

ARCH1101

THE STAIR

THE STAIR

STUDIO TASK
STAIRS
STUDENT WORK

TODAY IN STUDIO

Note: Throughout the class students will be demonstrating modeling techniques using Sketchup.

- 1.** Using the scheme you developed in SketchUp (and inspired by the stairs shown below) design two sets of stairs; one that goes from the above ground studio down to the showroom space and a second that comes from the below ground studio up to the showroom space.
- 2.** Represent each stair with at least 2 sections. Keep all the notes, details and sections relating to each stair on one pair of facing pages. Or on two screens if you are using an iPhone, iPad or similar device.
- 3.** In consultation with your tutor take another one of the sections created in the first studio session and design two sets of stairs for that scheme. Represent each of these new stairs with at least 2 sections.

By the end of the studio session you will have at least 8 sections (representing 4 sets of stairs).



ANDREW BARRY



RACHAEL WHITEREAD

STAIRS

Stairs are an interplay between form, material, structure and light. While primarily responsible for enabling transitions between vertically distributed spaces they can also activate a space through their sculptural presence. They are equally poetic and pragmatic.

The base component of a stair is called the tread. It is the (normally) horizontal element that you stand on. The vertical distance between each tread is called the riser. The riser might be physically present or not. The barrier to prevent someone falling off the stair or to assist them in climbing the stair is called the balustrade. Finally, some kind of structure is required to support the treads, risers and balustrades. In the examples below some of the the stairs are supported by central beam, or two beams (one on each edge), or they are cantilevered from the adjacent wall ... or supported by a structural balustrade.

When you consider the stairs shown below look for the components described above and try to imagine what the designer was intending by expressing them in the way they have.

Discuss with your classmates or your tutor to see if they come to a similar, complimentary or contrasting conclusion.

CATEGORIES

A note on how the stairs below are categorized:

The stairs shown below are grouped into several different categories. As is the case with any classification system there is always a little room for negotiation; in other words, the stairs below might fit in more than one category depending on how you define it. You should think about your own categories of stairs and start collecting examples (through images, drawings, models and animations/video) that inspire you.

The online social platform Pinterest is a good option for doing this.

LIGHT STAIRS











STRUCTURAL BALUSTRADE



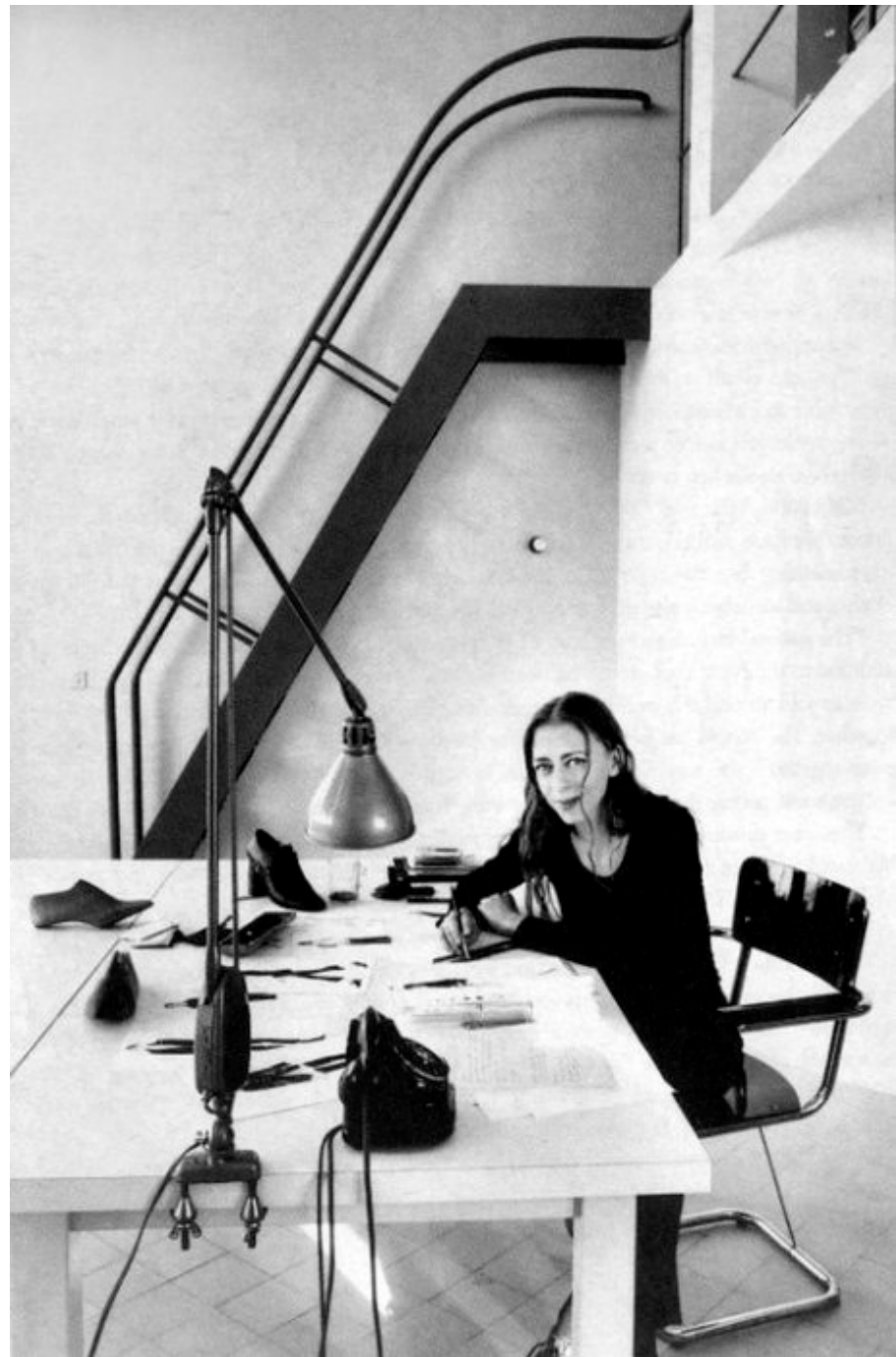




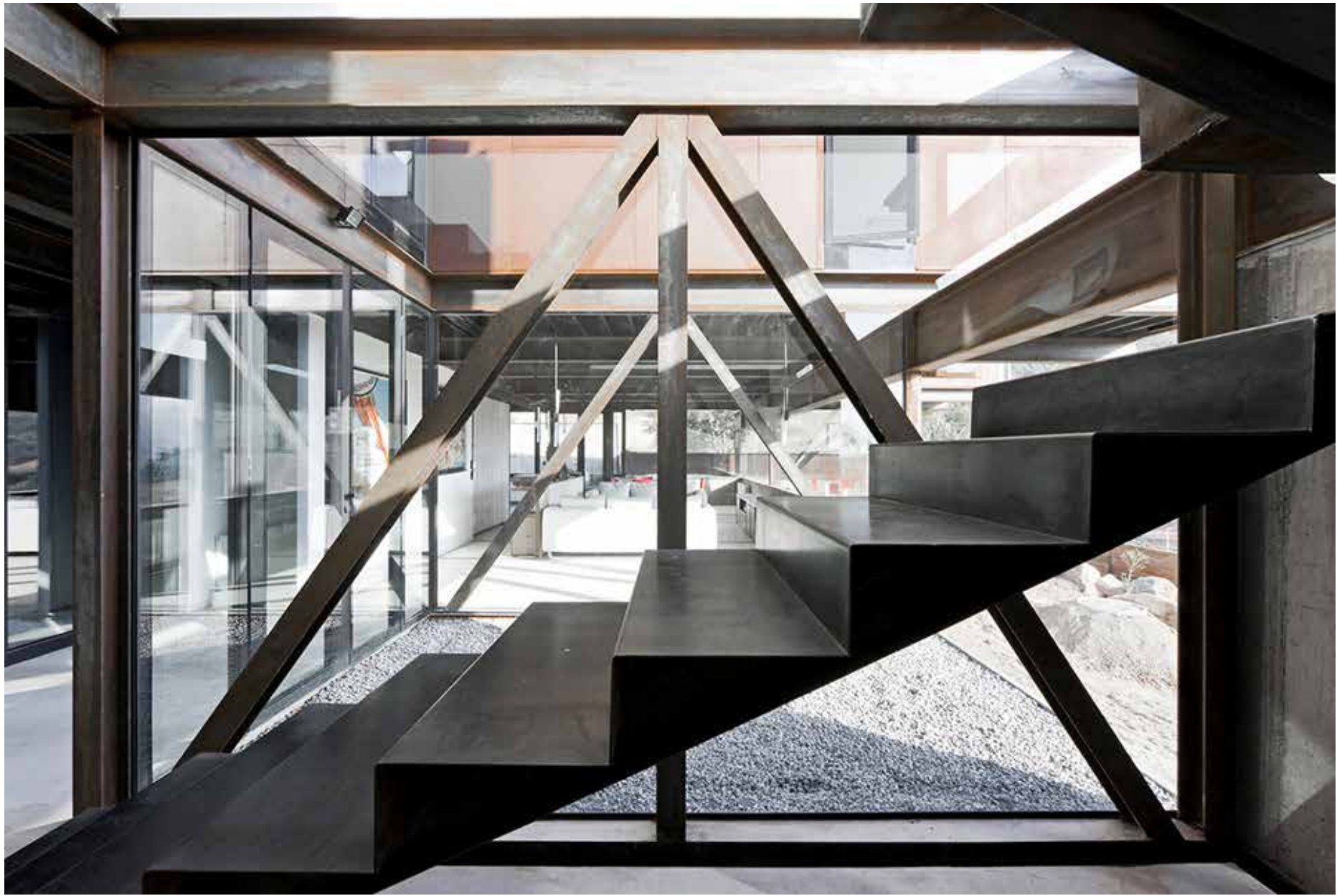
CENTRE POMPIDOU, PARIS



VILLA VPRO, MVRDV











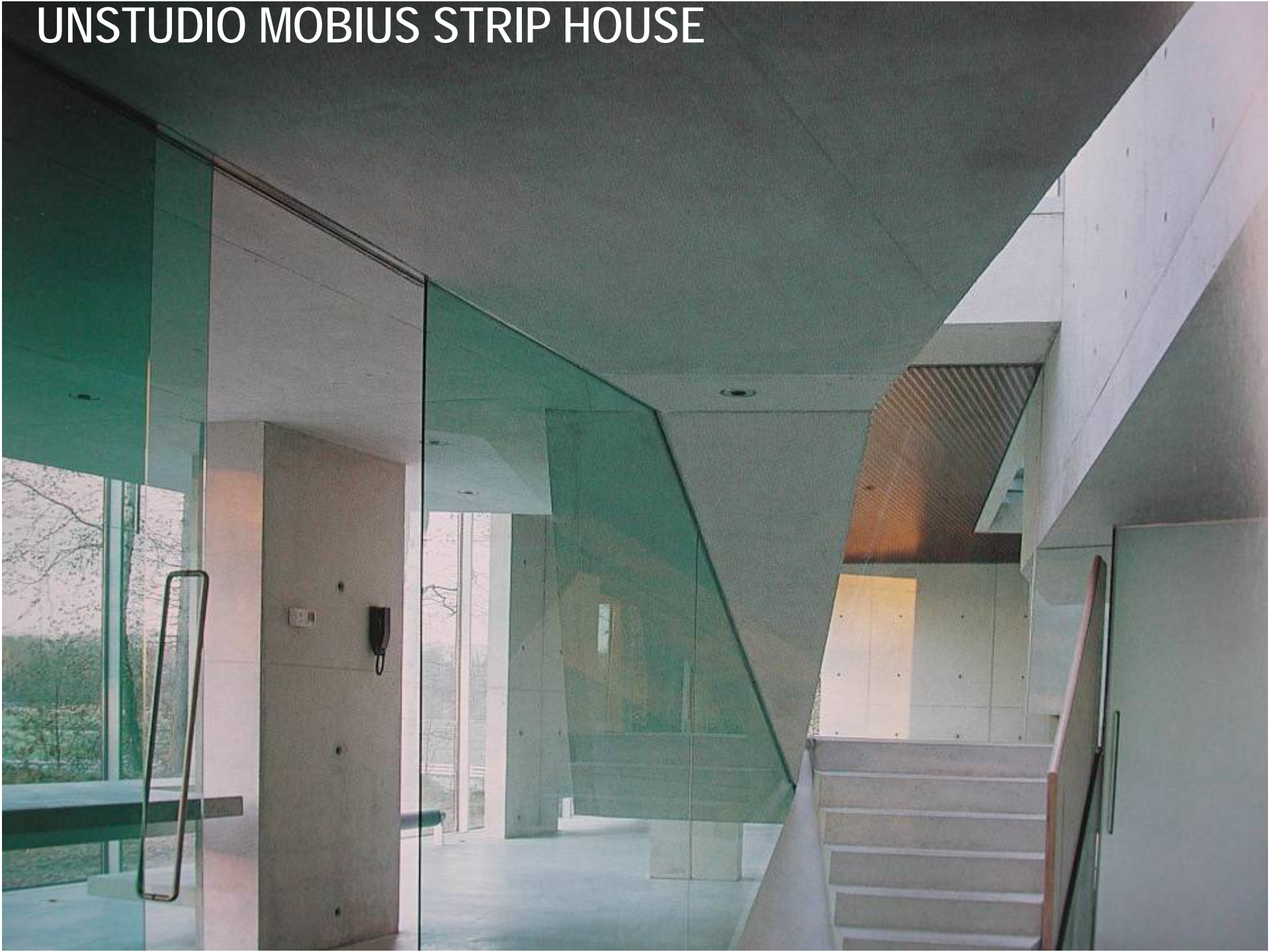


HEAVY STAIRS





UNSTUDIO MOBIUS STRIP HOUSE









LUIS BARRAGAN



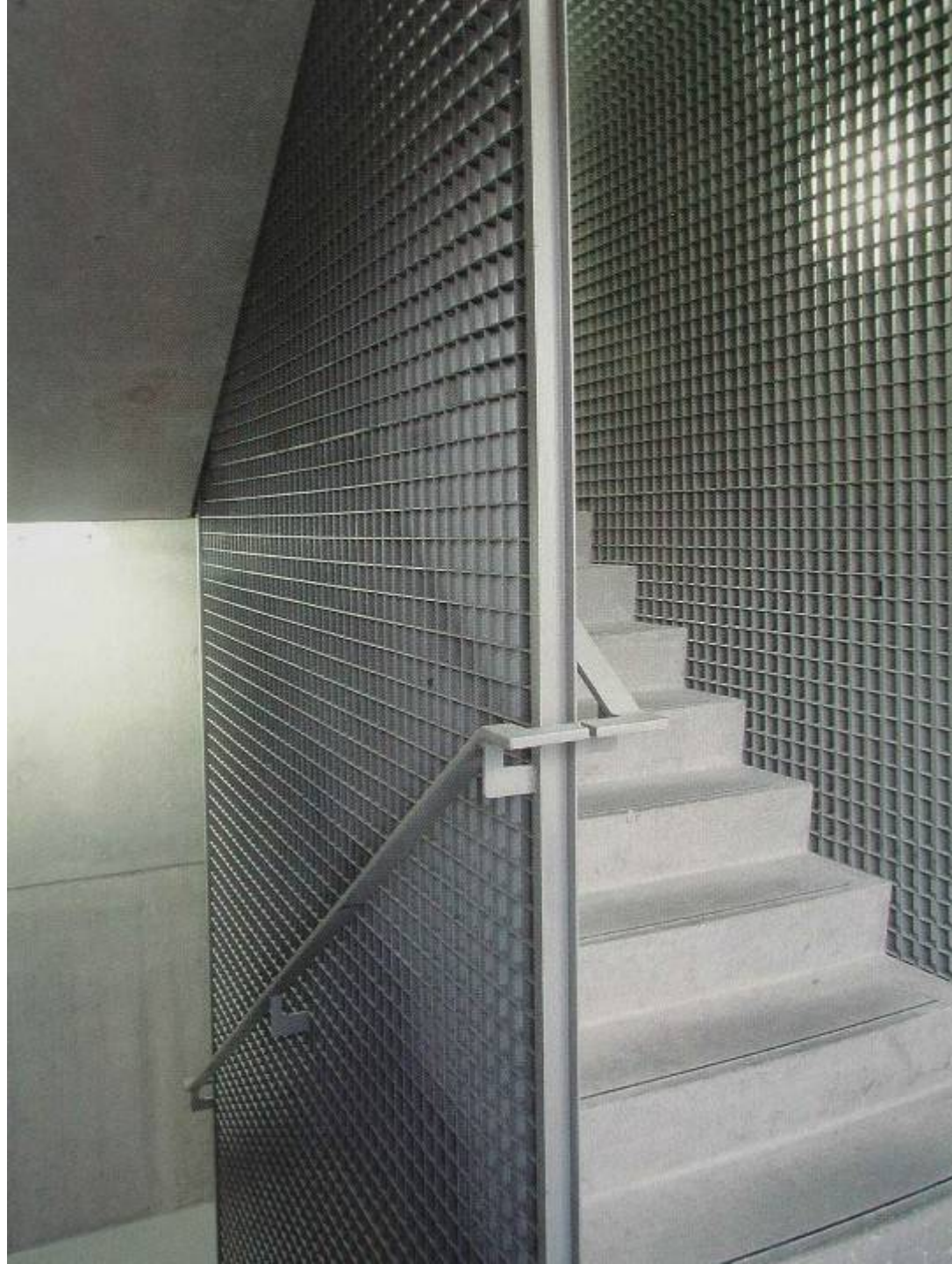




DANIEL LIBESKIND: JEWISH MUSEUM









PHILLIPPE STARK

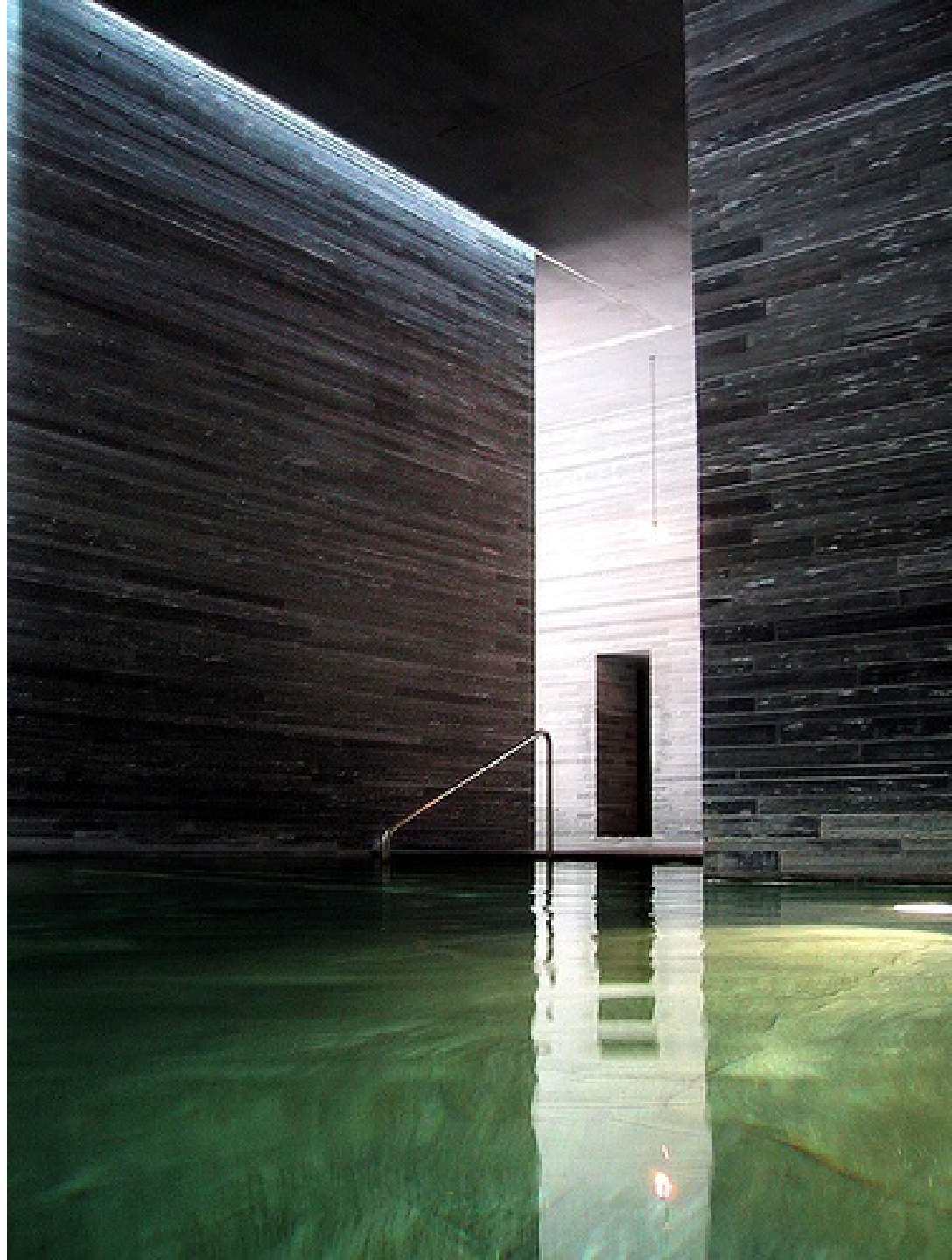


CARLO SCARPA





PETER ZUMTHOR
THERMAL BATHS, VALS



CANTILEVERED STAIRS

can·ti·le·ver [kan-tl-ee-ver]

Noun

1. Any rigid structural member projecting from a vertical support, especially one in which the projection is great in relation to the depth, so that the upper part is in tension and the lower part in compression.
2. Building Trades, Civil Engineering: any rigid construction extending horizontally well beyond its vertical support, used as a structural element of a bridge (cantilever bridge) building foundation, etc.
3. Aeronautics: A form of wing construction in which no external bracing is used.
4. Architecture: A bracket for supporting a balcony, cornice, etc.

World English Dictionary (Collins)

