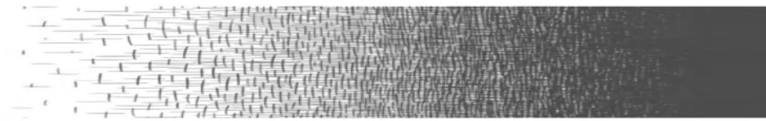
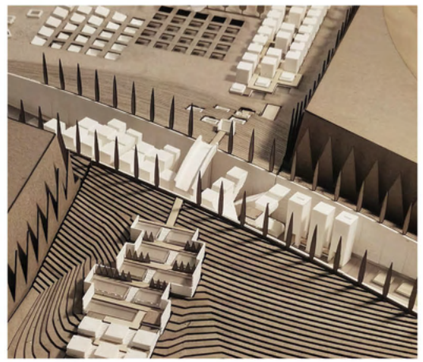
Fan Yang

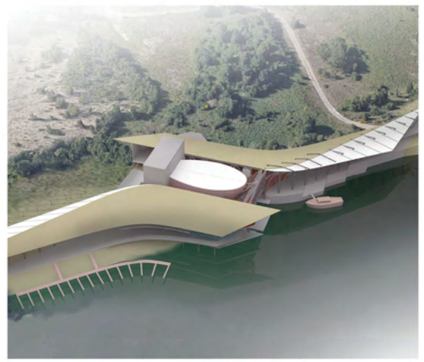
fan.yang.fy66@yale.edu francisfanyang.com

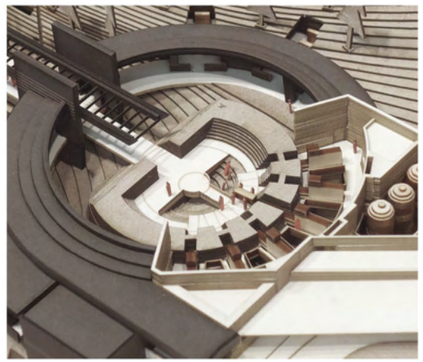


Yale - M.Arch
2021 - 2023



Carnegie Mellon - B.Arch
2013 - 2018





Professional - KPF
2018 - 2021

GALAPAGOS RESEARCH INSTITUTE

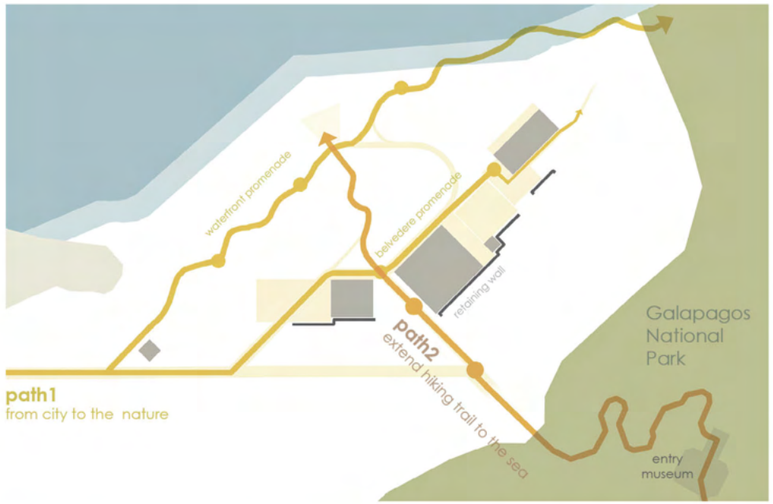
San Cristobal, Ecuador

Instructors: Tod Williams & Billie Tsien | Yale University | Individual work | Fall 2022

This research institute locates on one of the Galapagos Islands, which are famous for their rich biodiversity, immense value for scientific researches, and subsequent reputation as a tourist destination. Accordingly, the program mainly consists of two parts: the public complex (featuring the office for conservancy organization, place for public convention, reception & cafe), and the research-education complex (featuring the labs, school, and lodging for visiting scholars & students).

san cristobal island

overview

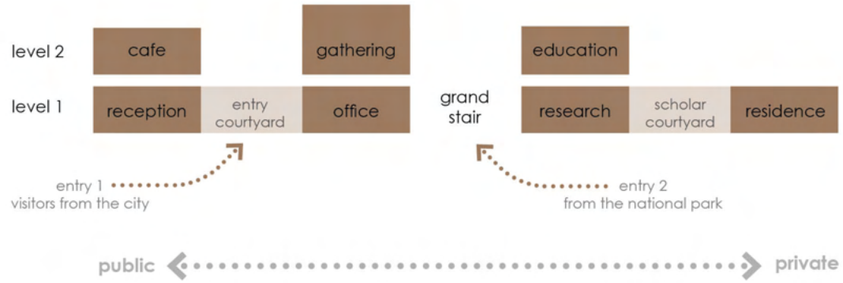


conceptual strategies

- accommodate tourism (integrate with the park trail system)
- intimate contact with nature (divide volume & mix with landscape)
- accomodate ocean view (utilize topography)

technical challenges

- circulation of different groups of user & visitor
- different spatial layout & privacy setting for multiple functions
- drop of height related to the topography

