Portfolio

Yian Liu Selected Work 2018-2023

Table of Content

1.Scaffodia

Tropical High Rise in Auroville, India

Pg. 4-13

2.Reviving Intimacy Cooper Hewitt Renovation

Pg. 14-19

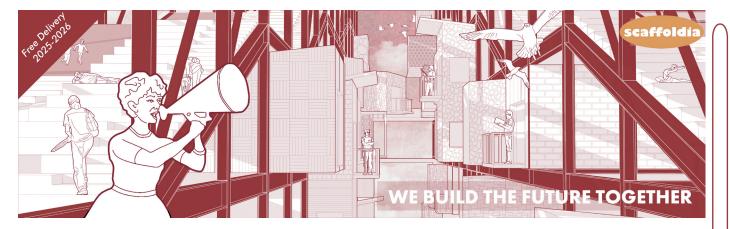
3.Levitating Landscape Garden Housing In La Perla Garden

Pg. 20-42

4.Other Work Rendering Systems

Pg. 80-83







0000 • 00000

Do what we can do now to incite more potentials for the future.

RENT NOW

APPLY TODAY

Scaffoldia

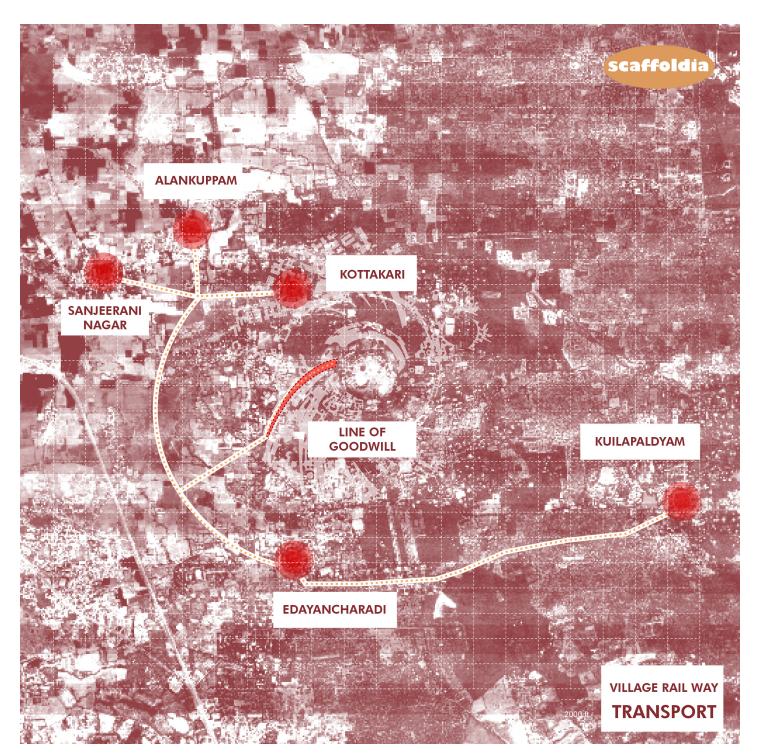
Tropical High Rise in Auroville India

2023 Summer
Advanced Architectural Design Studio
Group Work
with Nuo Lyu
Instructor Professor Anupama Kundoo

Human settlements need to reorganize themselves in the interest of reducing resource consumption while enhancing the human potential to propel human society forward. Taking note of the growing imbalances in current urbanisation, the studio will use integral thinking thereby addressing environmental, social and economic impacts of development. Given the growing population on the given available land in India, it is urgent that new models be found for compact cities with a greater sense of community.

The need of the hour is to design self-reliant urban communities where people can live together in a relatively small area and yet find the diversity and all the useful services that can be accessed by foot. Built environments would be primarily be built out of local materials and local skills improving thereby local economy, while reducing the environmental impact. It can be imagined that such settlements would manage water and waste water integrally and efficiently where water thus saved can be directed to growing food within the urban areas; that renewable sources of energy can reduce reliance on fossil fuels and perhaps the urban areas can be generators of energy; that air quality would improve through keeping motorized vehicles at bay, while achieving silent and healthy environments where residents feel nurtured, happier, healthier and more peaceful.

