

**KIMBERLY  
VAN HOUTEN**

ARCHITECTURAL PORTFOLIO  
2021-2022



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# DISASSEMBLY

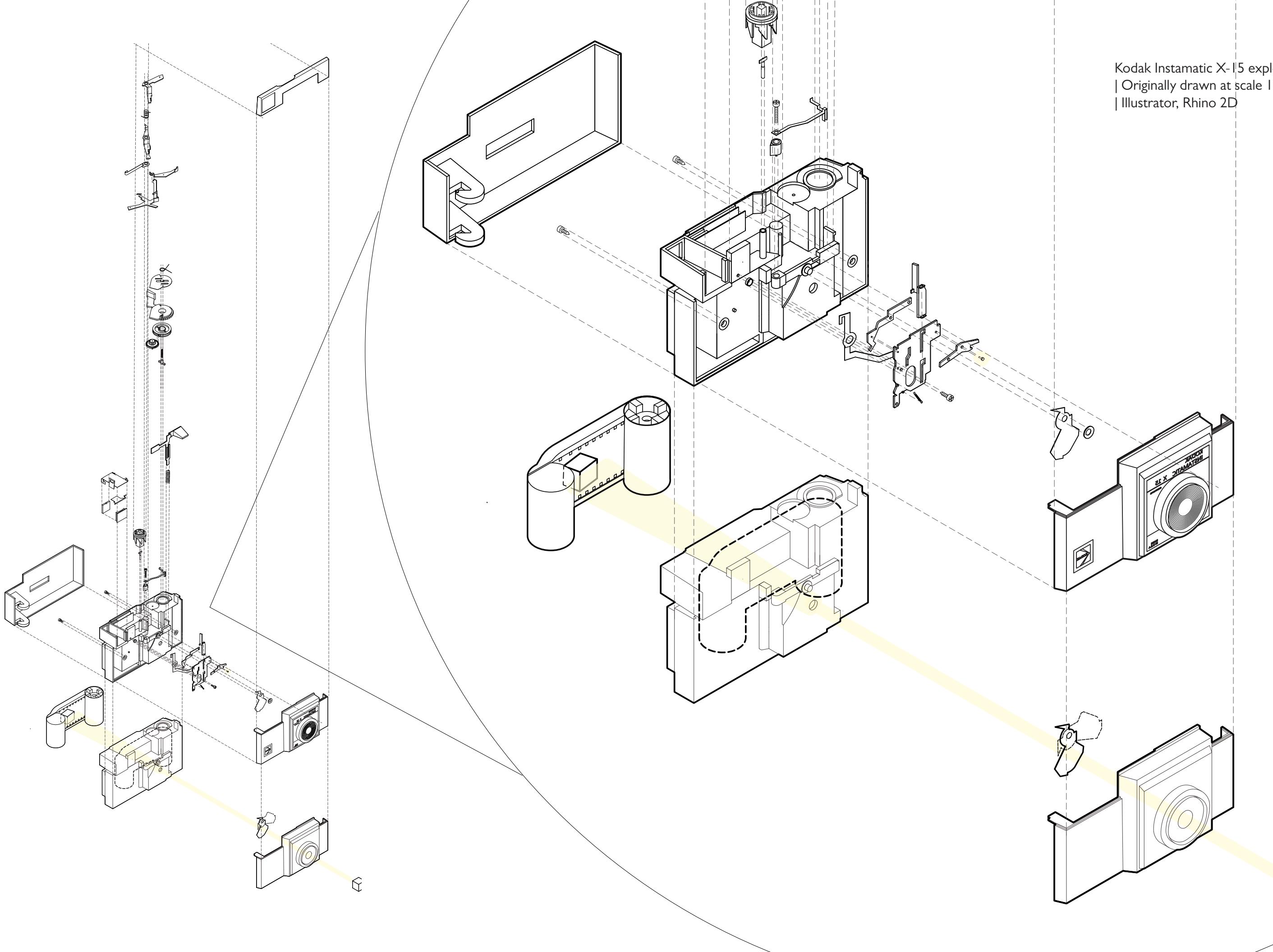
## THE KODAK INSTAMATIC X-15

Winter 2020 | Graphic Communications  
| Professor Jono Sturt

This project examines the disassembly of a mechanical object. Specifically, it focuses on the method of representing movement through a digital drawing. This drawing is of a Kodak Instamatic X-15 with

all of the parts exploded through an isometric view. Through the use of lines and repeated geometry, this image focuses on the way that light moves through the camera to capture an image on film.





Kodak Instamatic X-15 exploded axonometric  
| Originally drawn at scale 1" = 2"  
| Illustrator, Rhino 2D

# CASE STUDY

## HOUSE ON THE STREAM

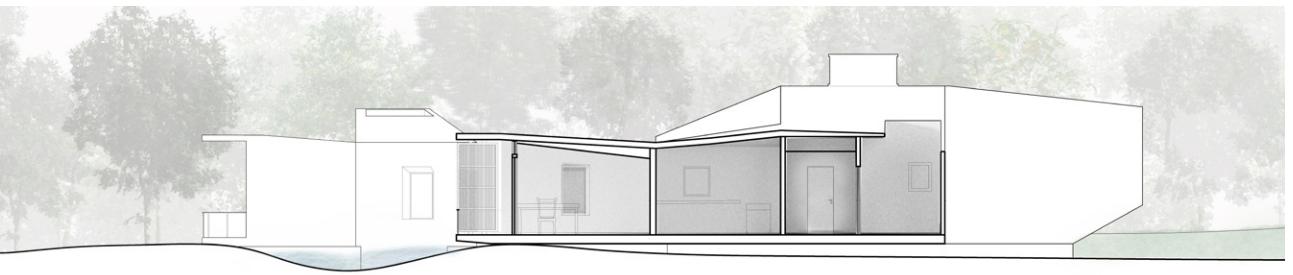
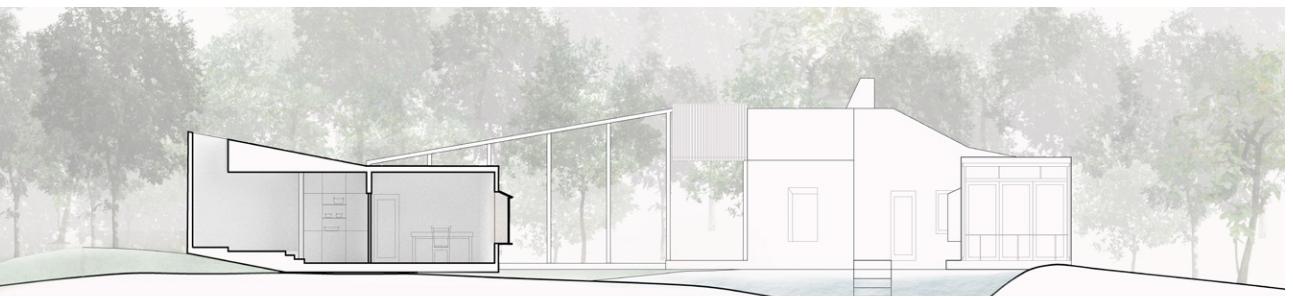
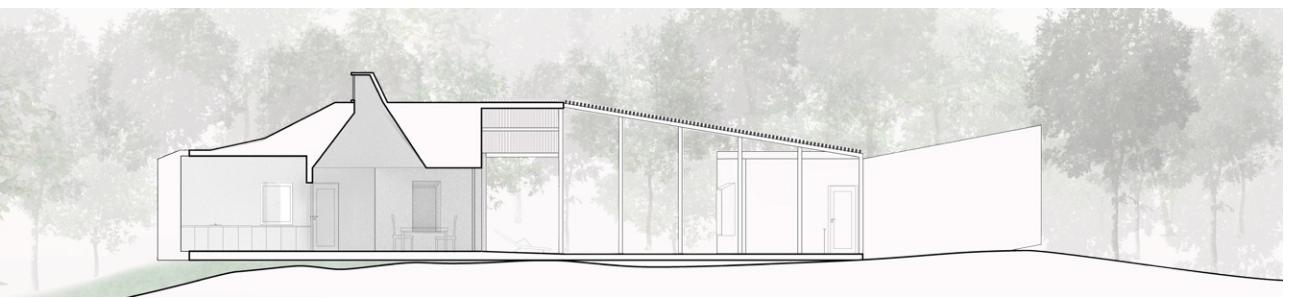
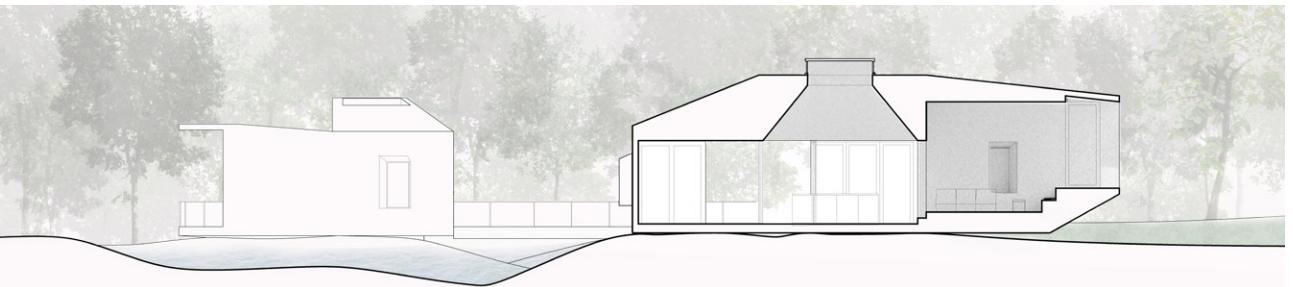
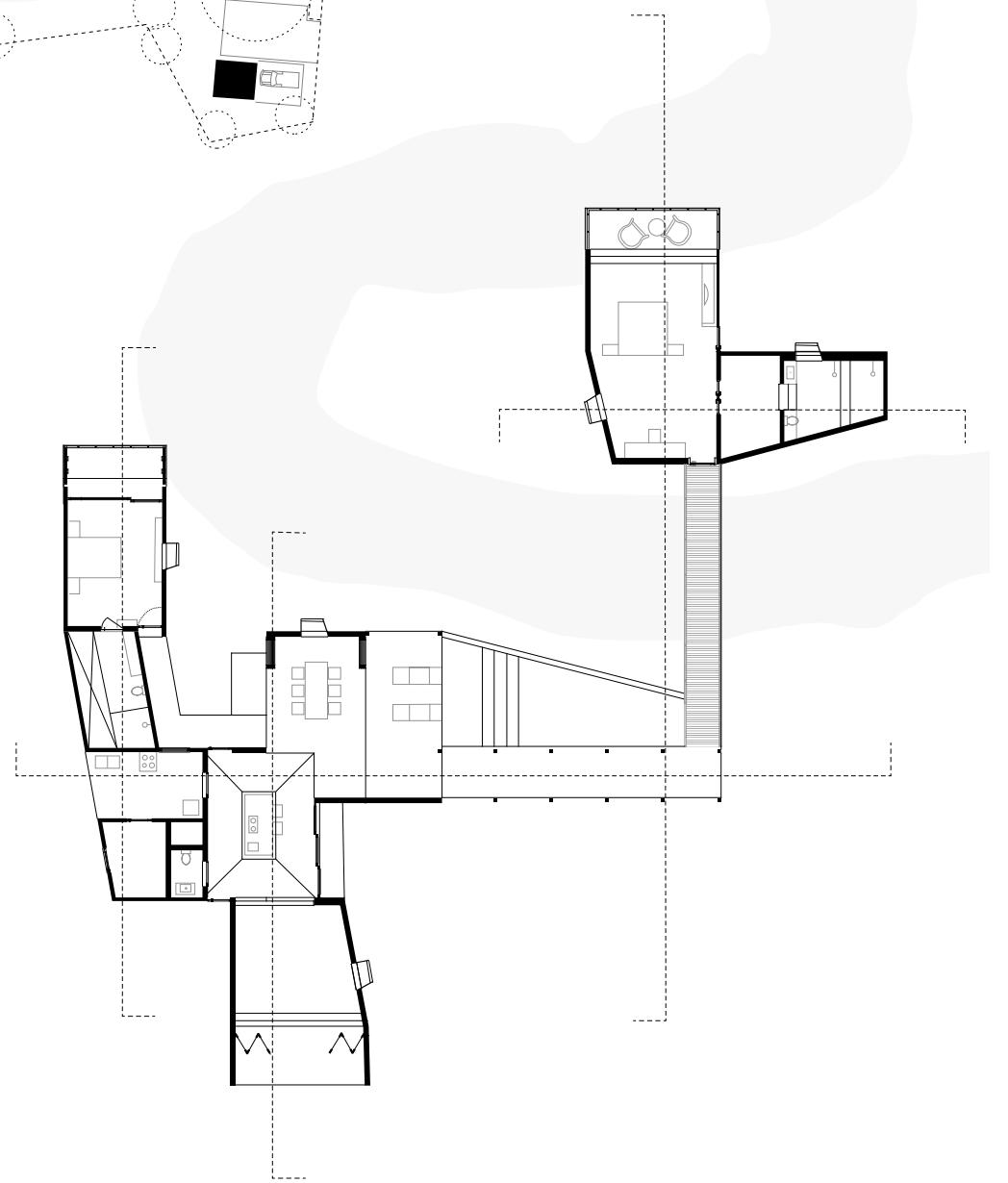
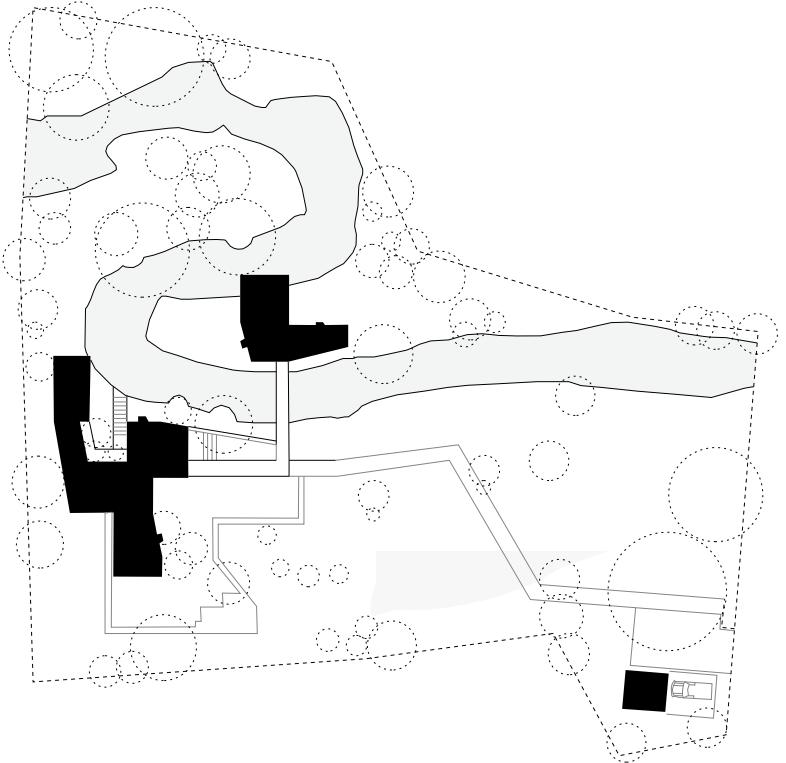
Fall 2021 | Architectural Design I (UG1) | Professor Ishan Pal | With Yin To Wong and Blaise Gimber

