

Andy Mund

PORTFOLIO

2025

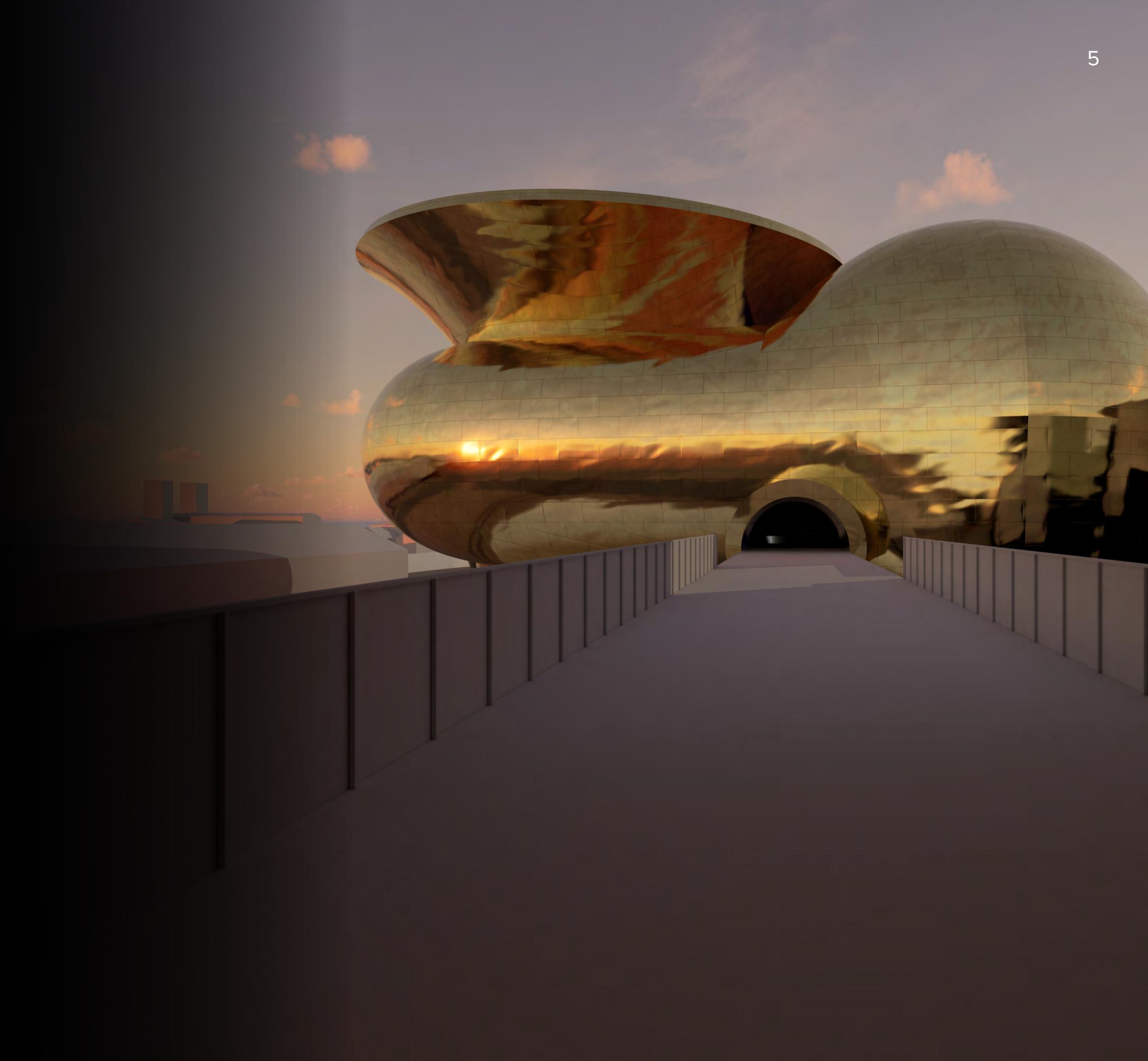
Projects

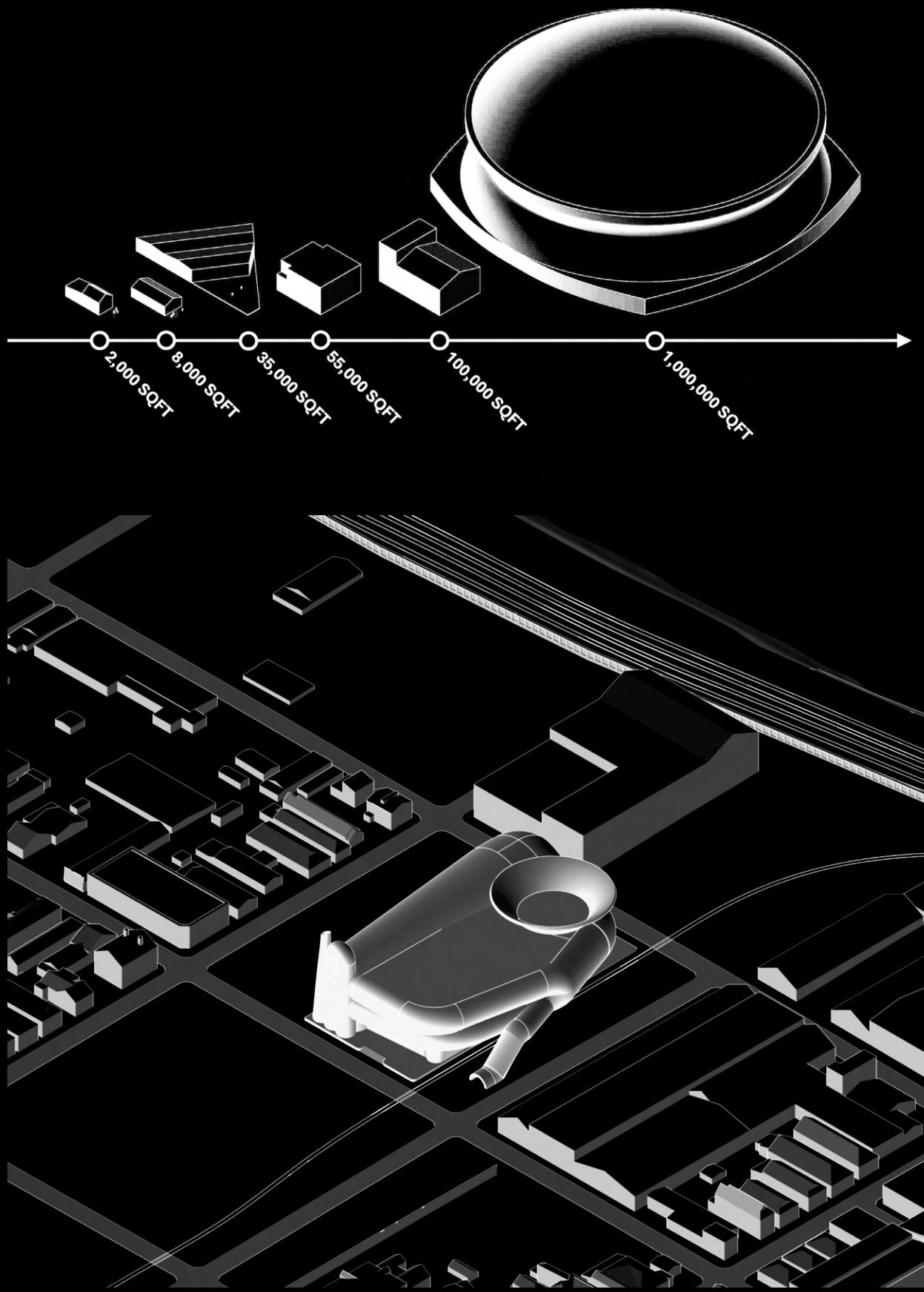
Bywater PAC
Spaces for Connective Encounters
Remnant Ecosystem
Panoramic Vision
Kit (Houses) of Parts
Scaffolding
[Fill-in-the-Blank] Foundation
Light Space Matter Modulator
Arts Square
Deep Decoration

Precedents

MIT Chapel
West Village Dining Commons
Gulf Coast Building Supply & Hardware

a performance hub intended to stimulate urban development, allowing NOLA to attract and retain talent within a burgeoning professional arts community in Bywater





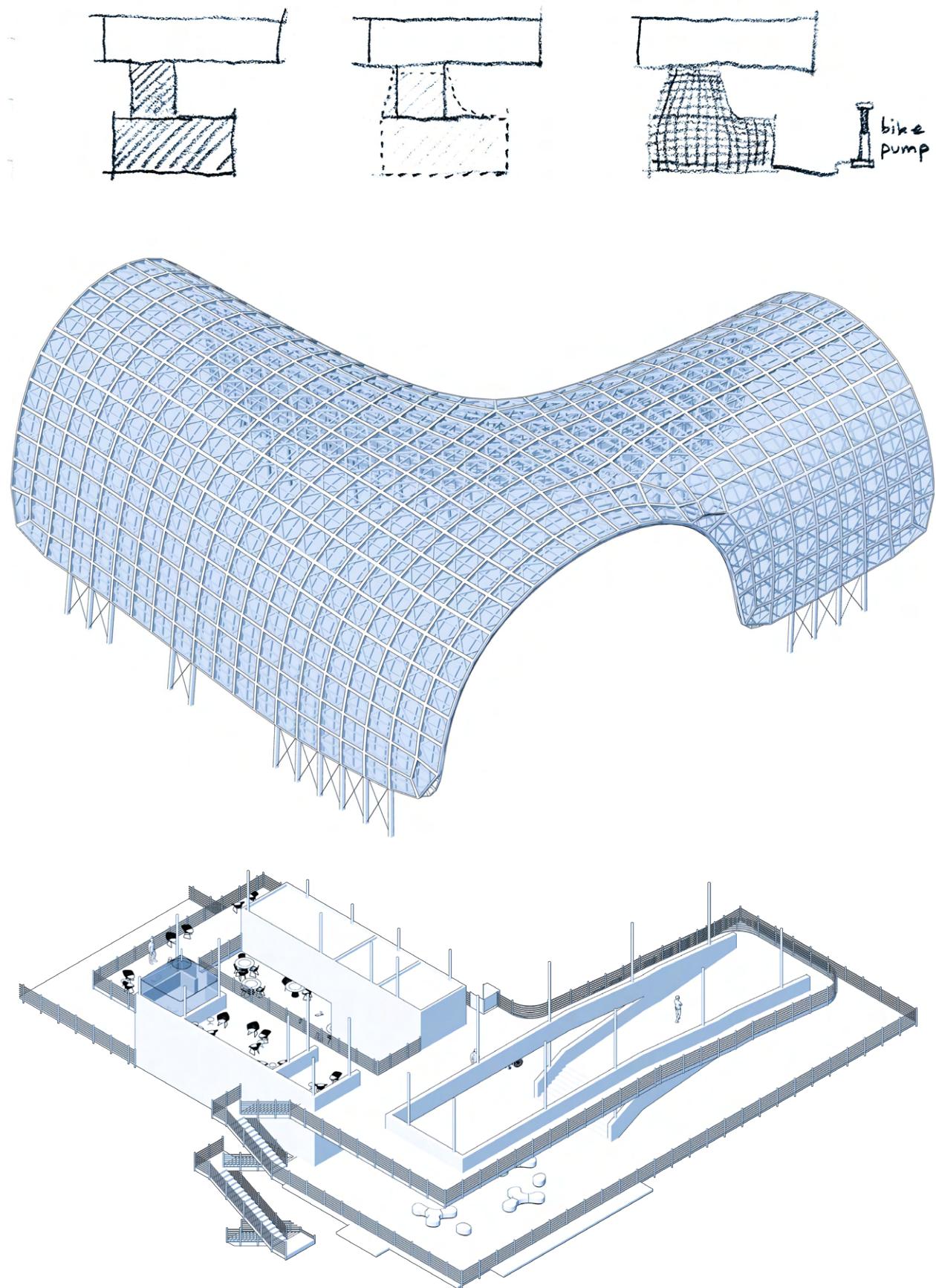
BYWATER PAC



SPACES FOR CONNECTIVE ENCOUNTERS

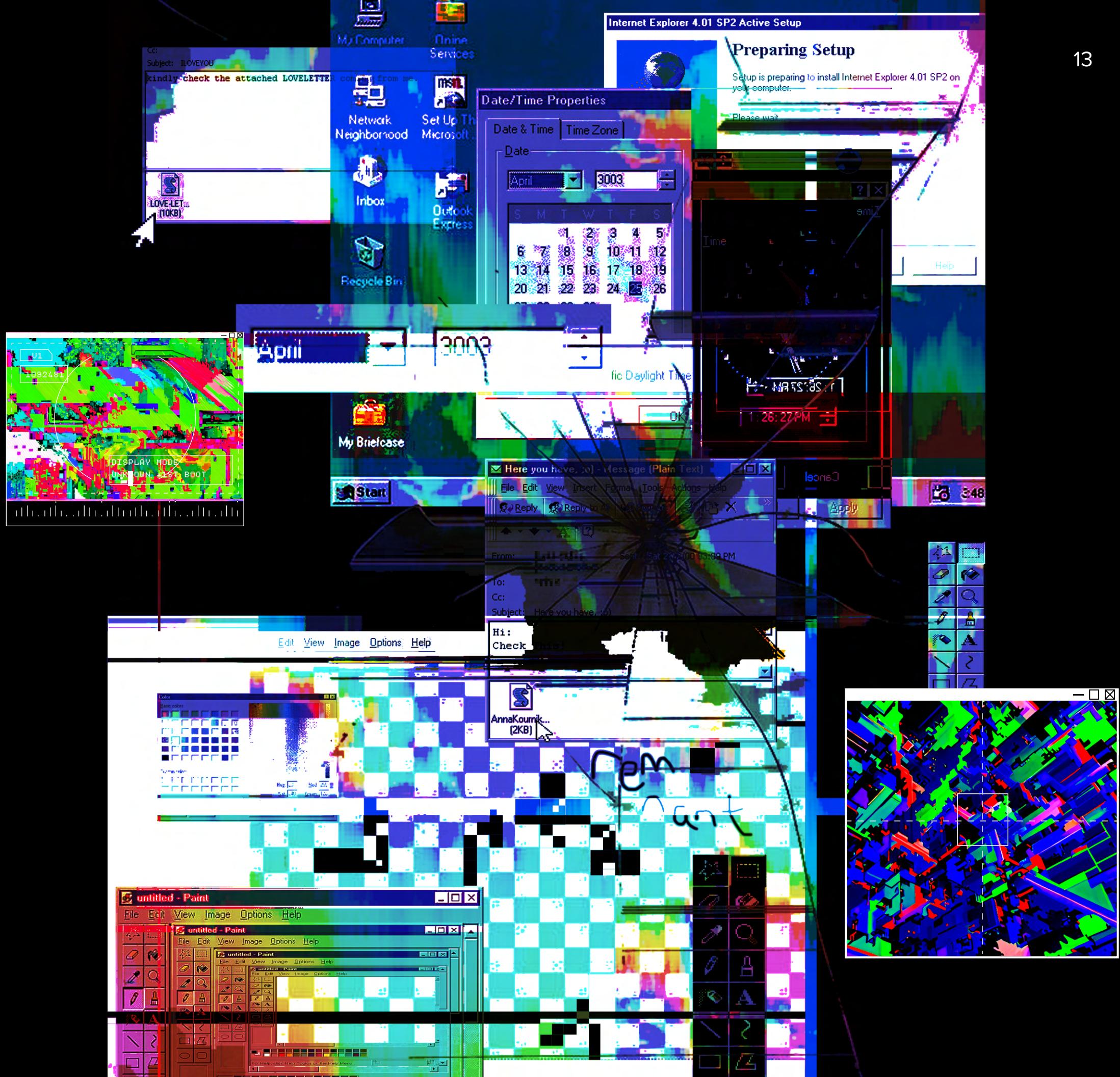
a public multi-use space which encourages human interaction through visual stimuli





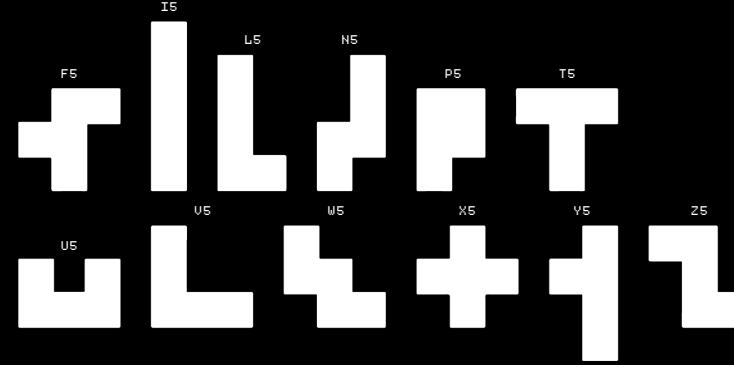
REMNANT ECOSYSTEM

a study of poche through a virtual game with defined pieces which interact based on a set of rules on a digital game board

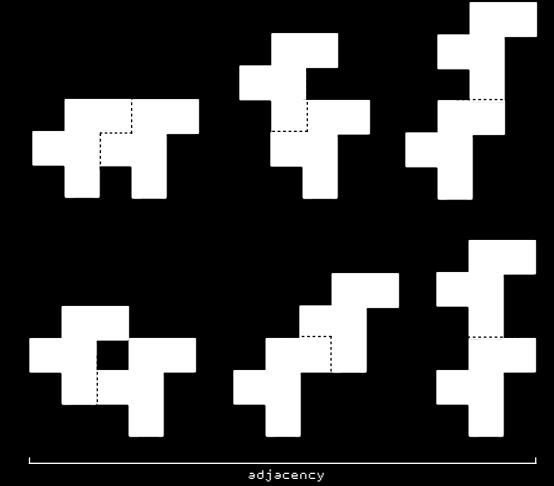


cremnentEcosystem

```
// The joining of planar, equal squares at their edges
results in what are mathematically referred to as
"polyominoes." A prefix denotes the number of squares
comprising each polyomino: those created from exactly
5 squares are called "pentominoes," of which there
exist 12 possible unique configurations (excluding
rotation and reflection). From those using just 10
squares, there exist 4,655.
```



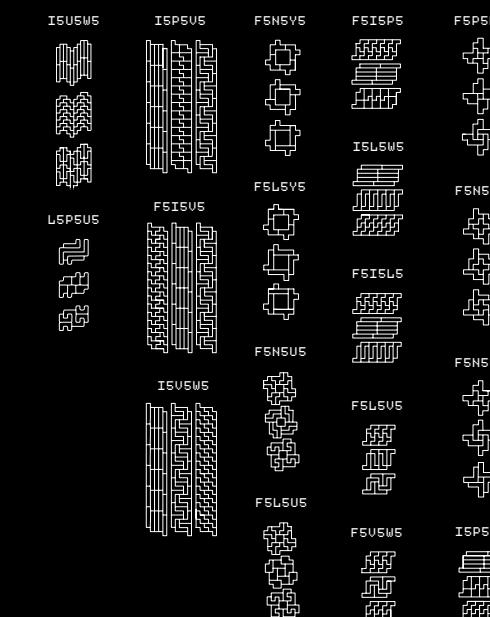
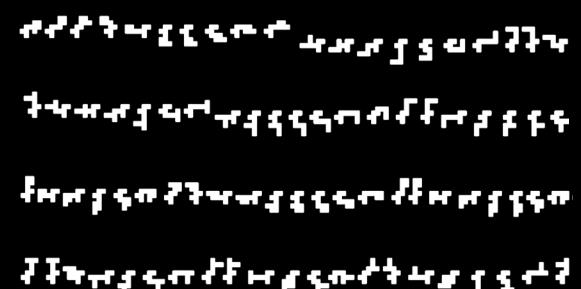
```
pentomino.define(randomizedGame).rules
while (game==play) {
    step.turn1;
    // black plays a random piece with a random
    rotation at a random position on the board
    step.turn2;
    // white plays a random piece with a random
    rotation at a random position on the board
    step.turn3;
    // black plays a random piece with a random
    rotation with a random number of required
    adjacencies and randomly selects a
    position from all possible connections
    which satisfy the previous stipulations
    step.turn4;
    // white plays a random piece with a random
    rotation with a random number of required
    adjacencies and randomly selects a
    position from all possible connections
    which satisfy the previous stipulations
```



