

ARCHITECTURE PORTFOLIO

5th year, Bachelor of Architecture
Works from August 2021 - December



TABLE OF CONTENTS

ASOS SELECTED WORKS

POSITIONING STATEMENT	03
ALUMNI DESIGN AWARD	
ALMONO GREENS COMPLEX	04-08
48-400 ADVANCED SYNTHESIS OPTIONS STUDIO I	
TIME + TIDE	09-16
48-600 ASO SUMMER STUDIO GENERAL	
CONSTRUCTION ENGENDERED	17-24
48-500 ADVANCED SYNTHESIS OPTIONS STUDIO III	

POSITIONING STATEMENT

ALUMNI DESIGN AWARD

As a fifth-year graduating architecture student who learned within the thematic connections of CARE, Materiality, Aesthetics, and Extractivism, I've become interested in the fluctuation of human-nature-power relations through architecture's lens. From traveling back to the very start of the Anthropocene, I investigate our biophilia, or the inherent aesthetic preference for nature and adaptation to sustenance through generations of evolution, alongside surfacing the axis of power and performance in the economic engine of societies.

I strive to design for issues and future potentials alongside nature, biologically, economically, and psychologically. Through the projects in this portfolio, I expand my scope to understand the narratives and opposition to formulate a standing position on these issues.

The first three years of my architectural study practiced understanding through research of data via diagramming, mapping, and mobile 2D representations. In the final two years of studio, my focus shifted to creating narrational immersion through research synthesis with tactile, movable, and mobile artifacts that integrate scales of time.

As I continue my work toward the end of my undergraduate education, I prepare to emphasize the built environment's conditional awareness, environmental constraints, and fragilities. I aim to design for the unpredictable changeability we must envision to sustain society.

ALMONO GREENS COMPLEX

48-400 Advanced Synthesis Options Studio I

“Cultivated - From Farm to Building”

Location: Pittsburgh, Pennsylvania

Year: 2021

Duration: 6 weeks

Instructor: Jeremy Ficca

Collaborators: Xiaoyu Kang

The Almono Greens Complex project is situated on parcels 61 -64 in the flats district of the Almono site, Pittsburgh, which is in close proximity to the Hazelwood neighborhood. After studying the Almono site and its relationship with the adjacent neighborhoods, the factory and housing are used as a means to create a more direct connection between the residents and the vacant lands.

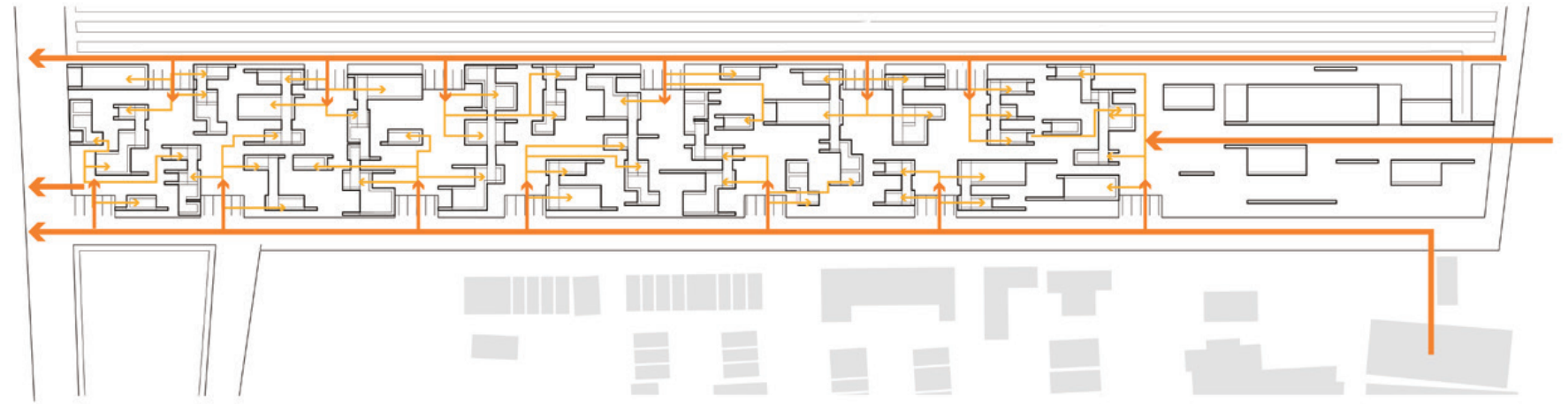
The project explores the potential of regenerative material flows and harvested building materials in the context of Pennsylvania agriculture. It focuses specifically upon the ecologies of industrial hemp to consider the prospects of farming, processing, and building with hemp in the postindustrial landscape of southwestern Pennsylvania.

The process yields a series of questions that are informed by the constraints of place, program, and material process. Through confronting the non-extraction, urban agricultural practices, and bio-based materiality, this process will lay the groundwork for the conceptual basis of the project and therefore must be given ample attention.

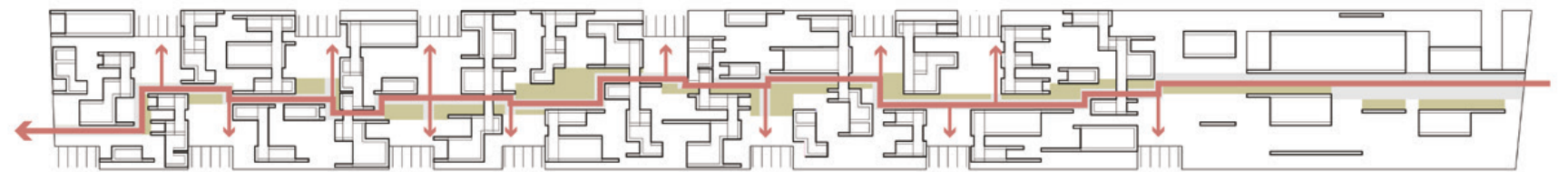




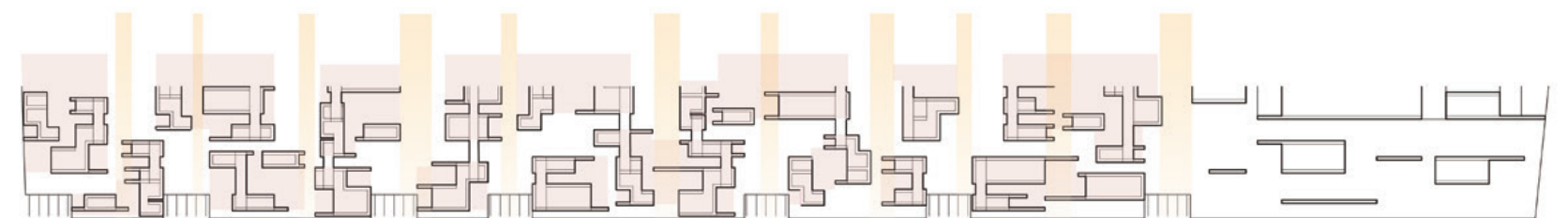
**Hazelwood / Almono:
Site Analysis**



Site Circulation Diagram



Central Alley Circulation Diagram

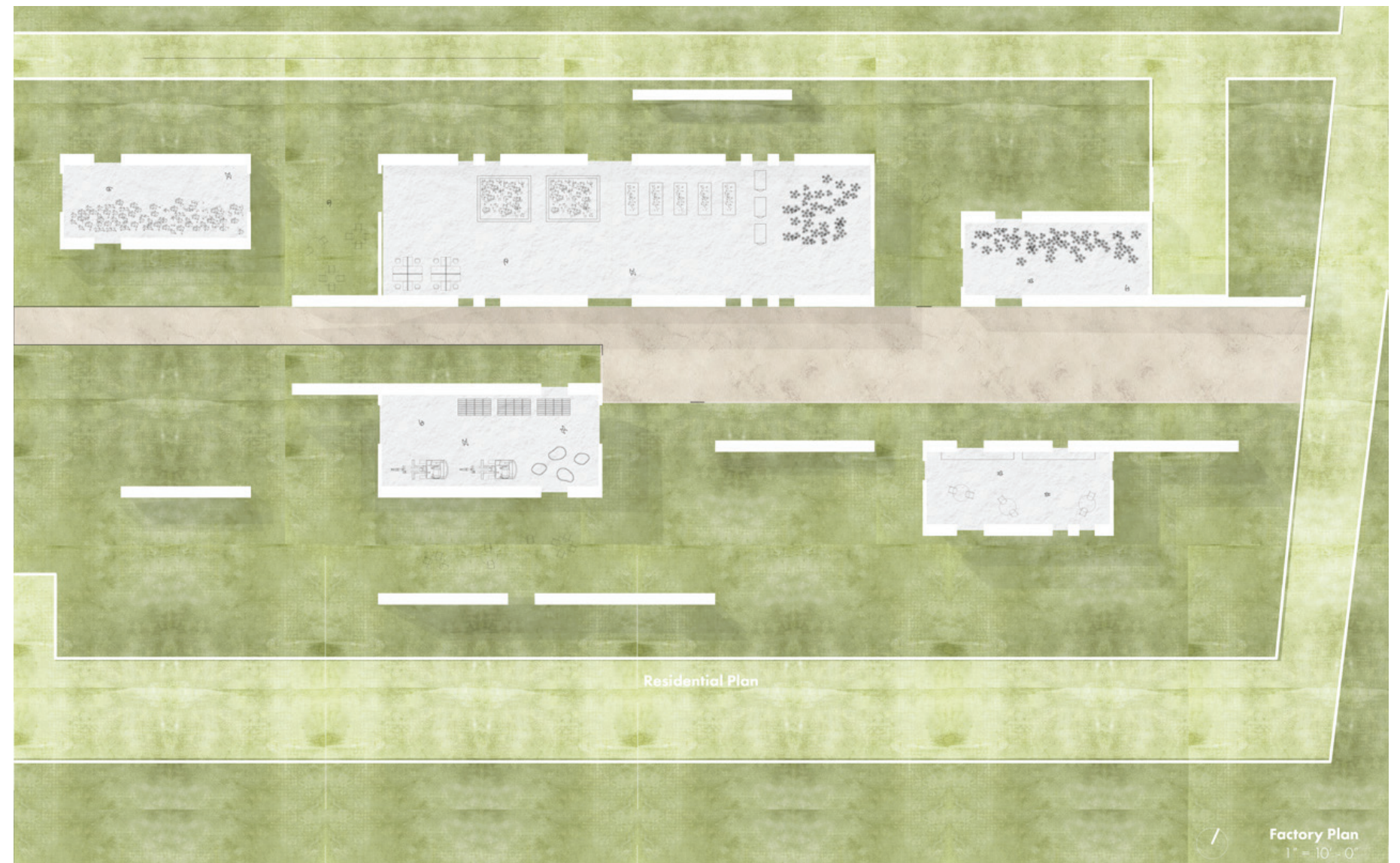


View Diagram

The factory is divided into individual parts based on the different functions that happen within it, with the main flow being storage for raw materials, processing space, and storage for processed materials. The secondary flows consist of the office space for the factory, as well as storage for mechanical farming equipment. The materials then flow directly into the housing site for housing construction.

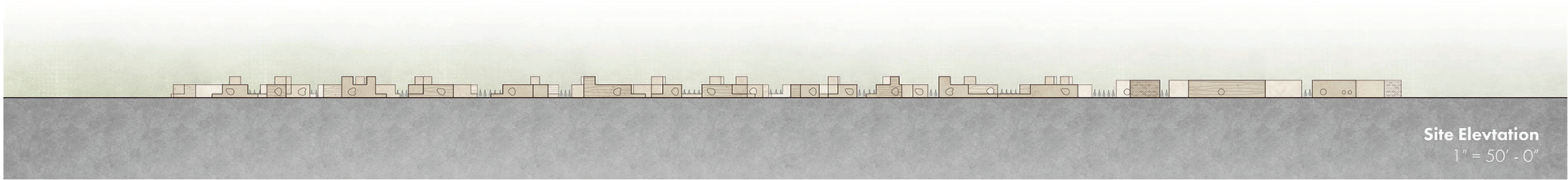
The housing would be constructed in different phases: originating from the facility, the houses will slowly be built along with the site. The central alleyway will first be constructed to mark the intended growth of the site. Both facility and housings remain as one floor only, and the roof of them are taken advantage of as gardening opportunities.

The factory, or facility, serves as a generator for harvested hemp products to be transformed into building materials, which are then delivered down the parcels to build housings directly adjacent to them. The site strategy elaborates on the concept of Urban Farming, which is the practice of cultivating, processing, and distributing harvests in or around urban areas.