5



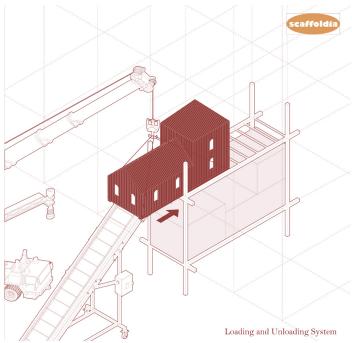
Auroville, A City in the Making

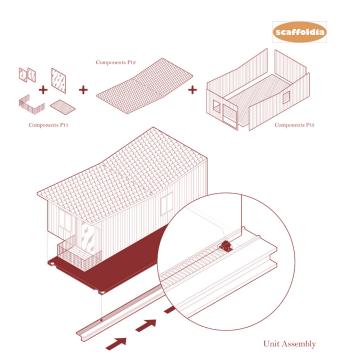
Auroville, a 'city-in-the-making' in South India was founded in 1968, inspired by the vision of Aurobindo Ghose, as a model city for the future where all aspects of city life could be radically rethought as an integral experiment. This project falls under the Indian Ministry of Education and is supported by UNESCO. The context of Auroville is radical in its relationship to land as a non-ownable resource belonging to the 'commons'. Alongside new ideas of mobility, circular economy and green infrastructure, non-ownership of land allows the development of collective living models that are not restricted by plot definitions but by land use definitions. The site lies within a compact residential area designed to house 8000 inhabitants and their related services.

