

Transition

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COLUMBIA GSAPP 2022-2023

Reflection, insights and thoughts...

This has been a journey to learn. Learn from professors, classmates and myself in a new environment. I will not say I came with a very clear path to follow inside GSAPP, but instead with a desire to explore and learn from different areas, ideologies, and people I found in my way. My work condensed in the following document is precisely the exploration of someone wanting to get out of their comfort zone.

One of the things I am leaving with after this year in the AAD in GSAPP is the idea of transitioning. The only fixed thing we have in life is that we are in constant change, we have a past we cannot deny and a future to define.

The word *transition* has embedded other concepts that are not explicitly said, that are invisible. Transition indirectly assumes that something came before and something different is coming after. But what is essential is not the starting point, nor the ending; it is the in-between. Transition, as a word and a concept, is silently asking questions like how is that middle point? How is the process? How we recognize what came before, how we define our positionality, and acknowledge what is prior in order to make a smooth transition to a new stage.

Over the past year in AAD, through courses, lectures, and conversations, I've come to understand that there is no straight path; instead, the journey is somewhat messy. We spend more time in those in-between moments, those transitional points, than in the final ones. The result is likely a culmination of changes, adaptations, and transitions that we only become aware of when looking back and reflecting. Reflect, and then continue moving forward. This portfolio is my path, my transition at GSAPP. It showcases how each experience has shaped my perspective and understanding, contributing to the culmination of my time in the program. These moments, as I've discovered, are just as essential as the final outcomes in shaping the architect I am and will continue to become.

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Tracing Electrolytes

THE ENVIRONMENTAL IMPACT OF NYC MAYOR EVENTS

Francisca Alliende
ADVANCED STUDIO - SUMMER 2022
 Professor: Ersela Krippa & Stephen Muller
 Studio Mentor: Zenah Sakaamini

New York brings together people from around the world because of massive events that are held annually. The city adapts quickly to carry them out, moving from one to another with impressive speed. Although they seem swift episodes, their environmental effects last much longer.

Trace of Waste is a project that uncovers the environmental impacts of major events in New York City, focusing on waste management during the Marathon. By examining the long-lasting effects and methane pollution caused by electrolytic drinks, the project aims to raise awareness about waste management systems and their influence.

According to a studio by the University of Cardiff, attending events results in a carbon footprint nine times larger than the average daily EarthShare per person. Due to the fleeting evolution of events, documentation, satellite imagery, and data are scarce, so indirect evidence is used to inform the investigation.

New York holds more than 4000 events annually. The Marathon is the largest event with 50,000 runners and 2 million spectators along a 26-mile route. Electro-

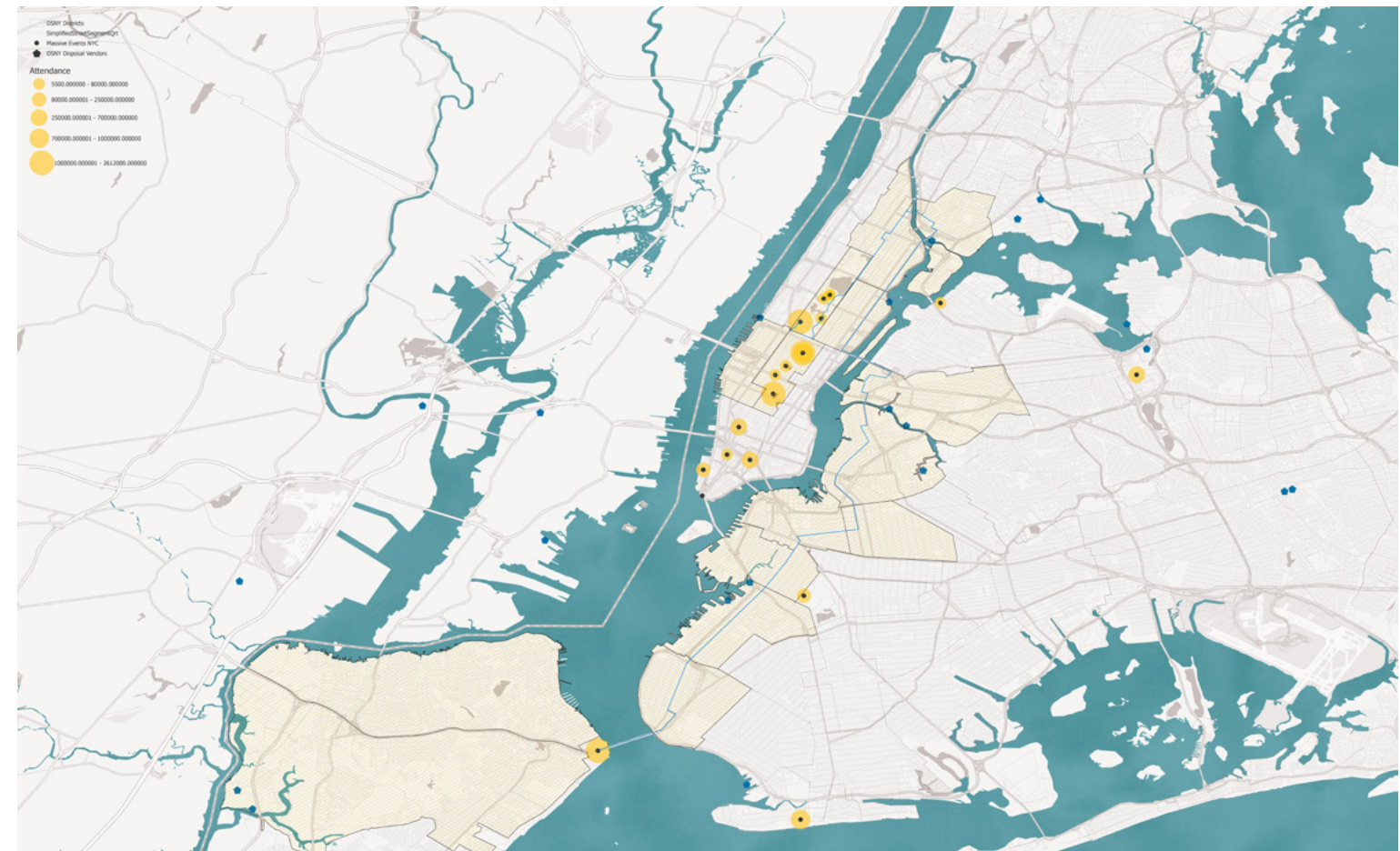
lytes, the most consumed product during the race, are used as a narrative device to reveal the hidden impacts of massive events and their waste.

Electrolyte drinks replenish salts and nutrients lost during physical exertion. Analyzing their effects on the body during the Marathon helps understand runners' physical condition and the impact of these drinks.

Each mile of the Marathon features hydration stations where electrolyte drinks are distributed in paper cups, which become solid waste after consumption. Over 2,000 portable toilets collect liquid waste, which is transformed into urine. The 2019 marathon generated 340 tons of solid waste and an estimated 47,000 gallons of liquid waste.

The project explores the territorial scope and stress placed on New York City's public systems by waste management. Truck routes collecting solid waste from each district are highlighted, showcasing the transfer stations and distant landfills. Methane emissions and intensity at these landfills are visualized using Carbon Mapper Data.

Liquid waste from electrolytes follows a separate system. Trucks collect the liquids from portable toilets and trans-



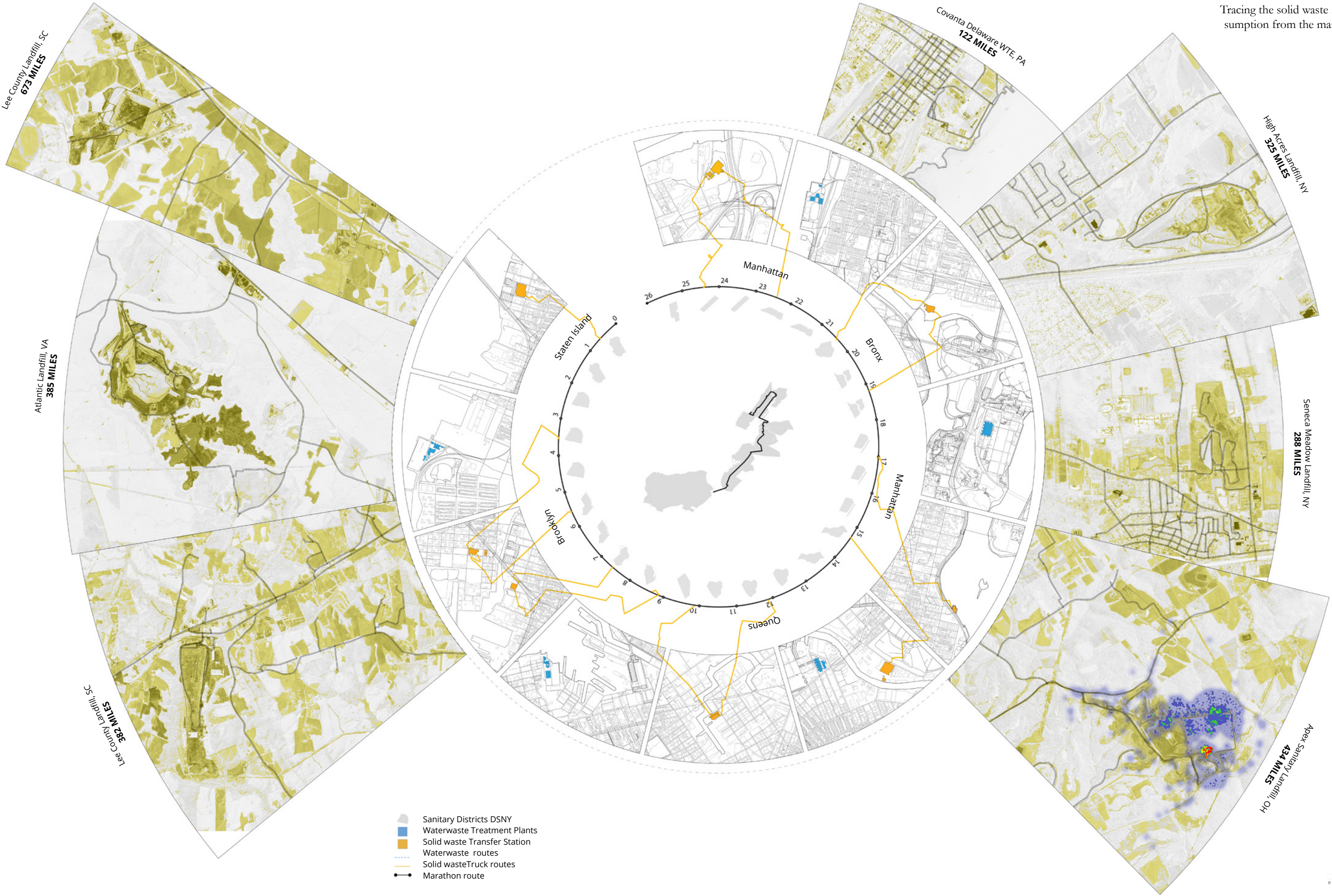
Location of the biggest events held annually in NYC and their respective attendance.

port them to water treatment plants, contributing to nitrogen pollution in nearby bodies of water.

To propose a paradigm shift, the project explores on-site waste management. A prototype hydration station condenses waste, inspired by the University of Colorado Boulder's design. Portable toilets equipped with heat and chemical processes convert human waste into fertilizer. A kinetic pavement surface by PAVEGEN harnesses energy generated by the Marathon to power these toilets.

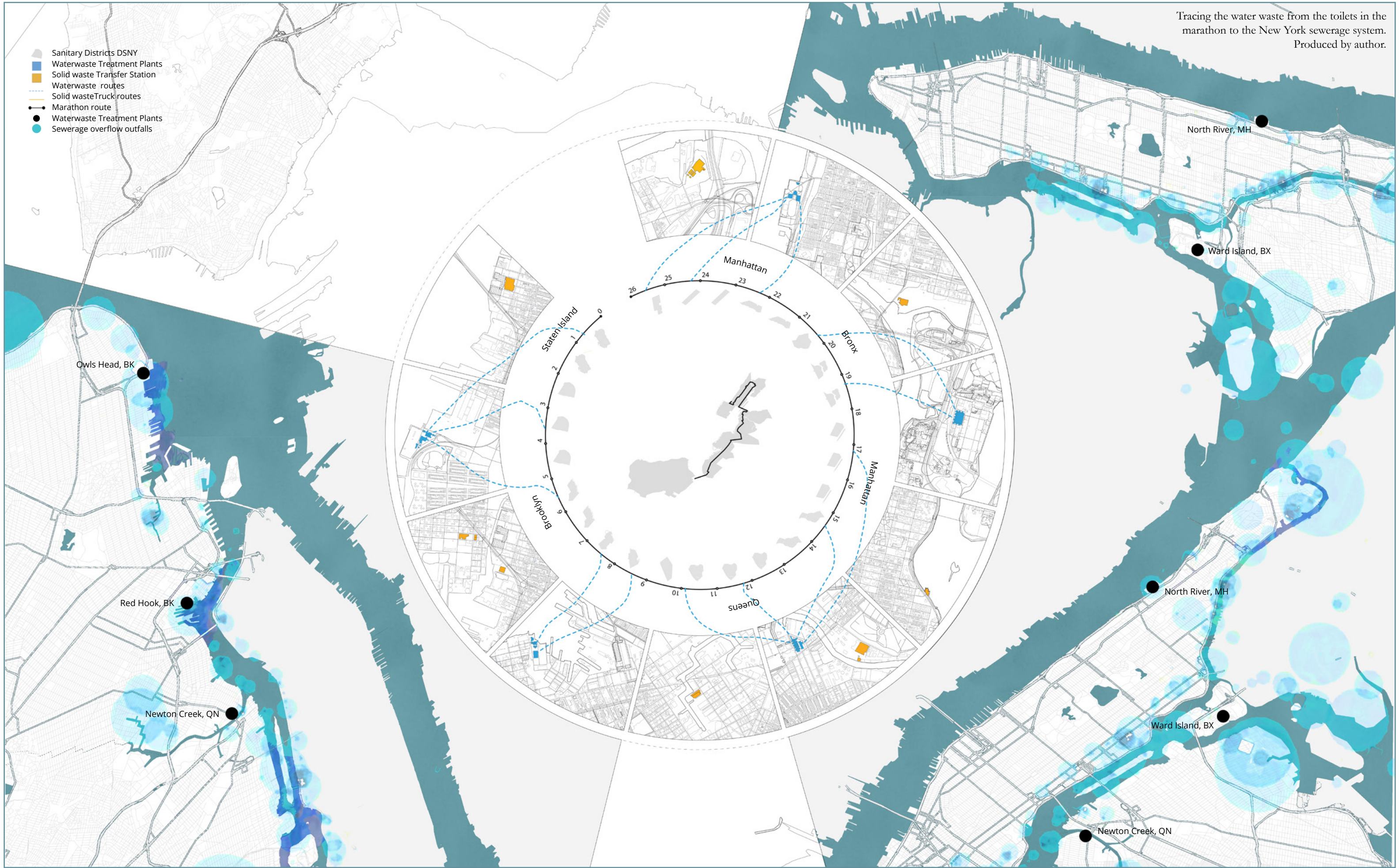
The high chloride levels in athletes' urine make marathon fertilizer effective for agriculture. The project envisions providing this fertilizer to local producers in New York State, creating a sustainable cycle of waste utilization. Although technology advances in converting waste into asset, including the human one; some questions also arise about the extent to which the body and its movement can be controlled and squeezed. What ethical implications does the growing development of these body-type technologies have? Finally, the project opens these discussions by reinterpreting the city through the marathon and the runners.

Tracing the solid waste from electrolytes consumption from the marathon to the landfills.
Produced by author.



