

SEARCHING FOR CONSTRUCTED FORM:
A STATION FOR PROJECTIVE GEOMETRY

JOHN TOBIAS ESKELAND II

Thesis submitted to the faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for
the degree of

Master of Architecture in Architecture

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Keywords: geometry, train station, waiting,
drawing, sketching

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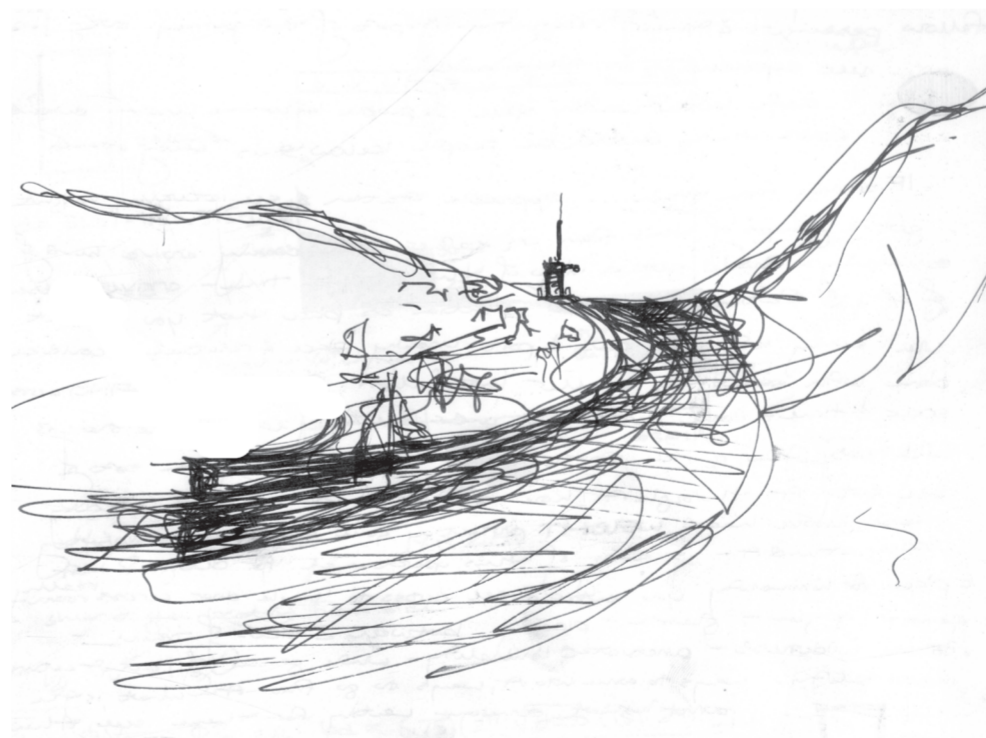
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ABSTRACT

The project is dreamed as a monumental edifice standing beside the rail corridor of South-Western Virginia. Two pairs of towers rise from the earth transitioning from squares to ellipses. The towers are cut mid-ascent to shape an eastern face, orienting the project and the rail traffic beneath.

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I N T R O D U C T I O N

The project is dreamed as a monumental edifice standing beside the rail corridor of South-Western Virginia. Two pairs of towers rise from the earth transitioning from squares to ellipses. The towers are cut mid-ascent to shape an eastern face, orienting the project and the rail traffic beneath.

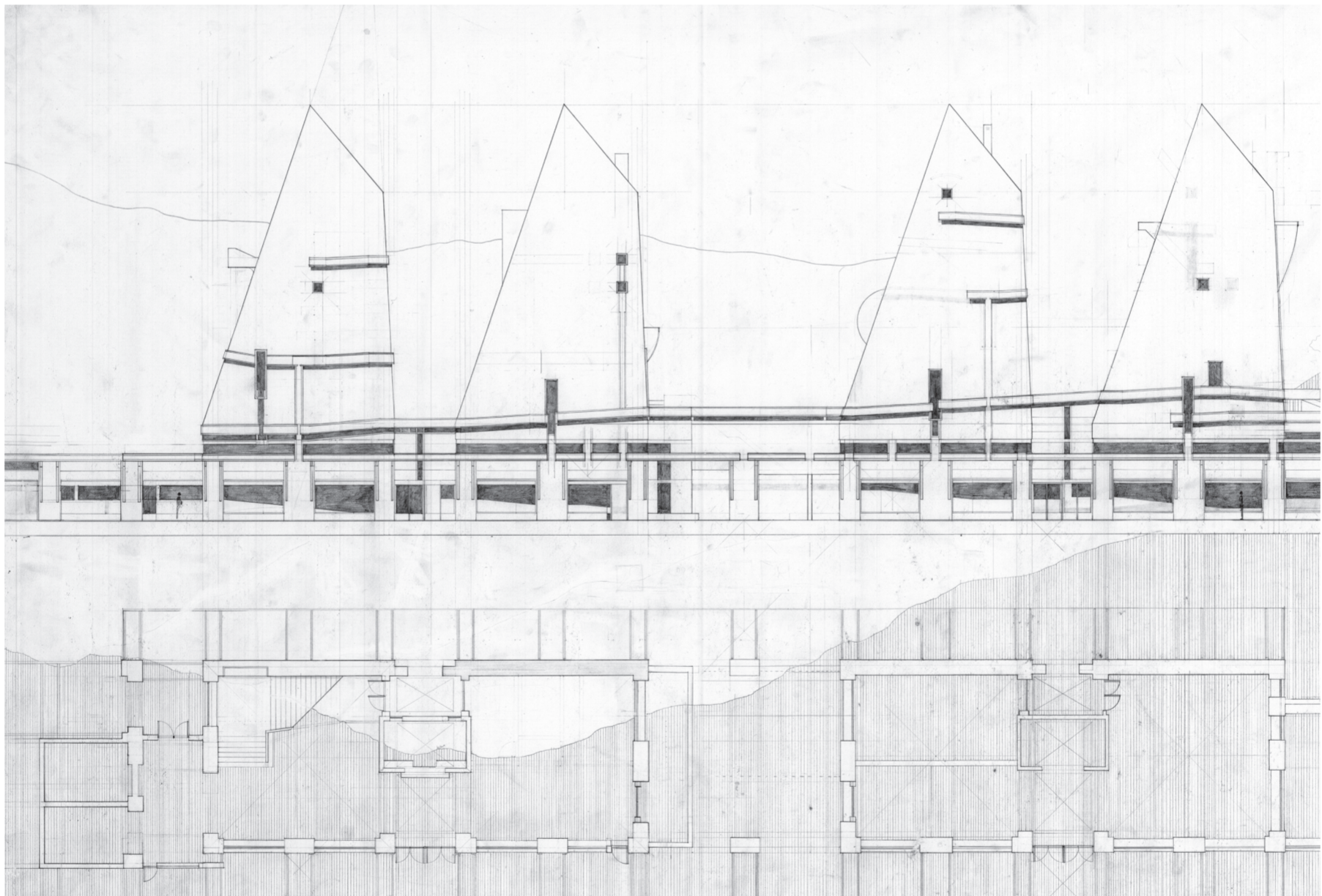
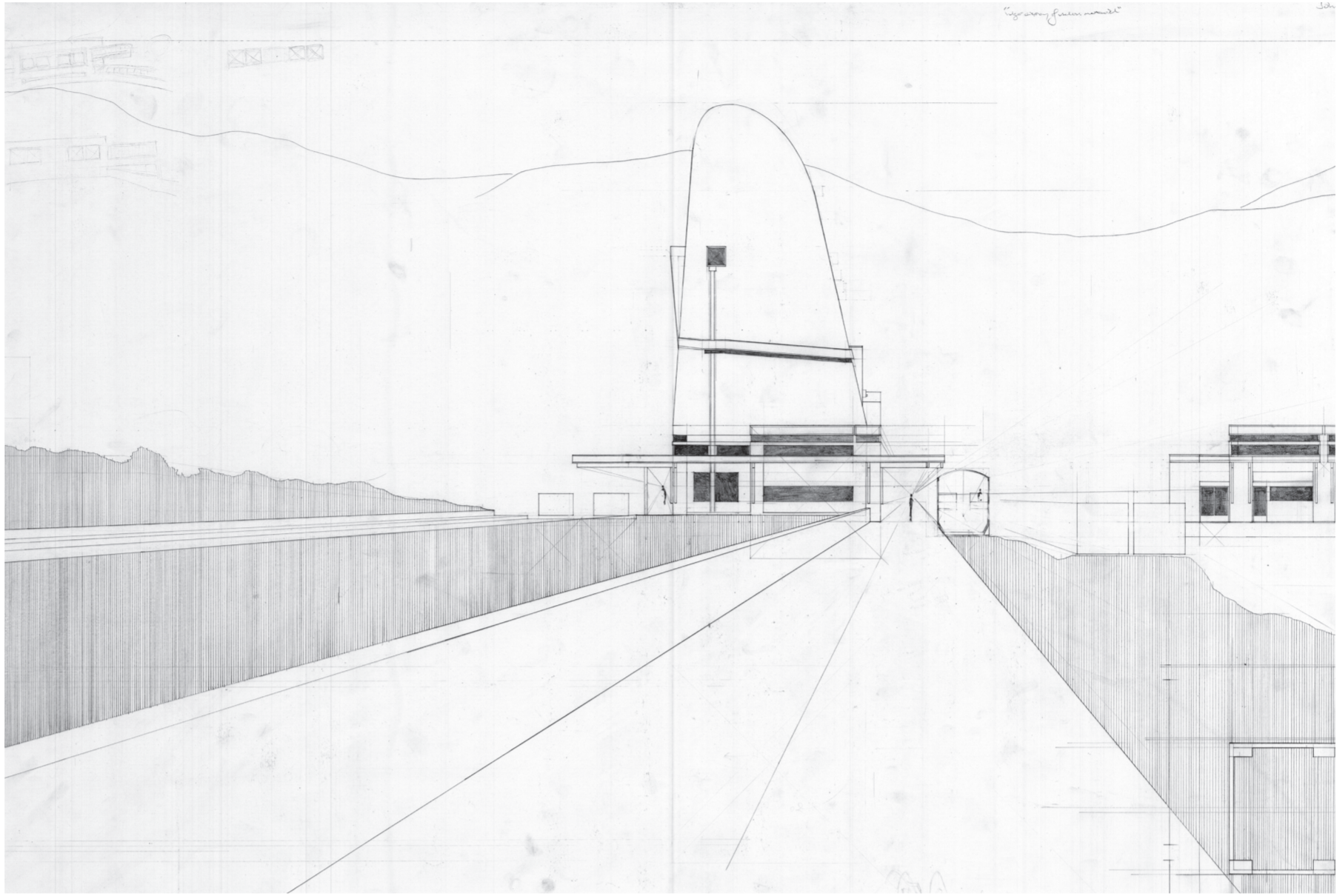
These resulting forms are rooted in Le Corbusier's posthumous work in Firminy. Borrowing the master's questions of squares, circles, and concrete, the project progresses as a variation on his theme.

Its slow development is represented here in three parts: firstly, initial drawings work towards finding the building's spirit; secondly, projective geometric drawings reify its irregular forms; and thirdly, the building is reconsidered with a fuller understanding of its purpose and parts.

The document is closed with an appendix of unresolved beginnings. Primarily shown in sketches, these pages share the author's anxious starts and falterings along the way to the realized work that follows.

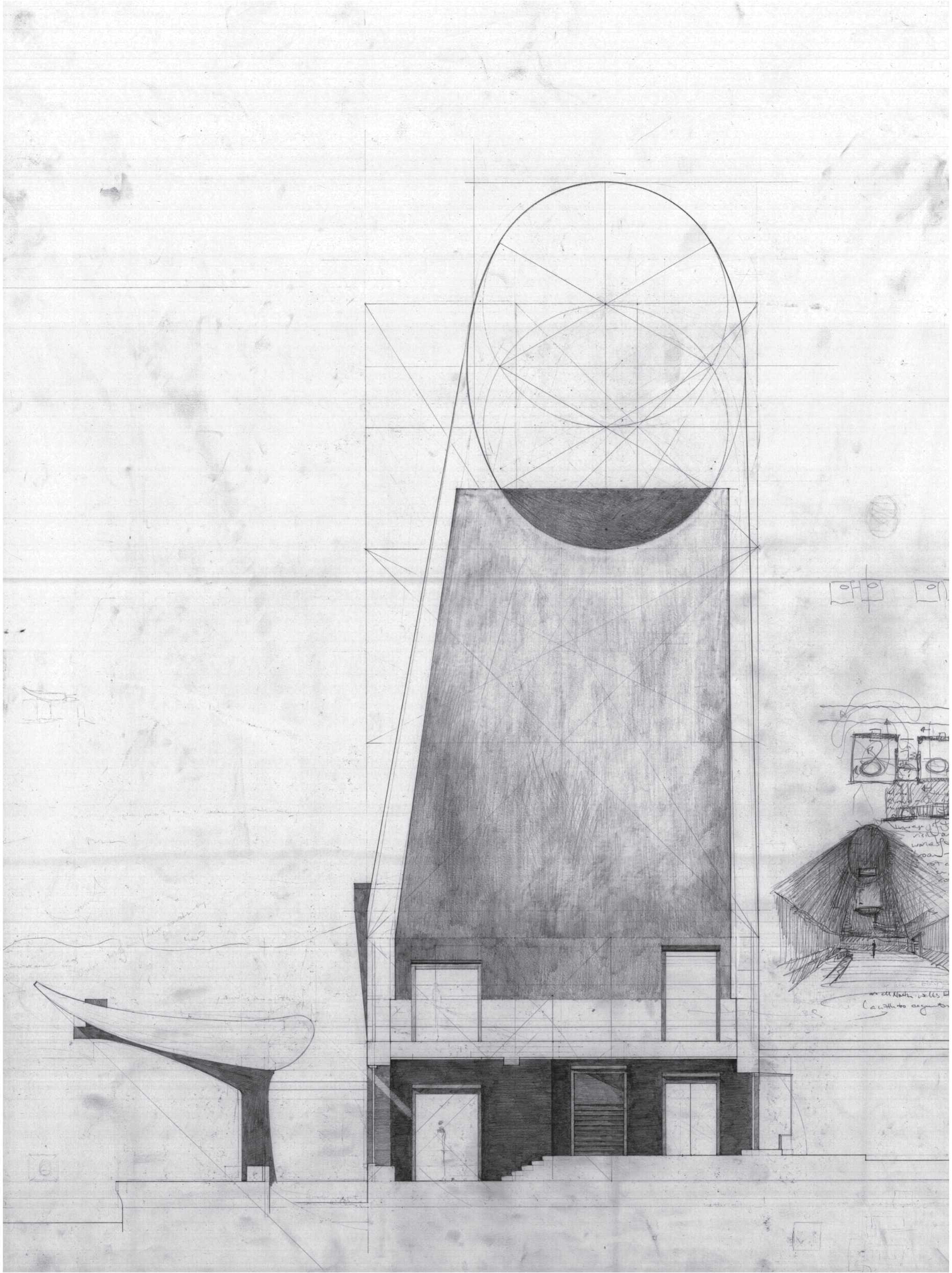


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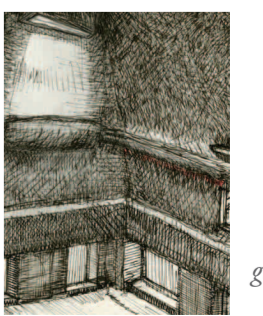


INITIAL VIEWS

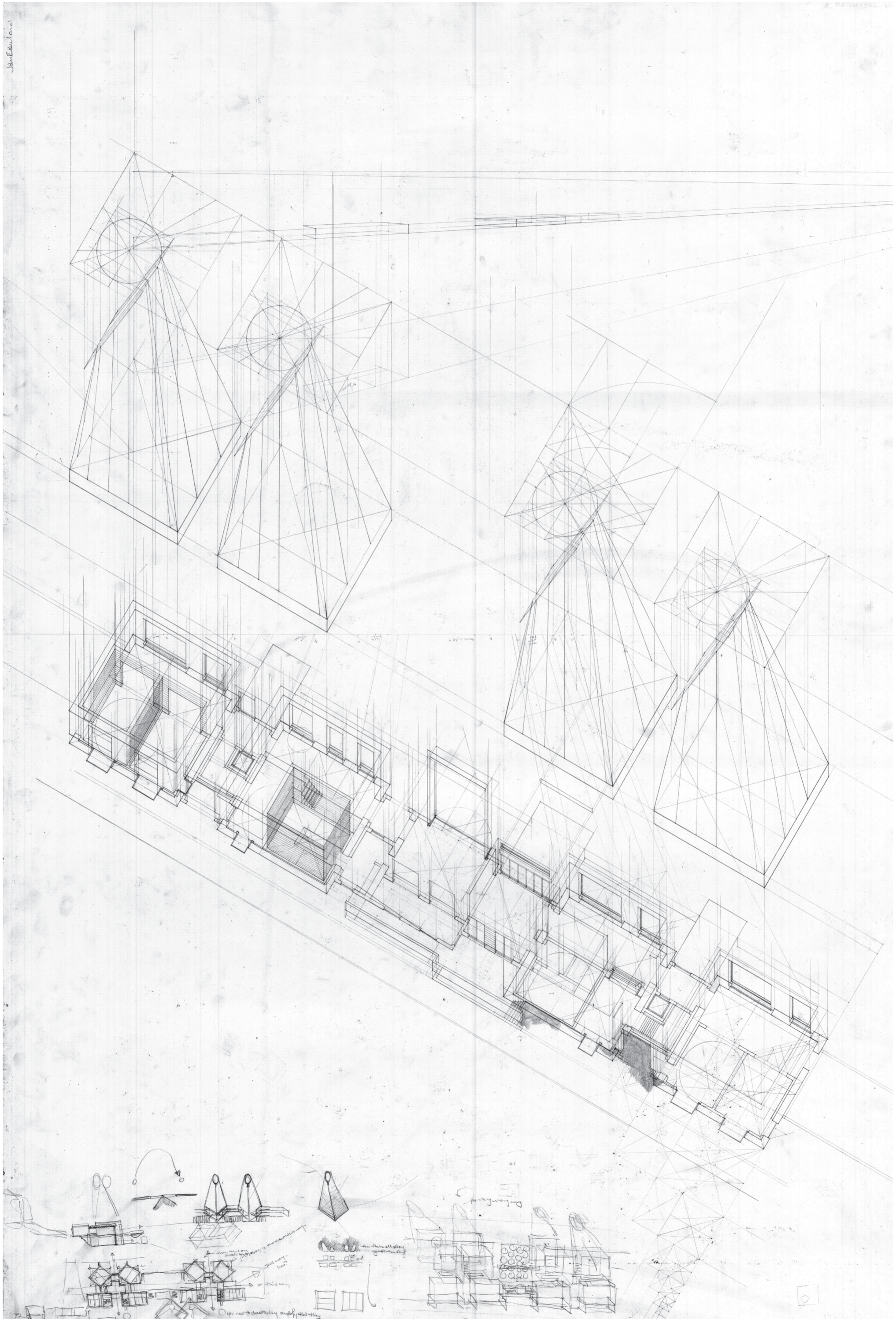


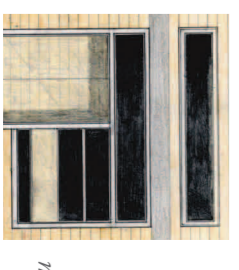
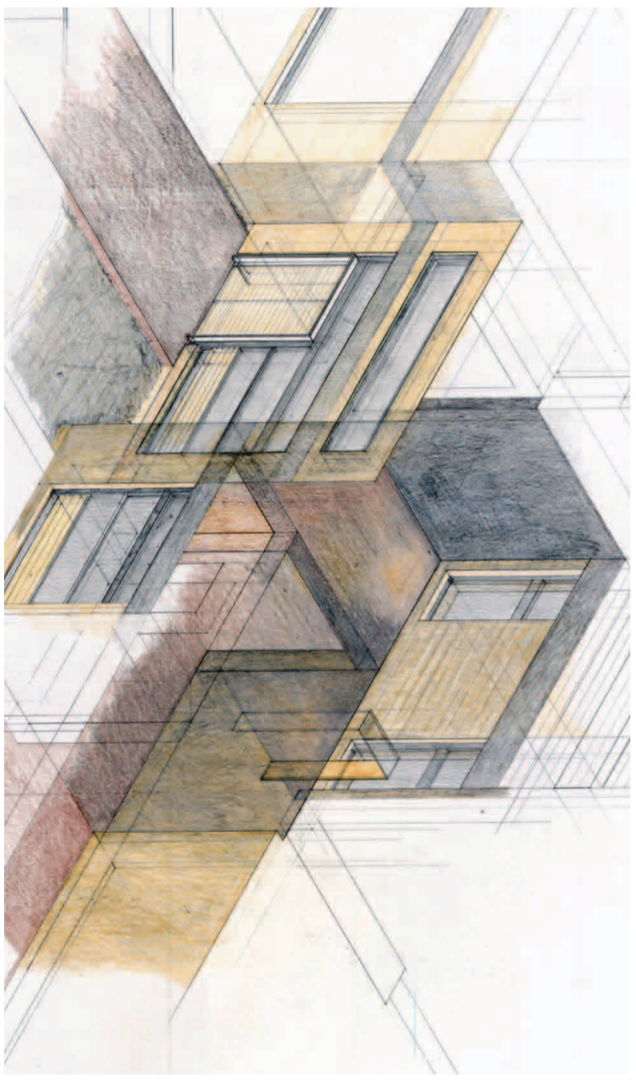
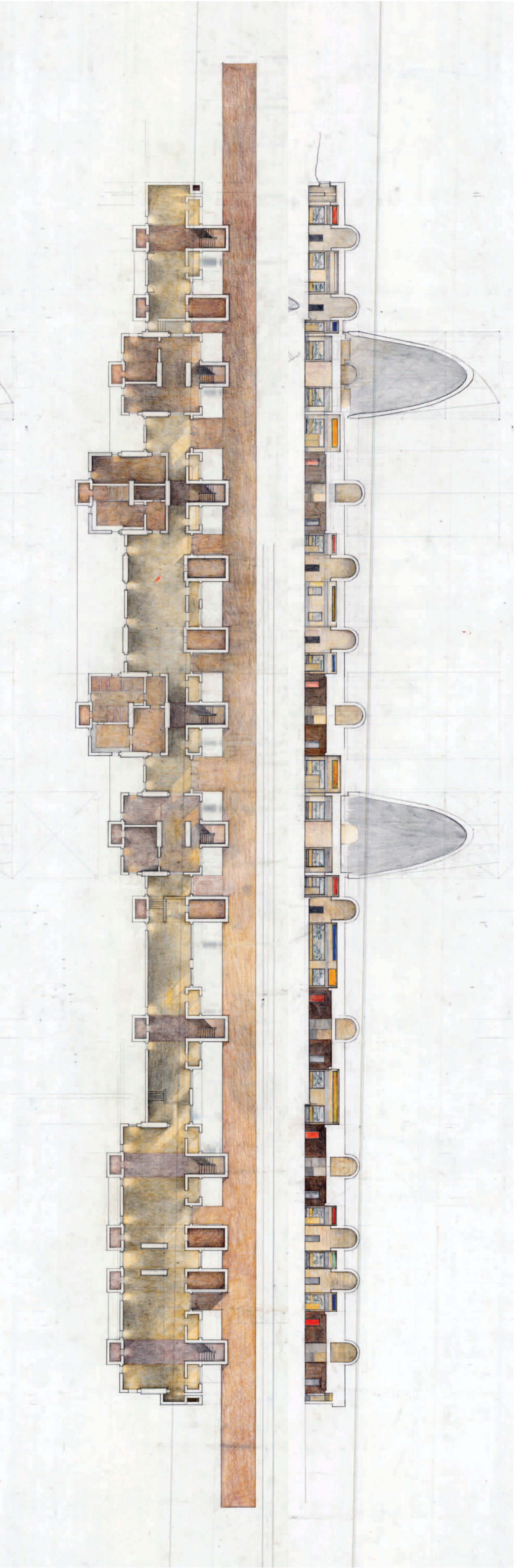