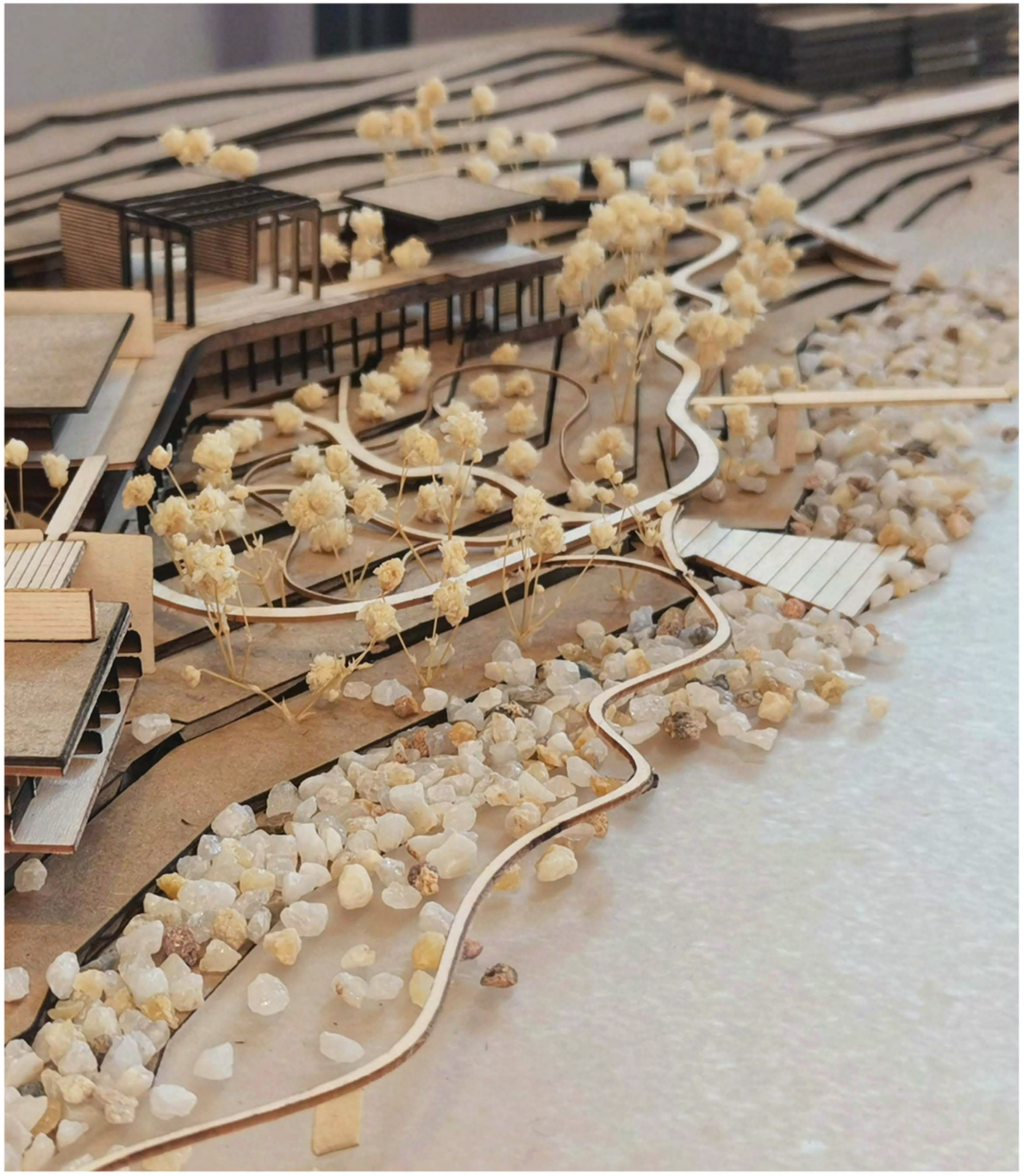


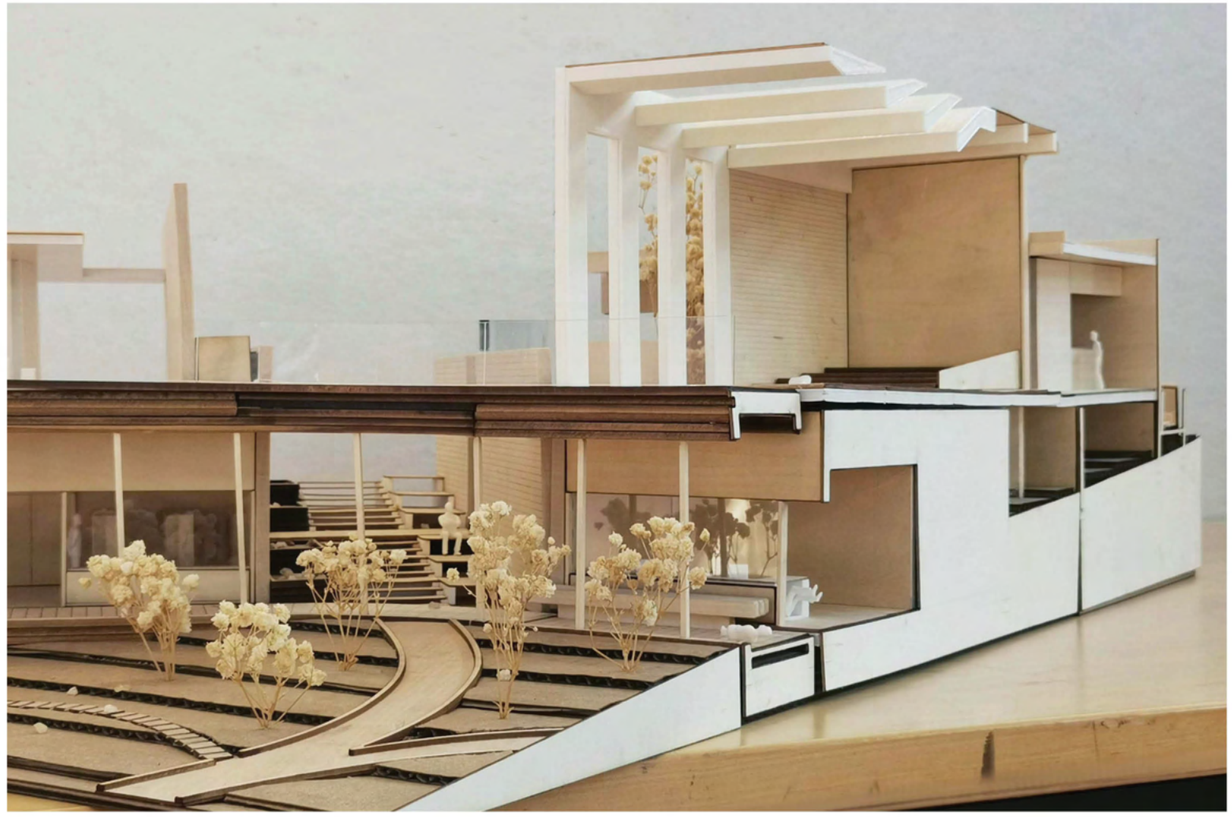
L2 destination - meeting hall

L1 destination - belvedere

grand stair - extend the mountain trail to the sea

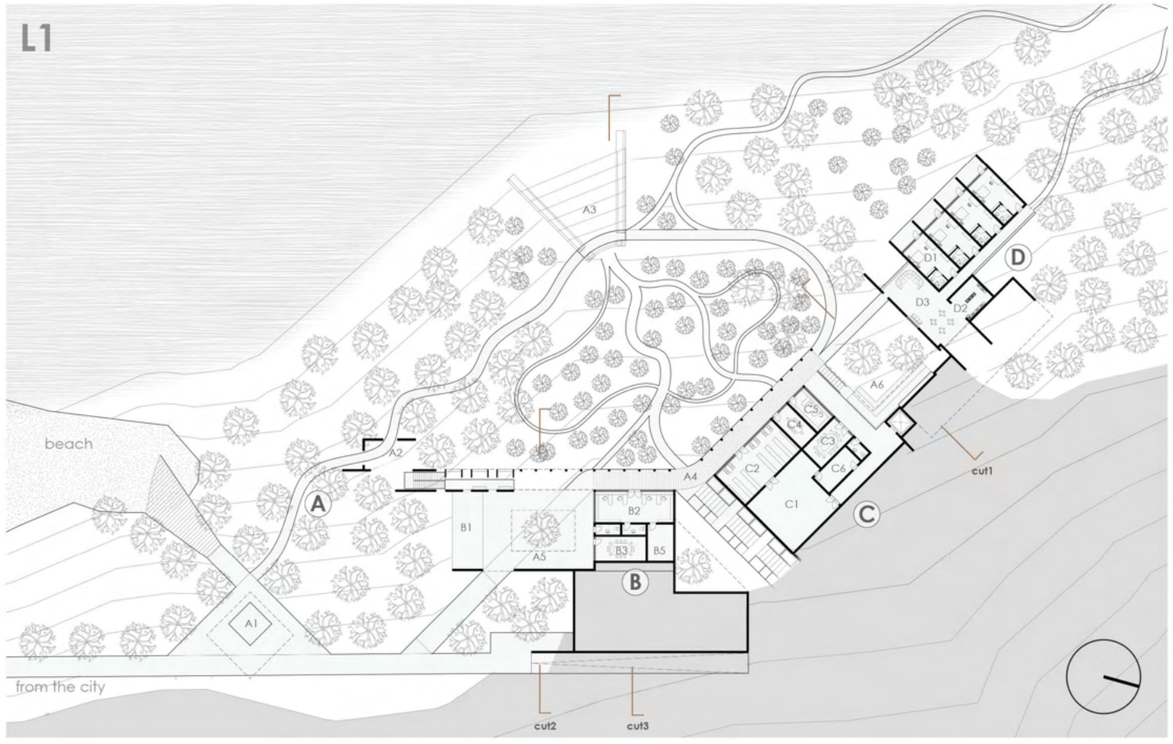
belvedere promenade

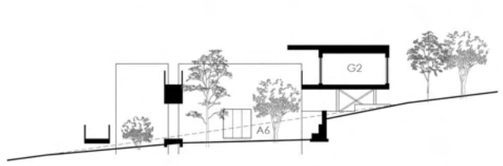




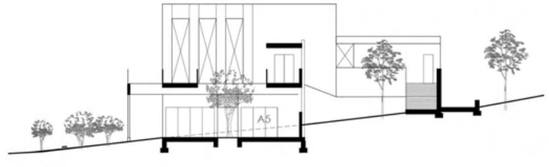
waterfront promenade

Provide new walking experience for the visitors while guaranteeing the privacy of the major complex. The shape of paths depends on the existing vegetation & waterfront condition, since this design aim to avoid moving any tree or stone.

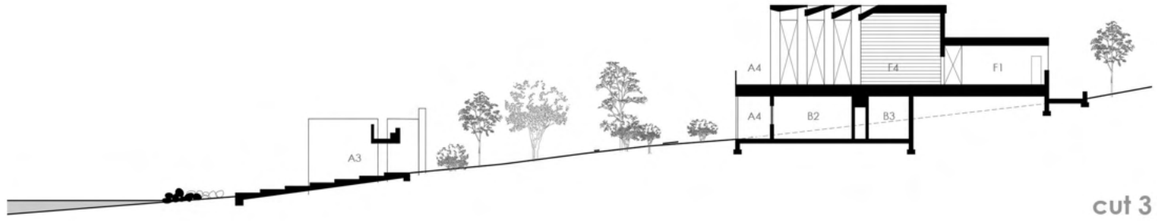




cut 1



cut 2



cut 3

public

private

L1

A. landscape & context

A1. general info/kiosk
A2. open-air exhibition area
A3. waterfront arena
A4. belvedere promenade
A5. entry courtyard
A6. scholar courtyard

B. galapagos conservancy

B1. reception
B2. admin offices
B3. conference rooms
B4. toilet
B5. storage

C. visiting scholar workspace

C1. laboratory
C2. library
C3. meeting rooms
C4. classrooms
C5. admin office
C6. storage
C7. toilet

D. visiting scholar residence

D1. bedrooms
D2. common kitchen
D3. common room

L2

E. cafe

E1. indoor dining
E2. kitchen
E3. pantry
E4. toilet

F. public meeting

F1. reception
F2. secondary reception
F3. conference room
F4. public hall
F5. catering kitchen
F6. toilet
F7. storage

G. shared education

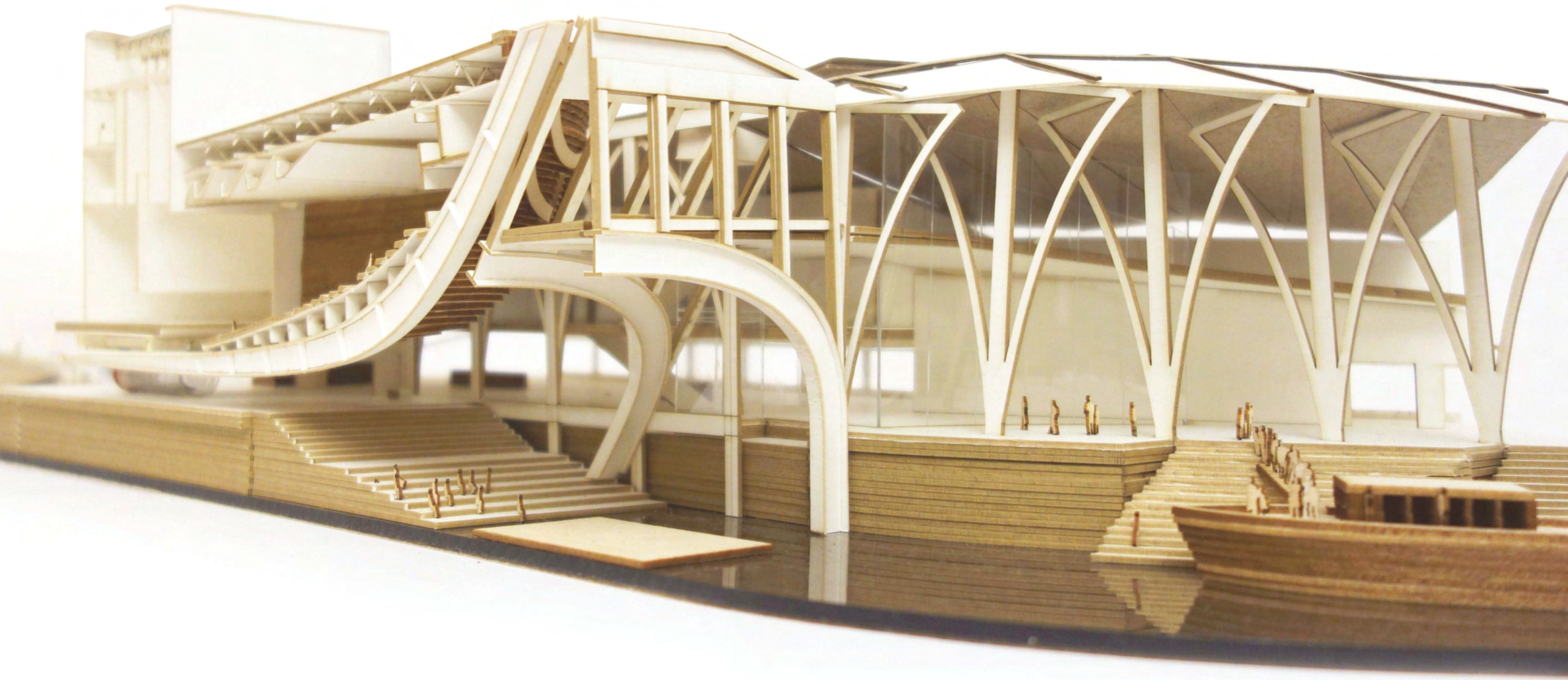
G1. classrooms
G2. lecture halls
G3. wet lab
G4. dry lab
G5. resource room
G6. admin office
G7. storage
G8. outdoor learning space
G9. loading dock

RIVERFRONT THEATER FOR FESTIVAL D'AVIGNON

Avignon, France

Instructor: Hal Hayes | Carnegie Mellon University Individual work | 2017

This theater was designed for the Festival d'Avignon, an annual arts festival held in the French city of Avignon every summer. It includes one 500 seats regular theater and one riverfront dining theater. The site is a peninsula of open land, bounded by the two branches of the river on two sides and the heavily trafficked Pont de l'Europebridge on the northeast.



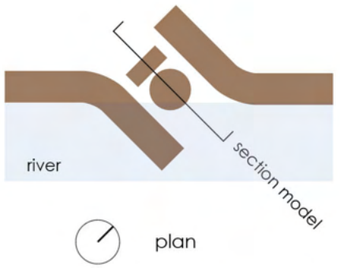
overview

conceptual challenges

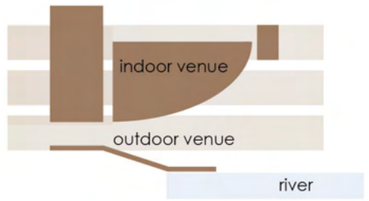
- adapt to the spirit of drama festival
- incorporate site experience
- respond to the historical context

technical challenges

- circulation of different groups of user
- fly loft configuration
- geometry of auditorium: sightline / lighting angle / etc.



plan



section1
(same as the section model below)

