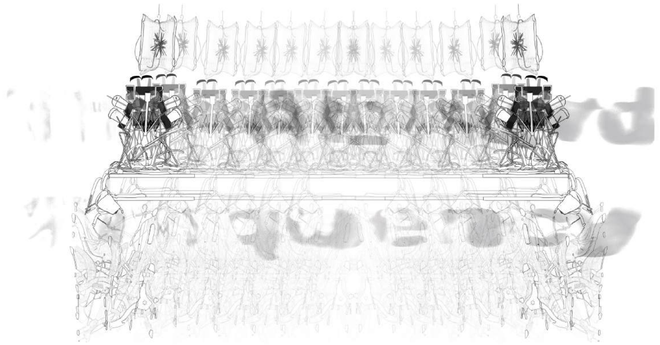
Wenyi Xu

Wenyi Xu selected works 2024-2025



CONTENTS

01 Commensalism of Floyd Bennett Field: City Island Planning

Guided by David Eugin Moon (N H D M)
May - August 2024

group work
group member: Zequan Yu
Mainly contribute the concept, ALL the drawings and renderings.
The manual model was completed together.

Our project at Floyd Bennett Field emphasizes cohabitation with the site, featuring a phased timeline.

Our program includes transportation systems, affordable housing, flooding prevention and preserving recreation areas. For main structural materials, we use mass timber for our modular buildings.

In the first 10 years, we plan to plant bamboo in the first triangle, excavate around the coast for flood prevention units, and remove asphalt to prepare for modular building construction. Additionally, existing trees and bushes will be relocated for new school farms into the second triangle.

By 20 years, a train line will connect to our first modular building. The farms will thrive, hosting farmers' markets and tasting events to foster a diverse community. We will also introduce floating farm units in the southern parking lot to address future flooding concerns.

In 50 years, a new bridge and transport system will integrate with our project, while our modular buildings expand along the existing asphalt pathways. This bridge will be constructed from bamboo sourced from the initial phase's bamboo farm.

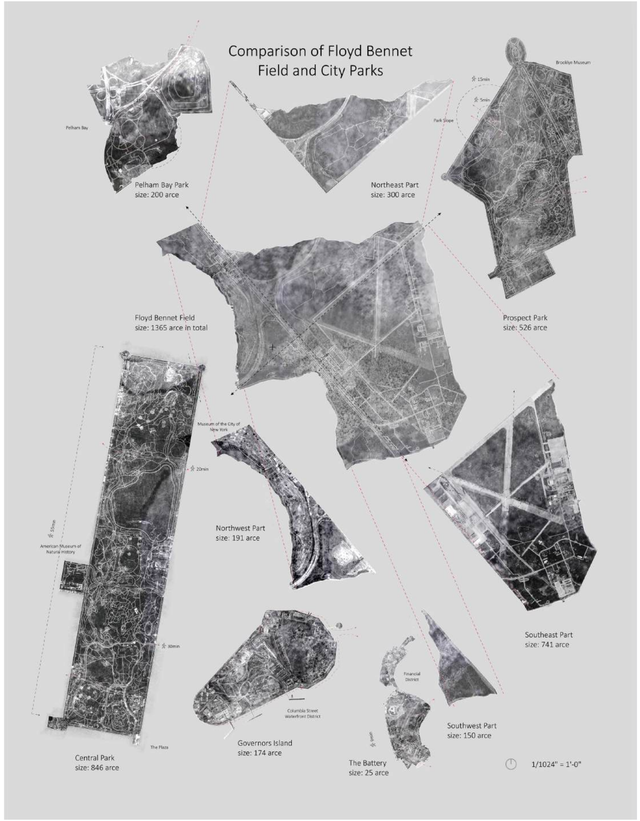
After 100 years, the site is expected to be flooded, with floating farms operating alongside our modular buildings. Our buildings will be elevated 10 feet above ground, ensuring safety as the flooding reaches 5 feet. Overall, asphalt will be replaced by a thriving community, adapting to changing environmental conditions.

Commensalism of Floyd Bennett Field

Flora & Fauna Bubble Map

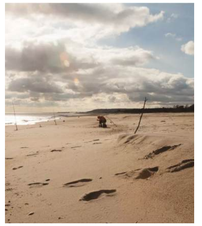
Site analysis and scale comparison

Our project aims to enhance ecological coexistence by preserving local wildlife and natural habitats while addressing transportation issues through new systems that connect to existing train, sea, and bus lines. The comparison with Floyd Bennett Field highlights the site's scale and potential to serve surrounding communities lacking access to parks. By integrating functions typical of city parks, the design seeks to make the area more accessible and appealing to local residents. Additionally, the study of visitor flow emphasizes the importance of thoughtful path design to improve connectivity and user experience, proposing walking paths and bike routes to encourage exploration.