House on the Stream is located in Alibaug, India which is a coastal region known for its lush forests and large beaches. The project was completed in 2013 and serves as a private vacation residence. The key features of this house are the ways that the structure interact with the landscape through circulation and crafting views.

The goal of this exercise was to copy the existing conditions of the home to better understand the intentions of the architects and the house itself. This was achieved by translating the house through a set of drawings and a model.



Top: Site plan | Illustrator, Rhino  
Bottom: Floor plan | Illustrator, Rhino  
Opposite page: Section cuts |  
Photoshop, Illustrator, Rhino



Scale model | Built at 1/4" = 1' scale |  
Foam core, wood



# LOOKING INWARD

## ADDING A ROOM TO HOUSE ON THE STREAM

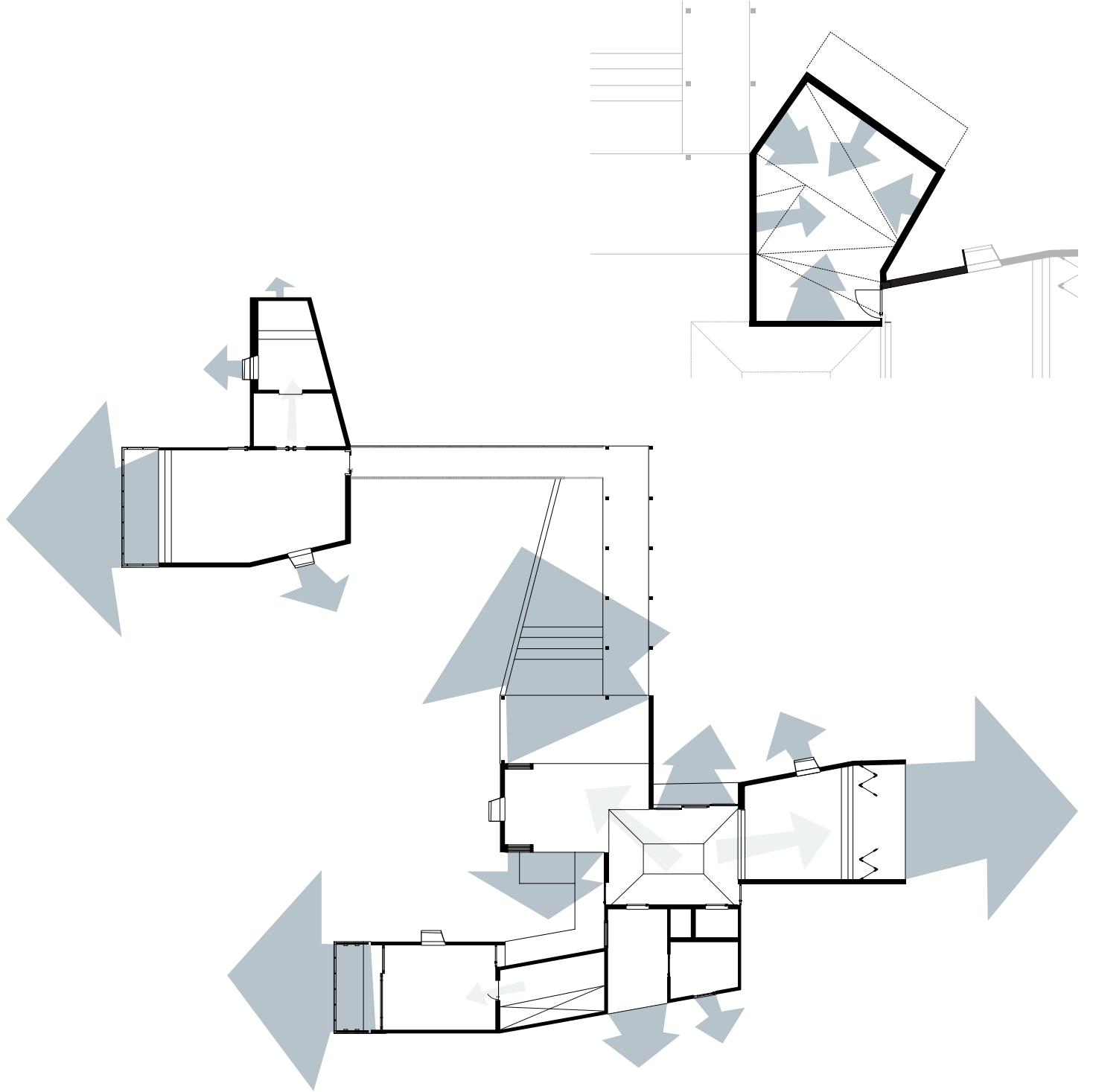
Fall 2021 | Architectural Design I (UG1) |  
Professor Ishan Pal

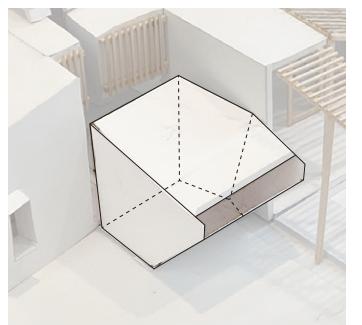
The addition or revision of a room propels an analytical examination of the architectural language of the precedent house.

This examination led to the understanding that House on the Stream is about facilitating a connection to environment through the way the views are framed by openings extend the eyes outwards across the landscape and bring the

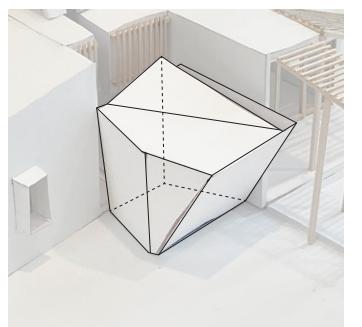
environment into the house.

My interest was about how to create a room in the house that had the opposite effect. I wanted to create a room that drew you inward and provided a barrier between you and the environment. This space could serve as a gathering space for close friends and family or be a place of individual retreat from the exposed house.

