# JAE KYUN PARK

M.S.AAD ’20

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# For Your Entertainment

*Summer 2019*
*Instructor : Ana Paula, Mecky Reuss*
*In Collaboration with : Hanseul Jang*

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# SALT POOL

## Entertainment for Seniors

The studio's purpose is 'What kind of space should the architecture provide for entertainment?' Our team set the subject of the entertainment experience for the elderly. As aging progressed, entertainment needs to be changed for them, but our society was indifferent to what they want and what architecture to present.

However, the elderly had many physical considerations, so there were many things to consider. We studied how architecture can minimize their physical limitations and provide enjoyment, and as a result, we have concluded that a salt pool is best suited.

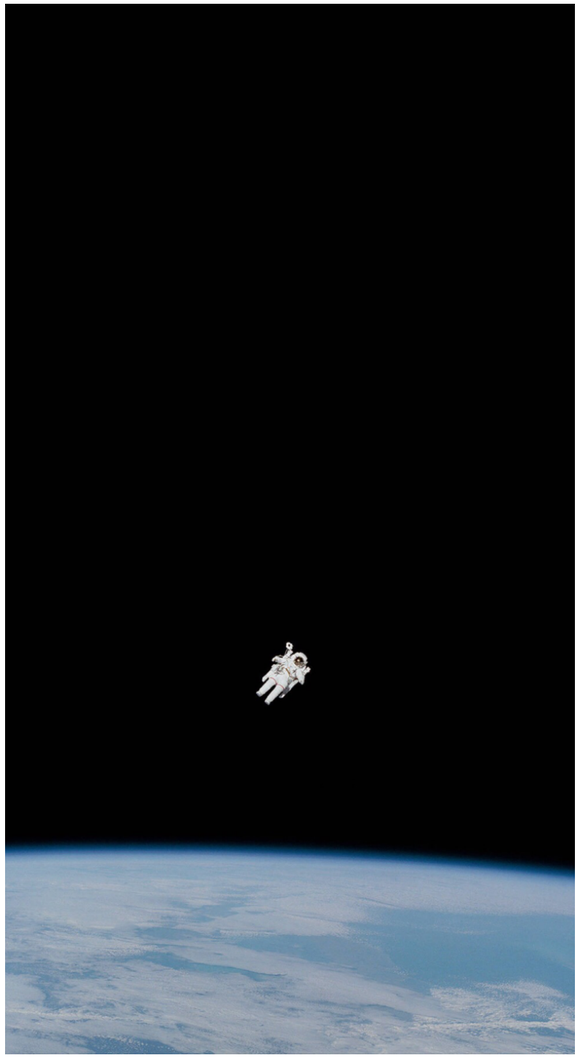
## < Roosevelt Island >

Roosevelt Island has the highest average age in New York's surrounding area, with a rate of 18%  aged 65 and over old. New York's total proportion of people aged 65 and over is 15 percent and 14 percent in Queens.

## < *Salted Water and Buoyancy* >

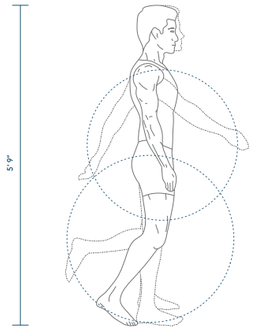
Dead Sea's high level of salinity provides extraordinary experience to the people who dive here. It is the experience that escaping from gravity.





## < *Consideration of the Gravity* >

Gravity is what makes people live on Earth. However, it is also what makes people limit the possibilities of their movement. We thought that entertainment is escaping from ordinary lives, which means that escaping from gravity can be entertainment.




Ave. Age : 20 - 50

Sex : Male

Note : Healthy

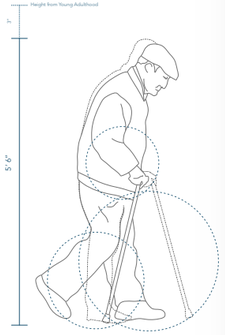
Walking (Moving ) Speed :

Ave. Age : 50 - 65

Sex : Male

Note : Healthy

Walking (Moving ) Speed :

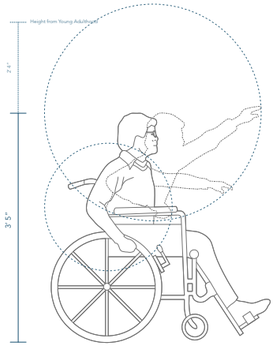



Ave. Age : 60 - 70

Sex : Male

Note : Use of Cane

Walking (Moving ) Speed :

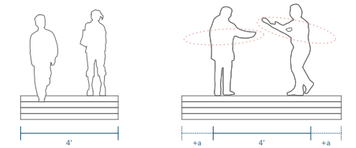



Ave. Age : 60 - 85

Sex : Male

Note : Use of Wheel Chair

Walking (Moving ) Speed :



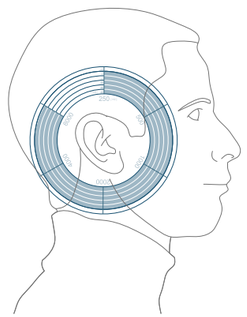

[ Typical Stair Width ]

[ Stair Width for People with Hearing Deficiency]

Regulating Element :
Space Demension

Note :
More spatial demension is necessary to ensure a larger peripheral body range.

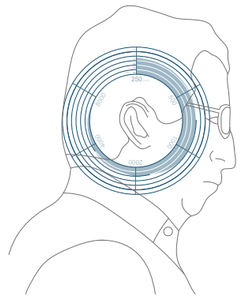
Space for the Hearing Aid IV



Ave. Age : 20 - 50

Sex : Male

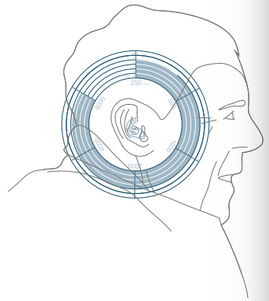
Note : Healthy



Ave. Age : 50 - 65

Sex : Male

Note : Healthy



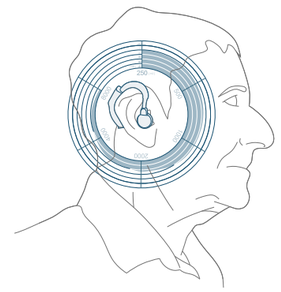
Ave. Age : 60 - 85

Sex : Male

Note : Use of Imprinted Hearing Aid

Frequency Range :

Hearing Aid Position :

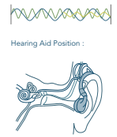


Ave. Age : 60 - 70

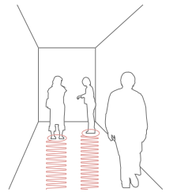
Sex : Male

Note : Use of Hearing Aid

Frequency Range :



Hearing Aid Position :



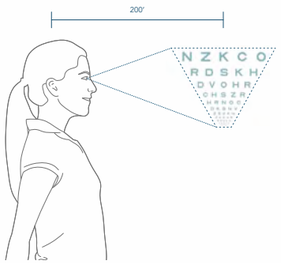
[ Plan Strategy ]

[ Viration through Floor ]

Regulating Element :
Vibration

Note :
Somatic sense needs to be maximized for people with hearing deficiency.

Space for the Hearing Aid III




Ave. Age : 20 - 50

Sex : Female

Note : Healthy

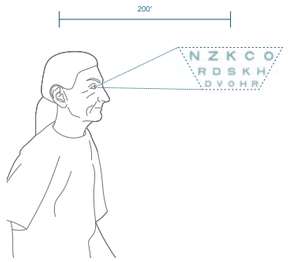
Average Vision : 20 / 20

Visible Spectrum : Full

Croma / Cognitive Spectrum :

Color Contrast :

* Females tend to have better peripheral vision and night vision. Females also tend to distinguish color better than males.




Ave. Age : 50-70

Sex : Female

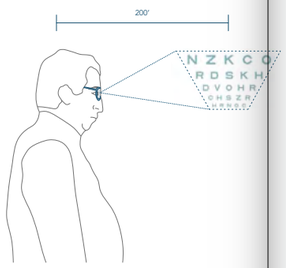
Note : Healthy

Average Vision : 7 / 20

Visible Spectrum : 50%

Croma / Cognitive Spectrum :

Color Contrast :




Ave. Age : 50-70

Sex : Male

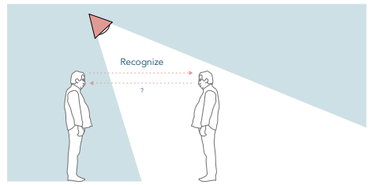
Note : Use of Glasses

Average Vision : 12 / 20

Visible Spectrum : 70%

Croma / Cognitive Spectrum :

Color Contrast :



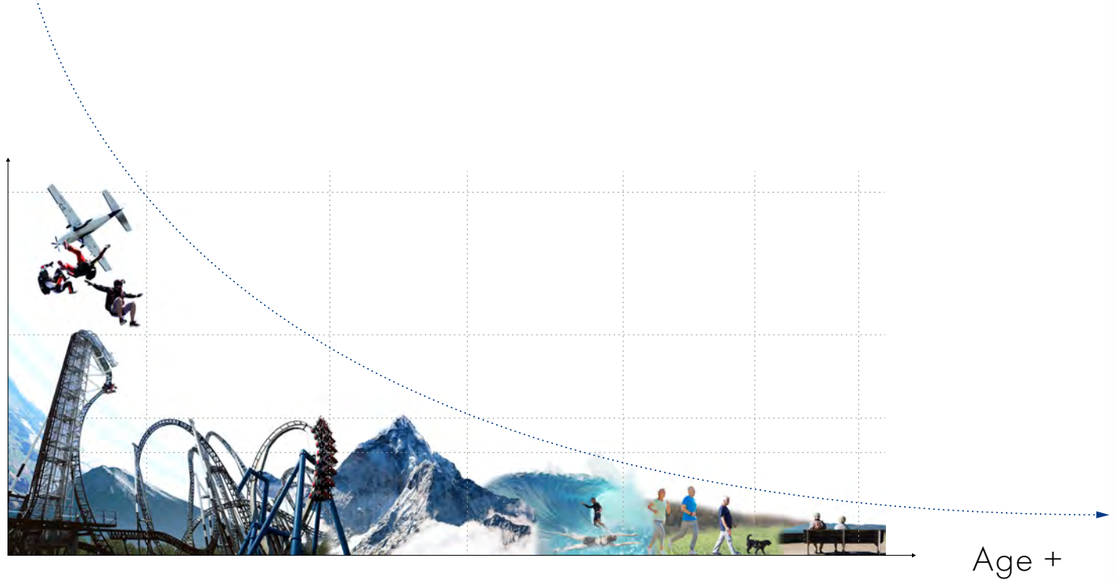

Regulating Element : Light

Note :
Seniors suffer from a severe nightvision loss. Articulation of light is crucial in senior design.

Space for the Vision Aid

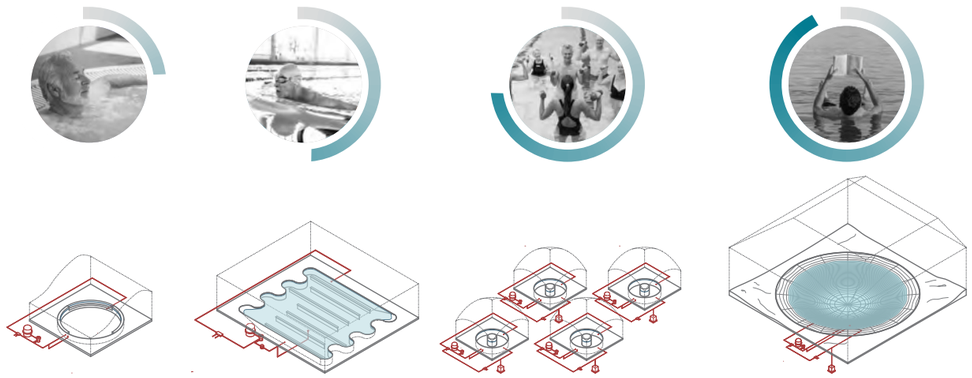
## < *Aging & Physical Changes* >

Various fields need to be considered so that consideration of physical characteristics, visual and auditory limitations of the elderly could be applied to the design.




