



PORTFOLIO  
Zeyin (Steven) Fei



QUEENS BOROUGH HALL  
NEW YORK, NEW YORK, US 4 - 7



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Steven Fei

# Queens Borough Hall

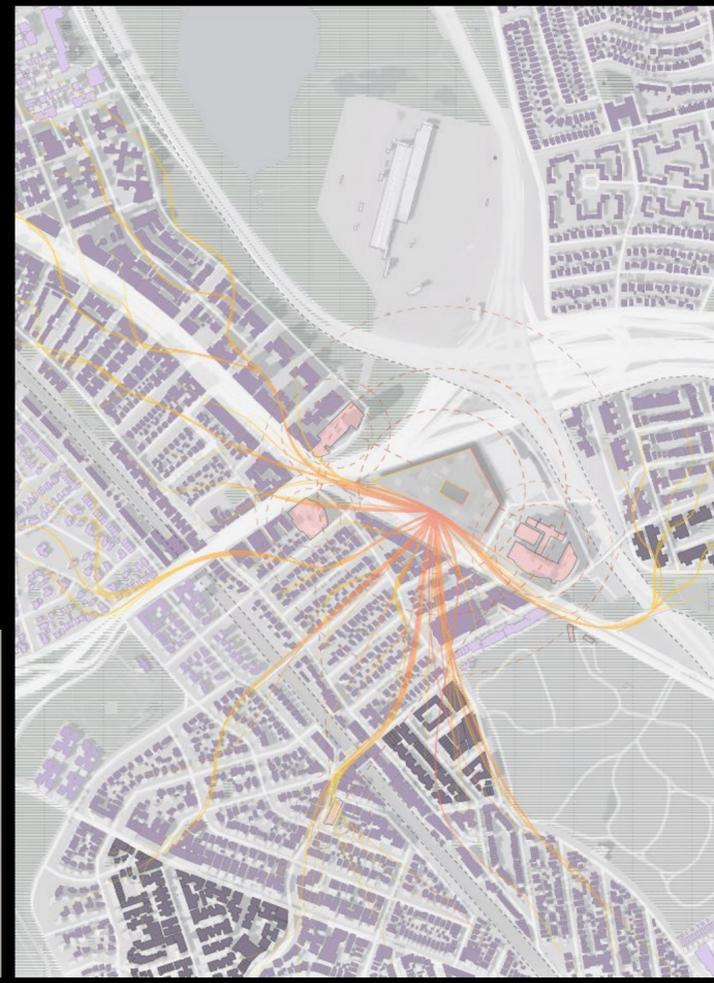
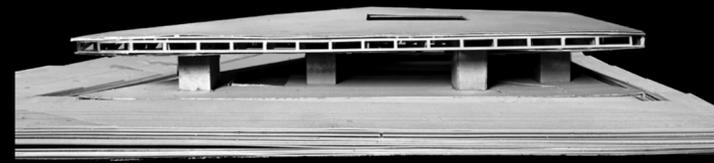
NEW YORK, US

Type: City Hall  
 Work: Individual  
 Time: 2023 Spring  
 Duration: 5 weeks  
 Instructor: Eric Bunge

The role of city halls triggers the question about evolve these government buildings can evolve in the 21st century. Despite the fact that city halls usually provide public services, for most of the times they are cut off from the social and political life of the public. Through transforming and assuming alternatives for the space of governance, the project reconsiders the emblematic and constituent elements of the halls to the society.

Queens has become one of the most diverse counties that hosts a wide range of residents from various cultural backgrounds. Within such **kaleidoscopic environment** of diversity, Queens Borough Hall was constructed in 1940s with a low cost of \$1.6 M.

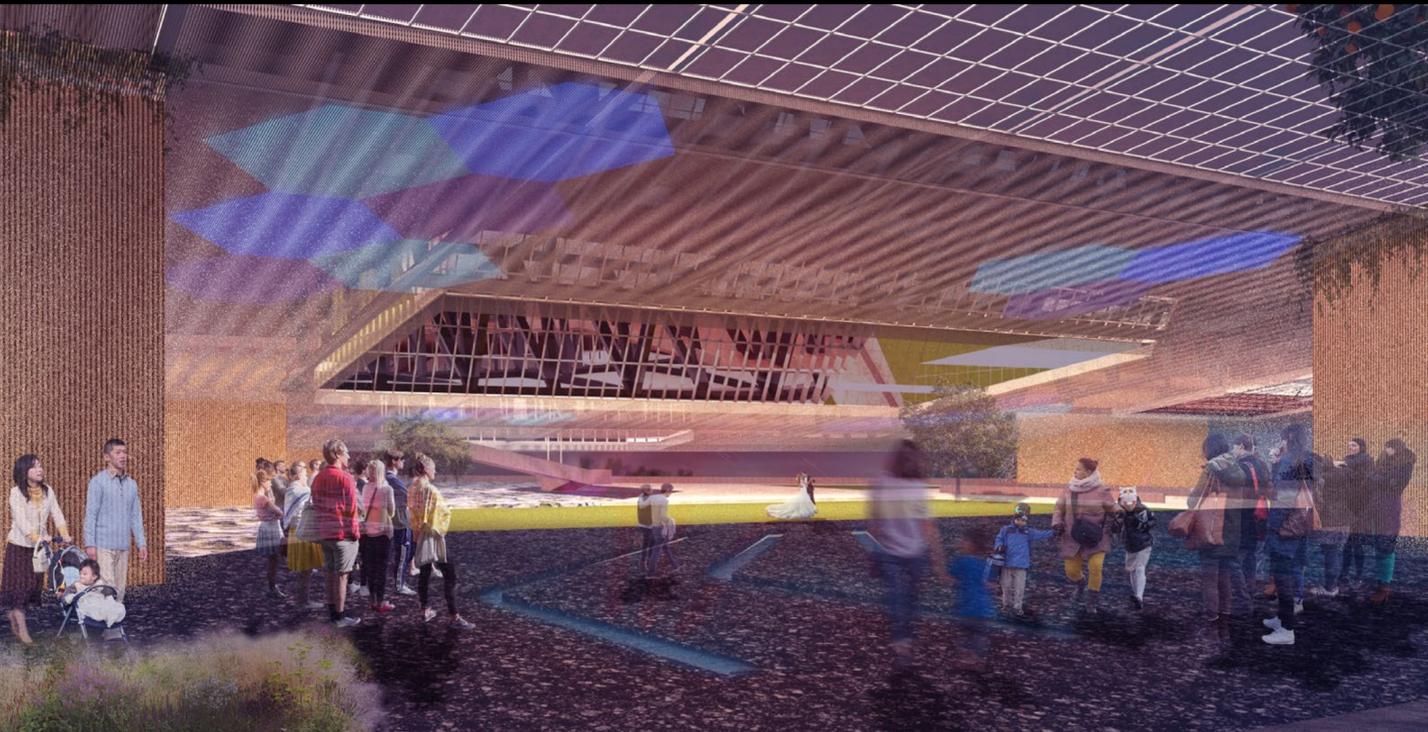
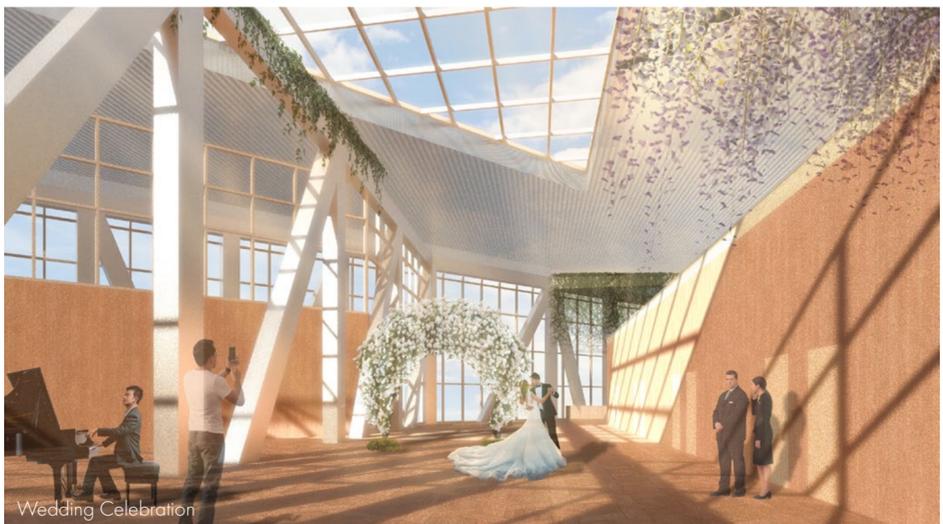
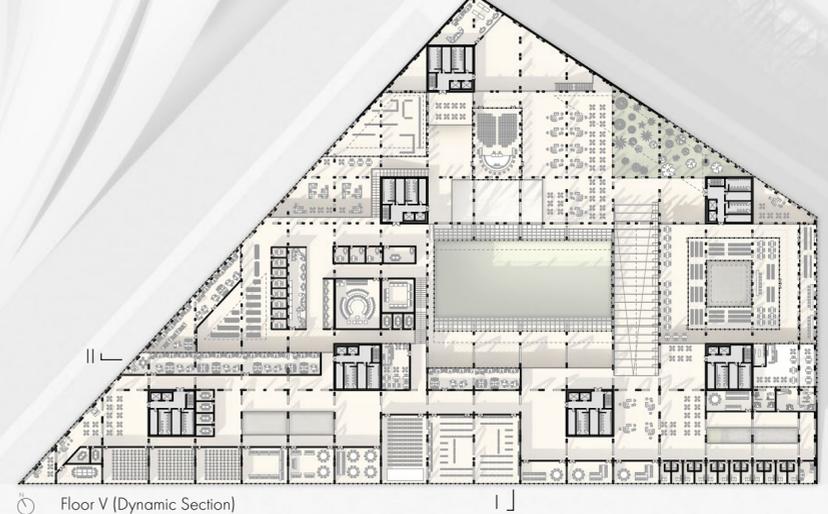
Though featured with highly diverse residents at the center of Queens, the area is still **losing its popularity**. To **revitalize** the heart of Queens, the project expands the architectural capacities of Queens Borough Hall with a series of **arenas** to re-energize the site. The proposal carves out a wedge void at street level to maximize its openness towards the public. Thereby, an elevated volume is created and more programs are proposed within the massive form.



## ELEVATED PRISM

The upper levels consist of stepped floors connected by a series of experiential stairs that guide circulations and views towards different spatial volumes. The original borough hall only provides limited public services like post office and marriage registration. The proposal brings a **wider range of programs for community service, cultural activities, and public care to the residents. Exhibition space, meeting rooms, performance rooms, library, team building space, and healthcare rooms** are included in the design to encourage interactions with different residents.

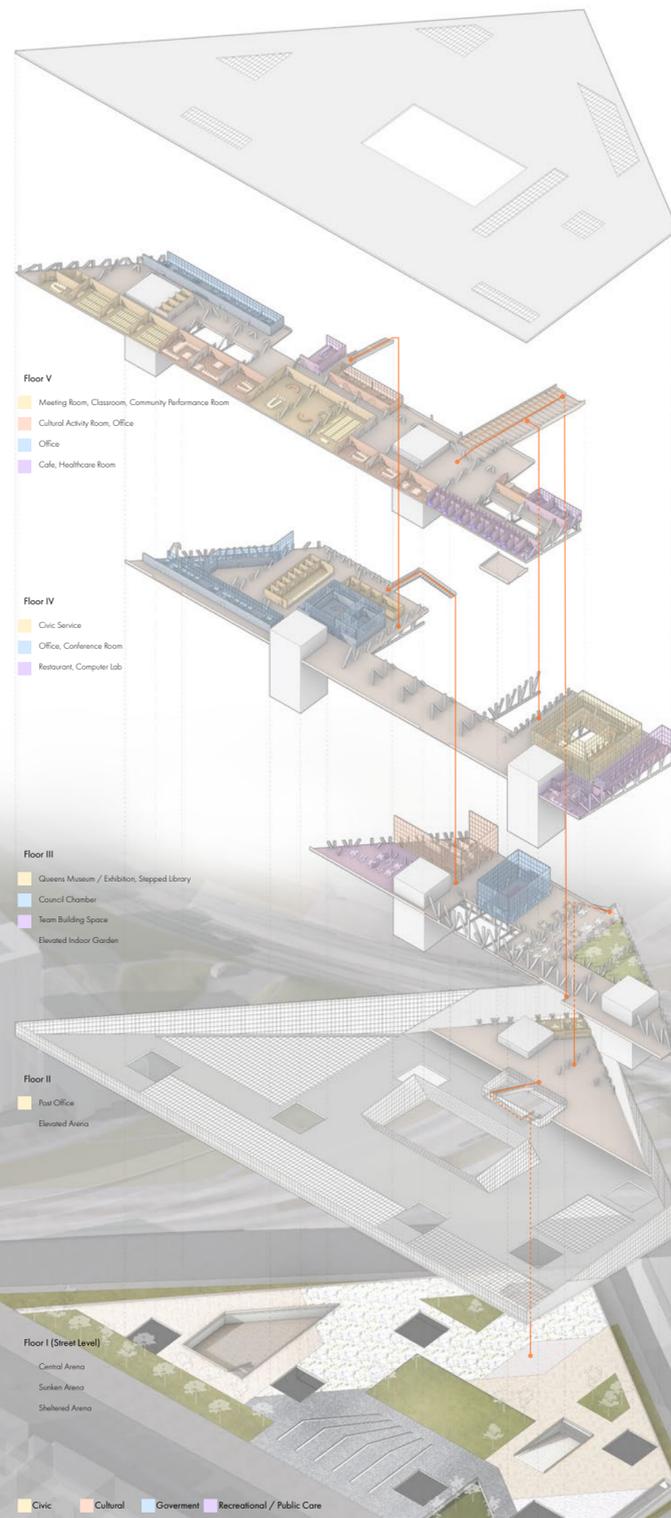
A **central void** is also carved from the upper volume to introduce more sunlight deeper into the areas at street level. The slight upward slope of the ground floor contrasts with the extruding overhanging structure, gently inviting the public to gradually enter and explore the elevated volume above ground. The council chamber is set **in juxtaposition with the central arena** to create the condition in which **decision-makers have to listen to the public's voice while making policies.**





## WEAVING IN THE OVERHANG

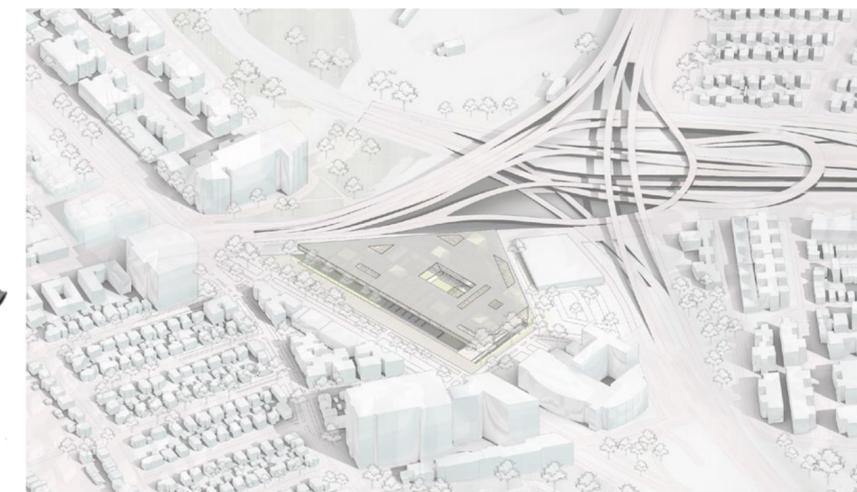
Some of the circulation area provides ample space for public engagement. Their orientations towards the center of the borough hall also transfer the focus down to the arenas. Arenas of different types are explored to also express the kaleidoscopic qualities of Queens. The arrangements and placings create different spatial experiences too. In addition to the 3 arenas accessible from ground level, another elevated arena greets the advent of the audience when they first arrive at the upper volume. Walking further up, programs for **civic, cultural, governmental, and recreational uses** are combined together to foster communications and collaborations.



