

PORTFOLIO OF WANTING SUN

M.S.AAD 2022 Graduation 2020-2022 Projects at GSAPP

Wanting Sun

email: sunwanting1996@gmail.com

EDUCATION

Columbia University, GSAPP | 2020-2022

M.S. Advanced Architectural Design

Iowa State University, College of Design | 2014-2018

Bachelor of Architecture

AWARD & HONOR

2017.08

Bronze Medal in Architectural Society of China | Chinese National Architecture Design Competition for college students

Project: Library in the Mist

Won in collaboration with Kaihong Gao and Haoran Zheng

2016.09

The Best Student Desisn-Build Projects Worldwide | ArchDaily

Project: TwoXTwo

Honor in collaboration with all Arch 202 Studio peers

EXPERIENCE

2020.03 - 08 Architectural Intern | EVA Architects, Shanghai, China

JinHua School, Zhejiang Province | Facilitated the schemetic design and design development

Wycombe Abbey School, NanJing | Facilitated the landscape design, building details and materials

FSY Museum, Shanghai | Generated the schemetic design of volume and circulation as well as the surrounding landscape

ShiJiaZhuang Memotial Park | Generated schemetic design, blending the sunken cemetery with landscape on top

Jinan Humanism Memorial Park | Schemetic design for the parking, toruism spot and rest & service

2019.03 - 08 Architectural Intern | Charlap Hyman & Herrero, Los Angeles, CA, USA

Moda Operandi, K11, Hong Kong | Facilitated the schemetic design and design development

MZ Wallace, NYC | Facilitated the schemetic design, produced 3d models and renderings

Valley Home, LA | Generated the house interior design, assisted the landscape design

Sugarbug Dental, Oxnard | Delivered the design of dentists' resting room, assisted the light design of ward room

BABYS LA | Researched site condition, produced 3d models, assisted with design development

Senta Fe Opera Stage Design | Created design renderings, made physical model

2017.05 - 08 Architectural Intern | Kooo Architects, Shanghai, China

Xin Hong Shu Yuan, Shanghai | Facilitated the interior design, produced floor plans, sections, 3d models, and interior renderings

Origin Villa, Tong Lu | Facilitated the 3D Models, produced site analysis drawings, assisted swimming pool and landscape pond design, researched materials, generated material suppliers, and supervised the sample quality

Weidong House | Assisted elevation and construction drawings, made physical model

2016.08 - 10 Research experience | Venice Biennale 2016, Venice, Italy

Disrupt/Displace | A response to Alejandro Aravena's *Reporting From The Front*, investigating the role of architects in the battle to improve the living conditions for people all over the world

SKILLS

Computer Proficiency

Computer-aided design: Rhino 3D (T-spline, Grasshopper), AutoCAD

Animation & Rendering: V-ray for Rhino

Graphics: Adobe (Photoshop, Illustrator, InDesign)

Office: Microsoft Office

Fabrication Proficiency

Subtractive manufacturing: CNC routing, cutting

(hot wire/laser)

Additive manufacturing: FDM 3D printing

Manufacturing: Painting, hand sketch, wood handcrafting, clay sculpting, mold casting(iron/plaster/concrete)

CONTENTS

01 / GUGGENHEIM ANTHOLOGY

NEW MUSEUMS FOR NEW NARRATIVES . THE INSTITUTIONS WE NEED

02 / ROOM of REQUIREMENT

SOCIAL HOUSING CORRECTIONS. THE TRY FOR STOPPING BUILDING

03 / ADUs and RFUs

NEIGHBORHOOD OCCUPATION. THE INFORMAL WITHIN THE FORMAL



GUGGENHEIM ANTHOLOGY

MUSEUM
on the Fifth Ave, NYC

Spring 2022

Instructor: Juan Herreros

Yiheng Ling | Jonathan Liang | Wanting Sun

In the Guggenheim's relatively young life, its story has been one of collections. The collection of artwork, architecture, initiatives, and capital. As the collection of artwork increased, the collection of buildings increased as a result.

As the amount of initiatives for the museum increased, the global footprint of the foundation and the collection of cities falling into this "Guggenheim Machine" increased as well. This led us to question the role of the original New York museum in this growing collection of the Guggenheim machine. Its mission is to become a laboratory for the development of modern art, but does its architecture allow that to happen?

Our project aims to deconstruct the monument and capital collection machine that is the Guggenheim Museum. Following its history of art, architectural, and asset collection; our proposal becomes an anthology of spaces, assembled like an archipelago formed by the deconstructed geometries of the old museum.

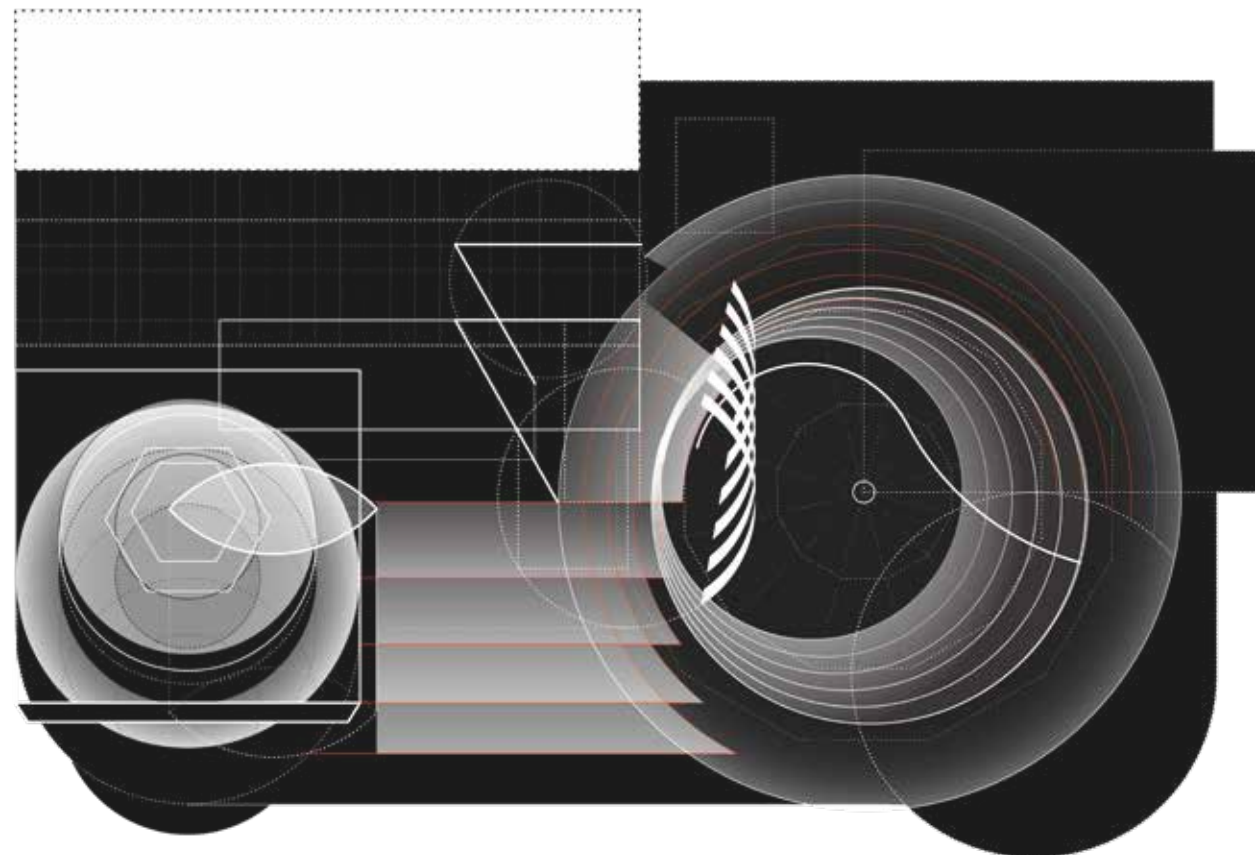
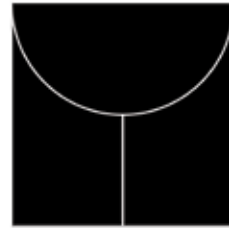
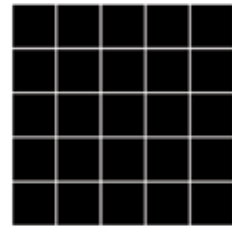
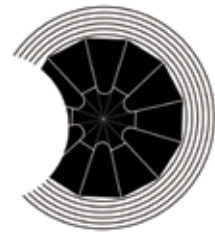
The Guggenheim, instead of remaining a singular experience, transforms into a collection of experiences. Taking visitors through an emotional and educational journey through the monumental, the underground, the ephemeral, and the water. Pushing the limits of creativity, modern art, and curation.

With this intervention, the Guggenheim will truly become a curatorial laboratory and dynamic cultural platform of the 21st century.

Guggenheim Represent

Studying the building began with the deconstruction of the monument into its geometries. Much like the Foundation that represents it, the Museum is a collection - this time, of simple geometries and spaces.

These would range from circles, to hexagons, to triangles, squares, etc. Over time, we started to combine geometries to form our own. This technique would be repeated in the design process. However, one geometry, the rotunda, became a complex and limiting challenge for curators. The most simple and stress free art to display was to rehash previous exhibits with old "modern" art from the original collection.



The spaces formed by these shapes are currently predominantly occupied by gallery and exhibition spaces. From the ground floor up, most of the Guggenheim is programmed as gallery space to house its vast collection. By going up the rotunda, visitors are incidentally increasing the value of the work on display. Programs adhering to the museum's mission statement are shoved underneath in the basement. The programming and the architecture have led us to conclude that the New York museum is getting further away from reaching its goals.

Guggenheim Reprogram

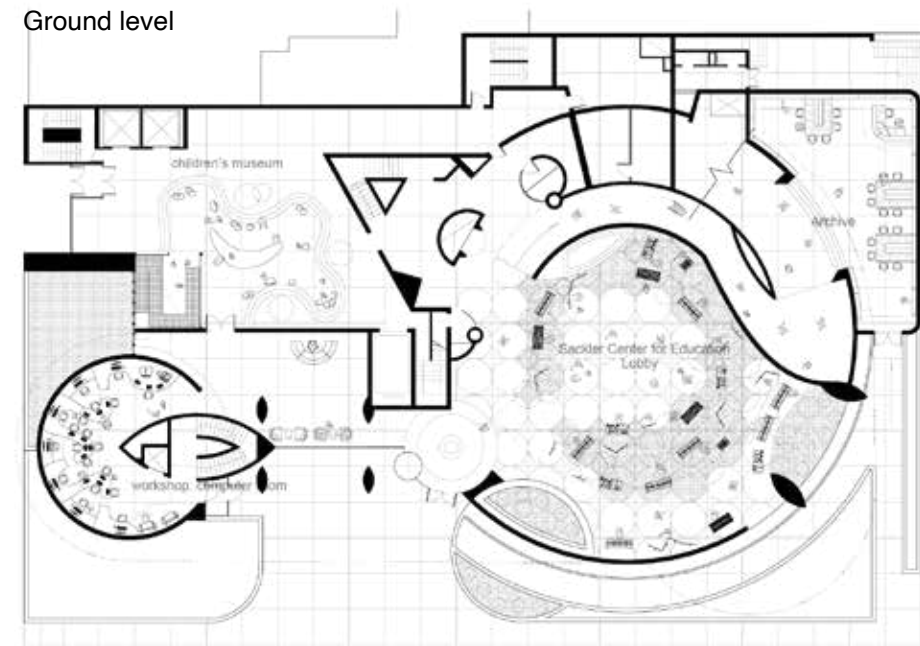
We began by reprogramming the Guggenheim. Key money-making cogs in the Guggenheim machine - like galleries, cafes, and restaurants - will be moved underneath central park and onto the jackie kennedy reservoir.

The architectural elements of the original building remain untouched. The act of taking over the building is done with wonky, customized furniture. Gift shops become computer classrooms, parts of the annex become a children's museum, and the rotunda - the crown jewel of the building - becomes a large public space open to all sorts of activity. Markets, hiking, farming, and slides.

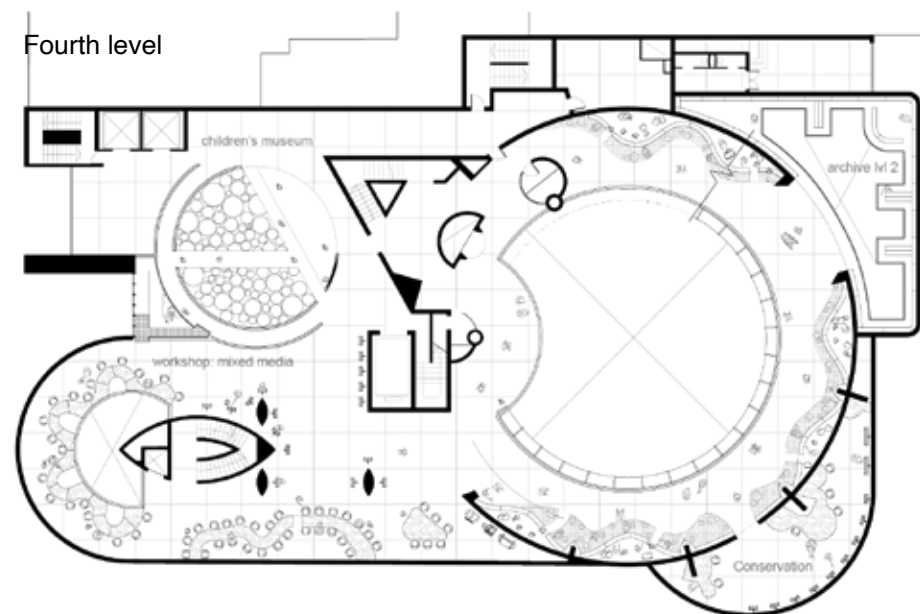
Bringing these two programs previously hidden from the public to the forefront of the museum experience is one step spatially the Museum will take towards fulfilling its mission statement. Now, instead of being a machine for collection, it has become a laboratory for art conservation, education, and development.