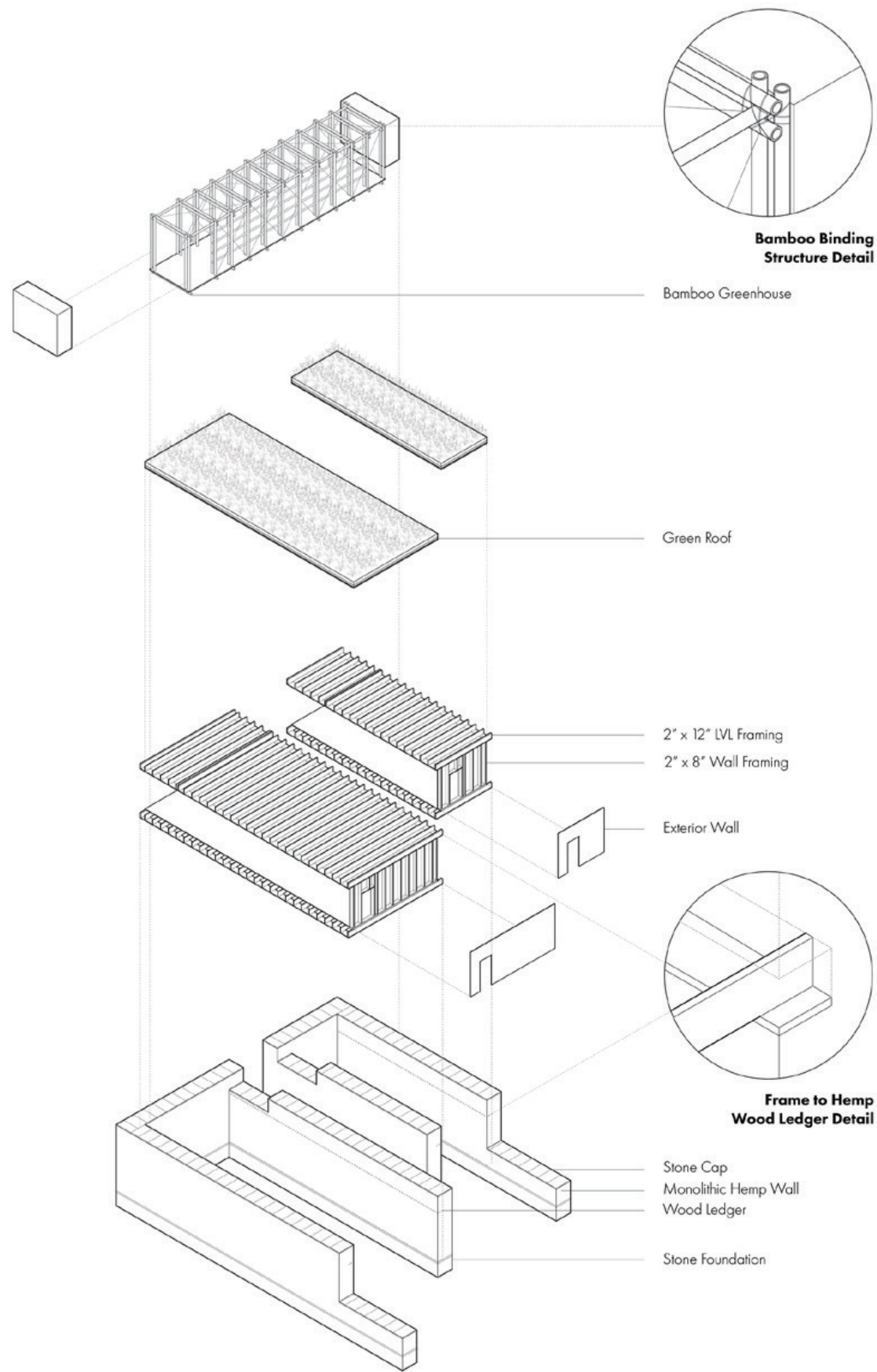




Site Plan
1" = 50' - 0"



Site Elevation
1" = 50' - 0"



Exploded Structural Axonometric Drawing





LAY FOUNDATION FOR WALL CONSTRUCTION

PUT UP FORMWORK TO FRAME WALL

FILL FORMWORK WITH HEMP-CRETE MIXTURE

MOVE FORMWORK UP WHEN BOTTOM LAYER DRIES

WINDOW TYPE #1

WINDOW TYPE #2

WINDOW TYPE #3

TIME + TIDE

48-600 ASO Summer Studio General

Location: Legazpi/Cauayan/Anibong, Philippines

Year: 2022

Duration: 4 weeks

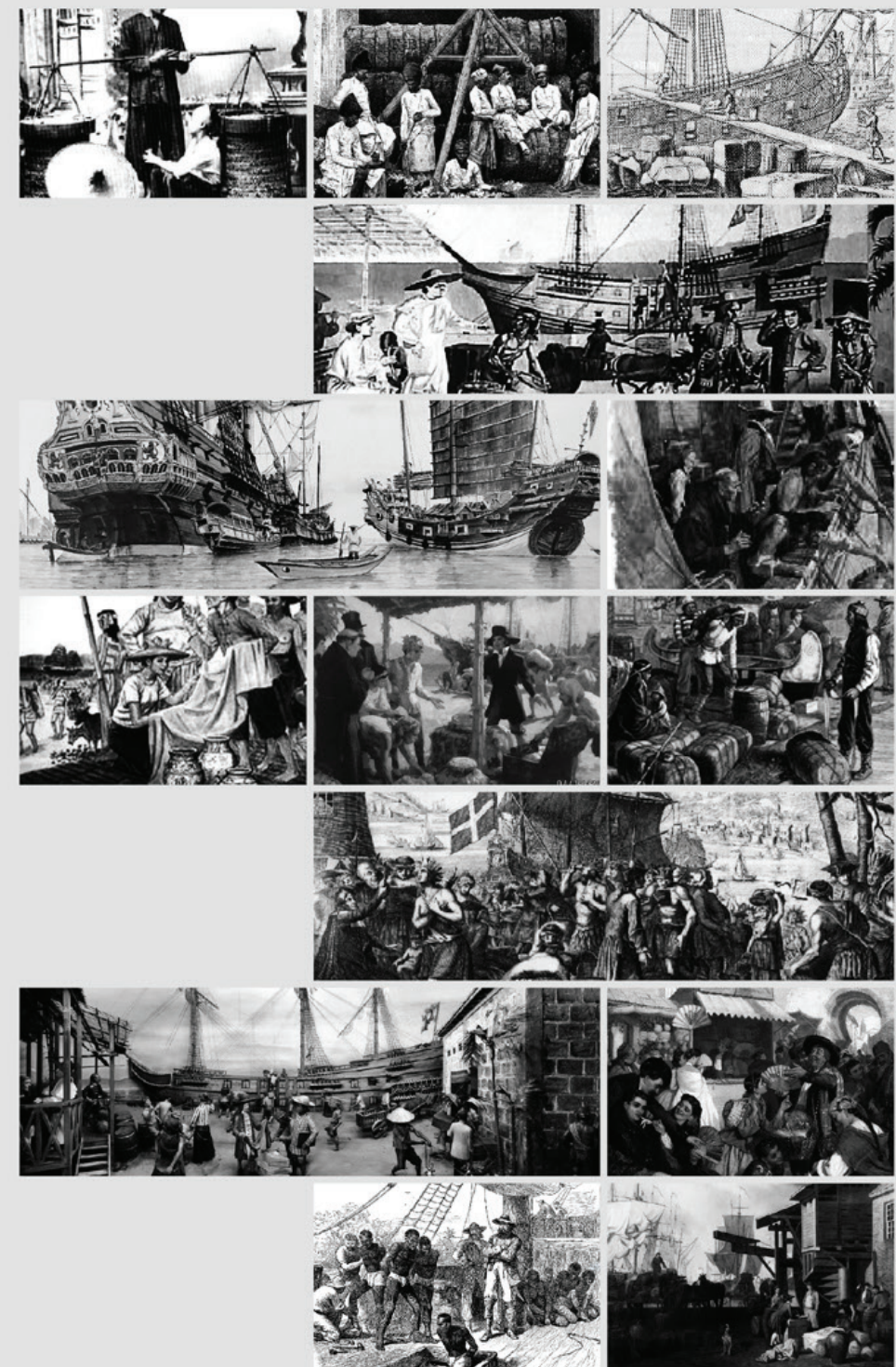
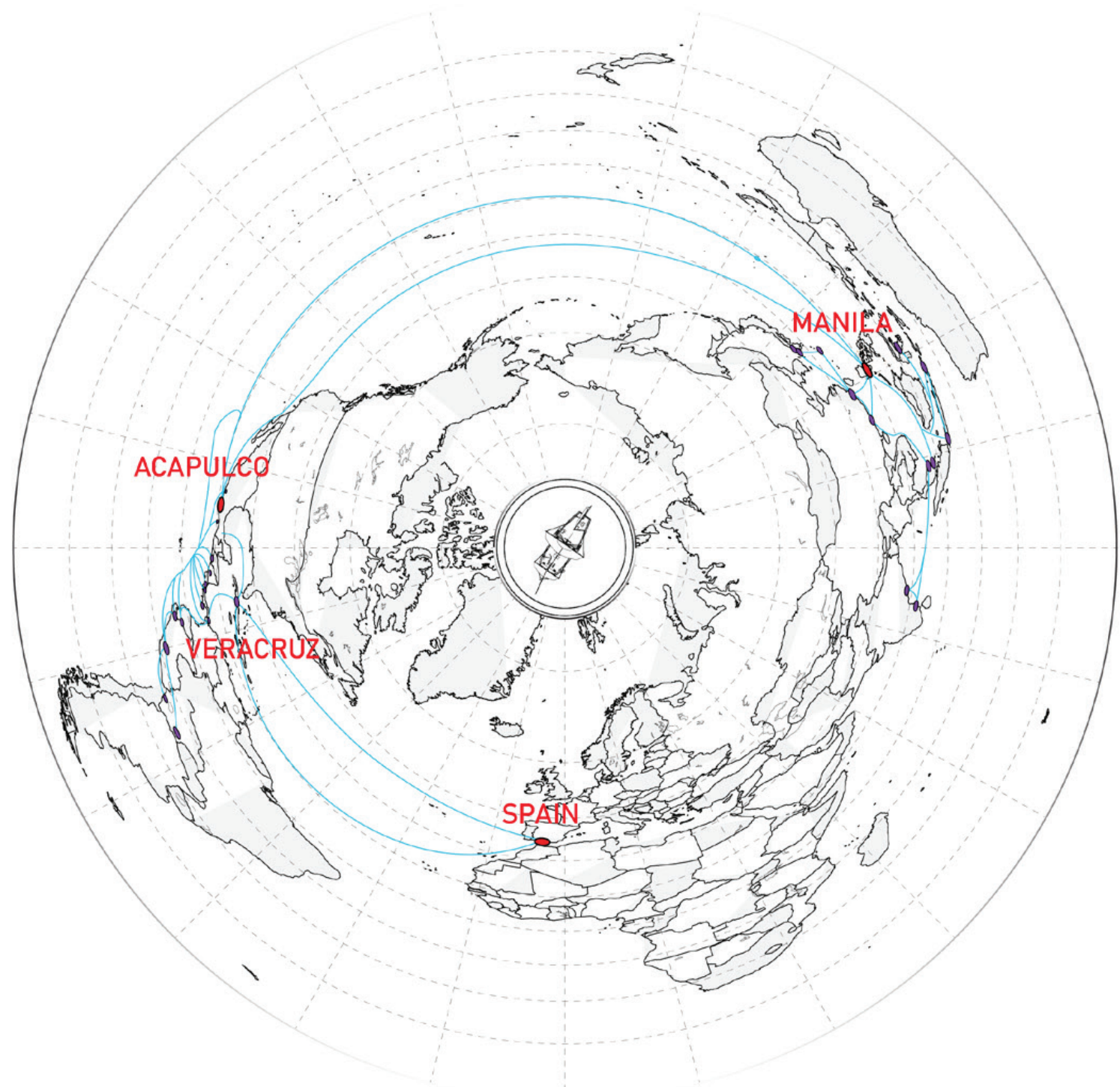
Instructor: Mary-Lou Arscott

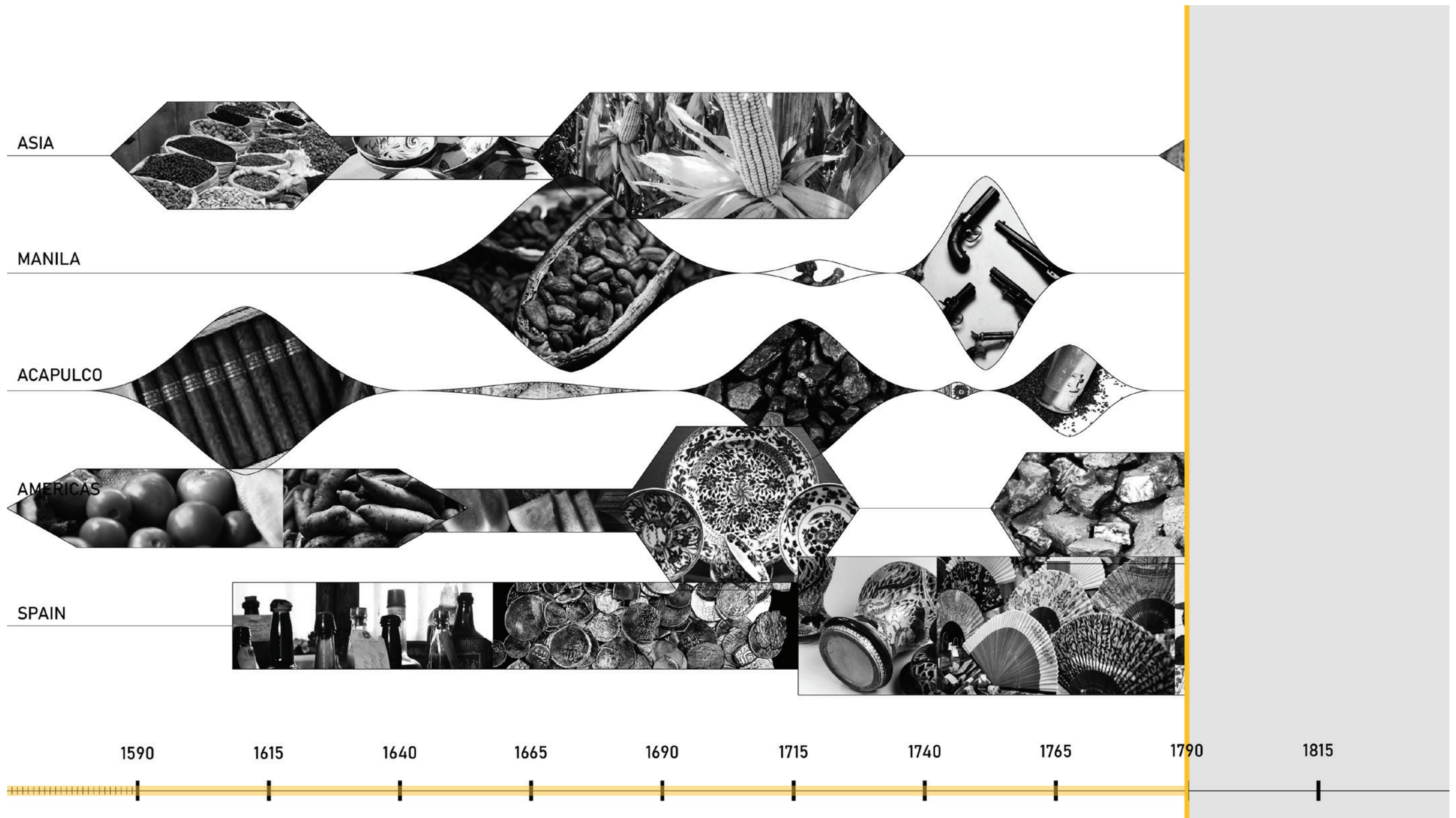
The typhoon events tie people's individual lives together and intertwine their experiences through this traumatic event. Through entanglement, suffrage, and resistance, people pass through the network and reach different outcomes. What are the seen and unseen forces that push the people through this network? Many regard natural disaster events as something that's destined or unalterable, and yet few realize that human activities are directly linked to the intensity and pain felt by the vulnerable. The narratives visualize the network, and the network makes one ponder the forces within its structure.

