



portfolio

Bachelor of Architecture

KHANH NGUYEN

TABLE OF CONTENTS

Curriculum Vitae 05.

Projects:

fresh food market and learning center 06.

woodstock library 16.

chit chat chairs 24.

multigenerational housing 32.

parametric wall 42.

fairfield by marriott 46.

KHANH NGUYEN



ADDRESS/ TELEPHONE/ EMAIL

461 Dekalb Ave Brooklyn, NY 11205

+1 346 263 4012

knguyen6@pratt.edu

WEBSITES

www.linkedin.com/in/khanh-nguyen-516482224

https://issuu.com/knguyen172/docs/portfolio_2023_khanh_nguyen-s

CURRICULUM VITAE

EDUCATION

Aug 2020 - present

EDUCATION

Pratt Institute School of Architecture
Bachelor of Architecture (B. Arch)
Expected Graduation: May 2025

WORK/ EXPERIENCE

May 2023 - present

Pratt ITL, Brooklyn, NY
digital fabrication lab technician

Aug 2021 - Dec 2022

Pratt ARC, Brooklyn, NY
event services staff

June 2022 - Aug 2022

TTT Corporations, Ho Chi Minh City, VN
representation intern

Aug 2019 - May 2020

The Village High School, Houston, TX
teacher assistant

COMPUTER SKILLS

MS Office

Word | Powerpoint | Excel

Adobe CC

Photoshop | Illustrator
InDesign | Lightroom

CAD/ Render

Rhinoceros | Grasshopper | Revit | AutoCAD |
VRay

Fabrication

Laser Cutting | ZUND | 3D Printing | Waterjet

LANGUAGES

Vietnamese (native), English (proficient)

FRESH FOOD MARKET AND LEARNING CENTER

Suggestion for an indoor-and-outdoor food market in collaboration with education for the Lower East Side region of Manhattan



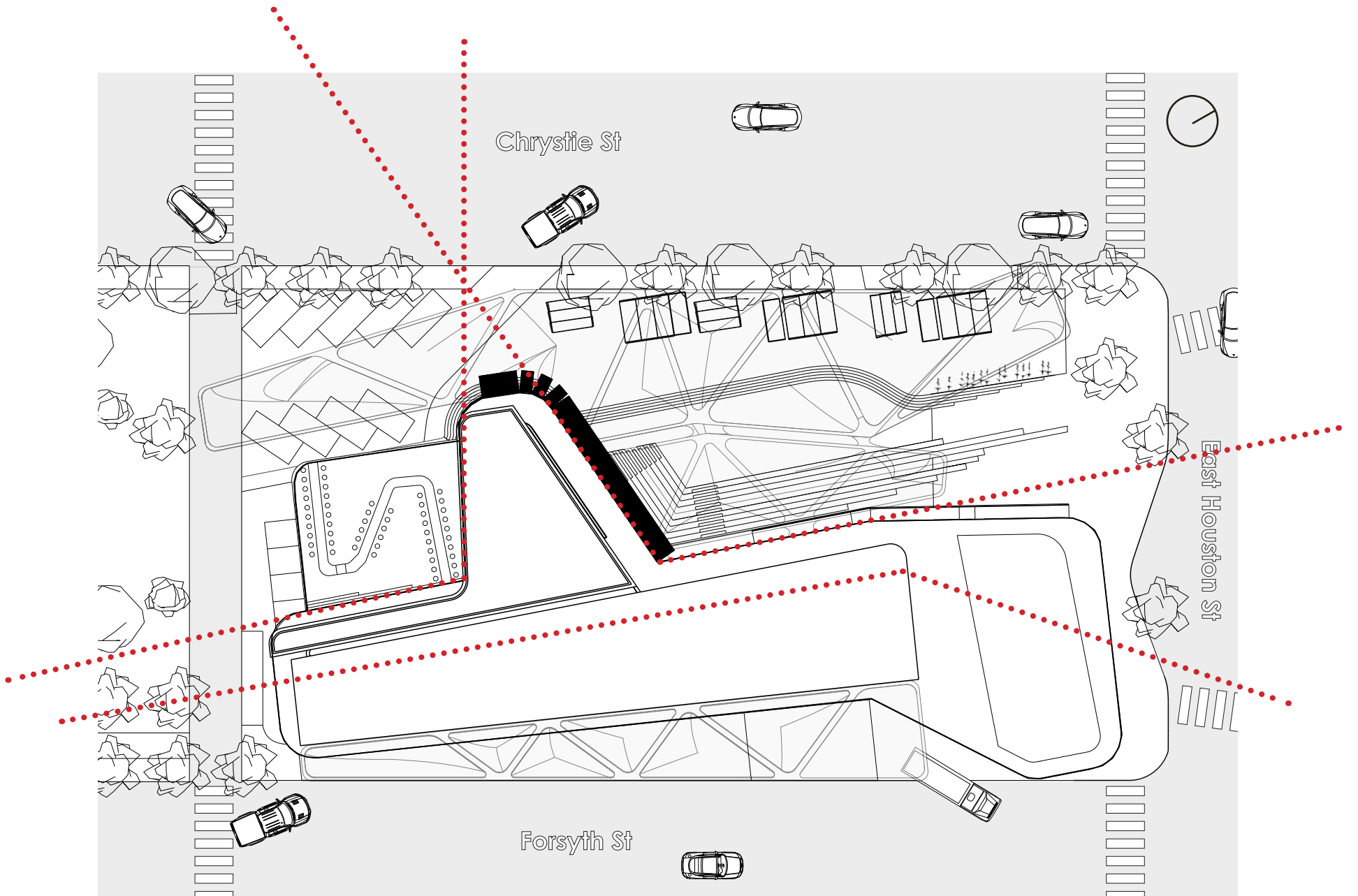
Architecture Design Studio 6

in collaboration with
Peizhong Ma

tutors

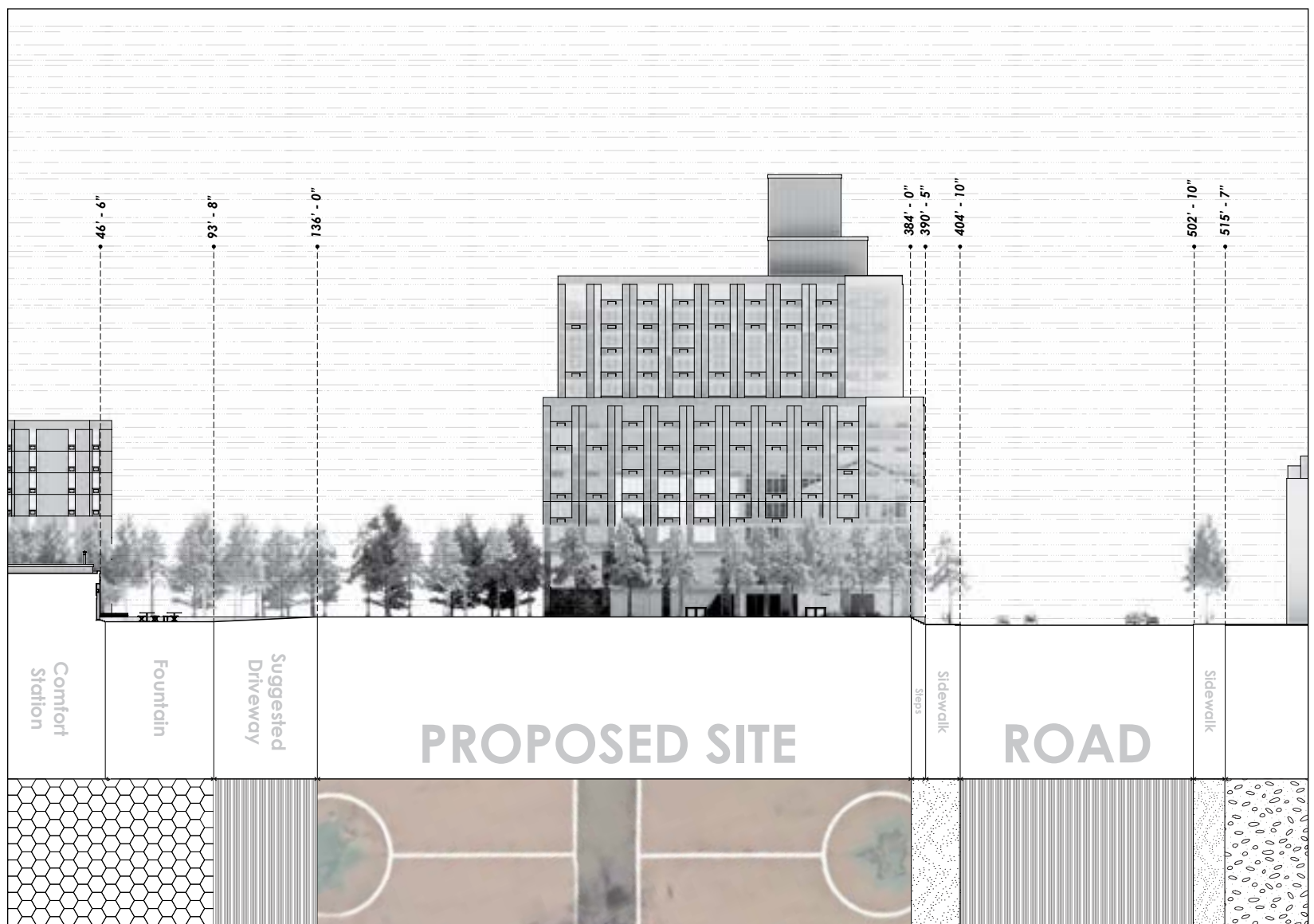
Prof. Beth O' Neill
Christina Chu-Garcia
Markus Wilmers
David Jones

The Sara D. Roosevelt Park located in the Lower East Side, Manhattan, has a significant impact on the neighborhood politically and socially, both in the past and at the present. Despite eventful activities happening at the moment, the space could surely be utilized utmost to serve the community. Therefore, in our studio, we discussed and developed a fresh food market and learning center to encourage more engagement from local occupants. Besides people's behaviors and structures, we also took the existing condition of the site, specifically trees in this case, into consideration during the designing process.

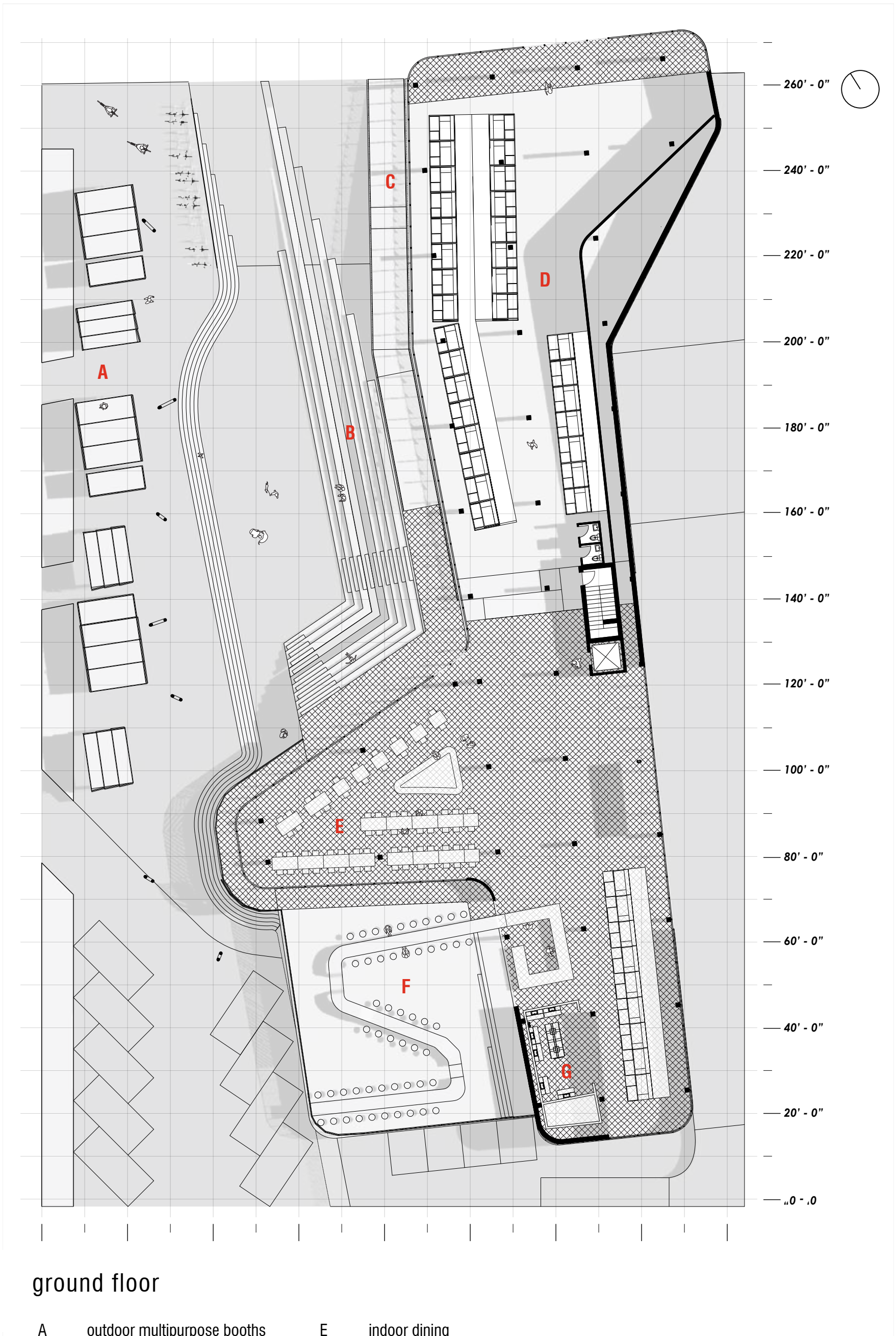


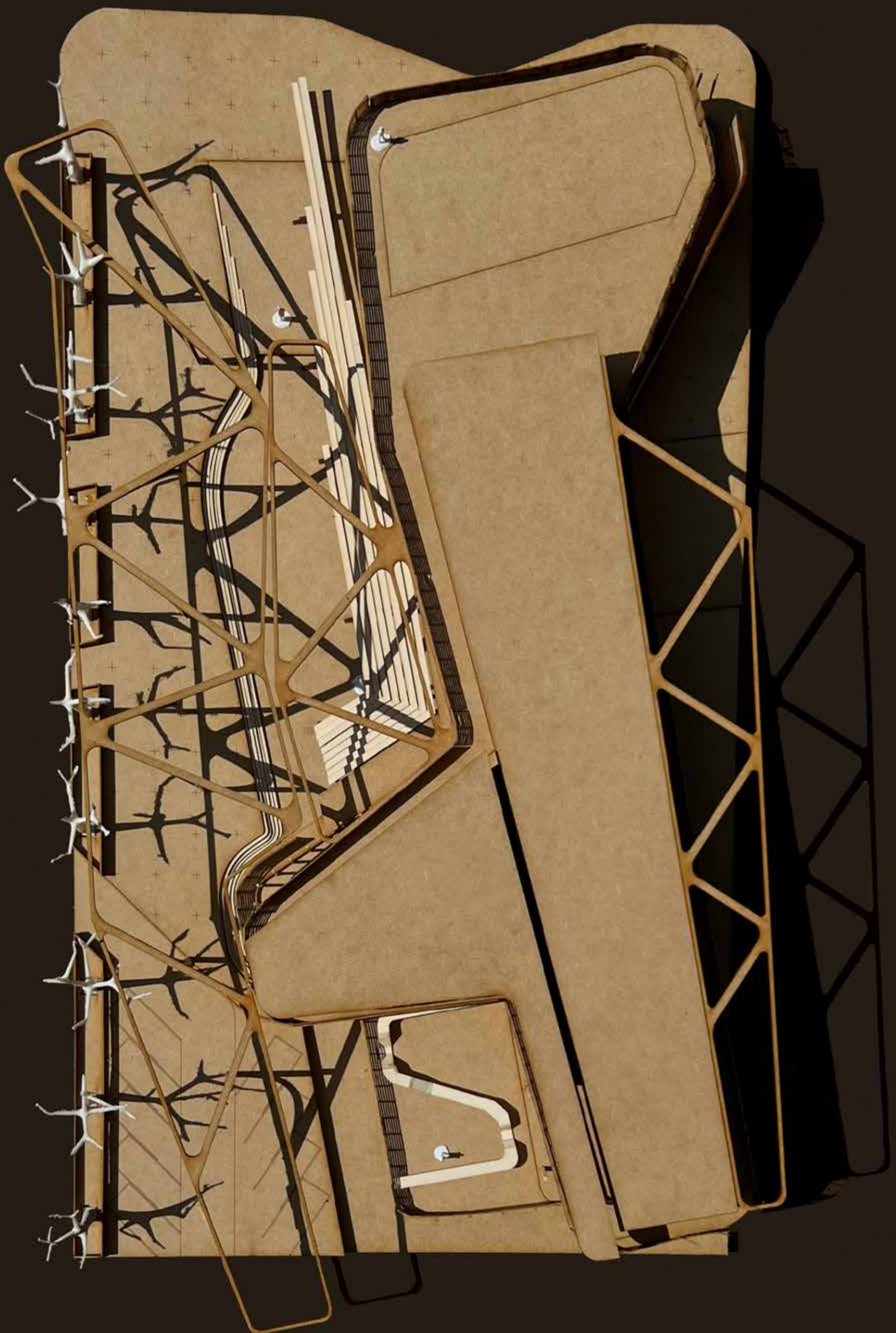
site design

The driveway for trucks to drop off external goods from Forsyth St. created a 'dent', influenced the shape of the building on the site. This results in dividing the site into three urban areas: the outdoor and opened market/seatings, the outdoor but concealed parking lot and dining space, and indoor the market.

