Selected Work

U Kei (Alexa) Long

PORTFOLIO

FALL 2018 - SPRING 2022
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This portfolio sets the intention of “Cultural - Redefine - In Appreciation” that weaves through six design studio projects, as the response to the design can be succeeded through the history and memories of one space.
In the 1890’s, Bushwick established dominance in breweries, while the expansion in railways to transport these goods, easing the access between Brooklyn and Manhattan. Decades later, the railway is now underutilized going across next to the site, because of the gentrification in the neighborhood, which is slowly changed to a media distribution hub.

Realizing the fact that lots of the creative production process is being put behind walls with no apertures and rendered unseen. In order to reveal the process requires the different media professionals, the design of this warehouse exposes some of the process and make it more rooted to the Bushwick context.

Based on these two major factors that is happening in Bushwick, this project acts as a joint of sound and image production for local artists, while it is also a logistical extension of the railway, where the local goods produced by food factories and handicrafts made by local artists could be sent to display at the market. At the same time, these goods will be transported to the rest of the city with the railway system.

The Ground Floor is the most open space where the local food market and the distribution center congregates. Walking up the central stairs to the second floor, the public could encounter the sound and image production process by seeing professionals working on the open platform and reviewing outcomes in the gallery or research library.

Due to acoustic and light requirements, the sound and image production will be housed in the solid rooms in the center of the tubes, while the periphery is where various kinds of per and post production take place.
Situated in Bushwick as the industrial zone, the site is surrounded by warehouses and factories, where new media now increments.

1. Wholesale Food & Beverage Distributor
2. Food Manufactory and Distributor
3. Food Warehouse
4. Industrial Zoning

A joint of Sound and Image production for local artist, also as a logistical extension of Bushwick by the revitalized railway system.
Original Warehouse

Reuse of Existing Structure: Brick and I-Beam

Double Entrance Facade as Entry Garden

(Re)carving the Floor

Building New Structure By Using CLT

Adding Roof Shades to Complete

Inspired by the two material operations from original warehouse, every moments that is designed to consist different variations of building materials.
Ground Floor as the local food market and the distribution center
where every Bushwick goods congregates.

-- Two main entrances with double layer facade as entry garden --
-- Reuse the existing structure system to new design --
-- As the aspiration of media transparency to public --

-- Cross Laminated Timber + I-Beam Construction --
Bushwick
Sound and Image Media
Logistic Station
As the Frick Collection museum transformed from a luxurious 20th century residence, the exclusiveness of the Frick Collection has isolated itself from the public which it is supposed to serve.

During the days when Henry Frick used it as a residence, the art collections were no more than a background of the family’s daily life. To reconnect the Frick Collection to the public, the project aims to highlight the domesticity by restoring its original function as residence before.

With its art collection as the background of context to demonstrate, this movement is intended to sustain the form of domestic activities with different groups of people, including visitors and locals, kids and artists related groups.

With the idea that “to destroy the part is to destroy the future,” this is the way that we redefine the meaning of domesticity to this home-like museum, by proposing the juxtaposition of different domestic possibilities for everyone to find their home there.

We are able to weave the publicness into this island, where we can now manifest: Frick Collection is the House for Everyone.
HENRY CLAY FRICK’S RESIDENCE

U. Kei Long

FRICK COLLECTION

With an endowment of nearly $40 million and an annual income in excess of $1 million, Trustee members who each give a minimum of $25,000 a year to the Frick Collection Hosting 270,000-300,000 visitors per year

Residence
CLOSED

Museum
OPEN

FRICK COLLECTION

- Over 300,000 books and exhibition cataloques
- Extensive directory and printed material
- Over 1.2 million images of art from the 4th to the 20th centuries

Commissioned by Helen Frick

House for Everyone

- Vault Addition (1914)
- 1171 Expansion Started
- 1171 Expansion Finished
- Current Location: Woodshopper on Board
- Reception Hall & Garden Apsey Addition
- Frick Collection

Henry Clay Frick
- An American industrialist, financier, and art patron, Founder of Frick Collection

Helen Frick
- Established Frick Art Library
- Moved to NYC before Pittsburgh
- Began buying art to decorate his home

Frick's death due to sudden heart attack

Adelaide and Helen Frick lived until the death of Adelaide Frick. Helen Frick inherited her wealth and became the Trustee of Frick Collection

The Frick Changes Plan for Vanessa Frick, Promoting All-Wing

The Frick has expanded its collections, including works by Rembrandt, Van Gogh, and Hopper.

The Frick is planning a new expansion to accommodate an increase in visitors.

Save the Frick Collection

The new expansion plan isn't right for the small archives to accommodate. Frick's history.

 Preservationists Protest New Frick Collection Expansion Plan

U. Kei Long

Henry J. Cowles

I'm a Miss

Frick Collection, With Fourth Expansion Plan, Crosses Its Fingers Again

The new range for Dad's collection highlights its environmental goals, with large windows and better climate control systems for a better experience with art.