## ARENAS IN THE SHELTER

3 arenas are directly accessible from street level surrounded by a ring of outdoor gardens. The main staircases leading to the upper levels are placed behind central arena so that when people are getting up to the elevated floors, they will again have the opportunity to witness the ongoing activities around the arenas. Echoing the kaleidoscopic quality of Queens, different material and texture combinations are also explored to convey the vitality and diversity of Queens.

1. Outdoor Garden
2. Sunken Arena
3. Main Entrance to the Upper Levels
4. Central Arena
5. Sheltered Arena
6. Sunken Garden
7. Parking Lot Ramp



# Grecale 2180

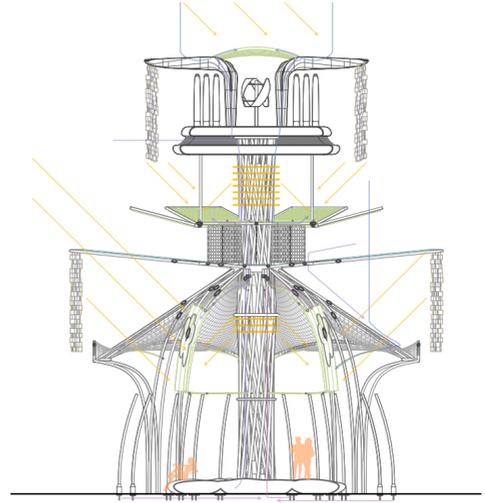
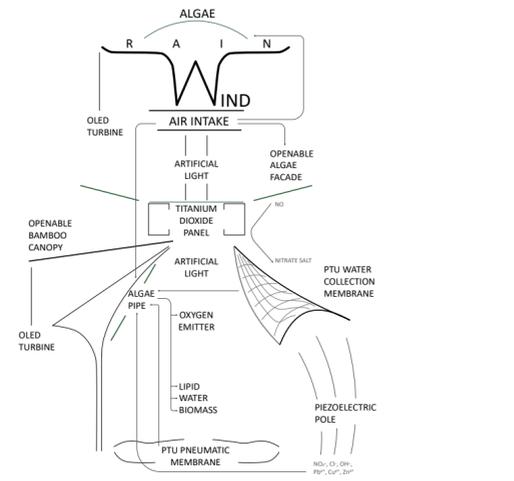
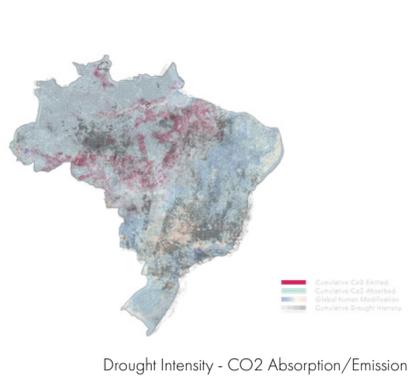
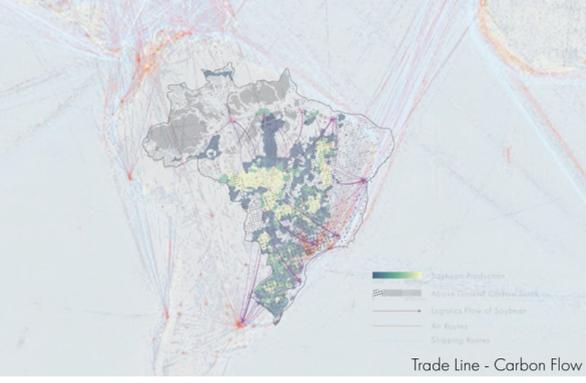
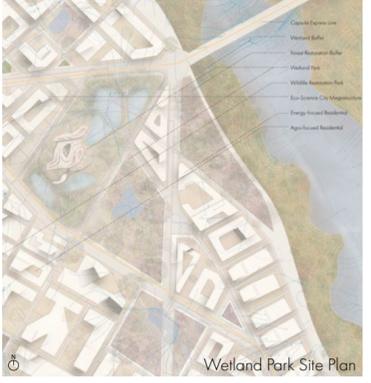
## SOCORRO, SAO PAULO, BRAZIL

Type: Research Institute  
 Work: Individual  
 Time: 2022 Fall  
 Duration: 4 weeks  
 Instructor: Vanessa Keith

Environmental challenges are projected to be more frequent and severe in year 2180. However, with the advancement of technology, architecture is equipped with more resilient strategies to confront such ecological issues and to help with urban regeneration. A **dystopic utopia** is proposed as an alternative for what and how architecture can evolve into.

Situated in a network of wetland park, the architecture actively responds to the prevailing northeasterly wind and **proposes a dynamic experience for the audience to act as part of the airflow particles to navigate through the institute.** The sleek aerodynamic profile converts accelerated airflow into energy and purifies the surrounding air quality by expanding the exposure with openable photobioreactor panels.

Equipped together with the climate devices, the project creates an intimate experience for the audience to engage with the architecture to form a **sybiotic** relationship between future architecture and the reconstructed urbanscape.

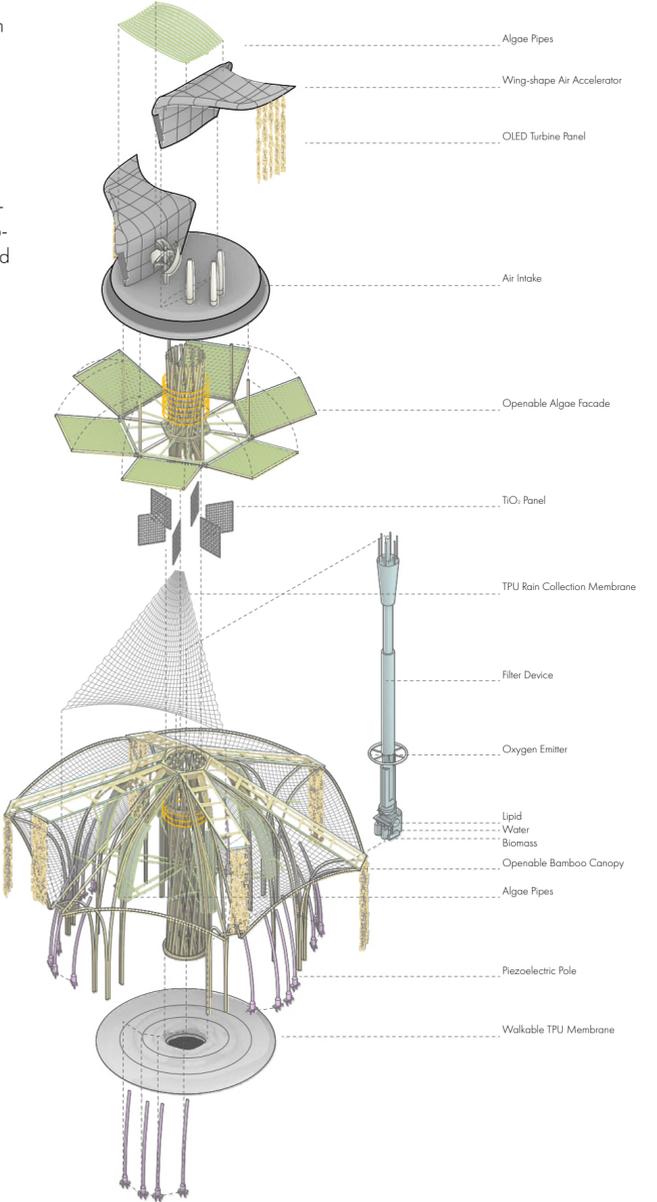


### RESTORATION EXPANSION -- CLIMATE DEVICE

Relationships between carbon footprints and environmental issues are explored to inform the urgency for ecological restoration. Moving beyond constructing single plant devices to mitigate such challenges, actors across the whole urbanscape at all scales will be integrated as a living entity to gradually regenerate an amicable and resilient future.

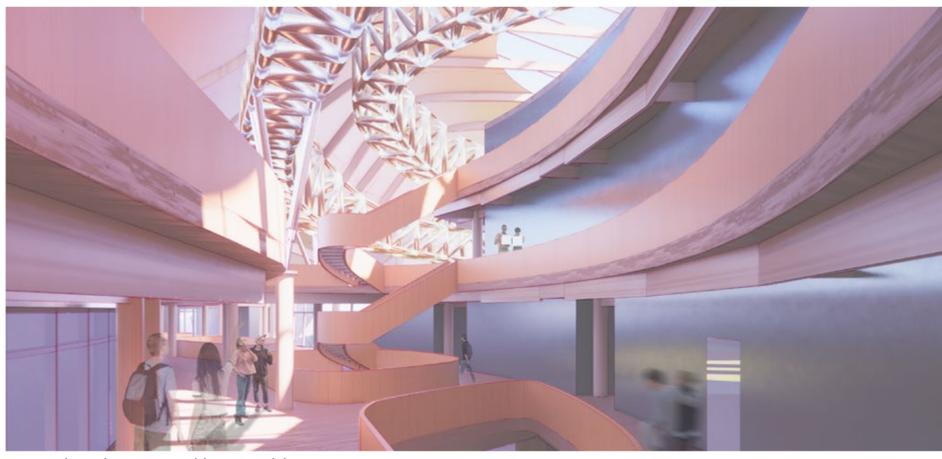
The research institute is located in a wetland park and is working closely with wind and sun. In 2180, it is projected that the water level will rise on an average of 13 ft and most areas of the site will be changed into wetland and wildlife parks as buffers against the issue of flooding or storms. The parks and green areas create a network of sponges to absorb and store water. Small singular warehouses and residential buildings will be merged into large structure with sustainable features for energy or food production facilities for a self-sustaining lifestyle.

A climate device is proposed at a medium scale to integrate environmental factors such as wind, sun, and soil. Such elements are combined with photobioreactors to provide cleaner air and extract toxins from the soil. To reinforce the **symbolic notion**, the climate device also includes TPU membrane allowing people's walking, jumping, and sitting as the driving force to pump more air into system which increases efficiency.