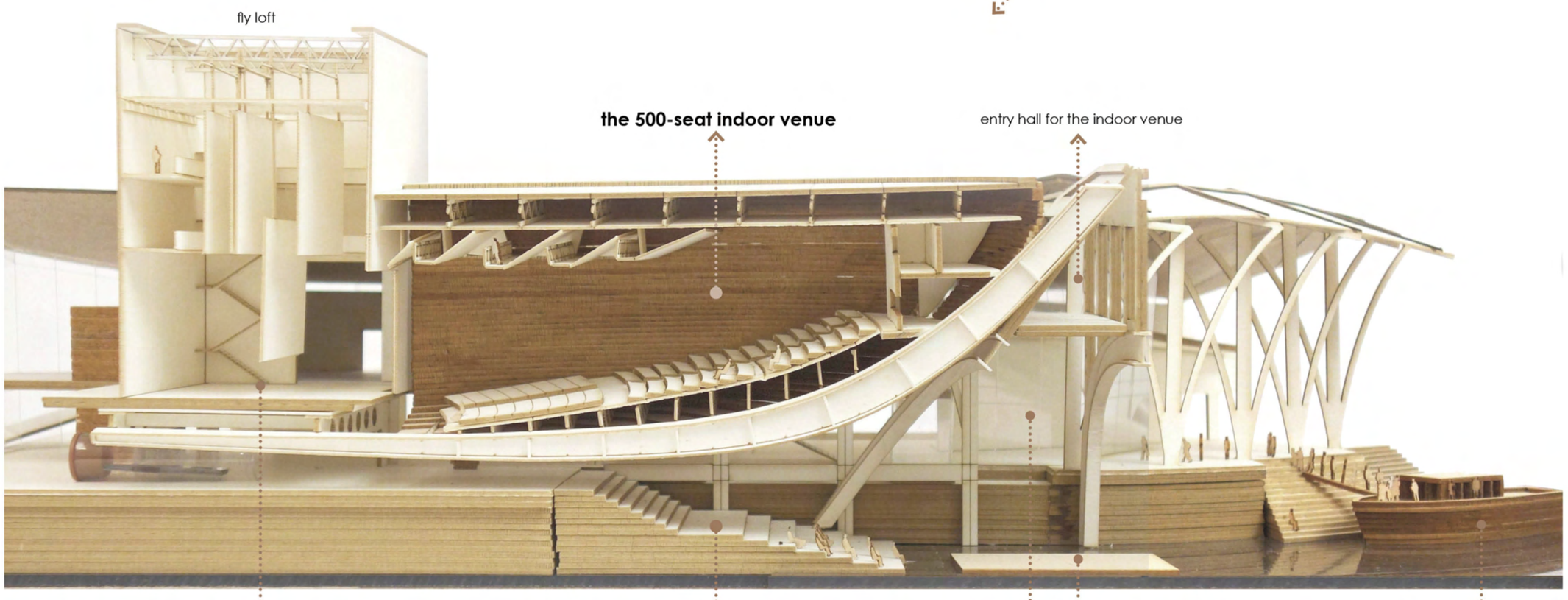
level 2: for audience

level 1: for staff

level 0: for all audience

section2

fly loft



the 500-seat indoor venue

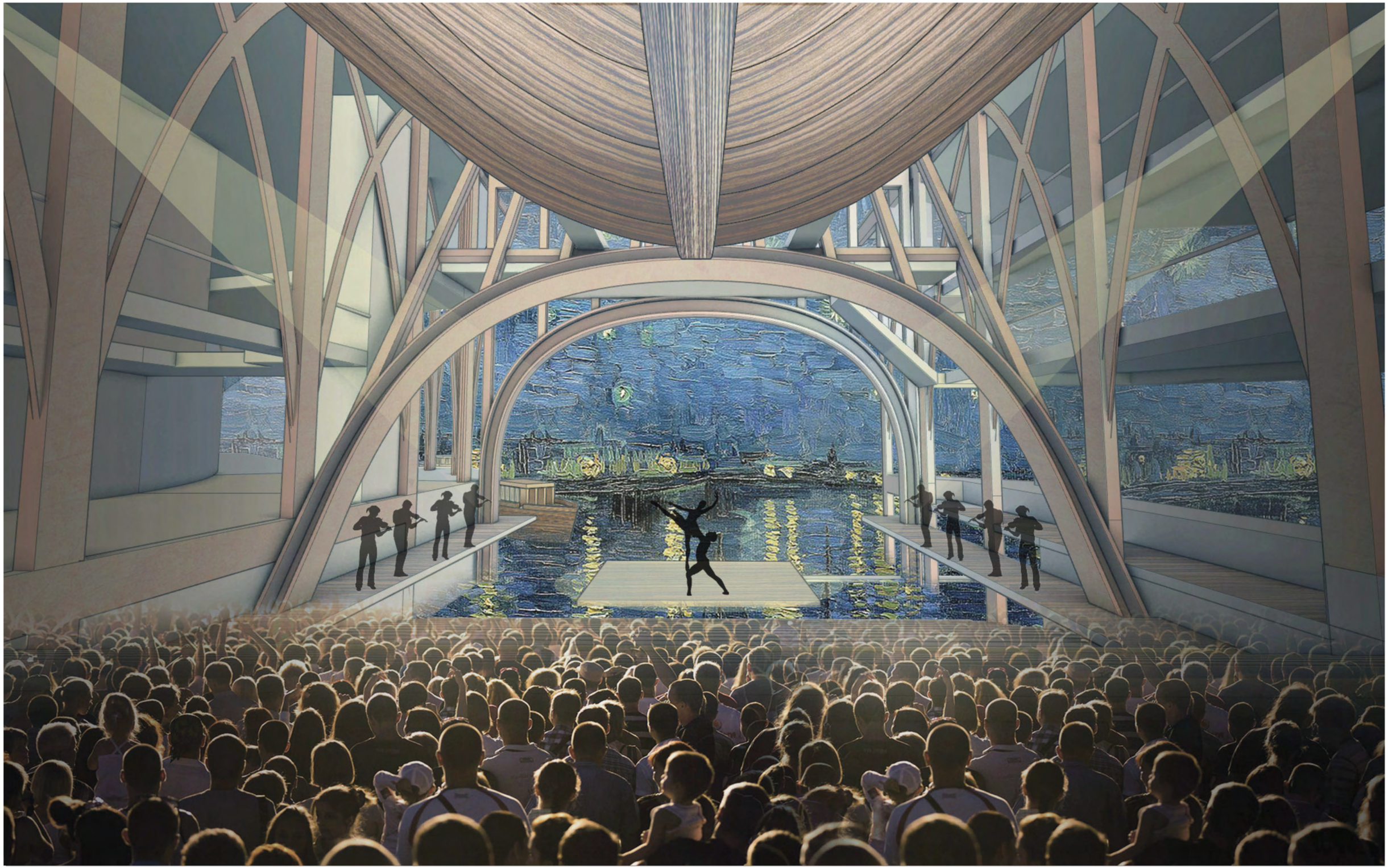
entry hall for the indoor venue

backstage

the riverfront outdoor venue
operates during the festival season every summer.

stage
entry hall for the outdoor venue

arrival
river cruise from the old town



process

The nature of the drama festival & the site conditions demands that the new venue need to:

- engage the site & river (outdoor venue)
- be festive
- respond to avignon

riverfront grotto (core experience)

- unfinished path toward the river
- old town & water as the backdrop

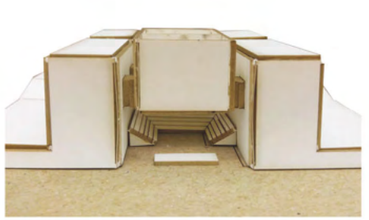
arrival

new river cruise

- accessibility
- arrival experience

① **core experience**

② view **core experience**



riverfront grotto

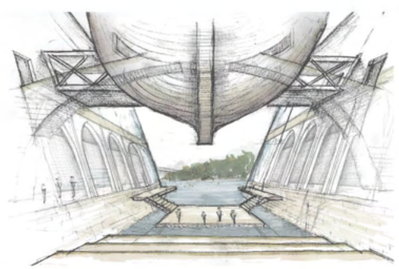
③ **core experience + secondary experience**

reorient the grotto to face the old city & extend both wings into riverfront corridors

④ **secondary experience**

- arrival sequence: rhone river cruise
- cultural identity: respond to gothic heritage & metaphoric dry dock

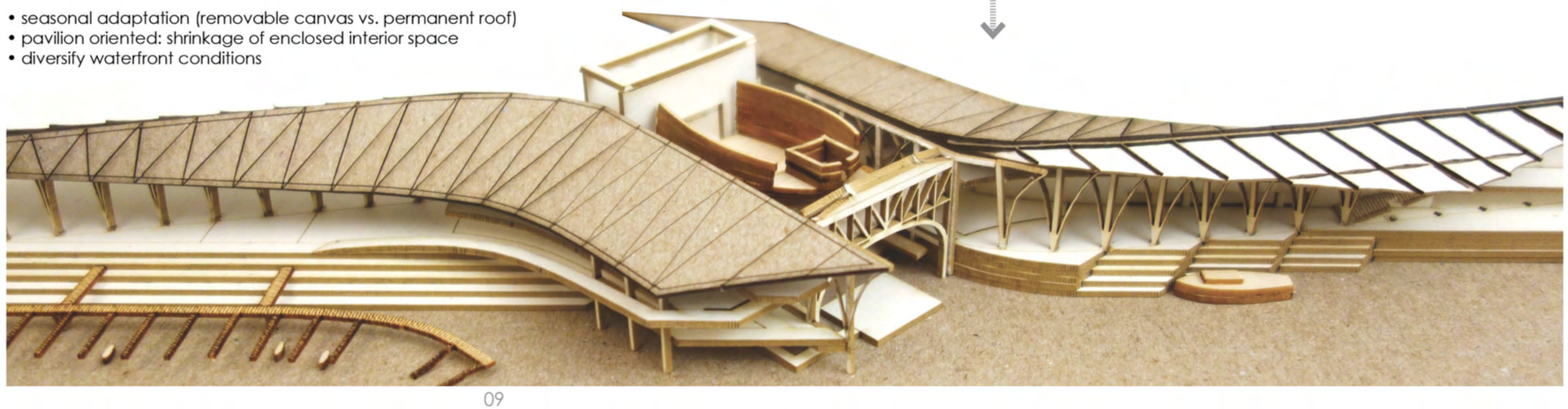
④ view **core experience**

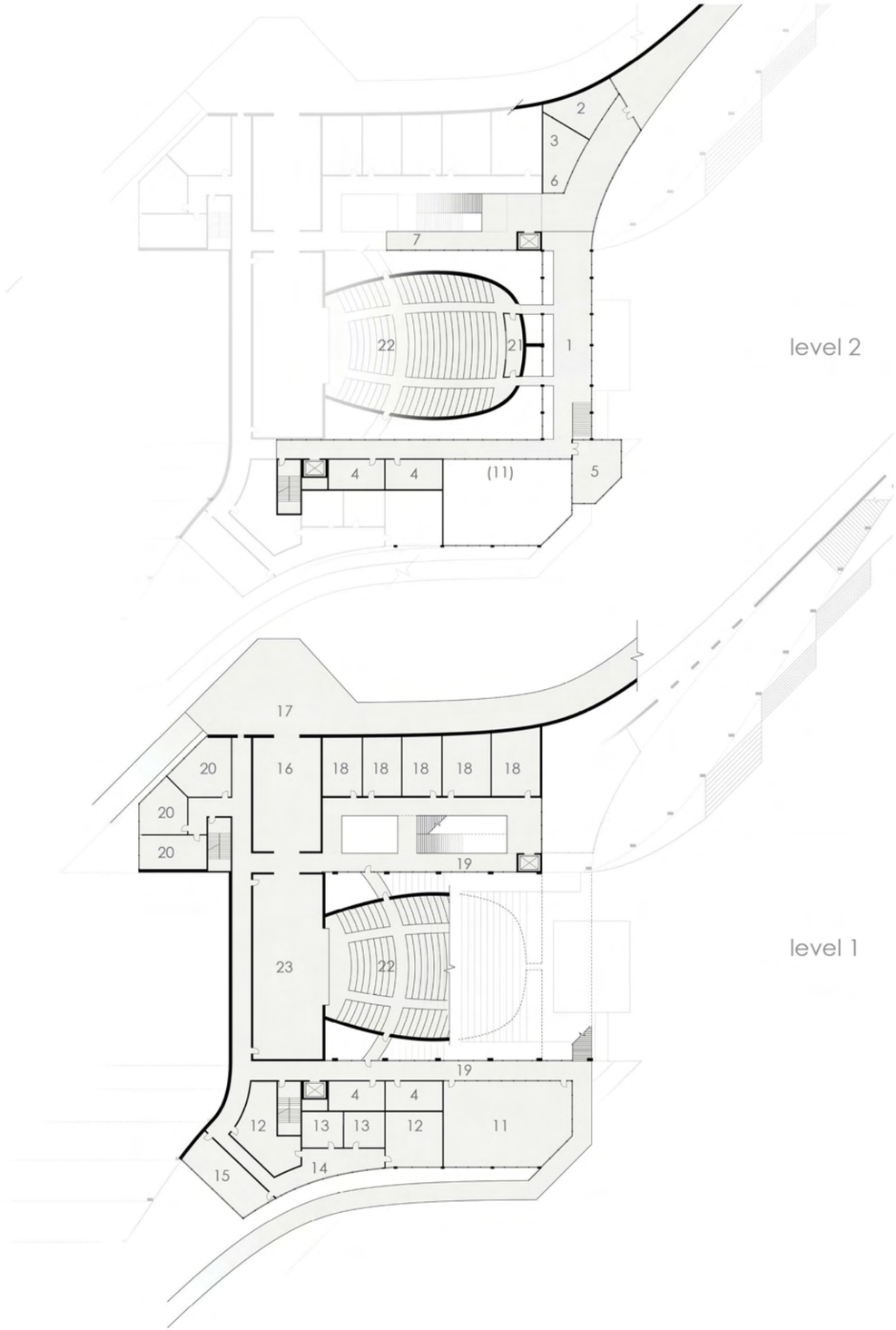


introduce notion of dry dock & arcade

⑤ **integration**

- seasonal adaptation (removable canvas vs. permanent roof)
- pavilion oriented: shrinkage of enclosed interior space
- diversify waterfront conditions





level 2

level 1

front of house (audience)

1. lobby
2. ticketing
3. coat check
4. restroom
5. patron lounge
6. bar
7. indoor dining
8. outdoor dining
9. kitchen
10. storage

back of house (artist / technician)

