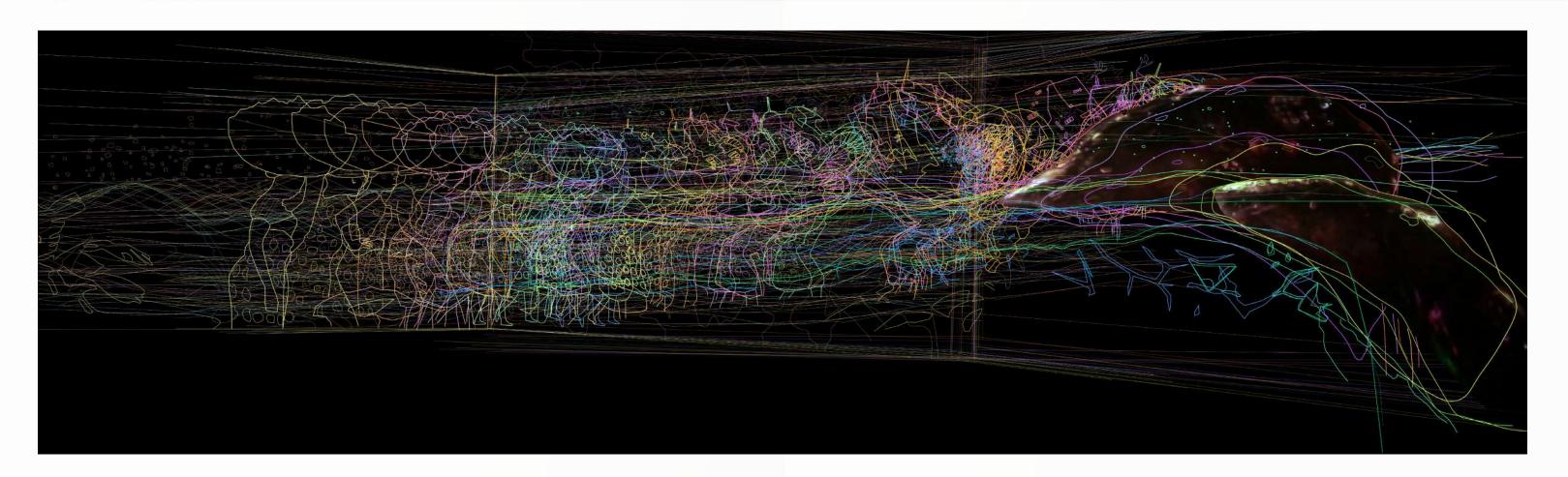
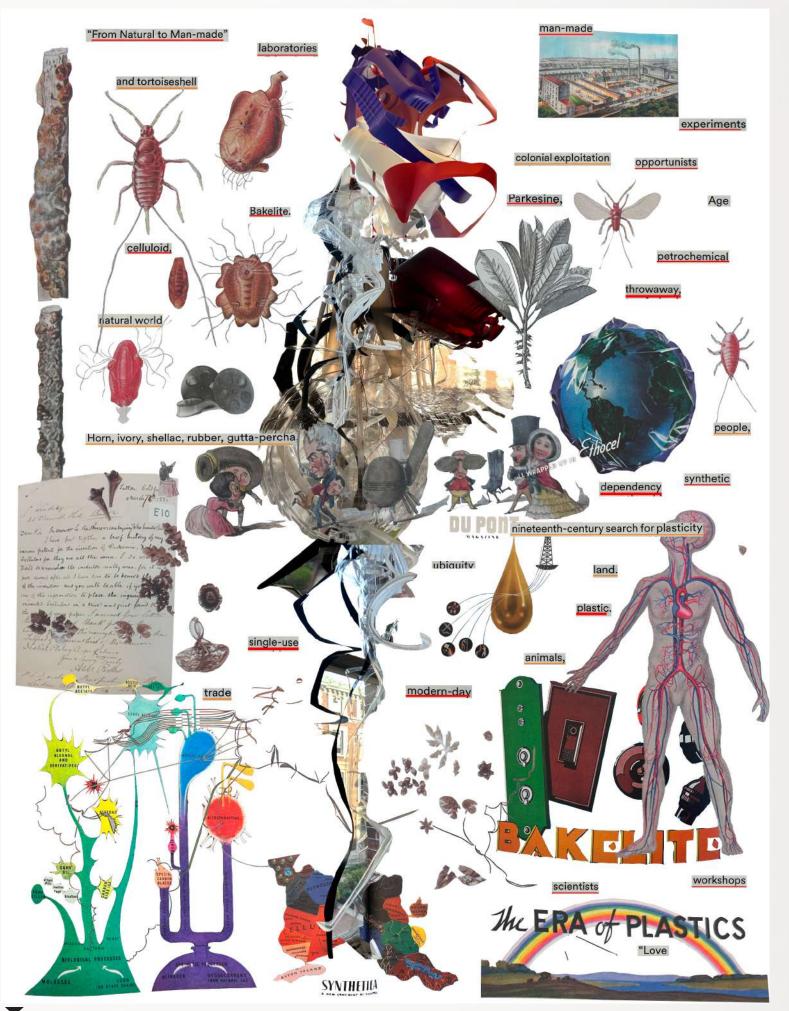


INTRODUCTION



The End of Carrying All is a video by artist Wangechi Mutu that traces a woman's journey across an ever-expanding landscape bearing a basket on her head.

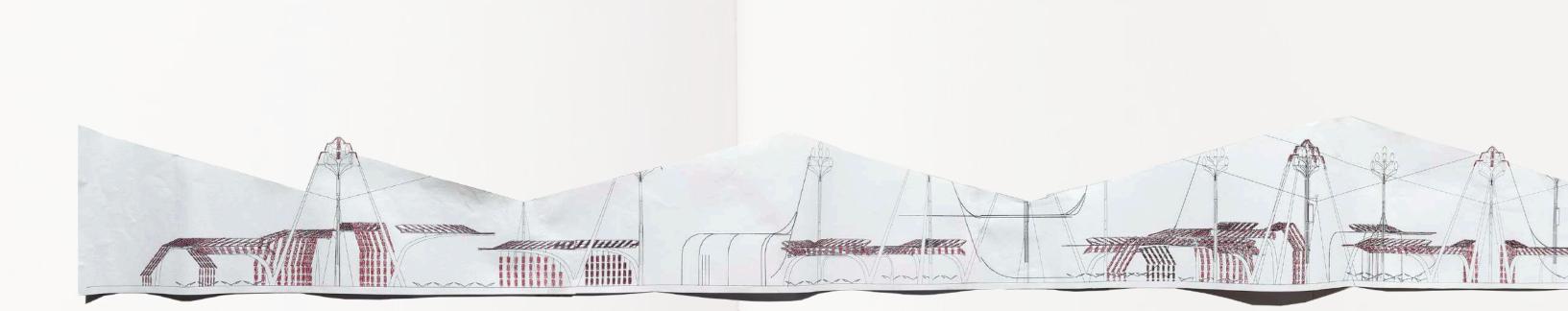
By dissecting the video to see how the form of the body transforms over time, it can be interpreted as the protagonist, an African woman, emblematic of Mother Earth, burdened by the weight of modernization metamorphoses into an alien or transstellar matter unquantifiable by humanist measures ADV VI Studio: After The End Faculty: Mario Gooden Spring 2025



Using Plastic: Re-making Our World as a primary source, this collage traces the history and development of plastics—from their invention in the 1850s to today's plastic waste crisis. It explores how 19th-century efforts to find flexible materials focused on the natural world. Materials like horn, ivory, shellac, rubber, gutta-percha, and tortoiseshell were in high demand, often acquired through colonial exploitation of people, animals, and land. At the same time, scientists and entrepreneurs began experimenting in labs to create synthetic substitutes, leading to early man-made plastics like Parkesine, celluloid, and eventually Bakelite. It also examines how the petrochemical industry became central to plastic production and contributed to today's reliance on disposable, single-use plastics.

Metabolic Materals: The Story of Plastic Faculty: Michael Wang Spring 2025

The centerpiece is an image of a model that threads together various singleuse plastic products that were collected over the course of the semester.



I. CLAY & SHADOW VEIL

ADV VI Studio: After The End Faculty: Mario Gooden Spring 2025

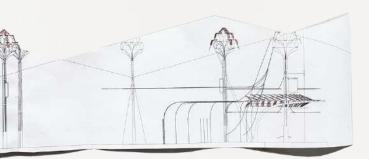
assessmith

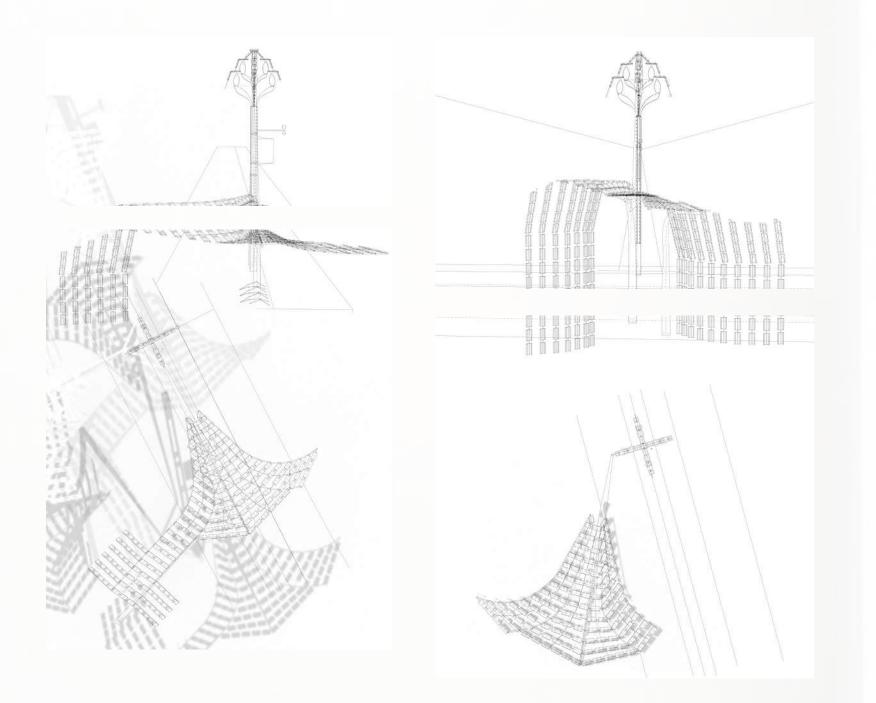
In response to the pervasive surveillance embedded in Addis Ababa's new Corridor Development Project, a series of public amenities are proposed in the historic Piassa neighbourhood that subtly subvert the mechanisms of control.

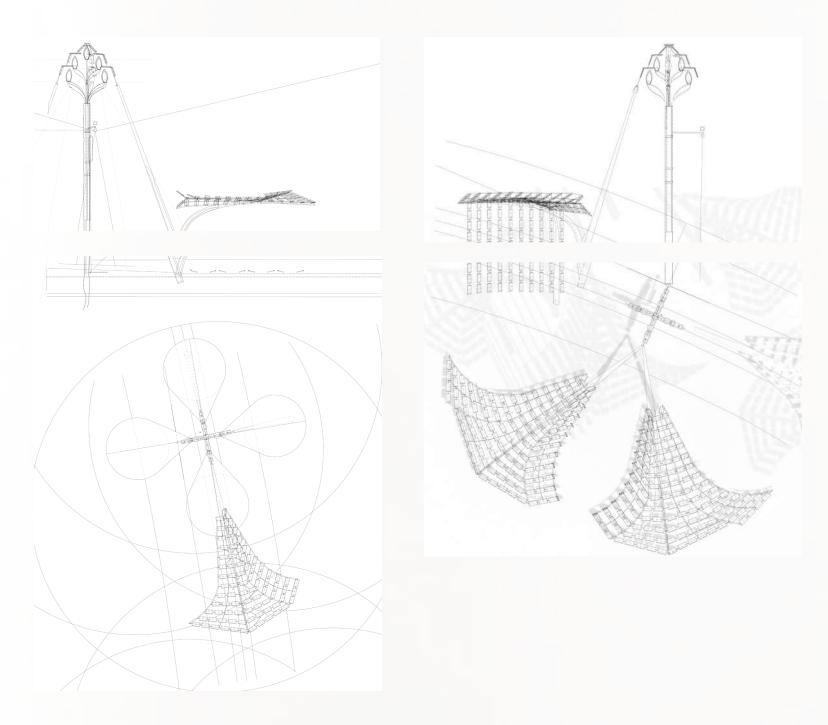
1 Property

ANI CELL

ALTONIES .

