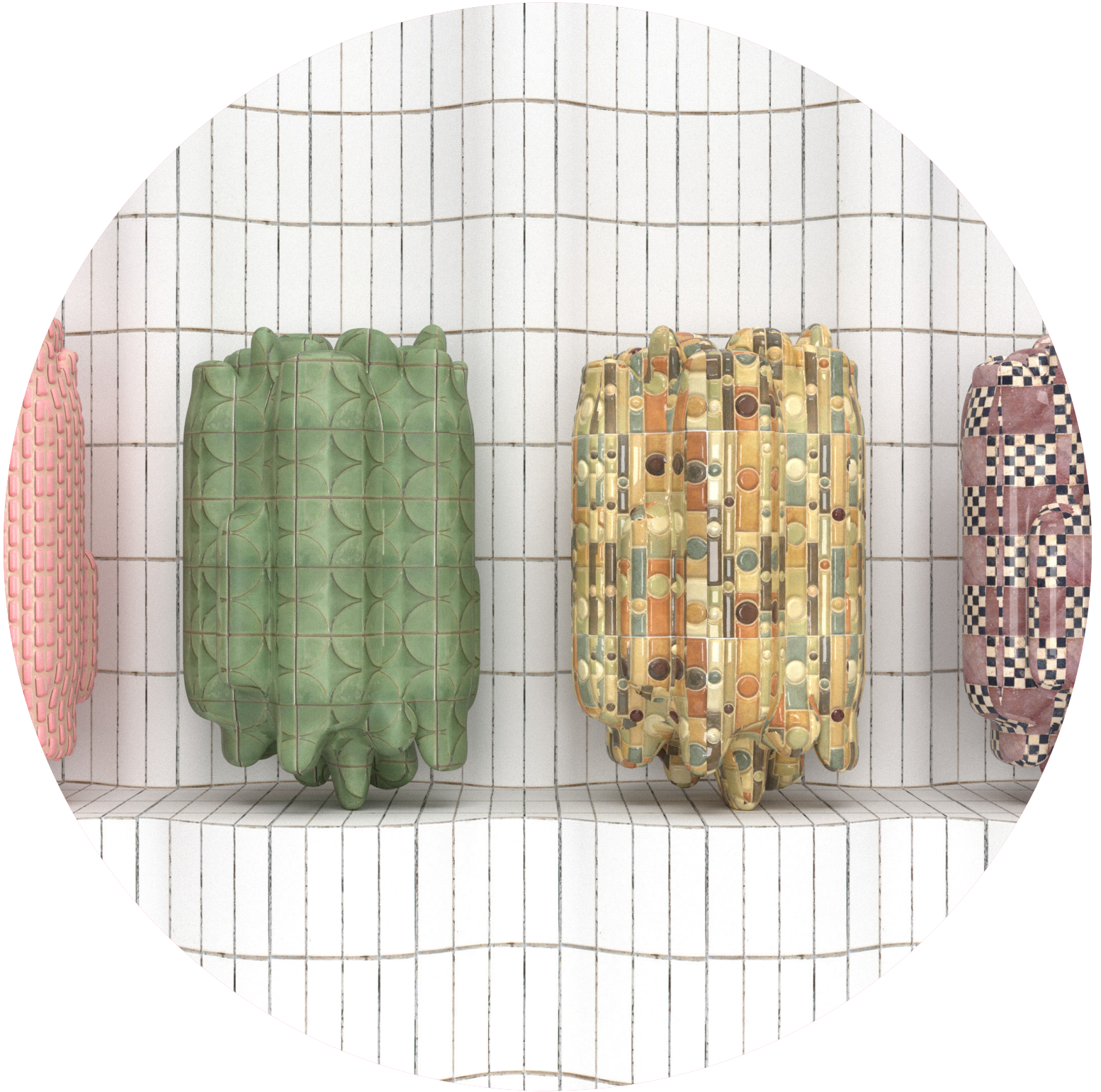




JACE AMBWANI

ARCHITECTURAL PORTFOLIO & RESUME
SELECTED UNDERGRADUATE WORKS

2020-2024



Jace Bianna Ambwani

Jace Ambwani is an American-born junior architect and independent artist based in Berlin, Germany. She received her Bachelor of Science in Architecture from Tulane University School of Architecture in the winter of 2022, and moved to Berlin In the Fall of 2023. Currently, Jace works at Laboratory for Visionary Architecture (LAVA) doing parametric design.

Jace’s main interests in architecture and design are interior design,visualization, fabrication, preservation, and research. As an artist, she enjoys exploring various mediums from painting to textile work, and surrounding herself with visual arts in any way possibe.

As for the future, Jace hopes to dedicate her career to exploring and designing the intersection between art and architecture in projects of various scales and contexts.

Education

Tulane School of Architecture, New Orleans, Louisiana
2018 - 2022 (Winter Term)
B.S. Architecture + Germanic Studies Minor
Deans List, GPA: 3.6

Experience

Laboratory For Visionary Architecture / Junior Architect
July 2023 - Present, Berlin, Germany
-Masterplanning
-Interior Design
-Conceptual design
-Template design
-Research & documentation

Nathan Fell Architecture / Architectural Intern
June 2022 - August 2022, New Orleans, Louisiana
-Project visualization
-Schematic design
-Interior design

Tulane Fabrications Labs / Technical Aide
Jan 2020 - Dec 2022, Tulane School of Architecture
-Manage lab appointments
-Assist with student and commercial projects
-Perform maintenance on Lab machines
-Extensive knowledge of Lab equipment
-Trained students and employees

Tulane School of Architecture / Teaching Aide
July 2021 - May 2022, Studio and Lecture
-Put together presentations and gave lectures
-Wrote final exam questions
-Extensive knowledge of the course topic
-Led in-class workshops
-Evaluated student work and provided feedback
-Individually worked with students in studio

Susanne Fritz Architektin / Intern
May 2019 - July 2019 , Zurich, Switzerland
-Translated firm website and press materials
-Designed color palettes and mood boards for built projects
-Interior Design
-Prototyping

Publications

Dean’s Dispatch, October 2022
Tulane School of Architecture
Project featured in the Dean’s monthly newsletter

Skills & Tools

Computational	Fabrication
Rhino + SubD	Universal Systems Laser
V Ray	Cutter
Lumion	Ultimaker 3 / Ultimater s5
Adobe Creative Cloud	Formlabs SLA Form 3
Revit	
Microsoft Office	
Plot printing	

