

Portfolio

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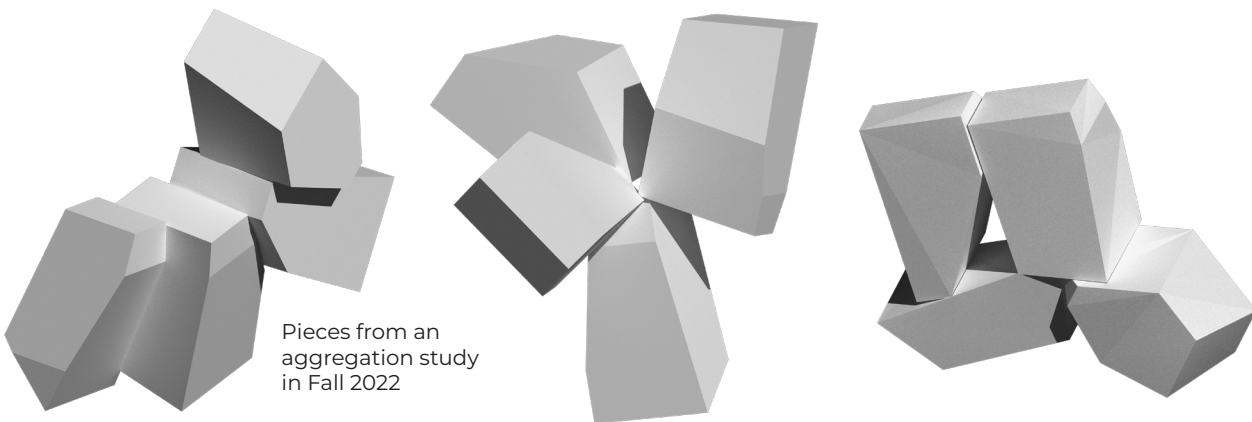
Fall 2023
16-unit apartment building in Montrose neighborhood
Houston, TX

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Spring 2023
Multifunctional center for Houston Botanic Garden
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Fall 2022
Pavillion and exhibition space
Houston, TX



Vassar Street Collective

With a variety of dwelling types and community spaces, this 16-unit social housing concept responds formally to the context of the site and facilitates community engagement.

The form of my project is derived from the idea of aggregation, the combination of a series of parts to form a cohesive, unified whole. Constructed of nine rectangular forms, rotated and stacked in a way that creates unique interior and exterior spaces, the building's form creates a sense of curvature, despite containing no actual curves.

In this way, the building responds to the adjacent building, Howard Barnstone's Vassar Place Apartments, in which many small, cubic protrusions form a strong crescent shape. While neither contains any curved walls, both buildings "curve" around the shared space between them, defining the physical and social center of the site.

Focusing around this idea of shared spaces, each of the building's 16 units is accessible either by the outside on the ground floor, or through a shared gathering space on the third floor, with no entrances on the second floor, and the aggregation of the rectangular forms creates an abundance of shaded areas from overhangs and easily accessible rooftop spaces for outdoor gathering and gardening. The units vary in type, from two-bedroom two-story apartments to studio style apartments that share a kitchen and a living space. Despite the interior variation, the facade follows a repeating pattern that dissolves the exterior division of the units, further unifying them.

Software Used:

