

**Ash In the Earth, Mist In the Air** is a death facility

**Unfolding Trailcape** is a pilgrimage

**Transient Landscape** is a furniture-space

**Shelter of Shelter** is a house-market

**Dynamic Solidity** is an experiment

**Plug In Bronx** is a collective housing

**Bounding Voids** is a school

**New York Bubble** is a forum

**Be Home Safe** is an observation

**Future in the Past** is a dream

**Agamograph/ Laurentian Library Ricetto** is a study

**Open Memory**

**Open Construction**

**Open Location**

**Open Material**

**Open Dimension**

**Open Program**

**Open Structure**

**Open Interpretation**

*\* Building change and grow, not unlike cities. To embrace impermanence, promote flexibility, time obsolescence, and welcome uncertainty, just as Umberto Eco proclaimed the birth of the open work. No longer strive to prescribe outcomes, let alone inscribe meanings in process.*

**Open Work\***

**Open Memory**

**Open Construction**

**Open Location**

**Open Material**

**Open Dimension**

**Open Program**

**Open Structure**

**Open Interpretation**

***Chapter. I***

*A memorial built of mist, evaporating while condensing. The smoke, the water, the mist, and the body are all connected as one. While a gust of wind could change its body, the memory of the past is continuously shaped and reshaped.*

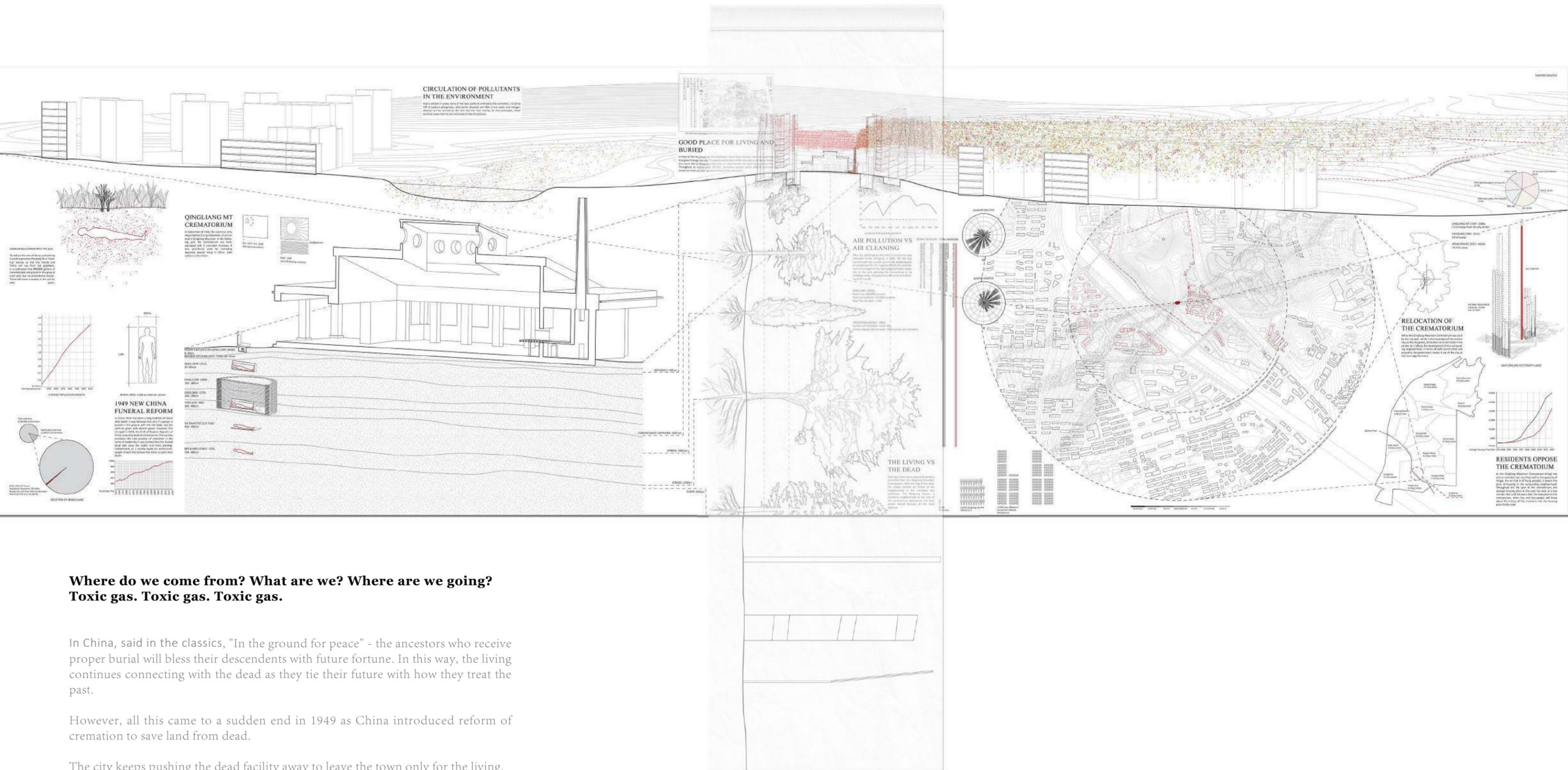


1 13:30  
Walking up to the entrance

TYPE: Burial  
INSTRUCTOR: Mario Gooden  
LOCATION: Nanjing, CH  
DATE: Fall 2022

**Ash In the Earth, Mist In the Air**  
A Parallel Path of Dead and Living in Nanjing

Living by the dead, dying by the living. While life and death are in nature two sides of one thing that one always follow the other, in contemporary China, death is a taboo that one should not talk about it nor even think about it. Such idea forces the modern Chinese to live a life without knowing death, while at the end, they are gonna directly face it. Such contradiction transforms death into a huge fear that the living have to carry throughout their life. By separating the two by force, one could not live well nor die well.

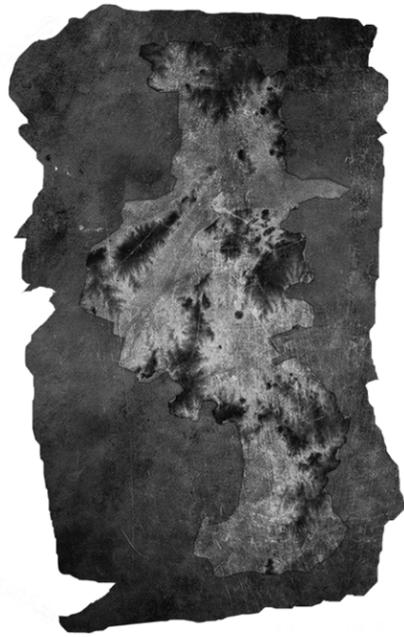


**Where do we come from? What are we? Where are we going?  
Toxic gas. Toxic gas. Toxic gas.**

In China, said in the classics, "In the ground for peace" - the ancestors who receive proper burial will bless their descendents with future fortune. In this way, the living continues connecting with the dead as they tie their future with how they treat the past.

However, all this came to a sudden end in 1949 as China introduced reform of cremation to save land from dead.

The city keeps pushing the dead facility away to leave the town only for the living.

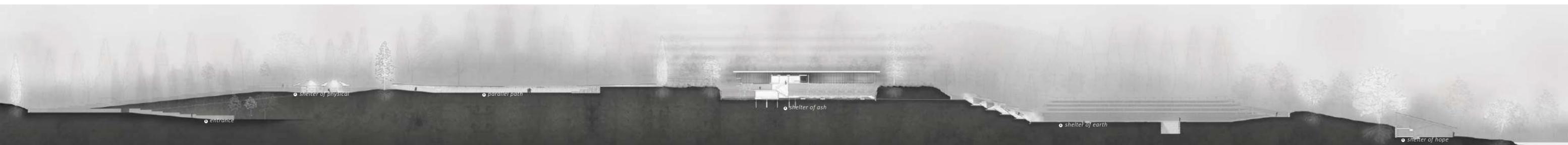


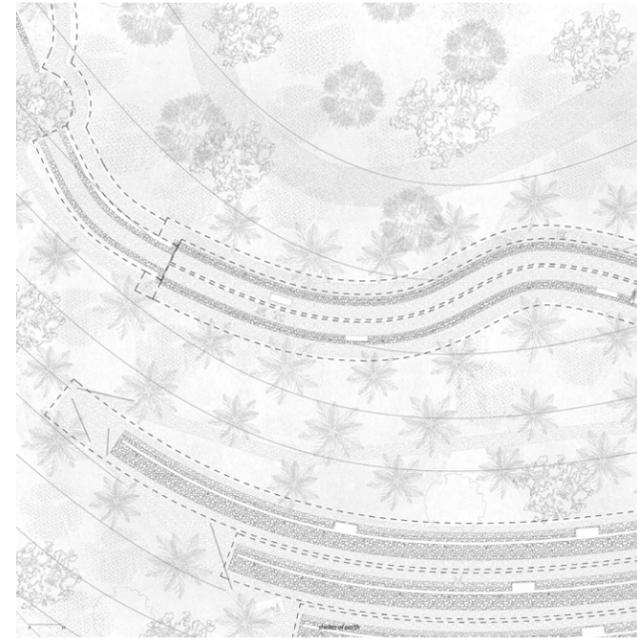
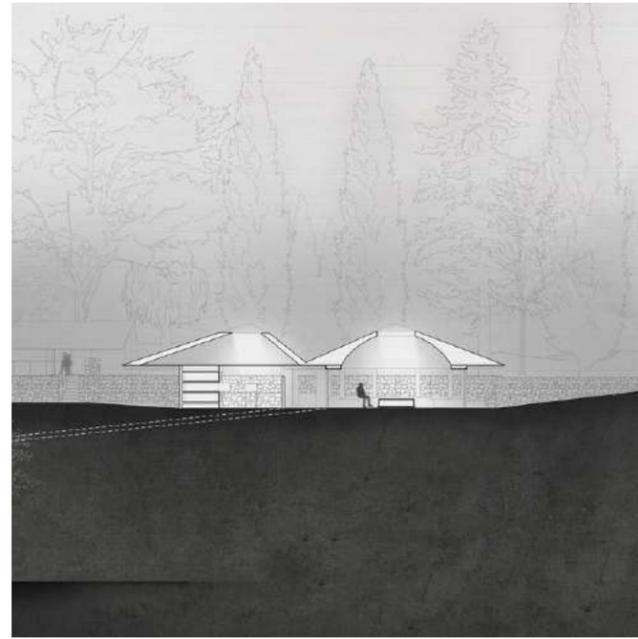
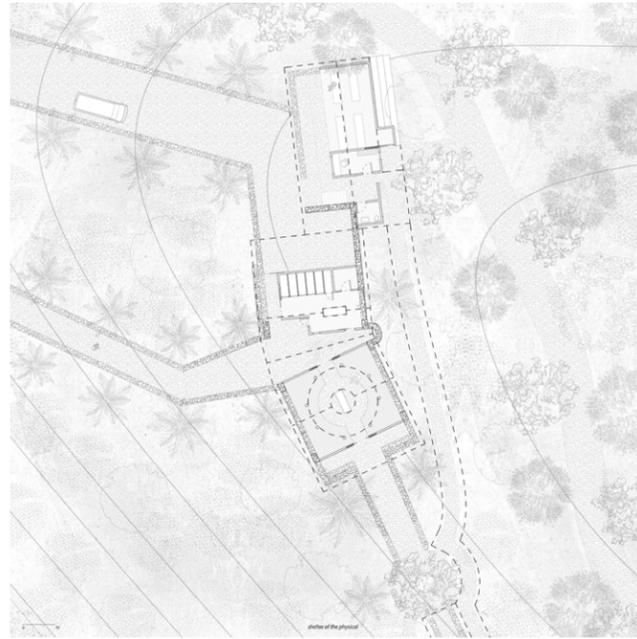
### Death in Mountain

Rather than having one cremation for the entire city, the new dead facilities will be smaller and spread around the city in every district.

### Path of Death In the City of Living

In the hill, a path of death is cut into the ground, going through and wandering around six spaces. Along this path, other than the four underground shelters, the existing historical pavilion on the hilltop and the future forests for terramation are also integrated.





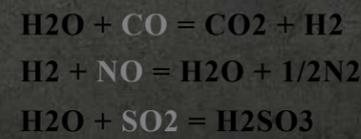
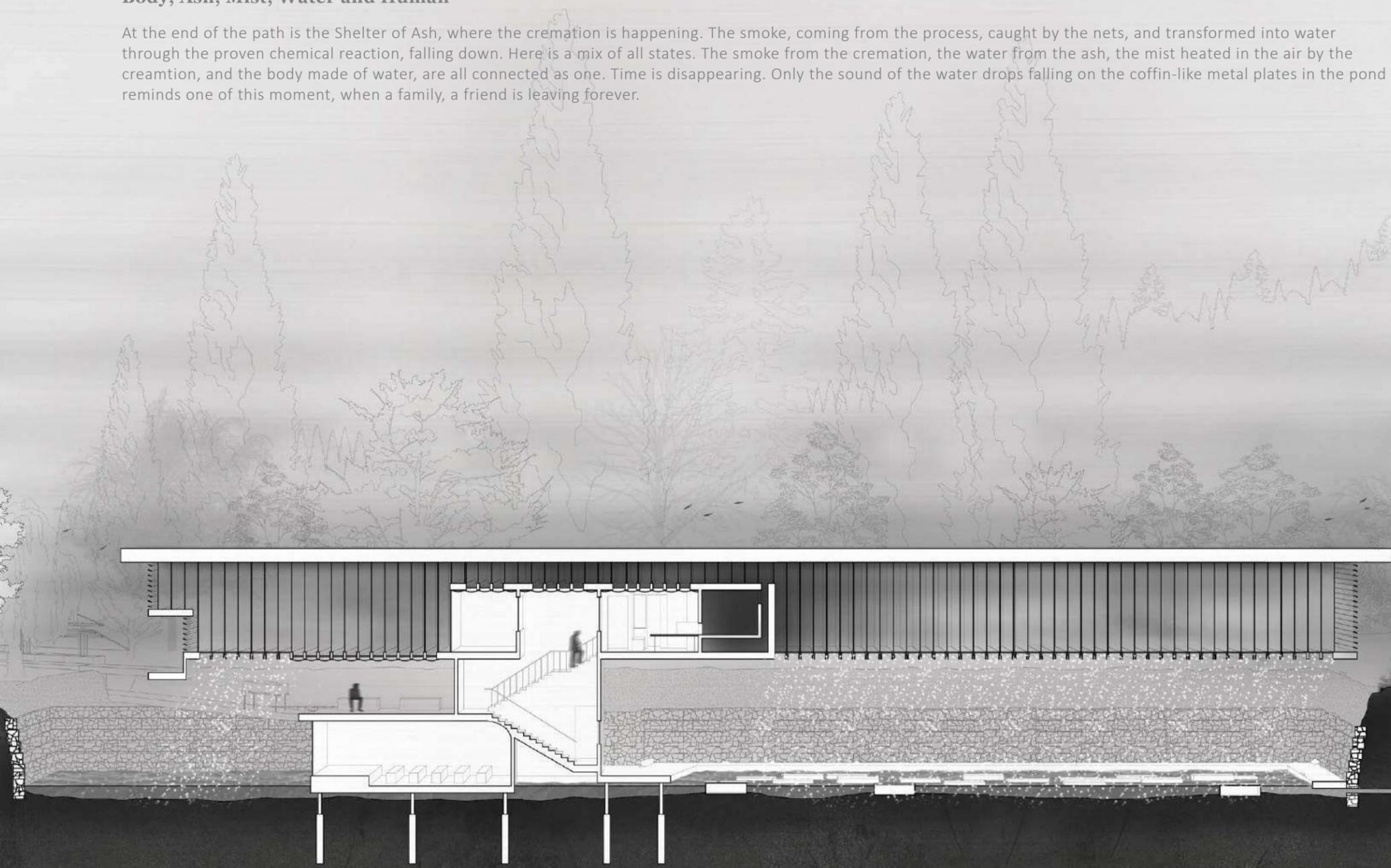
2 14:00 - 15:00  
Sunken Shelter of Physical: Farewell

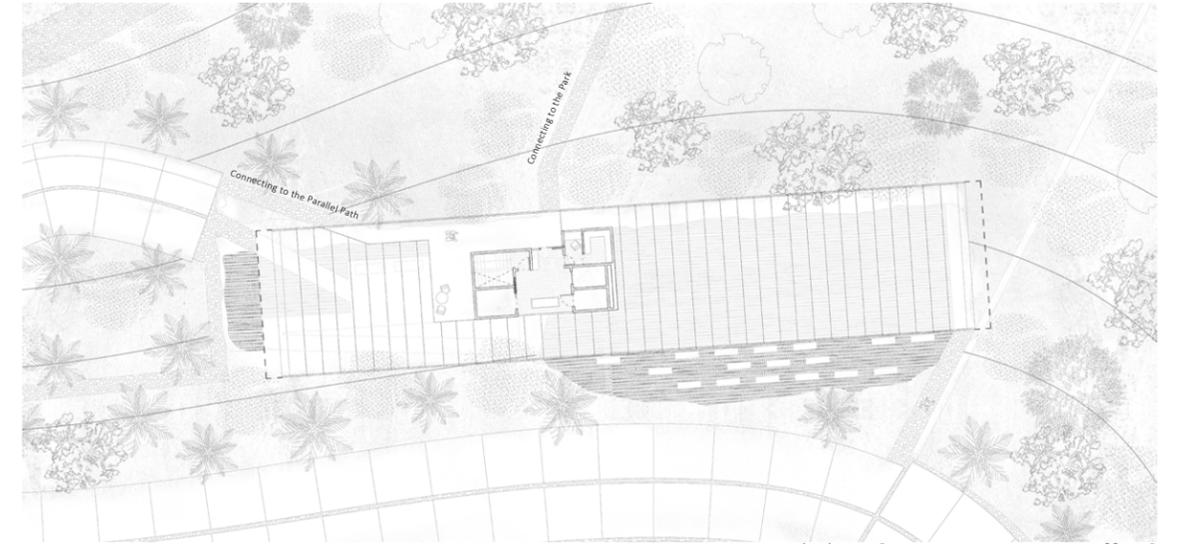


3 15:00 - 15:30  
Parallel Path: Walking Side by Side

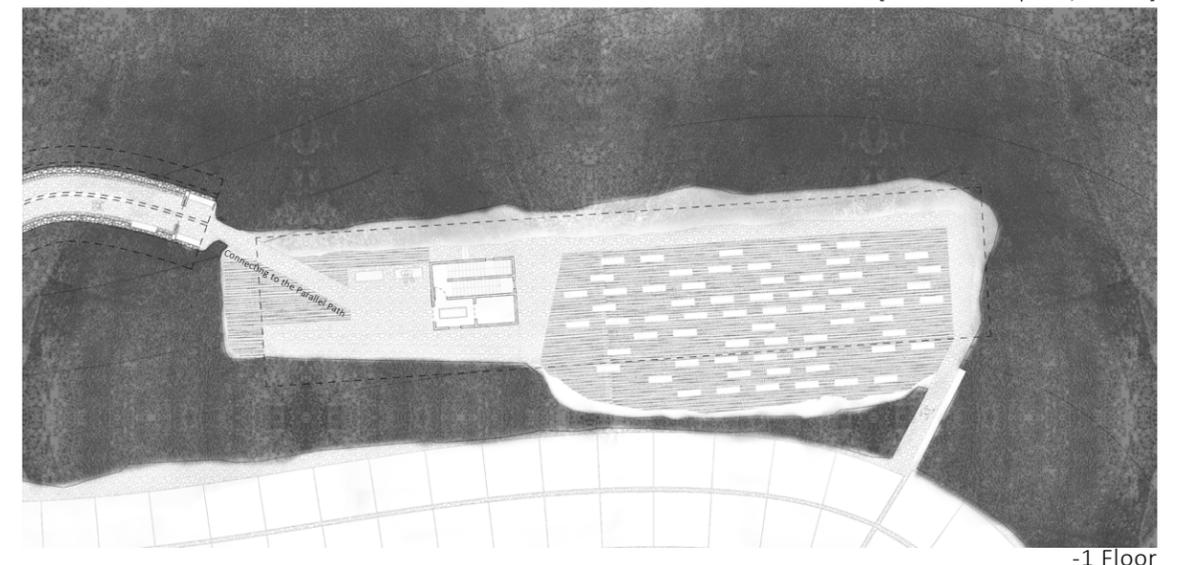
### Body, Ash, Mist, Water and Human

At the end of the path is the Shelter of Ash, where the cremation is happening. The smoke, coming from the process, caught by the nets, and transformed into water through the proven chemical reaction, falling down. Here is a mix of all states. The smoke from the cremation, the water from the ash, the mist heated in the air by the cremation, and the body made of water, are all connected as one. Time is disappearing. Only the sound of the water drops falling on the coffin-like metal plates in the pond reminds one of this moment, when a family, a friend is leaving forever.

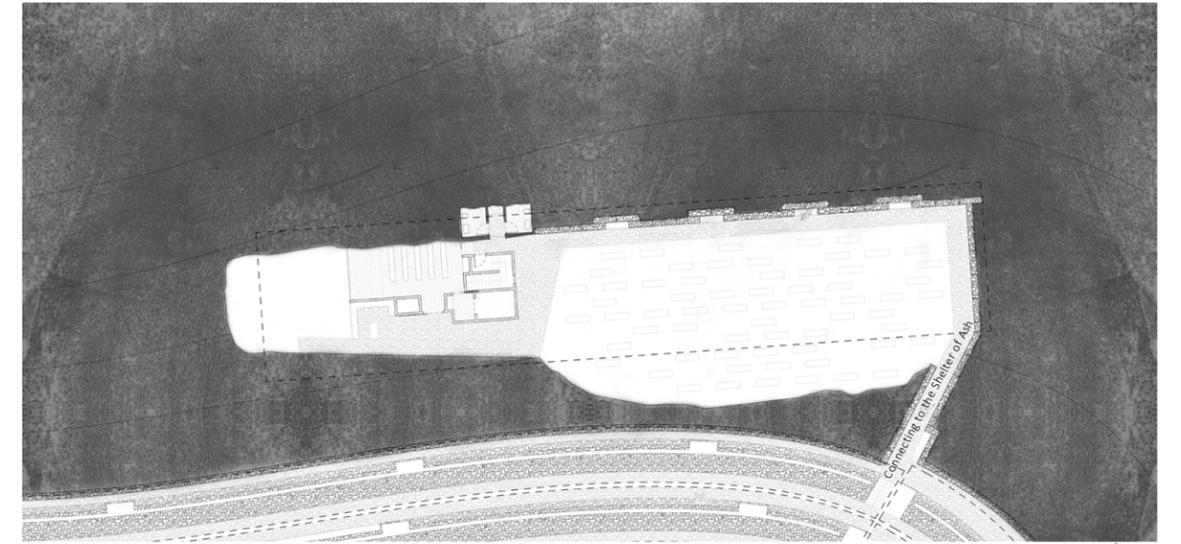




Ground Floor [Cremation Space, Office]



-1 Floor

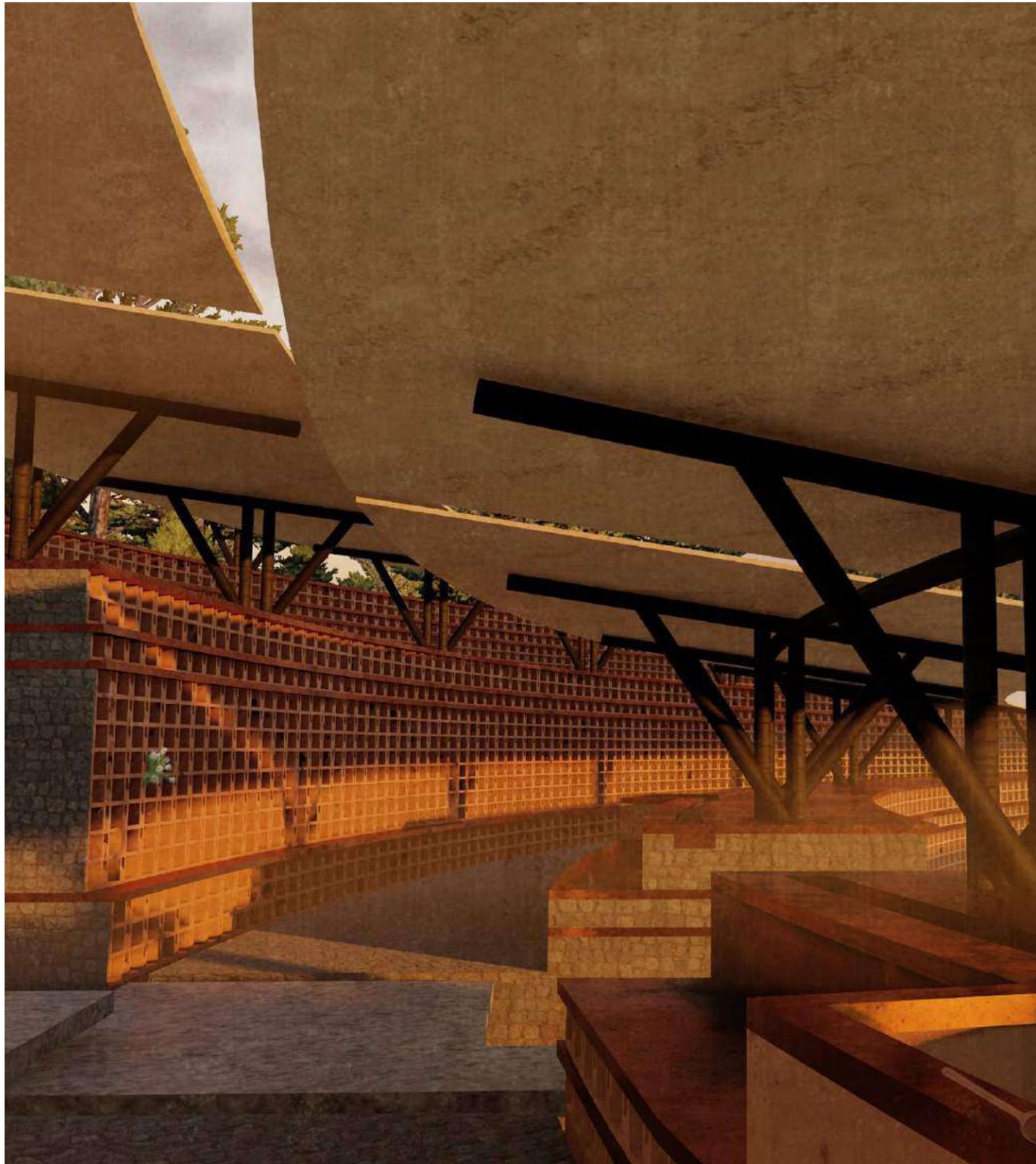


-2 Floor

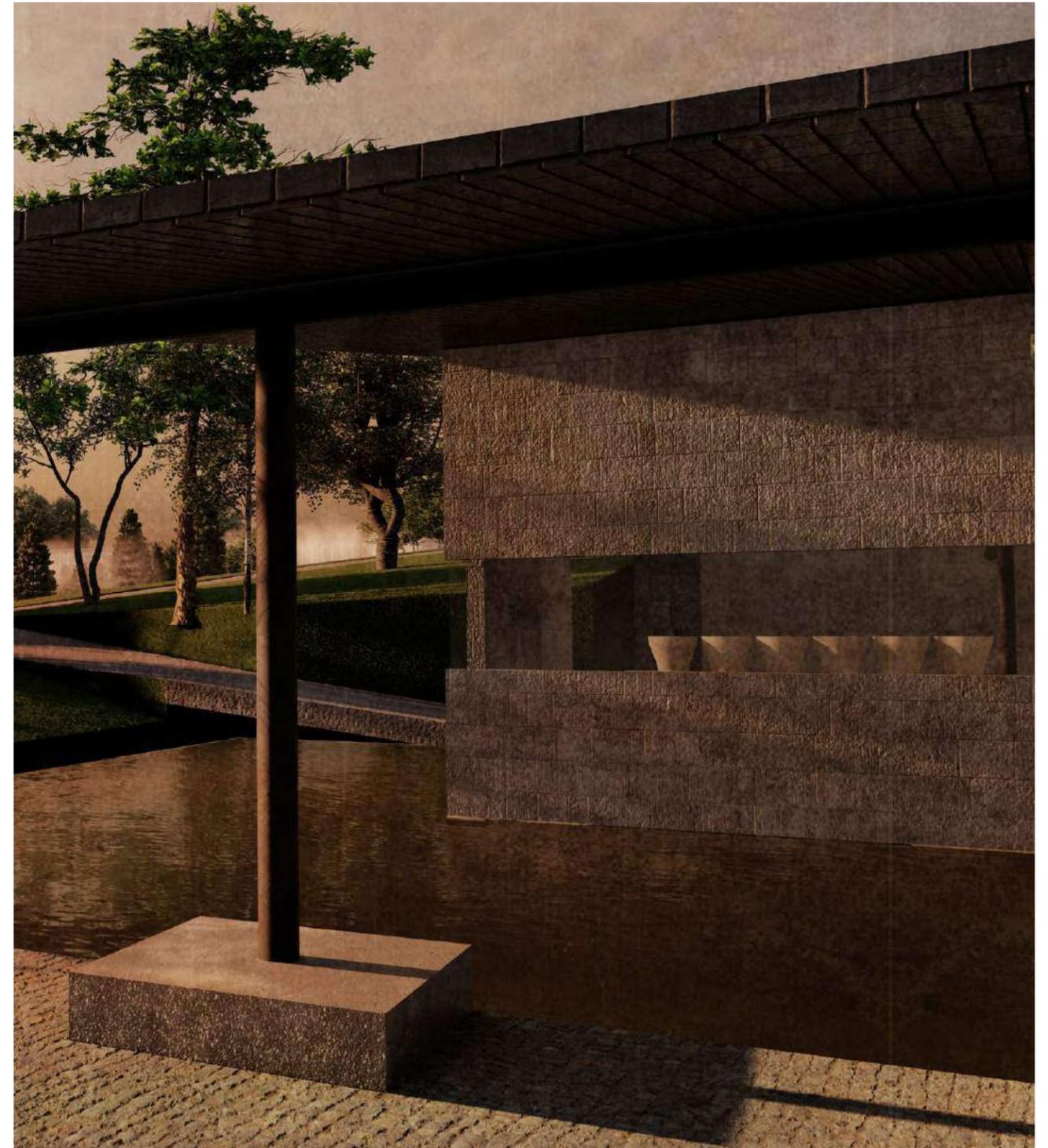


### **Fog a Proof of Existence**

As most of the crematorium sits underground, the only parts above are the nets catching the smoke from the process. While the cremation uses a lot of energy and produces a tons of heat, this warms up the surrounding air. A mist of fog enfolds the space. The shelter disappears in the clouds as a citizen passes by.



