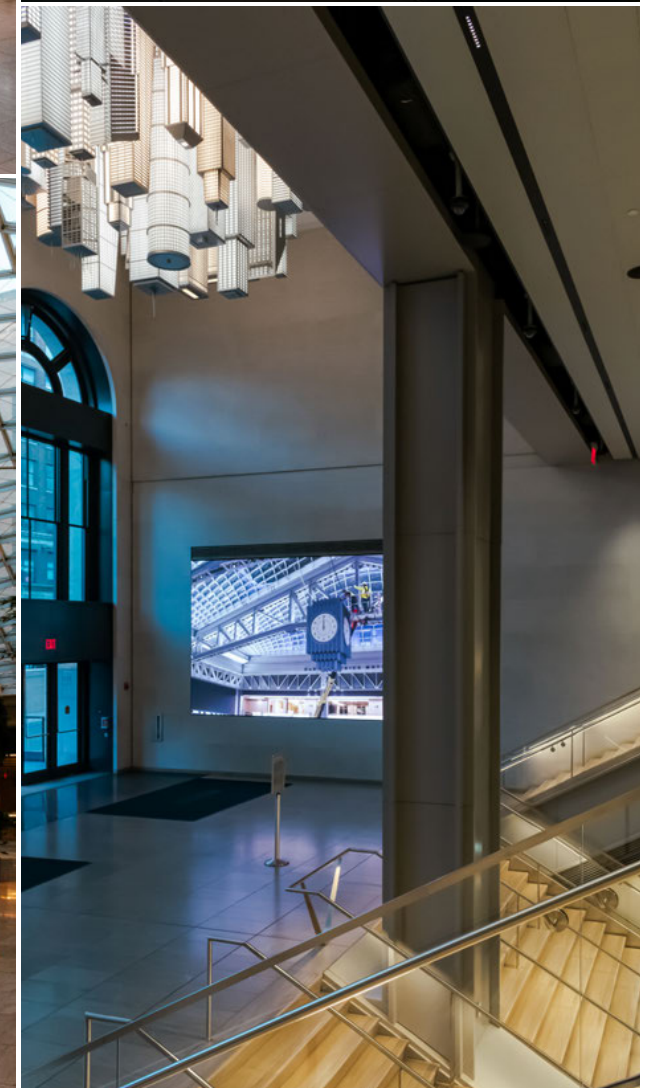
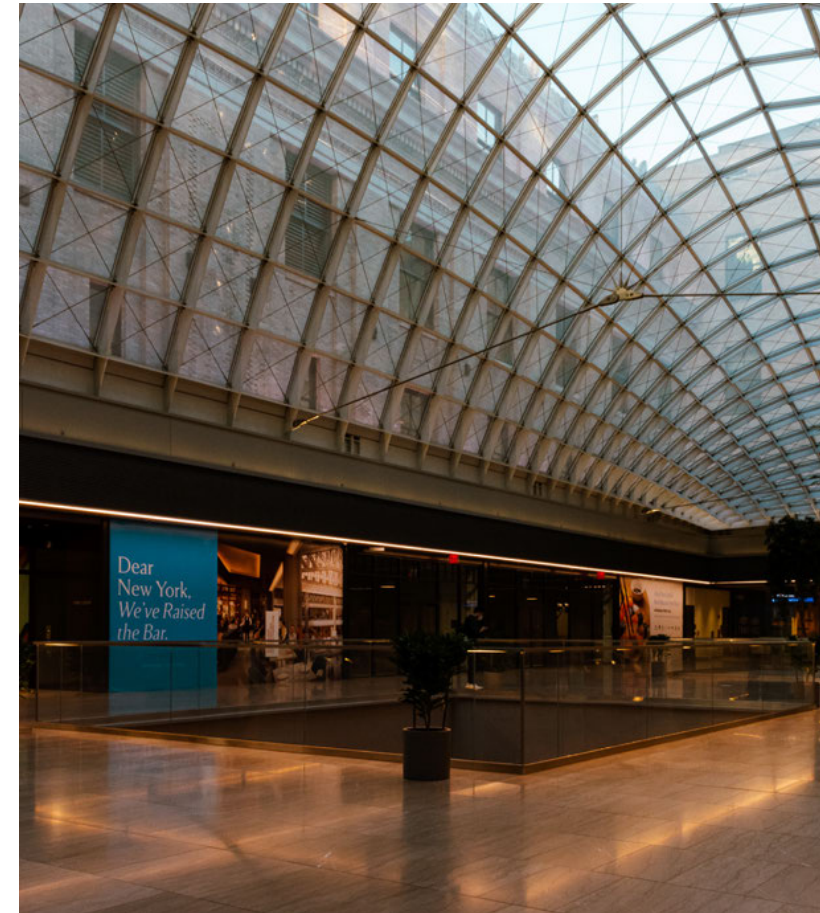
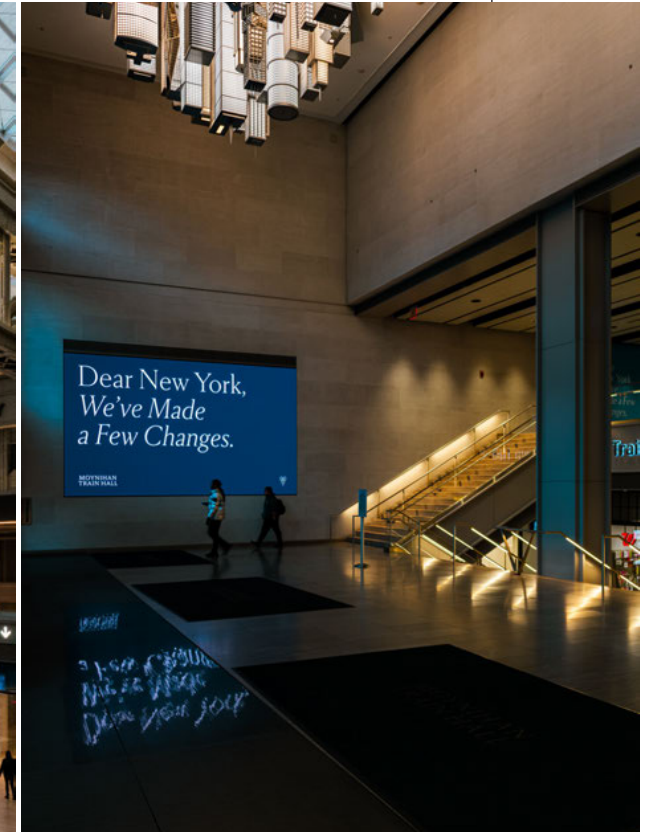
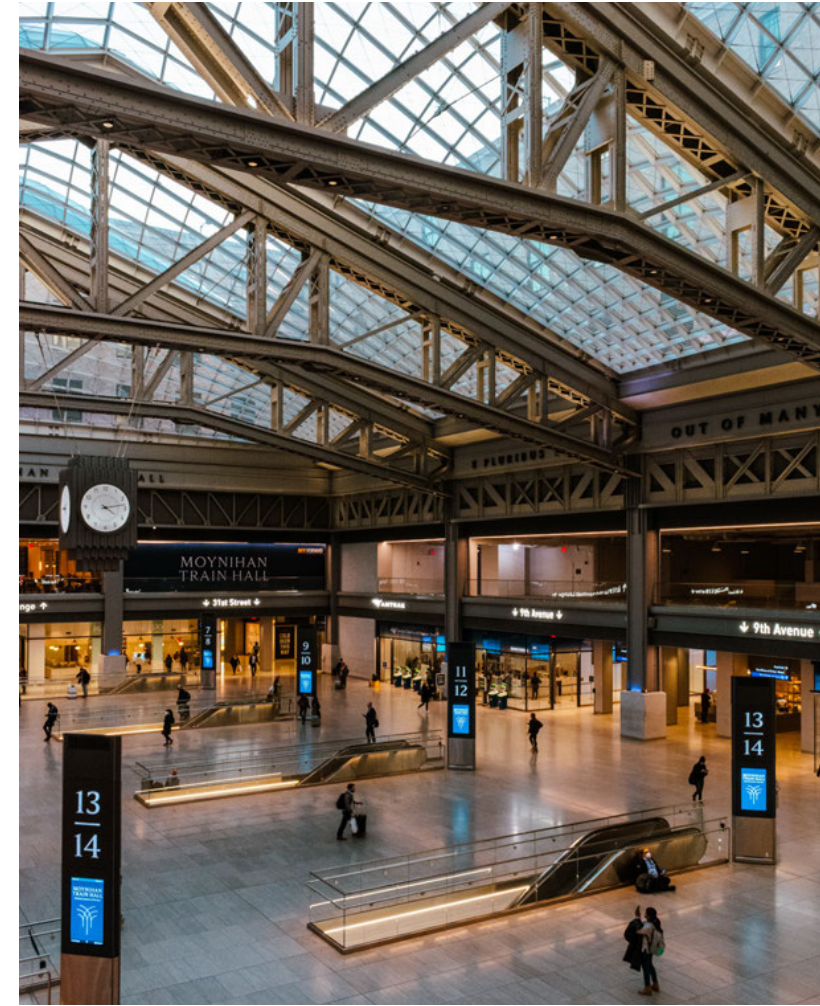
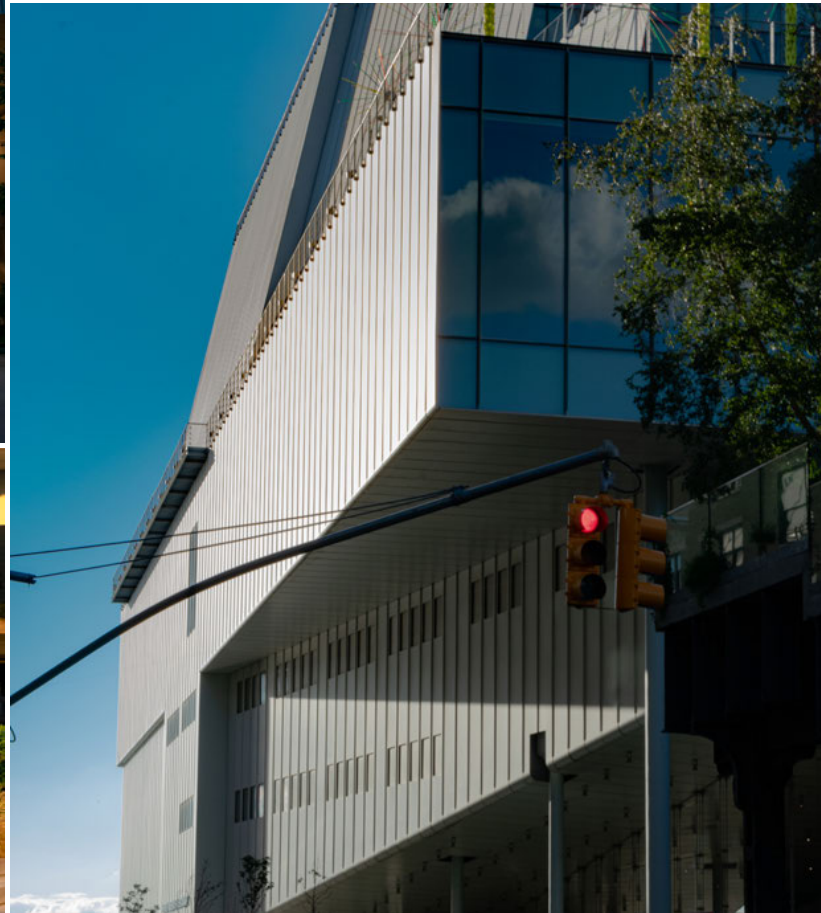
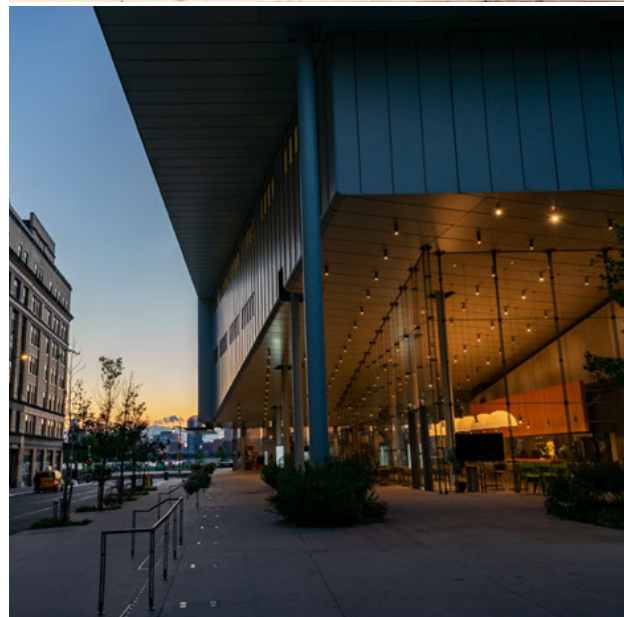
Locations: *The Oculus Center (Tribeca, NY)*