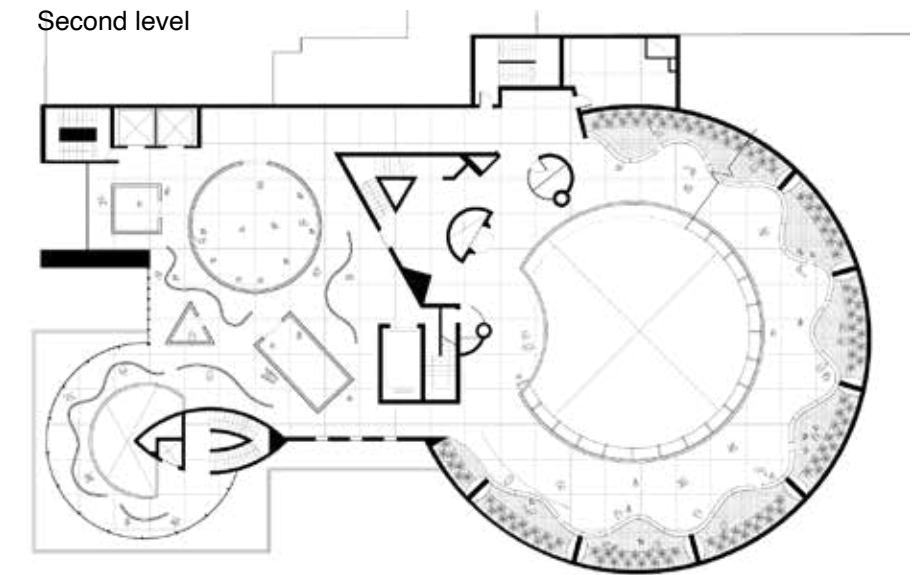
Education spaces, a children's museum, curatorial labs, digital art galleries, and other amenities for the public will take over the leftover spaces.



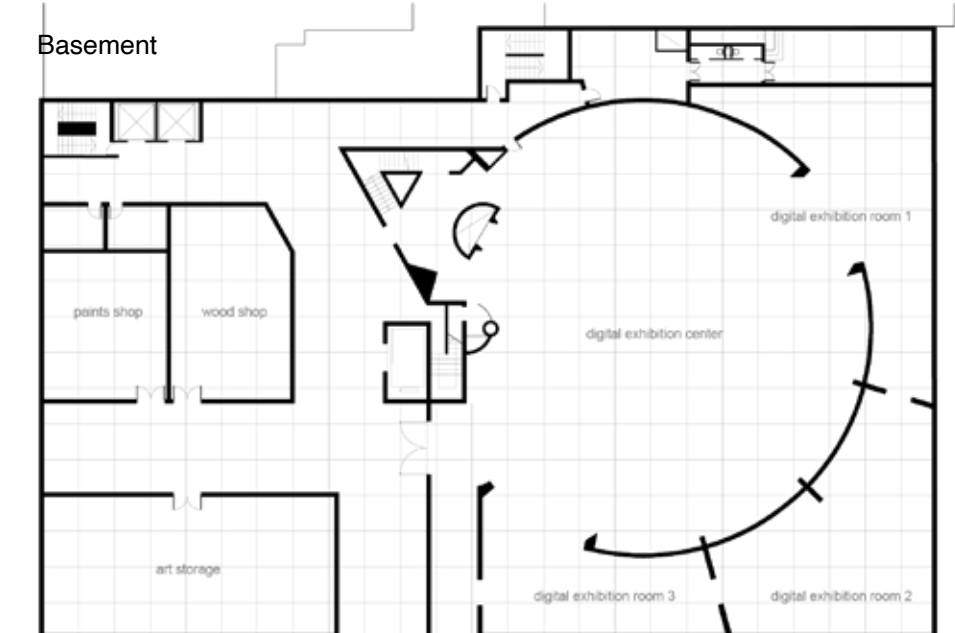
The walls become bookshelves that store hundreds of priceless art books, and have spaces hidden away behind them. They can become an extension of this library, or be small, experimental UV farms.



On the journey up the rotunda, spaces previously used for the High Gallery and the Reading Room showcase the Guggenheim art archive and spaces for art conservation.

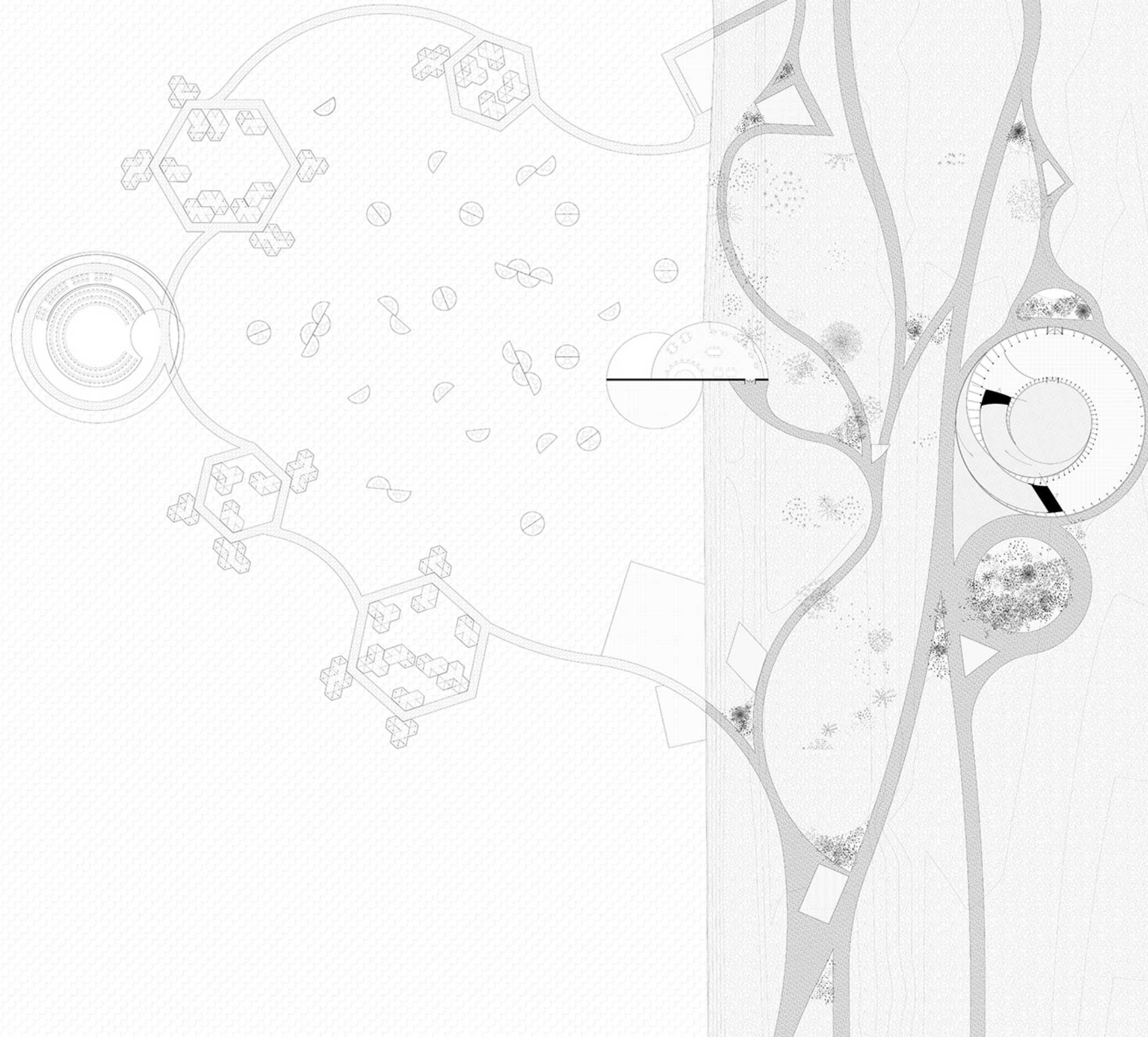


The basement has underground connection to the park side lobby with immersive experiences from the digital exhibition room to the digital corridor gallery. There's also a downward slope leading to the BoH loading level.



Water Interventions

Our reservoir interventions are also organized like an archipelago of islands. They go from a partially submerged restaurant and cafe, to light steel frame structures in the meditation spaces and performing center floating on the water. Each experience on the water comes with other small experiences as well. The restaurant and meditation pods have modules that can detach and float onto a small controlled body of water, allowing customers to drive their own experience.

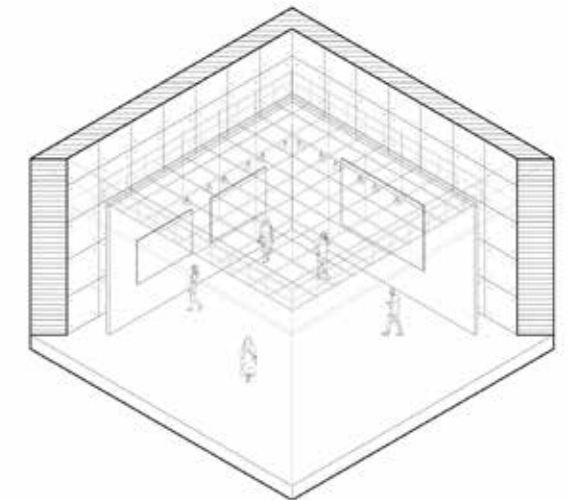
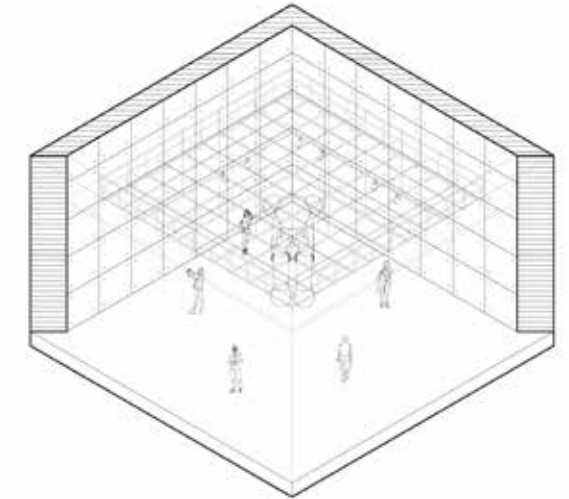
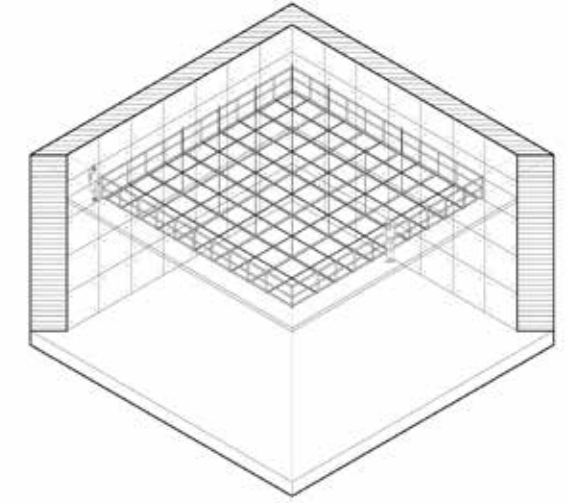


Park Level

At the park level, there will be glimpses of these galleries, small teasers for the public. The geometry of the entrance and its spiral from the park level down to the gallery level provide New Yorkers an easy means of access to art as a part of their daily lives.

Gallery Room

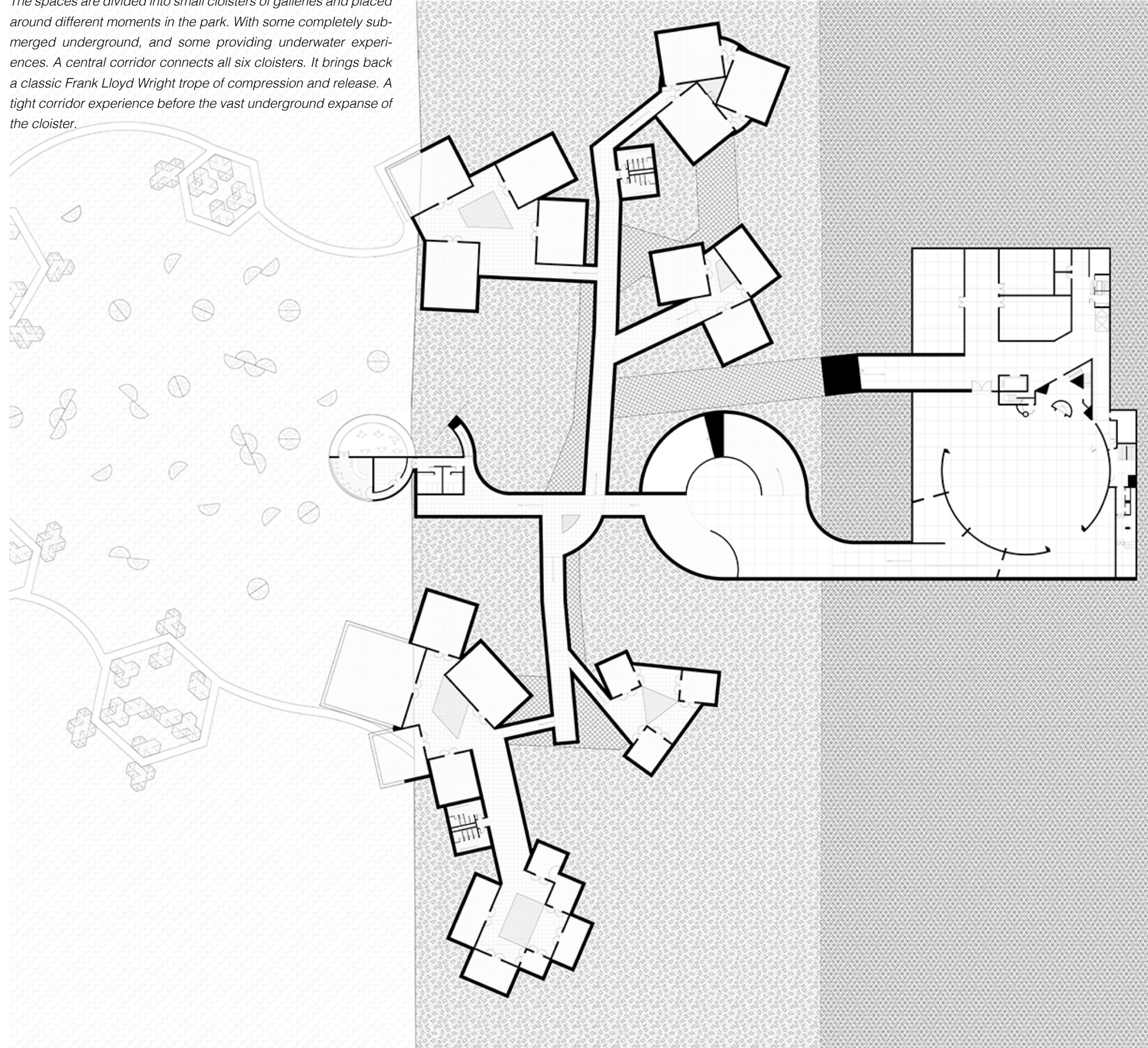
The structure is held up by a 3 foot thick recycled concrete aggregate wall. This wall is a mix of reclaimed concrete, and the rock and dirt removed from Central Park to build these underground islands. Almost every gallery room is equipped with a demountable tension grid. Curators and artists are allowed to customize the visitors' experience. Whether that be with generic white walls, or possibly exposing the concrete structure and bare environment around them.



