

**2018**

**2020**

# **Wenjin Wang**



| 王文瑾

# Design Work

\_01



## Rejuvenation

*Interior design for a multi-purpose building  
Individual work, 2019*

\_02



## Color Lab

*Exhibition of Art and Color Perception  
Individual work, 2019*

\_03



## Sense of Breathing

*Adaptive reuse of an island architecture  
Individual work, 2020*

\_04



## Soft Sentience

*Installation Design for Nanjing Railway Square  
Group work, 2018*

\_05



## Remember Me

*Exhibition of Dementia-Friendly Environment  
Individual work, 2020*

01

06

14

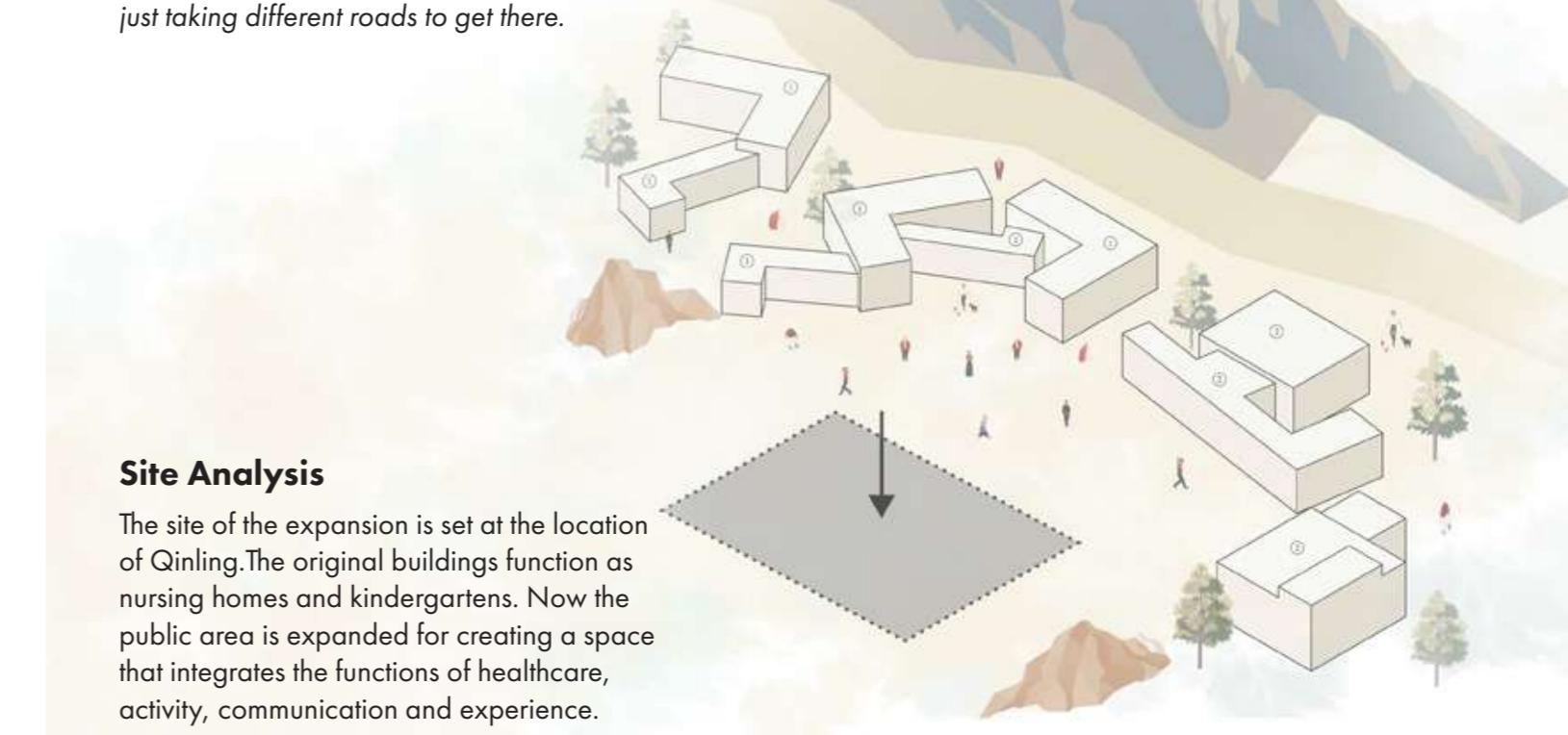
23

26

# Rejuvenation

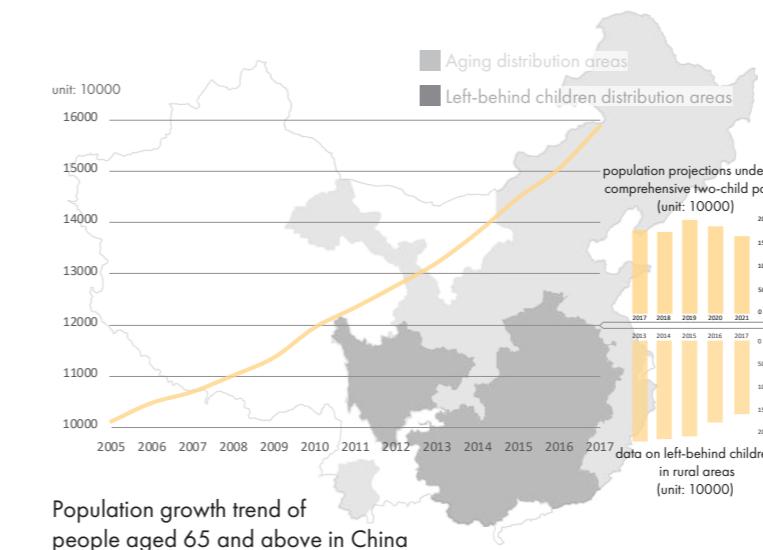
*Interior design for a multi-purpose building*

*We are all going the same way,  
just taking different roads to get there.*



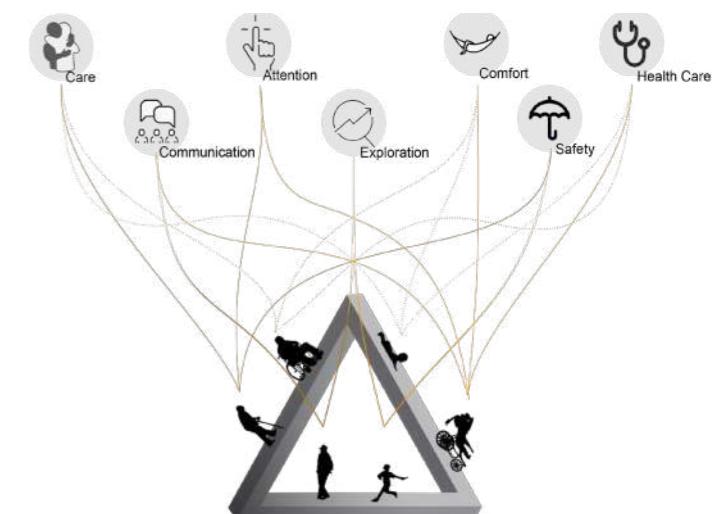
## Site Analysis

The site of the expansion is set at the location of Qinling. The original buildings function as nursing homes and kindergartens. Now the public area is expanded for creating a space that integrates the functions of healthcare, activity, communication and experience.



## Current Problems

The elderly and children represent aging and new life respectively on the timeline of life. Left-behind children and an aging society are two major problems which my homeland, China, is facing now. Although the two populations may not be directly related, in many mountainous areas, these two groups actually interdependently live together because the middle-aged generation (e.g., parents) have to migrate to urban areas for work.



## Needs of Users

After careful analysis, it turns out that there are many differences in daily demands between the elderly and the young. However, they actually share many common daily demands, such as needs in attention, exploration, safety, communication, and education. As a designer, we can take the responsibilities to create a multi-purpose building in the mountainous areas, which can meet both their physical and psychological needs and also provide them with a better living environment for a higher quality of life.

## Concept Collage

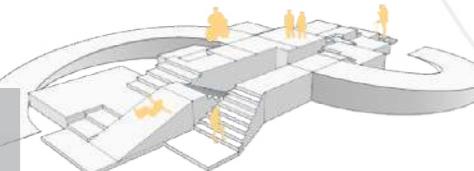
02

**Small Padding Pool**  
for refreshing

Tremendous efforts, mick,  
with a modest result.

**Projection Room**  
for exploration

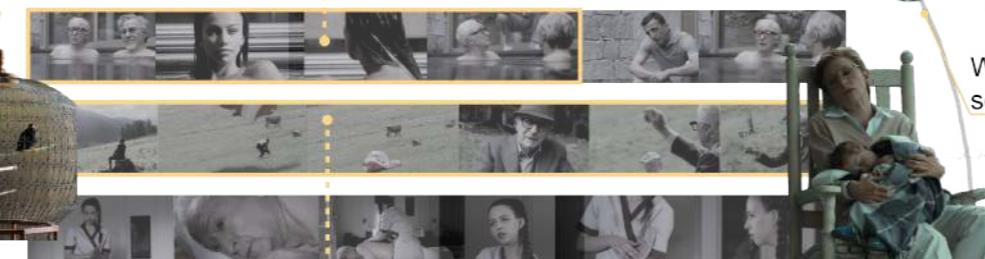
After pain, come pleasure,  
and then ... pain again.



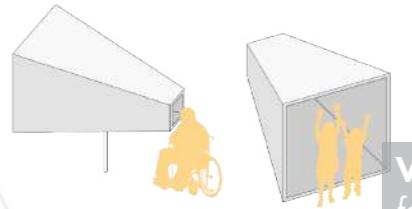
**Walking Area**  
for exercise



Men, artists, animals, plants ...  
we are all just extras.



When you are young, everything  
seems really close, that is the future.



**Viewing Area**  
for relaxing

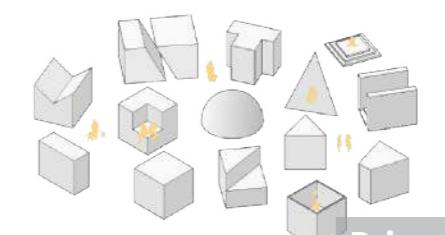


**Theatre & Movie Area**  
for attention

You are on your own road.



Everybody feels different about  
themselves, one way or another.



**Private Healthcare Room**  
with Different Shape  
for well-being

03

## Generation of Block

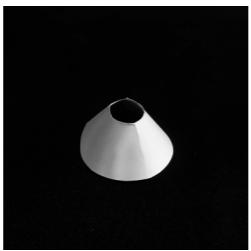
### Different Space Types



different forms of  
consultation rooms



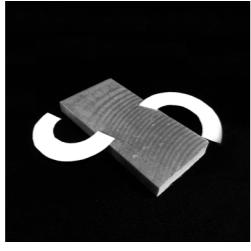
two kinds of viewing  
telescopes



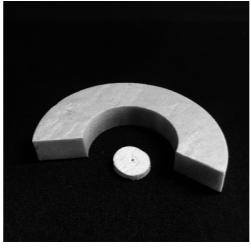
projection experience  
room



stage and theatre

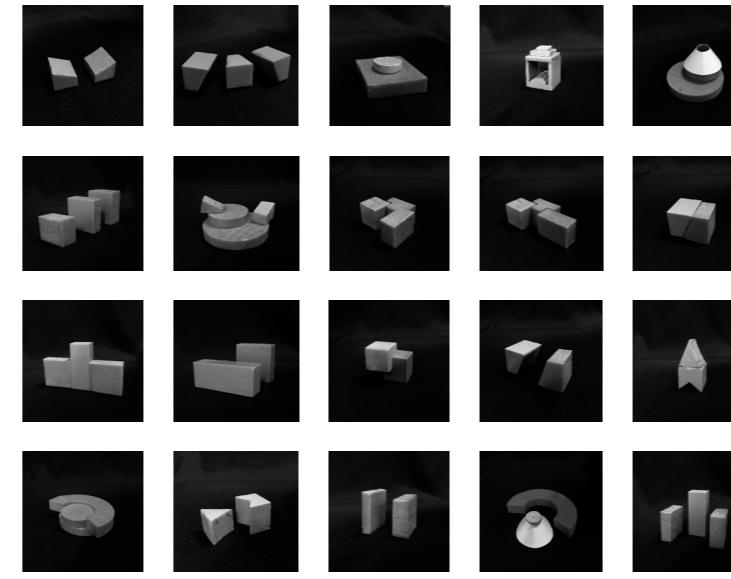


walking area



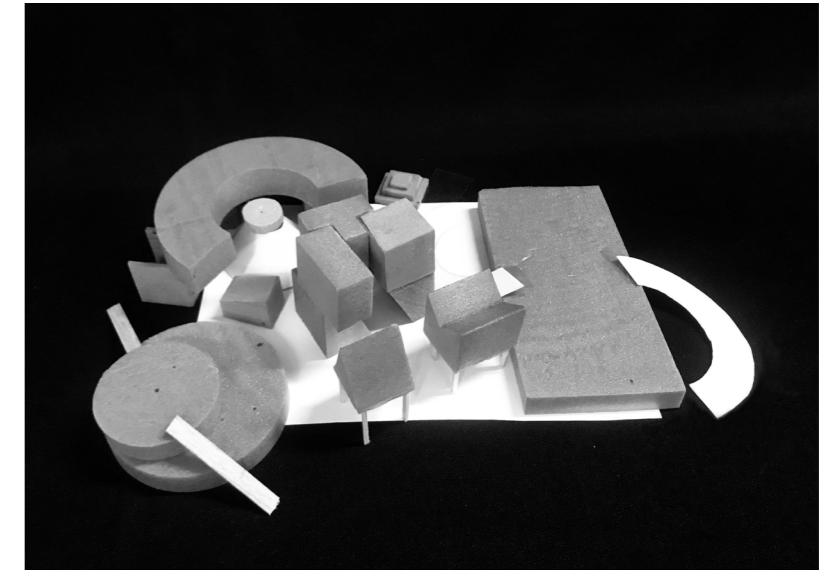
paddle pool

### Different Combinations of Space



compose in different ways to form for different functions of small space

### Final form of space

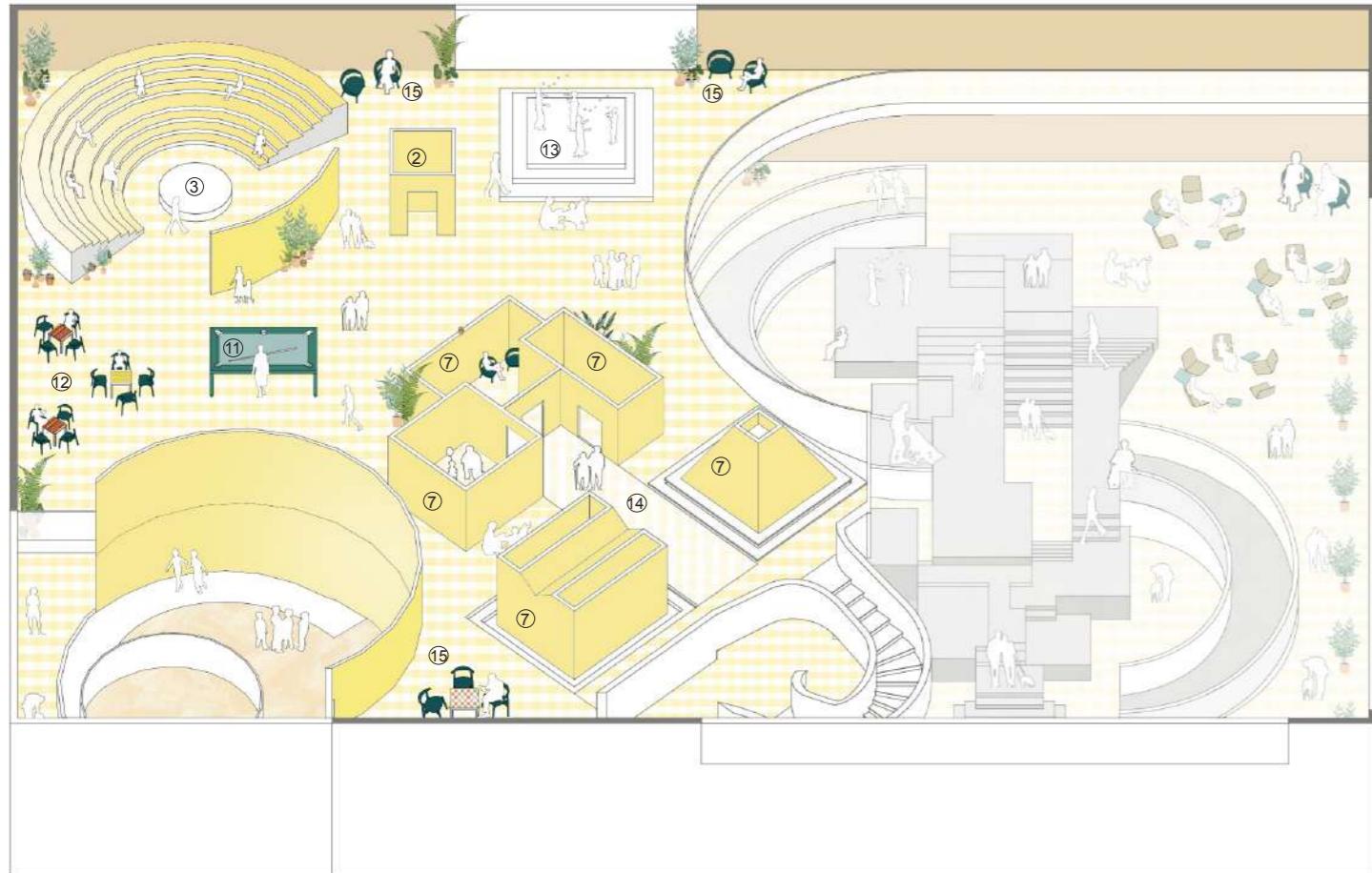


Fourteen small spaces are combined to form a large space divided into two layers

## Ground Floor Plan



## Second Floor Plan



- ① Open Healthcare Room
- ② Elevator
- ③ Little Theatre
- ④ Swimming Pool
- ⑤ Projection Experience Area
- ⑥ Walking Experience Area
- ⑦ Inclosed Healthcare Room
- ⑧ Viewing Experience Area
- ⑨ Reading Area
- ⑩ Chatting Area
- ⑪ Activity Area
- ⑫ Cafe
- ⑬ Meditation Stage
- ⑭ Transparent Corridor
- ⑮ Rest Area

### Theatre Area

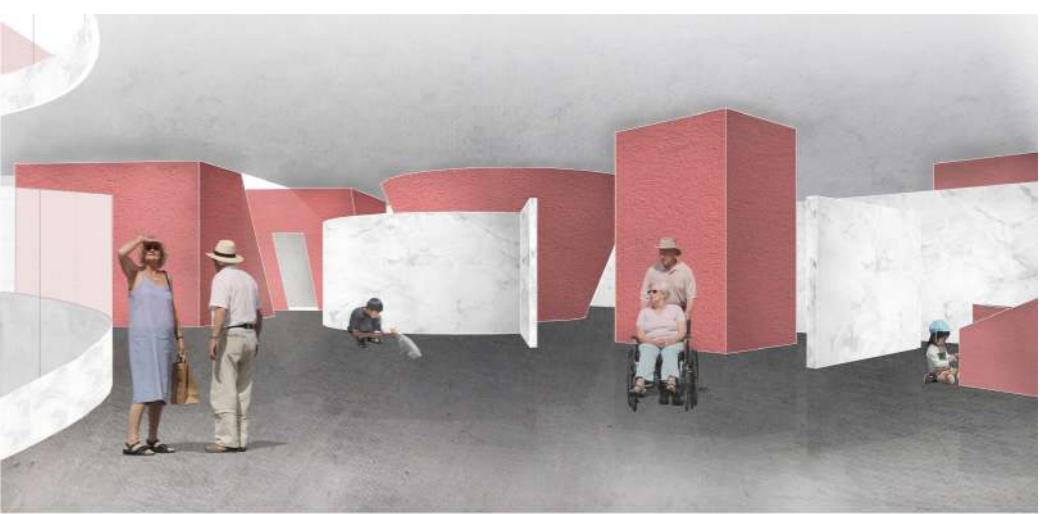
Both old people and children are eager to be the concerned. They need others' attention to find their own meaning of existence. With the setting of arc theater and round stage, they are the focus and center. Meanwhile, they can watch movies and performance there.



