DHRUV RAVI GOWDA

My time at GSAPP MSAAD 26

Summer studio

Understanding larger implications and climatic changes.

The first semester in GSAPP was an exercise in understanding larger climatic implications and trans-scalar connections. Understanding as humans our actions have effects that ripple and affect things across scales. Tracing these invisible connections and representation was explored through collages, essays and objects. The studies majorly revolved around staten island. Professor Nerea pushed us to explore designing with disasters in experimental ways.

S1 Rolling through

S1 | Rolling through

Carving, shaking and mounding of Anticolonial ecologies

The world has been cracking for over 4 billion years due to constant tectonic movement. These tectonic shifts shaped regional fault lines such as the Ramapo Fault and buried seismic zones beneath Staten Island.

Studio - Geological Natures
Group - Abhilash Satish
May - July 2025
Faculty:- Prof Nereia Cavillo

Rising sea levels and changing climates of staten island

Approximately 450 million years ago, volcanic eruptions along the Cameron Line produced lava that later solidified into serpentine rock, forming the bedrock of Staten Island. Rich in magnesium and nickel, this serpentine geology created toxic soils that limited vegetation, resulting in serpentine barrens.

Glacial movements during the last Ice Age deposited clay, sand, gravel, and nutrient-rich black soils along Staten Island's coast, enabling wetlands and mangrove forests to thrive. Todt Hill, the highest point on the East Coast south of Maine, formed from volcanic rock and glacial deposits.

Fig 4.1. Layers of soil in Staten island

Fig 4.2. Terrarium timelapse study

Fig 4.3. Collage of Stories in staten island

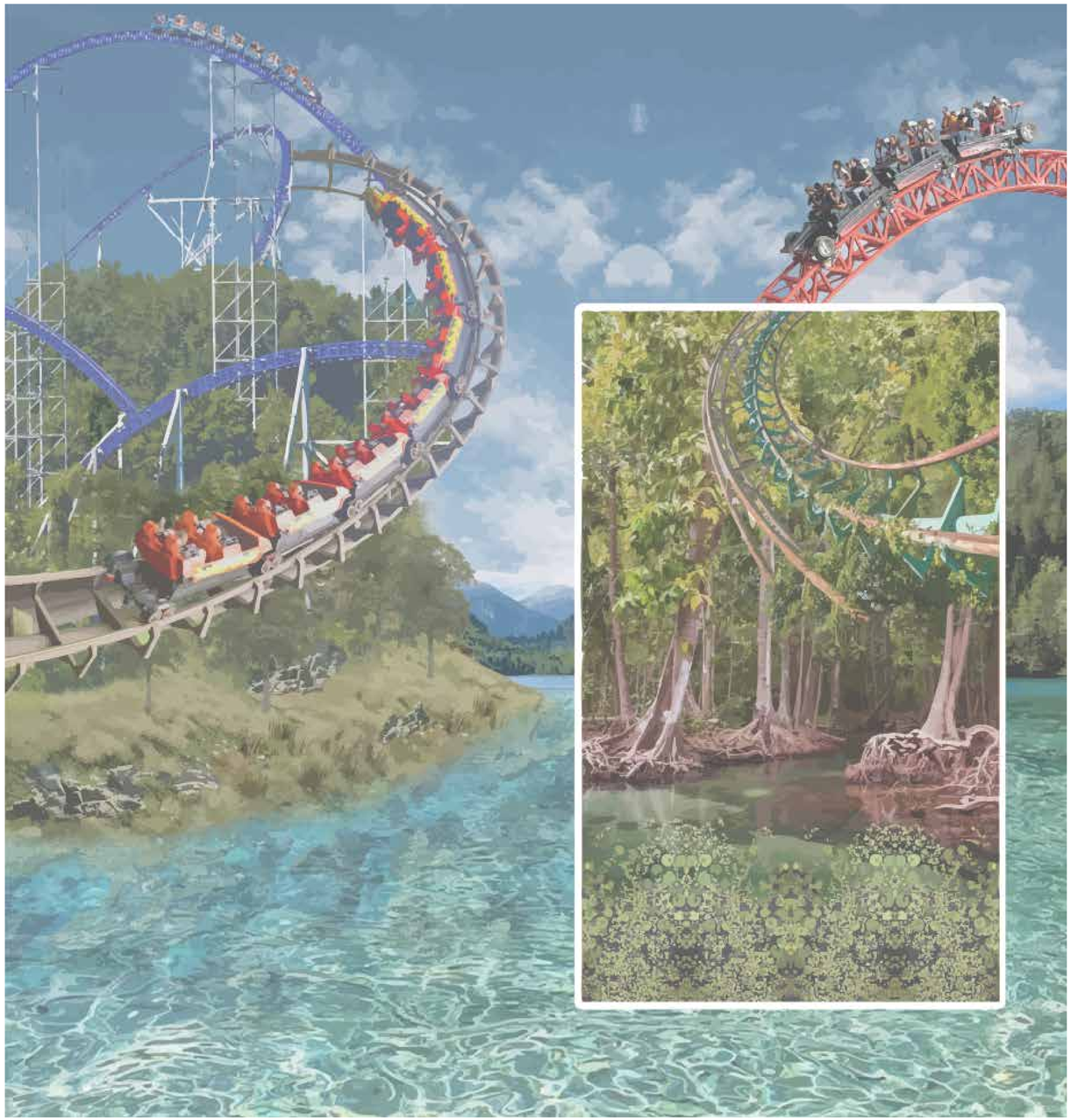
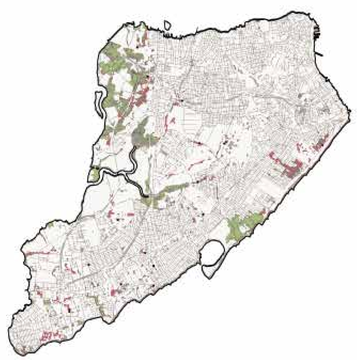


Fig 4.4. View of amusement mounds

Fig 4.5. Mounts in 2035

This project reimagines flooding as an intentional force ,using hurricanes, mangroves, canals, and mounds to reclaim land. Excavation at Midland Beach reverses geological strata, creating basins and water corridors funded through a water park inspired by Happyland.

Mangroves are replanted, oysters introduced, and regulatory bodies engaged. Over decades, repeated storms breach mounds, expanding Bluebelt flooding zones. By 2050, sea-level rise fully reclaims the basin, completing a transformation toward ecological resilience and anticolonial restoration.



2020 - Rising sea levels and hurricanes strike

2035 - Amusement park grows with the blue belt initiative

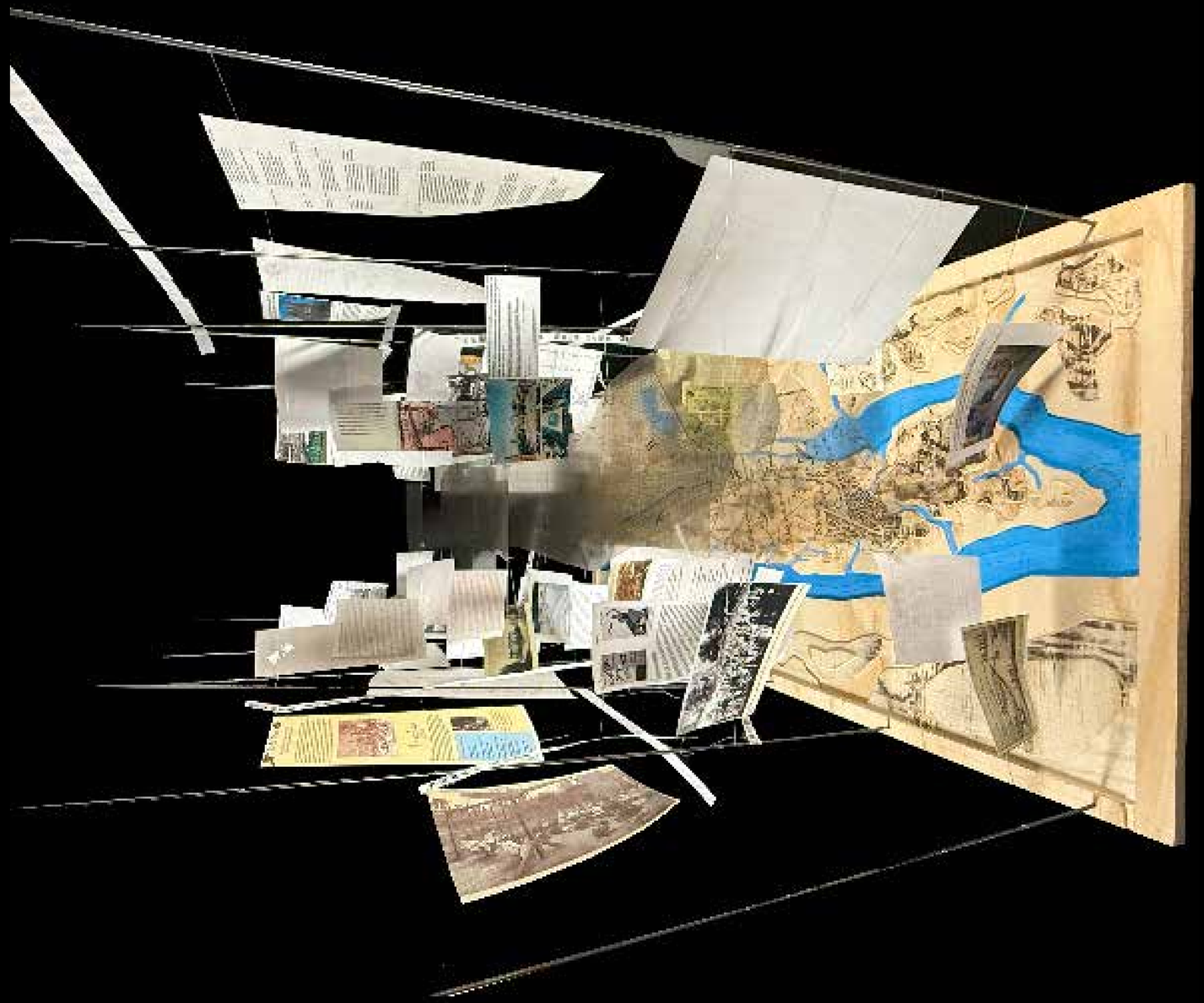
2150 - Parks are long gone, the changed climate gives birth to new ecosystems that take over the mounds

Fall studio

Tracing archival evidences and institutoinal obligations within the neighborhood

We take a look at Columbia and ripples taking place in our own neighborhood of Morningside Heights and Harlem. There have been patterns of displacement of not just communities but also natural ecosystems and floral species. The ripples of displacement can be traced across Manhattan in the form of parks and open spaces. We uncover these through archival mapping and photographs.

F1	Re- negociations	-	Imani Brown
F2	Lets swim	-	Emily Bauer
F3	Crunch time		



F1 | Re - negociations

Tracing leagcies of displacement in the neighborhood of Mornong side Heights

The story of Manhattan is one of layered ecologies and colonial dispossession. What was once a diverse terrain of wetlands, beaches, and rocky hills was majorly flattened and transformed in the 1600s when the Dutch settled in the region. The clearing of land for trade colonies marked an early form of extractivism through the erasure and dispossession of Indigenous people and native ecologies such as swamps and rocky schist hills. Rivers that once supported abundant life are now degraded, no longer suitable even for an afternoon dip.