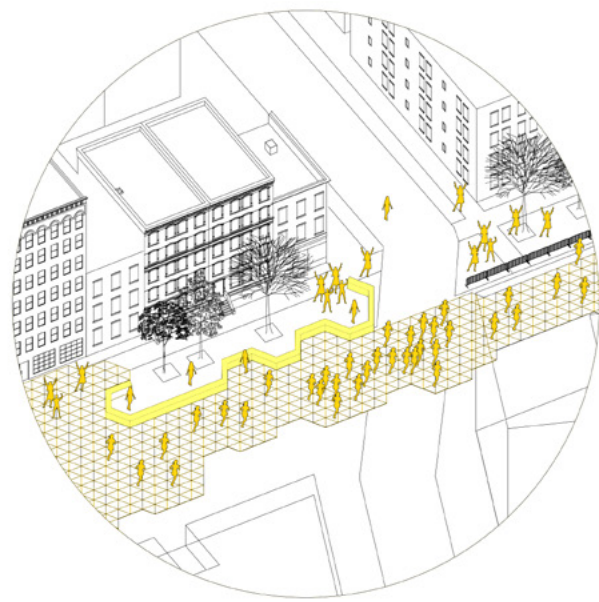
- Sanitary Districts DSNY
- Waterwaste Treatment Plants
- Solid waste Transfer Station
- Waterwaste routes
- Solid waste Truck routes
- Marathon route

Carbon Mapper Symbology
0 enhancement (ppm) 4000

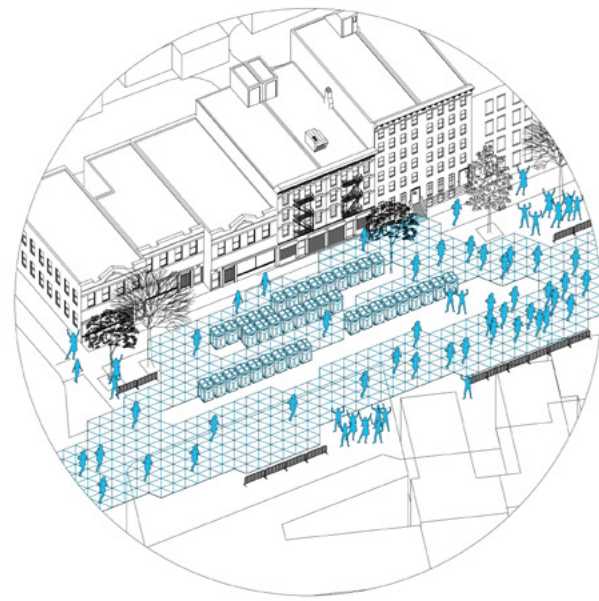


Project of hydration station using body and mass cinetic energy for waste managment.
Produced by author.

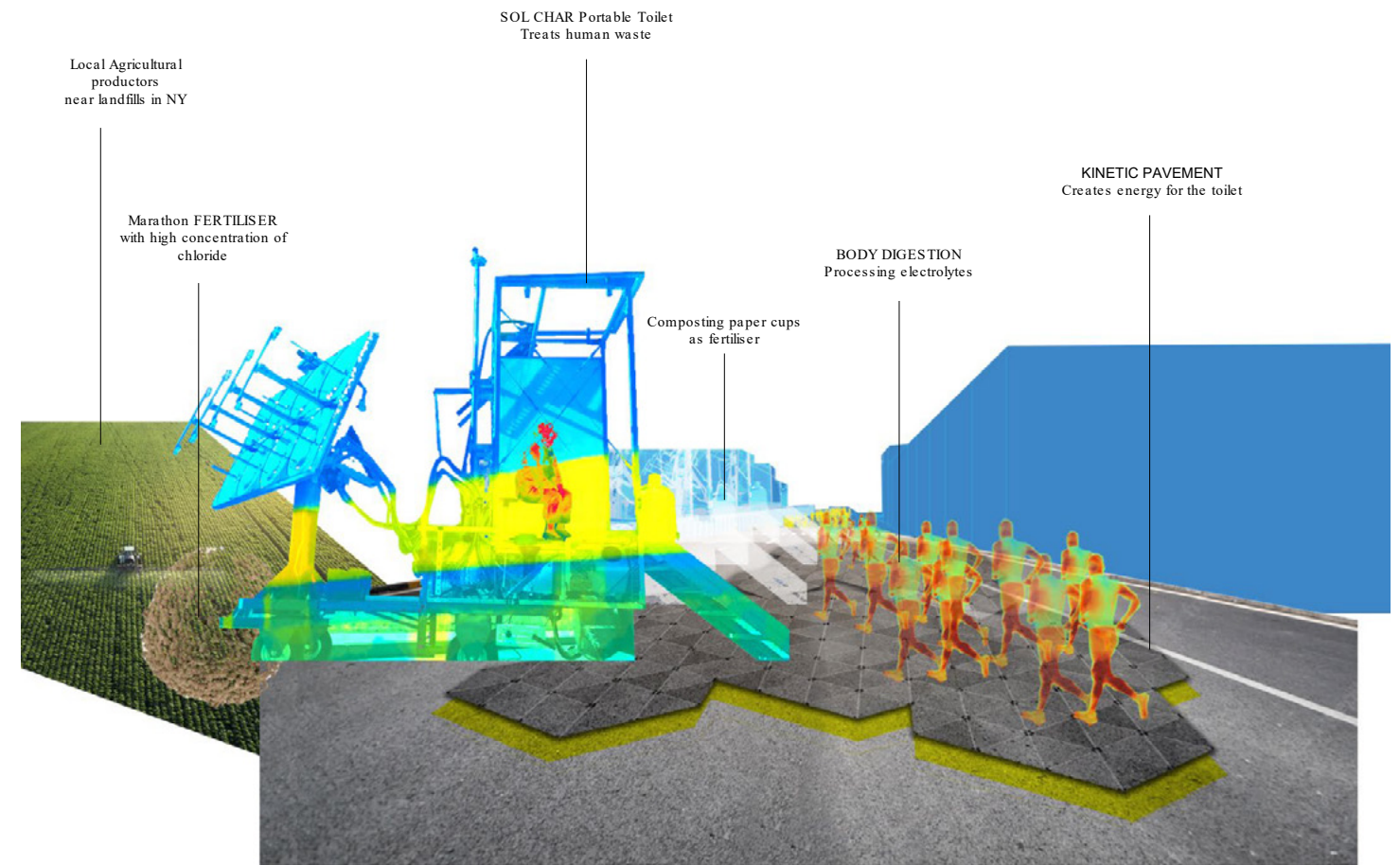




Hydration-electrolytes station



Toilet station



Technologies collage. Design proposal.
Produced by author.

Foreign Farmers

Essay on exhibition by Leone Contini
Manifesta 12, Palermo

“Then, the action of feeding is the climax of the performance where the multiscale sequence is finally entangled: world - migrants - local - seed - plant - food – bodily; and even politics.”

In the middle of the Mediterranean Sea, Sicily emerges as a gateway to Europe. Palermo, its capital, has historically been the epicenter of immigration for people who travel from Africa and the Near East because of political, social, or environmental reasons in search of new opportunities. In 2018 the scenario was critical: with migrants being approximately 20% of the population in the city center and a new wave of immigration, the city tried to define its identity based on the richness of cultural diversity. In this context, immersed in the Orto Botanico (Botanical Garden) of Palermo, Leone Contini installed his work “Foreign Farmers” as part of the European Art Biennial Manifesta 12.

A collection of seeds from around the world recollected over ten years are the main element of the artwork and organize its narrative. Contini, under the biennial’s topic “The Planetary Garden”, combines artistic installation and performance by erecting a pergola where various foreign species of vegetables

grow, placed in an outdoor space that was once an acclimatization garden within the Botanical Garden.

In between the vegetables growing in the pergola were texts written by farmers with the species’ names and origins. Although the seeds came from all over the world, they were collected by Contini in different Italian communities, in small home gardens and orchards where the foreign species grow. Like their farmer-owners, these species had to acclimatize to a new environment, requiring agricultural work to be both preserved and adapted to ground soils. The name of the installation (Farmers) reveals the author’s intention to make visible the migrant labor force and the richness that cultural diversity gives to the local imaginary. The seeds are evidence of the transnational trajectory of farmers and the relationships that the proposal suggests between the local scale of Palermo’s agriculture, its labor force, and the global scale of the migrating species and people.

One of the most exciting aspects is that the seeds collected and documented are not simply displayed in their primary form in the pergola, but are enacting their growth as plants and vegetables. Subject to the seasons, weather, and even pests, the pergola is a performance in itself, and the fruit of its evolution (literally) is an object of activism for Leone Contini. With them, he made community meals where he provided food to migrants, highlighting culinary diversity as the nutrition source for the body. Then, the action of feeding is the climax of the performance where the multiscale sequence is finally entangled: world - migrants - local - seed - plant - food – bodily; and even politics.

Exposing seed diversity was also a political manifesto: the Mayor of Palermo, Leoluca Orlando, during the biennial period in 2018, took immigration as the main bastion of his management. He sought to build an identity for the city linked to the coexistence of diversity and its “cultural richness”; as he

mentions in the introductory book for Manifesta named “Palermo Atlas”, his intention was for the city to be recognized as the “Capital of Cultures”. Thus, more directly than indirectly, the biennial served as an instrument to promote a specific political agenda. As one of the 45 expositors, Contini’s work expanded the limits of the artistic practice by getting involved in the different scales of immigration, a topic that was not addressed before until Manifesta 12.

References:

1. OMA. Manifesta 12: Palermo Atlas. Milano, Humboldt Books, 2018.
2. “Future farming. How migrants can help Italian cuisine adjust to climate disruptions”, We Make Money Not Art, consulted on July 14th 2022, <https://we-make-money-not-art.com/future-farming-how-migrants-can-help-italian-cuisine-adjust-to-climate-disruptions/>.
3. “Lecture-performance and tour of Foreign Farmers with Leone Contini - Manifesta 12 Palermo”, Manifesta 12 Palermo, consulted on July 14th 2022, <http://m12.manifesta.org/lecture-performance-and-tour-of-foreign-farmers-with-leone-contini/index.html>.
4. “The Artist as Caretaker: A Conversation with Leone Contini - Sculpture”, Sculpture, consulted on July 14th 2022, <https://sculpturemagazine.art/the-artist-as-caretaker-a-conversation-with-leone-contini/>.

Where Light Meets Dark

AT&T LONGLINES ADAPTIVE REUSE PROJECT

Nicolas Ocean Shannon & Francisca Alliende
ADVANCED STUDIO V - FALL 2022
Professor: Wonne Ickx

The AT&T Longlines building rises in the popular neighborhood of Tribeca in New York City, and stands as a remarkable testament to the city's telecommunications legacy. This distinctive structure captures attention with its unique architectural concept—a windowless design that sets it apart from its surroundings.

Constructed in the early 1970s, the building designed by the architect John Carl Warnecke, diverges from traditional norms by denying the conventional use of windows and a brutalist form, resulting in an intriguing and enigmatic facade. The use of one single material in the outside expression makes the building look like a monolith.

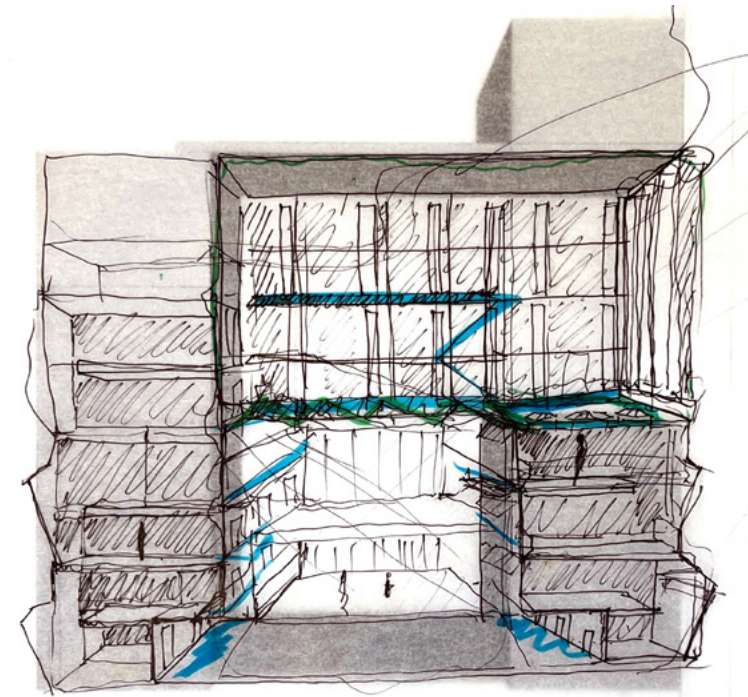
While the exterior draws attention with its unconventional design, the interior of the AT&T Longlines building holds a vast amount of advanced equipment and intricate systems. A building for machines.

Rising majestically to a significant height, the AT&T

Longlines building exudes an air of mystery and makes it an intriguing landmark in the heart of Tribeca, New York City. At night a dark volume stands out in the city of lights skyline as if it is a blackout. It is the focus of many tweets, publications, TikTok, and conspiracy theories that try to unveil their what happens in the interior.

Our project celebrates the mystery and hermeticism of this windowless building by exploring opacities, massiveness, and the interchange of light. We embrace the challenge of introducing affordable housing and social programming while preserving the original façade and the monolithic character of the exterior. Seeking a delicate balance between light and darkness, the purpose is to keep the intrigue and not entirely reveal what happens in its interior.

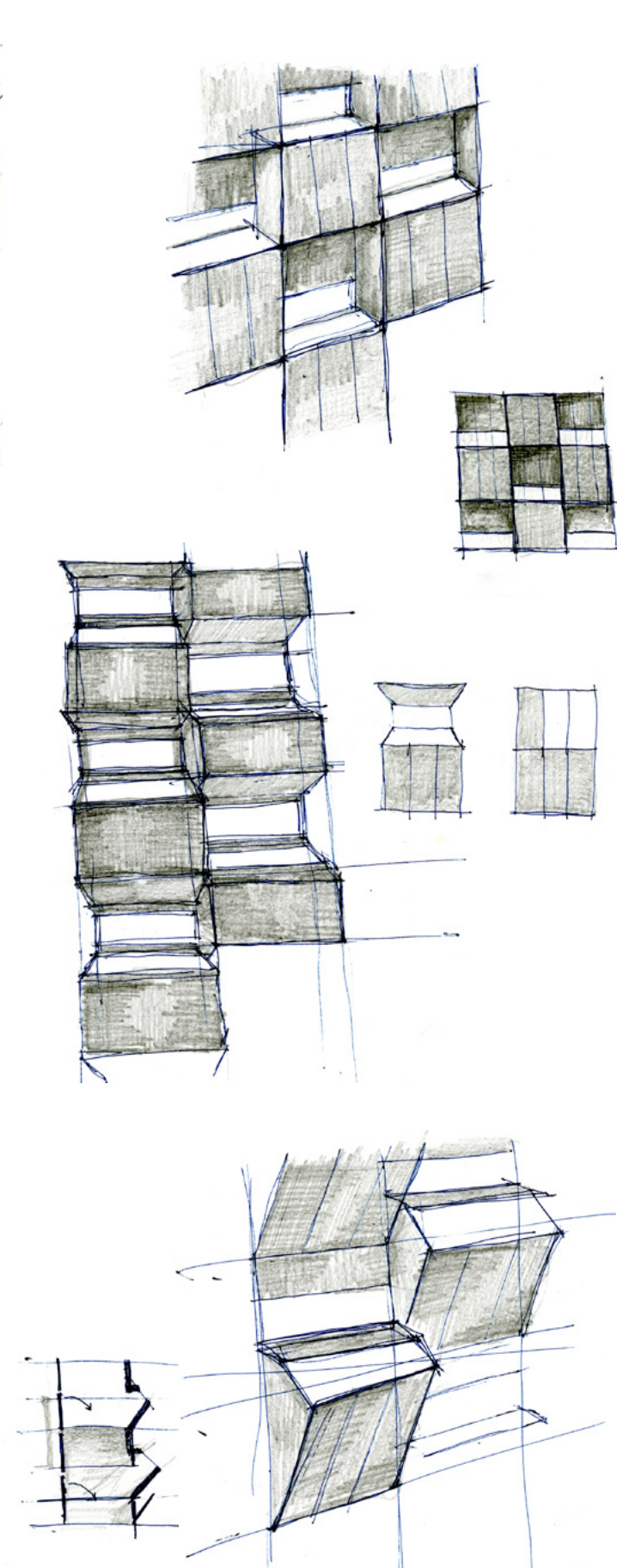
To achieve this, the building has been divided into distinct neighborhoods, each spanning six stories in height, with an entire floor dedicated to social programming below. Seven neighborhoods are stacked through the skyscraper's elevation. Two big alcoves break the monotony of the facade, adopting a contrasting architectural language and maximizing natural light intake, in that way illuminating every



Design process sketches - alcove concept.
Produced by authors.

habitable space, including the residential units and social programs. These alcoves also serve as neighborhood plazas, giving a collective space for affordable housing.

