

# ZERO TO ONE

A PORTFOLIO OF ARCHITECTURAL EXPLORATION  
FROM THE OUTSIDE IN

GSAPP M'ARCH 2024  
By JamonZixuan Mok





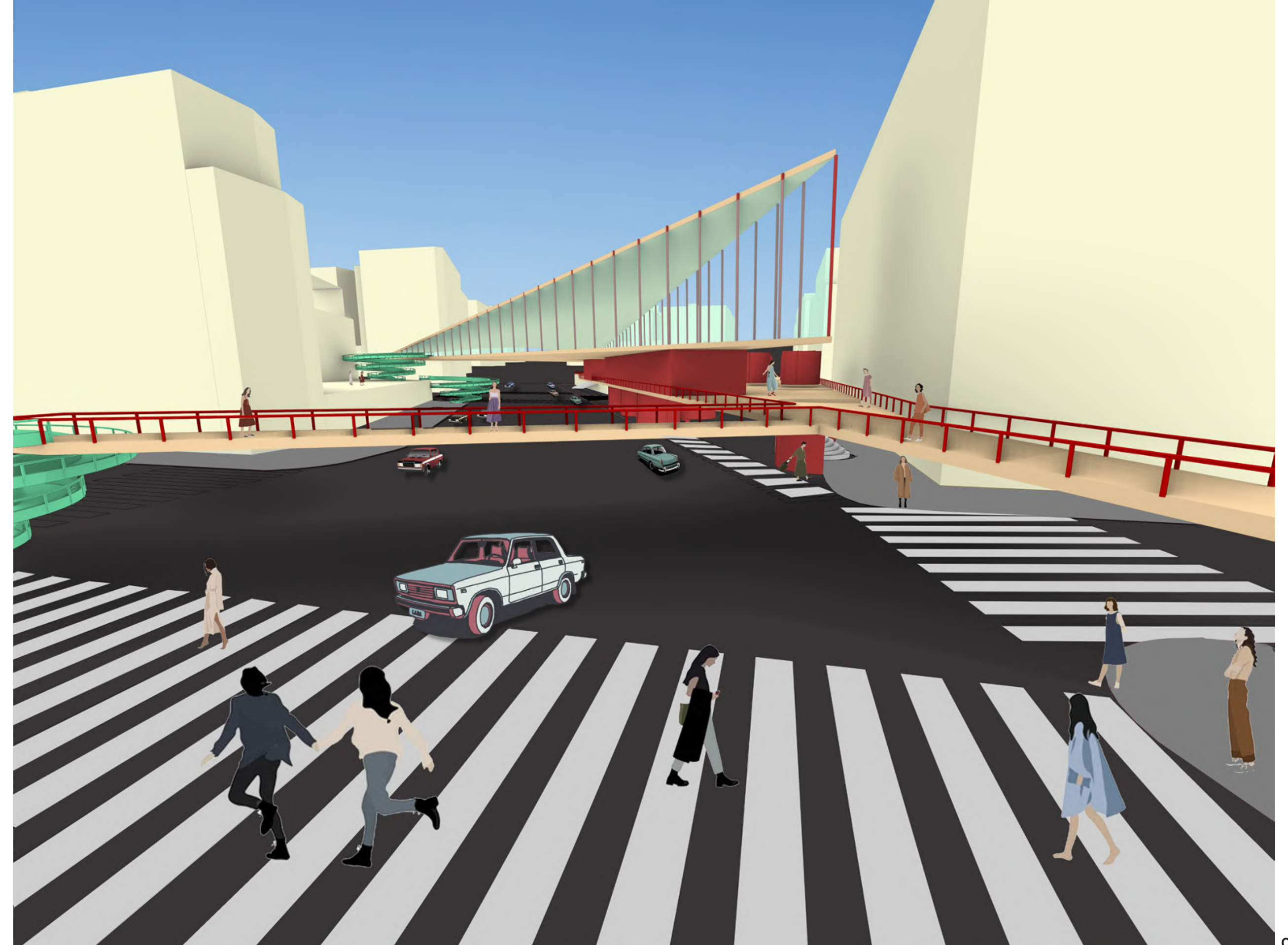
# CORE I

BROADWAY STORIES

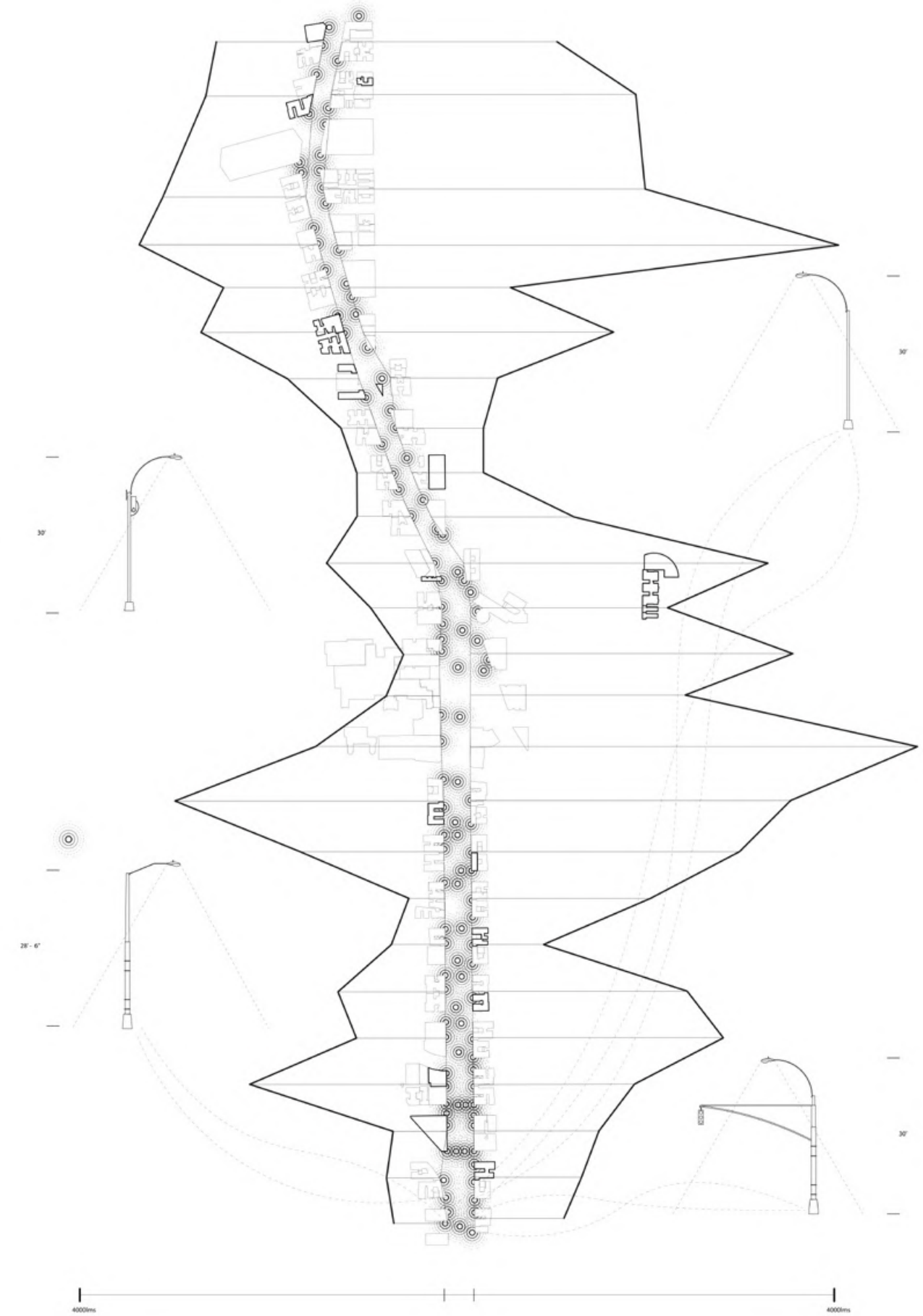
## BROADWAY ON AIR

**Instructor:** Miku Dixit  
**Studio:** Columbia University GSAPP Core I, Fall 2021

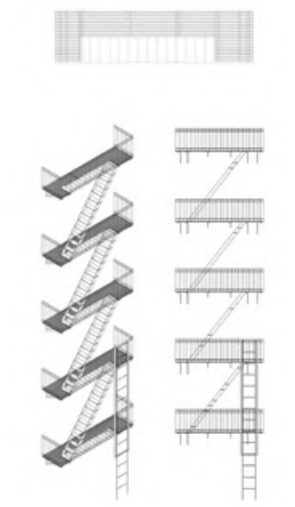
When the grid fractures, an orphan plot is born. Broadway on air looks at how air rights from disparate organizations could be utilized to activate orphan plots in New York City to create community-centered Architecture.



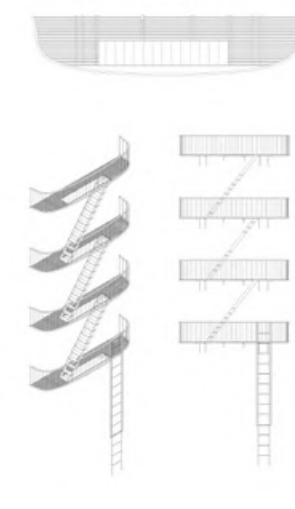




TYPE B - THE STANDARD



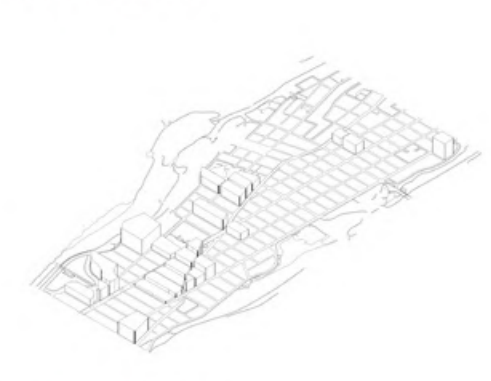
TYPE C - THE STANDARD



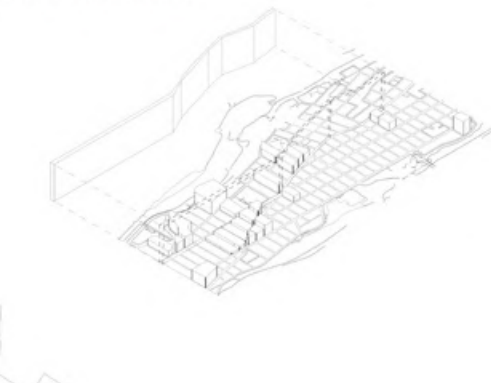
TYPE D - THE TRAPEZOID



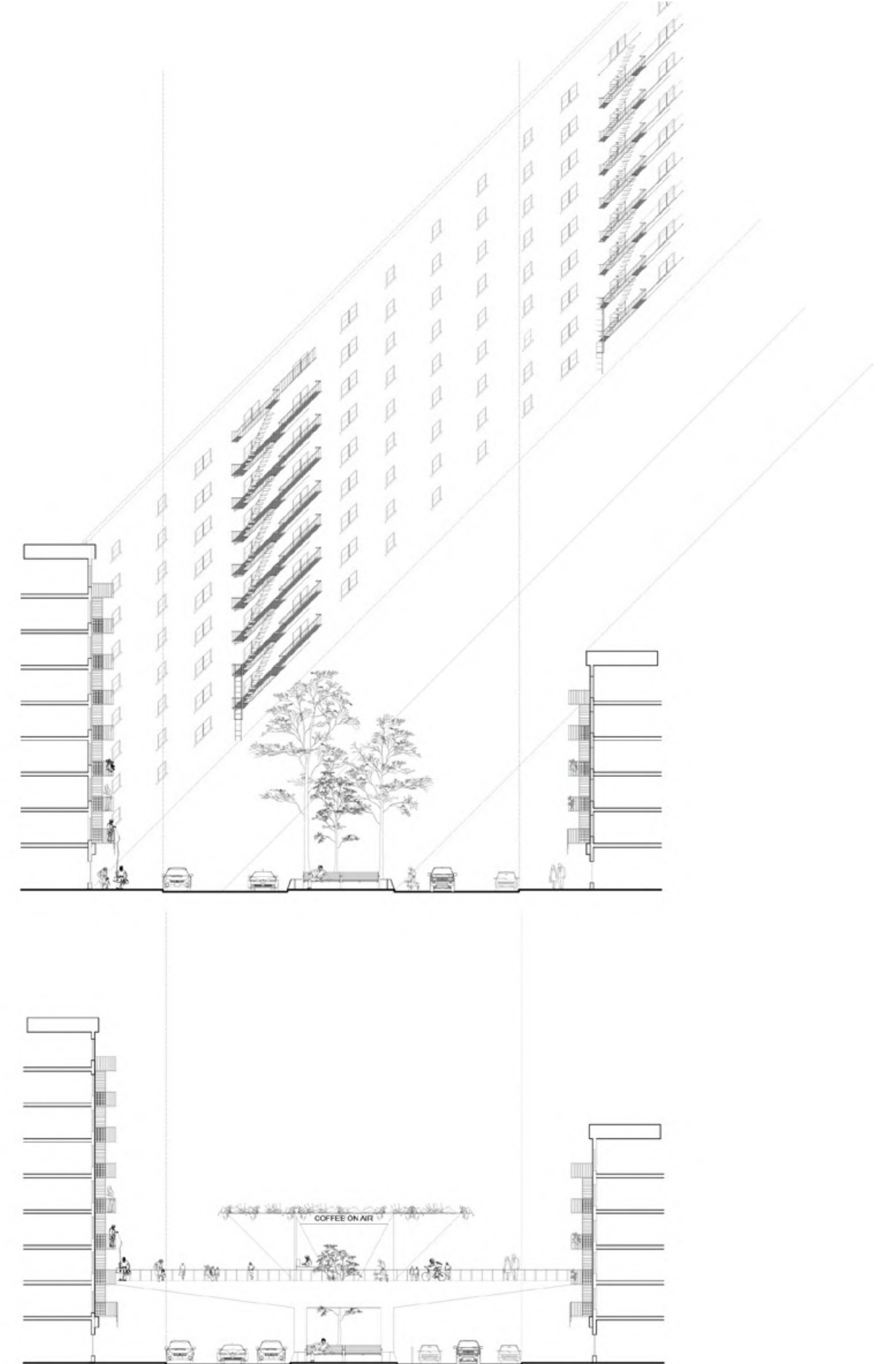
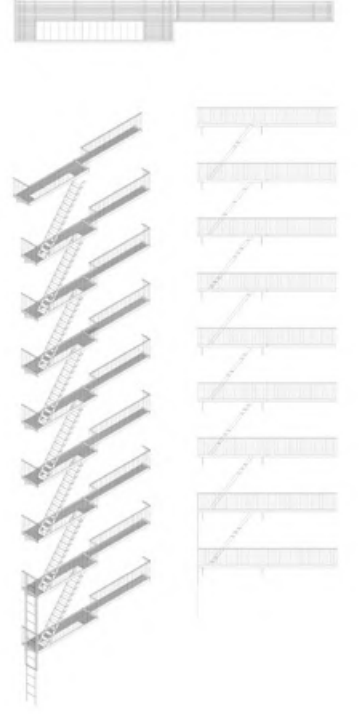
AVAILABLE AIR RIGHTS



BROADWAY AIR RIGHTS



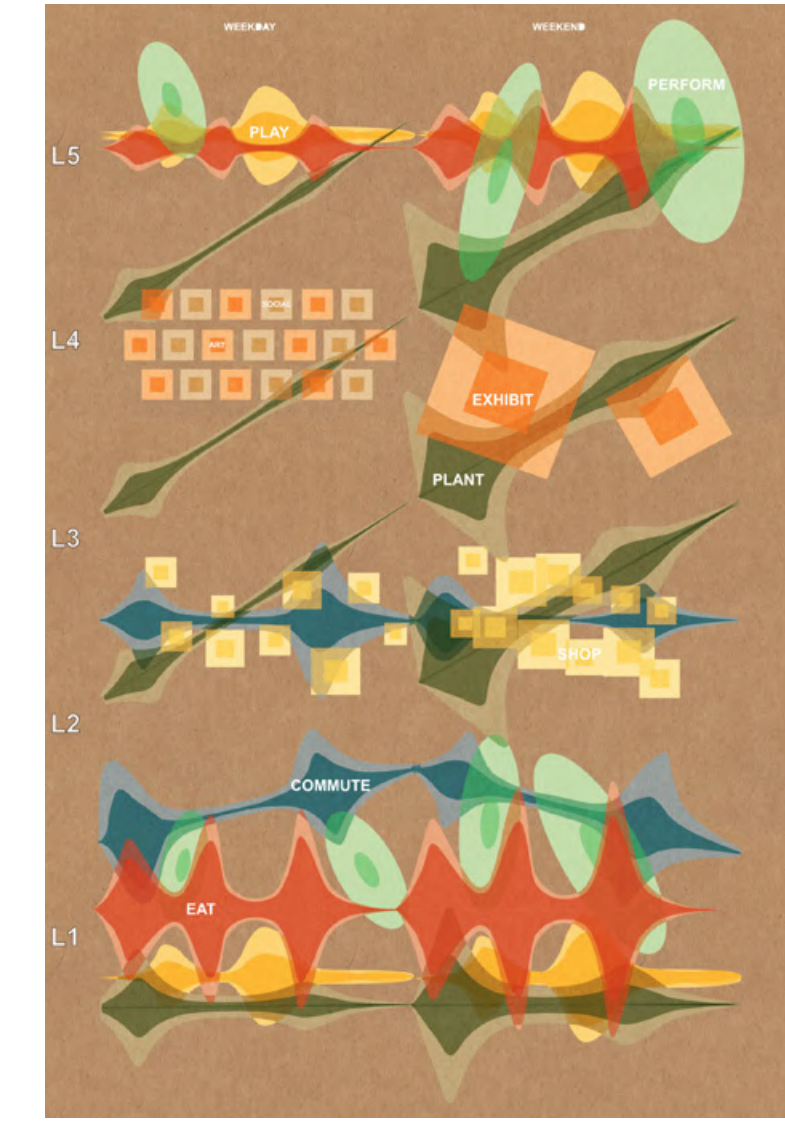
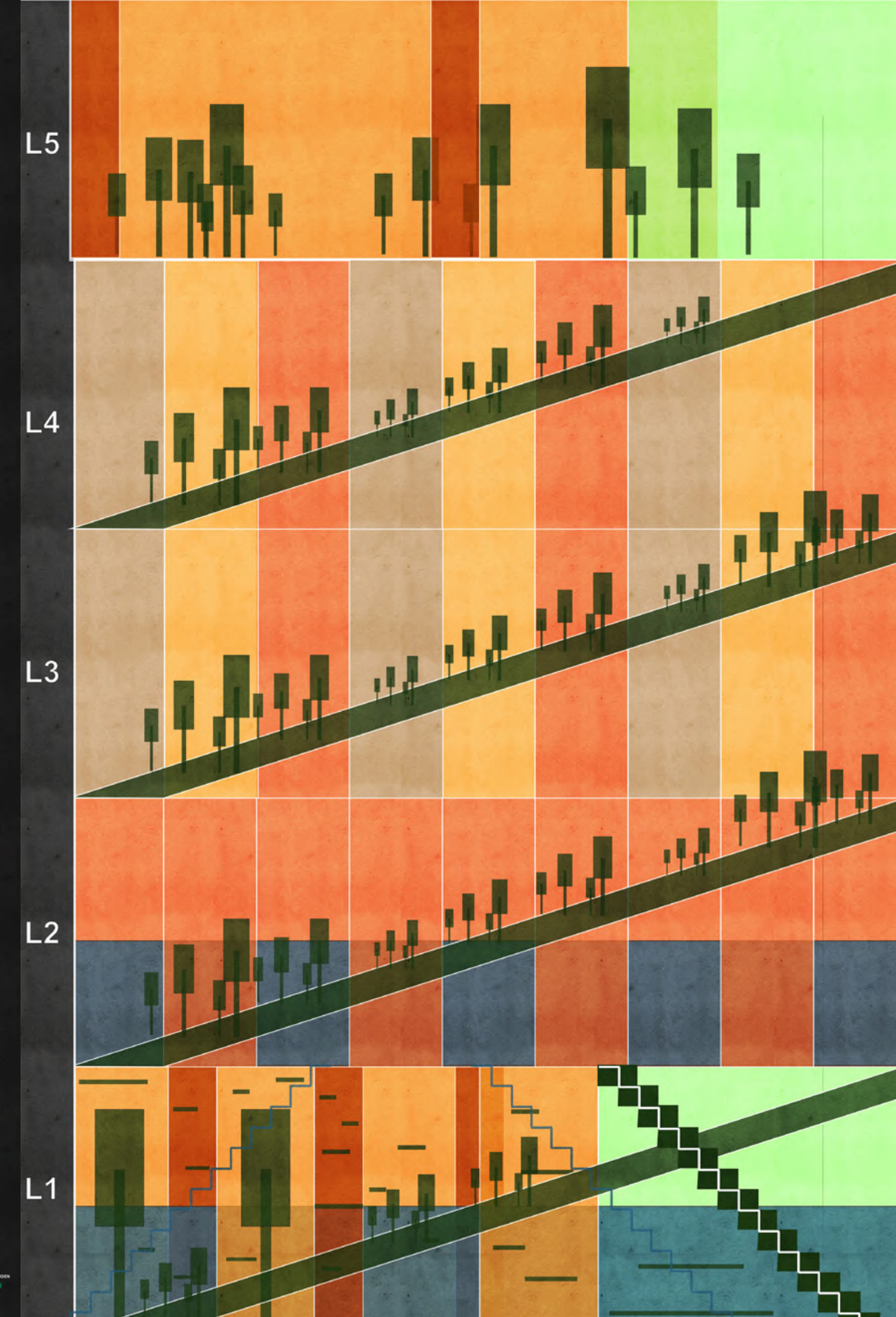
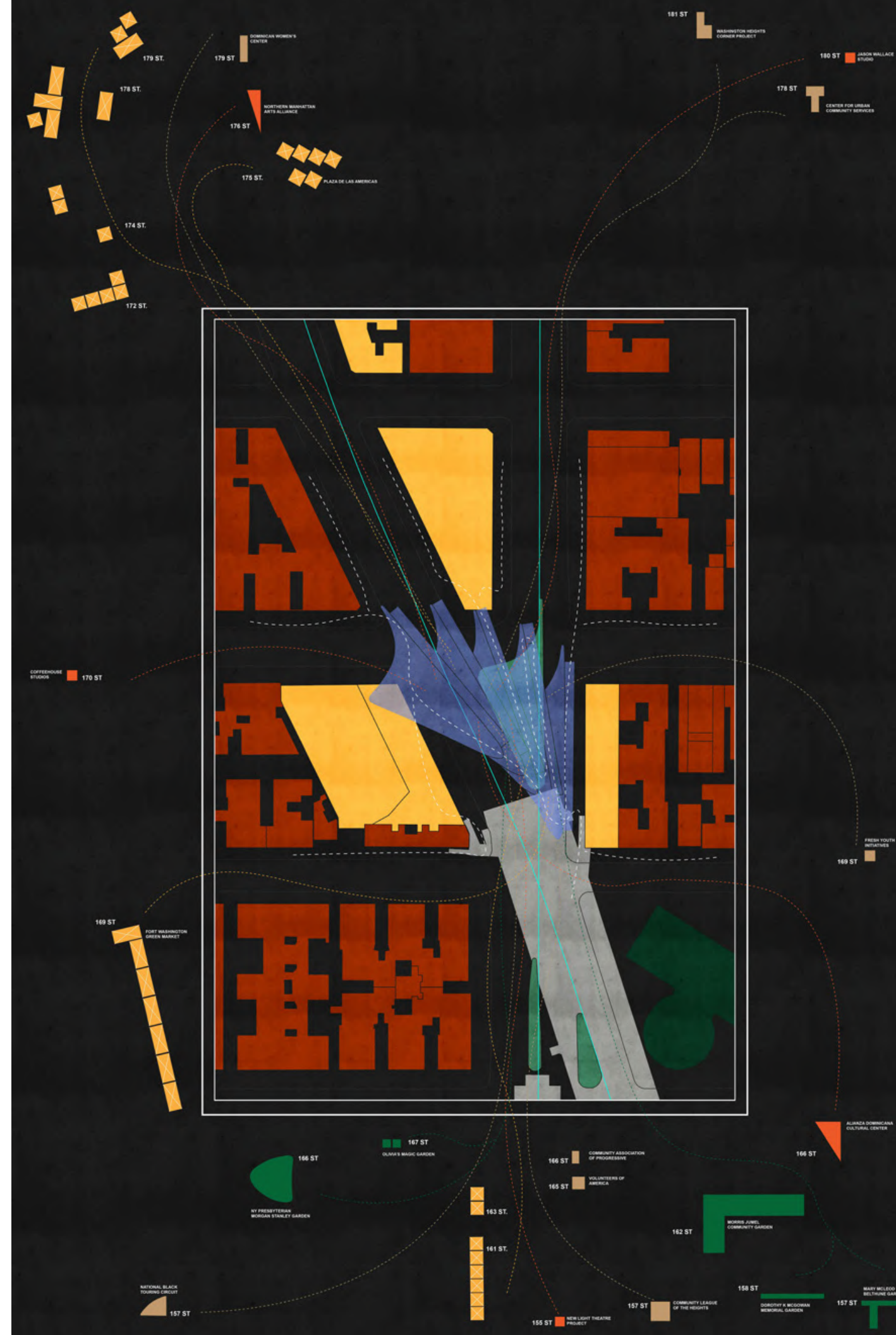
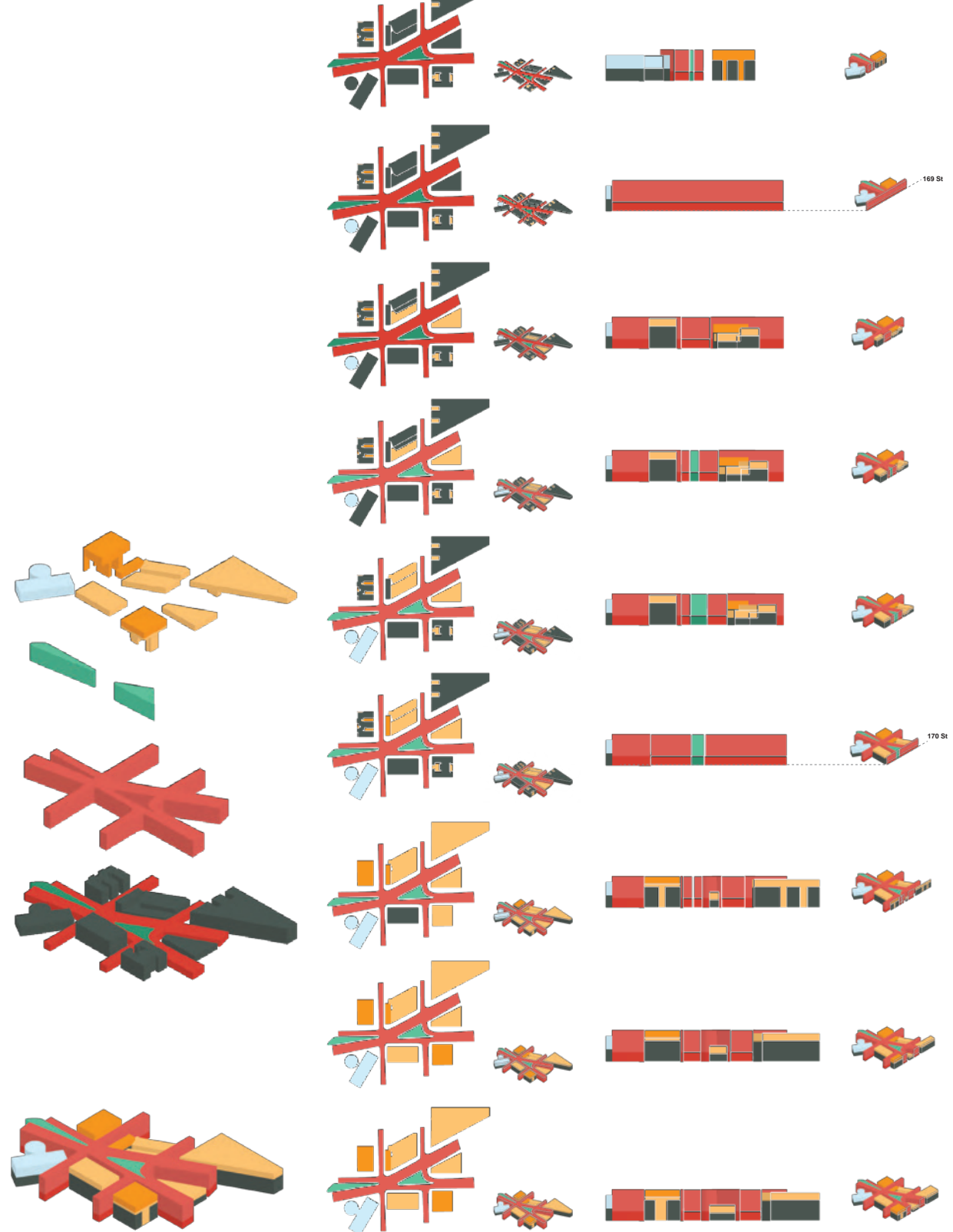
TYPE A - THE EXTENDED





