

JAMES SOTIROFF

UNDERGRADUATE ARCHITECTURE PORTFOLIO

FALL 2019 - SPRING 2021



University of Michigan

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SNOW ARCHIVE

UG1 Studio

Fall 2019

Instructor: Peter Yi

*Nominated for the 2020 Taubman

College Student Show

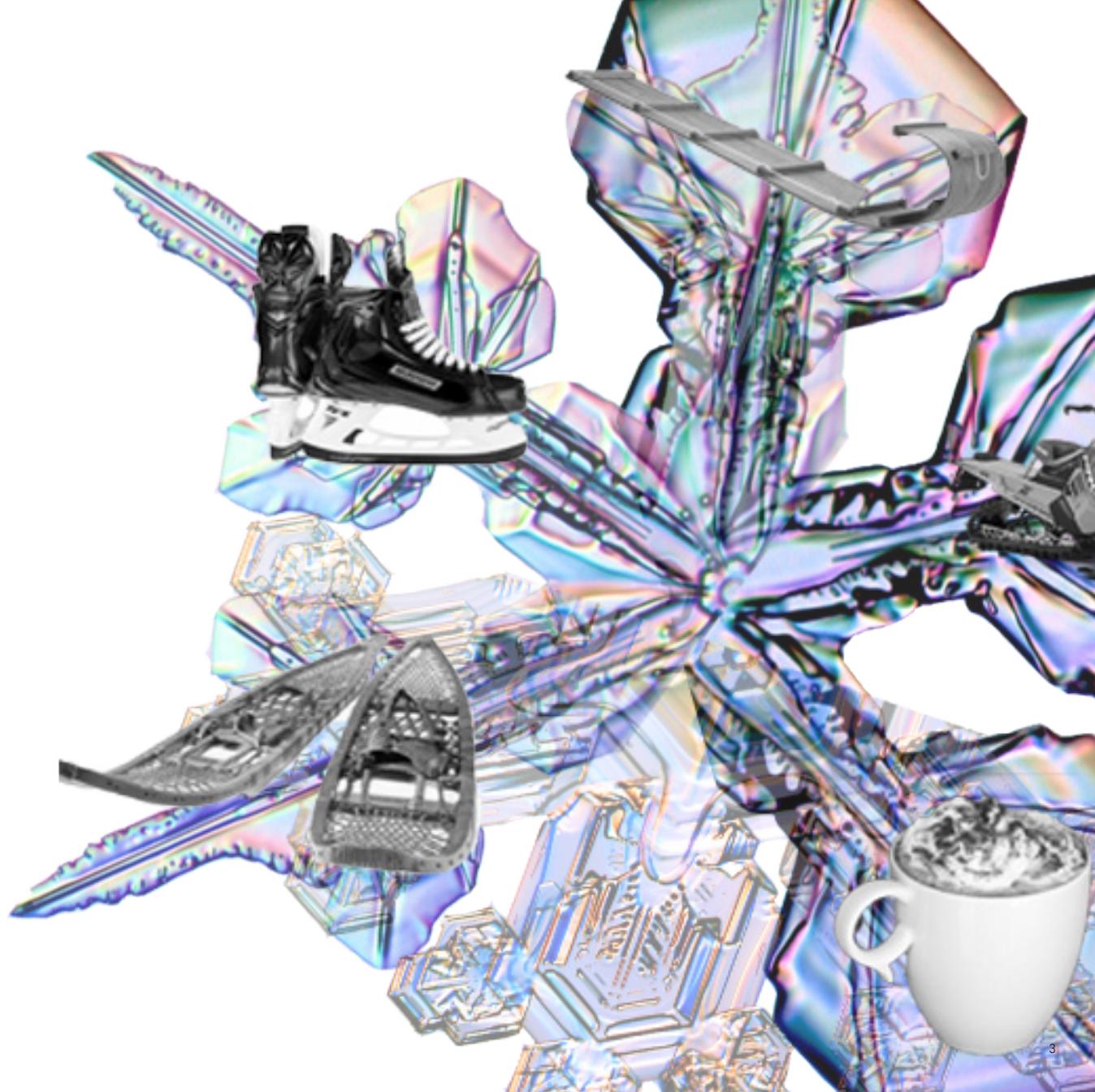
As the home to the University of Michigan, **Ann Arbor is an academic hub**. The University attracts people of many different **backgrounds from around the world**. Those individuals from warmer climates however, **may never have experienced a snowfall before**.

This snow archive **establishes Michigan's winter culture** and engages in participation **acting as donation center for miscellaneous winter objects** to be displayed and available to be reused.

Throughout the project, the snow archive uses the **implied line** explored in previous projects as the **architectural language**. A prescription for space making utilized in various moments throughout the archive.



Site | Ann Arbor, MI

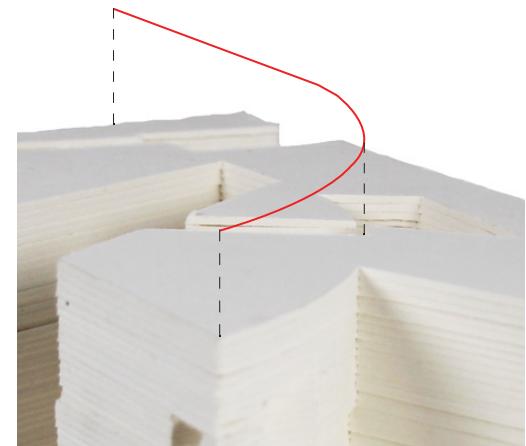


THE IMPLIED LINE



The Mescher
Ellsworth Kelly

The Mescher is a **powerful 2D provocation**. Its elegance lies in the five columns we perceive but don't actually exist. These implied columns sparked a semester long exploration of what I call, "**the implied line**".



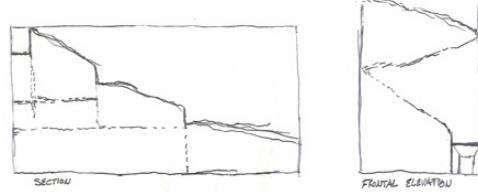
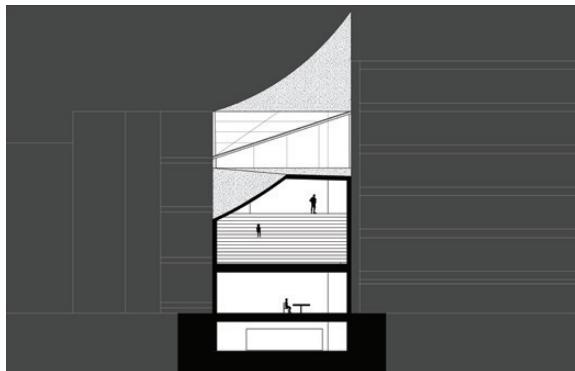
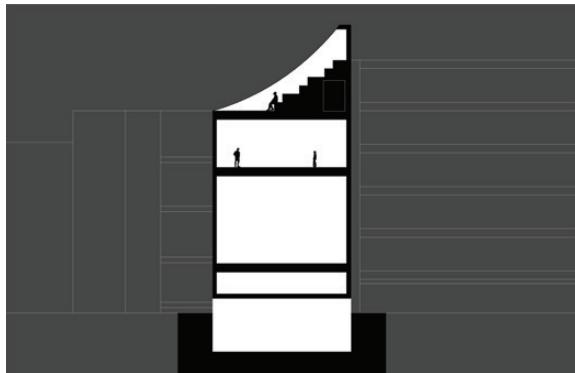
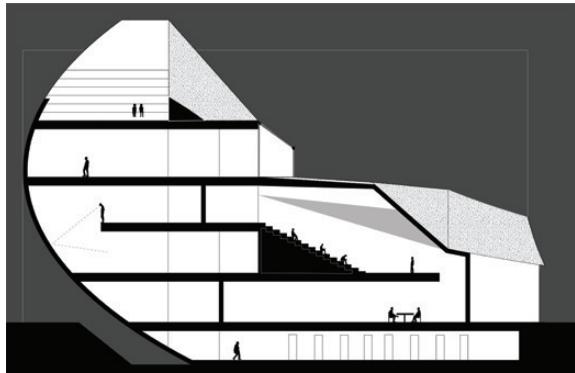
Implied Line Example



Subtraction Model

The **solid and void** operate on a similar level as the **blue and green** in the painting; the green, or void, is doing all the work through **alignments and misalignments to depict the implied**. The lines not only speak in the 2D but the 3D as well with lines wrapping and scaling and curve along the surface of museum board.