*< Age & Preferred Entertainment >*

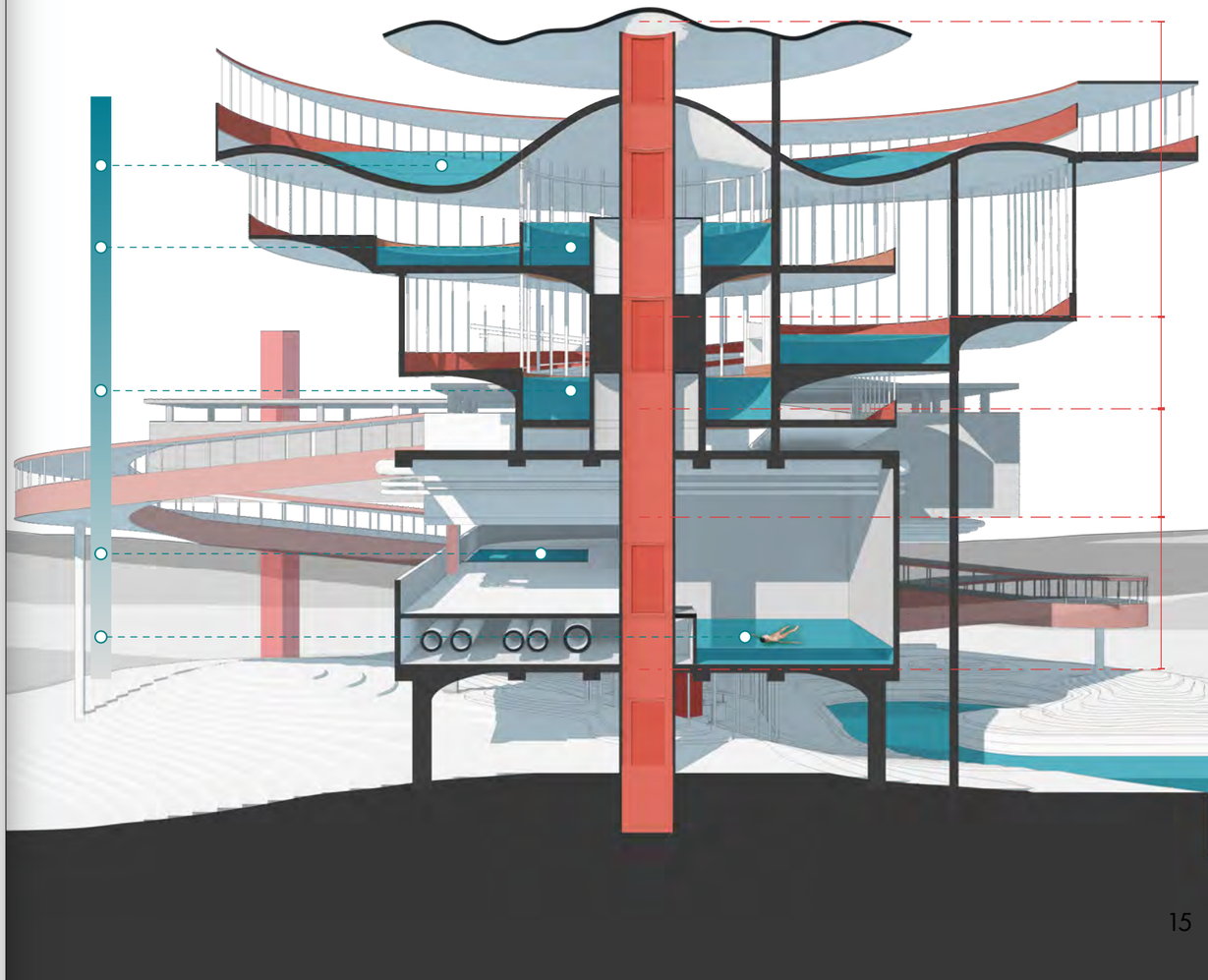
As people age, physically and mentally changes a lot, so the form and type of play preferred change accordingly. In particular, in the case of the elderly with many physical limitations, most of the activities are very horizontal and non-dynamic.

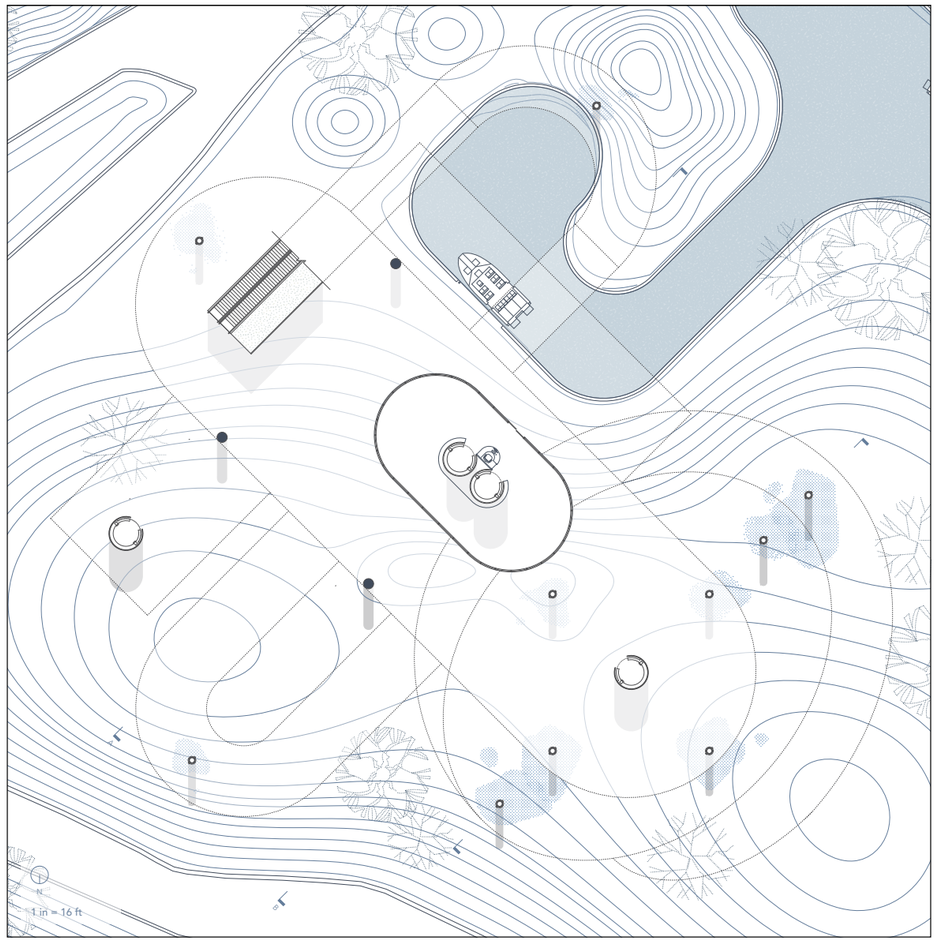


*< Salinity & Program >*

For the elderly, four types of programs, including the spa, swimming, physical education, and sea bathing, were set, and four levels of salt concentration granted accordingly.



