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M.S.AAD
Columbia University

Selected Work from 2019-2020

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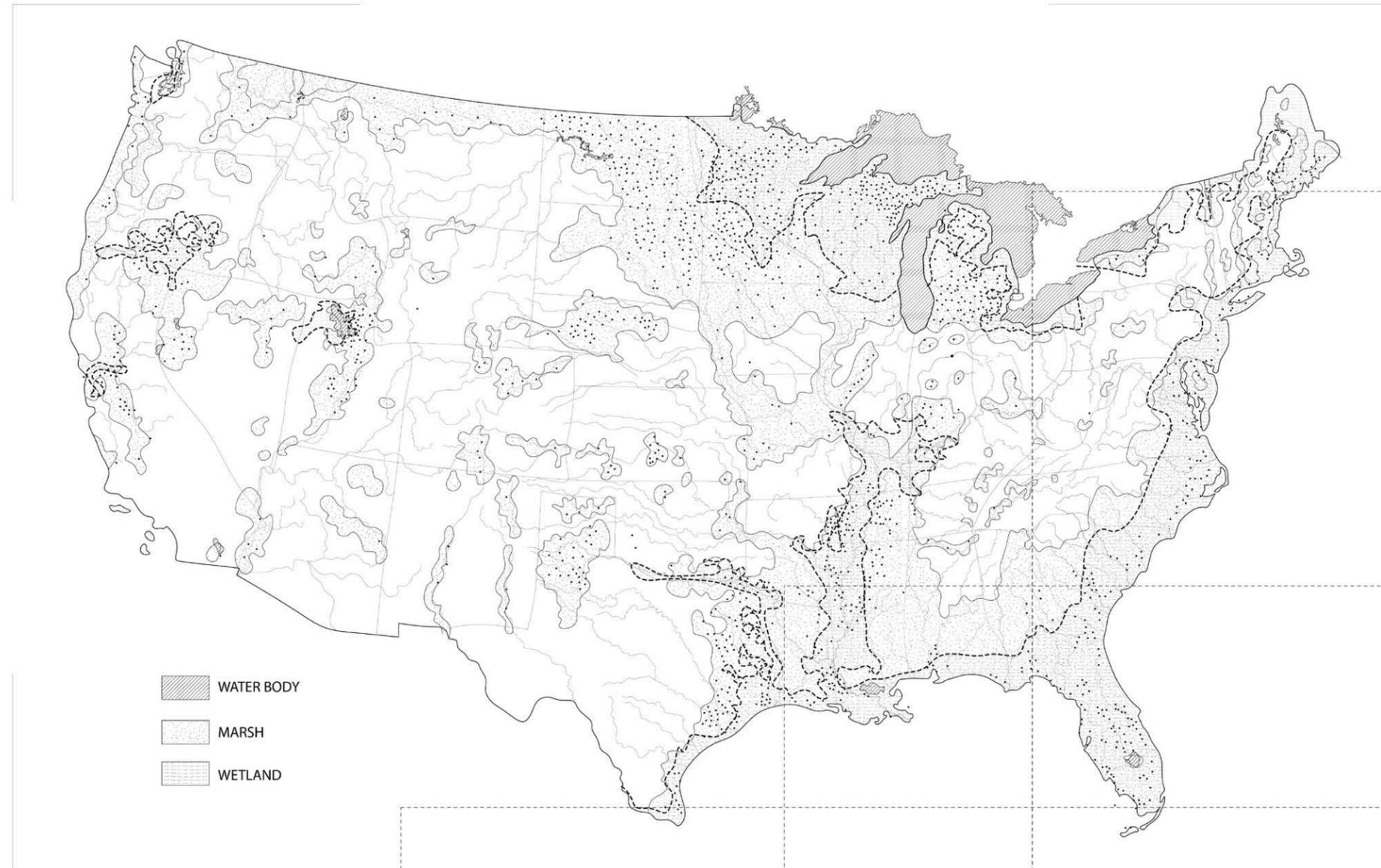


THE PLATFORM

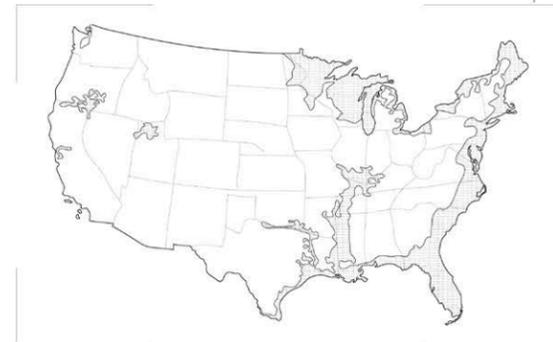
LOCATION: Louisiana, USA
TYPE: Academic, Collaboration
COLLABORATOR: Yanan Cheng
SUPERVISOR: Phu Hoang
PROJECT DATE: December, 2019

Louisiana State Sediment Diversion can create new land but unfortunately kill marine life. In order to reduce its negative effects, we want to use mycorrhizal fungi to solidify new soil so that to decrease the frequency of sediment diversion usage. Between the intersectional areas of wetland and marsh we establish a public platform which allows the researchers and fishermen to communicate the latest information on native creatures. The building is supported by mycelium bricks which are strong in compression. At the beginning, our platform is above water and the earthducts are used for plants. Overtime as the soil pile up, our building will be partially underground.

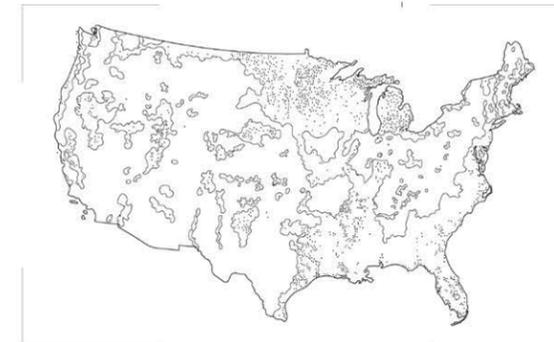
THE INSECTION OF WETLAND AND MARSH



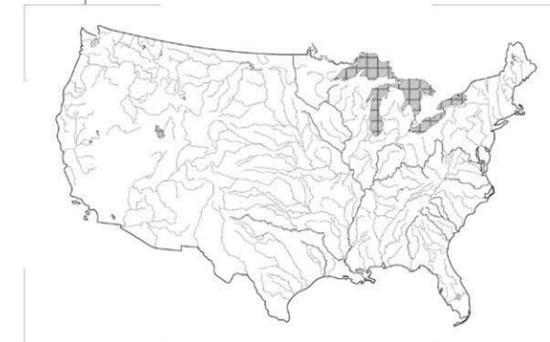
WETLAND



MARSH

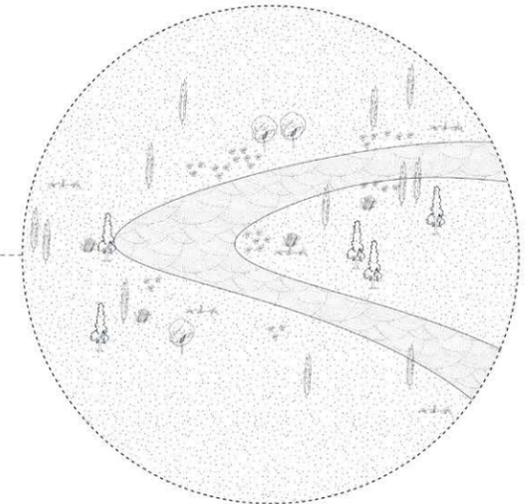


WATER BODY

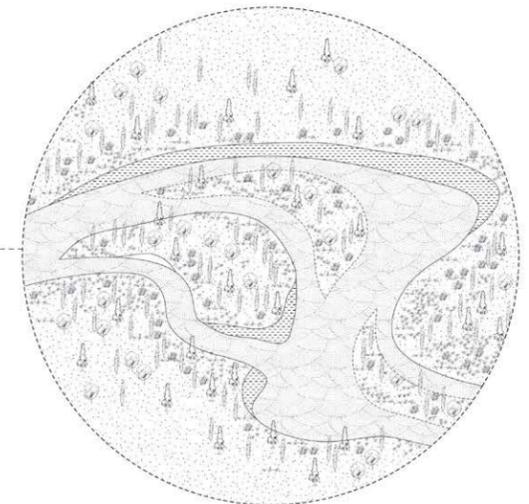


SEDIMENT

Water bodies carry a great amount of sediment which can form new land



Fungi can help strengthen the underground root system of plants in marsh



A strong root system could help solidify the soil from the new land



Wetland and marsh is identified by their different salinity. Wetland is a distinct ecosystem that is flooded by water, either permanently or seasonally, where oxygen-free processes prevail. Wetland is more close to the ocean, and the watercourse is more curve. So there can be some reaction at the intersection of marsh and wetland.

We are trying the land loss problems in Louisiana, where losses the land of one soccerfield every second. The sediment diversion project can save the land by leading the fresh water from Mississippi River to the Marshland, due to the curves in the watercourse, the sediments brought by the river will stay and create new land.

LOUISIANA FUNGUS



Cantharellus Cinnabarinus

It is a member of the genus Cantharellus along with other chanterelles. It is named after its red color, which is imparted by the carotenoid canthaxanthin. It is edible, fruiting in association with hardwood trees in the summer and fall.



Amanita Muscaria

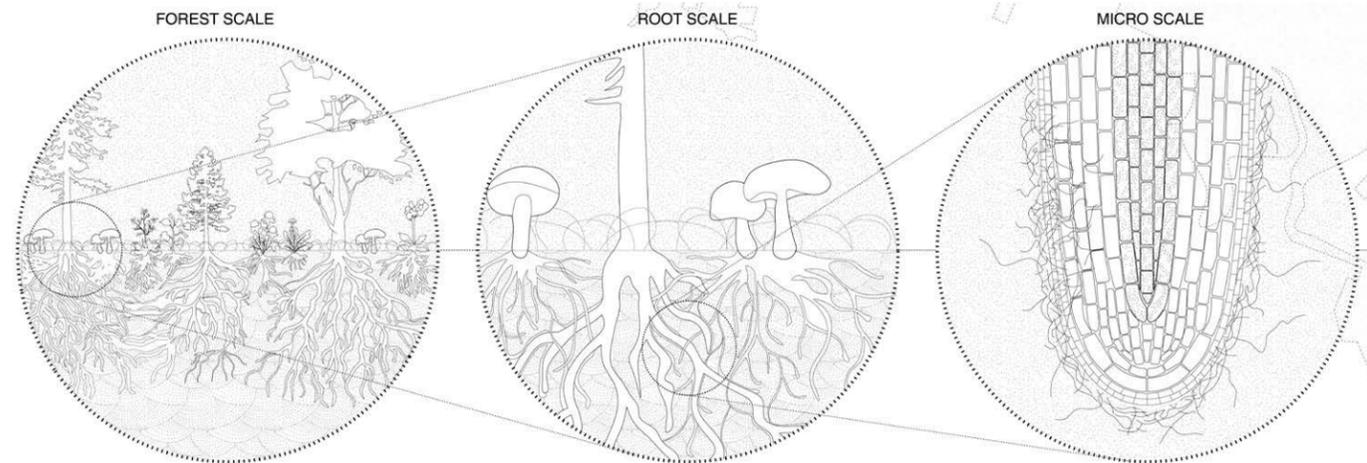
Amanita muscaria has been unintentionally introduced to many countries in the Southern Hemisphere, generally as a symbiont with pine and birch plantations, and is now a true cosmopolitan species. It associates with various deciduous and coniferous trees.



Boletus Barrowsii

is an edible and highly regarded fungus in the genus Boletus that inhabits south-western North America. Found under ponderosa pine and live oak in autumn, it was considered a color variant of the similarly edible B. edulis for many years.

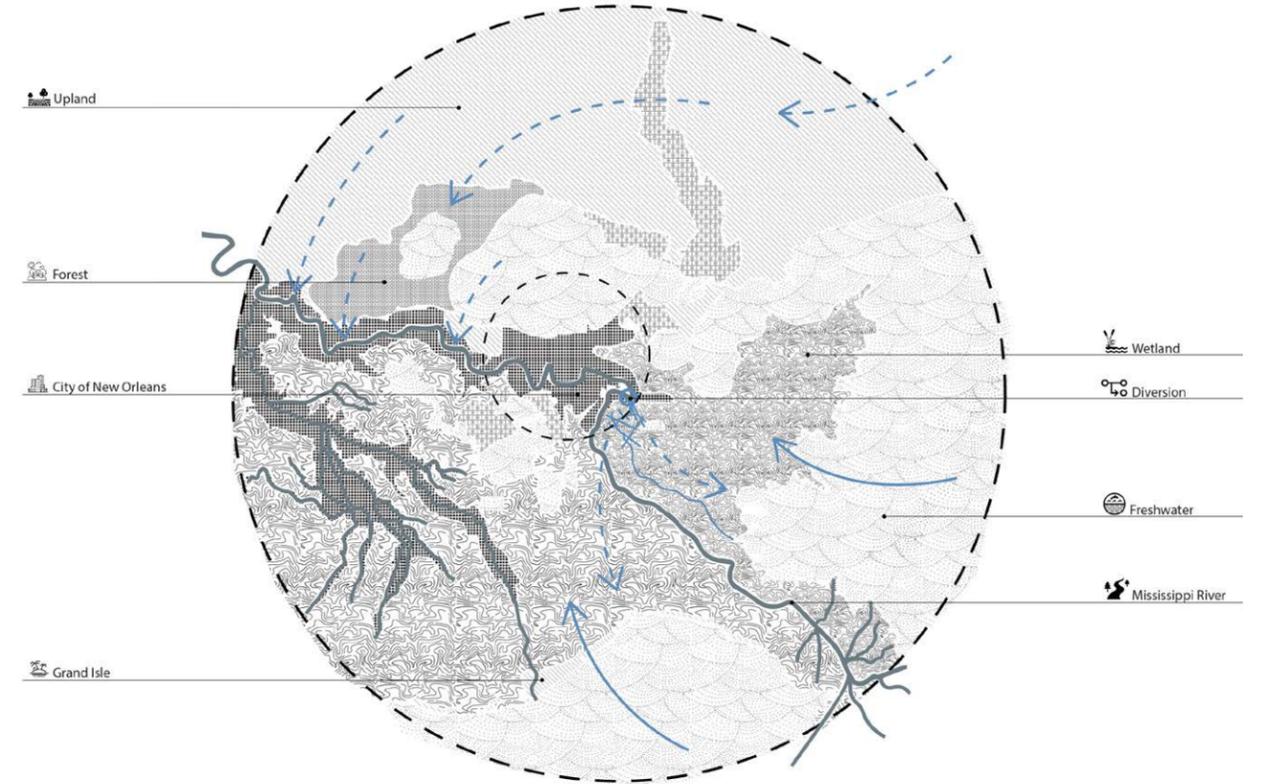
MICORRHIZAL FUNGUS



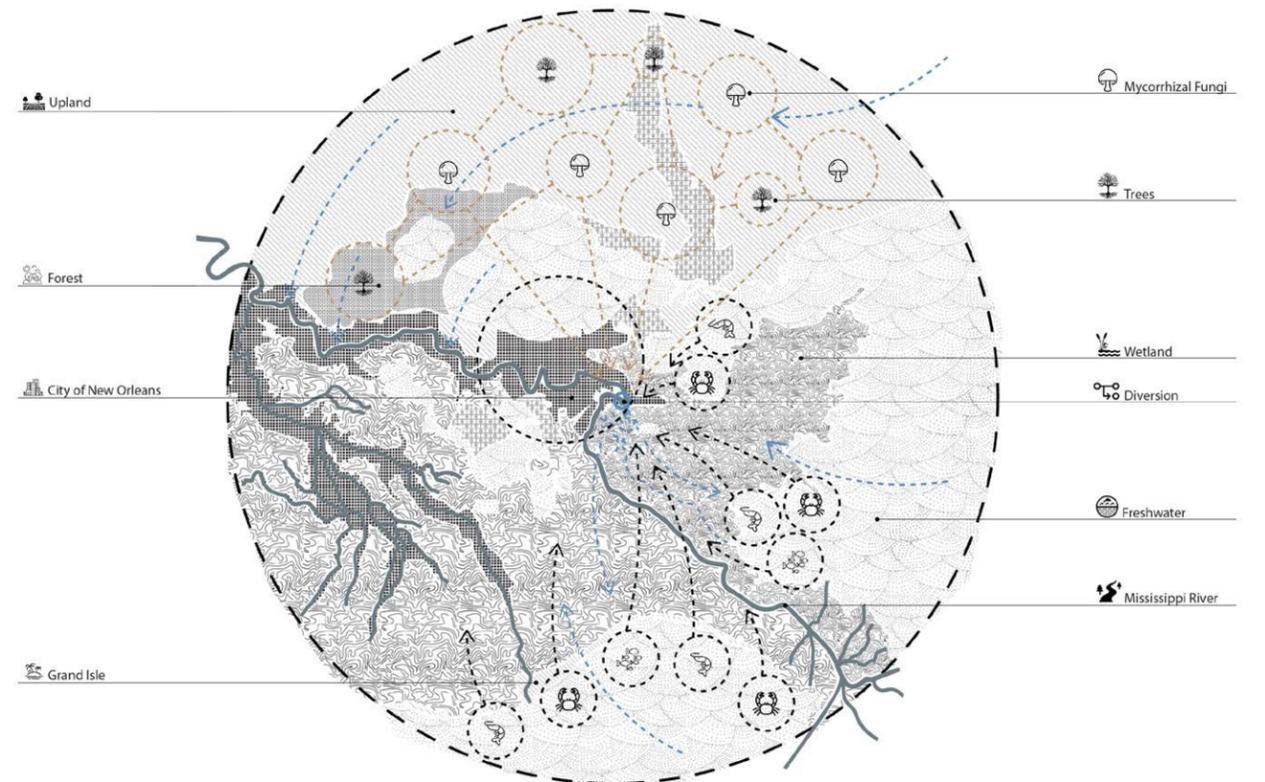
Mycorrhizal is a symbiotic association between a fungus and a plant. The term mycorrhiza refers to the role of the fungus in the plant's rhizosphere, its root system. Mycorrhizae play important roles in plant nutrition, soil bi-

ology and soil chemistry. In a mycorrhizal association, the fungus colonizes the host plant's root tissues, either intracellularly as in arbuscular mycorrhizal fungi, or extracellularly as in ectomycorrhizal fungi.