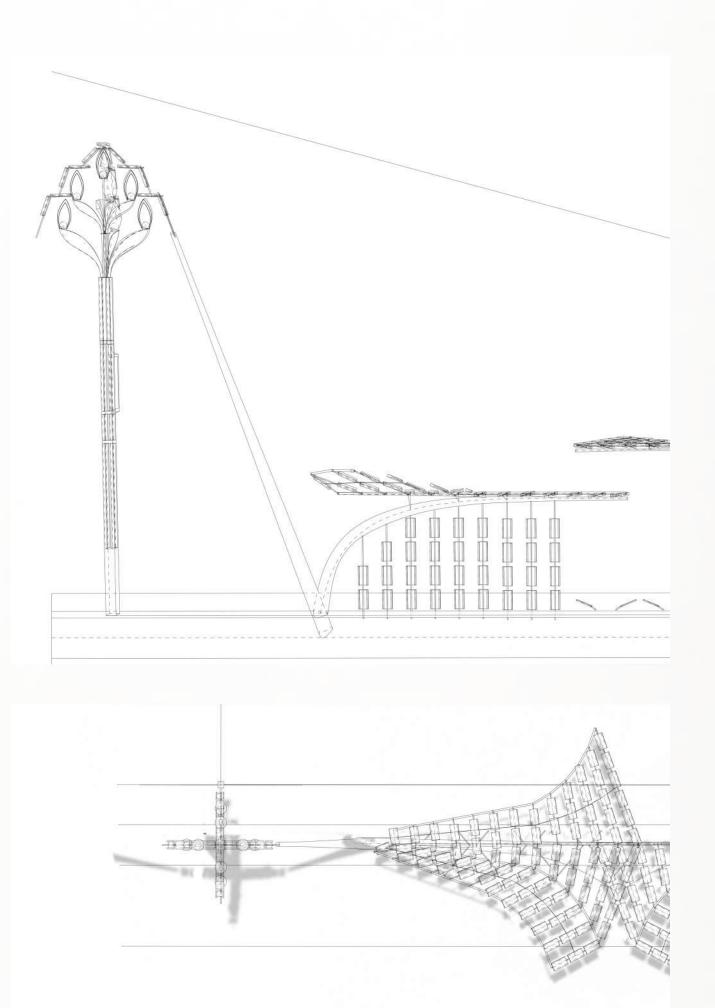




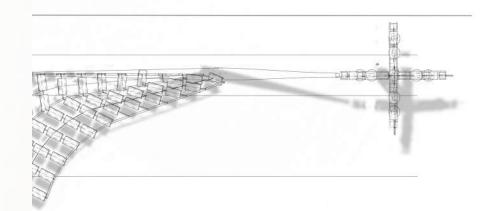


The first proposal is a form of light shields made of clay tiles

that redirect the light coming from the newly installed lotus lamp bulbs to limit light pollution.

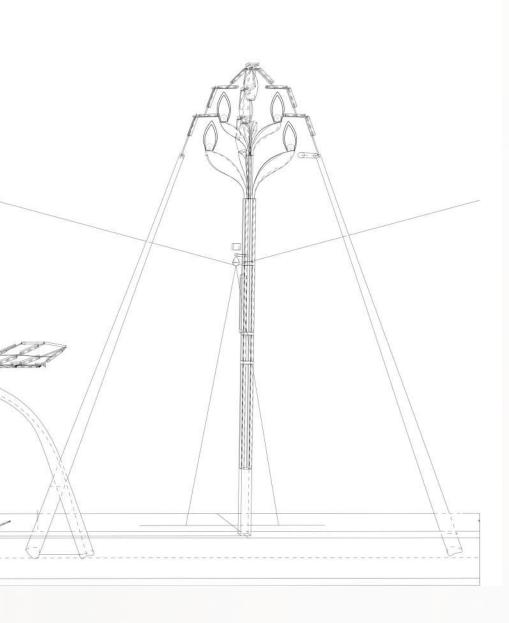


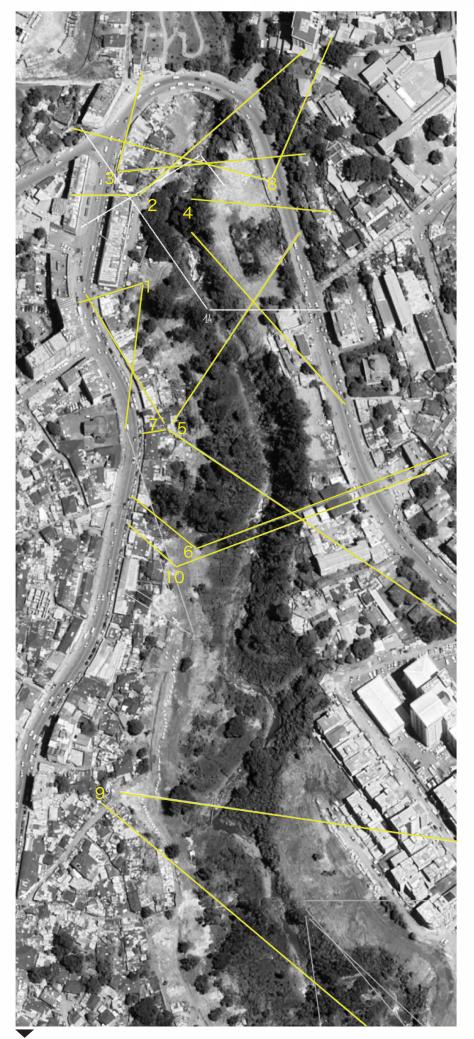
These shields then metamorphose into a shading device for the new pedestrian and bike lanes along the corridor



the app and and

creating lattice shadows to produce intermittent blind spots within the new camera's surveillance range.













Piassa pre-Corridor Development





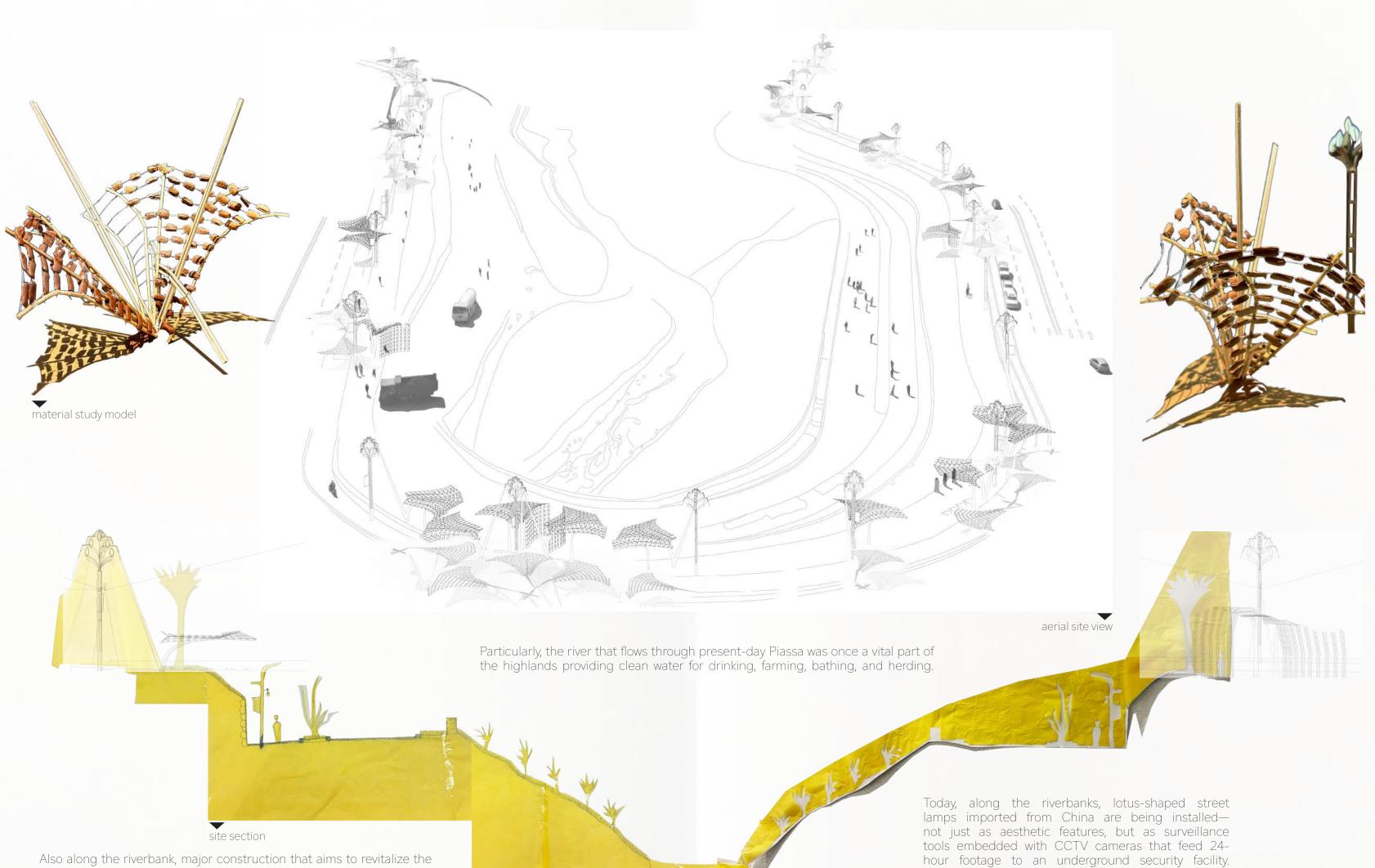








Piassa during Corridor Development

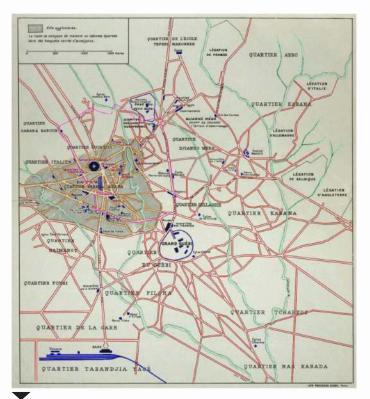


Also along the riverbank, major construction that aims to revitalize the river and create riverfront parks have unearthed rich clay deposits.