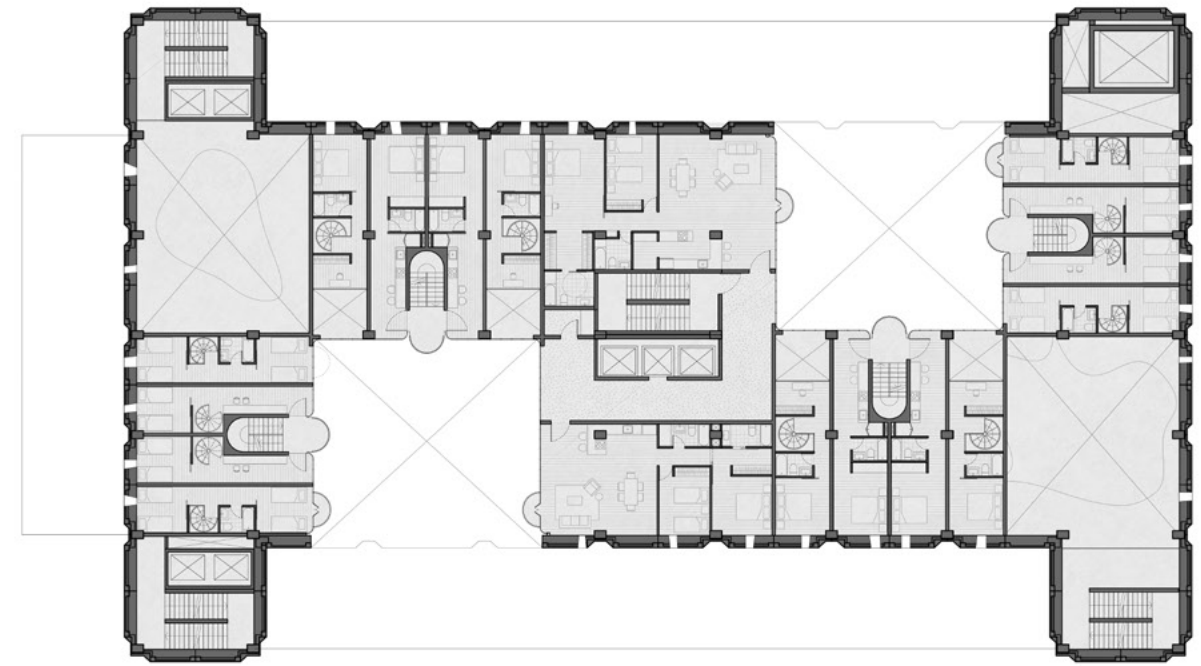
By occupying the deep floor plan of the original building with thinner and double-sided units, the layout makes the most of the natural illumination provided by the alcoves while preserving much of the building's original structure. On the ground floor, we continue the concept of neighborhoods and plazas, although in a public manner, connecting with the street and the neighborhood. In this spaces, we introduced a theater and various social public programs that complement the surrounding open spaces.



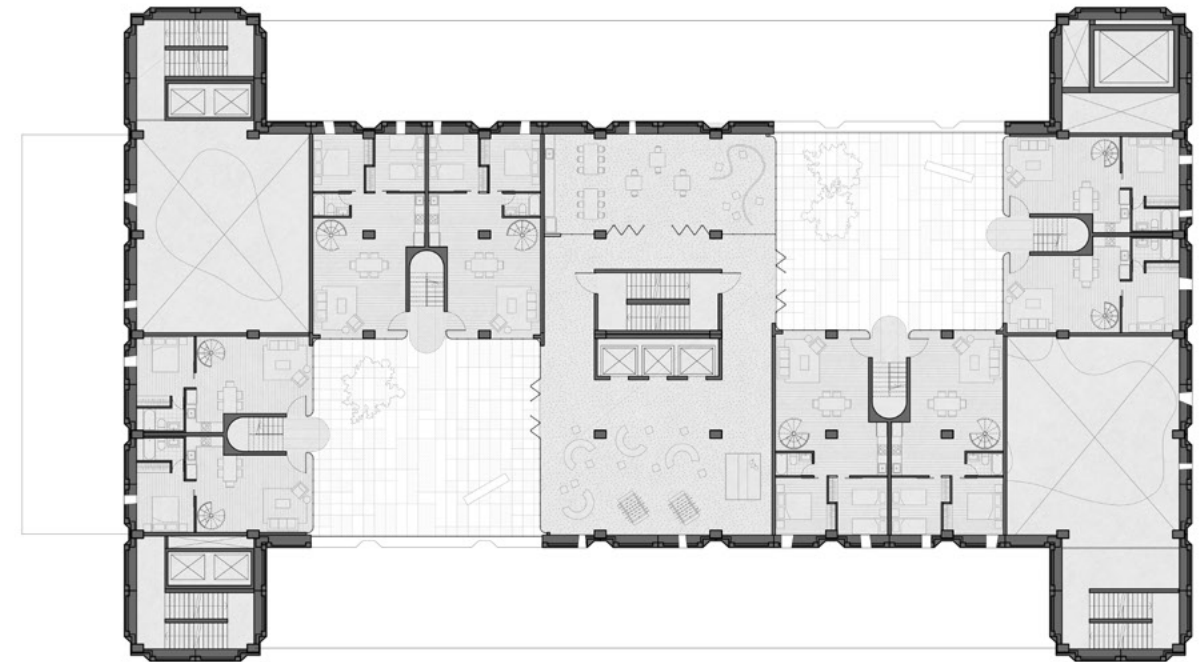
Design process sketches - facade openings with panels iteration.
Produced by authors.



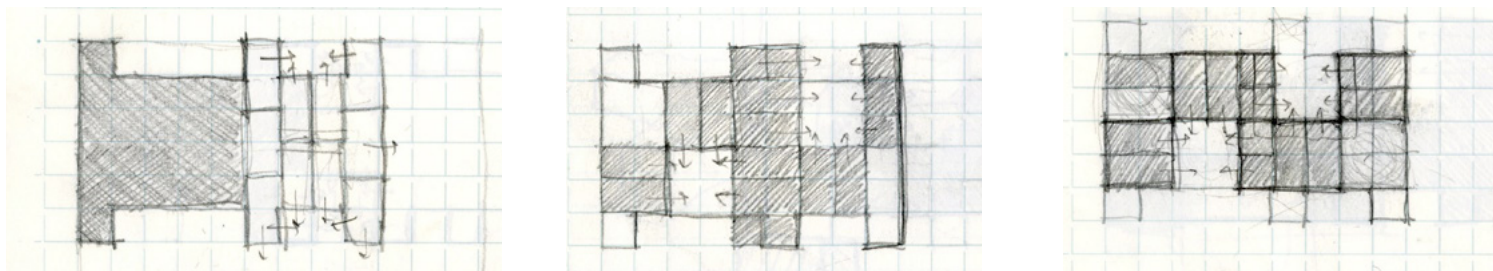
Duplex and double-sided units. Common spaces facing alcove and bedrooms facing original facade with smaller openings.
Produced by authors.



NEIGHBORHOOD 2ND FLOOR PLAN

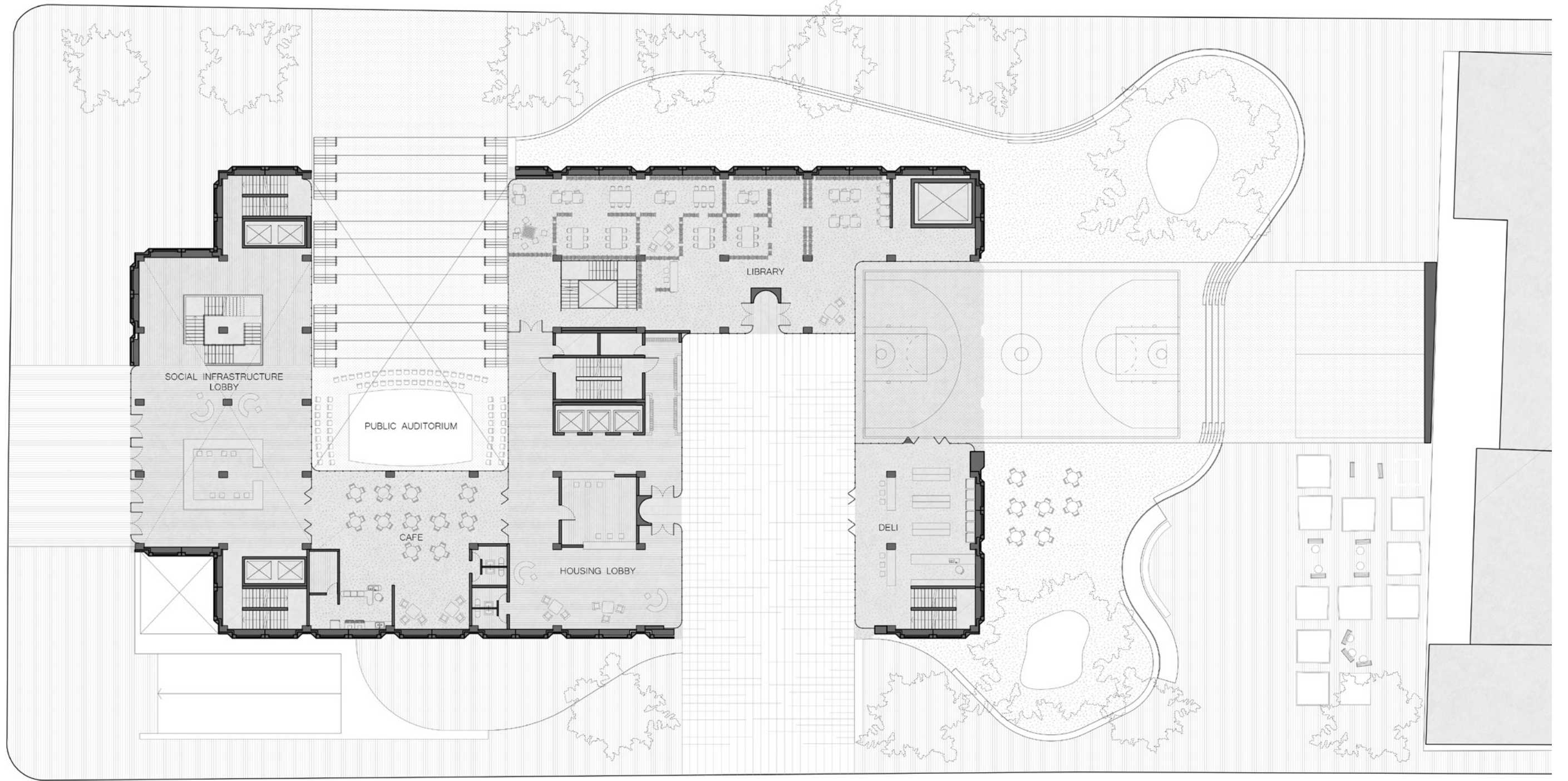


NEIGHBORHOOD ACCESS FLOOR PLAN



Design process sketches - General floor plan layout.
Produced by authors.

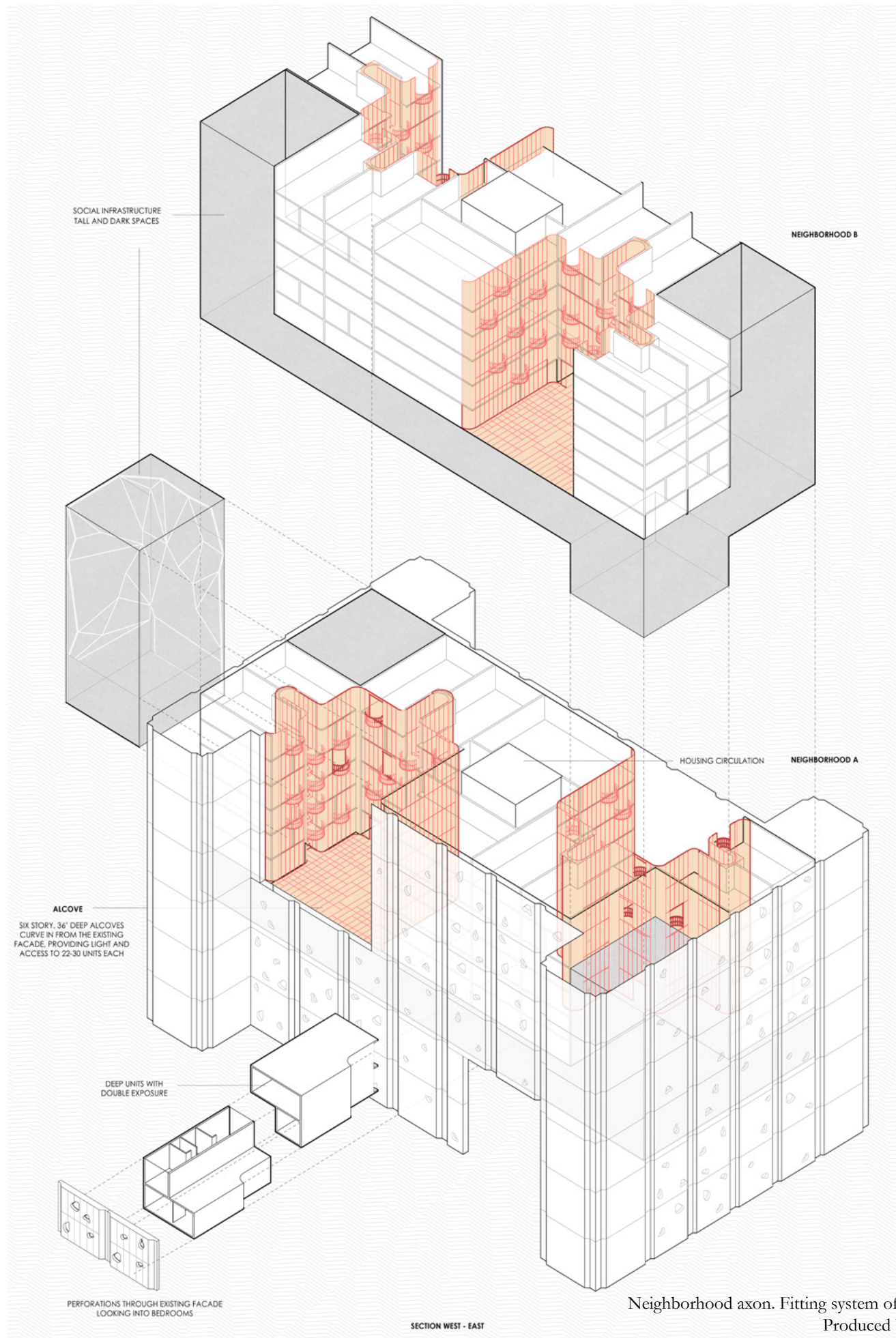
Neighborhood typical floor plans.
Produced by authors.