The Whitney Museum (Chelsea, NY)

Moynihan Train Hall (Midtown, NY)

Through this series of image making, I hone into a modern urban industrial aesthetic. Each set encouraged and challenged me to immerse myself in familiar and unfamiliar locations around New York City with a sharp eye for capturing the environmental and social conditions of a site at a particular time and place. In each session, it was interesting to analyze scale, lighting effects, and the role a particular architecture plays to activate engagement.





05 Research: Position Paper

Expand epistemologies available to the built environment and reveal new possibilities for designing in response to lived experiences

Semester 3 | Spring 2023

Bodies + Public Spaces

Instructor: Bryony Roberts

My position paper articulates that architecture has the agency to implicate change, so it is critical to explore the significant role of a multi-scalar network of care that embraces feminism and care within the public realm. It highlights the tribulations of gender identification and postpartum mothering, especially during the current social and political conditions in America that preconceive these constructs. Researching the work of Ani Liu as a case study, especially her recent exhibition *Ecologies of Care and Labor of Love*, coupled with the analytical support of Bell Hooks' "Can Motherhood be a Mode of Rebellion" and Jia Tolentino's "Feminism is For Everyone" to emphasize the significance of this position. Through this discourse, I embrace the importance of recognizing the complexity of caregiving and the necessity to create more equitable architecture integrated into the public realm that supports caring bodies and challenges oppressive societal norms.