### Private Healthcare Room

- Multi-Mind
- Multi-Space
- Multi-Function
- Multi-Shape

We may gain power from both ourselves and the outside world. We all differ from our personalities, looks and experiences. Space also brings us different experiences through opening or closing, different visual angles, and various virtual and real relationships. In different types of space, the elderly and children are more able to find themselves, understand themselves and narrate themselves.



### Walking Area

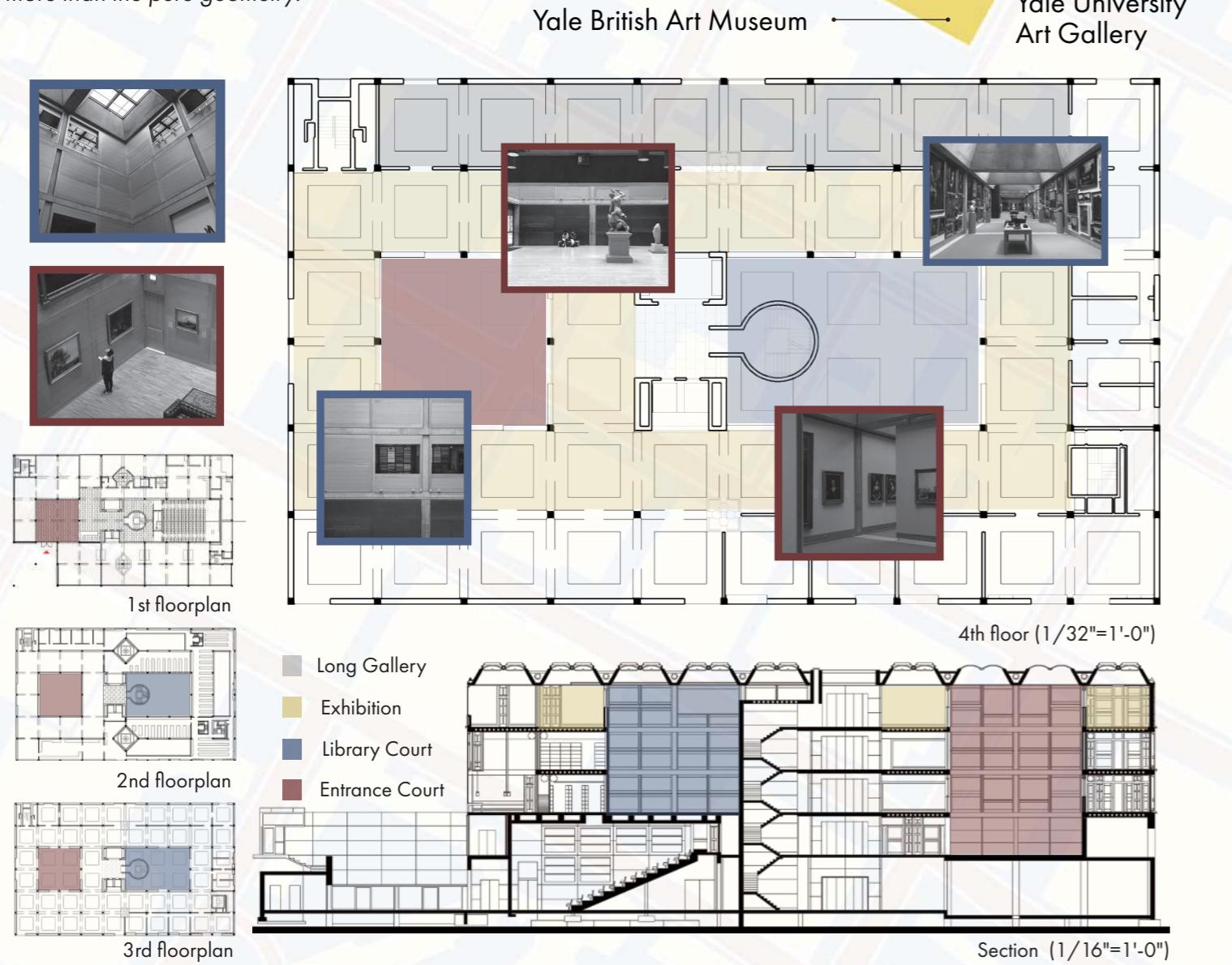
The ups and downs the stairs are like the rises and falls of life. We need to take a break in the middle. Also, we will know ourselves better while facing others during this journey.



# Color Lab

## Exhibition of Art and Color Perception

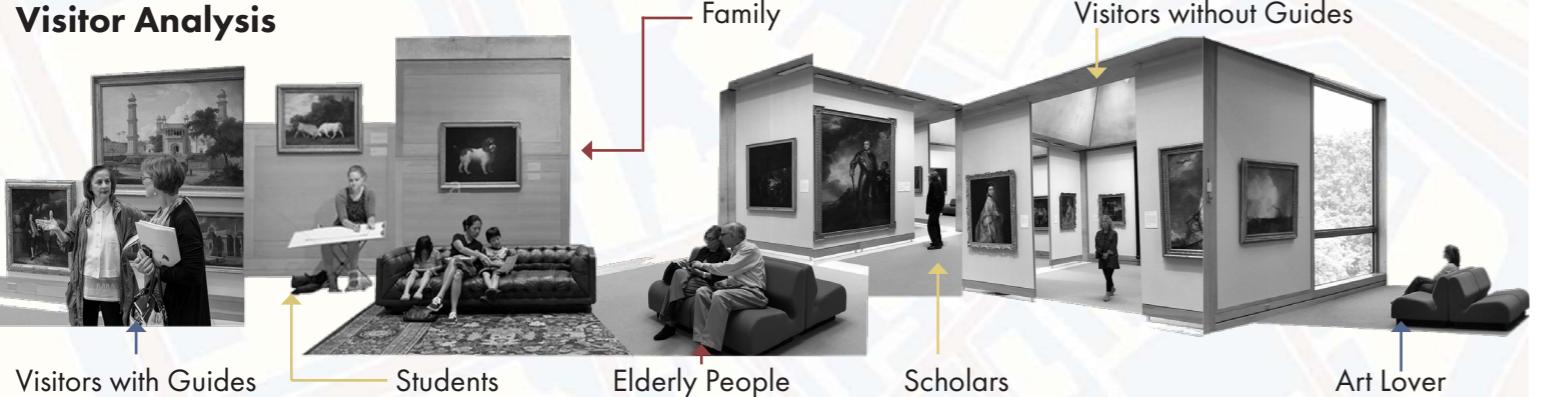
Color can be free from the function and language load to form a space more than the pure geometry.



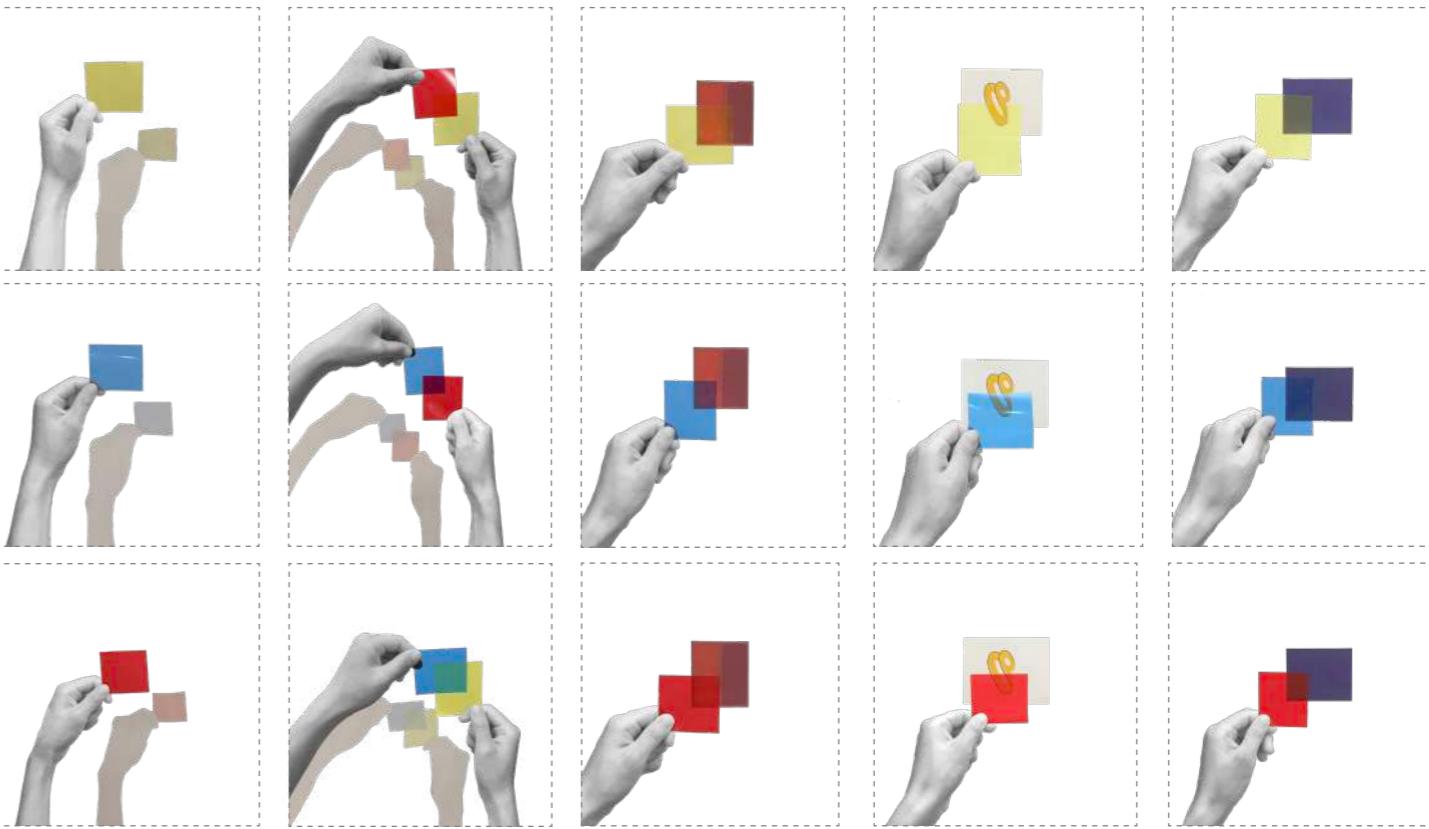
## Analysis of Original Building

The location of this exhibition is at Yale center for British Art. There are four floors, the 3rd and 4th floors are for exhibition area. The 1st library court and 2nd entrance court floors can be atrium space to hold exhibition. The exhibition of Art and Color Perception will be held on 4th floor. The whole space is divided into separate small spaces. This could minimize mutual interference between these small spaces and maximize the effects of each small exhibition spaces.

## Visitor Analysis

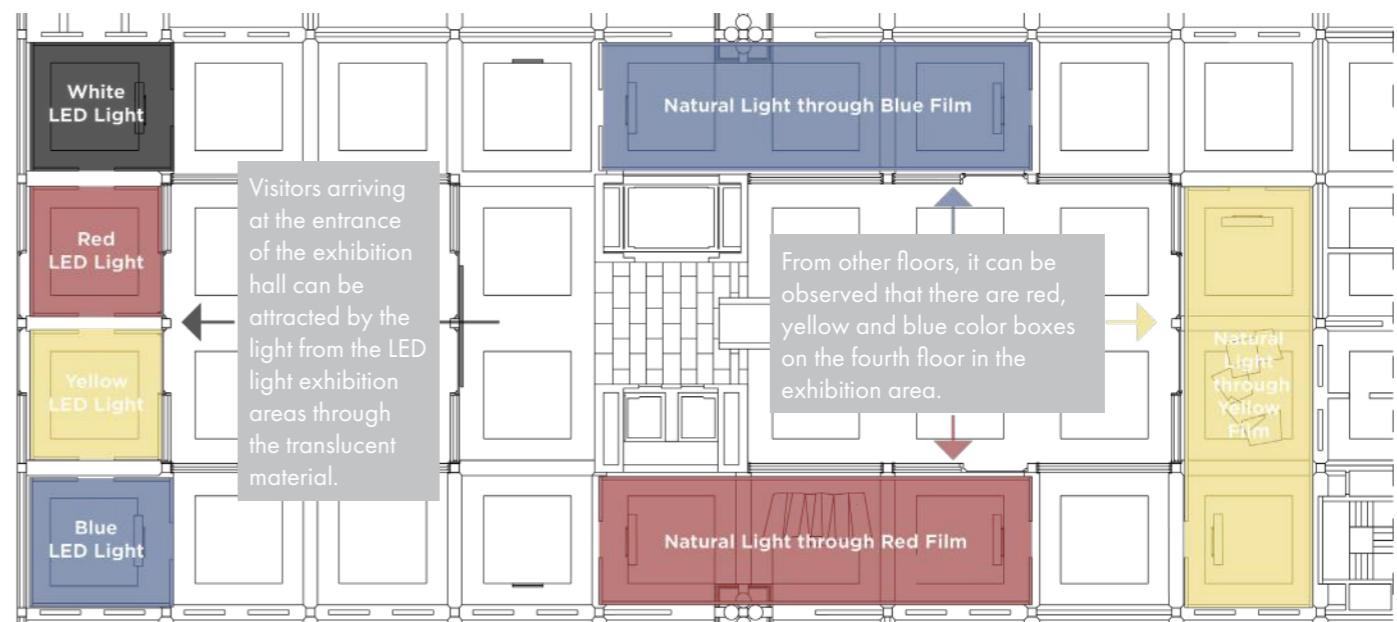
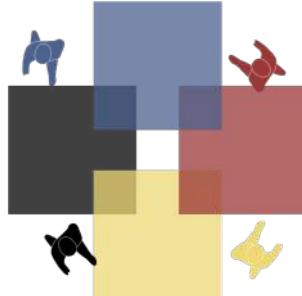
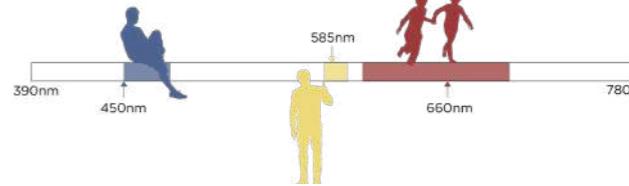


The exhibition *Color Lab - Art and Color Perception* is an exhibition that provoke a heightened sensory awareness in the visitors, tapping into people's deep entrenched relationship with color and exploring how it can move visitors emotionally, psychologically and spiritually. The exhibition will change the way people perceive artworks under different lighting effects by transforming the existing space and introducing different colorful natural light and artificial light respectively. The changed the lighting effects in small individual spaces will create different experiences while visitors viewing artworks with specific color (e.g., a red artwork being viewed in the room with red natural/artificial lighting or blue artwork in the blue/yellow lighting room).