Thumbnail of the Line of GoodWill







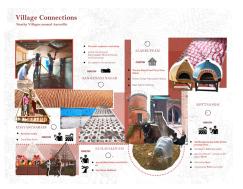


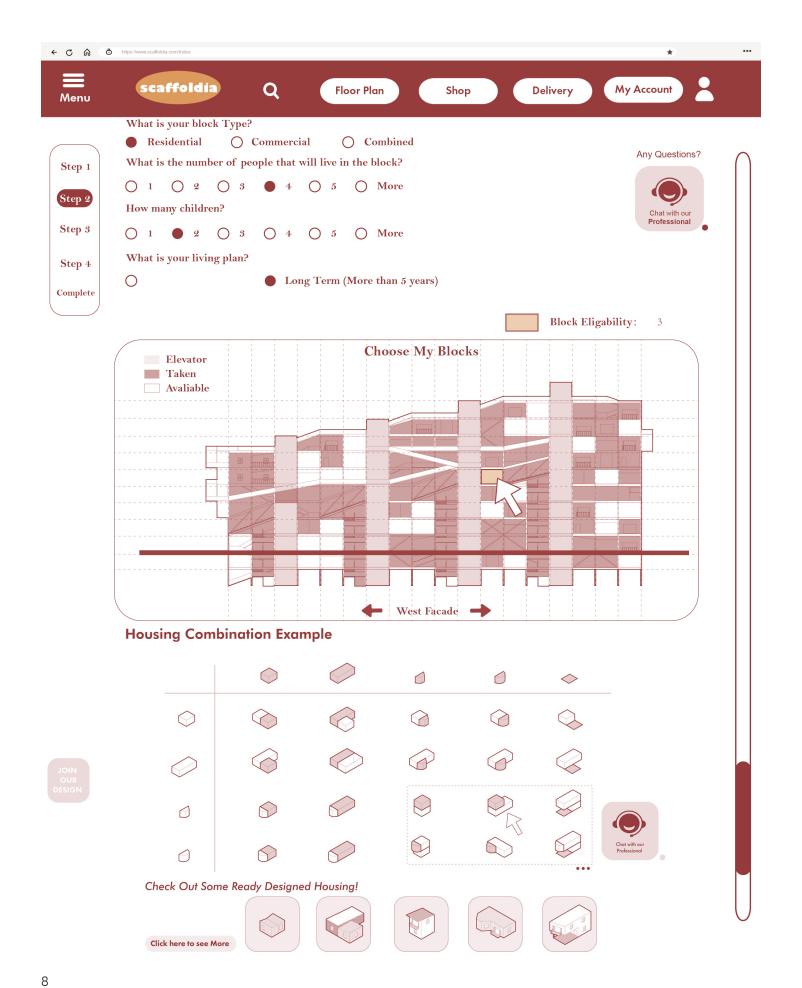


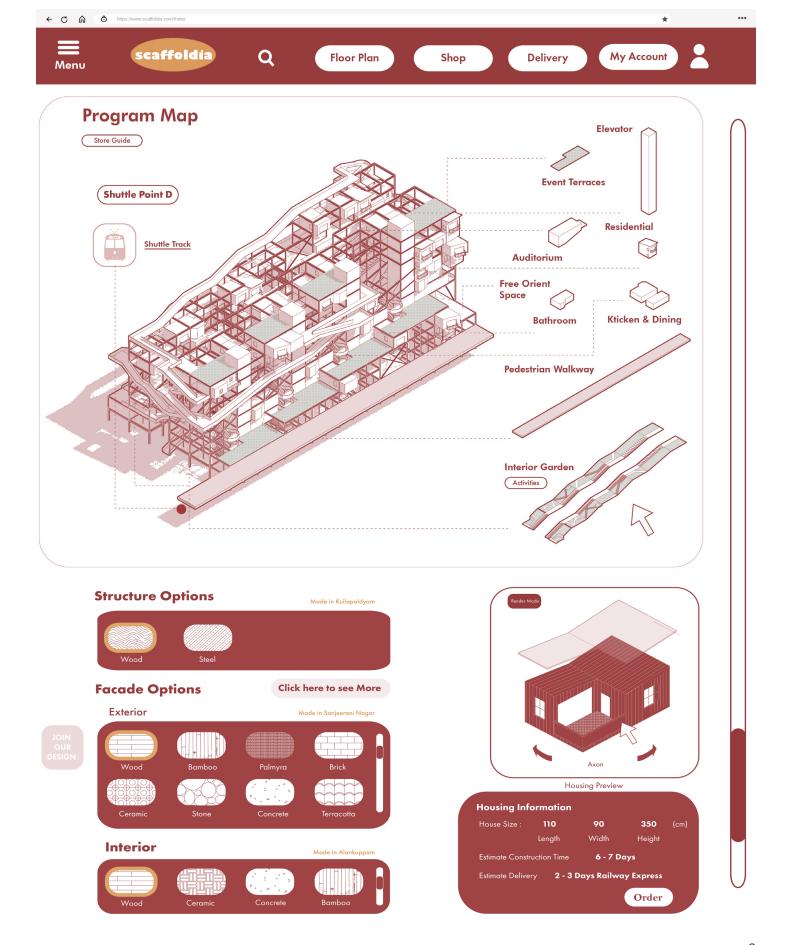
The Manufacturing and Erection of Living Units

The process of manufacturing living units commences with sourcing raw materials from diverse villages surrounding Auroville. These materials are then skillfully assembled within local factories, effectively contributing to the economy of the region. Following the manufacturing phase, the completed living units are transported to the Line of Goodwill via railway systems, subsequently hoisted into position through the use of cranes onto meticulously designed scaffolding systems. These scaffolding structures boast unique locking mechanisms, ensuring the secure placement of the living units. Ultimately, this process establishes an environment conducive to harmonious living and flourishing within the newfound community.

Thumbnail of the Village Connections

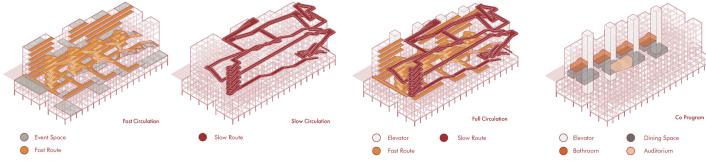






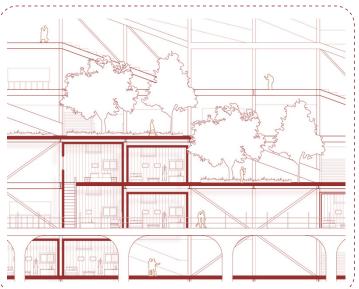


Typical Plan

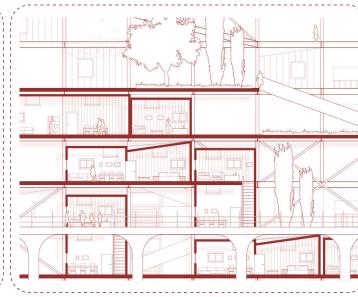


Circulation System

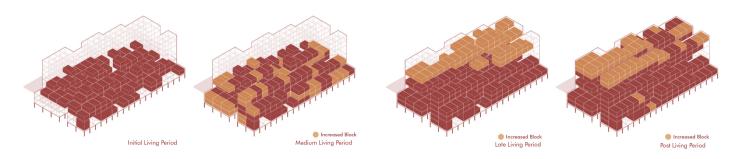
The circulation system is divided into two separate routes. The slower route runs outside the structure, maximizing residents' views of the surrounding context. Meanwhile, the faster route is designed for efficient internal movement within the building, meeting the need for swift travel between different areas of the structure.