For Women, By Women: Ani Liu, Jia Tolentino, and Bell Hooks Stimulate Designing for Empathy that Activates Architecture as a Tool for Intersectionality and Inclusive Care

Recent social and political conditions in America have brought to the forefront the challenges that women and mothers face in navigating societal expectations and structures. Feminism and care have long been intertwined, yet the intersectionality of these concepts is often overlooked. Architecture has the agency to implicate change, so it is critical to explore the significant role of a multi-scalar network of care that embraces feminism and care within the public realm. Specifically focusing on the tribulations of gender identification and post-partum mothering, which are particularly relevant in the current climate. By examining how these constructs are preconceived and the impact they have on women's lives, this paper takes the position on the importance of embracing a multi-dimensional approach to care that designs holistic spaces inclusive of social and political sensitivities that acknowledge the complexity of women's experiences.

The recent *Roe v. Wade* action in America, which overturned the landmark decision that legalized abortion nationwide, has had a profound impact on women across the country. This decision has threatened women's bodily autonomy and has the potential to restrict access to reproductive healthcare, endangering women's health and welfare. Architecture can be an agent of change in this context, by committing to design with social, political, and environmental awareness, especially women, to develop a network of care that embraces feminism and mothering. This can manifest in the form of designing healthcare facilities that prioritize women's needs and provide safe, accessible, and non-judgmental care. It can also mean creating public spaces that are inclusive and welcoming to all, regardless of gender identity or expression. By creating spaces that prioritize care and the needs of women, architecture can play a vital role in supporting women's health, well-being, and empowerment.

Research-based artist and experimental technologist, Ani Liu, exhibits work at the intersection of art and science. Her recent research-art series, *Ecologies of Care and Labor of Love*, are critical exposés that highlight the tribulations of gender identification and postpartum mothering, especially during the current social and political conditions in America that preconceive these constructs. Her work stylistically indicates certain caregiving tensions and cultural-self-identification limits that act as a catalyst for challenging the role of material culture and how they can be redesigned to raise awareness, accommodate, and embrace the invisible labors of mothering.

Birth has affected everyone. Embedded in the understanding and development of motherhood is the prominence of the biopolitics of care work and motherhood as a way political rationality puts life in order. Sex, referring to biological physical differences, and gender, referring to a person's self-representation, are social constructs that are beginning to be analyzed and diffused to be more inclusive of the range of self and social identifications. Ani Liu's analyses and expressive curations, especially her works exhibited in *Ecologies of Care and Labor of Love*, creatively advocate and entice an audience to inform about the reciprocal relationship between science, technology, and the catalytic influence on human identity, cultural ideologies, and social methodologies.

The works of *Ecologies of Care and Labor of Love* are vulnerable and unspoken issues in society. These artistic creations express the seriousness of the existing work-life social construct, specifically in America, and how the work that a parenting person, the majority mothers, does to raise and educate their children is often referred to as "invisible labor," because it occurs out of the public eye.¹ Liu's temporary NYC summer 2022 exhibition showcased her stylized translation of the analyses and recordings from her personal experiences of new motherhood. This unified aesthetic-scientific data art exhibition creatively captivates an audience to raise awareness about the extensive efforts of motherhood. Through technology, design, and architecture, Liu intends to advocate for inclusive compensation for and to normalize the postpartum mothering labors, especially breastfeeding, changing, and sex/gender educating. This design approach signifies a methodology where architecture can be mobilized to reverse political and economic tendencies to empower feminism.

¹ Liu, Ani. "Solo Show Reviewed in the NY Times!" Ani Liu. Ani Liu, May 1, 2023. <https://ani-liu.com/new-news/2022/6/30/bcyxuxemby83uw99uqdxqbuu3cdav1>.

The 2020 pandemic highlighted the importance of mothering and identified this caregiving as essential work. The demanding work required of a mother, or parenting person, postpartum is densely articulated through Liu's self-data portrait exhibition piece, *Untitled (Labor of Love)*, which reflects on the historic devaluation of "women's" work, whereas "this sculpture questions and problematizes the types of work we value, and the care that we often take for granted."² Liu claims this work as an artistic representation of her recorded cataloging of every feed and diaper change throughout her first phase of postpartum. The importance of this initial phase is additionally supported by Anne Fausto-Sterling's recent study, at Brown University, which examines the challenges of interdisciplinary research in the field of critical sex and gender development, by stating that "from birth to 15 months infants and caregivers form a fundamentally intersubjective, dyadic unit within which the infant's ability to recognize gender/sex in the world develops."³ Liu's analytical contextualization coupled with Fausto-Sterling's supportive research emphasizes the amount of labor required to care for a newborn and the criticality of this formative postpartum period. In contemporary society, specifically in America, there is a societal conceptualization that one's work, through its economic compensation, determines the worth and value of a person. This materialist culture maintains the political and societal status quo. However, the existing scaffolding needs a radical reconfiguration that adapts to the changing gender/sex identification constructs and work typologies.

The urgency of Liu's artwork-research development was stimulated by the demonstrated political problems and social reflections during the pandemic. Post-pandemic the government attempted to improve accommodations for "real" work done by "essential, and specifically healthcare, workers" by providing monetary support and designing resources to accommodate their needs relative to the amount of extensive labor; in which "essential" is determined by the government, leaving outside motherhood, not because it is not essential to human life, but rather because it is invisible. These efforts acknowledged as "essential work" are similar to the labors done by mothers, especially during the first phase postpartum caregiving. Motherhood and the childcare crisis were highlighted during the pandemic, which emphasizes the urgency for political and social reshaping. The rescripting aims to improve existing tendencies, adjust preconceived gendered occupational standards, and reverse the historic devaluation of "women's" work, which has been another form of capitalist, biopolitical control. There has been and continues to be an overlooked domestic shift, where mothers transition from corporate work 9am-5pm to the labor of love work 5pm-9am. Evident through Liu's research and personal experiences translated into a sculpture, motherhood is "real" work, even by the governmental standards of qualified "essential work efforts", and essential to the holistic welfare of the child, the family, the economy, and the society Fig.1+2.

In Jia Tolentino's essay "Can Motherhood Be a Mode of Rebellion," she articulates how caregiving is an area where the tensions between individuality and collectivity are most acute.⁴ Tolentino suggests that by embracing motherhood as a form of resistance, women can challenge the societal norms and structures that often place the burden of caregiving on them. This concept of caring bodies is comprehended through her adage that, "the terrain of mothering is not limited to the people who give birth to children," and references Angela Garbes' *Essential Labor: Mothering as Social Change*, to emphasize that "raising kids is not a private hobby, not an individual duty, but rather a social responsibility, one that requires robust community support. The pandemic revealed that mothering is some of the only truly essential work humans do."⁵ This notion is echoed in Ani Liu's recent exhibition *Ecologies of Care and Labor of Love*, to reveal the transscalar concept of care and its impact on individuals and communities. These works underscore the importance of recognizing the complexity of women's experiences and the need to create more equitable structures that support caregiving in all forms.

