

SILENCE, LIGHT, AND MEMORY IN ARCHITECTURE

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My thesis work indeed helped me explore more knowledge in architecture designing and hand drawing. I believe these precious experience I gained in my thesis year will continue to help me through my entire life.

Abstract

This work seeks to explore the unmeasurable qualities of architecture that enrich the architectural experience, with a focus on the roles of light, sound, and memory as they interact with architecture in the making of that experience.

Introduction

Interpreting architecture is like telling a story: how the story begins, how the chapters are organized in a sequence, how the plots unfold and imply the latter ones, how and where the story ends... In this architecture, the reader will see how light would change in the procession of movement, how space recollects the reader's memory about the path that that person has walked or seen before, how the sound takes a break and leaves a silent space. The reader's emotion is affected between opposing categories of light and dark, silence and sound, calm and tension, surface and heaviness, expanse and compactness, contrast and similarity. Silence, light, and recollection are internalized in this architecture, form as immaterial, unmeasurable, the central idea of the story.



Fig. 1



Fig. 2



Fig. 3

A poetic path for approaching the building.

The photo is of a secluded valley I have been to several years ago. A river path formed naturally by the seaweeds, guides the boat flowing slowly through the valley. The path of seaweeds extends the sequence from the outside to the inside.

Satellite image of site and the area nearby
 Photography of approaching the building
 Satellite image of site

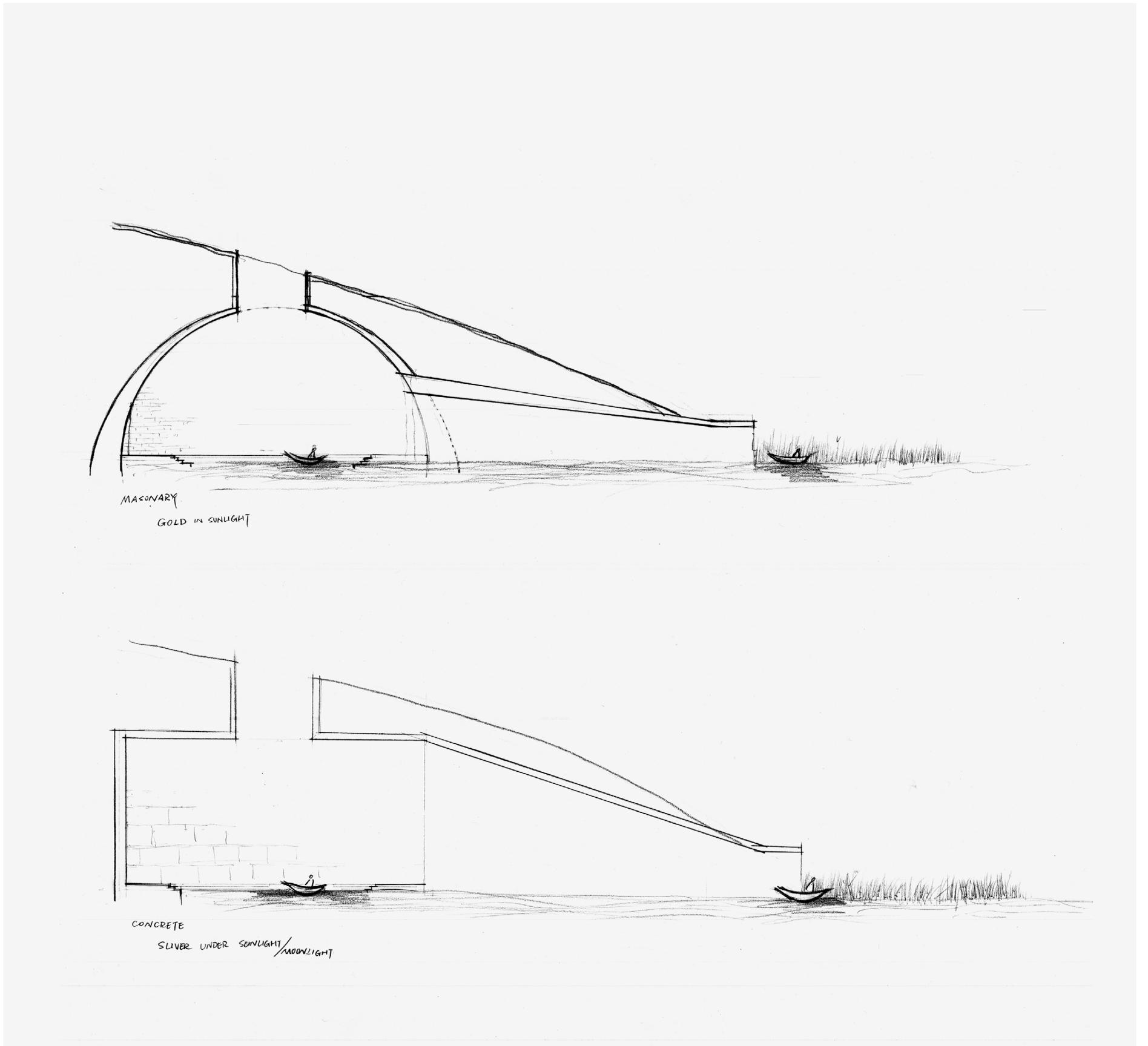


Fig. 4

After sailing through a dark narrow underground tunnel, one would get to a dome space lit by the skylight and the moonlight. While floating above the water, one could appreciate the starry sky through the lightwell, both at day and at night.

Section drawing of the moment of arrival
Pencil on sketch paper
18 x 24 in

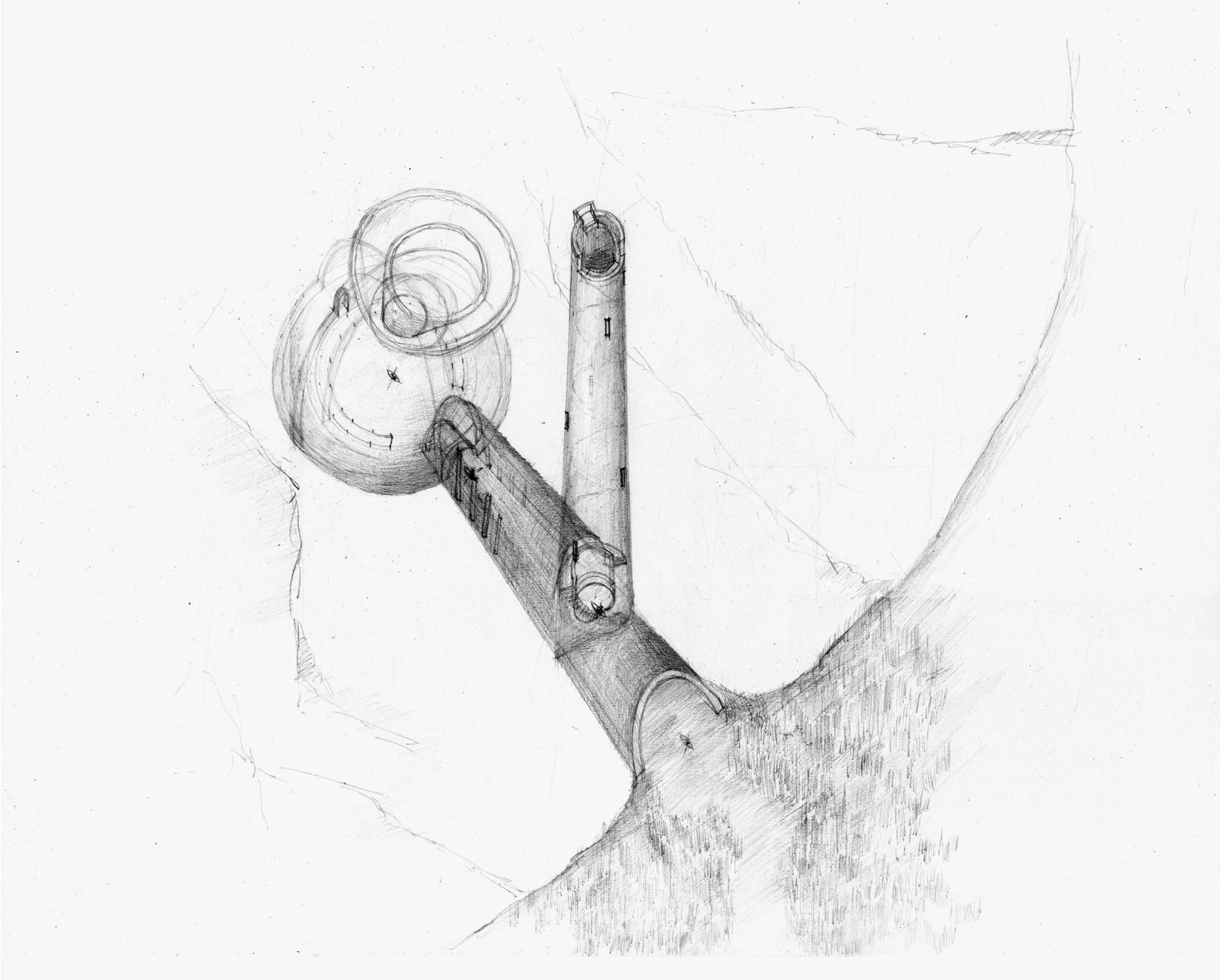
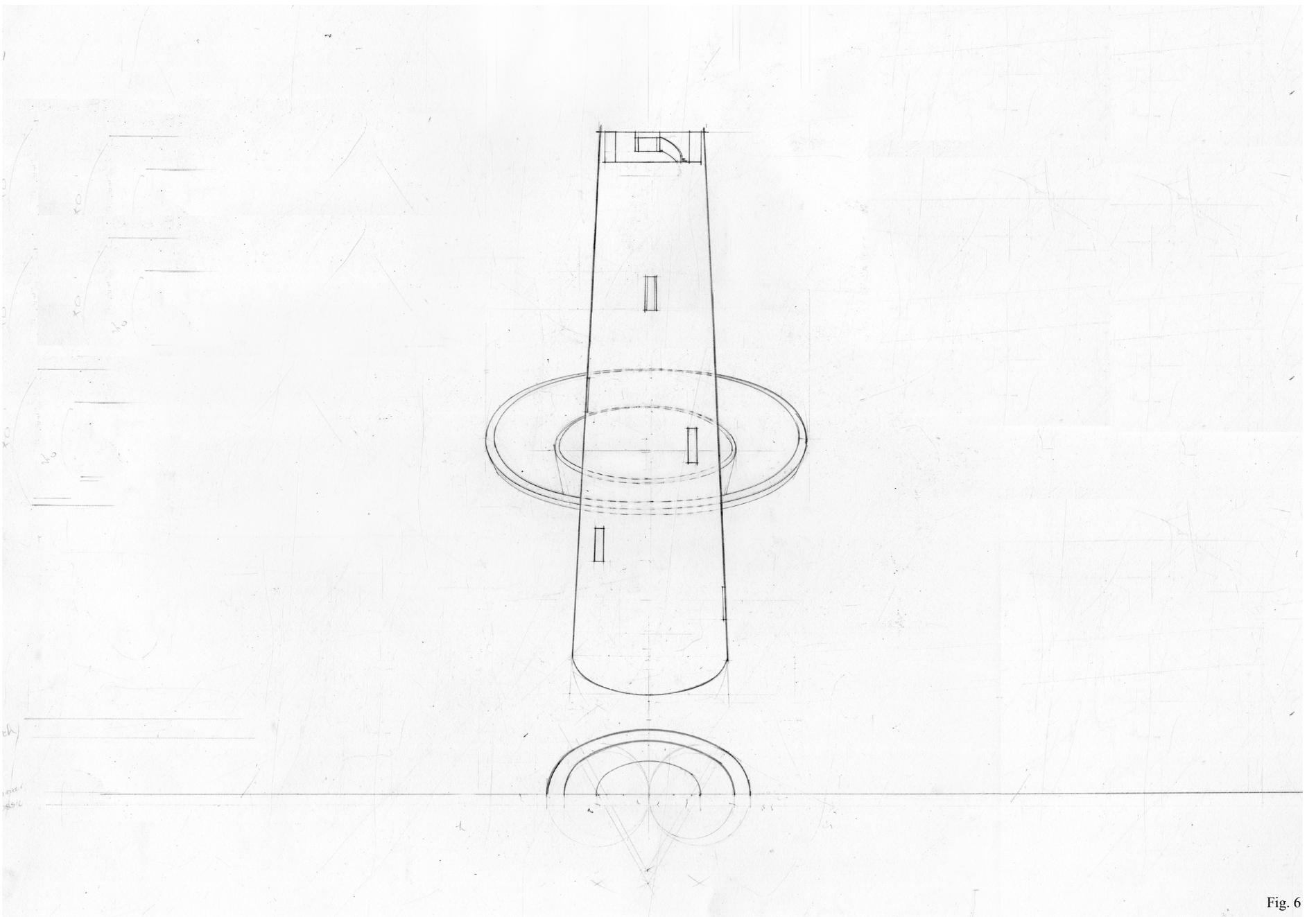