Scene 1: Individual Living Unit Connects to Public Garden

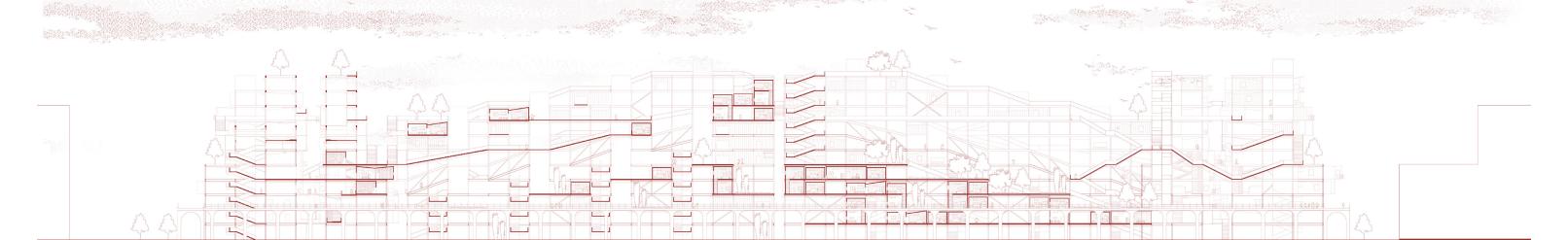


Scene 2: Sharing Living Community



Structure Dynamic Growing

The structure is continuously evolving and designed for ongoing growth, ensuring high adaptability to new materials and advancements over the next few decades.



Unfolding Section



Daytime Activities at Interior Garden







Reviving Intimacy

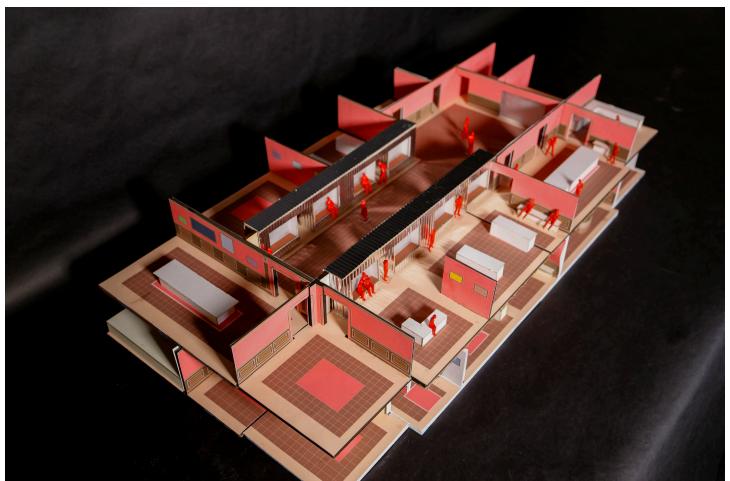
Cooper Hewitt Renovation

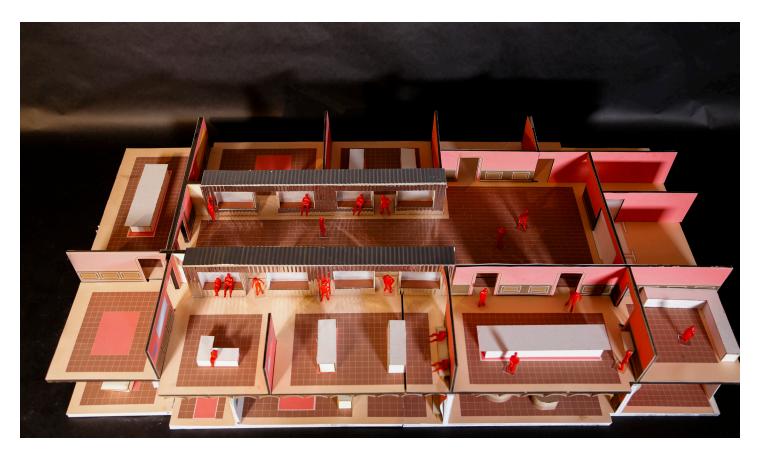
2023 Fall Advanced Architectural Design Studio V Invididual Work Instructor Professor Jing Liu (SO-IL)