Studio - Architecture of Solidarity
Individual work
September - December 2025
Faculty:- Prof Imani Brown and Andre Santos

The Grid takes away systems of ecology which consists of swamps and grasslands

This ongoing inquiry examines the dispossession of Morningside Heights by Columbia University, not just of people and communities, but of its multiple formations, like the river swamps and hills that have been repeatedly overwritten through time. Through mapping, I trace how the colonial grid imposed on Manhattan was not only a spatial system, but an ec o-political instrument that continues to determine patterns of accessibility and exclusion of its more-than-human populations. I attempt to reinterpret the notion of "open park space," not as a curated object of consumption, but as a restorative tool. By layering archival traces, ecological memory such as beaver trails, and agricultural practices like slash and burn, I explore how the city's public spaces could evolve toward forms of rewilding that more justly includes more than human species, negotiating between the multiple constituencies of past, present, and future of Mannahatta.

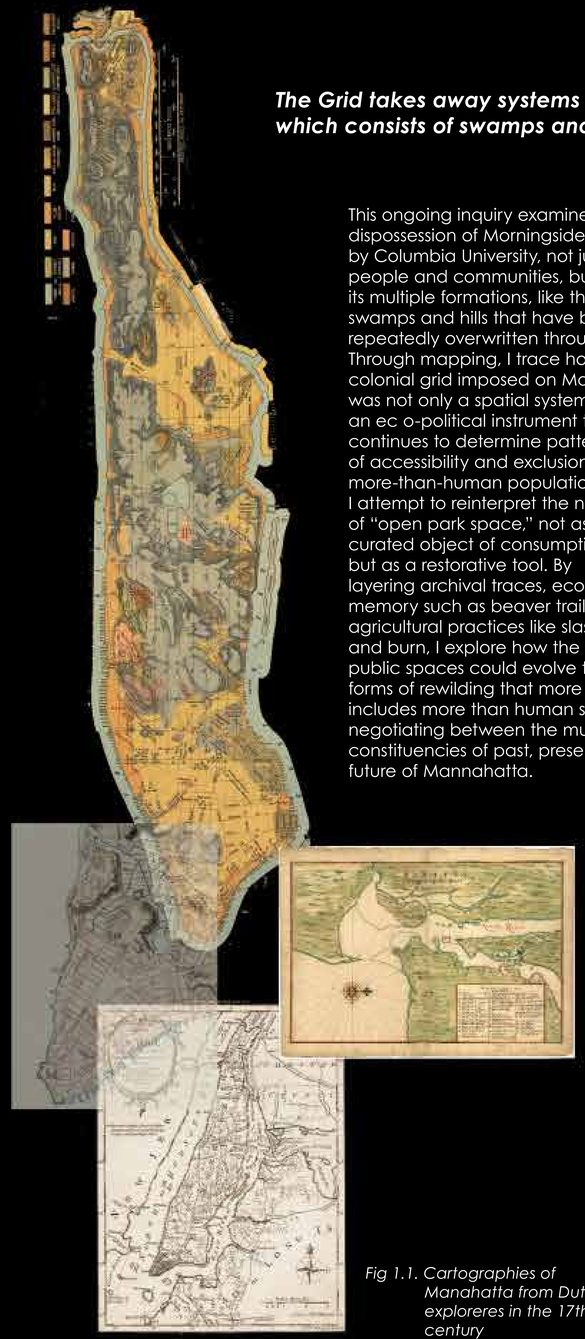


Fig 1.1. Cartographies of Manahatta from Dutch exploreres in the 17th century

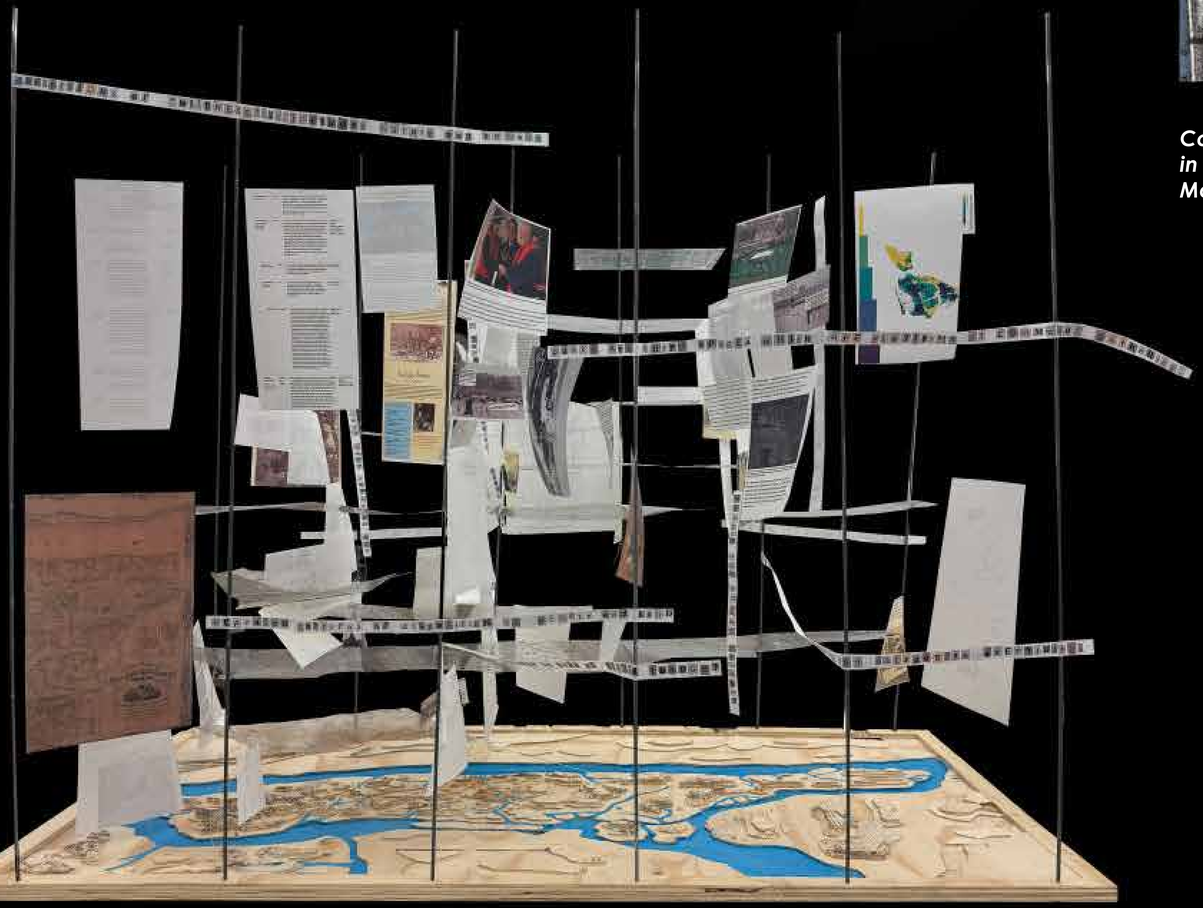
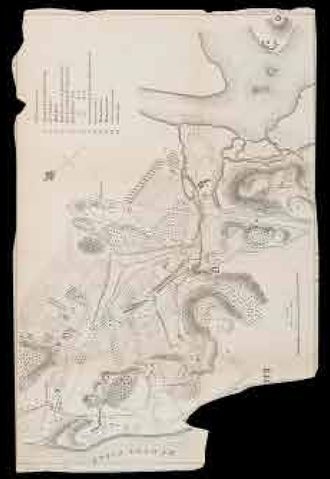


Fig 1.2. Physical model of layered history of Manhattan linking colonial pasts to Columbia's recent land acquirements and protests in th neighborhood of morningside heights.



Columbia University in the neighborhood of Morningside Heights

Within this larger history, we work from within Columbia University. Built on the apex of a rocky plateau, Morningside Heights once hosted Bloomingdale asylum from 1821 till late 1890s and later developed as a semi-rural neighborhood for Black and migrant communities. Because the area was topographically isolated and disconnected from the city's main railway lines, land values were low, drawing minority residents. These same conditions, however, attracted Columbia's board of trustees, st. John Cathedral, who saw the plateau as ripe for institutional expansion in 1896. Despite promises that the University would serve the broader community, hence its formal name—Columbia University in the City of New York—in practice, this vision of growth primarily benefited a white academic elite while displacing local communities of color.

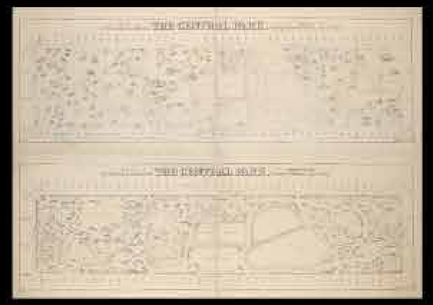


Fig 1.3. Seneca Village displaced to create what we now know as Central Park

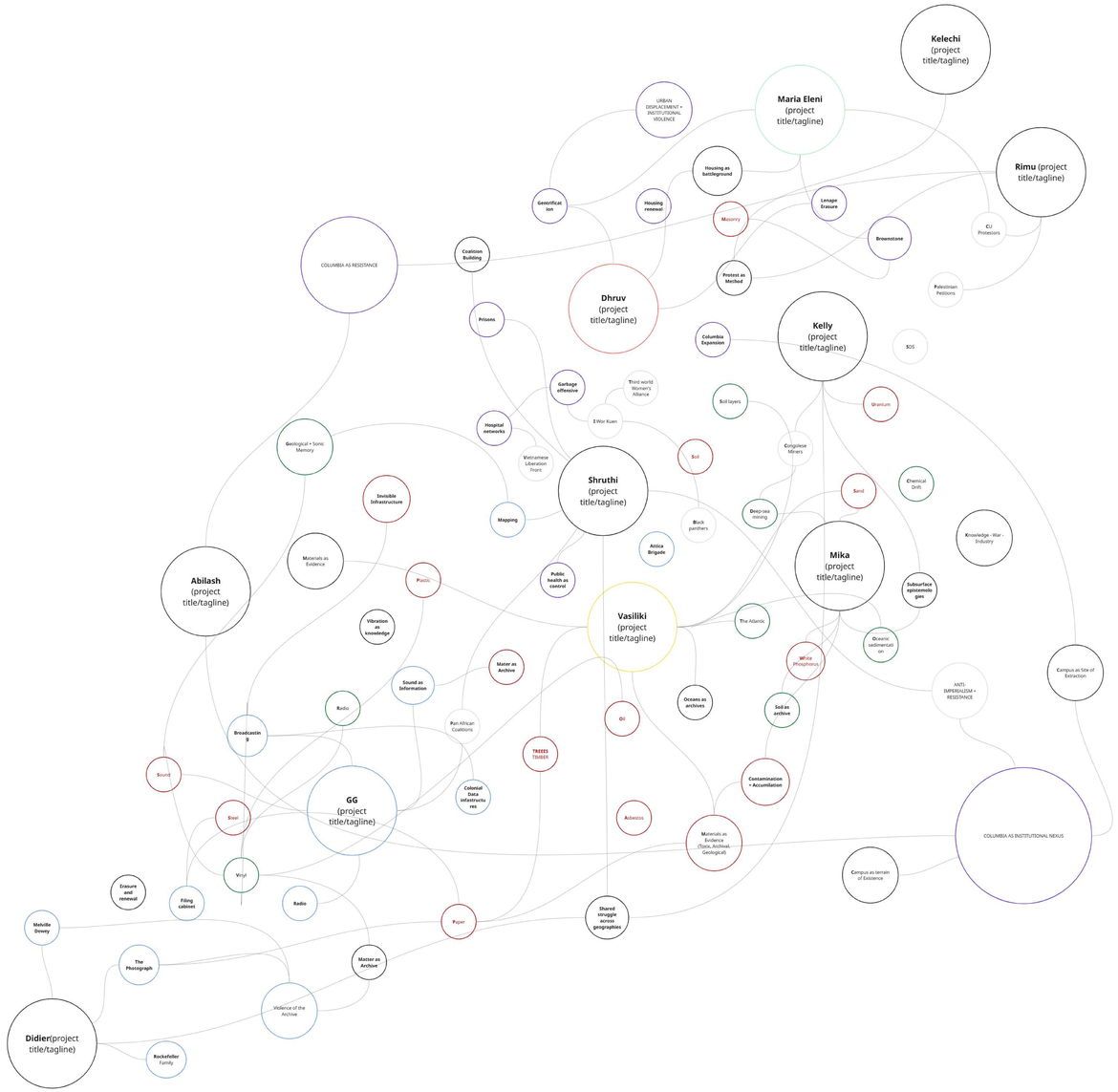


Fig 1.4. Connections and ripples

The ripples of the institutional displacemt of communities by columbia were explored across the class in diffrerent regions. These were constantly discussed and developed through peer to peer reviews.

