

I. STUDIO

a. Beyond Carnaval	Rio de Janeiro	Spring '24	Galia Solomonoff	Layered Urbanism
b. NYC-APSON	NYC	Fall '23	Rosana Montiel	NYCDMX
			Thomas de Monchaux	
c. Re-Makerspace	NYC	Summer'23	Uriel Fogue	Atlas of Architectures for the End of the World

II. VISUAL STUDIES

a. Subject_Object		Spring '23	Suchitra Reddy
b. GAP III - Design Seminar		Fall '23	Wael Morcos
c. Rendering Systems		Fall '23	Seth Thompson

ESTEFANIA PEÑA

GSAPP

MSAAD

PORTFOLIO

COLLECTIONS

I. STUDIO

b. Beyond Carnaval

Spring '23 | Galia Solomoff

NYCDMX



BEYOND CARNAVAL

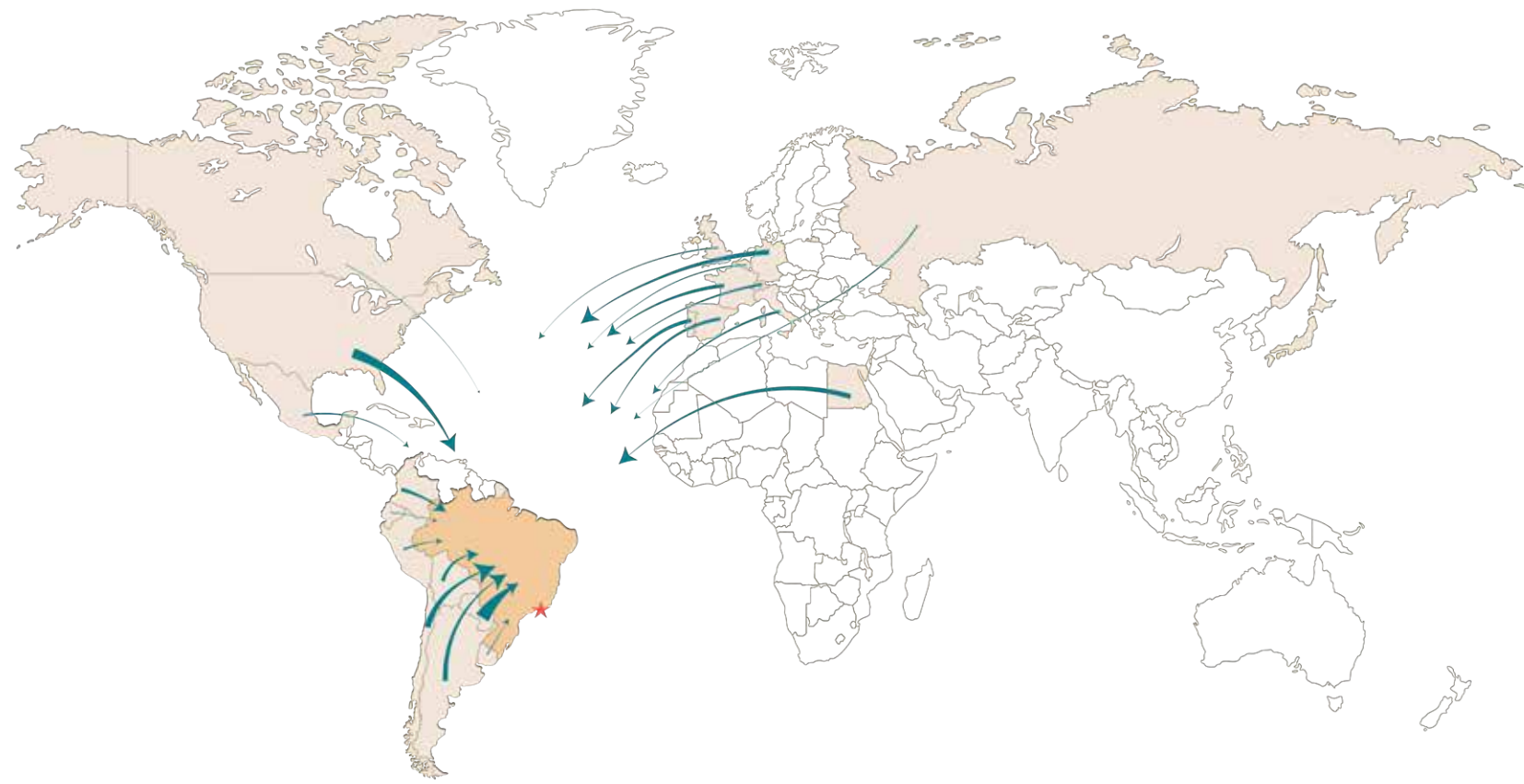
tourism for economic equality

Layered Urbanism | Estefania Peña

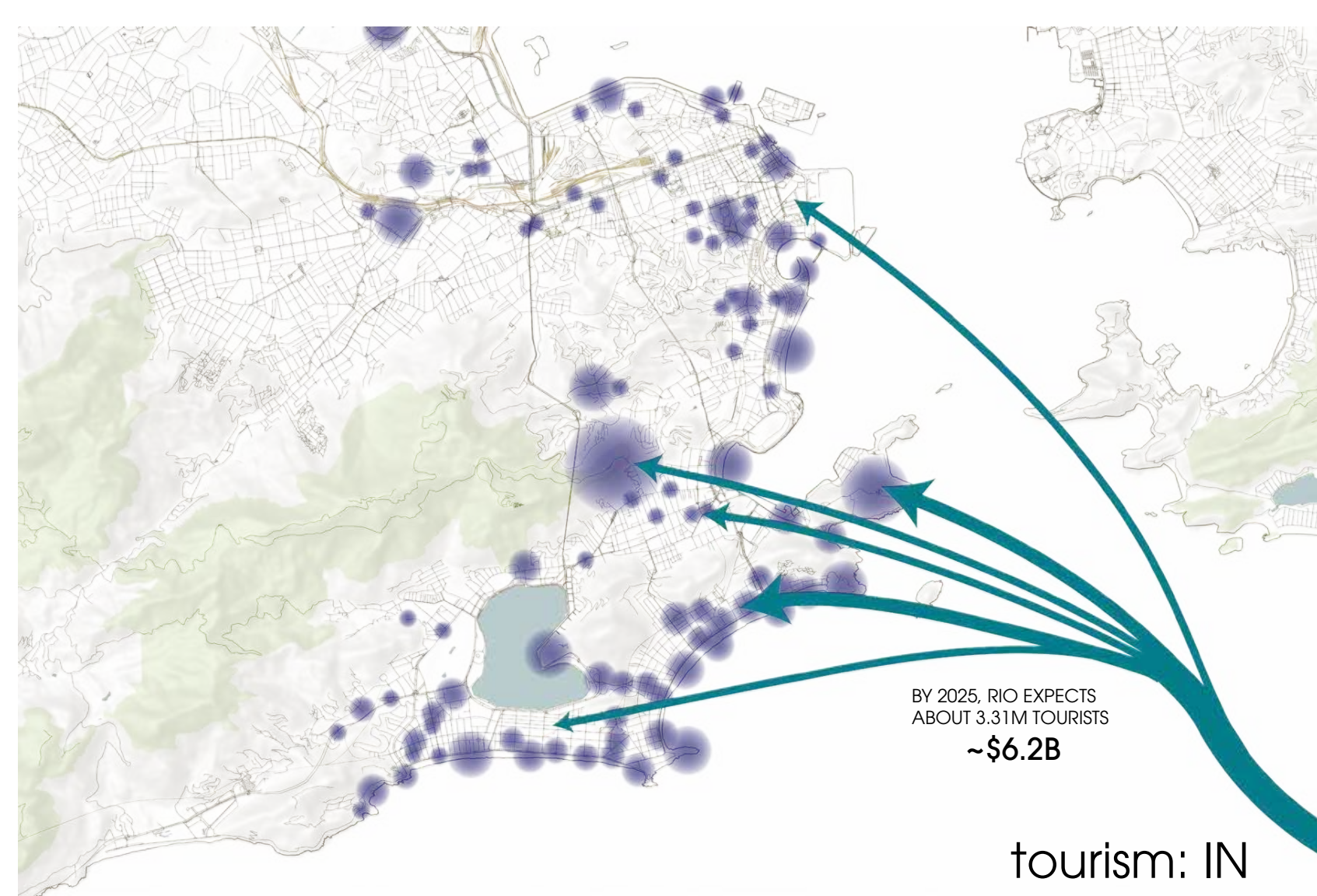
Located in downtown Rio de Janeiro, this adaptive reuse project nests itself in A Noite, a historic, 22-story building built in 1927 for a newspaper of the same name. Its prime location brings forth an opportunity to bridge the gap between local and tourist. This proposal seeks to give agency to local communities to address the disparaging difference between tourist spending and local wages as well as the cultural detriments that tourism causes.

Inspired by the cultural significance of Carnival, a unique celebration deeply ingrained in Brazilian identity, A Noite is reimagined as a cultural center dedicated to all things Carnival. While preserving the building's historical significance, the structure is primarily dedicated to the Morro de Conceição community's preparation for Carnival, offering spaces for workshops, float construction, costume design, as well as music and dance rehearsals. During Carnival, the building hosts a Bloco (parade), flowing through the building from Morro de Conceição onto Praça Mauá.

Taking advantage of the yearlong Carnival activities, the building provides tourists with the chance to immerse themselves in the spirit of Carnival through workshops and exhibitions, coordinated by locals. By empowering the Morro de Conceição community to take ownership of their cultural heritage, this project aims to mitigate the negative impacts of tourism while promoting inclusivity and sustainable cultural preservation.



tourism



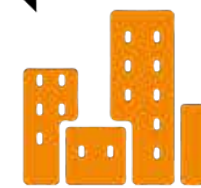
tourism: IN



immigration

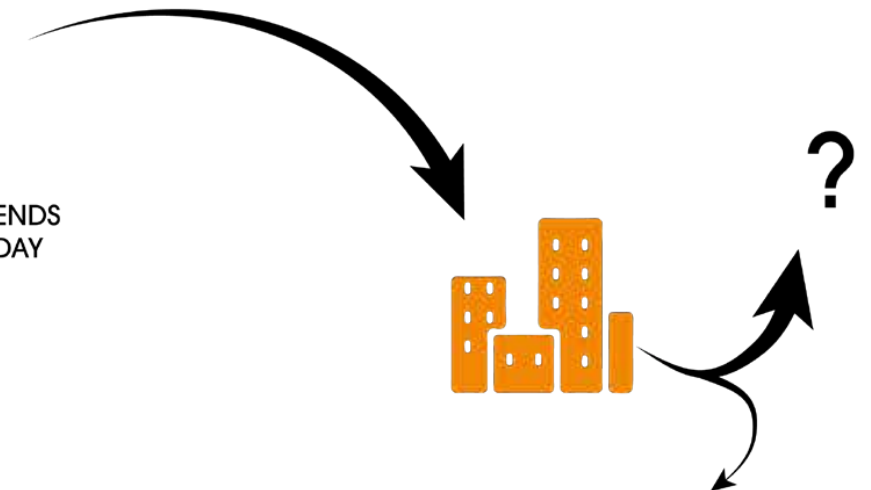


AVERAGE TOURIST SPENDS
R\$1862 (\$375) PER DAY



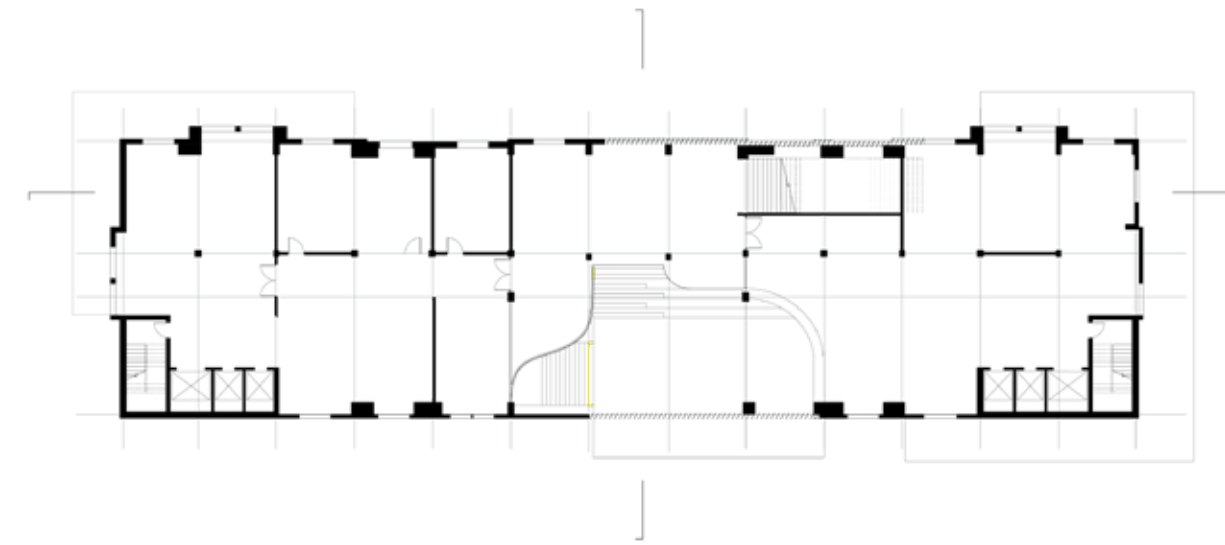
MINIMUM WAGE IS
R\$1400 (\$280)