Architecture and design have the power to expose the invisible labor of motherhood to normalize, raise social awareness, and provide an informative understanding of the actions and time required for this essential caregiving labor, which can motivate future generations and political methodologies to better accommodate and support this kind of work. Liu's other exhibit installation piece, *Untitled (Feeding Through Space and Time)*, was created as a reflection on the experience of pumping breast milk in the workplace, whereas the audible and visible simulation of breastfeeding integrates into the exhibition circulation to raise public awareness of the constant "obligations required of postpartum bodies back into the labor force as to inform the assumption that all spectrums of society can balance the demands of paid work and care work."⁶

² Admin. "Ecologies of Care." Artists Alliance Inc. Artists Alliance Inc., May 1, 2023. <https://www.artistsallianceinc.org/ecologies-of-care/>.

³ Fausto-Sterling, Anne. "A Dynamic Systems Framework for Gender/Sex Development: From Sensory Input in Infancy to Subjective Certainty in Toddlerhood." *Frontiers*. Frontiers, April 9, 2021. <https://www.frontiersin.org/articles/10.3389/fnhum.2021.613789/full>.

⁴ Tolentino, Jia. "Can Motherhood Be a Mode of Rebellion?" *The New Yorker*, May 8, 2022. <https://www.newyorker.com/books/under-review/can-motherhood-be-a-mode-of-rebellion>

⁵ Tolentino, Jia. "Can Motherhood Be a Mode of Rebellion?" *The New Yorker*, May 8, 2022. <https://www.newyorker.com/books/under-review/can-motherhood-be-a-mode-of-rebellion>.

⁶ Liu, Ani. "Untitled (Feeding through Space and Time)." Ani Liu. Accessed May 1, 2023. <https://ani-liu.com/feeding-through-space-time>

Therefore, there is a contemporary urgency for strides in economic and healthcare compensation as well as workplace flexibility that accommodates the needs and provides resources to the parenting person(s), which can be progressed by inventive architecture that is accessible and inclusively integrate the labors of love with political and social constructs to embrace parent-infant bond during the postpartum transformation. Liu's work inspires how we can reverse existing political, social, and economic tendencies by designing a system and spaces to inclusively accommodate domesticity and labor force commitments with parenting and parent-infant relationships. She specifically highlights the reimagination of our public space infrastructure to reduce the societal stigma against public breastfeeding, by integrating this "invisible labor" into the public space to normalize motherhood works. Liu shares the progressive work of Ivana Priess and Filip Vasic, who created an "ergonomically-designed bench that enables mothers to comfortably breastfeed in public to empower women to nurse however they wish and provide them with more choices" Fig.3.⁷

Design can articulate complex social phenomena, which is showcased through Liu's exhibited work, recorded research, and focused analysis of the historic legacy of gender/sex and motherhood roles by evaluating fashion trends and toy design that aimed to conceal mothering labors, growing bodies, and primed gendered proclivities. Her contextualization of motherhood articulates it as essential caregiving labor of love, which expresses her position on parenting and designing to encourage adolescent self-discovery and identification. Although invisible, mothering is the backbone of society and the fundamental system for child development and self-identification. The existing legal constructs are classist and racist, which require reshaping to improve inclusivity. Ani Liu's work not only contextualizes the position for advocating and improving feminism, gender expression, motherhood compensation, social education, political re-conformity, and the powerful relationship of art-science but also how it could be extended in understanding design as additionally shaping the political arena rather than just as a tool of analysis. Her work of artistically representing data analysis to expose certain facts of biopolitics in care work and motherhood opens a window of action to architecture to redesign the political arena.

Similarly, Bell Hooks emphasizes the importance of intersectionality in feminist theory in her book, "Feminism is for Everybody." She argues that feminism must be inclusive and intersectional, addressing the ways that systems of oppression intersect and impact different groups of people. She also emphasizes the importance of caring for bodies and the environment in feminist practice. With regards to architectural design specifically, Hooks states that "a feminist architecture would be one that recognizes and values the work of caretaking and caregiving. It would be grounded in an ethic of care that sees the built environment as a place to foster and support human relationships."⁸ She highlights the need for a feminist approach to design that considers the diverse needs and experiences of people of different genders, races, and abilities. Furthermore, Hooks' position further advocates that feminism is not just for women, but is a movement that benefits everyone by challenging and dismantling systems of oppression and promoting equality and justice for everybody.

The works of Ani Liu, Jia Tolentino, and Bell Hooks collectively embrace the importance of recognizing the complexity of caregiving and the necessity to create more equitable architecture integrated into the public realm that supports caring bodies and challenges oppressive societal norms. They showcase the power of intersectionality and the necessity of caring bodies within the realm to challenge existing oppressive societal and political constructs in America, especially considering the recent Supreme Court case *Roe v. Wade*. Liu's *Ecologies of Care and Labor of Love* series exhibit the critical role that architecture and material culture can play in creating spaces that prioritize care and inclusivity. Tolentino's "Can Motherhood be a Mode of Rebellion" illustrates how motherhood, often seen as a limitation, can be a powerful form of resistance against patriarchal norms, and how access to reproductive care is essential to enable women to make choices about their bodies and lives. And Hooks' "Feminism is for Everybody" emphasizes the importance of recognizing the intersections of race, class, and gender in feminist movements, and how the fight for reproductive justice is central to feminist activism. Together, these works stimulate discourse about the potential of architecture as an agent of change to promote reproductive justice and pave the way for a future that embraces intersectionality and centers the experiences and needs of caring bodies within the public realm.

⁷ Yang, Vy. "Moms Breastfeed Heer: An Ergonomically-Designed Bench for Nursing in Public Spaces." *Design Milk*, October 8, 2018. <https://design-milk.com/moms-breast-feed-heer-ergonomically-designed-bench-nursing-public-spaces/>.

⁸ Hooks, Bell. *Feminism Is for Everybody: Passionate Politics*. Cambridge: South End Press, 2000. p.107.