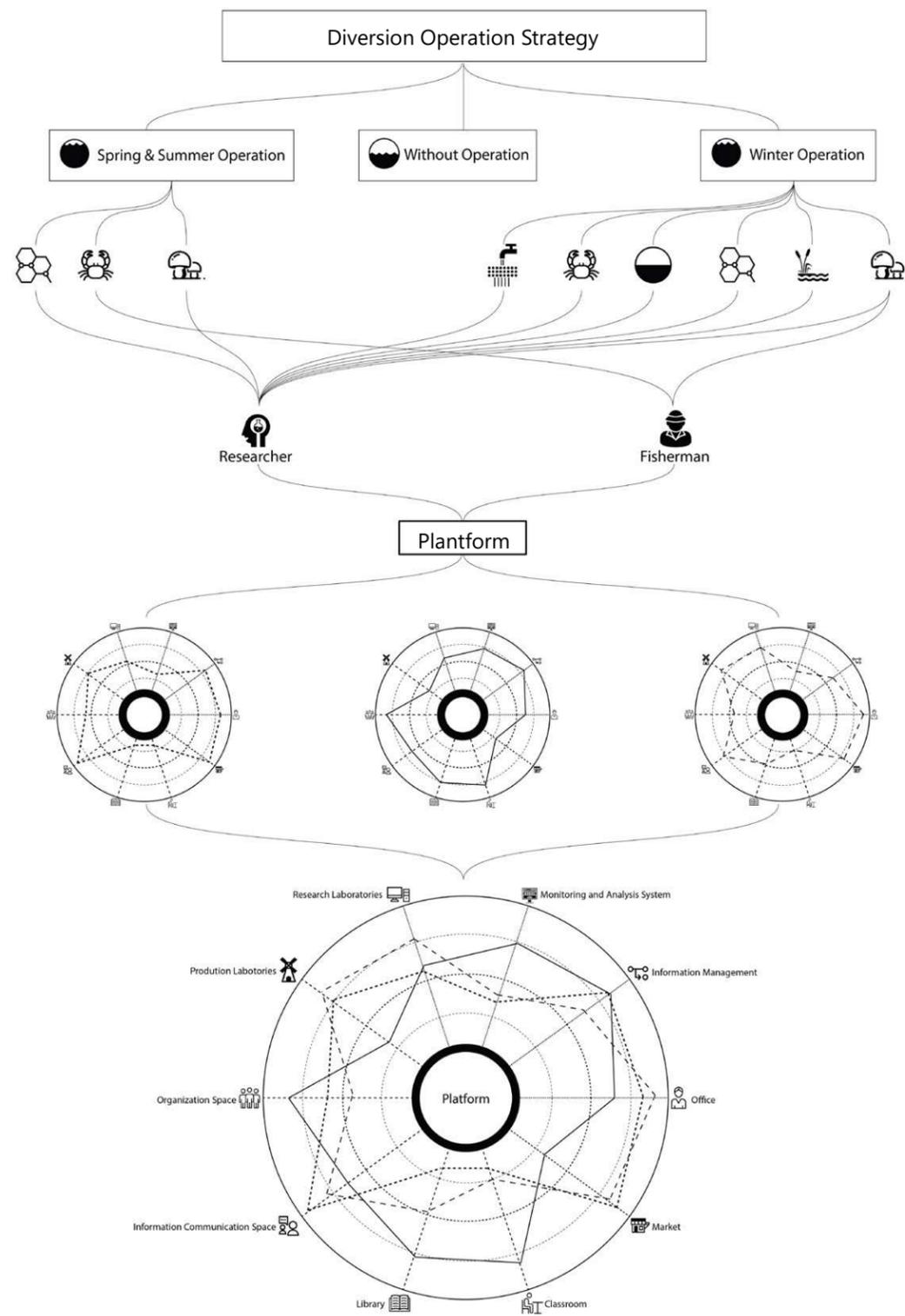
CURRENT BALANCE



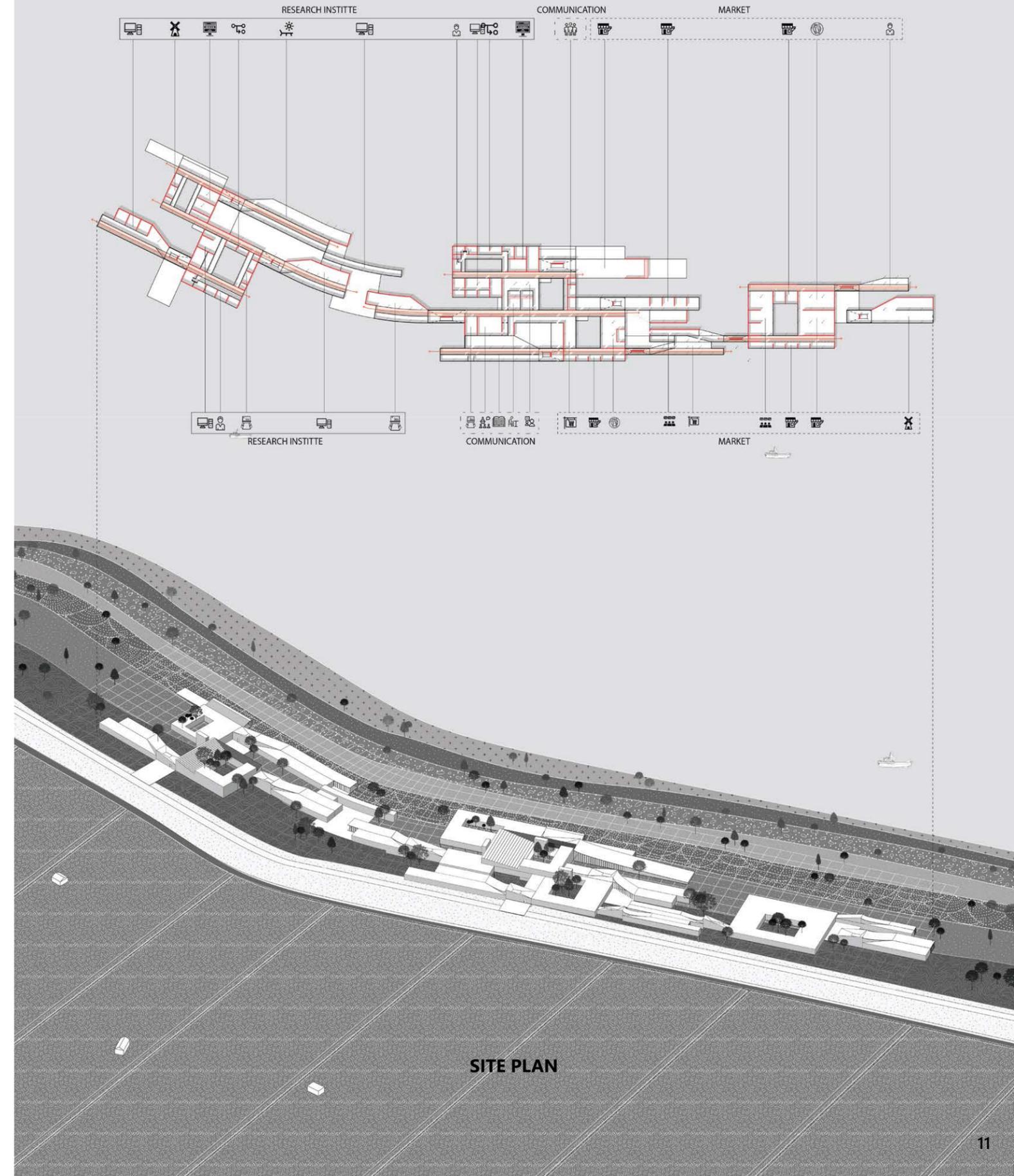
INTRODUCE MICORRHIZAL



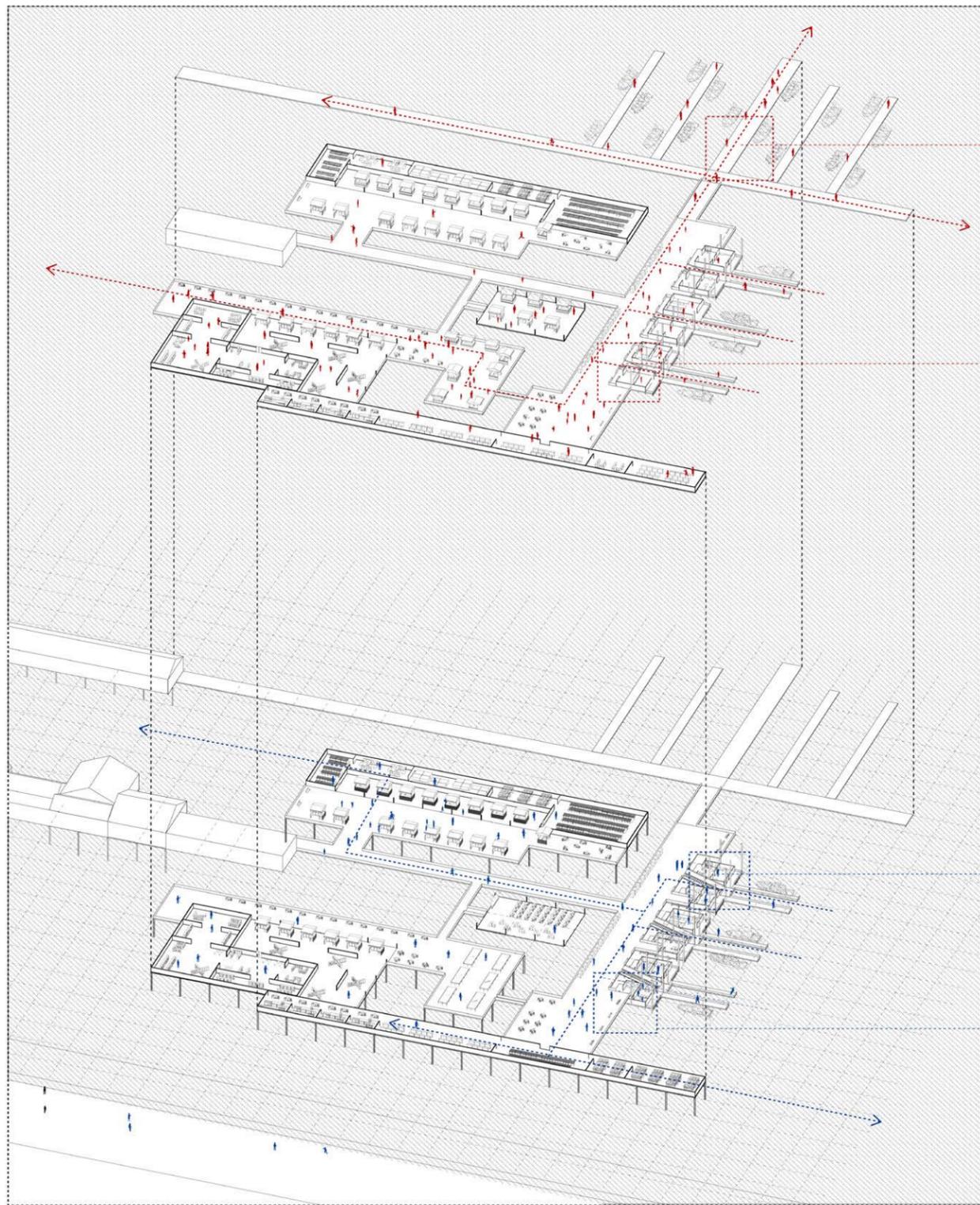
SEASONAL PROGRAMMING



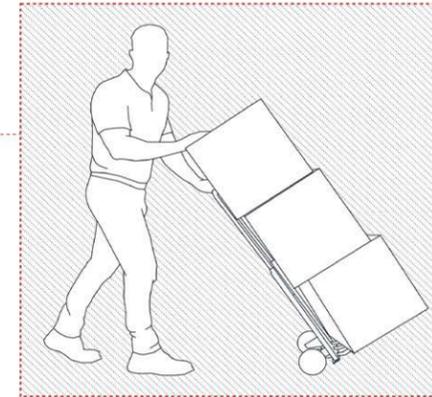
The sediment diversion will also have some bad influence on the production of the fisherman in Louisiana for some reason, so the conductor decide to have seasonal operation on the sediment diversion. This measure will also influence the programs, so we have flexible and seasonal functions and spaces in this building



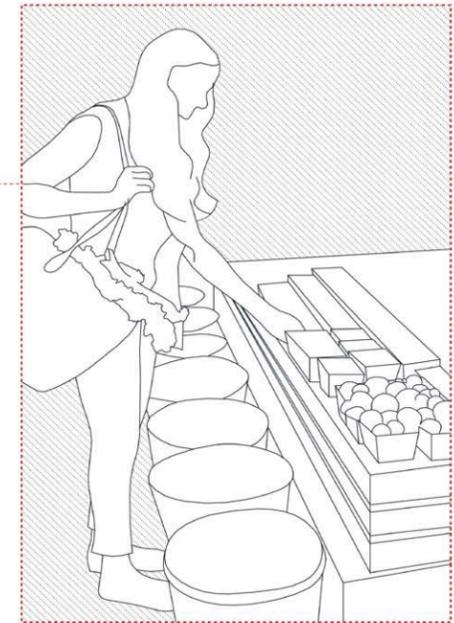
SITE PLAN



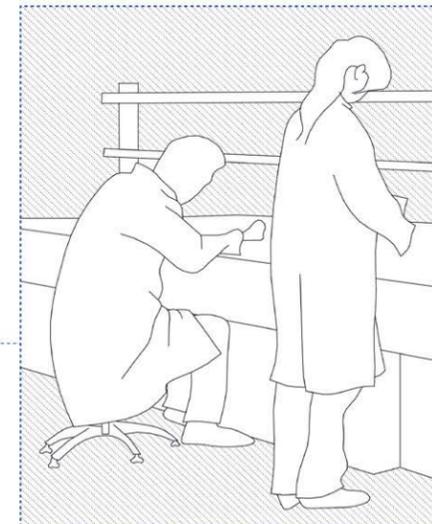
SEASONAL PLAN



transporting



marketing



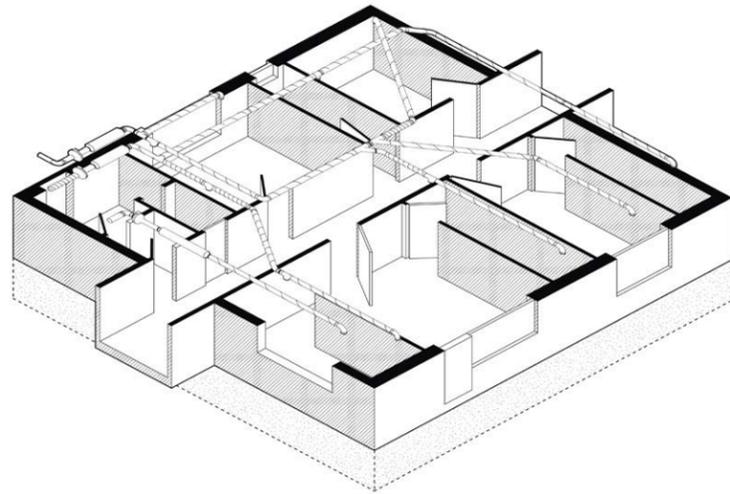
experiments



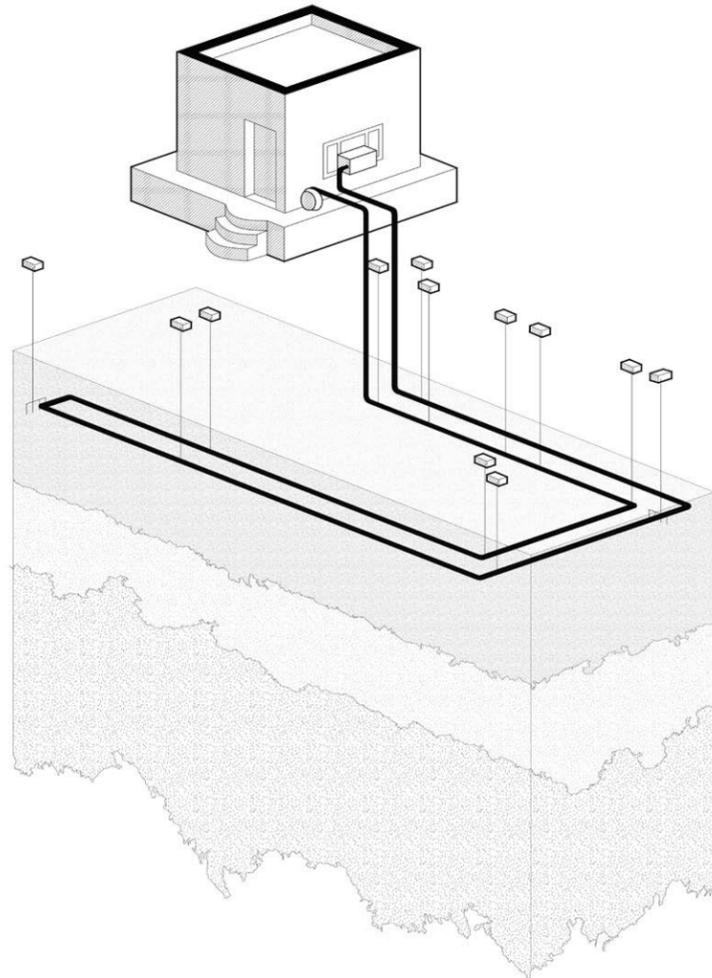
processing

SEASONAL ACTIVITIES

AIR CORRIDOR LAYOUT

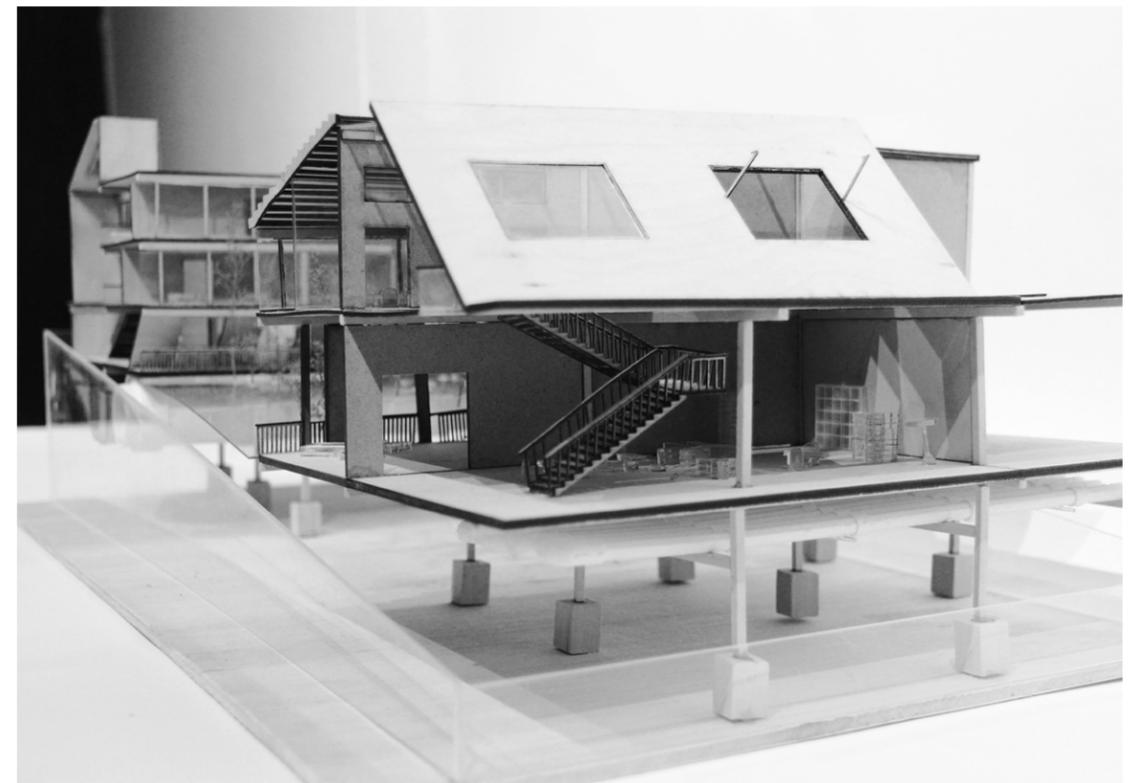
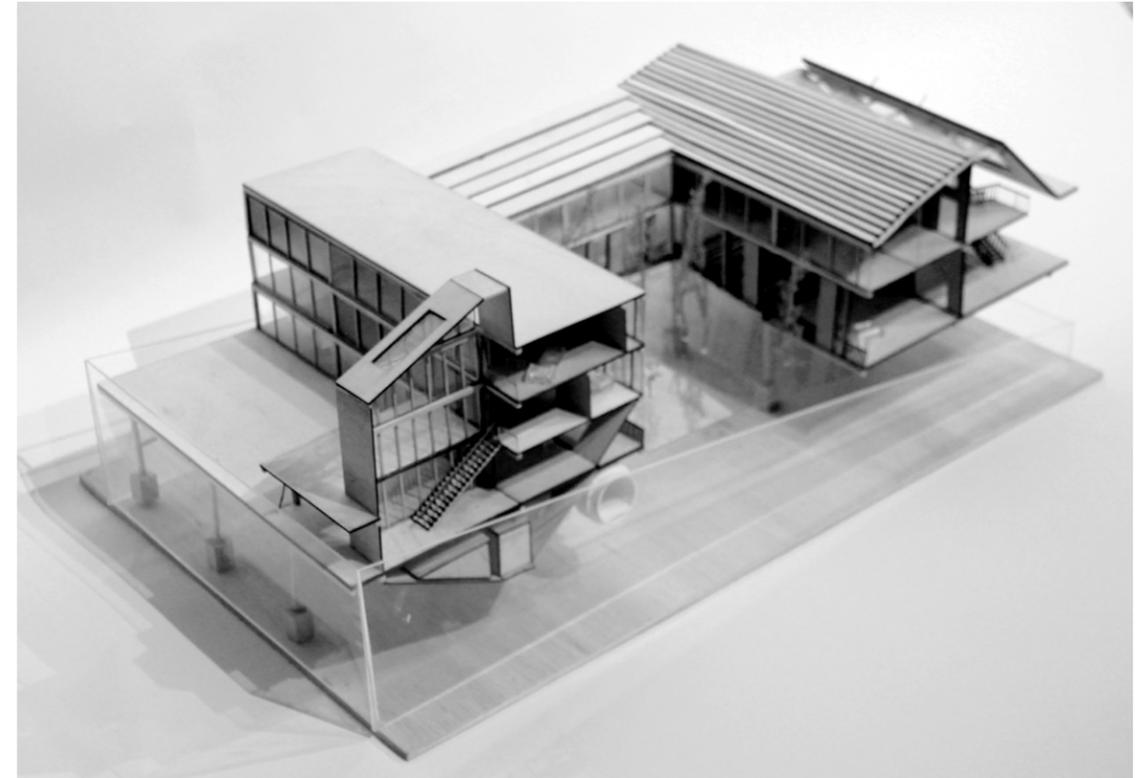


EARTH DUCTS AND MYCELIUM BRICK WALLS

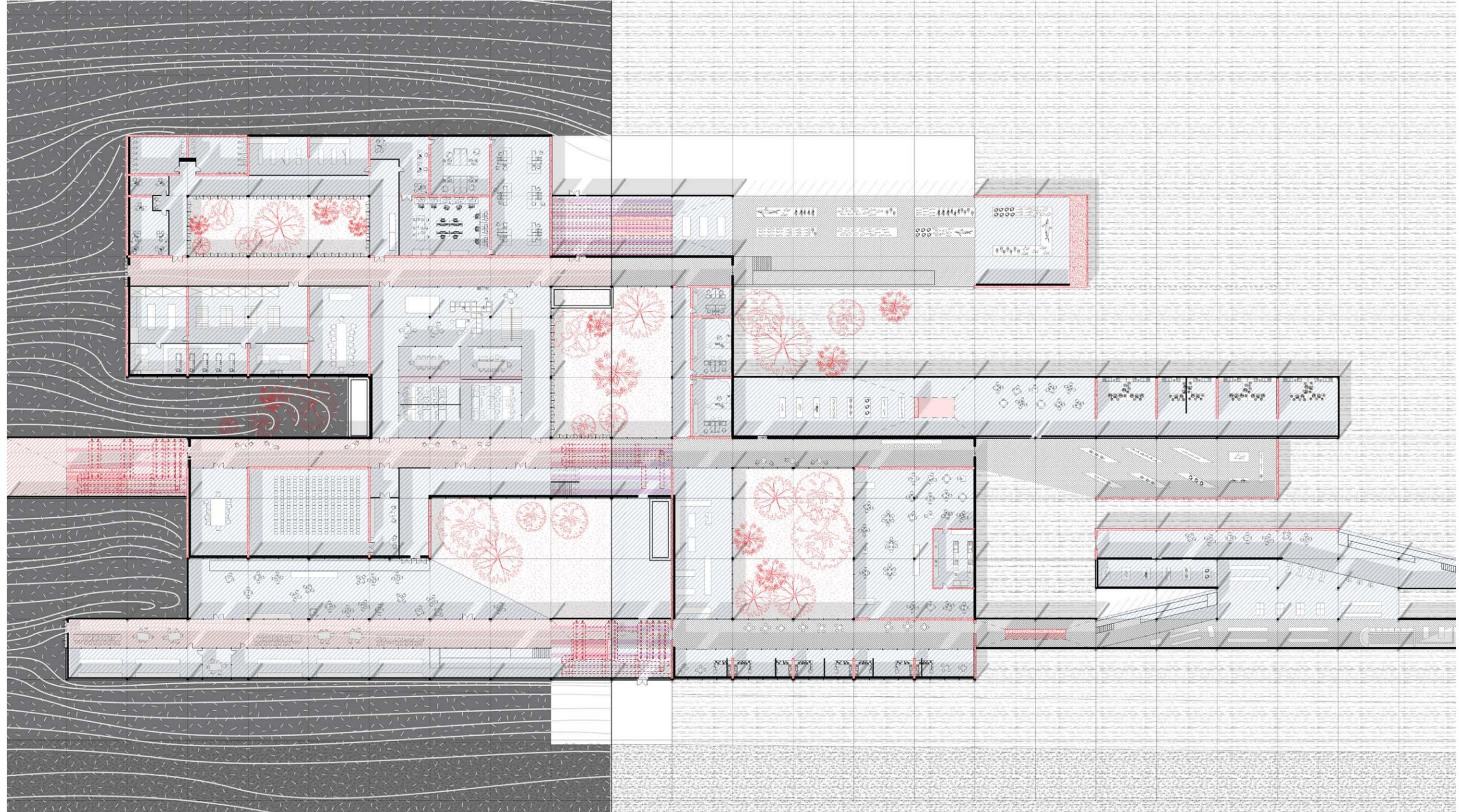


An earth tube is a buried ventilation duct. The idea behind burying ventilation ducts — the ducts conveying fresh outdoor air to a building — is that the soil surrounding the ducts will warm the ventilation air during the winter and cool the ventilation air during the summer.