## Light Intervention

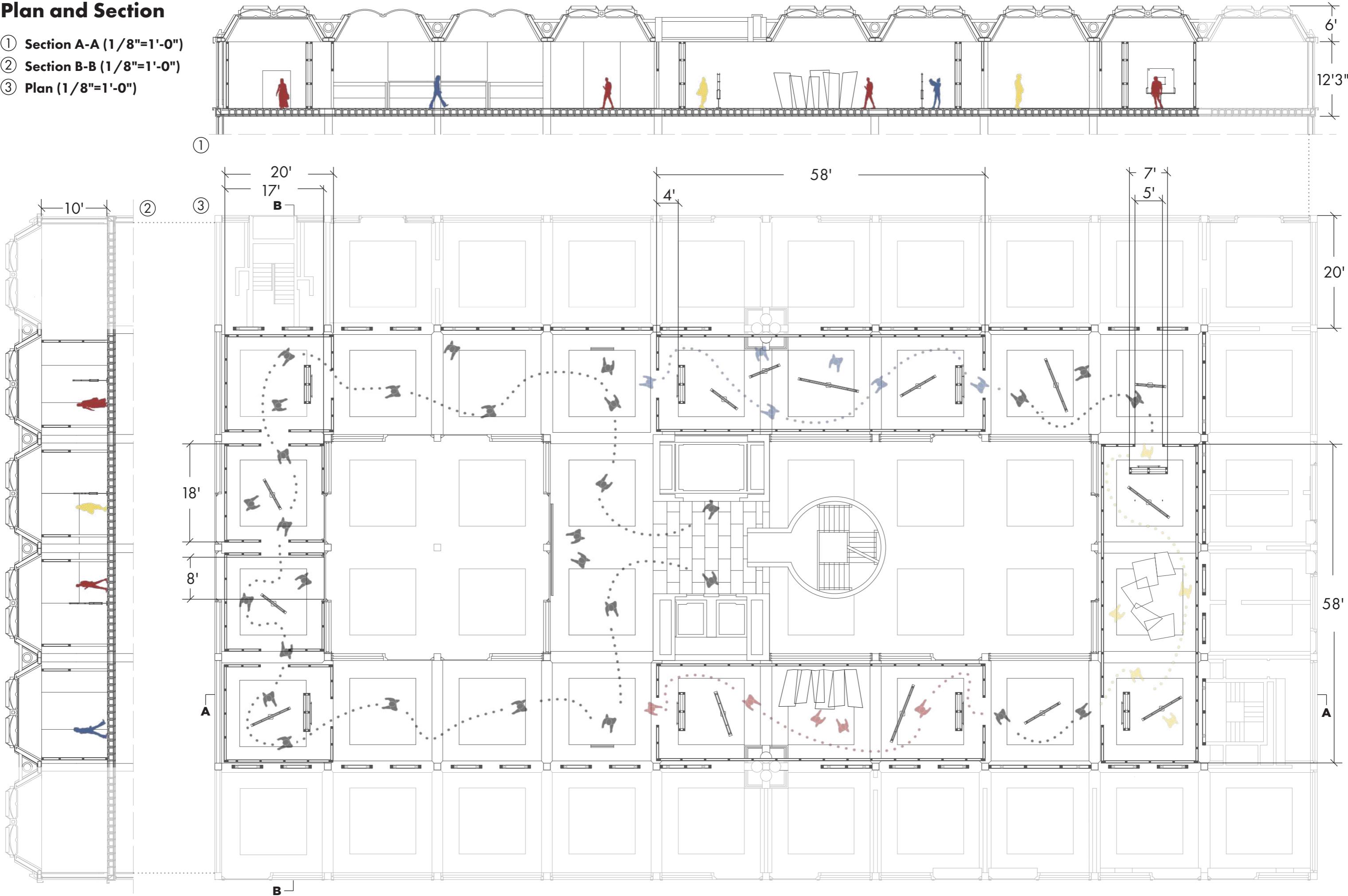
Different colors represent different meanings in different culture. Light (both LED and natural light) with different colors have different wavelengths. The different light sources can be perceived differently. Going out of some colorful atmosphere and into a different color atmosphere area immediately will lead the *Afterimage*. Every box has its individual effect due to light with different color filling, which creates the immersive experience and the *Afterimage* to the visitors.



08

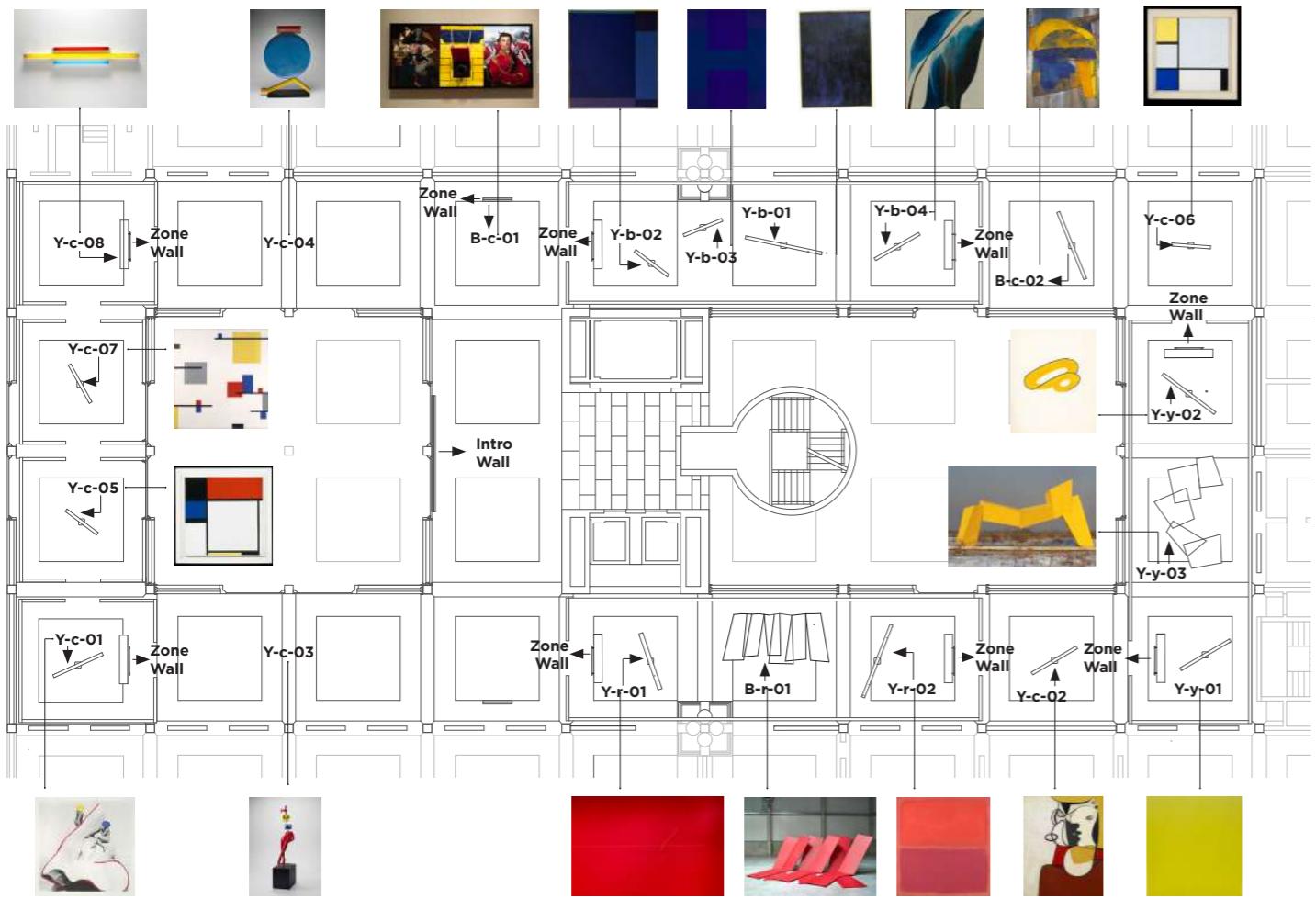
## Plan and Section

- ① Section A-A (1/8"=1'-0")
- ② Section B-B (1/8"=1'-0")
- ③ Plan (1/8"=1'-0")



09

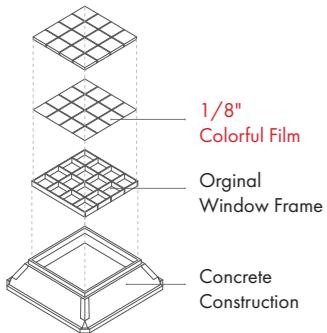
## Exhibition Layout



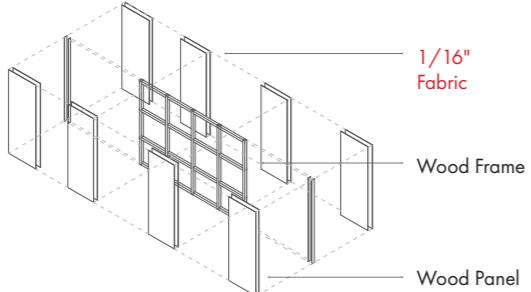
## Construction Intervention

The frame can be rotated so visitors can see every art work and interact with them. They can observe the art works in different angles with different light effects. Two acrylic panels with four wood fasteners make sure the work is held and seen well. The curved wooden handle with rounded corners, along with the specific height of the handrails and the works are designed for visitors. The back side will be the information of the art work, therefore, no matter which direction visitors come from, they will get something to see and know.

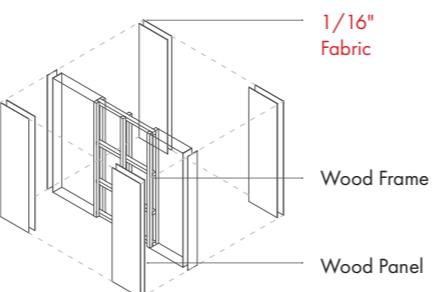
### Roof (Natural Light)



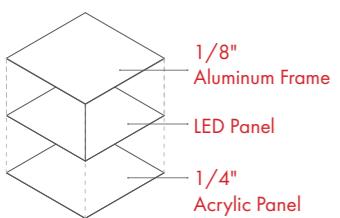
### Movable Panel (Large) for walls of small individual spaces



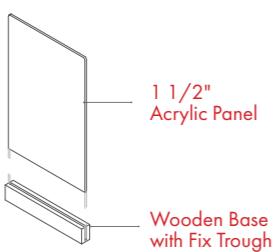
### Movable Panel (Small) for walls of small individual spaces



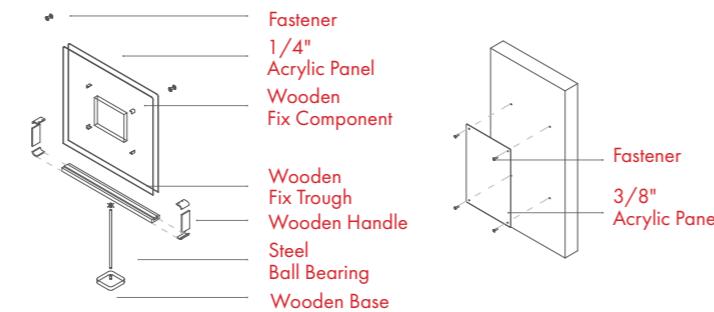
### Roof (Artificial Light)



### Standing Panel for zone/intro panel



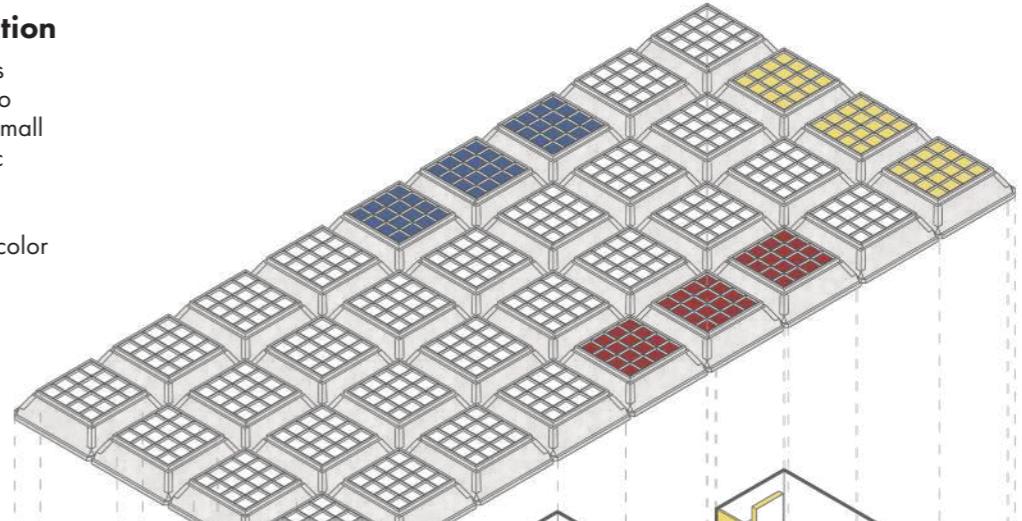
### Rotatable Frame for artwork



## Axonometric Drawing

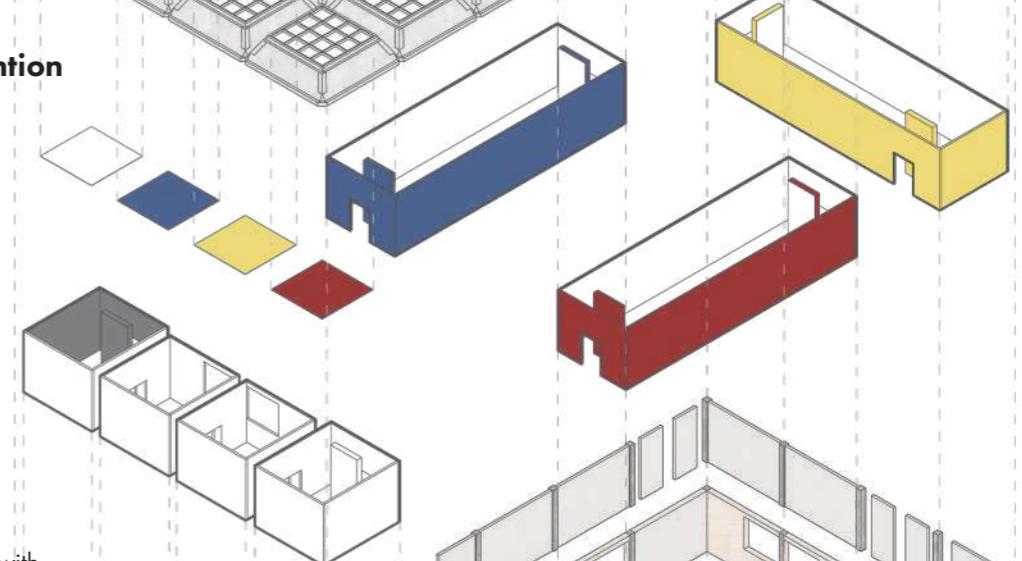
### Natural Light Intervention

After the renovation, color films are added to the original roof so that natural light will enter the small individual space with a specific color (red/blue/yellow). The atmosphere of the small space would be filled with a specific color lighting effect.



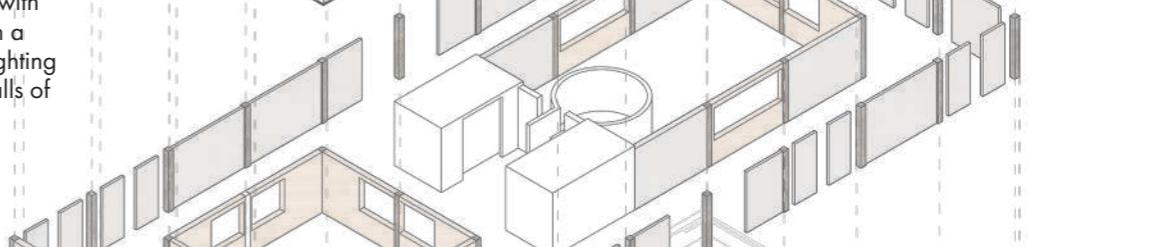
### Artificial Light Intervention

The roofs of the four small room with artificial light sources are modified and added with a layer of LED lighting panels. The small spaces will also be filled with a certain artificial color lighting effect.



### Small Space Division

The outer walls of each small individual spaces are covered with a layer of fabric and painted in a color that corresponds to the lighting effect in the room. The inner walls of the spaces are painted in white to ensure the purity of the lighting effect (the inner walls of the rooms with white LED lighting are painted in black to enhance the white lighting effect).