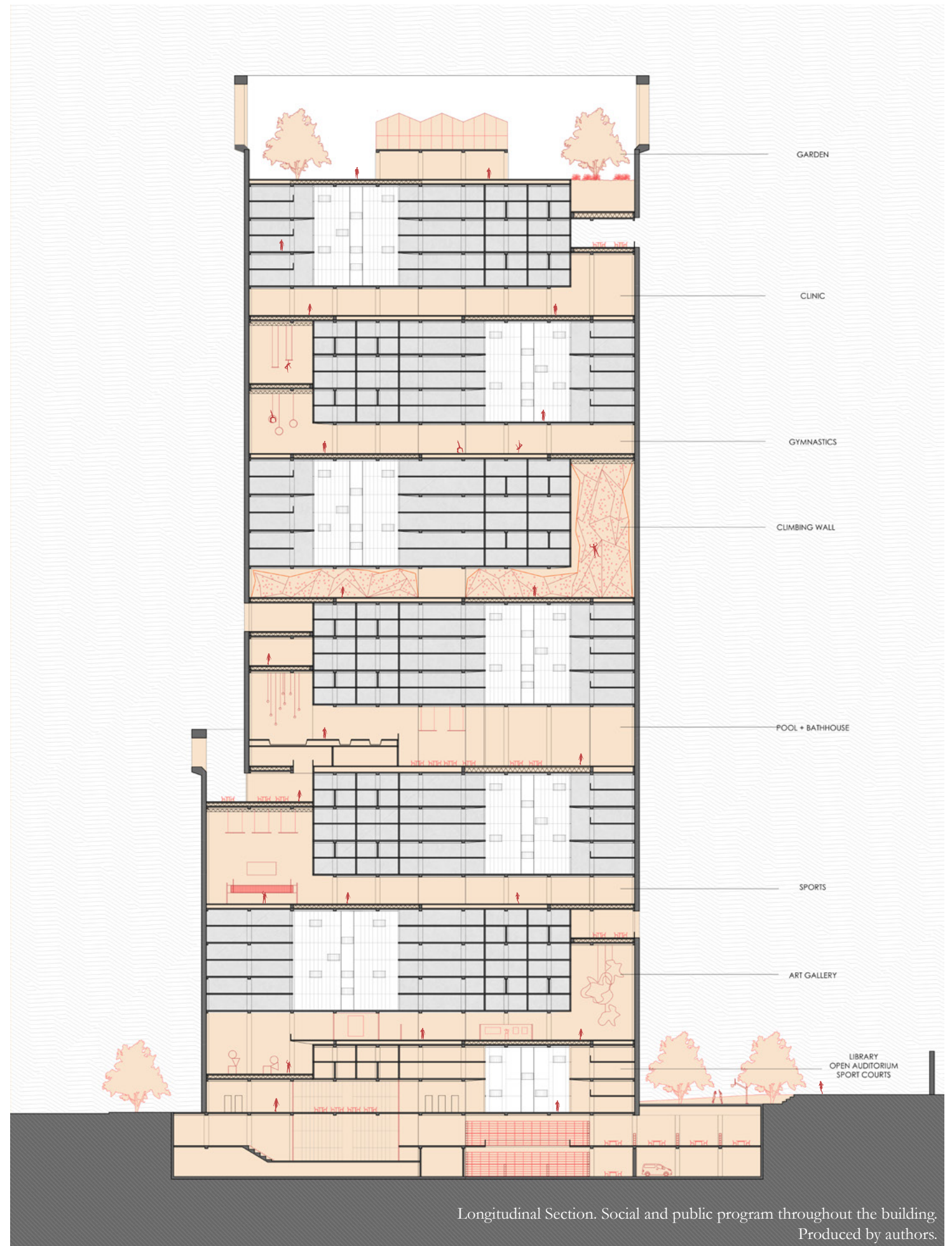
Ground Floor Plan, public alcoves related to street.
Produced by authors.



Image from the interior of the alcove.
Semi-translucid and homogenous language that contrast with the granite pannels of the original facade.
Produced by authors.



Neighborhood axon. Fitting system of programs
Produced by authors.



Longitudinal Section. Social and public program throughout the building.
Produced by authors.

Fugitivity

Noun. The state of being fugitive.
(Fugitive) Adjective. Lasting for only a short time.
- Cambridge Dictionary

“They issue for delay, they are made of an incidence of time given spatial form, and yet they are always fractionally out of time —incapable of absolute simultaneity, and yet dogged in their persistent, syncopated accompaniment of the present tense”.

— Wolukau-Wanambwa, Stanley. “(W)hole”.



The concept of fugitivity is fascinating and thought-provoking, especially in the context of photography. The text states that fugitivity is embedded in every essence of photography as a medium. The medium of photography, which is generally perceived as an objective representation of reality, actually plays with the distortion of time and fragmentation of the timeline, making photography unique.

(W)hole, the title of the text also resonates with this idea. It can mean paradoxically the opposite: Whole as everything or hole as void. Photography, as it is theorized in the text, can be as contradictory. It captures an apparently “objective” image of a situation but is never objective in the present because it stands in the past. The second is taken, the image is already in the past. Here comes the idea of fugitivity.

In this sense, photography relies heavily on memory, which is almost a nostalgic way of measuring and traveling. The relationship with shadows is also important, as there is a volatility in the way it moves and its intensity. The picture tells a story, is a memory of the place, conditions, actors, weather, and the situation, but also the camera, the light, the shadows, the photographer, and the post-production as well. It tells a story, it travels, even if it is digitally. Everything in it, or what is captured in the click, is irrepeatable, is in the past, and is fugitive from the very beginning.

The image shown is my personal experimentation with photography and time. In the context of a photography course in Columbia, the task was to capture the essence of an interior space. It was mainly an unconscious way of trying to capture time and movement in it as something that characterized this place. What I never thought was that the image shows fugitivity.

Infectious Borders

RECOVERING THE FOREST THROUGH THE RED COCKADED WOODPECKER AND RED HEART FUNGUS

Syed Haseeb Ajmad, Alejandro Marin & Francisca Alliende

ADVANCED STUDIO VI - SPRING 2023

Professor: Mireia Luzárraga & Alejandro Muñio

Co-instructor: Andrea Molina

Studio mentor: Irmak Turanli

North Carolina is considered one of the most ecologically biodiverse regions of the US due to the rich ecosystem in its wetlands and bottomlands. However, its forests and multiple species face mass extinction due to the extractive methods of the biomass industry.

Enviva, the second largest global producer of wood pellets, operates 10 plants across the USA, including a major facility in Garysburg. These plants churn out approximately one million tons of wood pellets annually, which are exported to Europe and the UK for electricity generation. Enviva claims sustainability by using “LOW-VALUE” materials such as thinning, tops, limbs, and mill residues, arguing that the carbon dioxide emitted during pellet combustion will be reabsorbed by new pine trees. However, the locations of these plants often disproportionately impact low-income black communities, exacerbating environmental racism.

Industrial logging practices threaten thousand-year-old ecosystems, as hundreds of acres are rapidly cleared to meet the growing demand for pellets. The shift away from energy dependence on Russia has

further intensified clear cutting, reducing the time required to cut down forests from 30 years to less than a decade. Over the years, the United States has witnessed the consumption of approximately 37 million acres of forests, replaced by monoculture pine plantations referred to as “green deserts.” This loss of diverse habitat heightens the vulnerability of countless species to flooding, inadequate water management, and hurricanes.

How can we protect and block lands and turn the forest into a political object?

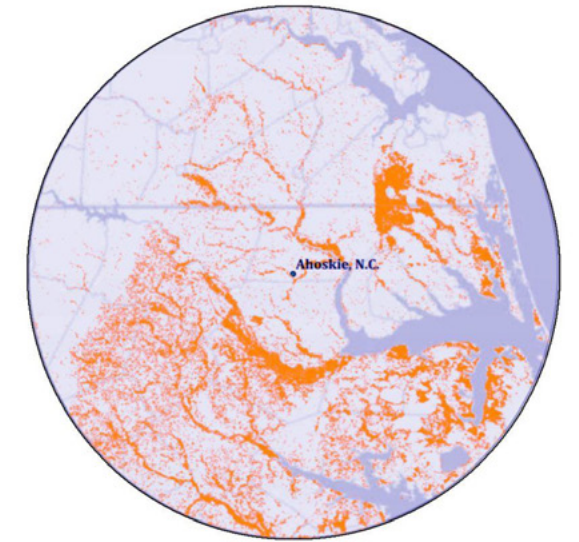
One key consideration was the identification of a keystone species that could have political agency over the forest and leverage the protection provided by the Endangered Species Act. In addition, the aim was to explore means of activist collaboration with species capable of regenerating habitats across federal and private borders through imperceptible interventions.

The investigation and cross-reference research led to the selection of the Red-Cockaded Woodpecker as a focal species. This species has demonstrated remarkable resilience despite facing endangerment and habitat loss. It can adapt to various forest types, from wetlands to bottomlands,

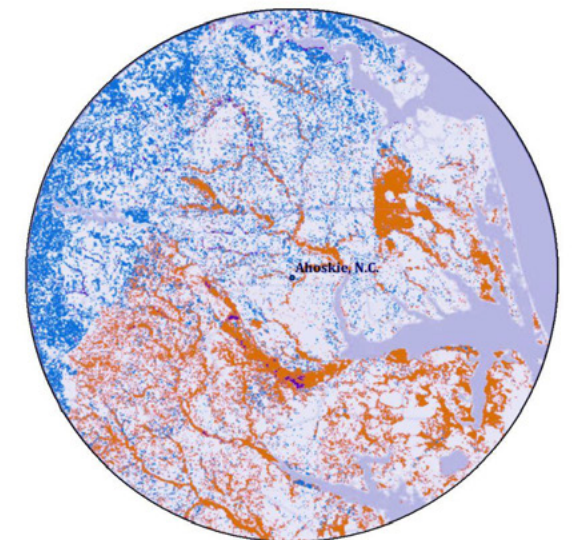
although it prefers nesting in pines. The woodpecker carves holes in trees with soft wood, often choosing pines containing the Red Heart Fungus, which aids in nest excavation at an accelerated rate.

The Red Heart Fungus has a symbiotic relationship with the woodpecker. It facilitates nest carving and attracts insects crucial to the woodpecker’s diet, which resides within the tree. This fungus has also been employed in forest management techniques across the USA to promote ecosystem health through spore manipulation and reproduction.

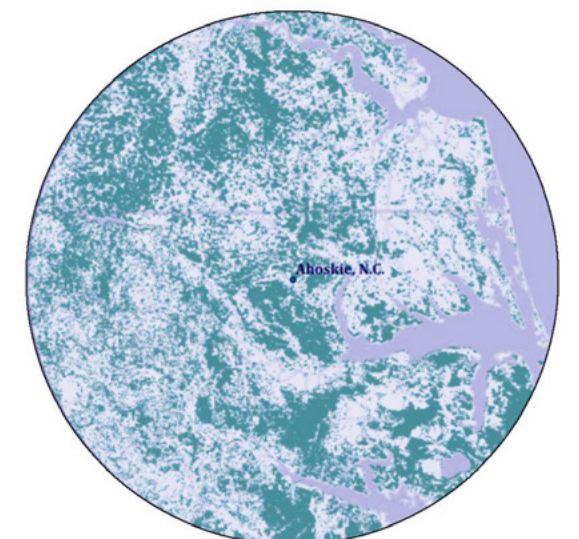
The proposed intervention involves a careful collaboration between the woodpecker, the Red Heart Fungus, and the forest. It centers on enacting federal laws across borders and deploying a network of devices to distribute fungal spores using wind dispersal. The goal is to attract woodpeckers to new habitats in order to promote forest protection and enforcement of laws by achieving a balanced level of infection across borders.