Fairchild PT-26 Cornell at H.A.R.P

Aviator Sports & Events Center



Fishing at National Recreation Area

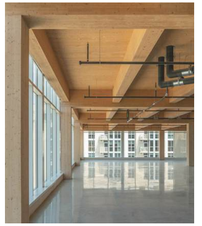
Moonbeam Gateway Marina

Ryan Visitor Center

Flooding Prevention

Affordable Housing

Preserving Recreation Areas



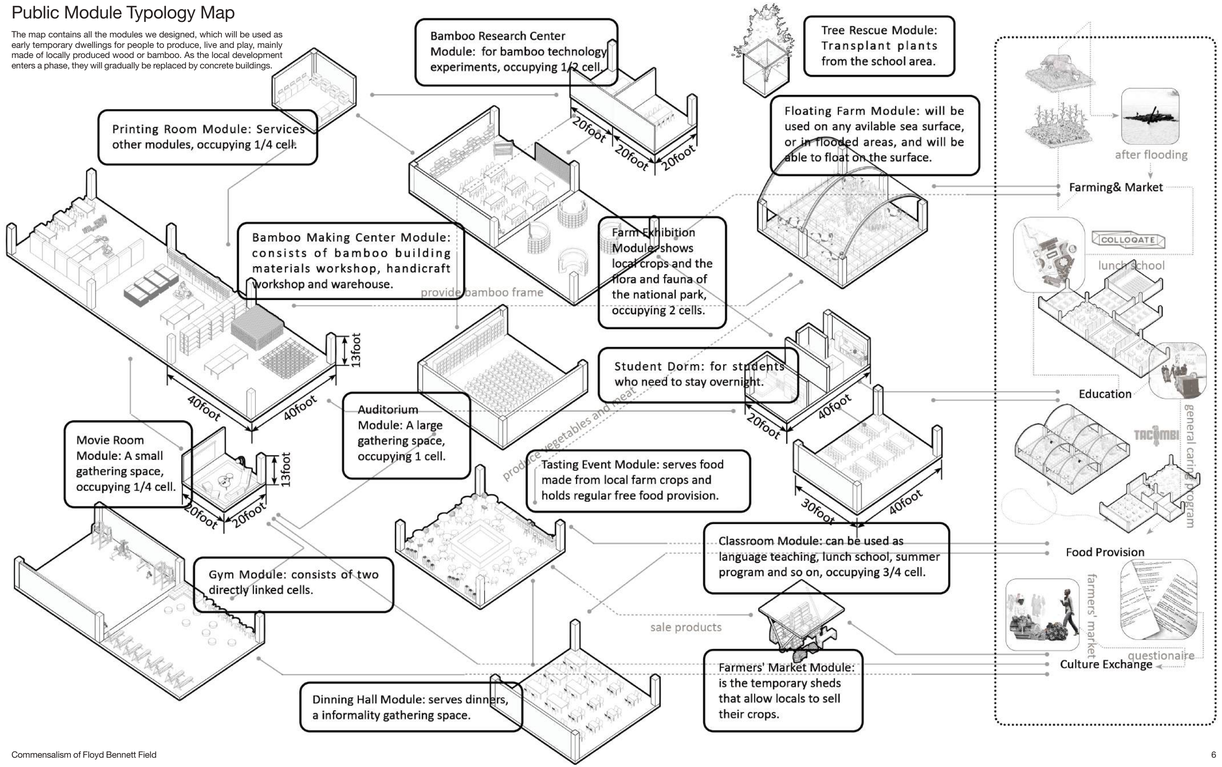
Mass Timber

Vignettes and collages of the focus and concept

Our programs including transportation systems, affordable housing, flooding prevention and preserving recreation areas. We are using Mass Timber as main structural materials for our modular buildings.

Public Module Typology Map

The map contains all the modules we designed, which will be used as early temporary dwellings for people to produce, live and play, mainly made of locally produced wood or bamboo. As the local development enters a phase, they will gradually be replaced by concrete buildings.



The inside view from the bamboo processing laboratory to the bamboo forest behind the house.

The outside view from the transport station to the module housing and farmer's market.

Main drawing and renderings

In our Main Drawing, we have timelines incorporated. We plan the renewal of the site in different periods of time, 20 years, 50 years and 100 years.

Full view of models and drawings

Photos of the final presentation

The project was finally selected into the 24 Summer Semester Exhibition.

1/8 foot main model, showing the growth of the module houseing.

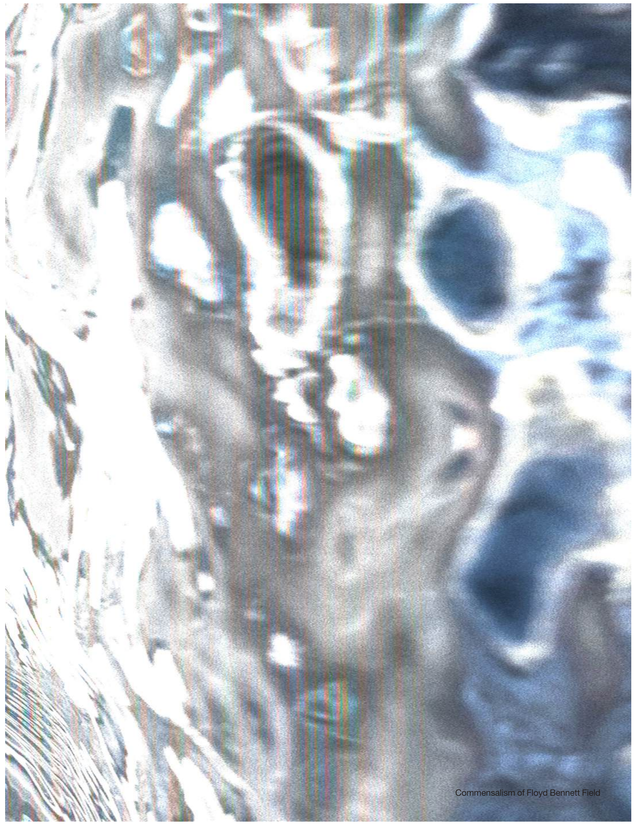
Use projection techniques to display 1/4 foot module model and asphall model.

