YUHONG LI PORTFOLIO

CONTENTS

01 The Defeated Flood
   The Awareness of Flooding
02 Daylight Reactor
   33 Thomas Street Facade Renovation
03 The Grid
   Coca-Cola Bottling Plant - Adaptive Reuse
04 The Reflection
   LoudReader

Contact
917-886-1362
yl4827@columbia.edu
Project 01

The Defeated Flood

The Awareness of Flooding

Type: Academic / Team work
Date: 2021/09-2021/12
Team: Vasco (Yuhong Li), Rourke Braceville, Shikang Ding
Contribution: Model, Design, Drawing, Render
Supervisor: Bernard Tschumi

Narrate the impact of climate change through the relationship between water and architecture.

The architecture wants to be an immersive experience between humans and water, a story of the possibility of the relationship between these two elements, how humans can be affected by the new condition, and the relationship with water as a resource and a disaster.
First Chapter-Below Water

The first chapter of this project is about suffering, by entering from the underground entrance offshore, people going through an underwater tunnel into a dark box inside the ocean. Rather than the normal water been a landscape or a controlled swimming pool for human, the water create pressure to make people feel the fear of the disaster.

The Installation that Response to Flood

The first part also try to be a response to the constant flooding situation in the city. Before the flood, people can see a dark corner inside the ocean which is a sunlight courtyard inside the box, however when the flood is coming, the corner will disappear into the ocean and the courtyard will be filled with water. And People inside will be surrounded with disaster.
Plan & Section
Using the element of water, we designed an island that responds to not only floods, but also climate change and brings awareness to its effects.

Second Chapter-On the Water
We want to direct the visitor of the island through the emotional change that a flood causes. Moreover, we want to highlight the beauty and positive impact that water has, if used sustainably. We designed our island to be a vessel for awareness of water as a catastrophic effect of climate change, and second, we designed our island to be technologically capable and responsive.
Furthermore, our island also serves to redirect rising water levels. To properly understand how best to redirect water, we took our first generative diagram and added a second dimension of time.

At high-tide and during periods of heavy precipitation, some part of our island is intentionally flooded by the rising waters of the Hudson River to redirect, purify, and store water in the case of an emergency. Ultimately, this brings awareness to the dynamic motion of water and its cyclical nature.

By designing with water, the island responds to water related disasters in a proactive and productive way. The island was designed not only for water, but with water.
Section

In order to achieve the emotion we were looking for and to fulfill the goal of bringing awareness, we reimagined the program in conjunction with the spatialized water. Broken into three main sections that correspond to the spaces of water, our program directs the visitor from the most private and smallest gross area placed underwater, to less private spaces that are situated on water, to finally the largest gross area and most public spaces placed above water.
Awareness

To restate: our main goal is to bring awareness to water related catastrophes in an emotional and a technologically sustainable manner. How we do this is through a cohesive design that weaves together emotionally generated spaces and sustainably driven proactive systems of technology with water. From under water, to on water, to above water, the visitor is taken on a journey that highlights water in climate change. Ultimately, when people visit the island their perception of water will be challenged, and hopefully they will reconsider their actions and consequences through the impending scope of climate change.
Daylight Reactor

33 Thomas Street Facade Renovation

Type: Academic / Team work
Date: 2021/09-2021/12
Team: Vasco (Yuhong Li), Ana Hernández Derbez
Contribution: Model, Design, Drawing, Render
Supervisor: Mark Green

Narrate the impact of climate change through the relationship between water and architecture.

The architecture wants to be an immersive experience between humans and water, a story of the possibility of the relationship between these two elements, how humans can be affected by the new condition, and the relationship with water as a resource and a disaster.
By setting curtain wall project module in revit, and create a custom family in Revit movable fin panel. Constrain each fin to 90 reference planes to obtain correct pivot point. The whole component complete a sun radiation reactive facade system which is used for an office setting.
The Grid
Coca-Cola Bottling Plant - Adaptive Reuse

Type: Team work
Date: 2022/01-2022/04
Core Team: Yuhong Li, Francesca Doumet
Contribution: Model, Design
Supervisor: Wonne Ickx

By introducing a dense grid system with a narrow road to challenge the idea of a big city block and big building in the old coca-cola bottling plant. To create positive public space, we try to define the new boundaries of neighborhood blocks. Each building can be connected to a specific open area.
CENTRAL PARK

THE NEW YORK HERALD.

The Reflection

Type: Academic
Date: 2021/05-2021/07
Contribution: Model, Design, Photo
Supervisor: Cruz Garcia Nathalie Frankowski
History is a Narrative of Remembering and Forgetting.

Loudreading
Do you want to walk past it or do you want to step close to it? Do you want to know the forgotten or do you just want to enjoy the scenery?

The Mirror
It can be a reflection of this peaceful scenery but it also can be a reflection of the forgotten history that has hardly been mentioned.