Basement Level

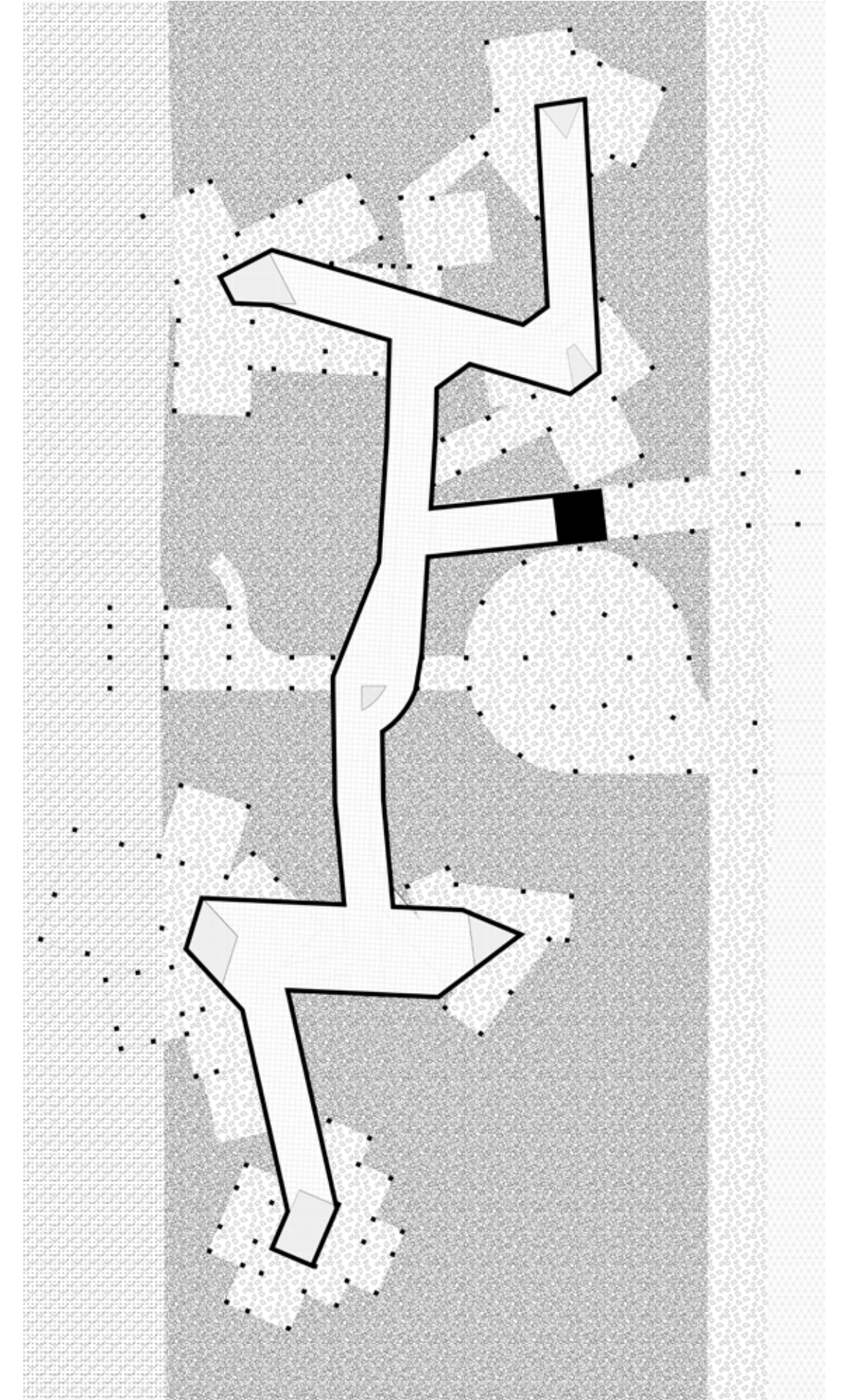
These gallery spaces on the park are unrolled from the 1,882 ft of exhibition space on the rotunda and wound around central park and bringing them down to earth.

The spaces are divided into small cloisters of galleries and placed around different moments in the park. With some completely submerged underground, and some providing underwater experiences. A central corridor connects all six cloisters. It brings back a classic Frank Lloyd Wright trope of compression and release. A tight corridor experience before the vast underground expanse of the cloister.



Back of House Level

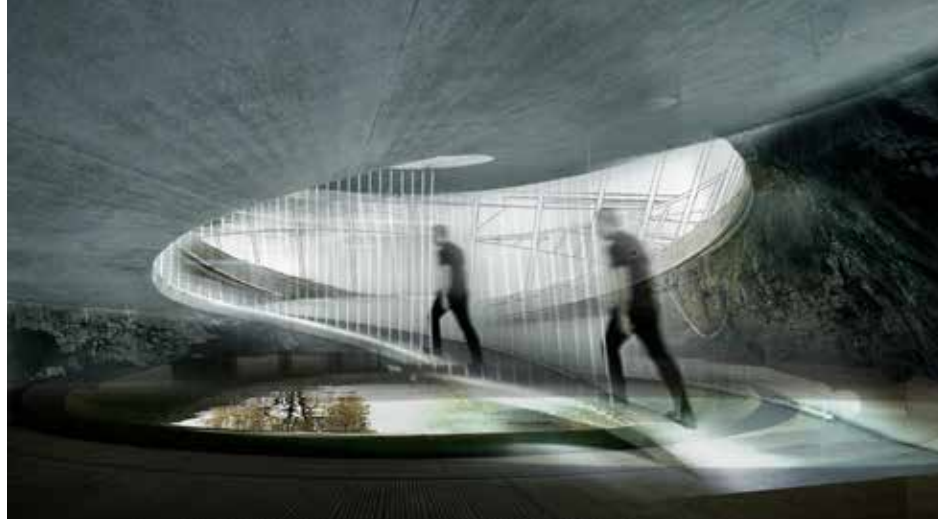
In order to access the gallery levels, BoH corridors directly inhabit a level beneath them. Curators and artists are able to load material and art via wide 20 ft corridors and reach the gallery levels via a loading lift that takes the shape of the central courtyard.



Collection of Experiences

These collections of spaces form a gradient from heavy to light. Starting from the solidity of the concrete structure in the Frank Lloyd Wright Building, transitioning to a submerged, partially solid underground world, to a light, floating experience above the water. These new ephemeral environments on the park and the water - rather than resisting the elements - flow along with time. becoming ever changing in elevation, materiality, and experience.

