

REPARATIONS

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Master of Science in Advanced Architectural Design

Columbia University GSAPP

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IMPERIALIST ARCHIVE
THROUGH NATURE CULTURES
Summer 2019

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01

DECOLONIZING AN IMPERIALIST ARCHIVE THROUGH NATURE CULTURES

Borderline Extreme Makeovers

Spring 2020

Instructor: Nerea Calvillo

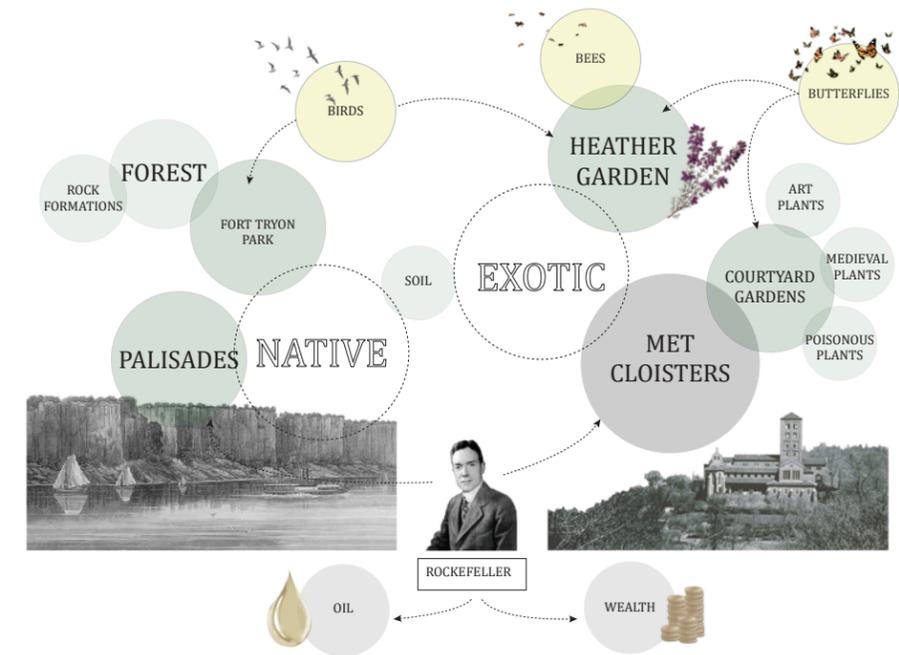
In collaboration with Farah Monib

The intervention activates both invasive and poisonous species found on site through digital and physical networks to dismantle Rockefeller Jr.'s icon and establish nature cultures. Fort Tryon park includes among other things; a heather garden, poisonous plants and the MET Cloisters museum, which the project will demolish. The site has been colonized politically through invasions, symbolically through the MET Cloisters museum and ecologically through the nonnative gardens, making it an imperialist archive. The project decolonizes the site by putting to work the capacities of the invasive heather plant and the poisonous plants. The Cloisters is broken down through micro explosions created by heating the excess gas of the poisonous plants. In order to determine the activation timeline, the project aims to handover the responsibility of the breakdown of the building to Rockefeller's oil empire; as fracking increases, micro-demolitions in the museum walls are activated.





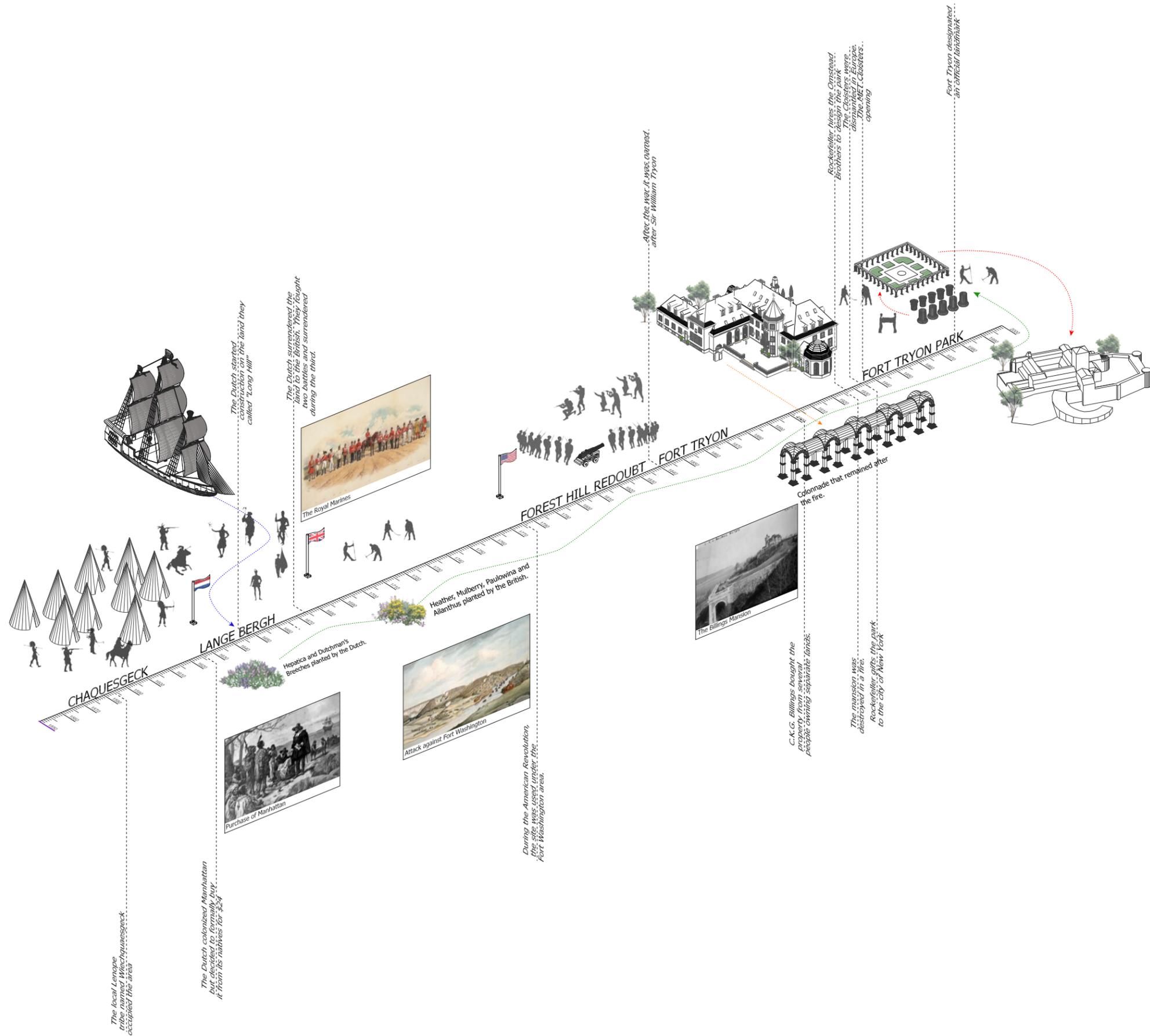
Site Plan
Upper West Manhattan



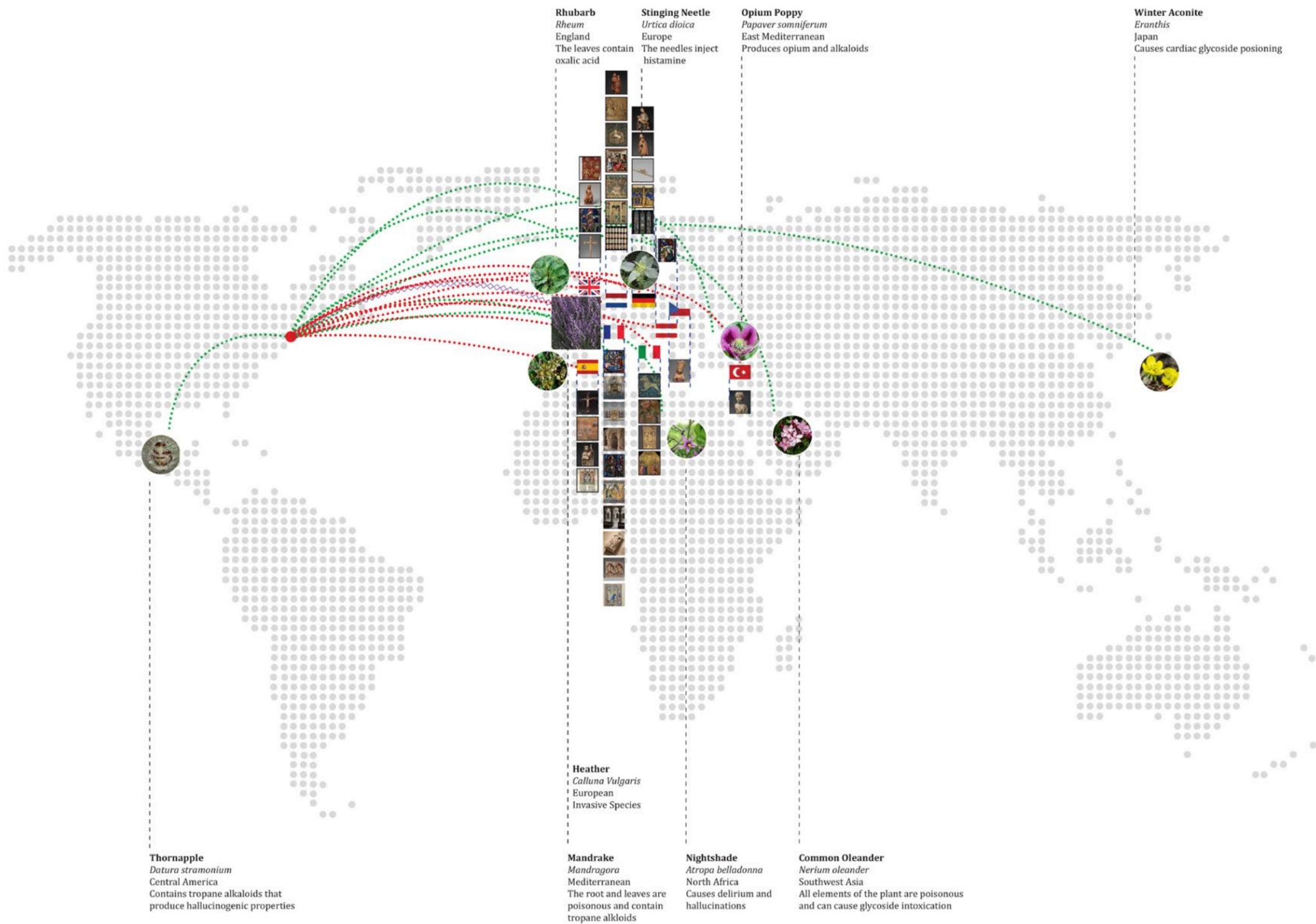
Map of Agents
Relationships between agents found on site

Fort Tryon Park has been colonized by multiple powers throughout history. It was originally inhabited by the Lenape Tribe who were driven out by Dutch invaders and then taken over by the British army. The land was finally won in battle by the Americans after the revolution. The property was purchased by Rockefeller Jr. in 1917. He employed the Olmstead brothers to design a park and then gifted it to the state of New York. The MET Cloisters is an exhibit of cultural, architectural and ecological extractions. It is a unique space where architecture and plants are both exotic to their contexts. Within the gardens of the cloisters, there are exotic species of poisonous plants that are brought in from all around the globe. One of them is Oleander, which releases excess nitrogen gas as a defense mechanism. The heather garden is another site of exotic species in the park. It takes over surrounding lands due to its large seed and pollen count. As it increases in quantity, it attracts large amounts of bees and butterflies. The project focuses on extraction of exoticism and its naturalization as native. It decolonizes the site by dismantling Rockefeller's vision. This is done by putting to work the capacities of the invasive and poisonous

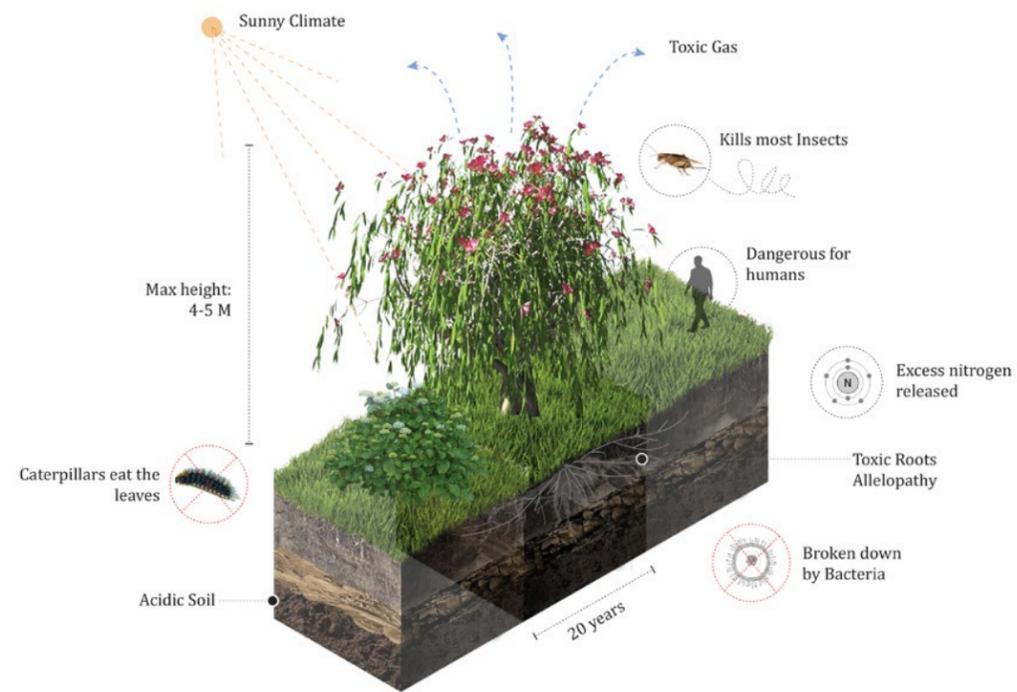
plants by creating nature-cultures. To do that, the MET Cloisters is broken down through micro-explosions. Poisonous plants are enclosed and their excess gas is collected, heated and pumped through pipes. The result is the breakdown of the building. The invasion is facilitated by a mesh that directs the heather's growth. It extends from the garden and envelopes the MET Cloisters. A network of wireless sensors and an irrigation system enrich the soil for the heather's growth. In order to determine the activation timeline, Rockefeller's Empire must be revisited. Standard Oil's monopoly was split up into smaller sectors that still function today. The Marcellus Shale supplies oil to New York City where Exxonmobil and Chevron, both descendants of Rockefeller's monopoly are fracking in that area. Not only are they continuing extraction practices, but they're also leading to an increase in earthquakes, water pollution and poor air quality. Therefore, as the fracking continues so does the demolition. The agents on site are activated to allow for an ecosystem that would synthesize the nativity and exoticism of both culture and ecology to eliminate Rockefeller from the landscape.



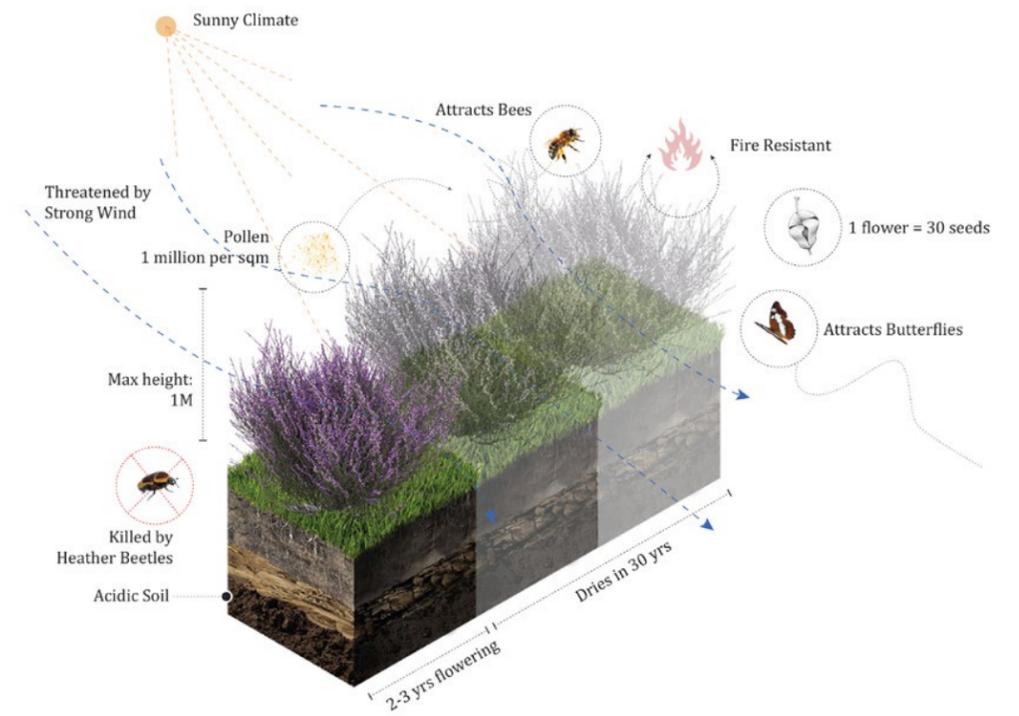
Storyboard
Site timeline analysis



Map of Extractions
Original locations of plants and art pieces



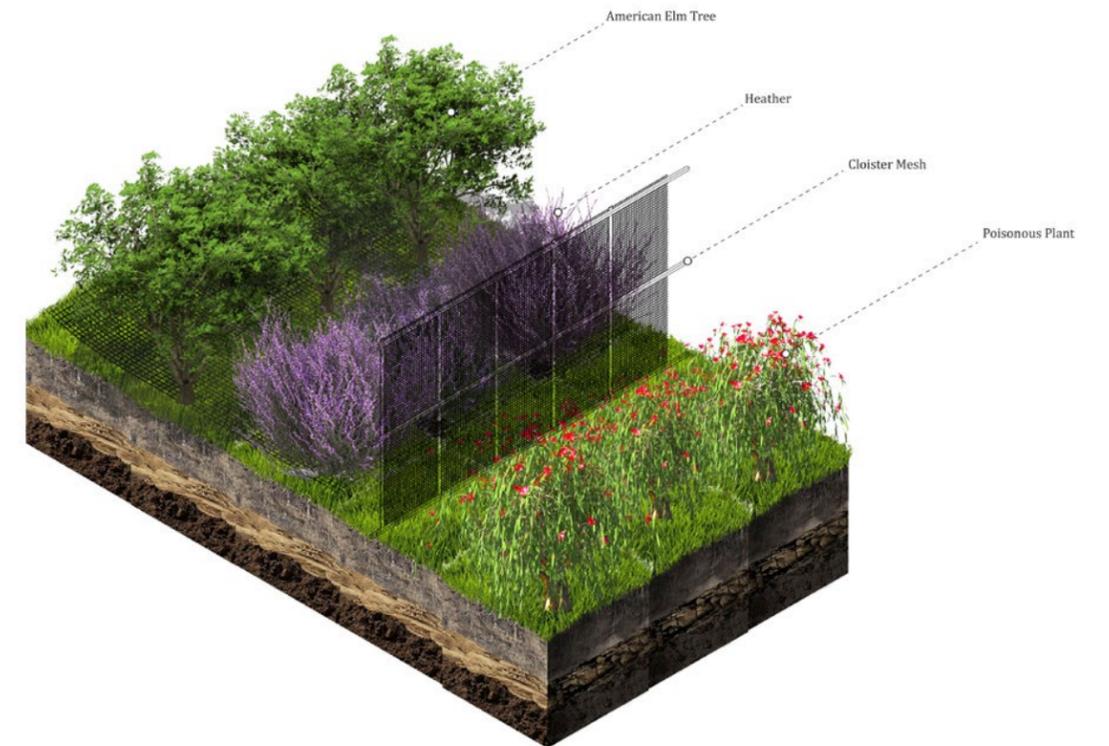
The Life of a Poisonous Plant
Toxic release of nitrogen



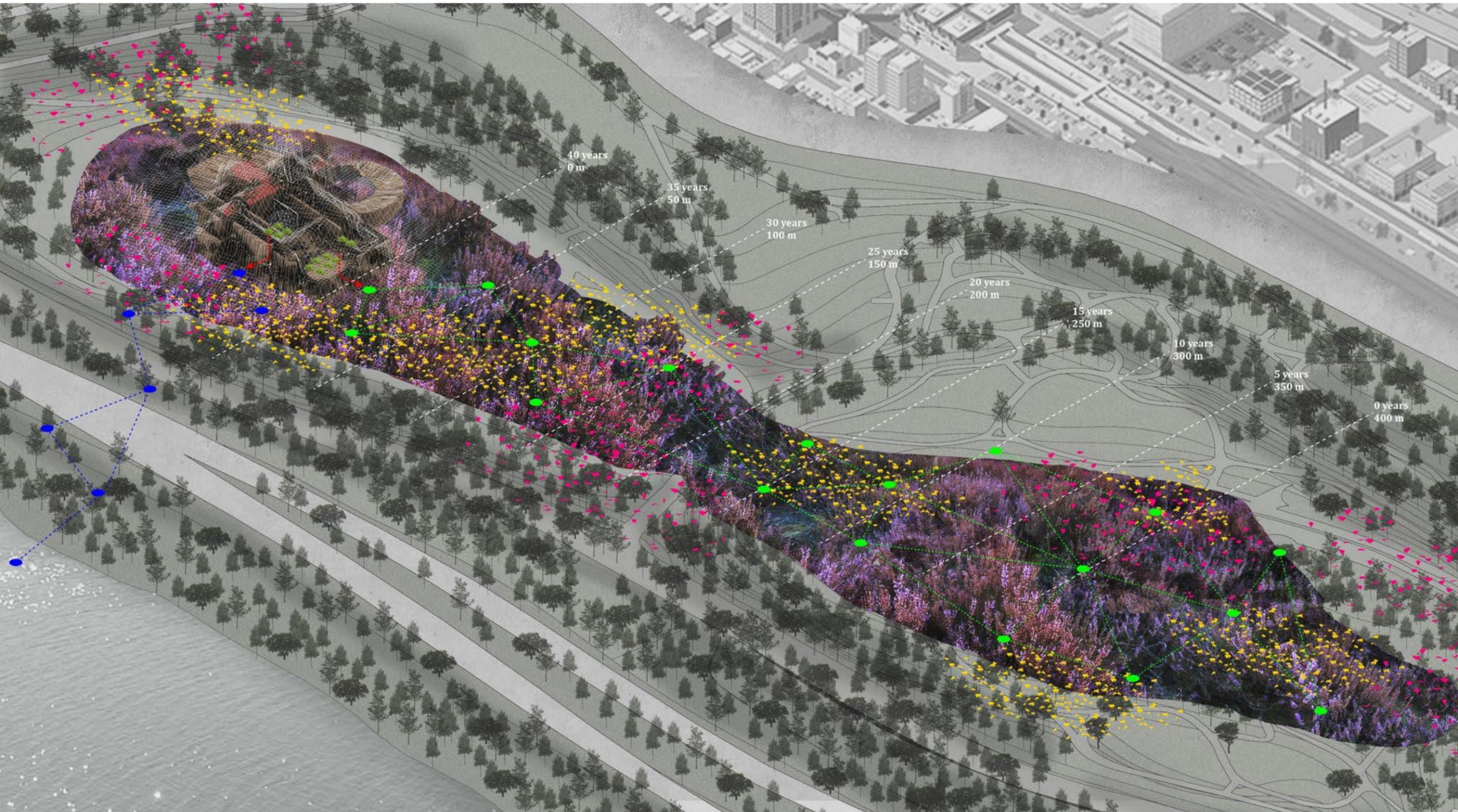
The Life of a Heather
Invasive species



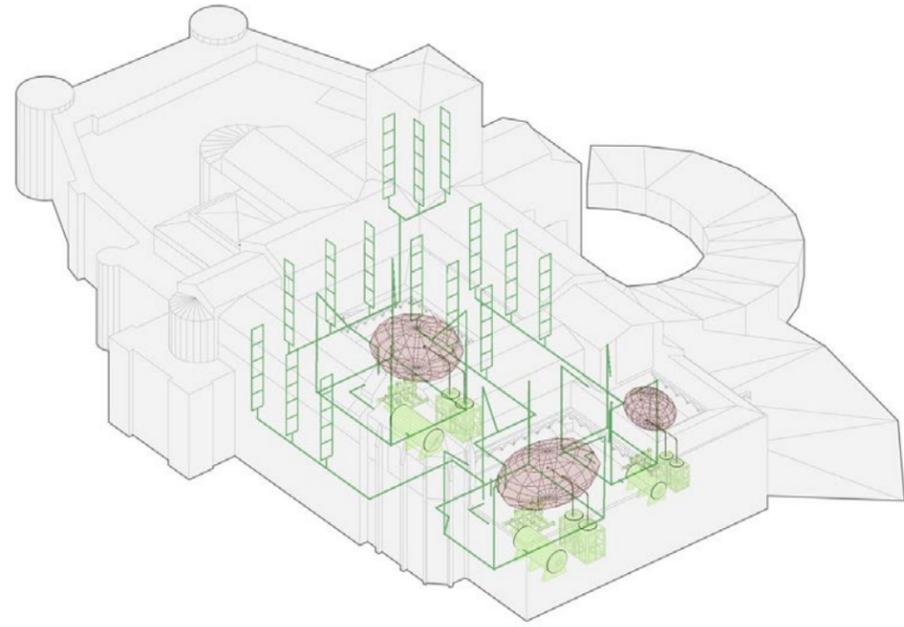
Site Plan of Heather Invasion
Mapping wind patterns and topography



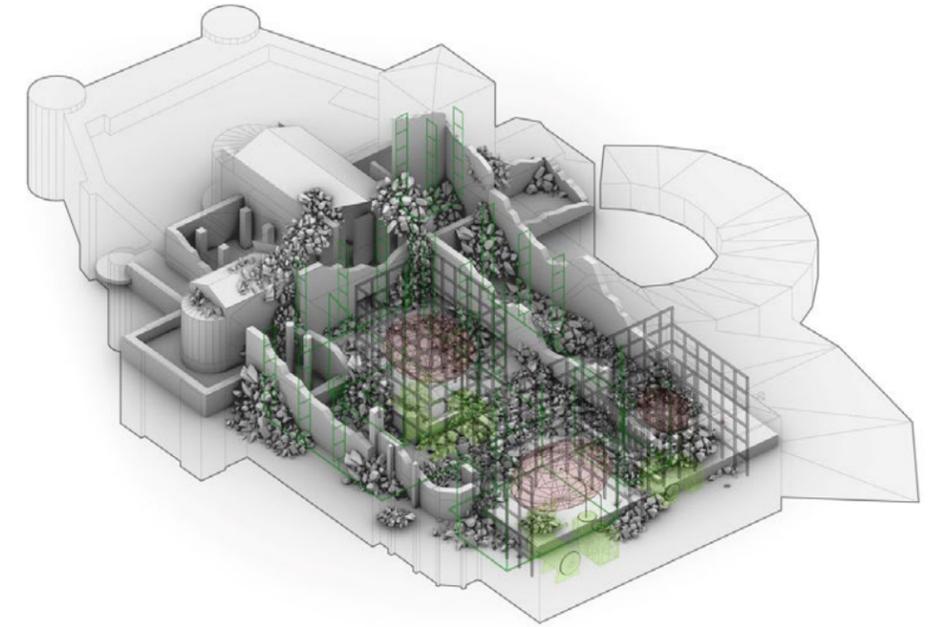
Boundary Conditions
Diagram of thresholds between project's active elements



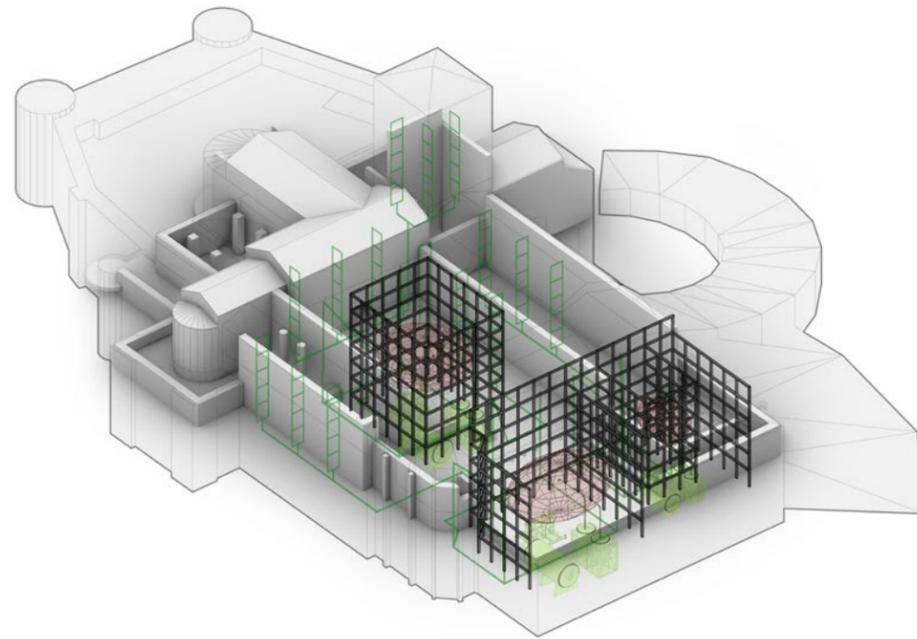
Site Invasion using Networks
Sensors are installed to activate heather growth



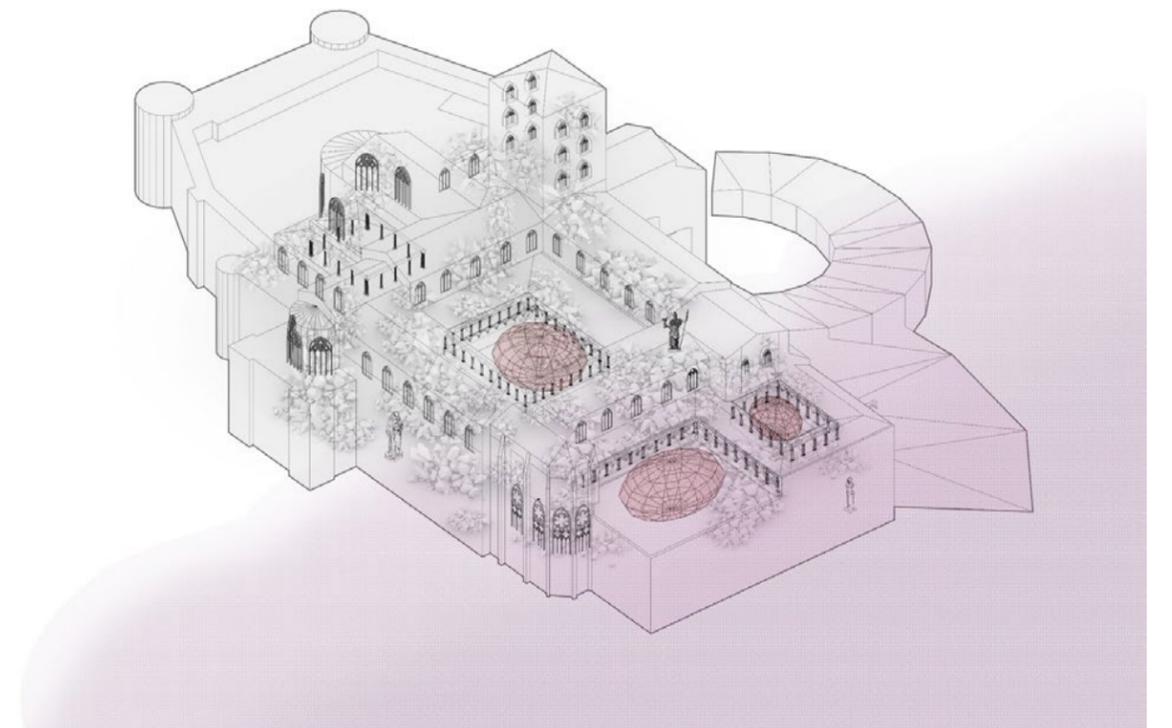
01. Poisonous gas network



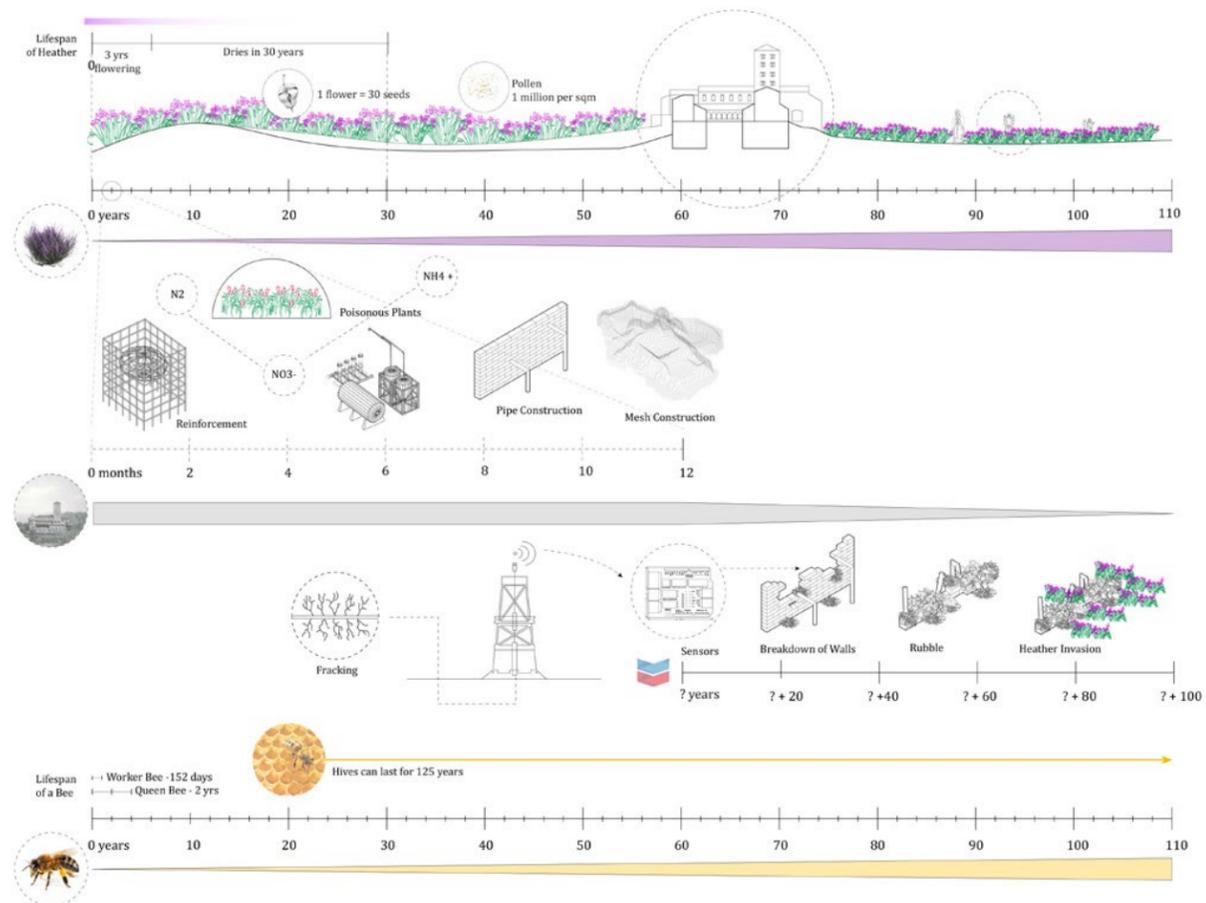
03. The resulting breakdown of the cloister walls