# BROADWAY ON AIR

AIR RIGHTS ANALYSIS OF 169-170 JUNCTION









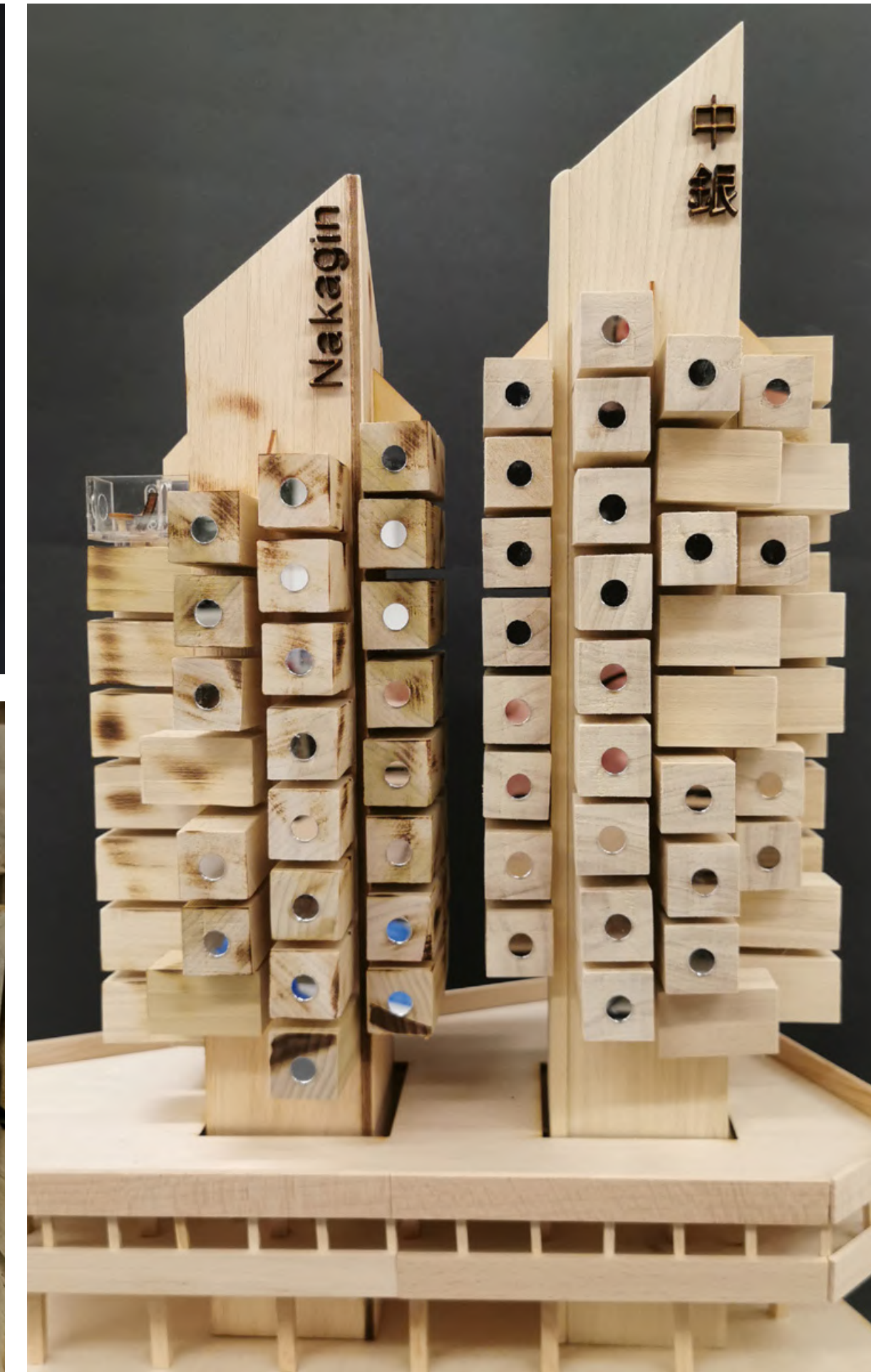
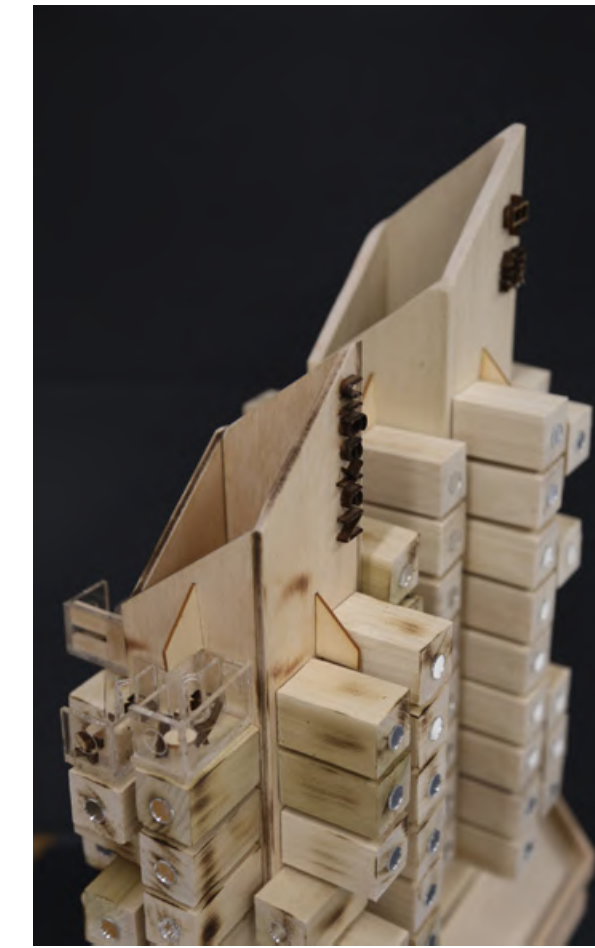
# ADR I

ARCHITECTURAL DRAWING & REPRESENTATION

## NAKAGIN CAPSULE TOWER

**Instructor:** Josh Uhl  
**Studio:** Columbia University GSAPP Architectural Drawing & Representation I, Fall 2021

Exploring new ways to represent Architecture, the Nakagin Capsule Tower was represented through the lens of time, with the imagined and actual realities represented in each tower of the model, and its lived reality expressed through an exploded axonometric and a perspective collage drawing.








  
**NAKAGIN**  
 CAPSULE TOWER  
 EXPLODED




  
**NAKAGIN**  
 CAPSULE TOWER  
 PERSPECTIVES  
 IN  
 TIME

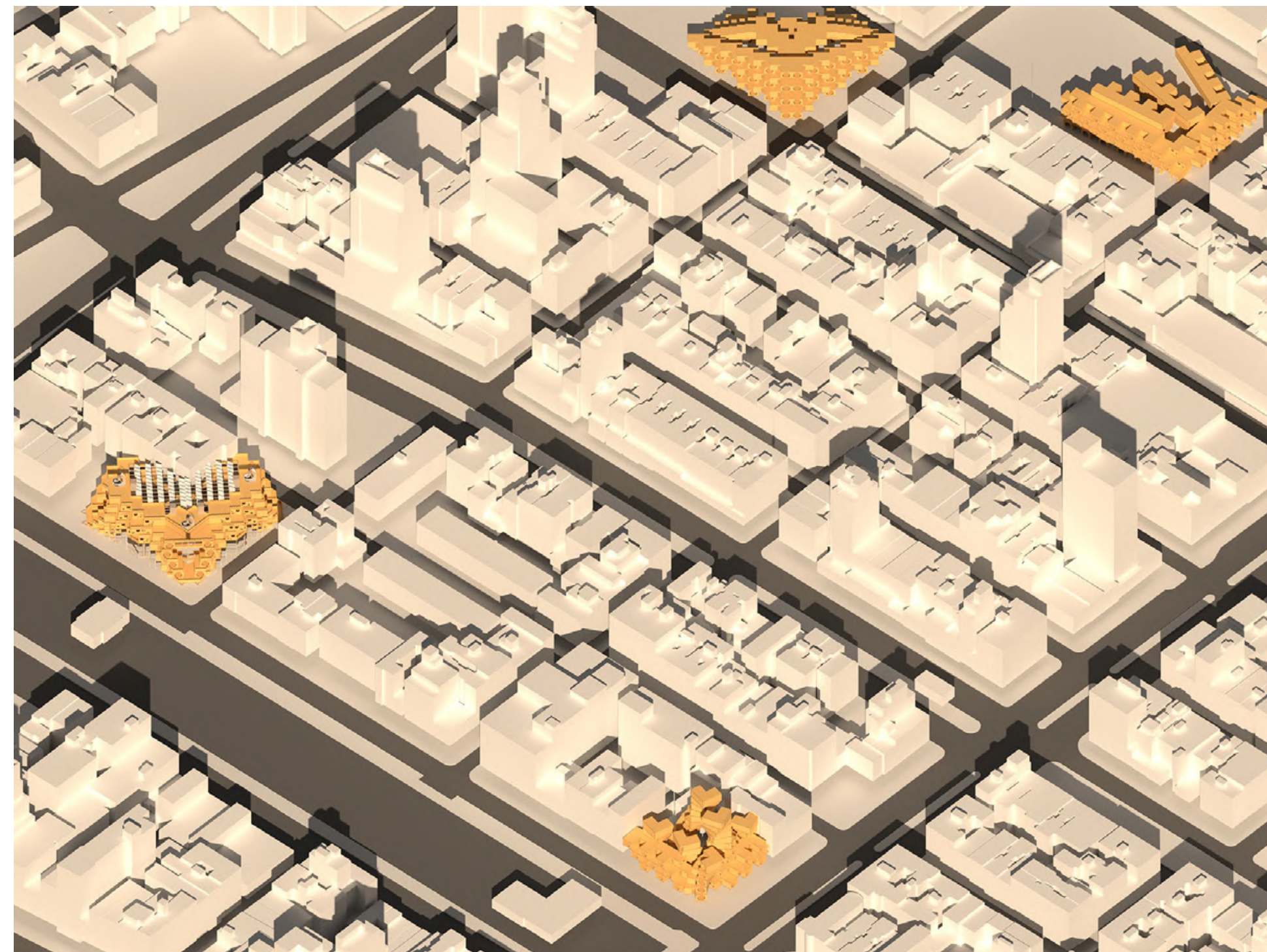


# CORE II

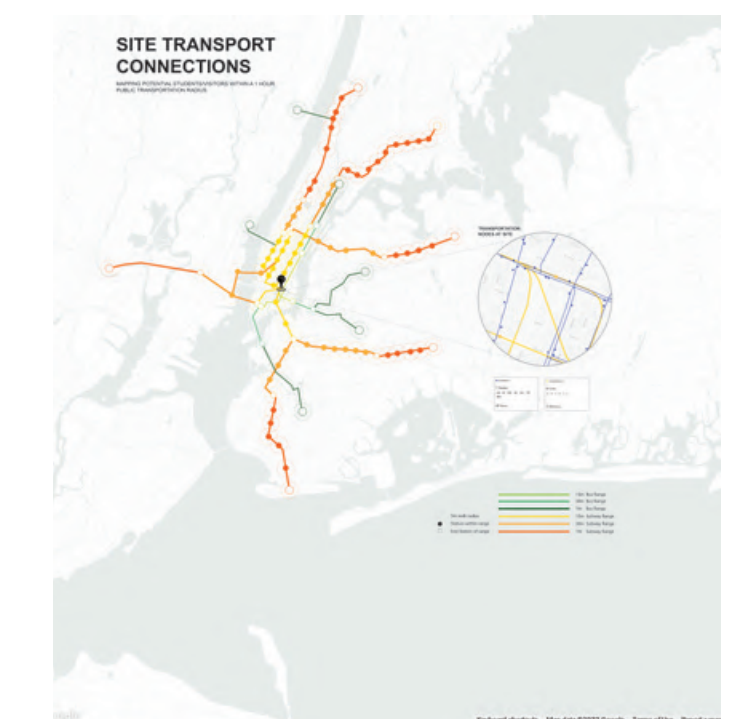
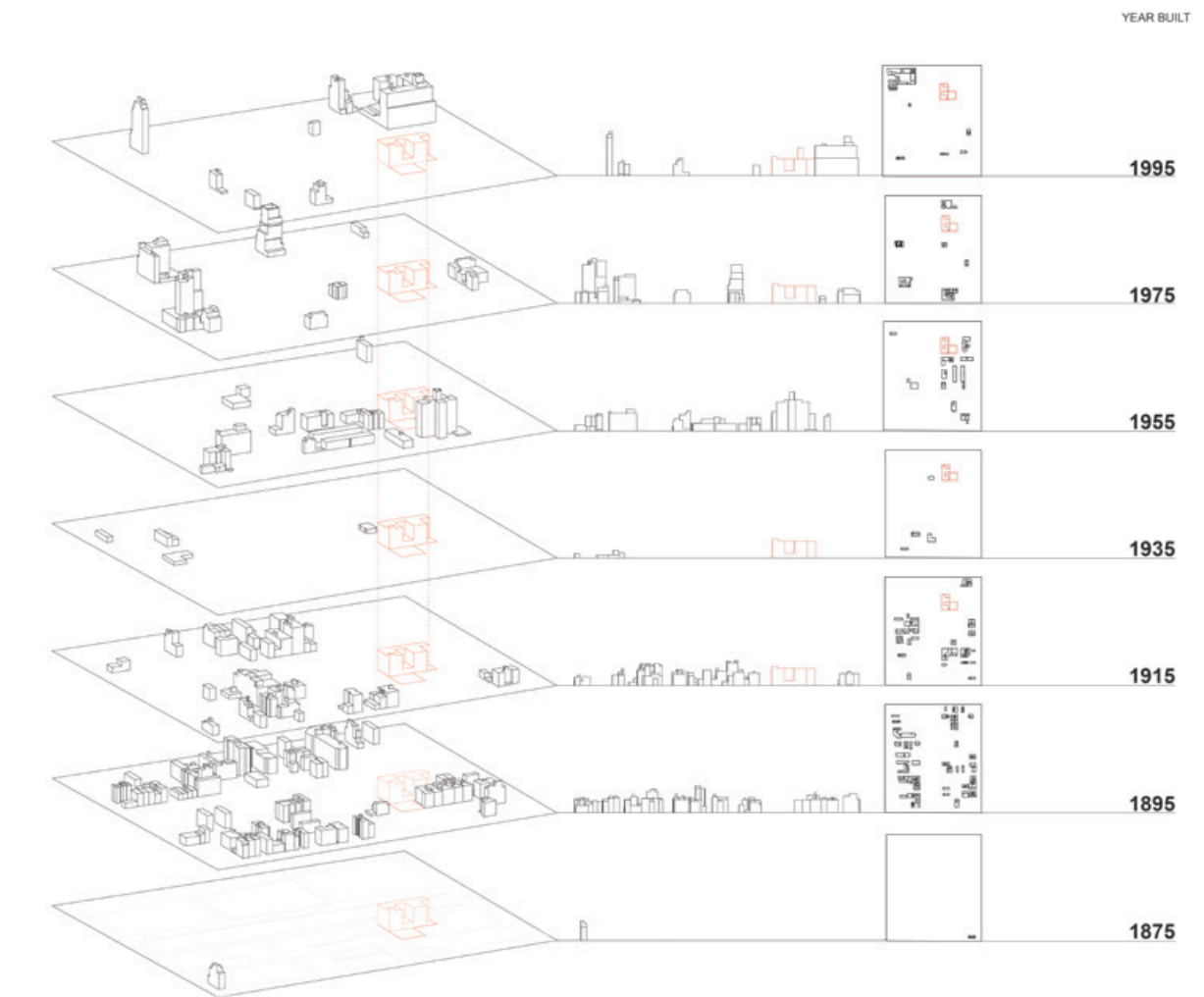
# OPEN FRAMEWORKS

**Instructor:** Benjamin Cadena  
**Studio:** Columbia University GSAPP  
Core II, Spring 2022

Against a backdrop of crumbling schools in America, Open Frameworks envision a future of modular schools with a kit of parts that every stakeholder has an opportunity to participate in the design of.



# NEIGHBOURHOOD DEVELOPMENT OVER TIME



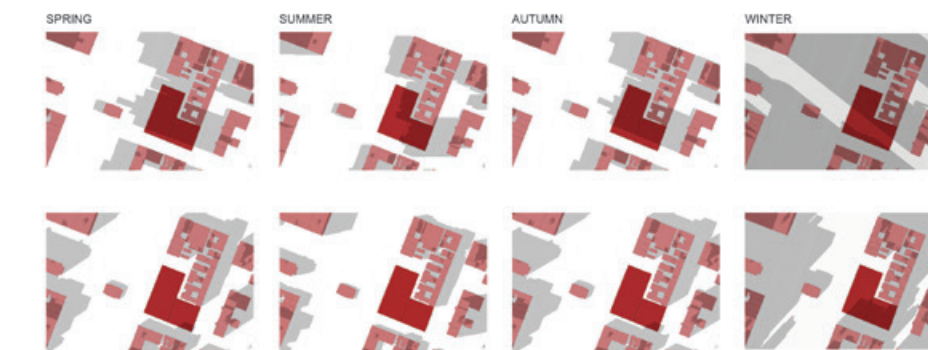
# SITE ANALYSIS

ENVIRONMENTAL + LOCAL CONDITIONS

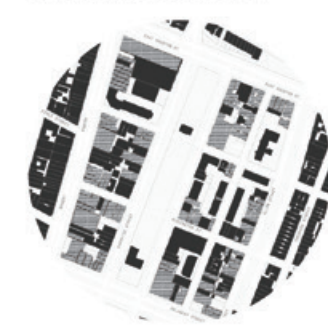
## SITE STRATEGY

Augment Roosevelt park as an interesting offshoot to the linear connector and provide public space that will serve to complement the lack of open space in the park. Maintain porosity and diversity of the neighbourhood by engaging in a dialogue according to the ebbs and flows of the energy within the neighbourhood. Be sustainable through being environmentally responsive by tailoring it to the seasons and local conditions.