1. A beam, girder, or structural framework that is fixed at one end and is free at the other





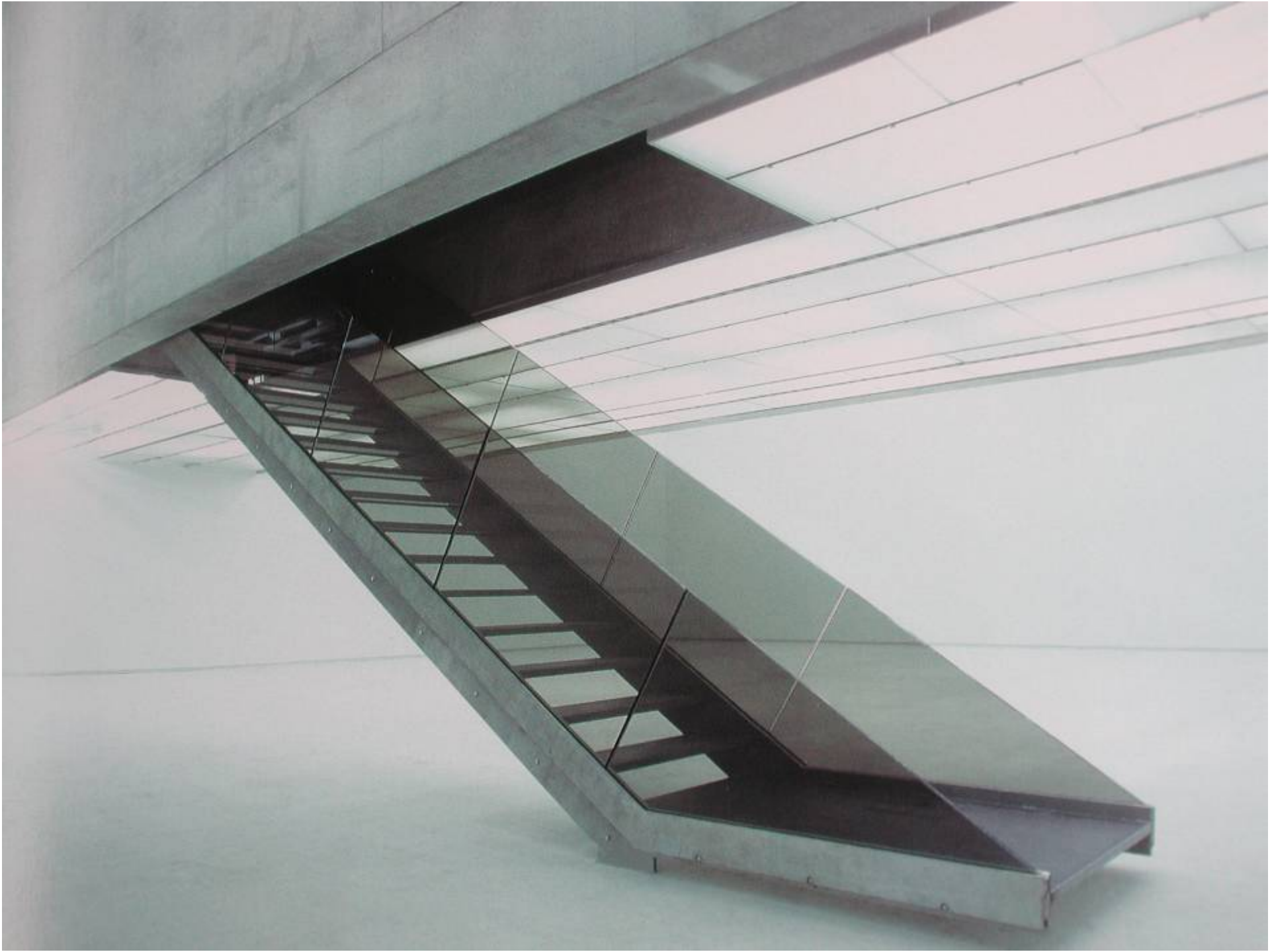








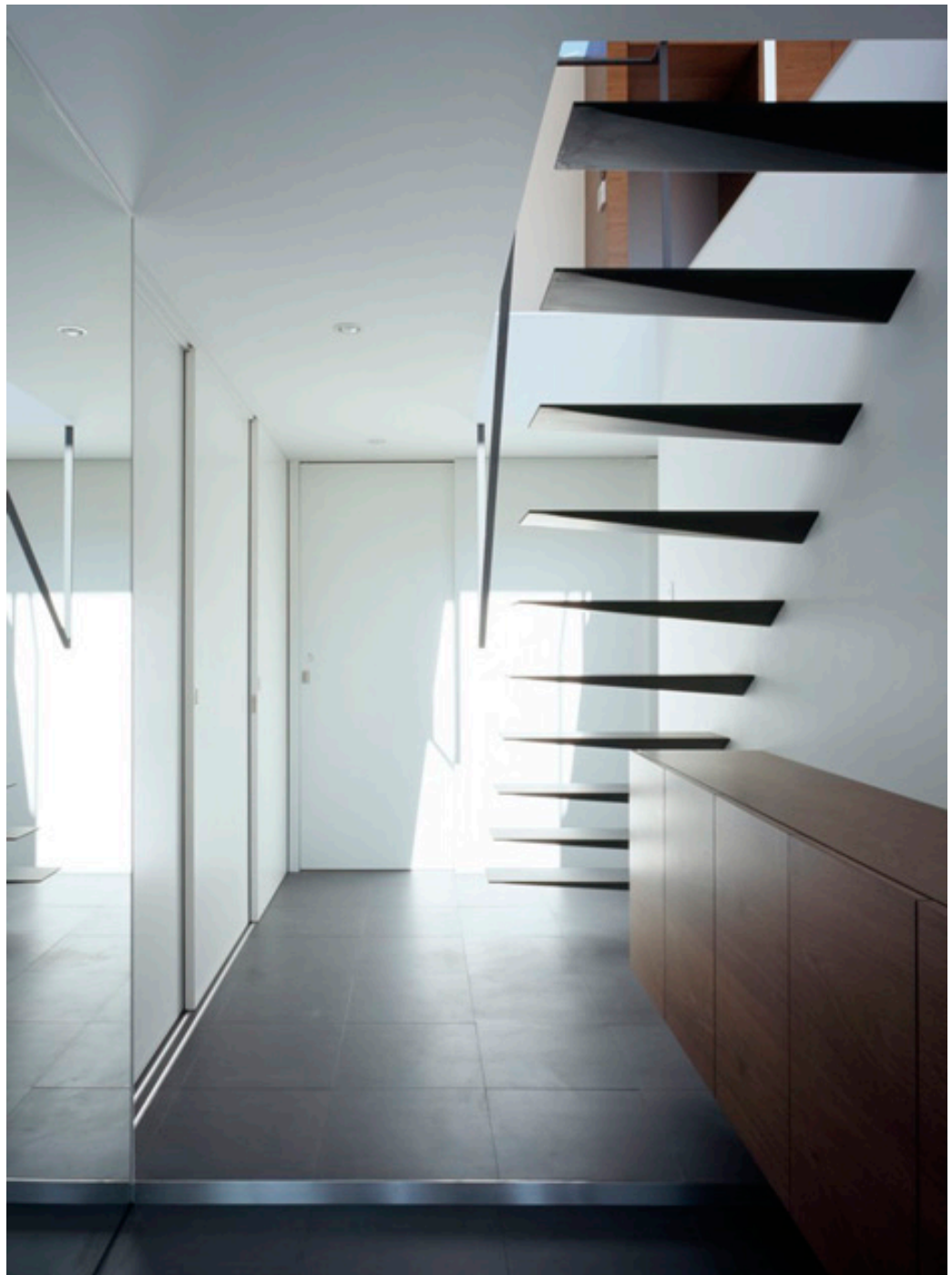
















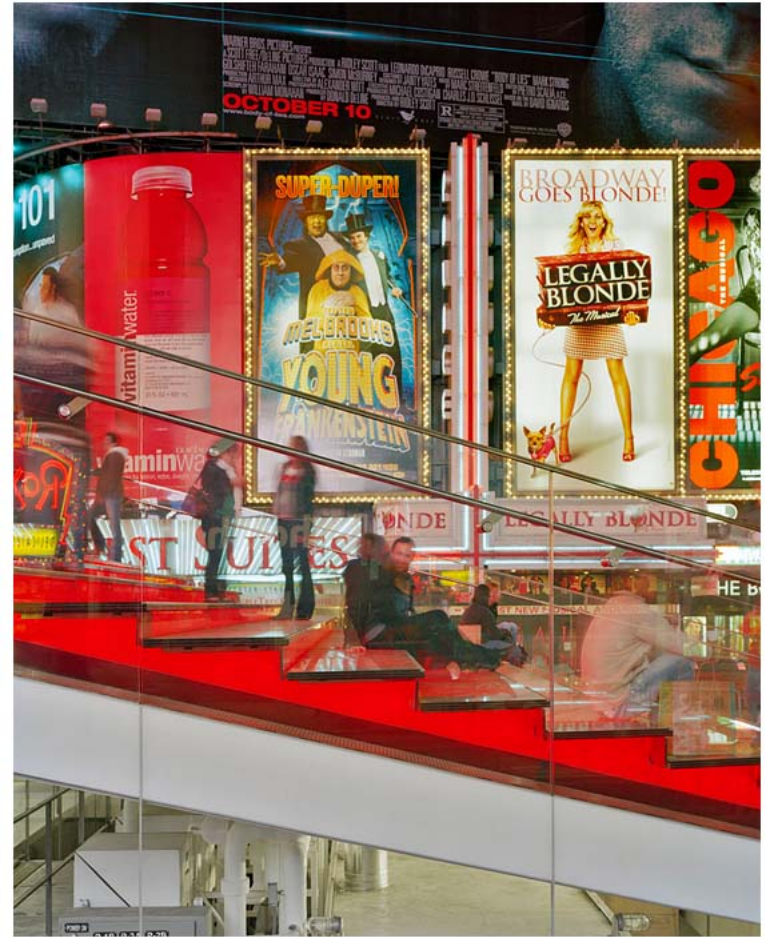
OUTSIDE STAIRS



PERKINS EASTMAN. NYC + John Choi and Tai Ropiha. Sydney



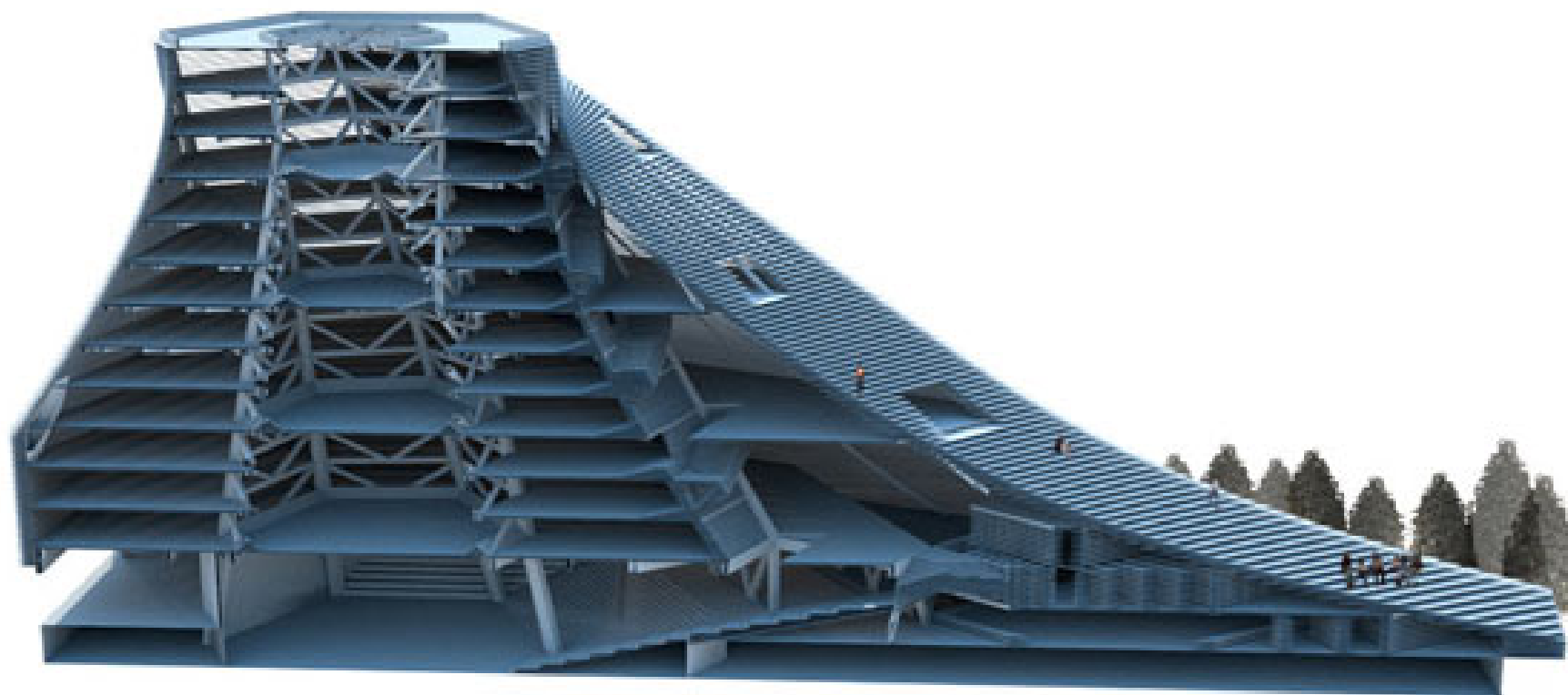
TROY DONOVAN



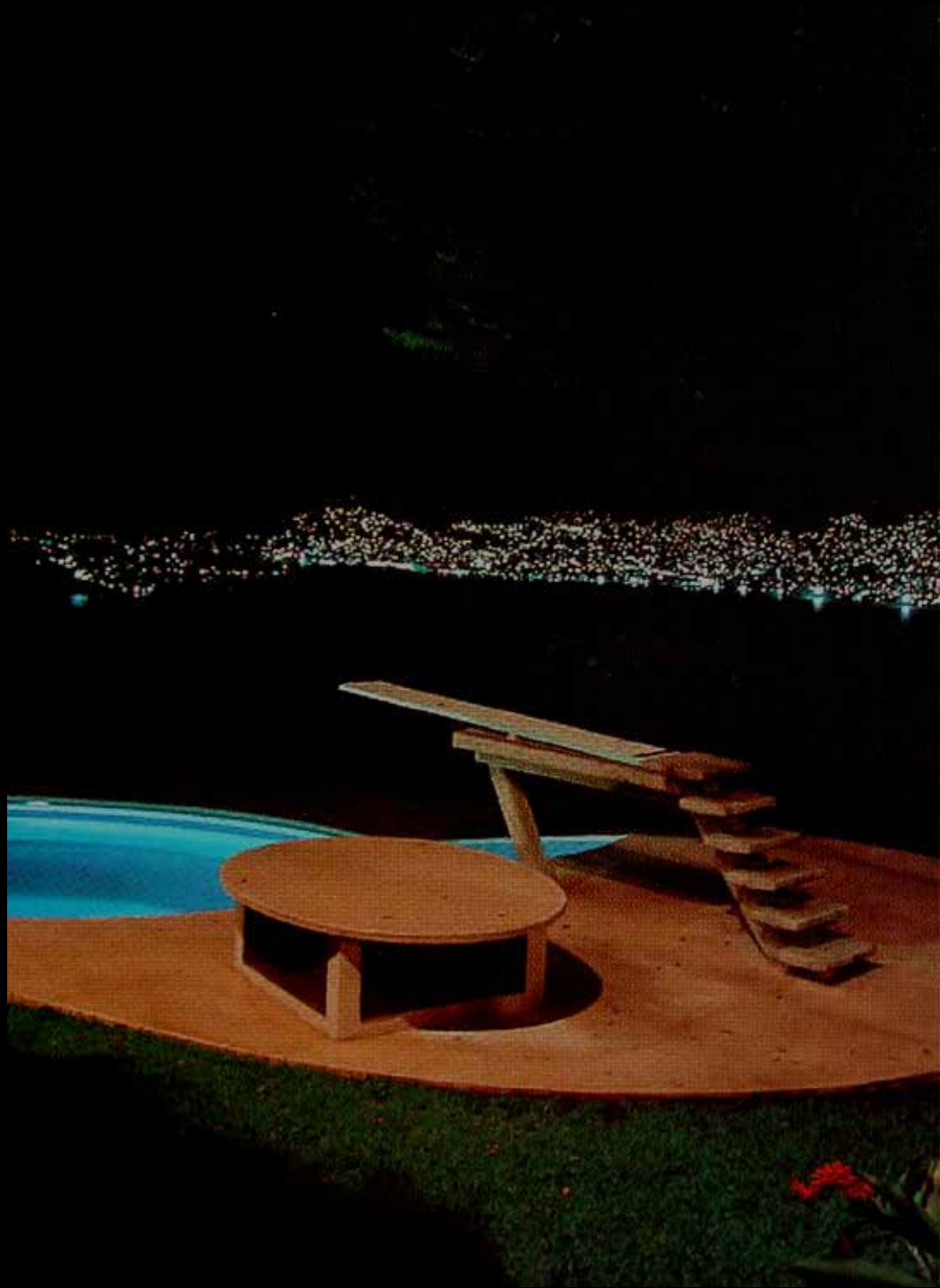


DETAILS





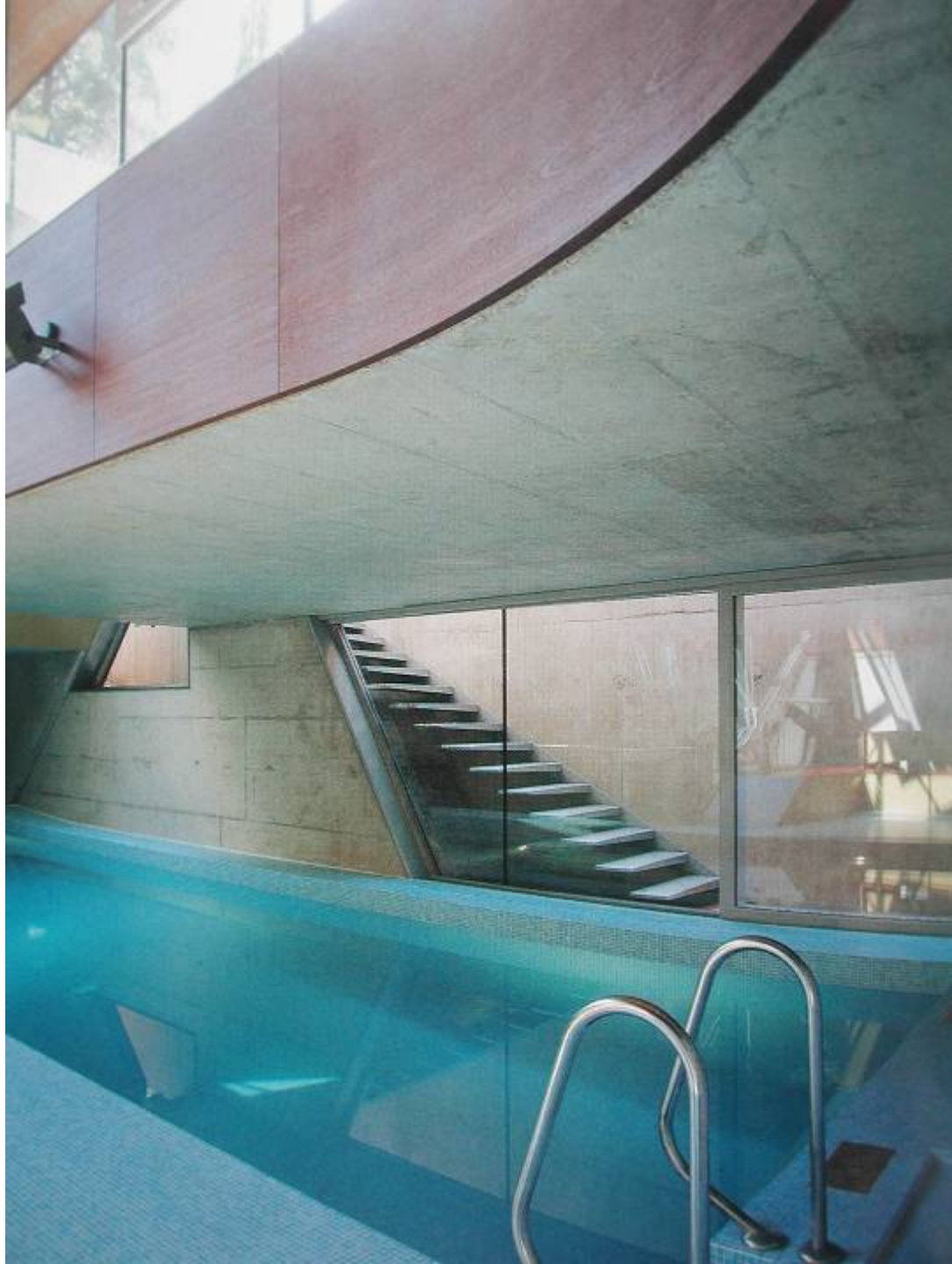




LAKE COMO. ITALY











HOUSE ON MYKONOS. MARC CORBIAU







GANGES RIVER. INDIA











LE CORBUSIER. CHANDIGARH



ROMAN RUINS. BATH. ENGLAND



CARLO SCARPA





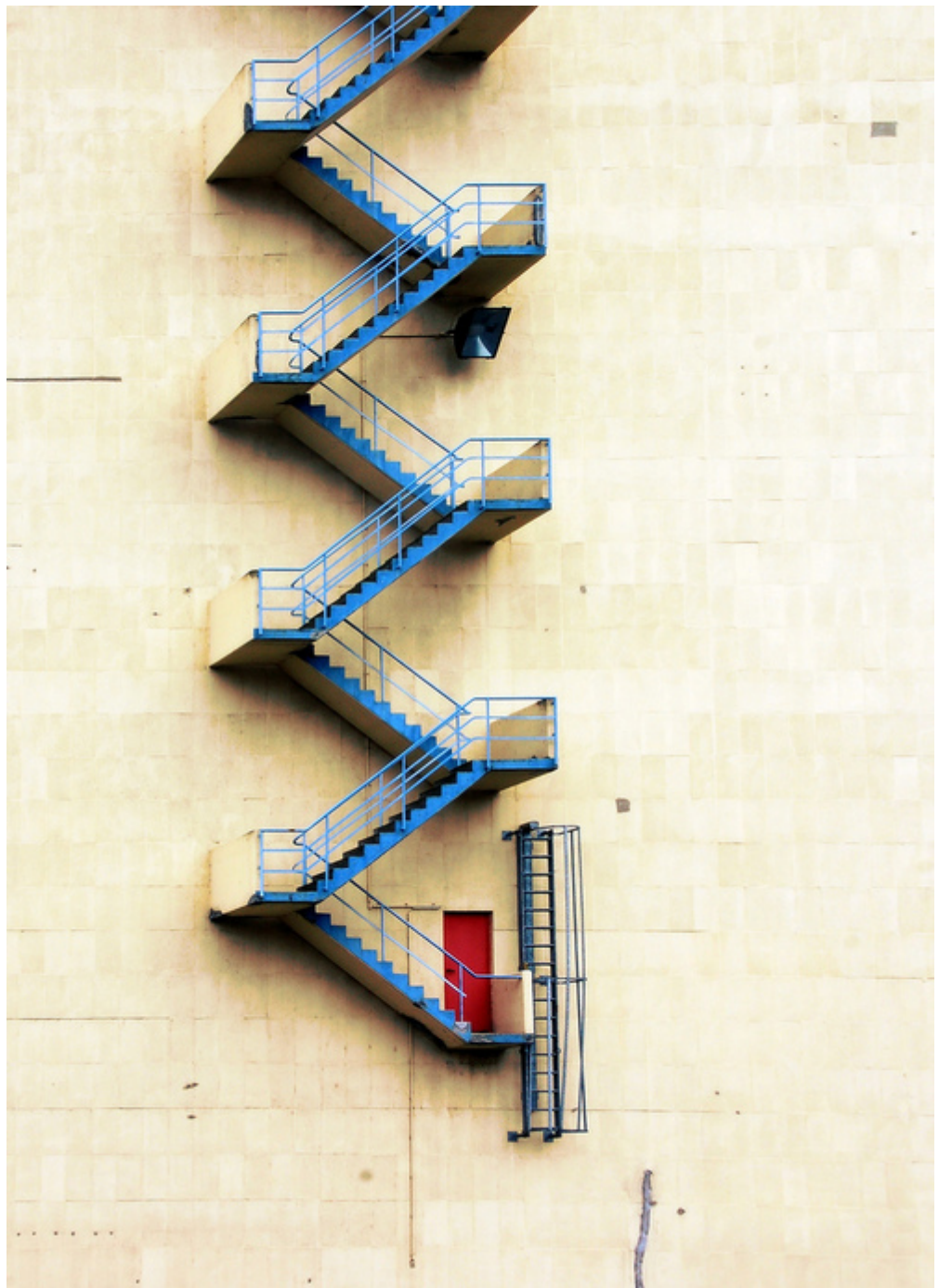


OPERA HOUSE. SYDNEY

























SPIRAL STAIRS

**CASA ROTA
MANUEL OCANA
ARQUITECTOS**











HERZOG AND DE MEURON



STEVEN HOLL

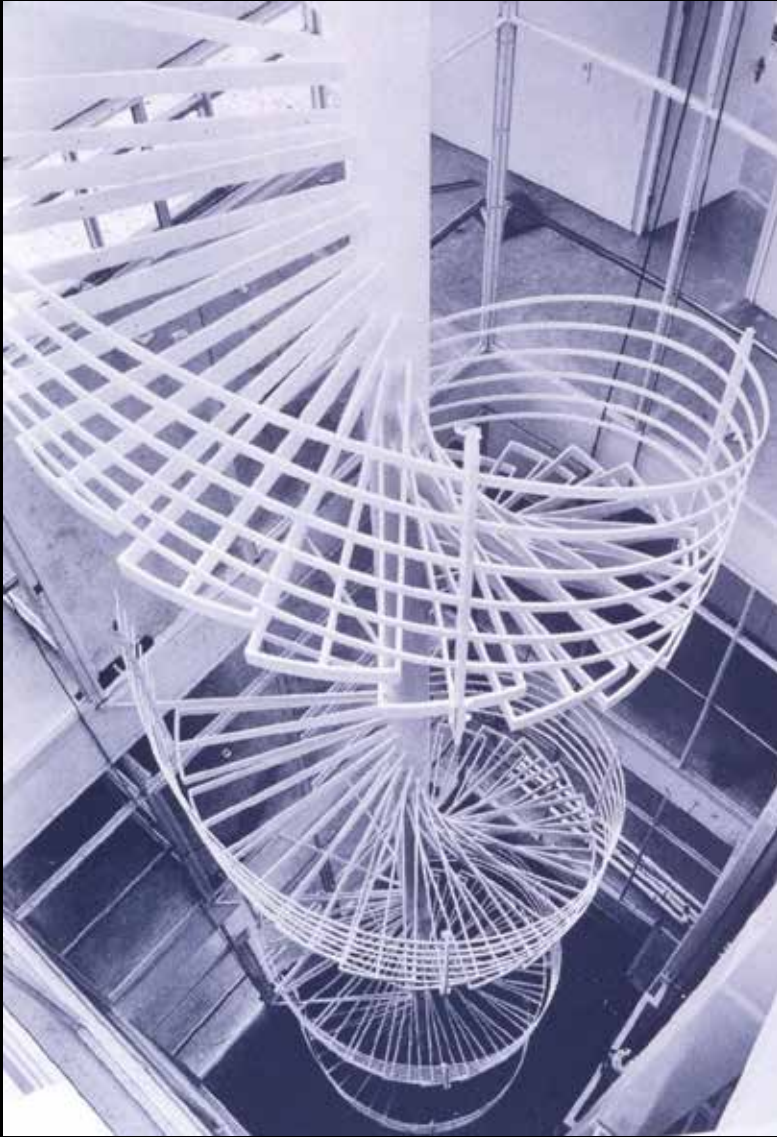




TATE MODERN
LONDON







**HOUSE AT BORDEAUX.
REM KOOLHAAS**

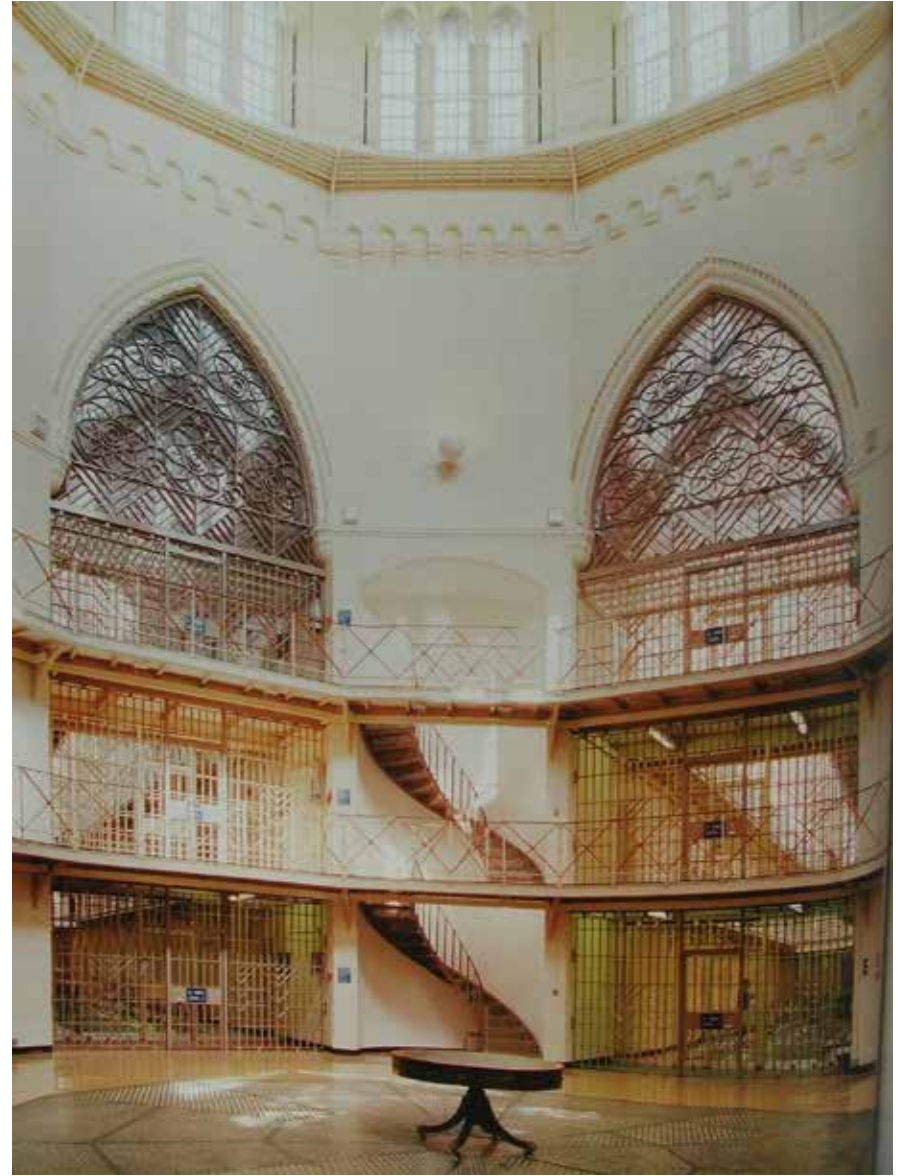
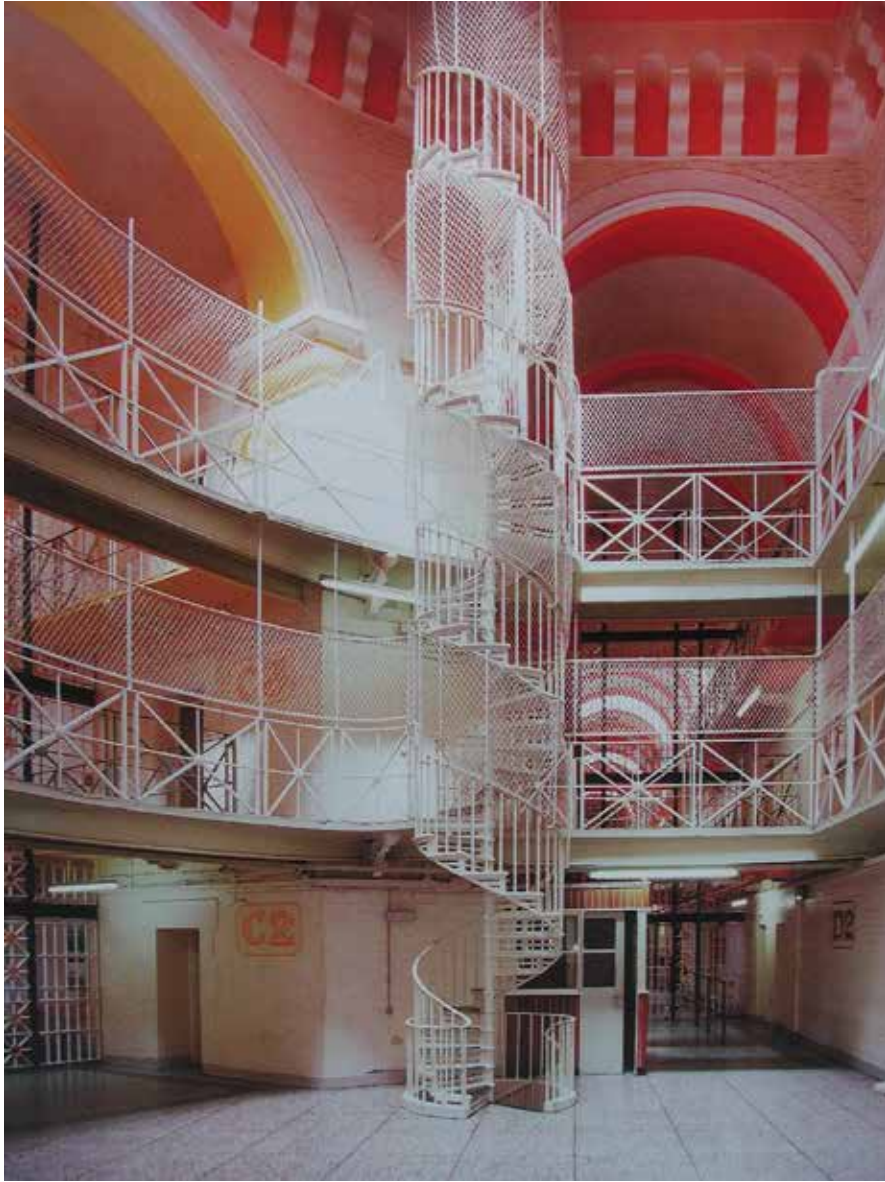