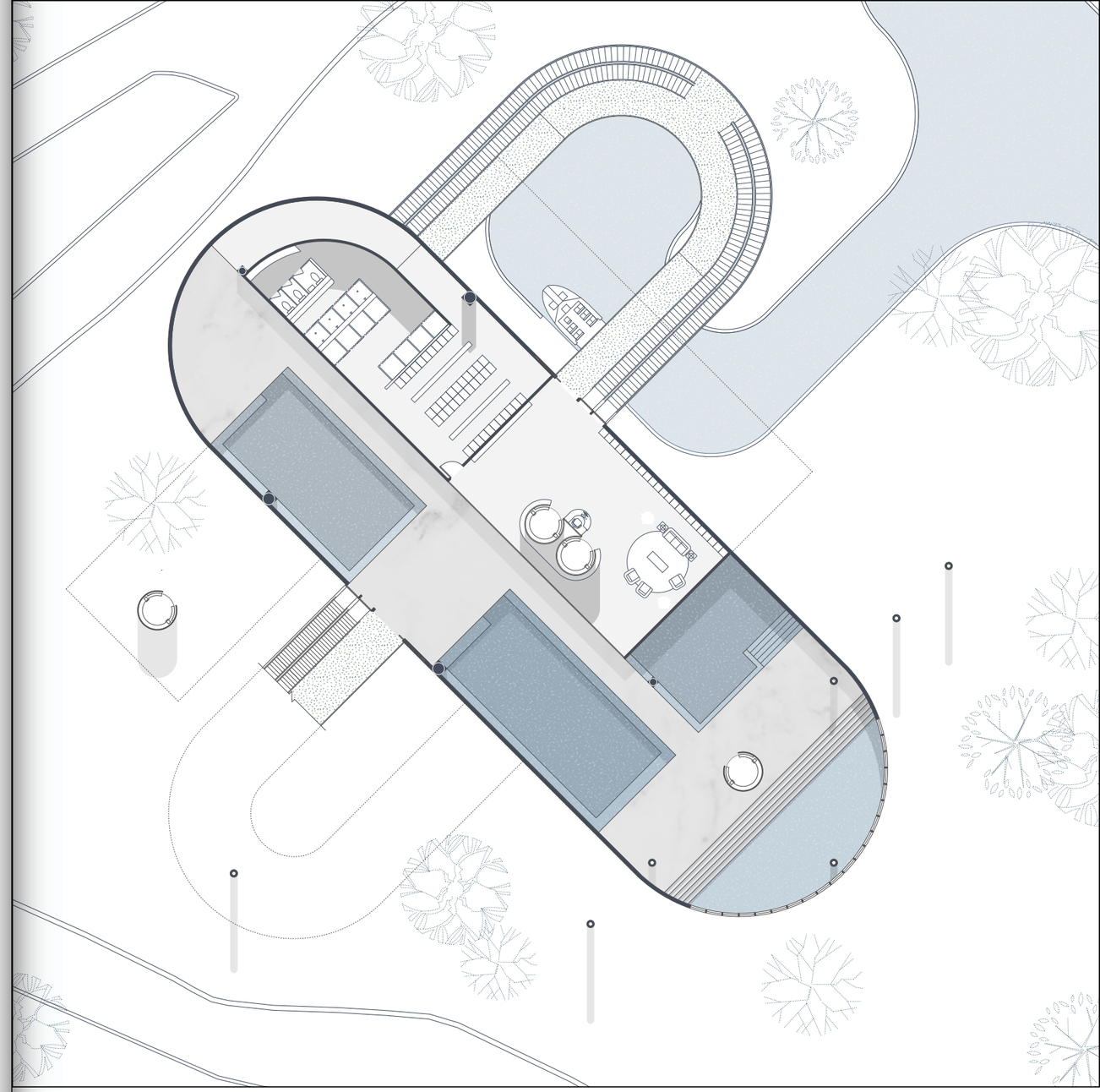





*< 1st Floor Plan _ Park >*

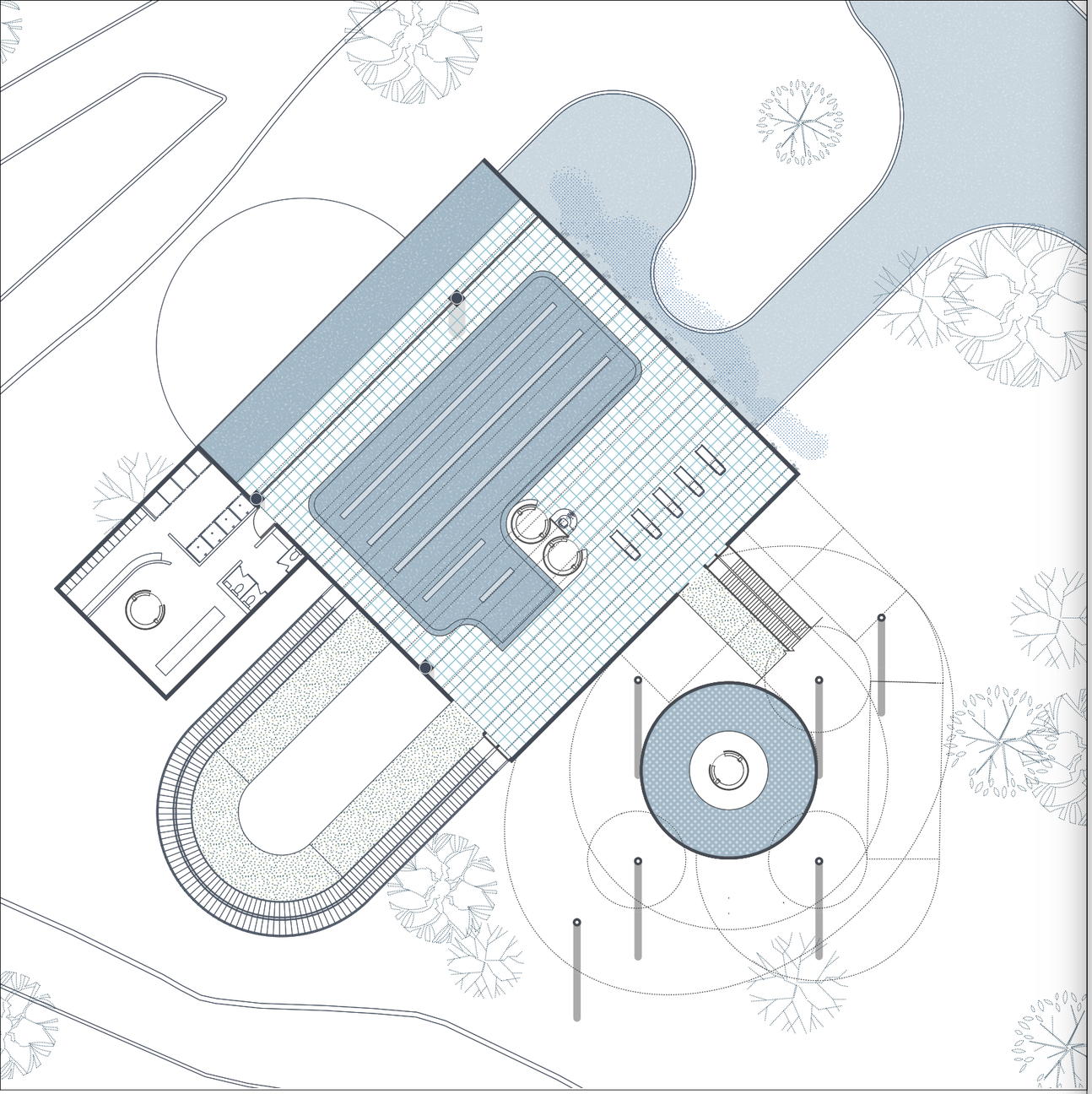
The salt pool will be built on the park at the southern end of Roosevelt Island. Since the first floor is all lifted except for stairs and elevators, the pool will not bother park users.





*< 2nd Floor Plan _ Spa >*

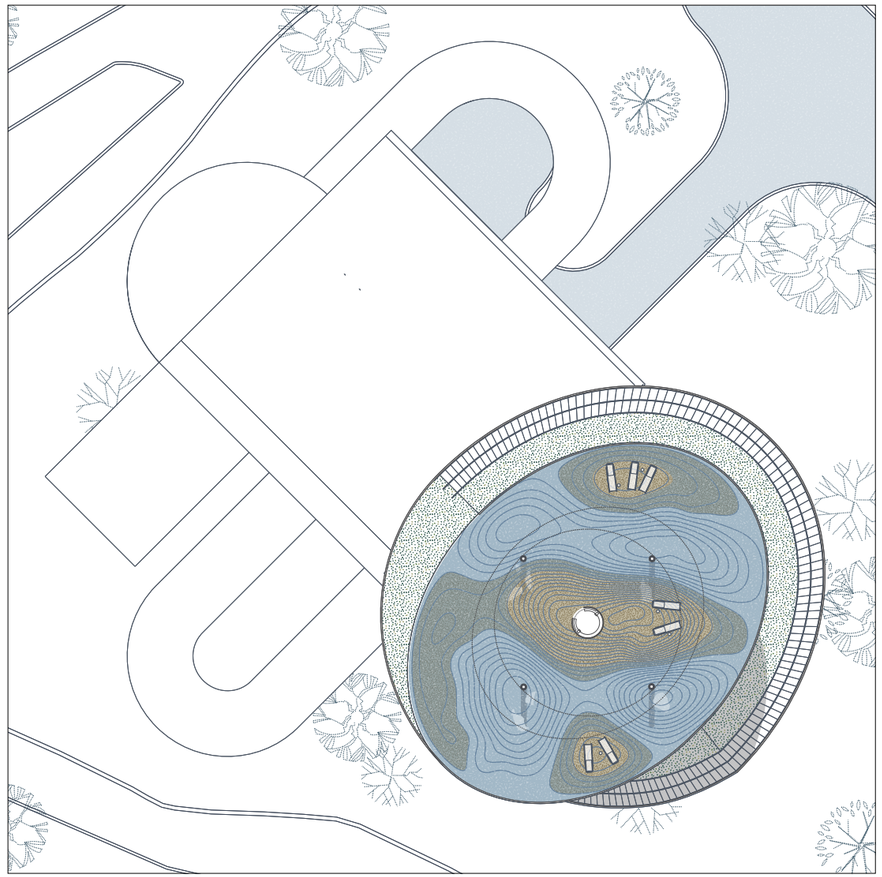
Unlike other floor pools, the spa is not salted water. Most of the users of the pool are seniors, a spa that can help the users to reduce their physical, mental tiredness.



*< 3th Floor Plan _ Infinite Pools & Class Pools >*

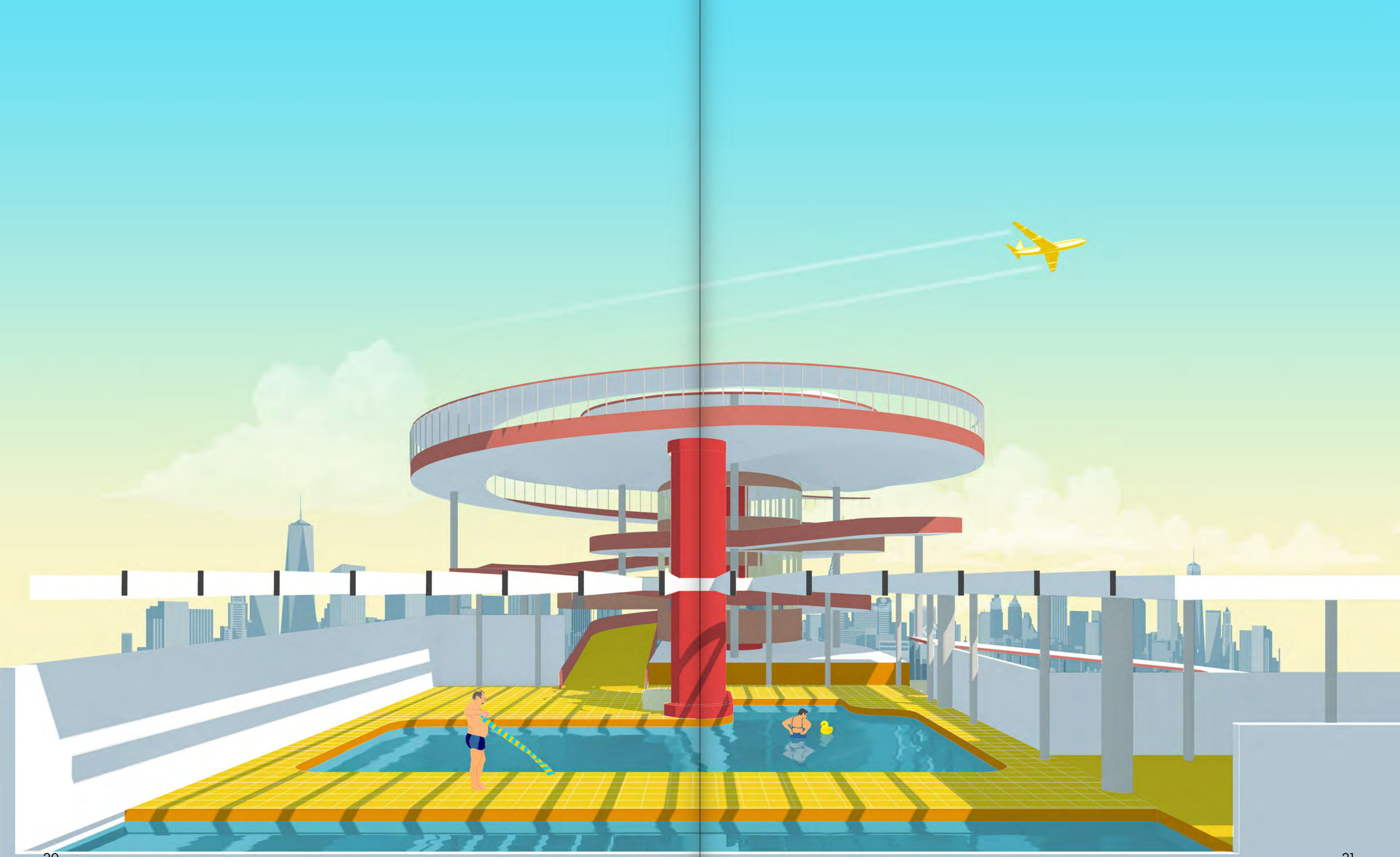
In a regular swimming pool, seniors can swim at a depth of the water that suits them. The distinctive feature is that unlike standard swimming pools, seniors can exercise more easily through salted water's buoyancy. There is a circle-shaped class swimming pool where elders can learn





*< 4th Floor Plan _ Beach Pool >*

The beach pool has the highest level of salt concentration. It maximizes the buoyancy. Users of this pool will be able to see the manhattan view around.

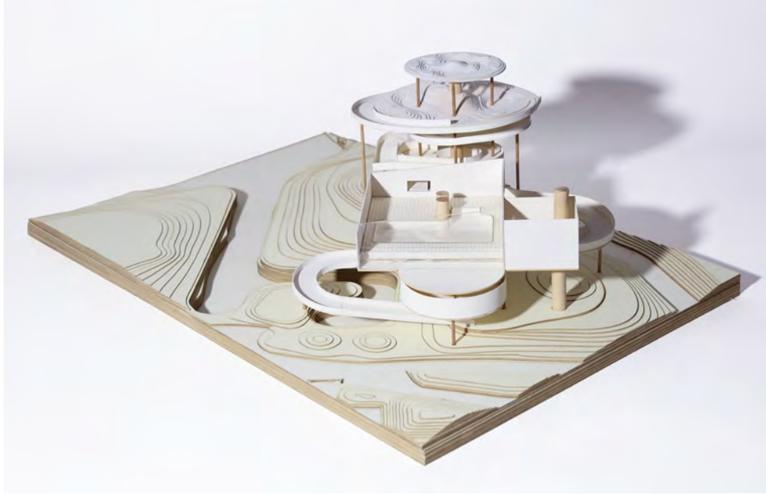


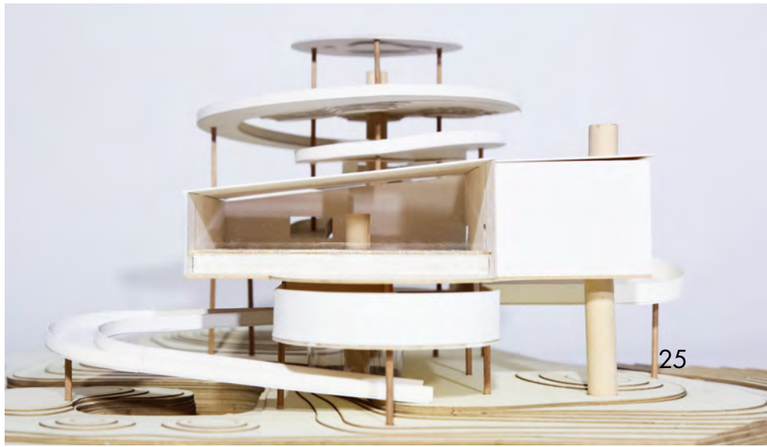
*< View from Class Pools >*

The class pool is a place for small groups of people to learn or follow the exercise.