5 17:00- 18:00  
Shelter of Ash: Embedding the Remains into the Mountain



6 18:00- 19:00 [sunset]  
Shelter of Hope: Appreciating the Sunset by the Remaining Foundation of the demolished Crematorium

Open Memory

**Open Construction**

Open Location

Open Material

Open Dimension

Open Program

Open Structure

Open Interpretation

***Chapter. II***

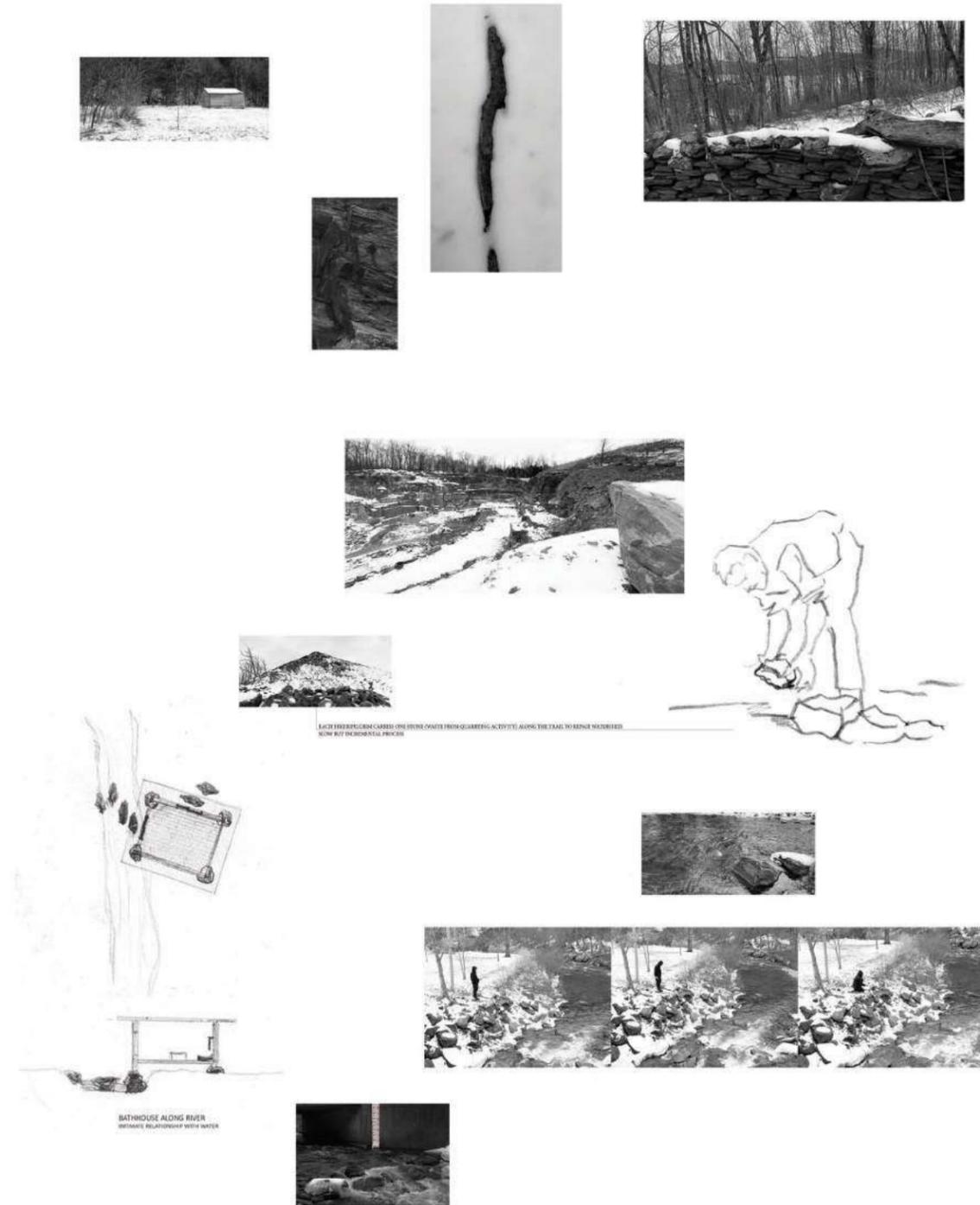
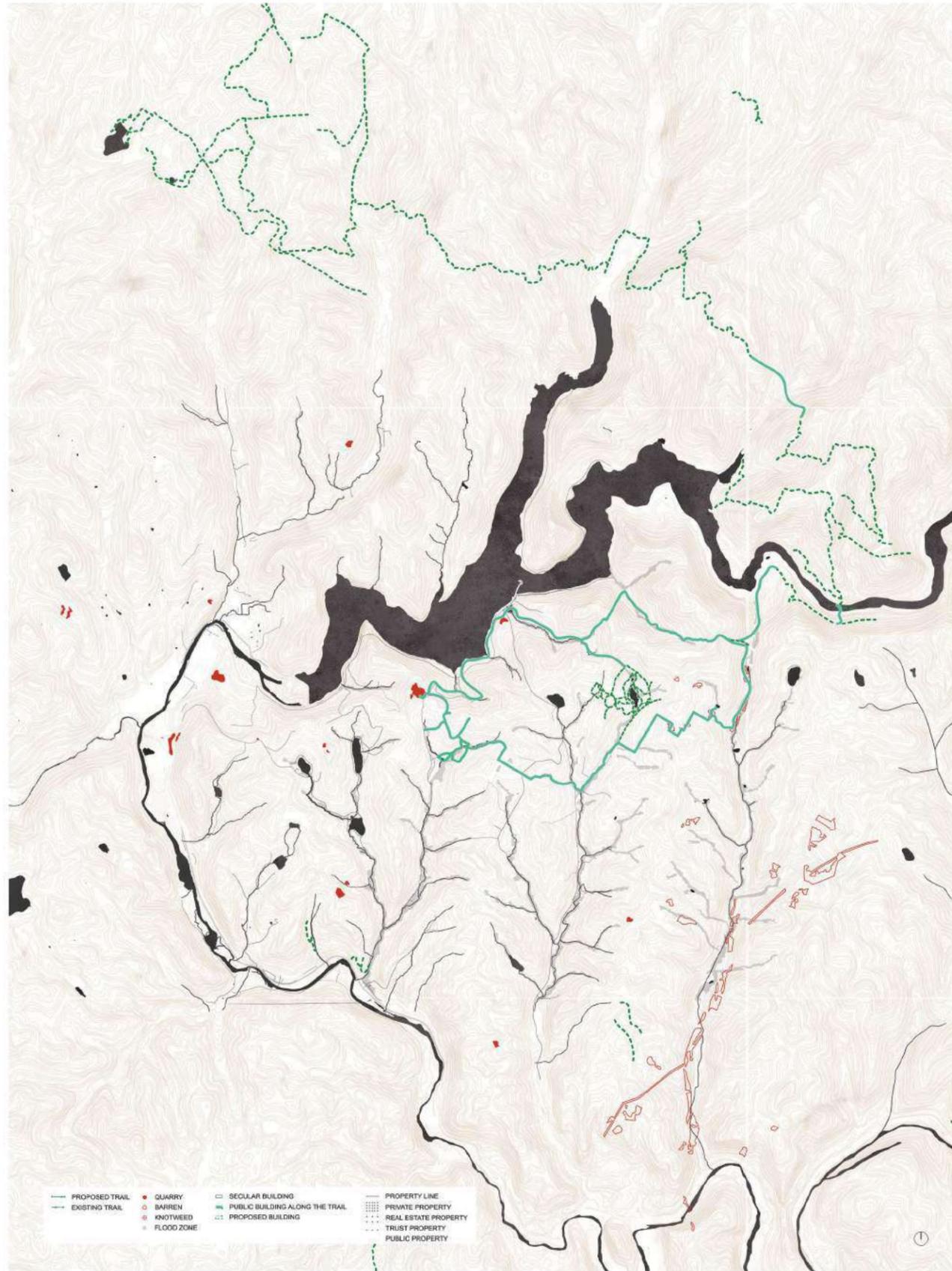
*Rather than built in a day, it grows over time. With people walking, the structure is being built. The rule is defined but the end is open. Within the gabion baskets, people shape the wall as they dream.*



Walking, the sole of the foot and the earth briefly touches. Pausing, lets root in the soil. Lifting, falling, as one foot leaves the ground, the other waits for its return. In the abeyance of walking, we know the road under our feet is both an exile and home-coming. In the accumulation of each small step, we come a long way. We become attuned to our surroundings, and our surroundings become part of us.

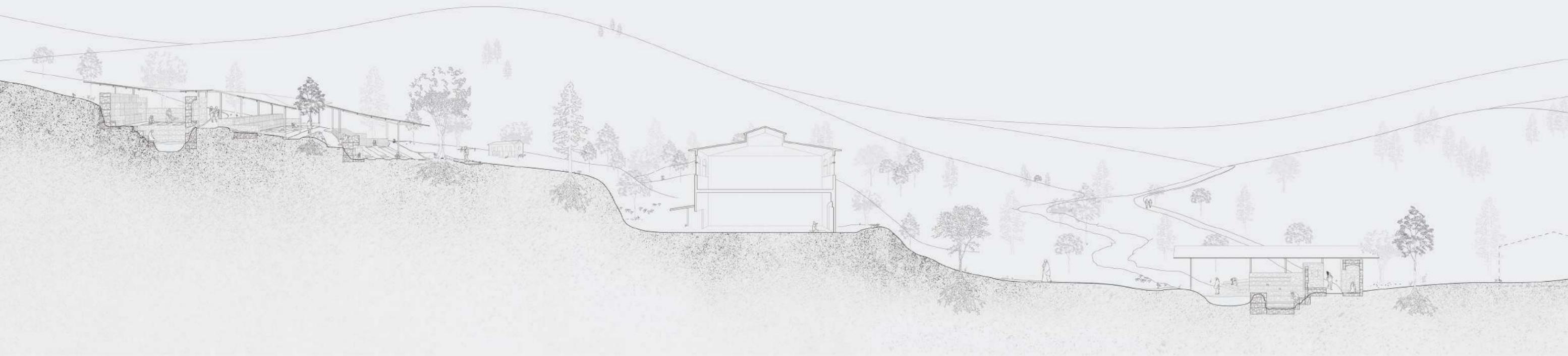
TYPE: Infrastructure & Public Building  
INSTRUCTOR: Ziad Jamaledine  
TEAM: Christopher Scheu, Mingyue Zhang  
LOCATION: Islamberg, New York, US  
DATE: Spring 2022

**UNFOLDING TRAILScape**  
Hajj x Ecological Restorative Practice In Islamberg



### Backyard Pilgrimage, Mobility Heritage, Act of Healing

To deal with the issue is to introduce a backyard pilgrimage that is for both pilgrims and hikers. By wayfaring from one point to the next, people take part **in the act of trail-making**. The trajectory of the trail is determined by the ecological issues along the way, passing through the quarry, erosion, flood, invasive species overgrown, creek and road crossings. As one picks up the stone from the quarry waste, carries it and puts it into the gabion wall along the creek, grows the seedling and plants it in the barren land, the trailscape becomes the practice of conservation of the land, a ritual in itself, bridging the contemporary nature-religion divide.



**Prayer Trail (2 hours, 4 miles)**

The shortest prayer trail centers around the existing mosque in the village of Islamberg, as a 1 hour prayer trail for local residents. Nursery, together with the mosque and the bathhouse enriches the religious life by creating spaces for spiritual rituals.



**QUARRY - MOSQUE IN ROCK**

Quarry has significant effects upon ecosystem as it transforms the land completely into barren, and destroys the habitat of any species in the area. Furthermore, it creates a huge amount of waste which composes over 70% of the total rocks it produces.

To reiterate it into a mosque in rock, several cavities is carefully introduced into the construction process of the quarry.

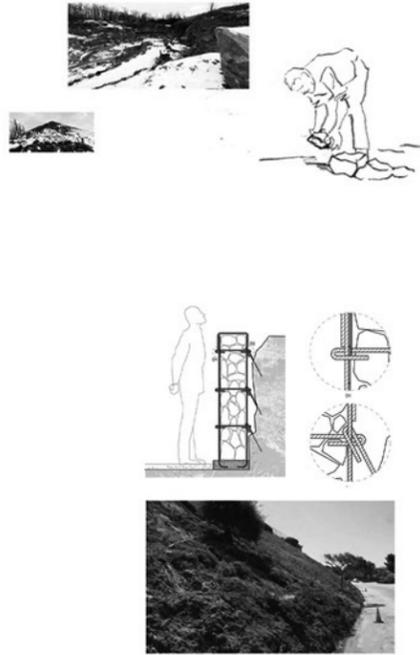
As hikers and pilgrims enjoy the tranquility in the shrine, they pick up a small rock and carry it as they continue the trail-

**EROSIVE HILL - NURSERY**

With limited vegetation and poor soil condition, the hill is facing the Islamberg is experiencing an issue of erosion.

To address the problem is to build gabion walls on the slope, strengthening the ground. The gabion walls together enclose the space for the nursery.

In the nursery, while rocks are put into the while, seedlings of pine trees are grown and carried to the barren land along the trail-

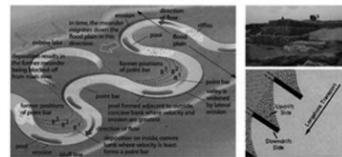
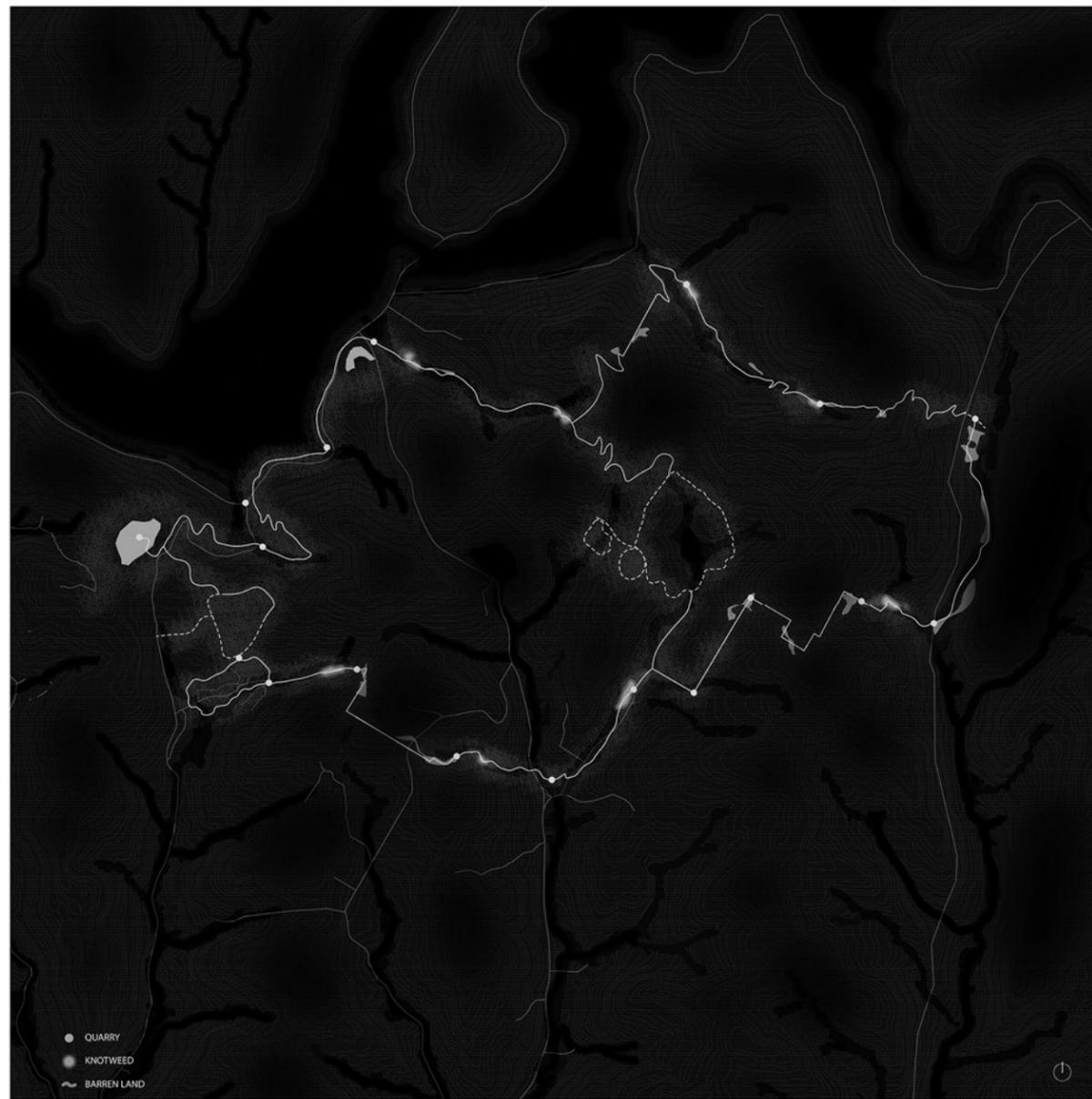


**FLOODPLAIN - BATHHOUSE**

As the creek meanders and will move forward at those curving points, structures nearby will face the danger of flood within 50 years.

To limit the destruction, groins are installed, perpendicular to the river bank, limiting the movement. In those groins, bathhouse is framed within the poche.

Here, people with rocks put them into the frames, building the groins-



**KNOTWEED OVERPOPULATION - SHRINE**

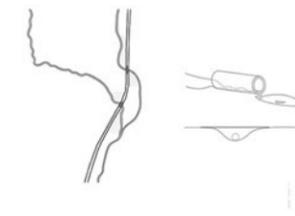
The overpopulation of the invasive species- knotweed, takes off the habitat of other species. To eradicate them, hikers and pilgrims cut the weeds, dehydrate and weaved them into sheets under the roof supported by the gabion wall. After cut, rocks are put on the land in the shape of seats and tables, marking the completion.

**SMALL CULVERT AT THE CREEK AND ROAD INTERSECTION - BRIDGE ON WATER**

Undersized and poorly placed culverts degrades water quality via scour and erosion, as well as restrict the movement of aquatic organisms between upstream and downstream habitat.

To reconstruct a safe and stable stream crossings, culvert is replaced with bridge.

In these area, to address the existing issue led by the culvert, including erosion, hikers and pilgrims put rock into the walls and plant seedlings along the bank-

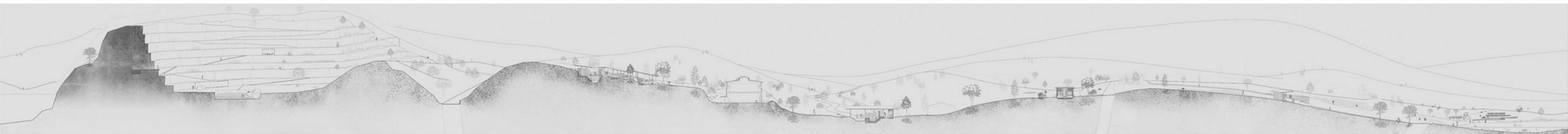


**PRIVATE PROPERTY LINE - SHARED REST STOP AND STORAGE**

The constraints of property boundaries create a significant challenge to ecological restoration due to limited access.

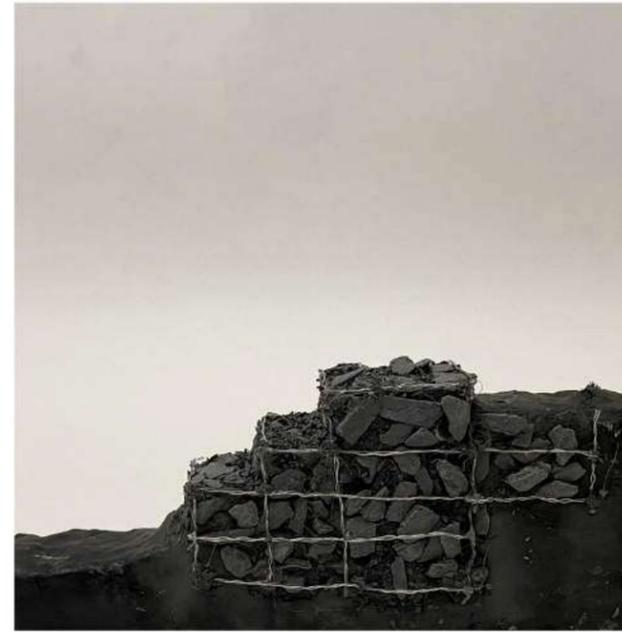
To address the issue is to reiterate the property line. Rather than a straight, arbitrary line on map, it is a curved line based on the site.

As hikers and pilgrims put rock along the path and into the preinstalled steel frames, place for rest and storage is created within the gabion walls-



**Unfolding Trailscape**

The sanctity of the trailscape arises through an incremental and long term approach to develop a symbiotic relationship between pilgrims/ hikers and natural environment. The constellation of healed spaces and the paths in between together form a trailscape which itself is a mobility heritage.

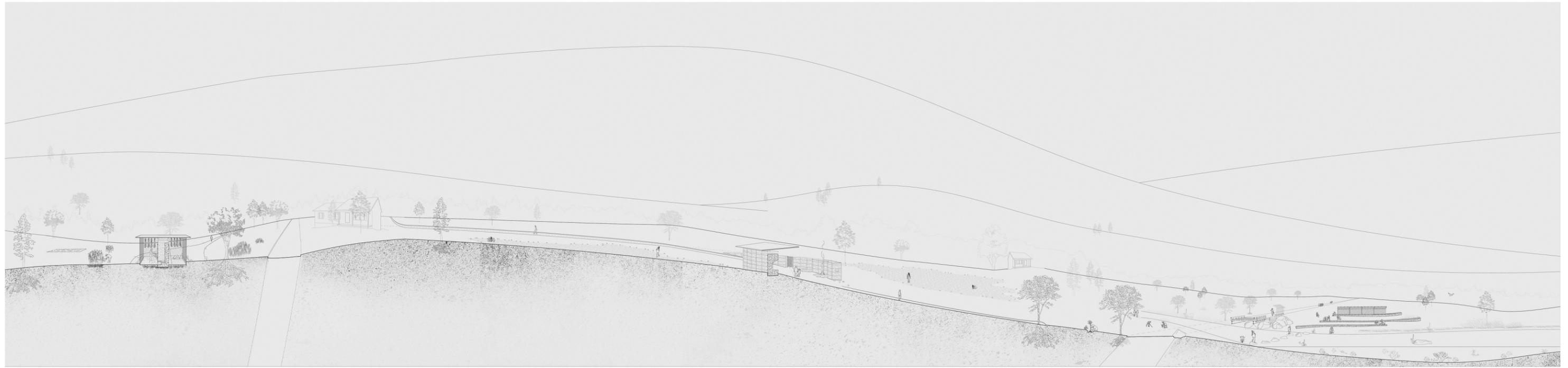


1: 25 Model - Construction Process

### **Walking as Building**

Walking on the trail, one carries a rock from the quarry waste to gabion walls along the flood zone to repair the ecological damage, while creating a spiritual bathhouse. By wayfaring from one point to the next, the pilgrim takes part in the the act of Trailmaking and Healing.