~\$5.6/hour

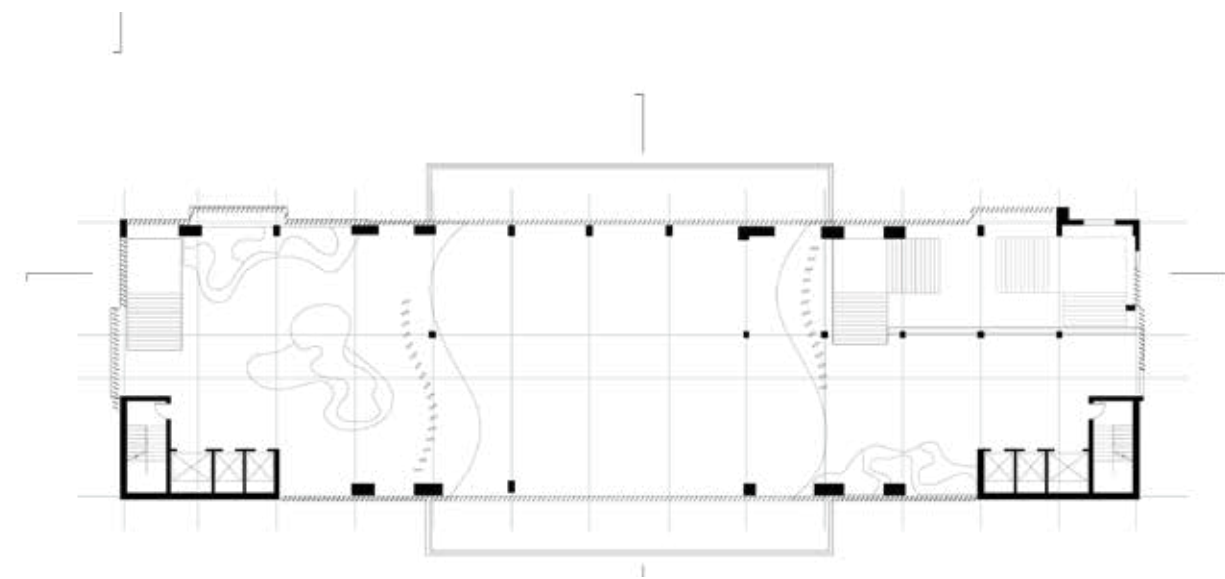




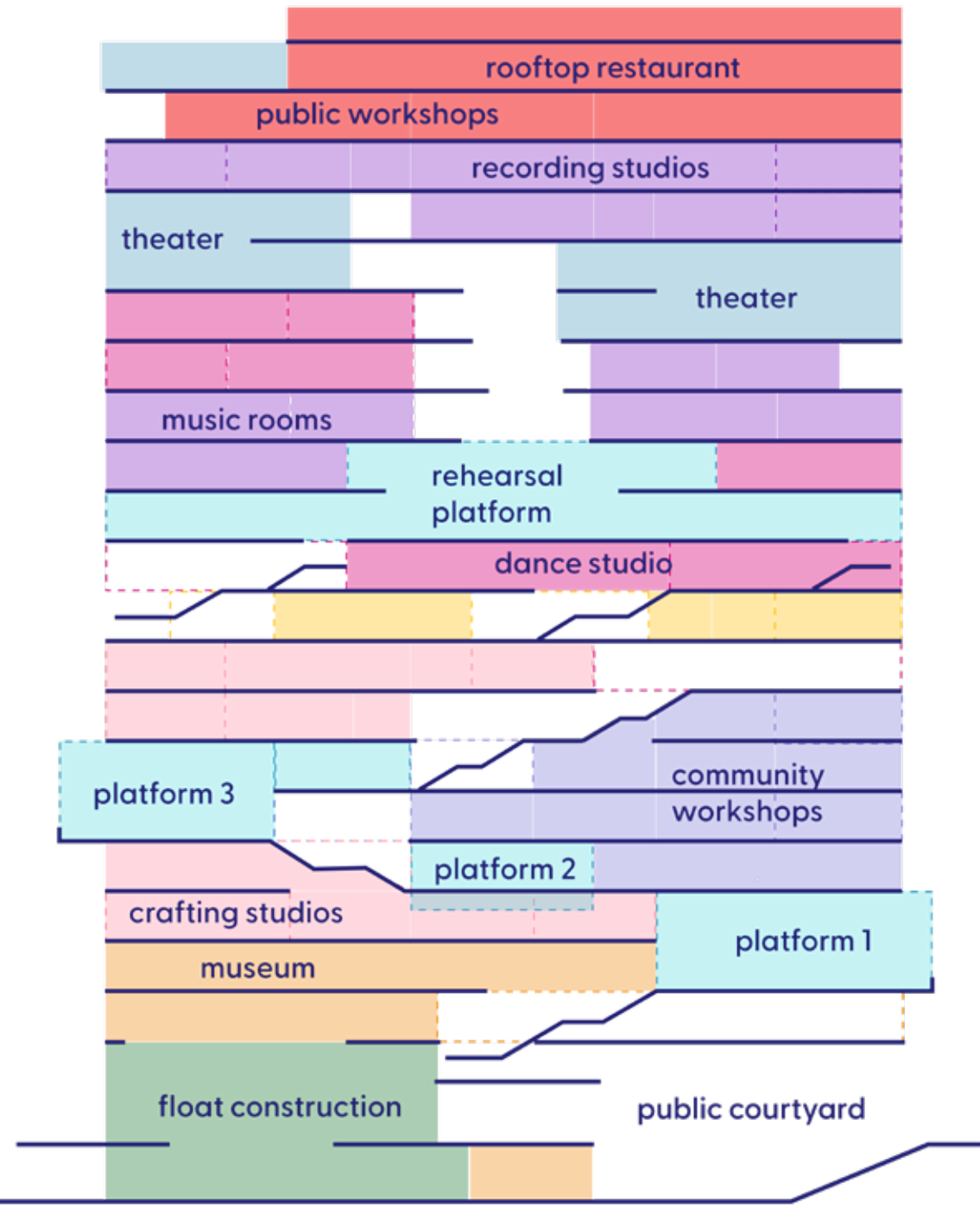
Ground Floor Plan



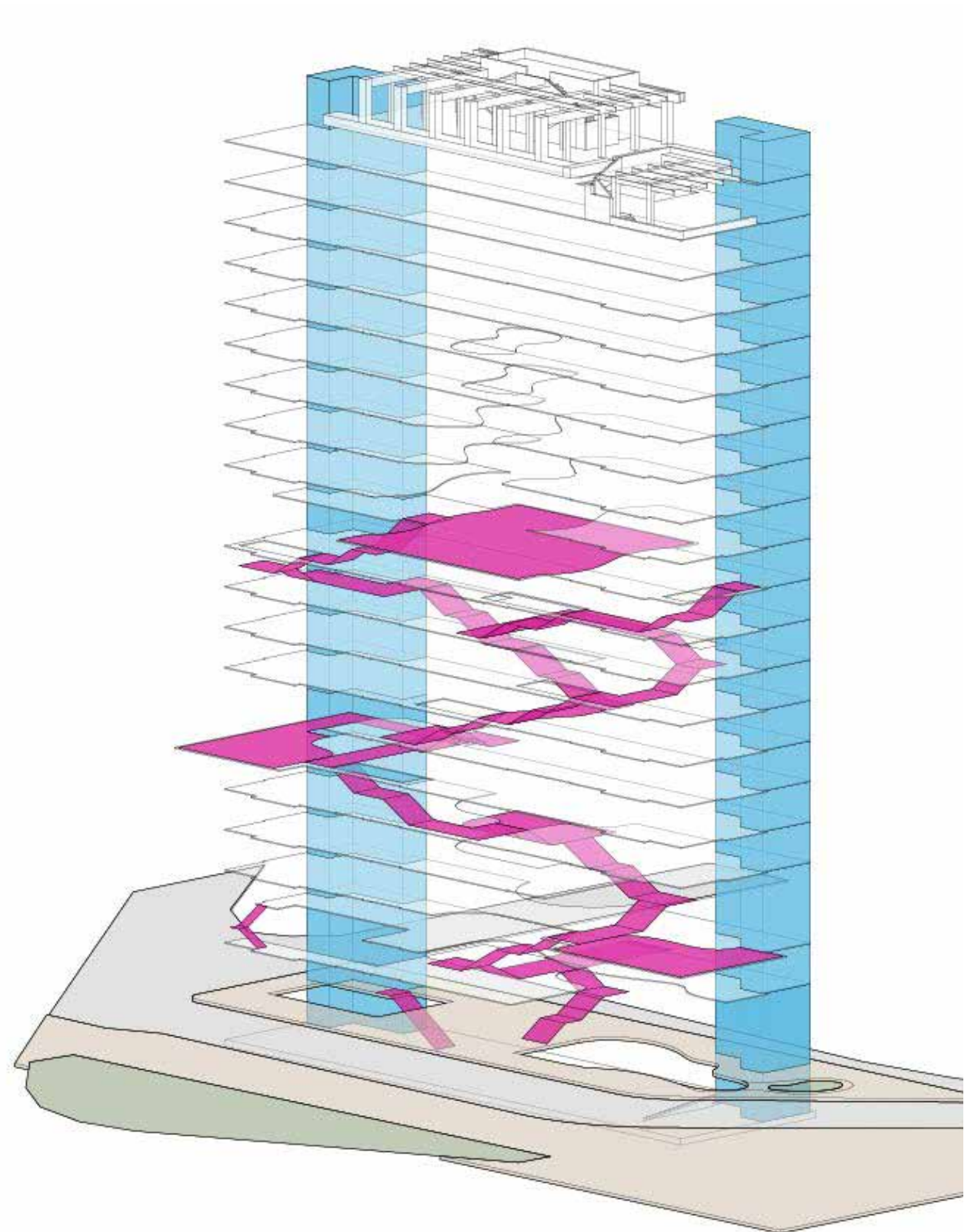
6th Floor Plan



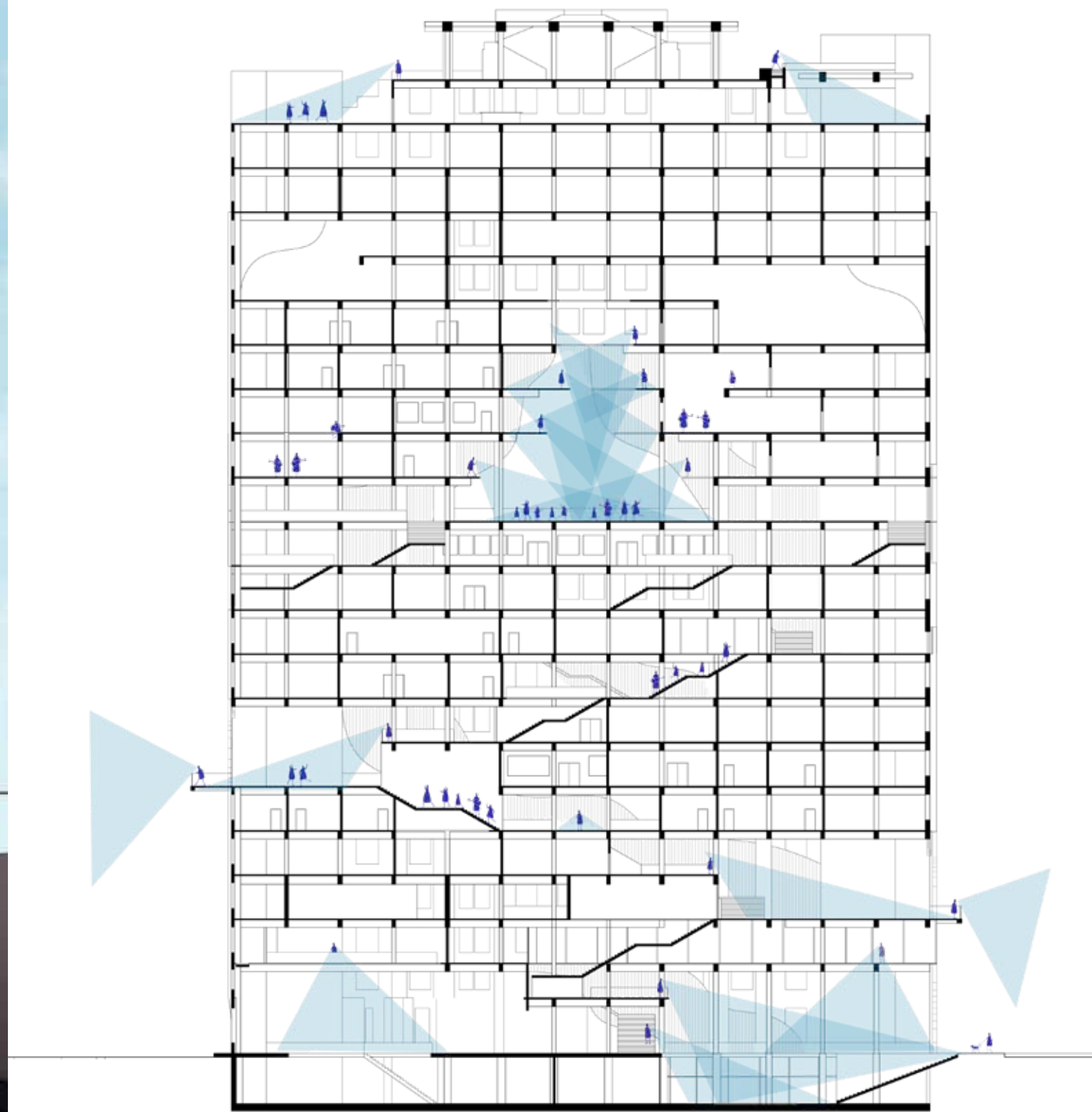
13th Floor Plan



CIRCULATION



PROGRAM



VIEWS

I. STUDIO

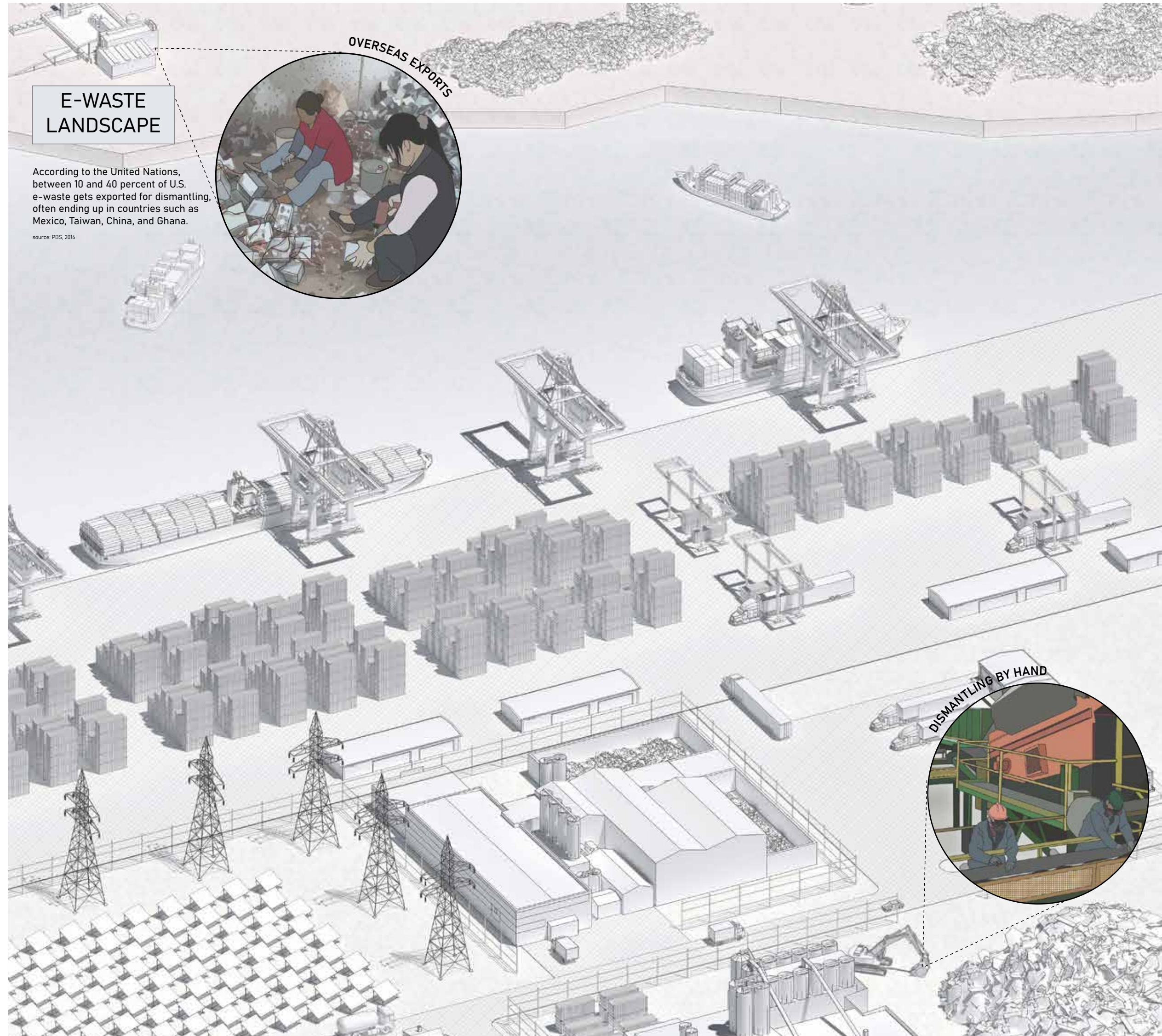
c. Re-makerspace
NYC

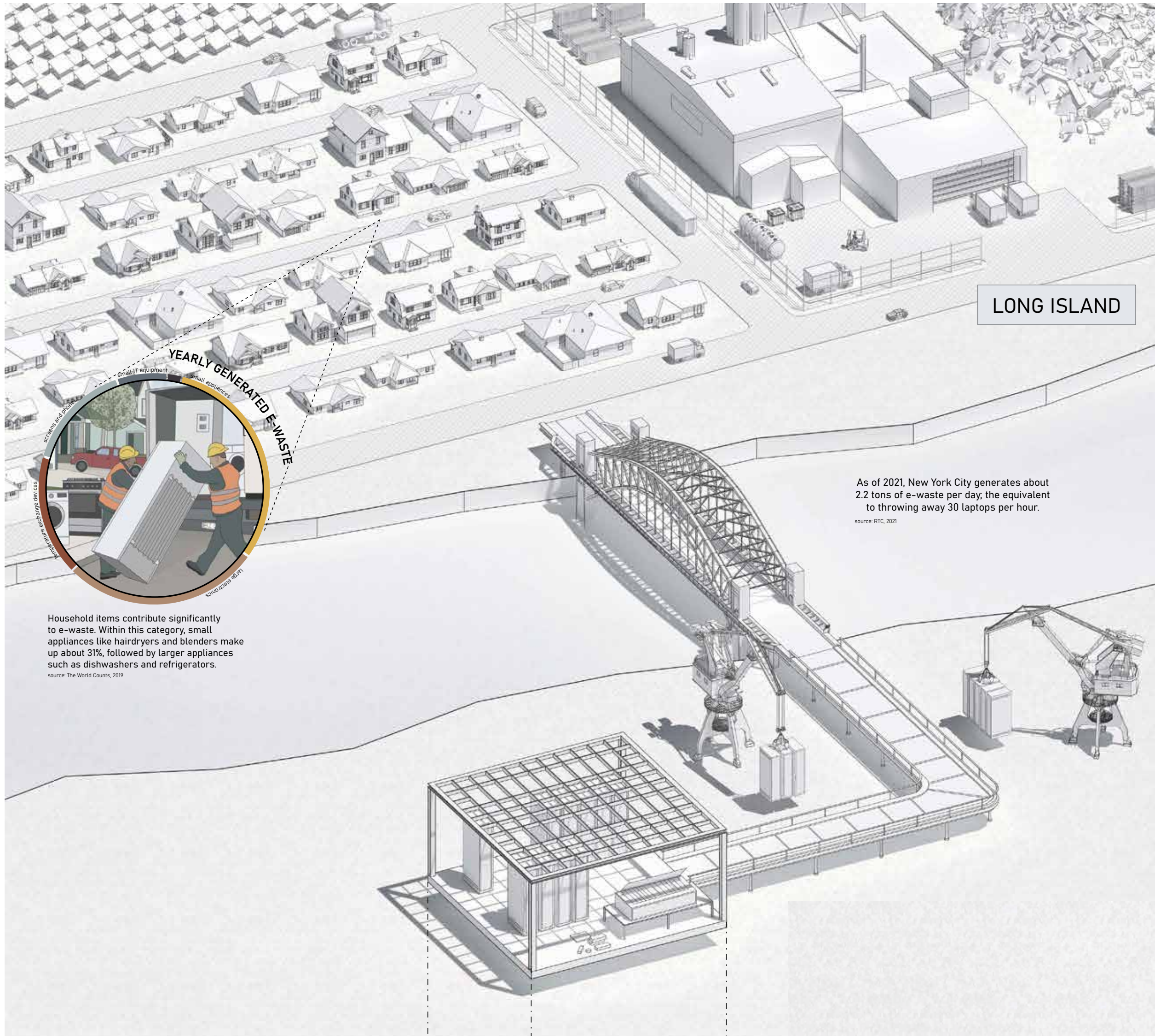
Summer '23 | Prof. Uriel Fogue
Atlas of Architectures for the End of the World

E-WASTE LANDSCAPE

According to the United Nations, between 10 and 40 percent of U.S. e-waste gets exported for dismantling, often ending up in countries such as Mexico, Taiwan, China, and Ghana.

source: PBS, 2016





LONG ISLAND



Household items contribute significantly to e-waste. Within this category, small appliances like hairdryers and blenders make up about 31%, followed by larger appliances such as dishwashers and refrigerators.

source: The World Counts, 2019

As of 2021, New York City generates about 2.2 tons of e-waste per day, the equivalent to throwing away 30 laptops per hour.

source: RTC, 2021

Rendering the Cloud Visible

