

THIAGO LEE

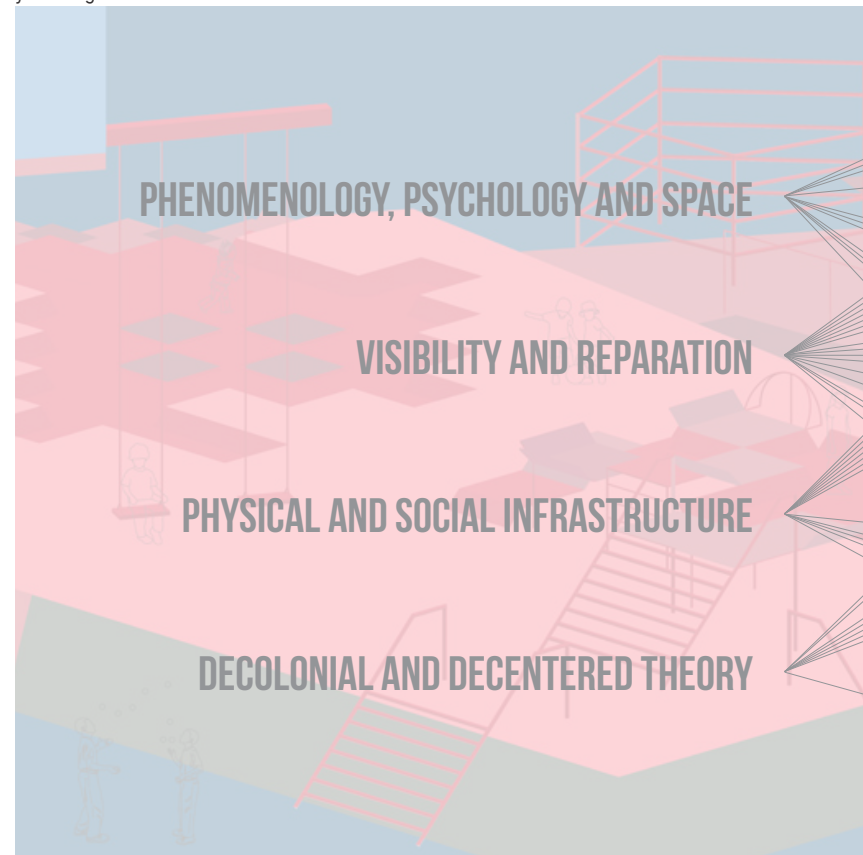
Columbia GSAPP

M. Architecture
M.Sc. Urban Planning

PORTFOLIO



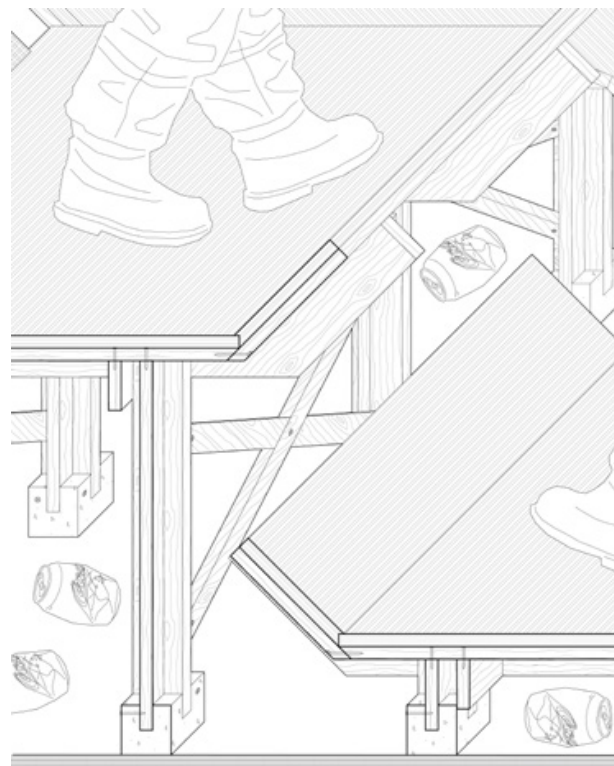
Few words can and cannot synthesize the central thematics sought to be unraveled during this four years of graduate school.



They speak about the scope of the work but, at the same time, about where I find myself at the moment.

CONTENT

STUDIOS	04 . Vocational Campus	/// Arch. Studio - Core 1
	18 . Cross-Cultural School	/// Arch. Studio - Core 2
	40 . Housing & Community Development	/// Arch. Studio - Core 3
	52 . Energy Futures Educational Complex	/// Arch. Studio - Advanced 4
	70 . Water Infrastructure for the Yawanawa	/// Arch. Studio - Advanced 5
	90 . Healing and Repose	/// Arch. Studio - Advanced 6
	107 . Grey to Green - Energy Transition in NYC	/// Urban Planning Studio
HISTORY & THEORY	110 . Towards a New Architectural Paradigm	/// QAH 1
	112 . Untangling Authenticity	/// QAH 2
	114 . FAU USP / Critical Regionalism / Death	/// Theoretical Turn
	116 . Lúcio Costa and the Pursuit of a National Identity in Brazil	/// Vernacular
	118 . Wat Pho and the Reclining Buddha	/// Sublime
120 . Rolezinhos / Funk Ostentação / Shopping Malls	/// Spatial Exclusion	
VS AND TECH	122 . Analysis of accessibility to opioid-addiction treatment in NJ	/// Geographic Information Systems
	126 . Studies on the Thong House	/// ADR 1
	130 . Studies on Representation	/// ADR 2
	134 . Guidelines for more Open Space Accessibility	/// X-Info Modeling
	136 . Board Game for Participatory Design	/// Drawing to Gather
THESIS	138 . The Civic and Political Participation of the 1.5 and Second Generations of Korean Immigrants in São Paulo	/// Urban Planning Thesis



1

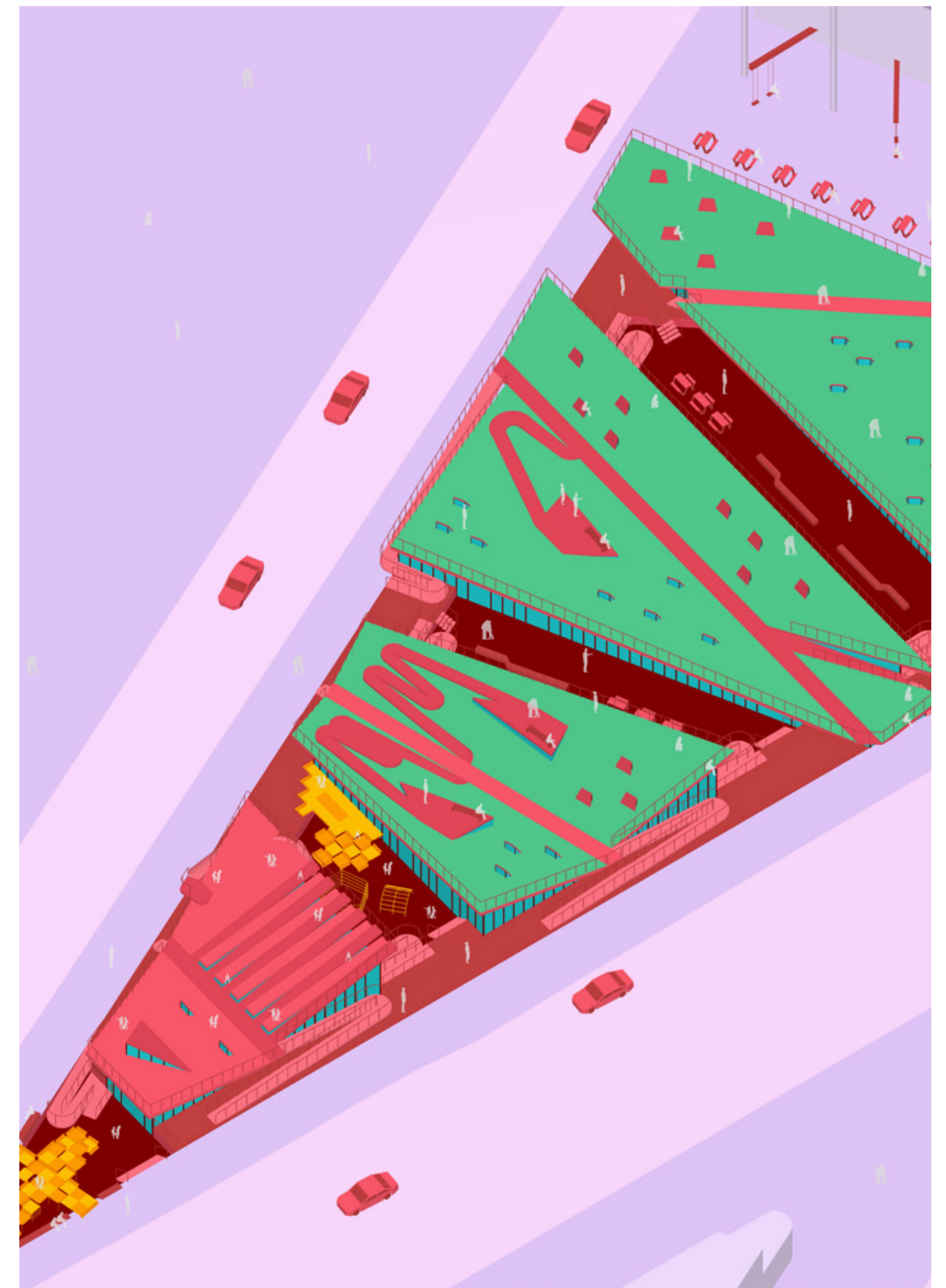
After an investigation of the displacement of the African-American population in Community District 9, what became clear was the historical expulsion of this group more and more to the outer boroughs. If during the post-war this region received low-income families of color and impoverished veterans, more recently, especially after Urban Renewal projects, gentrification have been pushing them away. On top of that, there was the involvement of Columbia University with this historical uprooting. The Manhattanville Houses and the Grant Houses, two NYCHA building complexes on Broadway Avenue, were the results of Columbia University's lobbying for the application of Robert Moses' Slum Clearance Plan over areas that were classified as blighted. These areas were mostly composed of African-American families that had been segregated due to redlining and other discriminatory practices. The new buildings were the opportunity for the homogenization of the area with the displacement thousands of African-American families.

Nowadays, Columbia has been provoking another social distress to local communities, but now on the surroundings of its new campus in Manhattanville. The increase in land value, rent value and living cost in the area due to Columbia's interventions has been responsible for numerous evictions and for families leaving the neighborhood, and puts pressure on the residents that remain, especially for those living in NYCHA facilities. Therefore, the realization of the second phase of the construction of the new campus needs to be addressed with a doubled attention not only for its impact on the immediate environs but also for the historical debt and responsibility the University has with the local African-American community.

VOCATIONAL CAMPUS & PLAYGROUND

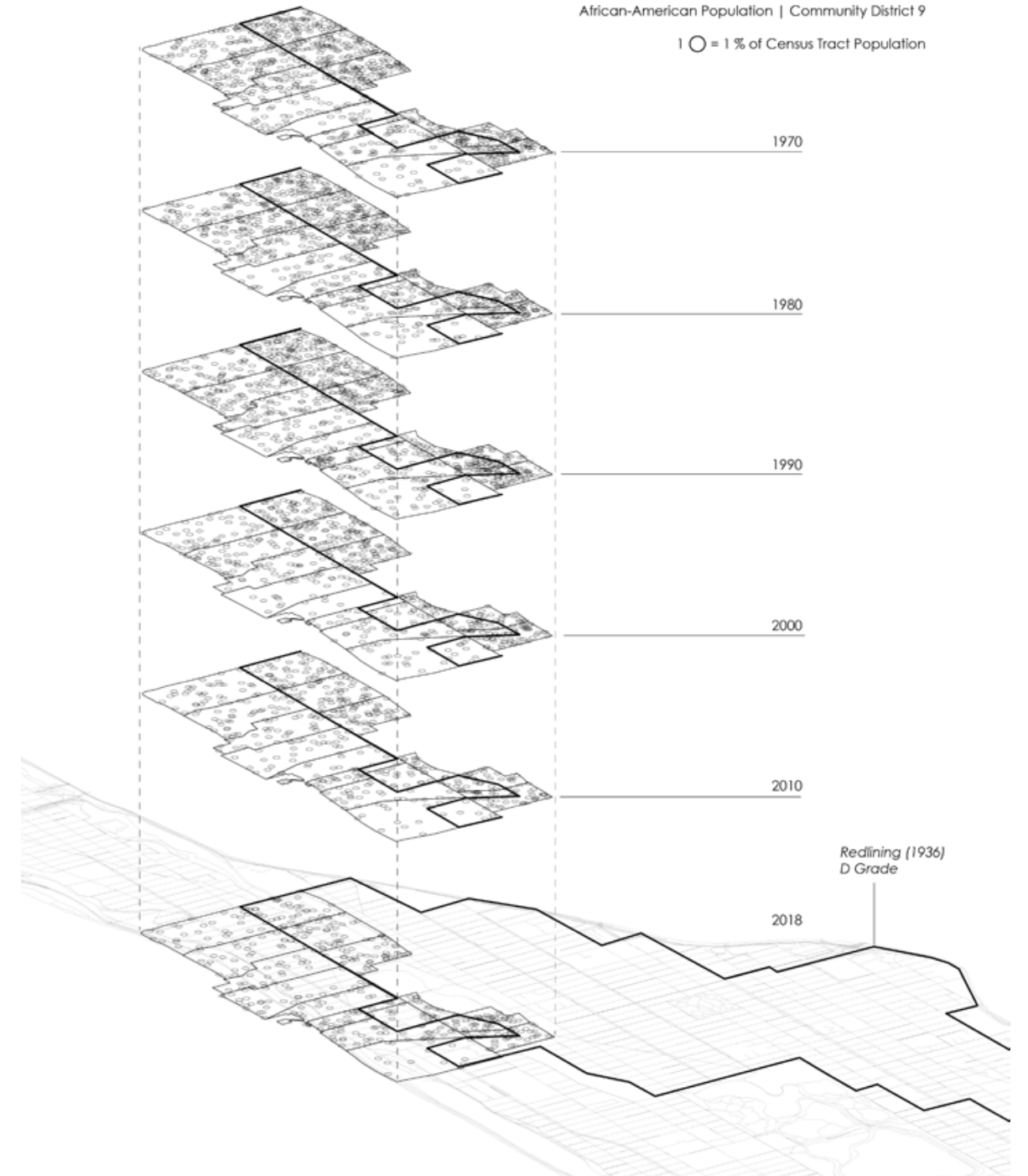
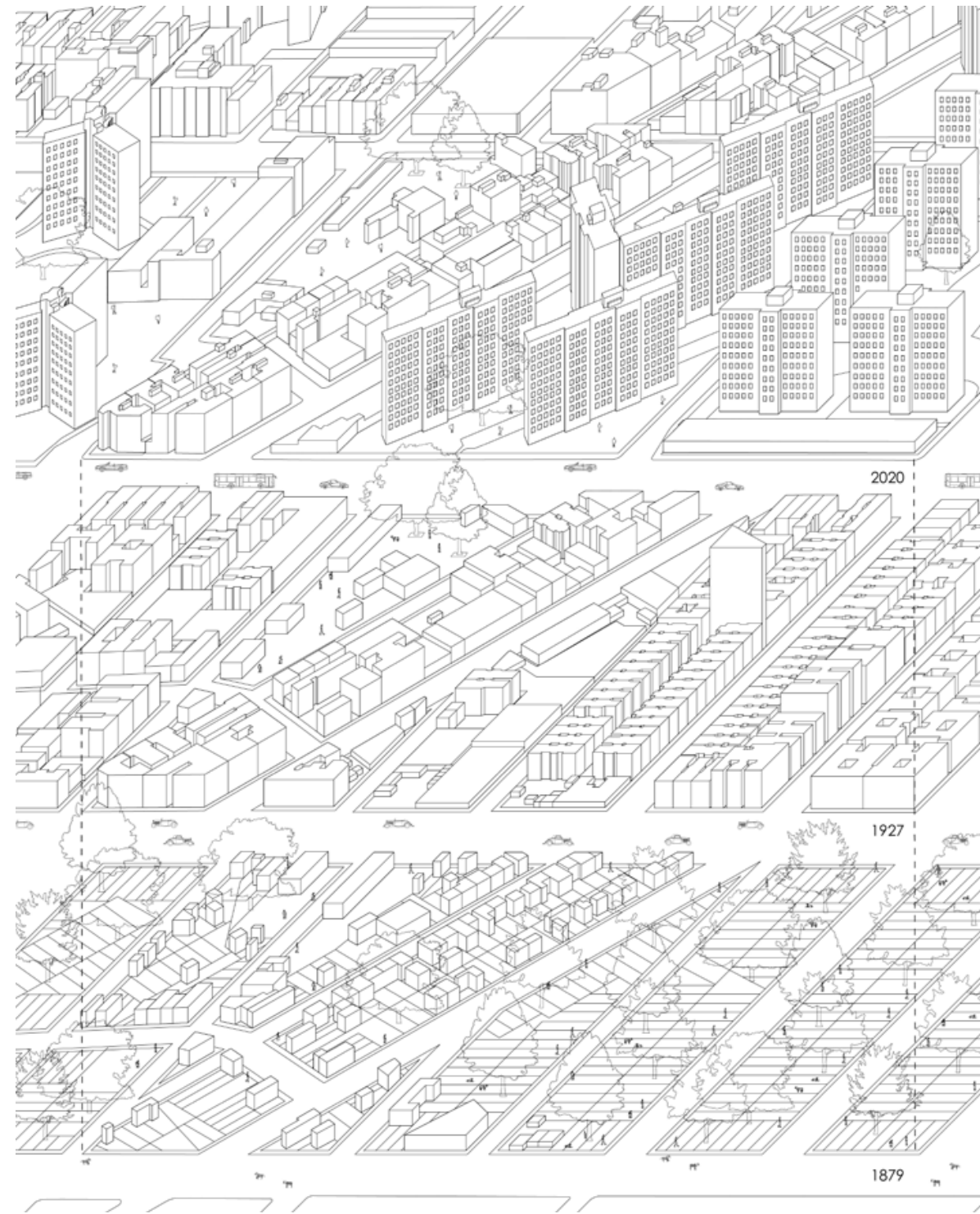
INSTR.: ALESSANDRO ORSINI
 YEAR: FALL 2020
 STUDIO: CORE 1
 NEW YORK CITY, NY

2

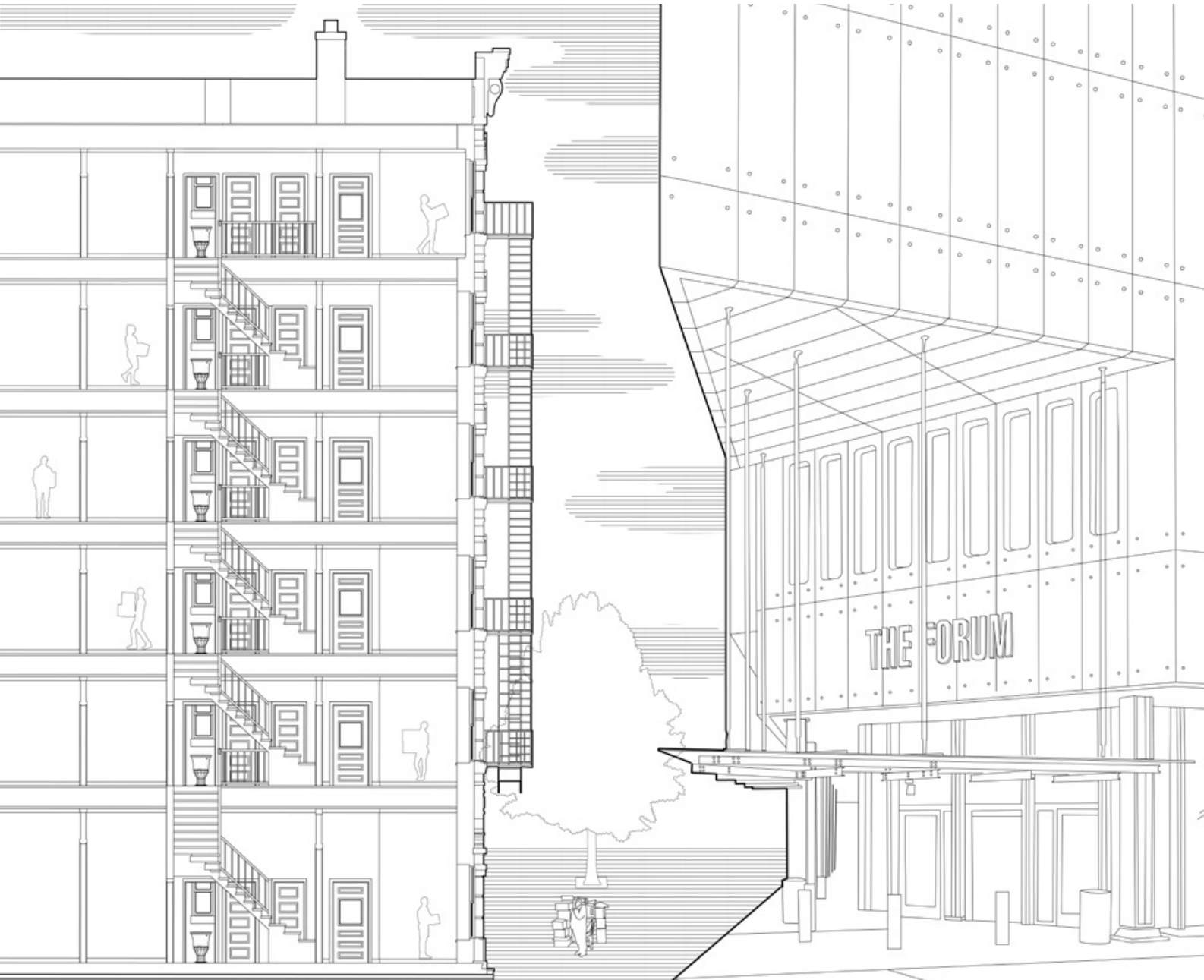


1 Detail drawing of playground structure that allows creative play
 2 Overview of Vocational Center in Manhattanville, NYC

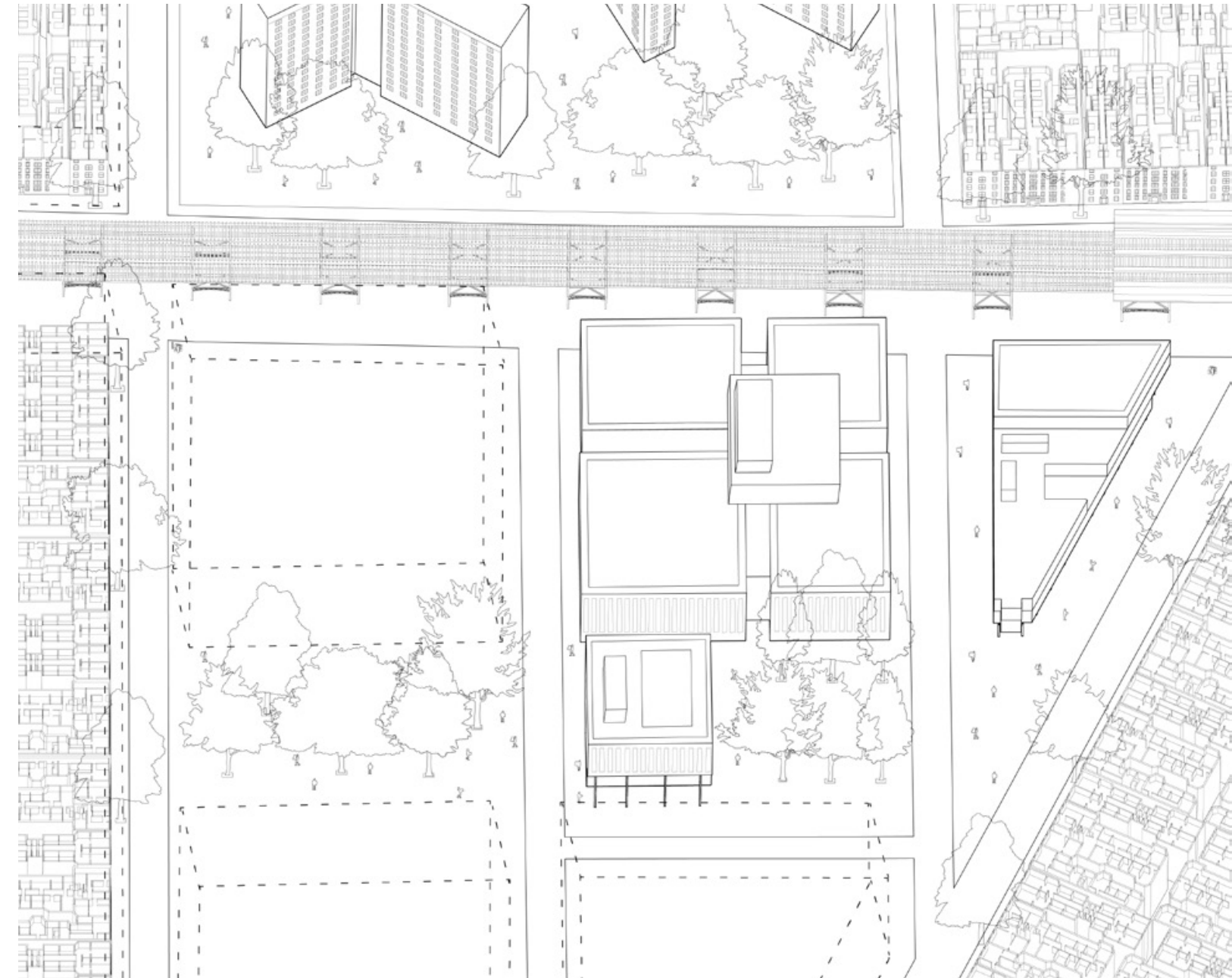
- 3 African-American population density over decades, pushed towards outer boroughs of NYC
- 4 Built environment evolution over the century depicting abrupt transformation of redlined areas



The new Manhattanville campus is already putting pressure over locals

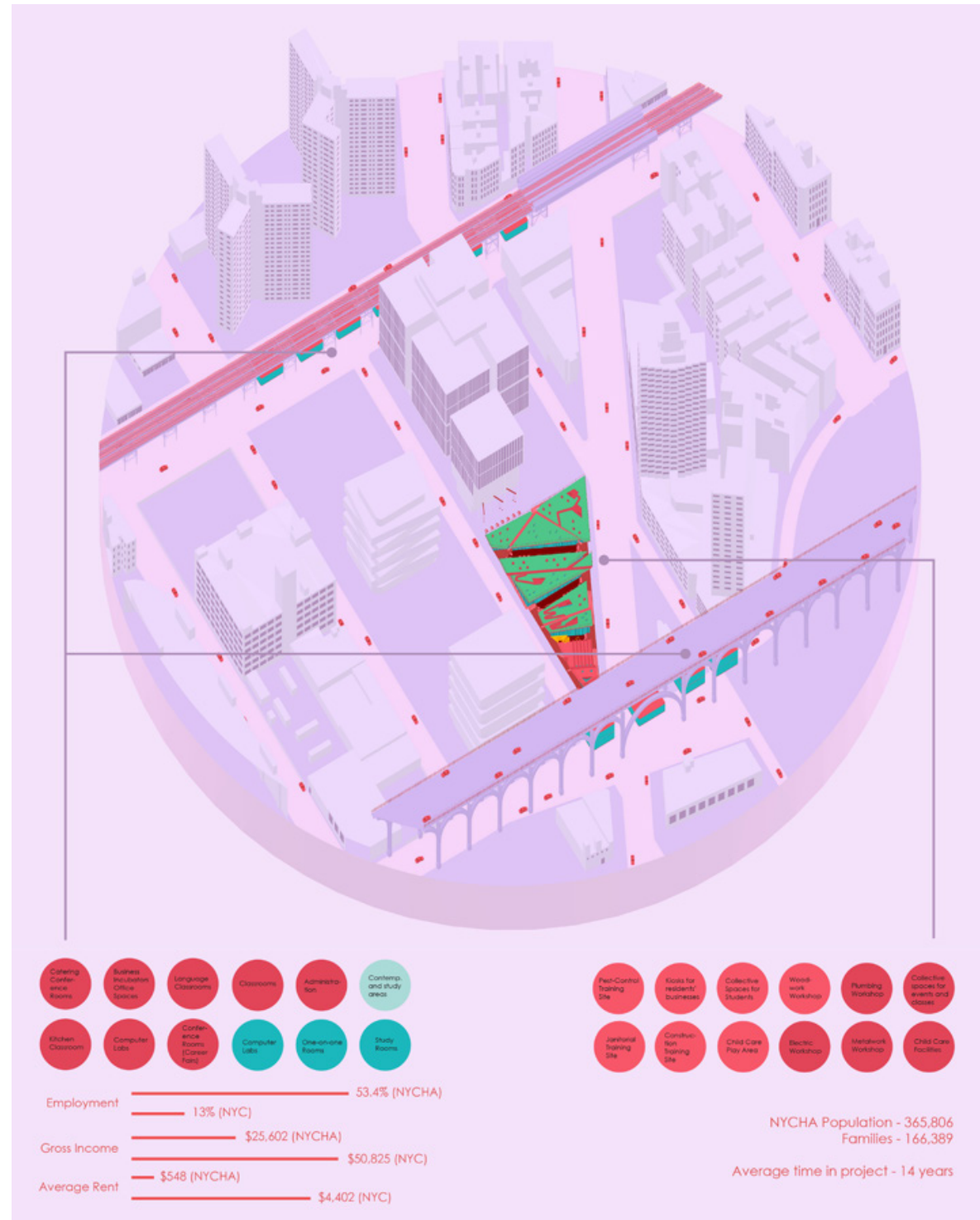


The new campus will expand and continue being a catalyst for gentrification if proper measures are not taken



The architectural proposal looks into the NYCHA population and its most pressing needs. As a group that has been suffering the consequences of rising living costs in the area and being composed of mainly low-income African-American families, an intervention to serve them seemed necessary. The unemployment rate amongst NYCHA residents is extremely high and their average gross income

very low. This situation can make many very dependent on NYCHA's assistantship with its residences and programs, as reaching self-sufficiency becomes difficult. Enabling the empowerment of residents becomes crucial and the design proposal focuses on providing a campus for NYCHA's Office of Resident Economic Empowerment and Sustainability.



Program distribution and placement of campus

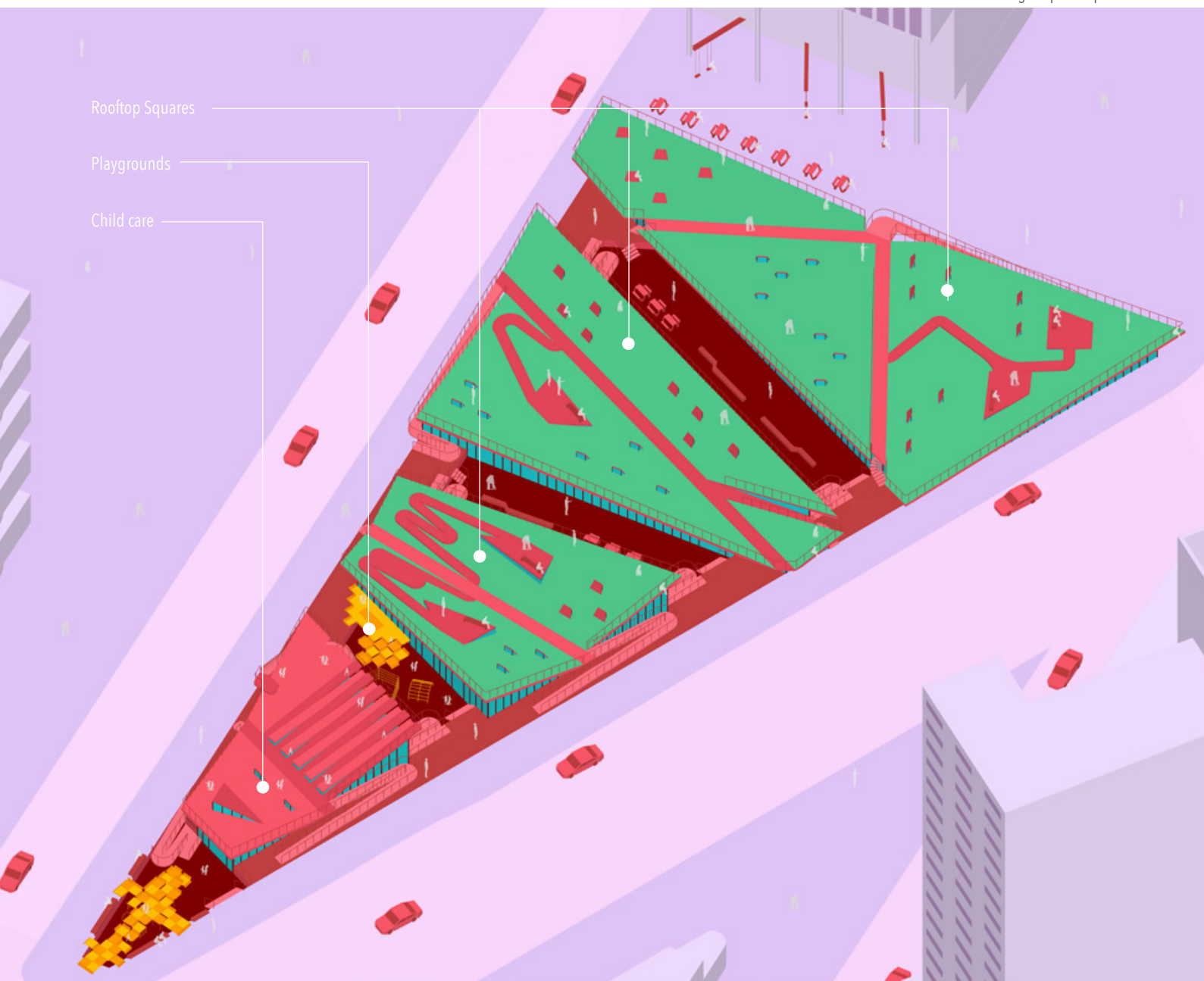
East-West Section



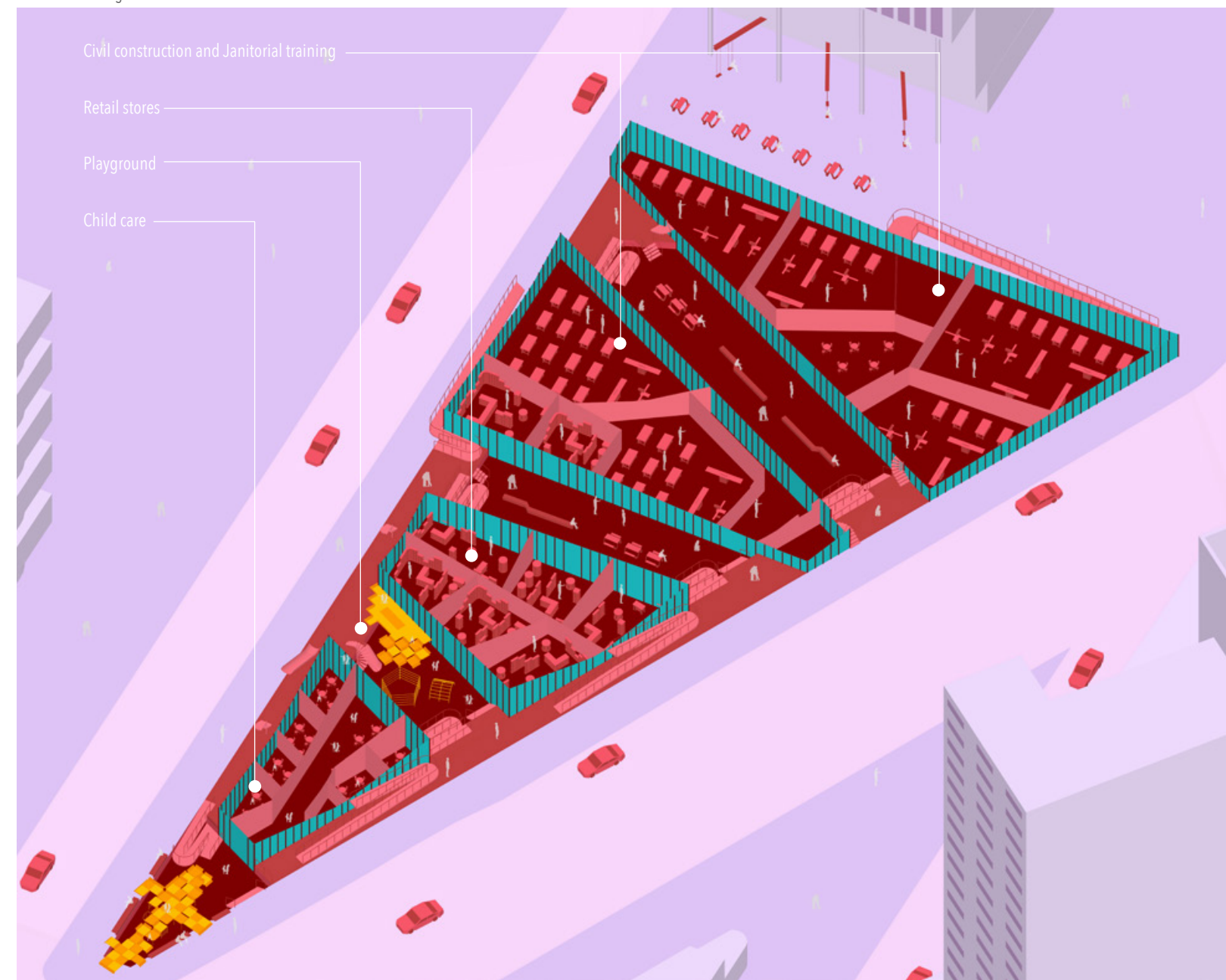
REES offers a variety of programs through partnerships with local organizations to educate, train and empower adults for re-entering the job market or for creating financial stability and autonomy. Utilizing urban voids beneath an elevated road and an elevated train line at Riverside Drive and Broadway avenue, respectively, and the yet un-

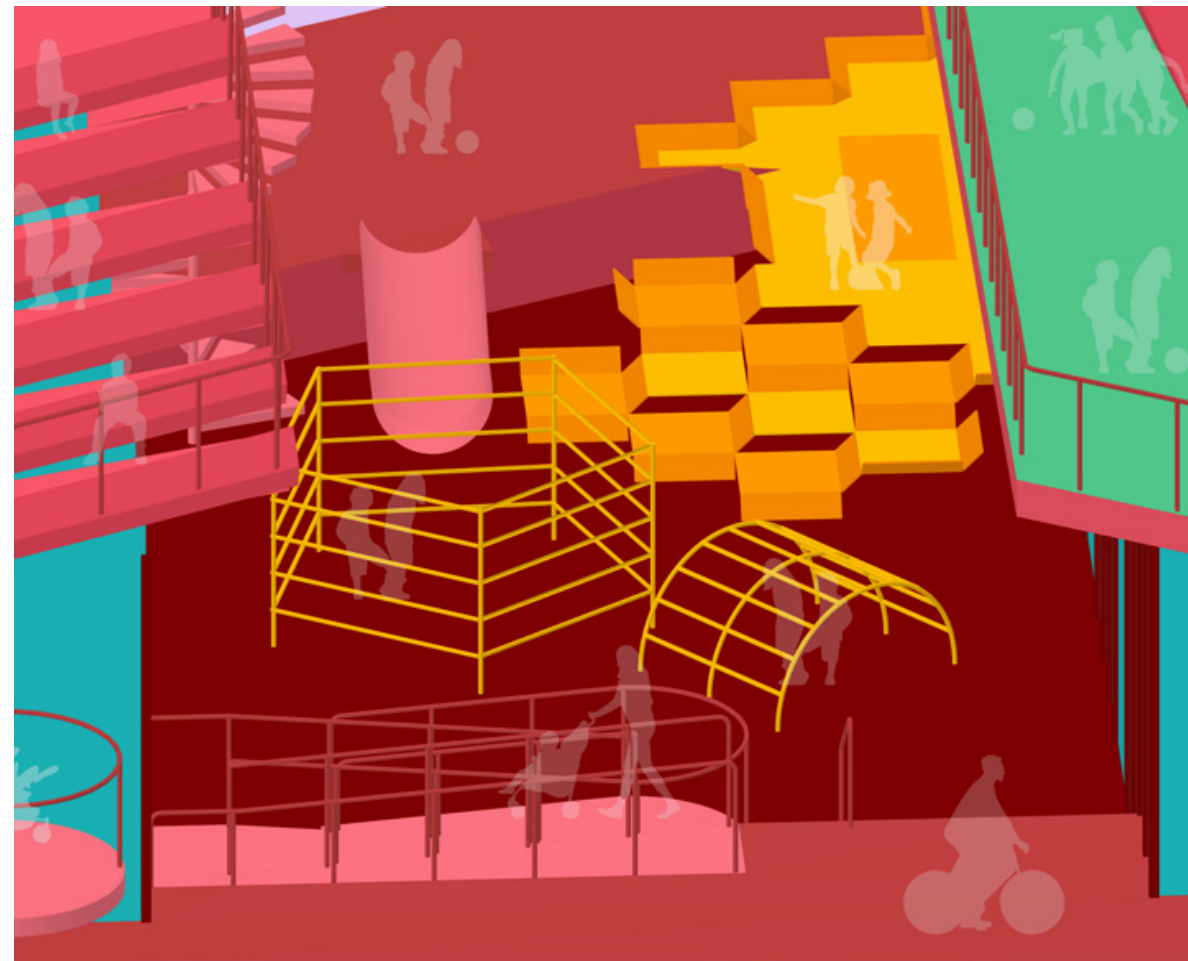
utilized lot owned by Columbia at 125th street, I wanted to place an open campus that is inviting to city life and integrated into it, offering open spaces and public facilities that could serve NYCHA residents and other local neighbors while also promoting a rich opportunity for learning and exchanges for both children and adults.