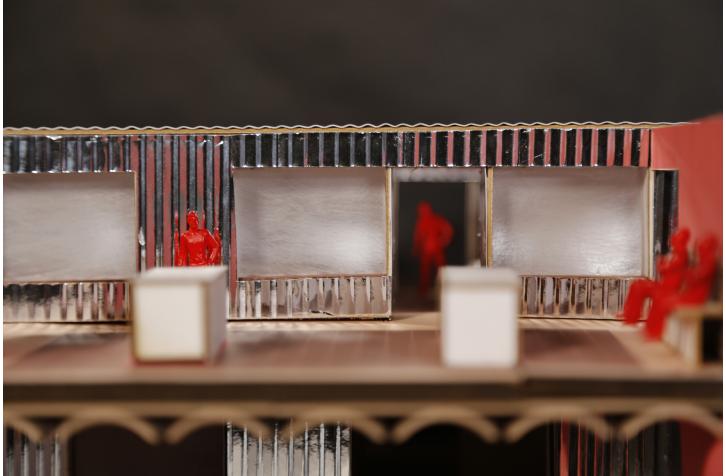
For a long time, architecture's infatuation with tabula rasa and newness - new forms, new media, new materials, new absolutes, has drawn a line between that which has passed and that which is to come. This divide however, is more conceptual than material. Everywhere around us, the old and new exist side by side or nest in each other for a myriad of reasons ranging from the pragmatic to the nostalgic; and ideas flow through time in a continuum. In fact, when we enter an environment conceived entirely of the new (or the old) and devoid of the other, it feels stifling. The old scribes history for the new; and the new thrusts the old into the present. In this studio we explore the impassioned love affair between the past and the coming. We take "disdained" architecture elements, whose "outdated forms", "obsolete programs", "(dis)functional parts", "expiring materials", and "antiquated systems" have fallen out of fashion with the time, and embed within, bond together, trace over and transform them anew.

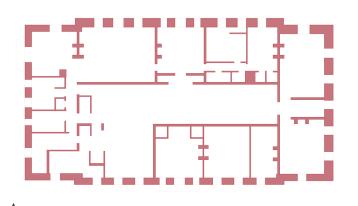














Architectural Plans of the Original House



































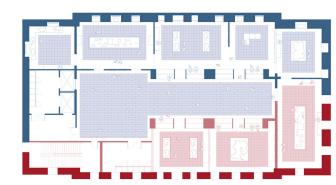
- A. Second Floor Original Plan
- B. Second Floor Re-Purpose Plan C. Third Floor Original Plan
- D. Third Floor Re-Purpose Plan
- E. Unit Diagram



