Columbia Graduate School of Architecture, Planning & Preservation
Master of Architecture
Collection of works
Fall 2019 – Spring 2022

Jo Hee Lee
jl5639@columbia.edu
youraveragejojo.com
Spaces & Fictions explores the boundaries between real & unreal. This is done by reconstructing, rerendering & reinterpreting an Avery Hall that investigates this divide. In doing so, the project aims to redefine them through forms of fiction and questions our spaces of familiarity.

Mentors: Stephen Cassell + Annie Barrett
By: Jo Hee Lee & Yuchen Huang
As part of an attempt to diversify Jamaica's tourist-dependent economy, one that has suffered since the Covid-19 pandemic, the proposal explores the economic, social & built-environment outcomes of developing and advancing a bamboo industry in East End, Jamaica. The island's current Bamboo-dealings have been limited to paper & small product manufacturing. This proposal looks at expanding that to all stages of the Bamboo life-cycle from cultivation-management-harvesting-treatment-processing & later use by multiple groups of Jamaican society and industry. This reduction in environmentally harmful extractive processes and its replacement with a sustainable one is the central concept driving the eco-sanctuary that intends to become a destination for local Jamaicans & foreign travelers.

Mentor: Vanessa Keith
Done by: Jo Hae Lee & Takashi Honzawa
Oceanography Center
Longitudinal Section
Spring 2021 Semester - Advanced IV
Above & Below

A design proposal for the Schaghticoke First Nations people on a 73-hectare forested land parcel in Columbia County, upstate New York. The focus was on creating a harmonious home base and sanctuary whilst learning from sustainable indigenous ways of living. Certain primary constructs of importance include the Gateway House & Camping pods. A need for flexibility and light landscape intervention were prioritized.

Mentor: Vanessa Keith
Done by: Jo Hee Lee & Jinseon Noh
**BIOSWALE**
This involves the diversion of existing over-surface water channels to a water retention pool in the agricultural zone of site. Aided with aquatic plants, insects and animals, it improves quality for use and/or later discharge. This then provides a more direct and local water source for agricultural purposes, thereby reducing dependency on municipal supply and stress from overdrawn water supplies in the catskills. Lastly the very visible water feature aids in the beautifying and educational purposes of the reserve.

**INSECT RESEARCH & DEVELOPMENT**
Insects have existed long before the mankind and will continue to do so after. Recognising the tenacity and innate longevity of these little organisms is crucial for future generations of human kind. A multitude of insect harnessing technologies are what we envision. These range from ecosystem repair to spatial imaging and mapping. Given the natural environment of the site, alongside a unique wetland feature, an insect research center/laboratory is to be developed to further this potential.

**EARTHWORM FARMING**
The earthworm contributes to the ecosystem via loosening and aerating the soil and feeding off decaying matter and enriching the soil with nutrients. By farming and harnessing earthworms, these hidden-heroes have far reaching contributions to the ecosystem, primarily through initially adding to soil health. Given plant waste to consume and give off nutrient rich soil mounds, this can then be added to farmlands that have seen poor soil qualities for crop planting. Earthworms, alongside bees, are the future. Instead of buying fertilized soil, farmers will potentially invest in earthworms to create their own local supply.
Cocoon Camping Pod
Situated in the South Bronx, New York City, the proposal reimagines the relationship between circulation and collective activity spaces on a multi-leveled layout. Here, vertical cores assume the primary means of movement to reach amenity spaces. Amenities are de-densified and dispersed to create localized relationships for each apartment unit and the resident in relation to their nearest amenity space. In doing so, it redefines the conventional horizontal dimension shared activity spaces are often confined to, such as corridors on amenity floors and the street level.

Mentor: Annie Barrett
Done by: Jo Hee Lee & Henry Black
Program distribution

- Residents
  - Bedroom
  - Bathroom
  - Work Space
  - Dining Room
  - Kitchen
  - Laundry
  - Exercise
  - Living Room
  - Lounge
  - Cafe
  - Workshop
  - Daycare

- Amenities

Circulation concept

- Section
- Plan
- Vertical circulation
- Housing
- Collective
- Individual
- CORE
- Localised Amenities
Elevated inner courtyard elevation
Public School 64, on the Lower Eastside of Manhattan, New York City, is a proposal responding to the different activity types of a school environment. Categorized between quiet/still and noisy/active spaces, the architectonic adoption of distinct positive and negative space types seeks to address this categorical differentiation.

Mentor: Jose Araguez
Done by: Jo Hee Lee
Program distribution

STILL PROGRAM (IN-ZONE) + ACTIVE PROGRAM (ON-ZONE) = TOTAL VOLUME
Meeting space
Model Photos
Structure

TUBES

COLUMNS
1000 x 500 mm

LIFT CORE & ESCAPE STAIRCASE

FAÇADE COLUMN
(COMPRESSION ZONE)

POST-TENSION CABLE
(TENSION ZONE)

ROOF SYSTEM
Fall 2019 Semester - Core I
Underground Straus Park

Located along Broadway Avenue between 106-107th street in Manhattan, physical and mental resonance were employed in chambers of different shapes and materials. In capturing both the sounds and activities of above ground (People, vehicles, animals) & the underground (Subway, city infrastructure), visitors encounter a unique and immersive sensorial experience of the city like never before.

Mentor: Lindy Roy
Done by: Jo Hee Lee