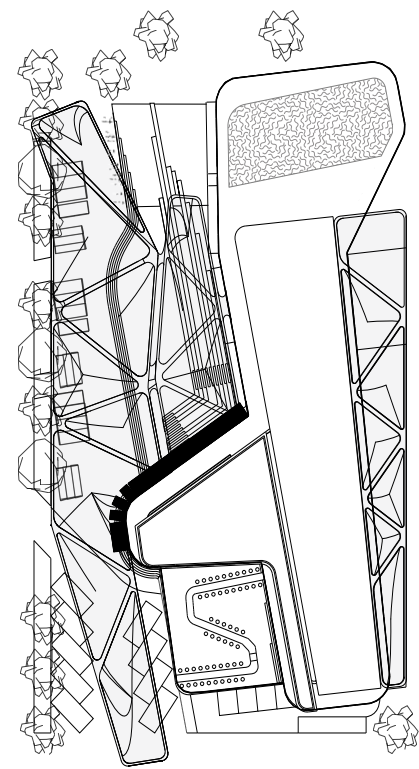
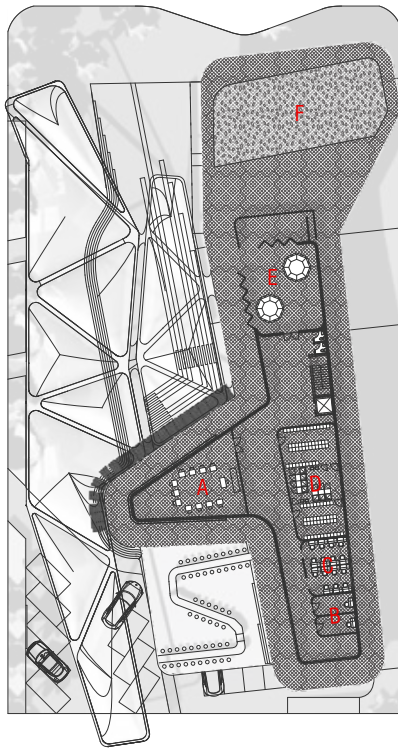
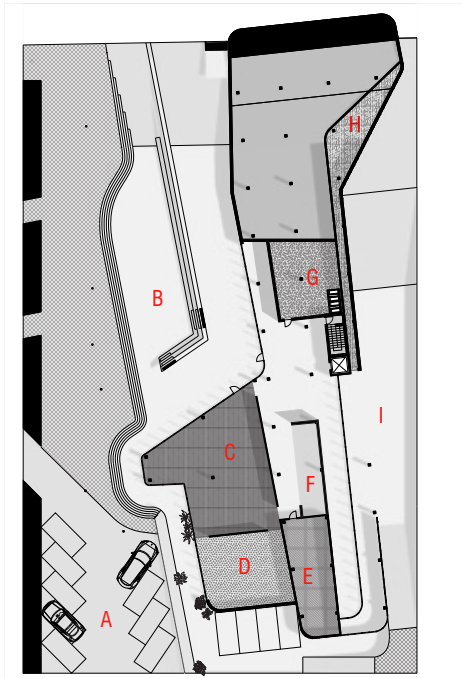


site section





cellar | second floor | roof plans



- A parking lot
- B pit
- C hydroponic garden
- D lab room
- E mechanical room
- F storage
- G electrical room
- H water + plumbing
- I goods drop-off station

- A indoor classroom
- B individual offices
- C open offices
- D staff coat space
- E hybrid classroom
- F seasonal garden

As one travels along the large ramp along the pit, there placed a hydroponic garden connected to a lab room where students can experience and learn about different methods of plantation, advocating the farm-to-table process of the market. The second floor focuses on the staffs and students learning and working offices. A seasonal garden is available towards the front of the building, serving both students as a learning material and a relaxation zone for staffs when needed.



indoor and outdoor dining

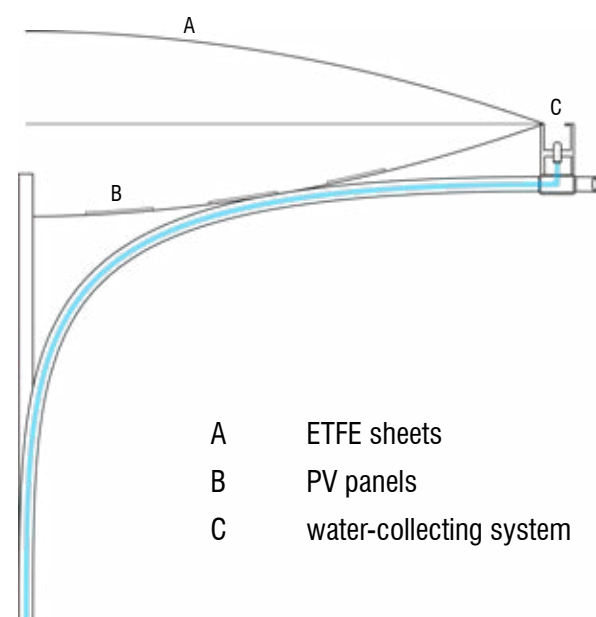


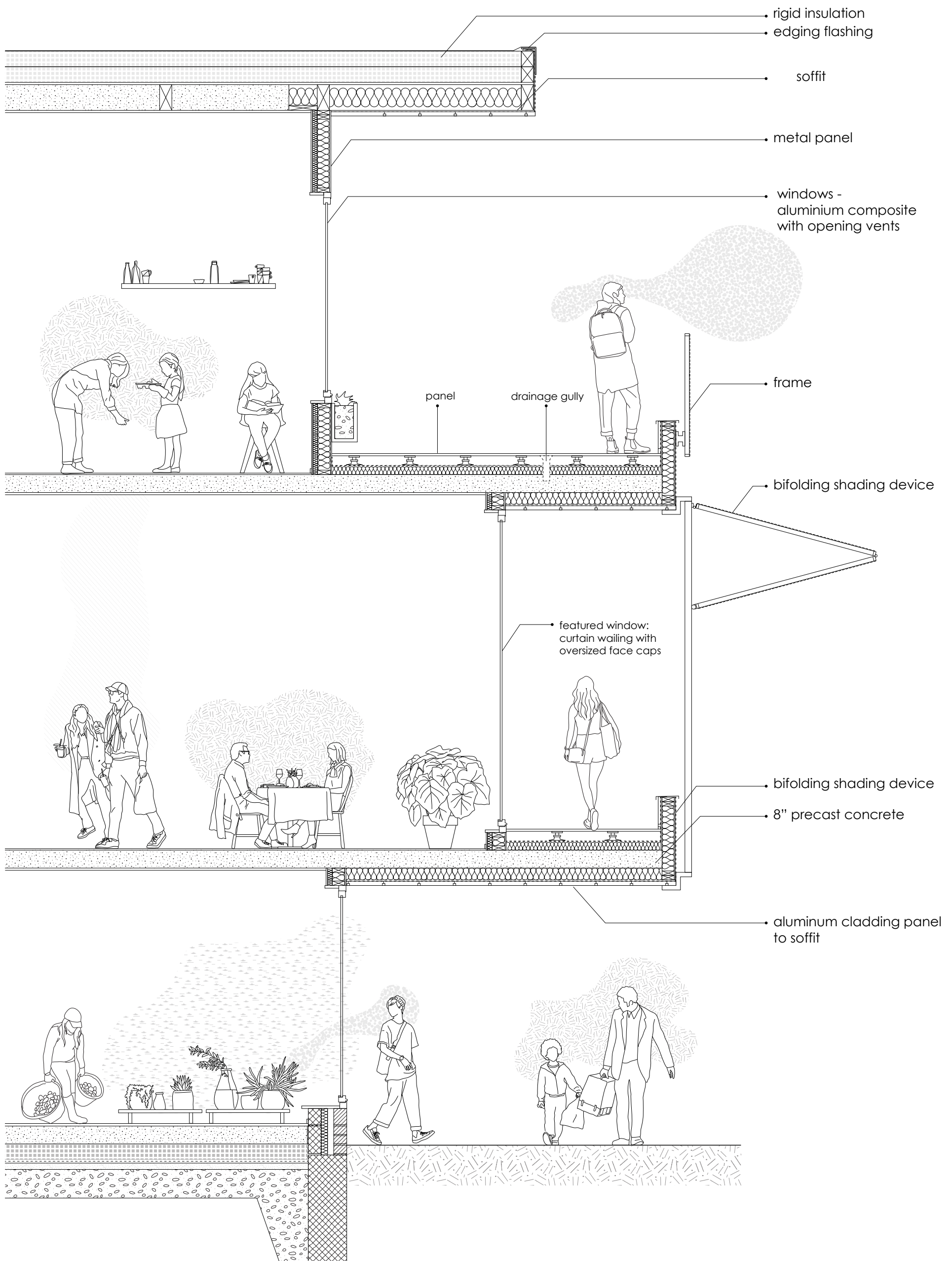
main entrance from E. Houston Street



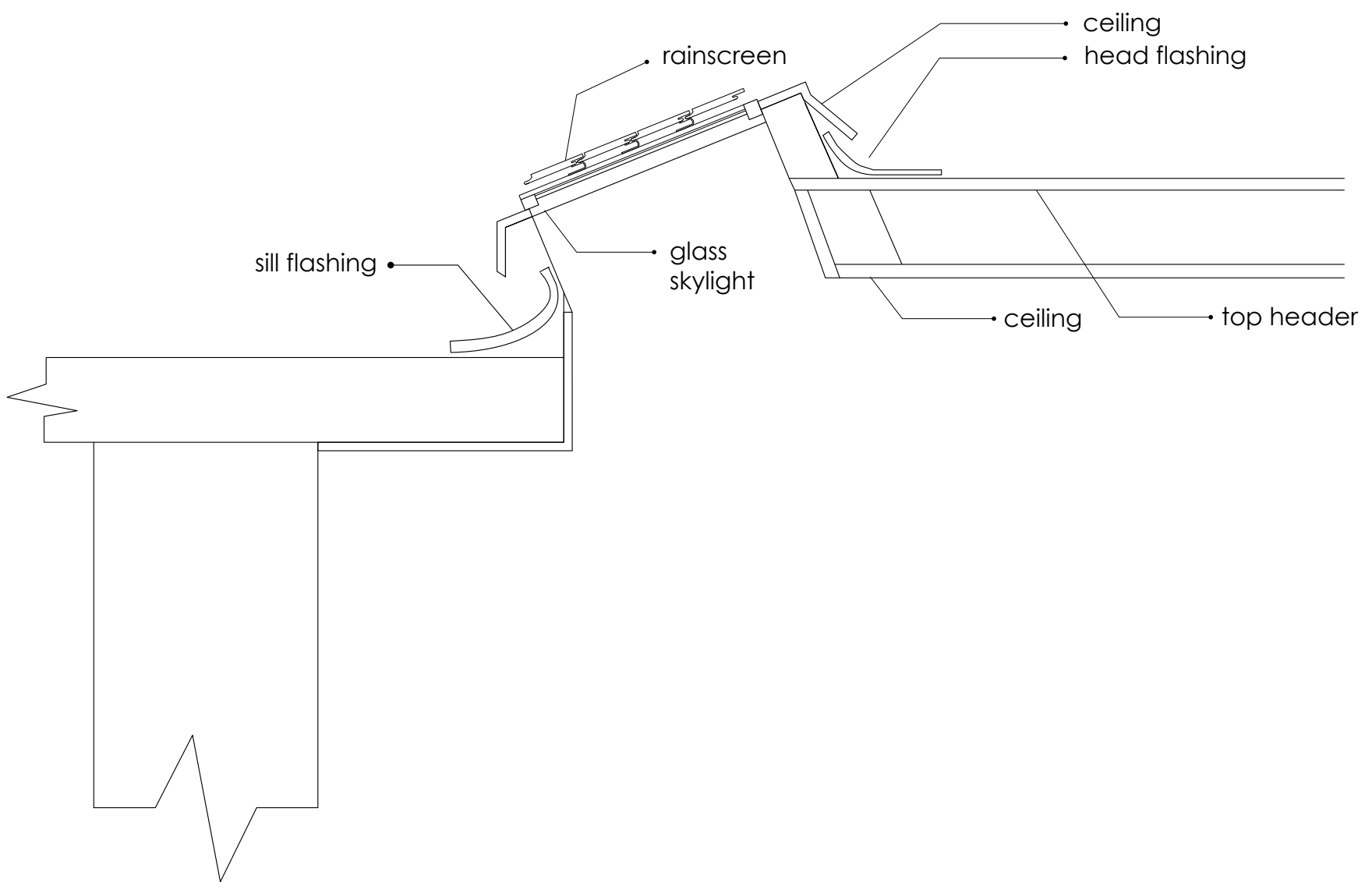
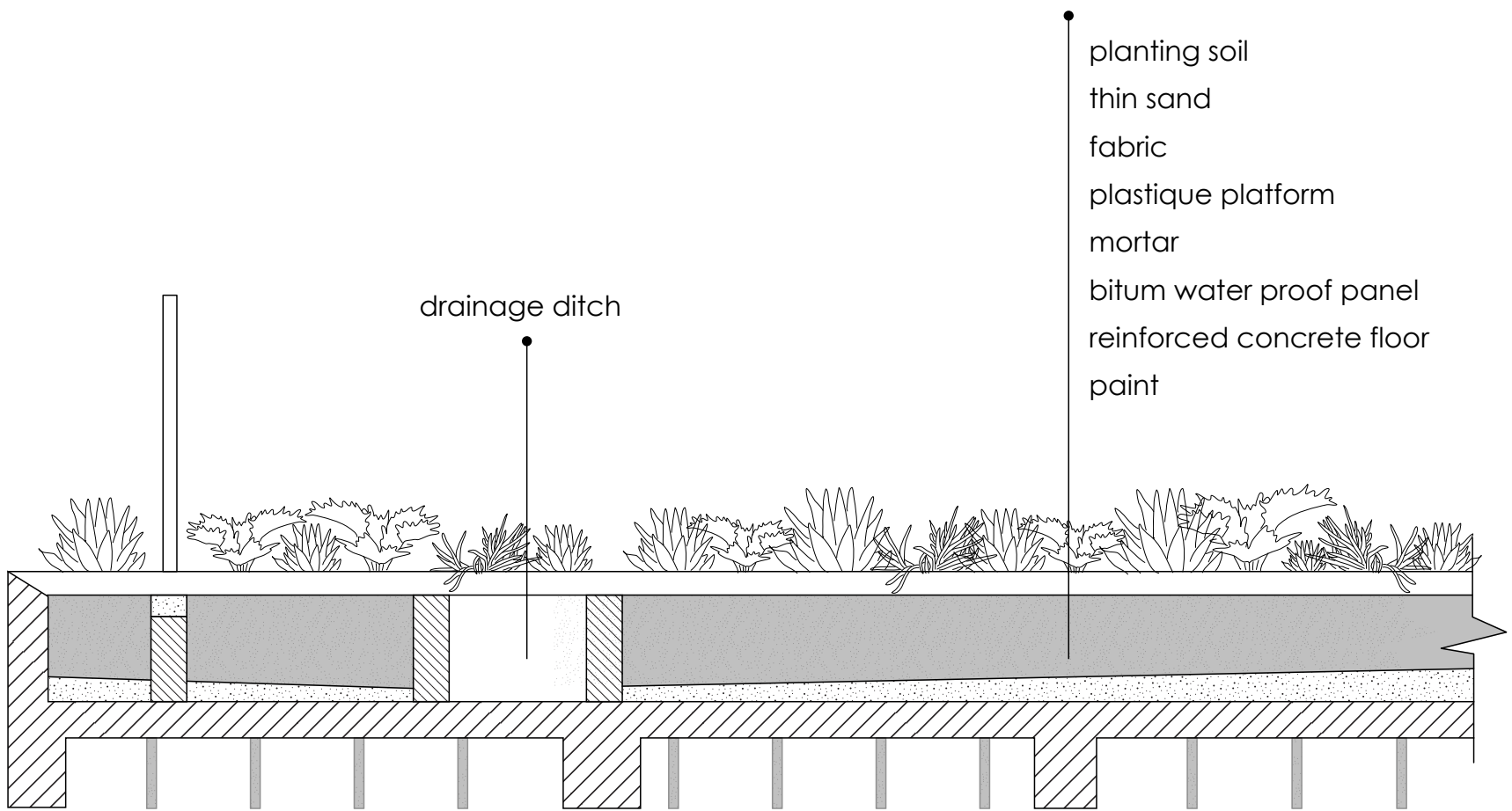
parking lot

The use of ETFE for the shading device does not only follow the existing organic curves but also the transparency of the building. As light travels through the ETFE, shadows with distinct effects are casted on the ground, entertaining visitors of the outdoor market. Water-collecting system is incorporated with the canopy's structure, leading water to the underground tank serving the building.