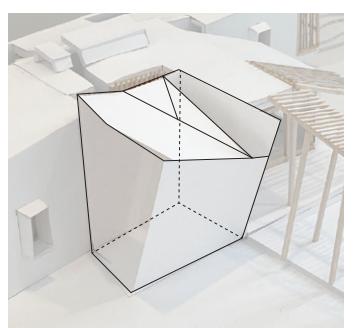




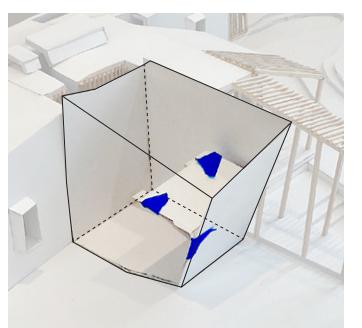
SLANT ROOF



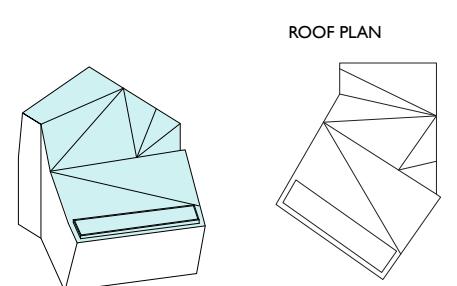
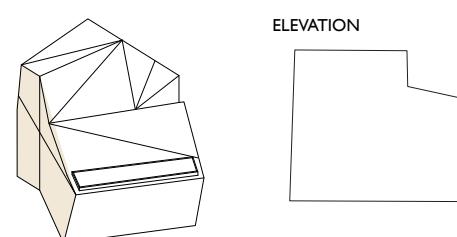
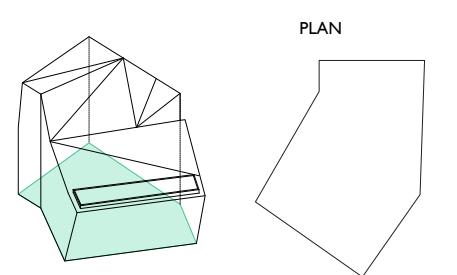
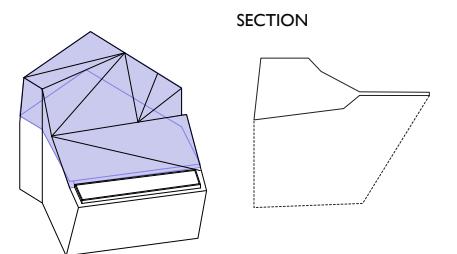
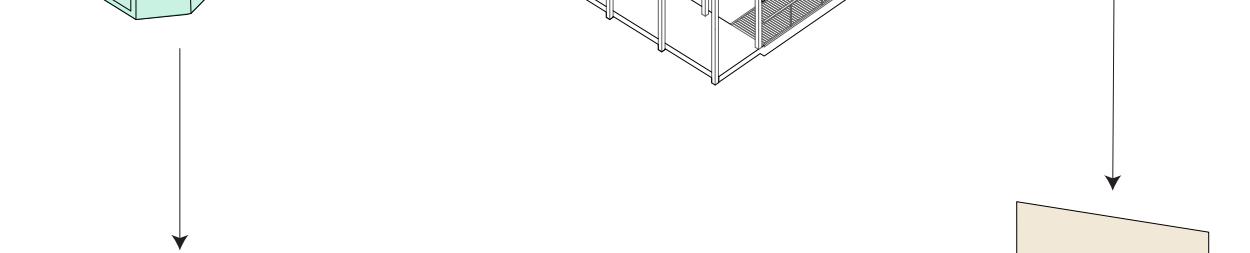
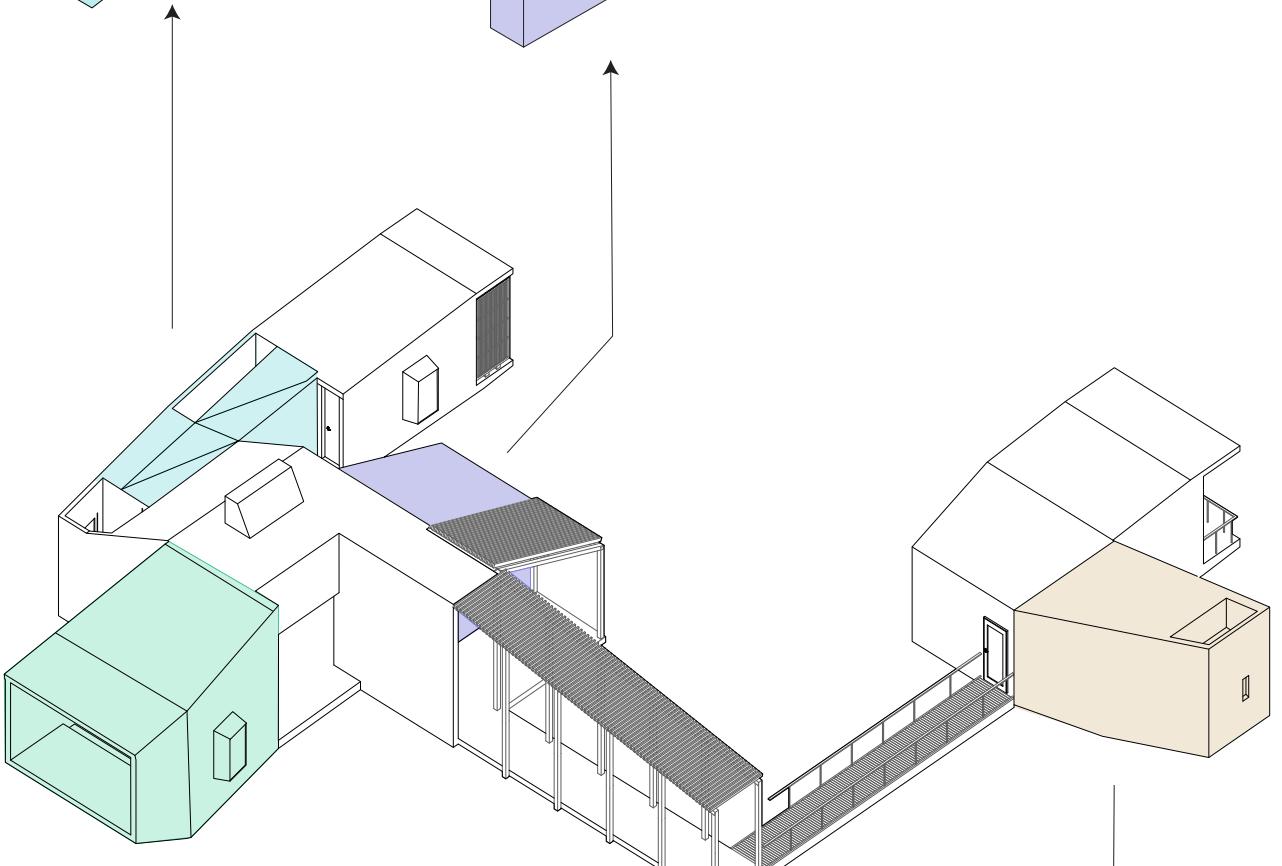
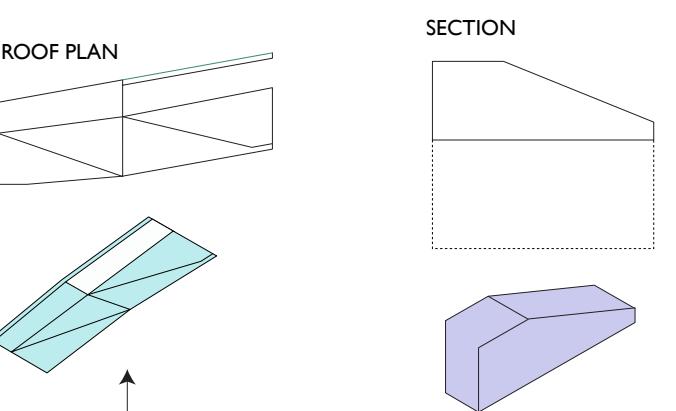
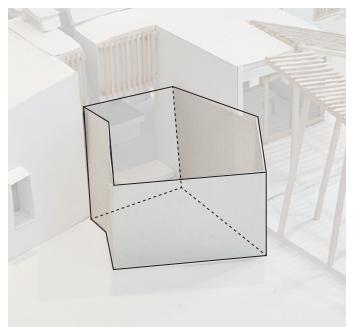
EXTEND