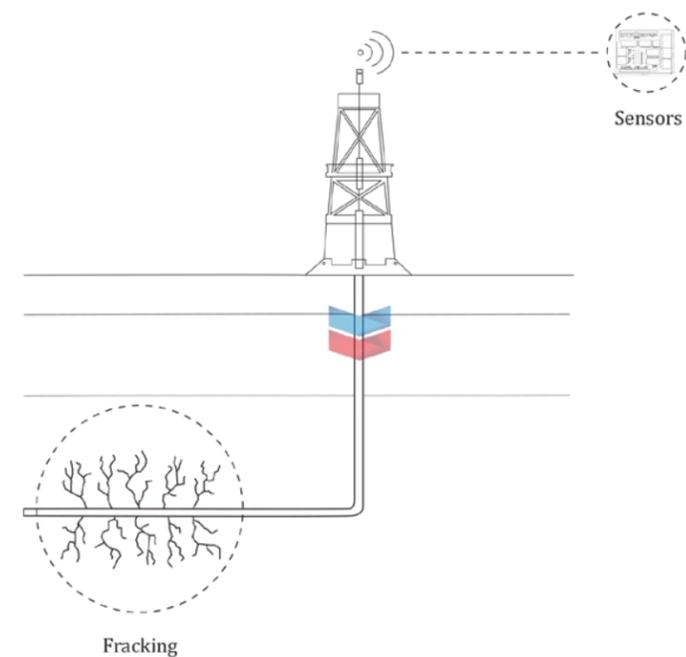
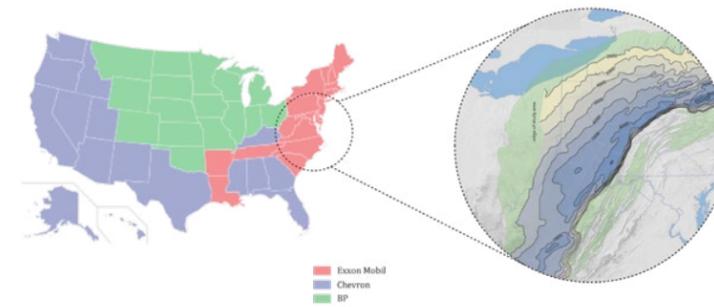
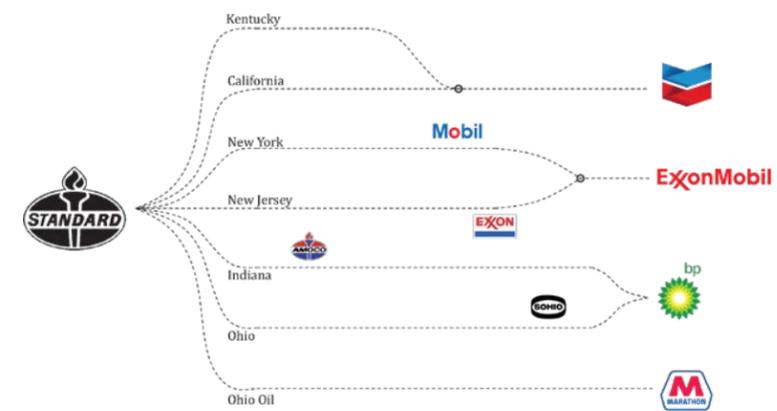
02. Added reinforcements to protect courtyards



04. The remaining art, plants and rubble



Timeline
Steps of demolition and invasion

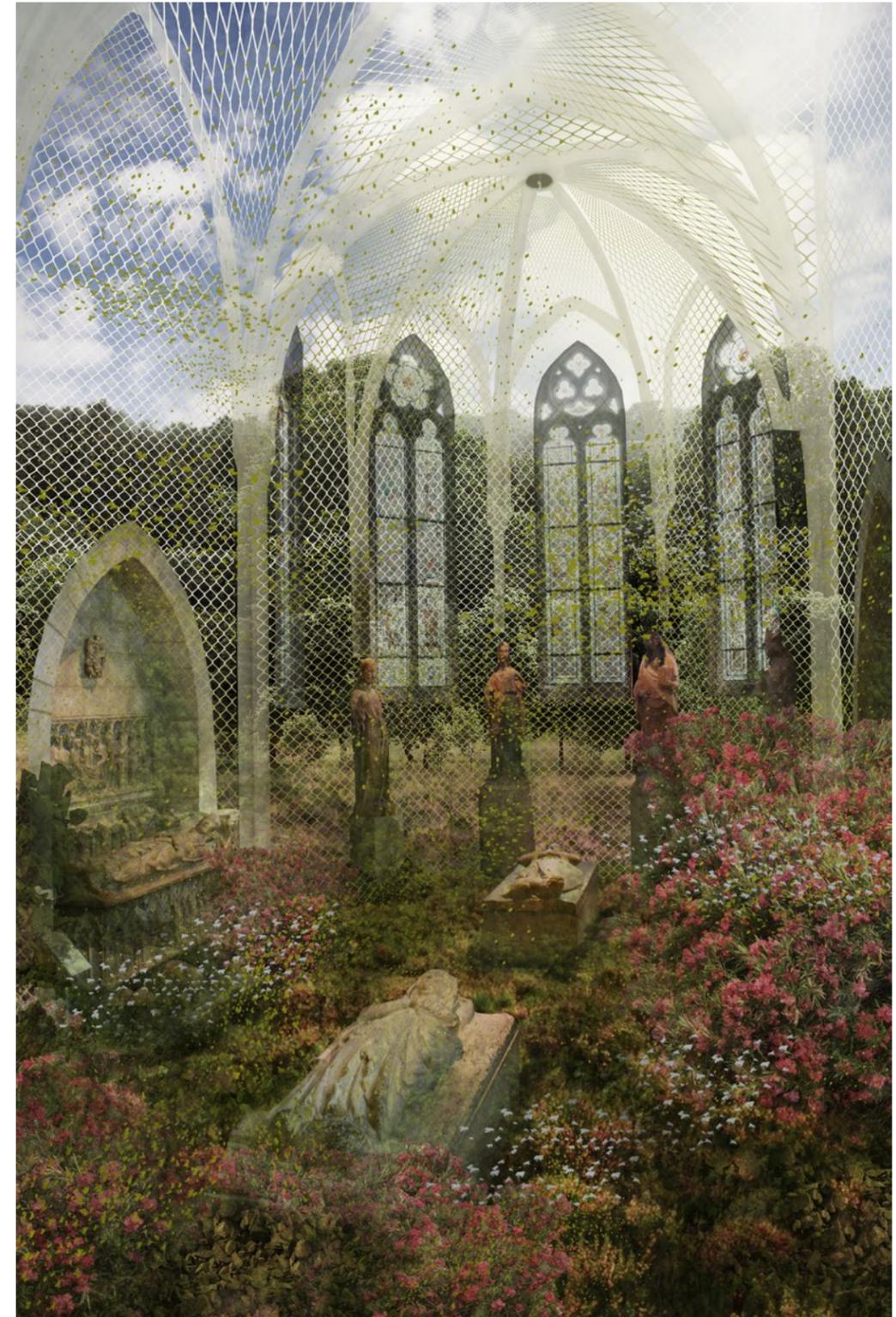


Fracking
Rockefeller's oil empire today (top)
Fracking location in New York (middle)
Installation of sensors on fracking sites (bottom)

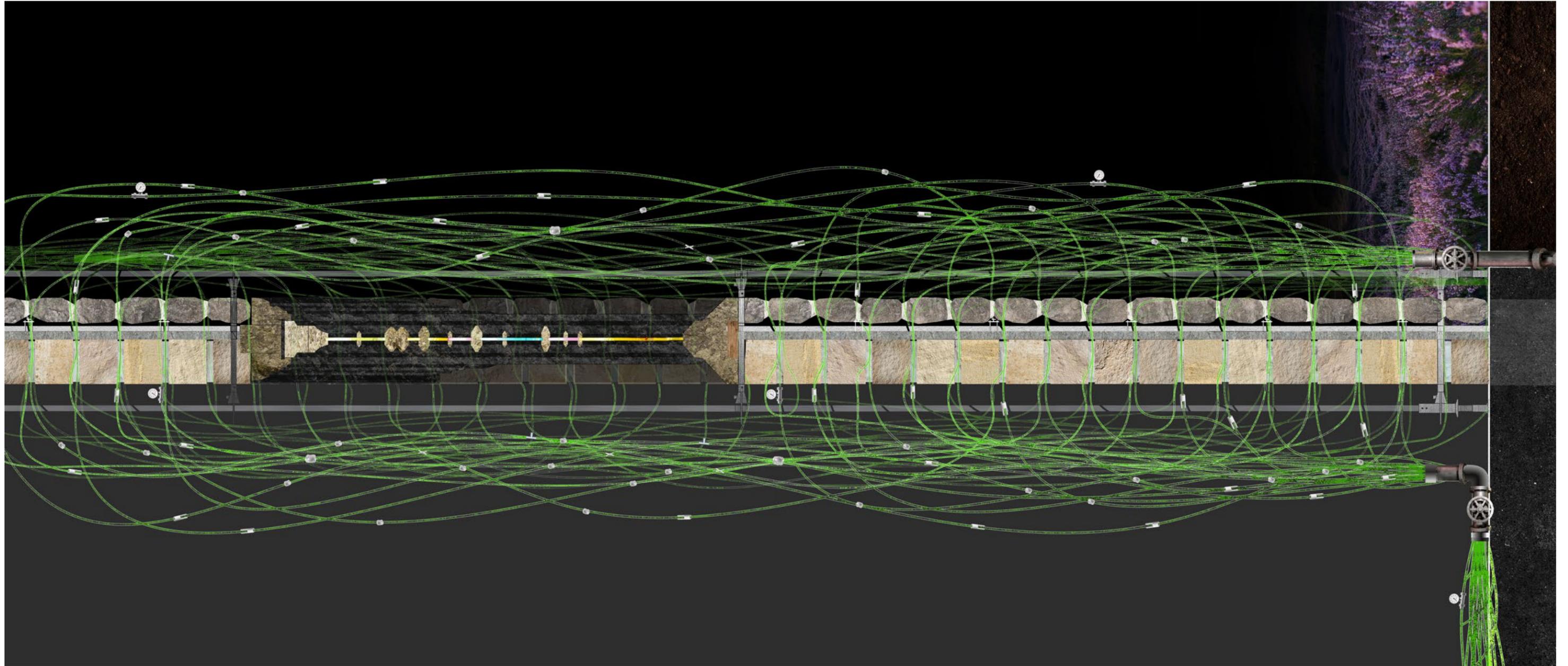




Before
Interior photograph of existing building



After
Interior render of nature-cultures



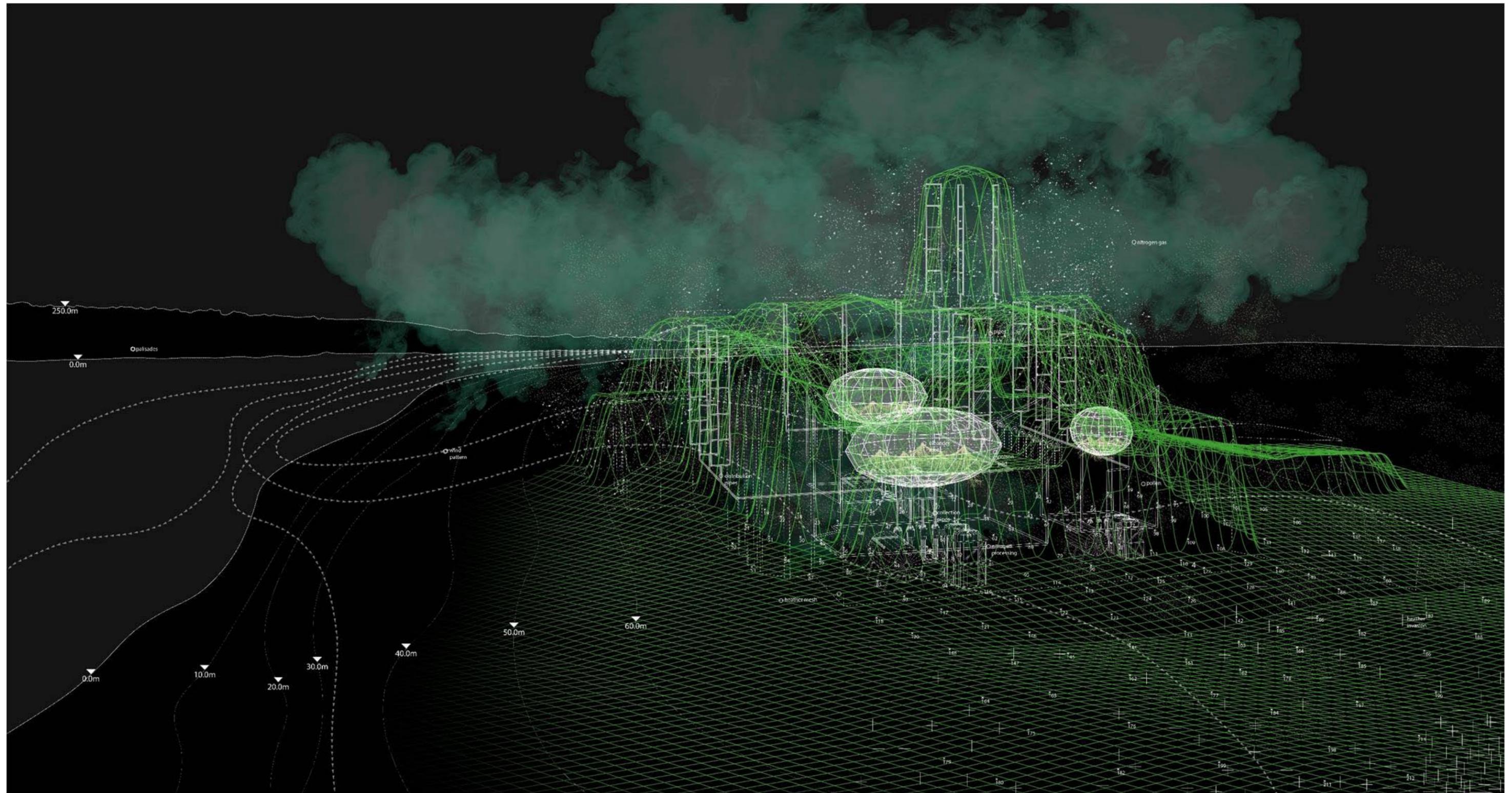
Wall Section
Section showing demolition strategy using micro-pipes



Before
The MET Cloisters today



Intervention Construction
Scaffolding built to protect art pieces



Gas X-ray

X-ray view showing the moment that sensors activate the release of the gas

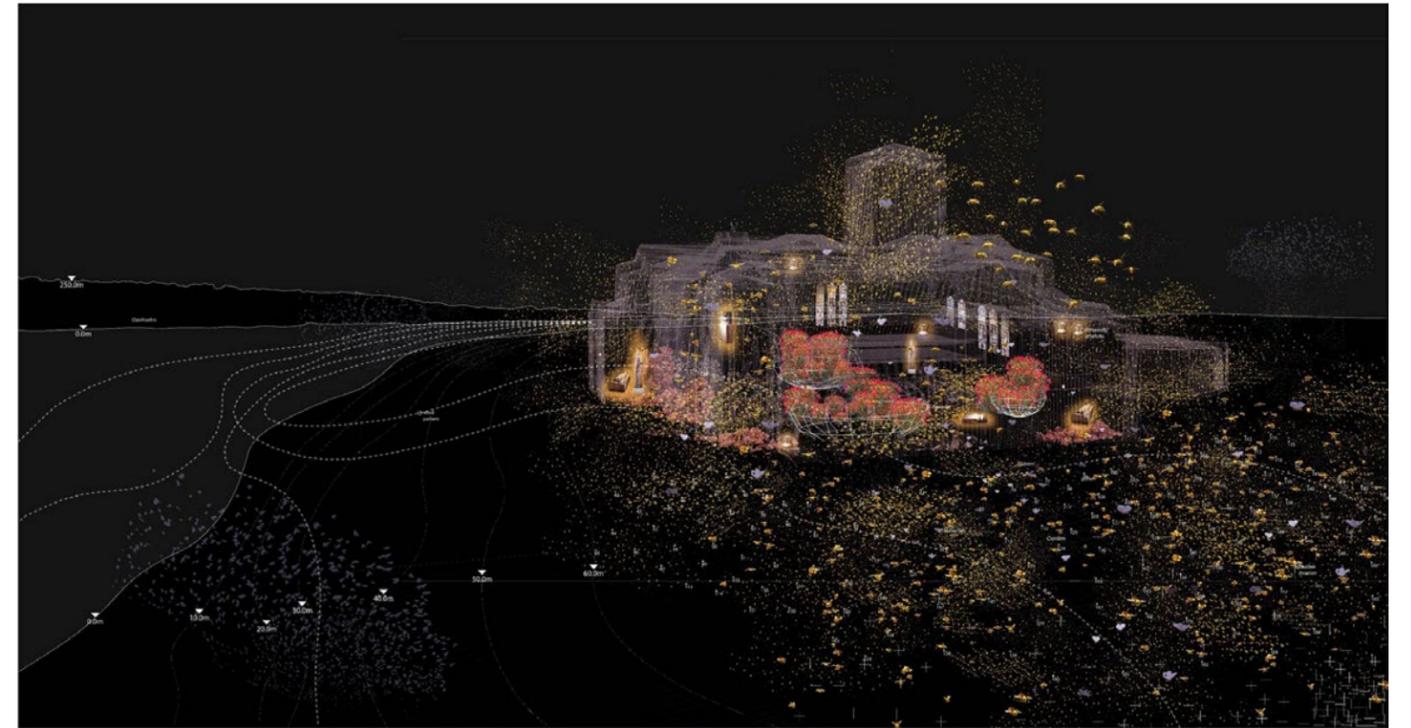


The Breakdown and Invasion

The MET Cloisters is broken down and the invasion of the heather takes place



The Ruins
The collapse turns the building into rubble



Ecosystem X-ray
The ecological results of the invasion



Nature- Cultures
The synthesis of the ruin and new ecologies

02

CIVIC SPEAK

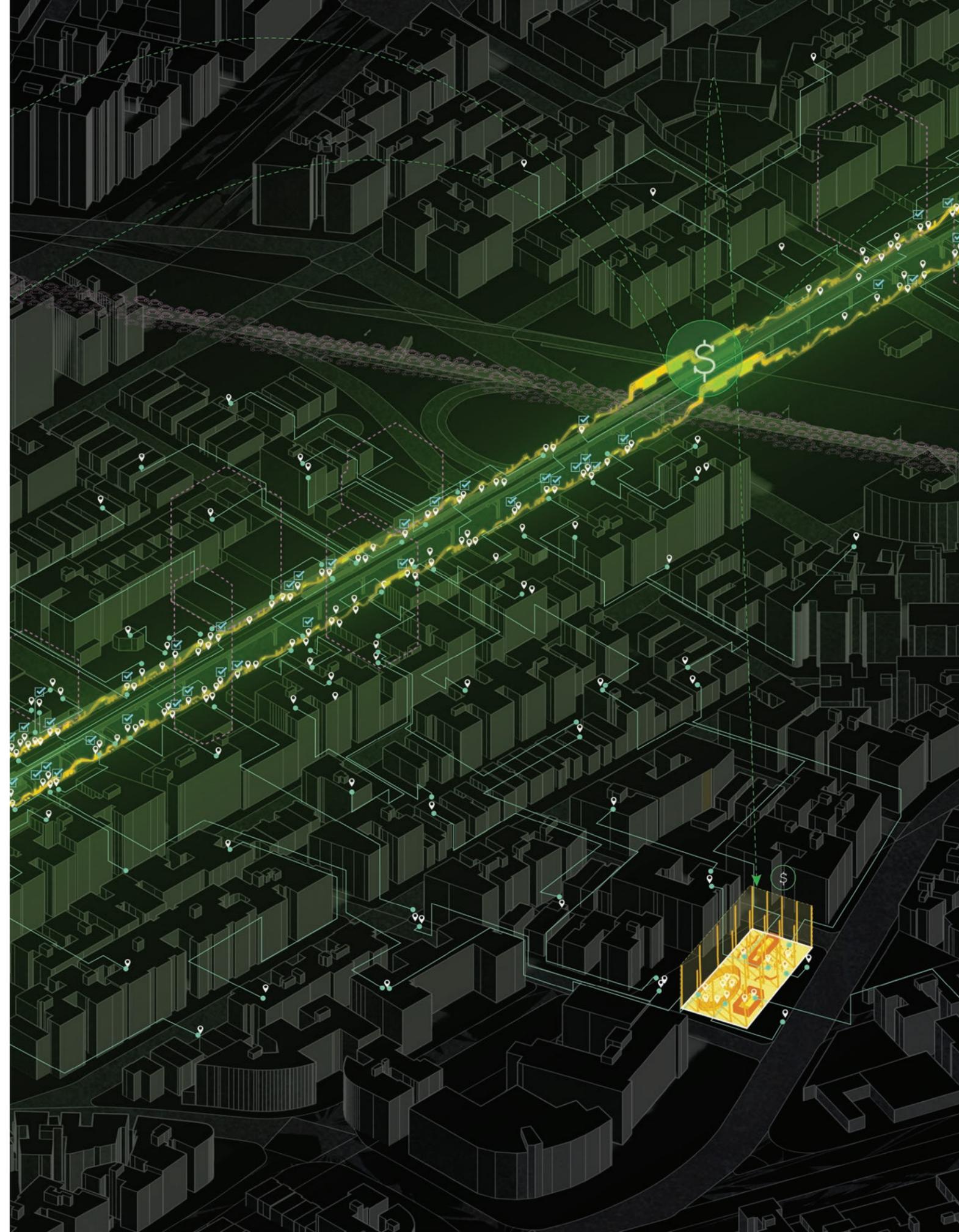
Protocols of Repair

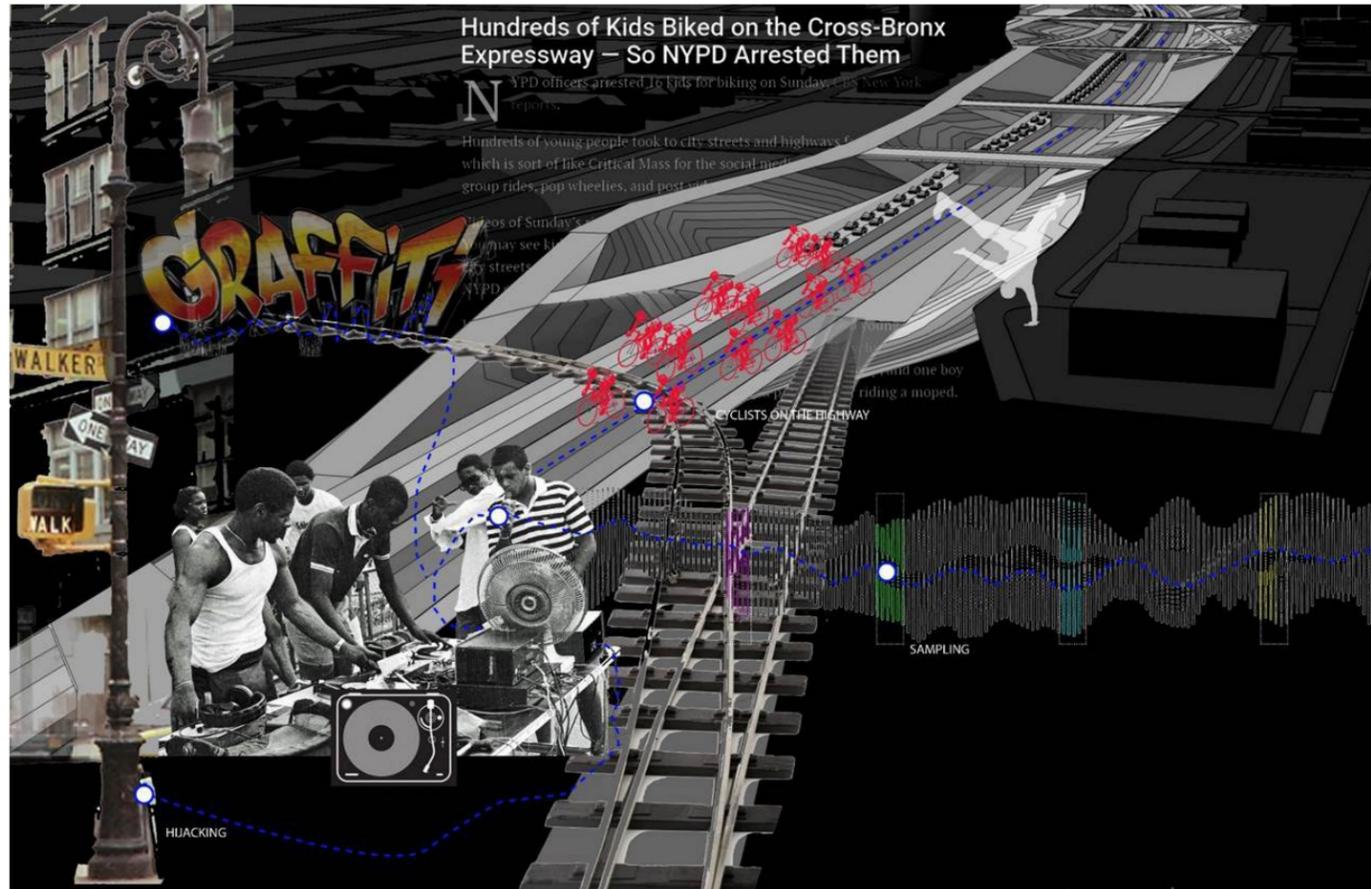
Fall 2019

Instructors: Mabel Wilson and Jordan Carver

In collaboration with Farah Monib

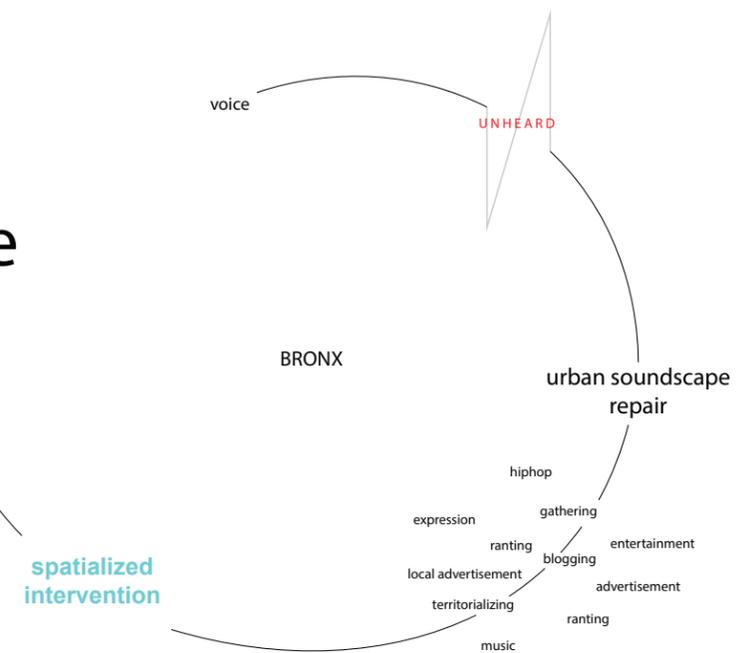
Civic Speak is a community run platform that transforms the Bronx's soundscape into a spatialized voice. It uses elements from the Bronx that are equipped with a user-friendly digital interface to collect input from the community. The protocol begins with Bronx resident id's that allow for participation in the input interventions. This is translated onto two different platforms; the first being a collection of sound-bites and the second being the mobilization of these sound-bites on cars, trains and the expressway itself. This also aims to promote an exchange of communication within the people of the Bronx. The second stage involves tolling the expressway which generates revenue to purchase empty plots of land. These plots will be used as assembly spaces for Civic Speaks' operations, over time these spaces will be occupied by those who will be displaced. The digital system keeps an archive of all the recordings to turn into transmittable sound bites. It also processes the logistics of complaint details in relationship with the years of residency to inform the allotted point system that the tolling and voting is based on.





Key Events on the Cross Bronx Expressway
The emergence of hip-hop; defining a new sub-culture

voice



Protocol Objectives
Interventions spatialize the voice of the Bronx residents

The history of these unheard voices go back to the events of 1955. The perpetrator goes by the name Robert Moses. He was an unelected official who had immense power over the city and ordered the construction of the Cross Bronx Expressway. This created a divide in the Bronx, tore neighborhoods apart, displaced people and left behind poverty. The protests of the community back then were not able to change the course of this violence. On the other hand, Robert Moses proposed a similar project in Lower Manhattan but it was contested and stopped by a series of protests led by Jane Jacobs. Two of the major differences between these two events is that Lower Manhattan's had access to people with a voice in the media and their ability to protest publicly.

Amidst all the destruction, hip hop emerged from the Bronx in 1973; defining a new subculture through the repurposing of facilities, spaces and even sampling of music. This created a form of cultural expression for the people of the Bronx.

A similar violence is taking place today. The residents of Jerome Avenue are facing the threat of displacement caused by the gentrification that will follow the recent upzoning policies.

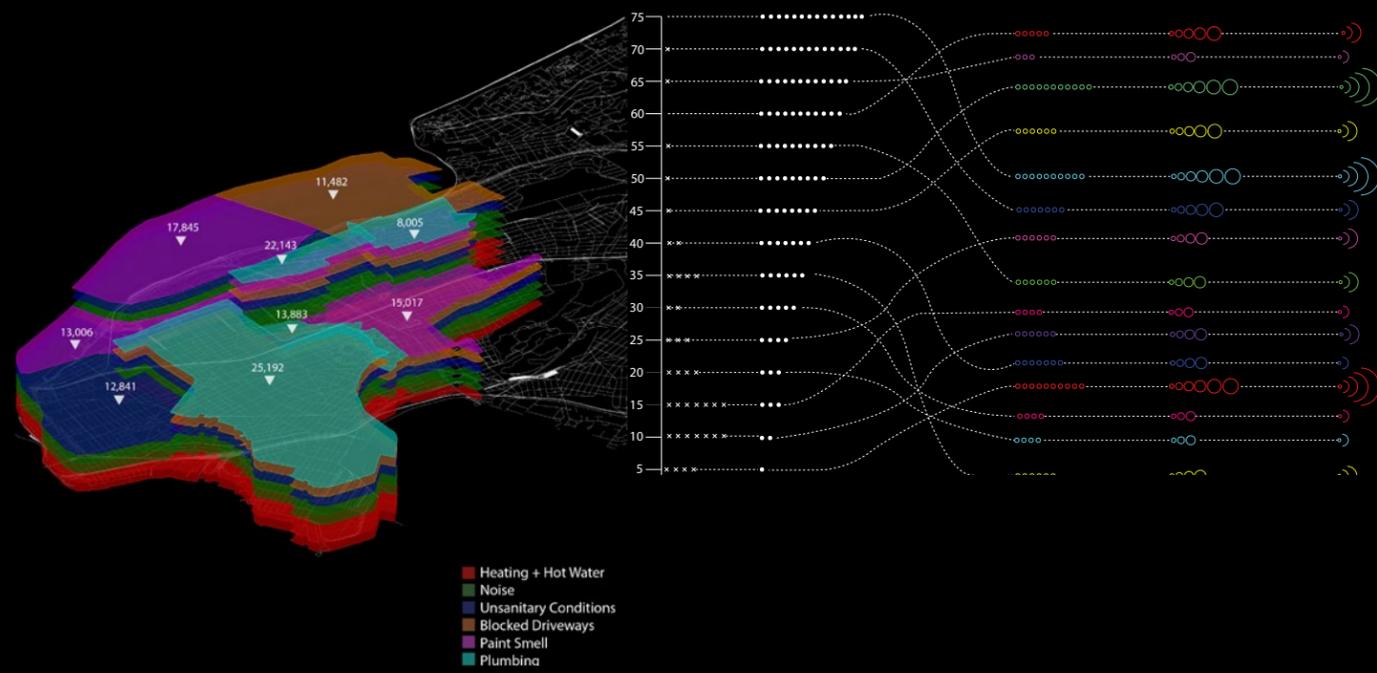
This violence of displacement under the name of urban development is an extension of the violence of the Cross Bronx Expressway which took place half a century ago. Even though the redevelopment is advertised as 'community based', the community has protested on the streets and online against it and once again their voices were not heard. When the community's protests fell on deaf ears, they transformed it into their own forms of repair.



Sound as Social Repair
Highlighting the rich soundscape of the Bronx



Soundscape Animation
Mapping different sound types and ranges on site



311 Complaints

Complaints are mapped, recorded and visually manifested



Protocol

Series of operations that carry out the protocol of repair



Expressway Toll System
Revenue is generated from tolling the expressway

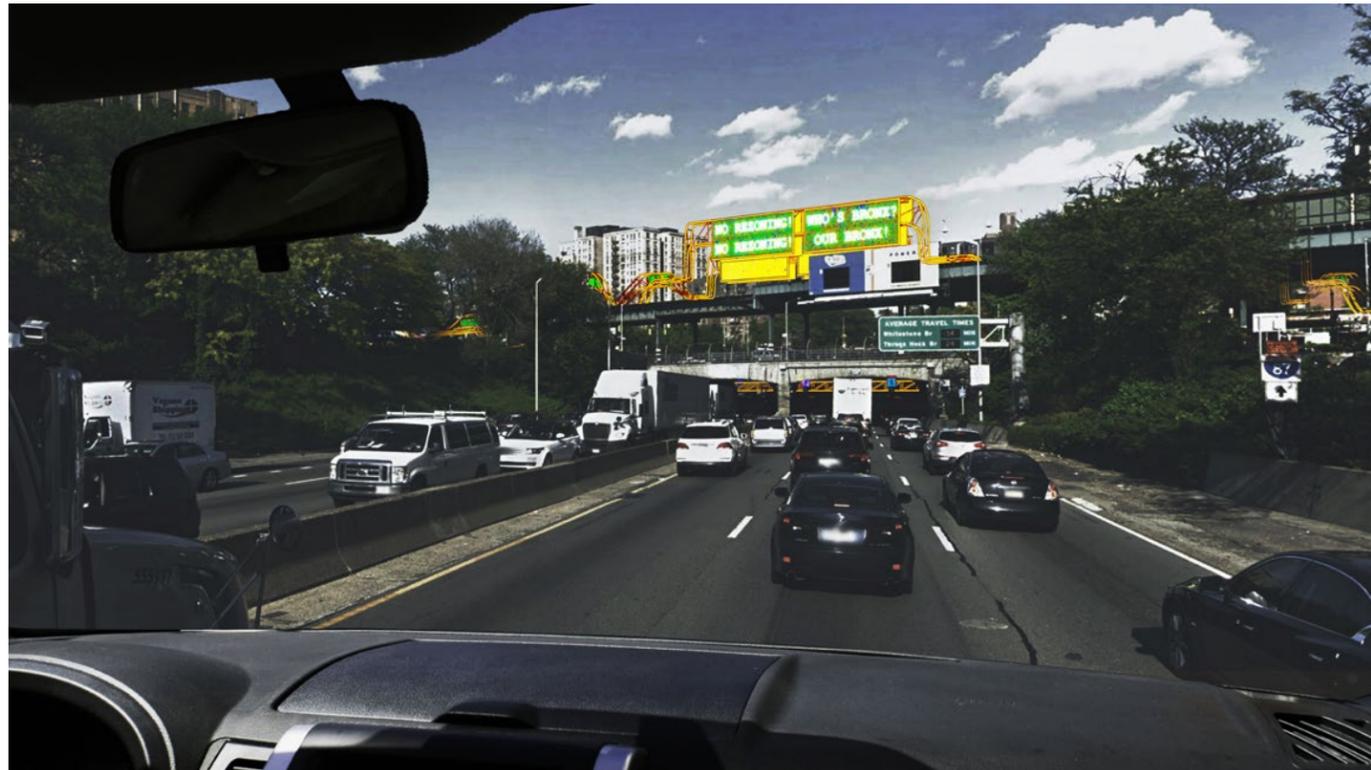


Catalogue
Repurposed objects found on site are catalogued and used to create an intervention



Jerome Avenue Intervention
Includes listening devices and screens for interaction and projection