Roofs extending the public spaces on other levels



Street and below ground levels

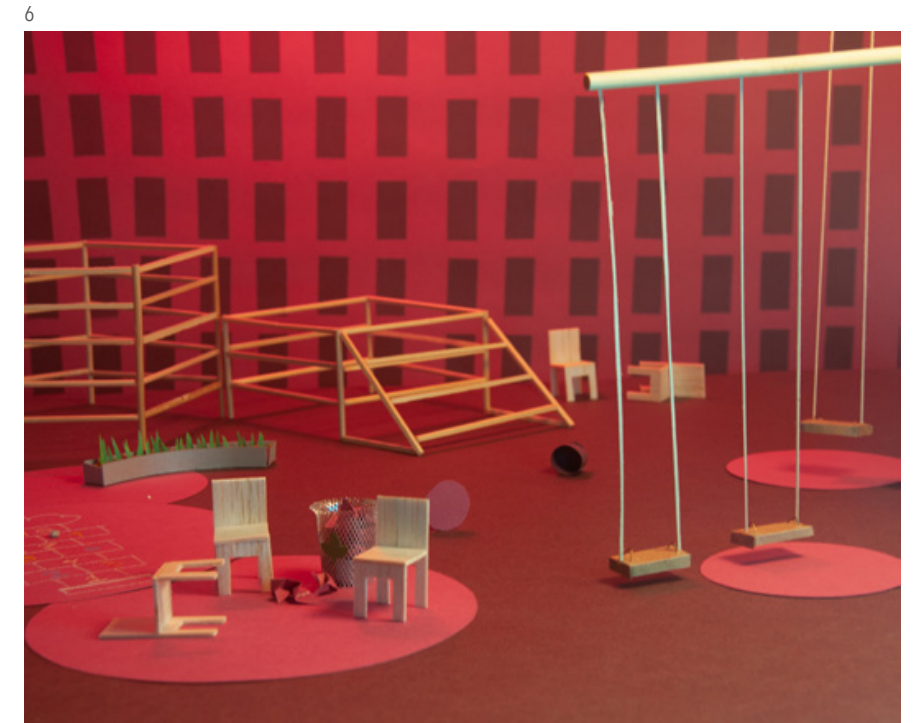




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5-7 Playground with non-figurative structures

The lot adjacent to Columbia's Science Center, at the encounter of 125th street, 130th street and Riverside Drive, was chosen for further development. The program includes spaces for training workers for civil construction and janitorial services, located in the two bigger buildings to the East side of the lot; a child care facility connected to open playground areas at the narrower part of the block; and commercial spaces for graduates of REES' business empowerment programs to jumpstart their business projects while having access to the foot traffic associated with the campuses and also being an attraction point to the area.



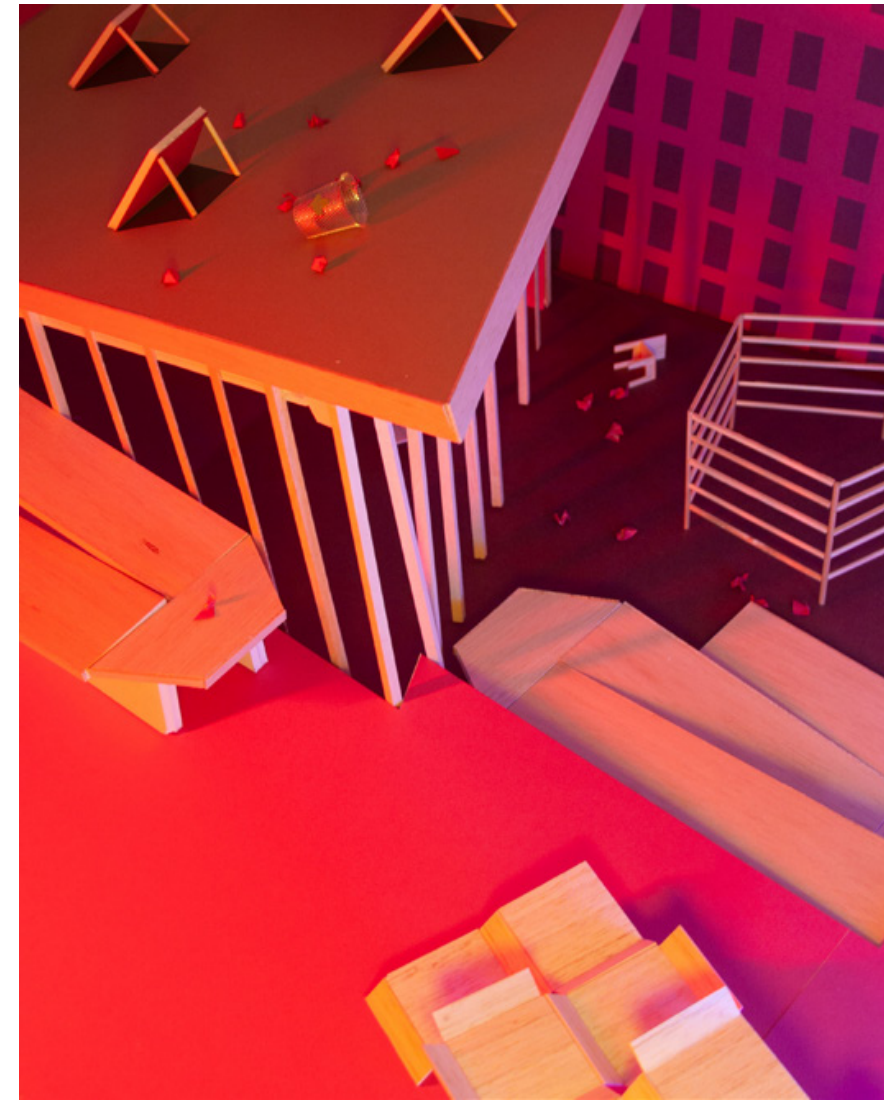
6

The open spaces aim to offer children and adults a place to learn, play, explore, contemplate and exchange, integrated to the urban fabric as well as repurposing it. For the adults using the campus, the close relationship between their learning spaces and the city proposes a constant reminder of the idea of urban life and the collective, as foundational for their training and education. At the same time, the close contact with the children in their play can give the adults a glimpse of their authenticity and creativity, perhaps instigating them to use the open spaces and its hills and valleys for explorations and to re-access those parts of themselves.



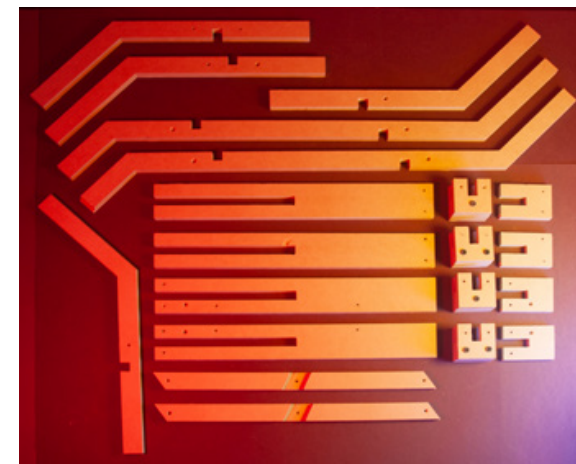
7

Interstitial space



The playground was developed using **non-figurative and non-suggestive play equipment**, with which children are able to develop a more imaginative play, which in turn can stimulate their social interactions and, consequently, the development of their individualities.

In conclusion, this campus proposed aimed to navigate topics such as **reparation, self-sufficiency, autonomy and play**, and to be a contribution to a complex process that does not start nor end in the architectural proposal.



Play Structure 1:2 study



1

This project for the adaptive reuse of a public school in the Lower East Side considers the neighborhood's history of being an area that continuously housed immigrants coming to NYC since the 1850s. From the German and Eastern European populations to the current Latin American and Asian significant presence, the region has changed and adapted to these cultural differences, and this project targets the cross-cultural condition of these families and their children in order to best serve them in their adaptation.

Drawing from background research and material studies, the main objective guiding the design decisions is the provision of spaces that allow social connection and solidarity as the means for the creation of place attachment, since cross-cultural individuals commonly deal with the strife of place identification. The lower floors are open to the local community outside school hours, and events and services can be provided, possibly stimulating solidarity amongst local residents. Upper floors are dedicated to the school community and have ample and diverse collective spaces for the students to find both connection and respite.

With overlapping layers of translucent and reflective materials, spaces for interaction and for seclusion are formed and are in constant exchange with the exterior. An inner street cuts through the building, connecting the 9th and 10th street and provides more natural light and ventilation to every classroom. Light wells are implemented on both wings as to bring more light to the interior and create the possibility for different spaces to visually connect vertically.

The layout of functions and the two separate entrances allow the partial opening of the school depending on the events and services being provided, and connections between the 2 wings on the upper floors dissolve this separation for the students.

CROSS-CULTURAL SCHOOL

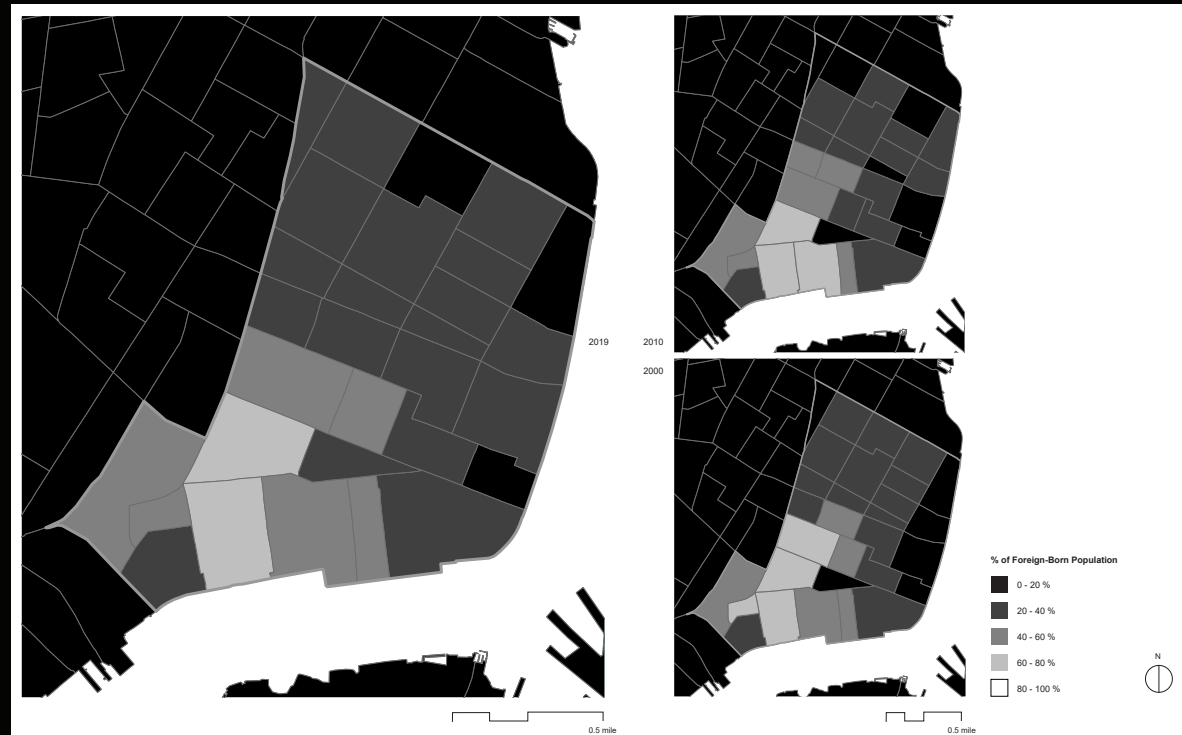
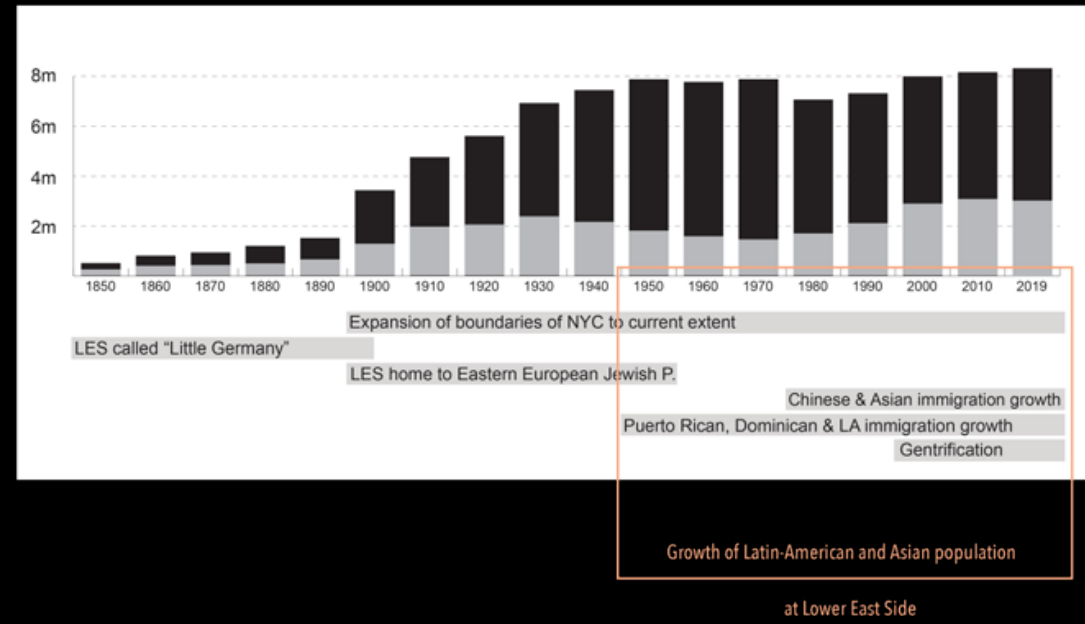
INSTR.: KARLA ROTHSTEIN
 YEAR: SPRING 2021
 STUDIO: CORE 2
 NEW YORK CITY, NY

EXHIBITED AT THE 13TH
 INTERNATIONAL ARCHITECTURE
 BIENNALE OF SÃO PAULO (2022)

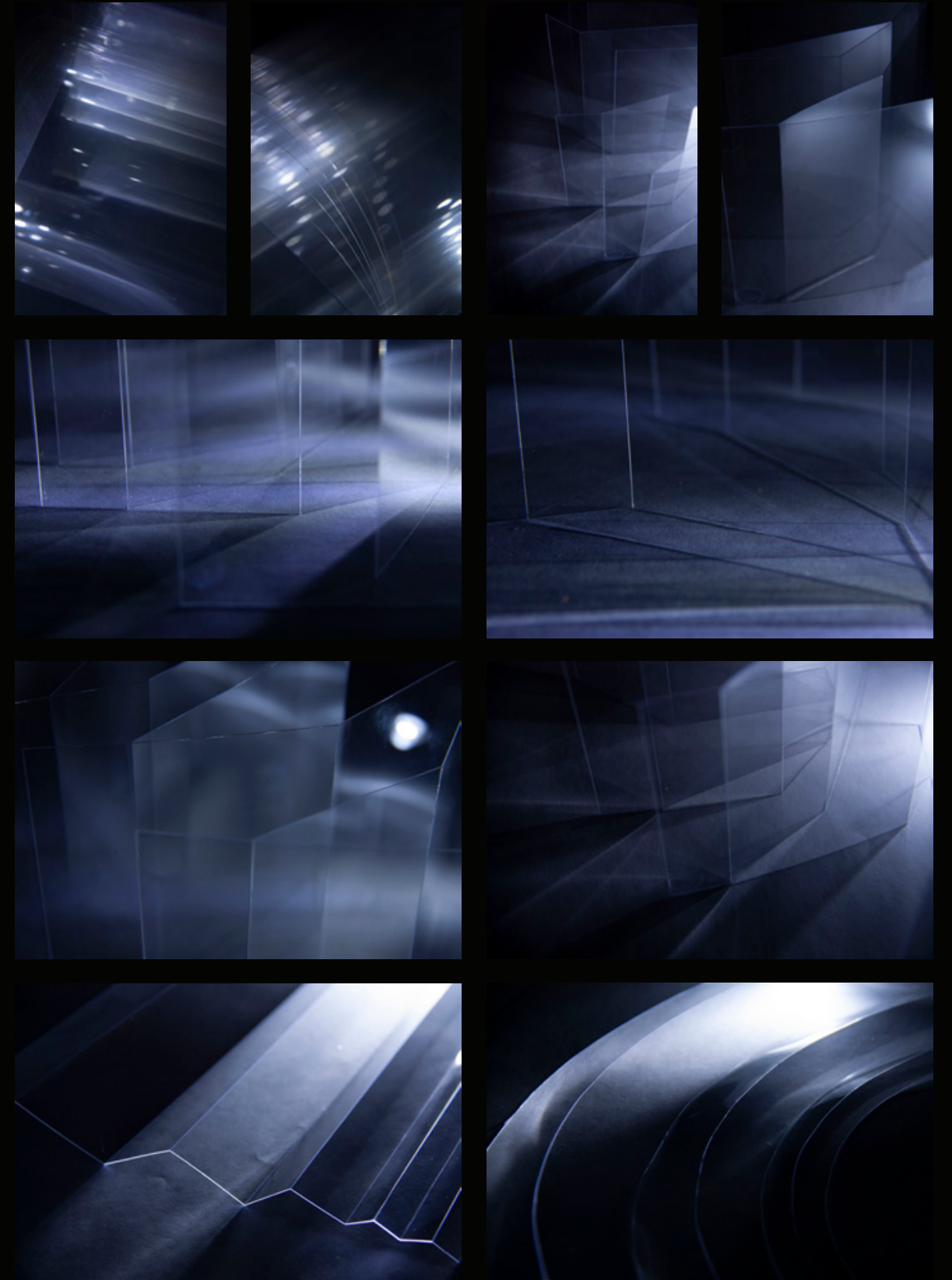


1 Birds-eye view of the project from 9th street
 2 View of the inner street from North

% of Foreign-Born Population in NYC



Total and Foreign-born population growth in NYC and Lower East Side. & Foreign-born population distribution over the past two decades.



This spread: Material property and light studies that sought to inform the design in its spaces for connection and seclusion, exteriority and interiority.

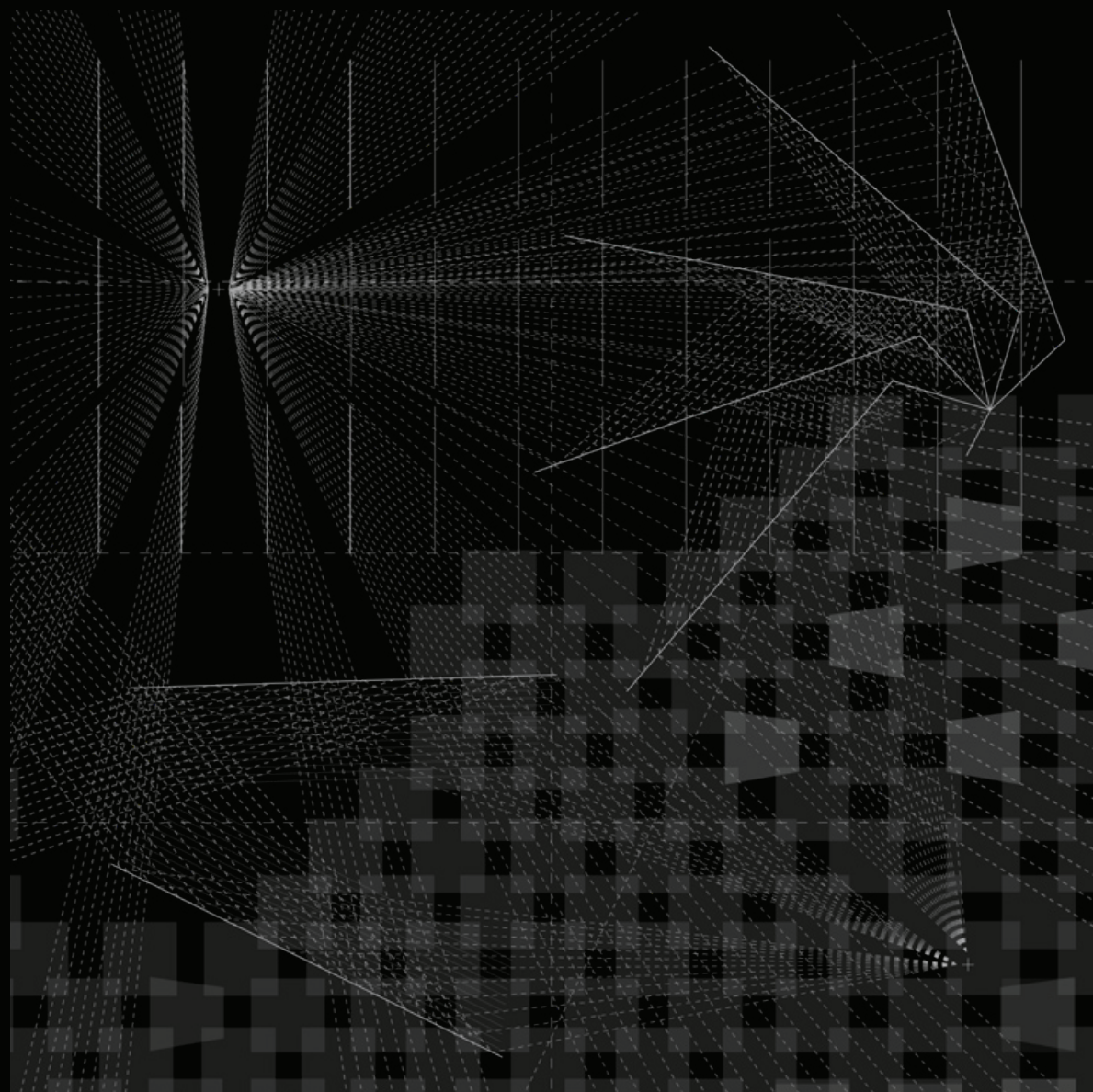
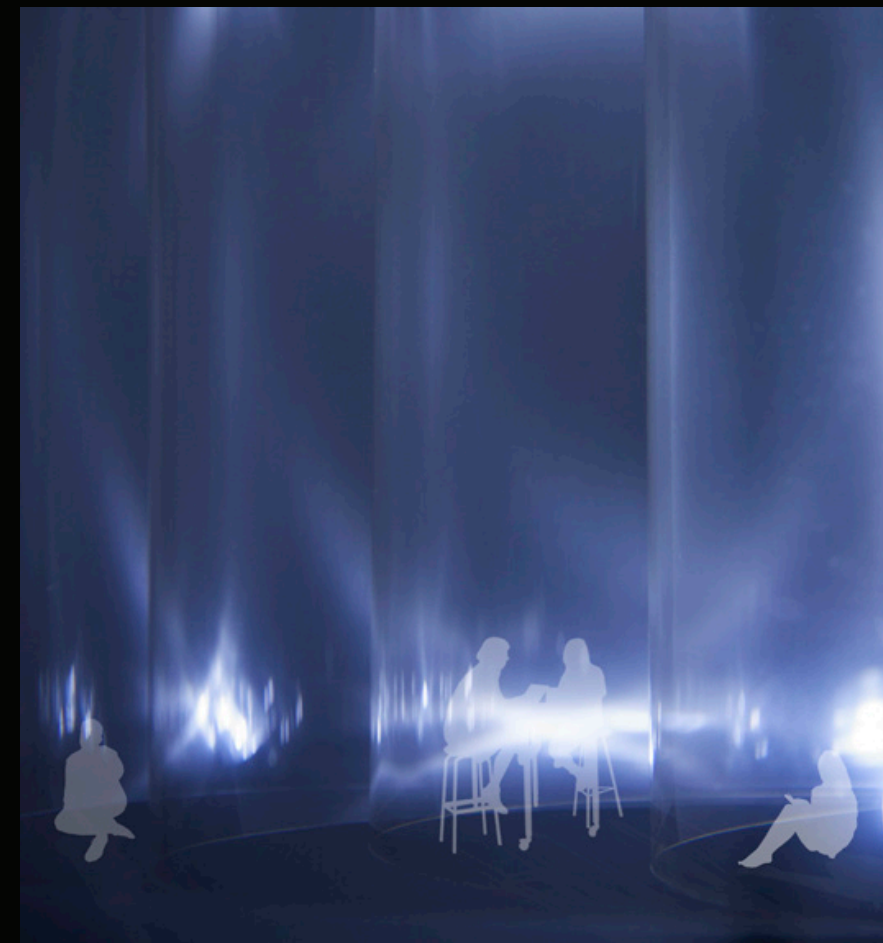
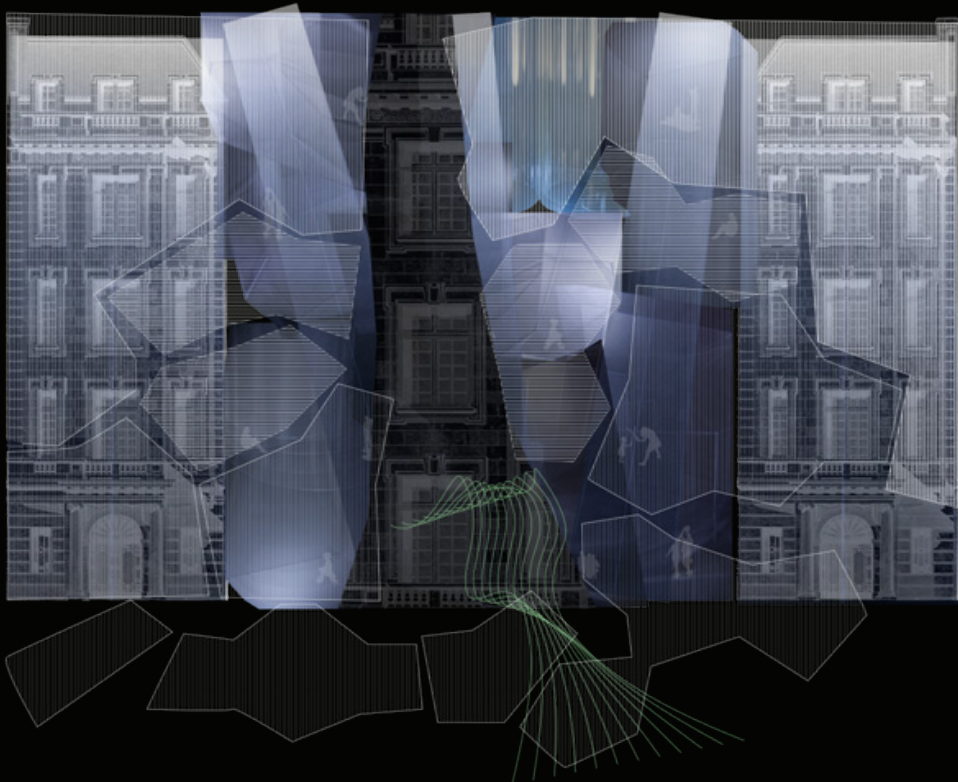
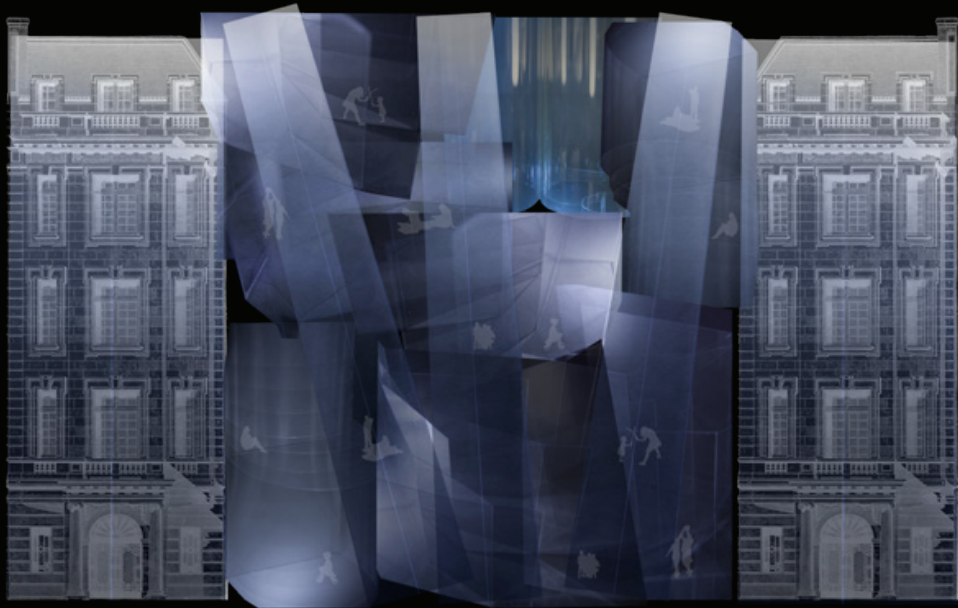


Diagram denoting relationships observed in the material studies.

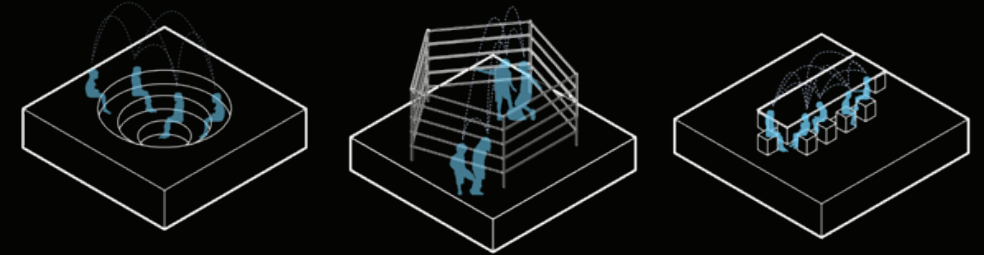


Conceptualization of interior spaces.

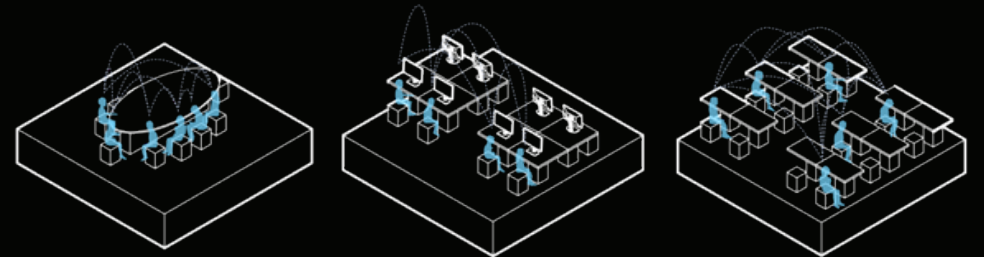


Conceptualization of programmatic distribution, connecting lower levels to the street and to a throughfare that traverses the building and connects the 9th and 10th streets. Functions that served the surrounding community placed closer to the ground and those exclusively for the students in higher levels.

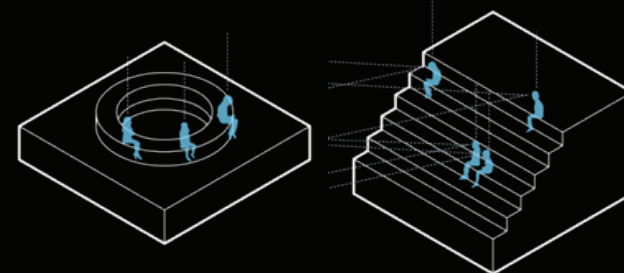
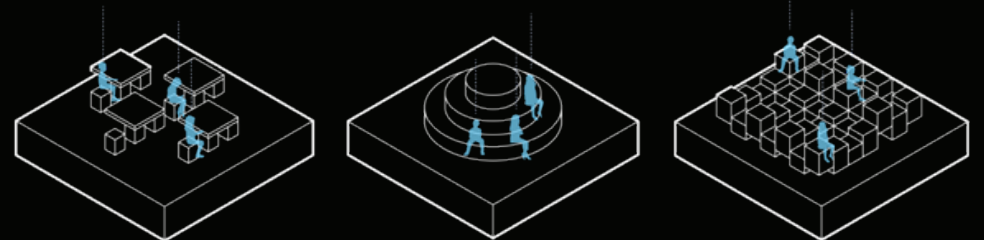
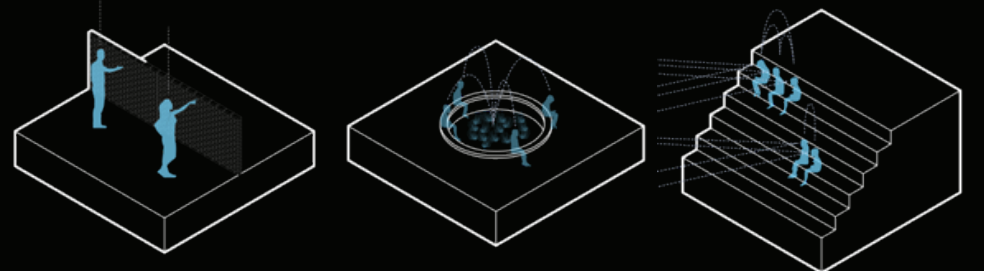
Spaces for connection
as a mean of creating
memories and belonging



Spaces for the creation of the sense
of ownership and place attachment.