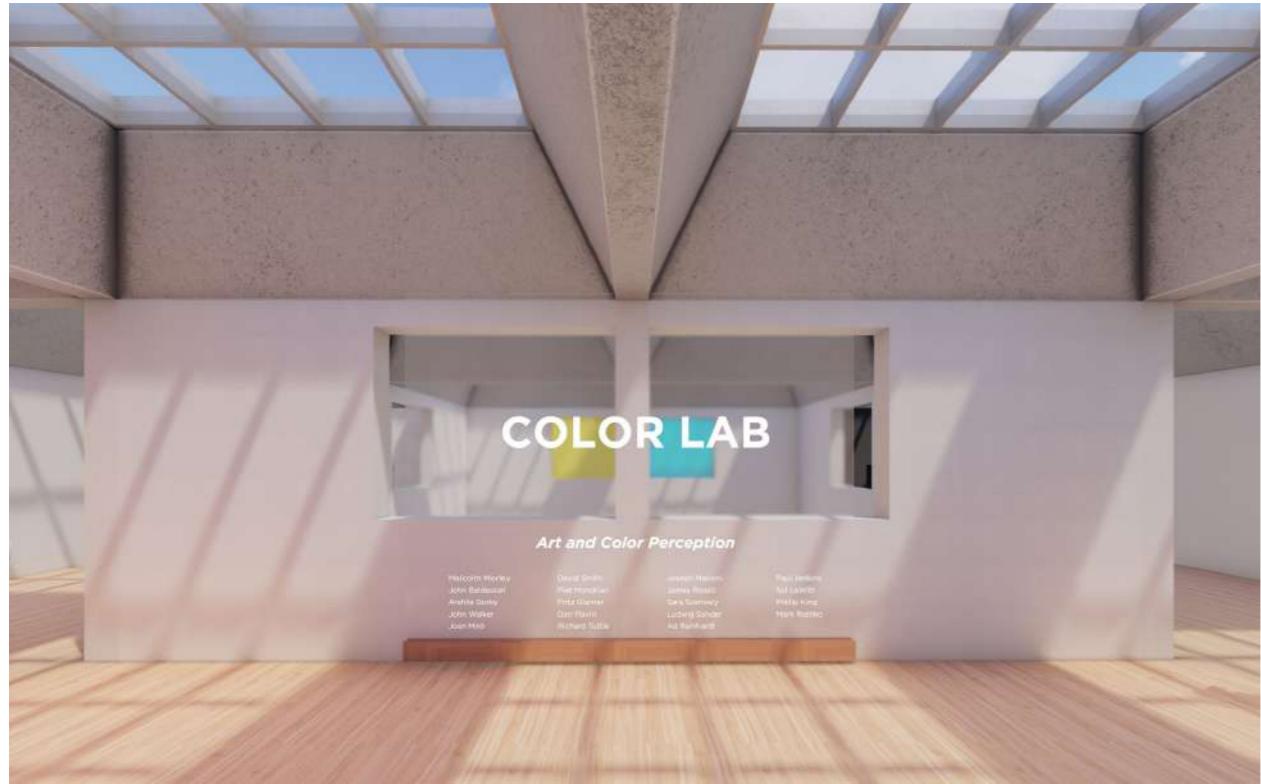


### Artwork Exhibition

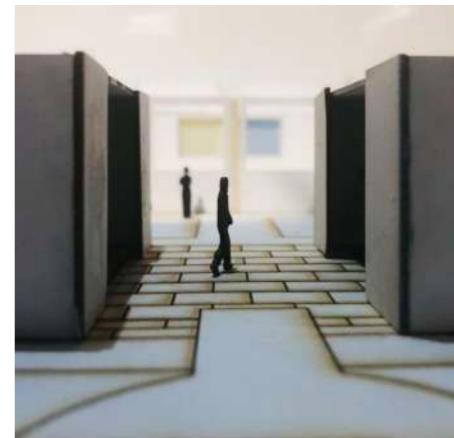
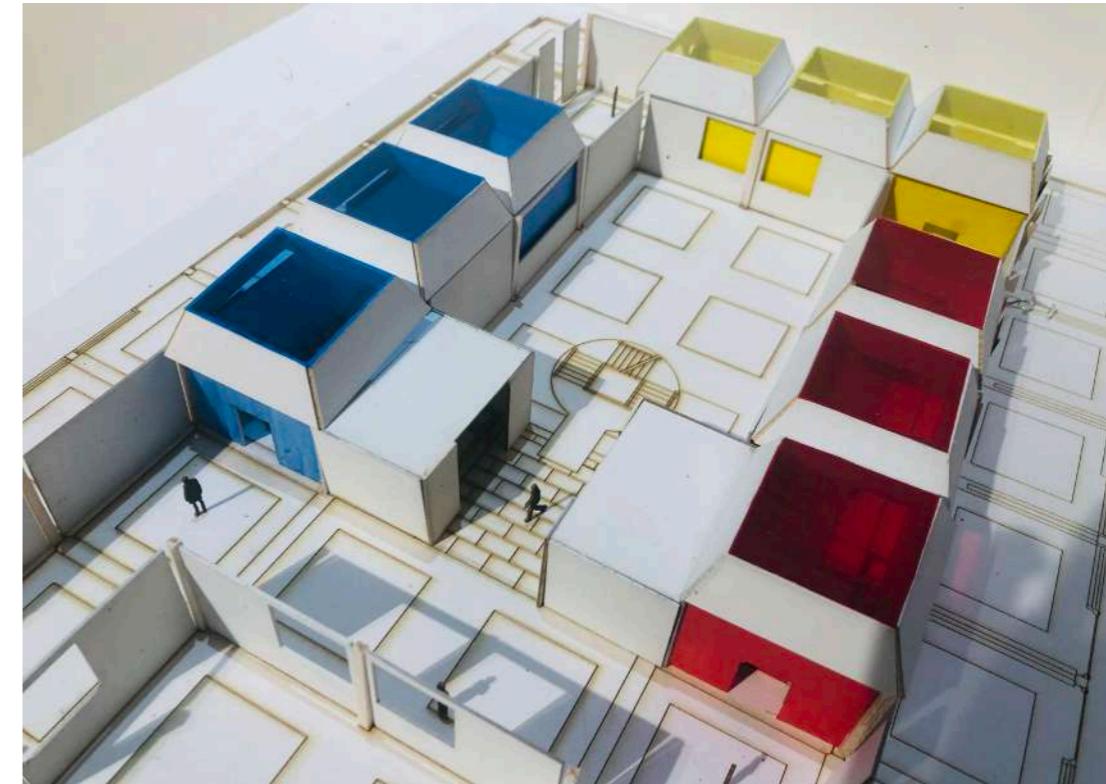
Artworks held in rotatable frames increase interactions for visitors and provides experiences in different lighting effects with different viewing angles. Zone/intro panels have the basic information for each area. Artworks with mixed-color placed in areas without lighting intervention provides an opportunity to view the artworks in natural light to contrast with different lighting interventions.



## Rendering



## Physical Model



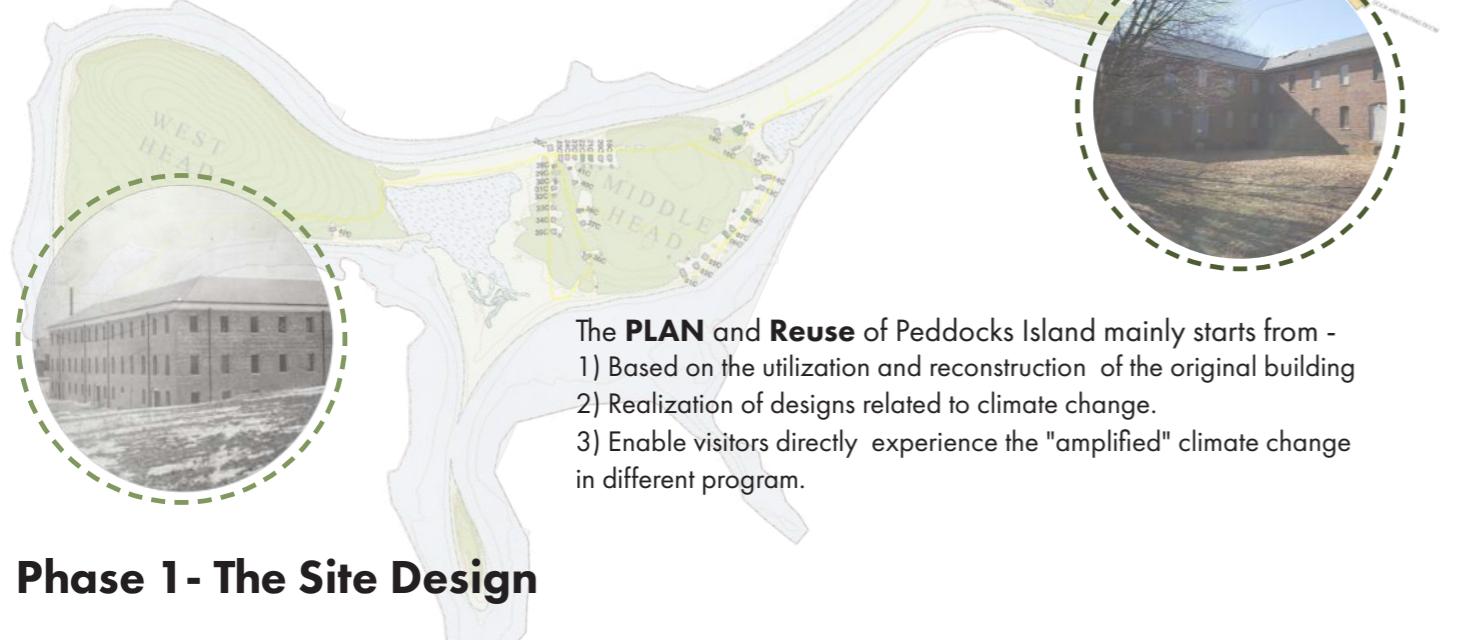
# Sense of Breathing

Adaptive reuse of an island architecture

Liberate people from busy urban life to the wild nature.

## Background

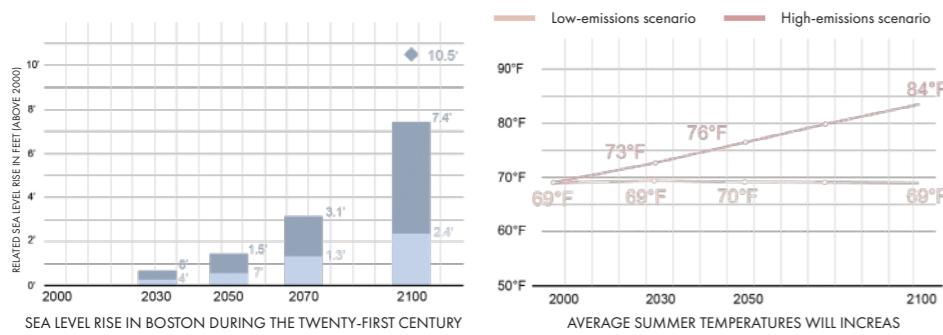
One of the largest islands, Peddocks Island is both beautiful, rich in history and off the beaten path. The island once was home to Native Americans, militiamen, prisoners of war, and farmers. Historic structures, such as Fort Andrews, built at the start of the 1900's, along with the restored WWII-era Chapel, reside at this location. Peddocks Island is also rich in biodiversity and is home to wildlife such as deer and turkeys, making it a fun location to explore. Come enjoy a day of hiking, bird watching, or simply settle into one of multiple campsites.



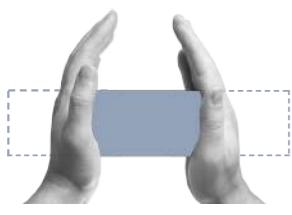
## Phase 1 - The Site Design

Climate change is no longer an unfamiliar issue for us. Actually, it has been integrated into almost everywhere of our lives. We are told that we experience minor changes every day in our daily life and there will be a huge change to our living environment due to accumulation of these nuanced changes. But it is difficult for us to actually feel what will happen in the future. So how can perceive the climate change better help us understand and start protecting our planet will be a significant problem.

### Current Issues



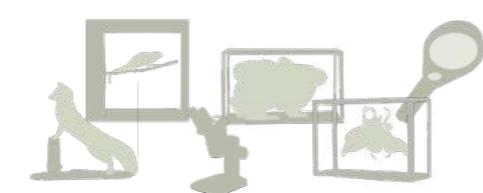
## How to conduct HUMAN- EXPERIENCE design on the island?



Compression of the predicted rising sea level



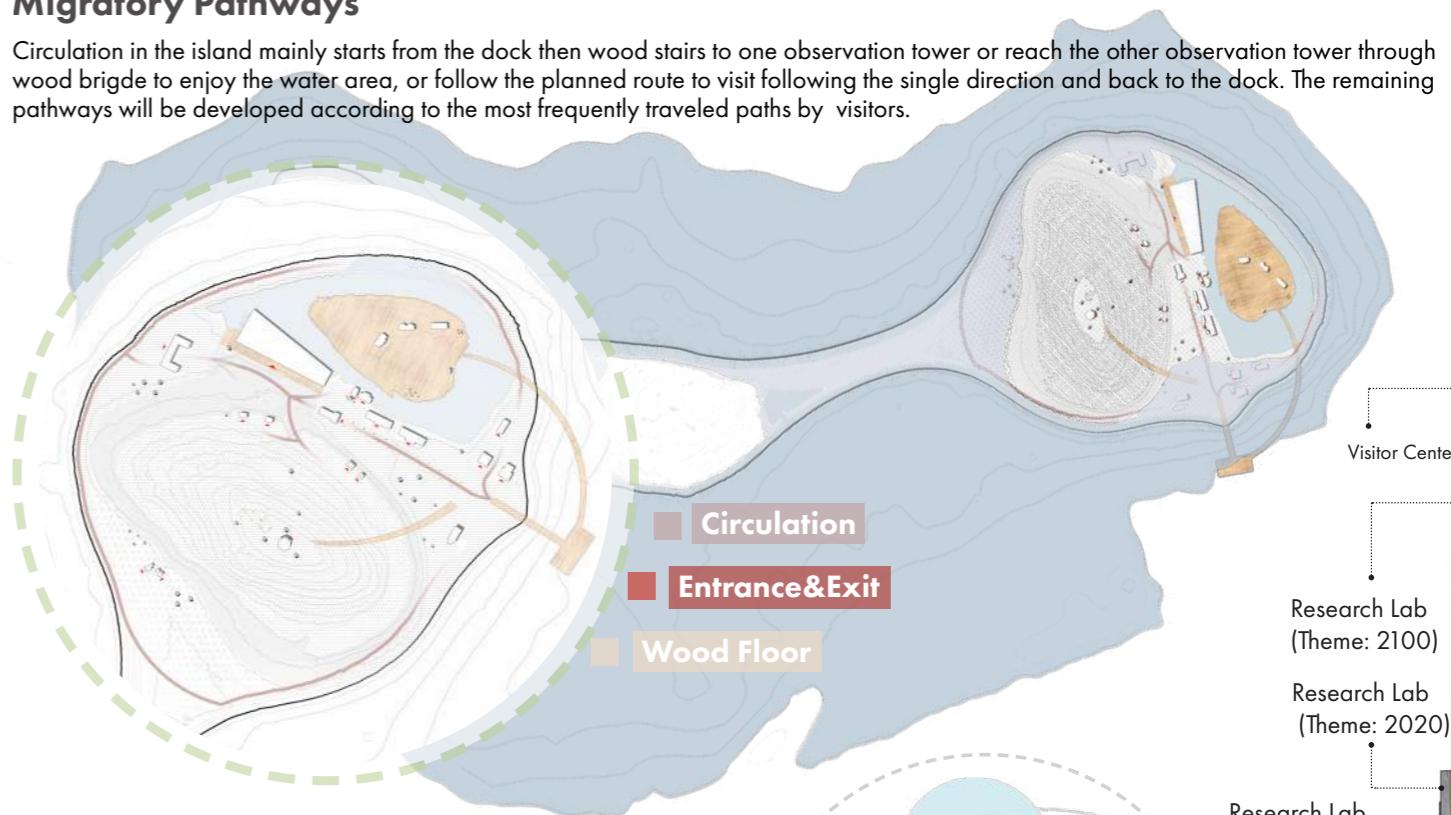
Touching or other body sensation to sense the change in temperature



Specimens arranged with timeline to understand the bio-diversity on peddock island

## Migratory Pathways

Circulation in the island mainly starts from the dock then wood stairs to one observation tower or reach the other observation tower through wood bridge to enjoy the water area, or follow the planned route to visit following the single direction and back to the dock. The remaining pathways will be developed according to the most frequently traveled paths by visitors.



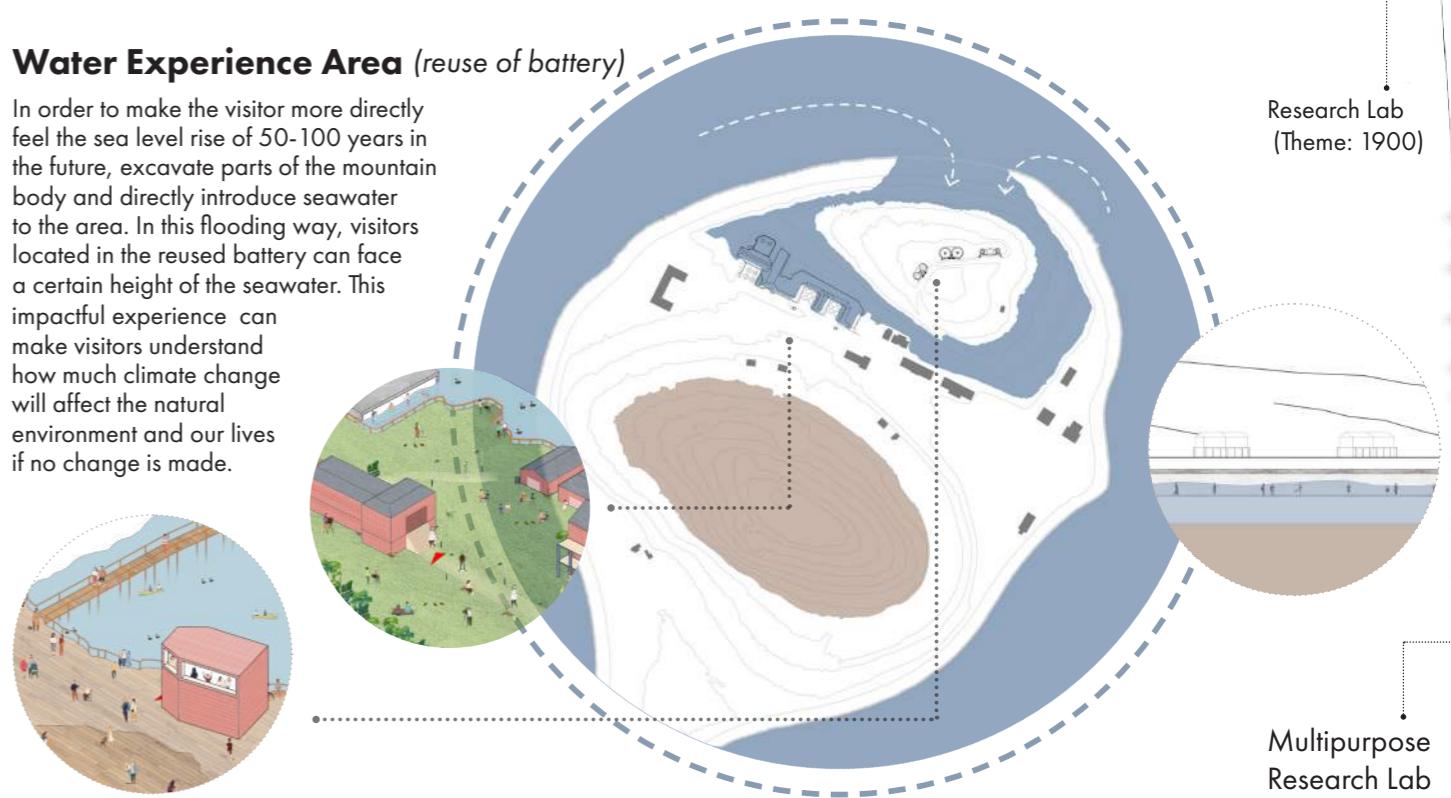
## Functional Subdivisions

The new Peddocks Island will become a **human-experience-focused** research lab to realize the combination of recreation and research in function. Three theme research lab will exhibit specimens with time lines that enable visitor to understand the bio-diversity change. Recreation area will involve the picnic area, cafe, etc.. The education area will include library, museum, etc.. The test site will include aquaculture test and body-sensation measurement area, etc..



## Water Experience Area (reuse of battery)

In order to make the visitor more directly feel the sea level rise of 50-100 years in the future, excavate parts of the mountain body and directly introduce seawater to the area. In this flooding way, visitors located in the reused battery can face a certain height of the seawater. This impactful experience can make visitors understand how much climate change will affect the natural environment and our lives if no change is made.