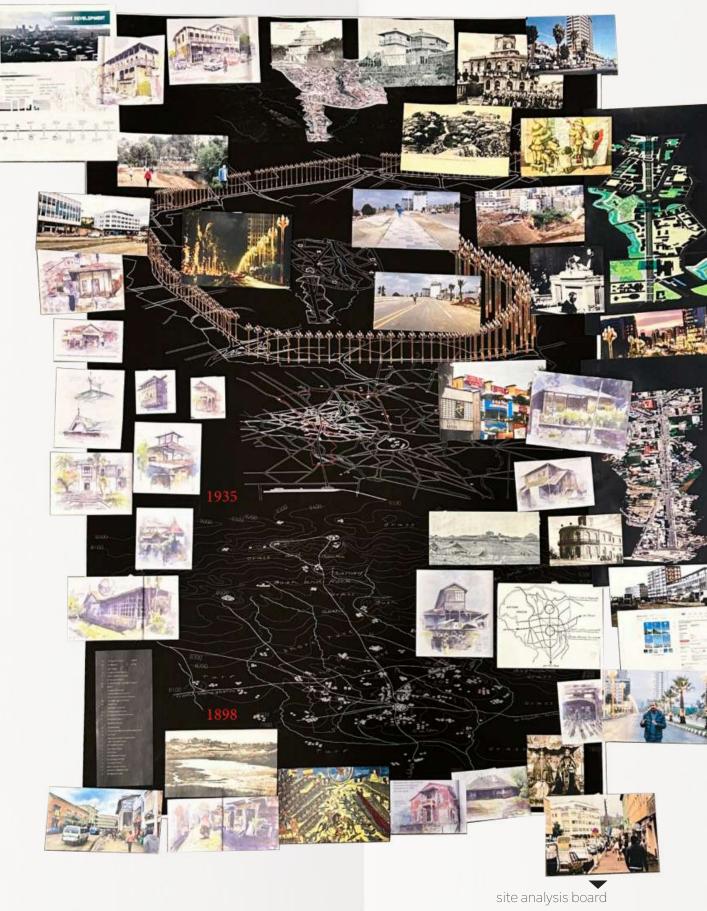




local clay craft

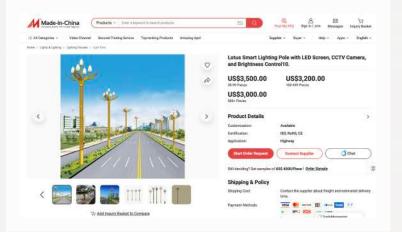


Addis Ababa map 1935

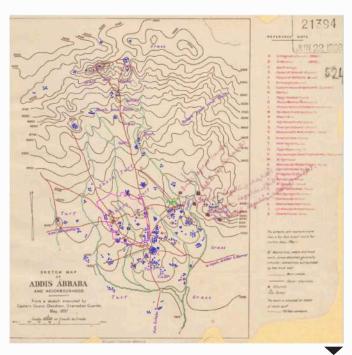




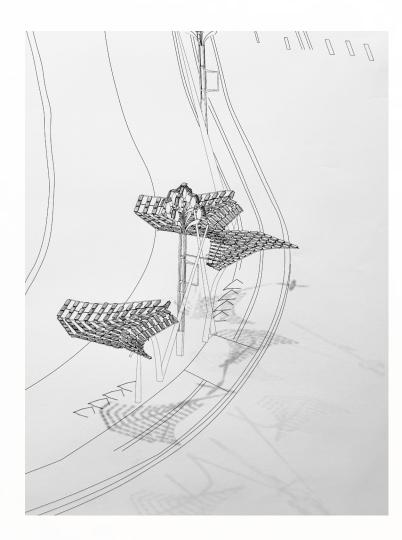
excavation of Piassa river



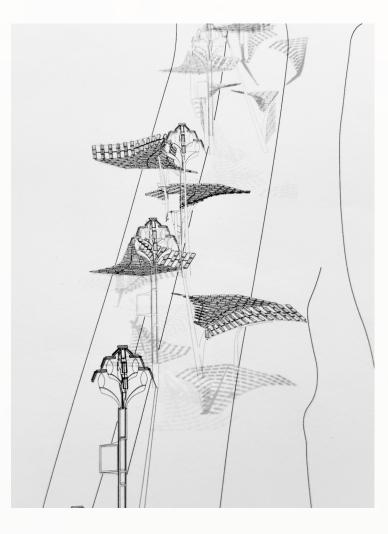
lotus lamp market specifications



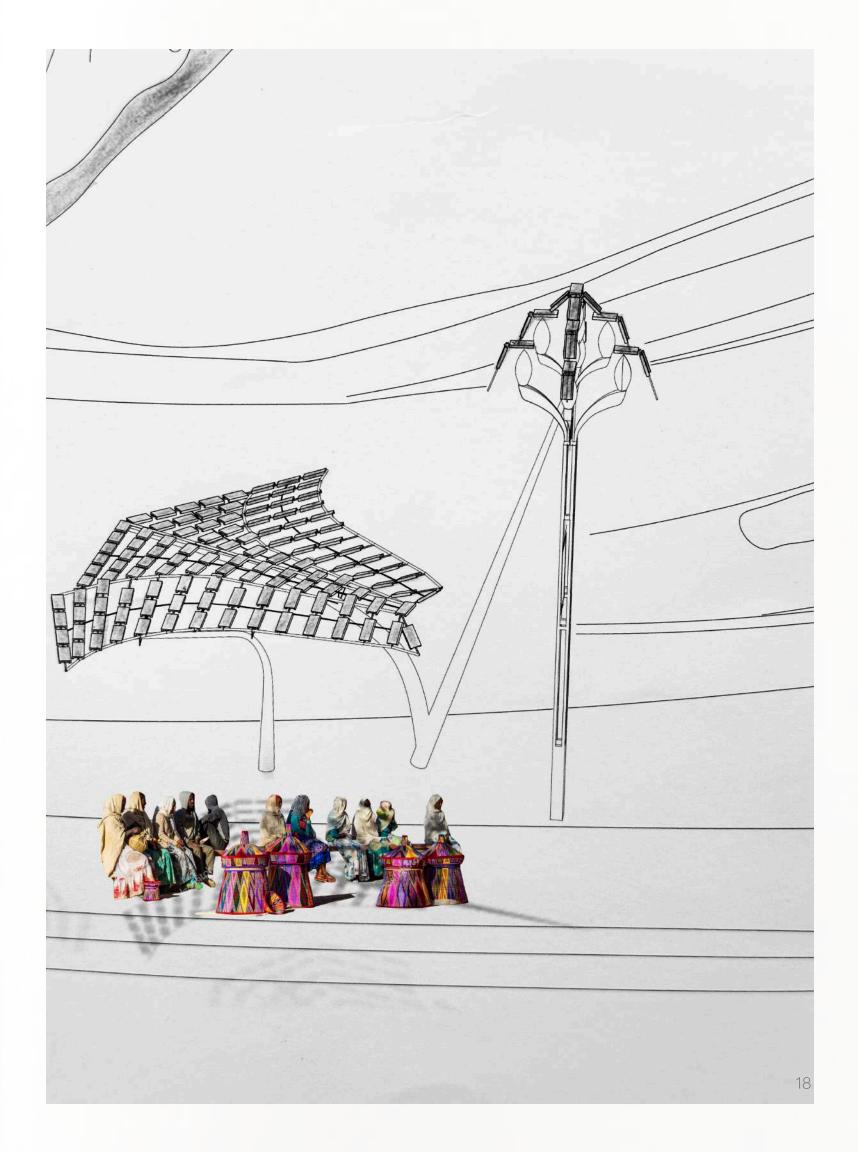
Addis Ababa map 1897







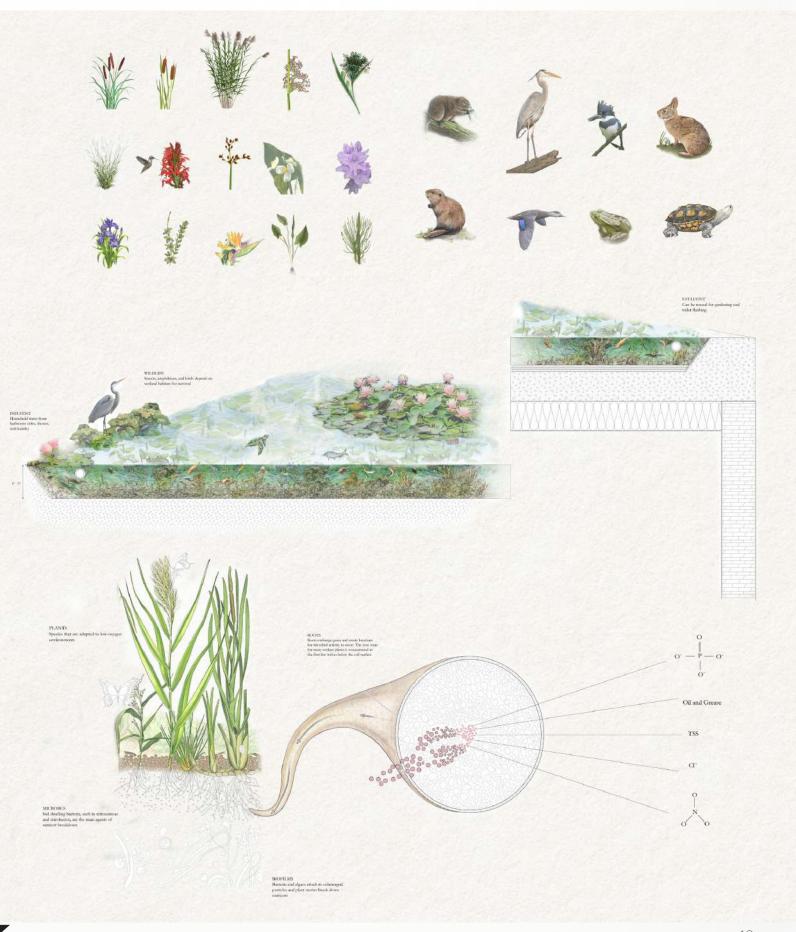




II. WETLAND VILLAGE

CORE III Studio: Housing Faculty: Galia Solomonoff Fall 2023





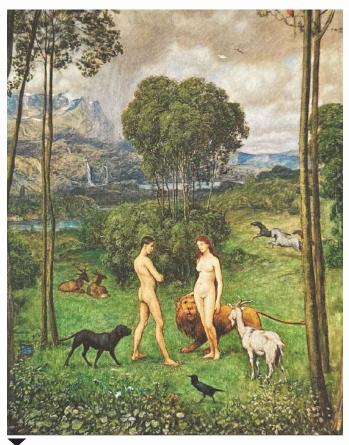
constructued wetland diagram

Thinking about two themes: gardens as paradise and garden politics in the context of housing in Harlem.

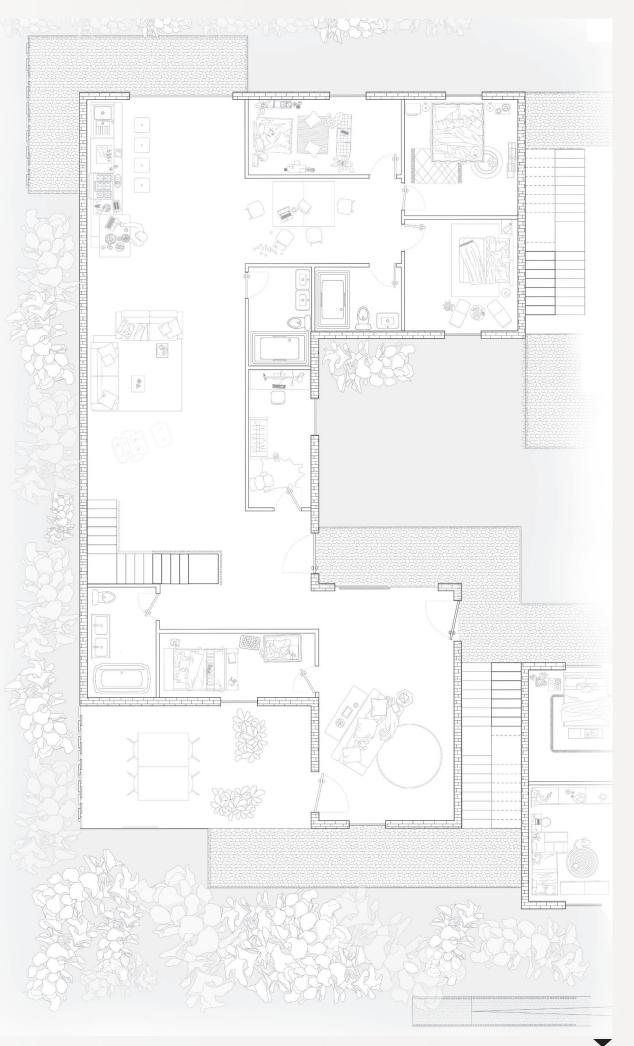


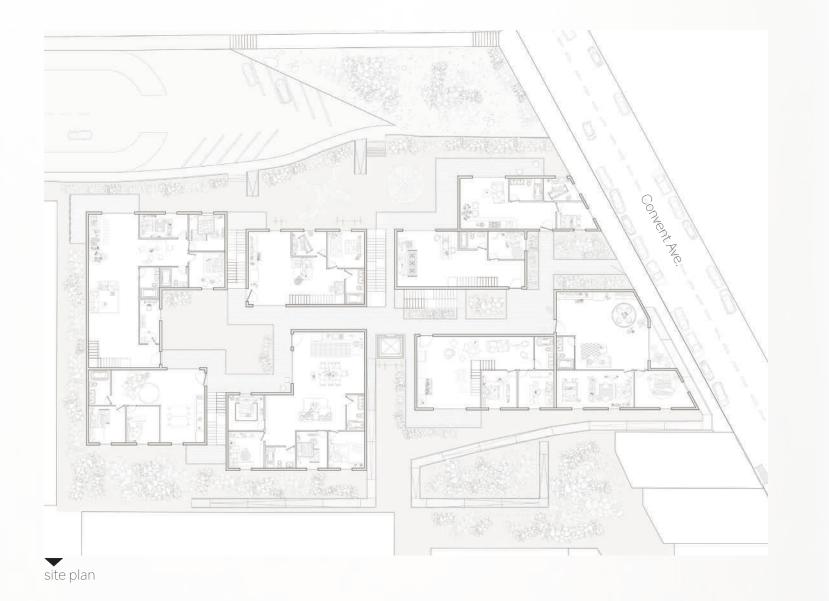
exterior view

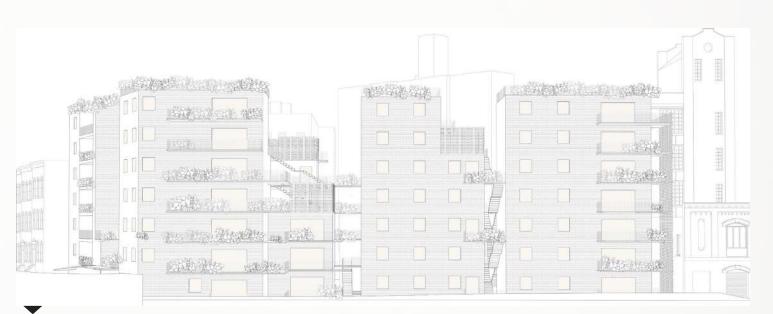
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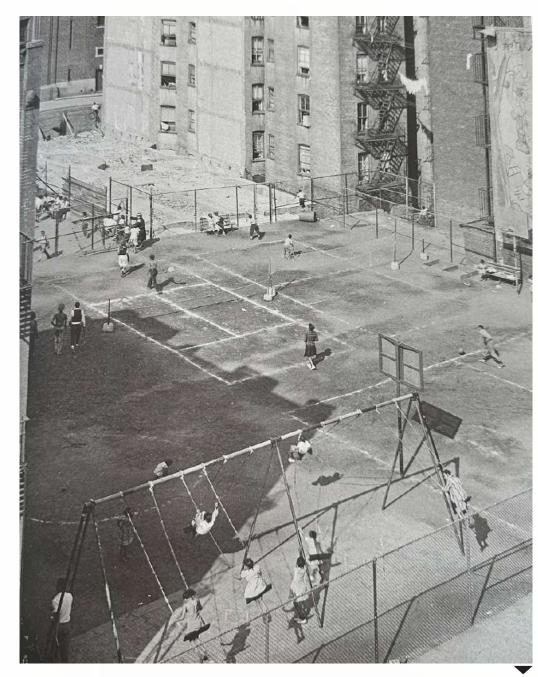


Hans Thomas, In Paradise, 1891



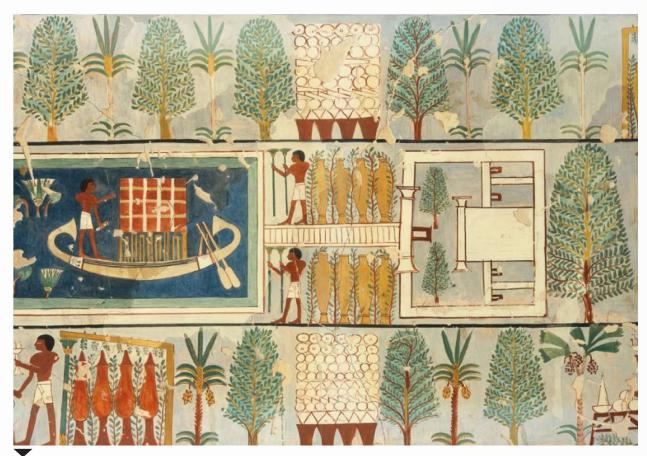






evelation 128th St.

playground in vacant lot, Harlem, 1939

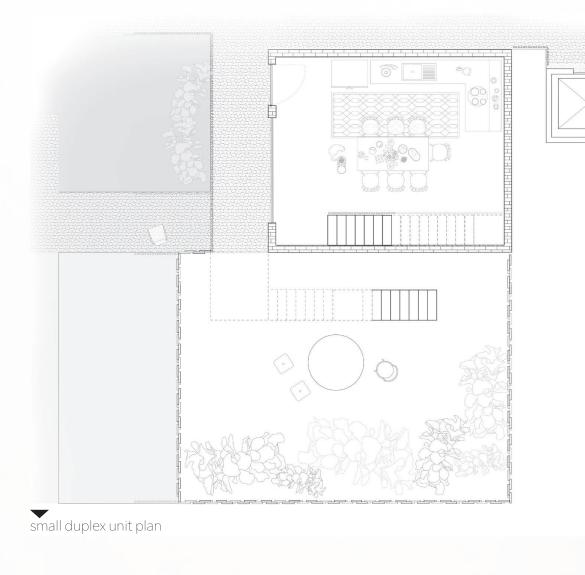


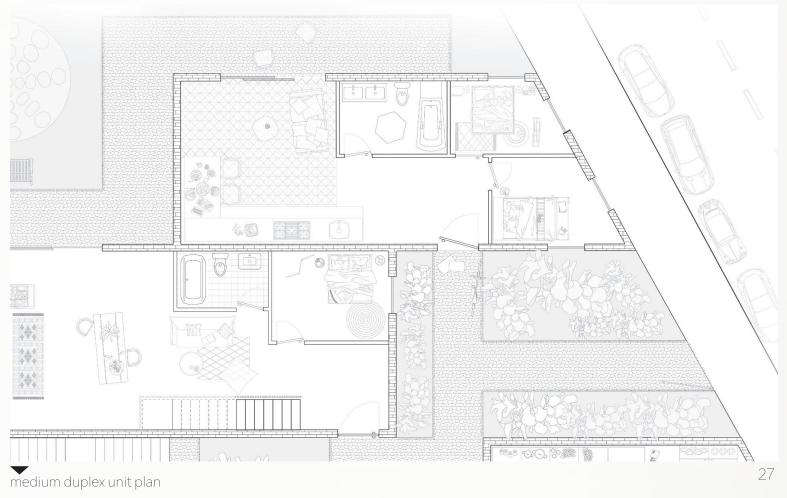
funeral ritual in a garden, Tomb of Minnakht, c. 1479 - 1425 BC





elevation Convent Ave.