11. rehearsal room
12. dressing room
13. shower
14. wardrobe
15. green room
16. scene shop
17. loading dock
18. shop & storage
19. catwalk for outdoor theater
20. office
21. light & sound booth

performance space

22. 500-seat auditorium
23. stage & backstage
24. riverfront seating
25. riverfront stage

service

26. ferry terminal
27. marina
28. marina service
29. mechanical room
30. pedestrian path

level 0

NATIONAL SLAVERY MEMORIAL

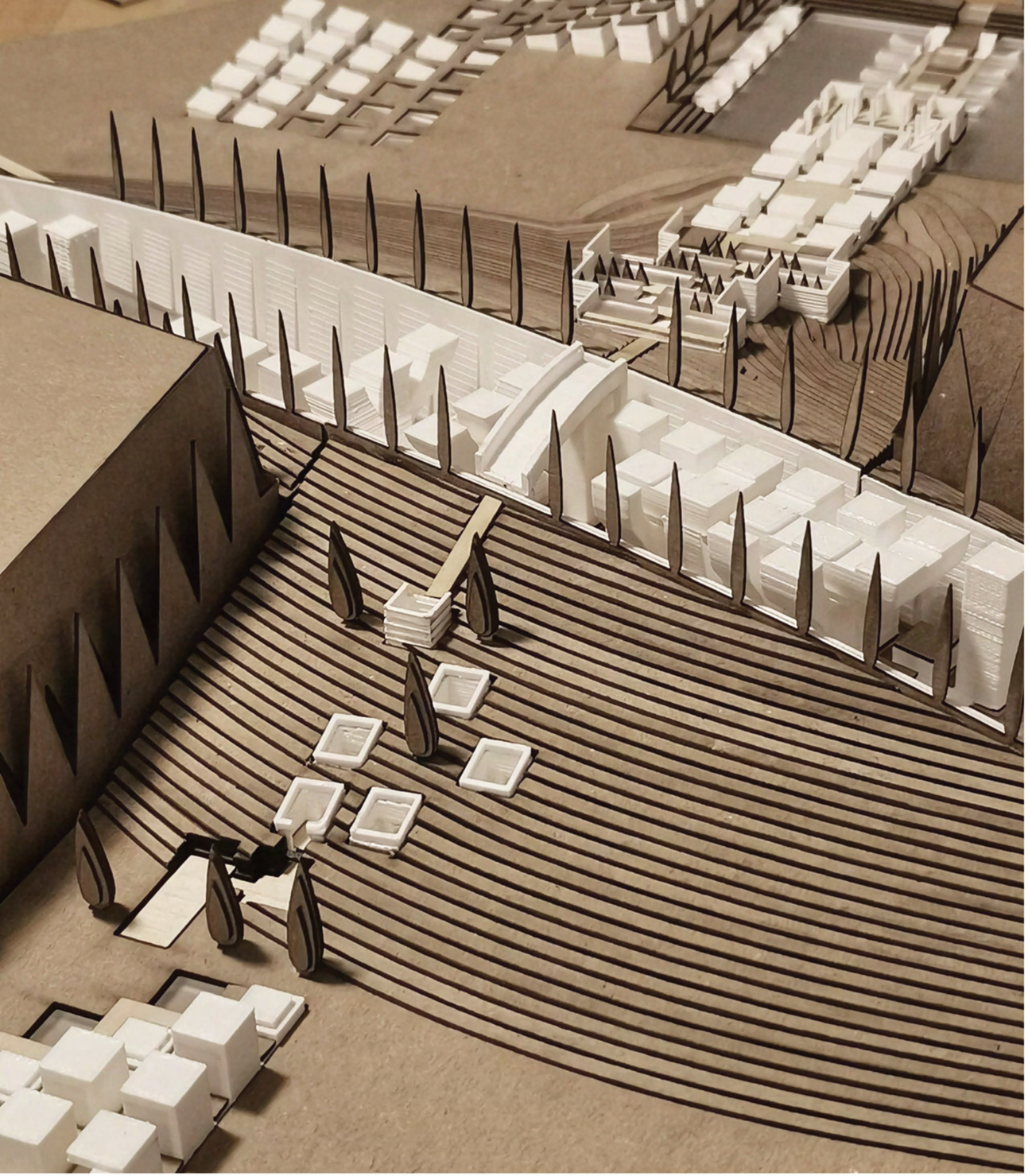
Washington D.C.

Instructors: Rodney Leon | Yale university Individual work | Spring 2022

This design applys cubic stone pillar as the entity of symbolic representation of individual character, creating both places for narrating the typical themes of slavery, as well as a place for comtemplation & rememberance. Besides narration, this project also aims to explore the design vocabulary of outdoor space and large-scale landscape.

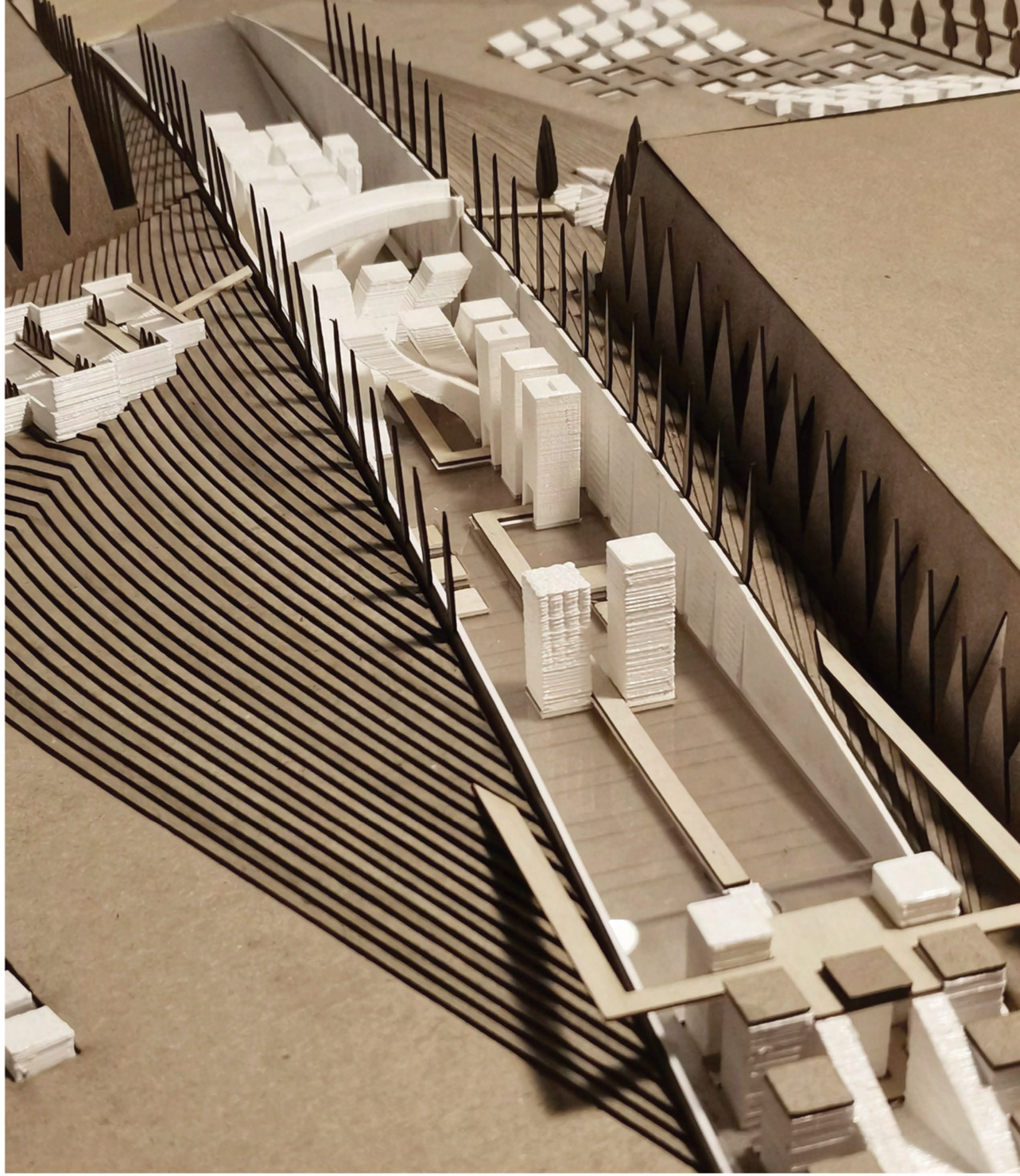
to lincoln memorial

washington monument



axis1

bridge - themes of remediation
(NW - SE)



axis2

valley - themes of slavery
(NE - SW)

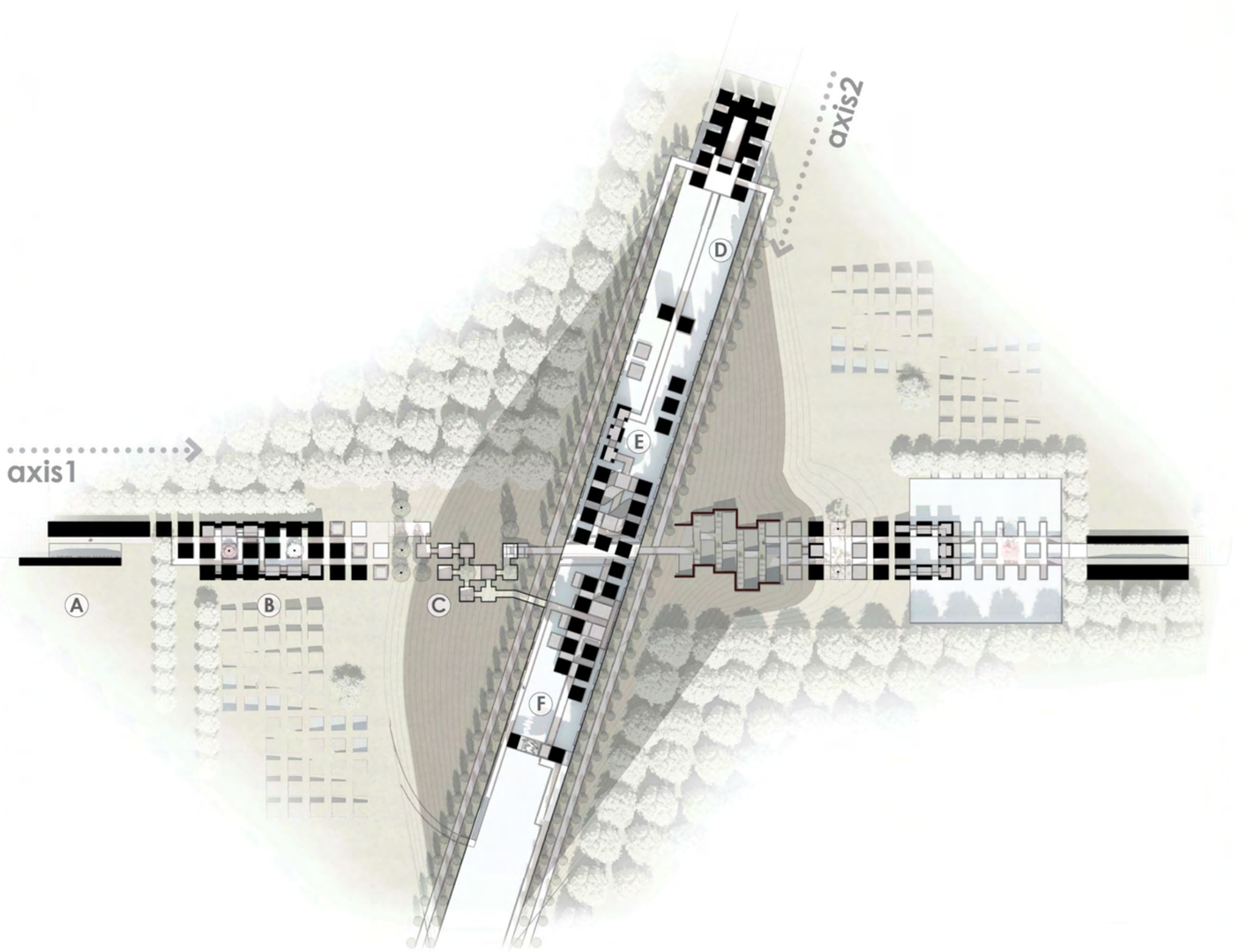
C2. tunnel overview

C1. tunnel

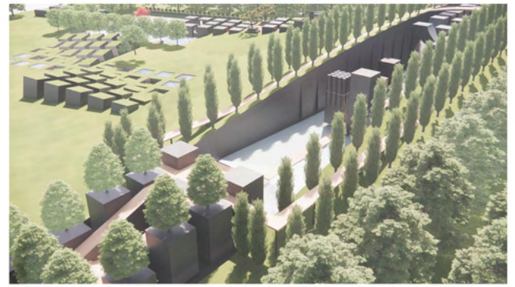
B. courtyard passage

A. entry

axis1

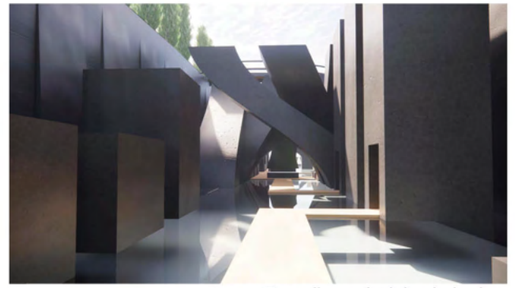


axis2



valley overview

D. valley - fetter



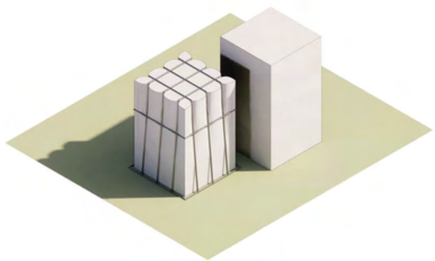
E. valley - twisted desiny

F. valley - inequality

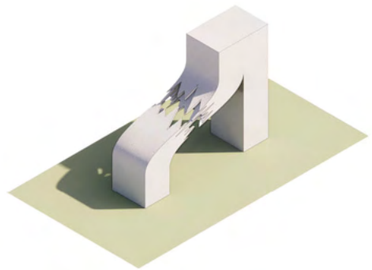
bridge - themes of remediation

valley - themes of slavery

Sculptural method
(themes of slavery)