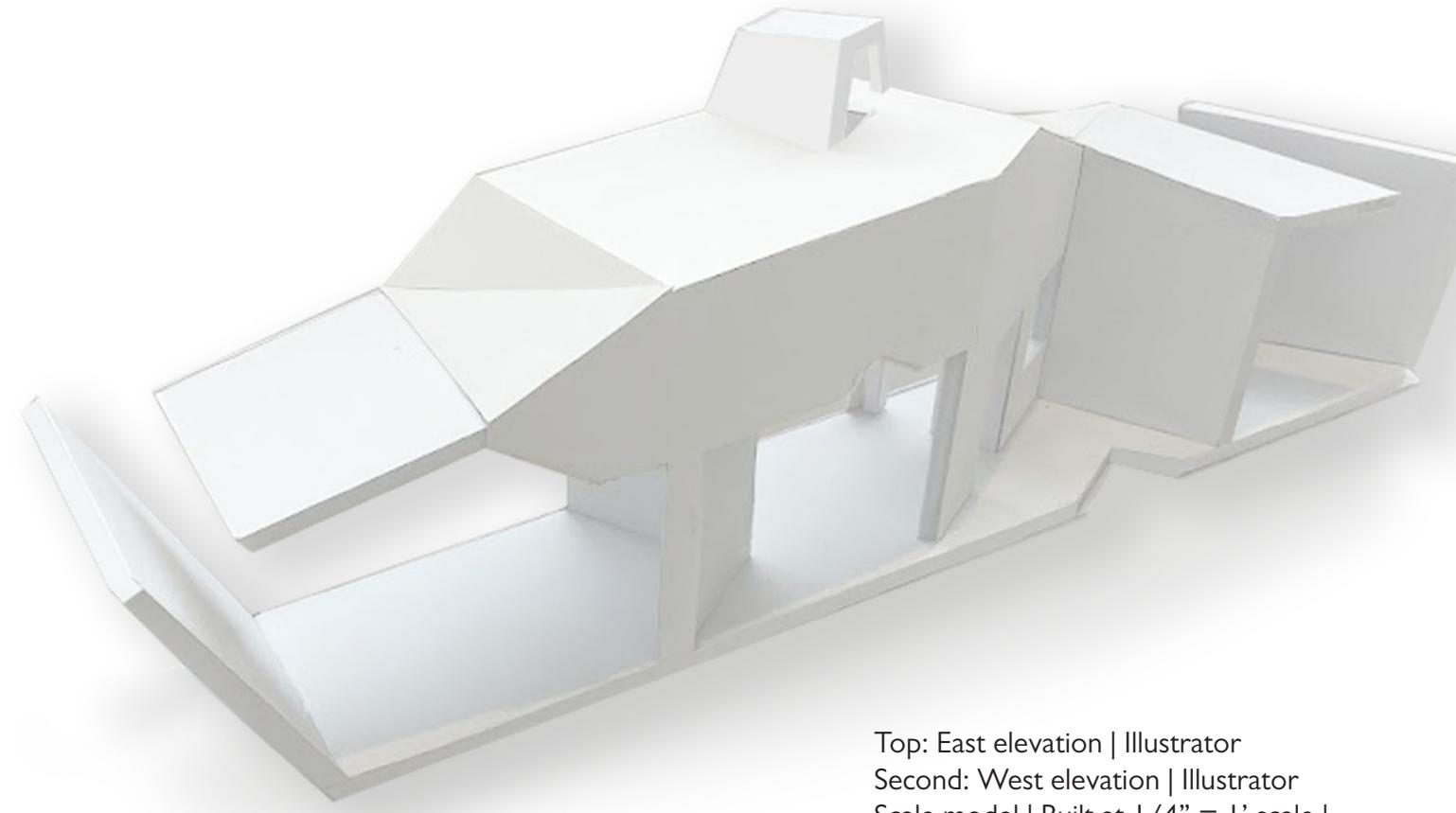
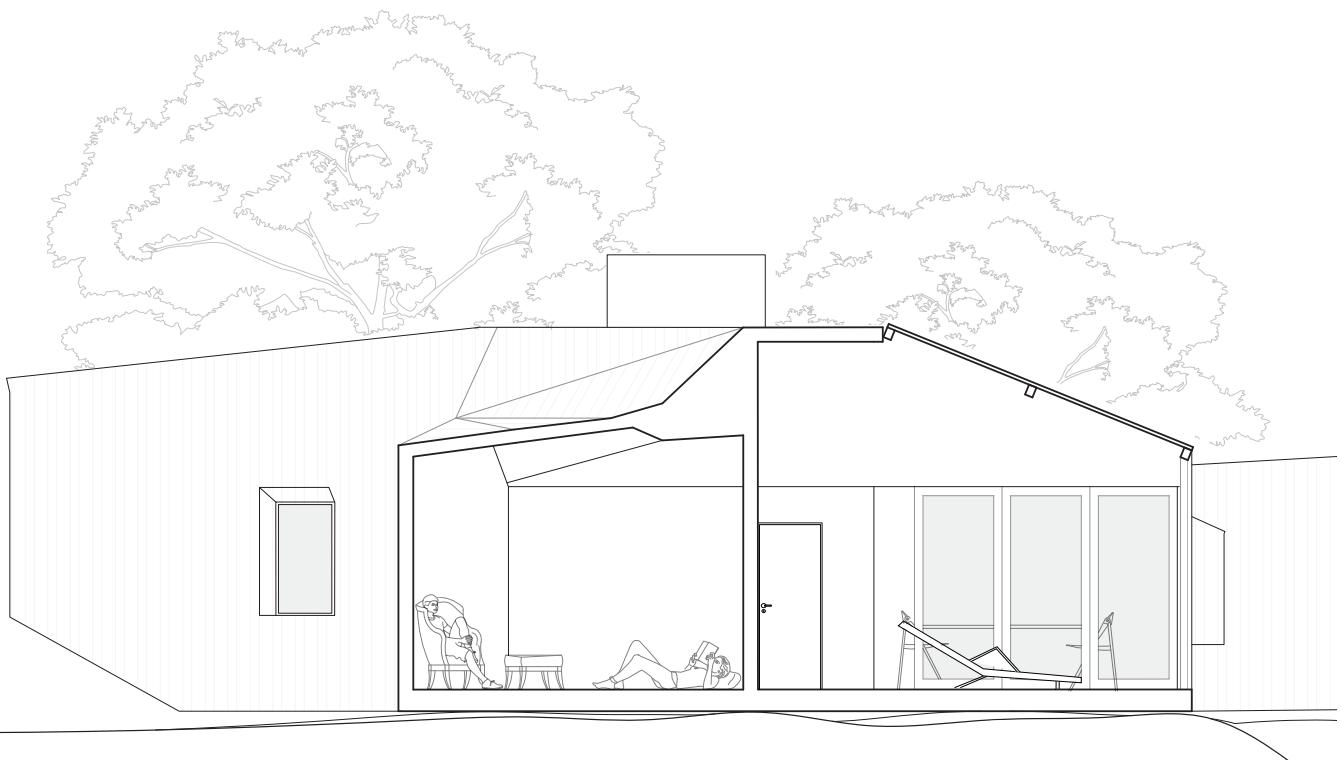
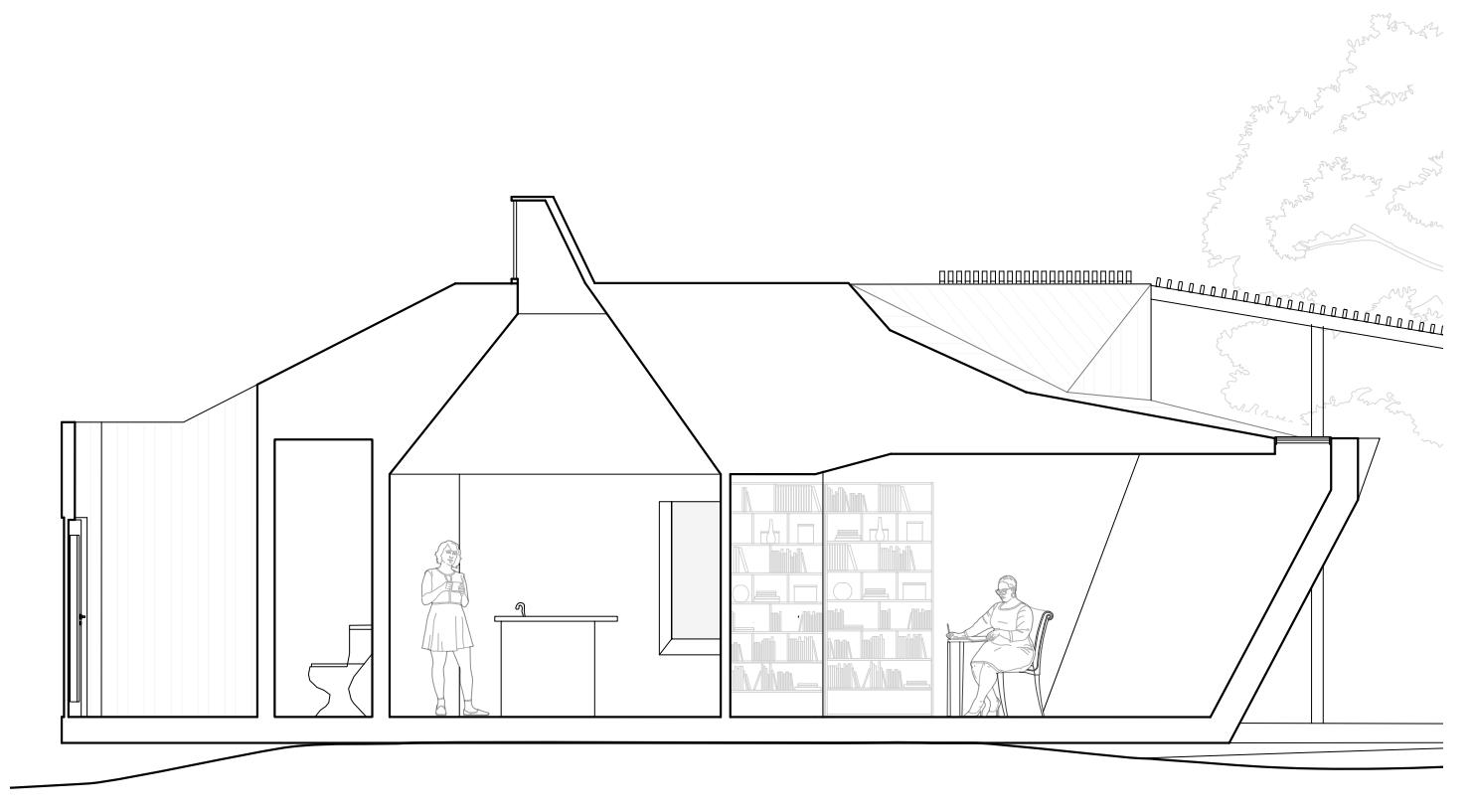


UNDO EXTEND



ROTATE





Top: East elevation | Illustrator  
Second: West elevation | Illustrator  
Scale model | Built at 1/4" = 1' scale |  
Foam core  
Opposite page: Section cuts | Illustrator