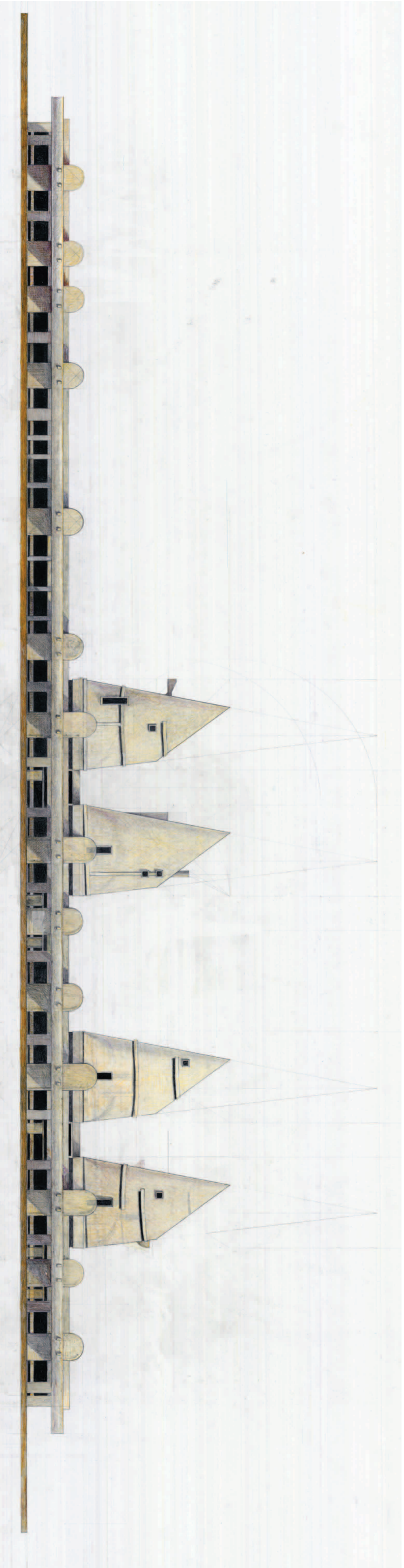
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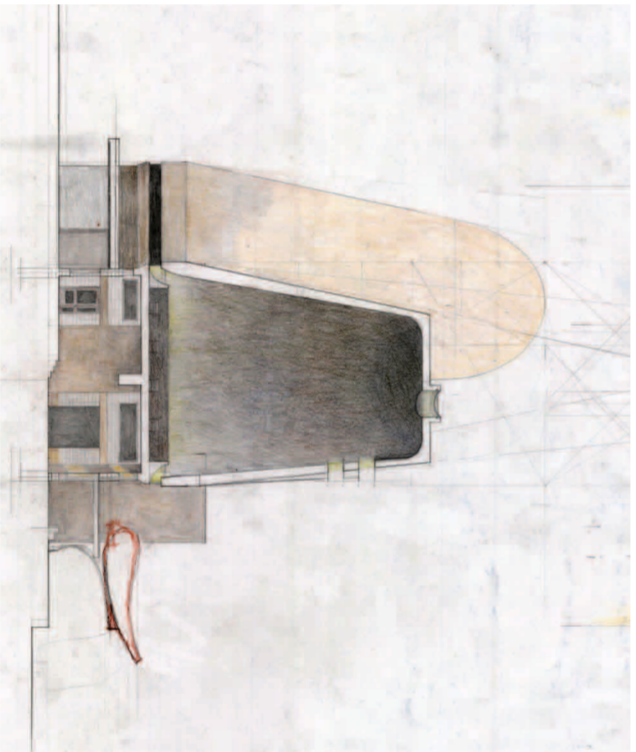
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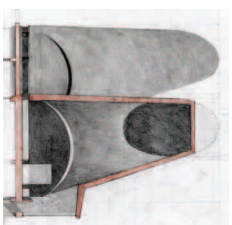




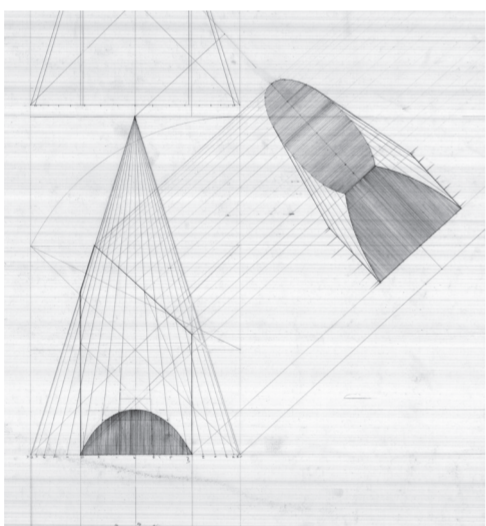
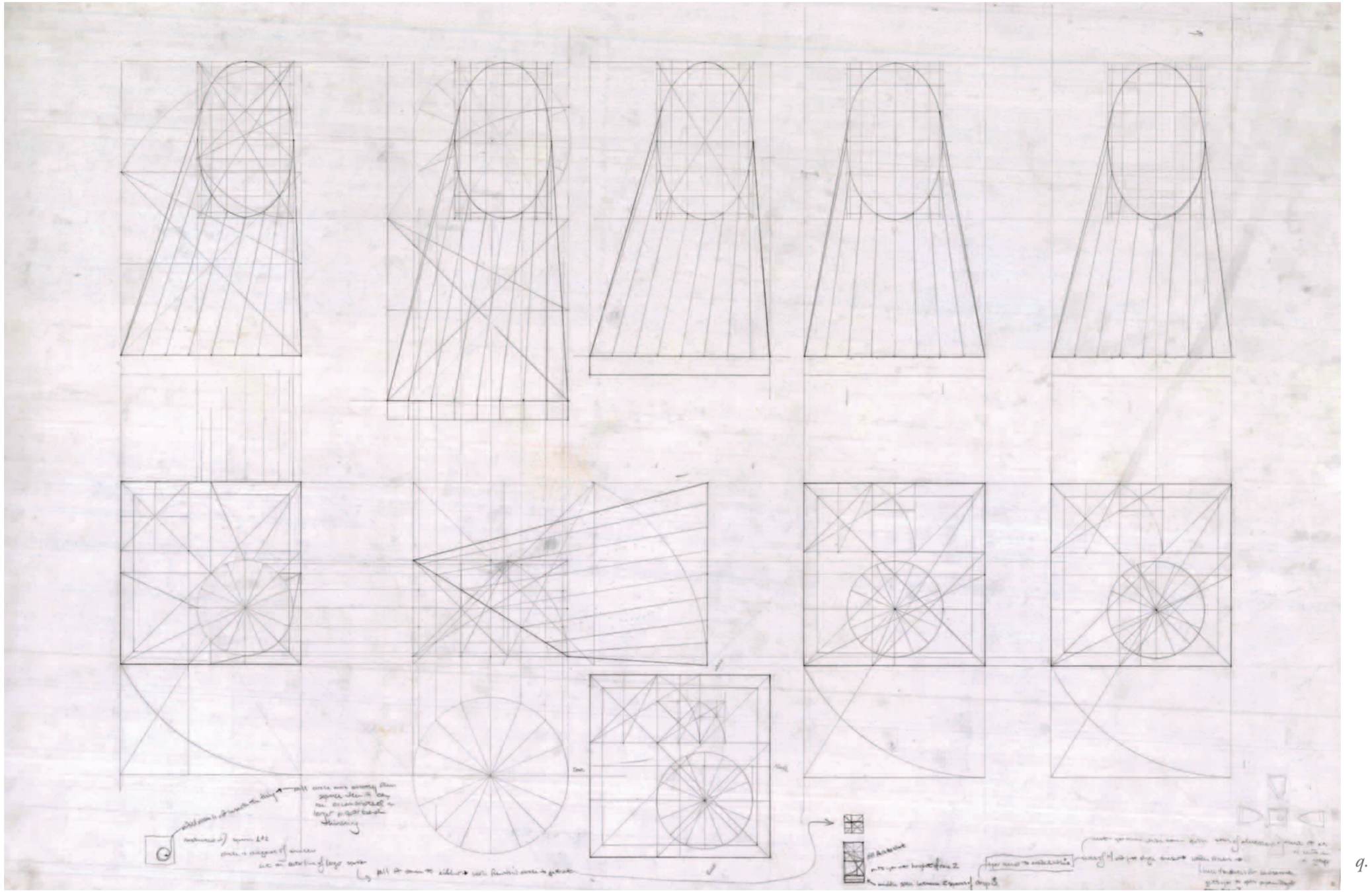
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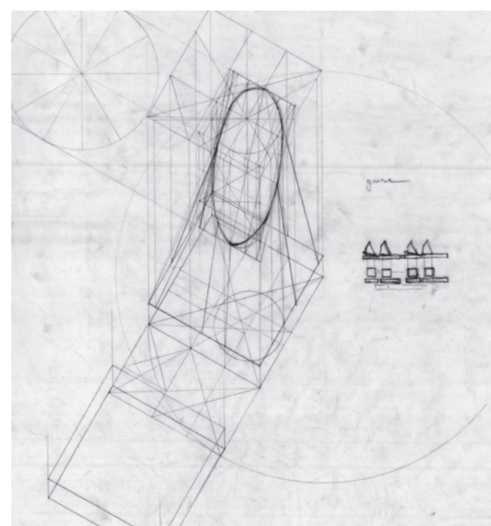
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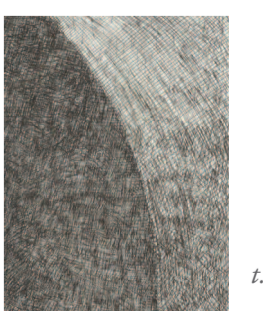


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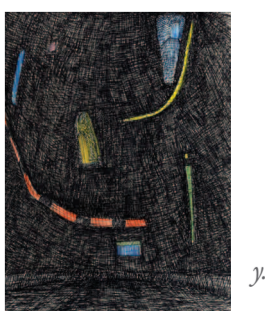
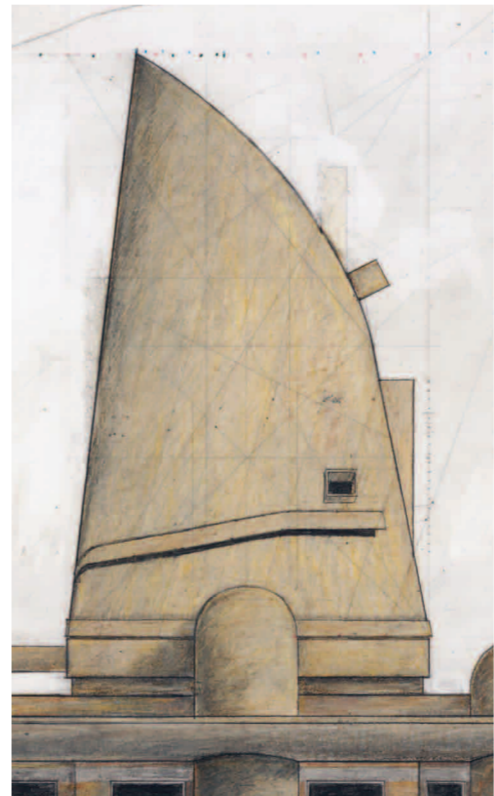
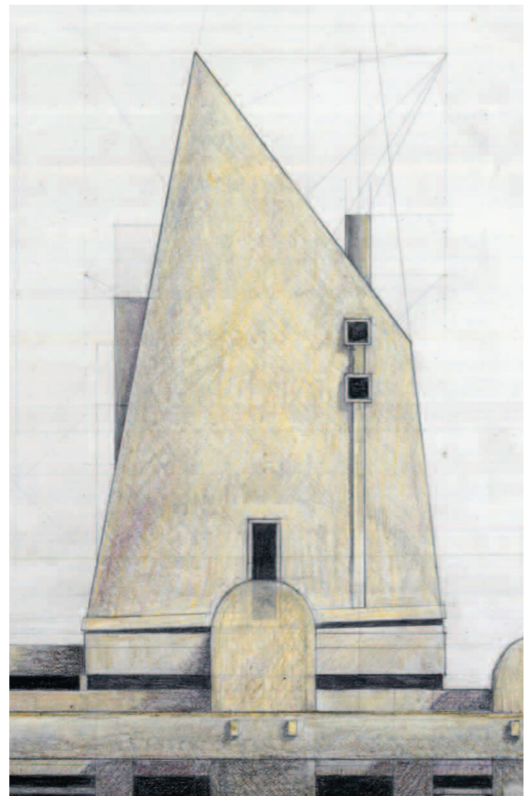
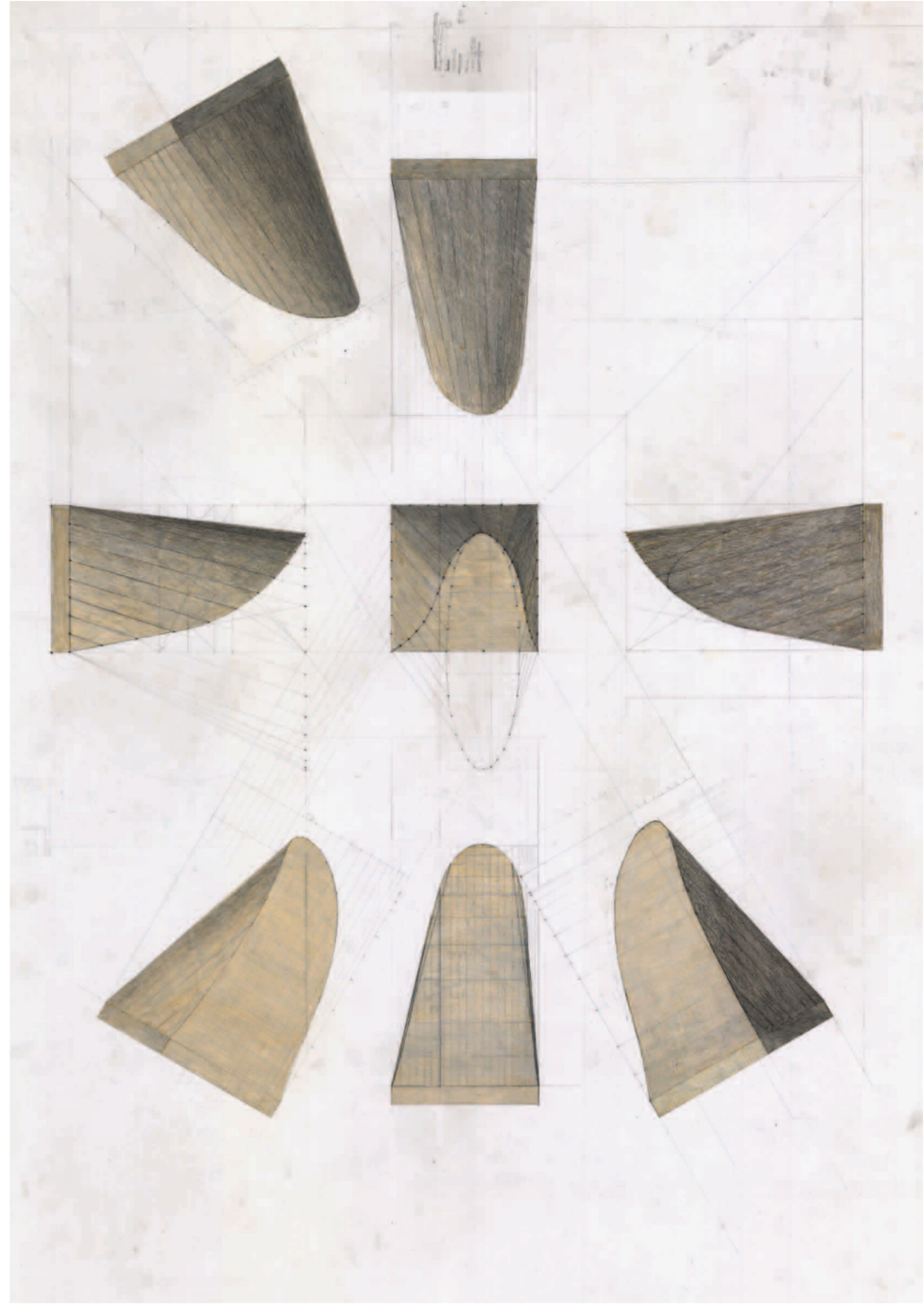
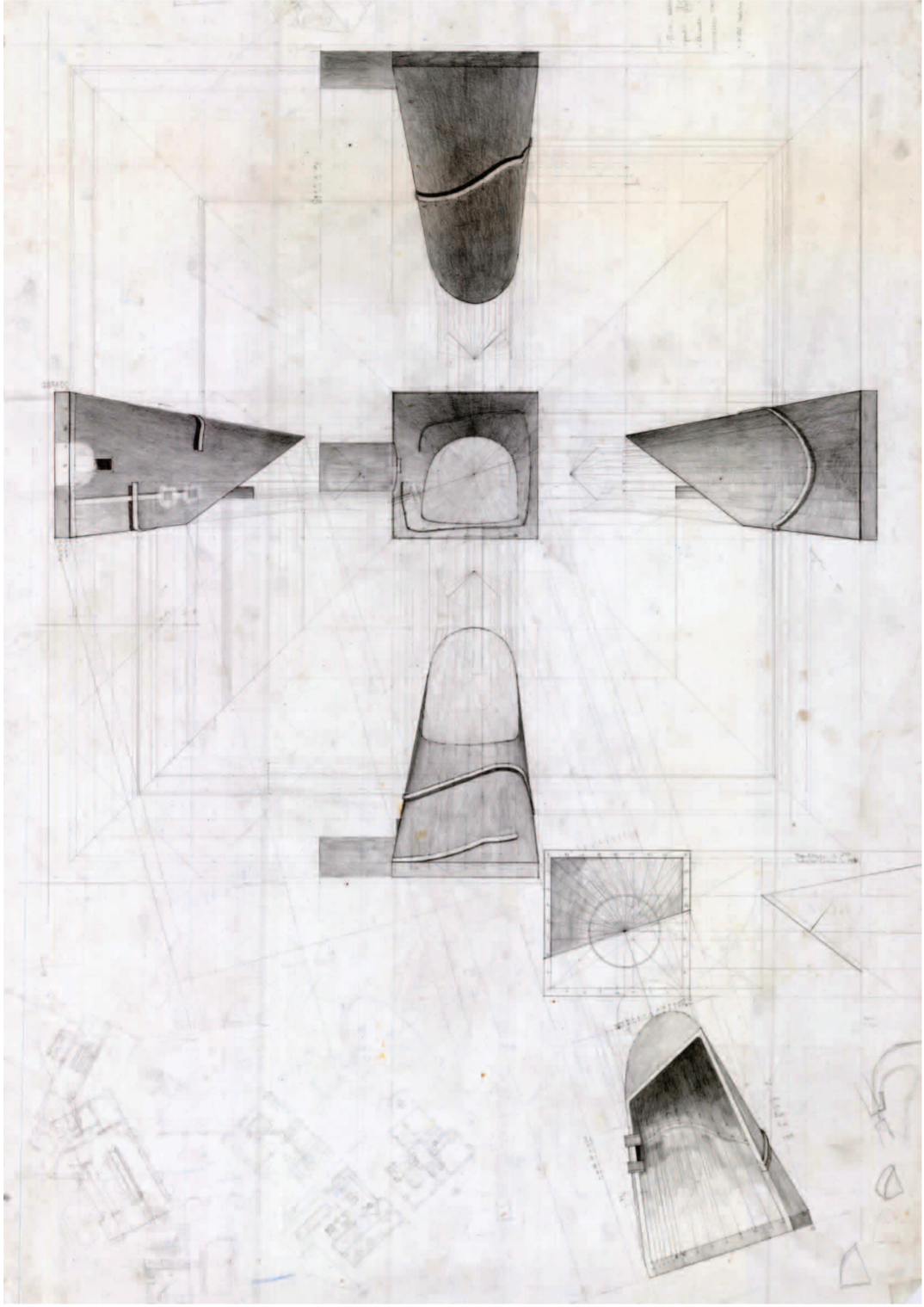
GEOMETRIC REIFICATION

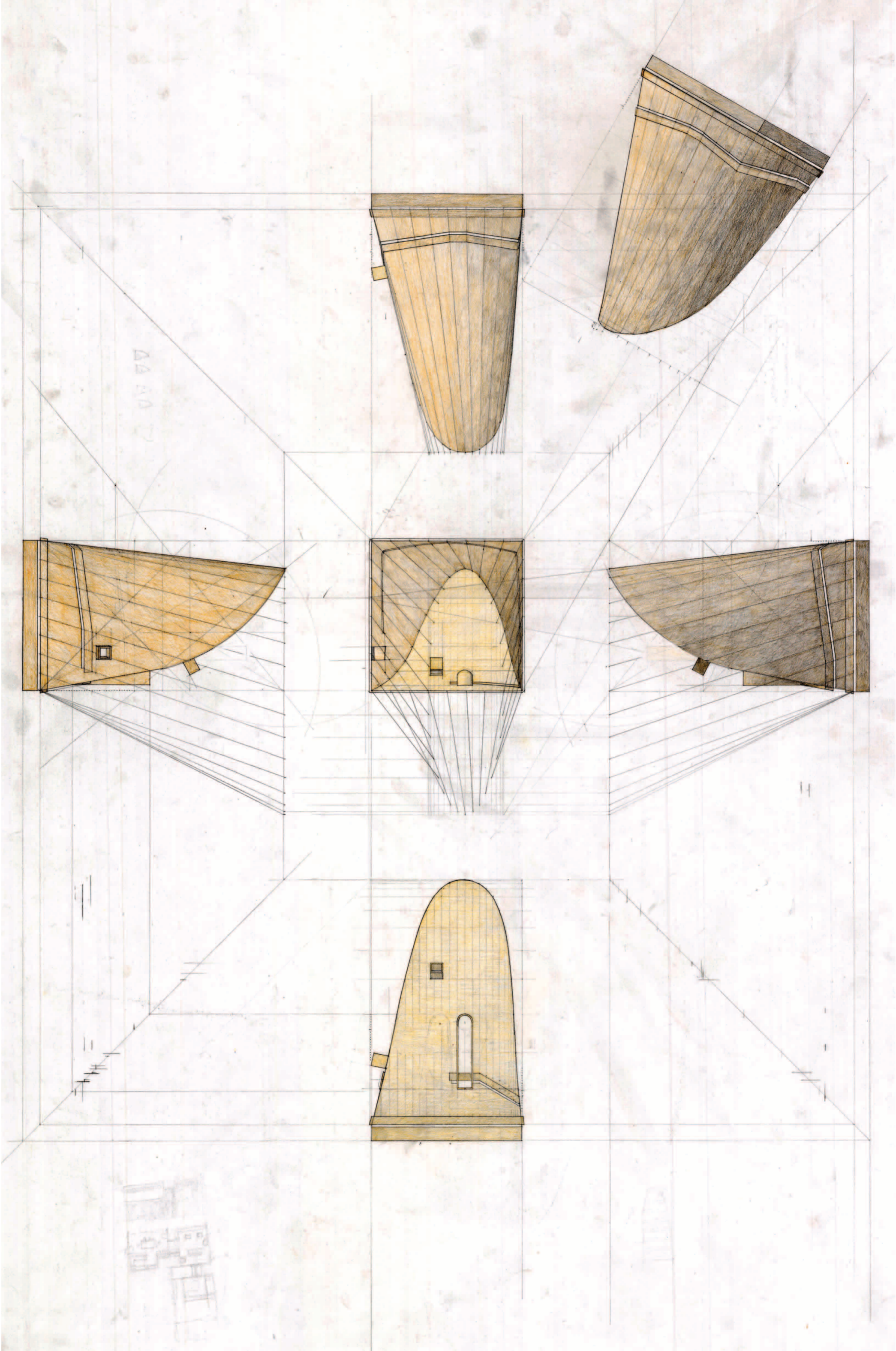
After selecting an outline for the towers it became imperative to geometrically describe their bodies. Despite a declared profile, an understanding of their form remained elusive. Numerous variations of truncated cones were interviewed. Each was discarded as the consequences of their cuts played out in three dimensions. Seeking a smooth continuous surface to receive the sun, it became necessary to design a shell between two autonomous shapes.