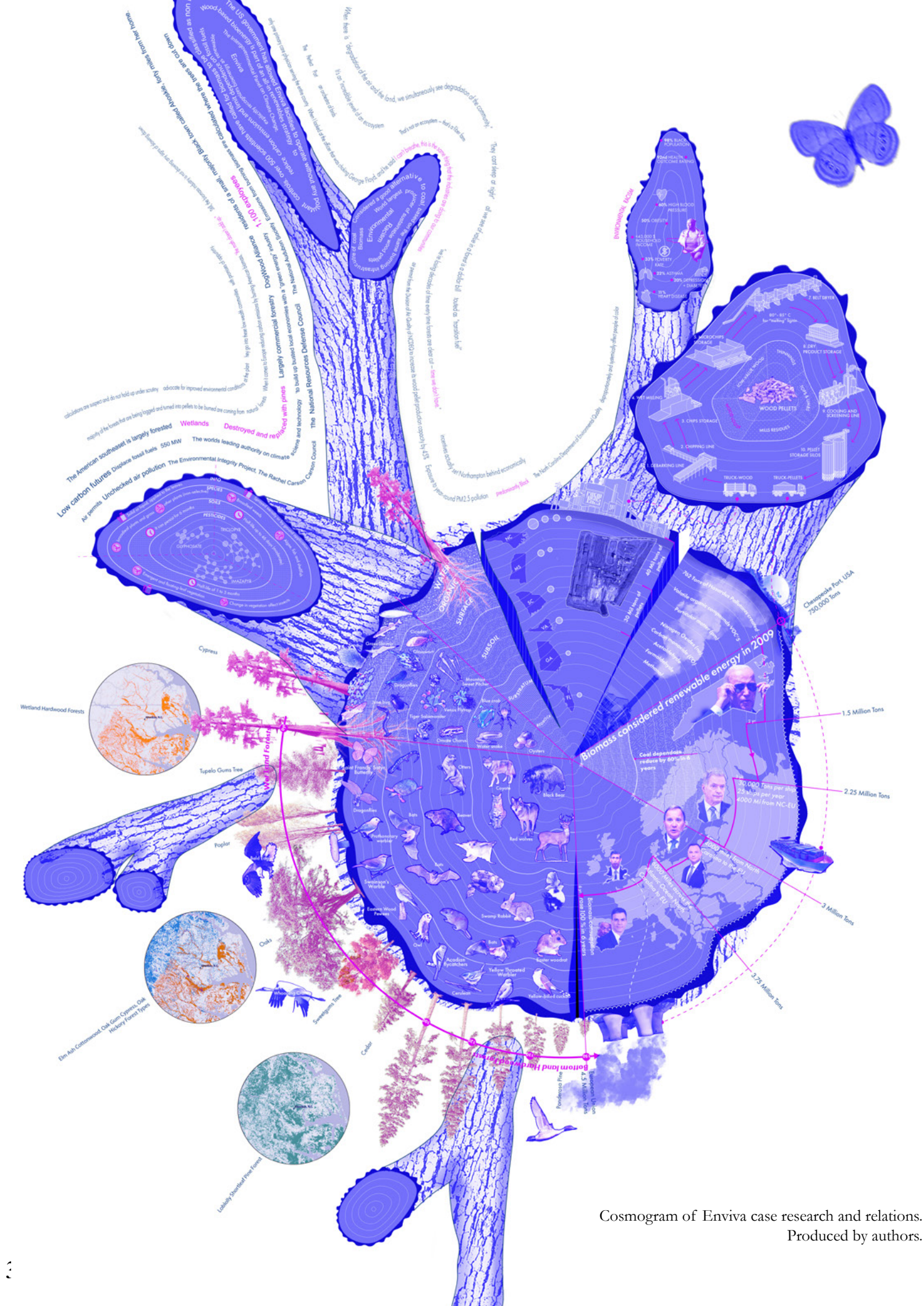
WETLANDS ECOSYSTEMS WITH DIVERSE SPECIES



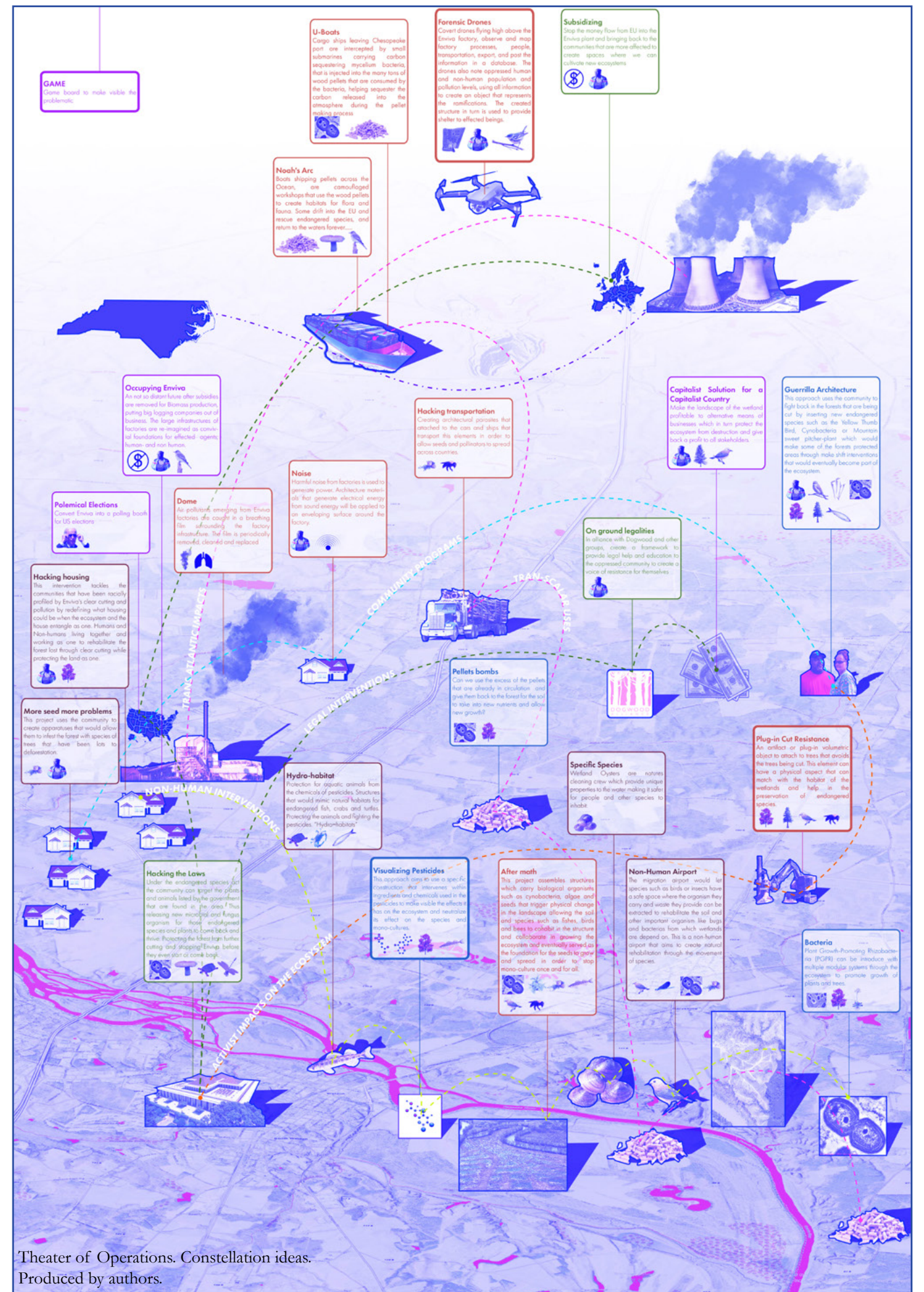
BOTTOMLANDS ECOSYSTEM WITH DIVERSE SPECIES



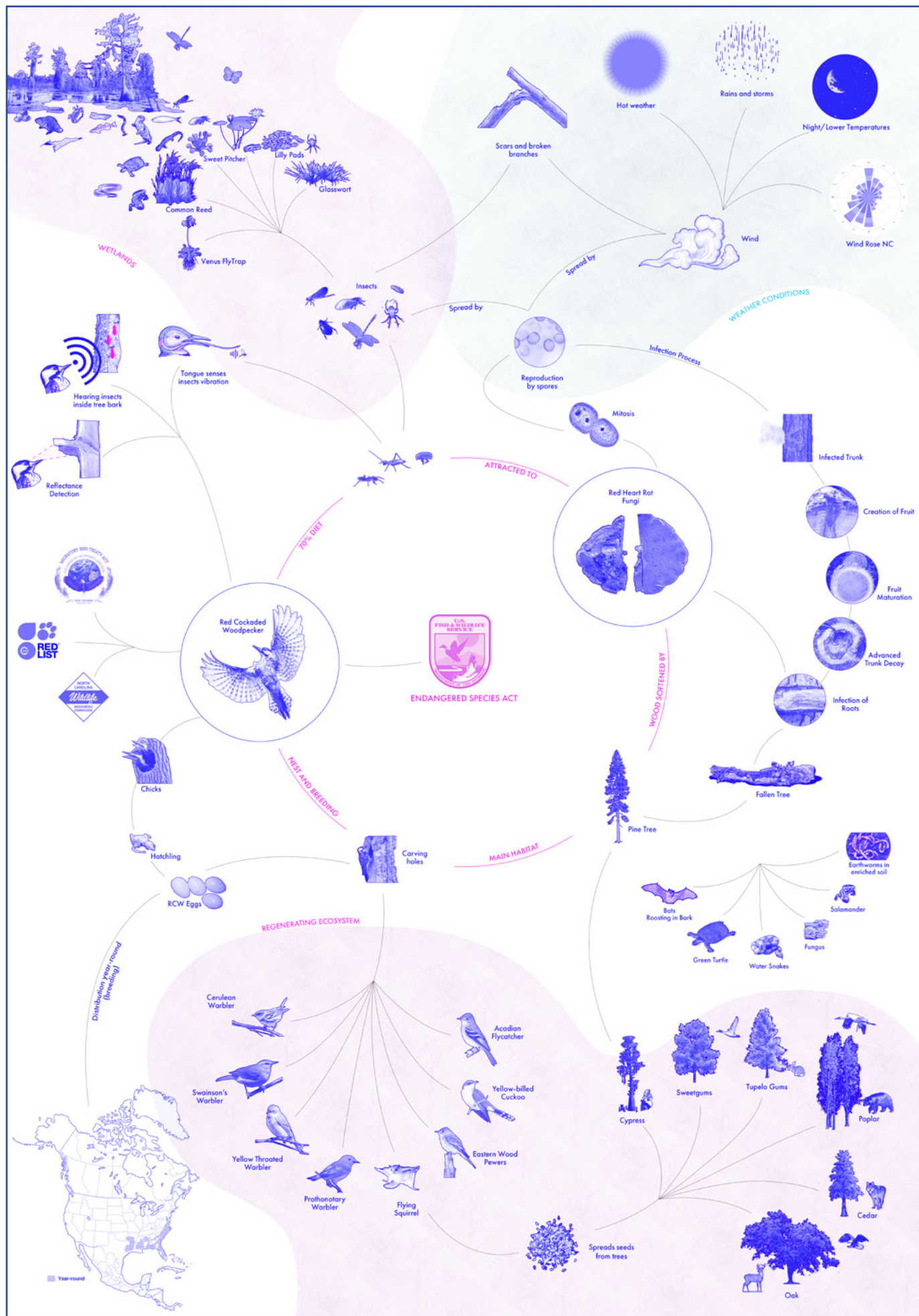
MONOCULTURE FOREST



Cosmogram of Enviva case research and relations.
Produced by authors.



Theater of Operations. Constellation ideas.
Produced by authors.



The Endangered Species Act protects species that are crucial to the ecosystem and the land they inhabit. It states that the “critical habitat” is the specific areas that contain the physical or biological features that are essential to the conservation and reproduction of endangered and threatened species and that may need special management or protection.

Our approach involved the design of a device carrying a tree trunk adorned with red heart fungus fruit, positioned 25 feet above the ground. This device automatically released spores below pine branches, targeting areas with wounds.

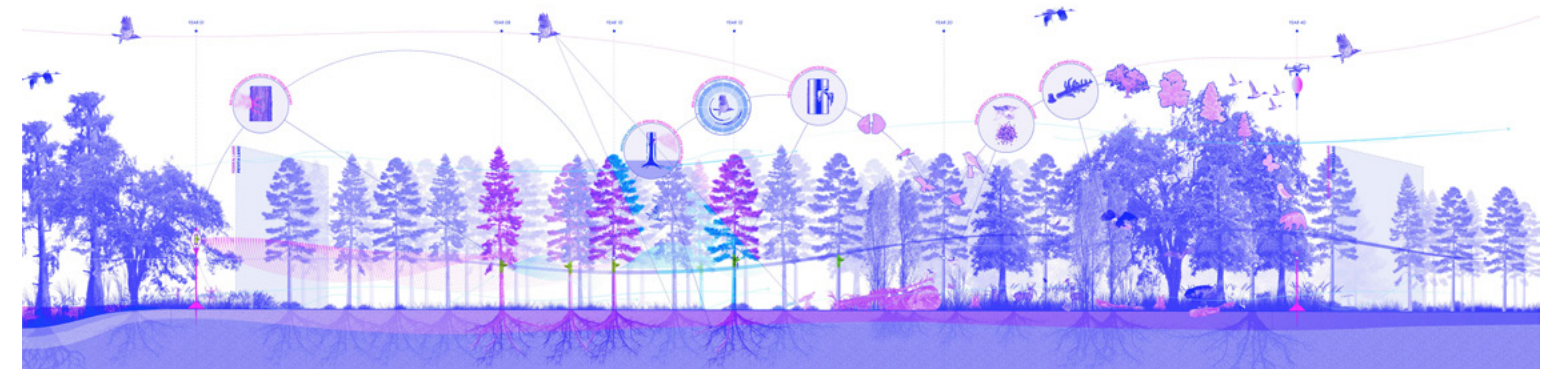
Multiple devices were strategically placed along the borders of federal, state-owned, and private lands. These devices gradually released spores over time, considering varying wind directions and speeds. Within half an hour, around 1 million spores dispersed, affecting 20% of trees that would eventually release their own spores within a decade.

We identified the most suitable months for spore release, focusing on periods with wind speeds ranging from 7 to 20 mph. By dispersing spores in different directions, we ensured wider coverage over a distance of 200 meters. Nighttime hours proved to be the most effective, minimizing interference from sunlight.

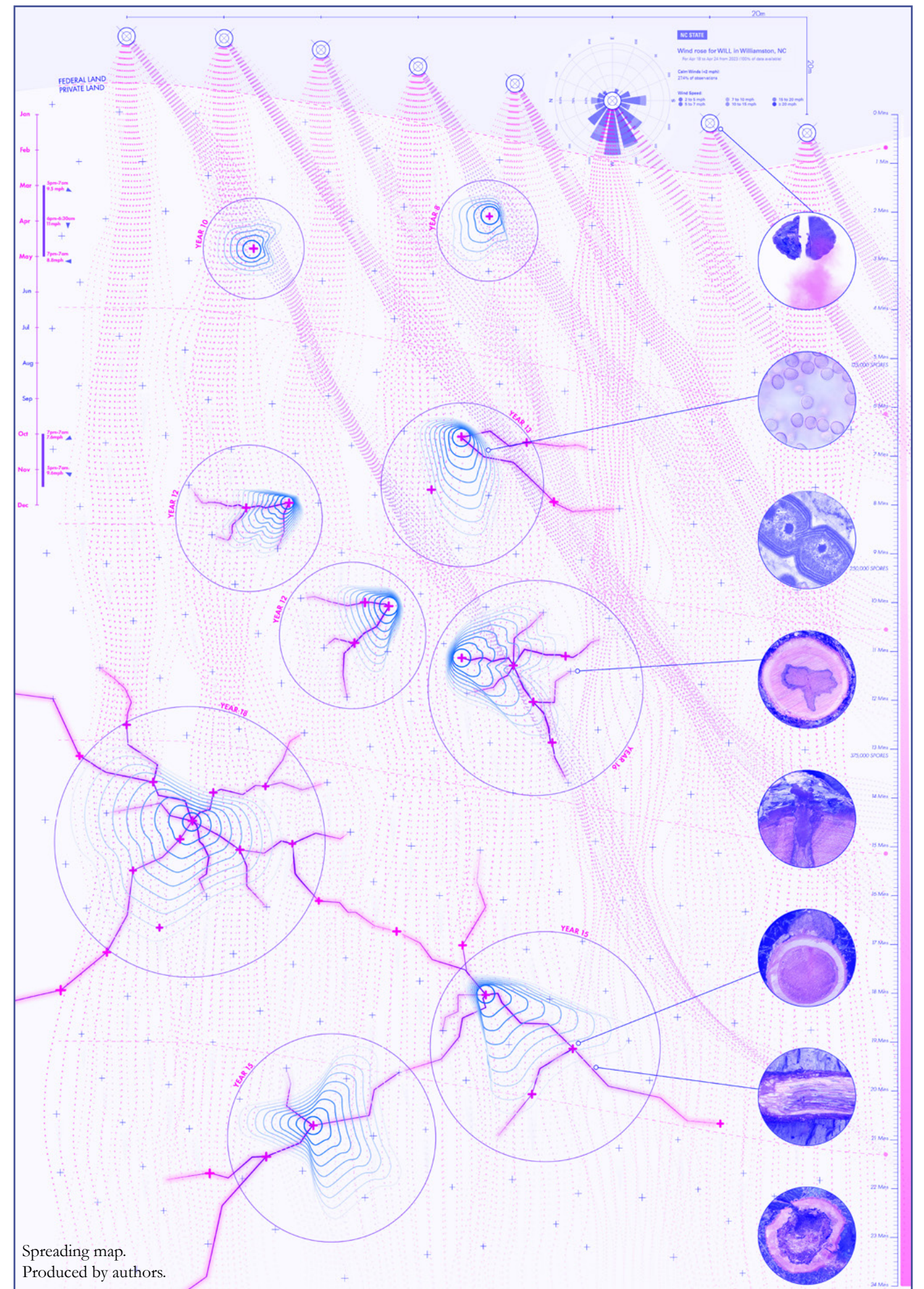
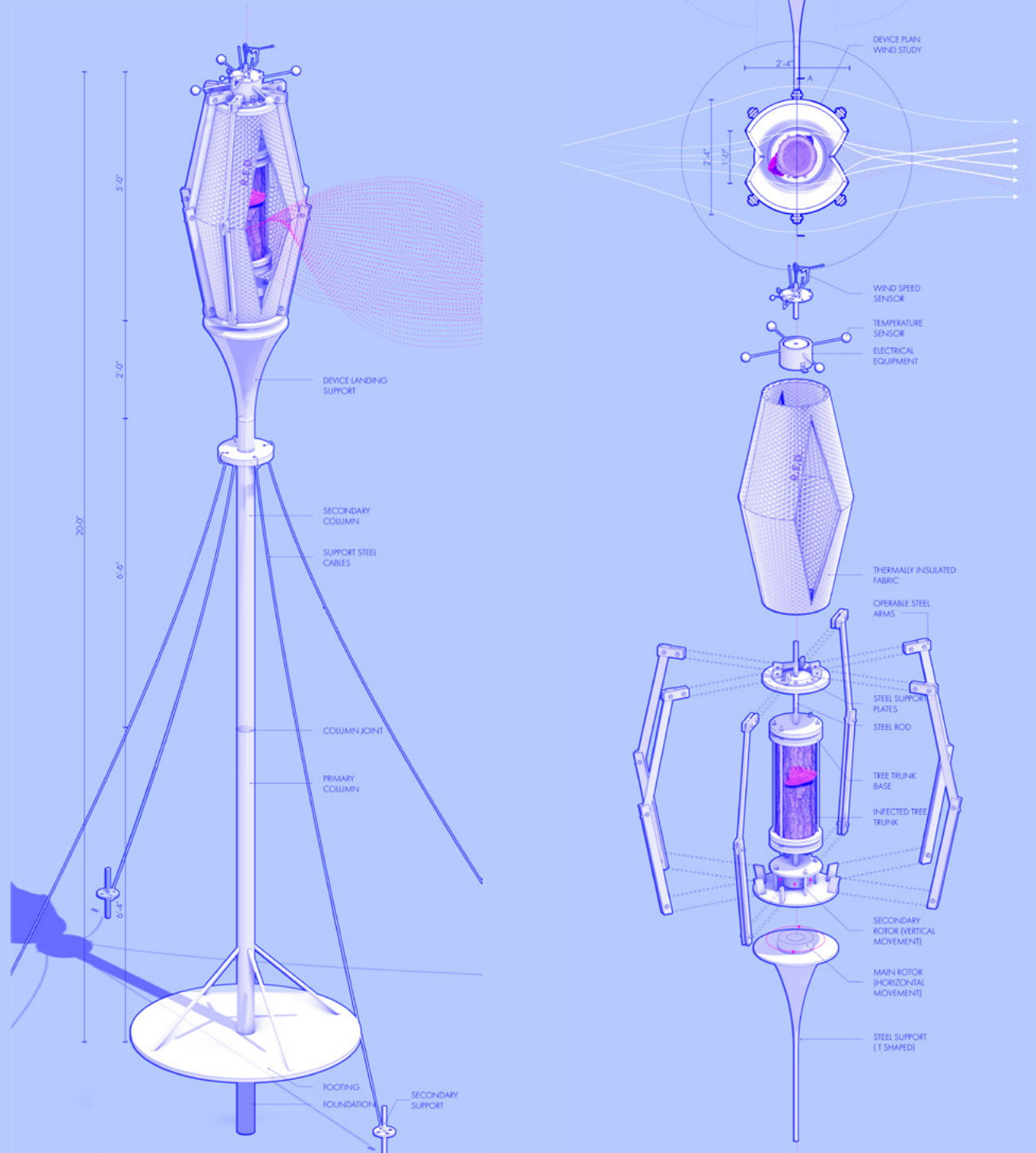
The released spores entered pine tree cracks, triggering the growth of the fungus inside the trees. Over the years, the spores consumed the tree’s sap and produced fruit that blended with the tree’s appearance. This fruit facilitated further spore spread. By year 15, the fungus started spreading through the tree roots, impacting nearby pines and increasing the possibility of infection.