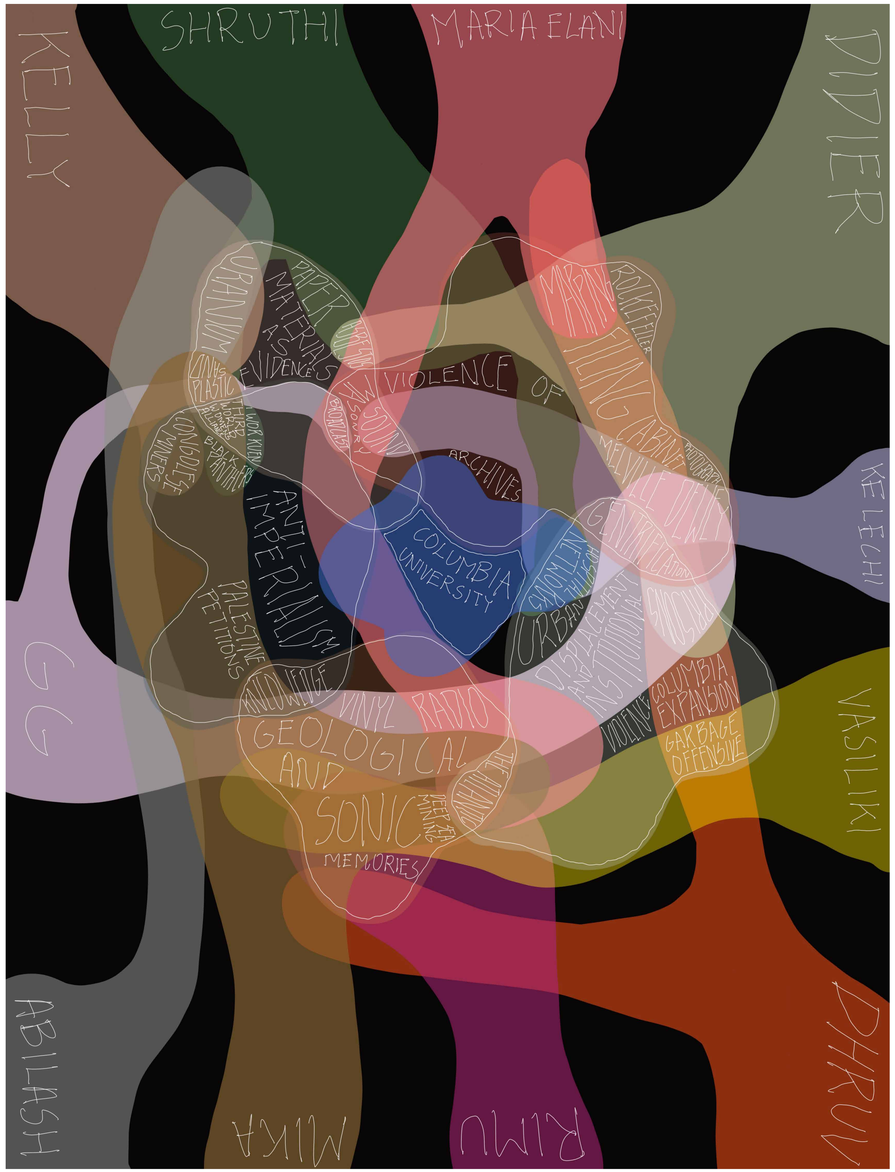


Fig 1.5. Final constallation of all projects in class.

F2

Let’s swim

Floaties to clean our rivers

Our float restores the ecological and cultural vitality of Bushwick Inlet Park by reintroducing tidal wetland functions once native to New York’s coastline. Designed to trap sediments, absorb floodwaters, and dissipate wave energy, it acts as a living buffer between land and water while improving local water quality. The structure interlaces stainless steel mesh with cork, filled with a mixture of LECA balls and moss to support wetland vegetation.

Studio - Seed bombs
Group - Jennie Zhou (MSAUD)
September - December 2025
Faculty - Prof Emily Bauer

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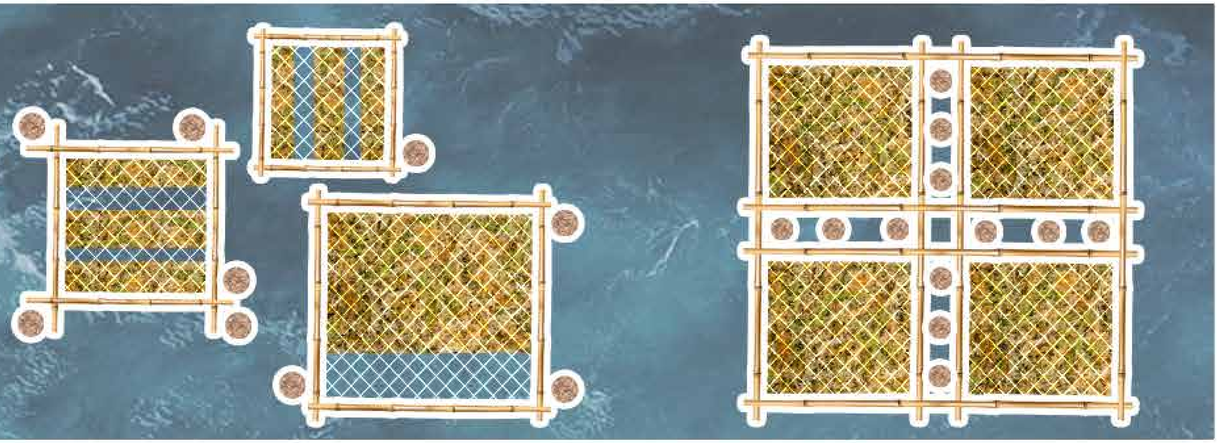
Sky

Perches are a way for birds to interact with the float. They provide shelter for migratory birds. Bamboo modules can be adpated to the required size depending on which species the user wanted incorporate.

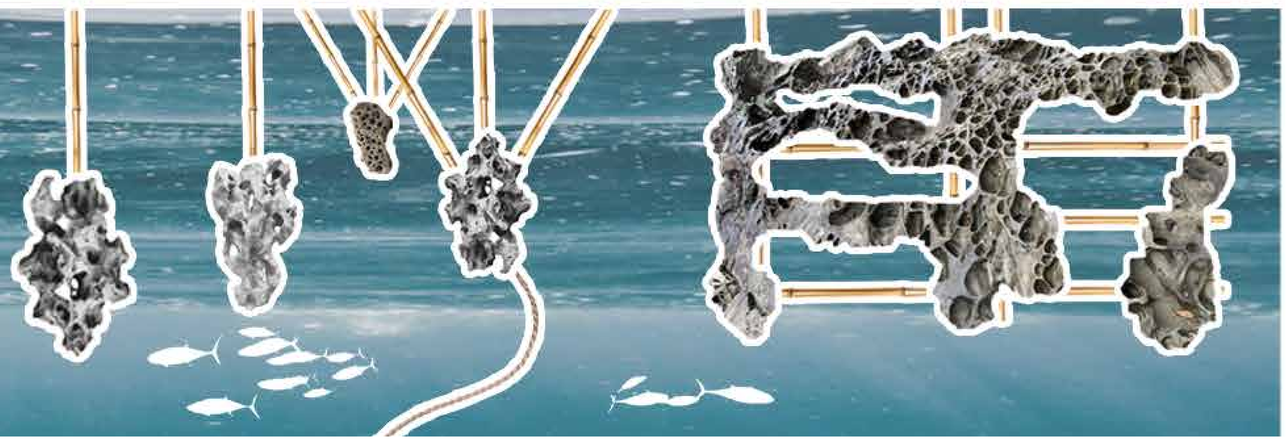
Ground

The framwork is modular and can be adapted to almost any size requied. The grow mats are also adaptaple to any shape requied. Aditional kokedama balls can be used to add plants as and when required.



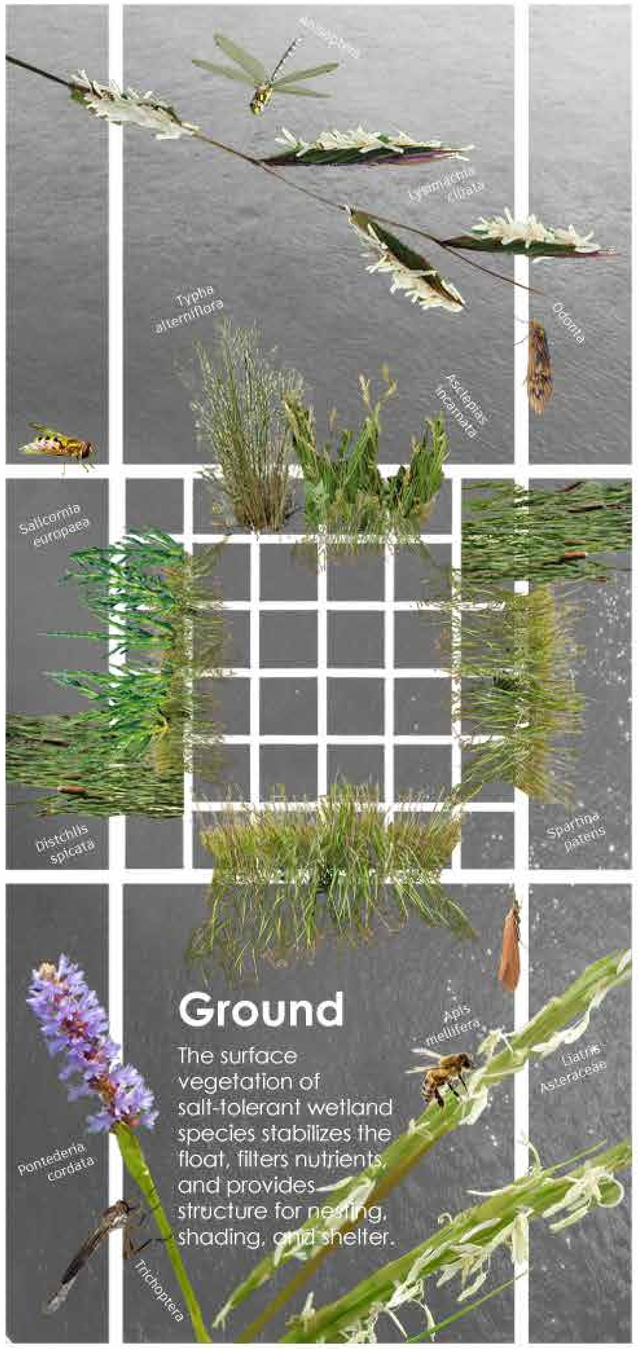
Water

Oysters and marine creatures like to latch on to rough surfaces with many crevices. With the use of everday waste we can create a mould for concrete. Reef balls are conbined with cork to add boyancy.