*< Physical Model 32 x 18 inch >*







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# Non-Institutional Art Space for Radical Hospitality

*Fall 2019*

*_2019.09 ~ 2019.12*

*_Professor Christopher Leong, Dominic Leong*

*_Individual Work*

# Art Box Project

## Art and Education

Leong studio looked at the relationship between architecture and the evolution of the contemporary art institution as a space of collectivity.  The art box project tried to push farther in order to propose an art facility that is beyond typical art institutions.

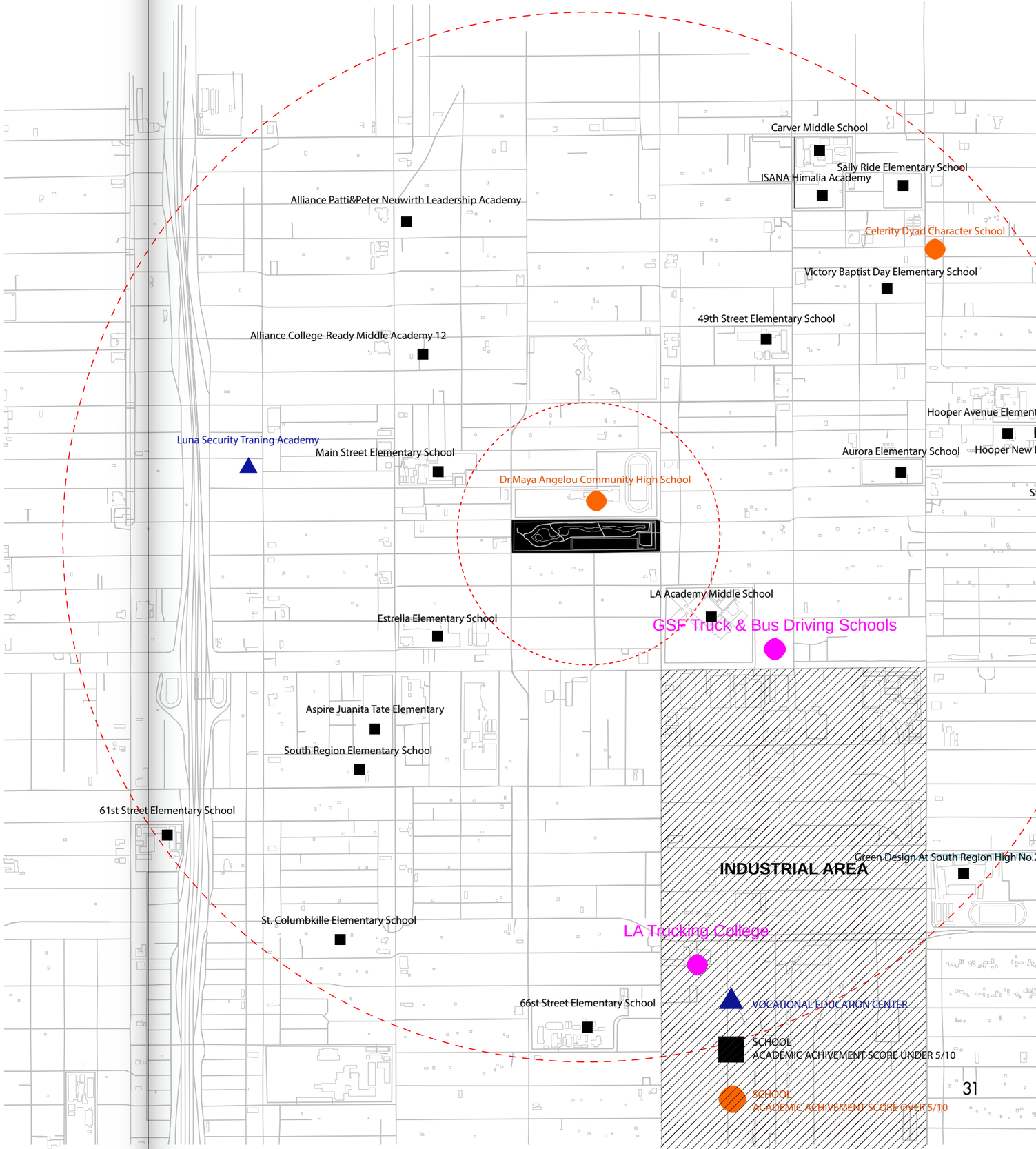
In order to go beyond the regular art institution, the studio aims to design for radical hospitality. The meaning of radical hospitality can vary on what each designer gives, but in this project, it means that the relationship between guest and host disappears.

The site 'South LA Wetland Park' has an abandoned bus terminal, which is very large and monumental. This project decided to renovate the building.

## < *Typical Art Institution _ LACMA* >

LA wetland park is in the southern part of LA. One of the most extraordinary aspects of this area is that the racial ratio. 49.4% of the people in this area are 2nd generation of immigrants, and 97% of the residents are Hispanic. Though there are educational facilities that spread around the site, there are no art-related facilities. The art box project can be a chance for the people in this town to learn and experience modern art.



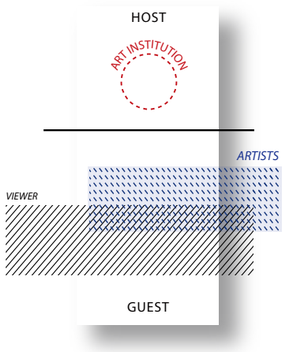


## < *Typical Art Institution _ LACMA* >

Typically, art Institutions has a clear division between guests and hosts. Art institutions are the host of the exhibition and the others like artists or visitors remain guests.

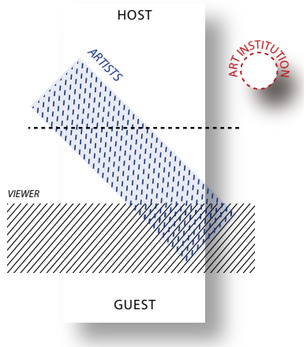
## < *LA Underground Museum* >

LA underground museum is a extraordinary type of museum. In this museum, the division between guests and hosts becomes vague. Exhibition space is not only a exhibition space, but also the artists' working space.



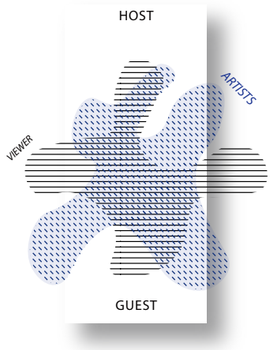

## 1. Typical Art Institutions

Only an art institution can be the host of the space. Artists and viewers remain guests.




## 2. LA Unerground Museum

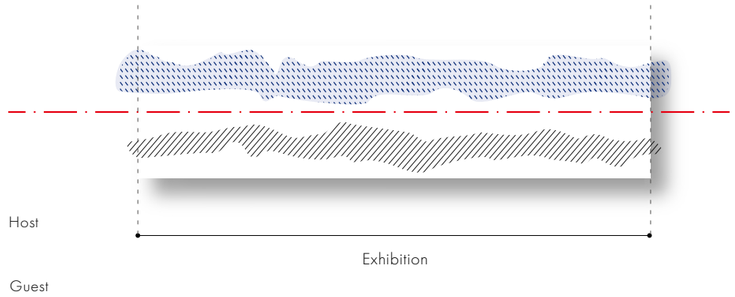
Artists become a host of the space. However, the distinction between guests & hosts remains.

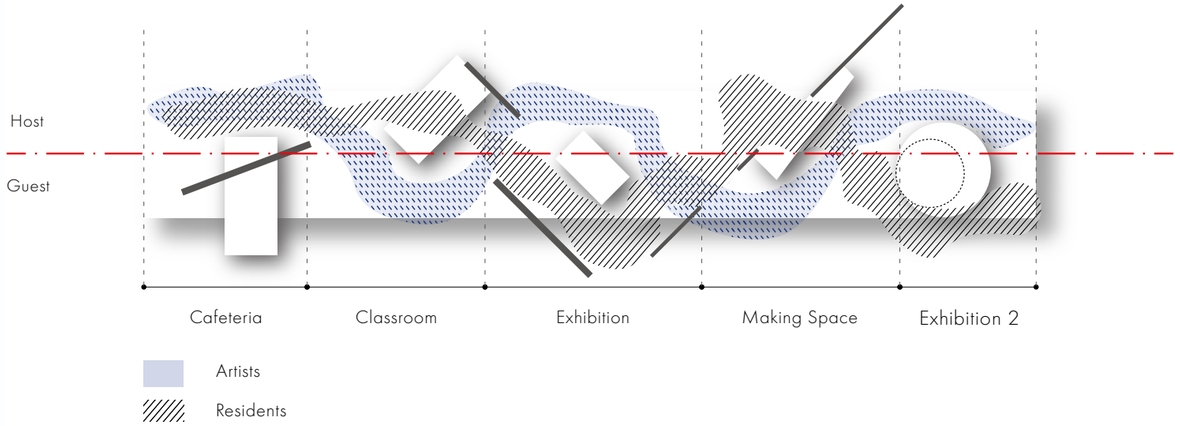



## 3. My Proposal

The distinction between guest & host disappears. Guests can be a host. Hosts can be guests.