Our long-term plan involves a choreographed strategy where the network of devices continuously migrates across the lands, allowing us to gradually expand the boundaries of protected areas throughout the deforested territory. We aim to challenge borders, laws, and landscapes, and highlight the potential of non-human alliances in driving activism during the Capitalocene era. By prioritizing key-stone species and embracing non-human and life cycles, we envision a future where forest rehabilitation is achieved through collaborative efforts.

Left: Action diagram. Research.
Down: section.
Produced by authors.

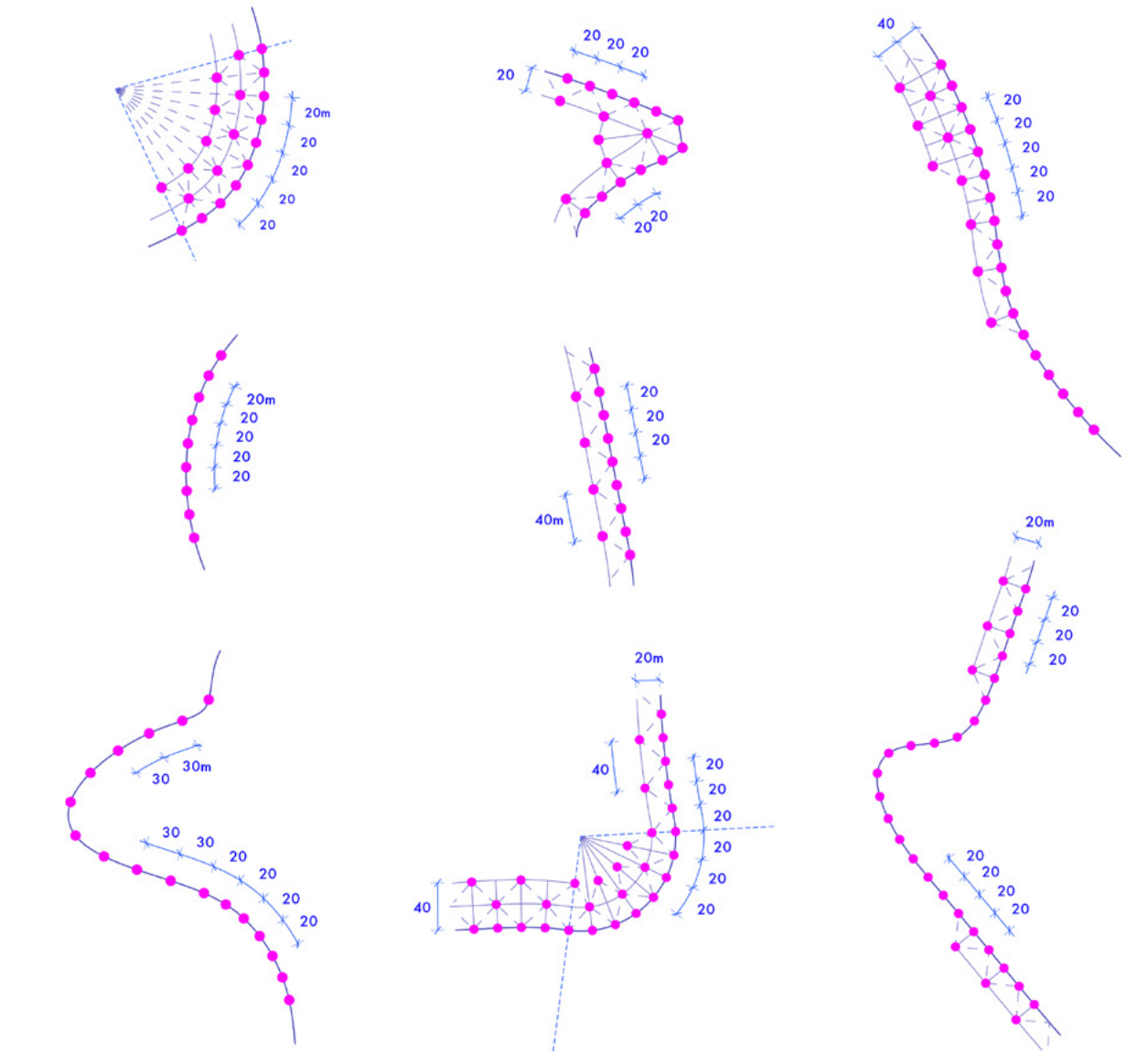
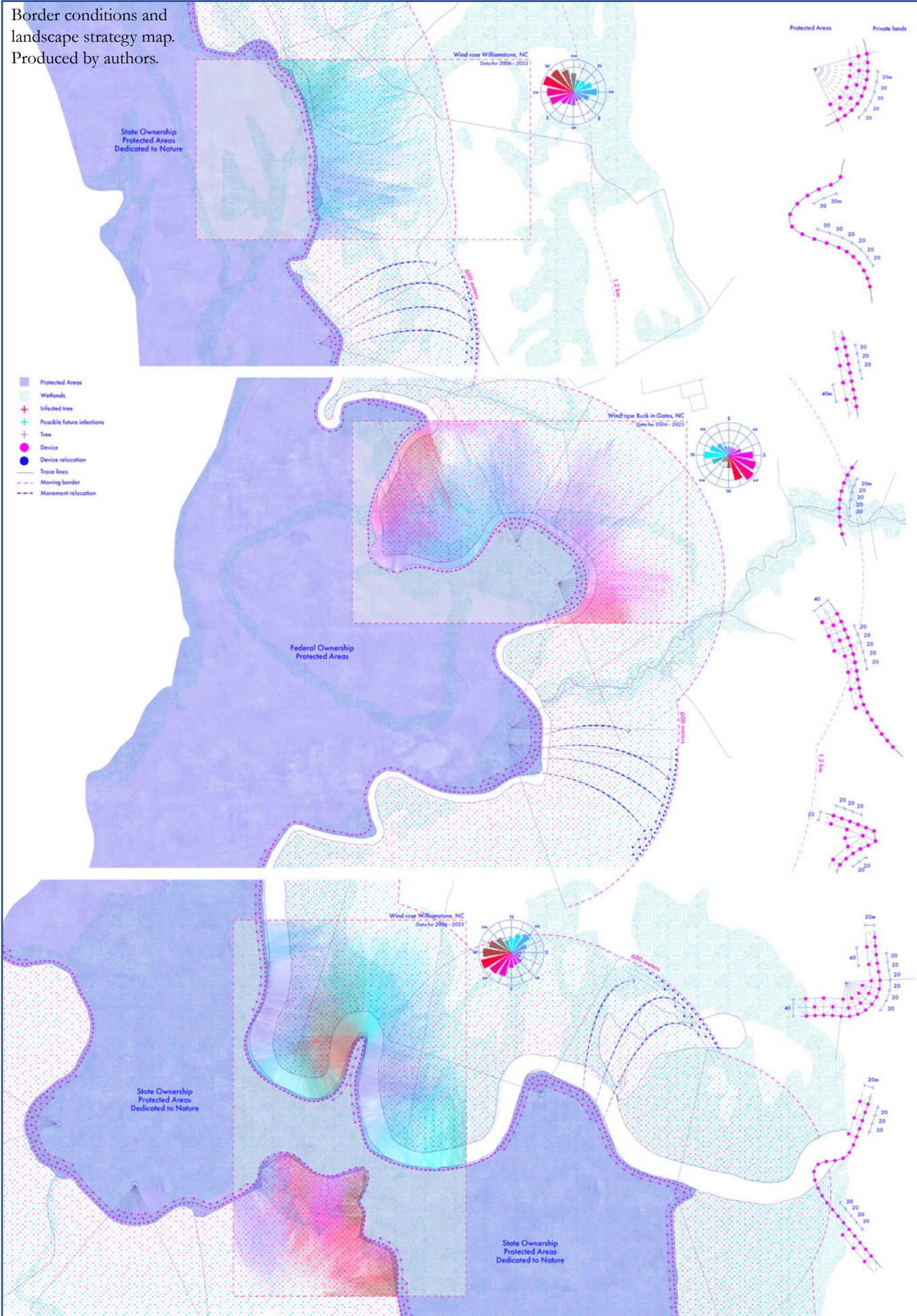


Device design that use wind as an agent.
Produced by authors.

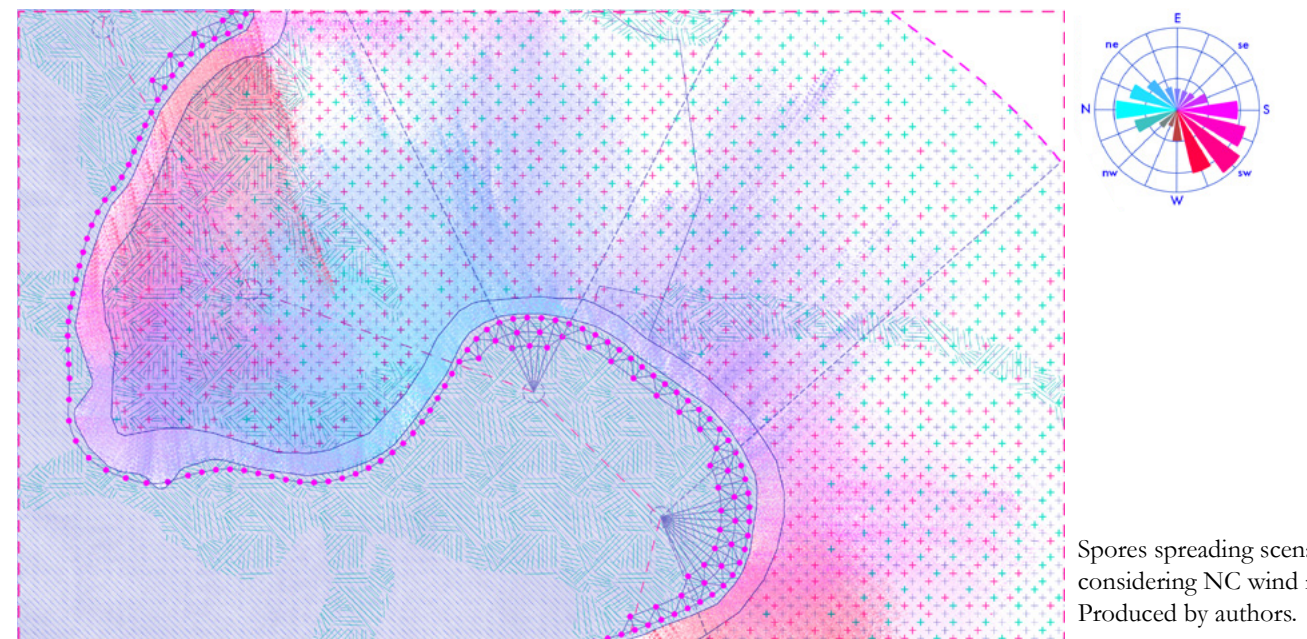


Spreading map.
Produced by authors.

Border conditions and landscape strategy map.
Produced by authors.



Displacement of network of devices in different border conditions.
Produced by authors.



Spores spreading scenario considering NC wind rose.
Produced by authors.

Maroon

Noun. A member of any of various communities in parts of the Caribbean who were originally descended from escaped slaves.
- Oxford Dictionary

Mabel O Wilson writes about the installation *The Histories (Le Mancenillier)* of the artist David Hartt in the Beth Sholom Synagogue, a building designed by Frank Lloyd Wright with a particular lighting condition and glass roof. The installation uses orchids as the protagonist, both physically and performatively, by moving them throughout the time the exhibition was placed, complemented by visual documents of their migration and history. Through the text, Wilson unfolds parallels to historical transplantation, both plants and humans: the migration of the orchid as a colonized specie and the migration of people and institutions related to maroonage.

She discusses the existence of traces of migration or memory landscapes that give rise to hybrid identities shaped by migration. The concept of new migrating identities or species particularly intrigued and provoked me. I wonder where to draw the line between autochthonous and in-

vasive, whether concerning species or humans. Eventually, most organisms or individuals originate from elsewhere, so at what point does migration define one's self-definition? When we might eventually adopt new autochthonous species as part of our primary cultural identity? We are constantly on the move, evolving, and migrating, even more in the globalized era where frontiers are blurred. Change is a constant.

It prompts me of the *Foreign Farmers* installation at the Palermo Art Biennale by Leone Contini, which depicted a growing pergola of vegetables introduced by migrant people who adapted to new conditions, mirroring the demographics in the city. The seeds symbolize the journey and history of migration, which has become the identity of Palermo. This relates to the text in questioning how migration creates new identities based on traces of transition and hybridization and on the process of self-definition.



Produced by author.

“The melodic structure of Gottschalk’s *Le Mancenillier* carries the sonic traces of the transplantation of Africans to Caribbean, of the migration of slave owners and their human property to America”.

Mabel O. Wilson

Reflections in Roberto Burle Marx

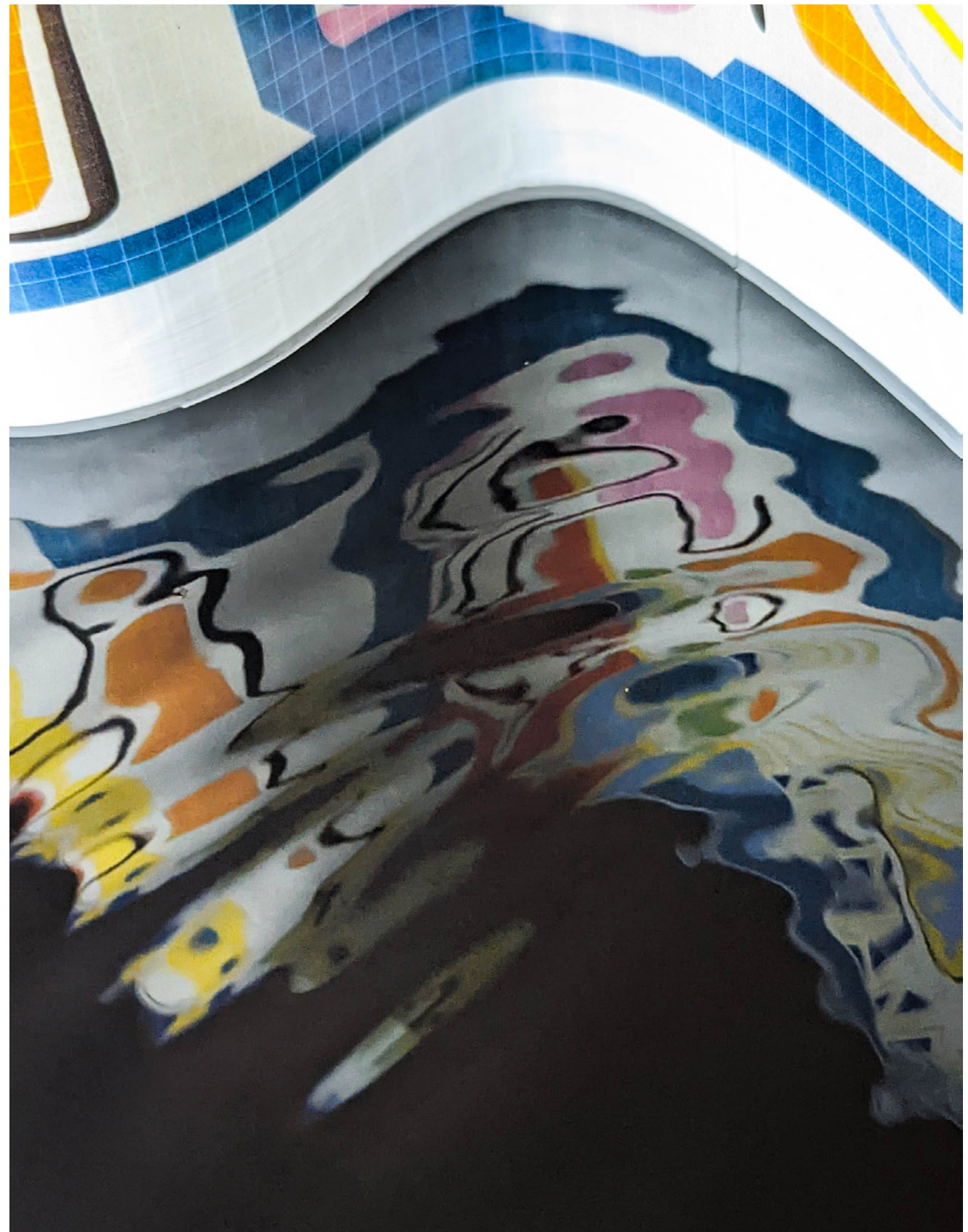
ART SEEN THROUGH NON-STATIC NATURAL ECOSYSTEMS

DESIGN SEMINAR - FALL 2022
Professor: Steven Holl & Dimitra Tsachrelia

The use of color and organic forms is an essential and powerful legacy of Roberto Burle Marx's work, strongly inspired by expressionism in Germany. The use of color, contrast and expression was evident not only in his famous gardens but also in his floor plans, artistic work, and tiles. The research focused on his tile work, starting with analyzing some of his "azulejo" tile walls. One of them, the piece placed in Walter Moreira Salle's residence, combined the grid + geometry + human body + blue color composition. But what is most interesting is how this tile is placed in the garden, on a curved wall, surrounded by vegetation, and directly related to a water body: a harmonic composition of reflection.