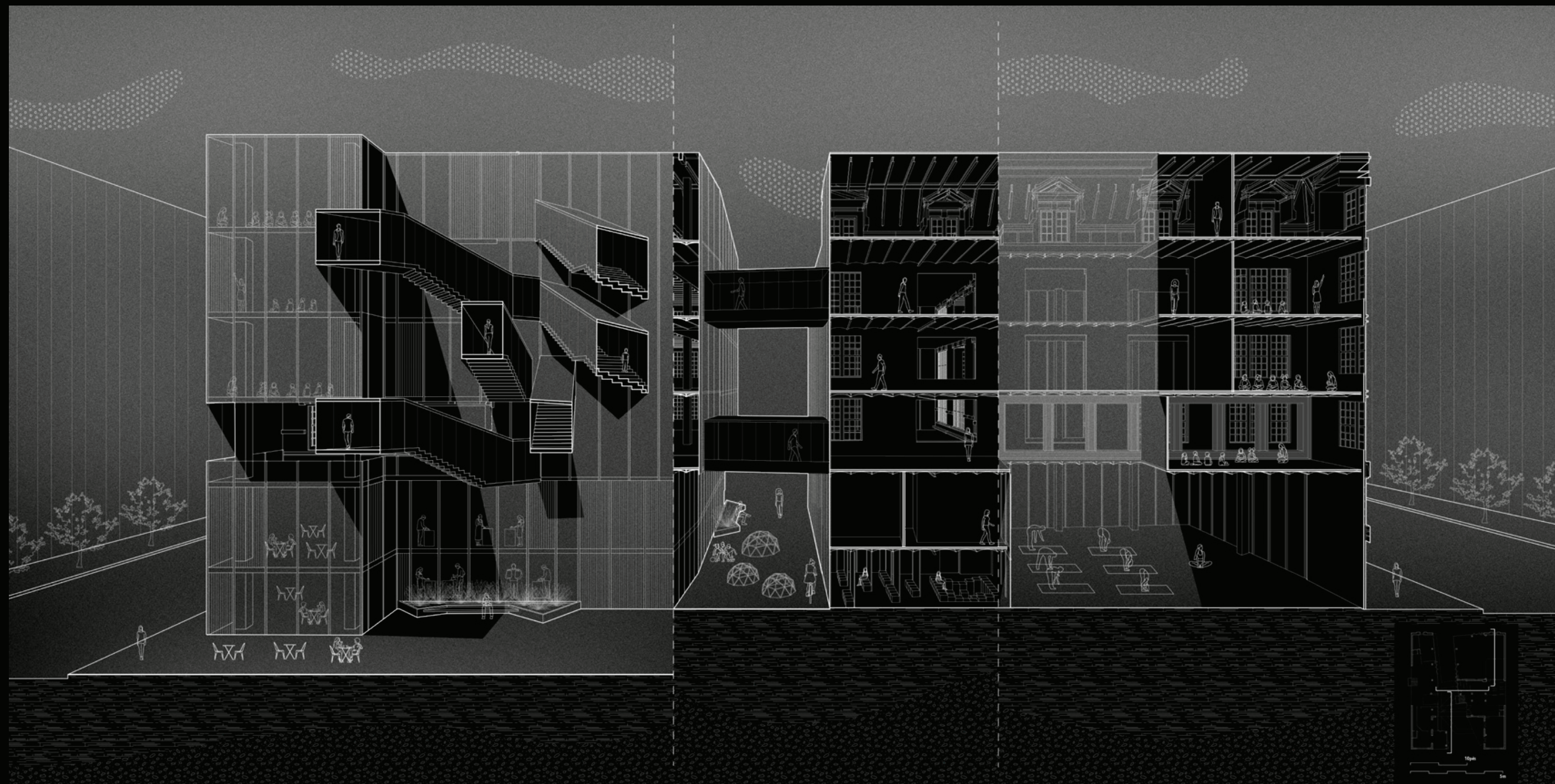
Spaces for seclusion
different levels of adaptation and extroversion
can seek more or less stimulation



Studies of possibilities for the collective spaces throughout the building.



First floor
The throughfare is in evidence. It connects both streets and bring the city into the building, expanding possibilities for the interior to connect to the exterior. The majority of the program has collapsible doors that enable larger events to take place and serve both the school and surrounding community. The vertical circulation, here seen as the staircases or the projection of the connective corridors, give users a distinct phenomenological experience as they journey through different types of interiority/exteriority.



Compounded section
Light wells and the use of transparent and translucent glass on the facade and interiors allow sunlight to reach almost every space and maintains the connection of the user with the city. A diverse set of spaces that have flexible programs gives users in different levels of adaptation and extroversion the possibility to encounter spaces fitting to them. With open expanses to showcase objects produced by students and other users, place attachment and ownership can be developed.



View from 10th street.

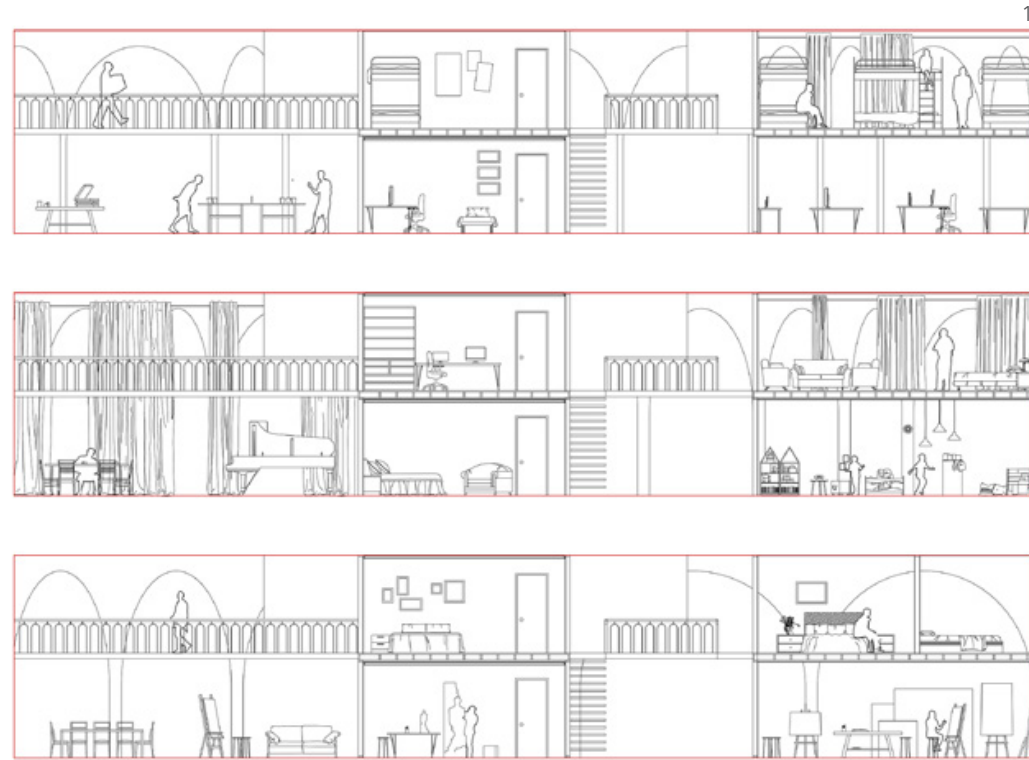


Interior view.
Spaces for connection and for secluded interaction that serves different target users.



Interior view
Spaces for connection and for secluded interaction that serves different target users.

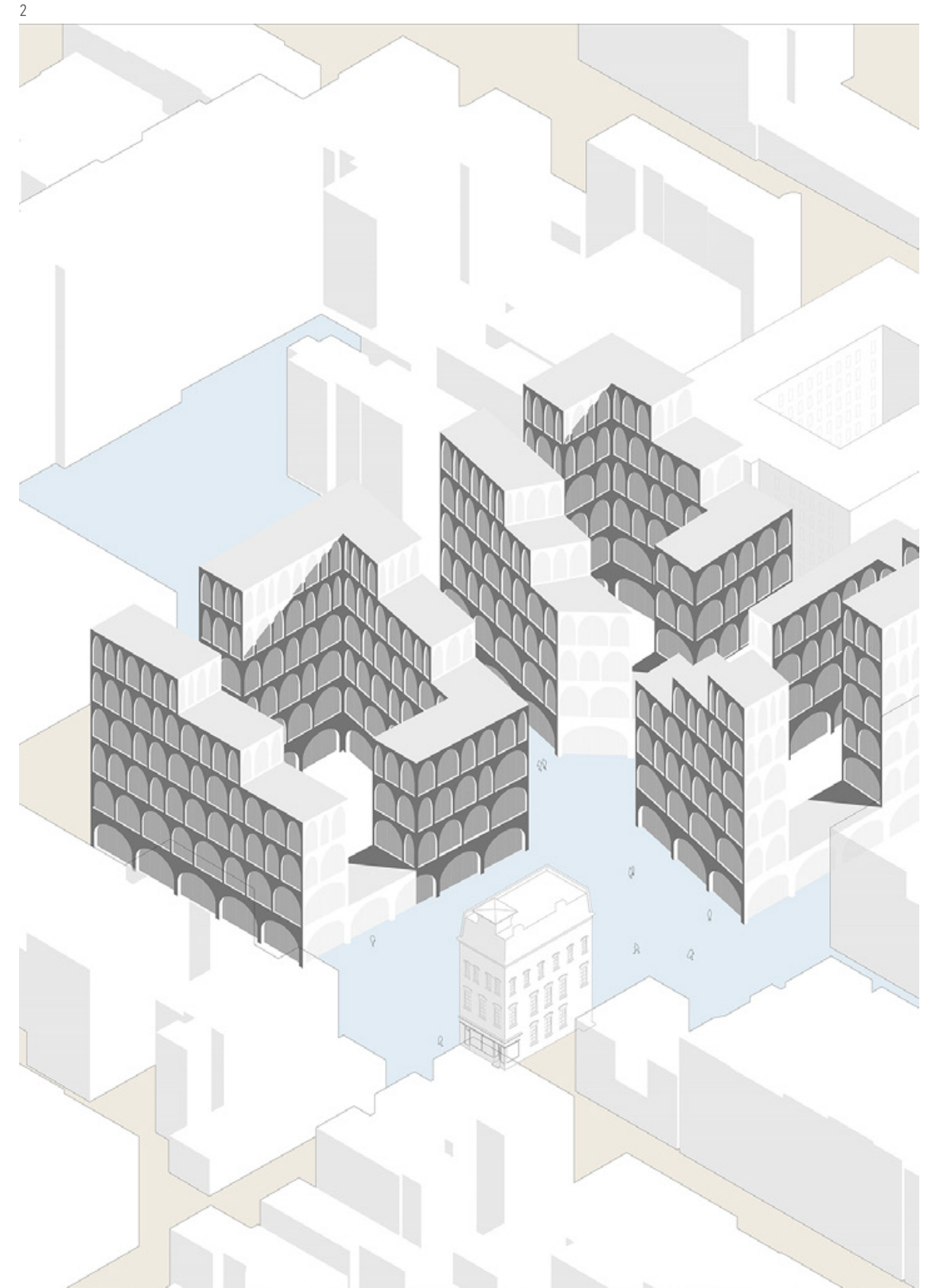




Segregational policies and continuous disinvestment throughout the Bronx have brought about a patchwork of underdeveloped or empty lots, creating a network of open spaces that are marked by this history. Moreover, the housing deficit in NYC is still rampant, forcing people to settle for substandard living conditions, and often packing them into apartments not designed for collective living. With our project, we aimed to transform the relationship between the buildings and the surrounding open spaces by expanding the activities of the Bronx Documentary Center and creating places amenable to active community development through artistic initiatives. Additionally, we are extending this strategy into the residential buildings offering co-housing apartments with series of collective spaces that vary in their degree of publicness and ownership, providing increased access to the NYC housing stock, affordable residences with better quality shared spaces, and also creating multiple opportunities for the strengthening of the sense of community.

HOUSING & COMMUNITY DEVELOPMENT

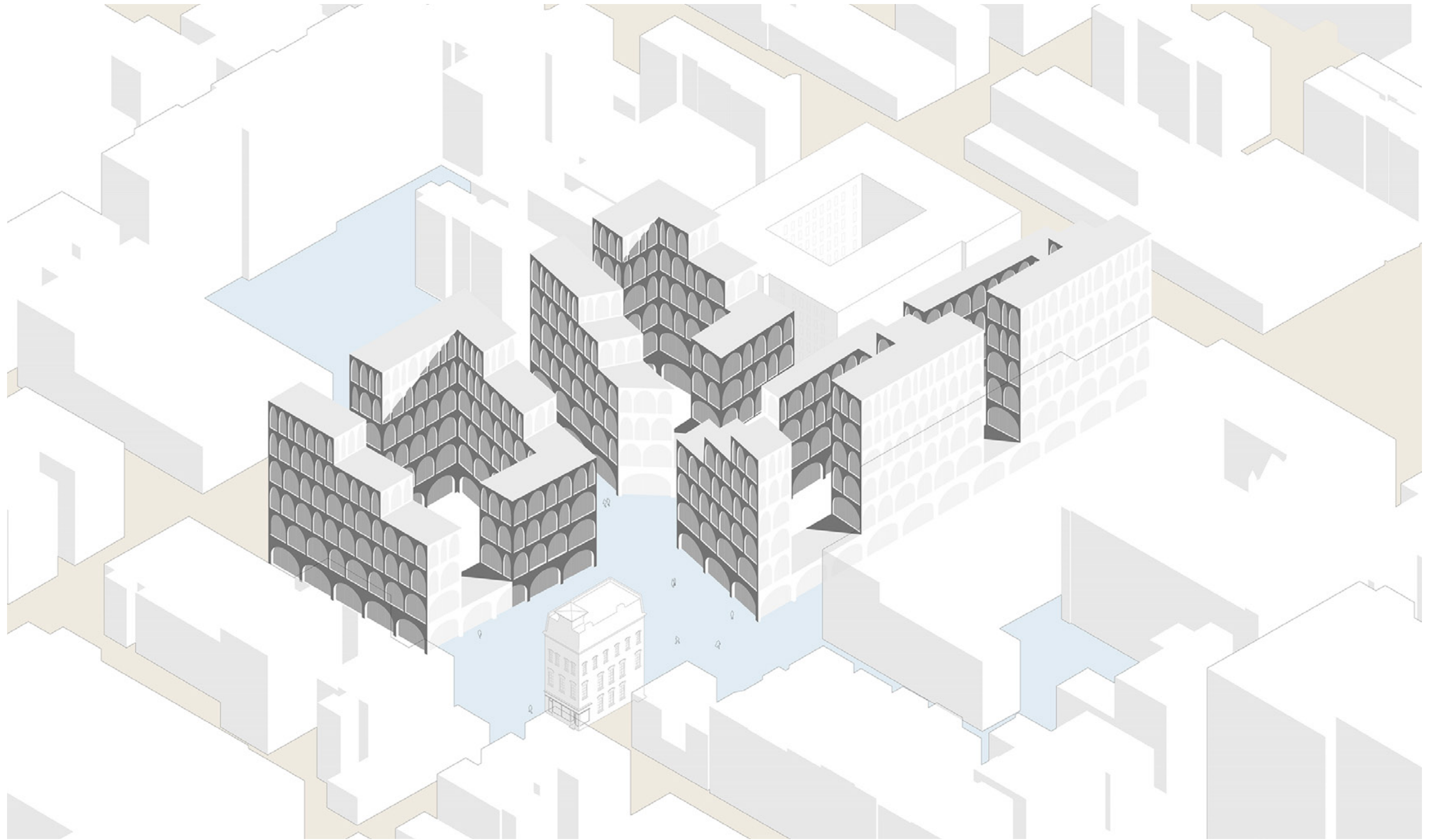
INSTR.: BENJAMIN CADENA
YEAR: FALL 2022
STUDIO: CORE 3
 NEW YORK CITY, NY
 WITH ISAAC KHOUZAM



1 Apartment Sections
 2 Overview of Housing Development



North-South Section of eastern building



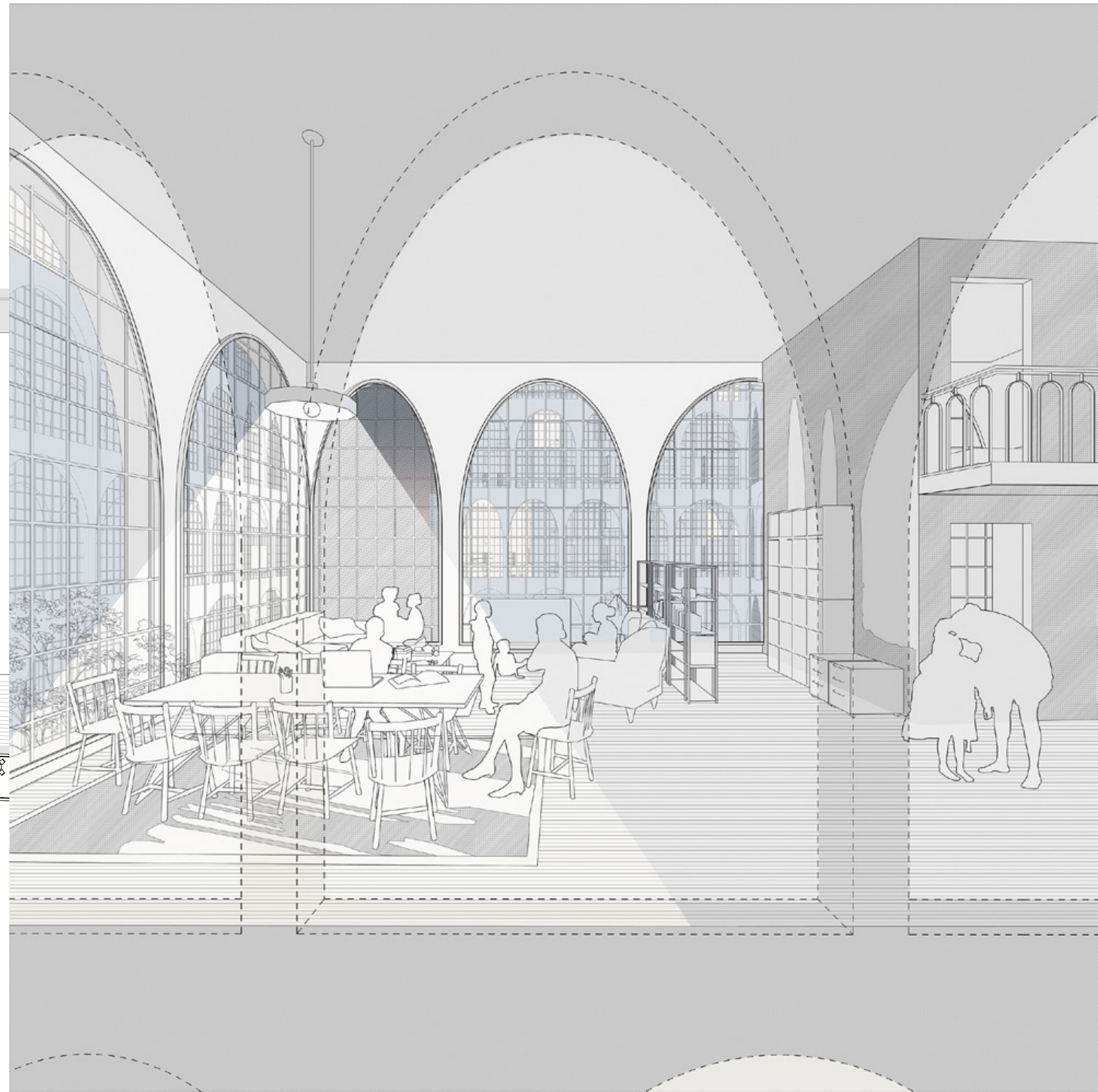
Housing and Cultural Complex overview



Ground Floor - Bronx Documentary Center expands its program throughout the open spaces and base of towers, with studios for arts, music and audiovisual as well as spaces for performances both indoor and outdoors.



Apartments provide an alternative layout to create community in which amenities are shared by tenants dispersed through two floors. Residents can meet neighbors in several spaces on his way out.



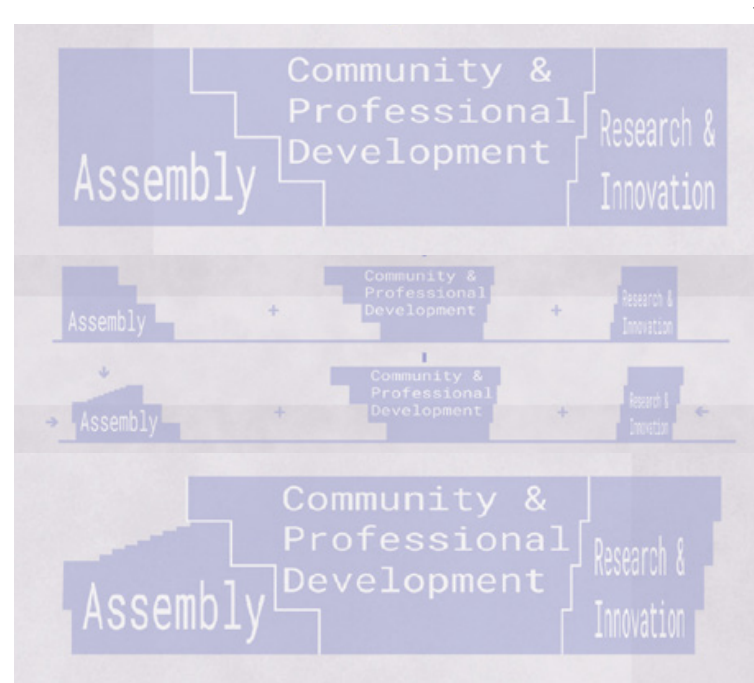
Apartment's interior



Resident's courtyard



Eastern access to main outdoor space



1

For our studio project, we considered the goals of New York's Climate Leadership and Community Protection Act which set the state to achieve carbon neutrality of its energy system by 2040 and to allocate the benefits of spending on disadvantaged communities. We proposed a project that will address the energy transition that NYS is currently undergoing and serve communities affected disproportionately.

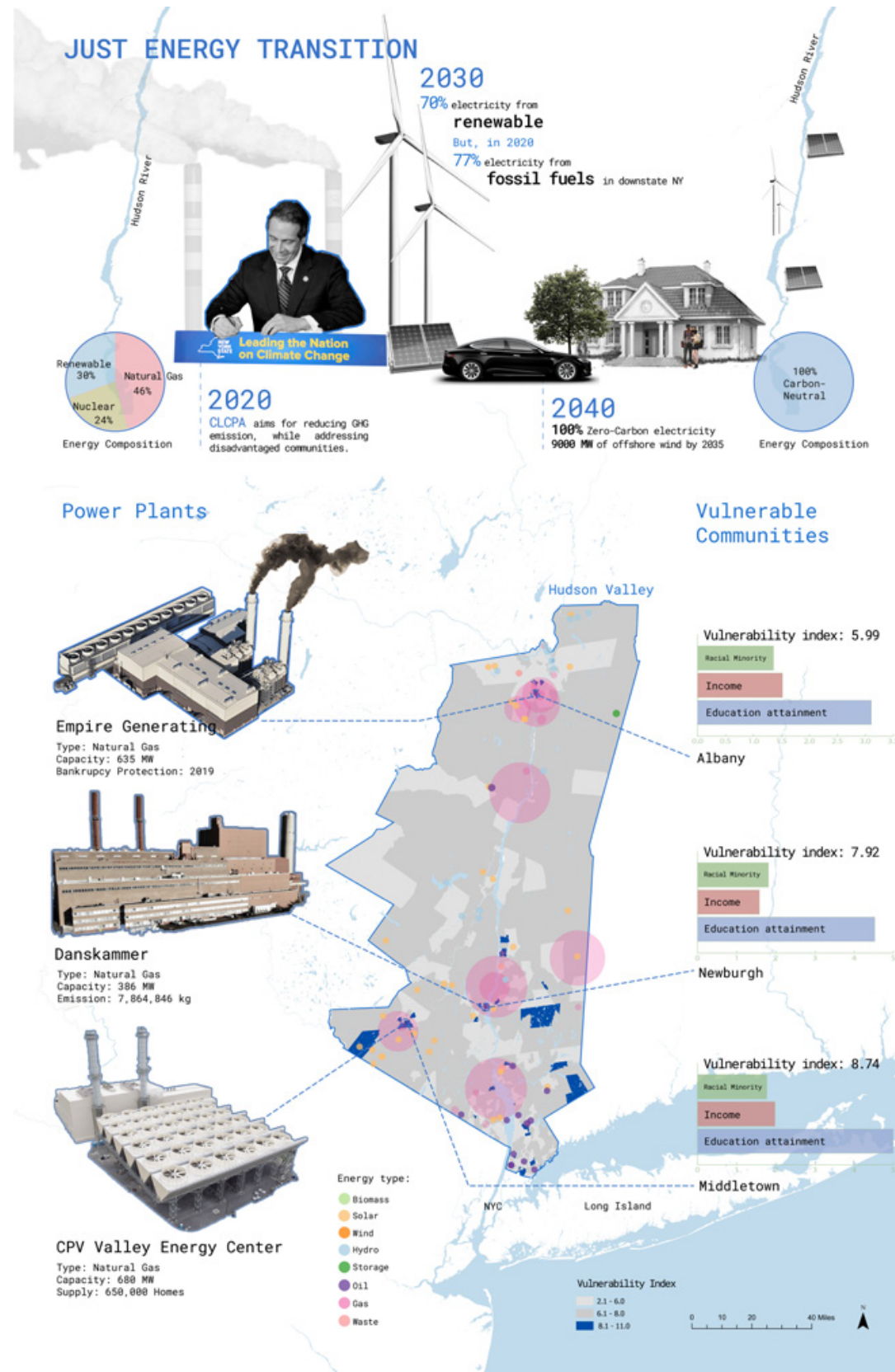
We have chosen to focus on the Empire Generating Co. combined-cycle natural gas power plant south of Albany and Rensselaer. The Empire Generating Co power plant will soon be decommissioned and this project adapts it to the energy transition. We first saw its proximity to disadvantaged communities and to the river, the port of Albany, and SUNY Albany and their potential catalyst for our proposal. We additionally identified the opportunity of increasing waterfront access for both cities, offering a proper connection for pedestrians and cyclists to cross the river, and promoting educational services that could inform and train residents in the energy transition and provide support and a sense of ownership that could facilitate the transition. It also provides opportunities for government officials, policymakers and other key stakeholders to learn the numerous benefits of clean energy solutions, openly discuss their decisions and interact with other stakeholders. Our proposal will include an indoor and outdoor Energy Museum, that will demonstrate how interventions in the individual and in the state level can be implemented to promote an efficient and carbon-neutral energy system for the future.

ENERGY FUTURES EDUCATIONAL COMPLEX

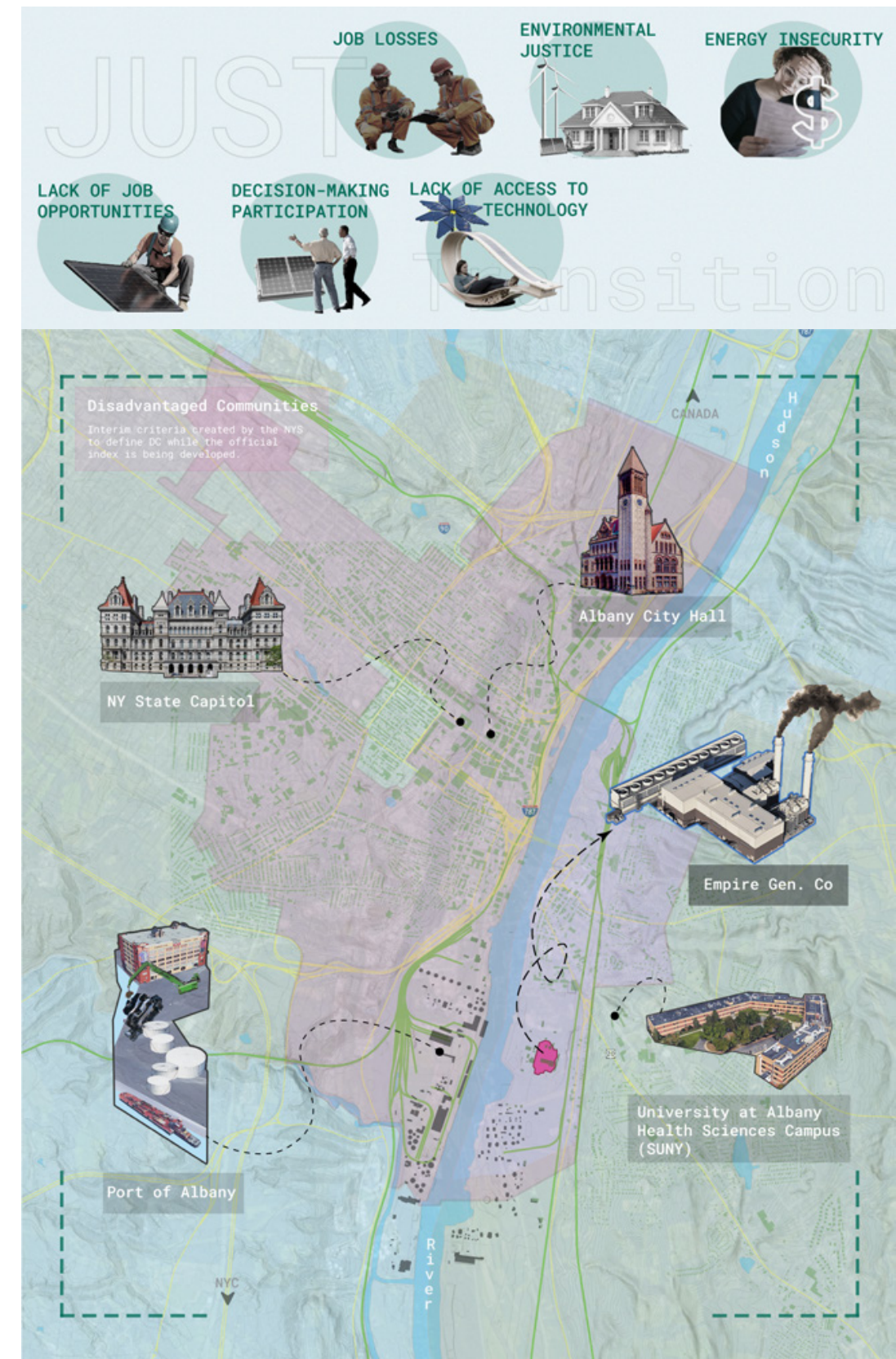
**INSTR.: PEDRO RIVERA &
UBALDO ESCALANTE**
YEAR: SPRING 2022
STUDIO: ADVANCED 4
NEW YORK CITY, NY
WITH ALAN CAI



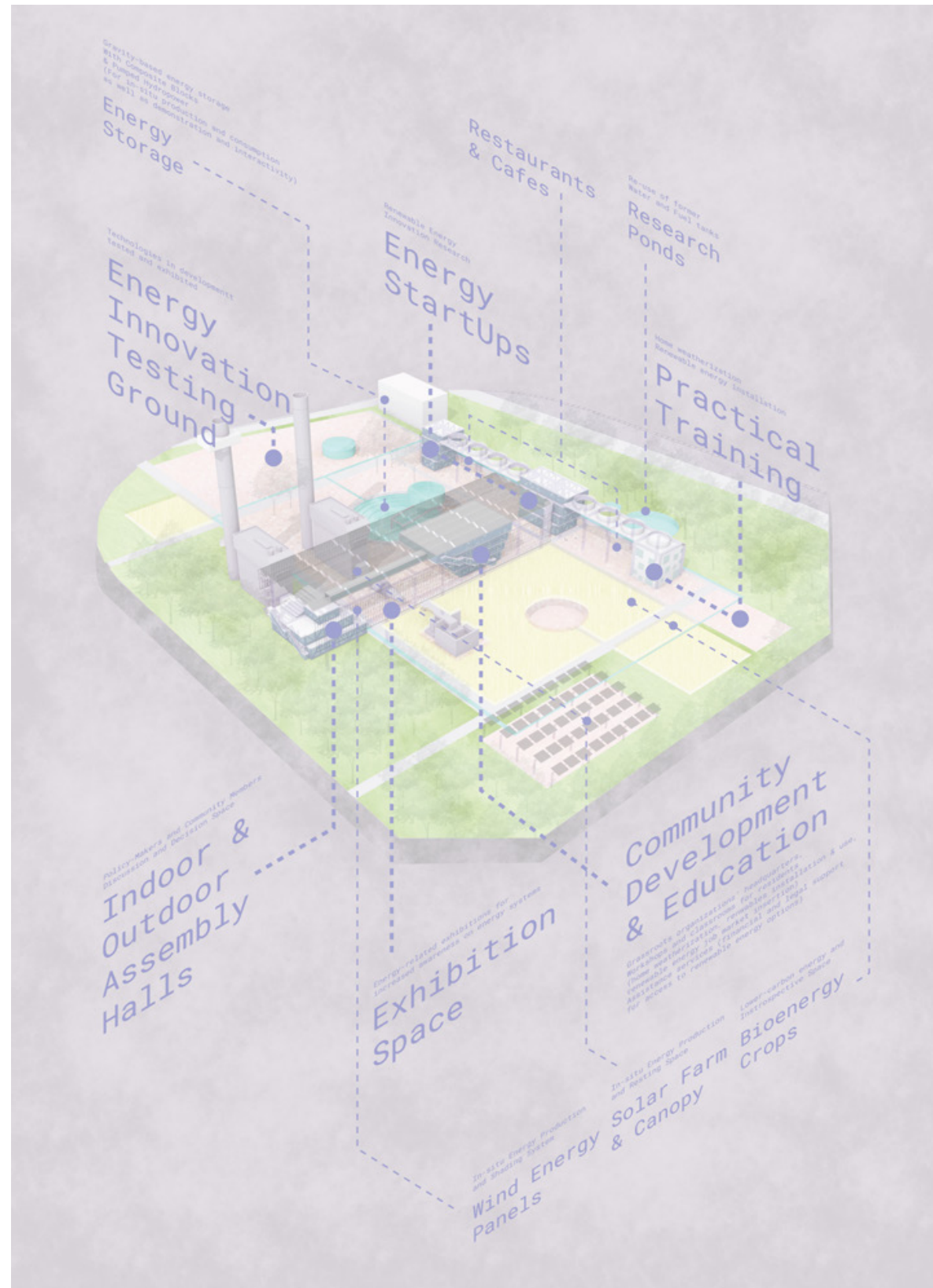
2
1 Conceptualization of New Constructions
2 View of the Main Square from North



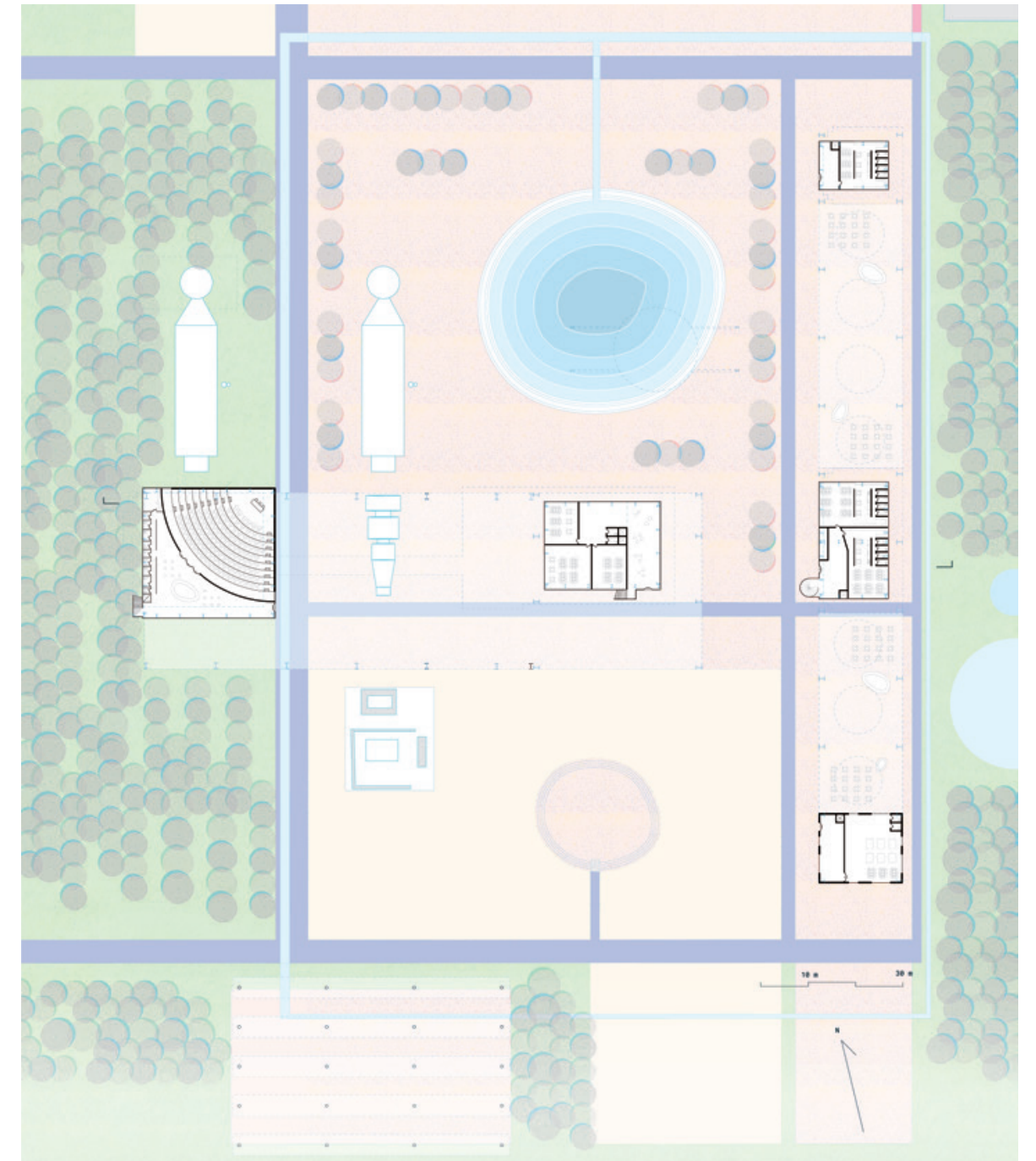
Energy Transition in NYS and Site Selection Parameters