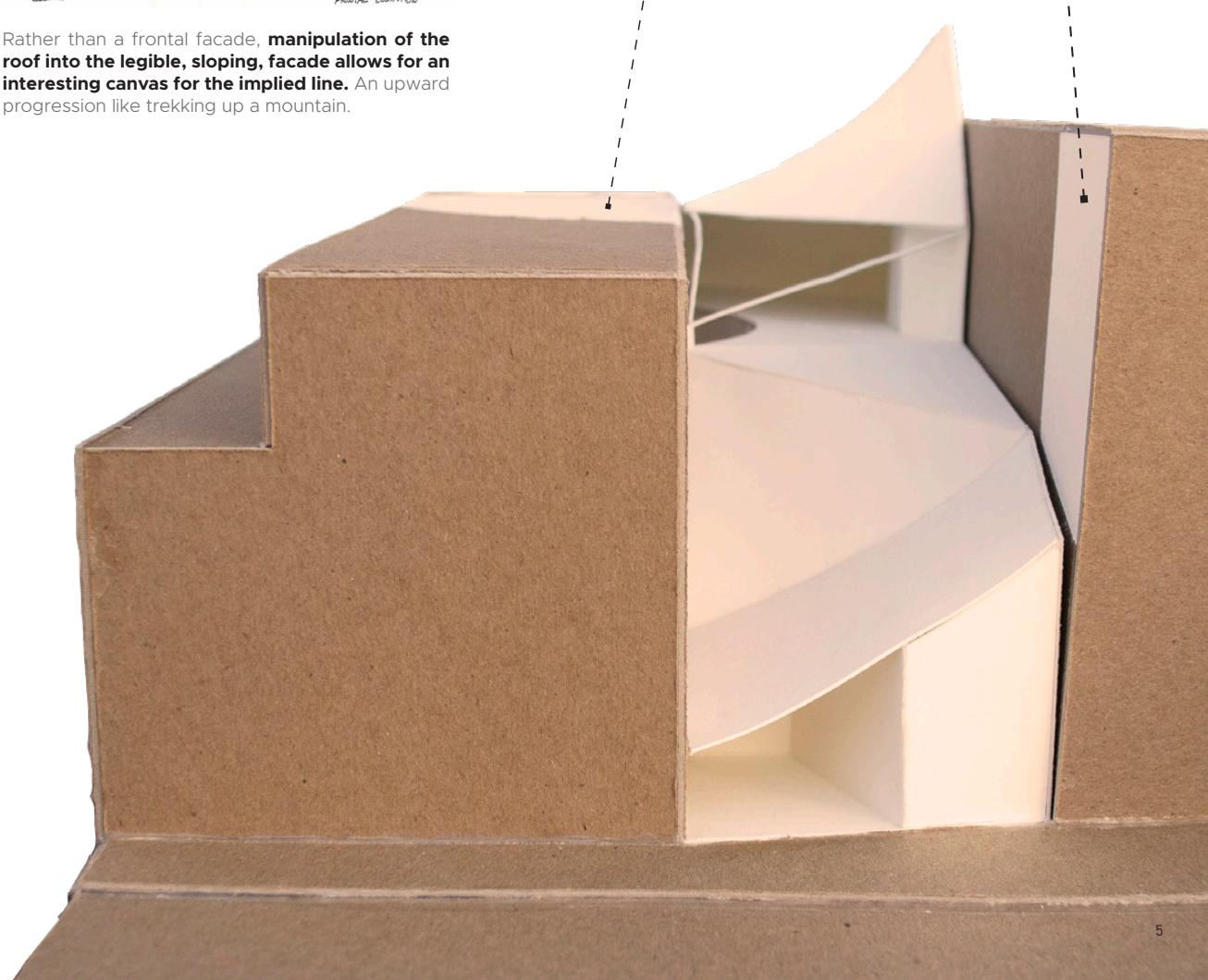
SNOW ARCHIVE



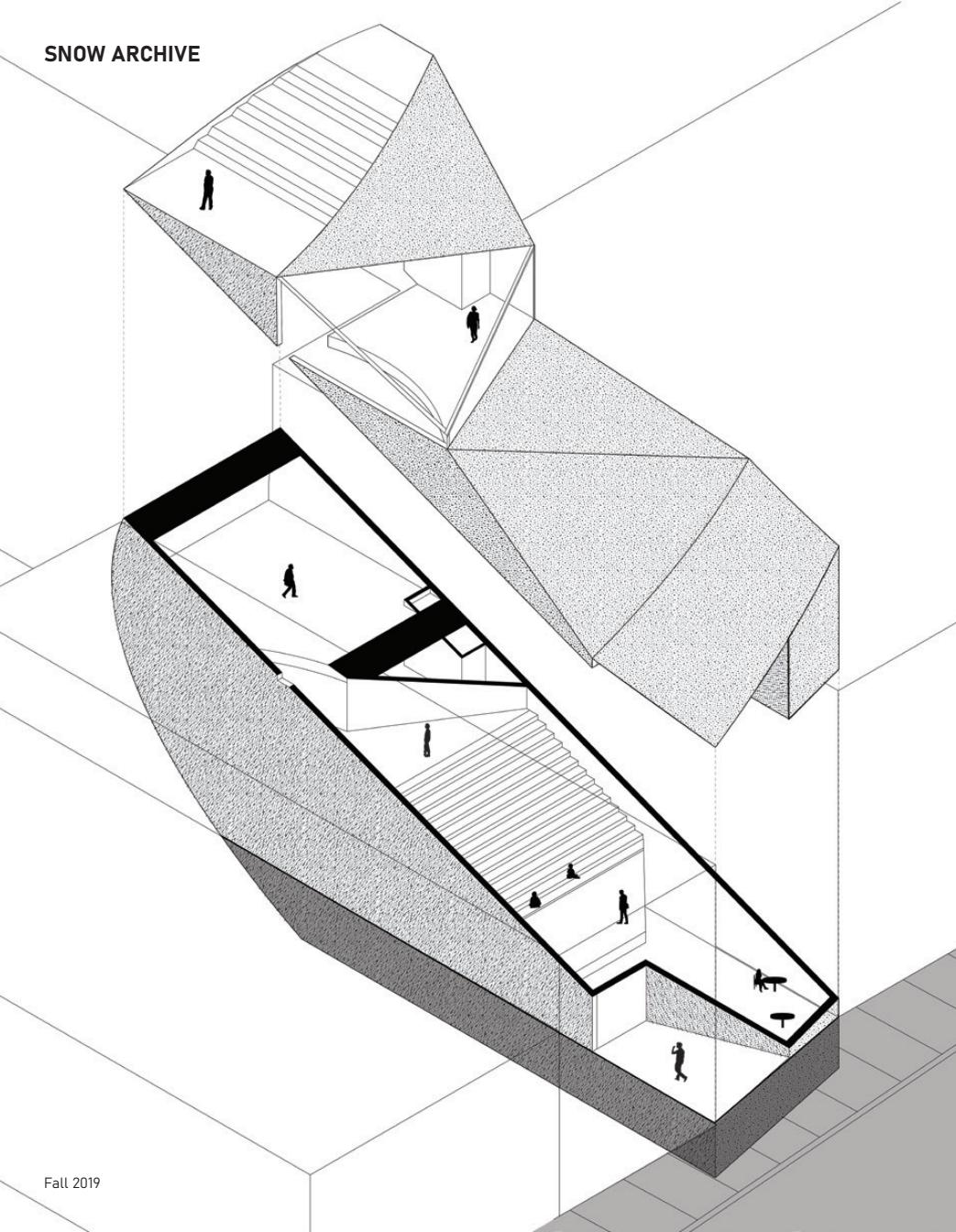
Rather than a frontal facade, **manipulation of the roof into the legible, sloping, facade allows for an interesting canvas for the implied line.** An upward progression like trekking up a mountain.