Reflection was something that Burle Marx studied with sketches and experimented in his gardens—composing artistic work in relation to plants and wa-

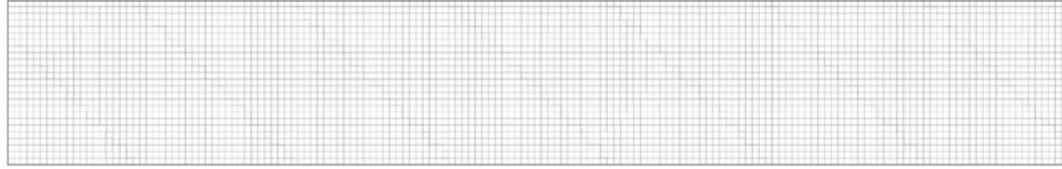
ter. The art and landscape are merged in Burle Marx's gardens. They are part of an ecosystem where the water, weather, plants, art, and architecture are related and are in constant motion. As a graphic example, the water changes the tile figure deforms the composition and makes the art non-static. How would a colorful tile change the reflection and the garden composition? The work intends to continue exploring this idea of reflection and motion by redrawing a colorful tile and playing with its curved form and reflection. As Burle Marx stated, "... a garden needs more than flowers and plants. It needs music and sounds...".



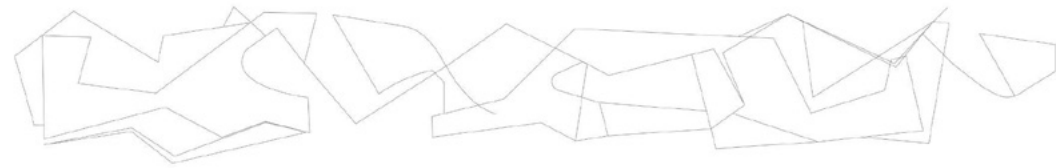
TILE



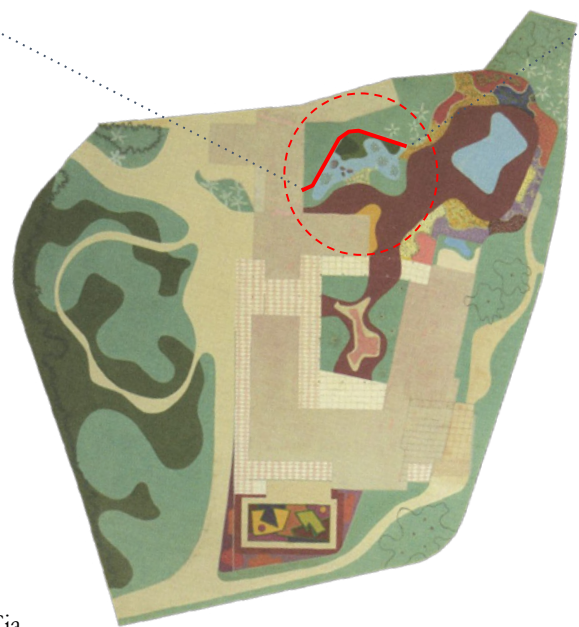
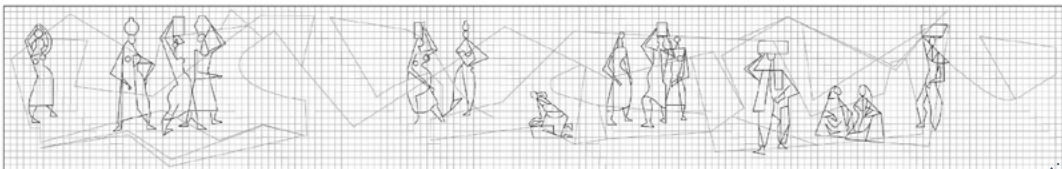
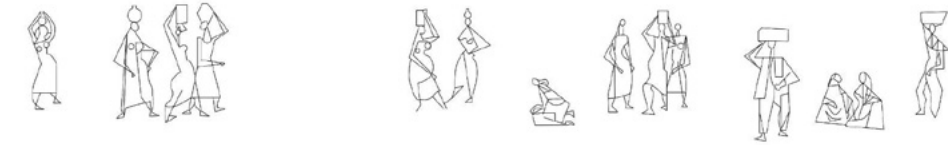
AZULEJOS
GRID



GEOMETRY



HUMAN BODY



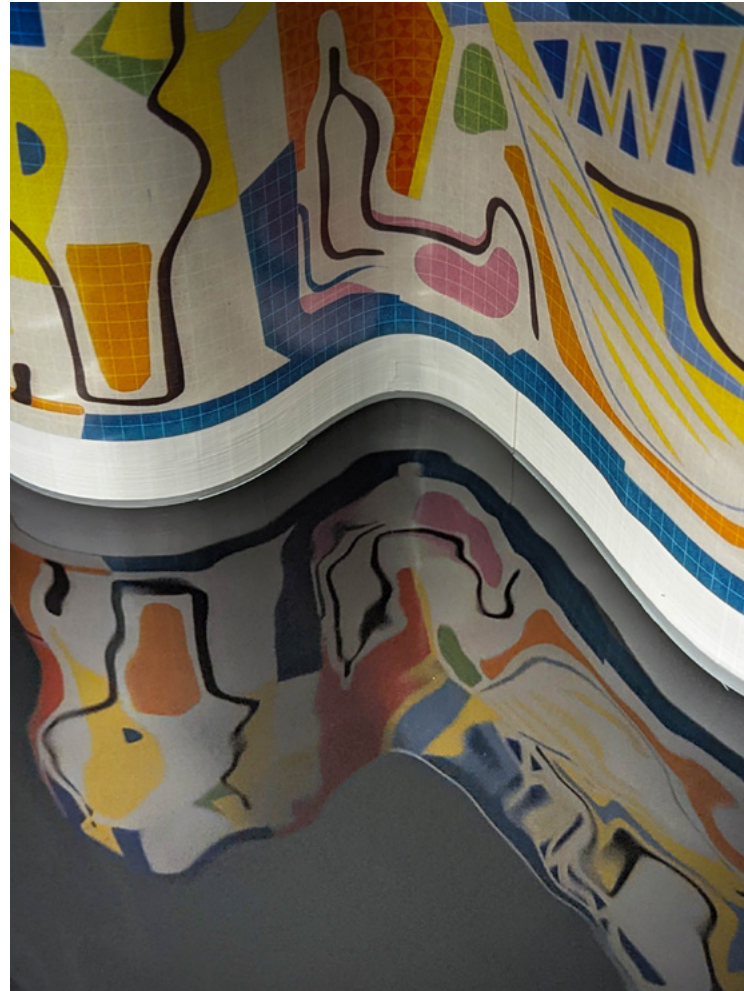
Floor Plan. Garden design for the Walter
Moreira Salles residence, 1951. Burle Marx & Cia.
"Roberto Burle Marx: Brazilian Modernist". P. 49
Analysis produced by author.



Tile redesign of R.B. Marx painting.



Tile redesign of R.B. Marx painting.



Color studies in water reflection.
Photographs of colored tile model, simulating its position within the landscape and bodywaters.
Produced by author.

Authenticity

Noun. The quality of being real or true. - Cambridge Dictionary

“The most important social function of film is to establish equilibrium between human beings and the apparatus”.

Benjamin, Walter. “The Work of Art in the Age of its Technological Reproducibility”

In the essay, Walter Benjamin discusses the influence of technology on the reproduction, expression, and perception of art. Artistic methods such as photography or film have shifted the way art is produced, or better say, re-produced, leaving behind the historical authenticity and uniqueness that characterized art production until that moment, with technology as the game-changer. Interestingly, this idea of the loss of authenticity shows that the film has a dissociation of time by the simple idea of something produced to be reproduced: as Benjamin said, there is no more here and now.

Thus, mechanical reproducibility has a social value in its possibility to democratize access to art, giving the film a strong political dimension. Benjamin, interested in mass culture, stated that film has a social value found in a collective way of experiencing art. In this context, I find fascinating this idea of collectivity that is probably more

developed in the film than in any previous artistic format. It is intriguing to think how the film looks for reciprocity in different scales through the collective experience, from the human body senses to the collective reactions of many individuals at a time.

However, the democratization of art, in relation to apparatuses and technology development, has drastically changed the collective experience of film in recent years. In the past, the cinema was the primary place for people to experience a film collectively. The rise of streaming platforms has given people the ability to watch films individually and at their own pace. As a result, the collective experience of the film has become fragmented, and the social character of the film has changed. It would be interesting to research how the translation of the collective experience of the film into spaces for mass culture has evolved over time.