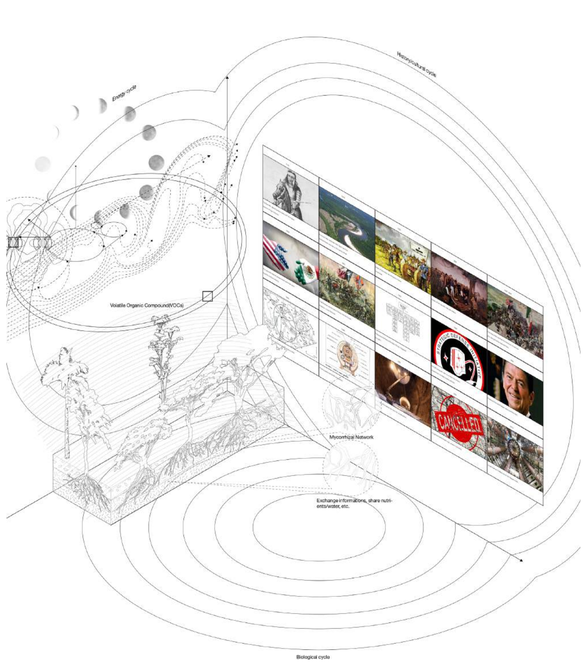
02 Super conductor super collider

Guided by Lindy Roy
September - December 2024

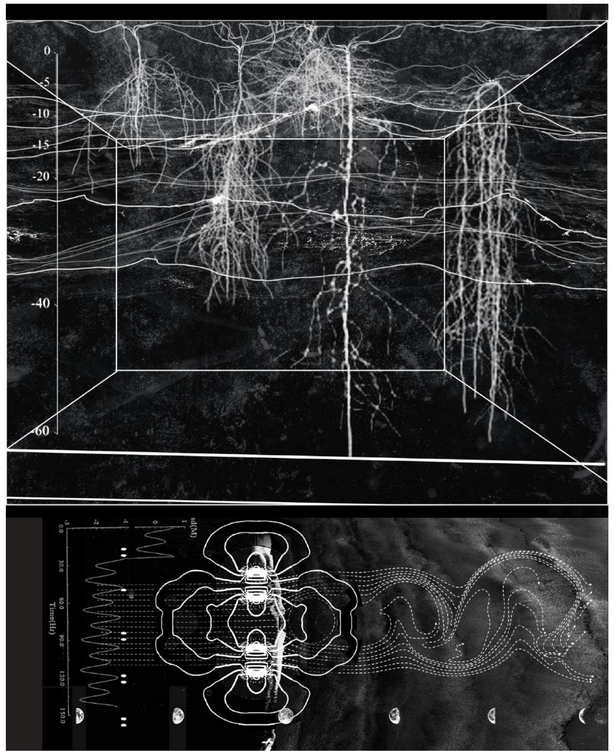
group work
group member: Kexin Xu, Yuxin Hong

In this project, there are three main cycles among this territory: historical/cultural cycle, biological cycle and energy cycle. The territory functions as an information exchange system at both macro and micro scales, where physical and abstract forces enable the flow of biotic and abiotic components, maintaining ecological balance. All organisms—humans, plants, animals, and microorganisms—are interconnected through symbiotic relationships. Human activities have altered the macro-scale environment, while electromagnetic fields from nearby anthropogenic activities impact the area, fostering diverse interactions in the local biosphere. This continuous flow of information supports the circulation of nutrients and energy, helping to sustain ecological equilibrium.