The outdoor public access program of the archive terminates at the top of the adjacent building **inviting use of the neighboring rooftop.**

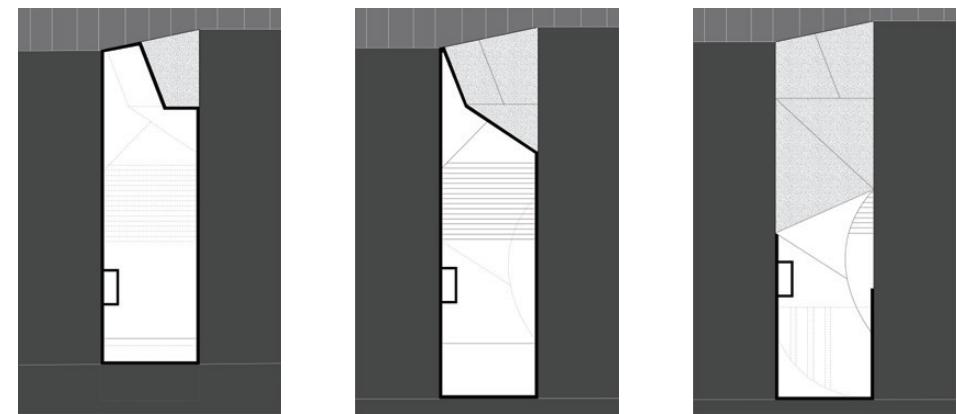
Incorporation of the neighboring facade for an **emphasis on the entrance condition.**



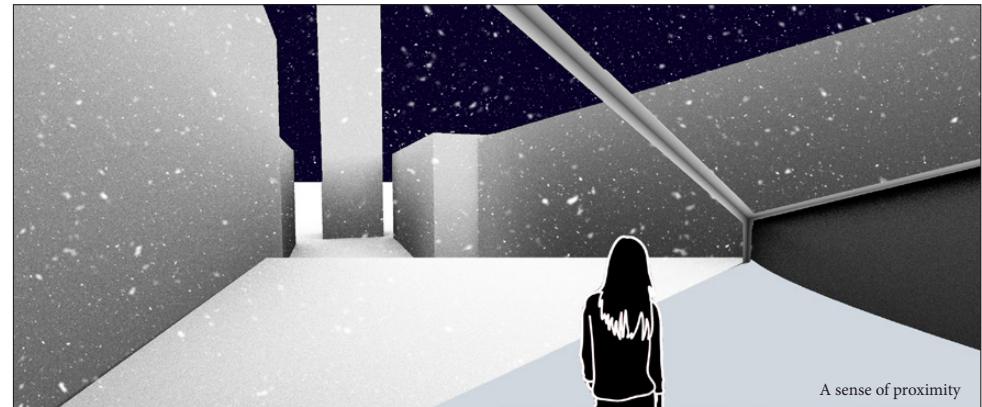
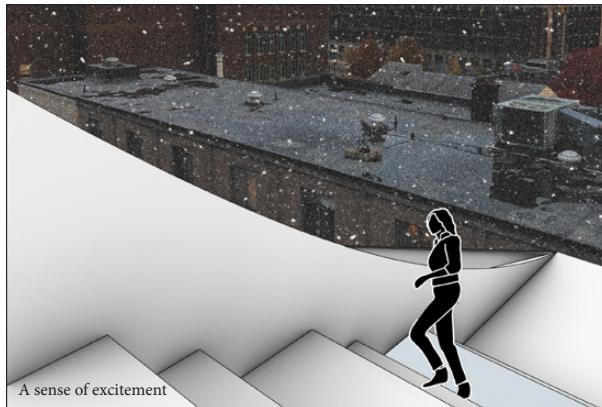
SNOW ARCHIVE



Regional Model

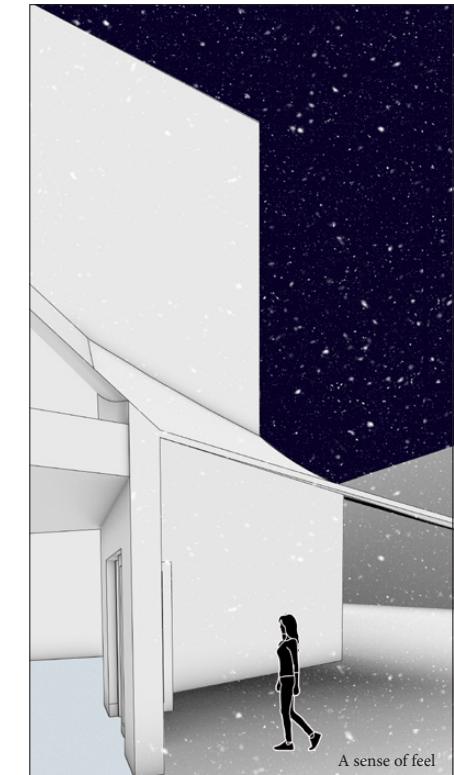
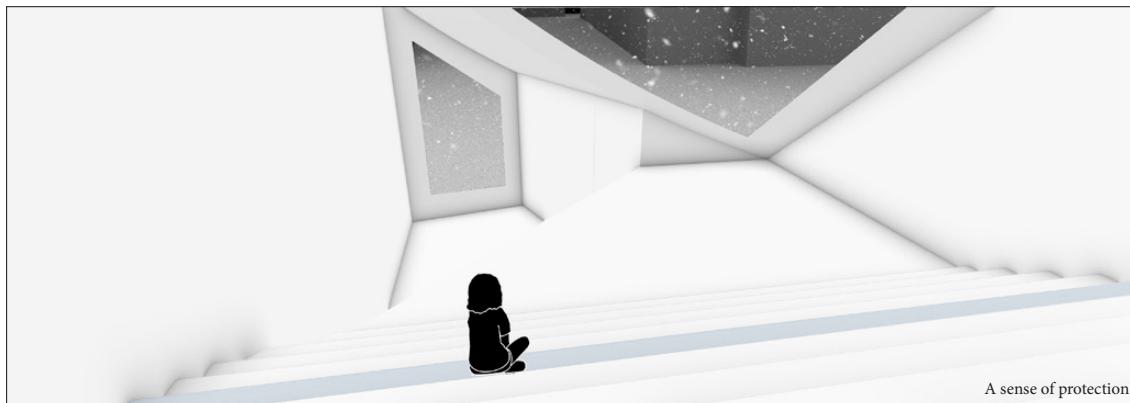
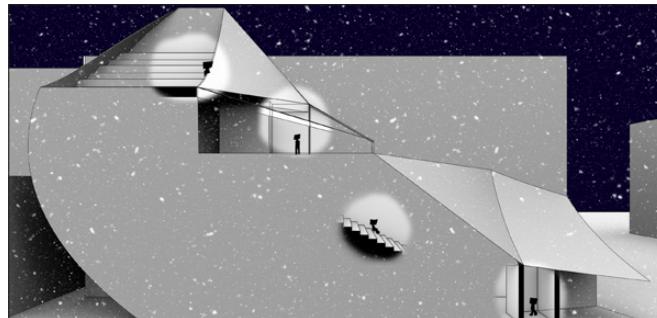


Floor Plans



Winter has its moments

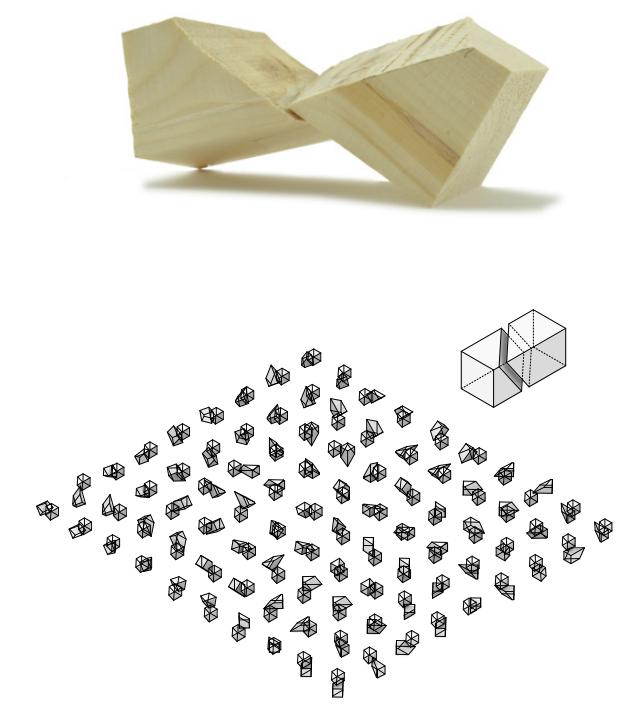
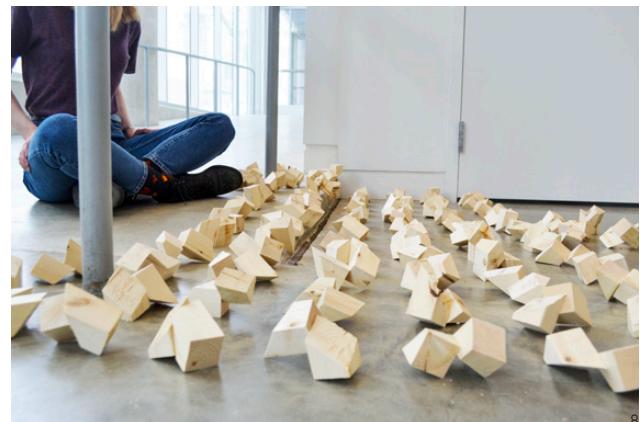
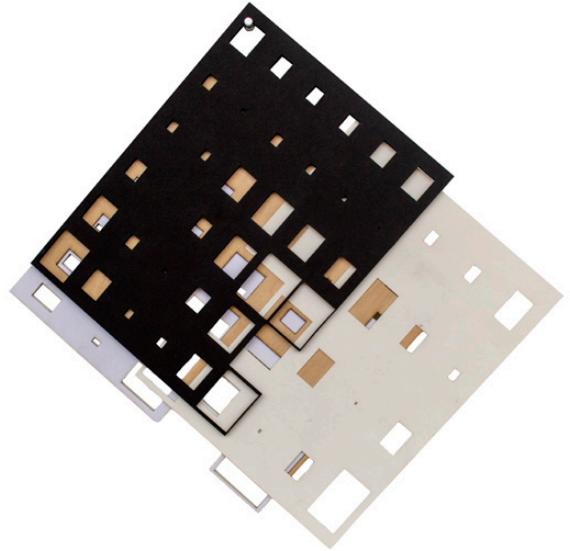
Rather than Michigan's annual transition from bright and vibrant to gloomy and gray as a source seasonal depression, winter offers an opportunity for contrasting pleasures. The day is cold and trekking to your destination is particularly difficult as Michigan's continental climate approaches 0 degrees Fahrenheit and the ground is covered in four inches of snow. Few things are on one's mind in this environment, but one thing's for sure, the desire for shelter. This is the remarkable aspect of our built environment, the protection it provides us from the unforgiving exterior. Although despite the division between interior and exterior, we are still compelled to find out what the cold has in store. The archive seeks to expose and celebrate these underappreciated moments of winter through the juxtaposition of interior and exterior.