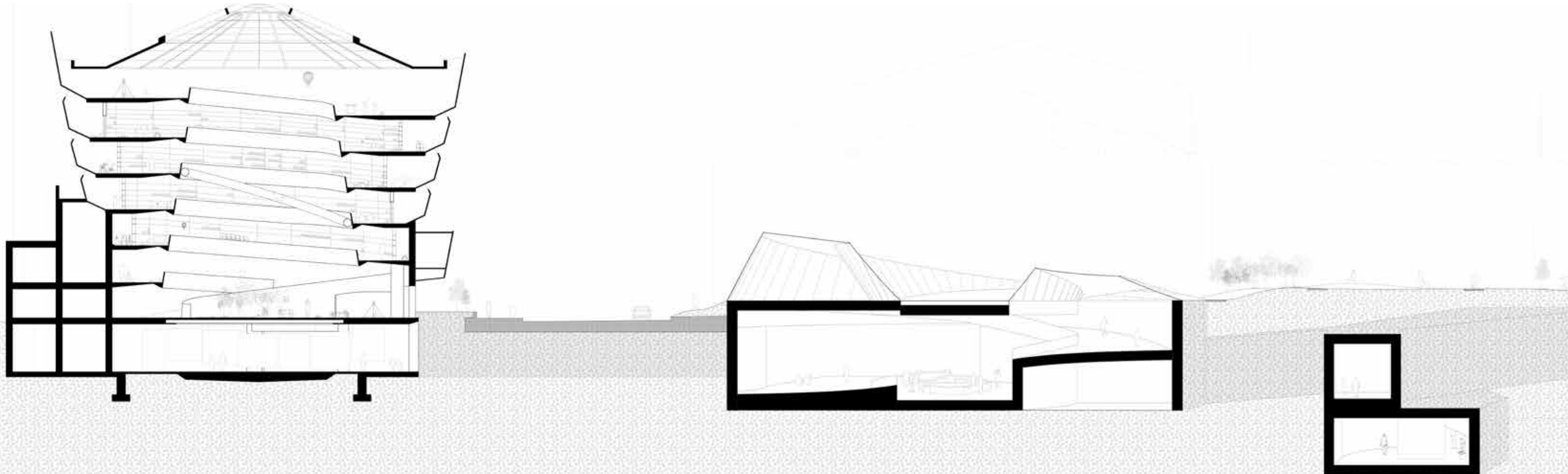
Park-side Lobby



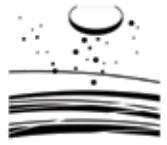
Gallery Corridor



Section



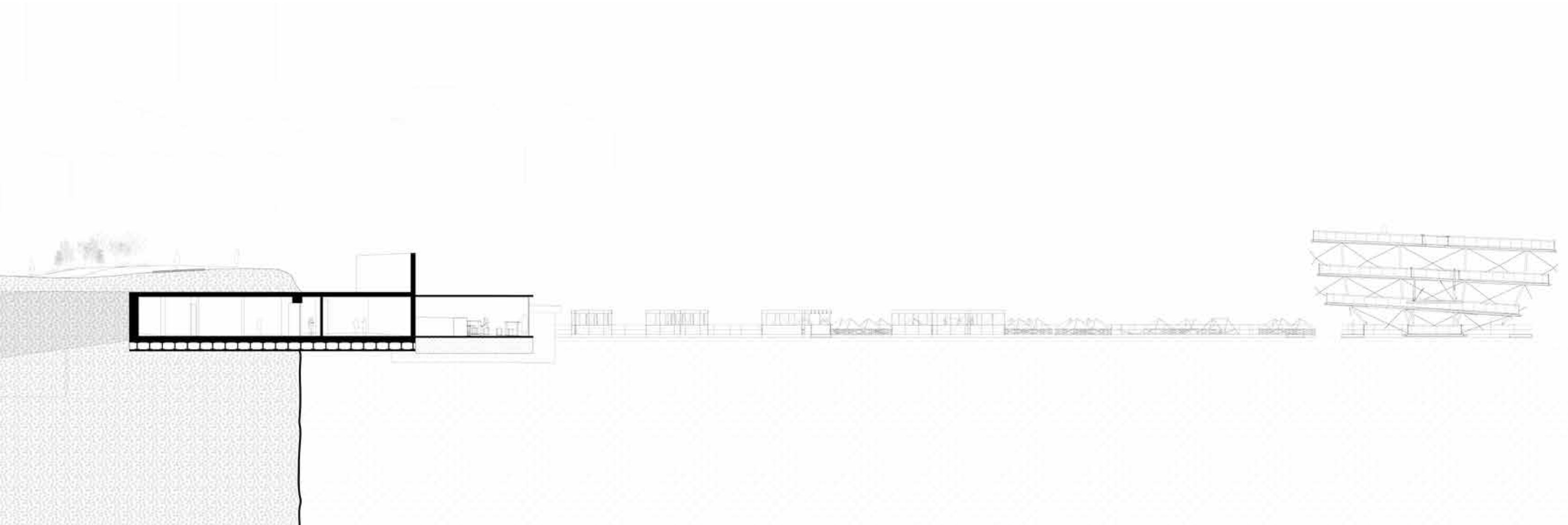
Waterside Gallery

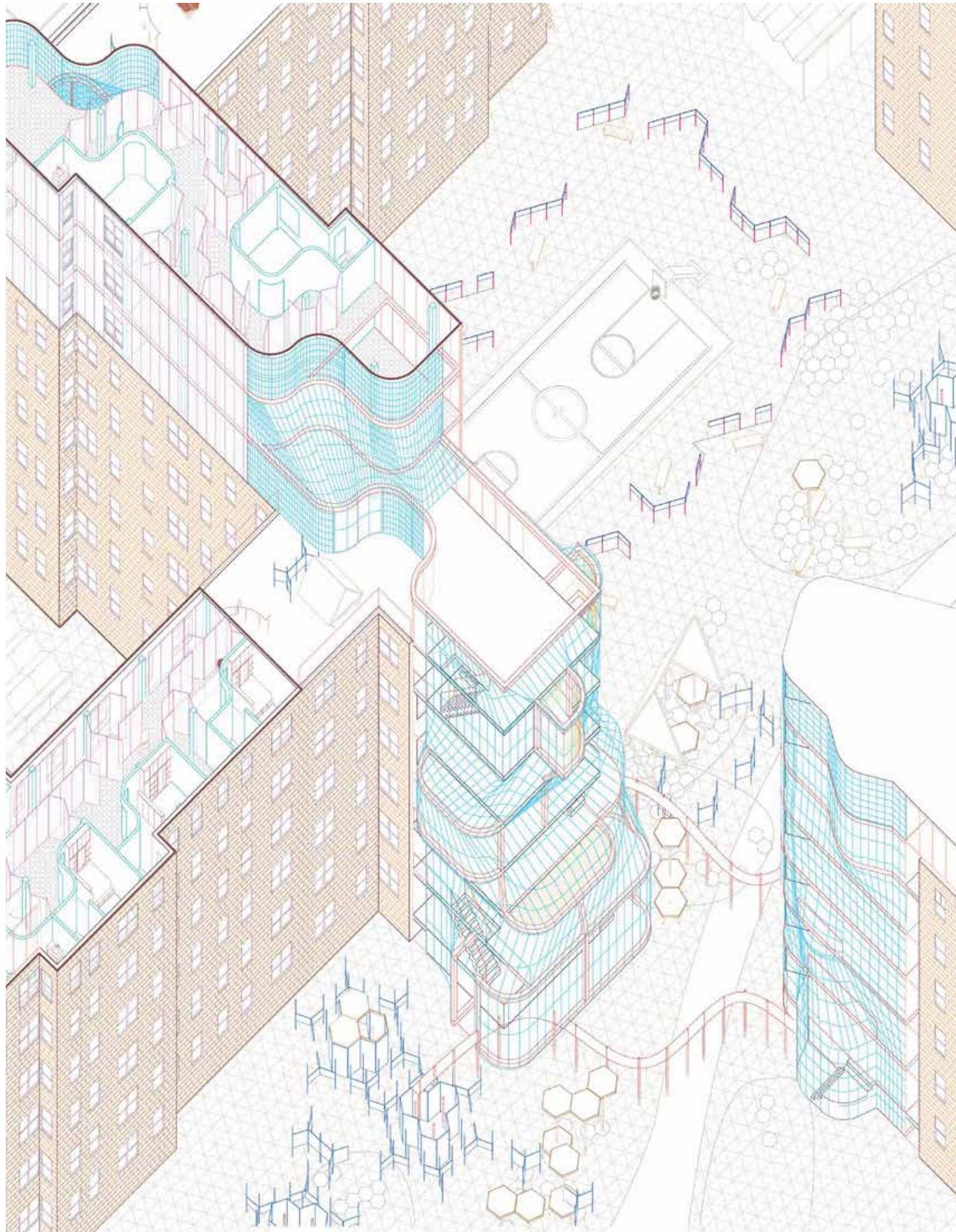


Meditation Float



Water Intervention





FLOWING REQUIREMENT

*HOUSING
IN EAST HARLEM, NYC*

Fall 2021

Instructor: Juan Herreros

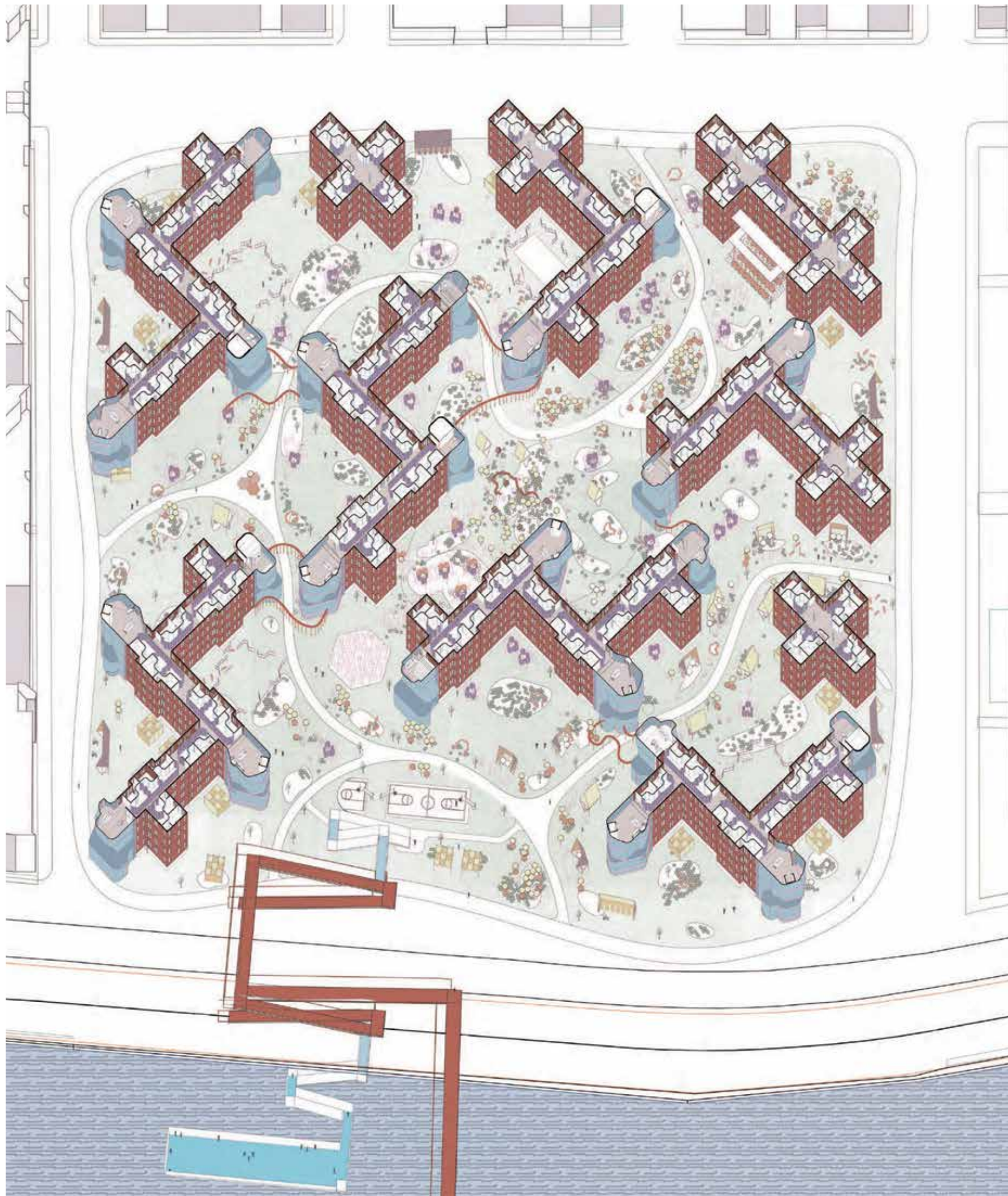
Lichong Tong | Yiheng Ling | Wanting Sun

The world is going through a deep environmental and social crisis that impacts everyone and everything. Environmental crises such as climate change, migration, pandemics, and the degradation of vital ecosystems, and social crises such as economic and racial inequality, and the erosion of human rights in general, have pushed architecture against the ropes, generating a completely new agenda to work on.

Coronavirus pandemic, we have witnessed a rejection of cities in search of contact with nature while living alone. This apparent solution, which only a few people can achieve. If change is not sought, for many, it will be a disaster on the horizon. How will the future of New York change again to offer the citizens a second chance?

“New York is an enormous incubator and accelerator of change, But the past is never completely effaced, It’s never completely eradicated,” Steve Jaffe said, curator of the Museum of the City of New York. Threatened by environmental crises such as climate change, migration, epidemics, and the degradation of vital ecosystems, social crises such as economic and racial inequality, and general erosion of human rights has pushed architecture to the brink. In this context, how can the complex system of New York continue to develop in a state of urban saturation?

In this context, the built city works as a complex system that enforces the processes of granting privileges, consolidating supremacies, and avoiding responsibilities but also contains the matter to work within the solution of many problems that we have created ourselves.



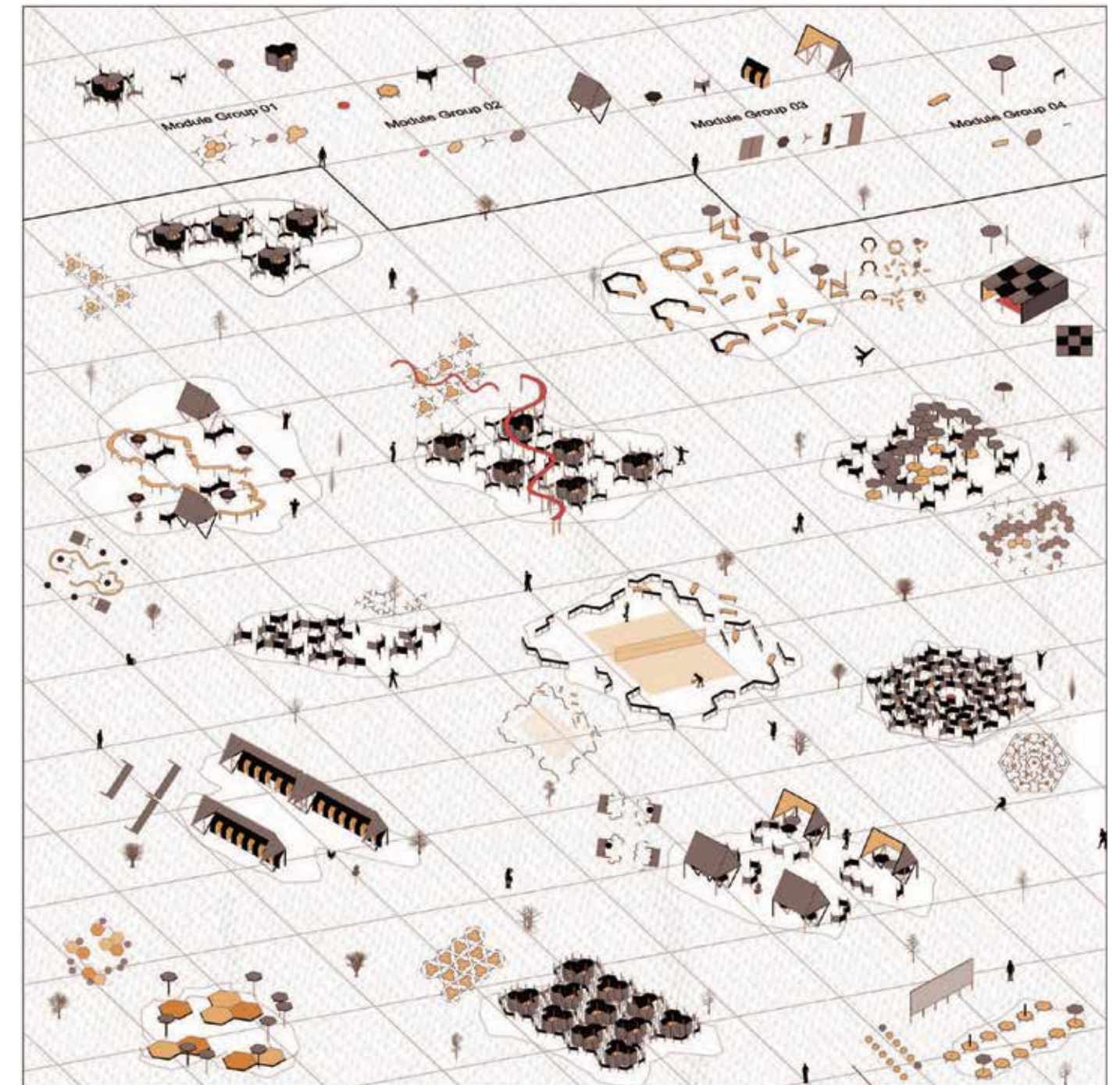
Community Modules



The project is divided into three scales: urban, public, and residential scales.

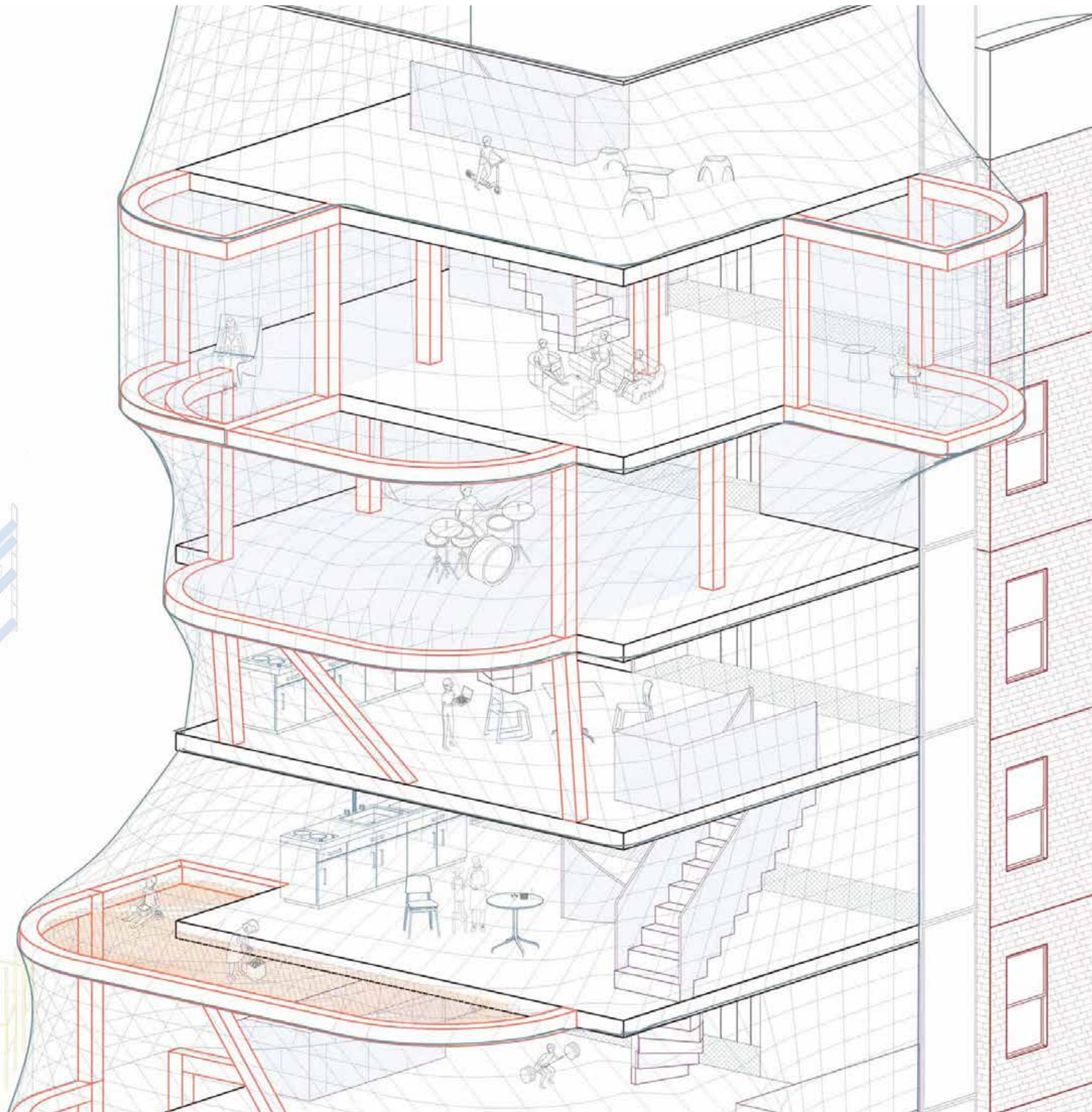
Under the urban scale, we created many variable modules based on a hexagonal grid. In order to create a more participatory open space, the modules have various functions enclosure, guidance, rest, and movement. We distinguished between public and private functions, establishing 15 variations based on four module groups.