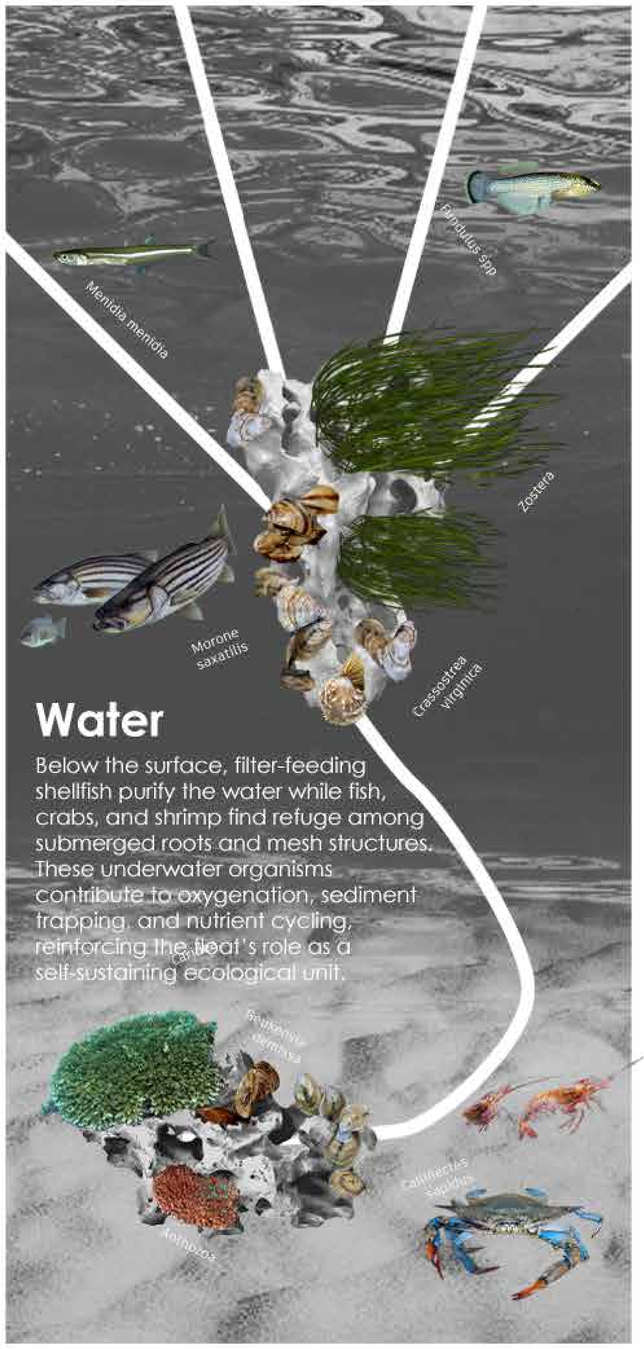
Sky

Birds forage, nest, and rest among the emergent vegetation, relying on the float for shelter, nesting materials, and access to insects and small fish. Flying insects such as dragonflies and caddisflies support pollination and nutrient cycling, with their larvae developing in the roots and stems of wetland plants.



Ground

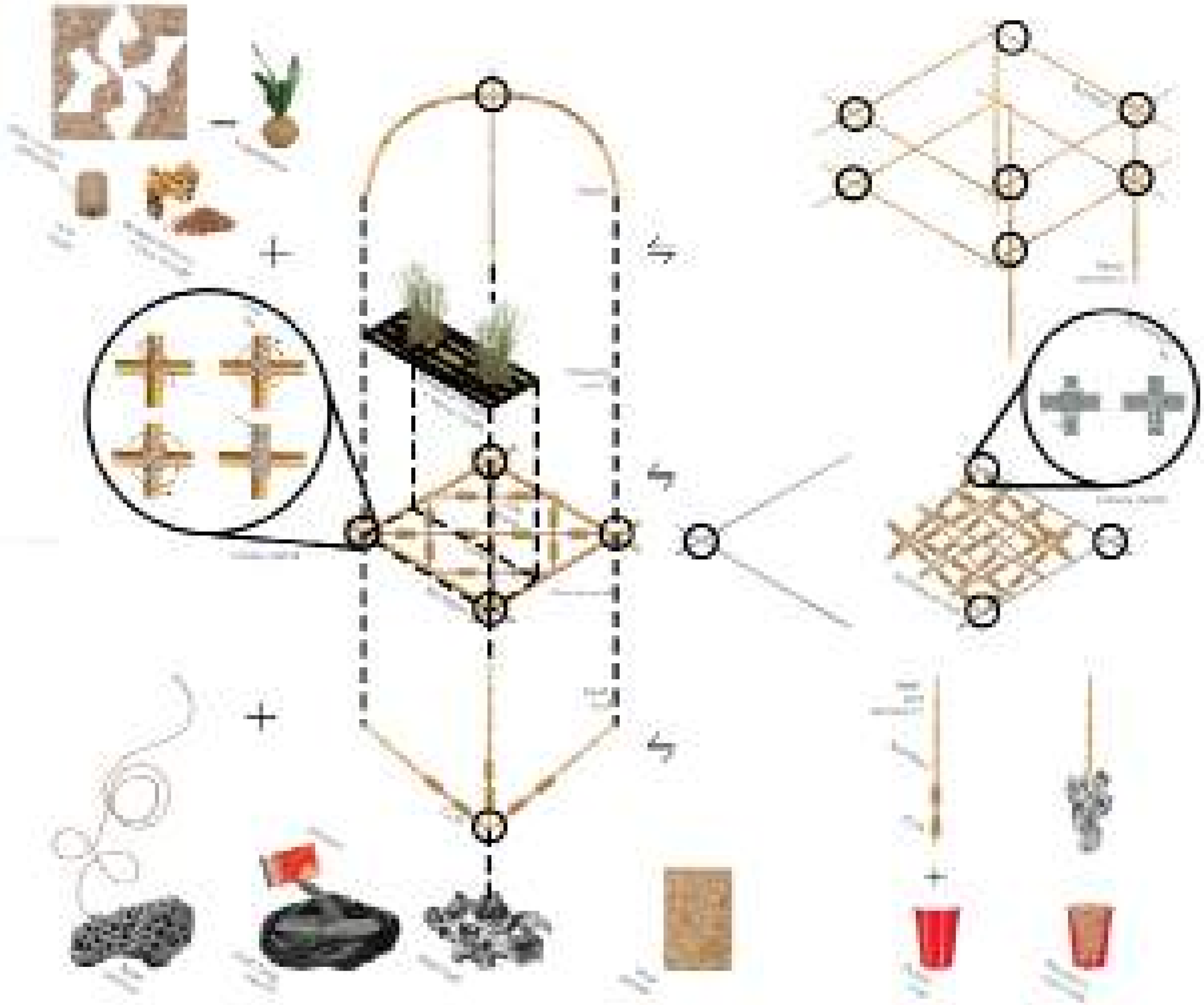
The surface vegetation of salt-tolerant wetland species stabilizes the float, filters nutrients, and provides structure for nesting, shading, and shelter.



Water

Below the surface, filter-feeding shellfish purify the water while fish, crabs, and shrimp find refuge among submerged roots and mesh structures. These underwater organisms contribute to oxygenation, sediment trapping, and nutrient cycling, reinforcing the float's role as a self-sustaining ecological unit.

Making



F3

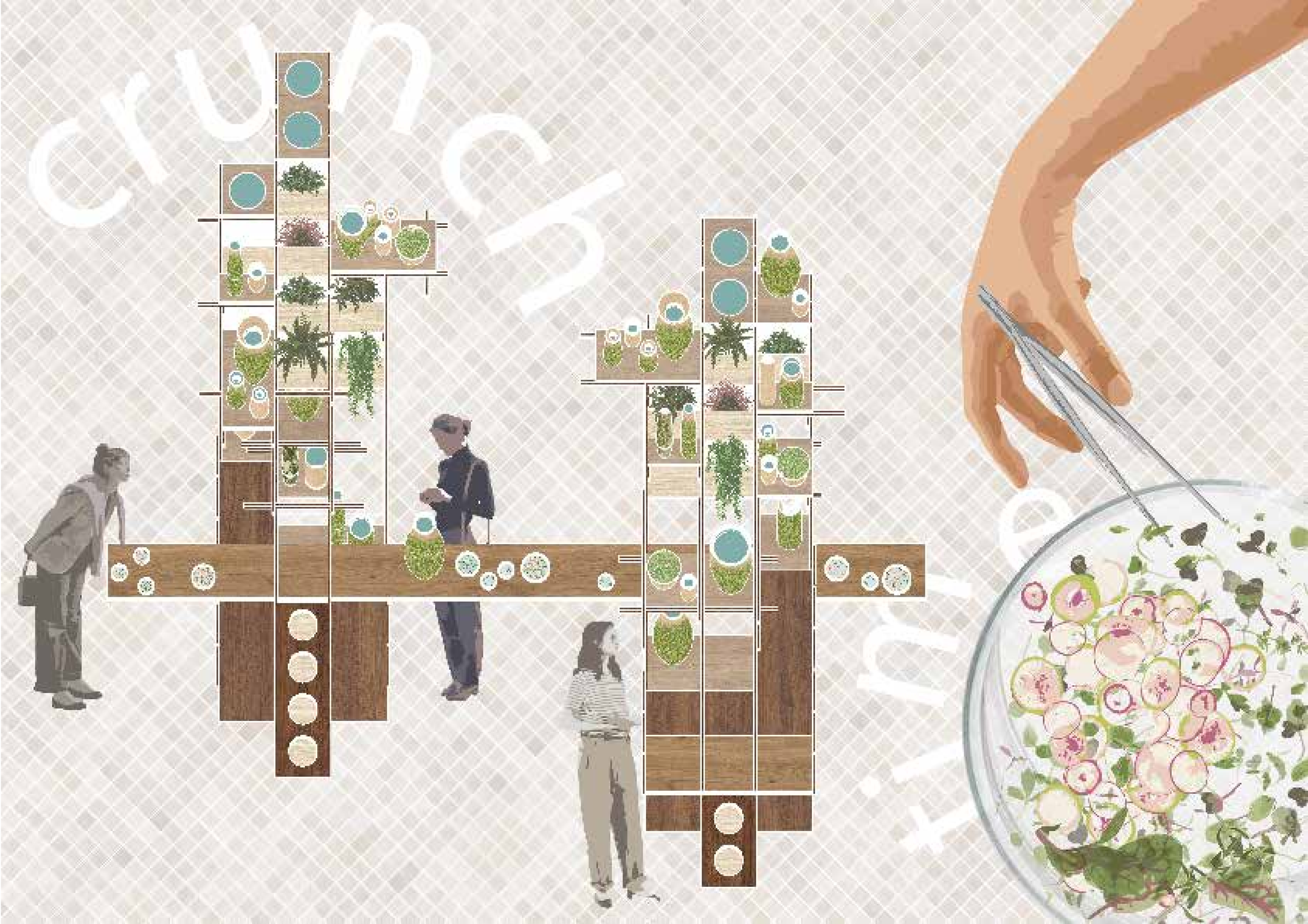
Crunch time

In today's world, eating has become a series of micro-decisions, fueled by speed, shaped by habit, and entangled with consequence. "Crunch Time" turns the act of eating into an investigative process: spoons are replaced by tongs, servings shrink to nano-portions, and plates resemble petri dishes.