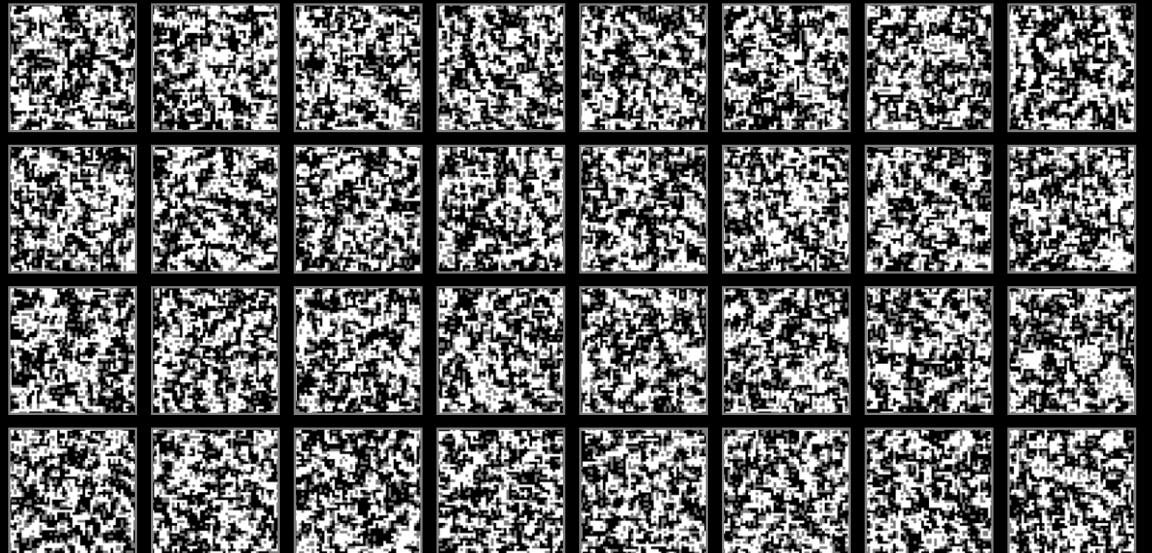
pentomino.define(complexity)

```
pentomino.triples
  == (pentomino.i^n + pentomino.j^n + pentomino.k^n)
```

```
// Livio Zucca along with a number of other puzzle
enthusiasts have tasked themselves with designing
various "triple pentominoes," defined as 3 identical
groupings which each utilize a different pentomino,
respectively. There exist 220 different combinations
of 3 different pentominoes with each combination
having nearly infinite possible solutions, but only
one with the smallest surface area.
```

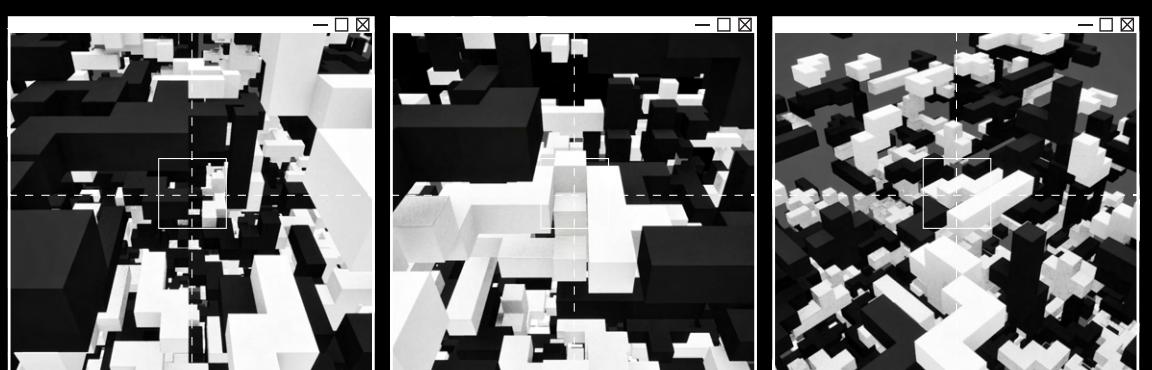


randomizedGame.finalBoardState.variations(n=32)

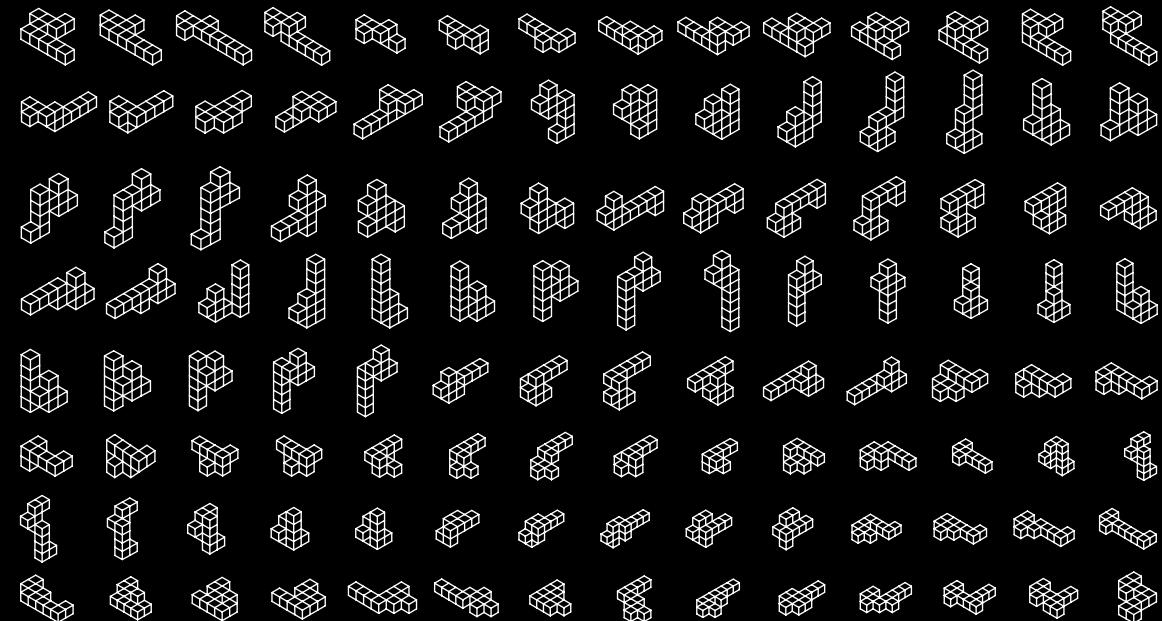
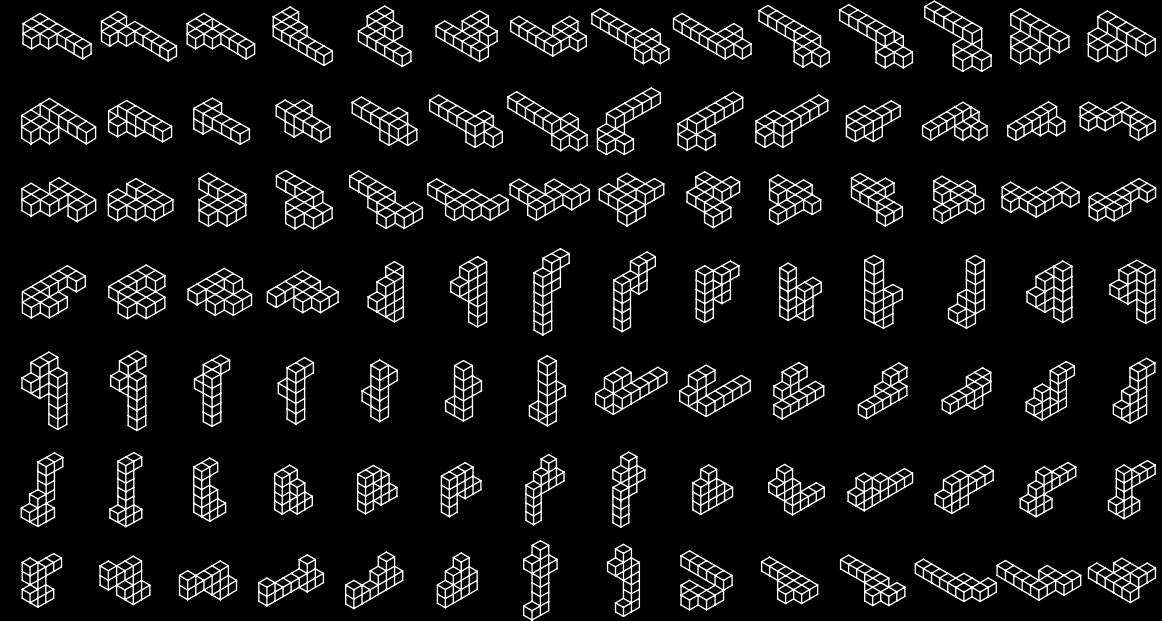
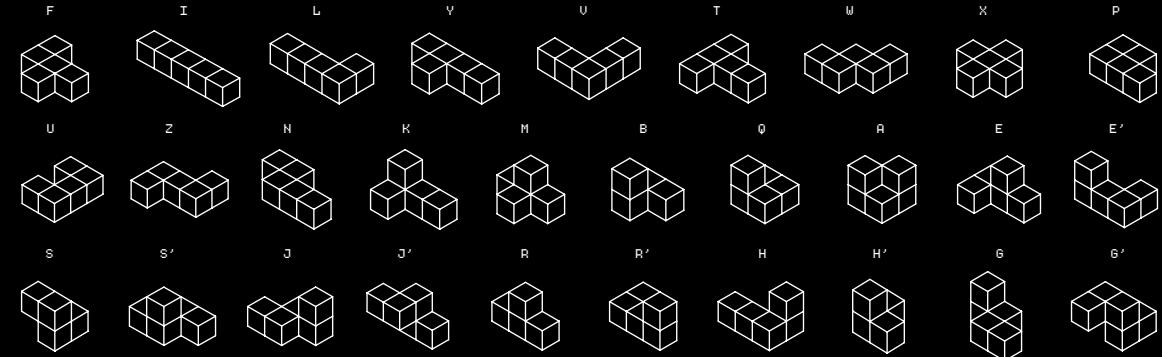


randomizedGame3D.finalBoardState.inGame

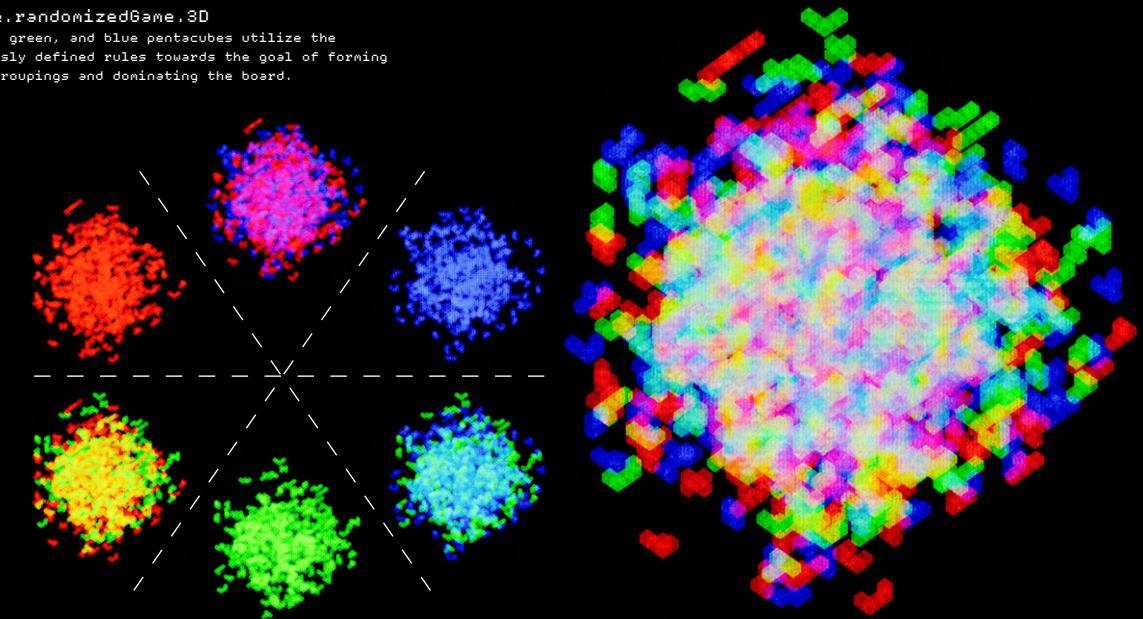
```
// A mockup 3D environment was created to visualize
the game generation, in which the player can travel
throughout the interior of the board to observe
groupings and piece-piece interactions up close.
```



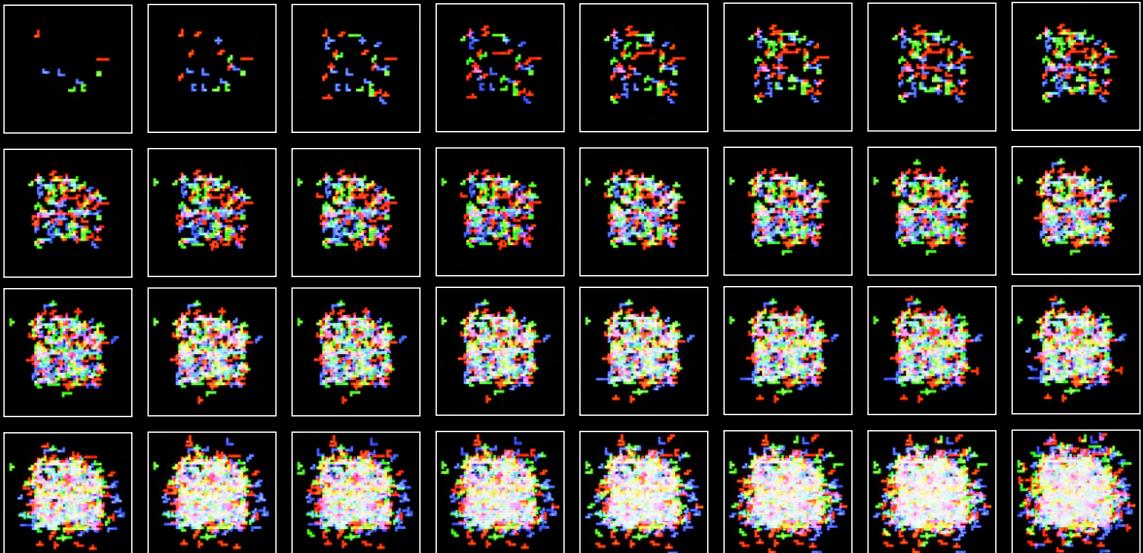
```
define(pentacube)
  // Just as with the pentominoes, the joining of what
  // are mathematically referred to as "polycubes."
  // Those created from exactly 5 cubes are called
  // "pentacubes," of which there exist 29 possible unique
  // configurations (excluding chiral pairs).
```



```
pentacube.randomizedGame.3D
  // Red, green, and blue pentacubes utilize the
  // previously defined rules towards the goal of forming
  // large groupings and dominating the board.
```