The site is scattered with a sense of mess fragmentation, fitting the overall style of NYCHA. Residents can always find a space to spend their leisure time here.



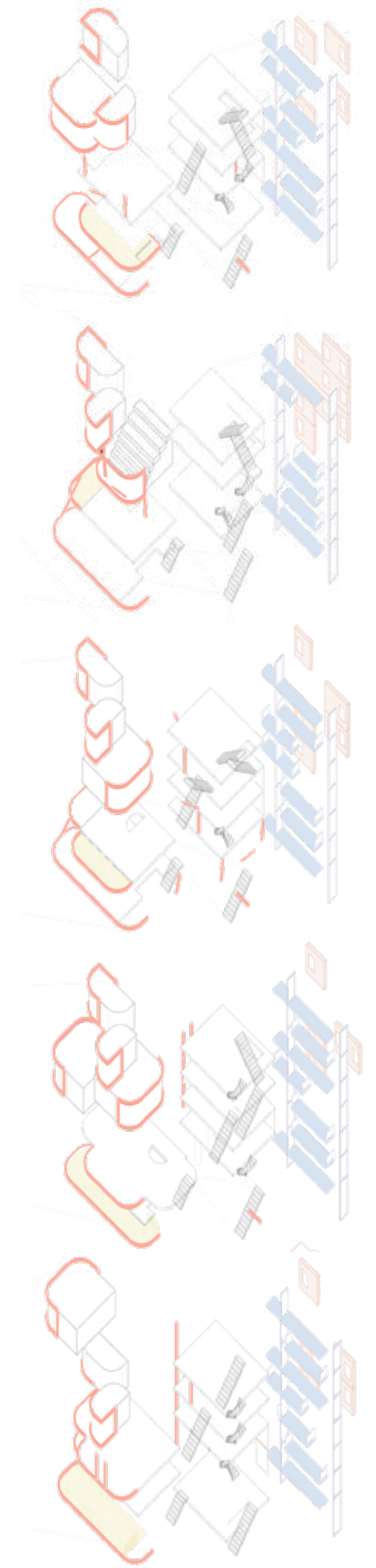
Circulation Tower & Extension Platforms

In the public space, we expand the platform mainly at the end of the building and put the vertical traffic on the platform, using a storyline to connect and make the vertical field more coherent.

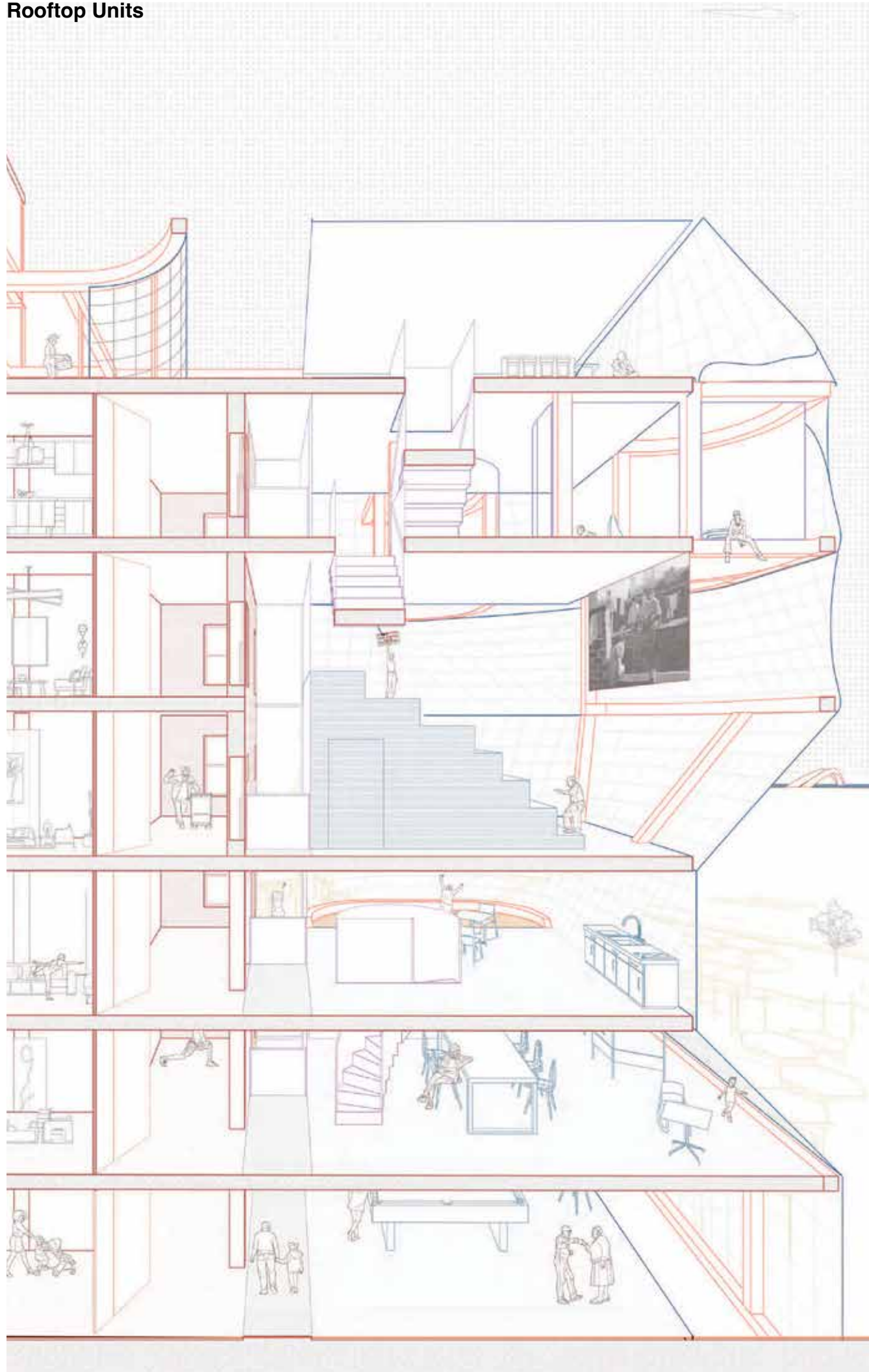


In social housing, each individual's individual living space is very limited. Except for the most private space, other living needs are integrated into the community's public sharing space.

In the extension platform, there is a silence room for people with families to have their own space when they need it. There is also a sharing kitchen, which provides a larger kitchen and dining space. There is also a climbing net for children's activity area. The design of the whole floor allows adults to take care of children in time without being affected.

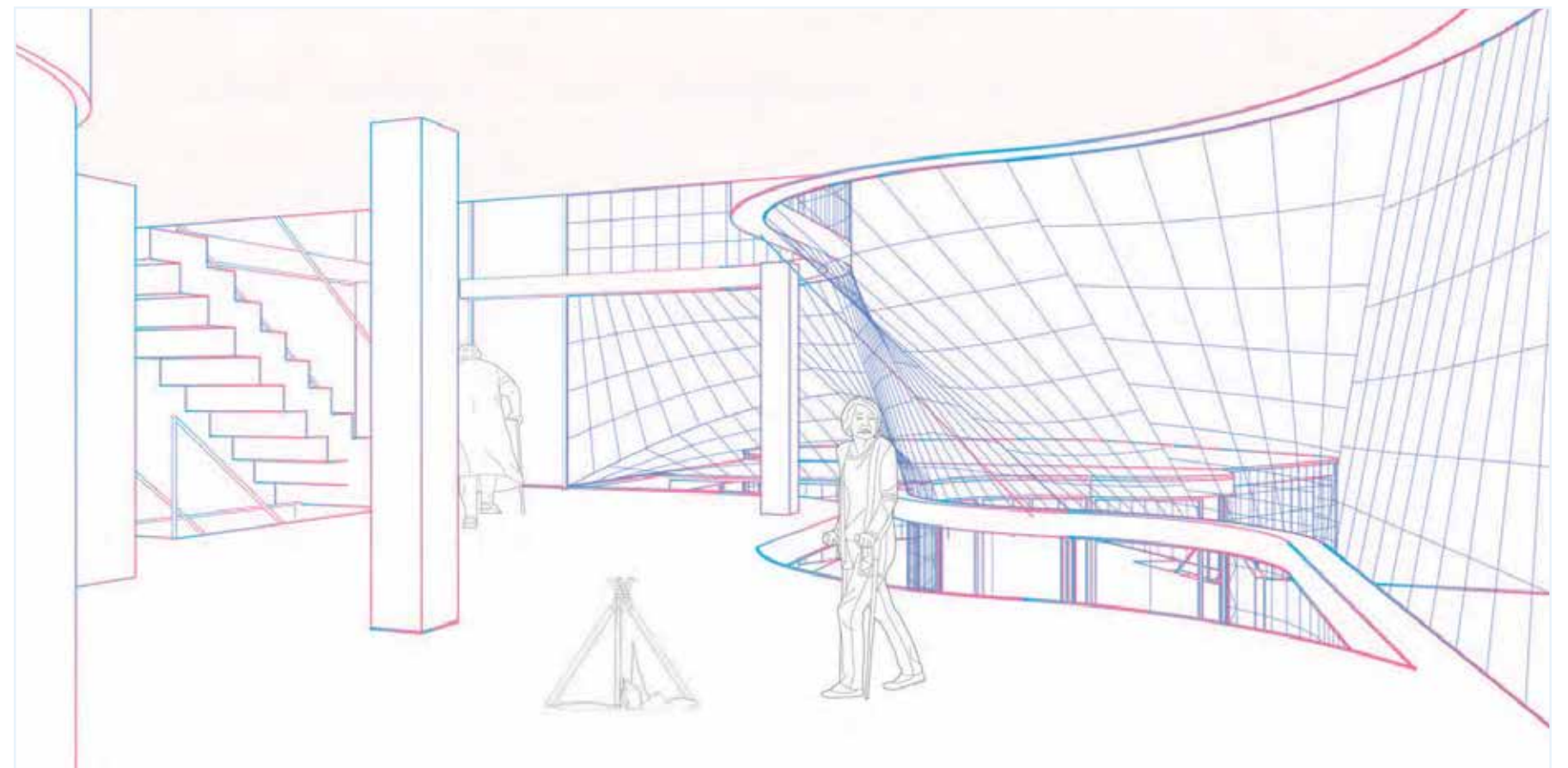
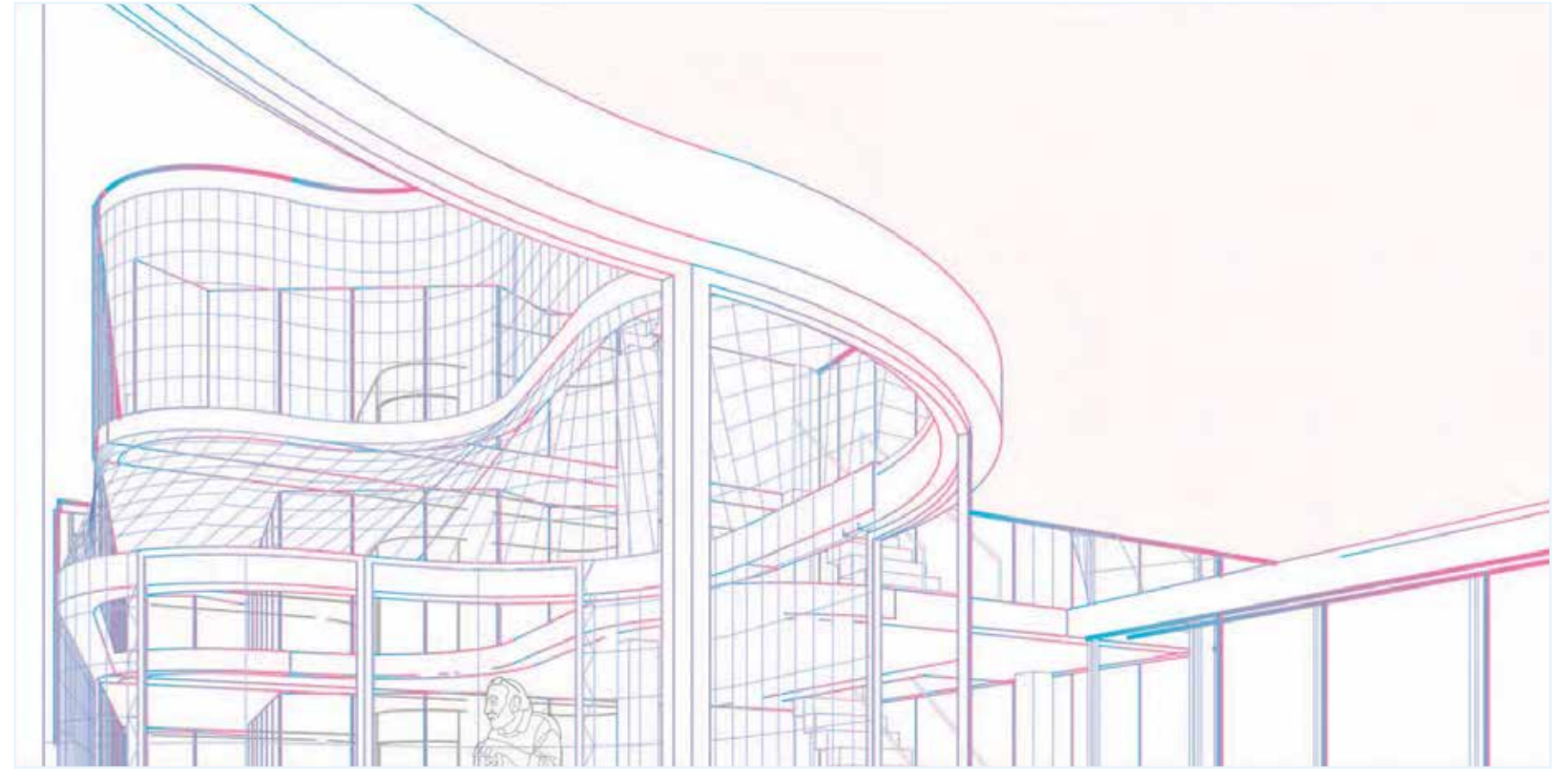