EXHIBITION

Digital Forms

Fabrication Studio
Spring 2020



DYNAMIC SANCTITY

[MOA 2020 Design and Build Competition](#)

Summer 2020

Teammates: Mitch Mead, Natalie Fox,
Brandon Meinders

*Awarded 2nd Place

The challenge for this competition proposed by MOA was to create an **art as sanctuary concept**. A design that allows accessibility to the public and **function as a respite for its users to re-energize, contemplate, and take temporary shelter from the elements.**

Dynamic Sanctity is intended to be placed along a cliff-side trail and serve as **a rest stop from the dynamic and harsh nature of the coastal bluffs**. By focusing on the sensorial elements of **light** and **sound** from the environment, the sanctuary provides a **customizable** psychological calming effect. **Dynamic Sanctity is a sanctuary both from and of the elements.**

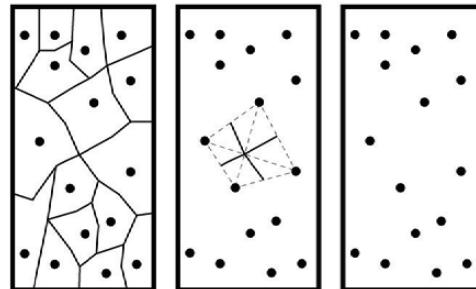


Site | Coastal Bluff

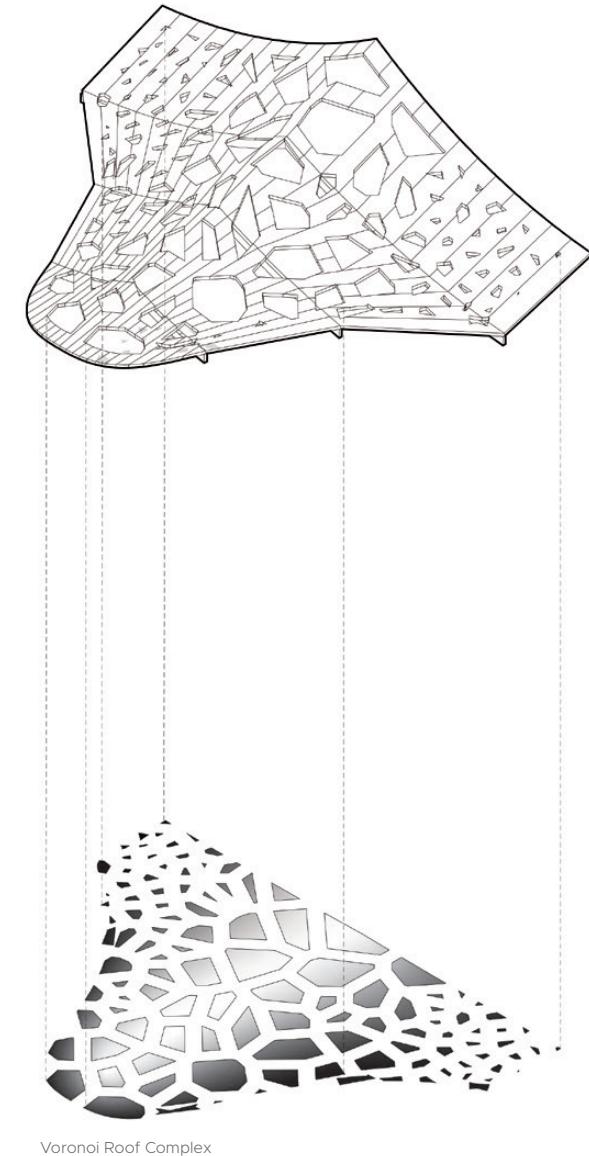
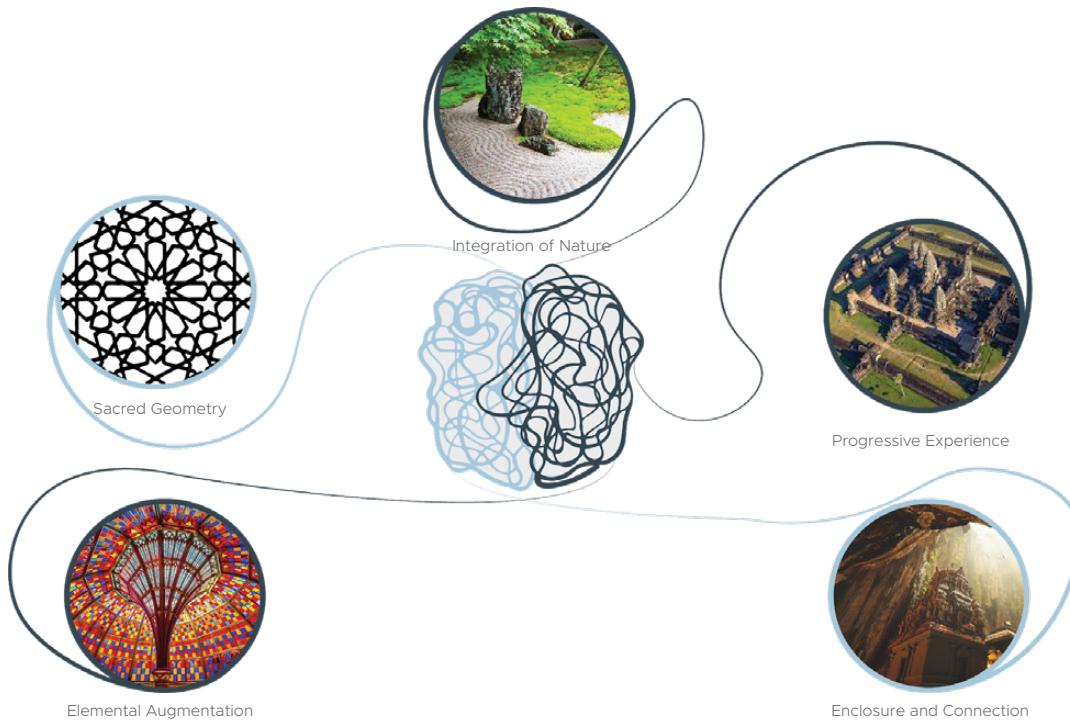


DYNAMIC SANCTITY

What is Sanctuary? After lengthy philosophical and historical discussions as to what realm sanctuary exists, we devised a contemporary definition for sanctuary: **the dynamic and individual relationship between the physical environment, senses, and psychological state which lead to a new form of consciousness.** Dynamic Sanctity is a novel approach which brings **traditional sacred design** into modern architecture and environmental psychology. Dynamic Sanctity provides a regenerative space from the harsh elements of a cliff-side environment and **enables visitors to seek and create their own sanctuary.**