Rhino

V-Ray

Illustrator

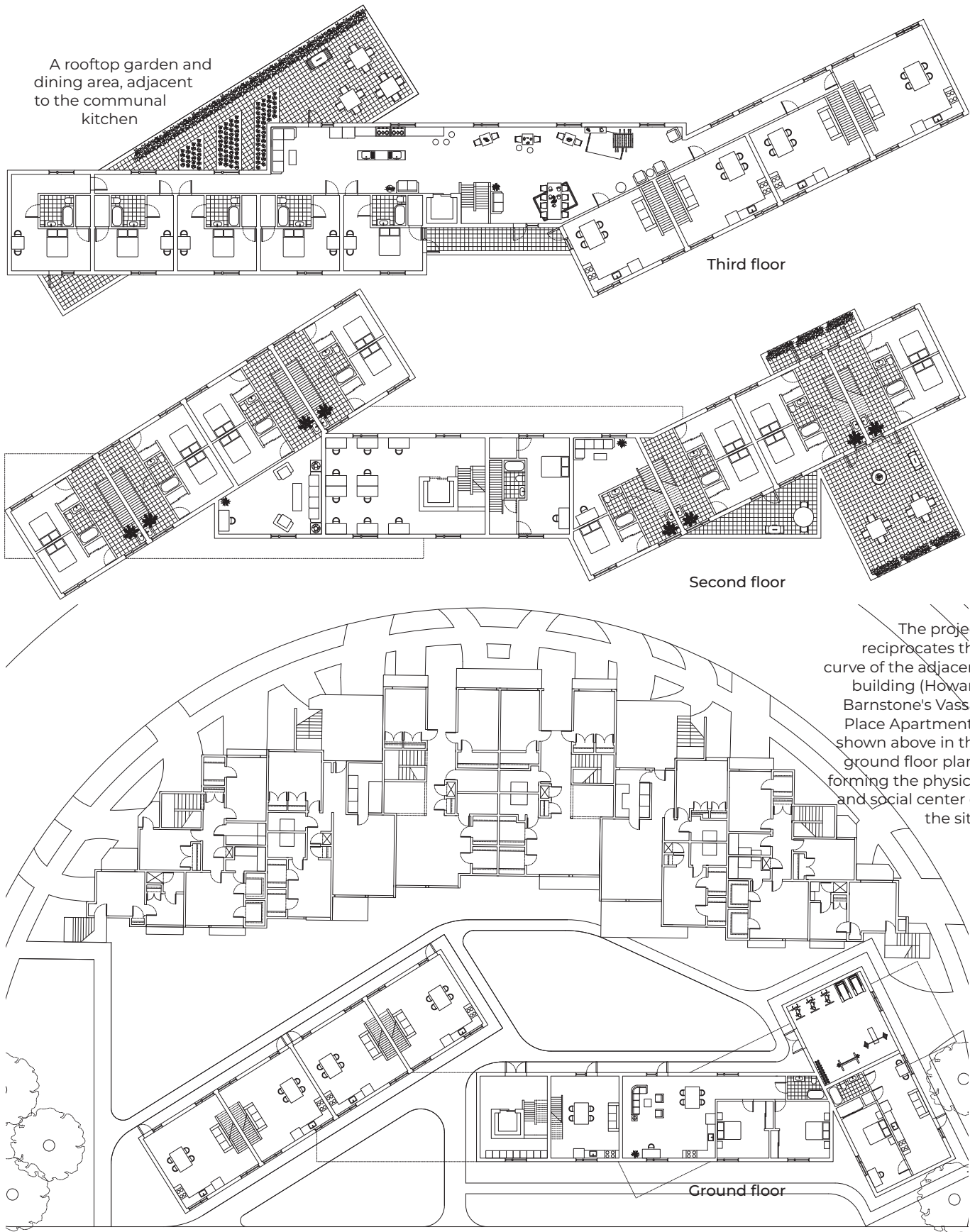
Photoshop

InDesign

Model made from painted plywood, cut with laser cutter and bandsaw



A rooftop garden and dining area, adjacent to the communal kitchen

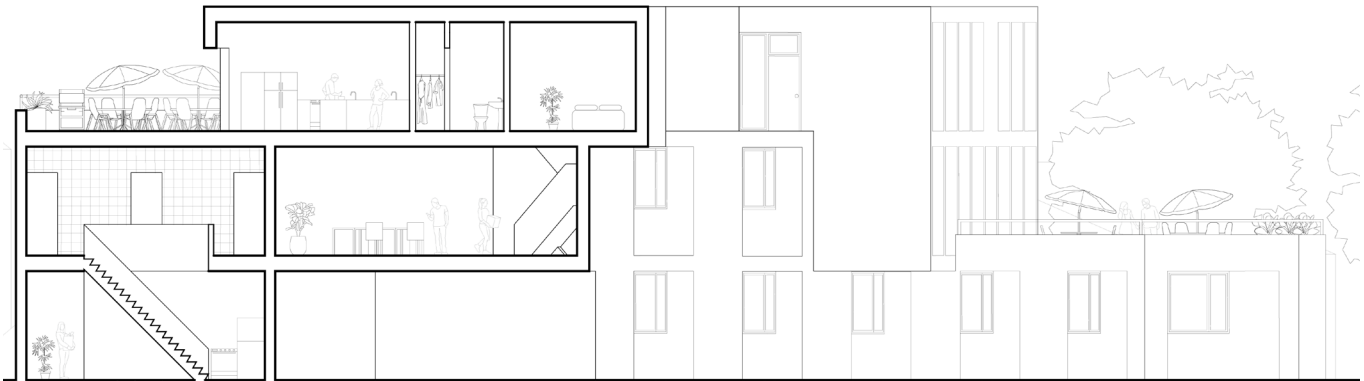


The project reciprocates the curve of the adjacent building (Howard Barnstone's Vassar Place Apartments, shown above in the ground floor plan), forming the physical and social center of the site.



North elevation



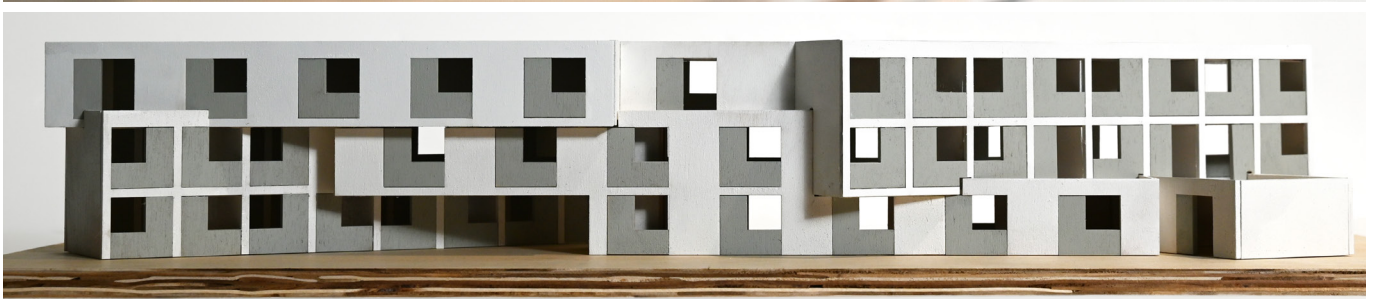


This section of my 16-unit housing project showcases some of its many unit types and features. With shared-kitchen studios and single and two-story apartments, people of all backgrounds interact in the social spaces, garden, and other amenities.



A section through
four two-story
apartments.