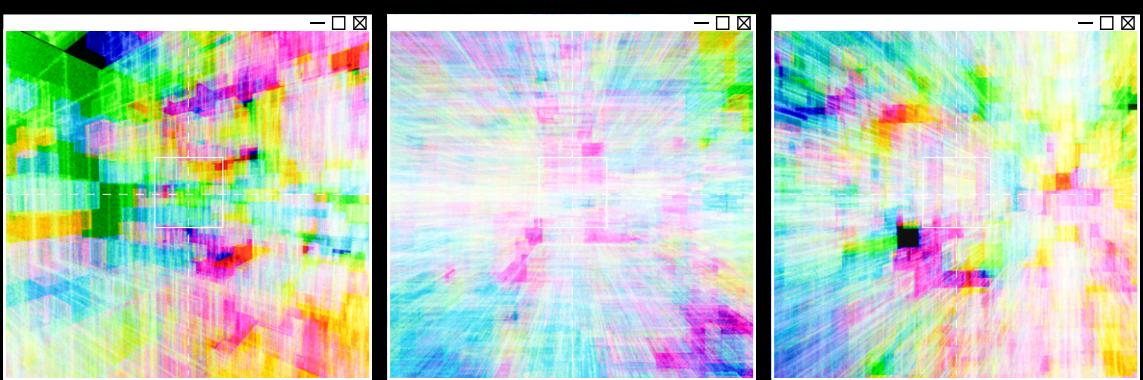


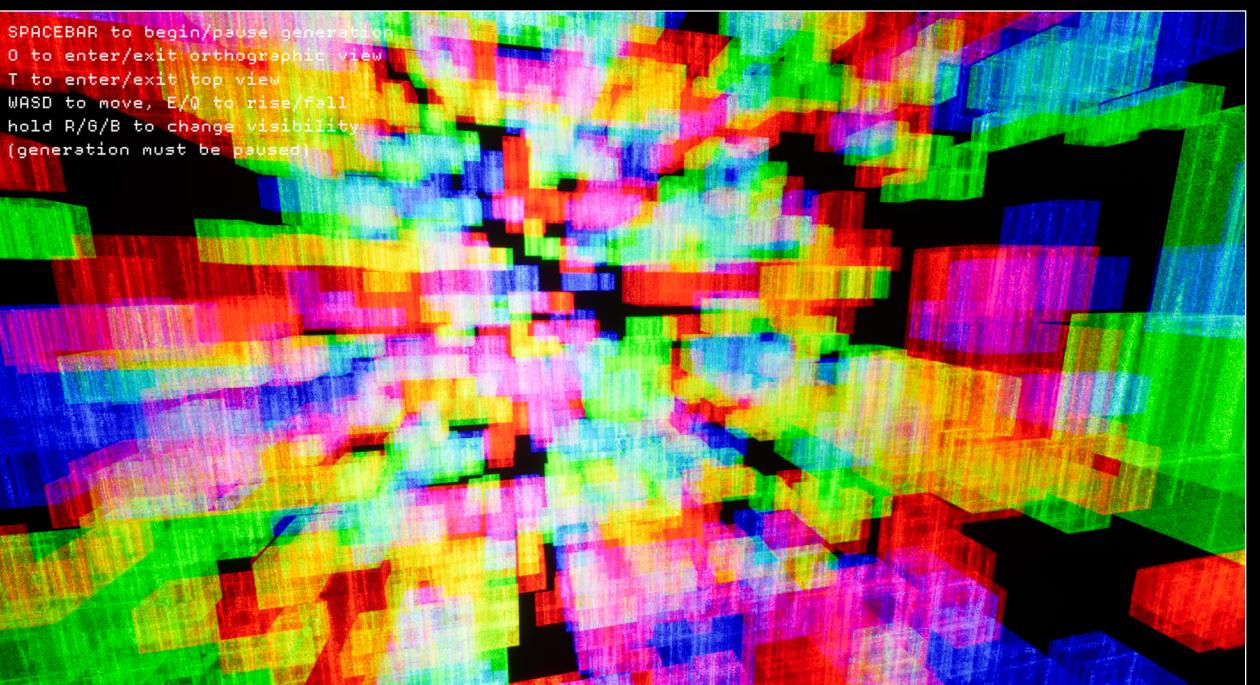
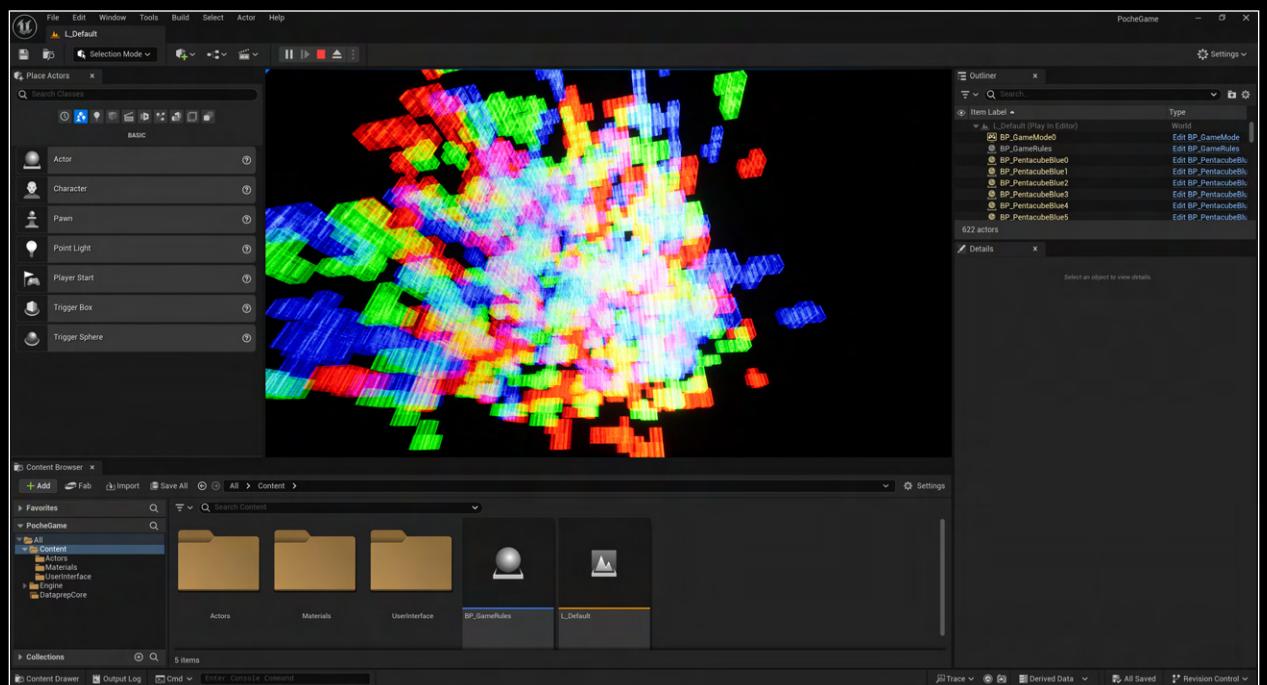
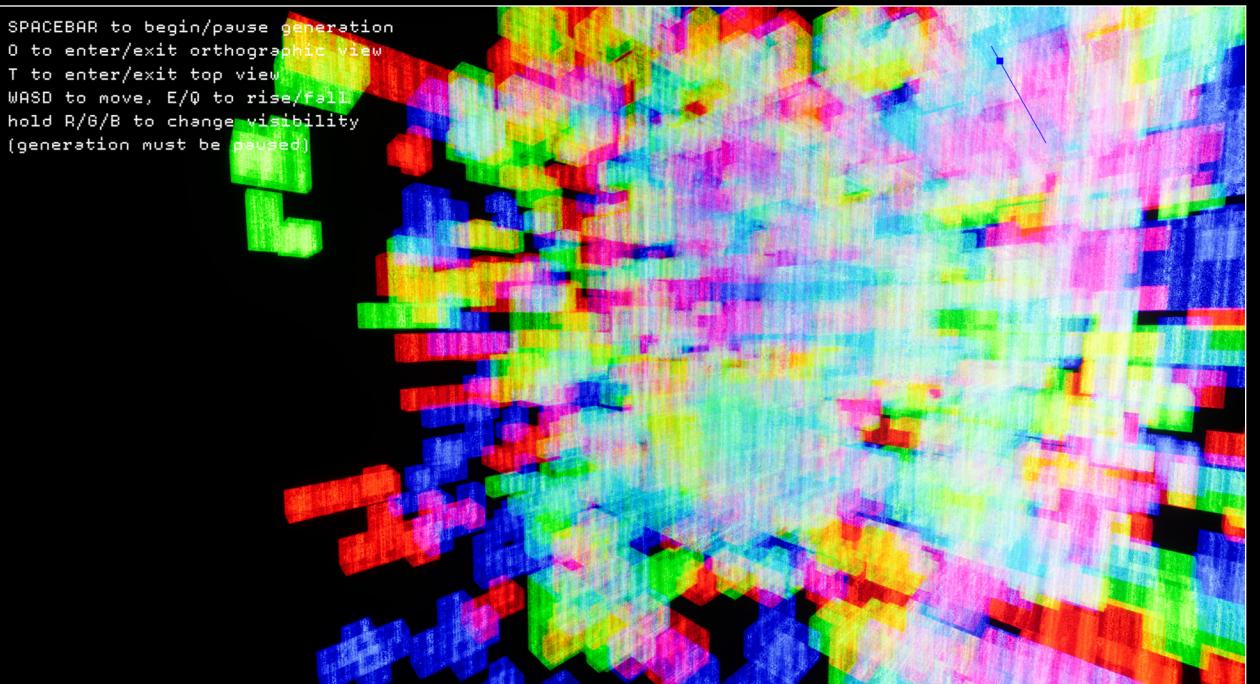
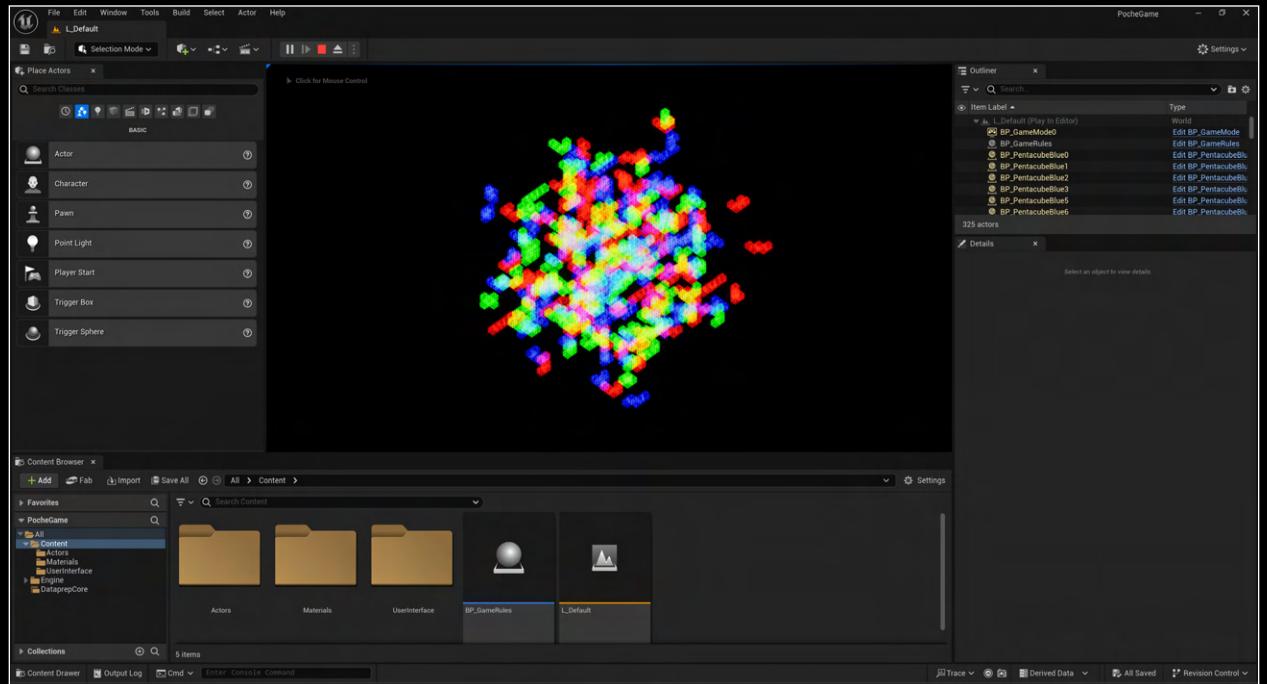
randomizedGame3D.step[1...{8}...256]



randomizedGame3D.finalBoardState.inGame

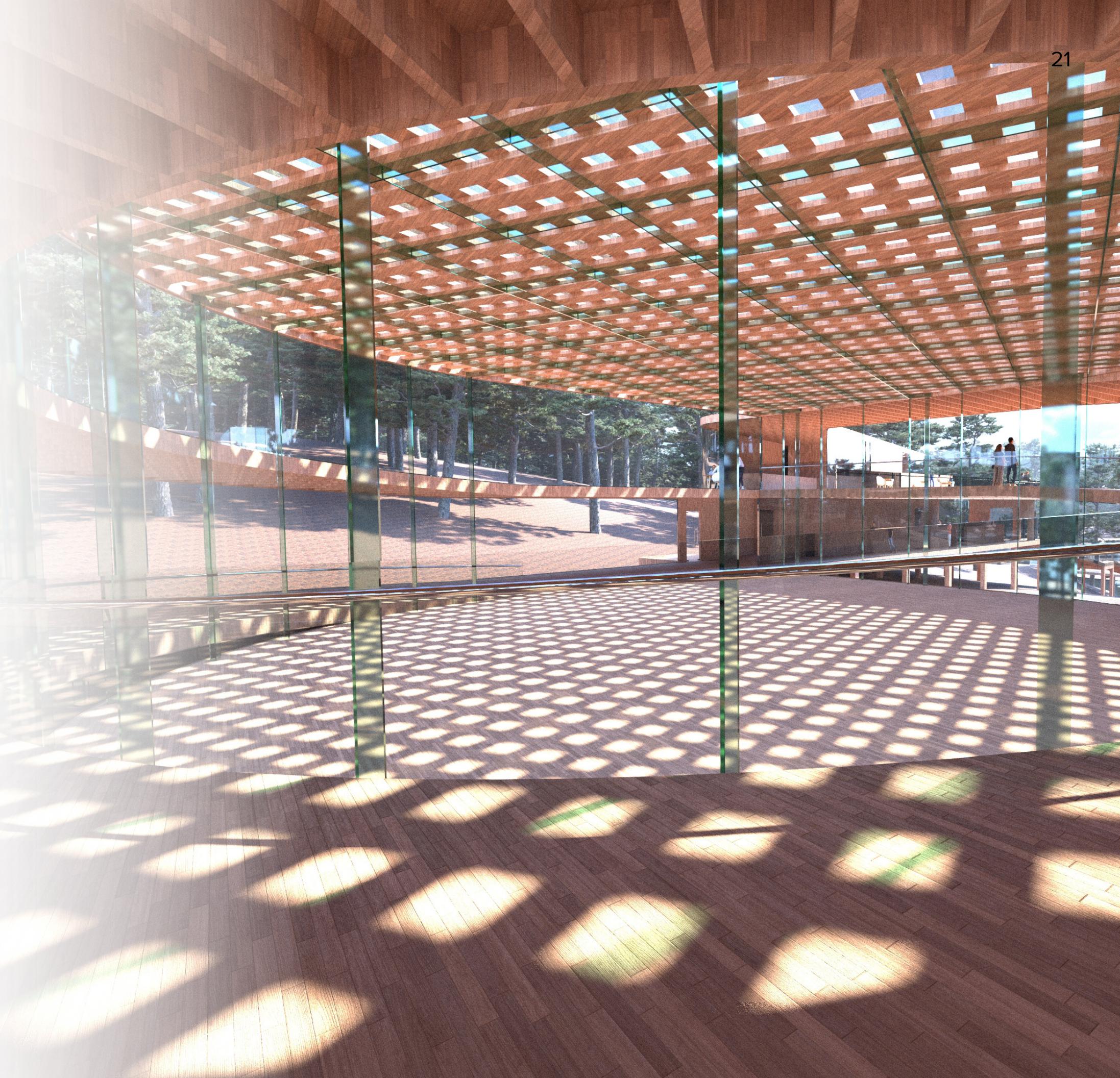
```
// A full 3D game environment was created to
  // visualize the game generation, in which the player
  // can travel throughout the interior of the board to
  // observe groupings and piece-piece interactions up
  // close. Additionally, the player can utilize keyboard
  // inputs to affect the visibility of certain color
  // groupings in the camera viewport.
```

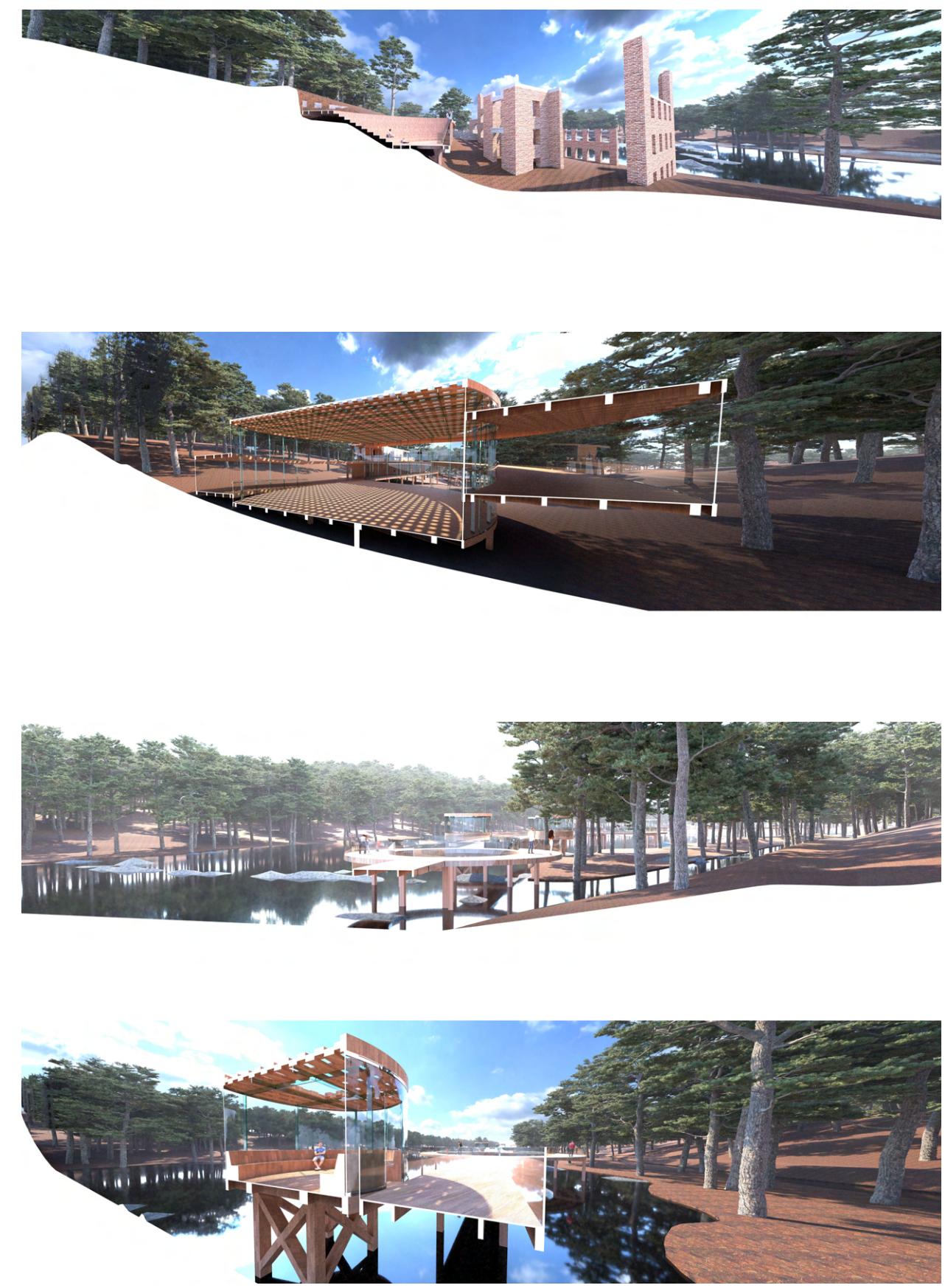
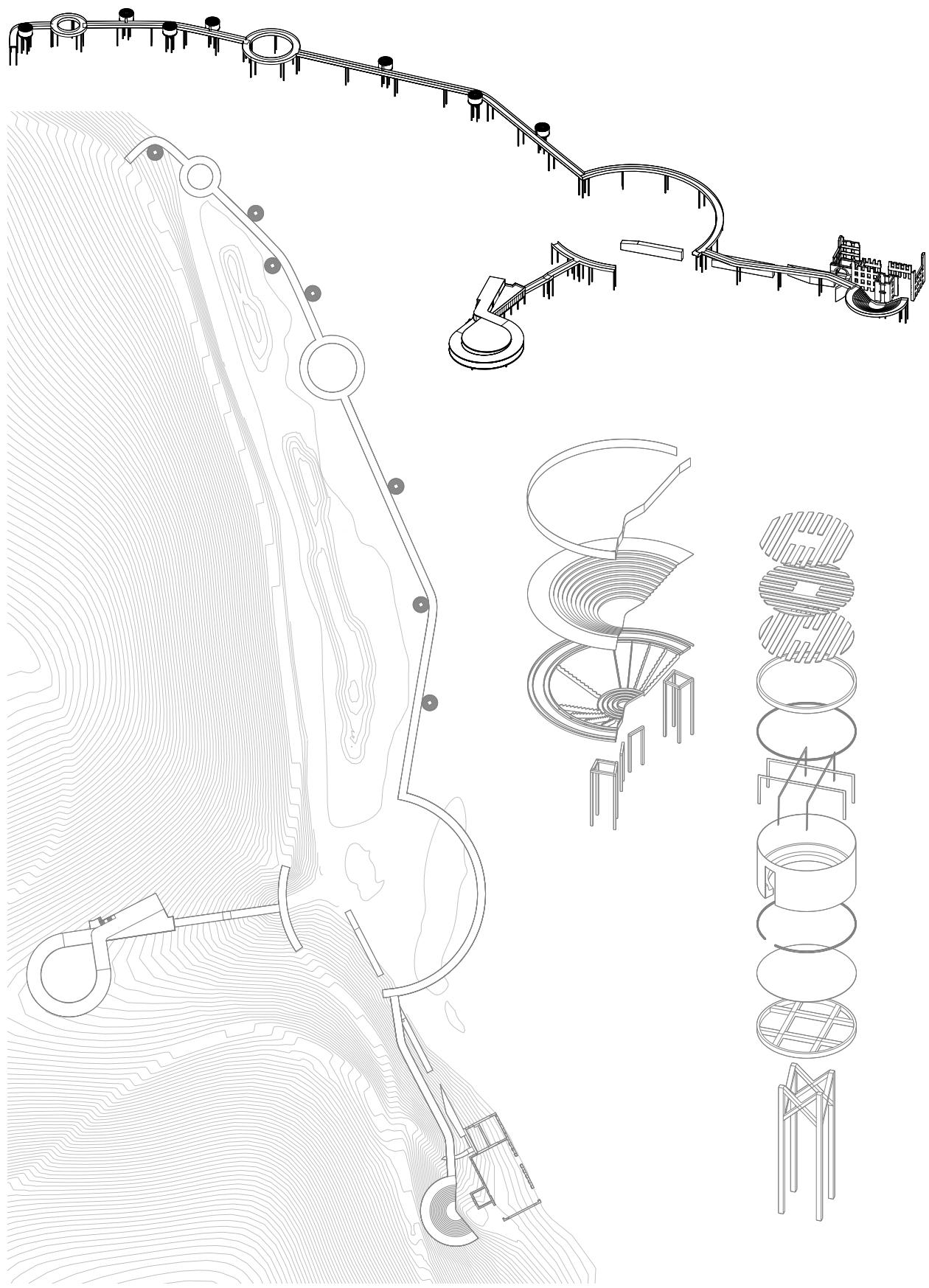




PANORAMIC VISION

provoking an engagement between user and site through the framing of wide angle views