MODEL PHOTOS

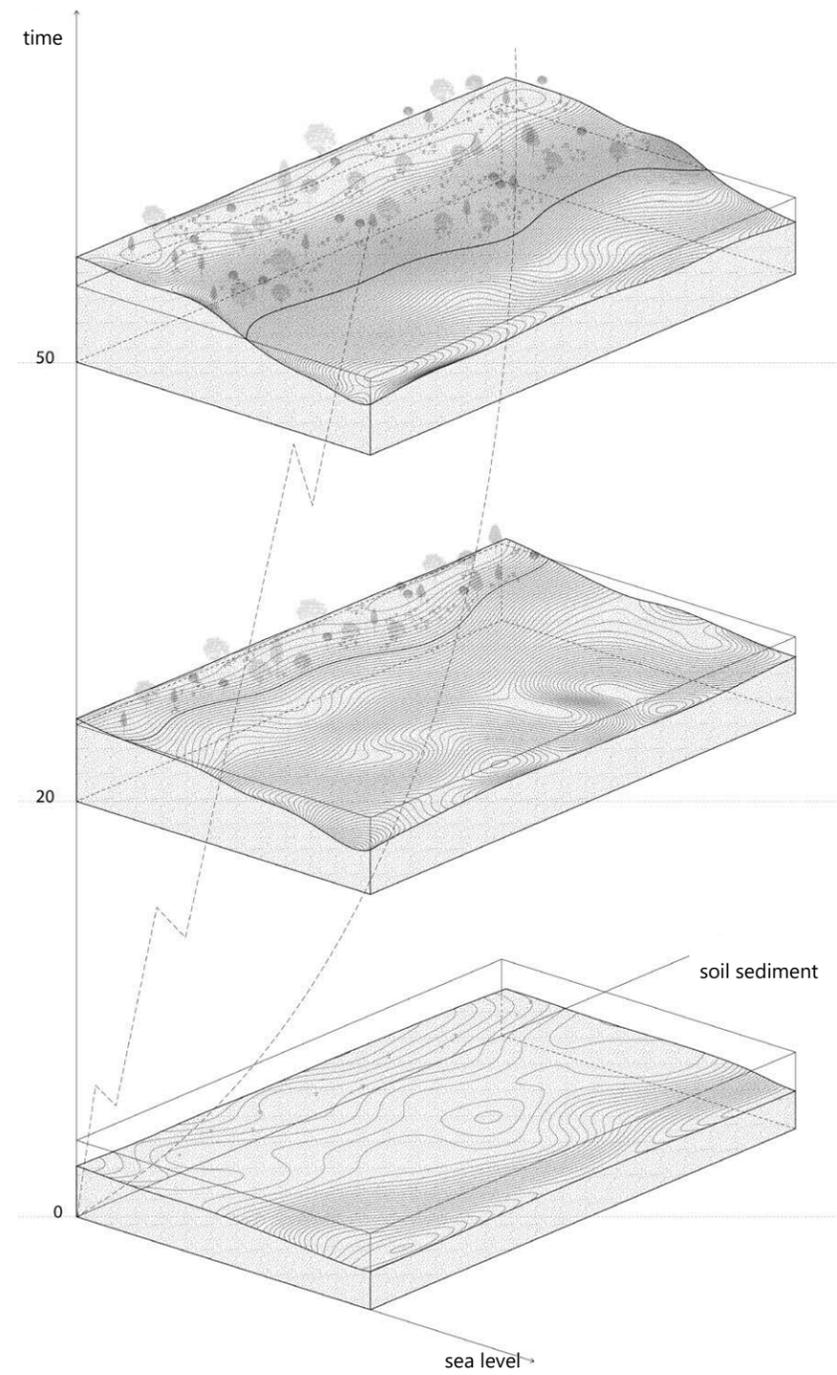


The other part of McKinney's plan, a heat absorbing, high-mass Trombe wall, was a common feature of many early passive solar homes. The appeal of both of these ideas lies in their simplicity, but many builders and designers now think their flaws outweigh any potential benefit.

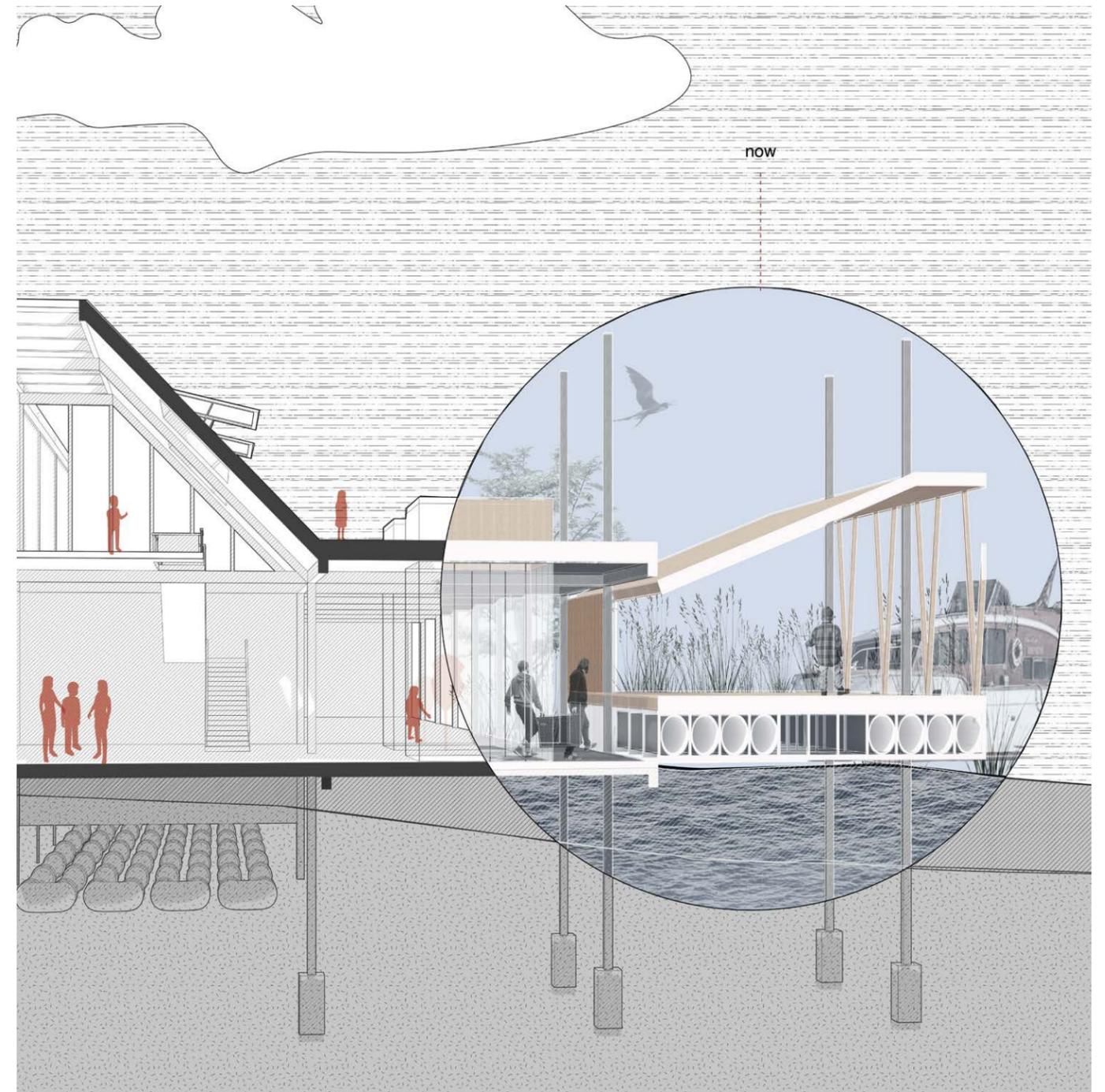


SUMMER

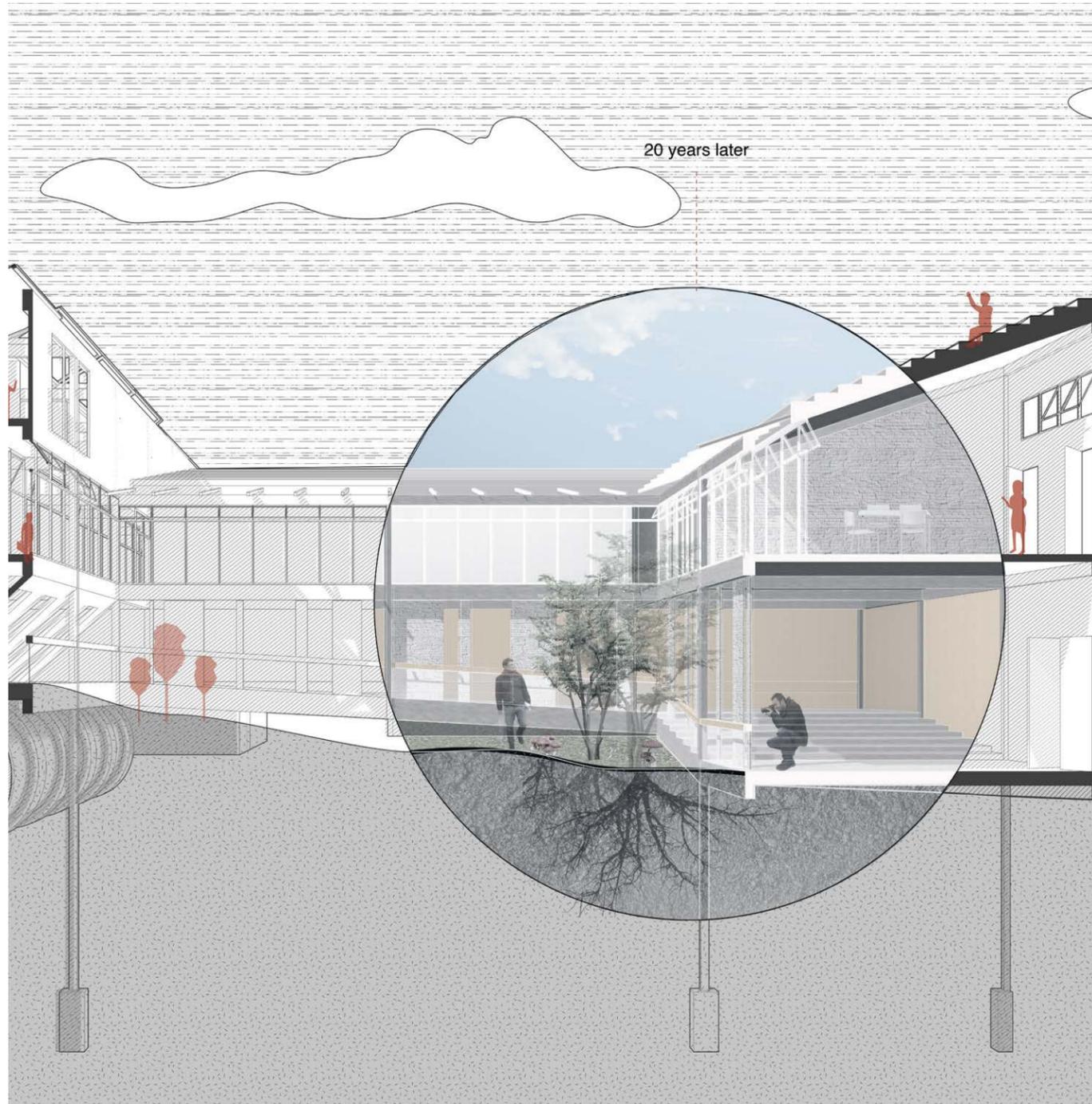
WINTER



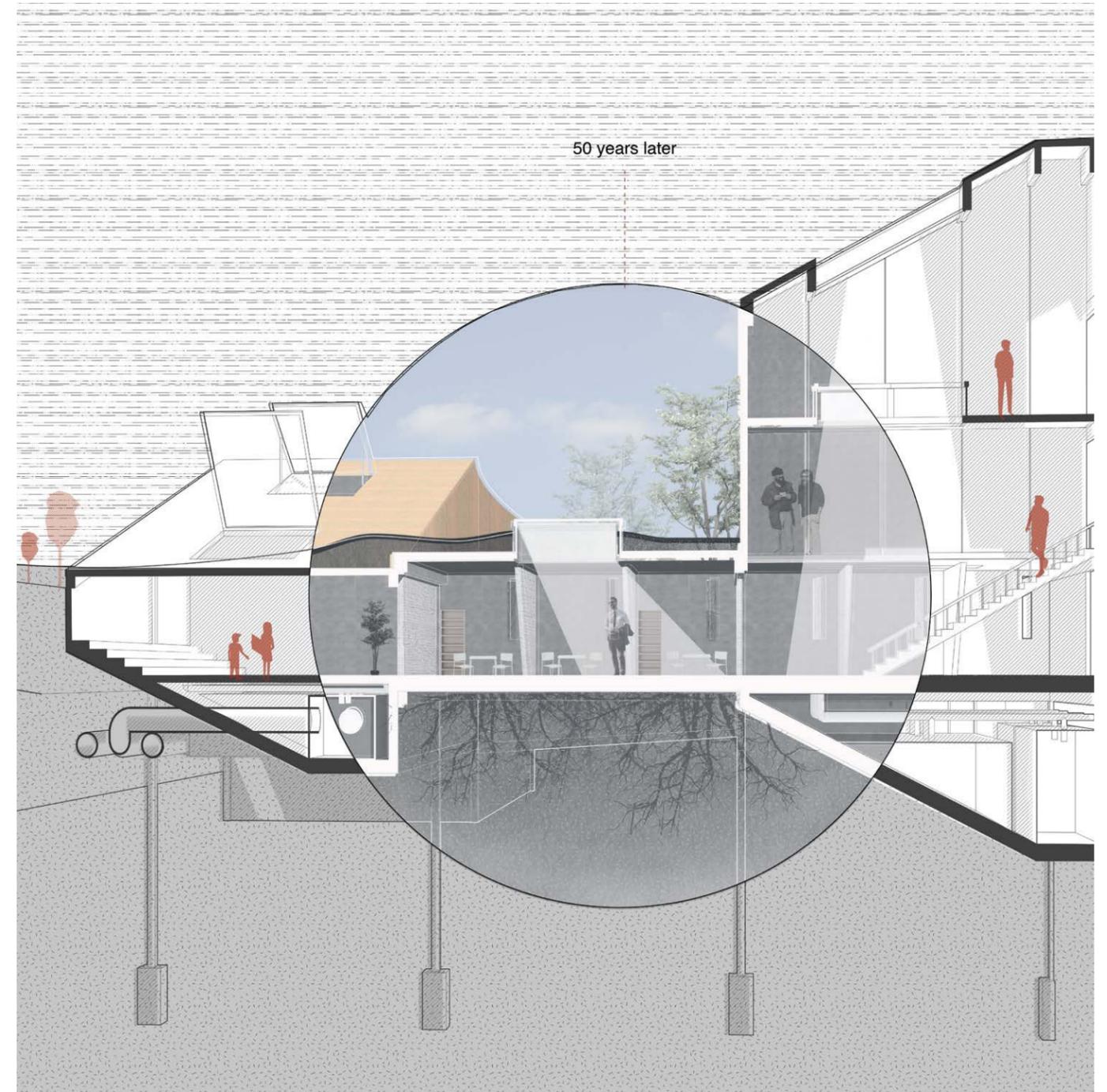
After using the sediment diversion project to lead water to the marshland, we introduce micorrhizal fungus and plants on these land to create wood wide web root system underground, to help solidify the newly created land.



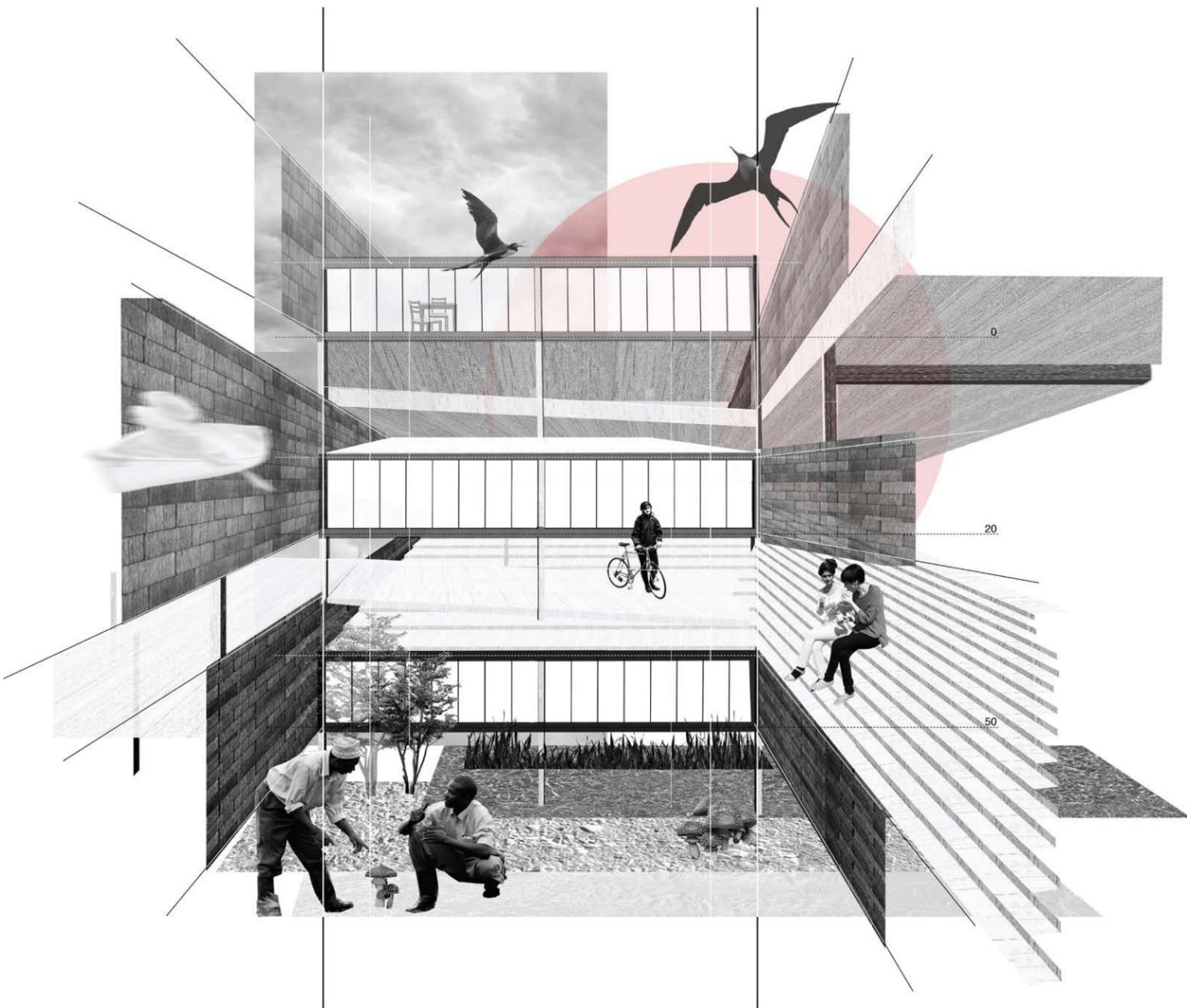
The scene from right to left shows the different users, different programs, different spaces from now to 50 years later, how the floating architecture turns into underground architecture.



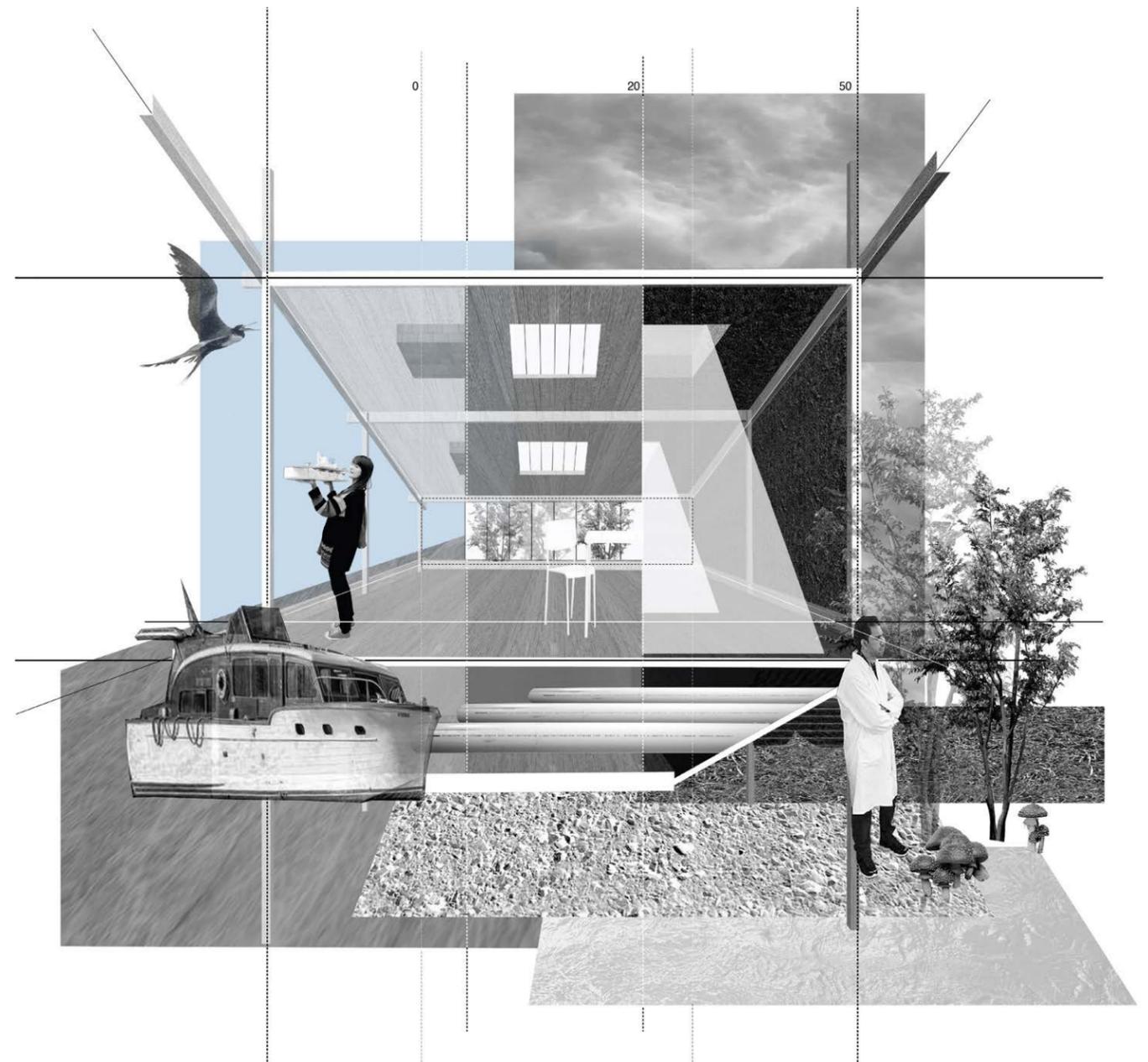
And there are some ecological technology according to the form of the architecture. This is a hybrid drawing showing the section from different time period of the building.



The left side and right side of the architecture have the reserve architectural form to show the different growing direction of the building. As the soil piles up, the building grows in the direction underground.



Due to the piling up of the soil, people outside will have different view toward this building. For the center courtyard, people can see it from an elevated spaces, to a sink spaces, and the activities will happen from the bottom of the building to the top of the building.



People inside will have different experience as well as the time changes. The open spaces will turn to a underground room which has the only light source from the rooftop. And the ecology environment will change from the marsh to a small forest.