Languages

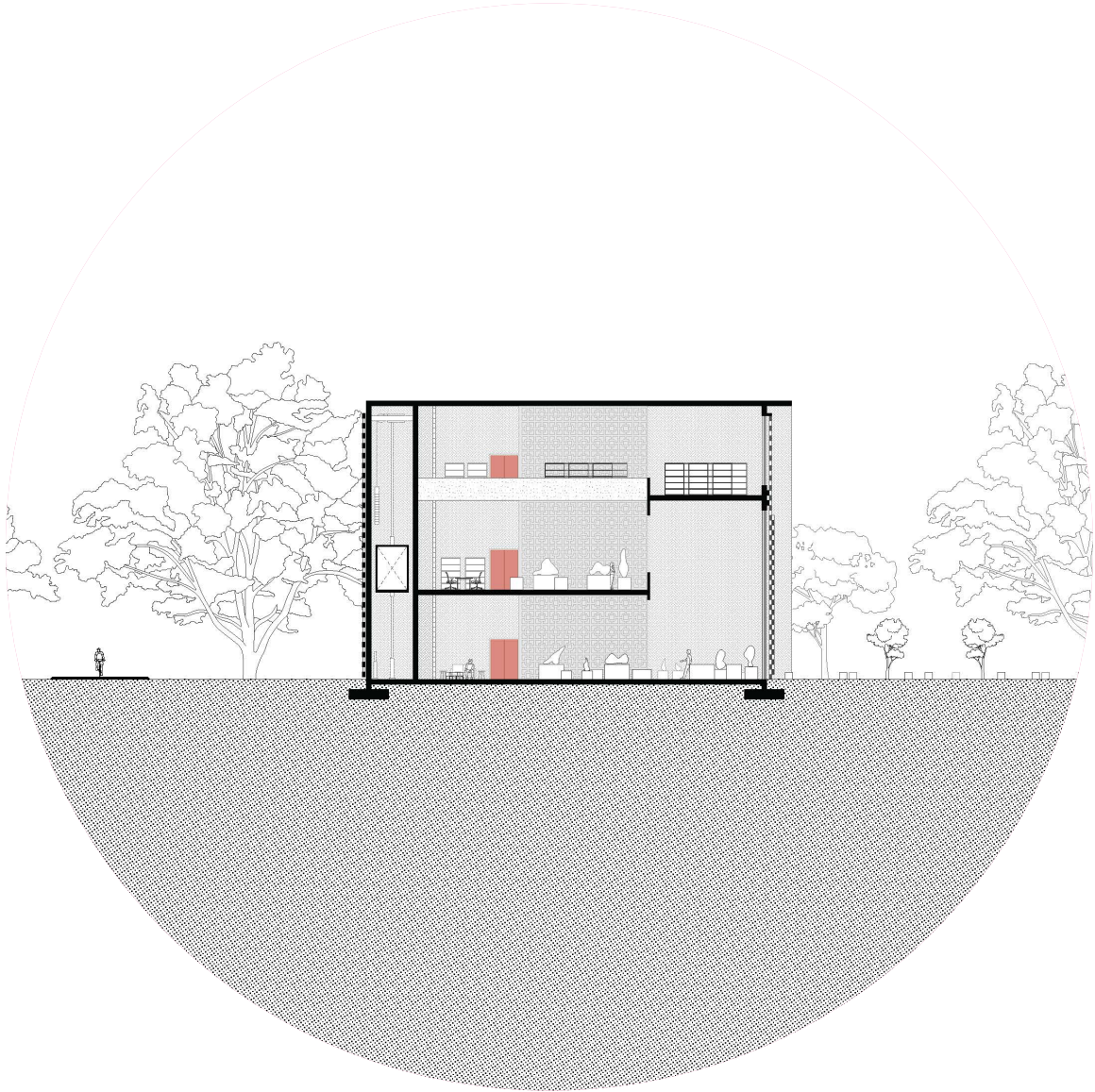
English
German
Italian
Spanish

Interests

Academics	Creative Endeavors
History	Acrylic Painting
Linguistics	Collaging
Foreign Language Studies	Printmaking
Architecture	Drawing,
Interior Design	Tattooing
Fine Arts	Sewing & Beading
Building Archeology	Jewelry Making
Fashion	

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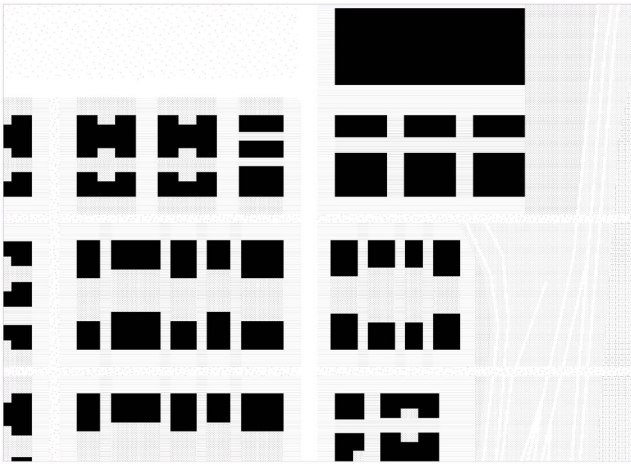
Los Angeles Hability Center

Educational, Cultural
ARCH3031 Final Project
Fall, 2022

Urban Revitalization

The Los Angeles Hability Center is vocational center for recently incarcerated persons looking to get a headstart in their reentry to society. The project is located half a mile south of the Twin Towers Mens’ Correctional Facility, which was once the largest men’s jail in the United States.

The site itself is a part of a 90 acre region of the city for which we were asked to design a new master plan in a previous project (bottom right). East of the site is the Los Angeles River with a collection of warehouses and industrial buildings on the opposite river bank.

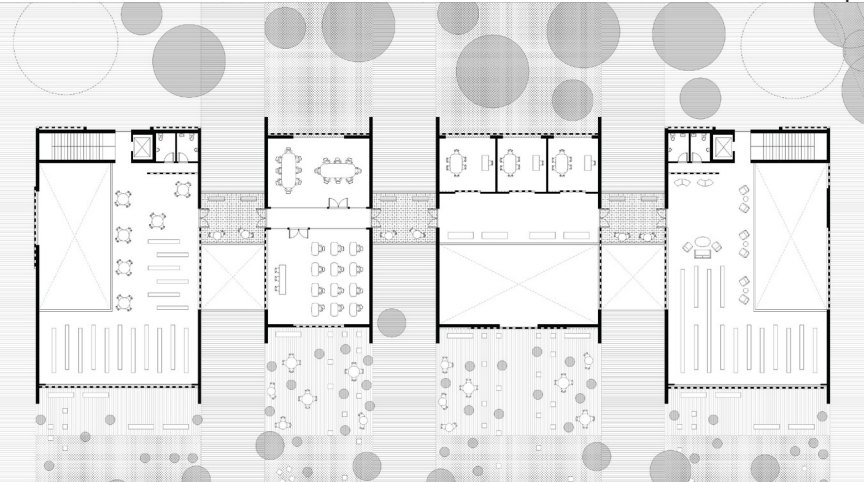


Designed Masterplan

Continuity Through Adaptability

Sustainable HVAC technology is one of the ways in which this project aims to reduce its environmental waste production. Breezeblocks offer an alternative mode of atmospheric control to our current mechanized heating and cooling systems. The environmental impact of mechanized HVAC systems in large buildings will only increase as the Climate Crisis results in more extreme temperatures in vulnerable regions.

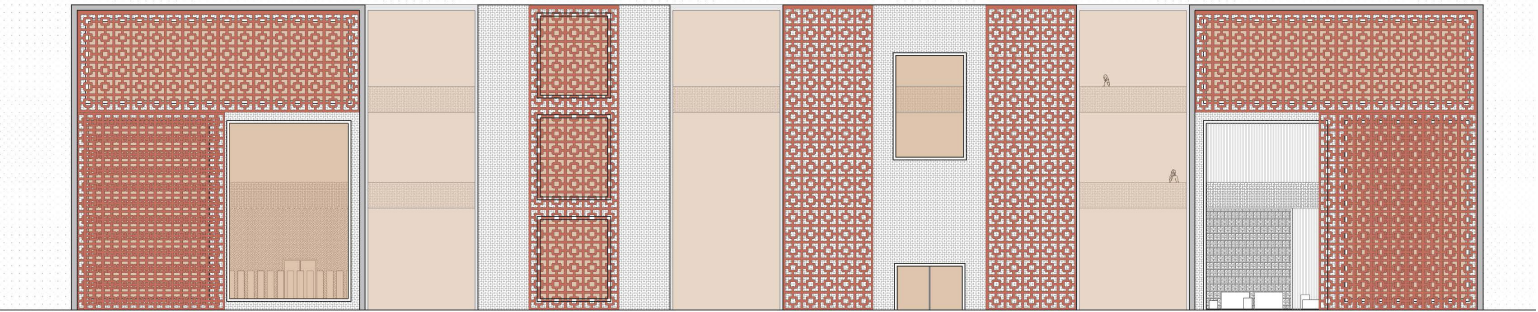
Breezeblocks can reduce the energy usage from cooling buildings that are subject to increasingly extreme temperatures, such as those in drought and wild-fire-prone regions like LA. Mobile breezeblock facades on the south side of the building serve both functional and aesthetic purposes. Suitable for the LA weather, breezeblocks provide sustainable ventilation for the building. They are used to regulate the interior environment, and provide a means of light, air, and noise permeability.