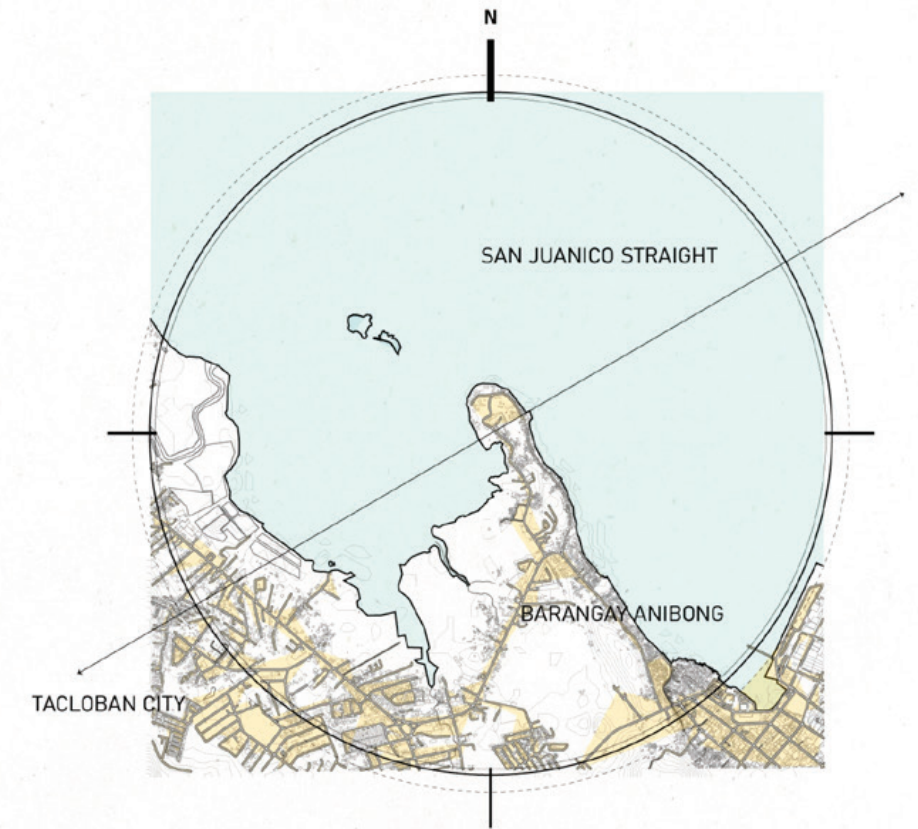
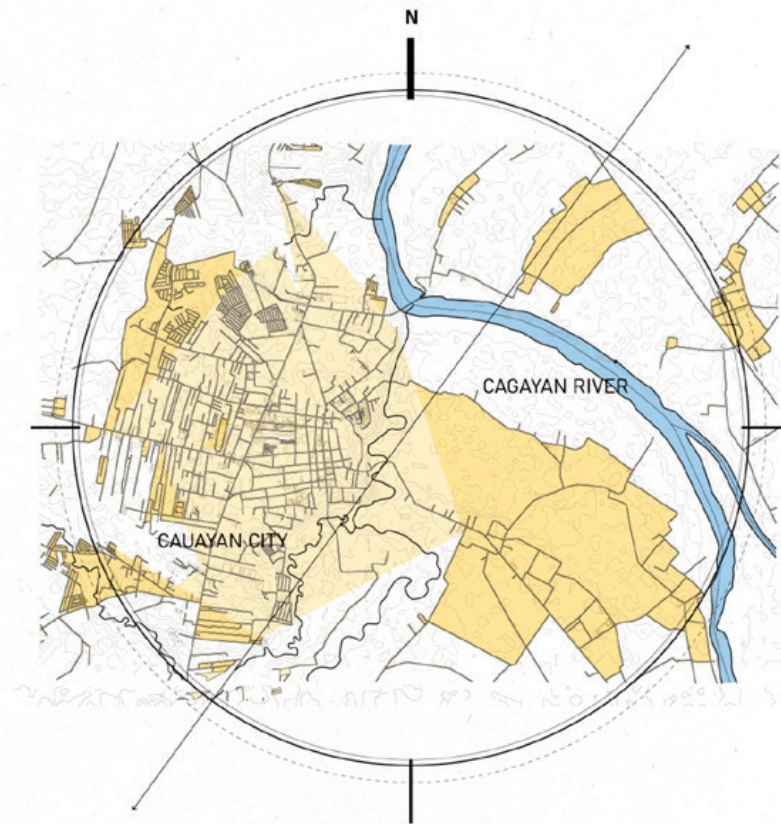
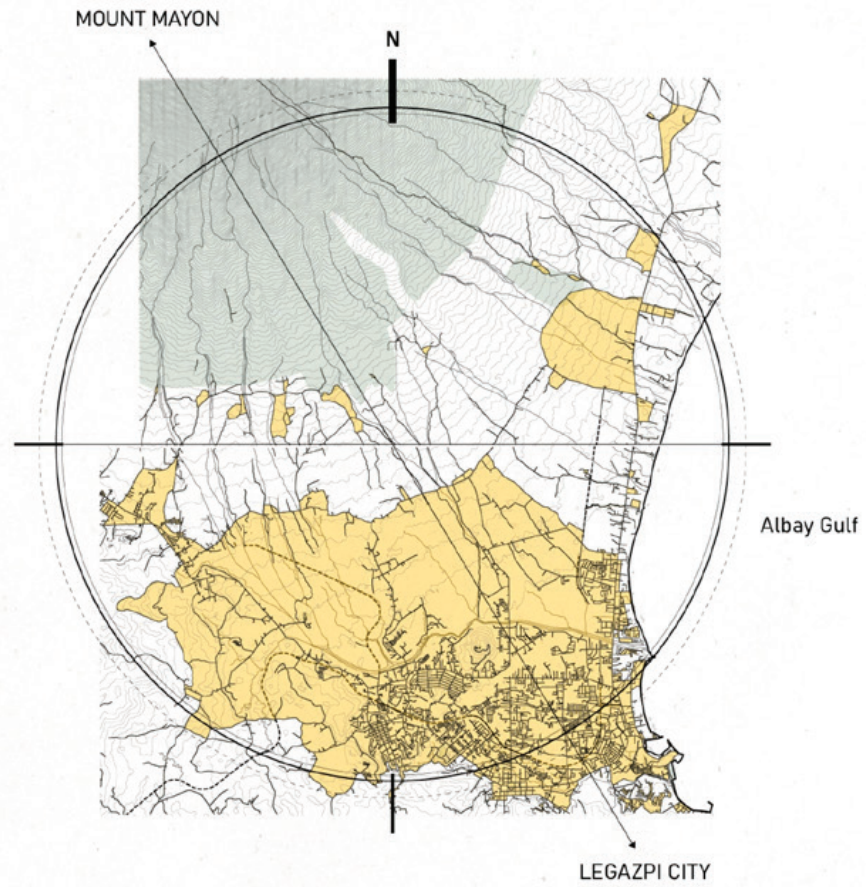
The project focuses on the archipelago of the Philippines, due to its geological location which experiences frequent, yet unpredictable tropical cyclones catastrophes annually. The current focuses are more similar to a passive response, rather than a holistic understanding.

The collective work would serve as a documentation of tropical cyclones understandings developed from research findings, and propose ways of rethinking the roles of architecture and architects in the face of repetitive yet unpredictable natural events: do we live for disaster response, disaster prediction, or disaster adaptation?





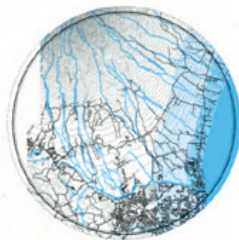




HUMAN

visual and physical interaction with forces of nature

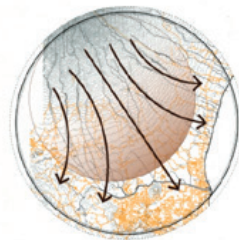
access roadways and vantage point



WATER

connection paths through means of water

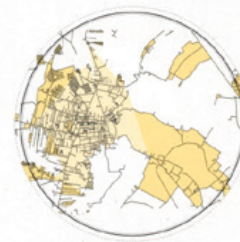
immediate coastal impacts during extreme weather conditions



LAND

direction of land flow and elevation drop

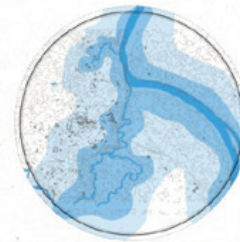
impact direction with landslide hazards



NETWORK

village location and distribution of streets

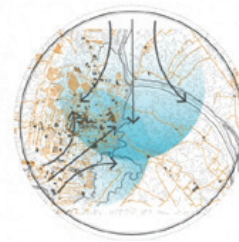
colorization of areas with human activity gatherings fostered by network



RIVER

river potential impacts on nearby regions during extreme weather

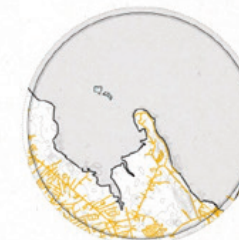
easy access to water from city provides efficiency



FLOOD

direction of flood flow from North Cagayan and Magat Reservoir

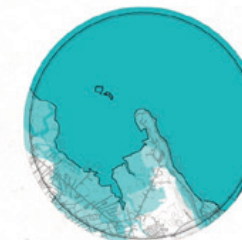
typhoon directly travels from east to west across the city



LINKAGE

anibong has strong physical connection with the coastline directly

streets, homes and sites are built directly adjacent to the sea



FLOOD

coast takes direct impact during an extreme weather

buildings along the coastline become "barriers" and destroyed

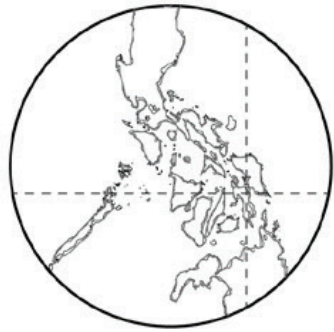


FLOW

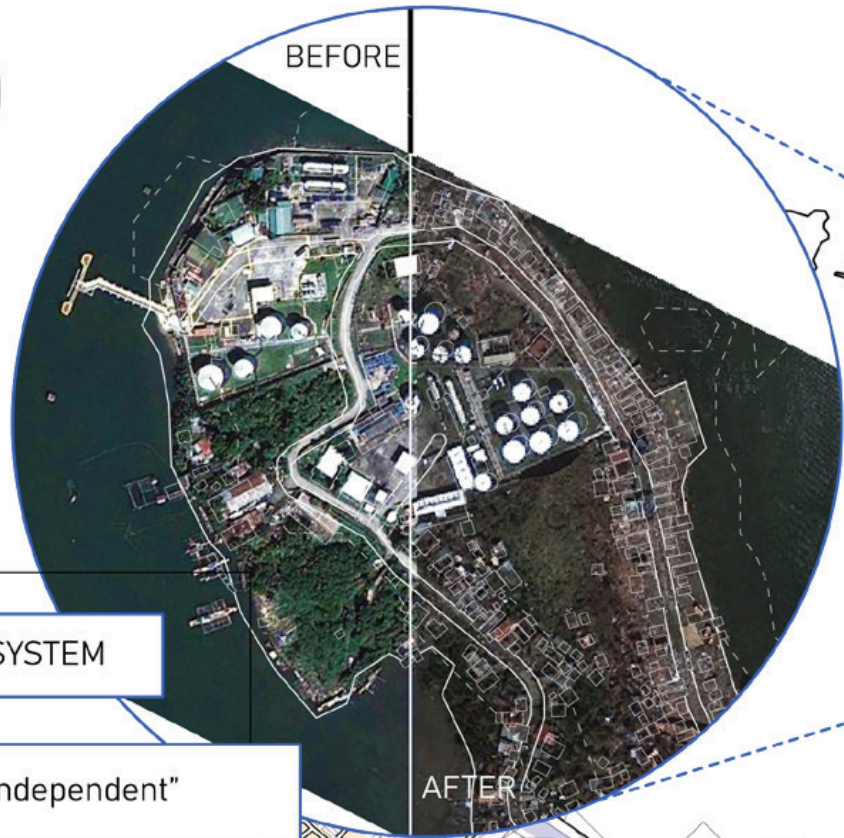
direction of typhoon flow from the Cancabato Bay

anibong is situated at a nook in the bay, will take stronger impact





ANIBONG, TACLOBAN



NATURE'S ROLE IN SYSTEM

the "independent"