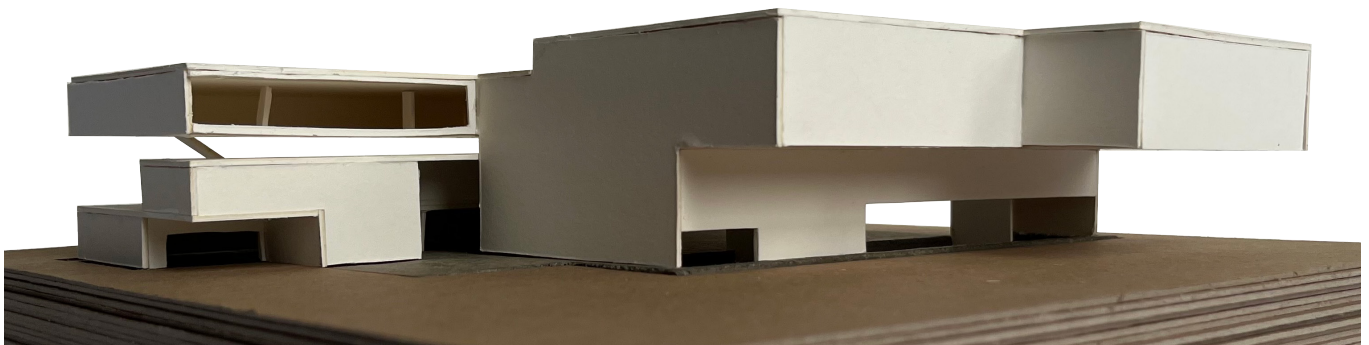
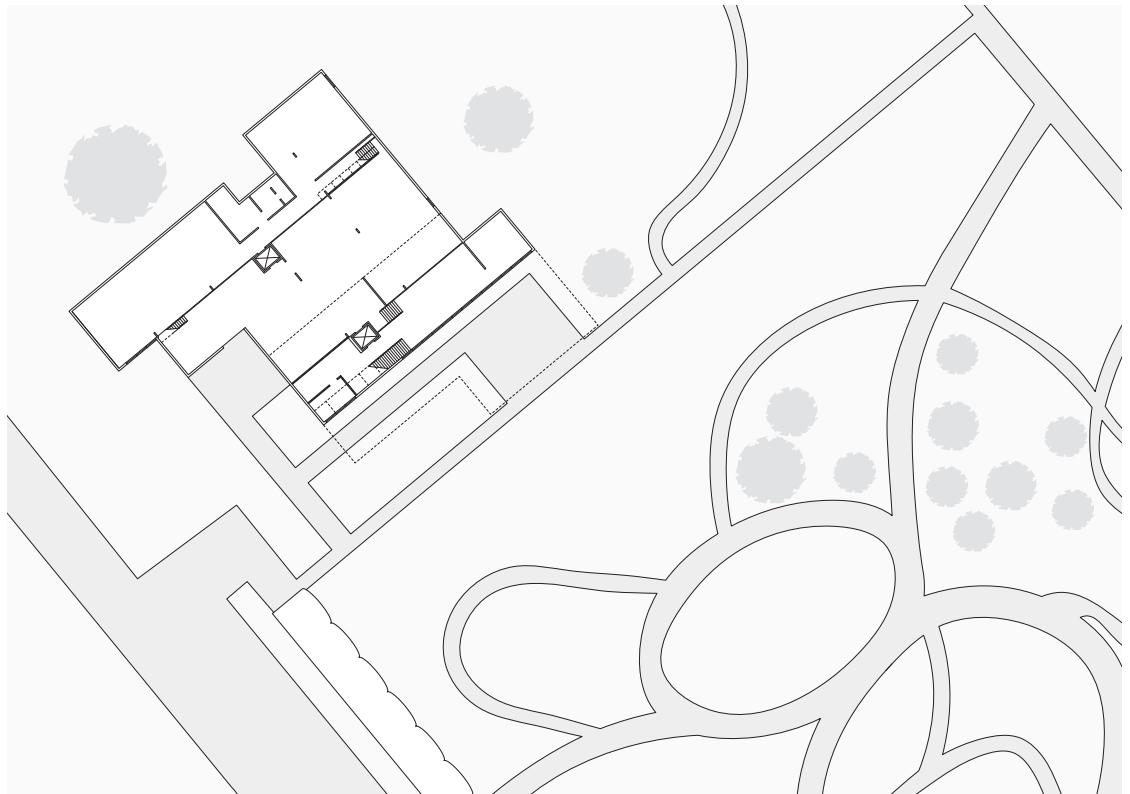
Interpretive Center

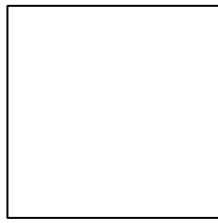
Starting from an abstract primitive form and adapting it through consideration of scale, site, and program, I designed an interpretive center for the Houston Botanic Garden, featuring an auditorium, community classrooms, gallery spaces, a library, and offices.

Software Used:

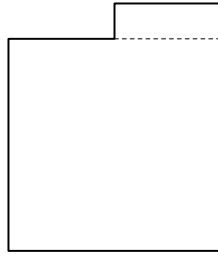
Rhino
Illustrator
Photoshop
InDesign

Model made
of museum
board with
cast cement
foundation and
chipboard base

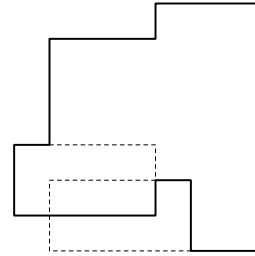




Primitive



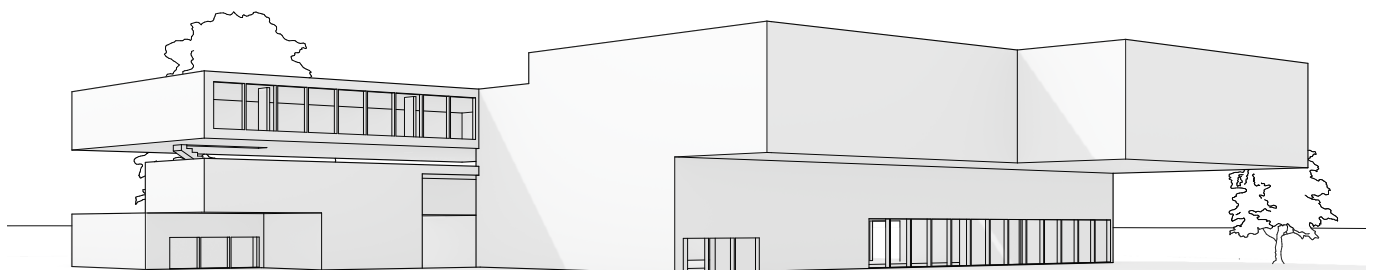
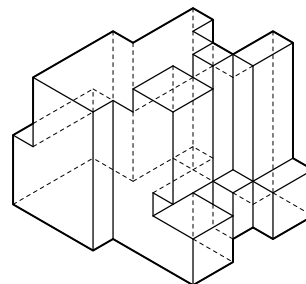
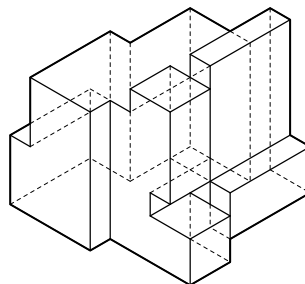
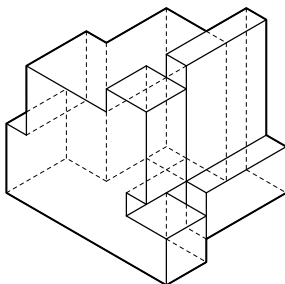
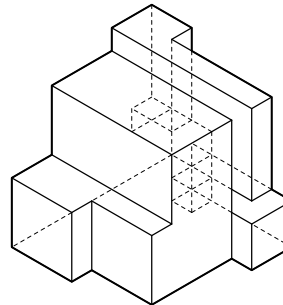
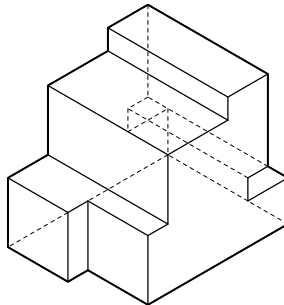
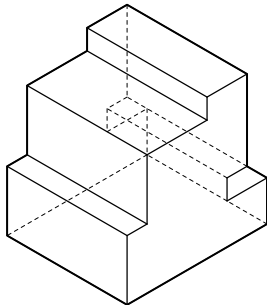
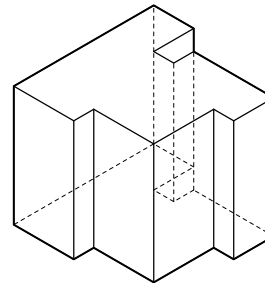
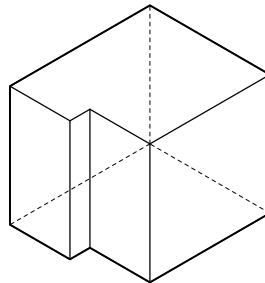
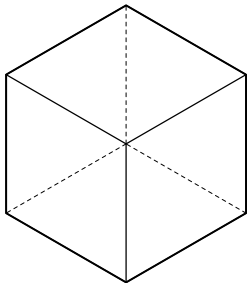
Extend