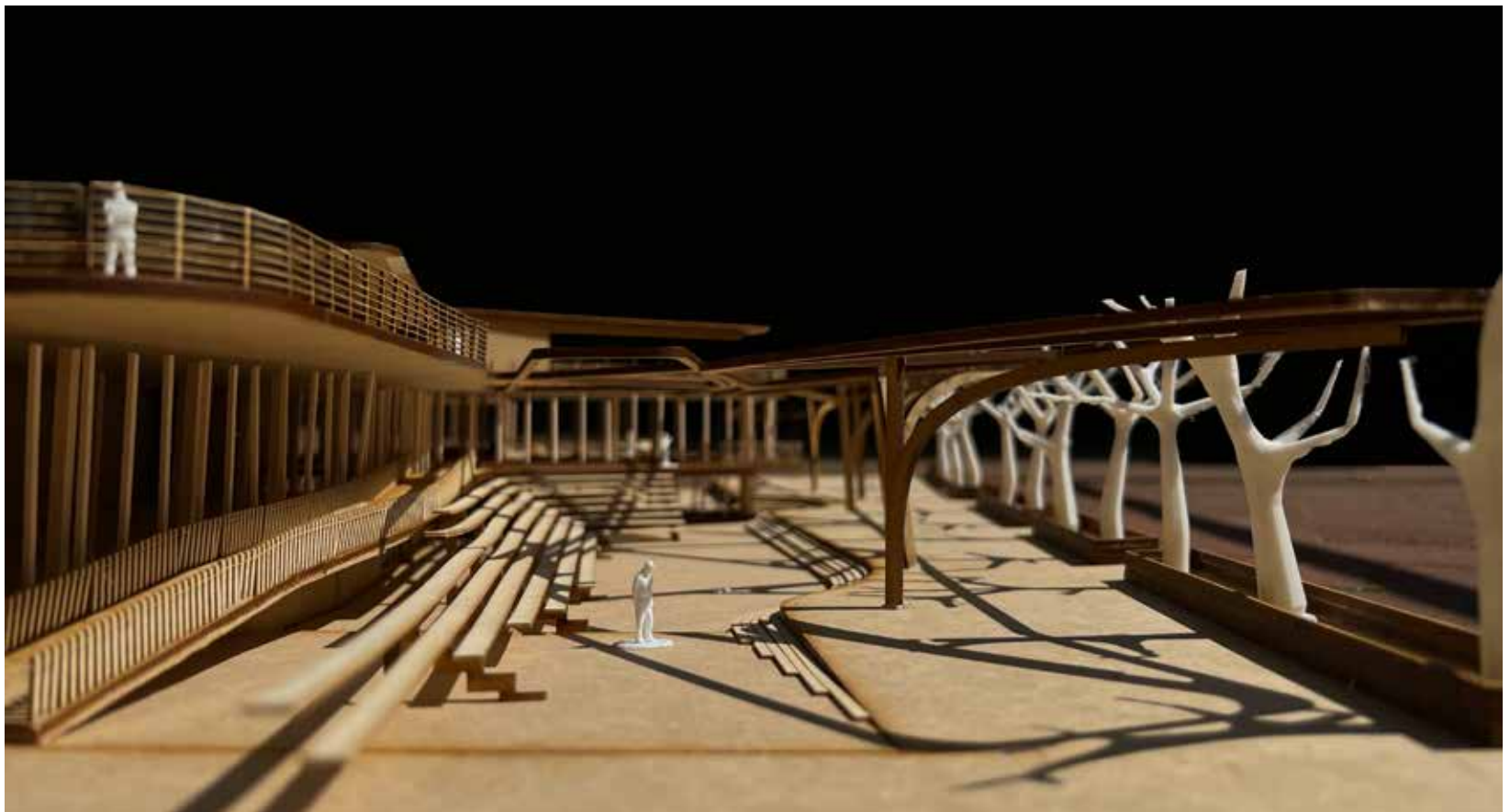




wall detailed section



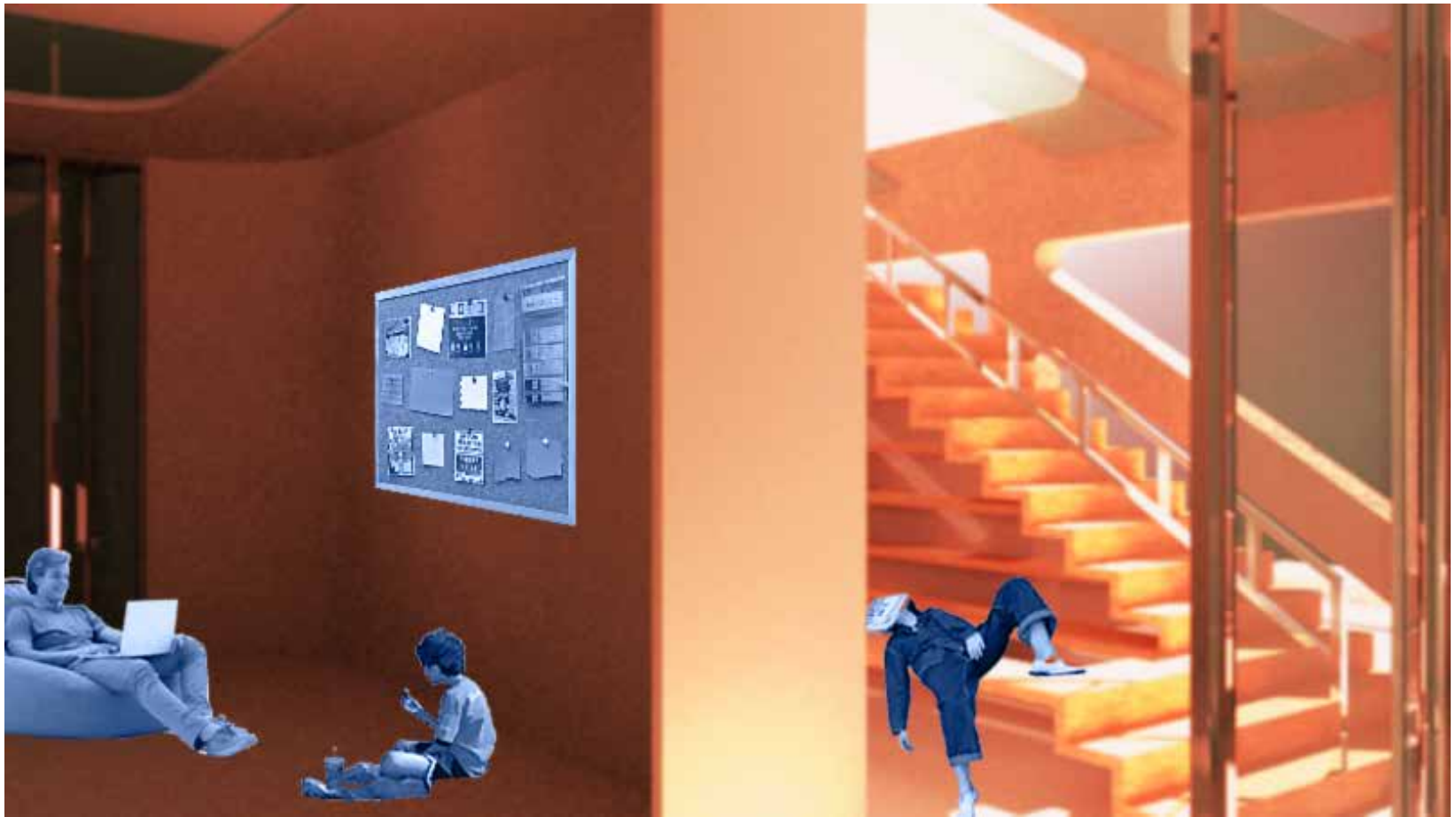
seasonal garden - skylight detailed sections





WOODSTOCK LIBRARY

Extension of the Woodstock Library, Bronx, as an audio visual educational center with the consideration of calibrating the interface between the extended hours of the New York Public Library for Public Ticketed Access while maintaining the facilities' operations of educational spaces.



Architecture Design Studio 4

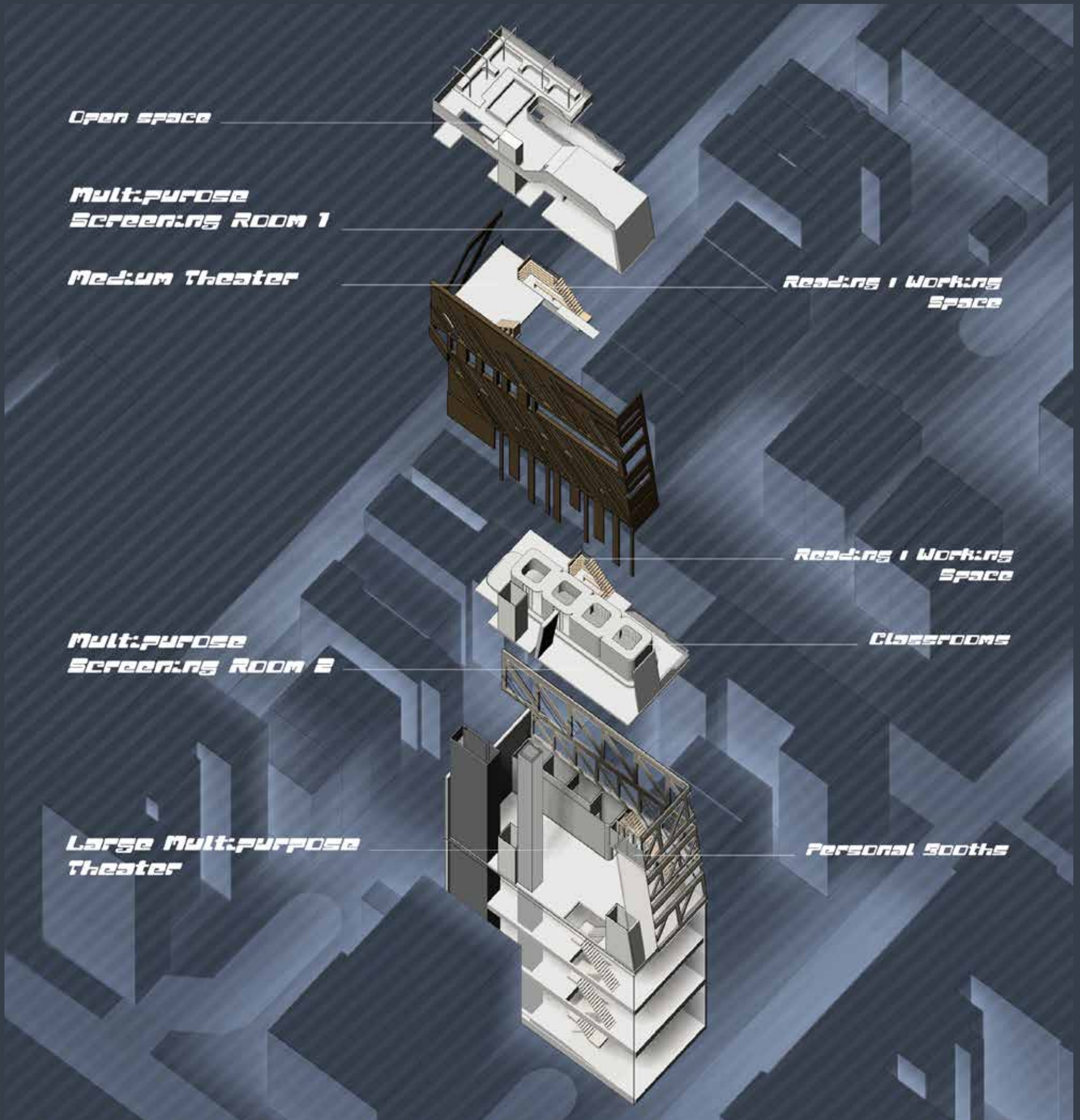
tutor

Prof. Michael Su

In order to add civic potential to three of Carnegie branch libraries of New York Public Library, our studio extended and renovated them with the addition of an audio and visual center, expanding their private educational spaces and public-interface. As a vertical extension is inserted to a pre-landmark building, it is important to be considerate to the sensitivity of the existing architecture. The design offers various multi-purposes areas, allowing a mixture of activities supporting both education and entertainment to take place.

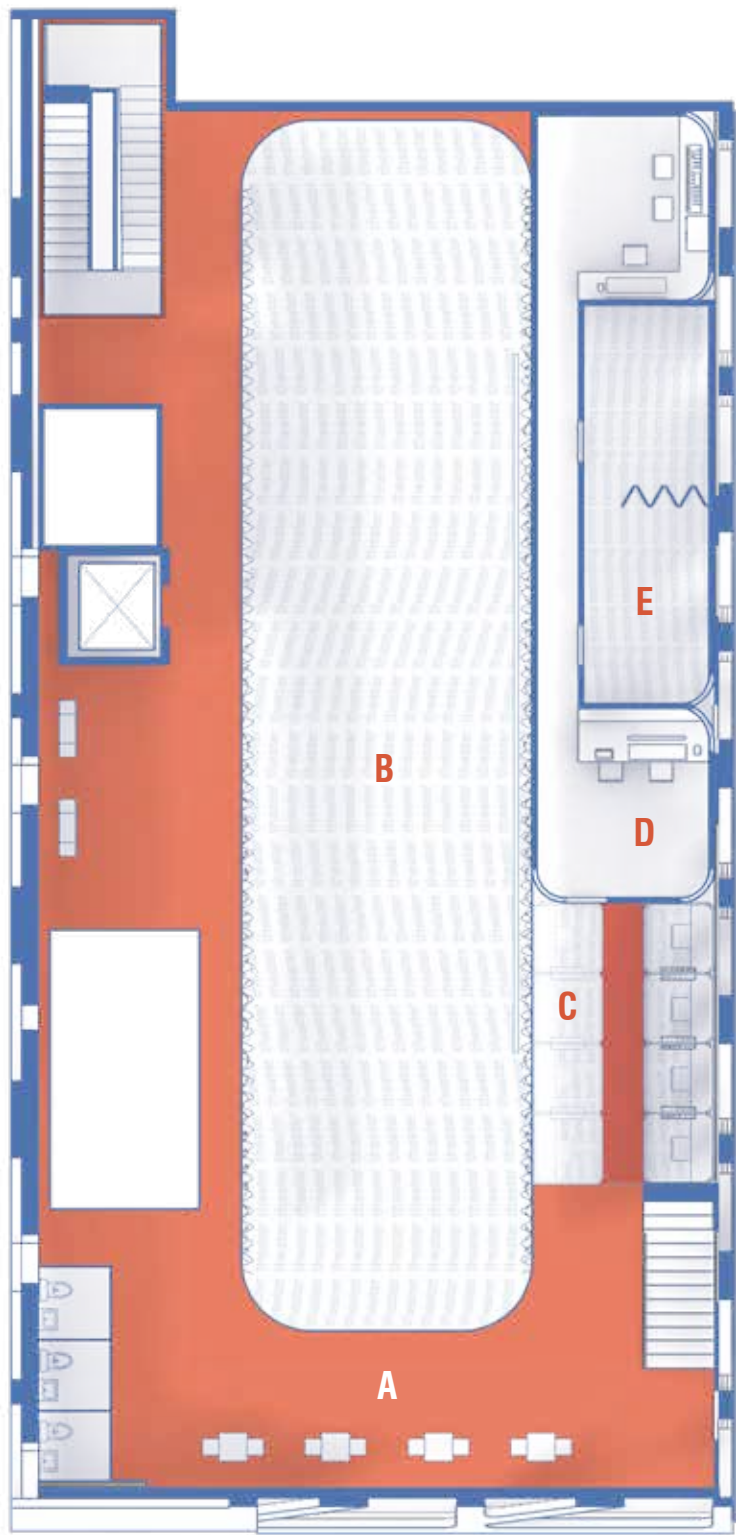


site plan



Difference in materials and apertures of facade determines by the programs adjacent to them. As the hangout spots concentrate on the East, glass and large openings are incorporated while smaller slits are made on the West facade.

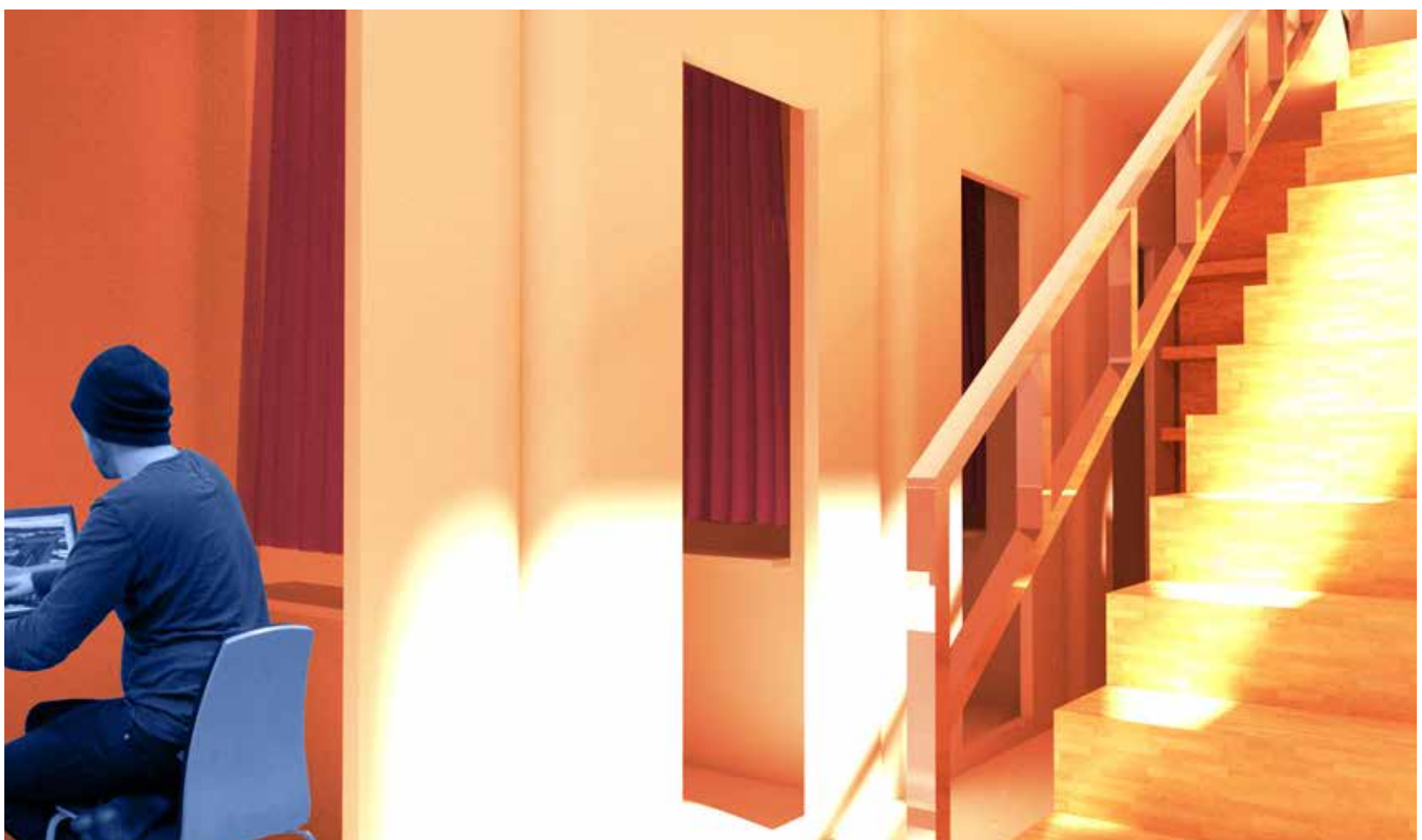
axonometric view



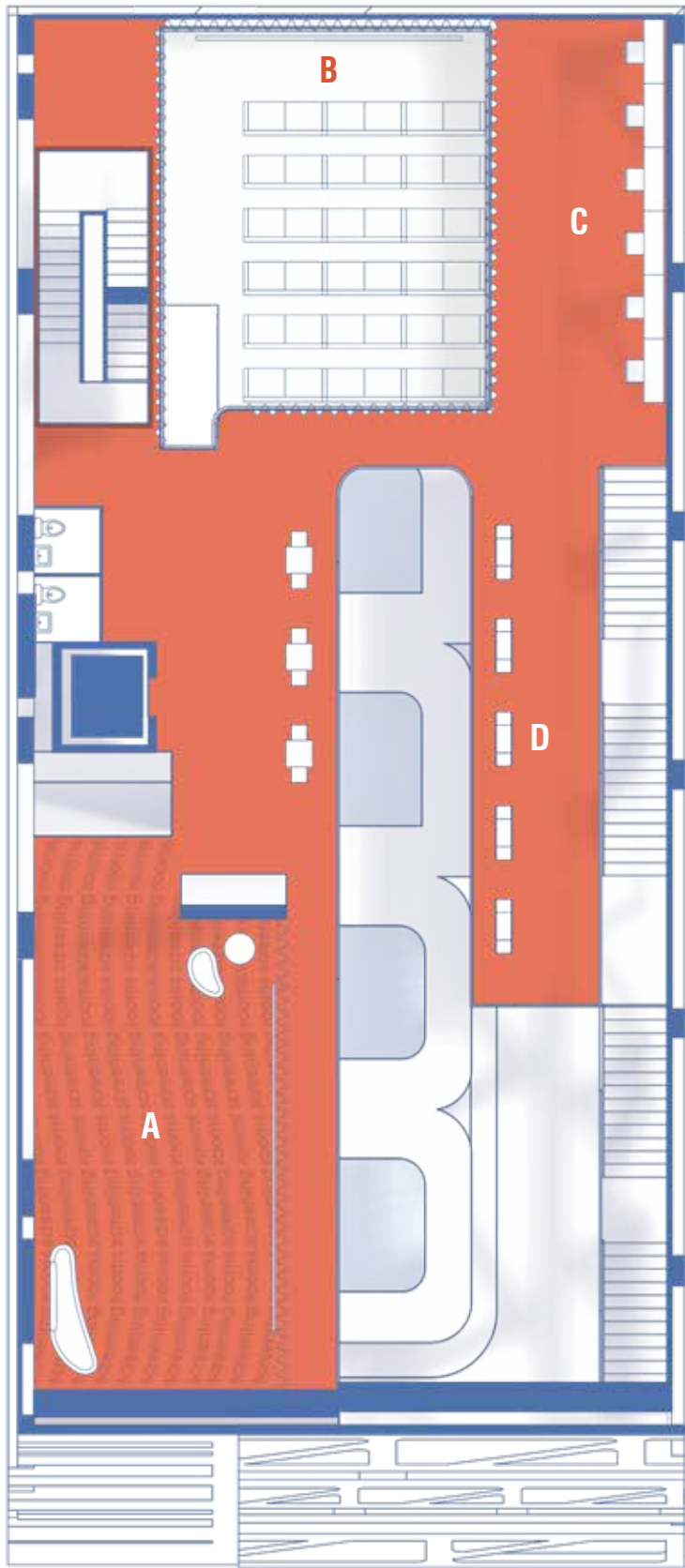
- A opened hang-out space
- B large multipurpose theater
- C individual working booths
- D production studio
- E closed recording studio

Educational spots such as classrooms and personal booths are constructed as pods with bifolding dividers or small windows at adjacent faces, encouraging social interactions and expanding physical spaces