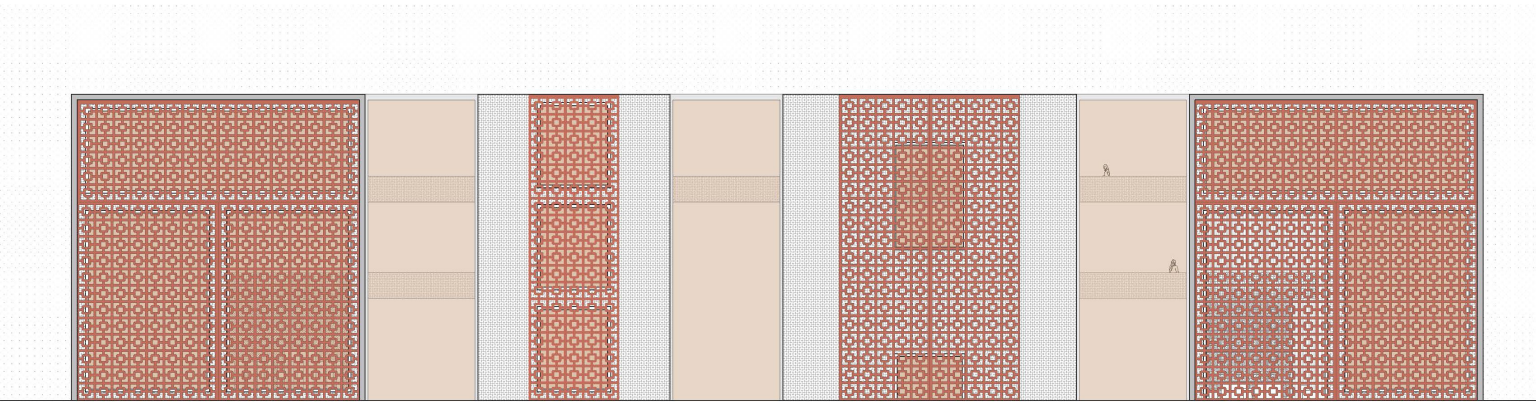
Second Floor Plan



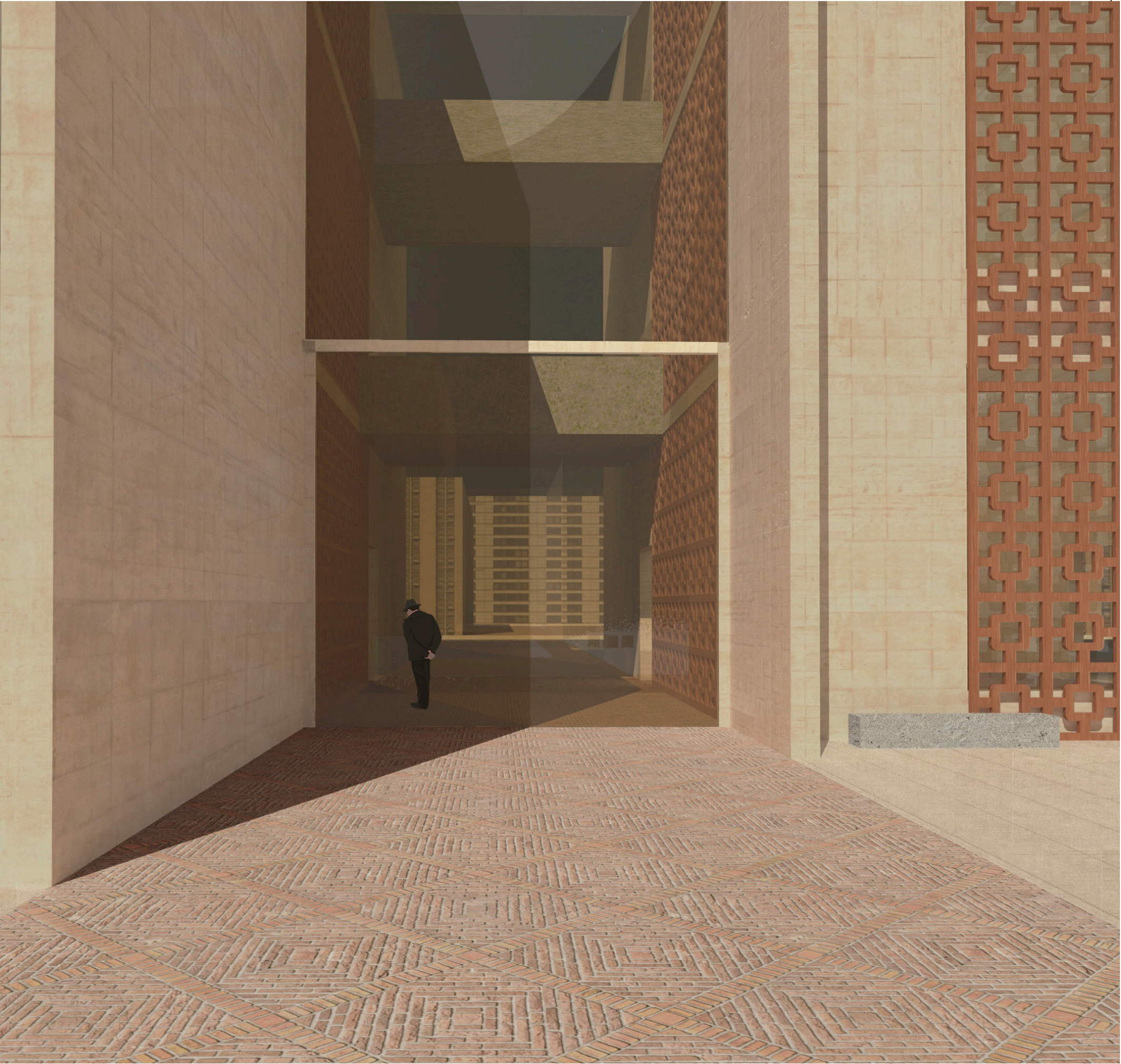
Building Axonometric on Site



Front Elevation: Open Facade



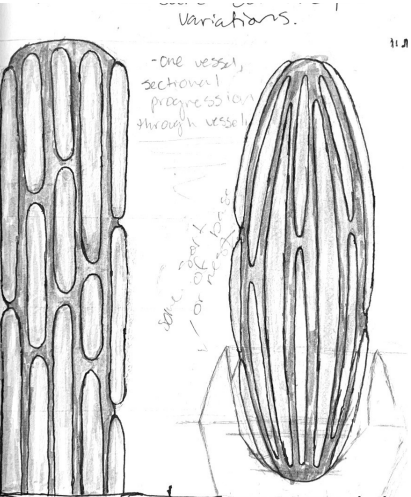
Front Elevation: Closed Facade





Tower Series

3D Modeling, Texture Mapping,
Rendering, Story Telling
Advanced Digital Media Final Project
Fall, 2022