strong visual and physical presence

important fishing grounds

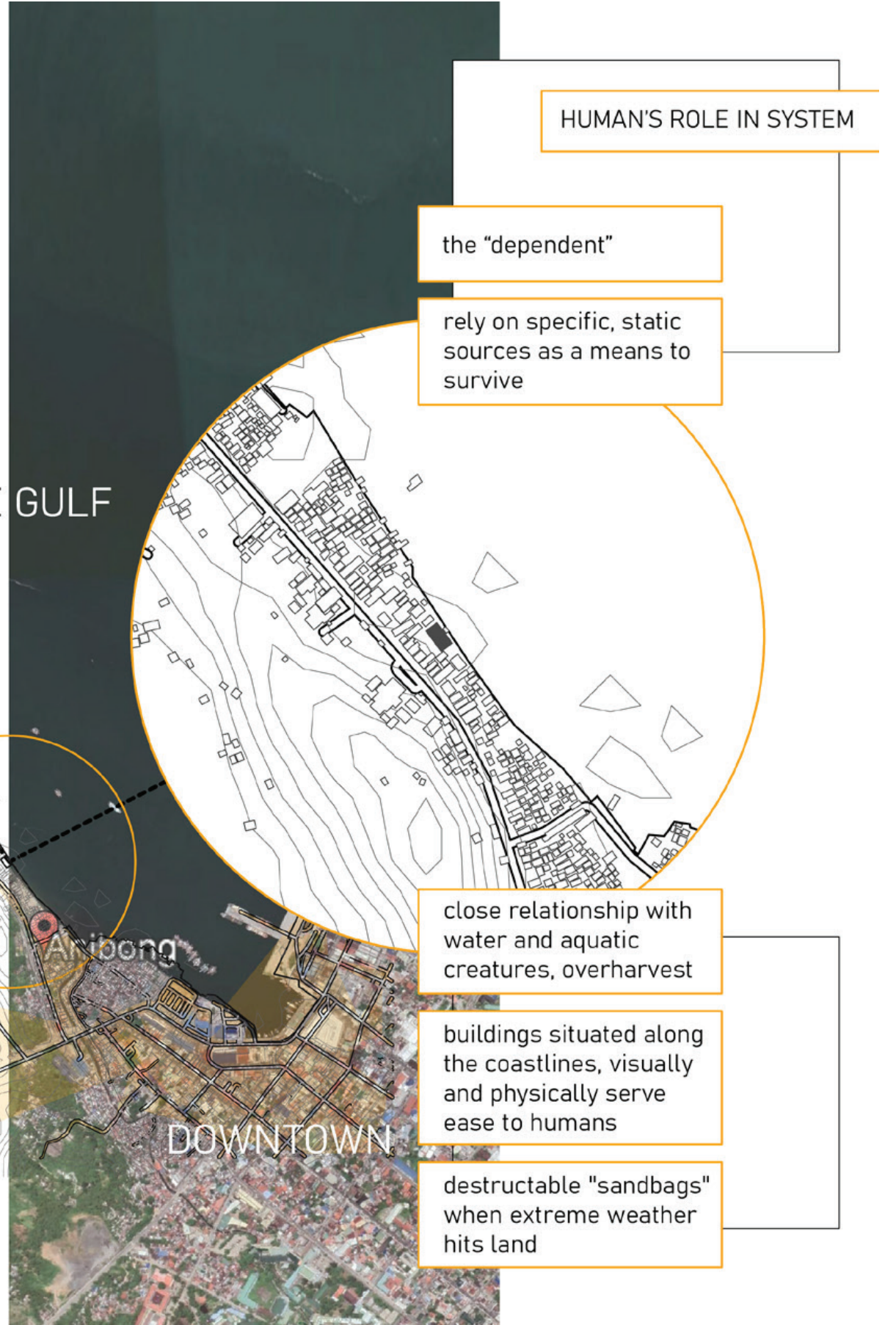
sustain the liveliness of the cities

create respectable yet infiltrate-able boundaries between elements of the existing system

formally make conscious of the invisible forces of nature



LEYTE GULF



The research helped me to develop a strong foundational understanding of Philippines and its three cities geographically, socially, and historically. From there I gathered a series of narratives that forms connections to the three lenses of my focus, and these narratives reflect my learning and thinking towards potential conceptual or structural interventions. These narratives are currently not restricted to a specific city: Although there are geographical differences to the three cities of focus, but the structures speak more to that: they are narratives that respond to enviro-socio-political situations.

The narrative starts with diagrammatically representing the complex interactions of Filipino society, as layers of relationship and interpretations build and intertwine with each other. Then I connect the idea of a person's beliefs and mindset is slowly shaped by its environment, how it **RESPONDS** to what it witnesses visually and physically, and represents that formally through a sequence of time. The narrative starts with the flow, of humans or wind or living beings or the spirit of resistance. Their imaginative paths of facing blockages is diagrammatically represented, and forms an intriguing composition of response as the blockages or constraints themselves start to take shape. The narrative starts with laying out the constraints diagrammatically.

The external and internal forces would start to manipulate the boundaries of the constraints, to which the boundaries would start to speak to each other. The collaboration would allow for opportunities of occupation, shelter, and survival, as well as interactions.



LAWLESS

AGE 27, HAIYAN, STORM SURGE

We were scared because it was so dark at night. We heard stories of people going to houses looking for anything we could get. Me and my brother-in-law had to stand guard or sleep outside under a tarp.

The barangay officials said we had to maintain a wall around the barangay to make sure no one came in. We had a system of knocking on the walls to signal that a thief was entering.



BORN IN CHAOS

AGE 21, HAIYAN, STORM SURGE

Twenty-one-year-old Emily gave birth to her daughter Bea Joy Sagales in a makeshift centre at Tacloban's airport on Monday. Emily had to swim and cling to a post to survive the storm surge.

She named her daughter after her own mother, Beatriz, who was swept away by the giant waves.

Ortega's husband was in the safety of the capital Manila, which is about 360 miles northwest of Tacloban. He did not know what had happened.



VEHICLE OF REMEMBRANCE

AGE 38, HAIYAN, STORM SURGE

I protected my taxi at a school's covered driveway, knowing it would provide livelihood after the storm. Before the storm, I sent my four children to my sister's house and my wife stayed at our house. I was crying because I couldn't find my wife after the worst of the storm.

Now when I gets passengers from out of town, especially tourists, I bring them to the memorials for the mass graves aside from the usual tourist spots.



WINDOW OF OPPORTUNITY

AGE 37, HAIYAN, STORM SURGE

When the storm passed, I rode on a motorcycle driven by my cousin's husband to my mother's home. Along the way, we saw bodies lined up and mountains of garbage.

I was able to find regular work because of the typhoon radio. Maybe it was God's will that I got the job I am thankful because of God's mercy, my experience of Yolanda had a positive outcome.



SCAR

AGE 72, HAIYAN, STORM SURGE

I watched in horror as the sea rose like a wall, unlike anything I had ever seen. I tried to hold on to him—Naro! Naro!—but he was gone.

I wish I were dead, too.

The wound will heal. But the memory of what happened that day will leave me only when I die.



RESILIENCE IS EXCUSE

AGE 22, HAIYAN, STORM SURGE

Resilience is a well-known Filipino trait. A lot of people say we are very enduring and adapt to whatever life throws at us.

Throughout the years, I've learned that resilience of a community is not always a good thing. It blinds people, resulting in a failure to provide long-term, effective, proactive and sustainable solutions. It becomes an excuse to hold off from taking action against those who are accountable.

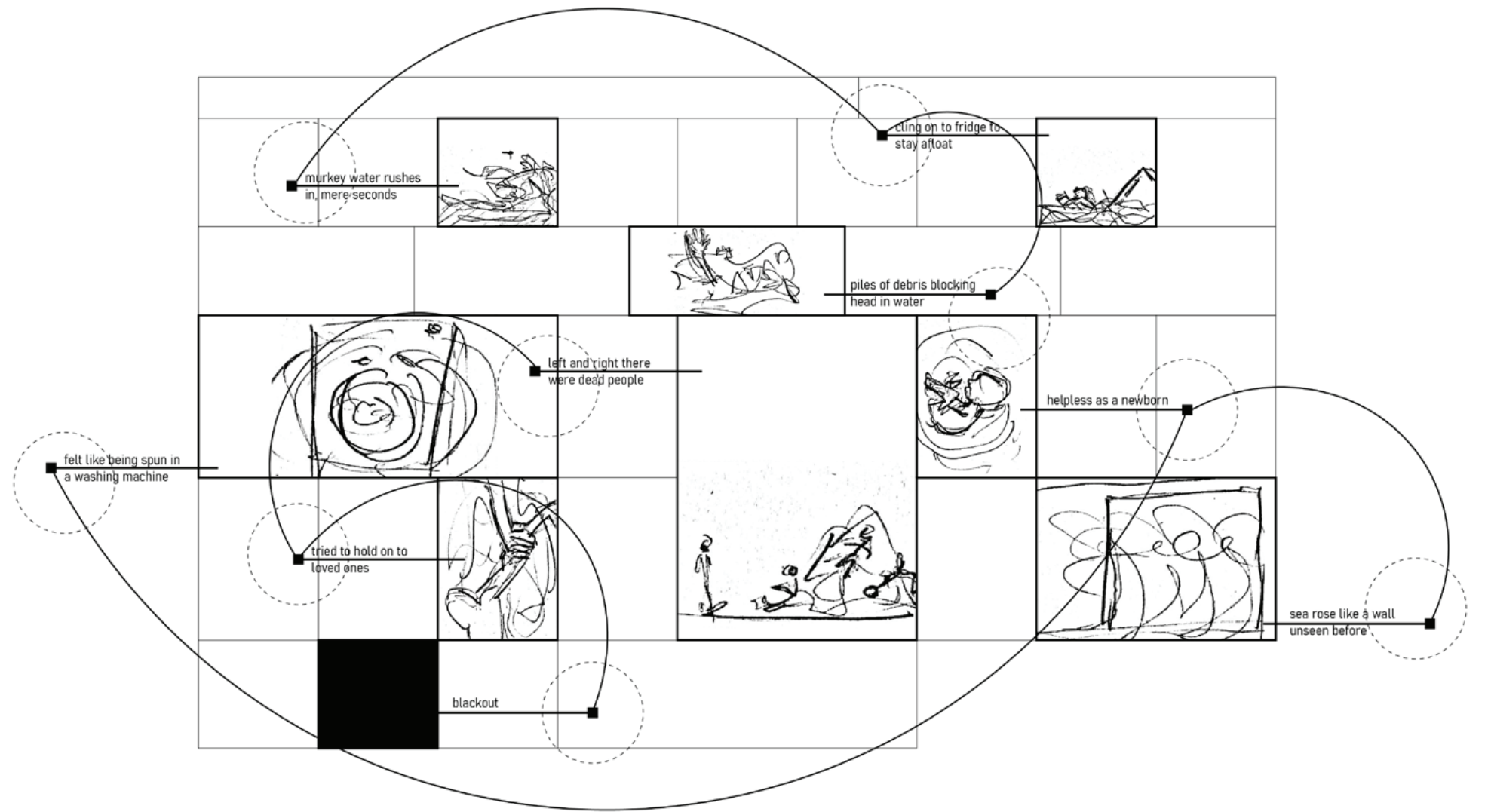
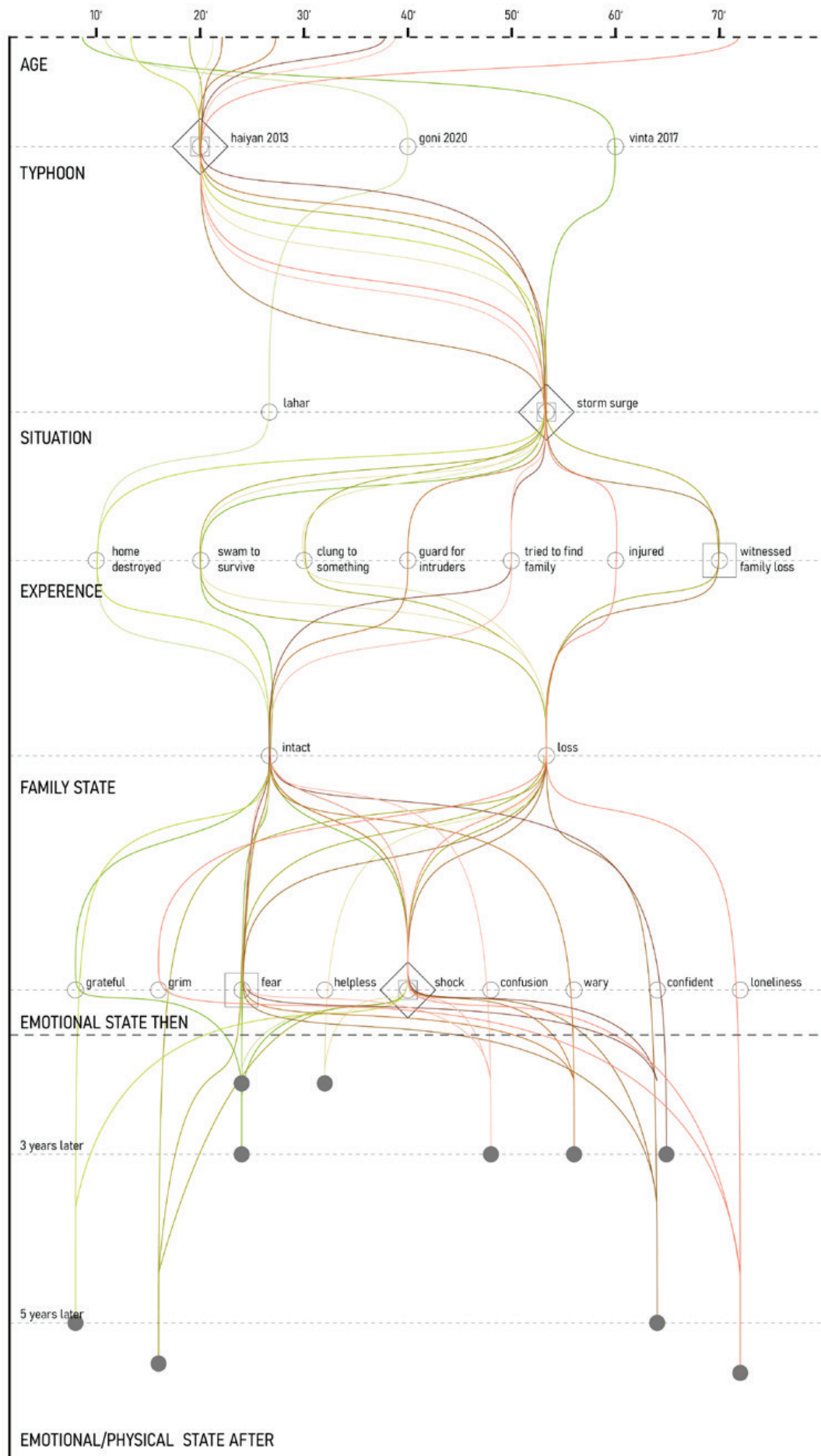


INTERTWINED NETWORK

The typhoon events tie people's individual lives together and intertwine their experiences through this traumatic event. Through entanglement, suffering and resistance, people pass through the network and reach different outcomes.