THE PLAYGROUND

LOCATION: New York, USA
TYPE: Academic, Individual
SUPERVISOR: Pedro & Juana
PROJECT DATE: August, 2019

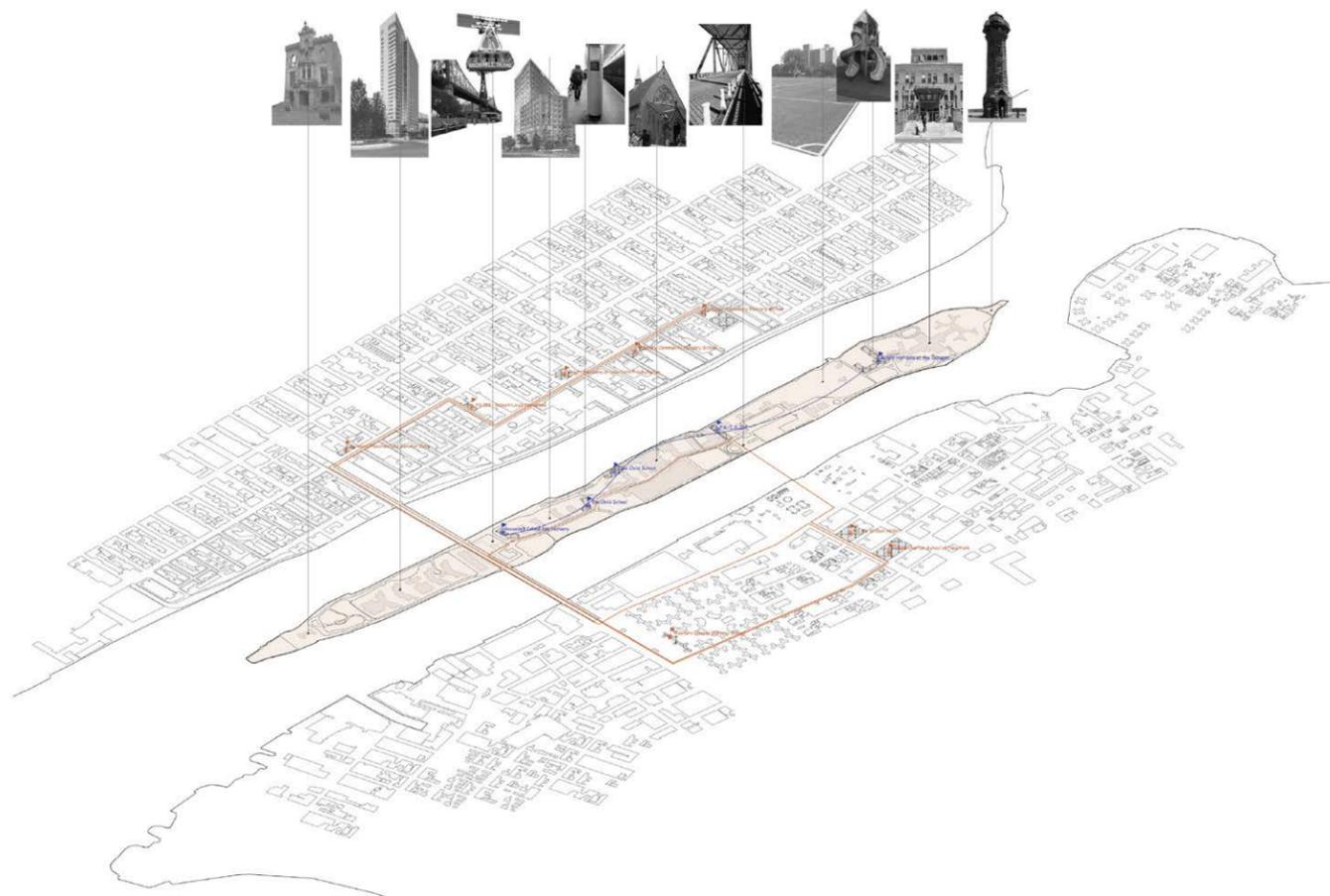
The playground is designed for the entertainment of the children in poverty in New York, aimed at using the way of entertaining to stimulate imagination at the early stage of their childhood. After analyzing the behavior and generating the multi-function spaces that are beneficial for their imagination, I arranged all the spaces by varieties of connections to create different storylines based on the different environmental conditions. This project works as a system, its programming started from the transportation system to the public services, to meet most of the basic requirements of the children in poverty. This project can later be applied to more sites in New York to form a playground network to serve better for them.



ROOSELVET ISLAND

In this studio, Our project is placing our entertainment design on Roosevelt Island at different spots to connect and activate this small island. Roosevelt Island is a narrow island in New York City's East River, within the borough of Manhattan. It lies between Manhattan Island to its west and the borough of Queens, on Long Island, to its east. I choose the site in the middle of the island and rightly under the Queensboro Bridge. Although Roosevelt Island is located directly under the Queensboro Bridge, it is no longer directly accessible from the bridge itself. I want to create a connection between the bridge and the island to make it easier for the children to approach to this site without the company of their parents, to provide convinience these New York families in poverty.

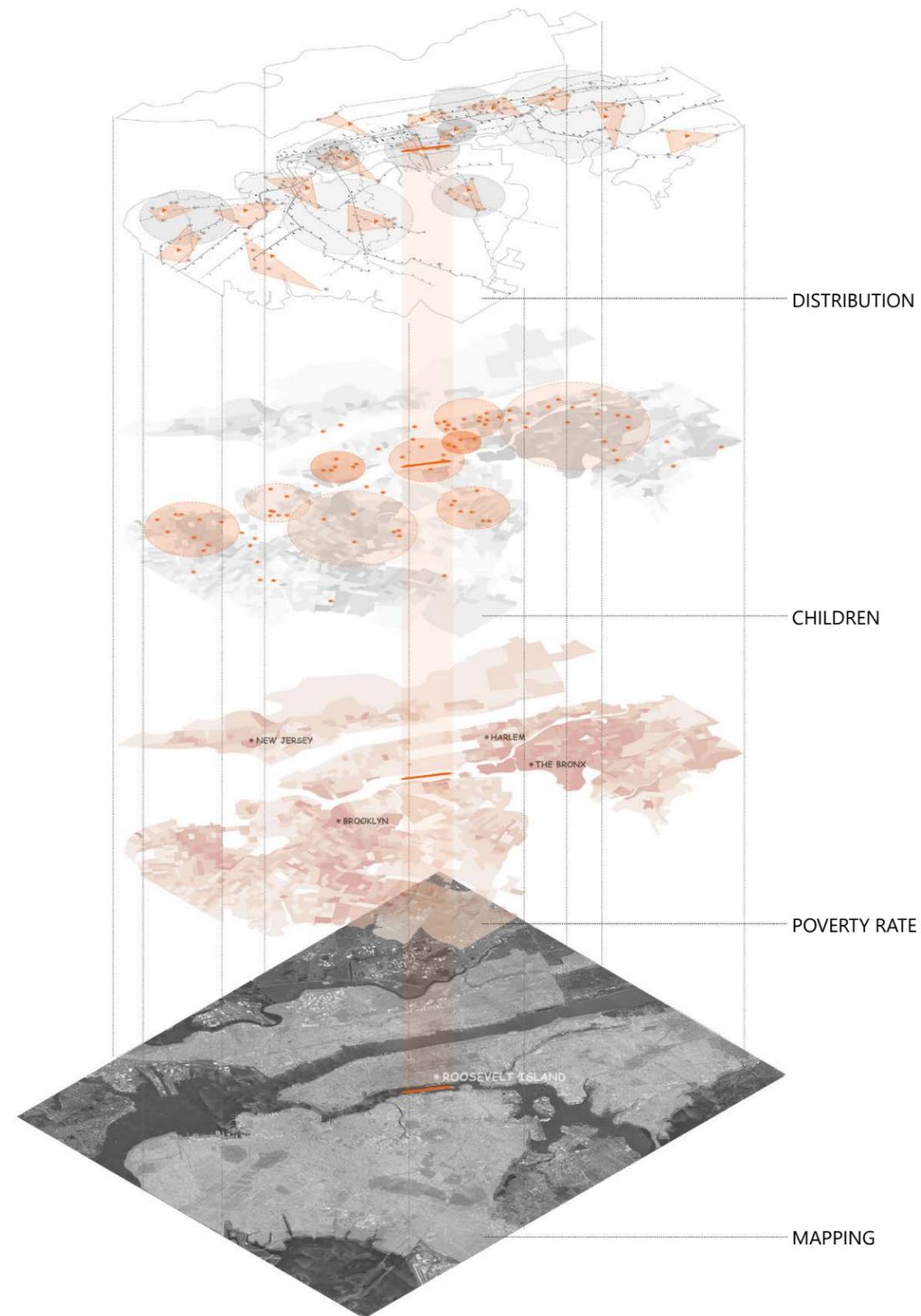
SITE ANALYSIS



During the 21st century, the area became more gentrified. The Blackwell Island Light was restored by an anonymous donor. In 2006, the restored Octagon Tower opened, serving as the central lobby of a two-wing, 500-unit apartment building. In 2010, the Roosevelt Island Tramway reopened

after renovations. A year later, South point Park opened south of Goldwater Memorial Hospital, near the island's southern end and Cornell Tech was announced the same year. In 2012, the Franklin D. Roosevelt Four Freedoms Park was dedicated and opened to the public as a state park.

SITE ANALYSIS



As the population of children in poverty is large and children have low mobility, so I think it is possible to create a net of infrastructure each of which serves the children in its neighborhood. I researched on the poverty

rate, children assembly places and the public transportation in New York to decide the distribution of the infrastructure, trying to serve well for the children in New York.



CHILDREN IMAGINATION

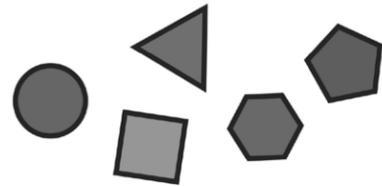
Trying to use the way of entertainment to achieve the effect of education, I analysis and categorize different kinds of children activities, and connect them to the children of different age periods, to see what influence the activities will have on the children. Then I found that the children from two years old will have emergence and development of language and representative thinking, it is a important period to develop their imagination, and the game faculty can be a good stimulation for the development for the children at this age. So my idea is to use a playground for them and to cultivate their imagination when playing. At the same time, the playground will also provide basic function for these children as well, like the daily care, food, and medical service as well.

CHILDREN BEHAVIORS FOR 2~7 YEARS OLD



0~2 Years Old

No language and thought; exploring the surroundings by sensing and motion



Diversity of color, shape and touching activity



2~7 Years Old

Emergence and development of language; representative thinking formed



Activity: game facility



7~11 Years Old

Logic thinking, and operation capacity formed

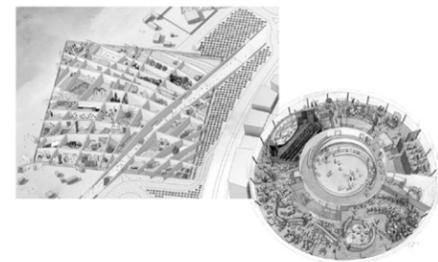


Intelligence stimuli, courage inspiring

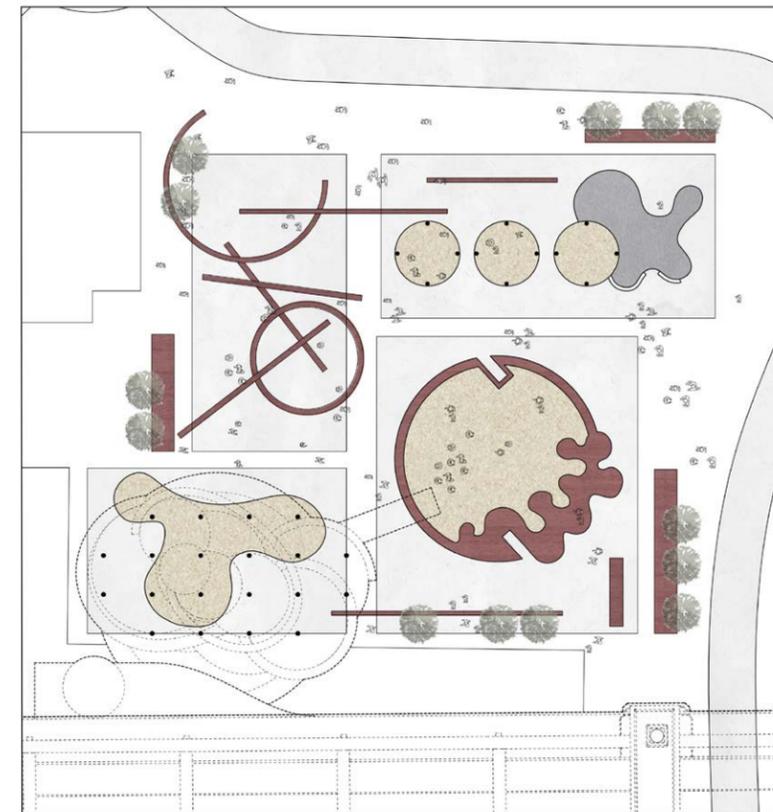


11~15 Years Old

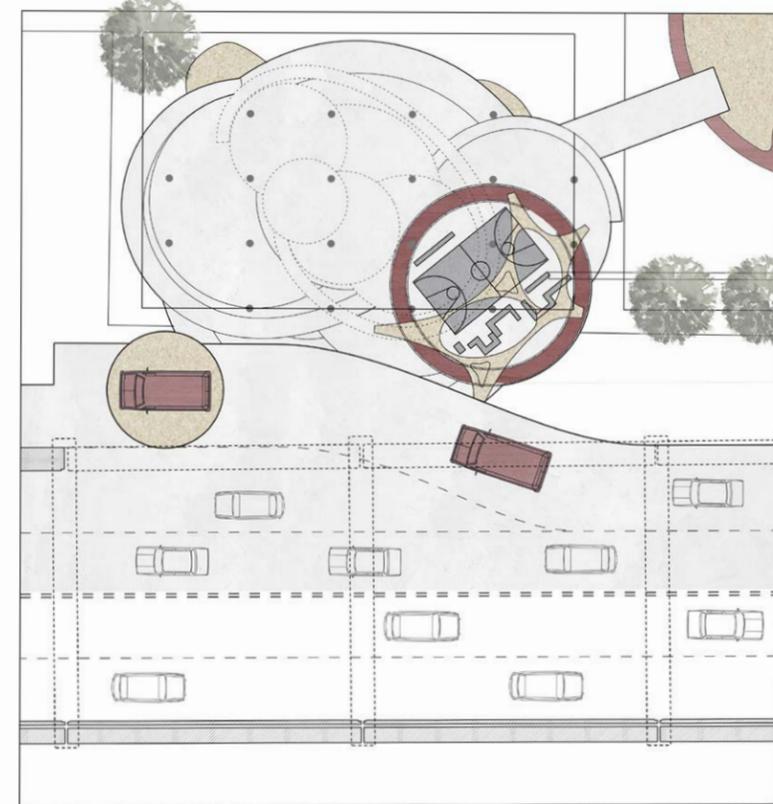
Making the logic operation for abstract and representative material formed



Exploration, culture, story and moderate adventure

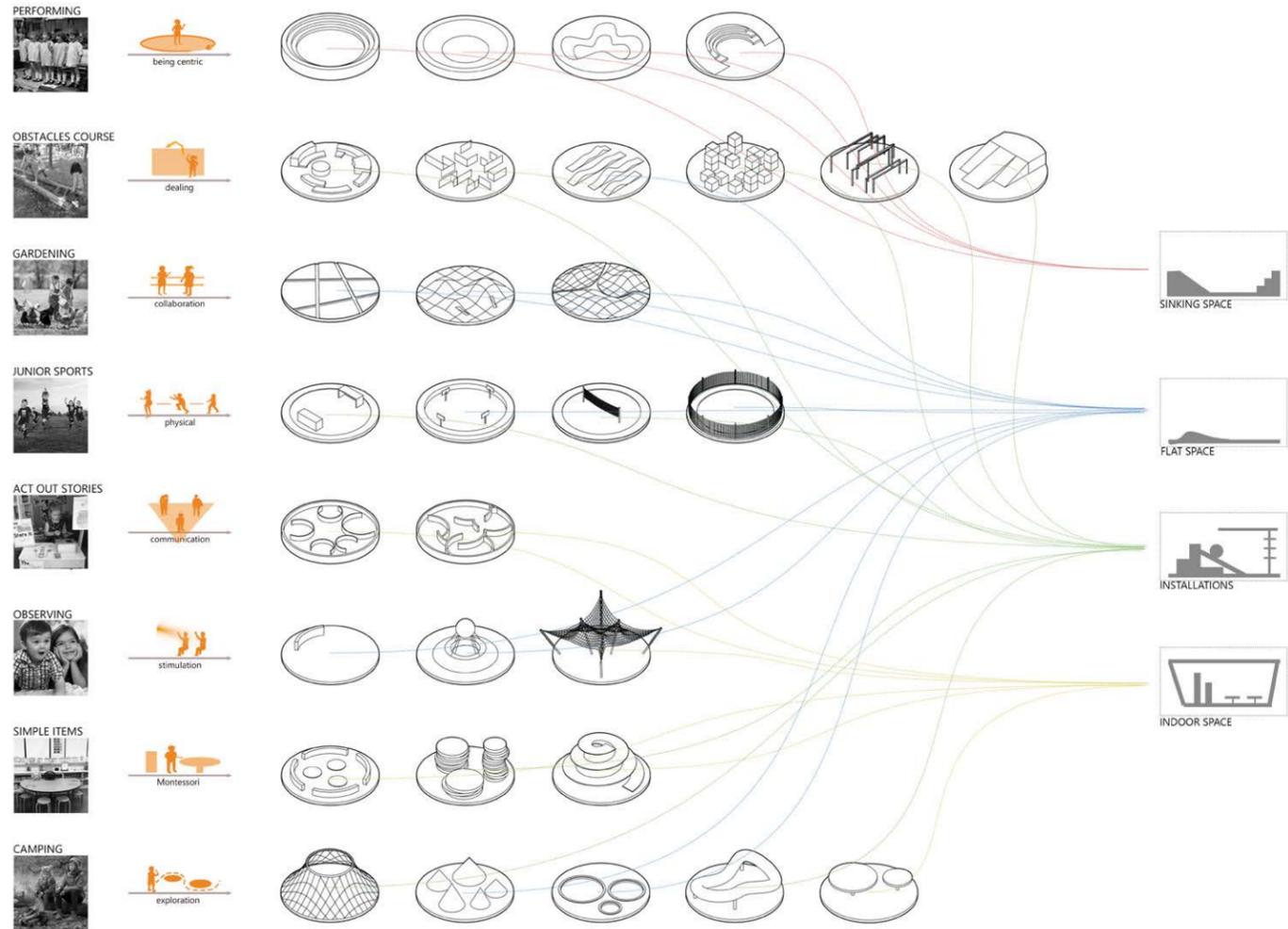


SITE PLAN

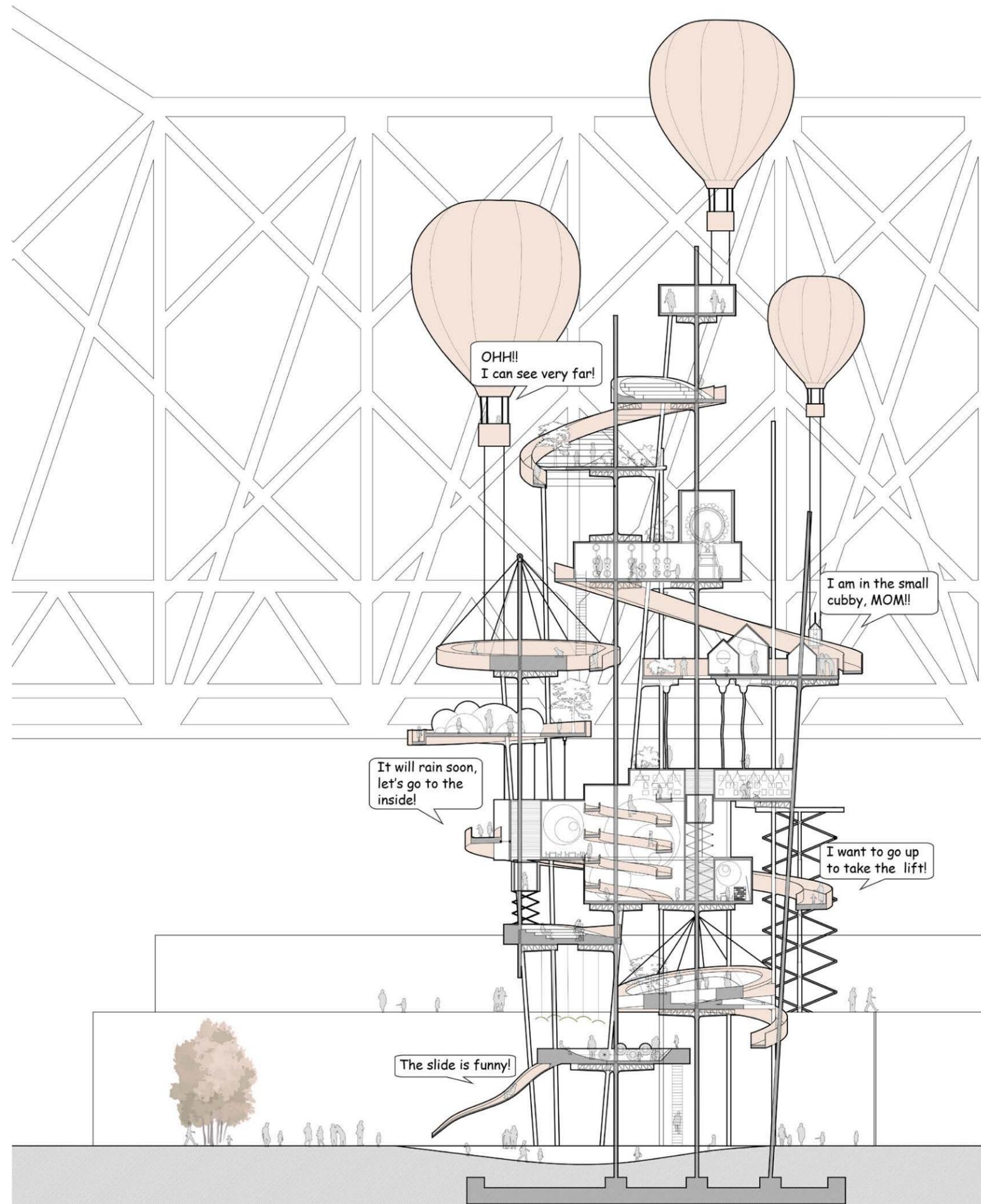
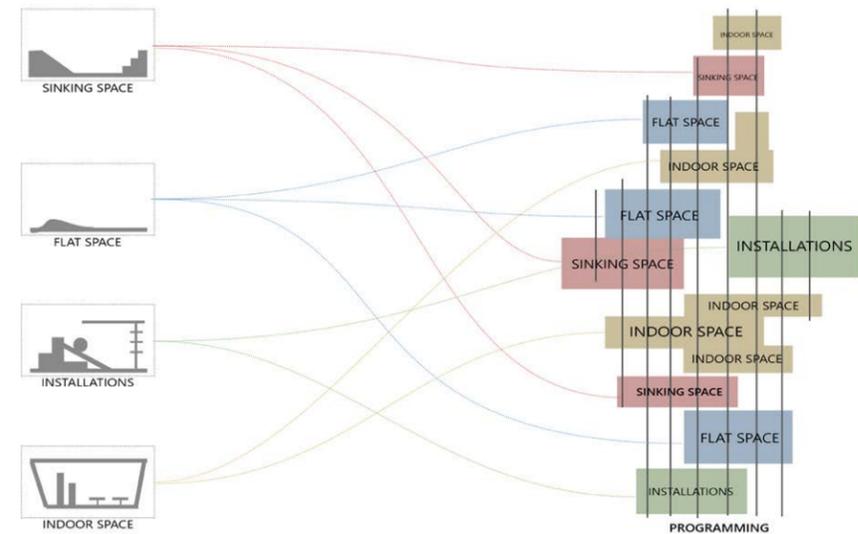