Shifting from the cone to the conoid, squares are pulled into ovals, circles, and ellipses before being sliced into the desired profile. To guide these operations the golden ratio is employed. Constructing the form in orthogonal views, the golden rectangle frames and place the shapes in relation to one another. Resulting construction lines order the cut and create an initial framework for the figure's dressing.

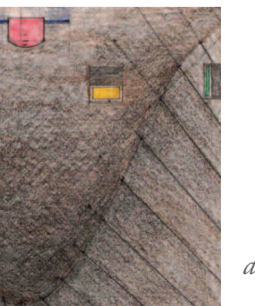


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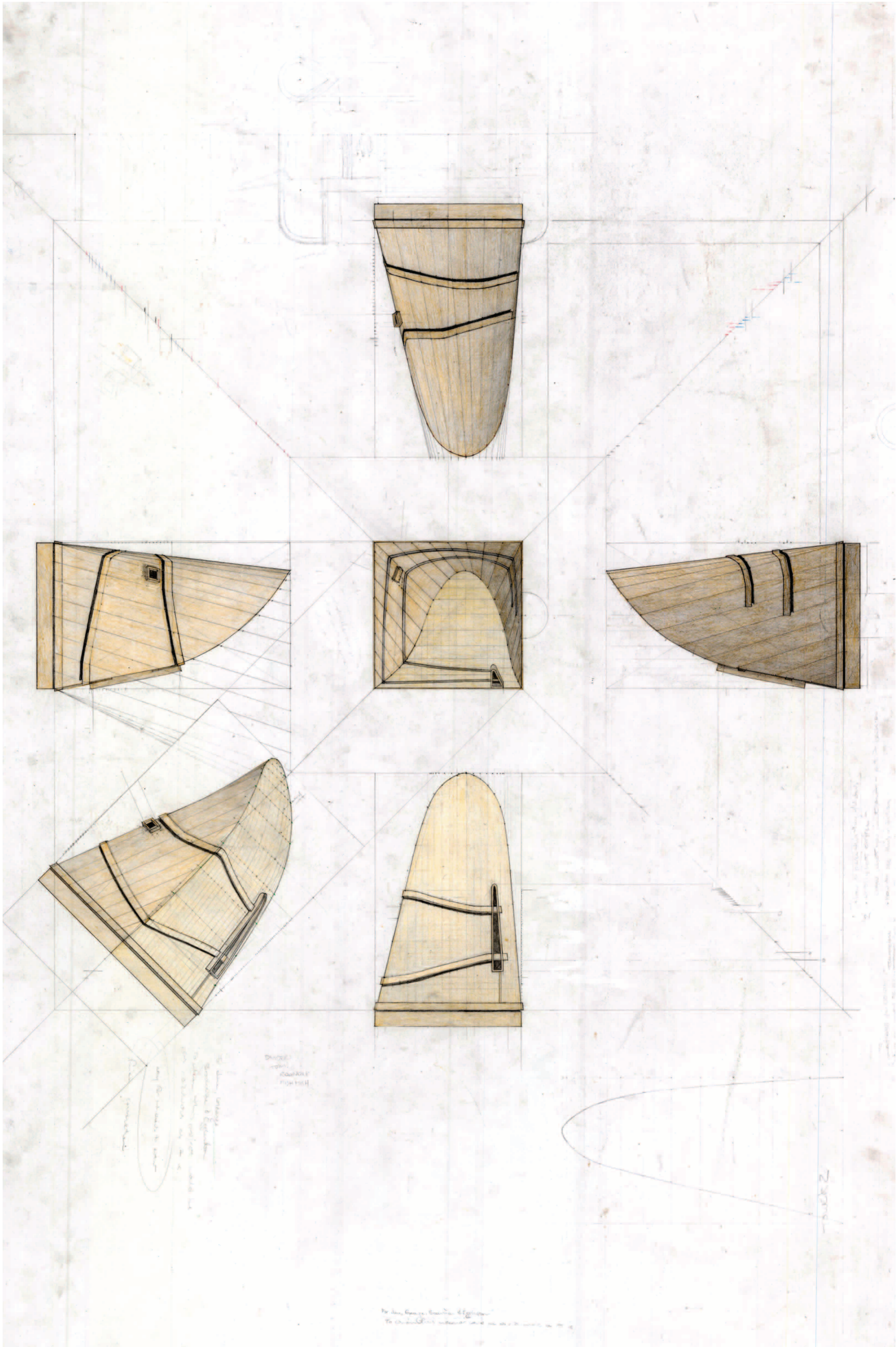




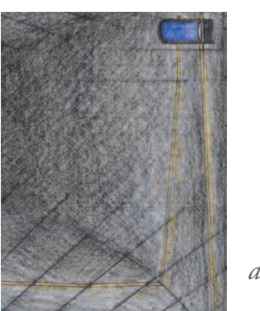
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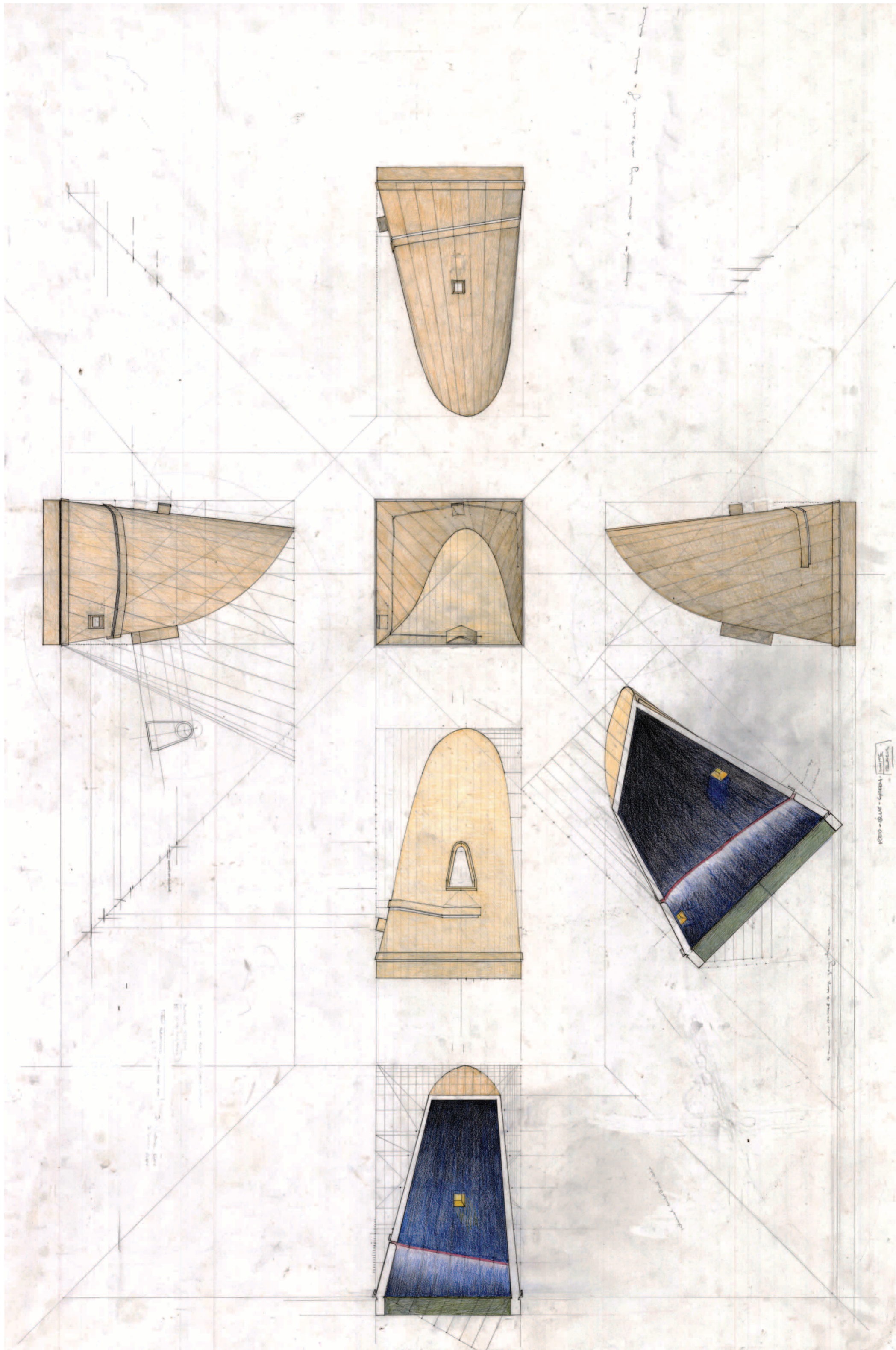
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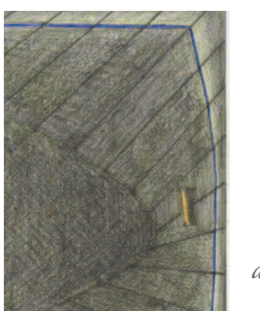
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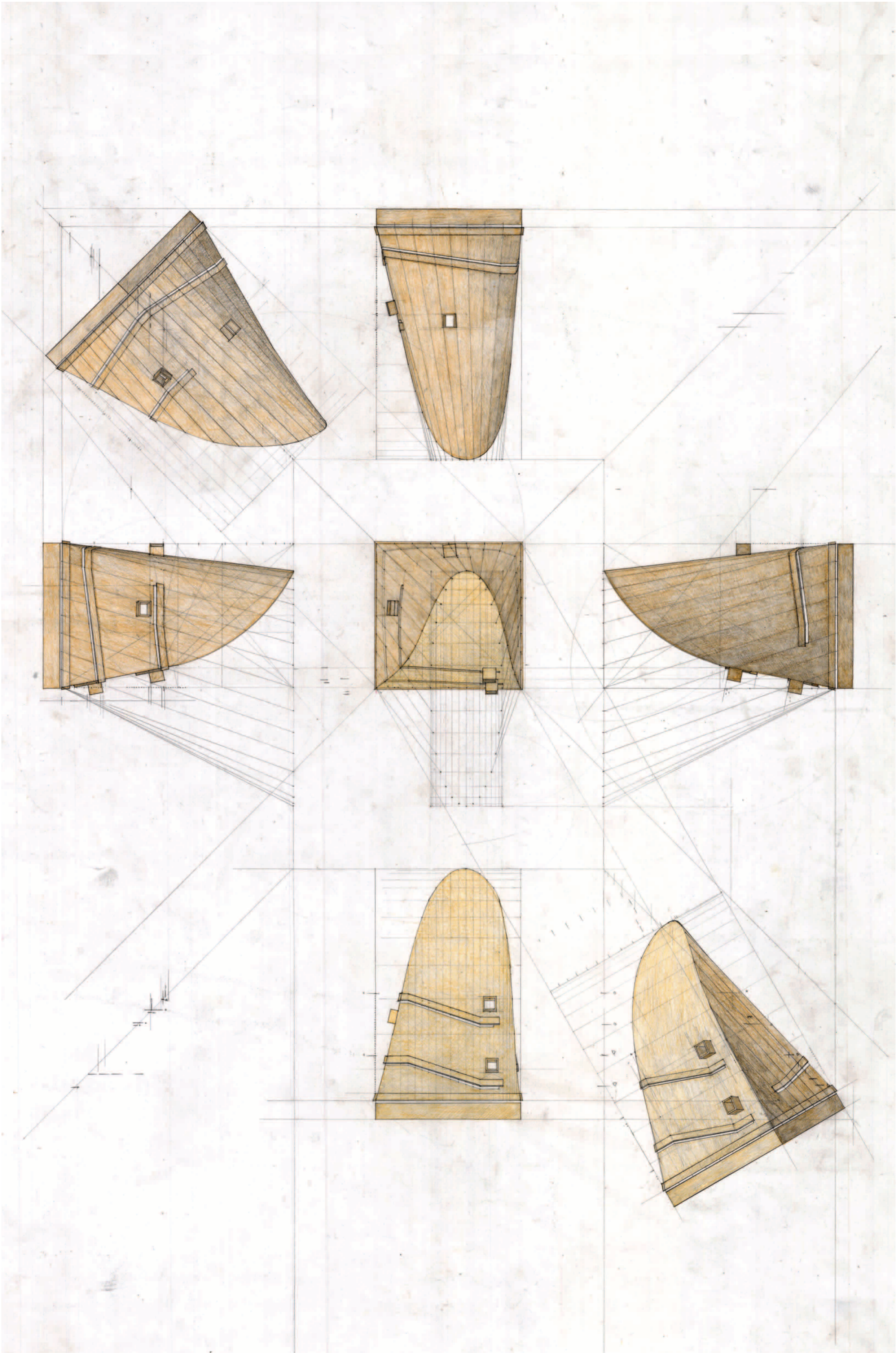
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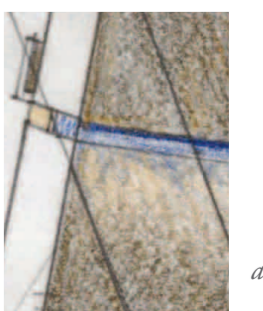
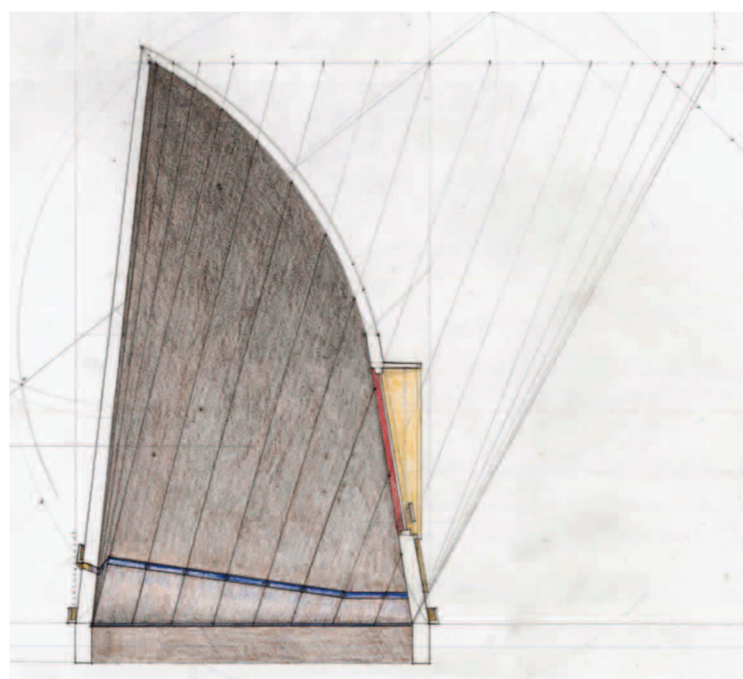
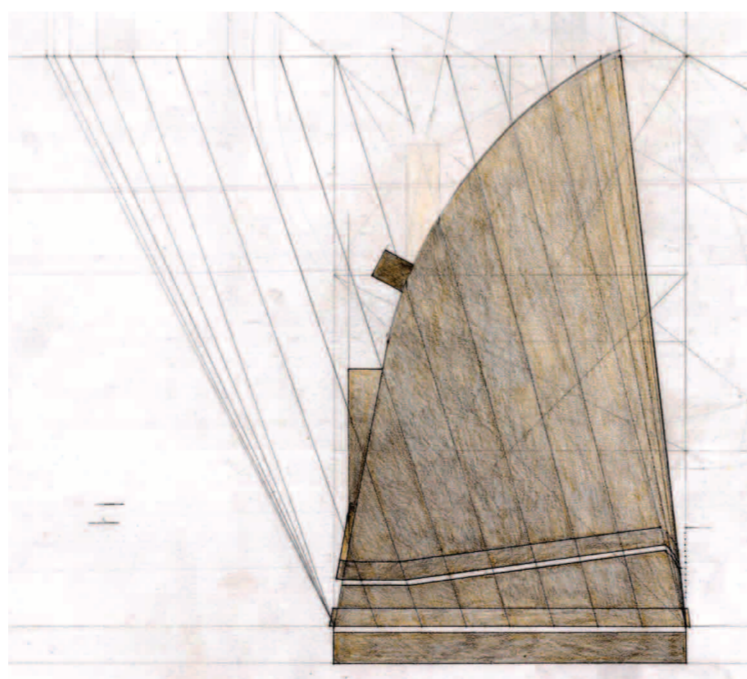
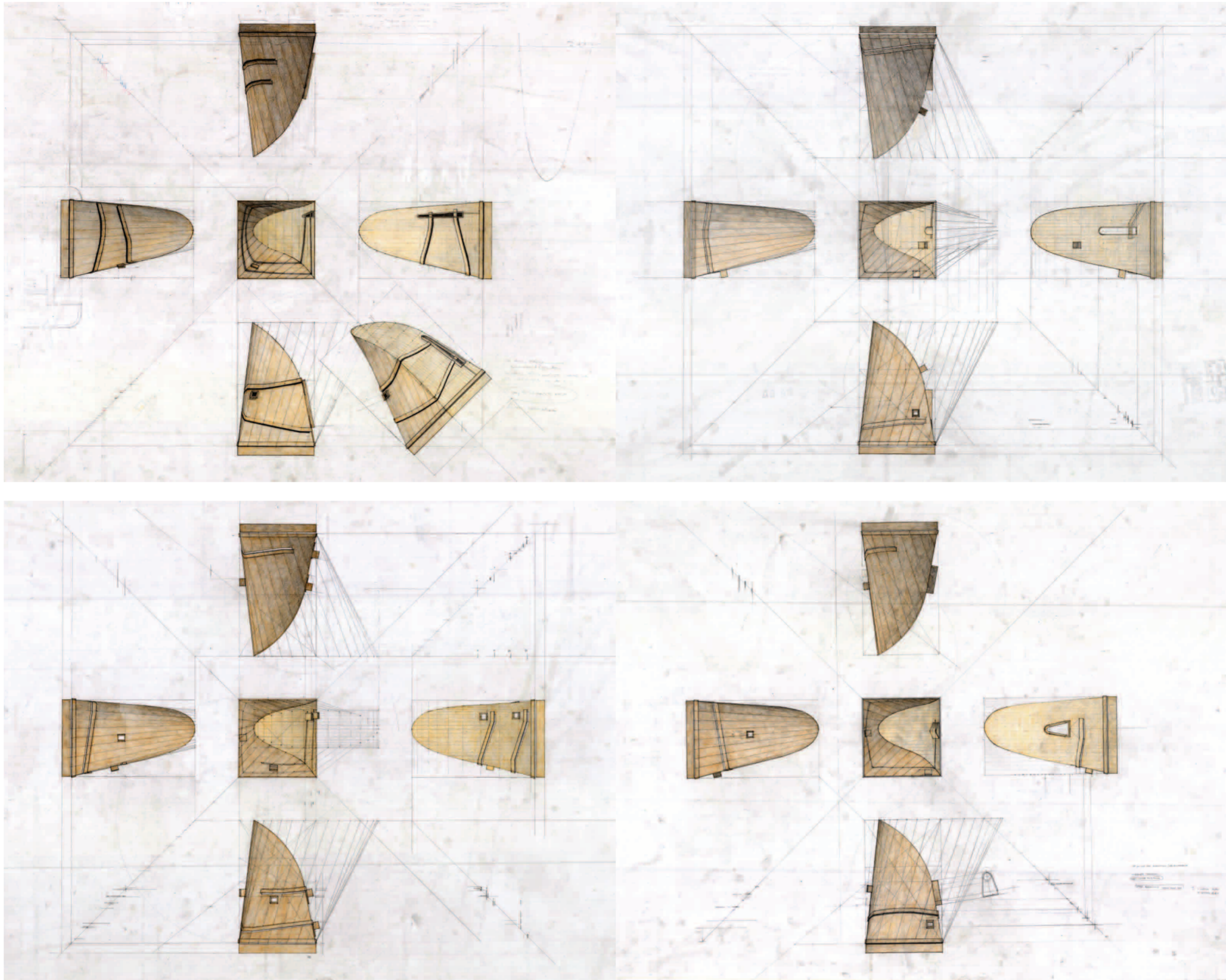
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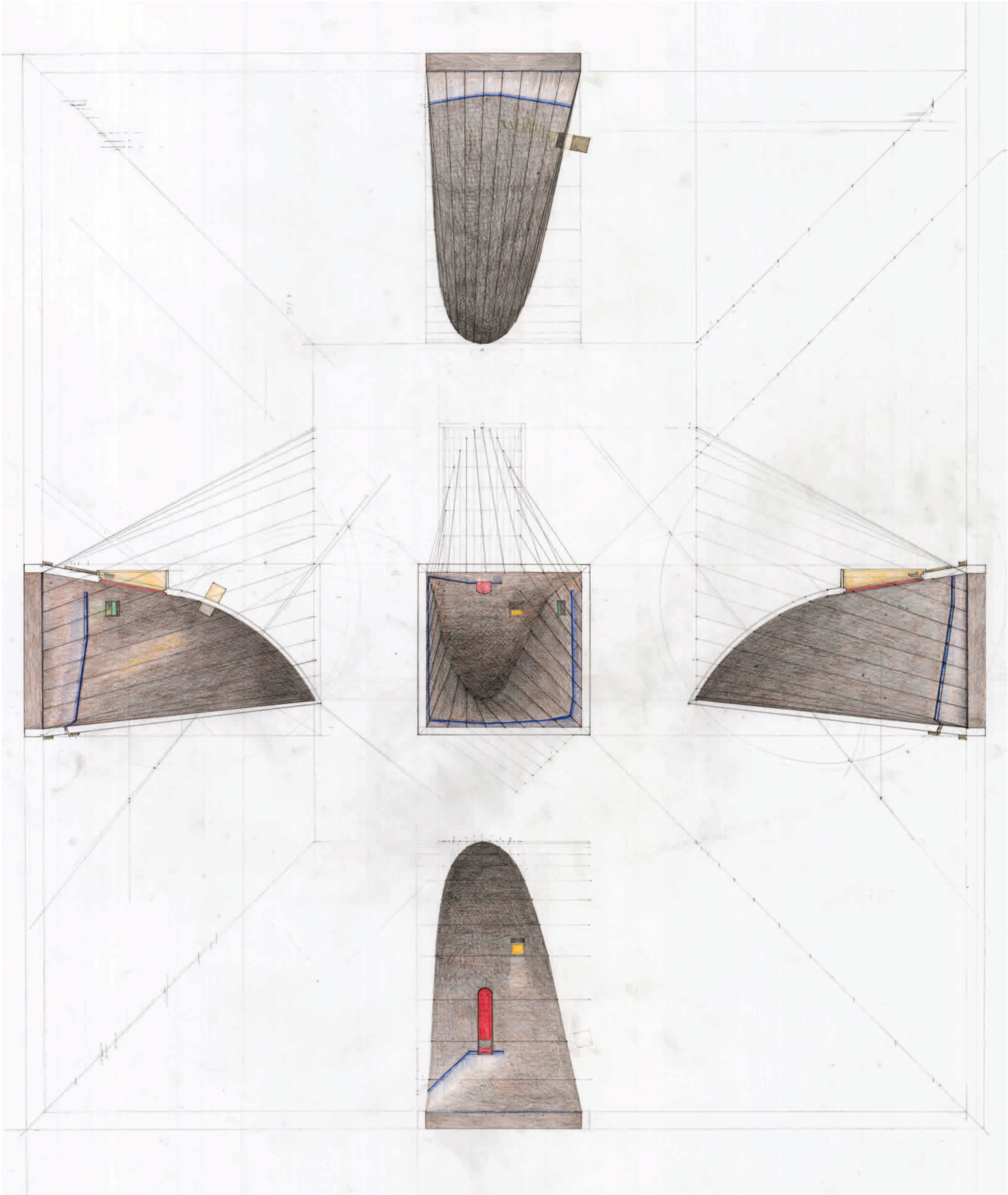