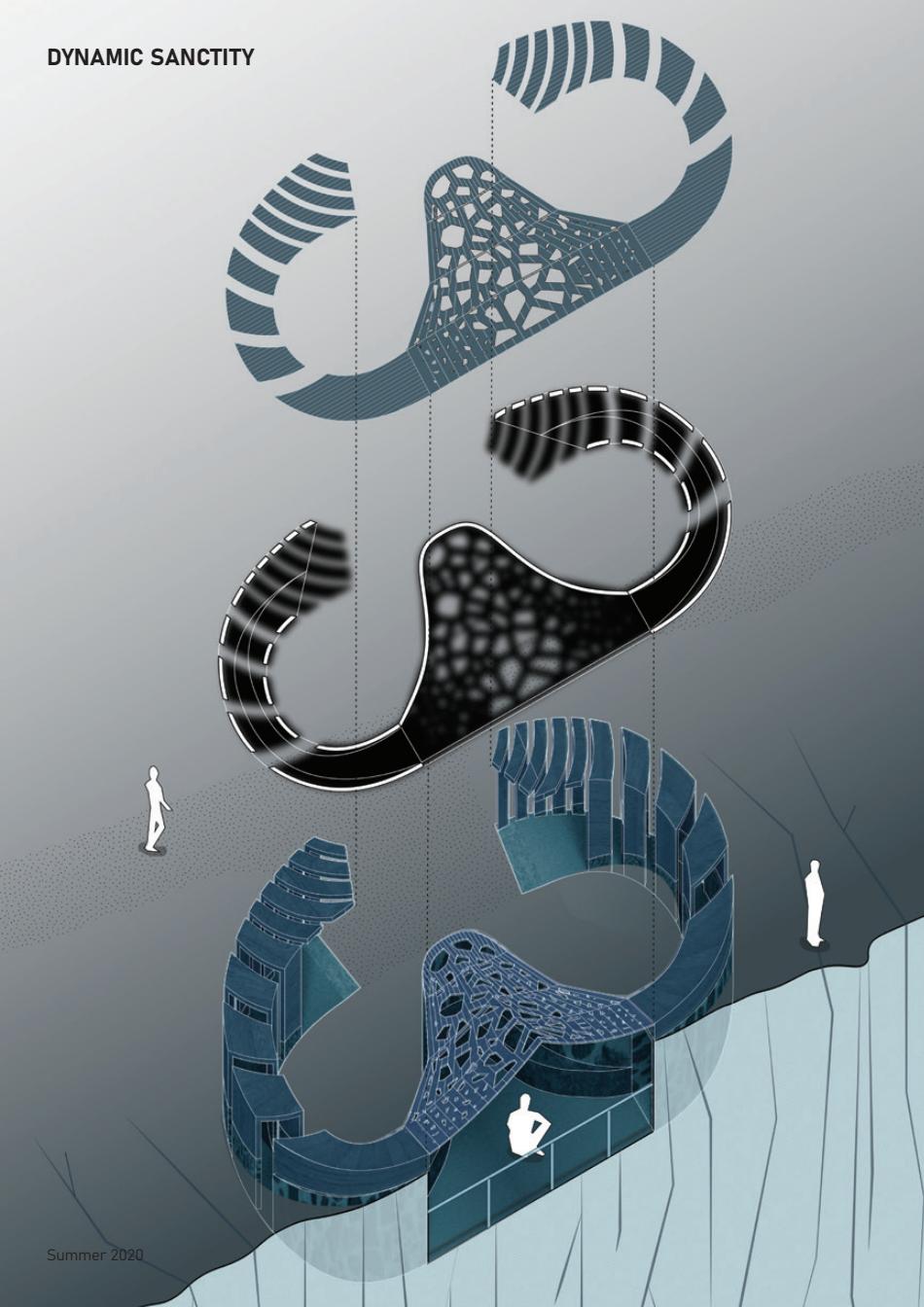


The architectural technology used to produce the roof system was a **voronoi cell method**, due to its **biophilic representation of tree branches** which can instill the psychological benefits.