Food is no longer just nourishment.
It's data.
It's labor.
It's culture under a microscope.

By framing time as currency, this edible encounter explores how we measure, consume both time and elements of nature. A juxtaposed arrangement of microgreens and produce unfolds over time across the table, illustrating a delicate and interconnected system.

AAD Edibles summit
Group - Neha Abraham
September - December 2025



Spring studio

Re-working material systems and chemical changes in a molecular level

My final semester at GSAPP was about intervening in the micro level of chemical changes that impact the larger climate. We also learnt ways to incorporate local structures which run and govern our respective sites of inquiry. The Kinne week travel to Mallorca and Ibiza gave us keen insights into such systems in the context of tourism.

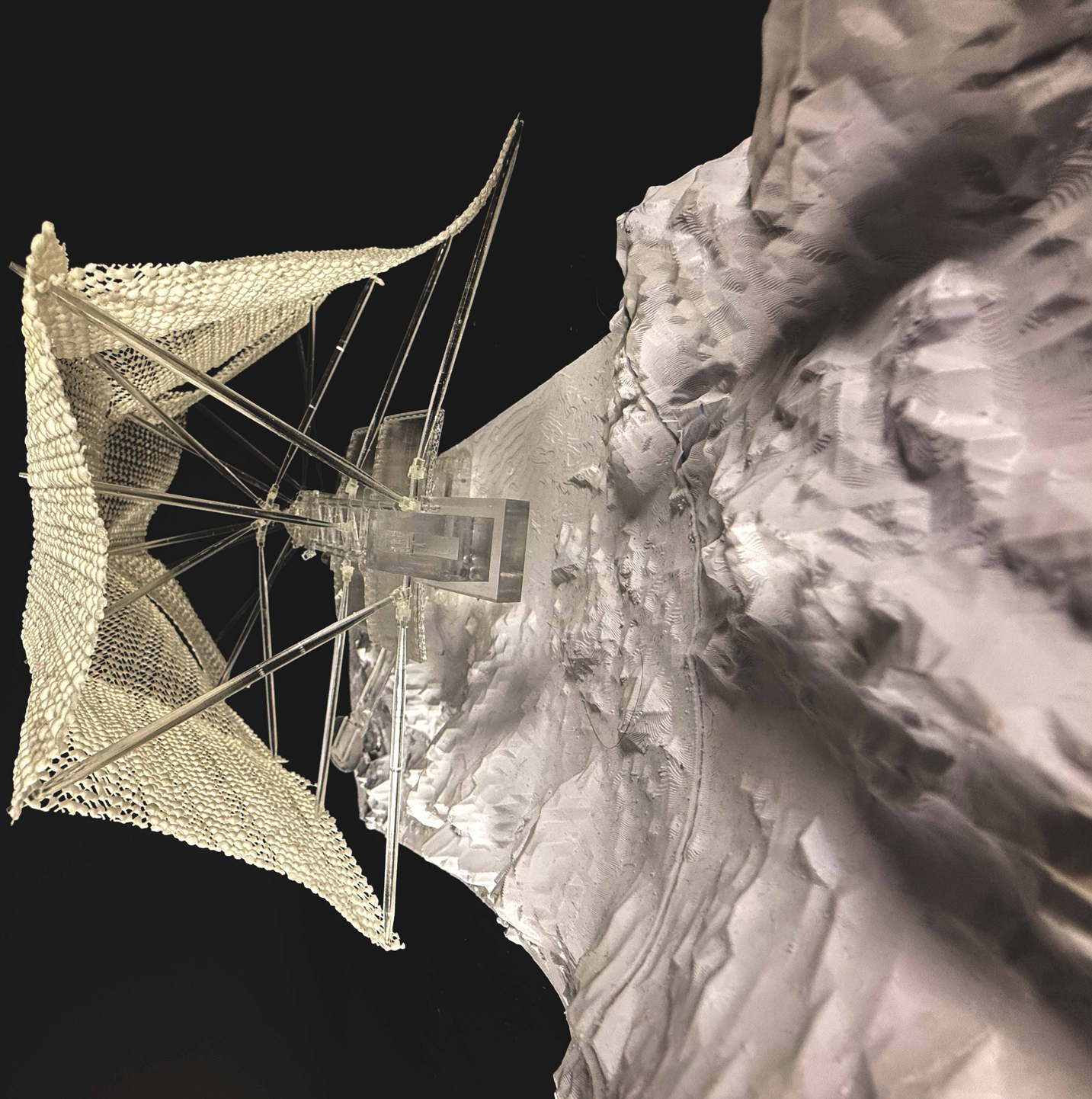
S1	Forgot this?	-	Mereia Luzarraga
S2	Trash awayyy	-	Sean Gallaghar
S3	Geo plume	-	James Nanasca
S4	Costume Design	-	Soule Golden

S1 | Forgot this?

Tracing toxicity in extractive landscapes of celebration

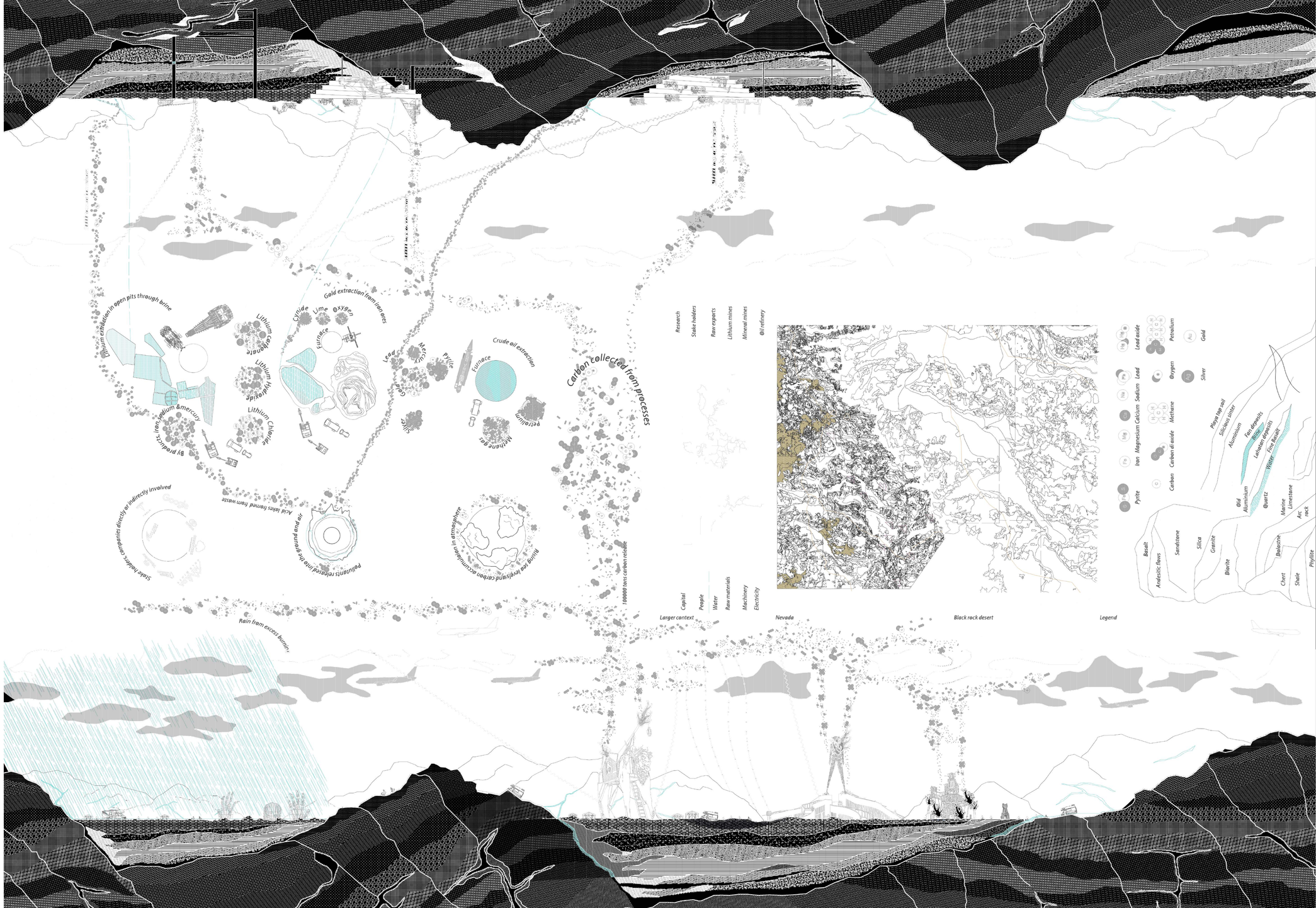
The notion and original values of the reason behind the burning man festival has been lost in translation over time. The core value of no traces is lost. Residues in the atmosphere from the festivities and industrial wastes are often left behind. Nevada being an open space for extraction, such waste often goes unregulated. This gives us an opportunity to re look at how we celebrate amogst such processes and re birth can be celebrated. The waste supercharged provides essential nurtients and allows for carbon capture on a large scale.