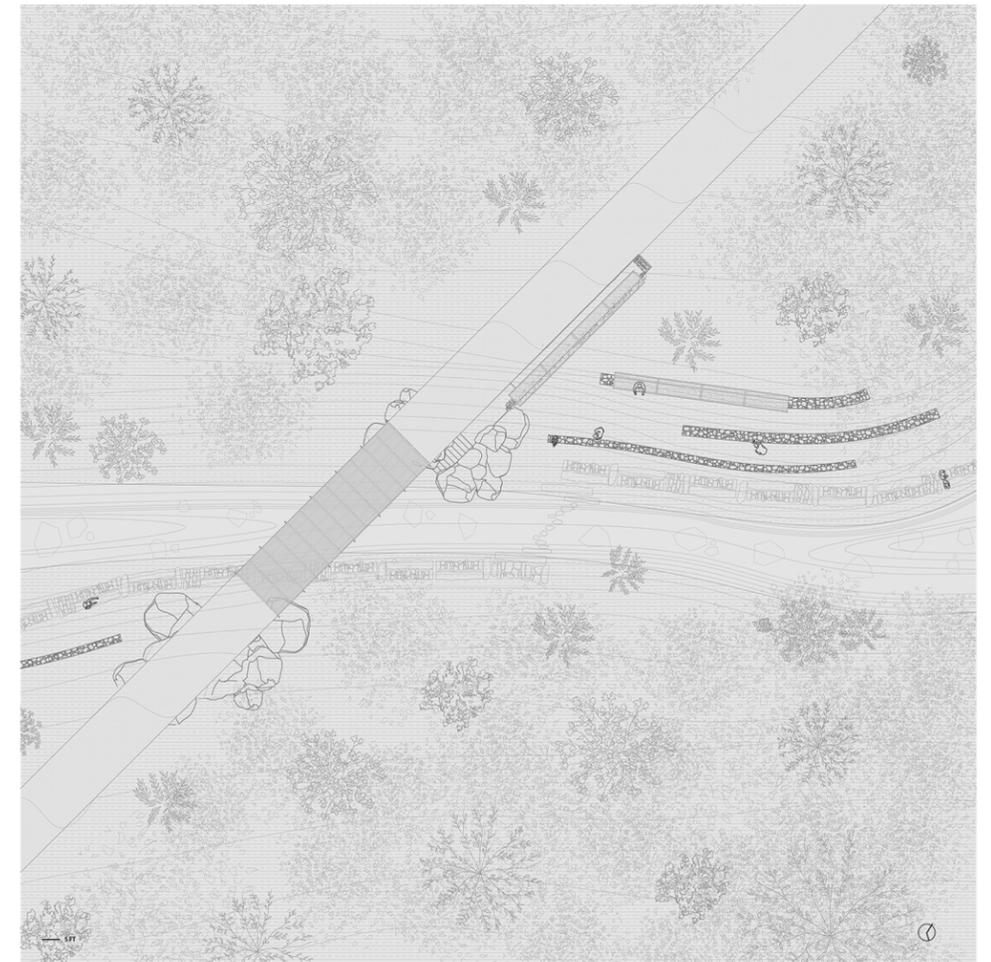
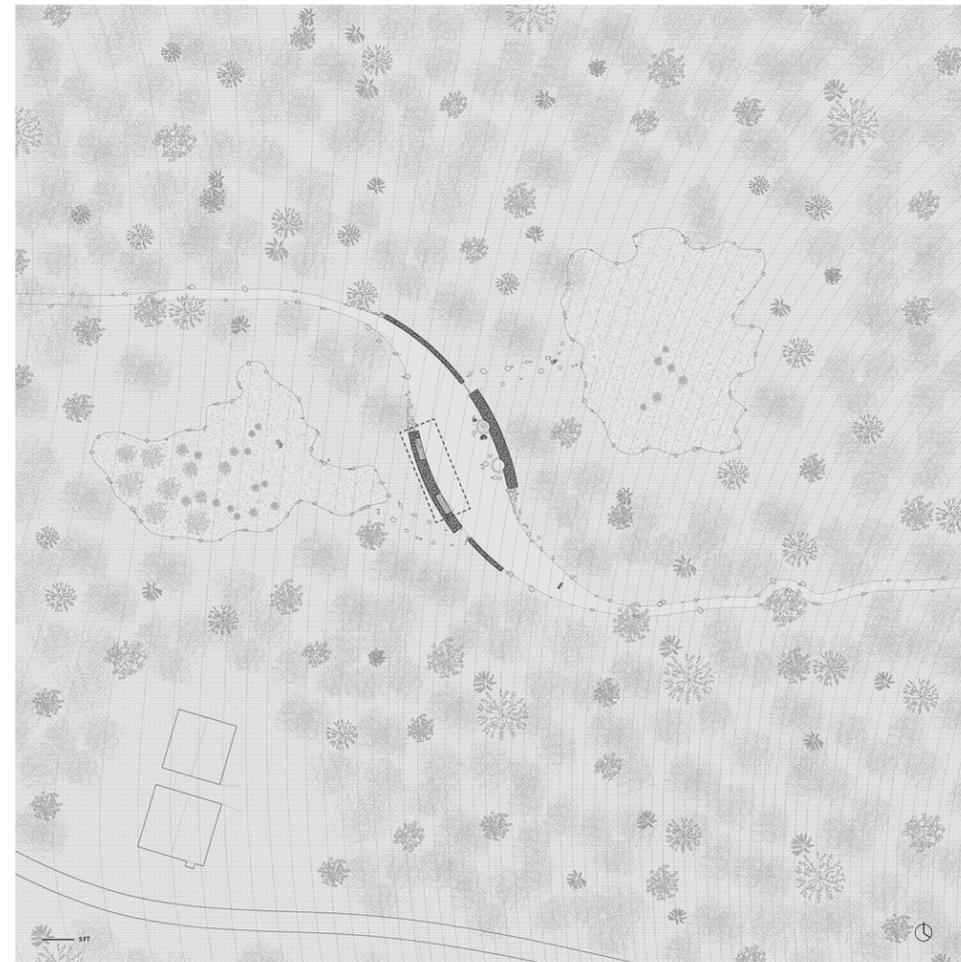
The trailscape becomes the practice of conservation of the land, a ritual in itself.



Knotweed Shrine

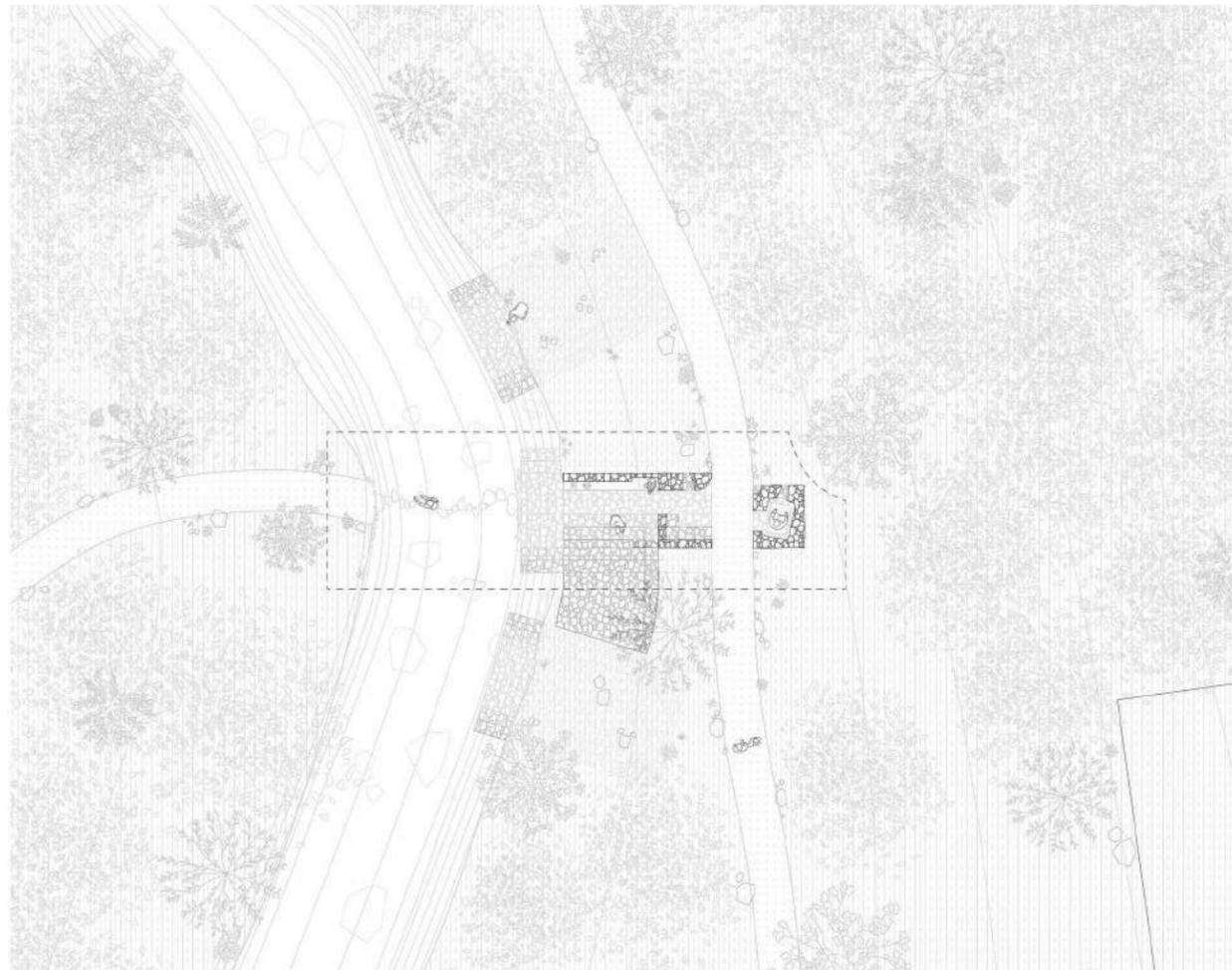
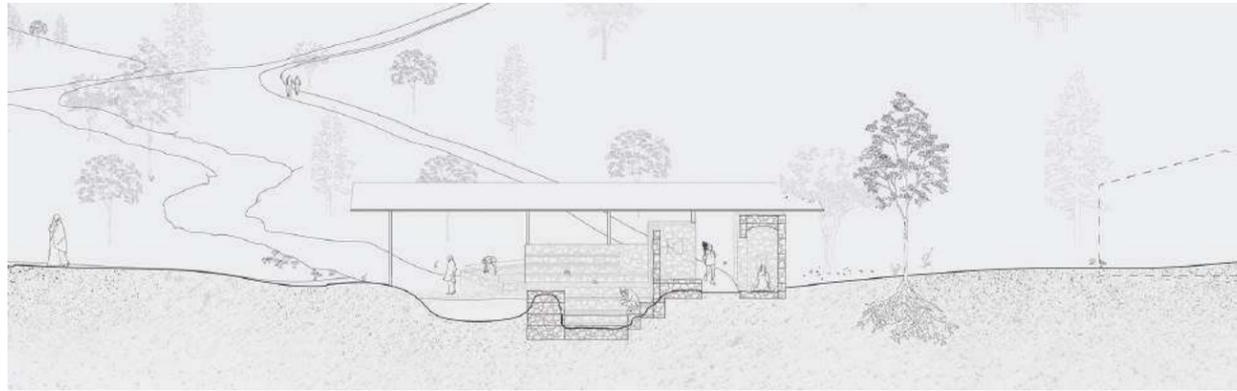
Private Property Line

Creek and Road Intersection



**Rock and Water Trail (4 - 8 days, 30 miles)**

The trail unfolds into the surrounding countryside, seeking focal points for environmental restoration. These points might be an area invaded by species like knotweed, where the property line is arbitrary and restricts the ecological restoration, or where road sits on the water and leads to issue of erosion.

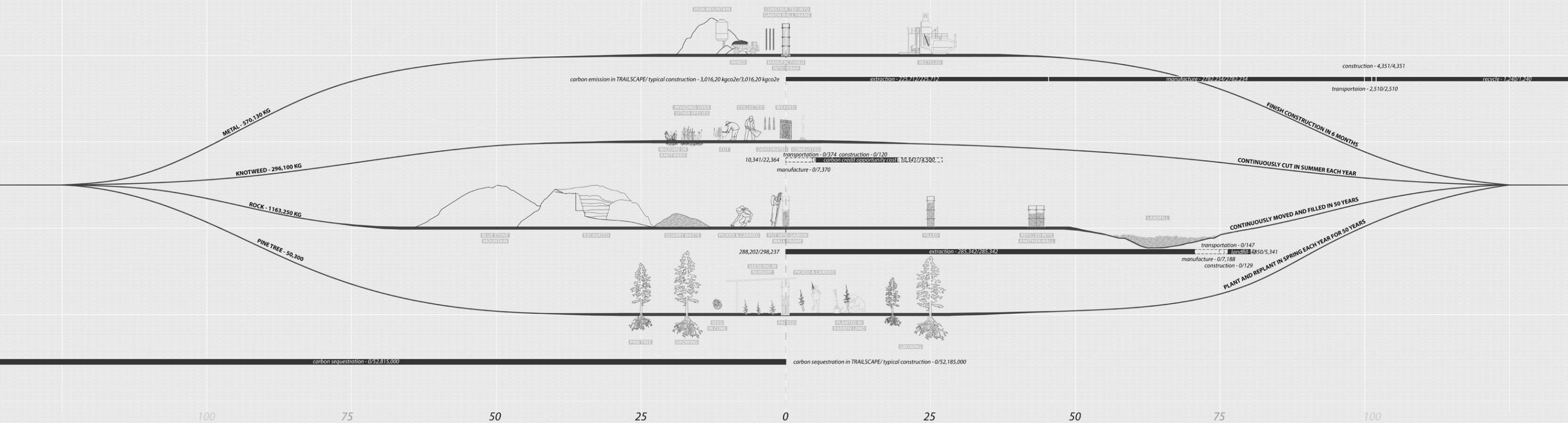


### **Bathhouse**

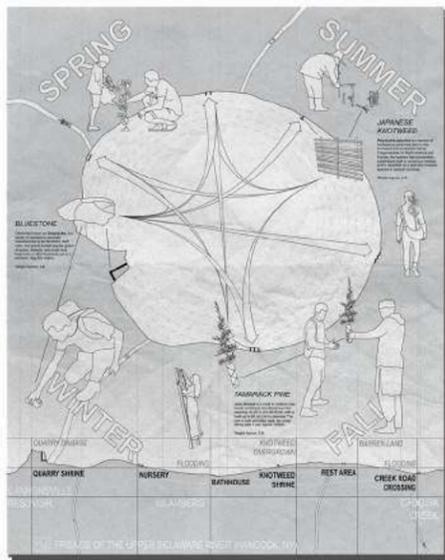
Made of the gabion walls, the groins intrude into the river, perpendicular to the river bank. The insertion of the framework will be done by the construction team, and pilgrims and hikers will fill up the wall with rock later.

The stepped gabions in the ground allow the water to flow into the bathhouse and form a basin where people could abluere and rest around. While the ablution is facing backward Mecca, the prayer on the other end is facing the holy city.





Material Cycle



(top) Material along the Trail  
(left) Guidance for Pilgrims and Hikers to Build

### Closed Cycle of Material and Labor

The trailscape is not supposed to exist only within a specific timeframe but rather endures throughout time and changes as it goes. Consideration over material and labor is taken from as early as the stage of extraction of material, to manufacture, transportation, construction, and state as a ruin.

The entire life of the trail is designed.

Most of the materials, except the rebar and mesh for the gabion walls, are from the site, and most of which, are even the waste on the site. The construction of the site lowers the negative ecological impacts to the smallest degree. As the pilgrims and hikers carry stone and plants along the trail to the designated destination, they further decrease the affect that construction team could have on the environment.



**Open Memory**

**Open Construction**

**Open Location**

**Open Material**

**Open Dimension**

**Open Program**

**Open Structure**

**Open Interpretation**

***Chapter. IV***

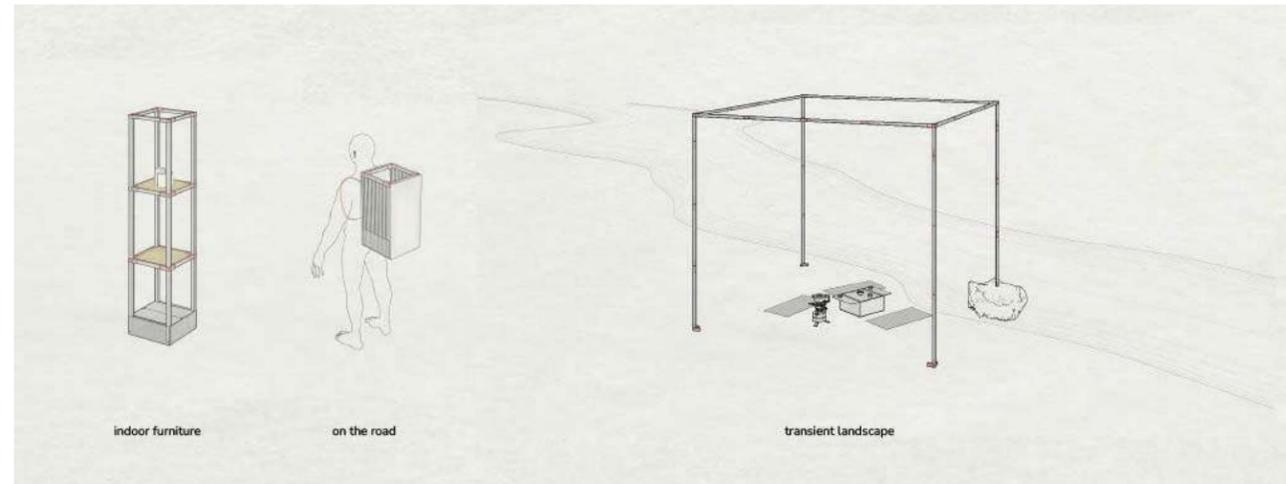
*A light at home. A bag on the way. A space by the water. Assembled and dissembled, the room travels as people moves. A collage of nature and people.*

## Transient Landscape

### A Deformable Teahouse

COURSE: 1:1 Fabrication  
INSTRUCTOR: Zachary Mulitauaoepele  
DATE: Fall 2022  
TEAM: Mingyue Zhang, Haojun Wang

Study the minimum amount of things needed, we design an object that is a furniture, a bag and a space. Settled in the wild by the water, integrating the site, sitting on a stone in the stream, a teahouse by water is constructed. At the end of the day, back in the house, it is waiting for the next trip.



**Transformation**



**Kit of Component**



**Construction**

Open Memory

Open Construction

Open Location

**Open Material**

Open Dimension

Open Program

Open Structure

Open Interpretation

*Chapter. V*

*All is involved, none is forever. It is not built to persist time but to change with it. The roof is eaten. The brick is made. It's always in between appearing and disappearing. Beings live, it lives. Beings die, it dies.*



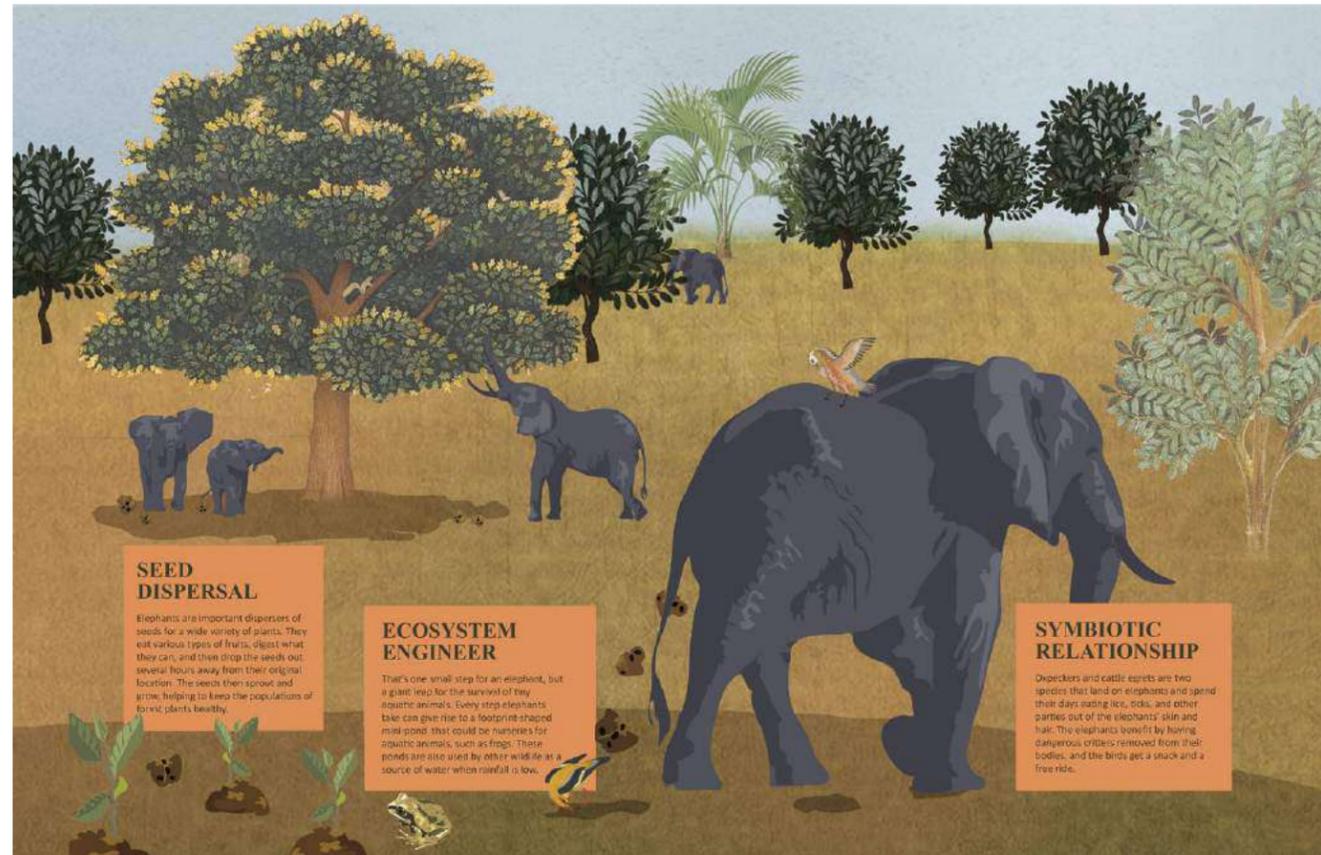
To build a more sustainable relationship between humans and others, for those elephants living in the human civilization, is it possible that they could live in a similar lifestyle of equal exchange? It is an environment that is human-centered or elephant-centered but rather everyone is on this cycle of exchanging.

**Shelter of Shelter**  
A House-Market in Ban Taklang Elephant Village

TYPE: Mixed Use  
INSTRUCTOR: Boonserm Premthada  
LOCATION: Ban Taklang Village, TH  
DATE: Spring 2023

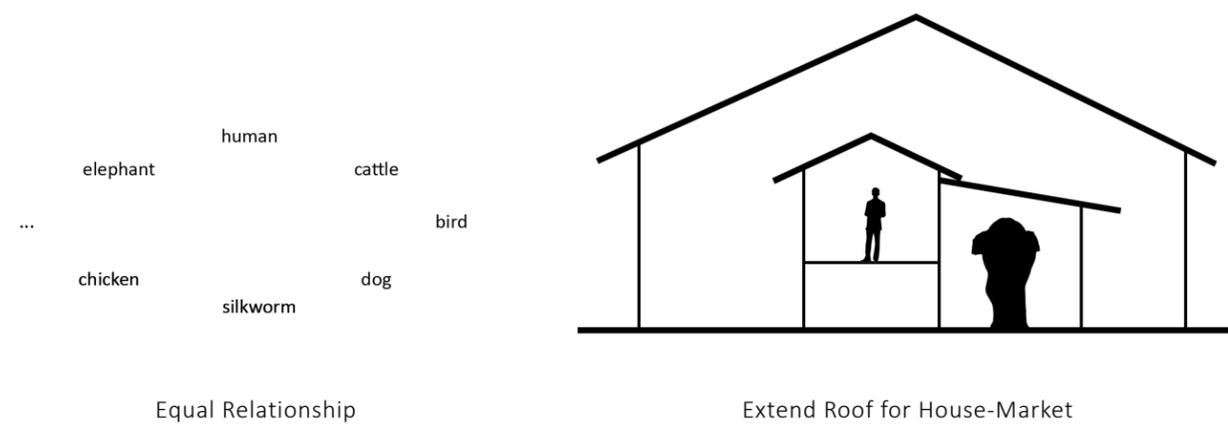
## Elephant in Wild

Living together with other species in an environment that is not prioritized for any, elephants and other animals, as well as the ecology, all benefit from this co-living.



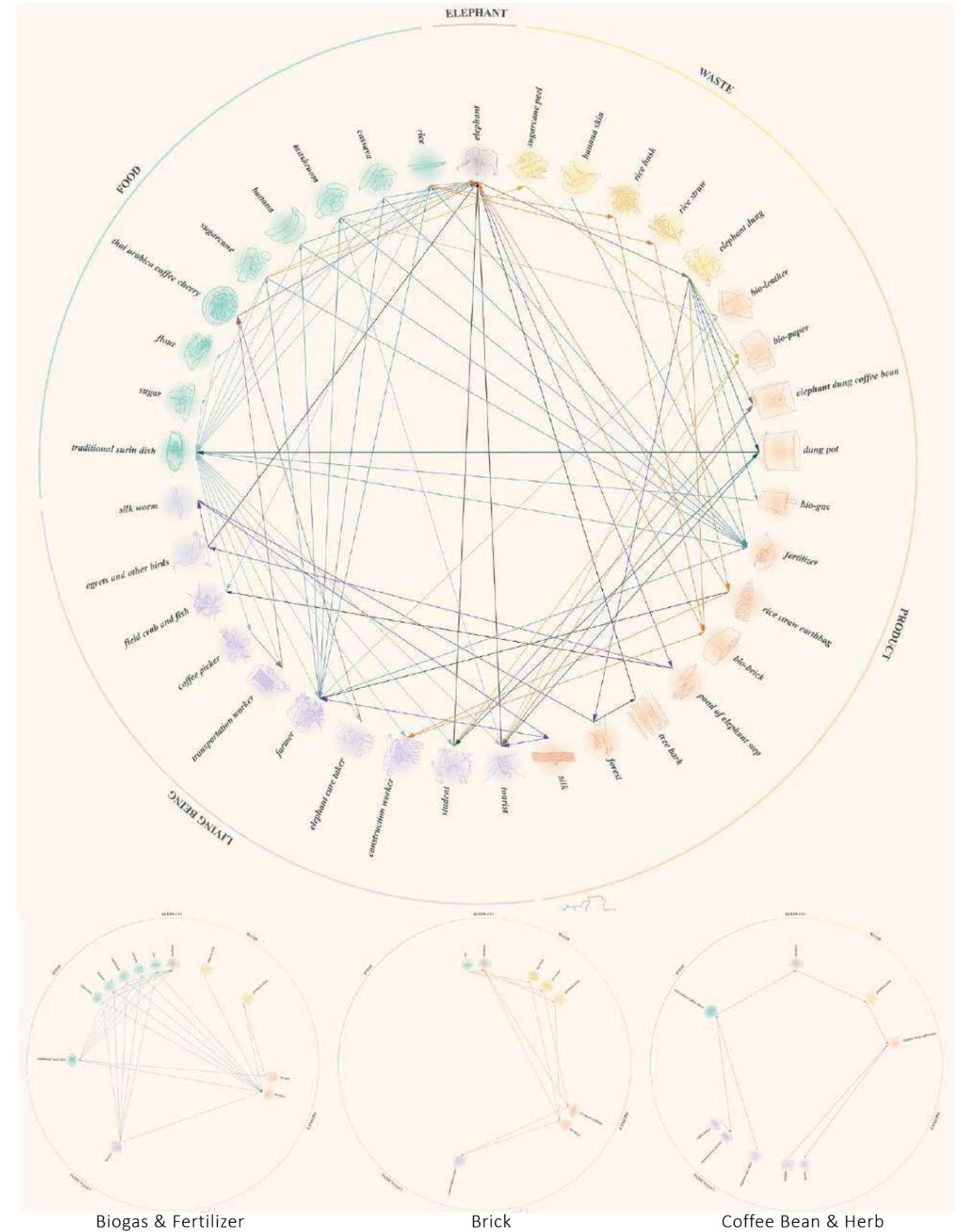
## Shelter of Shelter

In traditional Kui houses, elephants are treated as part of family members. Humans extend their roof to share with the elephants. To further extend the roof of elephants' and humans' houses, an area is created for public inter-species activities between private spaces of living as house-market.



## Build a Symbiotic Relationship

To build a new but also ancient lifestyle of exchanging between living beings, the project maps out the different needs and supply of varied beings and matches accordingly for exchange to happen in between.



## Shelter of Shelter

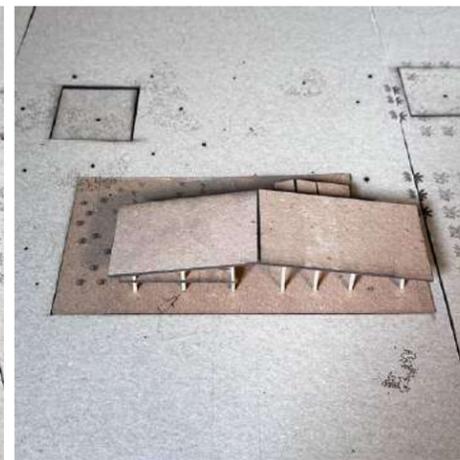


### Roof of Market

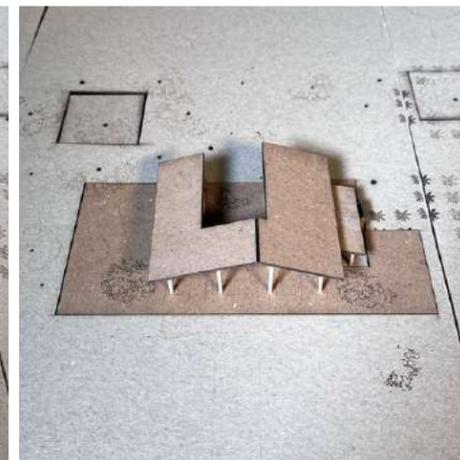
Following the tradition of reusing material , the project demolishes some structure to build for the new. Roofs are shaped in different ways for varied purposes. Some angles in one direction to collect water from the roof. Some differentiates entrances for elephants and humans by having different heights according to the distinct scales of living beings. Each family could choose roof and market type based on their own needs.