Rooftop Units



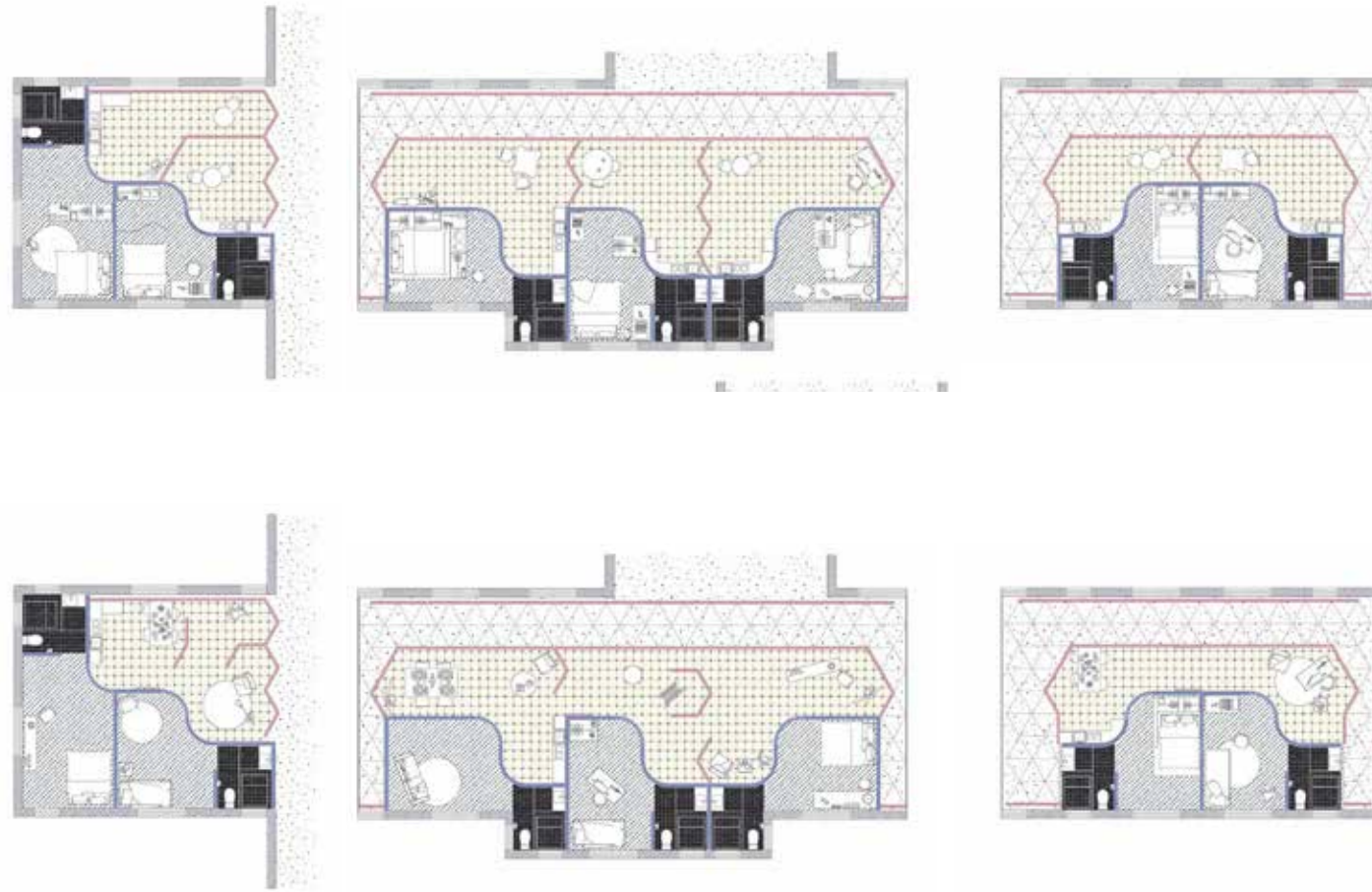
Rooftop Units

Three floors were added to each roof to house more residents. Continuing the design of Attach Towers, the new facade is more transparent and energetic. It is connected to the original building via Circulation Tower.



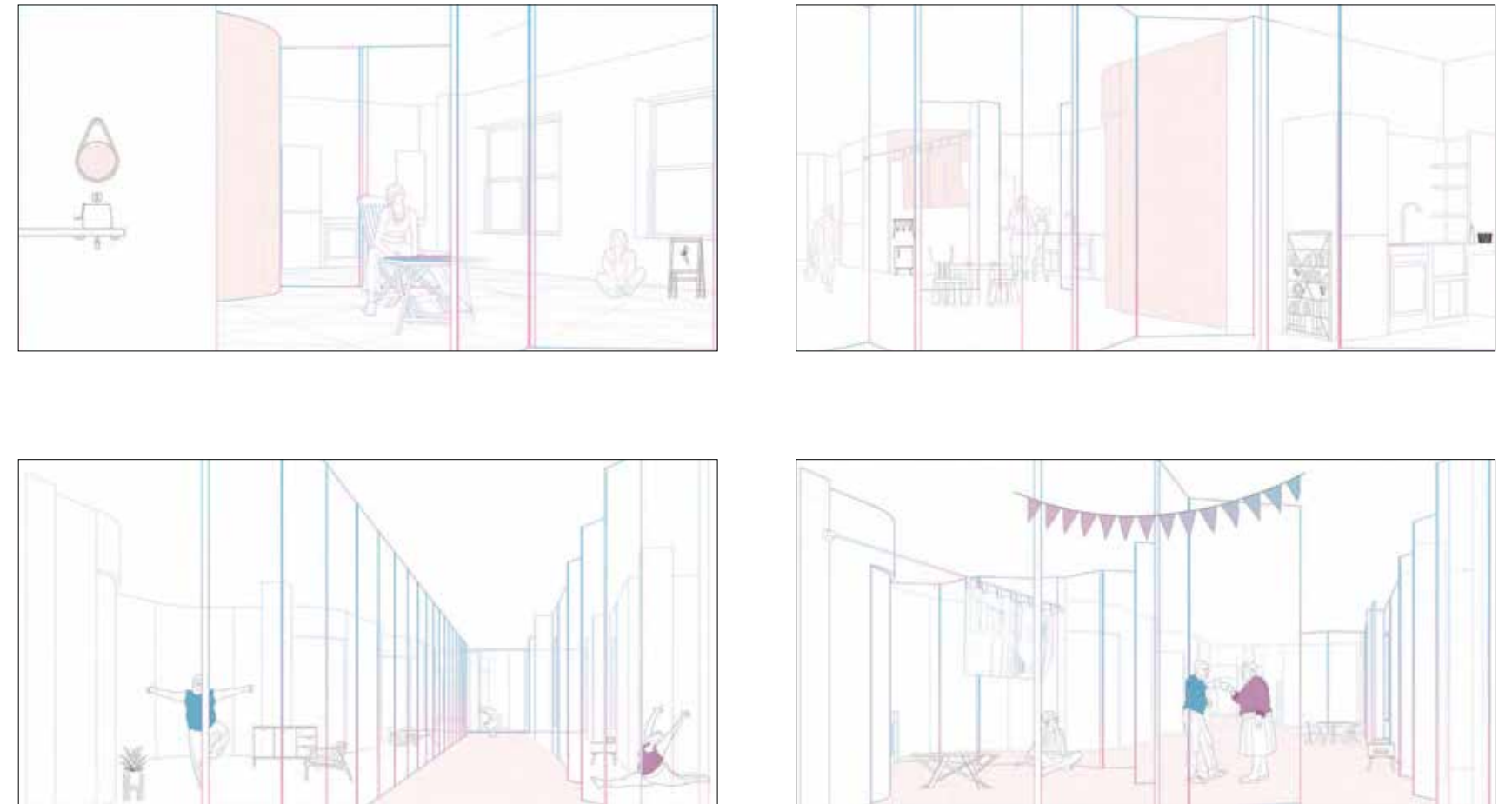
Apartment

On the residential scale, hexagon is also used as the base grids to separate the spaces. The bedroom and the restroom of the original NYCHA residence have been retained. The unit is divided into the smallest unit of bedroom. Each unit has a variable living room, which can be connected to adjacent rooms according to family or personal needs.



Living Room & Corridor

Movable polycarbonate wall blocks on the grid are used to build different functional interior spaces at different times, which can open up the kitchen, connect the corridor to the living room, and allow other spaces to circulate. Only the bedrooms and restrooms are fixed.





ADUs & RFUs

The informal within the formal
HOUSING
IN QUEENS, NY

Fall 2020

Instructor: Phu Hoang

Domenica Velasco | Wanting Sun

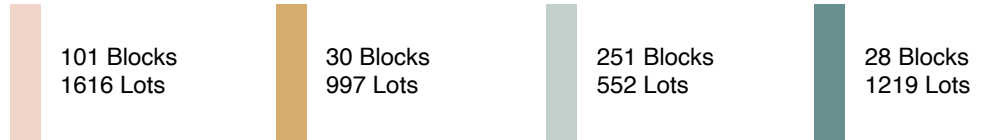
The informal within the formal encounters new definitions to topological concepts that have dictated the development of architecture and city planning. In the informal subdivision of Jackson Heights, Queens, and Zhangyuan, Shanghai, we discovered an anti-typological occupation of space, as well as the socio-economical emigrant/immigrant space appropriation and the illegal networks that create new micro underground economies.

“Climate gentrification” in eastern and central Queens, foresees possible displacement by the scarcity of affordability. Informal residents are facing a climate injustice.

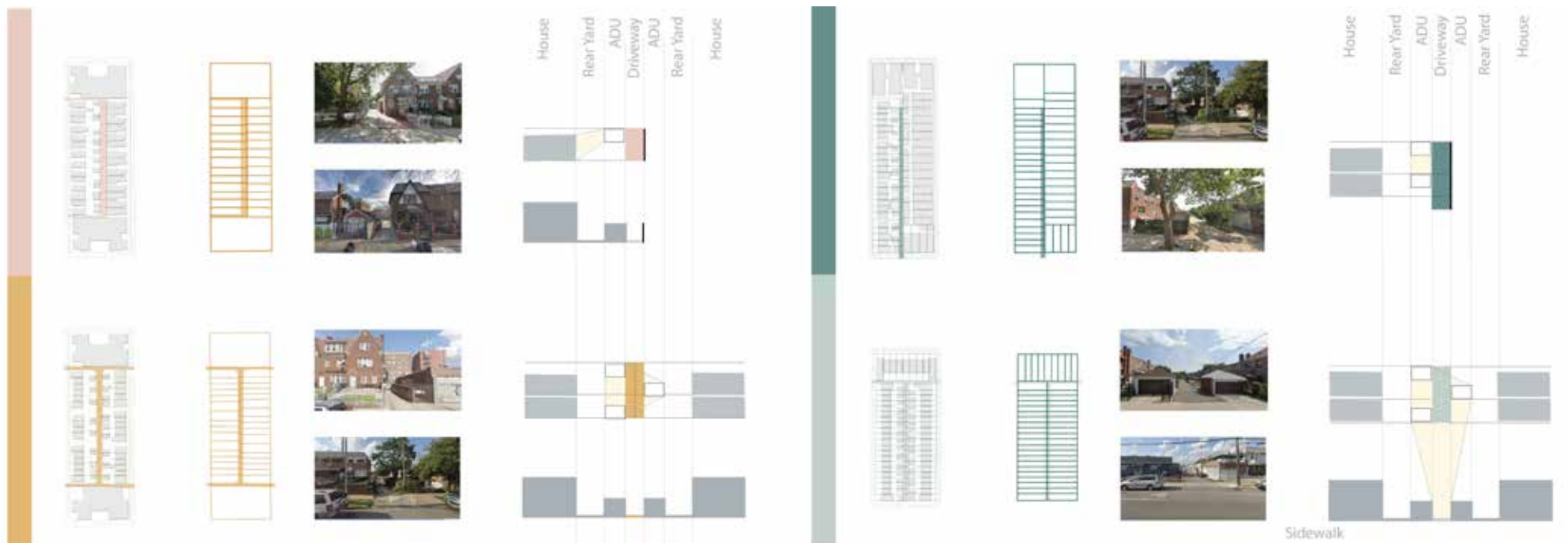
The inside space has delinked itself from precious concepts of scaling, while the urban has not adapted to this break of the space barrier. The interweaving inside and outside variance does no longer responds to typological architectural elements.