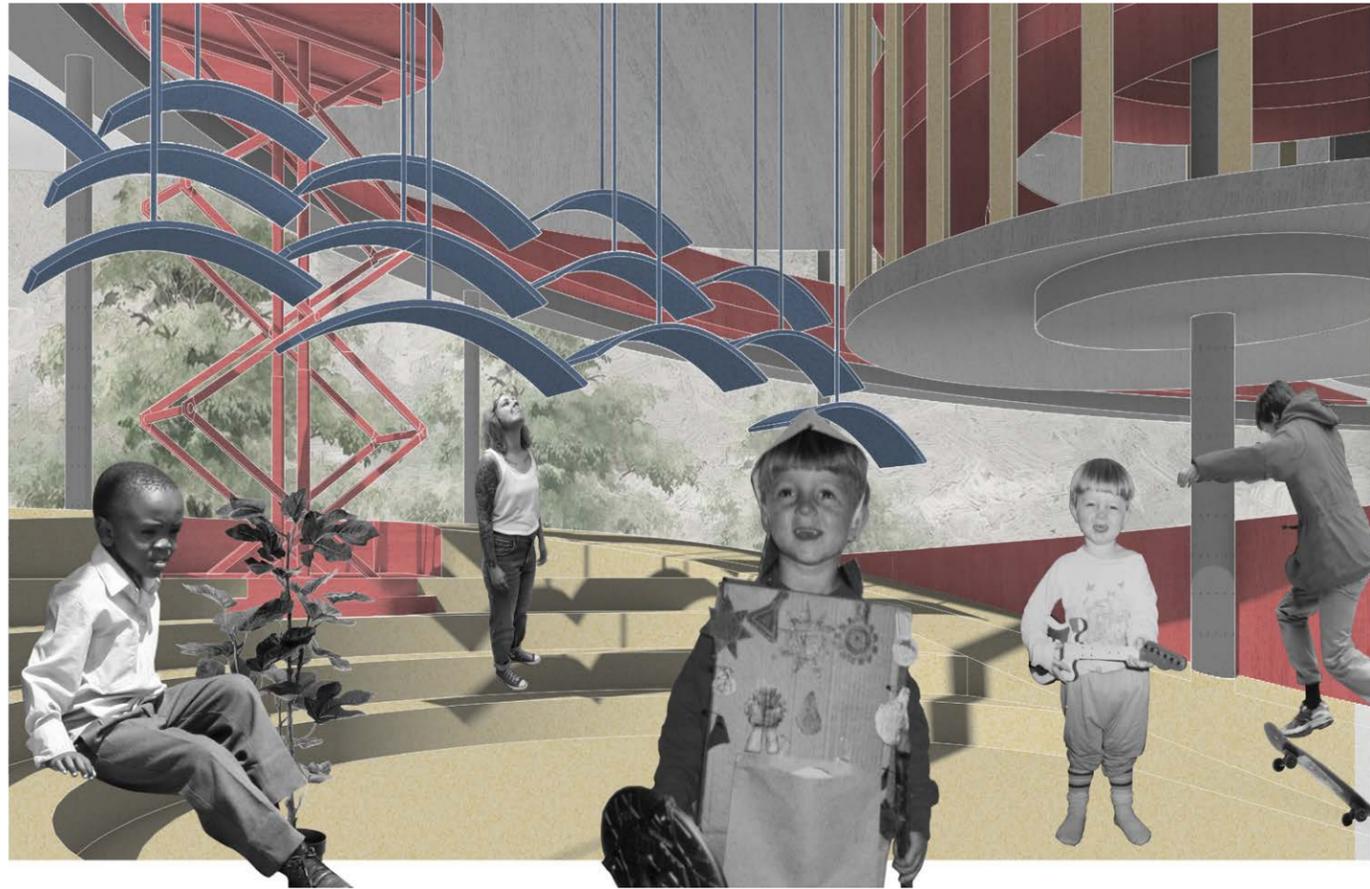
BRIDGE FLOOR PLAN

CHILDREN BEHAVIOR AND SPACE ANALYSIS



SPACE ORGANIZATION





SINKING SPACE



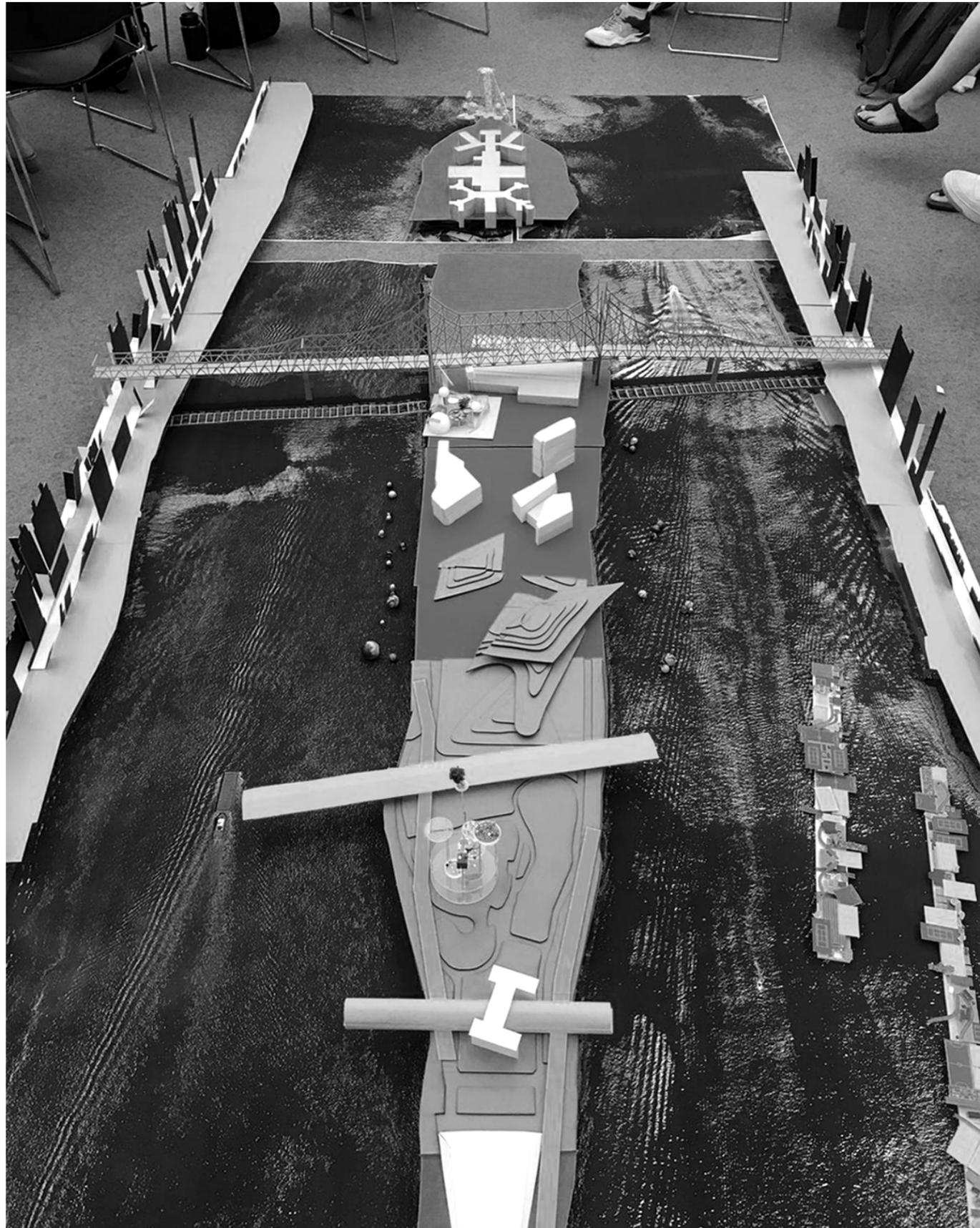
INSTALLATIONS



FLAT SPACE



INDOOR SPACES



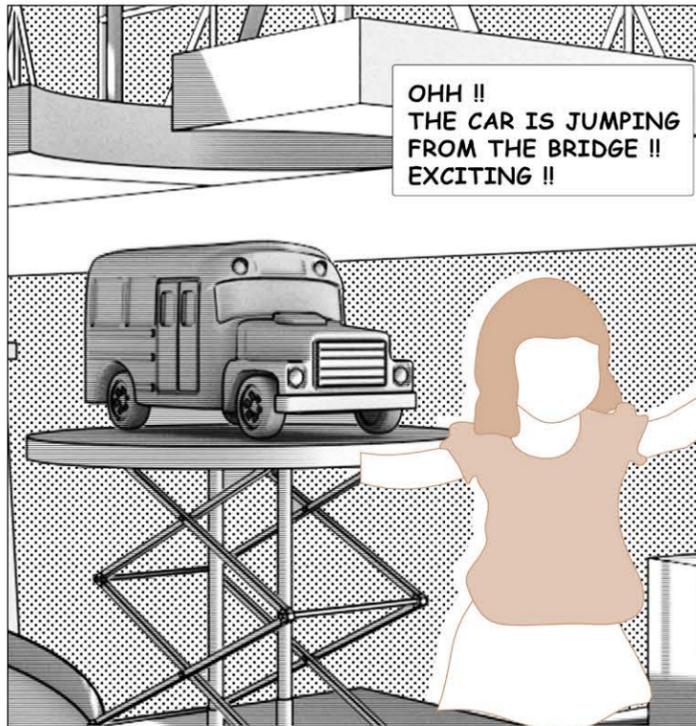


HAVE A GOOD DAY ANDY!! I HAVE TO WORK, AND TAKE CARE OF YOUR LITTLE BROTHERS...

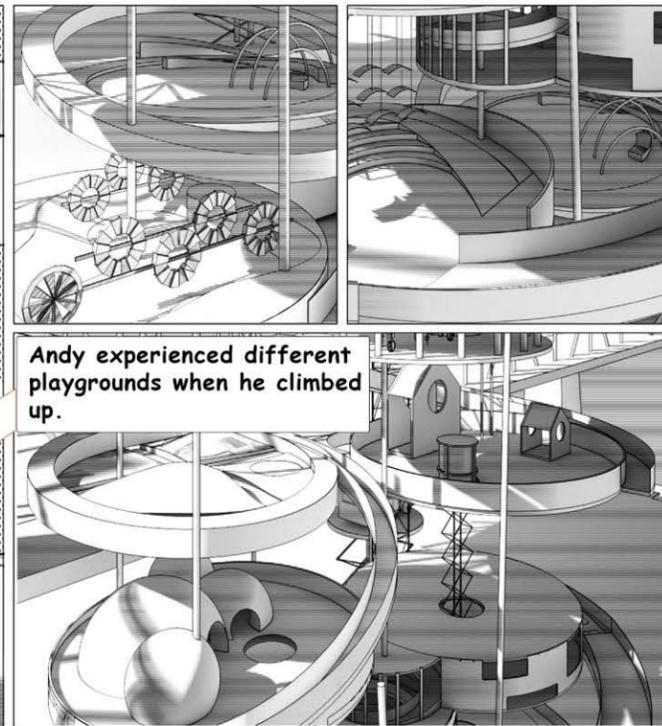
Andy is a little boy from Brooklyn, He lives with his mother and little brothers. His mother has no time to stay with him...



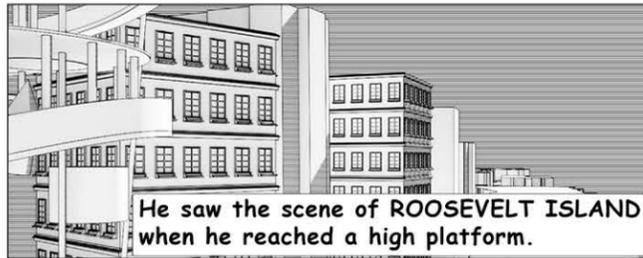
Andy met with new friends on the bus, they travelled around New York, from Manhattan to Brooklyn.



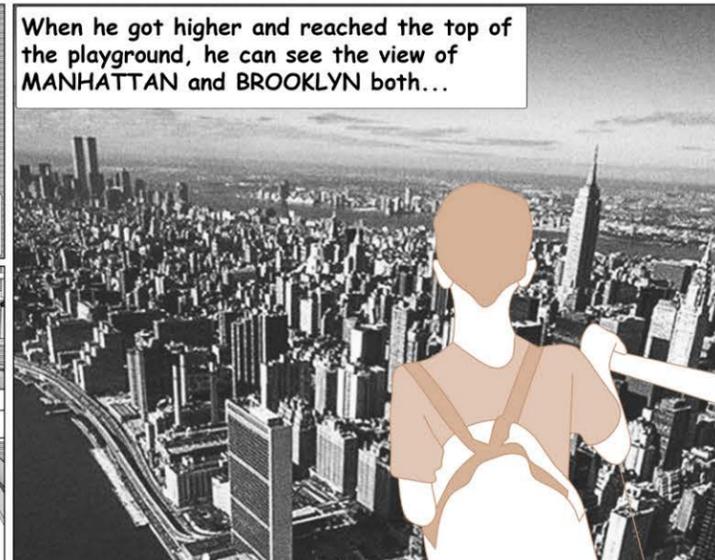
OHH !! THE CAR IS JUMPING FROM THE BRIDGE !! EXCITING !!



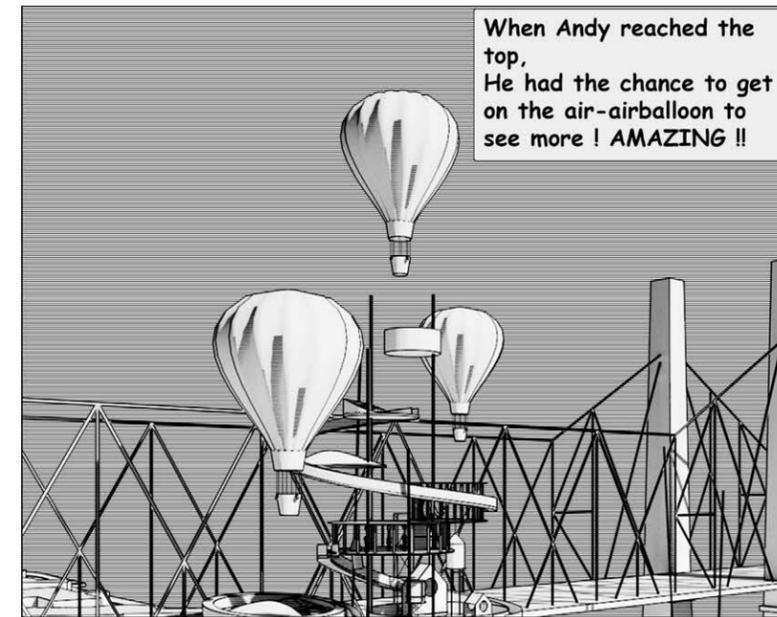
Andy experienced different playgrounds when he climbed up.



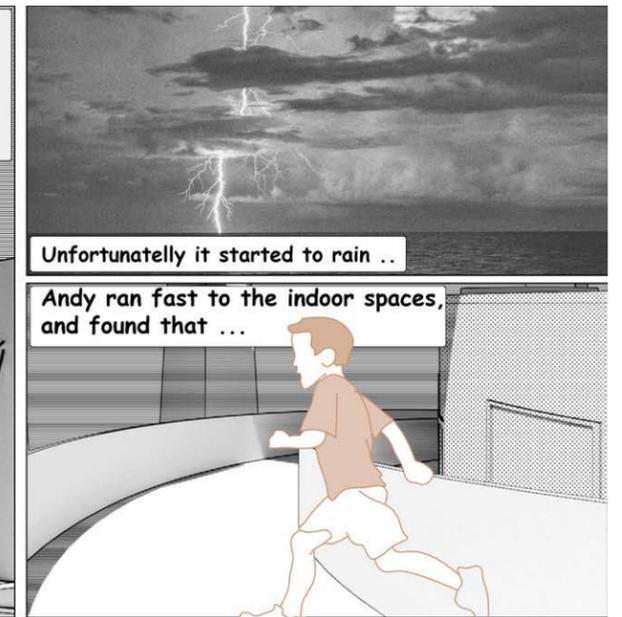
He saw the scene of ROOSEVELT ISLAND when he reached a high platform.



When he got higher and reached the top of the playground, he can see the view of MANHATTAN and BROOKLYN both...



When Andy reached the top, He had the chance to get on the air-airballoon to see more ! AMAZING !!

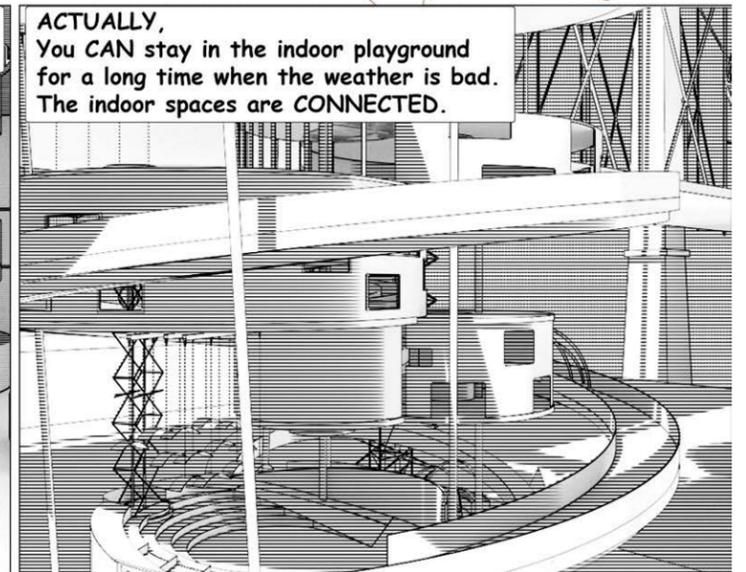


Unfortunately it started to rain ..

Andy ran fast to the indoor spaces, and found that ...



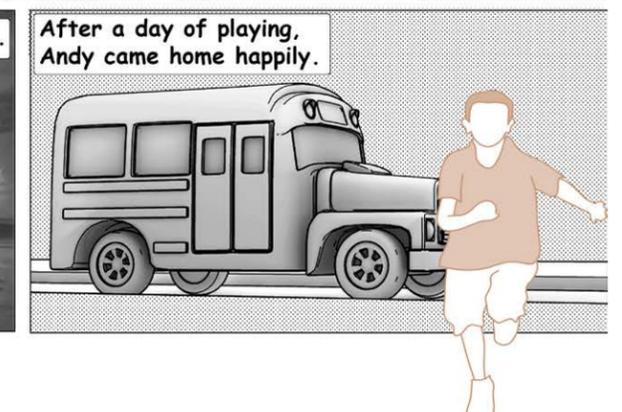
THERE IS SO MANY PLAYING ACTIVITIES IN THE ROOMS !!



ACTUALLY, You CAN stay in the indoor playground for a long time when the weather is bad. The indoor spaces are CONNECTED.



WHEN the sky started to dark ..



After a day of playing, Andy came home happily.

I use a story of a boy, who lives near Roosevelt Island, and how he spend a day in this playground to show the programs and spaces of the playground, how it is organize and connect to its neighborhood, how it works in different conditions and deal with the problem of poverty.



Photo: Gheorgi Bruno Viktorov Pentchev/Dreamstime

THE NEW KABUKICHO

LOCATION: Tokyo, Japan
TYPE: Academic, Individual
SUPERVISOR: Sarah Dunn & Martin Felsen
PROJECT DATE: April, 2020

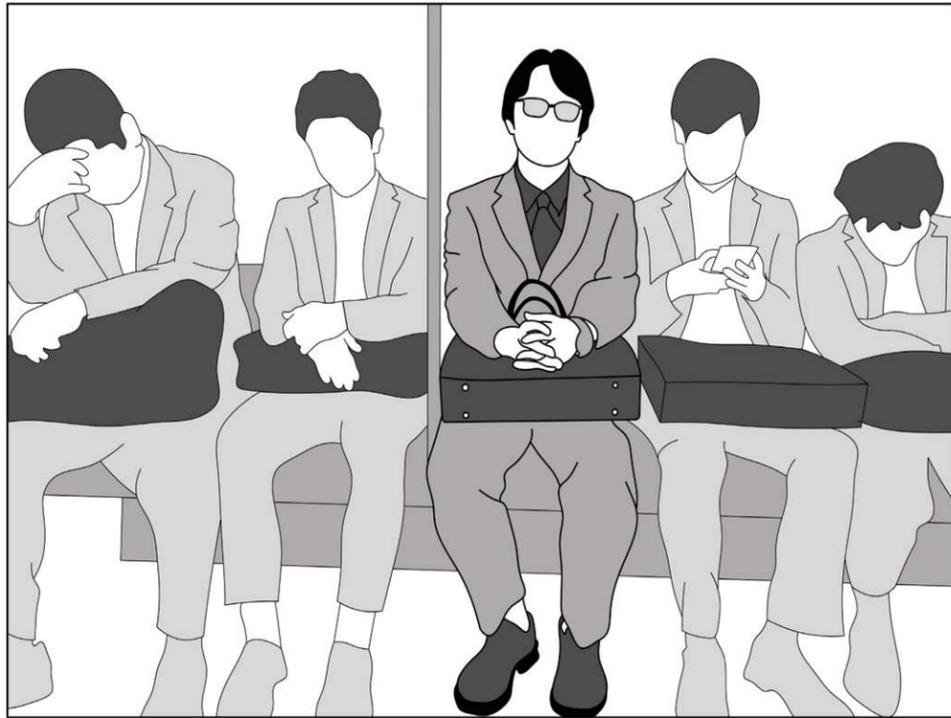
Kabukicho is a district to blow off steam and have fun for lots of salary(wo)man in Shinjuku, but the salary(wo)man in other places don't have the comforting zones like Kabukicho. What if we were to consider Kabukicho not as a neighborhood but as a new urban typology specifically designed to release the stresses of Japanese workers. Then a mega-scale architecture could begin to fulfill the needs of Otemachi's office workers and subway workers. The New Kabukicho is designed to make connections among the Otemachi subway station, street and coporation buildings.



A salary(wo)man is a salaried worker and, more specifically, a Japanese white-collar worker who shows overriding loyalty and commitment to the corporation where he works.



In conservative Japanese culture, becoming a salary(wo)man is the expected career choice for young men and those who do not take this career path are regarded as living with a stigma and less prestige.



Salary(wo)man are expected to work long hours, additional overtime. The salary(wo)man typically enters a company after graduating from college and stays with that corporation for the duration of his career.



Japanese workers suffer from high stress levels as a result of their demanding jobs. This can result in poor work life balance, neglect of family and loved ones, and even a high rate of suicide.



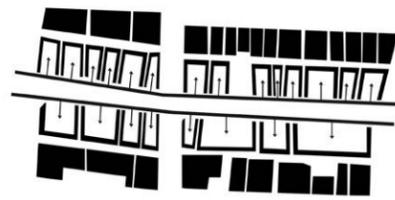
SHINJUKU

Shinjuku is a major commercial and administrative centre, housing the northern half of the busiest railway station in the world (Shinjuku Station) and the Tokyo Metropolitan Government Building, the administration centre for the government of Tokyo.