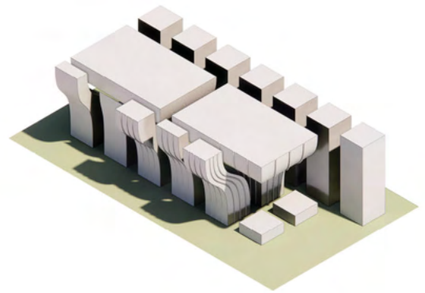


fetter



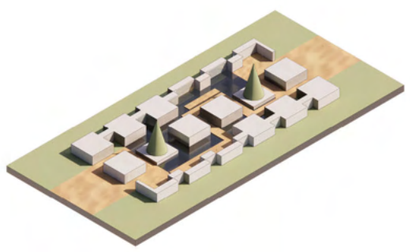
family separation

twisted destiny

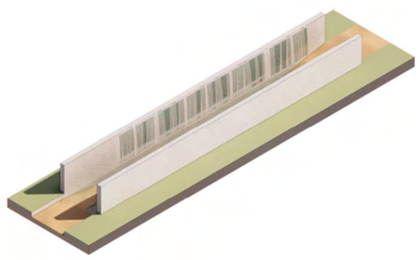


inequality

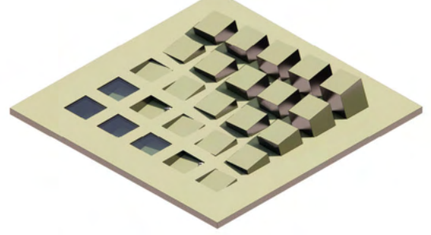
Landscape method
(themes of remediation)



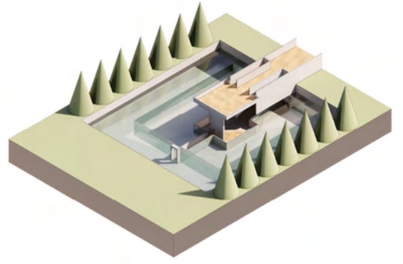
courtyard passge



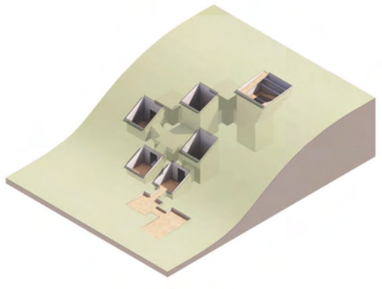
water wall



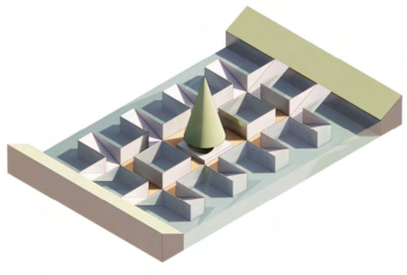
?



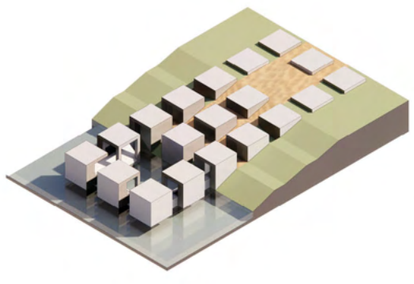
meditation platform



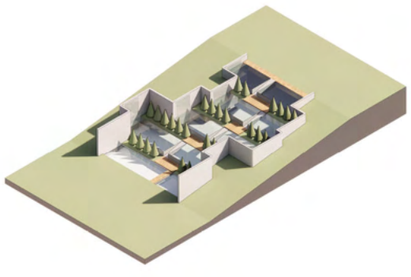
tunnels



basin



theater



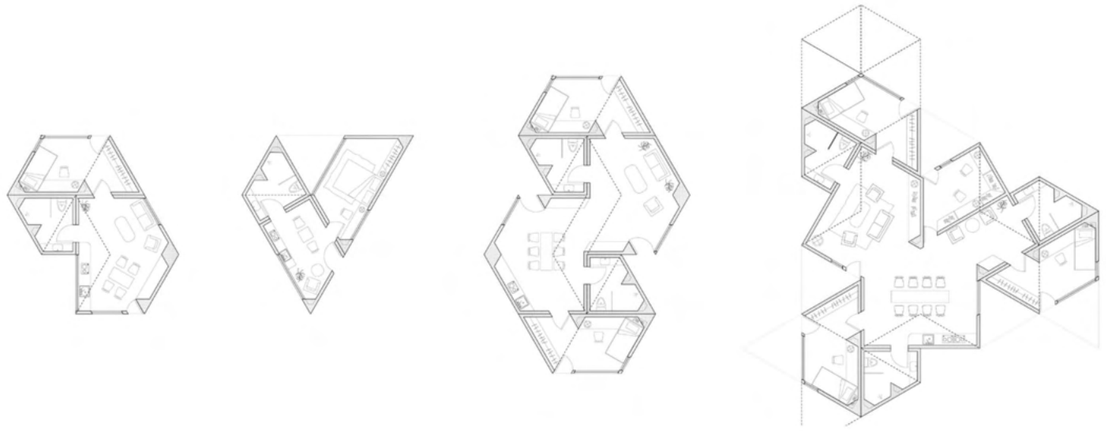
terraces

PREFAB HOUSING SYSTEM

Los Angeles, CA

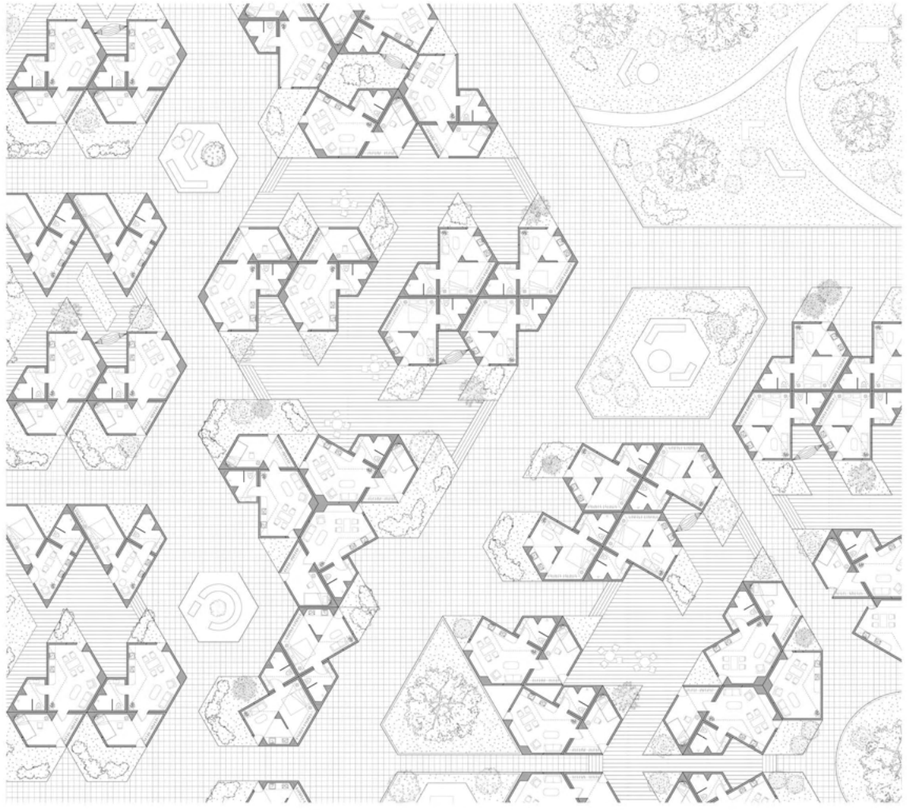
Instructors: Heather Roberge | Yale university | Collaborated with Tianyue Wang | Fall 2021

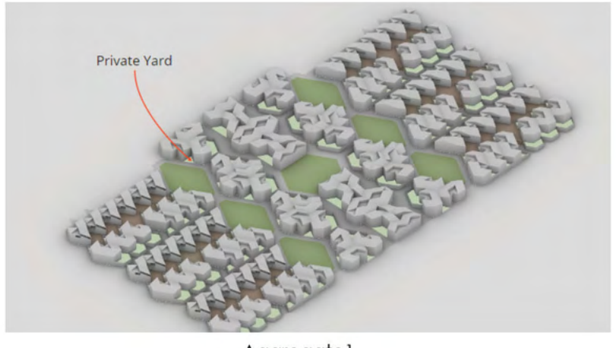
This project proposed a volumetric prefab system organized by the equilateral triangular grid, which compose various unit types with 3 basic volume types. The ambitions for this housing system are twofold: construct particular associations between people as community and make allowances for a variety of living and social formats.



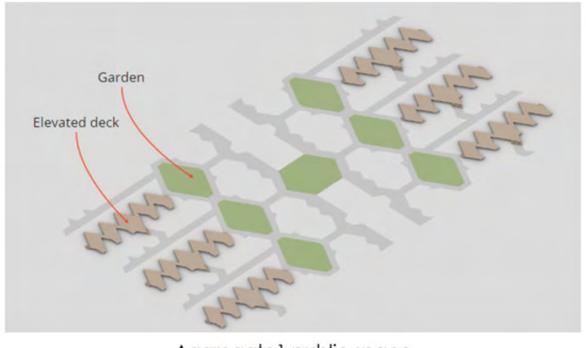
This design aims to cultivate a sense of community by creating different scales of association: island, village and district. Shared amenity networks are generated at different scales corresponding to each of the aggregations.

Instead of mechanized repetitive addition, the units always maintain independent geometric identity and become new ingredients for the next level of aggregation.

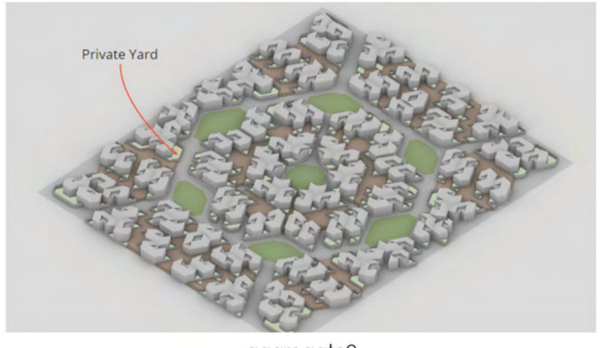




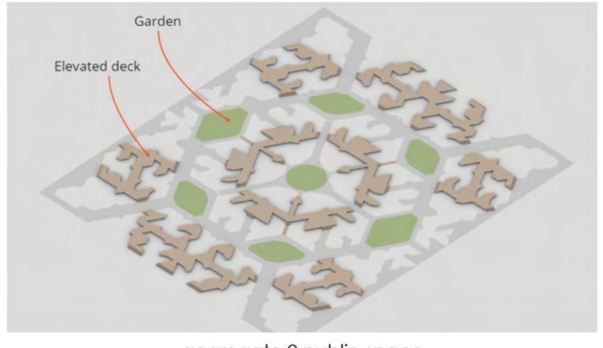
Aggregate1



Aggregate1 public space



aggregate2



aggregate 2 public space

The hierarchy of community also features a hierarchy of outdoor intimacy, which is further implied by the hierarchy of floor height and circulation width. While each unit has a private courtyard, the close neighbors on each elevated island also share intimate access and small public space.

SHIPYARD RESEARCH

Gothenburg, Sweden

Instructors: Alan Plattus & Andrei Harwell
Yale university | Summer 2022

This reconstruction of the typical shipyard aims to represent the overlaying of several urban systems, the flows of various groups of mateiral & staff, and their joint impact on the procedure of ship production.

❶ Material Transportation & Unloading

❷ Panel Building & Equipment

A typical panel is composed of several steel plates butt-welded together stiffened by profiles, girders and brackets. And then, sections are built by welding together panels and individual parts. A section is the basic construction unit of a ship, where a typical complex ship is composed of 50-200 sections. After a section is assembled, the section is moved to a paint hall to be painted.

❸ Block Building

Several sections are welded together to form blocks prior to erection.