What are the seen and unseen forces that pushes the people through this network? Many regard natural disaster events as something that's destined or unalterable, and yet few realise that human activities are directly linked to the intensity and pain felt by the vulnerables.

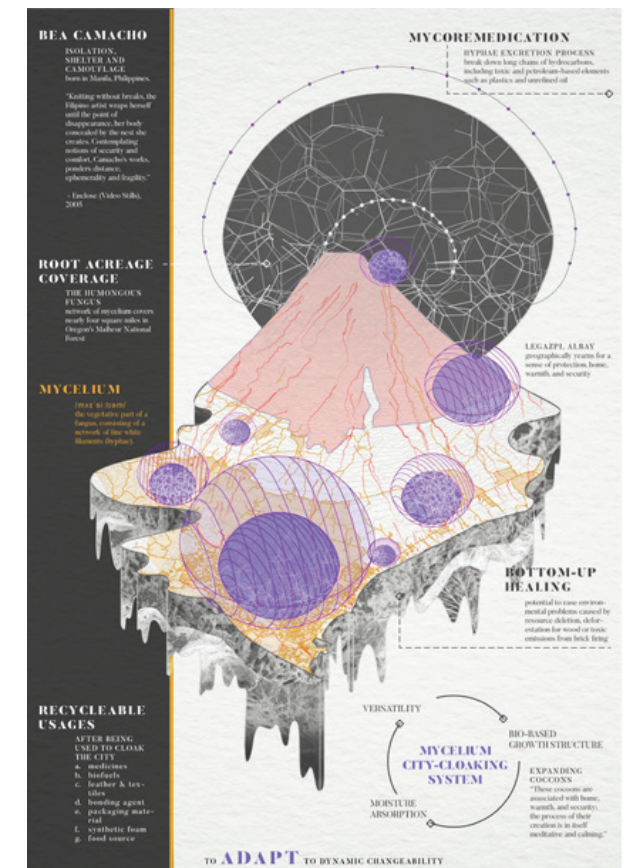
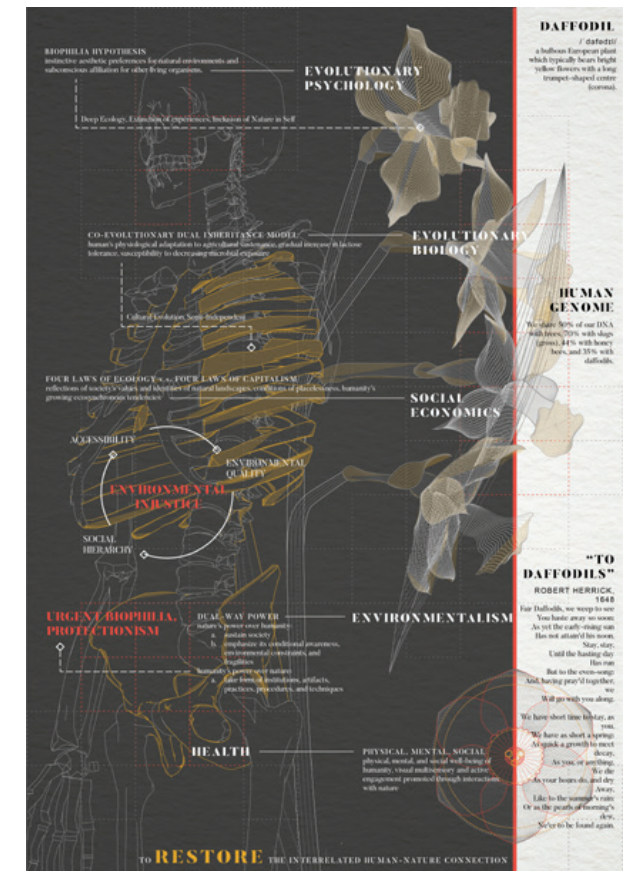
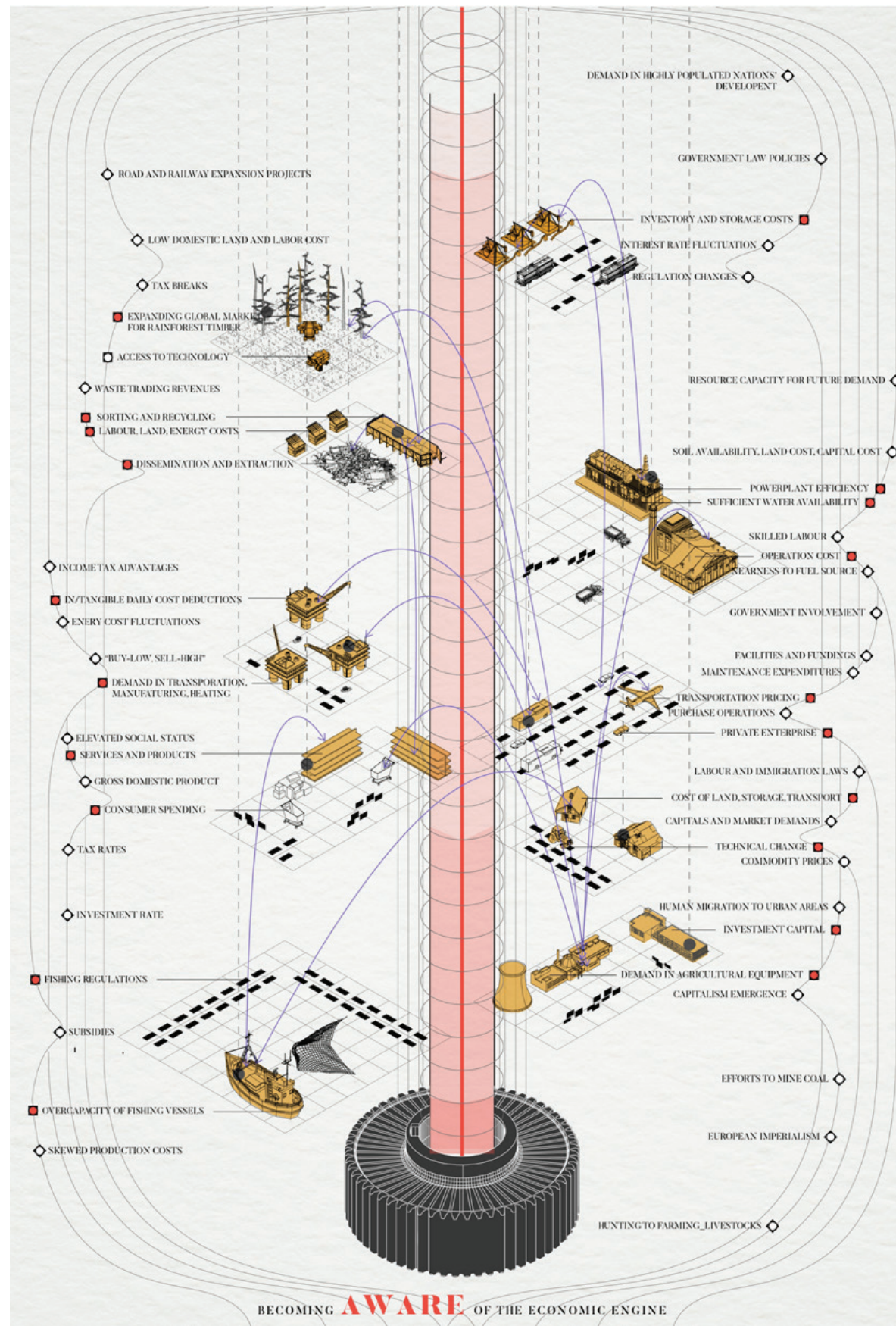
The narratives visualize the network, and the network makes one ponder the forces within its structure.



Stemming from the narratives of survivors in the extreme weather, I explored the purpose or meaning that we could carry forward with them. I questioned what the narratives are telling us beyond being descriptions of what has happened physically and mentally to the individuals. What is a larger application that can be made to the entire humanity? Is the purpose to raise awareness of the climate change? To undo what we've done to try and "restore" the planet's state and reduce destruction? Or are we trying to move forward with what we have and adapt while attempting to slow down the deterioration?

From there, the three possibilities emerged: To be aware, to restore, and to adapt. More specifically: to be aware of the economic engine, to restore the interrelated human-nature relation, and to adapt to dynamic changeability. A series of questions helped me to further define the three paths. Where do all three paths lead to? Are they combined? Implemented in different stages? What scale are they on in terms of geology and time?

The investigation is continued in Spring 2023 as my Thesis project: **"Intertwined Network: Interpreting Community, Resistance, and Architecture in Tropical Catastrophes"**.



CONSTRUCTION ENGENDERED

48-500 Advanced Synthesis Options Studio III

Location: Pittsburgh, Pennsylvania

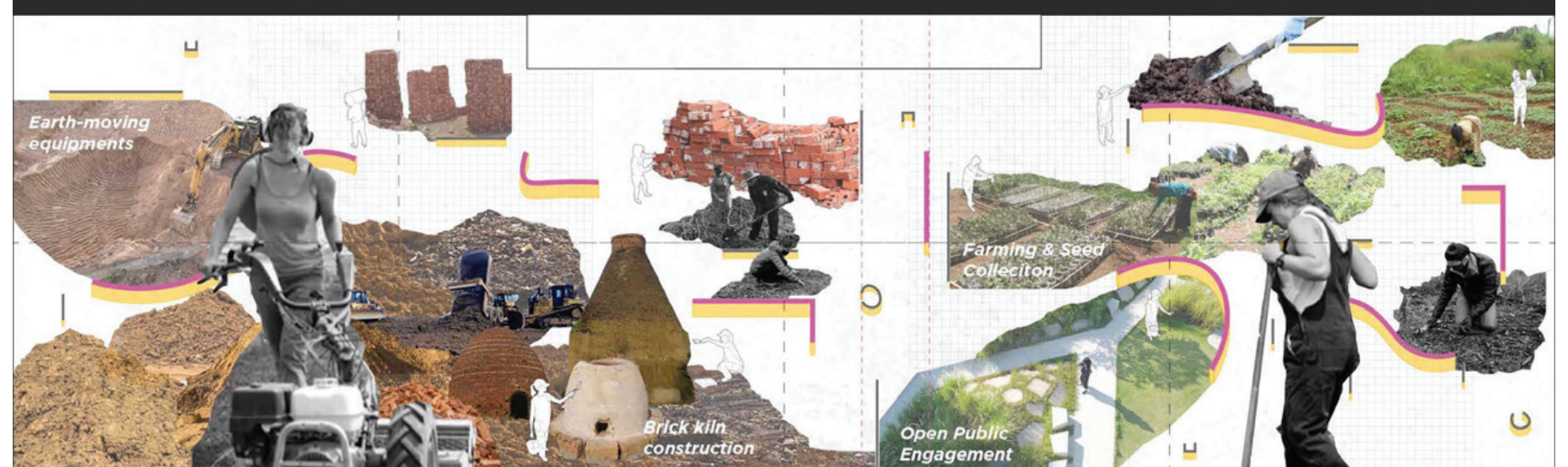
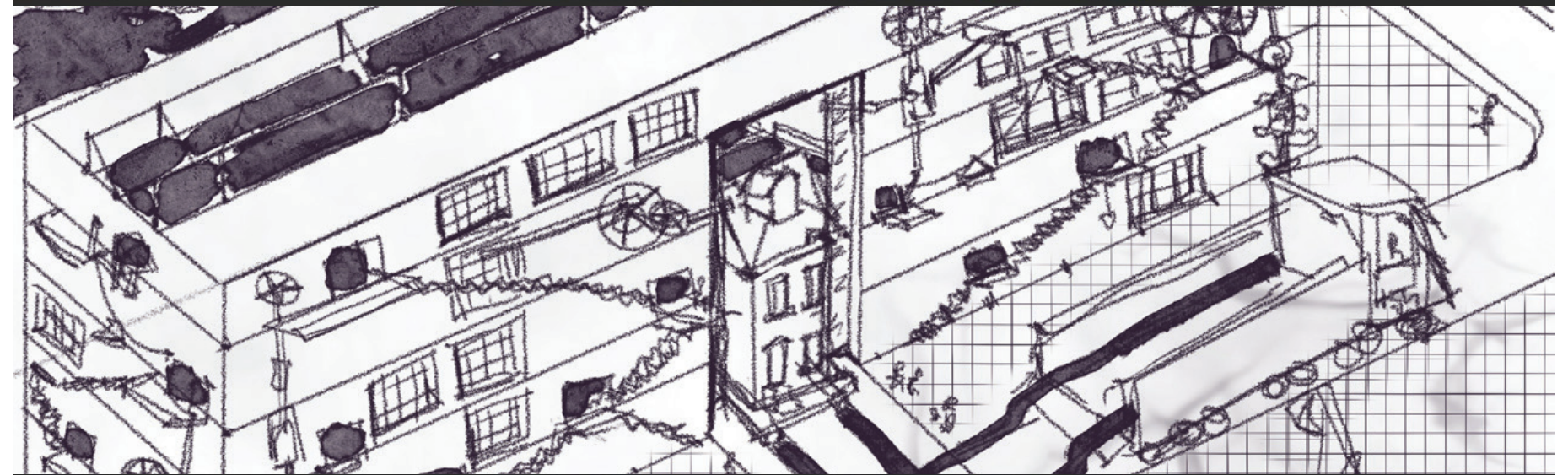
Year: 2022