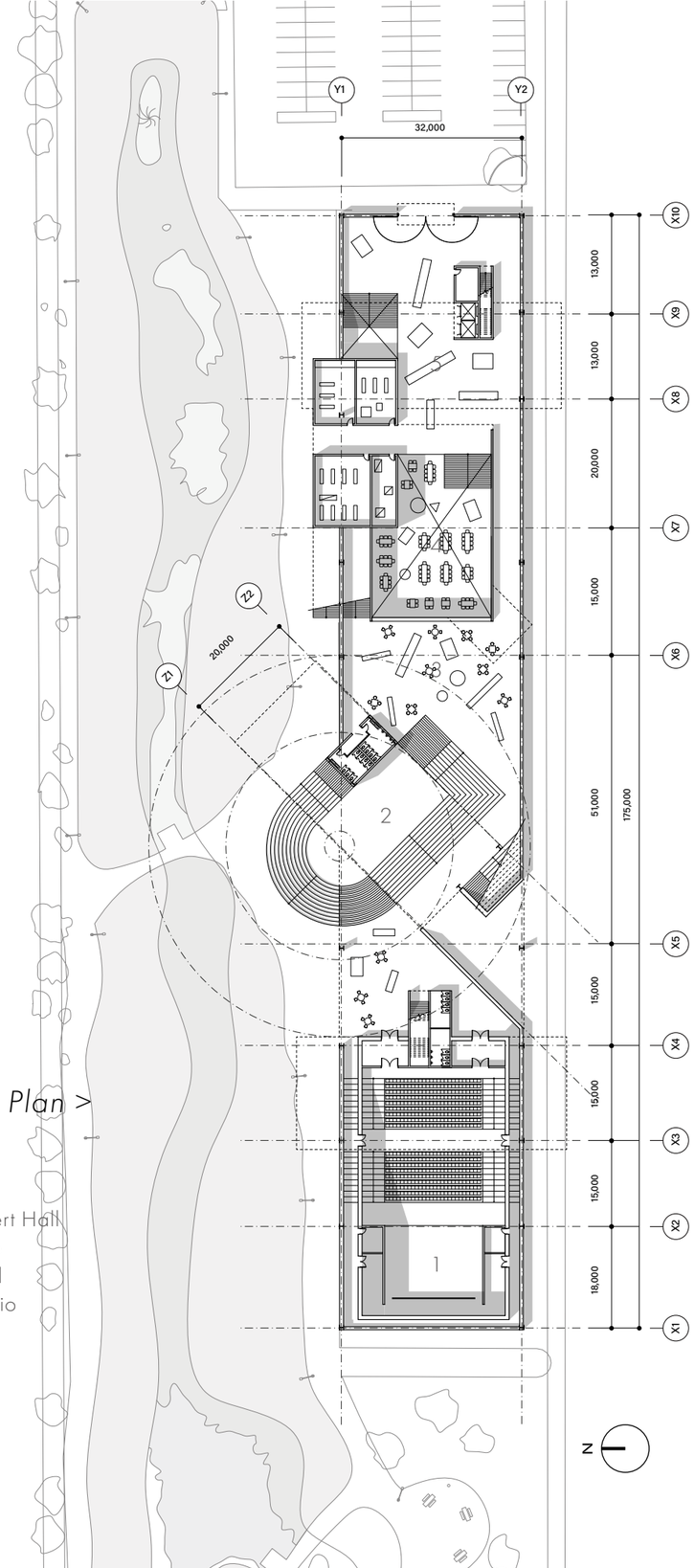





*< Relationship Diagrams between Gruest & Host >*

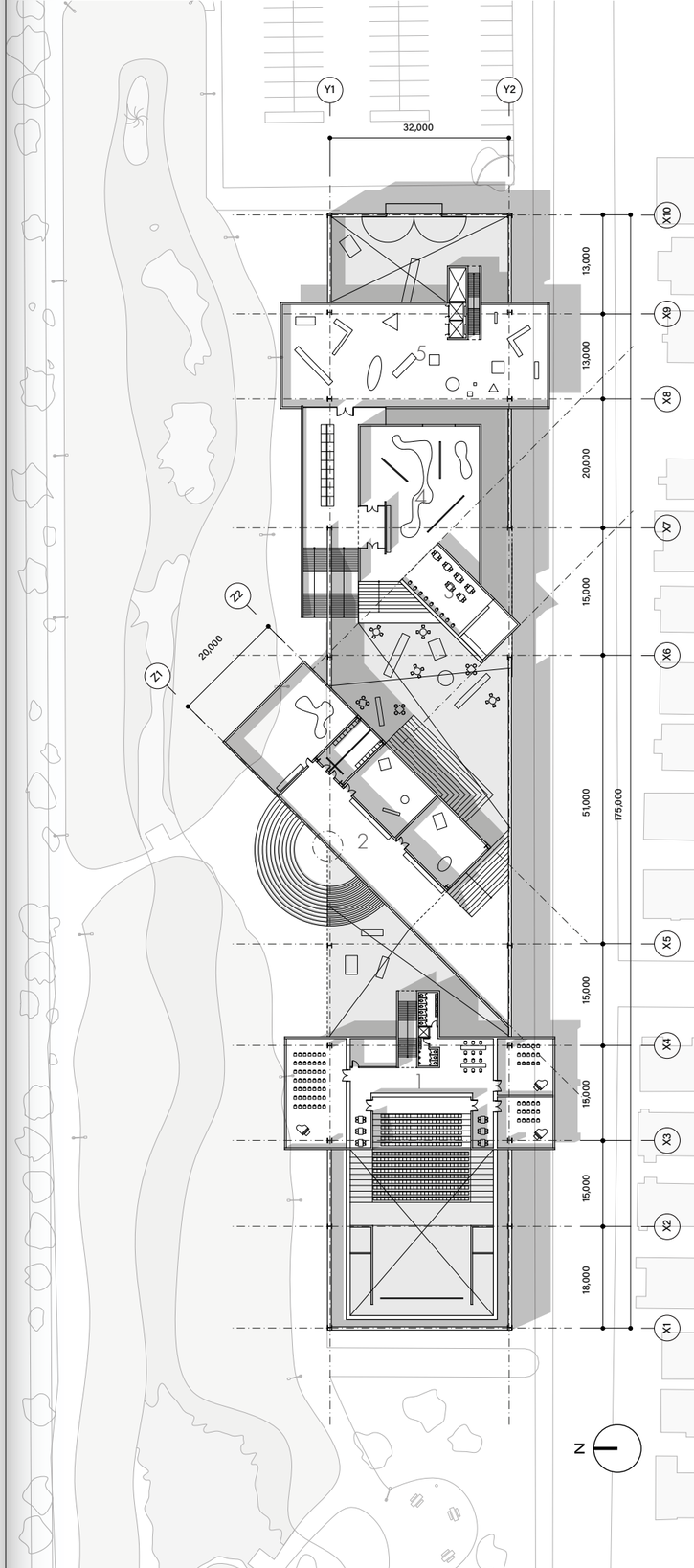
In the Art box, the relationship between guest and host keeps changing according to the programs. In the case of the cafeteria, artists and viewers are all guests. However, when they are in the classroom, artists become hosts, and viewers become guests as a student. In exhibition spaces, this relationship shifting happens vise versa.




< *1st Floor Plan* >

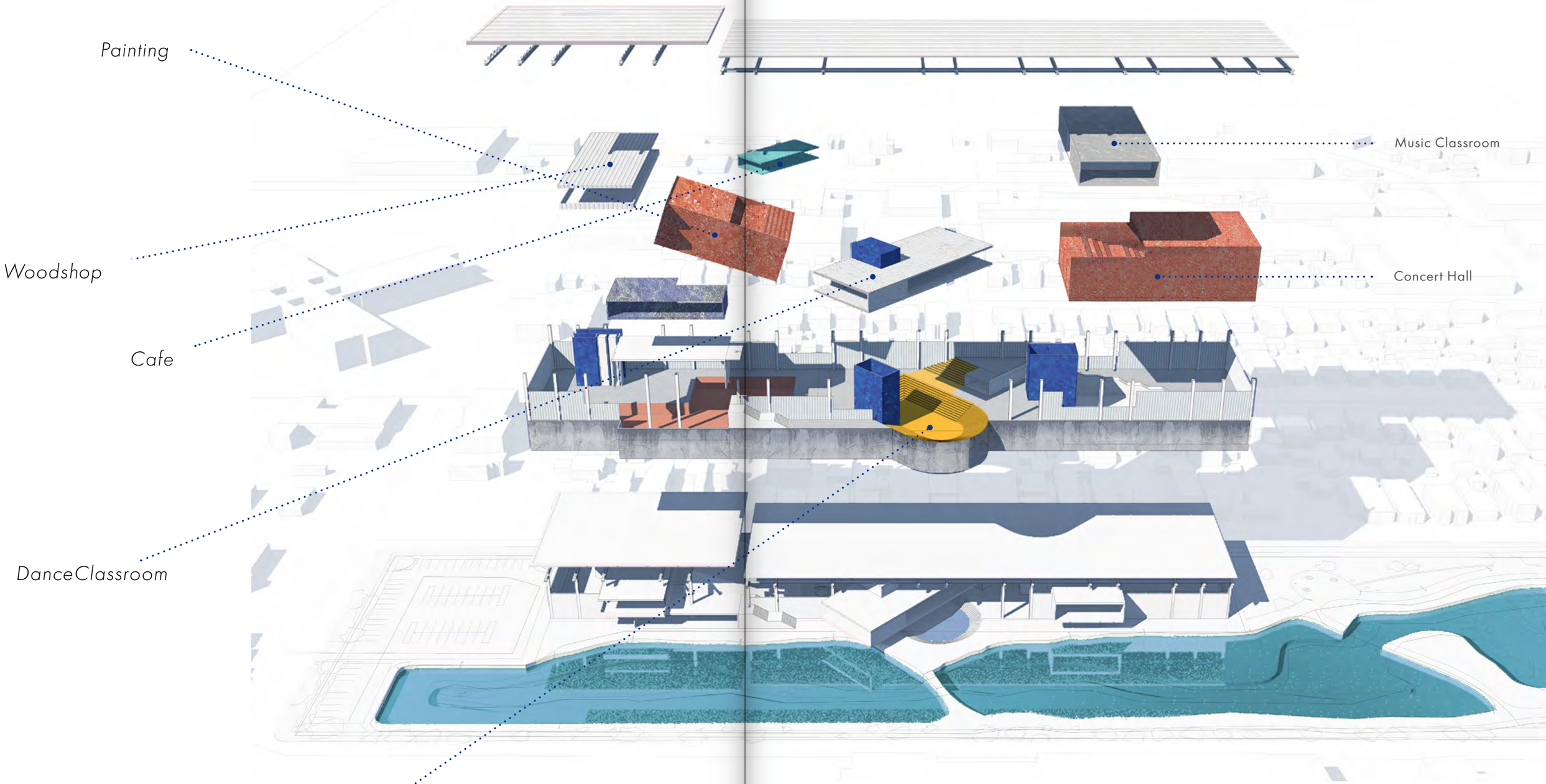
1. Music Concert Hall
2. Dance Stage
3. Meeting Hall
4. Painting Studio
5. Woodshop






< *2nd Floor Plan* >

1. Music Rehersal, Classrooms
2. Dance Rehearsal, Classrooms
3. Cafeteria
4. Painting Gallery
5. WoodshopGallery

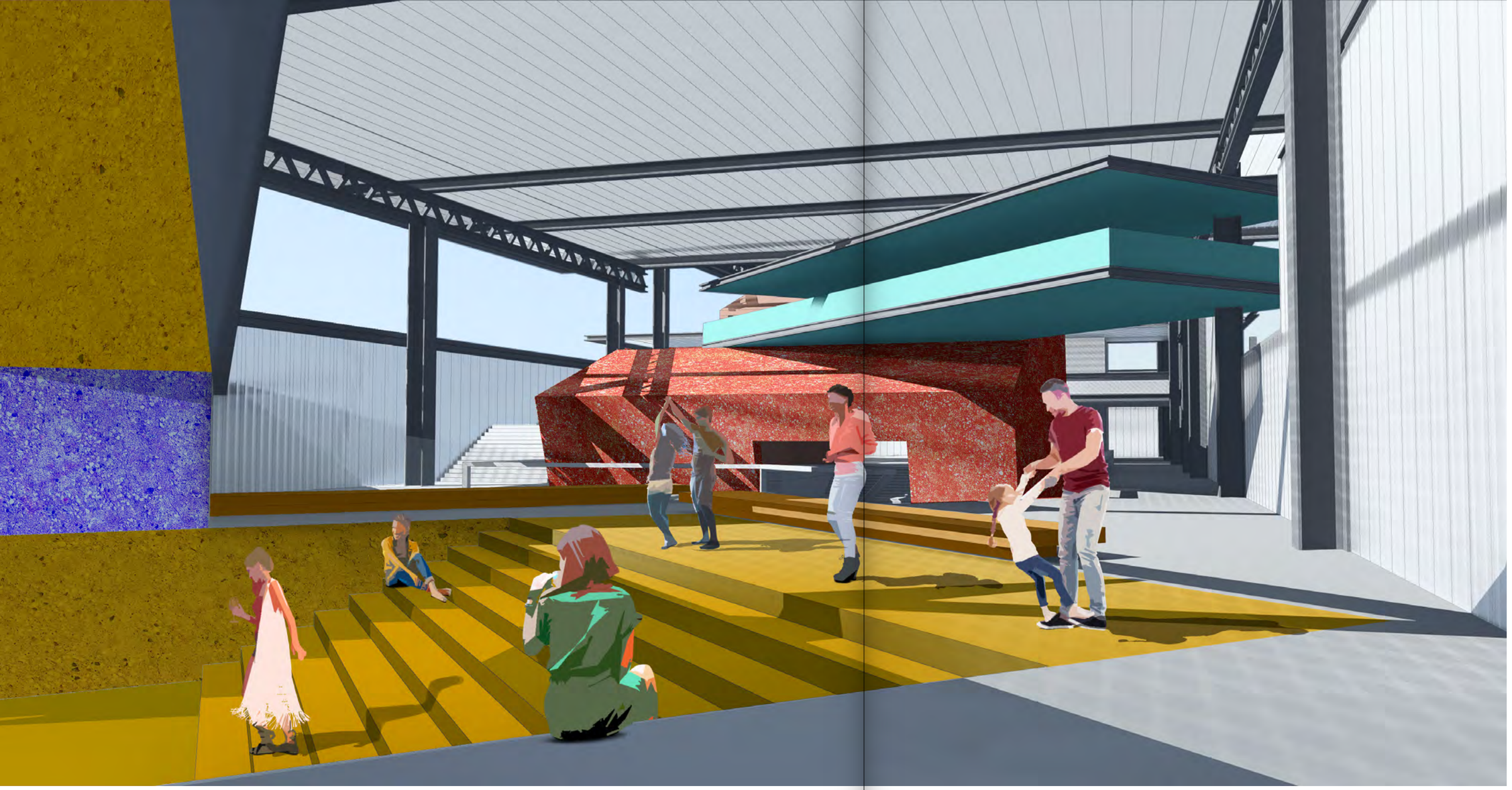



< Program Axon >

Existed abandoned bus terminal becomes a box to contain various art exhibition spaces and educational facilities. Four different genres, including dance, music, wood-crafting, painting programs, are in it.