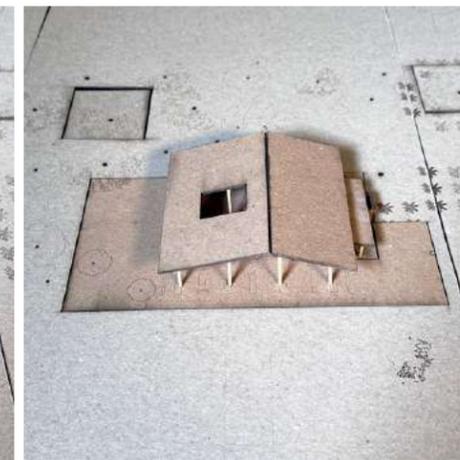
Existing House for Elephant and Human



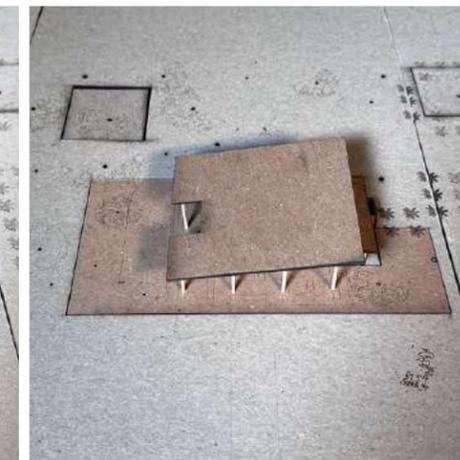
Grass Market with Kitchen



Coffee & Herb Market with Forest



Fabric Market with Theatre



Fruit Market with Pond



Soil Market with Mud Pool





### Start along the Main Road

While all of the existing houses in the village will be updated and reshaped to house the new activity of exchanging, the project starts along the road between the Elephant World and Ban Taklang Village as it's where the main circulation of everyone, both elephants and humans, will happen every day.



### Street Market

While originally, the houses are dispersed and distanced from each other, the visual appearance of big roofs extending from the houses set back to the front of the road connects the street as a continuous market with stops. In this way, the activity of exchanging is no longer limited within the unit of a single family but is extended to the entire village. Both elephants and humans could come in and out, go through different houses for buying and selling.



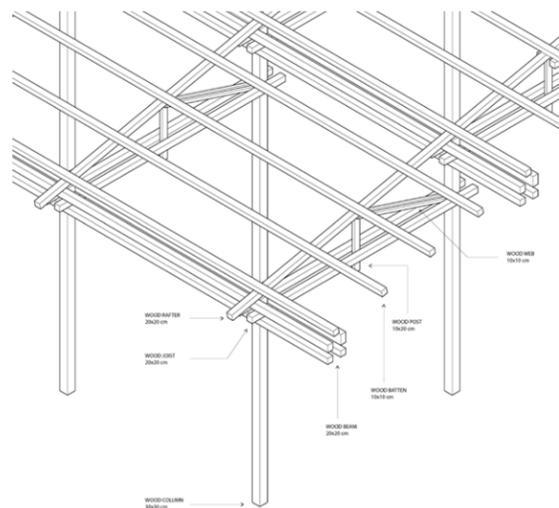
**Material from House-Market**

The simple structure of the house-market takes all its material from the market itself as well. The roof is of dry Napier grass, which is the food for elephants. The beams and columns use the woods of the demolished buildings on the site. The kiosk is of brick rammed by elephants. And the floor is of weaved grass mat to allow for the comfort of walking on the mud in rain.



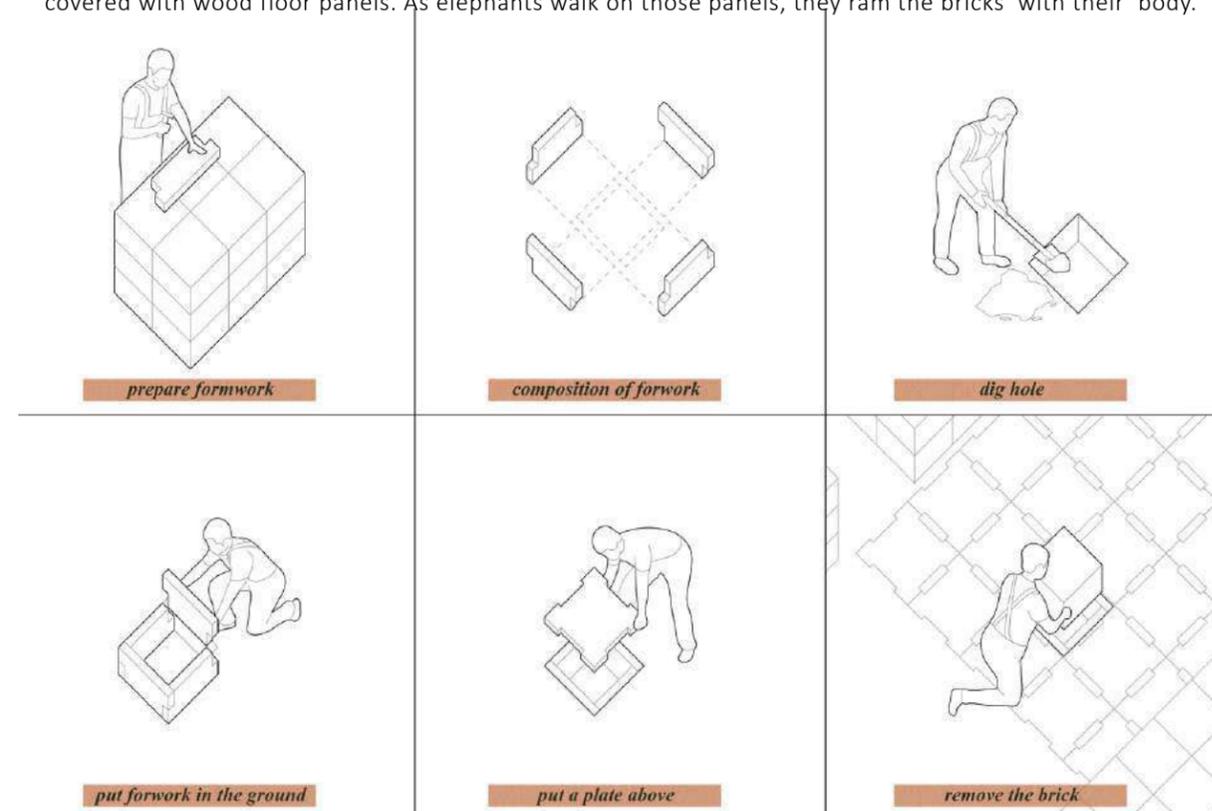
**Built by Elephant and Human**

As elephants share the house-market with the humans, they also contribute to the construction of buildings. The formworks for the rammed earth bricks are installed in the holes underground by humans in advance and covered with wood floor panels. As elephants walk on those panels, they ram the bricks with their body.



**Local Technique**

The simplicity of the market architecture is decorated with a full expression of the roof structure. Learning from the local buildings, the truss of the roofs allow for lightness and quick construction.



**Shelter of Shelter**

## Degree of Exchange

In the House-Market, the degree of exchange varies throughout time. During weekday, the social activity will be mainly happening between the elephants and the mahouts, as elephants eat and play, mahouts live-stream their daily life to earth money for buying food.

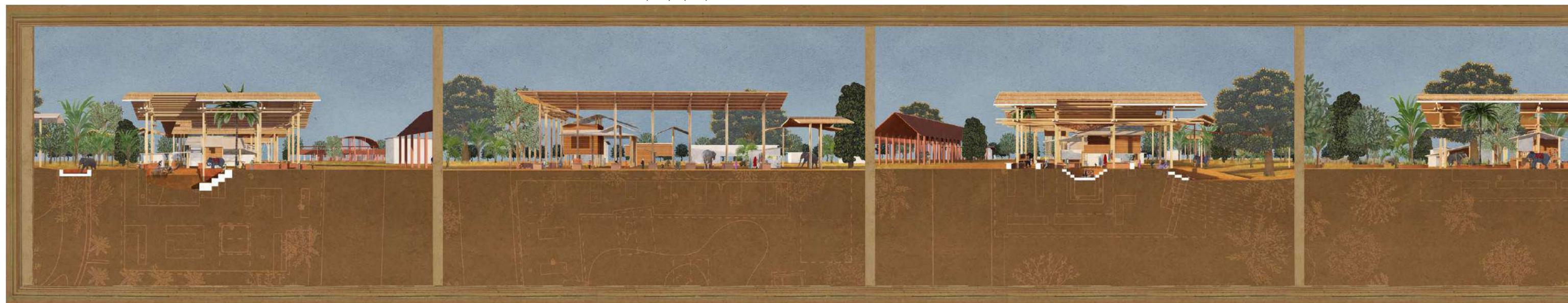
During the weekend, the house-market will be fully open as more visitors will come into the village to see elephants. Various types of markets happen under the roof. Elephants exchange with locals, tourists, as well as other animal.



Weekday (half open)



Weekend (fully open)



Fruit Market with Pond

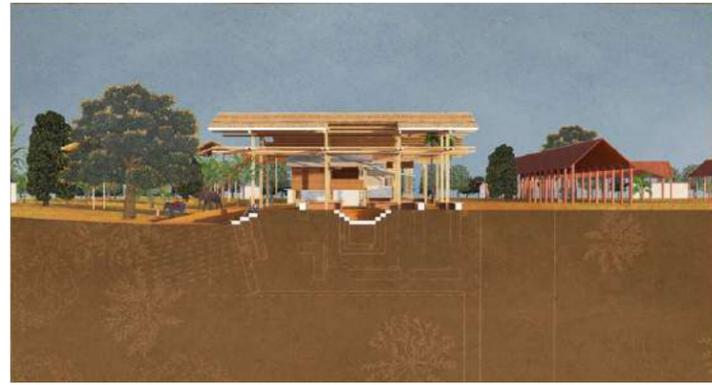
Soil Market with Mud Pool

Fabric Market with Theatre

## Ceremony in House-Market

Every day, markets start and end with ceremonies. In the morning, under the guidance of mahouts, the elephants will pull the fabric hanging from the roofs and help with tying the other side to the tree.

An event space under the red fabric roof colored by elephant dung is created for gathering. A concert of students from the school nearby singing with the elephants welcomed everyone to the house-market.



Ceremony start as elephants tying the fabric from roof to tree.



Students sing and dance with elephants.



Market starts.

## Growth in House-Market

The house-market is not built in one but rather grows over time. The simple structure of the roof is built quickly in the first 8 months to create a covered environment from the strong sunlight and rain. In this extension of the private house as a public space, mahouts gather together for social and elephants also get to meet with each other.

The brick formworks are installed underground to prepare for the second phase.

After one year, with enough rammed earth bricks made by elephants, it is ready to build the kiosk in the market and an elephant passageway surrounded by low walls for elephants to walk freely by themselves without disturbing others.

As they eat Napier grass and dispersed the seeds through their dung as they walk along these passageways, a grassland gradually appears in the back of the house-market.



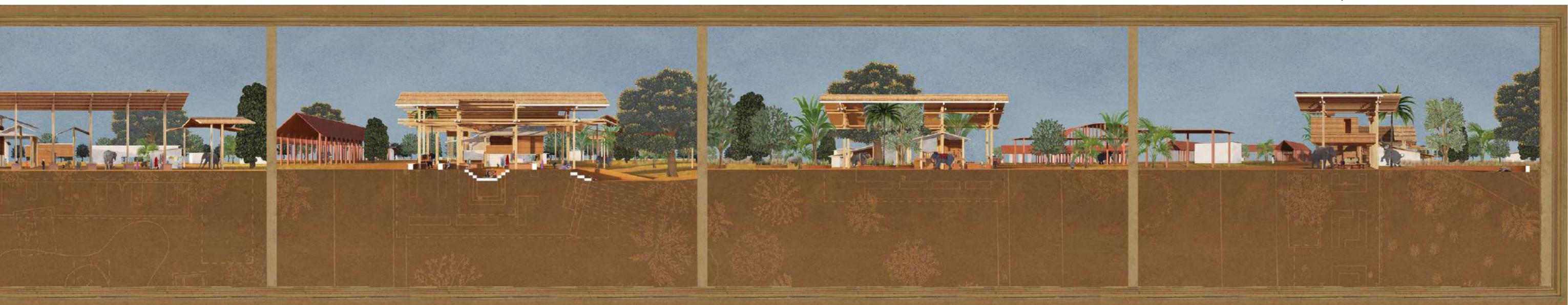
8 months



12 months



5 years



Fabric Market with Theatre

Coffee & Herb Market with Forest

Grass Market with Kitchen

## Dynamic Solidity

An Experiment of Fluid Soil

COURSE: Making with Earth  
DATE: Spring 2023  
INSTRUCTOR: Lola Ben-Alon  
TEAM: Zhuofei Tang, Zixiao Zhu

Dynamic Solidity aims to create dynamically shaped architectural components using a technique called poured earth, and drawing inspiration from traditional earthbag construction. The fabrication process revealed that using nonwoven permeable fabrics allows for the earth-based mixture to dry through evaporation.



**Open Memory**

**Open Construction**

**Open Location**

**Open Material**

**Open Dimension**

**Open Program**

**Open Structure**

**Open Interpretation**

**Chapter. V**

*A house for one, or for two, three, four? Within the grid, room has the magic to shrink and expand. Home grows as family grows. Generation after generation. It's a home not a house.*

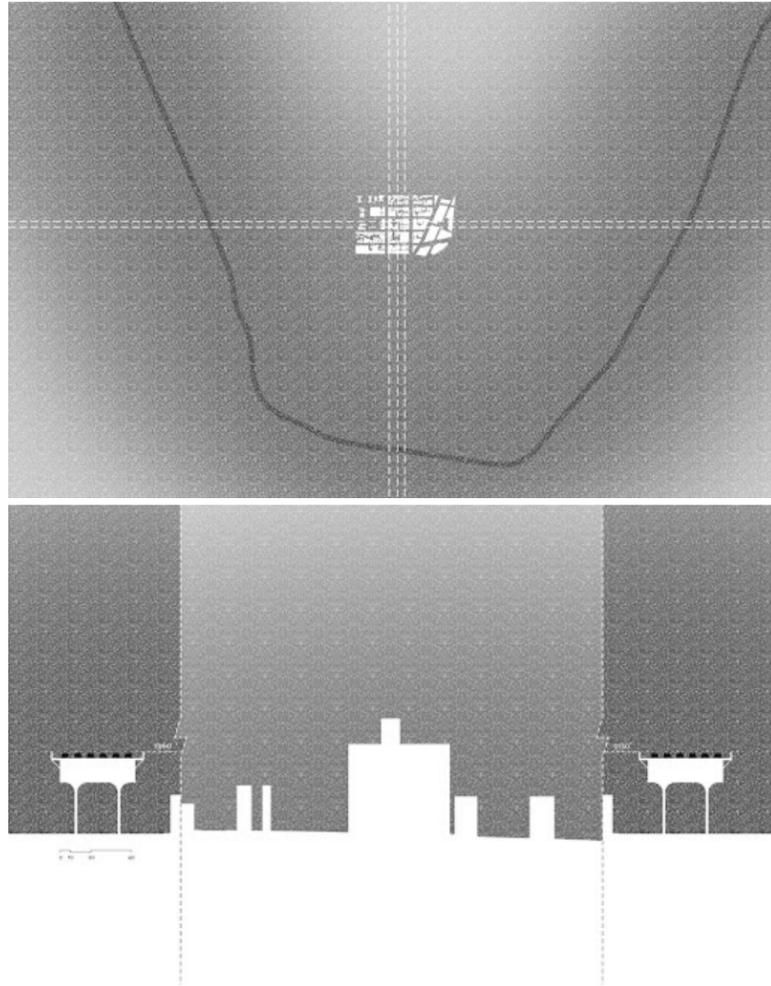


TYPE: Social Housing  
INSTRUCTOR: Erica Goetz  
TEAM: Jackie Pothier  
LOCATION: New York, New York, US  
DATE: Fall 2021

**Plug In Bronx**  
Collective Housing in Bronx

Located in the Hub, the center of Bronx, the project is aimed to build up not only an ever-changing landscape to meet with changing needs and lifestyles of locals, but also offering them a life-long home that could be inhabited for generations.

The Melrose neighborhood, the site of the collective-housing has a long history of suffering of environmental impact from neighboring industrial and distribution centers, as well as large highways. These early study diagrams analyze the distance of our site to neighboring highway systems, and reveal its potential impact of pollution on the site. The environmental impact of such factors, and their subsequent impact on the health of the neighborhood requires environmentally-sensitive attitudes to the site of housing. Further, considerations emerged over whether the site could provide commercial access specifically for and by the residents of Melrose.

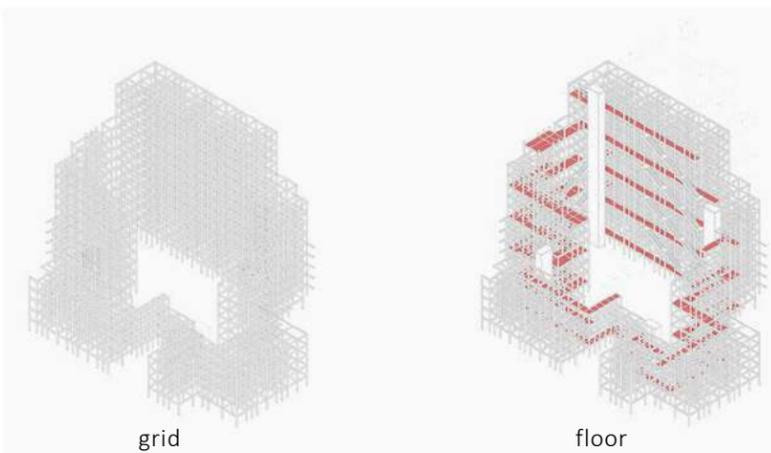


**Site Analysis**

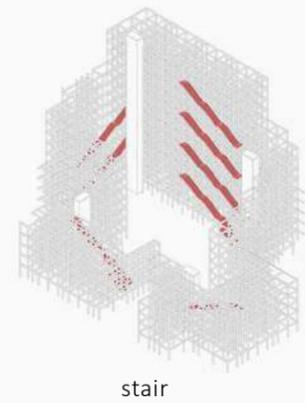


**Plug in Housing**

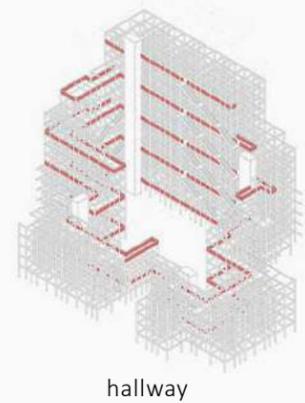
The collection of prefabricated elements allows quick and variable construction according to other various needs of the residents.



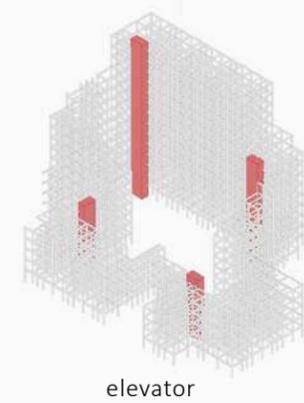
**Elements on Grid**



stair



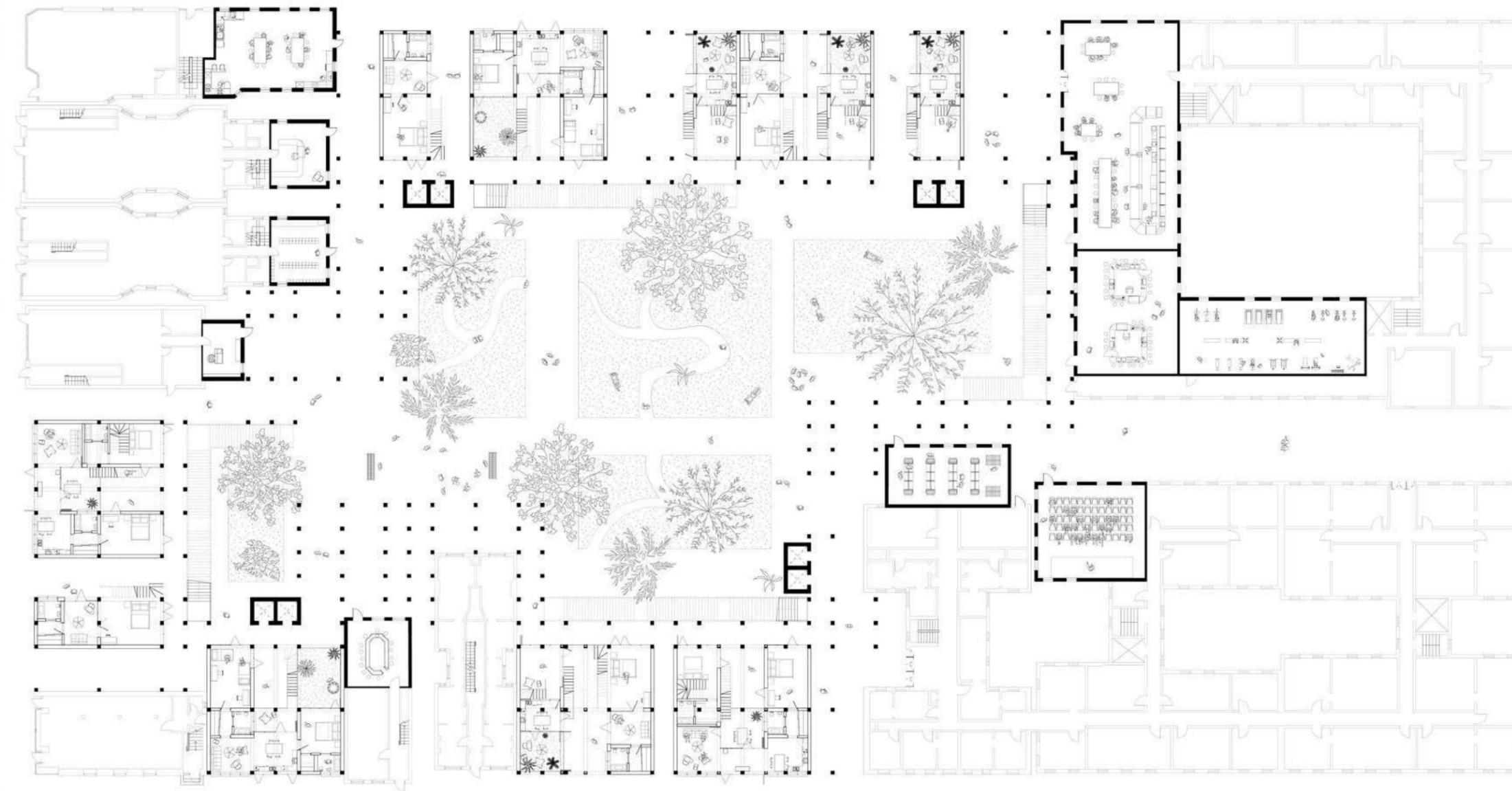
hallway



elevator

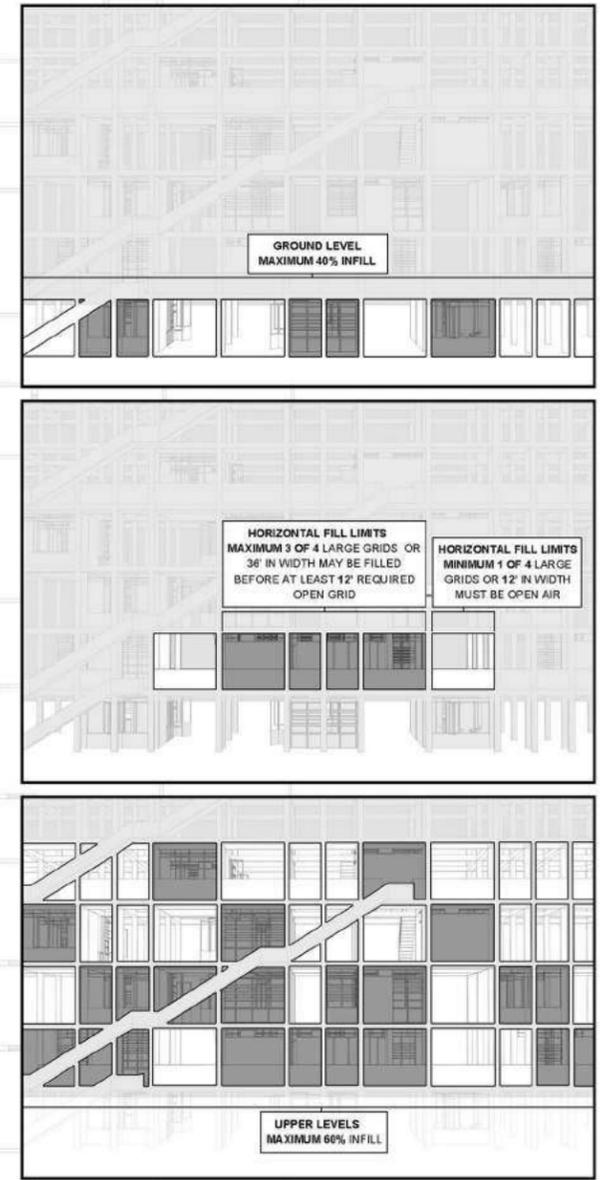


PLUG IN BRONX



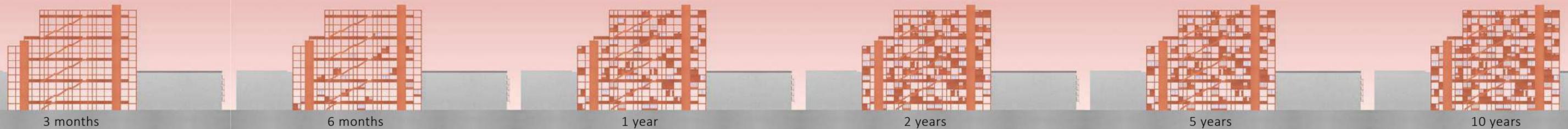
**Mixed Used Ground Floor**

On the ground floor, most of the existing residences are kept except the public senior housing which is outdated with poor facilities. The residents of this building will move into the proposed Plug In housing together with other new residents. To engage these people into a stronger connected community and offer them better facilities, part of the existing buildings on the ground floor will be reprogrammed into commercial and public spaces, including shops, markets, offices, library and gym, that are also open to the locals.