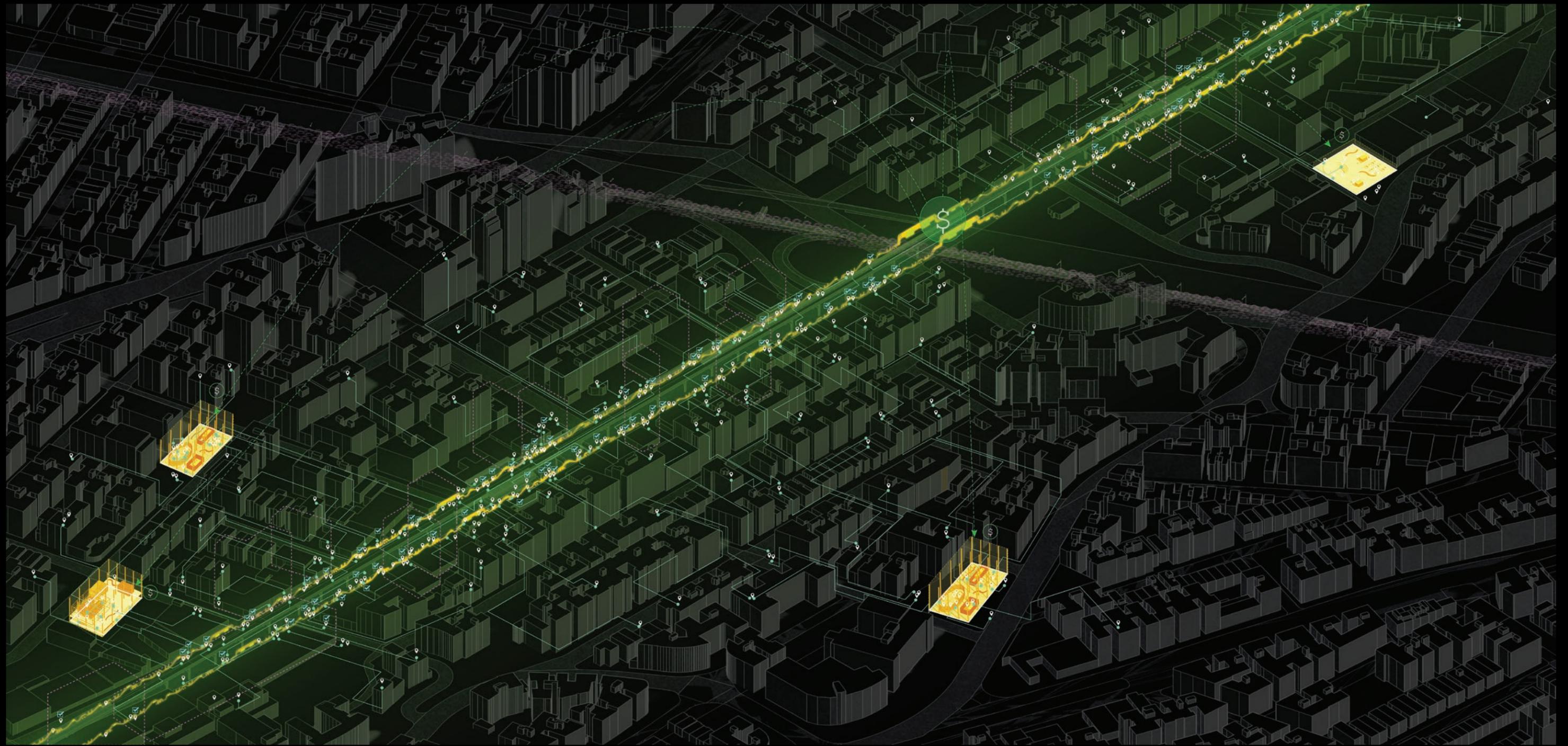




Projections
Inputs are projected on the Cross Bronx Expressway



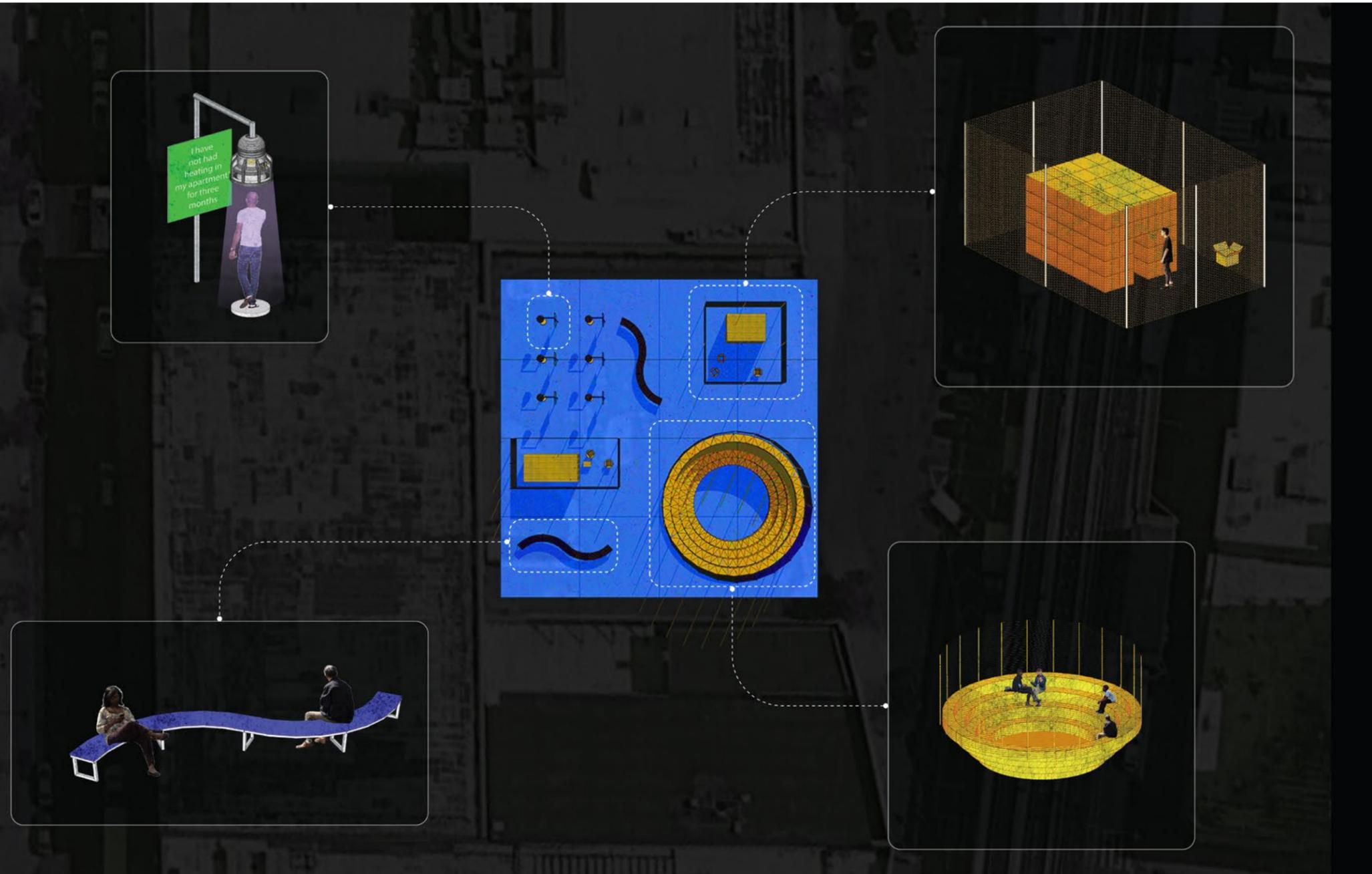
Mobile Media
Attached to cars as a means of exchange across the borough



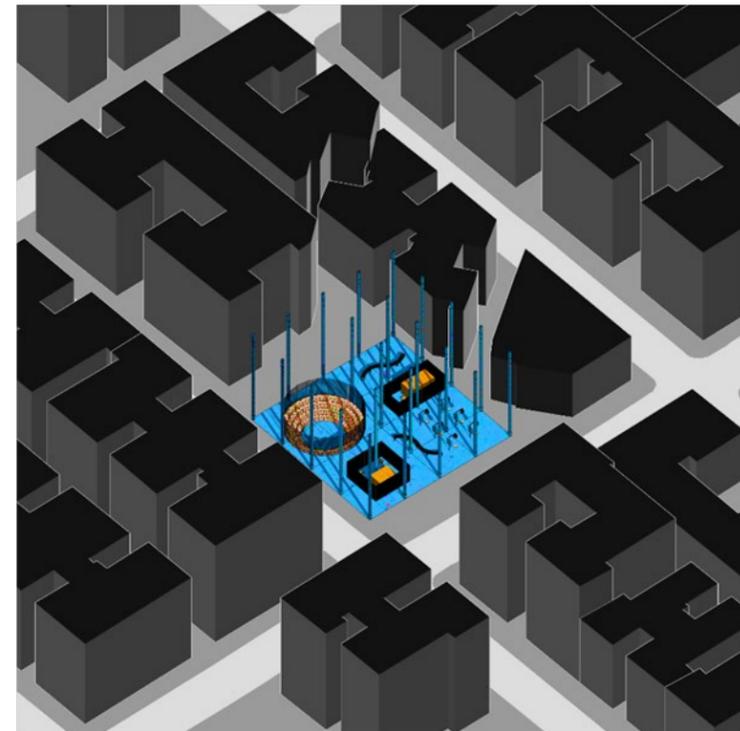
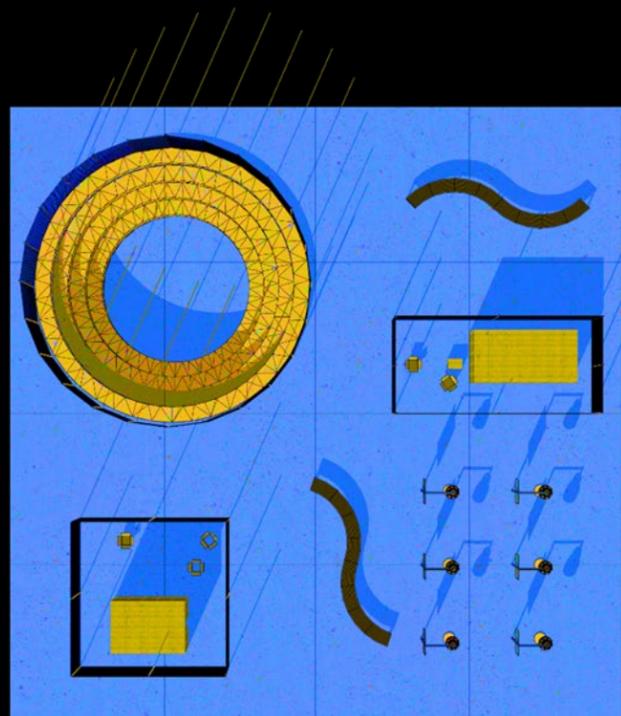


Assembly Spaces

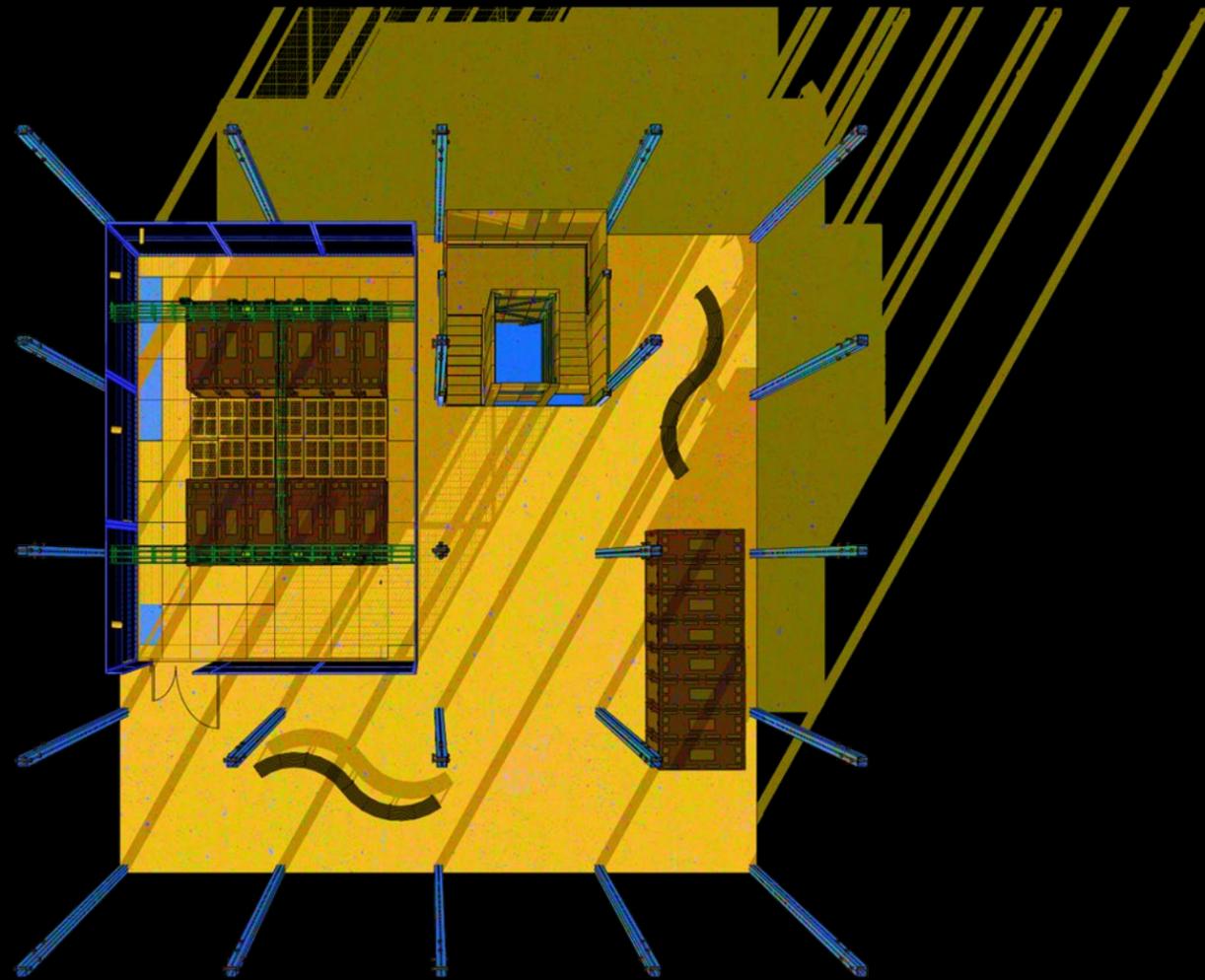
Revenue generated from tolls is used to purchase empty lots



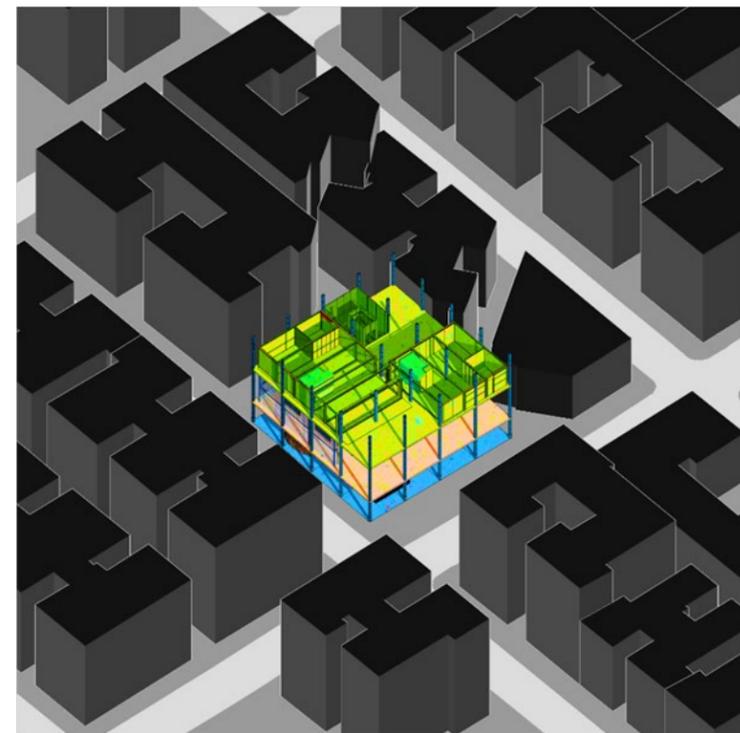
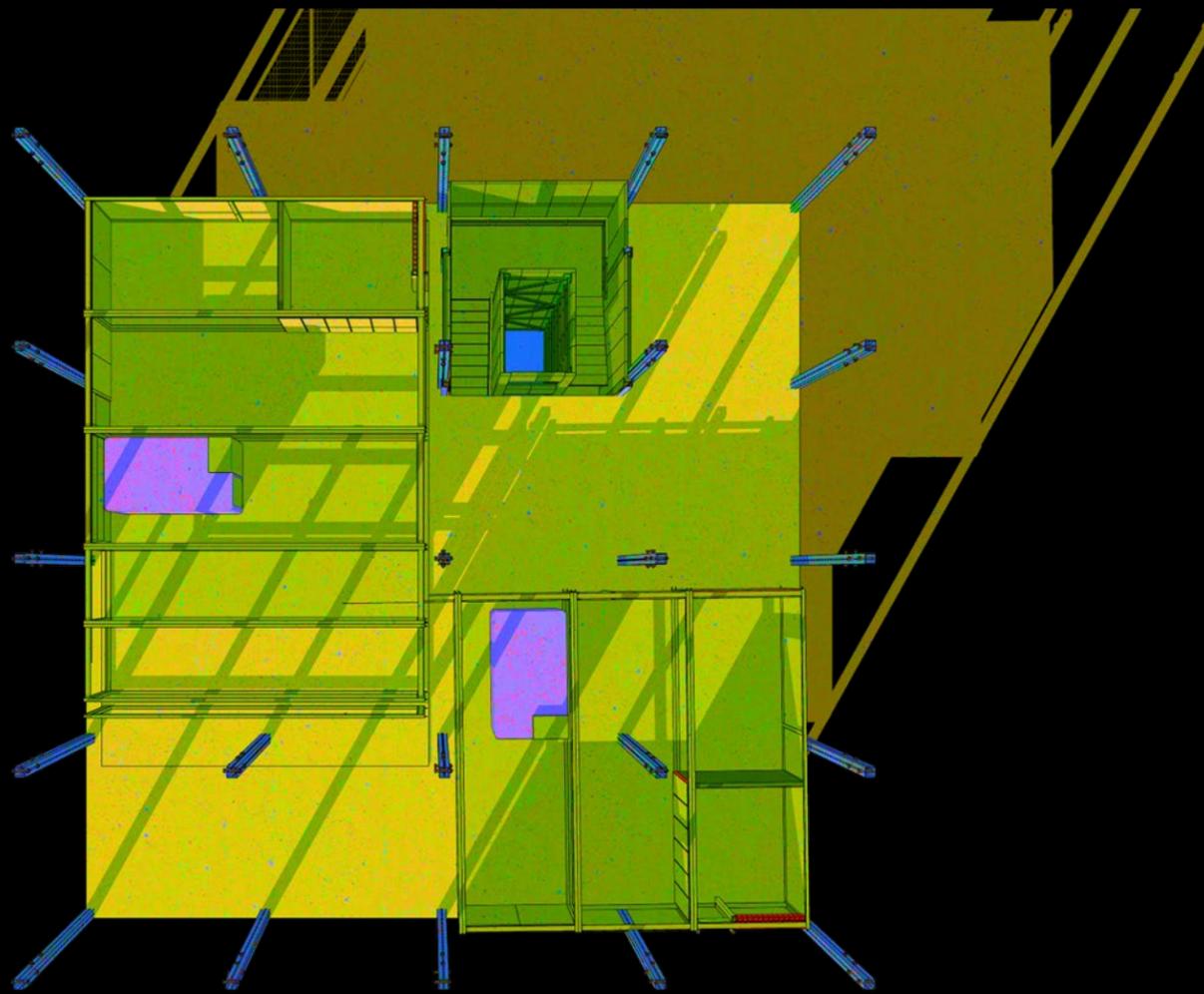
Assembly Spaces
Empty lots become headquarters for Civic Speak



Assembly Spaces | Stage 1
Seating areas for activist discussions



Assembly Spaces | Stage 2
Data processing of inputs and archiving of voices



Assembly Spaces | Stage 3
Shelter and spaces for refuge

03

OPERATION RENDEZVOUS

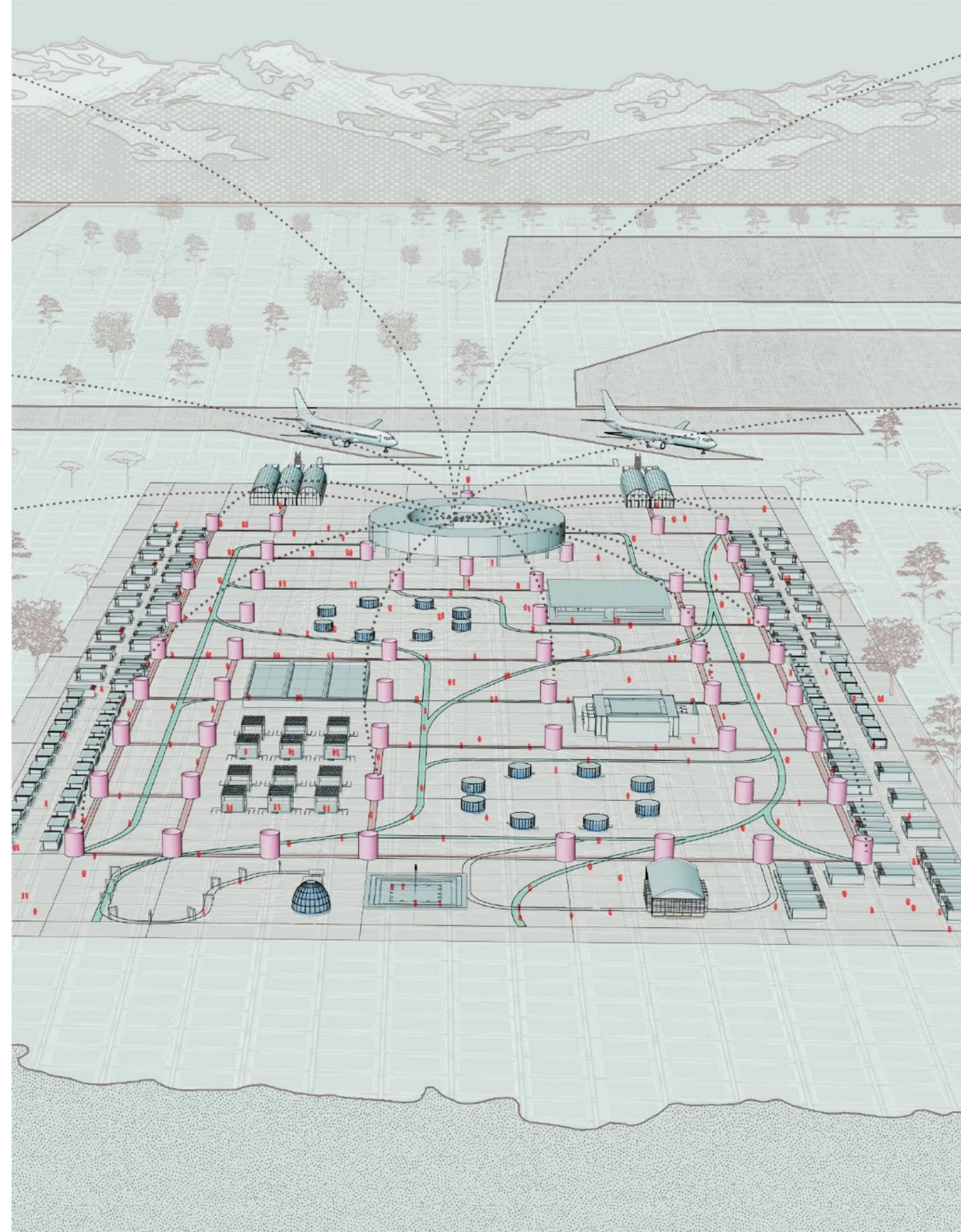
Cultural Agents Orange

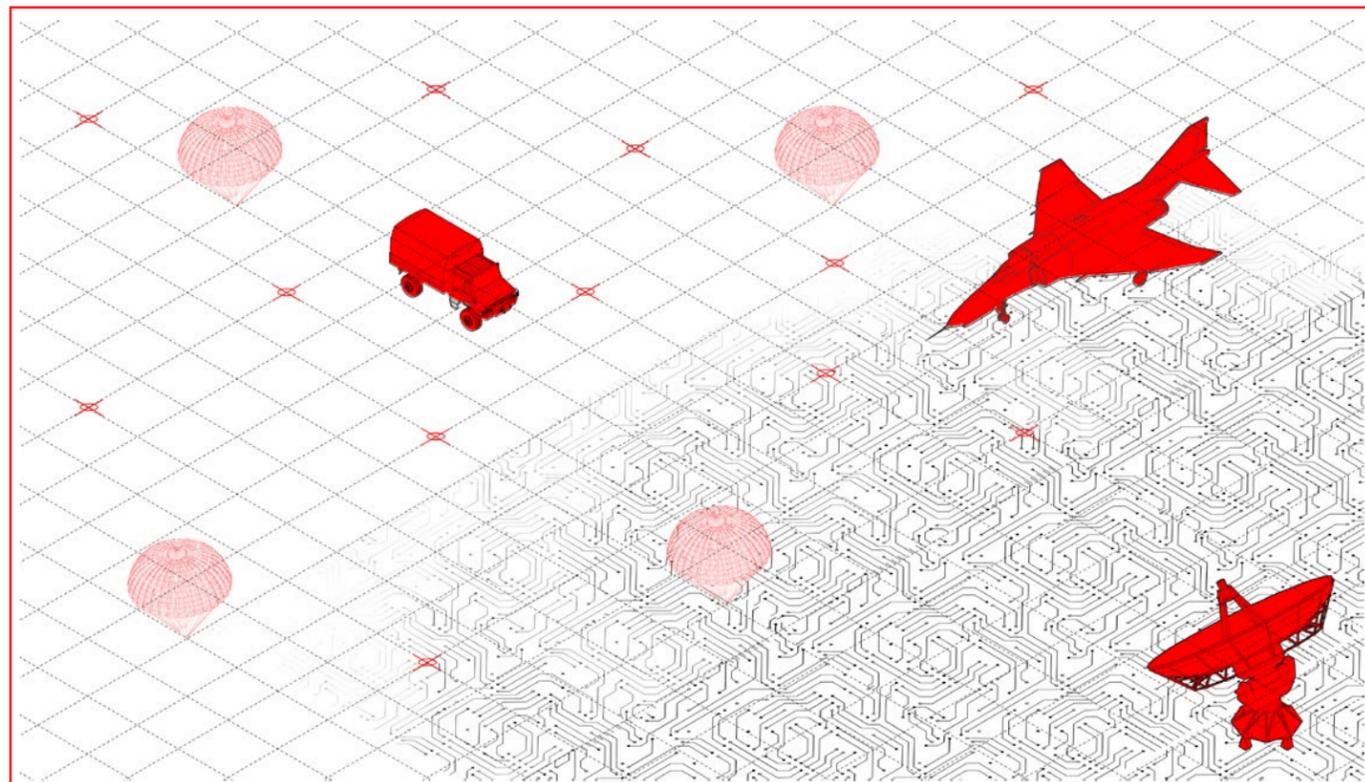
Spring 2020

Instructor: Mark Wasiuta

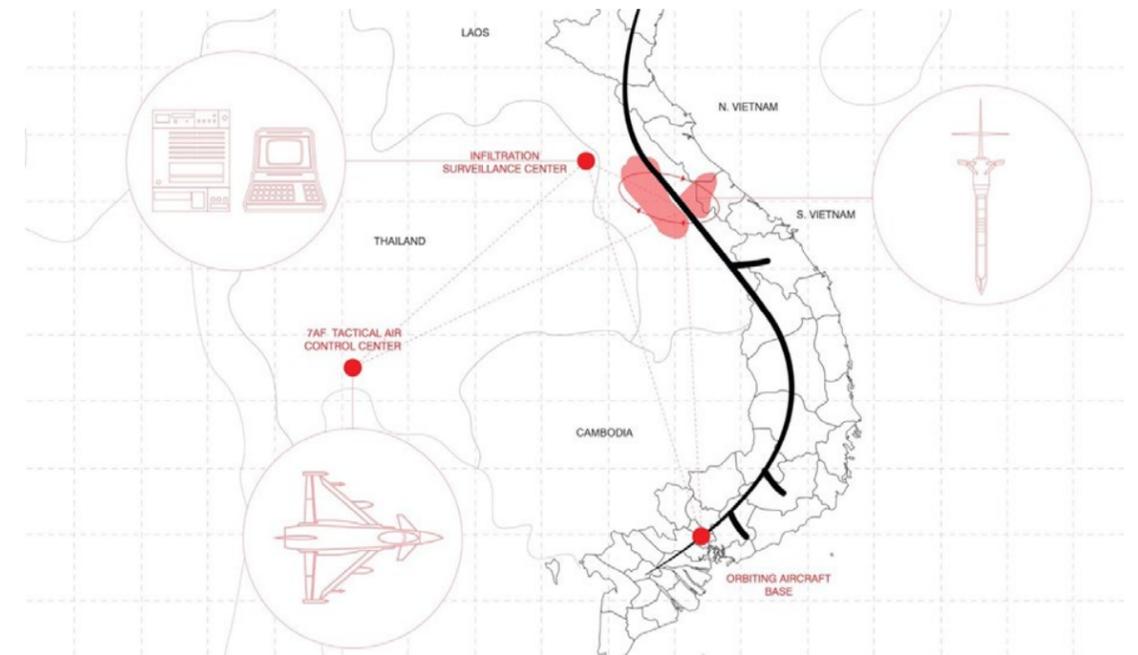
In collaboration with Shailee Kothari

Operation Rendezvous aims to create a socio-technical system which aids in the reunification of separated families by applying principles of the information war operations through data extraction and analysis. The spatial strategy known as Camp Reversal involves creating an electronic landscape with programmed activities that facilitate the reunification and immigration process. Movement across the site is organized by the information system which aims to understand the visitor's emotions and describe paths relative to that. As a part of the process DNA will be collected to find biological matches and create a database for easy identification of American and Vietnamese genes. As more people visit the site, information will be collected in order to form an archive and a network of persons which can be used to find other matches. The proposal investigates the use of military logic when assigned to a social program. It employs a reversal of the military strategies used in the extraction missions in order to question the operations of the past.





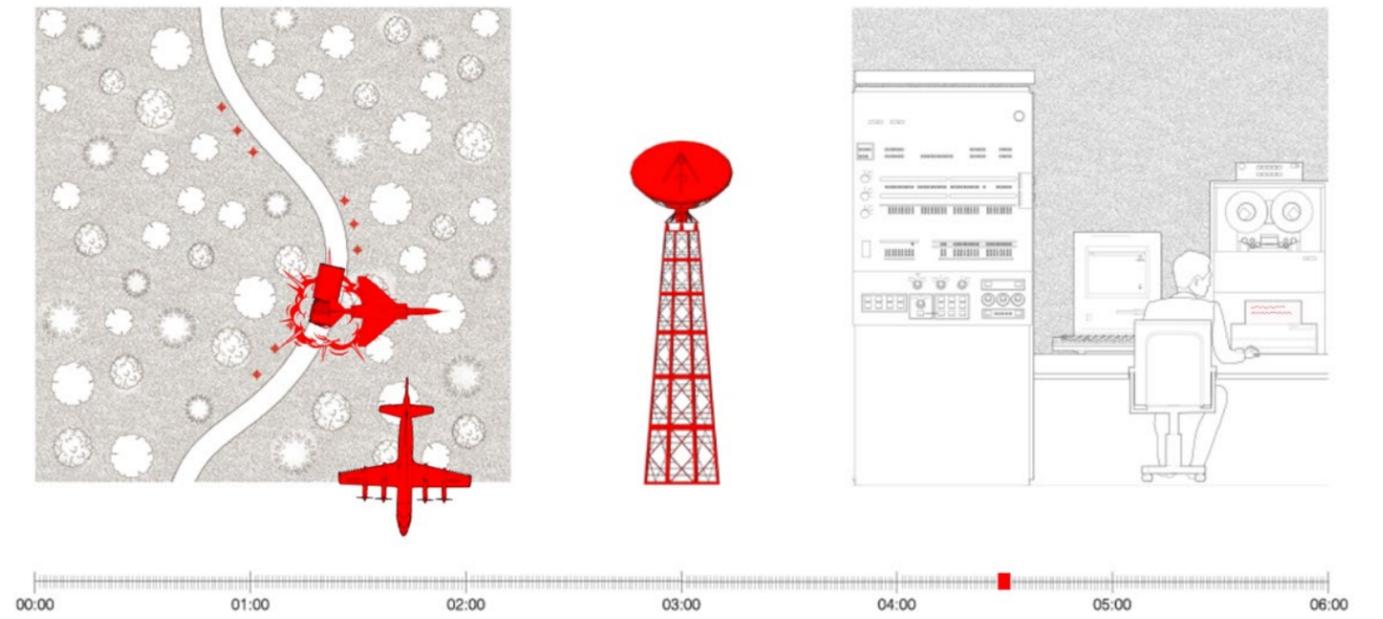
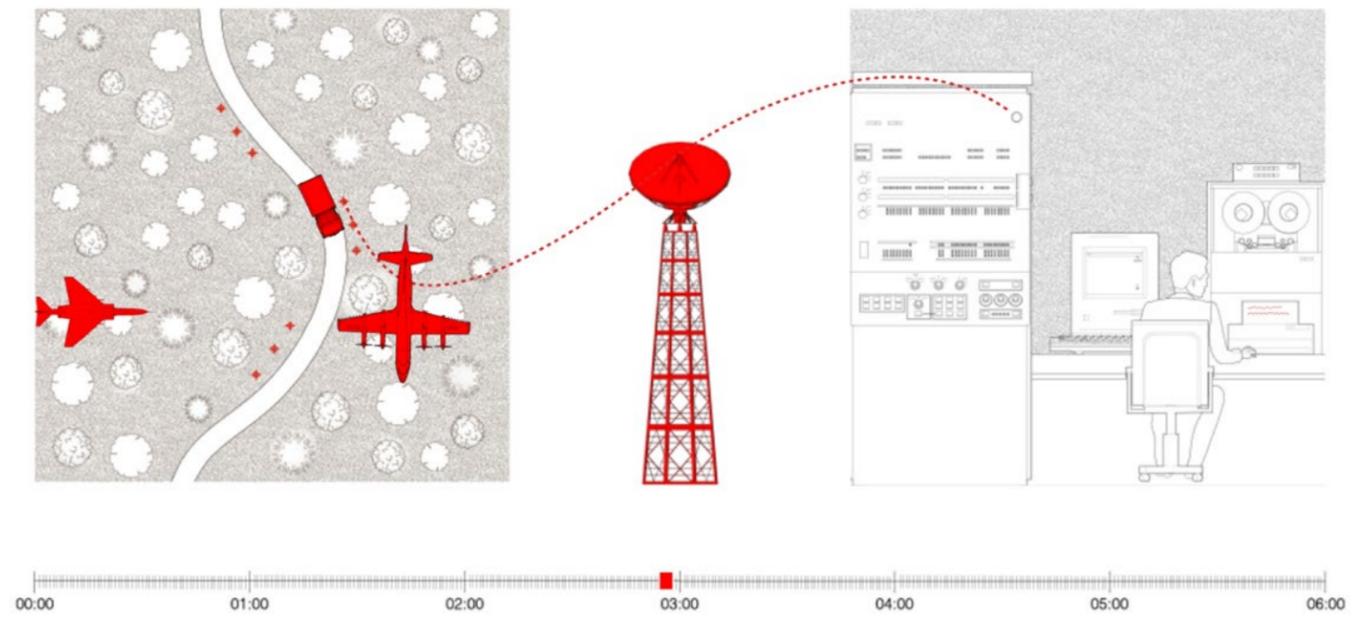
Information Extraction
Environmental concentration