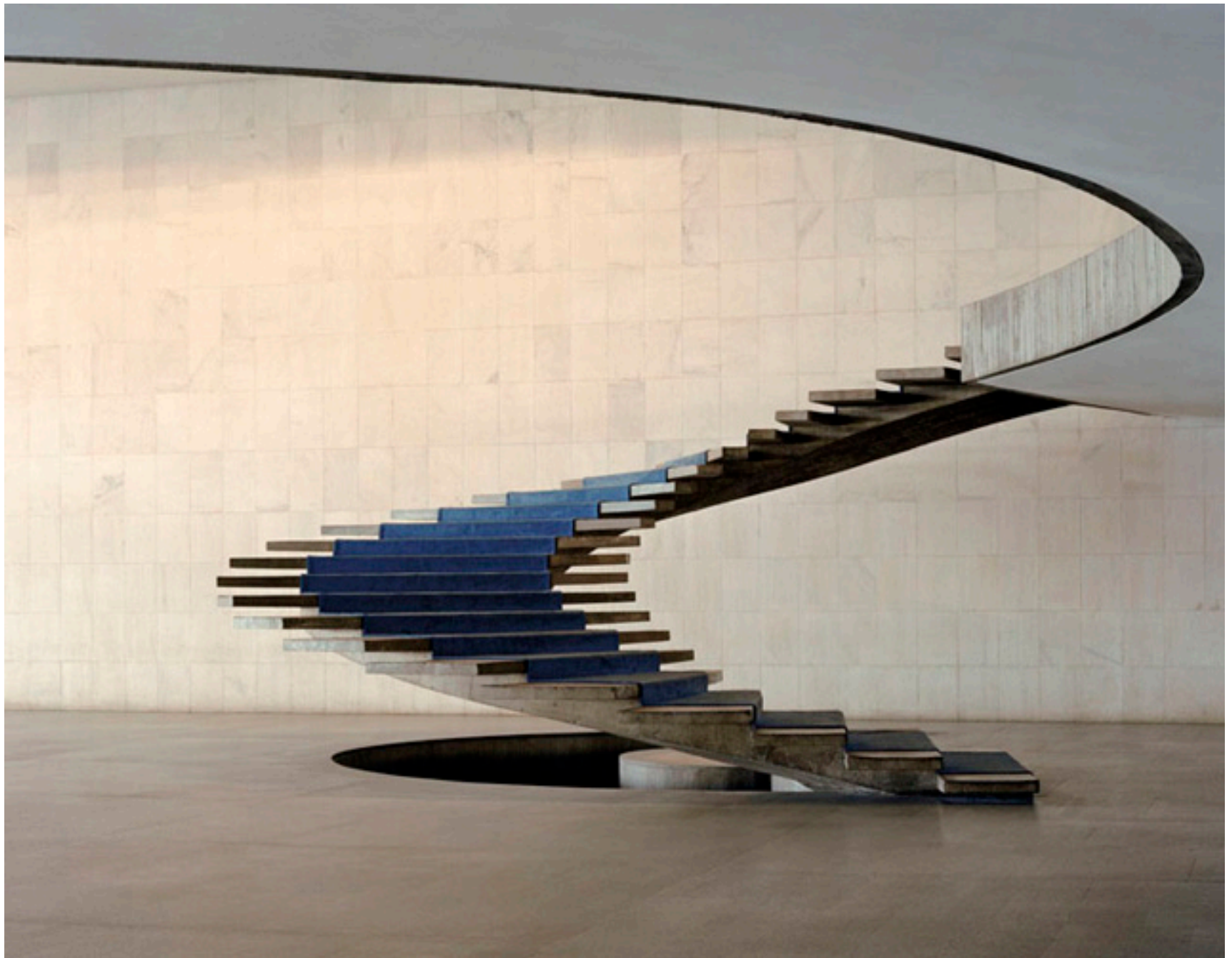
TETSUYA NAKAZONO

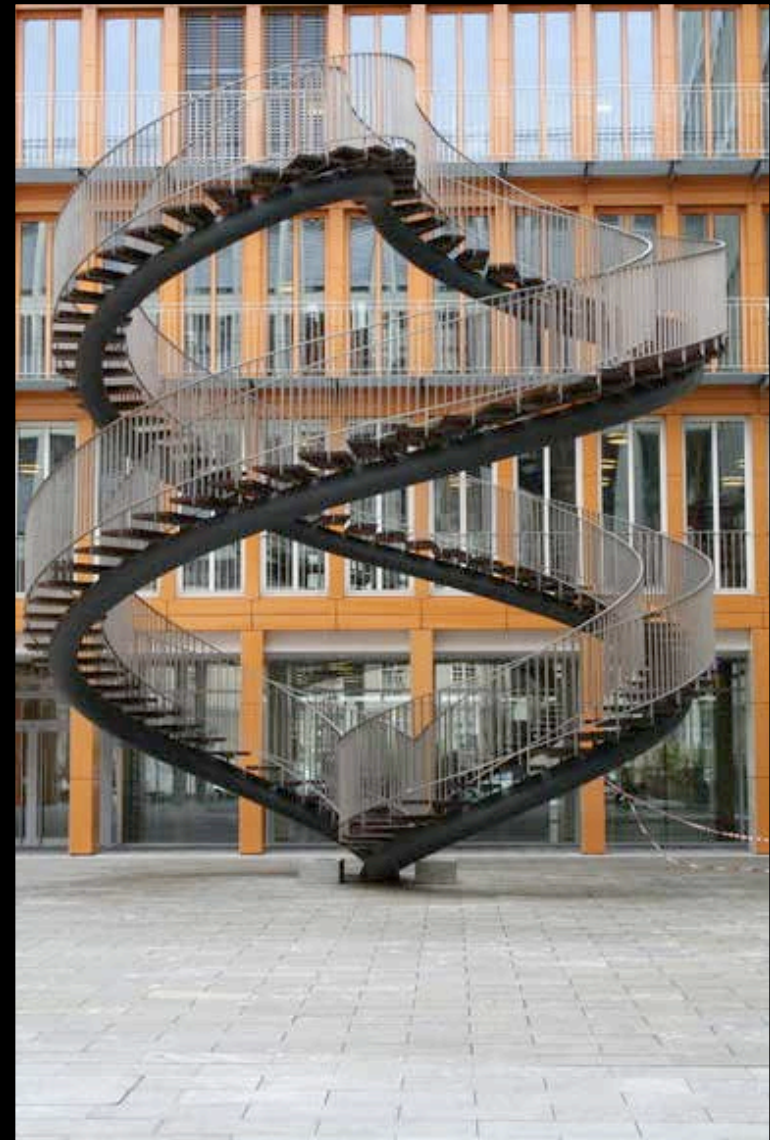


TETSUYA NAKAZONO









OLAFUR ELIASSON. MUNICH







ROSS LOVEGROVE. DNA STAIRCASE.

SHOP STAIRS



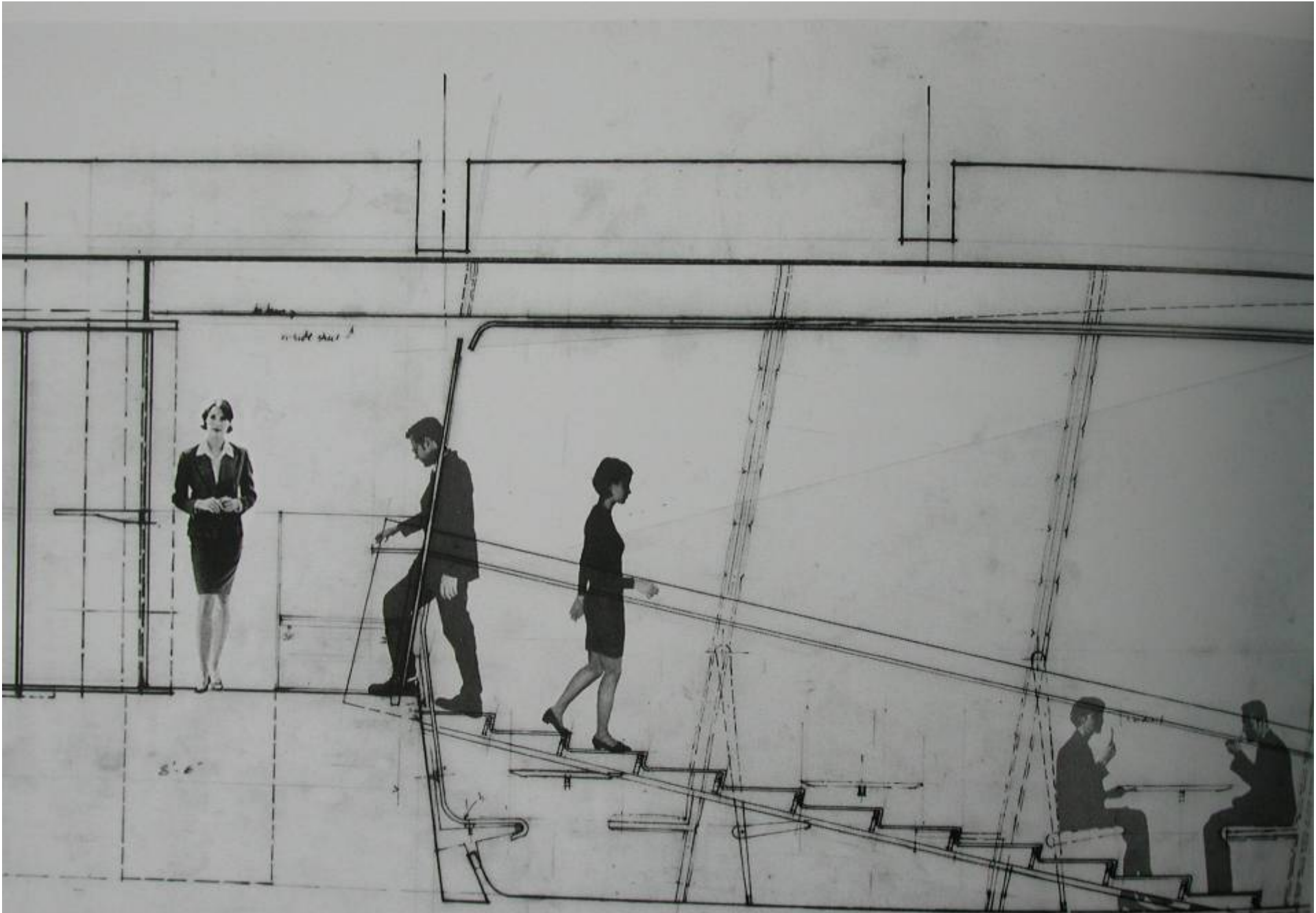
REM KOOLHAAS. OMA. PRADA. NYC











DILLER + SCOFIDIO



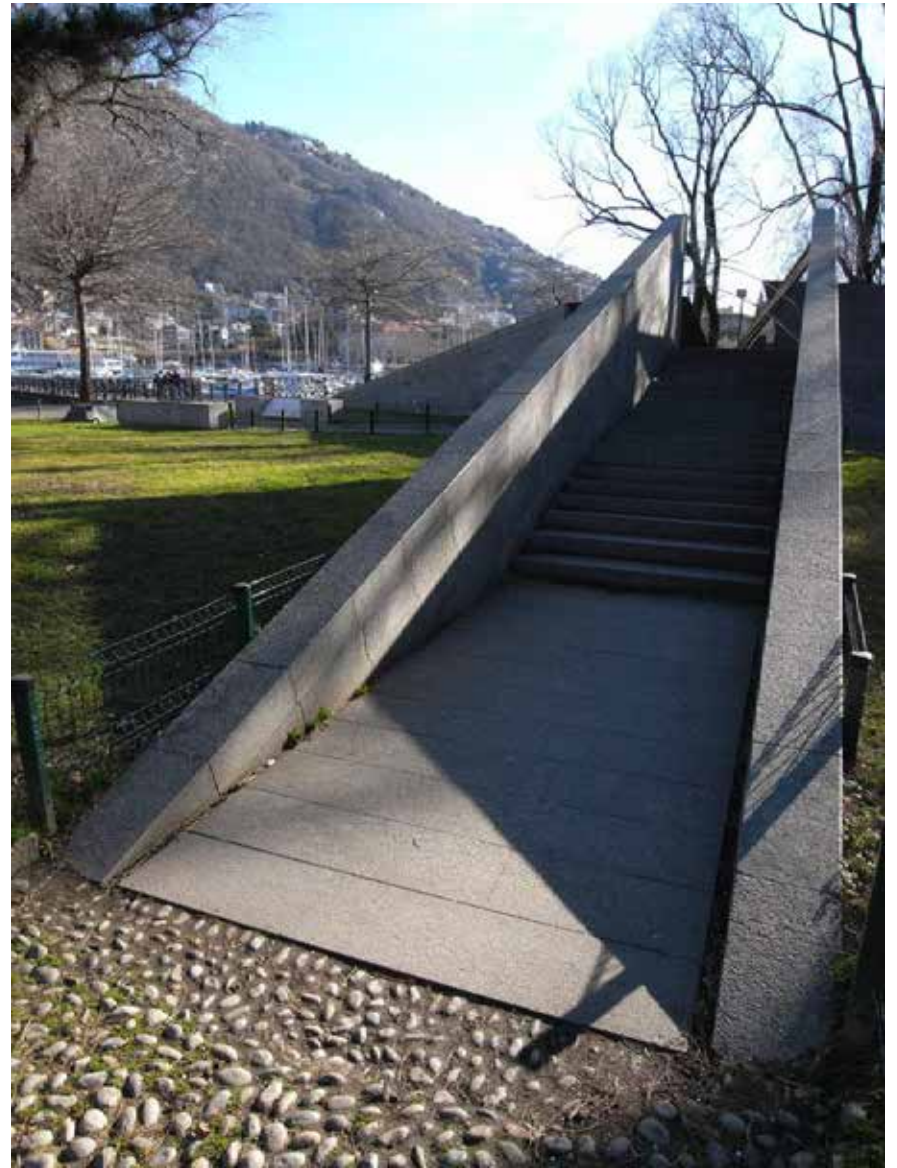


ZAHA HADID

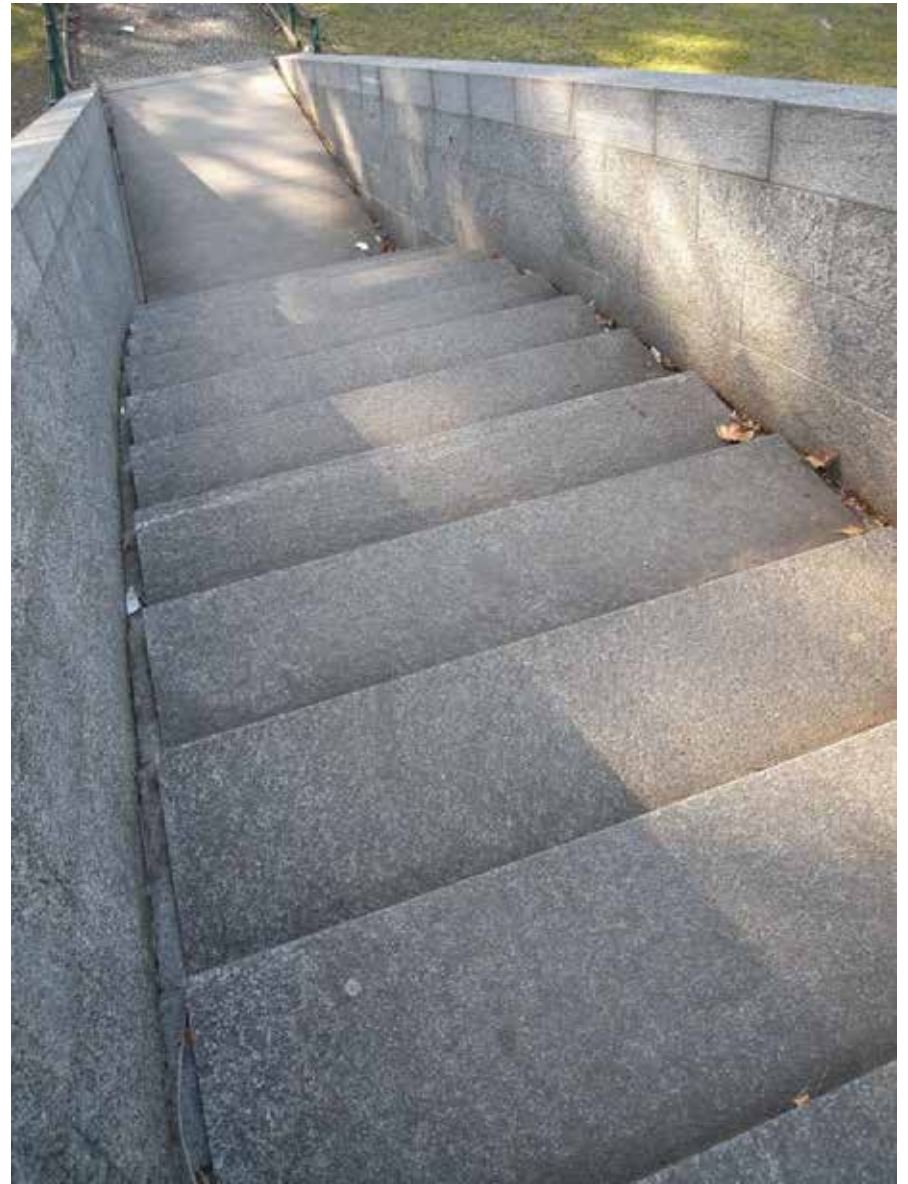
MONUMENTAL STAIRS



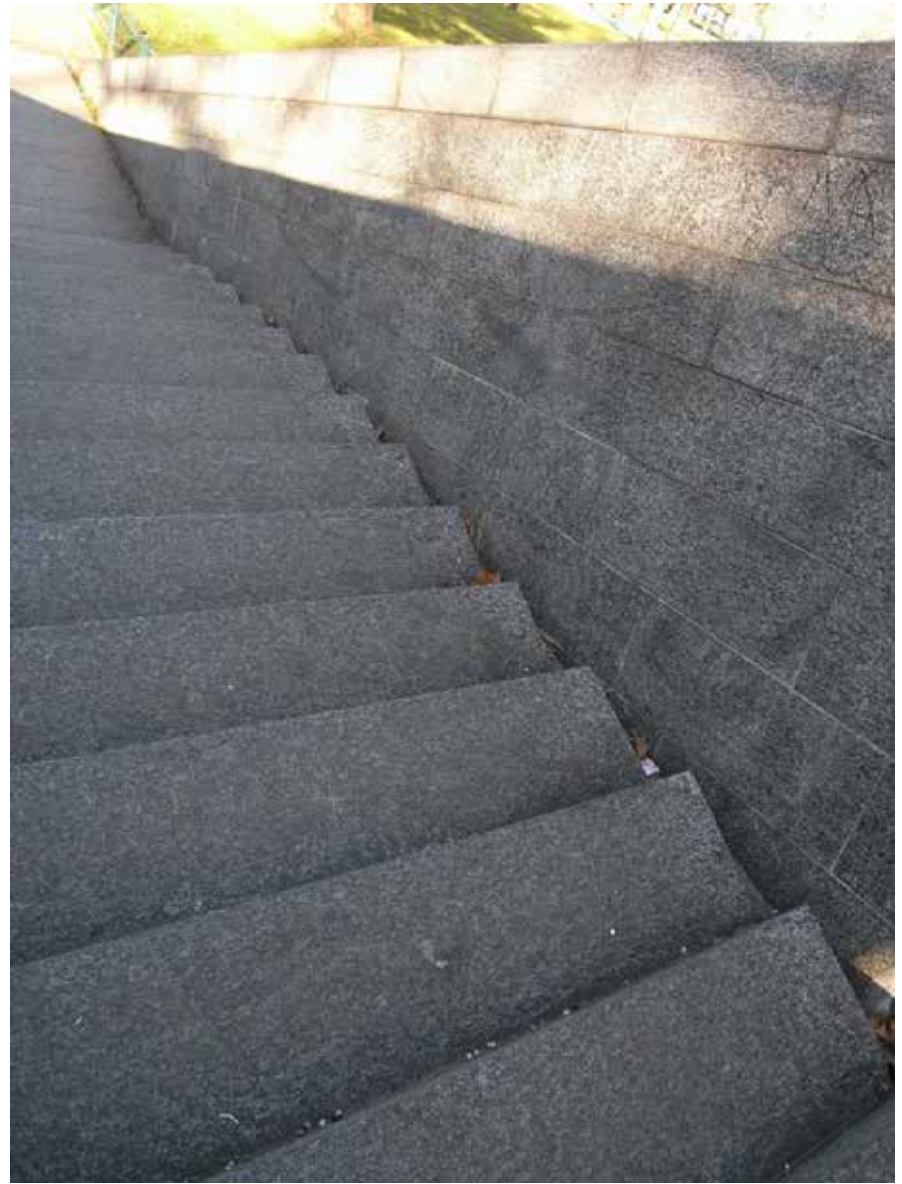
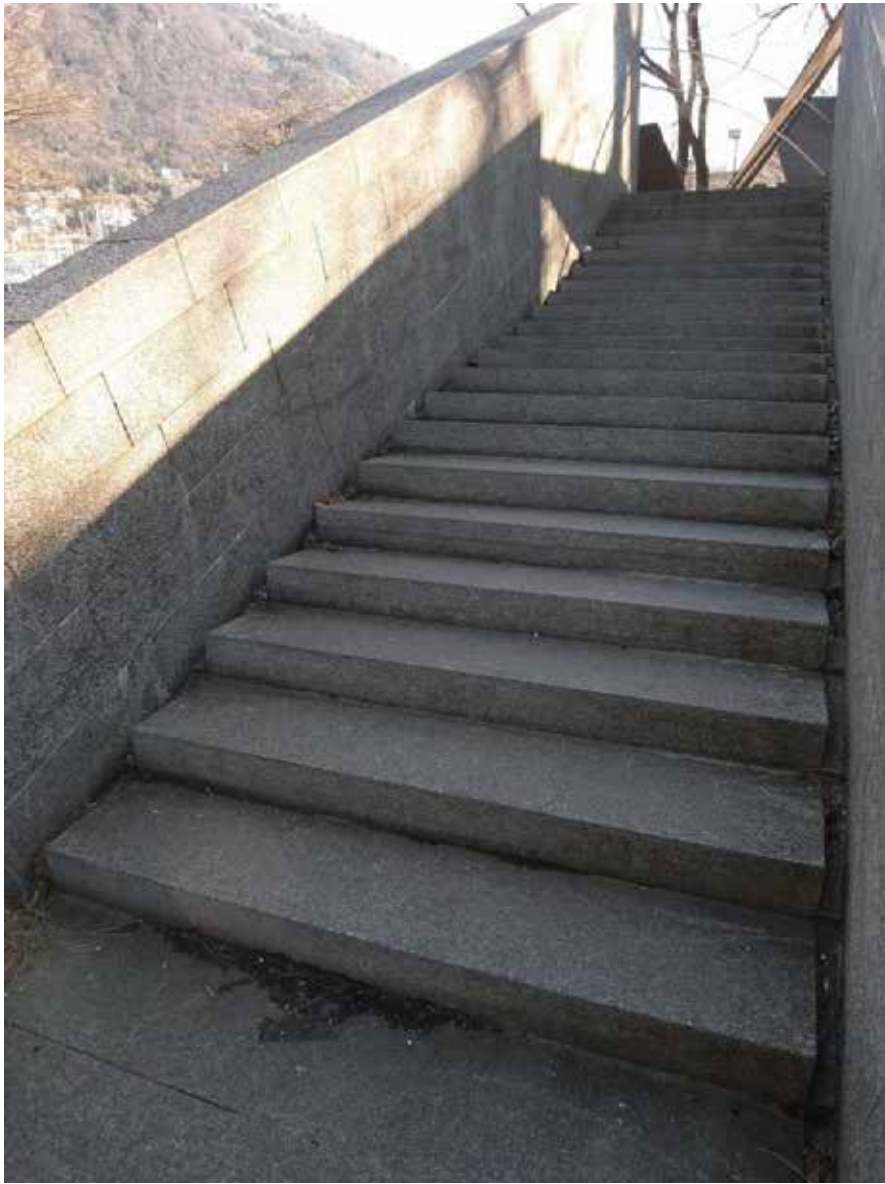
LAKE COMO. ITALY