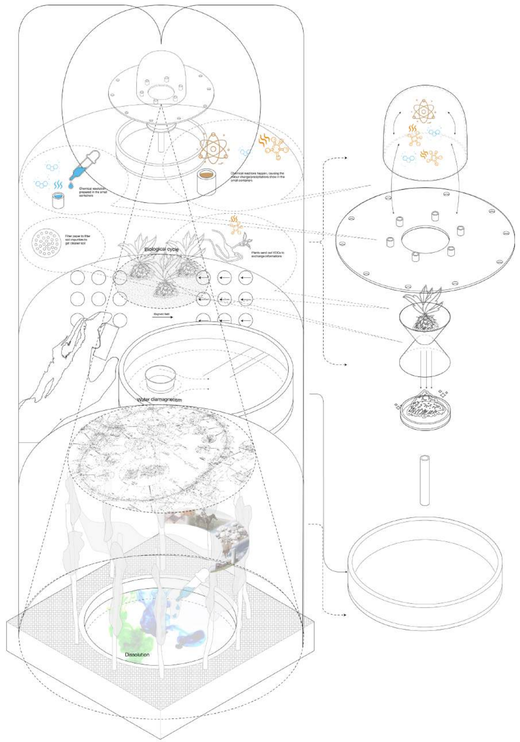
3 Cycles of biology, history and energy

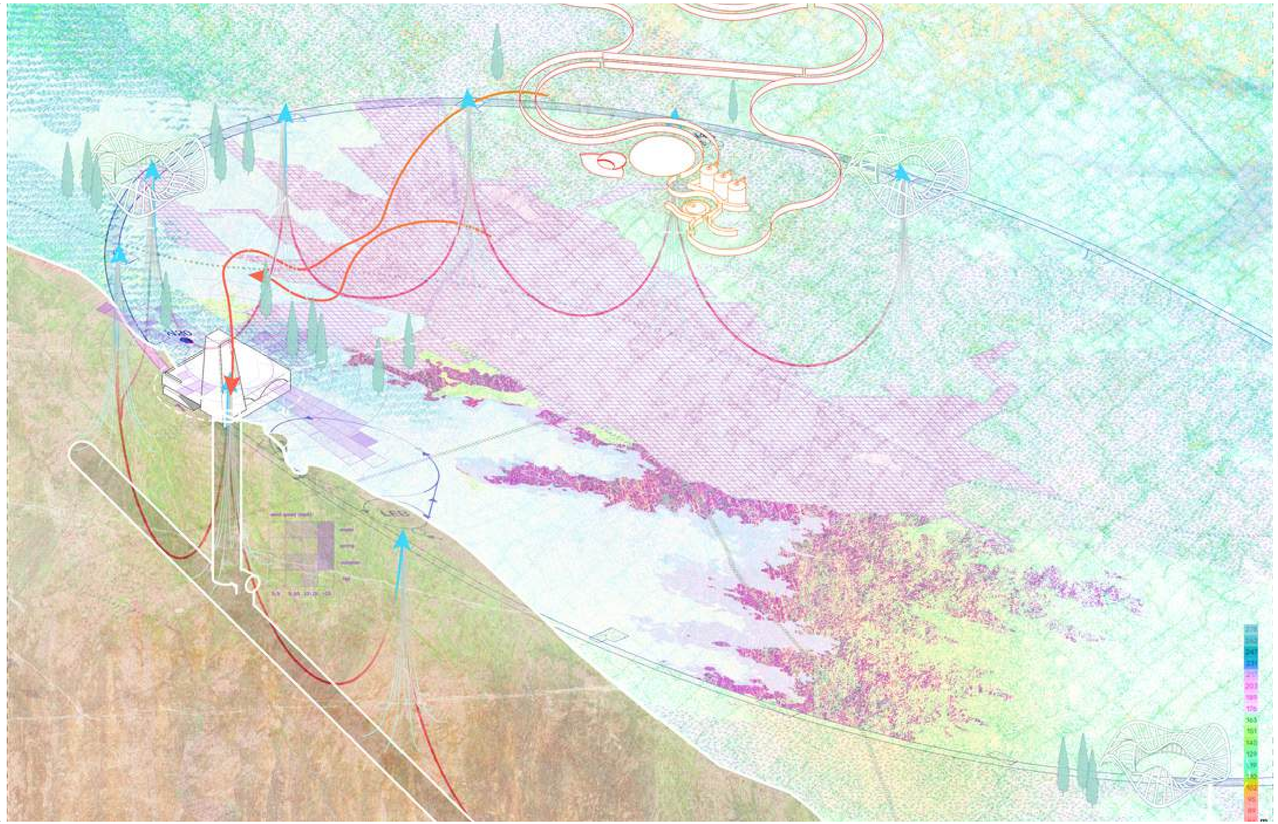


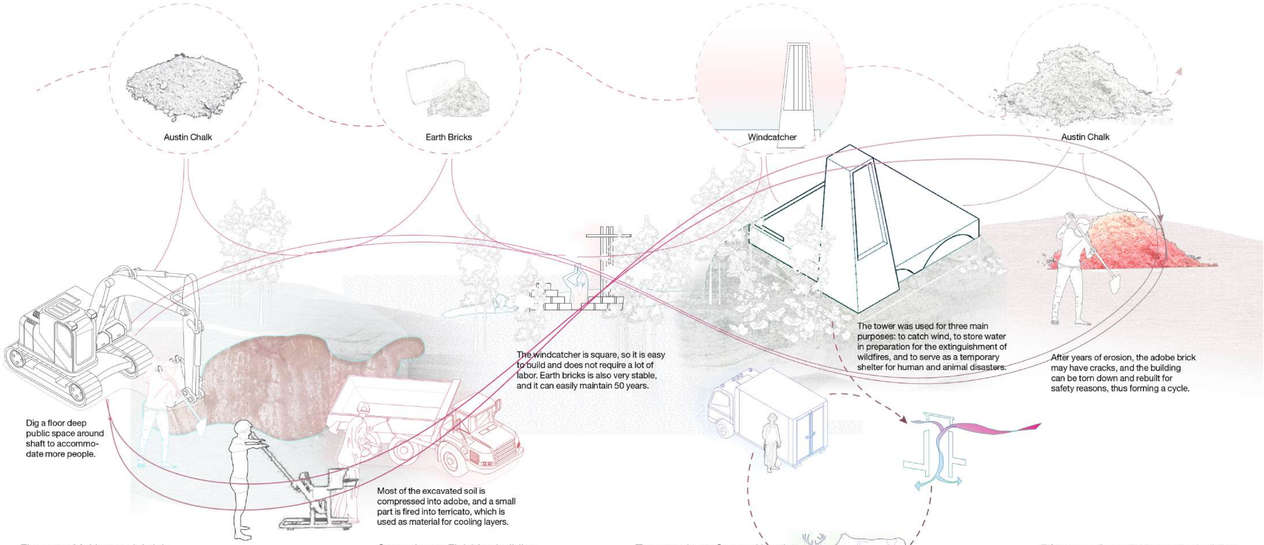
Prototype photograph

Prototype

Our prototype transforms the three parameters into three experiments: The biological cycle experiments use pH indicators, chemical reactions, and gas chromatography to detect and visualize VOC-mediated defense signals through color changes or precipitates in sealed environments. The energy cycle demonstrates the energy exchange between human activity and nature we used the diamagnetism of water experiment to show how groundwater is affected by the energy around it. This experiment represents the exchange between culture, symbolized by cotton as physical entities, and consciousness, symbolized by ink dissolving in water, transforming from a fixed form to an abstract, freeform state.







First year: Making earth brick

In the first year, the main work was to dig a large pit around the shafts to use as a public space, and then take the excess dirt and press it into adobe.

Second year: Finishing building

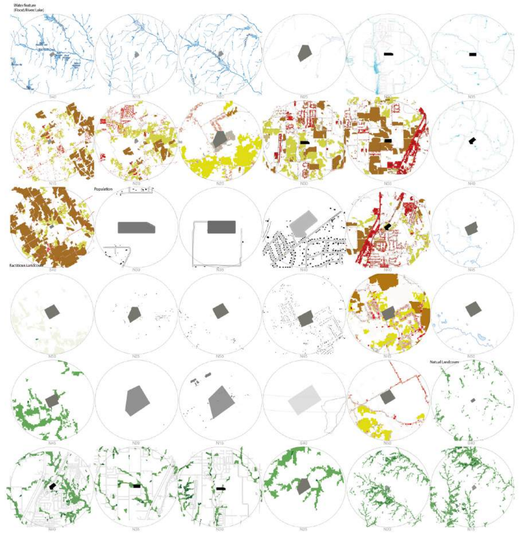
After all this is done, the tower can be built, which does not require high technology, so it can be organized by local people to complete it themselves.

Ten years later: Covered by plants

We hope that the wind catcher will be environmentally friendly and it will not cause any damage to the forest., and we also hope that the surrounding plants can cover the surface of the tower. After several decades, it can finally be integrated with the forest.

Fifty years: Demolishing and rebuilding

Due to the limited life of adobe bricks, for safety reasons, the tower can be rebuilt after 50 years, using raw materials.