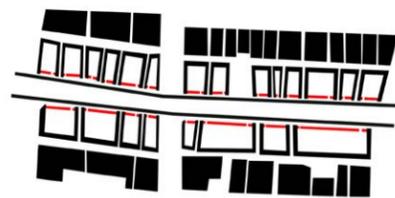
To combat this, the business district of Shinjuku has Kabukicho as its district to blow off steam and have fun. Kabukichō is the location of many shops, restaurants, and nightclubs, and is often called the "Sleepless Town". Shinjuku Golden Gai, famous for plethora of small bars, is part of Kabukicho.



KABUKICHO BUILDINGS



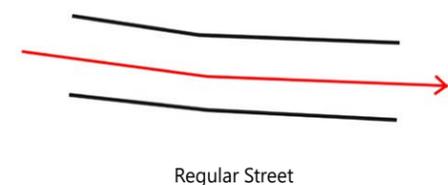
Regular Street



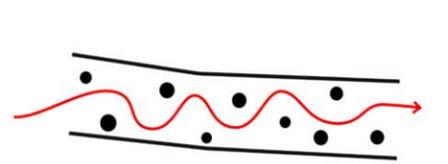
With Kabukicho Buildings



KABUKICHO STREET



Regular Street



With Advertise-man

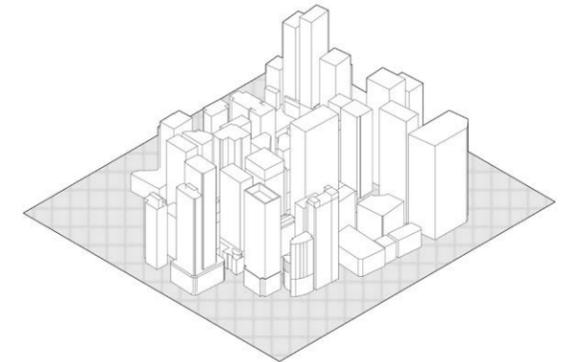


ŌTEMACHI

Otemachi is the district just to the north of Marunouchi and is more or less a continuation of Marunouchi. It's served by Otemachi Station – an important subway station which brings together the Marunouchi Line, the Chiyoda Line, the Tozai Line and the Hanzomon Line on the Tokyo Metro as well as the Toei Mita Line.



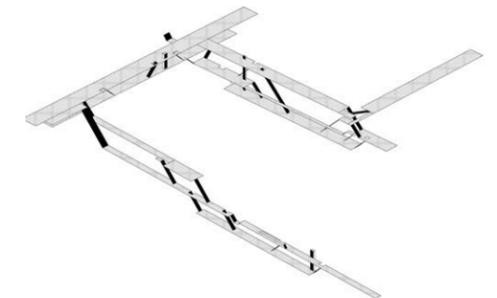
ŌTEMACHI BUILDINGS



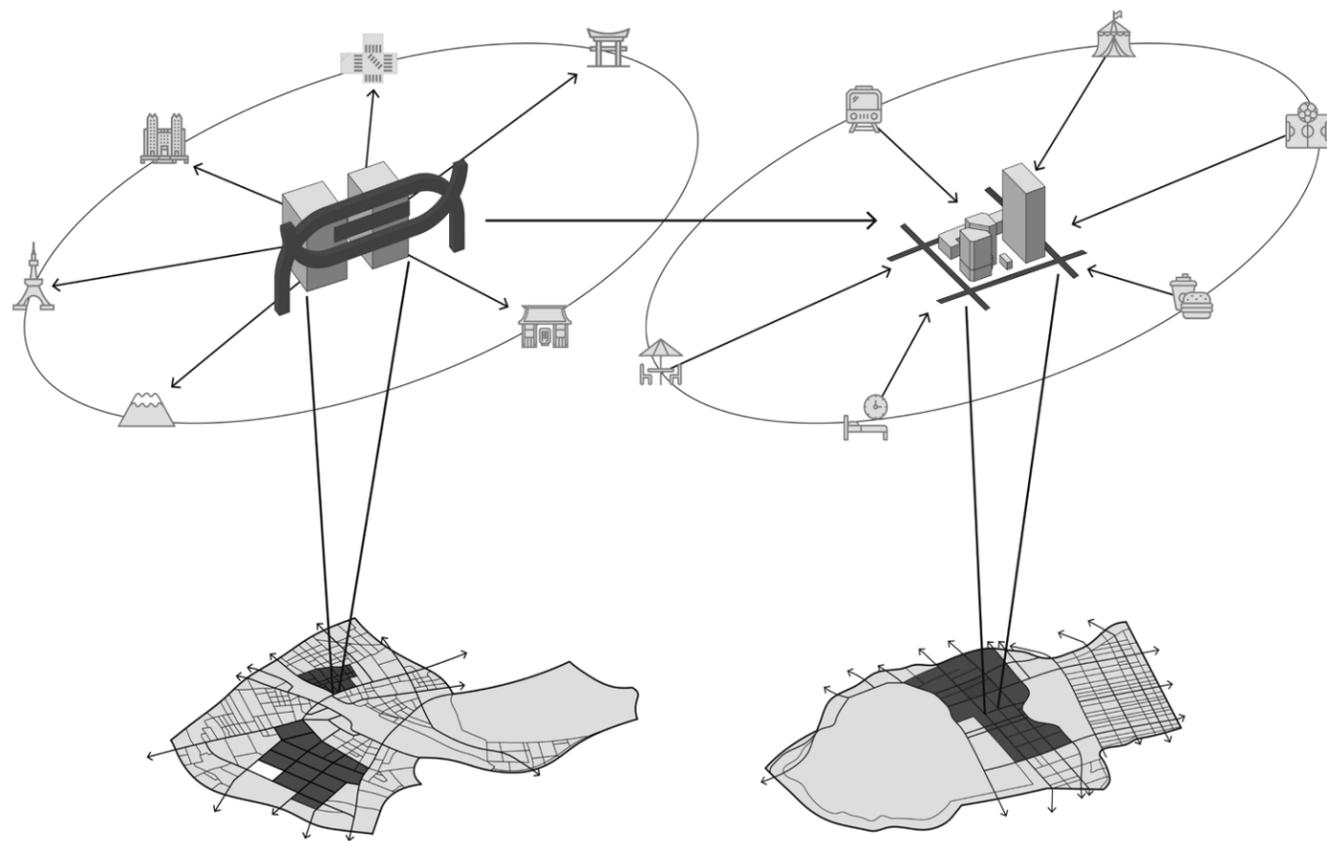
Otemachi is known as a center of Japanese journalism, housing the main offices of three of the "big five" newspapers as well as being a key financial center and headquarters for large Japanese corporations.



ŌTEMACHI STATION

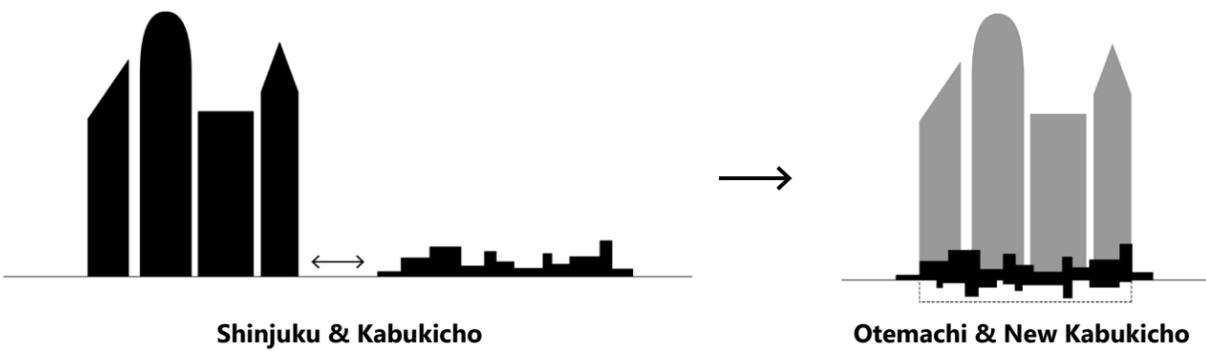


Otemachi Station is a subway station in Chiyoda, Tokyo, Japan, jointly operated by Tokyo Metro and Toei Subway. It is served by five lines, more than any other station on the Tokyo underground network, and is thus the biggest subway station in Tokyo.

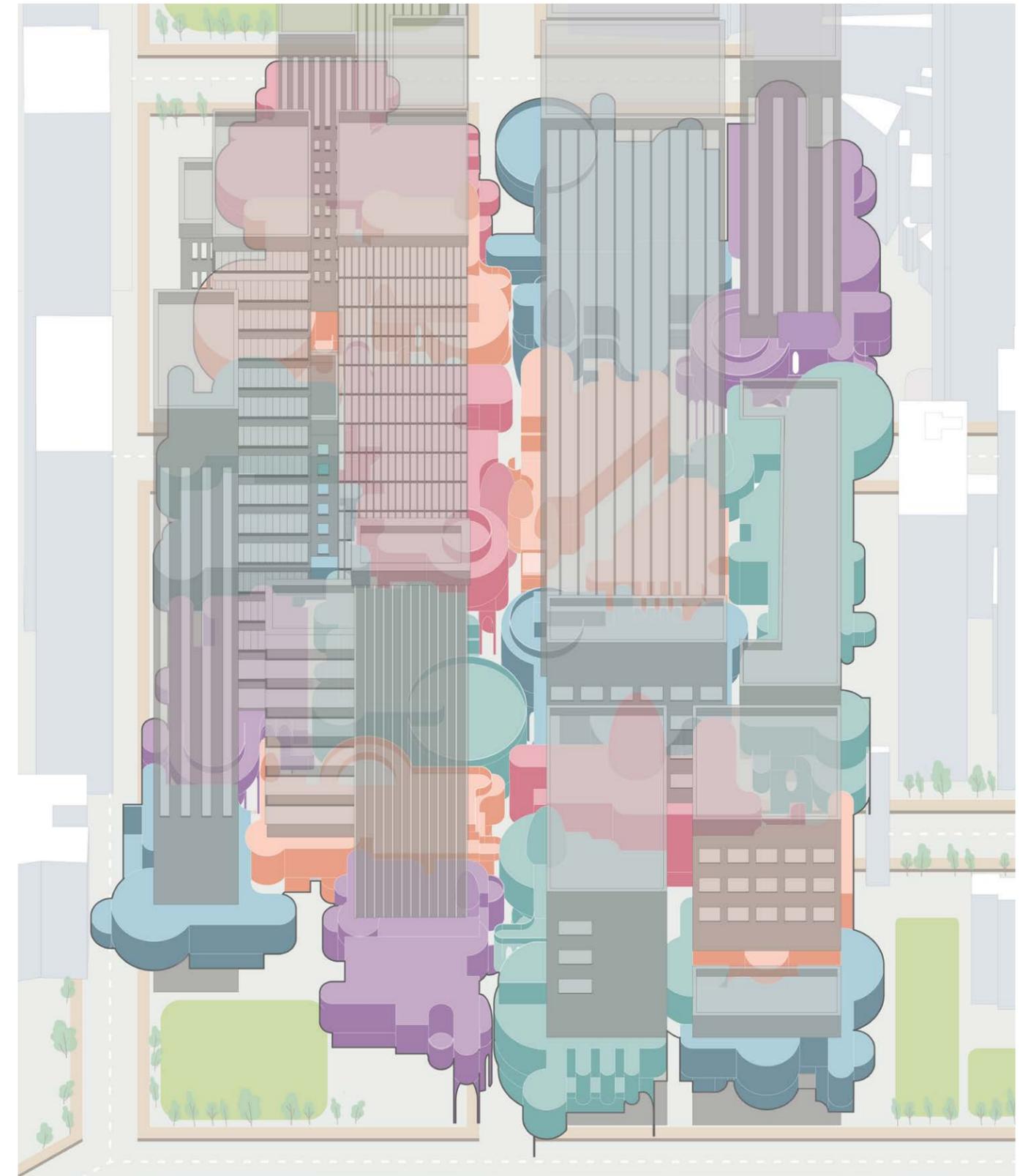


What if we were to consider Kabukicho not as a neighborhood but as a new urban typology specifically designed to release the stresses of Japanese workers.

Then a mega-scale architecture could begin to fulfill the needs of Otemachi's office workers and subway workers.

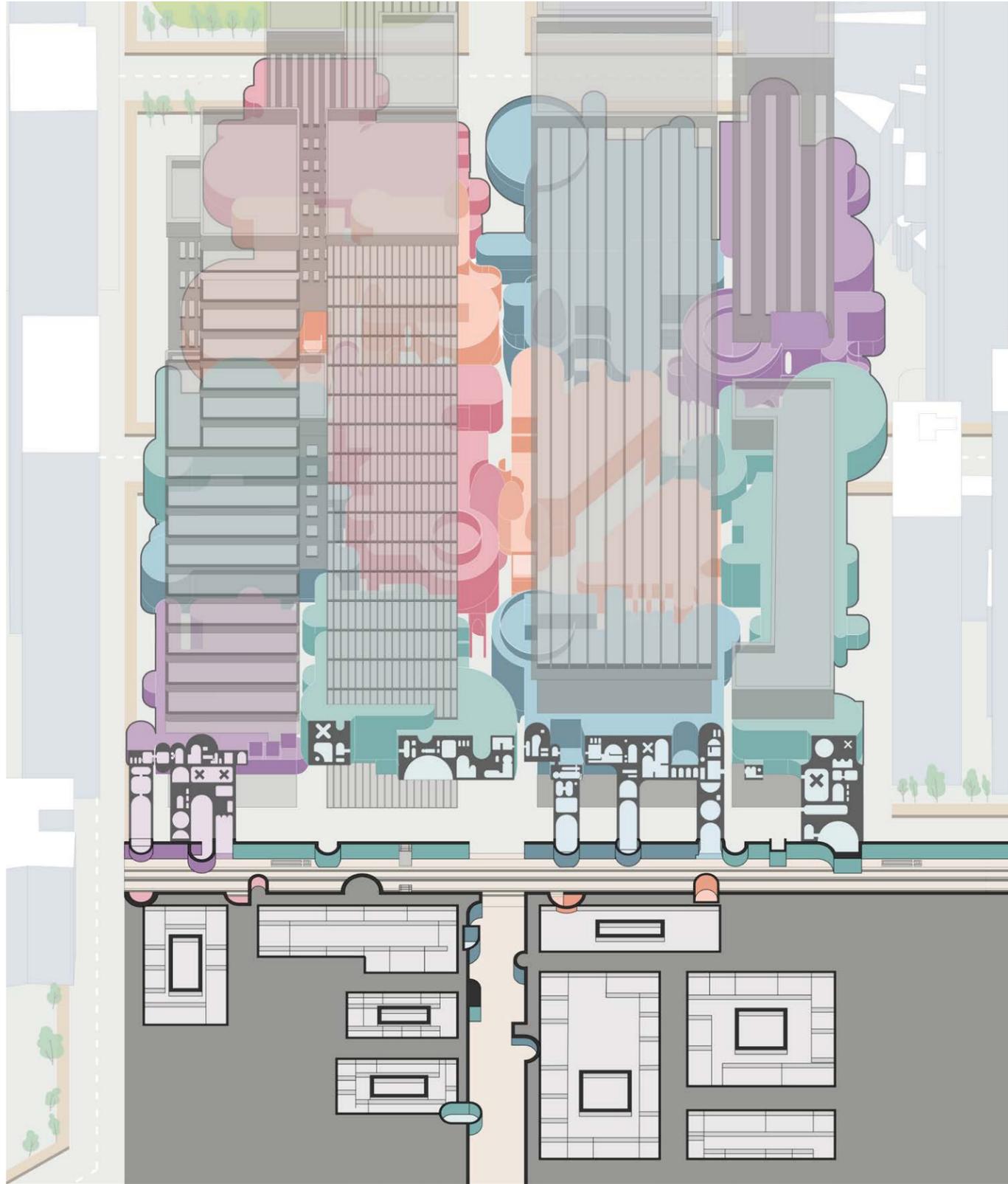


NEW KABUKICHO



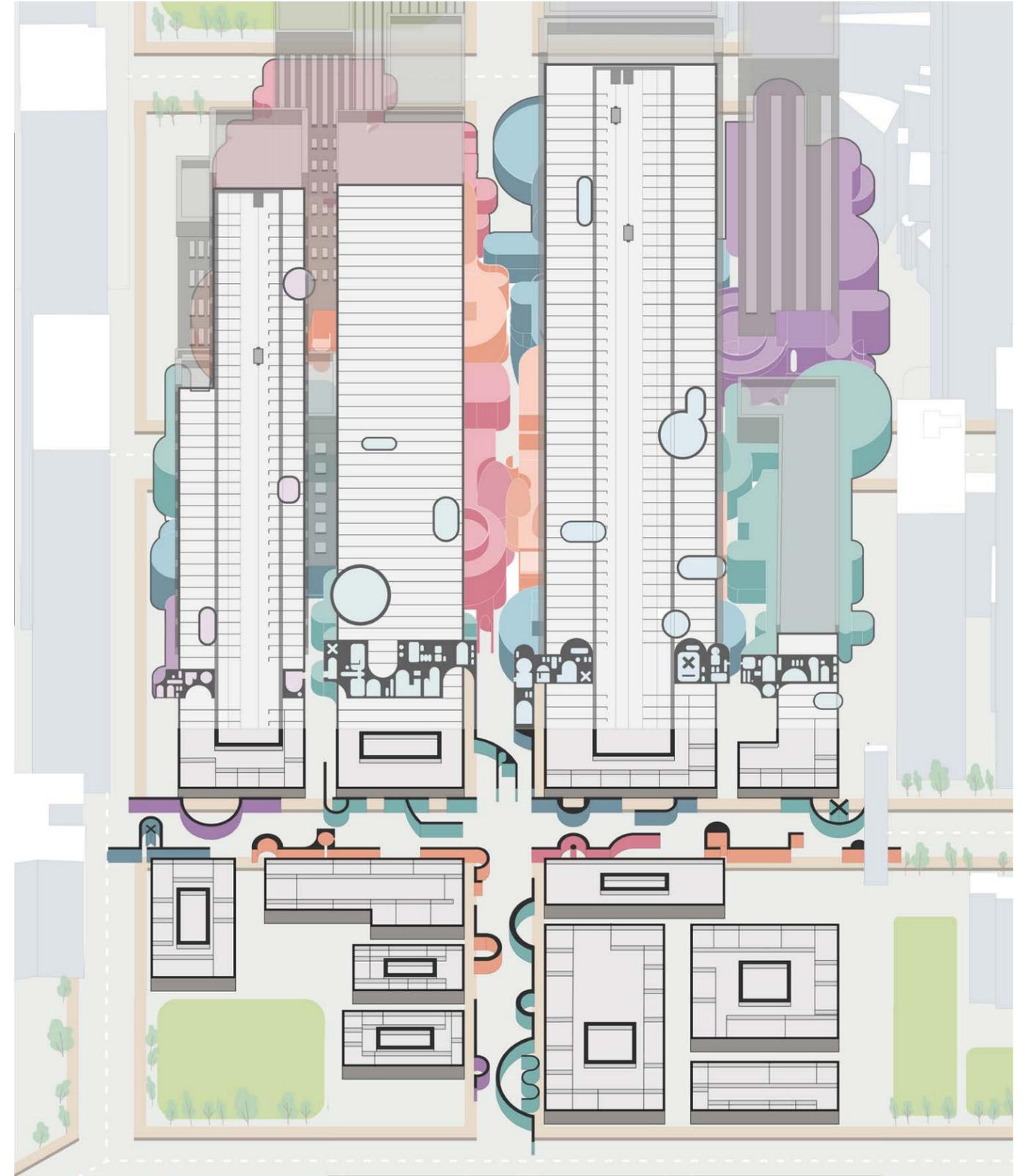
We were to consider Kabukicho not as a neighborhood but as a new urban typology that can connect the Otemachi station, street and buildings, to release the stress of Otemachi workers.

CONNECTED WITH STATION

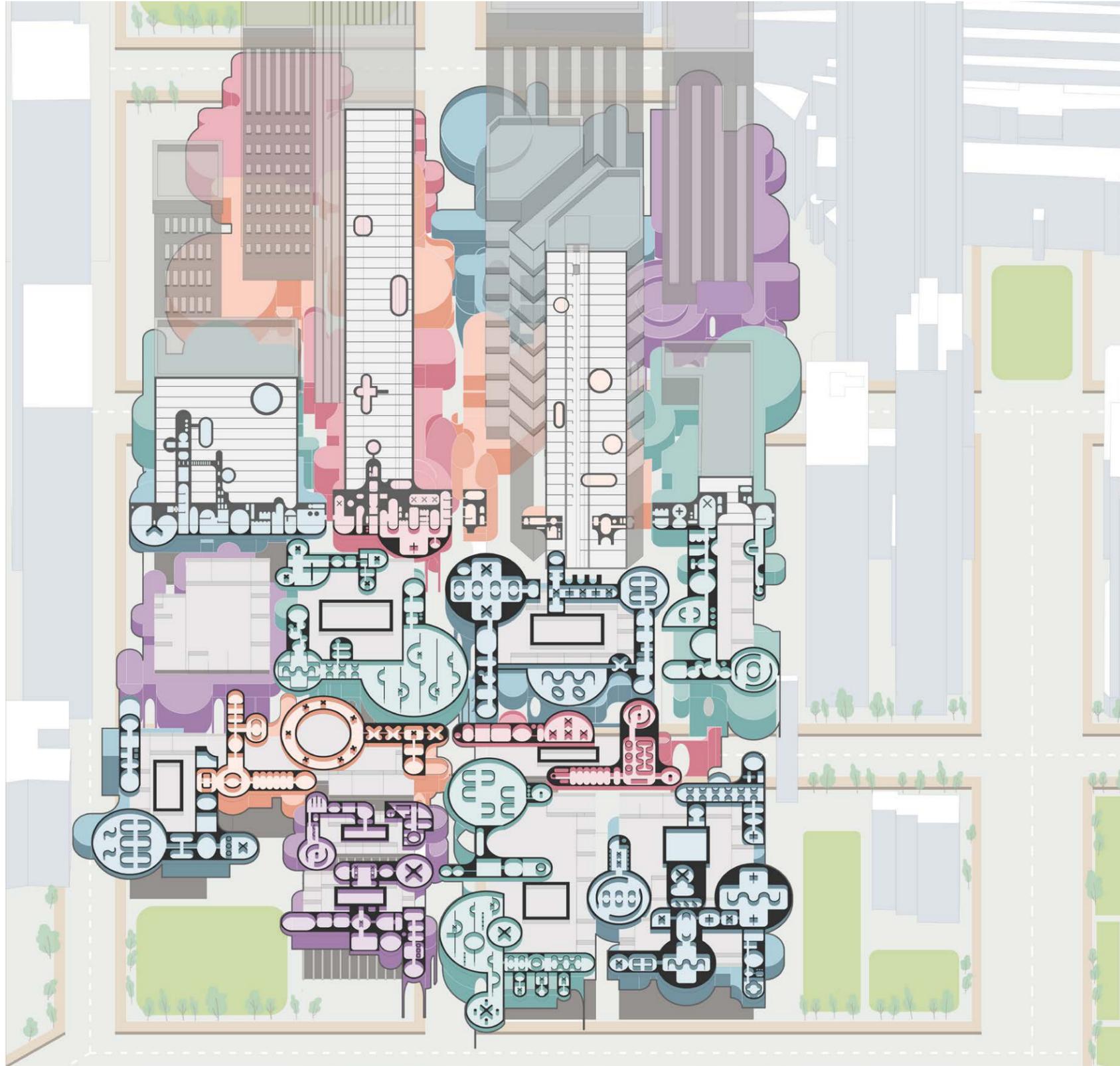


Provide Spaces for crowd from Otemachi Station to relax and communicate, and it is directly connected with the main part of the new Kabukicho and buildings.