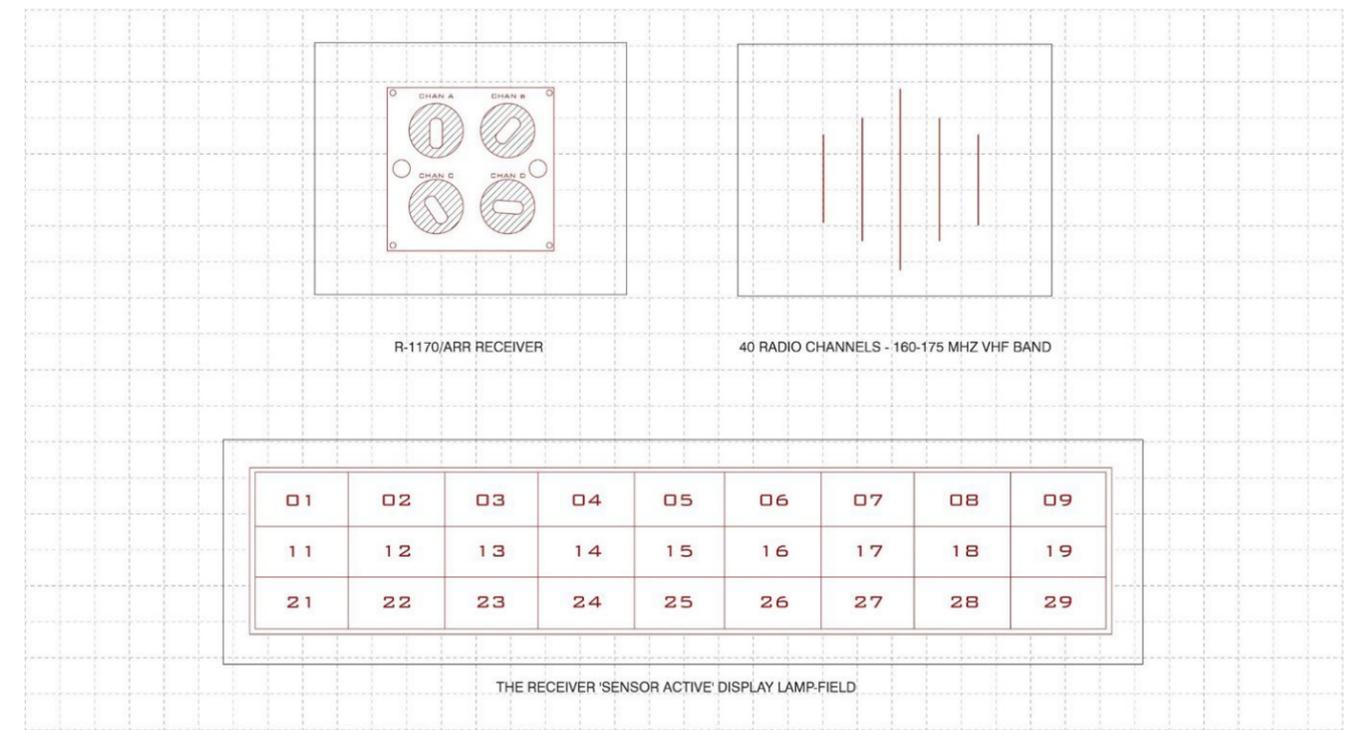
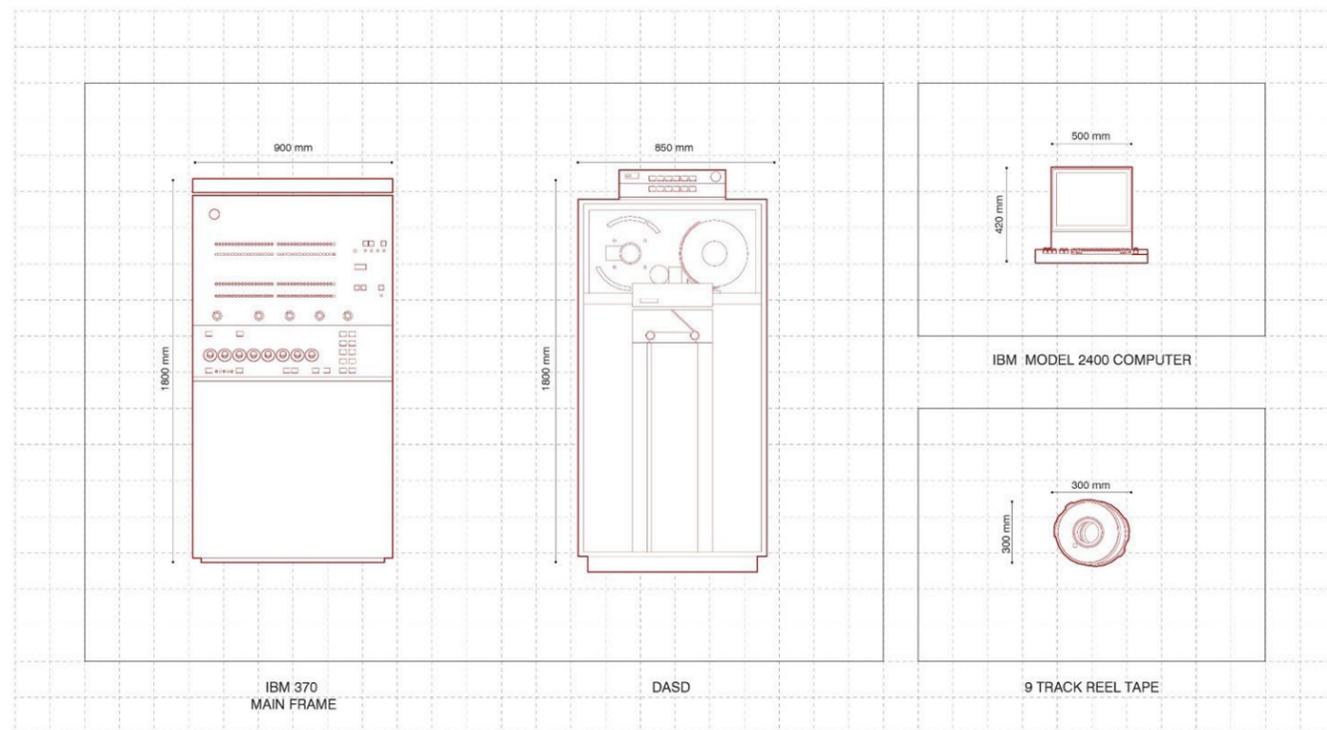
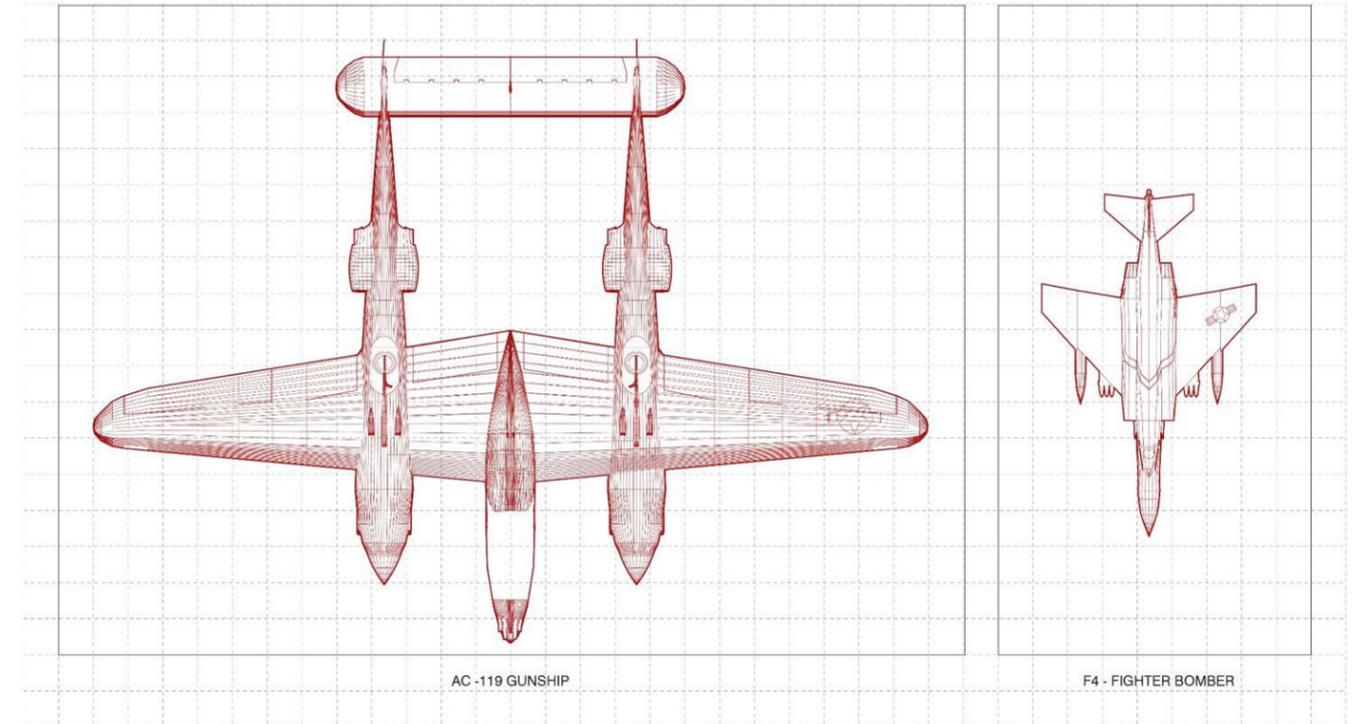
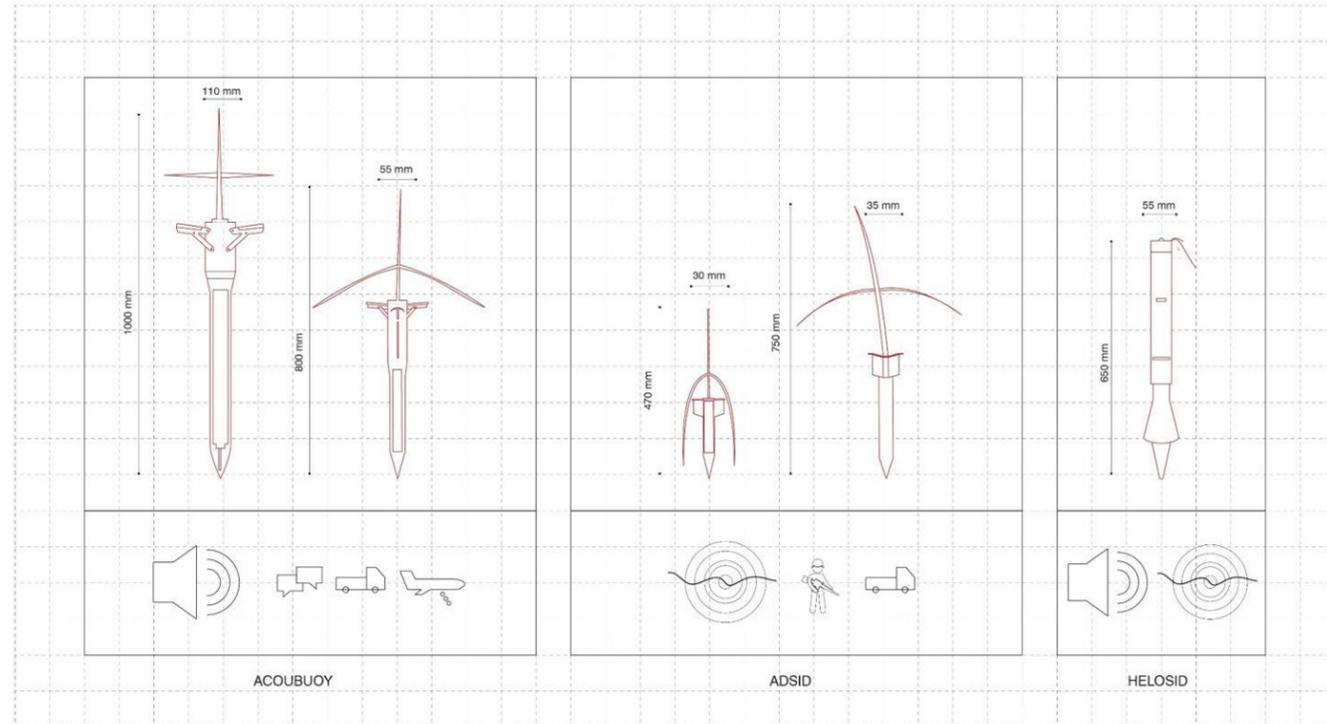
Operation White Igloo
Points of interest on the Ho Chi Minh trail

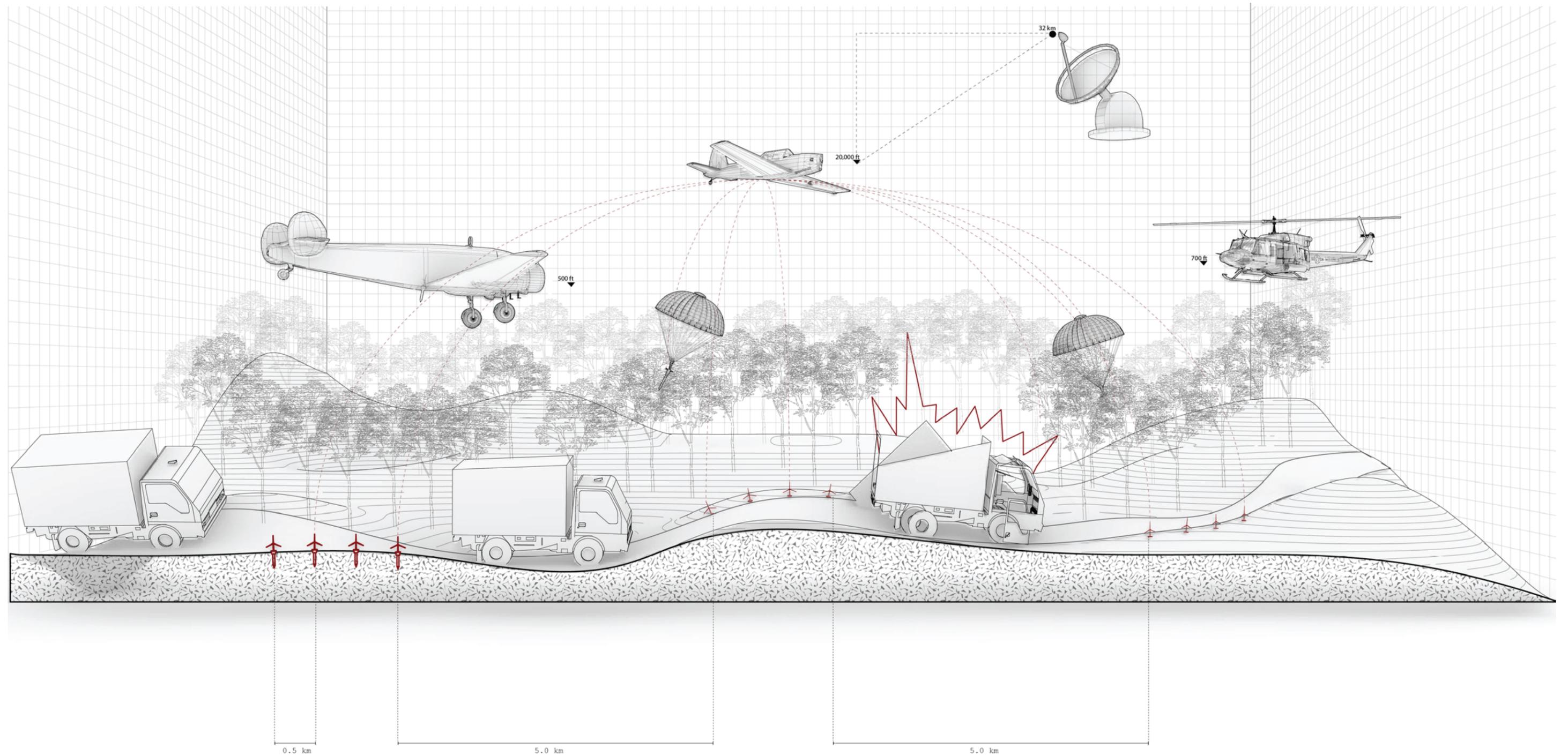
The environmental concentrations look at the war as the first war in military history to be run with full scale assistance of electronic data and computer based analysis. Operation White Igloo created a virtual anti-infiltration barrier along the Viet Cong supply route on the Ho Chi Minh trail, leading to an electronic battle fought from multiple territories. The virtual wall was created by dropping acoustic and seismic sensors along key locations to detect enemy movement. The sensors were designed to be camouflaged in the landscape as grass or trees. The acoubuoys consisted of sound transmitters and audio amplifiers, while the sonobuoys contained mini seismometers. The sensors would be dropped from airplanes, helicopters or parachutes. Orbiting aircrafts would relay the received sensor signals to the command center through their receivers at different radio channels. Target assessment officers would analyze these signals and relay bombing target locations to the attack aircrafts. Through an information relay network, the operation was an almost real time intelligence source about enemy movements. This turned the bombing operations into a mathematical puzzle.

The second intelligence mission of interest is the Hamlet Evaluation System. It was a computerized pacification reporting system which translated the intangible dimensions and development trends of South Vietnam hamlets into objective statistics. US district advisors operated as 'embodied sensors'. The advisors along with Vietnamese translators produced a location-based ontology through observation and surveys. Six main conditions were recorded on the HES worksheets. The data was then analyzed and reorganized into a grid of 1km x 1km across South Vietnam. Hamlets were marked by UTM coordinates resulting in a predecessor to the contemporary GIS positioning system. Hybrid digital-paper maps were generated using SYMAP. These computational maps represented a security score from A to E for every hamlet. With A being hamlets which support the US operation and E being those that did not. These statistical reports about the Vietnamese population control system would be sent to Washington DC as evidence of progress of control. The system translated these qualitative socio-political life of the hamlet into a quantitative ordinal score.

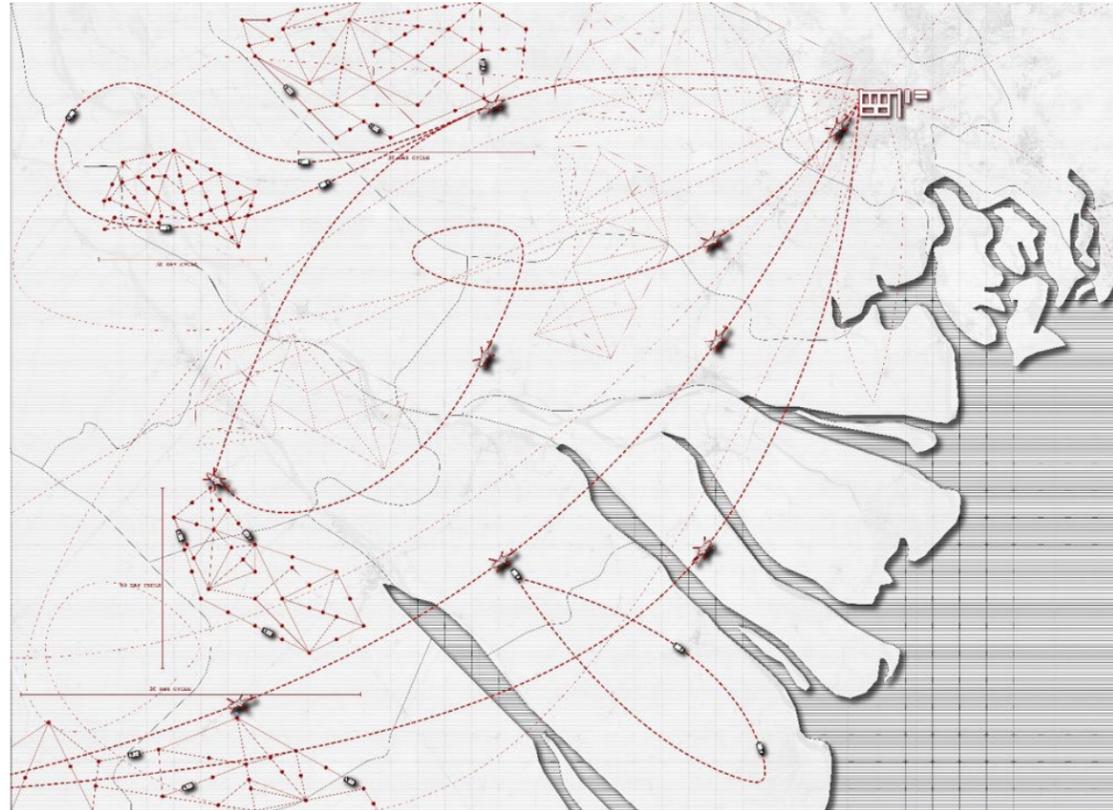


Operation White Igloo
Feedback loop

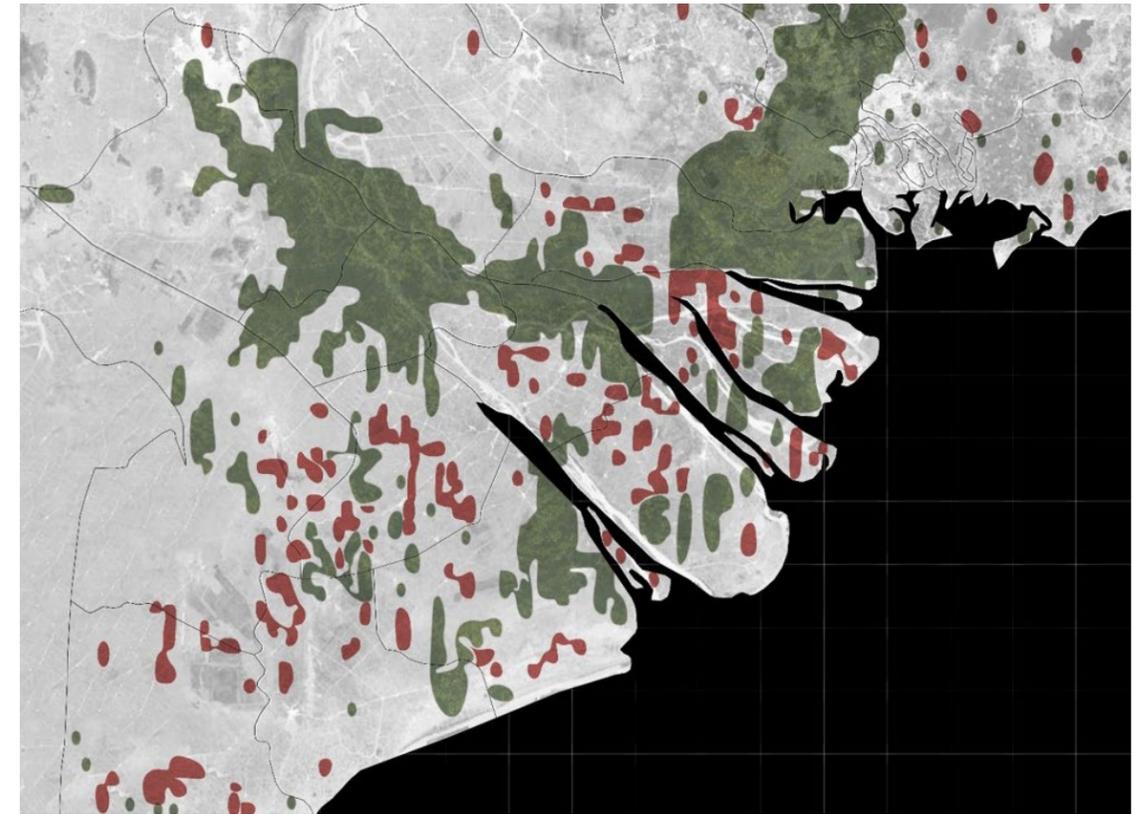




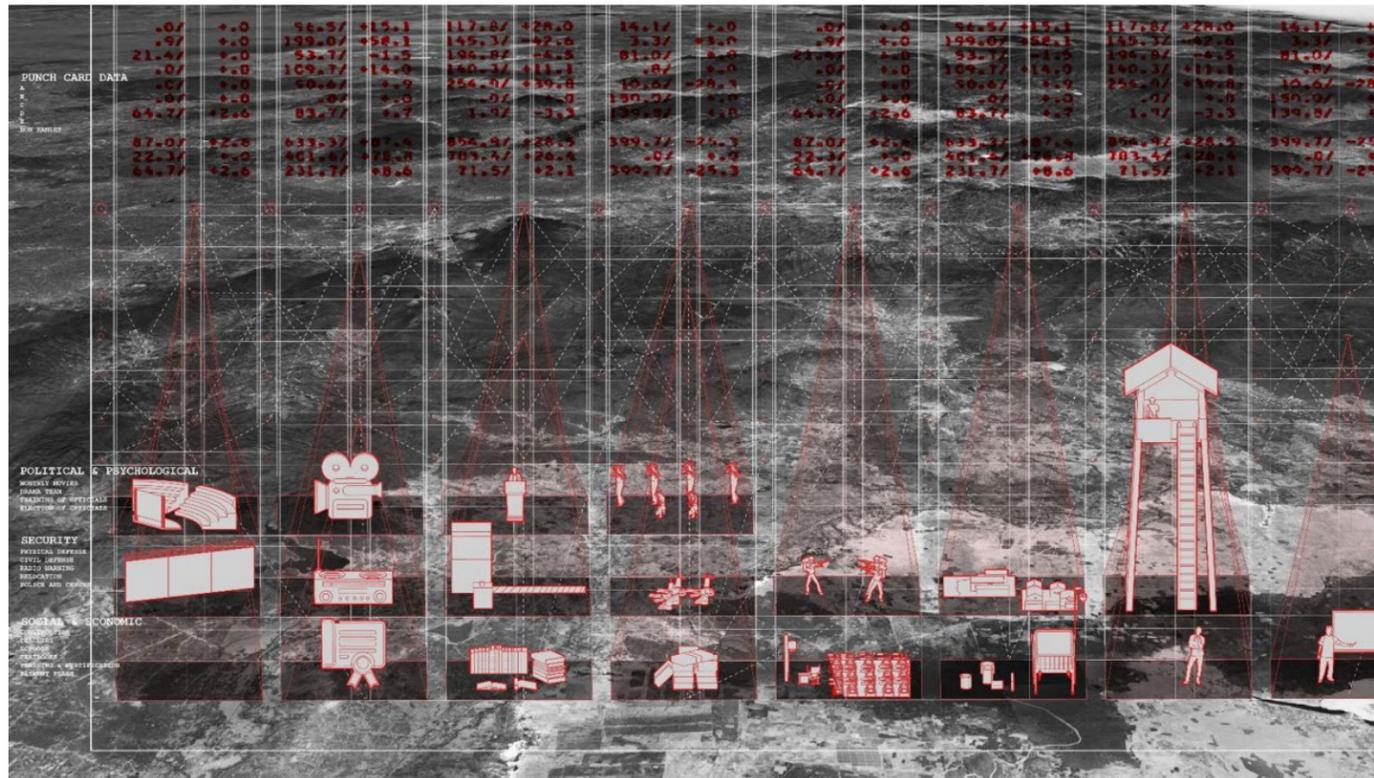
Operation White Igloo
Network systems used for bombing operations



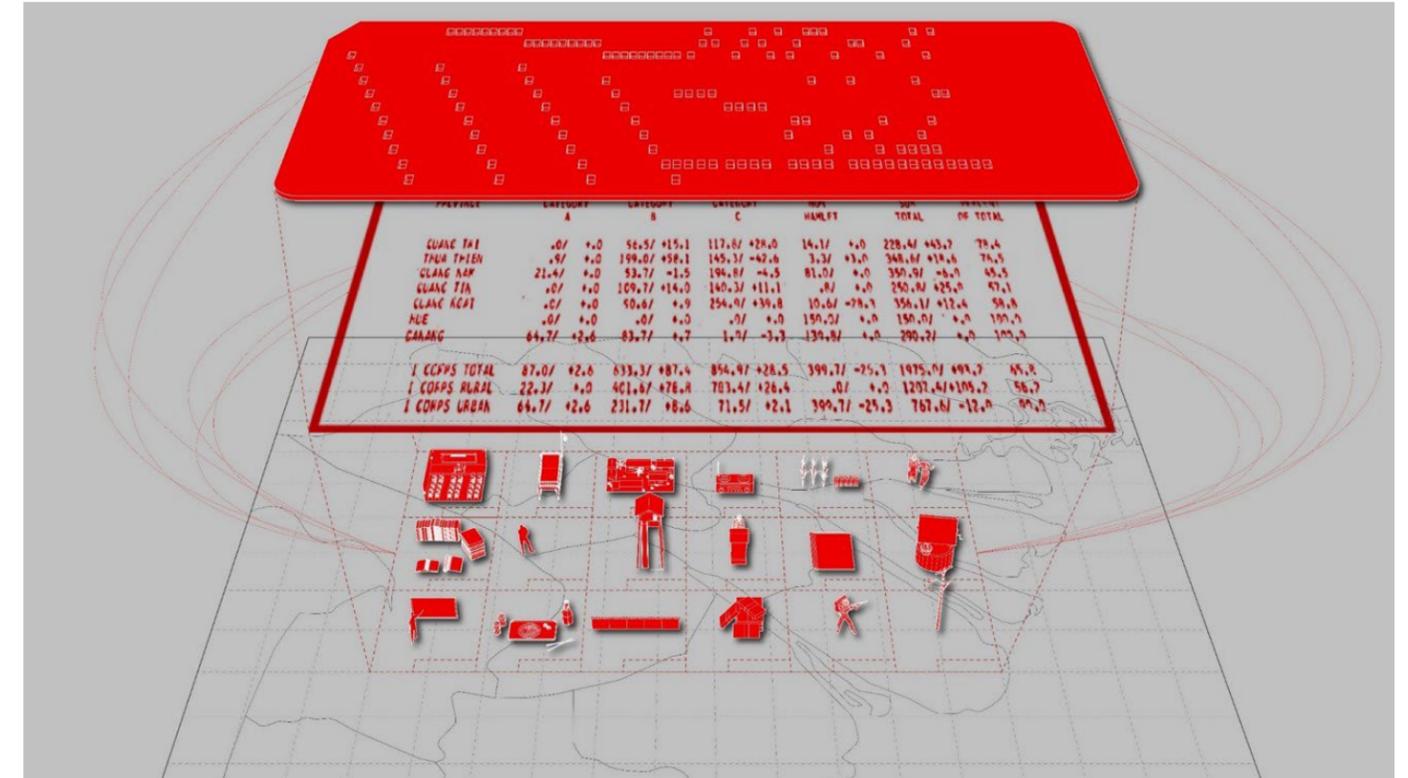
Hamlet Evaluation Strategy
Survey territories



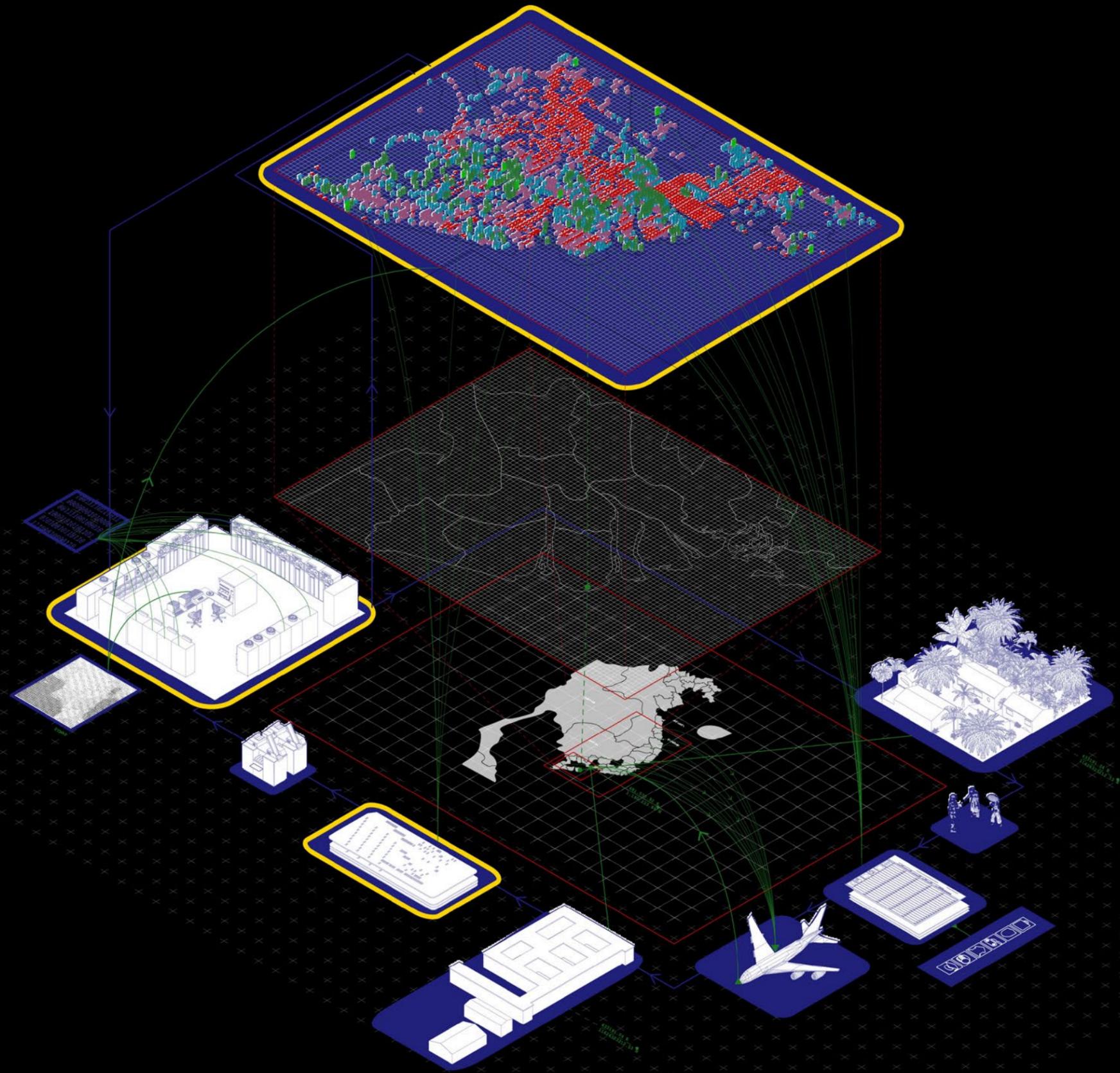
Hamlet Evaluation Map
Summary of A to E hamlets

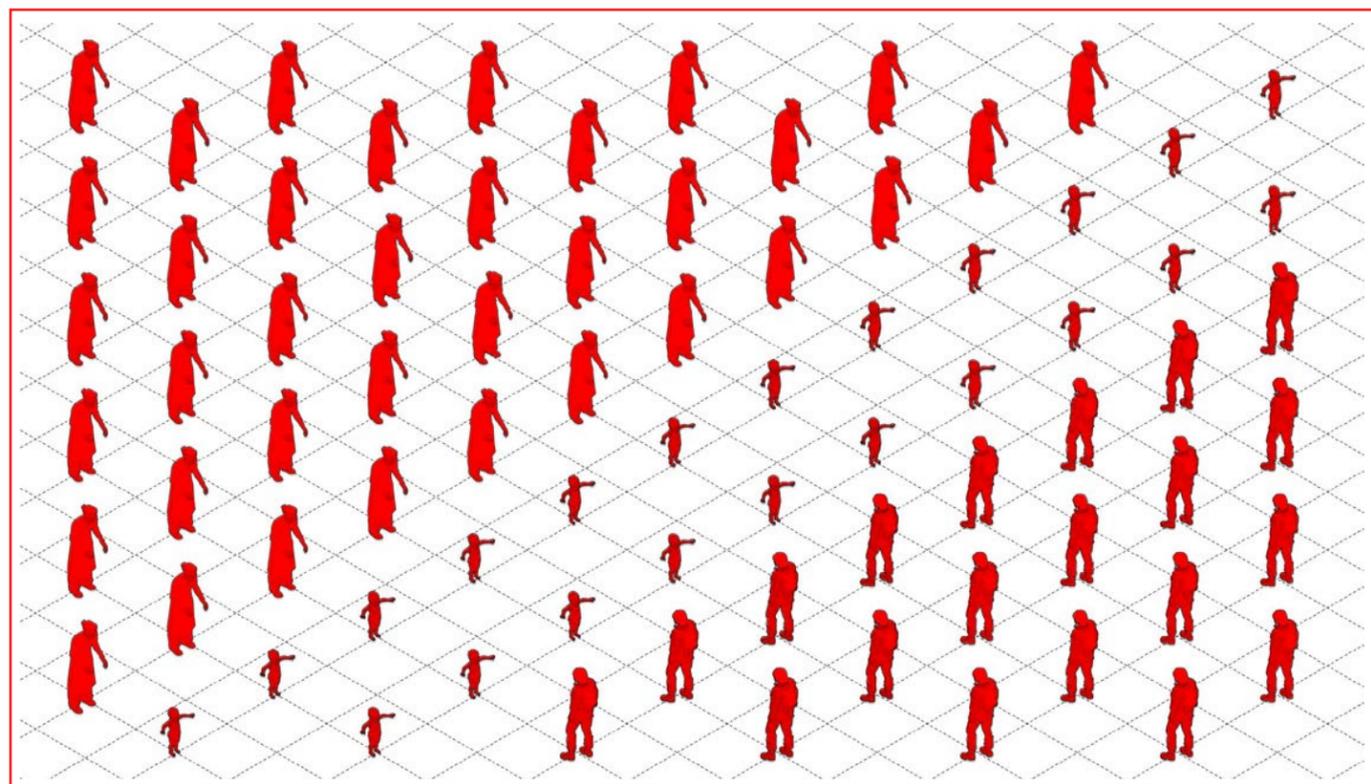


Pacification Plan
Pacification hoped to increase loyalty towards the government



Matrix of Observations
Reporting system uses punch card analysis





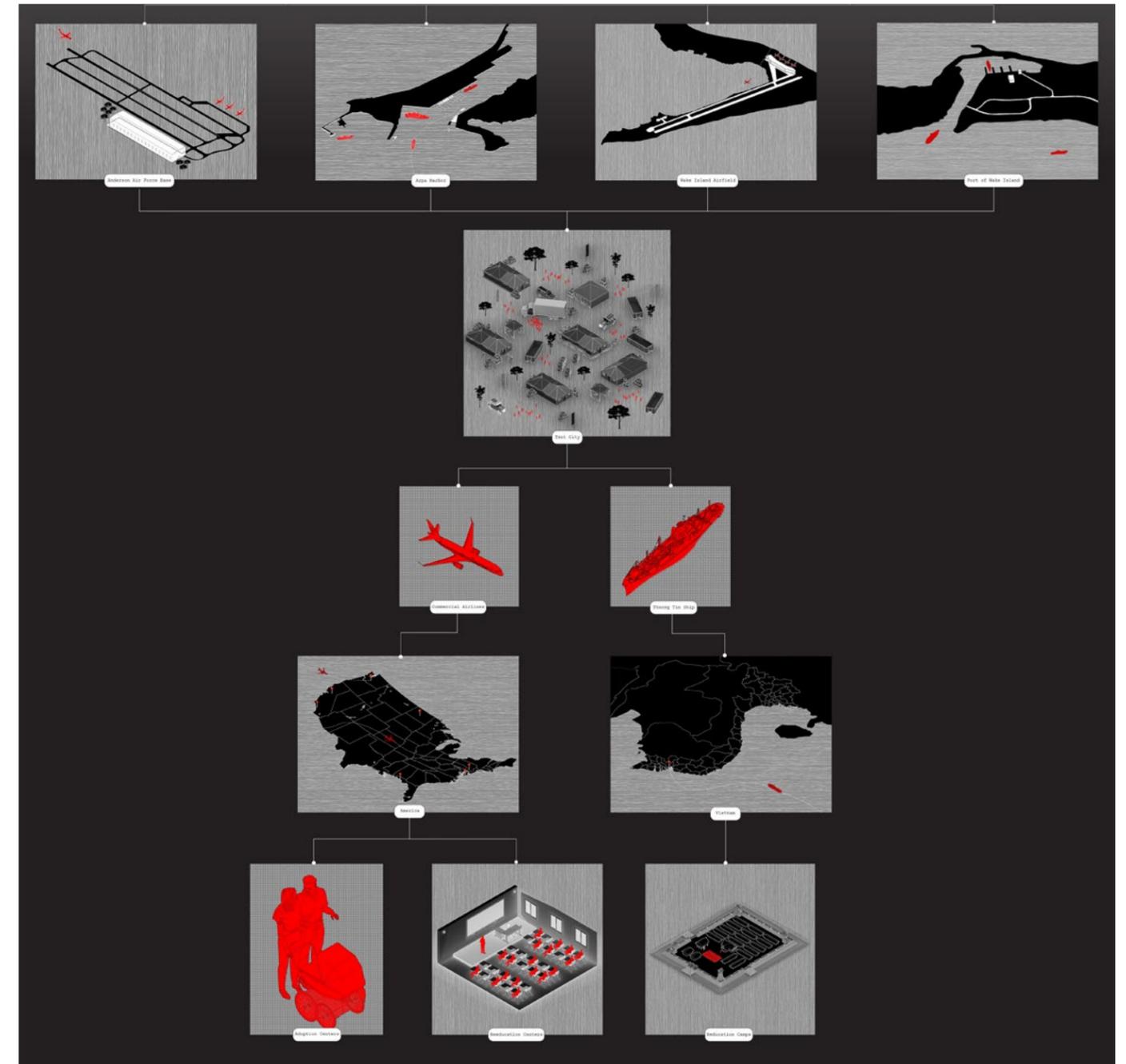
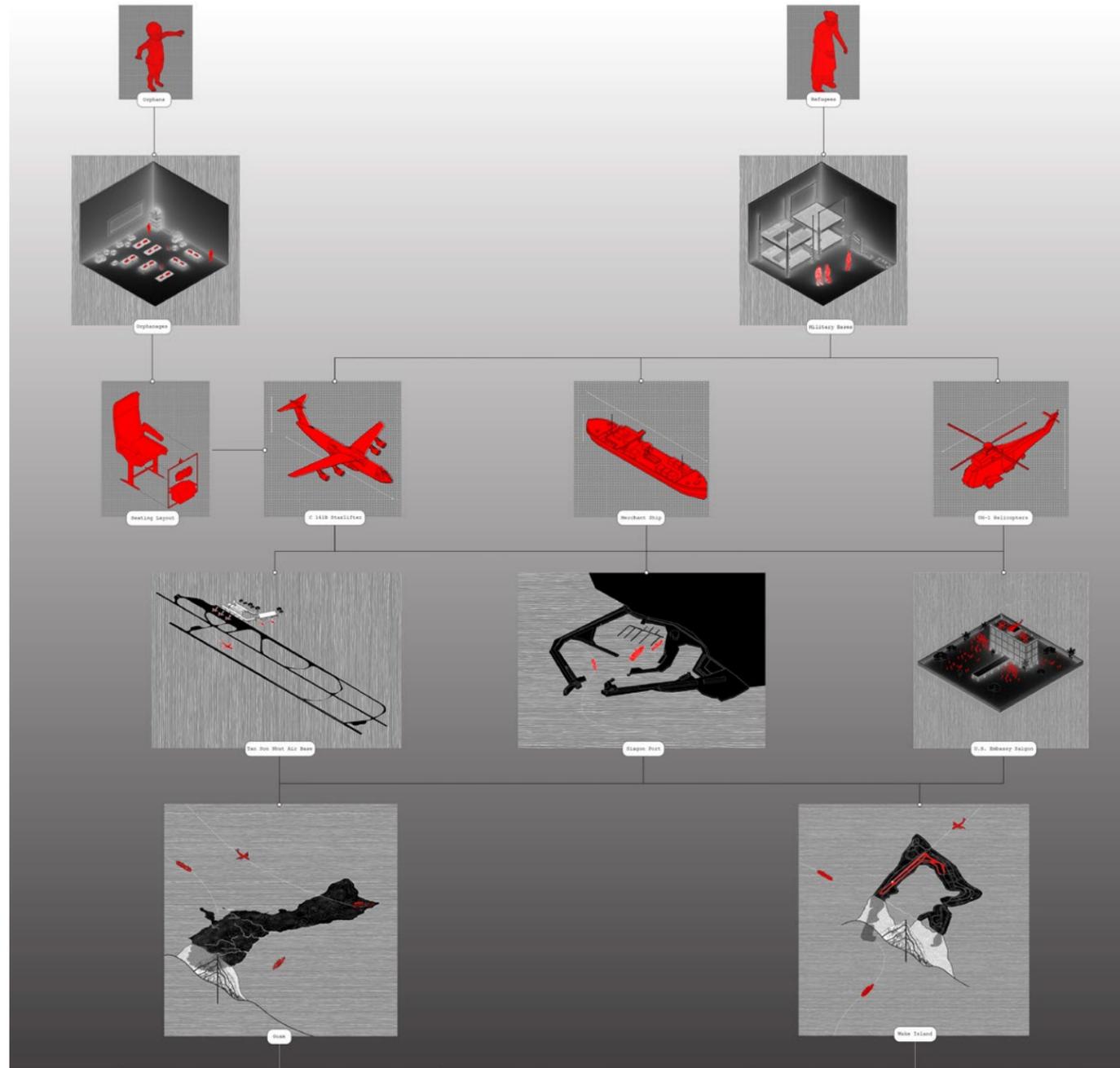
Mass Human Extraction
Cultural concentration