Section of Housing Unit



Section of Exhibition



С



Levitating Landscape Garden Housing In La Perla Garden

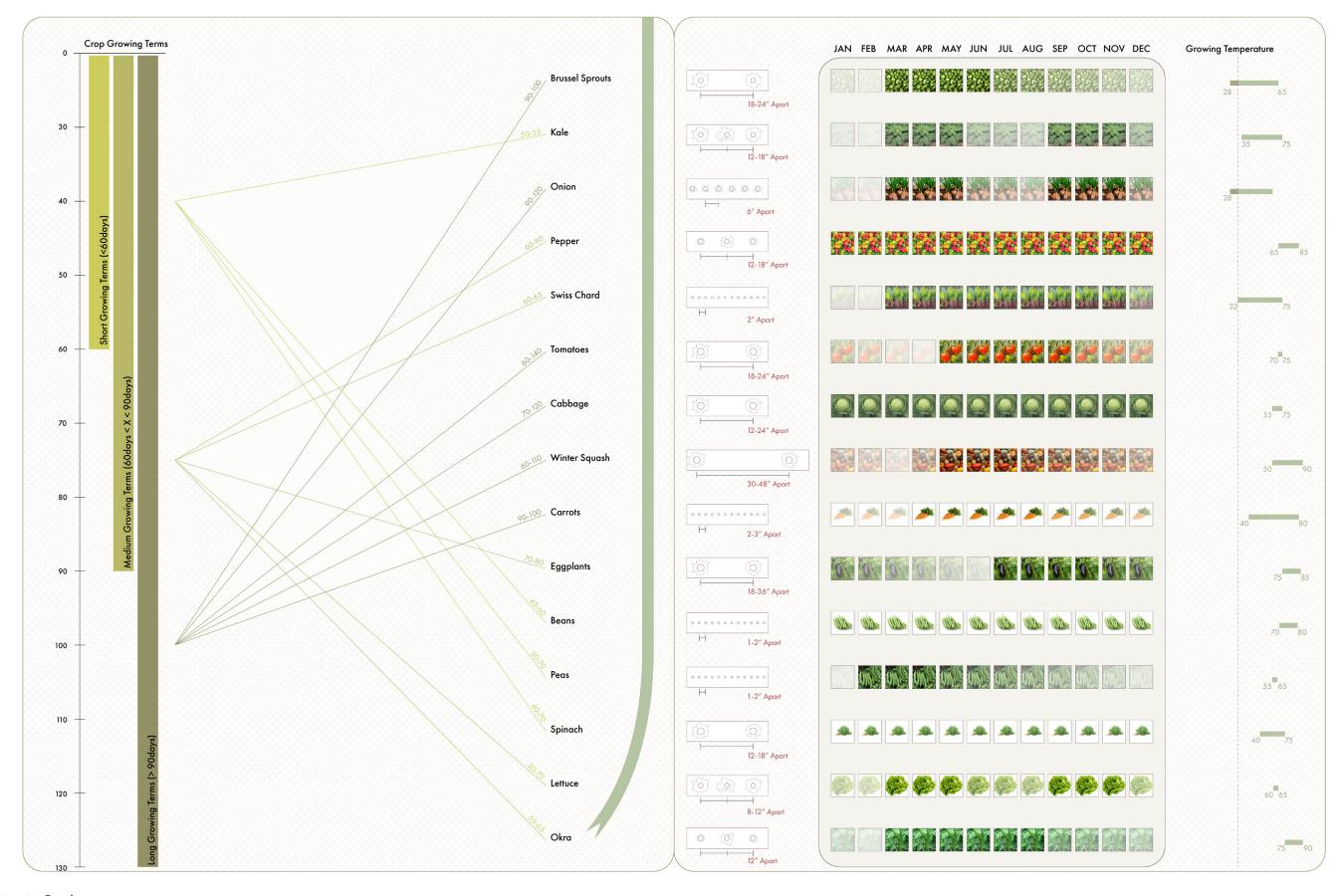
2024 Spring

Advanced Architectural Design Studio VI Individual Work Instructor Professor Hilary Sample

In considering the La Perla Garden's future amidst the surrounding context of public housing like NYCHA buildings and nearby public schools, as well as its proximity to Central Park, a delicate balance between urban development and green spaces must be struck. The growing need for additional housing in the area should be met while also preserving and enhancing the garden to ensure its continued vitality following the construction of new residential buildings.

Integrating the garden into the urban fabric can offer numerous benefits to the community, including providing a green sanctuary in the midst of urban density, promoting biodiversity, and offering residents a space for relaxation and recreation. By connecting the garden to the neighboring public housing complexes and schools through designated pathways or programs, the garden can become a hub for community engagement and education, fostering a sense of connection and ownership among residents.

Moreover, leveraging the proximity to Central Park as an inspiration for design elements within the garden can create a cohesive green network that enhances the overall urban landscape. Drawing upon Central Park's success in blending natural elements with urban living can guide the development of the La Perla Garden in a way that harmoniously integrates with its surroundings, offering a blueprint for sustainable urban development that prioritizes both housing needs and green spaces.