Summer 2023 Architectures of the End of the World

CRISIS CABINET: The World Without us
Data Centers & Electronic Scrapyard Landscapes

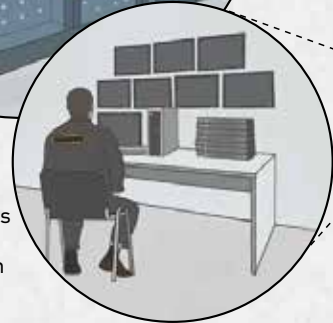
Martin Lee
Estefania Peña

DATA CENTER ENERGY CONSUMPTION



H5 Data Center per square footage, processes 371,666 TB per year. This is equivalent to 1.5 million iPhones worth of data storage.

source: Data Center Hawk, 2021



MANHATTAN

DATA COLLECTION CONCERNS



About 81% of Americans say the potential risks outweigh the benefits when it comes to collecting data.

source: pewresearch.com, 2019





potential risks outweigh the benefits when it comes to collecting data.
source: pewresearch.com, 2019



PLANNED OBSOLESCENCE



Over 50% of Americans replace their fully functional phones every 2-3 years. Taking just Apple's iPhone sales in 2021, more than 46 million will likely be disposed in the coming months.
source: Slashgear, 2022



OVERCONSUMPTION

The electronics industry wields significant influence over societal norms, continually introducing new devices on a yearly basis and encouraging the unnecessary upgrading of existing ones.