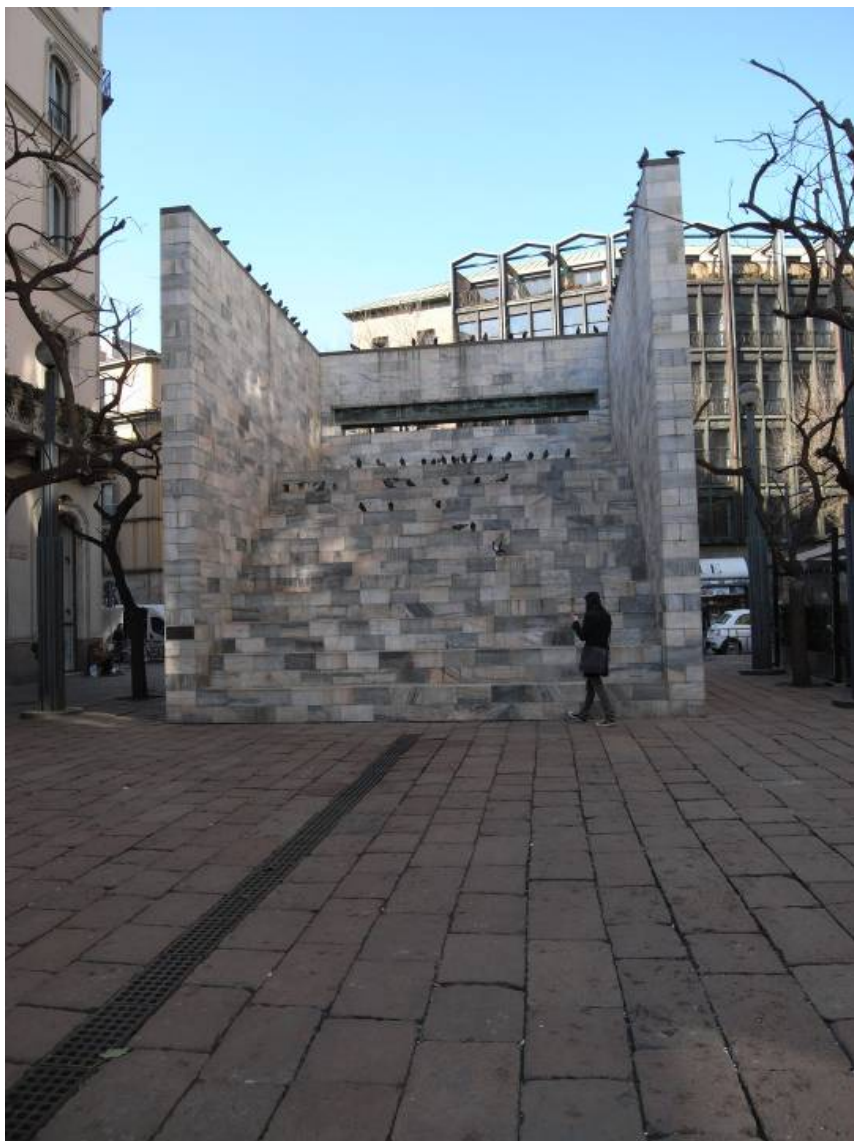
NOTE THE UNEVEN TREADS AND RISERS IN THESE STAIRS



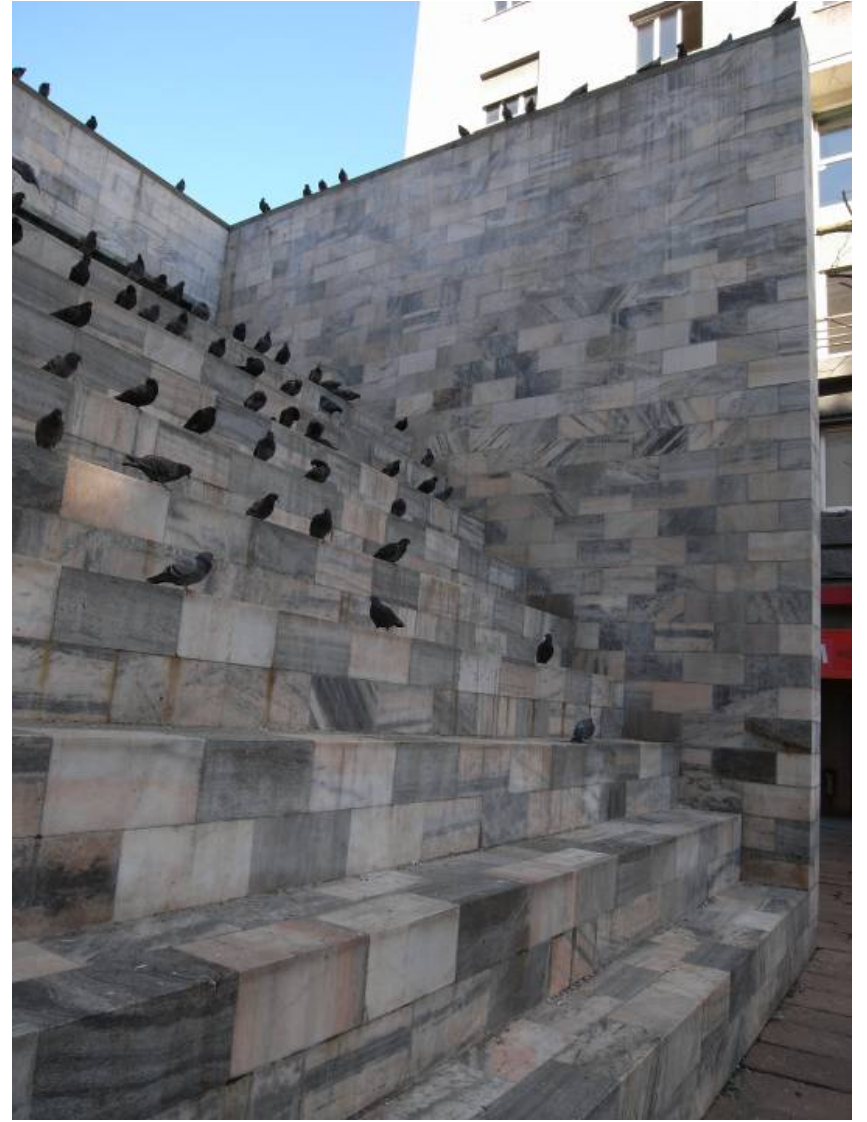
THIS MONUMENT IS A REFLECTION ON WAR.