Fig. 5

Axonometric drawing of the
project
Pencil on sketch paper
18 x 24 in

The Story about Sensation of Space

A story about light and shadow, silence and sound, breadth and depth, surface and heaviness, expanse and compactness.



Entrance, the first moment to perceive the architecture: the tower, the tunnel, and the double-layered well.

Fig. 6
Entrance / North-west elevation drawing
Pencil on Bristol
22 x 30 in

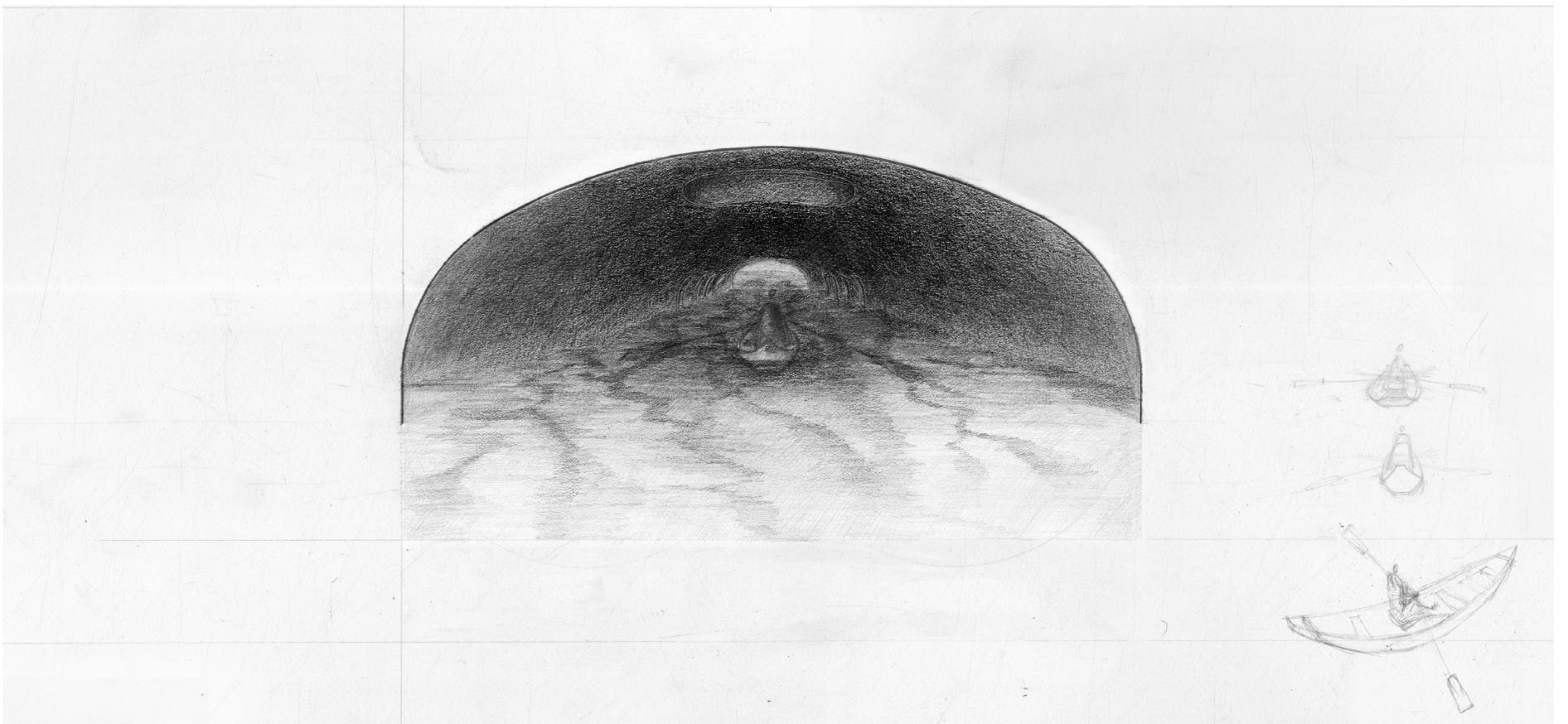


Fig. 7

Sailing in a tunnel with water. The sound of paddling echoes in the tunnel. Space is wide and deep.

Perspective drawing of the 1st scene
Pencil on Bristol
22 x 30 in

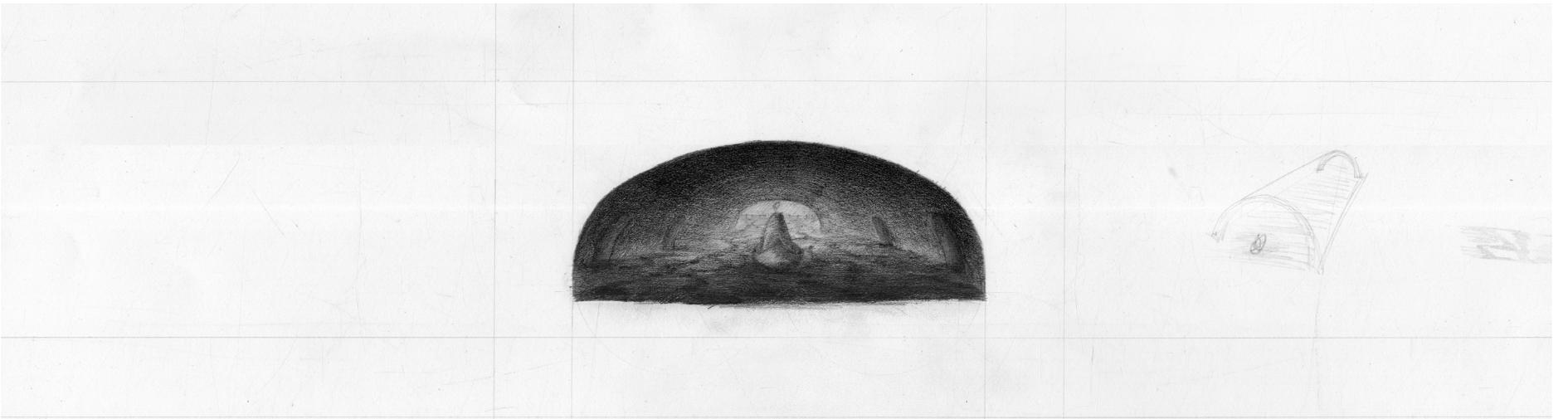


Fig. 8

Space is getting more compact and darker. A light room can be seen at the end of the tunnel. The sound of paddling echoes between the walls with niches on both sides.

Perspective drawing of the 2nd scene
Pencil on Bristol
22 x 30 in

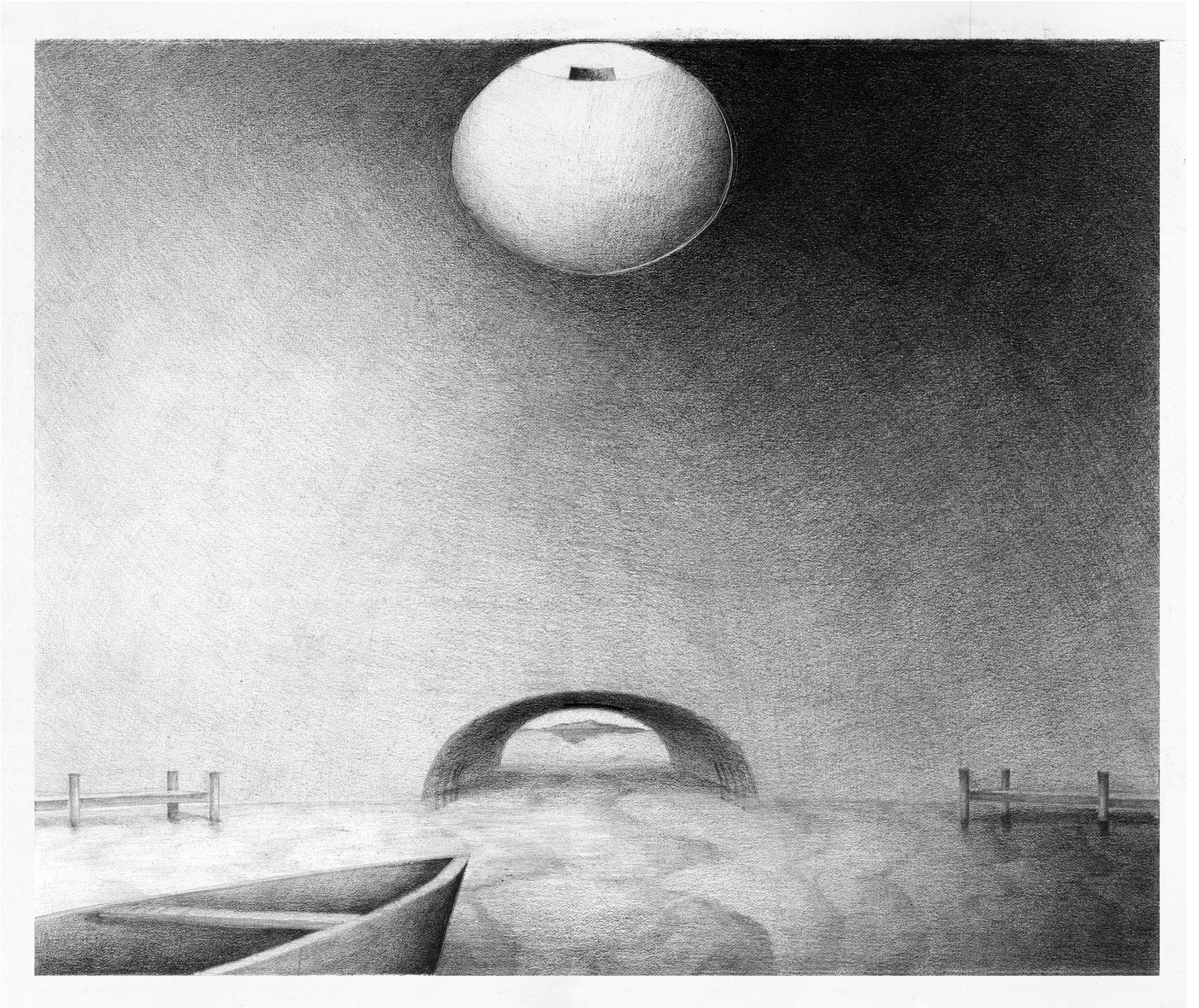


Fig. 9

The space for arrival: a broad dome space lit by the skylight. The sunlight goes down and lights up the river. The wall is slightly shimmering because of the reflection of sunlight on the water. The moonlight would give the space a dark, silvery tone. While floating above the water, one could appreciate the starry sky through the conic lightwell, both at day and at night. The top of tower can be seen from here.