Operation New Life and Babylift
Guam as a site for processing of refugees

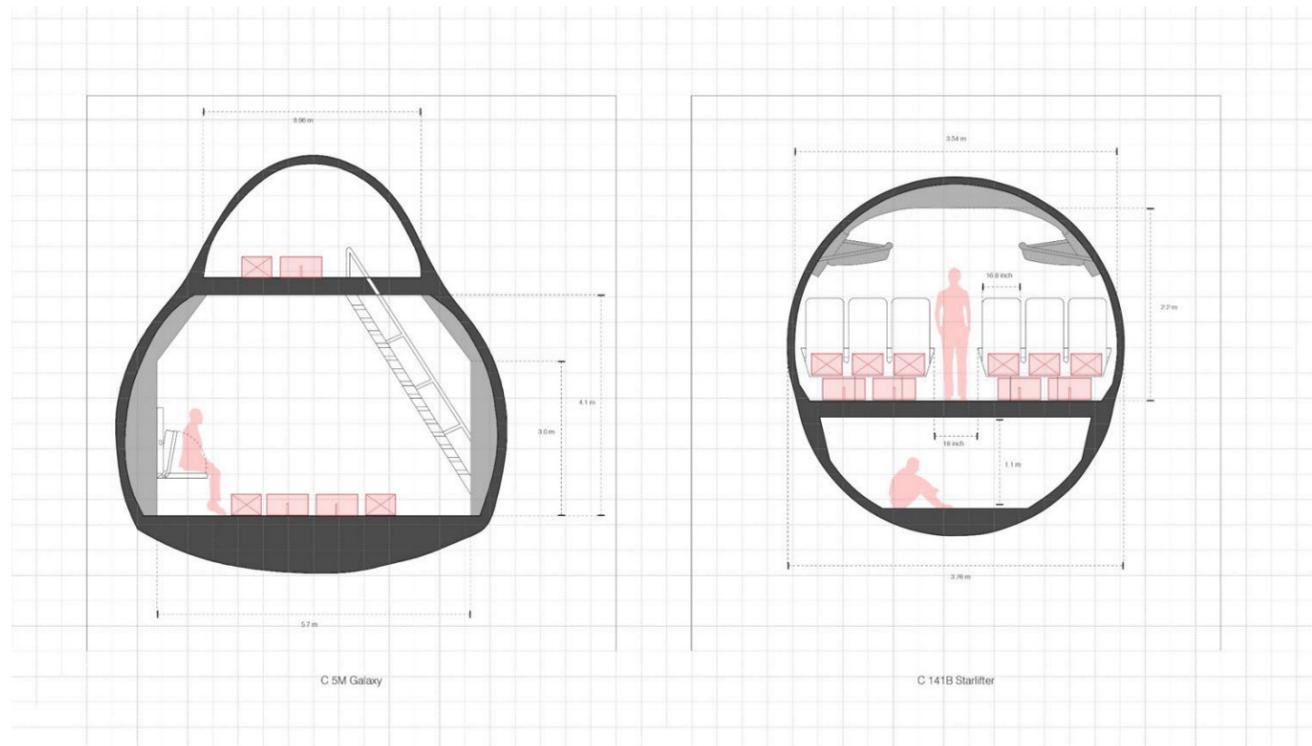
The cultural concentration focuses on the military strategies used to extract humans after the war as well as its cultural influences. During the final days of American occupation in Vietnam, thousands of people became refugees and had to flee their homeland. The United States army carried out a series of evacuations named Operation New Life and Operation Babylift. This involved evacuating over one hundred thousand Vietnamese refugees from Saigon and transporting them to Guam for “processing” before granting them access to American soil. Guam, an island in the Pacific Ocean, had to transform itself to house this increase in population in less than two weeks. First, more than 450 acres of the jungle had to be cleared out to make the space more habitable. The soldiers erected Asian huts and military squad tents- deploying a total of 3,546 units. Tent city, as it was called, had a population of fifty thousand residents at a time with about thirteen thousand people arriving in just one day. By November of 1975, eight months after the operations were carried out most of the refugees had been relocated to America to start a new life or were returned to Vietnam to face the reeducation camps.

These operations required reversing military strategies. Military tactics and procedures were employed to recover lives rather than end them. Operation babylift was the name given to the mass evacuation of supposedly orphaned children. C5M Galaxy and C 141B Starlifter were used as cargo planes for ammunition during the war, they now carried over a thousand babies. Some flights were so full that people had to be seating in the cabin on the lower deck. The children were strapped in boxes that once held bullet cases and since they were placed on the floor and in between seats they were secured by repurposing gun straps. The children stayed for a period of three to four weeks before being resettled in the United States. After reaching their final destination, they were sent to adoption agencies and were finally adopted and raised by families in different locations. Today, some of these children are now seeking to go back to their homelands in search of their adopted parents and cultural heritage. Others were children from Vietnamese war brides and American soldiers. These children are now adults trying to immigrate to America after facing racial difficulties in Vietnam.

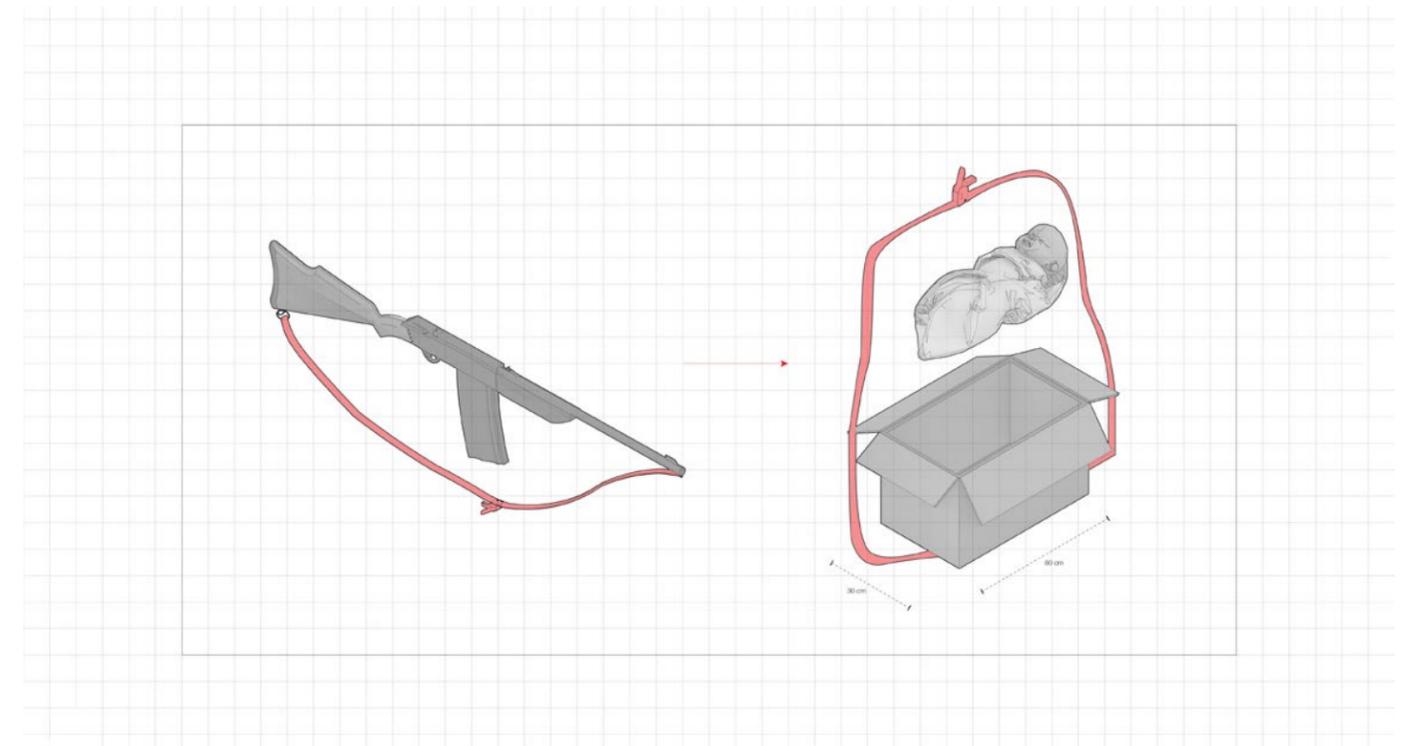


Evacuation Plan

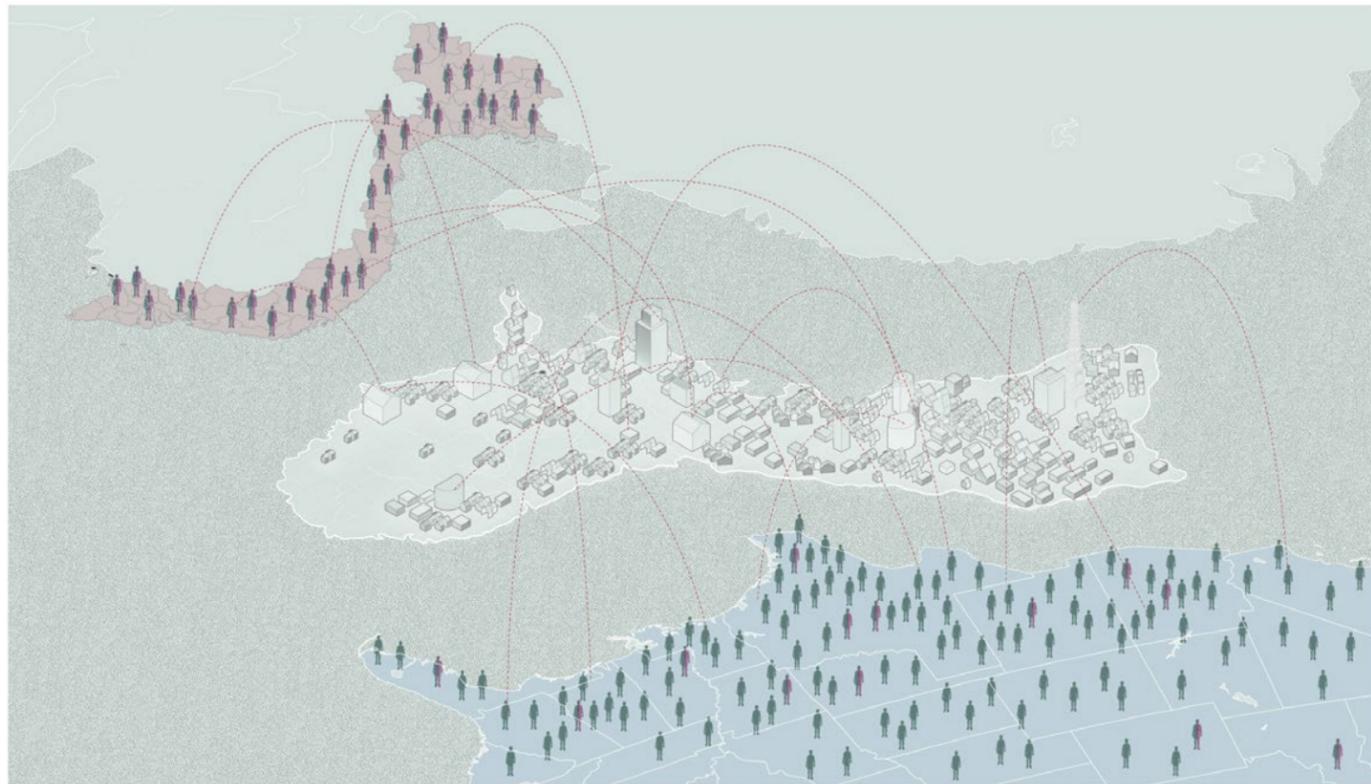
Summary of strategies and locations used in the evacuation missions



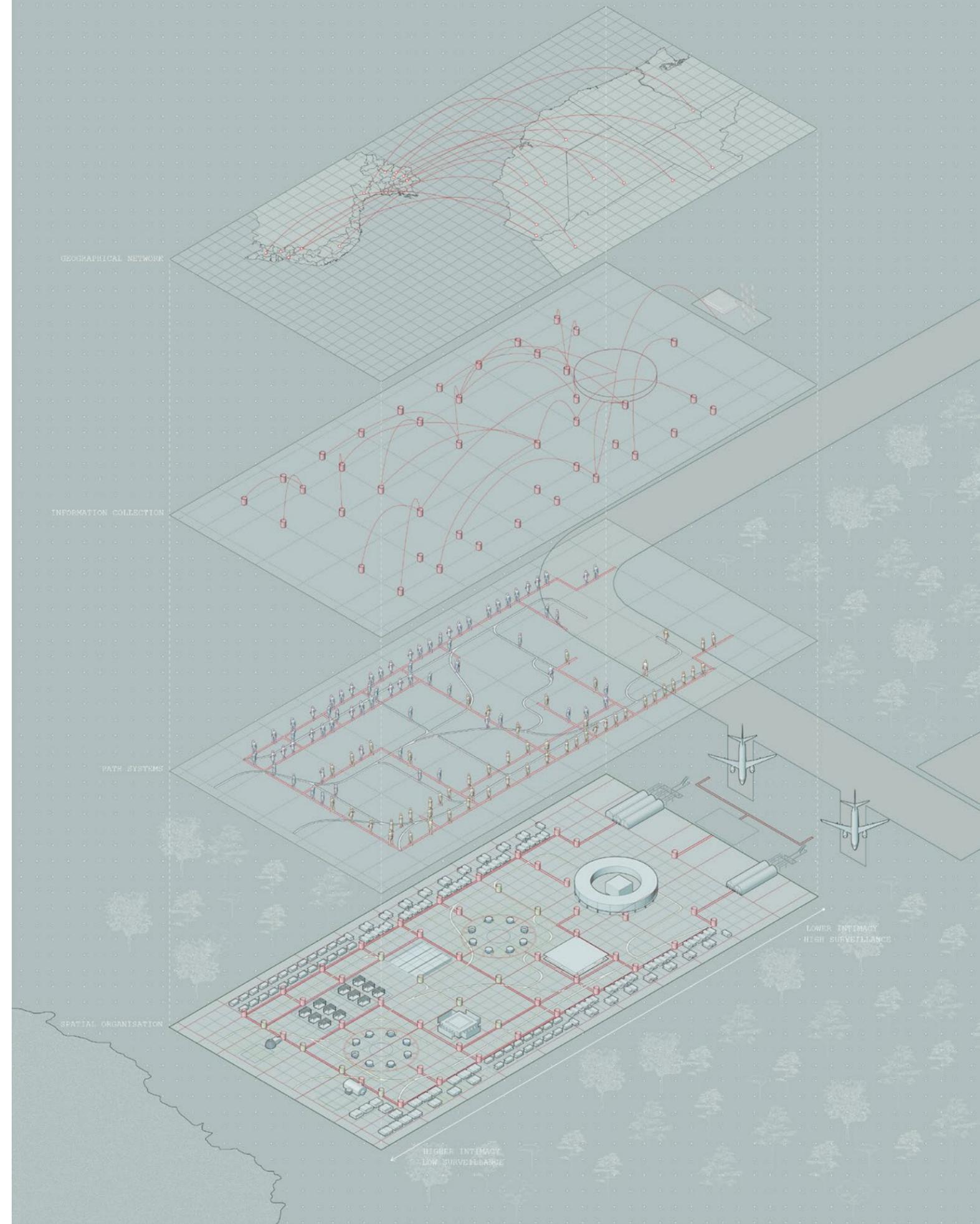
Operation Babylift
Cargo planes used to transport babies

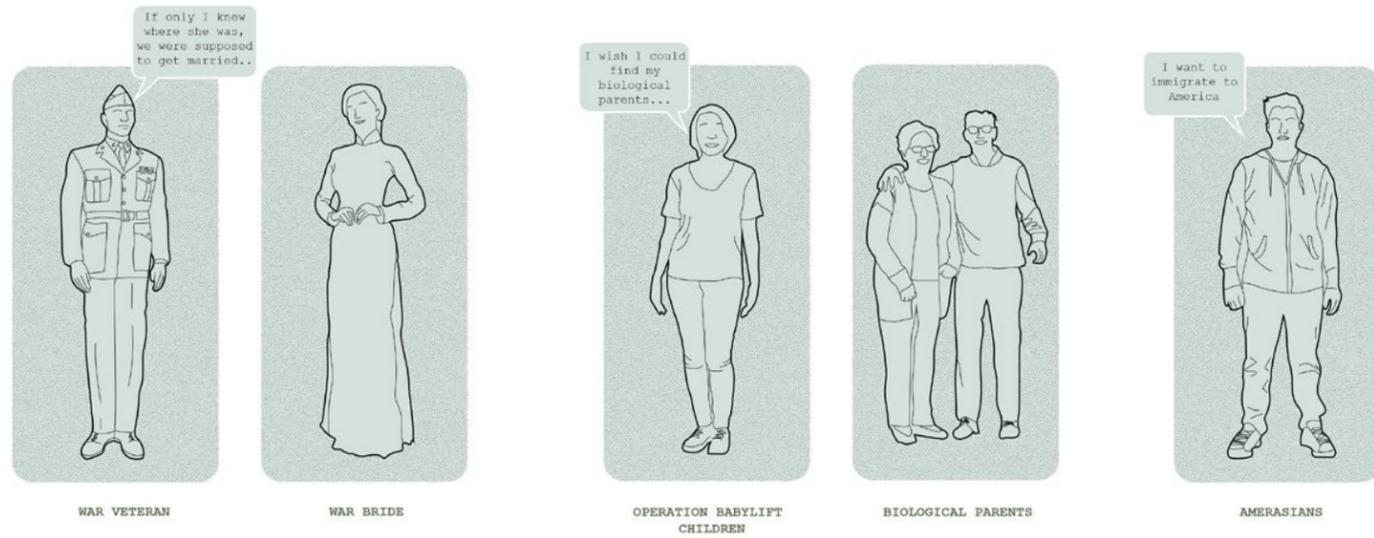


Repurposed Equipment
Gun straps used to secure babies in boxes

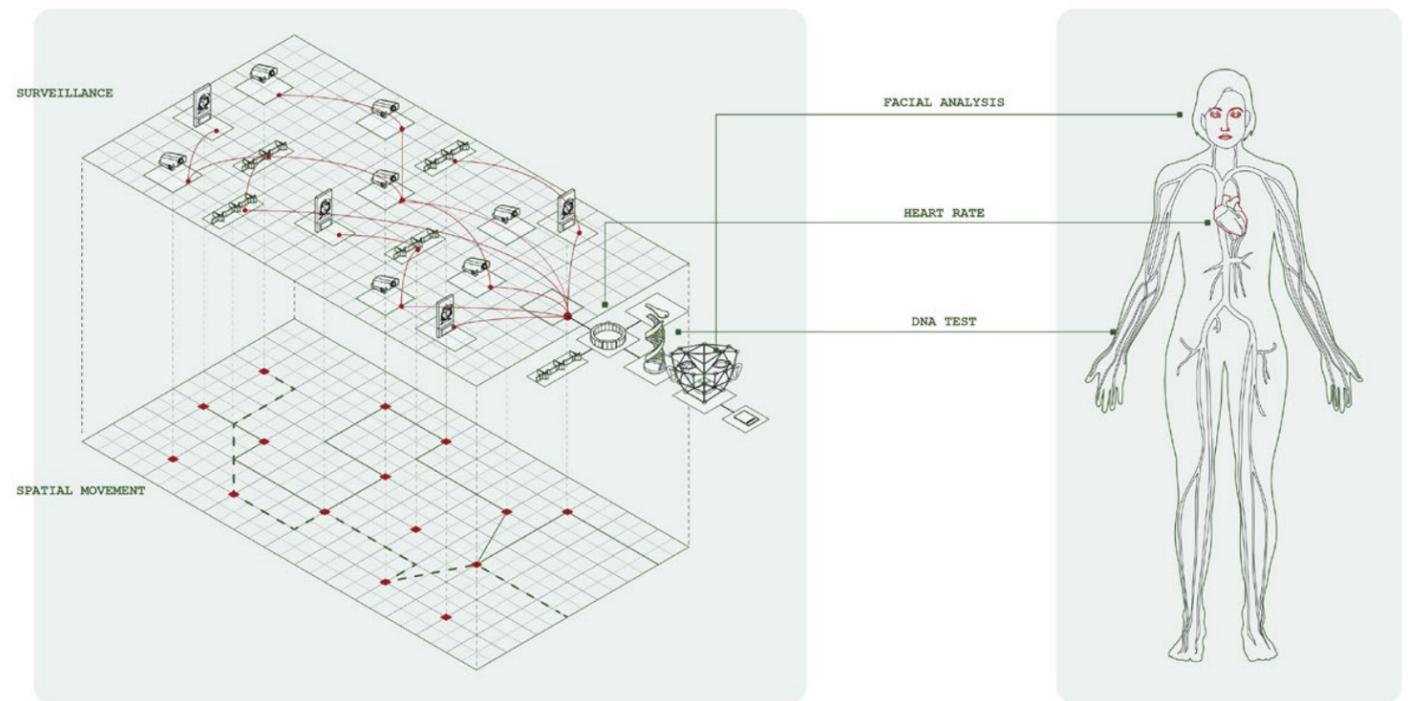


Camp Reversal on Guam
Guam is a space of new diplomatic relations between Vietnam and America

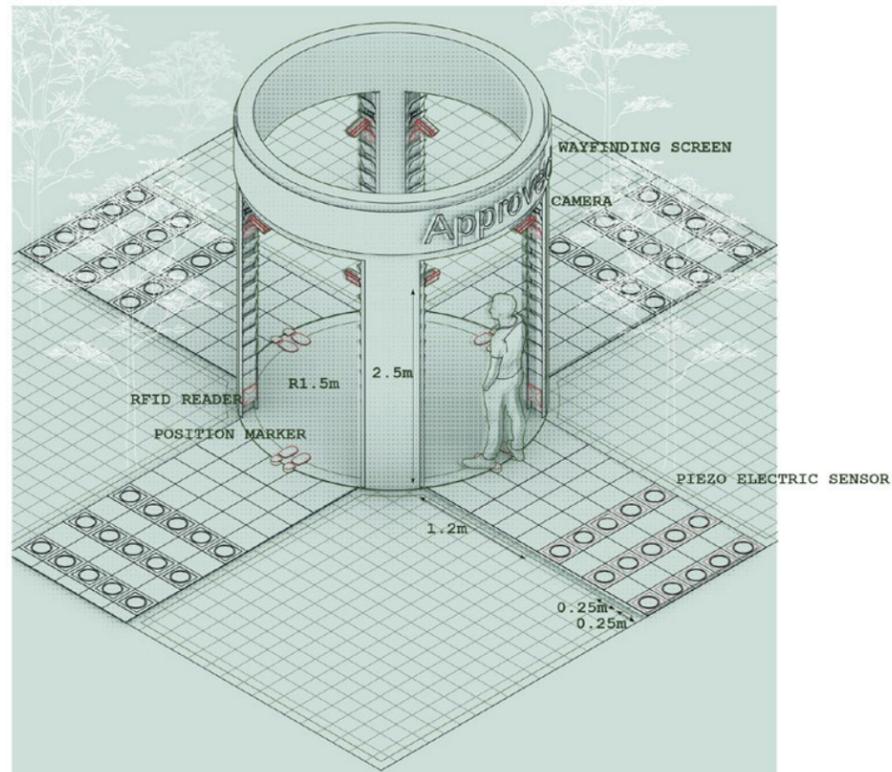




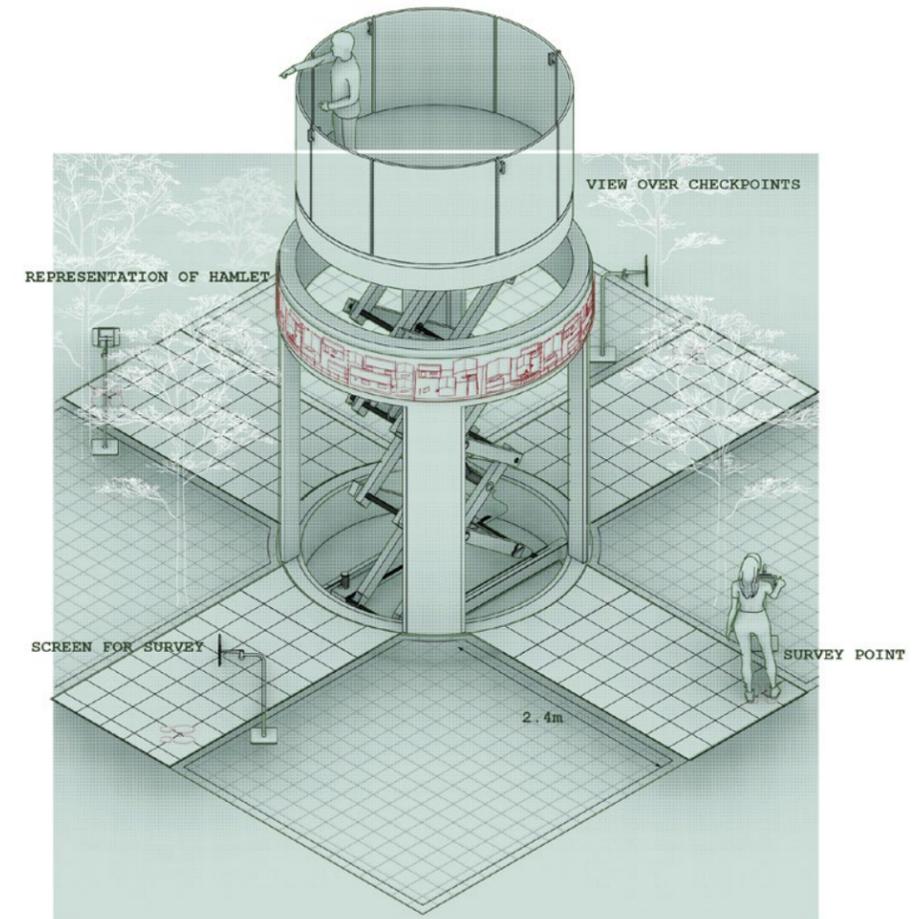
Visitor Profiles
Camp Reversal processes individuals case by case



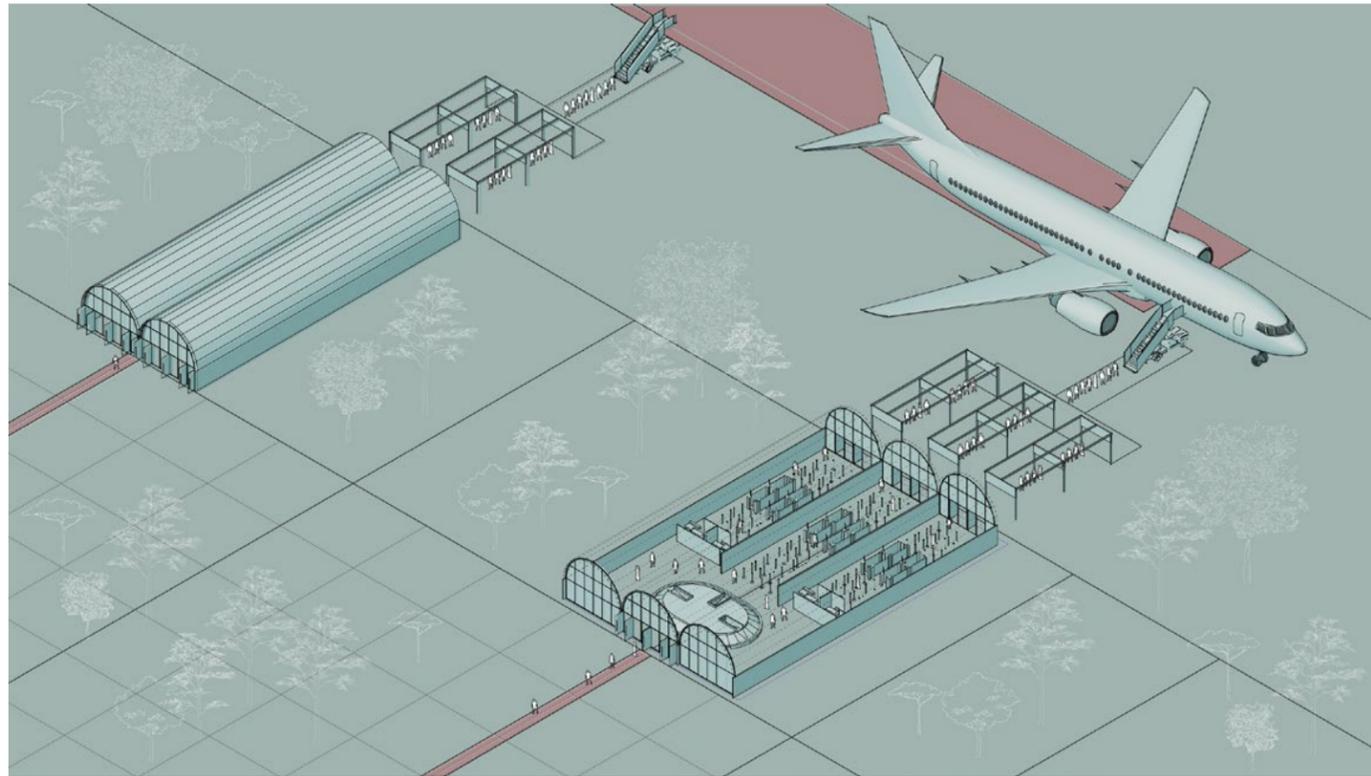
Information Collection
Heart monitors, facial analysis and emotional surveys are taken at checkpoints