Albany (NYS), Just Transition Parameters and Contextual Analysis



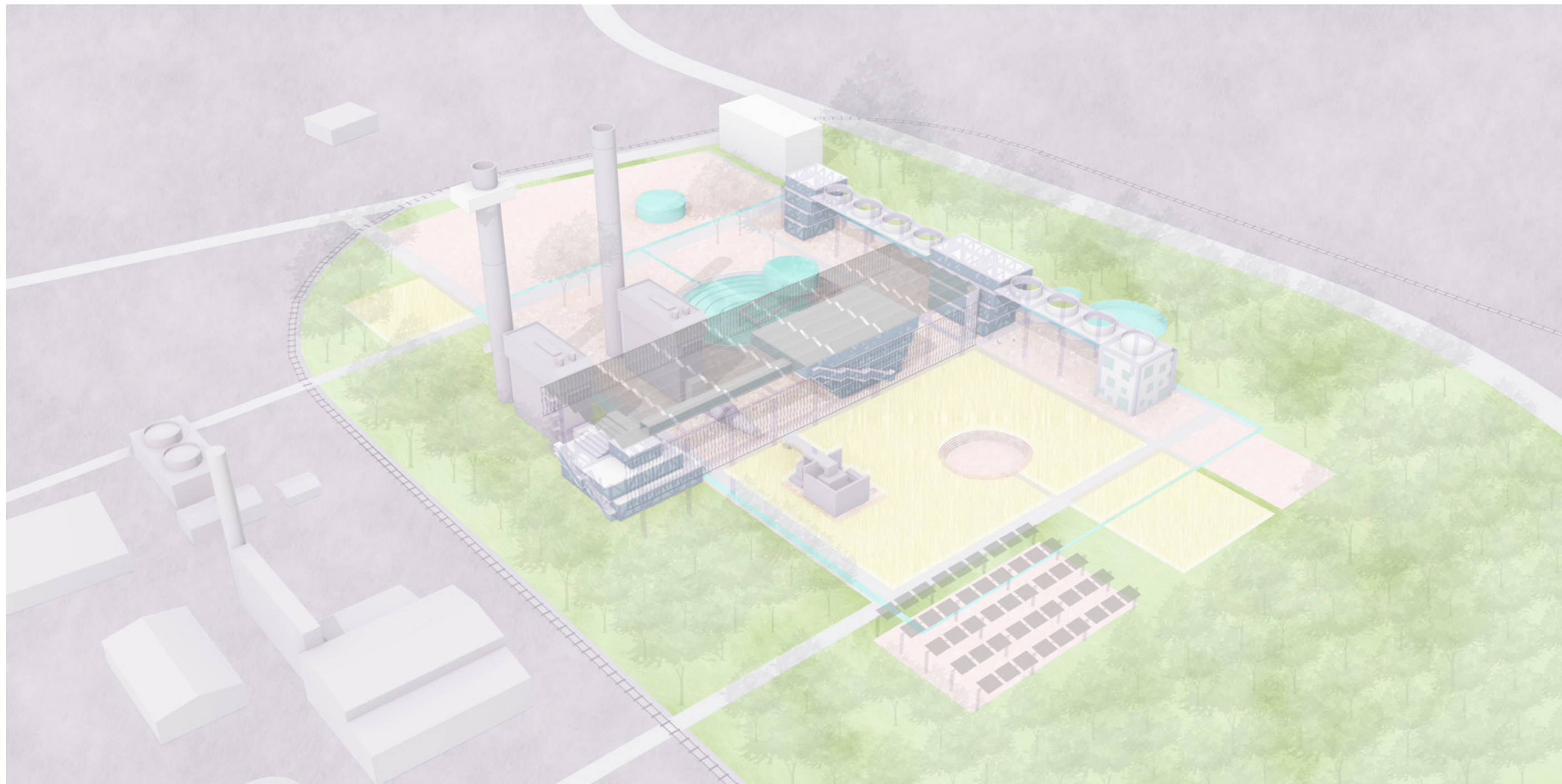
Program distribution



Site Plan



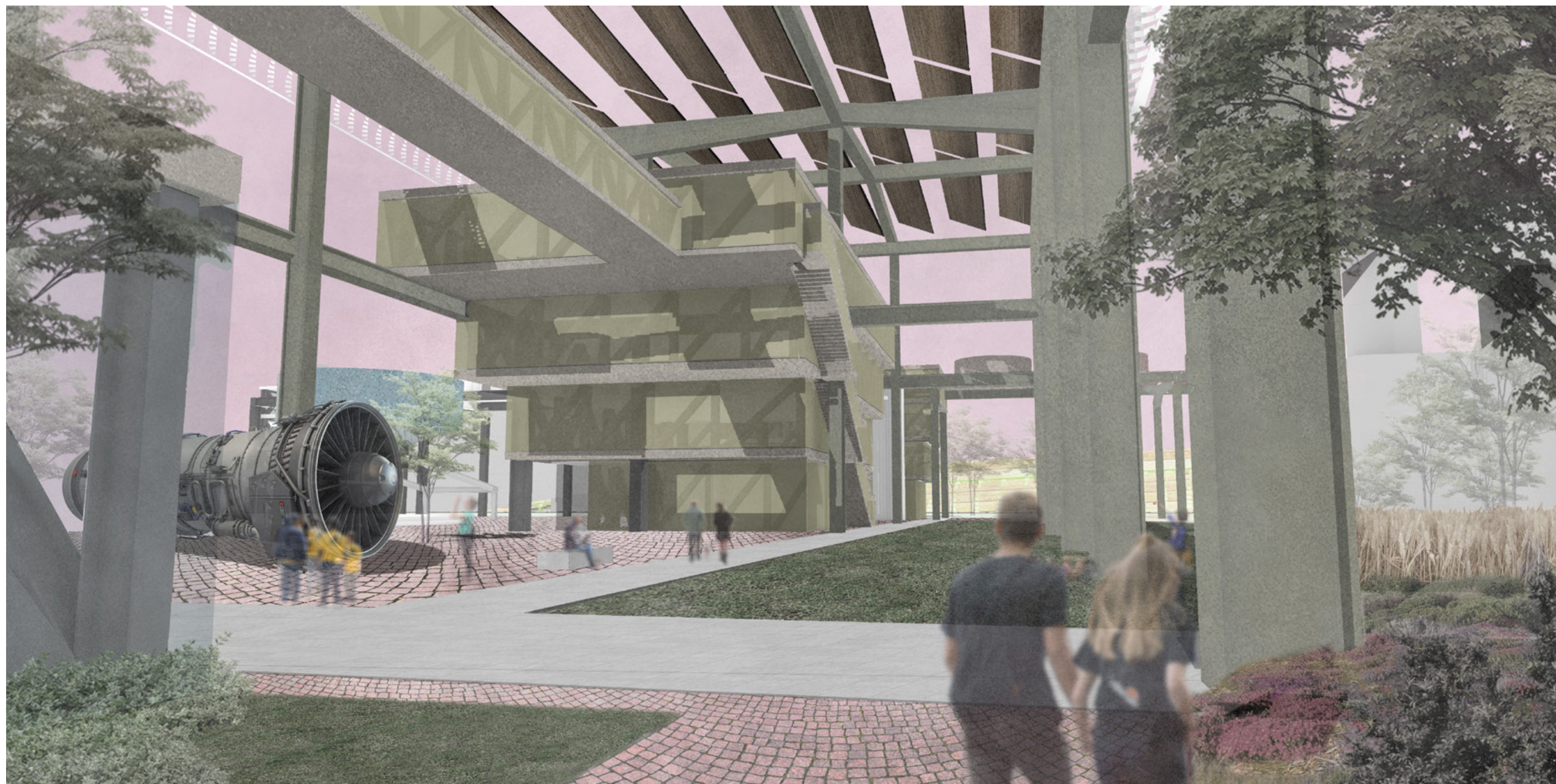
Section



Aerial view from South



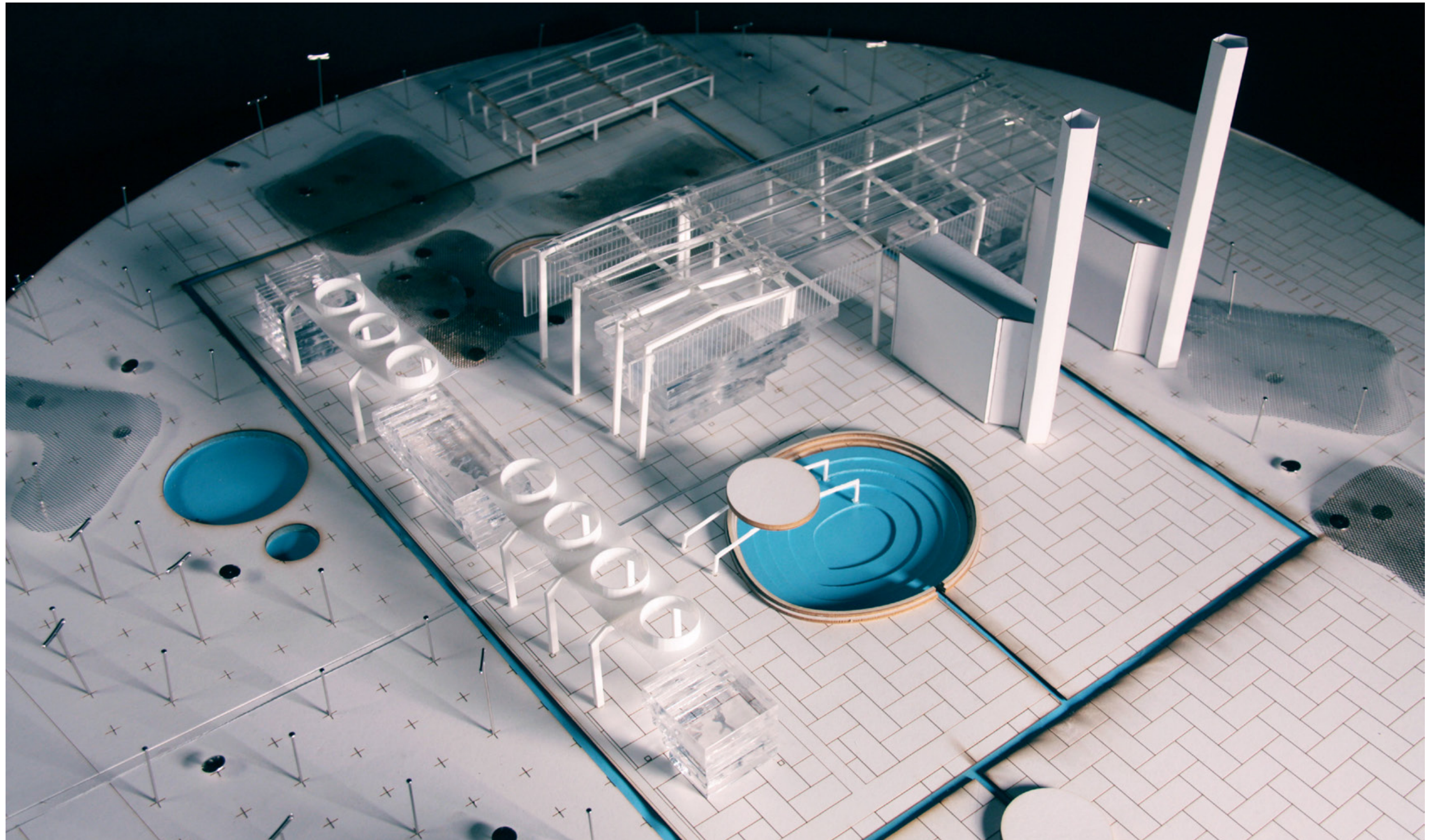
Main Square from North side



| 64 |

| 65 |

Main buildings entryways



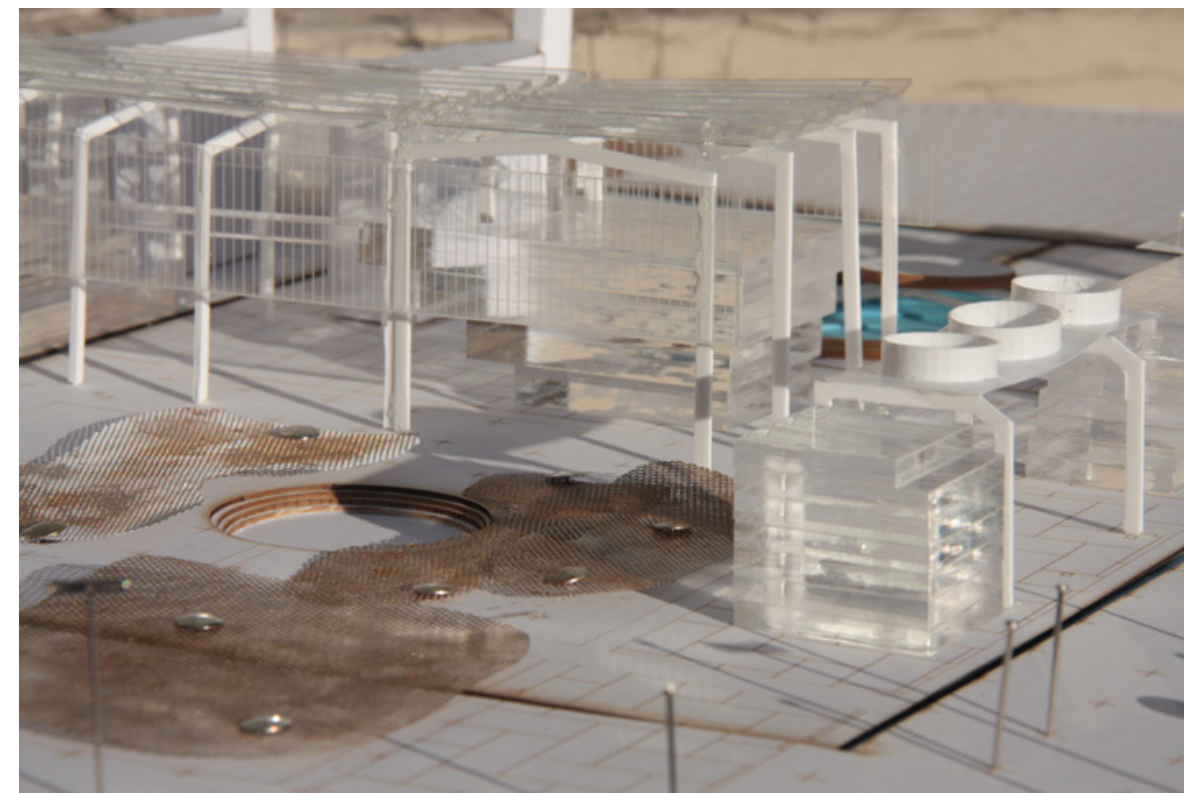
Aerial view from North side



Biomass crops and enclosed amphitheater



Hydro pump energy storage



View from South side



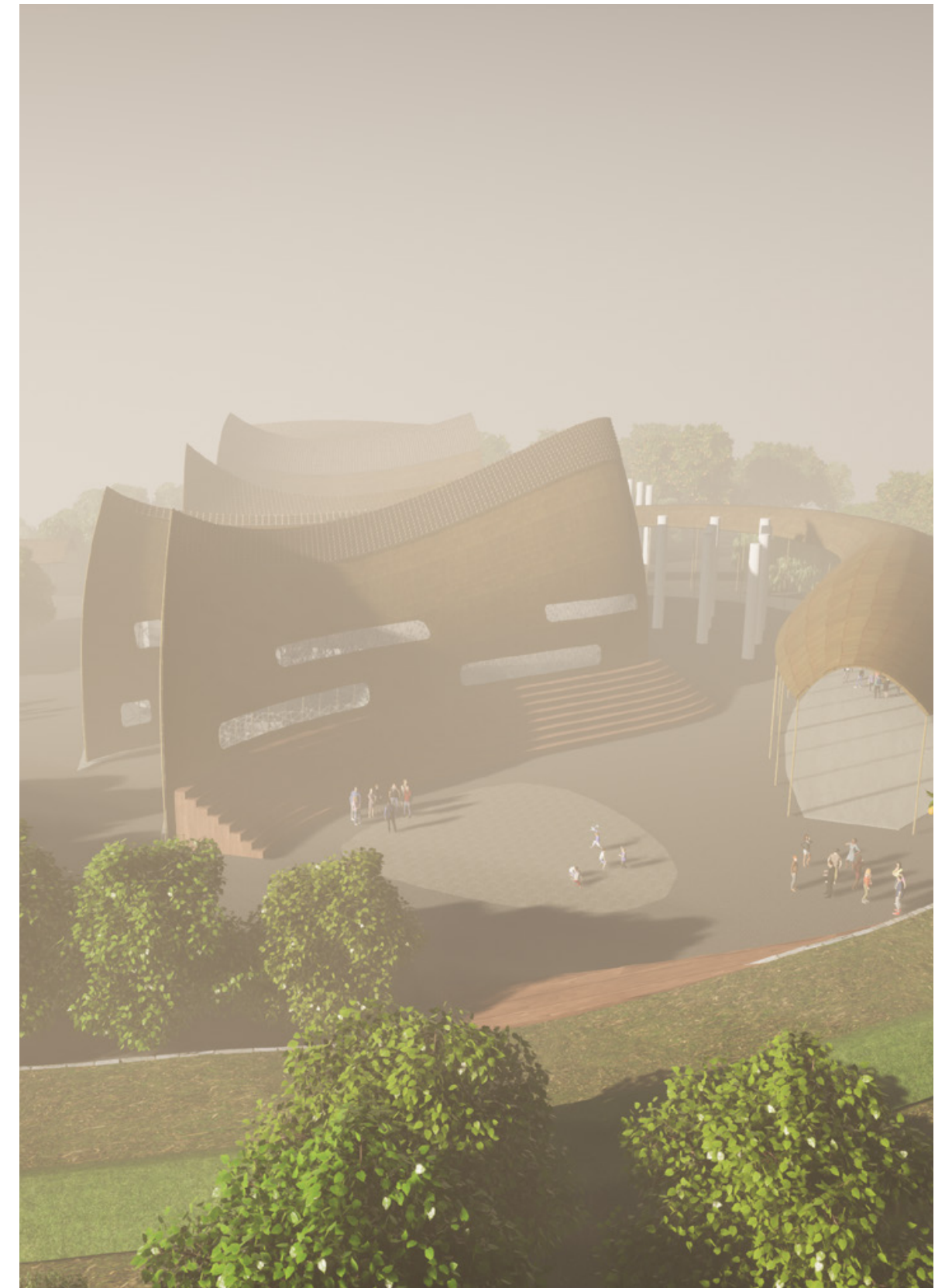
1

Indigenous communities in the Amazon Forest currently face numerous difficulties originating from the lack of urban infrastructure and the pressures from private and public stakeholders that stem from the colonial past. This project envisions the expansion of the Shukuvena Village in 2180, imagining a community that is self-sufficient in its energy production, potable water distribution, and sewage treatment while maintaining its traditional practices of using the land with the collective management of public areas and the harmonious co-existence with the surrounding natural landscape.