Perspective drawing of the 3rd scene
Pencil on Bristol
22 x 30 in



Fig. 10

Leaving the dock and entering a space in between the double shell. Space is narrow but tall. The viewer will perceive how light would change while stepping upward.

Perspective drawing of the 4th scene
Pencil on Bristol
22 x 30 in

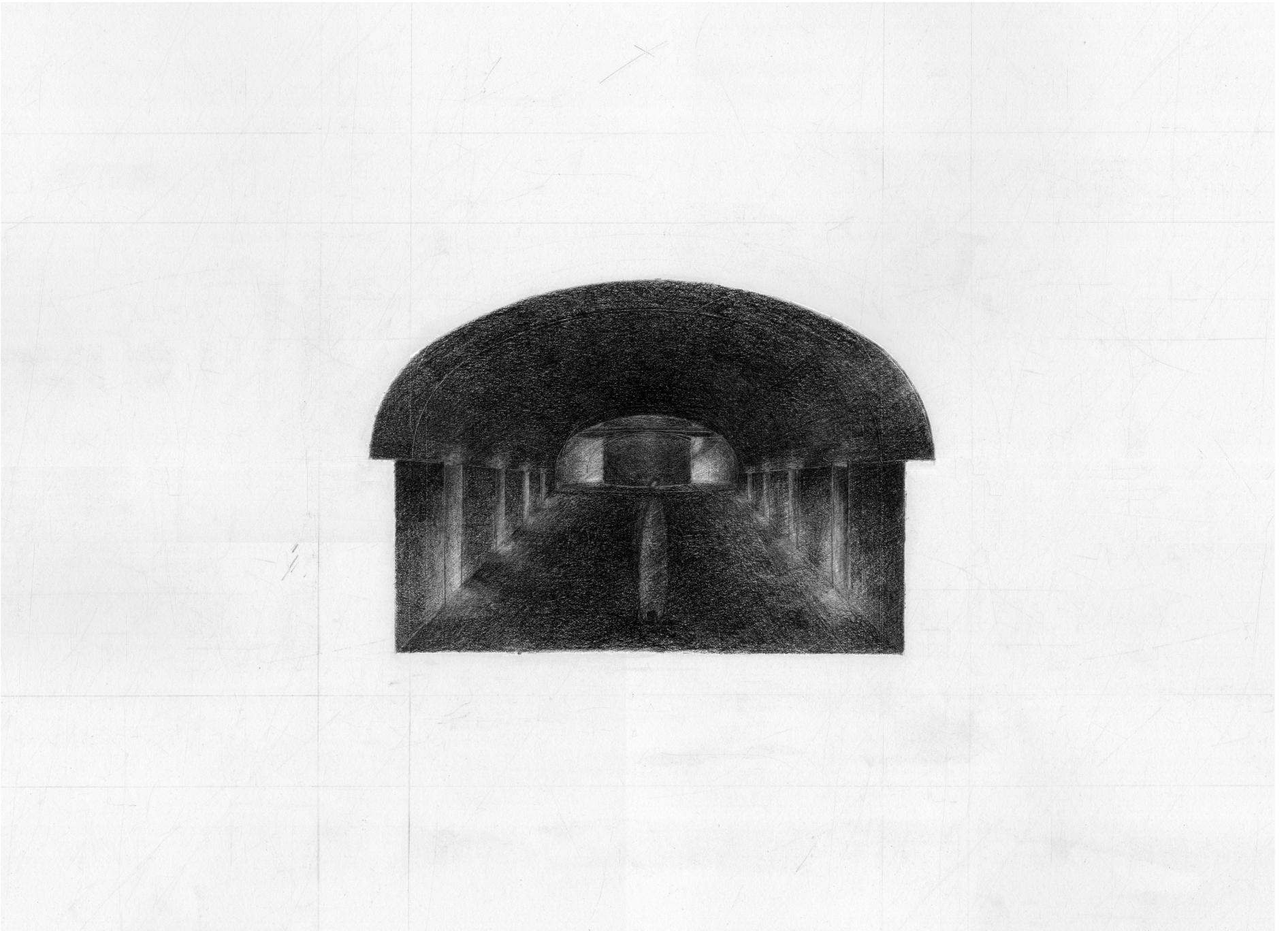


Fig. 11

The viewer turns into a dark space. The slight light in front indicates the direction of advancement, the faint light rises from the bottom side of the niches. With stepping forward, the sound of water and footsteps echoing between the walls, remind the viewer the tunnel s/he has sailed before.

Perspective drawing of the 5th scene
Pencil on Bristol
22 x 30 in

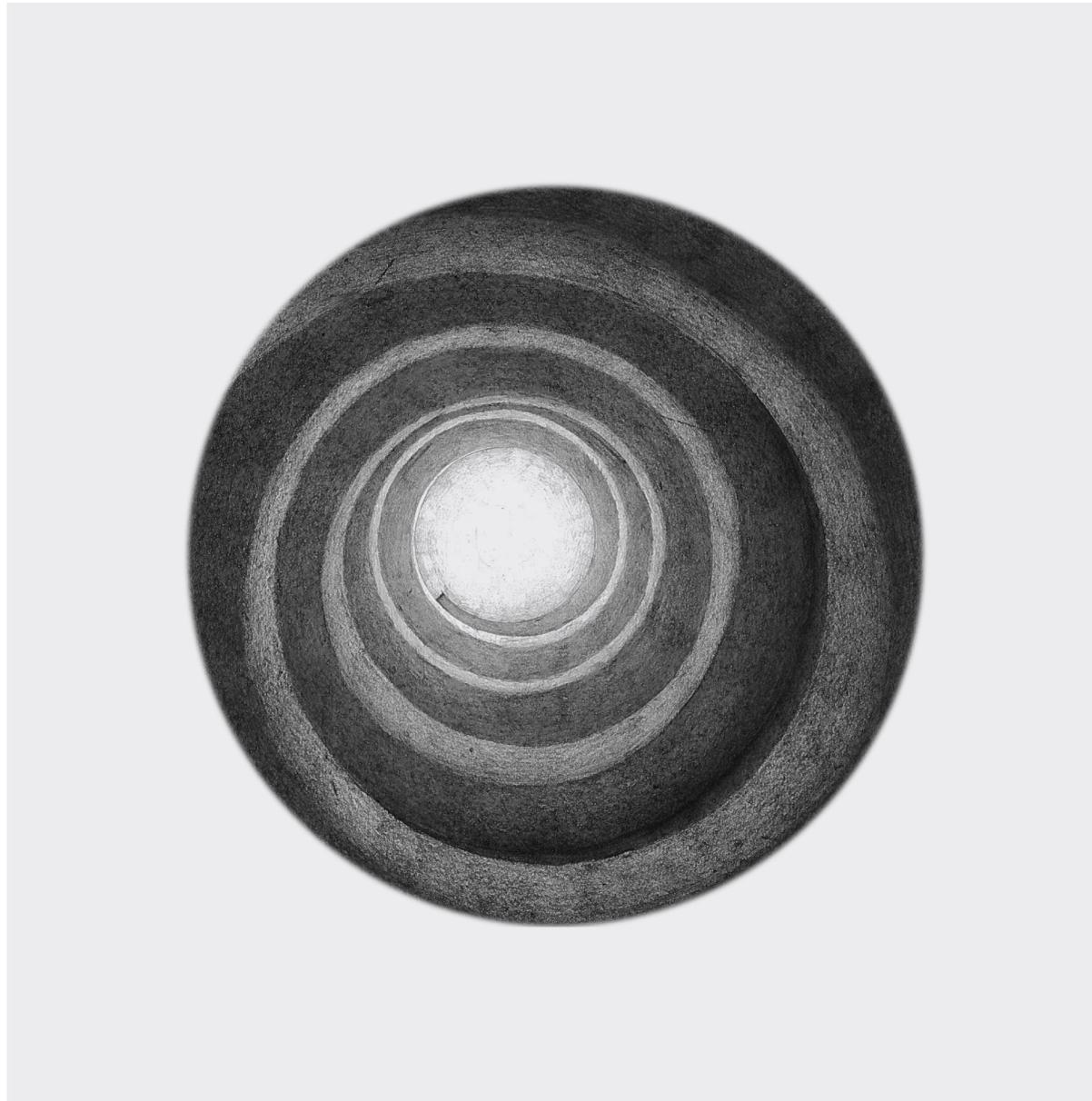


Fig. 12

The tower stood at the end of the dark tunnel. With stepping upward, the form and the sound of the spiral stairs recalls the visitor's memory of the spiral stair between the double shell, the conic tower reminds the visitor the moment when boating in the tunnel with water and the dome space for arrival.

Perspective drawing of the 6th scene
Pencil on Bristol
22 x 30 in

In this series of drawings, the visitor's sightline is always looking at a light space through a dark tunnel. The similarity of sightline works as an implication, connects spaces with different qualities in a sequence.

