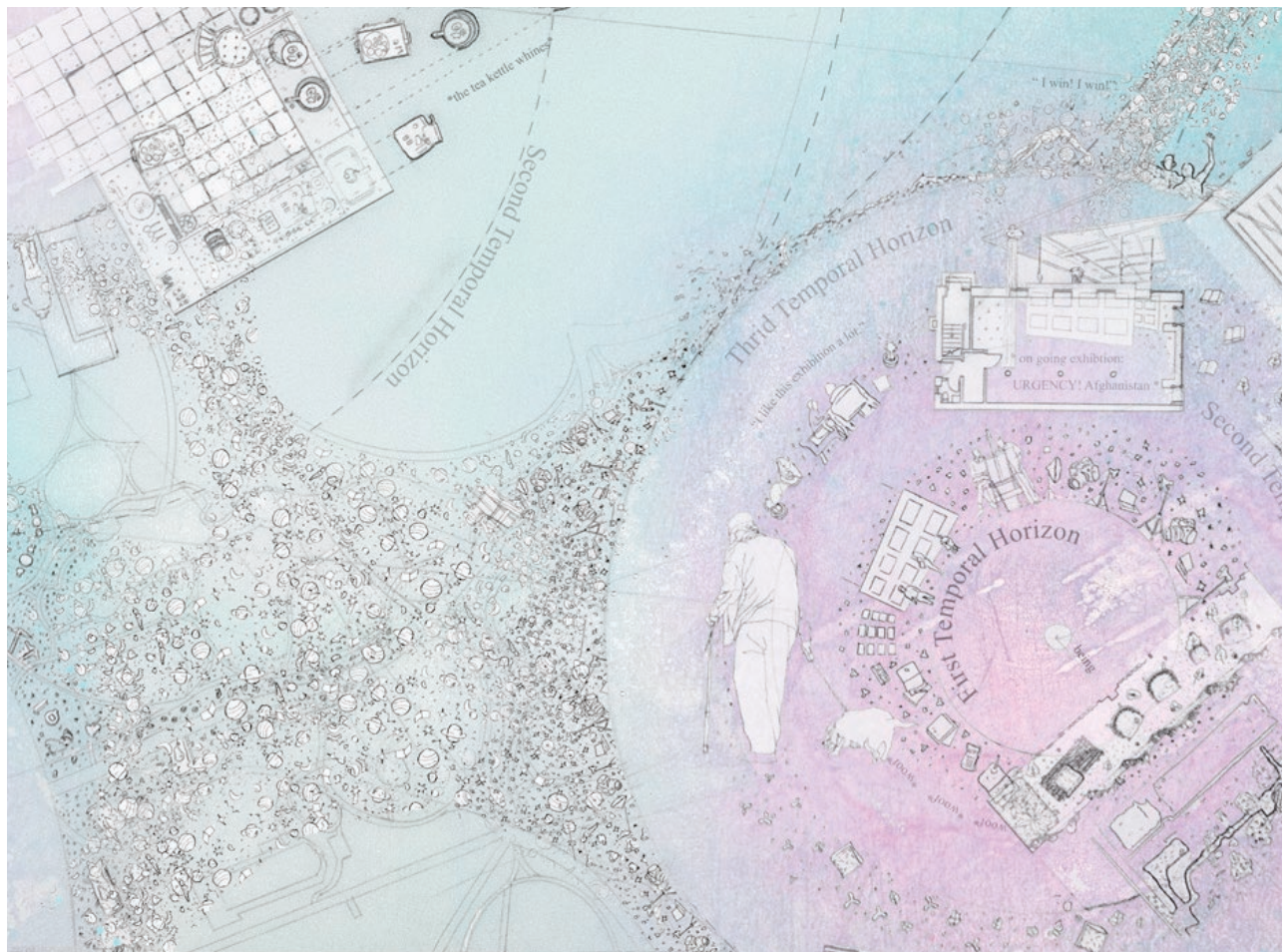
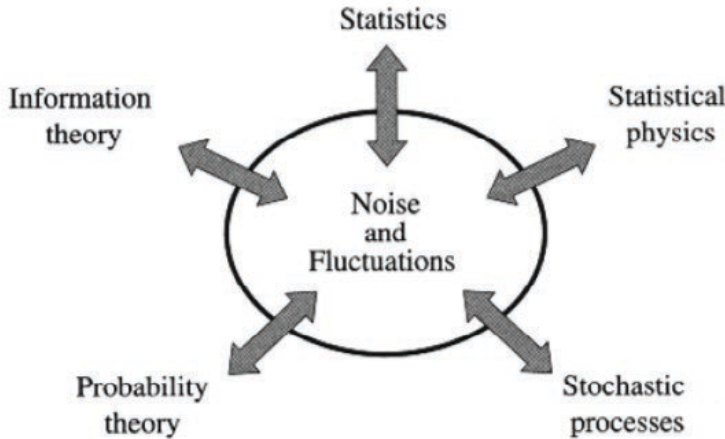