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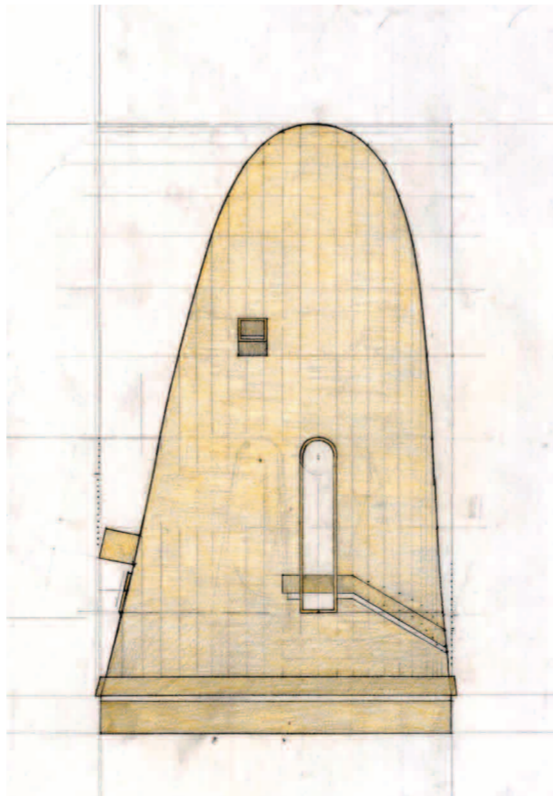


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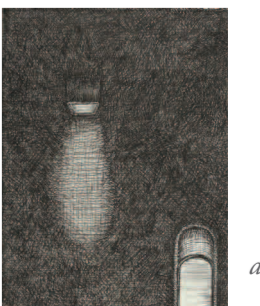




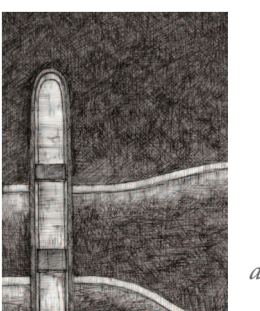
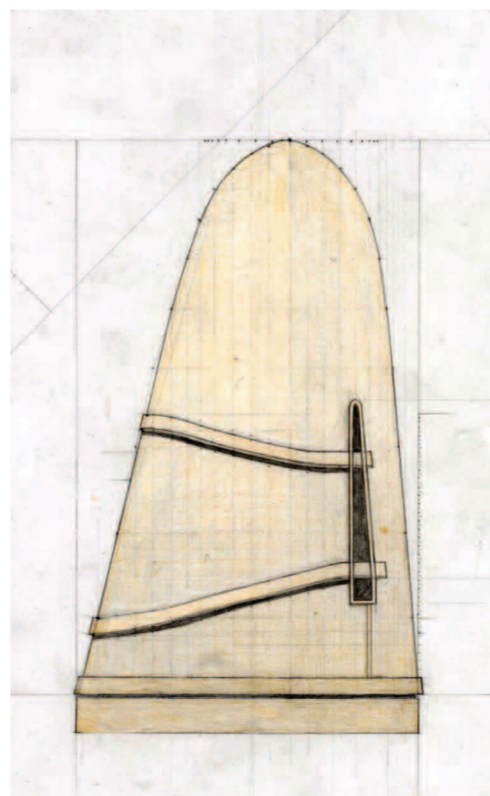
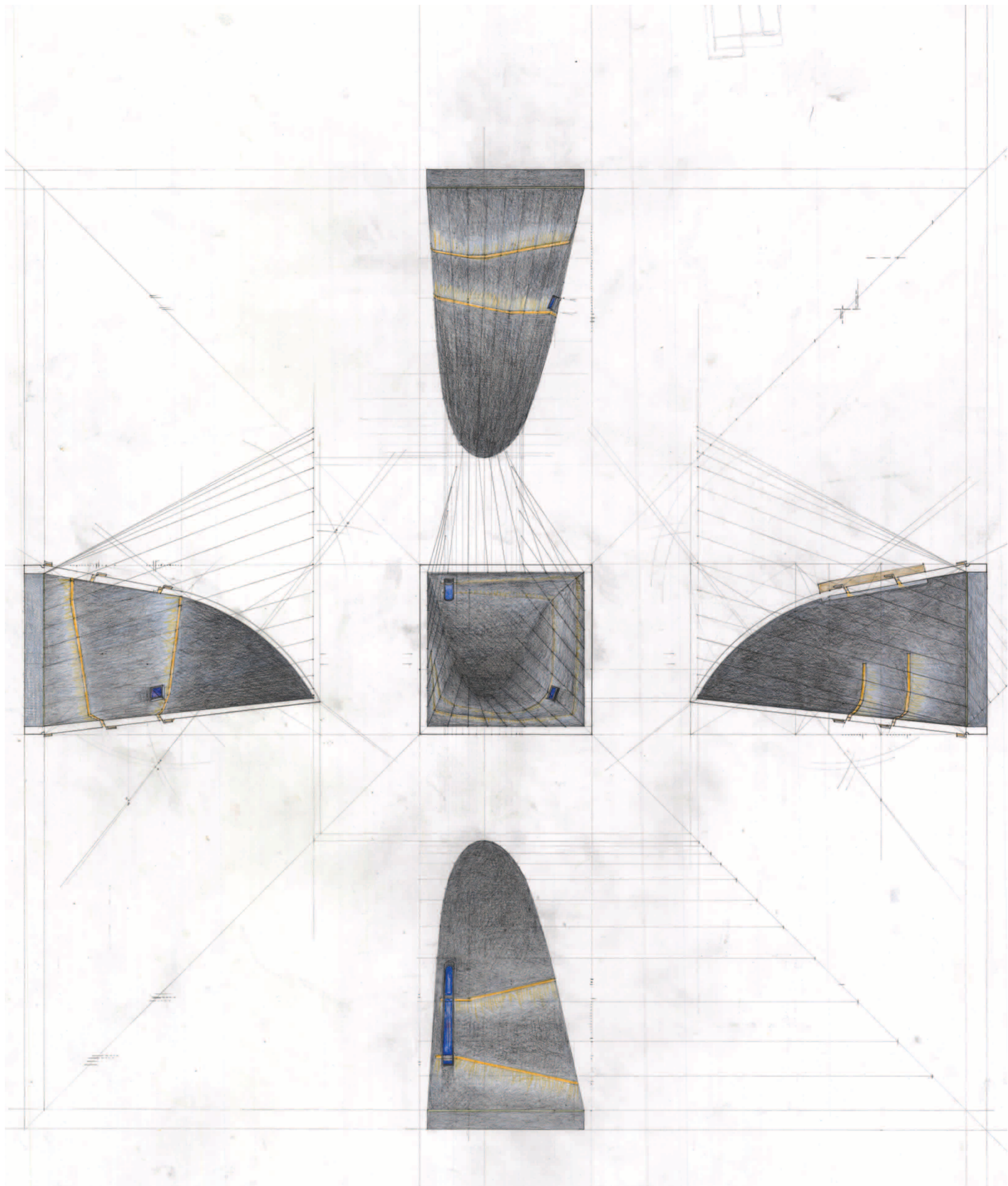
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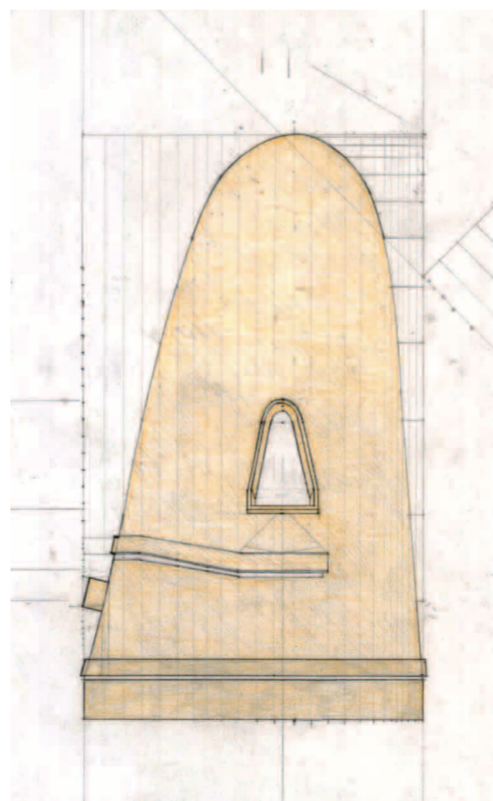
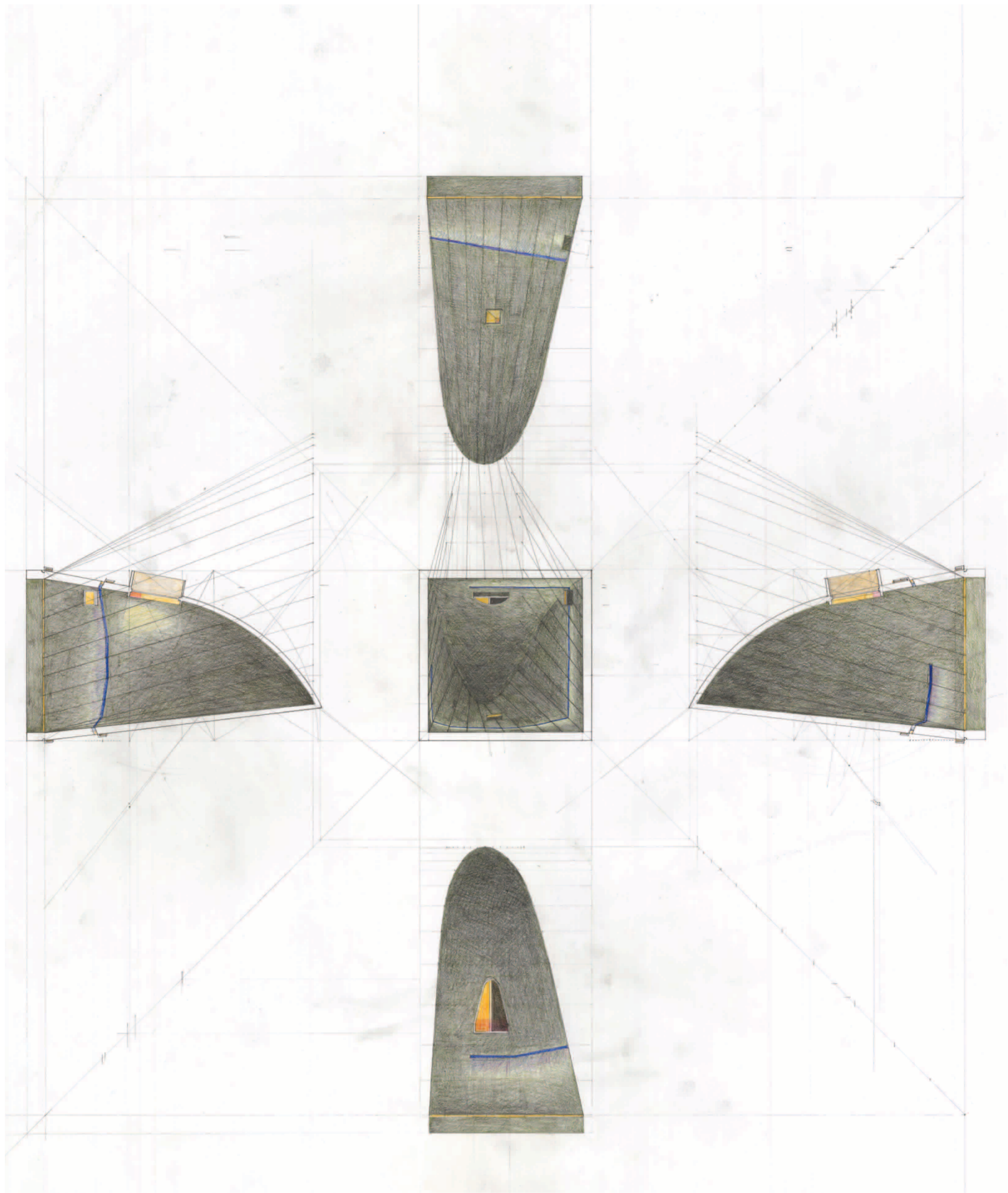