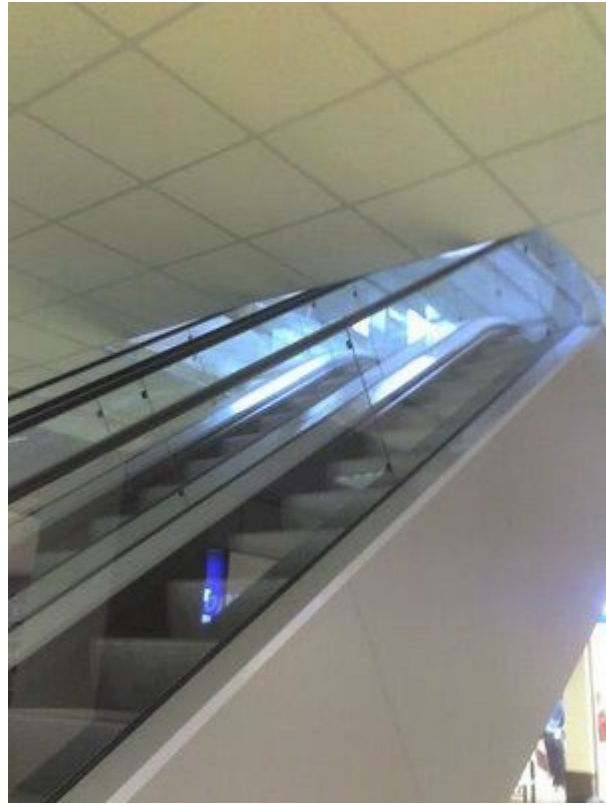


ALDO ROSSI. MILAN





FAILURE





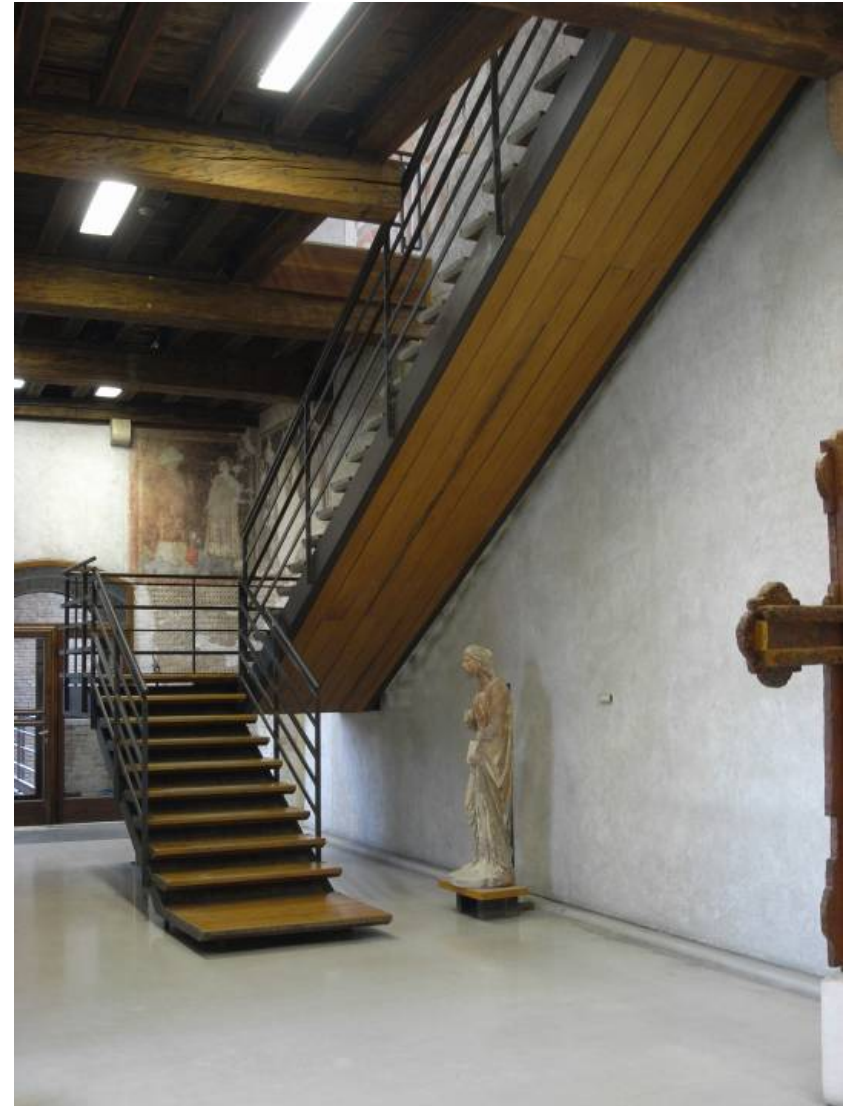
CASTLEVECCHIO

CASE STUDY

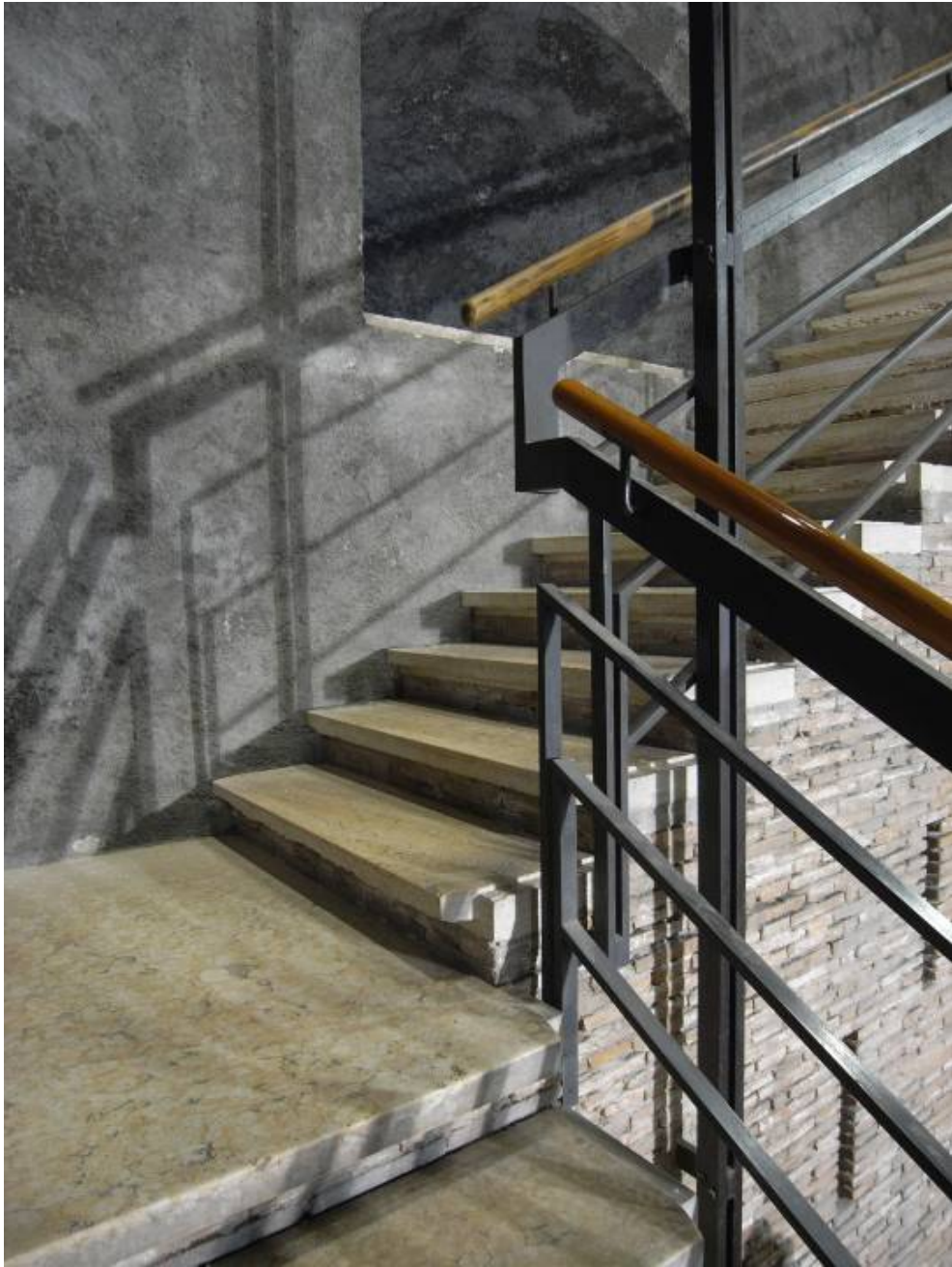
CARLO SCARPA



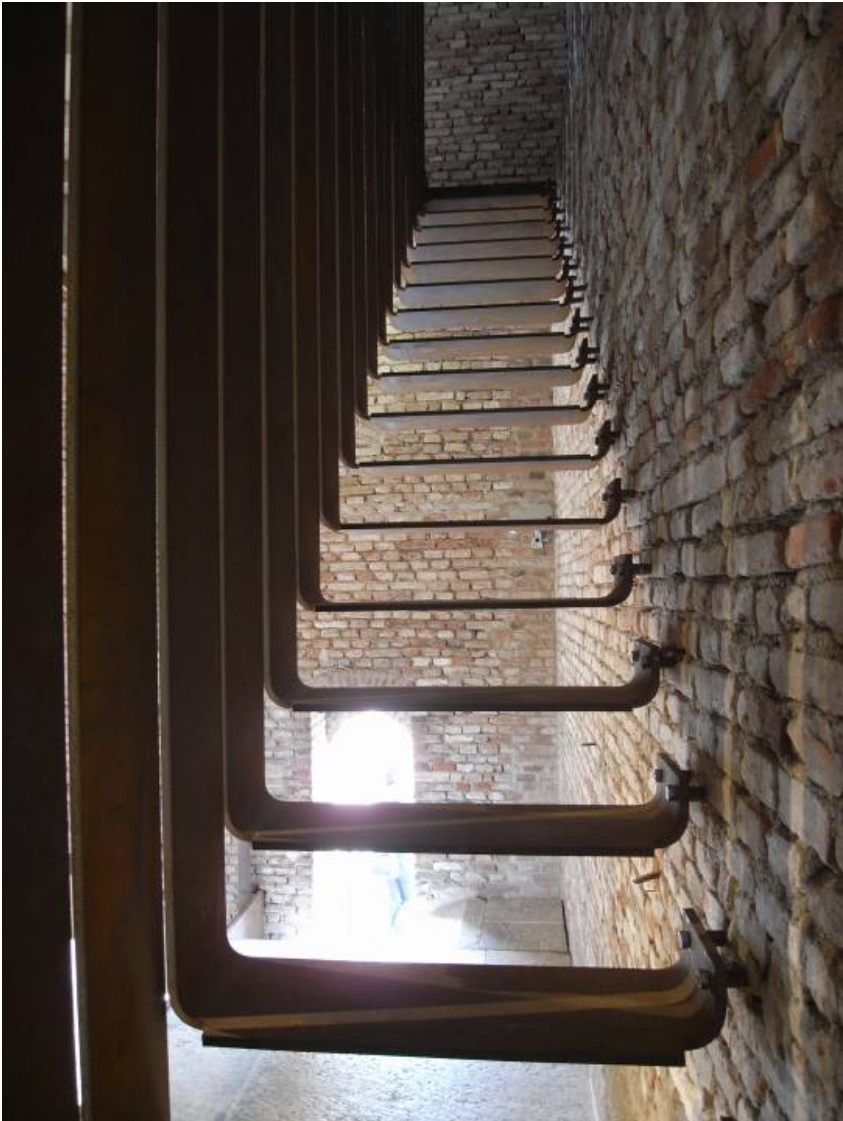
























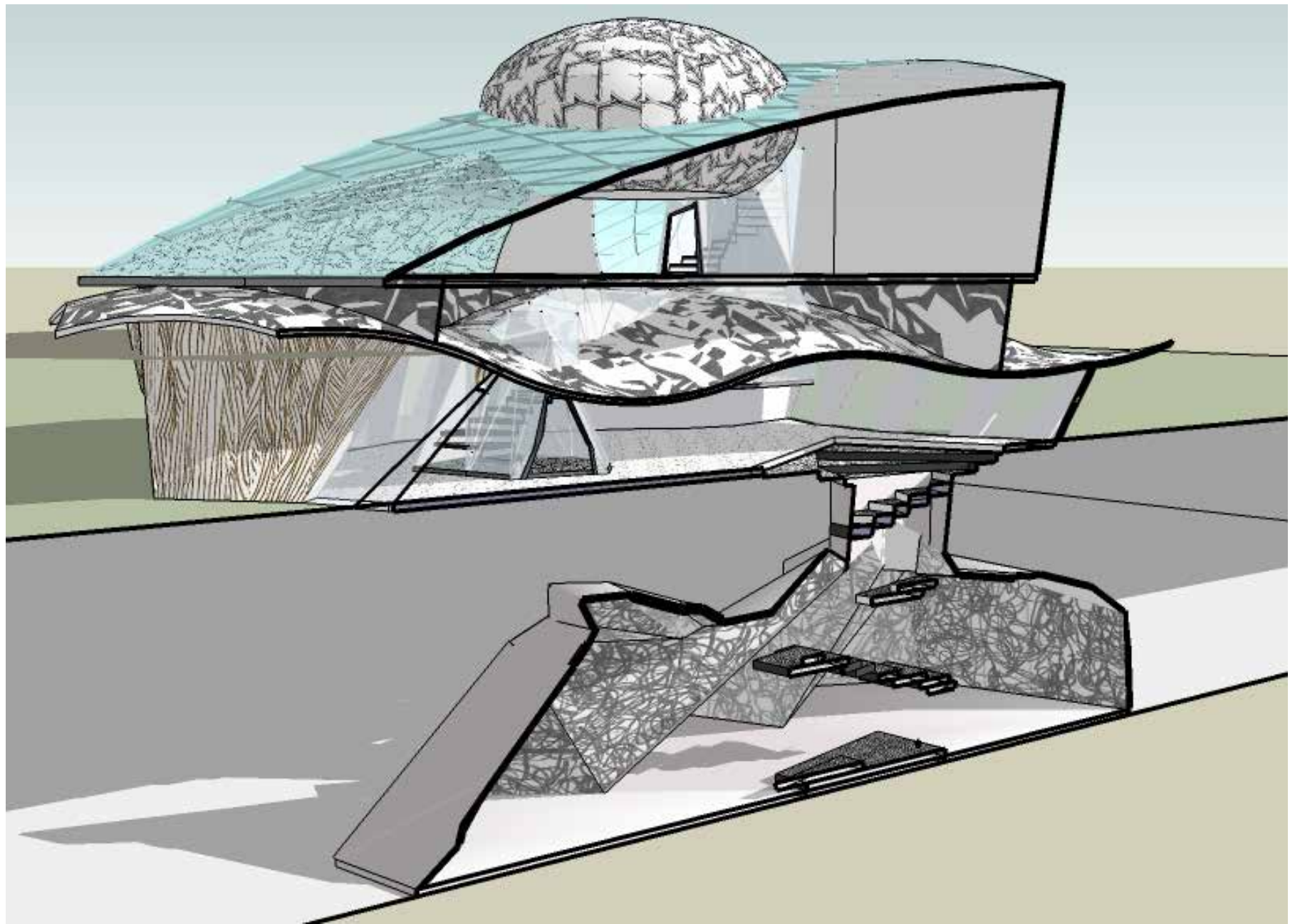


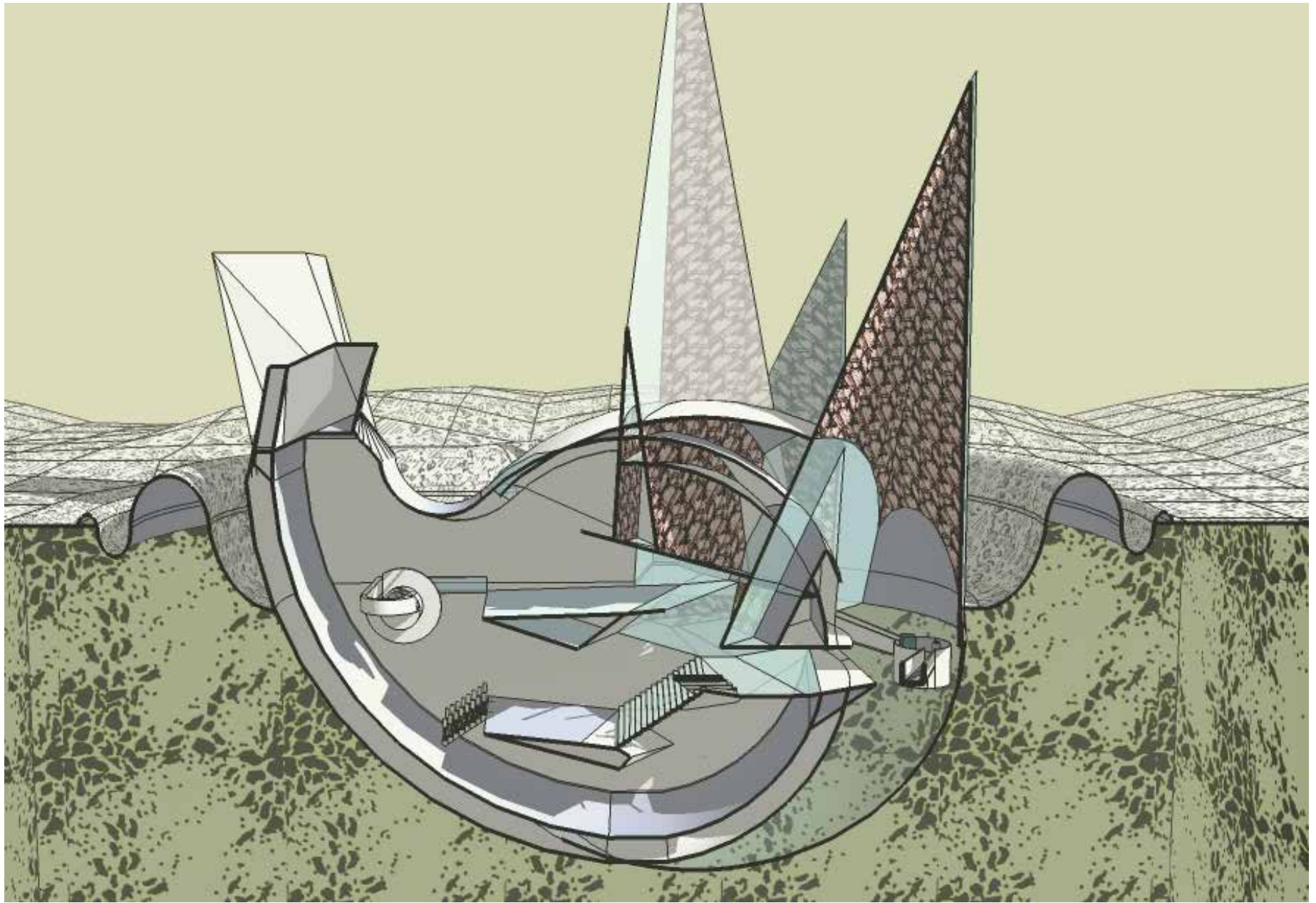


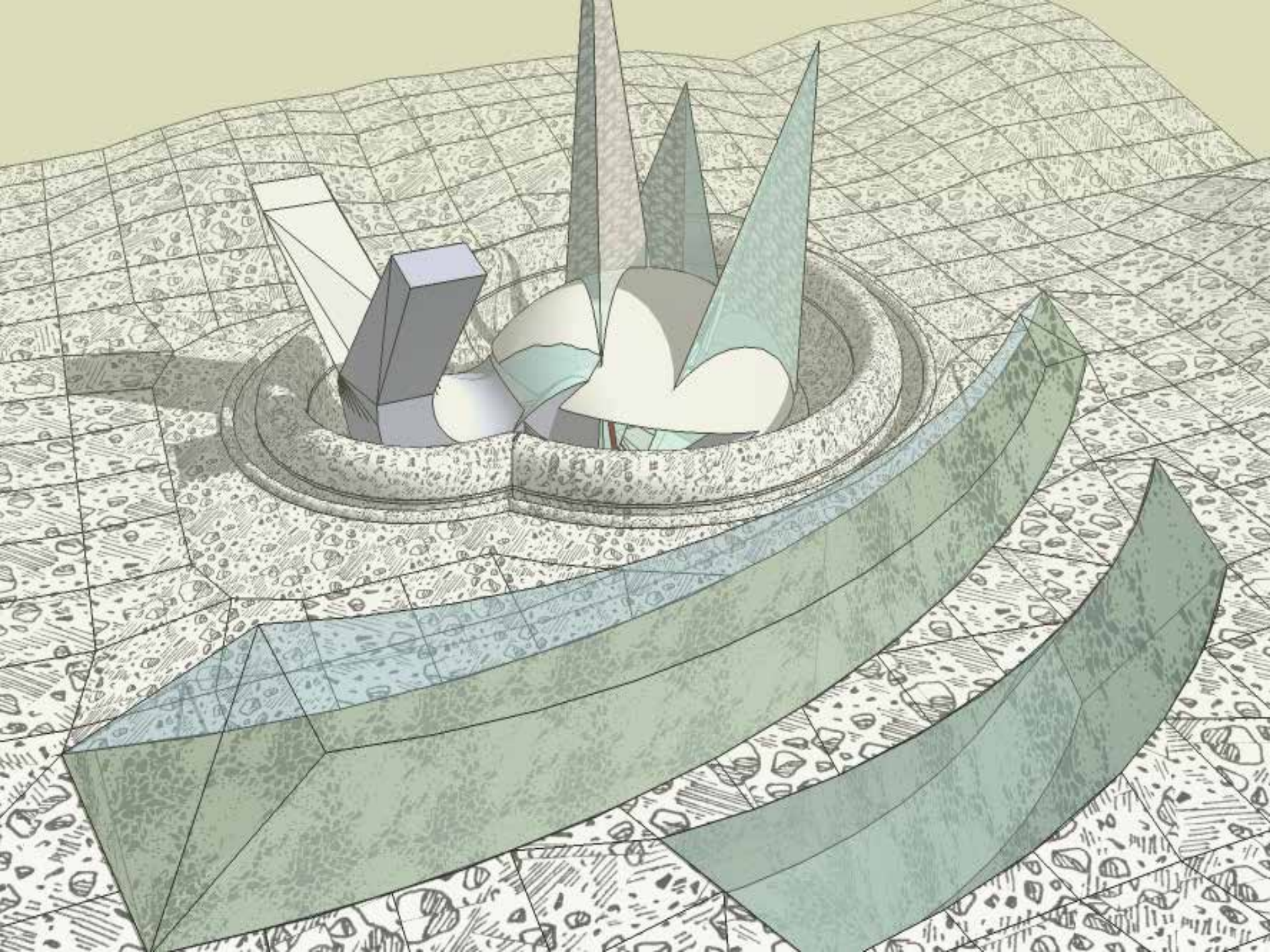


ARCHITECTURE DESIGN STUDIO ARCH1101

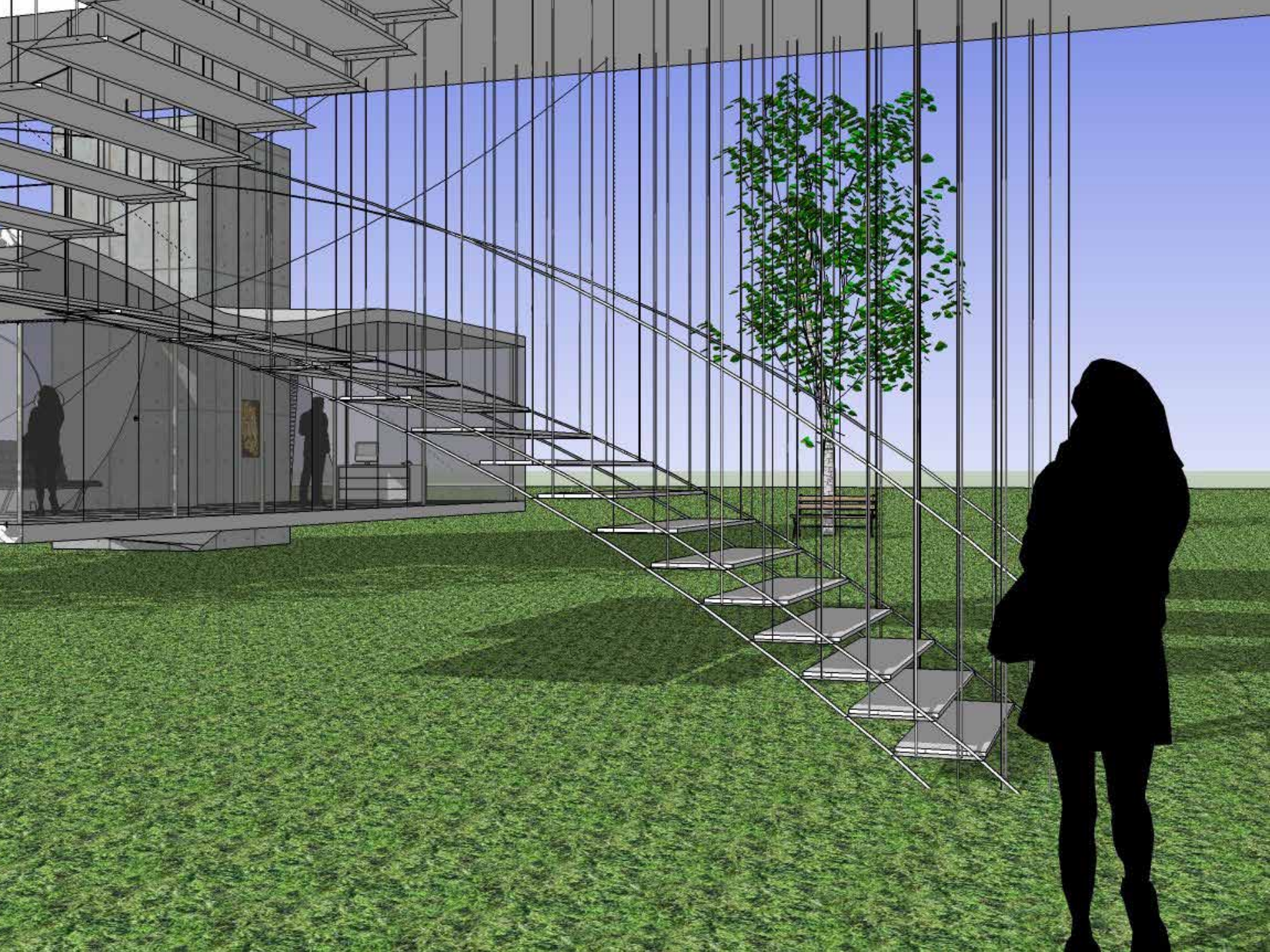
STUDENT WORK



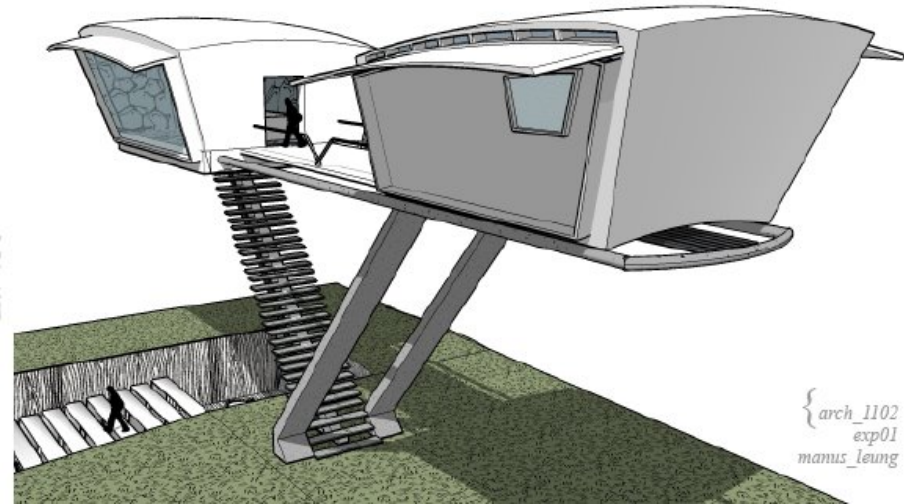
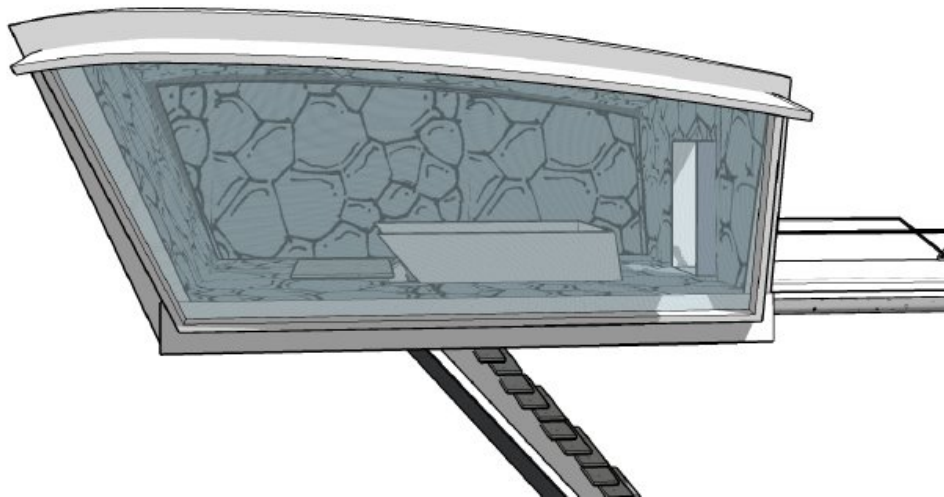
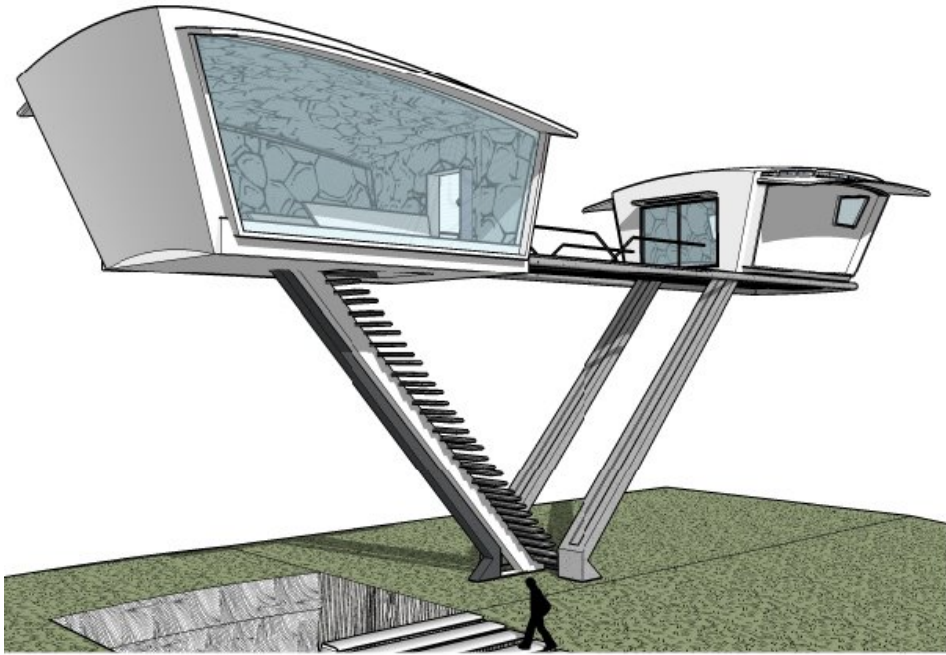


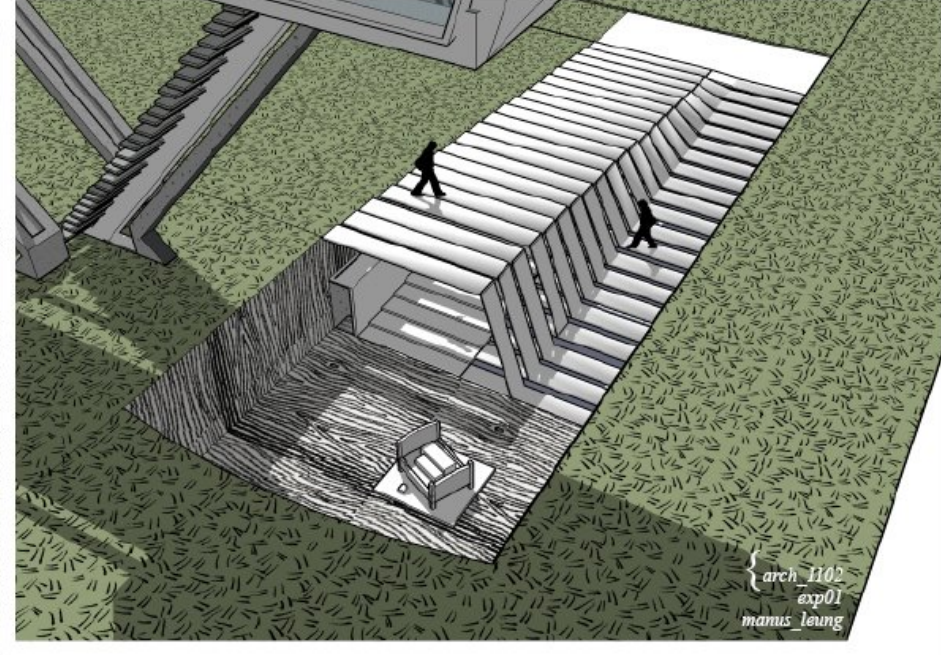
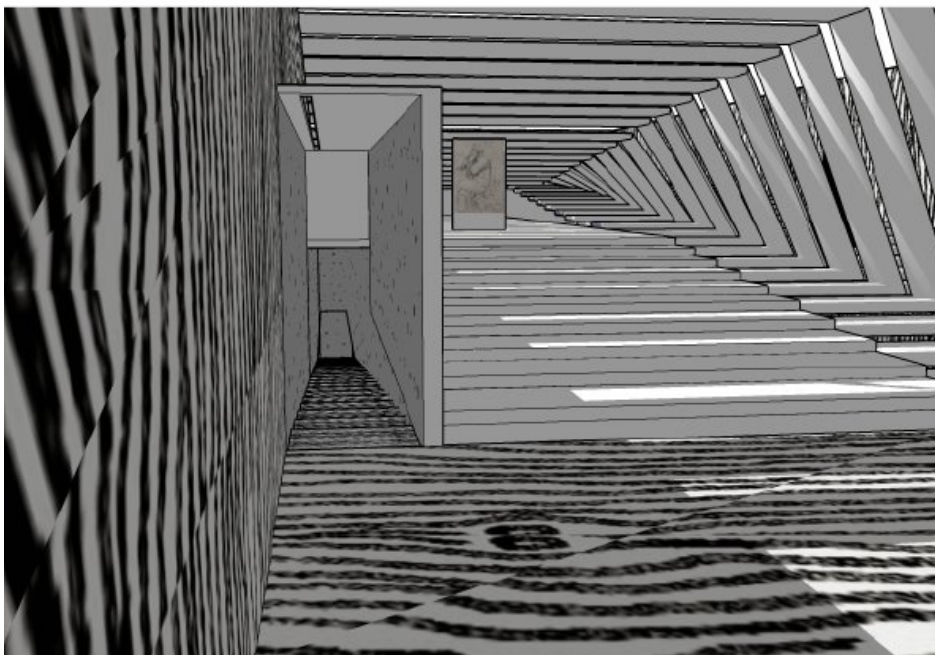
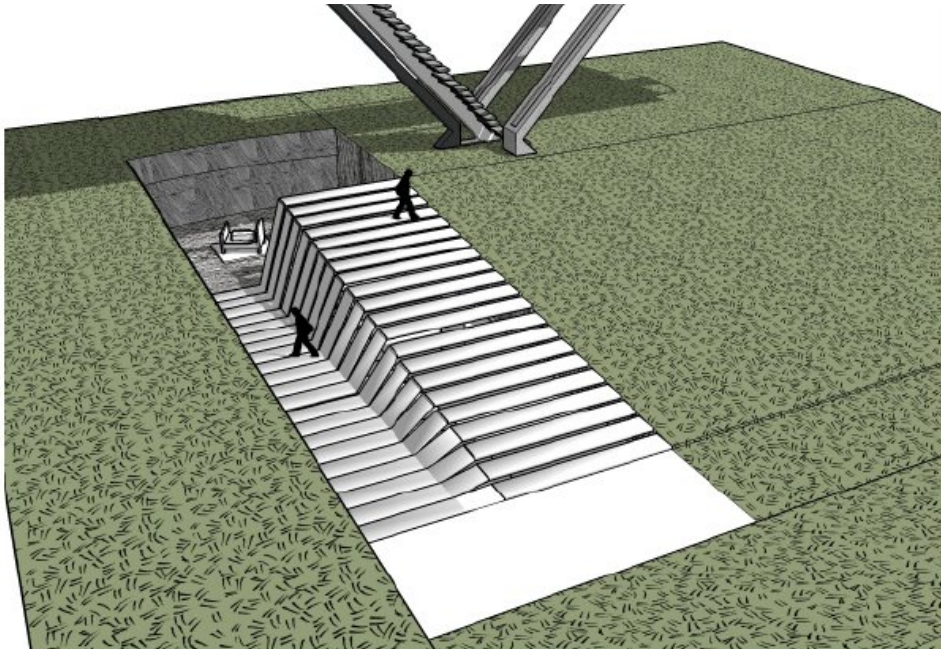
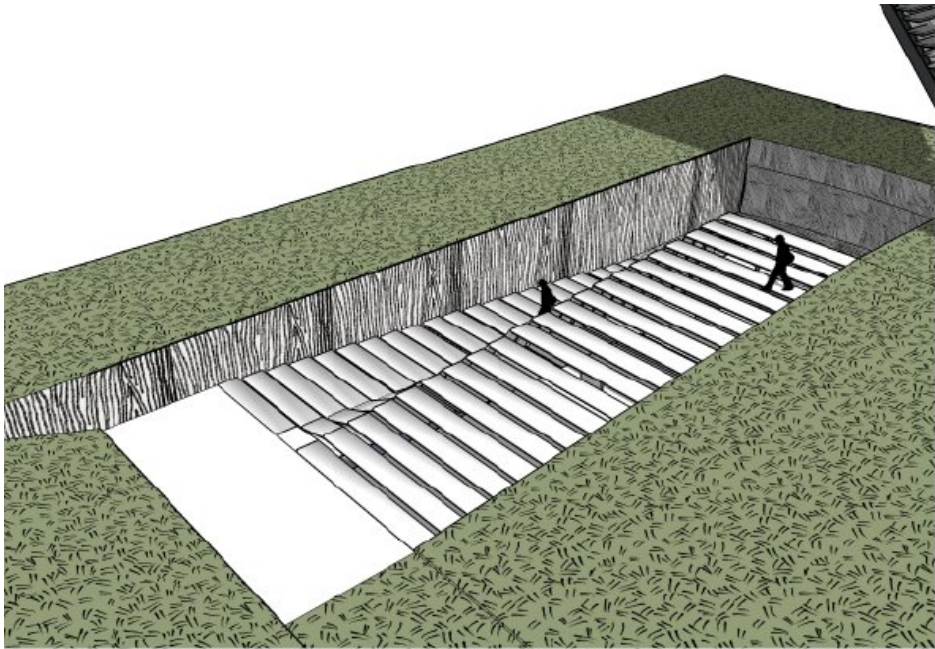








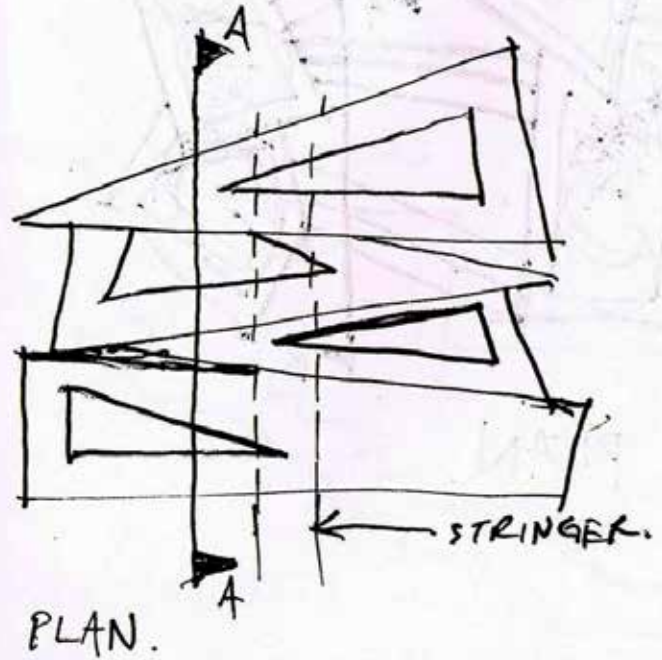
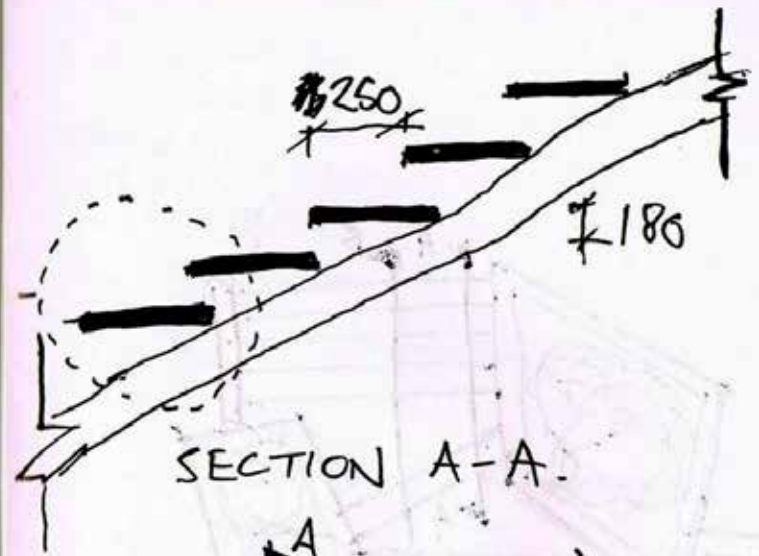
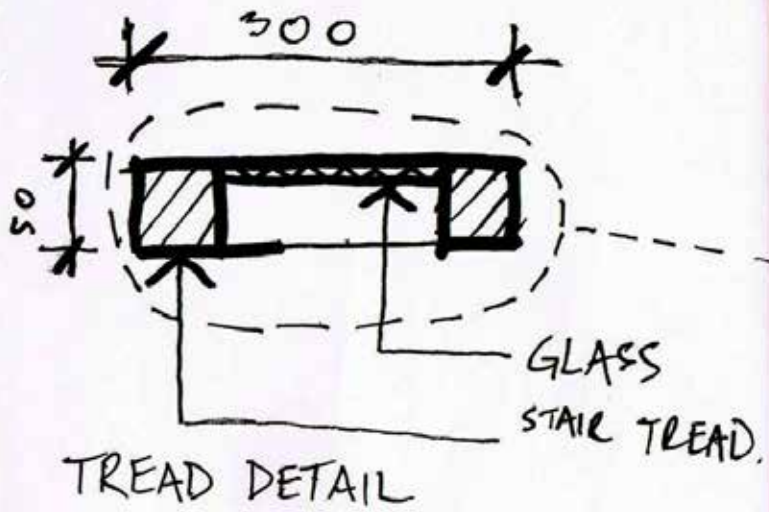


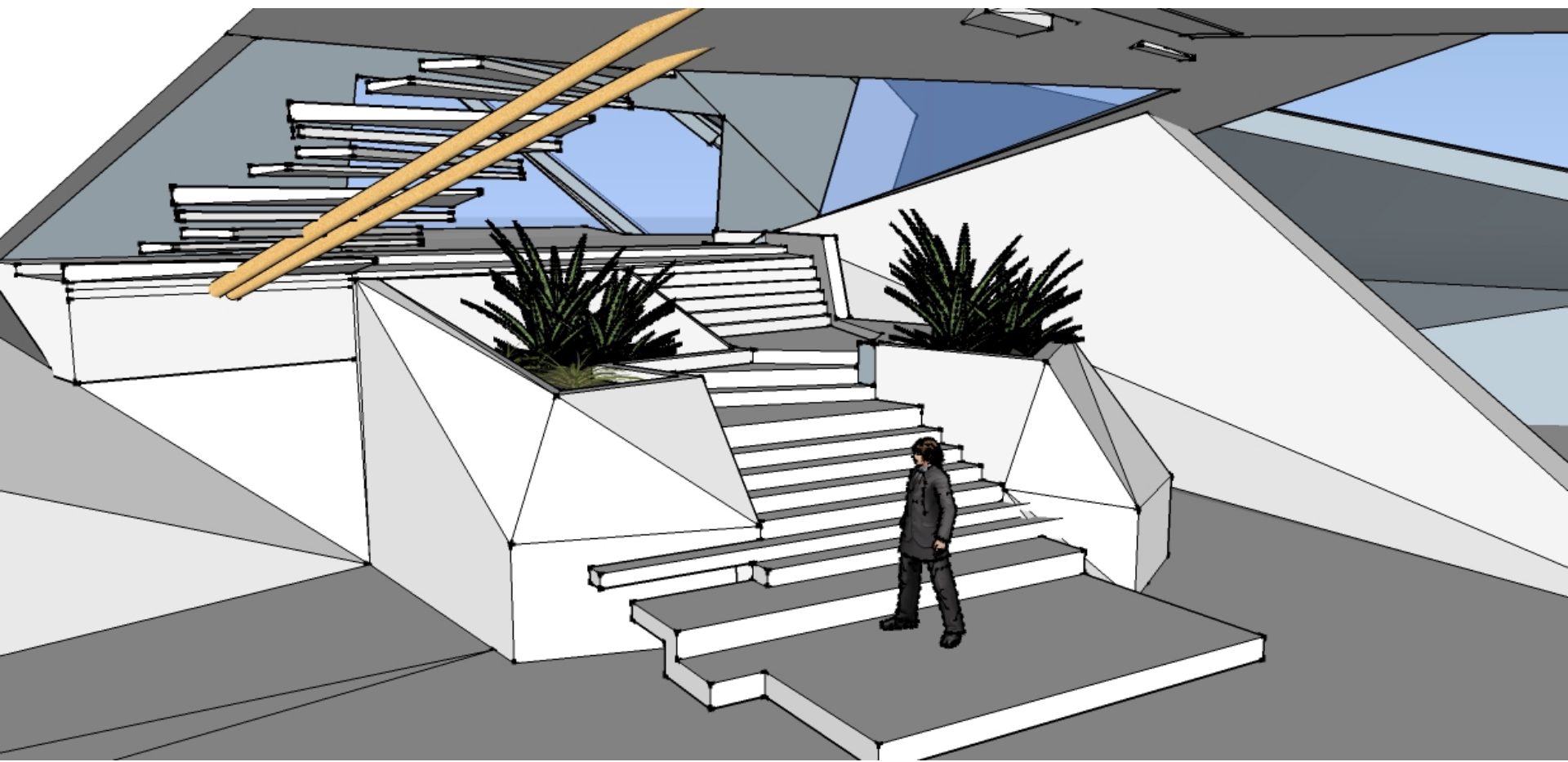


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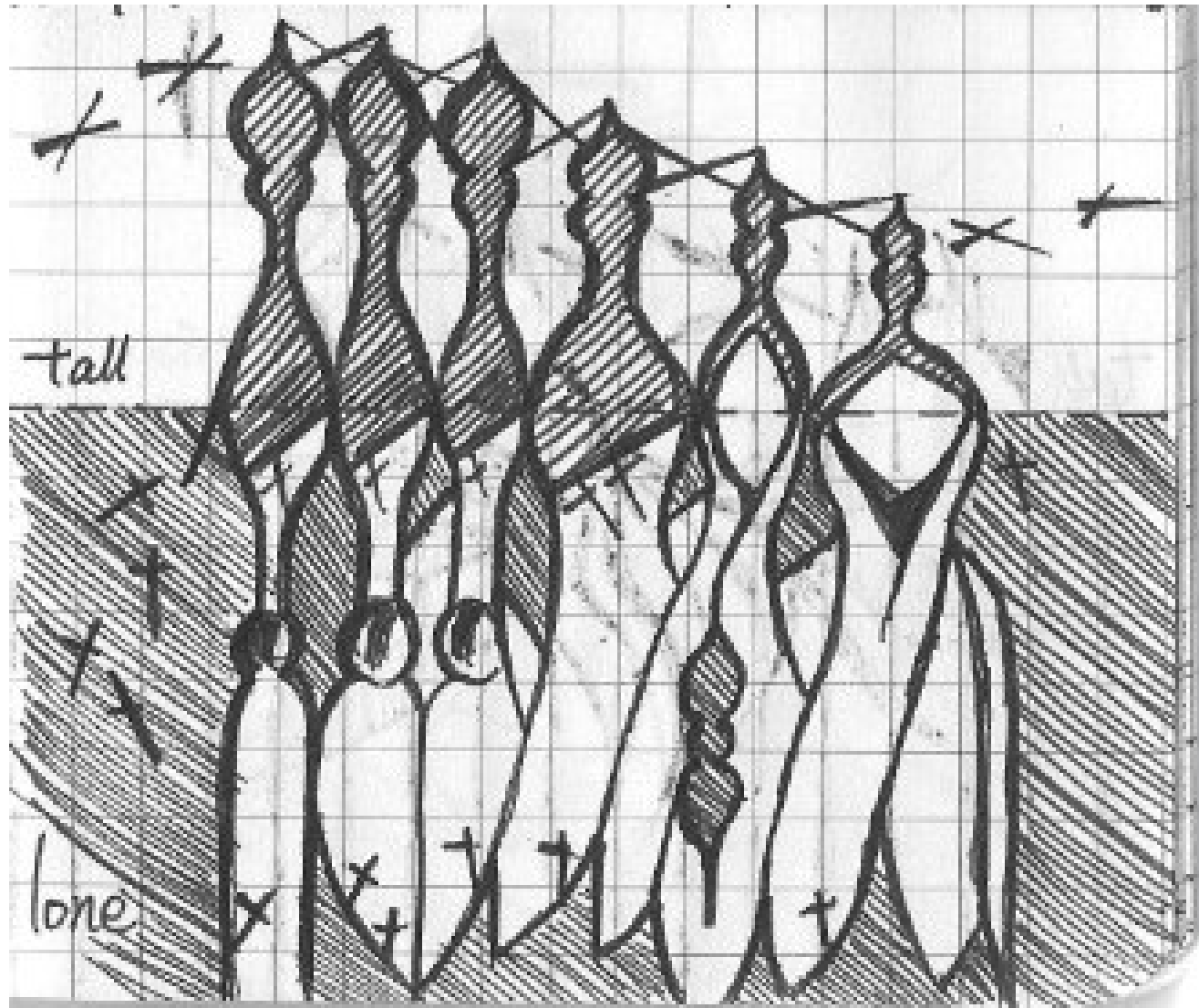
HAYDEN