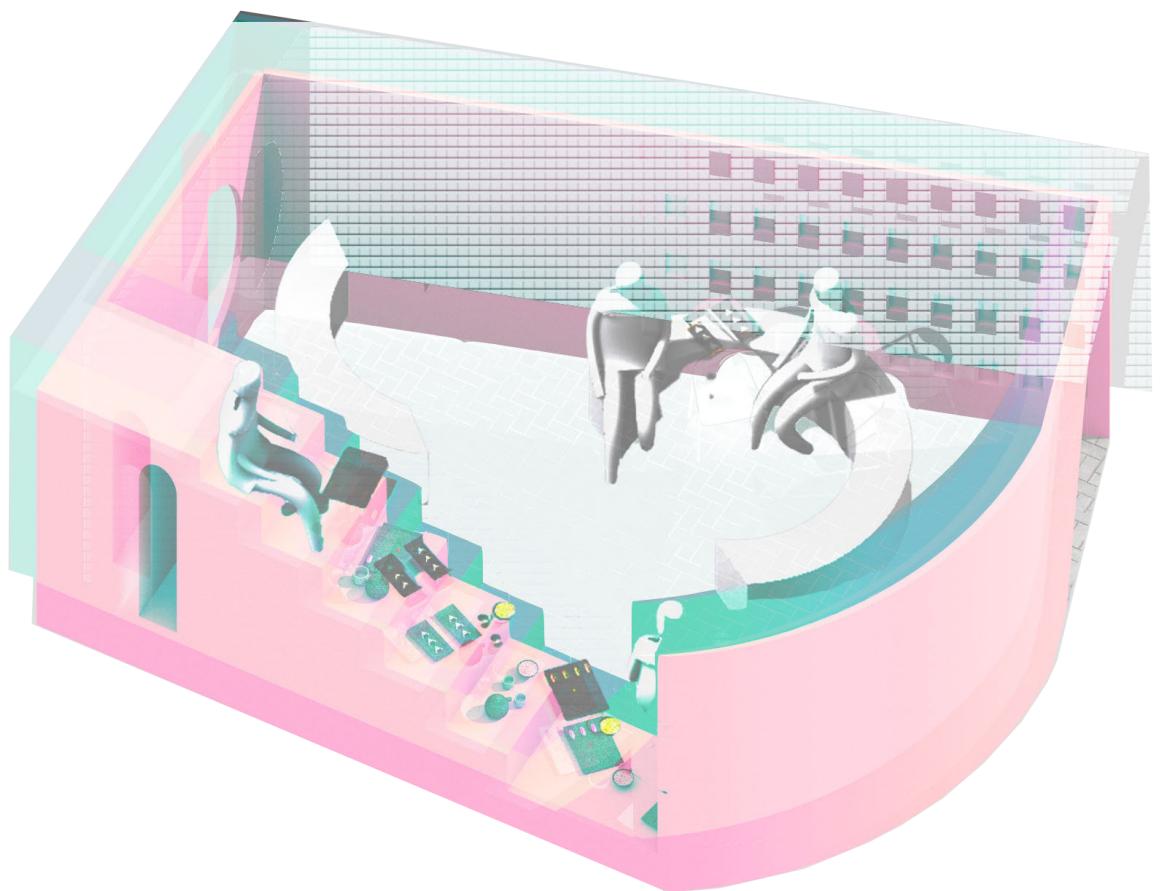
# SETTING THE SCENE

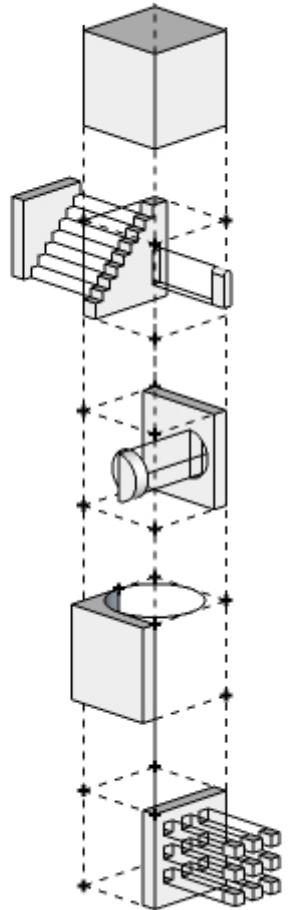
## A DINING ROOM

Winter 2020 | Digital Drawing |  
Professor Liz Galvez

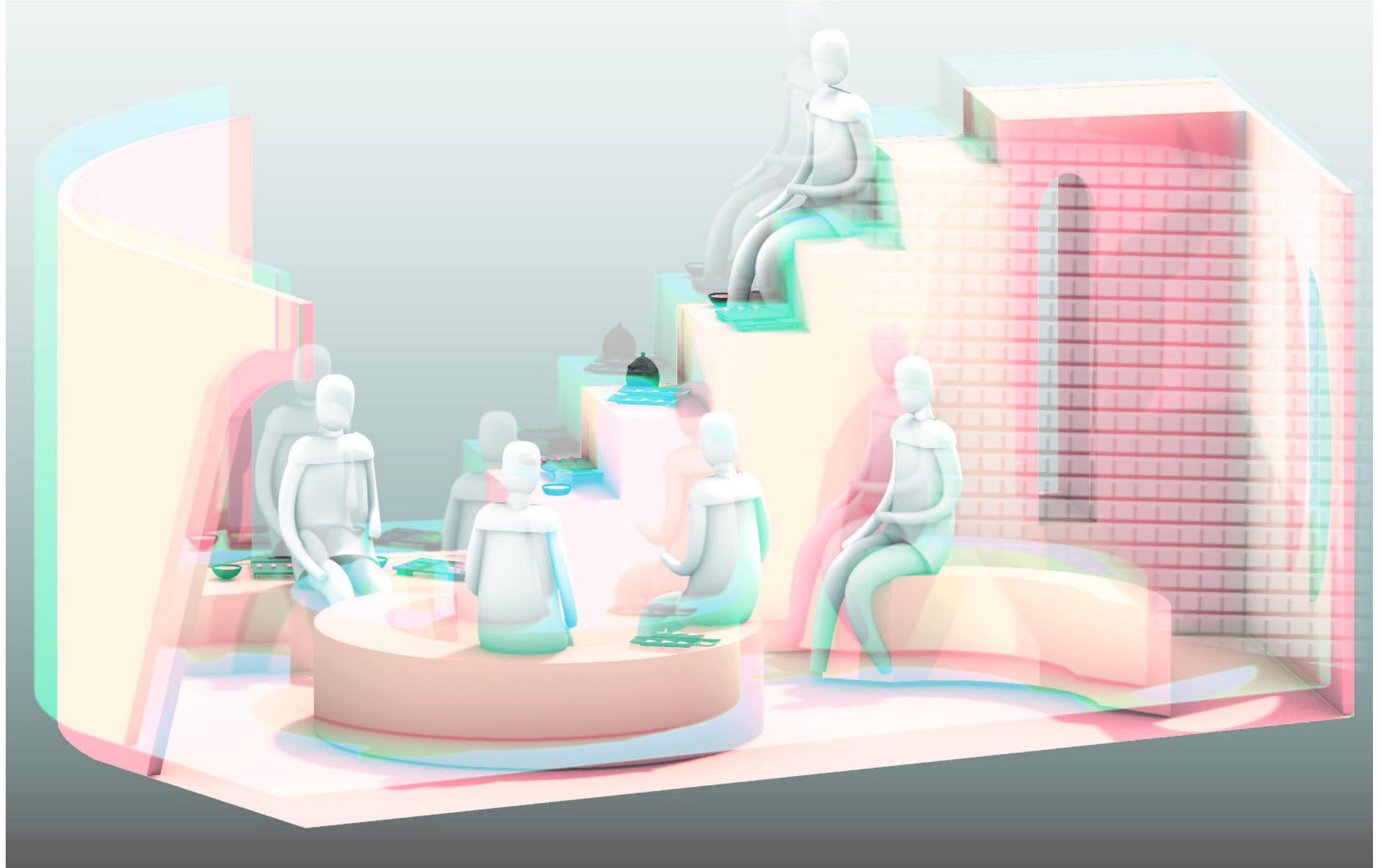
This project sets up a scene for an unconventional dining experience where the walls and floor become the table and chairs. The form comes from simple shapes of a cube and sphere. Starting with a cube, simple shapes are subtracted to create the

form of the structure. The treatment of the images comes from a desire to create surrealist experiences by combining Photoshop collaging with “dream-scape” rendering styles.





The diagram shows the shapes that have been extruded from each side of the cube to create the form of the room.



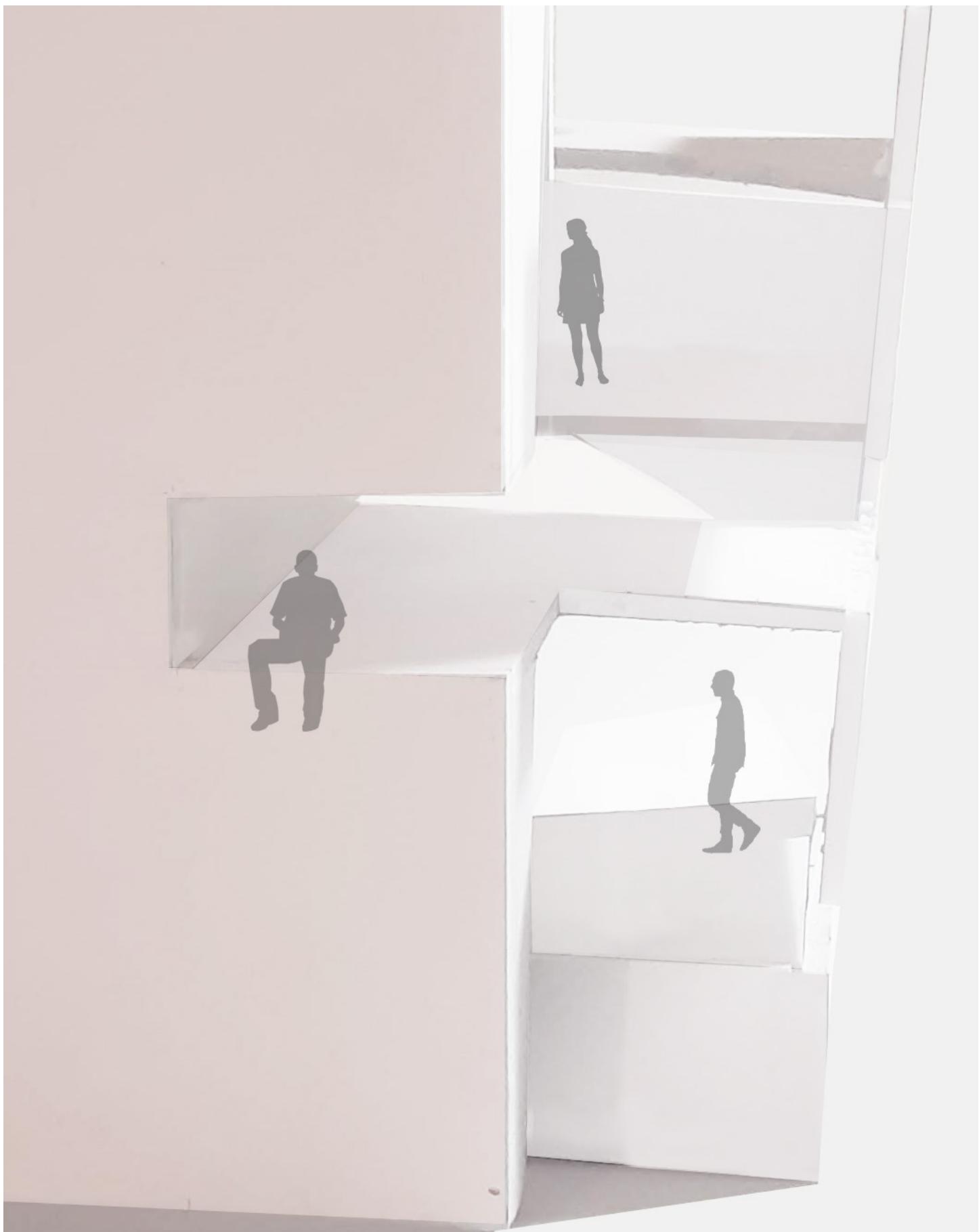
# TRANSLATIONS

## EXPLORING THE SOLID/VOID RELATIONSHIP

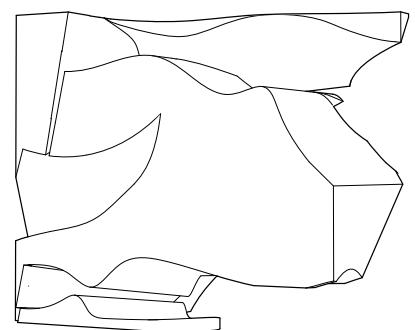
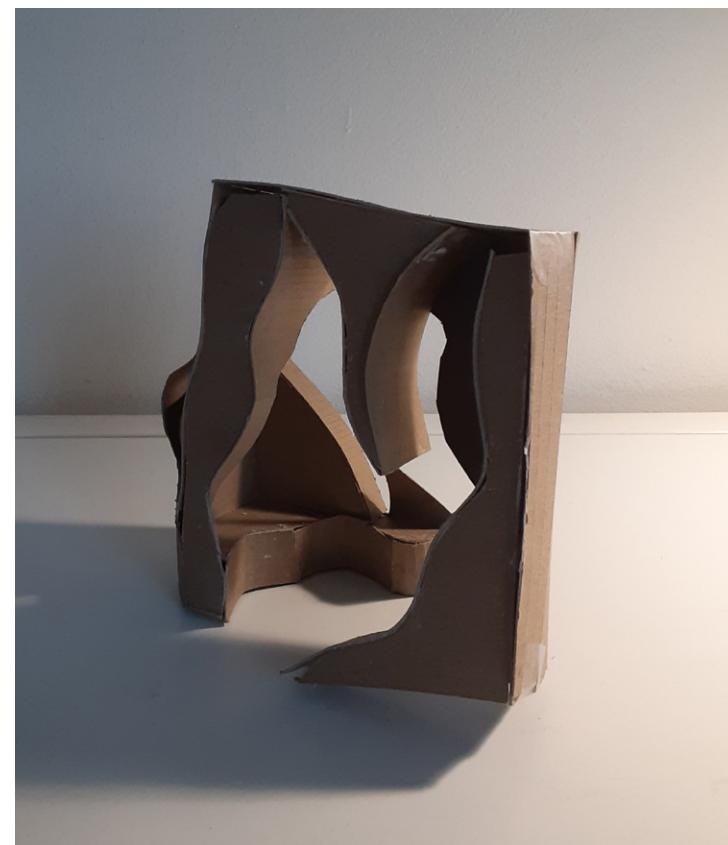
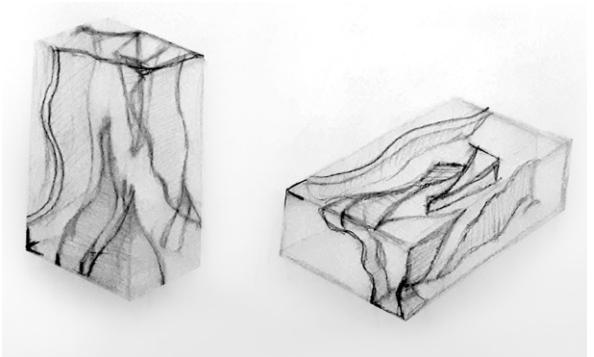
Winter 2021 | Visual Studies |  
Professor Anca Trandafirescu