## Phase 2 - Adaptive Reuse of Quartermaster's Storehouse

### Quartermaster's Storehouse

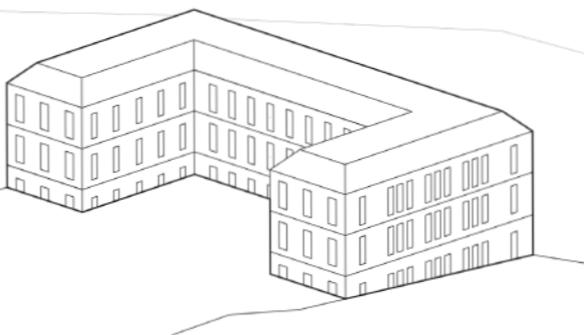
**Status:** stabilized, mothballed; columns are corroded, floors are damaged

**Function:** island supply storage

**Typology:** two stories plus daylight basement; red brick, wood framing, iron columns, slate roof

**Views:** waterfront views, Boston skyline in the distance **Utilities:** not connected

The breathing research lab allows people to gain direct feelings of climate and nature environment changes. After all, the research and follow-up actions conducted for climate change and environmental protection are more like our self-reflection on nature.



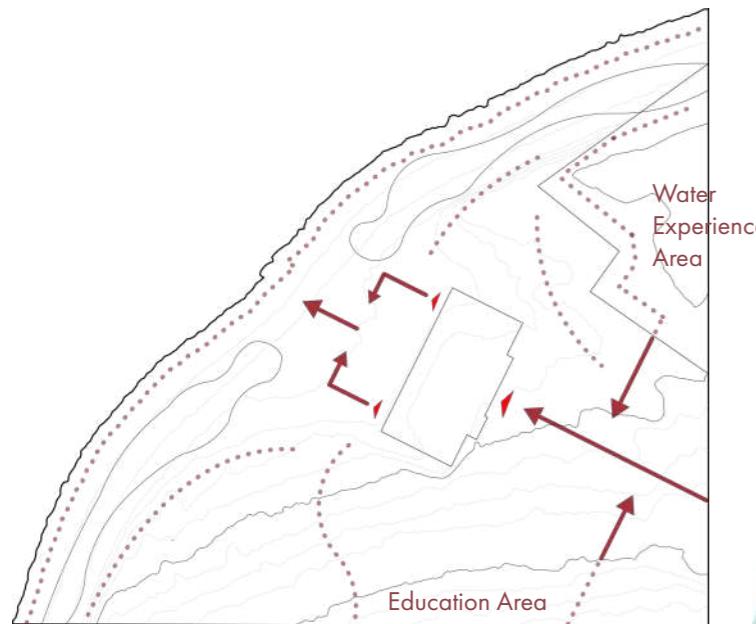
Legend:  
Shore  
Flowers and taller grass  
Grass  
Dwarf tree  
Tall Tree



Site Plan (now)



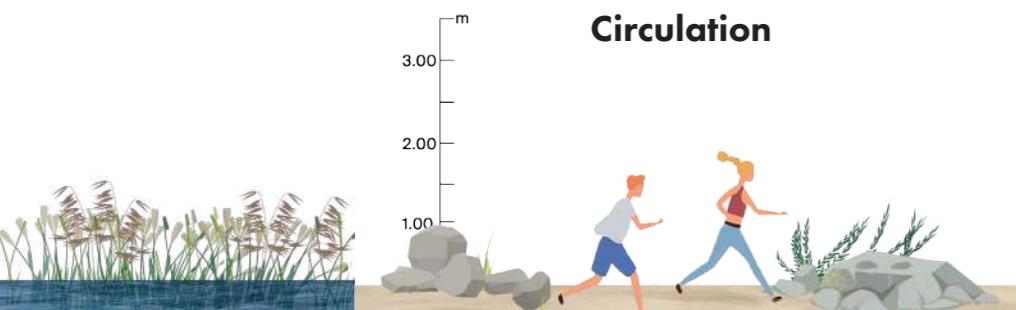
Site Plan (after 100 years)



Circulation



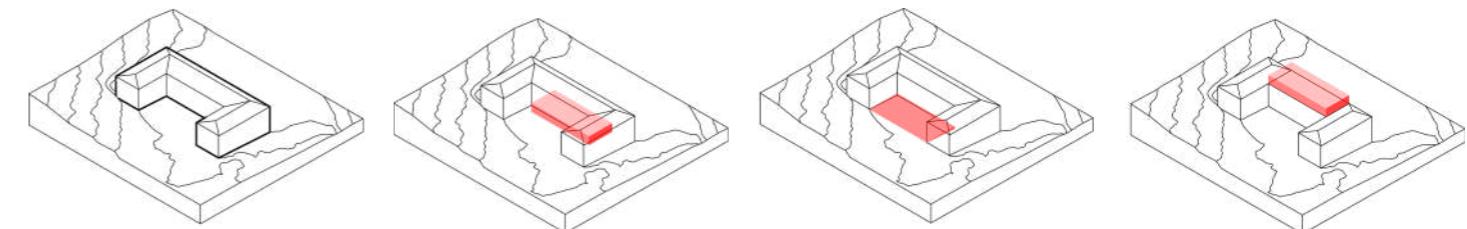
Vegetation Distribution



Vegetation Sample

### Concept generation

#### Generation of Blocks



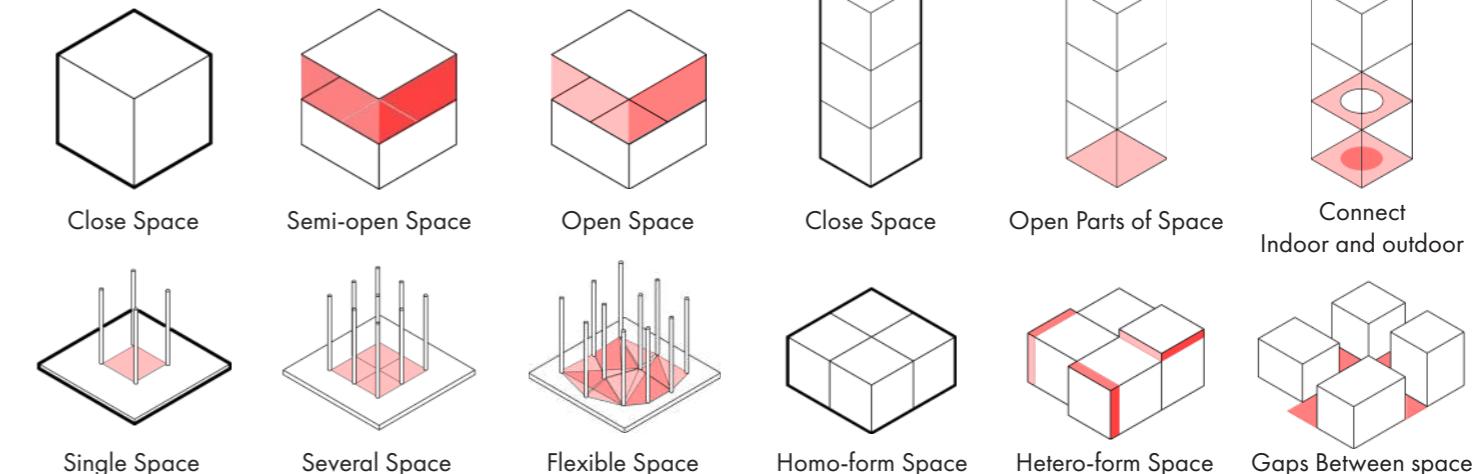
For reuse of old buildings, it is important to **RESPECT** the typography of the original building.

**REMOVE** some walls of ground floor to form a space connected to outdoor space. After the sea level rises, this space will be flooded to be one water-viewing area.

**RAISE** the back-sea side outdoor space of the first floor to form a small outdoor square. After the sea level rises, the building is connected to the unflooded land by the bridge.

**RECONSTRUCT** the roof of the middle part. The new space provides a good viewing point for people to stay, and enhances the variability of the roof.

#### Translation to Space



### Programming

The required functional spaces are planned and divided into three areas - private areas for researcher (including staff dormitories and offices); shared areas for both researchers and visitors (including outdoor and indoor cafes and restaurants, a multi-purpose hall, a small outdoor square and viewing areas on the roof); and also public areas (including the laboratories and classrooms).

Office

Dormitory

Exhibition

Classroom

Laboratory

Small Square

Viewing Space

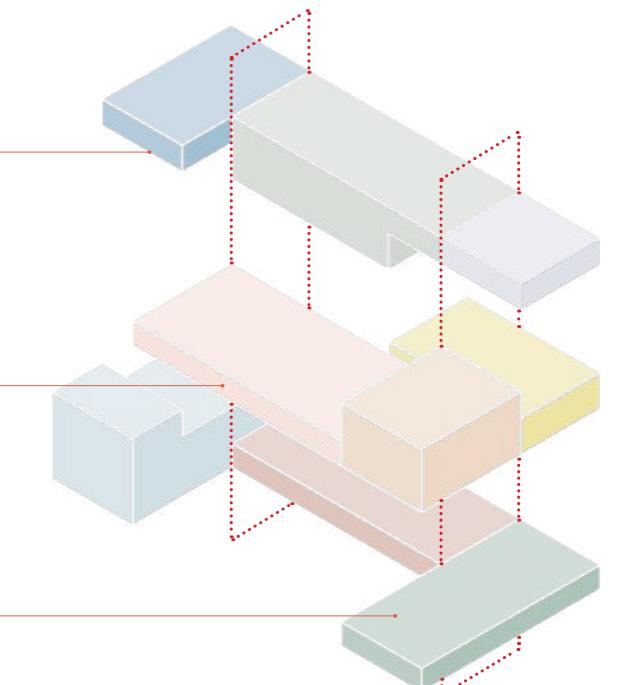
Cafe & Restaurant

Multiple-purpose Hall

Private Space

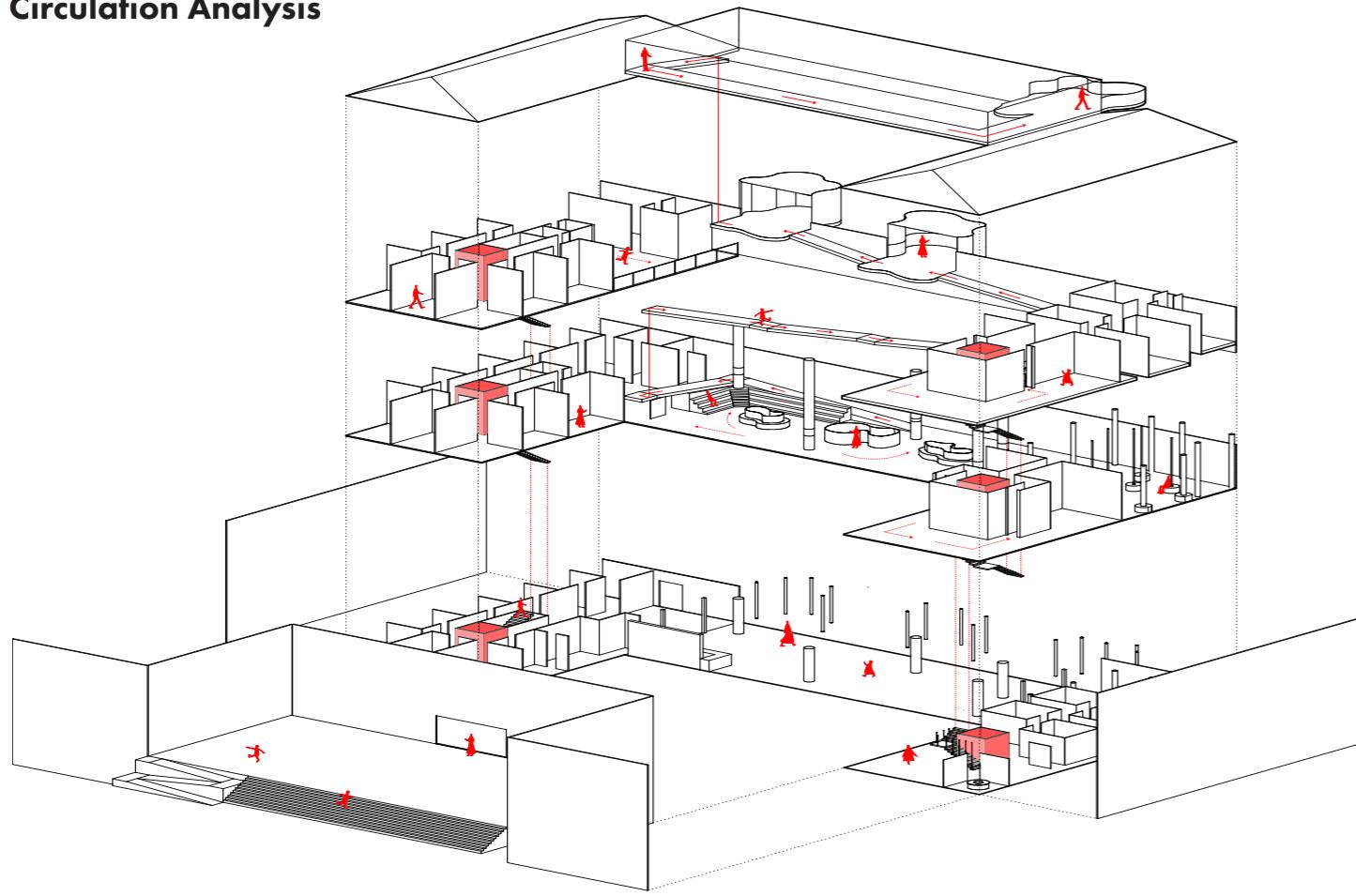
Sharing Space

Public Space



Vegetation Sample

## Circulation Analysis



## Reuse Strategy

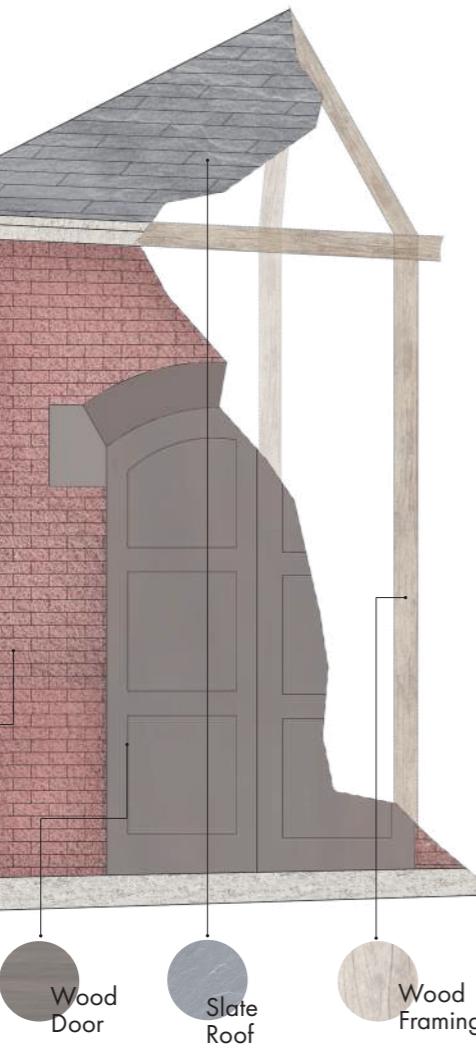
### Other Materials

Cedar      Asphalt

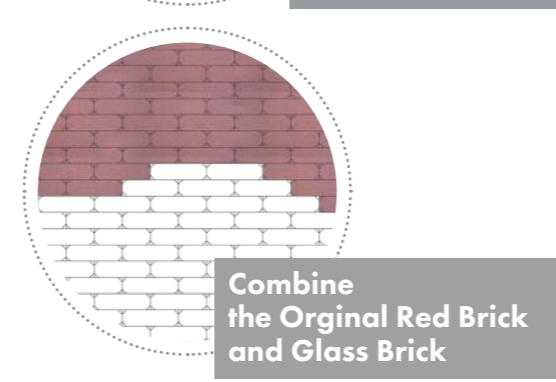
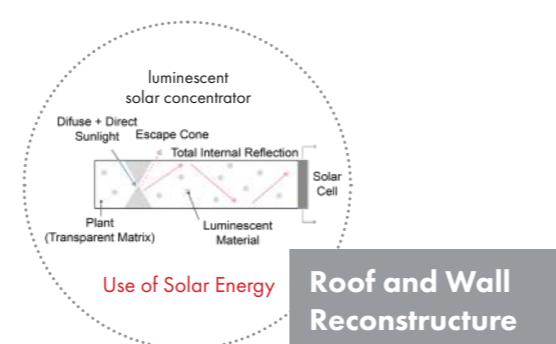
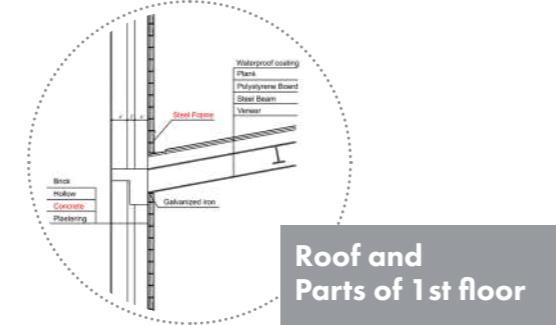
Limestone