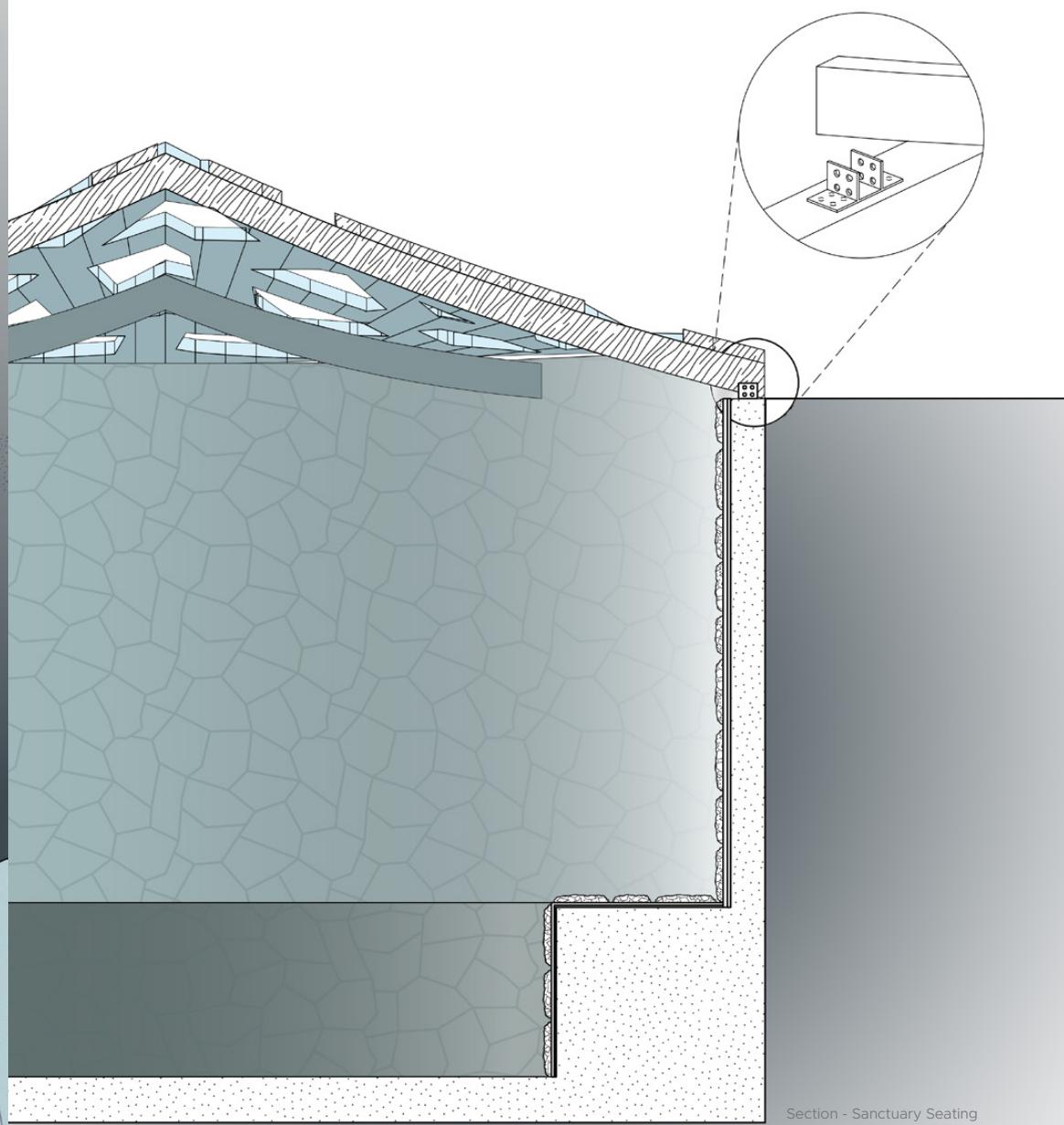


Voronoi Roof Complex

DYNAMIC SANCTITY



Summer 2020



Section - Sanctuary Seating

DYNAMIC SANCTITY



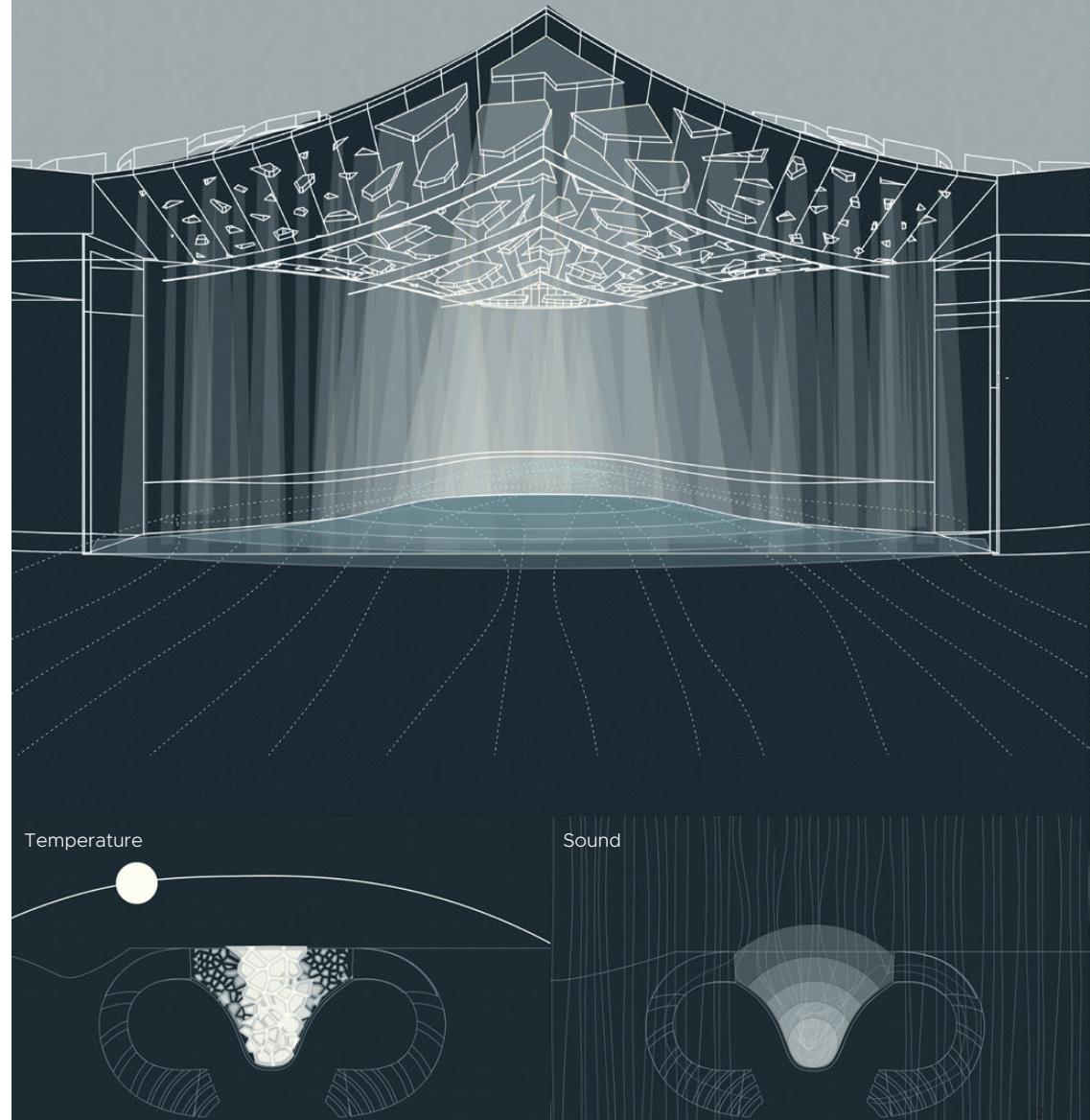
Approach to Sanctuary



Circulation to Sanctuary

Light

Geometry breeds variation in light, sound, and temperature



Temperature

Sound

DYNAMIC SANCTITY

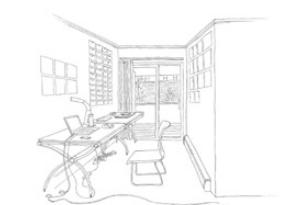


EXHIBITION

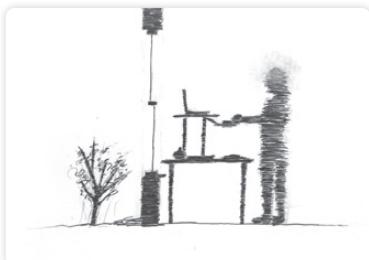
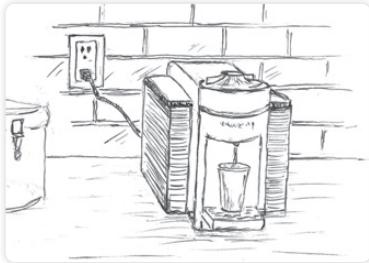
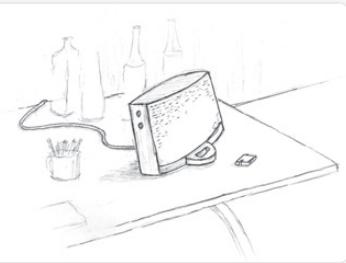
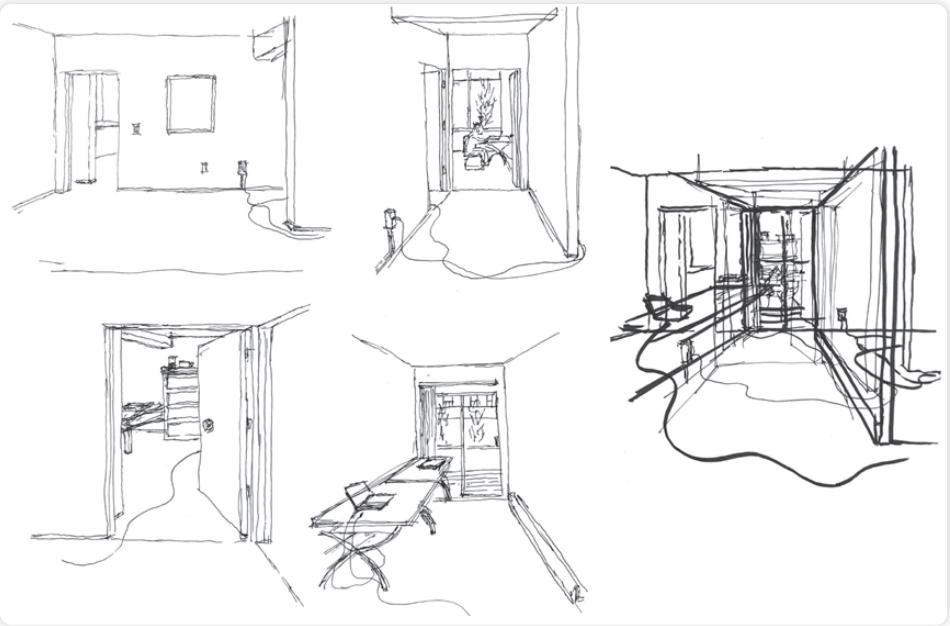
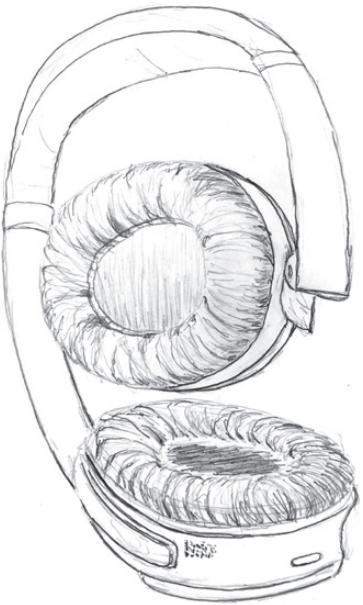
Domestic Devices

Directed Drawing
Spring 2021

DOMESTIC DEVICES



JANE GENTON
ARTS FACULTY
DIRECTOR, MUSEUM OF
UNIVERSITY OF TORONTO



EXHIBITION

Ceramics

2014 -2016

What began as merely a high school course to fill my art credit quickly developed into **an addiction**. For me, the ceramics studio became a sacred place, a getaway of mine. A place where life concerns disappeared and **my mind could wander freely**. This experience was life changing to me and marked the **realization of my compulsion to create and design**.