Site Strategy

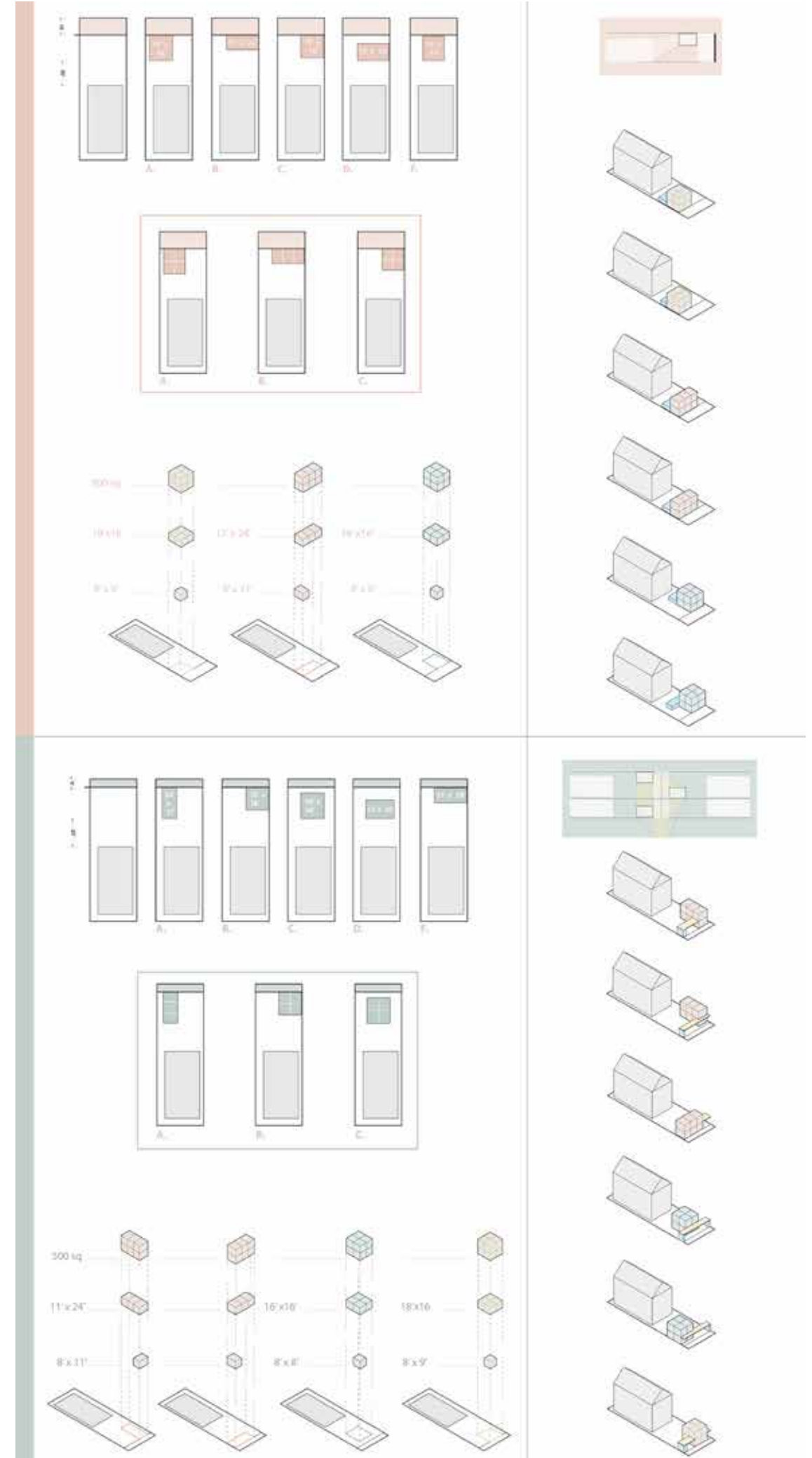
Possible ADU in Jackson Height Area: 4384
 Possible new condition for community Driveways: 184



Possible ADU in Jackson Height Area: 4384
 Possible new condition for community Driveways: 184



Project Proposal



Informal within the Formal Life

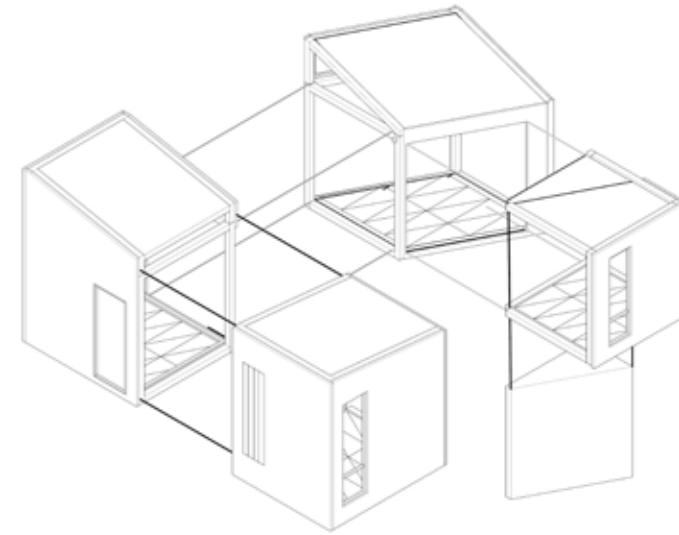


Module Formation

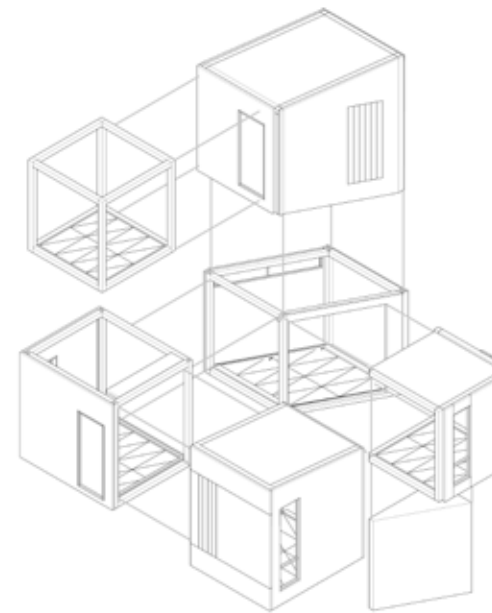


ADU Typology

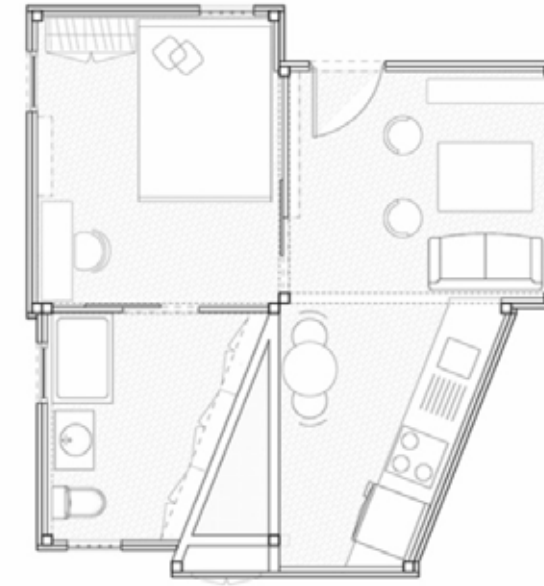
The 8*8 and 8*10 Prefabricated modules are combined into garage apartments by rotating a certain angle, and the overlapping spaces are used for indoor circulation and the placement of water storage tanks.



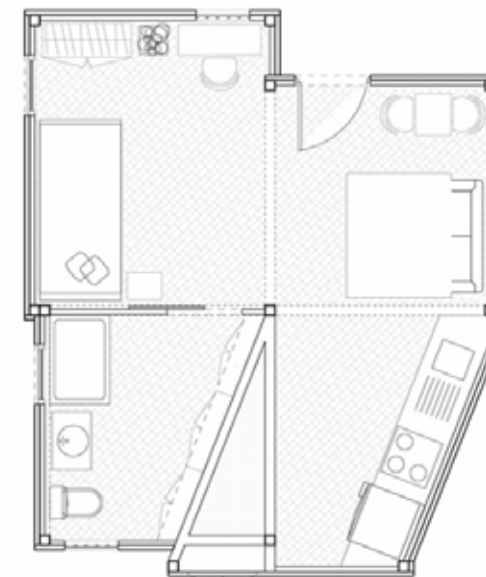
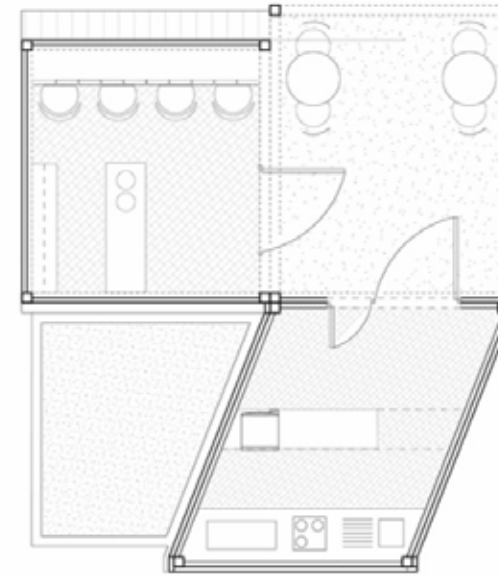
Studio : 2(8x8)
2(8x10)



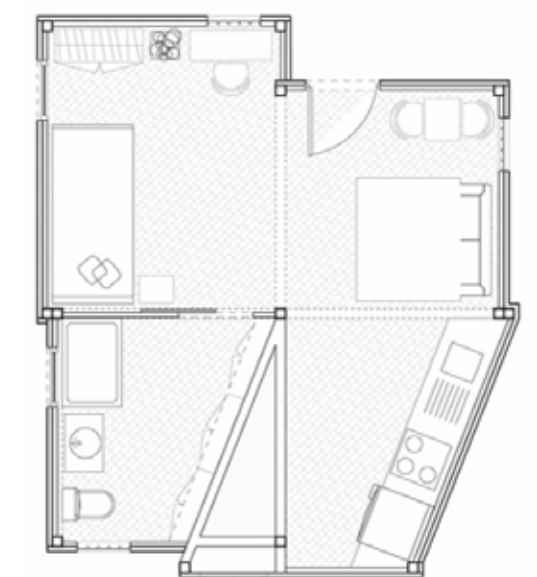
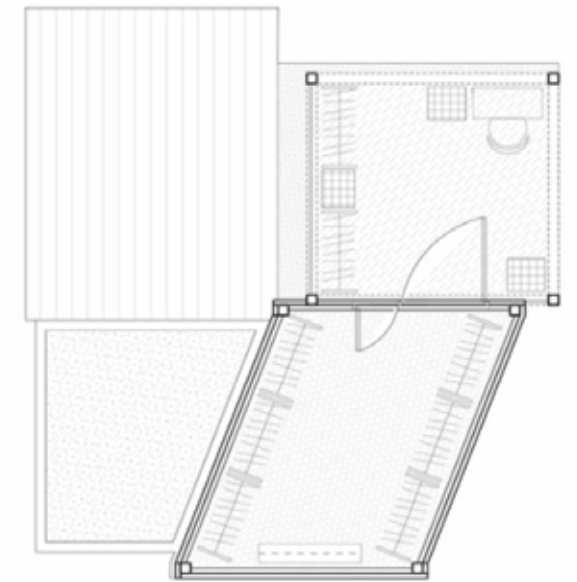
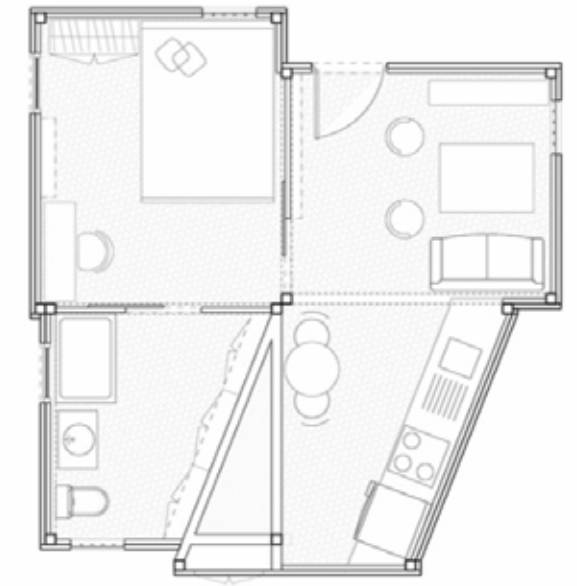
Studio : 2(8x8)
2(8x10)
Retail : 1(8x8)
2(8x10)