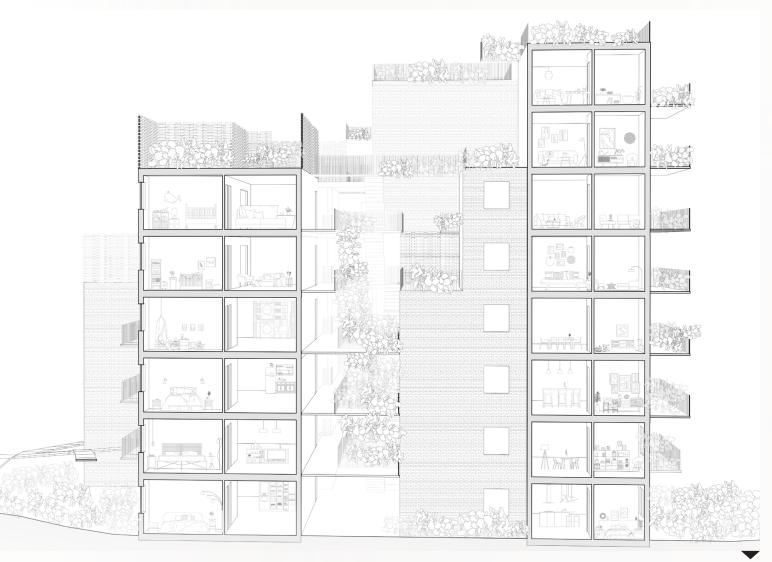


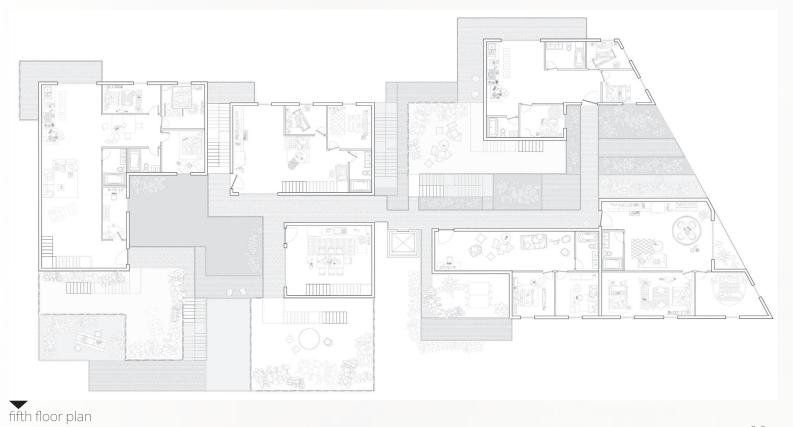


vacant lot, West 91st Street, 1962



Bagh-e Shahzadeh near Mahan, Iran





section



a. Gardens of Eden in the midst of a forceful threat

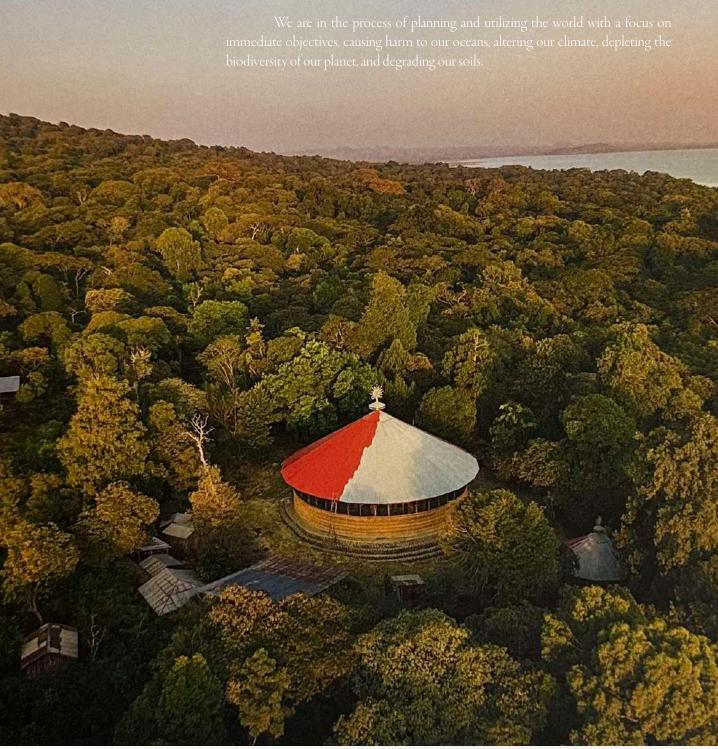
Speculative City Faculty: David Eugin Moon Fall 2023







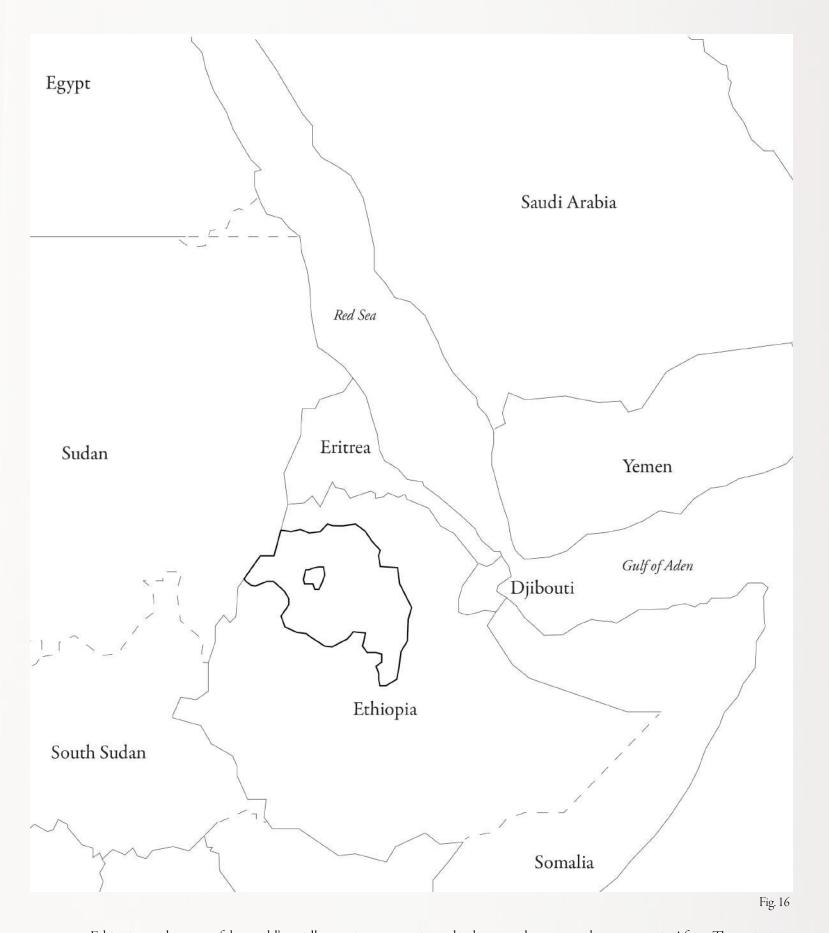




In the Amhara province of Ethiopia, agricultural deforestation has transformed once-forested areas into arid plains. Within the Orthodox Tewahedo Church, a fundamental belief is that forests are sacred spaces, and the trees surrounding the church are entrusted to the care of the priests. In the face of extensive logging that nearly eradicated an entire forest, this stewardship played a crucial role in preserving small pockets of ancient forests. Today, these sanctified and diverse ecosystems serve as vital hubs of biodiversity. The priests' efforts, treating these areas as paradisal gardens to be safeguarded, are not only essential for the survival of the forest but also for promoting sustainable agriculture.⁸

Fig. 13

Fig. 15



Blue Nile

Ethiopia stands as one of the world's rapidly growing economies and is the second most populous country in Africa. The majority of its population resides in rural regions, where the gradual expansion of settlements and agricultural activities is gradually reducing the forest perimeter due to factors like cattle grazing and plowing. In the last century, Ethiopia has witnessed the loss of 90% of its forests. In the Amhara province, the last remnants of native forests are found encircling the structures of the Ethiopian Orthodox Tewahedo Church.⁹

Situated south of the Sahara and slightly north of the Great Rift Valley in the landlocked country, the Blue Nile originates from Lake Tana, the largest lake in the nation. Surrounding the revered source, there is an arrangement of nearly 20 000 forest islands spread across the arid highlands, resembling a collection of emeralds. Nestled within each ring of forest, beneath the ancient canopy and surrounded by abundant vegetation, lie saucer-shaped churches—otherworldly structures.¹⁰

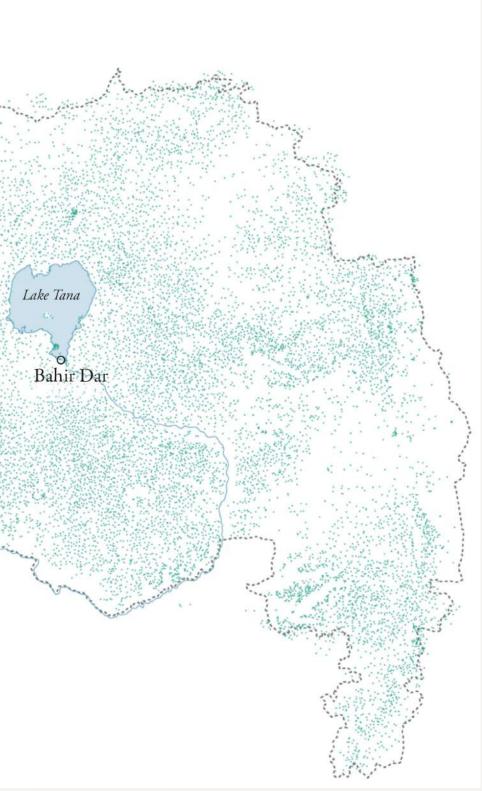
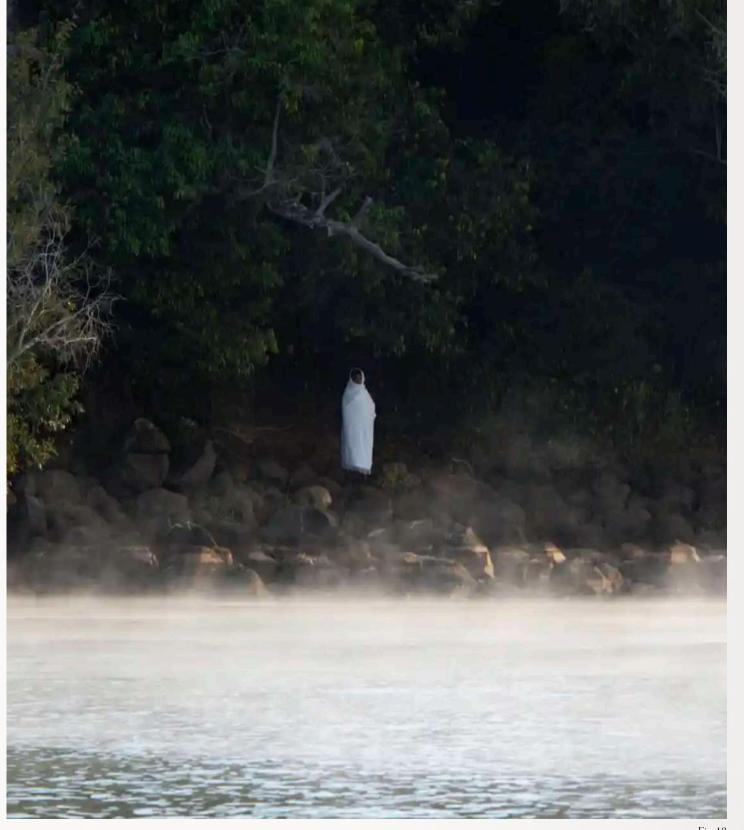


Fig. 17

Preserved through centuries as an expression of faith, these forests serve as a testament to the influence of spiritual beliefs in establishing sustainable landscapes. Viewed from above, these wooded areas distinctly delineate the boundary between the sacred and the secular, the church and the field, as well as work and rest. While they exist apart from everyday life, these forests hold a central role, shaping human endeavors and relationships within society. Much like other elements within Orthodox traditions, the forests guide worshippers to look beyond the visible.¹¹





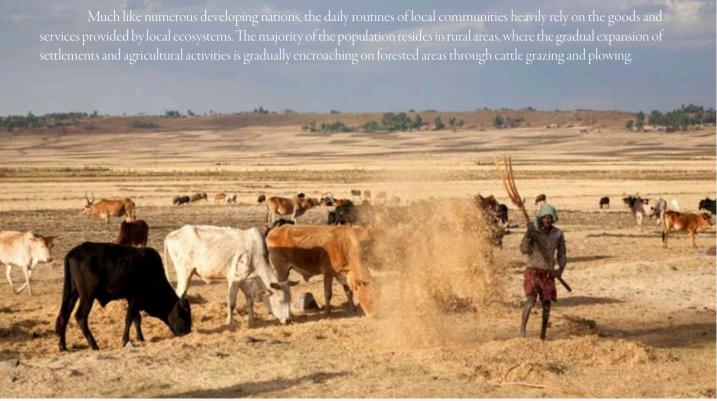
Upon entering them, the dry silence of subsistence farmland yields to the refreshing, fragrant air of the forest, resonating with a symphony of diverse sounds from insects, birds, monkeys, and human voices reaching up to the canopy and heavens. Across generations, people continue their lives beneath the same age-old trees as their forebears.