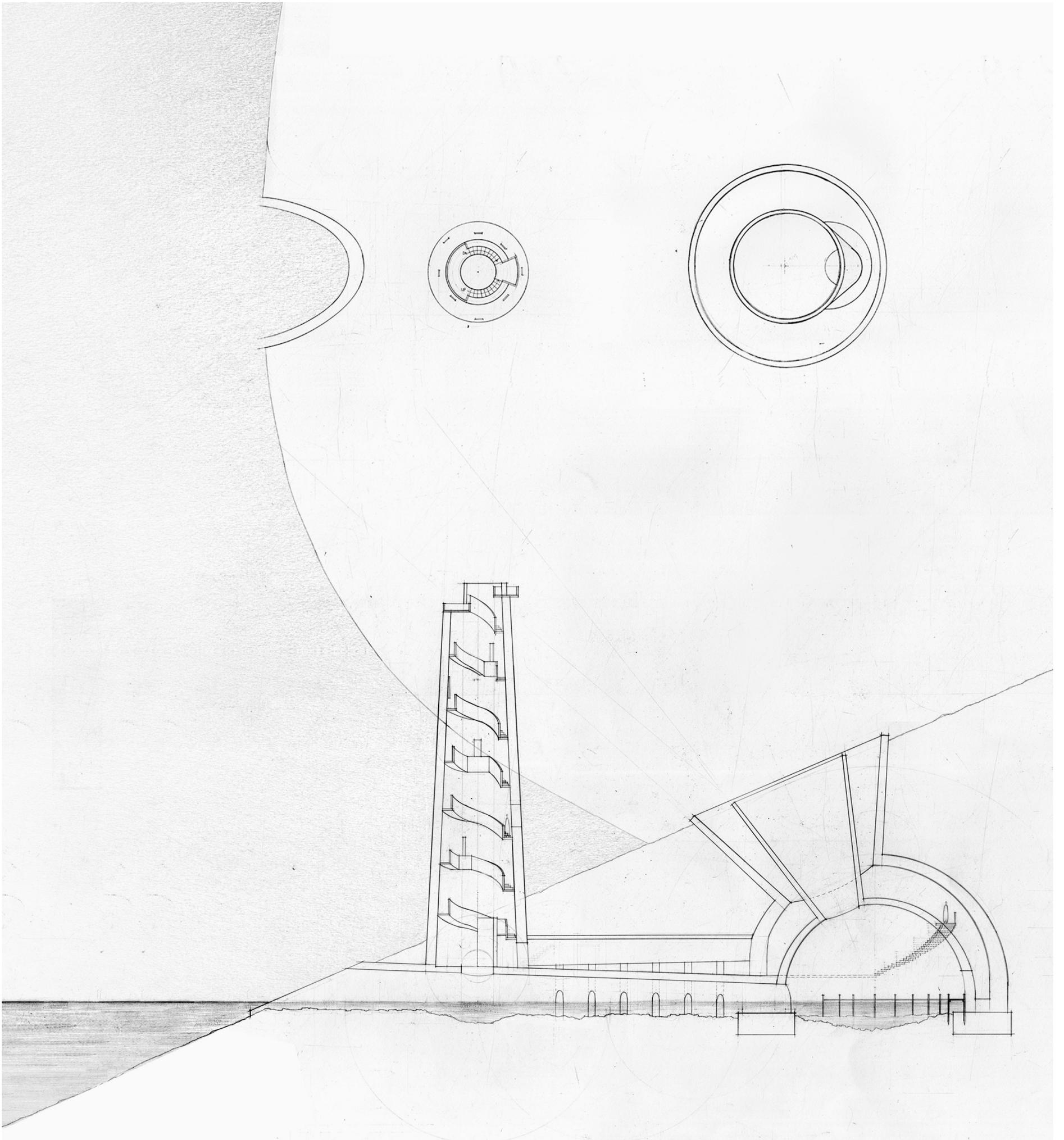


Fig. 13

Section and site plan drawing
Pencil on Bristol
22 x 30 in each

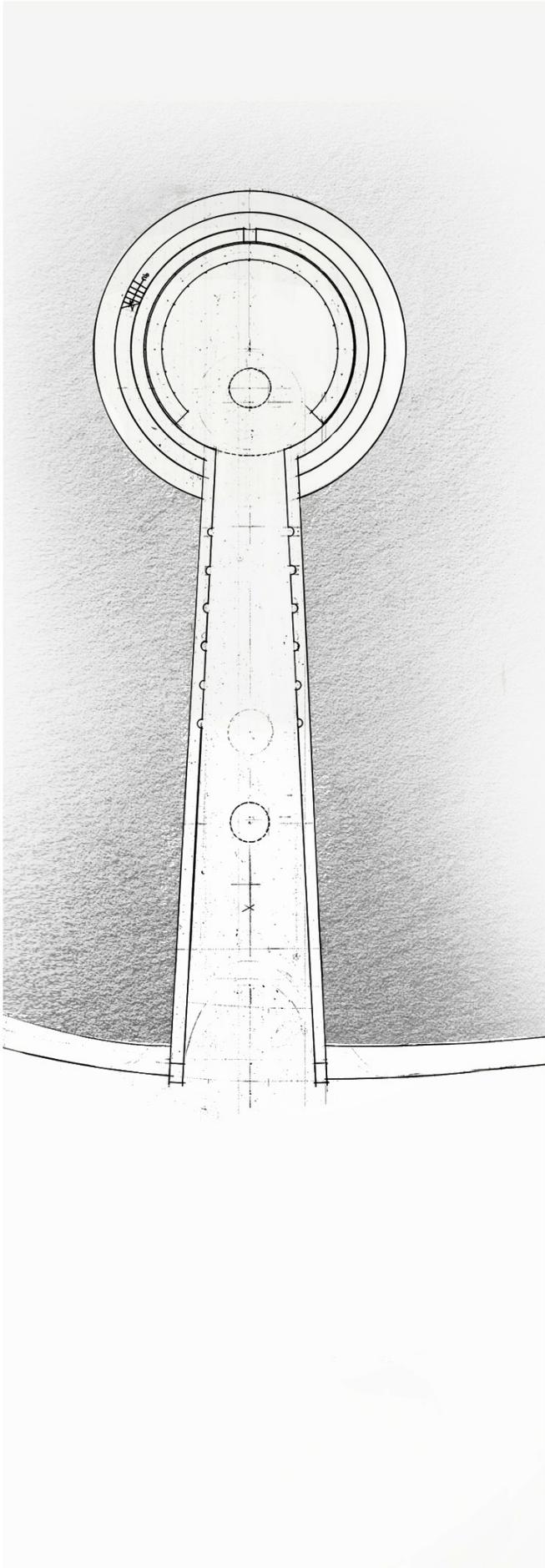


Fig. 14
Gound Floor Plan

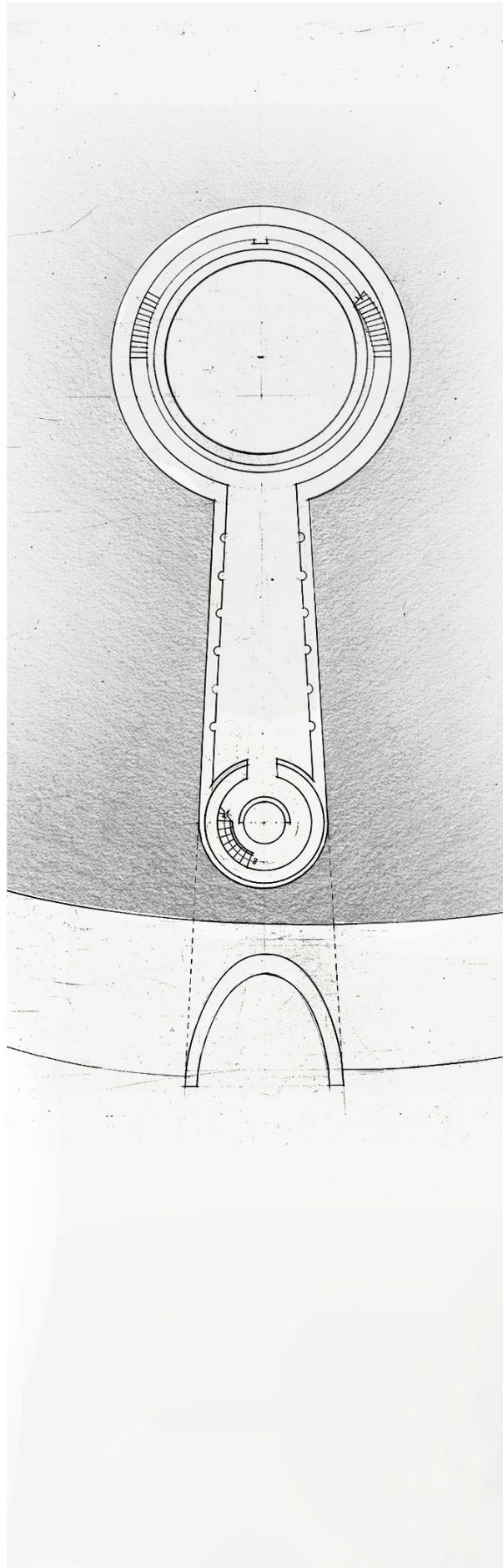


Fig. 15
Second Floor Plan

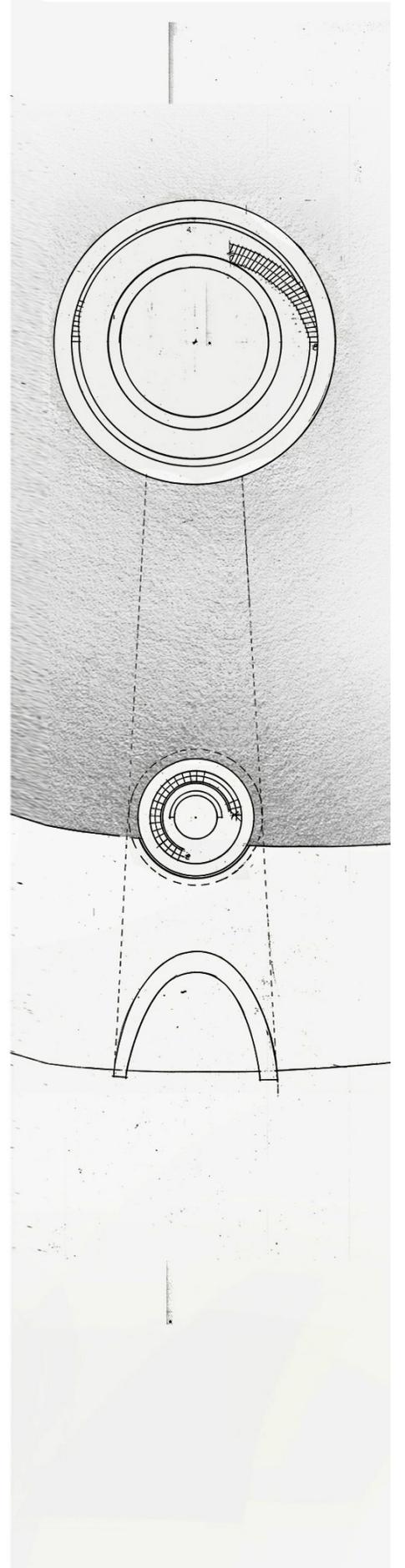


Fig. 16
Third Floor Plan

Plan drawing
Pencil on Bristol