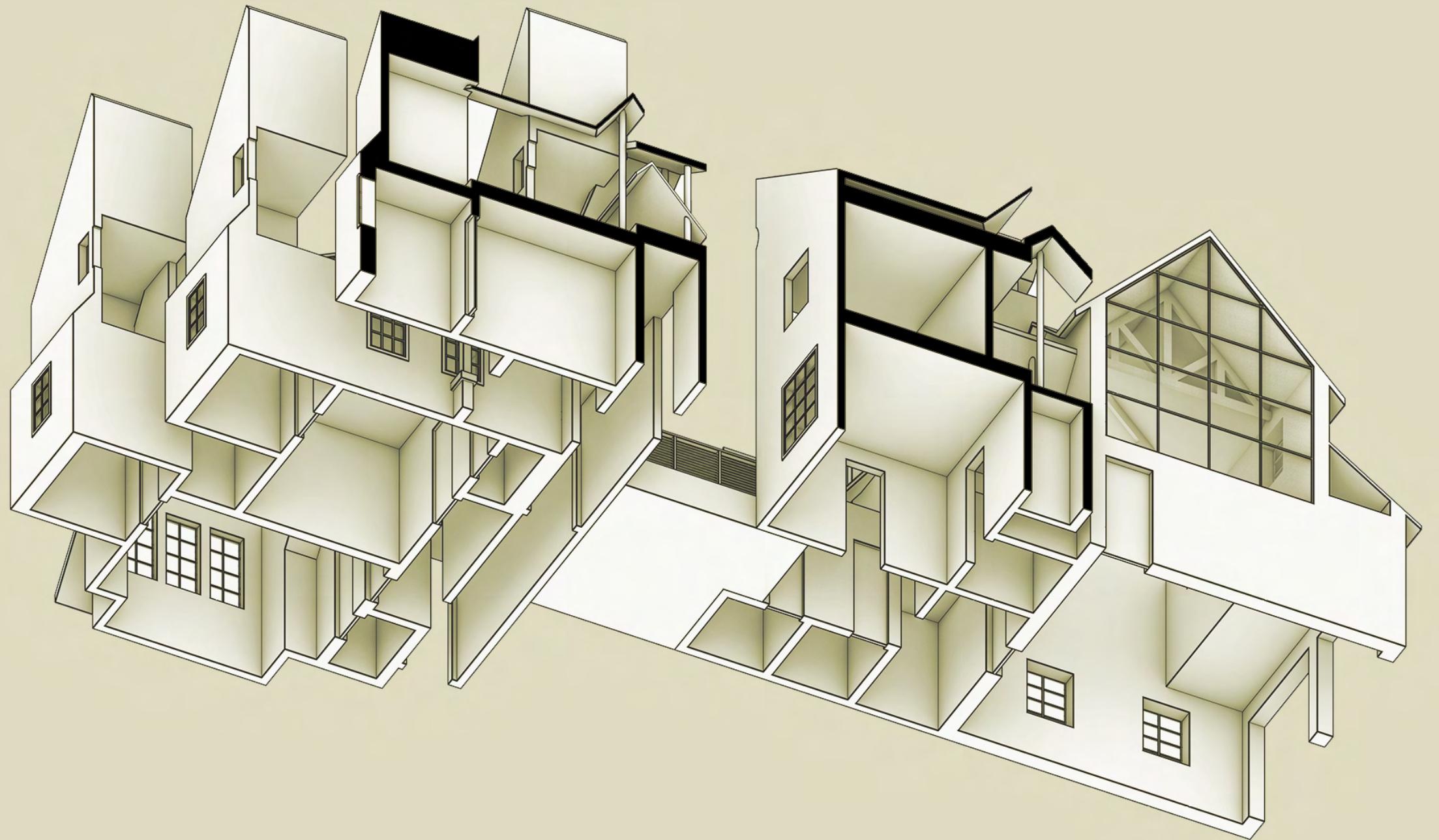


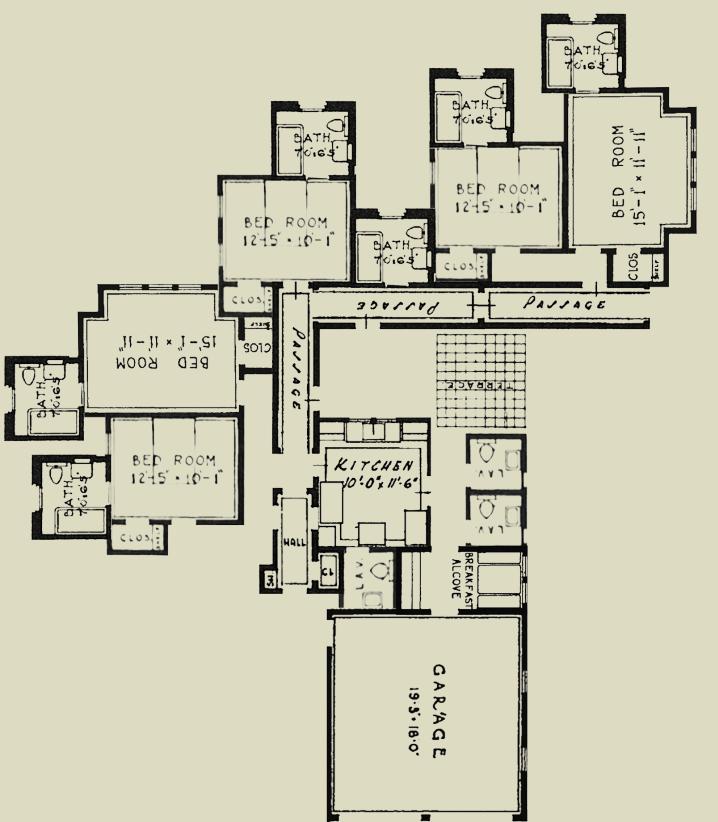
PANORAMIC VISION

KIT (HOUSES) OF PARTS

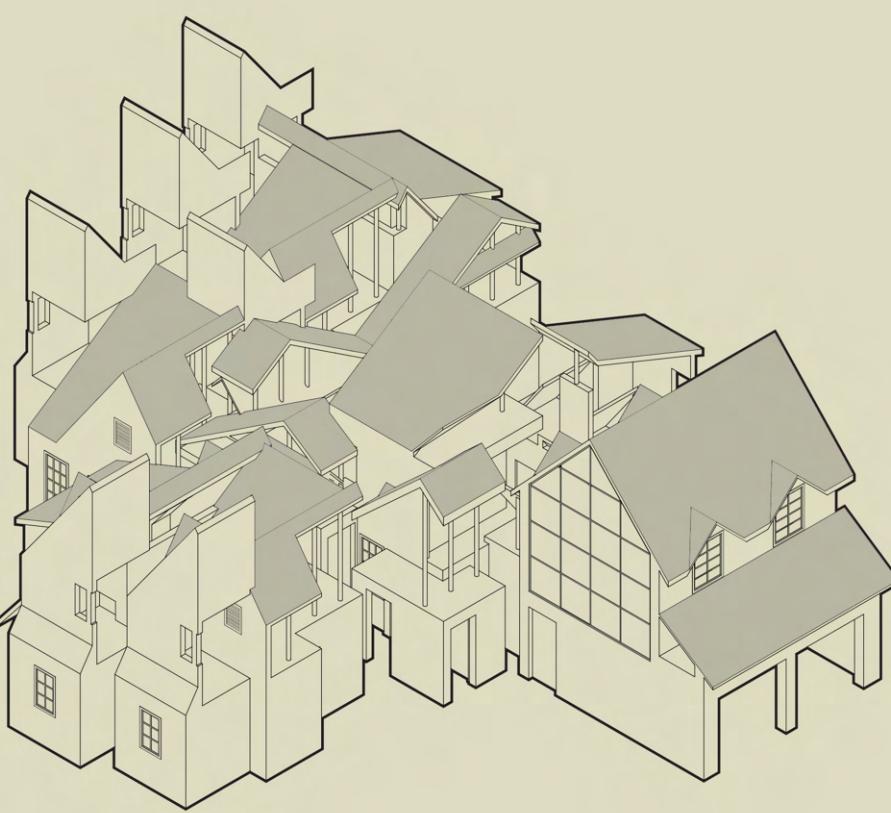
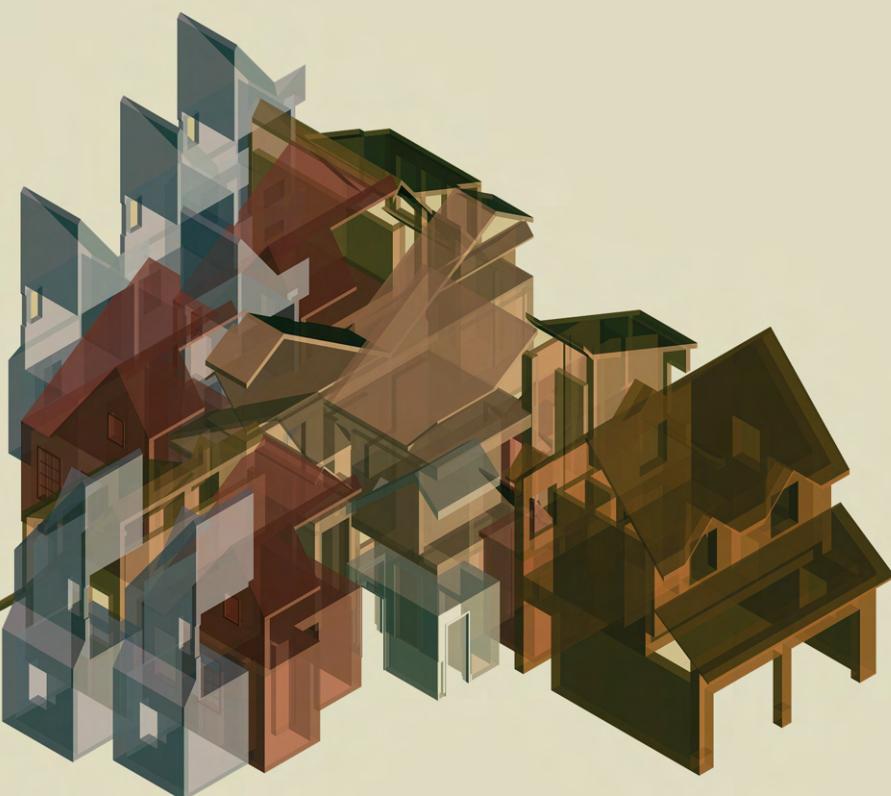
25