WOOLDRIDGE



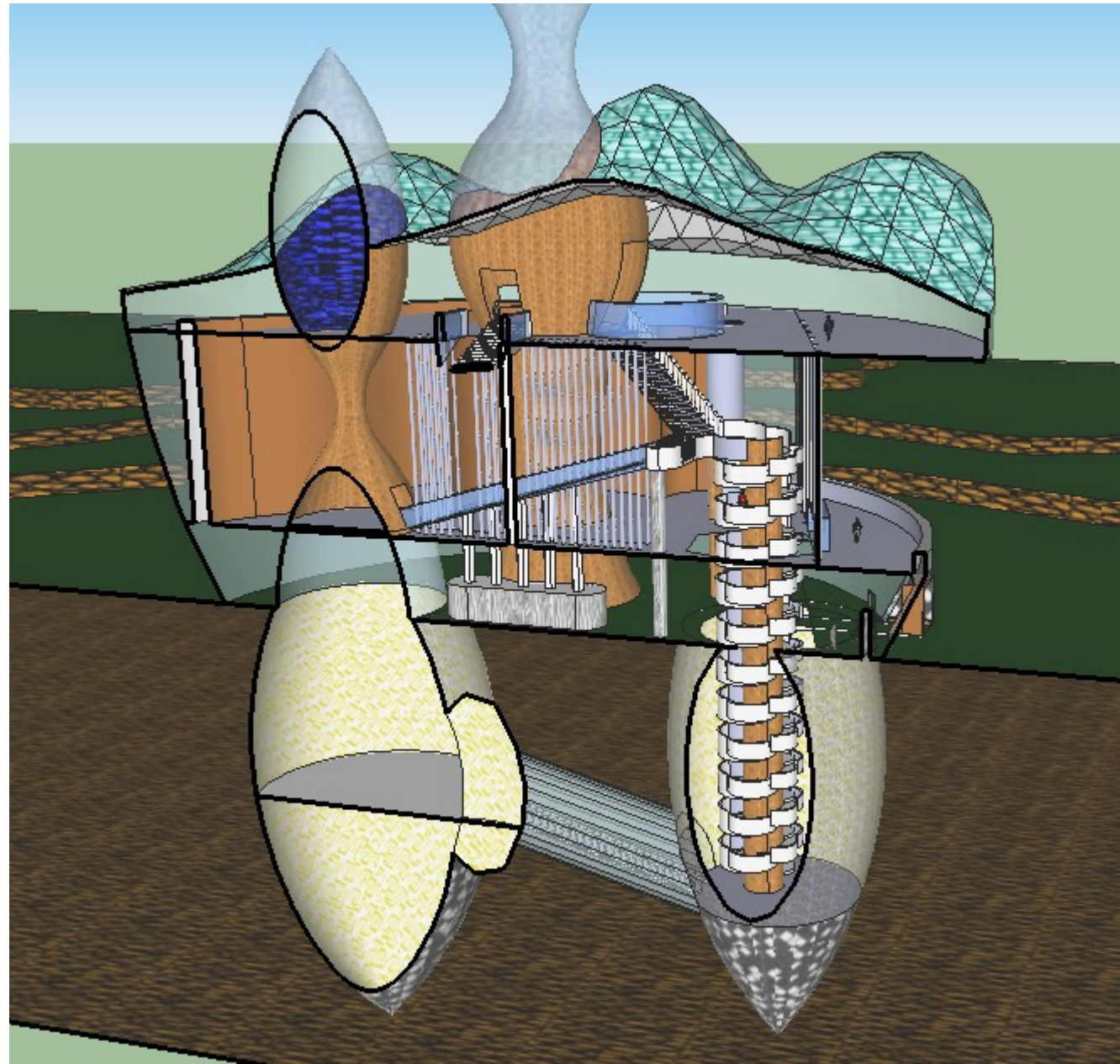


LI QIAN

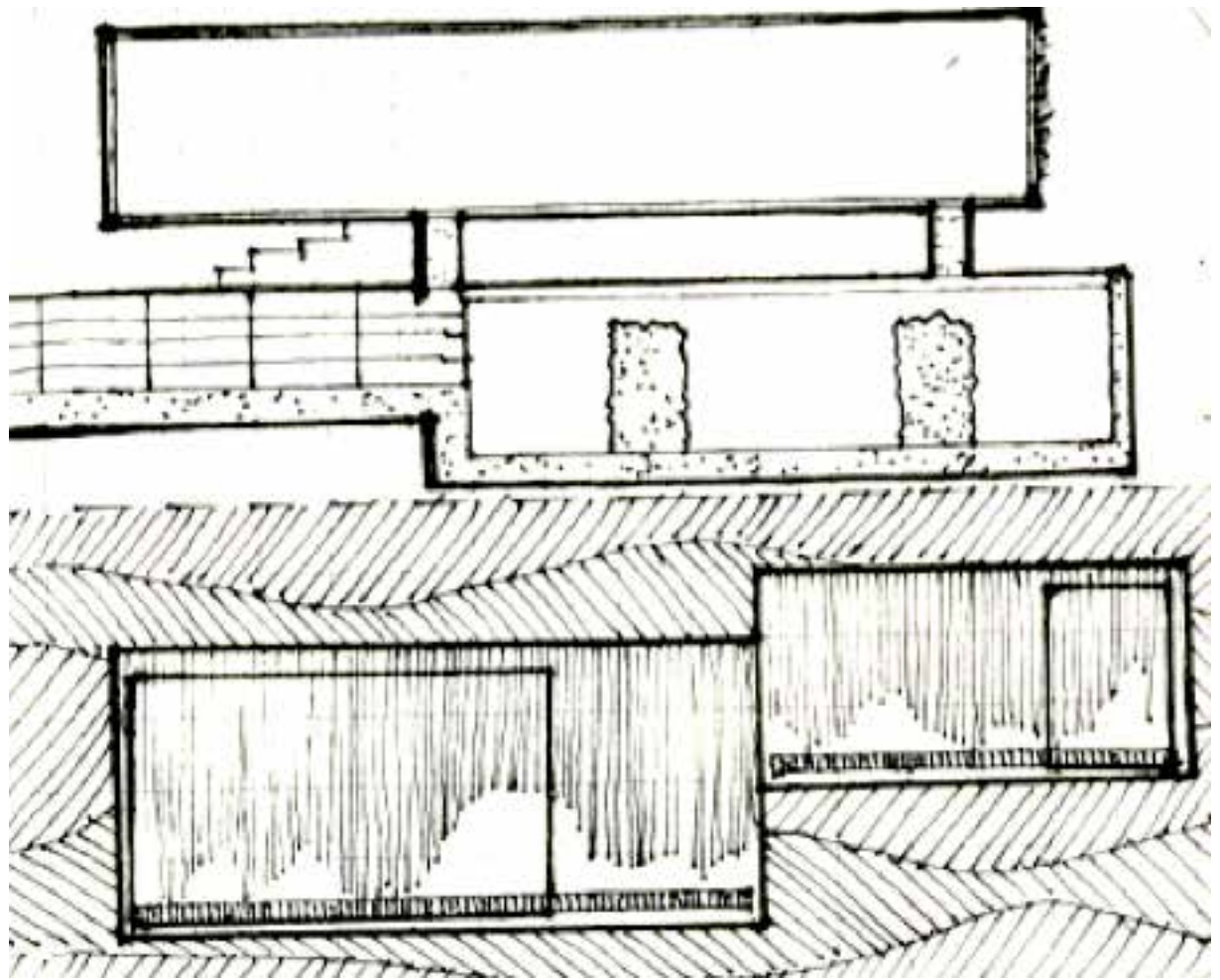


tall

lone

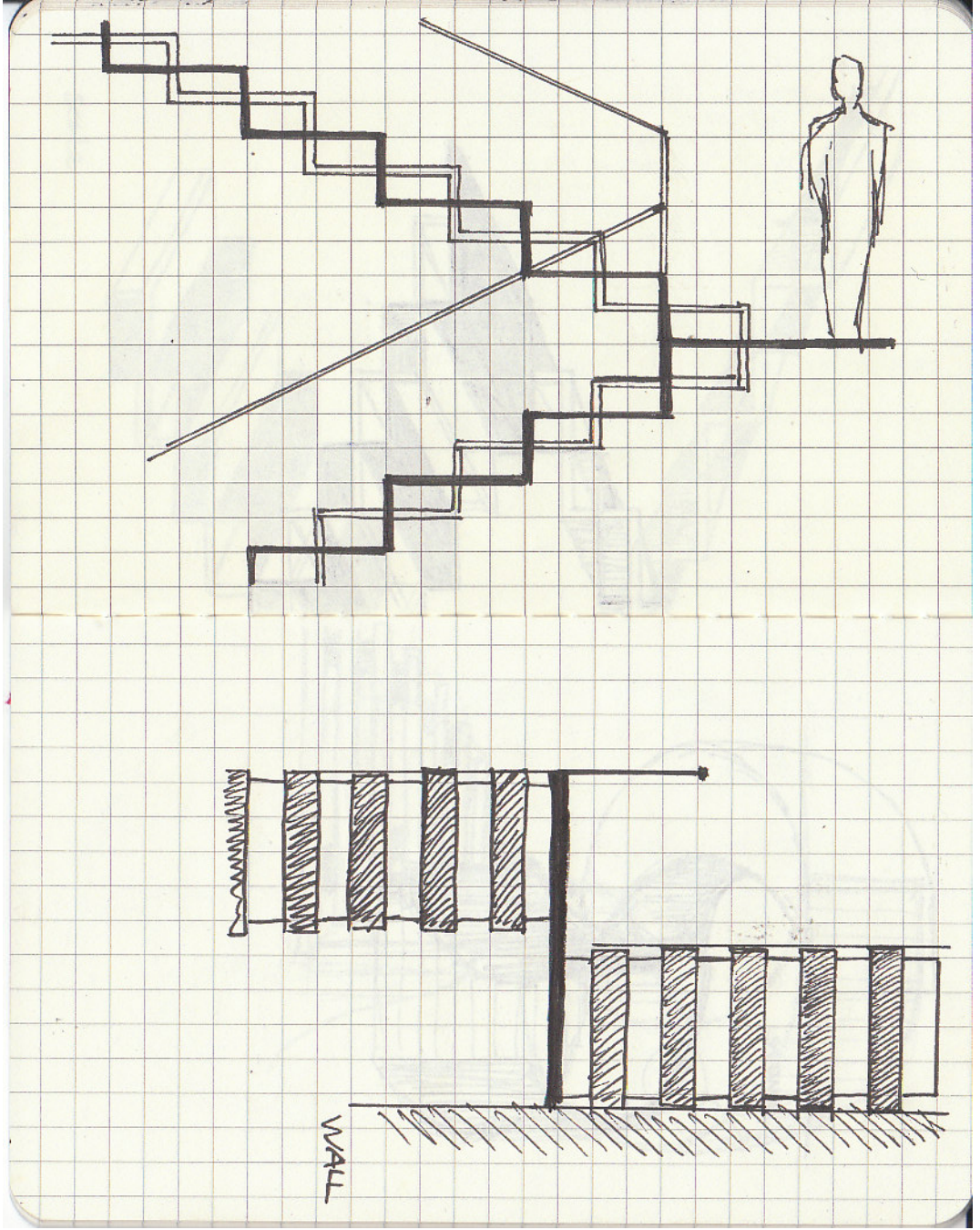


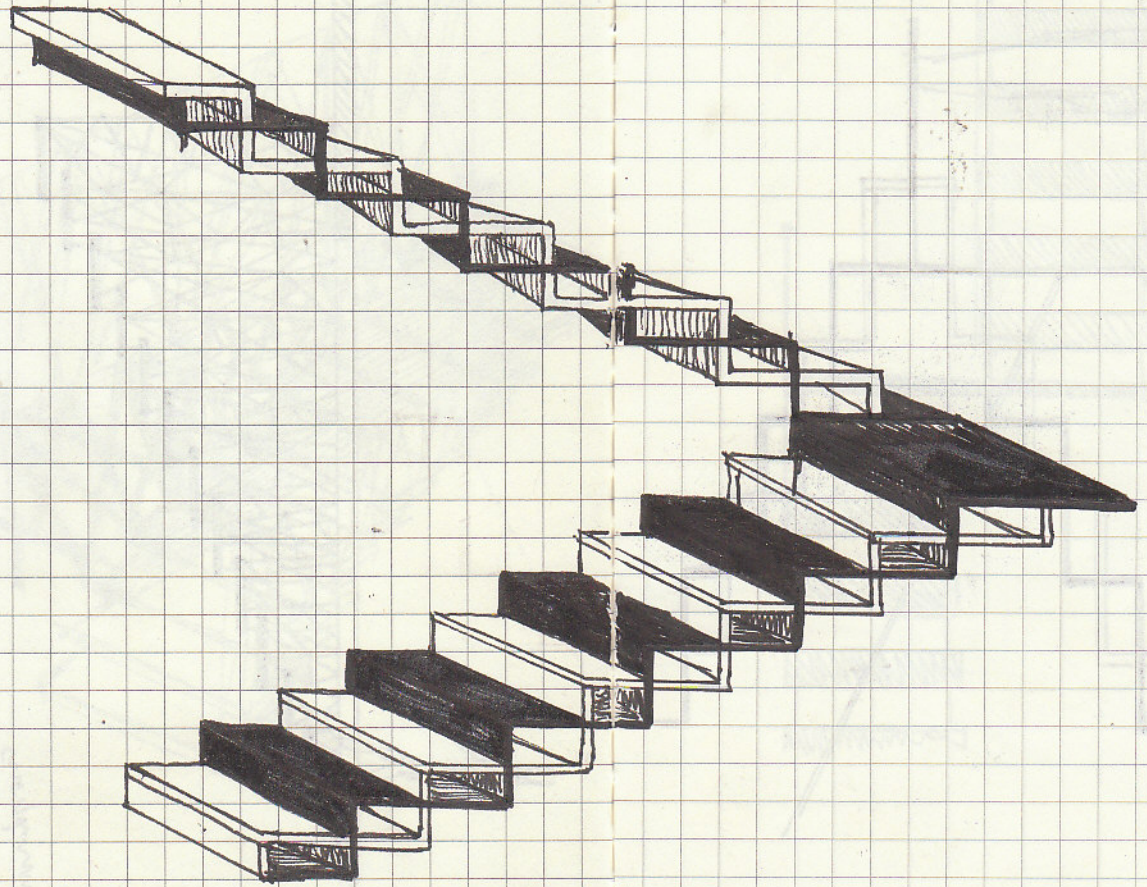
REMI CRICK



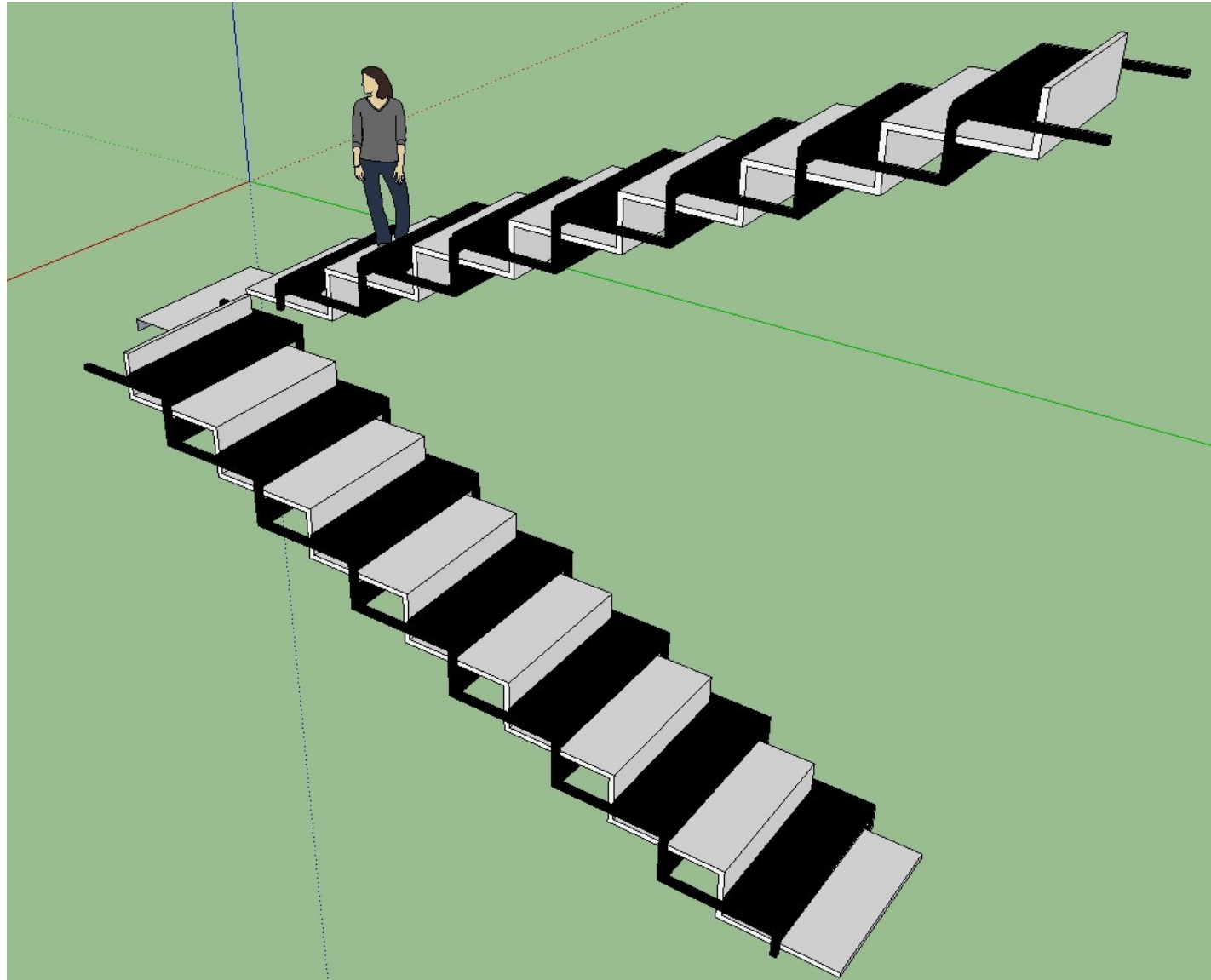


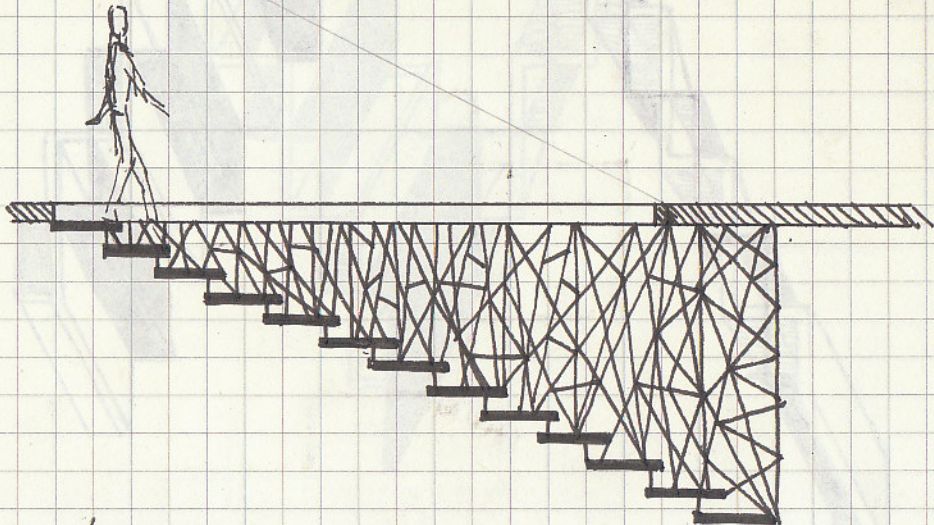
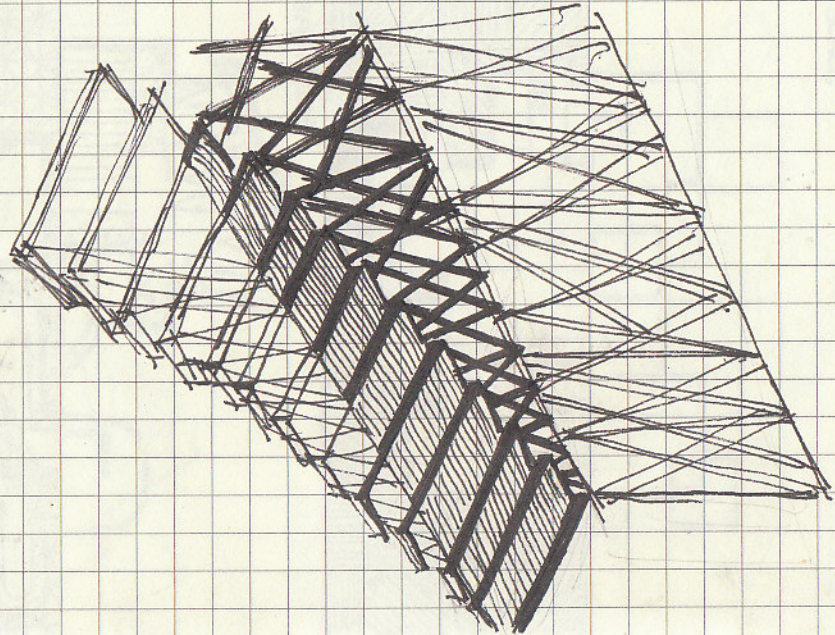
YIMING SONG