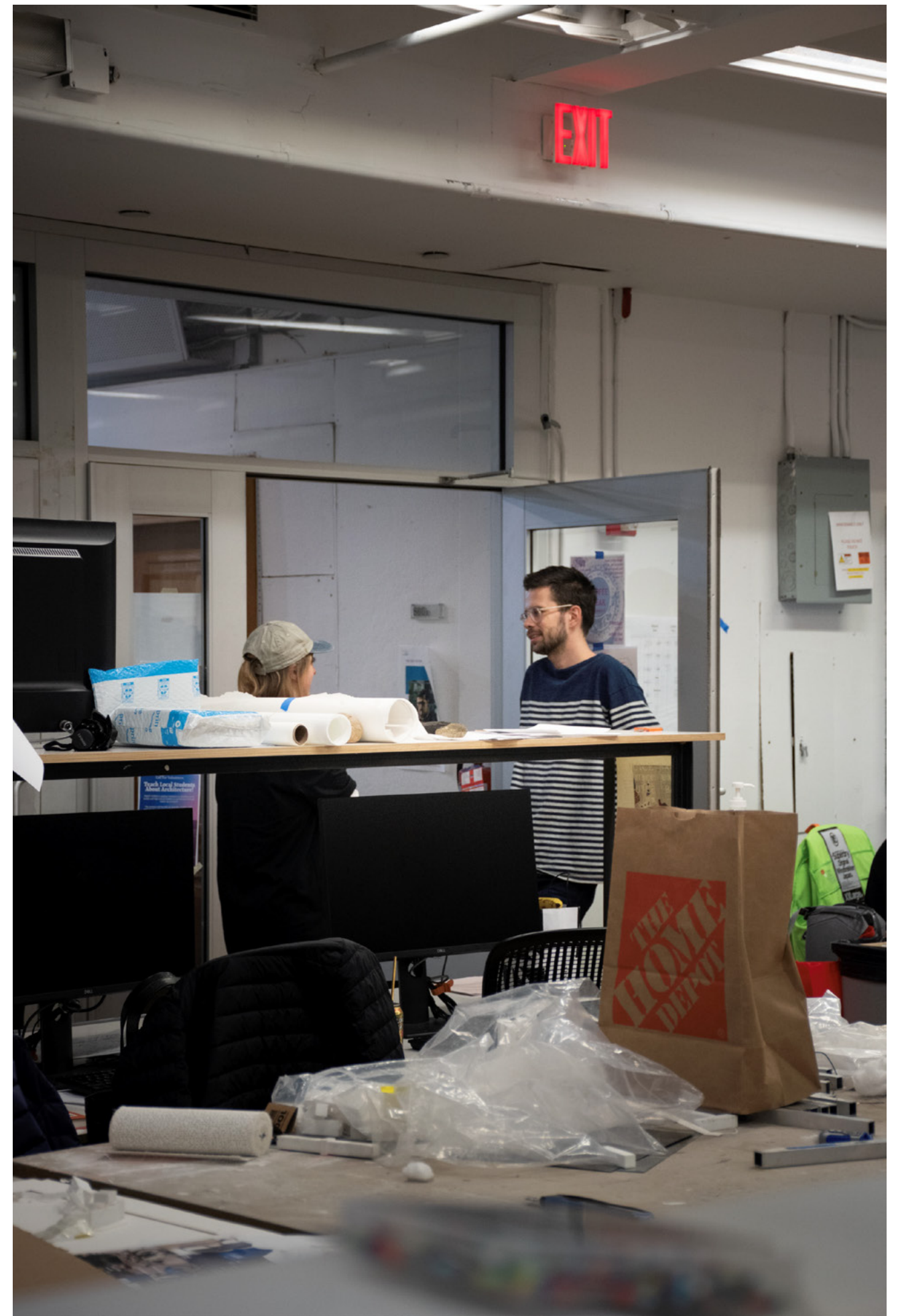
Crossing Looks

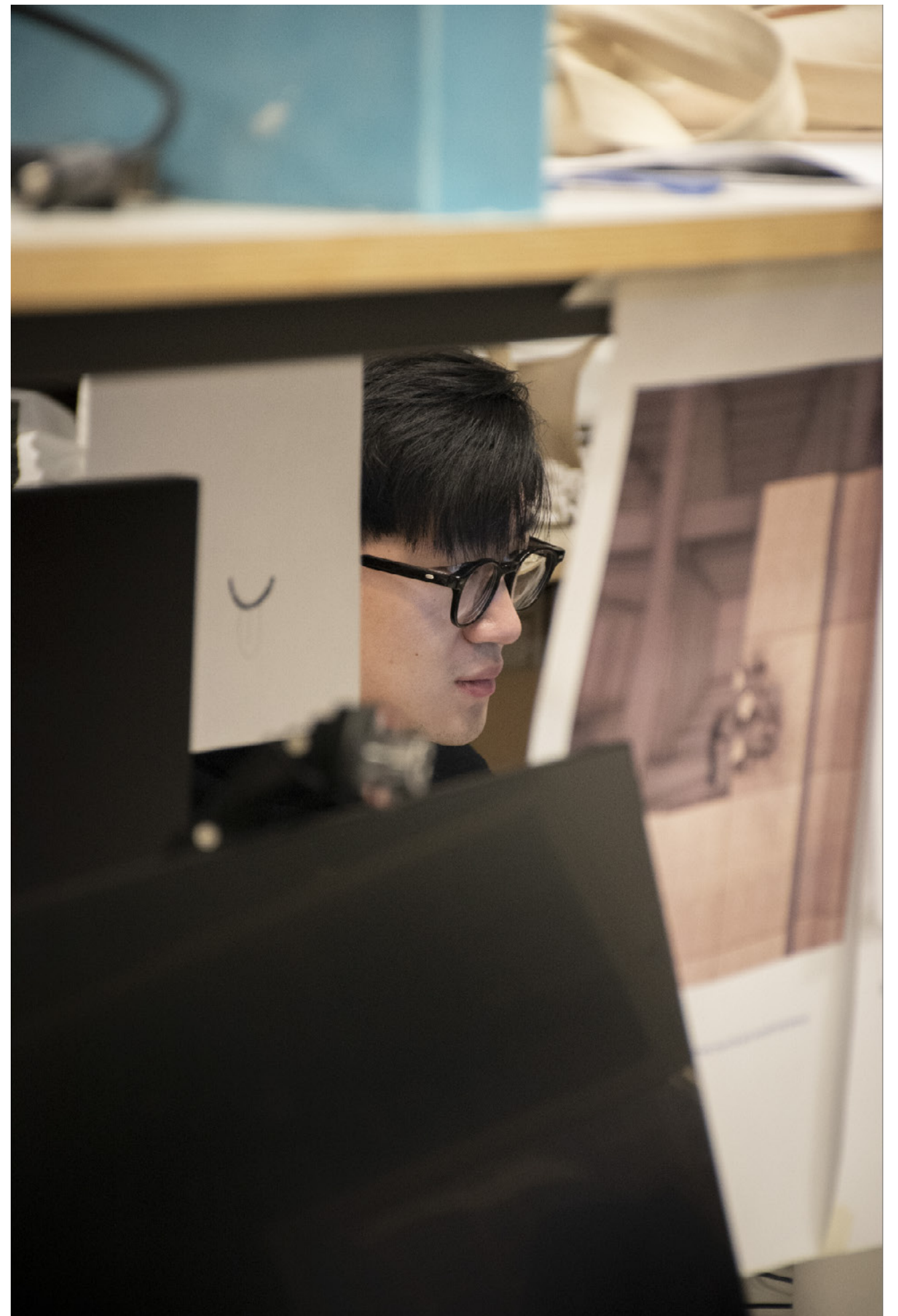
CAPTURING THE PROCESS OF MAKING ARCHITECTURE

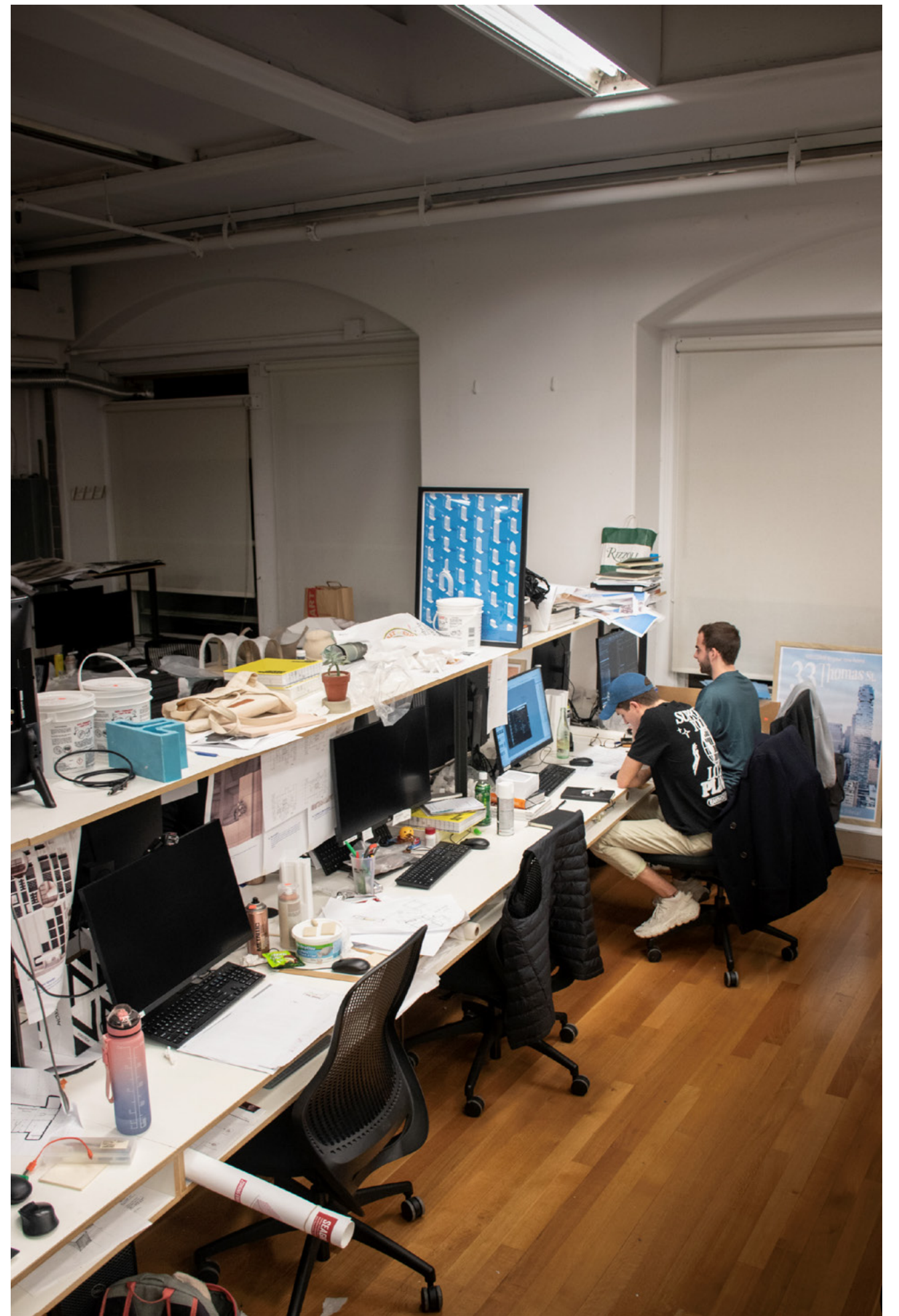
VISUAL ELECTIVE - FALL 2022

Professor: Michael Vahrenwald

All photograph where taken and edited by the author in
GSAPP studios during fall 2022.







A window to the Reichstag Parliament

Essay for the course Transcalarities.

Professor: Andres Jaque

Mentor: Bart-Jan R. Polman

“Glass, the primary material used in the project, symbolizes the transparency of the new system, “reconciling new interiors with old” (Foster + Partners 1999)

“At night, the cupola becomes a beacon on the Berlin Skyline” (Foster and Abel 2011, 87). As a lantern, the Reichstag Building was again an icon in 1999, renovated after being unoccupied for 66 years. On the historic building emerges the primary architectural expression of the rehabilitation design: a 40m diameter glazed dome that crowns the building offers 360 views of Berlin to its visitors through two helicoidal ramps that play at finding each other on its perimeter and reach a platform at the top. The Foster + Partners design also incorporates interventions at different scales, such as restoring and exhibiting historical expressions on the walls and integrating passive systems that minimize emissions. But without a doubt, what stands out the most is the intentional opening of the building to the public through the habilitation of the roof and the glazed cupola as a symbolic act.

The dome seeks to revive the Reichstag’s memory of its past, a building that embodies Germany’s history since 1894 and the darkest years of

World Wars and the Cold War. It was in the interwar period the last time the building was inhabited after suffering an intentional fire in 1933, coincidentally weeks after Adolf Hitler took power and the tension was increasing. The fire also destroyed the original square-based glazed dome. Foster’s reinterpretation of the old dome represents the ideas of a new unified Germany after 1990, a symbol of democracy.

“In the middle of the dome is a fantastic object. A fountain of little mirrors erupts from the center of the glass ceiling of the chamber” (Foster + Partners 1999). With this phrase, Foster + Partners reveals the most symbolic and radical intervention in the transformation of the Reichstag: a circular window that opens onto the parliament hall, uniting the pristine (almost secret) space of the forum with the public realm of the dome and the rooftop. In addition to providing natural light and ventilation within the hermetic shell of the parliament chamber, this “light sculpture” symbolizes the ideas of a new unified Germany after 1990, contemporary and democratic.

Glass, the primary material used in the project, symbolizes the transparency of the new system, “reconciling new interiors with old” (Foster + Partners 1999). The glass of the circular window takes center stage as the leading actor in this political act, a manifesto for its mere existence and location in the project. An element that allows the tension between the world of the representatives and the represented and seeks to break down these barriers. The question now is, does it break it? Are these symbolic architectural decisions enough to overcome the historical secrecy of parliamentary elites?

At 643 km from the Reichstag Building, in the city of Bretten, is the headquarters of BGT Bischoff Glastechnik, the glass processing and finishing company that supplied the 3000 m² of laminated glass that was installed in the dome. The energy consumption is the non-wanted invisible face of the project because of the technical process: subjecting two 12mm glass with a high-resistance film (PVB) in between to

high temperatures and pressure to achieve good adhesion and transparency in the glass of the Reichstag Building. Bretten’s population lives silently affected by a company that provides “transparency” to the most significant architectural projects in the world.

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Ethics in Architecture

SEASON 3, 2023

rAADio PROJECT

Andy El Set
Simran Ranswant
Armita Peirovani
Alejandro Marin
Zhuofei Tang
Maria Candelaria Ryberg
Francisca Alliende

The “Unethical” season dives deep into what it means to be ethical in our profession, practice, and academia. Our goal is to unpack and uncover the intricacies of ethics in areas such as Disciplines, Technology, and Labor, in a world that is full of political, cultural, and social complexities. We won’t be defining ethics, but instead, we aim to explore its viscosity as architecture evolves.

Season 3: Episode 6: “Material World”

By Simran Raswant and Francisca Alliende Covarrubias

Intro sound: 1-3 seconds (fades into the episode)
S3_E6_1_Hook_Take_1

SR: Hi, this is rAADio, and this third season we are discussing Ethics in Architecture. I am Simran Raswant.

FA: And I am Francisca Alliende, and today we continue unfolding the question of how our buildings are built.

SR: Join us as we dive deep into labor practices, rights, and ethics.

S3_E6_2_Opening_Take_1

This is rAADio, an investigation by Advanced Architectural design students in the Graduate School of Architecture, Planning, and Preservation at Columbia University. As a cohort from a plurality of diverse backgrounds, we aim to observe the many polycentric entanglements of architecture. We explore the questions of how we expand the traditional role and associations of architecture between assemblages, interrelationships, bodies, and technologies; beyond simple scalar translations.

Sound: (*Longer transition*) Material Girl extract (Madonna)

S3_E6_3_Chocolates_Take_1

SR: In this episode, we will continue unpacking the implications of labor in ethical architectural practices and what it means from a transnational perspective through supply chains.

SR: (By the way Fran, what are you eating?)

FA: Tony Chokolonly (tow·neez chaa·kuh·low·lee)!!, have you tried it? It’s everywhere here in New York.

SR: mmm... I don’t think so. I am a Lindt fan. Why do you ask?

FA: Well, it has an interesting story by the way. The brand started with a Dutch journalist and chocolate lover, who was overwhelmed by the reality of larger chocolate companies that were involved in forced and child labor in West Africa. So he decided to create his own brand to prove that operating profitably and ethically can go hand in hand so Tony’s Chokolonly was born.

SR: Woahhhh. This is really interesting. Well, you convinced me, now can I get a piece?

FA: Of course! Fun fact: if you see the chocolate bar, the pieces are completely asymmetrical because of the inequity of the cacao supply chain, and so he has taken this philosophy a step further in the design as well.

SR: This is amazing, Fran. Thank you for sharing. By the way, Tony’s Chokolonly is not a sponsor for this season of RAADIO, but if the makers are hearing us, we wouldn’t mind some samples.

FA: (Laughs) Just saying.....

Sound: (Break transition)
S3_E6_4_Supply Chain_Take_1

SR: There is something about invisibility that is very powerful in our day-to-day behaviors at different scales.

FA: Absolutely! And it is intensified with technology and globalization, which is a double-sided sword. It gets us closer to goods all over the world, but at the same time, we are unaware of the complexities and conditions that surround it like culture, production, labor, and laws. These many times allows unethical practices.

SR: I agree, Fran. There is an asymmetry in the way we receive information, and that translates into the supply chain as well. I think this happens because of 2 reasons. The first is that consumption is perpetuated by distance and lack of access to on-ground information about conditions. And secondly, reinforcement of labor laws is scarce, which makes it very cheap and profitable for the employer to hire them.

FA: Hmm...My main question here is if this is highly discussed in other disciplines, like fashion, food, and cosmetics, why is it not addressed with urgency in the built environment?

SR: Undoubtedly. I think it is even more essential as practitioners to challenge our preconceptions of ethics in the building environment. We need to expand our scope of action and knowledge with our design practice.

FA: For sure Sim. It is important to re-envision as architects

how our design decisions involve third parties. And for that we must begin to challenge and question the opacities in the global material supply chain from the lens of architecture.

Sound: (Break transition)
S3_E6_5_Material_Take_1

SR: Fran, Did you know there is a very interesting report from 2020 by Design For Freedom by Grace Farms. This organization has been working actively to bring awareness to recognize and uncover forced labor in building material supply chains.

FA: Yes.. They are also working to uncover the reality of the built environment related to “modern slavery”, which most commonly affects marginalized populations all over the world.

SR: Well according to the report by International Labor Organization, construction is the largest global industrialized sector and at the highest risk of forced labor, after services and manufacturing. Unfortunately our industry tops the charts in this report

FA: Ironic.. isn't it

SR: Well did you also know 16% of all adults are involved in forced labor exploitation, that's roughly 2.6 million people!!! Many of these cases involve migrant workers whose situations of forced labor stem from extortionate and fraudulent recruitment practices.

FA: It caught my attention that modern forms of slavery are present in all countries. Even the richest ones that extensively import materials which are not slave-free. The report by Design For Freedom highlights 12 raw and composite materials that have high-risk of forced labor: Materials like timber, glass, and bricks are at the top of the pyramid using extremely extractive and exploitative practices.

SR: I remember reading about timber, which the United State is the 5th highest importer of and has 38% risk of forced labor.

FA: Sim, Where is this timber mainly extracted from?

SR: As far as I remember, it mainly comes from Brazil and Peru which are countries with unregulated policies.

FA: Wow, it is alarming to see the international implications of the hidden labor in the supply chain. Our job as architects is to start thinking how to avoid subsidizing unethical practices.

Sound: (Break transition)
S3_E6_6_Codes_Take_1

SR: Fran, since we are talking about advocacy and transparency in the built environment what can we do as architecture students? Is it about awareness...is it about certifications or is it actually more of a design issue? What is our position on this ethical discussion?

FA: Great questions! I don't think there is a unique answer, to be honest. Getting involved in the supply chain and with labor requires a wider view of how we understand architecture and our role as architects. For example, working with local materials is one step in that direction. This allows us to engage and be conscious of what unethical practices make certain materials possible.

SR: In fact, since we spoke about Design For Freedom, I remember coming across this Toolkit that they created, specifically for professionals of the built environment. They also work in partnership with schools in the US to inculcate these ways of design thinking early on.

FA: I also think academia is a good start, as it has been historically the place of avant garde thinking about the architectural discipline and its constantly expanding limits.

SR: I agree. As architects we are also obsessed with certifications like LEED and GRIHA that deal with the environmental impact, but we are missing the human aspect of it. We should start thinking of slave-free materials or buildings as part of this so-called “certification”.

FA: I think this should also be complimented with another perspective which is the legal framework which defines how an architect exercises their responsibilities.

SR: Well, our codes of conduct are dictated by AIA (USA), COA (INDIA), Order of Engineers and architects (LEBANNON), and RIBA (UK) and maybe it's time to revisit some of those. These organizations essentially prescribe the manual of what it means to practice in some ways. Probably these definitions should go beyond the local scale where

we are practicing, and extend to how our practice impacts in invisible ways other transnational realities, labor communities and landscapes.

FA: It is definitely something to keep reflecting on. There are multiple responsibilities of an architect when it comes to labor. We leave you with open questions to keep thinking about responsible ways of looking at the practices not only in architecture but across different fields.

SR: I think the discussion is shifting in the understanding of architecture not as an isolated discipline, but as an ecosystem that goes beyond the traditional limits including places, communities, non-humans and of course materials production.

FA: Well at the end we are living in a material world.

Material Girl extract (Madonna)

S3_E6_7_Closing Credits_Take 1

This episode has been produced by the 2023 rAADio editorial board, a collective of Advanced Architectural Design students at Columbia University's Graduate School of Architecture, Planning, and Preservation. Thanks to Dean Andres Jaque and AAD assistant director Xiaoxi Chen for their guidance. Also a big shout out to our director and producer Max Lauter, composer and audio engineer Alex Hamadey, and recording engineer Alana de Vito for their support.

Closing sound: ~3-5 seconds (fades out)