NOISE



phoenix yAng

NOISE



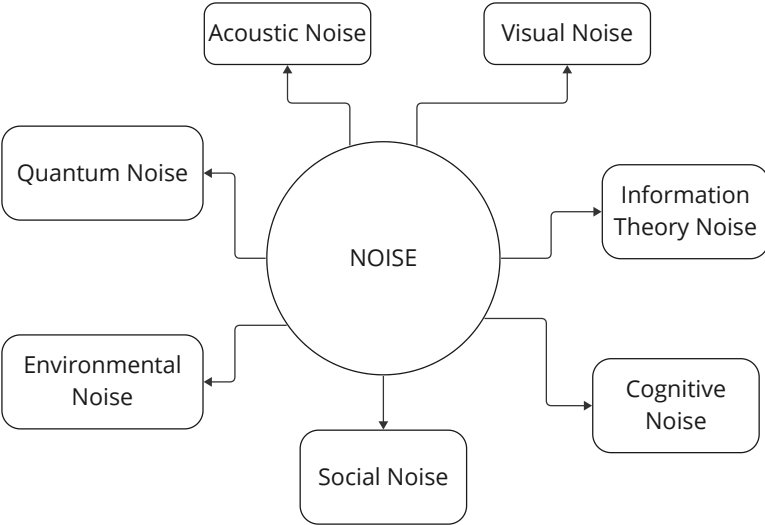
Noise Diagram¹ by Philippe Réfrégier

As a notion in physics, "Noise" echoes the approach and disposition towards the urban milieu throughout the projects in this portfolio. In the context of Heidegger's "Being and Time," noise can be comprehended as a gathering of non-prevailing atmospheres emerging from the inconspicuous existence of everyday dwelling. ¹This includes ambient sounds, indistinct images, wavering signals, and unheeded voices. Rather than presenting itself as a dissonant force, noise dissolves into the environment, materializing as a persistent component that challenges and transforms prevailing norms and edifices. It embodies a constant resistance, functioning as a pedagogical, cultural, social, spatial, and environmental response from the silenced voices to dominant norms.

Within the architectural and urban context, NOISE learns from a vast array of chromatic, emotive, atmospheric, and relational dimensions from the intricacies of past and contemporary urban fabrics. It transmutes the future into increasingly receptive, equitable, and sustainable built environments by acknowledging the domesticity of place, the exigencies of communities, and the climatic imperative. In this manner, "NOISE," as opposed to being a complete disruption, represents an approach imbued with resilience and optimism. This approach transforms our dwelling and the environment, unearthing opportunities to embrace and coexist with the challenges and crises inherent in its perpetual existence.

NOISE is a confluence of manifold ideas, mediums, objects, forms, cultures, and spaces that constitute the fundamental modes of temporality and spatiality, constantly transforming the architectural milieu and our existential mode of being-in-the-world.

NOISE is a collection of Phoenix Yang's selected works.