## TYPICAL SCHOOL DAY SHADOWS ANALYSIS



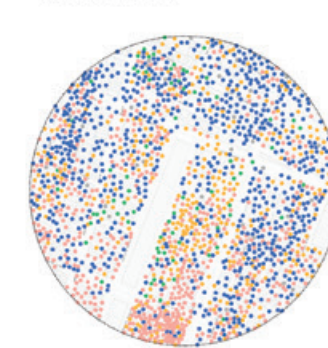
## FIGURE GROUND + POROSITY



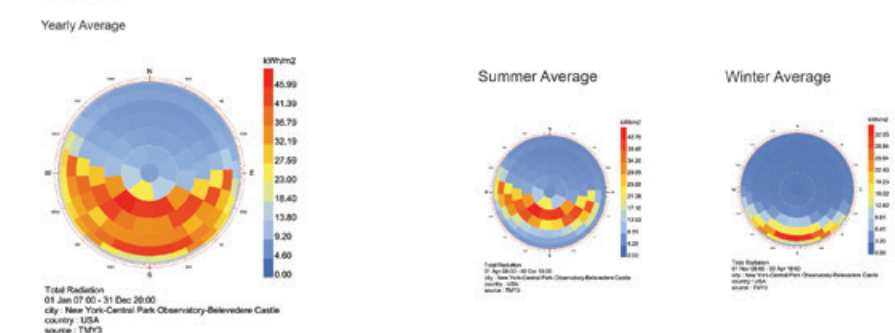
## LAND-USE



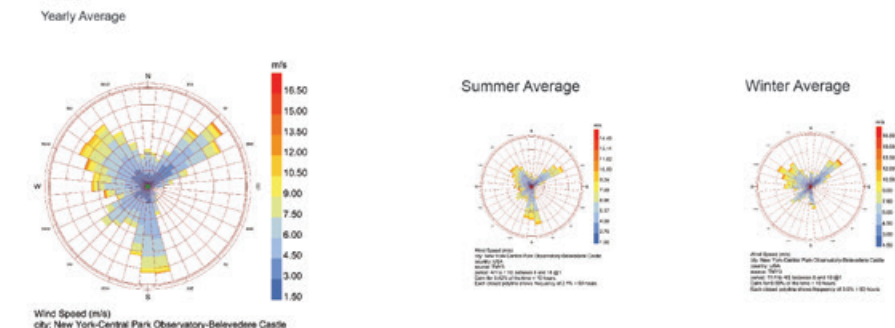
## DEMOGRAPHICS



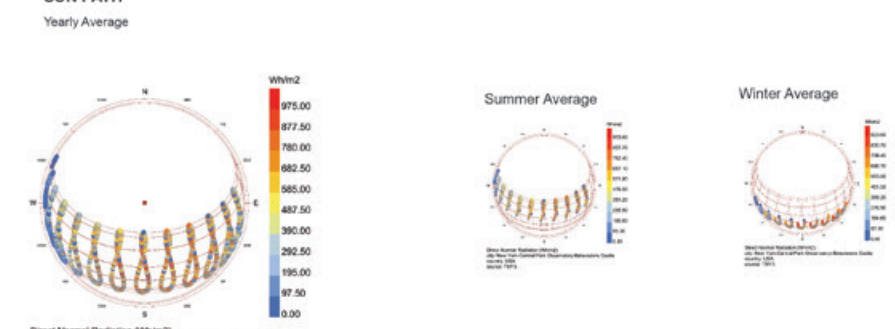
## RADIATION



## WIND



## SUN PATH

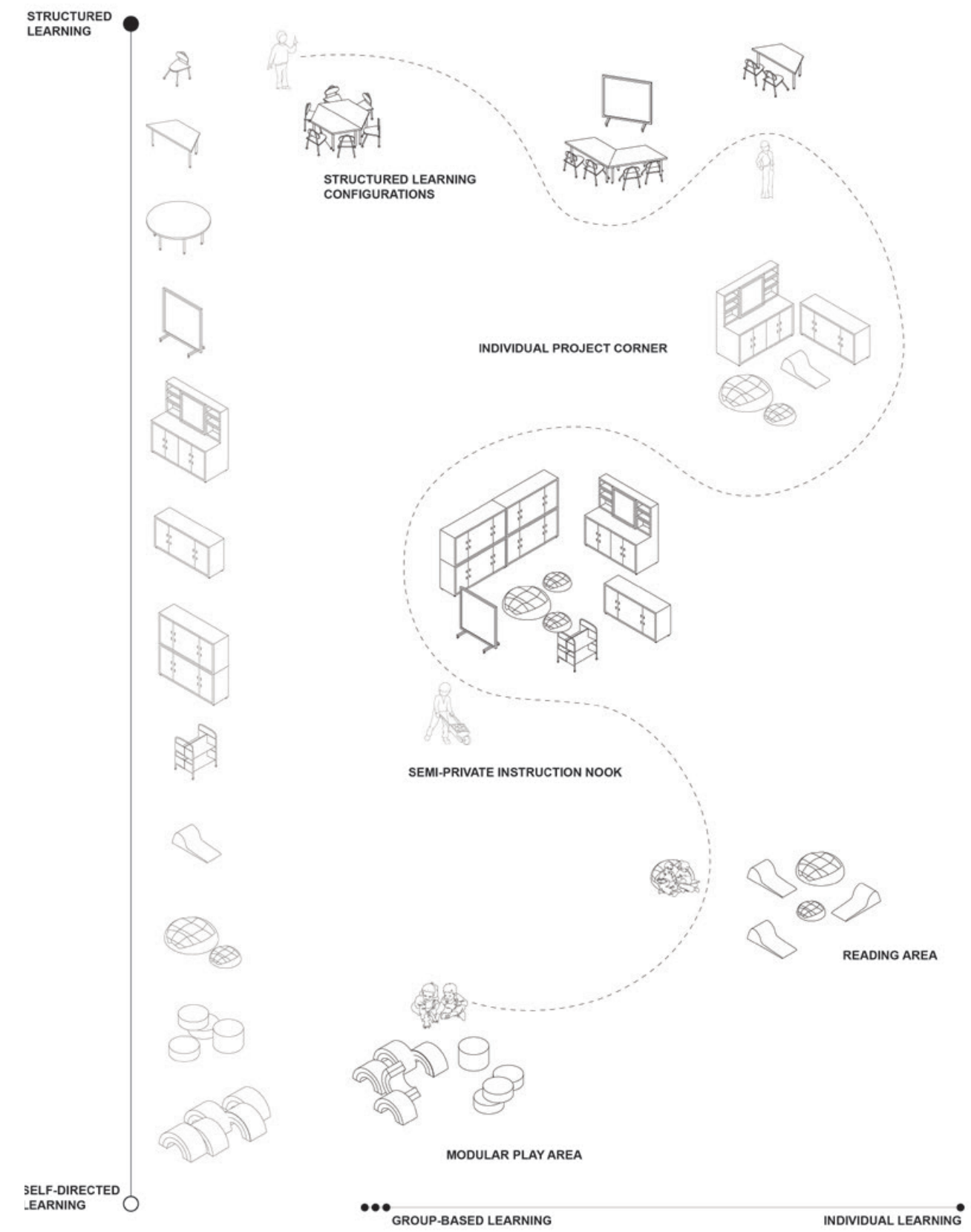




# CONTEXT

WITHIN THE OPEN PLAN

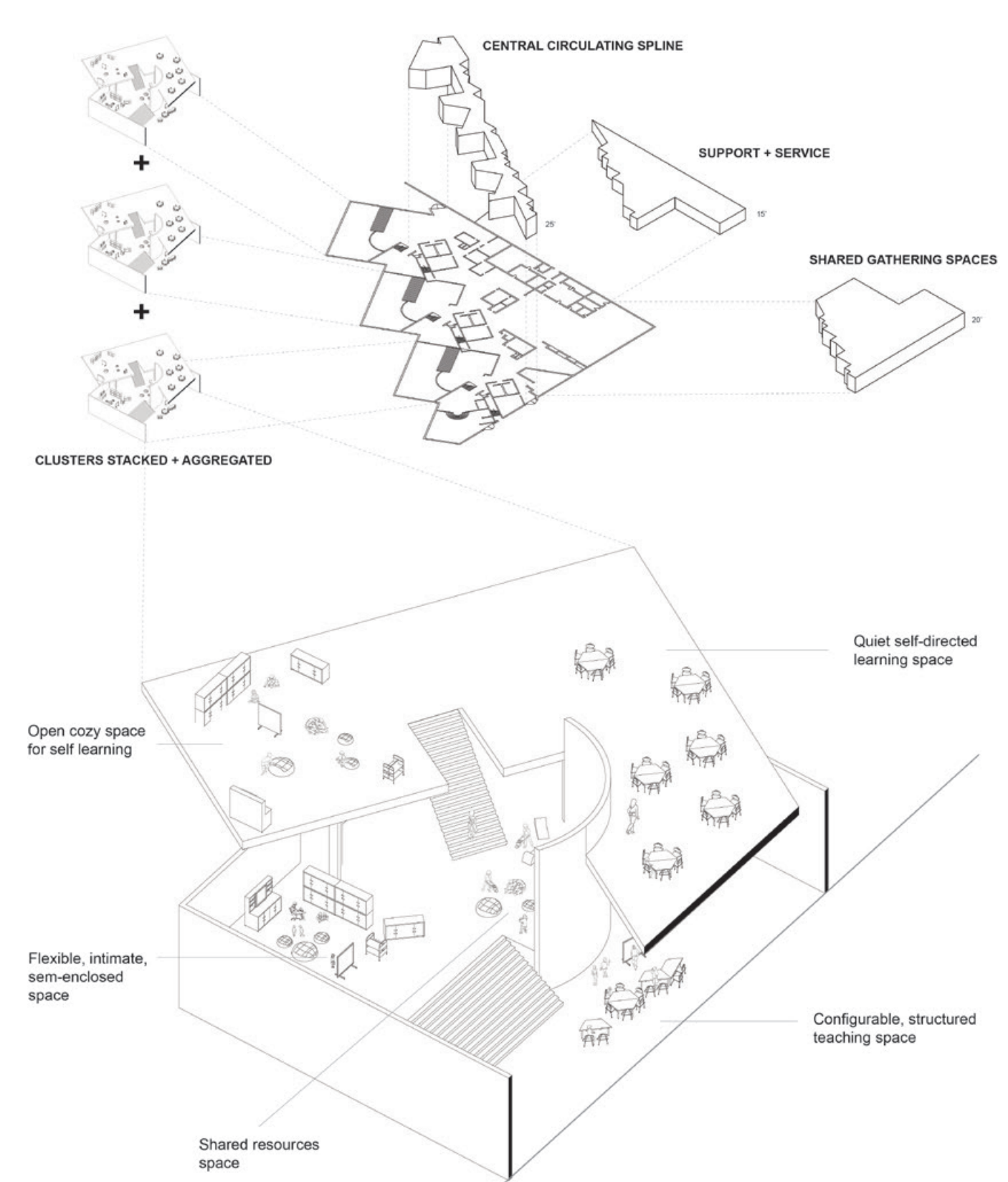
ELEMENTS THAT CREATE THE CONTEXT OF AN OPEN PLAN



# FORM

CREATING THE OPEN PLAN

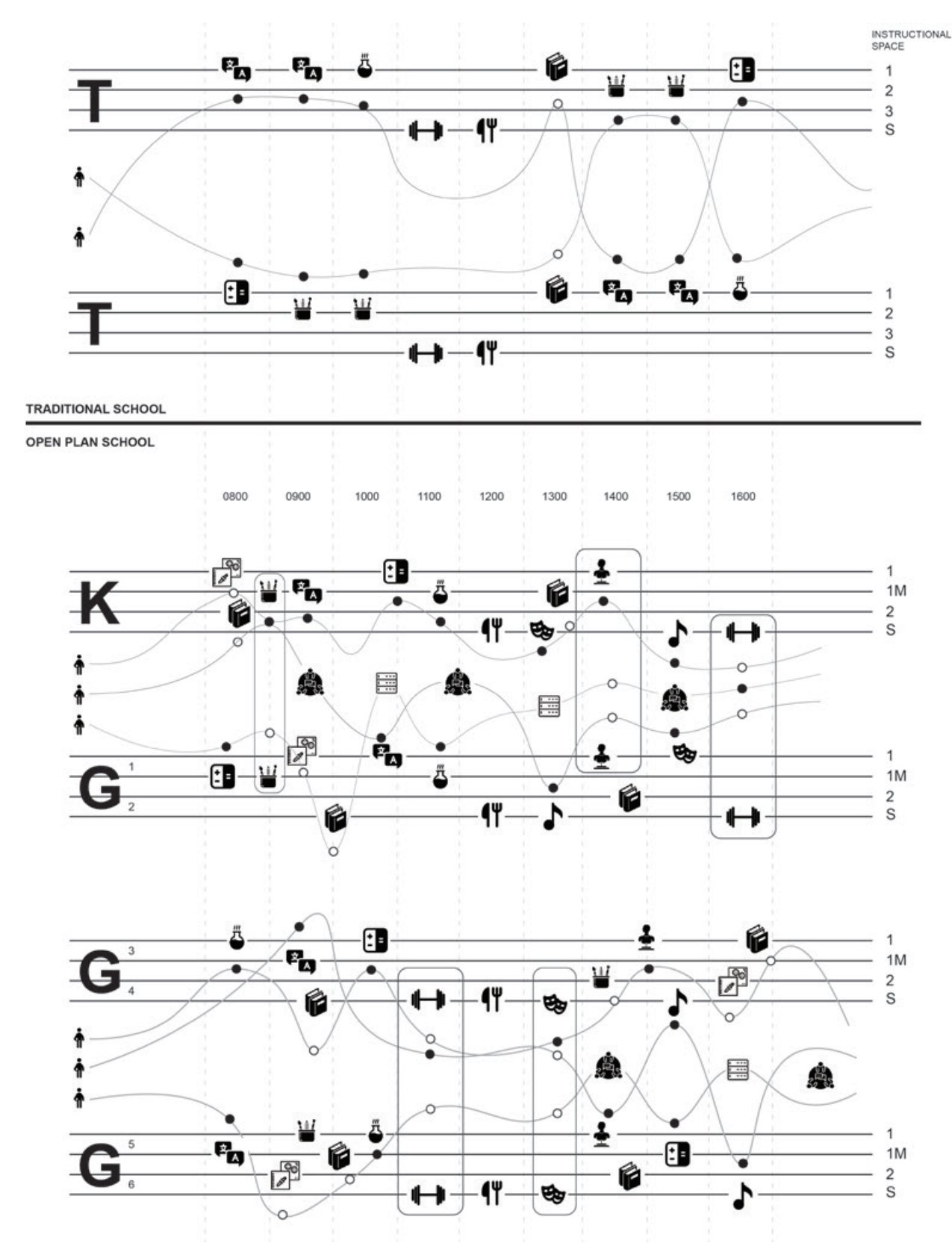
ORGANIZING PRINCIPLES VIA SKEWING, OVERLAP AND STACKING



# FLOW

IN THE OPEN PLAN

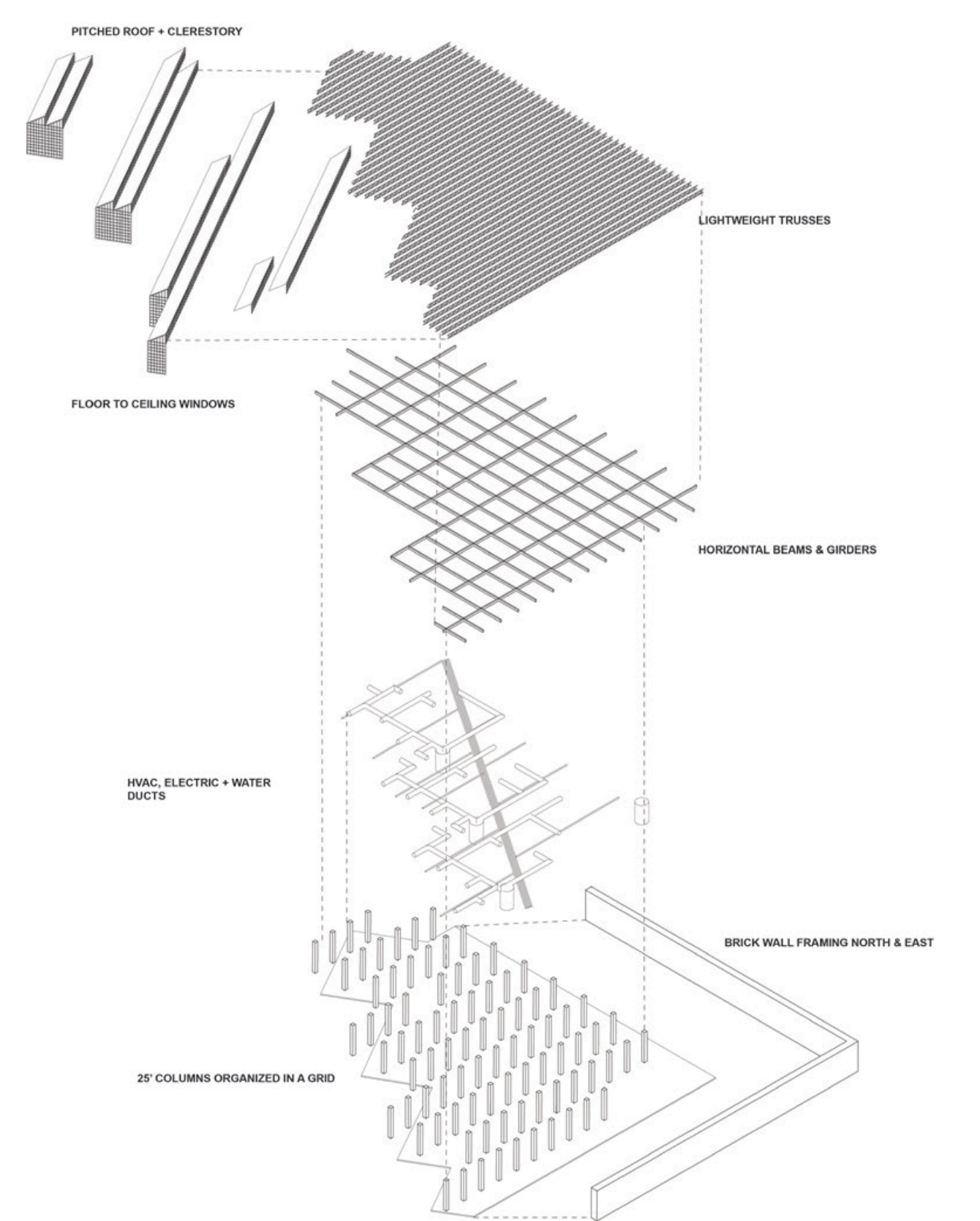
MOVEMENT, PROGRAM, AND THE CACAPHONY OF MT HEALTHY ELEMENTARY SCHOOL



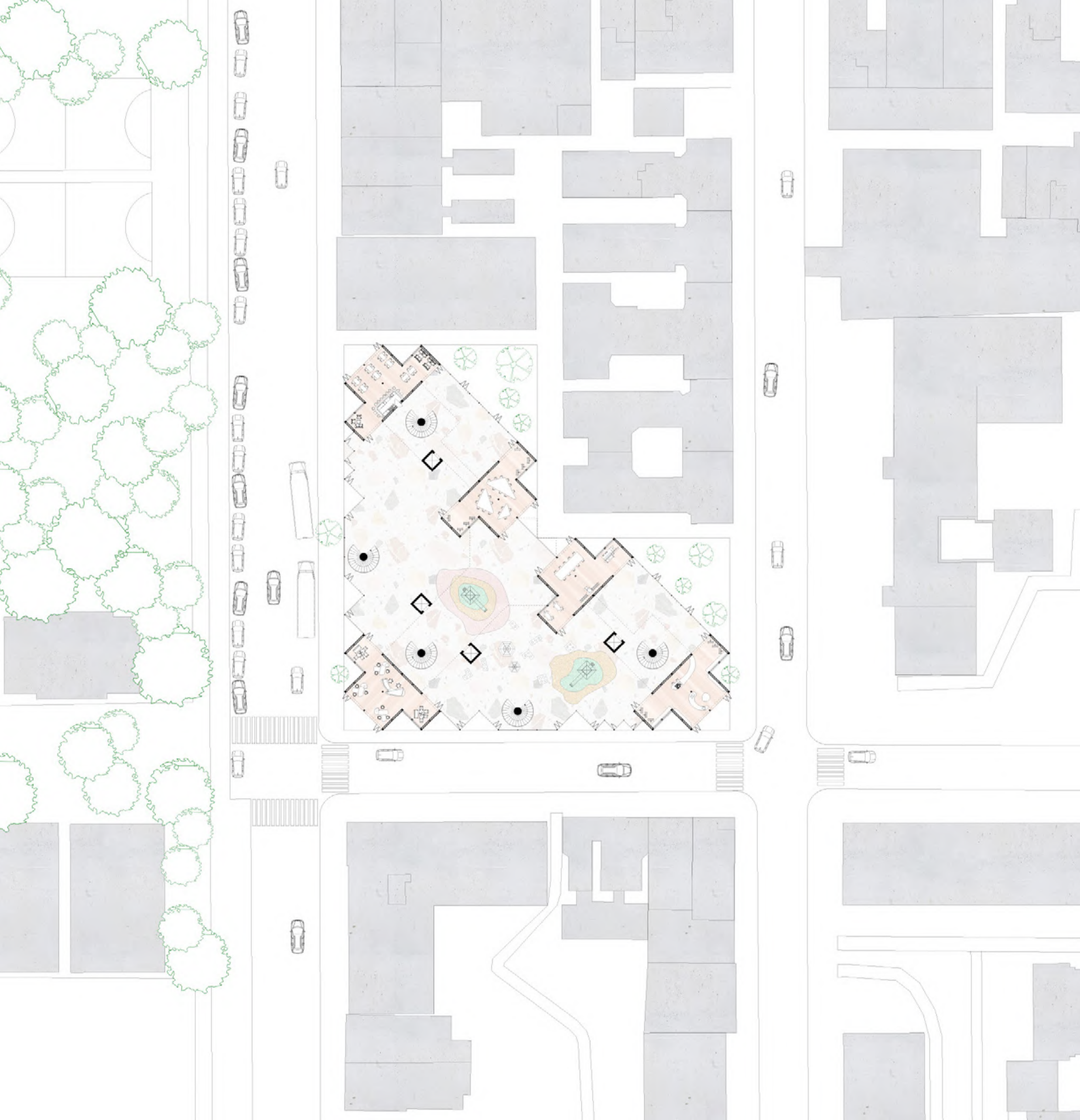
# STRUCTURE

OF THE OPEN PLAN

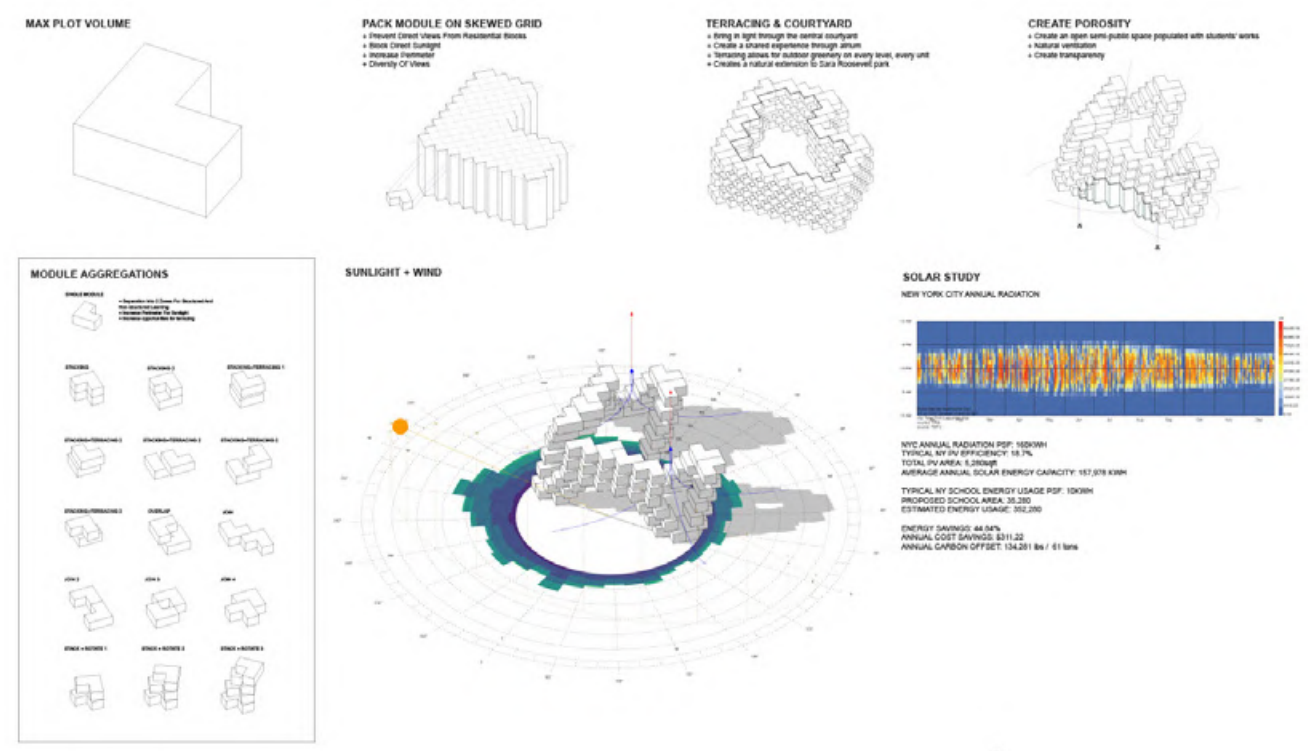
ELEMENTS THAT ENABLE THE OPEN PLAN AT MT HEALTHY ELEMENTARY SCHOOL



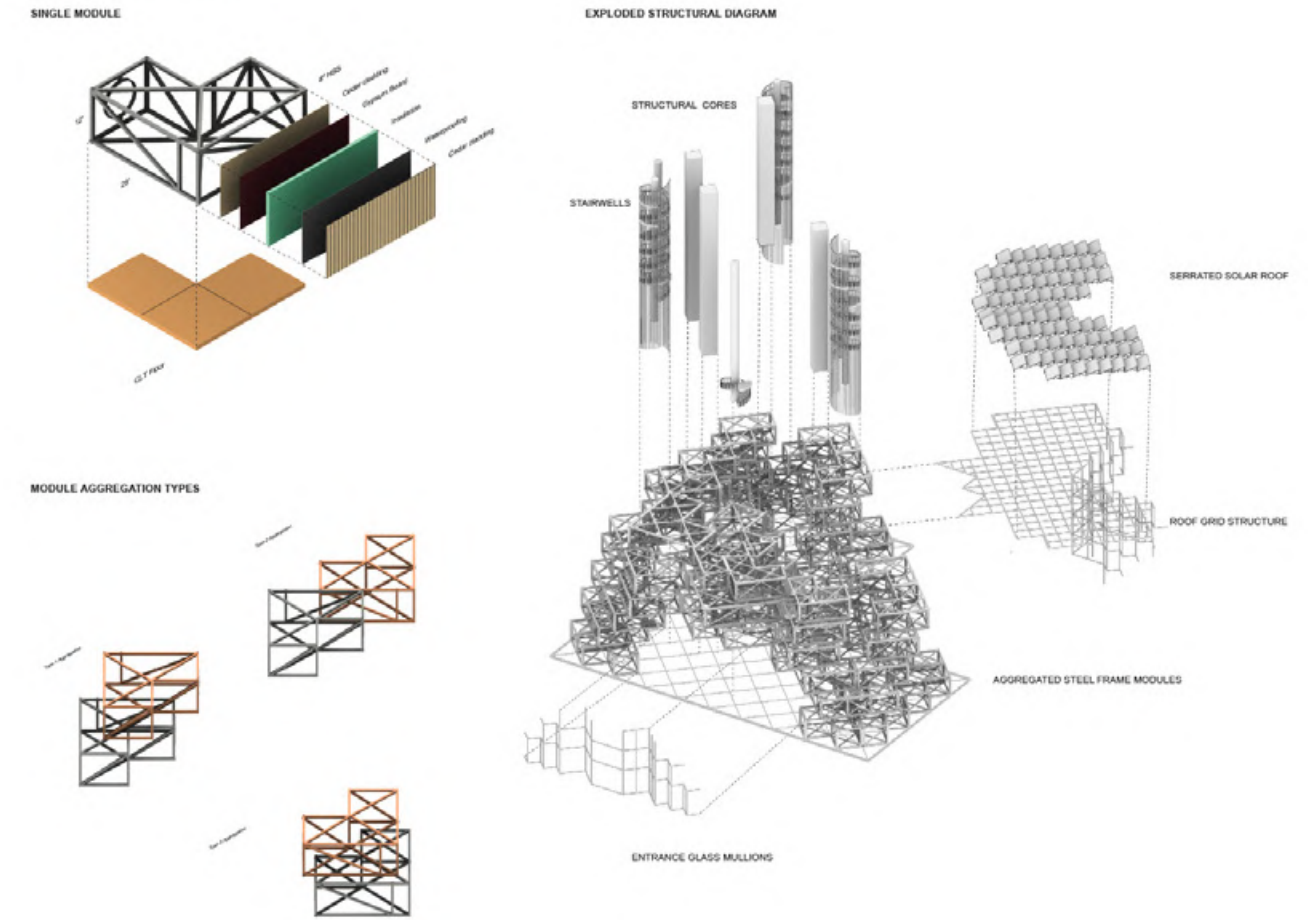




### OPEN FRAMEWORKS



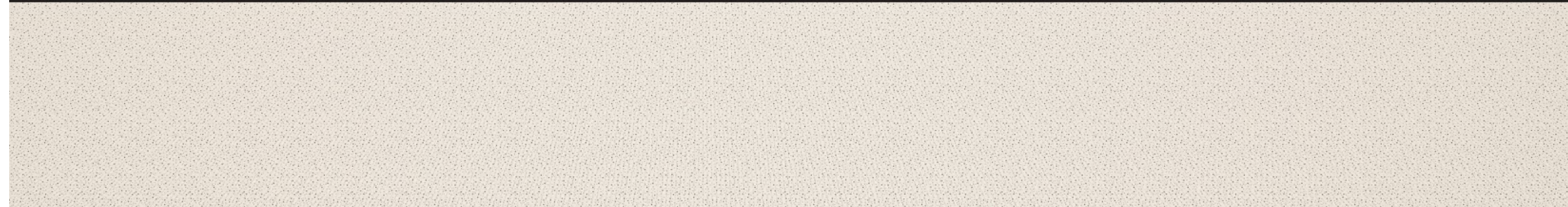
### STRUCTURAL MODULARITY











# LITTLE RYAN

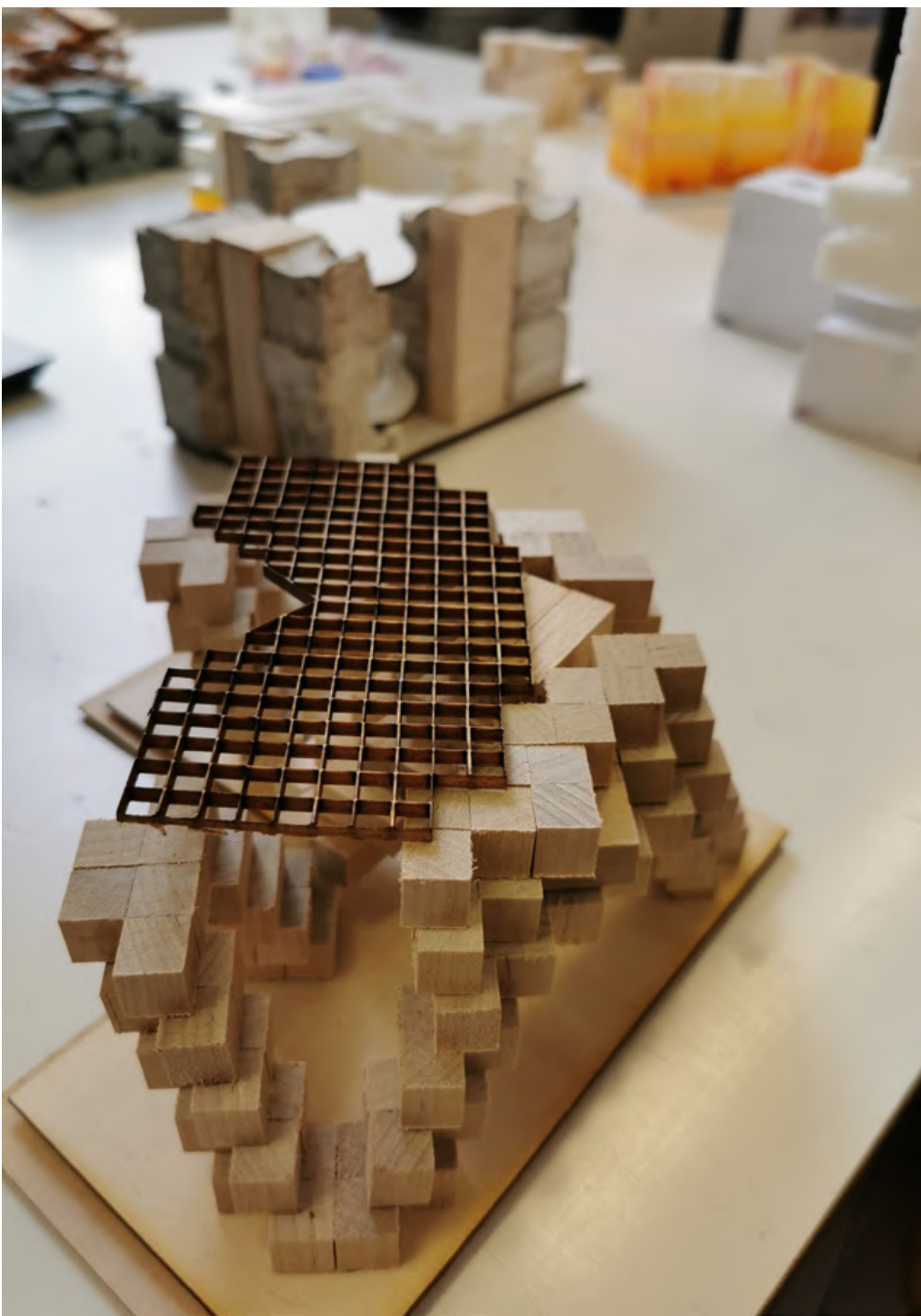


# SCHOOL IN NEW YORK

- DAY 26













# CORE III

## GLACIERS ON HARLEM RIVER

**Instructor:** Galia Solomonoff  
**Studio:** Columbia University GSAPP Core III Housing Studio, Fall 2022  
**Partner:** Chris Kumaradaja

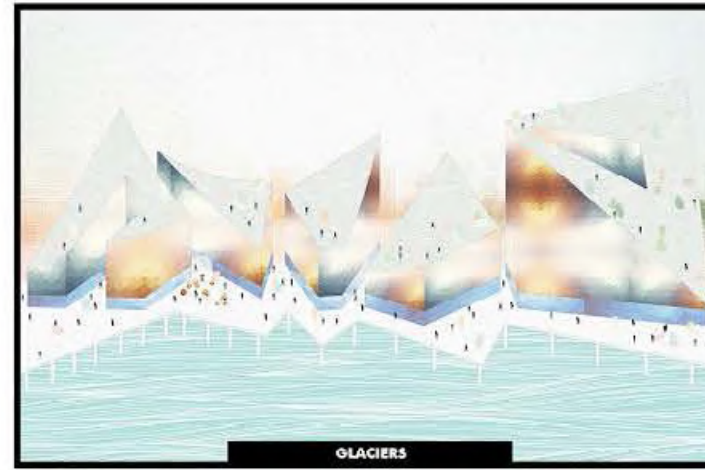
Presented with an estranged riverfront site among industrial zoned properties, this project seeks to redefine the meaning of Affordable Housing. Guided by a manifesto:

Affordable Housing is Iconic  
Affordable Housing is Flexible  
Affordable Housing is Performative  
Affordable Housing is Universal Basic Income

The housing development is dense, iconic, open-plan, sustainable and program driven to establish a new co-op model that provides its residents with Universal Basic Income.