The religious significance of these forests is matched by their ecological importance. These sanctified havens contribute to raising water tables, moderating temperatures, shielding against destructive winds, and providing a habitat for essential pollinators that enhance surrounding agriculture yields. Consequently, these forests act as crucial genetic repositories essential for the future survival of human life in Ethiopia. Priests who neglect the protection of these natural resources are considered to have failed in their mission. Understanding the global significance of the forests they oversee has deepened the priests' commitment to preserving them.¹²

Fig. 19



and grazing lands, as well as wood for fuel and construction. The absence of effective land use policies and corresponding laws further exacerbates the deforestation rate. The continual establishment of new settlements within forests contributes to the ongoing conversion of wooded areas into agricultural and alternative land use systems. Currently, the remaining pristine high forests face threats from investors, as they convert moist evergreen mountain forests into alternative land use systems, such as coffee and tea plantations.¹





In recent decades, priests and local residents have undertaken initiatives to construct stone walls surrounding the church forests," delineating the boundaries of the property. Methodically, they gather stones from agricultural fields, transporting them on donkeys' backs, and arranging them to create hand-built walls. The priests perceive this endeavor as a means of paying homage to the church.¹⁴

Fig. 20

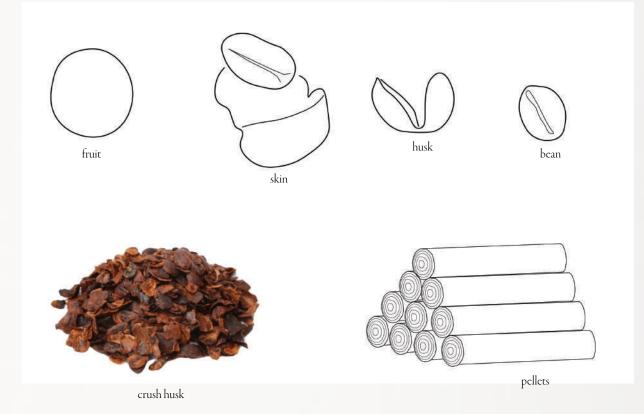


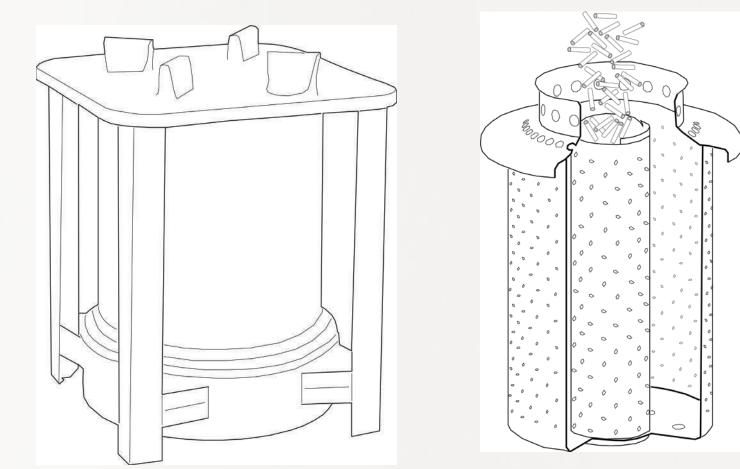
Fig. 22

Advancements in energy efficiency play a crucial role in the development of countries like Ethiopia, where the majority of the population relies heavily on biomass fuels such as wood, charcoal, dung, and agricultural residues. The excessive use of these fuels contributes to the depletion of forest resources. In Ethiopia, a distinct cooking method known as Injera baking accounts for a significant portion of domestic energy demand, often carried out inefficiently using an open fire or three-stone system in most households. Recognizing this issue, both governmental and non-governmental organizations have been actively working since the early 1990s to address it. The creation of biomass Injera stoves is one outcome of these efforts, widely promoted for its ability to achieve fuel efficiency up to 50% compared to the open fire system¹⁵.

An example of the biomass gas fire cookstoves proposed here is one that use fuel pellets - a type of biomass fuel made from compressed organic materials, typically wood or agricultural residues. These small, cylindrical pellets are manufactured using a process that involves compacting and densifying the raw materials. The result is a highly efficient and standardized form of fuel that can be used for heating purposes, particularly in stoves designed to burn pellets.

Ethiopia is one of the world's leading producers of coffee and is renowned for its high-quality Arabica coffee. Coffee is a significant part of Ethiopia's economy and culture. The country is often considered the birthplace of coffee, with a rich history dating back centuries. Coffee husk is the byproduct generated during coffee cultivation and is utilized for extracting caffeine and tannin. Notably, coffee husks serve as suitable materials for pellet production, offering an eco-friendly alternative to fossil fuels like coal. These coffee pellets can be employed in furnaces, pellet stoves, or for heating spaces in schools, marketplaces, companies, and hospitals. They have the potential to partially or entirely substitute fossil fuels in large-scale industrial processes, contributing to energy cost reduction. In the course of coffee processing, the cherry and its husk are separated to obtain the coffee bean. This process generates solid waste, including coffee husks. The various processing technologies employed in coffee production result in husks with distinct characteristics concerning moisture content and composition.¹⁶





biomass stove

1 Kries, Mateo. Garden Futures: Designing with Nature. Vitra Design Museum GmbH, 2023, p. 21

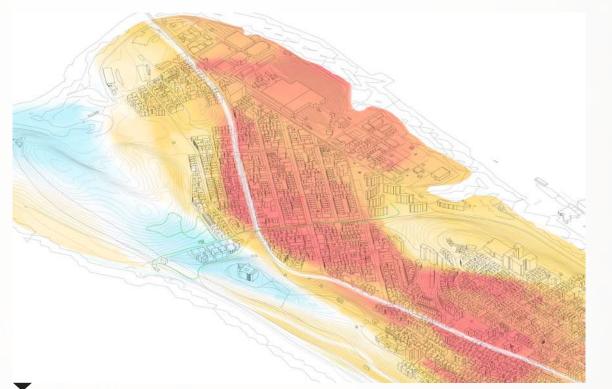
- 4 Mateo. Garden Futures p. 40
- 6 Mateo. Garden Futures p. 76
- 8 Mateo. Garden Futures p. 174
- 9 "Gardens of Eden: The Church Forests of Ethiopia a Photo Essay." The Guardian, Guardian News and Media, 8 Nov. 2021

ed and Mining Lands Management, vol. 6, no. 3, 2019, p. 204 14 "How Building a Wall Can Save a Forest." Inside Science, www.insidescience.org/news/how-building-wall-

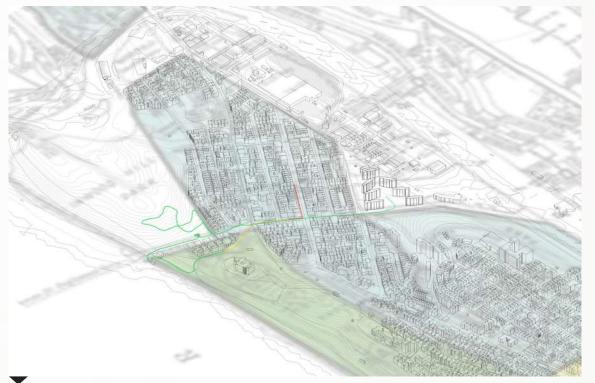
15 Alemayehu. "The causes, consequences and remedies of deforestation in Ethiopia." p. 207 16 Foodfuelfuture. "6 Ways the Coffee Industry Is Turning Waste into a Resource." Sustainable America, sustain interior section

III. CHOREOGRAPHING (with) CLIMATE (dis)COMFORT

CORE I Studio: Broadway Stories Faculty: Patricia Anahory Fall 2022



heat map tracing walk



redlining map tracing walk

I often spend my summer weekends with my grandmother who lives in Inwood. The journey from where I live in Central Harlem often feels calming and is an escape from my chaotic life in the city. What I appreciate most are the walks that I take with my grandma. We usually start by heading to Inwood Park where we watch people play dominos.

One afternoon, as we were looking around the park, we saw an advertisement for The Hudson, a restaurant at the western most part of the neighborhood that sits on the river bank. Excited to try their food, we decided to take a walk up the hill to the marina. When we arrived at the gate, we were greeted by beautiful views of the water and the George Washington Bridge. After enjoying the breeze and feeling refreshed on the hot summer day, we started our trip back to her apartment at the Dyckman Houses.

As we walked down the hill and crossed Broadway, the temperature got increasingly hotter and my grandmother started running out of breath. Thankfully, we were able to find a cooling center nearby. Concerned about my grandmother's health, I began researching heat related morbidity and came across a study that was done by the Climate School at Columbia. The analysis measured the ground temperature in different parts of NYC during the summer of 2022 and found that "Inwood, east of Broadway had the highest temperatures recorded in the research" and that the phenomenon was likely to worsen as the climate warms over the next couple of years.

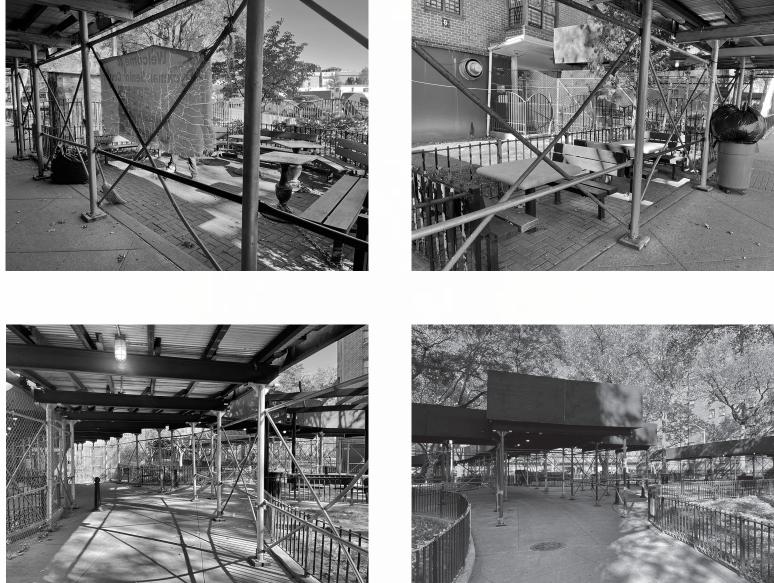
The East side which is hotter than the West by an average of 6 degrees Fahrenheit also happens to have less monetary value. More homeowners reside in the West while most of the apartments in the East are rentals. The west has been historically more affluent while the east is more commercial, industrial and inhabits newer immigrants from countries such as the DR. In this context, Broadway served as a form of redlining giving those who had power at the time the most pleasant and comfortable areas which were maintained and appreciated over time.