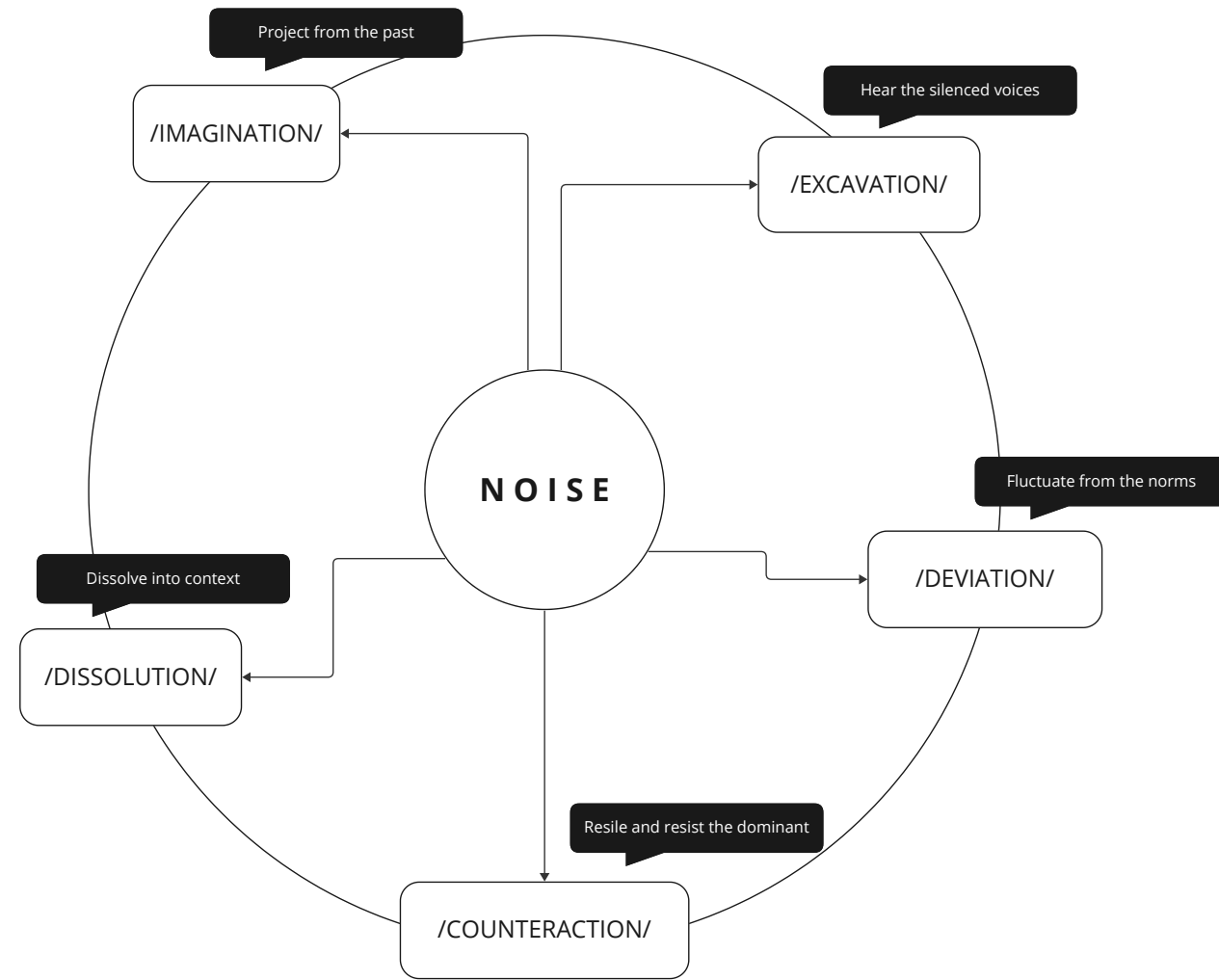


Noise in Different Disciplines

¹ Philippe Réfrégier, Noise Theory and Application to Physics, From Fluctuations to Information (Berlin: Springer, 2004), 13.

¹ Heidegger, Martin. "Building Dwelling Thinking." Poetry, Language, Thought, edited by Albert Hofstadter, Harper and Row, 1971, pp. 143-161.

NOISE AS DESIGN METHODOLOGIES



Noise as Design Methodologies

/EXCAVATION/: Noise represents the underrepresented and marginalized voices within society, often silenced or deemed unwanted. To hear, document, and amplify such noise, unseen images are retraced; silenced conversations are recorded; and these voices are visually and spatially collected into curated design projects.