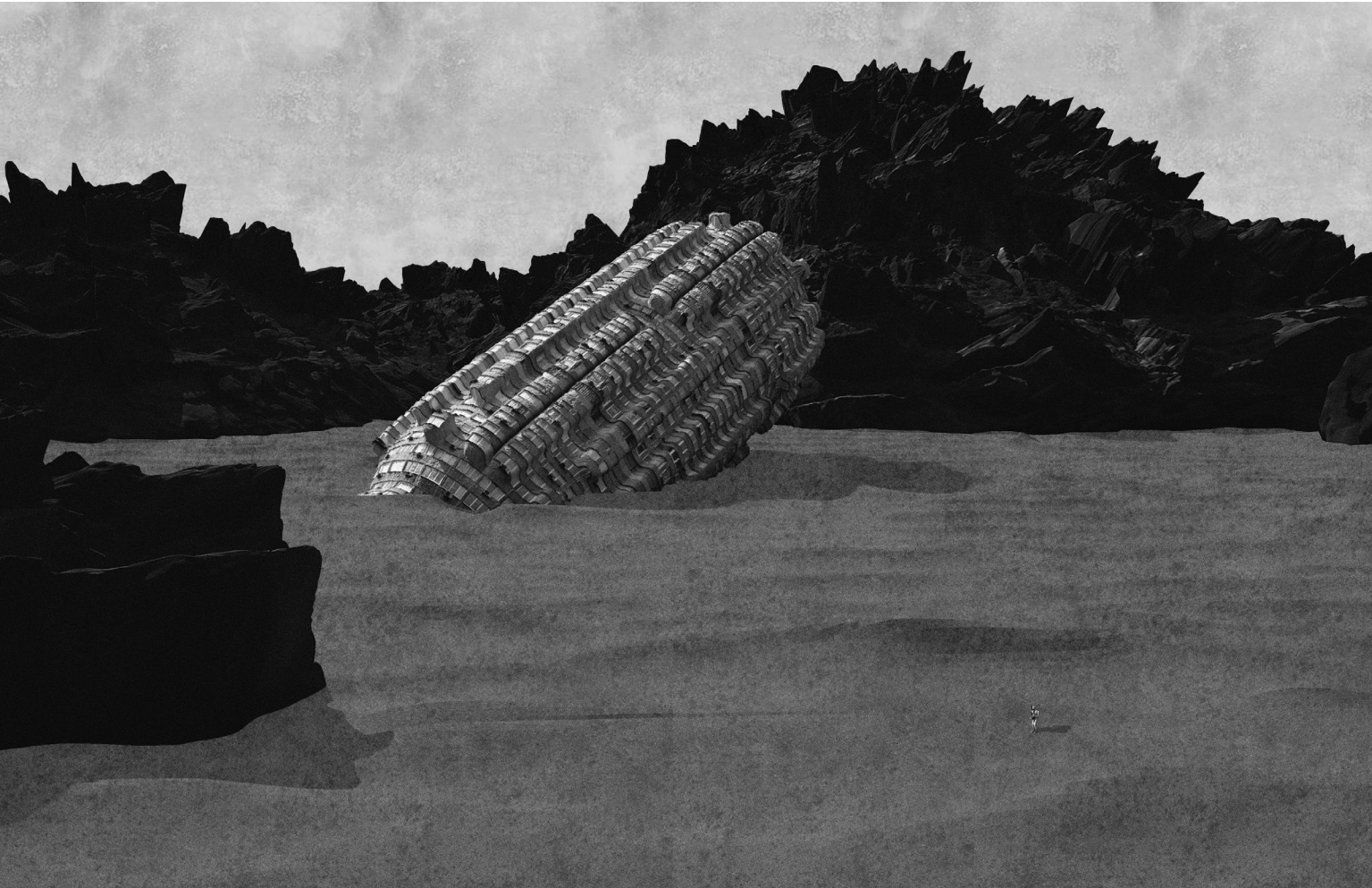
Initial Sketch

Exploring Liminality and Desolation in Far Away Places

In this course, we were introduced to various digital visualization tools including Rhino SubD modeling, V-Ray, and Grasshopper. For our final project, we were asked to use these tools to come up with our own digital media project that explored various themes of our own interest.

My project used scale, massing, and composition to explore the themes of liminality and desolation. The towers are meant to resemble the form of rocket ships while talking about the visual characteristics of old soviet apartment buildings.

The towers are left abandoned on a far away planet, referring to the suggestions made by the ‘Great Filter’ phenomenon in the Fermi Paradox. In short, if we were to discover ruins of an ancient civilization on a foreign planet, humanity could be doomed.

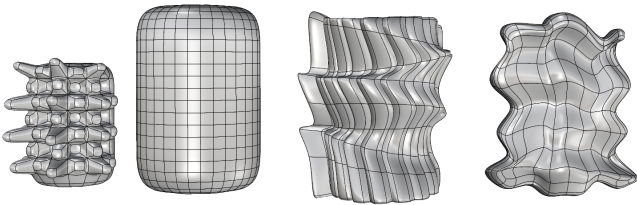






Vessel Series

SubD Modeling, Texture Mapping, Rendering, Displacement, Seamless Texture Design
Advanced Digital Media Assignment 2
Fall, 2023



Proto Vessels

‘Tile’ and Error

For this project, we were asked to explore a theme of our choice using SubD modeling and texture mapping. The assignment was to SubD model a series of vessels and create our own displacement maps from seamless textures to render our vessels to life.

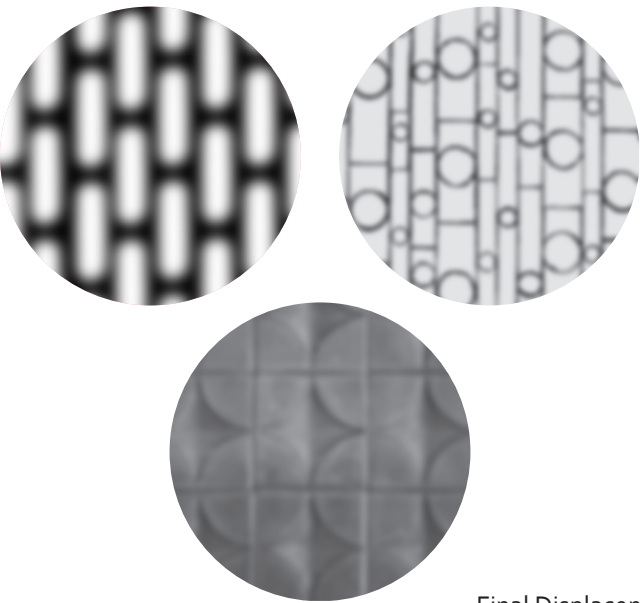
For my theme, I explored the juxtaposition of organic forms and strict symmetry. My vessels are organic and cylindrical form, and I used tile patterns to add symmetry and order to their forms.

My work is titled ‘Tile and Error’ because of the nature of this challenge. I tested various organic forms and and analyzed over 200 tiles to acheive my desired result.

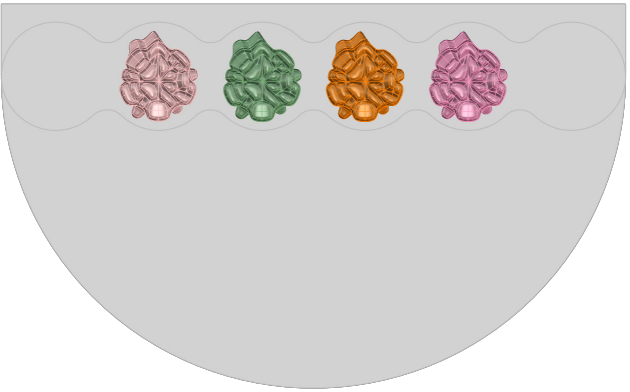
This project was featured in the Dean’s Dispatch monthly newsletter.