RURALIZING SUBURBIA

UG4 Studio

Spring 2021

Instructor: Eduardo Mediero

Teammates: Evan Parness & Cooper

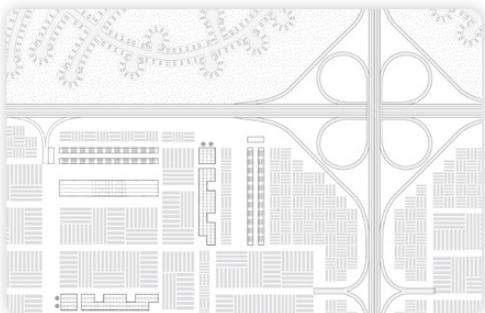
Schwartz

*Wallenberg Finalist

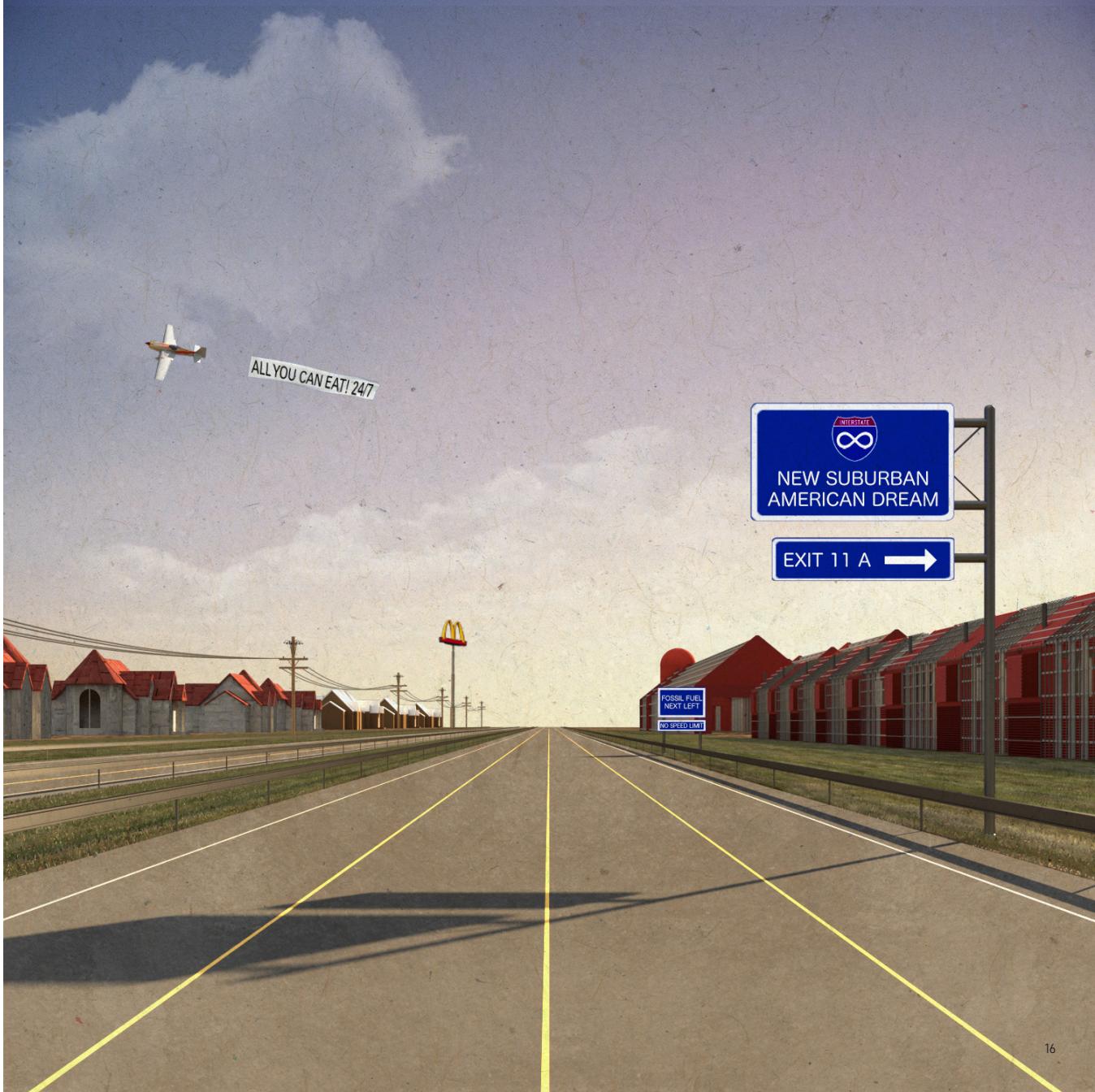
The United States has been designed around a **dependence on consumption**. Our economic model prioritizes exponential growth and development for the expansion of financial capital, instilling a culture where the **citizen's role is to consume, and contribute back to the economy**. This saturation of **convenience and commodification of goods** can be identified in a typical suburban home and shapes the domestic lifestyle.

By **merging the rural within the suburban**, we hope to address the growing issues around the suburban home and propose multiple new typologies for suburban communities across America that seek to ameliorate our domestic lifestyle.

Our model for a new suburban community is designed and operated around the premise of **SUSTENANCE over CONSUMPTION**.



Site | Adjacent to Any Rural Highway

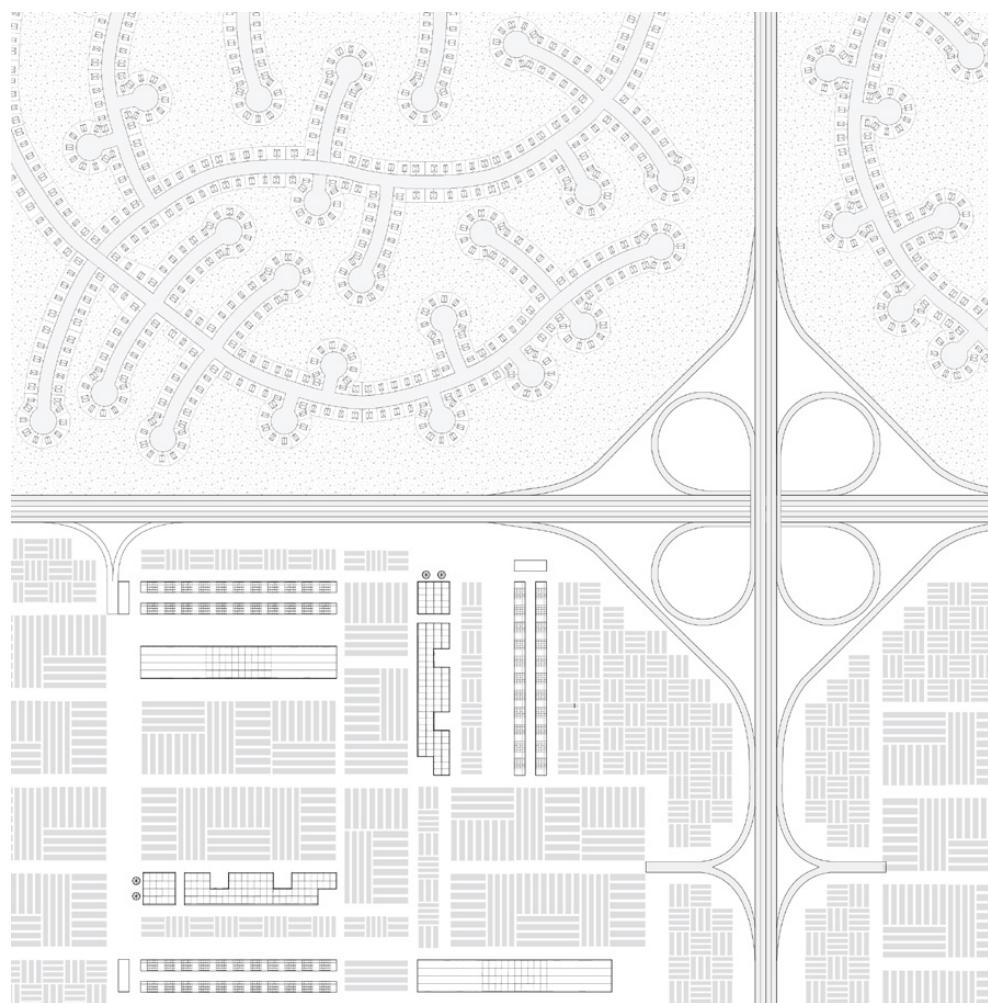


RURALIZING SUBURBIA



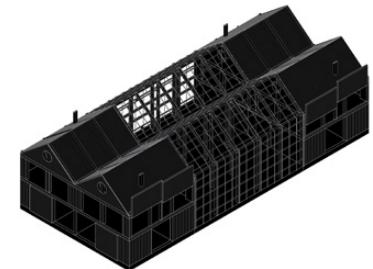
Precedent

Each community is built around the **interconnection of agricultural production with self-sustaining family housing, resource generation, and public community spaces.**

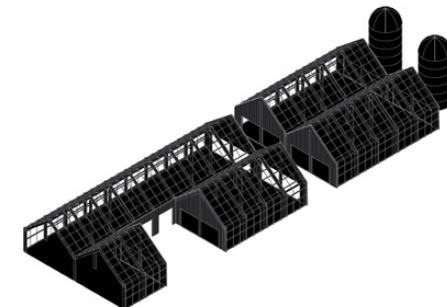


Resource Diagram

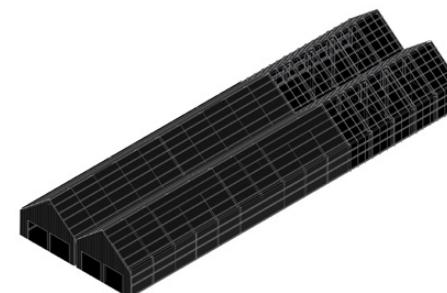
Site Plan - Typical Suburbia vs Rural Intervention



Housing Axon



Farm Axon



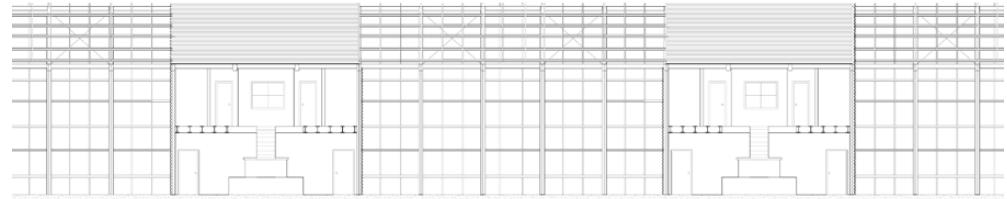
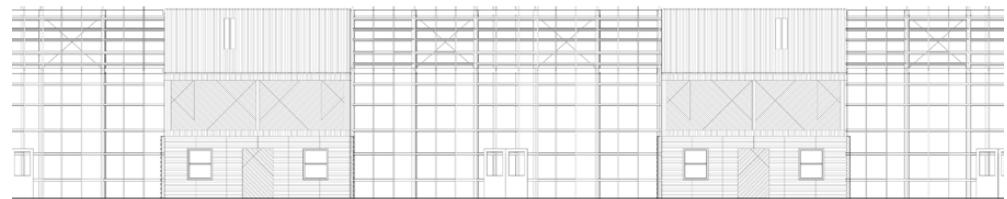
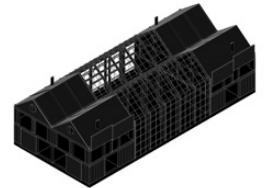
Resource Center Axon

RURALIZING SUBURBIA

Row Housing, corrugated paneling with adaptable openings, **creating semi-public and private housing for families/ community**, able to open up the first floor between neighboring homes and greenhouses. Main entry is through the greenhouse.