reassembling sections of houses from
the Sears Modern Homes catalog



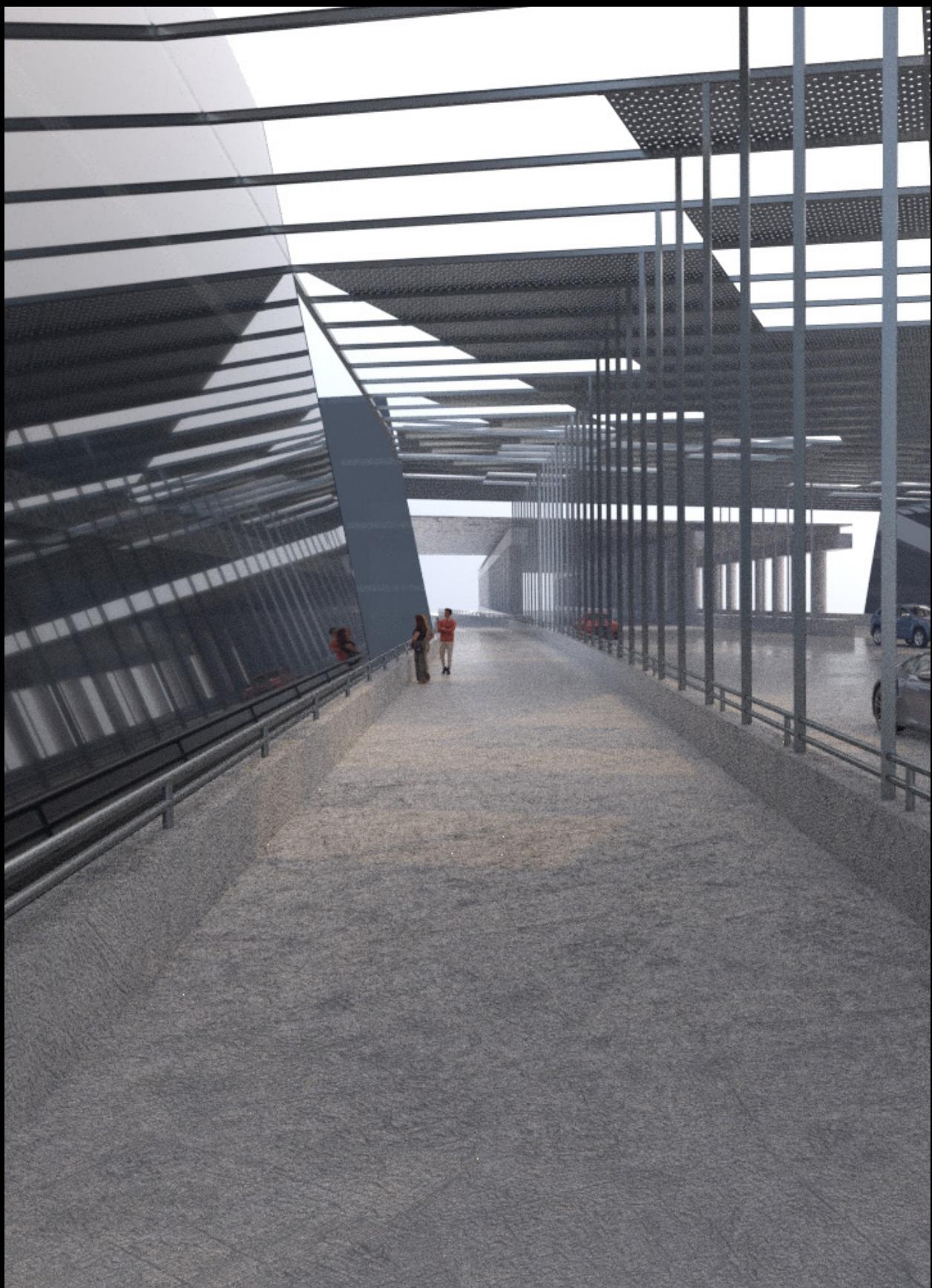


Torrington
Strathmore
Corning
Lynnhaven
Wexford
Colchester



SCAFFOLDING

studies utilizing steel scaffolding
and inflated ETFE



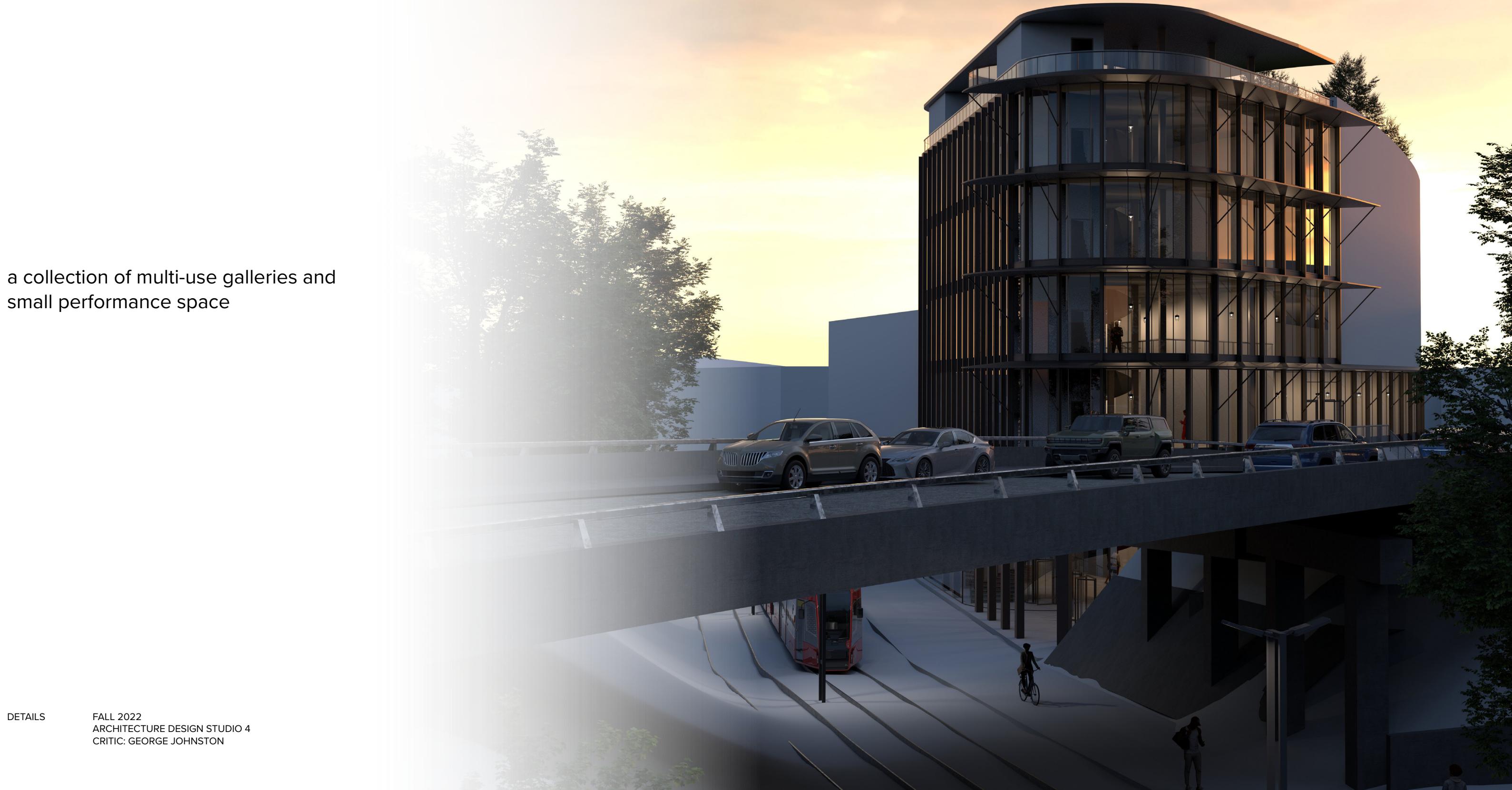
SCAFFOLDING

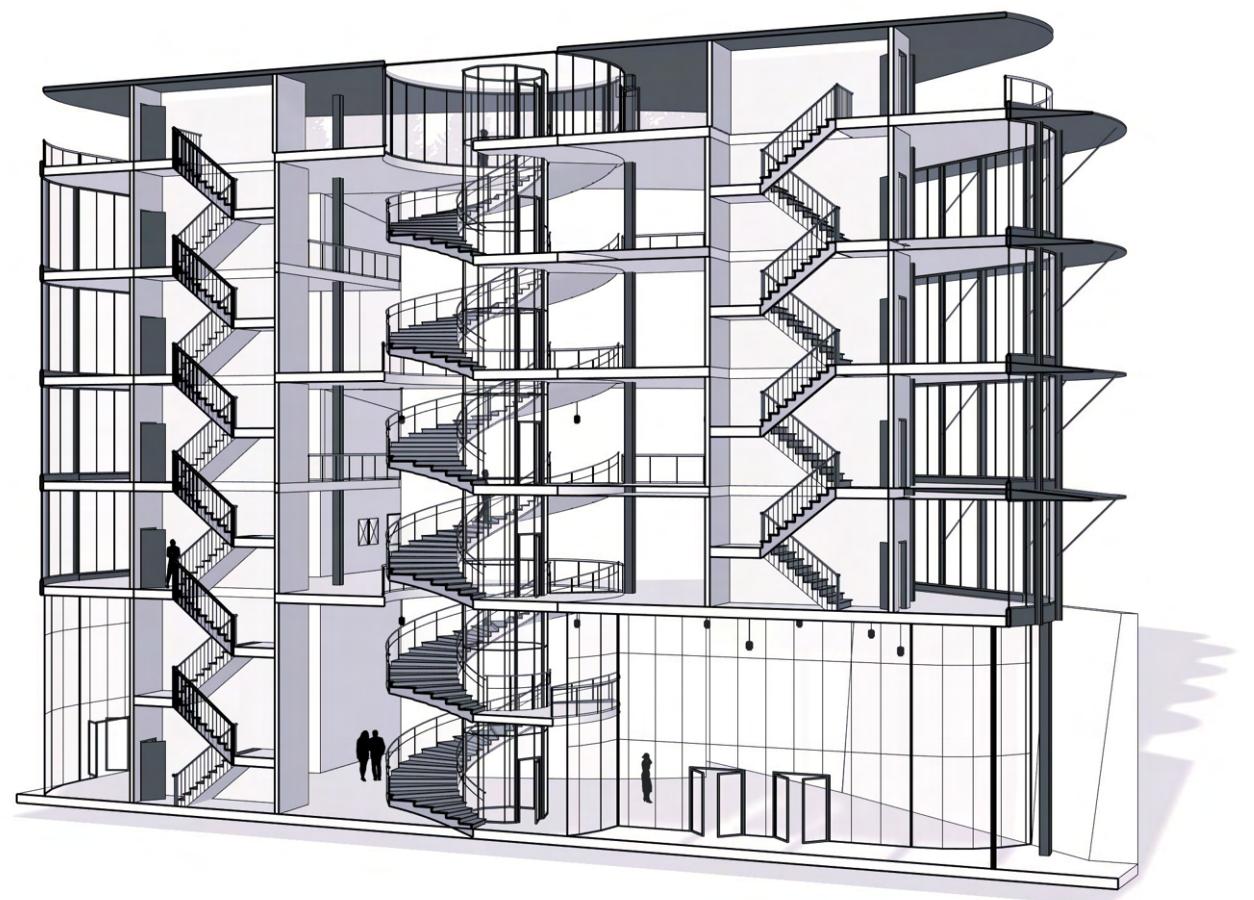
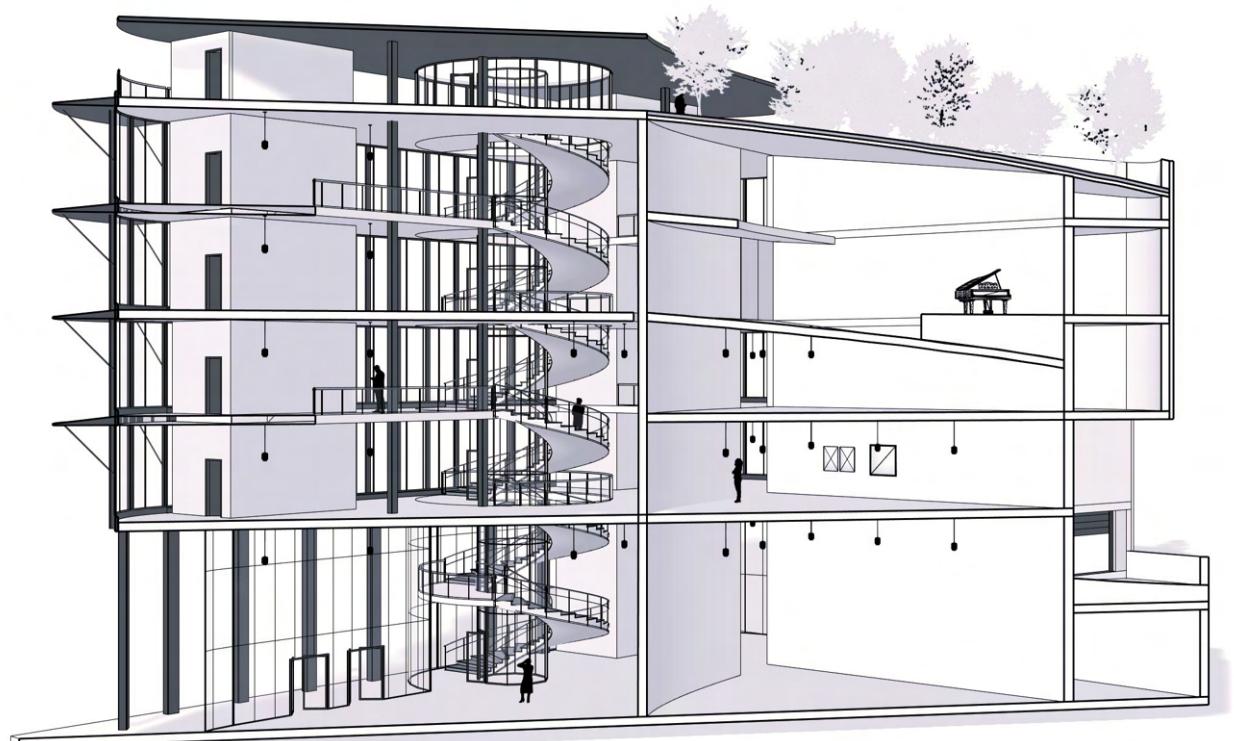
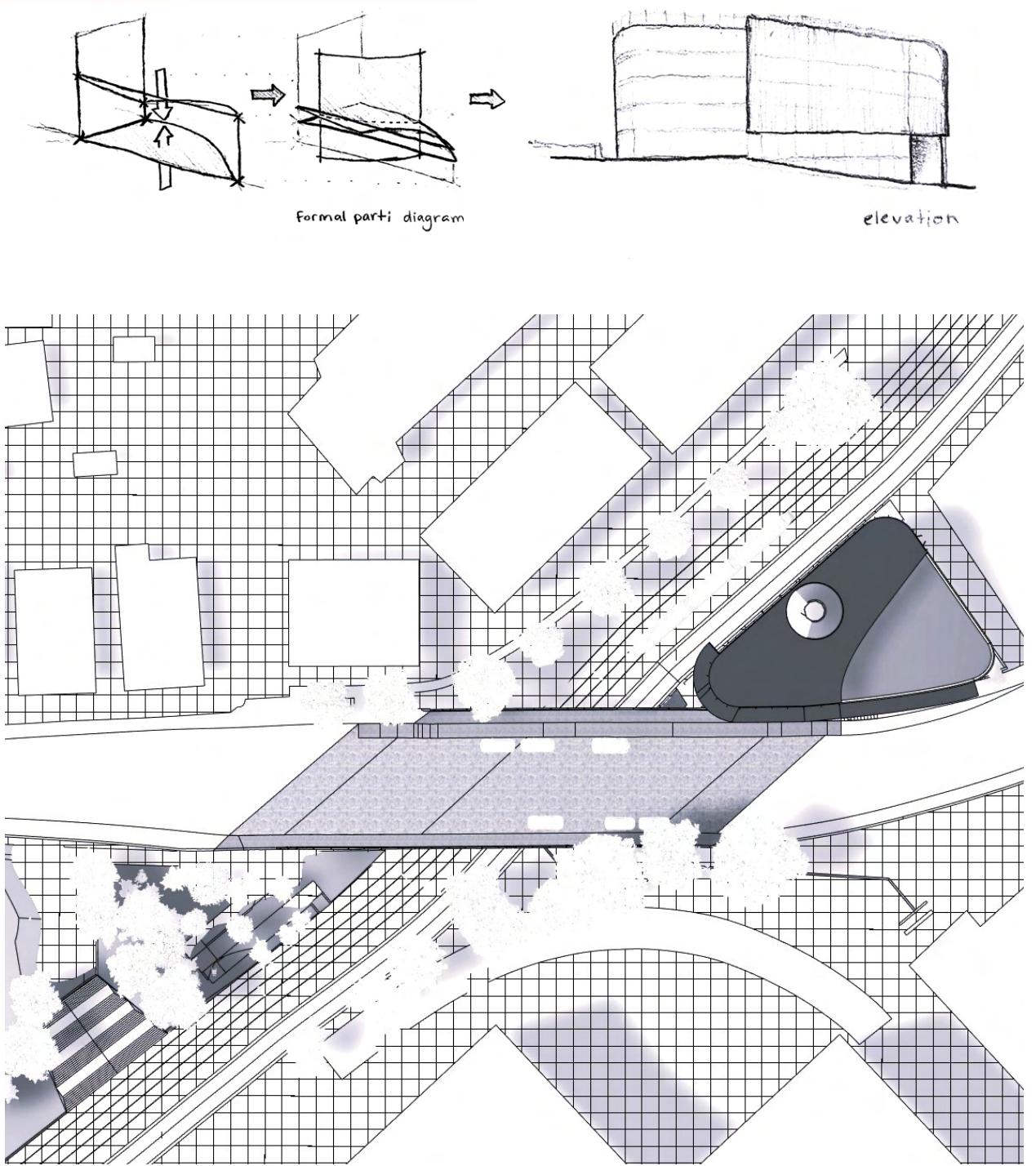
[FILL-IN-THE-BLANK] FOUNDATION

a collection of multi-use galleries and
small performance space

DETAILS

FALL 2022
ARCHITECTURE DESIGN STUDIO 4
CRITIC: GEORGE JOHNSTON



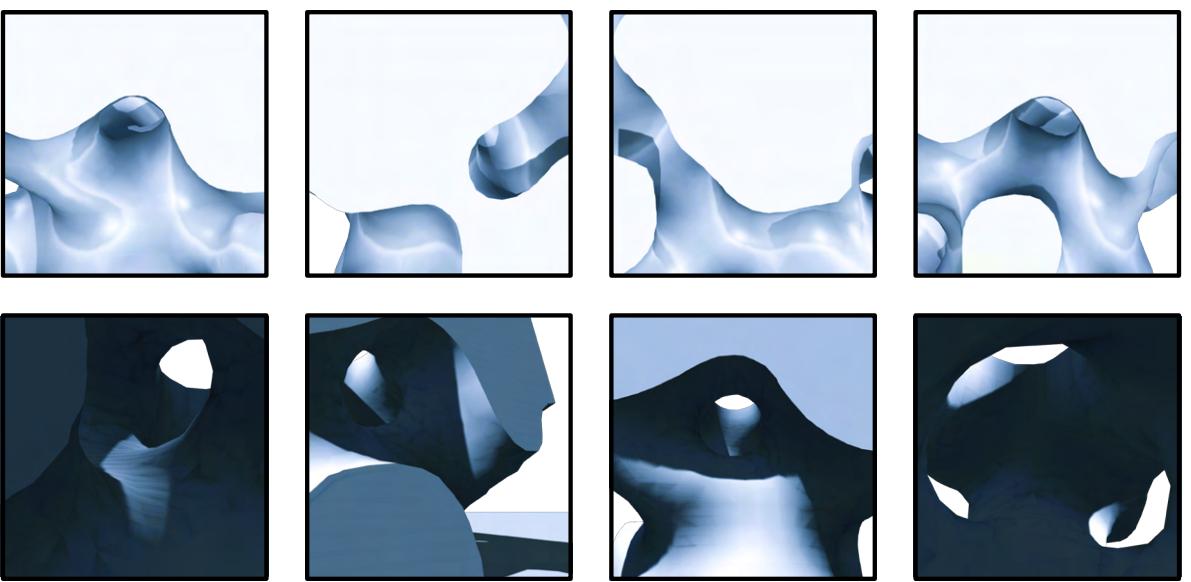
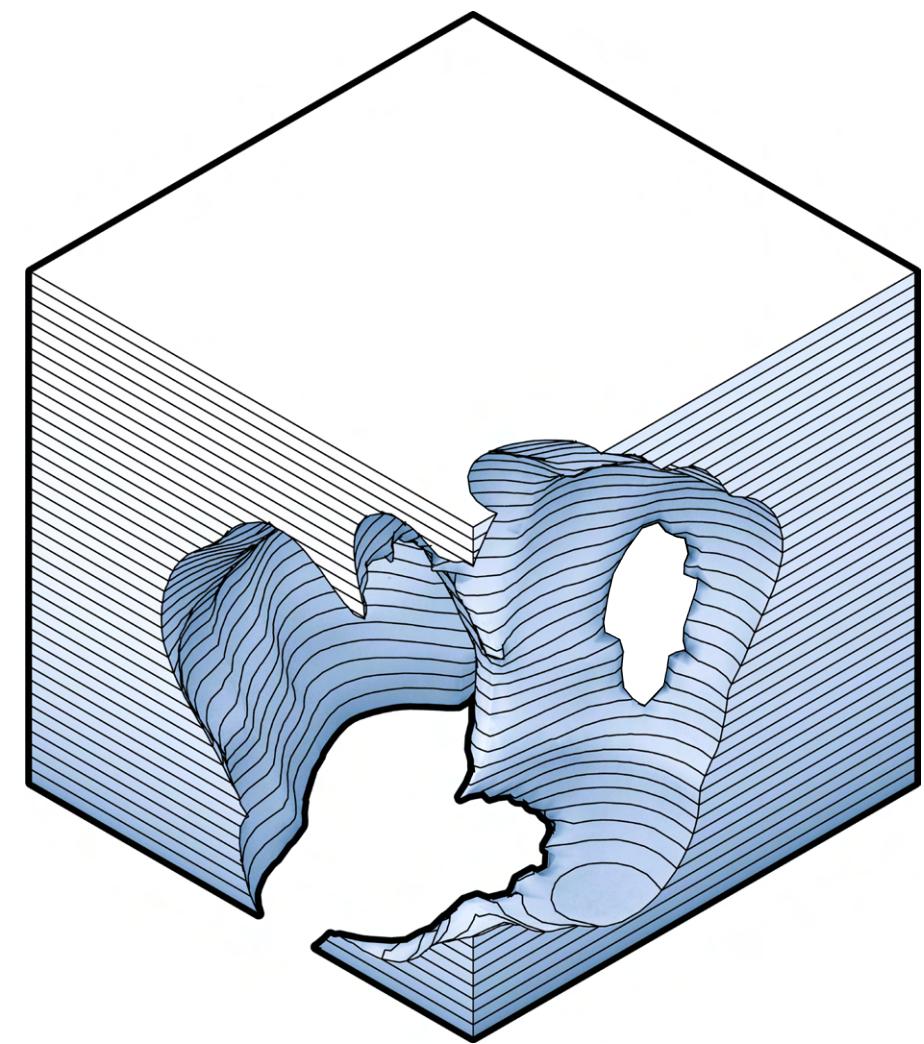
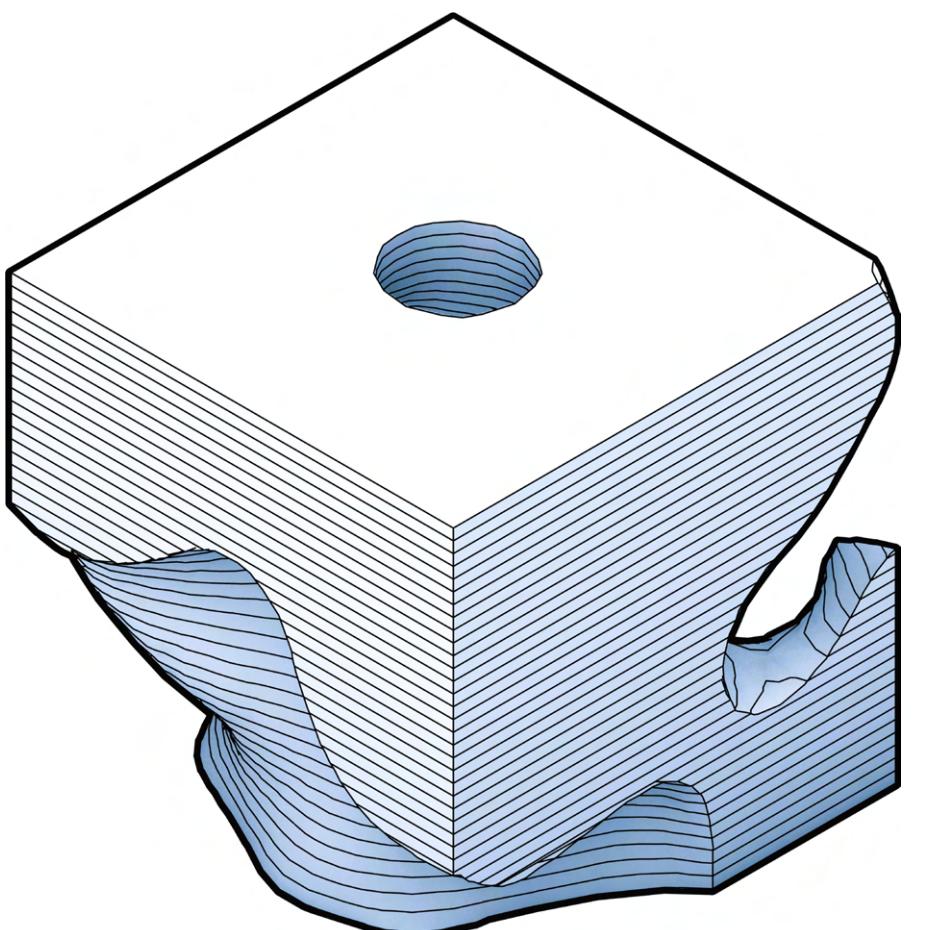


[FILL-IN-THE-BLANK] FOUNDATION

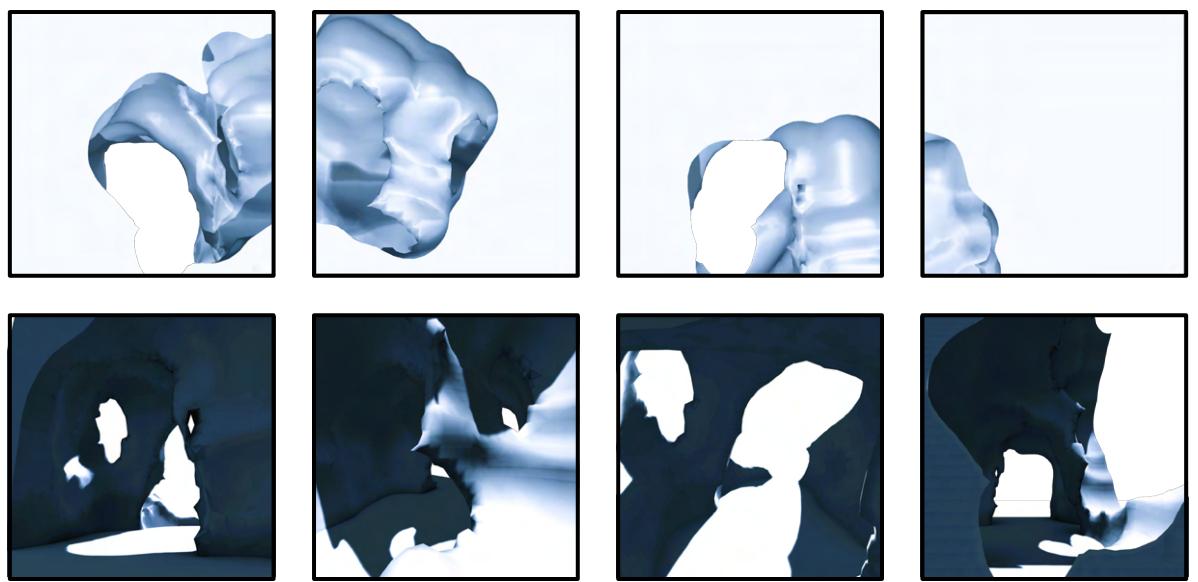
LIGHT-SPACE-MATTER MODULATOR

a dialogue between generative processes and descriptive systems utilizing both physical and digital modeling