WATER INFRASTRUCTURE FOR THE YAWANAWA

INSTR.: VANESSA KEITH
YEAR: FALL 2022
STUDIO: ADVANCED 5
ACRE, BRAZIL

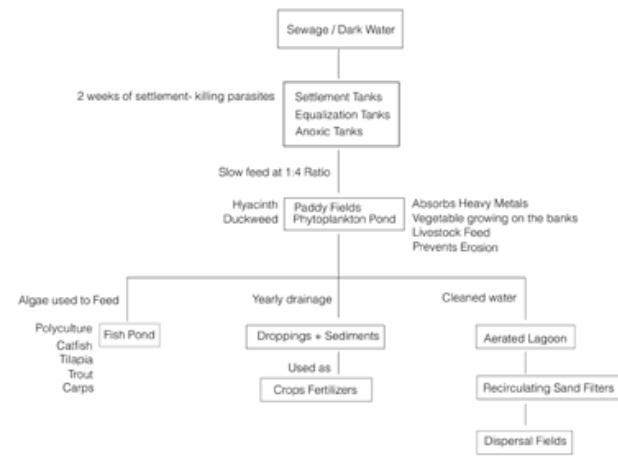
2



1 Water Tower Detail
2 Wildlife Sanctuary Museum Overview



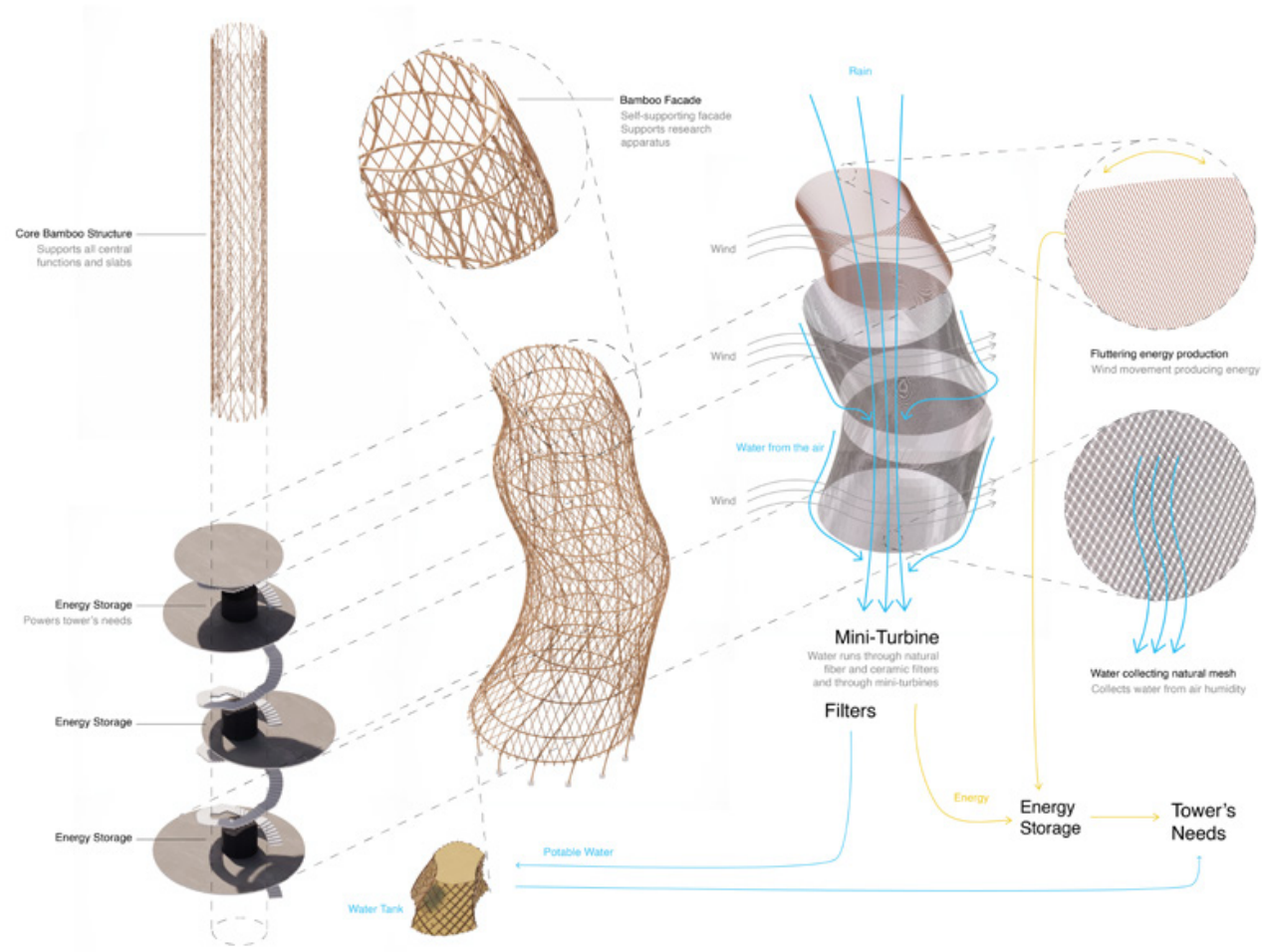
Open Spaces distribution



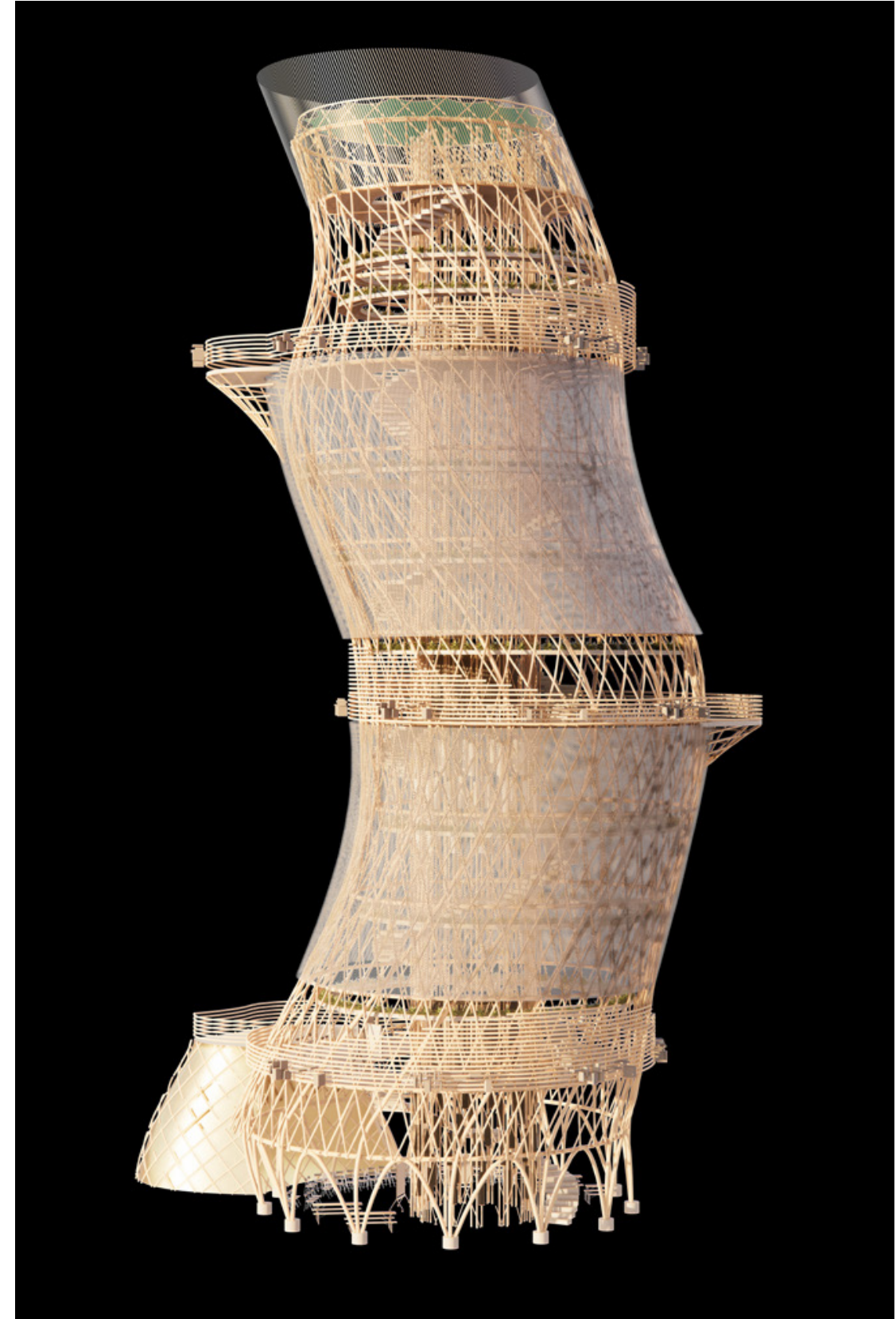
Sewage Treatment System



Yawanawa Village Site plan



Water Tower Functions



Water Tower Frontal View



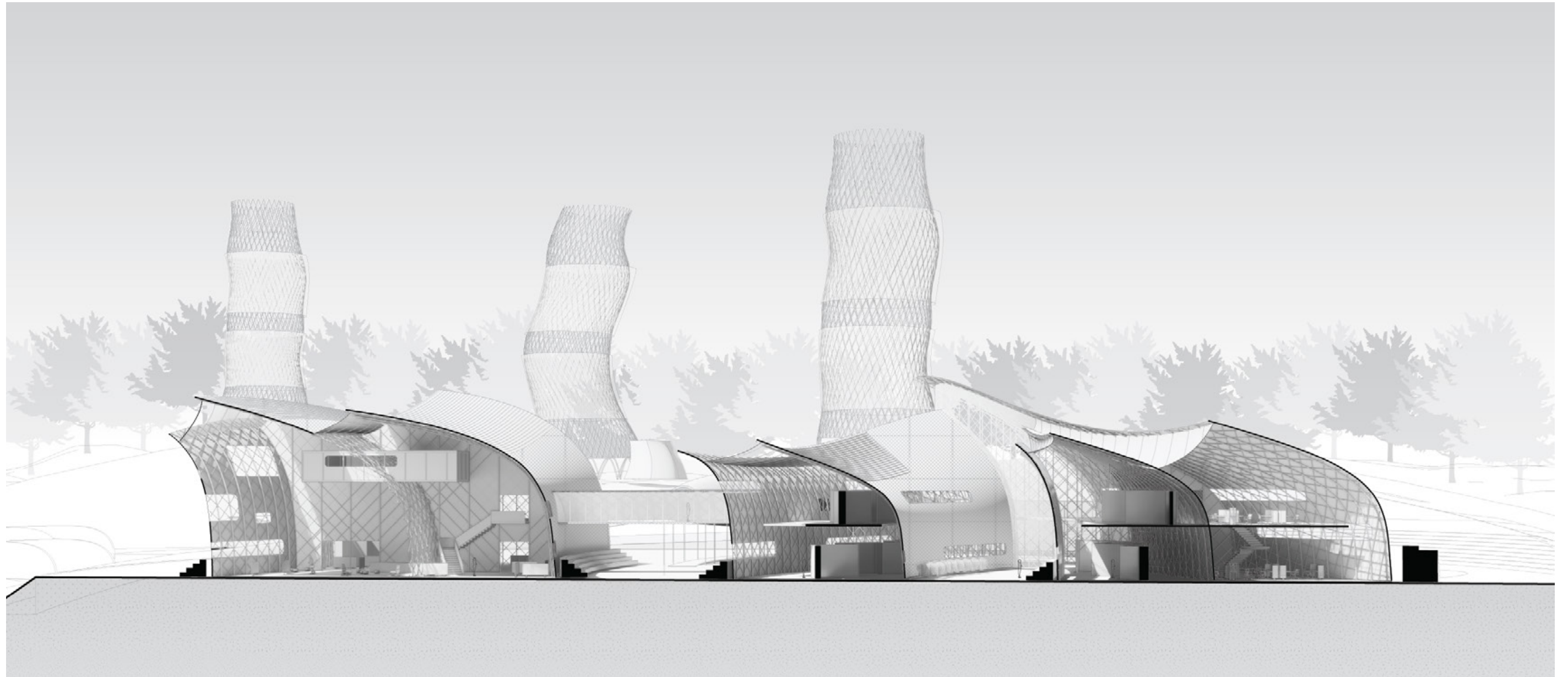
Wildlife Sanctuary Museum Site Plan



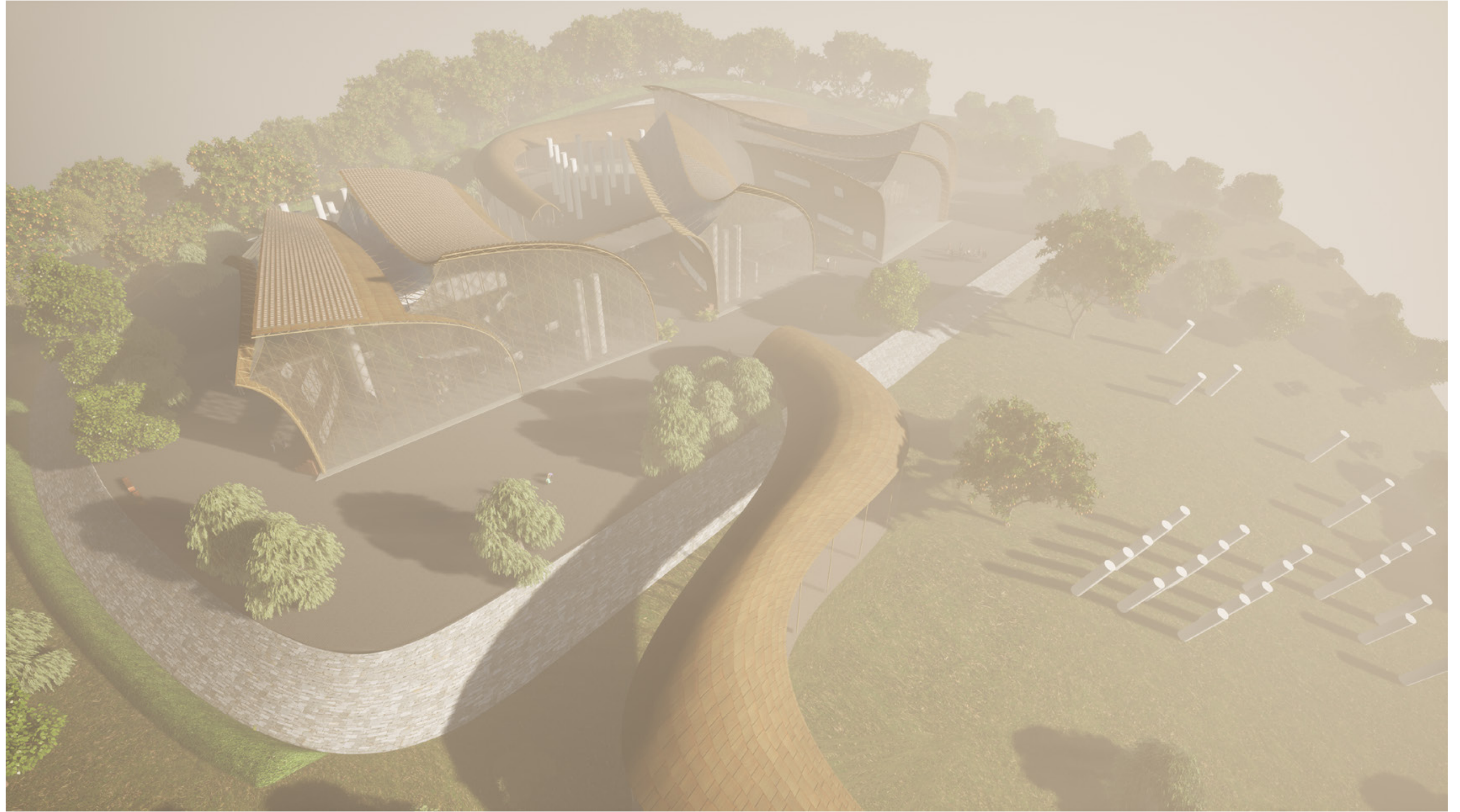
Second Floor



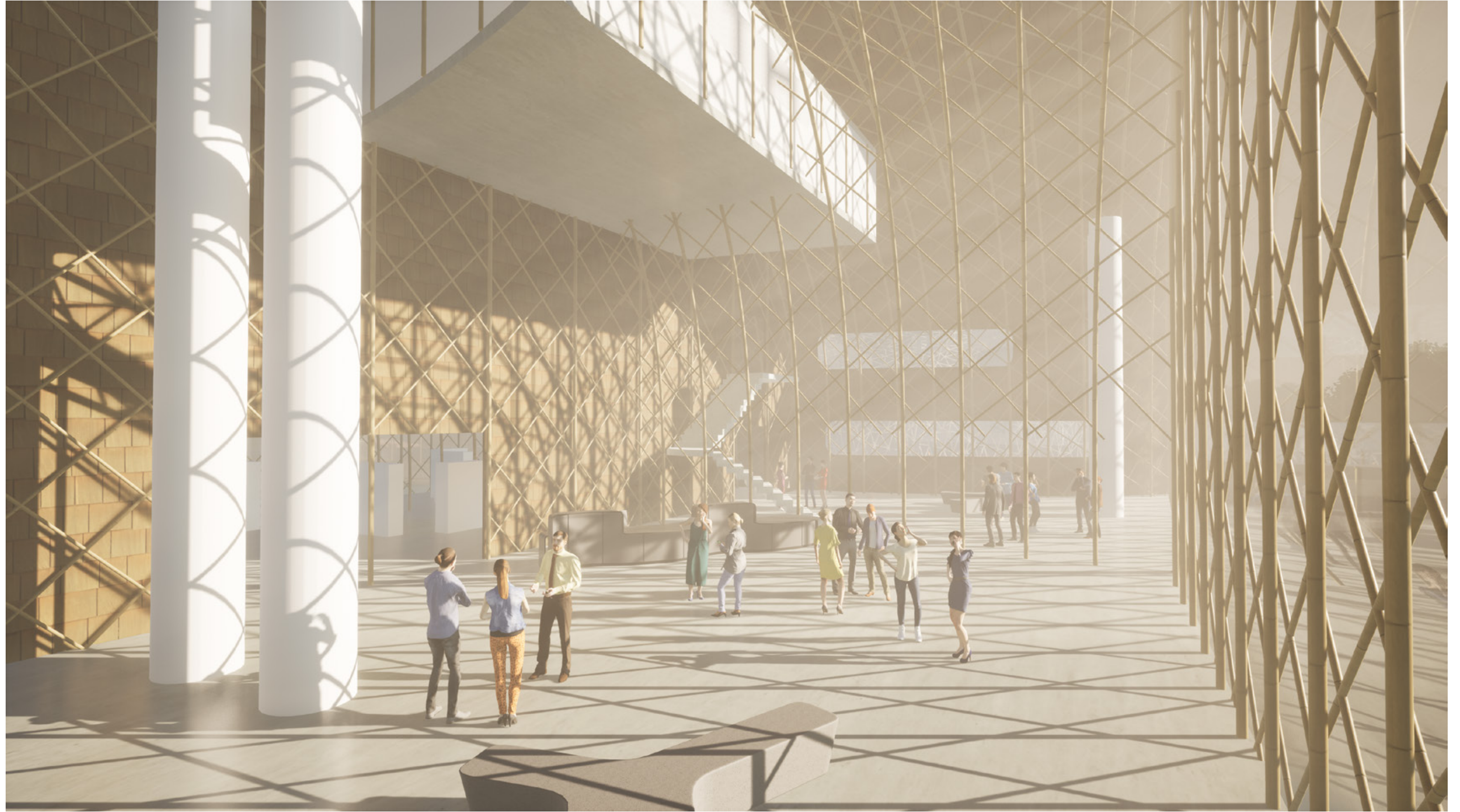
Ground Floor



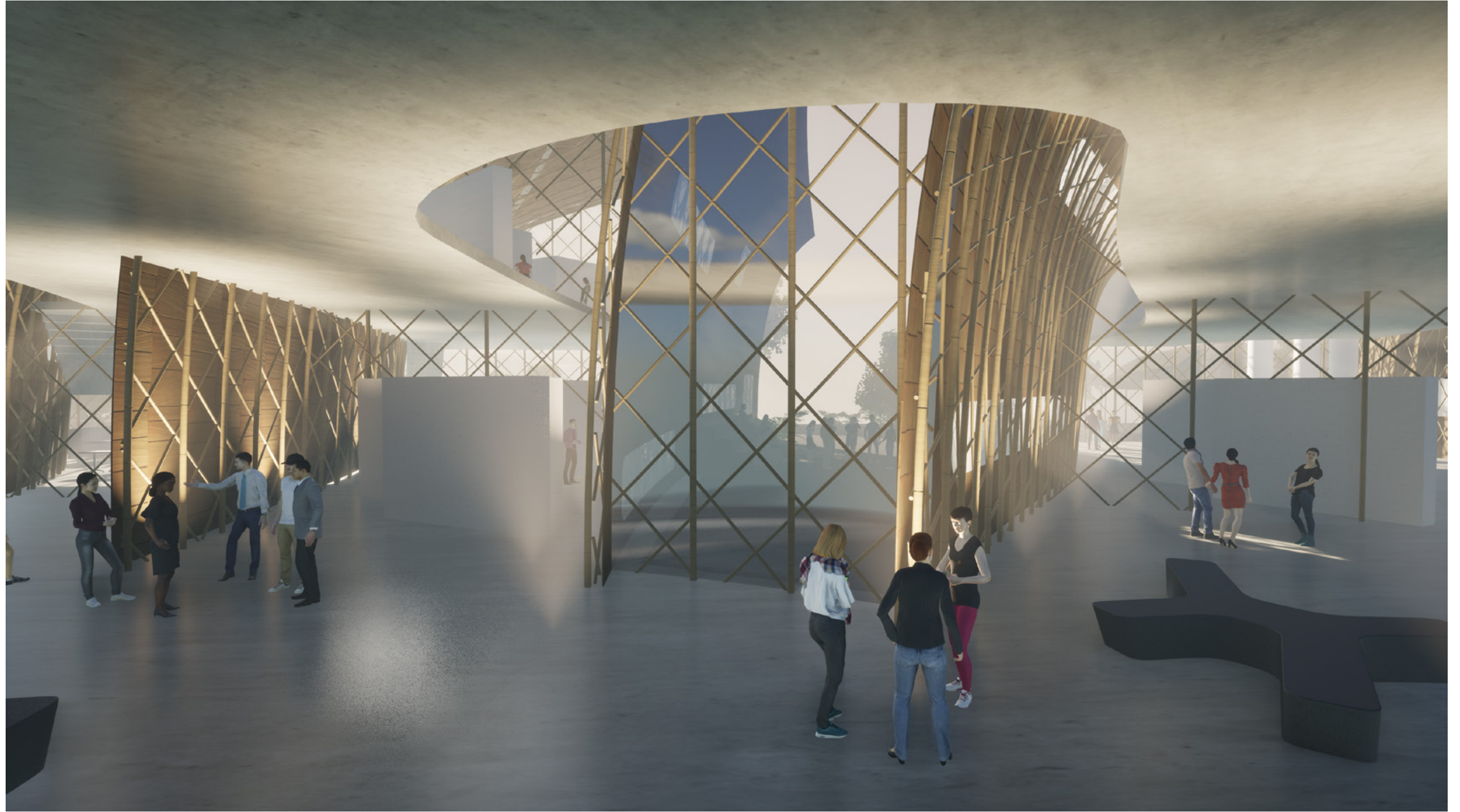
Section of Wildlife Sanctuary Museum



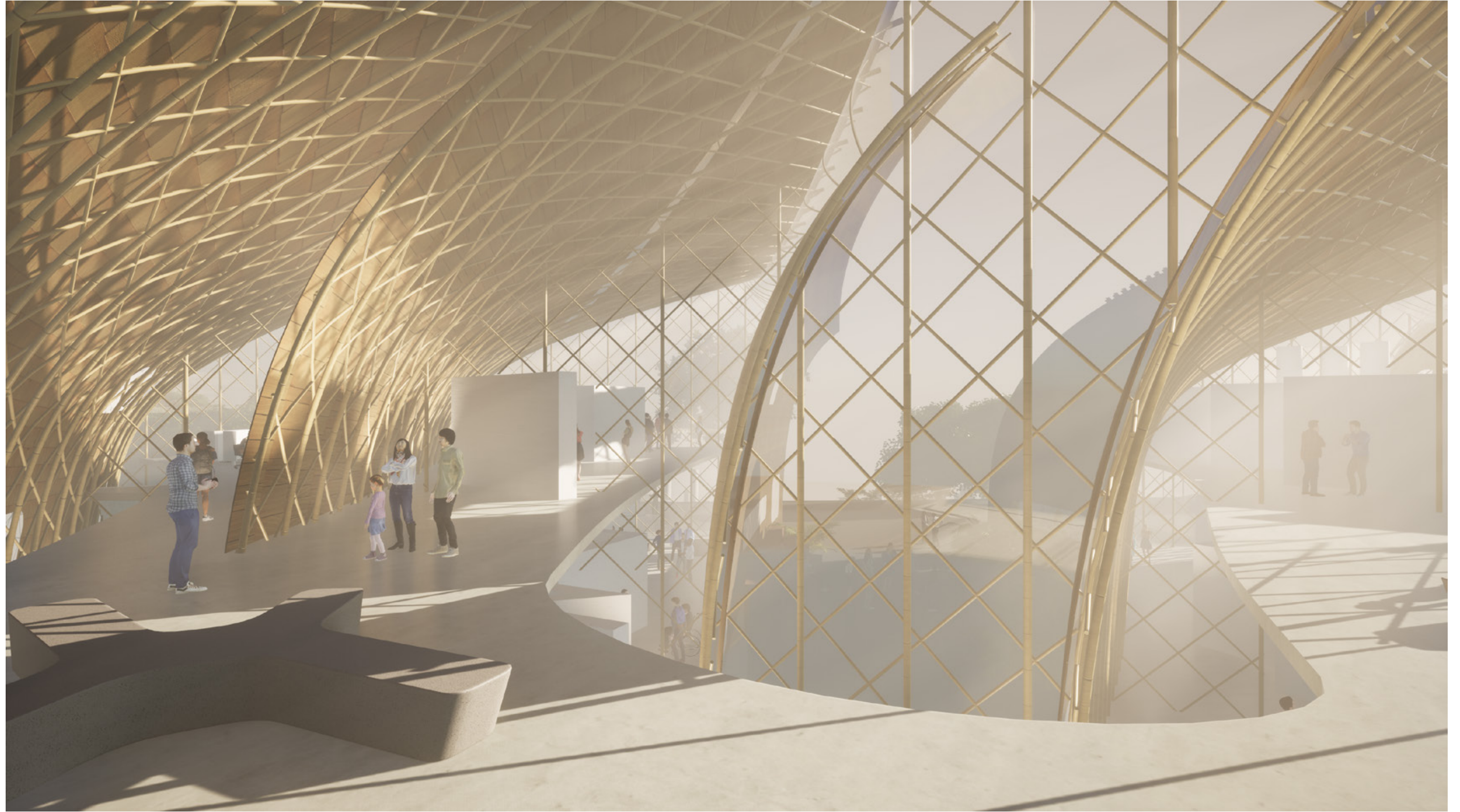
Wildlife Sanctuary Museum East View



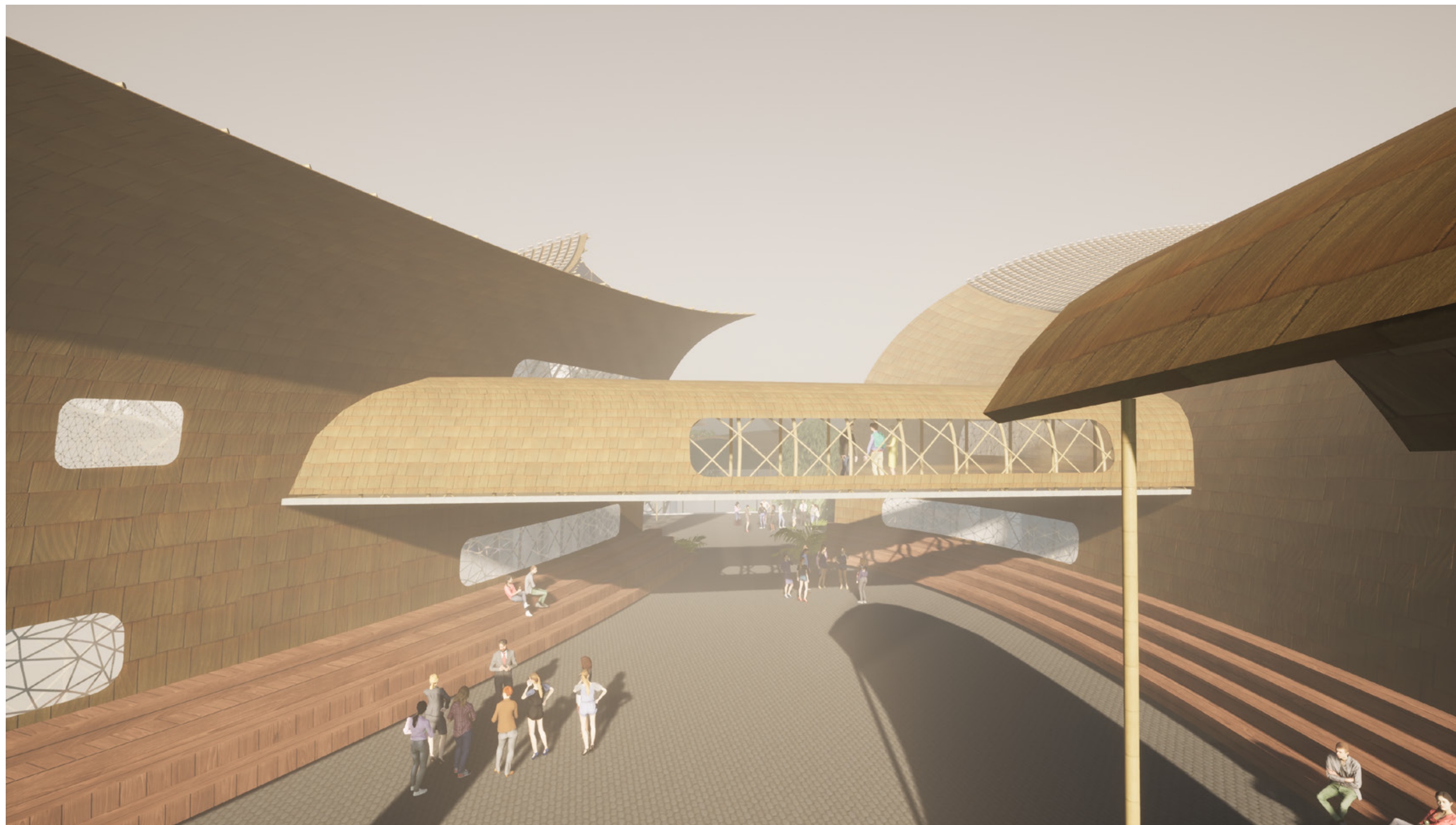
Wildlife Sanctuary Museum Main Lobby View



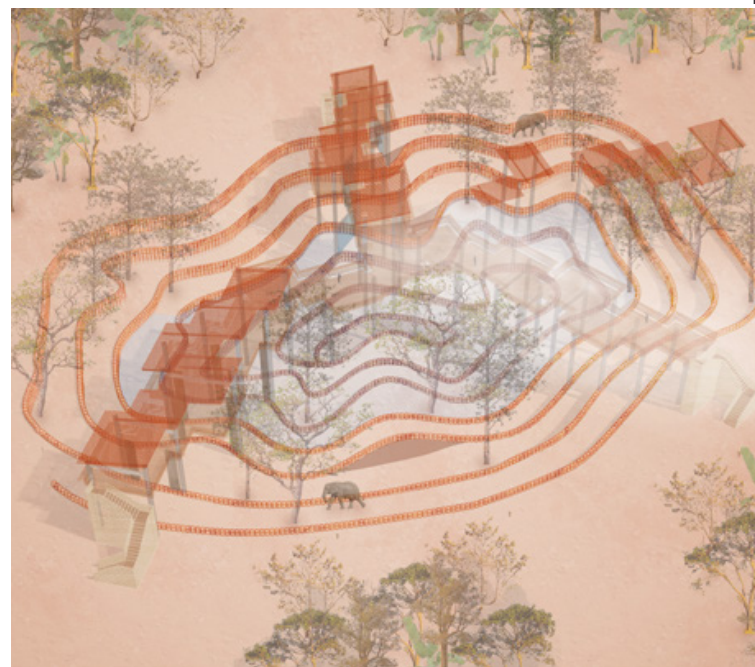
Wildlife Sanctuary Museum Main Exhibition Spaces



Wildlife Sanctuary Museum Main Exhibition Spaces



Wildlife Sanctuary Museum Interstitial Spaces



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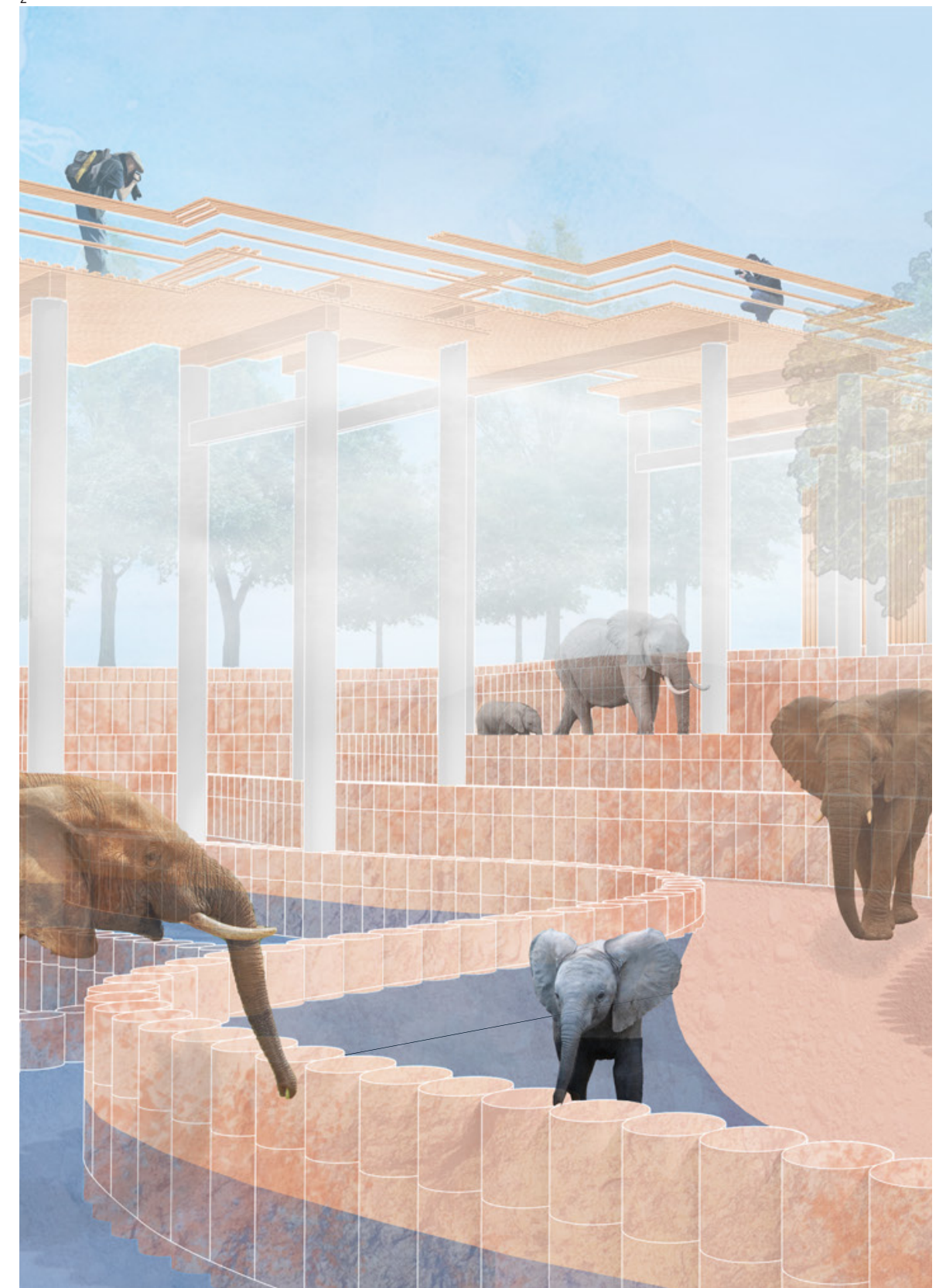
Elephants are capable of a high level of cognition due to their large hippocampi, enabling them to have keen memories and complex emotional expression, putting them at risk for psychological disorders, such as complex PTSD. The Human-elephant conflict - term that considers issues such as threat to habitats, captivity, and tourism exploitation - has been a significant conservation concern in elephant-range countries and is a major threat to this population's emotional wellbeing. Due to the harsh conditions, the elephant's psyche is often compromised, resulting in the manifestation of dangerous and harmful behaviors.

Although many of the resulting neural implications of trauma can alter the cognition of the individual, it has also been seen that some of these implications can be alleviated through proper tending. The Kui people have cared for elephants very respectfully for generations, and many of these elephants have been rescued from some kind of traumatic history. Consequently, the Kui have learned and developed ways to mitigate these psychological harms.

The main objectives for this project is to offer healing and repose for elephants coping with the internal pressures of emotional trauma. By looking into the symptoms of complex PTSD in elephants, I was able to distinguish 3 main needs in terms of emotional healing: To learn how to exercise Agency since the ability to make their own choices can be lost under violent conditions and must be recovered; Socialization - When an elephant can discover other animals and humans but also itself through interaction and play; And Meditation, which involves governing one's own body, thoughts and feelings. The aspect of repose considers that healing can be a long-term process; and relaxation can be a main

HEALING AND REPOSE

**INSTR.: BOORNSEEM
PREMTHADA**
YEAR: SPRING 2023
STUDIO: ADVANCED 6
SURIN, THAILAND

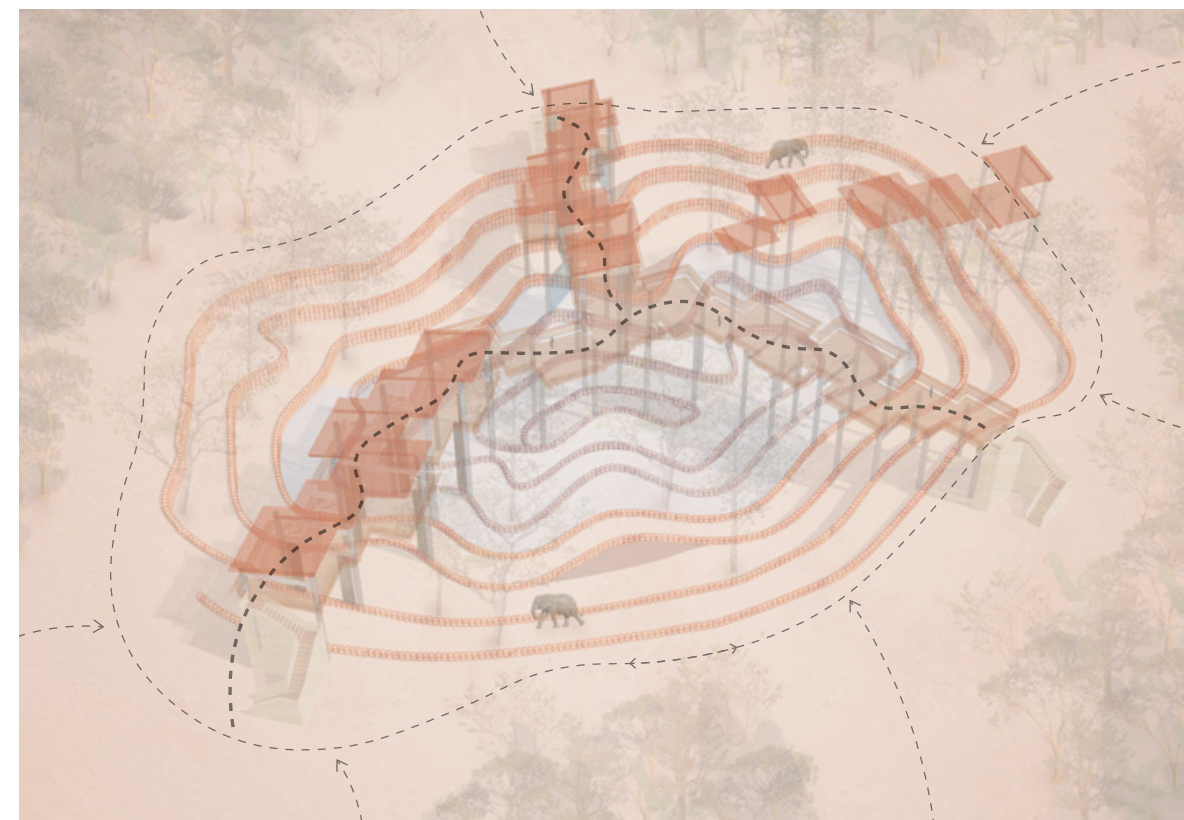


2

1 Overview
2 View from the Pond



Site location and Water Circulation



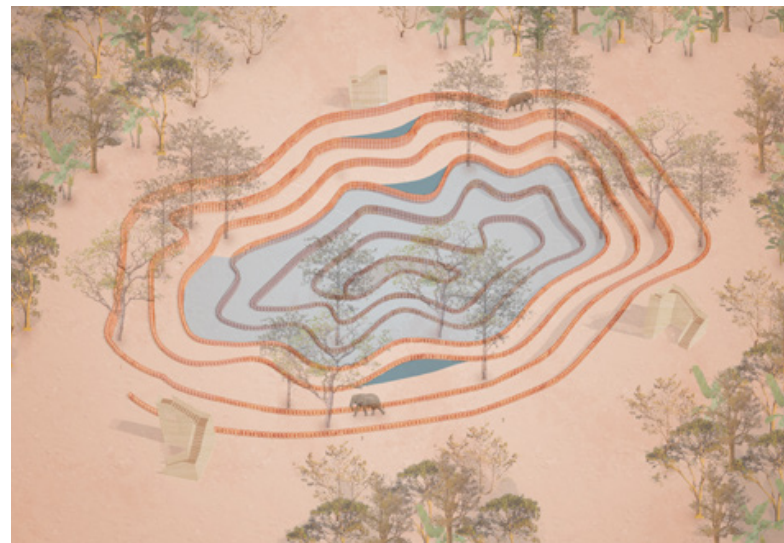
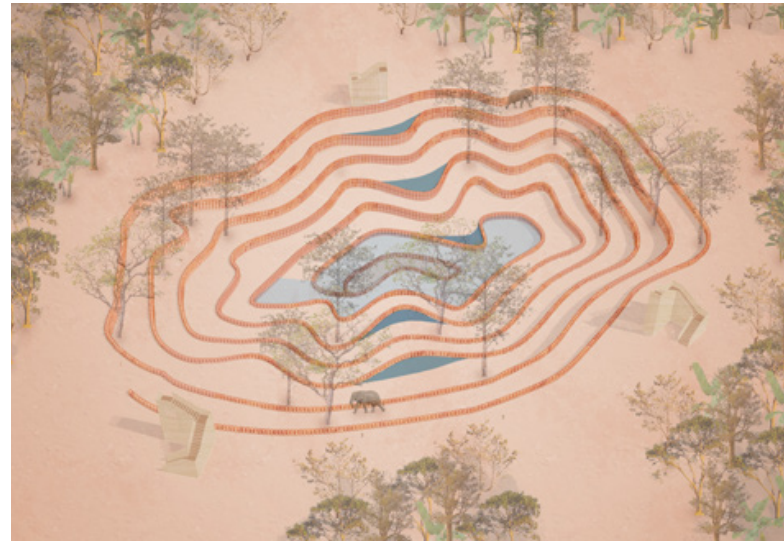
Elephant Circulation and Human Circulation

signal of the success of this process

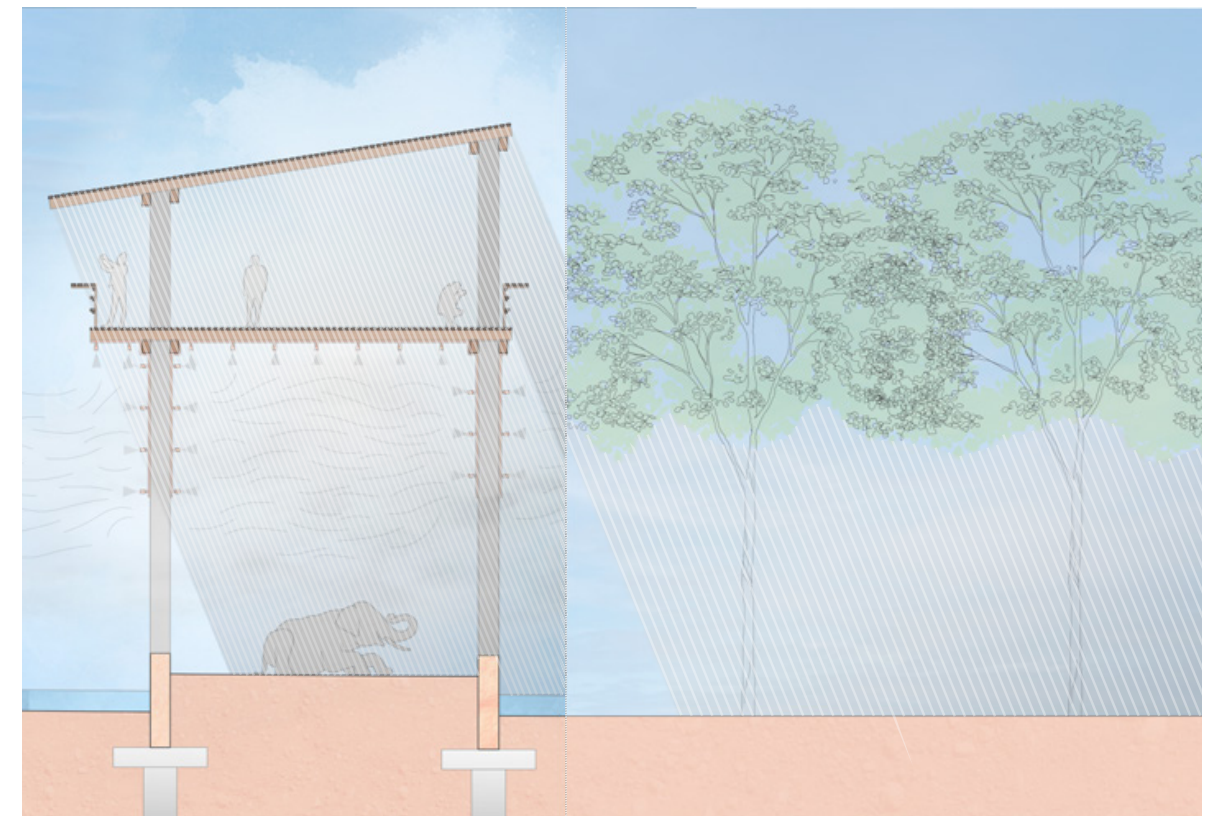
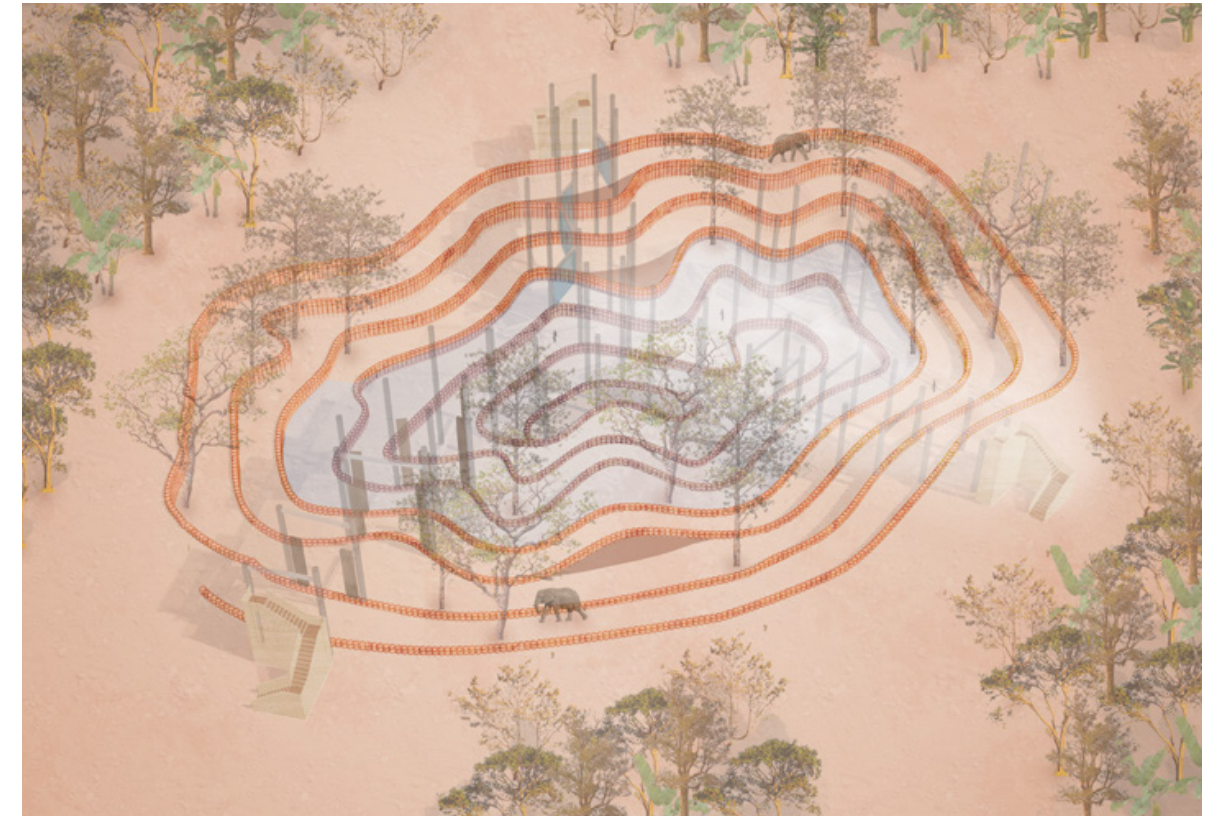
The first approach for the design process involved understanding the value that was given to water in ancient Hindu temples in Southeast Asia, where they were a fundamental element to establish connection to divine figures. In this project I wanted to shift this function and provide a place where elephants can find, create and even reconnect with themselves. In addition, the Kui people's methods to rebalance elephants coping with trauma involve releasing the animals in expansive open spaces such as paddy fields or taking them to natural environments, being worthy of note the elephant's appreciation of clean water. Another consideration was the transformation of the Kui village's base economy that, due to the pandemic, saw the decline in tourism. Since then, many families have incorporated producing online content with their elephants as another source of income. These factors led to the choice of a pond near two mahout villages and the elephant world. And that is also currently used by elephants to bathe in wetter seasons.

The pond was reimagined to create different activities for the elephant population. They can walk up to 7.5 miles a day, and a continuous spiraling path creates an opportunity for long walks to happen as a form of meditation and exercising autonomy. Mahouts can walk over the pond via pathways that offer new vantage points of the animals that are active in the water. With the variation of rainfall between seasons, different sections of the structure emerges and new options of use and interaction become available. Making also the shallower ponds for infant elephants appear or be submerged. The supports for the mahout path above also create water features for the passing elephants. Waterfalls to the north, mist in the eastern arm and gentle-sounds-emitting fountains using laterite brick walls in the western branch. Lastly, the mahout structure was conceived as an extension of the surrounding tree canopy, continuing the tree covering over the water. This can create a variegated shadow experience to the elephants below.

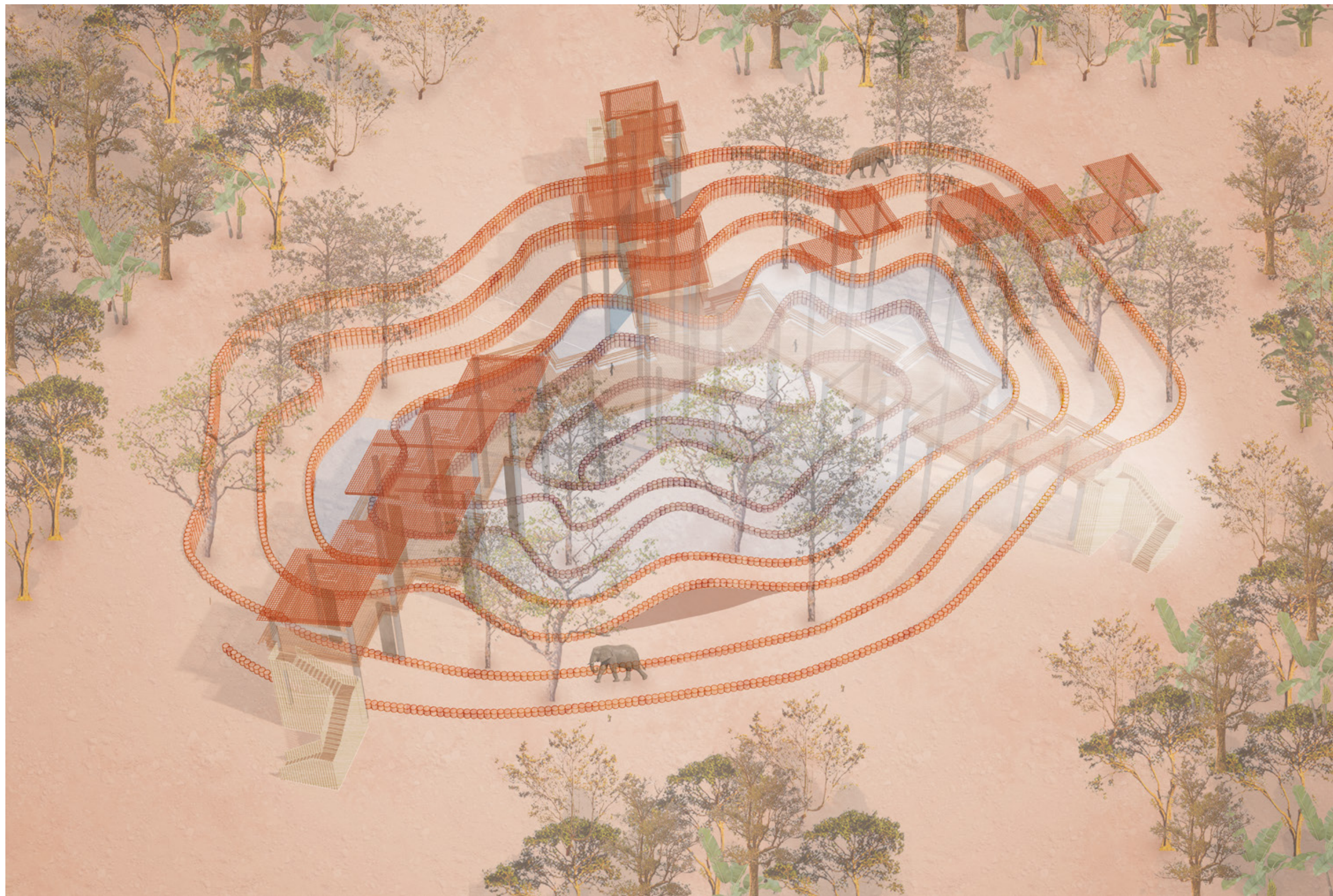
The section shows the sound fountains and waterfalls, as well as the shallow ponds for young elephants. These are usually not taken to bathe in lakes but here they can have a safe play space. In terms of materials, the



Water circulation through different seasons



Water features on colonnades and Built canopies mimicking natural canopies



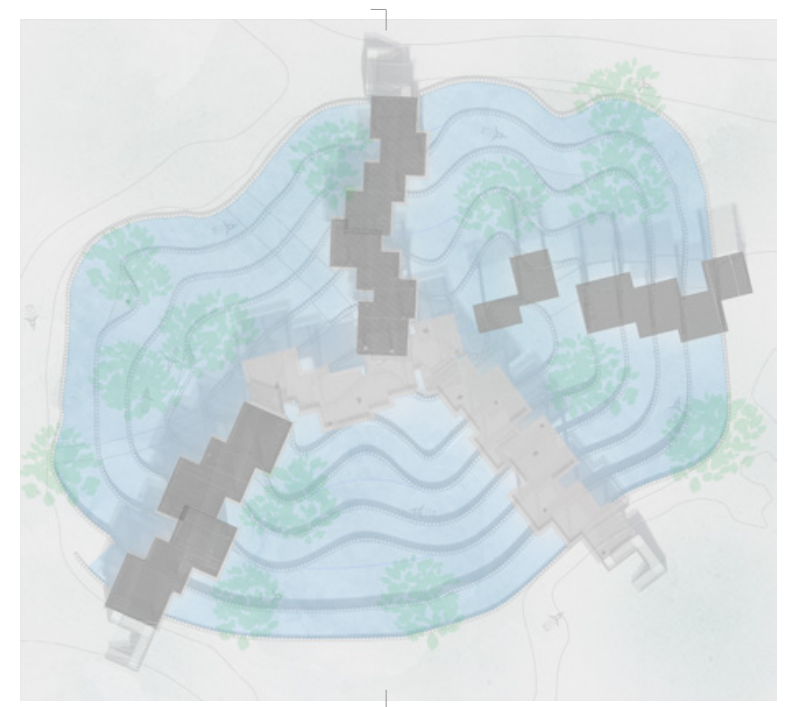
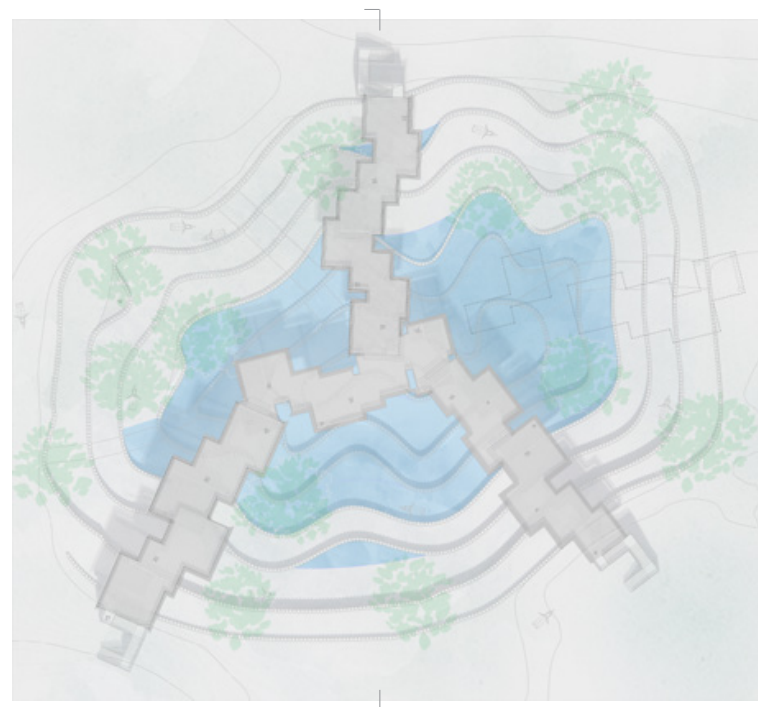
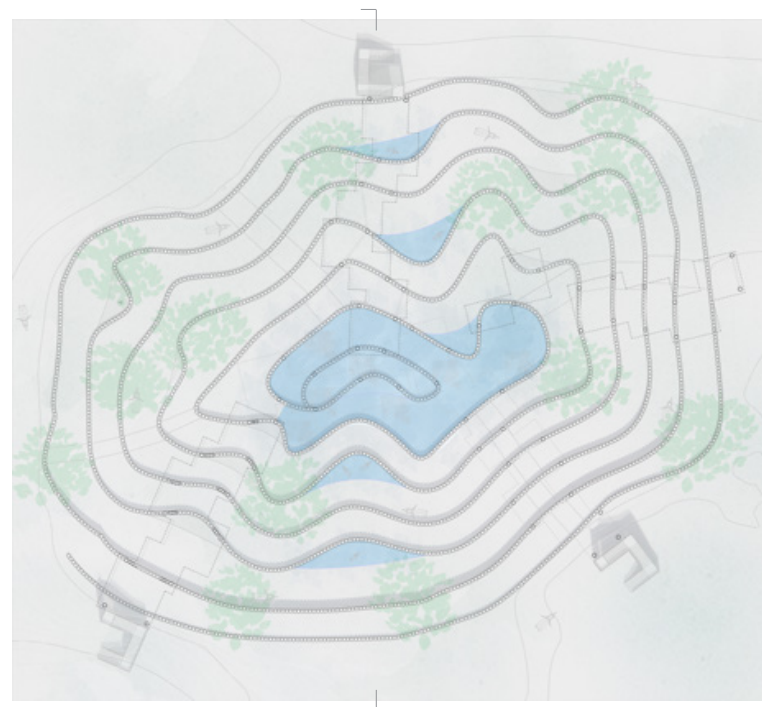
Overview looking North



| 98 |

| 66 |

wooden structure on top is supported by concrete columns, and the retaining walls are composed of laterite stones, holding the soil that make the trail. In the lowest level, plan the expansion of the width of the pathways are more evident, which creates the smaller pools and the platforms for the mahouts to interact with their animals. The platforms were inspired by the irregular placement of vegetation in a forest, and by the internal symmetry of each tree. The roofs protect parts of the platforms and parts of the trail. From the platforms one can observe the elephants more closely without interfering in their activities. And in the trails below elephants and their families are offered places where they can play and meditate.