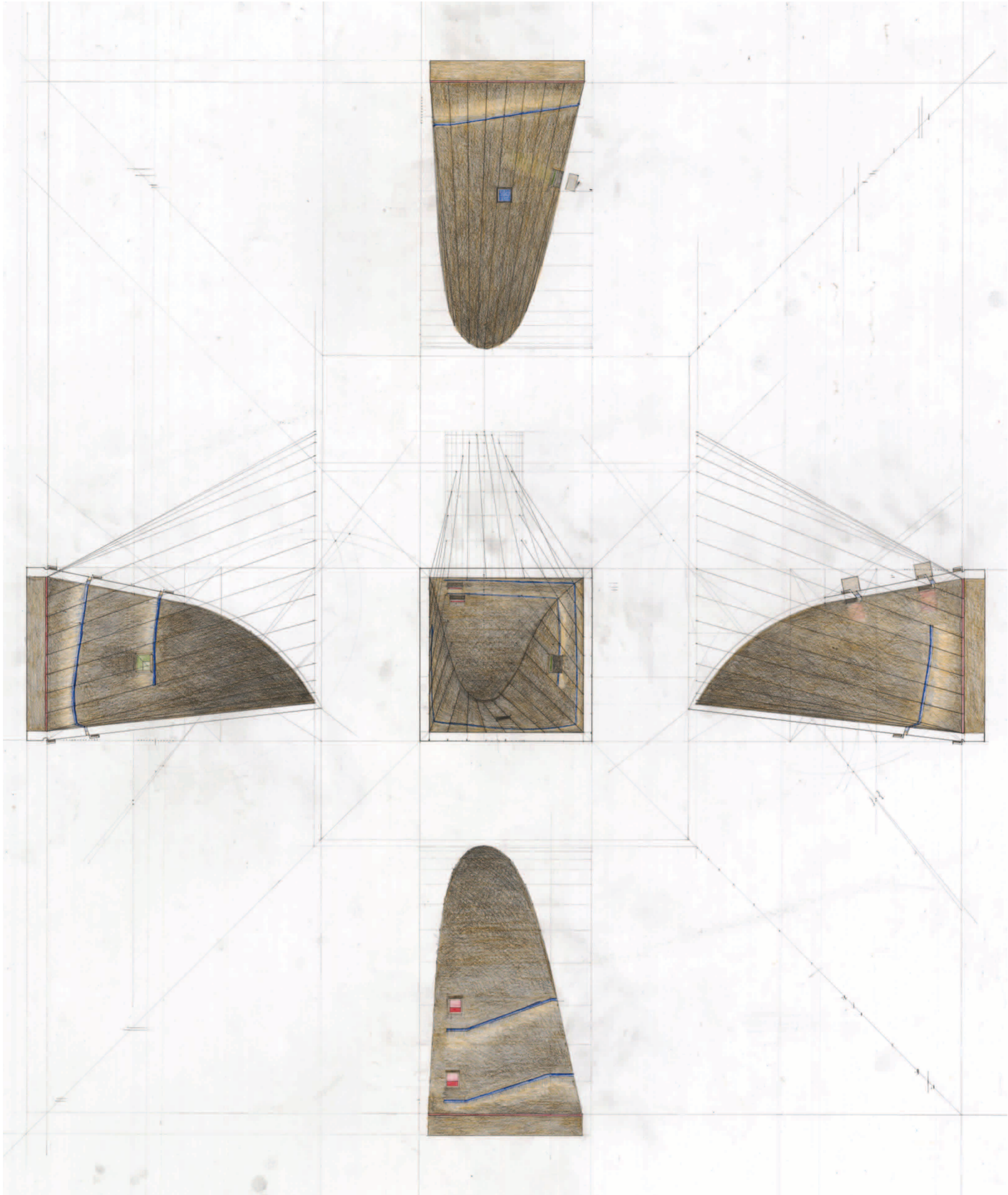
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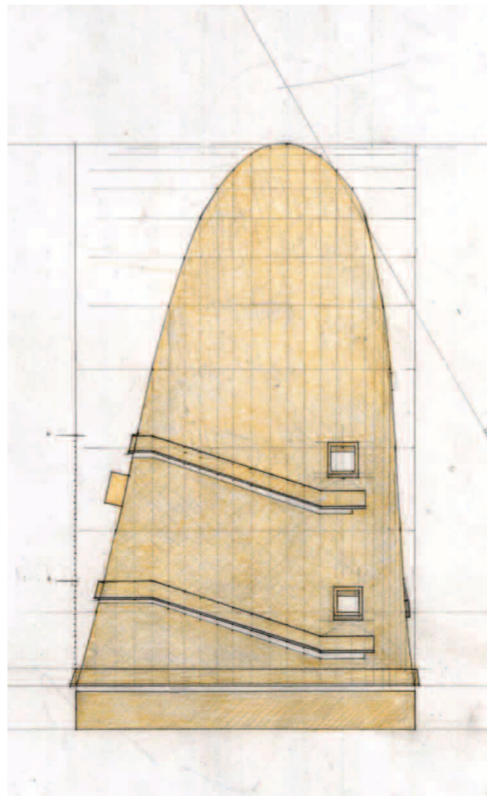
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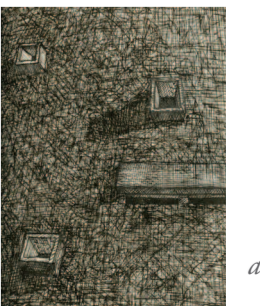
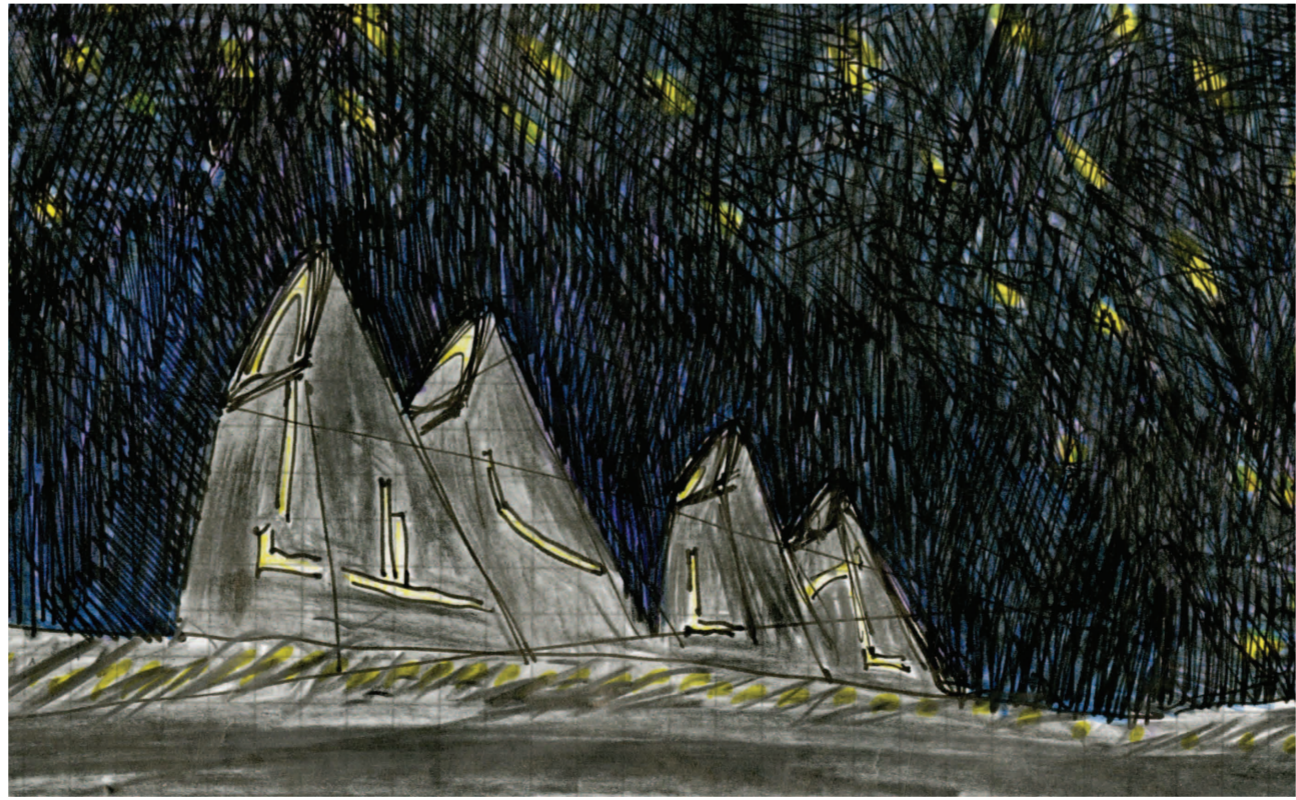
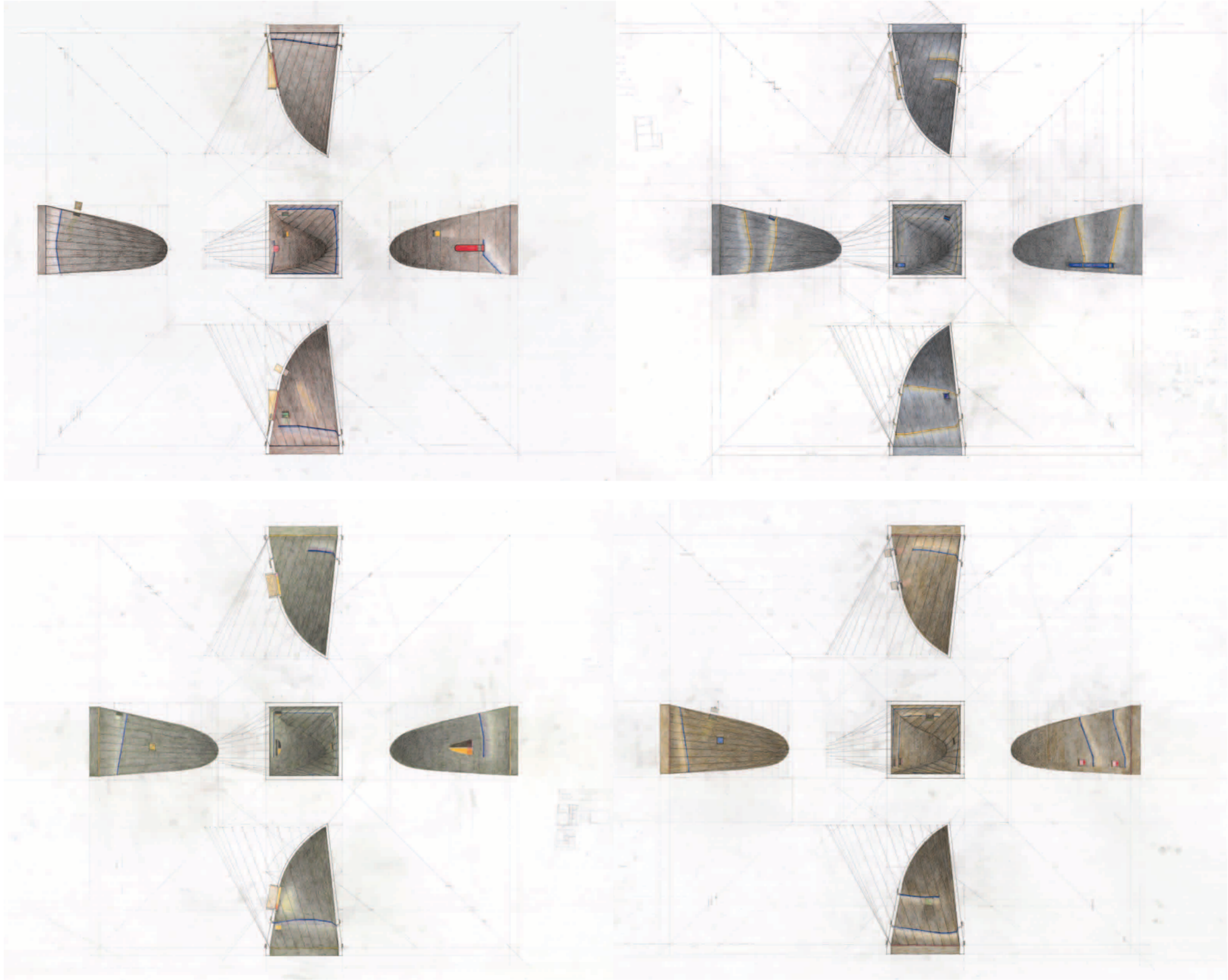
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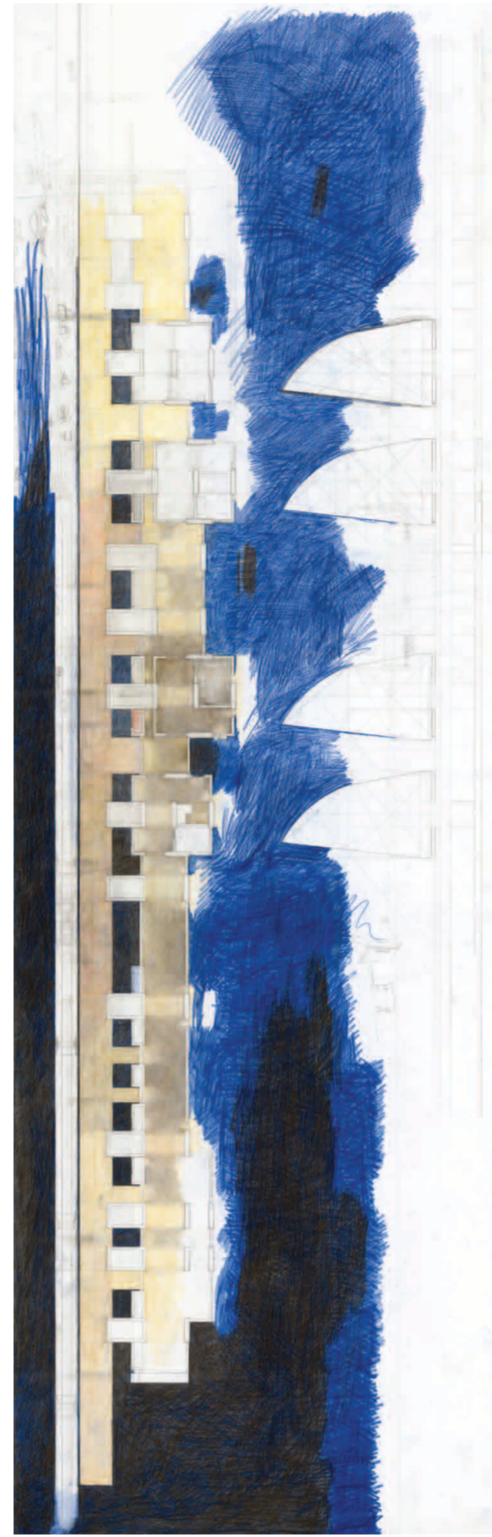


aw.



aw.





THE STATION RECONSIDERED

With a fuller understanding of the station's primary figures and function, the final iteration ensues.

The train begins with an idea of two people sitting across from one another. Two benches flank a window, outside of which a cinematic world passes by.

As the train rounds a soft curve two pairs of towers come into view. Shifting slivers of sky and earth open and close between the concrete masses.

With a noisy gush of air, the train stops beside the platform. The low roofs almost touch. Only a thin line of light, punctuated by each car's dimpled ends, reaches the stone paving.

The platform is separated from the building's edge by a garden, both metered by the station's facade and shadows. The station's figures accompany the passengers waiting to arrive and depart.

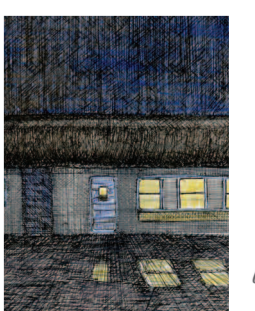
Crossing the garden, passengers enter a long hallway running along the station's southern face. Echoing the train's form, it joins a series of rooms into a linear city.

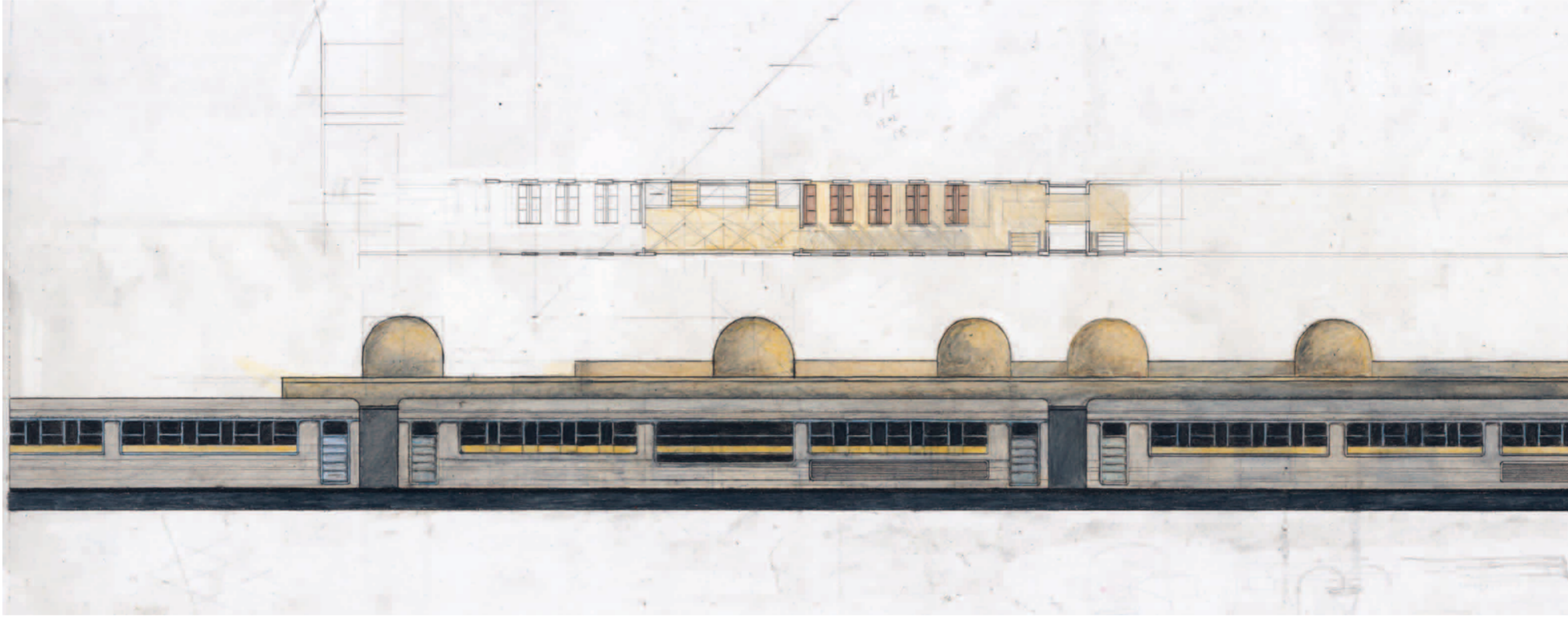
The station is bracketed by a diner and market. Rest rooms, shops, and newsstands line one side. At the center, it opens into a hall spanning the station's width.

The hall exits onto another porch running along the station's northern face. Passengers spot rides, hail taxis, and begin waiting again.

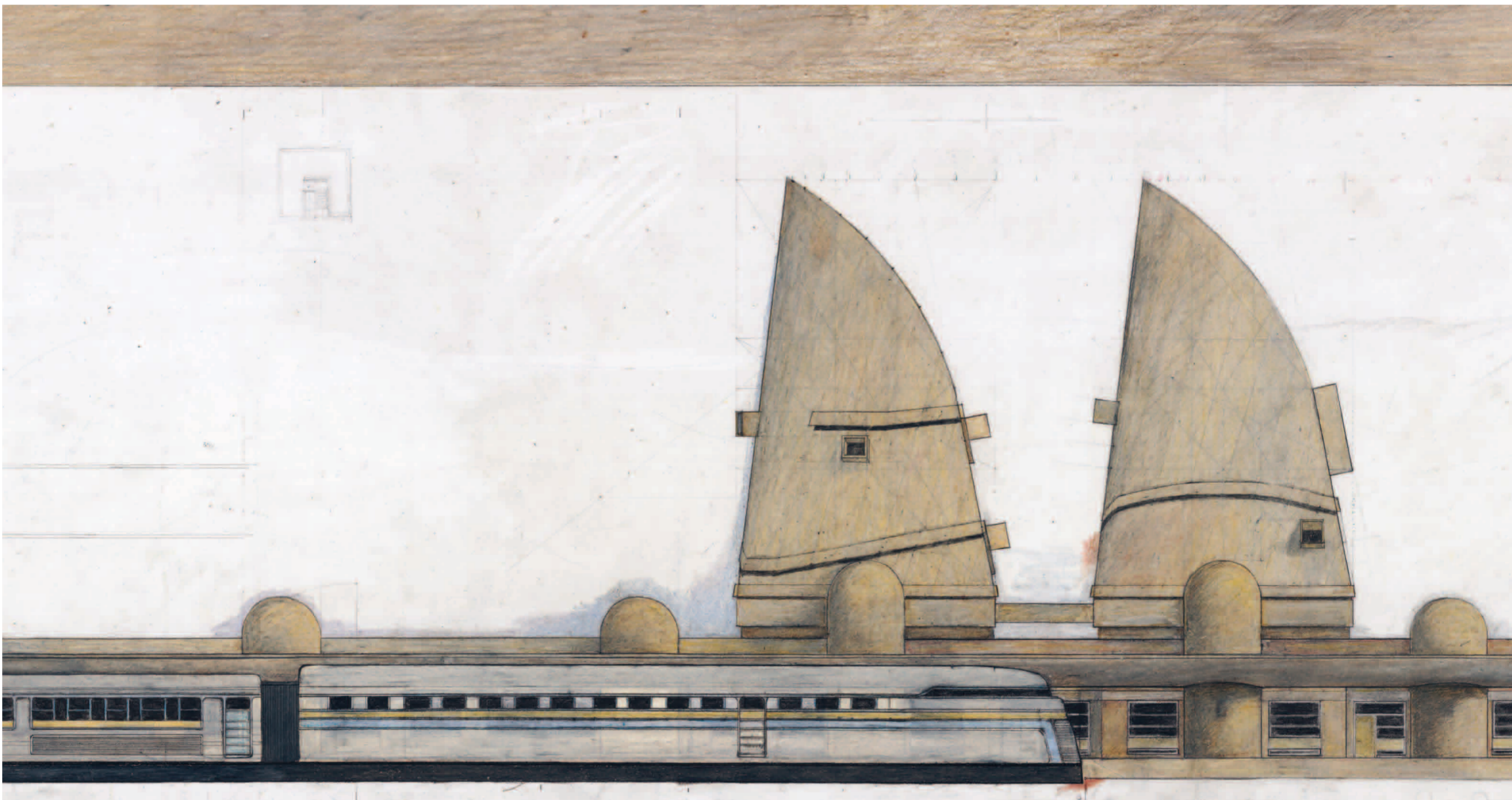
Above these happenings the four towers remain fixed. Each houses a waiting room, entered and experienced individually.

In the morning the sun animates the tableaux of the eastern faces. Glass and paint color the light as it shifts over the course of the day. At night, the towers' apertures seek to articulate the heavens. Constellations are framed, and their travels are mapped by lines across the domes.





bc.



bd.