USA



ISRAEL

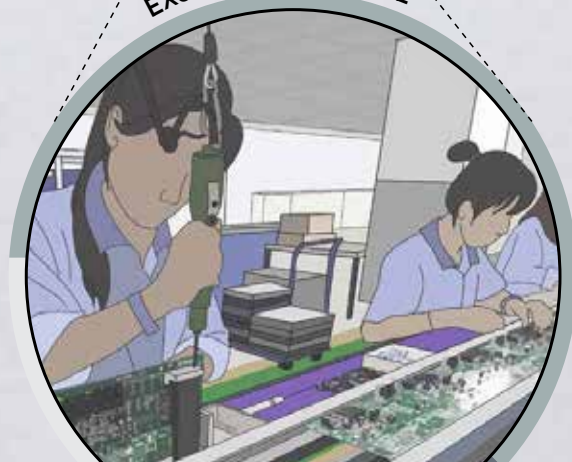


CHINA



MALAYSIA

ELECTRONIC MANUFACTURING



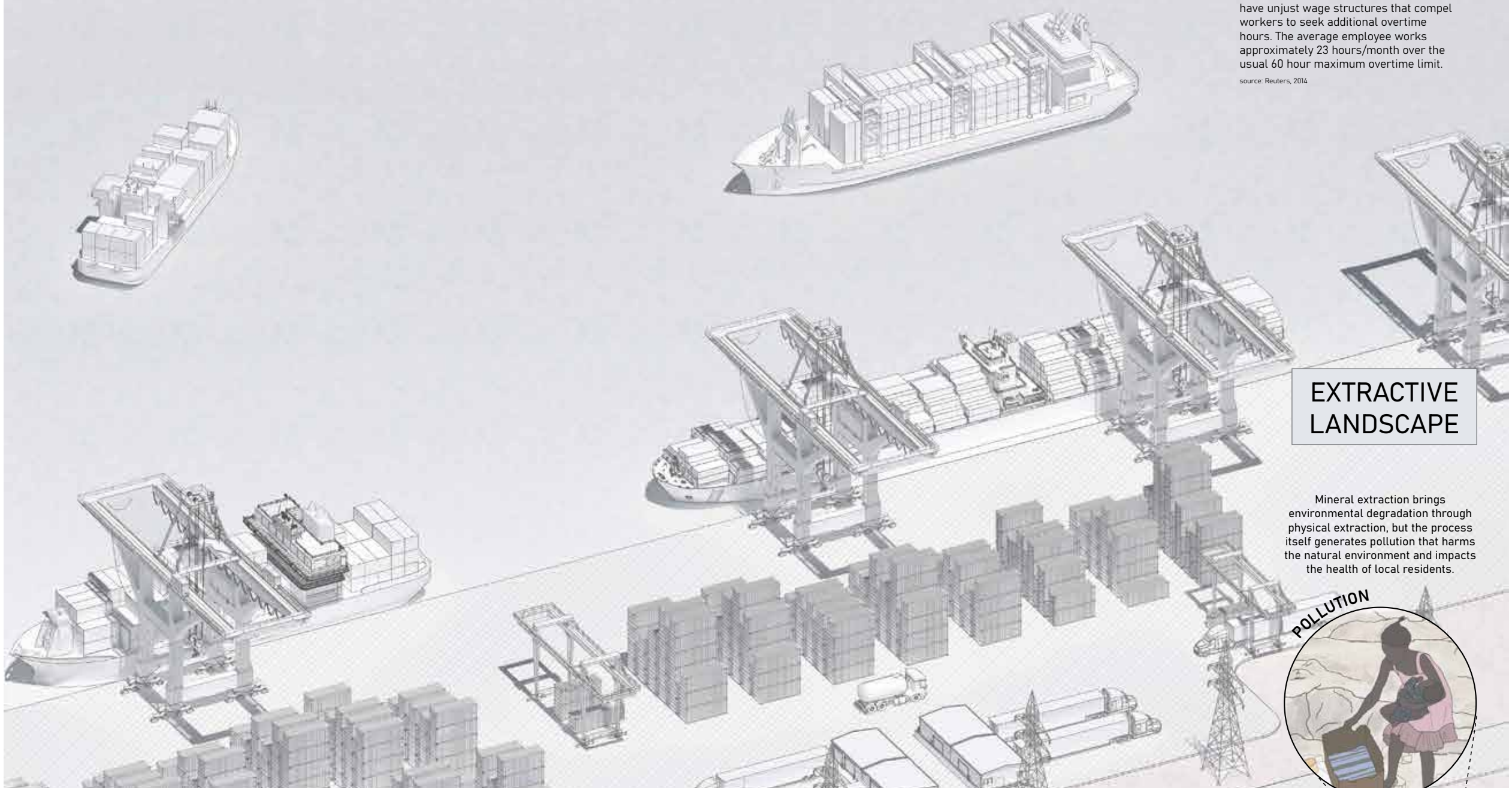
EXCESSIVE OVERTIME



ELECTRONIC MANUFACTURING



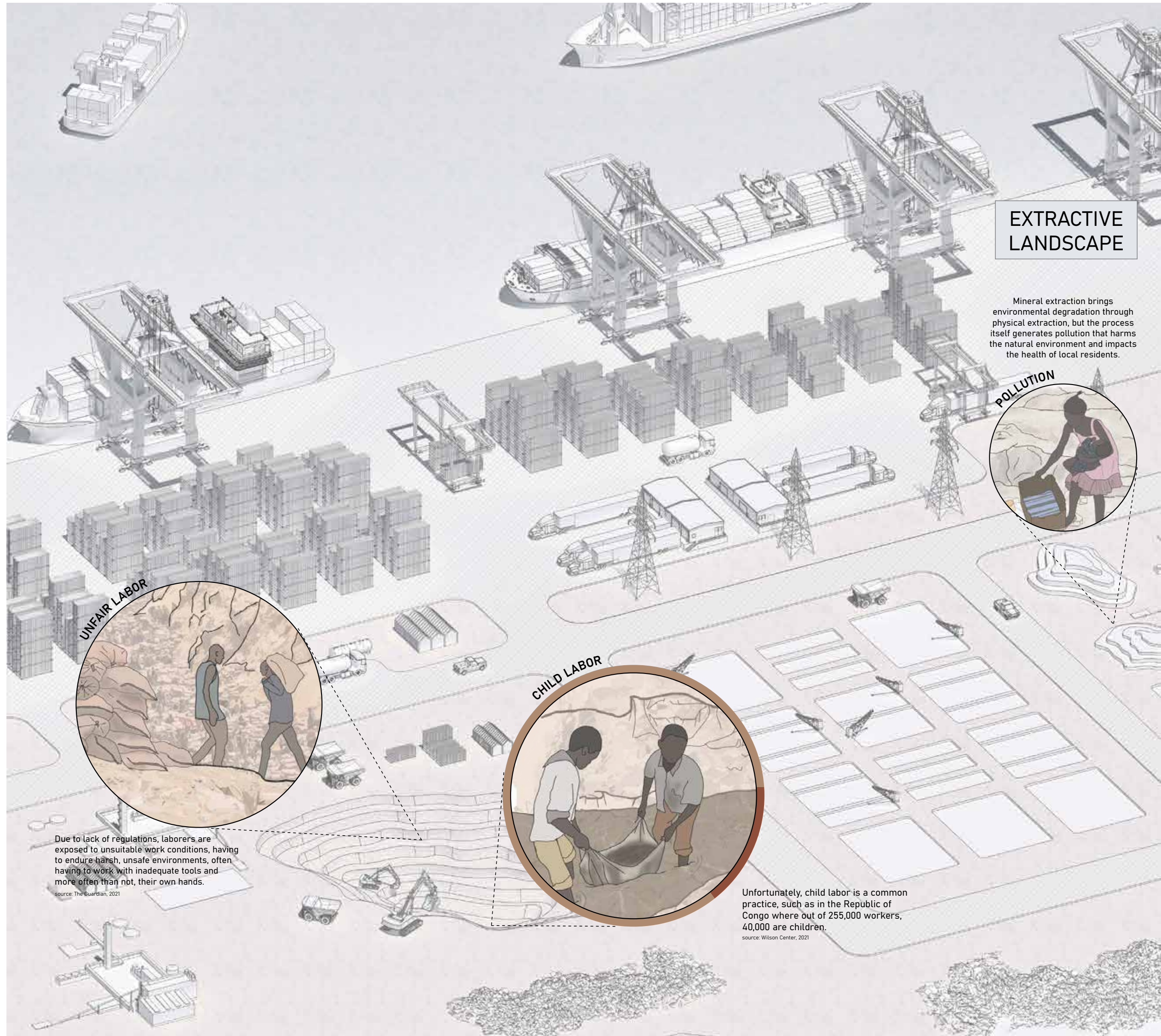
Numerous electronic manufacturers have unjust wage structures that compel workers to seek additional overtime hours. The average employee works approximately 23 hours/month over the usual 60 hour maximum overtime limit.
source: Reuters, 2014



EXTRACTIVE LANDSCAPE

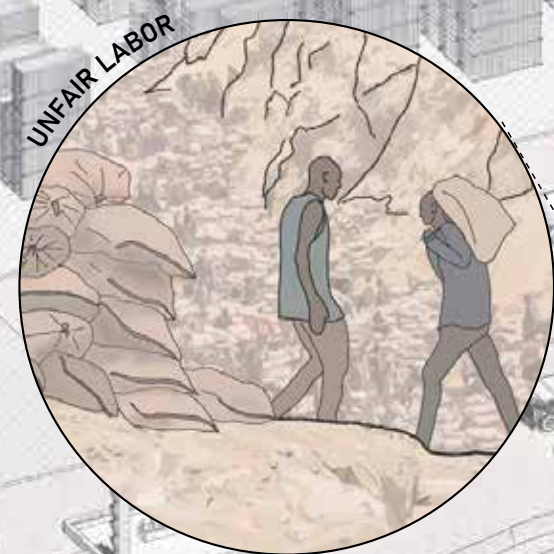
Mineral extraction brings environmental degradation through physical extraction, but the process itself generates pollution that harms the natural environment and impacts the health of local residents.





EXTRACTIVE LANDSCAPE

Mineral extraction brings environmental degradation through physical extraction, but the process itself generates pollution that harms the natural environment and impacts the health of local residents.



Due to lack of regulations, laborers are exposed to unsuitable work conditions, having to endure harsh, unsafe environments, often having to work with inadequate tools and more often than not, their own hands.

source: The Guardian, 2021



Unfortunately, child labor is a common practice, such as in the Republic of Congo where out of 255,000 workers, 40,000 are children.