Checkpoints
Way-finding systems and information collection points

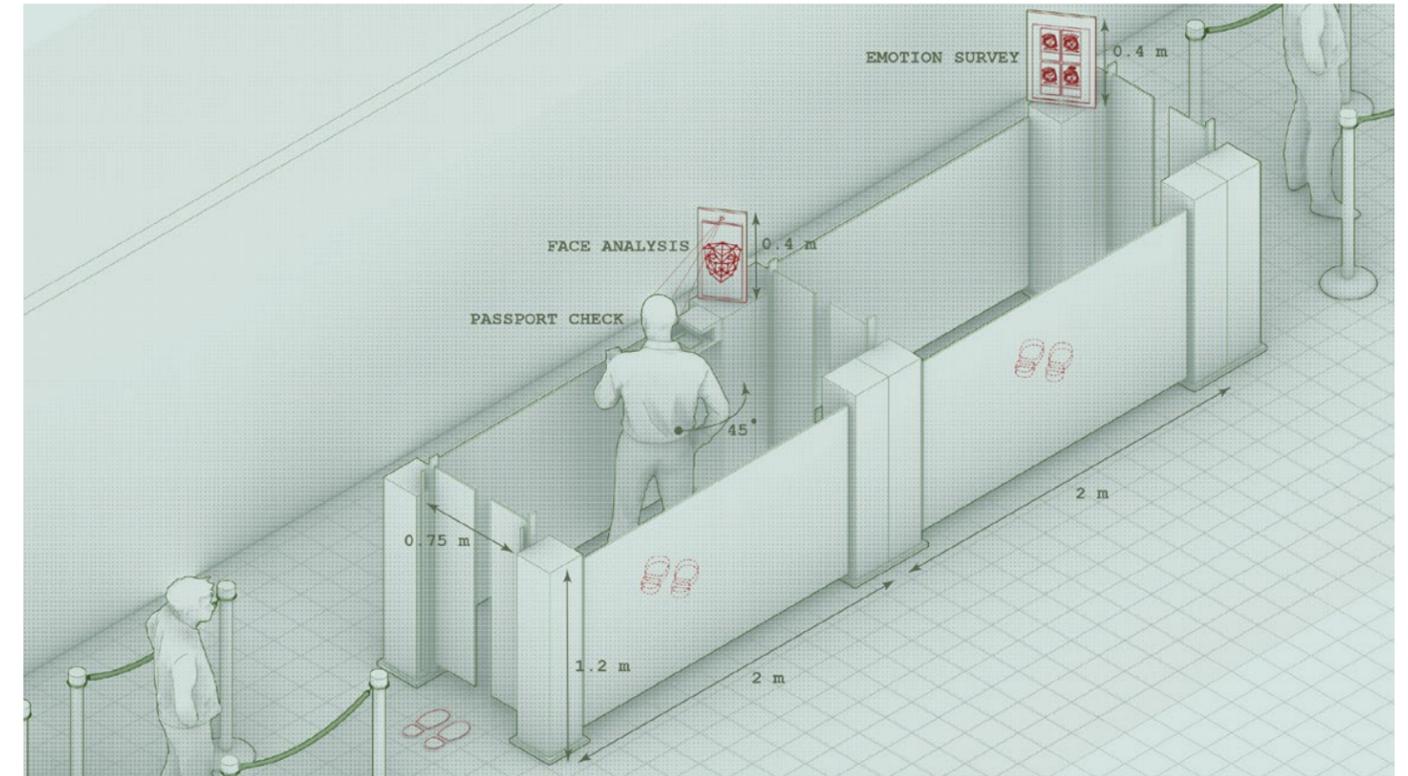


Checkpoints
Activated by motion sensors



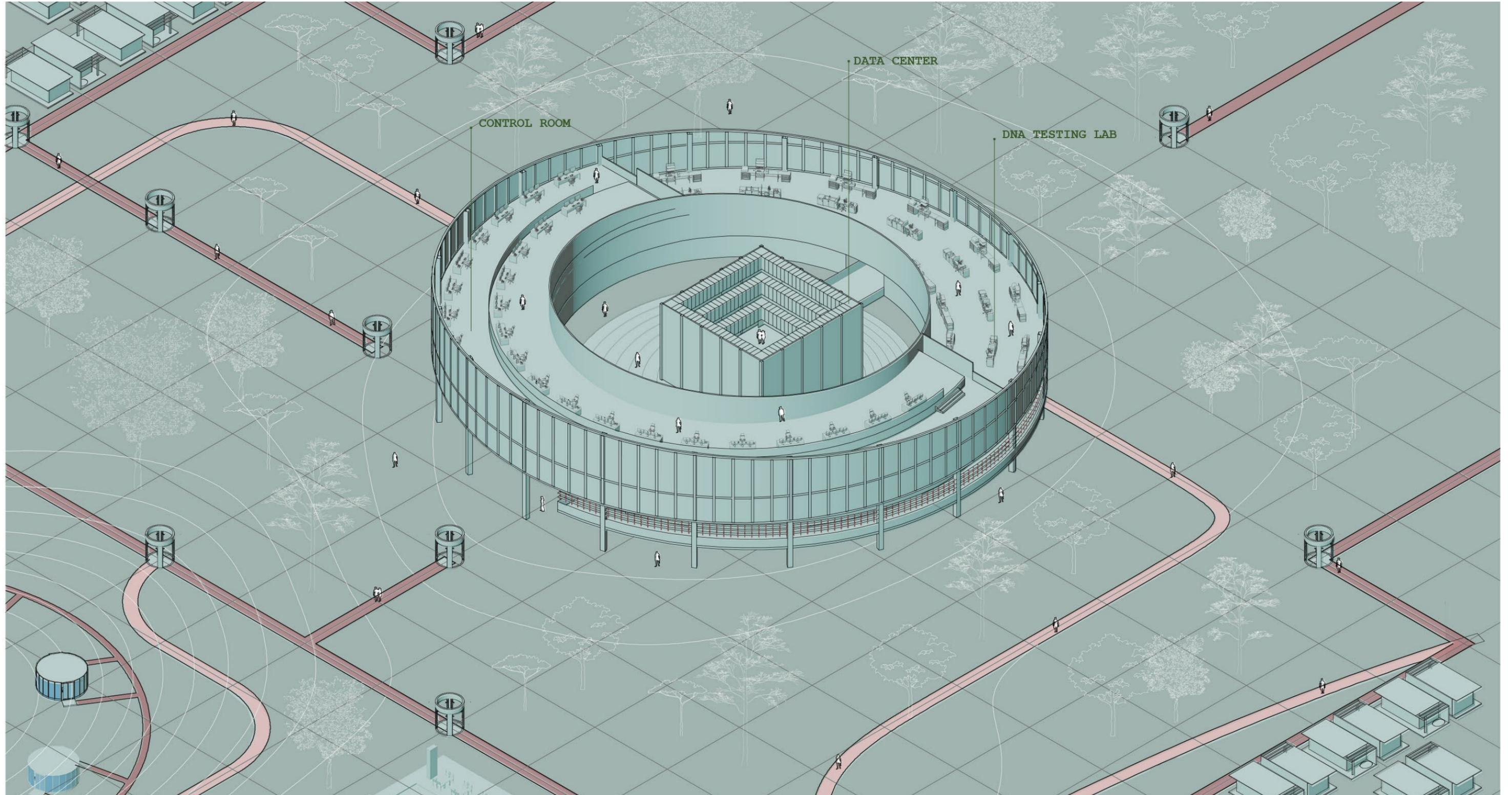
Arrival Terminal

Two terminals exist for arrivals from Vietnam and America

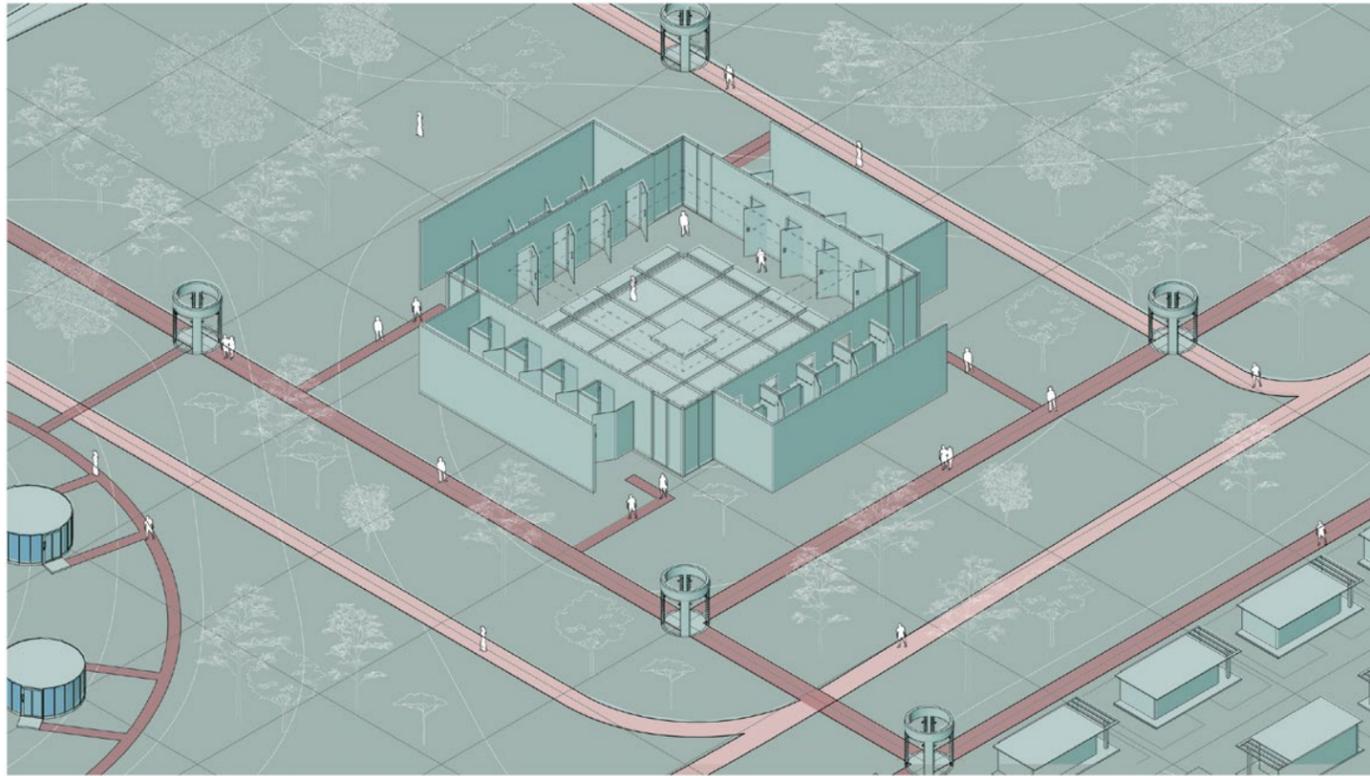


Entrance

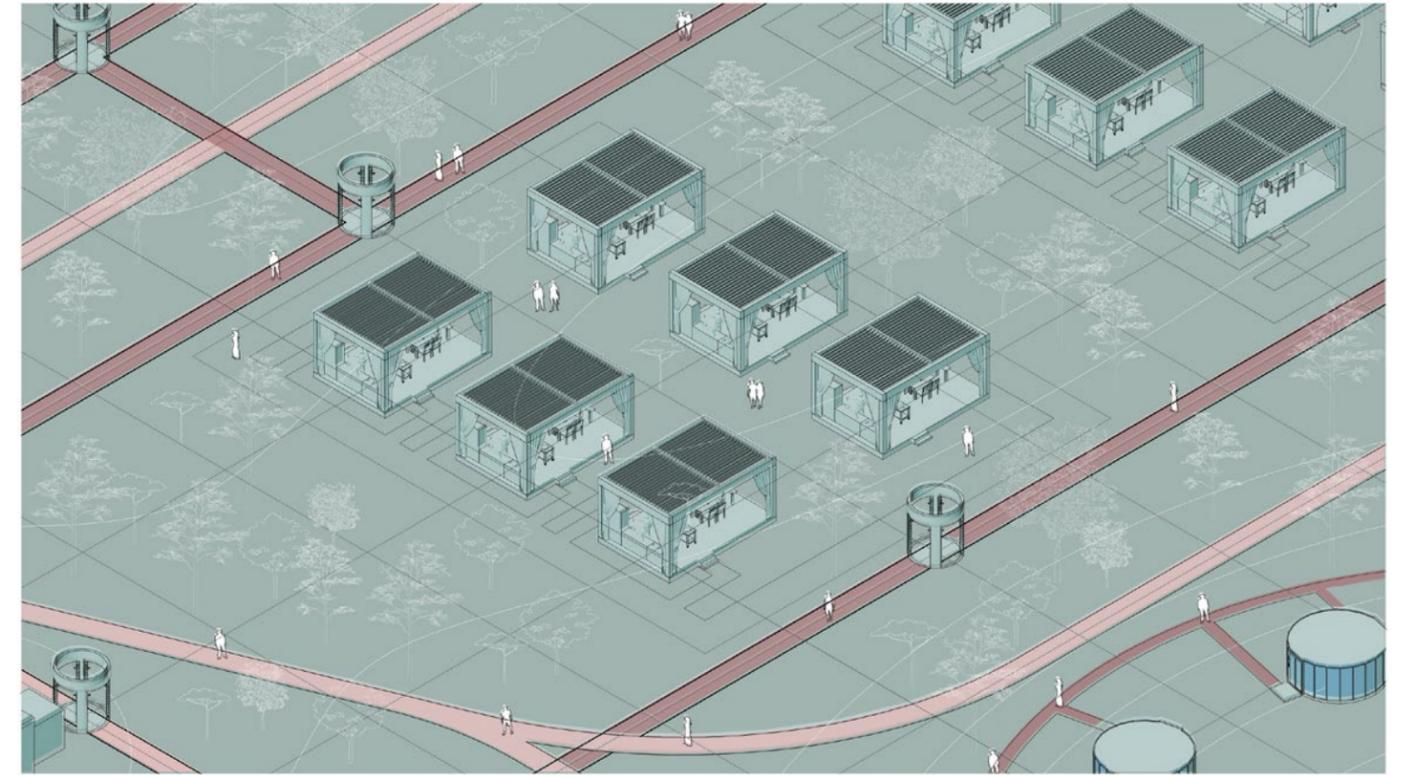
DNA swab and facial recognition information is collected



Reunification Centre
A space for the two parties to meet for the first time



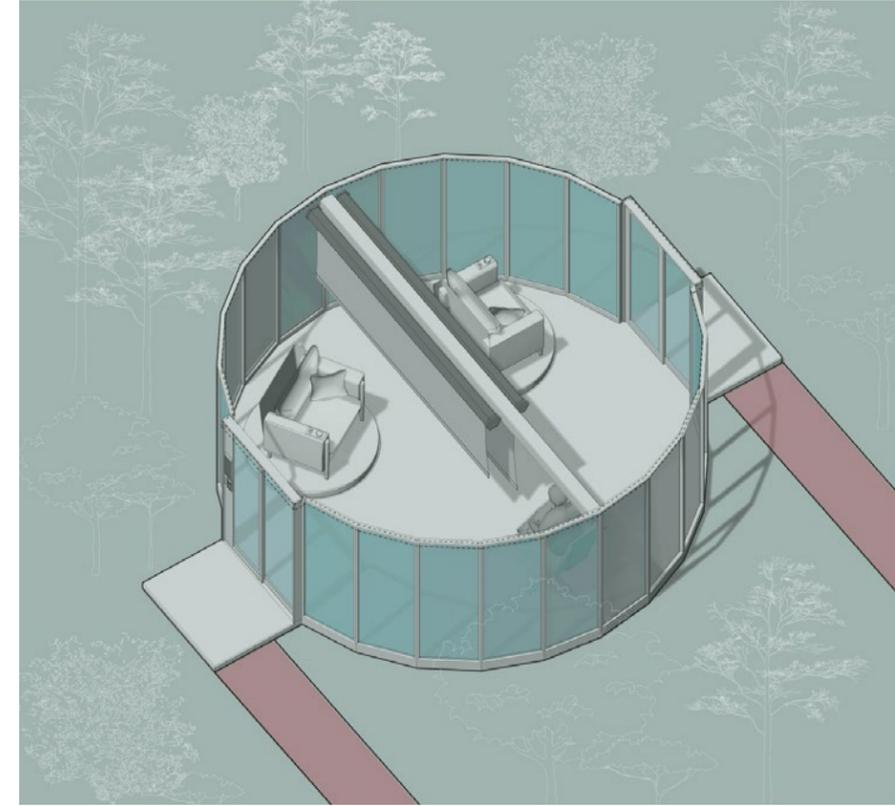
Meditation Space
Forms of therapeutic architecture for visitors



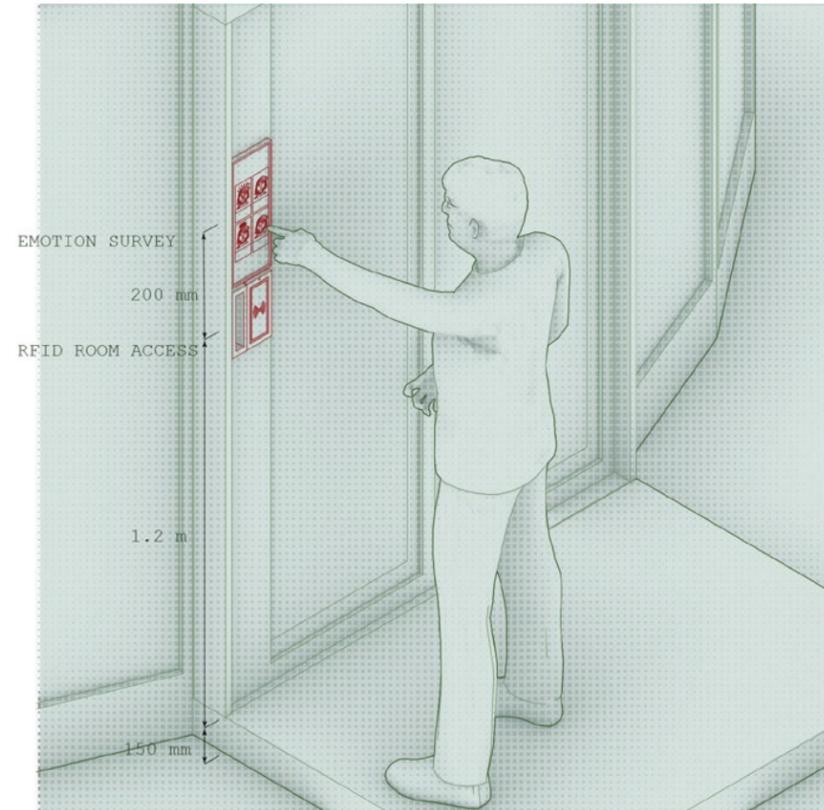
Private Dining
Cultural exchange and shared experiences are created



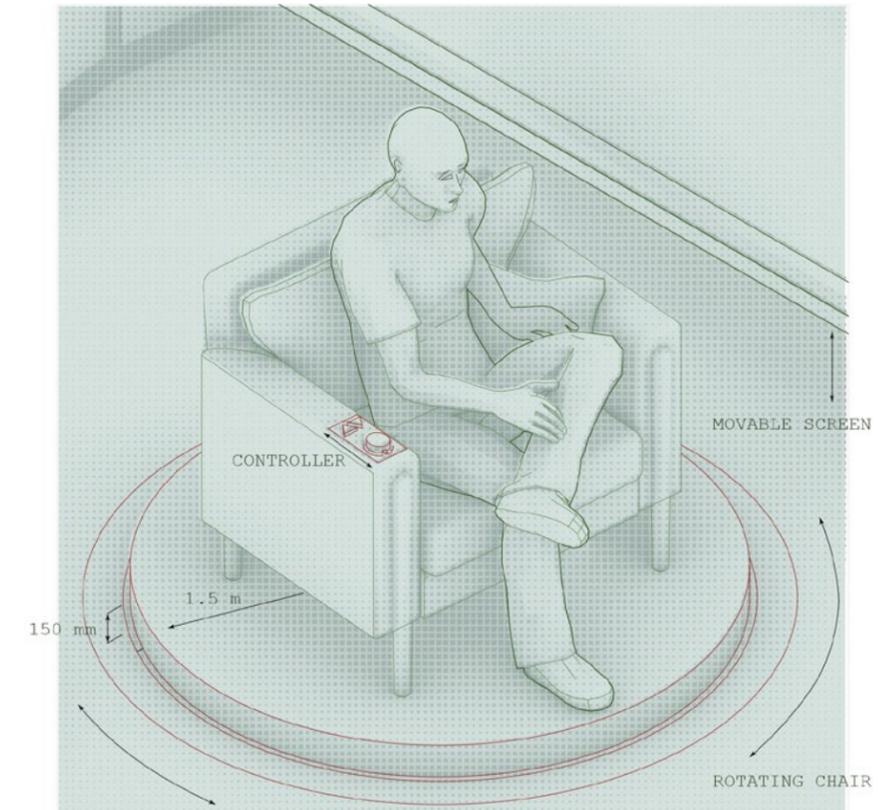
Counselling Space
Two individuals meet in the presence of a counsellor



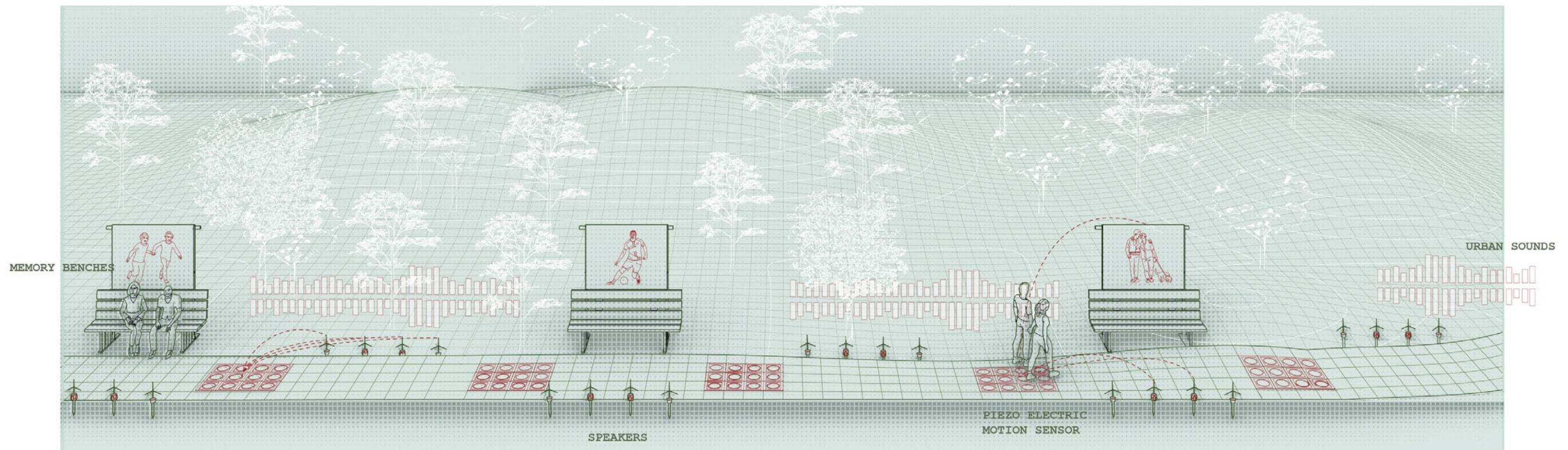
Counselling Unit
Resolves feelings of abandonment and resentment



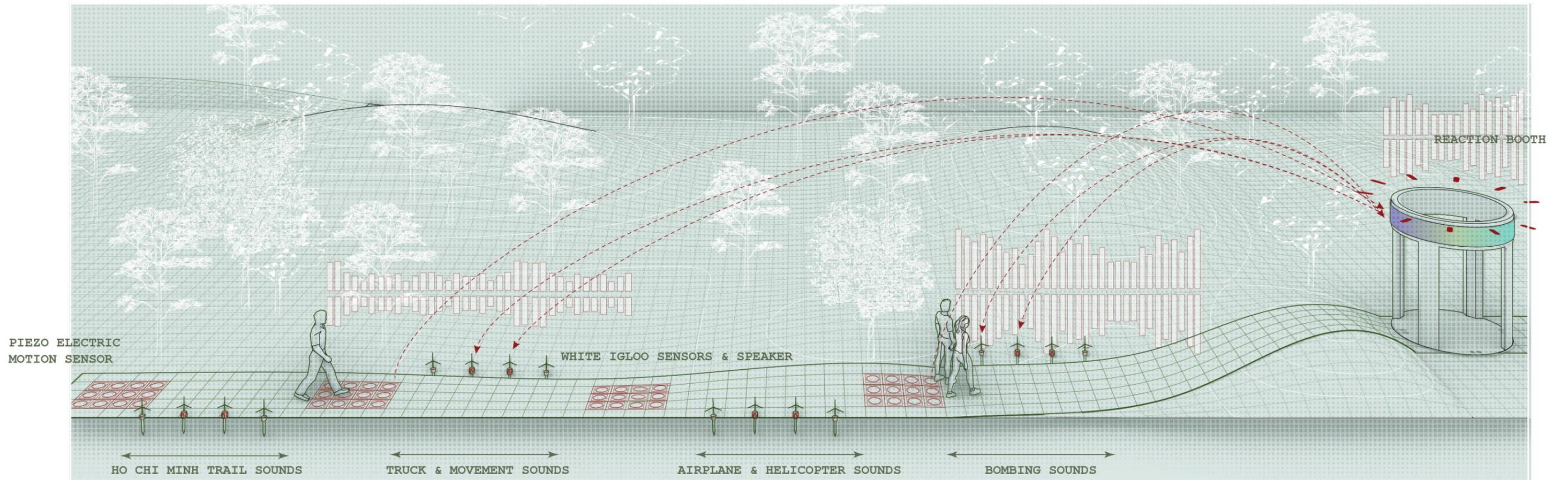
Counselling Entry
Entry is granted through access cards



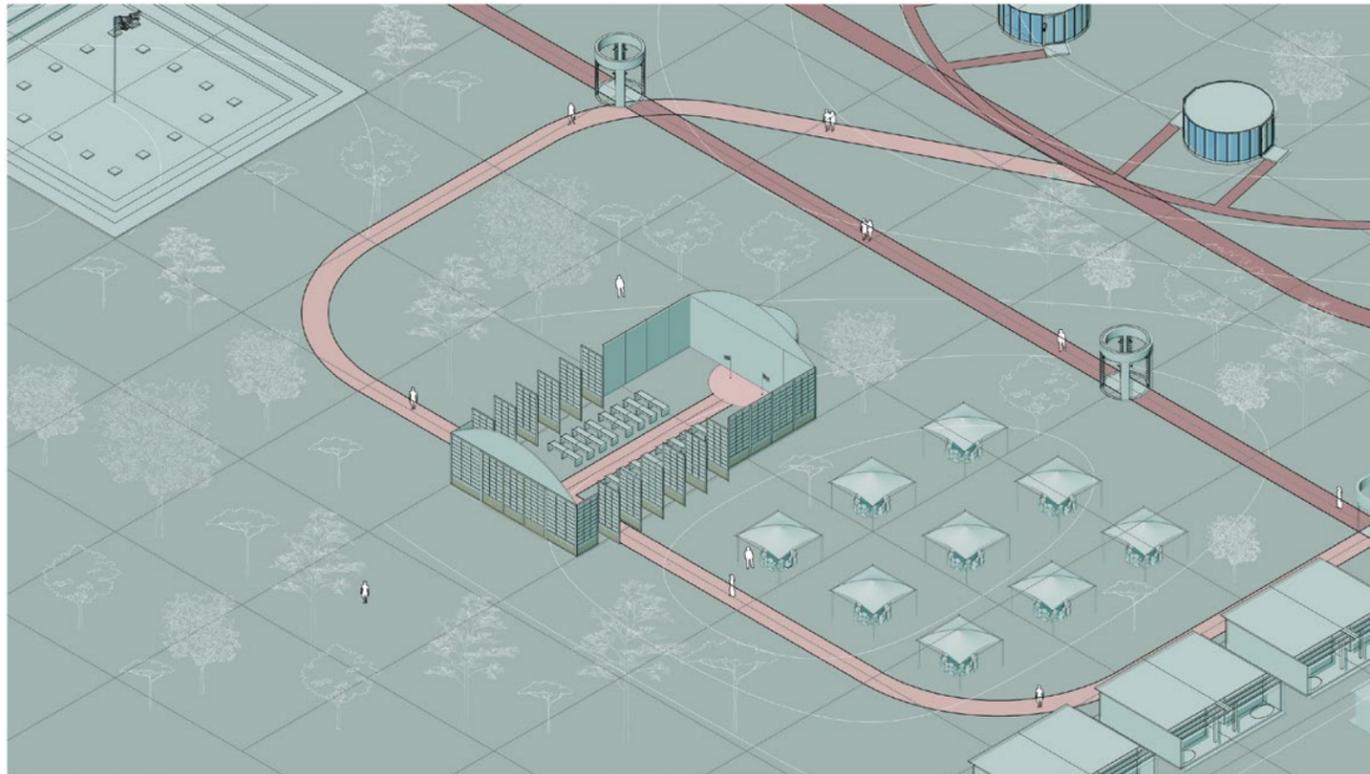
Counselling Seating
Flexible seating and movable screens



Personal Trail
Partners walk along personalized pathways

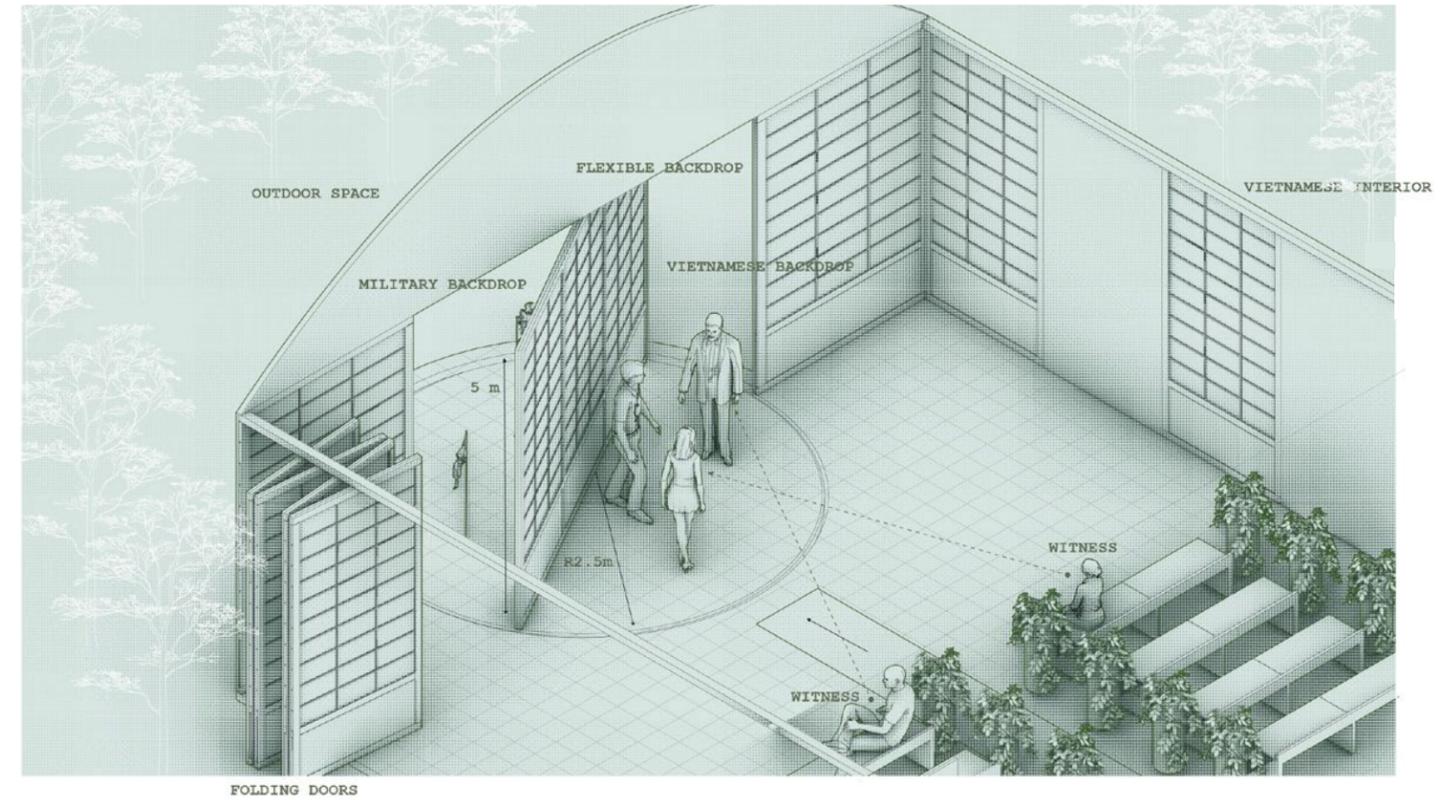


Memorial Trail
Sensors activate different sounds



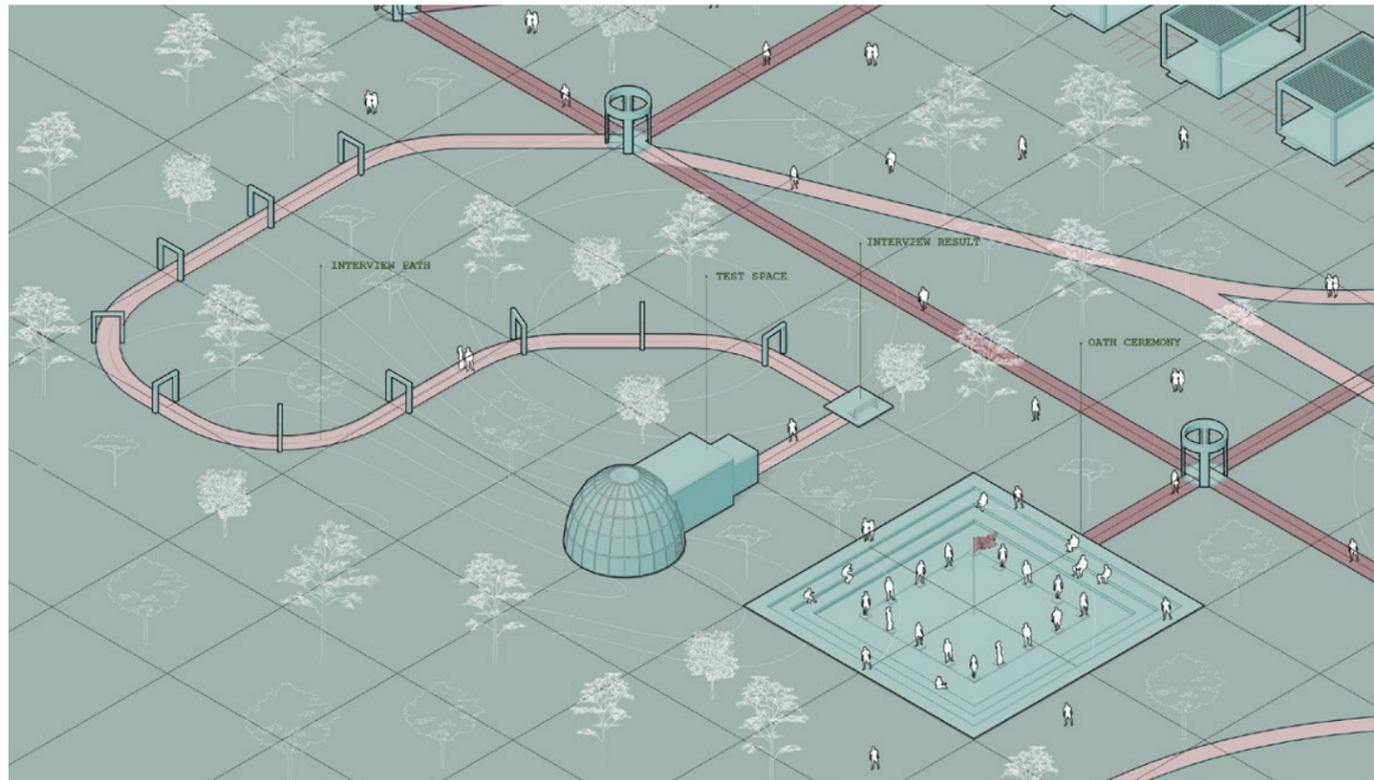
Marriage Space

Space to allow war brides and war veterans to get married

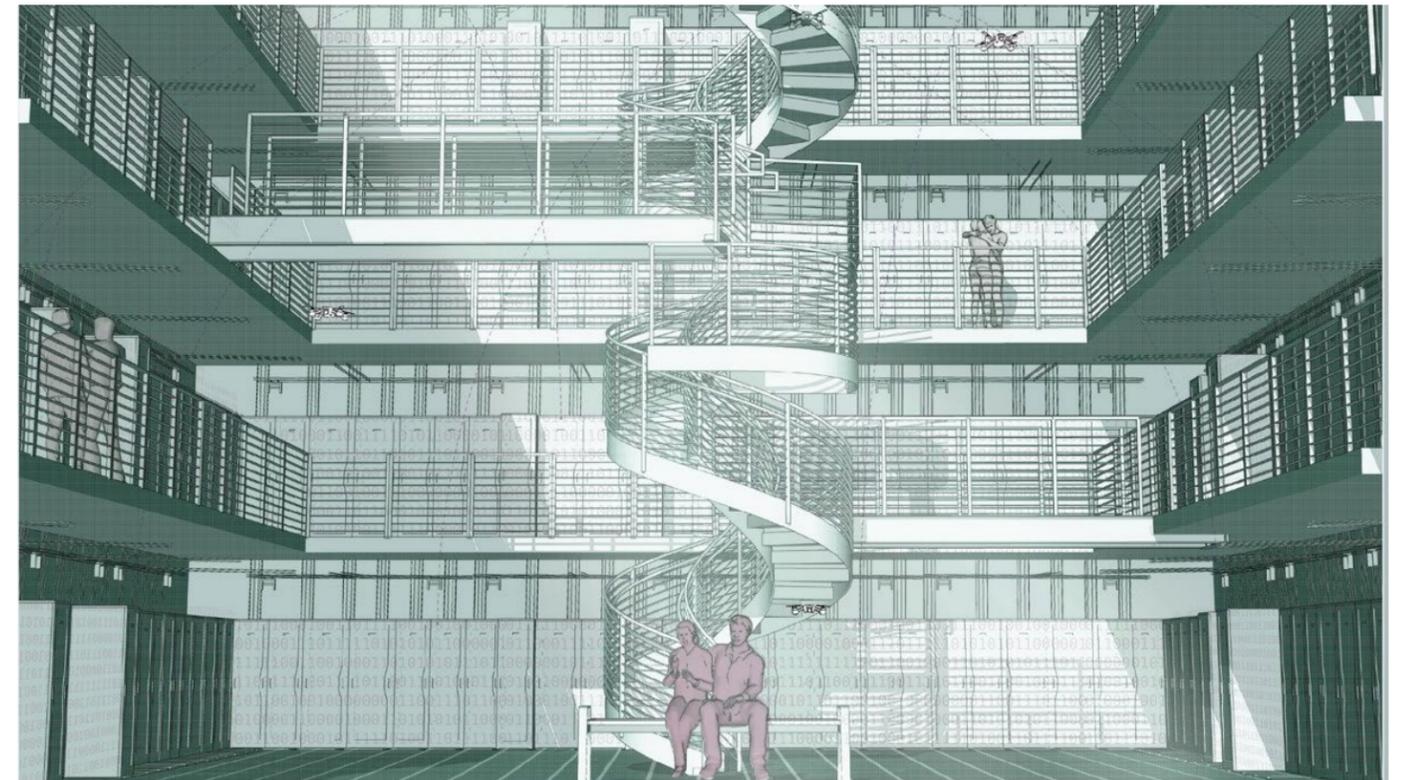


Wedding Ceremony

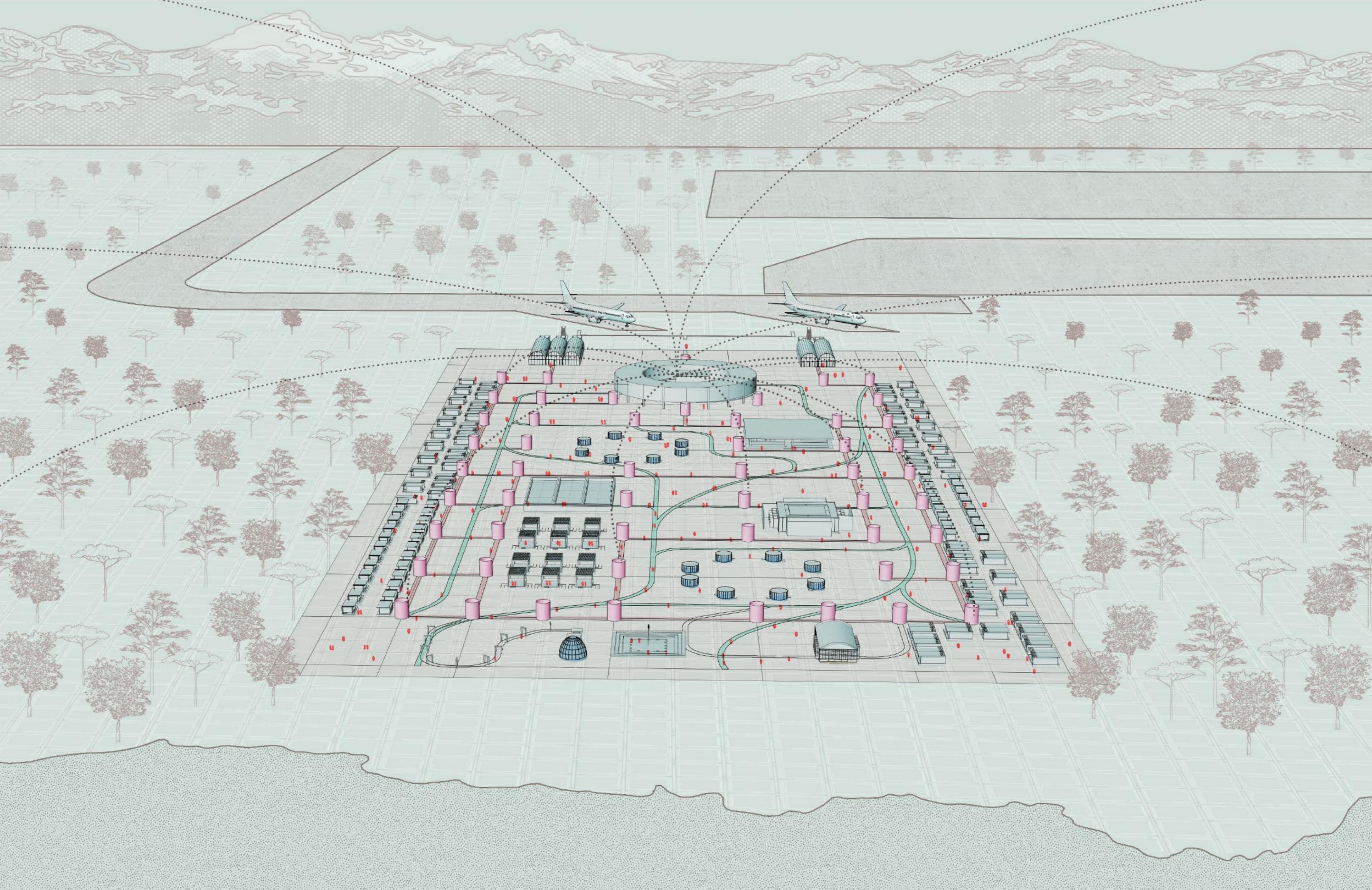
Flexible backdrop for different types of ceremonies