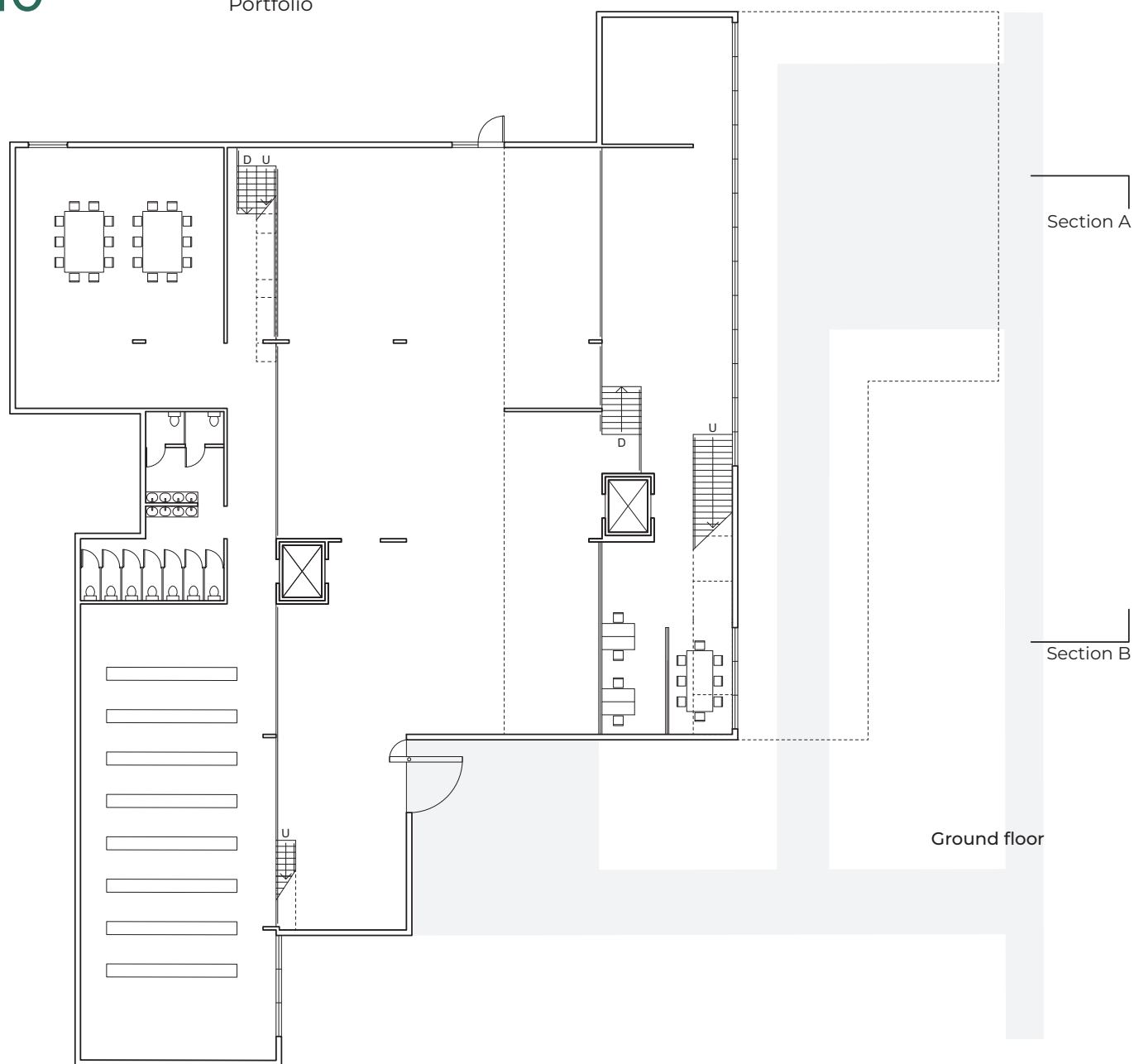


Displace

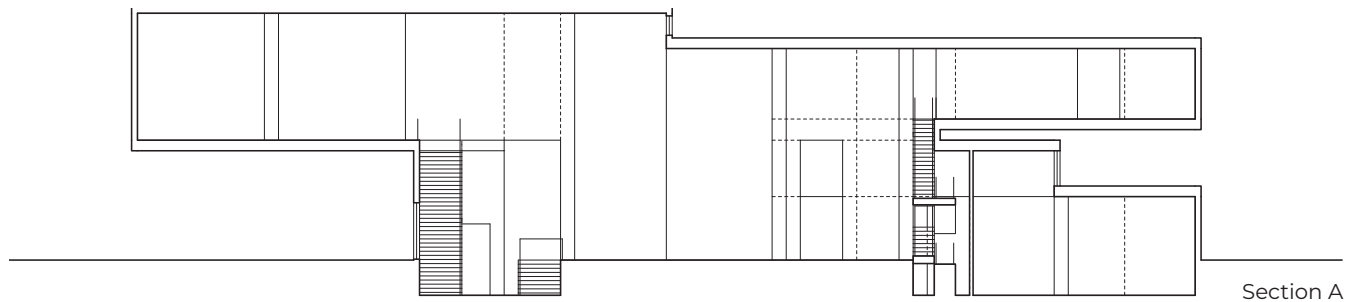
Formal Process

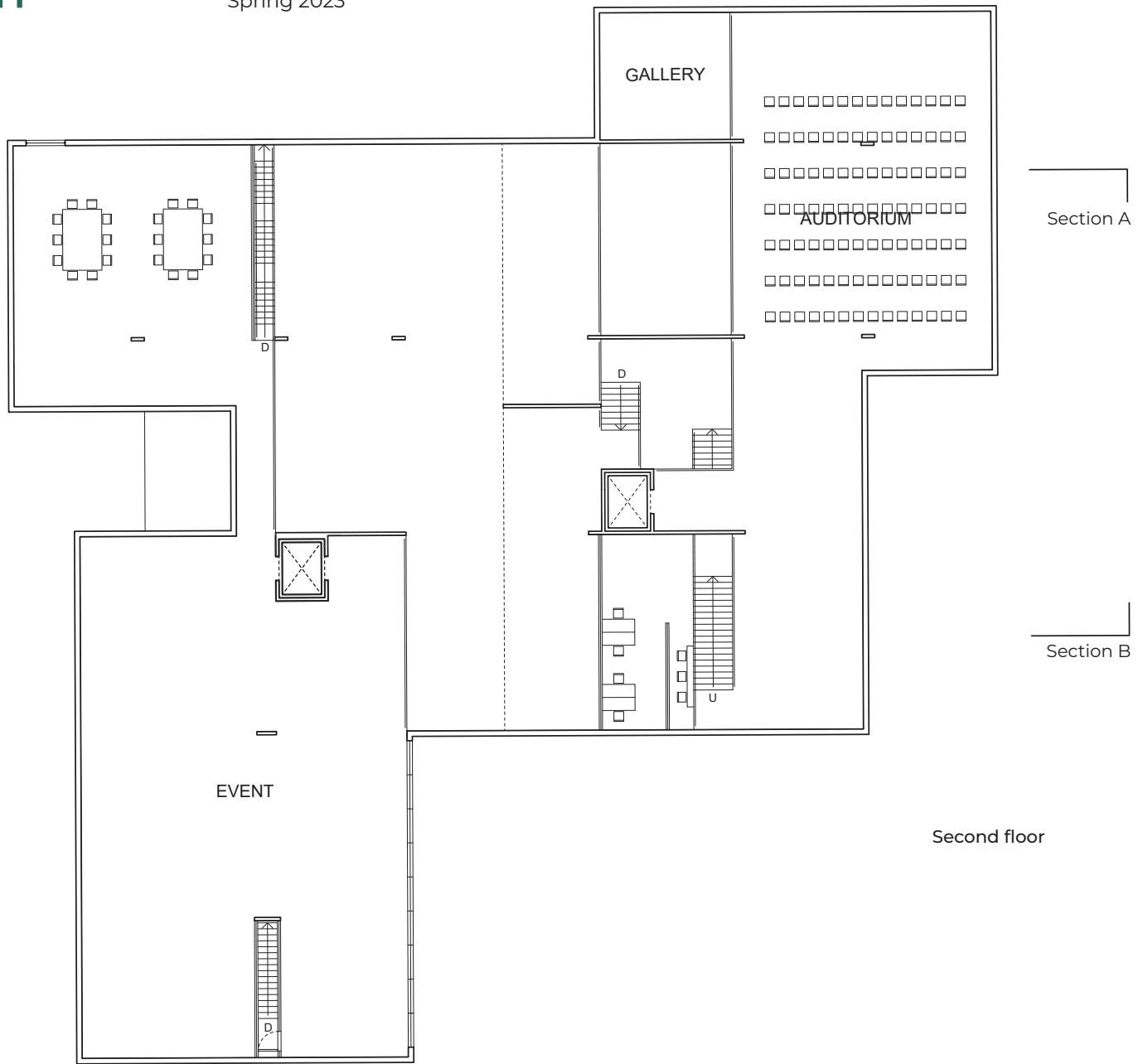
The form of the project was devised by applying a series of three-dimensional transformations (extend, displace, and rotate) three times to the starting form of a cube, and then rotating and flattening the resulting shape to better accommodate the program and site of the project.