### Main Materials

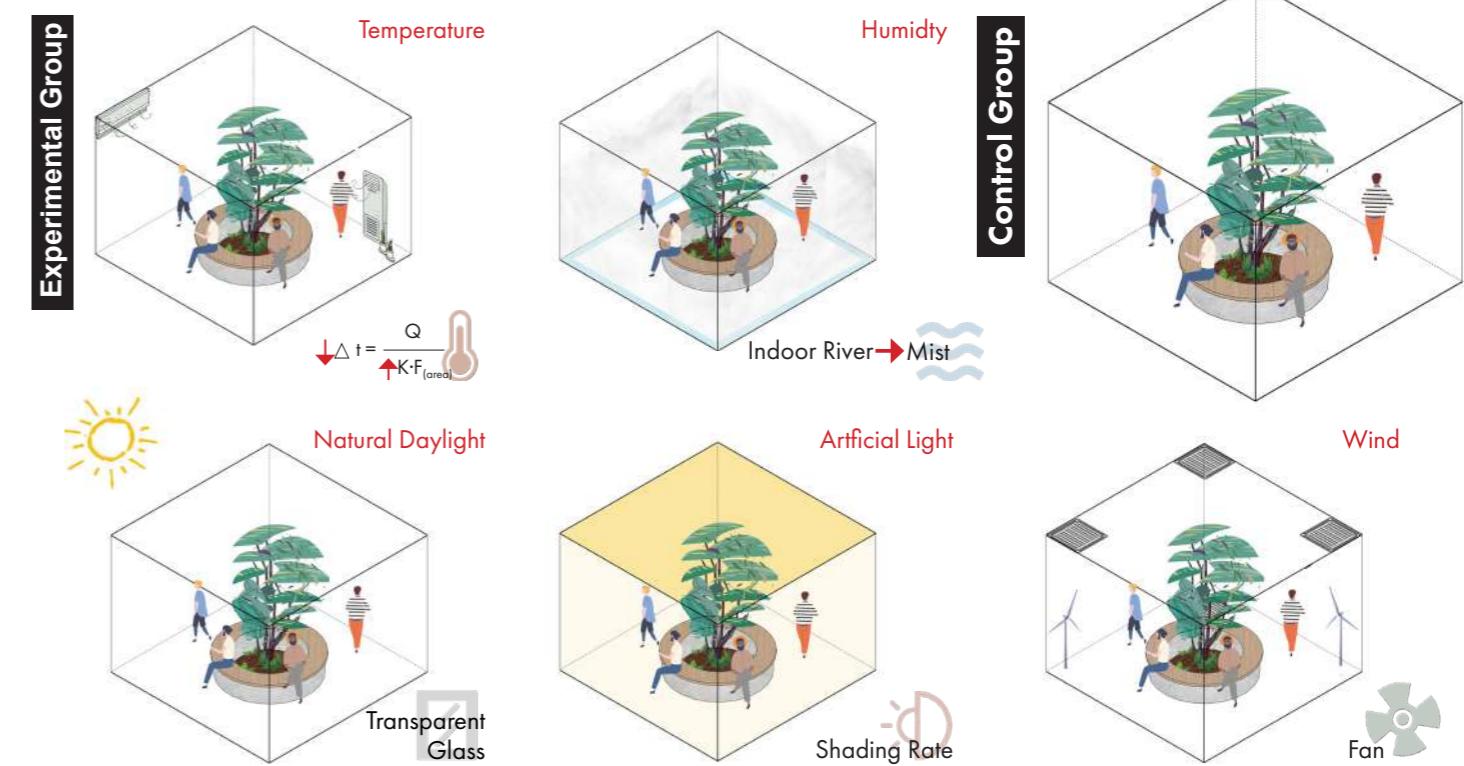
Granite Foundation  
Red Brick



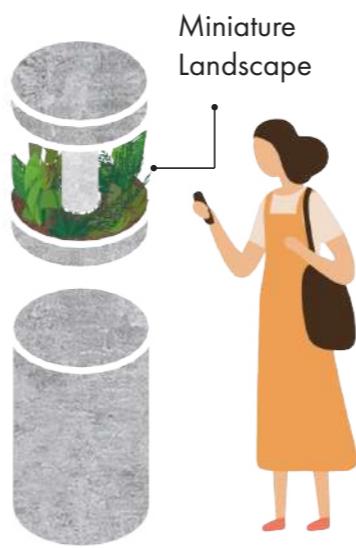
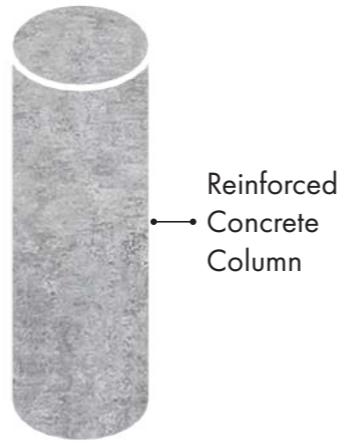
## Structure & Material Analysis



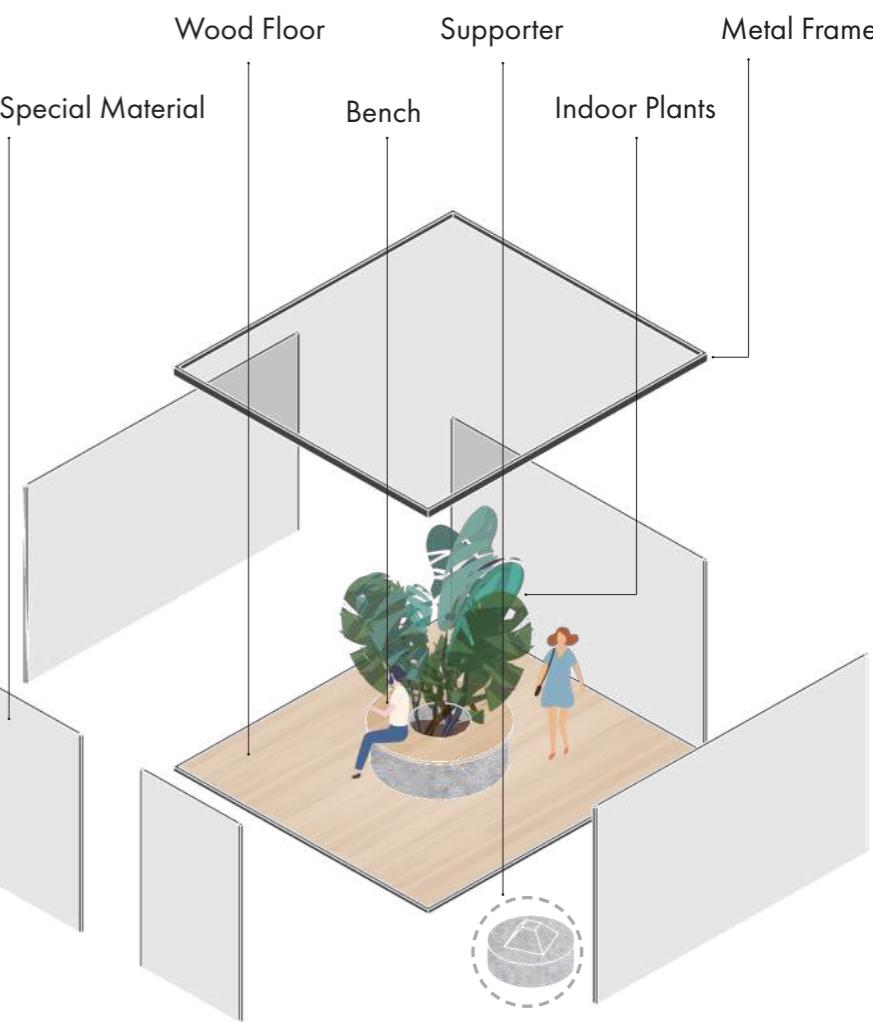
## Detail of Installation Concept Generation

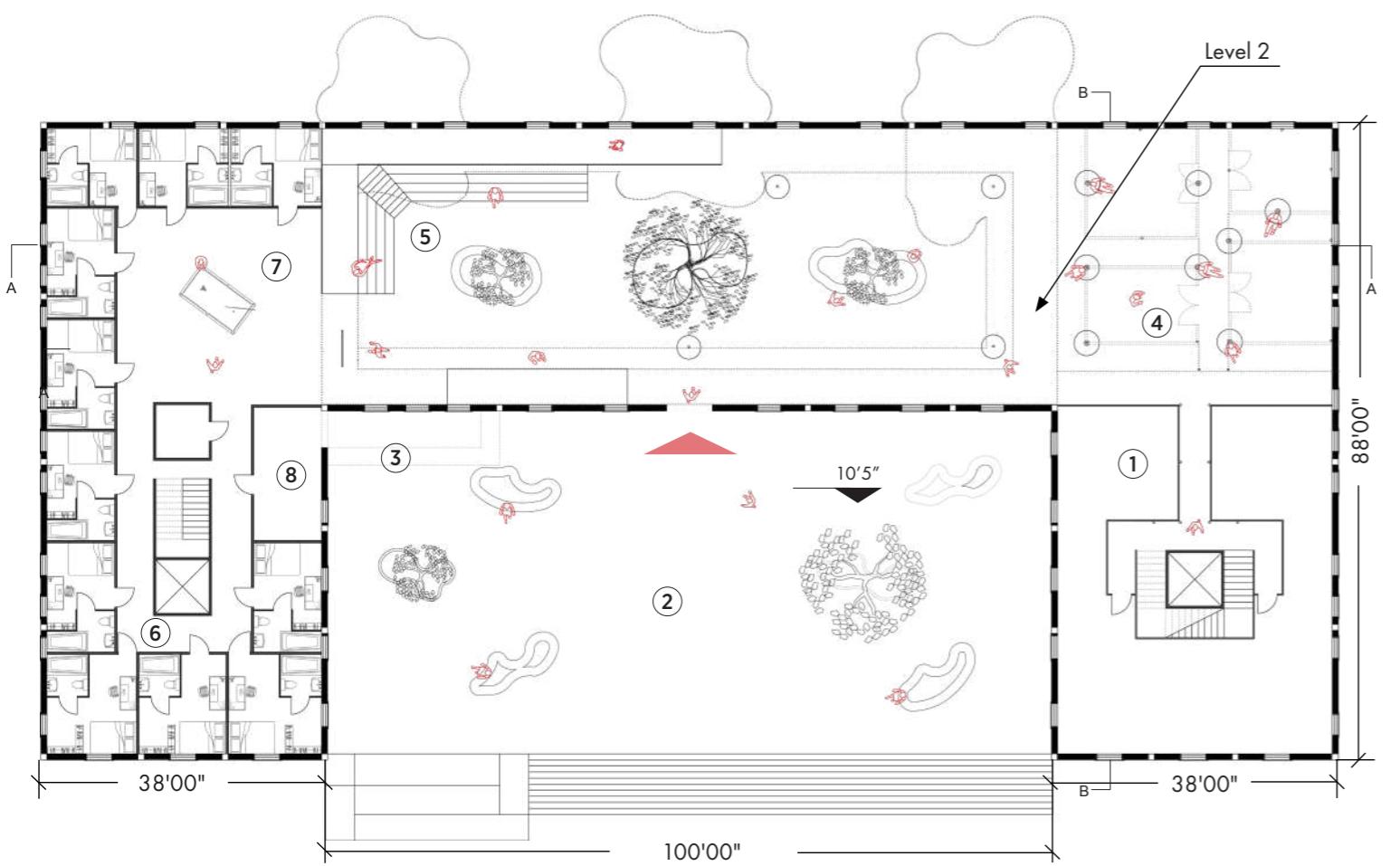


## Miniature Landscape

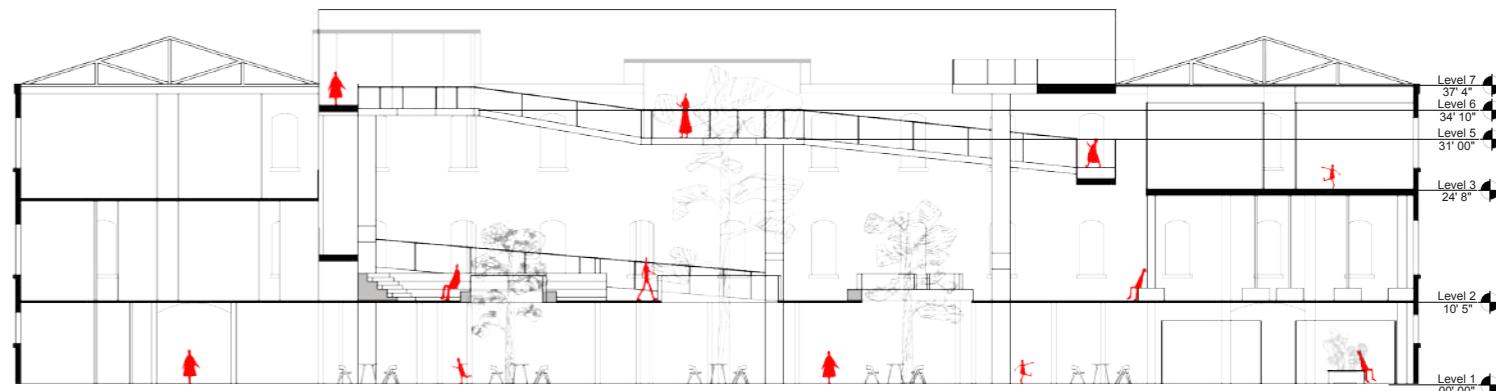
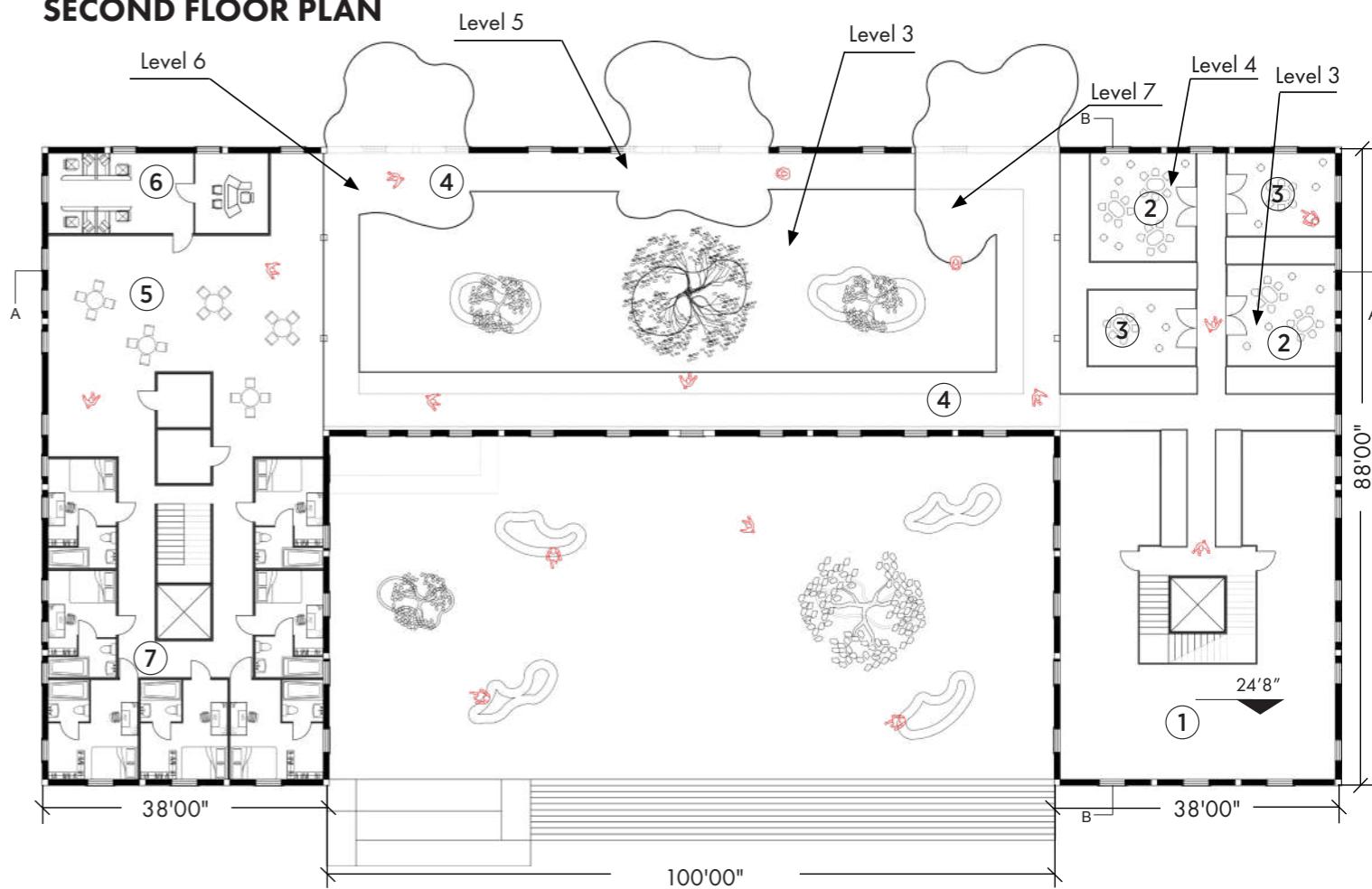


## Small Laboratory



**Ground Floor PLAN****FIRST FLOOR PLAN**

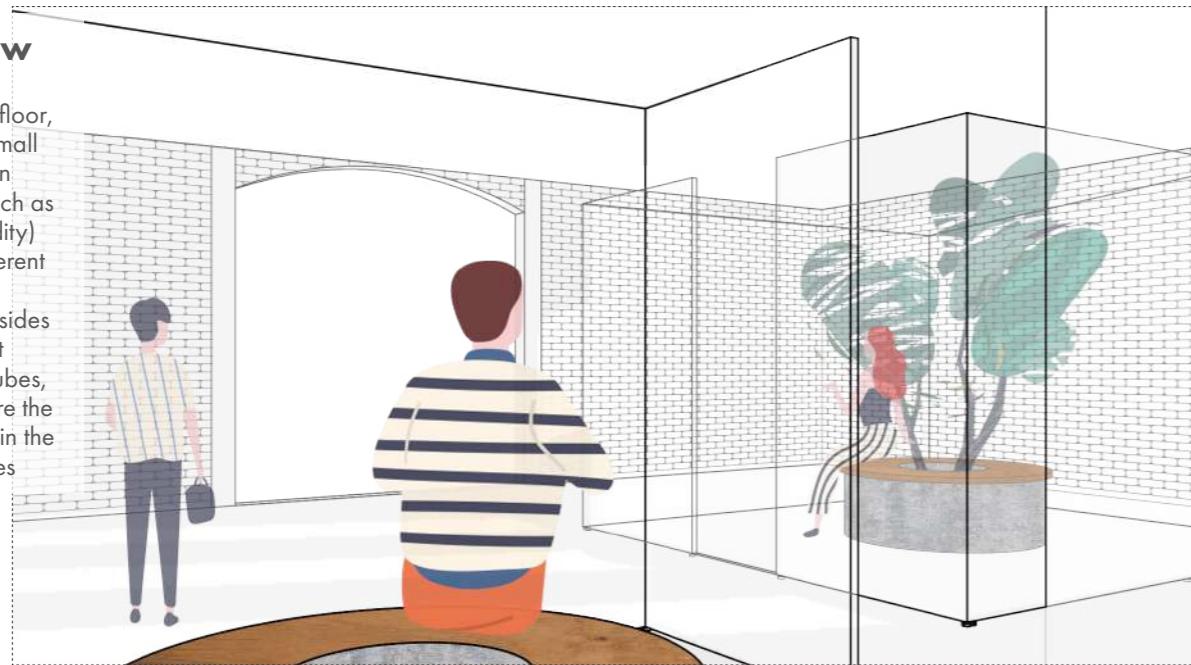
- (1) Laboritory
- (2) Small Square
- (3) (Cafe & Restaurant)
- (4) Multipurpose Hall
- (5) Rest Area
- (6) Dormitory
- (7) Staff Activity Area
- (8) Kitchen

**SECTION B-B****SECTION A-A****SECOND FLOOR PLAN**

- (1) Labortory
- (2) Classroom
- (3) Seminar Room
- (4) Viewing Balcony
- (5) Open Workspace
- (6) Office
- (7) Dormitory

### Exhibition View

In the exhibition area located on the ground floor, there are six different small cubes. In each cube, an element is changed (such as temperature and humidity) to create the direct different human experience in different conditions. Besides comparing the different environment of each cubes, visitor can also compare the growth status of plants in the cube to feel the changes.