Citizenship Path
Steps to gain citizenship to migrate to America



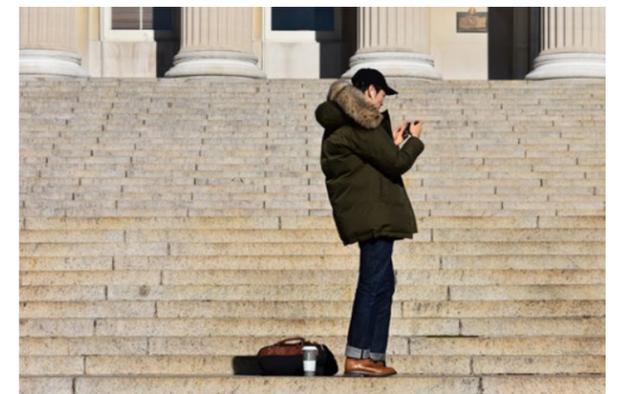
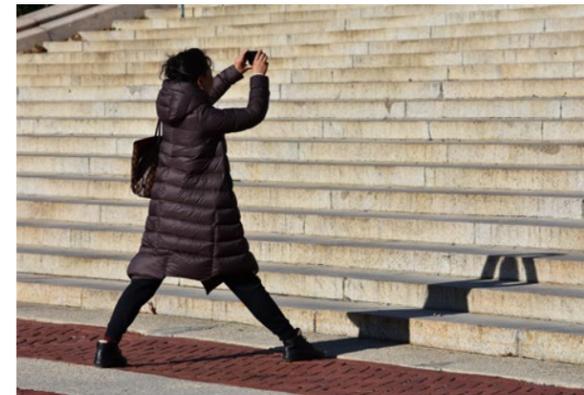
Data Centre
Database of virtual network of reconnected families



04

PHOTOGRAPHY

Architectural Photography
Fall 2019
Instructor: Michael Vahrenwald

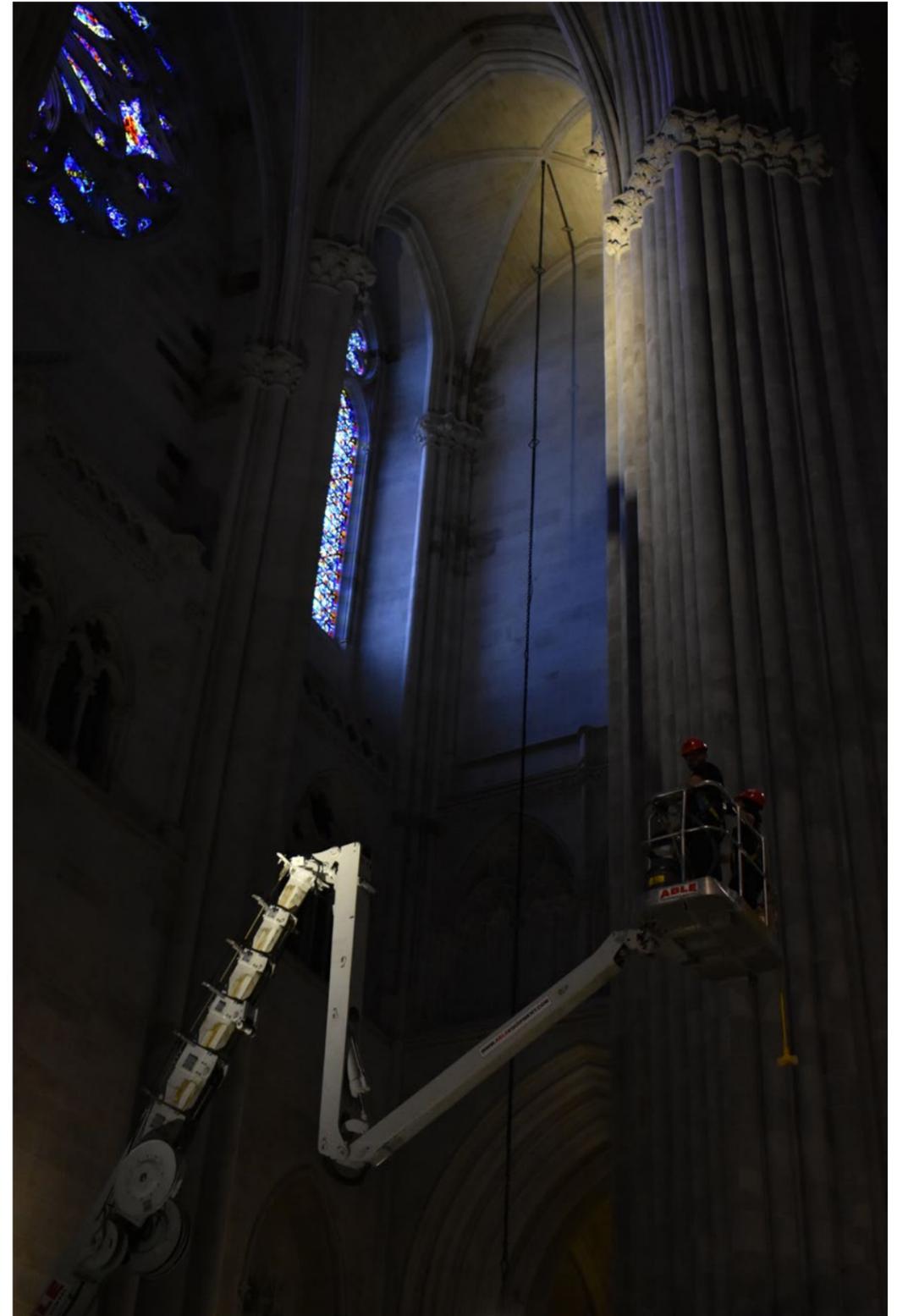
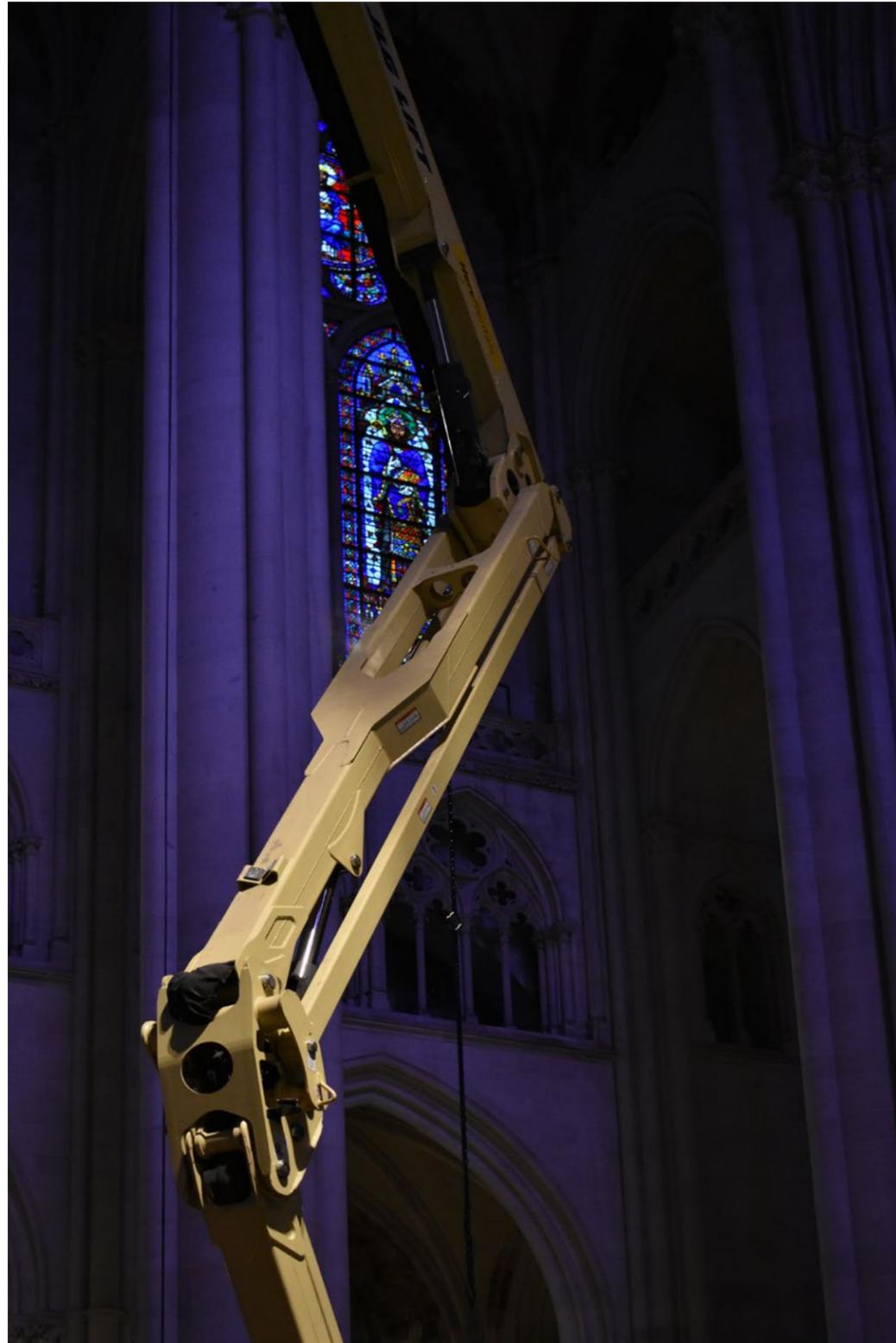


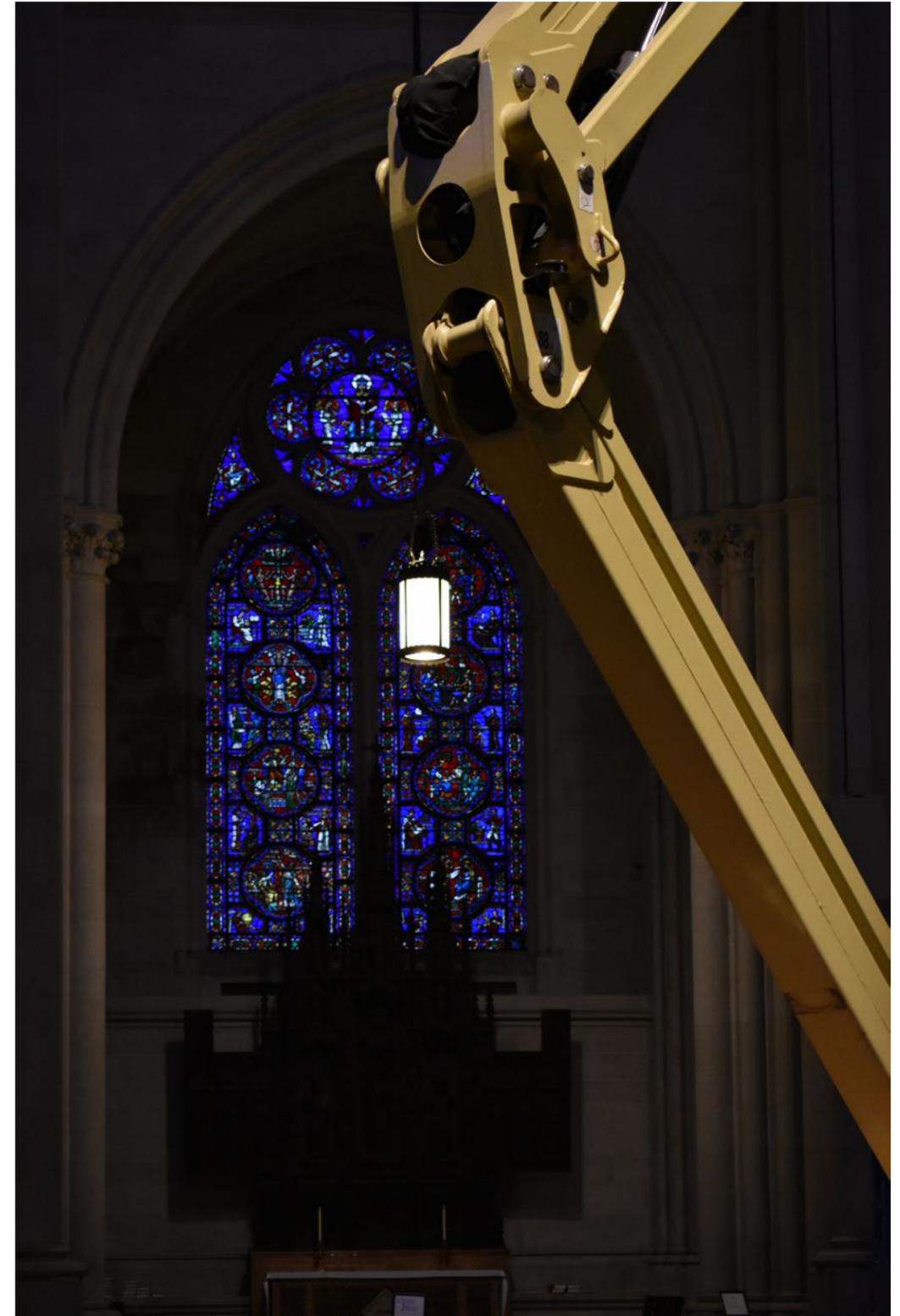
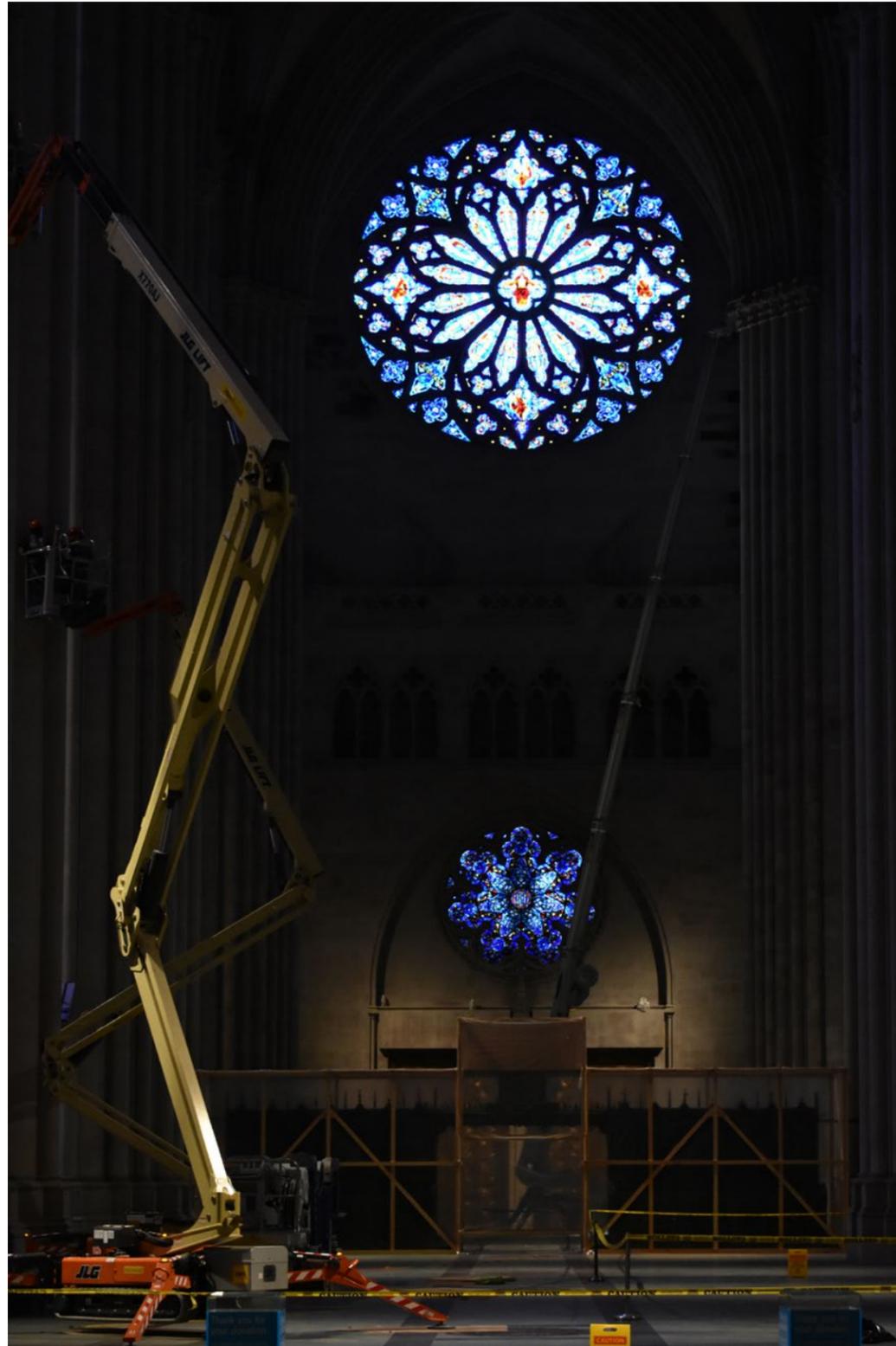












05

SEWAGE BLUES

Transscalarities
Summer 2019

Instructors: Andres Jaque and Elliott Sturtevant

In collaboration with Chang Pan, Dylan Denton and Frederico Castello Branco

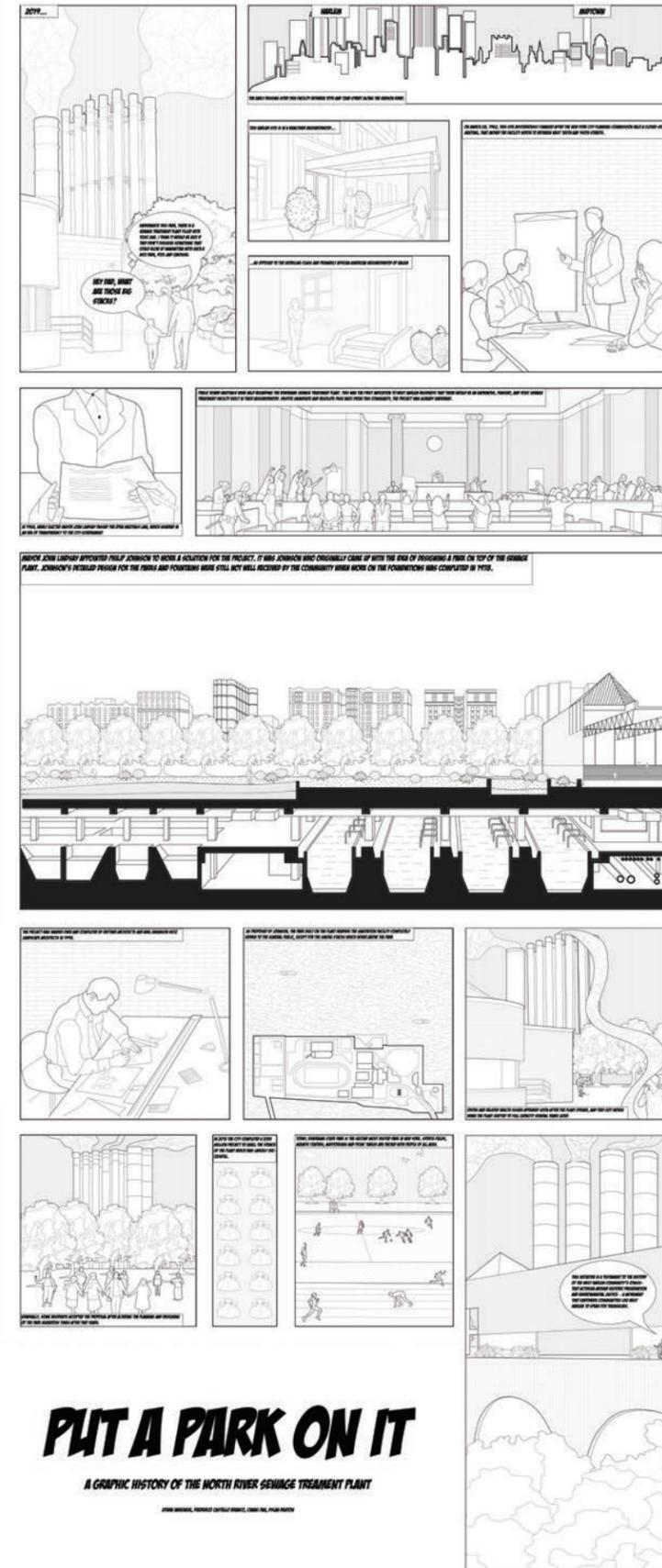
Riverbank State Park, located at the banks of the Hudson river is a controversial topic in the city of New York and among the West Harlem community, as made evident by the statement made a West Harlem resident following an explosion in the plant in 2011, ““It would be nice if they didn’t disguise something that could blow up Manhattan with such a nice park, pool and carousel.” Some who were born after the incident might not even be aware of the sewage treatment plant underneath the park, this has however not hindered the sewage treatment plant from affecting the neighboring community. In spite of regular monitoring by the NY State Department of Health that determined that recorded levels did not pose an immediate health risk; many residents have moved away due to concern for their children’s health. Even though this 28-acre park provides West Harlem with necessary infrastructures, the invisible pollution in both the air and the Hudson River will always be a matter of concern.

New York City wastewater infrastructure is made up of fourteen treatment facilities, three of which serve Manhattan Island. One of these, the North River Treatment plant, also known as the Riverbank Sewage Treatment Plan, serves the entire western stretch of the island, from the Meatpacking district to Fordham Hills. Plans for a plant that would address the environmental degradation of the Hudson River as a result of the existing precarious sewage infrastructure date as early as 1914.

The first master plan imagined a distributed system with dozens of smaller facilities to be built in Manhattan including seven along the Hudson River waterfront. Before this plan was realized, however, in the 1950s, the Department of Public Works reimaged the waste management system as a single larger plant which could handle all the sewage waste from Manhattan’s West Side. The early designs sited this facility between 70th and 72nd street along the Hudson River.

On March 28, 1962, this site mysteriously changed after The New York City Planning Commission held a closed-door meeting, that moved the facility north to between West 135th and 145th streets. The vote for this modification was unanimous. Over the next six years, city planners and bureaucrats rushed this proposal through red tape without informing any of the West Harlem residents.

It was only in 1968 when newly elected Mayor John Lindsay passed the Open Meetings Law, which ushered in an era of transparency to the city government, that board meetings regarding the Riverbank Sewage Treatment Plant became public. This was the first indication to West Harlem residents that there would be an enormous, pungent, and possibly toxic sewage treatment facility built in their neighborhood. Despite immediate and resolute push back from this community, the project was already underway.



The Harlem community was distressed by the idea of building a sewage treatment plant close to a residential neighborhood. Borough President Percy Sutton, Democratic District Leader David Dinkins, and Congressman William Ryan began campaigning against the plant, spreading awareness of the issues to the West Harlem community in order to stop the North River Plant proposal. Ignoring the overwhelmingly negative response from the community, the Board of Estimate, New York City's principal governing body, still allocated funds to support the proposal. In an effort to earn some support from the West Harlem community, Mayor John Lindsay appointed Philip Johnson, at the time one of the worlds leading architects, to work a solution for the project. It was Johnson who originally came up with the idea of designing a park on top of the sewage plant. Johnson's detailed design for the parks and fountains were still not well received by the community when work on the foundations was completed in 1978.

After several projects proposals that were denied due to budget constraints and/or acceptance from the neighboring community, the project was handed over and completed by Dattner Architects and Abel Bainnson Butz landscape architects in 1993. It was a challenging situation as few precedents exist for such a project; however, both firms had previous experience with riverside projects on the Hudson. As proposed by Johnson, the park built on the plant renders the sanitation facility completely hidden to the general public, except for the smoke stacks which hover above the park creating confusion and interest for many of the parkgoers as stated by the executive director of WE ACT for Environmental Justice group.

Odors and related health issues appeared soon after the plant opened, and they got worse when the plant shifted to full capacity several years later. Gradually, some residents accepted the proposal after altering the planning and design of the park numerous times. However, many residents were still concerned and bitter over the North River Plant, and protests resurfaced. In 2013 the city completed a \$106 million project to quell the stench of the plant which was largely successful.

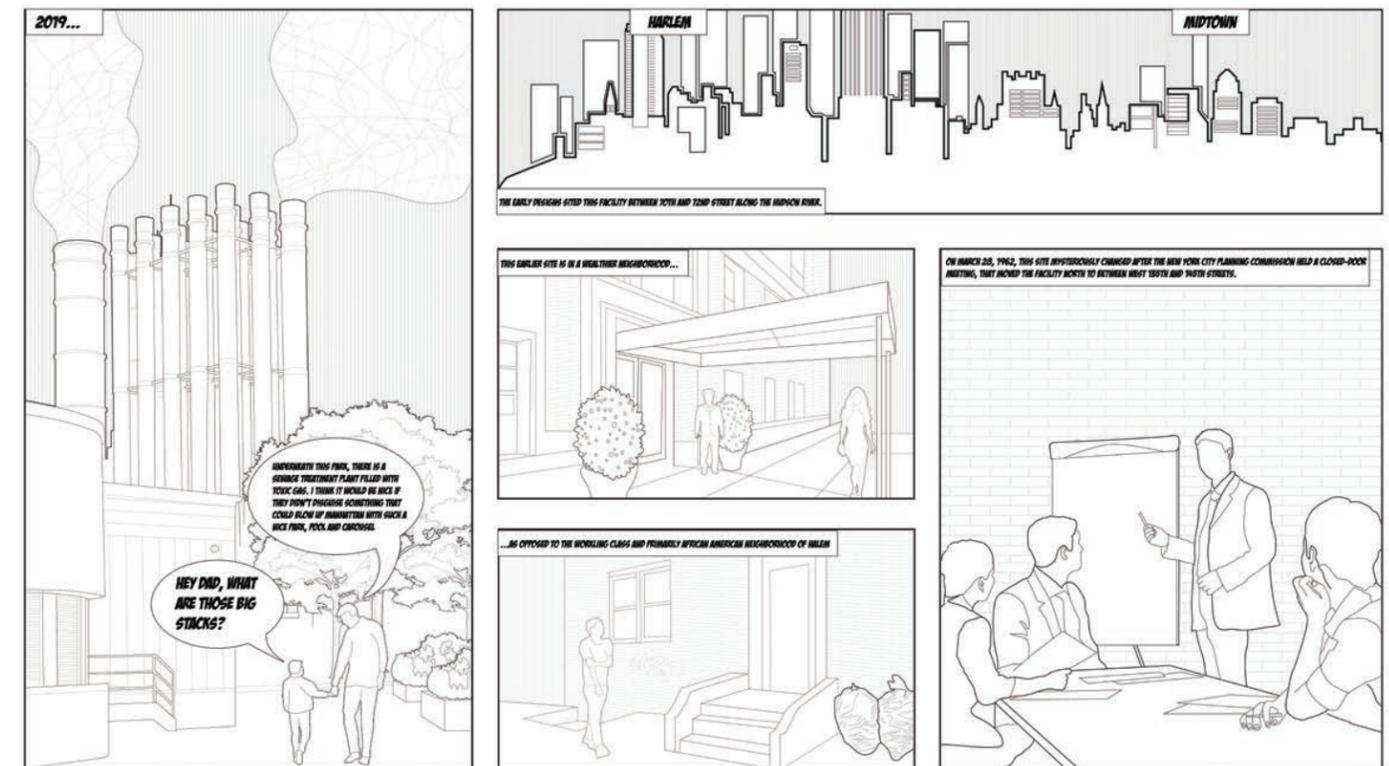
Today, Riverbank State Park is the second most visited park in New York. Sports fields, aquatic centers, auditoriums and picnic tables are packed with people of all ages.

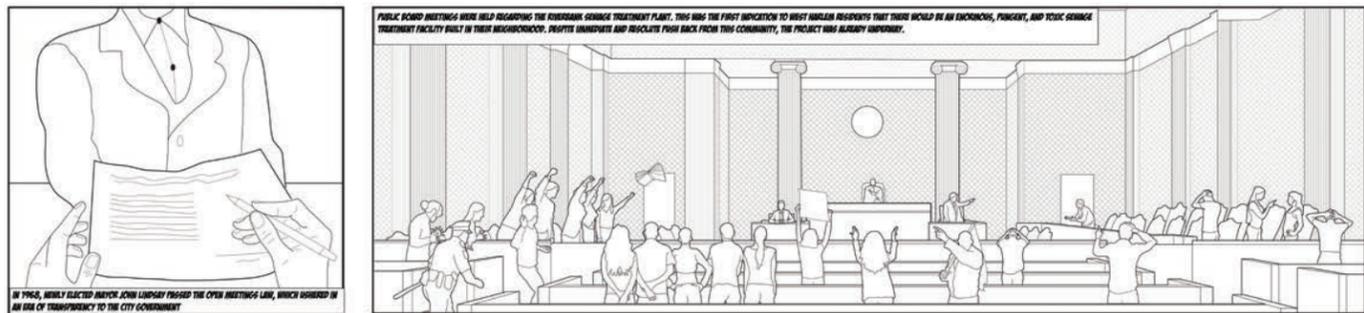
The smell still lingers in certain areas but is not a deterrent from the park's use. Despite all the controversy surrounding its construction and suspicion surrounding the possible health risks that arise from a treatment plan (warranted or not) as made evident from the quote by Marcus Simmons, a construction worker from The Bronx, who visits the park sporadically, "if we came on a regular basis and had young kids, I would be concerned because you don't know what's in the air..." it remains an integral part of Harlem's community.

This model, successful or not, was replicated in Philadelphia's Venice Island having been better received from the community since, from the offset, air filters and other methods of preventing toxic gases from being released into the neighborhood were a main concern. More recently The Upper East Side Marine Transfer Station in New York, slated to open in 2020 has produced similar tension between government officials and the surrounding community.

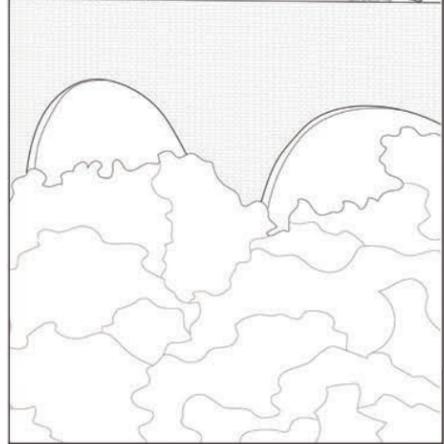
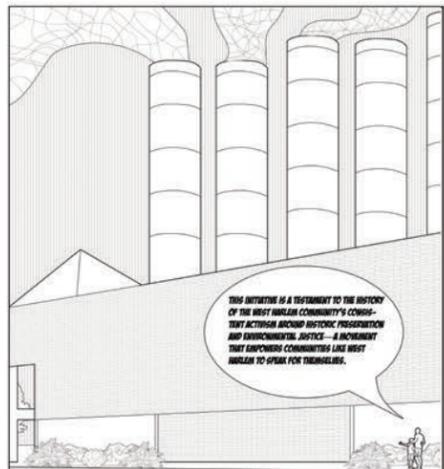
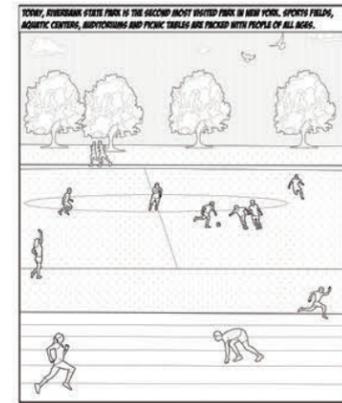
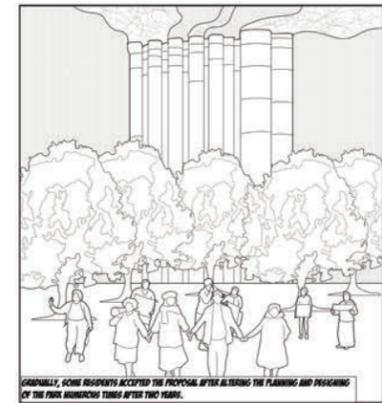
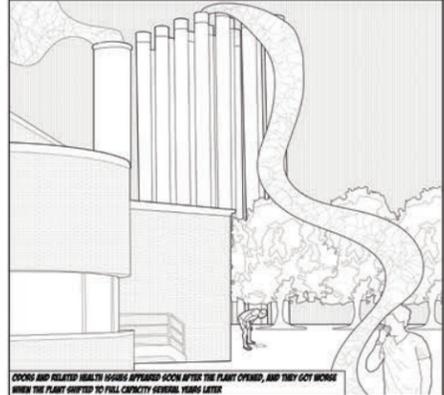
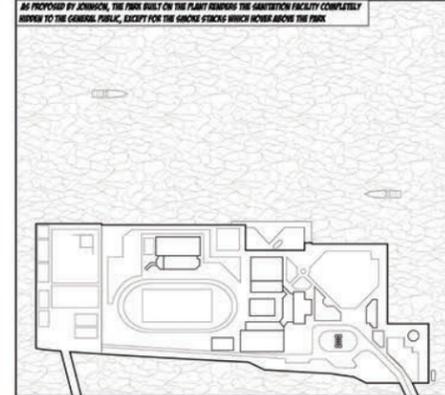
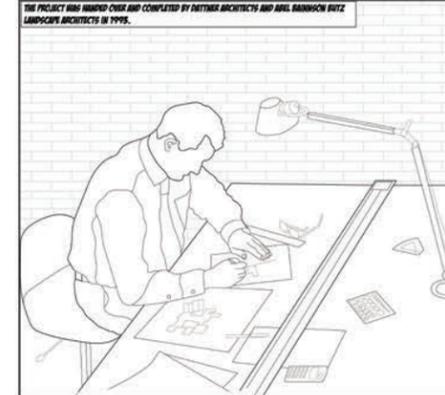
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MAYOR JOHN LINDSAY APPOINTED PHILIP JOHNSON TO WORK A SOLUTION FOR THE PROJECT. IT WAS JOHNSON WHO ORIGINALLY CAME UP WITH THE IDEA OF DESIGNING A PARK ON TOP OF THE SEWAGE PLANT. JOHNSON'S DETAILED DESIGN FOR THE PARKS AND FOUNTAINS WERE STILL NOT WELL RECEIVED BY THE COMMUNITY WHEN WORK ON THE FOUNDATIONS WAS COMPLETED IN 1978.