For More Arta

Frick Art Museum
The temporary home of the Frick Collection while the start of 4th expansion.
To demonstrate the value of superimposition, through the rearrangement of Furniture, Partition walls, poché and Transitional installations.
These intersections of spaces for different groups of people performing their domestic activities behind the Frick Collection’s context will be superimposed on each other.

To show the vertical interactions in different levels that interweave the ground and second floor together, and break the uniformity of the spatial sequence.
The meaning of domesticity to this home-like museum, by proposing the juxtaposition of different domestic possibilities for everyone to find their home there.

This Frick Collection welcomes everyone to attend, and provides all domestic possibilities for everyone to install their daily life there.
Alone Together:
Library Without Rooms

Spring 2019, GSAPP Core II Design Studio
Instructor: Mimi Hoang | nArchitects

The Core II Library studio starts with the theme - Alone Together, where the project defines the moments of expansion and attraction, to create the wrapped atmosphere with interweaving moments.

The proto model is inspired by the Beinecke Library’s grid completion, to develop the idea in physical form and investigate the spatial moment in layers of grid distortion in constrast.

The concept of triangle structure form that can be run in four different directions to create a topology of program, spaces and layers in the library, where this structure can be expanded everywhere inside and outside of the building, the moments of expansion and attraction will then separate into a forest of triangle structure form.

It works as a knot in every levels that is pulled from one point to another that will create gathering spaces and also individual spaces throughout the entire building, while every architecture moments such as facade, wall, envelope, space and bookshelves is working with this structural expansion formula to create calm and small spaces or dynamic and bigger spaces.
Expansion

Beinecke Library, SOM
Study model of Grid Completion

Attraction

Prototype Model
Study Model of Grid Distortion
Alone Together is where the library is the fantasy of interweaving knowledge as connection, and distorting spaces through human interaction.

In this library, the metaphor of Alone Together is without any vertical wall construction. There are nearly no walls, doors or rooms.
The moments of expansion and attraction will then separate into a forest of triangle structure form.
"This is the Library has no boundaries or rooms that will interweave us through our visual and spatial instincts."

It works as a knot in every levels that is pulled from one point to another that will create gathering spaces.
The moments of expansion and attraction will then separate into a forest of triangle structure form.
These triangles are the connection between *floors to extract or dissolve* public moments inside and outside of the building.

At night, the library luminates the triangular landscape that *interweaves individual and collectives.*
The condition of current NYCHA Housing is crowded, squalid and dangerous living conditions in the Manhattan Neighborhood. While the typical NYCHA floor plan has no interest in providing commercial space to the residents, the tower in the park style is widely considered a failure.

With the confusion of visual and functional space to the residents and audience, the inactive and obstruction of the entrance to the NYCHA building, leads to the failure of the tower in the park.

This project attempts to approach the failure of NYCHA building moments and criticize the theory of Tower in the Park. The type Y Housing structure is a successful building type with enough sunlight and social efficiency, while the connections of these three Y housing structure brings in the continuous housing apartment throughout the entire site.

The Park Tower engages with possibilities of the building afterlife through different green space, with enough social engagements and tree life to the building, and even inside the building. The Tower activates many different programs throughout the commercial hubs as three cores connect with the apartments.

The Roof level becomes the social engagement for the building residents as other private spaces with a view to the Manhattan skyline.
The Park Tower engages with the possibilities of Housing afterlife and opens up different green space, with more social engagements and tree life to the building.
1. **West Wing**
- Duplex Apartment - 2 Bedrooms
- Studio Apartment

2. **West Wing**
- Duplex Apartment - 2 Bedrooms
- Studio Apartment

3. **West Wing**
- Duplex Apartment - Up to 4 Bedrooms
- Duplex Apartment - 2 Bedrooms

4. **North Wing**
- Duplex Apartment - 2 Bedrooms
- Studio Apartment

5. **East Wing**
- Duplex Apartment - Up to 4 Bedrooms

6. **East Wing**
- Duplex Apartment - 2 Bedrooms

7. **East Wing**
- Duplex Apartment - Up to 4 Bedrooms

3 **Studio Types**
- Rectangle Studio - Up to 2 Bedrooms

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The diagram illustrates various floor plans for the different wings of the Park Tower, showcasing the variety of apartment types available, including studio apartments, duplexes, and triplexes, with room configurations ranging from 2 to 6 bedrooms.
The Tower activates many different programs throughout the commercial hubs as three triangular cores to activate the social programs.

The Roof level becomes the outdoor social space for the building residents as other private spaces with a view to the Manhattan skyline.
The intention of the commercial hub in Park Tower, is from the study of circulation model on Gifu Katakafa by SANAA.
Incremental Urbanism: Islamberg

Spring 2020, GSAPP Advanced Design Studio IV
Instructor: Ziad Jamaleddine | L.E.F.T Architects
Partner: Lin Hou

By collecting the quarry waste and dust around Islamberg to produce quarry brick as an efficient material to build on-site, this proposal is able to benefit Islamberg as an intentional community to become self-construct and sustainable to expand.