Testing and Displacement Process

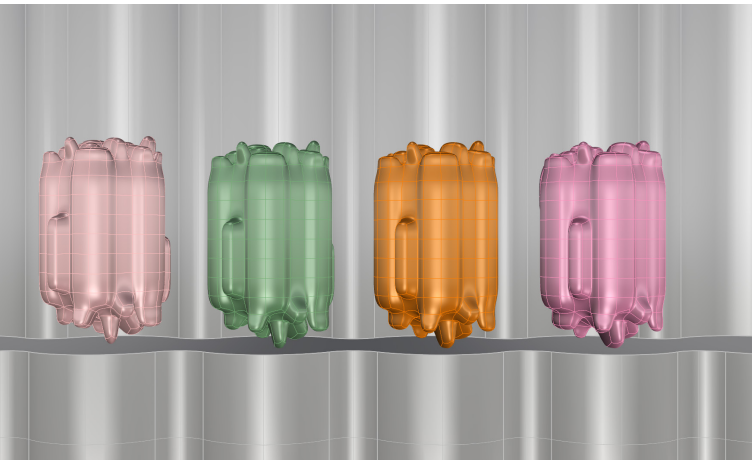
The design process involved sorting through and test-ing over 200 different tile patterns.
The testing process took place in photoshop, where I would turn the tile into a seamless texture and create a displacement map.



Final Displacement Maps



Vessels and Backdrop Top View

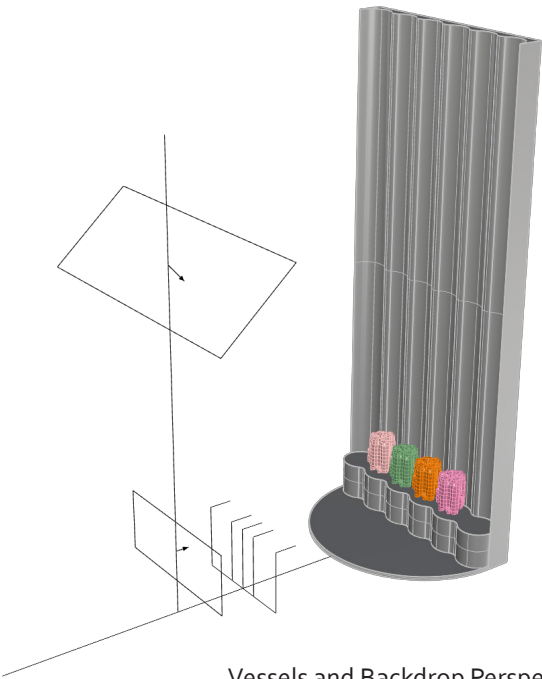


Vessels and Backdrop Front View



SubD Modeling Space

I used SubD modeling in Rhino to explore organic vessel forms and create a showcase for their display.
The final vessel would later inspire the theme and basis for my final project of this course (see Tower Series).



Vessels and Backdrop Perspective





In Plain Sight New Orleans

Housing, Healthcare, Educational
Community Design
ARCH2022 Final Project
Spring, 2022



Building Axonometric on Site

Crisis and the Need For Community

In this studio, we worked with the ideology that urban transformation by cooperation can benefit both tenants and homeowners. The goal of collective living is to reiterate suburban living in a more compact, sustainable and socially minded way.

The COVID 19 pandemic had forced issues such as domestic violence and eviction rates into light. What often has gone unnoticed, now has the chance to be given a voice and a community through architecture.

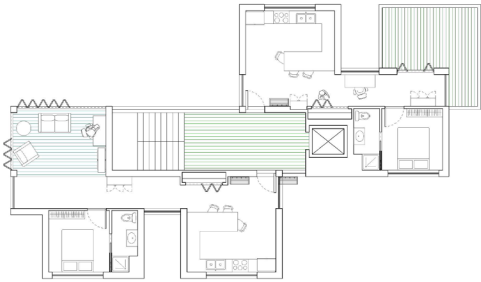
“In Plain Sight” is a temporary and long-term housing shelter for individuals and families seeking asylum from threatening living situations. Collective living is the residential embodiment of “choice,” making it the ideal housing option for empowering women and children in a system that works against vulnerable communities on a fundamental level.

Concept Design: Modularity

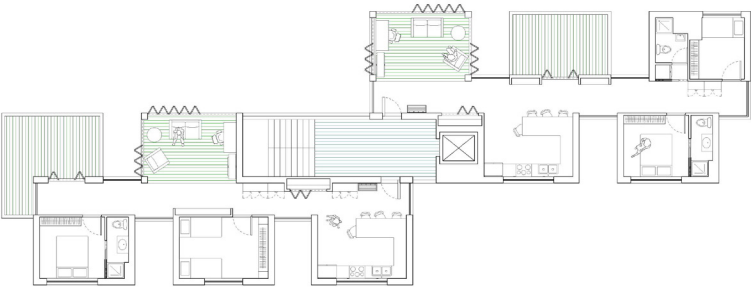
The design for this project is influenced by the need for anonymity, safety, and recovery. Characteristics from a previous single-family home project dictated how the project uses form and materiality to meet those needs.

Two typologies were formed by taking the layout of the single-family home, flipping it, and then subtracting rooms to create space for the vertical core and to organize terraces and convertible spaces. Rooms are equipped with convertible facades to open or close a space.

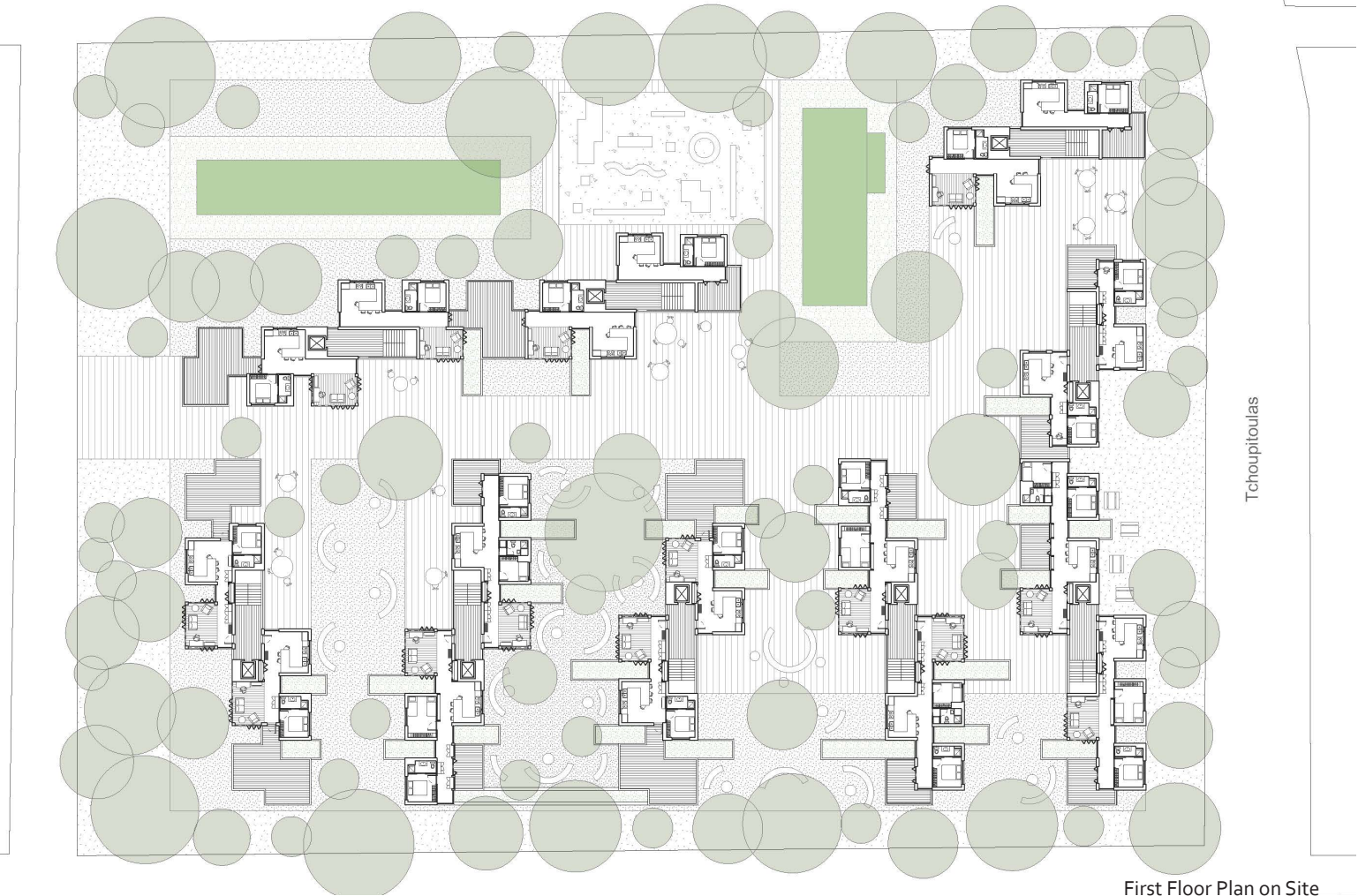
The building clusters were formed by stacking alternating typology layouts, which created covered terraces and emphasized the subtract and stack concept.