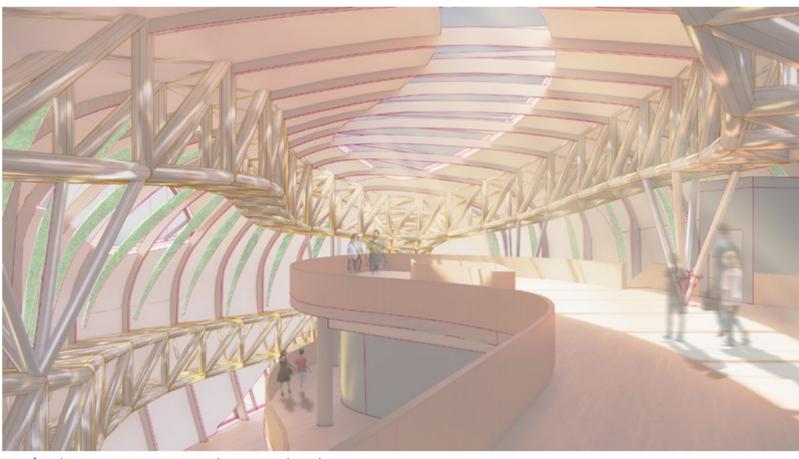


**AERAINMA (AROMA)**

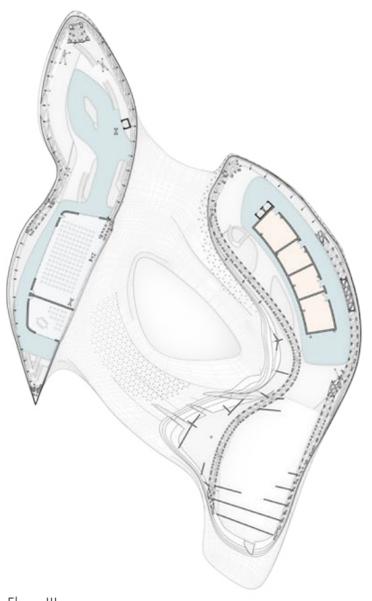
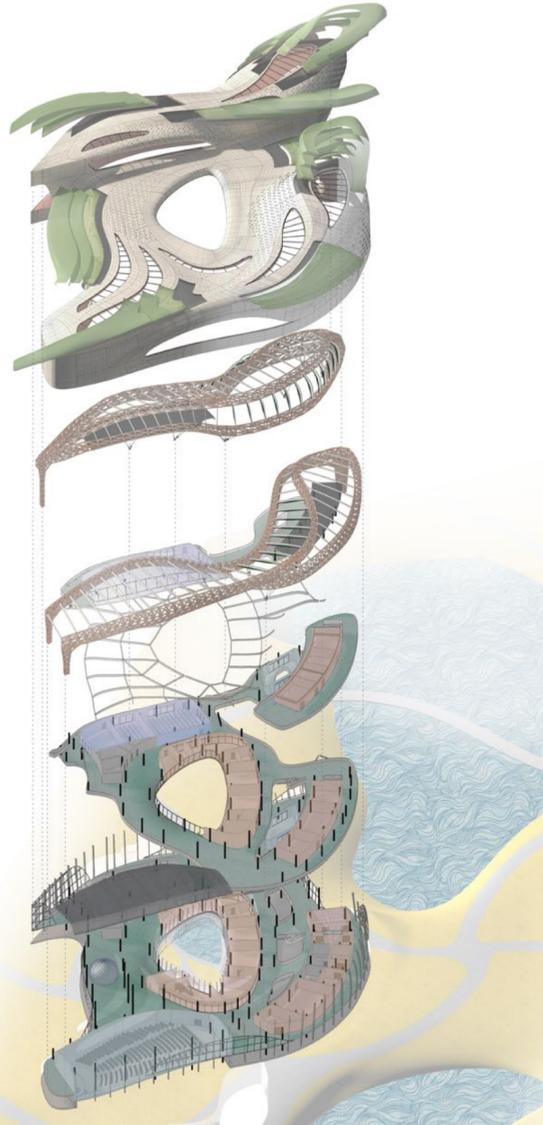
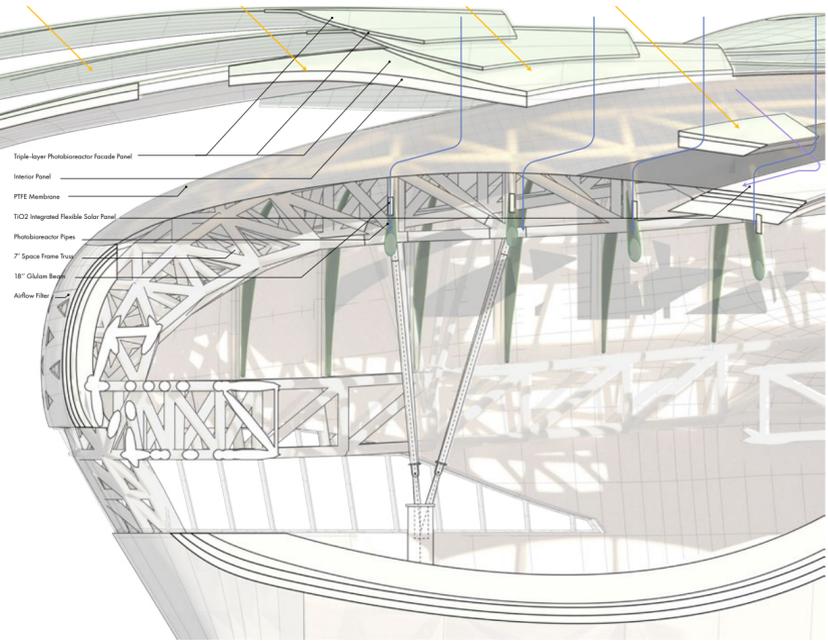
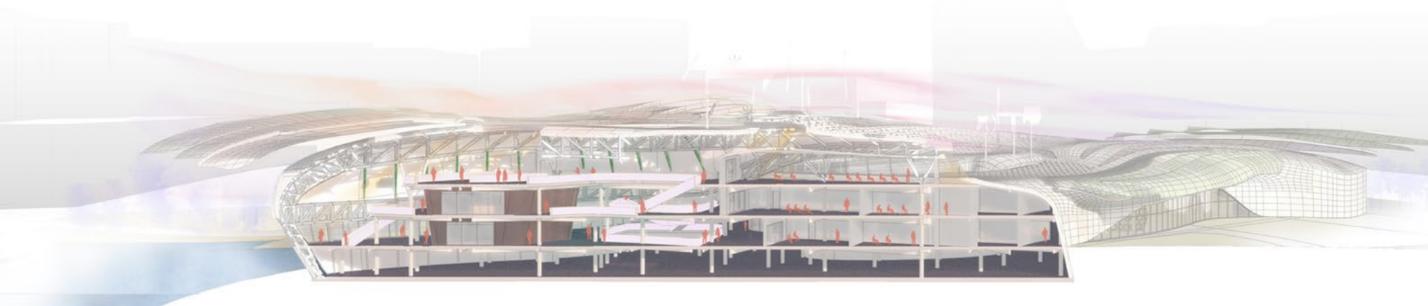
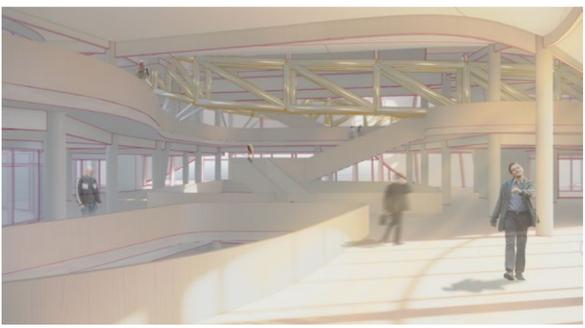
The facade of the research institute harnesses **wind, sunlight, and rainwater**. The triple-layered algae facade panels are openable structures that can open during the day to expand areas to receive sunlight and provide an adequate shading down below. When the panels are expanded, the PTFE membranes are extended to fill the gaps between the panels and the fixed structure. They will also act as rainwater conductors that later leads rainwater to the algae photobioreactors or the water storages. In addition to the openable algae panels, the rest of the facade consists of titanium dioxide integrated solar panels to generate electricity and hot water arrays and at the same time cling wastes in the air to the building facade. Triangular patterns of slits are also designed on some areas of the facade to let airflow into the algae pipes.



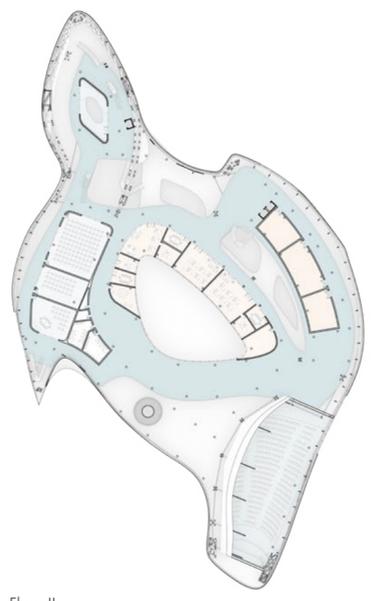
Spatial Vitality Aroused by Tangible Structure



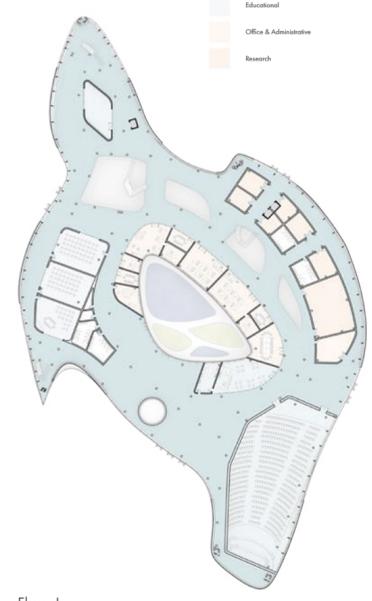
Refreshing Experience with Air and Light



Floor III



Floor II



Floor I

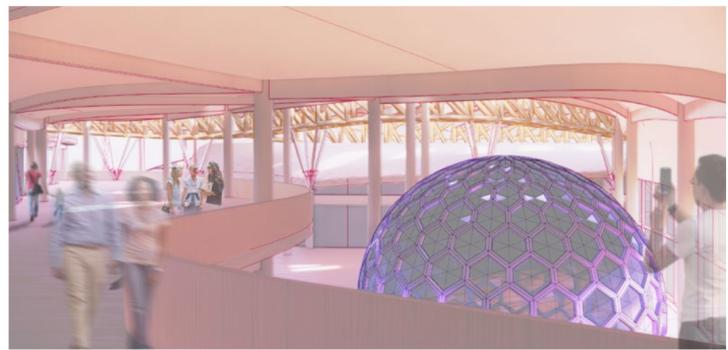
- Public Circulation
- Public Programs with Special Purposes
- Educational
- Office & Administrative
- Research



**DISPERSION - CONVERGENCE**

The architecture consists of 2 wings that are connected together to create an inner courtyard. The truss structure is working both with the exterior facade and the interior programming to create a spacious and **immersive experience**. Atriums are created across floor levels and special public programs such as conference auditorium, vr experience hemispheres, libraries are also integrated into the design. The north and west wing welcomes public participation and is also the place where most classrooms are located at. The central transitional zone is arrayed with offices and administrative rooms and the south wing is more private for research purposes.

Changing gradients of the zones determined by the transparency of programs are weaved by the continuous walkways and staircases, **relating to a similar experience of the airflow** along the outer facade of the architecture. Audience **act as such airflow members** explore the freedom of the interior space by following the continuous curvature of the roof, leading to **different conversations** and interactions among **different groups of users**.



# Flushing Post-Pandemic Healing Park

## FLUSHING CREEK, NEW YORK, US

Type: Research Institute  
 Work: Collaborated with Lingfan Jiang  
 Time: 2022 Fall  
 Duration: 4 weeks  
 Instructor: David Moon

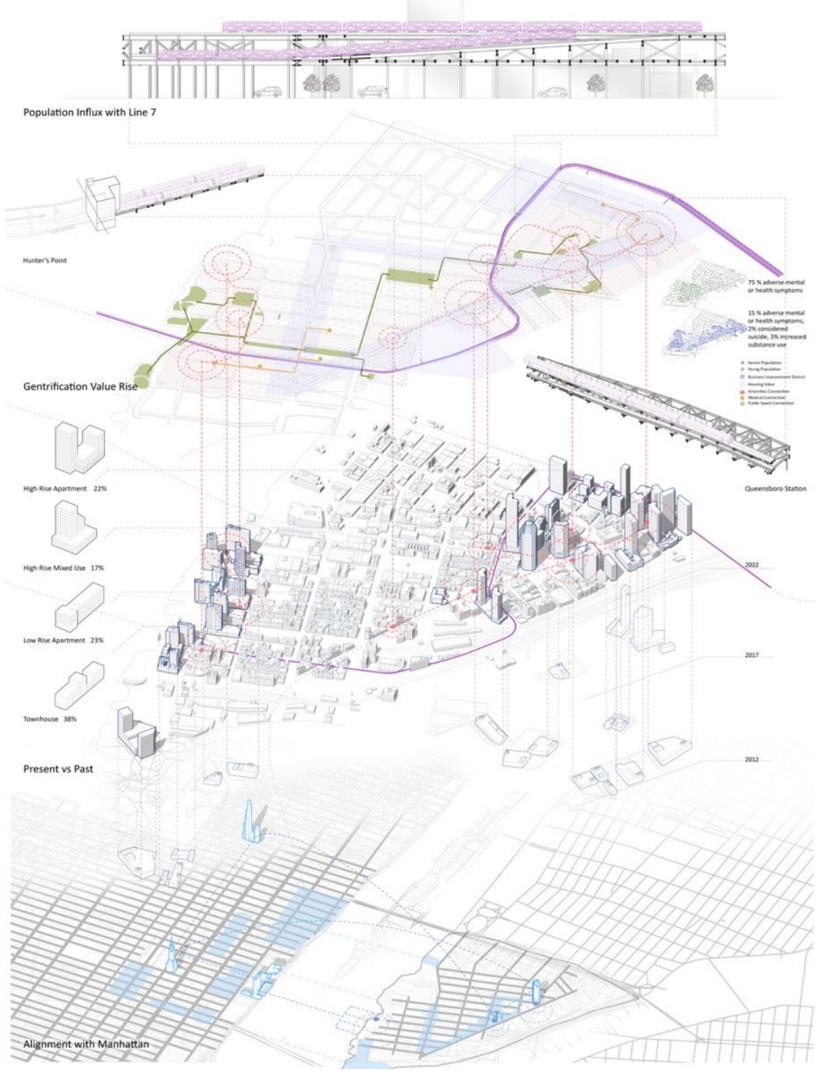
### URBANIZATION REFERENCE

Facing the risk of flooding and mental health issues of Flushing residents, the project proposes an alternative for the site to become a healing garden that incorporates a theater, a "village" of healthcare units and a boathouse with wetlands, habitats, farming lands. The proposal hopes to invite more residents from the Flushing community by hosting growing events to both heal the local residents and improve the waterfront ecology. The original U-haul building is turned into a laboratory for indoor growing and experimentations.

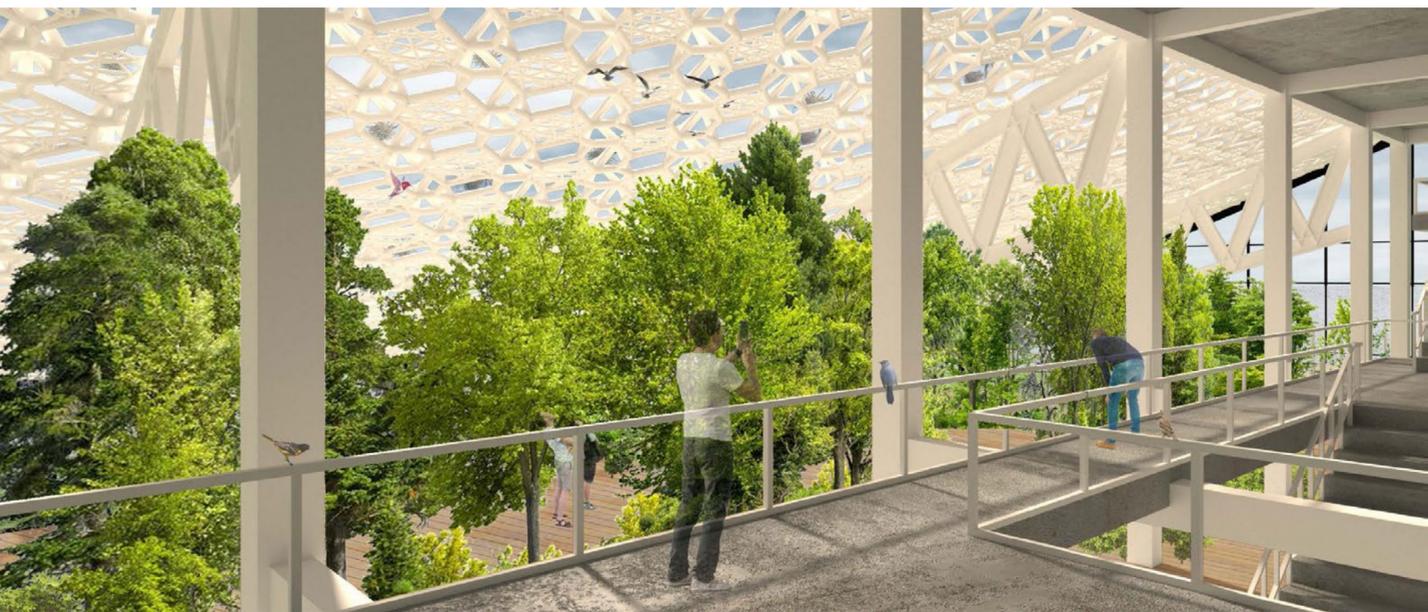
The north end of the site is bounded by the existing U-haul building, and we decide to renovate the facade and reuse it as our agricultural management and research center. The south end is our healthcare village. The second level of those buildings provides an open and panoramic view of the site. The huge sloped area in the middle is our collective farming land. The soil at the site now is highly contaminated. The bioswale garden close to the street helps mitigate stormwater runoff. The two plots next to the farming facility help experiment with suitable vegetations and crops for soil remediation. The main farming lands in the middle are further divided into smaller plots so that the community members can claim and take care of them.