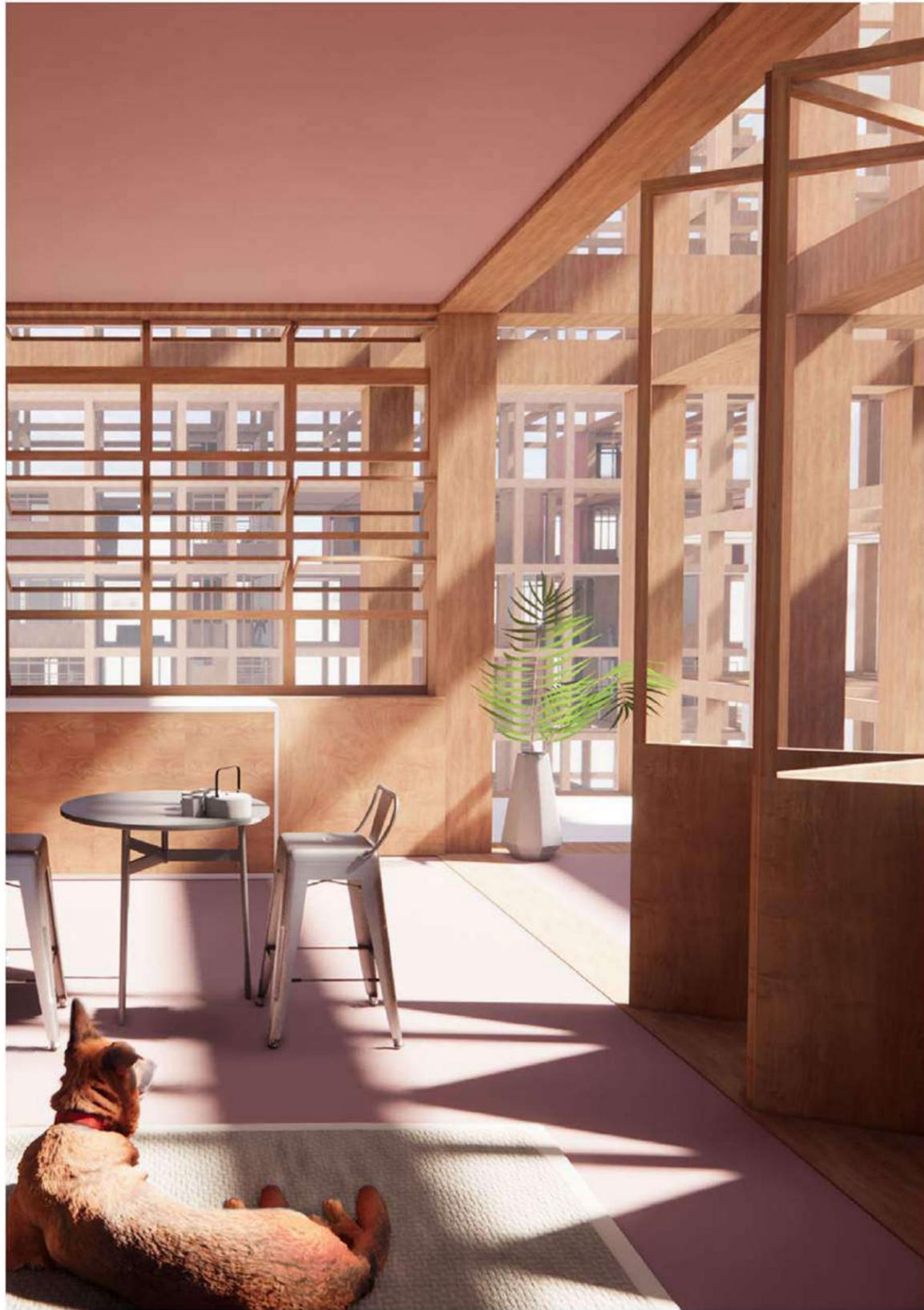


**Vertical Zoning Regulations**

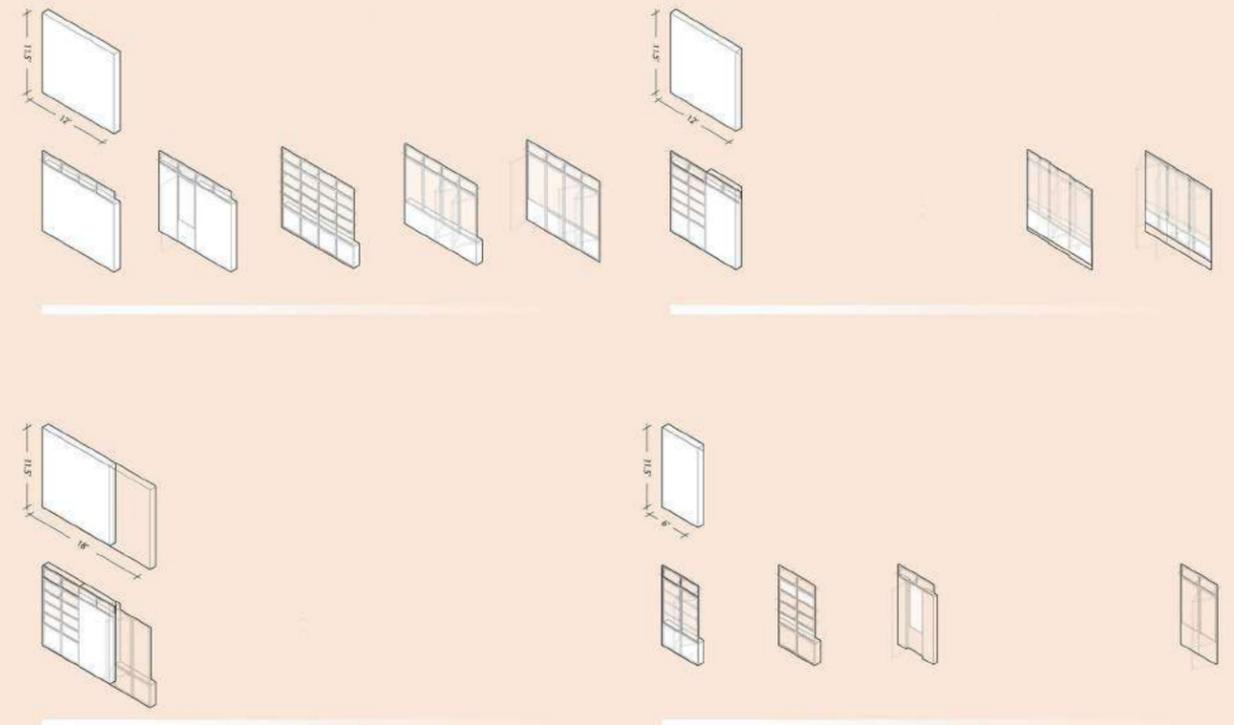
Though it may be impossible to predict how the units in the Plug-In House may result in layout, form, occupation, and so forth, a set of vertical zoning regulations is implemented to ensure again overcrowding and grids.







**Unit in the Grid**

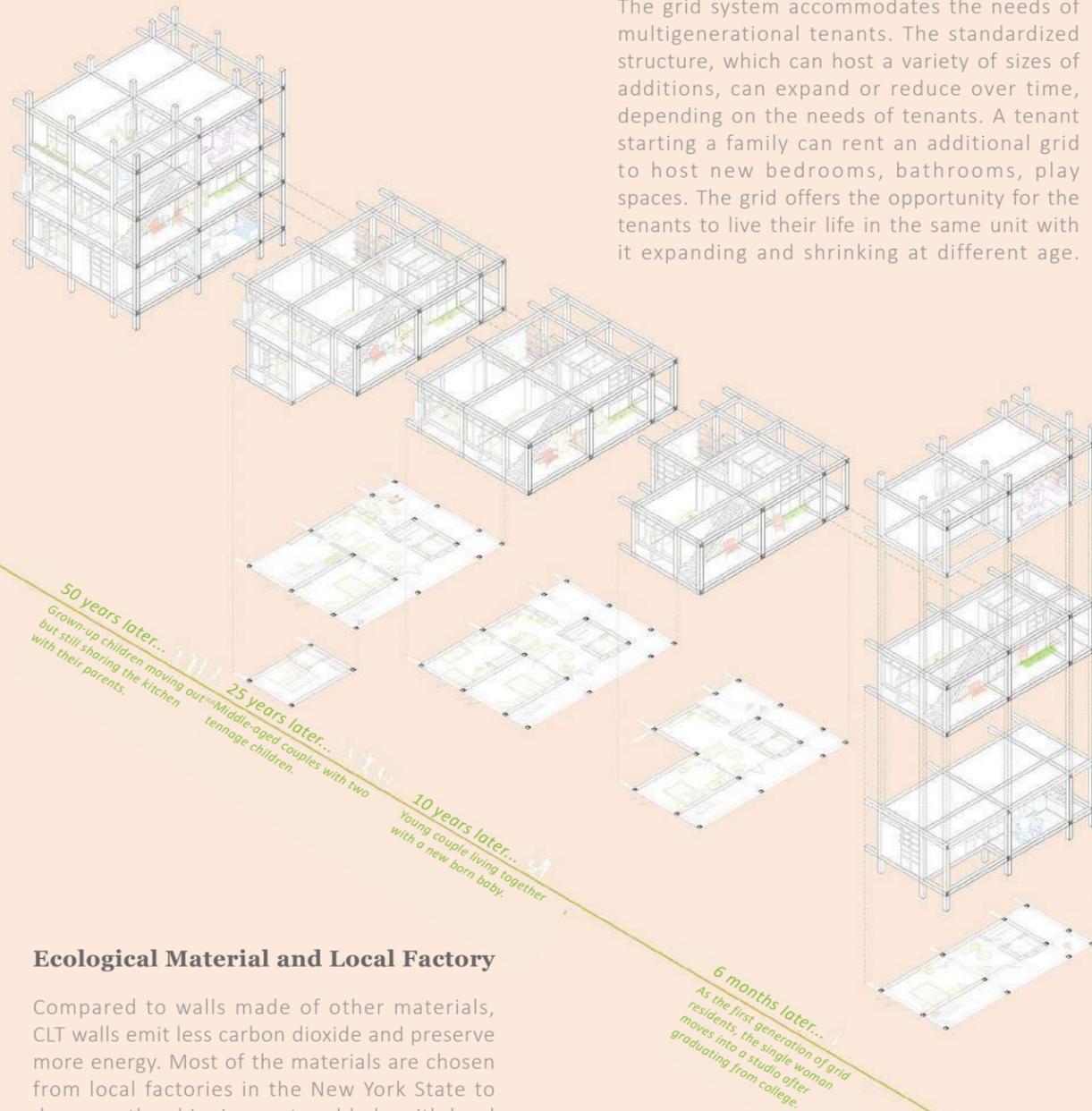


**Assembly of Prefabricated Clt Members**

The members of the complex, all columns, walls and floors are designed and prefabricated. Before they move in, each resident will receive a brochure of the wall selection and order the members they want.

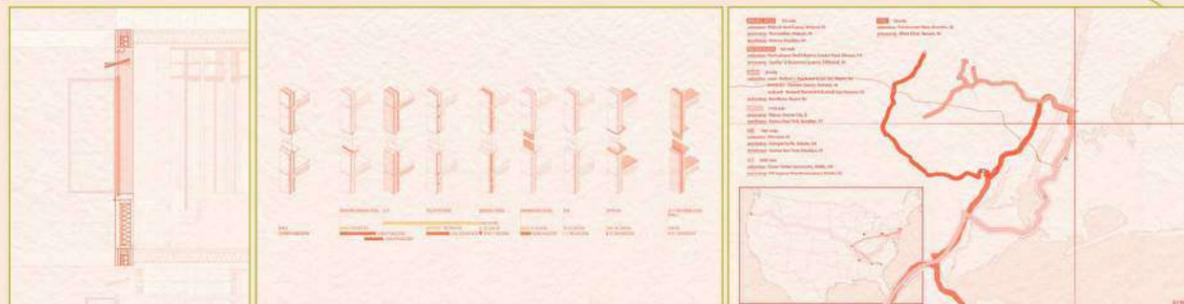
## Home For Generations

The grid system accommodates the needs of multigenerational tenants. The standardized structure, which can host a variety of sizes of additions, can expand or reduce over time, depending on the needs of tenants. A tenant starting a family can rent an additional grid to host new bedrooms, bathrooms, play spaces. The grid offers the opportunity for the tenants to live their life in the same unit with it expanding and shrinking at different age.

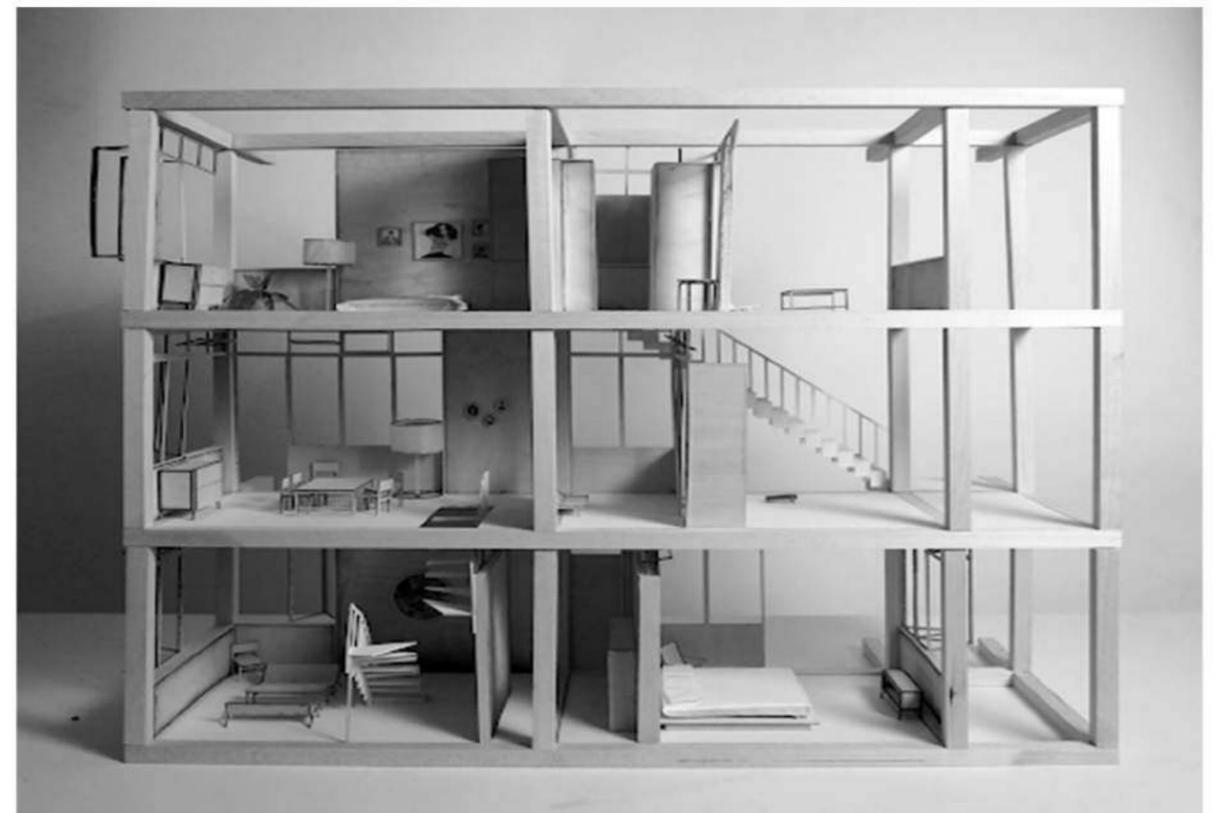


## Ecological Material and Local Factory

Compared to walls made of other materials, CLT walls emit less carbon dioxide and preserve more energy. Most of the materials are chosen from local factories in the New York State to decrease the shipping cost and help with local business.



view from the one bedroom unit looking into the shared patio



units cluster around the shared patio



**Units Cluster Around the Shared Patio**

Many components of the standard unit walls are operable. Windows with adjustable louvers allow more or less air flow and light, and large doors turn walls into breezeways. The operable nature goals for sustainability and flexibility.



**Units Cluster Around the Shared Patio**

The four apartments, utilizing three different levels, share common private stairs and outdoor spaces. Parts of each apartment share levels with parts of other apartments, so that opening the large living room partitions can expand a private interior space to a shared exterior space.



**Open Memory**

**Open Construction**

**Open Location**

**Open Material**

**Open Dimension**

**Open Program**

**Open Structure**

**Open Interpretation**

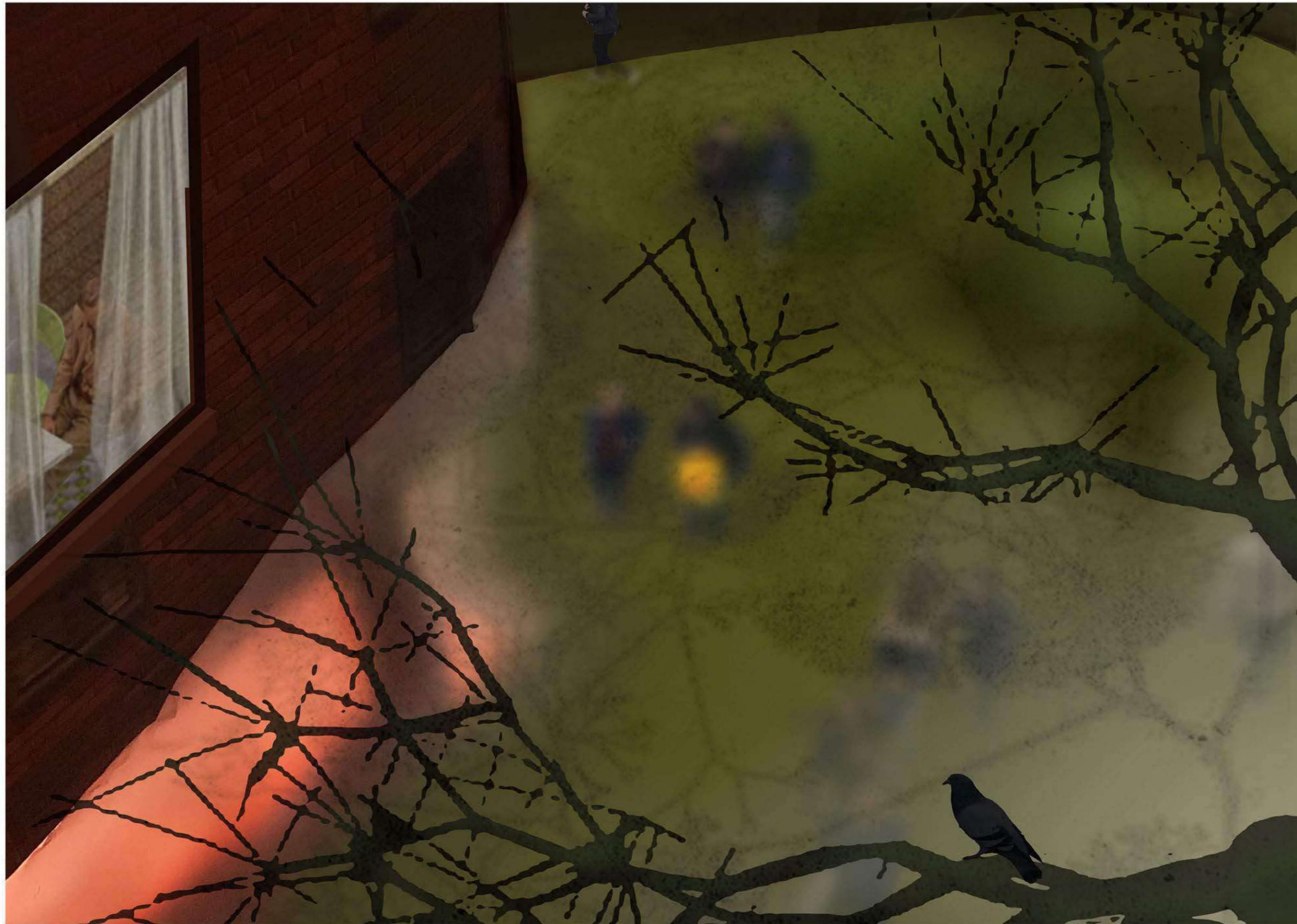
**Chapter. VI**

*The soft bubble, weaven by the trash bags, is inflated and deflated. From windows and doors, it enters into building and comes out. It has no shape. It is formed by the surrounding. In a theatre, it becomes a theatre. In a classroom, it becomes a classroom.*

INSTRUCTOR: Ana Puigjaner  
LOCATION: New York, New York, US  
DATE: Fall 2020

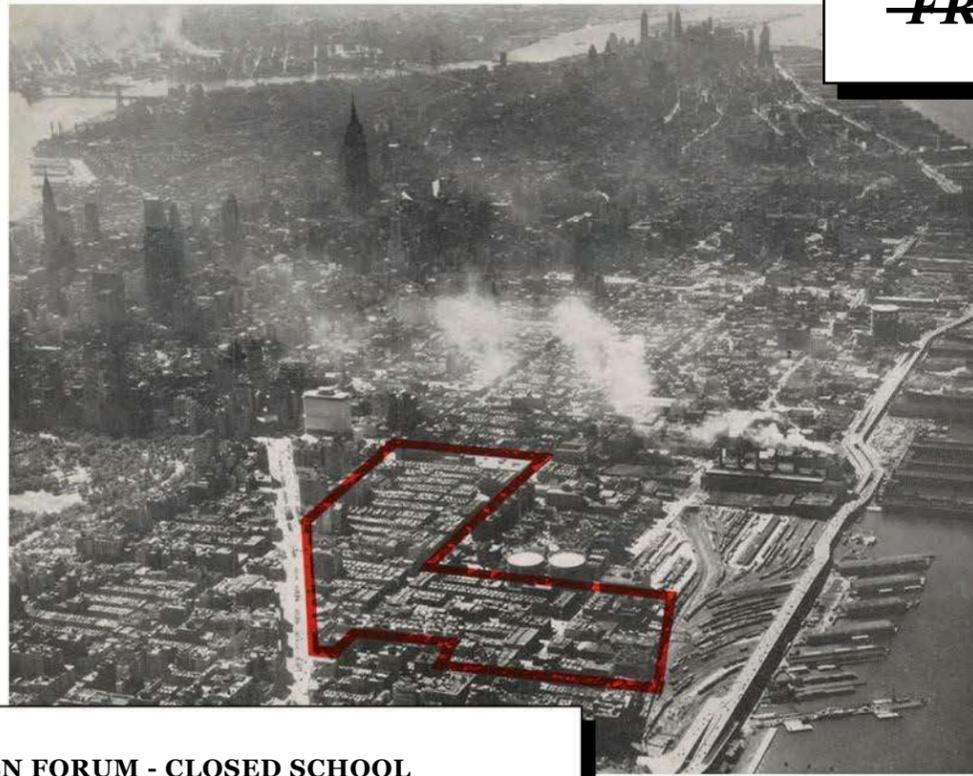
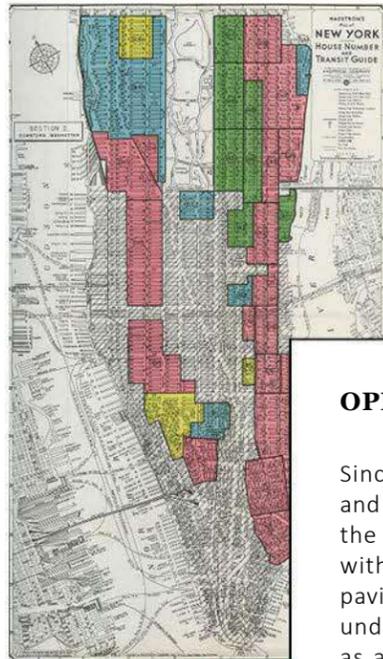
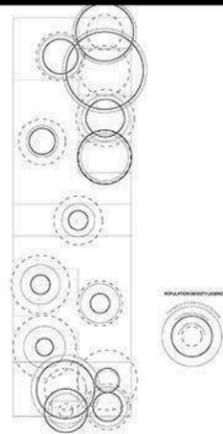
### **NEW YORK BUBBLE** San Juan Hill After School Forum

The story happened along the Broadway is a history of segregation. Specifically in the Upper West Side, the Urban Renewal project significantly affected the race structure in the area. While housing contributes heavily to the gentrification, the unequal distribution of education resources in the neighborhood gradually worsen the situation and eventually leave no hope for any remission. The division among residence and school broadens the gap between people. In this project, a system of after school programs is designed to deal with the segregation issue by rebuilding the connection between the divided communities in the area.



**SEGREGATION**

Though the Upper West Side appears to be home of rich white people only, nearly 40% of the population sharing the area are from different backgrounds. A lot of them are identified as African American and Puerto Rican with low income. Invisible to the view of public, those people live away from the center of the neighborhood and aggregate around the northeast and southeast corners, mostly around NYCHA (New York City Housing Authority) projects, the public housing offered by the city to people in need.



**OPEN FORUM - CLOSED SCHOOL**

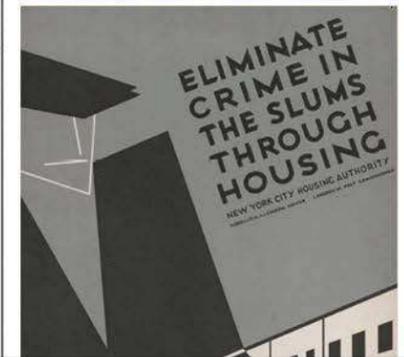
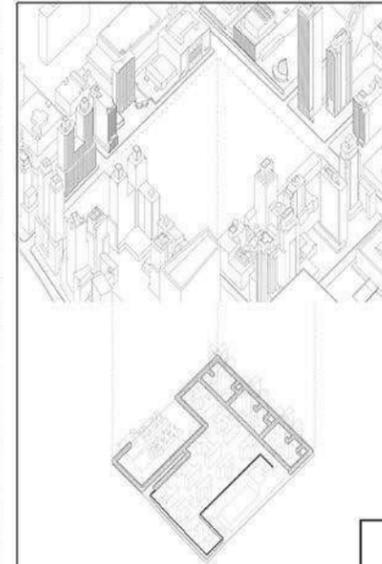
Since the late 19th century, when African American and Puerto Rican moved to San Juan Hill (which is now the Upper West Side) and built their neighborhood, with limited economic support, they built school as pavilion open to both nature and community. School under such condition became ancient Roman forum, as a place that welcomes everyone and open to all ideas.

However, as the Urban Renewal started in 1930s, the goal to wipe out slum in the city turned down all those free structures and instead build up "safer" and "better" schools with solid walls and iron fences. Now, not only education becomes a privilege that only certain people could enjoy but also the subject of learning is limited to only books and nothing from nature and community is included.