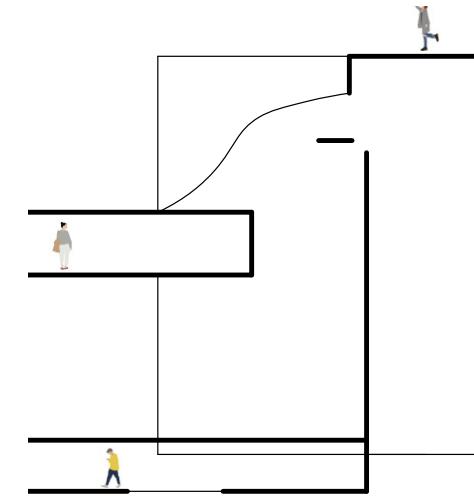
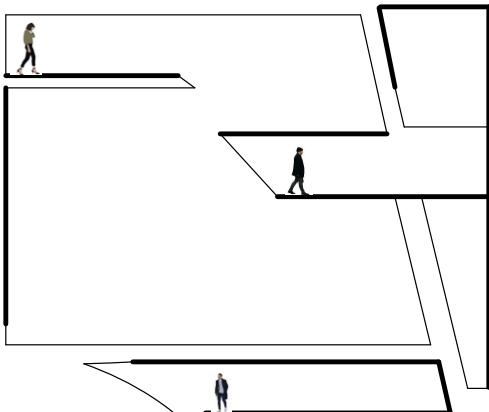
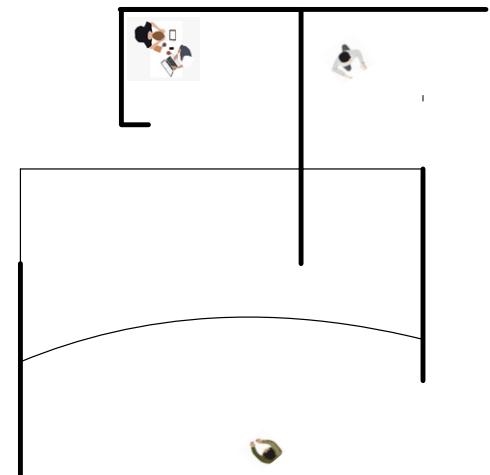
This project explores the translation of forms from the two-dimensional to the three-dimensional. It aims to create ambiguity between a figure and the ground and then between

the volume and the void. My thesis: create the illusion of disconnected parts by cutting through the volumes with voids.

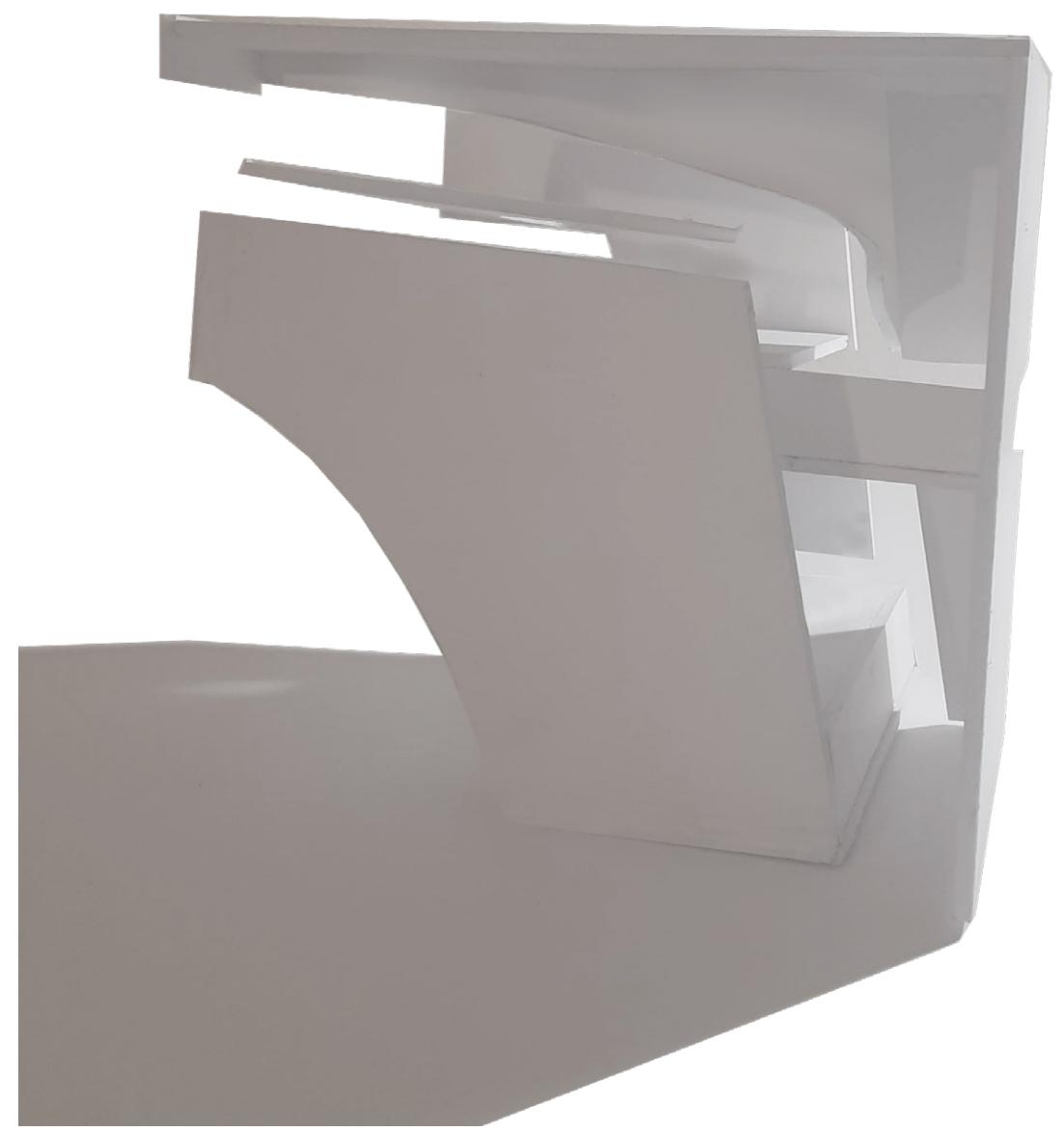
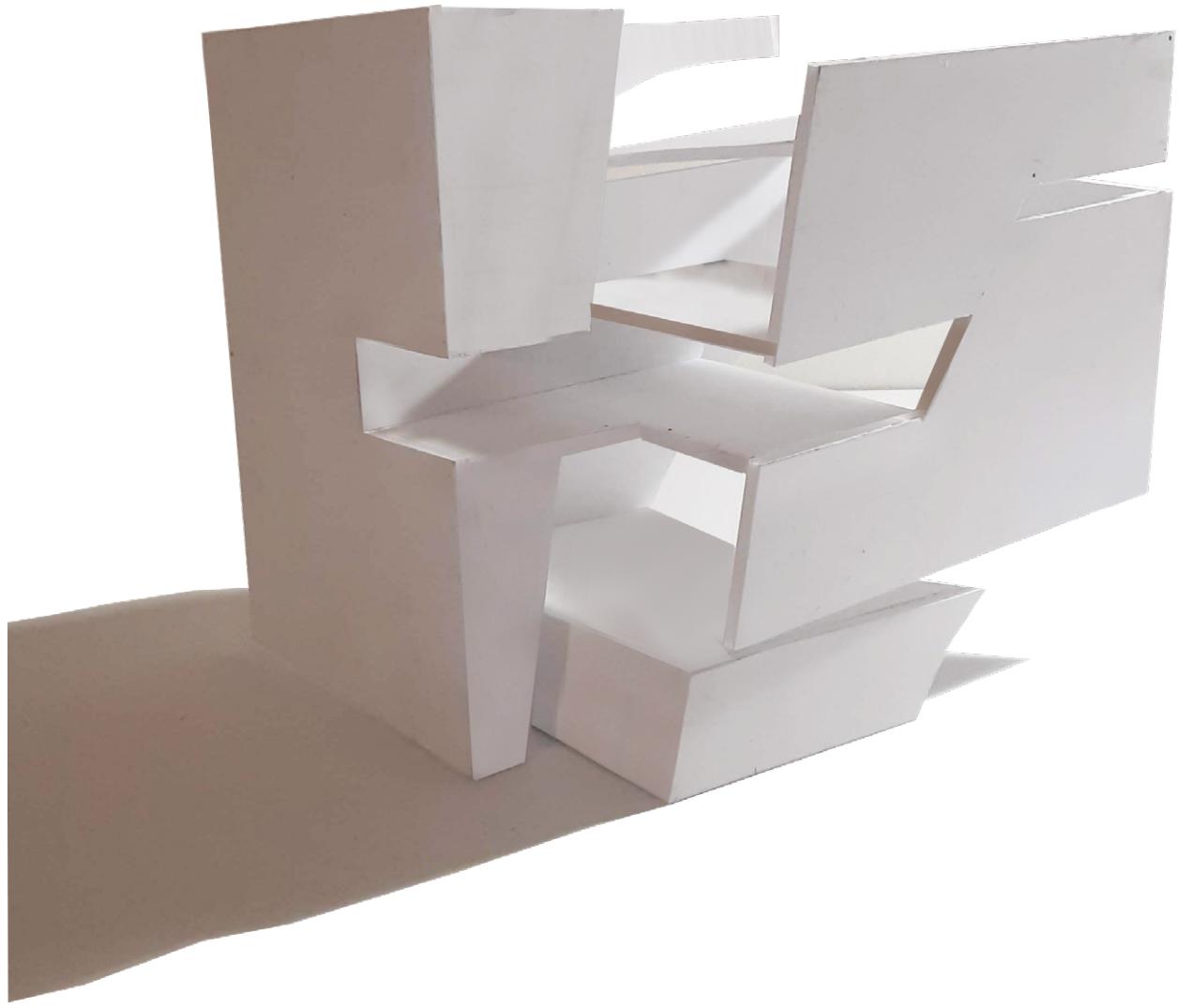


The form is explored through a series of 3D models and 2D drawings. The first drawing mapped a 2D image across all sides of a cubic volume. Each next step abstracted from the initial sketch.