### Atrium View

The miniature landscape with different conditions embedded in the columns is a preview of the exhibition. The surrounding ramps guide visitors to topmost viewing point. Green plants growing from the ground floor connect indoor and outdoor space through three holes and make the building breath. The transparent roof and translucent floor will provide enough light for every floor.



### Balcony View

People can feel changes of temperature and humidity easily. Three balconies (open-air, semi-open, fully enclosed) extended from the ramp provide visitors with different feeling of temperature and humidity like a simple way to feel the seasonal changes. Meanwhile, they also extend indoors for visitors to rest and appreciate the view of the atrium.



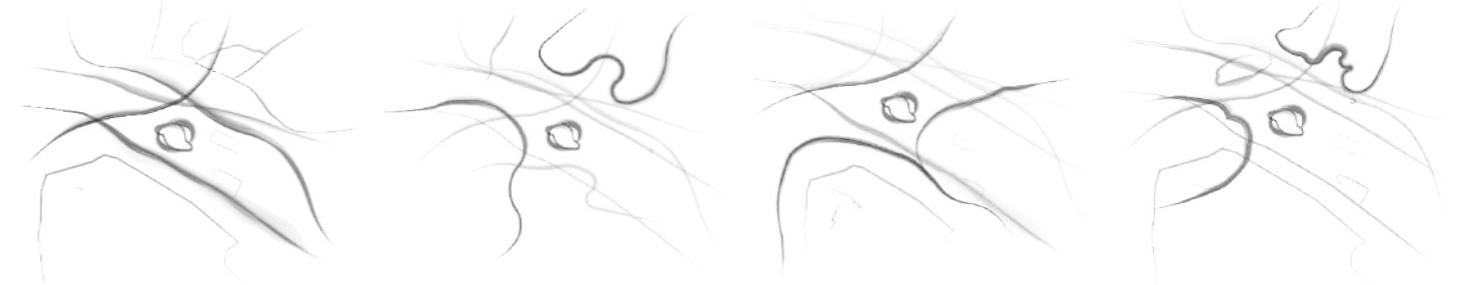
# Soft Sentience

Installation Design for Nanjing Railway Square

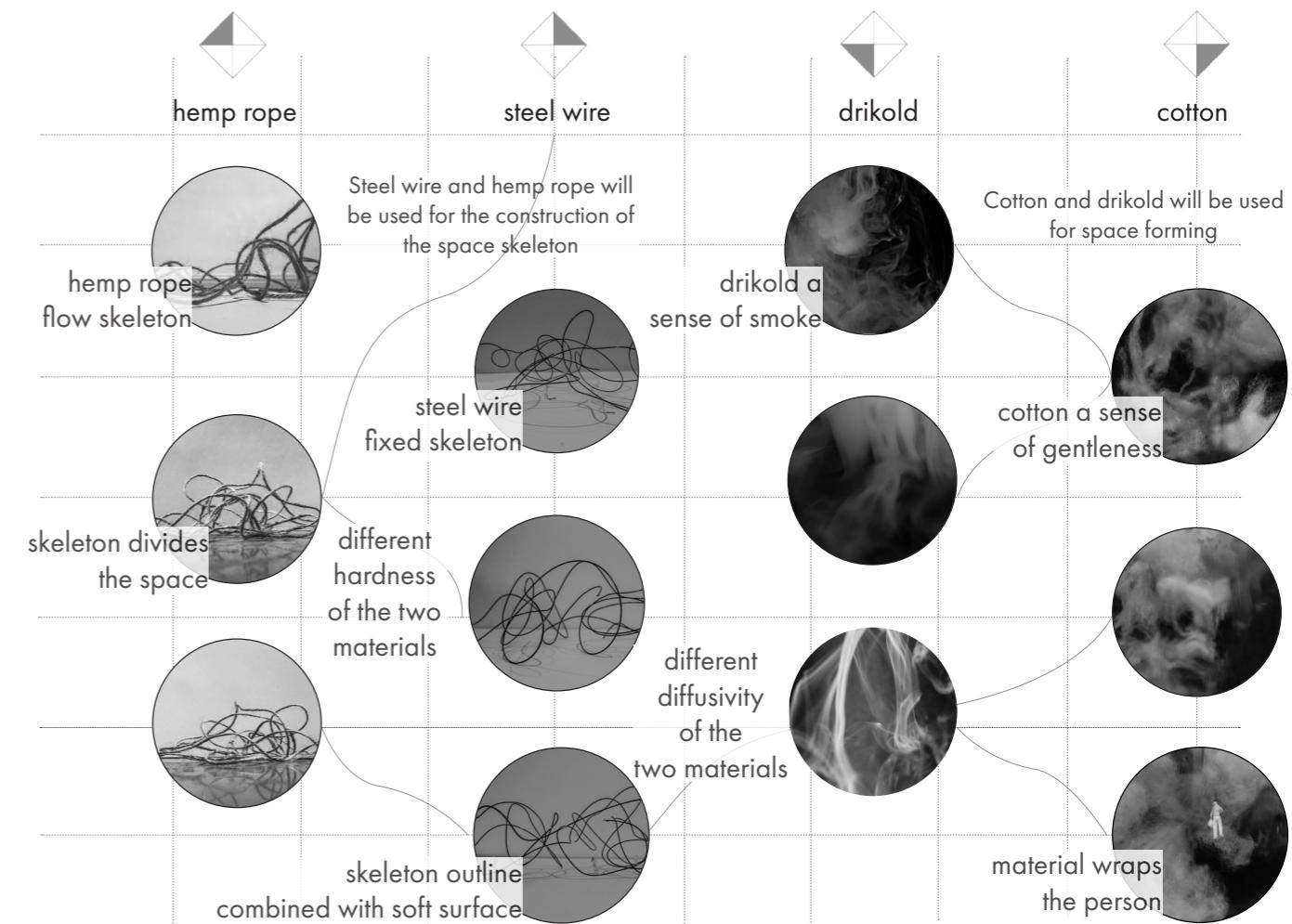
*Modern people are too polite to each other. We need to get close.*

### Site Analysis

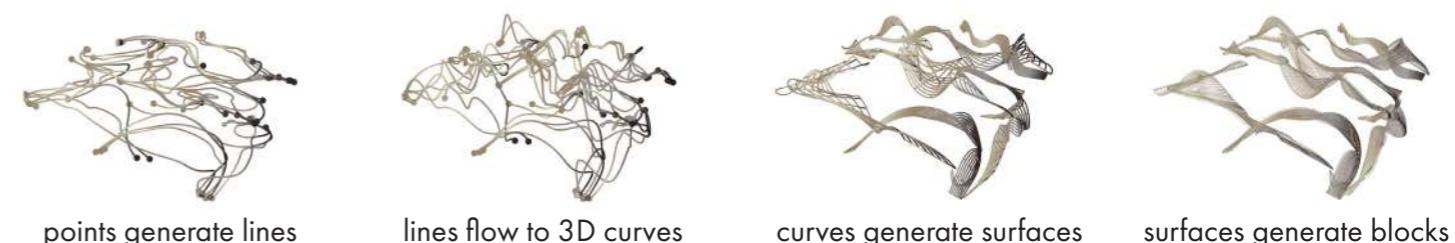
The place where people would like to gather near the Nanjing Railway Station Square



### Material Analysis



### Generation of Block

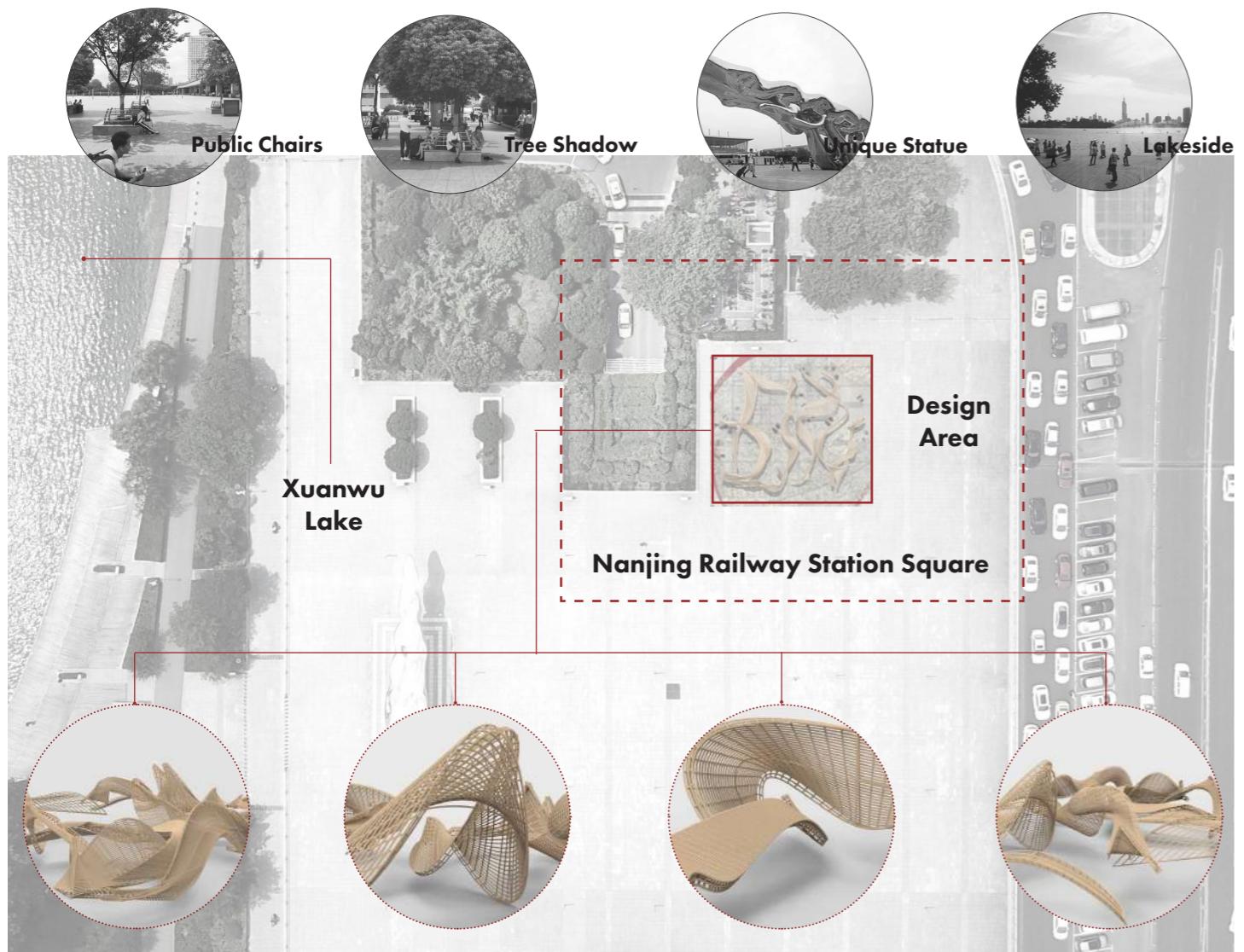


## Development of Soft



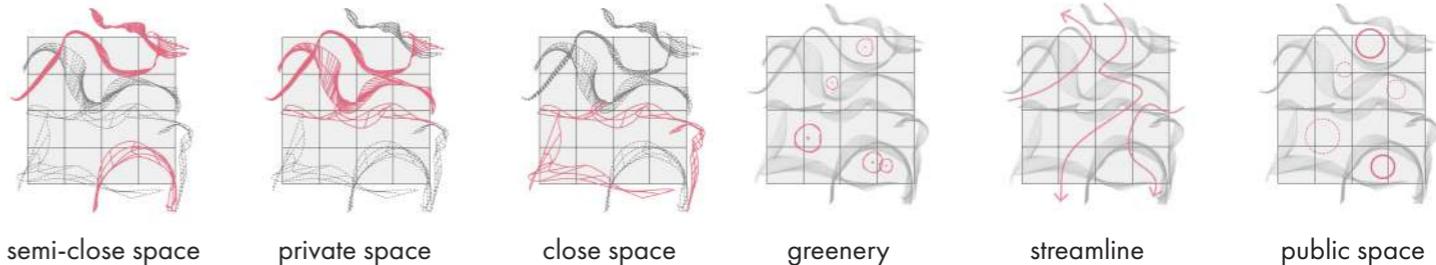
Modern people are too polite to each other. There is a **distance** between people and the hard sense of space will deepen the sense of alienation. We want the concept of **soft sentience**, which means **fluid and soft**, can make downy atmosphere fill the space and make the shuttled crowd that shuttle become close.

## Photo by UVA

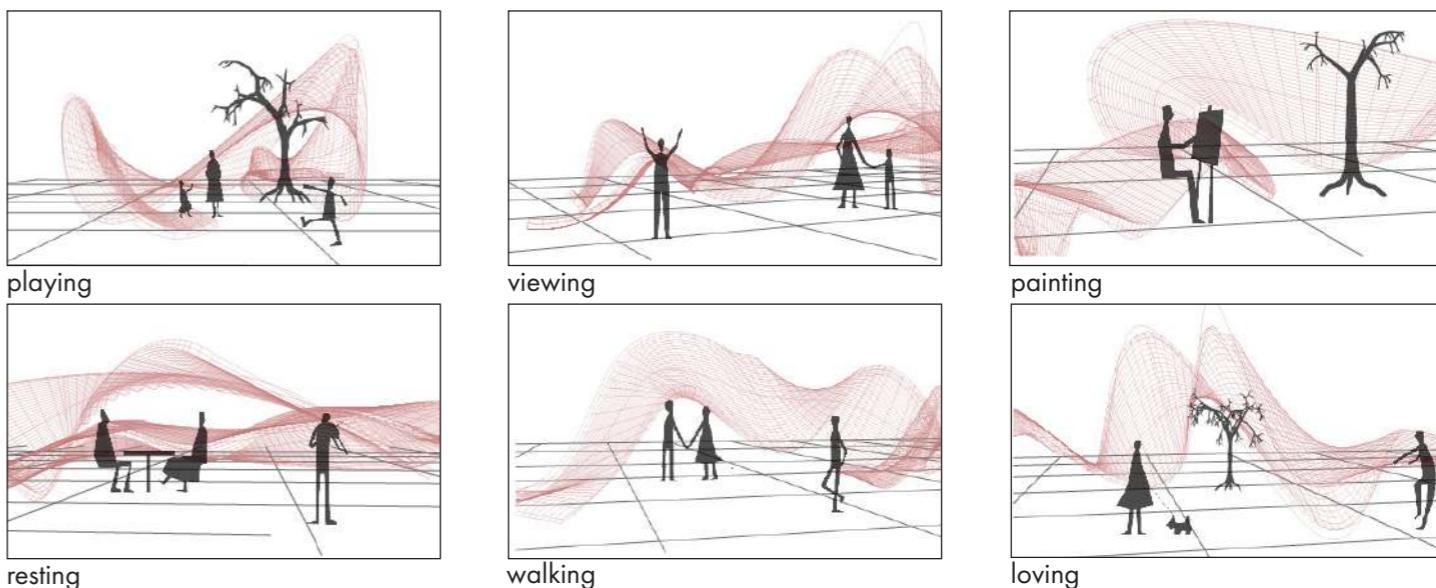


## Atmosphere Analysis

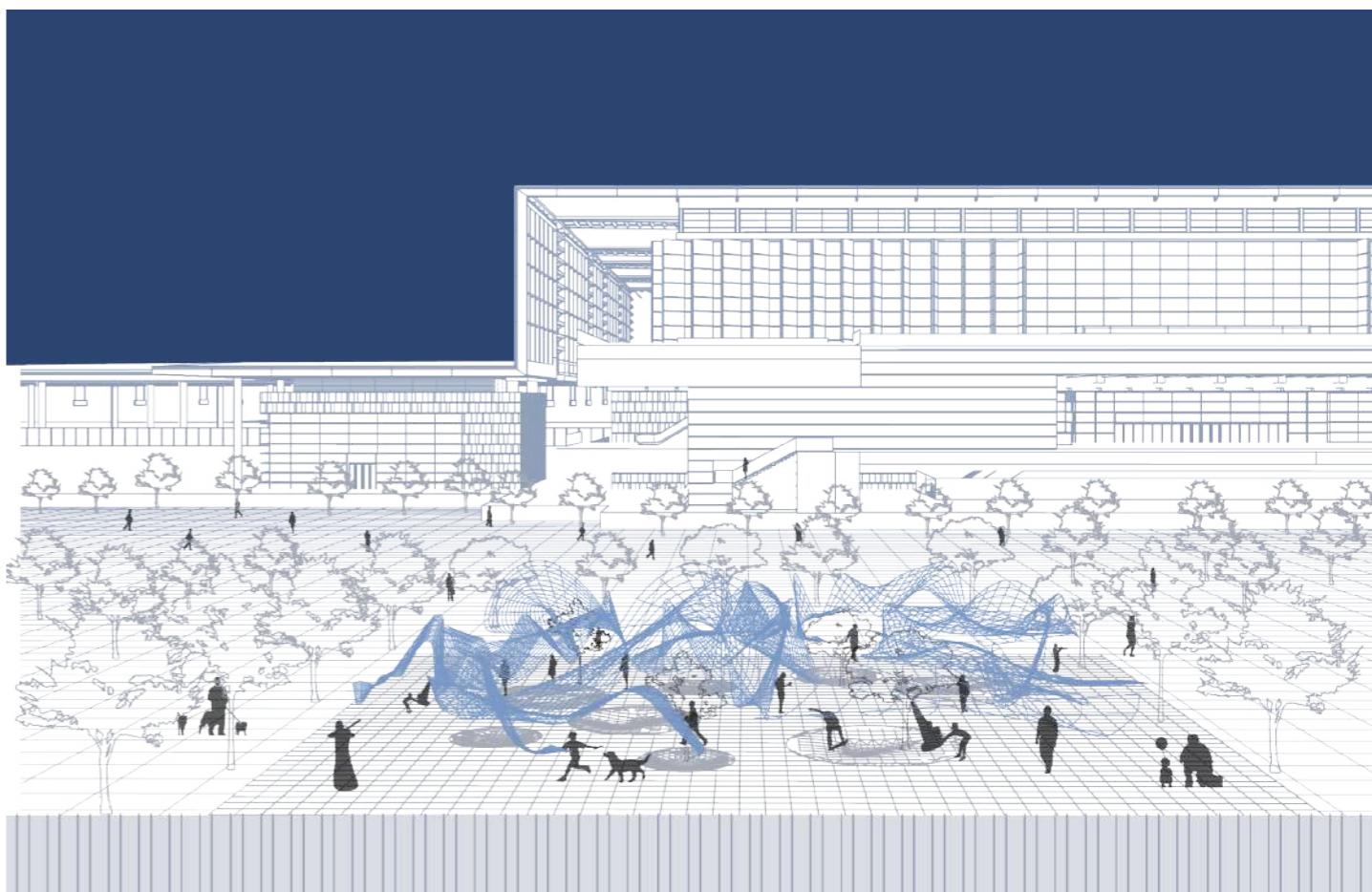
Use the installation to create spaces in order to let people gather around