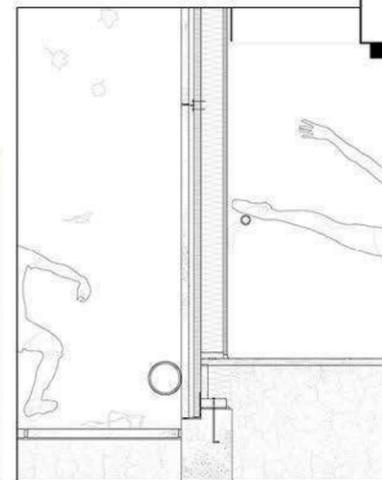
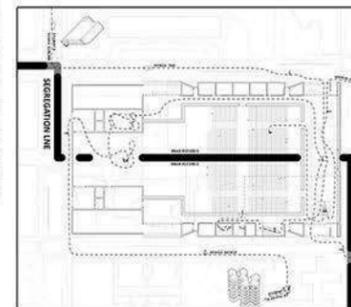
**~~FREE EDUCATION~~**

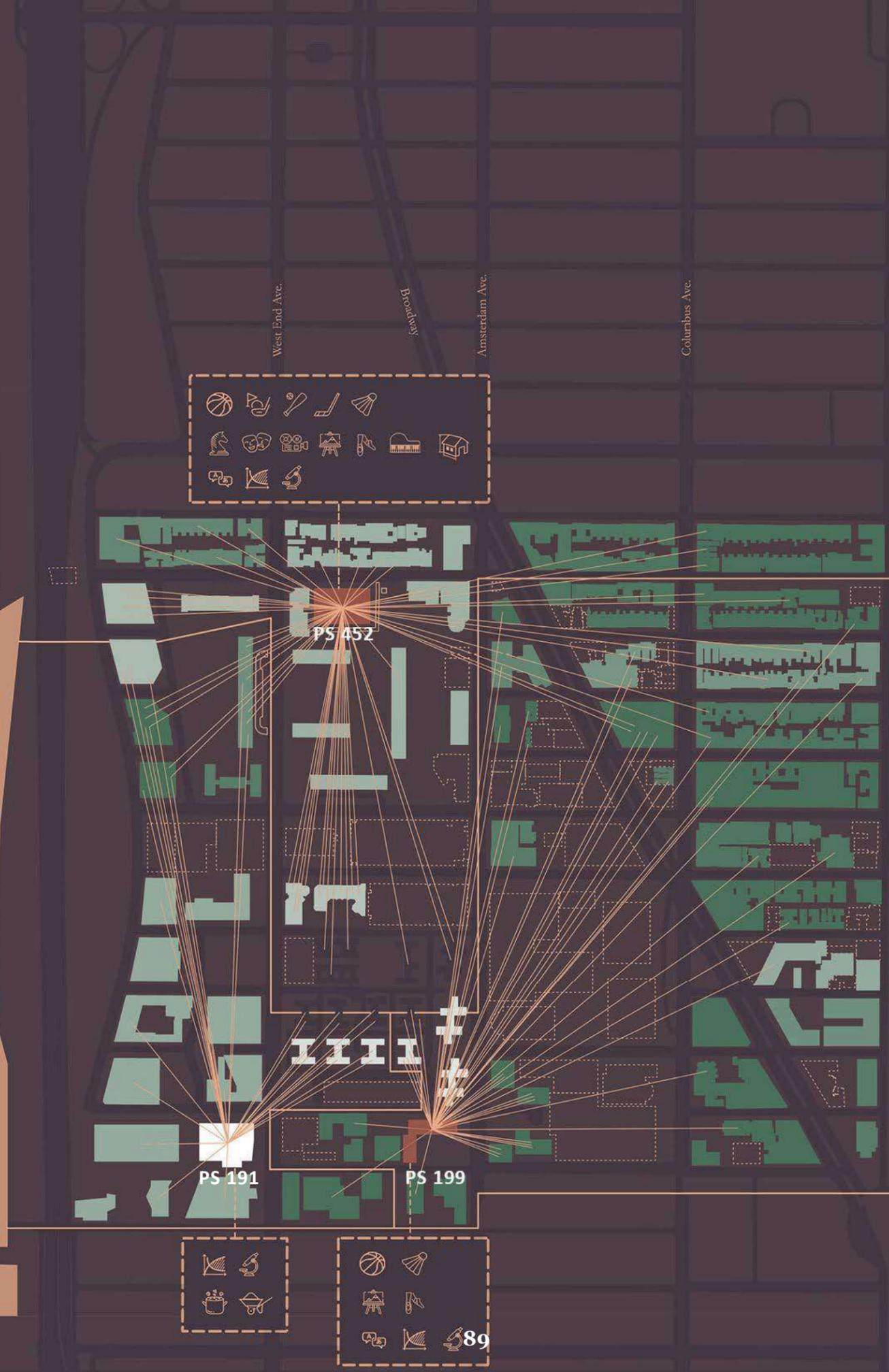
"free" adj.  
not limited or controlled;  
costing nothing, or not needing to be paid for



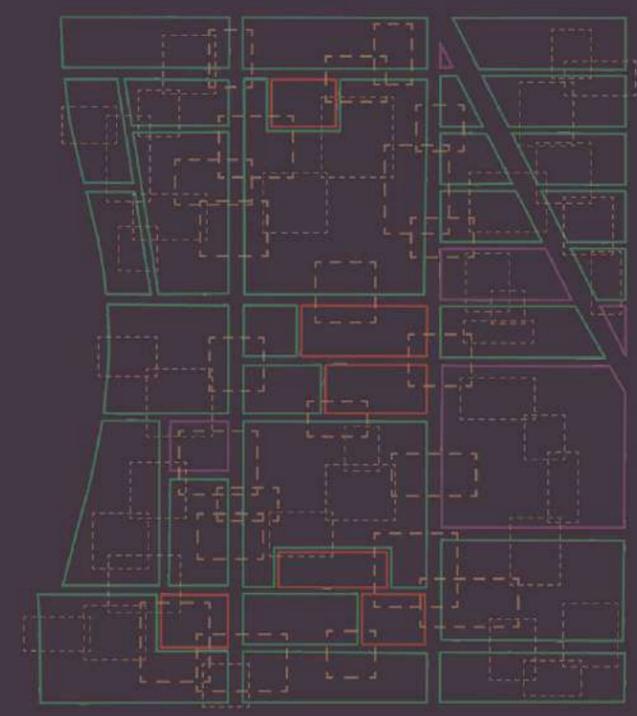
**SCHOOL AS DIVIDER**

Though enrollment at school is regulated to allow for a diverse group of students, the reality is that parents still choose to have their kids stay with those from similar background. As a result school deviates from its original goal as freeing young generation with all possibilities but instead trapping them in a solid frame.





- Legend
- 20 Public School Students
  - School Zoning Lines
  - Commercial Buildings



**rebuild the connection**

As the proposed after school spaces disperse around the area, they connect the previously separated housing, schools and neighborhood and thus shape a closely connected community.

- EXISTING SEPARATED BLOCK
- RESIDENCE
  - SCHOOL
  - PUBLIC
- PROPOSED CONNECTION
- STUDY/SPORTS
  - ART/PRACTICE



**Reuse the vacancy**

The new after school spaces will grow on the existing indoor and outdoor vacant lots in the neighborhood and provide opportunities for education and exploration for not only kids but also residents of other ages in the area, rebuilding the open forum for everyone.

- PROPOSED CONNECTION
- ART
  - SPORTS
  - STUDY
  - PRACTICE
- VACANT LOT
- OUTDOOR
  - INDOOR
  - INSTITUTION



**Entire Neighborhood as Open Forum**

Four types of after school bubble with varying looks and functions will be spread out in the Upper West Side, some time along the street or in the backyard, some time on the plaza or in the lobby... They are programmed not only for students, but also for adults and seniors. As they decentralize the education resources, knowledge is offered to those residents out of sight. Eventually, the entire Upper West Side neighborhood will be turned into a campus open to all.



**01 Study**

Two layers of bubbles.

The outer bubble curves up and down for the sufficient contact with nature; the inner one is more closed for indoor activity.

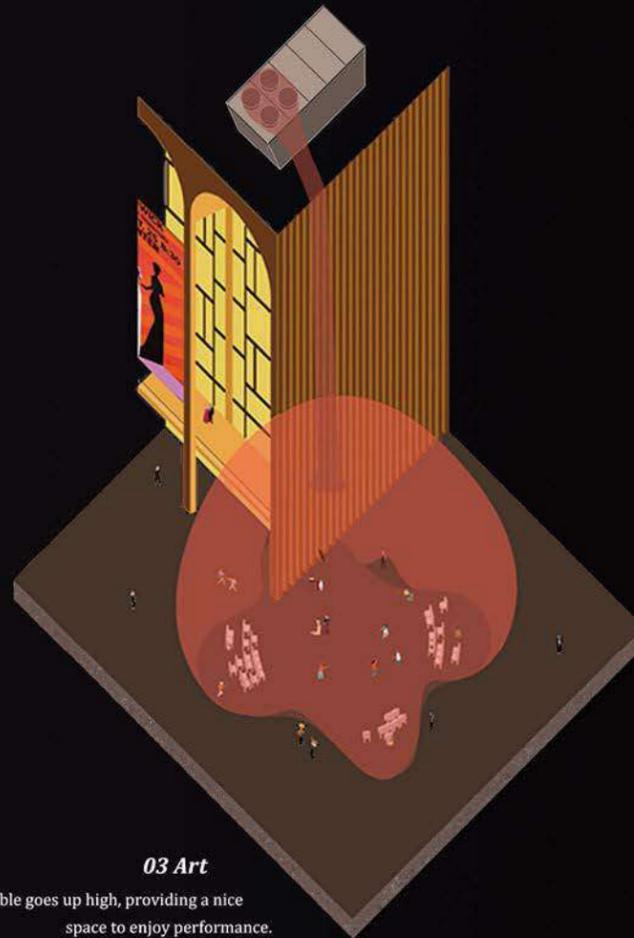
**02 Practice**

The bubble is a canopy having over. Going up along the boundary, it invites the passing passengers to see the plantation/ market/ construction



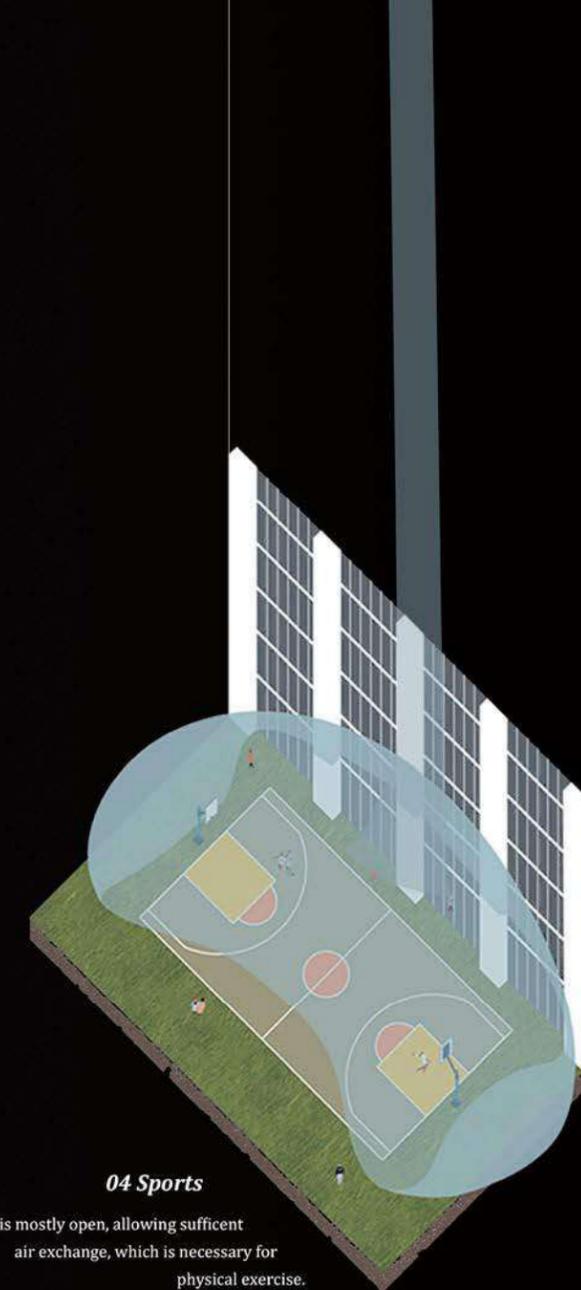
**02 Practice**

The bubble is a canopy having over.  
Going up along the boundary,  
it invites the passing passengers to enjoy  
the plantation/ market/ construction inside.



**03 Art**

The bubble goes up high, providing a nice  
space to enjoy performance.



**04 Sports**

The bubble is mostly open, allowing sufficient  
air exchange, which is necessary for  
physical exercise.

**Bubble Up**

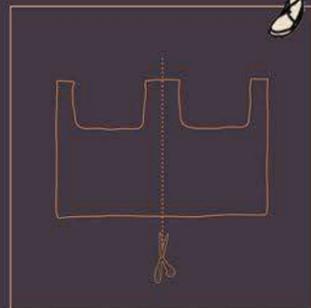
By their functions, the after school bubbles are classified into four types with different colors and shapes. Each bubble has its nose growing up all the way to the roof of the building it is attached to. Through its connection with the heating system of the existing building, it inhales and inflates to its full shape. Those noses, as they climb all the way to the roof, are visible to the students on the ground from far away. On their way from home to school and back, students can easily recognize the after school bubbles along the way and find their semi-destination.

# Manual For After School Bubble Made of Plastic Bags

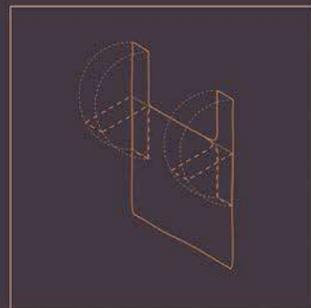
- 1 Inflated Sliding Door
- 2 1" Steel Bolts
- 3 2" x 2" Glulam Door Frame
- 4 Disposed Plastic Bags



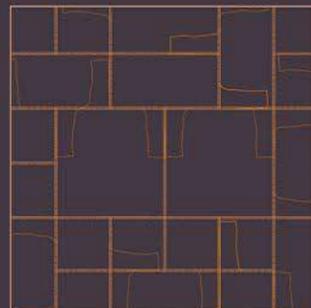
Find a disposed collective bag.



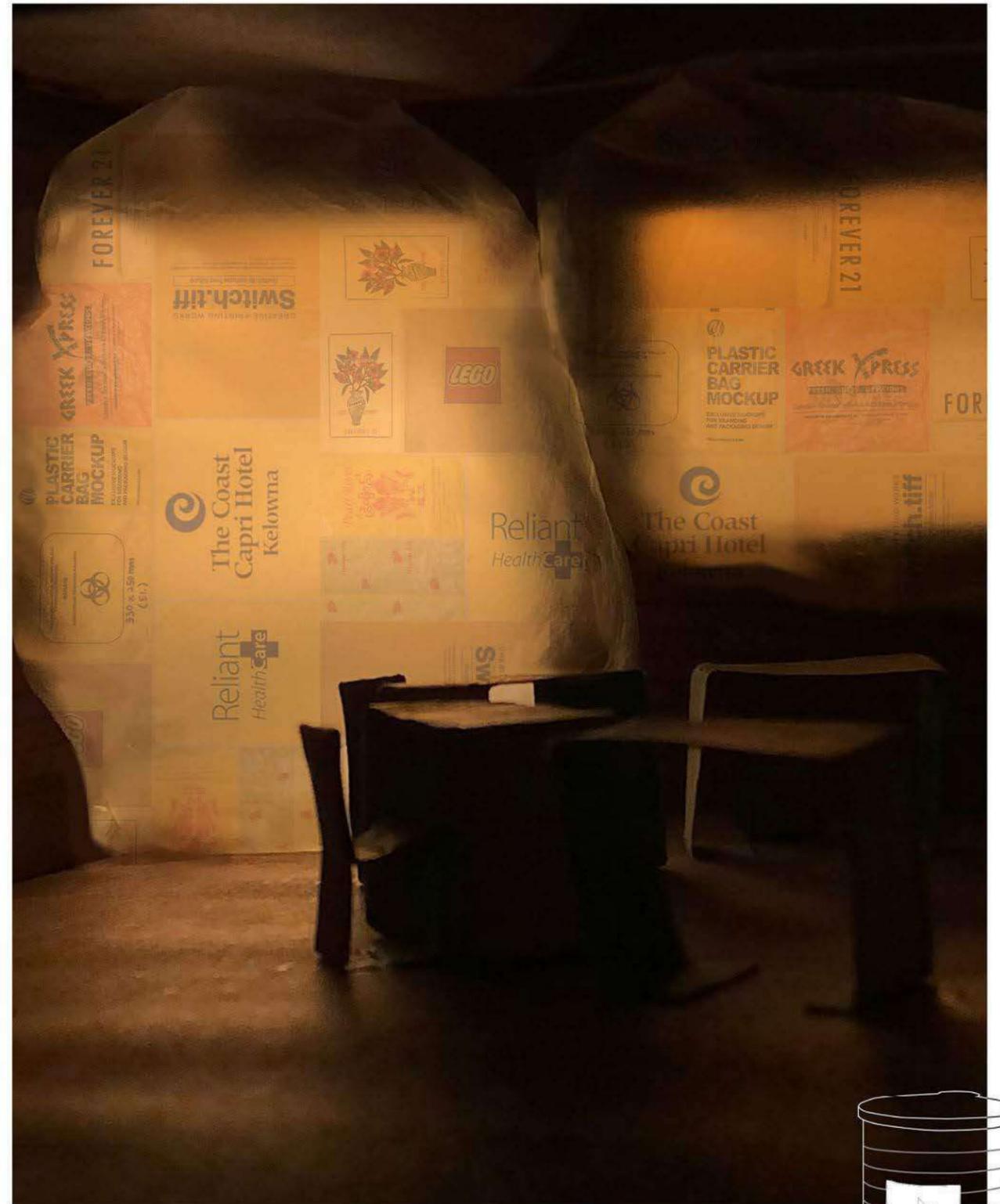
Cut it into 2 pieces.



Fold the handlers in and seal them with the bag.



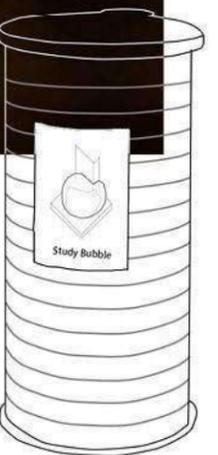
Seal all the bags side by side with 1/4" joints.

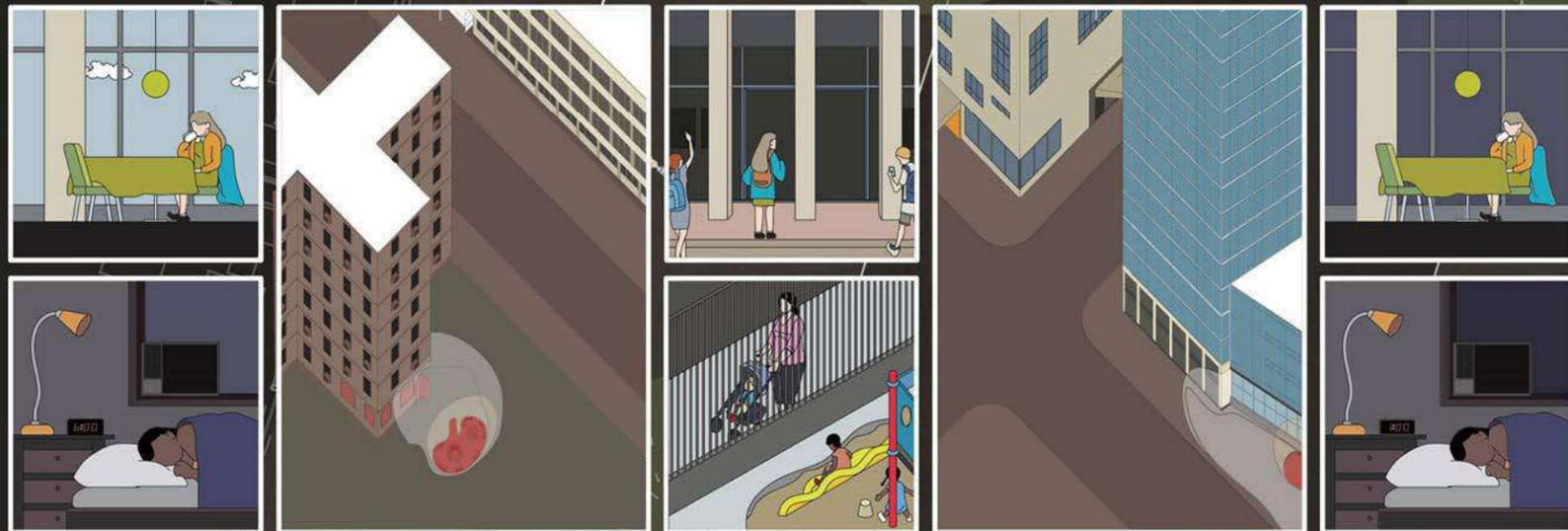


## Building Our Own Future

The bubbles are made of disposed plastic bags. By putting recycled trash bins all around the neighborhood, the entire community help with building up the open forum. They build for themselves.

New York Bubble





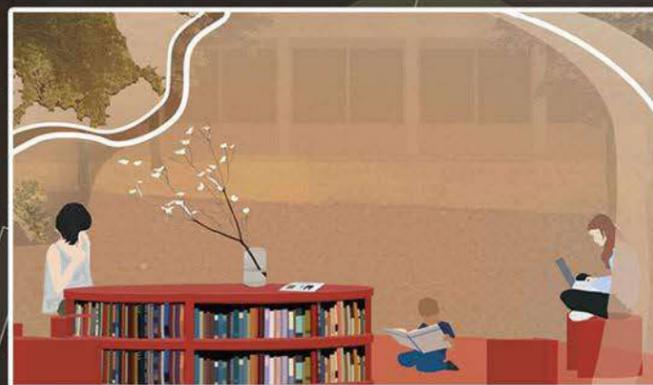
**Intersection**

The locations of the after school bubbles create unprecedented opportunities for local students to be exposed to their peers from other schools and share their time and space together.

The cartoon above shows the new intersection.

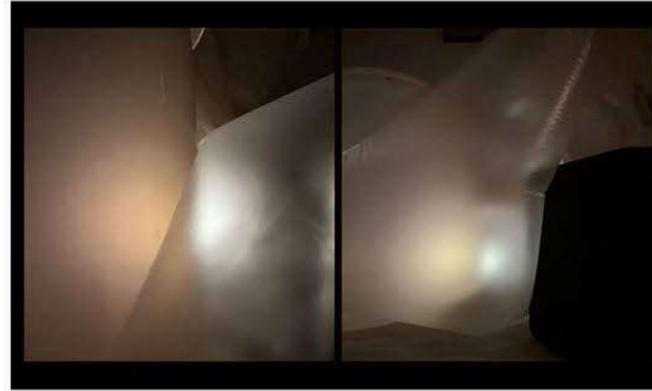
The upper one is the story line of Eleanor, a white girl living in One West End Tower and going to PS 199. The lower is of Alex, a black girl living in NYCHA and going to PS 191. On each school day, the two girls have to go across the boundary to get to their school in the other's zone. However, they never meet with each other because of the solid boundary created by the architecture of school and home.

Now the after school bubbles help the two develop a new relationship with each other. Those bubbles in each zone allow them to choose either one near school or home. No matter which their choice is, the previously non-intersecting stories of the girls will now start to mingle with each other.



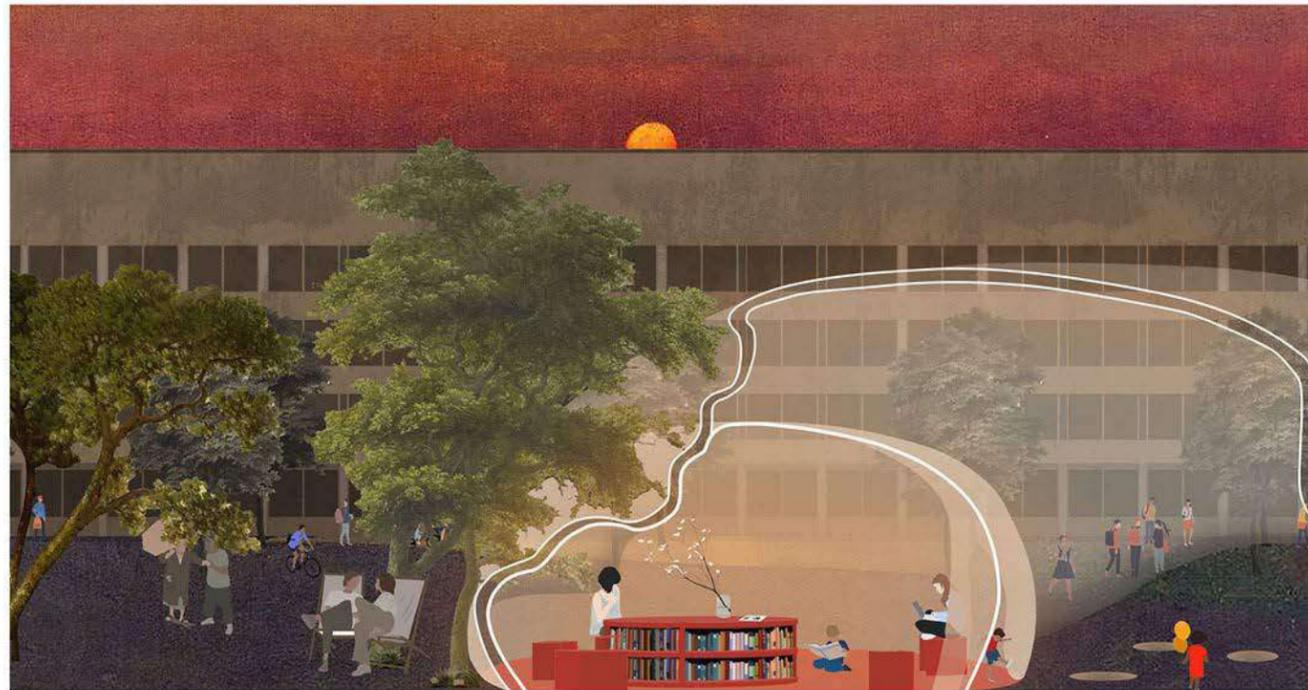
Across the schools are the bubbles glowing gently and catching the attention of students and leading their way into the unspotted residence area.





### Soft Bubble

The form of the after school space is a transparent self-illuminating plastic bubble. The softness of the surface allow it to be molded by its surroundings. The bubble gently squeezes into the building through the openings, imperceptibly welcome people into the new proposed space on the previously unoccupied ground floor.



### Neighborhood Living Room

The vacant rooms on the ground floor is reprogrammed to hold the public activity for the local residents during time other than after school. It is purposed so for time sharing among the community.