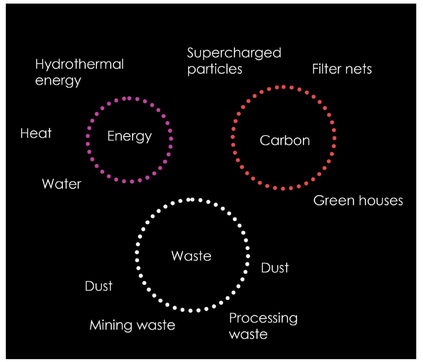
Studio - No Vacany
Individual work
Febuary - May 2026
Faculty:- Prof Mereia Luzarraga and Thomas

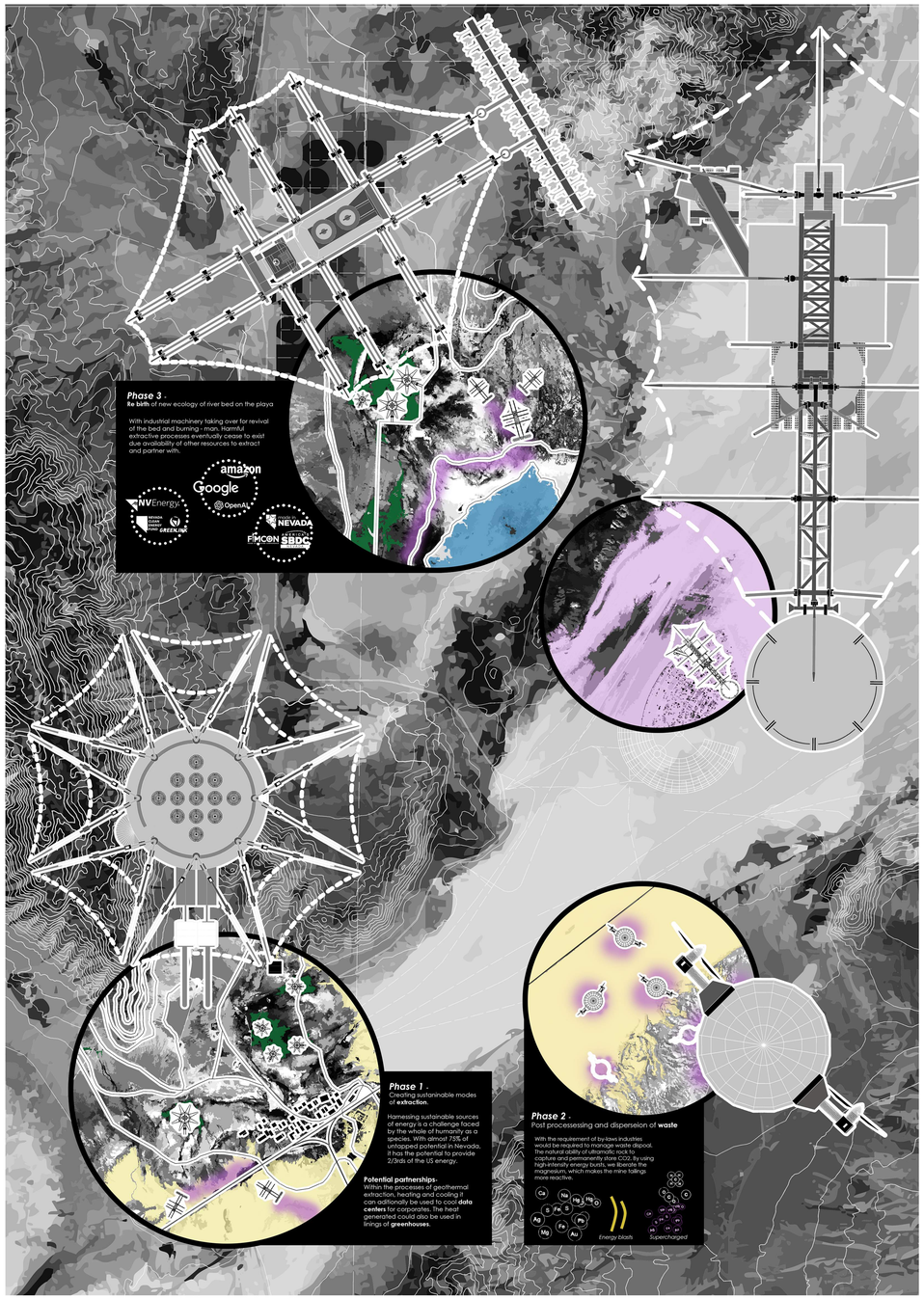


Tracing trails of toxicity in the ground and atmosphere

Burning man as a festival is estimated to cause carbon booms with volumes comprable to a small country. This has raised concerns and protests among locals due to micro climate changes. Mining as an industry has also been unregulated which is open grounds for dumping toxic wastes. We re look at the relationship between the festival and existing operations and link them through shared resources and material processes.







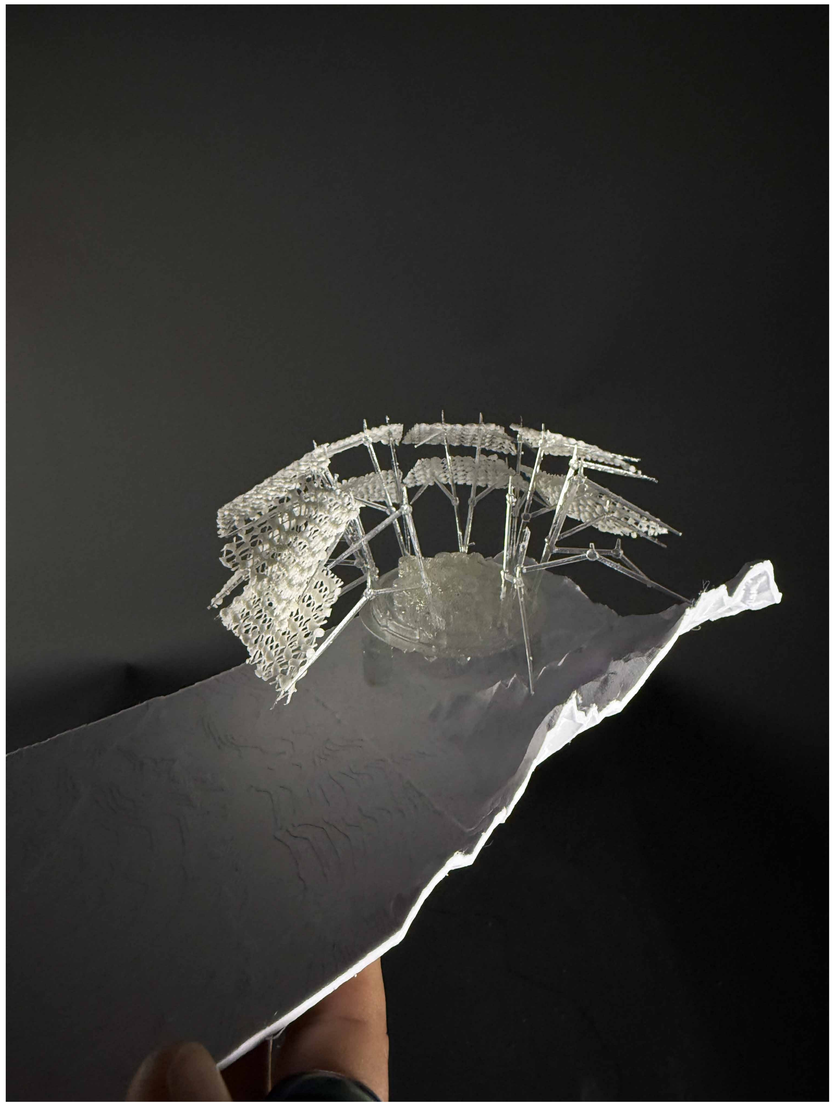
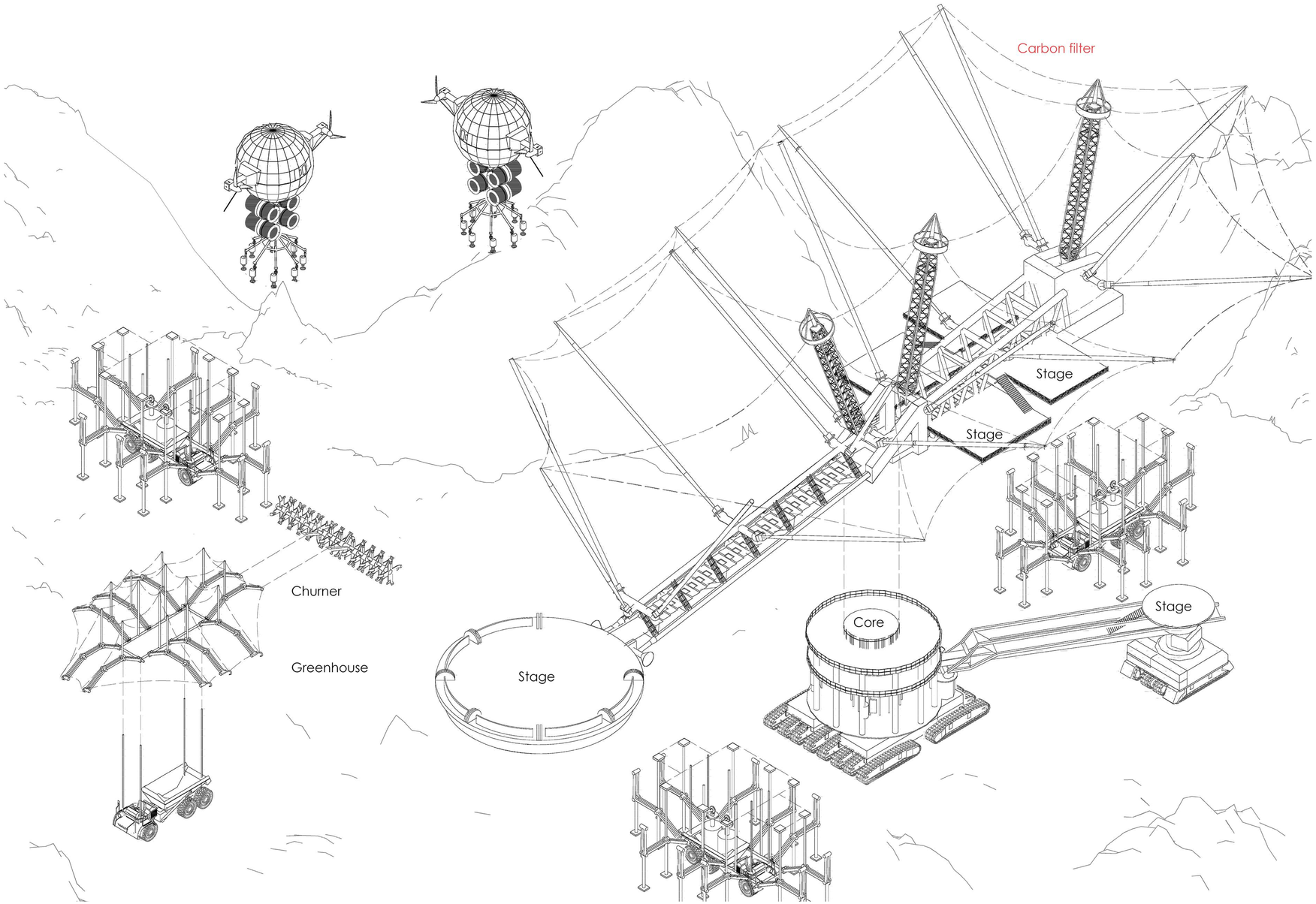


Fig 1.5. Physical model of Hydrothermal energy extraction.