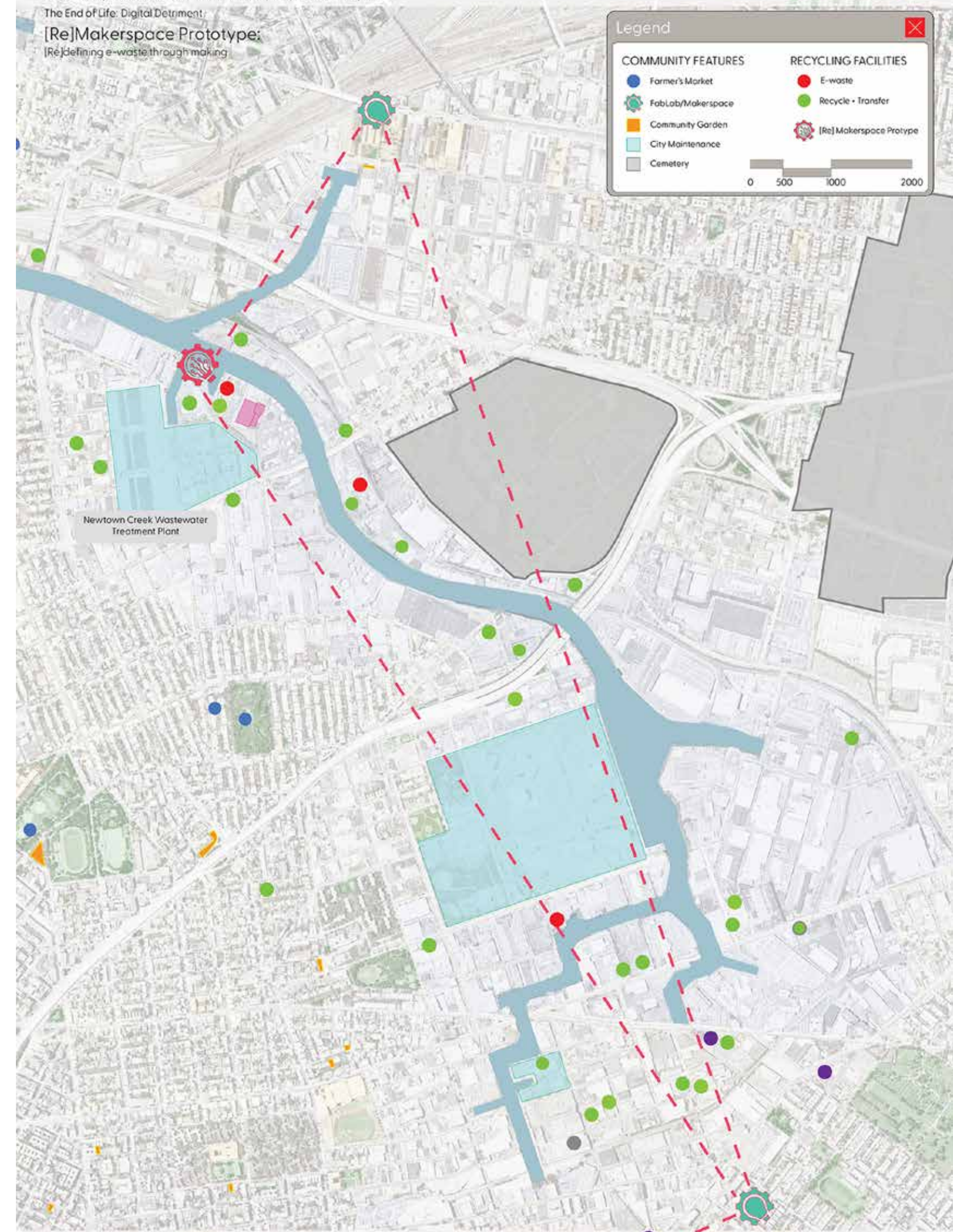
source: Wilson Center, 2021



Legend

COMMUNITY FEATURES	RECYCLING FACILITIES
Farmer's Market	E-waste
FabLab/Makerspace	Recycle + Transfer
Community Garden	[Re] Makerspace Prototype
City Maintenance	
Cemetery	

0 500 1000 2000



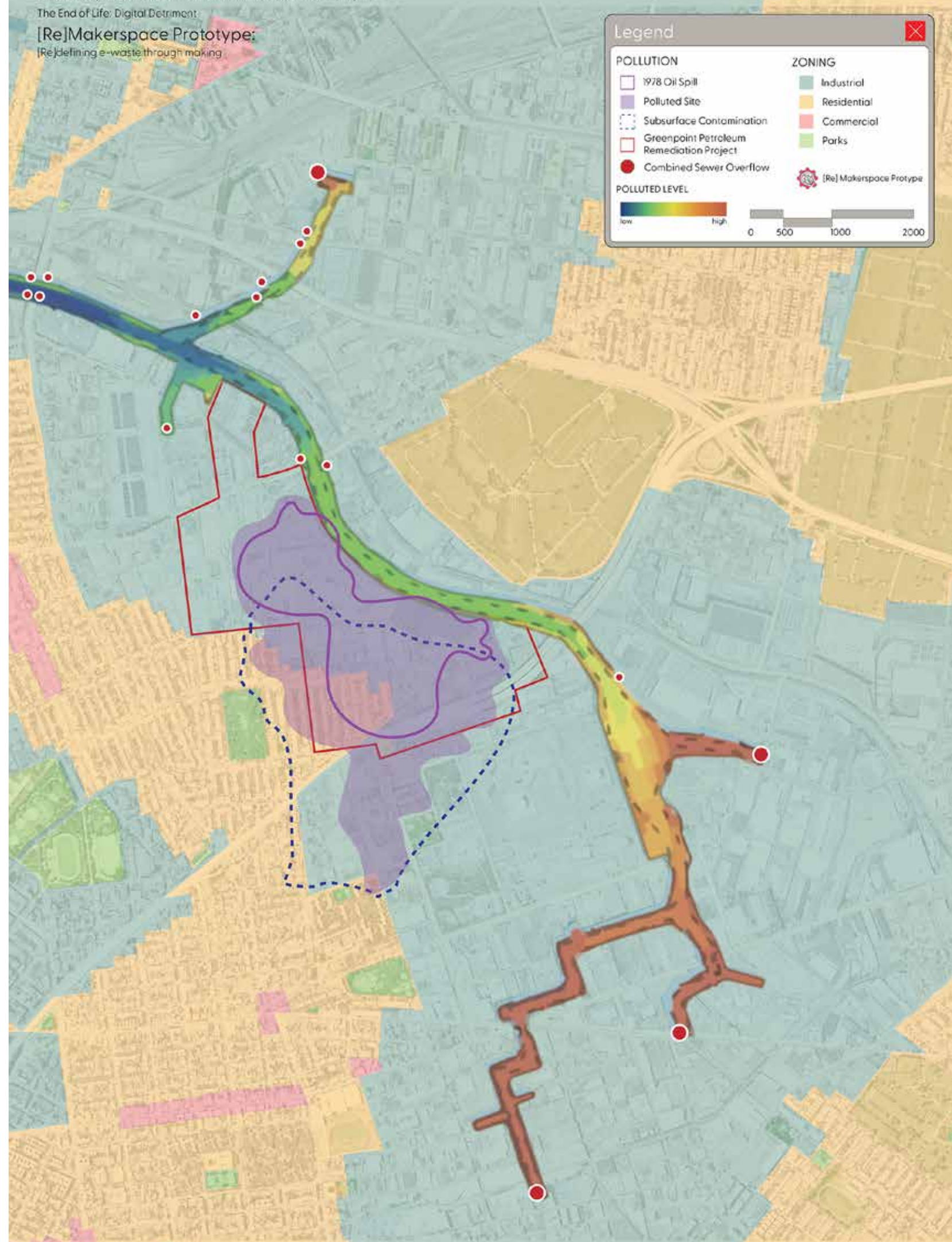
Legend

POLLUTION	ZONING
1978 Oil Spill	Industrial
Polluted Site	Residential
Subsurface Contamination	Commercial
Greenpoint Petroleum Remediation Project	Parks
Combined Sewer Overflow	[Re] Makerspace Prototype

POLLUTED LEVEL

low High

0 500 1000 2000

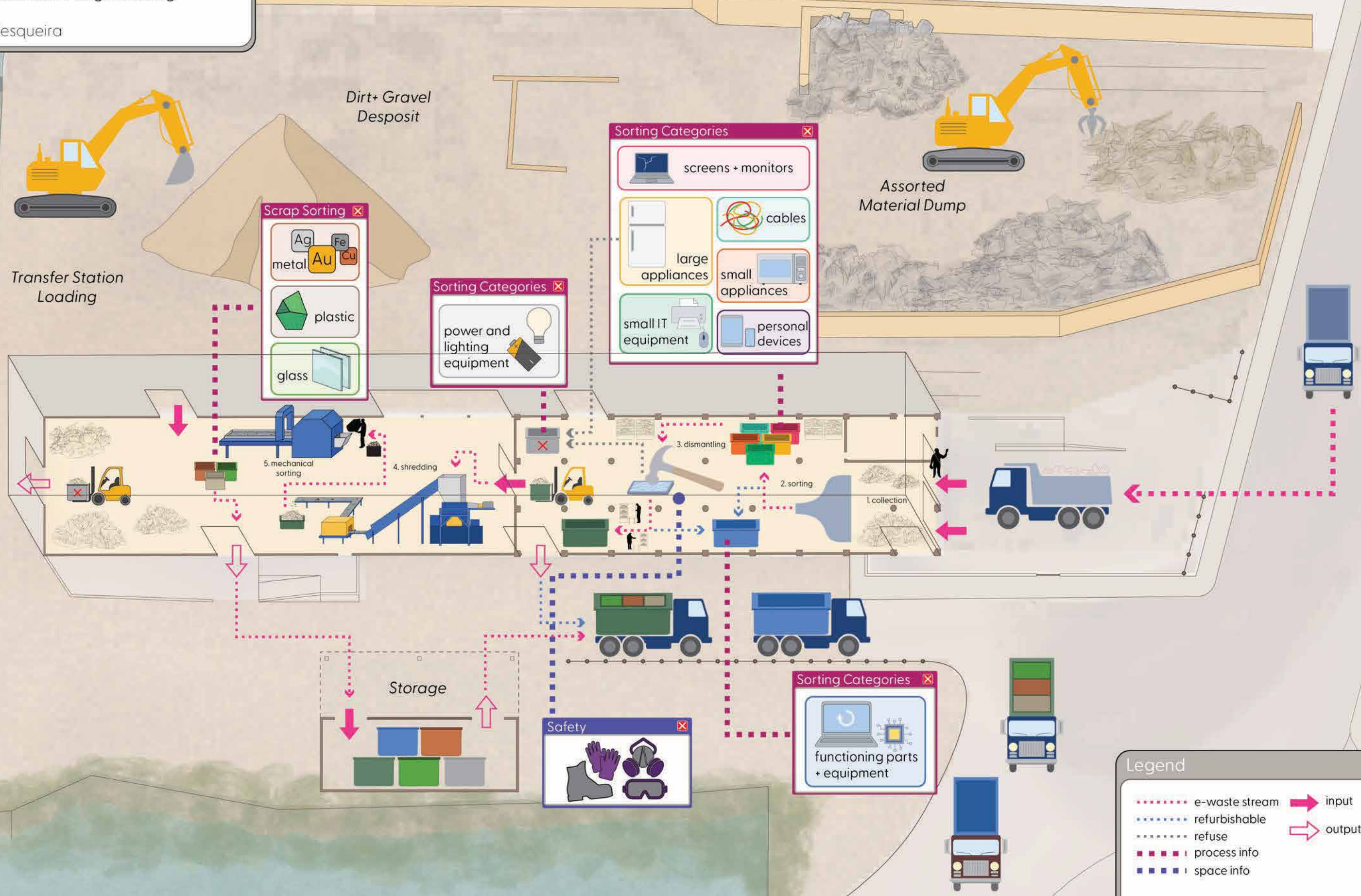


The End of Life: Digital Detriment

[Re]Makerspace Prototype:

[Re]defining e-waste through making

Estefania Peña Pesqueira



Sorting Categories

- screens + monitors
- large appliances
- small IT equipment
- cables
- small appliances
- personal devices