22 x 30 in each

Studies of Light and Space

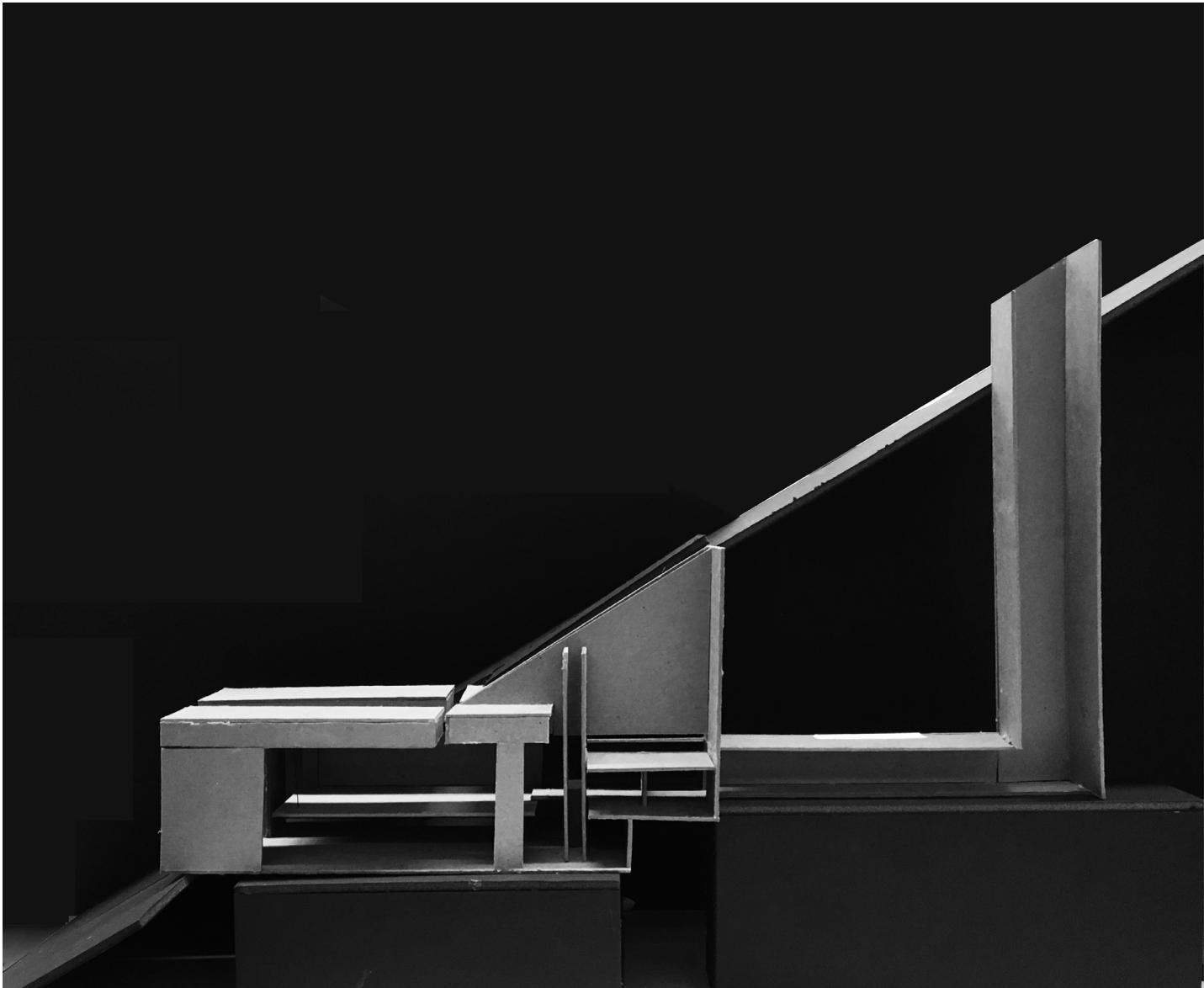


Fig. 17

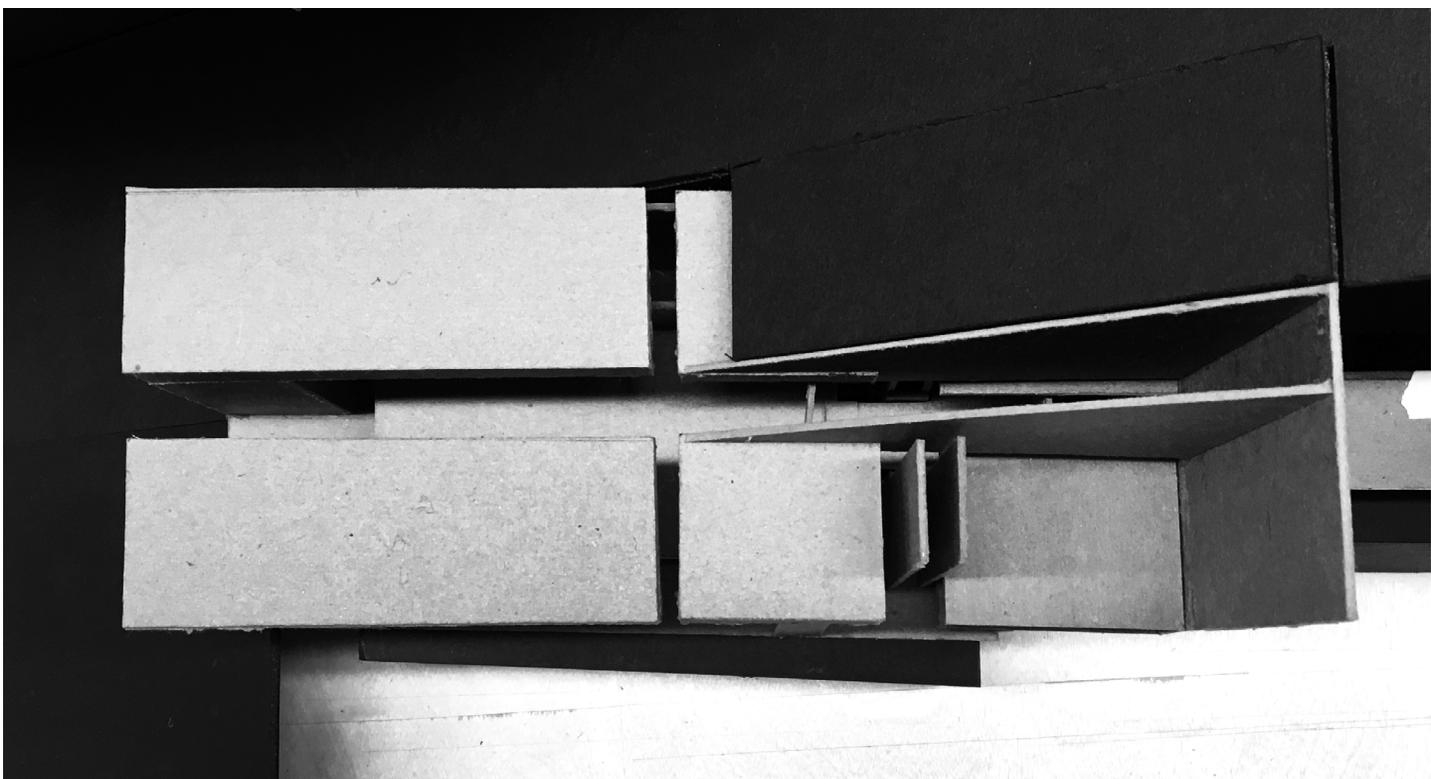


Fig. 18

Scheme 1

Study model | Between Silence and Light
Photography
18 x 24 in

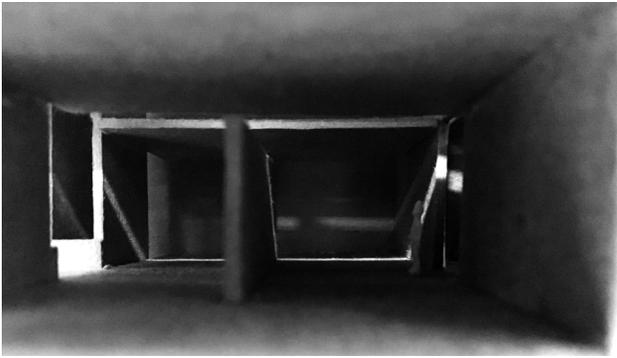


Fig. 19

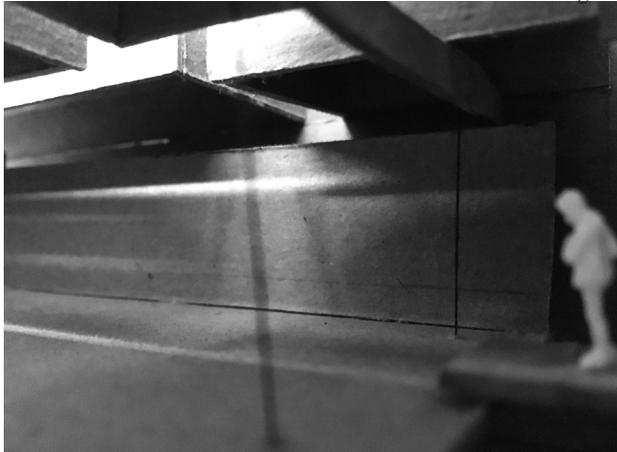


Fig. 20



Fig. 21



Fig. 22