3:32 | first additional floor



individual study pods



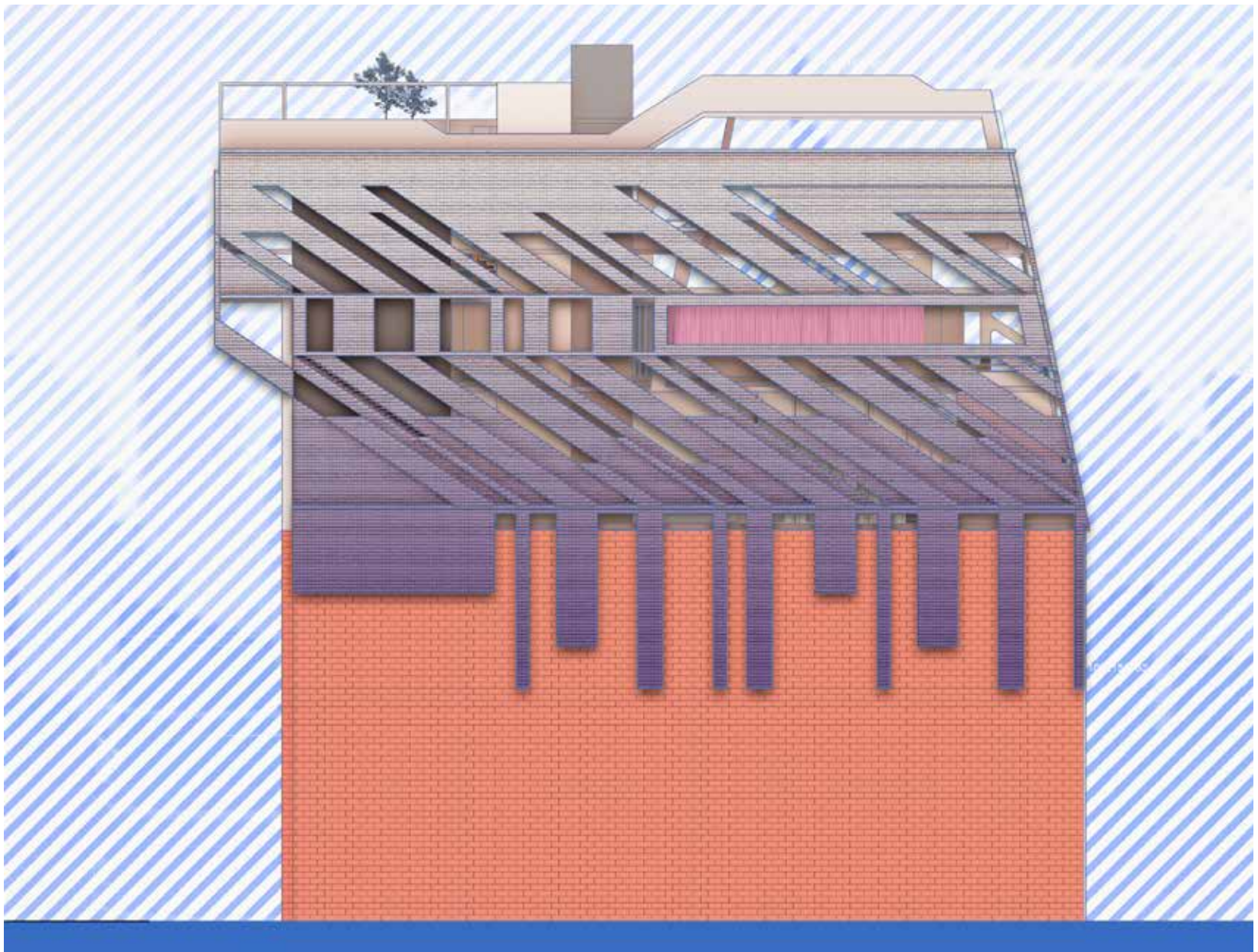
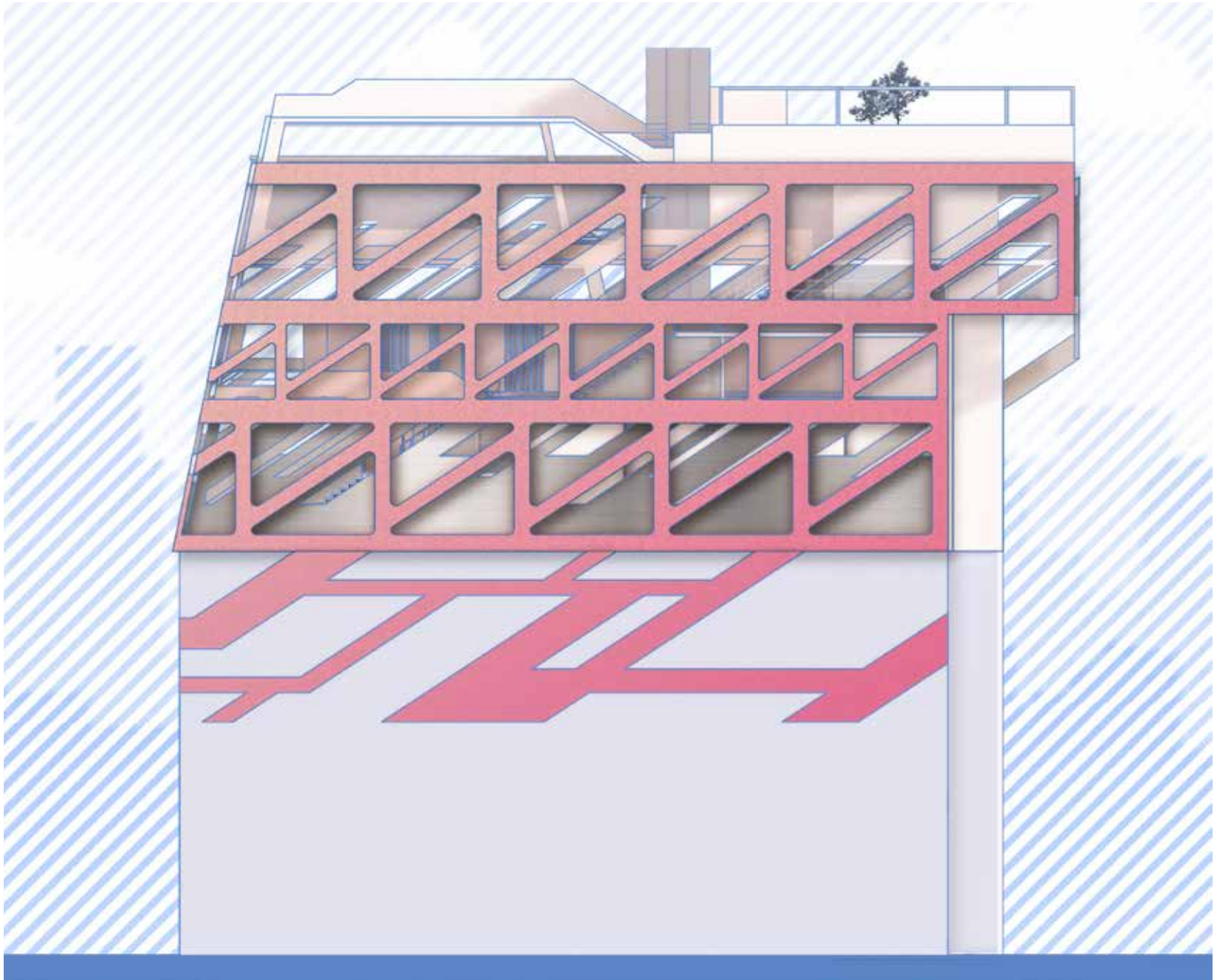
- A screening room
- B double-height theater
- C opened study space
- D seatings

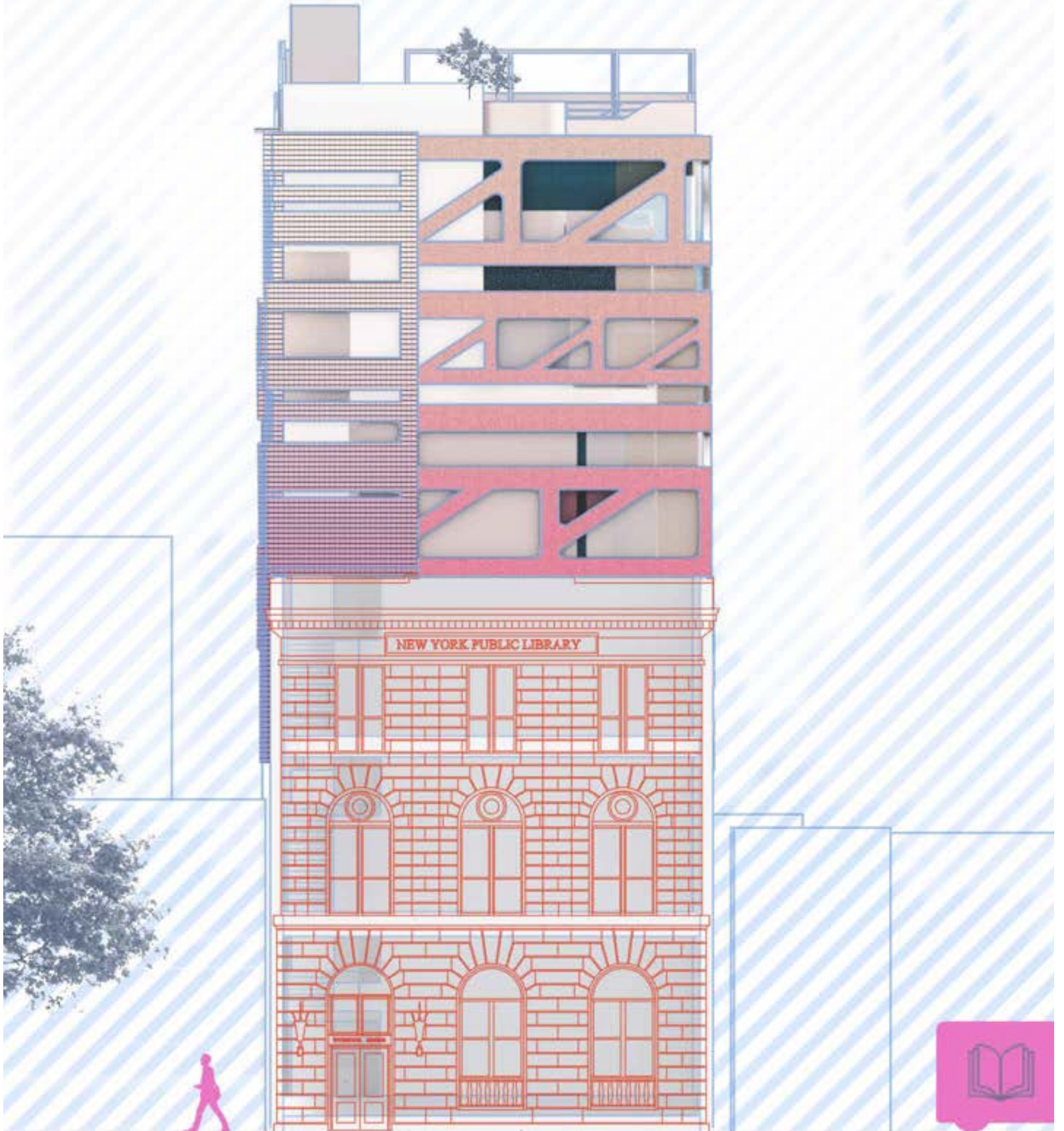
The use of curtains do not only set the perimeter of used room but also transmit and shade natural light when necessary. Using the atriums, educational areas such as pods, reading and working areas are regularly brightened throughout the day while streaming-prominent regions are more shaded.

third additional floor | 3:32



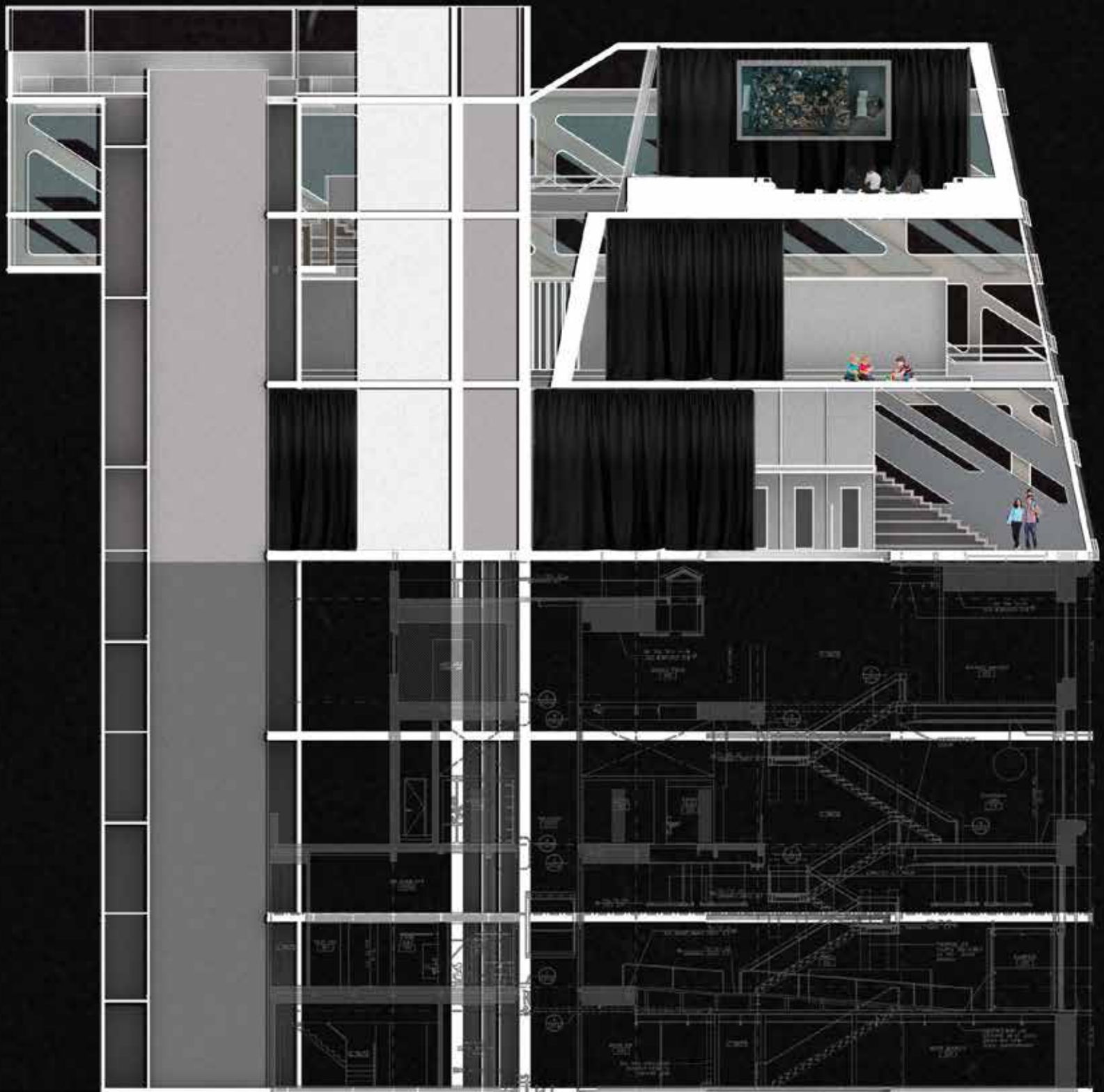
double-height theater





north elevation | 1:8





CHIT CHAT CHAIRS

Proposal for a life-size pavilion or furniture located on Pratt Institute Main Campus, serving certain targeted audience. The project must be based on either the modular double folded stripe or the linear folded stripe method documented by Rupert Maleczek



Architecture Design Studio 7

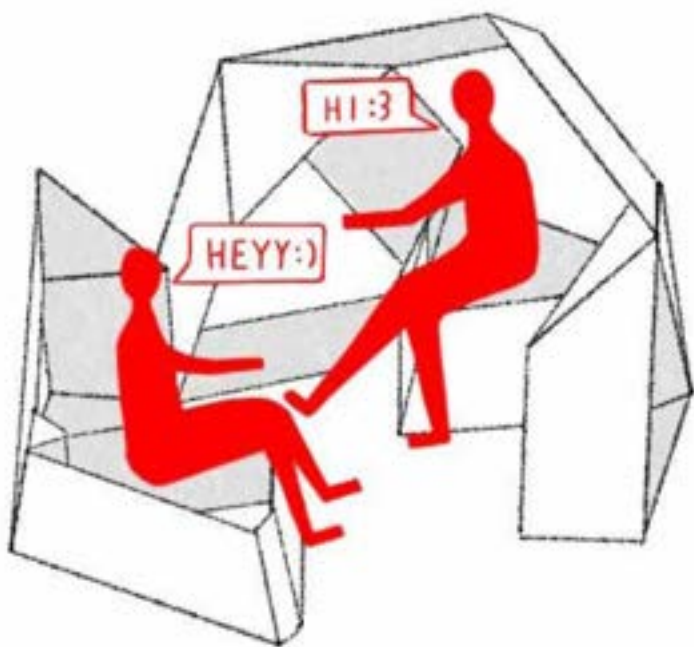
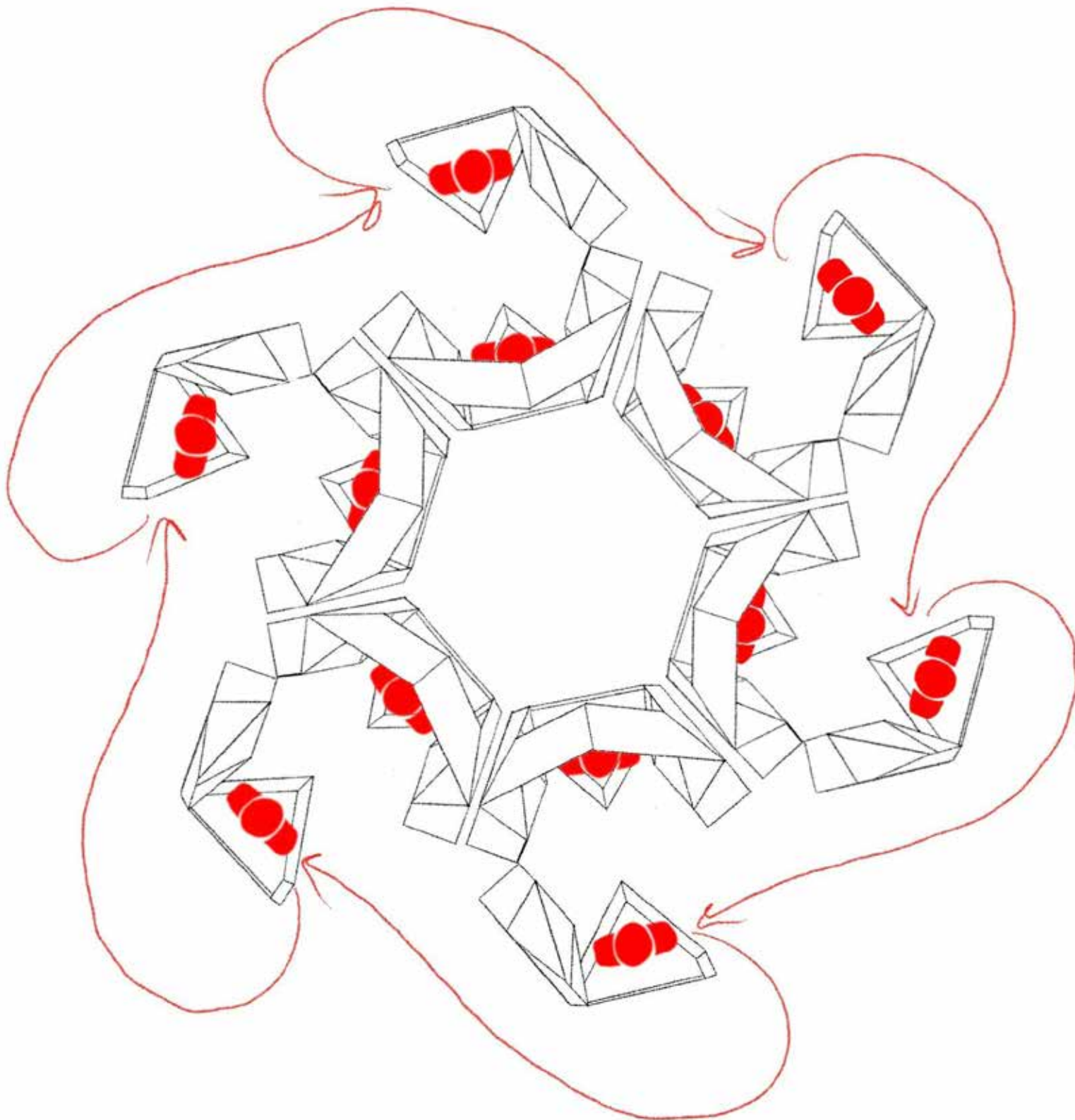
in collaboration with

Trent Bangle, Oona Ashraf, Allyson Gale
Quintillan, Gabriele Randall

tutors

Duks Koschitz
Robert Lee Brackett III

In this design-build studio, we wished to facilitate conversation, interaction, and gathering of face-to-face socialization, inspired by the classic speed dating set-up. We aimed to group and seat people in pairs, time their conversations and have people rotate after a few minutes. While the initial inspiration was the format of speed-dating, other potentials such as portfolio reviews or finding your thesis partners are also taken into consideration. The aggregations we developed moved beyond the strictly polar or linear arrays we saw in the research, the connection of the component was adjusted depending on its application. The project involves constructing various study models and sketches, hands-on testing new materials (alucobond), and holding an event to introduce our final product to the public.