Scrap Sorting

- metal (Ag, Au, Fe, Cu)
- plastic
- glass

Sorting Categories

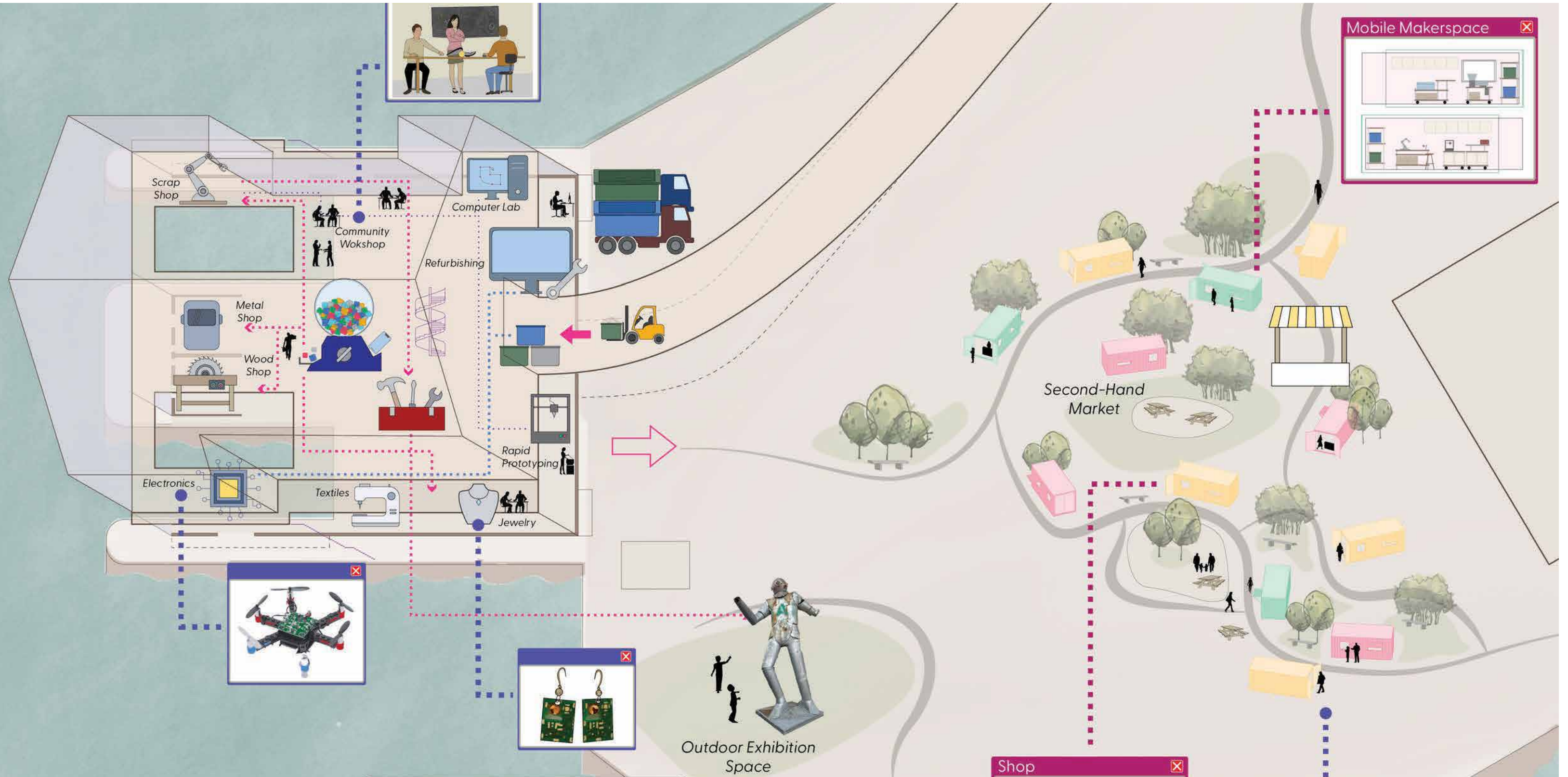
- power and lighting equipment

Sorting Categories

- functioning parts + equipment

Legend

- e-waste stream (dotted red line)
- refurbishable (dotted blue line)
- refuse (dotted grey line)
- process info (dashed red line)
- space info (dashed blue line)
- input (solid red arrow)
- output (solid pink arrow)



Summer 2023 | Architectures of the End of the World

The End of Life: Digital Detriment

[Re]Makerspace Prototype: [Re]defining e-waste through making

Estefania Peña Pesqueira

Legend

⋯ → e-waste stream	➔ input
⋯ → refurbishable	➔ output
⋯ → refuse	
⋯ → process info	
⋯ → space info	

0 10 20 50 100

SCRAP
\$5/LB

I. STUDIO

b. NYC-APSON

Fall '23 | Prof. Rosana Montiel

& Thomas de Monchaux

NYCDMX

COLLECTIONS OF 116TH ST.

Reflecting upon the urban landscape along 116th st, from Columbia University to Little Mexico, these collections utilize nature to identify borders and the instances where these are breached.



LEAVES



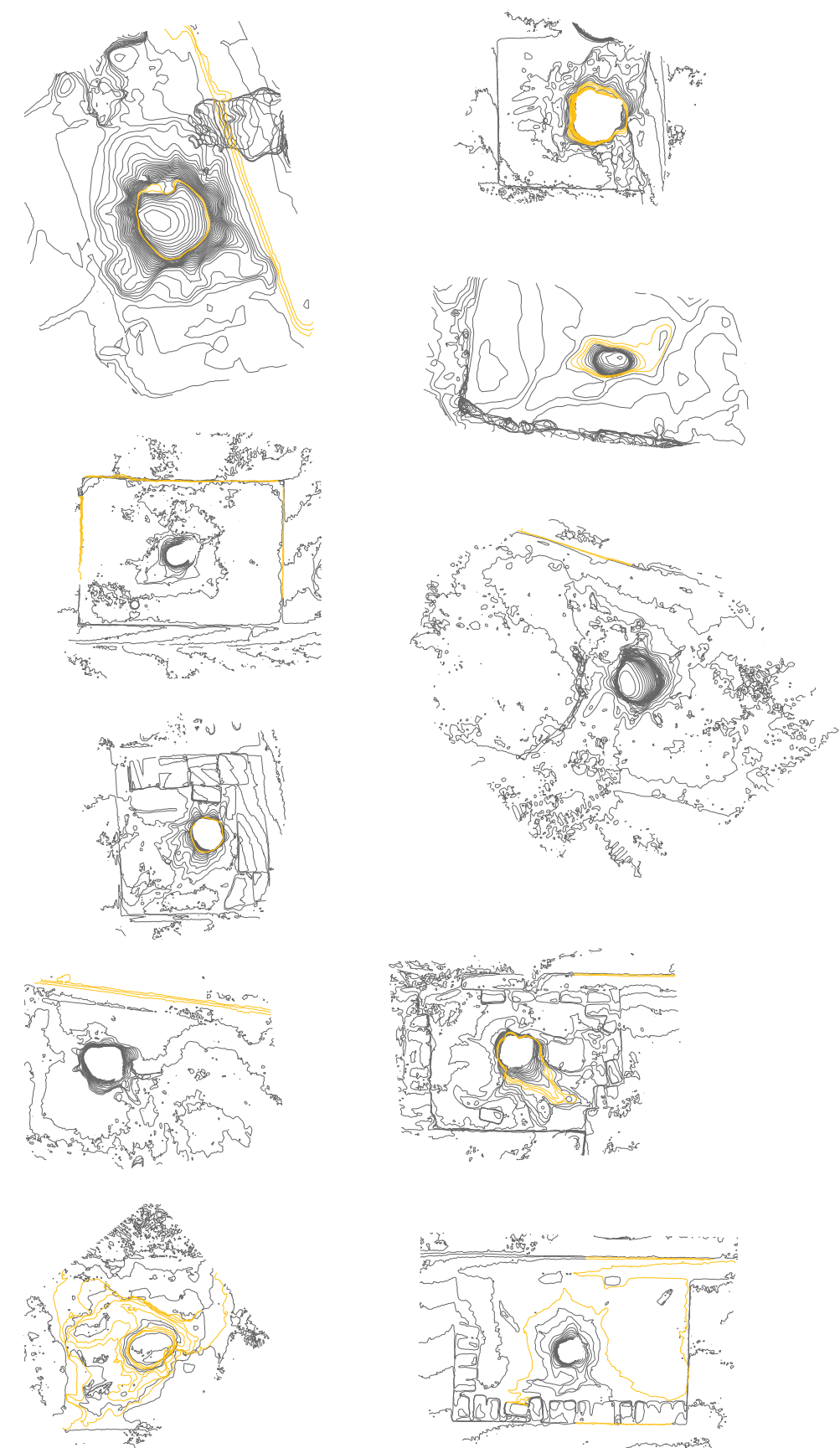
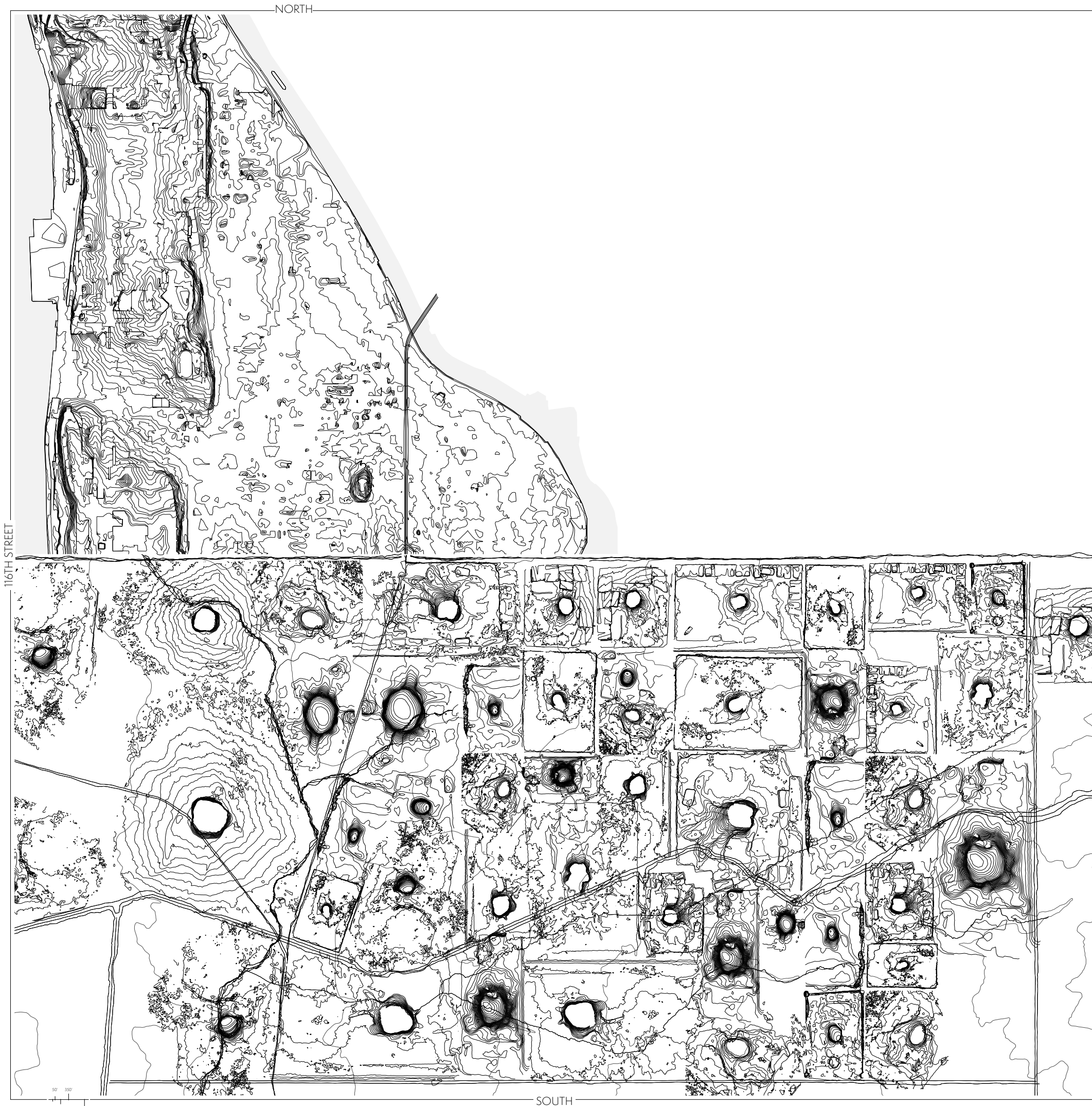
TRANSGRESSIONS OF NATURE