Typology A1



Typology B1

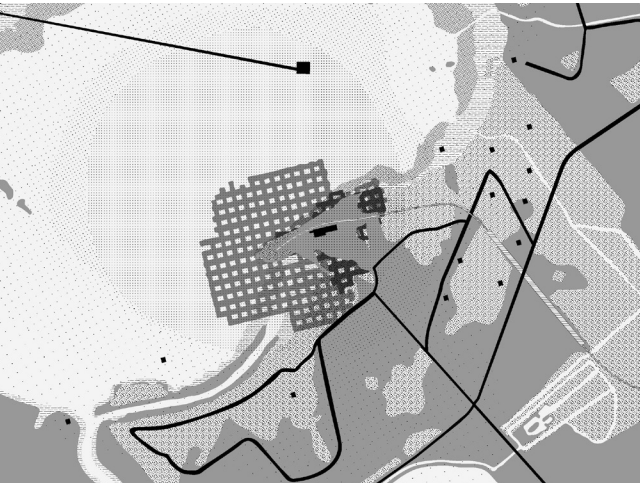


First Floor Plan on Site



Jefferson Island Visitor Center

Educational, Cultural, Research,
Conceptual Design, Model Making
ARCH2021 Final Project
Fall, 2021



Resource Extraction Research Diagram

Natural Resources, Human Intervention, and Terrain Conditions

Jefferson Island is one of five salt dome “islands” along the central coast of Louisiana that form prominent topographic landmarks amidst the cane fields and tidal marshes. These islands have unique ecosystems and a compelling geological, economic and cultural history.

Following a phase of research, site documentation, site analysis, and program analysis, we were asked to design a small institute and visitor’s center dedicated to environmental research and education.

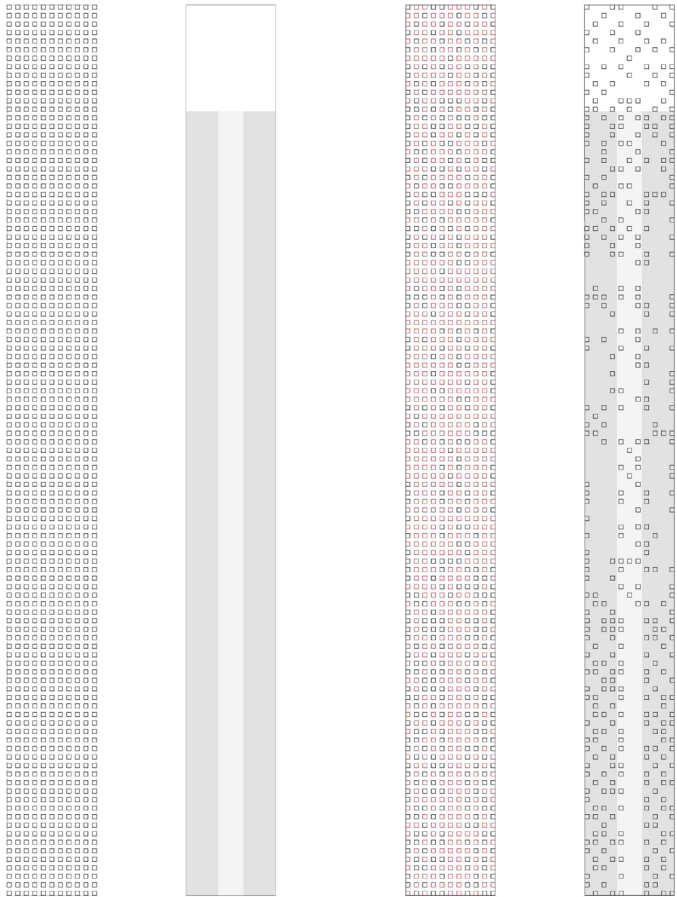
The project is a single architectural intervention that prioritizes sectional representations to engage and reveal the complex geology of the site. The project is an opportunity to either reinforce or challenge existing, overlapping edges and enclaves that compose the site, its context, and its history.

Concept Design: Room and Pillar Salt Mines

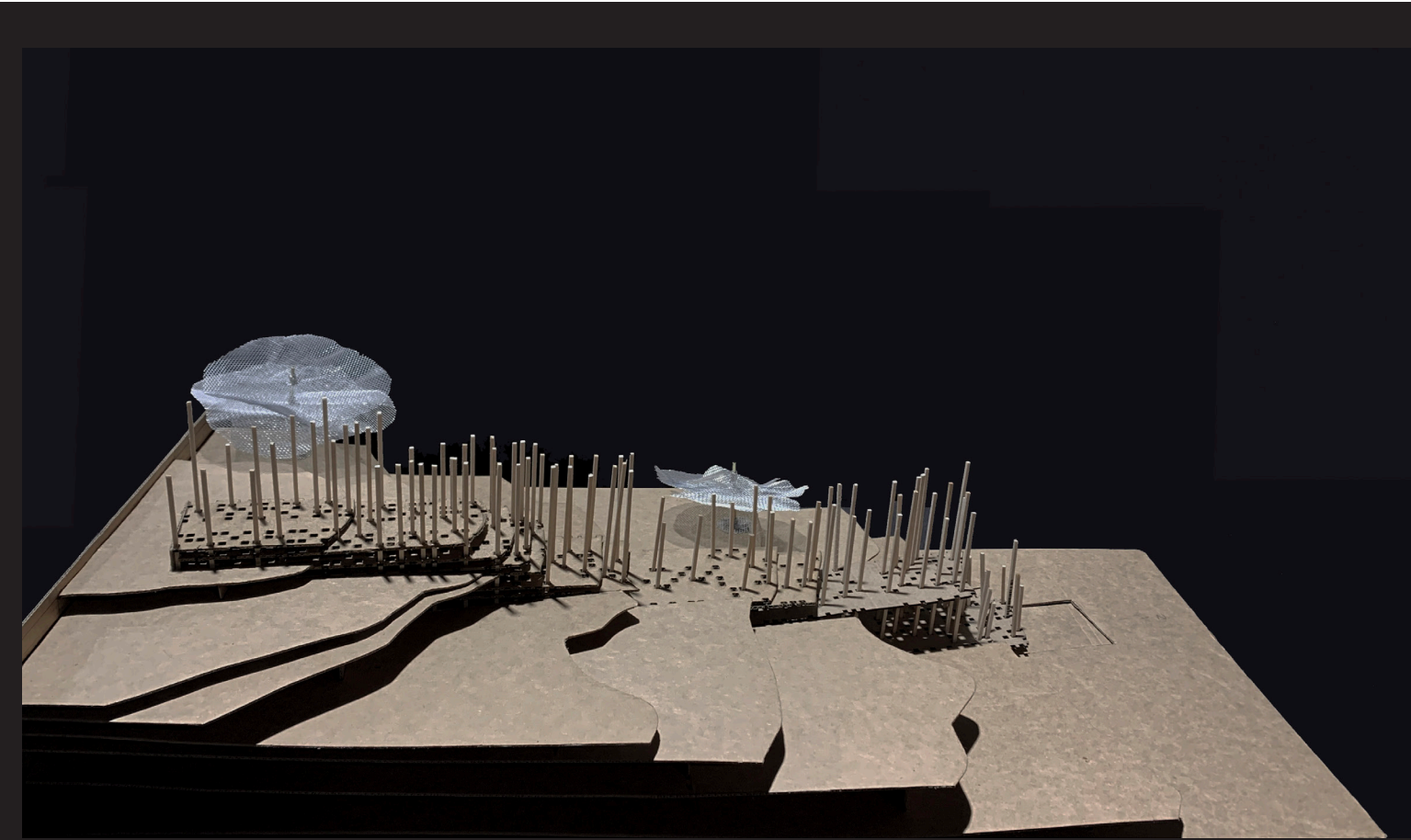
The concept for the Jefferson Island visitor center and exhibit explores the research of human intervention in the Z-axis through the use of pillars that pierce through the ground directly above the former historic room and pillar salt mine.