Manual of Planting in Garden



Site Plan of La Perla Garden



Plan of La Perla Garden



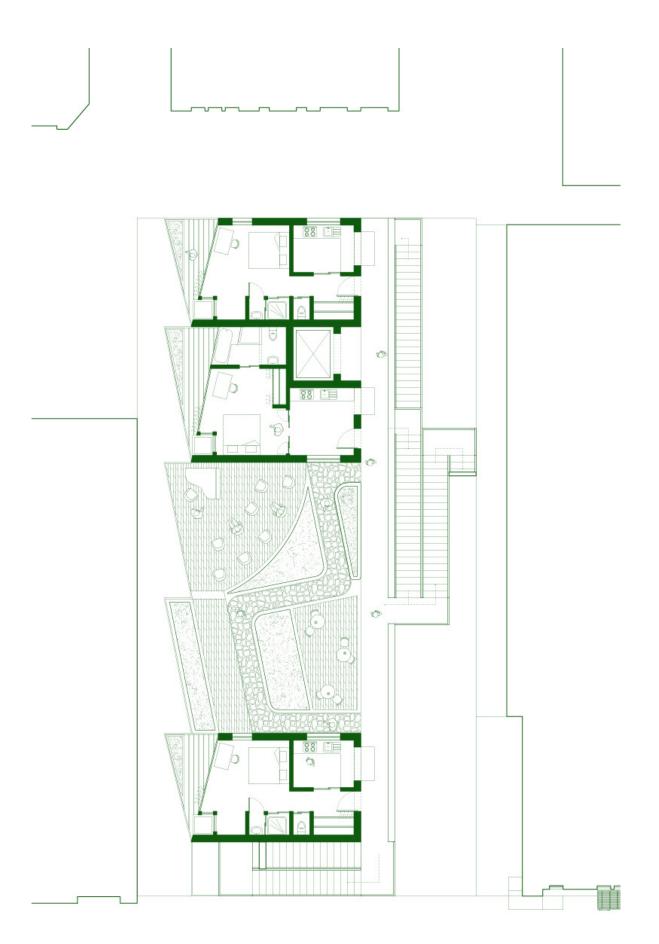
Section of La Perla Garden

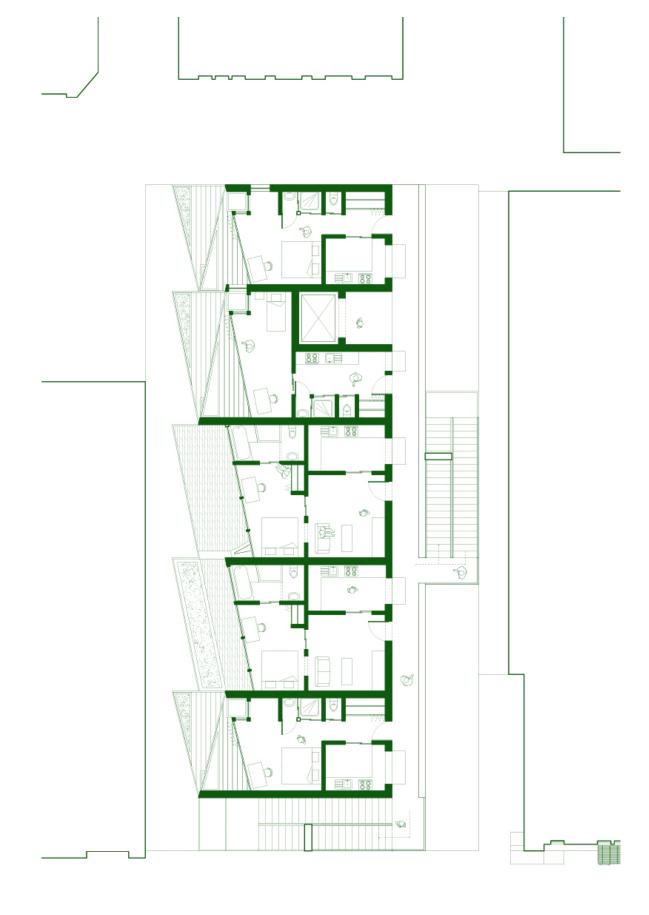


Frontal Axon of La Perla Garden

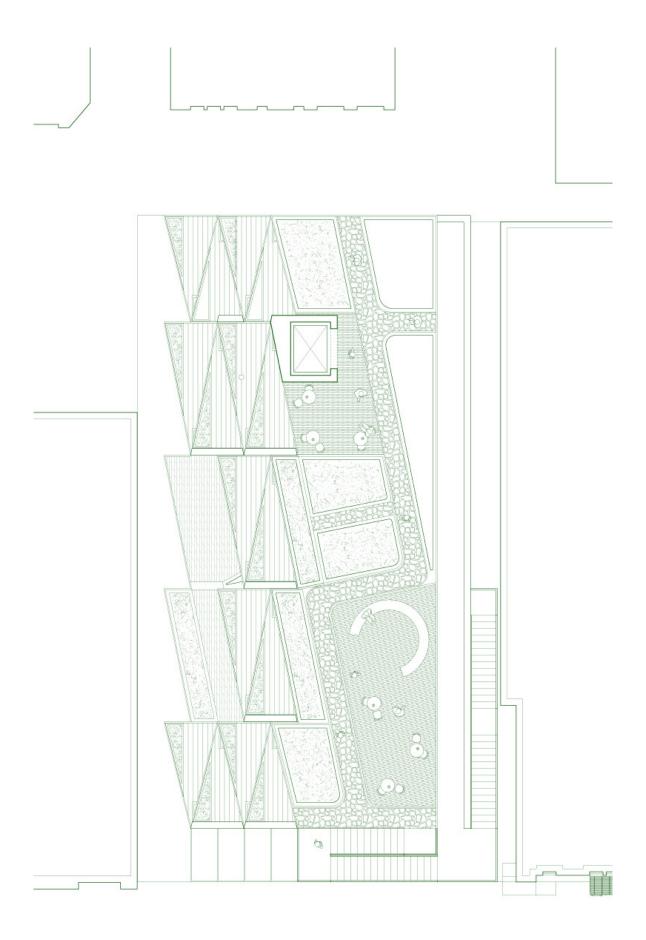