The study of long island city along the 7th line shows an uneven distribution of population and wealth caused by gentrification. Similar to our site, the 7th line also comes from underground to above ground, and the rails transition from parallel to overlapping at different levels. Most of the high rises are constructed along the 7th line, and the addition of the amenities, healthcare, and open space are forming a network to reinforce the gentrification by excluding people who cannot afford the rising housing values. Because of its **proximity to manhattan**, the layout of long island city is getting more aligned with the manhattan grid. The similarities of both the MOMA, the Citigroup building, the Chrysler Building, and the zoning of the mid-to-high rise residential buildings create a **symmetrical pattern along the axis of the river**. The analysis of LIC gives us a negative example of urbanization and thus we hope to suggest an alternative for the public and create a space with the Flushing characteristics.

Facing the **risk of flooding**, the topography of the site is moderated to be more resilient against natural disasters. Kayaking represents a proactive action to fight for environmental justice and waterfront rehabilitation. Though the theater and the botanic garden will become submerged, the top of the structure still permits a possible connection for to the main site and provides a relatively stable and proper space for public gathering.



Rendering Courtesy Lingfan Jiang



Rendering Courtesy Lingfan Jiang





### HEALING PLACE FOR ENVIRONMENTAL JUSTICE

A theater exists discreetly among the plants. The theater is also connected to a botanic garden that provides a space for people to both witness different types of vegetation growing and to observe birds inhabiting from the sloped roof. The perforations on the roof create a niche-like area for birds to hatch and breed. Wetlands and forests are considered as buffers. The habitats are created to attract birds and animals (such as Canada goose, blue jay, and European starling) to come back and inhabit the site and restore local ecology. Pollinator pathways are also proposed to **encourage people's connection with the environment such as bees and flowers.**

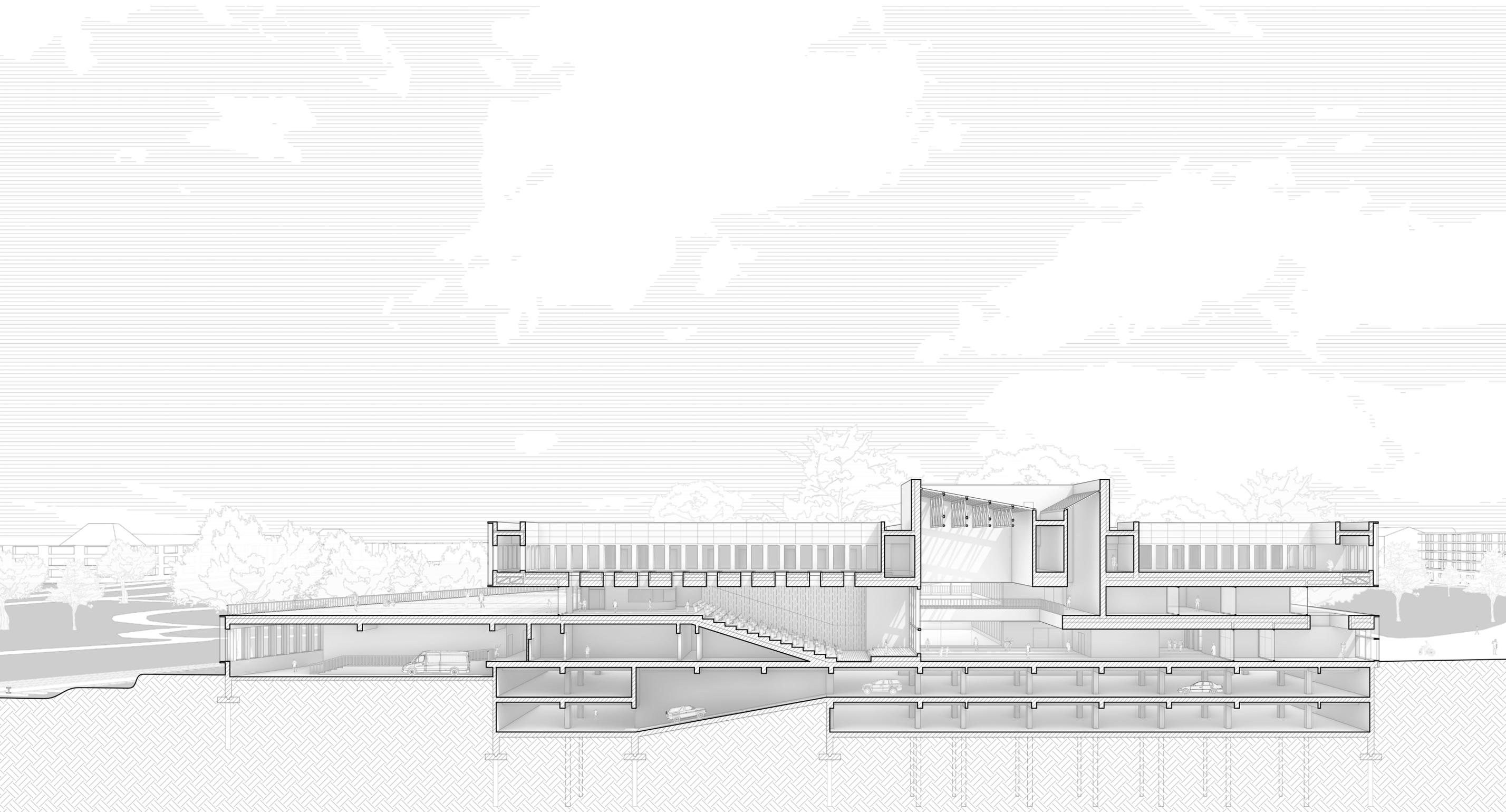
### ENGAGEMENT WITH LANDSCAPE

The programs are arranged and woven based on the slope of the landscape with the theater structure to create a walkable condition that gently ascends and descends. The kayak docks are arranged along the branch of the waterway and part of the riverside. Our design hopes to invite the public deeper into the site and create possibilities for their circulation flow to meet with people coming for the theater or healing events at the waterfront. Besides, it's also a satellite site for the existing Guardians of Flushing Bay who is a coalition of human-powered boaters, park users, and local residents advocating for a healthy and equitably accessible flushing creek.



Seminar of Section

Type: Commercial  
Work: Individual  
Time: 2023 Spring  
Duration: 6 weeks  
Instructor: Marc Tsurumaki



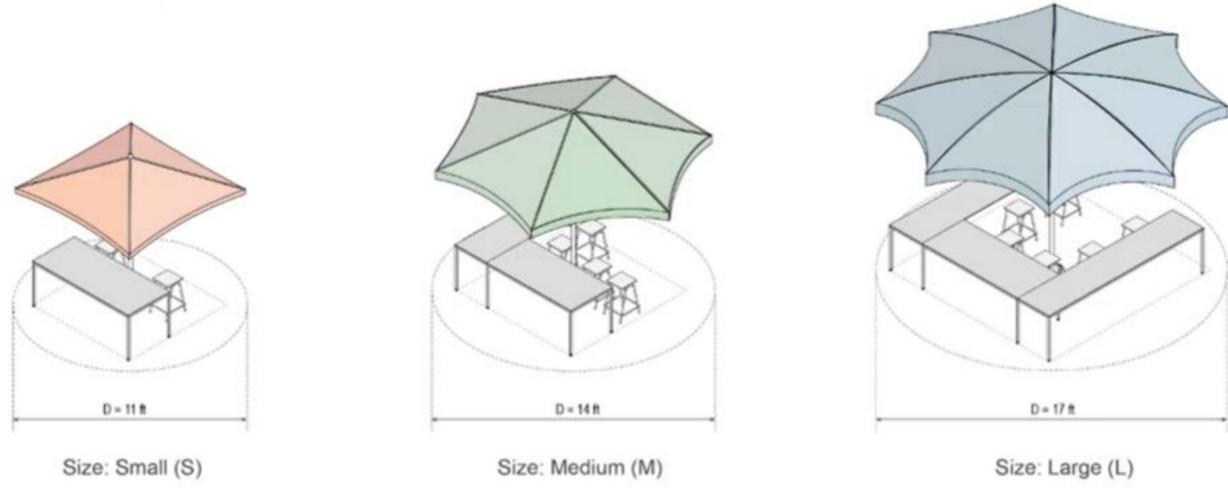
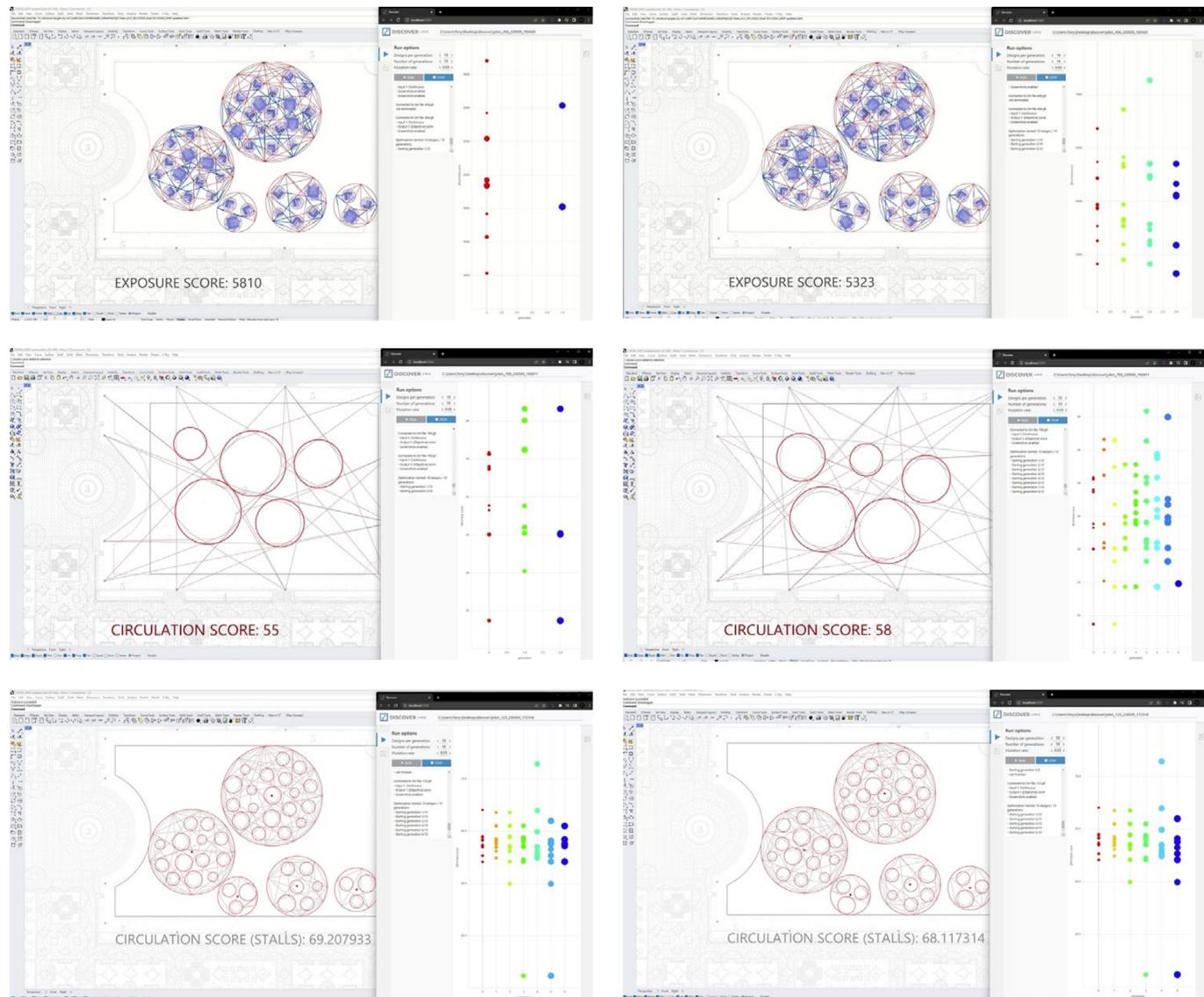
# Generative Design

Type: Research  
 Work: Collaborated with Jie Lai, Yufei Huang, Weiyu Xu, Tony Feng  
 Time: 2023 Spring  
 Duration: 6 weeks  
 Instructor: Danil Nagy

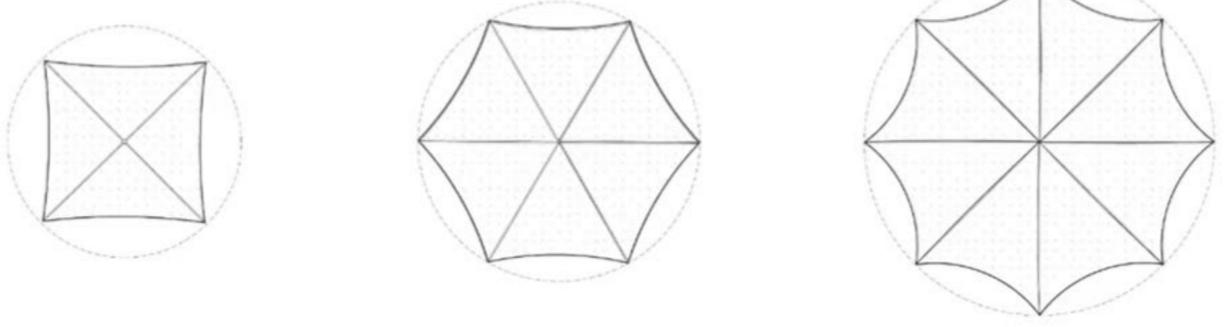
## STALL & PATH OPTIMIZATION FOR BRYANT PARK

Bryant Park has become a popular place for public activities. In order to encourage more flexibility in circulation and maximize exposure to the market stalls distributed in the park, the project aims to test out possibilities to balance the locations of the stalls of various capacities and sizes and propose convenient circulation routes for the pedestrians.

Through the iterations of circle packing and experiments with shortest paths to navigate within and through each boundaries for the stalls, a primary map for locating each stall and scheme for the orientations towards the visitors are laid out.



### Design Top View



# Rethinking Bim

Type: Residential  
 Work: Collaborated with Ze Meng, Annie Yu  
 Time: 2022 Fall  
 Duration: 12 weeks  
 Instructor: Joseph Brennan

Team Echo (Annie Yu, Steven Fei, Ze Meng)



## 160 EAST 22ND STREET

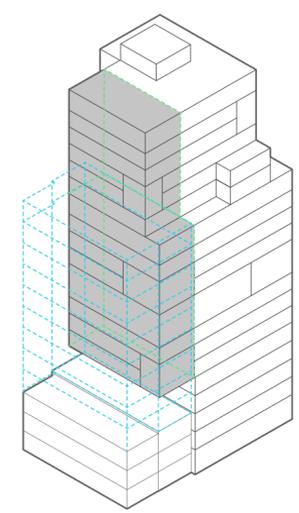
Located in Gramercy Park neighborhood in Manhattan, the 21-story building provides 84 condominium apartment units to the public. The architecture's 24' cantilever starts from the 6th floor and is punctuated with alternating fenestration pattern combined with consistent limestone cladding. Following the setbacks under the C2-8A Zoning district rule, the building grants the residents of top level units to have access to the terraces.