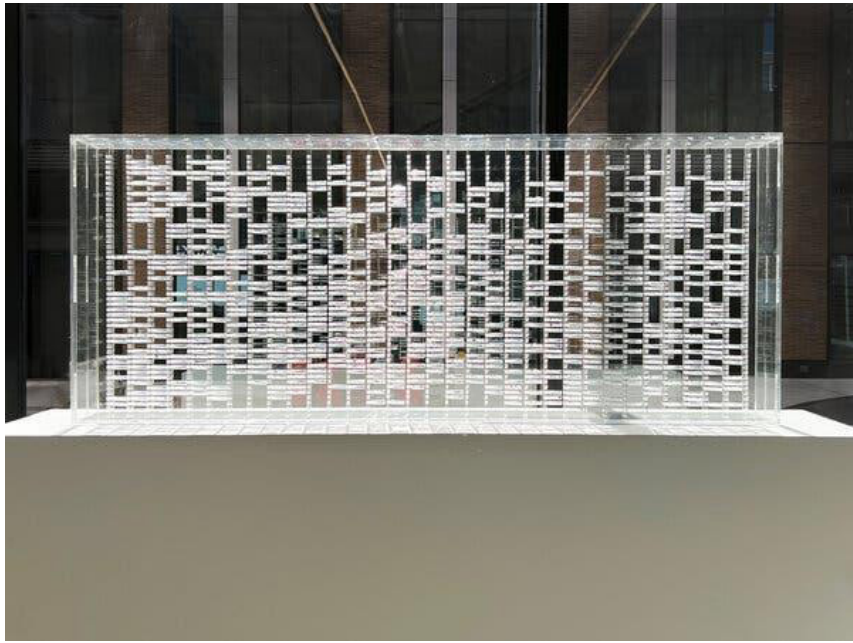


Figure 1 | *Untitled (Labor of Love)*: A data portrait recording every feed and diaper change for the first 30 days after giving birth. | Liu, Ani. "Untitled (Labor of Love)." Ani Liu. Accessed May 1, 2023. <https://ani-liu.com/untitled-labor-of-love>.

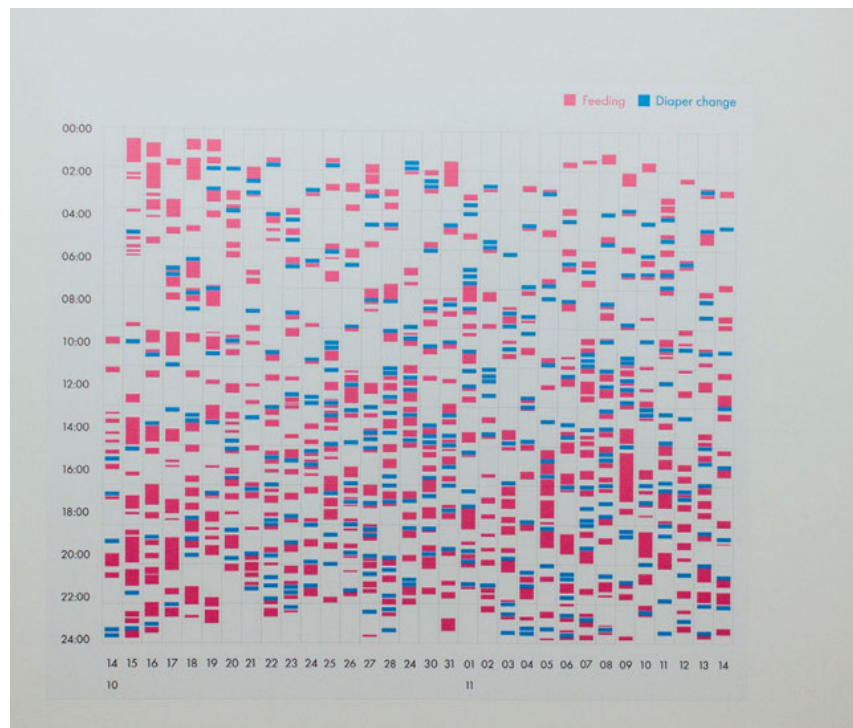


Figure 2 | *Untitled (Labor of Love)*: Original diagram of the postpartum data. Image credit D Peterschmidt for Science Friday. | Liu, Ani. "Untitled (Labor of Love)." Ani Liu. Accessed May 1, 2023. <https://ani-liu.com/untitled-labor-of-love>.



Figure 3 | *The Heer* is designed to rotate (so that moms can find the best position to suit their preferences), rock (to comfort babies), and offer privacy, should the mom prefer it. *The Heer* isn't completely closed off which allows moms to stay present in her environment, whereas the bench half of *The Heer* is intended for company and other public users. | Yang, Vy. "Moms Breastfeed Heer: An Ergonomically-Designed Bench for Nursing in Public Spaces." Design Milk, October 8, 2018. <https://design-milk.com/moms-breastfeed-heer-ergonomically-designed-bench-nursing-public-spaces/>.

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- Liu, Ani. "Untitled (Feeding through Space and Time)." Ani Liu. Accessed May 1, 2023. <https://ani-liu.com/feeding-through-space-time>.
- Tolentino, Jia. "Can Motherhood Be a Mode of Rebellion?" *The New Yorker*, May 8, 2022. <https://www.newyorker.com/books/under-review/can-motherhood-be-a-mode-of-rebellion>.
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06 Research Installation:

Art, Social Structures, and Building Technology For Interconnected Environments

Semester 3 | Spring 2023

If Buildings Could Talk...

Site: Revson Plaza, Columbia University

Morningside Heights, NY

Instructor: Sharon Ayalon

Team: Victoria Shay, Javier Flores, Kriti Shivagunde, Florianne Jacques, Valentina Jaramillo

Columbia University's imposition on Harlem threatens its culturally diverse heritage by encroaching neighborhood boundaries that diminish community belonging, ownership, local economies, and its historical contributions to art, architecture, music, and cuisine. Its growing institutional wealth and population are further fueling this gentrification of homes, businesses, and several acres of historical buildings to which the general Columbia Community is unaware of and blind to.

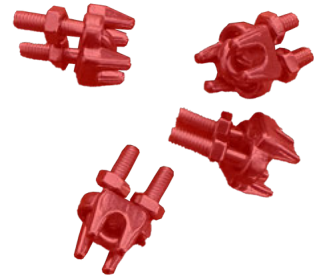
While bridges typically connect spaces and people, Revson Plaza, an elevated overpass above Amsterdam Avenue that connects Columbia's main campus buildings, disconnects the surrounding neighborhood communities from access to public spaces. This site exemplifies the existing physical boundaries that segregate Harlem from the rest of Manhattan's predominantly white neighborhoods - while dousing the street below with darkness.

The project attempts to highlight this physical separation that Revson Plaza forms, which symbolizes the larger inequity faced by the residents of Harlem. The installation is a hybrid apparatus that plays with color and light to engage Columbians, commuters, and workers who use the spaces above and below. The cantilevered reflective glass assembly suspends in the transitional space between the sidewalk and the bridge. Derived from hard data on Harlem's periodical gentrification, the work abstracts the neighborhood zones into layered shards of glass, with the stable neighborhood layers towards the top that gradiently descend to the gentrified neighborhood layers at the base. The viewers experience the piece differently depending on where they are situated on the site; from the ground, one can sense the overpowering presence of Columbia's institutional imposition, and from the top, you can see the longstanding repercussions of gentrification caused by the University's continual expansion. "Shattering the Bridge" intends to bring to light this reality of Columbia's role in gentrifying Upper Manhattan.