Our initial idea elaborated on one group of people remaining within the inner ring while another set of people rotated along the outside. The arrangement of polar arrays gave us the idea for a system of connected booths which also establishes a private space for each conversing pair.

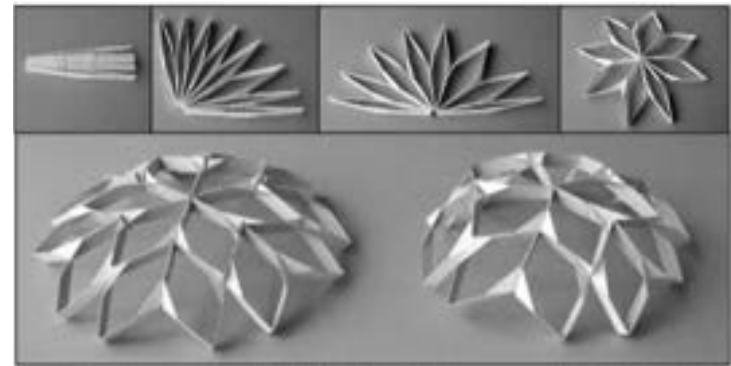
folding technique from Rupert Maleczek

Double linear folded stripes is a method discussed in Rupert's research to make a modular cell. The mechanism of this cell allows it to be folded flat in two different ways, creating different profiles. By attaching trapezoids of the components in the face-to-face manner, Chloe Genevaus was able to form a dome. Using these references, internal research was done by with a wide range of deployability.

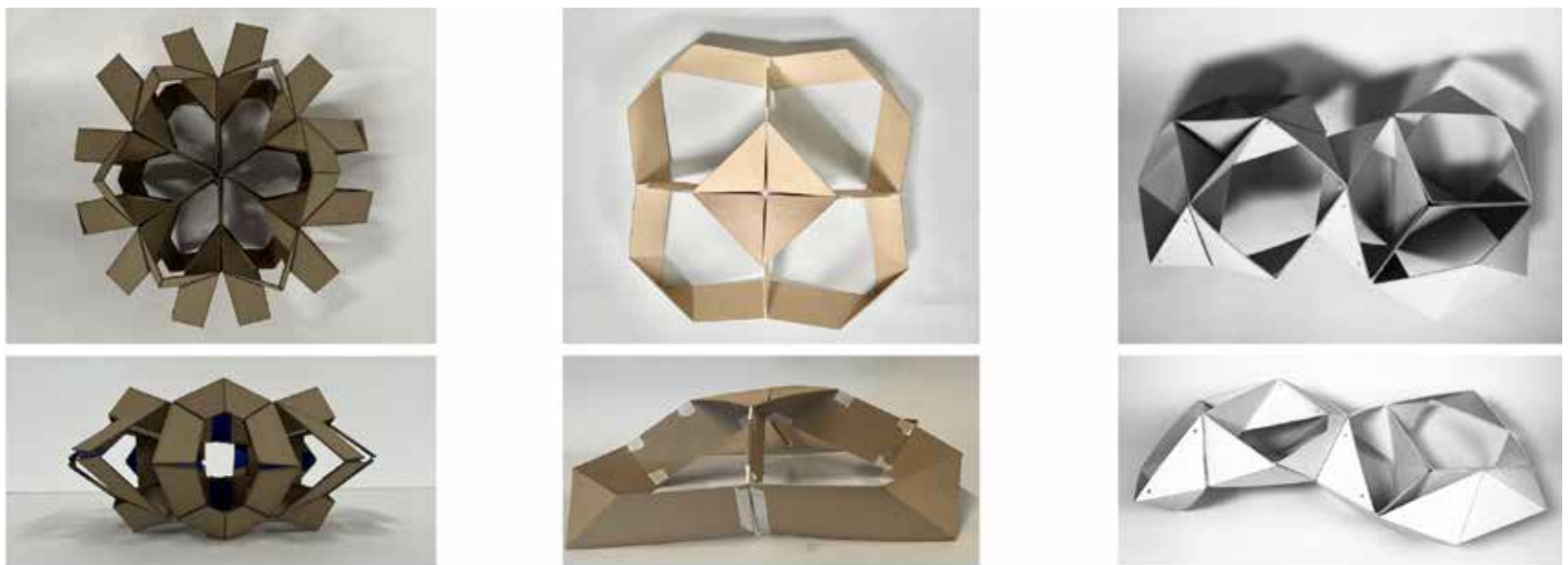
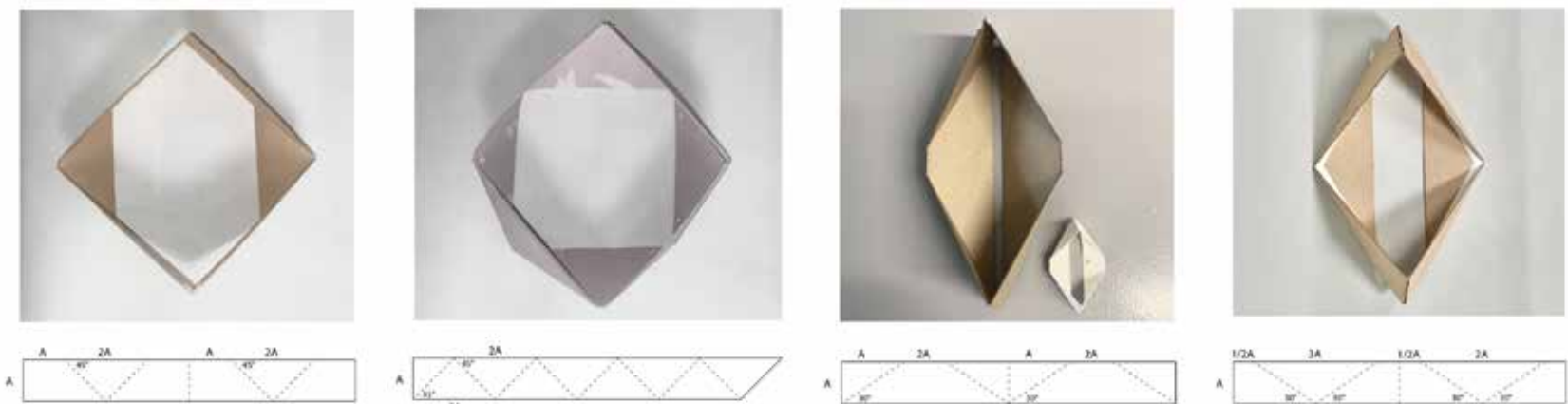
Changes such as exploded vertex or increases in certain angles allow us to create distinct variations. The chosen modular component satisfied the combined aptitude to function as a mechanism while maintaining its structural form.



modular folded cell with 6 folds, paper model, Th. Berthomier, 2006.



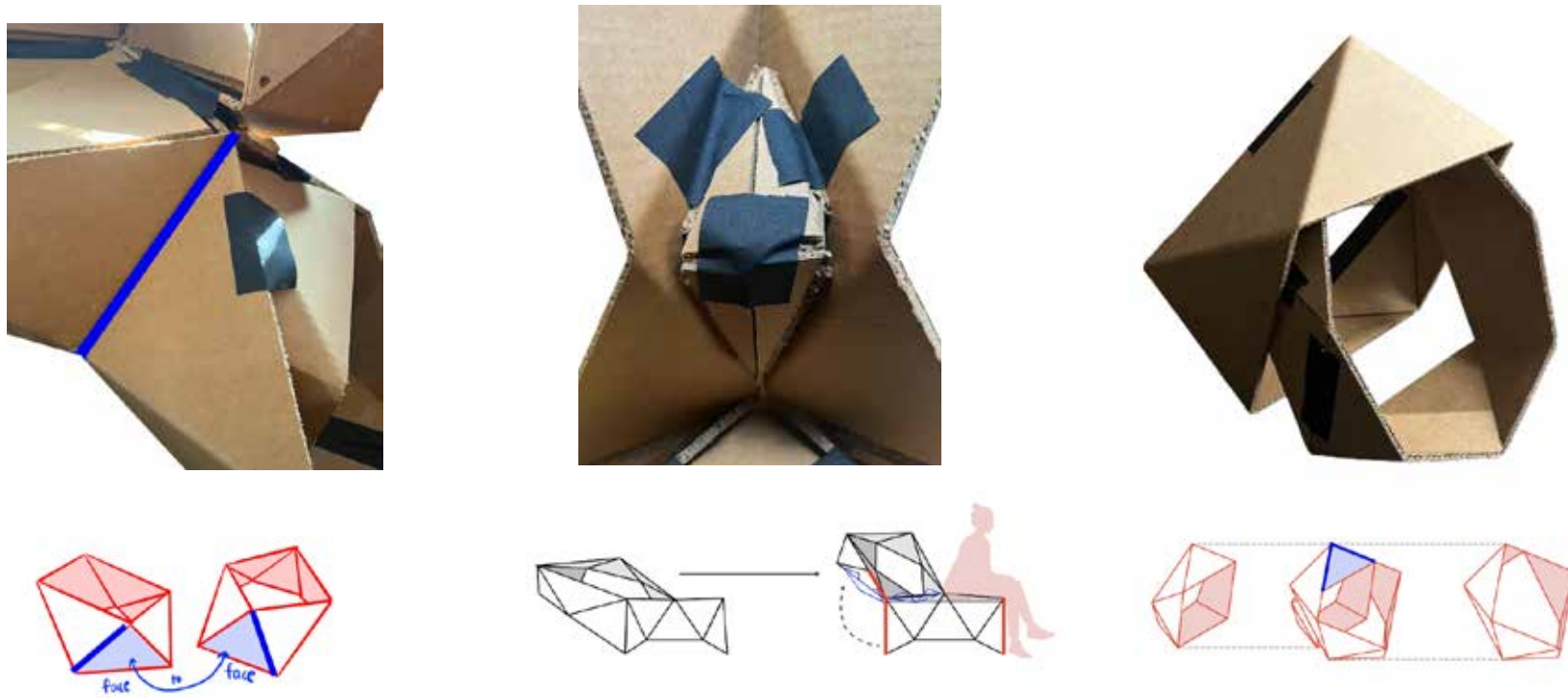
modular folded cell with 6 folds, paper model, Th. Berthomier, 2006.



scales



attachments



armatures



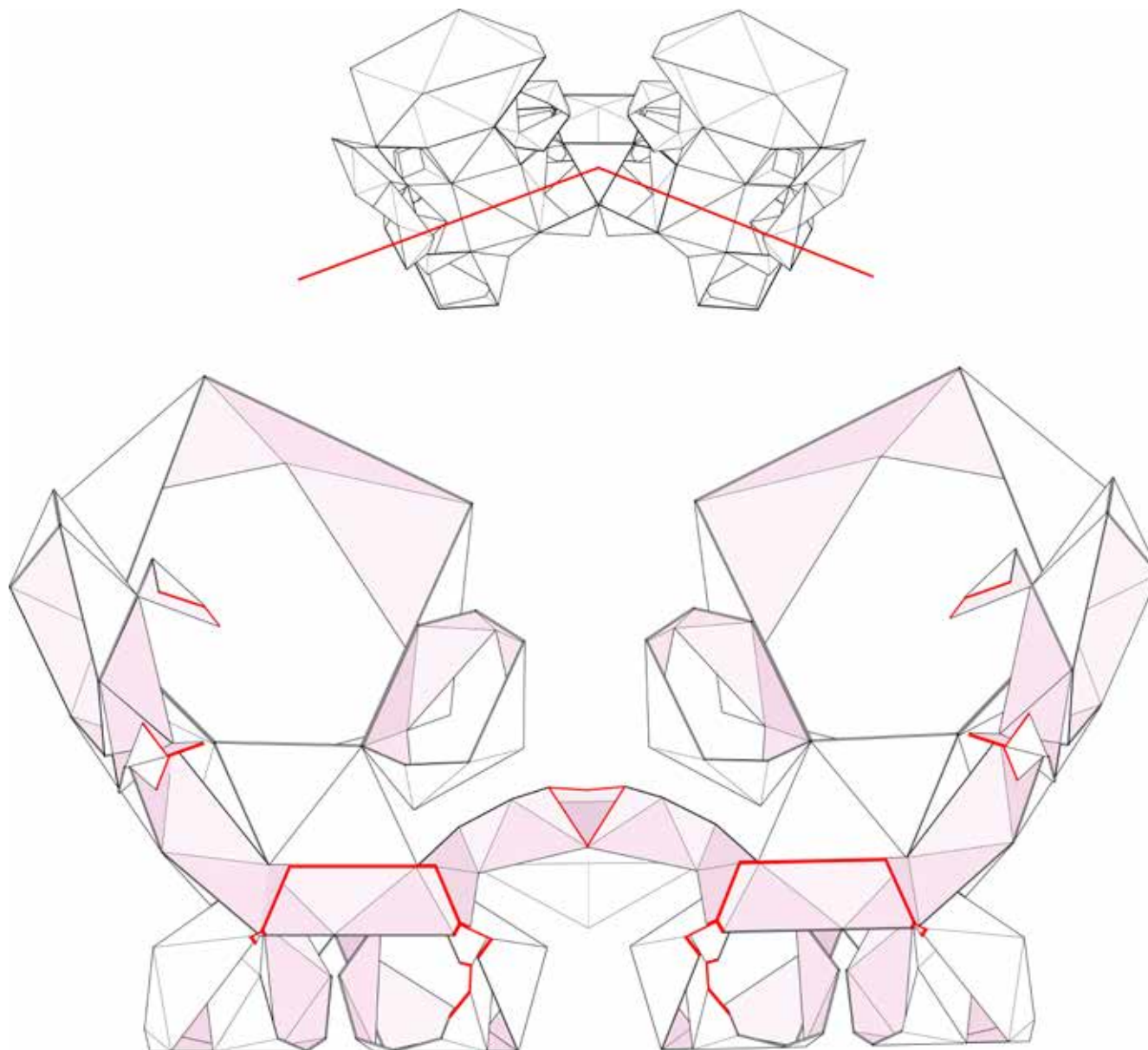
different elements of the aggregation were altered to solve temporary problems

(top) exploration in scales: seat+chair | wedge/infills | armatures

(middle) exploration in attachments: traditional face-to-face | double face-to-face | internal face-to-face

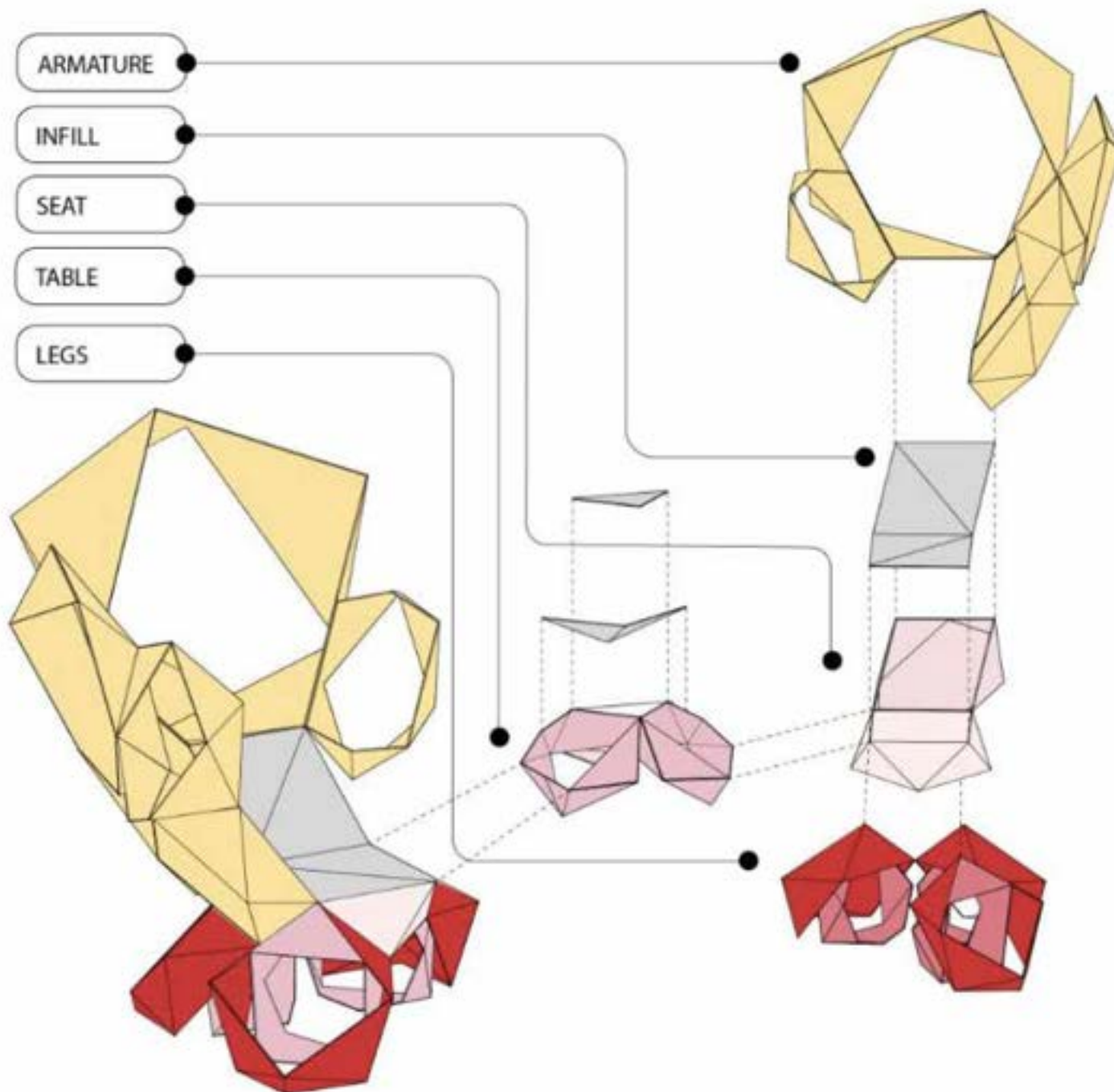
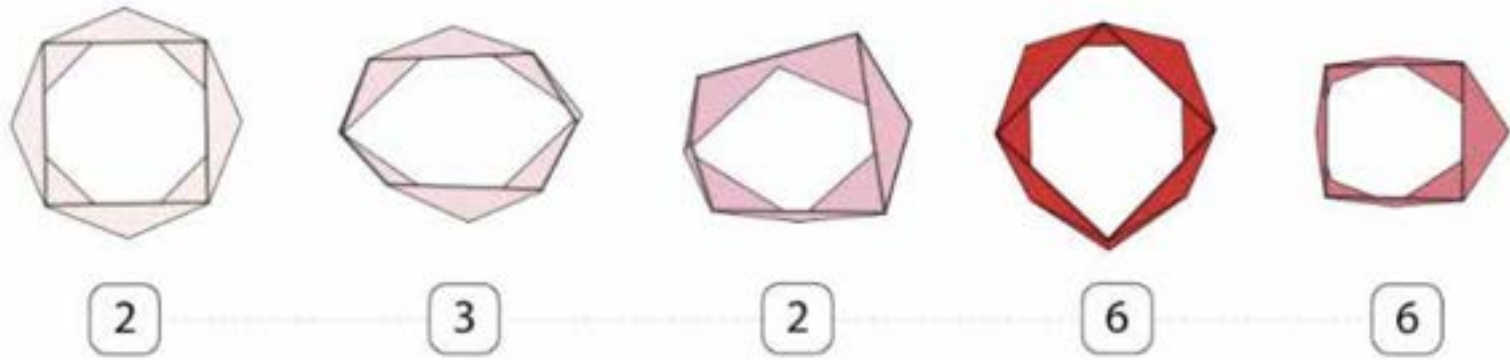
(bottom) exploration in creating privacy for armatures:

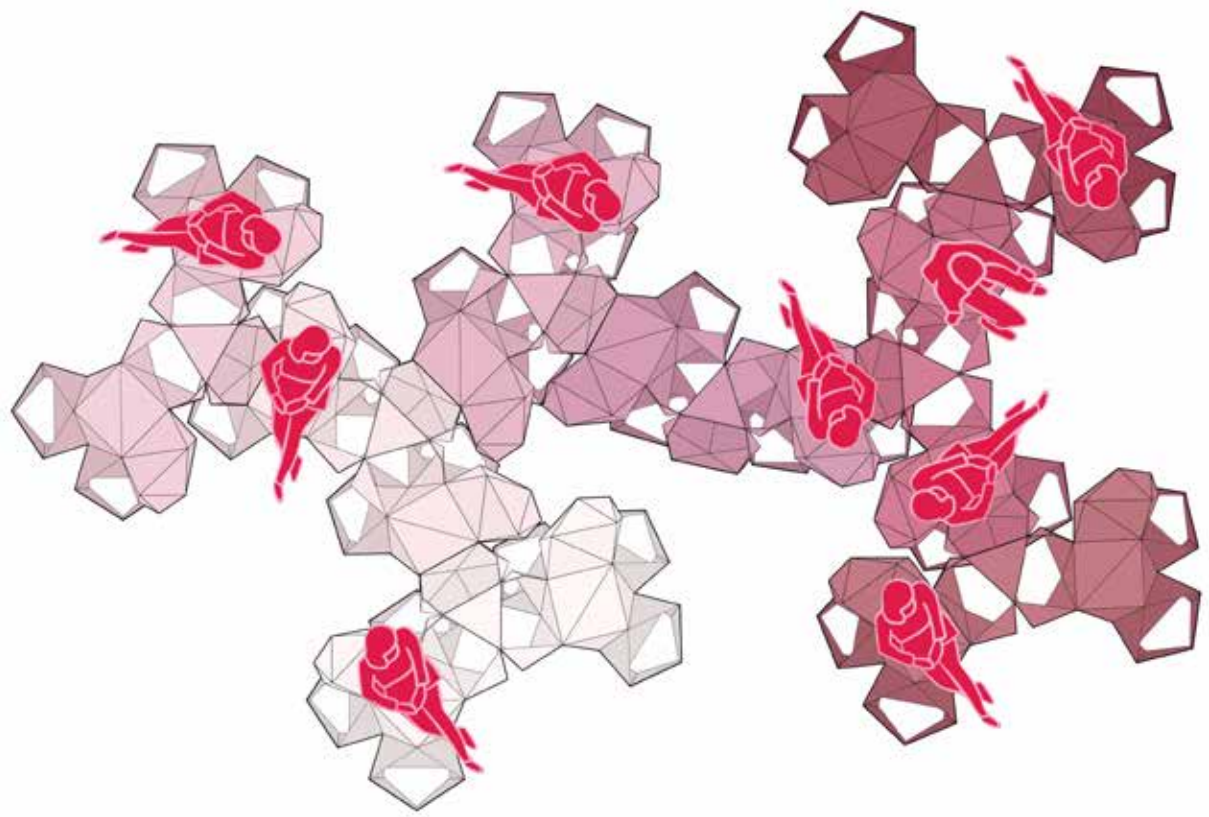
using different scales of one component | using same-sized components



plan and section

Instead of having two opposing separated seats, they are now connected by a small table constructed using the same component and the face-to-face attachment technique. Besides acting as a storage surface, the table also suggests spontaneous acts such as being a third seat.





branching and endless possibilities

the overall layout starts with one set of seats then multiplies as they rotate, creating a division of space but also a potential for interconnected conversations.



MULTIGENERATIONAL HOUSING

Proposals providing new solutions for multigenerational housing for the neighborhood of Bedford- Stuyvesant, Brooklyn, with the emphasis on each residential unit and their relationship to the collective social spaces shared throughout the entire building.



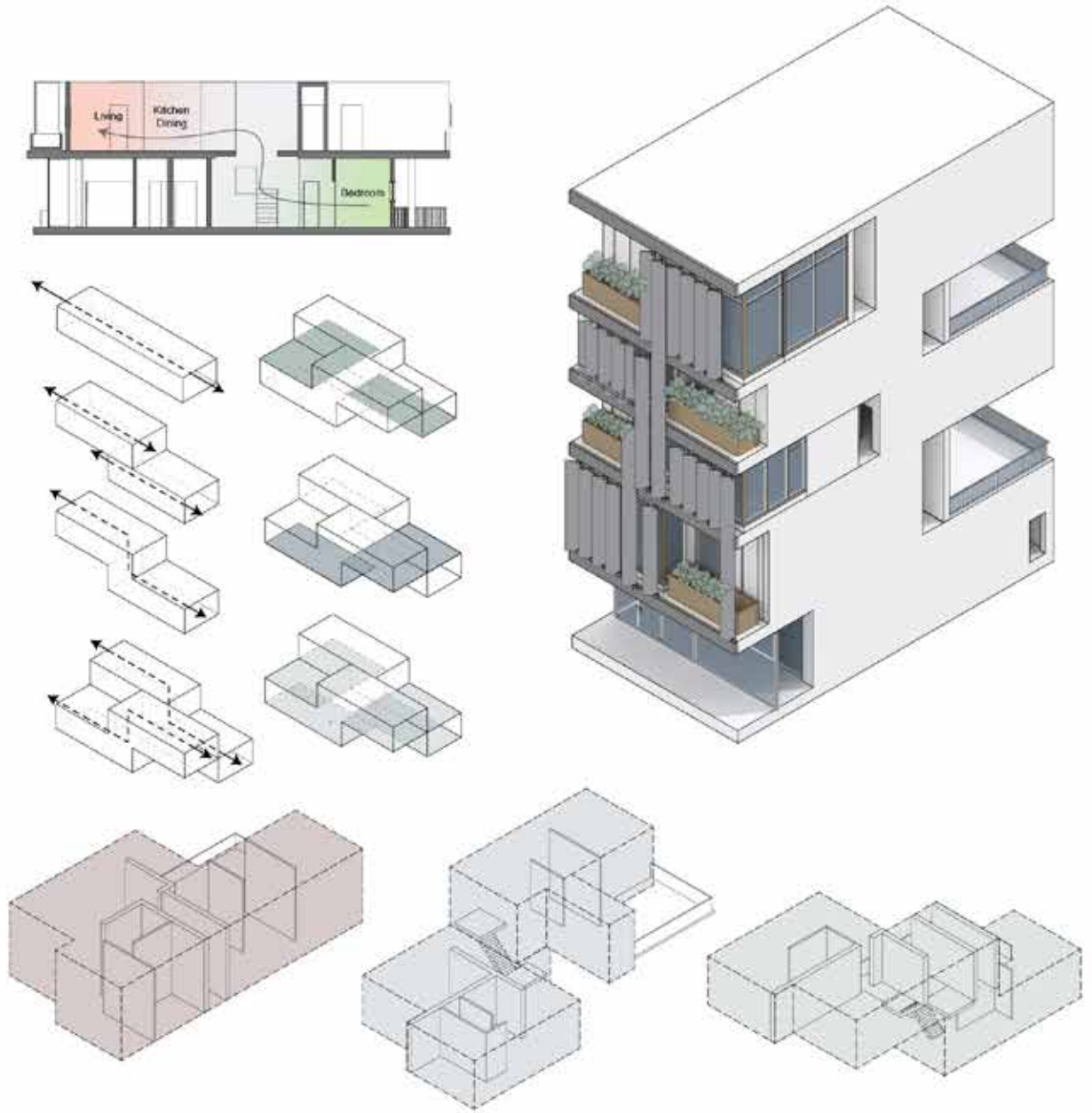
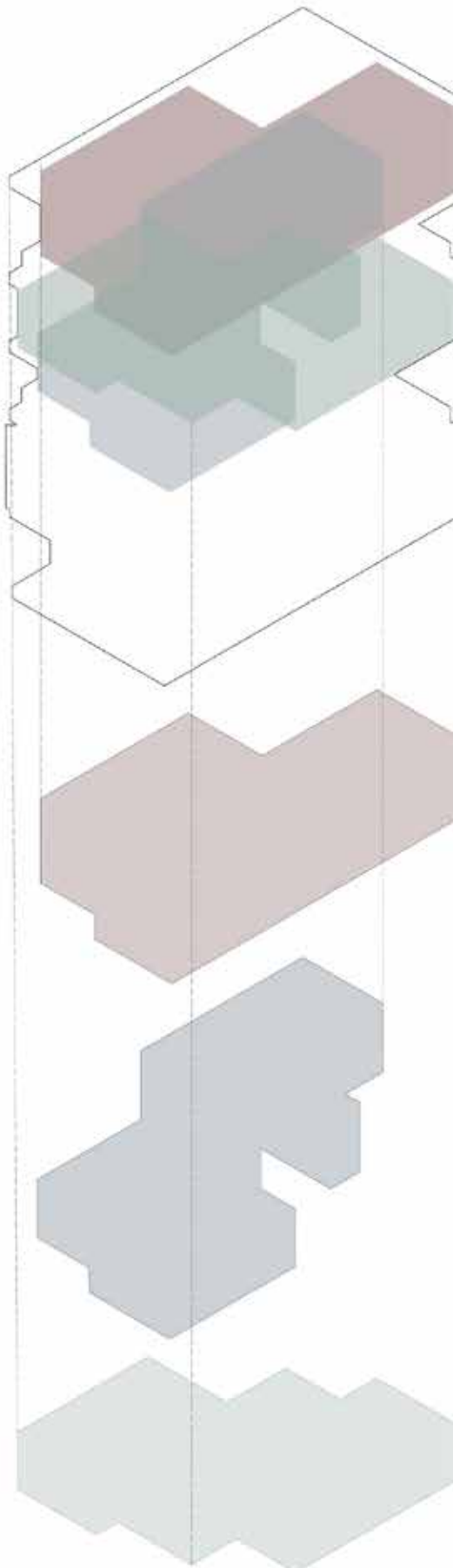
Architecture Design Studio 5

in collaboration with
Dorothy Balansag

tutors

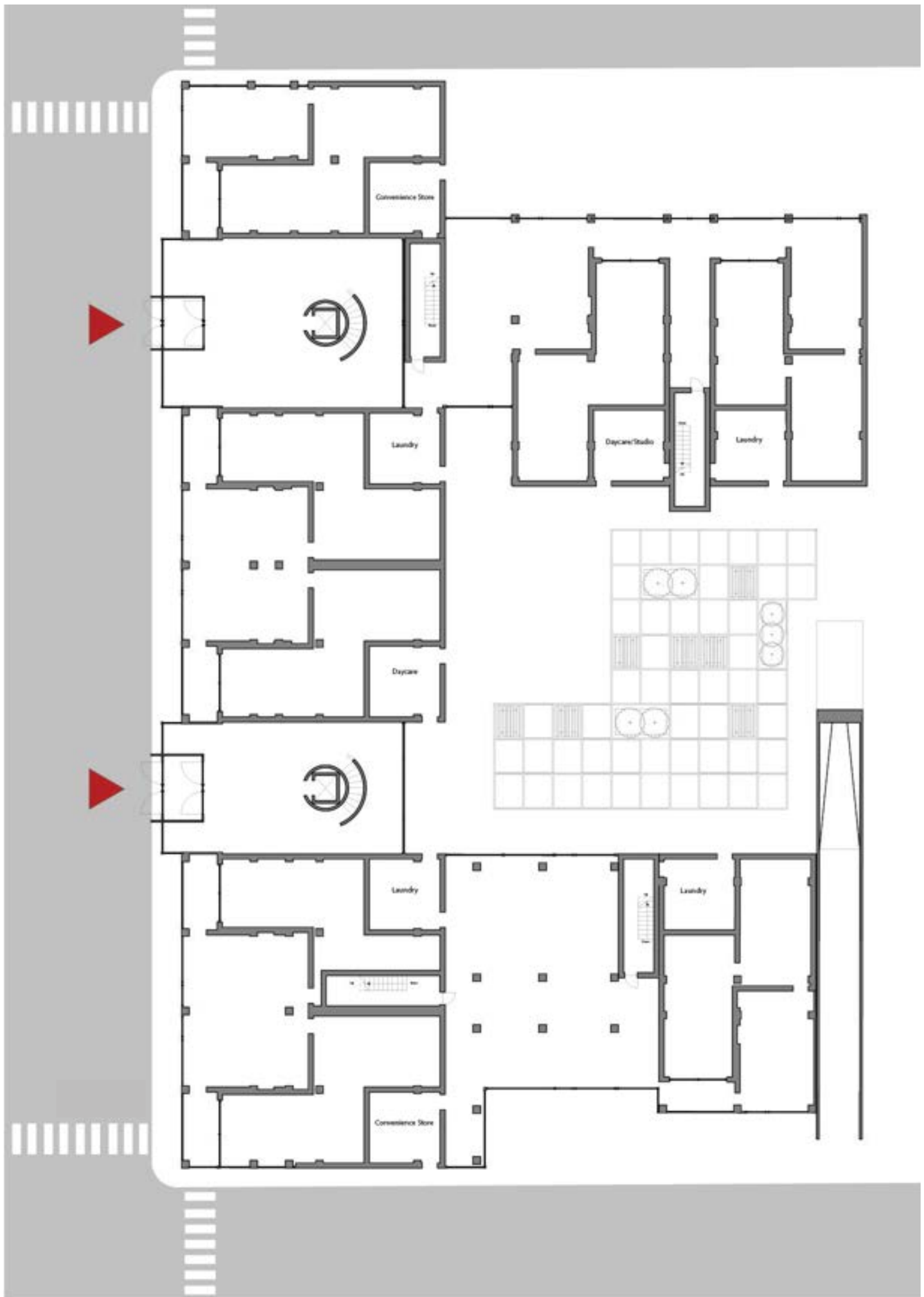
Prof. Thomas Hanrahan
Christina Chu-Garcia
Markus Wilmers
David Jones

Globalization and social changes lead to new emerging domestic architectural proposals. Changes in family behavior and normative understanding of the family in recent decades have led to a much greater range of family structures and forms. Our lives are no longer determined only by class, religion, traditions, family and family relationships, but also by the labor market, the welfare state and the education system. These changes in the family model open the way to a new coexistence, joint work and joint economies. Therefore, for this studio, we investigated different cohousing strategies in which social space is accentuated.



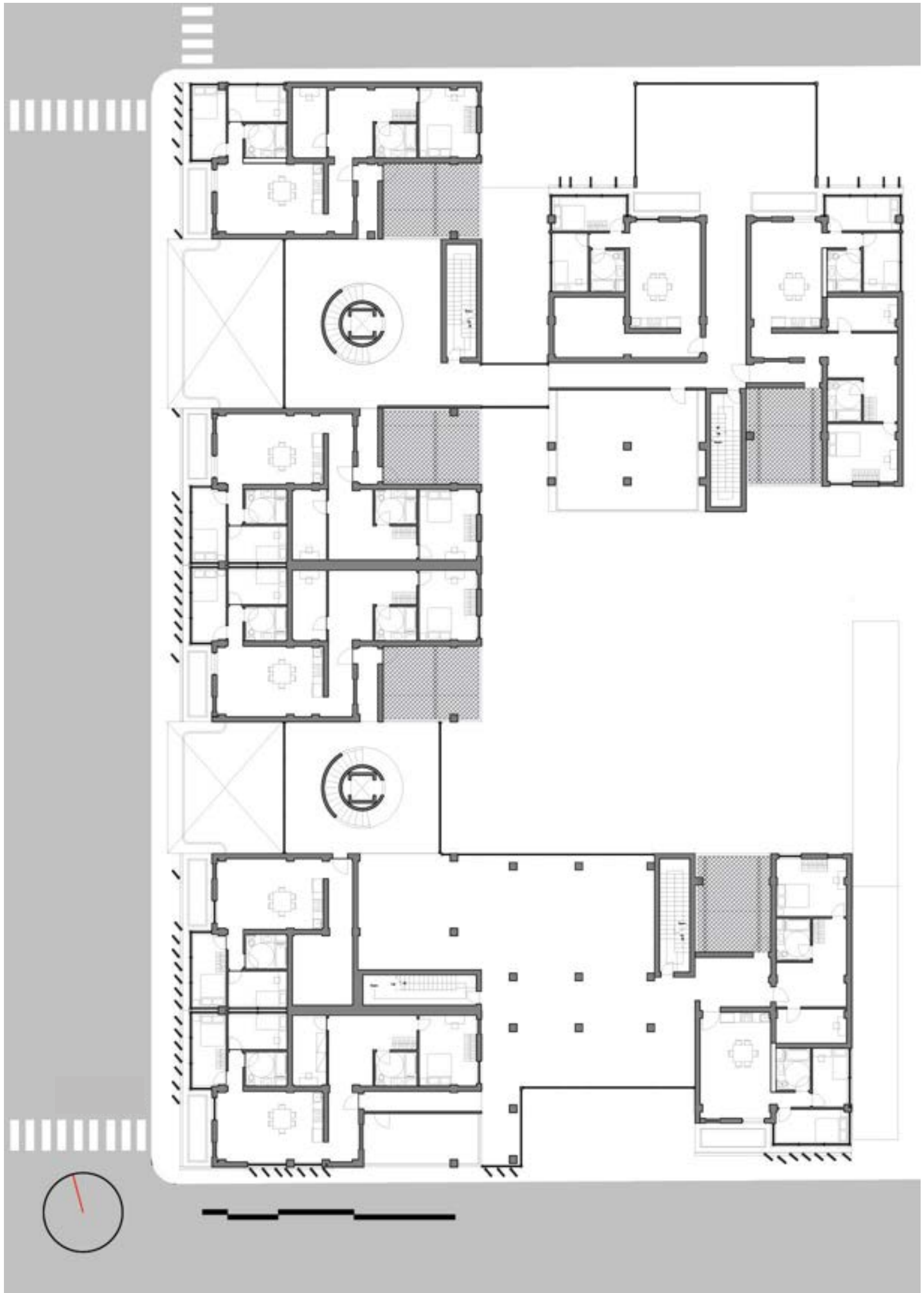
The designs of the residential units accommodate families with different number of members and ages variety. Double-height region is included in certain modules to ensure natural ventilation and opened spaces. Situated on top of one another, each unit's level obtains its own backyard, framing an alternating pattern in elevation.