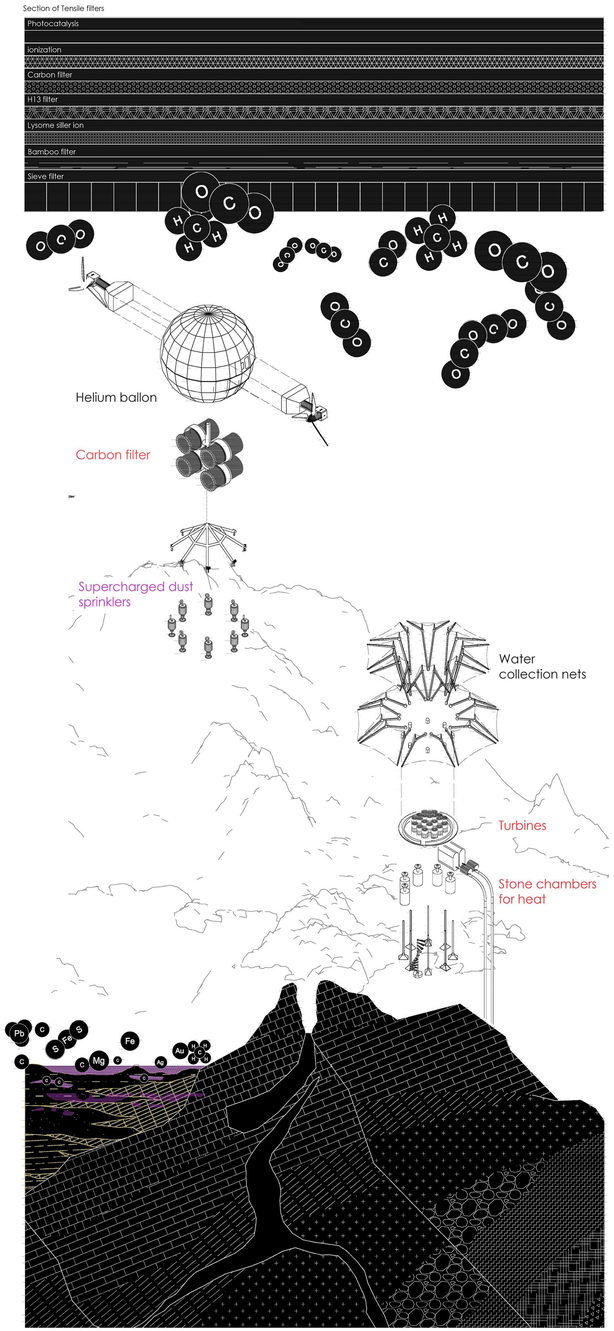


Fig 1.3. Axonometric of all interventions on black rock desert

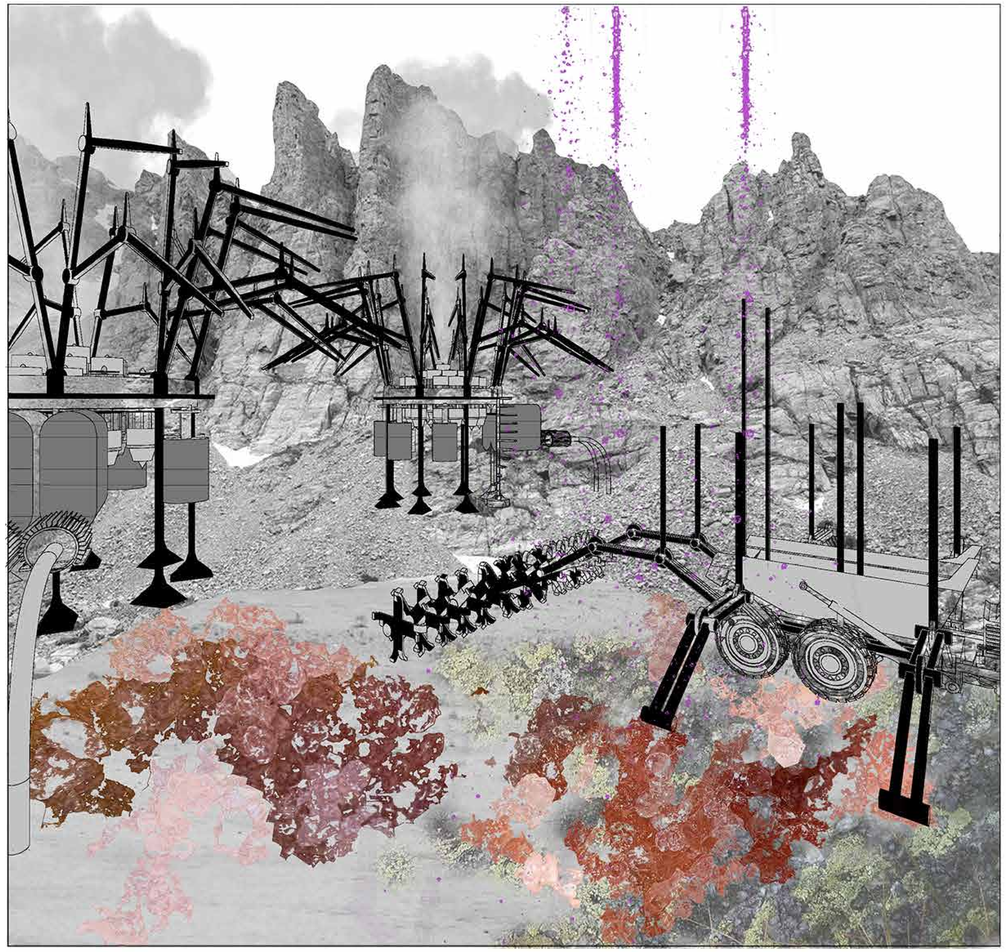


Fig 1.4. Land transforms into carbon capture arena

Fig 1.5. View from burning man bucket wheel machine

S2

Trash awayyy

closing loops of recycling and trash

The way that NYC treats its trash is highly inefficient and leave lots of space for additional revenue and recycling. The biggest challege is storage and sorting of different forms of waste. To make things simpler we bring break down of materials one step closer to us. By clubbing the existing technology of reverse vending machine and bar games, we can breakdown materials such as glass and aluminium within our neighborghoods, further allowing us to take ownership and to profit off of trash.

Studio - Emerging optimism
Individual work
Febuary - May 2026
Faculty - Prof Sean Gallaghar

TRASH AWAYYY

Reverse vending machines

Beer pong
Skee ball
Whack-a-model

The vending machine is able to recycle 100% of accepted used materials from your home. It includes plastics, glass and metals.

It is designed to fit seamlessly into your lifestyle. Simply put your used materials into the Lasso door and your job is done. Prototypes can recycle upto **20 bottels per day**.

LASSO

envipco
Making recycling easier.

Raw materials

Used materials have value, let's **reclaim** it. Receive cash returns within **five years** of ownership, subject to your consumption

Recycled raw aluminum waste goes to specialized scrap yards, municipal recycling centers, or industrial processors, where it is melted into ingots to create new products. In NYC, it can go to facilities like TNT Scrap (Brooklyn), Rockaway Recycling (NJ), or Allocco Recycling (Queens) for processing

Lets talk money $$$

Homes

Selling to recycling facilities

Typical Earnings: **$60 – $200/month**

Selling to Manufactoreres

Typical Earnings: **$300 – $500/month**

Buisnesses

Selling to recycling facilities

Typical Earnings: **$500 – $1000/month**

Selling to Manufactoreres

Typical Earnings: **$2000 – $3000/month**

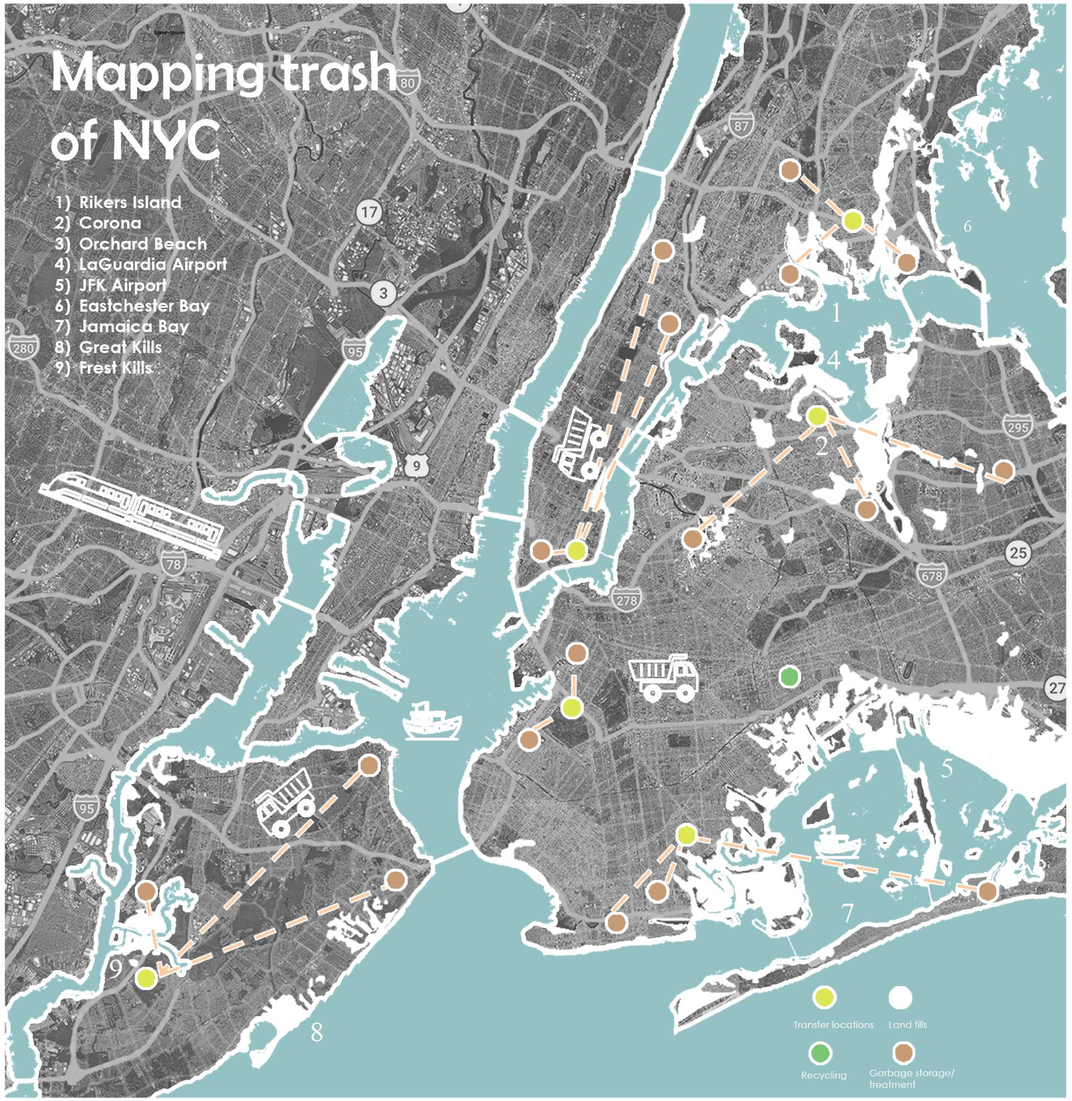
Novelis

Alcoa

SMI
Strategic Materials, Inc.

Coca-Cola

Mapping trash of NYC



Export and tranport of trash consumes **26 percent** of the Department's budget, totaling over **$470 million dollars**

Addressing inefficiencies in the private trash hauling system would save businesses another **$26 million** annually.

City would save about **$275 million** annually by redesigning municipal waste collection policies.

Journey of trash

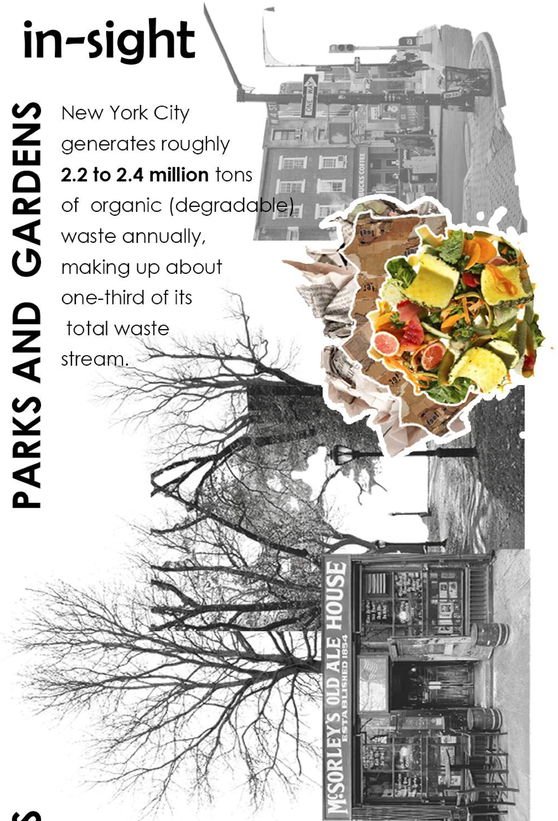
12,000 tons of residential garbage are collected every day

The journey of a few hundred miles from curb to landfills, incinerators and recycling centers costs taxpayers around **$75** per dwelling unit per month

Opportunities in-sight

PARKS AND GARDENS

New York City generates roughly **2.2 to 2.4 million** tons of organic (degradable) waste annually, making up about one-third of its total waste stream.