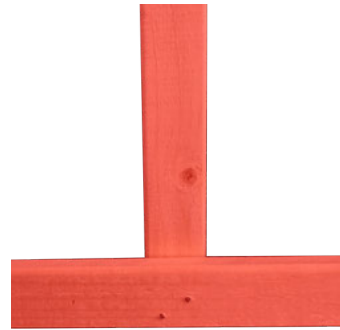
This project evokes how through data and information one is able to create a piece of art, this piece of art its final purpose is to call attention, becoming a beacon point that will then guide the user to its base information. Art and abstraction transform into a vessel that reveals the real nature of urban life.



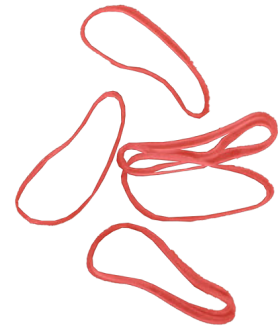
What Makes The Shard?



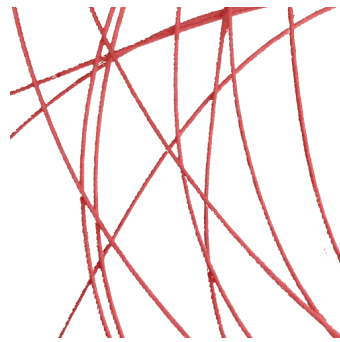
Rivets



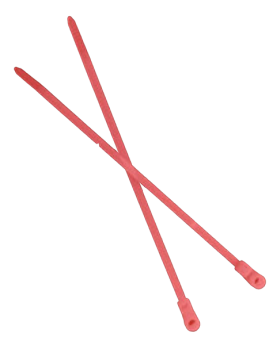
Timber Frame



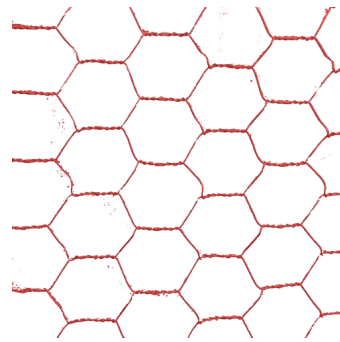
Clear Elastic Bands



3/8" Steel Cable

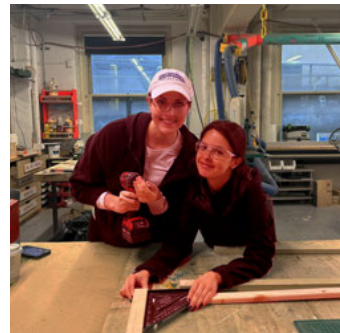


Clear Zip Ties



Chicken Wire Mesh

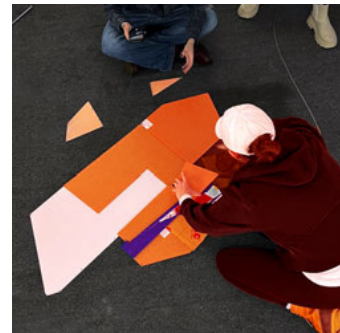
Construction Process



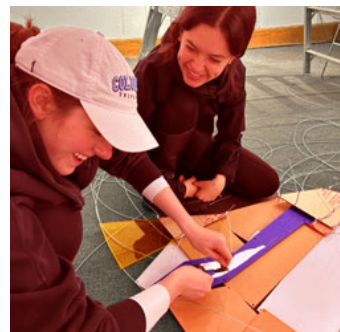
Measure



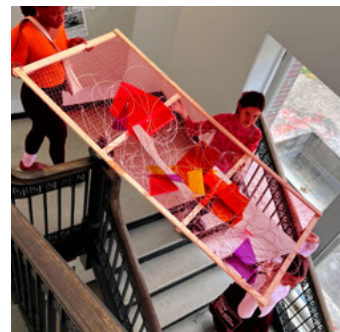
Construct



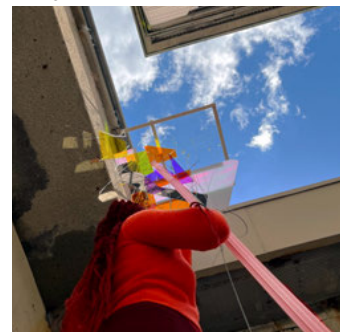
Arrange



Assemble



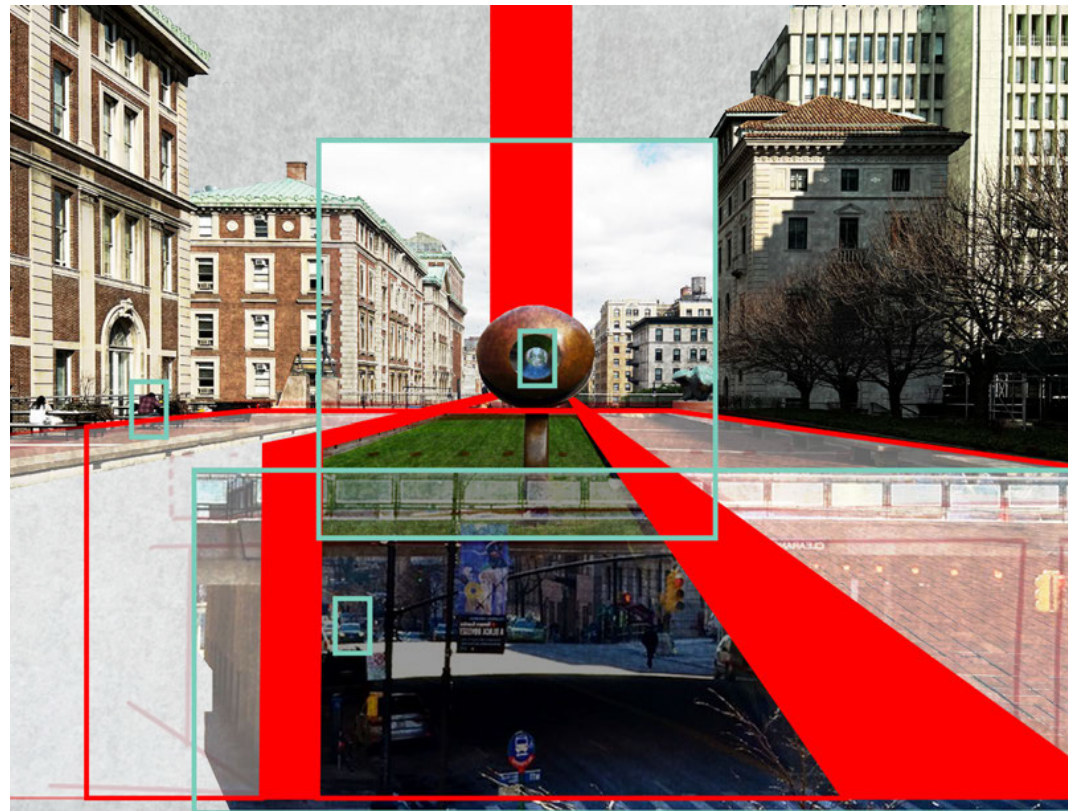
Transport