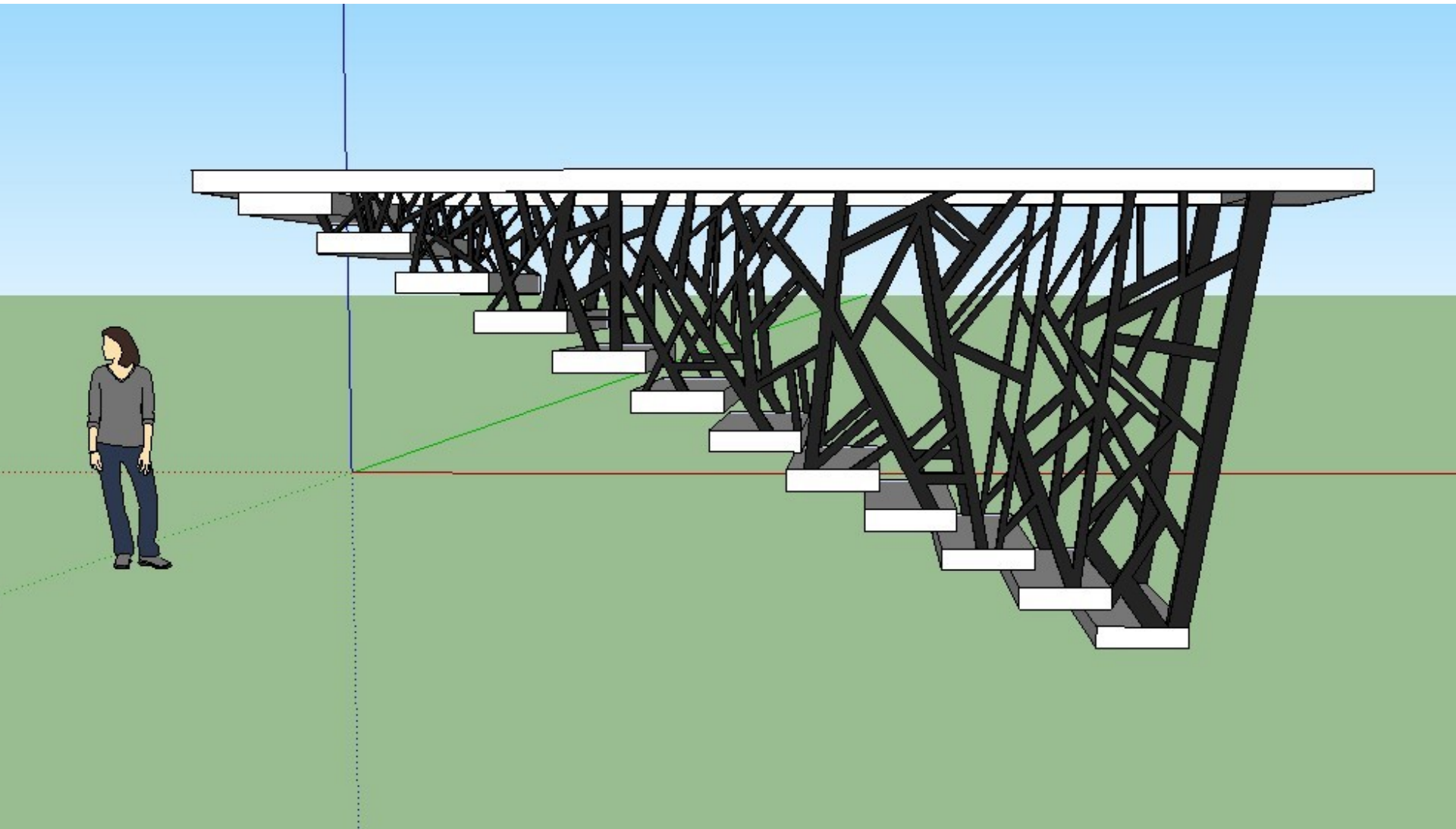


scale

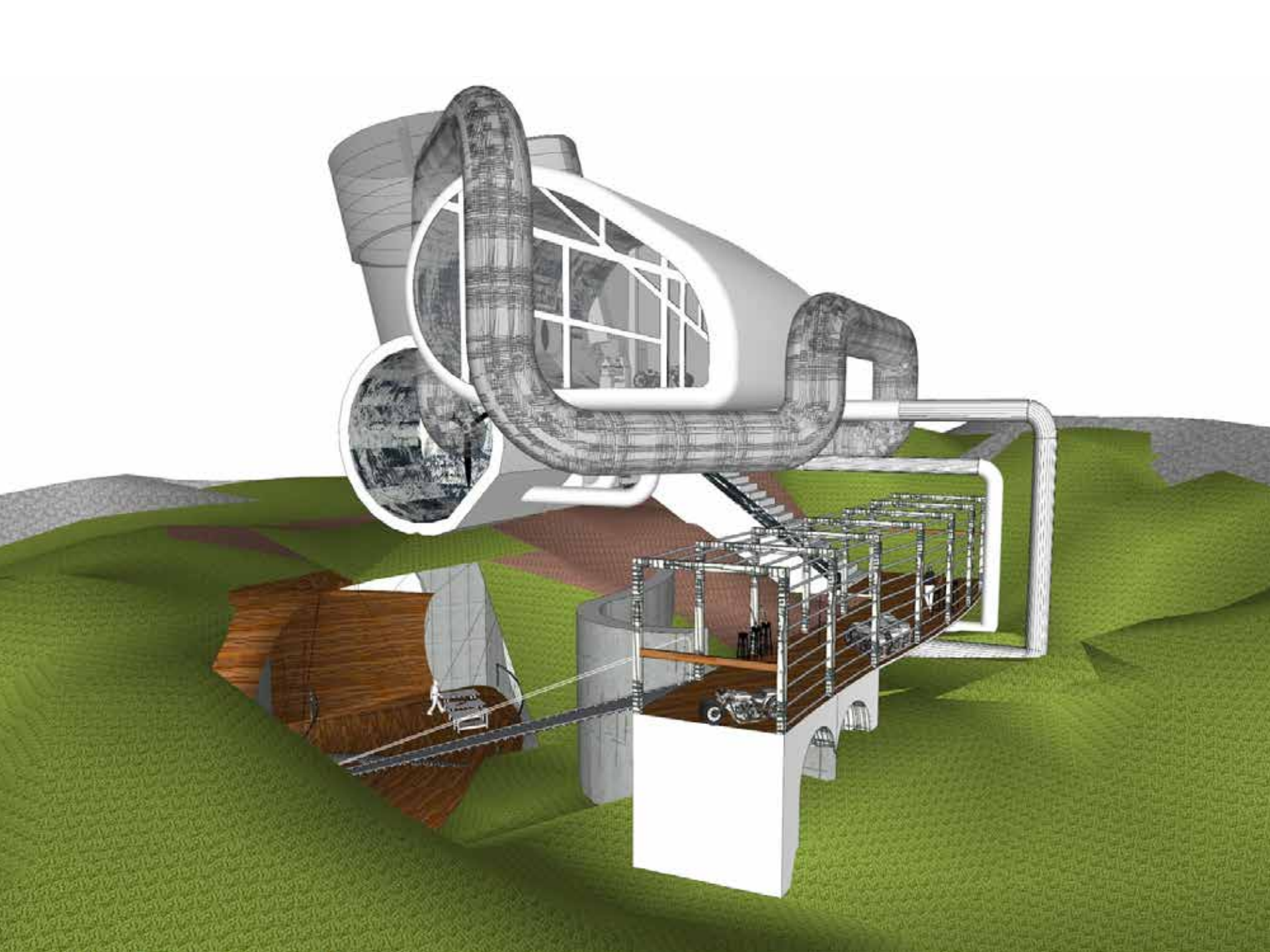


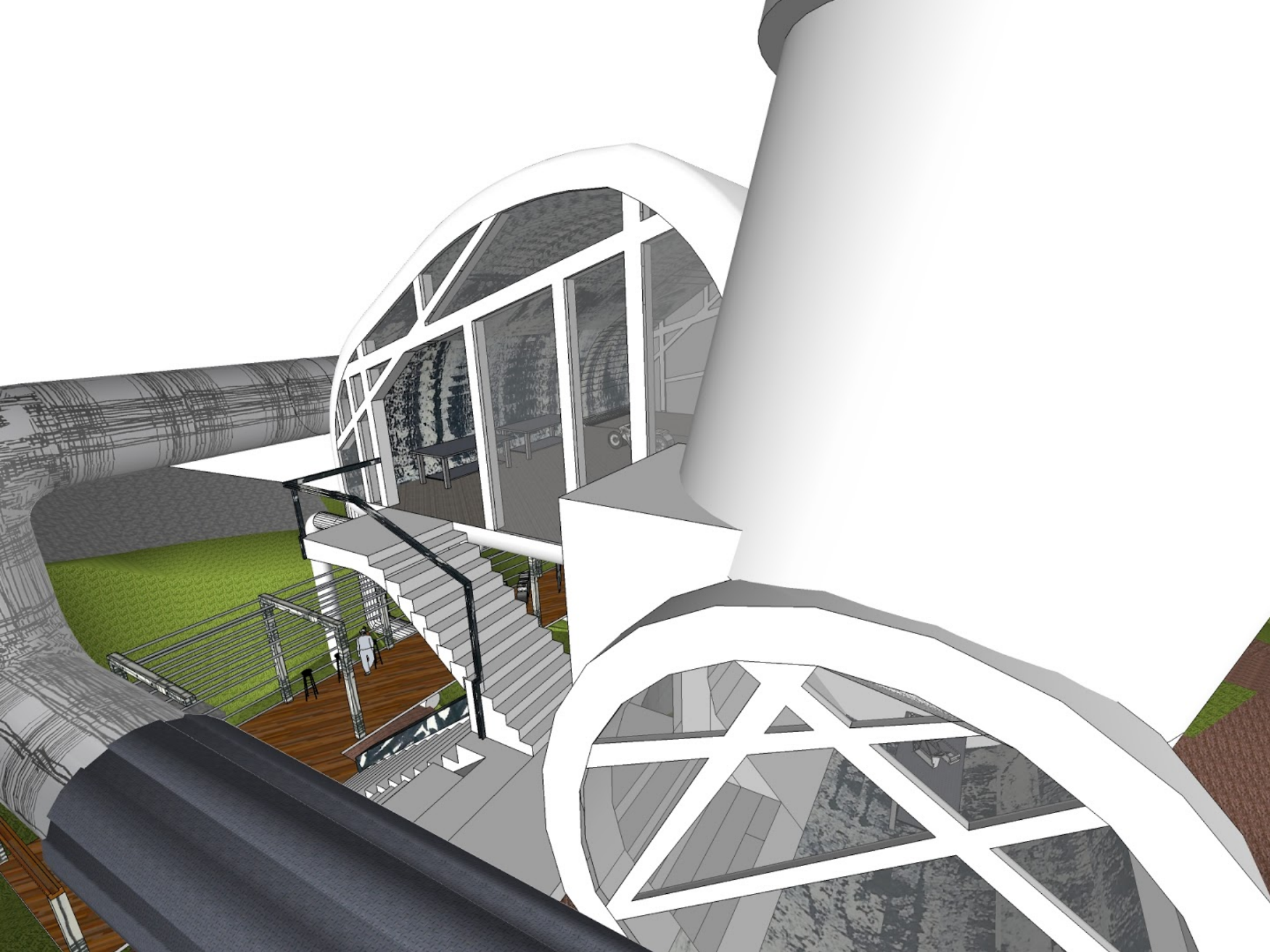


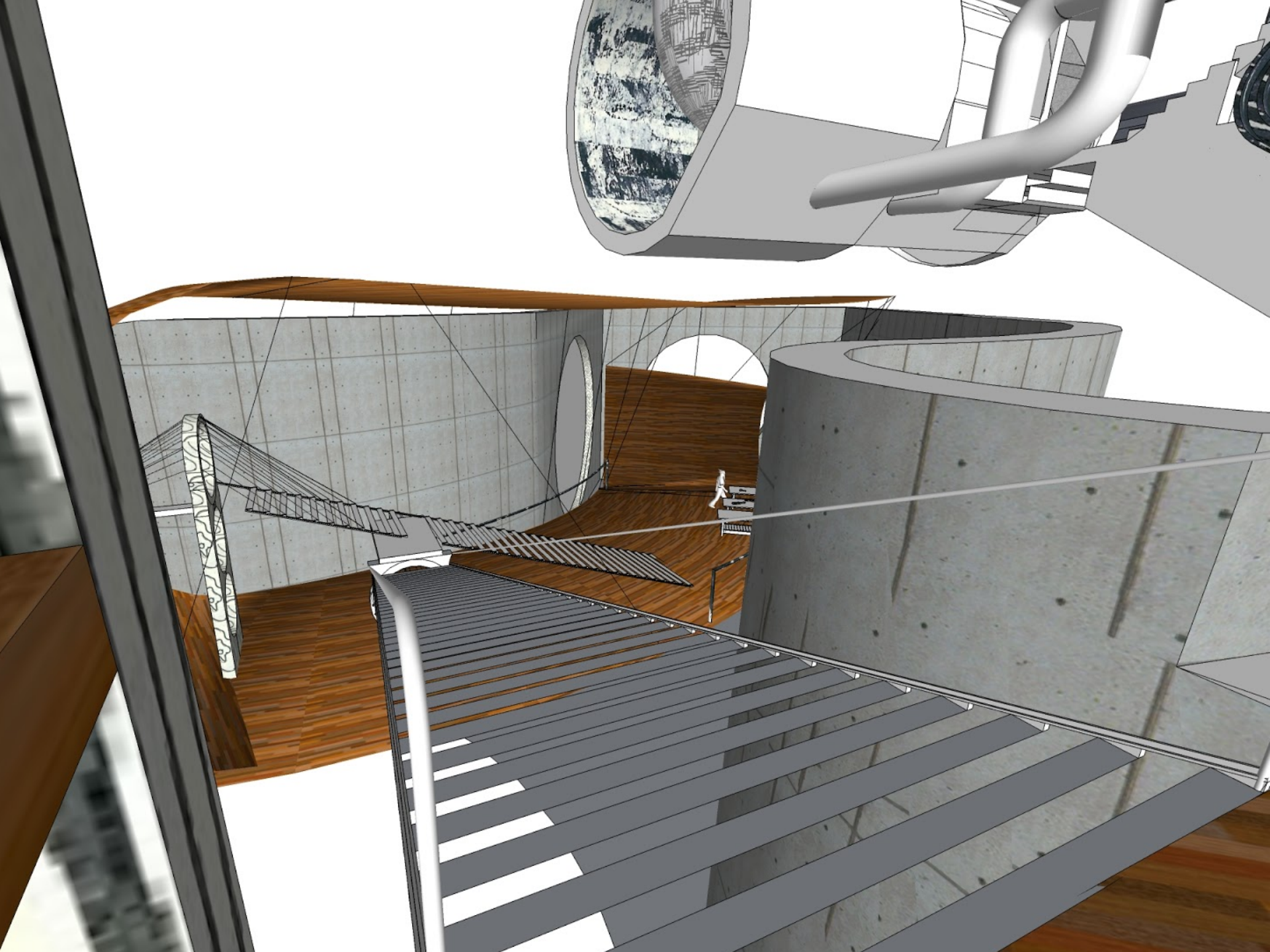
amorphous



ANDREW WEETMAN

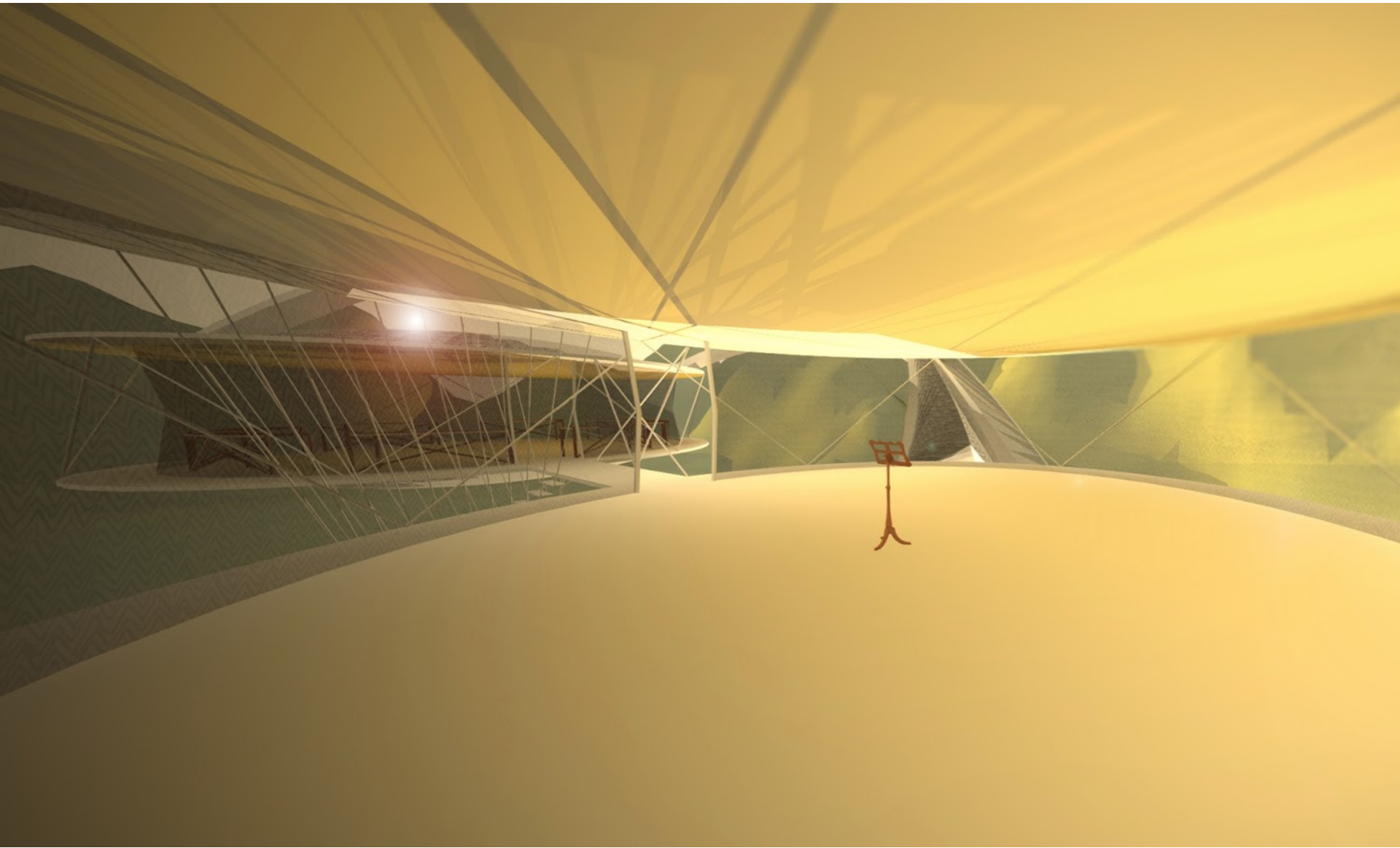


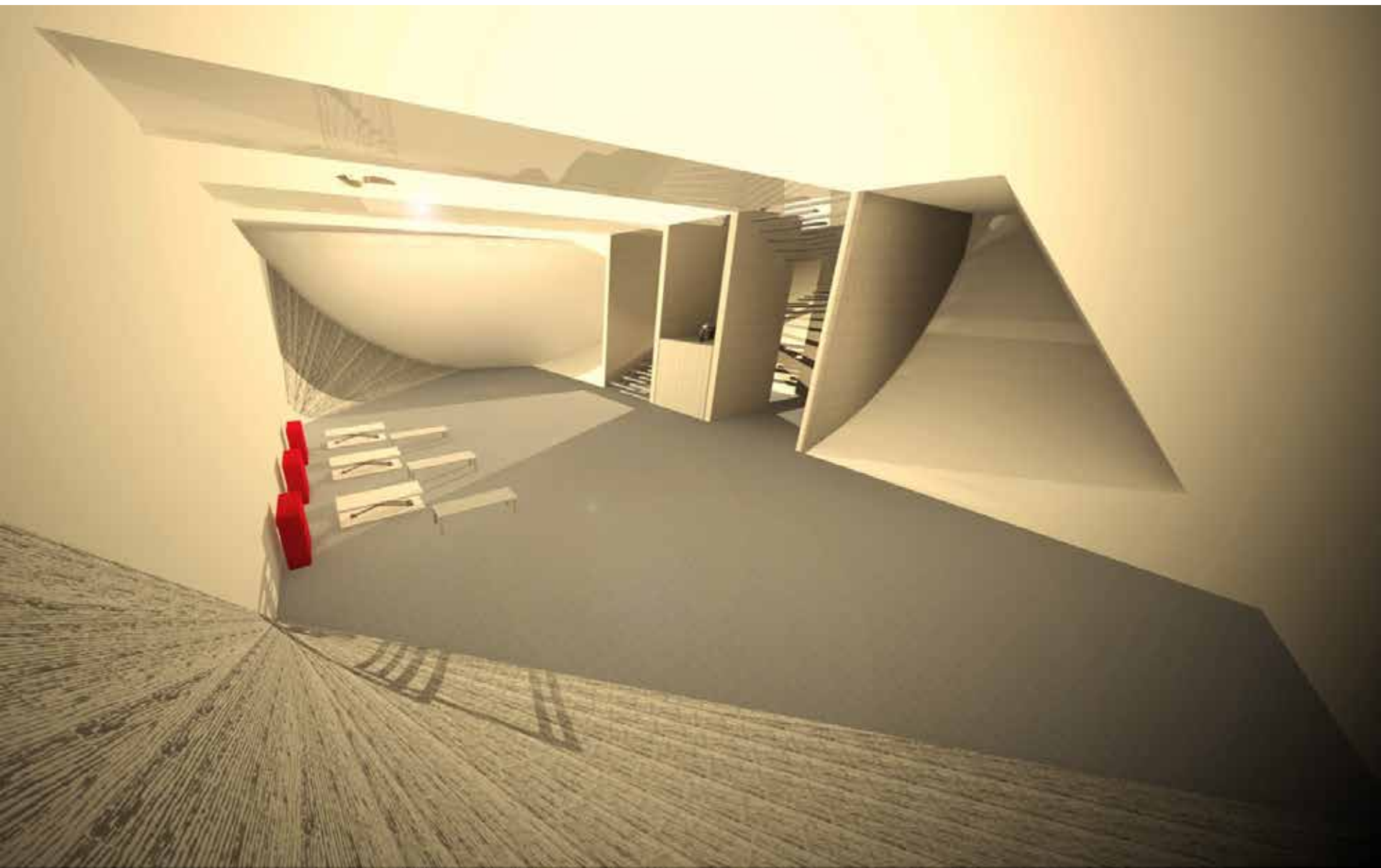


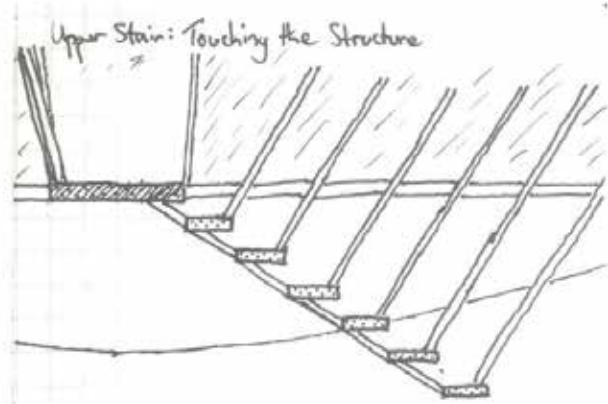


DOMINIC BALEY

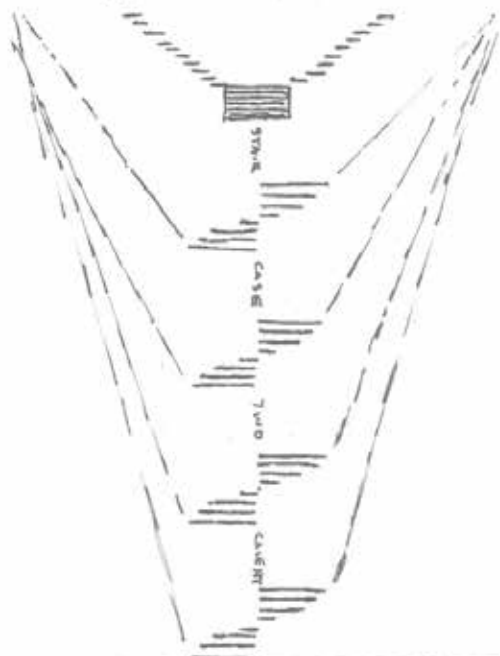




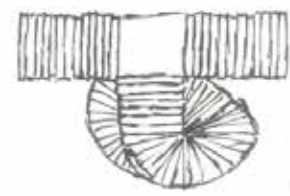




Section One



Section Two

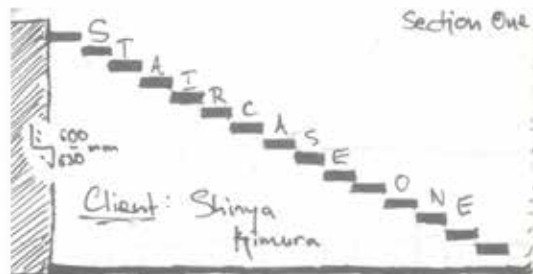


Plan

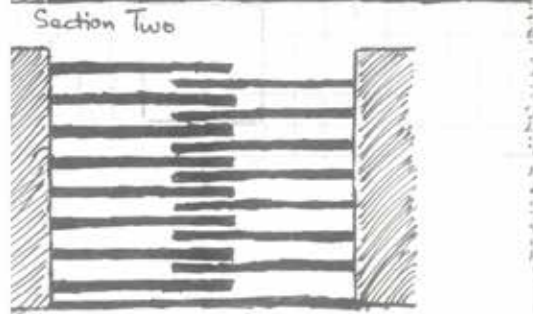
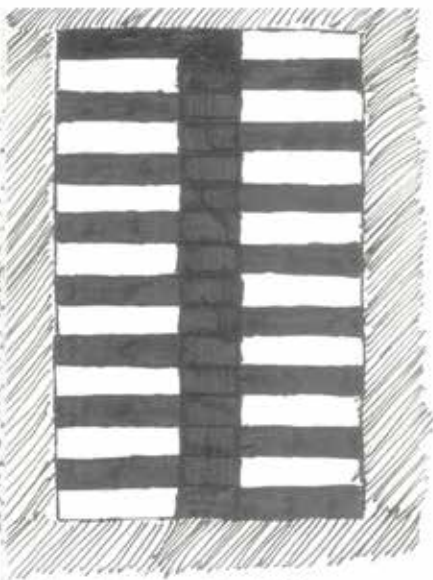


Why so insubstantial?
Metaphor for the transcendent
experience of music.

Emphasises the fragile balance of
violin making.

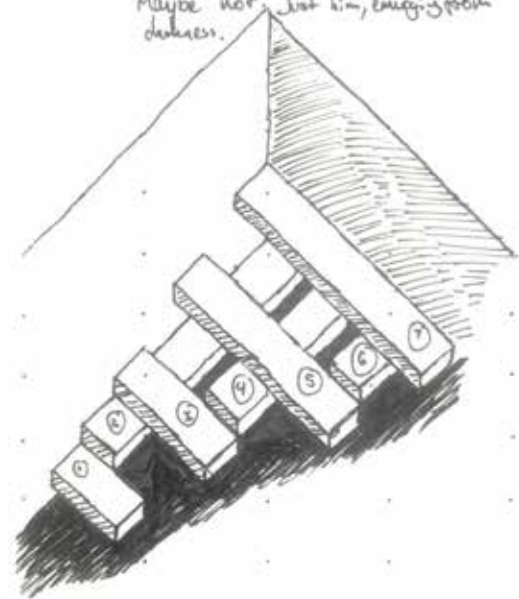


Section One

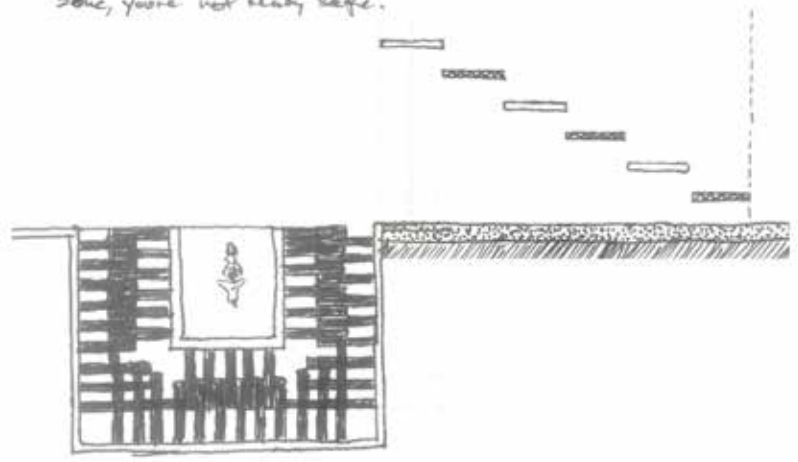


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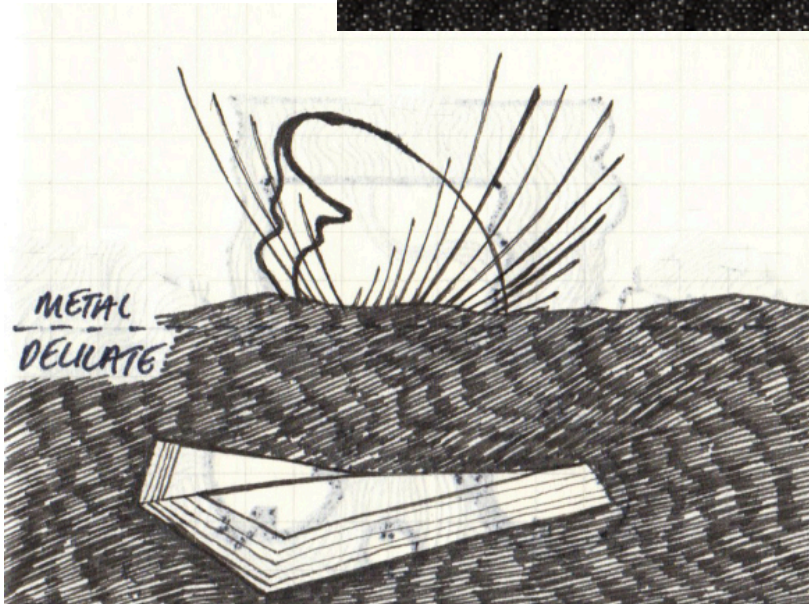
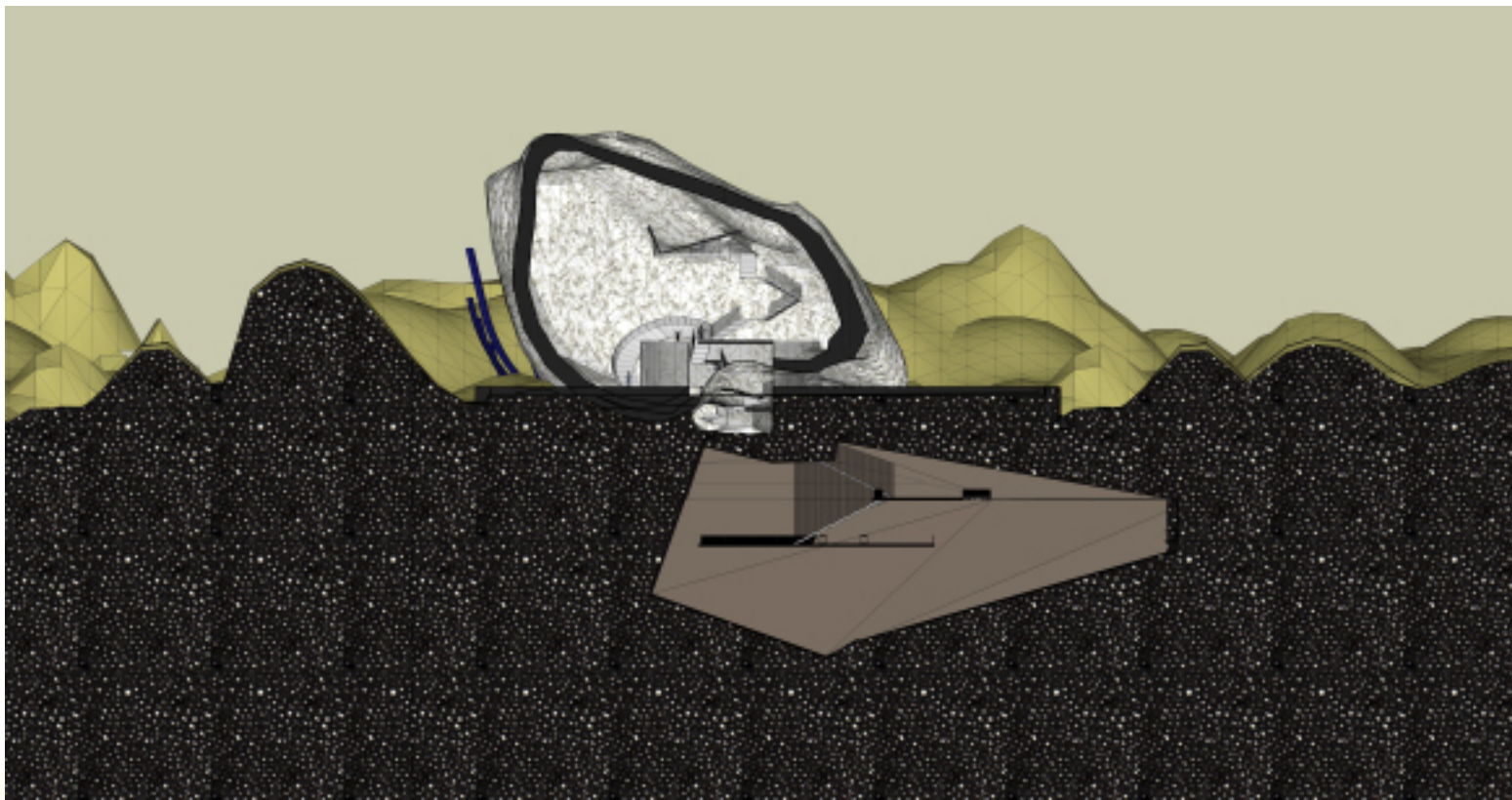
Below Ground to Ground Plane.
 Kimura
 Will he bring the motorbikes up?
 Maybe not. Just him, emerging from
 darkness.