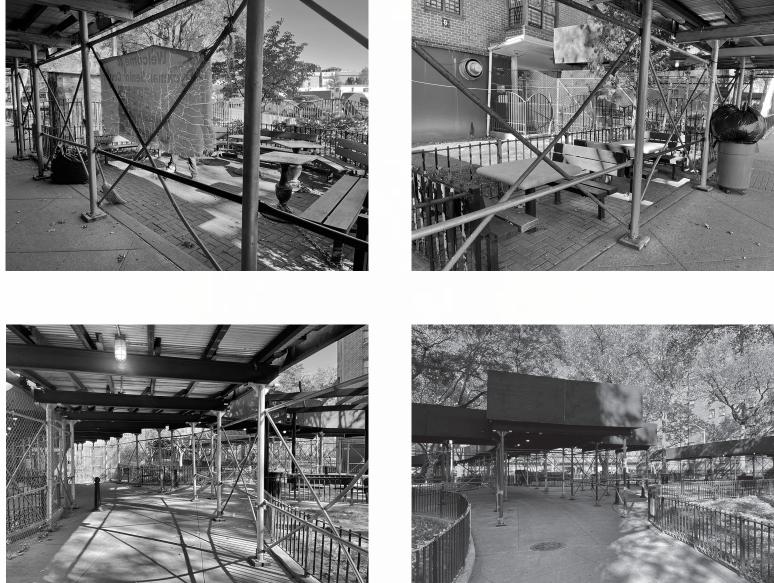
A fabulated story







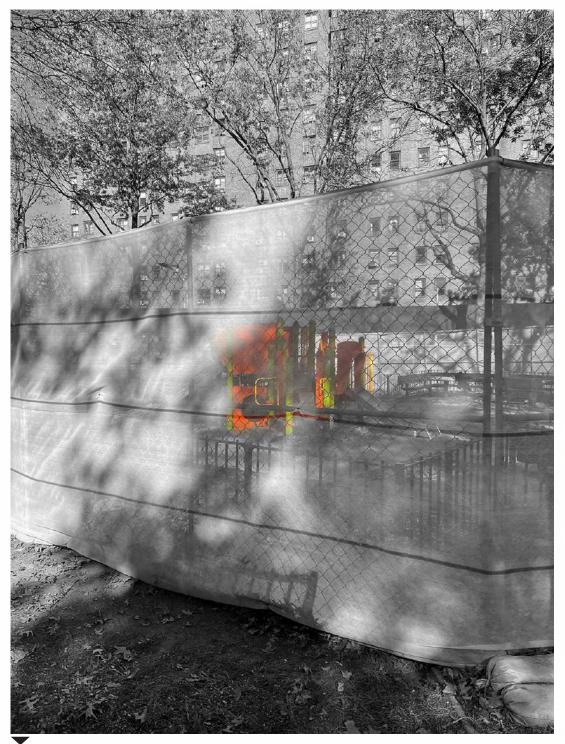




Dyckman Houses outdoor

To address the lack of welcoming outdoor spaces, I propose the removal of undesired scaffolding that has been on site since 2015 which residents find is obstructing their view and depriving them of accessing the vast open green spaces that exist in the complex. Secondly, I recommend the reorganization of public outdoor spaces, based on my previous shadow and sunlight study, by moving the playgrounds and basketball court to areas on the ground that get more shading in the summer and more sunlight in the winter to achieve optimal thermal comfort.

re-choreographing site plan



south facade cooling extension

V Dyckman Houses playground

The second intervention is a facade extension on the most disadvantaged building - constructed using the unnecessary scaffolding found on site - that serves as a collective cooling center during the summer and holds pv panels that collect solar energy throughout the year to provide heating and hot water which are scarce and seen as one of the major challenges I have heard residents talk about.



b. Three Lions in a Third Modern Built Space

Questions in Architecture History II Faculty: Nader Vossoughian Teaching Fellow: Iván-Nicholas Cisneros-Rangel Spring 2023

> In 1938, a young Eritrean¹ by the name of Zerai Deres led a one-man demonstration in Rome to protest the looting and relocation of the monument to the Lion of Judah, an emblem of his native country, from Addis Ababa to the Italian capital where the statue stood at the time.² The Lion was one of the many historical articles that were taken to Italy from Ethiopia between 1936 to 1937 as war booty including royal crowns, paintings, state archives, airplanes, and one of the most treasured obelisks of Axum dating back to the fourth century which was broken into several pieces, transported to Rome, re-erected and sited at the end of Viale Africa.³ The act of appropriating and repurposing buildings was a widespread Renaissance practice also known as spolia and had two alternative, though not mutually exclusive, motives. One was ideological, where the repurposing of buildings or building elements from a former or conquered government was a display of the conqueror's superiority. The second was pragmatic and affirmed the profitability of reusing materials.⁴ During the brief Italian occupation of Ethiopia from 1936 to 1941, a series of reciprocal appropriations between the Italian and the local governments took place in Addis Ababa. The aim of this paper is to frame the modern built environment that emerges in Addis Ababa from 1930 to 1974 as neither an Ethiopian Imperialist modernity nor an Italian modernity but rather a third modern built space that begins with the pre-colonial environment that becomes appropriated by the Italian regime and then further reappropriated by Emperor Haile Selassie in post-colonial years as a form of exquisite corpse.⁵ This thesis will be articulated by analyzing three distinct moments and forms in which the Lion of Judah, a symbol of Haile Selassie and the Solomonic Dynasty that ruled Ethiopia from the thirteenth to the twentieth century, was represented and materialized.

> Three representations of the Lion of Judah from three different periods of Haile Selassie's rule are indicative of the modern built environment that manifests in Addis Ababa. As a result of the reciprocal appropriations that take place between the Italian colonial government and the local one, the characteristic that emerges in the city is neither a purely Italian colonial modernity nor an Ethiopian Imperial one. The implications of these appropriations in the form of exquisite corpse resulted in a form of modernity that once inspired the the anti-colonial movement but by the 1970s was no longer representing freedom but instead materialized as a symbol of oppression which led to a violent decimation of the dynastic rule that reigned in Ethiopia since the thirteenth century.



Figure 2 Stairway topped with the Lion of Judah, garden of the Institute of Ethiopian Studies (formerly Guenete Leul Palace), Addis Ababa, Ethiopia, 193 (photo by Grant Rooney, 2014 https://www.alamy.com/stairway-with-lion-of-juda



Figure 3 Statue of the Lion of Judah in Addis Ababa, Ethiopia returned to Addis Ababa from Rome in the 1960s (photo by © A.Savin, WikiCommons)

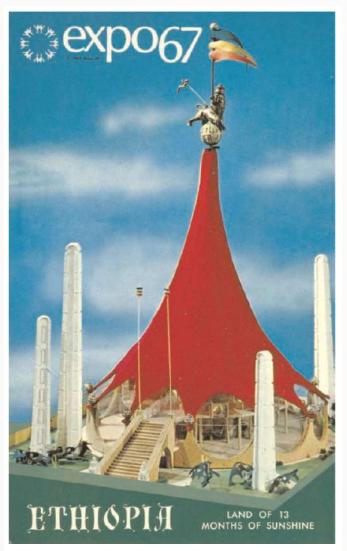
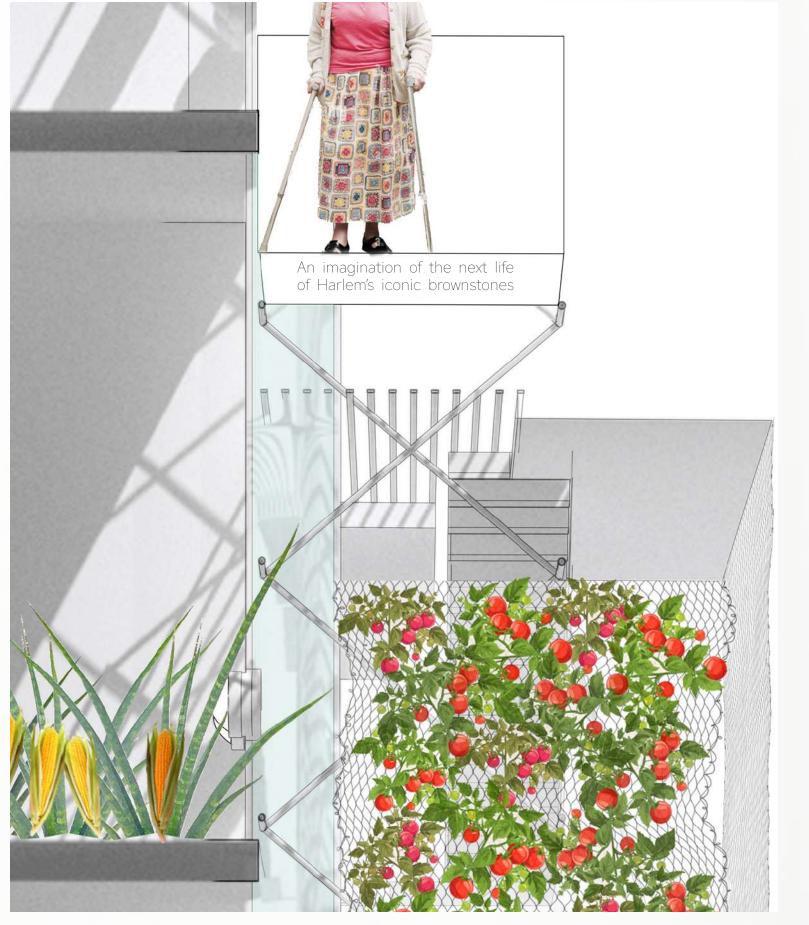
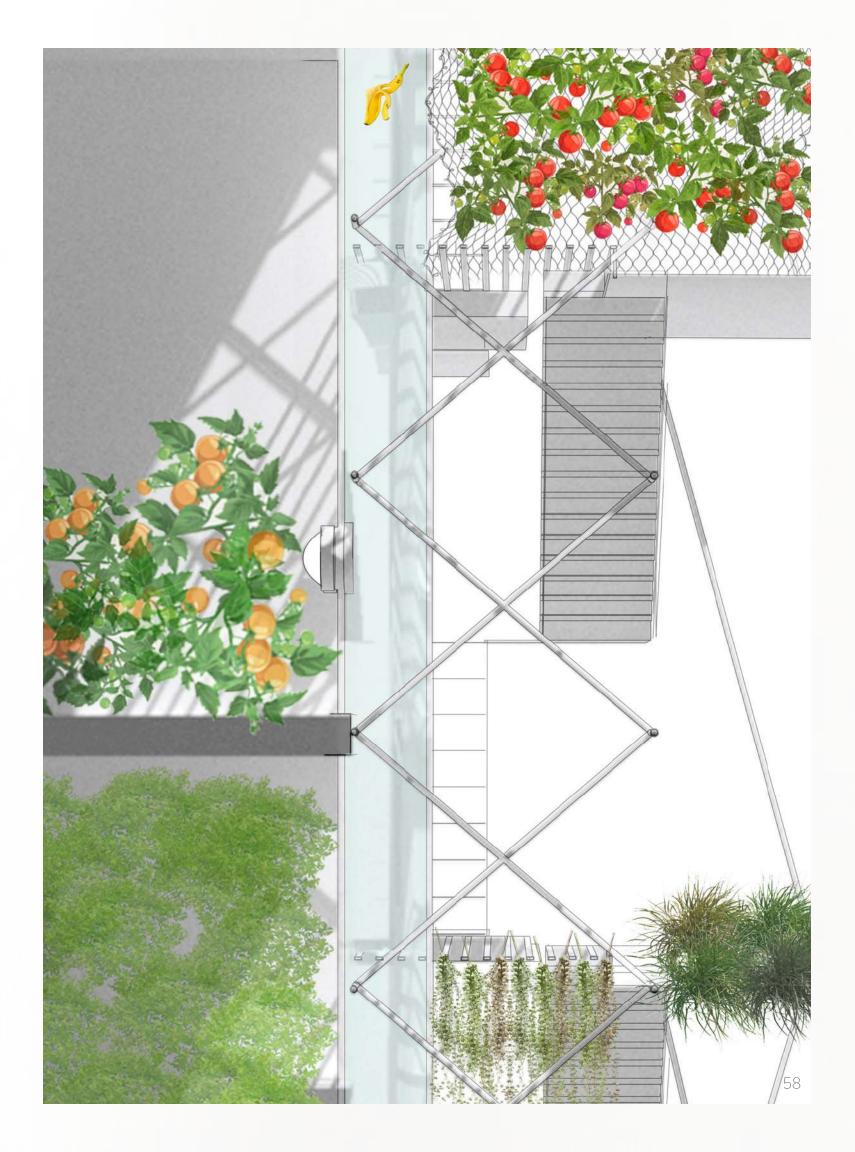


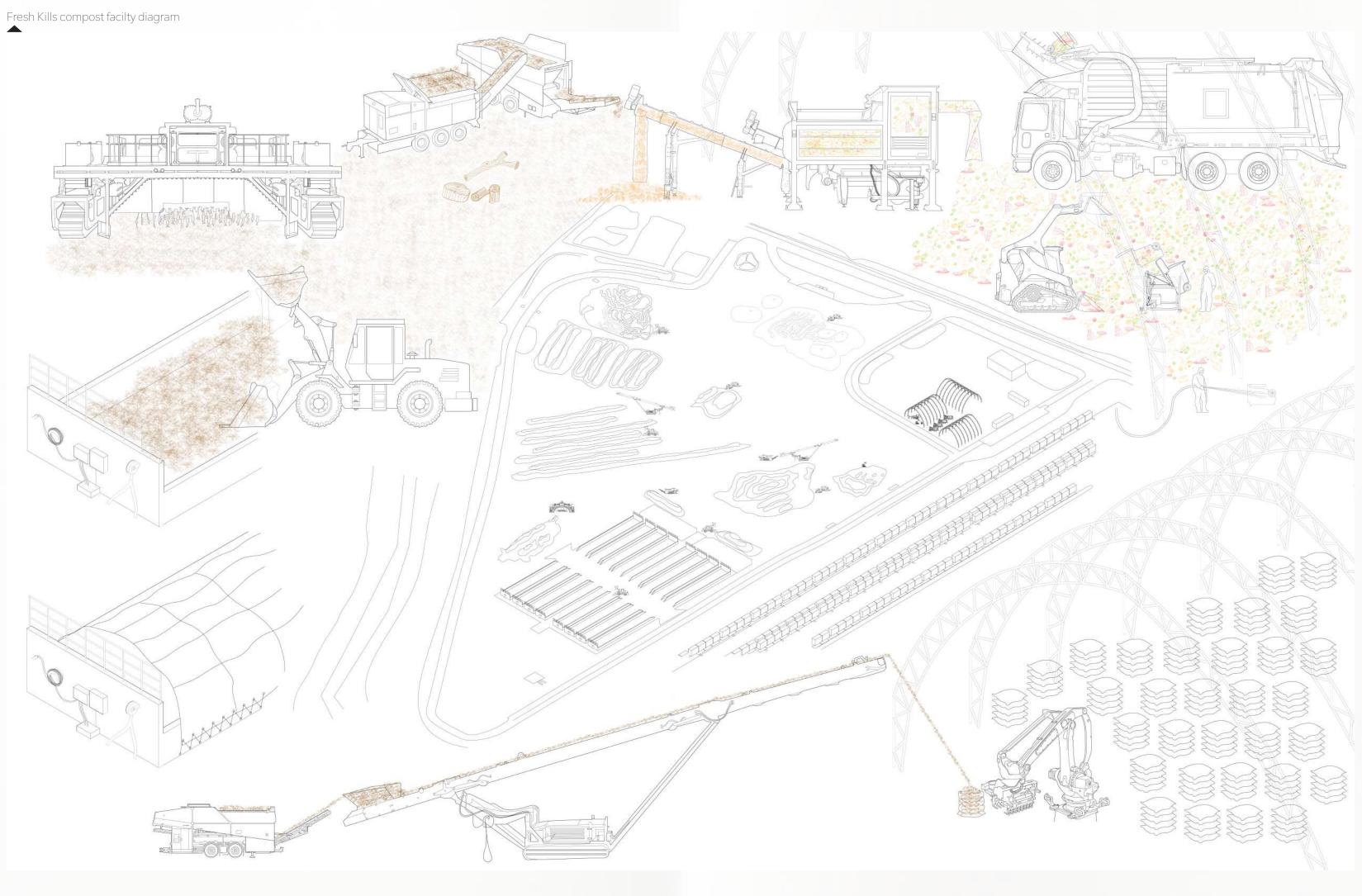
Figure 5 Henri Chomette, Ethiopian Pavilion, Expo 67, Montreal, 1967 (official publication; the presented document is the property of Archives des Pierre Chomette-Architectes/Paris).