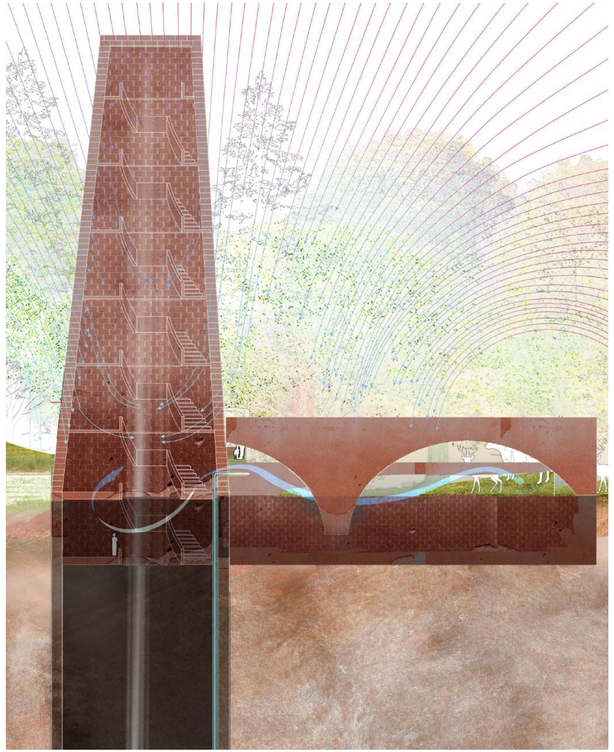


Land information

Strategy

In this project, we build a wind catcher above the shaft of N20, its function is to catch warm wind from the height, and then cool it through the filtration system, as well as the whole underground tunnel, which acts as a natural refrigerator to cool the wind and send it to all other shafts. The main material will be earth brick made of local Austin Chalk compression, there are many factories in Texas, and it does not need to be fired, so it does not require a lot of energy consumption, and is very environmentally friendly. At the same time, its thermal insulation performance is good, so the wind won't be heated by the outside temperature. We will use the extra soil from the sunken space to make earth bricks. Maybe after 50 to 70 years, the bricks will crack, and then we can knock the tower down and rebuild it. It will be a circular process.

Super conductor super collider



03 Makergraph: The Absurd Frequency

Guided by Giuseppe Lignano, Ada Tolla (LOT-EK)
March - May 2025
Complete independently.

This work is a book called Abstract Frequency.

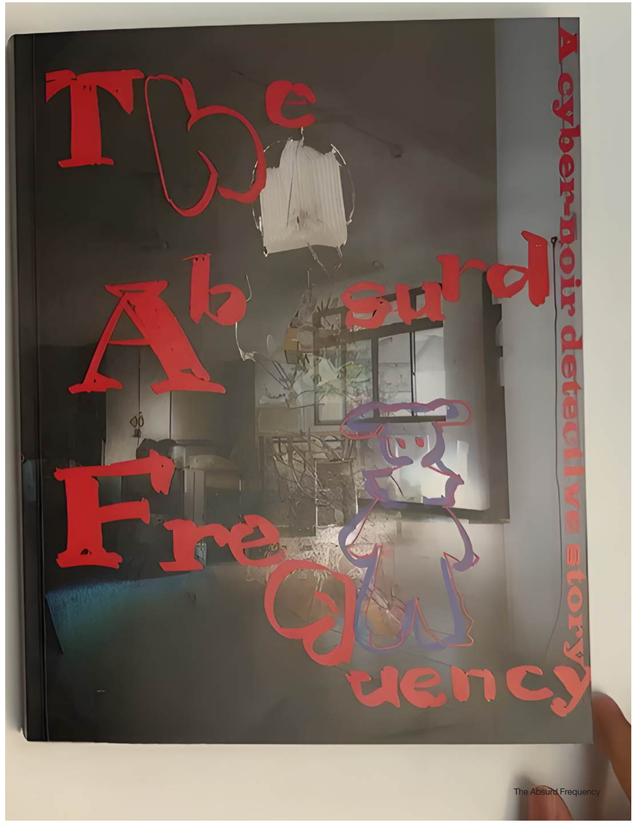
It tells the story of a fictional character named Fume. In the book I use simple, everyday materials to create big, strange, and magical images through photography.

In this book, I tried different ways to show how visual effects and strange images are made. To make this fictional world feel more real, I played with the zoom and lighting of my photos, and I also drew many illustrations by hand. I drew Fume interacting with strange structures — like clouds of smoke, twisted architecture, and fragments of invisible machines. I added section drawings, technical sketches, and diagrams of impossible devices. Drawing characters, figures, and imaginary structures has always been part of my ongoing practice. These hand-drawn elements make the story feel lighter, more playful, and less rigidly architectural.

Still, I'm not trying to chase after visual effects. What I really want is to use the most basic things to fight against the biggest illusions.

This project started as an experiment — part photography, part drawing, part daydreaming. It grew into a way of mapping the fragile edge between what we see and what we imagine.

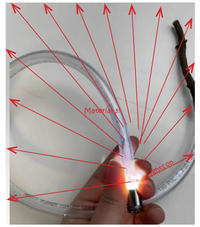
To me, meaning begins when we stop turning life into a show. It begins when you take off the glasses called Urna, and look at life with your own eyes. Real moments are blurry, hard to share, and easy to miss. But nothing else can replace them. Maybe that's what Abstract Frequency really tries to preserve — not clarity, but presence.