ROOTS

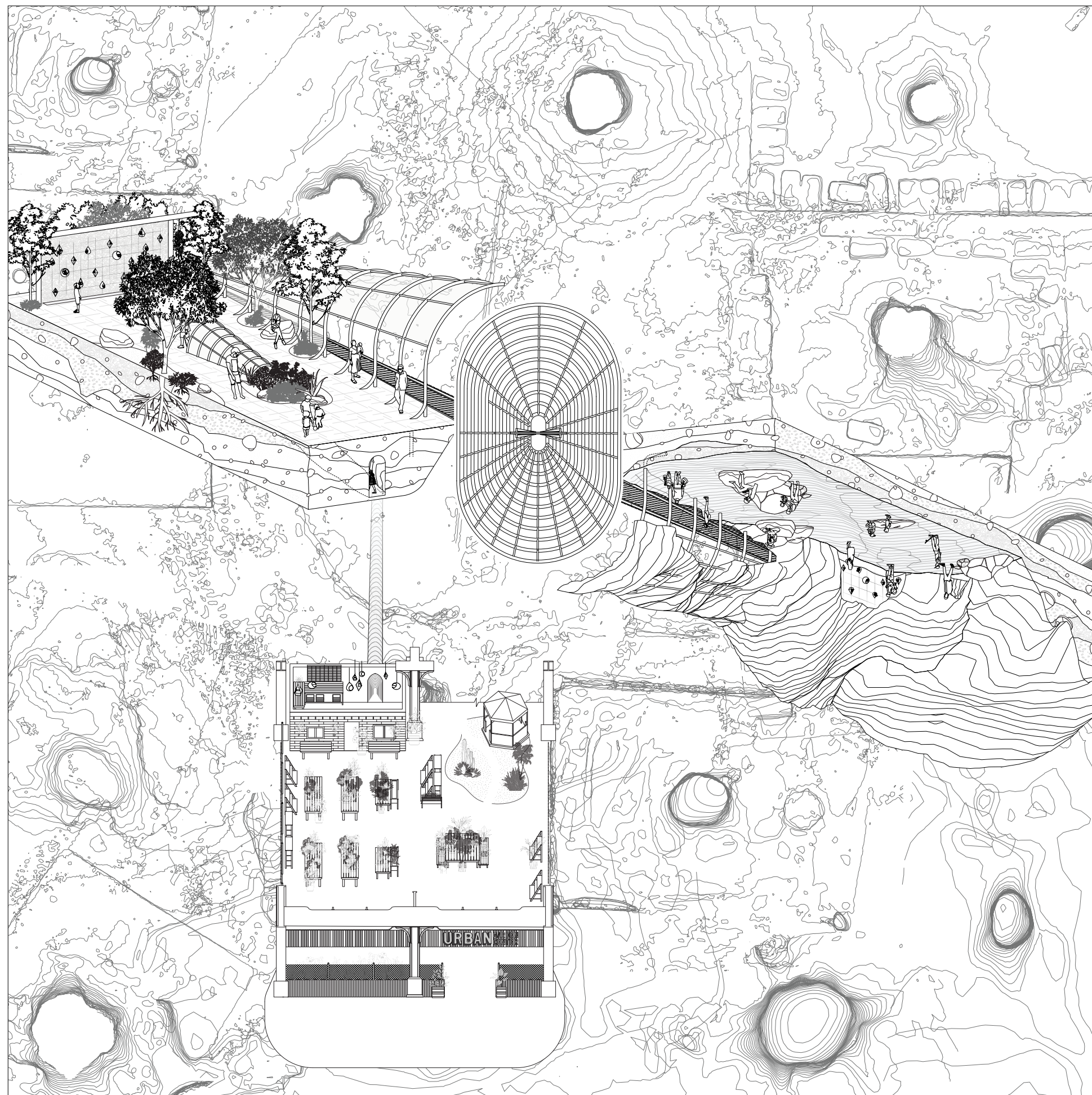






Roots & 116th St

A map that connects New York City to Agua Prieta, Sonora through nature. This depiction involves incorporating the topography of NYC and reconstructing Agua Prieta with the contours of trees along 116th Street.



The design of the portal is influenced by the structural similarities between greenhouses and mining tunnels. It takes inspiration from the intricate histories of both, acknowledging their significant roles in displacing nature.

II. Visual Studies

a. Wall (inter)Section

Spring '24 | Prof. Suchi Reddy

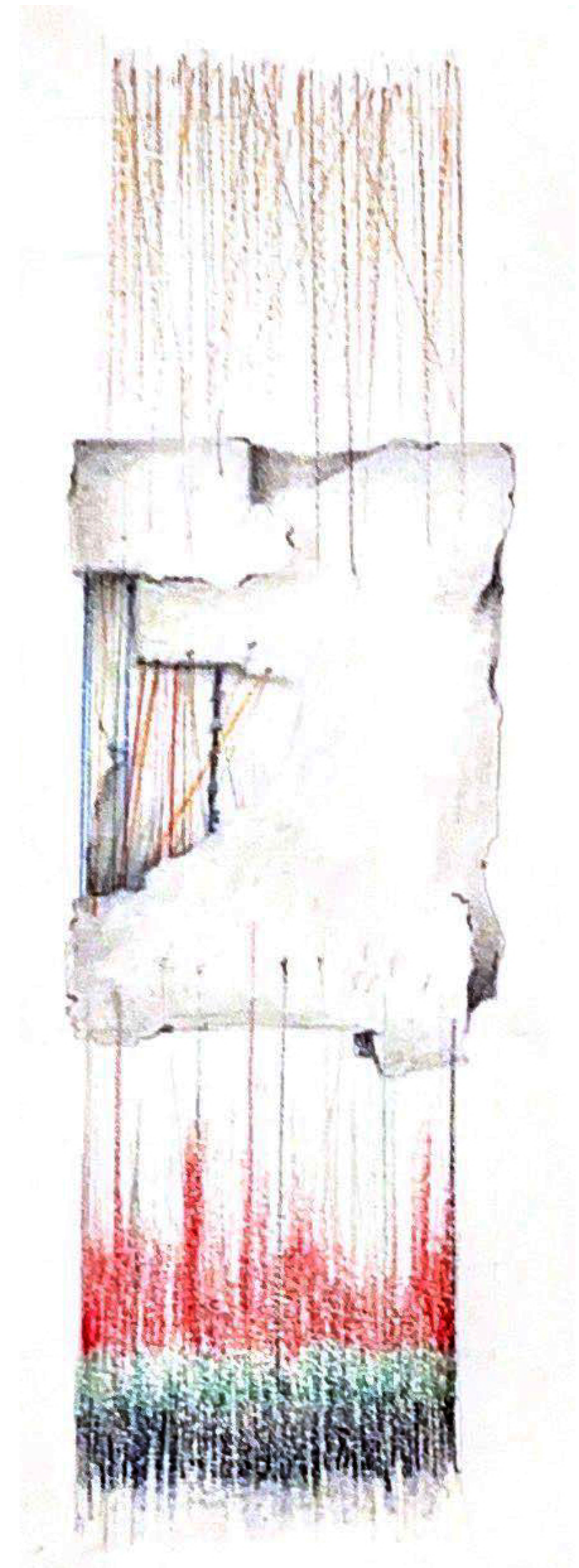
Subject_Object

wall [inter]section

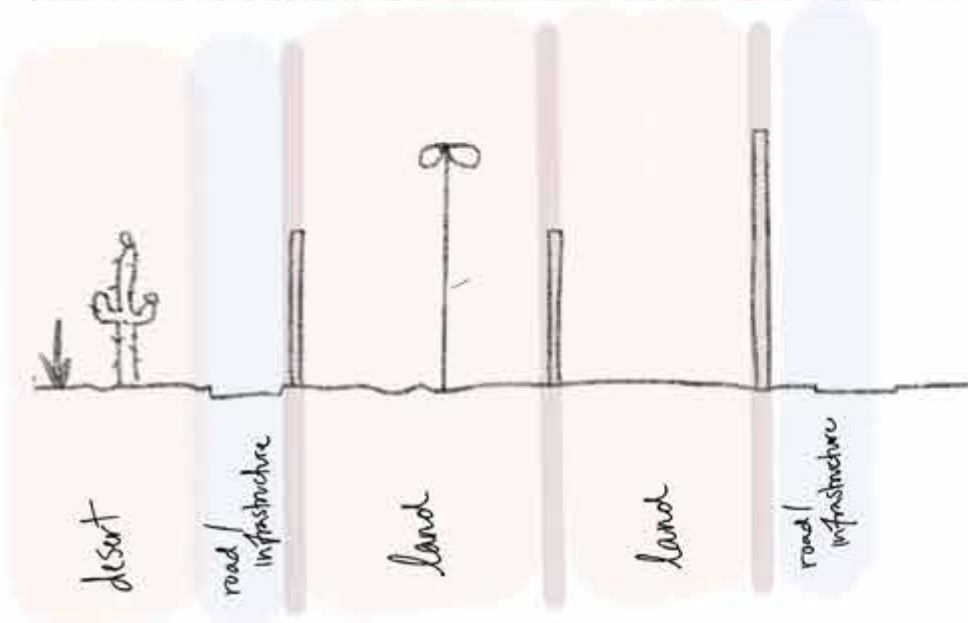
Statement:

Delving into the multifaceted nature of borders this object seeks to explore the [in]between of the US-Mexico Border. The object reveals the intricate relationship of opposing views through the interweaving of materials. A perceived need for relentless fortification and security, penetrated by resilience and hopes of opportunity.

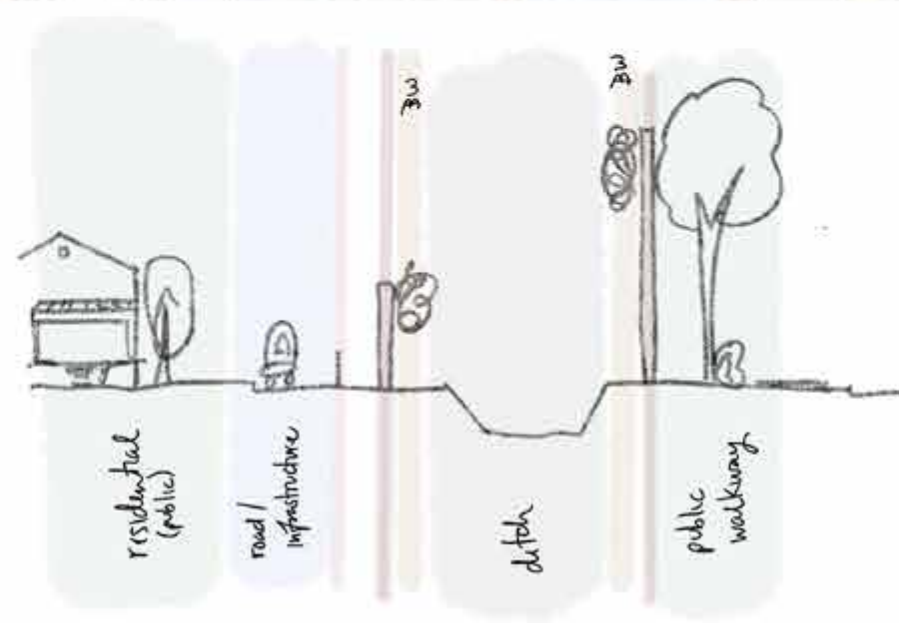
Media: Cotton fabric/thread, twine, concrete



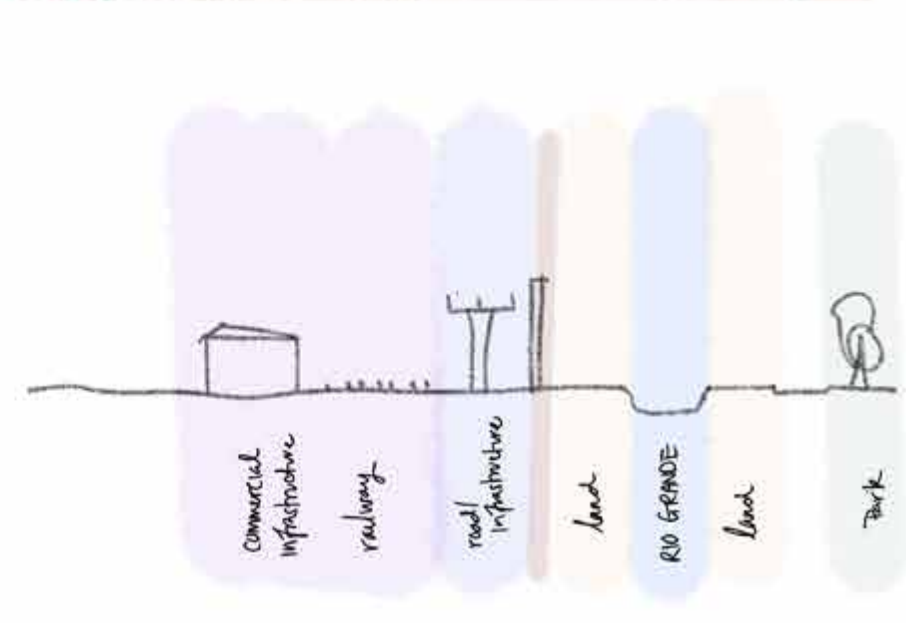
San Luis, AZ - San Luis, SON



Douglas, AZ - Agua Prieta, SON



El Paso, Tx - Ciudad Juarez, CHH



concept



process



object

II. Visual Studies

b.