Depicted in the diagram (right) is a strict bar scheme that organizes program and circulation, accompanied by a dense grid of pillars that occupy the bars. Pillars have been subtracted from the grid to imply movement throughout the space while also tempting visitors to weave between them to experience different light and spatial conditions.

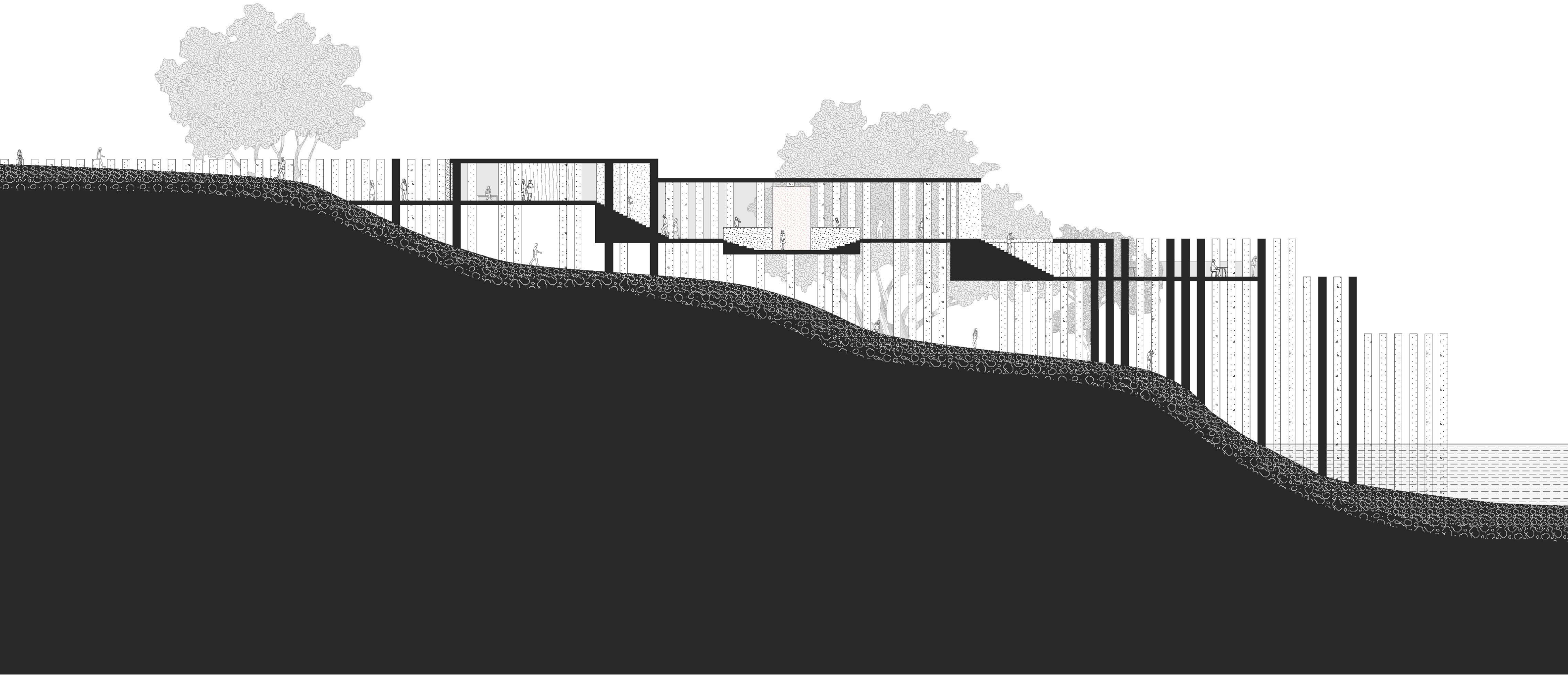
The effect of the grid and pillars on the site is depicted in the model (below) which excludes the building and exists as a pillar and grid concept model for the site.