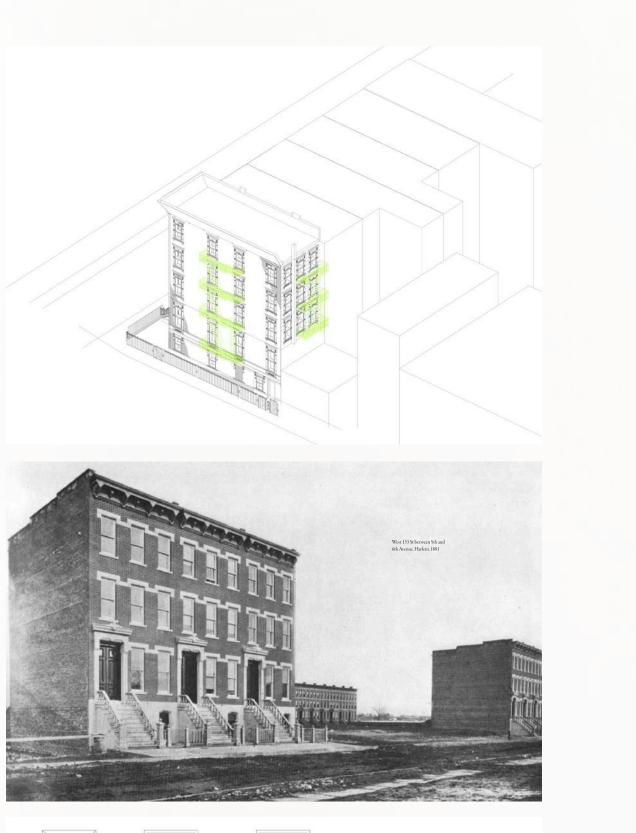
IV. FOODSTONE

ADV V Studio: Food First Faculty: Mio Tsuneyama and Fuminori Nousaku Teaching Fellow: Sonam Sherpa Fall 2024













building floor plans

62



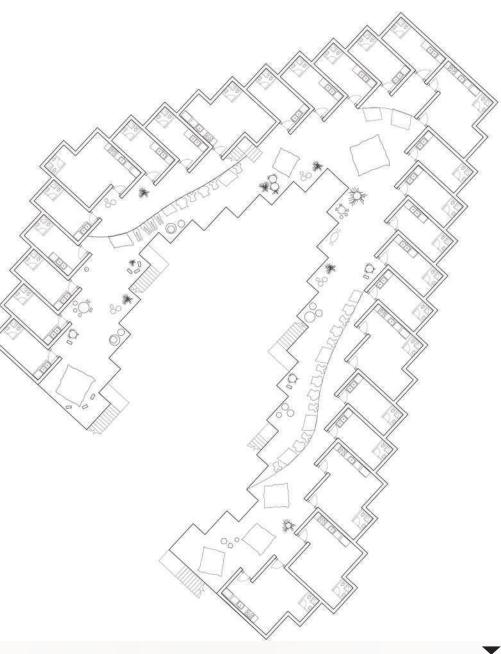
V. SHELTER CITY

CORE II Studio: Damage Control Faculty: Regina Teng Spring 2023 Questioning Addis Ababa's government-built condominiums by taking inspiration from informal settlements.