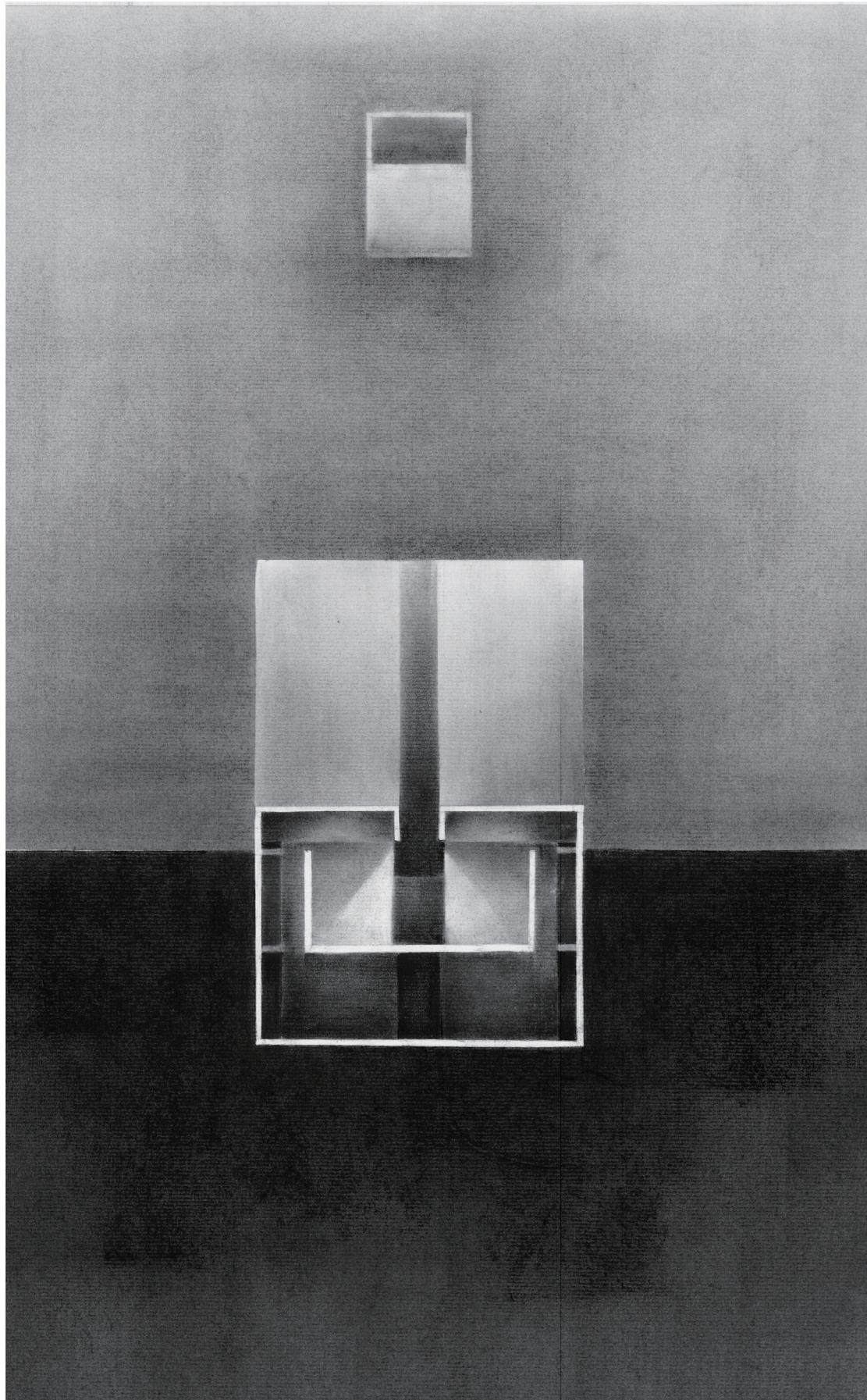


Fig. 23

Study model | Secion drawing about light and shadow
Charcoal
18 x 24 in

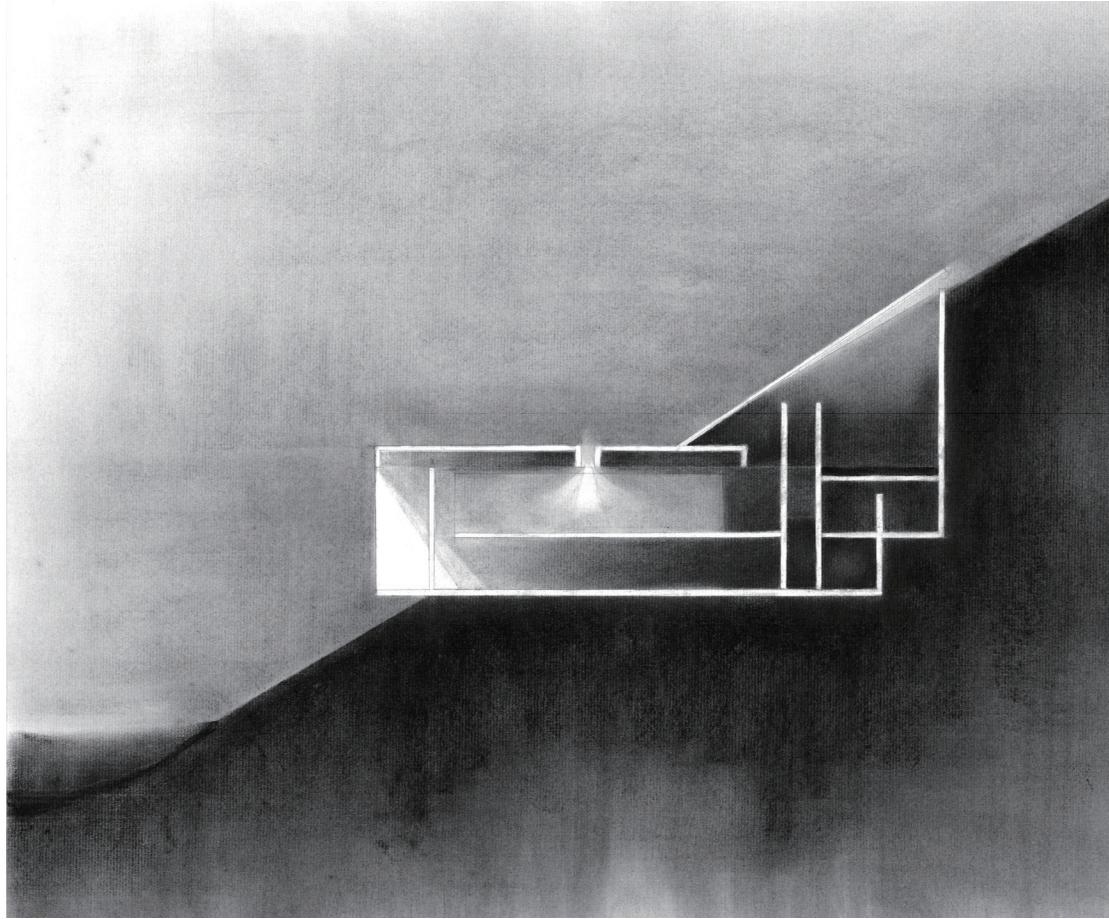


Fig. 24

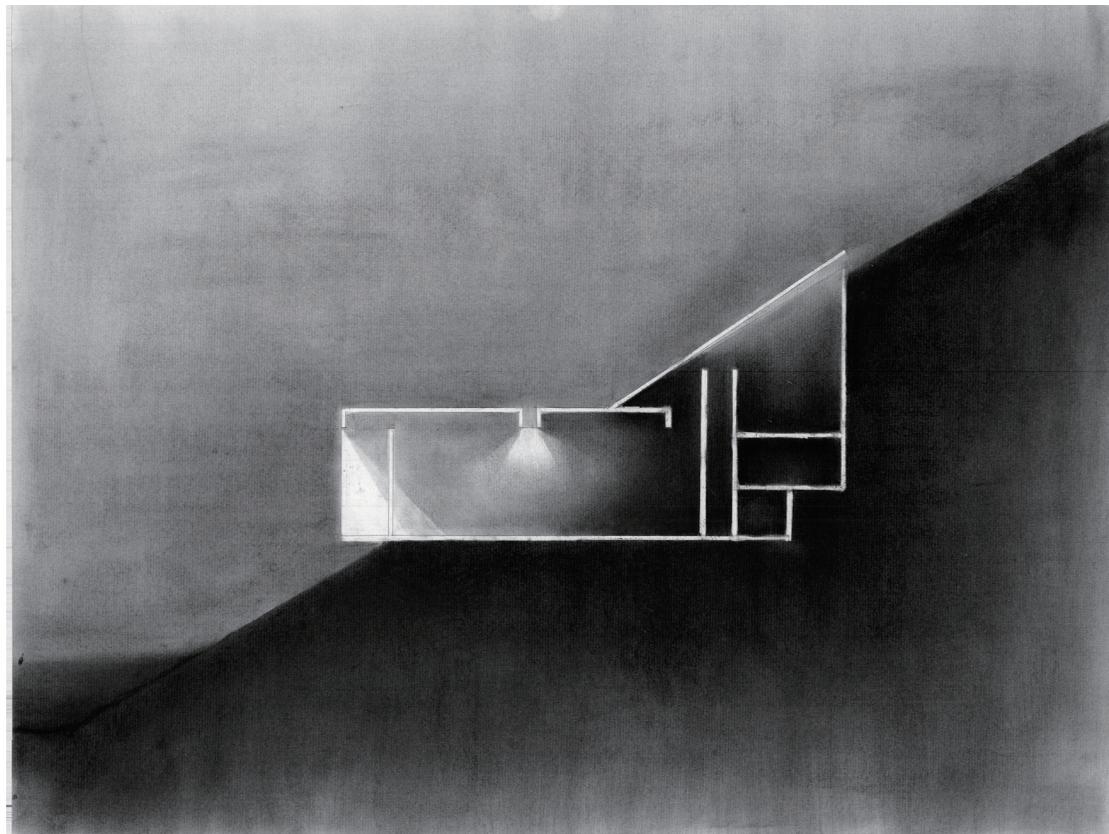


Fig. 25

Study model | Secion drawing about light and shadow
Charcoal
18 x 24 in each

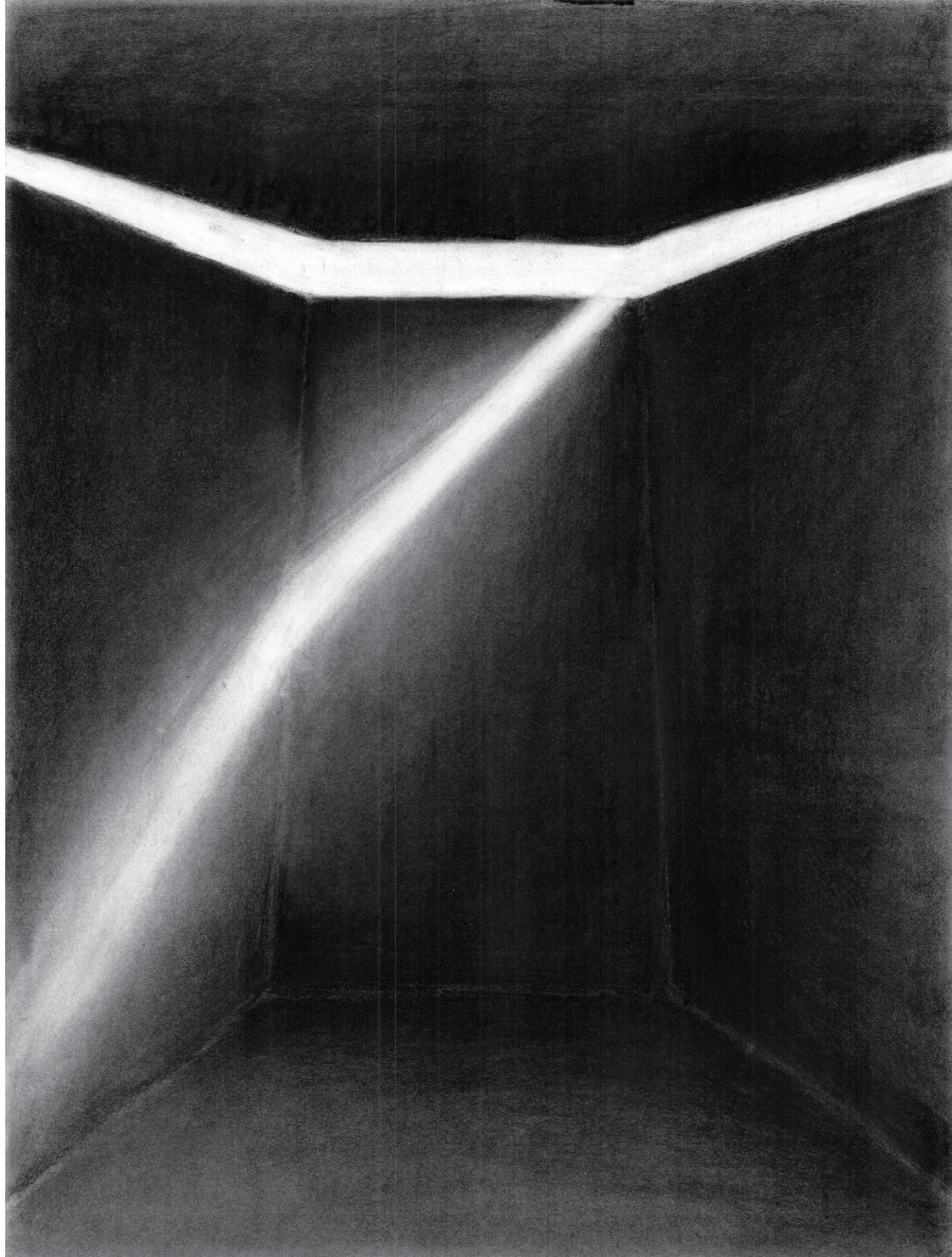


Fig. 26