## 160 EAST 22ND STREET

S9 Architecture

|                           |  |
|---------------------------|--|
| <b>Zoning District:</b>   | C2-8A                                    |
| <b>Land Use:</b>          | Mixed Residential & Commercial Buildings |
| <b>Lot Area:</b>          | 4,950 sq ft                              |
| <b>Lot Frontage:</b>      | 66 ft                                    |
| <b>Lot Depth:</b>         | 75 ft                                    |
| <b>Number of Floors:</b>  | 21                                       |
| <b>Gross Floor Area:</b>  | 89,730 sq ft                             |
| <b>Total # of Units:</b>  | 82                                       |
| <b>Residential Units:</b> | 81                                       |

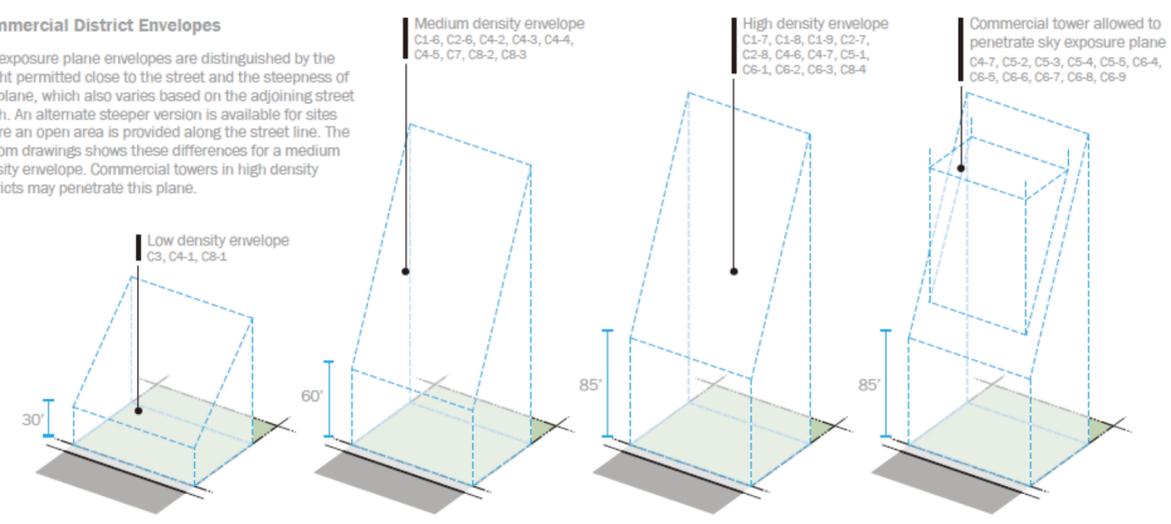
|   |                                |
|---|--------------------------------|
| <b>C2 Commercial FAR:</b>                               | 2                              |
| <b>R10A Residential FAR:</b>                            | 10                             |
| <b>Allowable Zoning Floor Area:</b>                     | 59,400 sq ft                   |
| <b>Purchased Area for Additional Air Rights:</b>        | 30,330 sq ft                   |
| <b>Available Air Rights from Neighboring Buildings:</b> | 16,944 + 15,938 = 32,882 sq ft |



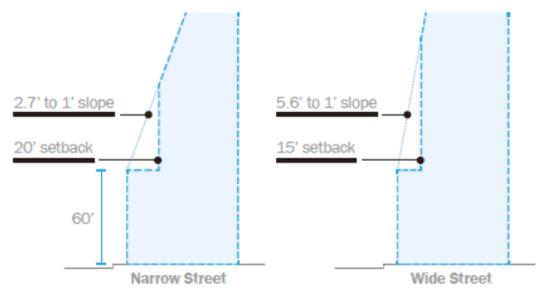
## Commercial Districts

### Commercial District Envelopes

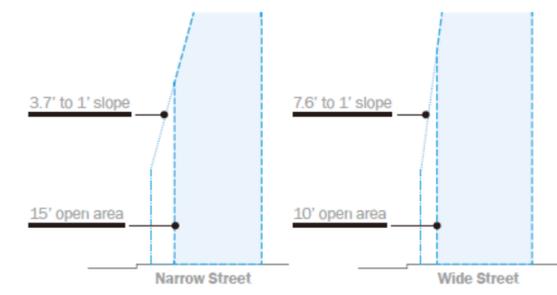
Sky exposure plane envelopes are distinguished by the height permitted close to the street and the steepness of the plane, which also varies based on the adjoining street width. An alternate steeper version is available for sites where an open area is provided along the street line. The bottom drawings shows these differences for a medium density envelope. Commercial towers in high density districts may penetrate this plane.

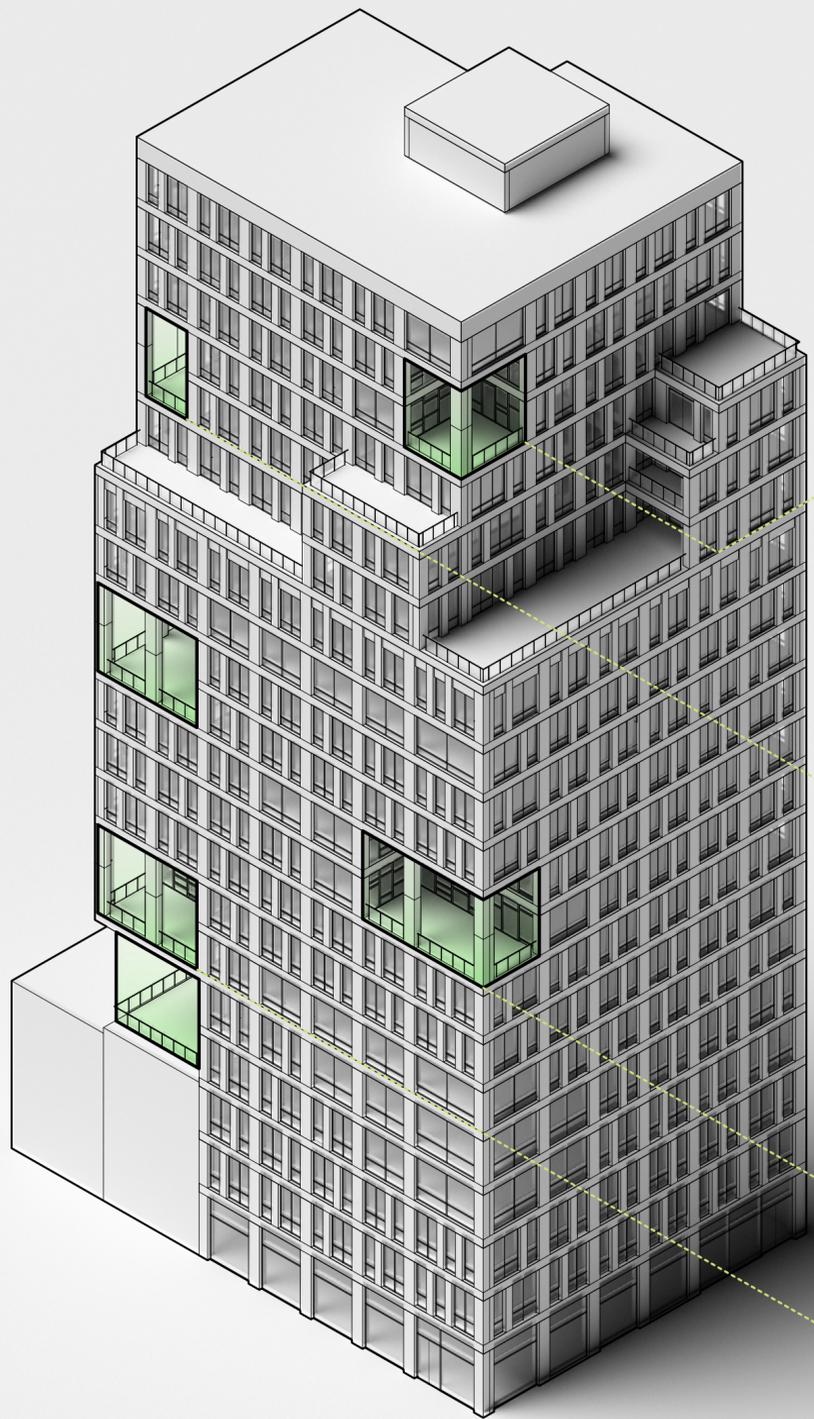
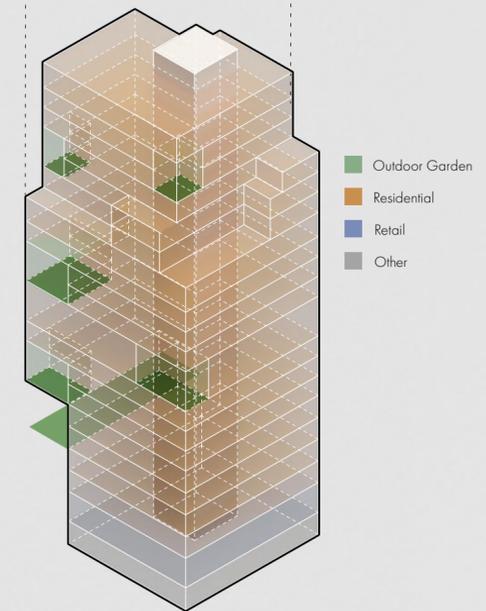
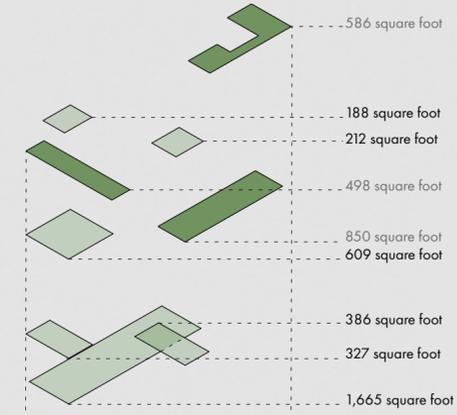
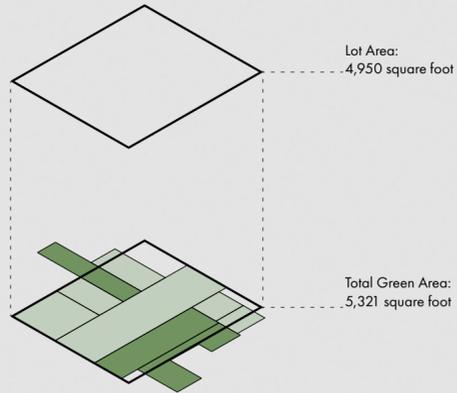


### Basic Sky Exposure Plane



### Alternate Sky Exposure Plane

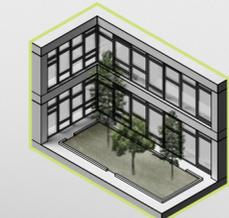




Outdoor Bar



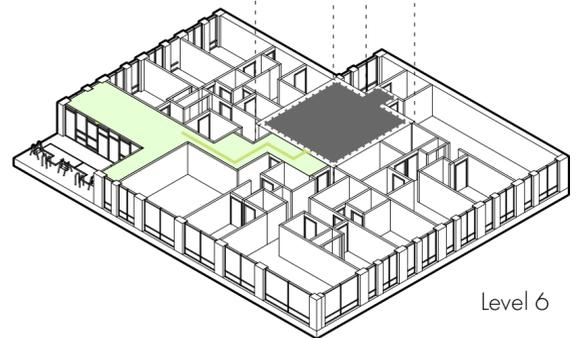
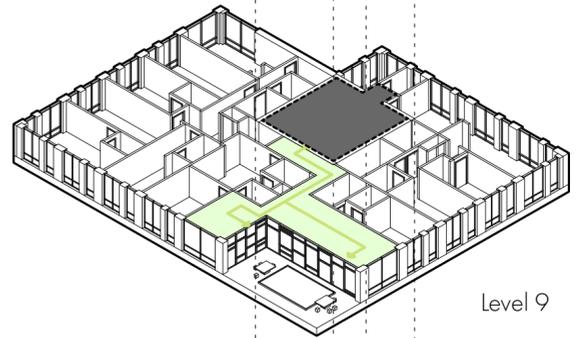
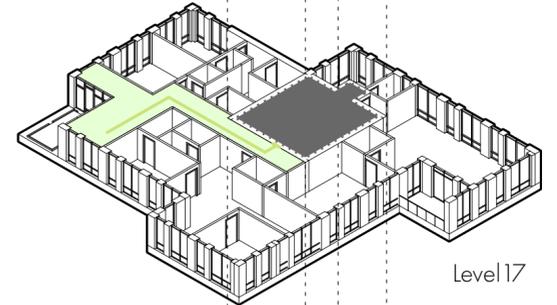
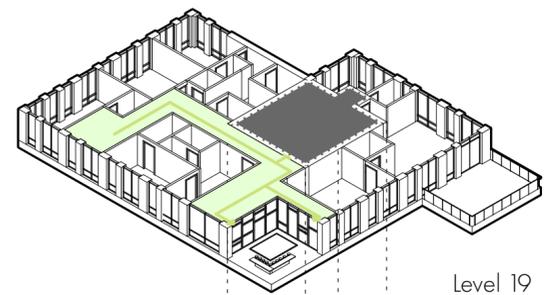
Meeting Space