SKYPARK



GLACIERS



Iconic



WATERFRONT



SUBURBAN LIVING ON AIR



OPEN PUBLIC GROUND PLAN



OPEN PLAN



MASS CUSTOMIZED PLANS



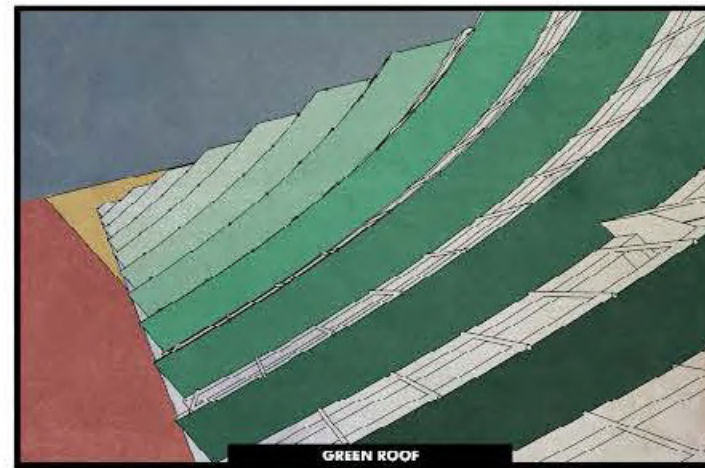
FLEXIBLE



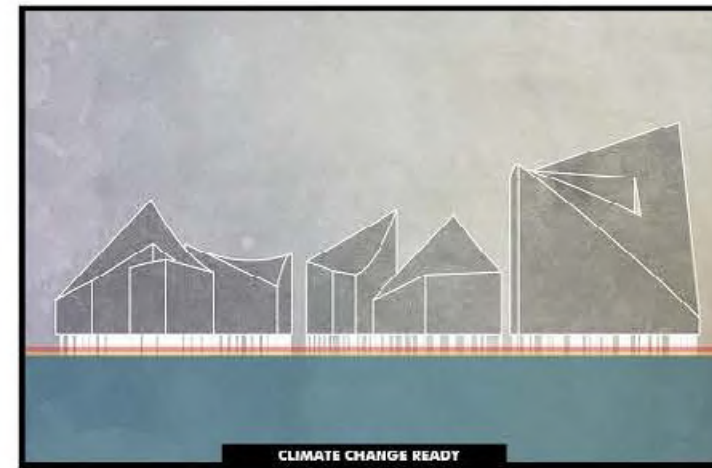
DYNAMIC STREETScape



PERFORMATIVE



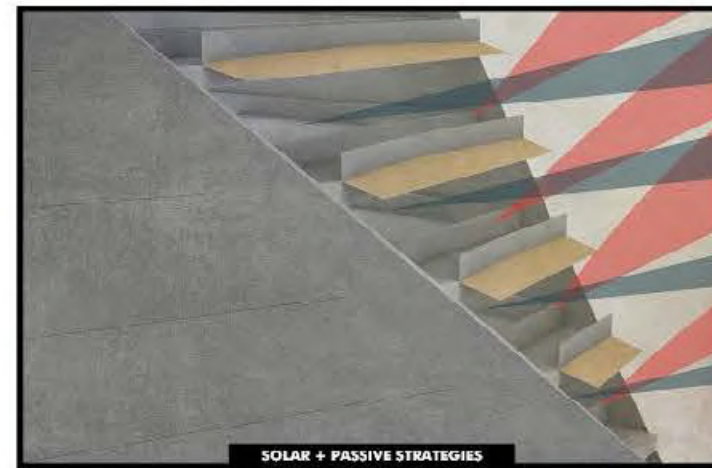
GREEN ROOF



CLIMATE CHANGE READY



CROSS LAMINATED TIMBER



SOLAR + PASSIVE STRATEGIES



MICRO-ENTREPRENEURSHIP

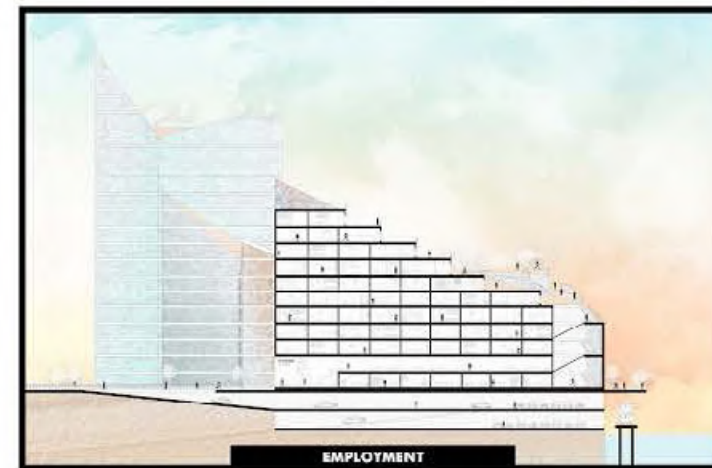


DUAL KEY

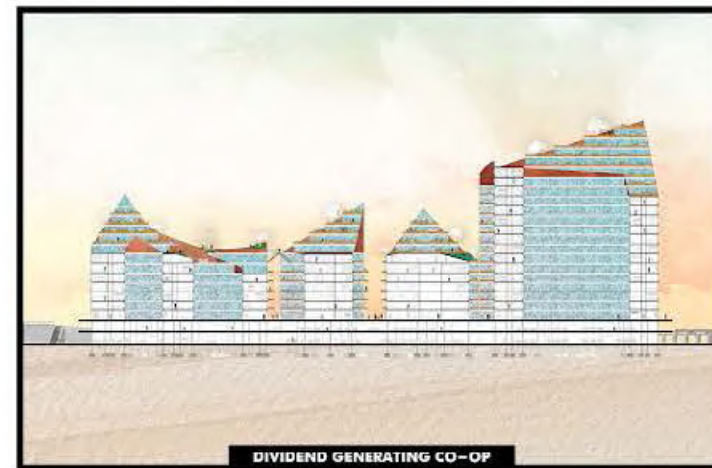
PARTITIONABLE



UNIVERSAL BASIC INCOME.