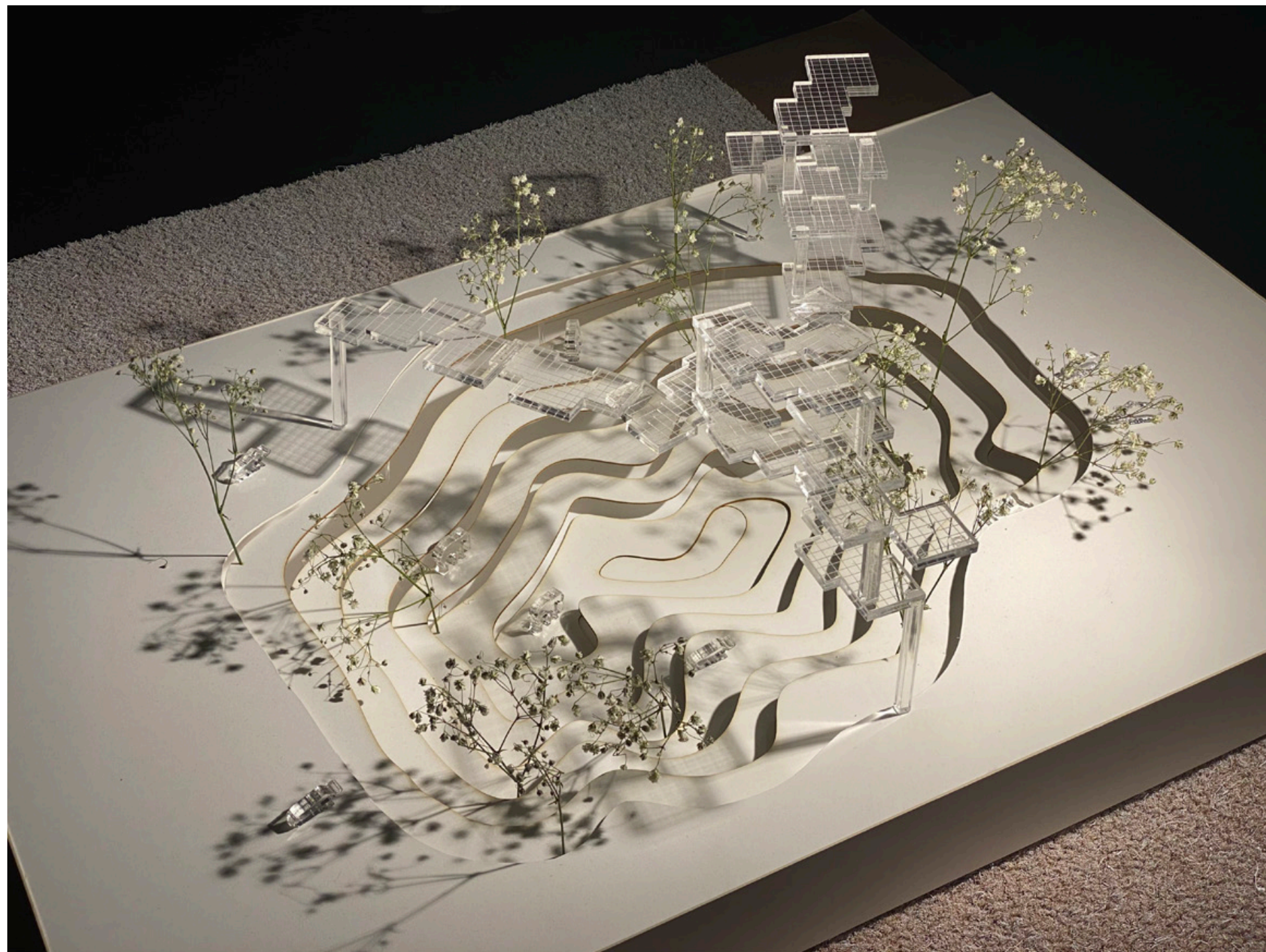
North-South Section
Plans for each level



View from the canopy looking West

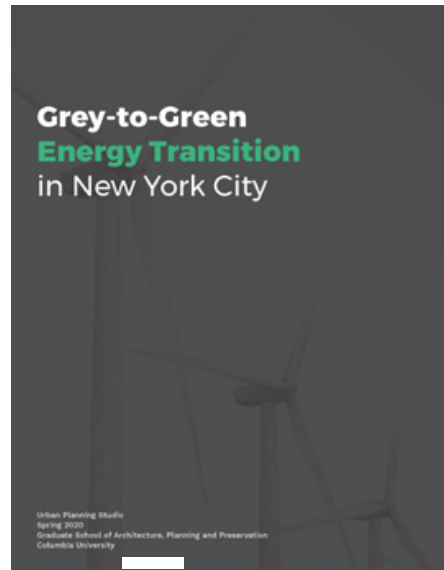


View from the pond looking Southeast



Shadow experience over the pond





PROJECT BACKGROUND **STUDIO MISSION** **CONTEXTUAL RESEARCH**

Studio Goal

The Grey-to-Green studio is challenged to identify strategies related to New York City's energy transition. Specifically, the studio aims to develop strategic recommendations and planning tools to facilitate a just energy transition in NYC.

Client

The studio client, Eddie Bautista, executive director of the New York City Environmental Justice Alliance (NYC-EJA), has been coordinating community organizations for decades to achieve environmental justice goals. NYC-EJA issued the New Energy Alternative Kilowatt (NEAK) Campaign that aims to replace peaker power plants in the City with renewable energy.

Peak Energy Alternative Kilowatt (P.E.A.K.) Campaign

As the first comprehensive effort in the US to reduce the negative and socially disproportionate impacts of peaker power plants, the goal of the P.E.A.K. Campaign is aimed at reducing peaker power plants with renewable sources of energy and storage in New York City. This campaign brings in all sorts of expertise, including technical, legal, public health and planning fields. Its partnership consists of the New York League for the Public Interest, studio client NYC-EJA, THE POINT CDC, UPRISE, Clean Energy Groups, Physicians and Physicians, and Scientists and Engineers for Healthy Energy (NYC-EJA, 2020).

Eddie Bautista
Executive Director, NYC-EJA

Celine Garcia
Energy Policy Planner, NYC-EJA

Urban Planning Studio
Spring 2020
Graduate School of Architecture, Planning and Preservation
Columbia University

The Grey-to-Green Energy Transition studio is challenged to identify strategies and opportunities related to the eventual closure of peaker power plants in New York City, specifically balancing community priorities with future energy-related demands.

Through our preliminary research, we found that there are a number of existing problems, especially air pollution, that have been affecting the community without much needed attention. These historically-disenfranchised communities, where most power plants are located, must benefit from the energy transition. We showed how to identify these communities through the NYC Communities and Environmental Screening (NYC CES) Index and how to ensure investments by recommending "benefits of spending" strategies.

Our research also proved that adapting to climate change is not as easy as replacing fossil-fuel burning peaker power plants to renewable energy sources. If so, there are a lot of limitations and lost opportunities to think outside-the-box. We hoped we have shown alternative visions as we explored solutions from placing solar panels and battery storages in strategic locations, and to proposing innovative clean energy infrastructures that provide benefits to residents and preserve the working waterfront of neighborhoods.

We do recognize vulnerability comes in multiple scales. This studio has proposed actions, ranging from transforming a small site to recommending state-wide policies. We also acknowledge the challenges of the temporal scale; there are actions that should be implemented immediately and also those that need to be carried over time. As the studio progressed, we decided to envision the energy transition in stages, from studying immediate replacements for peaker power plants to proposing innovative energy infrastructure that could be implemented in the long run. All of these actions, despite differences in spatial or temporal scale, should serve to accelerate a just energy transition.

GREY-TO-GREEN ENERGY TRANSITION IN NEW YORK CITY

INSTR.: ANTHONY BORELLI & GRAHAM TRELSTAD
YEAR: SPRING 2020
COURSE: URBAN PLANNING STUDIO
 NEW YORK CITY, NY
 GROUP OF 12 STUDENTS
[FULL REPORT HERE](#)

PROJECT BACKGROUND **STUDIO MISSION** **CONTEXTUAL RESEARCH** **REGULATORY PROPOSAL** **SITE PLANNING PROPOSAL** **EPILOGUE**

Energy Planning Structure in New York City

Electricity Generation in New York City (NYC)

According to the 2019 OneNYC report, 27% of electricity consumed in NYC comes from renewable sources (Fuleihan et al., 2019). Historically, the Robert Moses Niagara Hydroelectric Power Station near Niagara Falls has been a major source of renewable energy for NYS (Rueb, 2017). Since 2014, solar capacity in NYC has increased sevenfold and NYS has committed to a number of renewable energy projects, including Empire Wind, a large offshore wind farm off the coast of the Rockaways (Fuleihan et al., 2019; Equinor, n.d.).

Energy Consumption and Greenhouse Gas Emissions in 2017

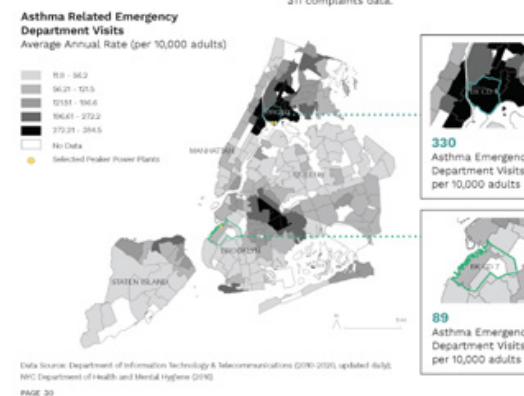
Source: NYC Mayor's Office of Sustainability (2017)

311 Data Analysis

The Grey-to-Green Energy Transition studio looked for ways to connect with local residents and community based organizations once we have established a basic understanding of the community. The two stakeholders anticipated to be our primary points of contact were UPRISE and The POINT. Both have working relationships with our client, NYC-EJA, and are already involved in organizing efforts around components of NYC-EJA's PEAK Campaign. We also reached out to contacts in various city agencies and community boards.

Unfortunately, as circumstances in the city began to develop pertaining to the COVID-19 response, it became clear that collaboration with these organizations would be extremely difficult. In light of this development, the studio began to look for other ways to capture community needs in the context of the studio outcomes.

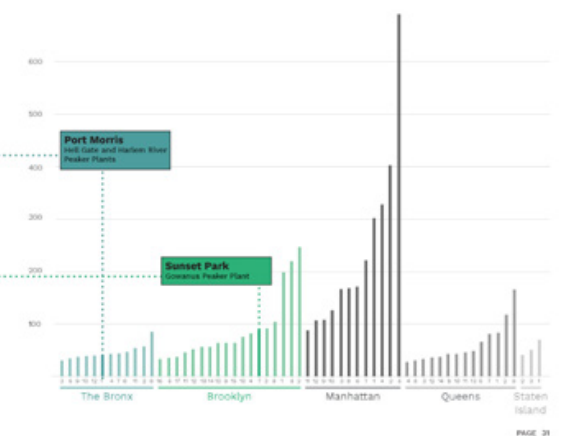
Based on the conversations with our client and our initial research, it was clear that asthma and air pollution are major health concerns in both communities. Thus, we conducted an analysis of 311 complaints data.



Air Quality Complaints & Asthma Emergency Department Visits

In mapping the count of 311 air quality complaints visits due to asthma had some of the fewest air per community districts against asthma quality complaints, while areas with relatively hospitalization and emergency department data, low hospitalization and emergency department we saw that the areas with the highest numbers visit rates had the largest number of air quality hospitalizations and emergency department complaints.

Air Quality Complaints in Community Districts (2010-2020)



Analysis of 311 Data

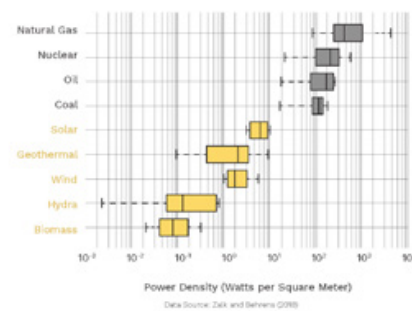
Results: Multi-Criteria Decision Analysis



Repowering: Solar

Among the many renewable energy options for replacing peaker plants, solar panels and battery storage are the most feasible in terms of cost, flexibility, and energy density. Other renewable energy options are impractical for various reasons, such as unsuitability in a city context or high costs.

Power Density

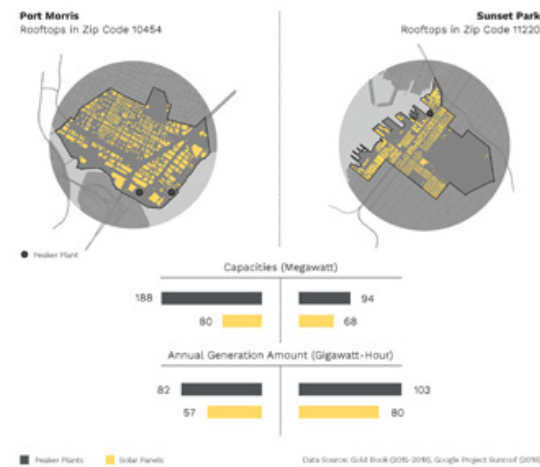


The concept of power density is important in evaluating the feasibility of replacing peaker plants. Power density is measured as output capacity per unit area and, generally, solar panels have a substantially lower power density than that of natural gas turbines, like those located at the peaker plant sites.

Capacity and Annual Generation

The generating capacity of the peaker power plants is different from the annual amount of power generated by the peaker power plants. Because the peaker power plants only generate electricity during peak demand from the grid, the annual amount of electricity generated is much lower than if the peaker power plants were running more frequently.

If solar panels were placed on most rooftops in the zip code area surrounding the peaker plants, the solar panel installations would be able to generate enough electricity to match the average annual amount of electricity produced by the peaker plants in the past 5 years (see appendix). This indicates that widespread installation of solar panels will be an important part of replacing the peaker plants.



Multi-criteria Decision Analysis for our site selection

Port Morris (Harlem River): Generating Power

As this studio has worked to find new sources of energy, like offshore wind, we also need to figure out how to use energy more efficiently. Heating and cooling our buildings accounts for 60% of NYC's GHG emissions (NYSDORA, 2017; NYC Mayor's Office of Sustainability, 2014). Drastically reducing carbon pollution from current heating and cooling systems, which relies on fuel and natural gas, can make significant progress towards a just energy transition.

This proposal includes two separate concepts: District heating & cooling, and Geothermal Energy. Both ideas are important on their own, but could become crucial to NYC's goals when considered together.

The Harlem River Peaker Plant site could help make that progress, by utilizing a well-established but little-used-in-the-US approach to heating

and cooling: Geothermal District Heating and Cooling. European cities have been heating and cooling their buildings using Geothermal District Energy for decades (BSNL, 2015). We envision the Harlem River Peaker Plant site serving as a pilot project, the beginning of a conversion of buildings across the city to a new way of operating.



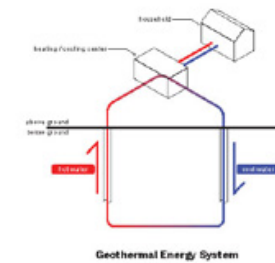
District Heating and Cooling

A district heating and cooling project considers the heating, cooling and hot water needs of an entire campus, neighborhood or town, and provides those as shared services, benefiting from economies of scale and collective action. A district system at Hudson Yards provides heating and cooling to 14 million sq feet of mixed-use space (Sheehan, 2017) which means that the buildings there do not need their own separate boilers and chiller plants. ConEd's steam system in lower Manhattan, which serves 1800 buildings, is one of the original district heat projects (Don Ed, 2018). While this approach is easier when led by a single developer or on a single institutional campus (King, 2019), there's no reason that New Yorkers couldn't begin to consider heating, cooling and hot water as collective services, accessible to all.

Geothermal Energy

District heating and cooling becomes more powerful when paired with a renewable energy source like Geothermal energy. Geothermal energy takes advantage of the temperature difference between the air and the ground (or deep water) to generate heat, which then heats water, which flows through a network of pipes and into heat exchangers within buildings. These heat exchangers then distribute heat throughout the building. In the summer, the system can be run in reverse, to cool buildings rather than heat them (Harvey, 2006). Cornell's tech campus on Ithaca's island has a geothermal system buried under their vast lawn, providing resilient, nearly zero-carbon heating and cooling (CommArch, 2018).

In 2018, The Mayor's Office of Sustainability and The Department of Design and Construction created a mapping tool that compiled data on every building and lot in the city, to assess its potential for geothermal energy generation (NYC Mayor's Office of Sustainability, 2018). They found that this Harlem River Peaker Plant site has the potential to generate enough geothermal heating and cooling to serve over a thousand apartments nearby. Building on that potential, this studio envisions building a pilot project: a district heating and cooling plant in Harlem River site that serves apartments in the surrounding community, providing a heating, cooling and hot water service that building owners will be subsidized to connect to. The "benefits" of spending on increased building efficiency would go directly to the local residents, who have borne the burden of "progress" for decades.



Port Morris (Hell Gate): Proposal

The Hell Gate peaker power plant site in Port Morris can be reimagined to house the new Energy Vault gravity tower and expand on the Haven Project plan. As the blocks rise and fall, the tower advertises the state of the grid. It illustrates the demands on it and how long those demands have been made. As the tower grows it communicates the potential being stored. Originally designed to serve in remote windfarms and utility-scale solar facilities, we believe that a smaller scale version of this tower could serve an important role in manifesting our move to renewable energy, serving as a monument to the transition.

Protected, but at the center of a new park complex that includes walkways and bikeways that connect residents to the waterfront, the tower can serve as a functional attraction. The investments made in removing the peaker power plant and replacing it should include funding for the surrounding park and greenways as well, incorporating the gravity tower into a larger park plan, one that celebrates what the Bronx once was, and what it could be.



We outlined proposals for the three most vulnerable neighborhoods in NYC

In her essay "Structural Racialism in Modern Architectural Theory" (2020), Irene Chang develops an argument demonstrating the racist genealogy of the modernist movement in architecture, and points towards its revisitation for an implicit subsequent transformation of contemporary consciousness. By a closer analysis of Owen Jones' "The Grammar of Ornament" (1865) through Chang's elaborations, it is possible to reflect and perhaps pull out a few directions for a racial debiasing and also decolonizing of current architectural paradigms, in a way that could allow the discipline to develop over more conscientious foundations.

Chang expands on a few main ideas about the architectural theory of the eighteenth and nineteenth centuries and how it was permeated and driven by racial theories of the time. The colonial conquests and explorations that permitted encounters with new peoples had led white Europeans to develop ethnocentric prejudices and various attempts in explaining human diversity. By the early nineteenth century, a belief pervaded throughout the continent concerning ingrained racial natures that engendered distinct cultural developments, which in turn served to support their own sense of civilizational superiority. This logic was only made stronger, if not driven, by political and economic imperatives such as slaveholding and imperial subjugations that existed to meet the industry's need for markets and raw materials. This was intermingled with the aspiration of "scientificity" of racial theorists trying to build frameworks to classify each different race by their physical and mental attributes, while also placing each in a specific stage of development based on a timeline in which Europeans were at its forefront. These racial theories tinted architectural thought and brought about ideas to the discipline that Chang clearly highlights and that can be observed in Owen's writing.

One important aspect of architectural theorization from the 1800s was its racial attributionism in which styles were understood as outcomes of peoples or nations, and nations determined by their racial components. There was an incremental establishment of ideas through different authors for the origins of architecture. Quatremère de Quincy in 1788 broke with the tradition of a monogenesis in the Greek hut idealized by Laugier to propose two other original types of architecture, namely the Egyptian cave and the Chinese tent. Quincy underlined the hut as the only model susceptible for progressive development whereas the cave was too monotonous and the hut too impermanent. Despite his more mythological approach, Quincy's theory would still underpin subsequent works attempting to explain global architectural diversity and also foreshadow the trope of Europeans being the prominent people capable of progress and historical advancement over other groups that were relegated to cultural stagnation.

Quincy mentioned geography and habit as the conditioning forces behind the original typologies, however Edward Freeman in 1849 reframes their basis. He ascribes the creative power of each people to an unfathomable divine providence that allocated different physical and moral constitutions to different races, that were consequently capable of different inventions. And this principle would guide many others thereon, with the association of mental capabilities of each race and people with their architectural and artistic productions. Owens would refer to Turkish ornamentation: "And thus it is with the art of the Turks as compared with the art of the Arabs: there is the same difference in the amount of elegance and refinement in the art of the two people as exists in their national character." (p.61) And would also describe Chinese ornaments:

" On the whole, Chinese ornament is a very faithful expression of the nature of this peculiar people; its characteristic feature is oddness, - we cannot call it capricious, for caprice is the playful wandering of a lively imagination; but the Chinese are totally unimaginative, and all their works are accordingly wanting in the highest grace of art, - the ideal." (p.87)

Viollet-le-Duc would further expand on these notions over race and architecture in his "Histoire de l'habitation humaine" (1875; English version published in 1876). Le-Duc began several chapters by describing characteristics of each race group as they had been codified by race theorists, bringing hierarchies, attributions of value and pejorative terms such as the "repulsive aspect" of Central Asian nomads, or that the Blacks were an "abject race", and that the "Arya" were "of great stature and brave (...) like superior beings, born to command." (p.122-23) He also followed Quincy's schematization and associated distinct dwelling materials and constructive methods with each of the original architectural typologies. The Chinese were associated with trellis-like houses based on agglutination of wood members, the Turanian race with small stones and mortar, and the Arya with wooden frame construction.

What remains important from the writings of Viollet-le-Duc, though, is his description of the Gallo-Roman peoples, responsible for the creation of Gothic cathedrals. They supposedly possessed a "natural genius" with "supple and innovative natures", and were "quick to seize upon the practical side of things", "given to reasoning things out; and they were driven by good sense as much as they were by imagination." They " never stopped trying to improve." (Viollet-le-Duc, 1990, p.71) His ideals that the white race held a "special proclivity for independence, rationality, practicality, and innovation, which was reflected in its architecture" would later be fundamental for the formation of modernist tenets, which many were based on racialized ideas while peeling off explicit racism (Chang, 2020, p.143).

The naturalistic understanding of racial differences of the first half of the 1800s, to which inherent attributes were seen as legitimizing the perception of non-Europeans as inferiors, gave way to a historicist outlook of race by the latter part of the century. Race and architectural theory began to attempt the insertion of non-Aryan groups in the same linear developmental timeline as Europeans, relegating them to primeval stages or as prone to stagnation or conquest. The diverse range of racial groups known until then were being transposed from the simple understanding of diverse populations inhabiting different areas around the world to a linear developmental history of humanity. Native Americans, sub-Saharan Africans, and inhabitants of the South Sea Islands were stagnant at one end of the timescale - called passive, savage, childlike, instinctual. Jones dedicated the first chapter of his book to the peoples in that stage of growth, calling them the "Savage Tribes". Other non-Western cultures were seen as suspended in one single initial stage in a nonhistorical mode, as seen, for instance, proposed by Bannister Fletcher in his book "A History of Architecture on the Comparative Method" (1896), in which he divides the many styles analysed in two main parts: the historical and the non-historical, including in the latter productions from non-European nations such as China, Japan, India, and Egypt. Europeans placed themselves in the other end of the timescale, as "predestined by biological aptitude to advance" (Chang, p.146) and conquer, disregarding their exploitative approaches.

Adolf Loos, who is considered a precursor of the unornamented modernism, had his definitions of modern deeply imbued with the racial thinking of the previous century. He derived from Owen Jones the conceptions of primitive and followed with an association of ornamentation with the primitive, - or, as he also mentions, "suited for Papuans" - and goes further and considers it a crime (publishing "Ornament and Crime" in 1913). Ornamentation and lack thereof became for him a measure of cultural development and maturity, and Aryanism was associated with progress.

"It is Germanic culture which, like a mammoth under the ice of the tundra, had been preserved intact in the British Isles, and now, alive and kicking, is trampling down all other cultures. In the twentieth century there will only be one culture dominating the globe." (Loos, 1998)

Loos saw in the universalization of Germanic culture a pathway for the future, and held high hopes for America as possibly being more homogeneous than contemporary Europe. However, more than an attachment with the people, Loos sought a definition of modernity rooted in Germanic racial attributes - inventiveness, rationality, practicality, a will to improve and progress - leaving it implicitly associated with an European subgroup. This would eventually permit it to be co opted into the International Style show at the Museum of Modern Art in 1932 by Henry-Russell Hitchcock and Philip Johnson, adhering to a desire for a universal aesthetics while stripping away any vestiges of racial particularity. Modernism was intended to be raceless, nevertheless only one of the 62 projects depicted was designed by a non-European and non-American architect.

Emerging from beliefs of the superiority of a particular race and its attributes, the modern movement and its reverberations necessitate, therefore, to be reconsidered in every of its aspects as they might have hindered - or even might still be hindering - the organic unfolding of the architectural style coherent with political, economic, and cultural specificities of each locality. The universalism of the modern must fundamentally be questioned for their relevance, even if it is now an inseparable part of every architectural history and tradition. It most probably will not be an abrupt rejection of the modern movement - even though it might be necessary at first - but mostly a pursuit to understand what truly are the needs and desires of each context defined by locals and not by foreign forces.

TOWARDS A NEW ARCHITECTURE PARADIGM

INSTR.: MABEL O. WILSON
YEAR: SPRING 2020
COURSE: QUESTIONS IN
ARCHITECTURAL HISTORY 1

After the modern movement following the footsteps of colonialism through Africa, the postcolonial era is marked by the pursuit of African and national identities. Reverberations of this aspiration are possible to read in the architecture developed in the last century but the realization of the authentic has yet to be fully embodied. Cross-cultural psychology might offer an initial scaffold to understand the future steps for the fruition of this objective.

Irene Cheng in her essay “Structural Racialism in Modern Architectural Theory” (2020) argues about the racialized origins of the modern movement in architecture and traces back the groundwork that supports Adolf Loos’ criticism of ornamentation to the scientificism of race theory of the nineteenth century. Looking at her text through the lens of Edward Said’s book “Orientalism” (1978), it becomes easy to imagine how major sectors of the European society of the nineteenth and early twentieth century espoused a hierarchical understanding of racial distinction that spilled onto architectural theory and that eventually justified colonization of African and Asian territories with the support of the modernist aesthetic.

Before the nineteenth century, most thinkers leaned towards the “Christian belief in the essential unity of humankind” (Cheng 135). In the midst of the civilizational hubris, there was a fundamental belief in human equality and biological uniformity sided with the tentativeness of tracing causes for human diversity. Differences and their explanations pointed mostly to the climate and environment but based upon an essential unity of all humans.

A shift came to be in the nineteenth century that transformed those beliefs into the notion of “starkly distinct and deeply engrained racial natures” (Cheng 136) that had either caused or retarded cultural development, and that was accompanied by a heightening of the sense of civilizational superiority of the European society. Unsurprisingly, this movement can be associated with economic and political interests driving major economies at the time, as the slaveholding United States and the leading imperial powers France and England harbored the strongest proponents of racial theory. The European superiority served to justify subjugation and slavery, which in turn fueled the growing large-scale industrialization’s need for raw materials and markets.

The trope for race theorists soon turned to establish a hierarchical developmental timescale to place different races, ranging from the primitive to the most advanced, putting non-whites developmentally before and below Europeans. Additionally, the narratives attributing to racial evolution, decline, diffusion, and hybridization as catalysts for historical change were gaining popularity.

These narratives were eventually mirrored and utilized in architectural thought. Anthropological and racial studies gave support for more “progressists” advocates of architectural change that defended the detachment from the academic and classicist approach - which sought the immutable model of divine nature - over the model of the biological and geological sciences in order to uncover the objective laws of historical change governing the evolution of societies and their cultural products.

Moreover, the distinction created between racial natures could be seen in the French academician Quatremère de Quincy’s and the English historian Edward Freeman’s theoretical postulates, both of which

had a significant influence on the architectural thinking of the nineteenth century. Quatremère de Quincy proposed a first radical break with the tradition of monogenesis in architecture when he wrote an essay in 1788 about three original types: the cave, originated by a hunting people and originating the stone architecture of Egypt; the tent, abode of shepherd and basis for the Chinese wooden construction; and the hut, created by a farming people and the foundation of Greek architecture. The hut was the only one considered susceptible to progressive development out of the three options.

This racial association and the preference for the European styles can also be perceived in Edward Freeman’s text “A History of Architecture” (1849), in which he added a fourth original style - the Gothic cathedral that mimicked the “deep forests of the North” (Freeman 15) - and, unlike Quatremère de Quincy that saw in the geography and habit as conditioning forces behind these typologies, Freeman understood race and its inherent attributes as the driving causes:

(...)

Cross-cultural psychology might be able to provide concepts that could inform some reflections about postcolonial theories in architecture, as it brings insights about the individual and social psyches that possibly influenced such processes of cultural domination and also points out to pathways for resolution.

The idea of acculturation, that is when two or more cultures meet in the individual or collective level, shows a potential to be translated into the discussion brought in this text. Before the psychological and sociocultural adaptation of an individual or a group, meaning the satisfaction and overall emotional wellbeing of the individual and the development of the appropriate sociocultural skills for living effectively in the new milieu, occurs the process of acculturation, when these two or more distinct cultures meet and a decision is made by the subject or forced through the new environment on how that will be processed.

There are four different acculturation strategies that Berry (2010) terms as assimilation, integration, separation, and marginalization. They indicate the extent to which people want to maintain their heritage culture and identity and how much they want to participate with other groups in the larger society. Assimilation is used when individuals do not want to maintain their cultural identity and seek closer interaction with other cultures, even, in some cases, adopting the new set of parameters of the new society. Separation is defined by the maintenance of the original culture and avoidance of interaction with the new social environment. Integration is characterized by the interest in maintaining one’s original culture and its integrity while also participating as an integral part of the larger social network. Finally, marginalization is defined by the little possibility or lack of interest in cultural maintenance and in relating with other groups, often because of external enforcements. They are neither static nor an end outcome themselves. Nevertheless, they present some framework that seems useful to think on seeking a renewed postcolonial identity in architecture.

These concepts differ from the colonial process in a few ways. They were created to describe the process undergone by a subject that moves into a new culture, becoming himself a minority in this new society, and does not necessarily refer to a dominating group that exerts power over a larger population. Moreover, the aspect that the colonized suffered subjugation on their own land might make the case for a distinct set of conceptual constructions. However, for this pseudo-scientific and quasi-rigorous text, they start pointing a way to understand postcolonialism and ideological independence in architecture.

For the colonizers, the intention was to create an artificial environment of cultural domination, to which the local peoples would be assimilated into. Assimilation would not annul the exchange of cultural traits but the opposing cultures were still not placed on a level of equality, as described by Said. Such assimilation was also reflected in the built environment as the modern movement became pervasive through the continent. There were attempts by a few architects to create integration but they were not revolutionary. When the independence movements started to emerge and the imperial powers began to physically leave the territory, their continuous political, economic, and cultural permanence would still maintain an ethos of precedence of the West (mainly the white Western European and American culture) in a manner that integration seemed the only possible path forward. It will be a long and arduous undertaking but the more autonomy the African nations gain the less there will be a need for any acculturation at all since the historical background all over the continent is so rich and diverse to buttress their own singular expressions. That might not equate in the end in an unequivocal denialism of the Occidental since to a certain extent all peoples undergo some kind and degree of acculturation with globalization becoming the norm. Yet, non-apologetic autochthonous architectural practices and canons must still sprout or expand concomitantly with the transformation of the current global value systems. A distancing from the age old racial historicism and a critical embracement of the regional through discussions, practice, and battles seem to be imaginable. And, as Lokko would endorse, we should live through our imaginations and not our histories.

UNTANGLING AUTHENTICITY

INSTR.: ATEYA KHORAKIWALA

YEAR: SPRING 2021

COURSE: QUESTIONS IN ARCHITECTURAL HISTORY 2

EXCERPT

The building for the Faculty of Architecture and Urbanism of the University of São Paulo (FAU USP) was finished in 1969, in the new University campus placed in a former rural state far away from the city center. It was designed by architects Vilanova Artigas and Carlos Cascaldi, and it was developed concomitantly with the pedagogical transformations the school was furthering during the 60s. Artigas was an active actor in this process, and the new curricular departmentalization between History, Technology, and Project, and the consolidation of a generalist formation of the architect, which would include landscape architecture, industrial design, and visual communication, were all considered in the compartmentalized distribution of programs throughout the building. It is the reification of a curricular change that represented a search for autonomy of the Brazilian architectural culture from the dominant European and American trends. The distribution of programs, their relationships and clear interconnections, all unified under a single overarching roof, were the embodiment of this new curriculum as a new aspiration for the future of architecture in the country. (image 1 - section with legends - The original functions of each floor)

This building - and especially its section - has been a source of inspiration for students and architects around the world. It carries, expresses, or is the target of the projection of diverse meanings. If the architect's statements are considered, the building is an articulation of democracy. It has no doors in its entrance, nor for its studios, bathrooms, museum, cafeteria, and making space. It has an atypical wide and open entrance. The ground floor has no formal separation with the outdoor grass fields and parking lot. The right to come and go can be freely enjoyed and no one is excluded. The building was designed and based on an aspiration for equity, and has become for some a symbol, in Peirce's definition, of that concept. Additionally, the uses might reinforce the symbolic nature of the building as they add more layers of memory to the perception of an admirer. The numerous public assemblies and lectures enabled by the many unbounded and connected areas have still contributed to (or perhaps were stimulated by) the symbolic aspect of the project.

The appeal of the project also lies in its rich visual and acoustic vertical connections, more perceivable in its section. The memories of these experiences are taken and carried by its users and impact the meanings they attribute to the construction, in a constant exchange with meanings derived from third party sources. This experience is only partially conveyed by images and articles that travel overseas, but they are enough to demonstrate the uniqueness of the design. This strength of the design mixes with values one might attribute to the modern movement and the brutalist movement, and ultimately, to the Brazilian and Paulista (def: original from São Paulo) architectural idiolect stemming from such movements.

Some aspects of the building can confound notions that are part of our collective perception of architectural attributes. From a distance, it appears like a simple concrete box on a plinth, which might not be appealing to all but is attractive to many. Parts of this box covers a lateral parking lot and several pathways that don't have any partition separating them from the ramps or the large central void. The boundary between the exterior and interior gets dissolved as you approach the building. Expectations for a clearly defined point of entrance is further blurred by the pavement covered in Portuguese stones, usually used in outdoor areas, that here sits partly outside of and partly beneath the grey box. Instead of a clearly marked entry point, the journey inwards and upwards seems to be better defined by a gradient of interiority or a gradient of exteriority. Almost every space is marked by even a hint of interiority and exteriority.

FAU USP + NEW AND OLD MEANINGS

UN-CENTERING CRITICAL REGIONALISM

DEATH BY ISOLATION

INSTR.: MARY MCLEOD

YEAR: FALL 2021

COURSE: THEORETICAL

TURN IN ARCHITECTURE

1960-2000: POSTMODERNISM,

DECONSTRUCTIVISM,

FOLDING, BLOBS, AND

POST-THEORY

The roof also allows new peculiar attribution of meaning. There are 960 translucent fiberglass domes that cover the entirety of the project. They filter but still allow a very clear understanding of the weather even though the levels of the studios and classrooms have no windows. The clouds covering the sun can be felt and seen, and the rain can be clearly heard (and sometimes felt, too, (un)fortunately). The movement up the levels, though leading to more enclosed spaces, does not lose its exteriority as all the levels seem connected and expansive, and the roof becomes a new sky

As you walk up the ramps, they get transformed into meeting places as you casually encounter peers. It has also been used as places for protest as well as spaces for exhibitions. Sometimes they become observatories and people watch people below giving lectures or just interacting with others. Even the circulation, which would commonly be a secondary priority, gains new meanings by its distinct new uses.

The FAUUSP project challenges common unconscious meanings associated with architectural elements. And as one learns more about its conception and history, the layers of meaning and its symbolic corpus only grows. This amalgamation and shifting of meanings, perhaps, has contributed to building Artiga's project's historical relevance.

Frampton's essay "Towards a Critical Regionalism: six points for an architecture of resistance" (1983) presents a reaction to modern and post-modern architectural theories with a claim for regional investigations and groundworks for a renewed approach for architectural design. In this text he proposes that the characteristics that are deemed local such as climatic and topographic conditions should be incorporated into the universal and global culture to transform it in a specific way that will produce a unique architectural expression. However, this perception might be limited by a Western European/American (WE/A) outlook which presupposes, takes for granted, and imposes a "universal" culture that could in fact be understood as a WE/A framework that was made ubiquitous by colonial and imperial forces, therefore not being vital in the creation of a regional architectural expression.