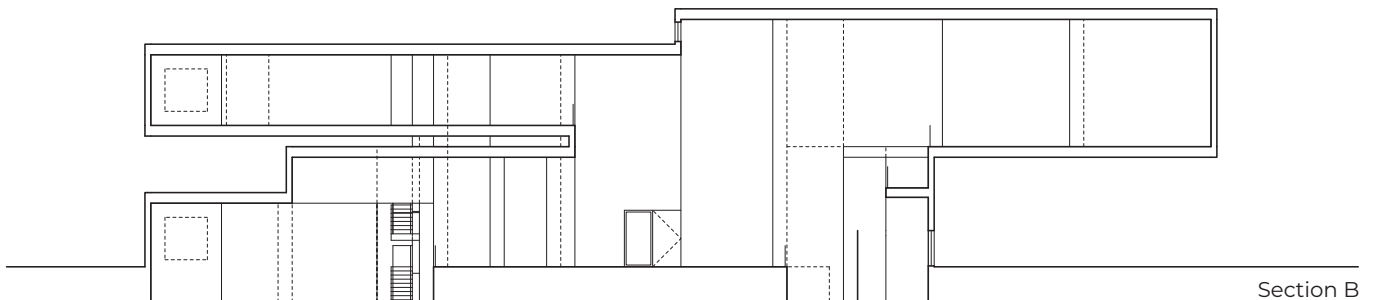


The interpretive center is divided into two distinct sides by a seam in the roof and by varying floor levels, with more private, enclosed spaces like classrooms and a library on one side and an auditorium on the other, with a large, open gallery space connecting them in the center.

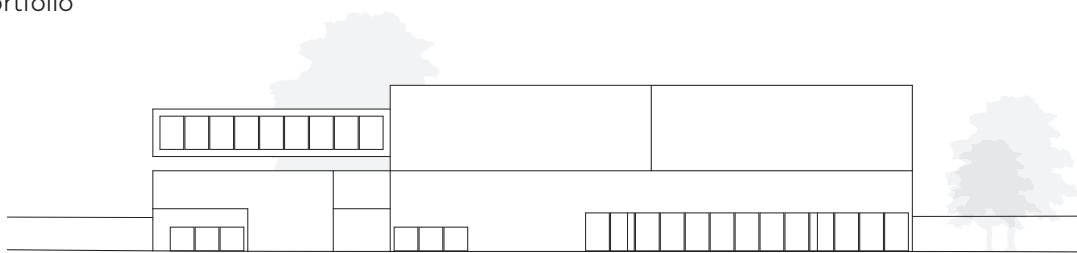




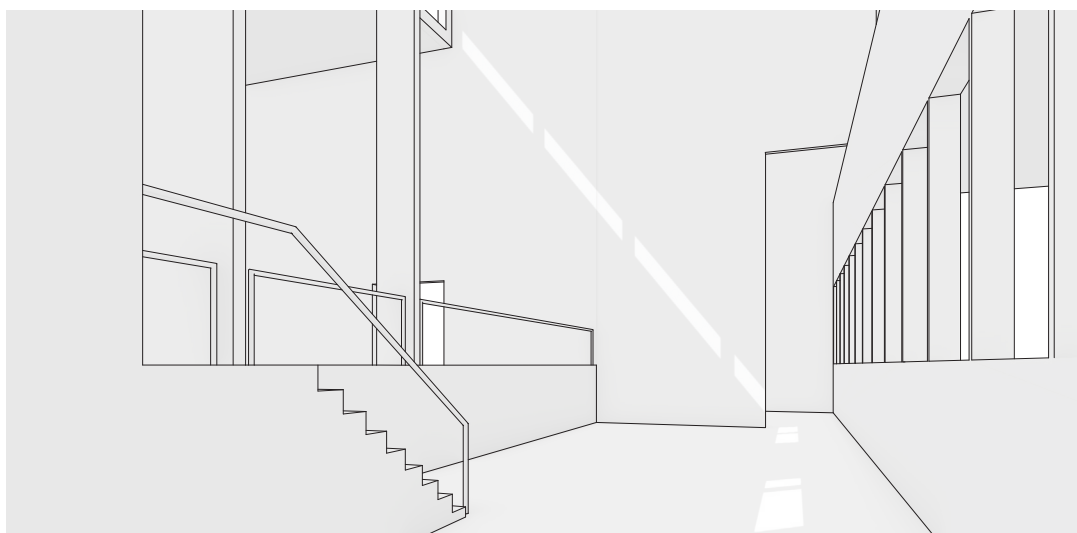
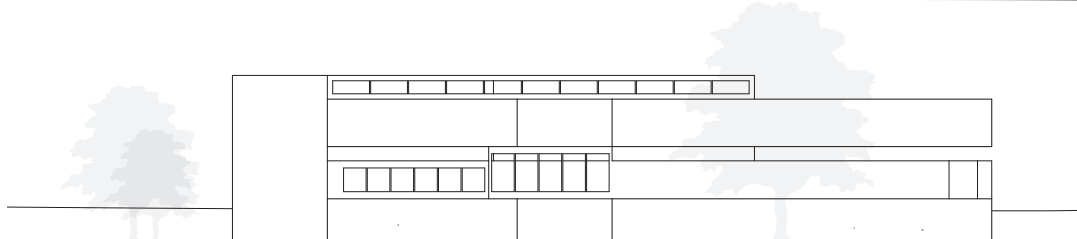
Second floor