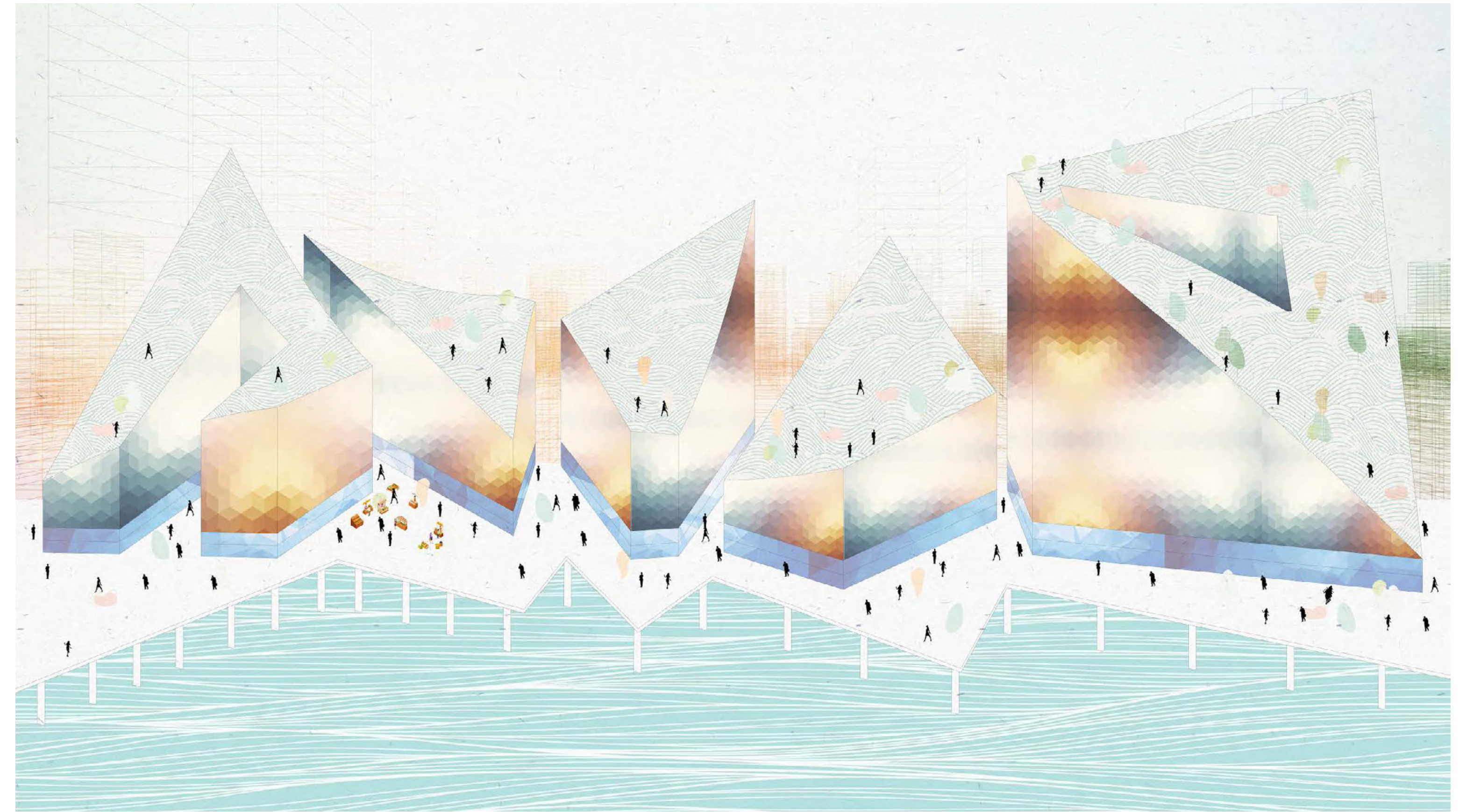


EMPLOYMENT

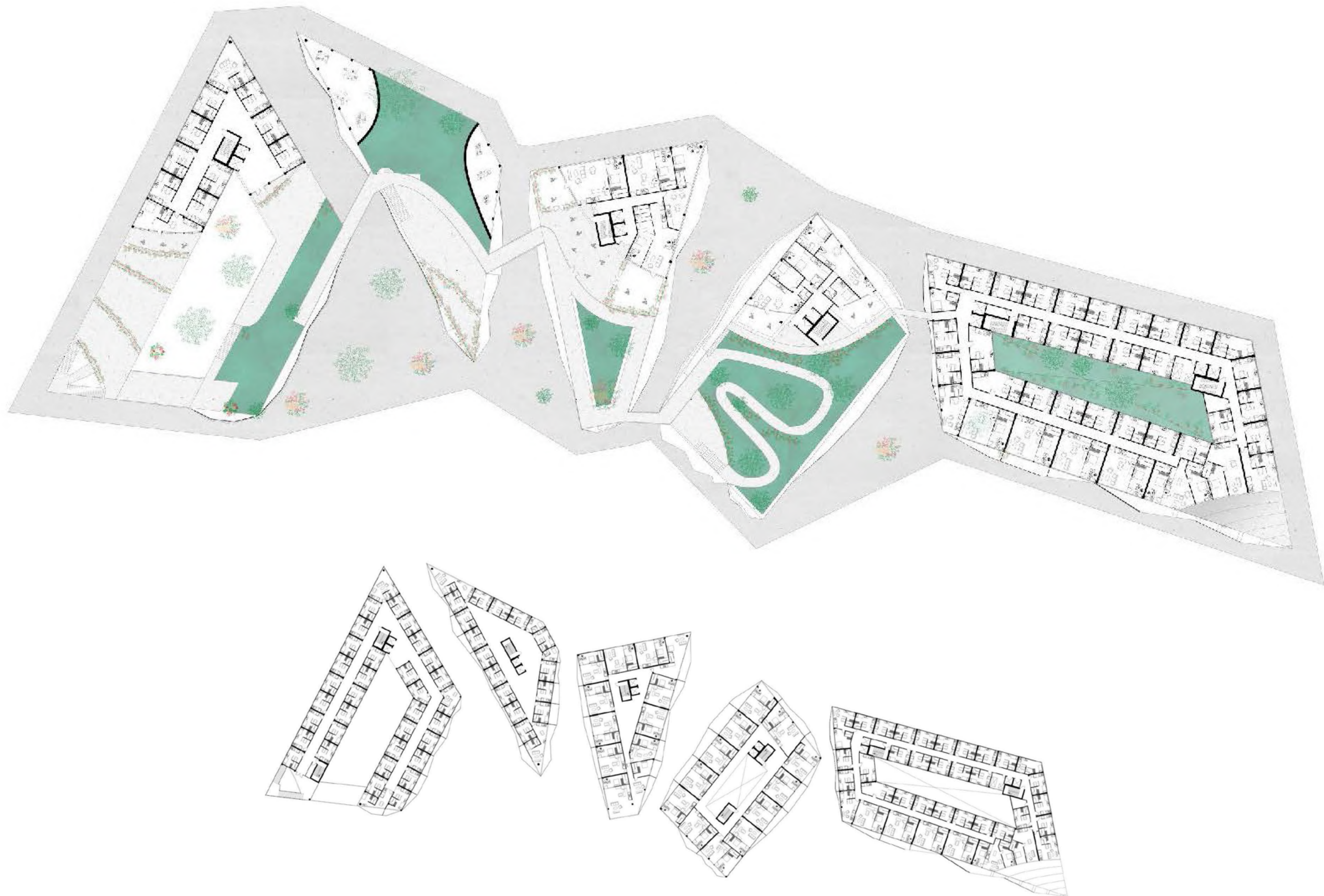


DIVIDEND GENERATING CO-OP

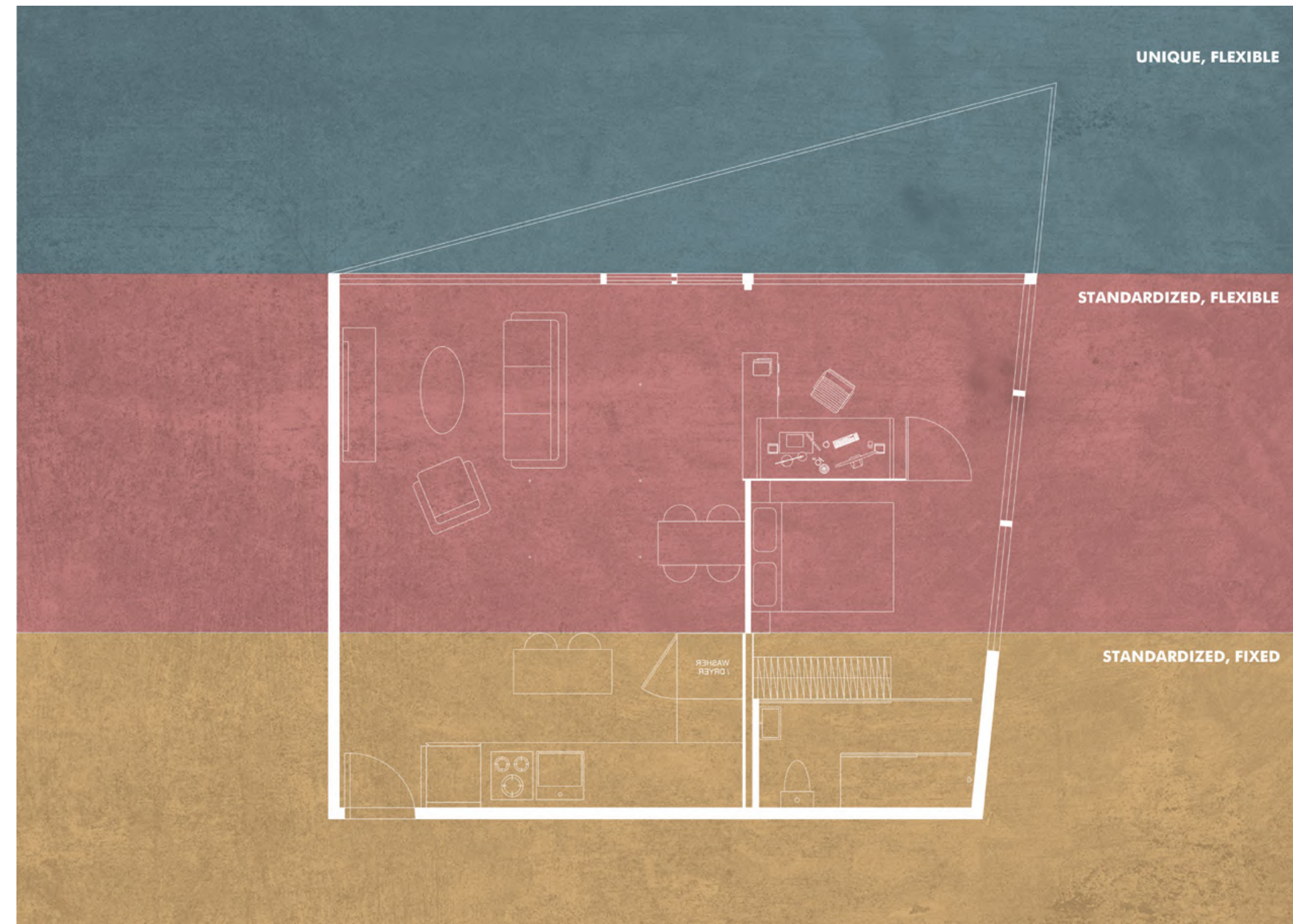




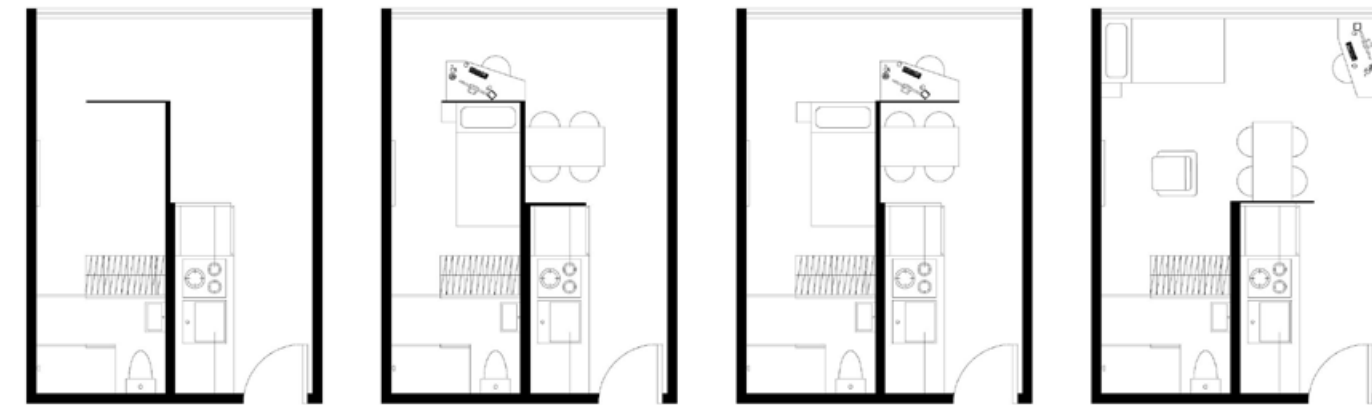




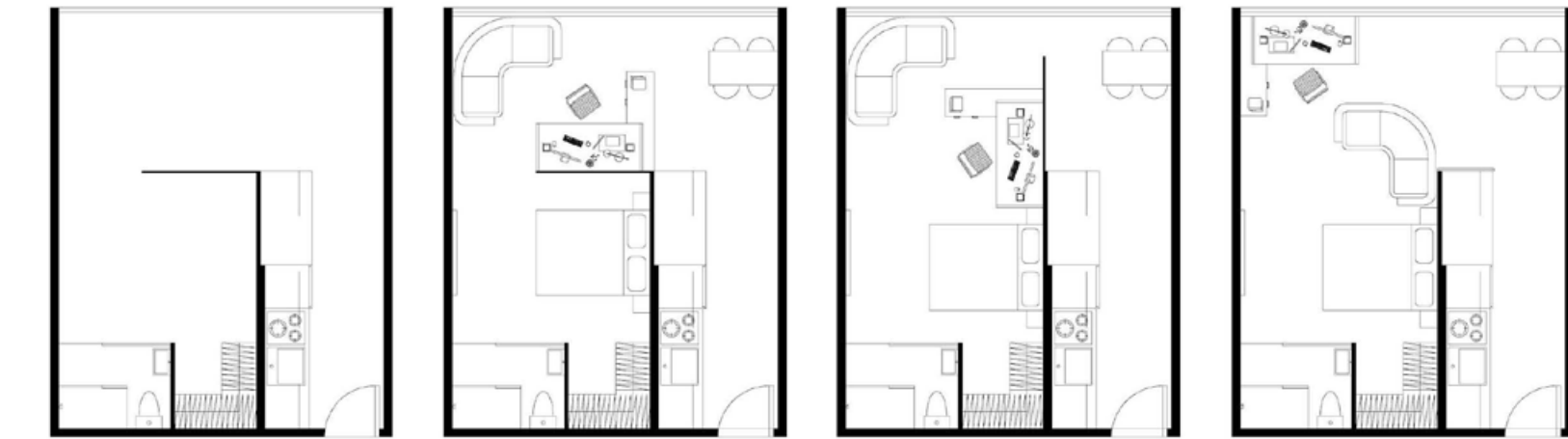




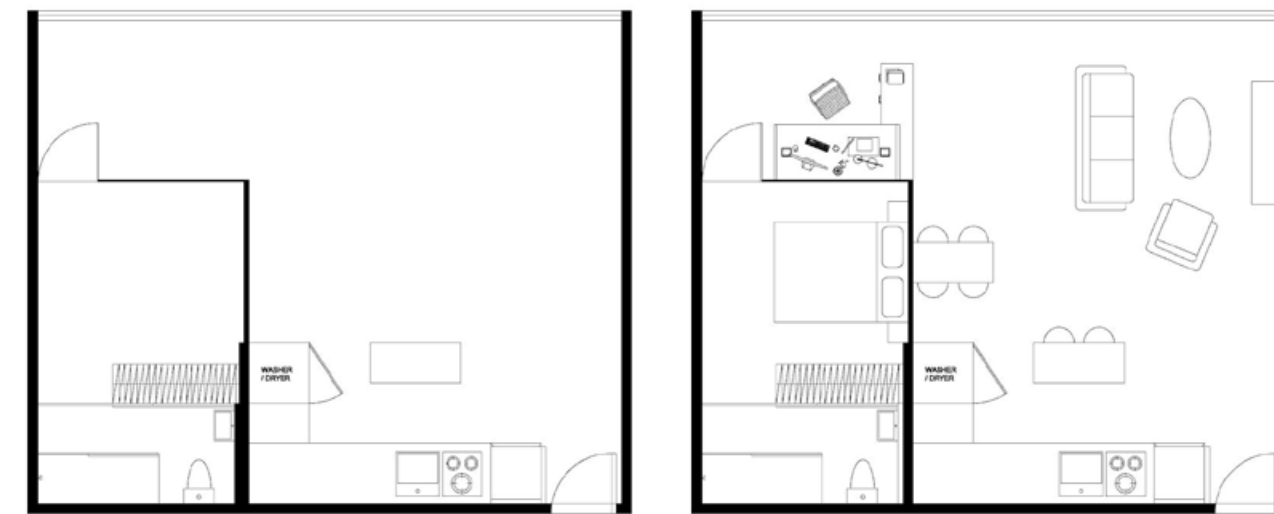
MICRO



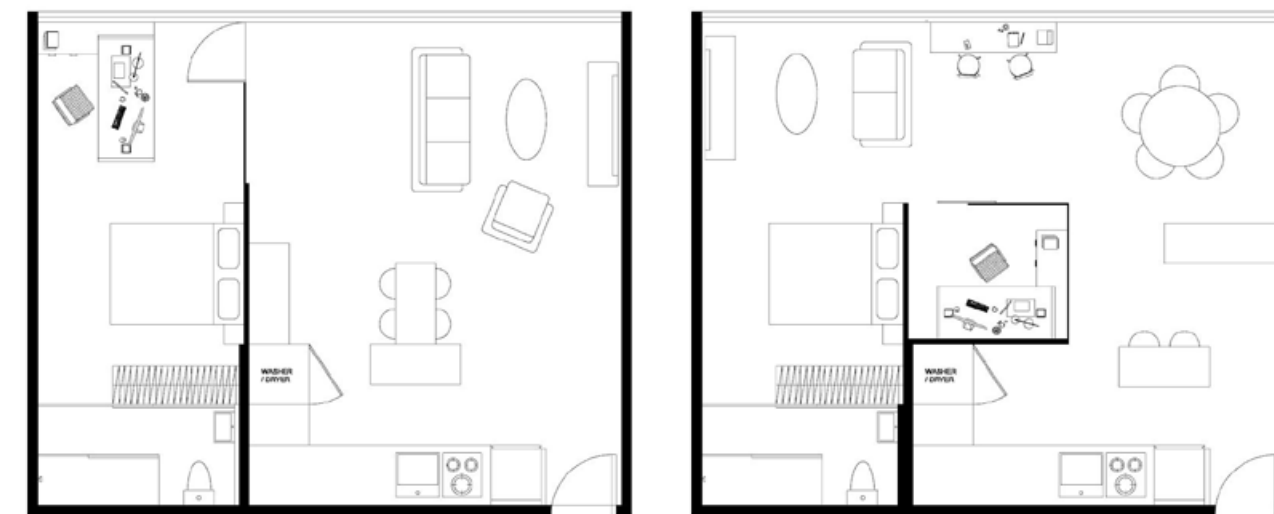
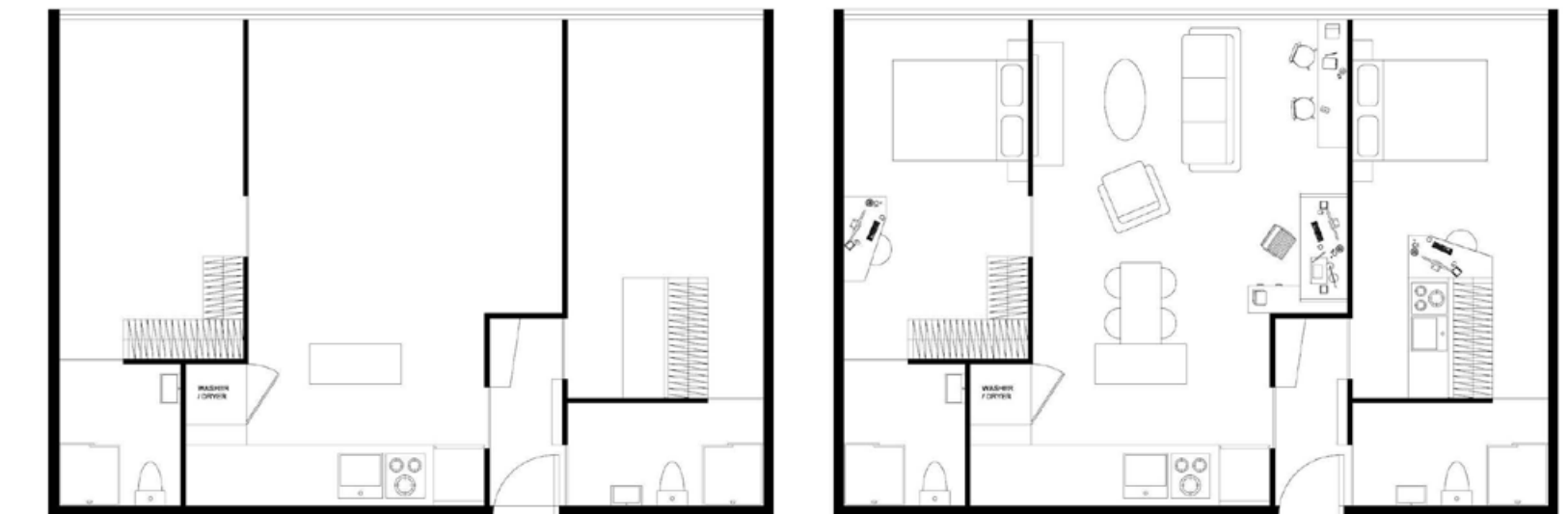
STUDIO



1BR



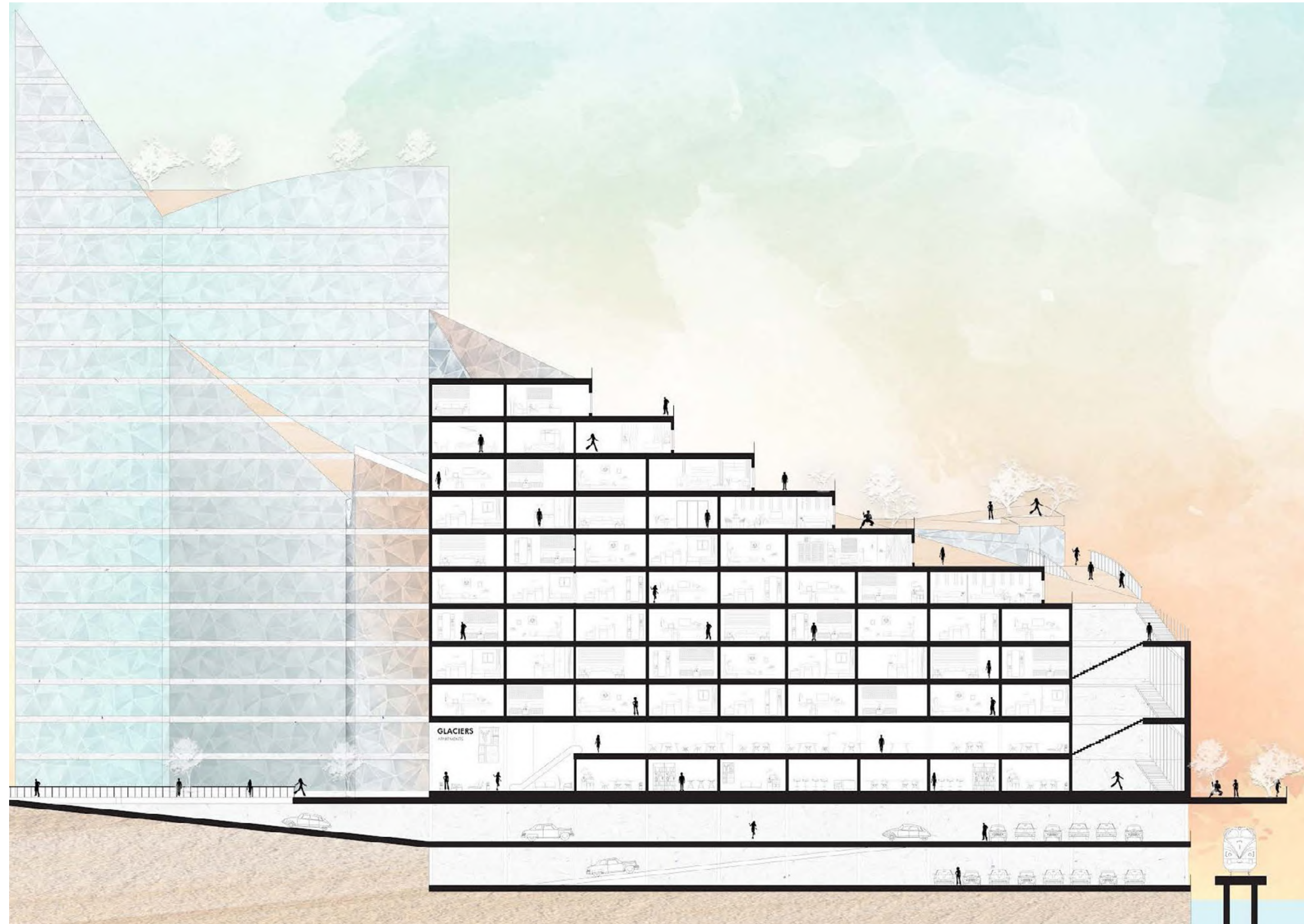
2BR

















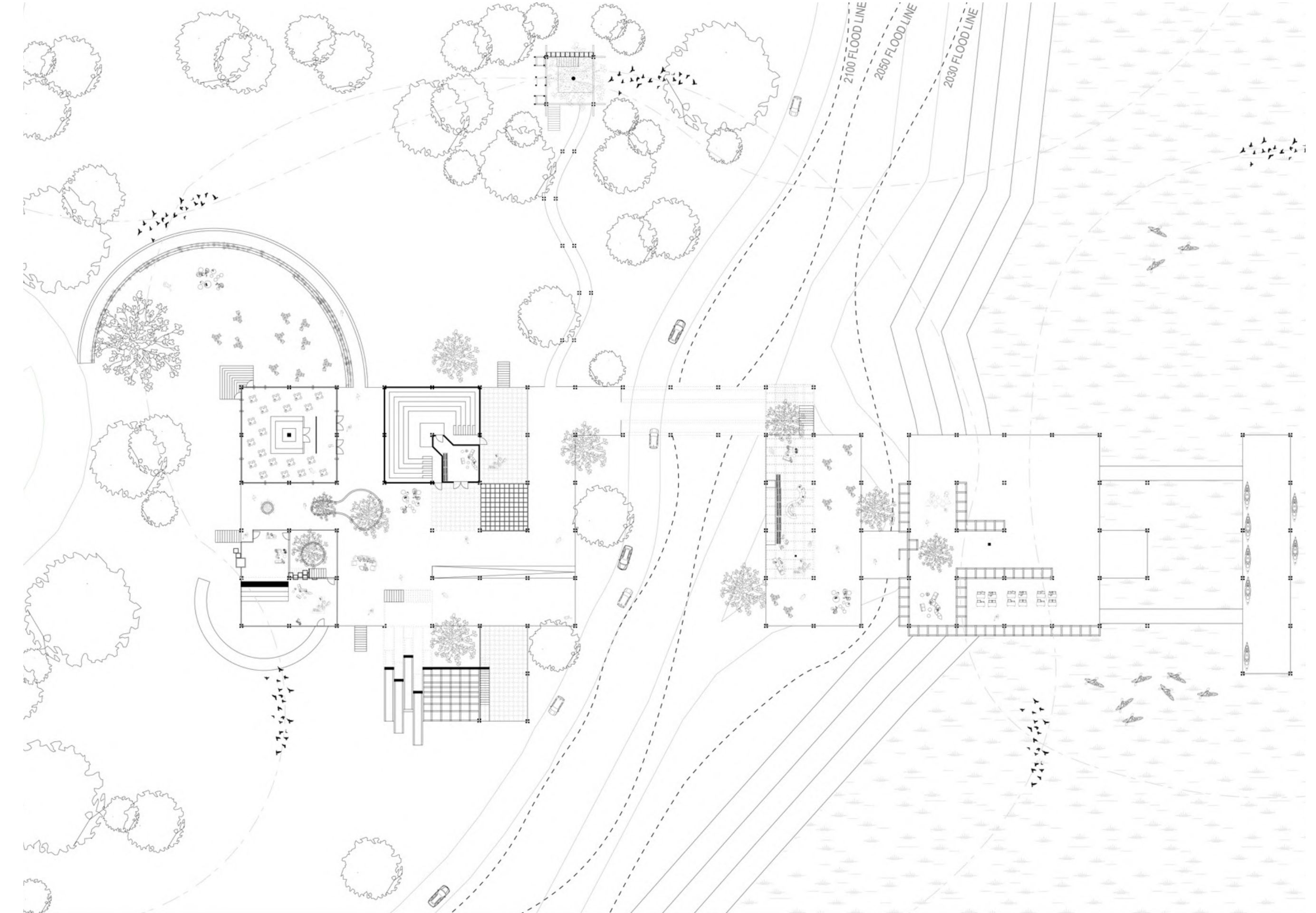
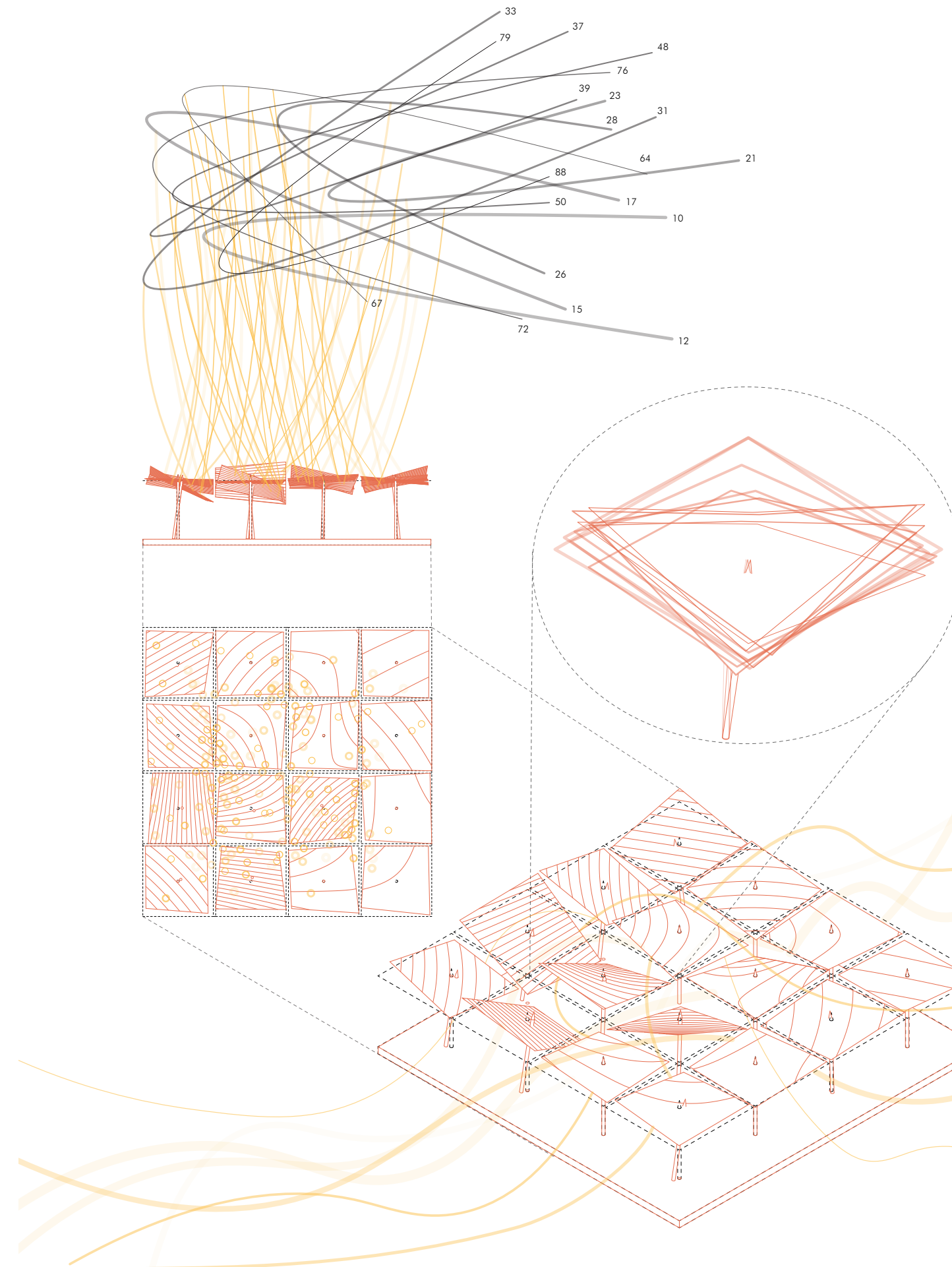
# ADV IV

## un / certain thresholds

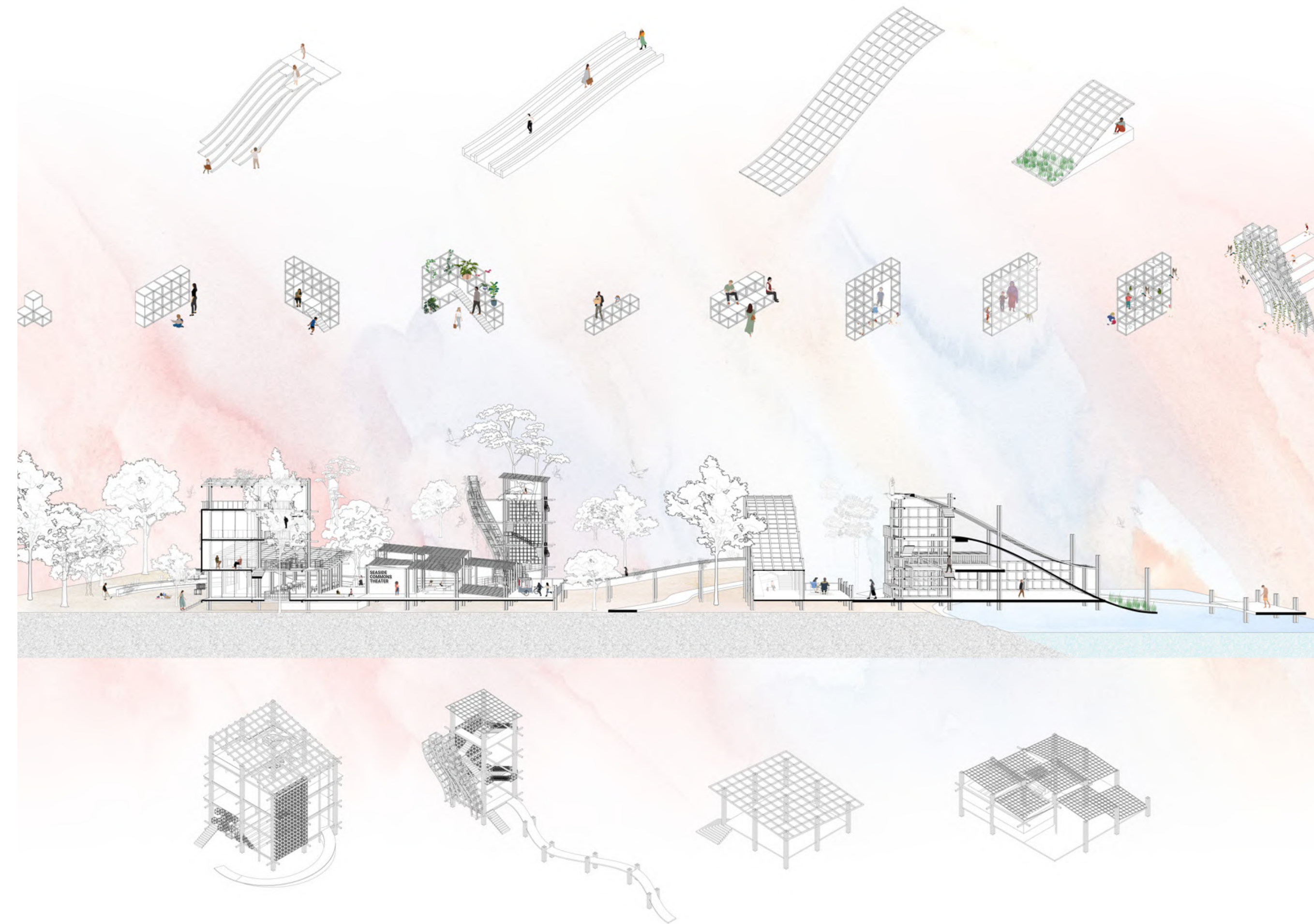
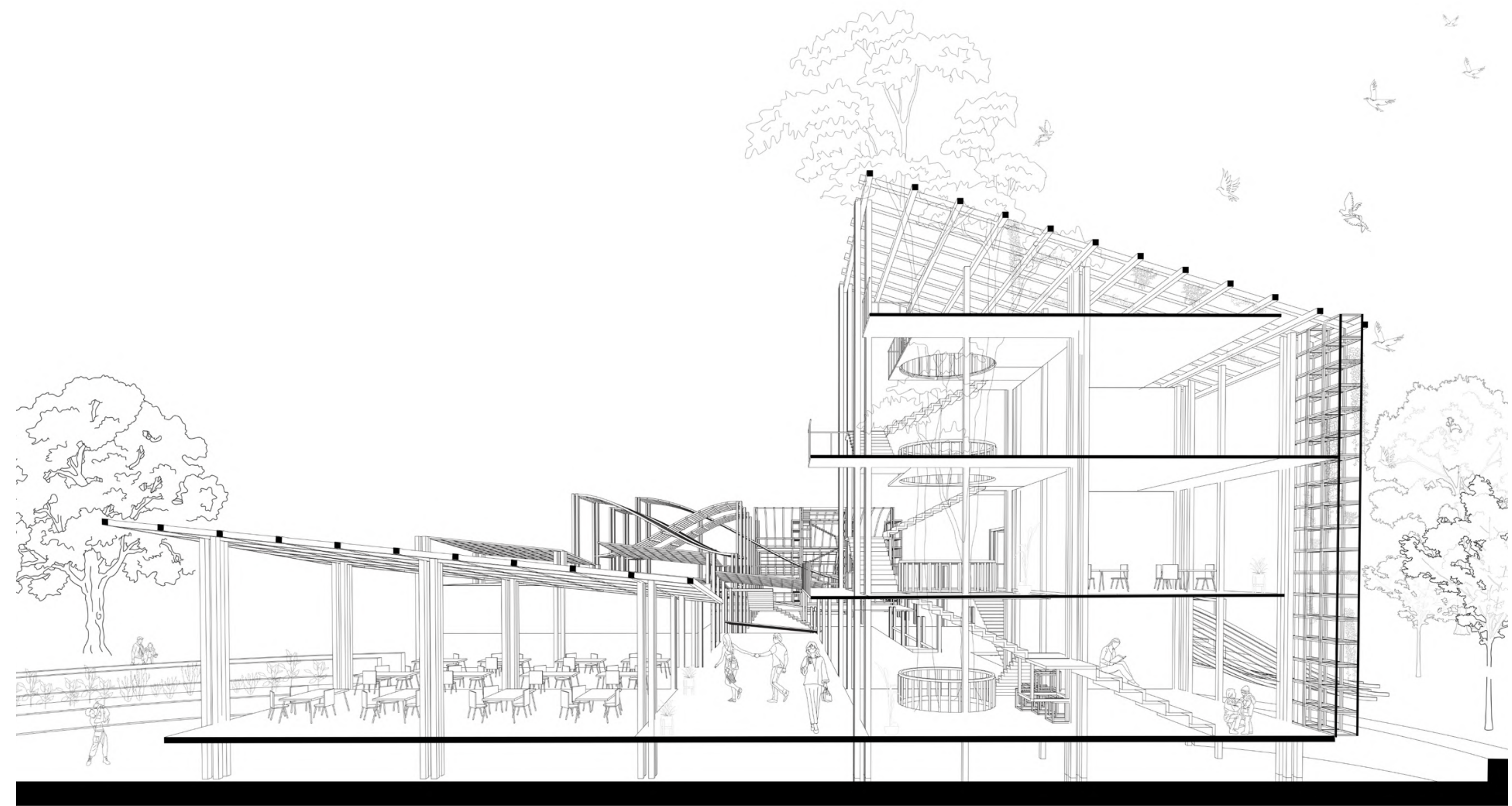
INSTRUCTOR: RACHELY ROTEM  
 SPRING 2023

Our studio prompt started with the research of uncertainty and how it could be used as a tool for our process of design. Starting by designing an experiment around uncertainty, we looked into ways to embed uncertainty and harness the power of randomness as a generative process to enhance and explore outside our comfort zone.

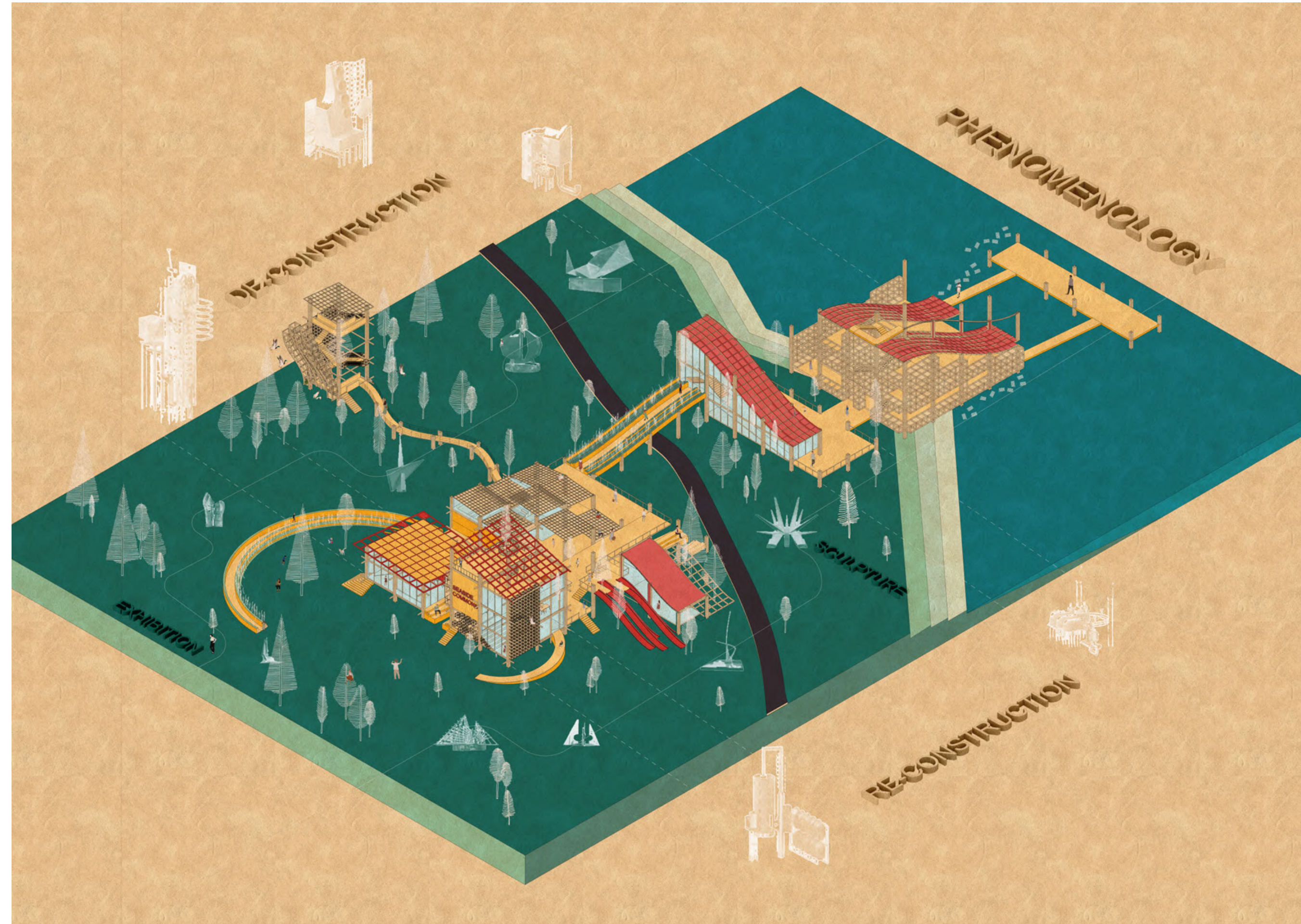
The site thus becomes a semi managed wetland that helps reduce flooding in the South-end by functioning as a stormwater reservoir, habitat for migratory birds, opportunities for trans-species interaction, education on wetland farming with oysters and flexible community spaces for music festivals, events, displaced religious spaces, creating an uncertain threshold that provides a phenomenological experience through the management of uncertainty.