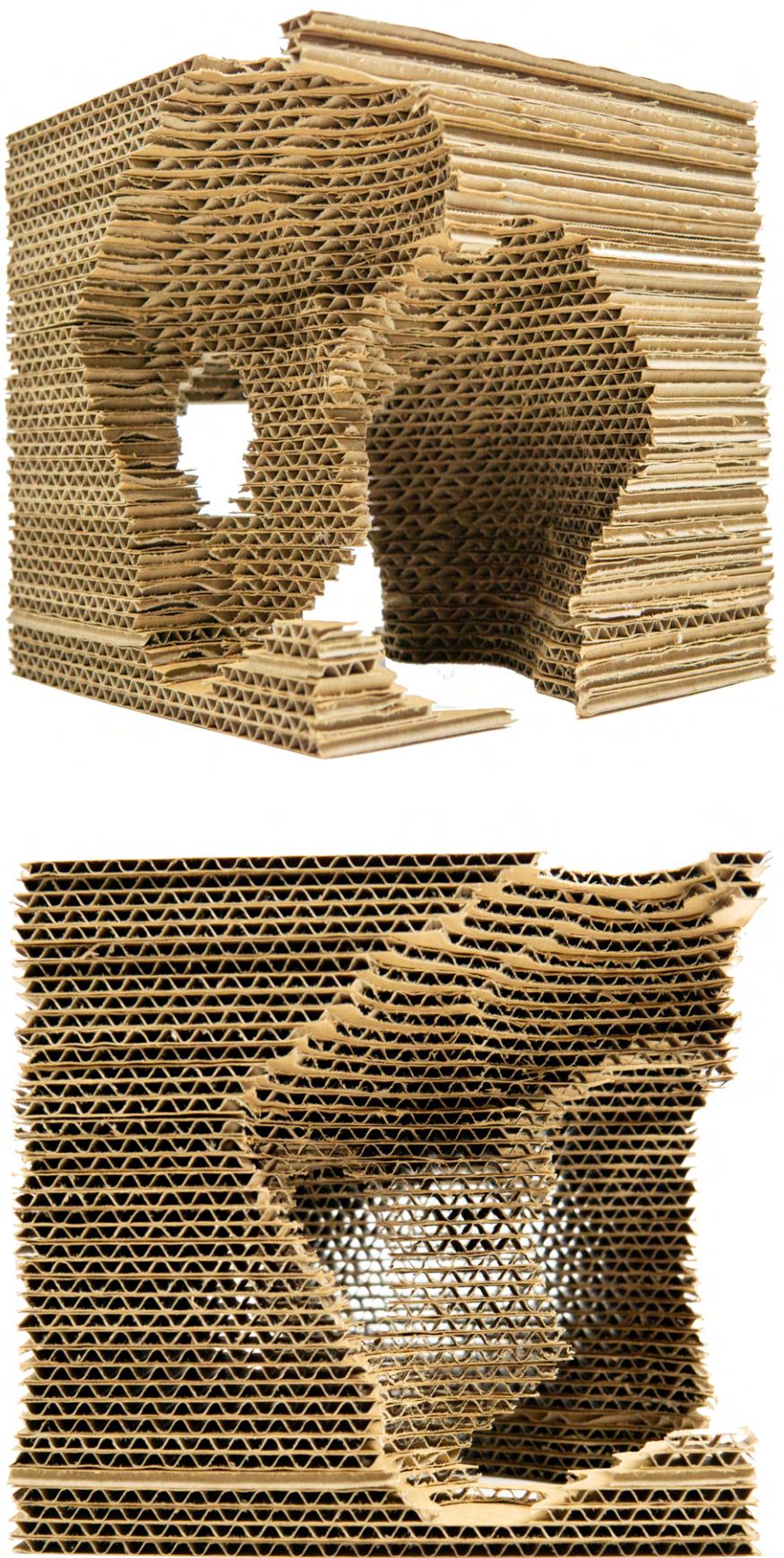




BRANCHING GROWTH



HILBERT CURVE

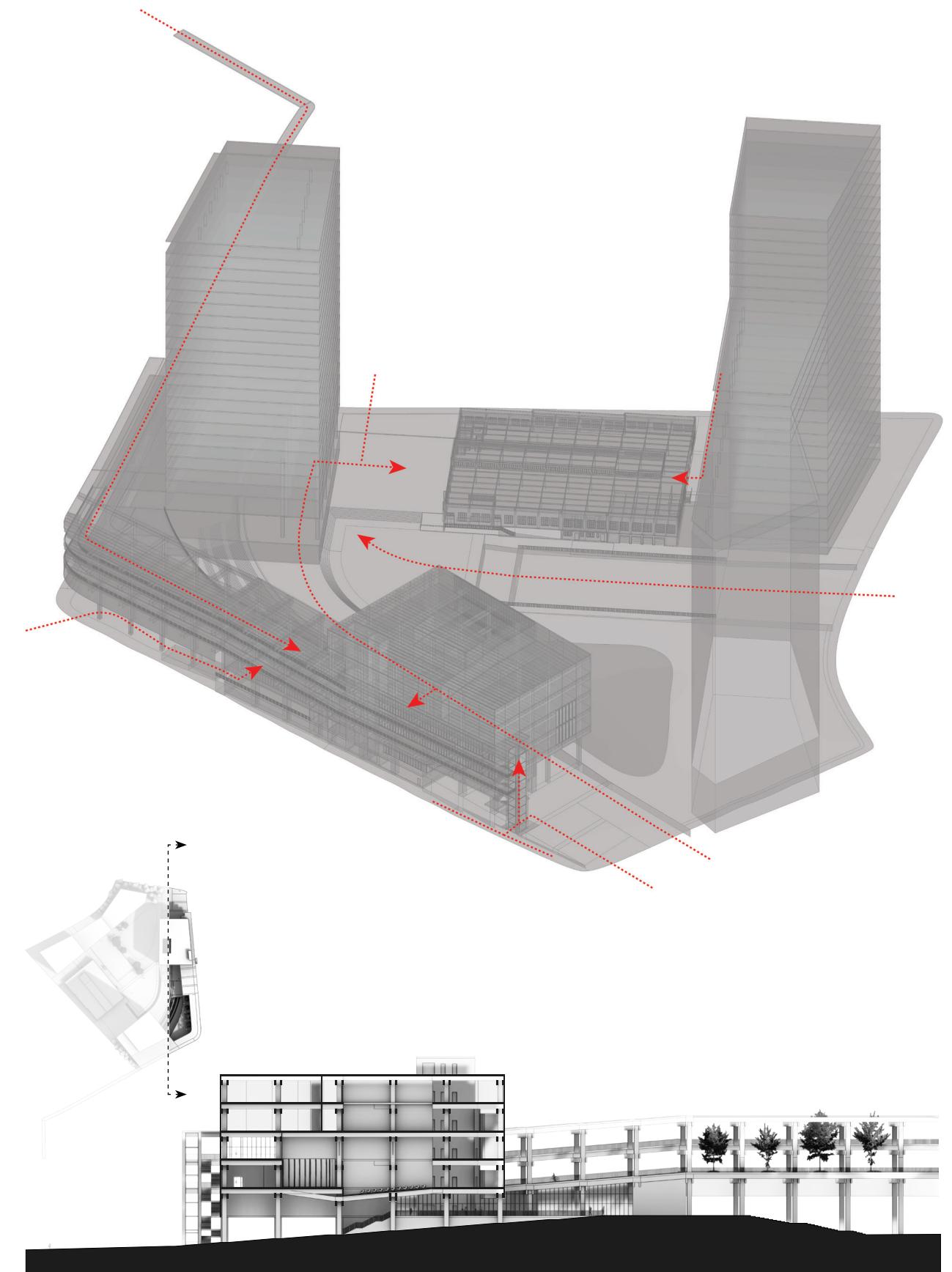
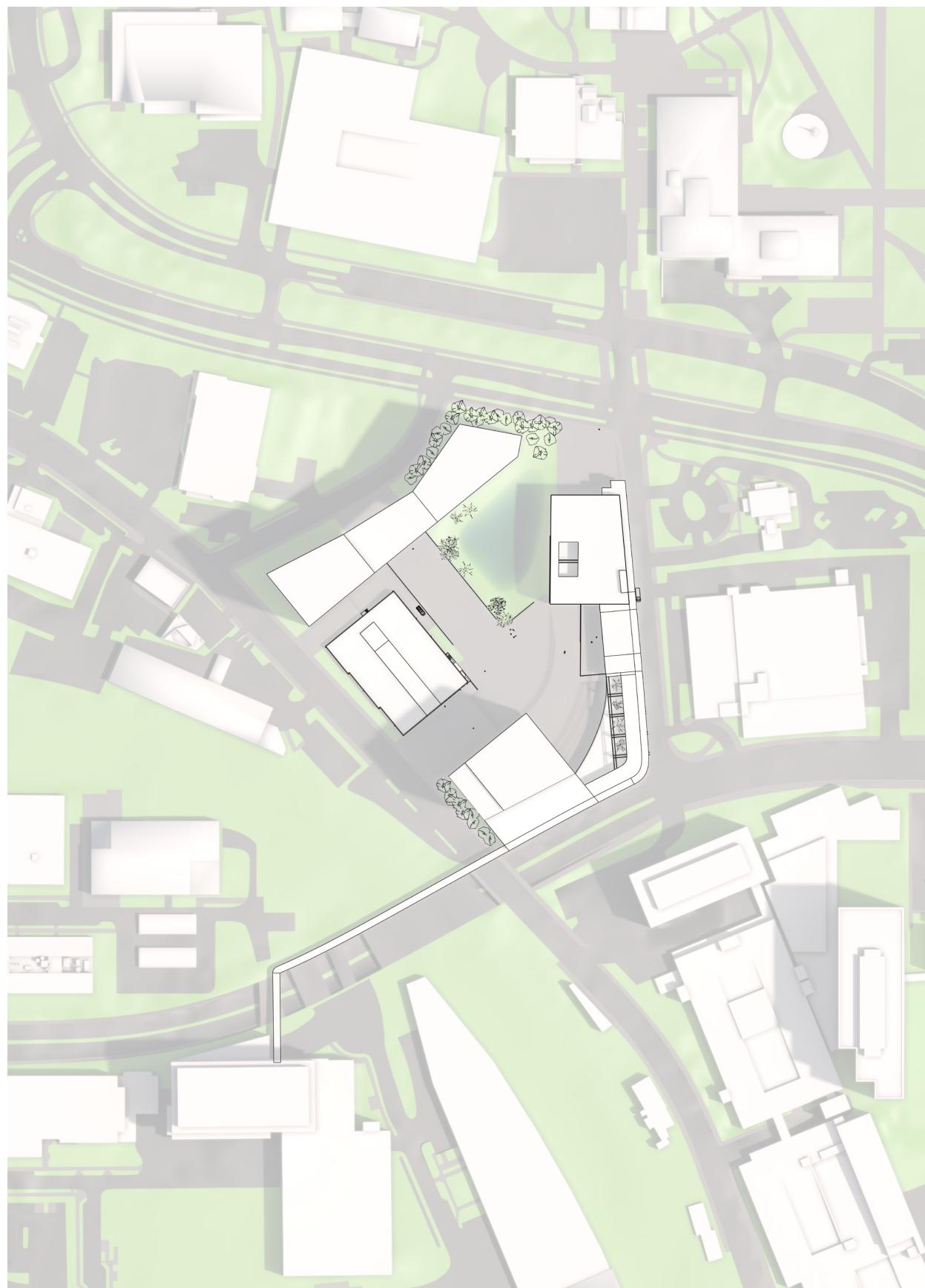