Quarry waste can be utilized efficiently for different purposes. By producing the quarry brick, people in Islamberg are able to build their own manufacturing shops and building expansion, while taking advantage of the site topography to create underground workshops as well as an elevated terrace by constructing retaining walls as a permanent brick wall, the quarry waste is also suitable for road development. Housing conditions can be renovated for water collection to use in the workshop underground and semi-brick courtyard.

With the large amount of quarry waste that people will be able to collect, they have the opportunity to build temporary brick walls as community and individual usage: private courtyard, community center, marketing plaza for selling the brick with other communities.

The proposal of incremental urbanism in Islamberg is a sustainable and conservative strategy, to let people on the site collect wasted material, manufacture new products, (re)build their own community and even connect with other communities. The different phrases have been designed based on specific needs-driven.
Incremental Urbanism
-- Islamberg, Masterplan--
Target Cluster
Islamberg Residents have the opportunity to build temporary brick walls as community usage or individual usage such as the private courtyard, community center, marketing plaza for selling the brick with other community.
By producing the quarry brick, residents in Islamberg can build their own manufacturing shops and building expansion, to **first rebuild finish their major community buildings**.

Taking advantage of the topography of the site to **create underground workshops as well as elevated terrace** by constructing retaining walls as a permanent brick wall.
Core 1 Studio discovers moments of infrastructure at Broadway Avenue, as the interest on the dynamic cultural changes of the Flatiron District, the project “Sleepless Scaffolding” captures this dynamic moment of retail area in Flatiron District, and departs from this multiple theme of furniture stores.

The site first starts at the ABC furniture and carpet store on 19th street that is right next to each other. The existing scaffolding condition in New York City is a tool to renovate buildings, but get abandon for years. In this historic district, the form of scaffolding has been used frequently because of building renovation. It has a great opportunity for the project to inhabit a new contemporary and futuristic retail experience.

This design of scaffolding is an new wave of retail production. As an new language of pedestrian to open up directional and liberate occupied spaces, it becomes an opportunities to distance consumption as a way to aware of mechanism.

The main design of these two building scaffolding is the program of one special and multiple activities that can happen in the same time with the level of engagement and distances to the existing buildings and the ground conditions.

It is planned to engage the public with rested spaces and exclusive moments like balcony on the top of the scaffolding volume, as the touristic moments to explore the ladies’s mile.
The scaffolding becomes an opportunities to distance consumption as a way to aware of mechanism.
18 Greenpoint Theater
Brooklyn, NY

Fall 2019, GSAPP Tech Design Project
Partner: Lin Hou, Rory Macfarlane, Florencia Yalale

The design of 18 Greenpoint theater includes the structural, mechanics and envelope engineering details as a pack of construction documents from the beginning of the design.

For this theater, the project took less than 30 millions as the budget to include all the materials, equipment and furnishings. The structure of the entire theater is supported by the grid column system by mass timber, which is sustainable for the timber recovery and waste of Carbon dioxide.

The 15’ x 15’ grid column system has perfectly divided the theater and black-box for different amount of audience to attend in the theater. All different programs such as dressing room, egress areas and control booth are divided well and sit on this column grid structure.

The Front of House’s lobby is facing the Manhattan Skyline through the glass wall, while it decreases the solar heat gain with the roof canopy and interior shade.
Grid Column System Concept Diagram

Front of House and Back of House Curtain Wall Section
Sustainability Strategy Diagram

CLT Construction Interior
To rethink one of the tallest buildings in the world that sits at the side of Central Park, this tower is the symbol of advanced technology and BIM construction to reach the height to the sky.

By studying the problems that may happen to this tower, we run through different software such as Ladybug, Grasshopping and Honeybee to understand the BIM behind this building.

This project demonstrates the roadmap of grasshopper and revit modeling to achieve the study of sunshades and the solution that we want to purpose to the Slender.
U Kei Long

In May 2015, K2 Development Group and Hackensack Meridian Health agreed to take over over 500,000 sf of office space at the new building. They also agreed to absorb the remaining 25 years of rent at the age 3 billion, and it is estimated to over 32 billion.

Chunk Model 1 - Top

Chunk Model 2 - Middle

Chunk Model 3 - Ground
The concept of this small retail design that is located at the shopping district of Tokyo, its exoskeleton facade design collaborates with the curtain wall system, with three layers of glass that is printed with dotted and lined simple patterns. The assembly of this curtain wall exoskeleton will be followed by three steps of procedure.

The Curtain Wall Subcontractor shall design, engineer, test, fabricate, deliver, install, and guarantee all construction necessary to provide for the complete airtight and watertight enclosure of the building, while this design shall conform to all requirements of the Building Code of the Tokyo Metropolis of Japan.

The Exoskeleton curtain wall consists of unitized extruded structural l-beam as the skeleton of the building that spans in two directions and followed by the curtain wall window system assembled on the skeleton structure.

- I beam spans covered with aluminum panels (anodic coating)
- Three layers of printed pattern glass