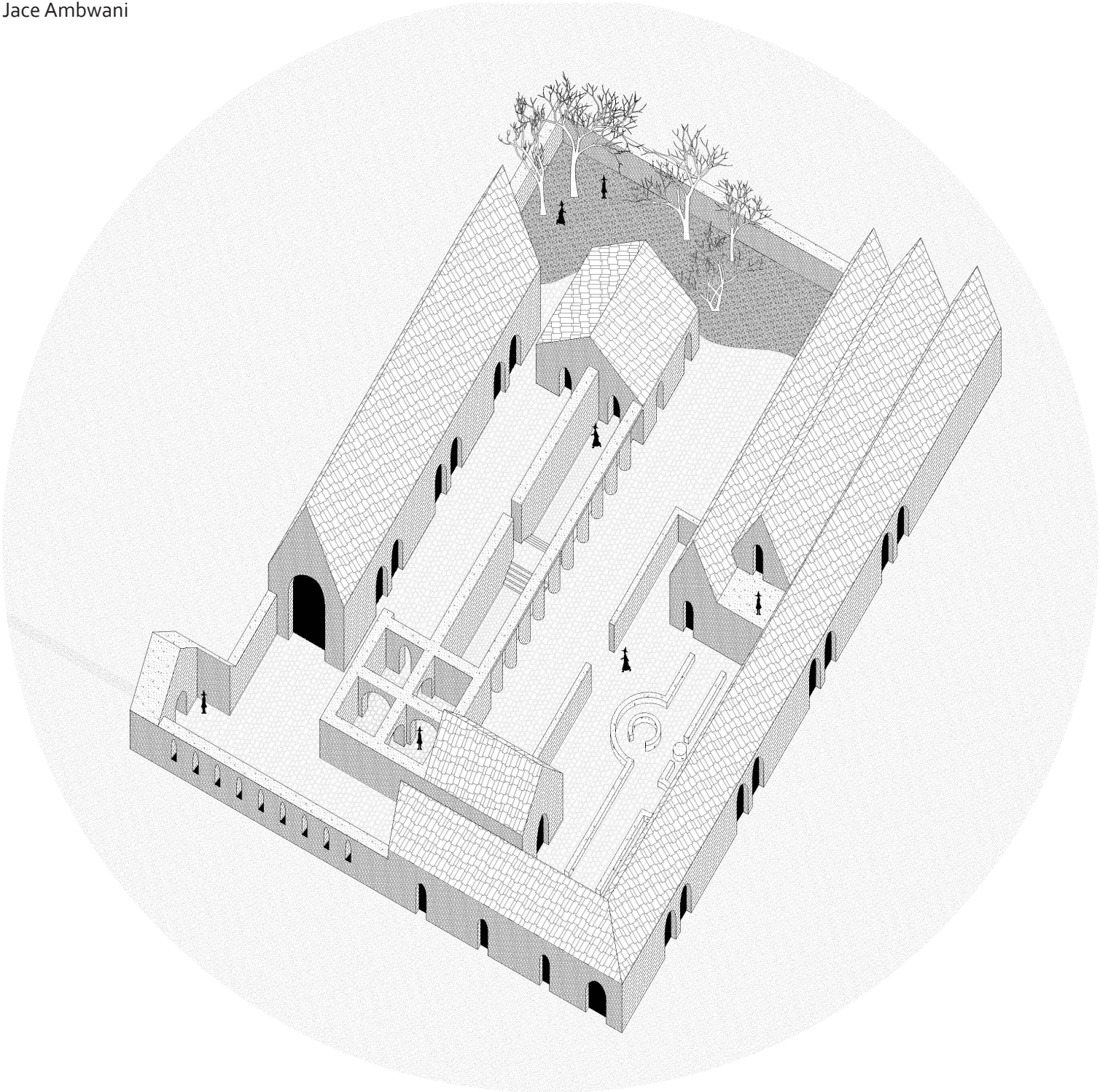


Room and Pillar Concept Diagram



Pillar Concept Model





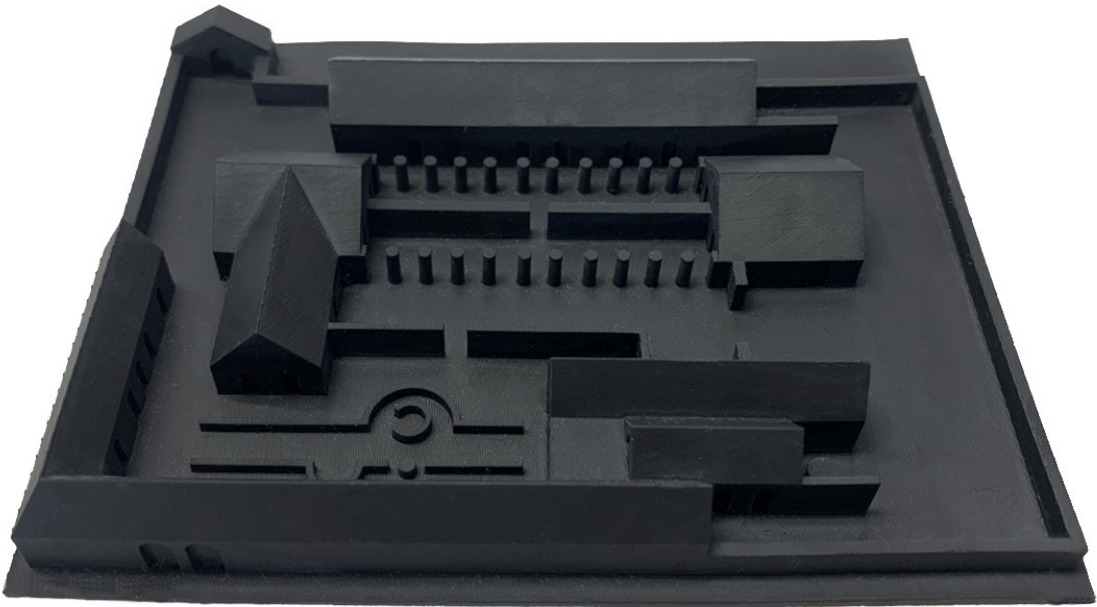
Coven

Visualization, Digital Media,
Story Telling, 3D Printing
ARCH2311 Assignment 3
Fall, 2020

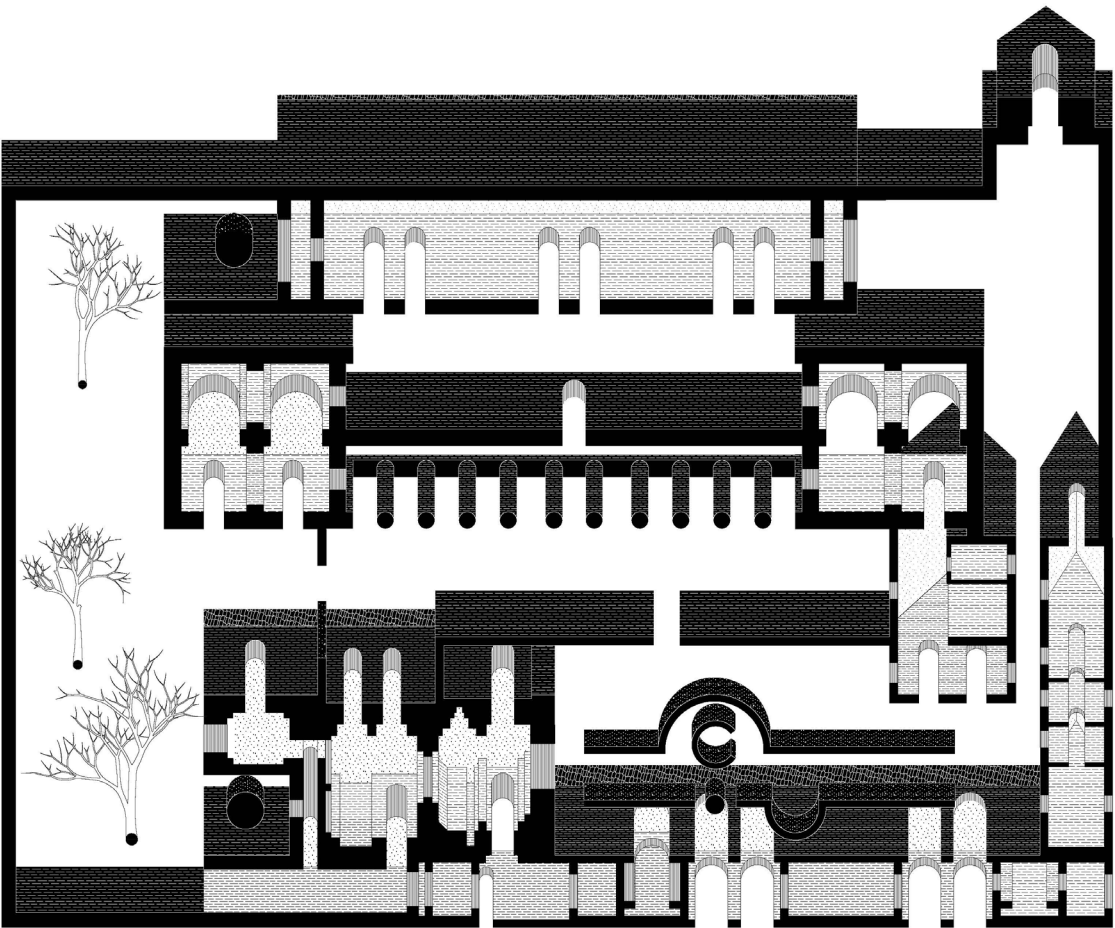
Digital Witchcraft

This assignment called for texture-based graphical devices of representation, with an emphasis on the means and methods through which depth and change-of-plane (horizontal vs. vertical) can be conveyed through tonal and textural shifts.

The structure must also have a ground to which the it is sited. The building complex, which itself is fictional, is a coven, a place of congregation and practice for witches.



Coven 3D Printed in Black Resin



Coven in Wormseye



Thank You.

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More Creative Work: IG [jacein.space](https://www.instagram.com/jacein.space)