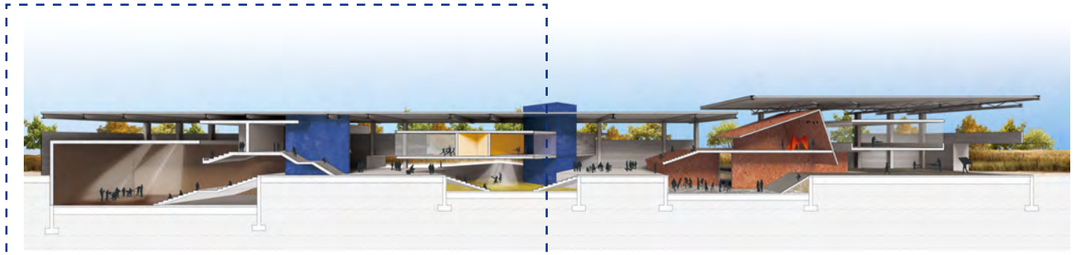
*< East Enterance View>*

Uplifted roof reveals what the art box contains inside. Boxes inside express their identities by colors or materials. Uplifted roof reveals what the art box contains inside. Boxes inside express their identities by colors or materials.



*< Dance Stage View >*

There are no walls that divide the inner space. What defines and divides the spaces is other boxes that contain different programs. The process of making art such as painting or rehearsal of performance are all opened to the visitors.



< Music >

The concert hall and the music classroom are vertically interconnected. Because it is a noisy space, it is located at the end. In this space, the relationship between the performer and the viewer often crosses. Because it is a space for residents, anyone can be a performer, and anyone can be an audience.

< Dance >

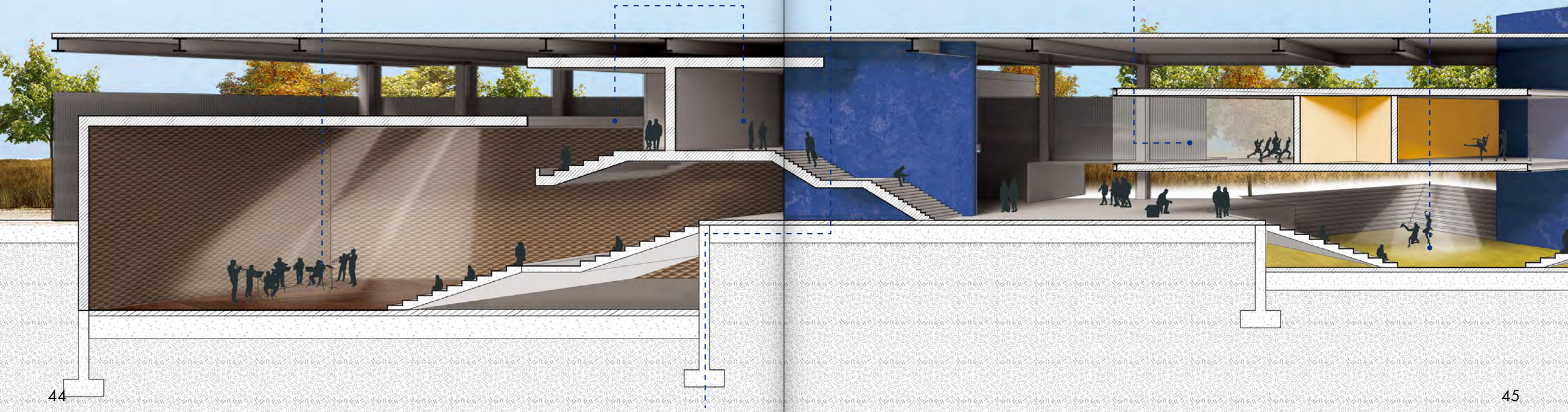
The dance space is the space where the relationship between the guest and the host is most active. In some cases, the classroom can be a stage because the rehearsal space and classroom are located directly above the stage.

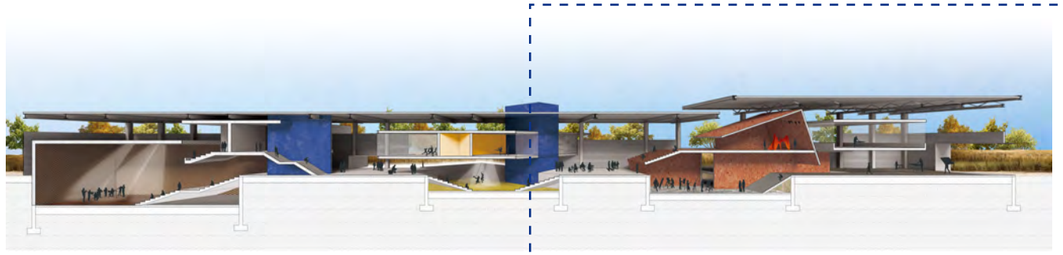
< Concert Hall >

< Music Classroom >

< Dance Stage >

< Dance Classroom >





< Painting >

In the painting area, the production space and exhibition space are housed together in an inclined box. In general, the classroom space, which is the production space, is open, blurring the boundaries between exhibition and production. The relationship between guest and host is often reversed in this space as well.

< Woodshop >

The woodshop is located on the first floor close to the parking lot because there is a frequent movement of large and heavy materials. It is connected spatially with the painting space next door, but the levels are different, so they do not invade each other's space visually.

< Main Hall >

< Painting Classroom >

< Painting Gallery >

< Woodshop Gallery >

< Woodshop >

*< Dance Studio and Stage _ Physical Model 24x32 inch >*

This model shows the dance classroom and dance stage below. In the same area, artists', residents', and viewers' relationship shift consistently. Dance classes above can also become a stage for the people in the park or stage at the ground level. Also, the stage's stairs can be stage and vise versa.

*< Enterance Facade _ Physical Model 24x32 inch >*

This facade shows the design strategy of the Art box. The slightly lifted roof of this project shows that there are different boxes in it. Also, the poly carbonate's translucent materiality helps people outside can vaguely expect that there are different boxes in it.

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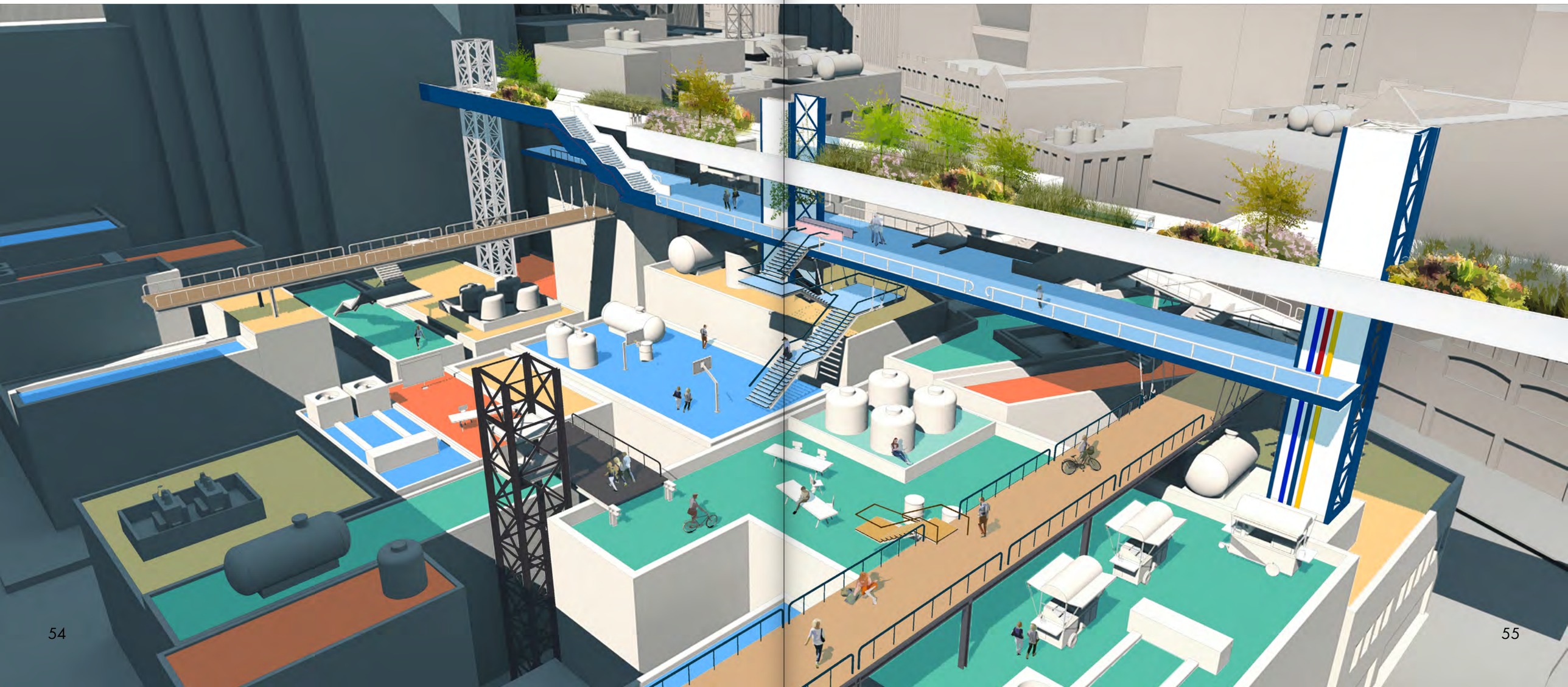
# The Street Studio

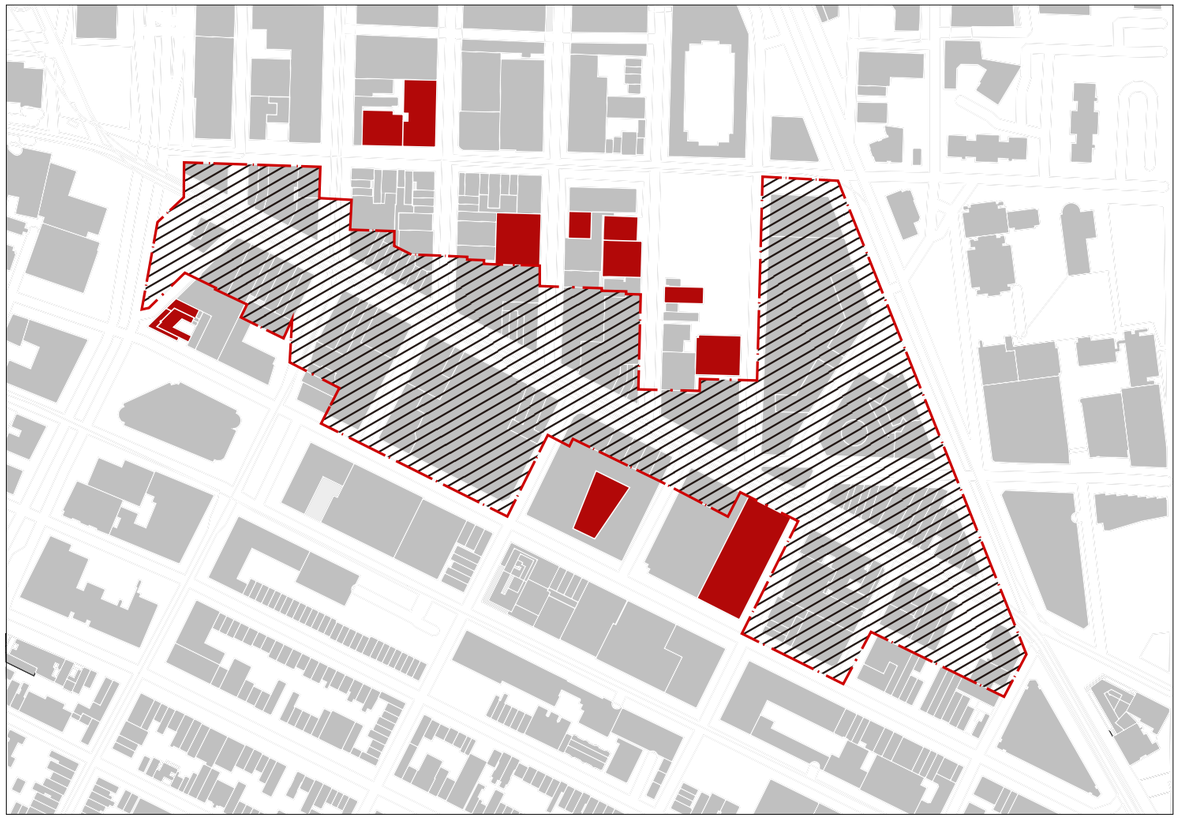
*Spring 2020*
*_2020.01 ~ 2020.05*
*_Professor Jing Liu*
*_Individual Work*

# The Urban Coral

## The New Street Above The Street

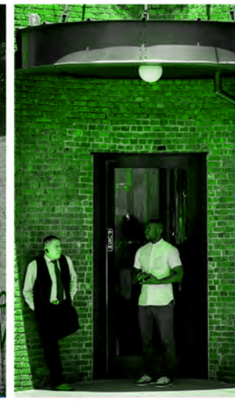
This studio researched the new players in the street, rediscover past experimentations that might still offer relevance and study possible new typologies that might be constitutive of contemporary discourse. The urban coral project focused on the situation of Fulton Street, where life becomes simplified due to dominant activities. The gentrification was harsh because the capital erodes the streets. The memories of the inhabitants who formerly lived there disappear. This project is a project to create a new street that preserves the values disappearing due to dominant activities. The new street will not only preserve the possibilities of events that Fulton had but also will create what they could not have so far.