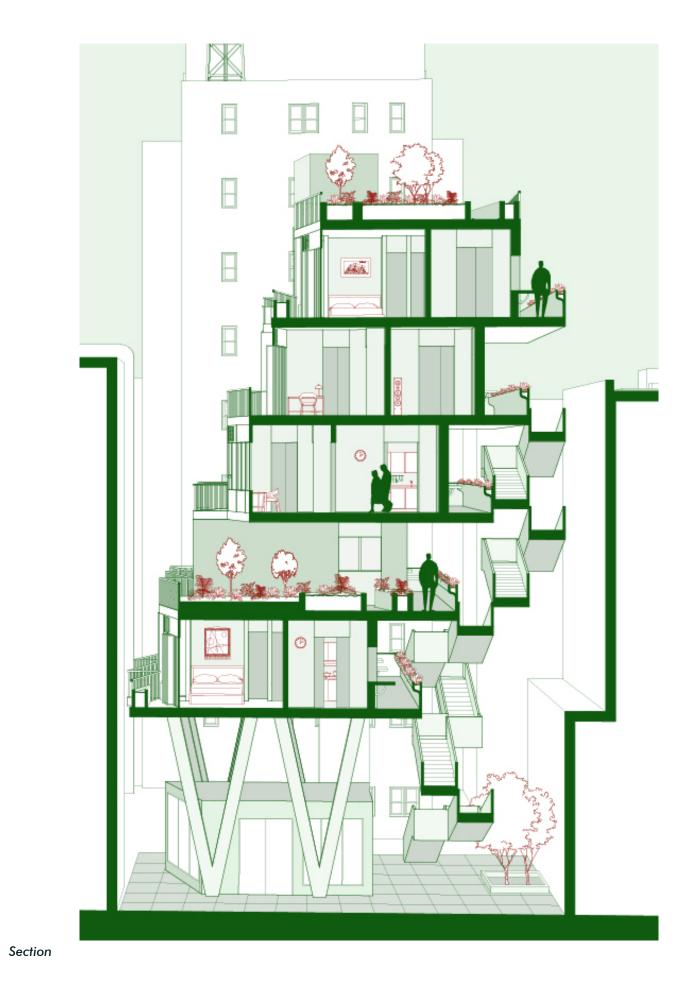
Frontal Axon of Housing





Courtyard Level Plan Typical Housing Unit Plan





Roof Garden Plan









Terrace Garden

Other Work







Rendering Systems

Yian Liu MS.AAD' 24 Columbia University Syracuse University B'Arch 23 yl5428@columbia.edu 315-750-5668