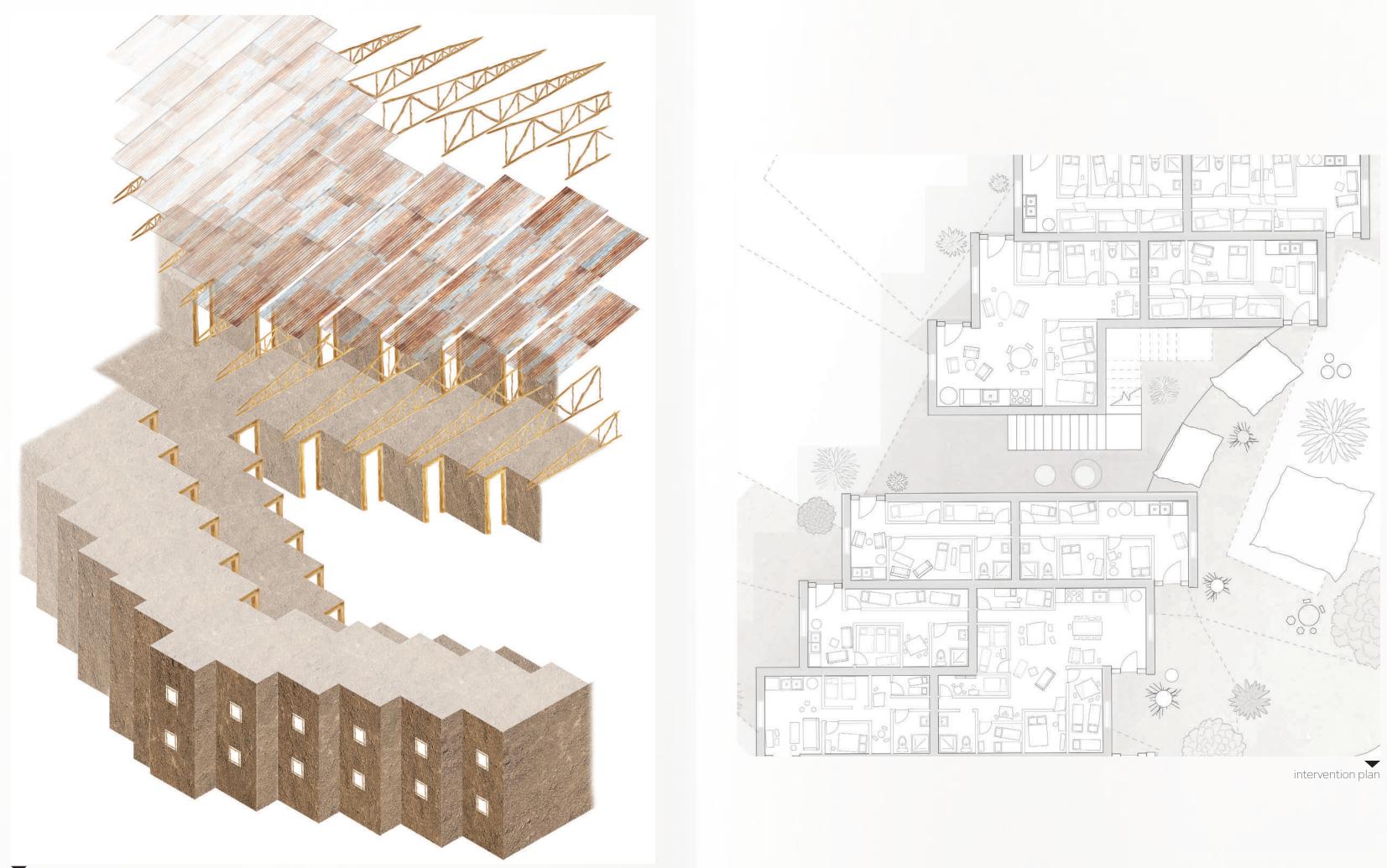
intervention section

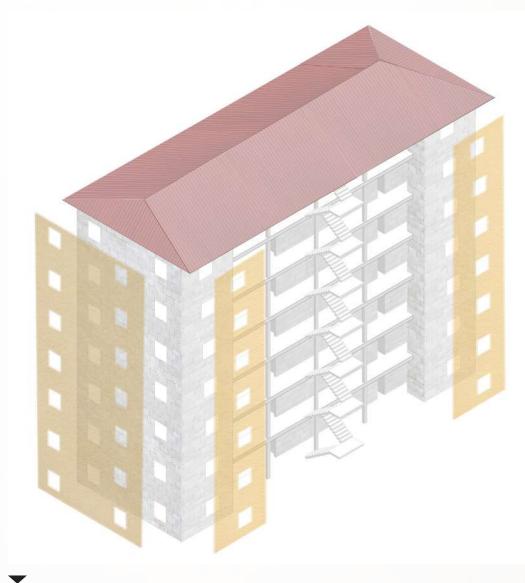




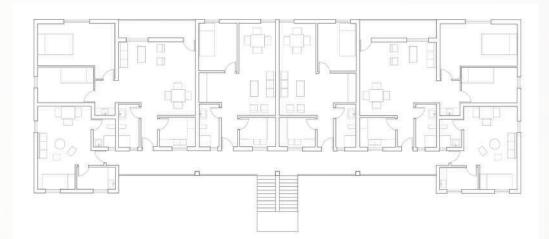
intervention ground floor plan

intervention first floor plan





condominium axon



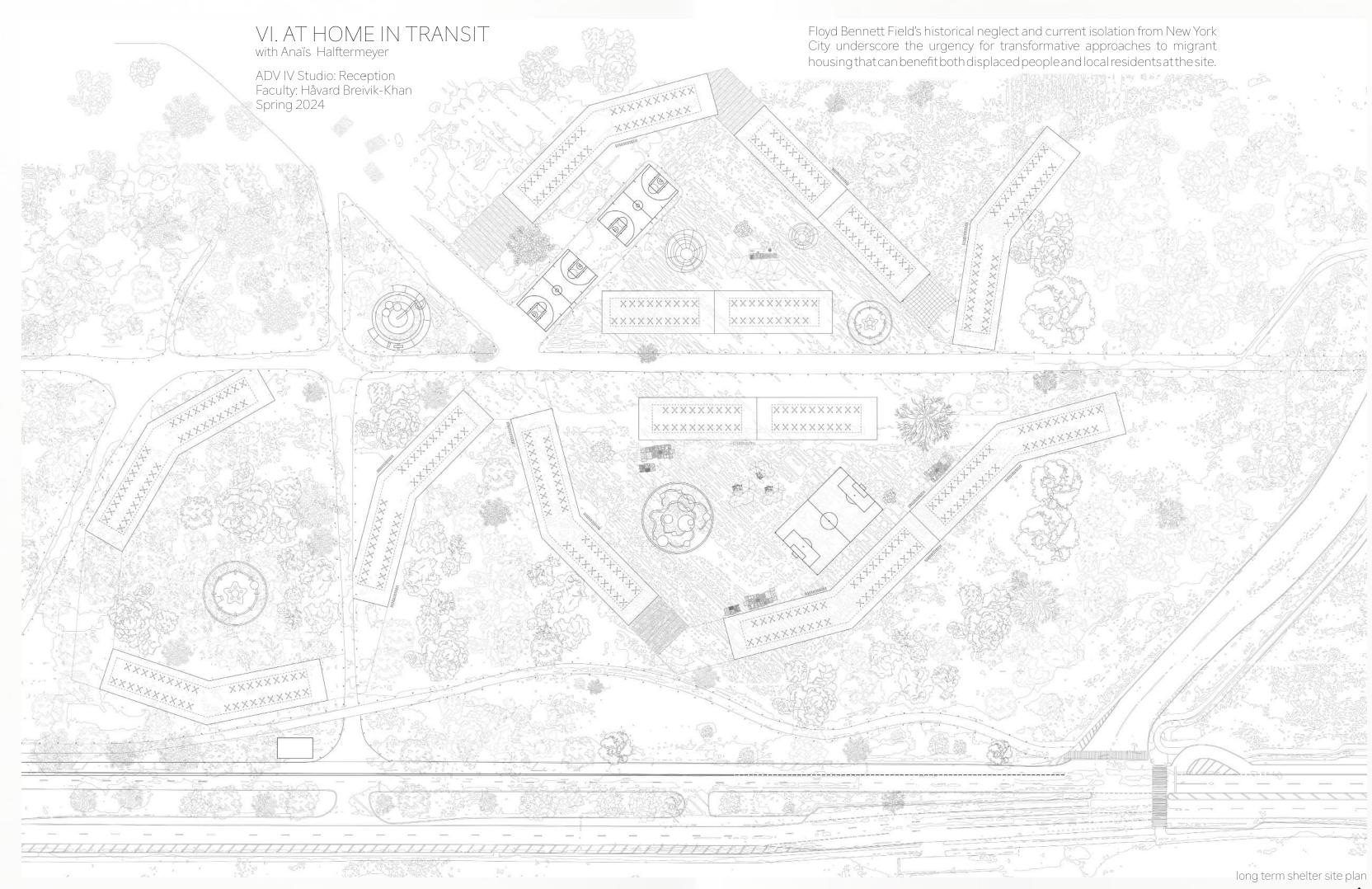
condominium plan

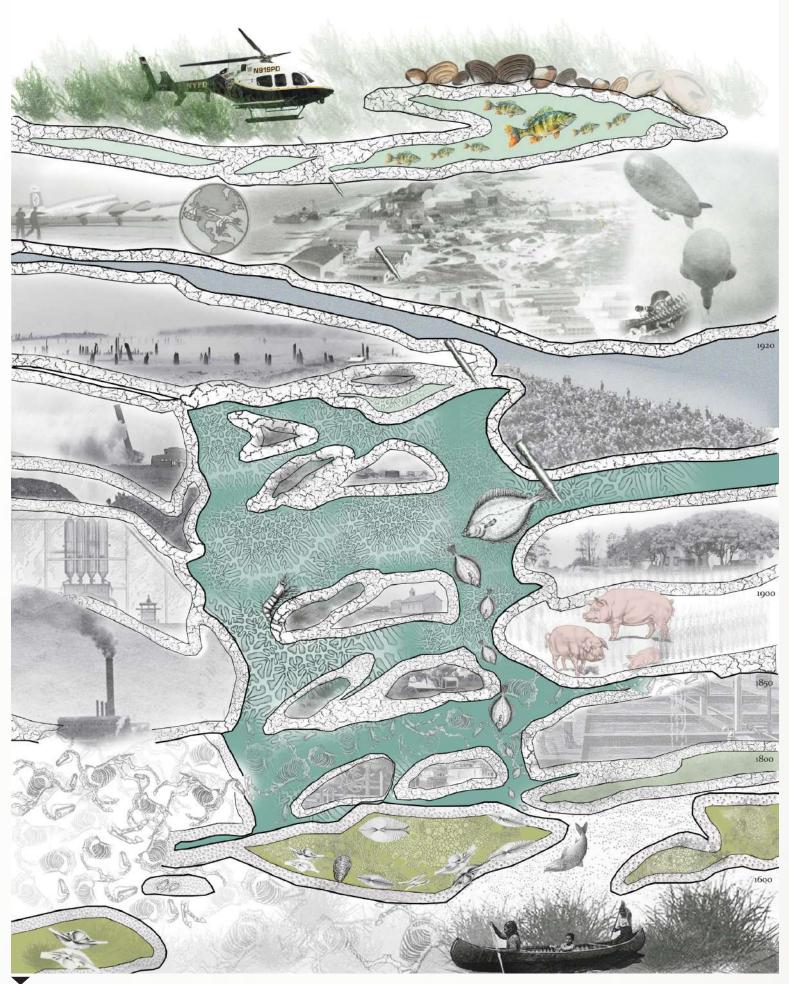




informal settlement axon

informal settlement plan

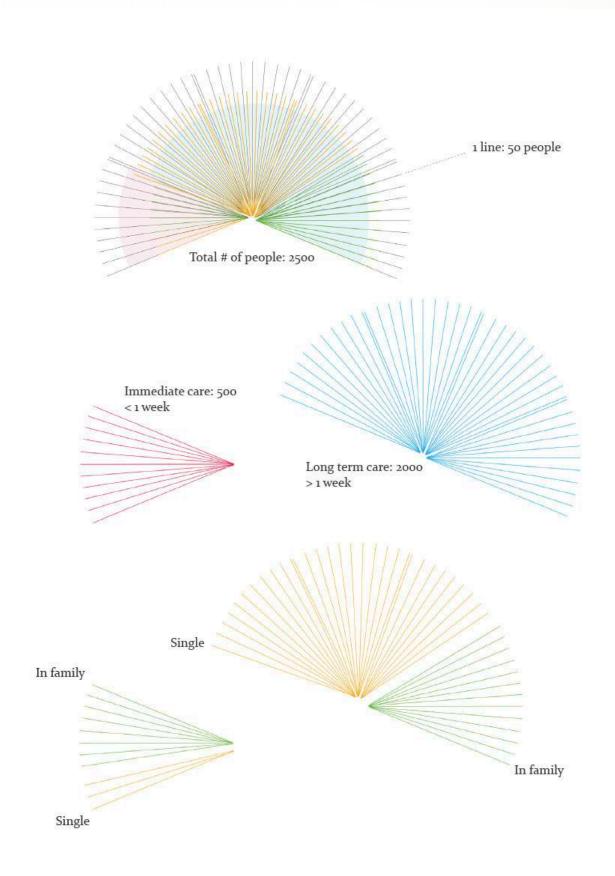


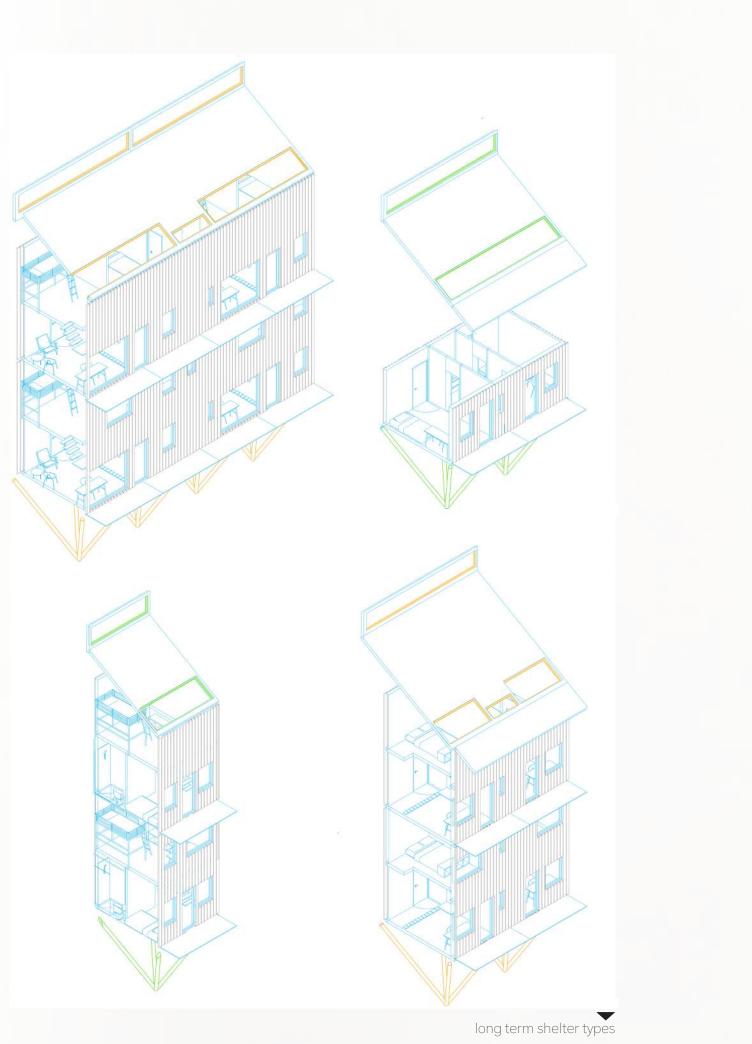




site analysis

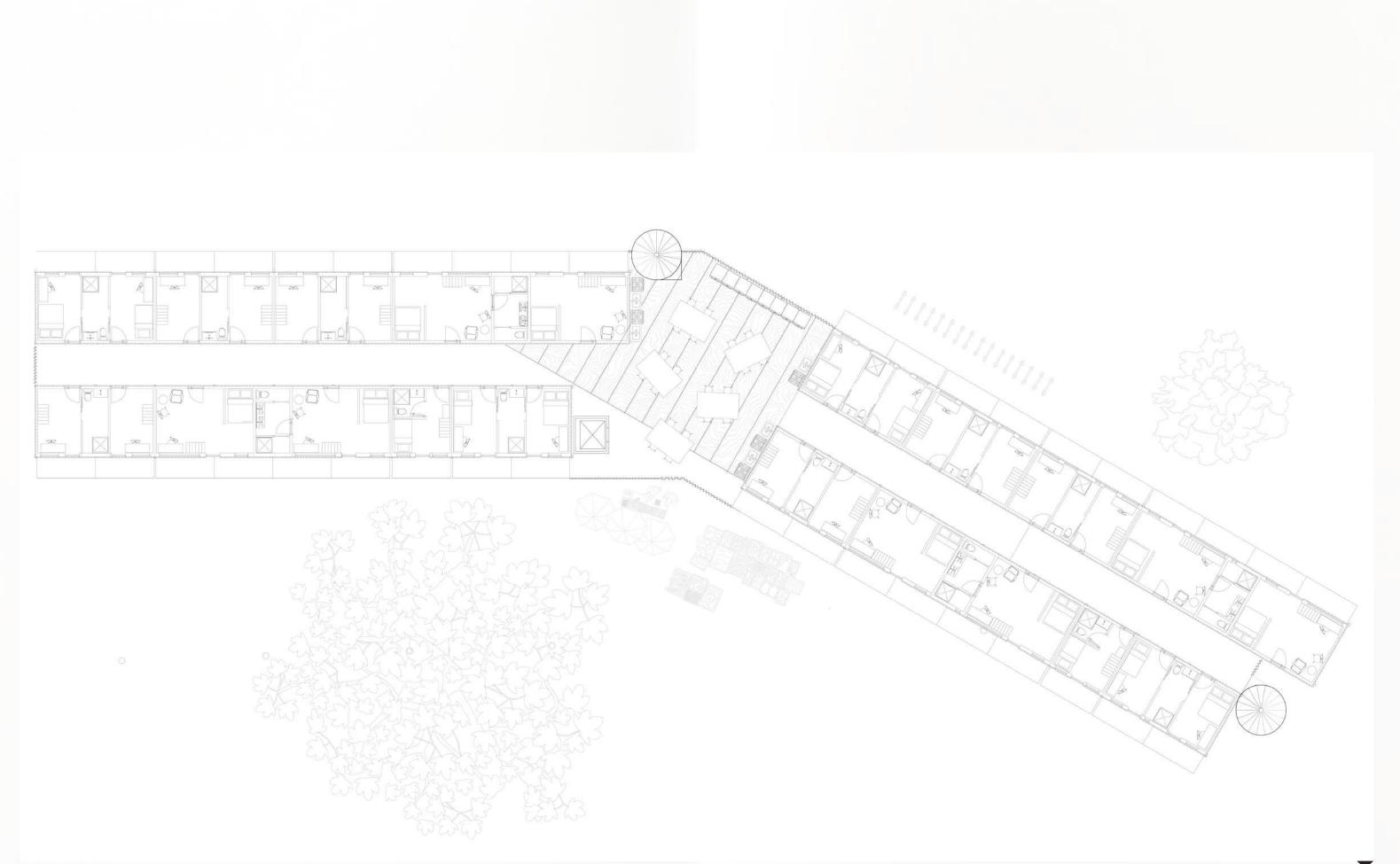
material study model





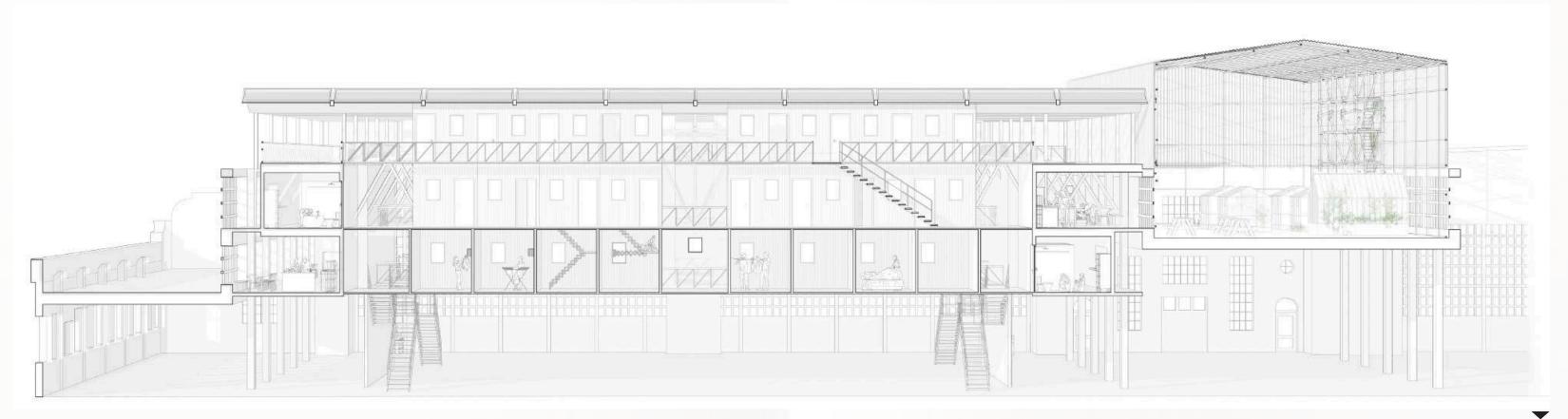


displacement patterns diagram



Long-term dwelling spaces constructed using wood, recycled brick, disposed scaffolding on Floyd Bennett Field.

long term shelter floor plan



Short-term dwelling located in existing hangar structure provides shelter during natural disasters and a safe haven for vulnerable individuals

immediate care section