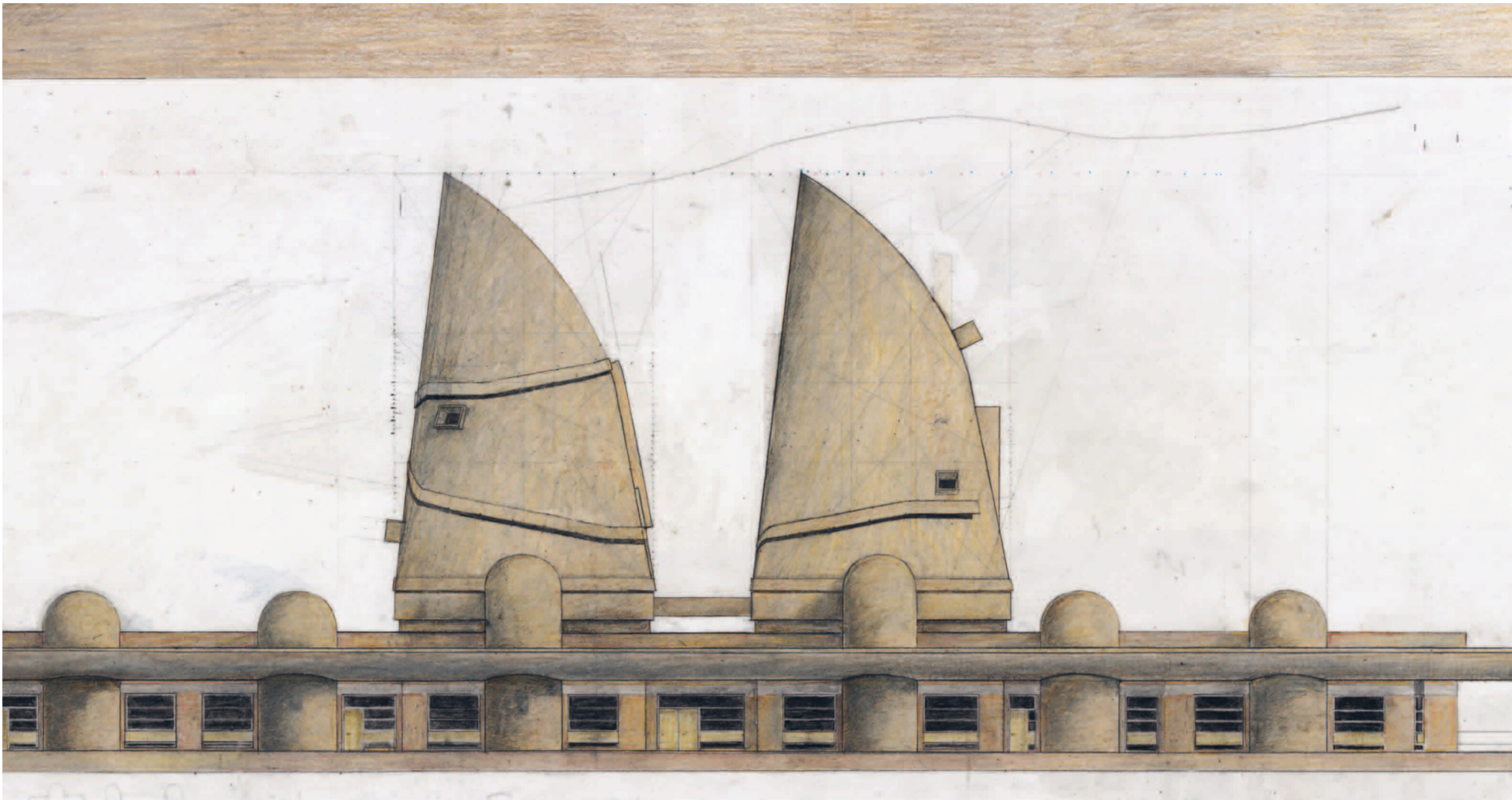
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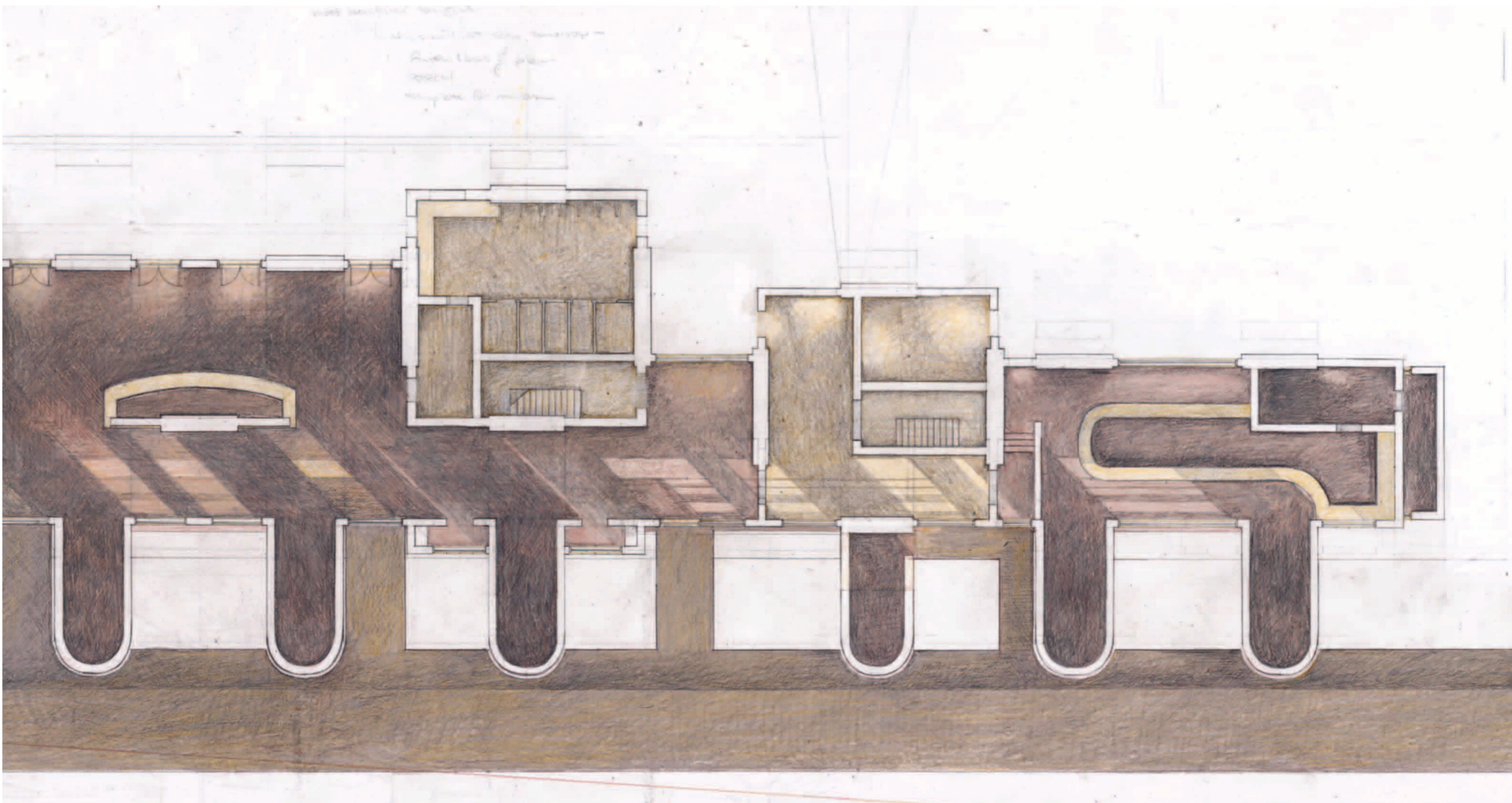
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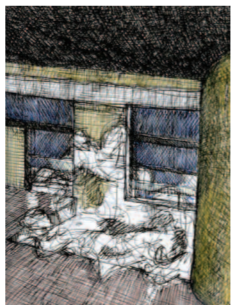
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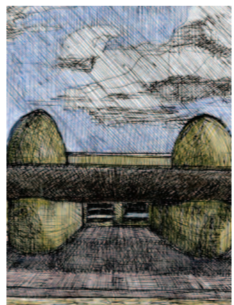
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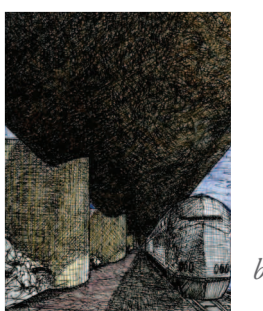
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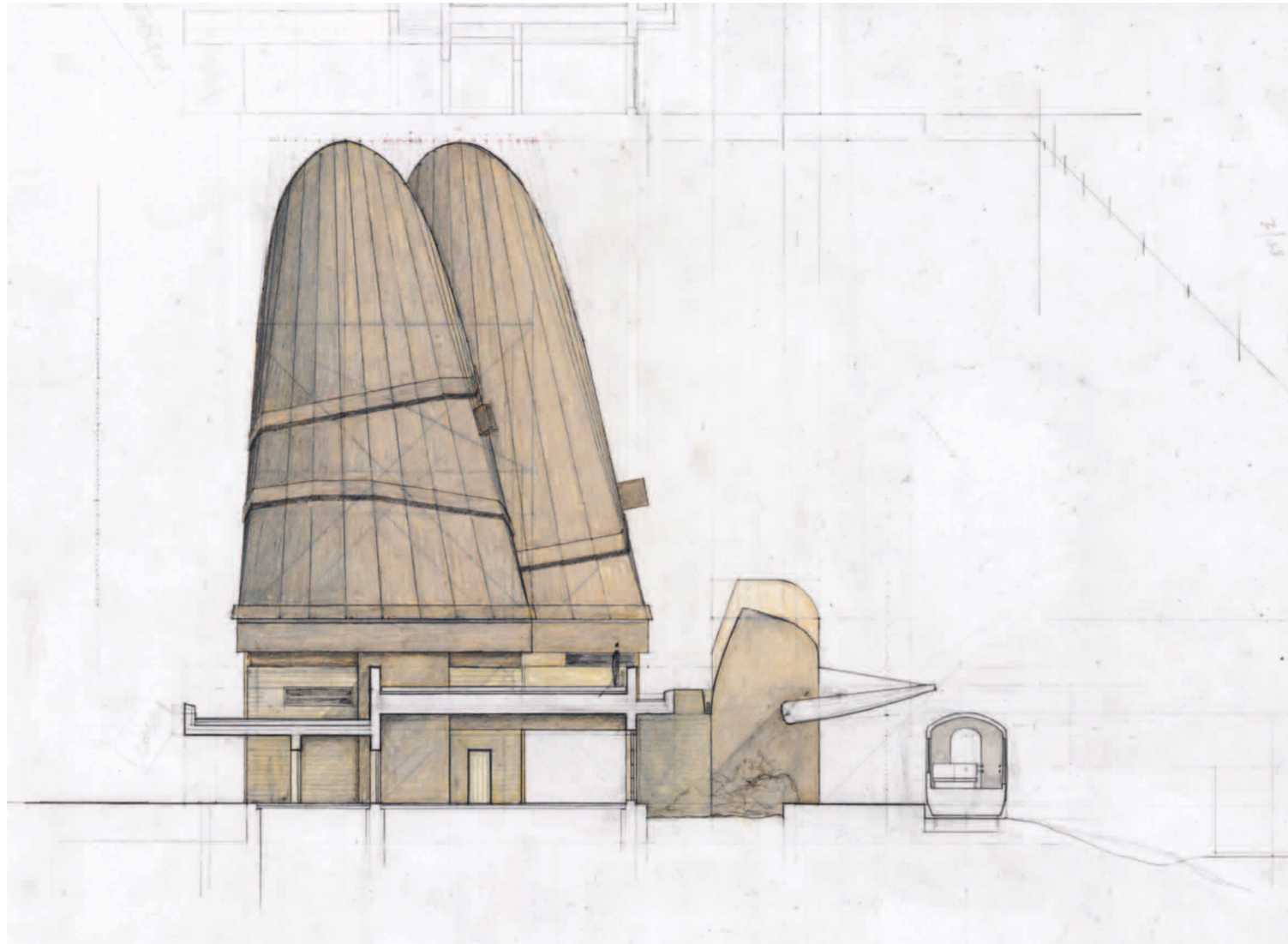
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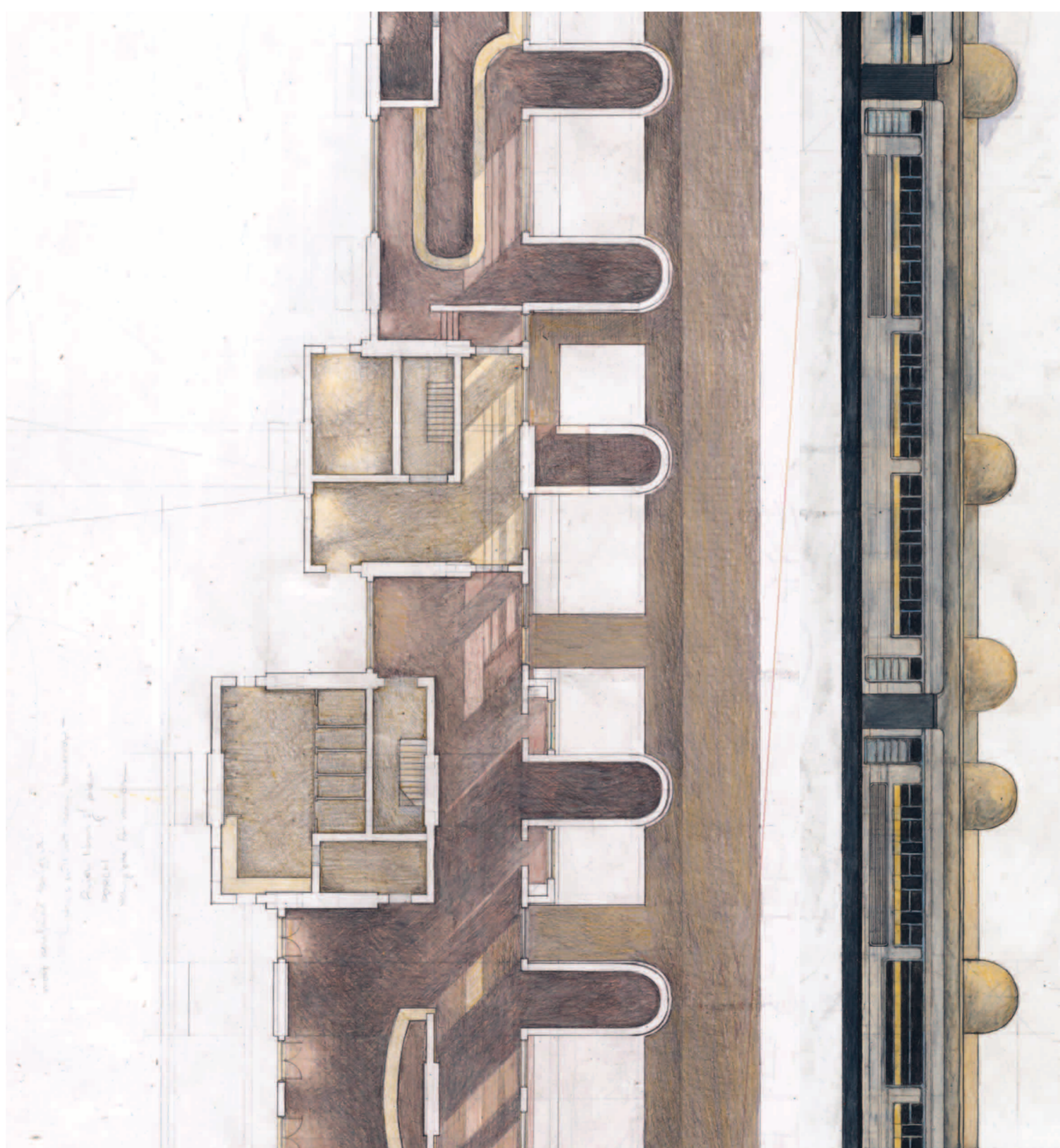
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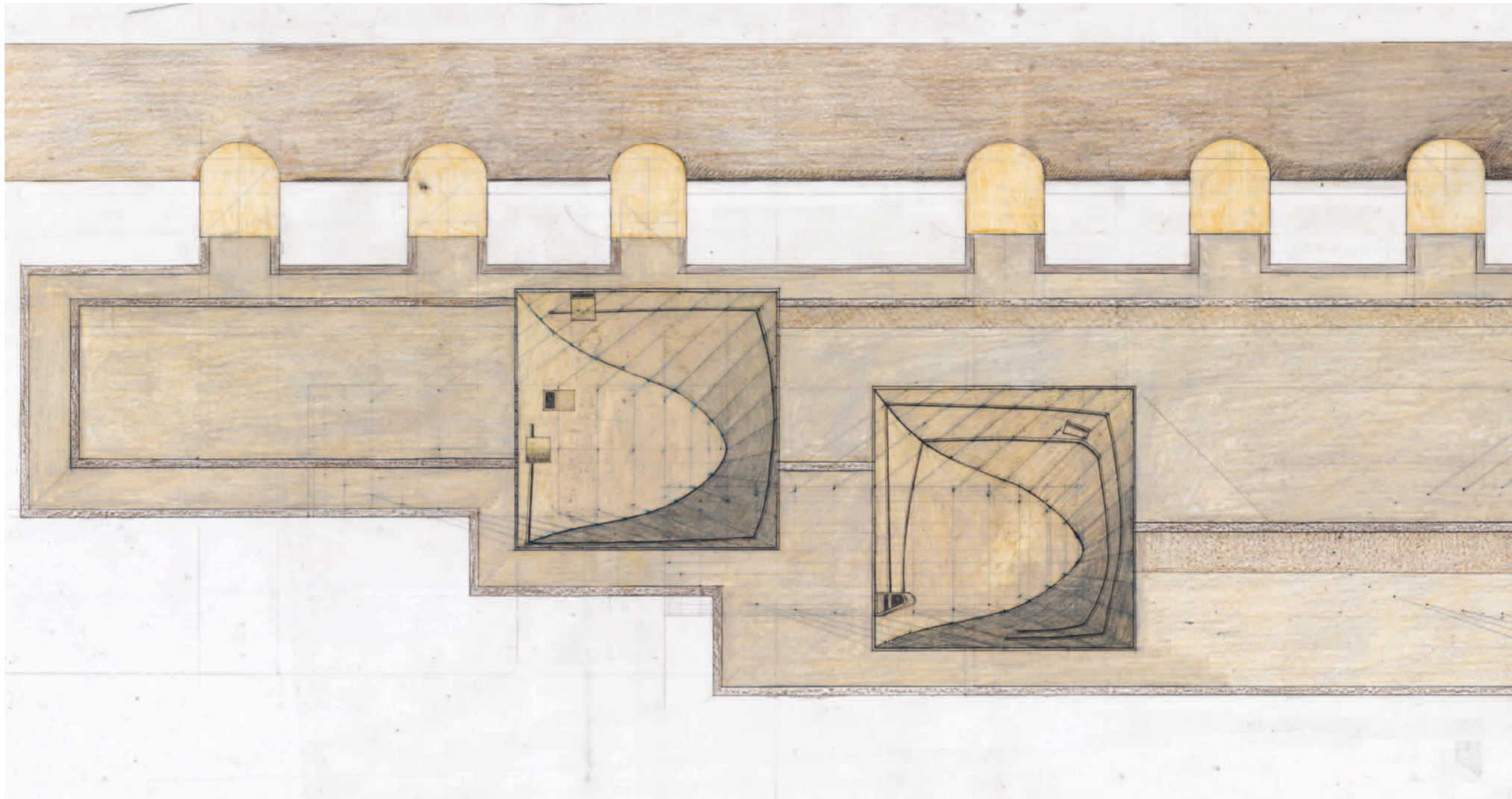
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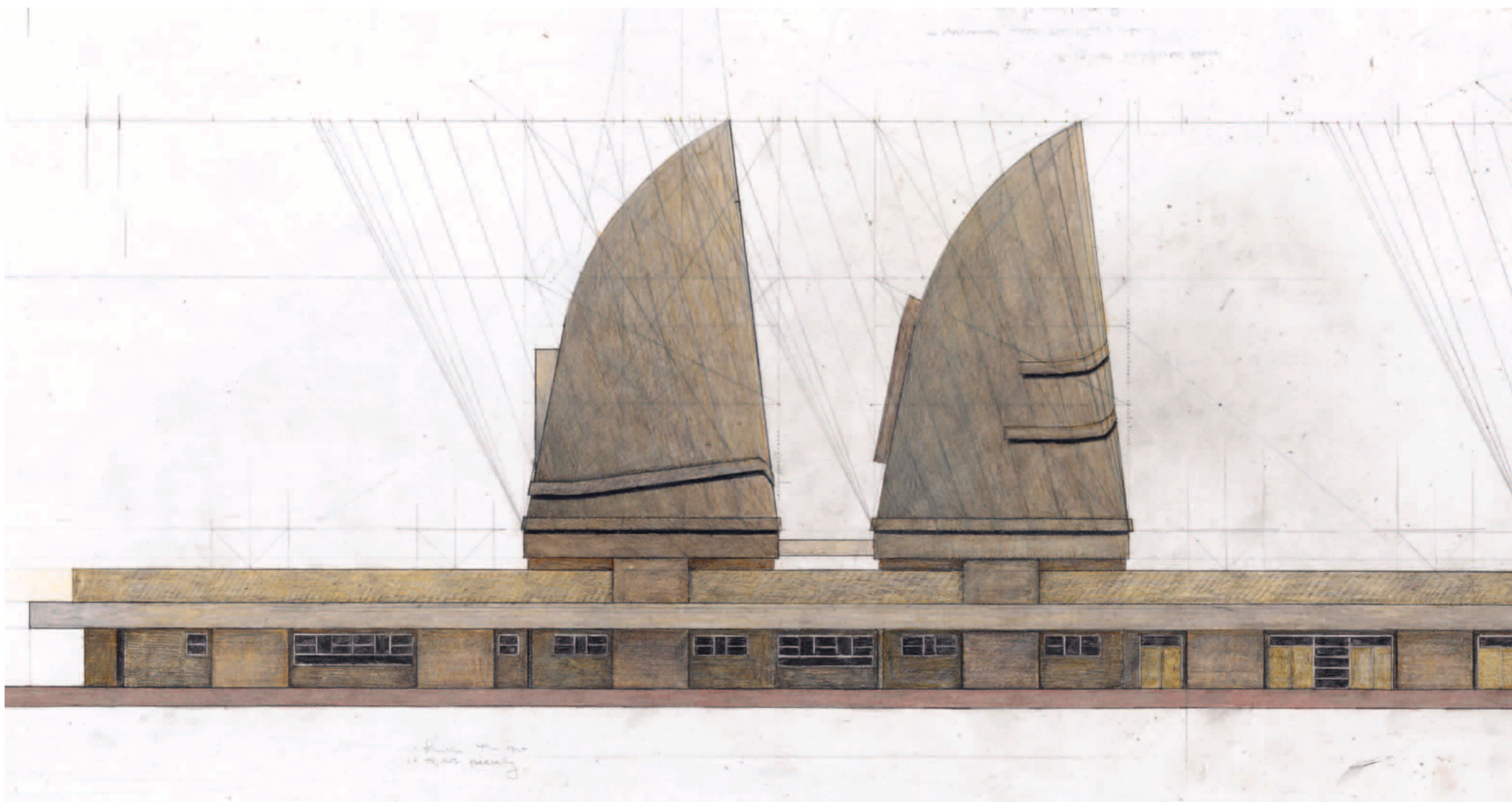
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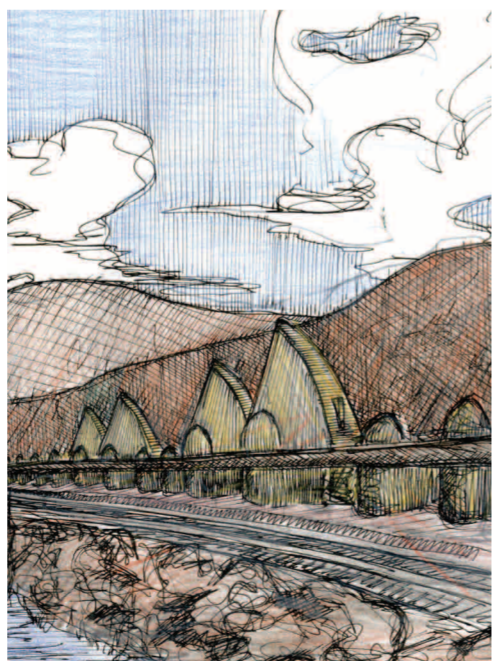
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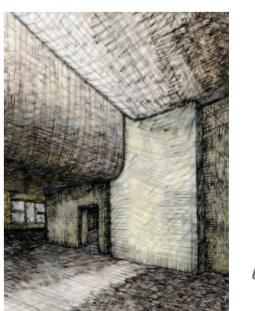
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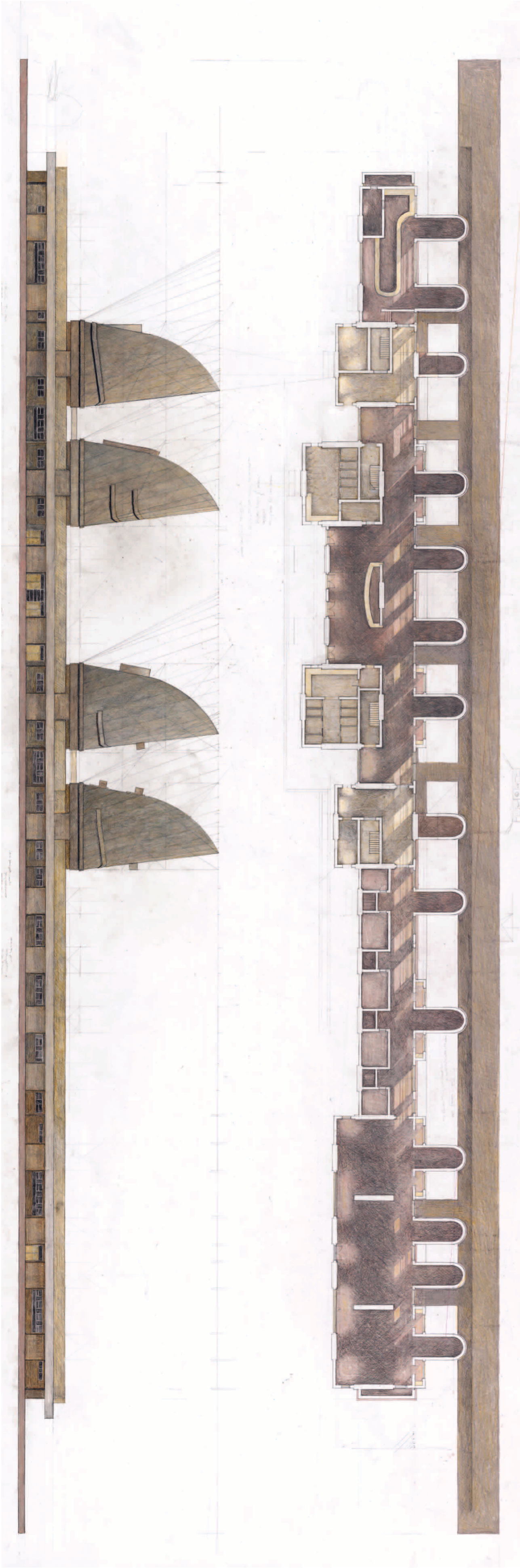
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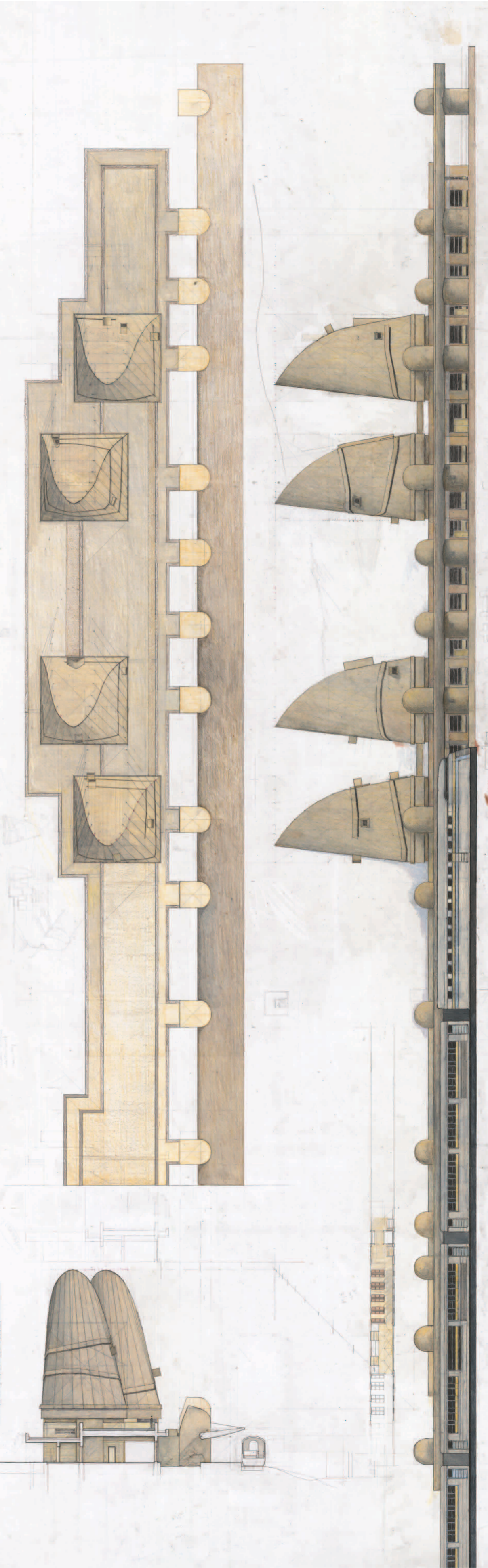
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bu.



bu.



bu.