Study model | light and shadow in a room
Charcoal
18 x 24 in

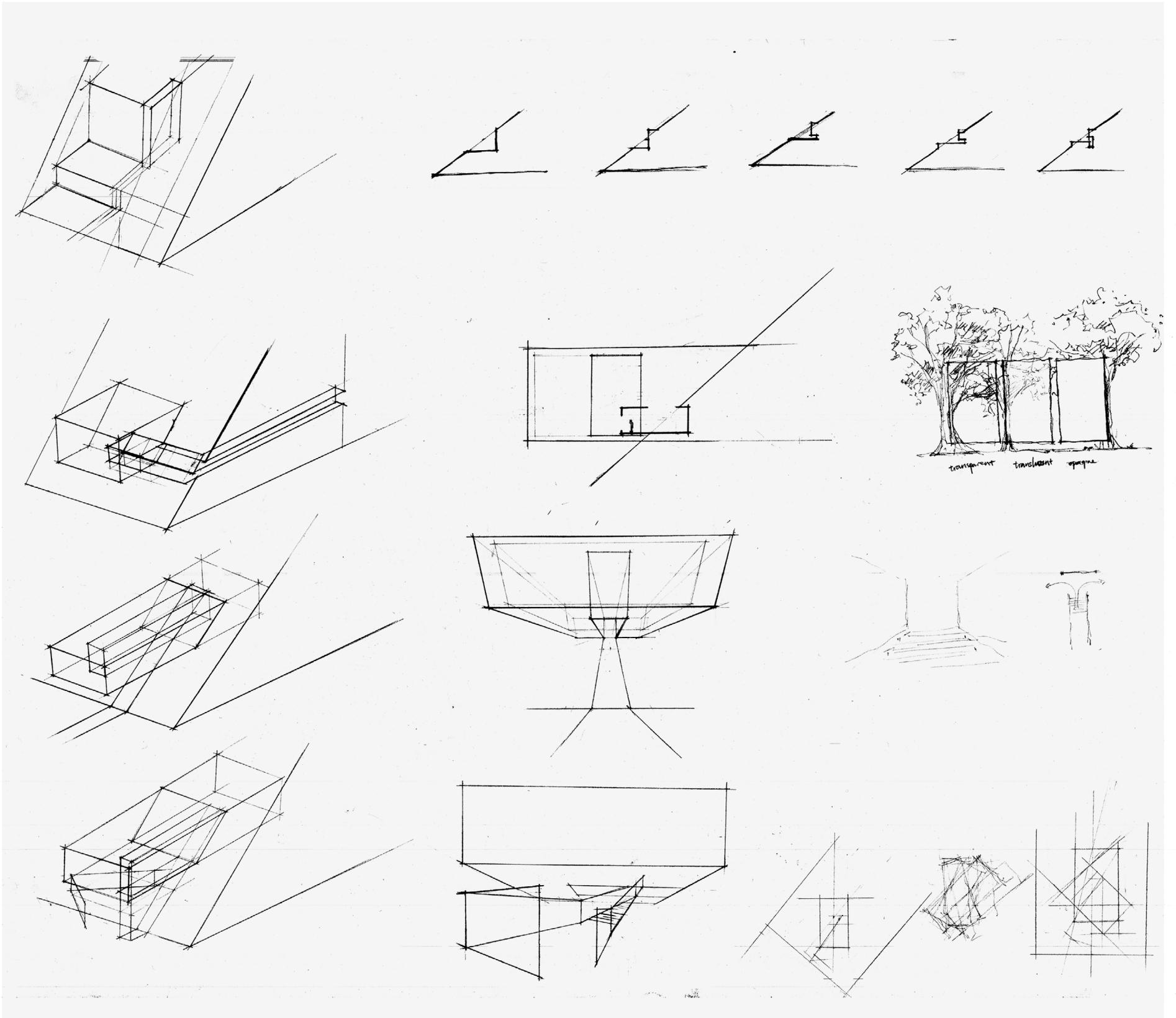


Fig. 27

The connection between the seclusion space and the surrounding environment.
Pencil on sketch paper
24 x 18 in

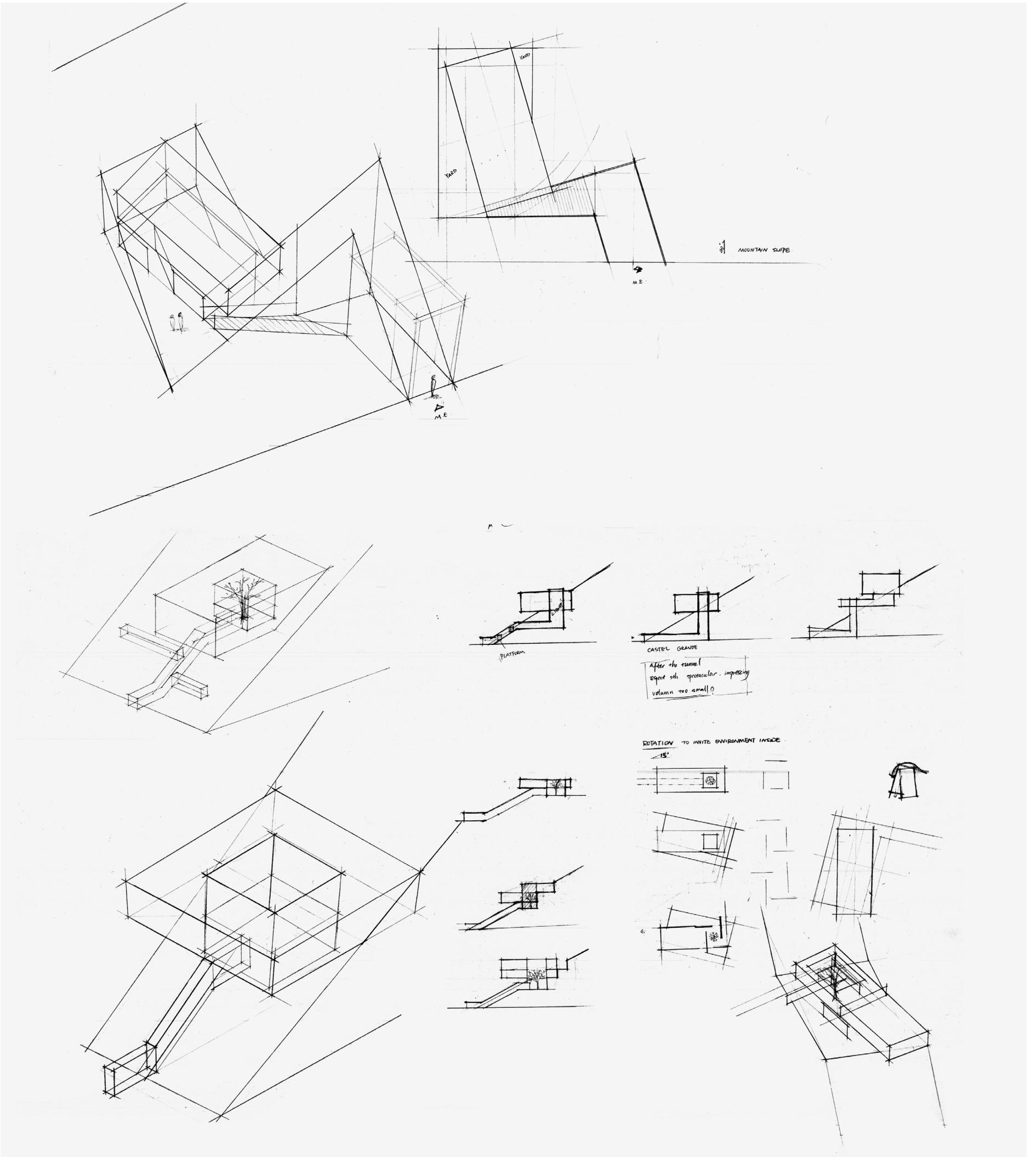


Fig. 28

Explore the first moment to perceive the architecture
Pencil on sketch paper
24 x 18 in