❹ Dry Dock Assembly

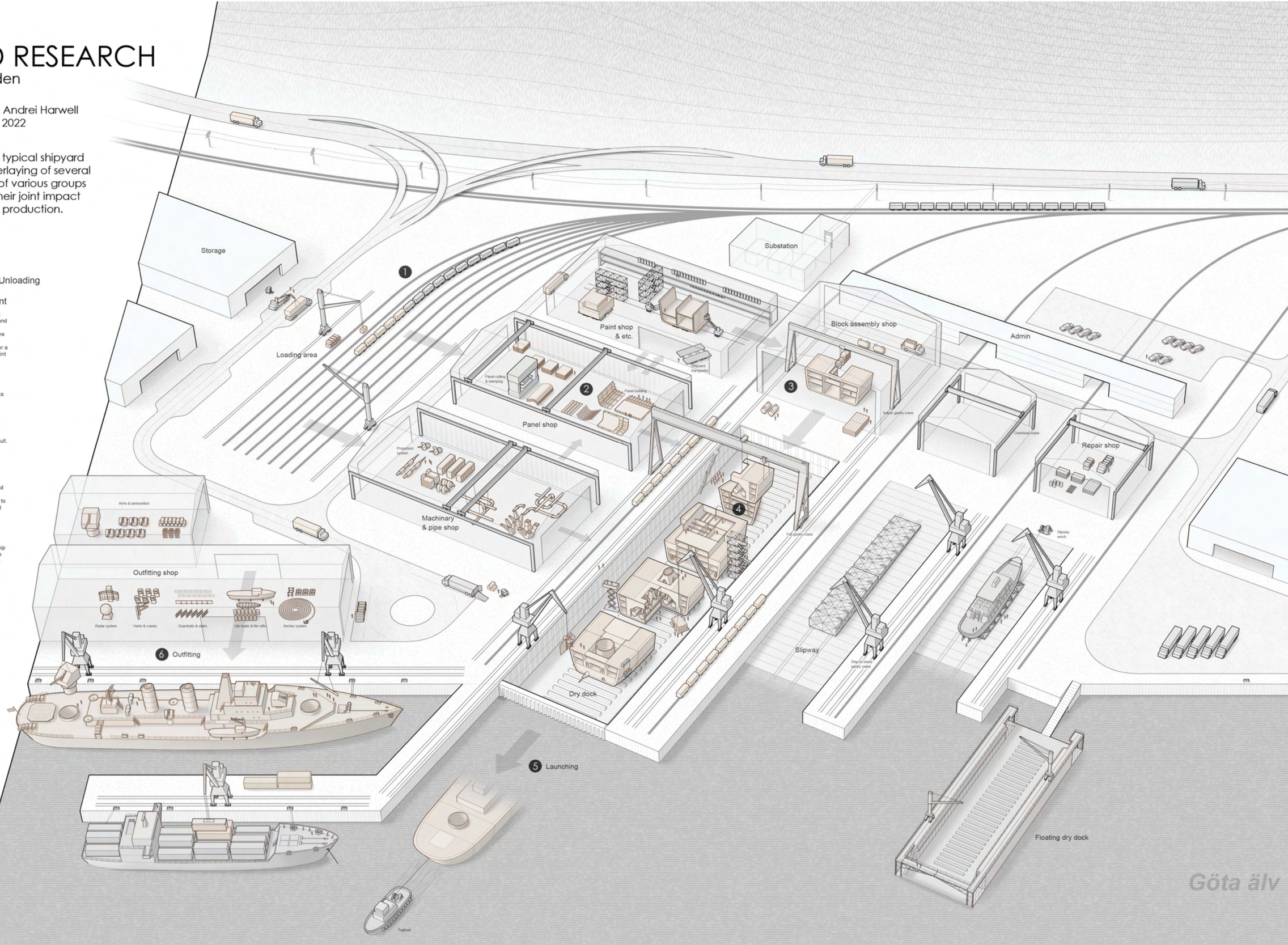
This stage involves assembling the sections and blocks of a ship on a slipway/drydock to form the hull. The sections and blocks are then welded together during erection.

❺ Launching

During this stage, water flows into the dry dock, and the ship floats up, and then is moved from the dry dock to the quay. The hull must be watertight prior to launching, and all external underwater work should be completed.

❻ Outfitting

This stage involves installing components in the ship while the ship is moored alongside the quay. At the conclusion of this stage, all components should be installed.



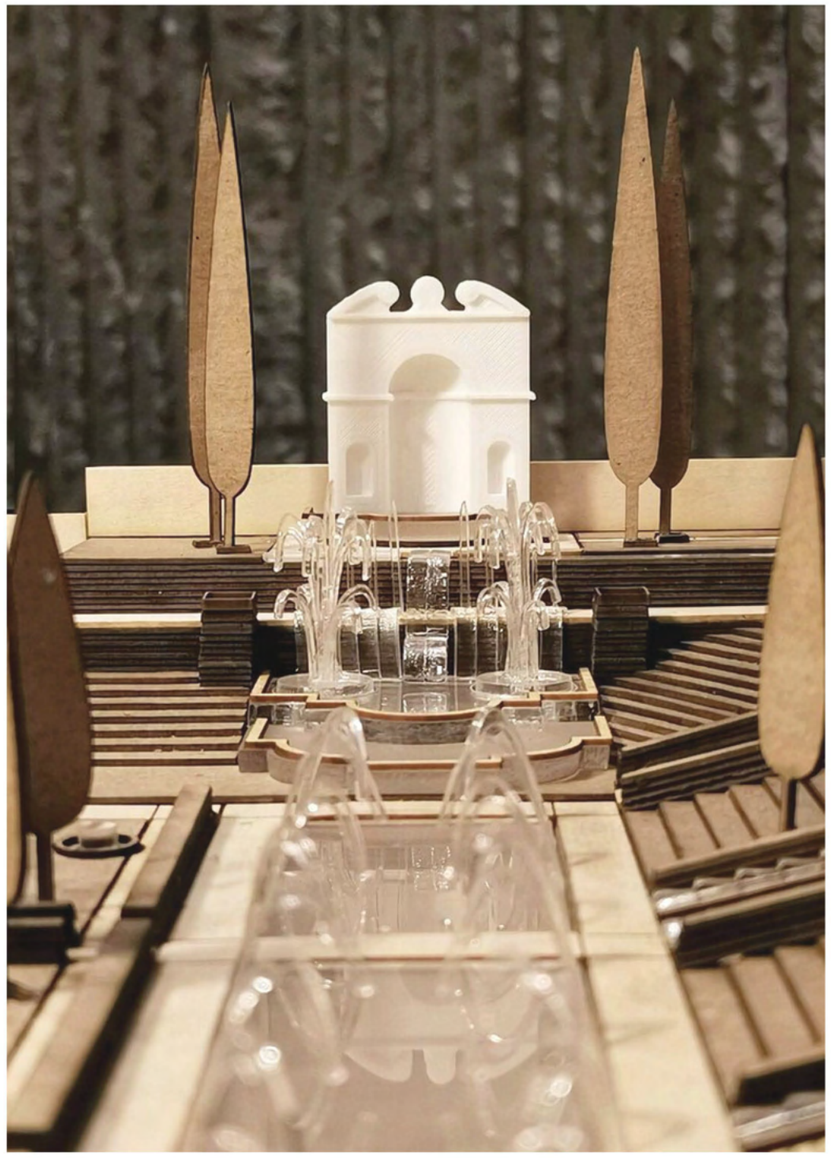
LANDSCAPE RESEARCH - VILLA D'ESTE

Tivoli, Italy

Instructors: Bryan Fuermann | Yale University | Fall 2021

Villa d'Este is an Italian Renaissance Garden famous for its terraced hillside and especially for its profusion of fountains, designed (1550s A.D.) by the Mannerist architect Pirro Ligorio for the Cardinal Ippolito II d'Este.

This model aims to diagram and categorize the various water strategies of this garden by isolating all key water features, along with any related decorative, terrace, and planting strategies.

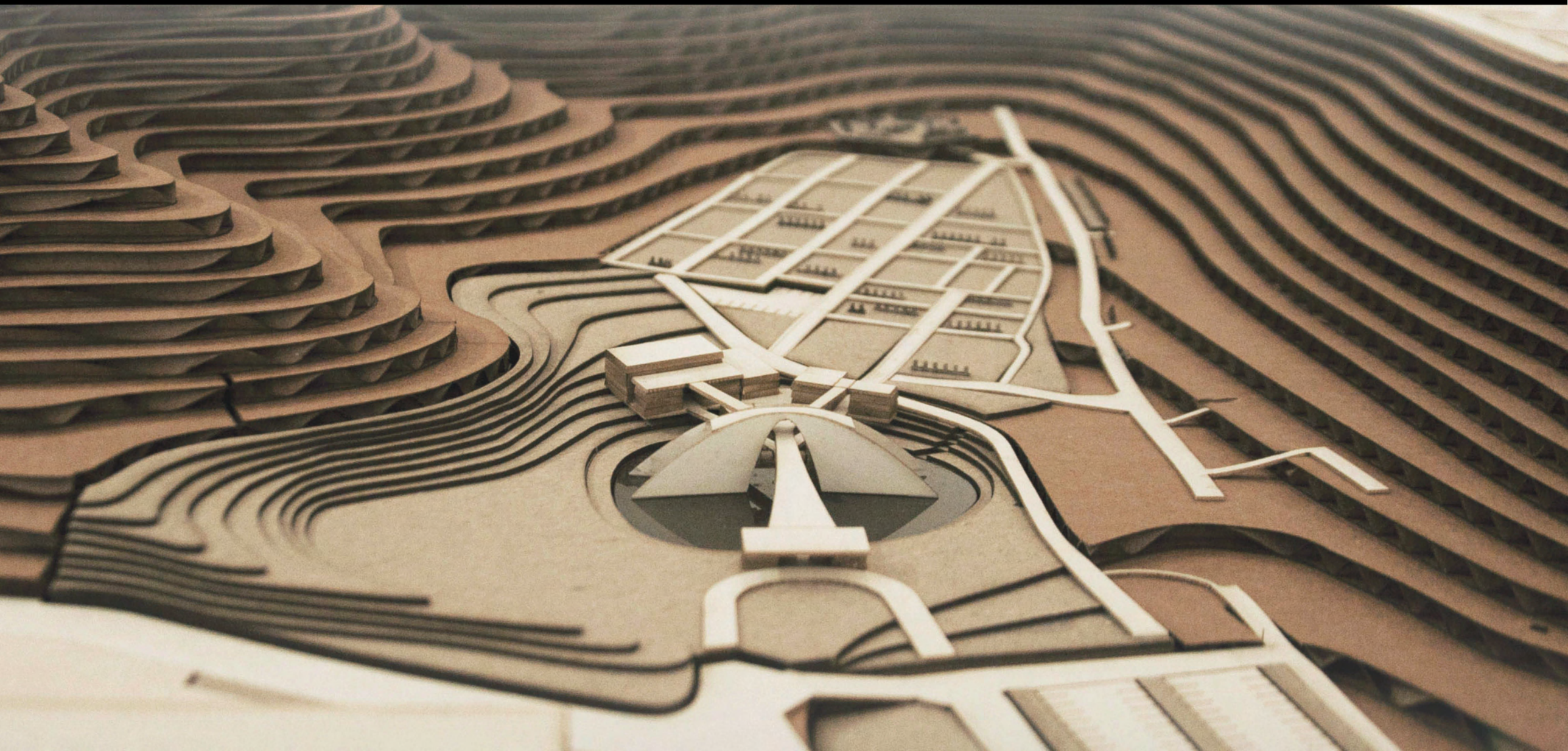


THESIS - NEW CREMATORIUM

Gifu, Japan

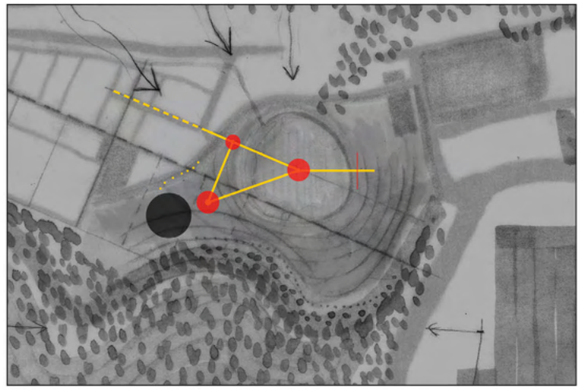
Instructors: Mary-lou Arscott & Christine Mondor | Carnegie Mellon University
Individual work | Spring 2018

This project aims to explore the potential of conceptual design by proposing multiple contrasting schemes, using the same program and site of one of Toyo Ito's crematorium in Gifu, Japan.