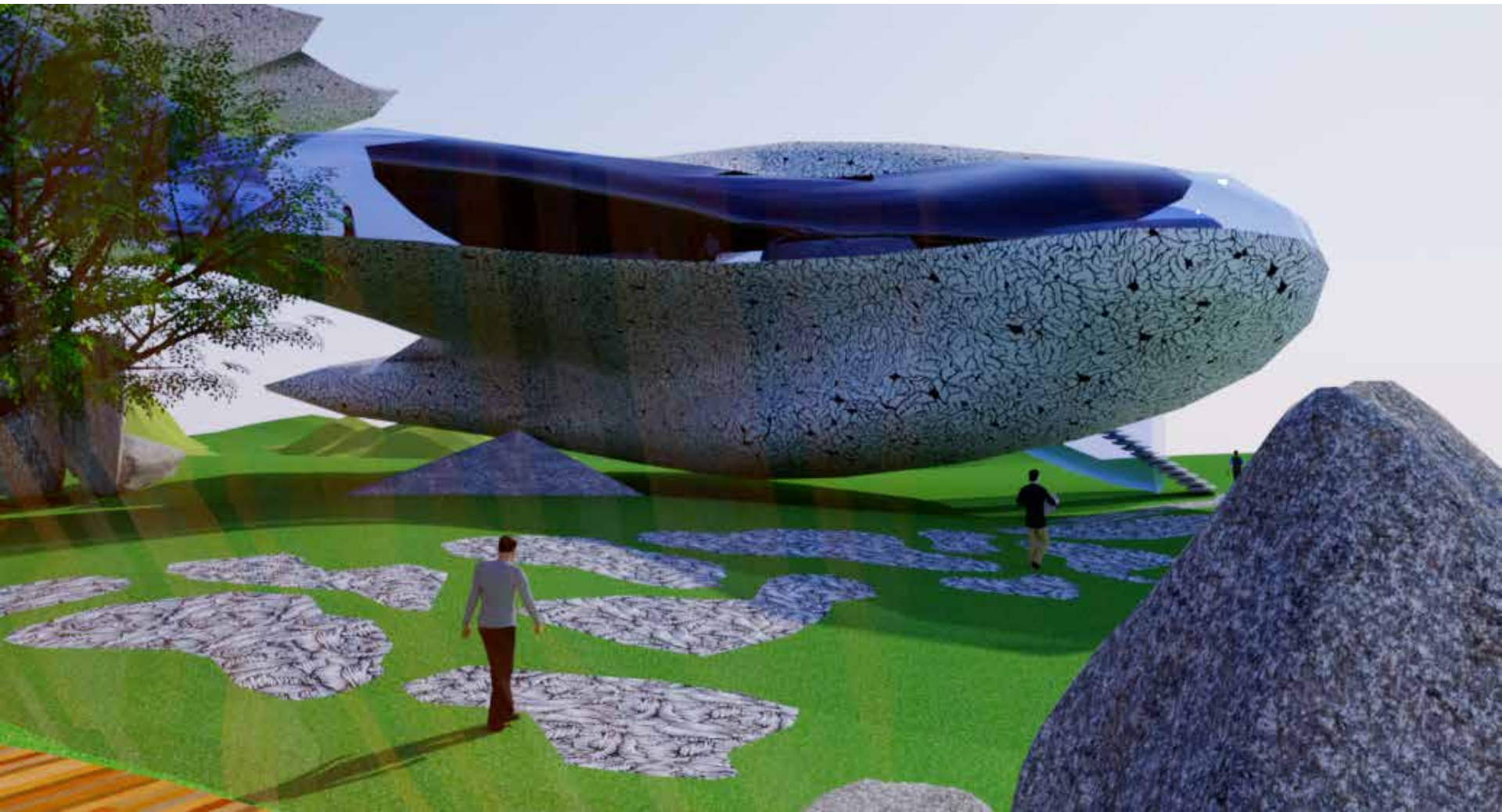
Why only the middle line?
 Metaphor for riding - the further you
 stray from the center line, the greater
 the danger. You must always pay
 attention.
 Cantilever
 Even when you are in that safe
 zone, you're not really safe.



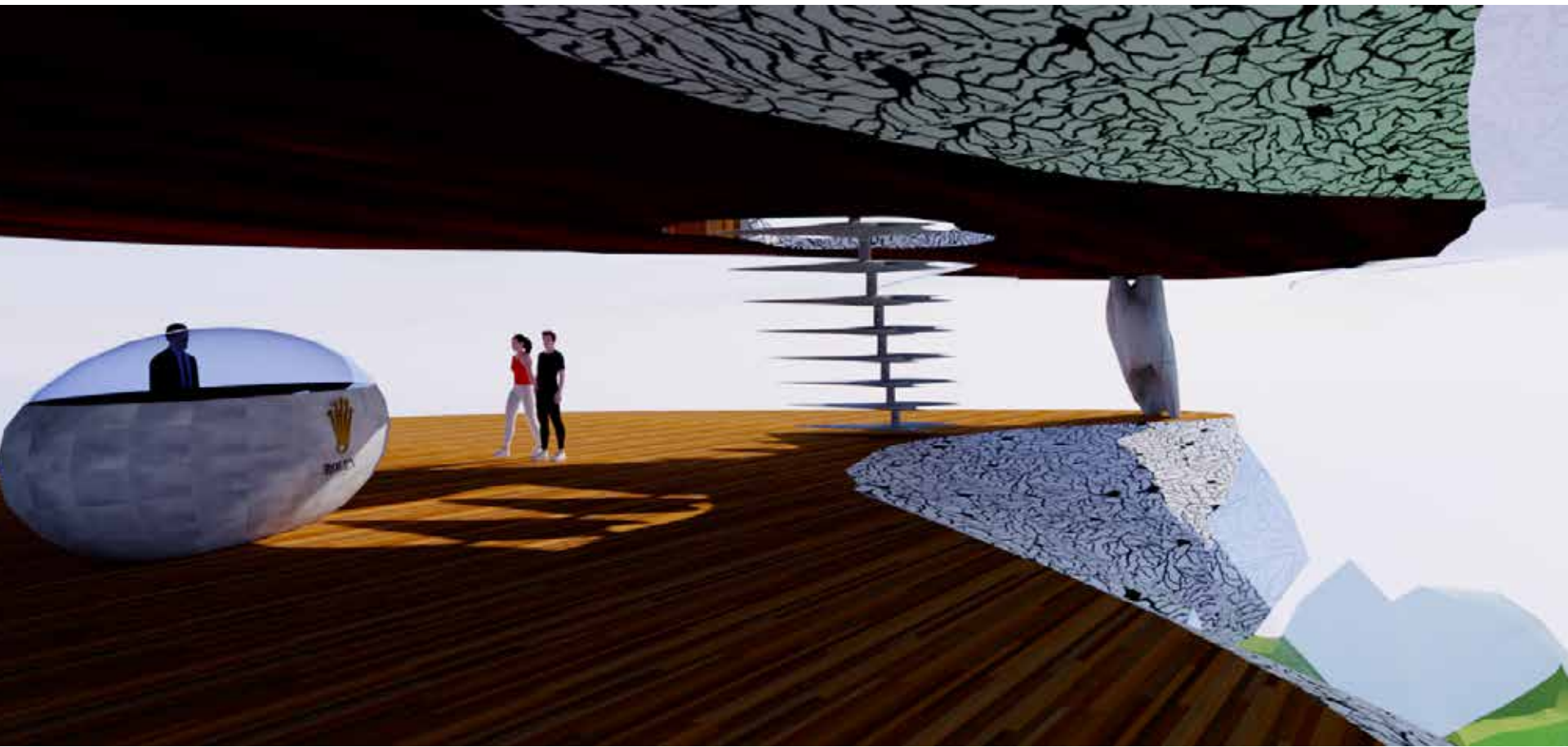
TANNY TAN

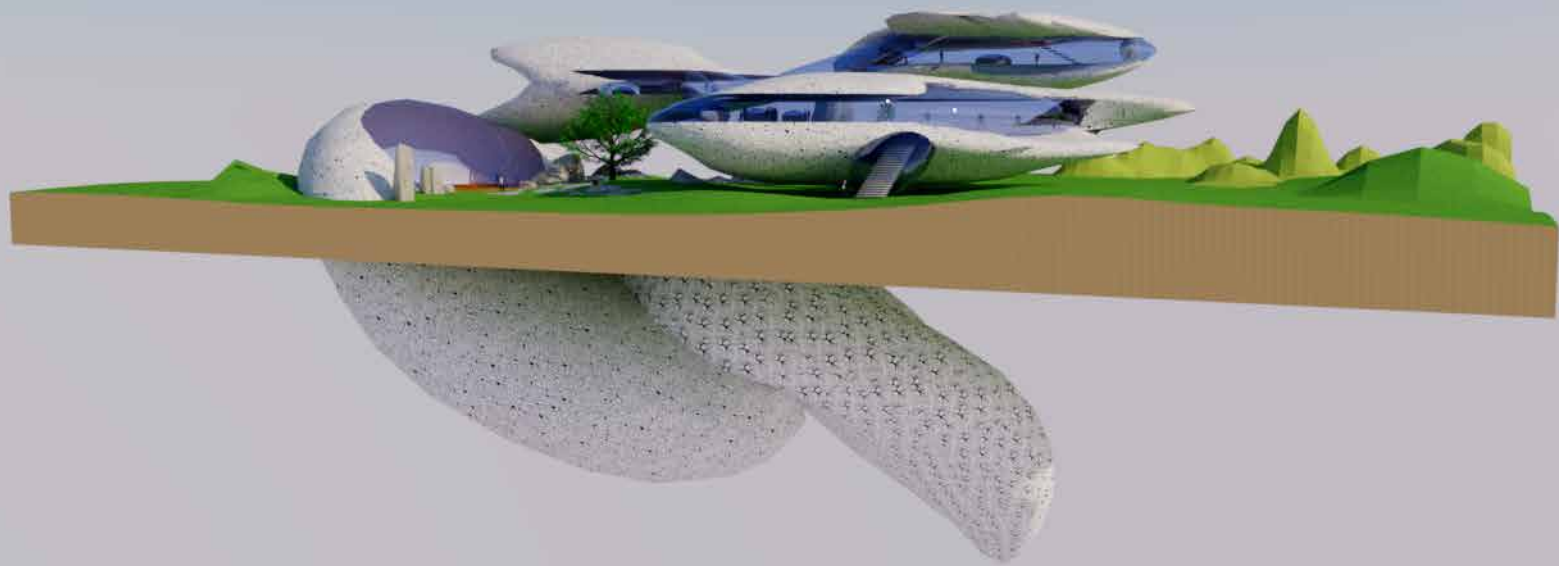


AARON BUCKLEY

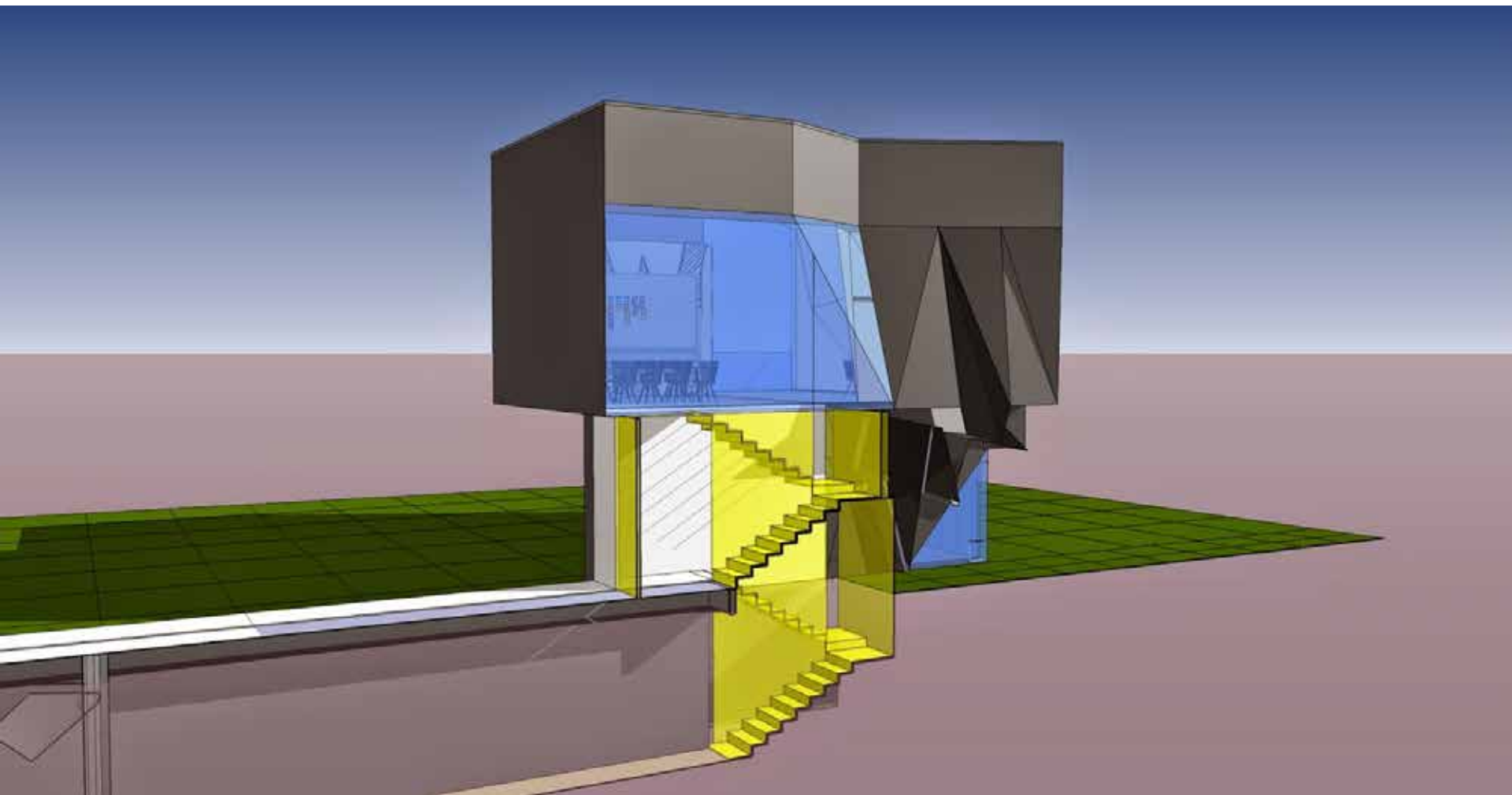








CHRISTINE PHAN



HARRIS PANERAS







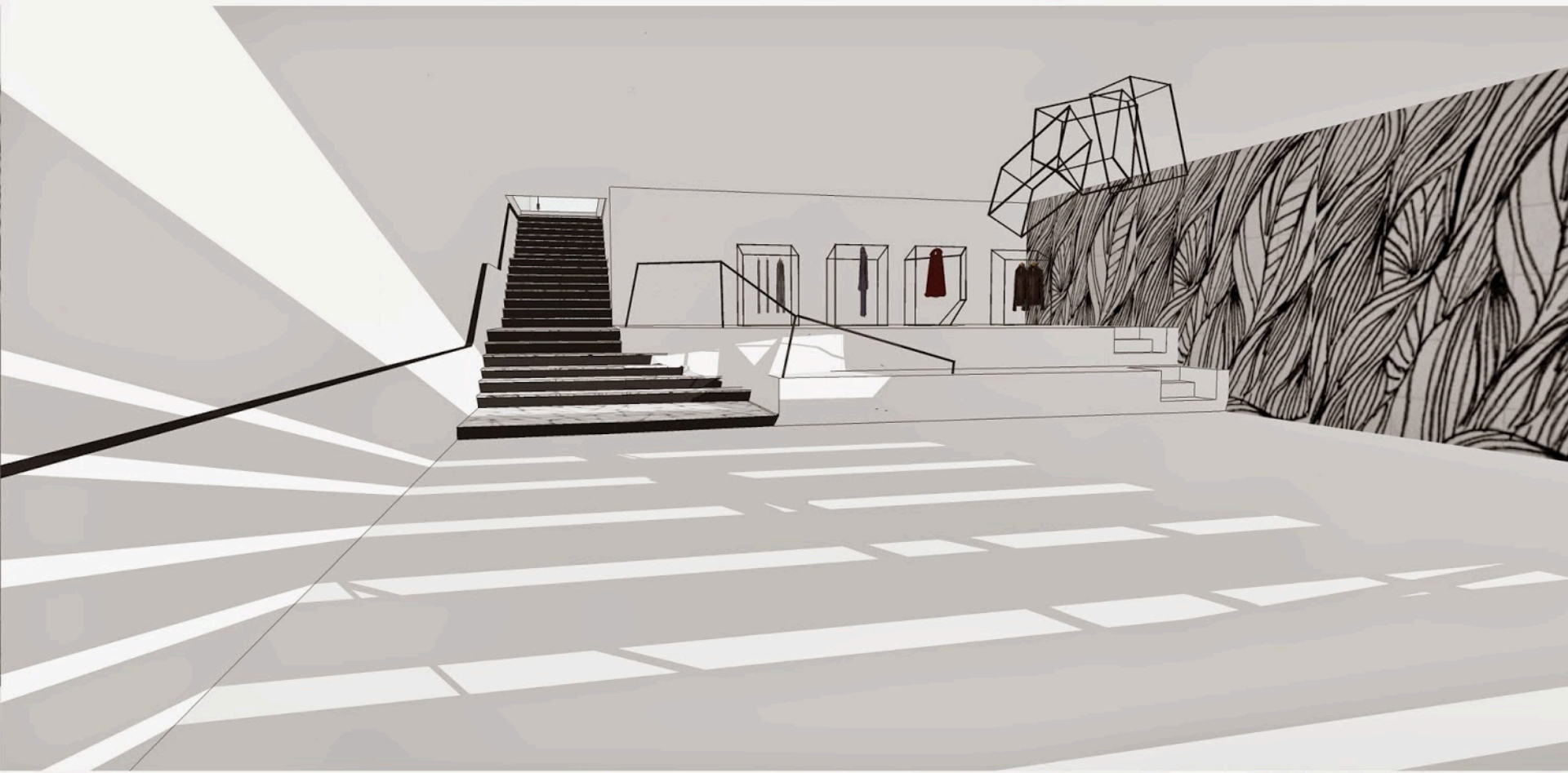
JESSICA WONG



Section //

Hazaan Motorworks Studio

Top: Hazaan Motorworks Studio
Inbetween: Exhibition Space
Below: Christian Benner Custom

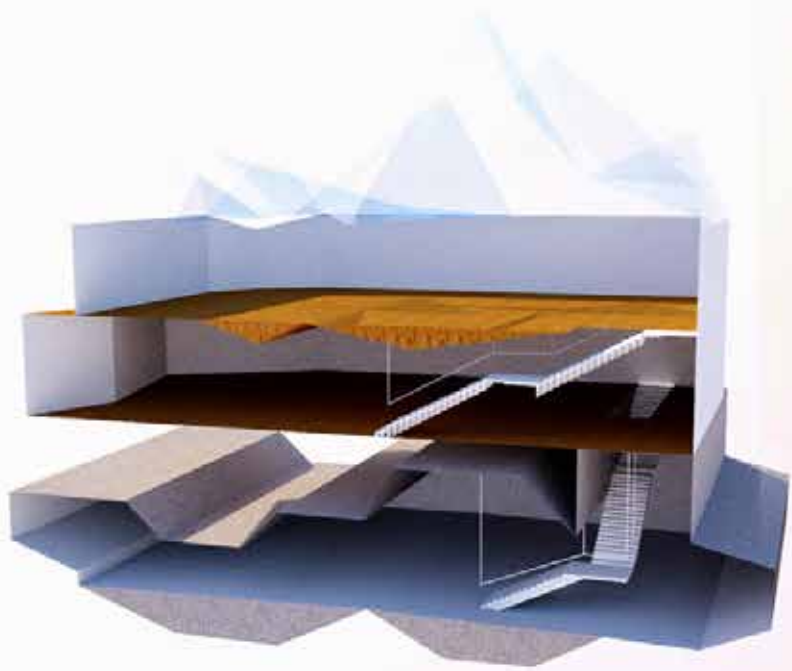


Perspective // *graymattersstudio*

Christian Benner Custom

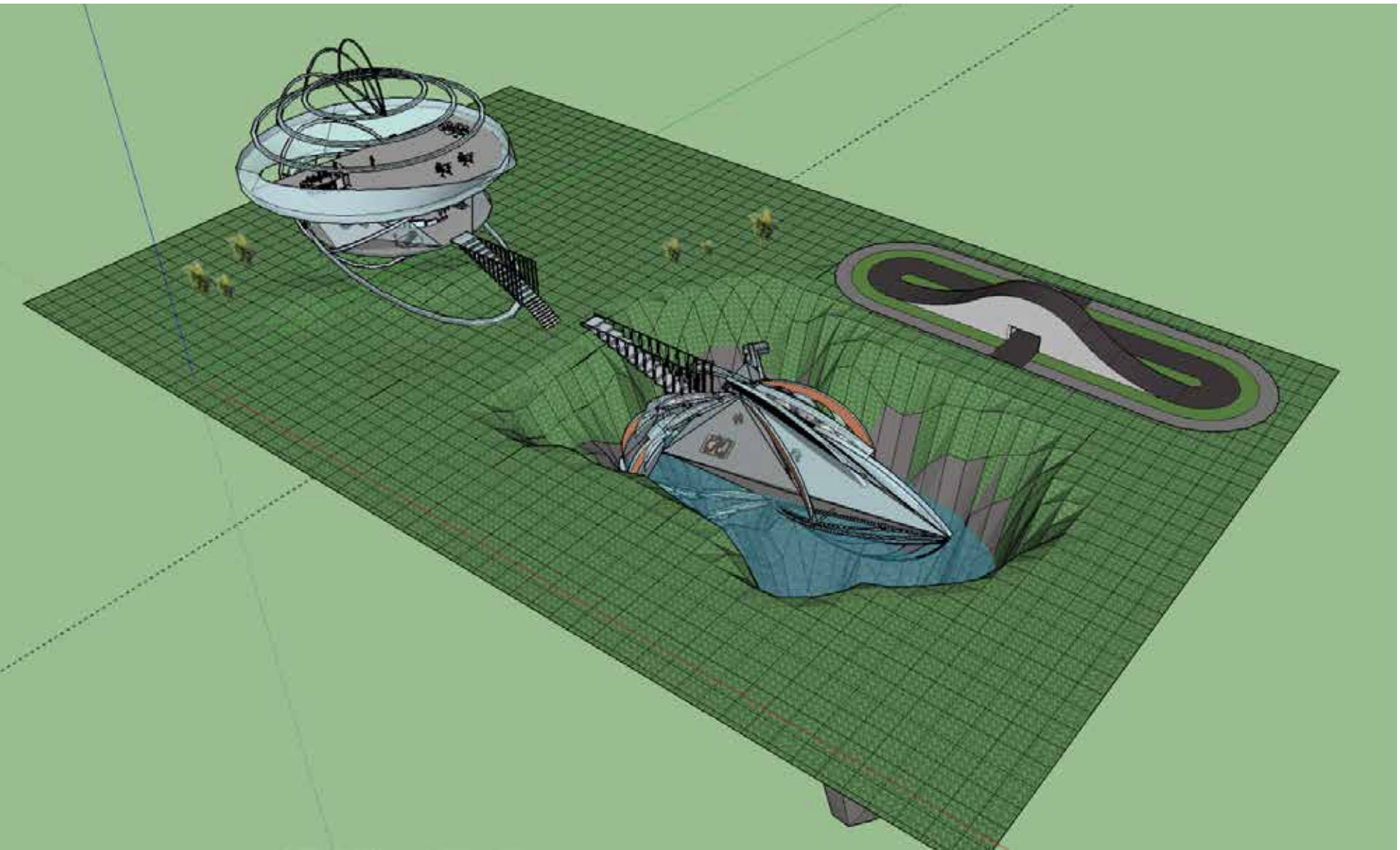
NARISSA BUNGBRAKEARTI







SHENGYAN HUANG



YISHUN TANG





TODAY IN STUDIO

Note: Throughout the class students will be demonstrating modeling techniques using Google Sketchup.

1. Using the scheme you developed in SketchUp (**and inspired by the stairs shown above**) design two sets of stairs; one that goes from the above ground studio down to the showroom space and a second that comes from the below ground studio up to the showroom space.
2. Represent each stair with at least 2 sections. Keep all the notes, details and sections relating to each stair on one pair of facing pages. Or on two screens if you are using an iPhone, iPad or similar device.
3. In consultation with your tutor take another one of the sections created in the first studio session and design two sets of stairs for that scheme. Represent each of these new stairs with at least 2 sections.

By the end of the studio session you will have at least 8 sections (representing 4 sets of stairs).