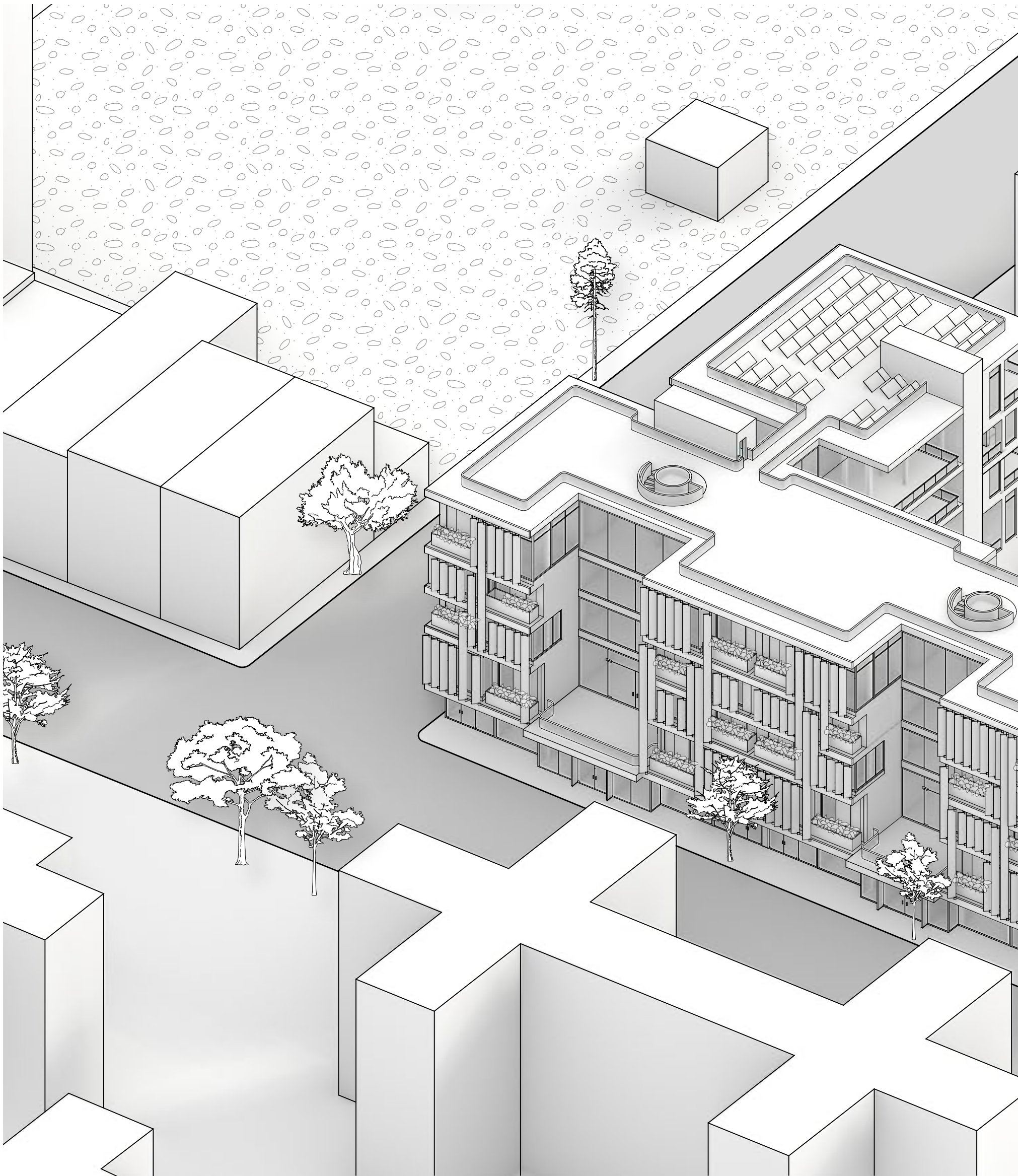


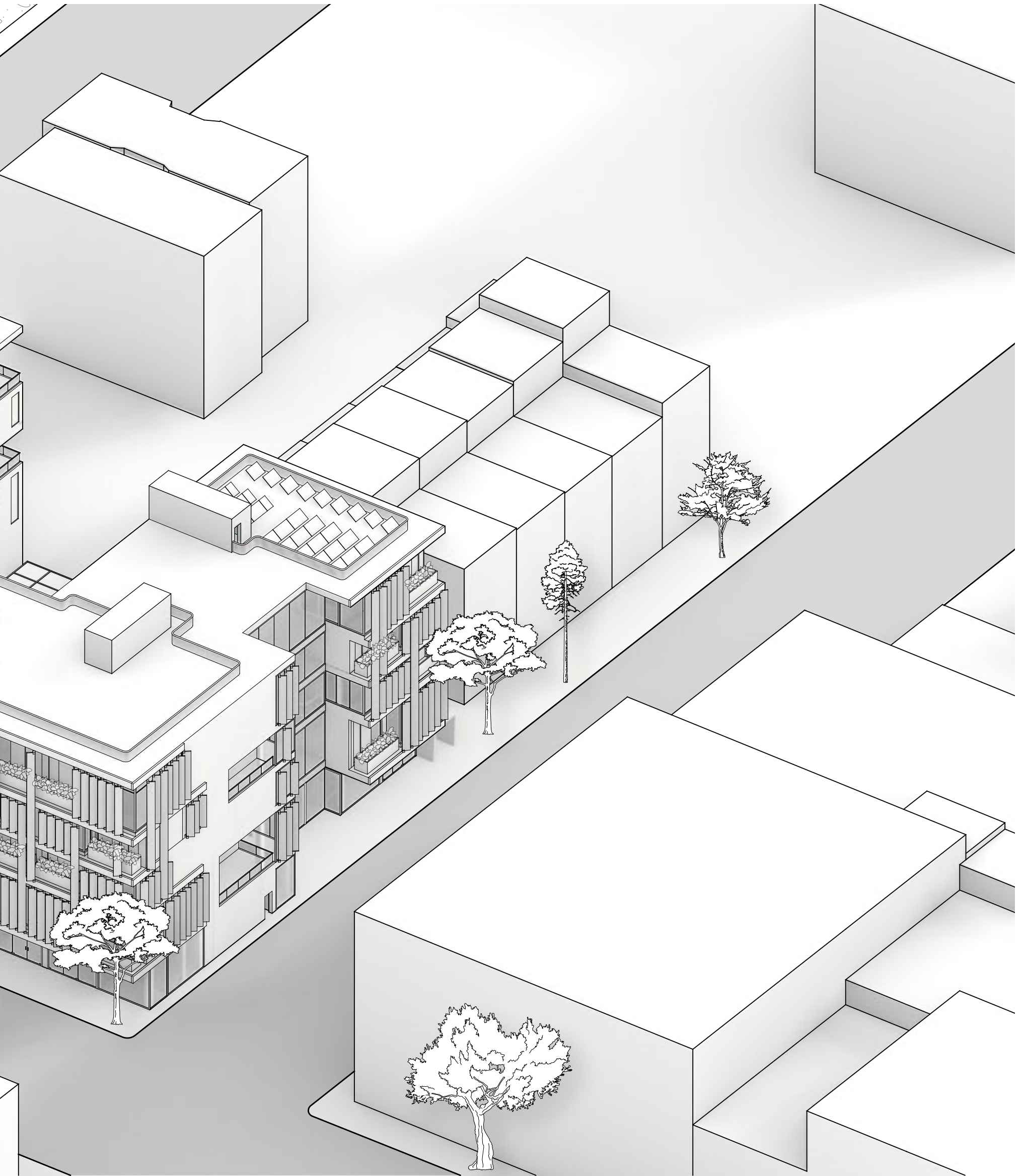
Contrasting to the grid system of the stacked modules, circular decorative staircases encasing elevators are places in the main lobbies, inviting social gatherings and conversations.

1:8 | ground floor



second floor | 1:8



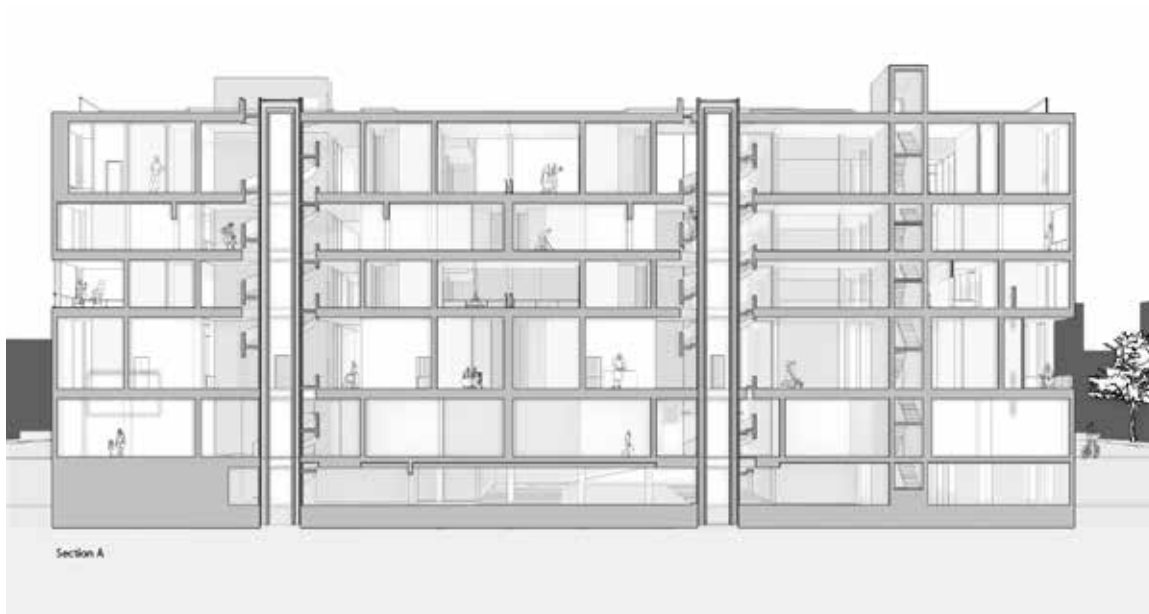


axonometric view

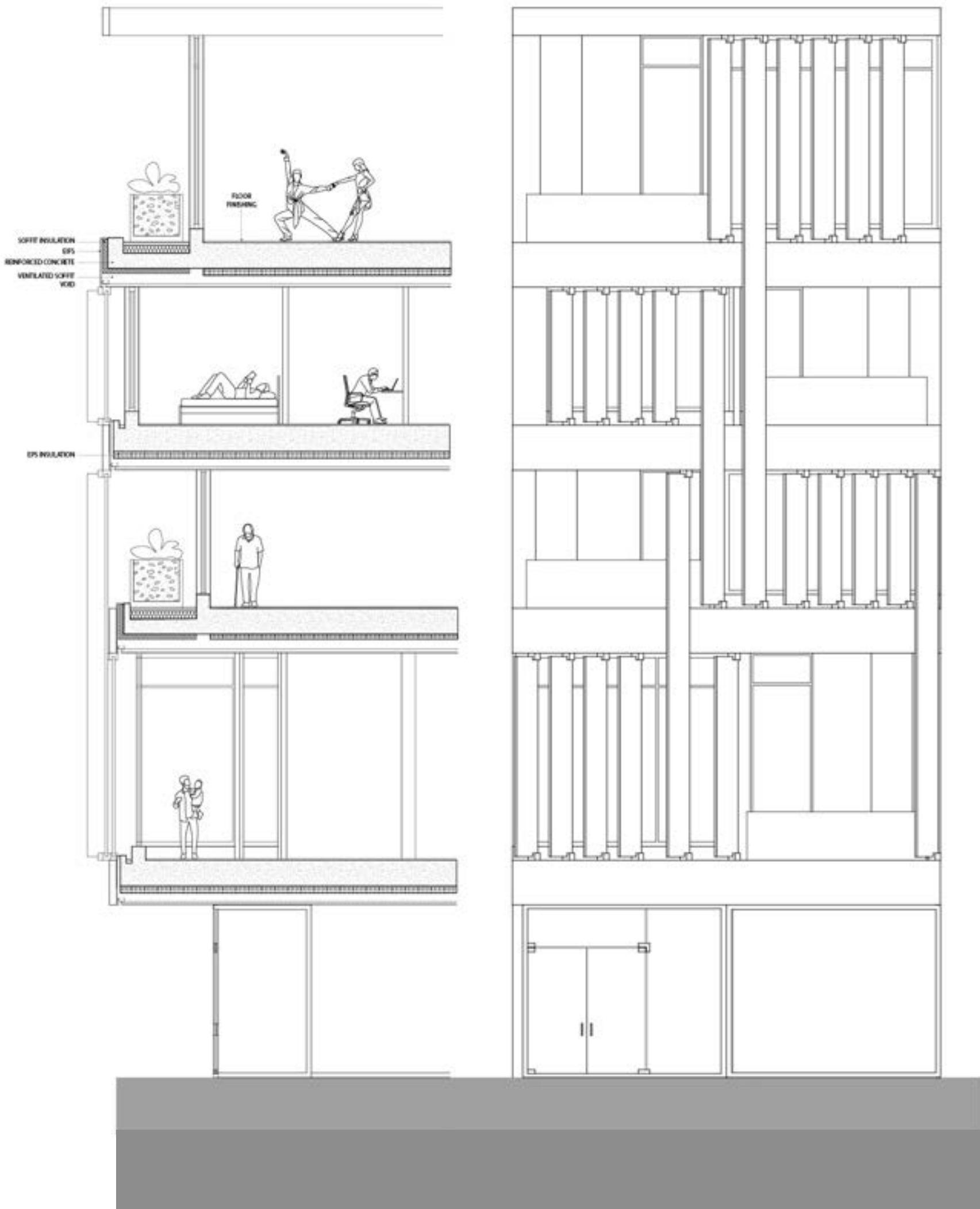


Vertical fins position themselves as not only shading devices but also emphasized the checkerboard effects on our facade. Between the contrast between porosity and flatness of the front and back elevation of the building is the intersection of both on the side facades, providing a variety of visual experiences for pedestrians.

Front elevation (top) | Back elevation (middle)
Side Facade (bottom left)



perspective sections



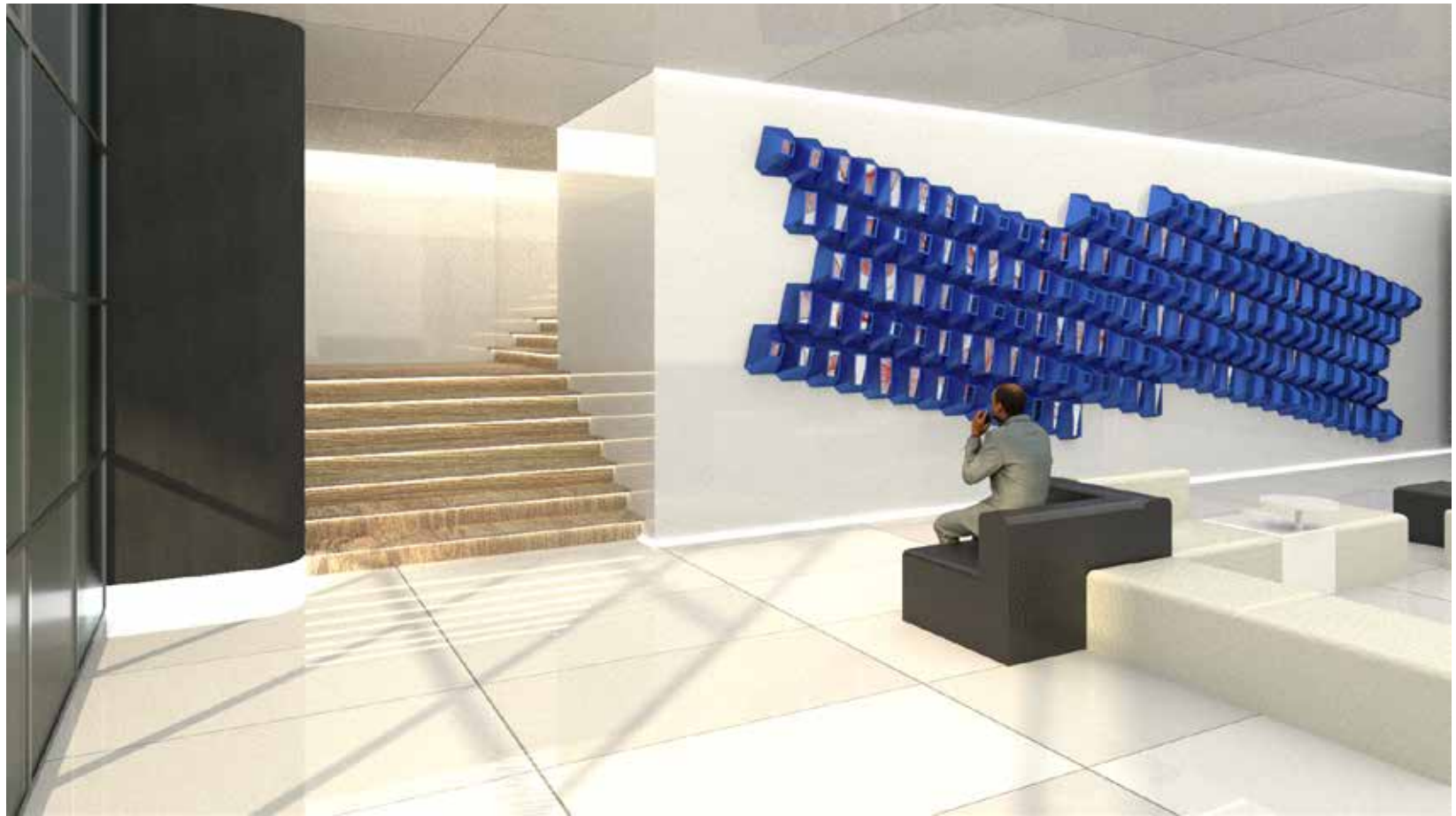
detailed wall section | facade



communal back yard | mezzanine

PARAMETRIC WALL IN LOBBY

Design and realization of a parametric wall developing from an independent module for the chosen lobby - the Jiu Mao Jiu Group Office Lobby, Guangzhou, China.