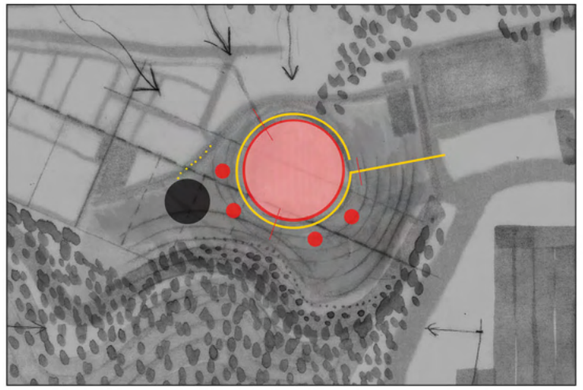


stage 1

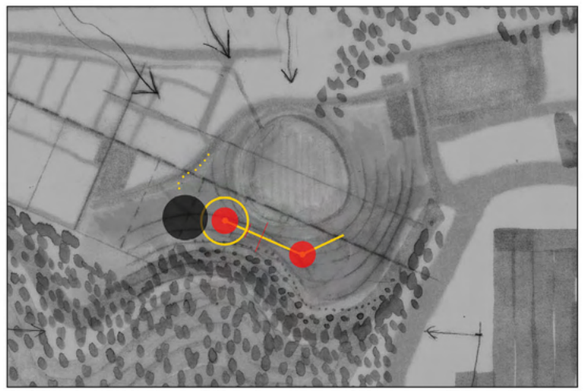
spatial identity
impression & cognitive map



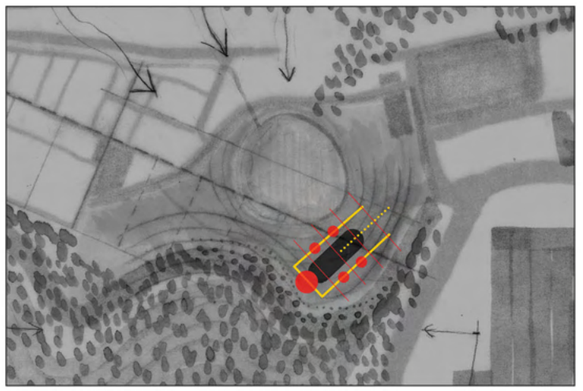
OPT1 lake bridge



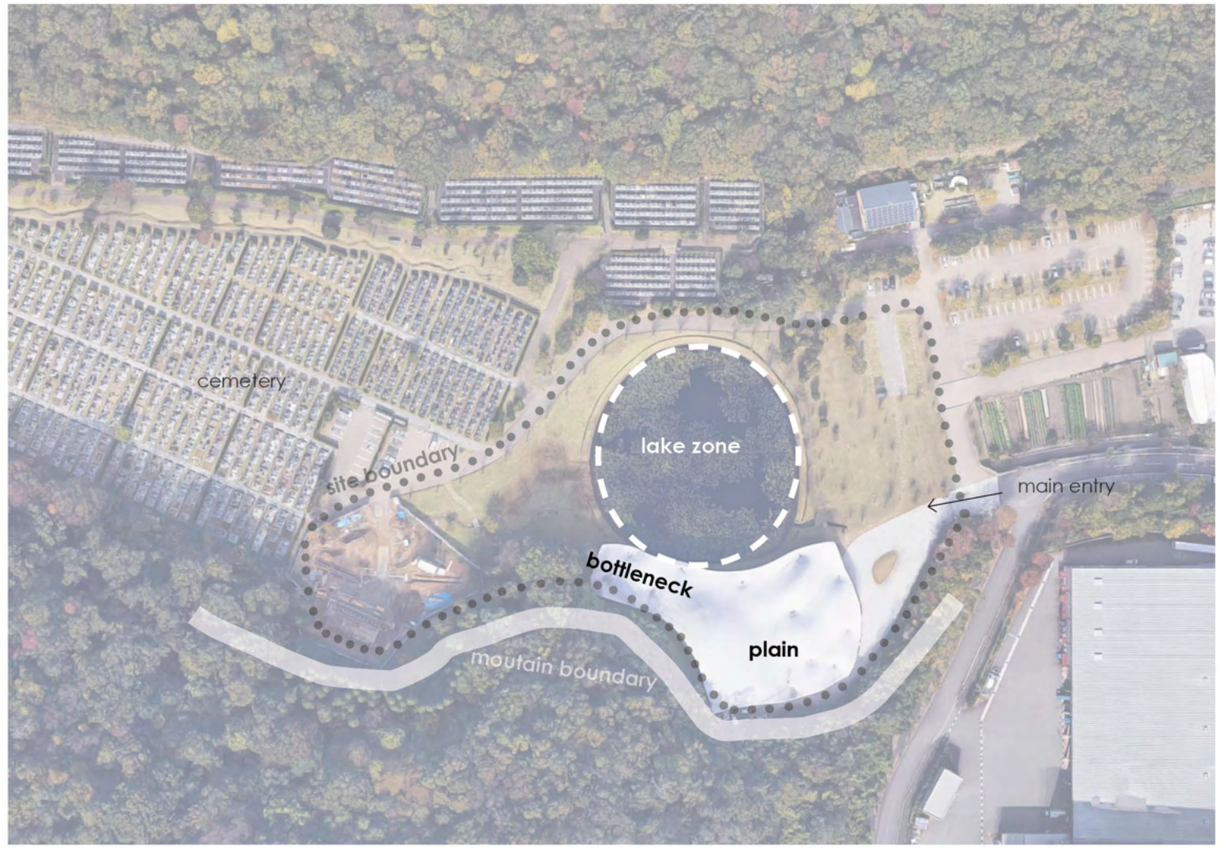
OPT2 lake shrine



OPT3 distant shrine



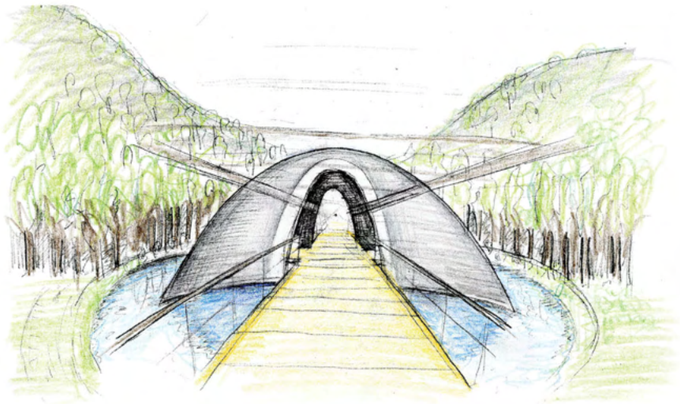
OPT4 serialization



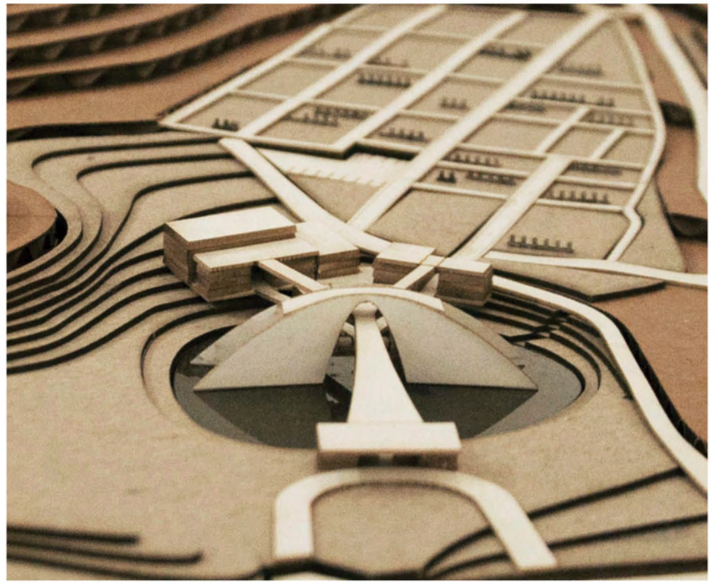
path / moving pattern (goal directed attention)

interaction / focus / event (stimulus driven attention)