BARS AND RESTAURANTS

New York City has approximately **25,000 to 29,000** licensed restaurants and food service establishments, along with over **2,100** specialized bars and nightclubs.

S3

Geo plume

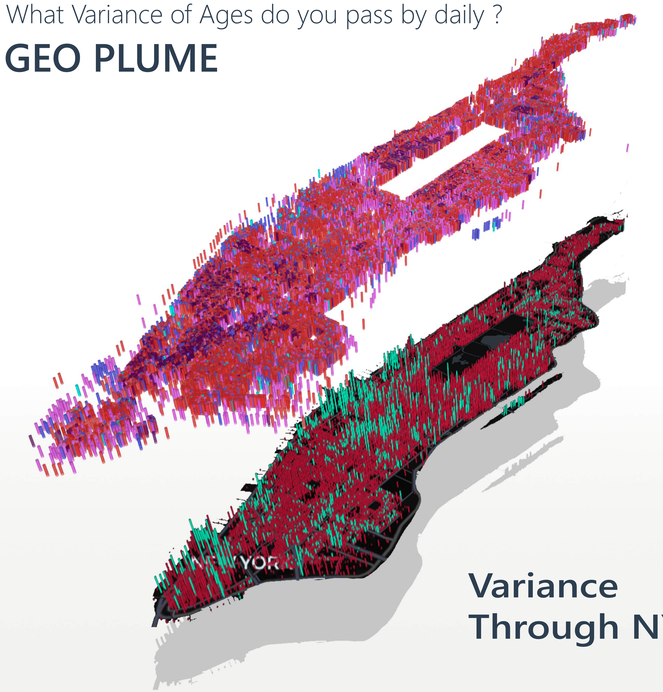
Sensing and moving thorugh time

What if clothes could look different in each city, each facade invokes a response from ones clothing. The wearable traces these movements through the city and responds to the timelines of the structures around you. The intensity varies depening on materials. The garment becomes a living automiton, seeing, processing and responding to materials around us.

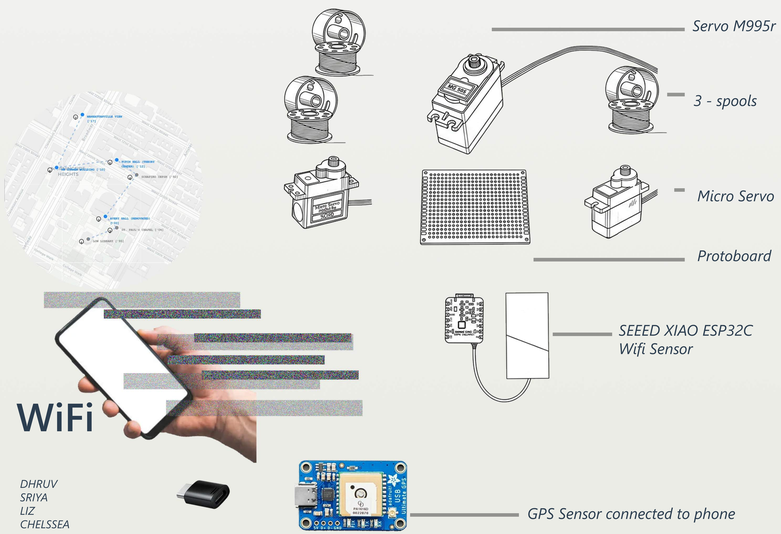
Studio - Making senses
Group - Sriya (CDP), Chelsea (CDP), Elizabeth (NYP)
Febuary - May 2026
Faculty - Prof James Nanasca

What Variance of Ages do you pass by daily ?

GEO PLUME



Variance Through NYC



DHRUV
SRIYA
LIZ
CHELSSEA

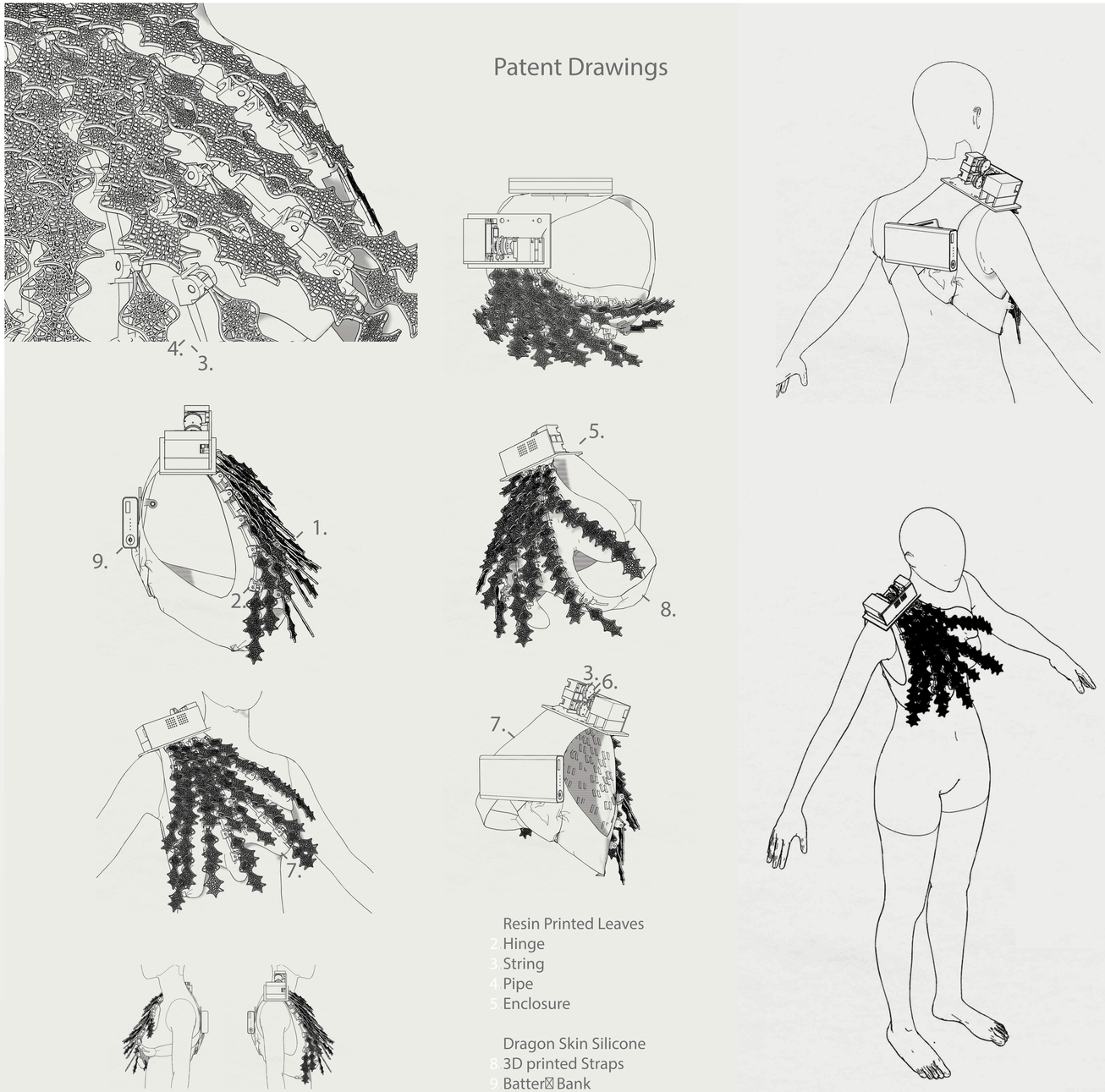
GEOLOCATION SENSOR

BUILDING AGES

MAKING SENSES

TEMPORAL EXPERIANCE

Patent Drawings



1. Resin Printed Leaves
2. Hinge
3. String
4. Pipe
5. Enclosure

6. Dragon Skin Silicone
8. 3D printed Straps
9. Batter Bank

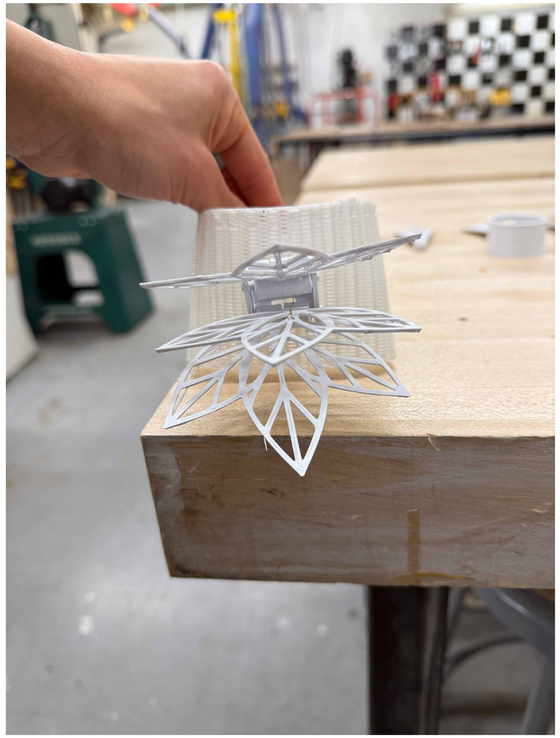


Fig 3.1.Fabrication experiments

Fig 3.2. Digital scan of model

S4

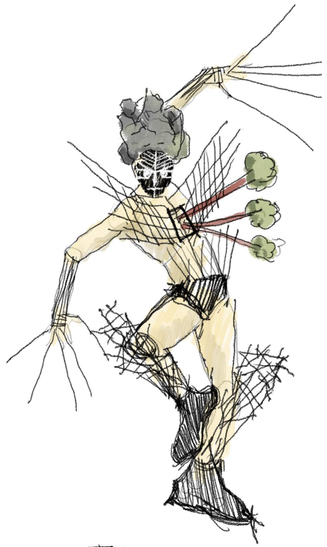
Costume design

Connecting themes of layered manhattan to costumes and theatre

The research from the fall studio of layered manahattan is taken forward in this class. We learnt the fundamentals of how theatres operate with technicalities of costumes. The class was an exploration to learn more through other means of art. Fashion has always been a keen interest of mine and this course at Barnard allowed me to merge my skills as an architect with clothes.

Studio - Costume design (Barnard Theatre dept)
Individual work
Febuary - May 2026
Faculty - Prof Soule Golden

SWAMPS & MARSHES



THE GRID

LENAPE & FIRES

MUSICIANS

SOIL

HUMANS

LAYERS OF THE CITY

RECLAMATION