The Absurd Frequency

Material 1: Dental floss

Material 2: Tubes and branches



Material 3: led lights

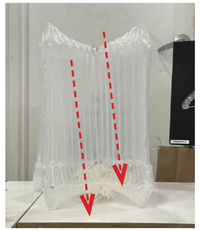
Material 4: cups and holders

Cup layers

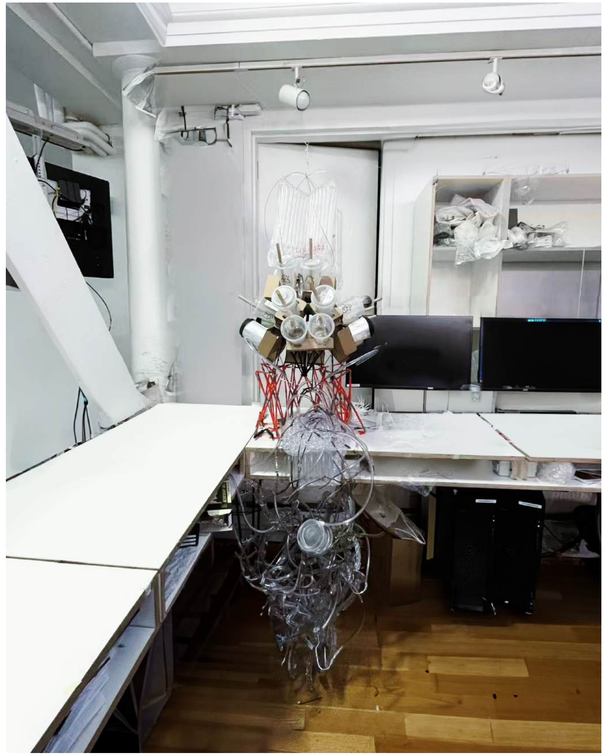
Material 5: straws

Straws tower

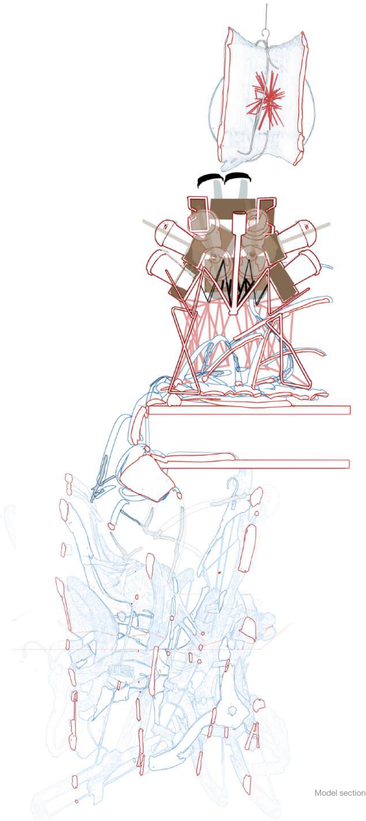
Material 6: hangers



Re-cut and sew

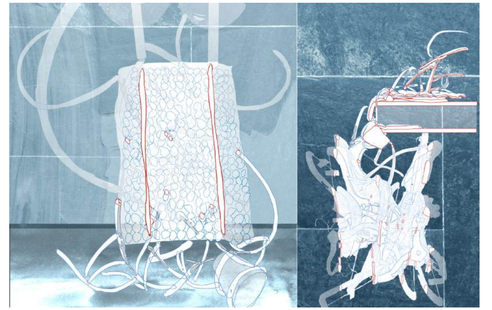


Model photo

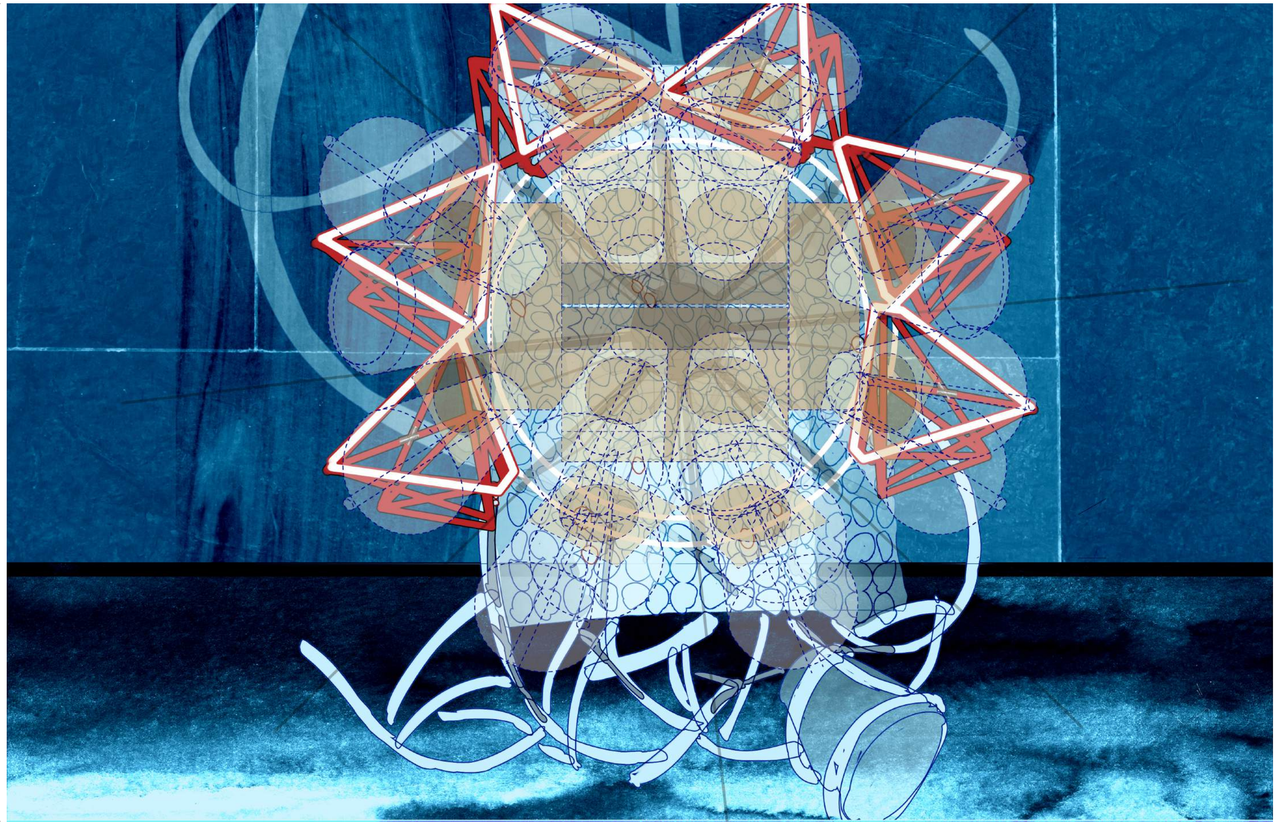


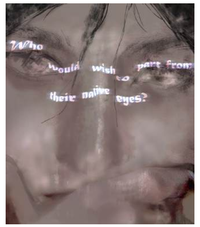
Model section

The main character in the section of the first part.



The section of second part.



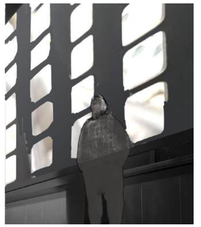


Who would wish to part from their native eyes?