PUT A PARK ON IT

A GRAPHIC HISTORY OF THE NORTH RIVER SEWAGE TREATMENT PLANT

WITNA BARCHIESI, FREDERICO CASTELLO BRANCO, CHING FAN, DYLAN PENTON

06

A QUESTIONNAIRE ON MATERIALISMS: AMY SIEGEL

Arguments

Summer 2019

Instructor: Benedict Clouette

Amy Siegel's commentary on materials delves into various aspects of how we use and perceive the materials that surround us on a day to day basis. Siegel showcases furniture as objects that are immaterial in nature leading us to question their viewpoints and its meaning. The domesticity and functionalism of the material comes into play as she questions the role of the objects. The circulation of the material is also brought into question since it makes a direct relationship with its treatment as an object. Materials acquired from different sites are transported and assigned value but at the same time are disconnected from its place of origin. The loss of craftsmanship and the idea of mass production is showcased as she details the journey of the Carrara marble from the mountains in Italy to the sink in 432 Park Avenue in New York. The discussion of the Italian marble is potent since it implies that the associations of the marble are far more powerful than its actual use. At what point do the materials in question become more about their worth than its actual function?

Material is treated as a spiritual event where each object has its own intrinsic value assigned through marketing ploys. As stated by Juhani Pallasmaa in the *Eyes of the Skin*; "instead of an existentially grounded plastic and spatial experience, architecture has adopted the psychological strategy of advertising and instant persuasion; buildings have turned into image products detached from existential depth and sincerity" (Pallasmaa, 1996).

How much of a role does the status of these objects as commodities play? When posing this question it is important to distinguish between the material and immaterial. The tangible materials that make up the physical area that we inhabit but also the ethereal reaction we have when we experience the space. Johnathan Hill in his book on *Immaterial Architecture* explains that "architecture is expected to be solid, stable and reassuring- physically, socially and psychologically. Bound to each other, the architectural and the material are considered inseparable; but the immaterial is as important to architecture as the material and has as long a history where the user decides whether architecture is immaterial or not"(Hill, 2006). If this is so how much is the individual's perception based on preconceived ideas resulting from marketing strategies? This leads to the question; do materials provoke a spiritual experience that is not related to commodification and is it possible to disconnect the two?

In response, Amy Siegel argues that the real and unreal becomes hard to decipher and that the work is invented to create these tensions between materials and its associations. "The animisim is brought by the artist or viewer, born between objects, between images, on desktops, screens...a constellation of things or a thing in context" (Siegel, 2016). She describes the house as a commodity but also as an extension of oneself. She claims that materials are already assigned socio-economic meaning that cannot be disconnected.

"You're not buying into the material, as you are buying into the sink, the idea, the spirituality that comes with the architect, the canonization, the context, the aesthetic movement which is associated within the chronology of our history overtime" (Siegel, 2016). In this view, material can be seen as a symbol within a vast cultural narration. Siegel also calls attention to the exclusivity in the content which can be seen at the end of her video "Provenance" where to marble which was once a part of the nature of the mountain has now become a luxury sink that can be purchased by only a few. This comment on exclusivity is ironic since she makes an interesting statement by auctioning her video "Provenance" at the Christie's auction house which just adds to the narrative of exclusivity.

Siegel expands on the discussion of materials by bringing up the viewpoint of the camera. There is a great attention to detail with regard to the capturing and showcasing of the materials. "In order to present the objects as of their own ontology, they had to be treated like people" (Siegel, 2016). This involves lowering the camera and using solely tracking shots that pan through the actions taking place that piece together the evolution of the material in questions. Therefore, giving the viewer a glimpse of the history that determines the assigned value of the material. Through the text and the video, Siegel opens up a conversation on object oriented ontology. By opening this Pandora's box she claims that her work portrays objects in their own view point by performing and intensifying the existing. This creates a sense of irony since the camera is also an object that is performing the function of capturing the material object. Siegel also claims to be a format slut which suffices to say that she has a keen interest on complying with formats. This creates an interesting paradox since there should not be a defined format that is applicable to all object and their ontologies.

In response to the work and the discussion, it seems that the answers are not black and white and the grey area must be examined more closely. Object oriented ontology is an interesting way to perceive the objects in a non-anthropocentric view. This study of object oriented ontology can be also applied to speculative realism where Graham Harman states that "while there may be an infinity of objects in the cosmos, they come in only two kinds: the real object that withdraws from all experience, and the sensual object that exists only in experience" (Harman, 2011, p.49). This creates a distinction between the "real" autonomous object and the "experiential" object that is open to our interpretation. If we were to blatantly ask the marble what it wanted?

Would it want to be shipped and cut, deformed and then made to conform? Of course there is no answer to this but by asking the question, it strikes a chord within us to investigate the meaning of these objects. How much agency are the objects meant to have? Is it even possible to measure this agency? If anything, Siegel states that she is in the business of asking questions and not in the business of solutions. Perhaps Siegel's work hints at a post human world of egalitarianisms devoid of commerce and consumerism.

In conclusion, Siegel's response does not directly answer the questions of commodification in relation to materials but instead opens up a discussion on what viewpoint should be considered. It seems as if the two concepts cannot be disconnected since they are co-dependent in our world today. Even in Siegel's work it is difficult to disassociate the material from and treat it unlike an object. We as humans use our power to assign value to the objects that we use in order to create hierarchies amongst them. However in an ideal reality, Siegel aims to minimize the gap between the subject and the object and return some agency to the object. This discussion calls upon us to dethrone the human subjects in this equation and create a world where there are no subjects and objects but only actors and actions.

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07

**VENETIAN GOTHIC ARCHITECTURE:
PALAZZO SANTA SOFIA**

Recombinant Renaissance

Fall 2019

Instructor: Mark Rakatansky

In collaboration with U Kei Long

Introduction

The Venetian Gothic style of architecture by name is derived from traditional Gothic architecture; however, its title is somewhat reductive since it is in fact an amalgamation of many different periods and styles. Since it exists primarily in Venice, its location plays an important role in the development of the style's unique characteristics. Venice is renowned for its geographical position and involvement in trade. Over the years, the cultural influences of this have significantly impacted its architectural language. One of the best examples of this style of architecture is the Palazzo Santa Sofia, more commonly known as Ca d'Oro; meaning "golden house". As a result of the gilt decorations that once adorned its walls. The Palazzo Santa Sofia at first glance resembles other Venetian Palazzo's along the Grand Canal but with a more critical analysis of its layout, a divergence from tradition is observed. On the other hand, the façade is distinct and eye catching but masks the hidden origins of its components.

Historic Background

The Palazzo Santa Sofia was constructed between 1428 and 1430 by Giovanni Bon along with his son Bartolommeo Bon and is one of the few surviving Palazzos of the Venetian Gothic period. It was built for the Contarini family, one of the founding families of Venice and members of Italian nobility. The family even provided the Republic of Venice with eight Doge's over the span of six centuries.

Therefore, it is no surprise that their palace would be designed to be ostentatious in order to celebrate their lasting legacy. The fourteenth and fifteenth century was an interesting era in the history of art and architecture since all other styles of architecture seemed to co-exist at this moment (figure 1).

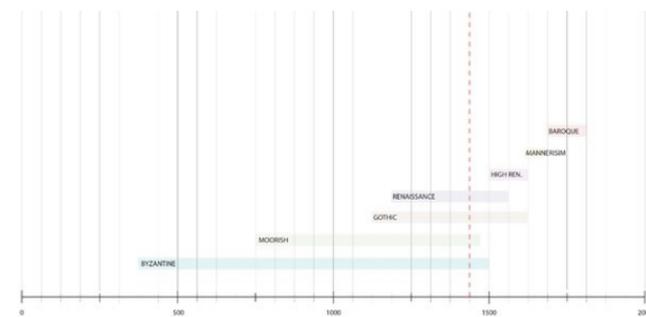


Figure 1

The Palazzo Santa Sofia epitomizes the Gothic phase of Venetian palace building. Palaces of this style typically followed the tracery pattern established in the fourteenth century at the Palazzo Ducale, also known as the Doge's Palace. The design of the tracery on the piano noble loggia as well as the crenellations above is very similar to that of Palazzo Santa Sofia (figure 2). Prior to their work on the Palazzo Santa Sofia, the Bon duo incidentally worked on the main door of the Palazzo Ducale known as the Porta Della Carta. We can see a similar treatment with the arches on both

façades, where the tracery is formed by double curve tre-foil arches that consist of quatre-foil openings within roundels.



Figure 2

The stone work on the building was carried out by a team of masons who were brought in from Milan. The workers had previously worked on the famous Milan cathedral and were educated in the traditional Gothic style. Hence, the Gothic tracery on the Ca'd Oro is somewhat more refined than that of the Doge's palace.

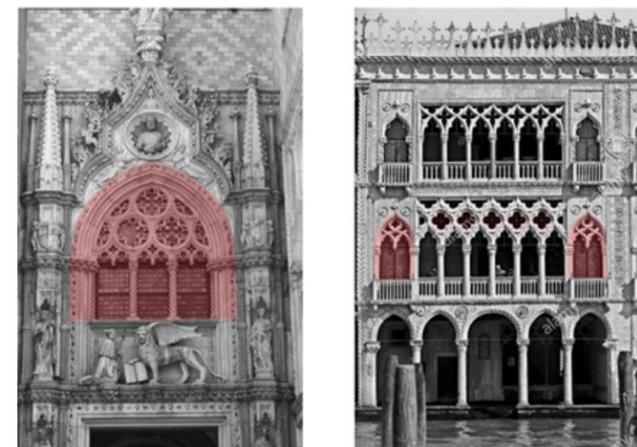


Figure 3

Venetian Palace Typologies

The very nature of Venice being a city on the water offers a new typology to the architecture that is created there. The canal has become the most important means of circulation and therefore the building design responds to that. Over the years the arrangement is created, repeated and modified across the palazzos in Venice. Since construction had to take into account water, the process of building foundations

followed the prehistoric method of using pile dwellings. Due to the scarcity of land in Venice, the city rejected any unnecessary additional weight on the structure of the building. This construction system resulted in the height limitations of the buildings in Venice. Buildings were primarily three to four stories tall with small private inner courtyards. This construction typology in Venice has been repeated over time, where the courtyard results in the plan taking the form of C, L or U shape (figure 4).

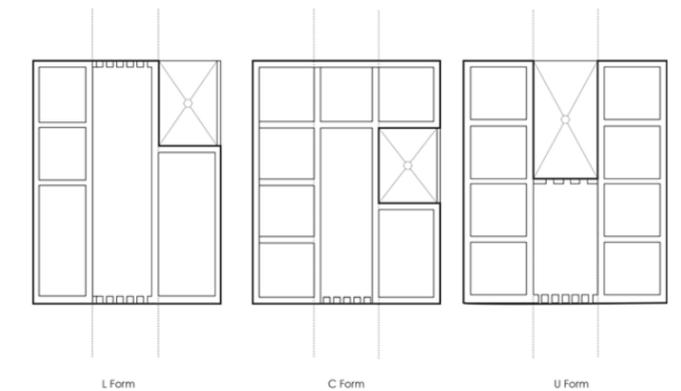


Figure 4

Like many other fourteenth-century Venetian palaces, Palazzo Santa Sofia is asymmetrical. It follows the form of C shaped plan that has an off-centered axis which runs through the entire building (figure 5).

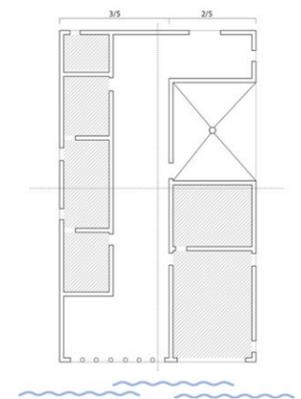


Figure 5

The void is created by the outdoor courtyard space on the right hand side. The central area consists of a portego for meetings and a hall for hosting parties. The front faces the Grand Canal and was historically used as the entrance which allowed for the docking of boats. The palace was designed as a basic module for members of the upper-class to organize the rooms for different programmatic needs.

Traditional Palazzo designs were broken into three parts; however the Palazzo Santa Sofia is broken into two leaving more room for the reception halls in proportion to the rest of the spaces. The function of the rooms is expressed on the façade through the level of decoration which is indicative of its use. The ornate nature of the upper two loggias corresponds to its program of reception rooms. Whereas, the comparatively ordinary lower story responds to its use as a service space for the delivery of goods from the waterfront (figure 6).

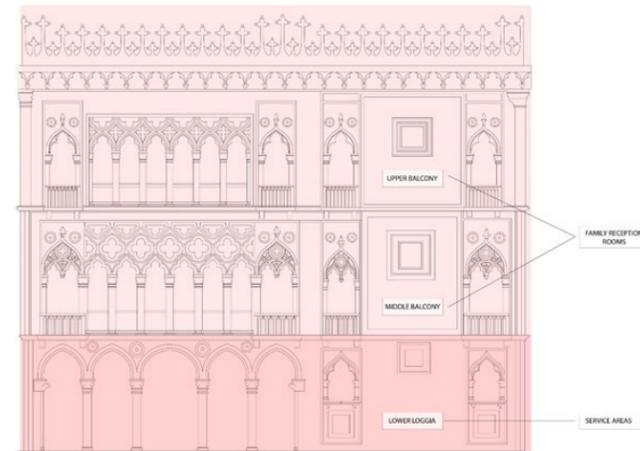


Figure 6

Since the structure of the pile dwellings have limited the building weight and height in Venice, the division of these areas in the Palazzo was repeated on every floor. The asymmetrical plan was the ideal design for the Contarini residents, who would have required larger reception rooms to entertain guests.

Façade Proportions

The elevation facing the Grand Canal becomes more decorative since it is treated as the front of the building and the first thing viewers will see when they enter the palace. In this case, the façade does not play a structural role, instead the side walls are load bearing. This allows the façade to become a means of artistic expression. Historically, Venetian facades create a sense of openness in comparison to Florentine architecture that is somewhat more fortified. The Palazzo Ducale which is an important state building has an open and inviting loggia that creates a public sphere of interactivity. On the contrary, its Florentine counterpart, the Palazzo Vecchio could not be more closed off with its stark box like appearance and fortress design.

Venetian facades included rich colors like dark reds or bright blues which were painted on the buildings. As one of the older palaces in the city, the colors of Palazzo Santa Sofia's façade faded over time and softened to more earth tones that we see today. Buildings that were constructed in the fifteenth century, during the Renaissance period were influenced by the color palette of the Palazzo Santa Sofia. The façade is clearly divided into three parts that correspond to each floor but the façade is also designed as a tripartite. There are three axes along which elements are mirrored (figure 7). The Palazzo's façade was also designed to have different scales of its openings determined by sunlight and privacy requirements. The different sizes of openings on the Palazzo Santa Sofia are influenced by the subdivision of the spaces within the building.

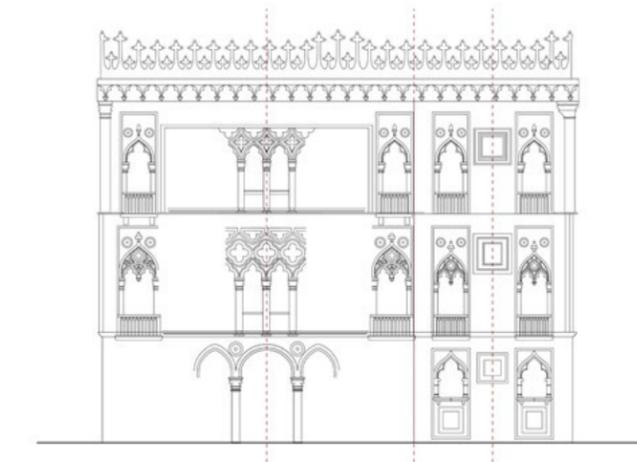


Figure 7

It dictates different situations for the openings, for example the ground floor has a larger arch at the center to provide space for a loading dock. The remaining arches on the ground floor work as the gate entrance from the waterfront to the building. The center axis lines up with the columns and traceries on the second and third floor. The openings of the columns and traceries are denser on the second and third floor, in order to create privacy for the living room. The scale and position of the window openings at the right side of the facade varies because of the division of spaces in the building. The ground floor window at the right side is relatively higher than the floors above. The sizes of the decorated balustrades on the facade are different in between each storey. The difference in the size of arches is also apparent in the second floor where all four arches are of a different size (figure 8).

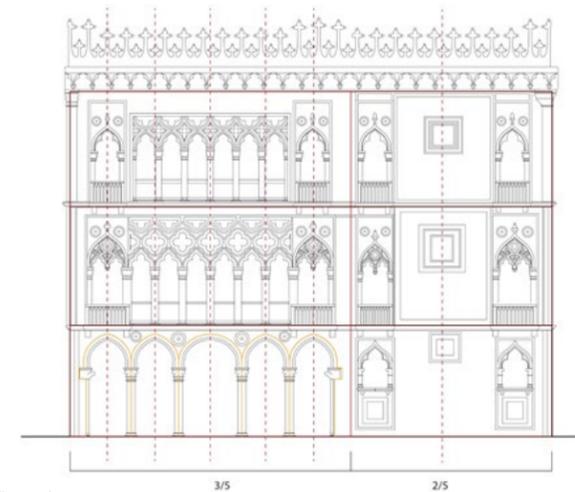


Figure 8

The original plot of land for the Palazzo Santa Sofia included the building adjacent to it. Unfortunately, the land could not be acquired and the building had to be reduced in size. One could not help but imagine what the façade would have looked like if the proportions favored a longitudinal design. Would Giovanni and Bartolommeo Bon have merely mirrored the façade to achieve the ultimate symmetry (figure 9) or would they have simply extended the arcades? One think is for certain, there is some beauty in the intentional or unintentional irregularity of the elements on the façade.

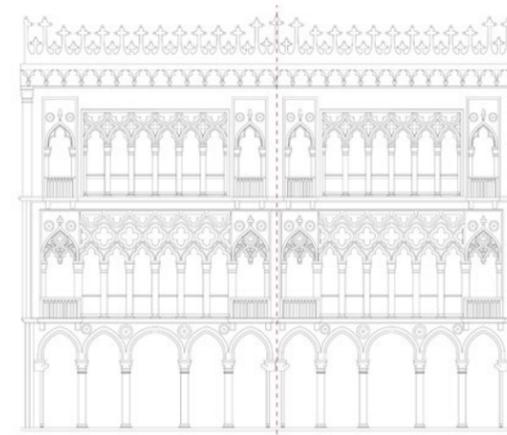


Figure 9

Venetian Gothic Arch

Venetian Gothic architecture similar to Gothic work in France is renowned for its overall light appearance and treatment of form. Over a period of two years, John Ruskin released three

volumes of his book "The Stones of Venice". The second volume and third volumes which were released between 1851 and 18853, look specifically at Byzantine and Gothic architecture within the city of Venice. His studies and analysis of arches under the chapter "The Foundations" is devoted to an analysis of the technical load bearing functions on an arch as well as the different styles that exist across Europe. Throughout his writing, Ruskin favors the Venetian Gothic arch and claims that "nothing can possibly be better or more graceful than a well constructed Venetian Gothic arch". (Ruskin, 1851, p.16). Ruskin chooses to analyze the changes in style through the arches since it clearly shows the transitions from one period to the next. Venice embraced the Byzantine style for a far longer period in comparison to the rest of Italy and Europe. Gothic architecture was prevalent for a longer period in France and mainland Italy before it finally reached the island of Venice.

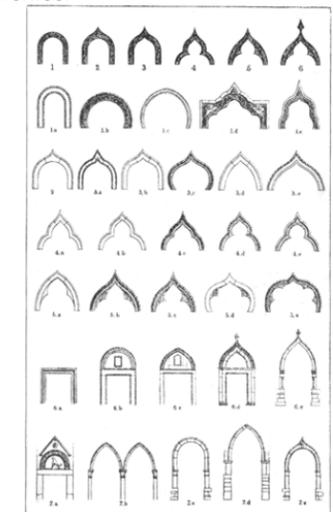


Figure 10

In his drawing titled "The Order of Venetian Arches" (figure 10), he categorizes six types of Venetian windows as well as designs for doorways. The first order is clearly Byzantine in nature but as the orders progress, we see that the second and third show a transition towards Gothic. Whereas the fourth, fifth and sixth orders become purely Gothic before it finally shifts to the Renaissance. Even though Ruskin presents these orders in succession to one another we can see that the orders overlap in the façade of the Palazzo Santa Sofia (figure 11). This interplay creates moments where arches of orders three and four exist within order six. When Ruskin visited the Palazzo Santa Sofia, it was undergoing extensive restoration,

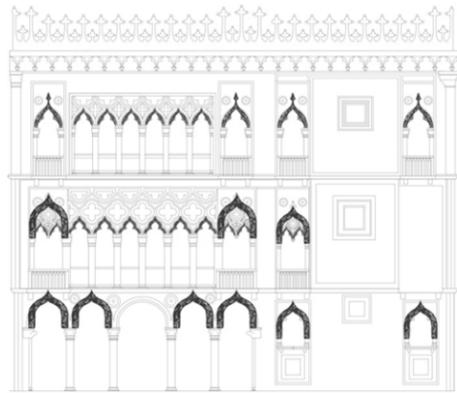


Figure 11

he wrote to his father stating that "I vainly attempted to draw it while the workmen were hammering it down before my face". In doing so he attempted to document all its features before some were lost in the process of renovation (figure 12).



Figure 12

Façade Element Analysis

The examination of individual sections of the facade offer a unique perspective, as its origins can be tracked and traced back to other periods and locations (figure 13). Firstly, the primary structural elements to call attention to would be the columns and the arches. Of course the columns trace back to Ancient Greece; however, on the Palazzo Santa Sofia the columns resemble the Roman composite model with ornamental alterations. The arches on the facade are rather opulent but have different characteristics on different loggias. On the lower loggia, rounded Byzantine arches are present which contrast the pointed Gothic arches on the two upper loggias. Gothic lancet windows first seen in the Basilica of St Denis in France; are present with the absence of stained glass windows. The Ogee arch, which is a typical feature of Gothic decorative architecture, adds a curvilinear reading to the façade. It is referred to as a flamboyant arch in France and a decorated in arch in England where it also makes multiple

appearances. This juxtaposition of arch typologies is somewhat uncommon on the facade of more traditional buildings. Other borrowed Gothic elements include the quatrefoils and roundels. Quatrefoils have Christian symbolism, and reached its peak during the Gothic and Renaissance eras and form part of the tracery.

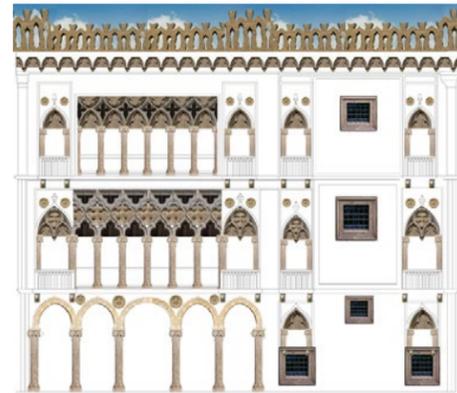


Figure 13

The crenellations on the roofline, as compared to the Palazzo Ducale, can be traced back to Middle-Eastern roots. The design of the fencing in the Ibn Tulun Mosque built in 879 in Cairo has similar characteristics to the Palazzo Santa Sofia. The flat diamond patterns on the façade are also influenced by Islamic geometric designs. For example, the minaret of Burkharā's Kalyan Mosque is adorned with similar motifs. Another element that calls attention is the square windows that disrupt the dynamic reading of the facade. These have associations with the Renaissance period in Italy. Almost the same composition and arrangement can be found in Alberti's famous Rucellai Palace. The Rucellai Palace is one of the ultimate declarations of the early Renaissance; the ground floor which was used for business purposes has distinctive square shaped windows that contrast to the rounded arch windows on the upper two stories. On the Palazzo Santa Sofia, they create a vertical division of space rather than a horizontal one. Lastly, the true Venetian element that is noteworthy is the lion motives carved into the facade. The lion of Venice is famously associated with St. Mark, a patron of Venice. It can be seen in the main square and in many other locations across Venice. The lion symbology on the Palazzo Santa Sofia addresses its context and grounds it in Venice. Other buildings in the neighborhood that have very similar characteristics are the Palazzo Barbaro and the Palazzo Giustinian. This wedding cake like façade recombines a multitude of pieces spanning countries and timelines that

make it a part of a much larger context.

Middle- Eastern Influences

As we have seen, the Venetian Gothic architecture is a synthesis of many different architectural styles. Gothic and Renaissance styles originated and existed in most parts of Europe but Venice is unique since it has clear Eastern influences. How exactly were these artistic and architectural methods of building transmitted across to the West? Venice's role as a mercantile city is infamous and their primary trade partners were the Byzantine city of Constantinople and the Islamic city of Cairo. In the beginning of the fourteenth century, Venice increased the number of exchange trips that took place to Egypt. Years of trade and interaction with the East led to the Venetians being more open minded about incorporating Islamic and Byzantine building styles. In general, Venice has a more outward way of looking for inspiration unlike the rest of Italy, who was more influenced by their neighbors in the North.

Geopolitics also played a role in this channel of transmission of ideas and structures. Venice was a cosmopolitan city but it was also had a lot of power since it was a key link between East and West and therefore it had political hegemony. They had the capacity to import construction materials such as stones, marbles, and even capital and columns which they repurposed. Recreating Islamic styles and motifs at home, allowed Venice to showcase its authority from a commercial and political standpoint. It is also important to note that this absorption of different styles of architecture is different from orientalism which became more apparent in the nineteenth century. Orientalism was a result of colonialism and Eurocentric thought, whereas Venice was directly involved with Eastern trade without imperialism.

Conclusion

In conclusion, the facade of the Palazzo Santa Sofia acts as a historic archive of elements and styles. At first what seems to be the architects' response to the horror vacui of the facade is in fact a thoroughly designed exterior. The form and function of the building conform and reject traditional building typologies at the same time. This creates a unique structure that fits within the urban fabric of Venice but at the same time attracts the attention of the passerby. The interplay of these different stylistic pieces is representative of different cultural periods and is frozen in time on the Palazzo Santa Sofia for all to experience and observe in admiration.

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08

TAUNTON'S POCKET MAP

European Urban Cartography

Spring 2020

Instructor: Victoria Sanger



The Taunton pocket map was printed in the year 1879. The various methods of mass transportation at the time is clearly highlighted on the map. Elevated railroad routes, horse car routes and methods of entering and exiting the city provide the user with a comprehensive navigation guide of New York. It consists of a double sided sheet with maps on both the front and the back that can be folded into a pocket book.

First when looking at the map one notices that colors play an important role in distinguishing the labels, lines and routes. This color coding is made possible because the map is a lithograph done in RGB and black. The front and the back of the map have the same number of colors which means that a single sheet of paper would have been printed on a total of eight times. This would have required creating eight different plates. A register would have been used to ensure the colors lined up correctly over each other. Errors can be seen on this corner where the blue, black and red print have not lined up; creating an offset effect. This is quite an exhaustive and time consuming effort especially since we would have to take into account the drying time between each print. Since this map was mass-produced it would not make sense for it to be made this way if it were done by hand. Looking at the history of printmaking, the hand operated version of the press invented by the Austrian engineer Georg Sigl in 1852. A steam powered version of the press was also invented by Sigl, was first patented in Austria and France. It was brought to the

United States in 1868 and could print one thousand sheets per hour allowing for maps like this one to be fabricated for a greater audience.

Lithography was done in stone and on plates that were made from thin flexible sheets of zinc or aluminum. Most printmakers in America switched to using metal plates after world war one because it was hard to procure stone during the war. The main problem with metal is that it suffers from oxidation resulting in moments like this on the map where a line is interrupted by a grainy texture creating blemishes in the print. Under the title it says S.D.L. Taunton successor to D.A. Edsall and Co. Taunton's print shop was in fact owned by Mr. David A. Edsall. Edsall was a printer and lithographer and his plates were taken over in 1879 by S.D.L. Taunton the same year this map was printed. A very similar map of New York City was made in 1877 just two years before by A. Edsall which was commissioned by the Adams Express Company; a freight and cargo business. It is even possible that Taunton used the same plate for his version and just added his credentials to the original plate.

In terms of content, the map is a guide map catered to shippers and merchants which also makes it a transit map. It provides information on the steamboat routes and piers, the railroad and the horse car routes. Firstly, looking at the transport by sea. The map illustrates the city with its multiple piers and numerous channels of transport. During the second half of the 19th century, the port of New York handled between forty and seventy percent of all trade in America. However, by the 1880s, the port was depleted of resources, space for the development of these business was diminishing and the port became too shallow for newer ships. The railroads that ran at street level beginning in the mid-1800's would eventually be superseded by elevated train lines in the final decades of the 19th century and those were of course finally replaced by electric powered subway cars of the 20th century. The city's transit history begins in 1831. When the state legislature awarded a charter to the New York and Harlem Rail road company authorizing its owners to construct a single rail way. By the time this map was created we can see the oldest line in Manhattan; the New York and Harlem rail road has extended till the edge of the city. The long island railroad is featured prominently on the cover of the map. Even though the actually railway routes existed from 1834, it was only in the 1870 that the railroad president acquired all the existing railroads and consolidated them into the long island railroad.

When looking at a transportation map, a relationship with the people being transported is important. It can also be used to understand the intended audience of the map. The port of New York was a primary driver of both population and density growth during the time this map was created. Between 1800 to 1910, density in Manhattan tripled from 200 to 600 people per hectare. Improved building standards, the flight of the middle class and the subway all contributed to reduced density in the city. The mass production of the automobile further accelerated the decentralization of the city. It is important to note how transit led to Manhattan's de-densification which is contrary to what most urban planners believe today which is that transit is a way to achieve density.

Another interesting feature when looking at this map and the Edsall map is a radial measure that is used to mark distance. In the center of the circle, you will find city hall hatched in black. City hall would of course be an important site for a traveler or visitor, however it's interesting that it is the center of this transit map especially since half of the radial distance ends up in the river. Perhaps it would be an indicator of times to come since the original southern terminal of the New York City subway was built directly under city hall in 1904. Overall the map in a way shows how much of the infrastructure is built around modes of transportation.

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09

MUSEUM BRANDING: A CASE STUDY ON THE LOUVRE ABU DHABI

Art and Social Infrastructure
Spring 2020
Instructor: Galia Solomonoff



In the last decade, the Abu Dhabi has been transforming itself into a new cultural hub that will contend with other famous cities such as New York, Paris and London. The Louvre Abu Dhabi museum is at the heart of this ambitious endeavor as it is an experiment in the power of museum branding. The Abu Dhabi government aims to attract tourists and increase the cultural development of the region but the museums true identity is controversial. The case study of Louvre Abu Dhabi begs the questions; is a museum only as good as its name? The power of brand association on capital culture is analyzed and its relationship to the development of the museum world. The value of culture is under scrutiny as Abu Dhabi's transcultural environment aims to buy it rather than create it.

Louvre Abu Dhabi is the first "universal museum" in the Middle East region. The project was designed by the French architect Jean Nouvel and it took nine years to build and complete. It opened its doors to the public in November 2017. It is situated on Saadiyat Island and is the first stage of masterplan to construct a new cultural identity for the region. The proposal includes a branch of the Guggenheim museum designed by Frank Ghery, a performance arts center designed by Zaha Hadid Architects and the Zayed National Museum designed by Foster and Partners. This star-studded island creates a new cultural district that allows Abu Dhabi to become a key player on an international art stage. The "Louvre" name is of course linked to its parent museum; the Louvre in Paris. The two of them are tied together by a branding agreement between France and the United Arab Emirates. This agreement was signed in 2007 and allowed Abu Dhabi to use the name "Louvre" for a period of thirty years. It also allowed Abu Dhabi to borrow artwork from the Louvre in Paris and other French institutions such as the Muse d'Orsy and the Centre Pompidou. The real piece de resistance is the 525 million dollars that Abu Dhabi paid to use the brand name. The Abu Dhabi government added another 750 million dollars to the French government to manage the loan of artwork. These figures are independent of the 600 million dollars needed to construct the project.

This multimillion dollar project received a lot of criticism when the agreement was first signed. An online petition against the deal which was signed by 4,650 French curators and historians claiming that France was selling its soul. Klaus Lehmann one of the signees said that "the Louvre is behaving like a corporation with a clearly defined strategy, that of profit maximization." To which the president of the museum at the time; Henri Loyrette responded "the Louvre cannot ignore

the internationalization of museum". Many others claimed that the decision to expand the Louvre to Abu Dhabi also helps enhance the image of France abroad but to what degree is France commodifying its heritage?

The Louvre is owned by the French government but in recent years its state funding has diminished. By 2006, the government funds dropped to 62 percent which meant that the Louvre had generate the remaining funds on its own. These pose many challenges to the museum as the government funding only covers the minimum cost of operations. Maintenance, renovations and new acquisitions are left to the museum to handle. Many museums like the Louvre are facing such problems which make it easier to agree to an expansion of this sort with financial benefits for the organization. Thanks to Abu Dhabi's generous contribution, the Louvre could invest in a long overdue renovation of I.M.Pei's infamous pyramid. It also gives the museum an edge in the global cultural market and creates a bridge between East and West.

The Louvre museum is part of Abu Dhabi's larger plan to safeguard the country's future by investing in art and culture before the oil runs out. However, the question it raises is whether Abu Dhabi needed to purchase an existing cultural identity instead of cultivating its own? This museum represents a recalibration of cultural power through brand association. The brand name evokes loyalty that is backed up by a reputation for quality. This is used to attract an audience that subscribes to similar values and interests. Marketing strategies take center stage here as the brand allows the museum to become international instantaneously.

The investment in museums plays an important role for developing nations like the United Arab Emirates. The Louvre Abu Dhabi has the added significance of being a symbol of cultural diplomacy that is rewarding for both parties. Public art museums represent the people within the state and create a dialogue for cultural exchange. The history of the Louvre in Paris adds to its legacy as it transformed from a private collection that was viewed only by elite members of society to a public gallery for all. By taking on the name, Abu Dhabi is aligning itself with France and this history but how can the institution be transformed to suit its new and culturally different habitat?

It is interesting to note, that the name of the museum is directly linked to the brand but the architecture and design calls for differentiation. This unique structure designed by

Jean Nouvel pays homage to Arabian history and Islamic architecture. Inspired by traditional domes and “mashrabiya” patterns; the project is deeply rooted in its context. The scale of the museum is also significant as the project becomes a standalone statement in the vast desert landscape. The architecture here plays a role in the branding as well but it is used here to distinguish it from its parent museum.

The artwork it houses on the other hand is an entirely different story. The universal nature of the museum and its location also provides it with the unique opportunity to provide a non-Eurocentric view to art. The pieces are arranged such that similarities are highlighted across from different cultures. However, the impact of colonialism on art is not acknowledged nor is orientalism for that matter. Issues of censorship also arise since nudity is taboo in the Islamic region. This results in a display of a collection that is neither universal nor contextual but perhaps one of co-existence? Over time this hybridization could be developed to celebrate both counterparts.

The collection is also questionable in relation to the audience it caters to. Since the UAE's population consists primarily of expats and migrant workers, the museum is positioned to serve an audience that is far from local. What relevance does this French partnership have on the local population and to what extent can the curation be “universal” but also a celebration of the region? Can the museum reconfigure the boundaries of social hierarchy and bar the exclusion of certain audiences to create a space of culture for all? This yet to be seen but the cultural references can be reexamined here in relation to the diasporic population that inhabits the UAE.

In the first year after its opening, the Louvre Abu Dhabi attracted 1 million visitors its French counterpart of course is the most visited museum in the world attracting over 10 million. Abu Dhabi's unique location between East and West provides the opportunity to attract a diverse number of tourists. Many long flights have layovers in the Emirates giving people the chance to visit for a day or two. It is difficult to predict whether the Louvre Abu Dhabi would have gained as many visitors had it been named something else, since the effect of branding cannot be measured quantitatively. One could argue however that the combination of the brand name, the artwork and the architecture all together makes it a key point of interest and a regional hub for art and culture.

The Louvre Abu Dhabi still has a long road ahead that would be up for discussion in the years to come especially once their thirty year contract ends. Will they renew it and continue using the brand name or will they have developed a reputation that can stand independently? It is difficult to predict what the course of action would be, but with the increase in revenue and the expansion of their collection anything is possible. Amidst all the questions and controversies, the Louvre Abu Dhabi is part of new era in the globalization of museums. It is evident that a nation cannot be a financial capital without culture and Abu Dhabi has made all the right investments for growth in that department. The city has an opportunity to cultivate a strong cultural framework and create a model for other developing nations.

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