Frampton highlights Jørn Utzon's Bagsvaerd Church as "achieving a self-conscious synthesis between universal civilization and world culture [or the "resistant, identity-giving culture"]" (p.23). And he defines Critical Regionalism as "a cultural strategy [that] is much bearer of world culture as it is a vehicle of universal civilization" (p.23). Indeed, universal civilization is upon all of us, as we cannot deny the impact of neo-liberal capitalism shaping the global economy. It transforms city centers into a homogenized forest of glass towers that attempts to create global cities and attract foreign investments. Nevertheless, the "universal" concept that Frampton uses, which also encompasses the modern movement ideals and aesthetic, still implies a WE/A framework that has forcefully taken over every nation in the globe through colonial and imperial endeavors that have been in action since the Age of Discovery until the African colonization and the American imperialism through hard and soft powers. The "universal civilization" has made the influence of the WE/A architecture traditions almost inevitable on the creation of a regionalist expression. However, they are not indispensable. The dominant systems fabricate the need for assimilation as a path for the integration in a global economy and society, but this should not be the case since this idea apparently is an imposition by capitalists from hegemonic countries that can see any diversity as a risk for their money and time. There is a "risk" in facing a different intellectual and cultural framework that demands from the observer instead of the observed. Even considering that this "universal civilization" might be symptomatic of globalization and financialization which in turn gives way for a hegemony of certain localized cultural productions over others, to infer that regionalism needs to intersect with it might not be completely true. Regionalist architecture, as an identitarian pursuit, should not involve assimilation but a critical assessment of its foundational idiosyncrasies, which could be historical and also avoidant of "universal civilization" impositions. It could also be understood as a process of self-affirmation that leads others to adapt to an authenticity instead of the inverse.

This position differs from the arguments the author presents as he favors an attention to local natural features and the tactile and tectonics as means to identify regionalism. Being a response to the emerging postmodern theorization, the refrain from historicism was a push against a superficial symbolism and the commodification of the architectural production. However, history informs us about behavior, cultural traits, and even local attitudes towards climate, topography, and materials that are part of the identity of the land. Moreover, the subjugation of territories across history has muffled many diverse cultural developments that were already in place, calling for a need for their re-surfacing and consequent evolution. Therefore, in many localities the observation of natural elements might not suffice to define boundaries for a regional practice, and a critical analysis of historical traditions becomes fundamental. In places where an architectural tradition cannot be identified, the outlook towards nature might be an appropriate starting point. Yet, in many others, the natural elements can be dismissive of a rich cultural heritage that has potential to influence contemporary architectural practices. If only natural aspects are considered, styles would again be homogenized around the globe as such characteristics are similar in different countries.

What is behind these arguments is the intention to see the WE/A canon uncentered, and Frampton, in his first text on Critical Regionalism, was still placing this concept under a fallacious primacy of the WE/A civilization. In many ways such an influence is unavoidable however it is not a conceptual pre-requisite. A critical distancing from such an influence might even be necessary for a clearer understanding of what is authentically regional. And what might be left after might be a more even ground and more room for different identities to evolve, and not a hierarchical value system that privileges only a few of them

Lúcio Costa's discussions and activities towards laying the foundation to what he argued was a proper pathway for the development of an autonomous Brazilian architecture was a product of its historical context and is generally perceived as a successful statement and legacy. It has laid a strong foundation that introduced the reflection of how the nation's identity interacts with the Modern Movement and universal narratives, and created a relevant backdrop for the establishment of contemporary Brazilian architectural expressions. Despite its successes, much yet is left to be uncovered on the definition of a national or regional articulation as his discourse denounces a privileged standpoint that did not aspire to or would not have even been able to be all-embracing in its comprehension of *brasildade* (Brazilianness). He has dived into a crucial aspect of the country's history and formation and we can now complement his reading with complexities brought up by historical developments. More than definite answers, there might be an open ground for current generations of designers to redefine the boundaries of Brazilian architecture.

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Lúcio started his studies on architecture when the Neocolonial style was on the rise as a nationalist aspiration and political endeavor. Architecture had been utilized by the state government as a tool and symbolic representation that expressed values that were considered generalizable as outcomes of a society but when in fact it was the manifestation of interests of dominant classes. This was the case not only with the Neocolonial style during the First Republic (1889-1930) but also with Eclecticism during the end of the Empire period (1822-1889).

Symbolic national values were construed by the creation of a collective cultural imagination that relied on the emergence of a "hope for a fraternity between peoples theoretically equals in their rights and in the opportunity to realize individual aspirations" (da Silva Neto, 2009, p.8). Among many initiatives of social organization to achieve that goal, the establishment of symbolic forms that act as cultural messages to the nation becomes necessary, and it is in part a task of the State to reproduce them. Intellectuals with a nationalist impetus either by self-determination or State imposition, are also made responsible of building these symbols (da Silva Neto, 2009, p.8).

Lúcio Costa was one of the assignees during the Vargas Era (1930-1945), and, alongside writers, musicians and visual artists working in their own fields, he sought to advance the state of architecture in the country at the same time that the identity of the nation was being consolidated. Literature has a pioneering role in the process of identity formation, as it feeds the perception of an integrated whole through heroic narratives, and in doing so, creates a collective memory of common self-cognizance. Books with mythological heroes like *O Guarani* by José de Alencar (1857) could be seen as performing such duty. This lay the foundation for an awareness of common traits and individuals incrementally feel they are part of a national community even if they never end up knowing their peers.

In a second phase of national construction, according to Miroslav Hroch, Czech historian that observed a 3-phase process of national movements formation in Central and East European countries, a new range of activists emerge, seeking to win over as many of their ethnic group as possible to the project of creating a future nation (Hroch, 2005). This phase occurs in Brazil between the second half of the Empire to the

LÚCIO COSTA AND THE PURSUIT OF A NATIONAL IDENTITY IN BRAZIL

INSTR.: MARY MCLEOD

YEAR: SPRING 2022

COURSE: MODERNISM AND THE VERNACULAR

EXCERPT

1930's Revolution, when the artistic production is encased in the rigid rules of the Beaux-Arts academy. They are limited to a Renaissance language seen as the only valid artistic expression to be taught in academic circles. Consequently any expression of popular art was considered lowly or even pathological. This was the period when Lúcio was trained in the Beaux-Arts academy in Rio de Janeiro, in which he was admitted in 1917. He describes his education in Registro de uma Vivência (1995):

"My architectural formation was traditional. We studied several styles, from the Gothic to the Renaissance, in order for the student to be able to respond to commissions, be it a church or a bank. Then we would go back to old styles. This attachment to tradition was a thing so binded to reality, to the present moment, that there was not this divorce people have, to think that the past is one thing and reality is another" (Costa, 1995, p.5a)

He was trained to advocate for the Neocolonial style since this movement was trying to establish a return to the past in a manner that maintained an elitism and a firm boundary of the legitimate architectural style for the era. It was "an allegoric connection with the past production of a dominant aristocracy" (Da Silva Neto, p.59). The declining agrarian oligarchy was losing economic power since the slavery abolition in 1888 and was attempting to unify the nation under its own terms towards their own objectives. From the Eclecticism to the Neocolonial, it was a performative patriotism of the ruling class, which excluded the popular culture and sought to maintain a power structure that was already rotting. And Lúcio, a few years after graduating from the Beaux-Arts school, sided with an opposing current that was also looming. He would soon realize that the architecture that was defended by the Neocolonial did not embrace a more quotidian type of architecture and instead prized one that had more visibility and prominence:

"I got caught in the Neocolonial Movement. It was this extravagance of trying to go back in time. This awareness that things change, but the essential is maintained from a period to the next, this would give me the confidence to accept new situations. Only after this academic formation is that I started to notice that the Neocolonial style was an aberration. It applied religious architecture resources on civil architecture, it would make a salad that did not correspond to reality anymore. Then I started to distance myself from the Neocolonial calling." (Costa, 1995, p.5a)

Machado de Assis, Brazilian writer born in 1839 from a poor family and grandson of freed slaves, would be the first to include a popular language to the nationalist vision. He highlighted the regular person, the slave and the mixed-origin people from a standpoint of trying to combat the hegemonic stigmatized image they all faced, image that trickled down from the commanding agrarian elites. However, it would be only in the beginning of the twentieth century that this new understanding of the nation would gain more momentum with the further decline of the ruling class in the 1920s and the rise of the modern version of nationalism in the 1930s.

Lúcio Costa begins his influence over Brazilian Modern Architecture in the 30s, after a realization of the disconnection between the most advanced construction technologies that freed the facades from bearing loads and the techniques still in vogue in Brazilian cities. He would join a group of intellectuals that were pushing a new vision for the country, one that would consider the miscegenation inherent to Brazilian history as a positive factor for national development and that included previously unheard voices into the scholarly production. Gilberto Freyre, Sérgio Buarque de Hollanda, and Caio Prado Júnior were writing about the new nationalism, associating development to immigration and adding nuances to the class system which had contradictions to what was previously seen simply as cohesive. In the realm of literature, modernists were divided into two groups. The verde-amarelistas (green-yellow-ists) that defended a harmonious integration of the diverse cultural groups into a homogeneous national culture. On the other hand, the antropophagic or cannibal current, led by Oswald de Andrade, were after a national synthesis that would come from a metaphorical antropophagic process of the universal culture values, which was adapted from cannibal indigenous tribes that would consume their enemies for the appropriation of their qualities and characteristics.

The current with which Lúcio Costa and Mário de Andrade were affiliated, drew from these artistic movements but sought to research the popular paradigms in order to build a national unified culture, which in turn would end up serving the cultural policies of the State government as they would join the public administration as public servants.

Lúcio's background history would differentiate his ideals from the Antropophagic group as he was not born into a family with an established higher status. His father was a naval engineer and he lived in several countries in Europe in his formative years, which provided him with a plural education. From this standpoint, Lúcio affirms that his affiliation to the country only became stronger, as he states in his aforementioned autobiography:

"I have only really known Rio de Janeiro when I was 14, 15 years old. Because I lived so much outside of Brazil is the reason why I am more Brazilian than any Brazilian" (Costa, 1995, p.5a) (...)



This paper analyzes the temple complex Wat Pho in Bangkok, Thailand, and in particular the building that houses the reclining Buddha, which seems to intentionally provide visitors with spatial experiences that enhance the awareness of the divine.

The reclining Buddha is situated in the Northwestern corner of the complex and its main entrance is on its Eastern facade. One enters the complex first gazing at the West wall and then walking alongside the North colonnade in order to reach the square that marks the entryway of the temple. The thick columns with surprisingly narrow spans are experienced from a confined path that is bordered by the temple to the South and accessory constructions and the outermost wall to the North. The width of this corridor carries the visitor in a walk in close proximity to the colonnade whose narrow spans make it be perceived as an opaque surface and hard boundary, providing it with an ambiguity of being (in) traversable. As one continues the path, the windows and doors become more noticeable, but they only allow a glimpse of the interior. The golden frames and the parts of the golden sculpture inside that are visible

WAT PHO AND THE RECLINING BUDDHA: ARCHITECTURE OF THE SUBLIME AND TRANSCENDENCE

INSTR.: RORY O'NEILL

YEAR: SPRING 2023

COURSE: STRUCTURAL

DARING AND THE SUBLIME

through the openings attract your gaze and curiosity towards the interior, promising the experience of a massive figure when you enter the temple. The gold and the intricate ornamentation of the frames appear to be oozing from the openings of the building, hinting on the sacredness contained within which escapes to the worldly ascetic exterior, leaving inescapable traces of the divine marked over the white wall. The faint shimmer of the golden statue seen through the portals resembles the account in Dante's *Divine Comedy* Canto XXXI of the encounter of the protagonist with giants. His disoriented perception confounds the giants with part of the landscape, causing him to immediately fall into awe and fear when the distance to the mountain is shortened and his perception is clearer. The reclining Buddha in Wat Pho can be mistaken for a gilded divider from the outside, only to be discovered as a monumental consecrated human figure when inside. Nonetheless, the aspect of fear is missing in this case, giving way for the pleasure of the mathematical sublime to possess the observer very quickly after the first glance of the golden statue. The prior knowledge of what the building contains partially eliminates the step between confused perception and dismembering and understanding. The sublime experience from the distinction of kind is taken away, but it still remains in the discovery of scale and ornamentation.

The ornamented frames of the windows and doors are conducive for the experience of a mathematical sublime when one first is confronted by the infinite amount of details in the engraving, which are, only in a following moment, more intelligible when zones and elements are detected and individually examined. This sublime impression is heightened when one enters the temple and is met with the abundance of murals and paintings over all surfaces, from floor to ceiling, and the small features in sections of the sculpture. The impression becomes more overpowering due to the exterior being almost completely white, which obfuscates the perception of the interior, impeding the anticipation of what lies within. After the first contact with the bewildering interior, the parts of the composition can be dissected and the murals on the walls can be differentiated from the textures from the columns that are even distinct from the ones on the beams, on the roof, and on the window and door frames. Subsequently, these parts are also dismembered into smaller pieces since murals have varied stories, portions of surfaces have their own pattern and each pattern has its particular colors and shapes.

Two additional rows of structural supports define narrow corridors on the periphery of the temple, creating a path around the Buddha while determining a limited distance between observer and the statue. The constant proximity to the gigantic statue maintains the sense of awe throughout the peregrination, and the scarcity of advantage points that allow the view of the whole image strengthens the mental boundary with the divine. Dante's discernment of what seemed to be towers as actually giants sparked in him fear. In Wat Pho, the gilded wall that unravels into a lying Buddha sparks the sublime by its monumentality, material and the infinitude of ornaments; fear seems absent, since the statue's immobility surrounded by the swarm of visitors sharing the same space all removes any trace of fear, which would necessitate a strong and undisturbed imagination to emerge.

The massive width of the columns and their close proximity to each other seem to be supporting an especially heavy roof. The only part of the roof structure of the central space that is visible from the interior are transversal beams that sit below a ceiling that creates an opaque tympanum covering every other element of the roof. This central space, that houses the statue, breaks the rhythm of spans and doubles the shortest distance between columns promoting an experience of a daring structure, which in turn emphasizes the higher sacredness of this zone through its distinctive spatial qualities and the apparent stable precariousness that covers the Buddha.

The directionalities of the interior are also key for the experience of the sublime. The verticality is explored to instill a sense of vertigo by the expansive and unrestricted height of the ceiling. The simultaneous experience of the vertical space in tandem with the small forms and shapes painted over the architectural elements closer to the ceiling increases the awareness of the spaciousness and its vertiginous quality. The vertical storylines on the murals and the intense amount of labor put onto the paint work over the elements under the roof direct the gaze upwards, placing the viewer in a reverential position facing the divine.

The temple atmosphere is also permeated with external sounds that build solemnity and deference. The constant play of the two gongs adjacent to the building and the sound of the waterfall in the fountain by the main entrance infiltrates the indoor space and give additional anchors for the mind to avoid the distractions and focus on the reverential experience.

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Through architectural elements and qualities, the enclosure of the reclining Buddha in Wat Pho stimulates and propels a sublime and transcendent experience. They incentivize the creation or augmentation of the religious engagement of its visitors with spatial and aesthetic incitements.

Rolês and Rolezinhos

The neologism “rolezinhos” is the diminutive form of the word “rolê”, a slang more commonly used by Brazilian adolescents, and that share some similarity with the french word “rouler” - to go, especially used for transportation means. In fact, “rolê” is used in the expression “dar um rolê”, which in turn could be understood as “having a stroll around”. For many of the youth in Brazil, “dar um rolê” became a common term to express the act of “hanging with friends”, and “rolê” and “rolezinho” the nouns to name the act itself. However, around December of 2013, these expressions started to be resignified in the broader culture, put into evidence by the mass media.

On December 7, 2013, over six thousand adolescents from the age of 14 to 17 years old, gathered for a “rolezinho” in a shopping mall in the neighborhood of Itaquera, East Zone of São Paulo, a peripheral region of the city. The encounter was organized on Facebook and was supposed to be another typical “rolezinho” - en event organized by the youth from middle- and low-income families living in peripheral neighborhoods in the city. They were usually arranged around famous figures in social media, typically other adolescents that amassed dozens or even hundreds of thousands of followers on Facebook, Orkut, Ask, or Youtube. This was not the first “rolezinho”, but it was the one that first attracted the attention of the news outlets and initiated the national discussion around civil rights and social segregation.

The teenagers first gathered in the mall parking lot. The event soon called the attention of other passersby and the police was called, leading many of them inside in a chaotic chasing and running that even had rubber bullets and tear gas bombs, with hostilities coming from both sides. It is a hard event to understand, as there were many contrasting points of view. Many of the staff of commercial establishments were taken by fear and anxiety and saw the event as an “arrastão” - a mob or collective robbery - stating that minor goods were taken. The mall administration affirmed that there were no thefts that day. The police promptly justified their actions by claiming it was definitely an “arrastão” - but their claims are difficult to be trusted. There were no charges for robbery or vandalism made though observers said they saw many stealing caps or drinking and smoking marijuana - there was even a video posted on Facebook of a teenager allegedly exhibiting sneakers he stole that day.

What was supposed to be another encounter to flirt and to meet with old and new friends, in a few hours became a field of violences, and eventually expanded itself physically and symbolically, turning into a phenomenon demonstrating social tensions that were being ignored by most. Soon after the “rolezinho” in Itaquera, others were organized in different shopping malls, the majority of them located in peripheral neighborhoods of the city, gaining similar scrutiny from the news media. Other encounters occurring in different cities around the country also started receiving growing media coverage following the Itaquera encounter.

In São Paulo, the Itaquera event was succeeded by other two encounters in December and two more in the first days of January. On January 11, the mall in Itaquera was again the stage for another “rolezinho”. This time the police intervention ended being much more aggressive. Four other gatherings were scheduled for the same day - one of them in a luxury-brands shopping mall - however, due to the visibility of the

organization on Facebook, injunctions in court were sought to bar these events from happening. Security guards were at the doors impeding underage people unaccompanied by their families from entering the premises. But no one showed up for these events.

The injunctions clearly juggled a conflict of interests and, in these cases, favored the mall administrations. There were a handful of other sought injunctions throughout the country that were in fact denied, as these unconstitutional impediments were seen as unfounded and based solely on rumors of violence and robbery since in many of the “rolezinhos” no case of illegal activity was registered.

The opinions of the general public were also marked by opposing views, giving way to numerous messages of hatred and racial and social banishment. The poll below depicts a glimpse of the opinions of readers of one of the major newspaper in São Paulo, showing how many (possibly middle- to upper-class citizens) were against the “rolezinhos”. The Youtube comments to a video of the first “rolezinho” in Itaquera shows the amount of hatred, contempt, and detachment there were (and that certainly still exists) between what looks like two different worlds separated by race, cultural habits, and purchasing power. The “rolezinhos” and social agitation that followed explicated deep and repressed resentments between two sides of the Brazilian population that we can only dream to see healed.

Funk Ostentação, identity, and class

One of the main discussions had during this period was over the rising middle class and the discomfort caused by the challenge to the established hierarchical class structures. The Brazilian society has always been characterized by its historic and starking income gap, which began to be dismantled by income distribution programs implemented by recent presidential mandates. This led to middle-income families to be seen as equals to the former low-income population to whom they felt and feel superior to, generating friction that burst into something resembling a Marxist class conflict.

As seen by the Gini coefficient graph, the country has seen a decrease in its income inequality, especially during the 2000s, after decades of hardship. The 1980s were marked by the process of re-democratization when the country was freed from the military dictatorship. The economy was left very unstable and during the 1990s the main effort from the government was to stabilize and diminish the inflation, process that involved the change of the national currency to the Real. In the 2000s, a major reduction in inequality happened and several factors could have contributed to it. Equality was starting to be seen as a product of income redistribution, and during the Lula presidency programs such as Bolsa Família or Bolsa Escola - in which an allowance from the government was distributed to families that filled certain checklists such as sending their kids to school or having an income below a certain threshold - were put in place to serve a major section of Brazil's population. Additionally, the minimum wage was a target of development and it was incrementally increased over the following years. This culminated in the lowest Gini score in 2015 of 51.9 and dozens of millions now “joining” the middle class (Mattos 2017).

This economic development seems to have echoed in the cultural production of the younger generation that experienced their parents grow financially. In 2008, in the Metropolitan Region of São Paulo and of Santos (a coastal city in the State of São Paulo), the “Funk Ostentação” was created in the midst of the young population of the favelas. It derived from the Funk already popular in Rio de Janeiro that in turn had its origins in the 1970s. The Funk in Brazil has musical influences from diverse African-Brazilian musical traditions such as the Samba, mixed with American music genres like Hip-hop and Gangster Rap. This is especially true for the “Funk Ostentação”, or “Ostentation Funk”, in which they, similarly to their American counterparts, rap and sing about their material possessions, economic ascension, mentioning themes related to sexuality and women objectification.

The Funk created in the State of São Paulo parted ways thematically from the Funk from Rio (“Funk Proibidão”), where the main topics were mostly concerning criminalized actions and drug use. The former quickly had its songs becoming hits around 2011 and rendered the artists unfathomable financial success. They were the children of this “new middle class” and were influenced by adult references that showed them other ways to prosperity other than crime and drug-trafficking. They were gaining a new purchase power and in their music, these artists had found a channel to exhibit their possessions. They were able to enter the cycle of connecting consumerism and material possessions to their identity and earned more money by attracting listeners through the same desires.

This youth was surrounded by the collective economic growth of their communities which fed the lyrics and the listeners with the hope of financial and social ascension. The ostentation and consumerism was a pursuit of legitimation and an attempt to occupy and claim a space where they did not have access before, much like what they saw their parents do in their new economic situation.

Jean Baudrillard (1995) stated that “The compulsion to consume might be said to compensate for failure to rise up the vertical social ladder. At the same time as expressing a status demand, the aspirations to ‘overconsume’ (on the part of the lower classes in particular) might be seen as expressing the felt failure of that demand.” The “Funk Ostentação” can be seen under this optic: the new purchase power and the new hope for social ascension made possible for these families - and especially for the youth - to yield to the desire for consumption and for the social status those goods can proclaim. This musical genre expressed these repressed aspirations and made a profit over it. And as it built up in popularity, its cycle of reproduction only continued as it influenced and, perhaps, shaped the perception of wealth and prosperity of its target public. (...)

ROLEZINHOS

INSTR.: HIBA BOU AKAR

YEAR: SPRING 2020

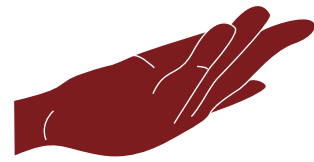
COURSE: ON SPATIAL EXCLUSION AND PLANNING

EXCERPT

PUBLISHED ON **URBAN MAGAZINE**
DIALOGUES | FALL 2020

Tracing Treatment in the Face of an Epidemic

An Analysis on the Accessibility of Opioid Treatment in the State of New Jersey



GEOGRAPHIC INFORMATION SYSTEMS
TIHANA BULUT | RYAN EUSTACE | THIAGO LEE

COLUMBIA CSAPP

Research Question

How does the presence of life altering impacts of opioid use differentiate across New Jersey counties?

Furthermore, how does the availability of Medically Assisted Treatment (MAT) facilities relate to this prevalence of life altering impacts of opioid use?

Medically Assisted Treatment (MAT)	Life Threatening Impacts of Opioid Use	Accessibility to Treatment
MAT facilities use three specific pharmacological therapies to treat opioid addiction: buprenorphine, naltrexone, and methadone. In addition to providing medication, these facilities require patients throughout their treatment. A growing body of research has found that treatments provided in the type of environments are more effective at treating opioid addiction and reducing relapse rates.	This study used the phrase "life threatening impacts of opioid use" to operationalize the detrimental impacts of the opioid epidemic on individuals. Two variables have been assigned to quantify rates of life threatening impacts of opioid use: drug related deaths as caused by opioids as well as drug related hospital visits caused by opioid relapse rates.	Research into the effectiveness of opioid treatment and growing on treatment facilities has found that patients who lived to have 1 mile or less had the highest likelihood of completing treatment, whereas those who lived more than 4 miles from a treatment facility had a lower chance of completing treatment and a higher chance of relapse. This suggests that accessibility to treatment facilities is a critical factor in the success of treatment.

Currently, New Jersey ranks 12th in the nation in its amount of opioid related deaths as calculated per 100,000 residents. Overall, the state ranked well over average in opioid related deaths comparatively to the United States as a whole. Furthermore, New Jersey recently passed a policy measure that made it easier for low-income patients to receive access to treatment for substance use disorders; the state's 1.7 million medicaid patients would no longer have to wait for doctor approval within their health insurance network in order to receive medically assisted treatment for opioid addiction. This reduction in barriers to treatment is vital in the fight against the opioid epidemic. Medically Assisted Treatment, otherwise more simply referred to as MAT, is now considered the gold standard of care for treating opioid addiction. This is the result of the treatments apparent success rate and its ability to reduce rates of relapse above that of any other available treatment option.

Studies have found that distance to treatment facilities and treatment retention are correlated. Typically, the farther a patient has to travel for treatment, the more likely they are to drop-out of treatment, and furthermore, relapse. Patients who travelled between 0-1-miles had the highest likelihood of treatment completion; patients who travelled 4 or more miles experienced significantly lower rates of completion. Therefore, this study analyzed the accessibility to MAT facilities throughout New Jersey.

This study defines accessibility to MAT facilities as having two directions, or rather, as being bi-directional. The first direction of our methodology looks at the availability of MAT facilities in each county, comparing this to other indicators. This was informed by calculating the ratio between the number of facilities to each indicator within each county. The second direction of accessibility, as defined by our methodology, focuses on the spatial manifestation of MAT facilities and the areas they serve. We measured this by creating service areas around each facility that capture populations within a 0 to 1-mile driving distance and a 1 to 4-mile driving distance. We continued by analysing demographic indicators within our service areas as well as within the counties as a whole, we attempted to demonstrate which target populations have high access and low access to the facilities. The full report and its results can be accessed in the link below.

ACCESSIBILITY TO OPIOID-ADDICTION TREATMENT IN NJ

INSTR.: LEAH MEISTERLIN
YEAR: FALL 2019
COURSE: GIS
NEW YORK CITY, NY
WITH TIHANA BULUT & RYAN EUSTACE
[FULL REPORT HERE](#)

Methodology

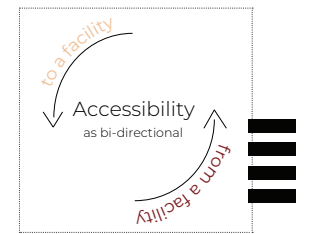
Assumptions and Limitations

- There are other life altering impacts caused by opioid use outside those utilized in our study, for example, arrests, permanent health damage, losing guardianship of dependents, lost wages, etc. All are valid in contributing to life altering impacts. These were not considered however.
- Our scope is limited to the state of New Jersey and the year 2017. Additionally, we are concerned only with opioid use rather than greater drug use.
- The index used to score counties with the highest and lowest rates of life altering impacts of opioid use is unweighted--we weighed both deaths and hospitalizations with equal importance.
- The distance of our accessibility buffers are supported by a wide body of literature showing that as distance away from facilities increases, effectiveness of treatment subsequently decreases. The specific range of 1 and 4-mile buffers, however, are substantiated by the findings of only one study.
- Lastly, although supported by our literature review, we only used Medically Assisted Treatment facilities in considering available treatment options. This neglects a wider breadth of treatment options available.
- It is possible that we experienced double counting in our use of hospitalization and overdose data.

This study defines accessibility to MAT facilities as having two directions, or rather, as being bi-directional. The first direction of our methodology will look at the availability of MAT facilities in each county, comparing this to other indicators. This will be informed by calculating the ratio between the number of facilities to each indicator within each county.

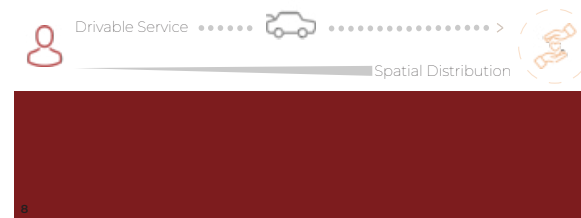
The second direction of accessibility, as defined by our methodology, focuses on the spatial manifestation of MAT facilities and the areas they serve. We will measure this by creating service areas around each facility that capture populations within a 0 to 1-mile driving distance and a 1 to 4-mile driving distance. We will continue by analysing demographic indicators within each service area and aggregate this through a proportional split. By comparing demographic indicators within our service areas as well as within the counties as a whole, we will demonstrate which target populations have high access and low access to the facilities.

Following the acquisition and dataset cleaning process, phase one of our project focuses on establishing which counties in NJ were most and least affected by life altering impacts of opioid use. To establish which counties were most affected, we examine two criteria across NJ's counties: hospitalizations due to opioid use and deaths due to opioid use, normalized per 100,000 people. Once we determined two counties with the highest and lowest impacts according to these criteria, we reclassified these rankings on a scale of 1-5--aggregating them to create an index score. Based on our final index score which ranged from 2-9, we selected our three counties: Bergen (least impacted), Camden (median impact), and Gloucester (highest impact). We then proceeded with our analysis.



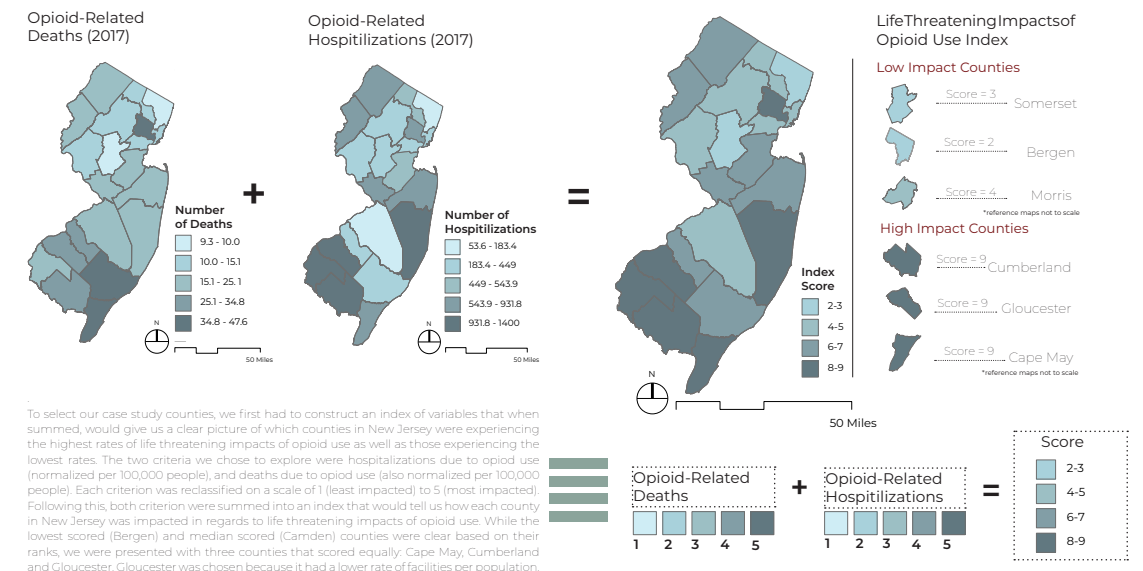
In phase 2 we looked at five demographic characteristics of the population in each of the three counties: its total population, the non-white population, population of adults holding a Bachelor's degree, population below the poverty line, and the unemployed population. A ratio between the number of facilities and each of these parameters was calculated to enable an analysis of the availability of facilities for populations showing vulnerability.

In phase 3, we established service areas of 1-mile and 4-miles based on driving, around each of our selected counties' available MAT facilities. Those within 1-mile driving distance to a facility were considered to have "excellent" accessibility to treatment, those within 1-4 miles were deemed to have "fair" accessibility to treatment and those more than 4 miles from a facility were deemed to have "poor" accessibility to treatment. Within each service area, using the proportional split method, we analyzed demographic indicators that were used in the previous phase to enable an analysis of the population that has adequate access to treatment facilities.



Phase One

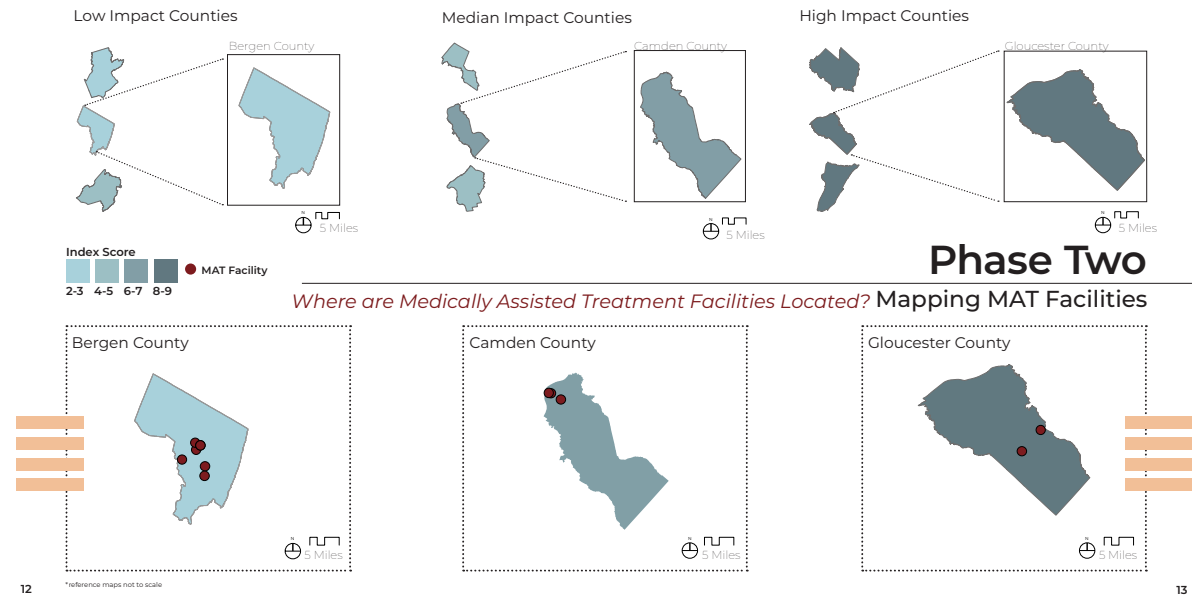
County Selection *How do life threatening impacts of opioid use differentiate across New Jersey Counties?*



To assess accessibility of MAT facilities in New Jersey, we started by narrowing our gaze over more vulnerable counties through a ranked model

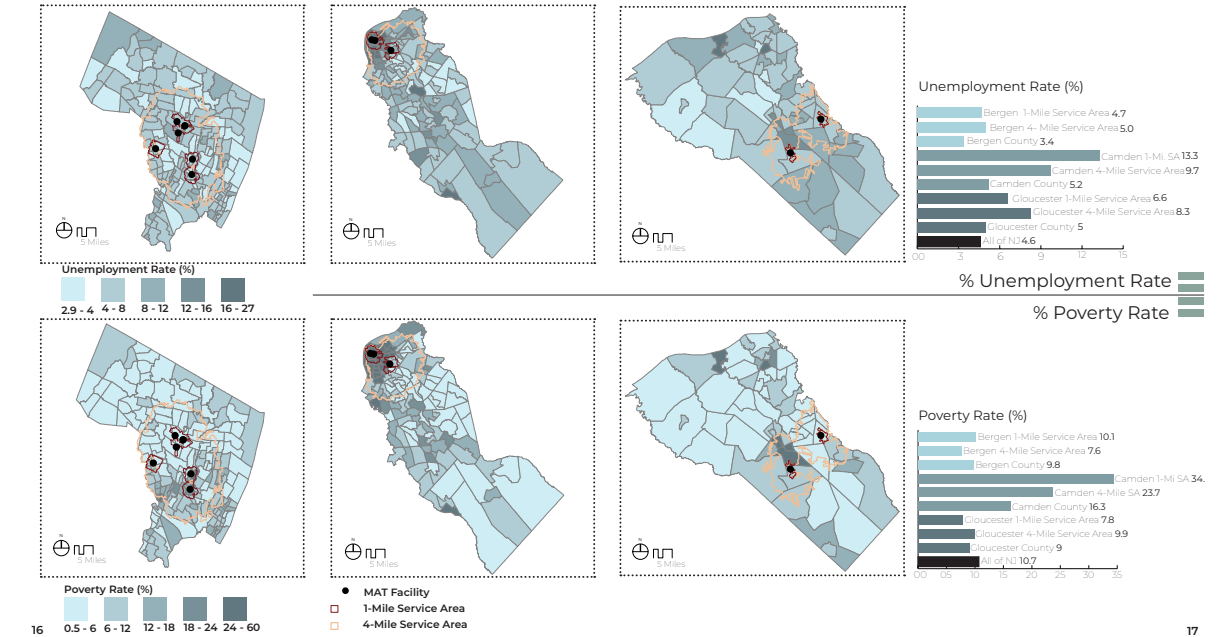
Phase One

County Selection *How do life threatening impacts of opioid use differentiate across New Jersey Counties?*



Phase Three

Demographic Analysis *Who are these facilities accessible to?*



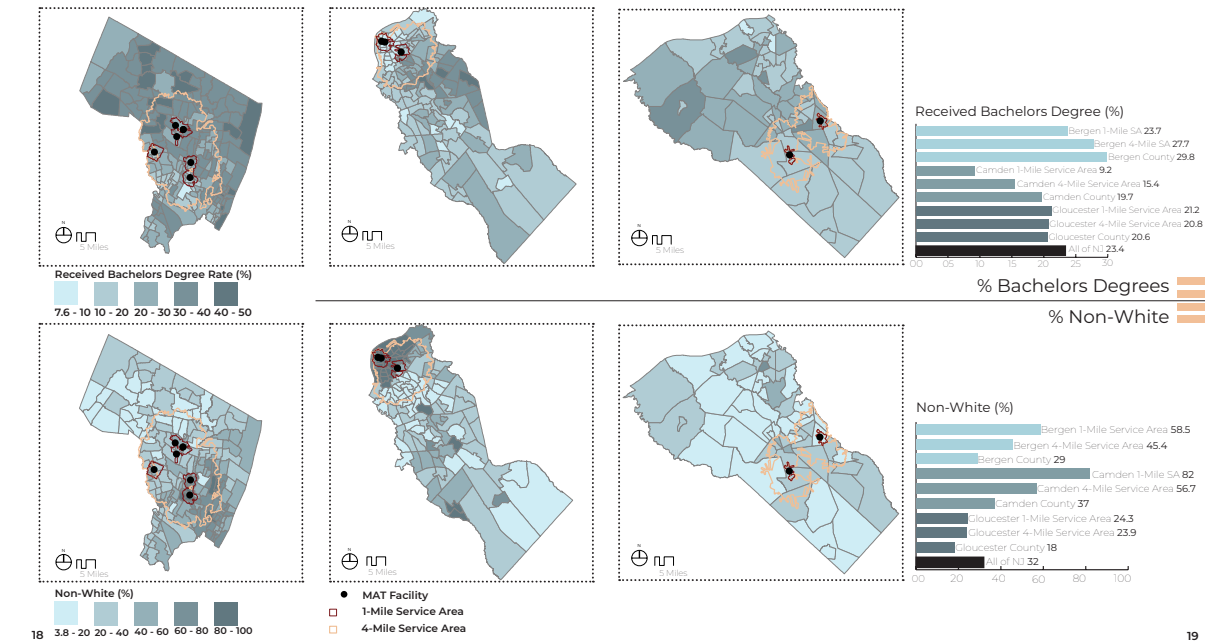
Phase Two

Where are Medically Assisted Treatment Facilities Located? Mapping MAT Facilities



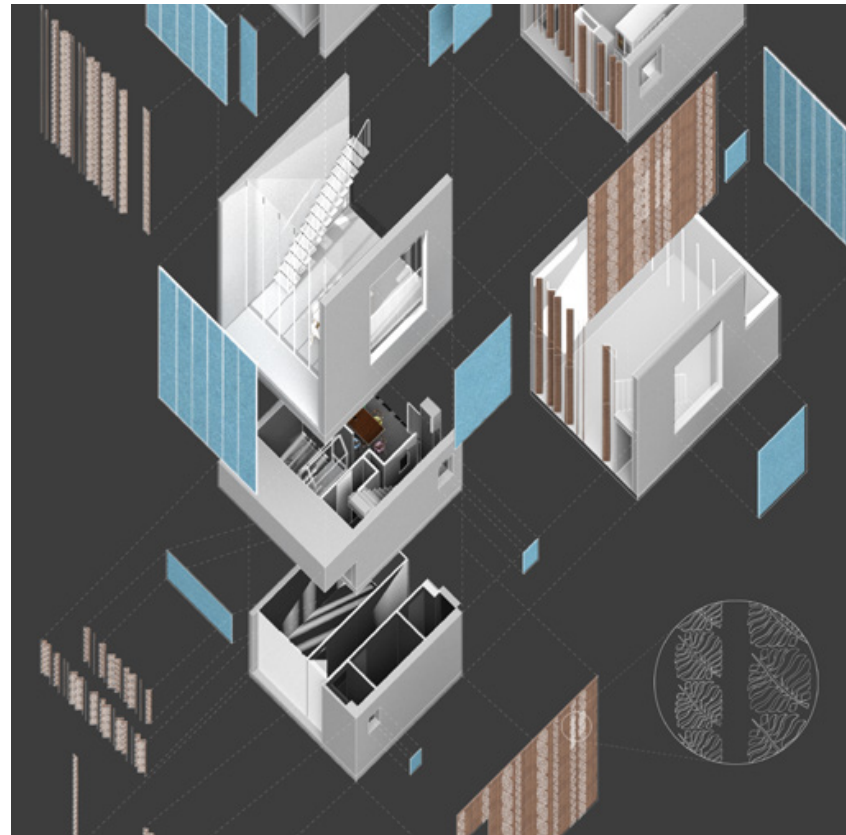
Phase Three

Demographic Analysis *Who are these facilities accessible to?*



In the most representative counties, we sought to locate the MAT facilities and compare their concentration with the population characteristics to understand if their distribution through the state was appropriate

Lastly, we conducted network analysis with the facilities' service areas and analyzed compared the population profile in them.