# ADV V

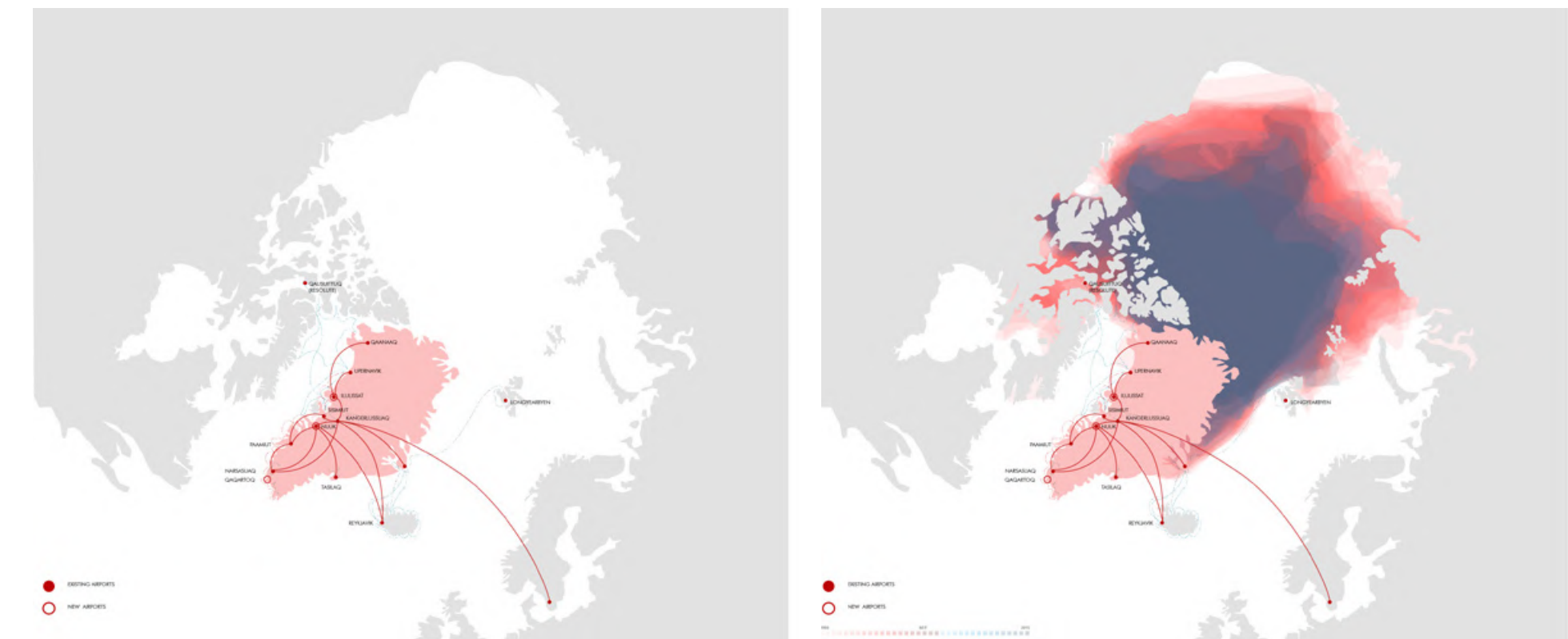
## ARCTIC TOURISM'S LAST FRONTIER

**INSTRUCTOR:** LESLIE GILL + KHOI NGUYEN  
FALL 2023

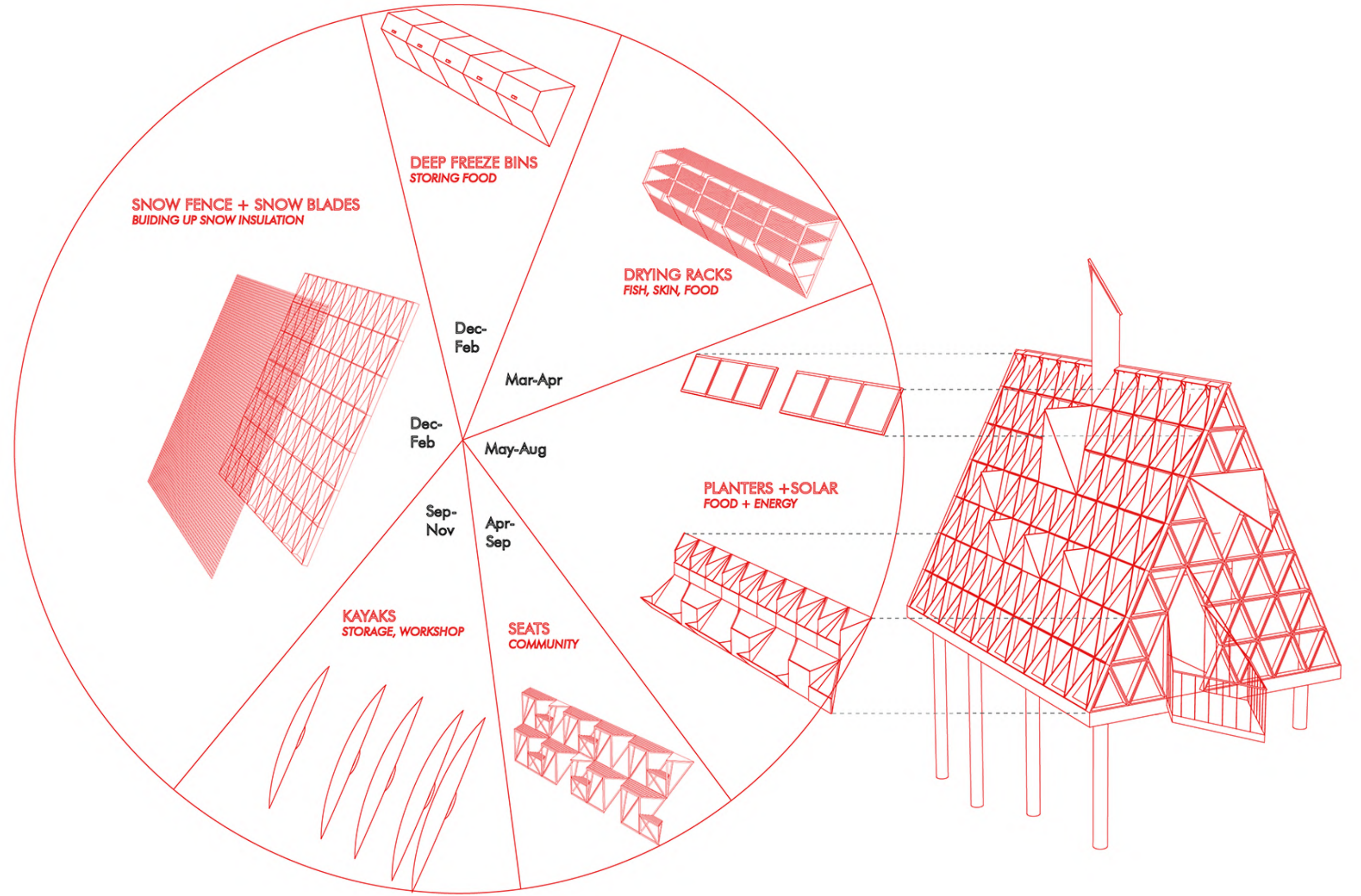
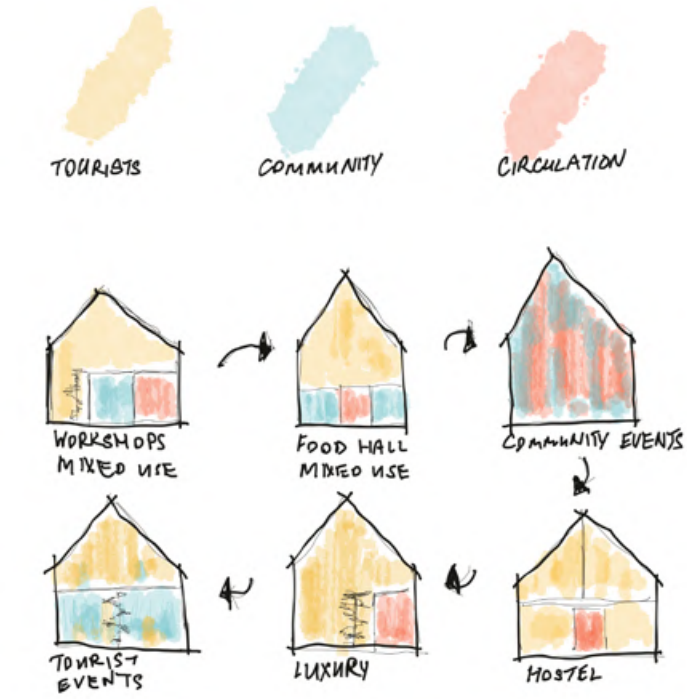
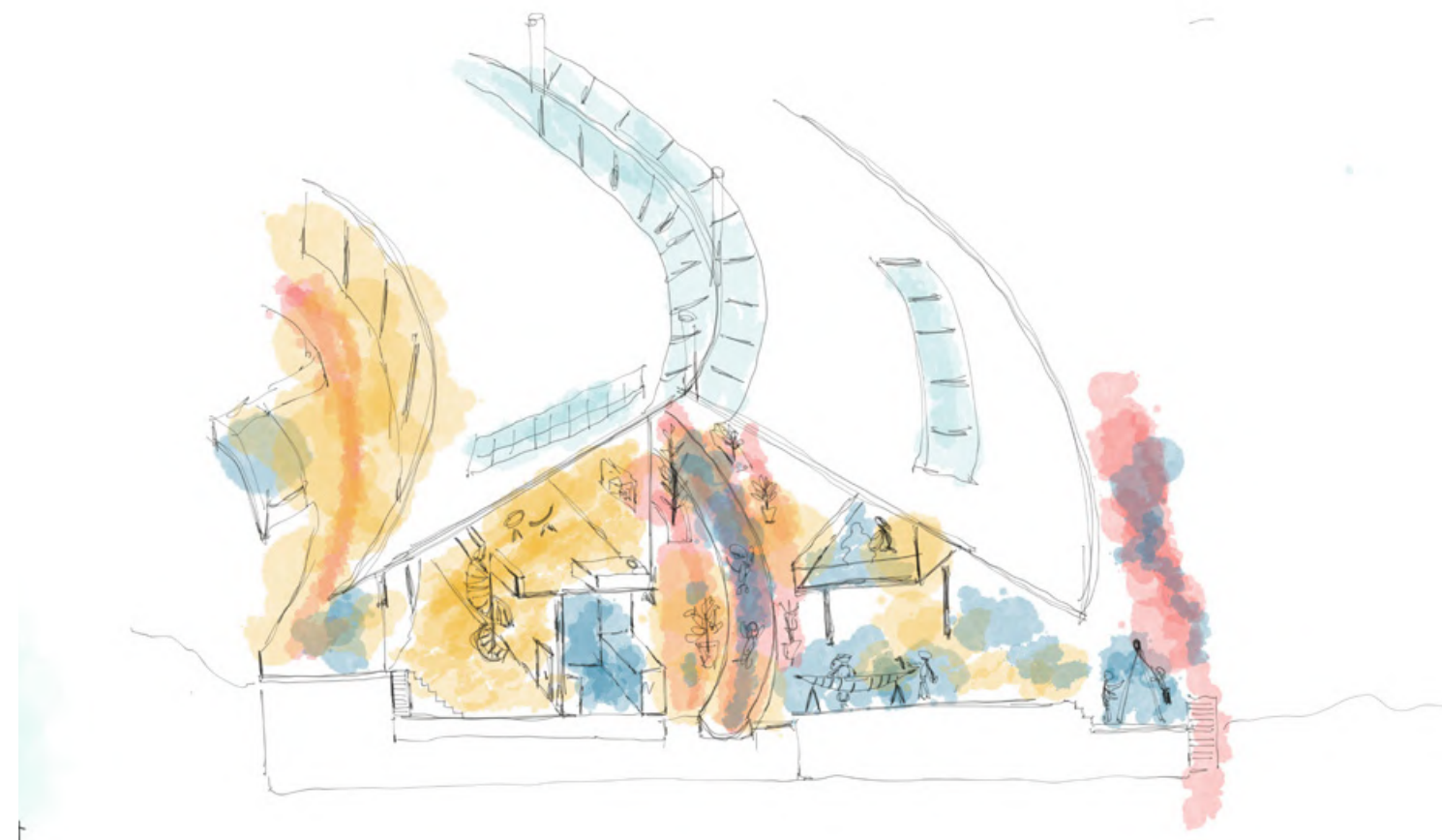
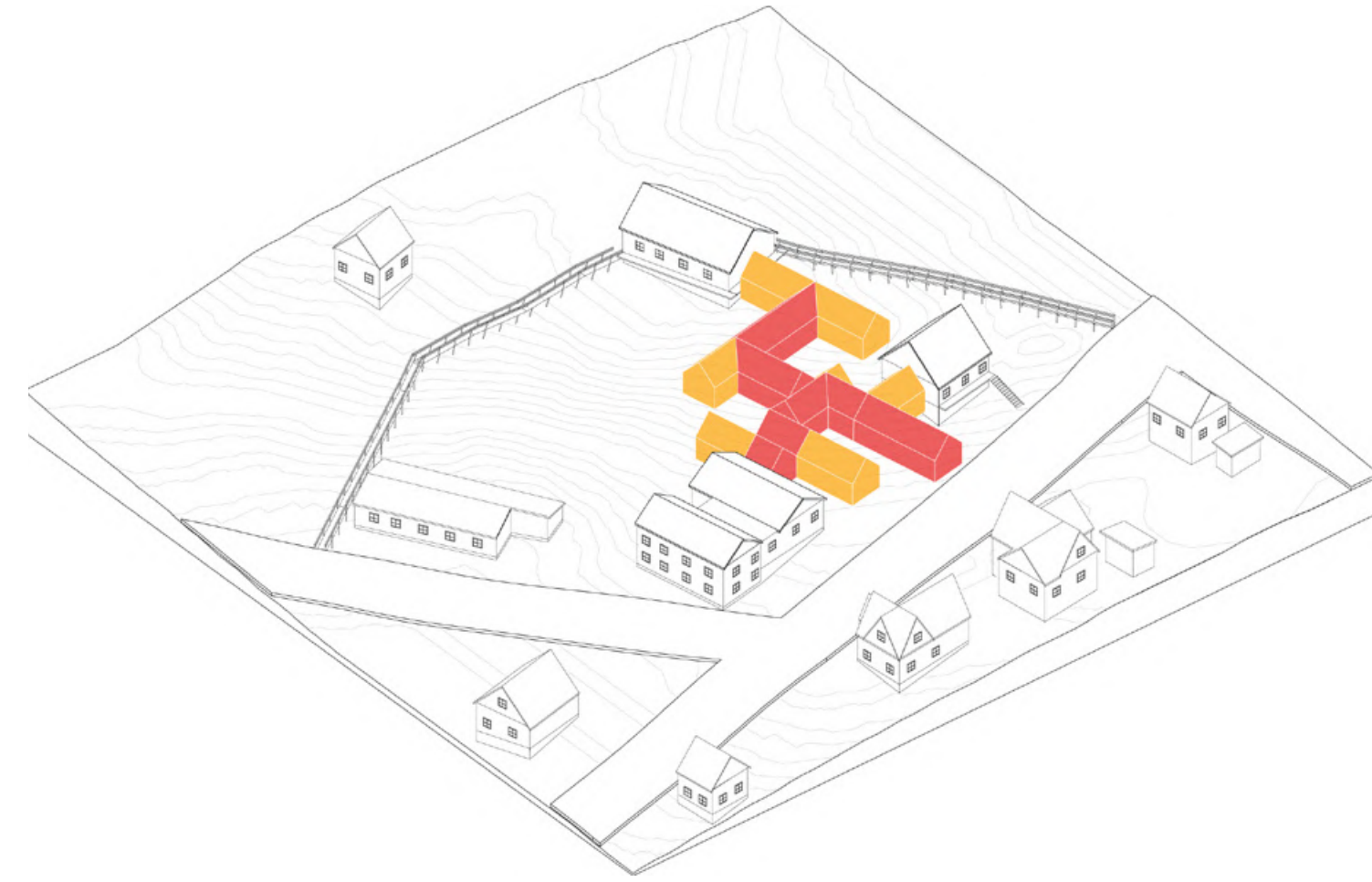
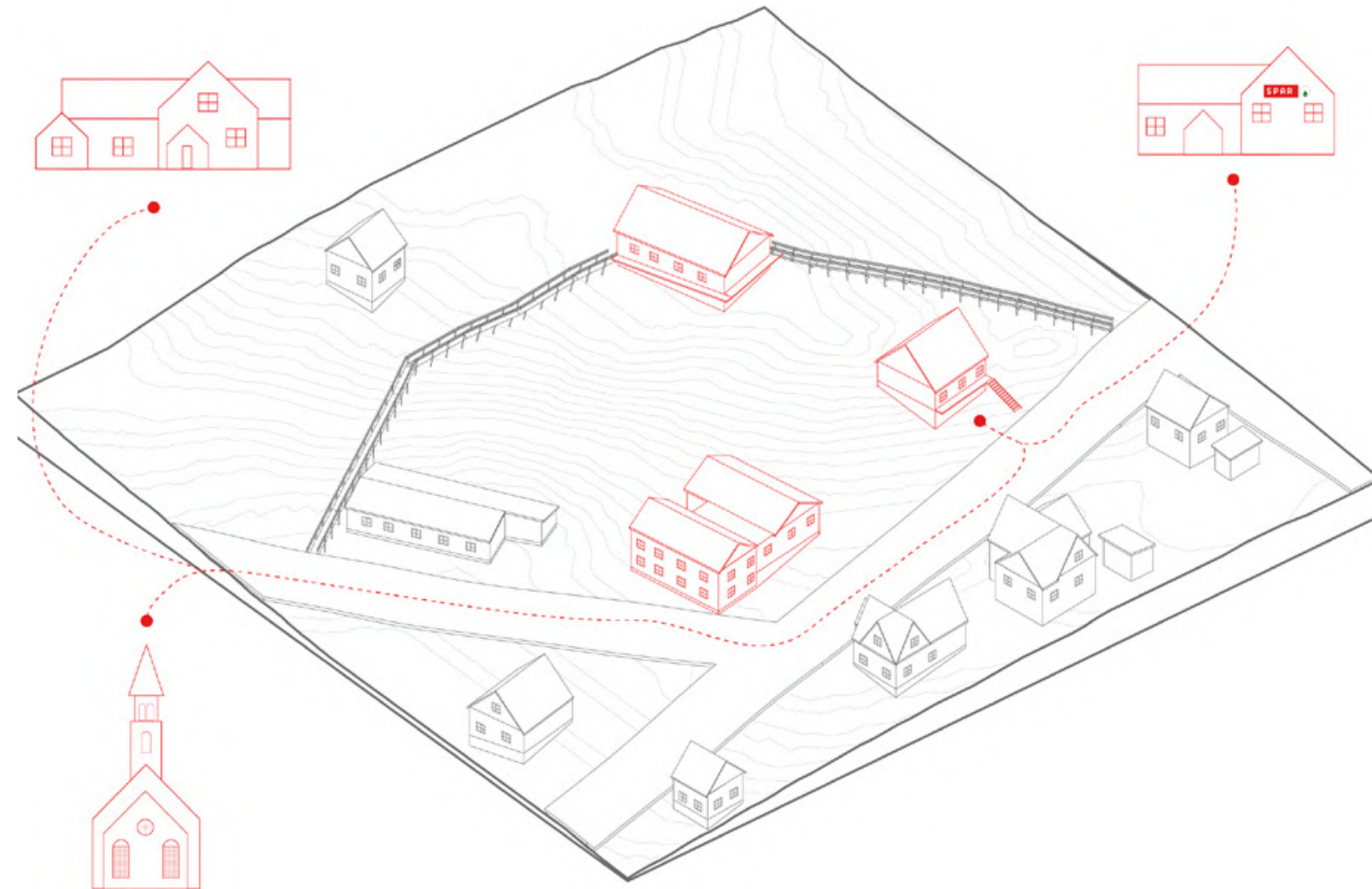
Greenland is an arctic nation with seafood, subsidies from Denmark and mining making up the vast majority of its economy. Tourism is one of its only alternatives to overfishing, extractive mining and loss of sovereignty to Denmark.

This project imagines a prefab snowhouse that utilizes modular frames to attach different modules to its facade to cater to the seasonal nature of housing, utilizing snow fences to capture snow for insulation in the winter.

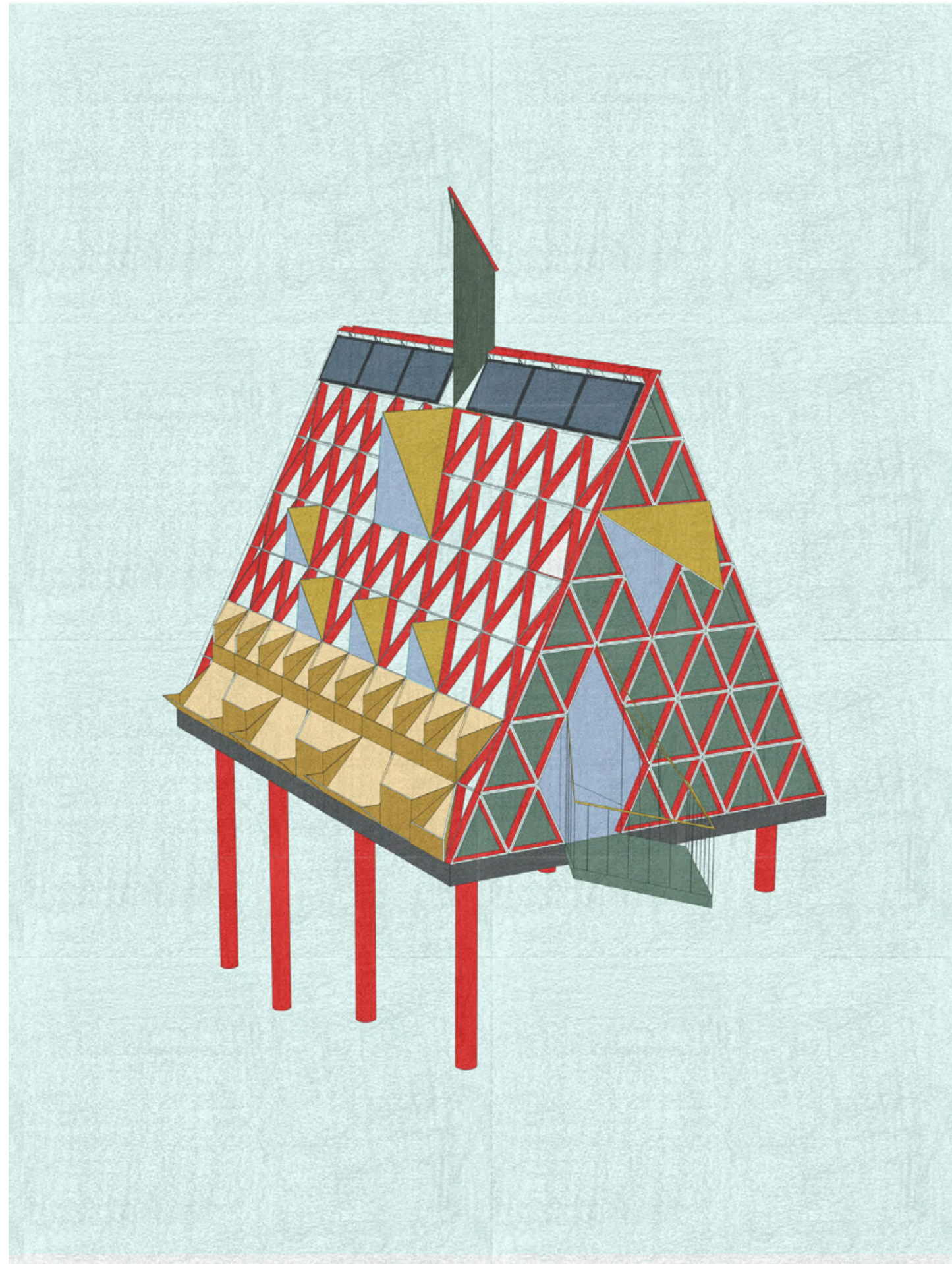
Community spaces in Greenland are also few and far between and so a collection of snow houses is proposed as infill between existing houses to create a local community center and tourist lodge that seeks to integrate tourism into locals' way of life. Through this integration tourism can be more respectful, small scale and sustainable while contributing meaningfully to locals and allowing them to share their culture, crafts and tradition.