CONNECTED WITH STREET



Creat Kabukicho-like street in Otemachi, to narrow the spaces and make people spend more time here, and provide private rooms in the public space.



CONNECTED WITH BUILDINGS

Main part from different buildings get really close but not connected, and entertaining spaces are inserted into the buildings.



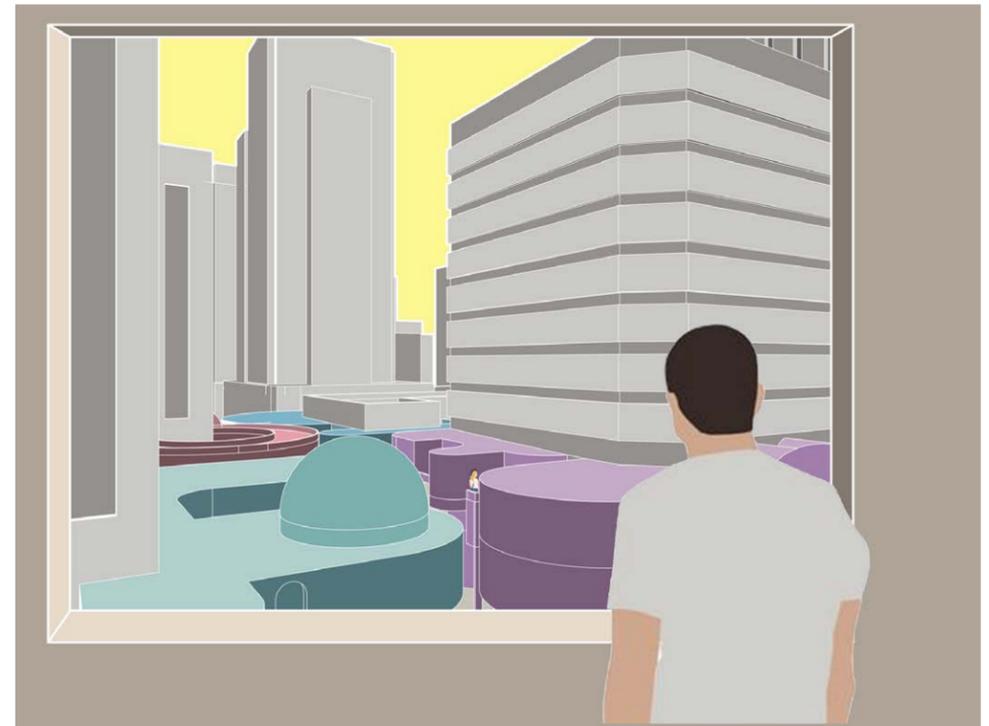
The salaryman who used work in Shinjuku is new to Otemachi, When he arrived at the Otemachi Station, he found something different. there are many places for people to stop and have a talk.



He went up to the street and there were many people walking around here.



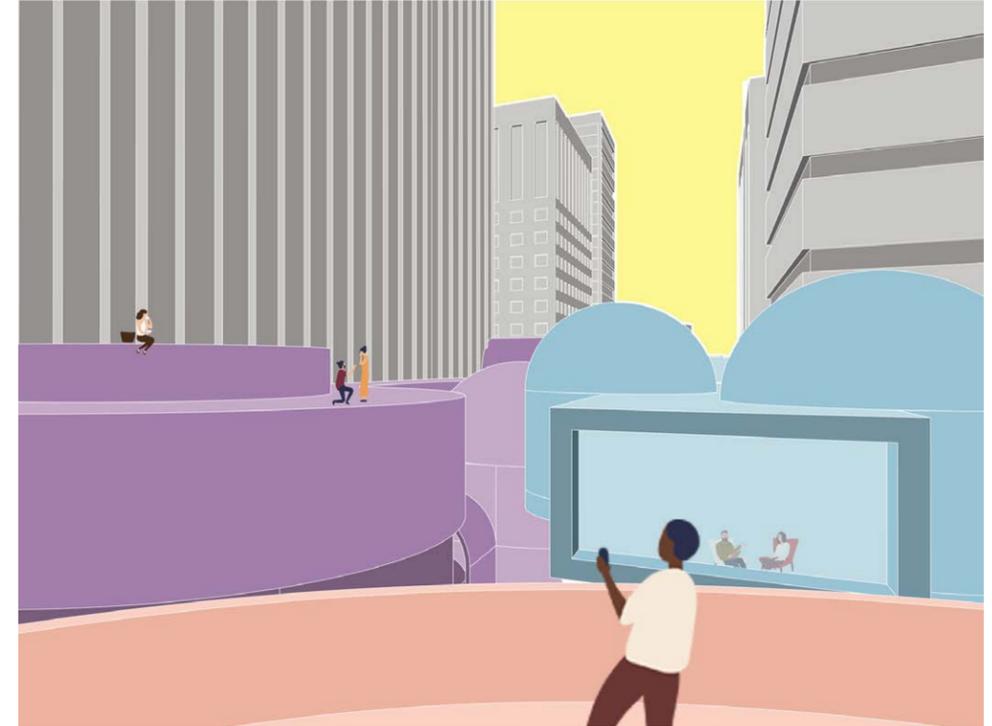
People have many activities here, and the scenery is totally different from the Otemachi before.



He can see the New Kabukicho from his office, which is attracting when he is working tired, so he decided to go after work.



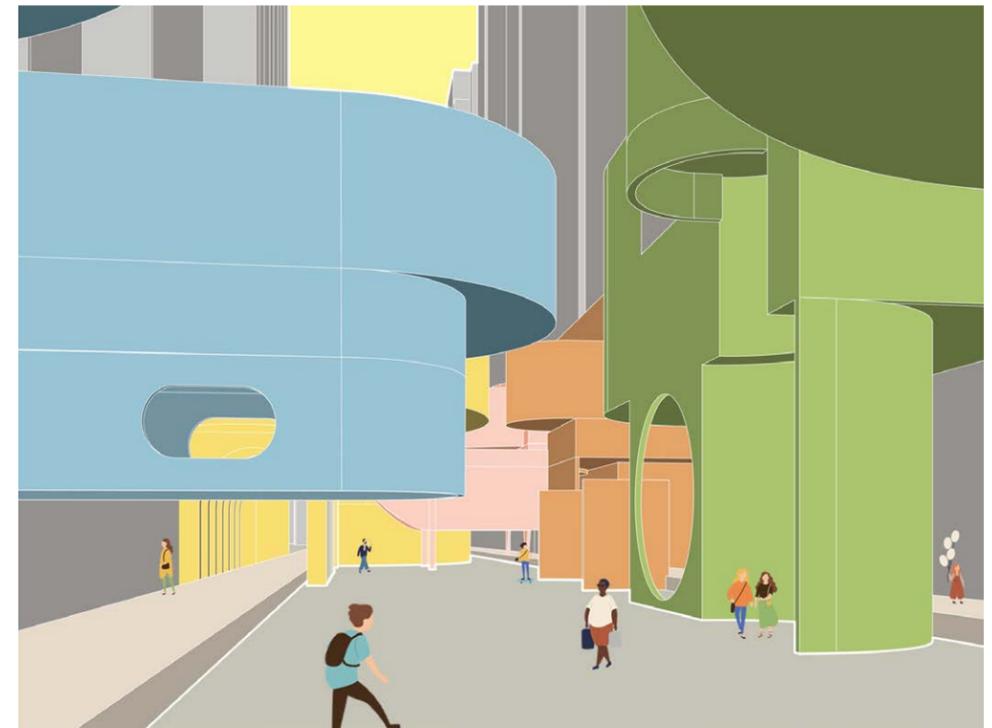
The New Kabukicho spaces is inserted into the buildings, so it is really easy for salary(wo)man to enter and the people inside is really relaxed.



The salaryman can see the people from other buildings, they can talk and make friends with people in different places.



But if they want to communicate more they can make a date and go outside or go to the private spaces underground.



The salaryman gets used to the lifestyle here quickly and make many friends The working people here can really enjoy their life.



Exodus of the Voluntary Prisoners of Architecture, Koolhaas & Zenghelis, 1972



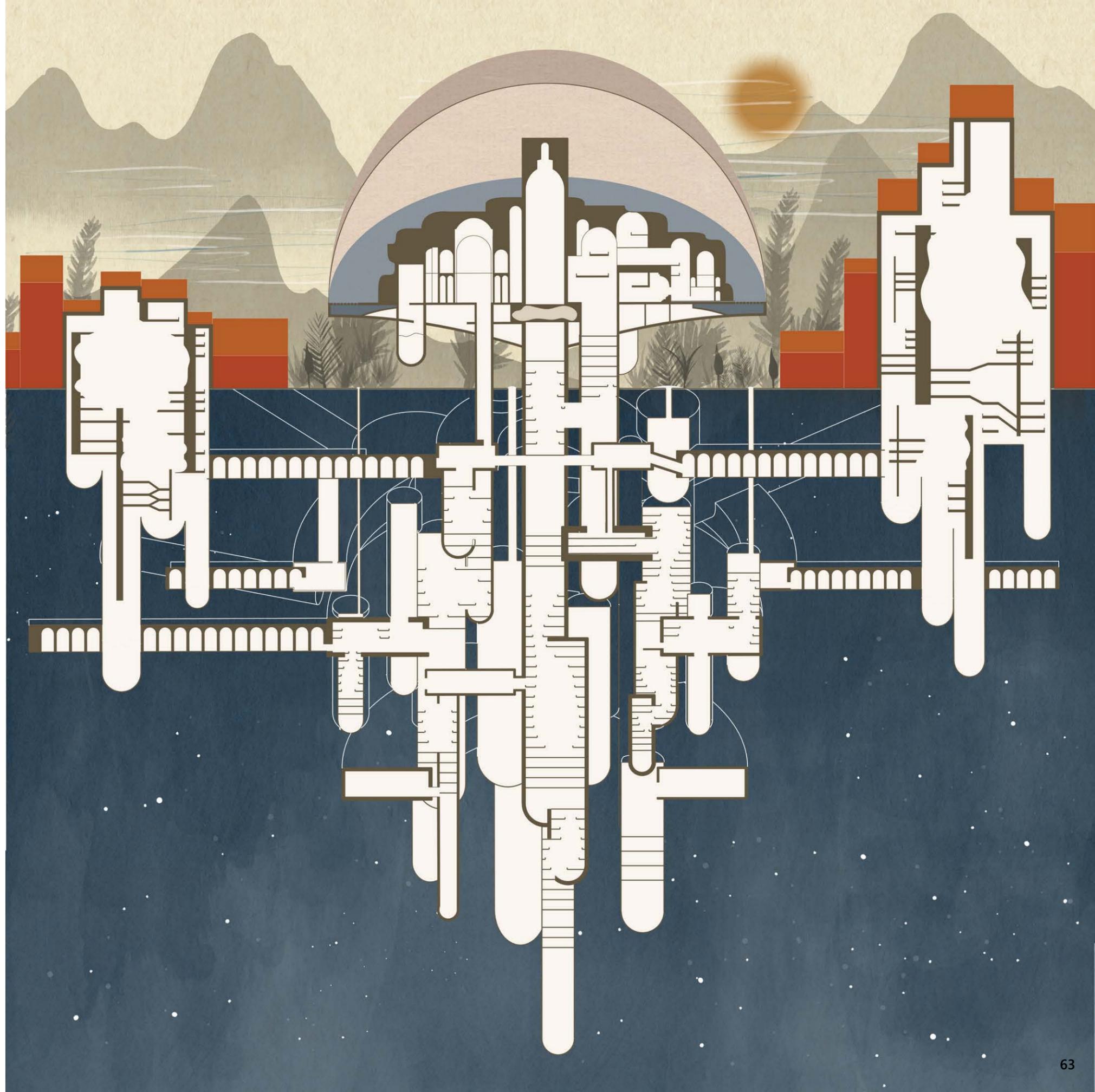


No-Stop City, Archigram, 1966-70

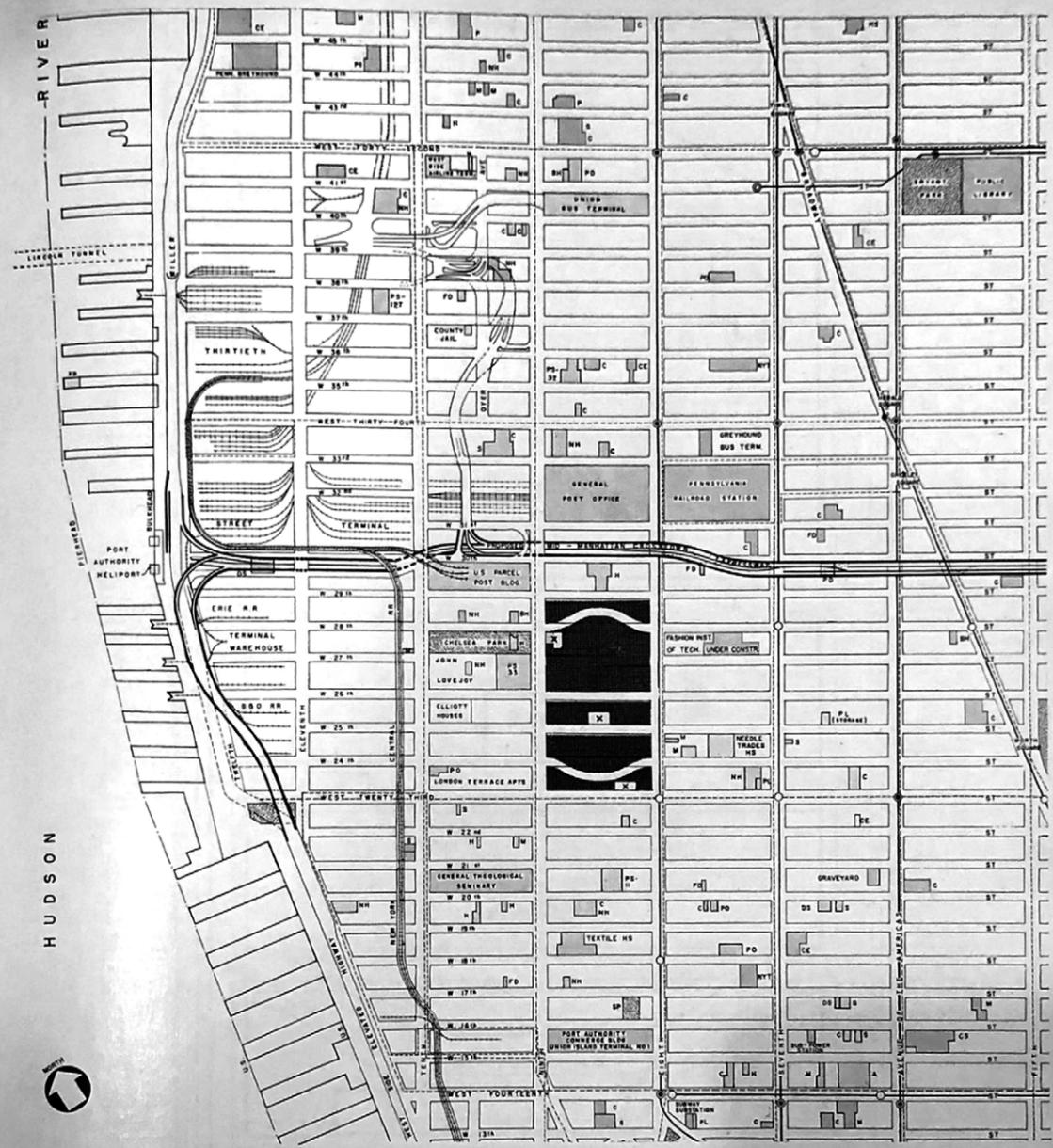




Palmtree Island, Haus-Rucker-Co, 1971

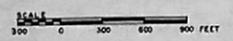


SHELF/CARREL 07A



KEY

COMMUNITY TRANSPORTATION	COMMUNITY FACILITIES	MUNICIPAL FACILITIES	OTHER PUBLIC & SEMI-PUBLIC FACILITIES
<ul style="list-style-type: none"> Subway & Subway Stations Express-Local Surface Transportation Railroad 	<ul style="list-style-type: none"> Public Open Spaces Other Community Facilities Title I Project Proposed New Facilities Proposed New Streets or Major Widening Line of Existing Streets Where Change is Proposed Excluded from Project 	<ul style="list-style-type: none"> BH Bath House DS Dept of Sanitation FD Fire Department HS High School PD Police Department PL Public Library PS Elementary School SP Swimming Pool P Playground 	<ul style="list-style-type: none"> National Guard Armory Post Office Consolidated Edison Co. NYT New York Telephone Co.
			PRIVATE FACILITIES
			<ul style="list-style-type: none"> Church Hospital/Clinic/Orphanery Mission House or Aid Soc Religious/Parochial House Private or Parochial School or College

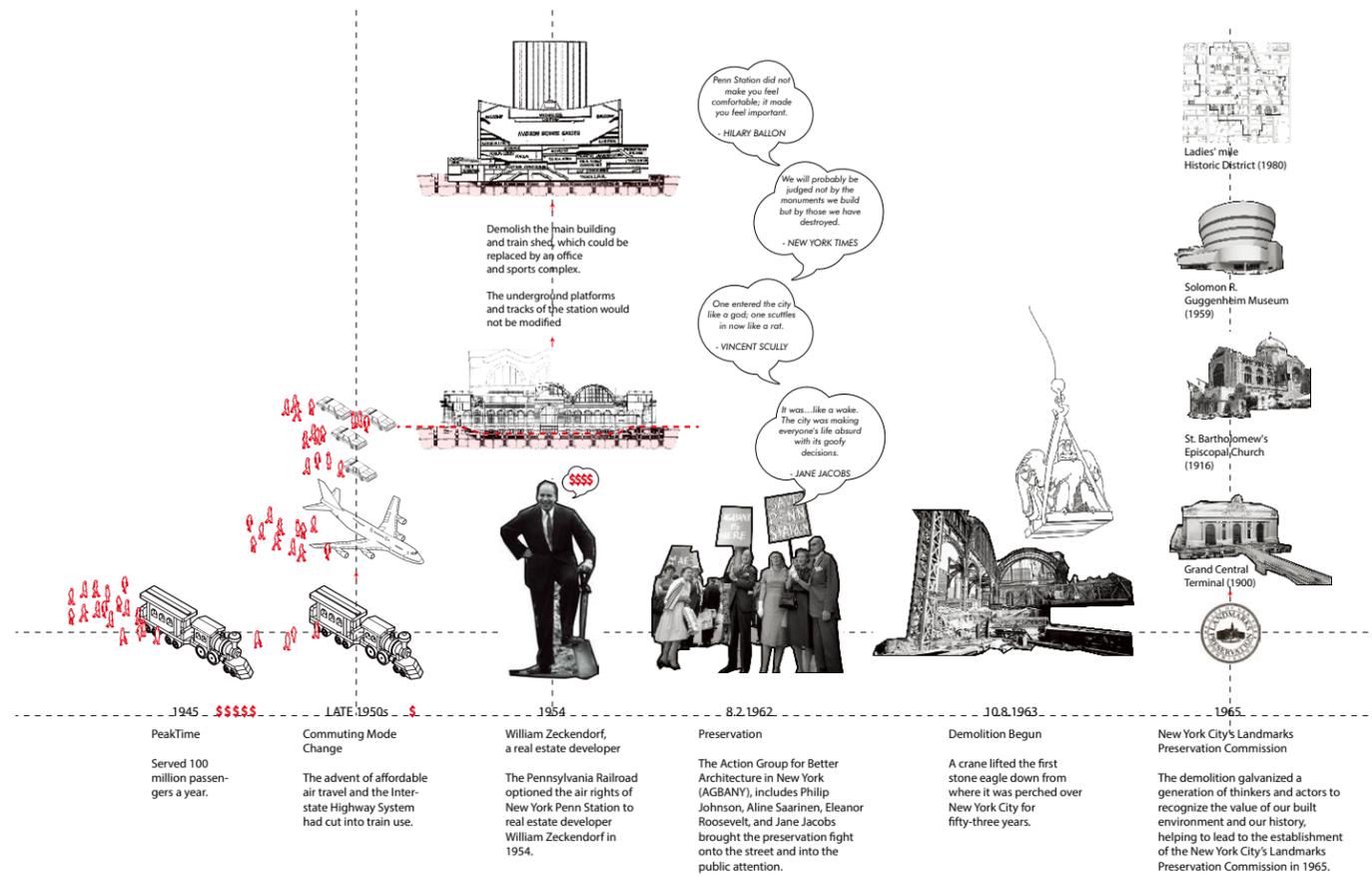


COMMUNITY FACILITIES AND TRANSPORTATION

**TRANSSCALARITIES:
THE EVOLUTION OF PENN STATION**

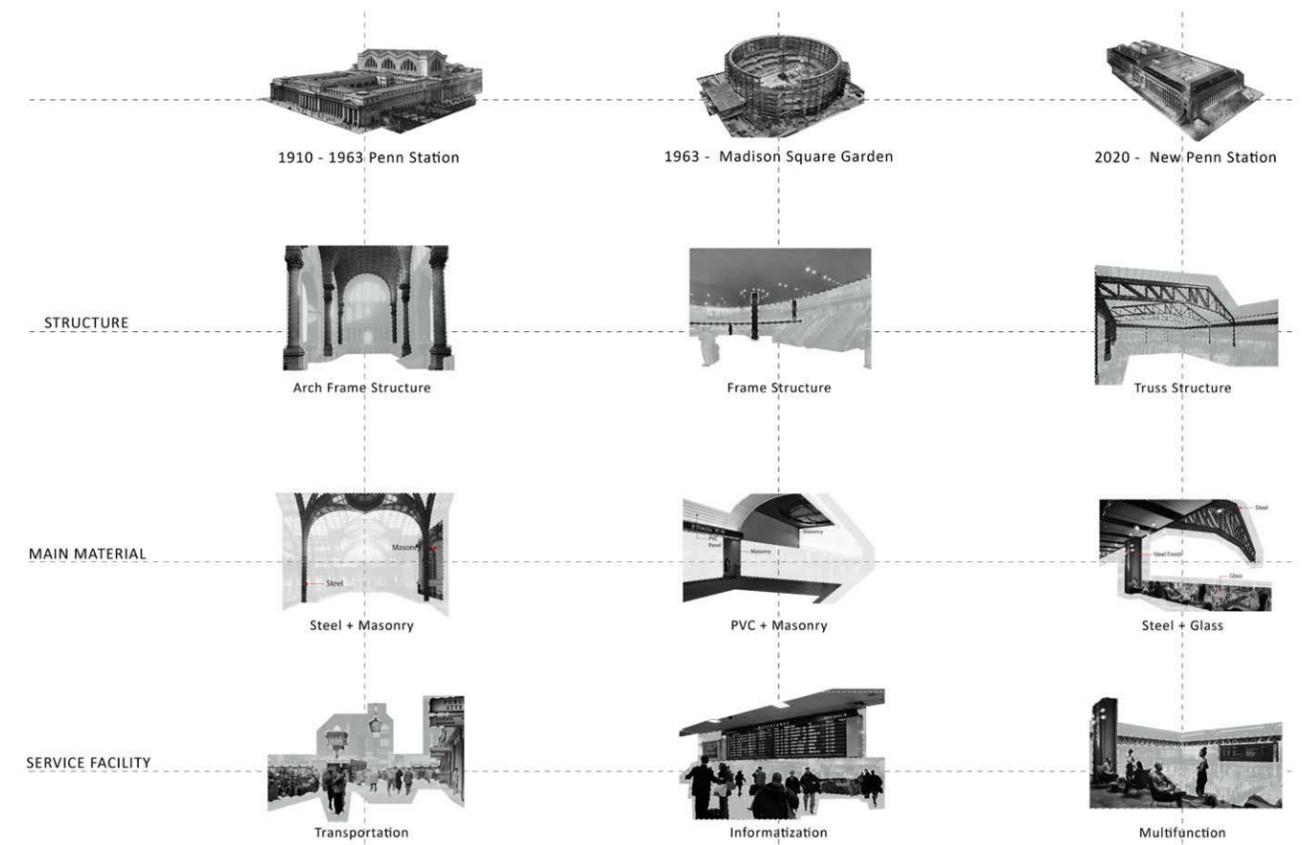
LOCATION: New York, USA
 TYPE: Research, Collaboration
 COLLABORATOR: Lu Xu, Benjamin Gomez,
 Christopher Spyrakos
 INSTRUCTOR: Charlette M. Caldwell
 PROJECT DATE: August, 2019

The architectural history of Penn station, its construction, design, demolition, and redesign can be seen as an example of changes in architectural taste and those effects on the built environment. In the 1963 Farewell to Penn Station [Farewell to Penn Station New York Times; Oct 30, 1963; ProQuest Historical Newspapers: The New York Times pg. 38] the architecture critic Ada Louise Huxtable, an important figure in the establishment of the NYC Landmarks Preservation Commission, wrote on this progression of taste that, "We will probably be judged not by the monuments we build but by the monuments we destroy."