Fulton Street Development Restricted Area

Redeveloped High-rise Building

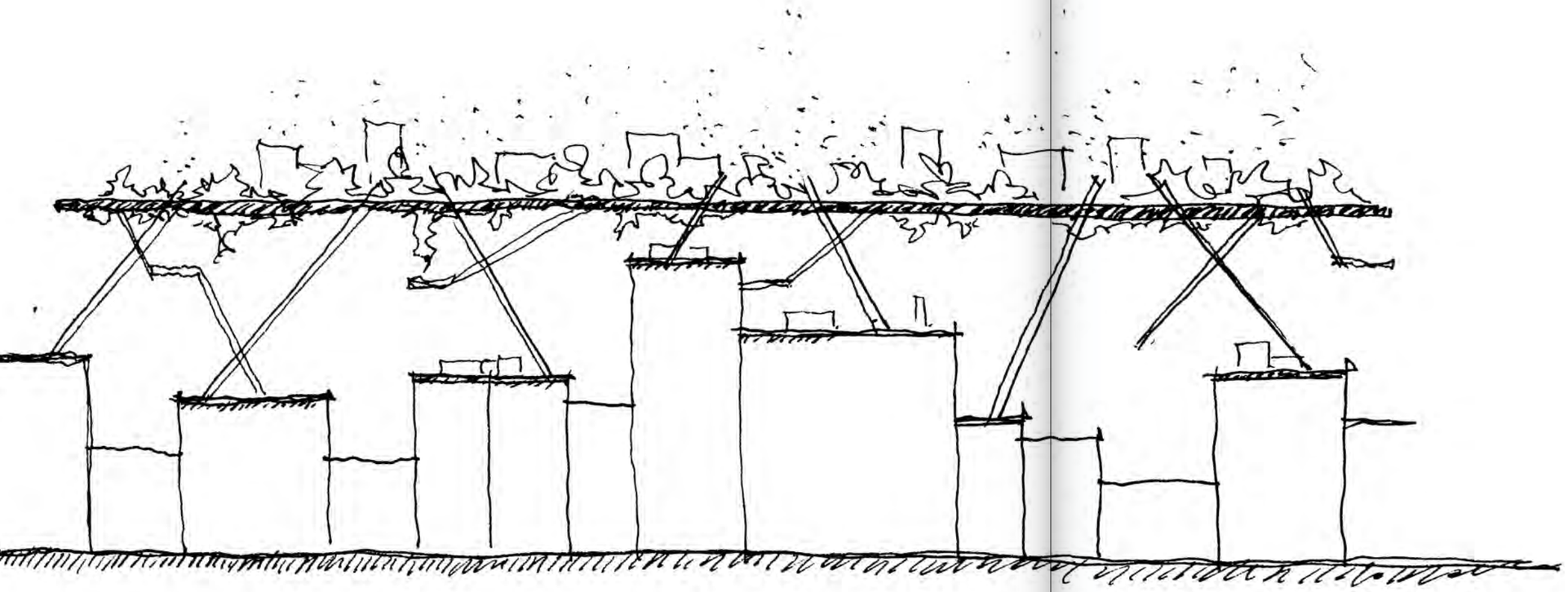


*< Fulton St. & Gentrification >*

Fulton Street is currently proliferating with a lot of investment support. Many companies were attracted, and jobs were created, but at the same time, gentrification was rapidly taking place, and existing merchants and residents were leaving the streets because they could not afford the rent.

*< Fulton Street  & Rooftops >*

If gentrification prevents residents from occupying the streets of the ground level because they cannot afford the increased rent, they can open up new areas. What this project suggests is the rooftop space. The rooftop space is an attractive space with a variety of sizes, heights, publicity, and private. However, they need a system to connect these scattered island-like spaces.

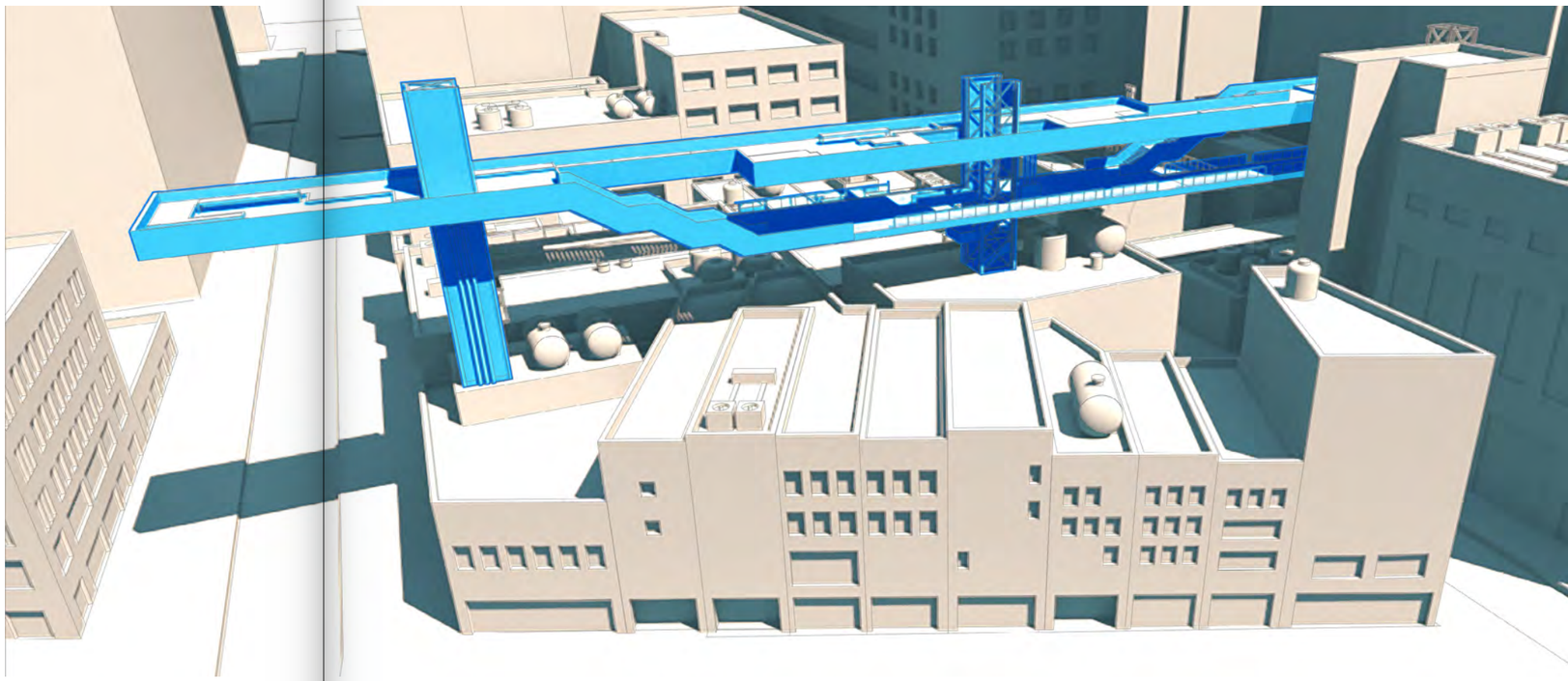


*< Concept Sketch _ Connecting Rooftops >*

In order to facilitate the movement between the rooftops of various heights, a bridge connecting them is necessary. The bridge becomes the spine of the new street. Owners of the buildings' roofs of each building can join as part of the new street by connecting their roofs to the bridge.