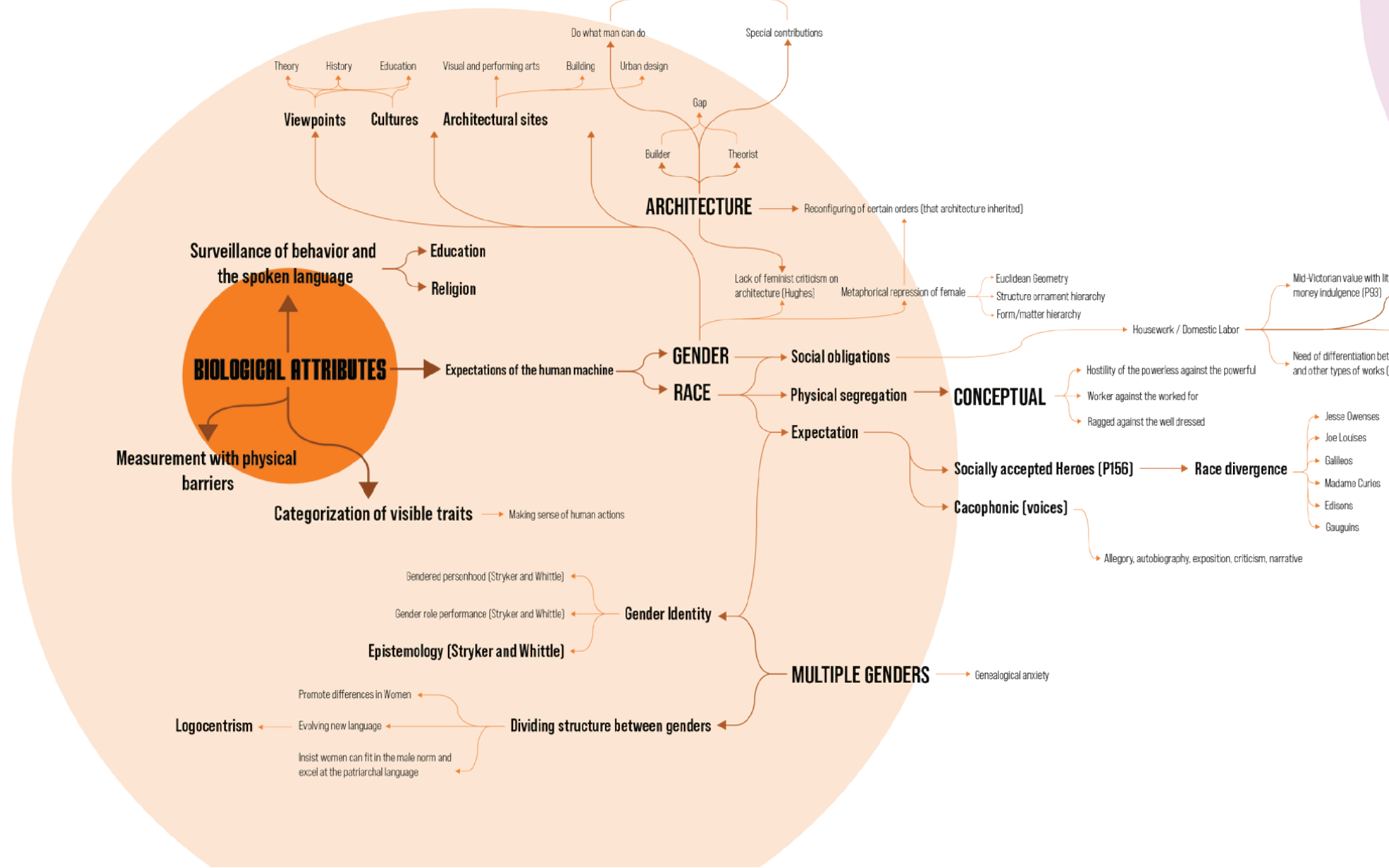
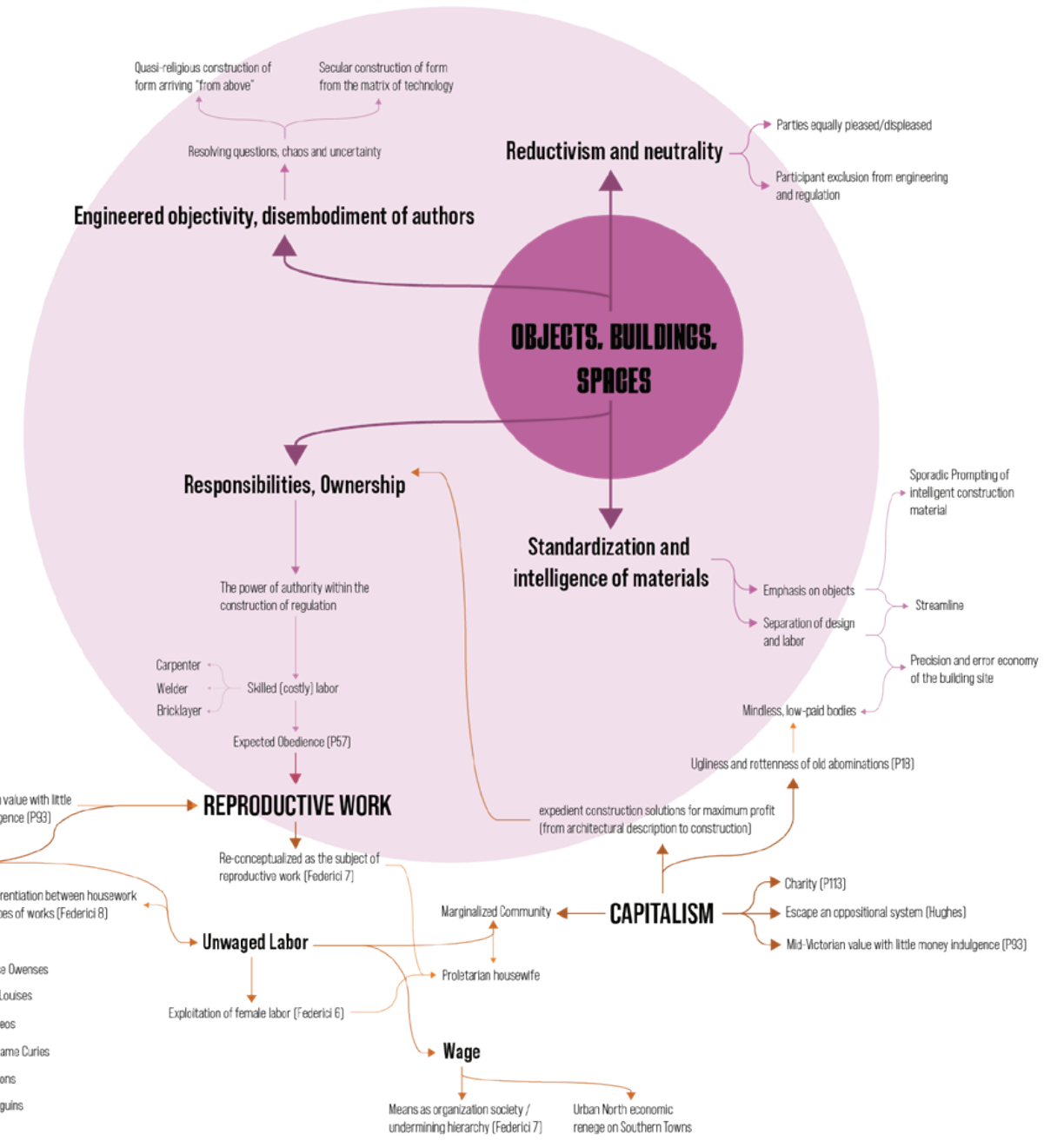
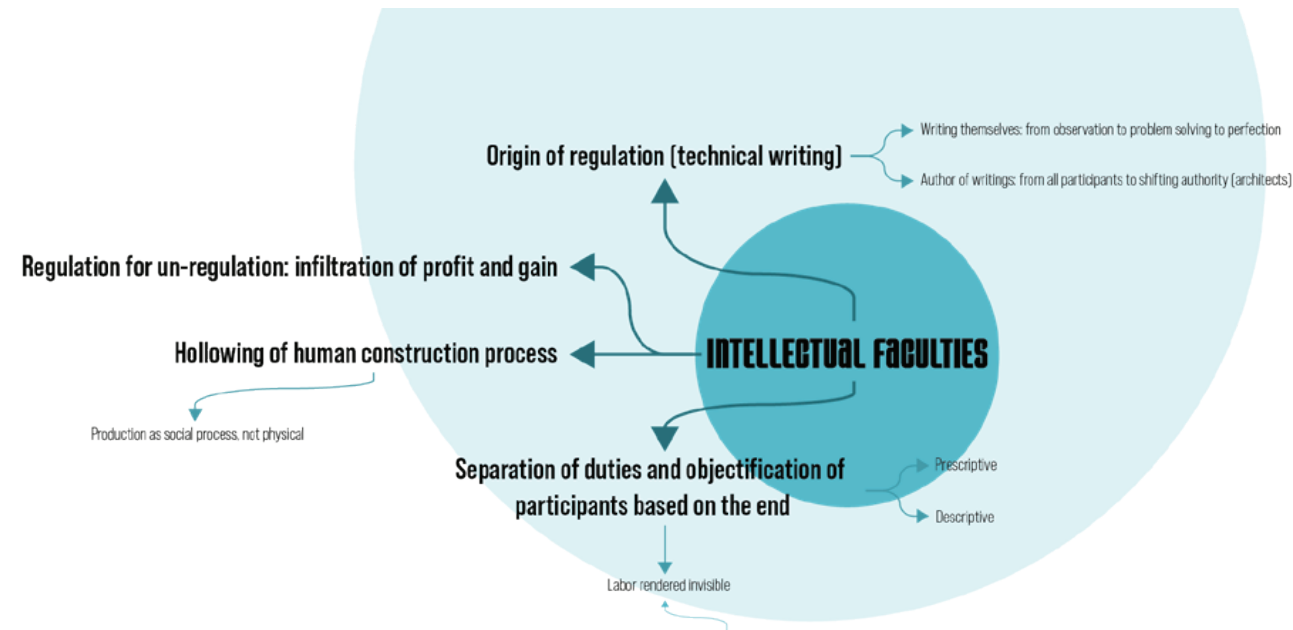
Duration: 4 months

Instructor: Mary-Lou Arscott

Masonry is a trade that encapsulates a holistic sense of skill, knowledge, and time. It can take mere seconds to learn how to lay a brick or years, decades, and generations to master it and pass down knowledge. It is a synthesis of decision-making, collaboration, calculation, calibration, and creativity. But more importantly, it is a trade that is predominately male. Searching terms such as “bricklayer female” online will show horrendous images of women making poses or wearing sexy costumes, a vivid representation of being undermined by the trade, the media, and society.

How do we bring an inclusive environment that provides for those interested in masonry, or all trades, to realize their maximum potential with pride and opinion? We anchor that question starting from 7800 Susquehanna. From the lens of masonry, I began to investigate, and challenge existing conditions through writings, drawings, and a final model that serves as a synthesis of my semester’s work, my proposals and questions, on how we can establish that environmental equity.





Following the analysis of readings focussing on the experience and circumstances of people identifying as women, This manifesto interrogate the axes of race, gender and bodies to reveal attitudes which create and compound mechanisms of exclusion and exploitation from the perspective of regulation in the construcion matrix.

“To achieve adaptable concordance, how might construction engender greater elastic regulation for opportunities?:

The first three statements serve as the premise to change, the next five statements as detailed specifications, and the last statement as an overarching direction for the vision communicated through this manifesto.

This set of documents serves as the atlas leading an explorer across an unfamiliar territory to frame a position and an argument in the following works.

I. REGULATION UTILIZED as a MEANS TO FREE ONESELF FROM CONTAINMENT AND OBSERVATION.

To escape from the fragmented singularity of one's identity.

II. REGULATION WRITTEN as an EXTENSIVE ADAPTABLE ACCUMULATION OF MEMORIA in an EXPERTISE.

To trace back to the purpose of regulation creation.

III. REGULATION REFORMED THROUGH DISTINGUISHING SOCIAL RELATION FROM PRODUCTION RELATION.

To halter capitalism accumulation and work towards production of the "commoning".

To achieve adaptable concordance.

HOW MIGHT CONSTRUCTION ENGENDER GREATER ELASTIC REGULATION ?

- IV. REGULATION ACKNOWLEDGING THE FRAGILE SPECIFICITY OF REALISM.
- V. REGULATION EMBRACING LIMINAL LANGUAGE OF LOGOCENTRISM IN EMERGENCE OF MULTI-GENDER STRATEGIES.
- VI. REGULATION RECOGNIZING INTERVENING LABORERS AND INNOVATIVE ON-SITE SOLUTIONS IN SYSTEMS.
- VII. REGULATION TERMINATING SEXUAL AND INTERNATIONAL DIVISION OF LABOR AND WAGE.
- VIII. REGULATION CHALLENGES THE STABILITY OF REFERENT "SEX" AND EXISTING CATEGORICAL NORMS OF GENDER.