Open Memory

Open Construction

Open Location

Open Material

Open Dimension

Open Program

**Open Structure**

Open Interpretation

**Chapter. VII**

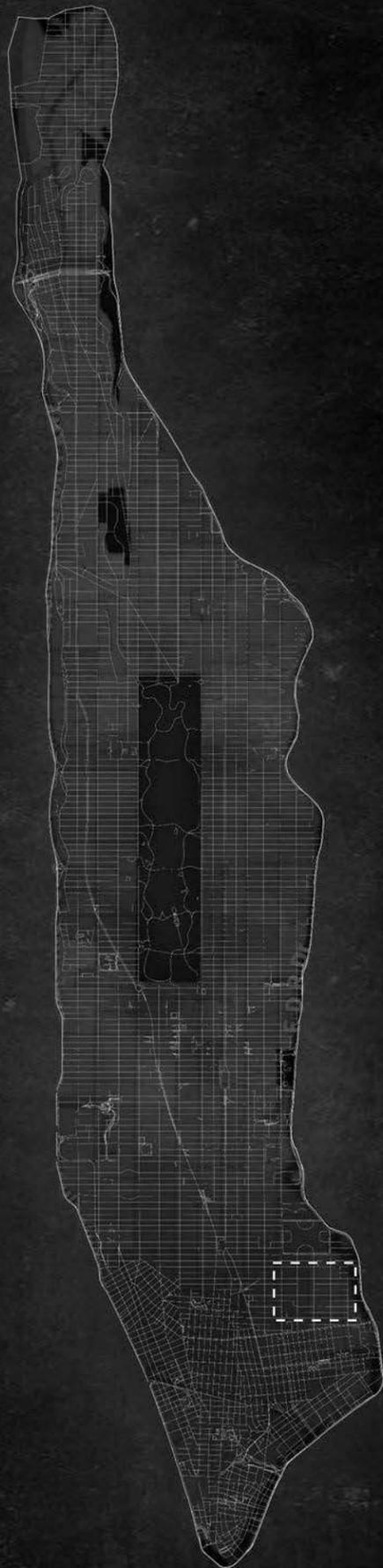
*Inhabit in the wall. The wall is the space. A row of clothes, or a stack of books. All can become walls.*

INSTRUCTOR: Karla Rothstein  
LOCATION: New York, New York, US  
DATE: Spring 2021

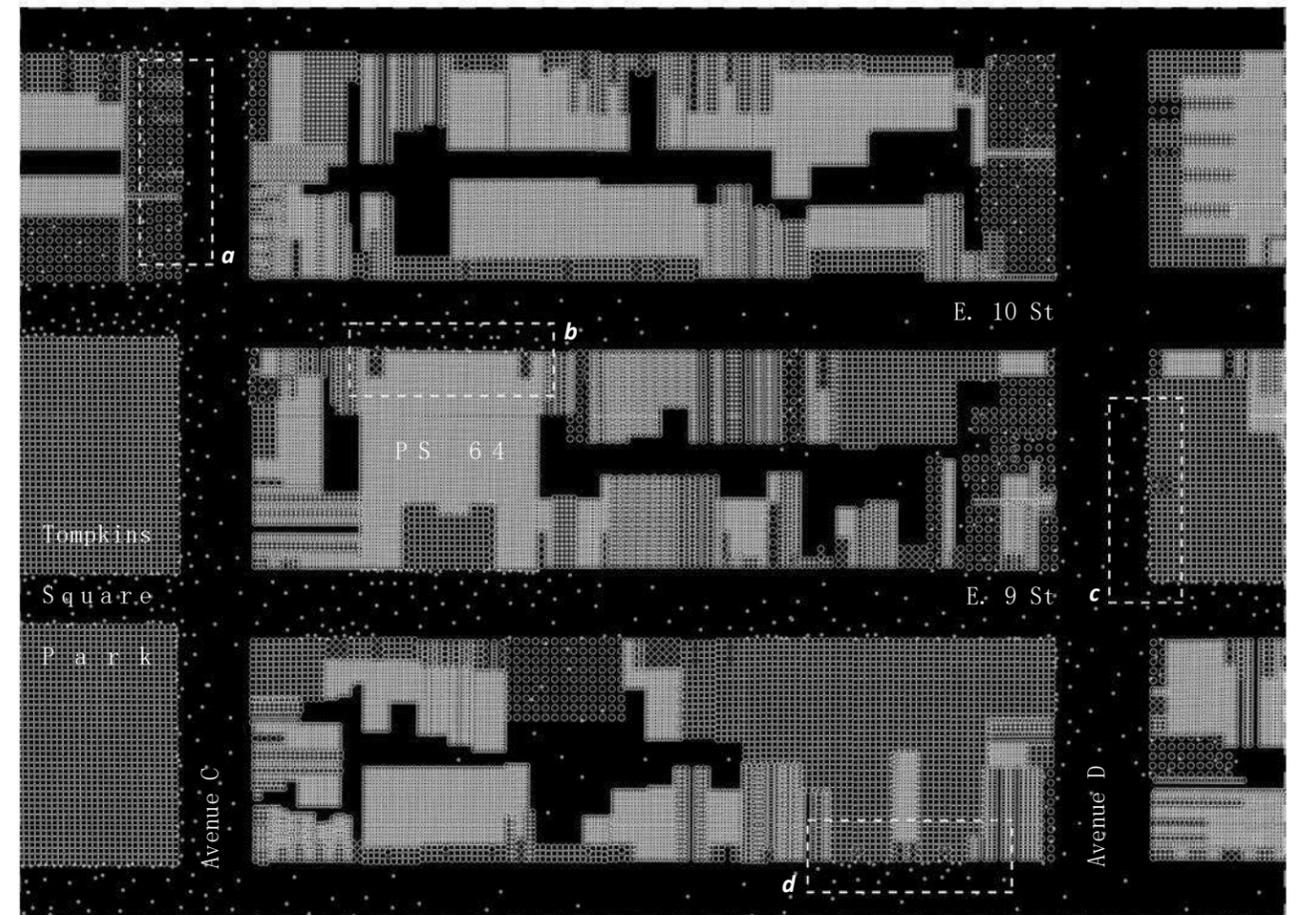
The flow of school is organized through fluctuations in attraction and repellency - bounding and unbounding. Voids allow changes in intensity and scale. With varying degrees of solidity among the boundary of rooms, each space and program has different levels of flexibility. While some are like weeds, actively interacting with the surrounding, others are rock, tough and everlasting. Around these, a river of activity runs through the school, introducing constantly changing scenes. The architectural flexibility reflects a pedagogy where students, teachers, parents, or citizens fully engage with and control their environment as well as experience and understand the surrounding.

**BOUNDING VOIDS**  
A Public School in Alphabet City

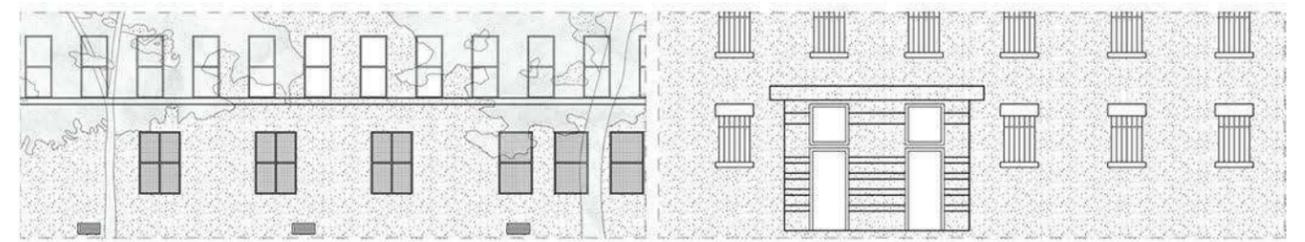




Alphabet City  
with well-defined structures, serves only a  
limited portion of citizens

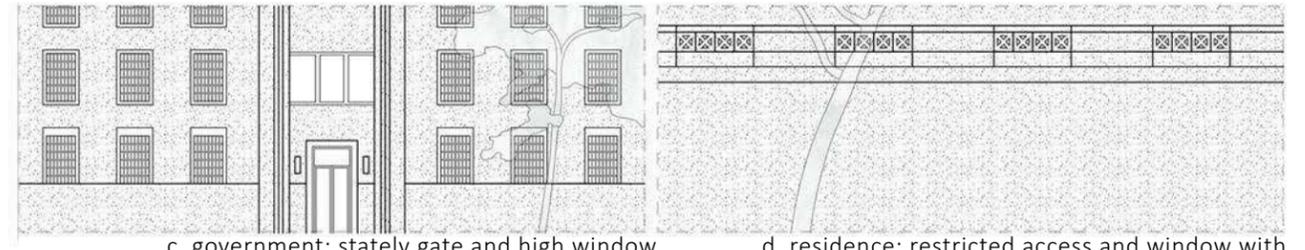


(top) solid school that is not only open to limited people but also open to limited action



a. shop: brick facade and clear window

b. school: high solid wall



c. government: stately gate and high window

d. residence: restricted access and window with guardrail

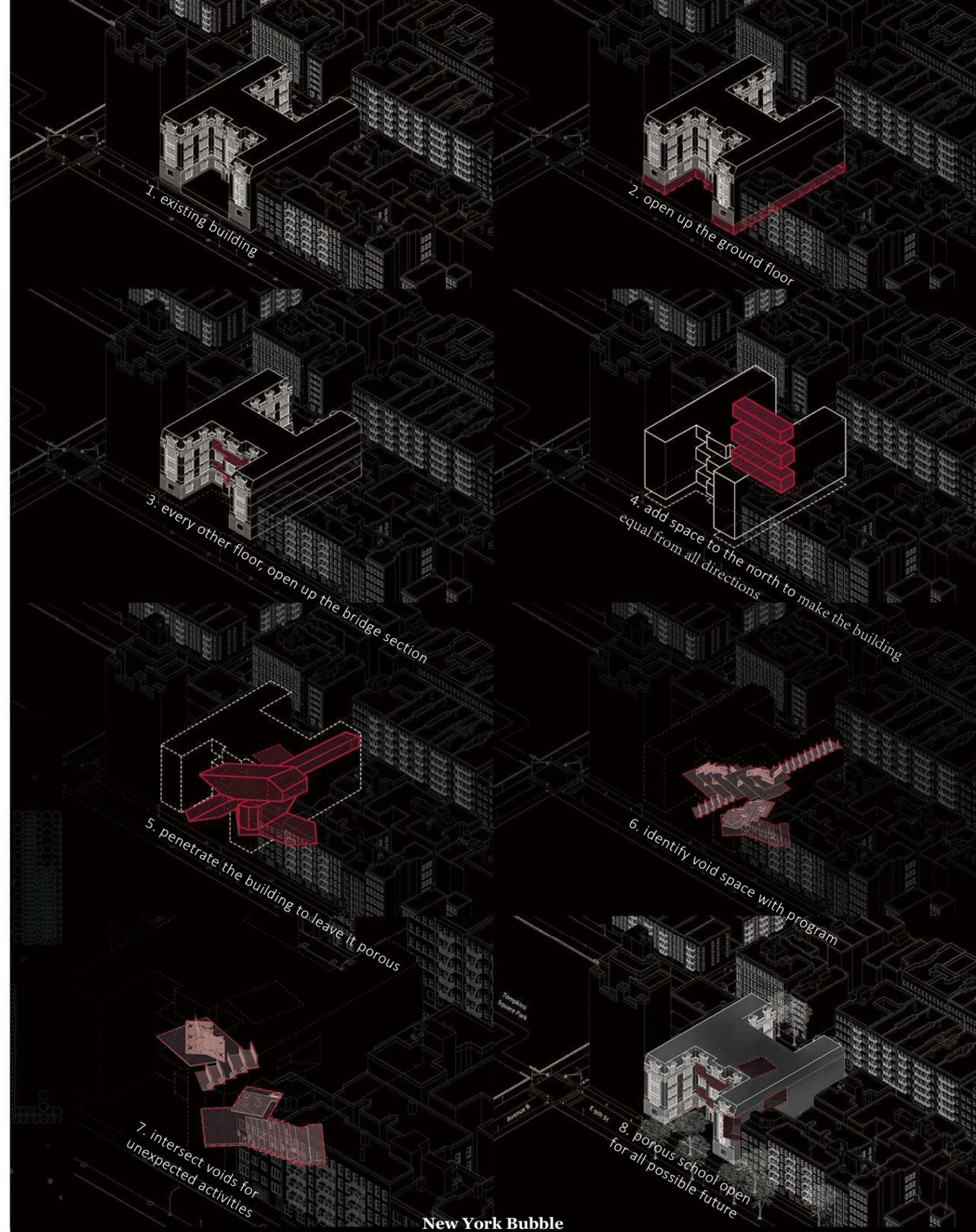
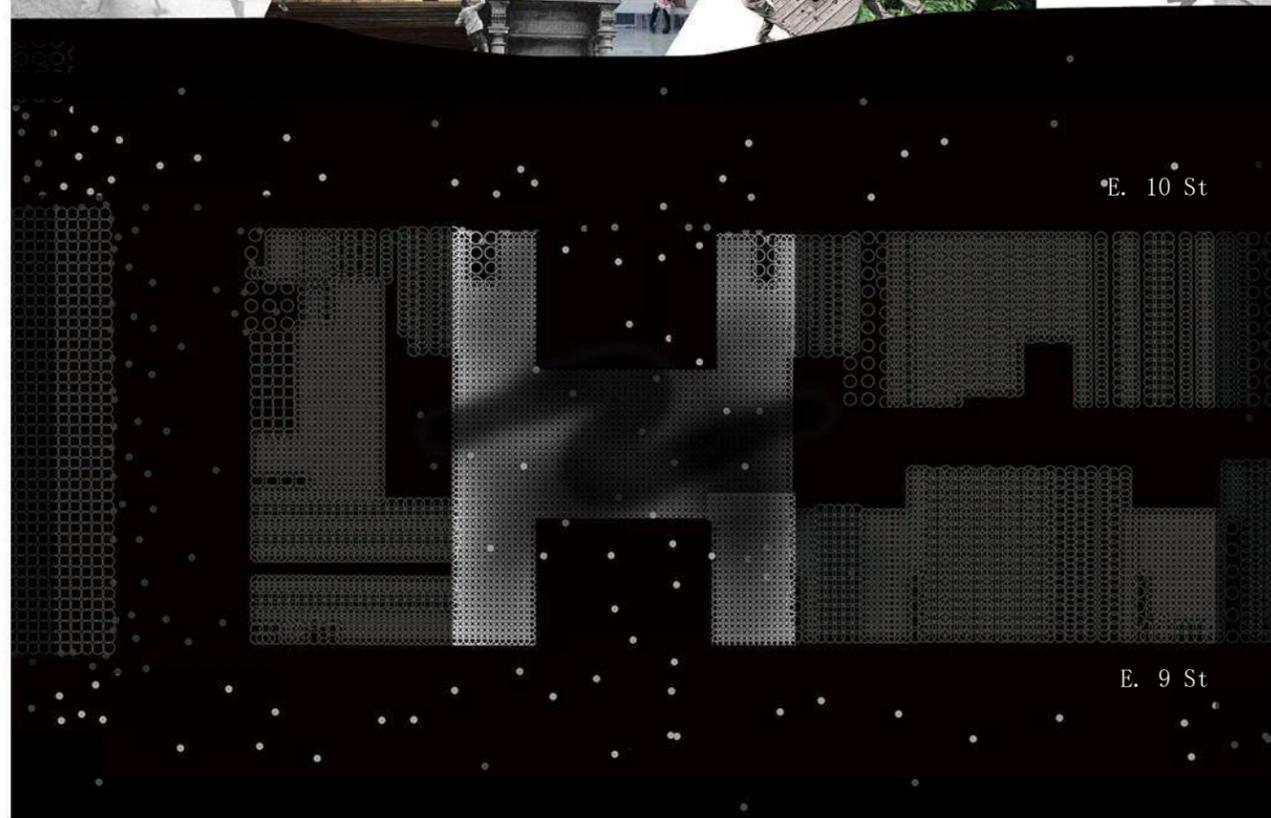
### Solid City and Its People

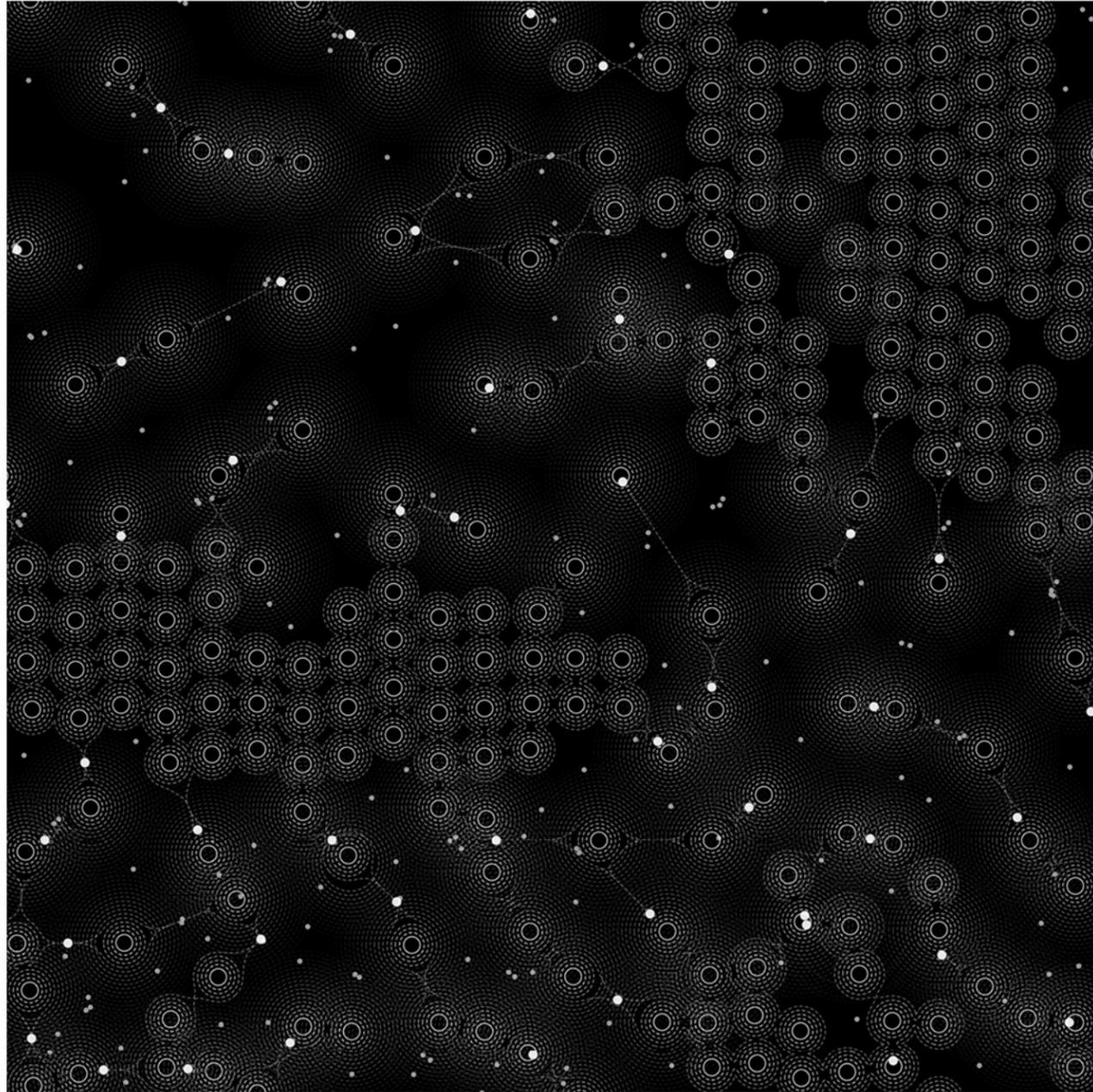
Before the construction of city, everything is like in a river, where there is no barrier. People are free. They walk or dance, sleep or read, doing all they could. As city builds, there comes residence, shops, and then government and school. More and more buildings are put into this river like obstacles. They are disciplined and limited at the same time. People are entitled an ideal shape.



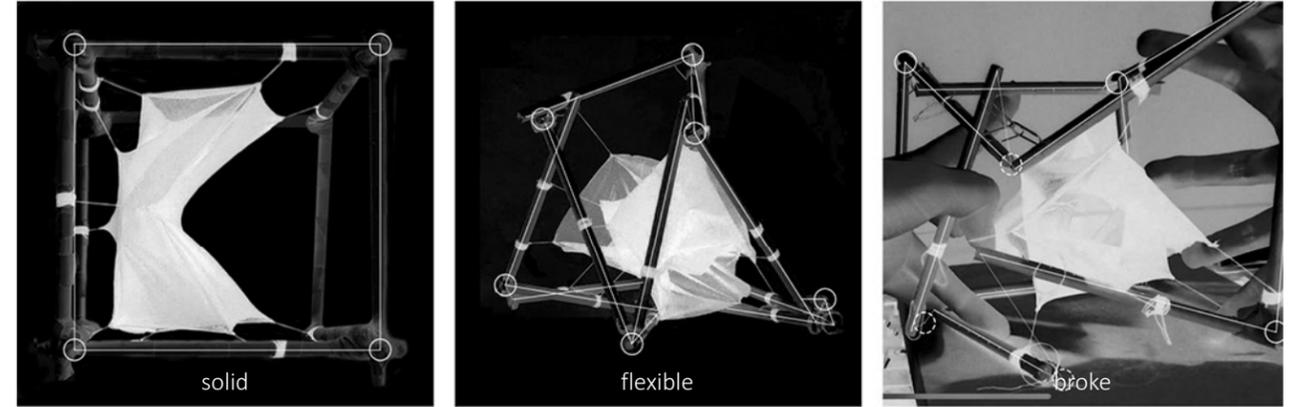
## Reintroducing the River

To free people from limitation and bring out all potential, the first step is to develop the ideology that everything, including study, work and life can be changed and reformed by anyone, anything, anytime.