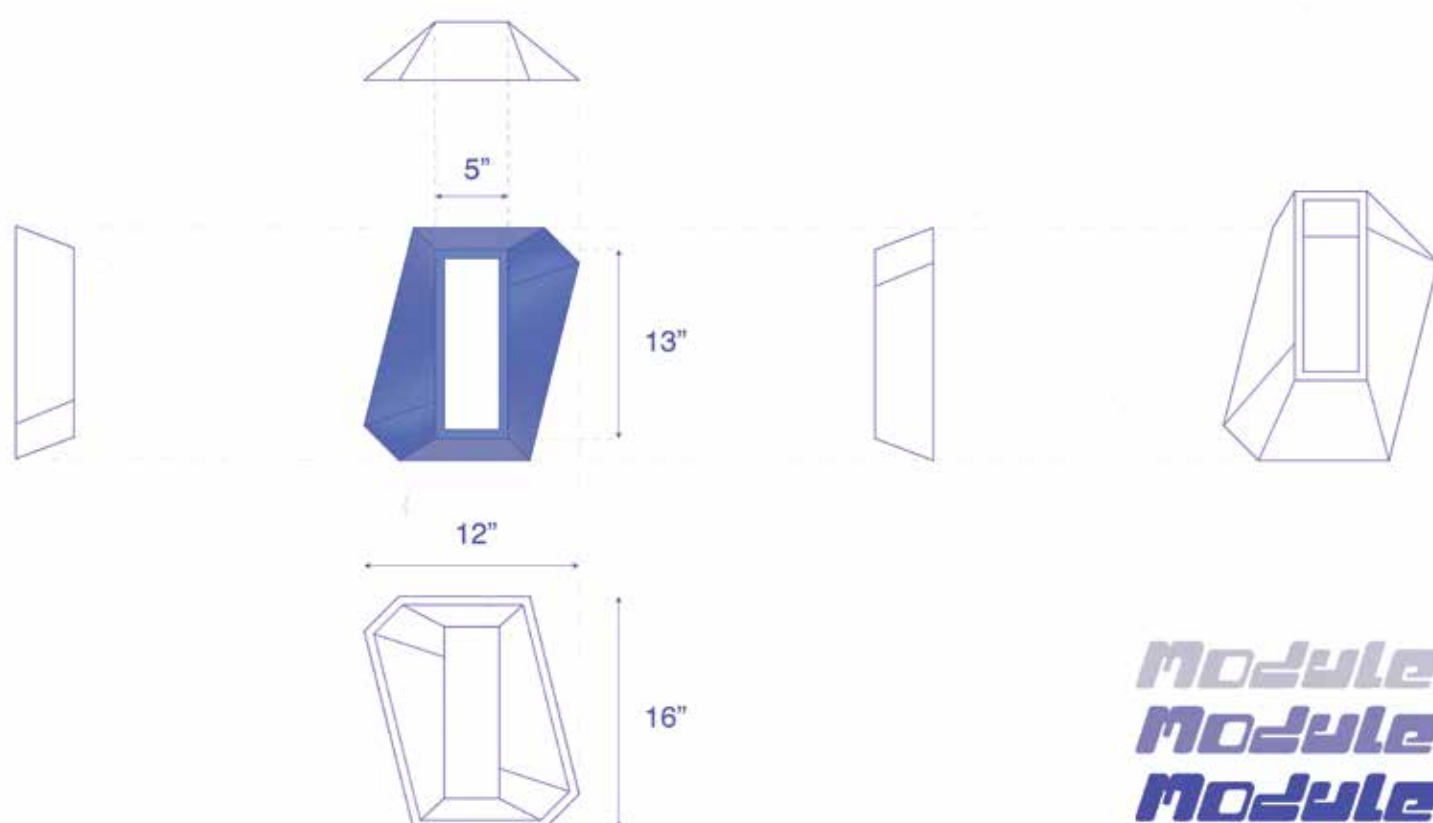


Representation 3

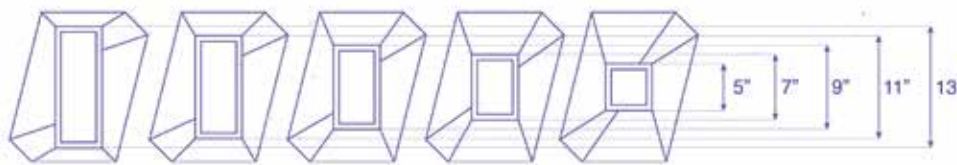
tutor

Prof. Sebastian Misiurek

This project explores the forms, variations, and aggregations of modularity. The choice of lobby should complement the parametric wall concept, scale, and materiality. As a result, a range of modules with different apertures' sizes and rotations are adapted in order to represent the wave illusion. The use of metallic material integrates in the setting of such modern lobby.



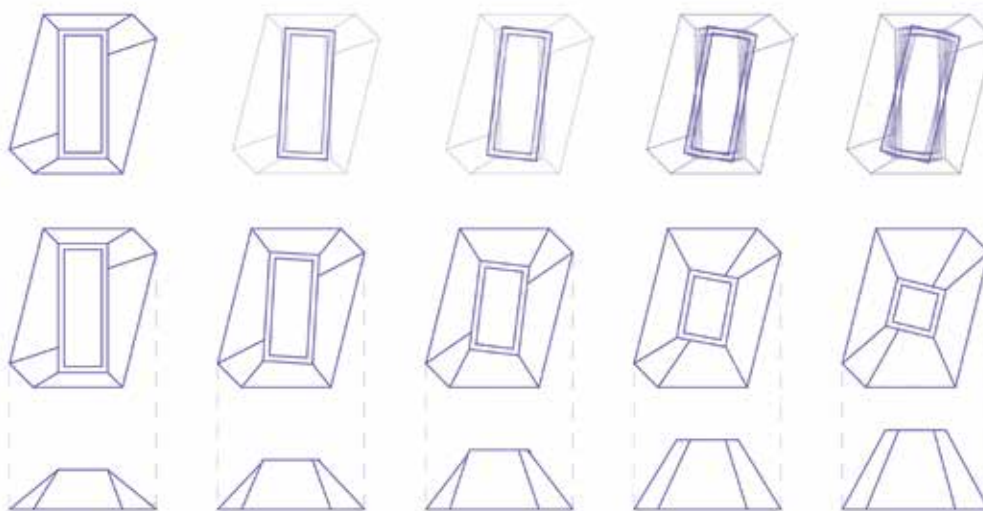
Aperture



Depth

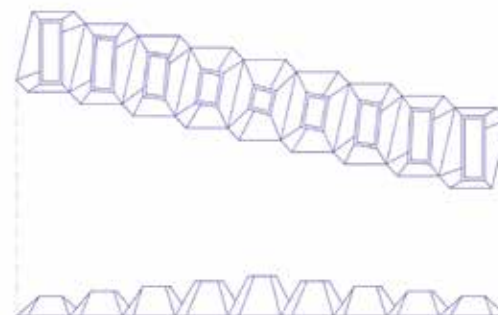
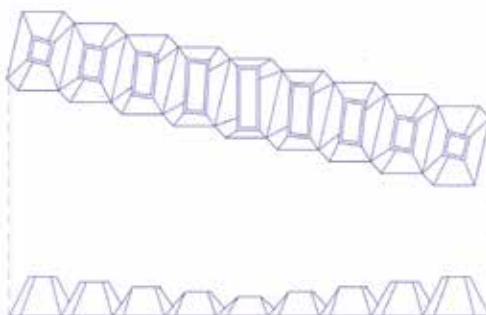
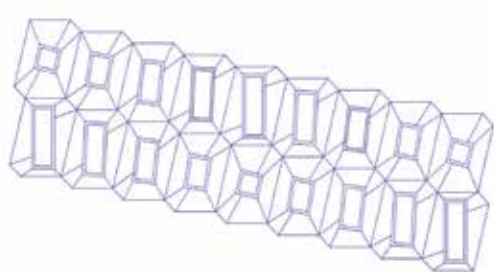
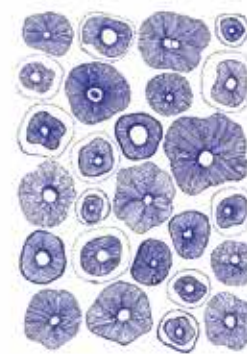


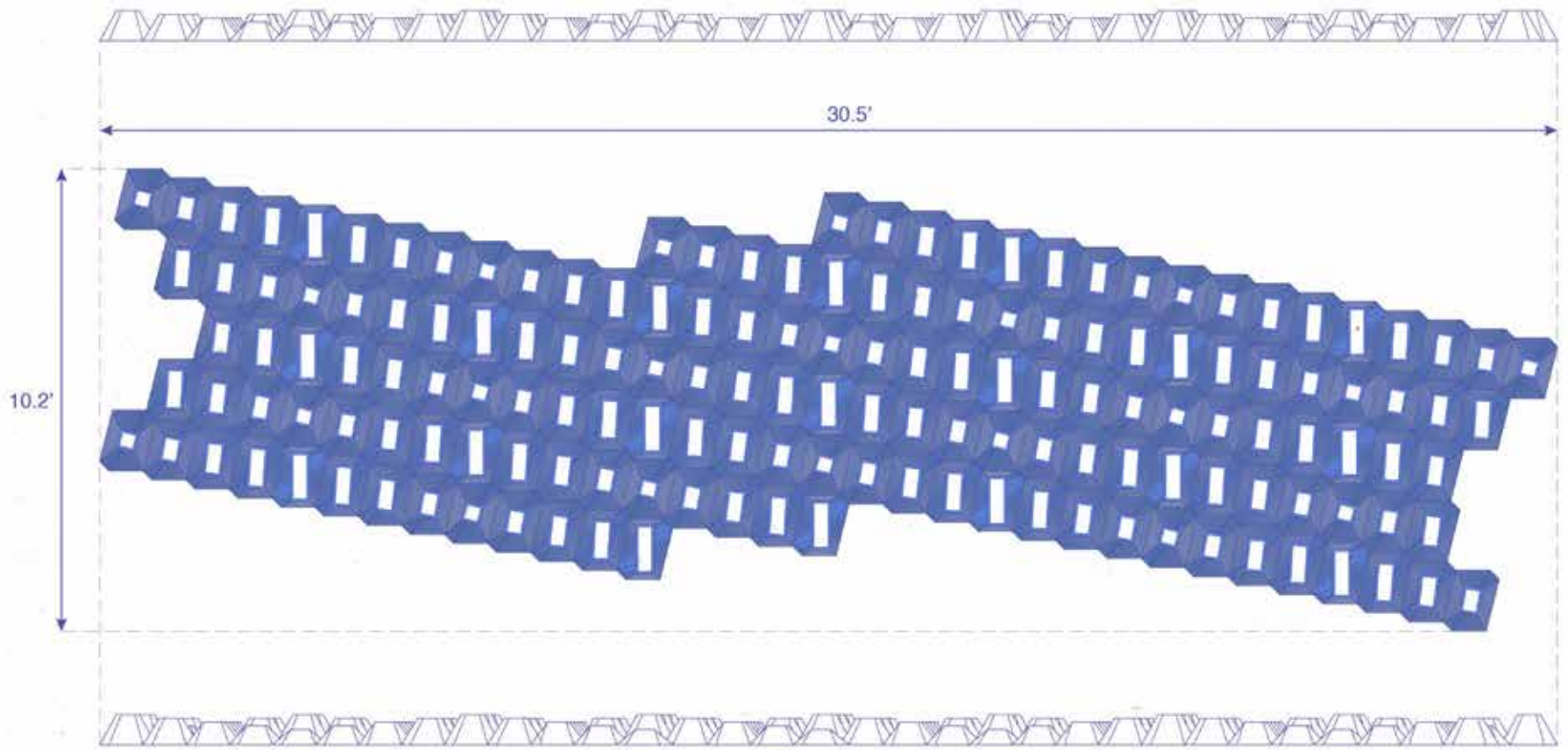
Rotation



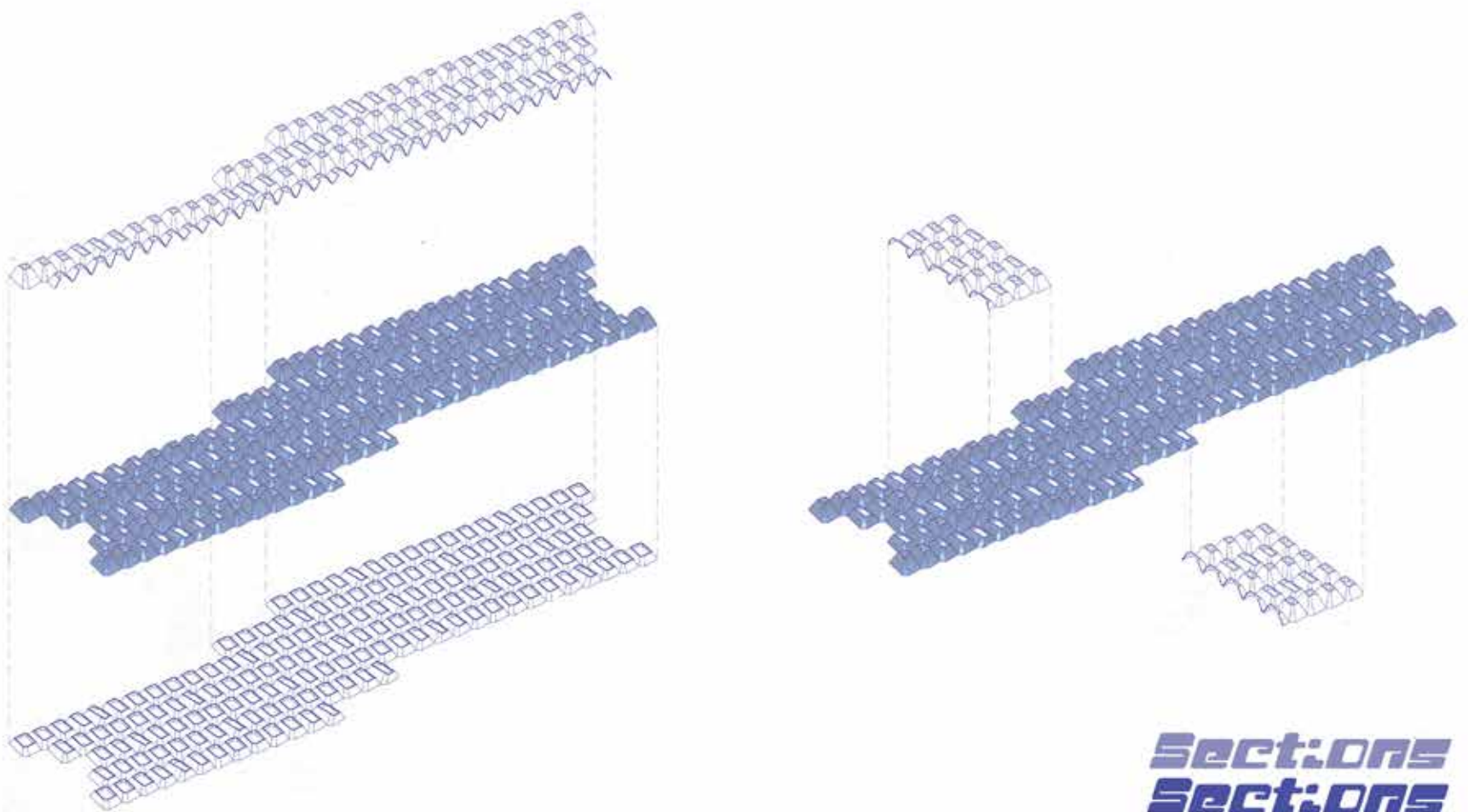
VARIES

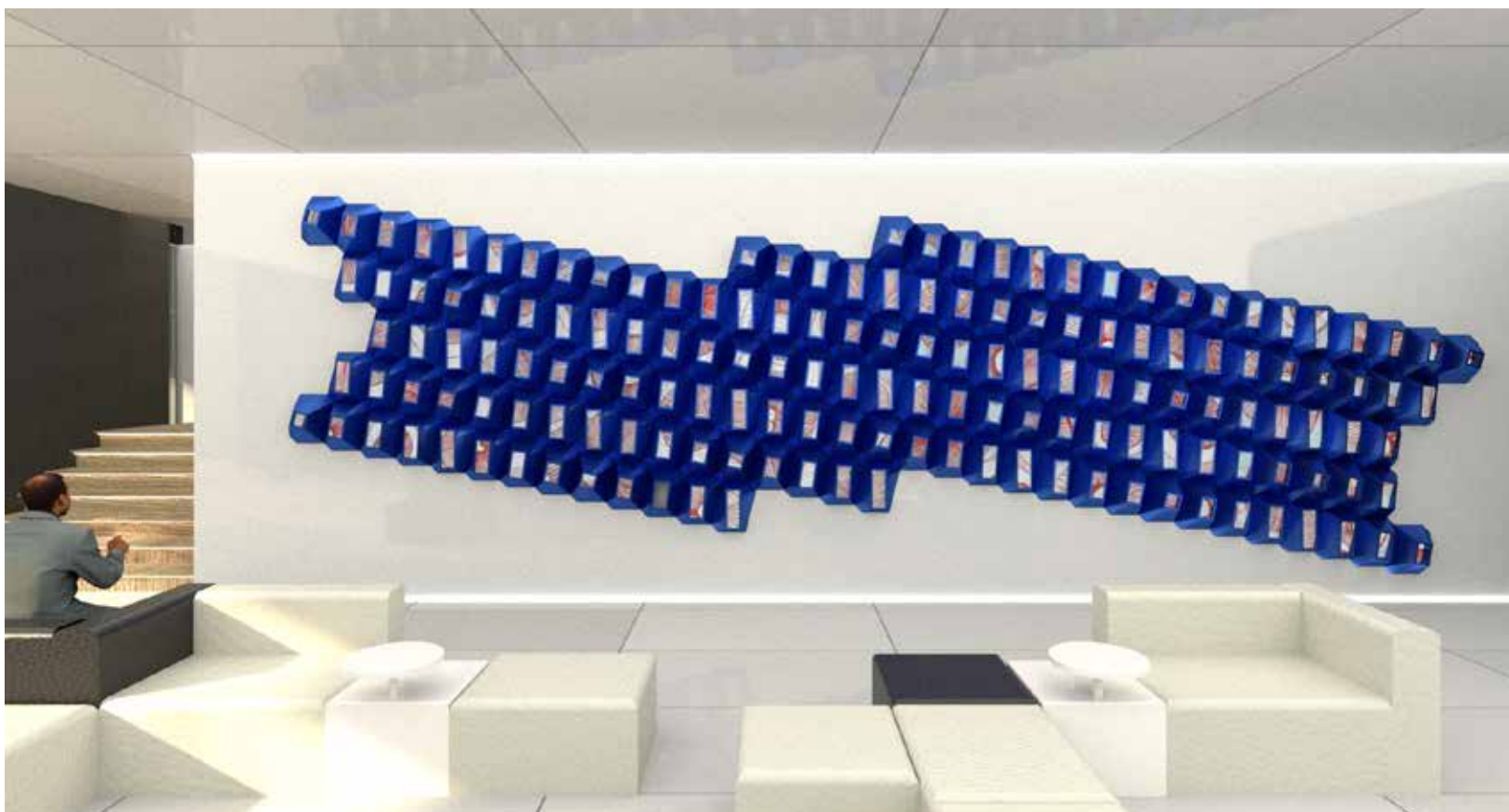
Concept





Plan - Elevations





FAIRFIELD BY MARRIOTT

Experimental interior visualizations of three hotel rooms with different layouts belong to the Fairfield by Marriott project in South Binh Duong, Vietnam.



Internship Summer 2022

tutor

Nguyen Duc Vinh

Nguyen Van Linh



bedroom I overall plan



bedroom views



living room



bedroom | bathroom