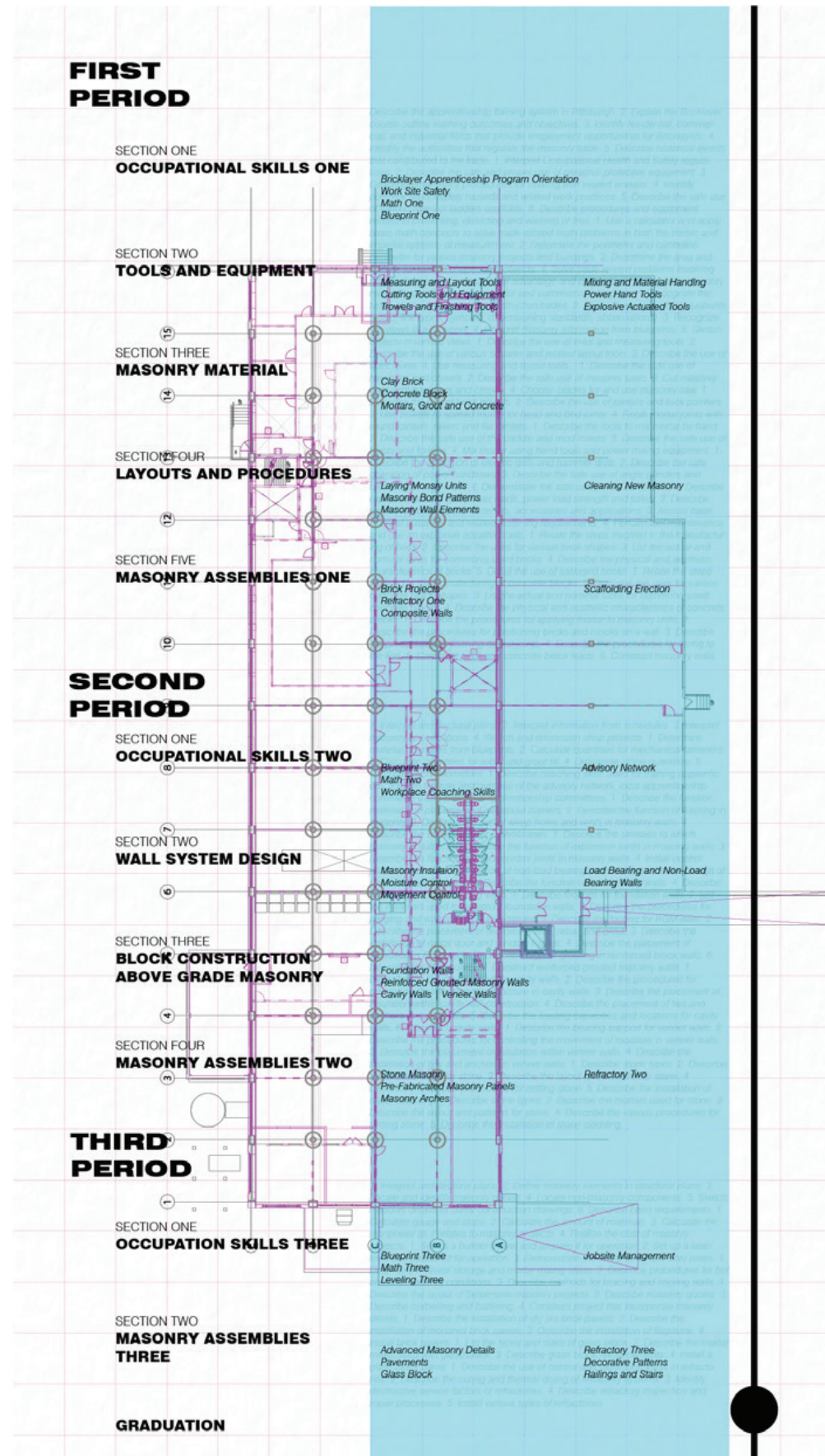
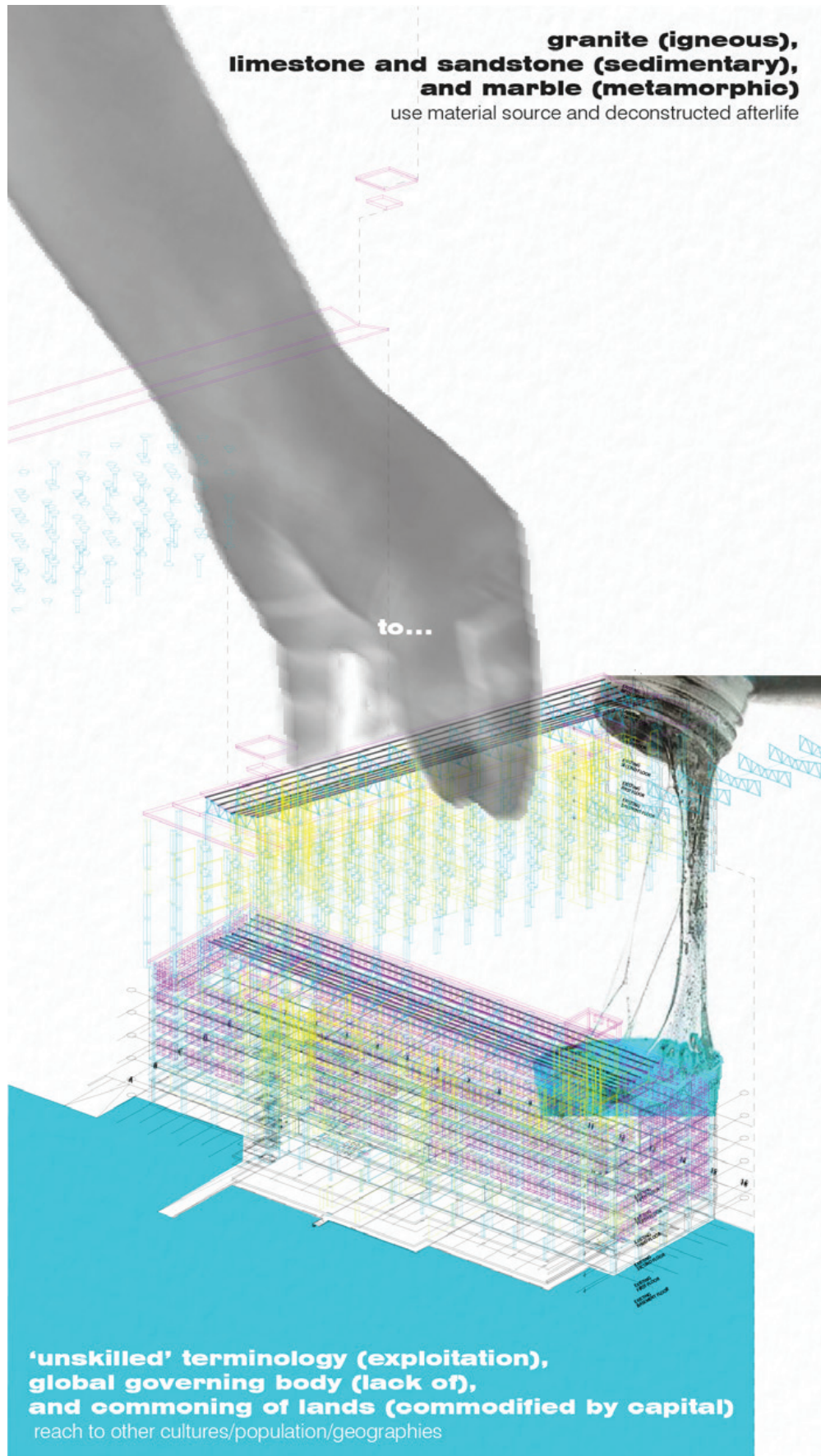
To achieve adaptable concordance.

HOW MIGHT CONSTRUCTION ENGENDER GREATER ELASTIC REGULATION ?

- IX. REGULATION DENY THE TRANSMISSION OF CONSTATIVE INFORMATION BY TAKING FORM OF PERFORMATIVE UTTERANCE.

To achieve adaptable concordance.

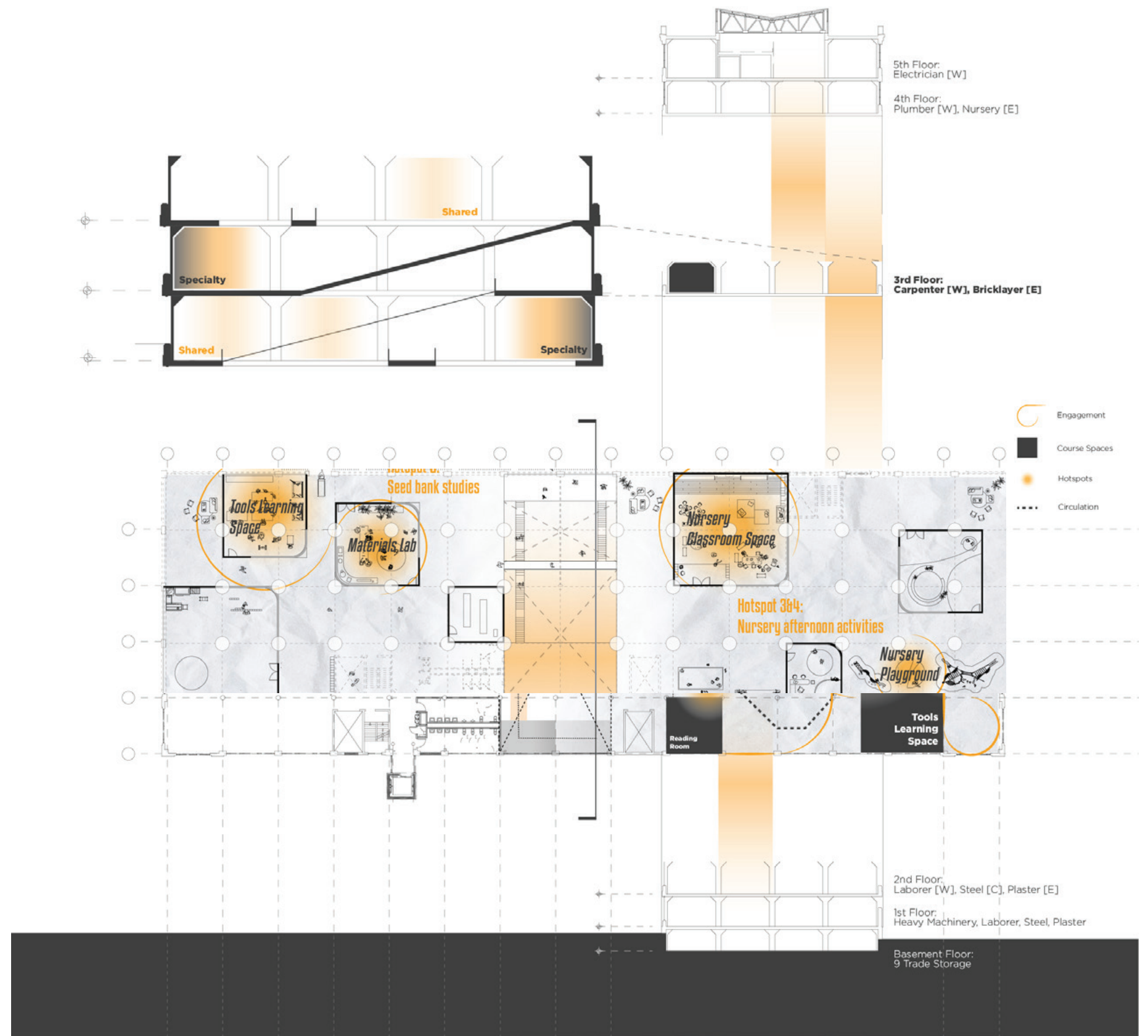
HOW MIGHT CONSTRUCTION ENGENDER GREATER ELASTIC REGULATION ?