1

These products were a result of a semester-long investigation of a row house project in Vietnam by Nishizawa Architects, based on a phenomenological approach to the distinct spaces created throughout the building. Drawings alongside a multi-sensorial immersive model and a video were the outcomes, attempting to demonstrate the experience and journey that the project offers.

STUDIES ON THE THONG HOUSE

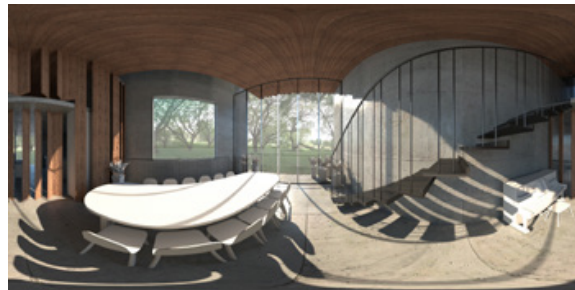
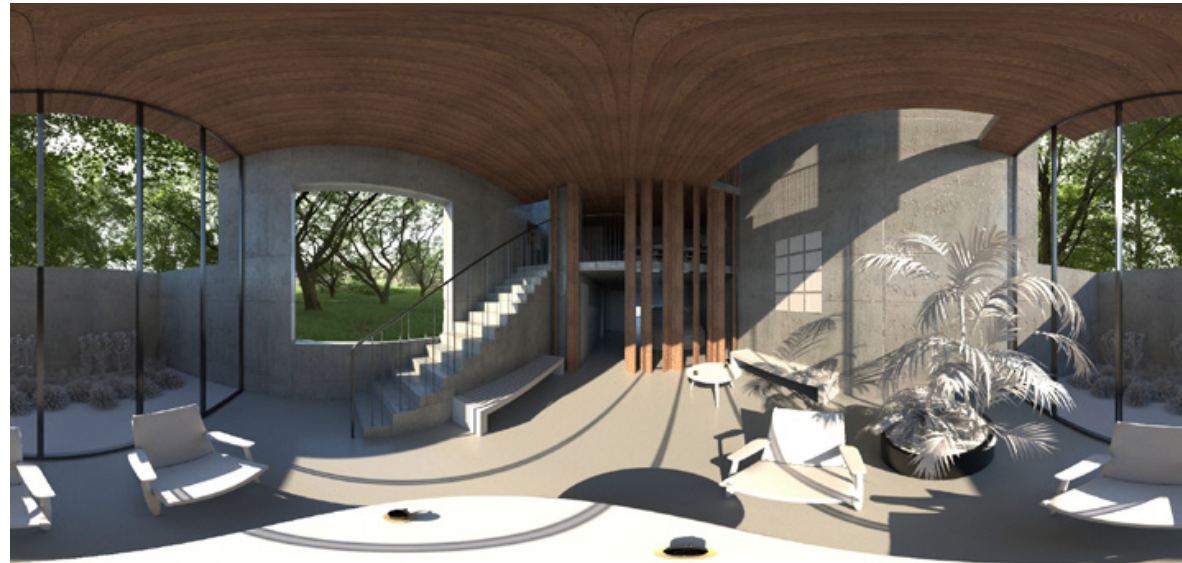
INSTR.: ZACHARY WHITE
YEAR: FALL 2020
COURSE: ARCH. DWG. & REPRESENTATION 1
 HO CHI MINH, VIETNAM

2



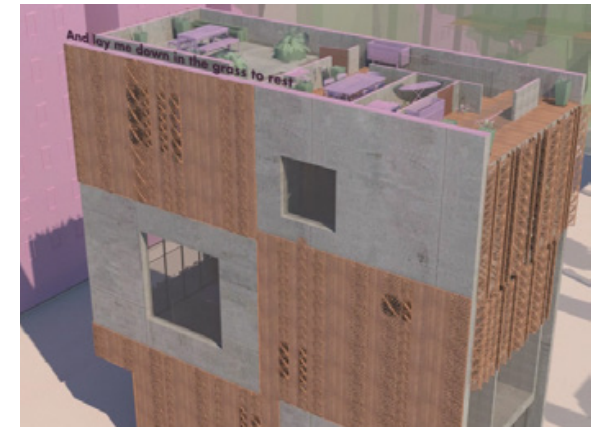
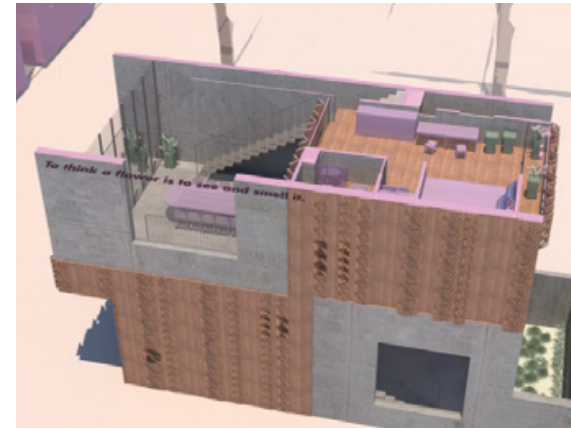
1 Exploded Axonometric
 2 Section Perspective

3



| 128 |

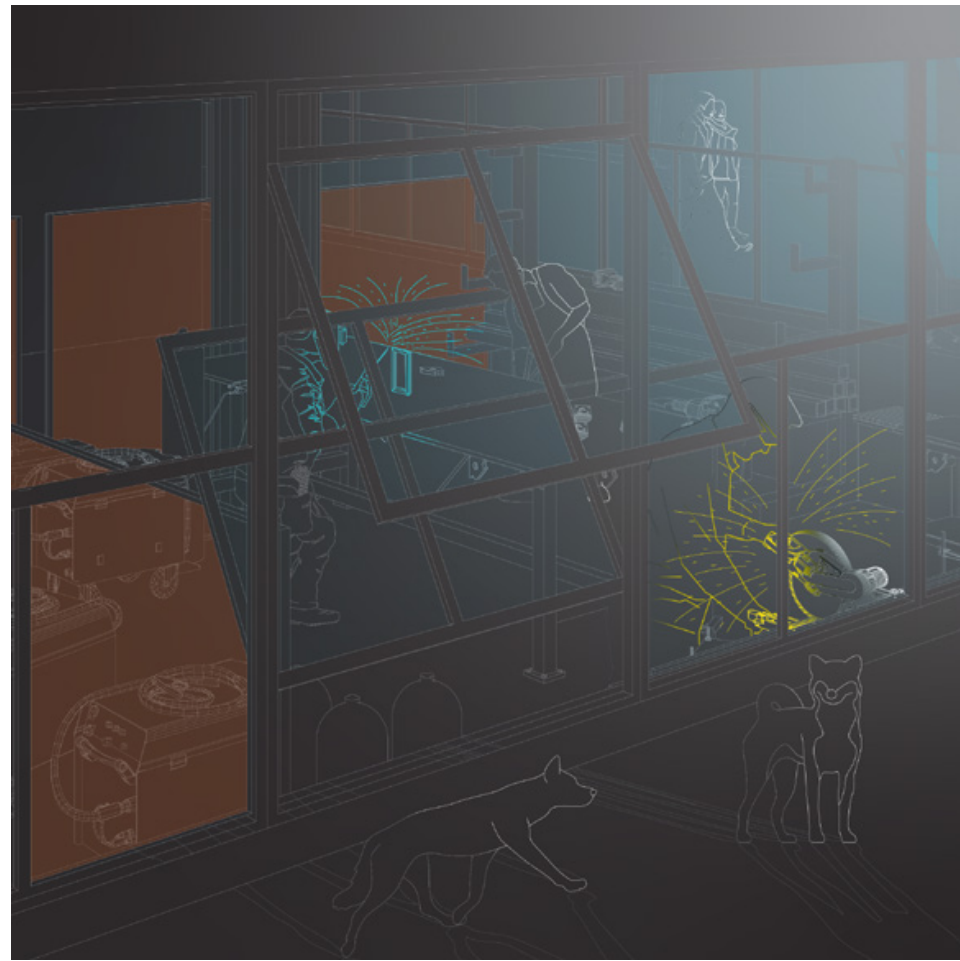
4



3 Multi-sensory immersive model. [Accessible here.](#)
 4 Animation [accessible here.](#)



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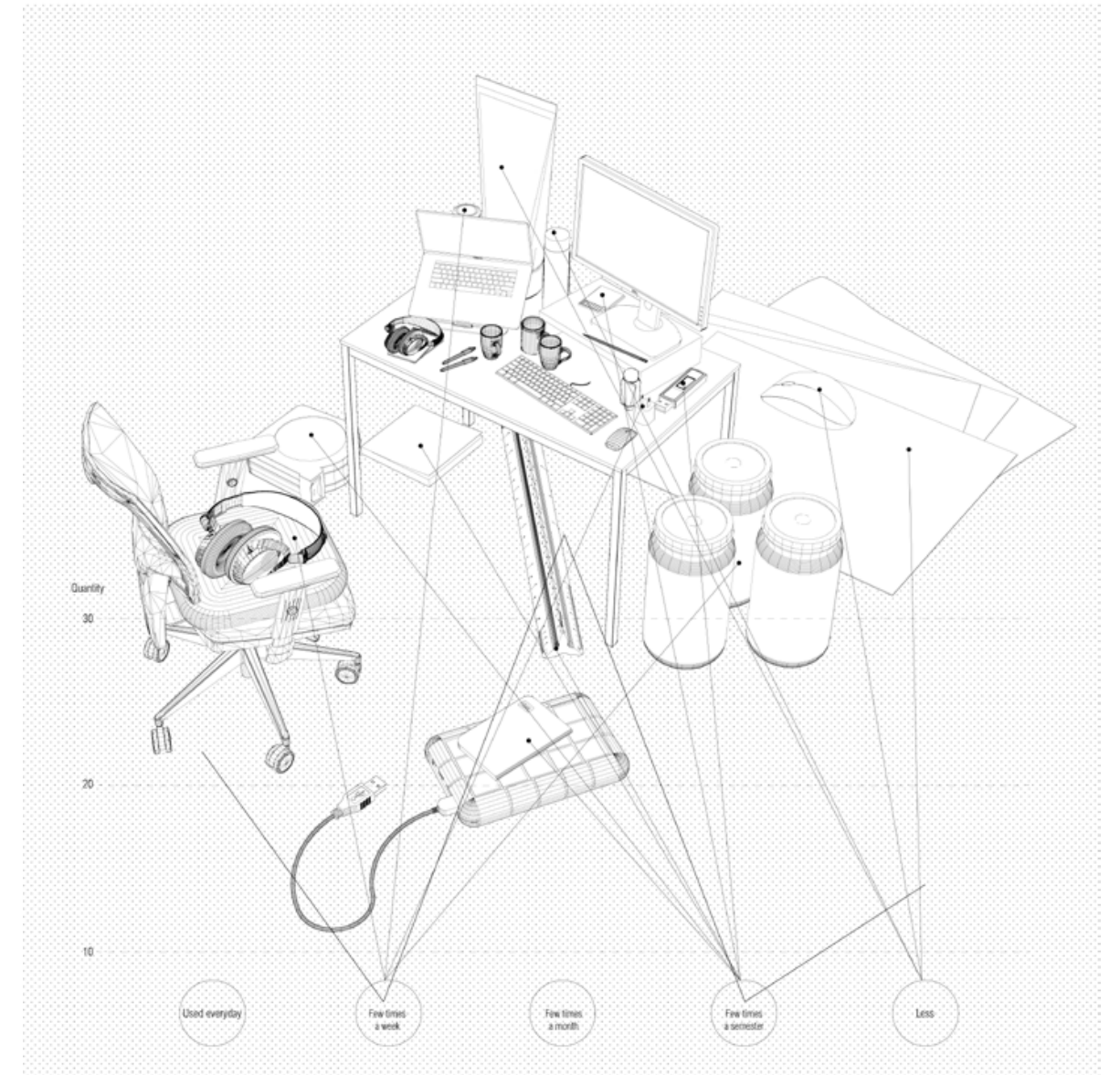
1

The drawings produced on this course continued to challenge us to think of how representation can effectively convey more information when properly explored. On the latter half of the semester we also explored the use of Grasshopper to produce diagrams and infographics.

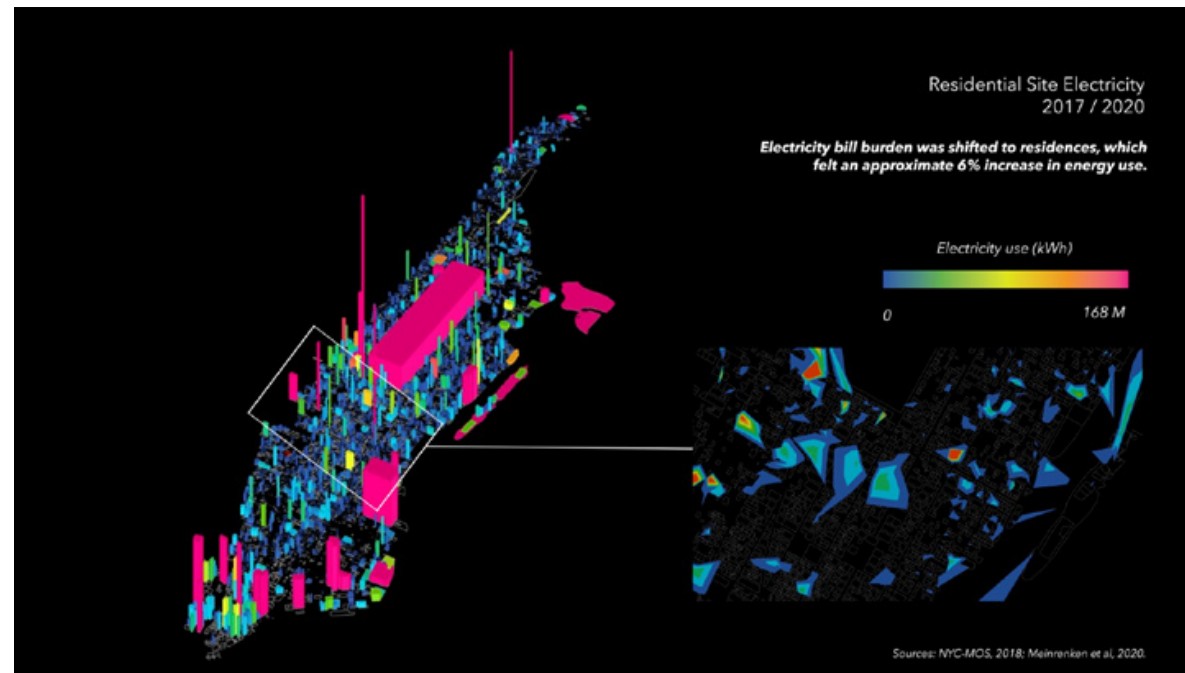
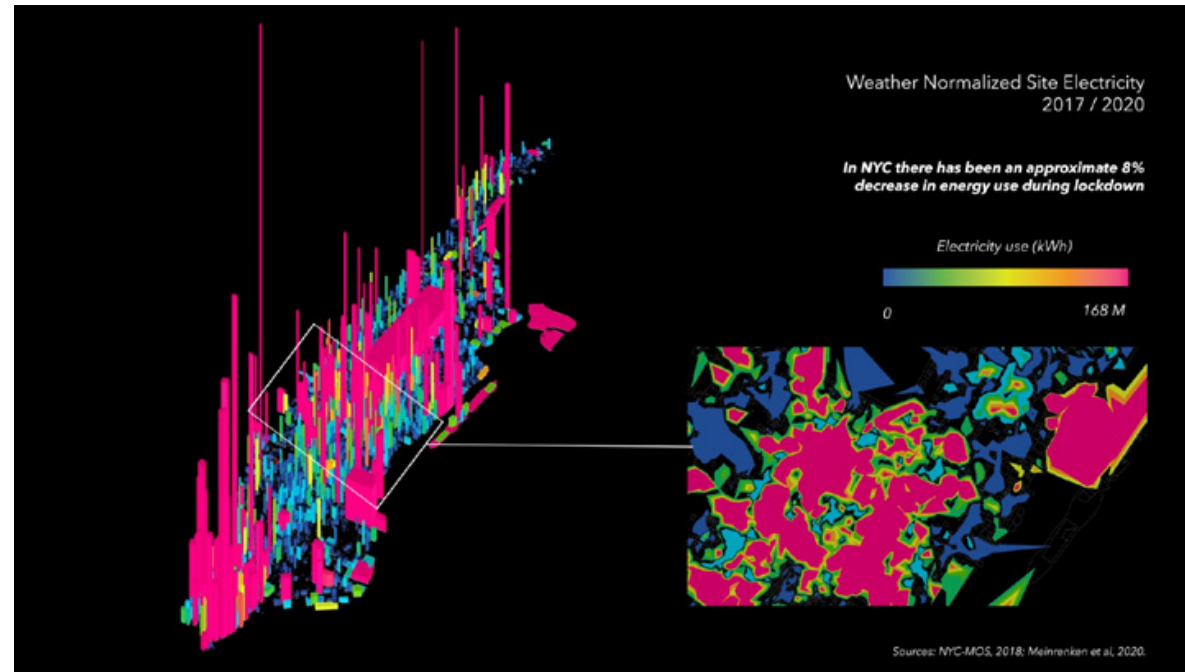
STUDIES ON VISUALIZATION

INSTR.: DAN TAEYOUNG
YEAR: SPRING 2021
COURSE: ARCH. DWG. &
REPRESENTATION 2
WITH PETER WALHOUT

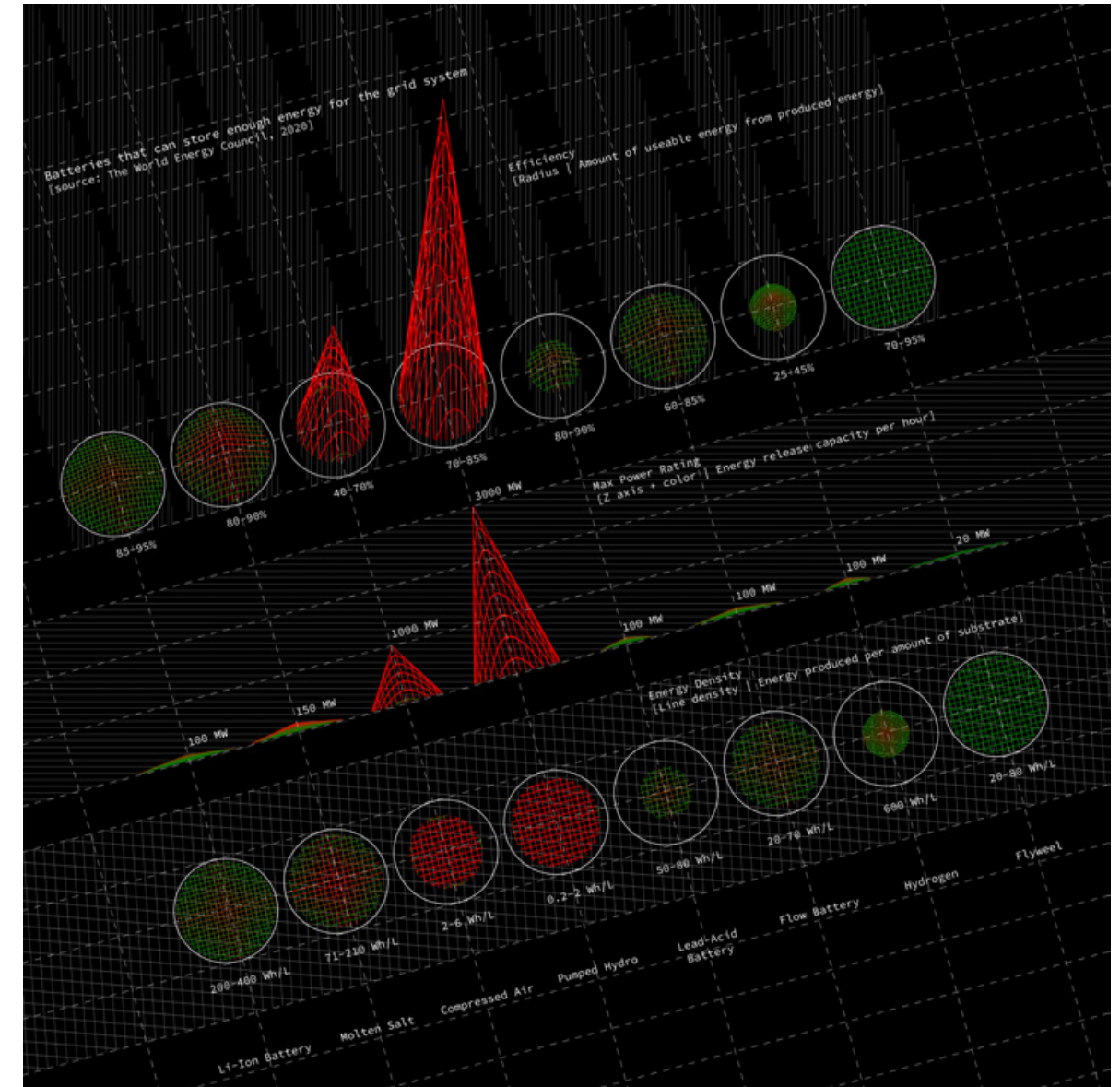
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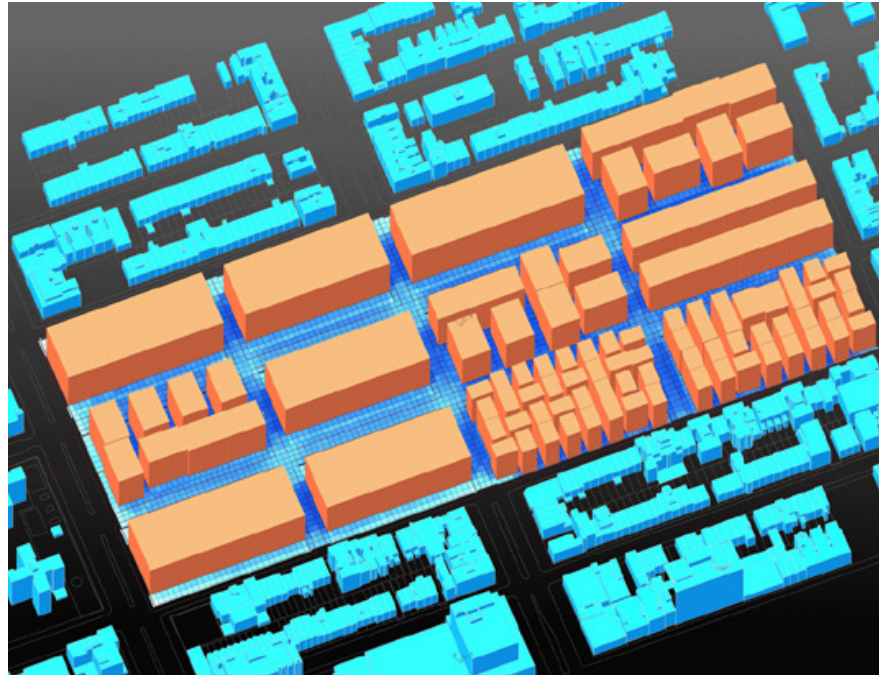
1 Proposing an ideal workspace, exploring lights and transparencies to depict the atmosphere.
2 Inquiry of my personal desk and the objects on it, scaling them to highlight the ones less used.



Frames of animation depicting the decrease in energy use and the increase of the financial burden laid upon residences during the lockdown measures of March-April 2020 in Manhattan, NYC.



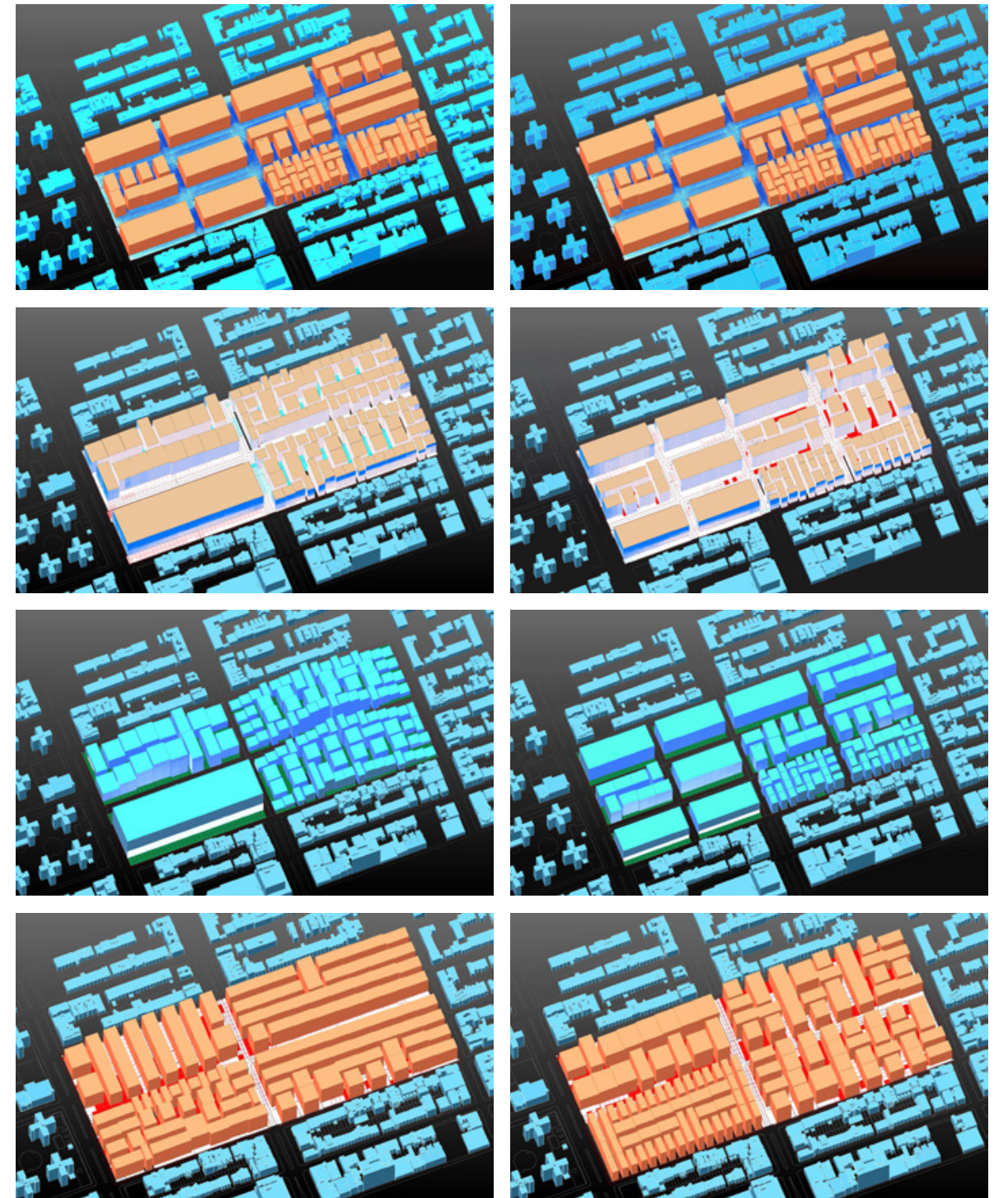
Comparison chart of different energy storage technologies currently in the market.



Using the plug-in Scout in Grasshopper, I analyzed the influence of daylight hours in winter and in summer, sky visibility from the ground, building views, and park visibility from building facades in order to determine the best scenarios for optimized accessibility of residents to open areas.

GUIDELINES FOR MORE OPEN SPACE ACCESSIBILITY

INSTR.: SNOWERIA ZHANG
& LUC WILSON
YEAR: SPRING 2022
COURSE: X-INFORMATION
MODELING
NEW YORK CITY, NY



Iterations for each criteria



From studying different methods of engaging communities in participatory processes, we designed a board game to facilitate the design of an open space in an urban environment. The game is targeted at educating lay citizens in the challenges of designing a public space that incorporates conflicting interests, giving them a first introduction to the frictions and negotiations demanded by a public project. Ultimately this tool serves to give the targeted community more knowledge and empower them when participating in public engagement processes, eventually reducing the power gap between professionals and laypeople.

BOARD GAME FOR PARTICIPATORY DESIGN

INSTR.: DARE BRAWLEY
YEAR: FALL 2022
COURSE: DRAWING TO GATHER
 NEW YORK CITY, NY
 WITH CANDICE JI AND MARGARET HANSON



Abstract

The Korean immigrant population has created a significant presence in São Paulo, Brazil, over the past six decades, and the majority of its 1.5 and second generations are currently in working age. Formal surveys on the political and civic participation of the community is lacking, however anecdotal references are observable: many ethnic associations have emerged and waned over the decades, while changes in economic conjuncture have recently propelled the creation of new ones; a handful members of the community attempted to be elected for political positions but none has yet succeeded; Korean churches are common catalysts for civic services for vulnerable groups. This research aims to understand how the 1.5 and second generation are presently involved in civic and political activities and to contribute to the discussion on its determinants. A historical study on the community and its main ethnic enclave – the neighborhood of Bom Retiro – was conducted followed by a literature review on conceptualizations about immigrants' identity and their relationship with their community and the host country. The latter involved studies from the fields of political sciences, sociology and urban design and was the foundation for semi-structured interviews that ensued, in which members of the 1.5 and second generation from diverse backgrounds were interviewed and their responses analyzed. From these incursions, this thesis proposes a new understanding of the civic and political engagement of the Korean community in Brazil and look into its possible future developments. Moreover, lessons learned from this population are broadened in their applicability for other small- to middle-sized immigrant groups worldwide.

1. Introduction

This thesis seeks to discern the current panorama of the civic and political engagement of the 1.5 and second generations of Korean immigrants living in São Paulo, Brazil, and to analyze possible causes for and future implications from this scenario. This topic originated from the position of the researcher as a second generation Korean immigrant born and raised in São Paulo, whose experience moving to the United States in 2019 to initiate his studies at Columbia University and the inevitable observation of the similarities and distinctions between the American and Brazilian Korean communities sparked the curiosity for a deeper investigation. The perception of a more politically active community in North America compared to the one in Brazil induced questions of the impact of the histories of immigration, belonging and identity on unity and political awareness, in order to understand what factors created the divergence in attitude in these two Korean groups.

The report begins with a historical study and literature review on conceptualizations that connect the immigrant condition to participation. Even though the Koreans in São Paulo are not solely concentrated in one area, more consideration is given in understanding one main centrality which is the neighborhood of Bom Retiro. It has become informally recognized over the decades as a Korean neighborhood and ethnic enclave, concentrating the city's most prominent commercial establishments for or owned by members of the community. In the past few years, with the rise in distribution and popularity of Korean media and entertainment, Bom Retiro has also attracted more attention and more visitors, very recently being under a contentious discussion over the attempt to rebrand it as “Little Seoul”.

A hypothesis was elaborated on the factors influencing engagement in this population based on these investigations, followed by semi-structured interviews that were conducted with members of the community. This data was analyzed against the research and hypothesis, leading to analytical and propositional conclusions.

Though the current research dives into one specific community in a developing country, the applicability of the observations could extend to other small- to middle-sized immigrant groups. Commonalities are shared between these populations concerning the struggles with adaptation to the host country and with becoming a minority group. Thus, understanding more intricacies about the participation of the Korean descendent population in São Paulo can not only expand on a subject that is not extensively explored but also further the discussion regarding immigrant communities at large.

(...)

5. Methodology

In order to better understand the level of participation of the Korean descendants in São Paulo, semi-structured interviews were conducted with a set of people composed of Koreans living in the city, who were contacted via snowball sampling. A group of 26 people were interviewed, and from those 16 were from the second-generation, 9 were from the 1.5 generation (born in abroad but emigrating to Brazil in a young age), and 1 had a distinct immigration path. The sampling method allowed the expansion of the network of connections creating a diverse set of interviewees with distinct backgrounds.

The profile of this group in terms of generation, profession, place of upbringing, church affiliation, and proximity to interviewer are displayed in the table and diagram below. It points to possible reasons for similarities or differences in some answers from the interviewees in topics such as how they perceive the engagement of the Korean community, how much are they themselves engaged or how they evaluate the Brazilian political system.

Questions were elaborated according to the themes investigated in the literature review however, after a few interviews, new topics were added and new questions were created based on topics of relevance that appeared in the responses. The existing questions were condensed so that the interview would not need to extend beyond one hour.

In addition to that, questions were adopted from the American National Election Studies conducted by the University of Michigan's Center for Political Studies, specifically the ones that are used to measure the internal and external political efficacy among the American electorate. These studies were initiated in 1948 and have been conducted ever since in the period around the major American elections in order to examine the political behavior of American voters. The questions used in interviews for the current study were taken from original set of questions on political efficacy and a few from later developments of the same survey (Craig, Niemi & Silver, 1990). The questions in the original survey demand simply an agree or disagree answer, and in the interviews conducted for this study, the interviewees were allowed to elaborate on their replies.

Data analysis was performed using the Thematic Analysis method (Mihás, 2023; Nowell et al, 2017; Braun & Clarke, 2006). This qualitative research method seeks to identify, analyze, organize, describe, and report themes found within a qualitative data set (Nowell et al, 2017; Braun & Clarke, 2006). A theme can be defined as “an abstract entity that brings meaning and identity to a recurrent experience and its variant manifestations. As such, a theme captures and unifies the nature or basis of the experience into a meaningful whole” (DeSantis & Ugarriza, 2000). Thus, following an iterative process, the data is systematized and categorized into codes and, eventually, into themes that interpret the raw material.

Braun and Clarke (2006) describes a six steps iterative method for thematic analysis: (1) Becoming familiar with the data, involving data immersion and iterative cycles of reading to generate further insights; (2) Generating codes, which refers to labeling and indexing important sections of the text as they relate to a theme or issue; (3) Generating themes, meaning sorting the codes into higher-level topics or themes, ending the process with tentative themes and subthemes; (4) Reviewing themes, in which themes are interrogated by revisiting the coded data, checking if there are sufficient and cohesive evidence supporting each theme and if the systematization necessitates refinement; (5) Defining and naming themes, entailing the finalization of themes definition that could involve debriefing with peers or re-scrutinizing the coding; (6) Producing the report, telling the complex story of the themes, describing each with illustrative examples, possibly discerning connective take-aways or meta-themes. As in all qualitative research, the process of data collection, data analysis and report writing can occur simultaneously, the Thematic Analysis method also considers the iterative and reflective development that develops over time, involving a constant moving back and forward between phases.

(...)

THE CIVIC AND POLITICAL PARTICIPATION OF THE 1.5 AND SECOND GENERATIONS OF KOREAN IMMIGRANTS IN SÃO PAULO

ADVISOR: JENNA DUBLIN

READER: JEFFREY SHUMAKER

YEAR: 2023

COURSE: URBAN PLANNING THESIS

SÃO PAULO, BRAZIL

EXCERPT

THANK YOU



THIAGO SANG HYUN LEE

Columbia GSAPP
M.Arch + MS. UP '23
thiago.lee@columbia.edu
+1 781-296-4371