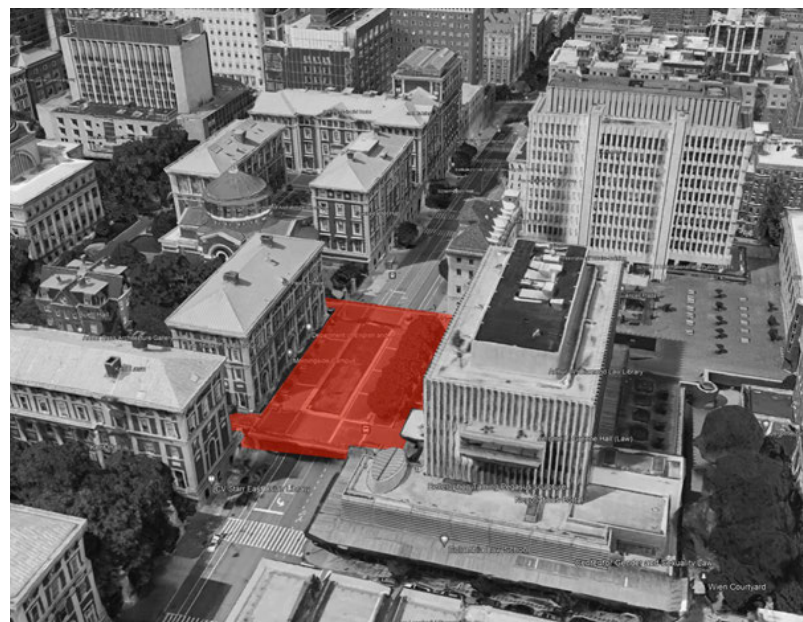
Install



Usually bridges are meant to connect but in this case is the whole opposite, that's why the project becomes an attempt to destroy an imposing bridge by breaking the physical boundaries through an art piece that is born from the history of the urban unfairness and institutional impositions.



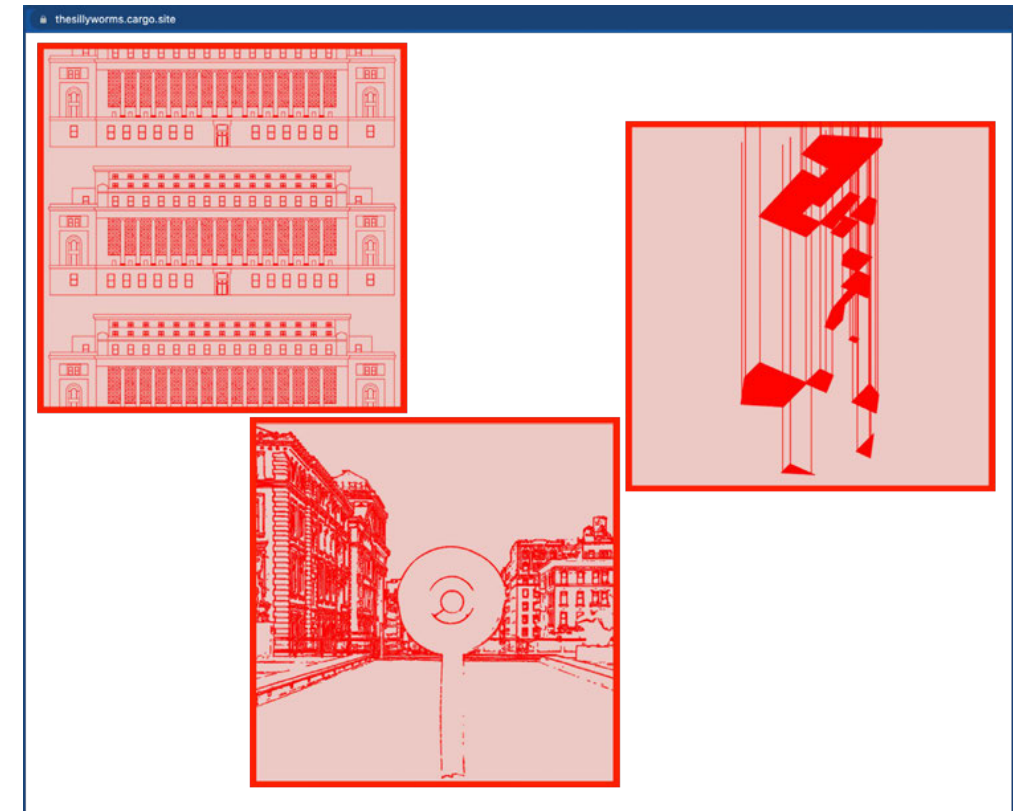
Post-digitalized collage illustration done by Victoria Shay. Highlights the separate movement typologies, segregated users, conditional and experiential difference above and below plaza



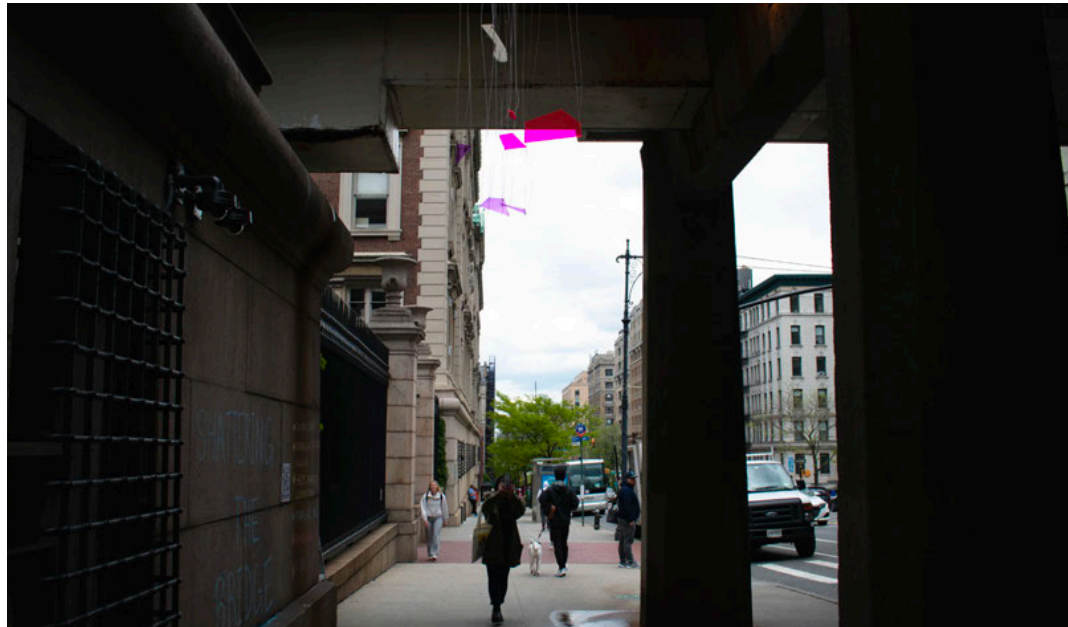
Historic view of Columbia University indicating plaza bridge site, prior to its construction



Installation site off of plaza



The project also comes with a website, which users are able to have access by visiting the sculpture, this website has become the main source of internal information that will wrap all the invisible narratives that have been part of the gentrification of upper Manhattan.