1 Bedroom : 1(8x8)
3(8x10)

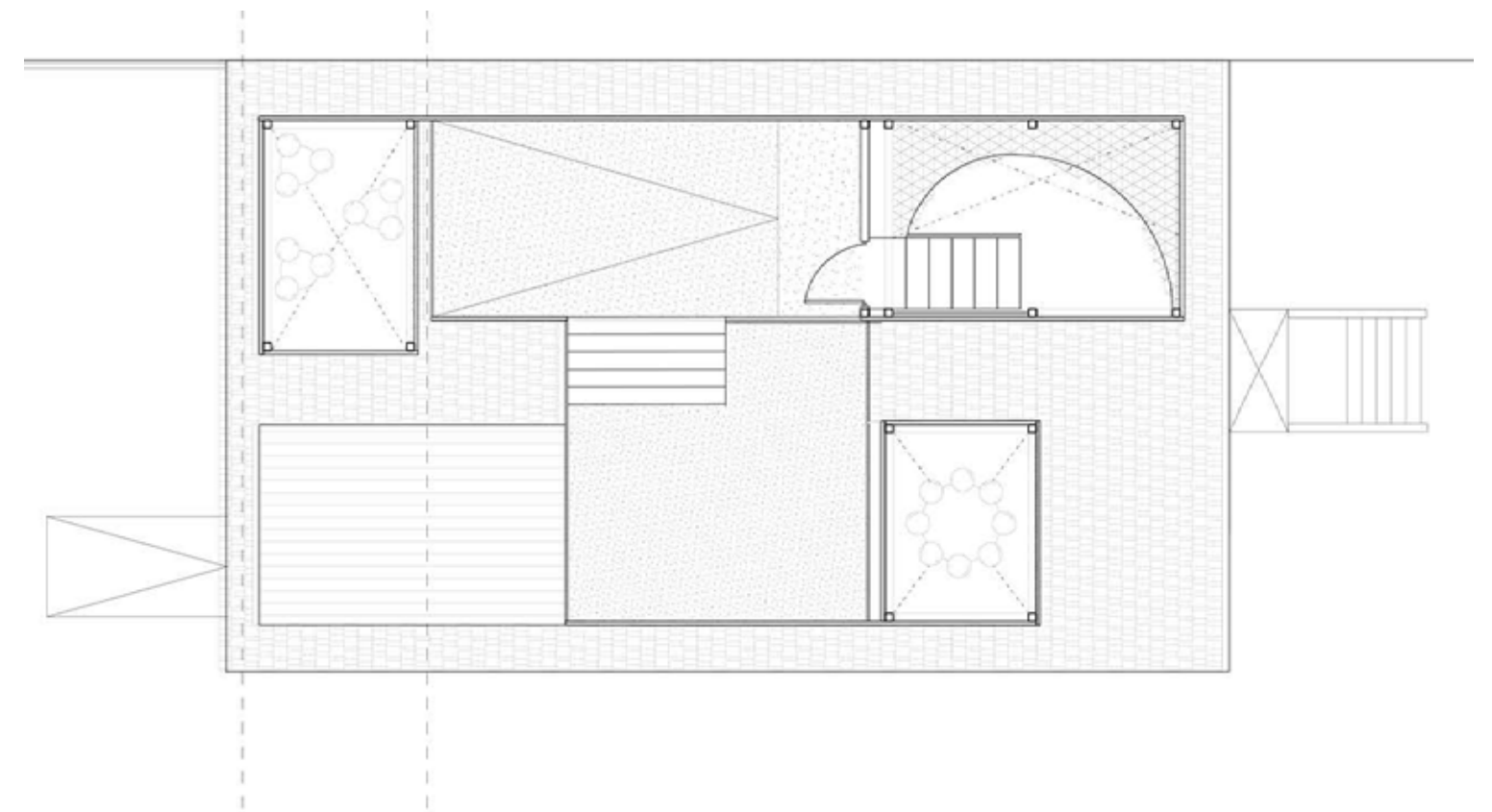
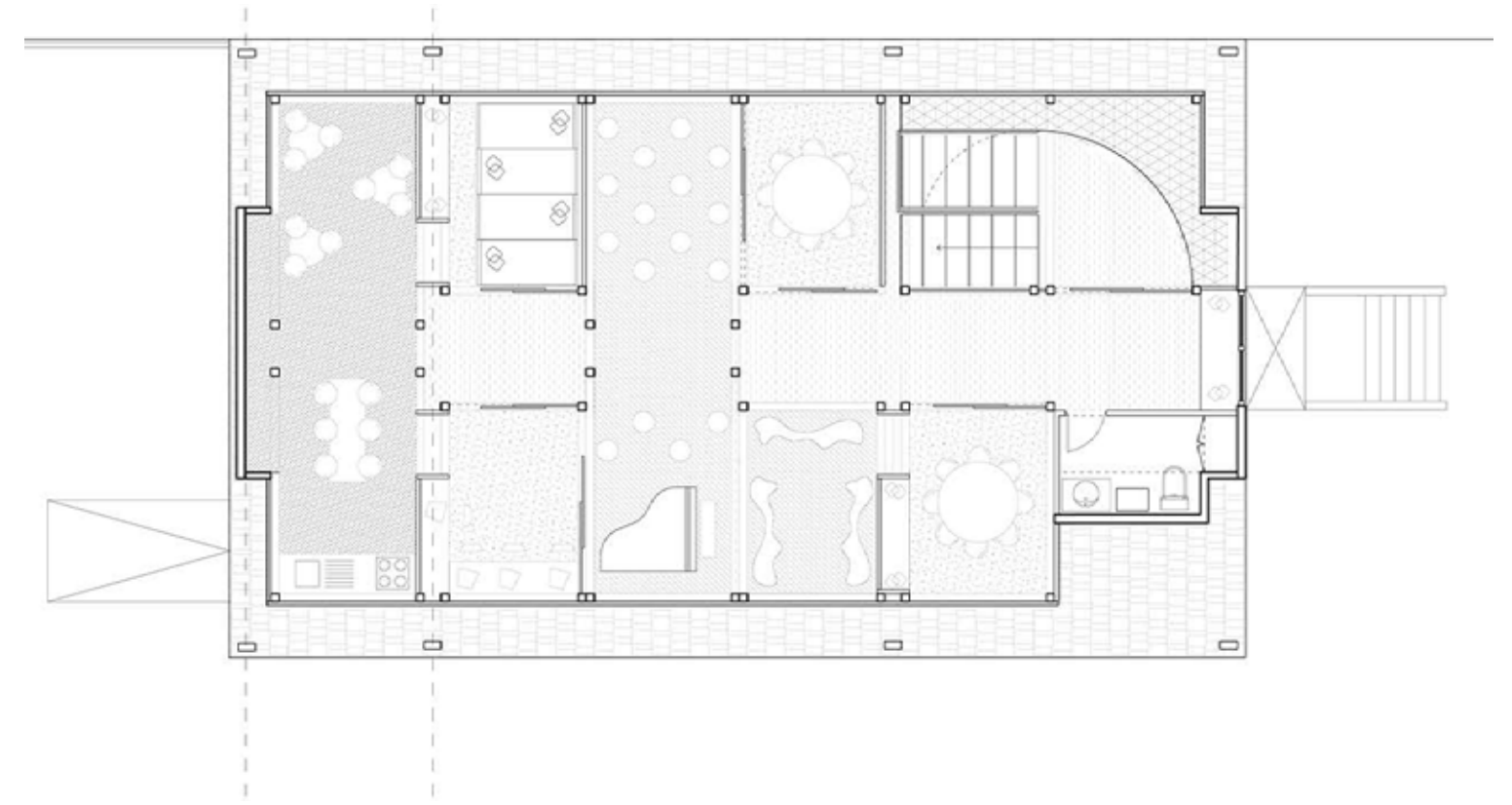
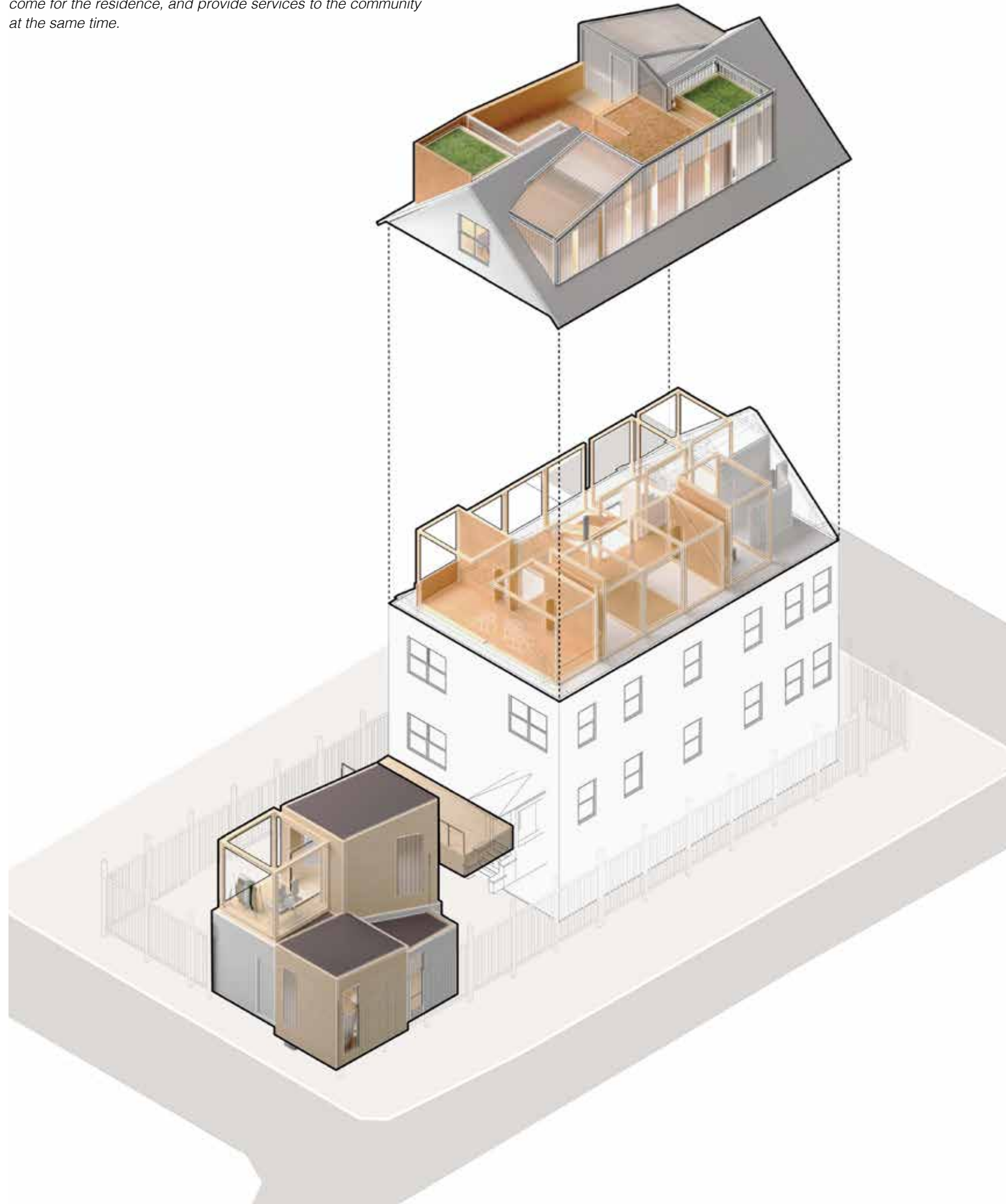


1 Bedroom : 1(8x8)
3(8x10)
Retail : 2(8x10)



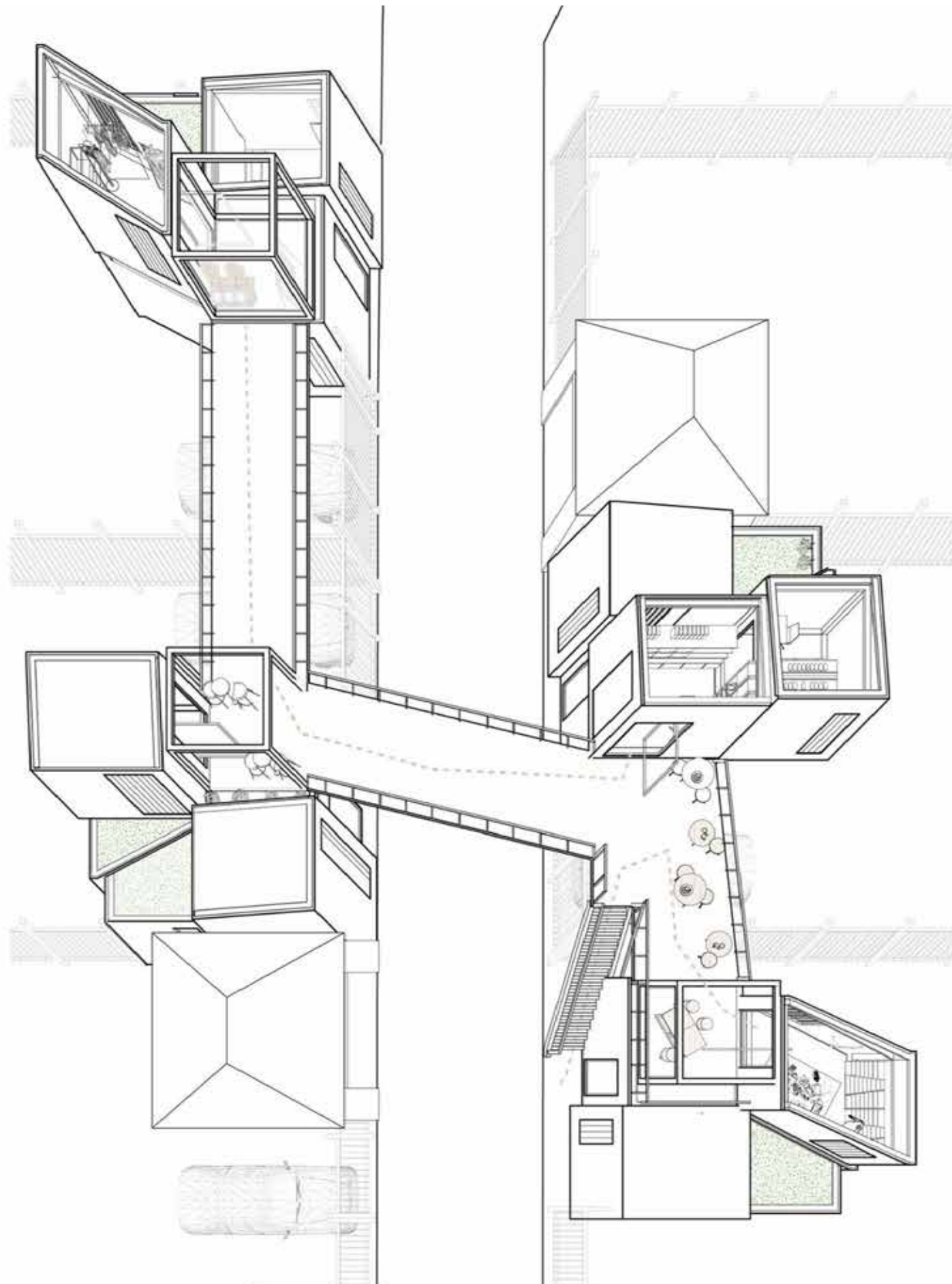
Rooftop Daycare RFU

*8*8 and 8*10 Prefabricated modules are also used for roof extension, which can become a daycare center, provide extra income for the residence, and provide services to the community at the same time.*



Garrage Bussiness

The upper floors of adu apartments are connected to the driveway through stairs and platforms. Small business, retail stall, cafe, workshop can be formed here, providing income opportunities for residents.



Apertures as elements of the inside, no longer to frame the space, but becoming the origin of the interior's projection to the neighborhoods. The apertures and share spaces are not a result of design, but the main informant of this informal urbanism.