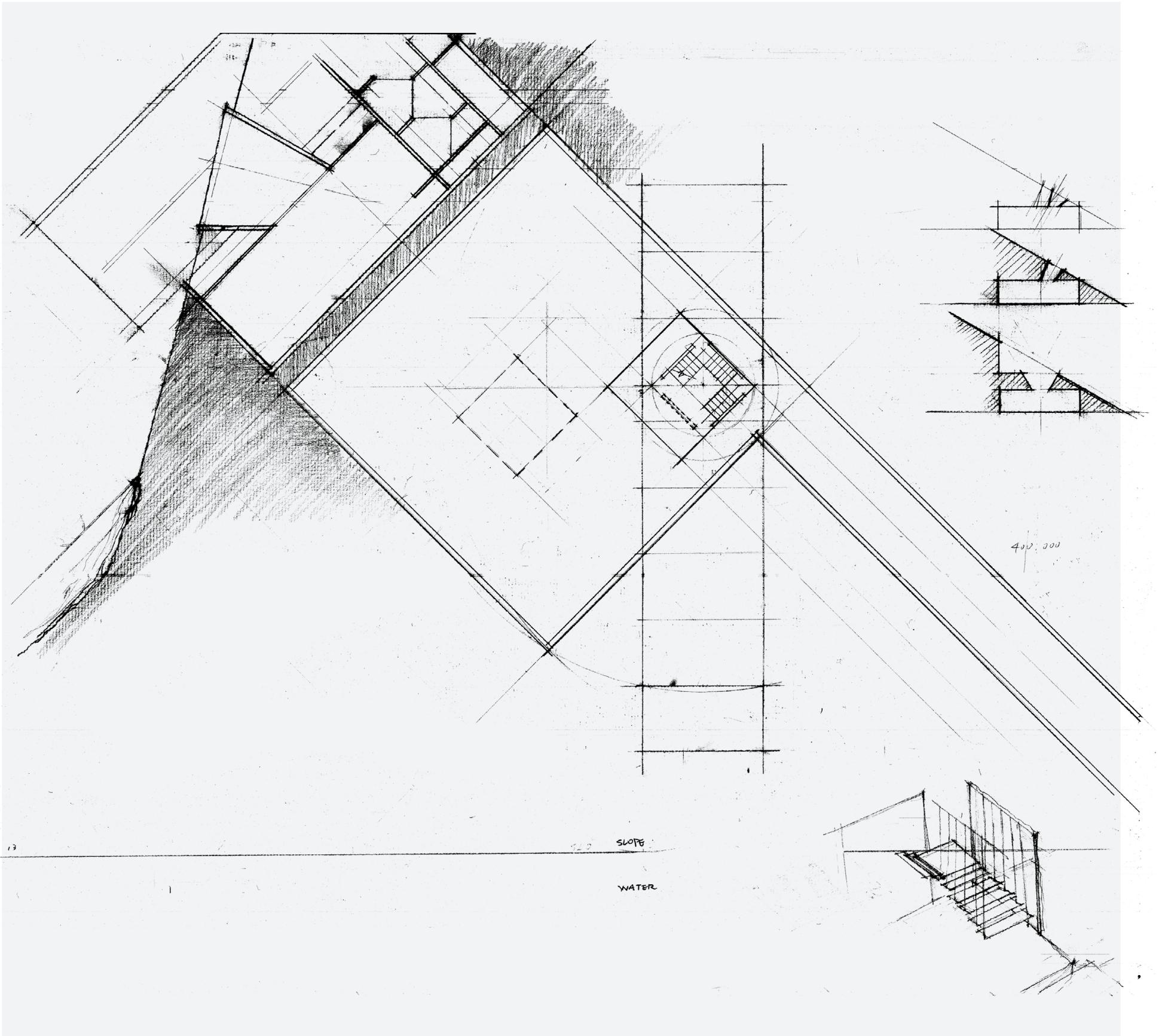


Fig. 29

Proposal for space of arrival
Pencil on sketch paper
24 x 18 in

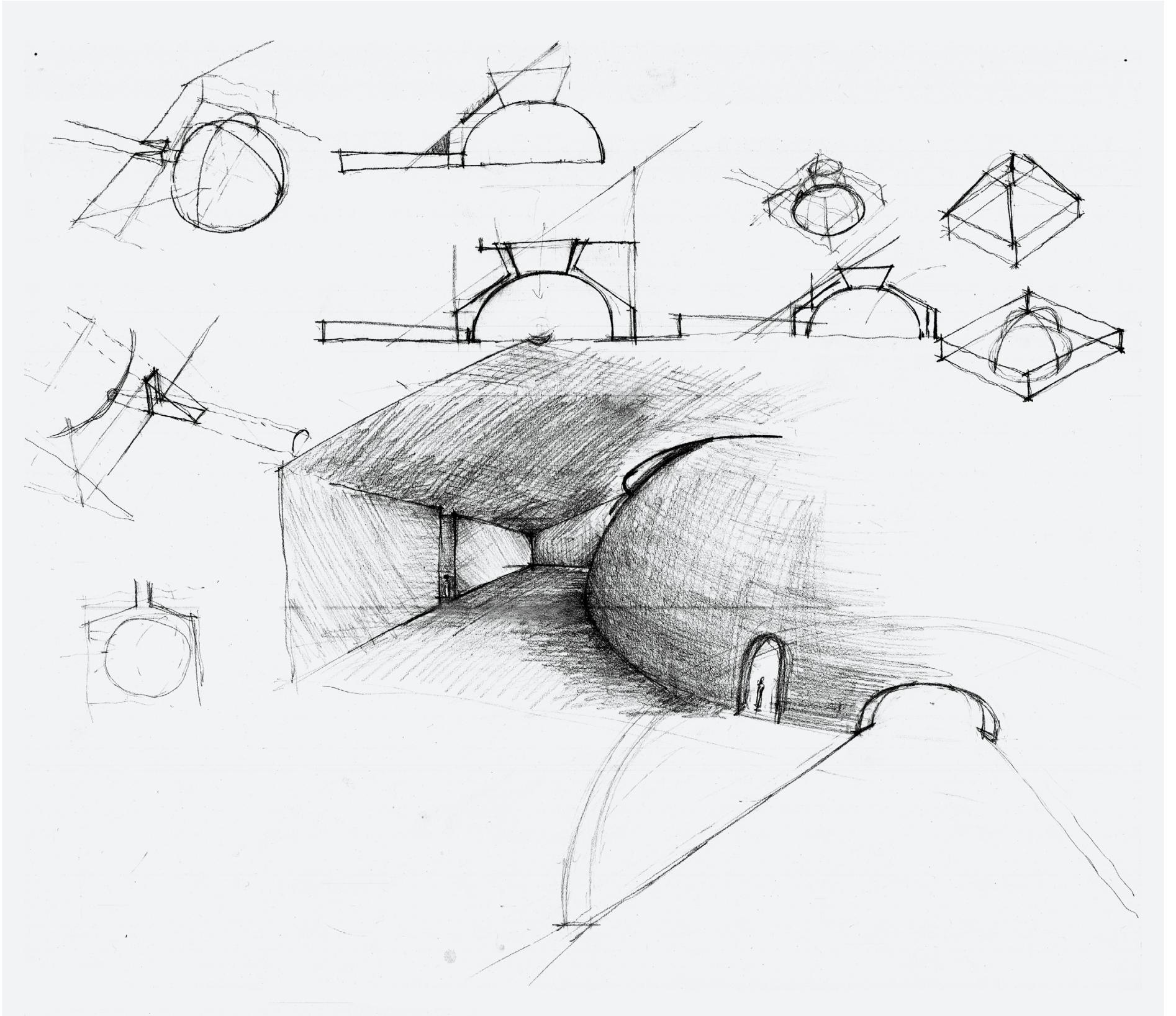
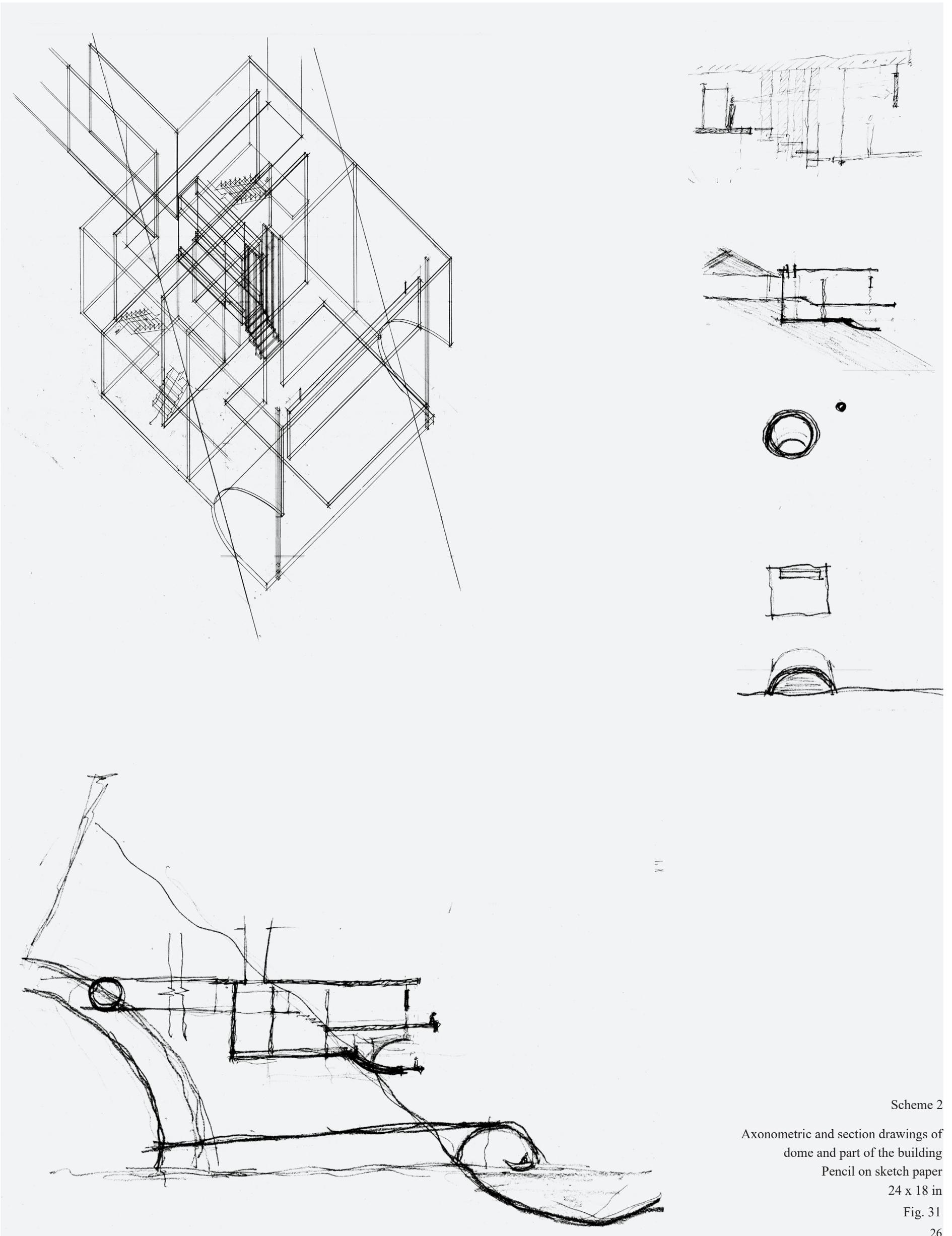


Fig. 30

Proposal for space of arrival
pencil on sketch paper
24 x 18 in



Scheme 2

Axonometric and section drawings of
dome and part of the building
Pencil on sketch paper

24 x 18 in

Fig. 31

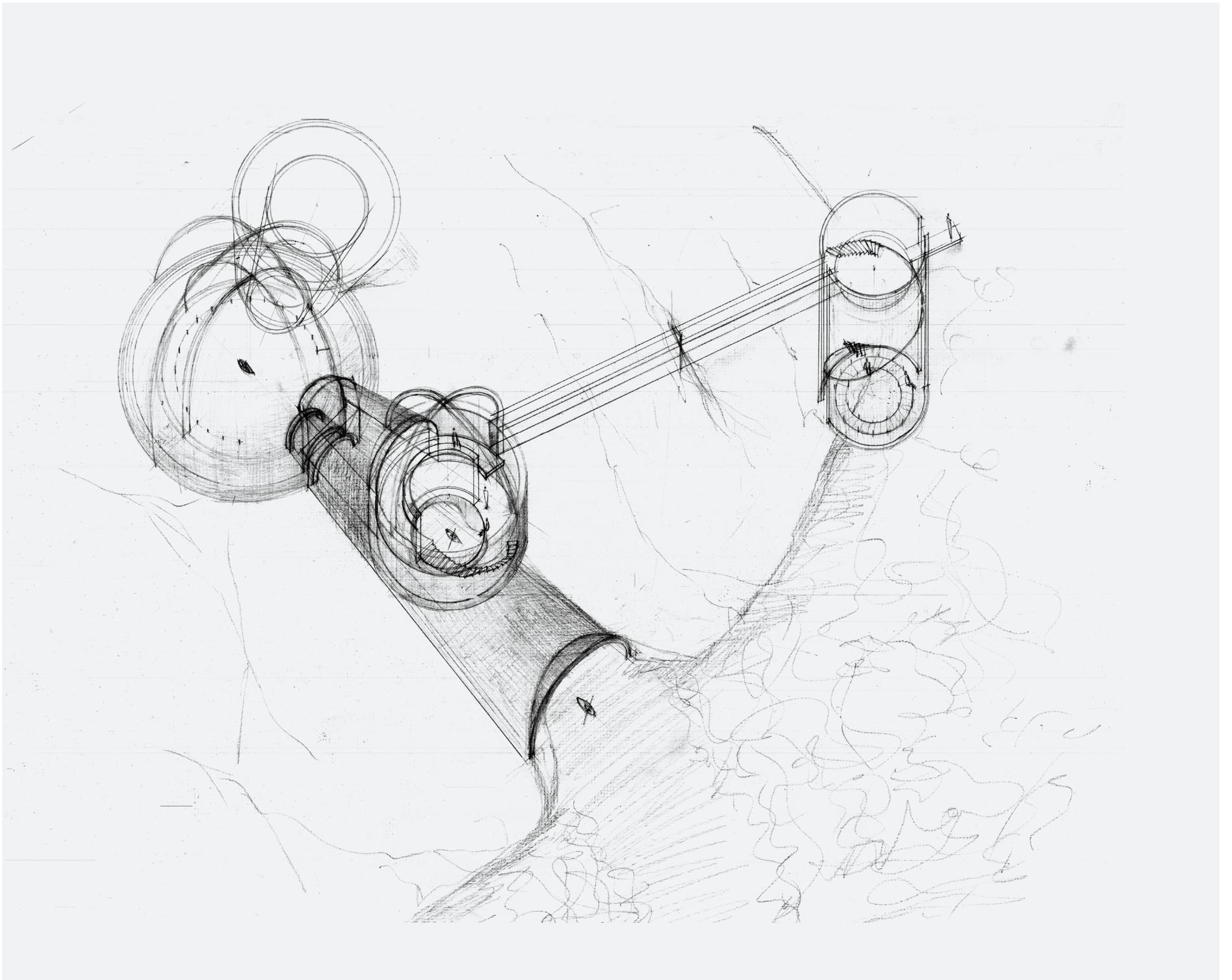


Fig. 32

The main building with a practical function is simplified to a continuous linear sequence. The essence of this architecture is about experiencing the sequence and the organization of the chapters, the continuity and transformation between spaces. In this way, the idea could be perceived through the whole journey, rather than a particular chapter or one part of the story.

Scheme 3
Axonometric drawing of project
Pencil on sketch paper
24 x 18 in

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