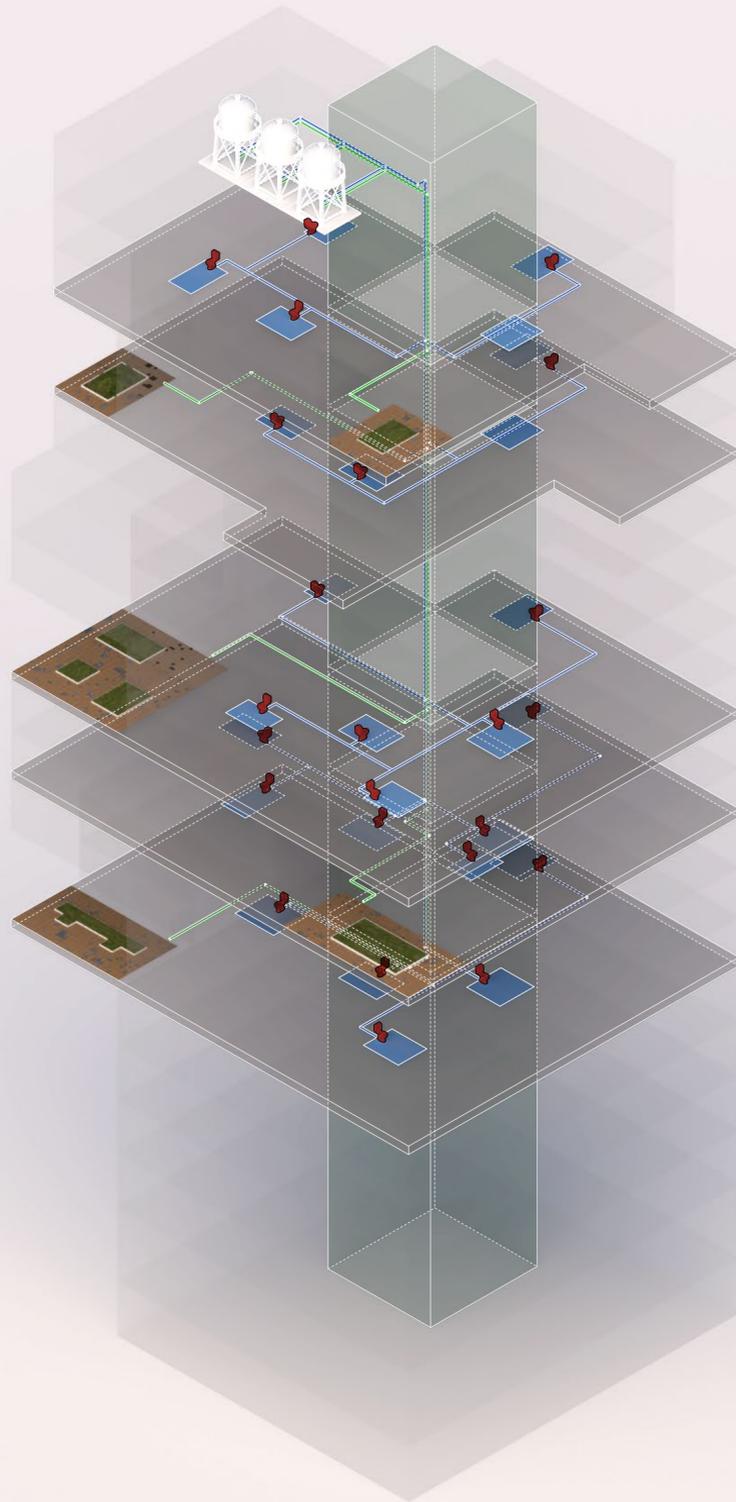


Sky Garden



Recreation





**Piping**

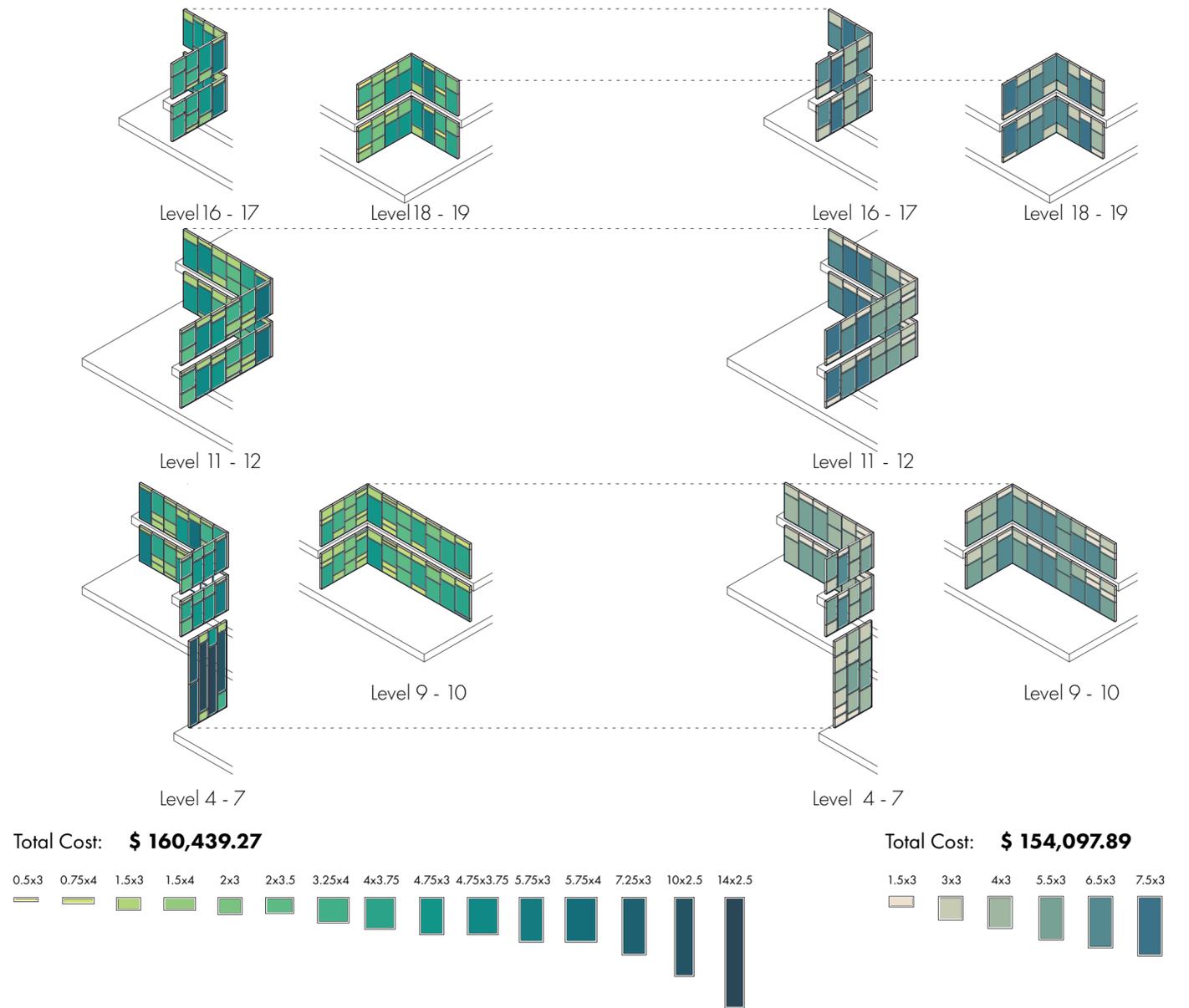
Rationalizing pipe system for better rainwater usage

- 8" Diameter Pipe for Bathroom
- 8" Diameter Pipe for Rainwater Collection

**Paneling**

Standardizing panels to get the lowest cost

Team Echo (Annie Yu, Steven Fei, Ze Meng)

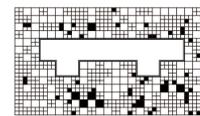


**Tiling**

Calculating the lowest cost of using the most slate

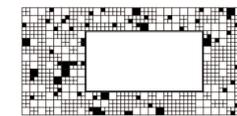
6th Floor

Tiling Area: 263.4 ft<sup>2</sup>



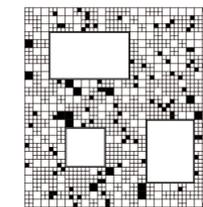
9th Floor

Tiling Area: 272.3 ft<sup>2</sup>



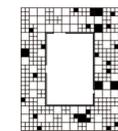
11th Floor

Tiling Area: 474.1 ft<sup>2</sup>



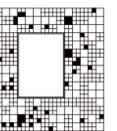
17th Floor

Tiling Area: 132.3 ft<sup>2</sup>



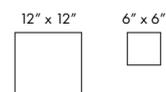
19th Floor

Tiling Area: 163.7 ft<sup>2</sup>



**Wood**

\$3/ft<sup>2</sup>



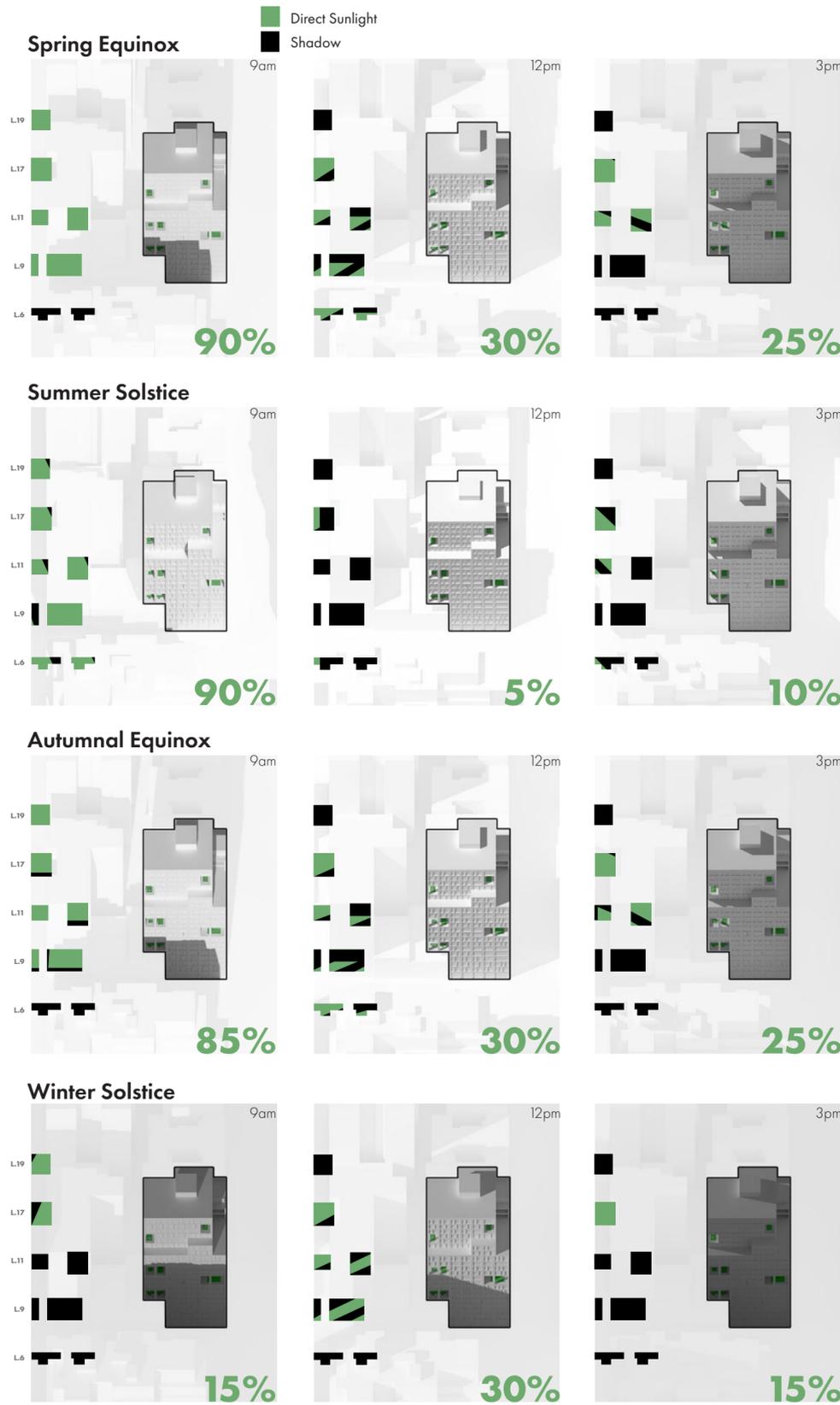
**Slate**

\$20/ft<sup>2</sup>

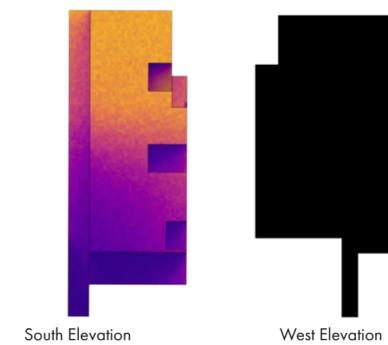
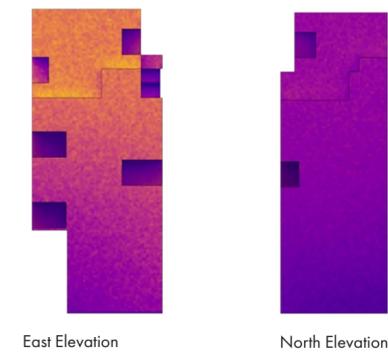
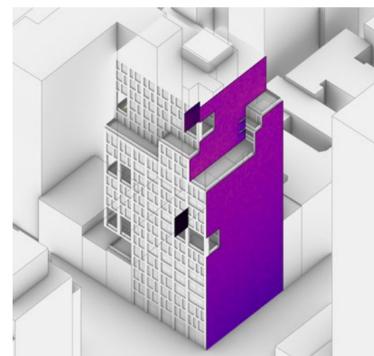


Area Ratio[Slate : Wood]: **3:7**  
 Lowest Cost: **\$ 5,711.13**

# Outdoor Garden Sunlight Analysis

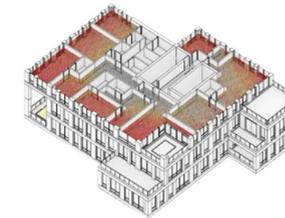


## Radiation Map

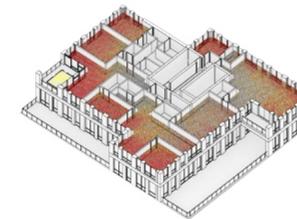


## Annual Glare w/o shading

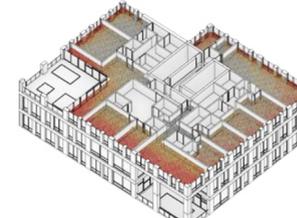
Level 19



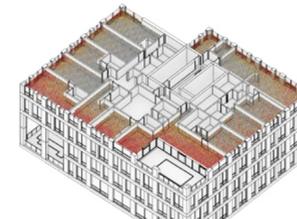
Level 17



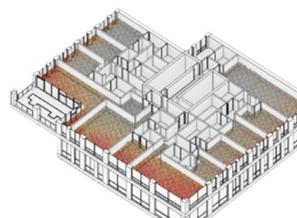
Level 11



Level 9



Level 6

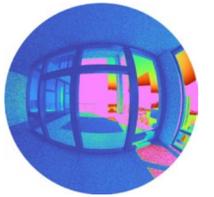


## Radiance Rendering at Selected Time of Day

June 23rd



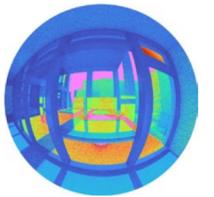
Sept 23rd



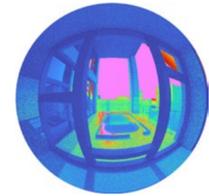
Dec. 22nd



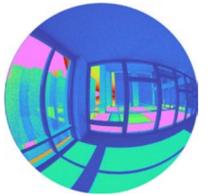
March 12nd



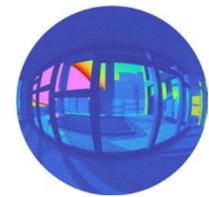
March 23rd



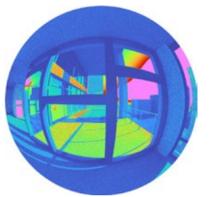
Sept. 22nd



June 22nd



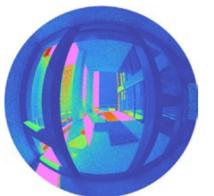
March 22nd



Dec. 22nd



March 23rd



# Indoor Daylight Availability Analysis

ASE analysis  
w/o shading

ASE analysis  
w/ shading

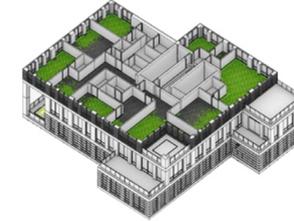
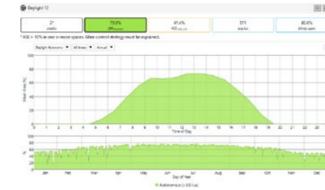
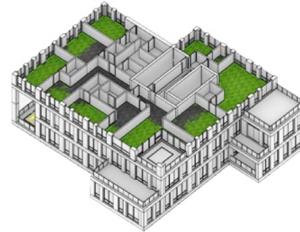
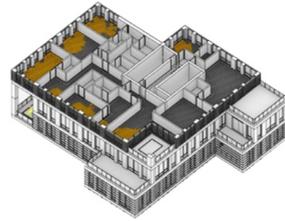
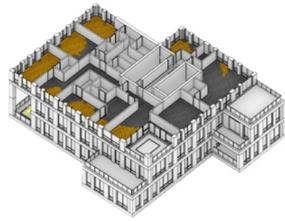
Daylighting  
Compliance  
w/o shading