ARTS SQUARE

43

an urban expansion to Georgia Tech
focused on the arts





ARTS SQUARE

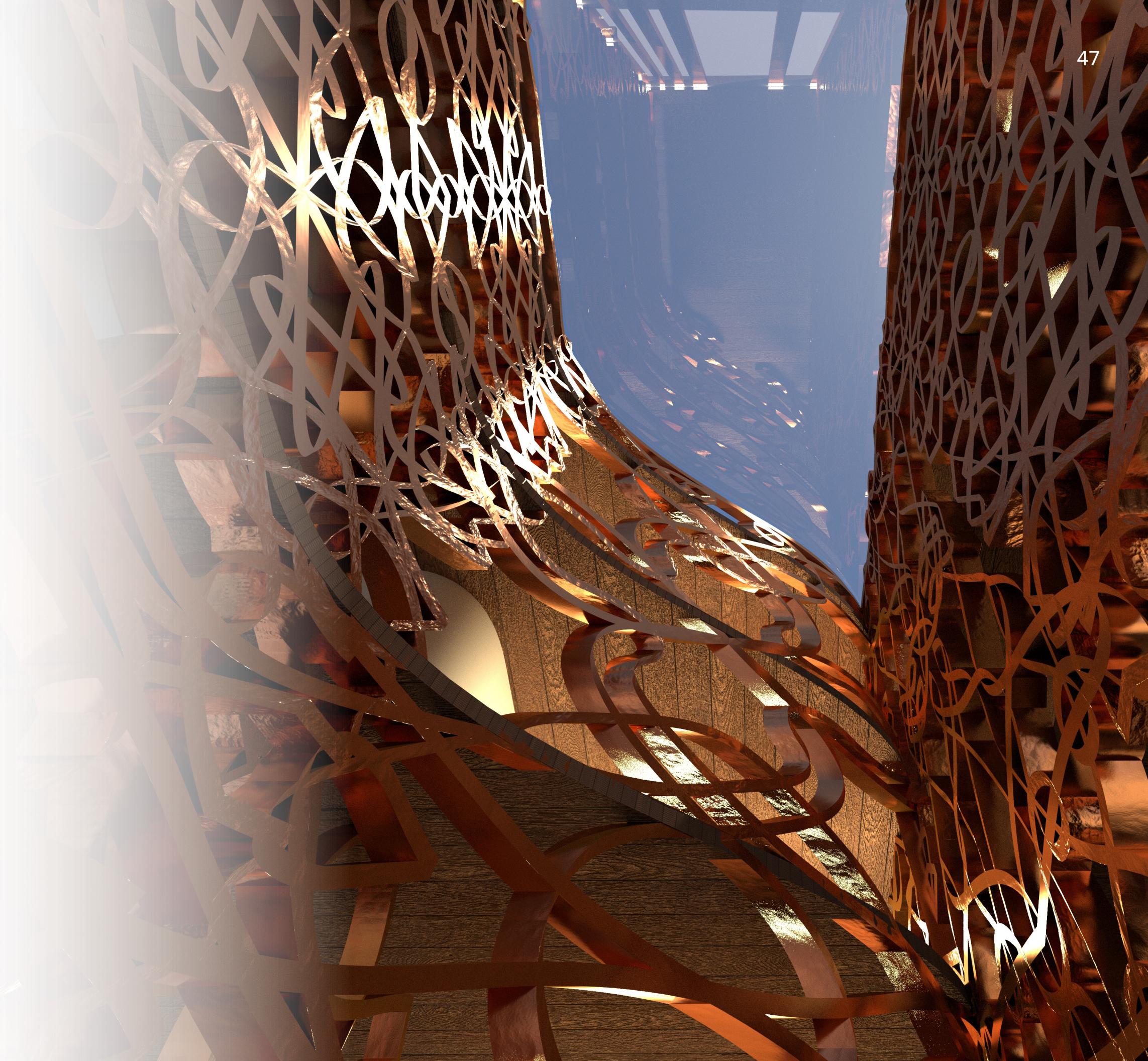
DEEP DECORATION

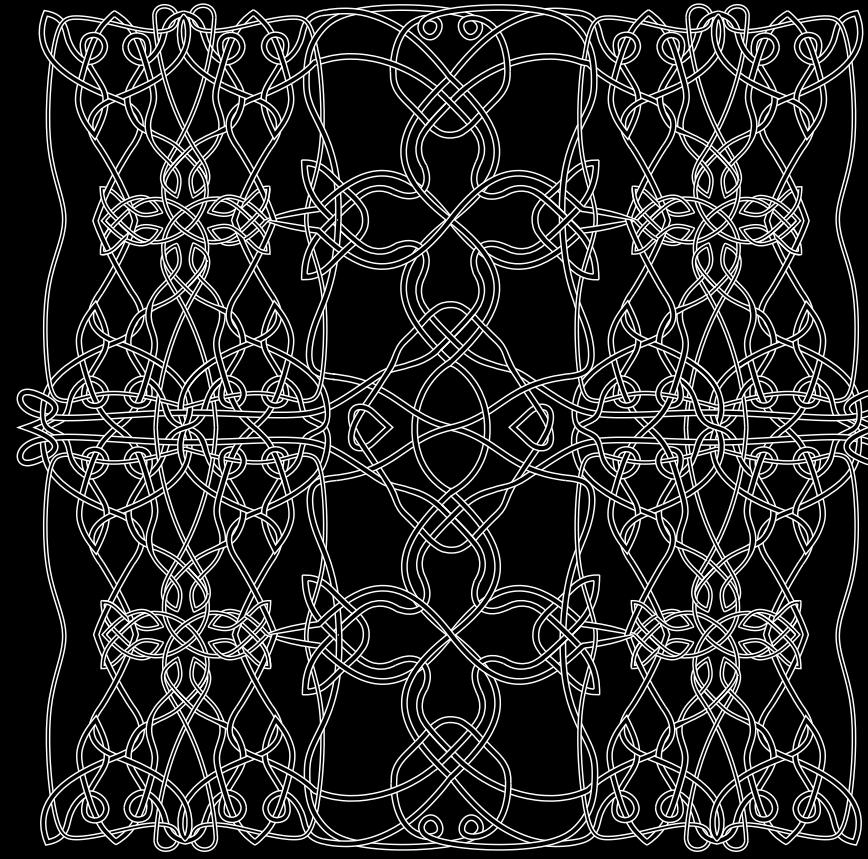
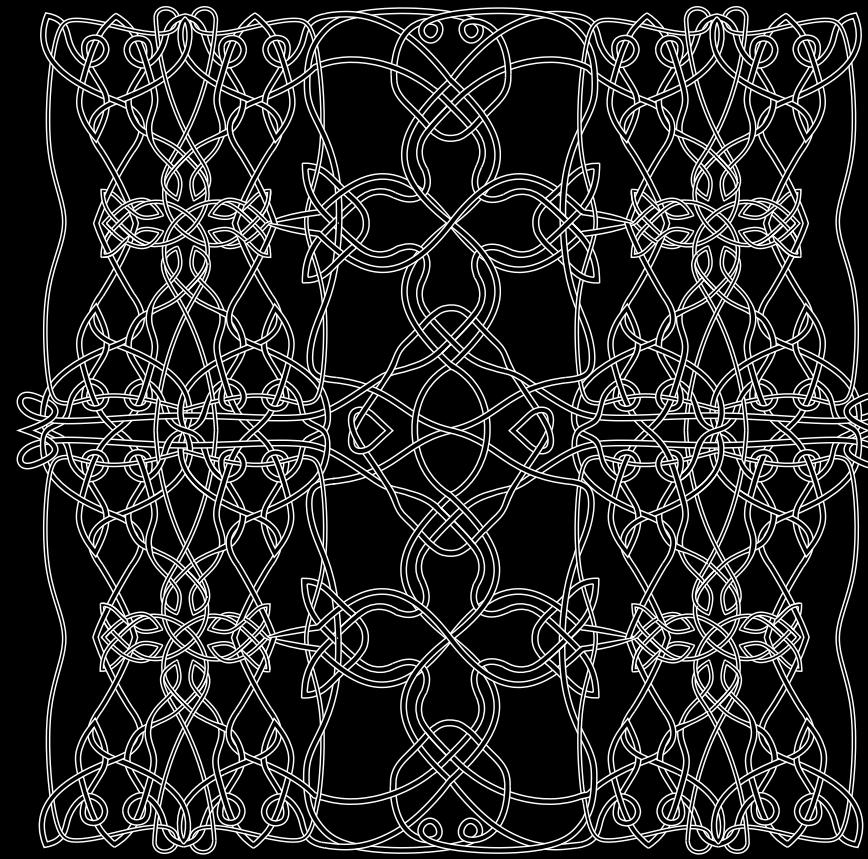
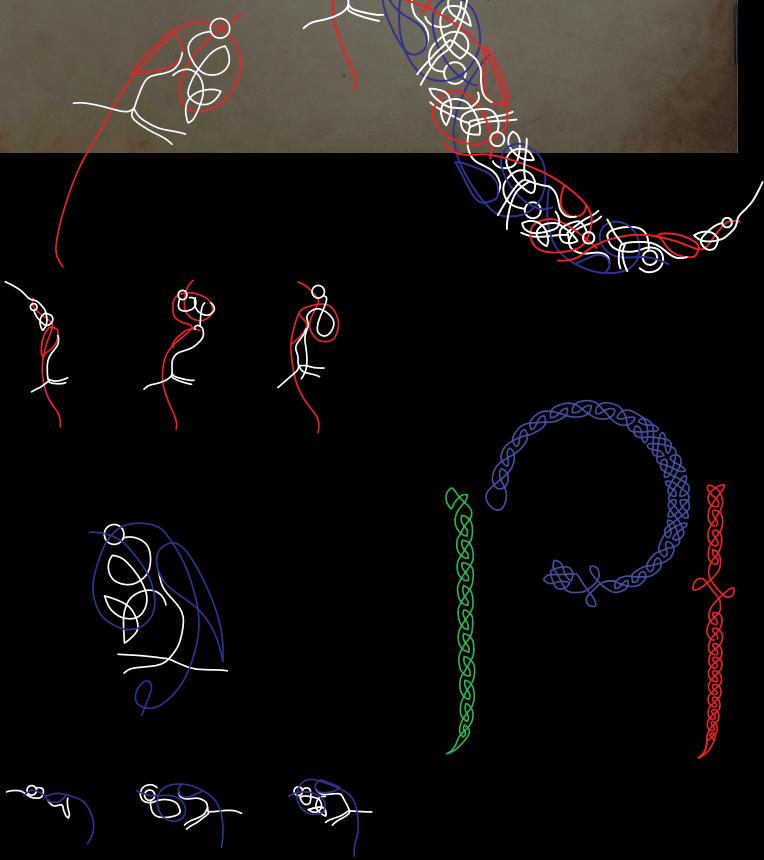
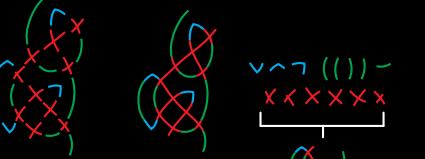
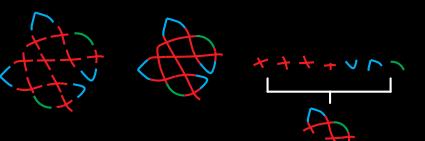
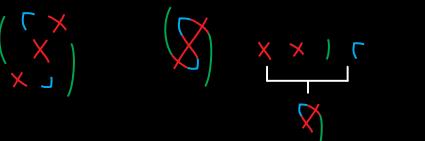
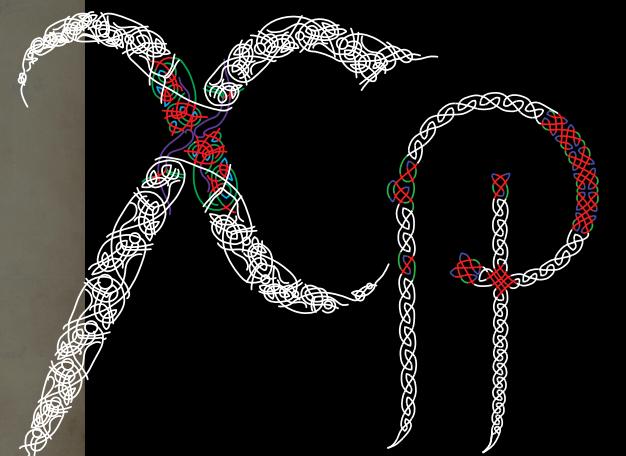
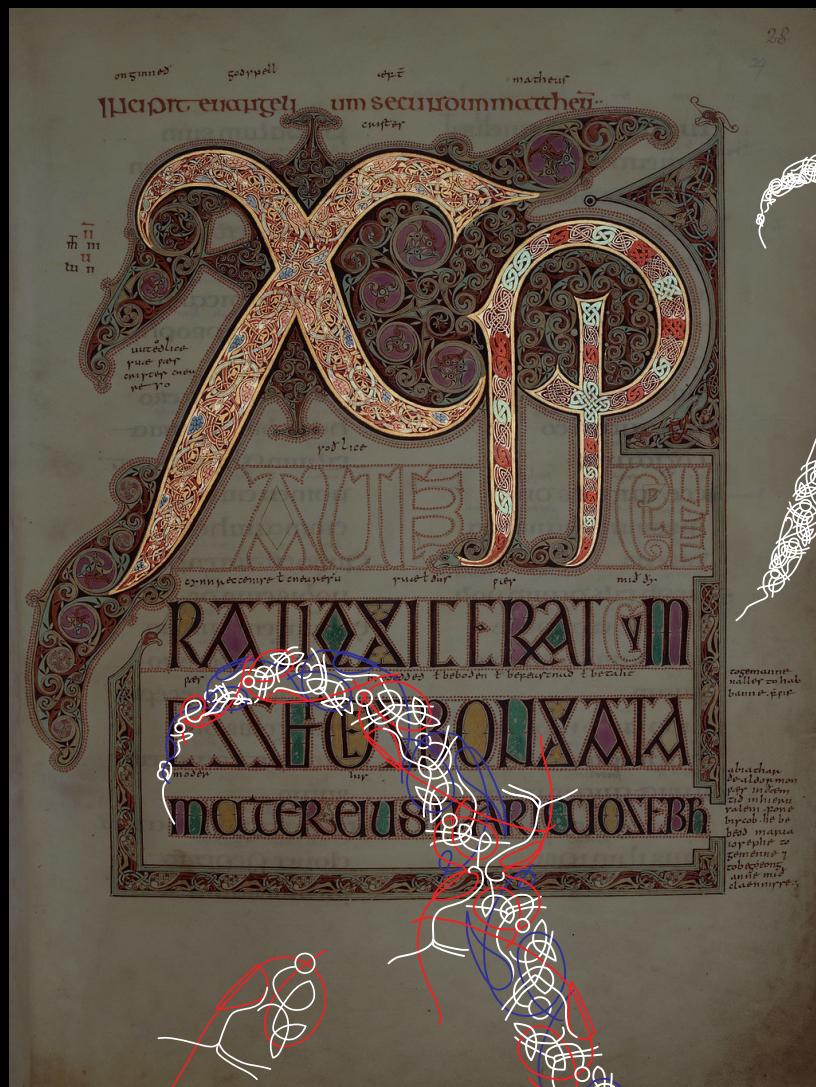
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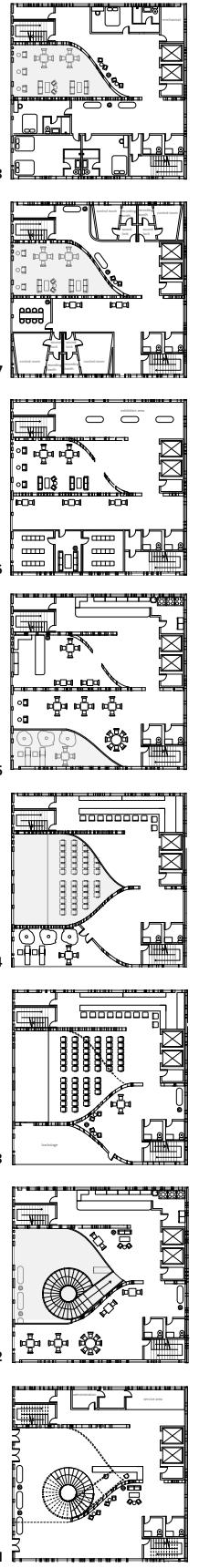
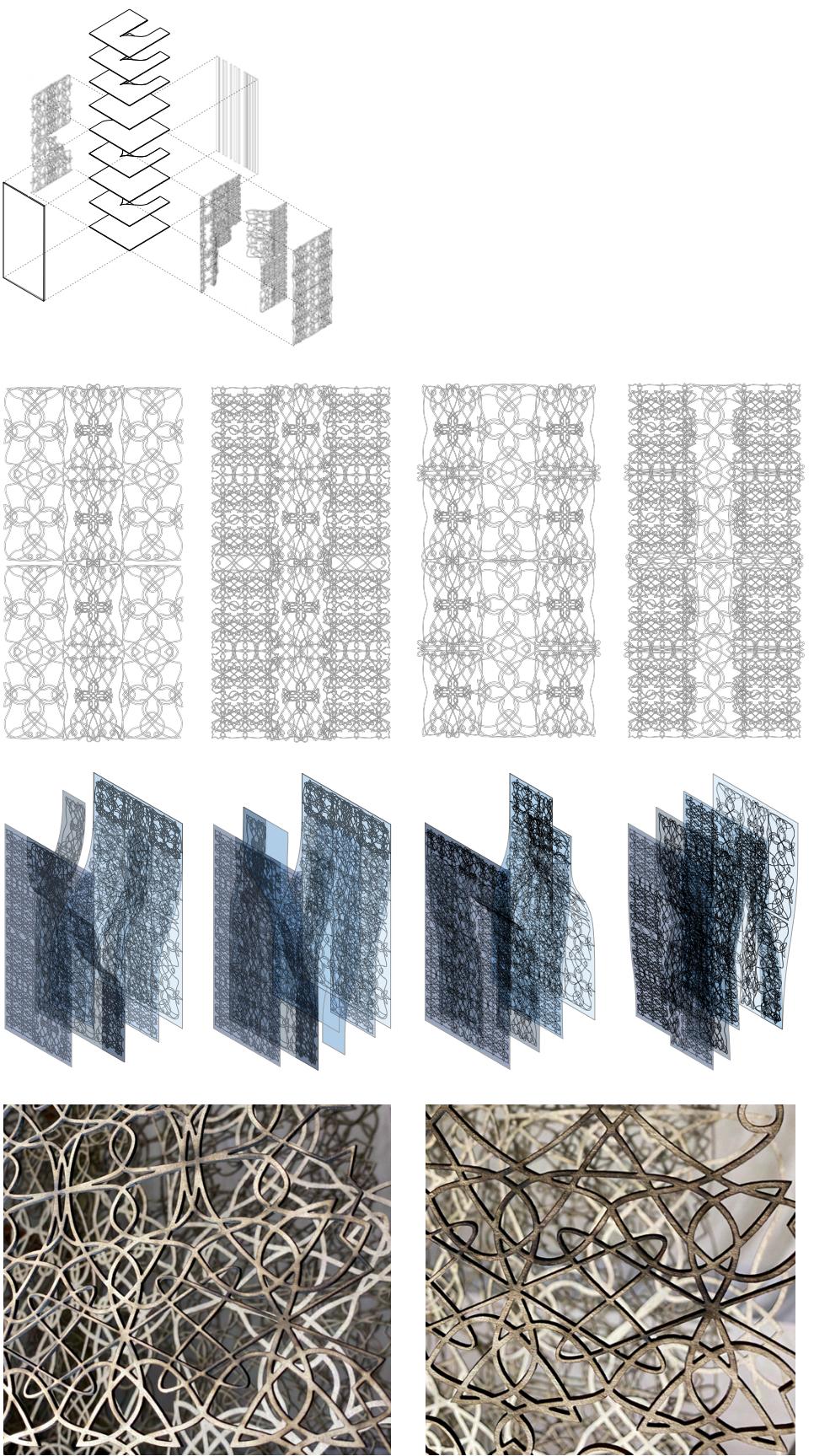
a synthesis of a formal pattern
language based on historic examples
of ornamentation

DETAILS

FALL 2020
ARCHITECTURE DESIGN STUDIO 2
CRITIC: LARS SPUYBROEK
COLLABORATORS: ALEX ZHENG

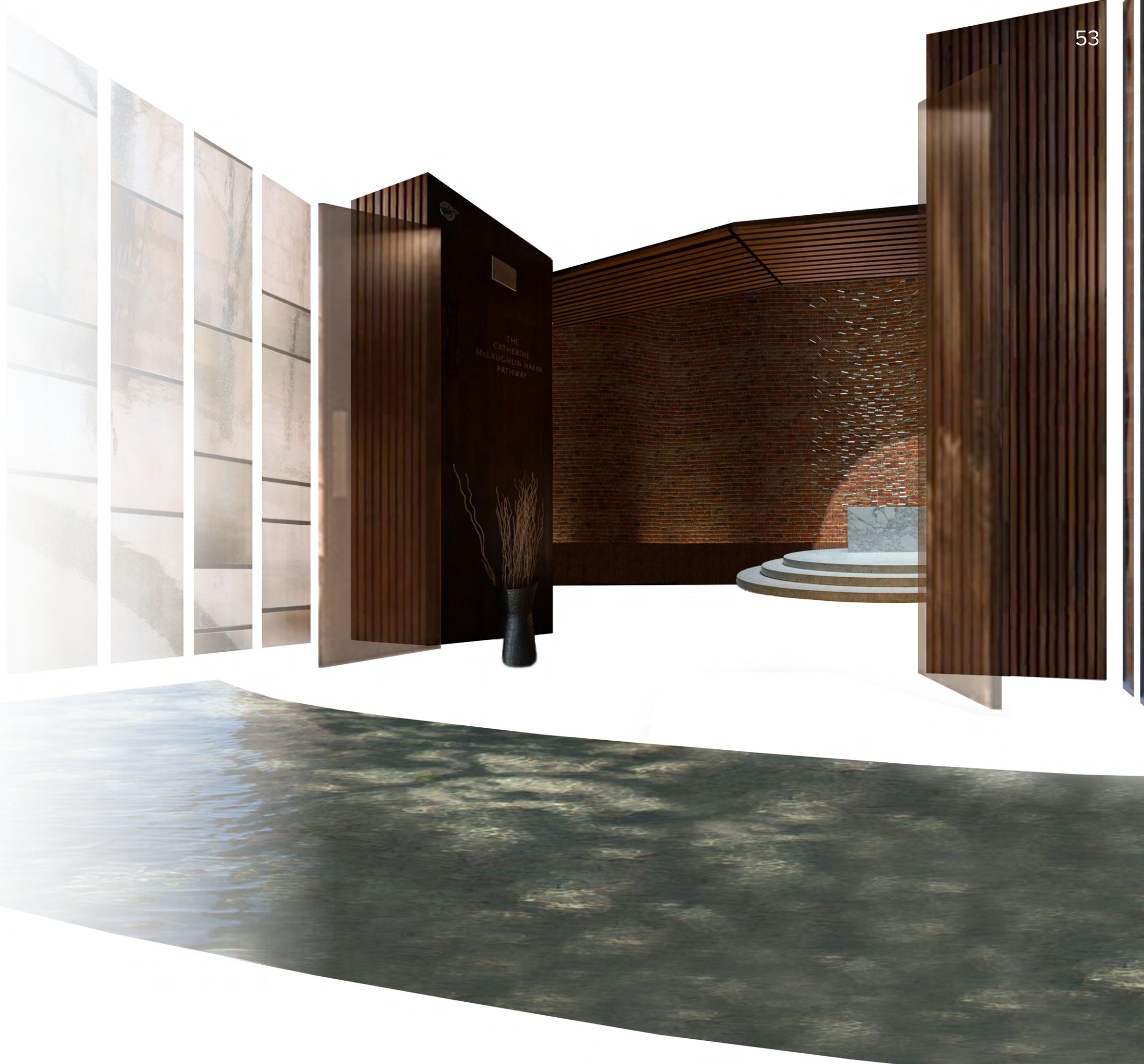


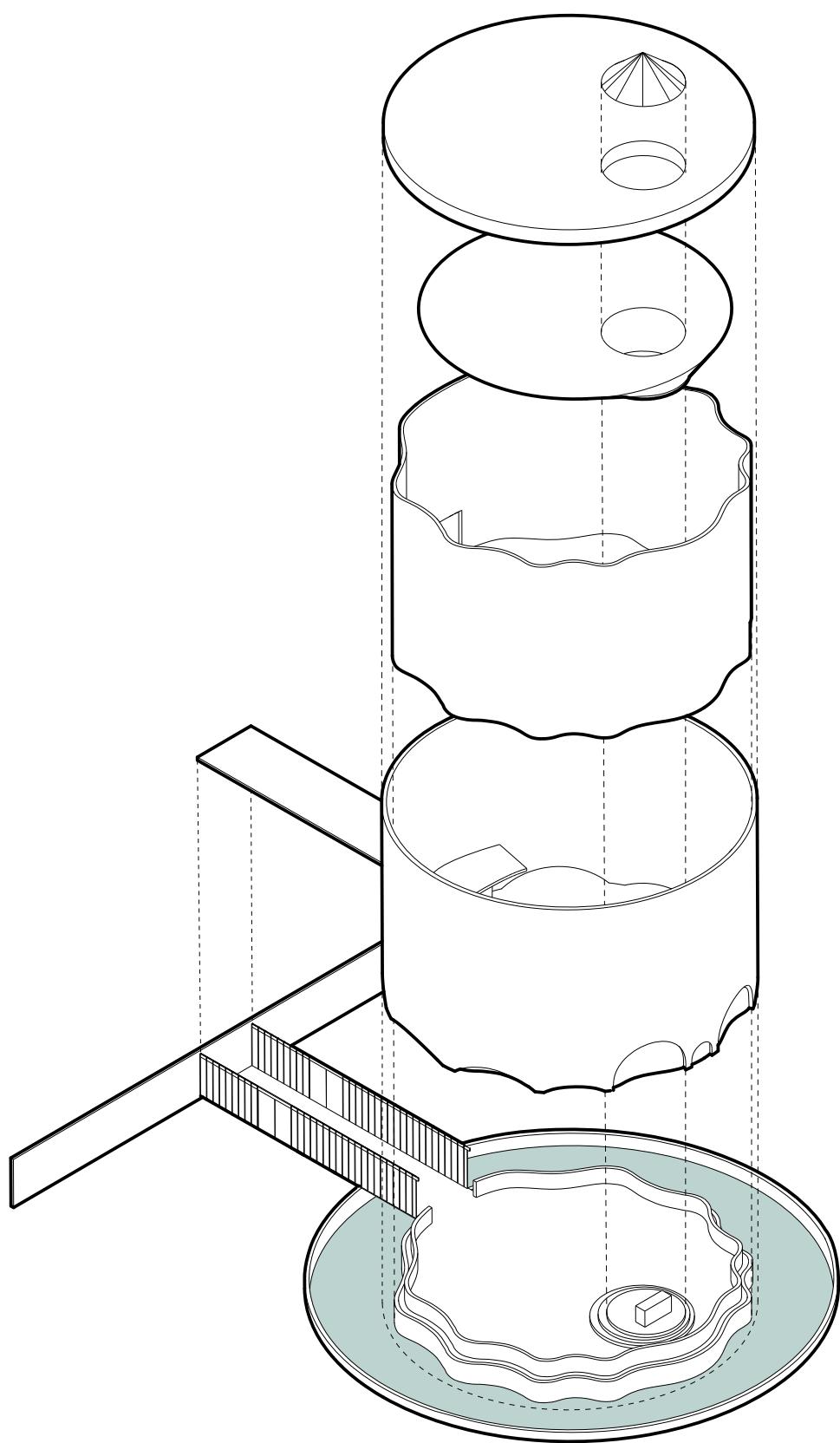
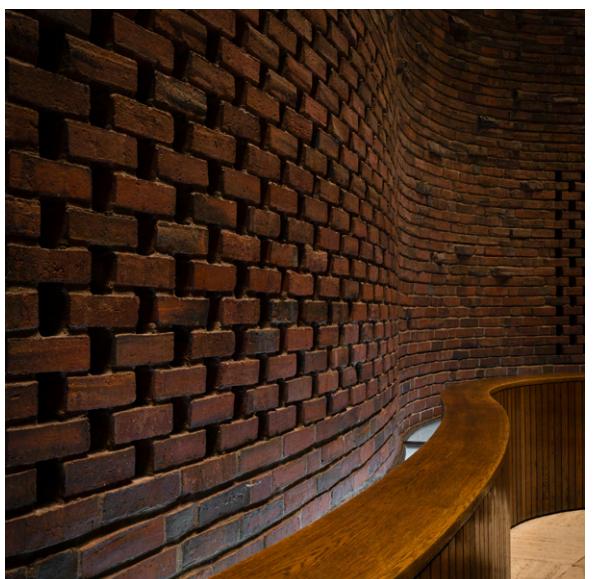
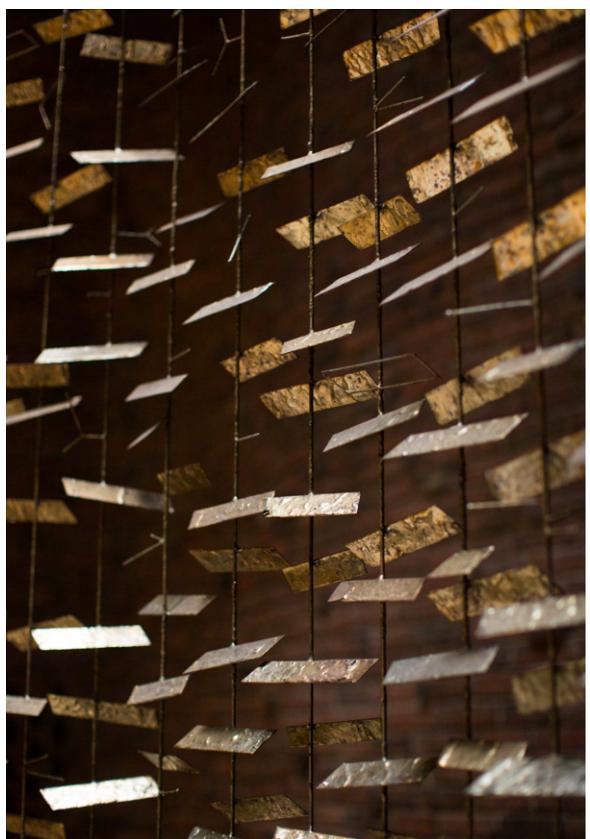




MIT CHAPEL

Windowless interior walls are undulating brick. A sculpture by Harry Bertoia glitters from the circular skylight down to a small, unadorned marble altar. Natural light filters upward from shallow slits in the walls catching rippling reflected light from the moat.