The final form moved away from the curves used in earlier iterations and focused much more on the experiences created in the slivers of voids. The exterior serves as a shell that contains spaces of either very low or very high height. The model is constructed of foam core within the constraints of a 8x8x8 volume.



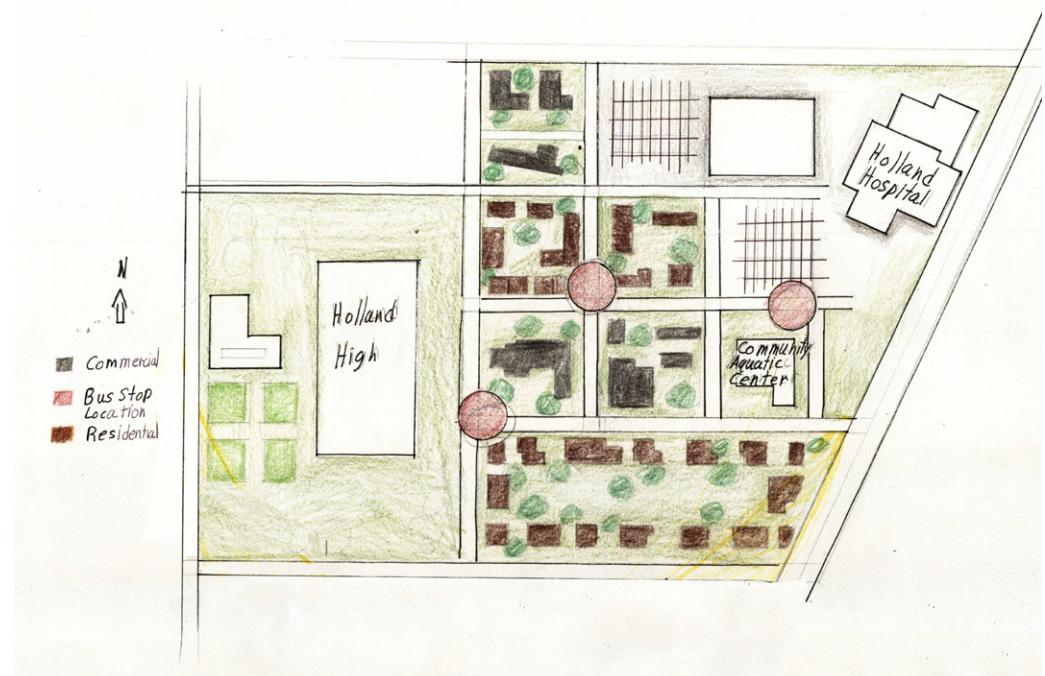
# THE BUS STOP

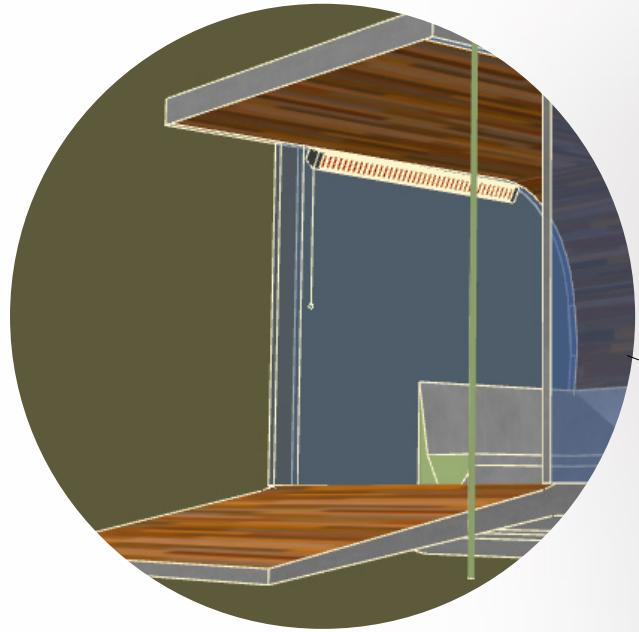
## A SUSTAINABLE AND ACCESSIBLE SHELTER

Winter 2019 | Taubman College Design Challenge

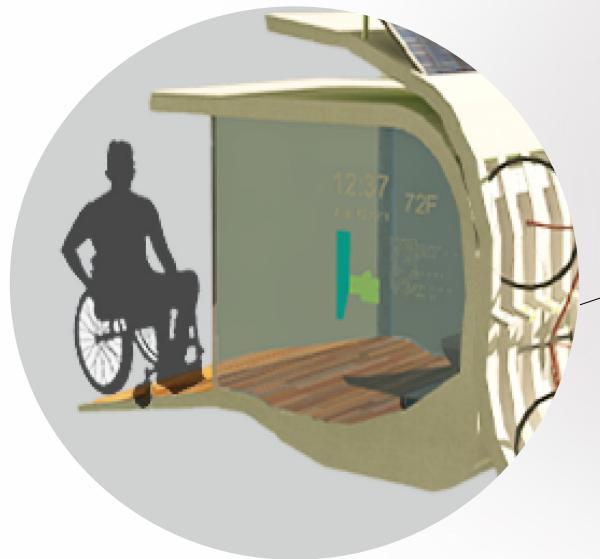
The challenge of the project was to create a bus stop that serves the needs of the community. This design for Holland, MI focuses on inclusive design and sustainability. There is wheelchair accessibility and the audio within the computer systems supports visually impaired

persons. The solar panel above the bike rack powers the digital interface and the infrared space heater for cold weather. The attached bike rack promotes a more sustainable means of transportation throughout the community. The form resembles a wave which celebrates the lakeshore.

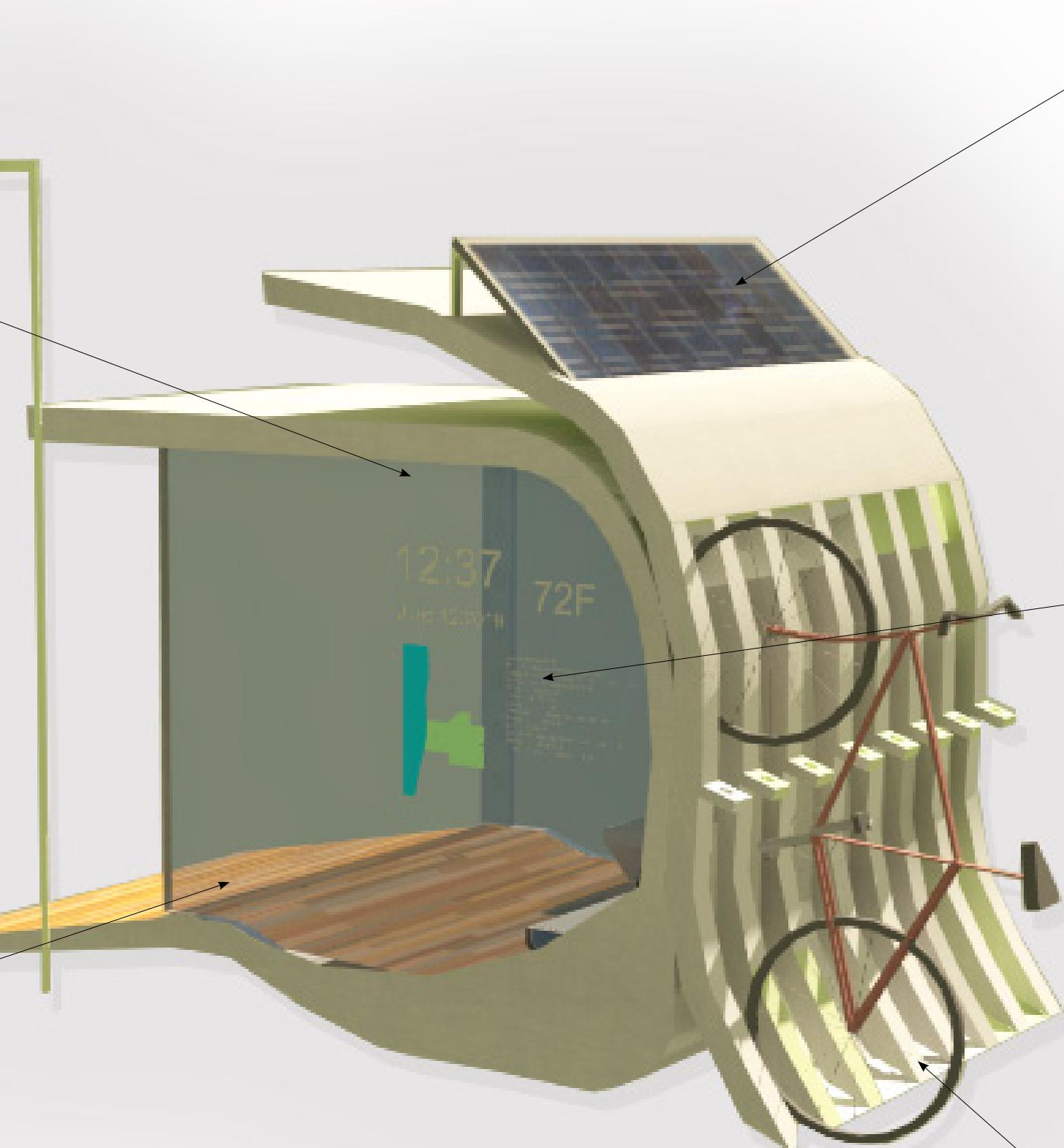




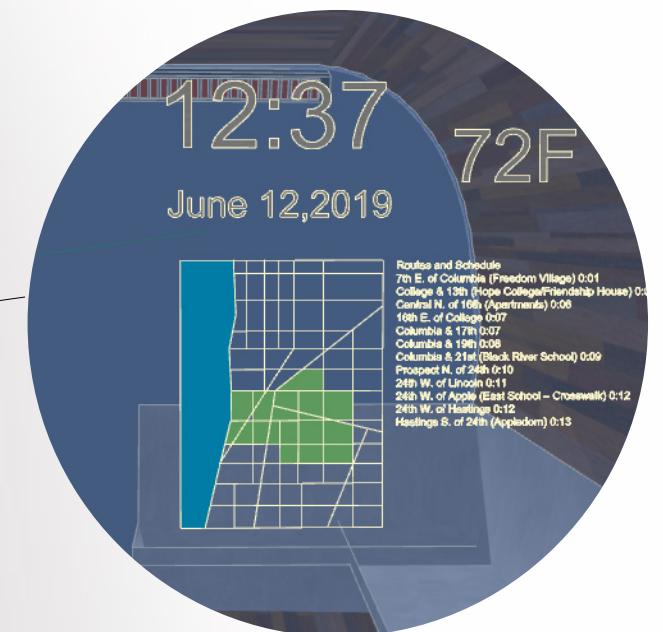
Solar powered infrared heater



Wheelchair accessibility



Solar Panel



Digital interface with map and routes

Bike rack

# HGTV AND THE CITY

## An American Obsession with the Single Family Home

Winter 2020, Fall 2020, Winter 2021 | With Professor  
Irene Hwang, Akima Bracken, Hannah Blatzan

In the last two decades, America has experienced a rise in popularity of home improvement shows. In particular, HGTV (Home and Garden Television) has risen to being the fourth most-watched cable network show.