Plastic forest 01

Plastic forest 02

Plastic forest 03



In the central control room 01

In the central control room 02

Signal or Language

Find out

Put the helmet on

Narrativity in the book

In this book, I tried different ways to show how visual effects and strange images are made. To make this fictional world feel more real, I played with the zoom and lighting of my photos, and I also drew many illustrations by hand. I drew Fume interacting with strange structures — like clouds of smoke, twisted architecture, and fragments of invisible machines. I added section drawings, technical sketches, and diagrams of impossible devices. Drawing characters, figures, and imaginary structures has always been part of my ongoing practice. These hand-drawn elements make the story feel lighter, more playful, and less rigidly architectural.

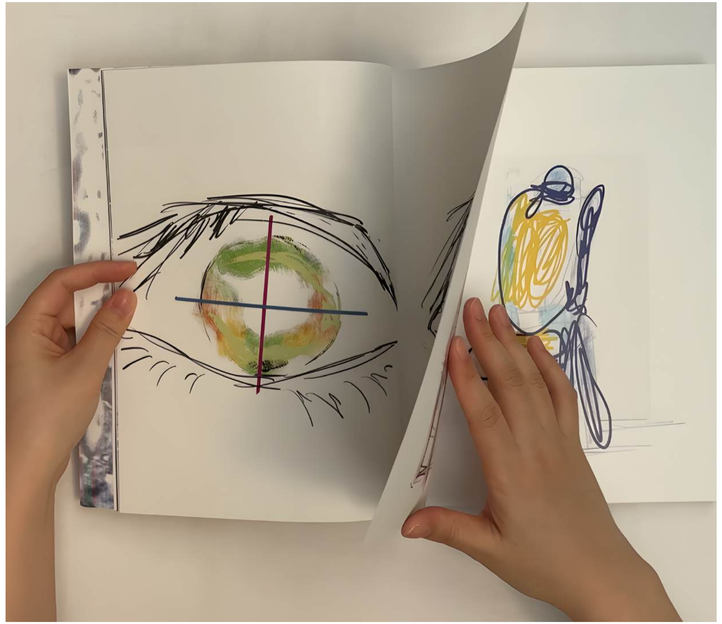
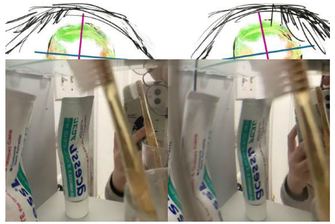
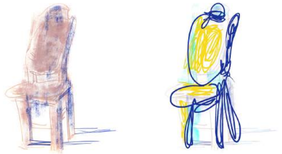


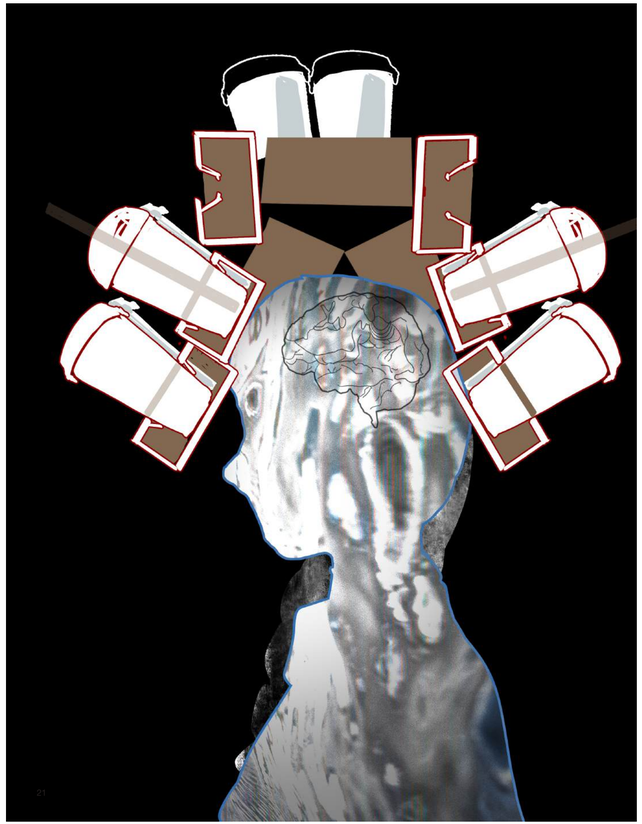
Photo of the real book

Specific details

Throughout the book, I use different ways of shooting photos to show how she sees the world with her own eyes. for example, in the first chapter — Who would give up their original eyes? — I put my glasses in front of my phone camera. Because my own eyes have different vision, the photos turn out slightly different in sharpness and color. These small differences show how her vision is slightly off.