MIT CHAPEL

WEST VILLAGE DINING COMMONS

BIM modeling and steel frame construction tectonics

DETAILS

SPRING 2024

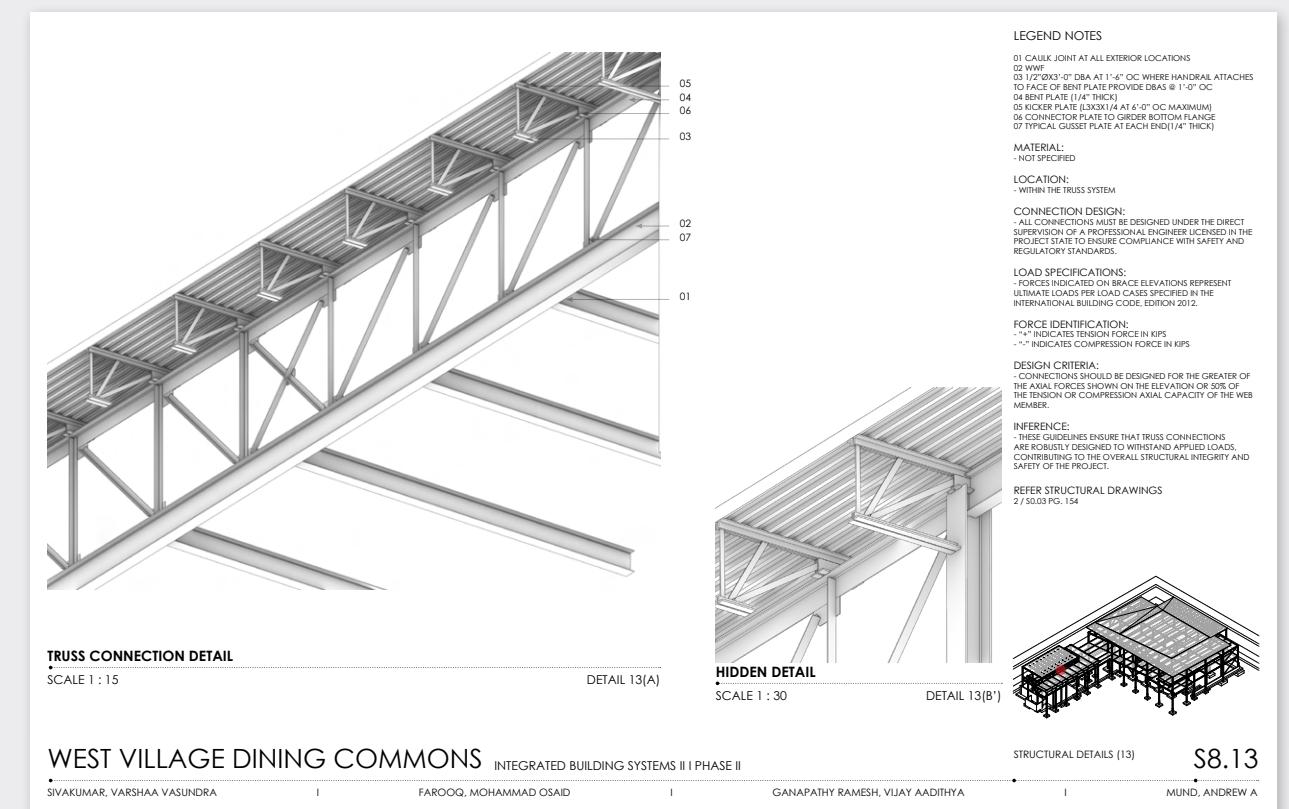
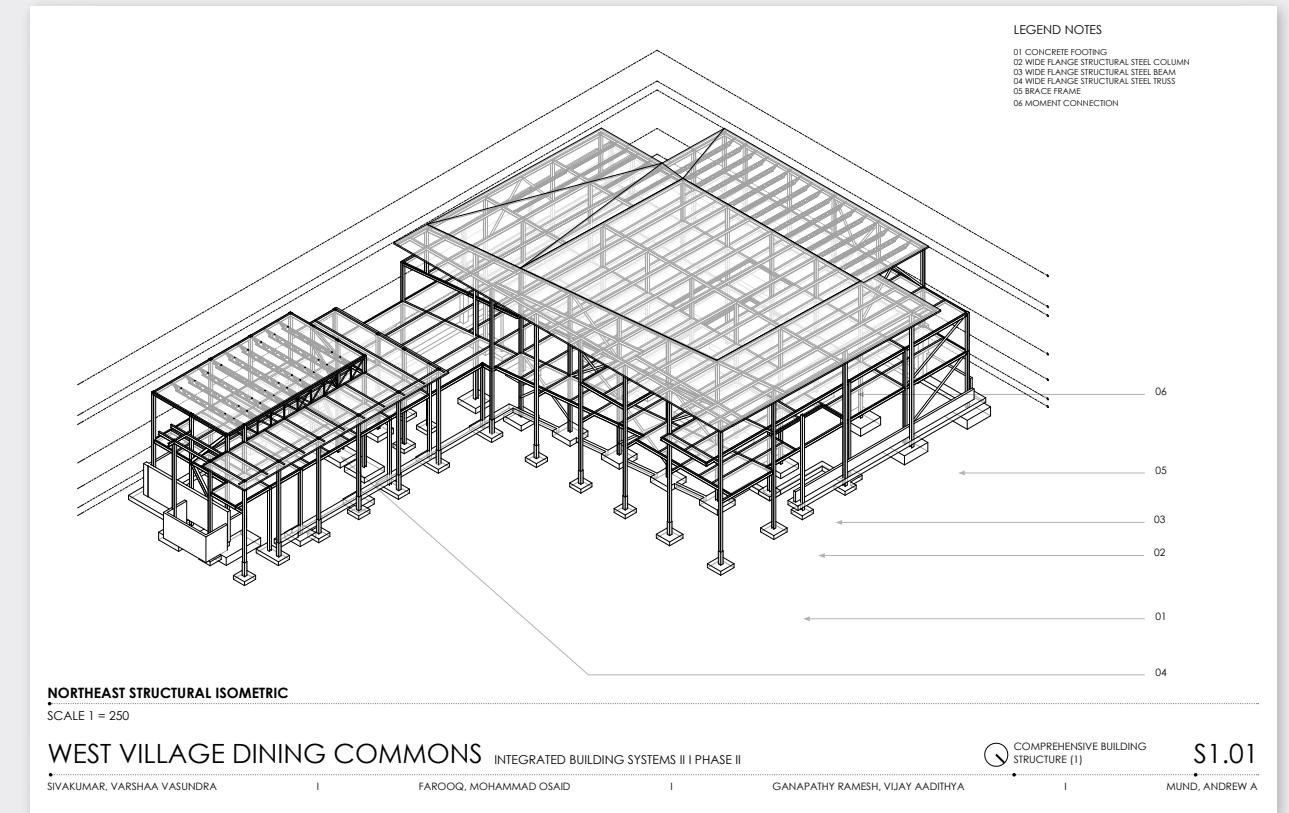
INTEGRATED BUILDING SYSTEMS 2

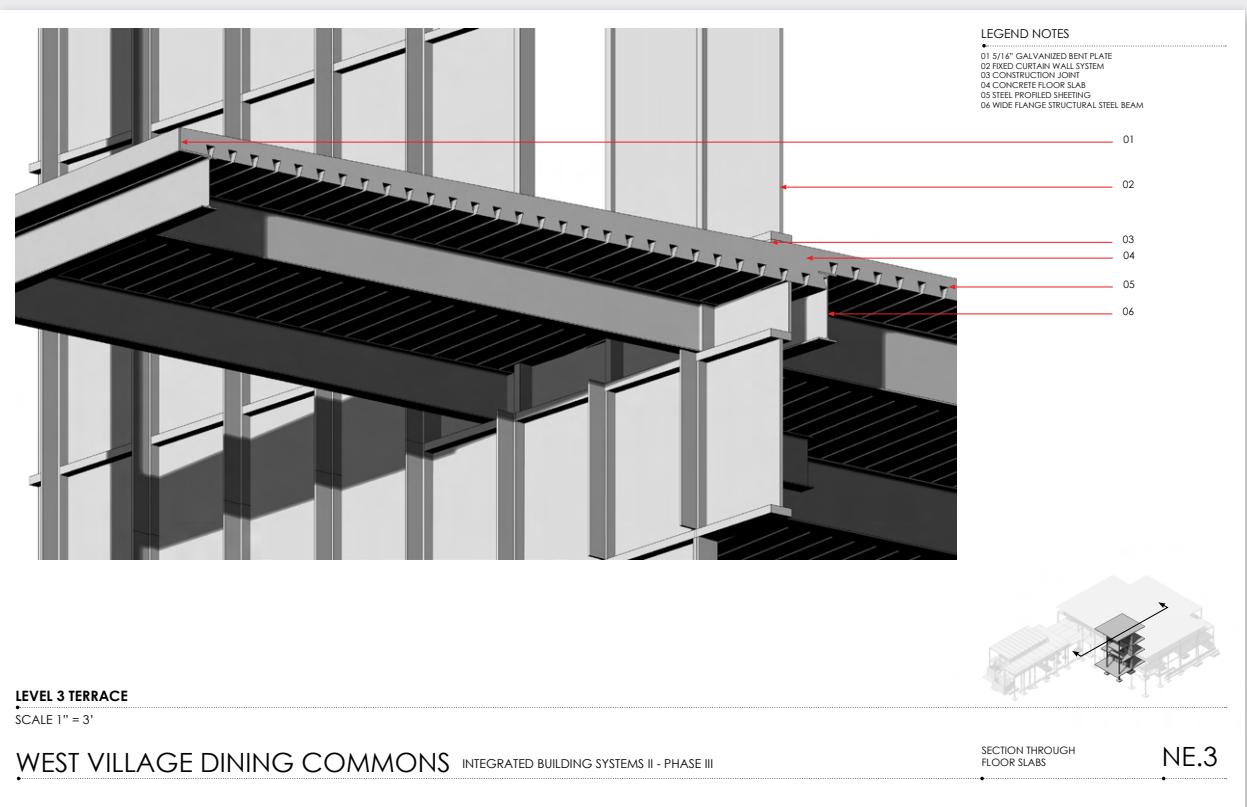
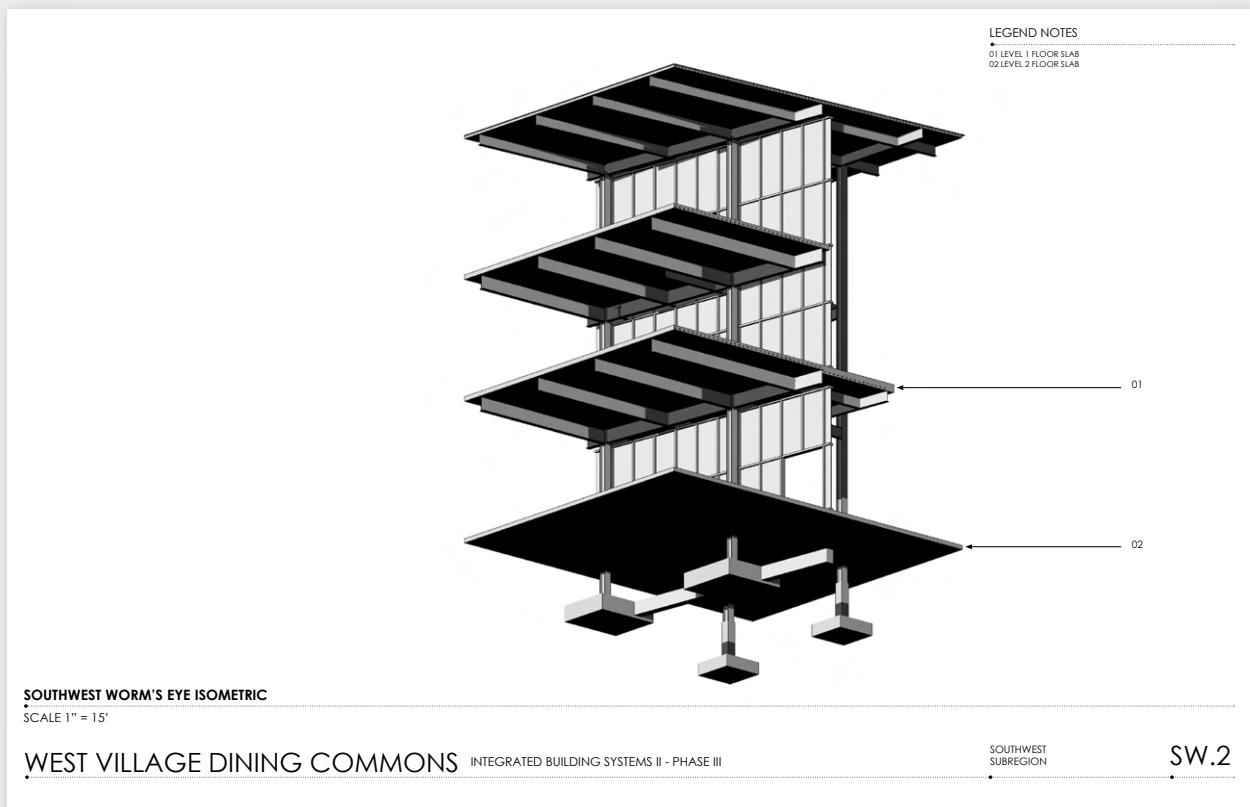
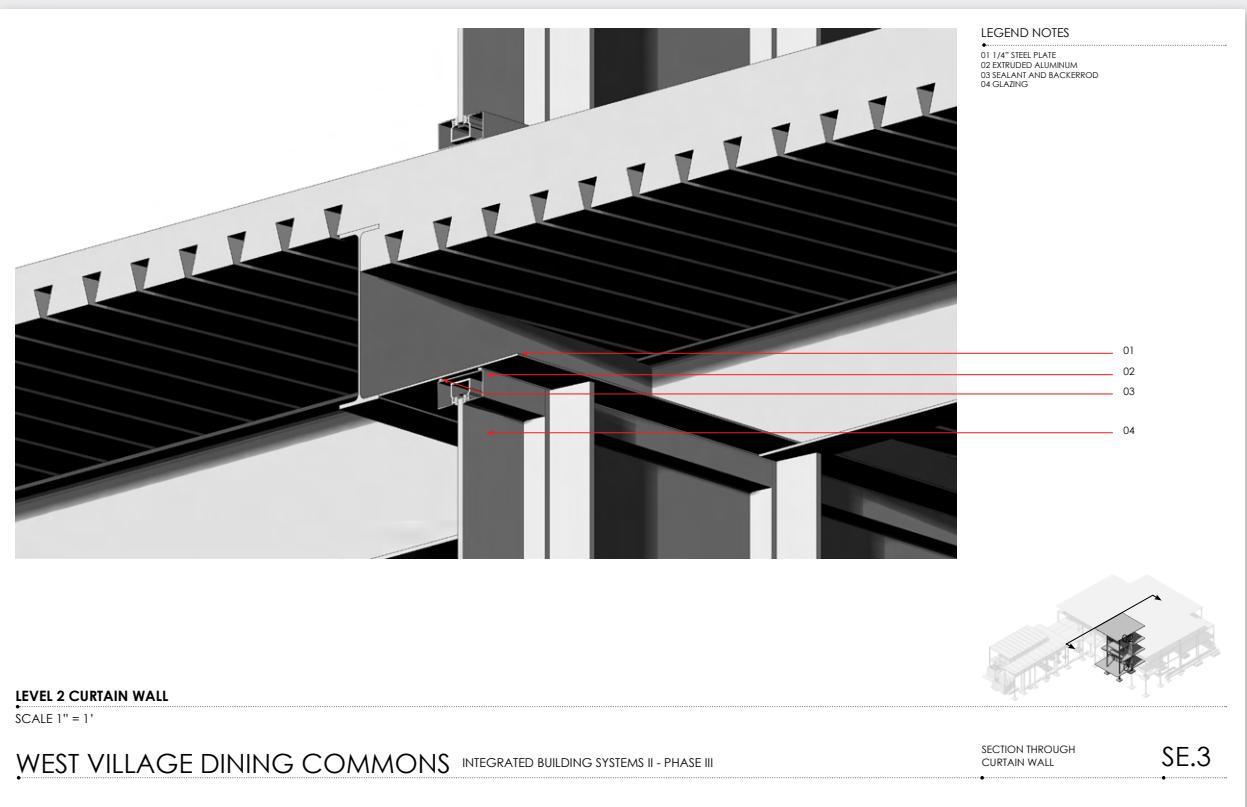
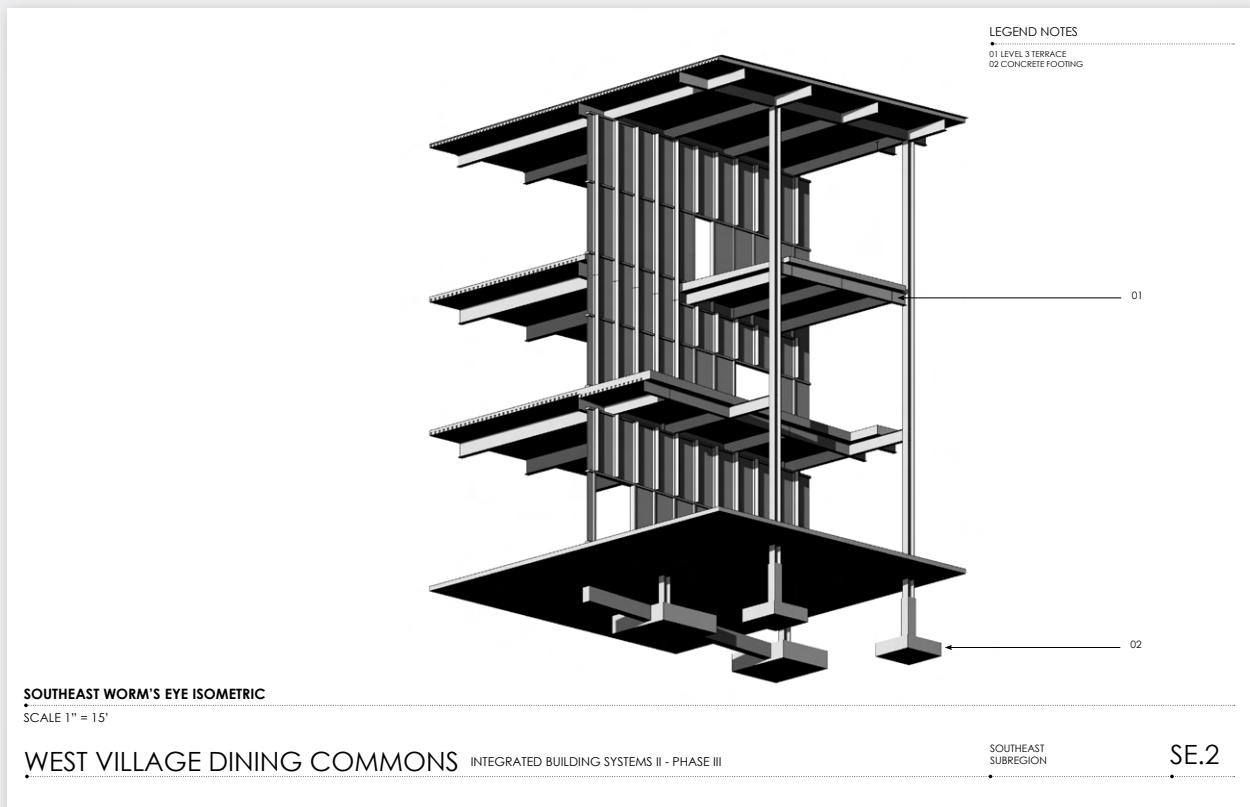
INSTRUCTOR: KAREN JENKINS,

JIM CASE, RUSSELL GENTRY

COLLABORATORS: VARSHAA SIVAKUMAR,

OSAID FAROOQ, VIJAY AADITHYA





GULF COAST BUILDING SUPPLY & HARDWARE

61

a site and inventory survey utilizing
LiDAR imaging in preparation for a
warehouse expansion