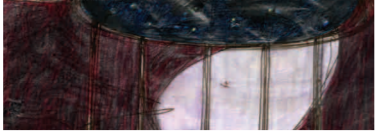
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A P P E N D I X

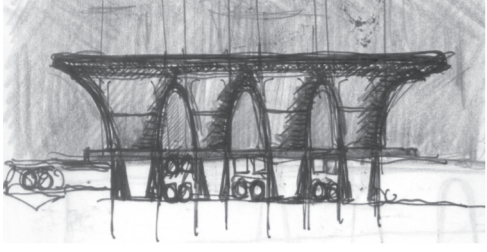
Along the way to the realized work, numerous iterations and schemes were visited. Although unresolved, these liminal works show the author's questions and concerns.



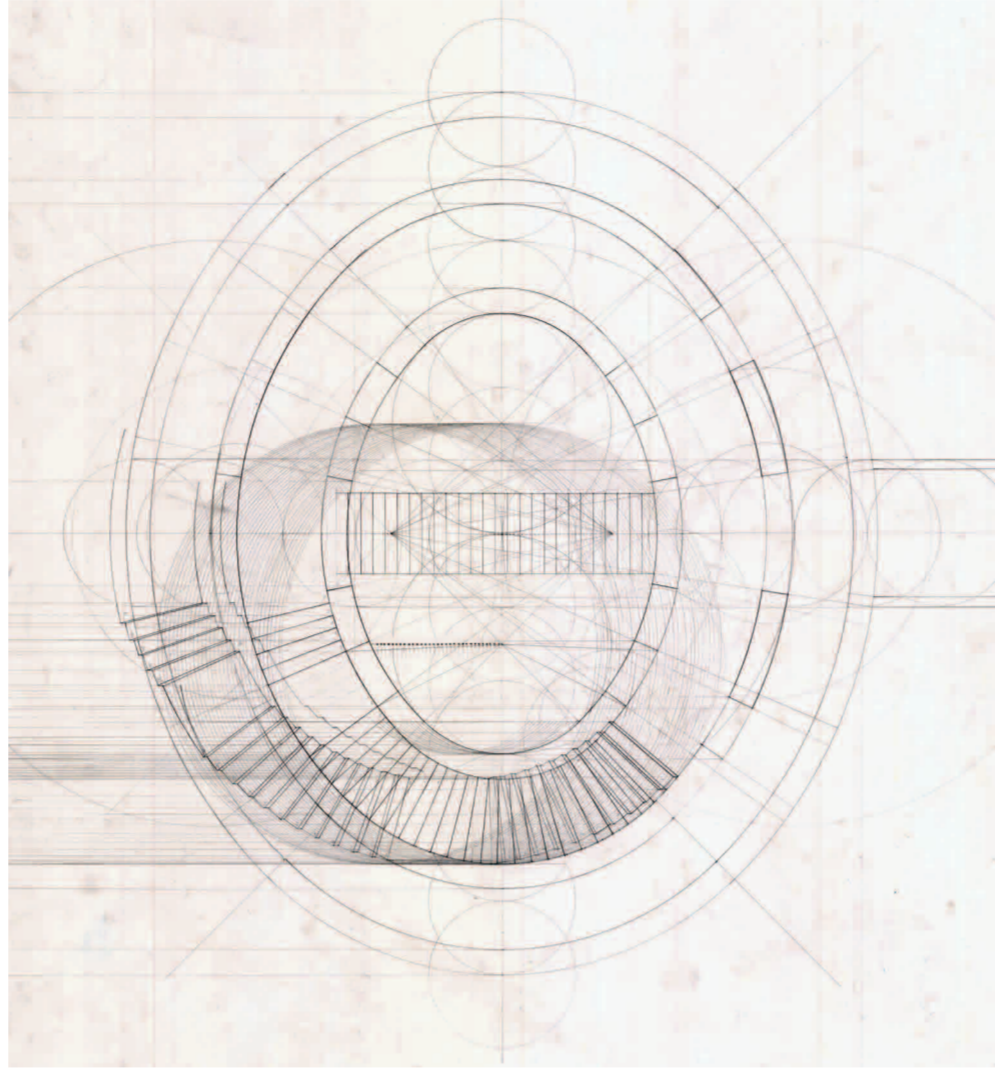
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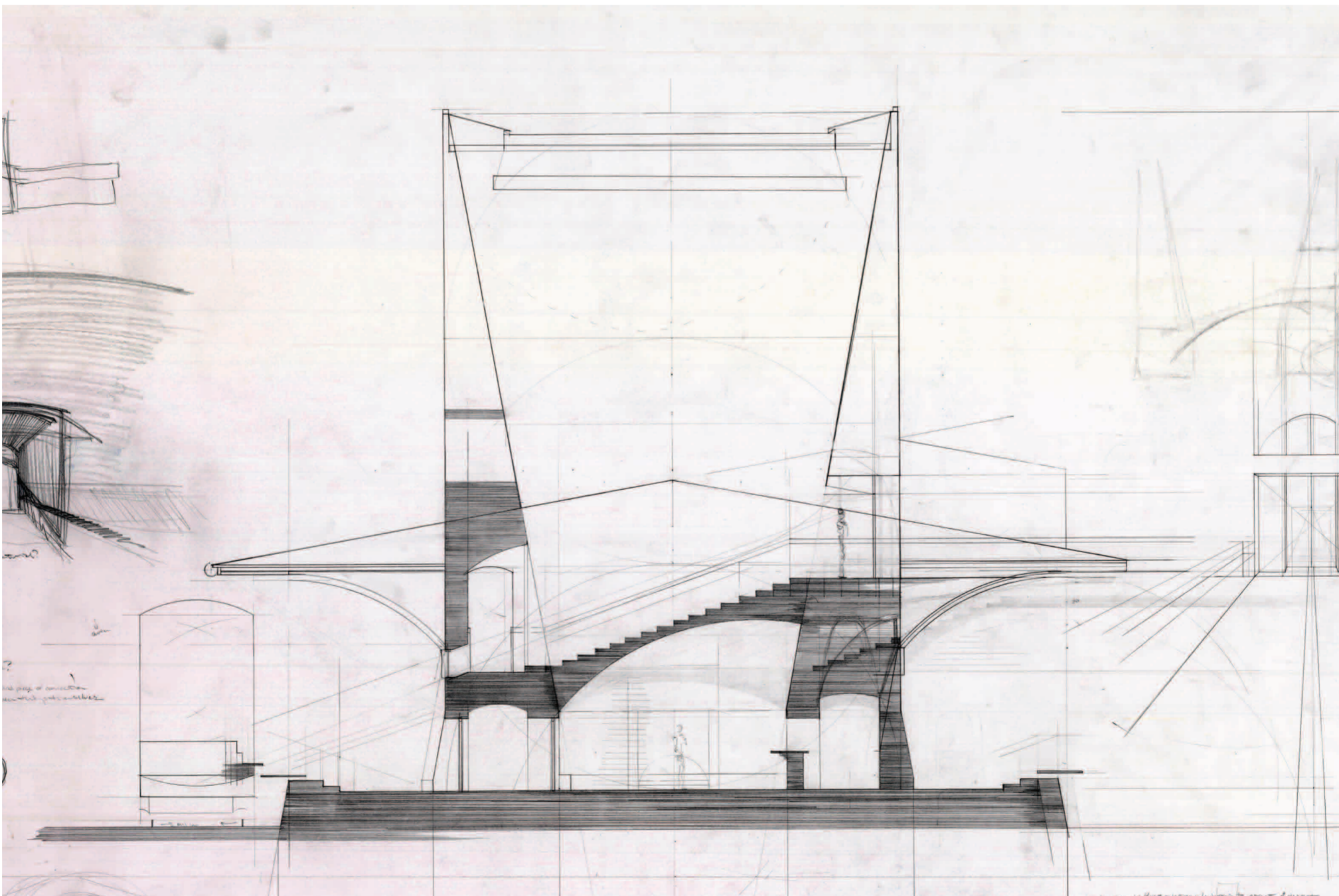
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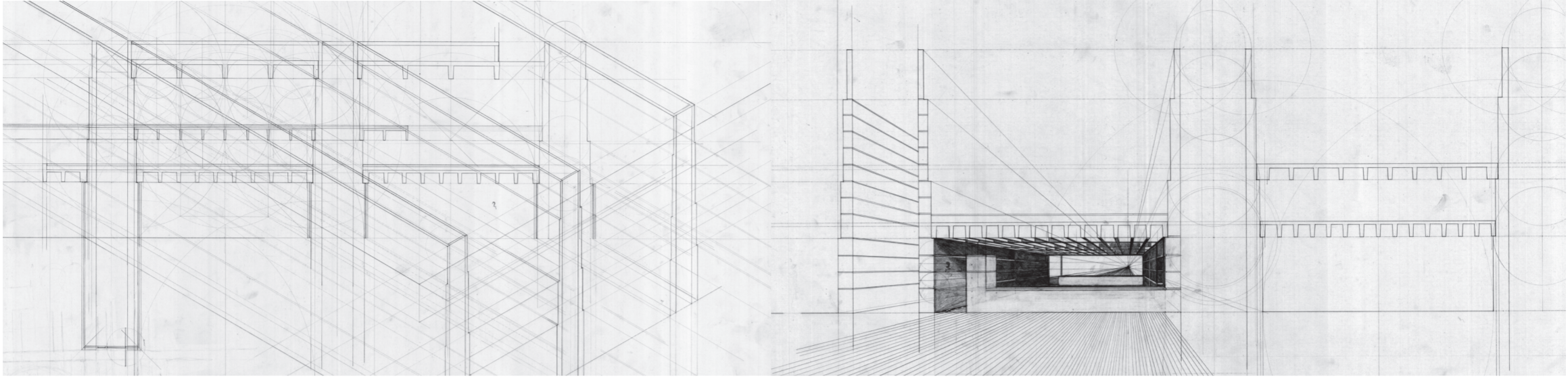
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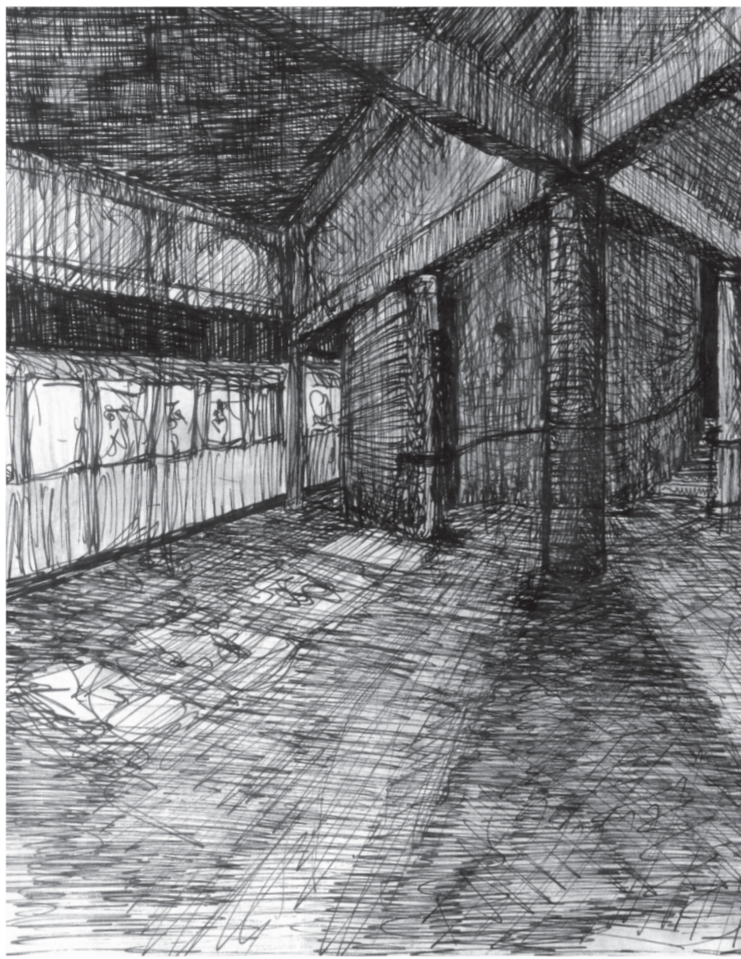


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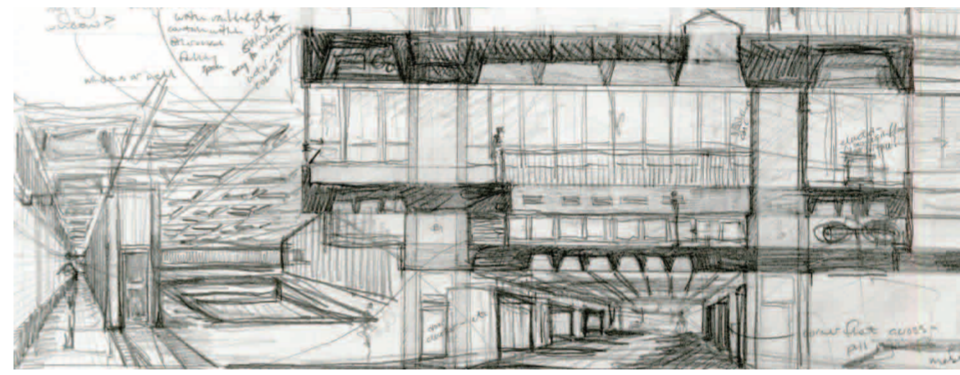


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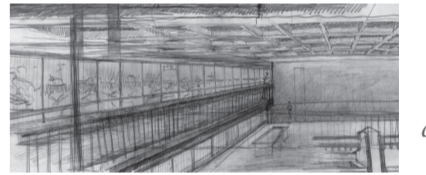
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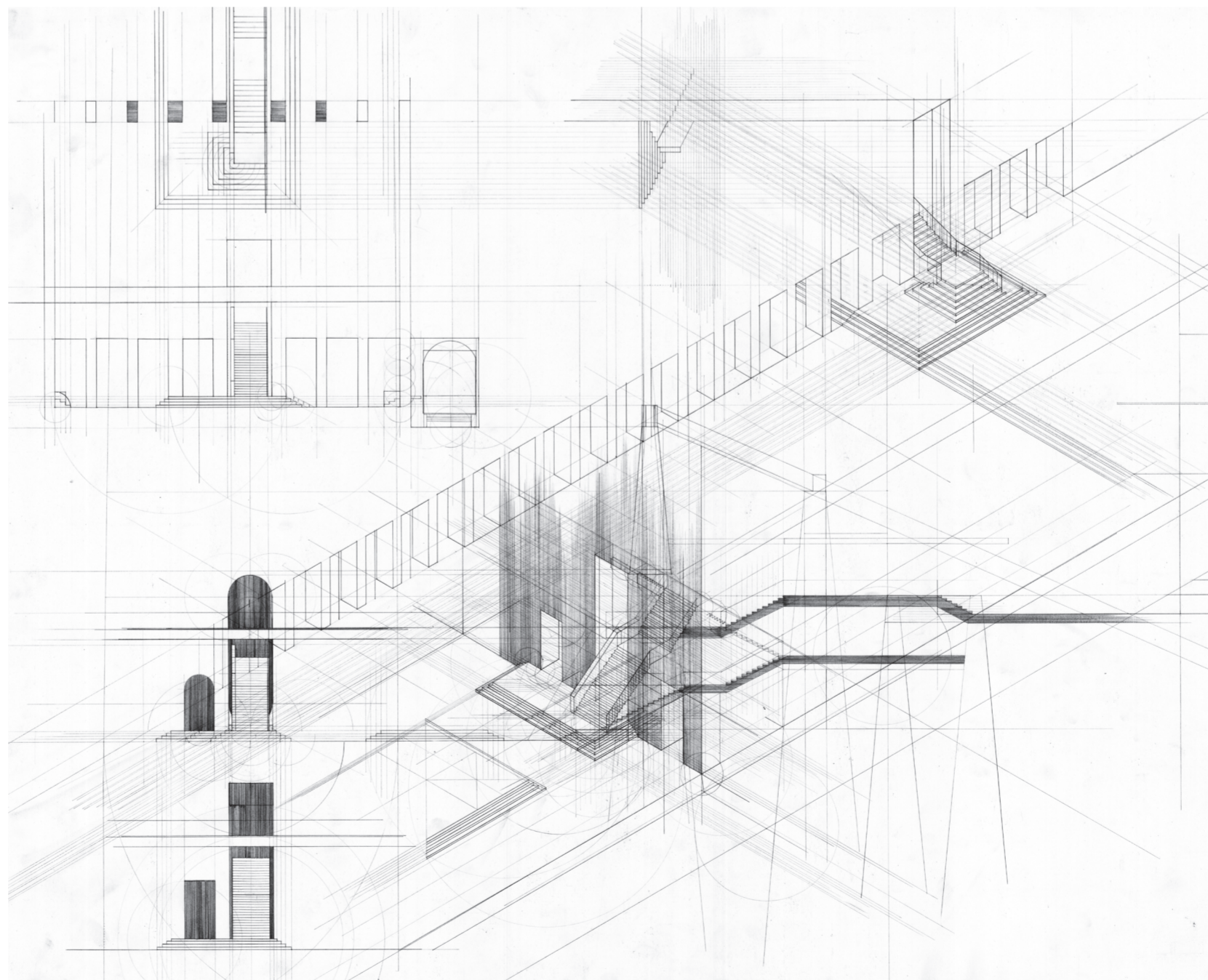
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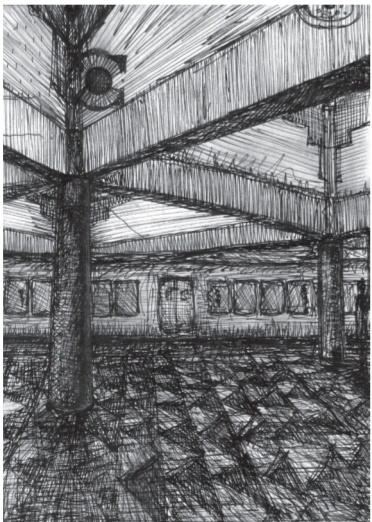
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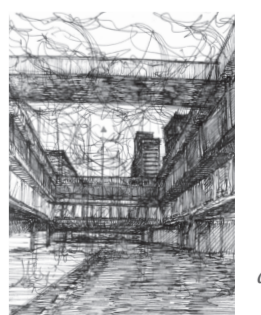
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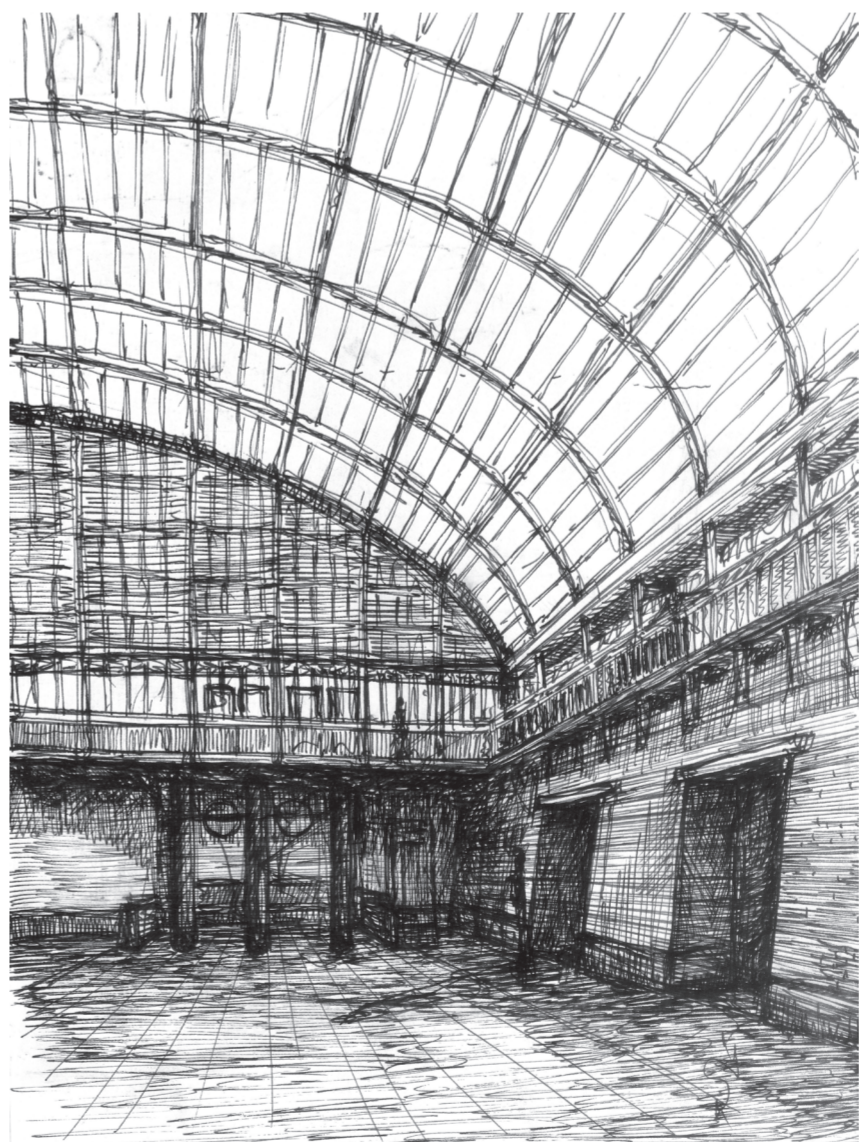
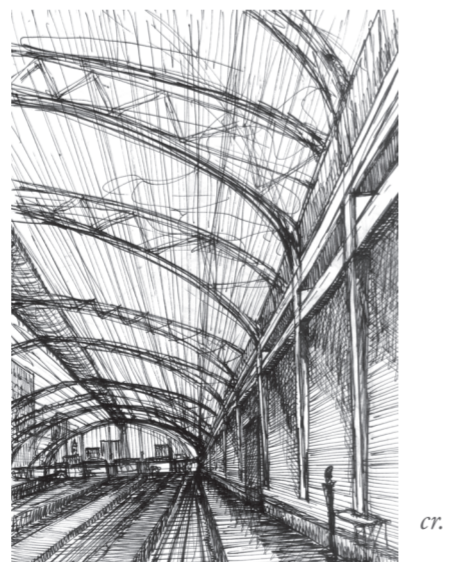
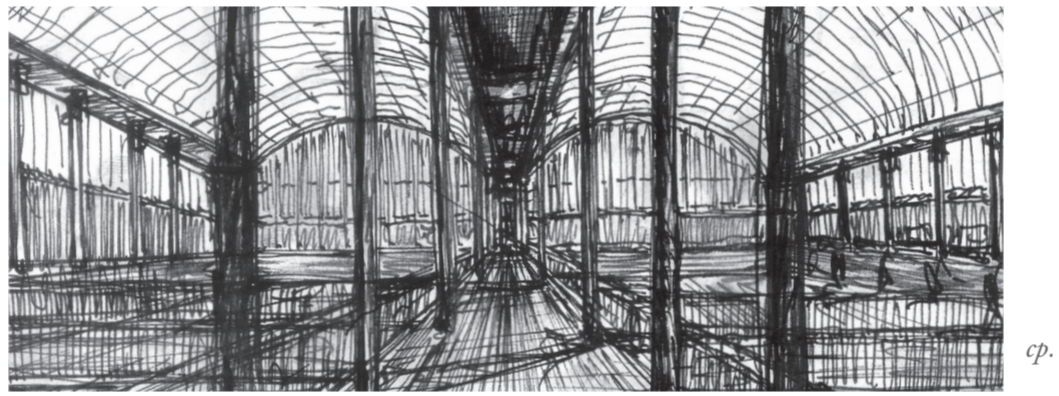
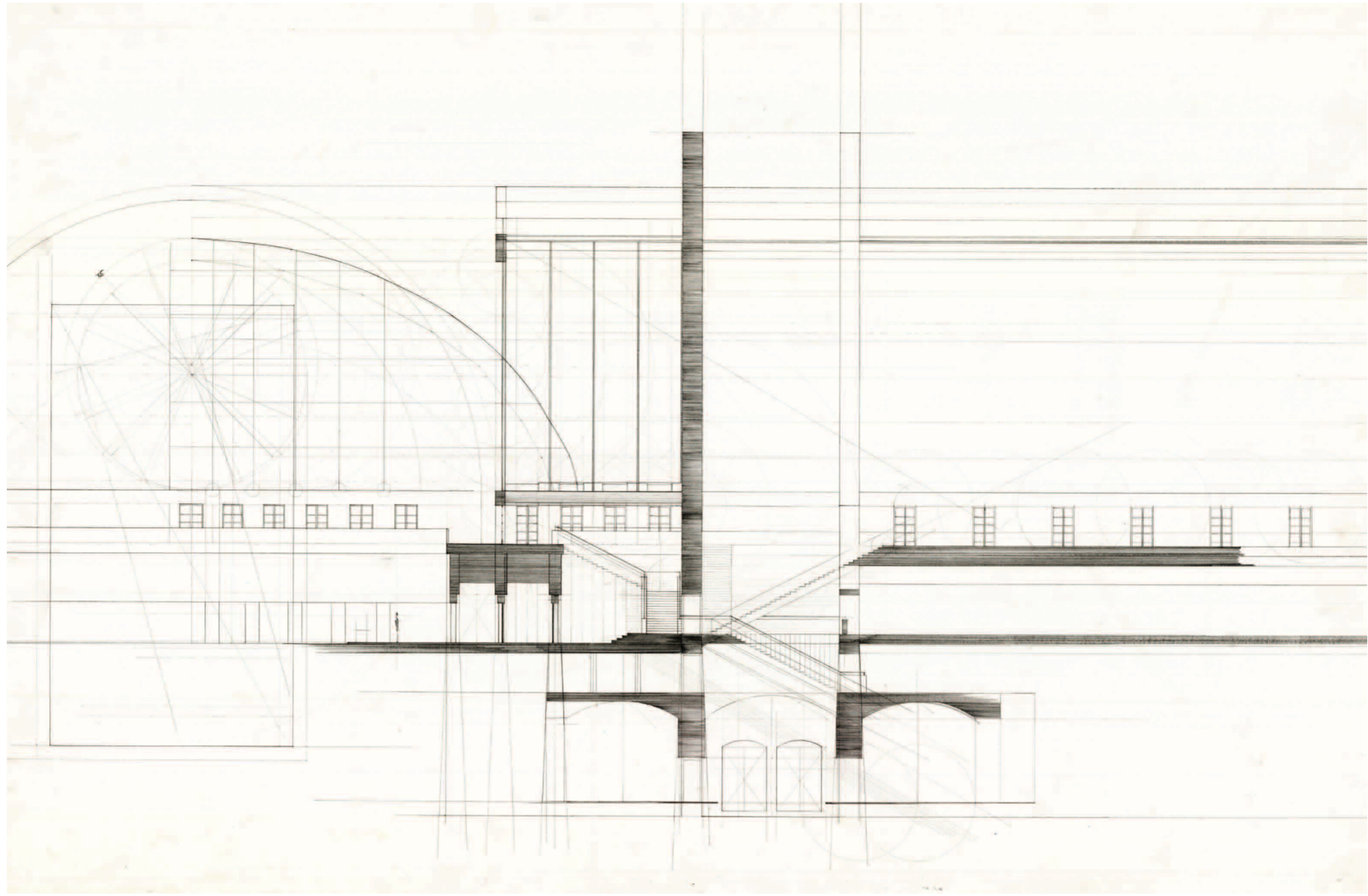
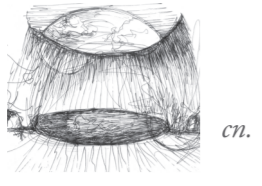
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ck.