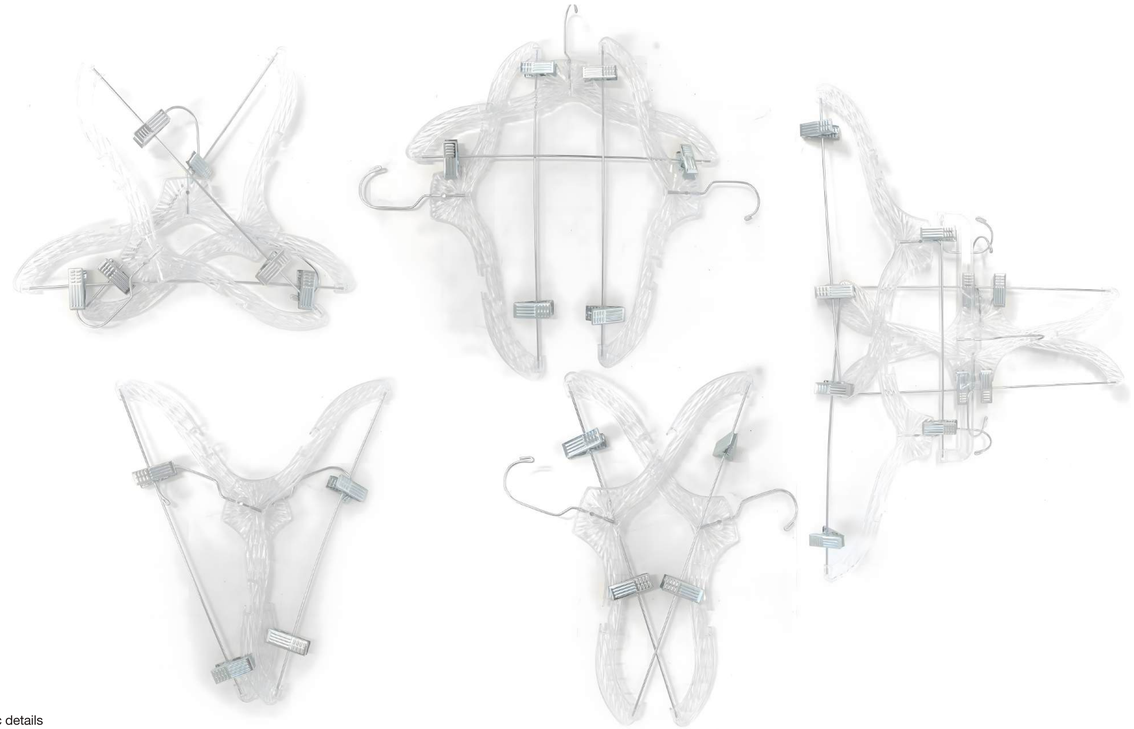






This is the content of a chapter in the book. The section on the left corresponds to the photo on the right.

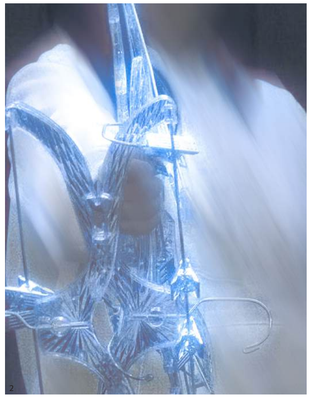
I hope such an expression can make the book more interesting.



Specific details

The components of the first part of the model.

1. Model photo
2. Holding the hanger
3.Holding the hanger
4. Model photo



The Absurd Frequency

Painting based on photo processing

Real photos of dental floss

Specific manifestations

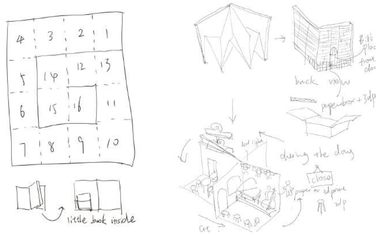
There are many parts in the book where I present magical pictures by modifying daily materials through paintings.

04 Other works: Power tools

Guided by Jelisa Blumberg
March - May 2025

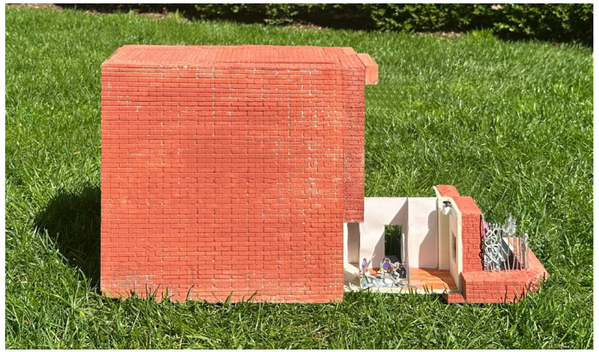
group work
group member: Cen Shen
The map was completed independently.
The model was completed together.

Task 01 global map sketch



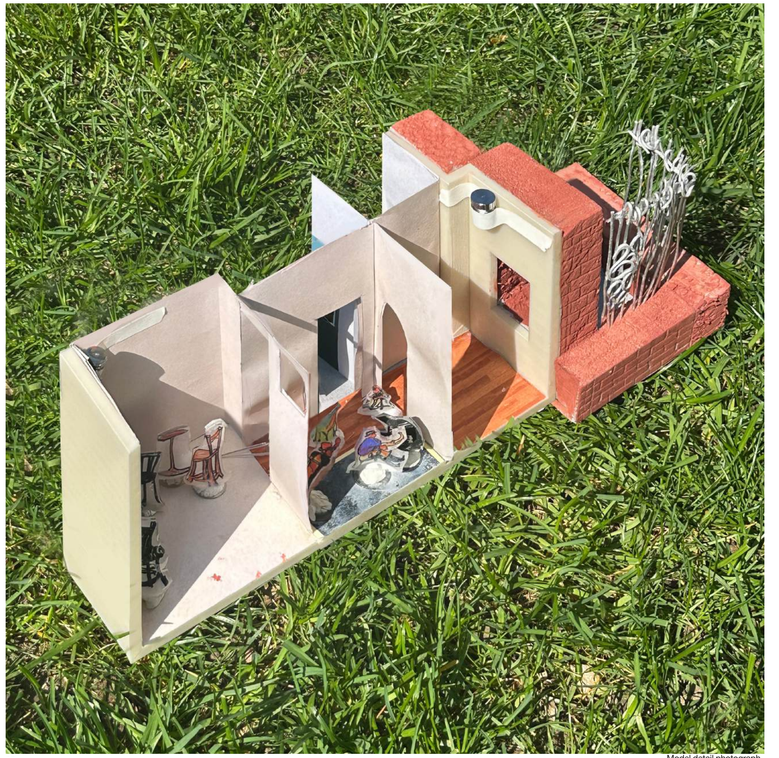
Task 03 handmake book and task 05 model sketch

Commensalism of Floyd Bennett Field



Model facade Photo 01

Model facade Photo 02



Model detail photograph

Front photo of the model

Task 6: Bill's Place Model

In this exercise, we replicated the space of Bill's Place, a jazz club located on the ground floor, and tried different materials: foam boards, 3d printing, aluminium wires, heat shrink sheets, etc.

Data visualization web programming

Other works: DATA VIS 4 ARCH, URB, HUM

Our project aims to enhance ecological coexistence by preserving local wildlife and natural habitats while addressing transportation issues through new systems that connect to existing train, sea, and bus lines. The comparison with Floyd Bennett Field highlights the site's scale and potential to serve surrounding communities lacking access to parks. By integrating functions typical of city