## Different Activities



## Final Perspective



# Remember Me

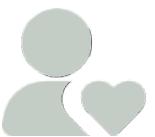
Exhibition of "Dementia-friendly Home Environment Design"

*As long as someone remembers you, you will not disappear in the world.*

## Goal

The exhibition should allow visitors to **learn more about dementia**, and also allows people with dementia and their family members or caregivers to **understand some existing dementia-friendly design strategies**. Therefore, the exhibition can **play a educational role and function as a platform to disseminate research findings** and help people with dementia maintain their functions and improve their quality of life.

## Audience



Family members or Caregivers



People Interested in Knowledge of Dementia



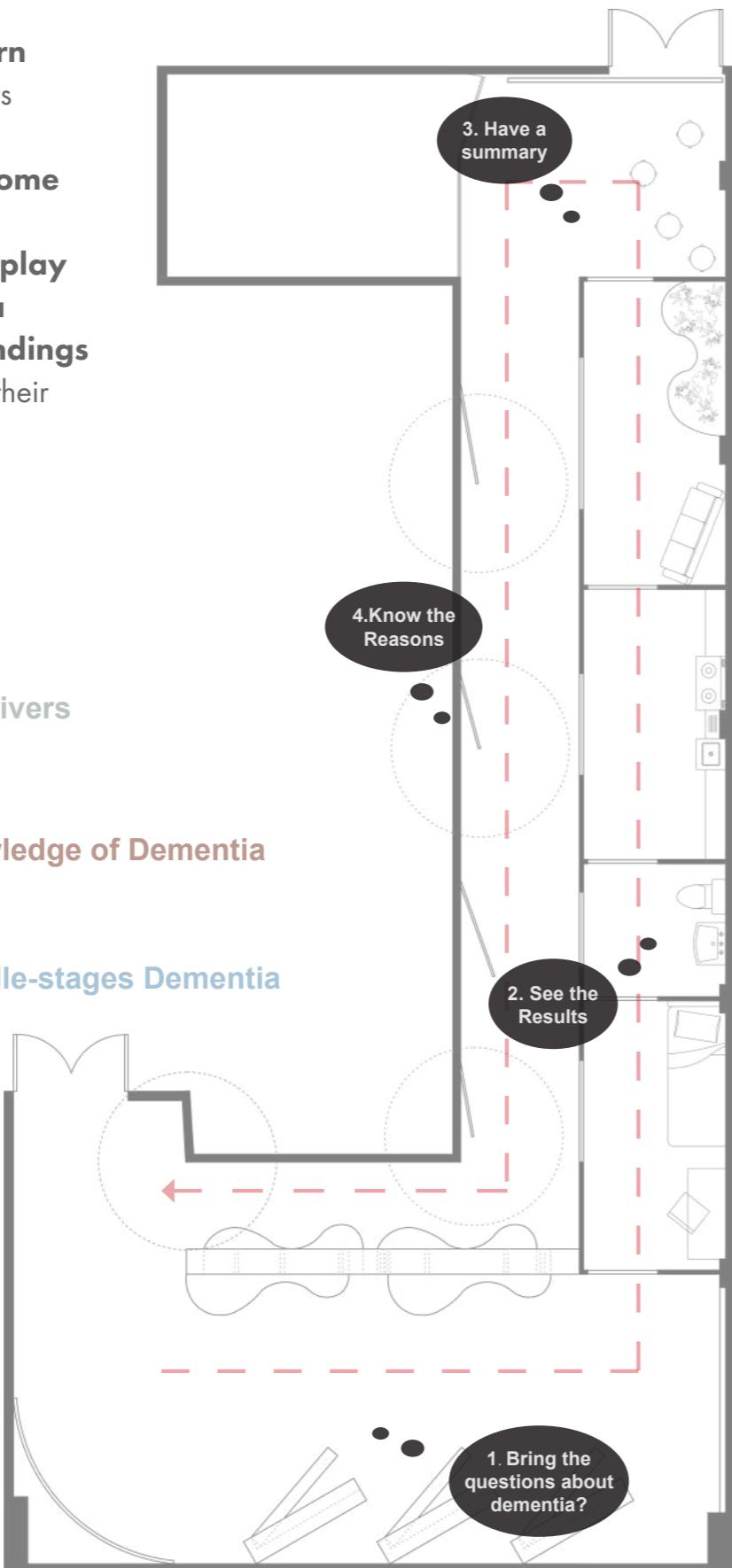
People with Early- or Middle-stages Dementia

## Design Strategy

Beginning with a basic knowledge of dementia, visitors follow a **one-way route** as the proposed circulation.

Visitors will sequentially go through four sections

- Ask "how to solve the challenges"
- View "existing developed methods"
- Know "current research states"
- Understand "theoretical foundations"



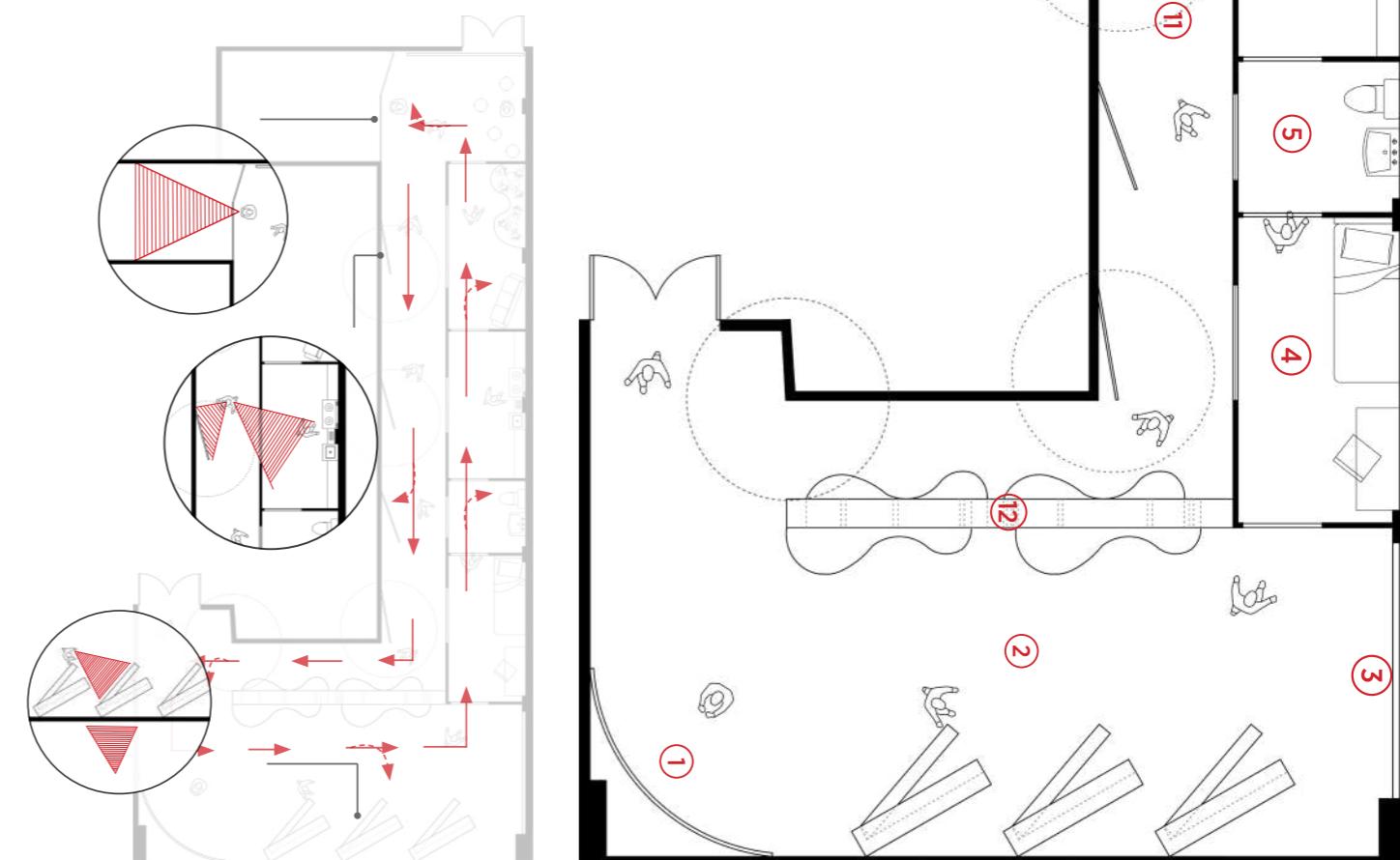
## Interventions in Given Floor Plan

(Site: Sol Koffler Gallery -  
RISD Graduate Student Gallery)

Ensuring the activities  
of wheelchair users

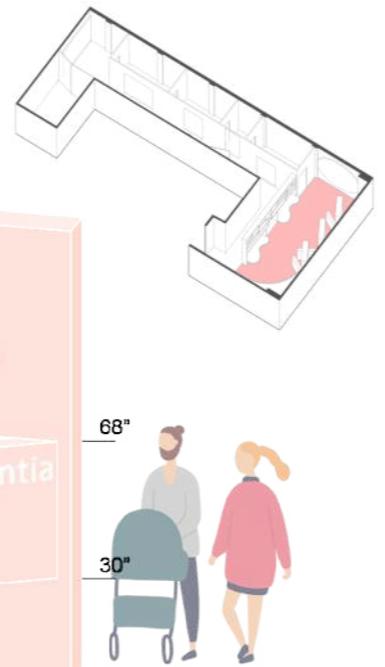
- ① Intro-wall
- ② Knowledge Hall
- ③ Schedule "Clock"
- ④ Bedroom
- ⑤ Bathroom
- ⑥ Kitchen
- ⑦ Living Room
- ⑧ Indoor Garden
- ⑨ Projection Room
- ⑩ Snoezelen Room
- ⑪ Panels
- ⑫ Shelf

## Proposed Circulation & Viewpoint



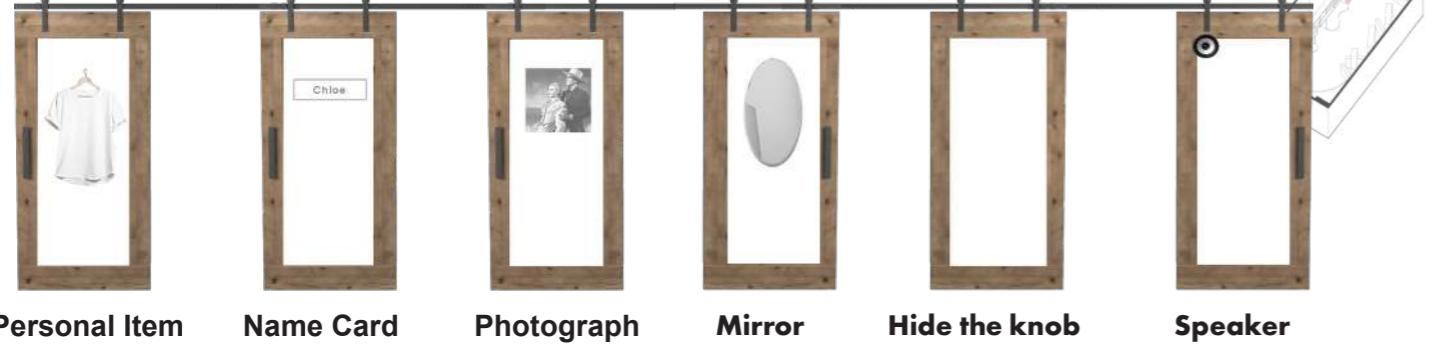
### Knowledge Hall (panel box)

One side of the panel boxes exhibit the general knowledge of dementia. On the other side, they will show the title of this exhibition to people outside through the glass wall of the Sol Kofler Gallery.



### Door Sequence

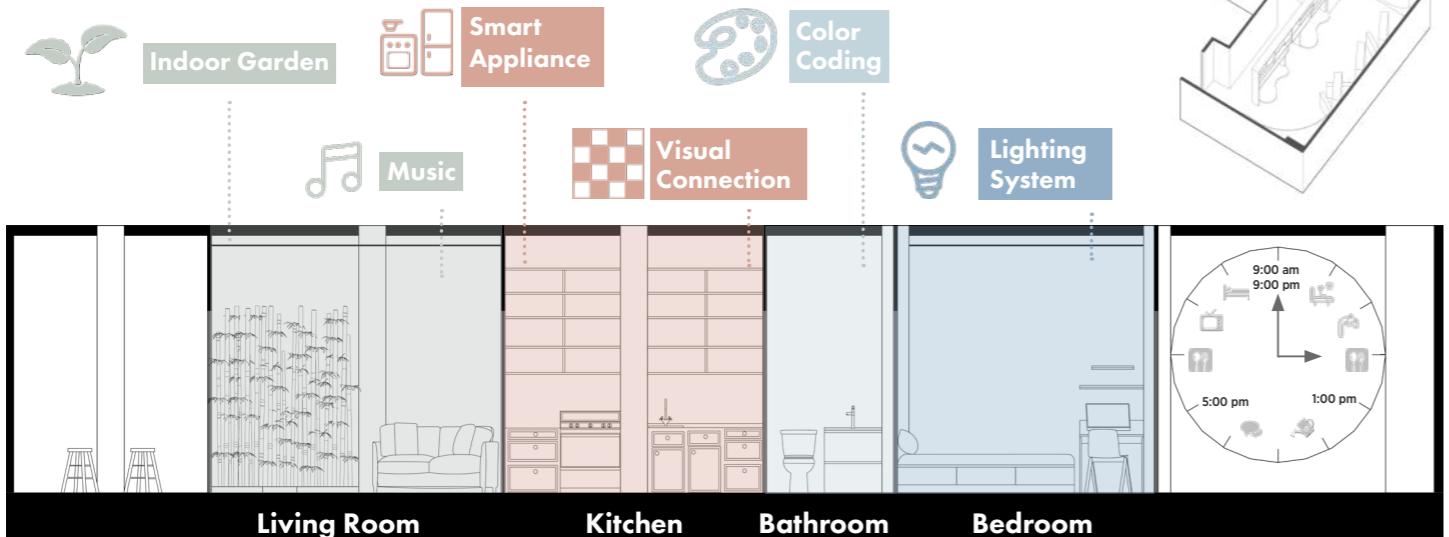
Exhibiting strategies for doors which help people with dementia knowing better where they are going to.



Personal Item      Name Card      Photograph      Mirror      Hide the knob      Speaker

### Room Sequence

Exhibiting some design strategies can make people with dementia live more functionally and independently.



### Projection Room

Playing the videos related to Alzheimer.



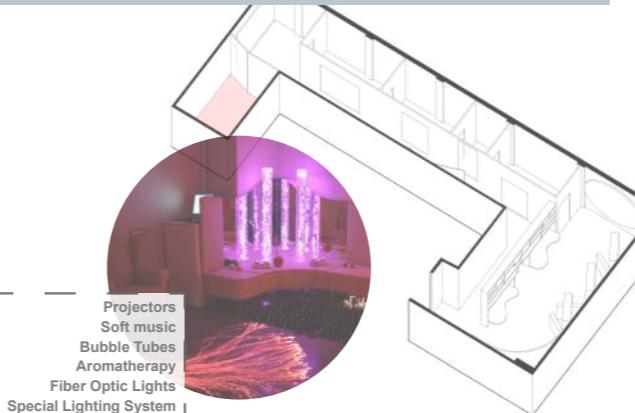
### Sitting & Book Area

For people to have a break after a long visit. Also, provide books of dementia and booklets of good long-term care program.



### Snoezelen Room

Exhibiting a sensory therapy for people with dementia.



### "Reason" Panels

Illustrating why designer use these specific strategies in "Room Sequence" to help people with dementia.