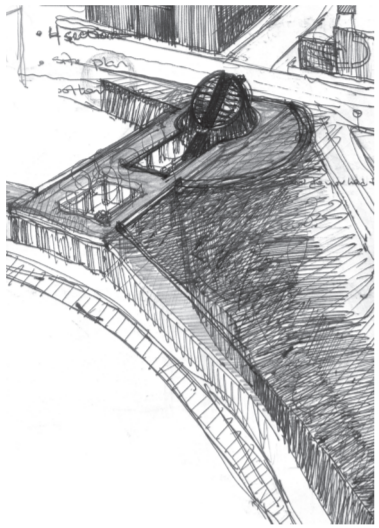


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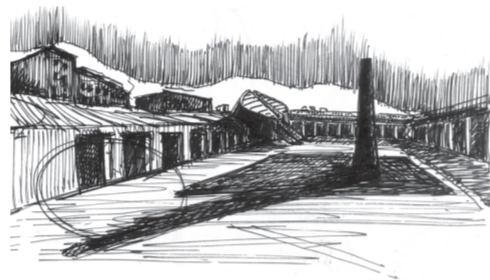




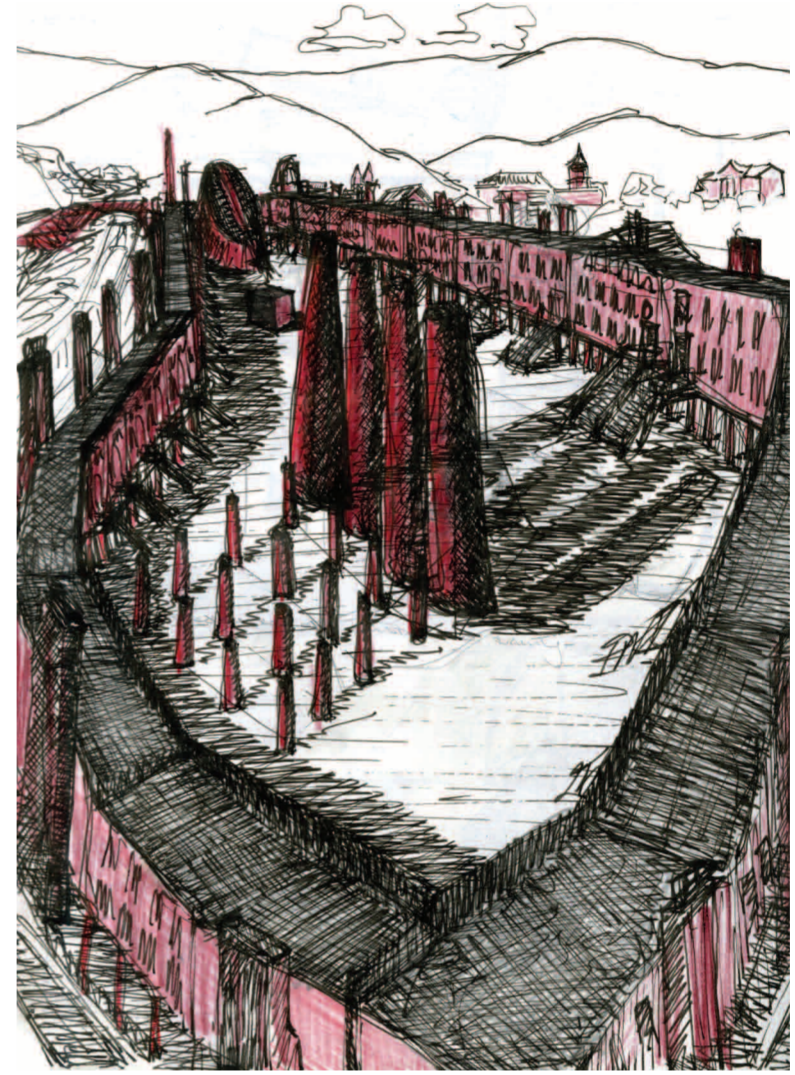
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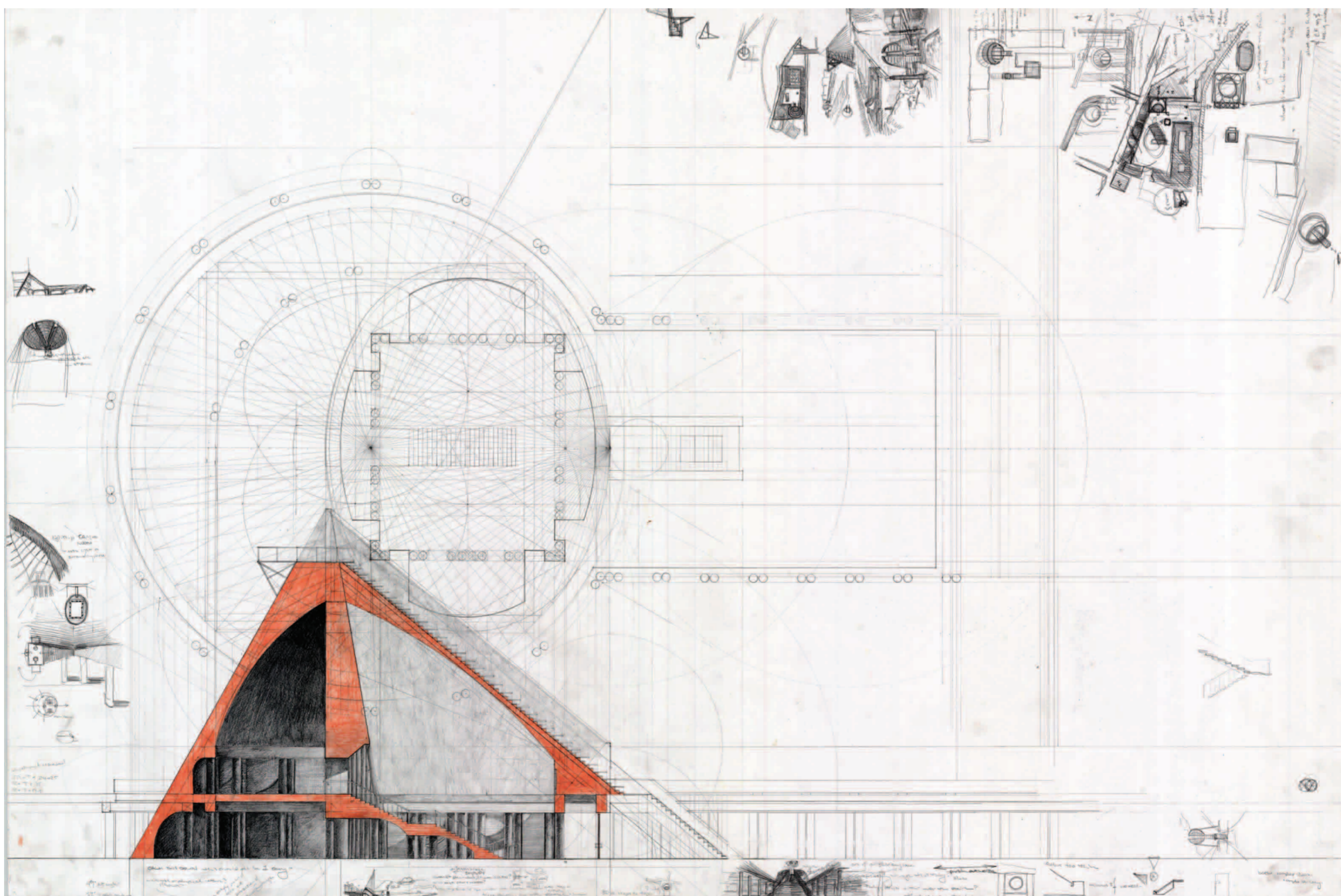
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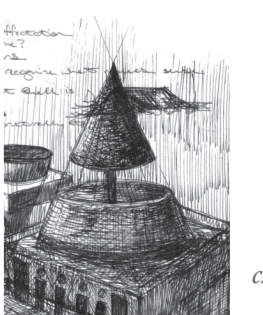
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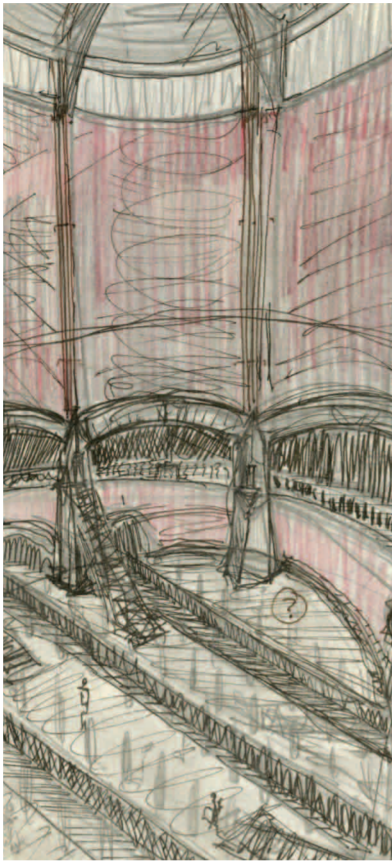
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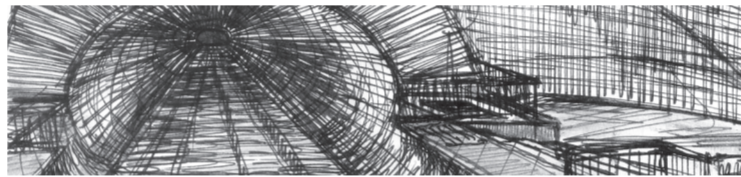
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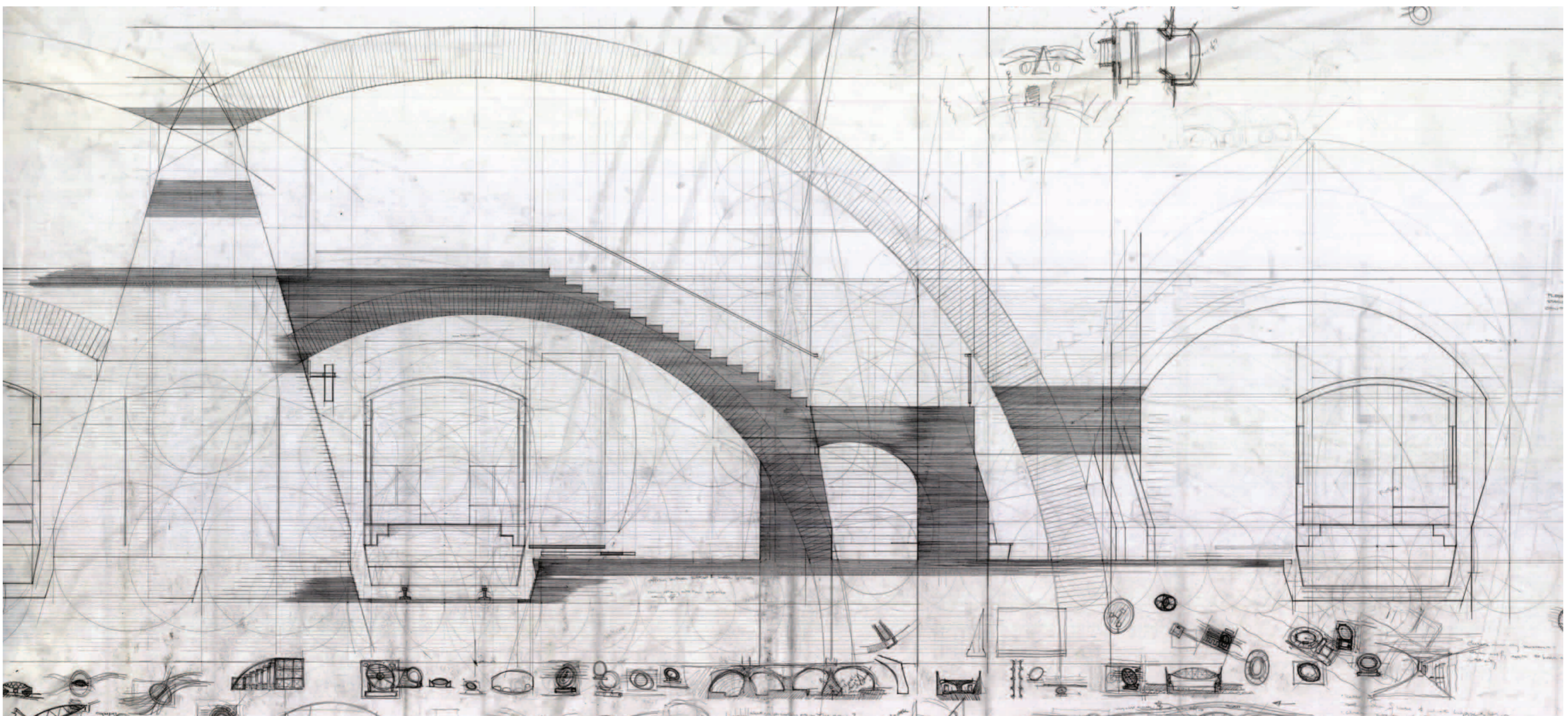
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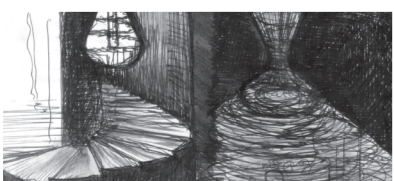
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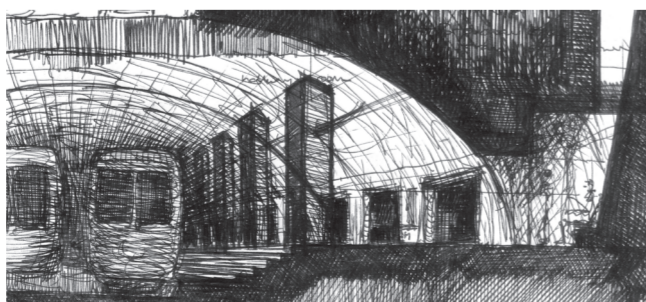
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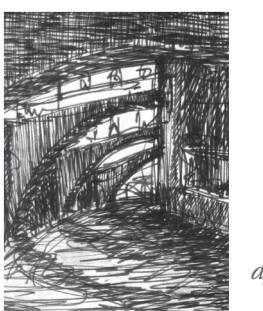
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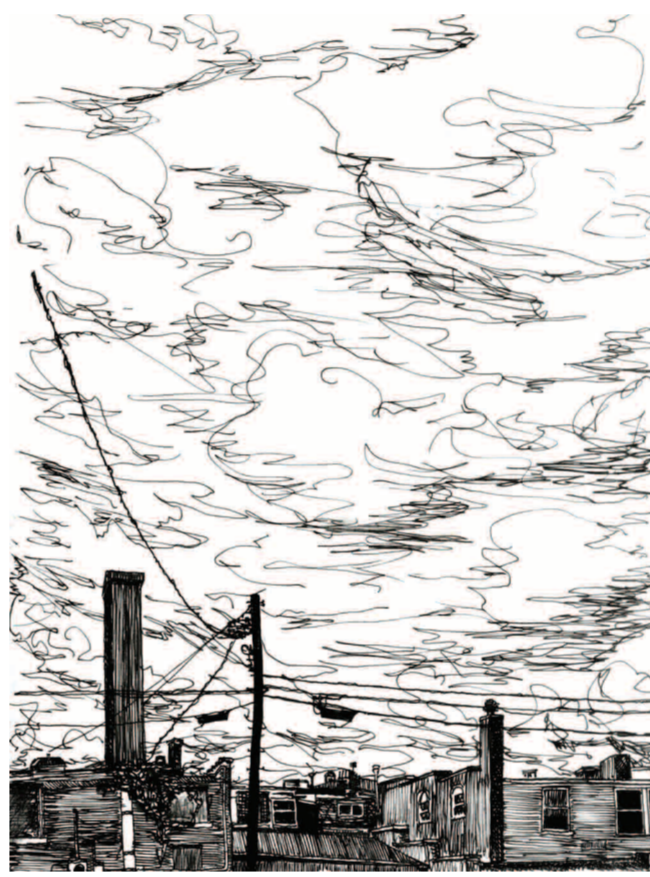
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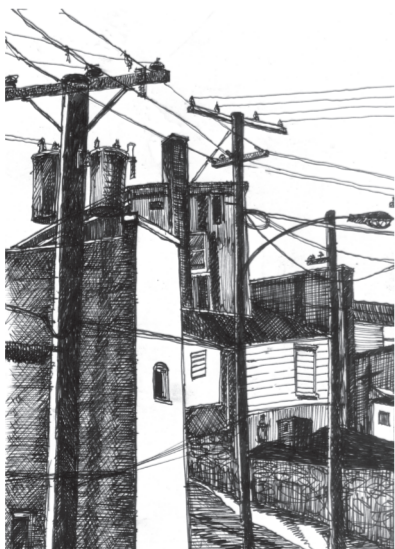
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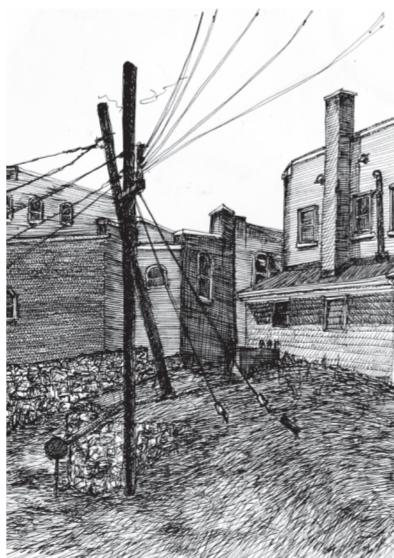
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