GAP III: Design Seminar

Fall '23 | Prof. Wael Morcos

longer fine
where gold
elephant
just opposition
wonderful
very quickly
ambitious
ambitious

a b c d e f g h i
j k l m n o p q r
s t u v w x y z

font:

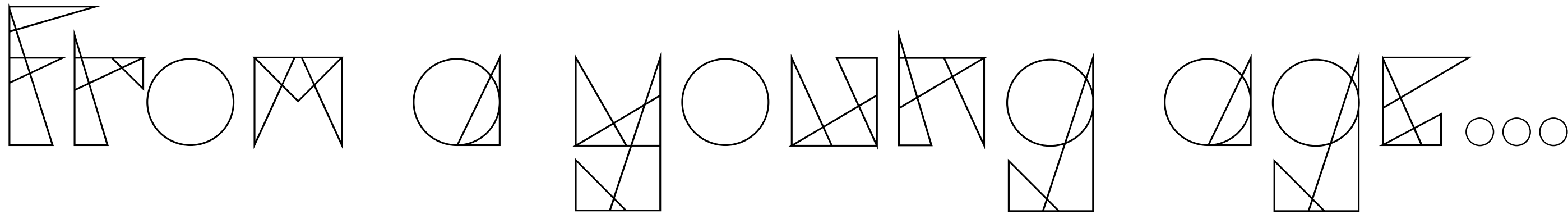
simple geometry



ESTEFANIA
PEÑA

FALL 2023





... I knew I wanted to be an architect. Even now, I struggle to find words to describe the reason behind my choice, but my tangible passion sufficed for me to pursue a career in architecture.

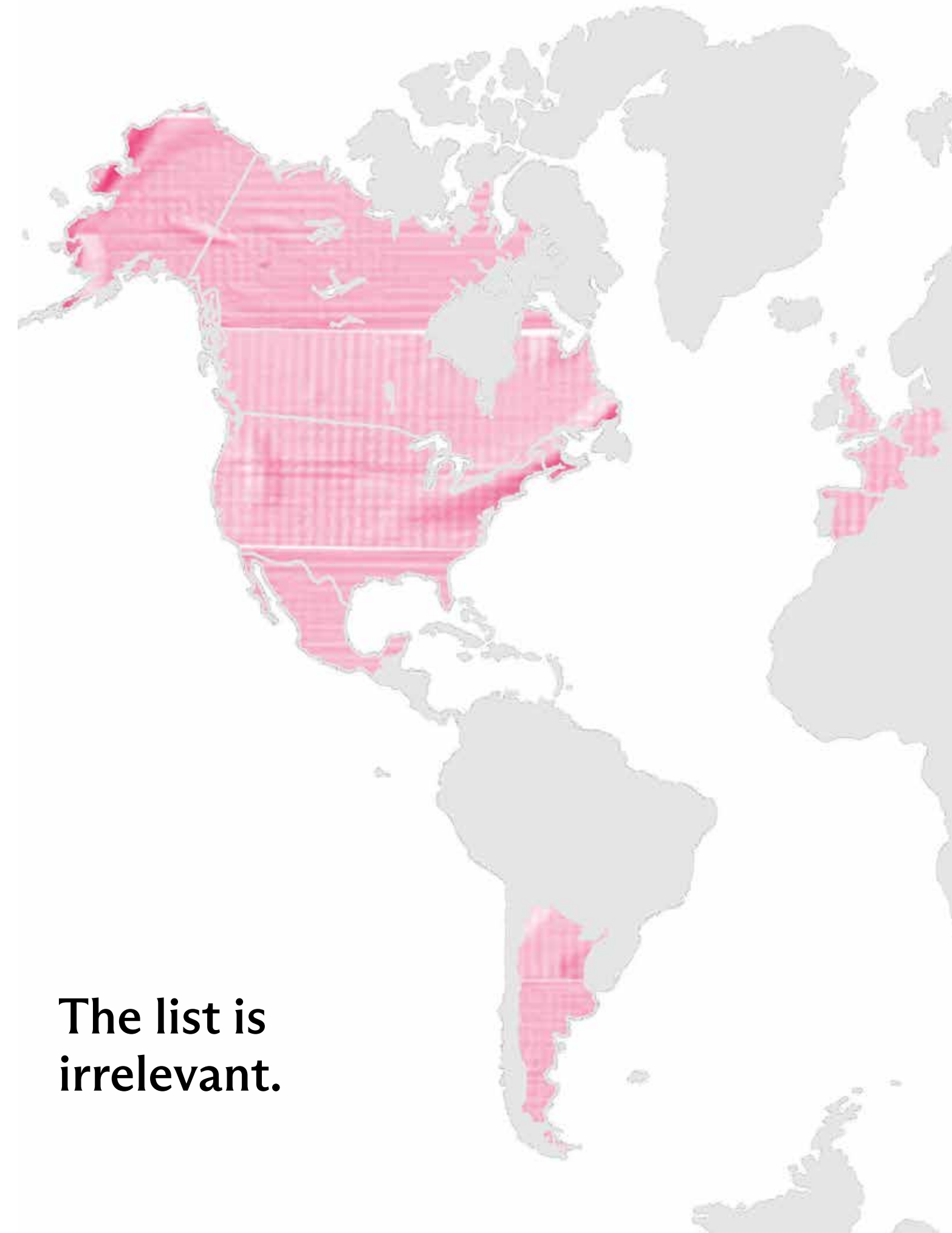
This is a reflection of my evolving design philosophy; a story of growth, embracing imperfection, respecting history, and more importantly nurturing creativity to weave narratives — a journey that continues to shape my creative endeavors. I believe that true innovation lies at the crux of tradition and novelty, and that design isn't just about creating objects; it's about crafting experiences that resonate deeply with the human spirit, the essence of the past, and the possibilities of the future. The significance of design lies not only in the final product but in the journey of ideation, creation, and refinement that leads to meaningful and impactful outcomes.

choosing

experiences

I firmly believe that the best way to learn about the world and its issues is to experience it firsthand. Being from the middle-of-nowhere, Arizona, my younger self romanticized history, escaping to old cities like Paris and Barcelona through reading. I read fast and I read a lot. And through reading, I started a mental list of places I wanted to visit and explore. The list grew along with me until it was so long it became irrelevant.

One of my life goals is to gain as much insight as I can from other parts of the world so that I can bring new ideas to my daily life and professional practices.



The list is irrelevant.



past and future

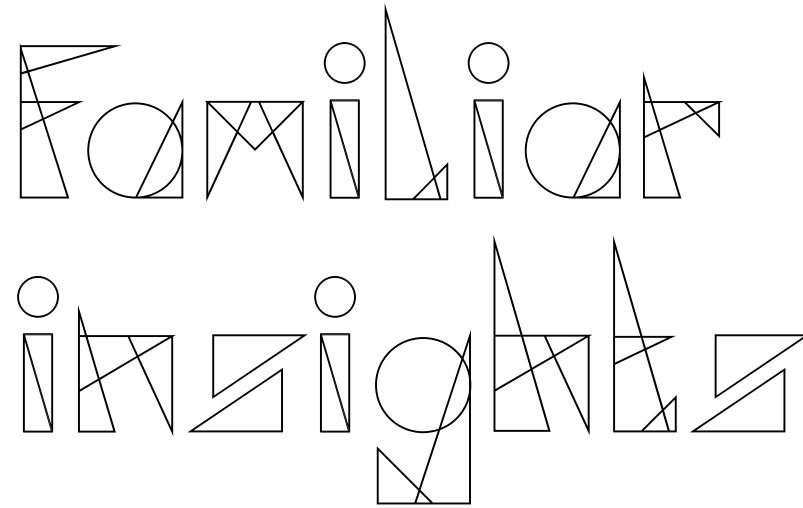
Growing up in a border town, I was exposed to political decisions, immigration, and economic inequality that attuned me to the relevance of these social processes and how they affect our quality of life. As I delved into my career, I eventually came to find the practice of Adaptive Reuse as an opportunity to address societal issues that surrounded me my whole life.

Adaptive reuse presents an opportunity to solve current issues of space and culture at multiple scales. By focusing on old, underutilized buildings, we can recycle available space within the city while giving new intention to culturally significant architectures.

This practice is an intricate challenge of harmonizing eras; like solving an impossible puzzle of blurred boundaries. I am fascinated by crafting narratives, preserving heritage, and creating spaces that resonate with timelessness—a harmonious blend of nostalgia and progress transcending temporal boundaries.

Looking back, my interest with adaptive reuse was destined to occur. Early on in life, I found myself growing fond of the unusual, seeing the beauty in items that people would normally see as expendable, like a beat-down pencil box. Initially, it was a simple container; its worn-out, boring appearance was a blank canvas awaiting an explosion of imagination. I saw potential in repurposing it, and transformed it into a piece of artwork of my own; a form of self-expression made of worn-out tape and Sharpie scrawls.

The value of giving old objects a new purpose has always been present. I naturally seek unconventional ways to repurpose items, merging functionality with imagination. The pencil box was just the beginning, guiding me to view everyday objects not for what they were, but for what they could become. Its influence extended beyond a mere container; it came to symbolize resourcefulness, an inspiration to approach problems with a fresh perspective, embracing the art of adaptive reuse in various aspects of life.



I often find myself “stuck” in my mind, lost without direction, stressed because all of the thinking took time from the doing. When things aren’t going at all as they were planned, I am reminded that design isn't a straight path.

“You can’t hate a project you don’t have.”

“Why do drugs when you can drink coffee.”

Words found in one of my most ordinary accessories – a ceramic coaster. This coaster serves as a symbolic representation of the profound impact people have on my creative endeavors.

As architects, we are artists that directly affect the makeup of societies; a responsibility that is too great to be carried on alone. Therefore, architectural design must be a collective practice, where different ideas and experiences come together to create significant change in society.

It all starts with coffee.

The essence of design can be found in the most ordinary of things. I've been drinking coffee for as long as I can remember. Beyond being a mere beverage, coffee is a fundamental part of my creative process, deeply intertwined with my design philosophy.

Coffee is a quiet morning sitting around my grandparent’s kitchen table.

Coffee is a hot summer evening, enjoying conversations and the weather outside.

Coffee is catching up with friends.

Coffee is downtime before starting to work.

Coffee, ironically, is also moral support after midnight while said work is still getting done.

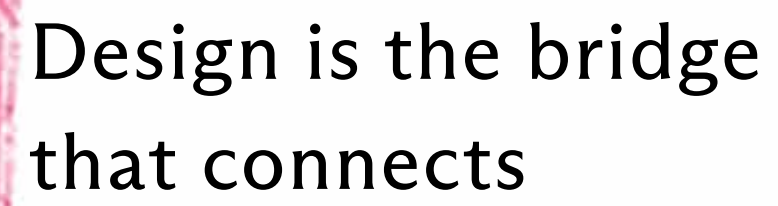
Coffee is also a nice break when you start making the inevitable mistakes that occur during the design process.

It isn’t just about the caffeine; coffee is a protagonist to many cherished moments and a catalyst for creativity.

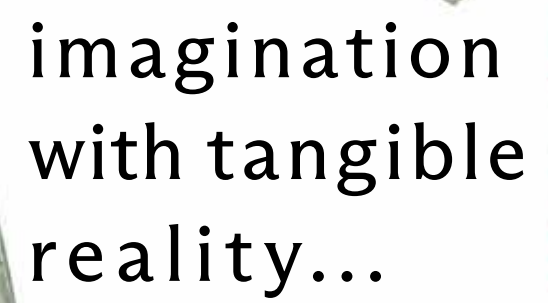
Just like traveling can be a resource for inspiration – *looking out*, I find a high value in looking at the familiarity, and the roots of oneself as a source of inspiration, friends and family – *looking in*.

Design isn't just about creating something pretty; it's about storytelling, evolution, and finding beauty in unexpected places. It is the bridge that connects imagination with tangible reality, essentially laying in its ability to enhance functionality, evoke emotions, and improve overall experiences. For me, the mundane stories or daily-use items that have accompanied me through different phases of my life have shaped my perspective and influenced my creative journey—a blend of personal history, imperfection, and...

a passion for
exploration.



Design is the bridge
that connects



imagination
with tangible
reality...

II. Visual Studies

c.

Rendering Systems

Fall'23 | Prof. Seth Thompson





movie night



all-nighter



midnight snack

midnights