support / backstage program

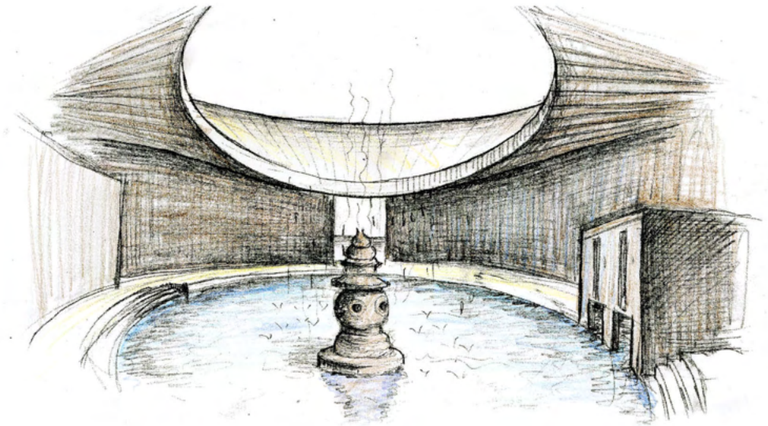


the lake as partitions & symbolic gateway of the valley of death

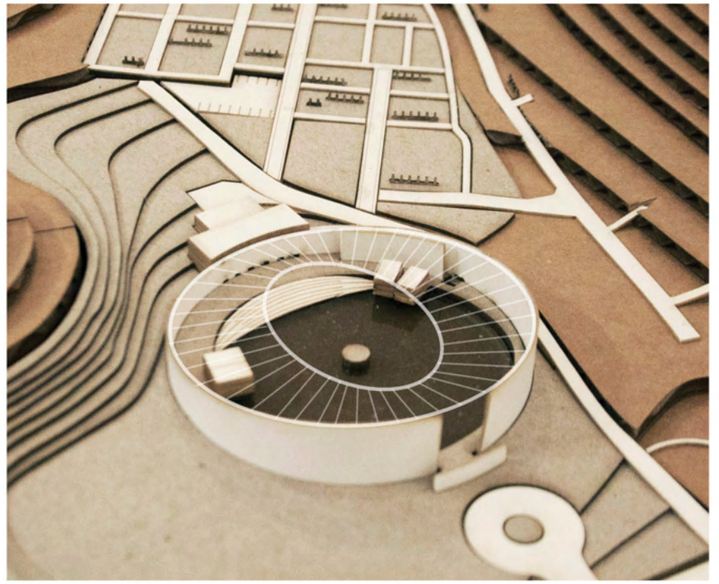


influenced by schema1: notion of transition | partition | consolation

OPT1 lake bridge

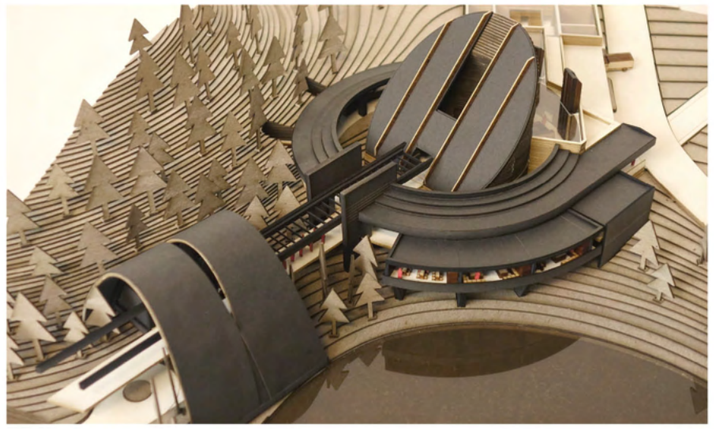


the concentric spatial order facilitates reverence & reflection

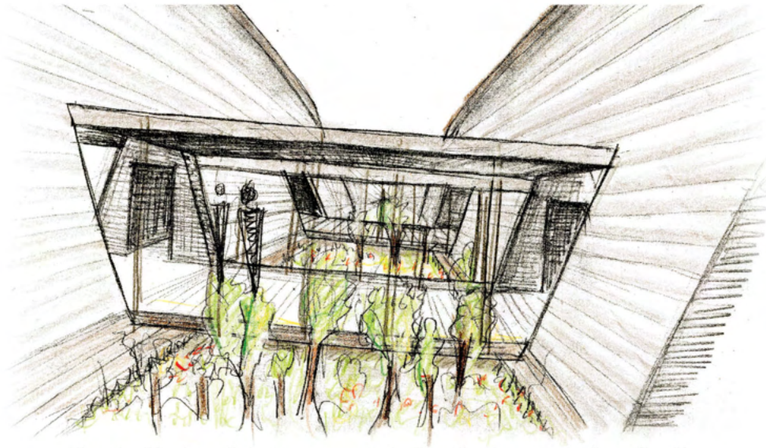


influenced by schema2: notion of reflection | nothingness | life cycle

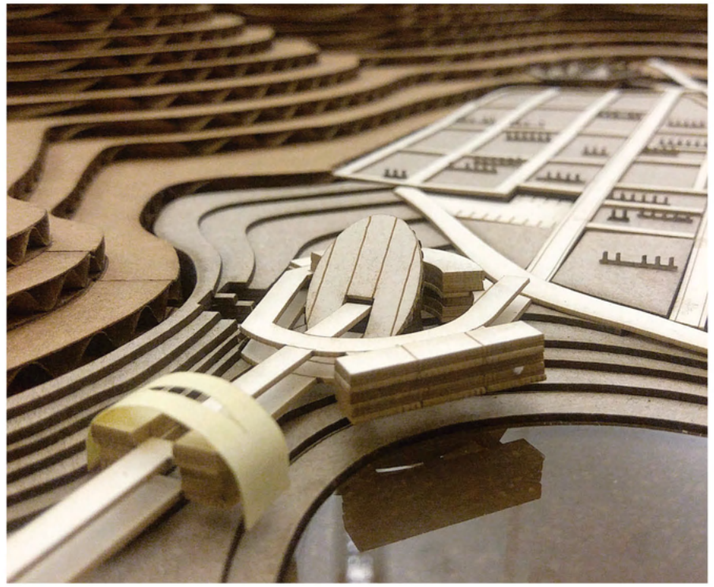
OPT2 lake shrine



B1&2 was chosen to be further developed

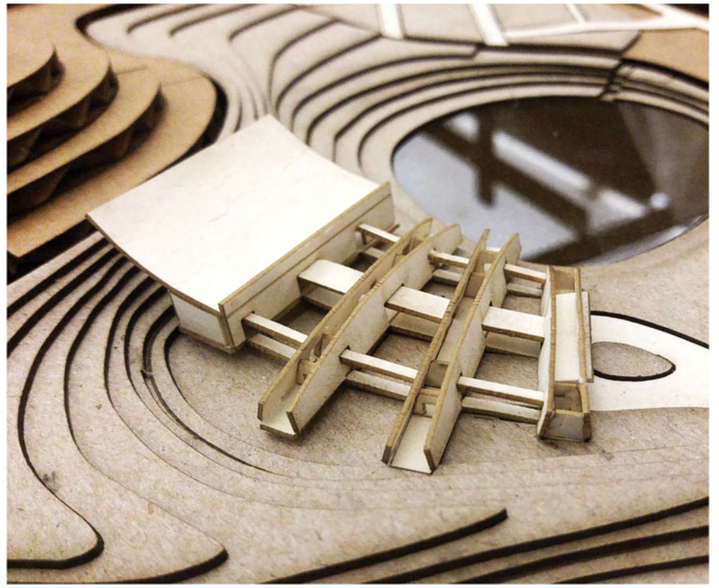


the stratified spatial sequence symbolizes the journey to the after life



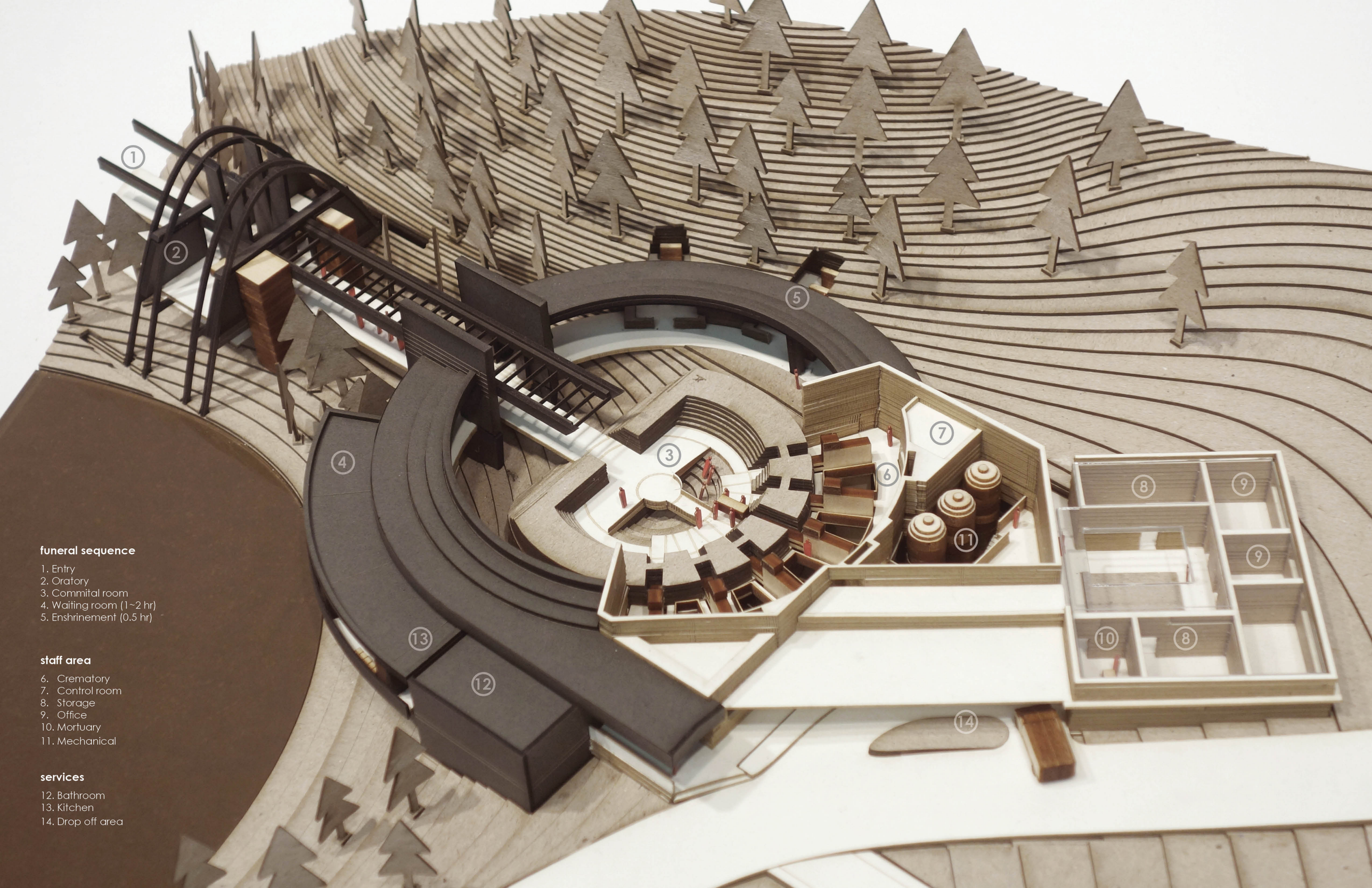
influenced by schema1/ schema2 / schema5

OPT3 distant shrine



influenced by schema1: notion of transition | partition | consolation

OPT4 serialization



funeral sequence

1. Entry
2. Oratory
3. Commital room
4. Waiting room (1~2 hr)
5. Enshrinement (0.5 hr)

staff area

6. Crematory
7. Control room
8. Storage
9. Office
10. Mortuary
11. Mechanical

services

12. Bathroom
13. Kitchen
14. Drop off area

HUAMU LOT 10

Shanghai, China

Kohn Pedersen Fox, New york & Shanghai
Team size: 5 to 20

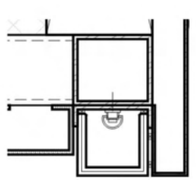
My involvement:

- interior SD & DD (7 mths)
- facade tender drawing set (4 mths)
- tender review (3 months)
- construction administration (19 mths)

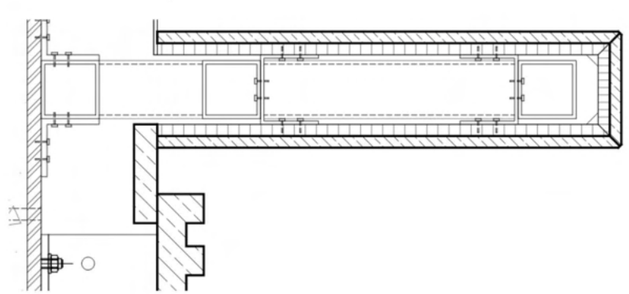
image credit: plompmozes

office lobby - SD & DD

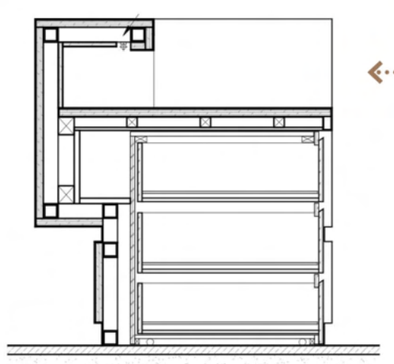
lift indicator



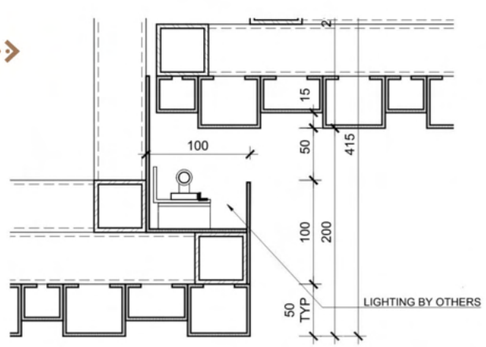
stone fin



reception desk



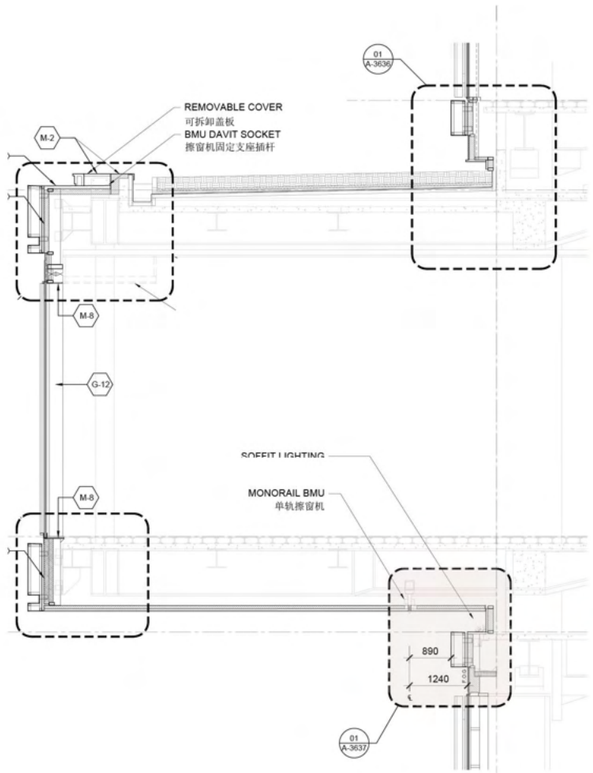
feature wall design options & detail



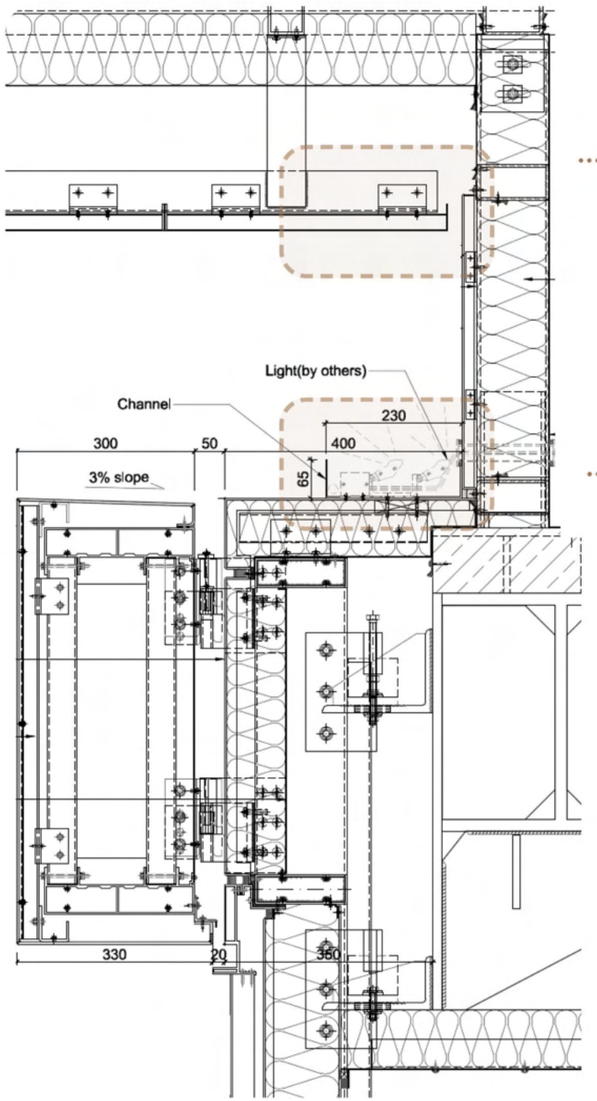
facade development & coordination

example: sky gallery soffit

1
produce tender drawing



2
review facade details
from facade consultant



3
revise design
per consultants' feedbacks

image credit: RFR (facade concultant)

3
select soffit material
(titanized sstl)

brushed finish | mirrored finish | shot finish | embossed finish

3
coordinate with
lighting consultant

image credit: OVI (lighting consultant)