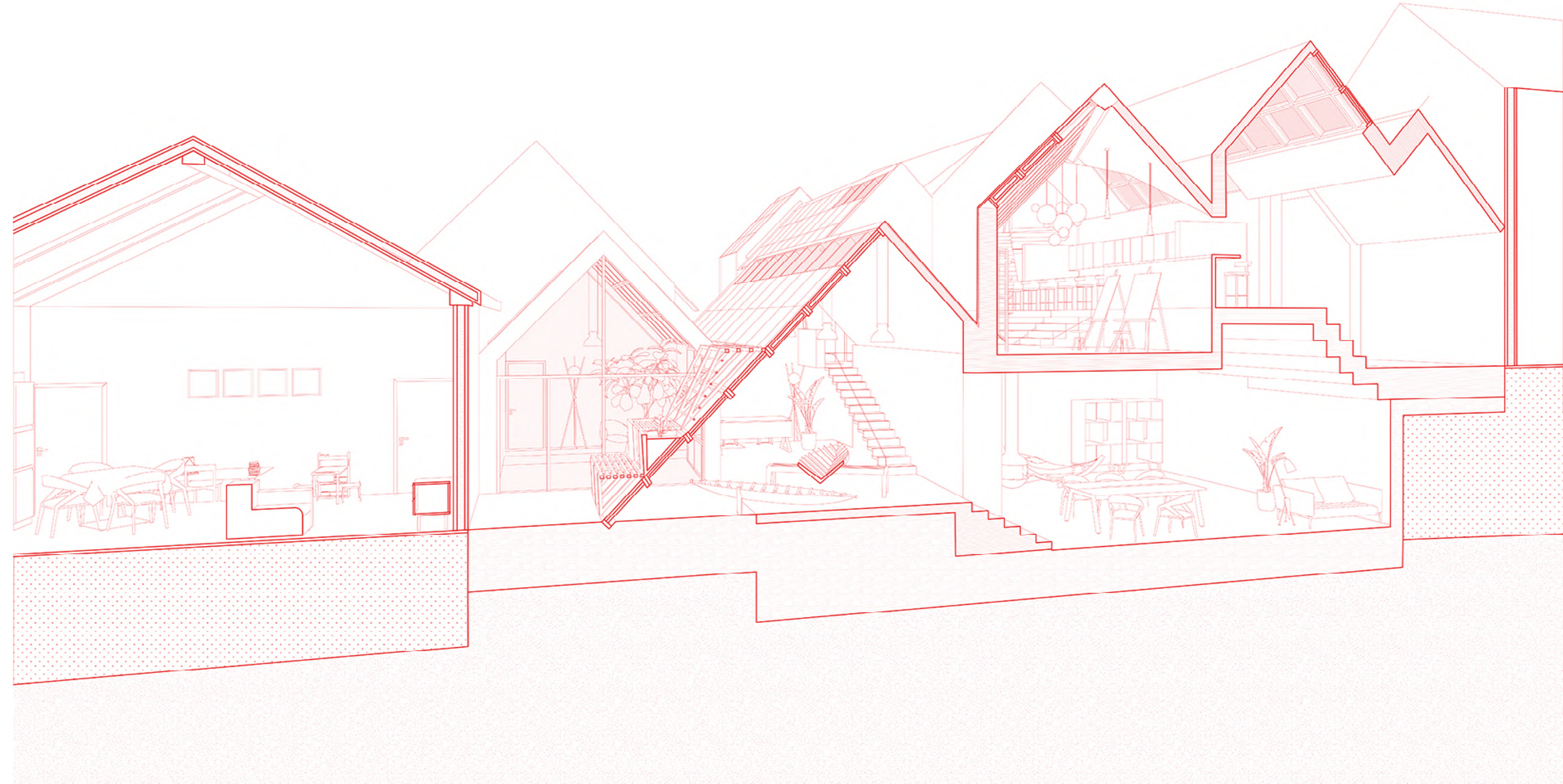




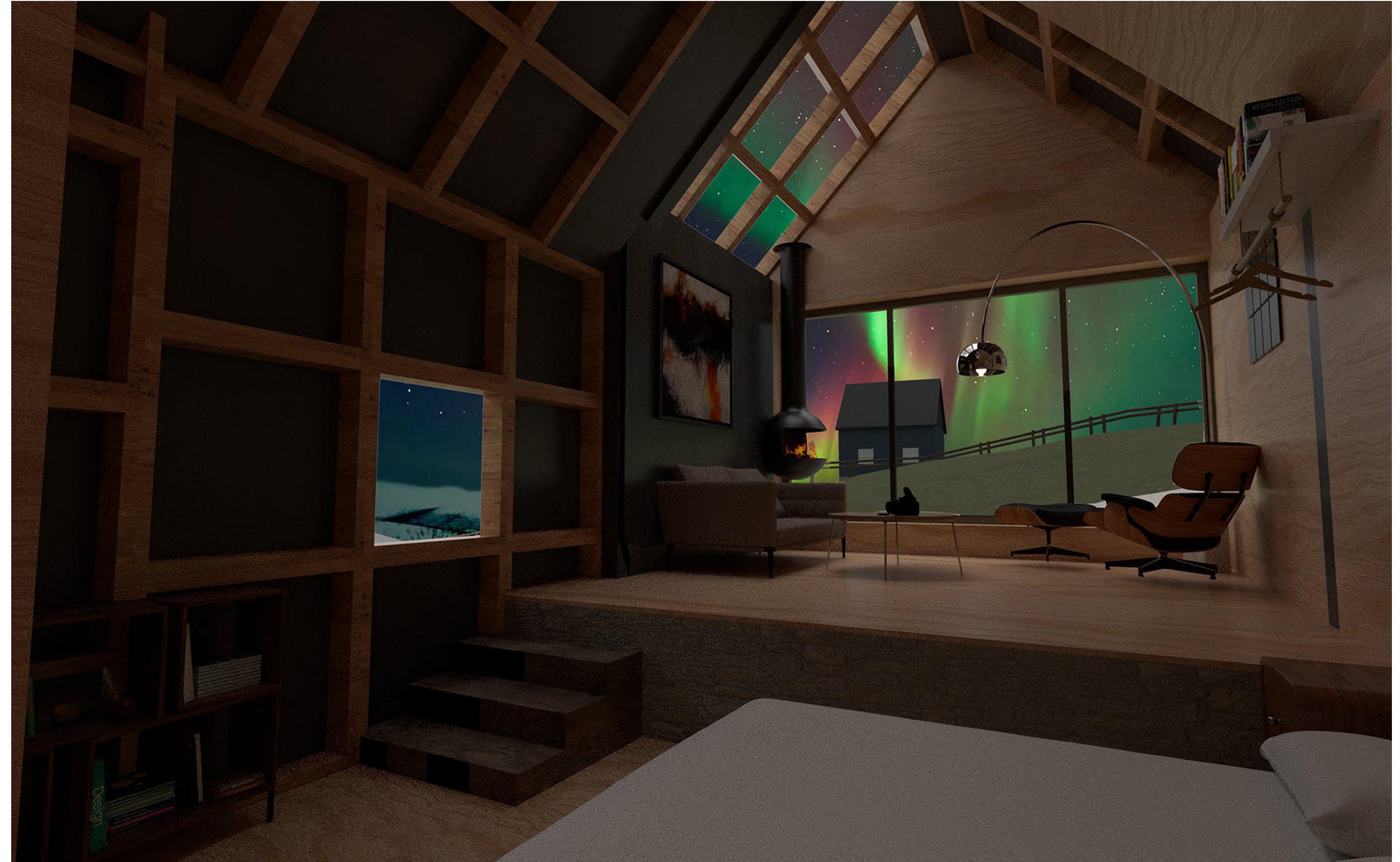








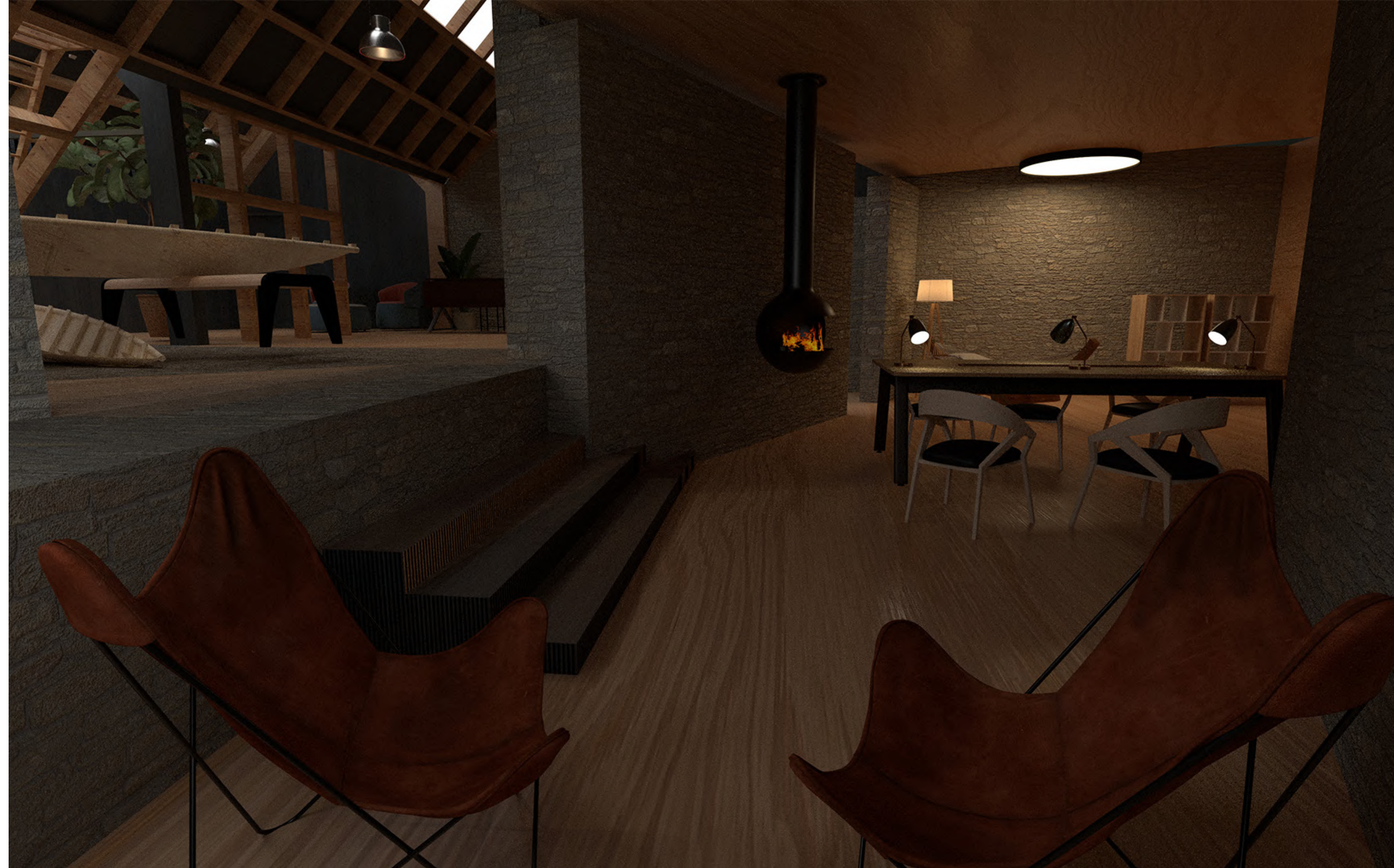




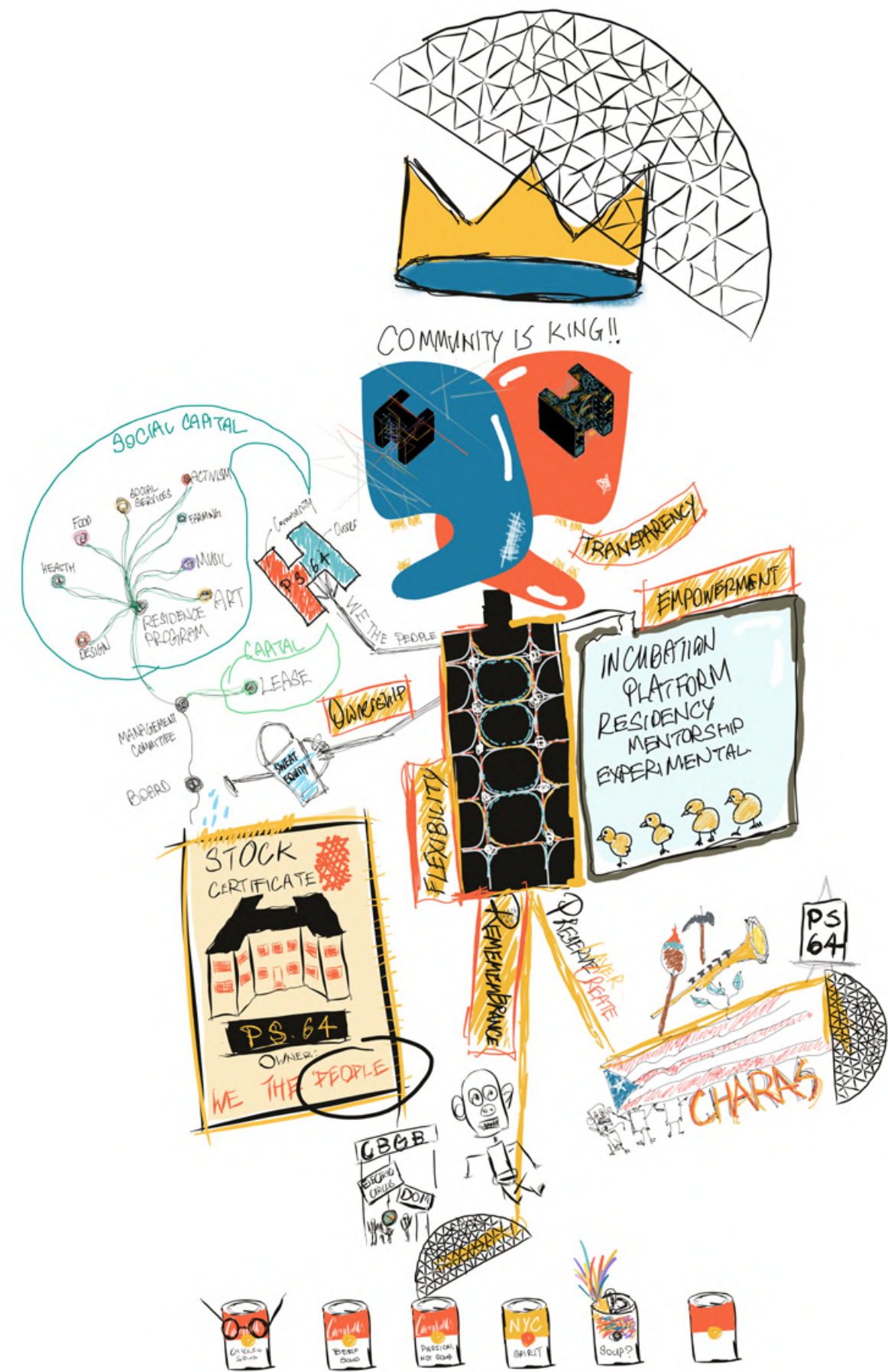












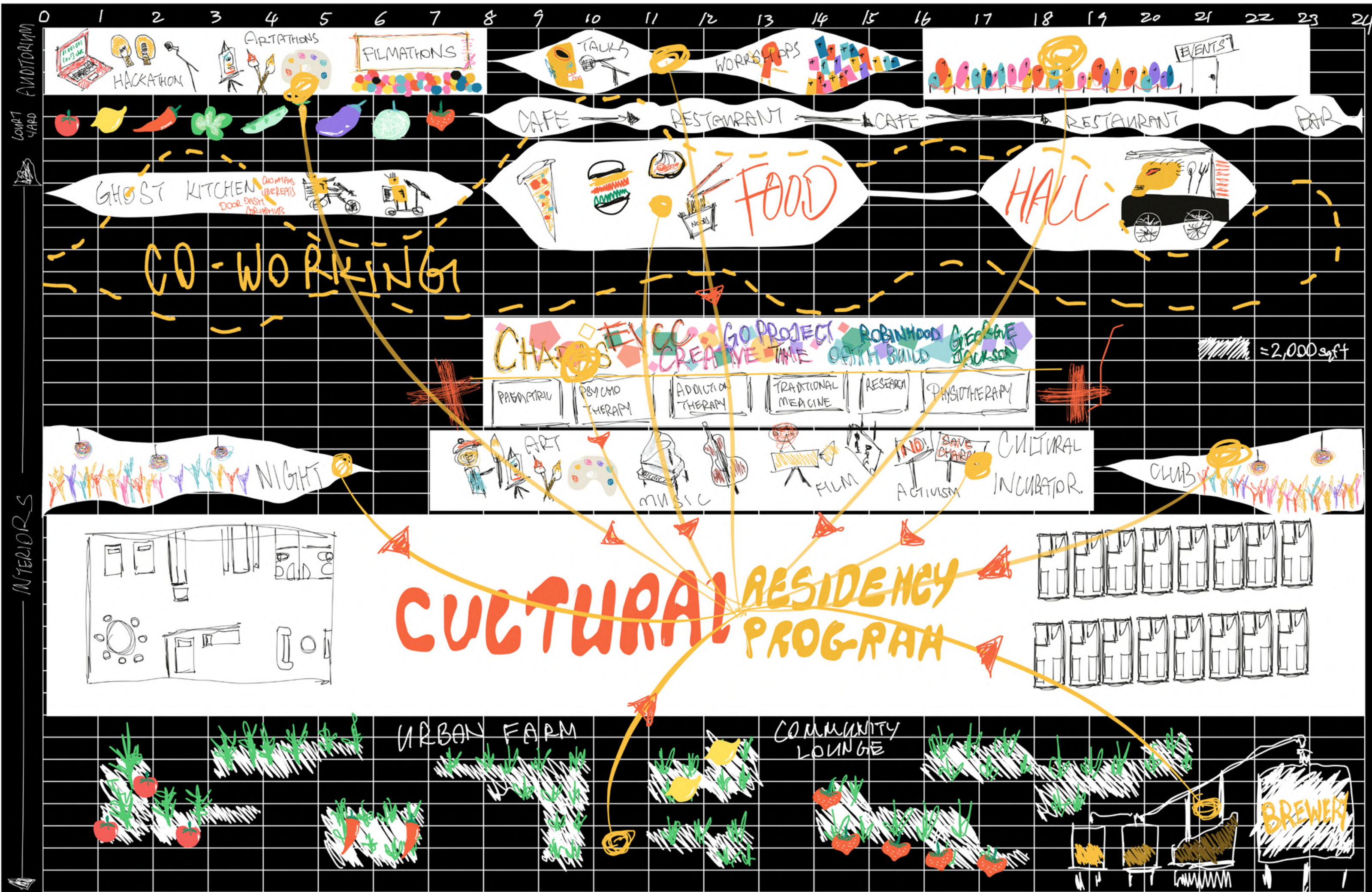
# ADV VI

## MANIFESTO FOR GENERATIVE REMEMBRANCE

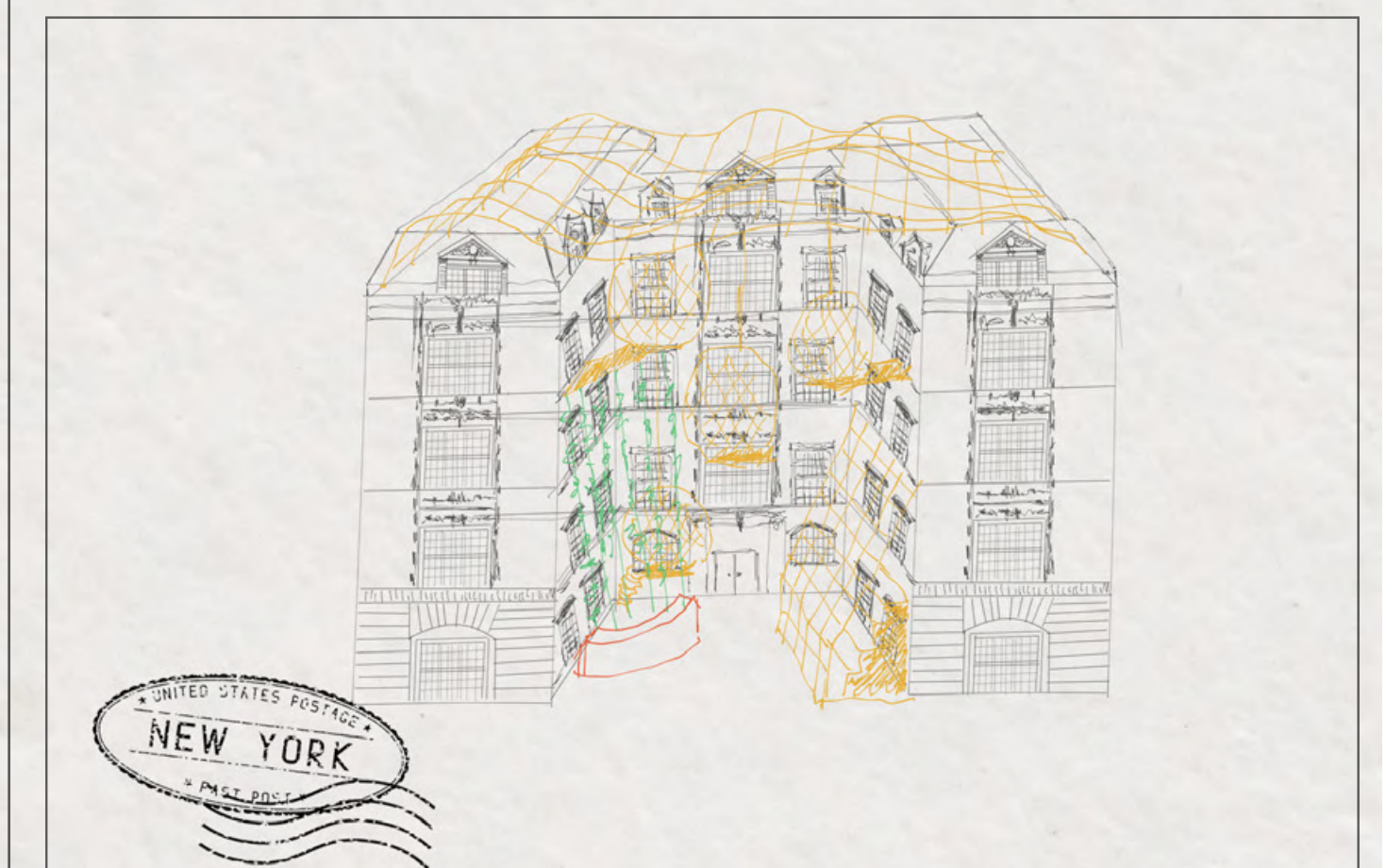
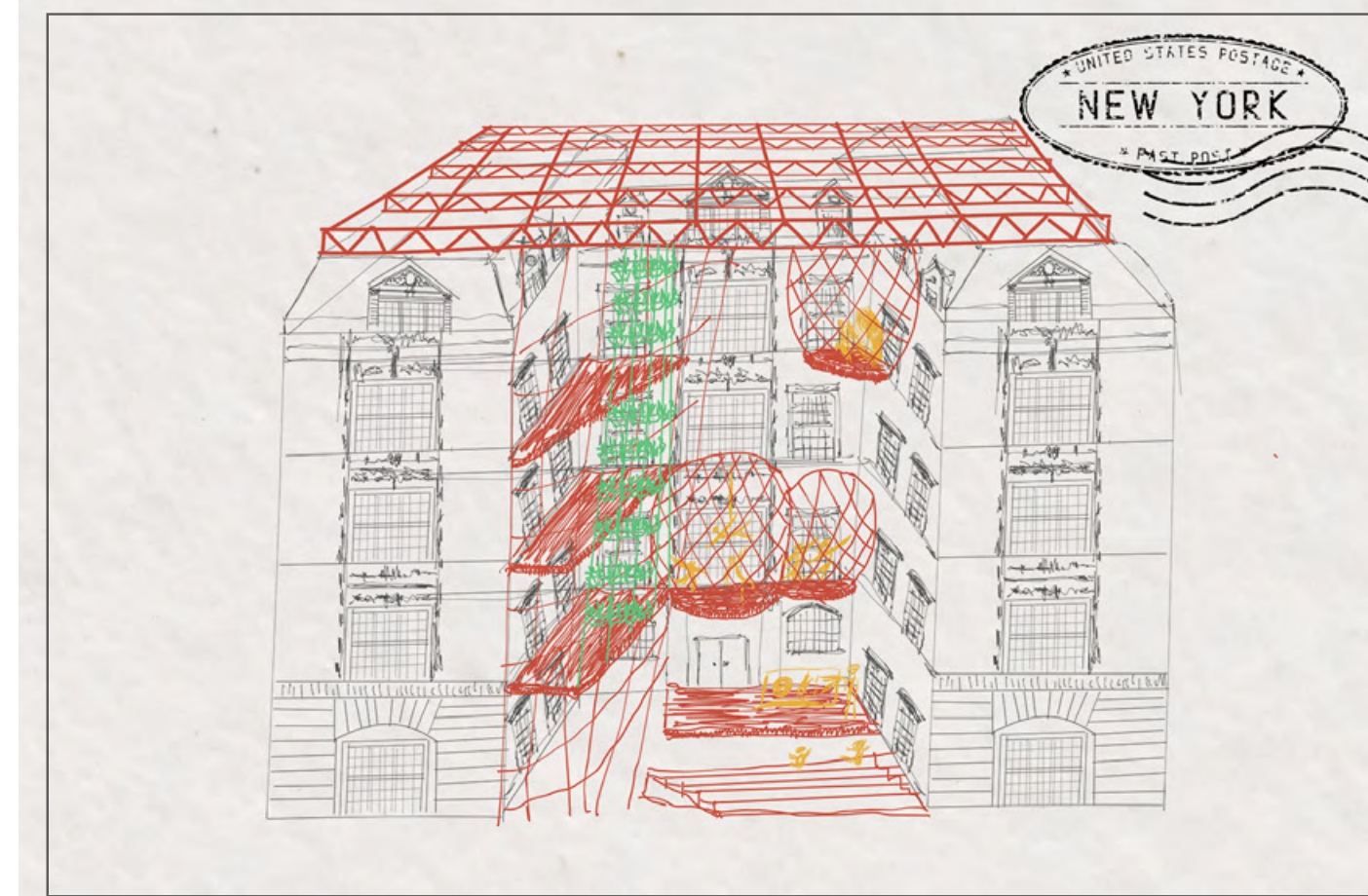
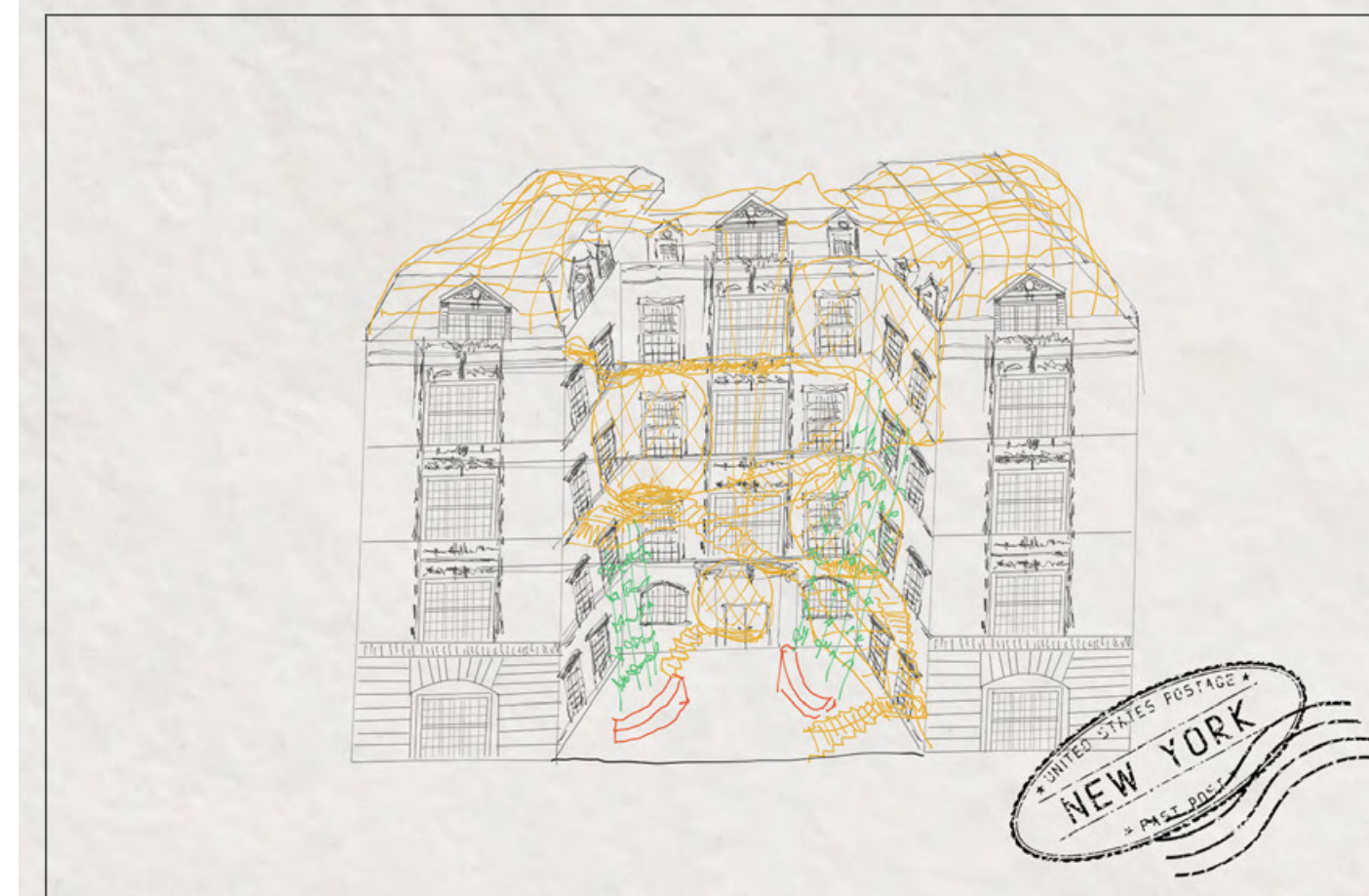
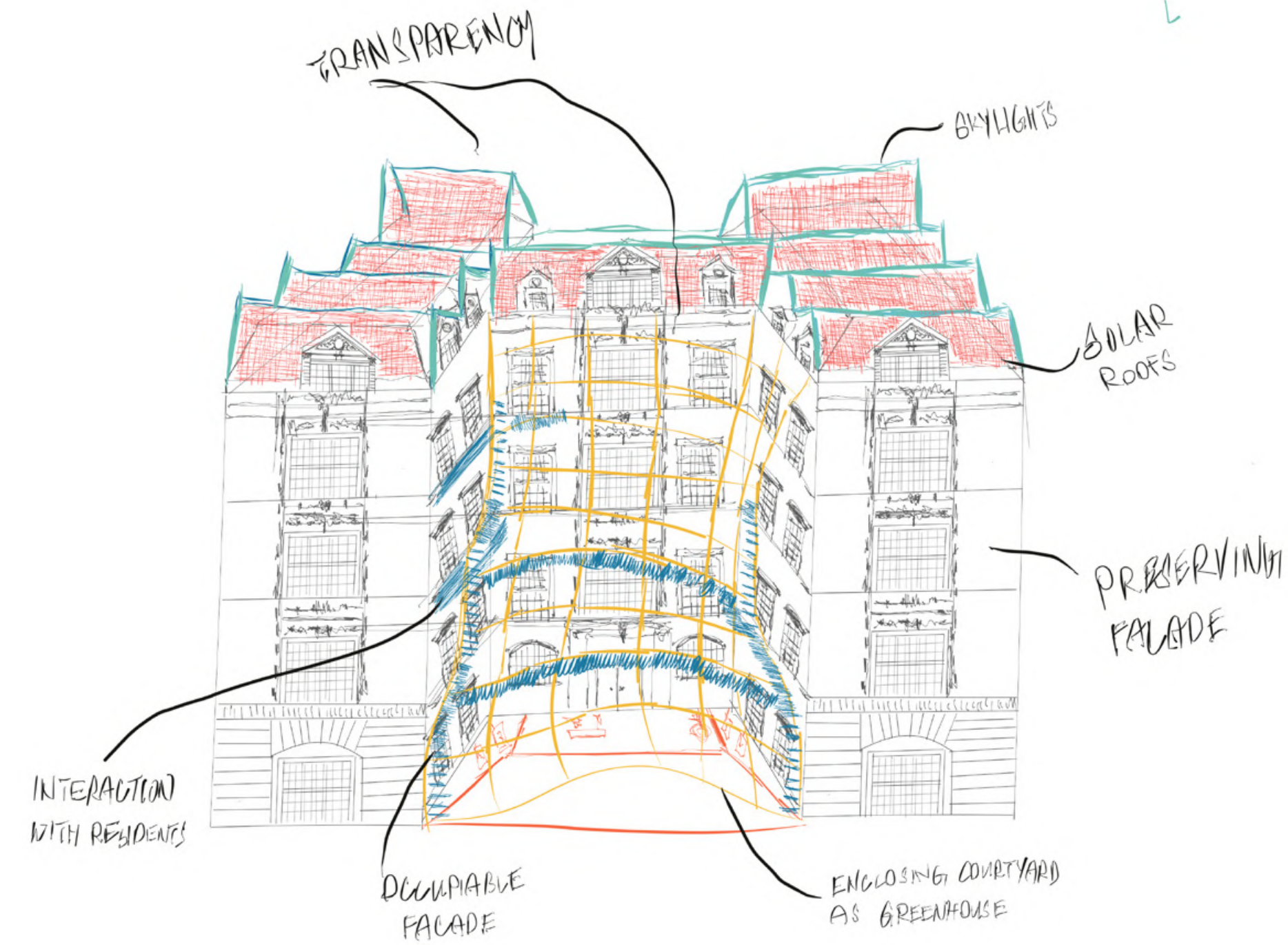
**INSTRUCTOR:** CHRISTOPH KUMPUSCH, PATRICE DERRINGTON  
 RED x ARCH Joint Studio; SPRING 2024