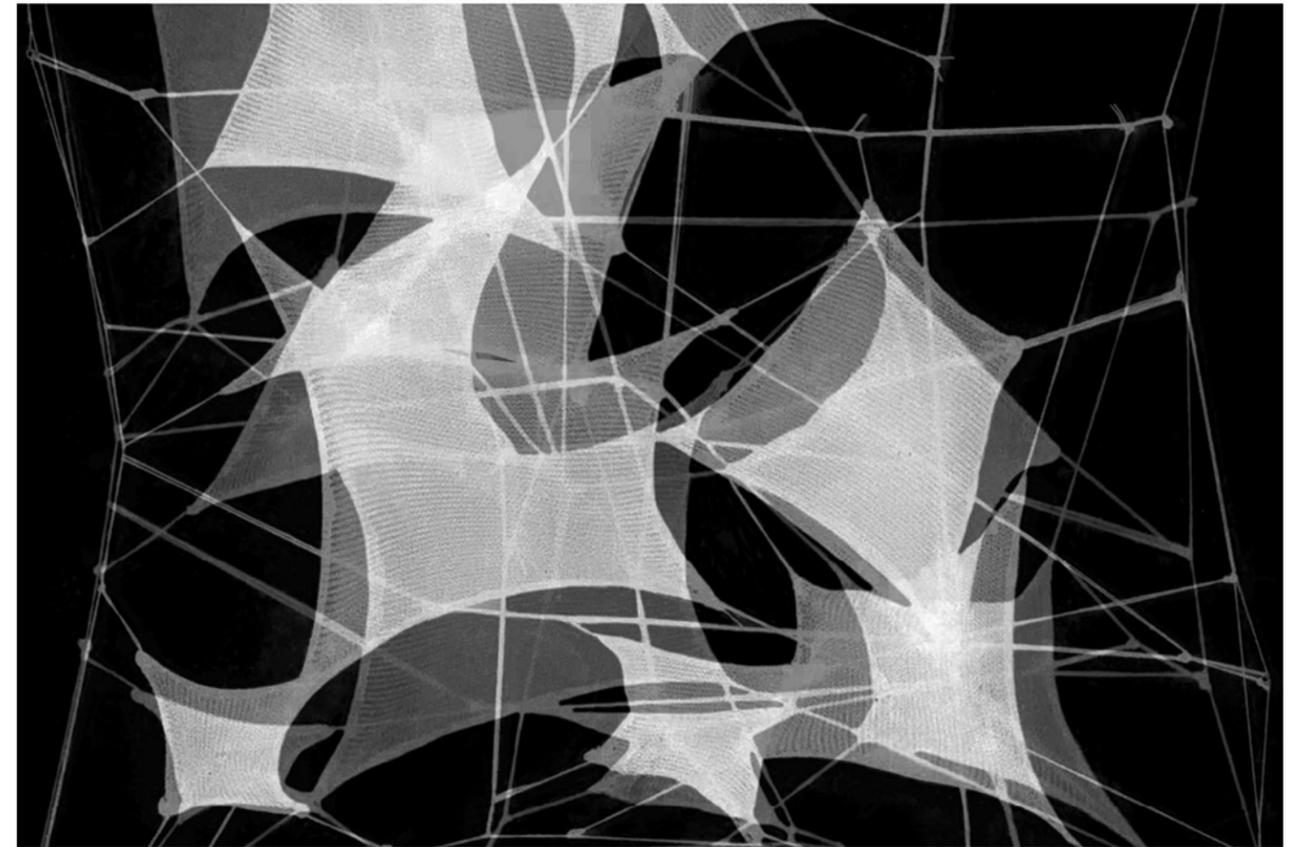




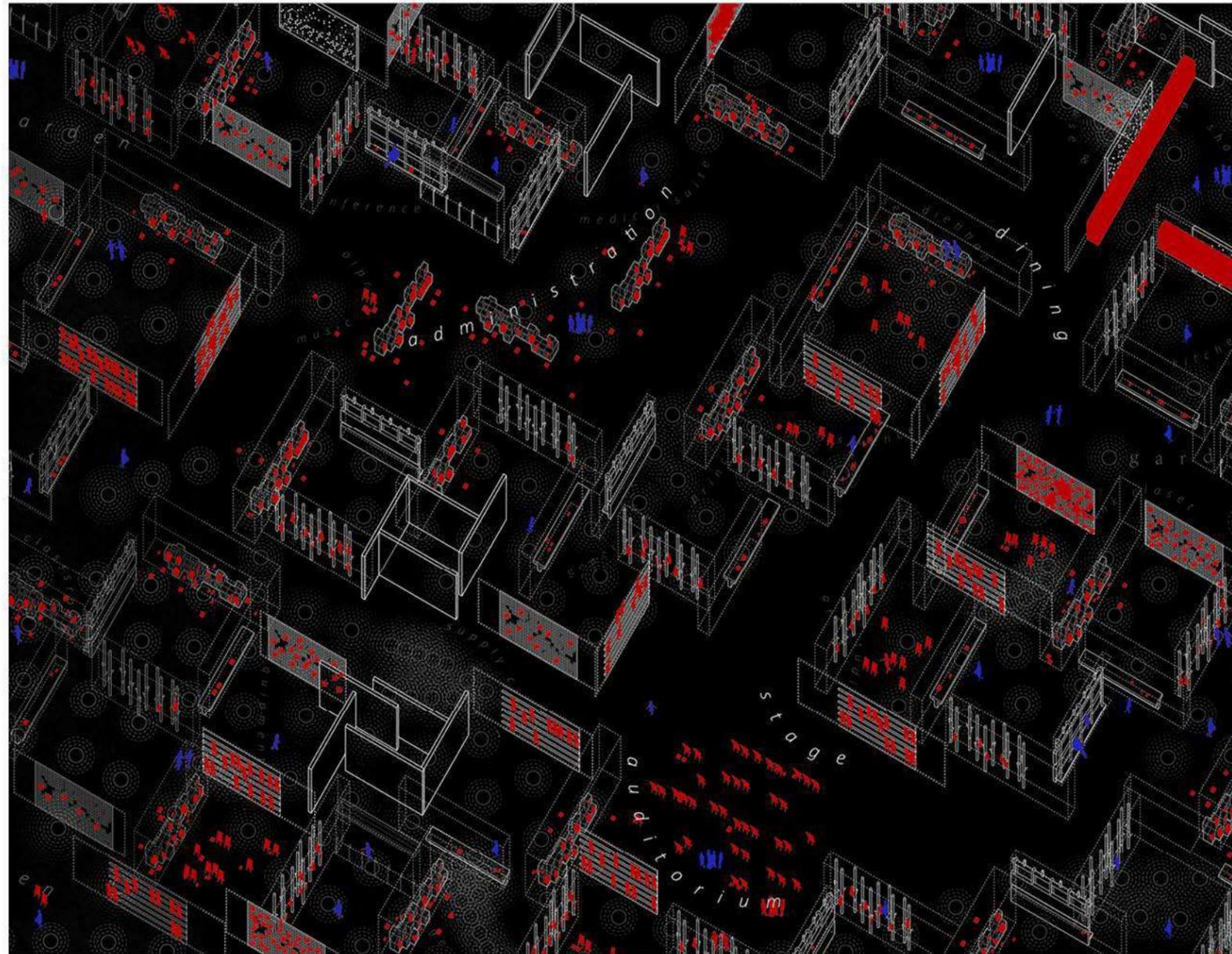
Attraction of Voids



Prototype Study

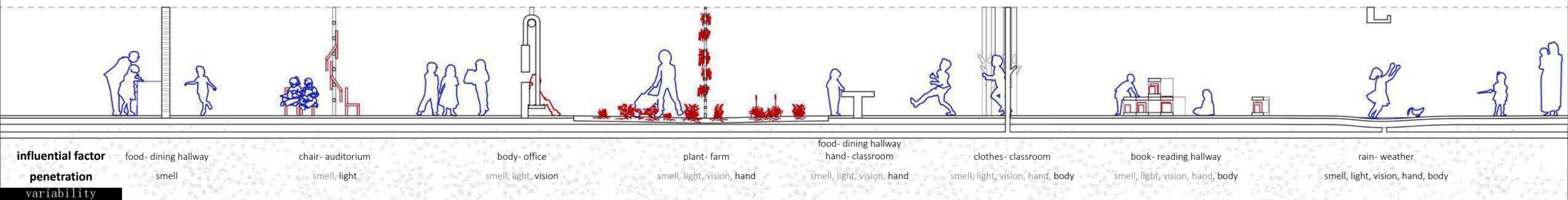


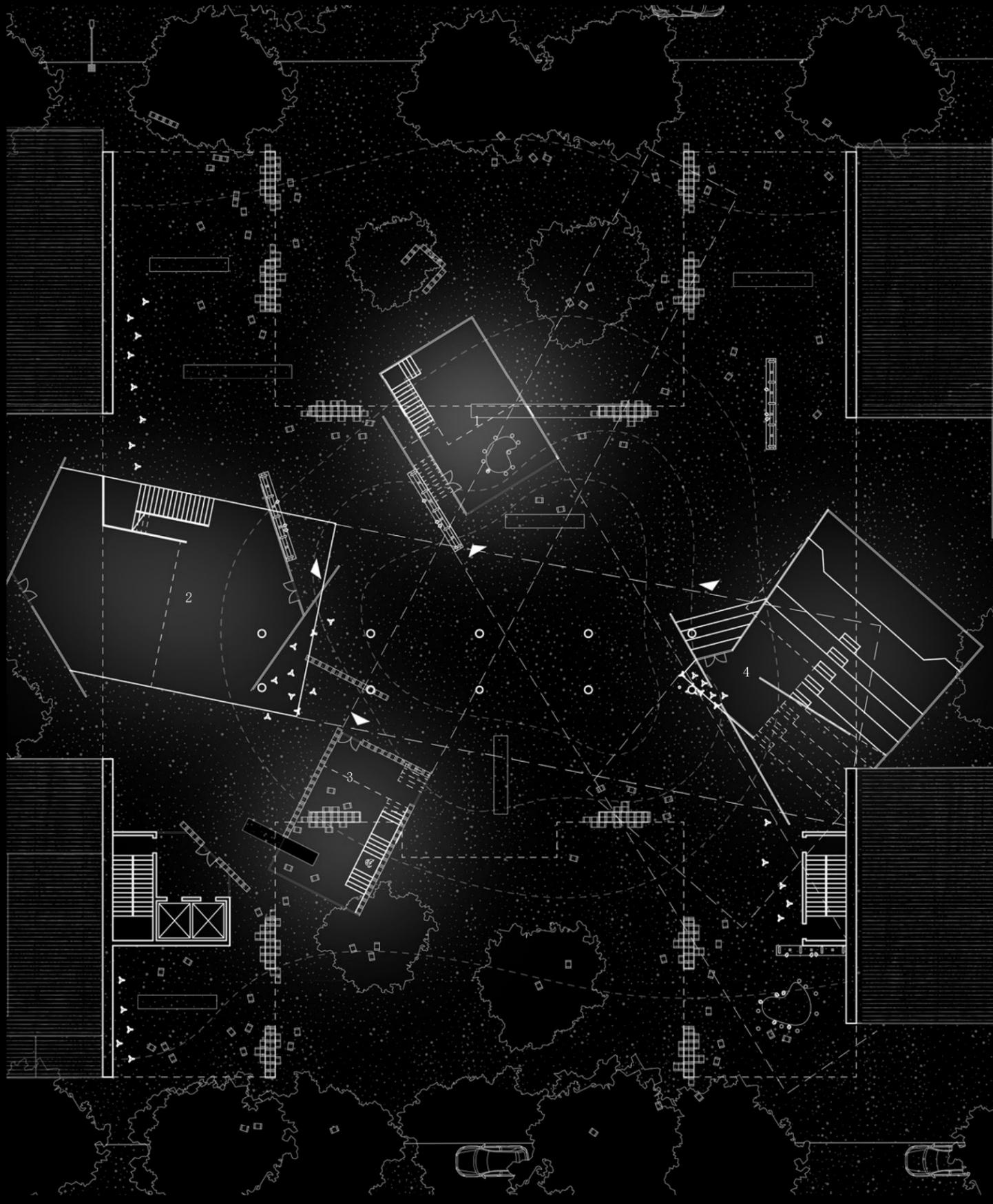




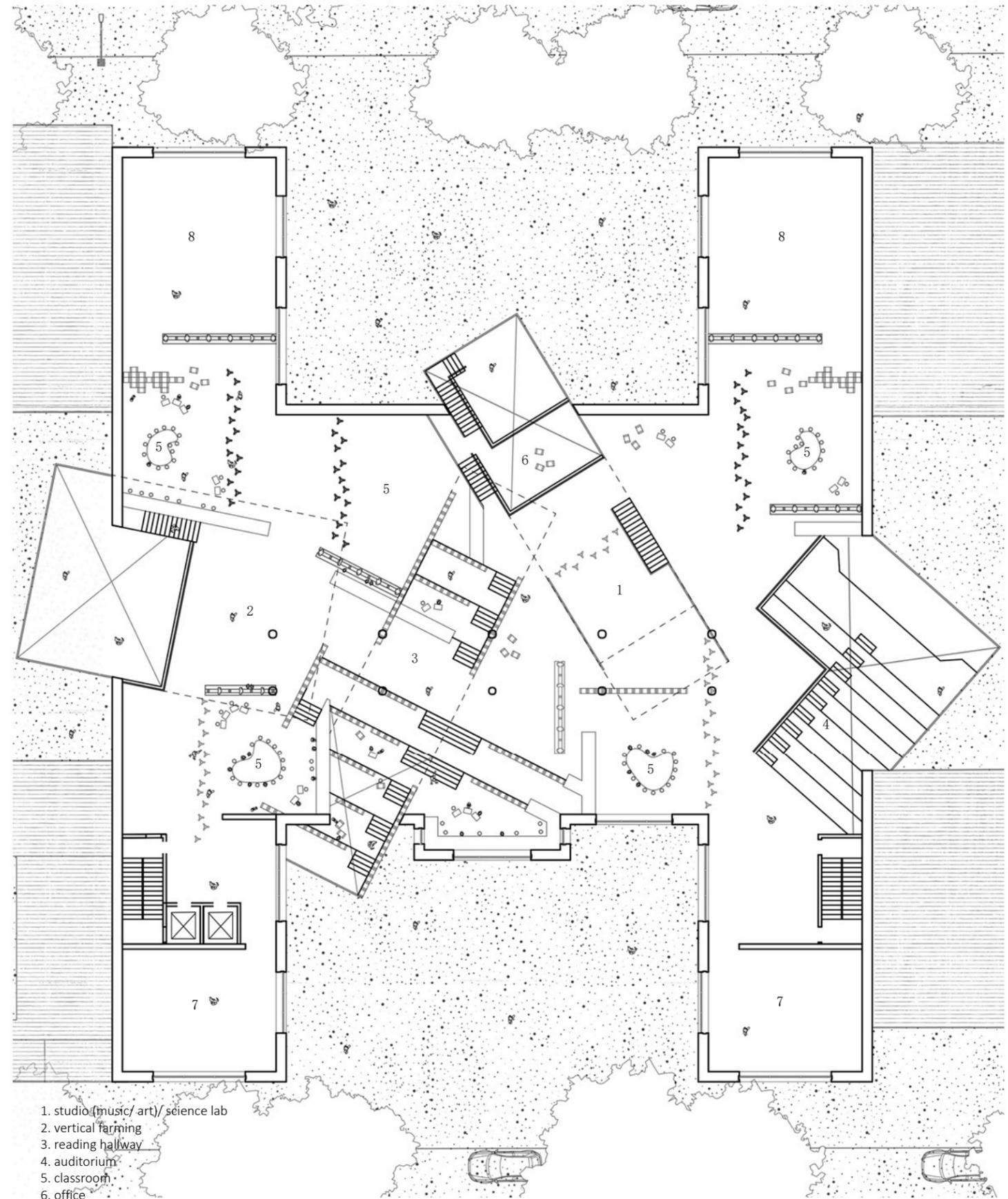
### Activity on the Wall

Rather than separating space and activity, the wall proposed is designed to hold actions as a in-between zone, where intersection and exchange occur.





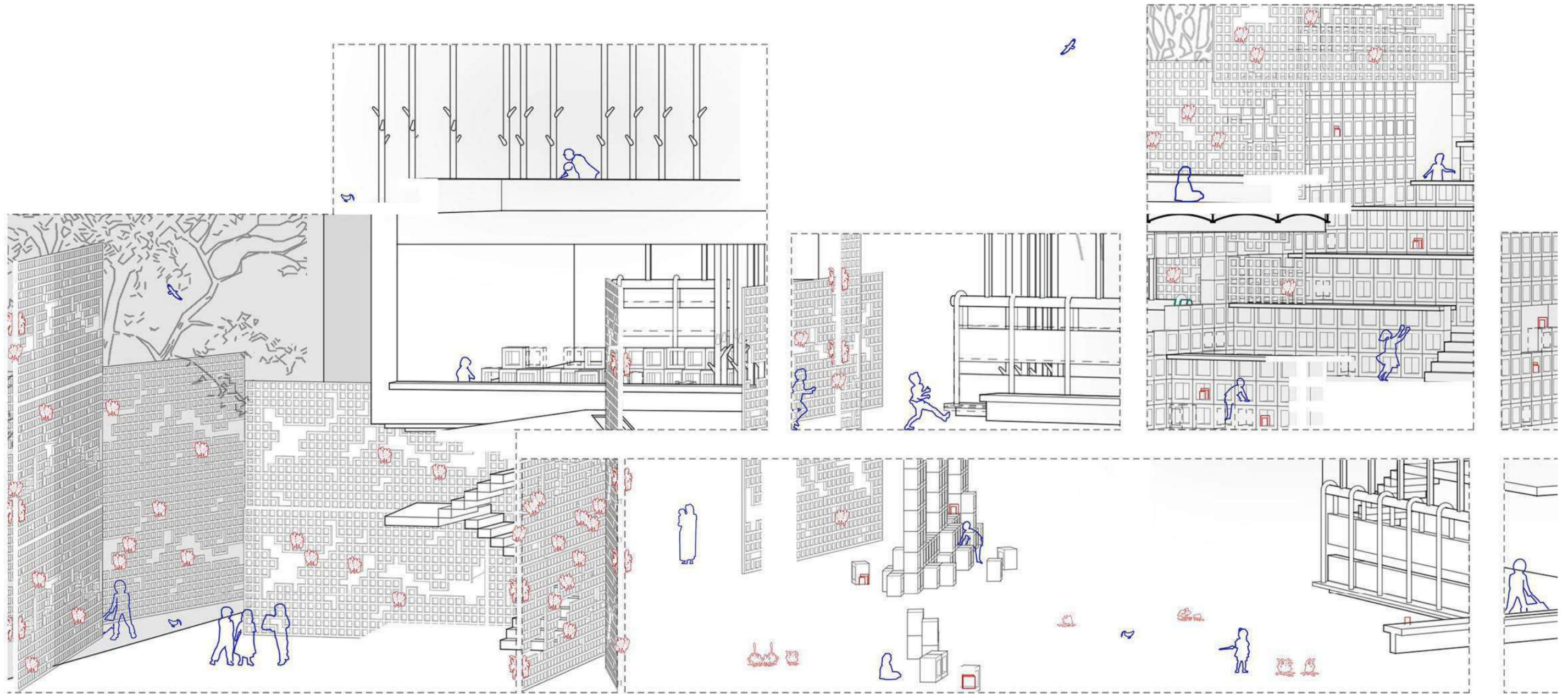
Ground Floor Plan



1. studio (music/ art)/ science lab
2. vertical farming
3. reading hallway
4. auditorium
5. classroom
6. office
7. private discussion
8. meditation

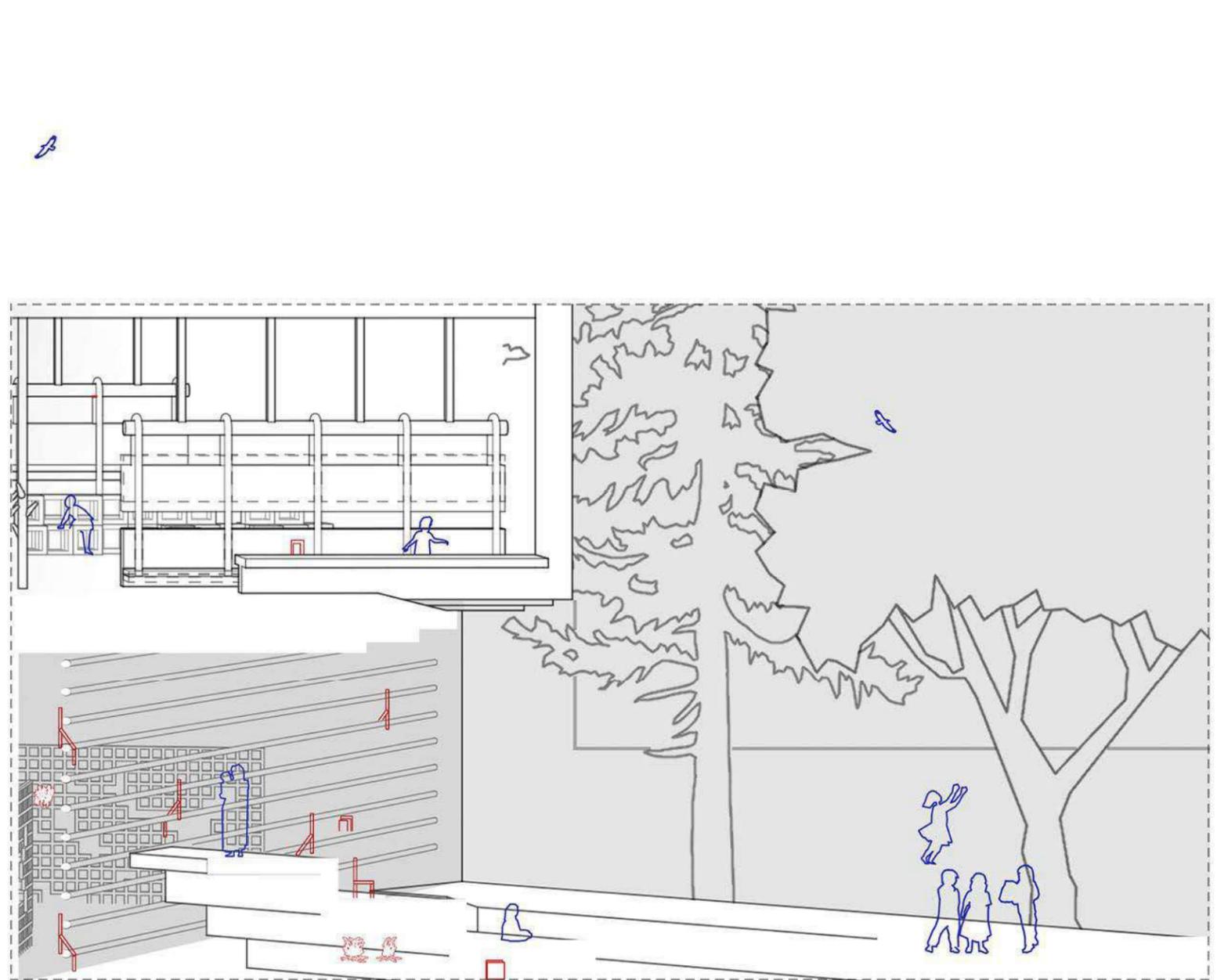
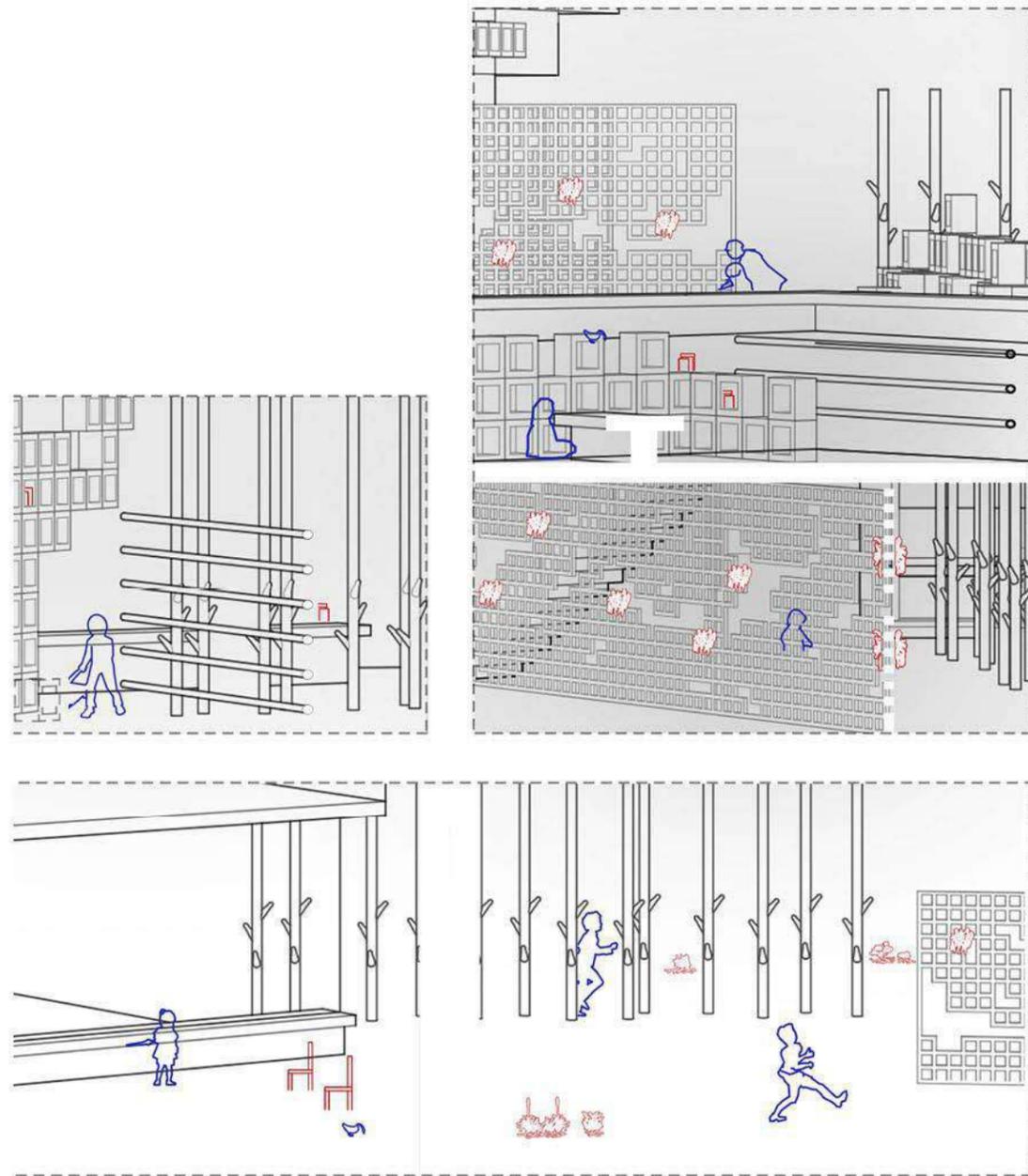
Second Floor Plan





Experience Day and Season in the School

*Wave after wave  
rushing forward,*



*and wind comes,  
reorient the forward.*



Open Memory

Open Construction

Open Location

Open Material

Open Dimension

Open Program

Open Structure

Open Interpretation

**Chapter. VIII**

*Can I see the back?  
Can I hear the step?  
Can I feel the wind?*

*Is it indoor or outdoor?  
Is it a column or a statue?  
Is the stairs ascending up or flowing down?  
Is this for the living or for the dead?*

*Future in the past.*

## Be Home Safe

A Trip from Studio back to Home

COURSE: Graphic Architectural Project III

DATE: Fall 2022

INSTRUCTOR: Michael Rock, Whitney Dow



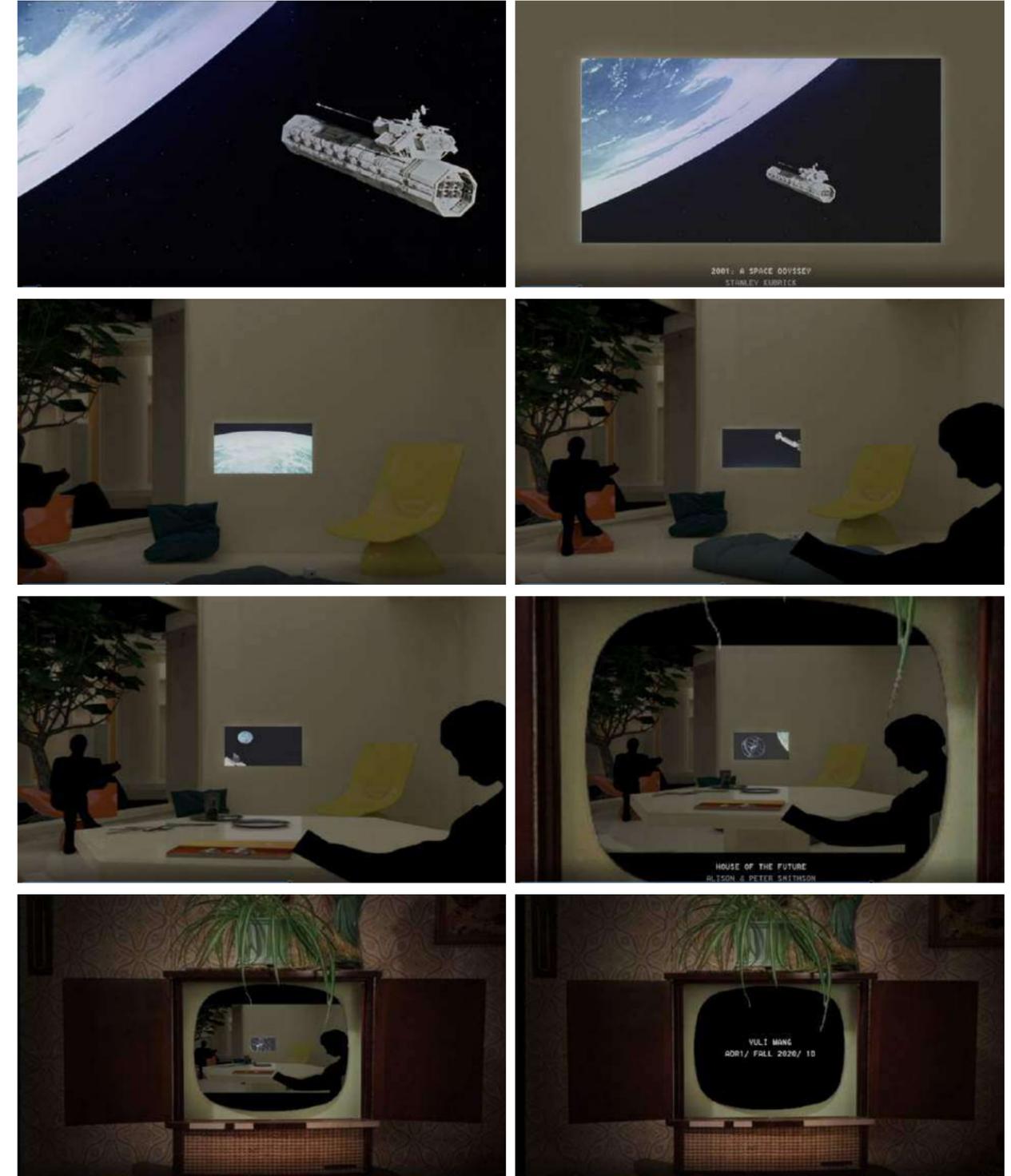
## Future in the Past

A Study of House of Future From Peter and Alison Smithson

COURSE: Architectural Drawing Representation I

DATE: Fall 2020

INSTRUCTOR: Farzin Lotfijam, Tsien-Shiang, Joshua Uhl, Zachary White, Stephan van Eeden



# Agamograph/ Laurentian Library Ricetto

ARCH 6451: Recombinant Renaissance

Prof. Mark Rakatansky

Spring 2023



1. Ricetto is an Italian word referred to as vestibule. It is a small room leading into a larger space such as a lobby, entrance hall or passage, for the purpose of waiting.

2. Wittkower, Rudolf. "Michelangelo's Biblioteca Laurenziana." *The Art Bulletin*, vol. 16, no. 2, 1934.

3. Agamograph, also known as a Lenticular, is an art form that was first used by Yaacov Agam to use optical illusion to create changes when you look at it from different angles.

4. Ackerman, James S. *Architecture of Michelangelo*. The Viking Press, 1961.

5. Brothers, Cammy. *Michelangelo, Drawing, and the Invention of Architecture*. Yale University Press, 2008.

The ricetto of Biblioteca Laurenziana holds a significant place in the annals of architectural history as the most important and influential secular building of the sixteenth century in Italy. The space, however, does not provide a conducive environment for one to stay, study, and appreciate, not even for architects. As an early and striking manifestation of Mannerism, the room exudes an overwhelming sense of oppression, evoking a type of unstable ambiguity. Despite the presence of windows, they offer no transparency; while niches are present, they lack statuary; columns are visible, but their function is questionable. The staircase leads upwards, but the flow of it is downwards. Through this arrangement, Michelangelo conveys conflicting messages throughout the room, claiming something to be one thing while simultaneously reminding us that it possesses its opposite. Such ambiguity lends the room the appearance of an agamograph that changes in appearance at different angles. For every component that comprises the ricetto, it vacillates

## Ricetto as Transition and Disruption

Situated alongside the cloister of San Lorenzo is a door leading into the vestibule, or ricetto, of the Biblioteca Laurenziana. With an elevated round pediment above in dark gray, the door differentiates itself from the rest along the balcony. The elevation in the ricetto surrounding the entrance, devoid of any ornamentation with pure blankness at human height suggests the main floor does not start until the stairs rise to the second level. The second level, emphasized over the other two, is situated well above eye level, distancing itself from observers standing on the ground floor. Before climbing up the risers, one is located in the basement.

A ricetto is traditionally the space in which visitors transition from the street to the building, it passively provides a gradual change for people to be prepared. The Biblioteca Laurenziana ricetto does the opposite. Failing to fulfill its role of transition, the ricetto provides a disruption between the street and the reading room. The absence of openings on the walls from all four sides fully isolates one from the external world. The darkness of the room breaks away from the sunshine of Tuscany on the balcony of the cloister.

The presence of opaque windows above, coupled with actual openings to the outside positioned at a height of 44 feet, and the initial ceiling skylight design, evokes similarities with the nearby Medici Chapel, which Michelangelo was working on at the moment. The lack of features at ground level to provide a sense of human scale creates an ambiance akin to one reserved for the deceased rather than the living. The atmosphere of the tomb in the ricetto is different from both the cloister where one would come from and the reading room to go to. between two opposing identities.

The prolonged entering leads the way prepares the visitor for the eerie feeling one is gonna sense in the ricetto.

While the quietness and calmness in the cloister feel more connected to the same atmosphere in the reading room, the ricetto appears unexpectedly between the two chapters.

## Room as Indoors or Outdoors

Upon entering the Biblioteca Laurenziana, visitors immediately perceive an exterior atmosphere, despite being within the boundaries of the ricetto. The impressive stairs leading to the upper level resemble a piazza in terms of their scale and monumentality, measuring over 20 feet wide and featuring an ornate layout of three flights that are fitting for an external space leading up to a primary structure.

Although the impression of exteriority is initially striking, Michelangelo confirmed the interiority of the same space by utilizing the traditional Florentine system for interiors, with pietra serena serving as the primary structural language and plain white for secondary walls. The extensive use of the dark gray color within the ricetto, in conjunction with the restricted penetration of sunlight from above, further reinforces the indoor nature of the space.

Nonetheless, Michelangelo's integration of elements that are typically associated with exteriors, such as the tabernacle, the roundel, and the lightwell, into the interior, creates an environment that defies easy categorization as either interior or exterior. This produces a sense of disorientation and unease that awaits all who visit the Biblioteca Laurenziana.

**Open Memory**

**Open Construction**

**Open Location**

**Open Material**

**Open Dimension**

**Open Program**

**Open Structure**

**Open Interpretation**

*\* Building change and grow, not unlike cities. To embrace impermanence, promote flexibility, time obsolescence, and welcome uncertainty, just as Umberto Eco proclaimed the birth of the open work. No longer strive to prescribe outcomes, let alone inscribe meanings in process.*

**Open Work\***

**Ash In the Earth, Mist In the Air** is a death facility

**Unfolding Trailcape** is a pilgrimage

**Transient Landscape** is a furniture-space

**Shelter of Shelter** is a house-market

**Dynamic Solidity** is an experiment

**Plug In Bronx** is a collective housing

**Bounding Voids** is a school

**New York Bubble** is a forum

**Be Home Safe** is an observation

**Future in the Past** is a dream

**Agamograph/ Laurentian Library Ricetto** is a study