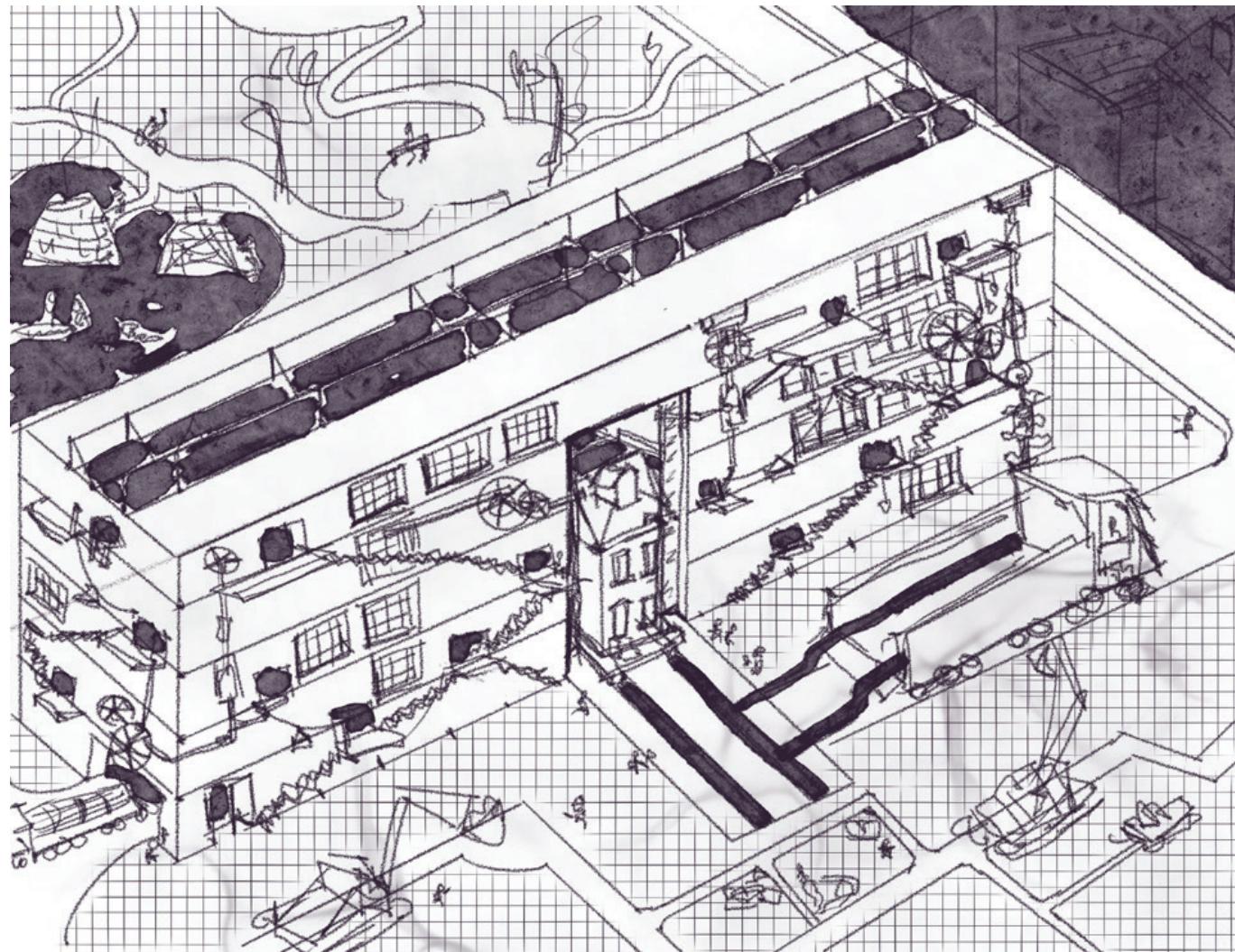
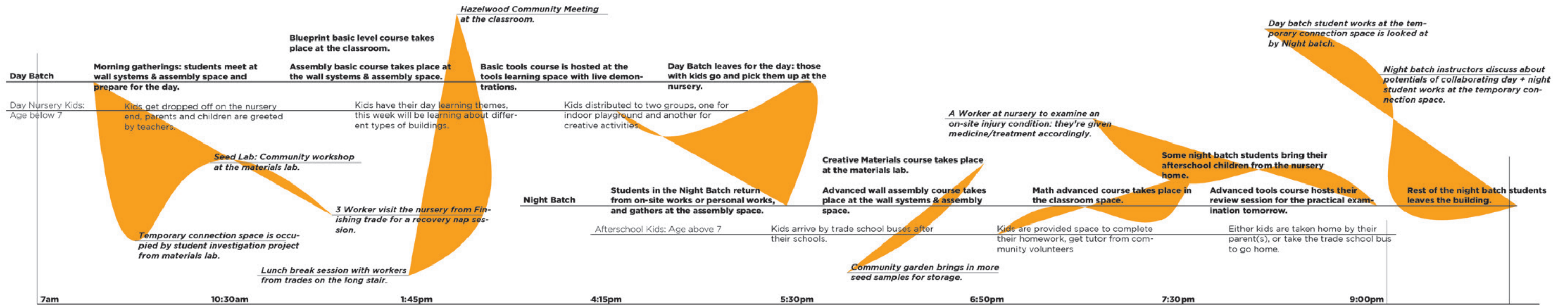


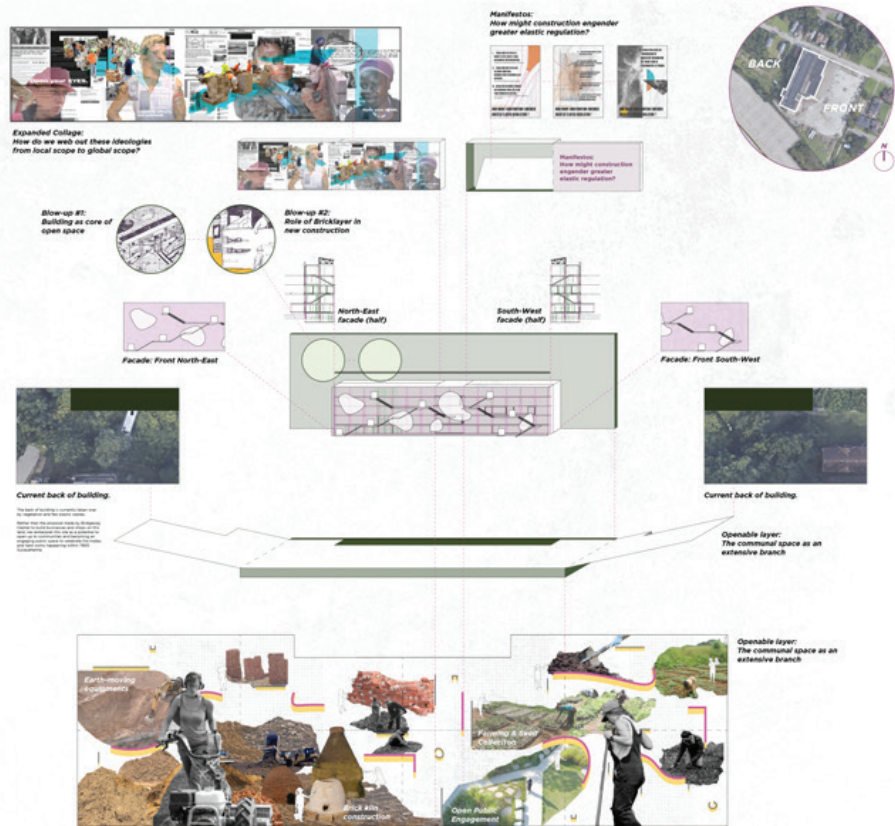
After the preliminary research and idea synthesis, attention is shifted to the 7800 Susquehanna building and site to design to re-imagine individual trade training interactions within the building and its immediate context. The trade institute program considers essential aspects of the trainees, including levels of basic education, language proficiency, mental health, housing and accessibility, childcare, visa status, and financial stability. The site is transformed to accommodate people in welcoming and inclusive ways, guide trainees to learn through structured classes and practical applications off-site, and reflect social organizations that foster learning between people with diverse backgrounds and interests.

The third-floor space, which consists of masonry trade and a nursery that serves the entire building and the Homewood neighborhood, is curated spatially along with consideration of the re-imagined training program. The space consists of a wall systems & assembly space, tools learning space, materials lab, reading room, and nursery activity spaces.

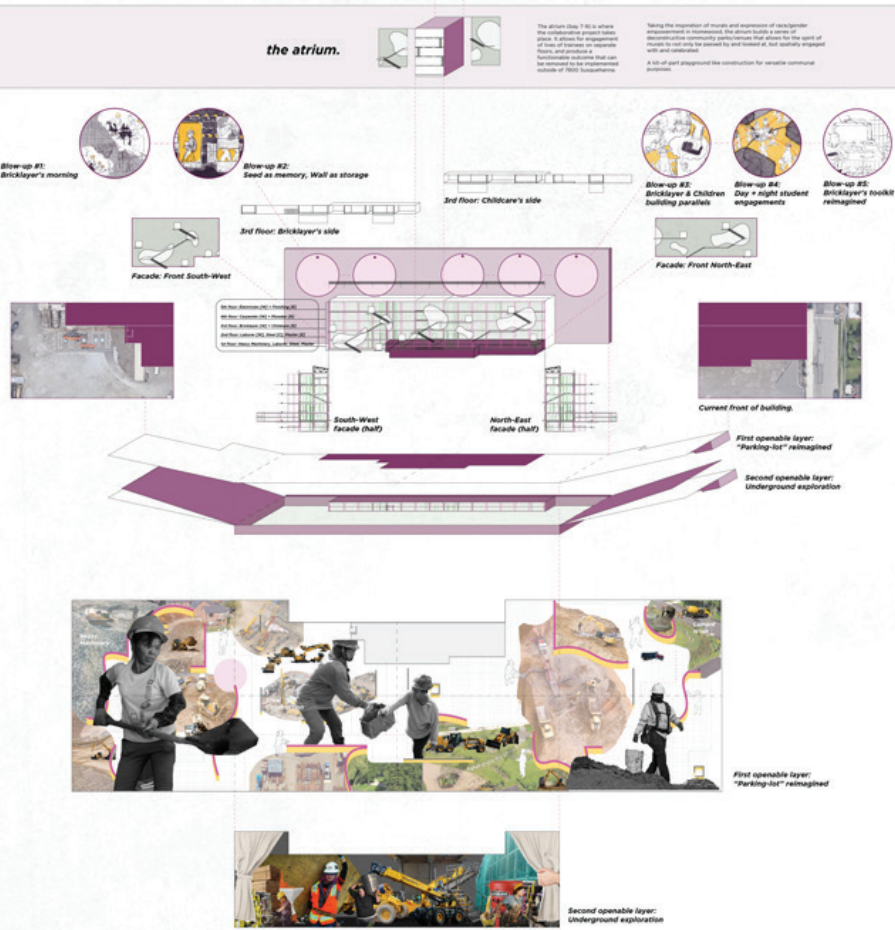
The time-of-day progression is imagined as activities in these spaces that foster engagement between trainees, community members, and children for mutual learning opportunities.





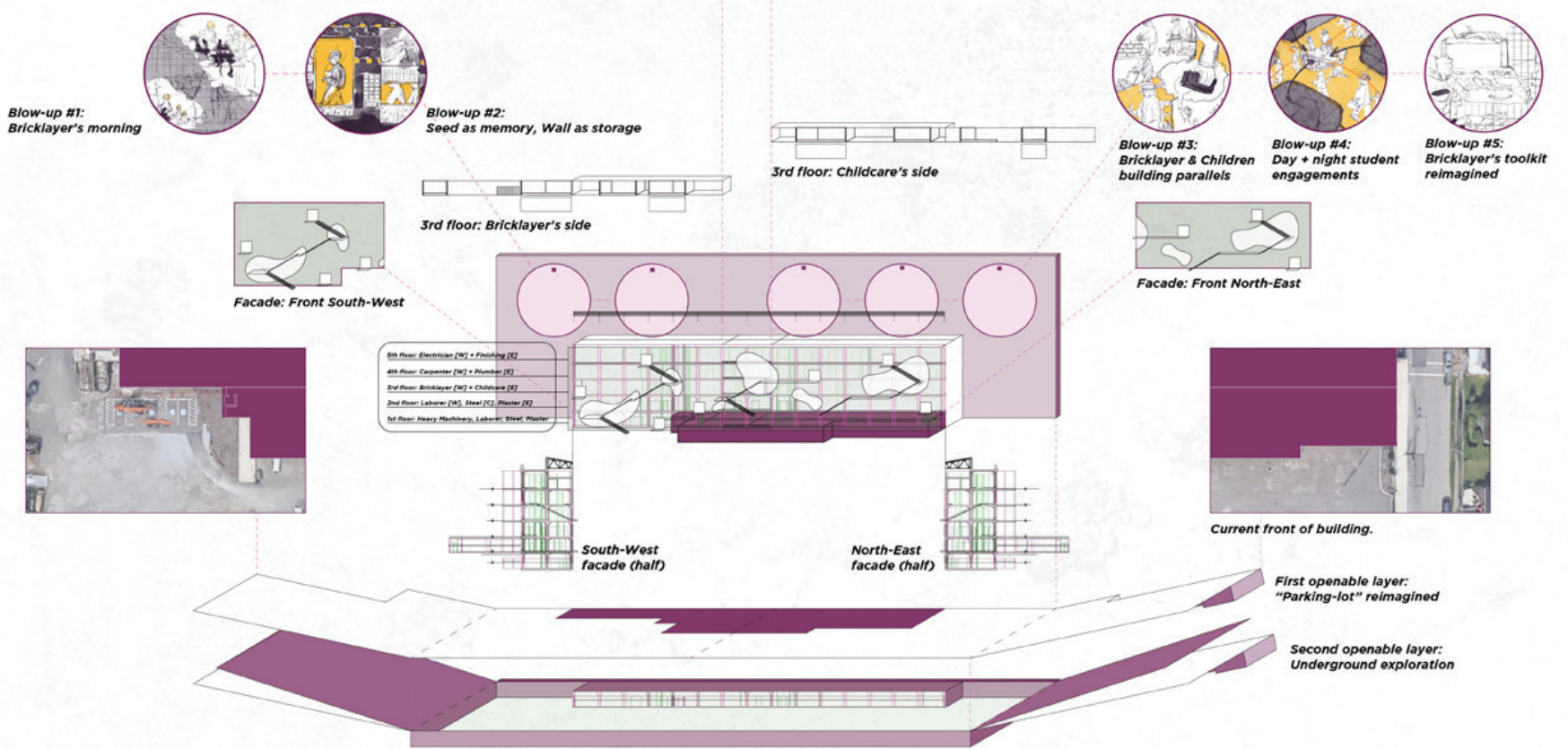


7800 SUSQUEHANNA: BACK



7800 SUSQUEHANNA: FRONT

the atrium.



7800 SUSQUEHANNA: FRONT

The interactive model, inspired by the studio's study on "ART BOOK FILM", synthesizes the semester's work, questions, and proposals on establishing the trade's environmental and gender equity. I explore a wide range of scales in my work, from:

1. the daily engagements of a single floor amongst the bricklayers on the third floor of the building;
2. thinking about the necessary programs or program changes needed to realize the environment, such as bathrooms and nursery;
3. how elements of the building may be morphed into inclusive engagements across trades and floors, such as the atrium and the brick facade;
4. to the immediate site where other trades are engaged for creative masonry work potentials;
5. lastly, going broader by challenging existing women & LGBTQ+ media portrayals and presenting a manifesto for greater elastic regulation as a response to masonry gendering.

This model represents the versatile potential of the current building as-is and is intended for people to look inside, open the model up, and look at the different ideas it holds. As an idea incubator, it plans for discussions to web out from the plot of land it is on how to reach out beyond Homewood and Pittsburgh and snowball into greater discussions about potential steps of change.