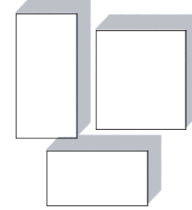
Southeast elevation



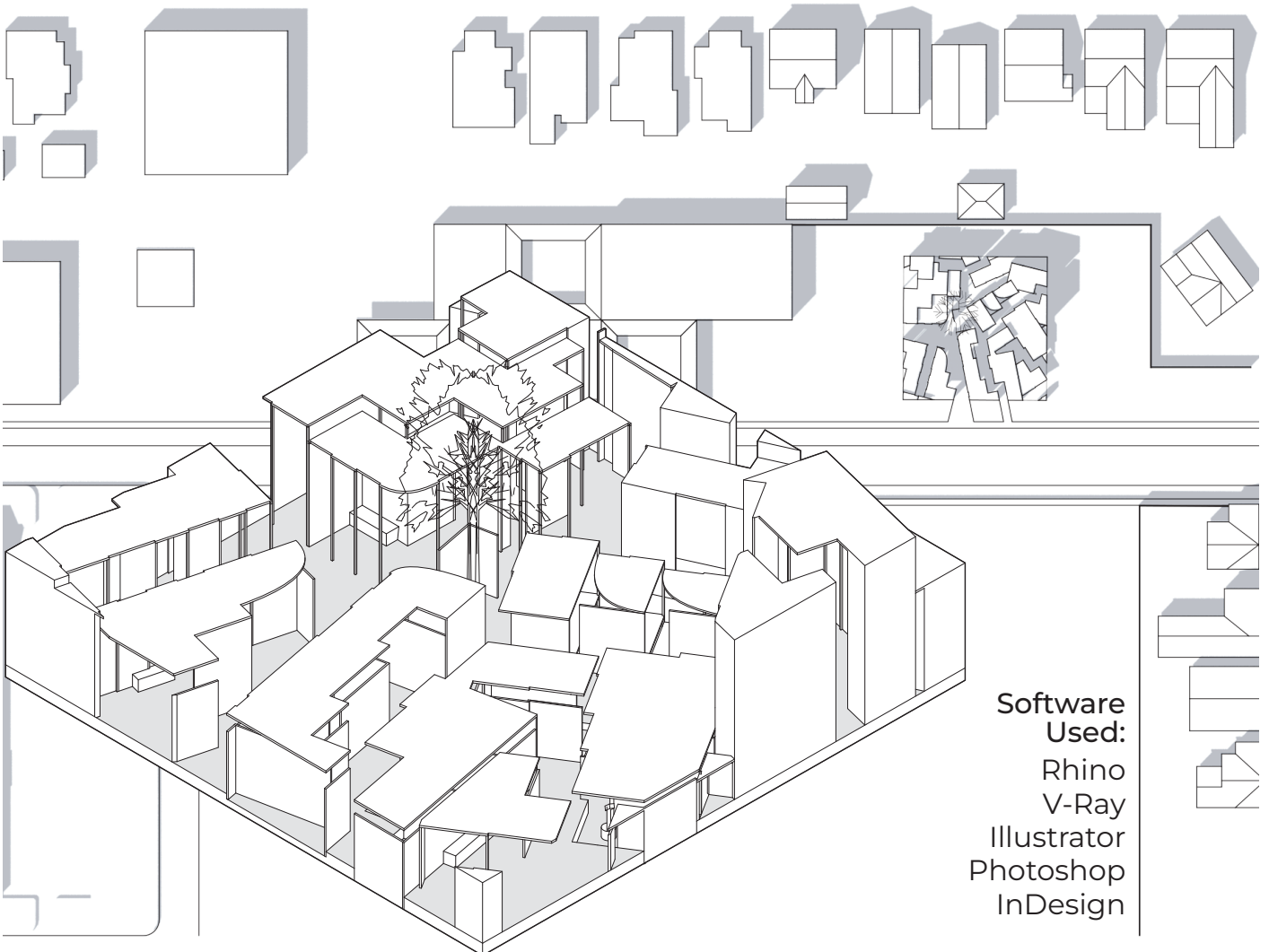
Northwest elevation



The Sculpture Pavillion



A pavillion adjacent to Houston's Menil Collection, serving both as an art and sculpture exhibition space, and as a sculpture itself.



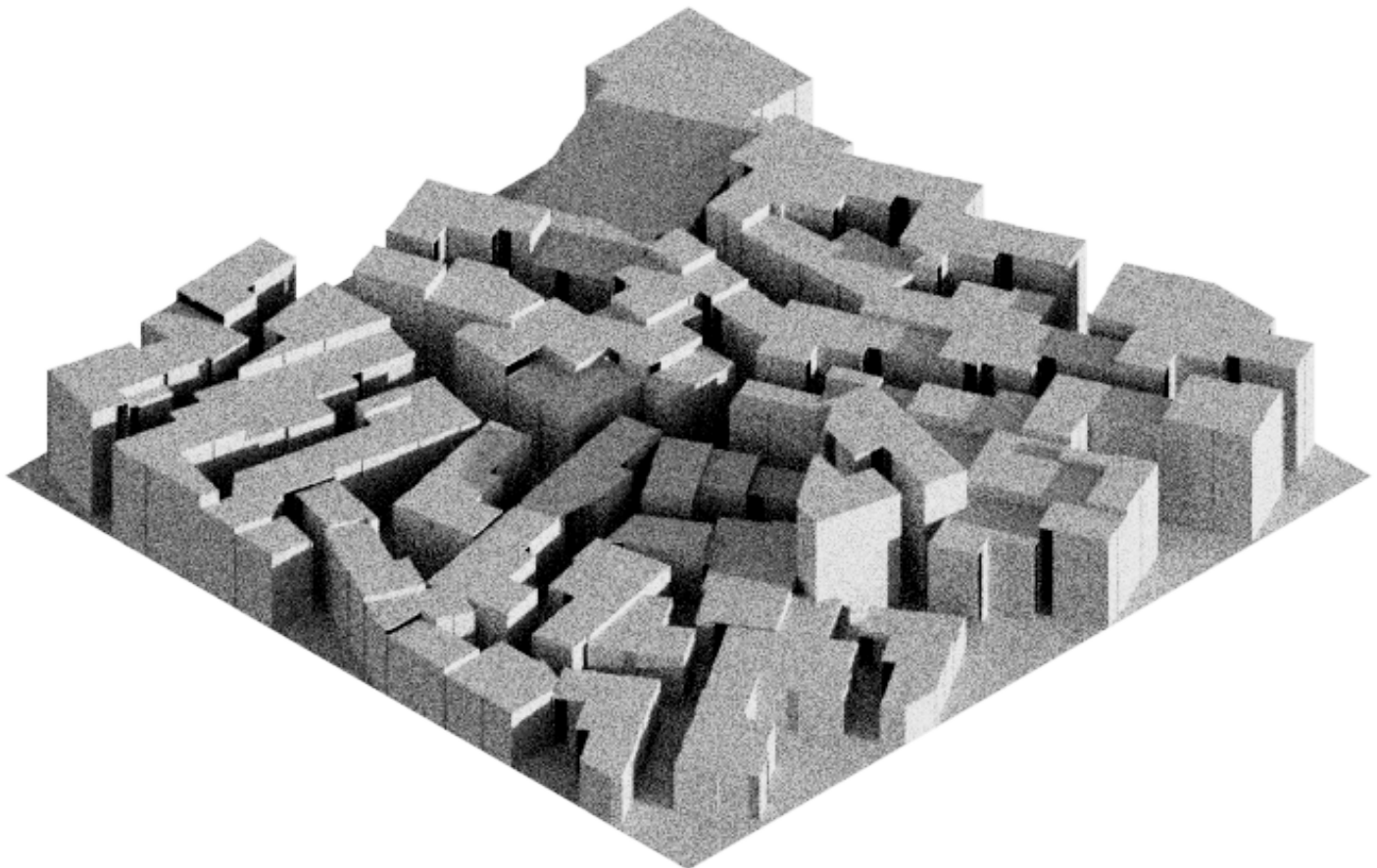
Software
Used:
Rhino
V-Ray
Illustrator
Photoshop
InDesign