These shows network's top shows like Property Brothers, Love It or List It and Fixer Upper, almost exclusively feature the single-family homes even in large cities like Nashville or Chicago where it is becoming increasingly unsustainable for the growing

population. When challenges arise in the built environment, it is imperative that architects join the conversation. There has always been a question of what the role of architect is in the development of housing especially as the builder and consumer dominate the discussion. While home improvement media downplays the role of architect to an optional luxury reserved for the wealthiest, the architectural perspective should be used for the betterment of our cities.



## HGTV features renovation projects



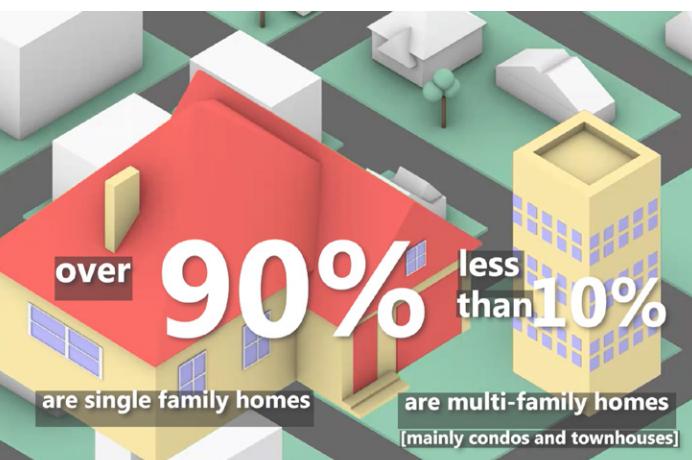
Each of these cities have unique housing needs

Yet HGTV features the same housing in every show regardless of its location

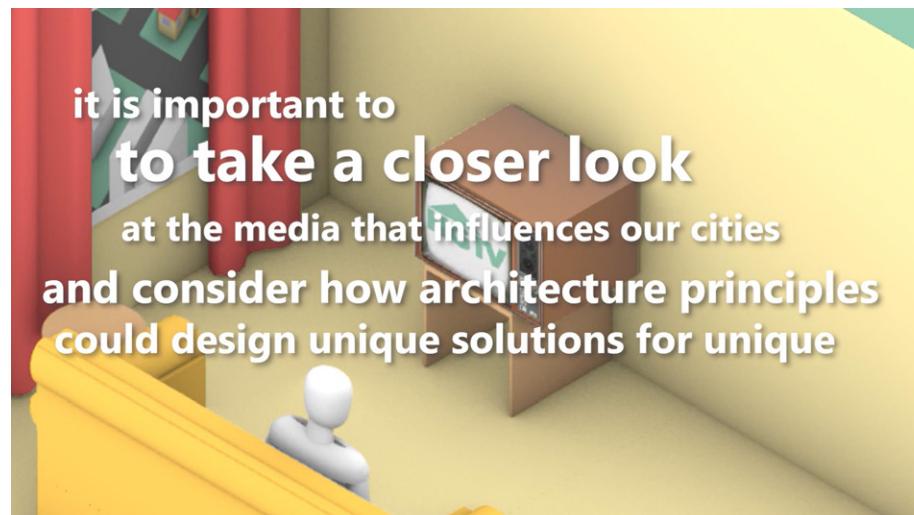
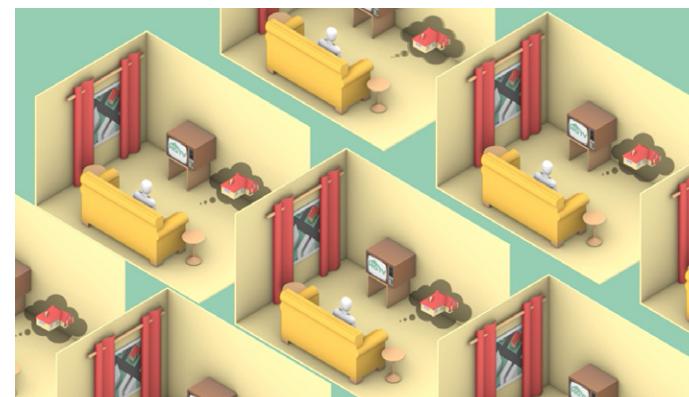
### SINGLE FAMILY DETACHED HOUSE



OF THE HOMES FEATURED on 12 different HGTV shows



Images taken from the video frames of an animation | Photoshop, Adobe After Effects, Illustrator



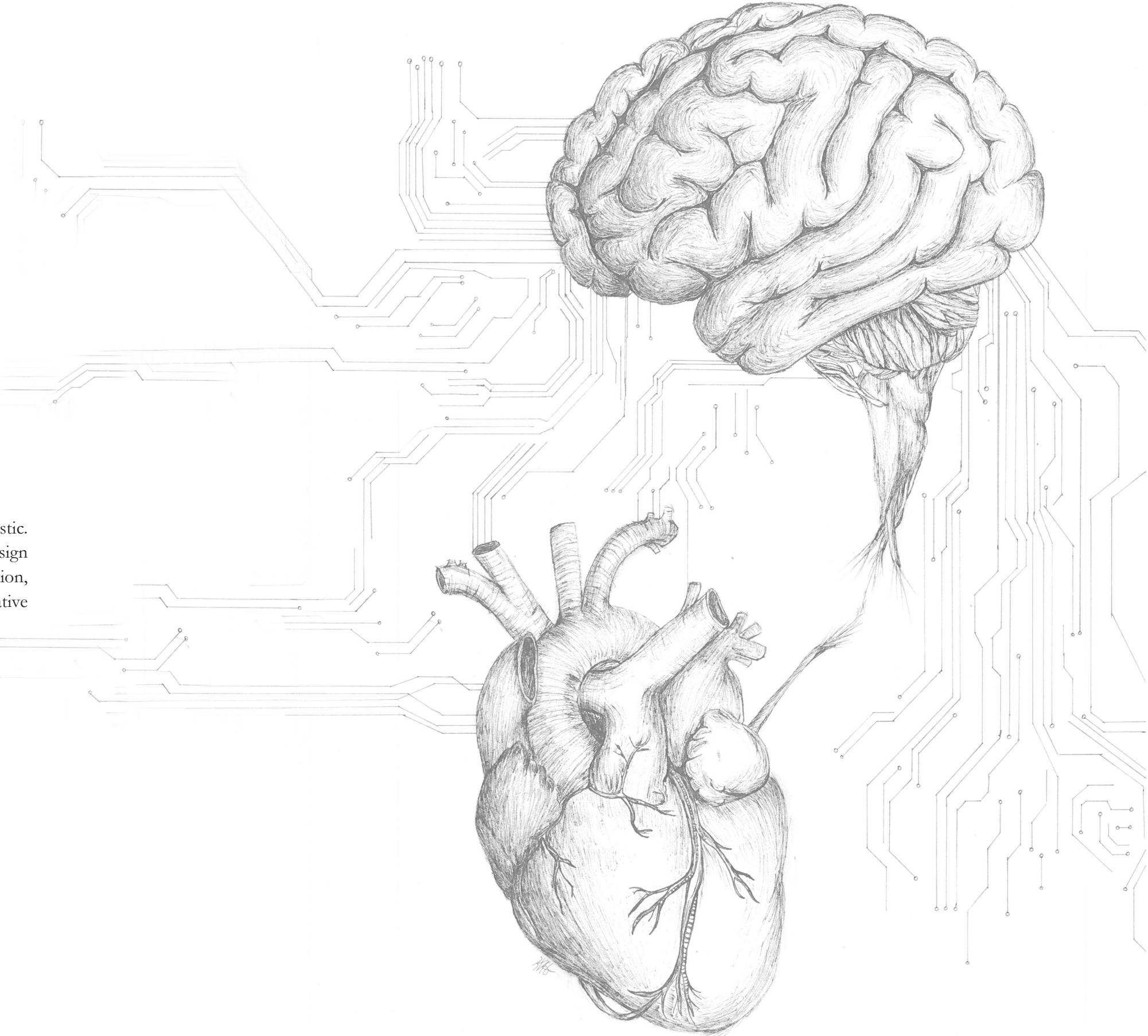
# DRAWINGS

## STUDYING HUMAN EXPRESSION

2019-2020 | Personal projects

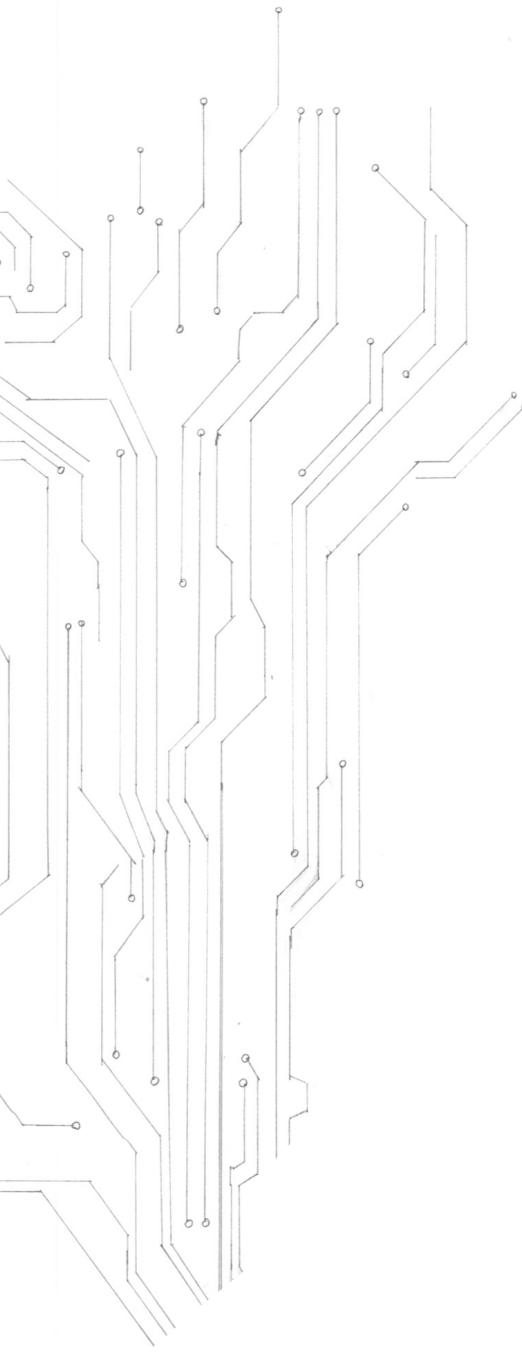
Drawing is something that has propelled my creativity because of the unlimited potential. I use drawing as a form of experimentation. Oftentimes what interests me in a new project is knowing that I have not done something like that before. These three images explore different aspects of human expression -

the internal, facial and the artistic. Drawing has strengthened my design skills as it encourages self-evaluation, dedication to a project, and creative ideas.



Left: Feeling Blue | Acrylic, Pencil  
Right: Street Performer | Charcoal





**THANK YOU!**

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