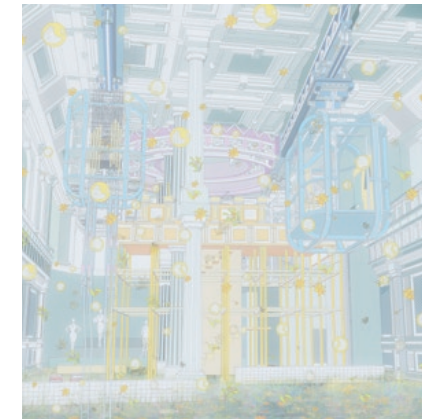
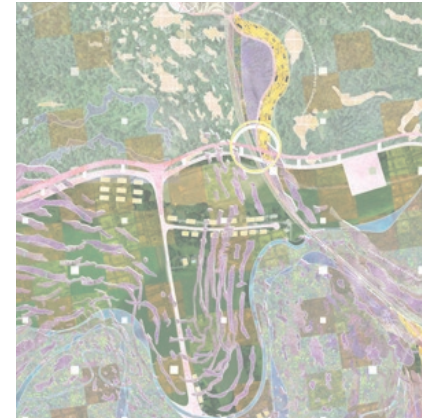
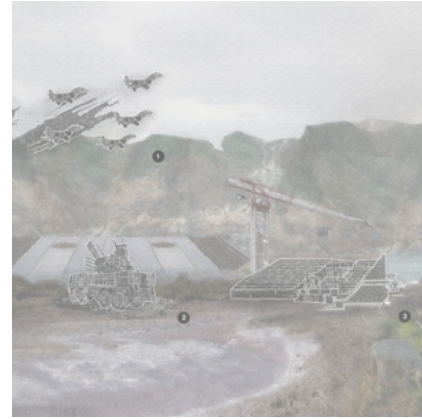
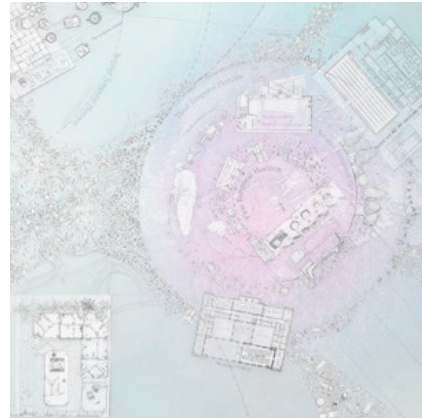
/DEVIATION/: Noise embodies a deviation from mainstream culture, environment, and pedagogy. By deconstructing and scrutinizing the complex mainstream spectrum into analyzable fragments, it discerns the discord and diverges from entrenched norms, thereby presenting alternative viewpoints and cultivating diversity and creativity.

/COUNTERACTION/: Though not entirely disruptive, Noise symbolizes resistance and resilience against prevailing social challenges and crises. By devising a network of small-scale, localized spaces and customizing programs to address community needs, it orchestrates and unifies currents of resistance, confronting crises through a broader, cohesive existence.

/DISSOLUTION/: Noise is embedded in everyday life in various forms, such as ambient noise, pixelated images, or data fluctuations. By comprehending and preserving the ambiance and emotions of the contexts and surroundings, this unassuming presence of Noise enables new designs to seamlessly dissolve into their environment, subtly shaping our perceptions and existence without causing sudden upheaval introduced by significant interventions.

/IMAGINATION/: Noise exists in both past and future contexts, anchored in historical and social contexts while bearing the trajectory of speculative change. The application of visual and digital tools propels the project into an envisioned future, projected by its continuous evolution from its historical existence, offering a critical lens to scrutinize the present and reflect on the past.

The subsequent projects in this collection of works employ one or more of the NOISE design methodologies, as outlined in the table of contents on the following page.