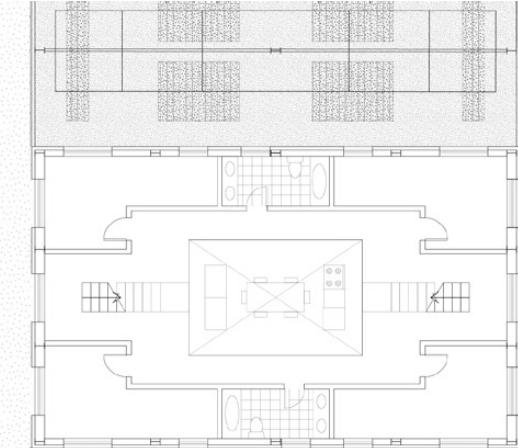
Housing Threshold



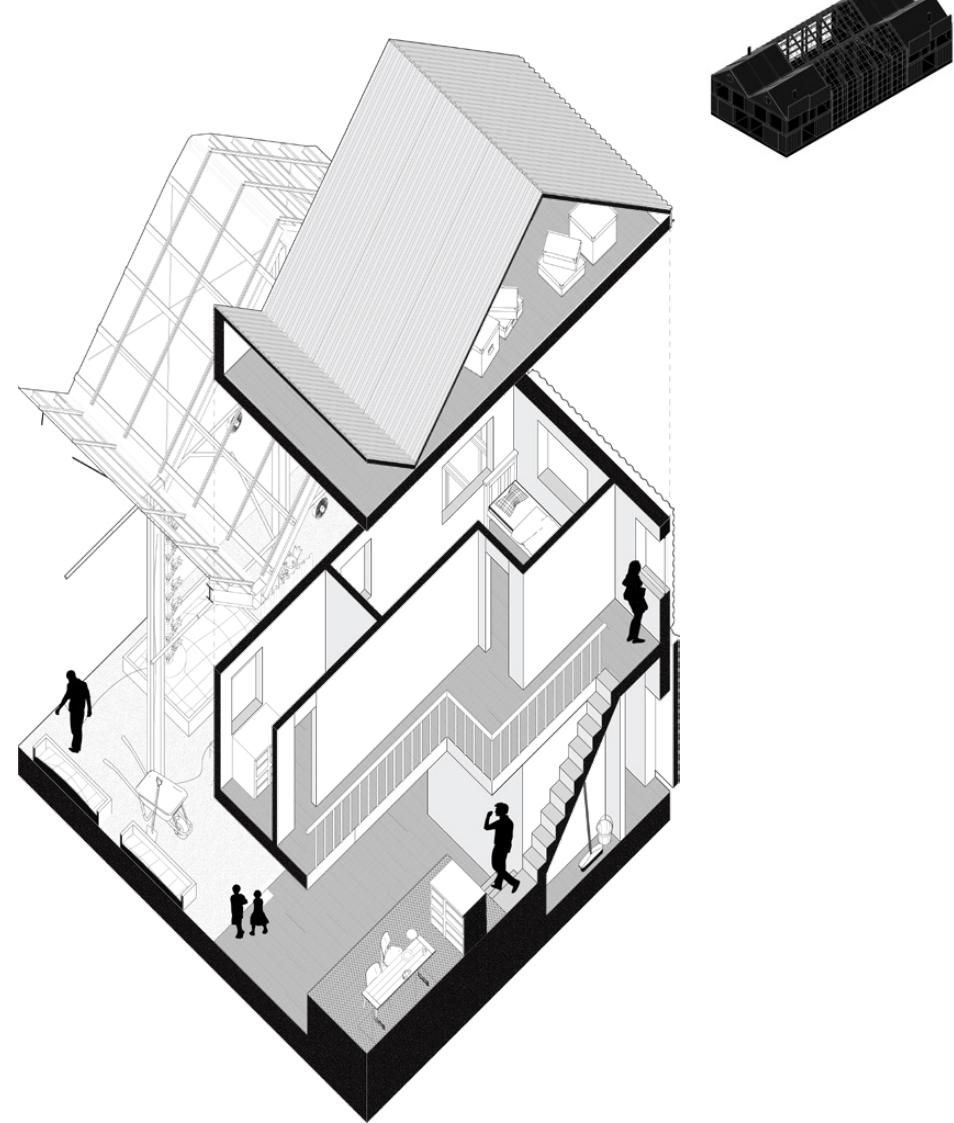
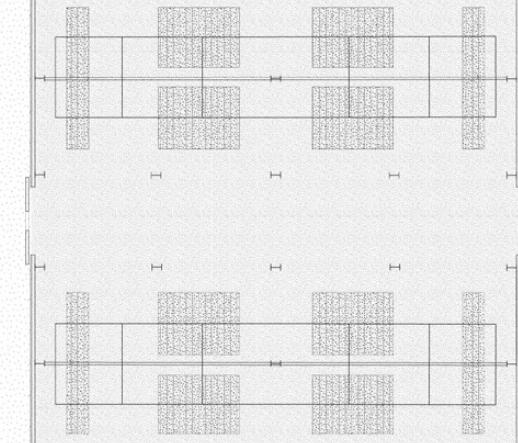
Housing Elevation / Section

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Second Floor Plan



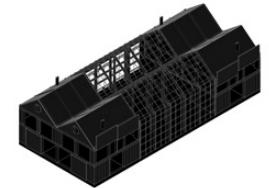
First Floor Plan



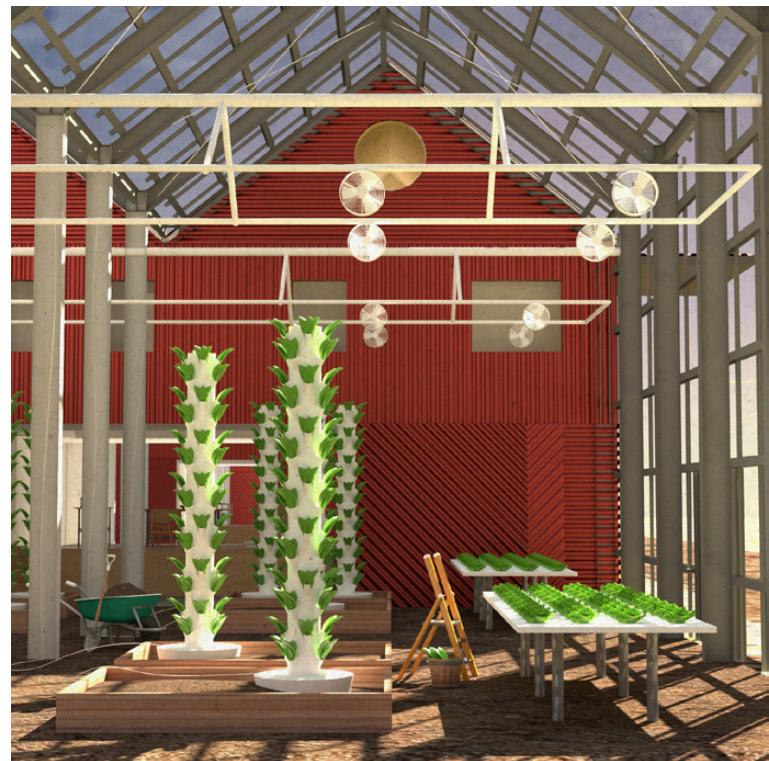
The kitchen is **elevated on a plinth** to emphasize the reworking of culture towards a more **sustenance over consumption** mindset.

RURALIZING SUBURBIA

Shared greenhouses between neighboring family homes are used for **mutual growing, redefining the private backyard as a space for community and sustainability.**



Housing Interior Kitchen



Housing Interior Greenhouse