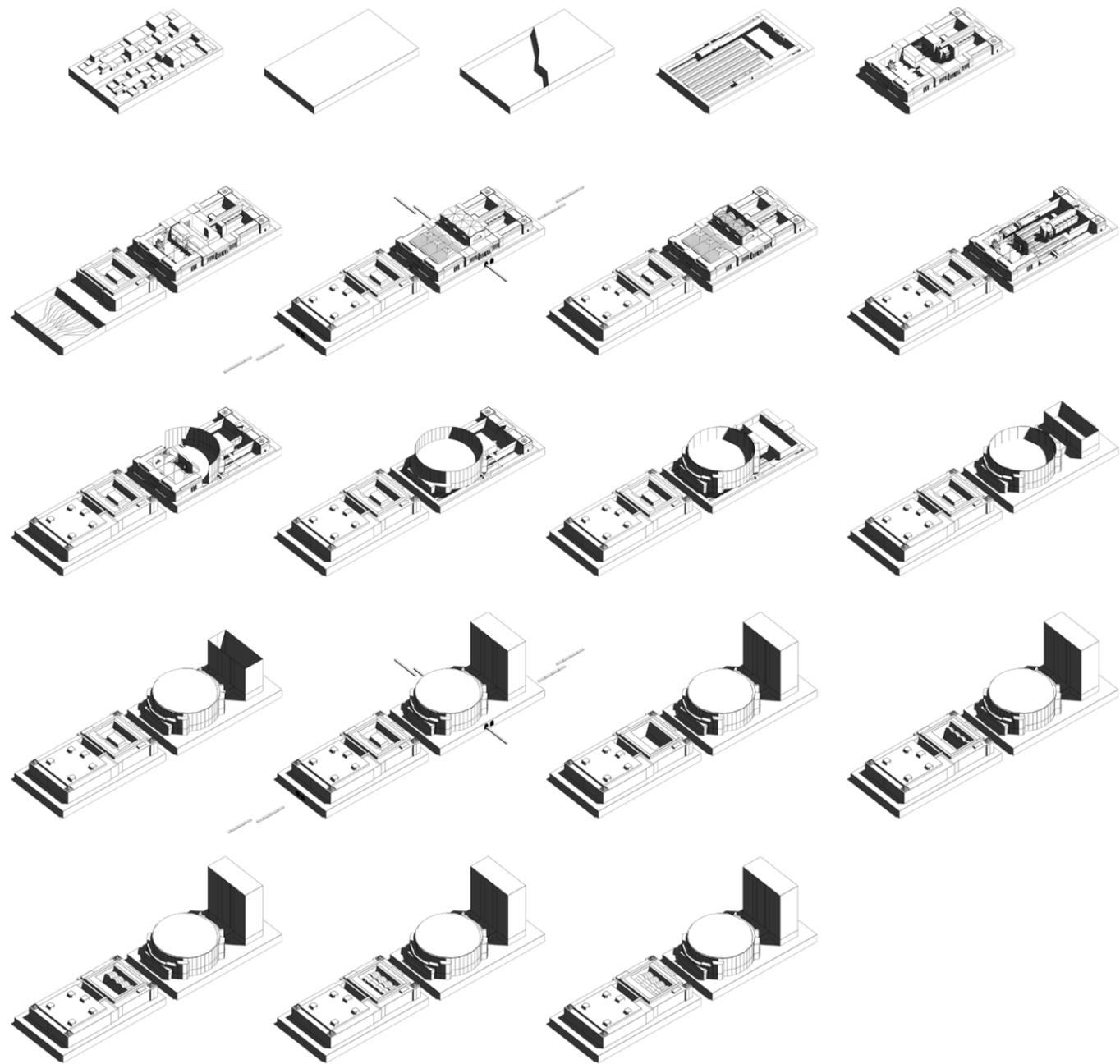
The construction and opening of the original Pennsylvania Station in 1910 received a graceful welcome from the public, architects and critics, soon becoming a landmark for New Yorkers and visitors. It was not only a transportation hub, but also a space equipped with a large range of amenities such as formal dining rooms, lunch rooms, coffee shops, parcel room, lecture rooms, library, billiards room, a bowling alley, and a gymnasium. Pennsylvania Station's design drew inspiration from ancient Roman baths, Bernini's piazza in the Vatican, and John Soane's Bank of England (Source?). As The New York Times acclaimed

on August 29, 1910, Penn Station, "was the largest building in the world ever built at one time". It served 18 million travelers annually, and by the end of the Second World War, the number had risen to 100 million. However, preferences in transportation began to shift with the introduction of the interstate highway system and growing interest in aviation, which drastically decreased travel time. This change ended the Penn Station's glory by the 1950s. The Penn Railroad could not afford to properly maintain the station, and it struggled to survive, seeking to raise funds from its valuable mid-Manhattan location.

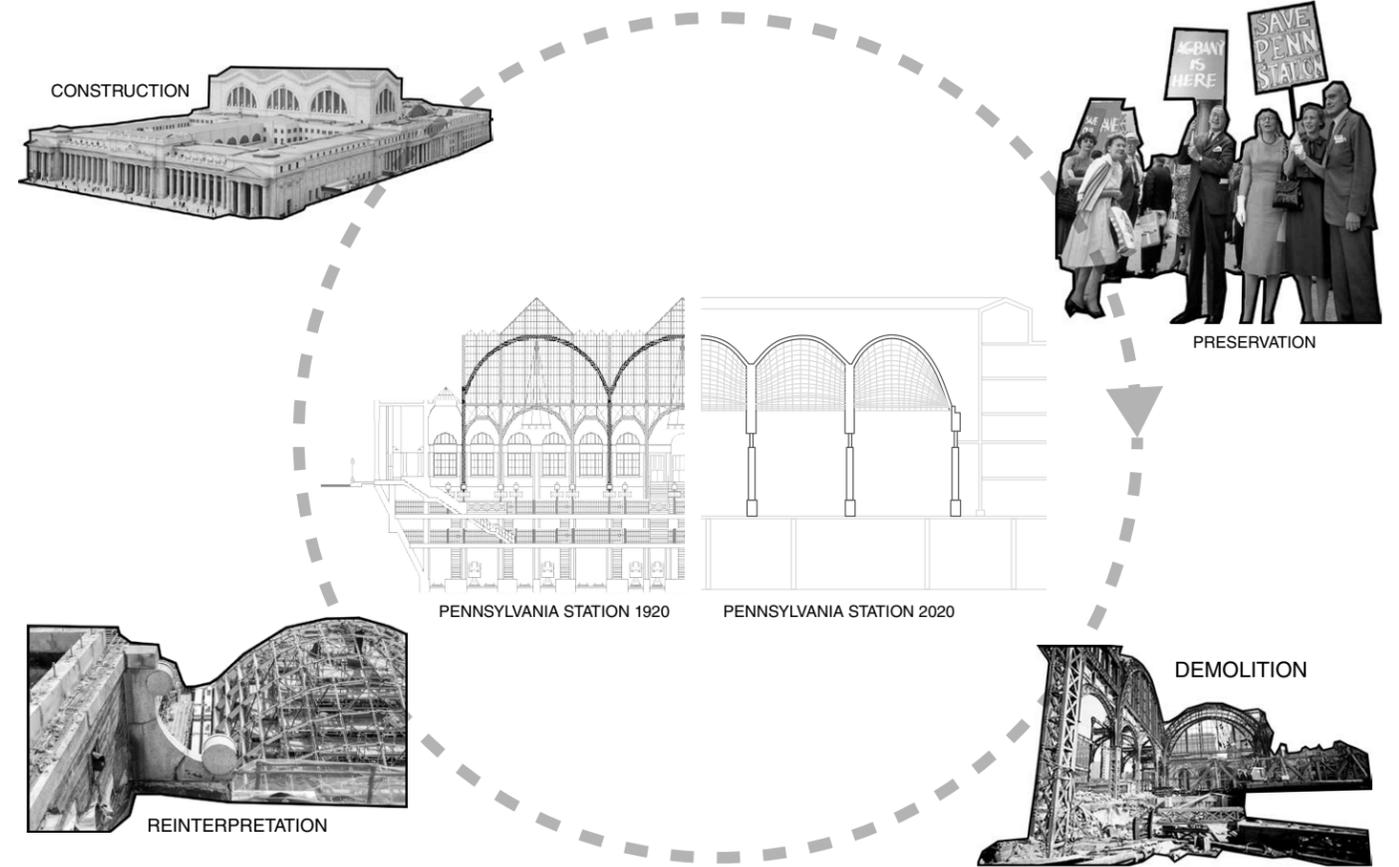


The current Penn station is completely underground, located under the Madison Square Center. It has multiple means of egress to provide ease of convenience. In addition, the current Penn station is one of the busiest stations in the world. The station has three levels: concourses on the upper two levels, and a train platform on the lowest level. The two levels of concourse are original to the 1910 station, which were renovated when the Madison Square Center was constructed. The Department of Reconstruction expanded it to connect with other stations to consolidate public transportation in New York City. The station now serves 1300 arrivals

and departures every day. Although the current Penn Station could be considered more effective than its predecessor, it is still plagued by criticism, with one comment from the New York Times referring to it as a "the ugly stepchild of the city's two great rail terminals." As a result of this criticism, Municipal Art Society hosted a competition in 2016, SOM won the competition; their designs for the station will be dedicated to commercial, retail and dining spaces. They proposed a station that would be more spatially comprehensive.



Construction Progress



Pennsylvania Station, more than a transportation terminus, is an example of the change in architectural taste: a once very luxurious and relevant train station devolved into an undesirable and expensive burden once the architectural taste changed, the use of trains declined, and its maintenance was impossible to sustain. As the desire for trains

becomes relevant again due to increasing urban development and a renewed appreciation for the Beaux-Arts style reemerges, the legacy of the old and spacious Pennsylvania station makes the city and people desire a new, more open space embodied in the principles of the original design.



THE CITY FORM: VERTICAL MANHATTAN

LOCATION: New York, USA

TYPE: Academic, Collaboration

COLLABORATOR: Scott Guo, Leah Zulkoski, Yechi Zhang,
Yixuan Shi, Alvi Rahman Khan

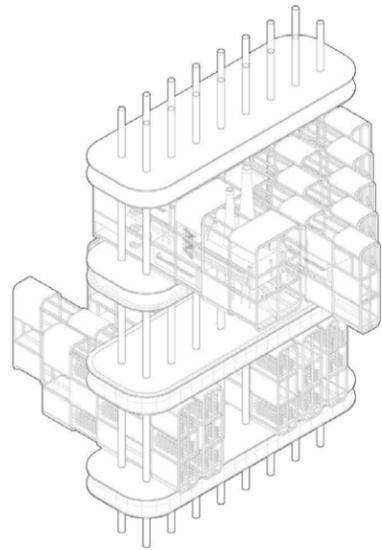
SUPERVISOR: Vishaan Chakrabarti

PROJECT DATE: November, 2019

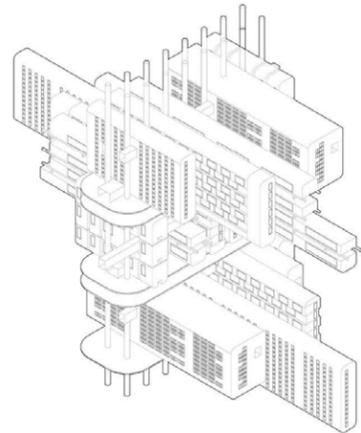
Our future city finds its physical form through a complete rejection of this view posited by Kevin Lynch, and proposes a modernist take on his outdated theory. Lynch himself states that "physical change can sometimes be used to support, or perhaps even induce, social change," so why not integrate and verticalize the city's physical form to promote a societal cohesion around resiliency and biophilia?

In Vertical Manhattan, the city and the building are indistinguishable, entangled in one, masterfully planned, vertical structure. The city megastructure is modularized through sub-sections, referred to as "block levels," with each exhibiting a unique character in its organic growth on the horizontal axis.

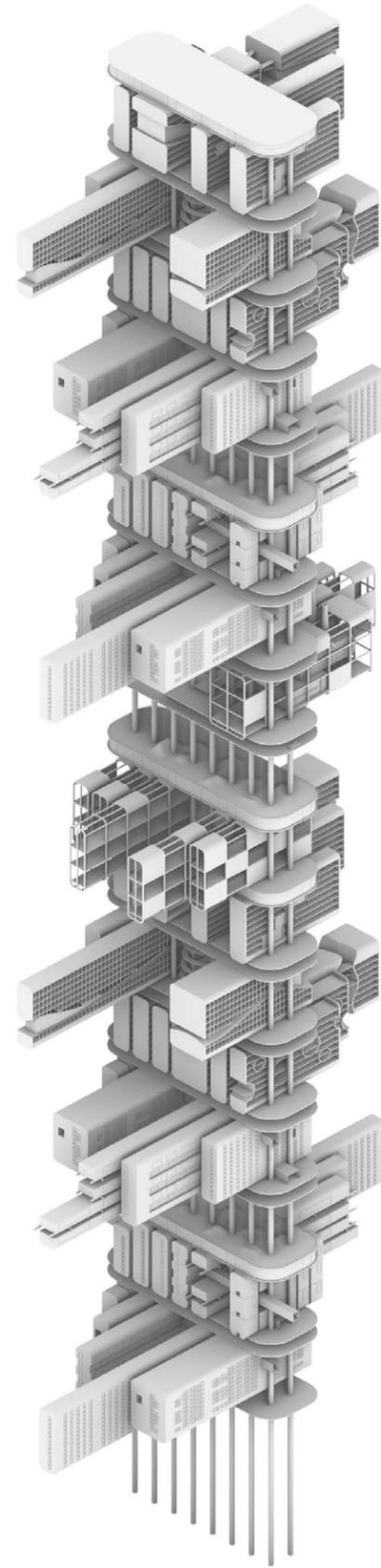
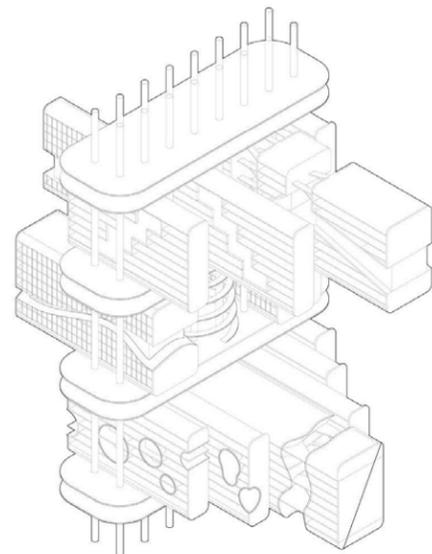
Industrial



Residential



Commercial



The foundation of our master plan for the CoF is built on the collaborative elements of resident participation in mass housing and the construction of resilient megastructures. The test site for our plan will be situated in Manhattan, New York City. Within this area, our long-term plan will include the numerous diverse neighborhoods of the East Village, Lower Manhattan, Upper West, specifically Alphabet City. Given the scale that our near-unlimited budget affords us, our plan can approach local stakeholders on equal terms, regardless of background. Additionally, by working alongside city agencies focused on Lower Manhattan coastal resiliency, our megastructures can further complement the flooding strategies being undertaken by public initiative and funding.

At the center of our design, the megastructure is a versatile complex that extends itself along a path of vertical integration of modular sub-sections. The transitional sub-sections include a base component, termed the "block level." Along the block level, new buildings are flattened and extend beyond the center plane solely in one direction. The buildings serve a multitude of well-defined purposes, including commercial, residential, public, and recreational. As a block adds more buildings, it forms a neighborhood along a horizontal axis, consistent with the existing city planning of the LES. Finally, once a block level becomes fully populated with buildings along its finite dimensions, structures can only continue on a different block along the same vertical axis. Unique to our megastructure, however, the development on adjacent blocks is distributed in opposite directions from one another, thus minimizing the public nuisance of new construction.

The megastructure is built on modern pilotis, reinforced concrete columns at the base of the building, that elevate the complex above the difficult flood plain of Lower Manhattan. The pilotis are further oriented in a manner to allow for multiple elevators into the blocks above. Additionally, fixed structures for water expulsion will be installed on the ground below the structure, varying by levels of obtrusiveness. These devices, including fixed walls, flip-up barriers, and roller gates, would work in accord with the infrastructure toolkit to be applied by the Mayor's Office of Resiliency, improving the efficacy of flood control and prevention in the region. Though ground floor commercial space is ultimately sacrificed, the long-term goals are being met for the agencies and civic organizations involved in The Financial District and Seaport Climate Resilience Master Plan: bolster methods of flood prevention, mitigate for extreme weather events, and preserving views and public access to the coastline.

The three blocks are residential, commercial and industrial. The residential block includes residential spaces designed with keeping equality and diversity in mind.

Apart from energy efficient housing, recreational areas, grocery stores, fitness centers, restaurants and other neighborhood amenities are provided in the block. The commercial blocks includes the Wall Street, business zones that consists of office spaces, cafes, auditorium and exhibition centers etc.

Thirdly the industrial blocks consists of raw material stores, production center, wholesale markets, industries etc. Each of the blocks has a significant amount of green space that is meant for recreational area in the residential block and agricultural area for industrial and partly the commercial block.

Lastly, with keeping the ground floor area completely open to sky, agriculture and biodiversity is promoted. Human beings and animals live in the same ground but in a different dimension. The food chain is versatile than ever before in history. Energy efficient solar powered automobile is used as a mode of transportation from one city to another and elevators are used for interior movement.

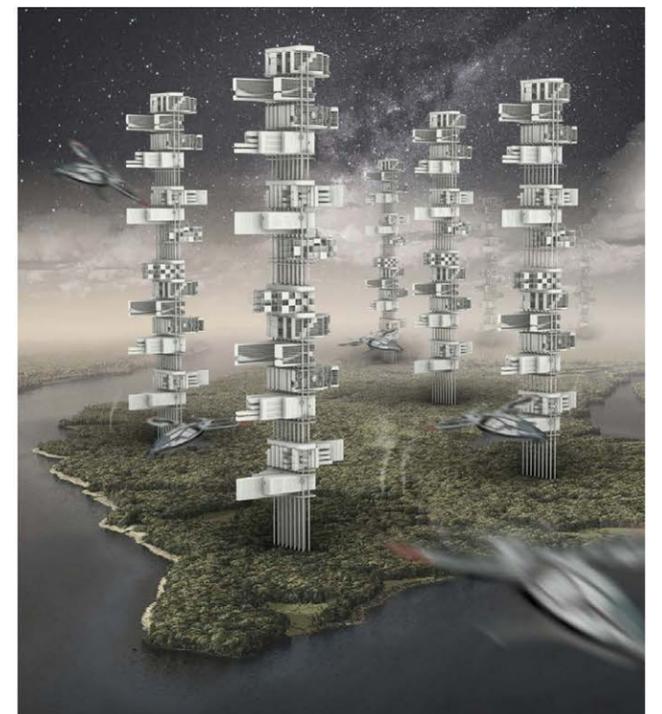
The city is more sustainable, climate resilient, population resilient, in the realm of biodiversity and programmatically efficient than any other city we have witnessed in history. It provides for people of all colors, races, and income taking all the aspects of modern living in mind.



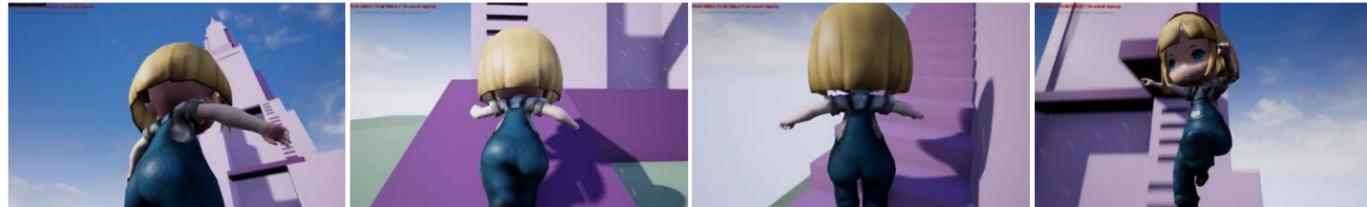
1609



2019



2300



VIRTUAL ARCHITECTURE: QUARANTINE ADVENTURE

TYPE: Game, Individual
SUPERVISOR: Nitzan Bartov
PROJECT DATE: May, 2020

Our built environment represents the limits of our physics and material properties. What types of architecture will emerge of exploration of alternative physical constraints? If cause and effect could be re-imagined, what would be the new modes of interaction with one's environment?

Using the unique affordances enabled by Virtual Reality headsets and Game Engines, this course wishes to explore speculative architectures, adapted to alternative physics, materials and casualties.



REALTIME: AUTONOMOUS VEHICLES IN 2050

TYPE: Animation, Collaboration

COLLABORATOR: Yanan Cheng

SUPERVISOR: Farzin Lotfi-Jam, Greg Schleusner

PROJECT DATE: December, 2019

"This project locates a narrative in the year 2060, a date touted by many technology industry experts as when vehicular driving will be fully autonomous. This simulation collects tropes from existing tech industry marketing material, and synthesizes them into a nonlinear narrative of future social life in an era of autonomous vehicular navigation."

Realtime explores, modifies, and develops a suite of real-time architecture and urban design assist tools using the Unreal Gaming Engine. To date, real-time software has predominantly been used in architecture and urban design to visualize environments and allow users to experience projects at the end of the design process.

ACKNOWLEDGEMENT

I would like to thank all who have encouraged and inspired me to finish this portfolio, including my teachers, advisors, friends, and my parents, who accompany and support me during my preparation for this portfolio.

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