07 Place of Belonging

2023 GSAPP Common Circle Lexicon Term

Semester 3 | Spring 2023

Site: New York City

Instructors: David Moon, Andreas Theodoridis, Thaddeus Pawlowski

The 2023 Common Circle initiative aims to elevate GSAPP's efforts to confront racism and colonialism as a fundamental component embedded in the School's pedagogies – and in our current and future work as professionals, practitioners, scholars, and teachers.

Workshop held throughout the year encouraged collaboration among faculty and students across programs to produce a Common Circle Web – a lexicon of shared terms and images we can collectively reference and acknowledge to address and confront racism, colonization, anti-racism, and decolonization in the built environment. Each participant contributes an example for a chosen term to the lexicon, and the resulting Common Circle Web is publicly launched as part of the 2023 End of Year Show.

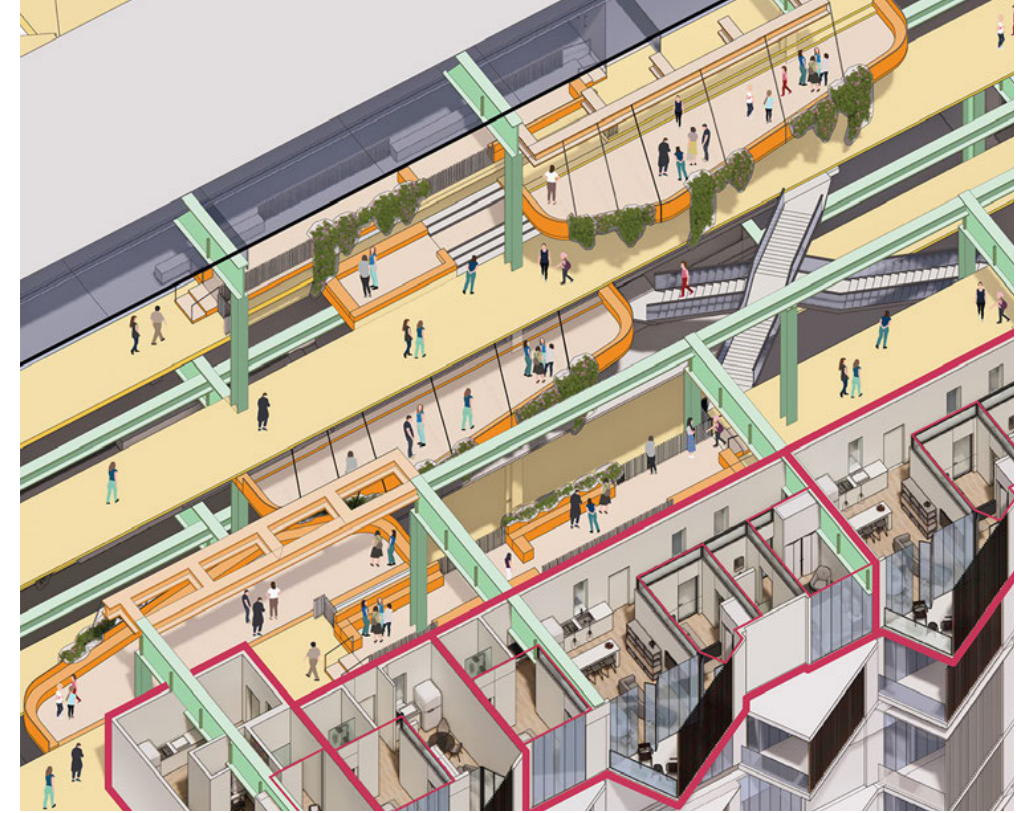
Further progressing my design methodology of human-centered experiences, I wrote about “belonging”, which focused on the historically significant New York City neighborhood characteristic and architectural typology of “stoops”.

COMMON CIRCLE LEXICON: BELONGING

Example: *Stoops*

Student Contributor: Victoria Shay

Site: New York City



Reinterpreted internal stoop typology intervention in NYC social housing proposal for Pier 57. Illustrated by author (Victoria Shay).

A stoop is a public space designed and constructed to facilitate accessibility along urban city blocks. A'Design Award and Competition articulates a stoop as a type of architectural feature that is a short, often flat platform built to connect a building's entrance with the ground of the sidewalk, which can be found in a myriad of styles, shapes, and materials.

Stoop architecture is a quintessential methodology of form blending function, which intersects practical architecture with holistic aesthetic. This spatial typology influences communal belonging and social-cultural expression. In addition to the stoop's intention of connecting ground to entrance, it also provides opportunities for seating and gathering space, which encourages homes along the block to share in outdoor activities and neighborhood engagement.

Through design and construction of townhome or building stoops, the architectural element exhibits a particular identity that embraces user scale, cultural practices, and social values. New York City neighborhood's vastly diverse range of characters, histories, and heritage, communities' cultures are ingrained in the activities that commonly convene on stoops. It develops a unique entity that responds to the urban environment and the people of the community, which establishes a collective sense of belonging unique to each neighborhood.

Sources

Moore, Lauren. "Stoop." A' Design Award and Competition - Design Encyclopedia - Stoop. A' Design Award & Competition SRL. Accessed March 1, 2023. <https://competition.adesignaward.com/design-encyclopedia.php?e=189161>.

08 Strategizing Storefront

Focus Group led by Tatiana Bilbao discussing Storefront For Art and Architecture's strategic plan for next decade of design in New York City

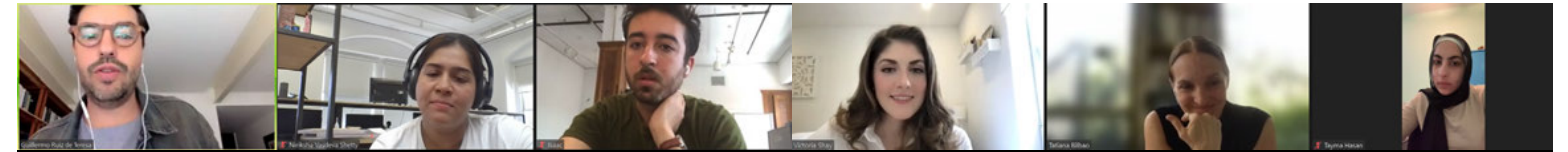
Semester 3 | Spring 2023

Site: Storefront For Art and Architecture

Soho, New York

Collaboration: Tatiana Bilbao, Guillermo Ruiz, Victoria Shay, Niriksha Shetty, Isaac Khouzam, Tayma Hasan

Storefront has been a fundamental organization since it was created in the 1980s and it continues shaping and informing our built environment. As a nominated Columbia GSAPP student representative, I actively participated in the collaborative focus group session for the Strategic Plan of Storefront for Art and Architecture, led by Vice President, Tatiana Bilbao. Gathered to contribute new ideas and create an engaging platform to reflect and rethink Storefront towards a progressive new decade of design. I offered my ideas, innovative work within the public realm, and diverse experiences to strategize contemporary programs for the organization to continue inspiring and leave a lasting impact.



In order to expand our network:

*** Are there particular people, projects or peers you feel we should approach, learn from?**

Zoom focus group collaborative meeting