Daylighting  
Compliance  
w/o shading

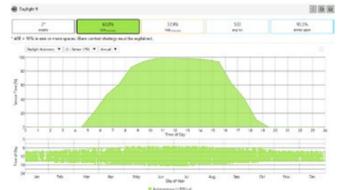
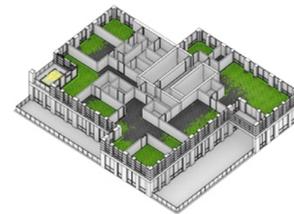
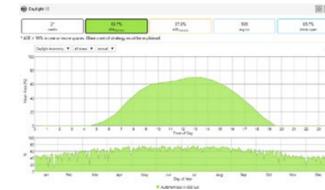
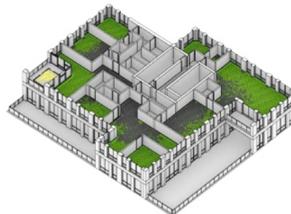
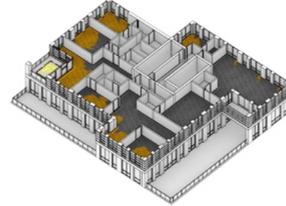
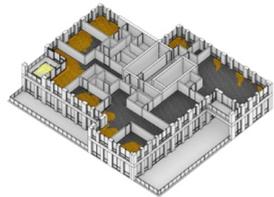
Daylighting  
Compliance  
w/ shading

Daylighting  
Compliance  
w/ shading

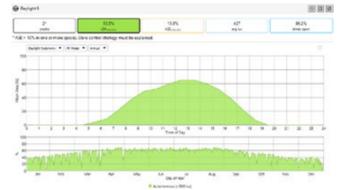
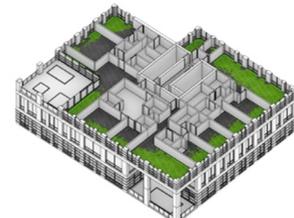
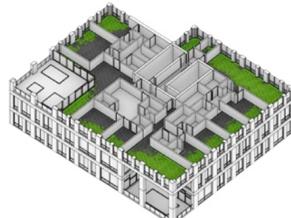
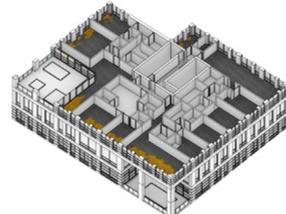
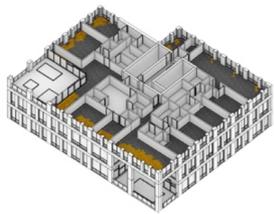
Level 19



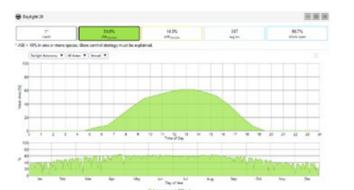
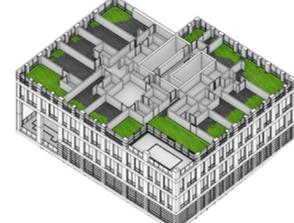
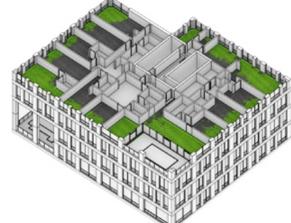
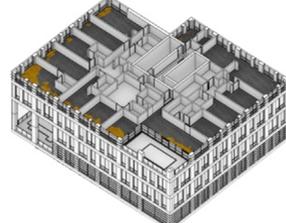
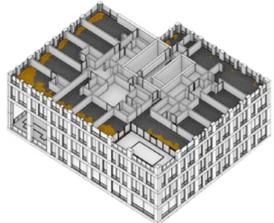
Level 17



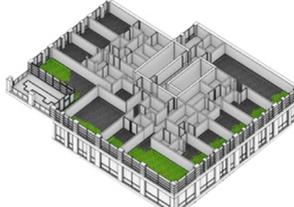
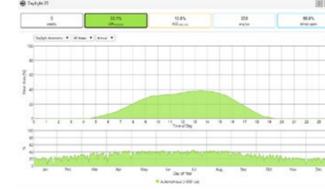
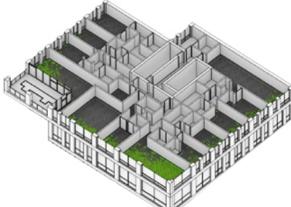
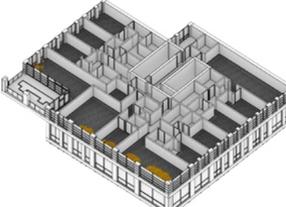
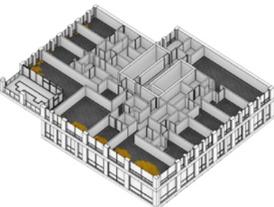
Level 11



Level 9



Level 6



# Optimization & Improvement Analysis

## Initial Design Adjustment

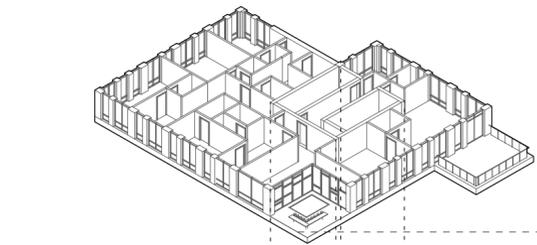
Average Rent per sq ft:  
Total Rent Revenue of Selected Levels with Existing Design:

\$ 1761  
\$ 1761 \* 34,263.3 sq ft = \$ 60,337,671.3

Average Increase of Value per sq ft:  
Average Units Lost per Level:  
Average Rent per sq ft:  
Total Rent Revenue:  
Profit Increase:

40%  
1.75  
\$ 2465.4  
\$ 2464.4 \* 26514.1 sq ft = \$ 65,367,862.14  
\$ 65,367,862.14 - 60,337,671.3 = \$ 5,030,190.8

## Optimized Design Strategy



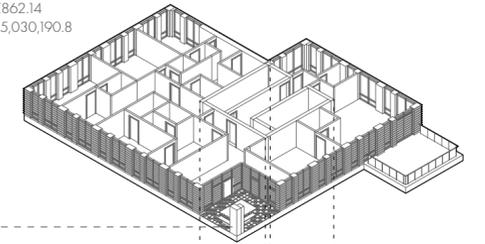
Level 19



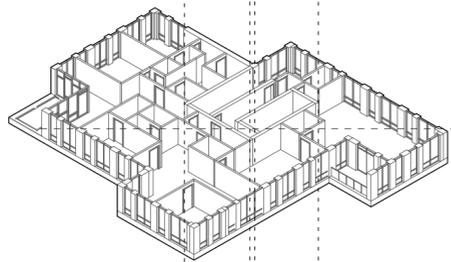
Outdoor Bar



Sky Garden



Level 19



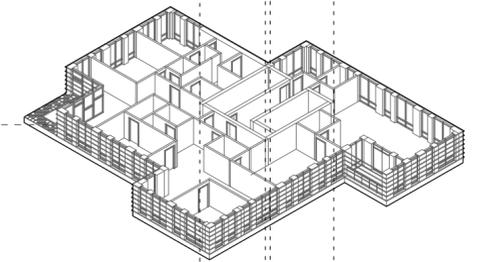
Level 17



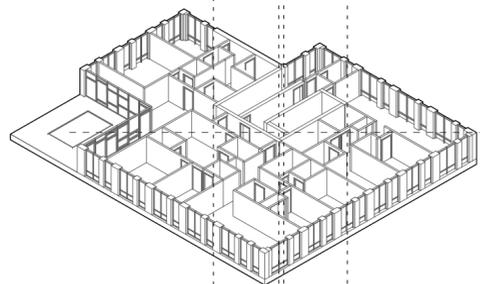
Children's Play Area



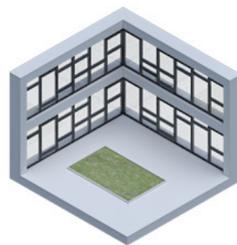
Children's Play Area



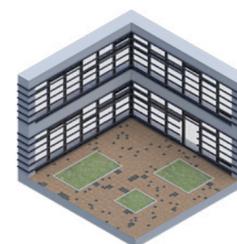
Level 17



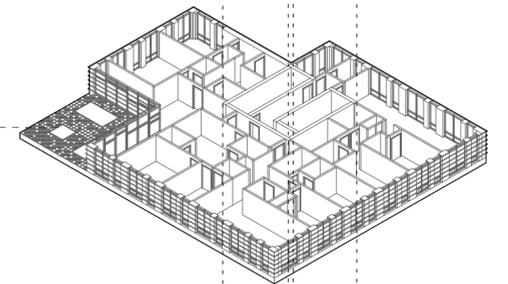
Level 11



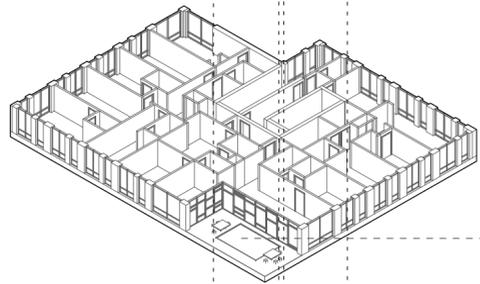
Meeting Space



Meeting Space



Level 11



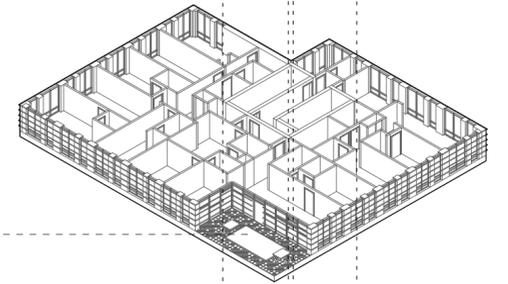
Level 9



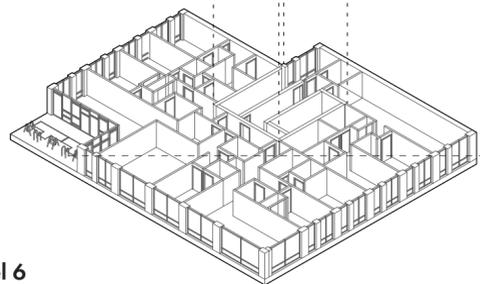
Sky Garden



Outdoor Bar



Level 9



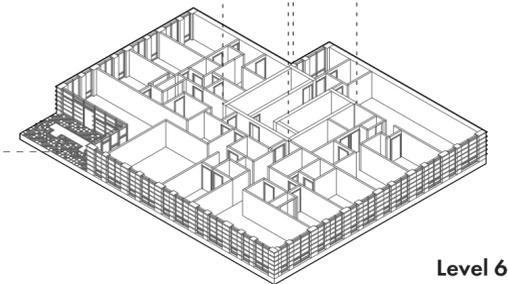
Level 6



Recreation



Recreation



Level 6



# Transscalarities

Type: Architectural Research  
Work: Individual  
Time: 2022 Summer  
Duration: 7 weeks  
Instructor: Andrés Jaque, Javairia Shahid

## Floating University by Raumlabor

Steven Fei  
Transscalarities  
Javairia Shahid  
July 28, 2022

### Abstract

The Floating University Berlin Project reimagines a sustainable future for urban coliving in Germany. The heavy industrial use of a water basin near an airfield has caused serious ecological damage to the site. Incorporated with water purification and reuse systems, the project creates a limited space with abundant programs that leave as little carbon footprints in the urban territory as possible. Through actively engaging with ameliorating the adjacent environment and communicating with actors across different disciplines, the project also proposes an effective alternative to future urban political structure for collective decision making and sustainable coliving paradigms. The following case study examines the Floating University Project through three lenses for the key aspects of the project: territory, ecosystem, and social alliance.

### Case Study

Serving as a haven for collective and experimental learning, the Floating University Project proposes a more sustainable future for the ecosystem and social infrastructure.

Situated on a wasted rainwater basin previously used for the airport field, the floating structure creates a possibility for revisiting the deserted ecosystem and actively engaging with environmental restoration. Through soil rehabilitation and water purification, the project gently touches the site with light structure at a controlled scale for various events and programs to take place.

In response to the changing dynamics of environmental exacerbation and reduction of usable territories for human society to expand, the architecture provides an alternative to embrace such shortages into simplified programming and integrated envisioning. The practice of the architecture encounters the problem of resource and land depletion, limiting its physical size and scale and the space it requires to occupy its architectural territory. Through constant reprogramming and efficient event management, the project invites artists, local experts, architects, musicians, and dancers to research and investigate daily routines and practices of urban living. The experiments prove effective solutions to mitigate carbon usage while still maintaining adequate dwelling environment for the residents.



Figure 1: Territorial Assemblage, <https://www.bellinink.com/2021/05/25/floating-university-berlin-outdoor-exhibition-territorial-assemblage/>

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In addition to the territorial confinement and revitalization of the adjacent ecosystem, the constructional details of the project guarantees a minimal impact on the surrounding context and envisions a solution to a structure capable of supporting dense population. Since most of the structure is built on water, lightness and stability are highly required for construction and connection. Though light in dimension, the structure performs in a versatile way to ensure abundant programs to take place. A leafy tower provides experimental space for tomato forests, and the narrow boardwalk bridges the tower to another laboratory tower incorporated with performative filter system to collect rainwater and actively joins with the daily water system in the kitchen and toilet. To consume material and spatial resources at a minimal scale and actively implement water recycling and purification systems, the project situates itself in a microclimate and constructs positive impact to revive the site.