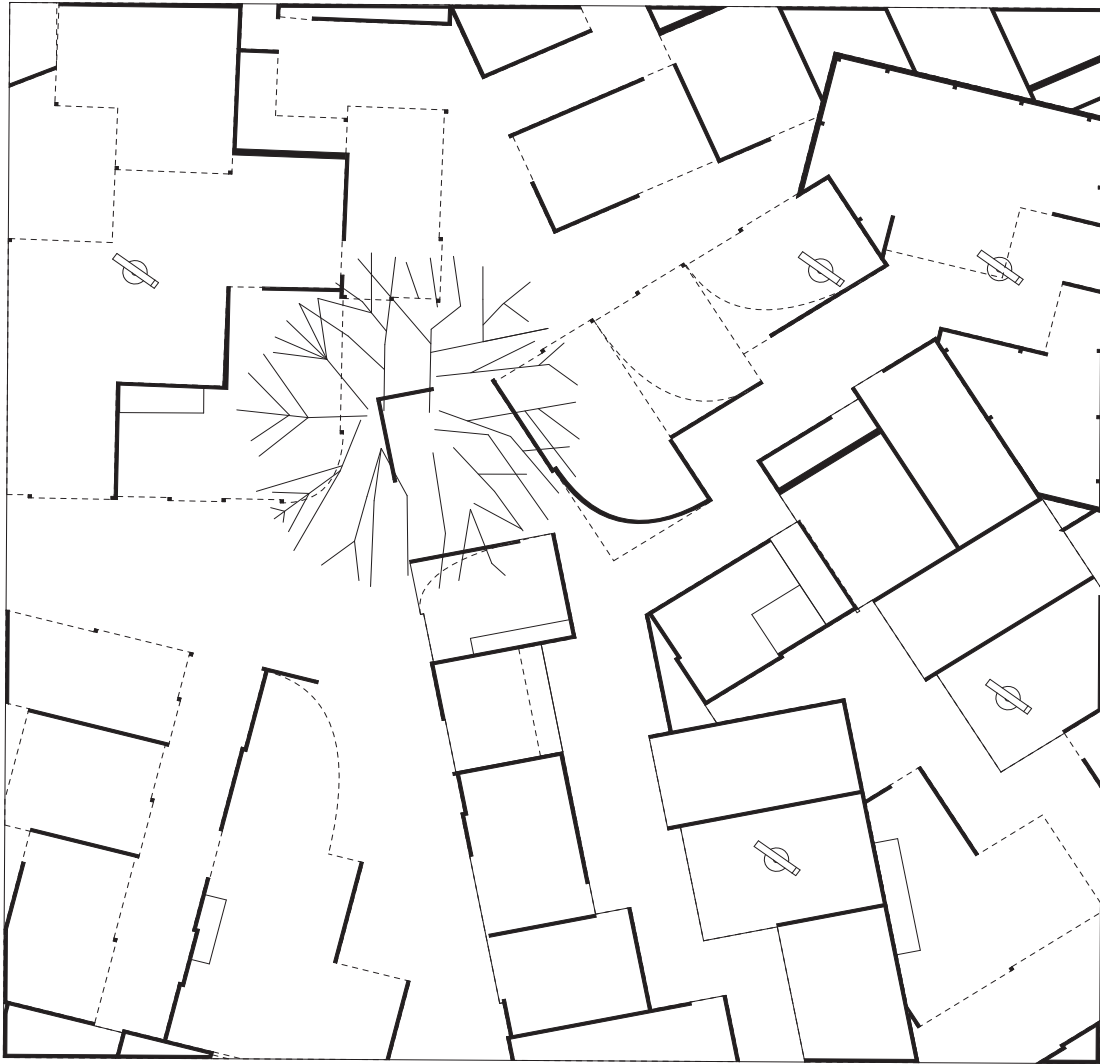


Formal Process

The form of the pavillion relies on one main "unit," with six pieces divided by a corridor. This unit is then duplicated and rotated repeatedly, merging with and intersecting itself, forming different chunks, zones, and pathways.

The next step was to assign hierarchy to these units by selectively raising and lowering them.





After creating the initial form, I selected a smaller portion of it to serve as the actual pavilion. I then selectively eliminated walls to open up certain spaces and to help with circulation, while choosing to keep certain walls to form pathways by which to navigate the exhibitions.