Public School 64 is a charged site with multiple layers of history while simultaneously being a landmark for the East Village Community. The same shell of a building has seen generations of students graduate through its life as a public school, activists championing their cause through Charas and great artists making their first indelible mark on the city here.

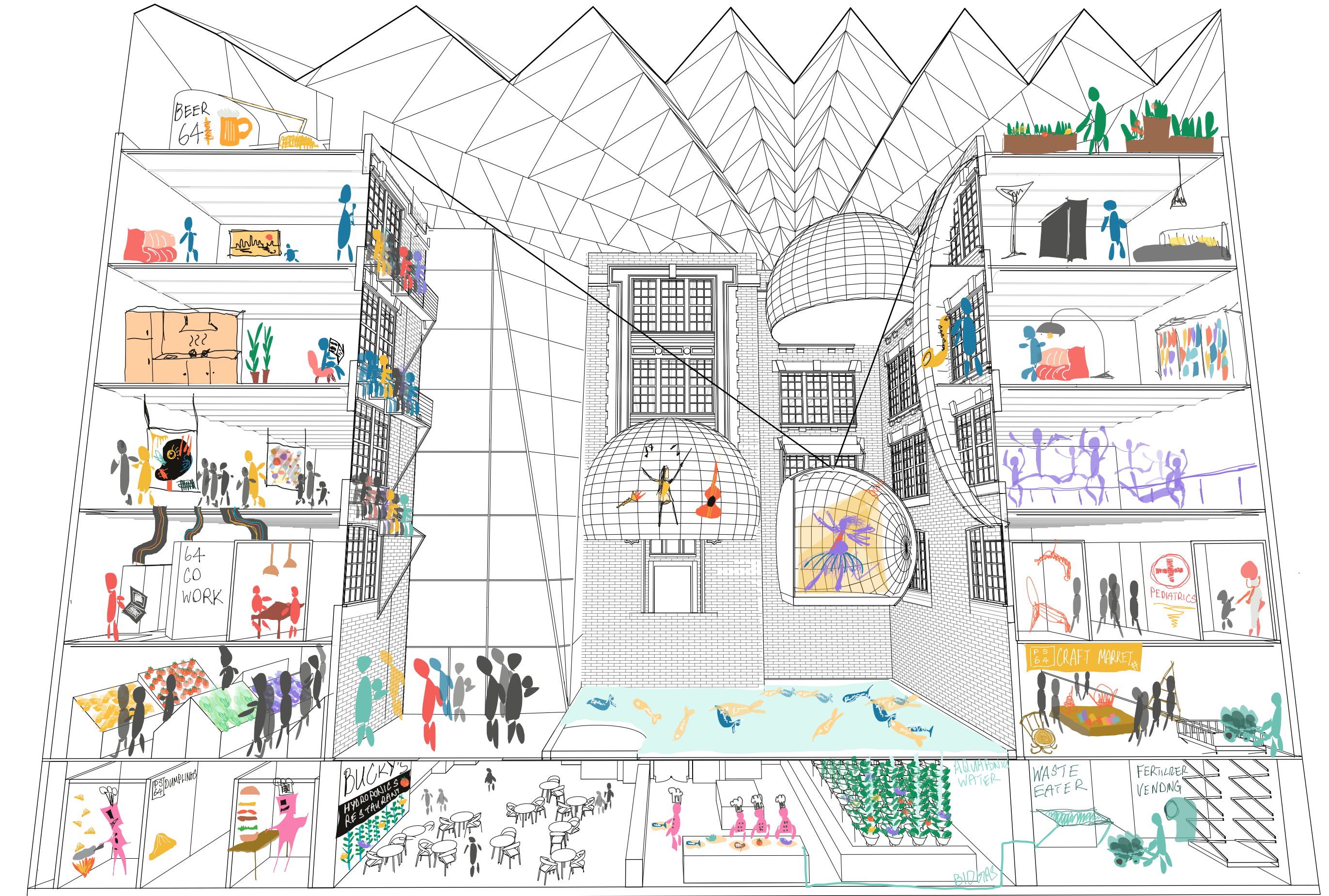
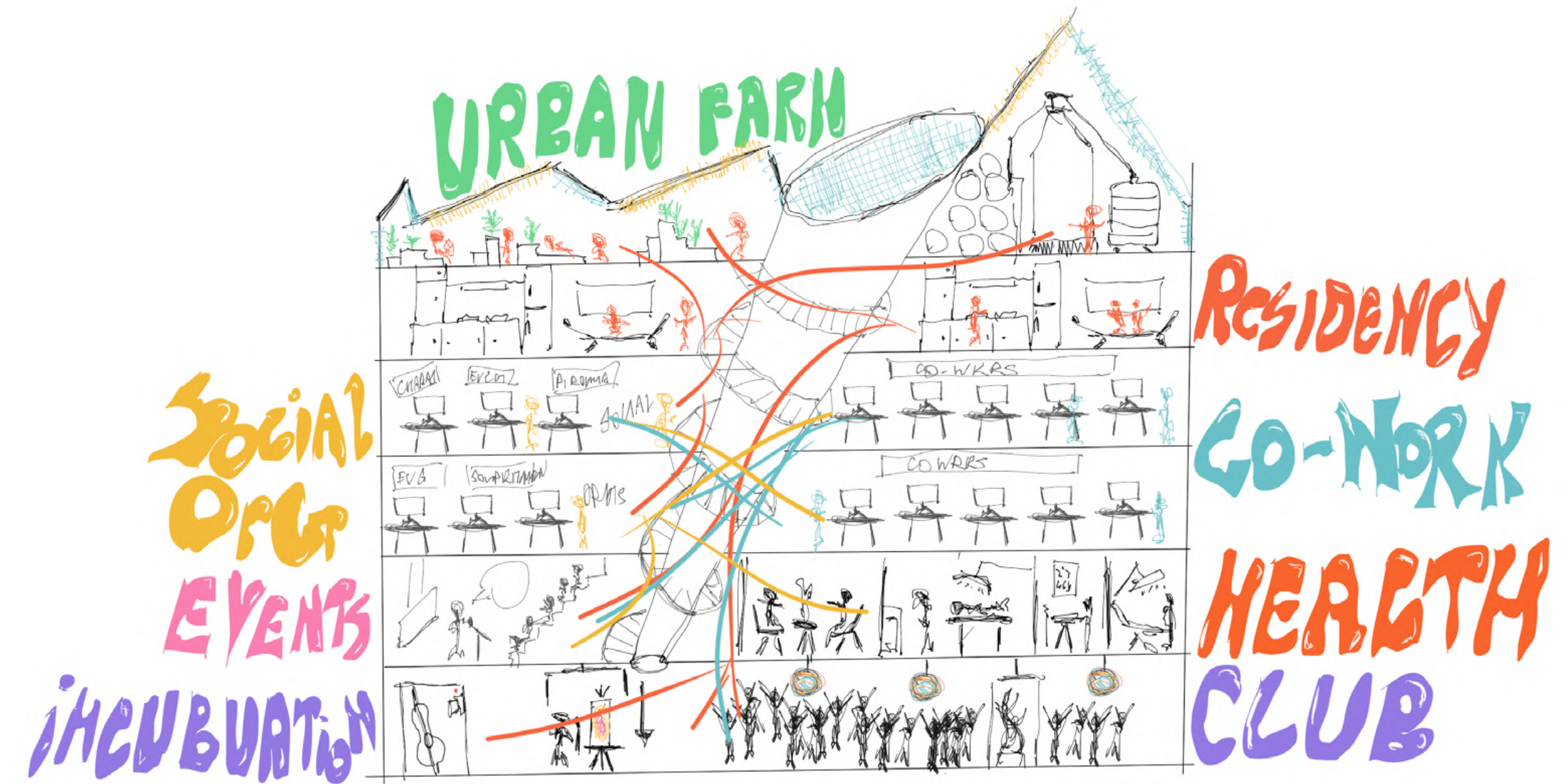
The project thus imagines a manifesto for the continued remembrance and collective imagining of its future potential through the lens of each community member built upon the foundations of its layered history. A light touch approach sees modular architectural elements appended to its preserved facade while infusing functional programs relating to the needs of the day such as hydroponics, aquaponics, urban farming - Elements guided by a manifesto that cedes ownership to community members and adapts to their needs as it changes. On the interior a modular system of frames allows for assembly and reassembly of spatial envelopes to create thermal envelopes connected to services on the ceiling for an adaptive and generative creation of a community first future.





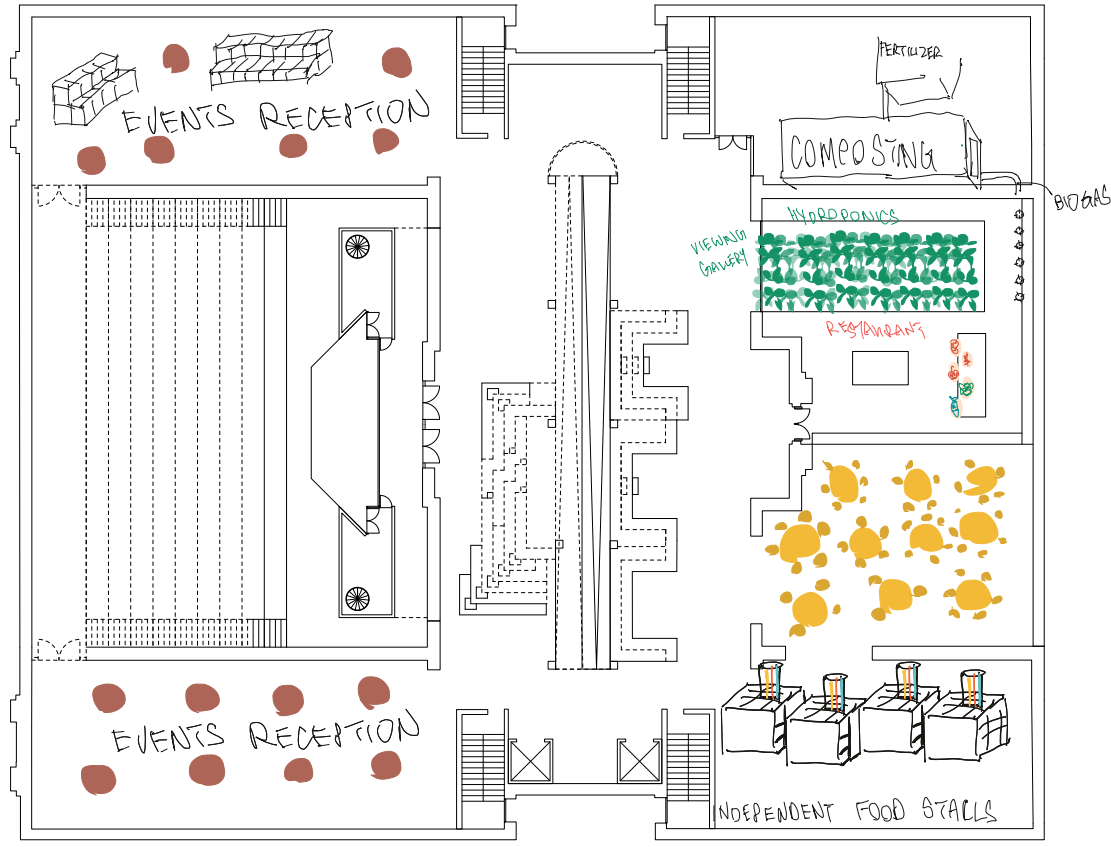




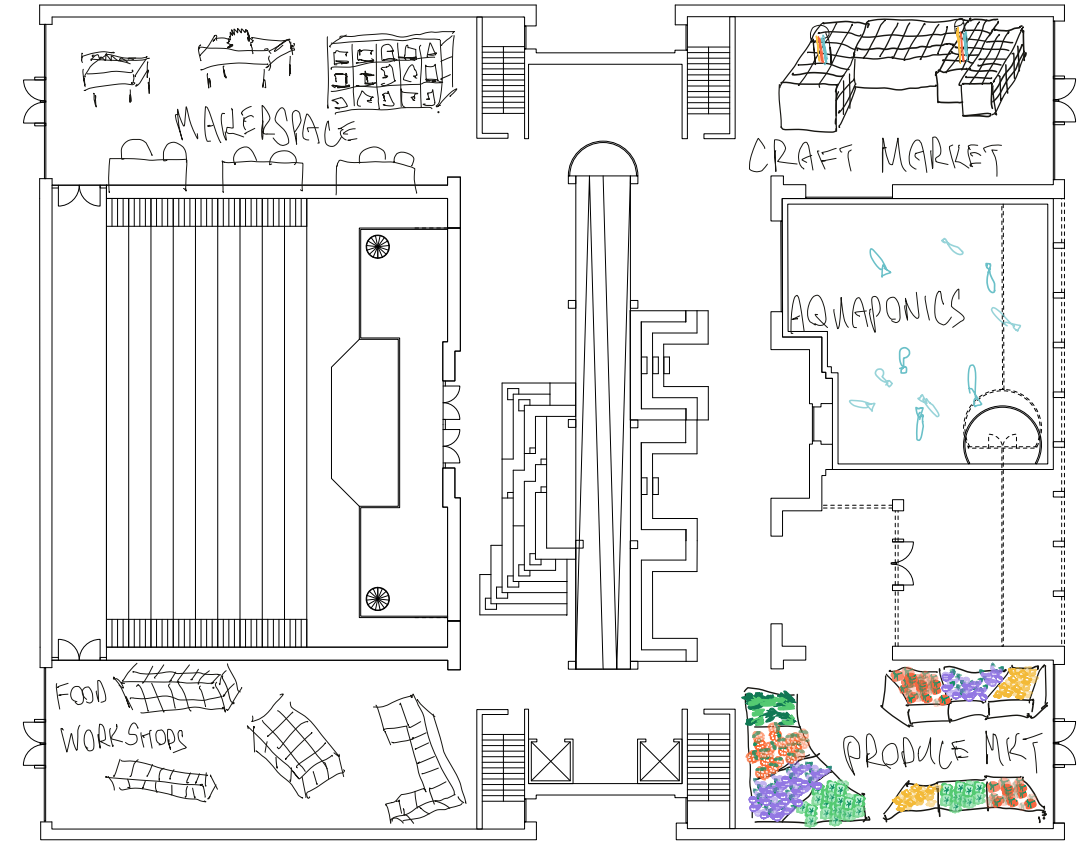




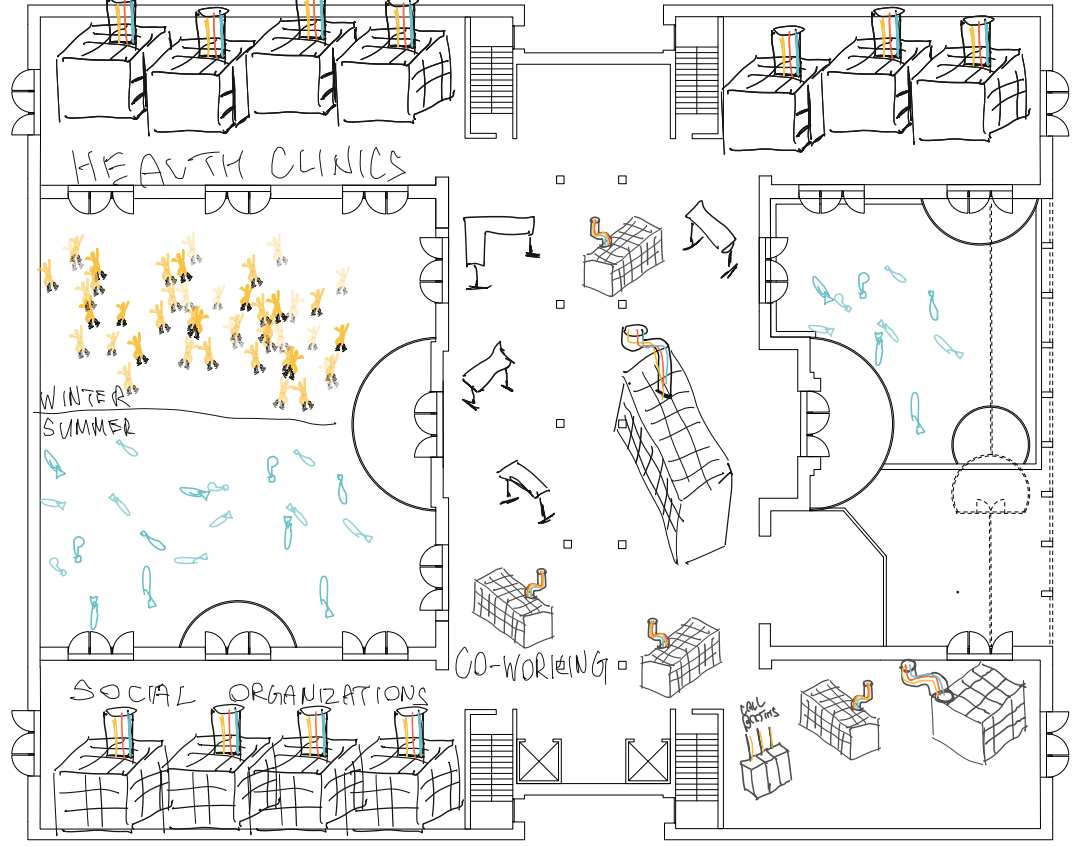
B1



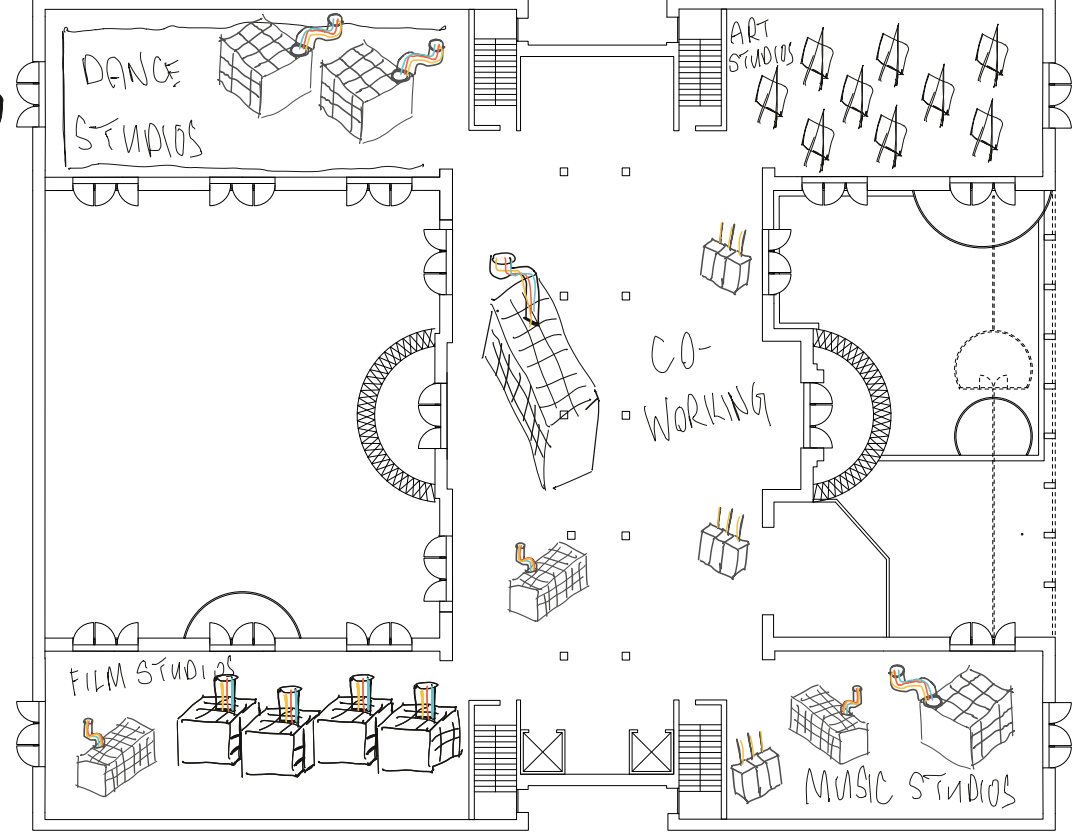
L1



L2



L3



L4



L5