Figure 2: Unerbodes Prototype for Design Education, <https://metropolismag.com/projects/floating-university-berlin-raumlabor/>

Not only does the project address the importance for climate and environmental engagement, the project also innovatively approaches to a more collective political atmosphere for social structuring and urban coliving. The "intra-urban offshore-lab" allows for collective thinking about the production of the city and the alternatives for urban models. Through hosting a series of lectures and public engagement events, Floating University attempts to question how applied research can be used for urban routines under various cultural environment, and how urban transformation processes should evolve and collaborate. The project reimagines the sizes of cities and urban spaces to deal with climate change and environmental issues collectively by uniting social actors across different disciplines. The collectivity of coworking and coliving are fulfilled through diverse programs taking place in the limited structure.

3



Figure 3: Alternatives for Experiencing the City, <https://www.demurech.it/en/events/istanbul-design-biennial-2019/04/for-the-floating-university-investigation-alternative-way-of-experiencing-the-city.html>

Through emphasizing the shared experience and encouraging complex communication of the multifaceted venture, Floating University both incorporates the institutional way of organizing and educating and elaborates on the entanglements of need for resource and social collectivity in the real world.

4

### References

Sagredo, Rayen. "Floating University Berlin / Raumlabor Berlin." ArchDaily, ArchDaily, 9 Sept. 2018, <https://www.archdaily.com/901501/floating-university-berlin-raumlabor-berlin>  
"Floating University." Big Think, 5 Sept. 2021, <https://bigthink.com/floating-university>  
designboom, myrto katsikopoulou I. "Raumlabor Reconstructs 'Floating University' Bubble for Knowledge Transfer in Venice Biennale&nbsp;." Designboom, 1 June 2021, <https://www.designboom.com/architecture/raumlabor-reconstructs-floating-university-structure-experimental-learning-venice-biennale-05-21-2021/>  
Contents, WA. "Raumlaborberlin Built a Floating University to Explore Future Possibilities of Experimental Education." World Architecture Community, World Architecture Community, 31 July 2018, <https://worldarchitecture.org/article-link/ehpp/raumlaborberlin-built-a-floating-university-to-explore-future-possibilities-of-experimental-education.html>

5

## Climavore by Cooking Sections

Steven Fei  
Transscalarities  
Javairia Shahid  
July 28, 2022

### Abstract

The Climavore project envisions the construction of space and infrastructure in response to climatic events and landscape alterations. Iterated in various sites by the water and mostly working through the method of food and diet modification, the team Cooking Sections has proposed different menus for local restaurants in accordance with local food resource management for maintaining more robust intertidal ecosystems. In order to propose new set of adaptations towards the unexpected climatic phenomena, the project frames our diet in the globalized market setting to transform large-scale agribusiness for sustainable food production and consumption. The following case study examines the practice and influence of Climavore through three lenses for the key aspects of the project: territory, political alliance, and actors.

### Case Study

Starting from an installation of an oyster table in the intertidal zone in Portree, Scotland, the Climavore project has been expanding its investigations concerning with food and local ecology. Through establishing intertidal polyculture farms to cultivate food, ecology, and habitats, Climavore proposes alternative recipes for what human should eat or not to address environmental preservation and regeneration.



Figure 1: Serpentine Galleries, Cooking Sections, <https://www.serpentinegalleries.org/what-on-climavore/>

Over-cultivating of salmon has led to an exacerbation of water quality and ecological disturbance. In response to the dead zones caused by salmon farms in the Isle of Skye in Scotland, Climavore collaborates with local residents, restaurants, activists, schools, and the general public to divert away from salmon farming. Through working with bivalves and seaweeds that clean the water, the project utilizes a structure with 1000 oysters to breathe and filter seawater. During low tide periods, it serves as a dining table for humans.

2

Transitioning from large-scale to a limited territory for aquaculture, Climavore aims to develop a more sustainable scheme for food production. The practice of overfarming has caused soil degradation and erosion. Wetlands have been drained for agricultural cultivation and more artificial "concrete shores" are constructed to prepare for the rise of water level worldwide. By recognizing the food shortages and the shrinking territories for human to exploit, the project constructs the light lattice-like structure in the intertidal zones to encourage new ways to support diverse food systems that thrive between the land and the sea. Less industrial-scale infrastructure is used for aquaculture and the negative impact of such territorial forms are reduced greatly. Under the circumstance, more space are liberated for wetland restoration and natural habitats to enhance a symbiotic relationship between land and sea.

In addition to the efforts to restore intertidal ecosystems, Climavore investigates ways to align political strategies and also aims to engage with the contemporary lifestyles through altering food production. Switching to the growing of seaweeds and bivalves ameliorates the water quality because they release antibiotics and chemicals to treat the excess of nitrogen caused by open-net salmon farming. To address the urgency of acidification, antibiotics release, appearance of new parasites, and the disappearance of wild species, the project raises such issues as a social and political coalition with local restaurants, farmers, and politicians to change the food production chain and recipes and expand public educational programs for regenerative aquaculture. The project continues to extend to a series of pedagogical actions, apprenticeship programs, ecosocial material innovations, and fostering of circular economies to encourage local societies to transform with more ecological awareness and sustainable aquaculture practices.



Figure 2: Climavore on Tidal Zones, <https://www.climavore.org/seasons/on-tidal-zones/>

What's more, Climavore considers the role of human and non-human species as actors to promote a sustainable symbiotic relationship under the current climate issue. Instead of considering non-native species as invasive forms that severely damage local environment, economy, and human health, the project encourages rethinking of the arrivals of such species caused by human actions. Through reflecting upon the nuances of the actors, regardless beneficial or not, native or invasive, Climavore experiments and mingles with different eating approaches to relocate, reuse, and redistribute such characters into the

3

society. The project considers the "negative" species as potential food or diet resources to shift from the need to exterminate pests to the mode of feeding on the pests. To rework the imbalances in multispecies relationships and the disturbance to social order, Climavore Station is created to investigate ways to convert the "pests" and extreme weather conditions into a beneficial foundation to support ecological and infrastructural systems.



Figure 3: Installation Performance, <http://www.cooking-sections.com/CLIMAVORE-On-Tidal-Zones>

Working beyond the alternative food systems that triggers a series of social and infrastructural regeneration, Climavore looks into a broader spectrum of issues in the current era of climate change such as subsidence, desert ecology, and shore pollution. To better organize the use of resources and participation of different actors, Climavore proposes an alternative future through aligning its effort with public coalition for environmental restoration and sustainable social lifestyles.

4

### References

Pascual, Daniel Fernández. "Recipe for Disaster: The Climavore Diet." Architectural Review, 25 July 2020, <https://www.architectural-review.com/essays/recipe-for-disaster-the-climavore-diet>  
Moss, Rachel. "Becoming 'Climavore': Why Eating with the Planet in Mind Is the Diet You Need." HuffPost UK, HuffPost UK, 14 Oct. 2021, [https://www.huffpost.com/uk/entry/how-to-eat-sustainably-climavore-diet\\_uk\\_6166ee81e40028316c905762](https://www.huffpost.com/uk/entry/how-to-eat-sustainably-climavore-diet_uk_6166ee81e40028316c905762)  
"The Climavore Project Is Asking Restaurants to Introduce Earth-Friendly Menus." <https://www.outlookindia.com/travel/the-climavore-project-is-asking-restaurants-to-introduce-earth-friendly-menus-news-187964>  
"CLIMAVORE: On Tidal Zones." Cooking Sections, <http://www.cooking-sections.com/CLIMAVORE-On-Tidal-Zones>  
Rosenthal Sloan, May. "On Cooking Sections." Afterall, vol. 49, no. 1, 2020, pp. 83–90, <https://doi.org/10.1086/709637>  
"Food for Thought: Climate Change and Art." The Economist (London), vol. 432, no. 9161, 2019, p. 86–Emery, Tom. "British Art Show 9." Art Monthly, no. 450, 2021, pp. 28–29.

5

# Arguments

Type: Architectural Critic

Work: Individual

Time: 2022 Summer

Duration: 7 weeks

Instructor: Andrés Jaque, Guillermo Arsuaga

## Social and Political Responsibility of Architecture – A Collection of Thoughts from Lectures by Ines Weizman and Frida Escobedo

The issue of architecture that I will be analyzing concerns with the social and political roles of architectural design selected from my questions from week 3 for Ines Weizman’s lecture. Since my question is relatively broad to outline, I will be specifying these responsibilities and capacities of architecture by generalizing the discussions from the workshops and lectures. Through deconstructing Ines Weizman and Frida Escobedo’s work from historian and designer perspectives, my essay aims to understand how architecture engages social participations into the complexities of reality.

Weizman’s methodology of tracing the materiality though 2 concepts (dust and data) reflected the entangled problem of colonial and imposing design strategies across the globe. Her interpretation of history through unfolding material made me wonder what political role architecture should take to avoid the same mistake in the contemporary global scale. Remains of the architecture lent evidence to reveal the secret treaties between UK and France, which outlined a border that gave rise to continuous conflicts in the middle east. Some of the material examined also reflected the allegations of disputable collaborations with Nazi Germany to transfer Jews and material assets. The analysis, which examined not only architectural materials but also bank accounts of the “companies”, appalled us in the processes of material, capital, and political transfers exerted onto the development of modernism architecturally. The Max Liebling House presented in the lecture recorded different layers of material history related to the political and economic entanglement of the house as a nexus of the White City’s complex history. Weizman illustrated the story of the residents with those of the Jewish students from Bauhaus who were forced to move to Mandatory Palestine. It implied the growth of Tel Aviv in 1920s to 1930s with the import of building materials and structures from Nazi Germany and situated beyond the border of Palestine to the development of Bauhaus modernism across the Sykes-Picot border line. Weizman’s alignment as a historian with contemporary digital data techniques discreetly unveiled the diaspora of modern architecture and dynamic movement of modern architecture forced by politics. To rebuild and restore the historic remains, the perspectives of the marginalized, dislocated, and oppressed voices that used to be unheard were now revealed through her analysis. To position architecture’s role in the contemporary reality, Weizman answered us to consider how and where architectural material could be assembled and the political regimes behind it. Through emphasizing the consciousness in design with buildings to document conflicts, complexity, and different historical narratives, she further reminded me of architecture as an active agent to echo the physical need and experiential sheltering for those are enduring political injustice and misconduct.

The migration of Bauhaus implied the practice of colonial modernism spreading across the world through the challenges of political reinforcement and historical authenticity. Such complex trajectories were also shown in the entanglements of Josephine Baker’s fight against fascism and issues of identity and social relationships. The enchantment with the actress led to Loos’s design for her house. Studying from Adolf Loos’s design of her house as a media, we were able to ponder Loos’s personal life and his design choices because of his hearing disability. Although lacking of detailing and program specificity,

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capital, and societal factors. By addressing the physical distance between sites of labor and manufacture and sites of consumption, she guided us to think more about multi-scalar cultural, material, and territorial implications of architecture.

Weizman and Escobedo had strong consciousness to use different aspects of architecture (materiality, programming, and geopolitical connections to physical and cultural transformation) to capture place and time and uncover conflicts and nuances across borders and actors. The beauty of modernist space couldn’t exist without the separation of discrimination, domestic labor, or coercion by political regimes that put those in dirty, precarious, and bad conditions which were usually inaccessible to the rest of the audience. Recognizing the failure of modernism in its neglectation of sociocultural environment and diverse range of audience types, both architects addressed the ethical responsibilities to reveal what political driving force was behind the formation of architecture and whether the architecture held the capability to serve for good causes collectively. Though neither of the architects responded directly to the question of what extent to punctuate on the flexibility in the programming of the space, Weizman and Escobedo called for transforming and blurring the boundaries to create more spaces with qualities of “circulating exteriority”, which provided chances for collectivity and equality.

Architecture used to be a passive device forced by political regimes or ideologies. Weizman and Escobedo motivate us to consider architecture proactively to participate in global geopolitics and stay genuine to the specific social context and milieu. Architecture is not a permanent monument but cultural bindings that echo the collective memories and histories and project towards a humanistic narrative of equality and unity.

different spaces of a spectrum of sound qualities were purposefully incorporated into the abstract design. The design of such rooms intrigued me for the capabilities to host various types of domestic, social, and political events. Weizman’s analysis discussed in the workshop and lecture presented the domestic work of Adolf Loos and the backgrounds and results revealed both the material evidence and the stories behind the secret wars of Josephine Baker. Her illustration and attitude to the universal subject of modernist architecture led me to weigh more considerations of the qualities of the audiences to architecture beyond just the architect’s design choice. Relating Loos’s design with the universalizing aspect of Bauhaus movement into colonial and imposing design strategies, Weizman demonstrated the sensitivity to understand the cultural and social elements specific to site and the conflicts and stories behind building materials and components to avoid the mistakes of modernism. Thus, personal experiences of design could be more linked to the socially constructed and the narrative of both the past and projected future.

Different approaches to care about the social hierarchy and political complexities across social classes were shown through Frida Escobedo’s lecture. From an architectural designer’s perspective, Escobedo examined the spaces for domestic labor workers specifically to illustrate the inequalities in Mexican modern architectural design. While Weizman was using digital techniques of the building material to uncover the invisible entanglements of those hidden history and reality in peril conditions, Escobedo explored such invisibility through a series of floor plans of houses and condominiums by other Mexican architects to amplify the discrepancy of the living conditions among different groups of users. Raising the question about the duality of visible and invisible, she highlighted how the spaces of domestic labor were consciously concealed by Mexican modernist architects. She also mentioned recent political changes in Mexico in 2018 changed the balance of forces involved in domestic labor composition and the complicit discrimination against them. She directly encountered the problems of the gendered, classist, and racist configurations in architectural design and encouraged us to deal with such division of social and economic relationships through architectural design. In regards to the question of how the social role of architecture should be to create chances of connection and communication among different social classes, Escobedo pointed out the importance of the awareness to make architectural interventions to recognize and redistribute the problems through circulation flow, structural and tectonic consideration, and materiality of opaqueness and transparency to move the “hidden spaces” into the public realm.

Aside from examining the lack of concern for domestic “reproductive” labor workers among some Mexican modernist architects, Escobedo managed to incorporate both empathy and experience of subjectivity to create more spaces adaptive to multiple uses and to blur the spatial and social boundaries. The interview and analysis about Escobedo’s Serpentine Pavillion discussed in the workshop highlighted her intention to create “temporal without being ephemeral and permanent without remaining in place” conditions. I found her Serpentine Pavillion echoing Weizman’s attention to the materiality and data that recorded history uniquely by displaying the site of material and spatial redistribution and accumulation and the capacity to witness the forced movements of migrant and refugee. The alignment with the Prime Meridian reminded us of her intention to position architecture in a geopolitical stance and the capability of architecture to encounter issues of global transfer of assets,

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### Works Cited

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3. Escobedo, Frida, Mauricio Patron, Galvez A. Hernandez, Xavier Nueno, and Santini L. Munoz. *Domestic Orbits.* , 2019. Print.
4. Constable, Joseph, Lewin, Rebecca. *Frida Escobedo, Serpentine Pavillion 2018.* , 2018. Print.

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