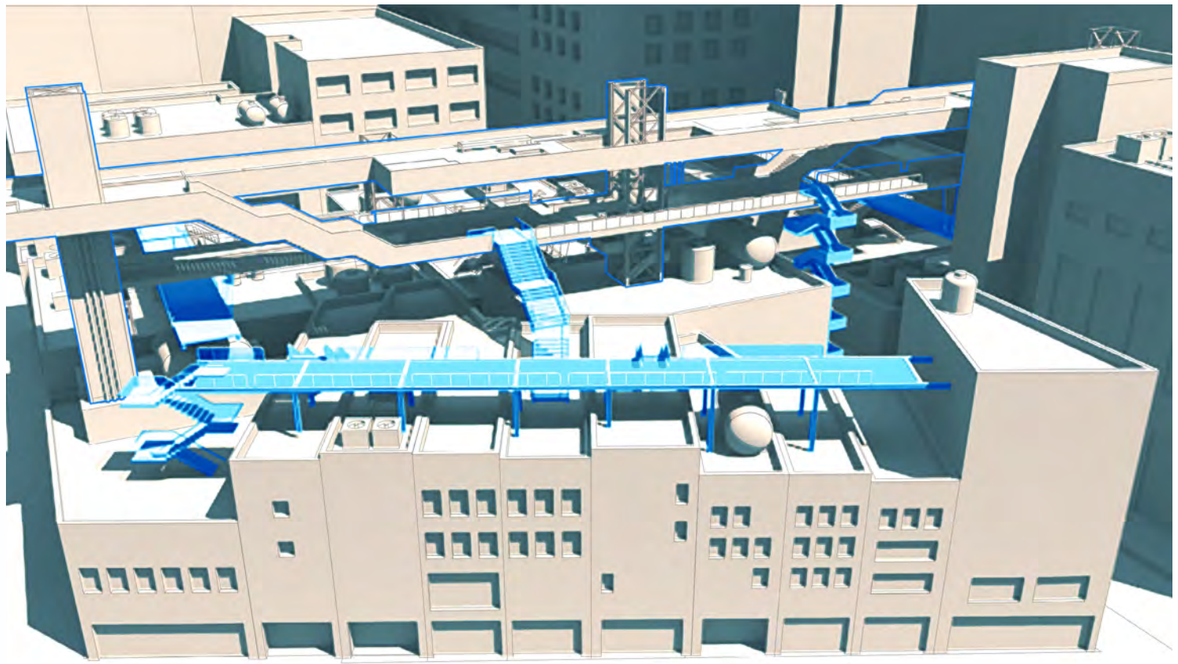
## < Connecting _ Main Bridge >

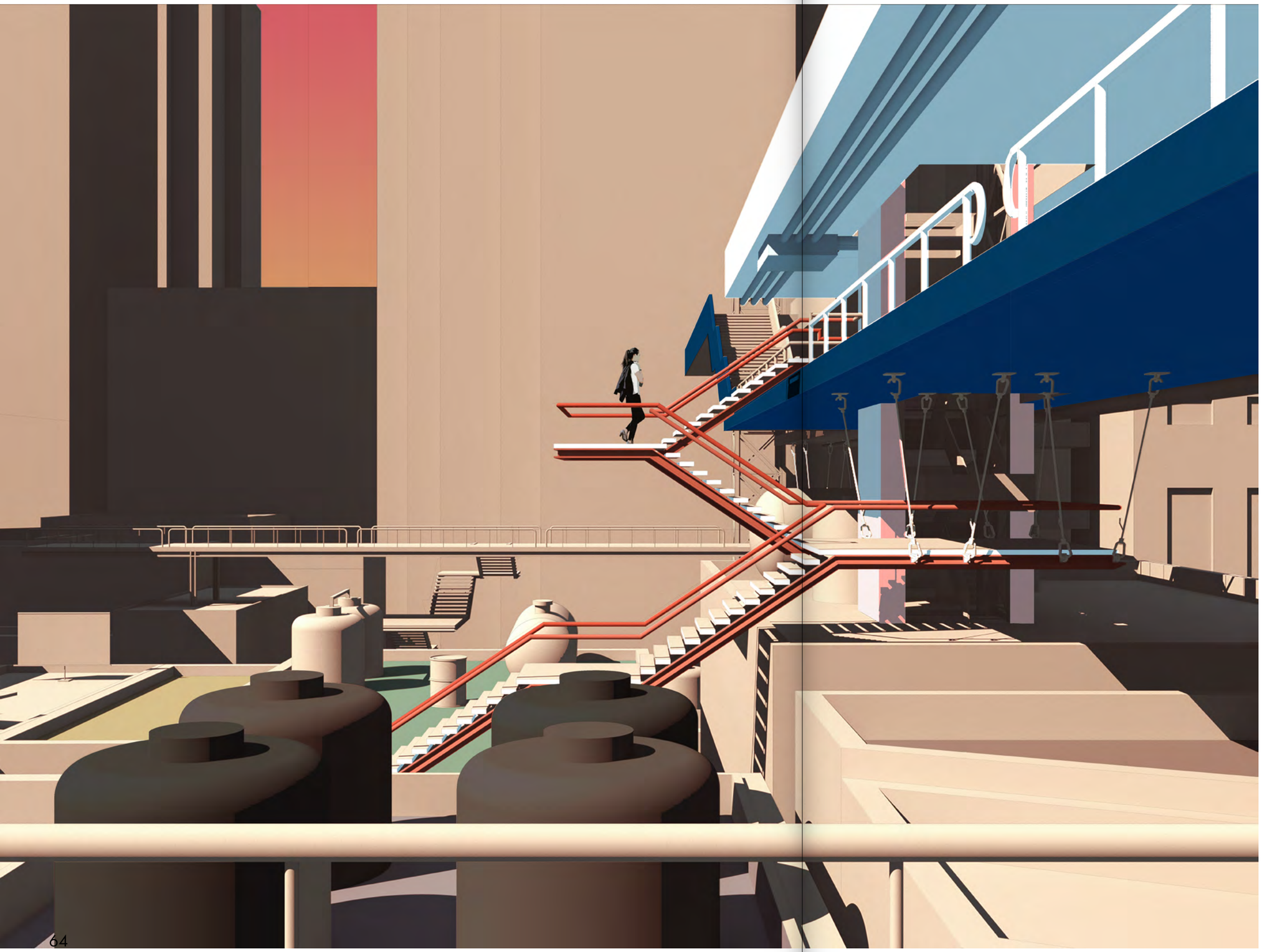
The main bridge serves as the backbone of the connections between the rooftops. In Fulton Street, buildings with strong cores are selected, and the cores are extended to be used as structures. This main bridge provides the light, electricity, and water needed to utilize the rooftop space.



## < Connecting _ Branches >

Each rooftop space can be connected with a temporary staircase that voluntarily approaches the main bridge if desired. With minimal architectural gestures, each rooftop space is no longer isolated, but incorporated into a new street.





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# Techniques of Ultrareal

*Fall 2019*
*_2019.09 ~ 2019.12*
*_Professor Joseph Brennan, Phillip Crupi*
*_In Collaboration with Byungryoung Lee, Changbin Lee*

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## Ultra Real : 3DS Max + V-ray

This project is to learn how to make the most realistic modeling and rendering. We used Rhino for 3d modeling and 3ds Max for rendering.

There were four main goals to express through modeling. A large concrete structure that divides the rocky terrain and the forest and divides the two. Finally, we placed the water that all of these elements reflected.

< Front View >

The concrete building in the middle has metal window frames and handrails. On the first floor, there is a dim light that reflects the rock wall inside . On the other hand, since there is no light source on the second floor, it is so dark that nothing shows.

## < Interior View >

The interior view maximizes the backlight effect. The backlight maximizes the grain of the concrete inside, and only the shape of the person is visible. Unlike reflective materials such as bridges and concrete, gravel and rocks on the floor are not highly reflective.

## < *Enterance View* >

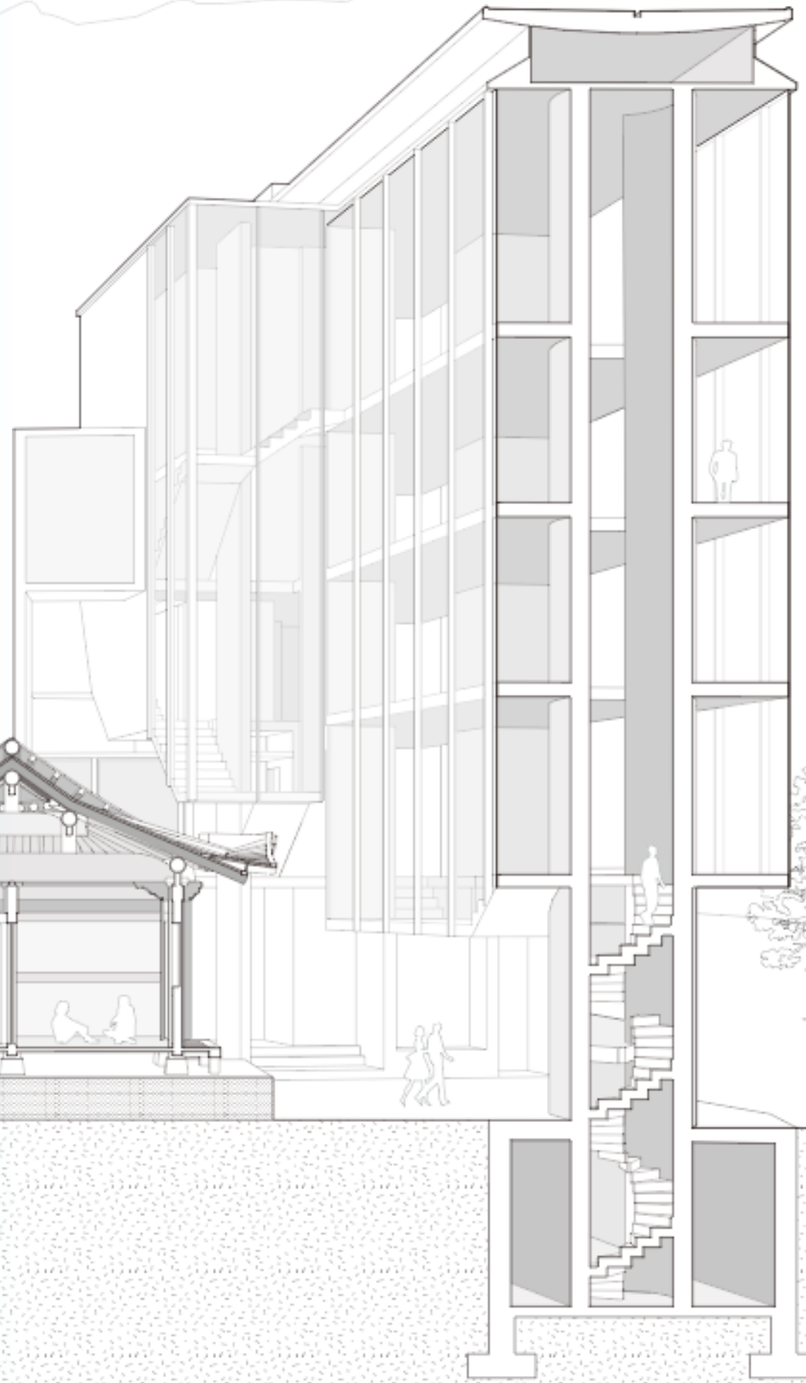
This image shows the natural form of a rock.
Moreover, at the point where the rock meets the water,
it shows the details of the moss.

# Seminar of Section

*Spring 2020*
*_2020.01 ~ 2020.05*
*_Professor Marc Tsurumaki*
*_Individual Work*

# ARARIO MUSEUM SECTION

The seminar of section class analyzes the section examples of various spaces and their types, and how to draw the appropriate section drawing accordingly. This drawing shows that the characteristics of buildings with three different types of materials and architectural methods.



## < *Arario Museum* >

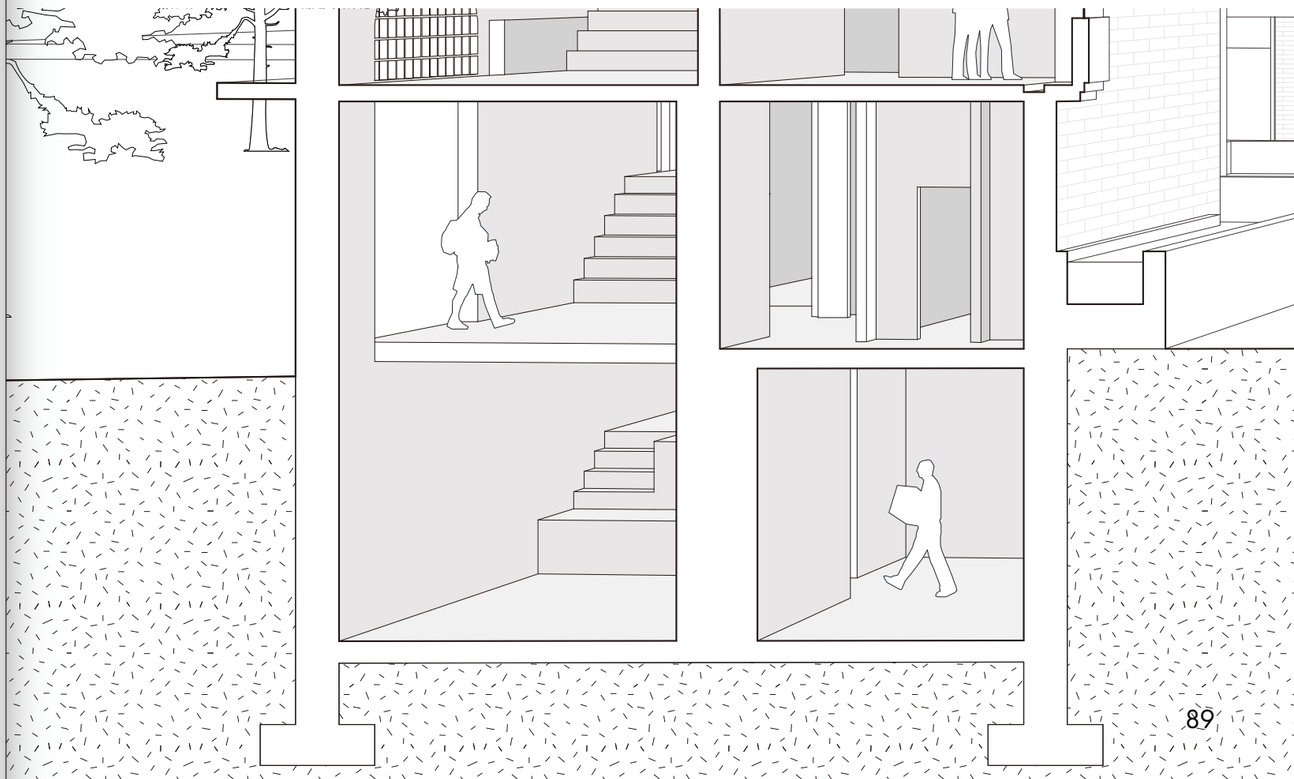
Arario museum was used for architectural office ‘Space’ in the past. However, it is now used for the museum. Since it was not built at one time and was expanded several times, a traditional Korean building is in the middle of the courtyard, and modern red bricks were used for the main building. Lastly, a

## *< Left : Brick Building >*

This brick building has a narrow corridor and low ceiling space. The size of the space is varying by floor, and the facade shows decorative extrude windows.

## *< Bottom: The boundary between soil and building >*

The thickest line that is descending along the building touches the ground and follows the ground, where the boundary line has the meaning of a void and a solid rather than a boundary between the ground and the building.



*< Bottom : Traditional Korean Building >*

Unlike other buildings, this traditional Korean building is constructed with different materials and methods. It is a prefabricated wood structure.

*< Right : Glass Facade Building >*

The main feature of this part is its glass facade, which is open to all sides with glass, and thus has almost no walls in the interior space.