HOMECOMING

/DISSOLUTION/

Bronx, New York
Columbia GSAPP
2021 Fall

SALT

/IMAGINATION/

Nile River Region
Columbia GSAPP
2022 Fall

ODYSSEY

/EXCAVATION/

Kingston, New York
Columbia GSAPP
2022 Spring

REWIND

/DEVIATION/

New York, New York
Columbia GSAPP
2021 Summer

DIALOGUE

/COUNTERACTION/

New York, New York
Columbia GSAPP
2021 Spring

P.S. 64

/COUNTERACTION/

New York, New York
Columbia GSAPP
2021 Fall

1. **P08-P34**

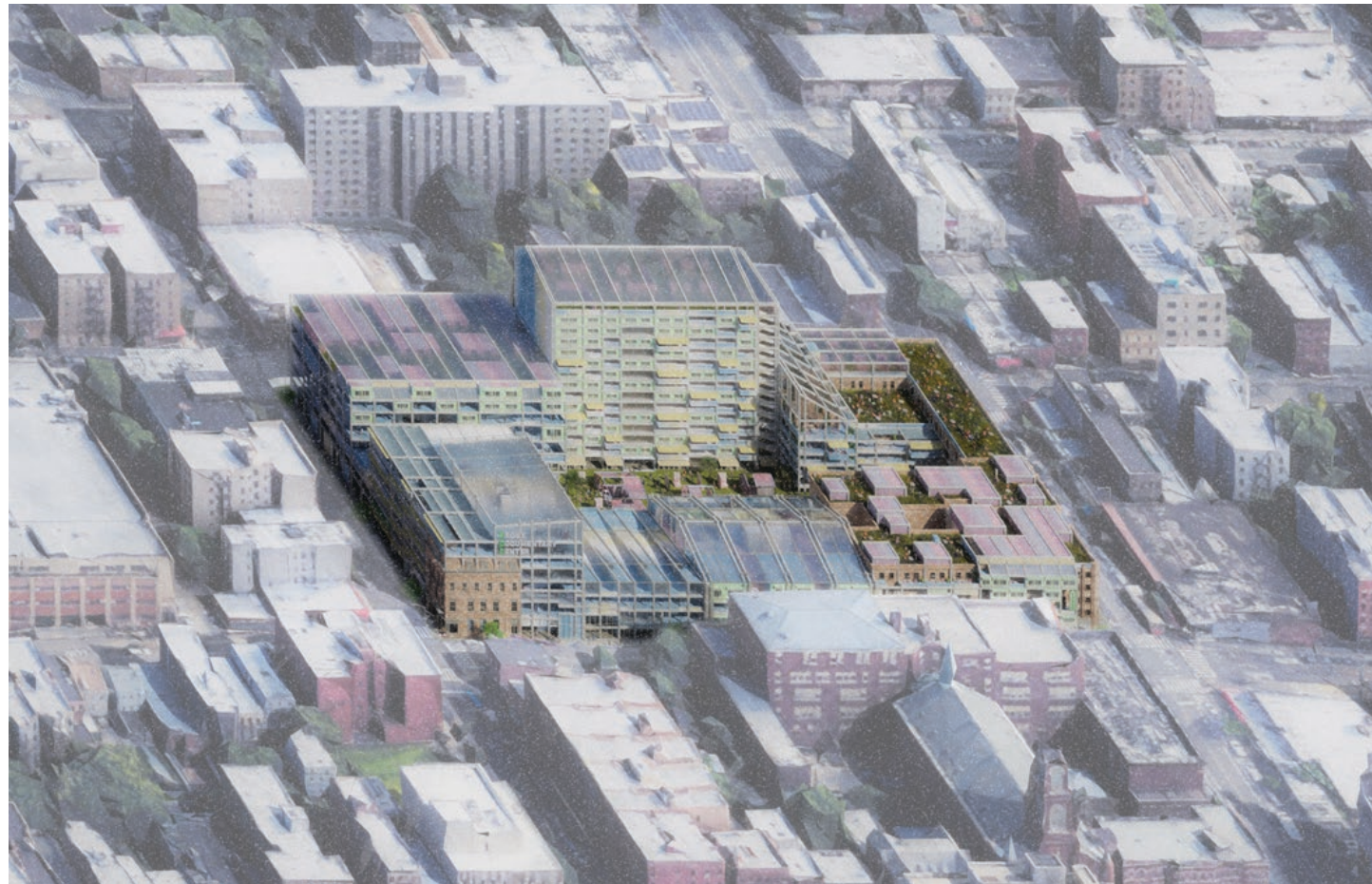
2. **P35-P53**

3. **P53-P64**

4. **P65-P78**

5. **P79-P100**

6. **P101-P112**



Digital Render of the Proposal

17" * 11" Render

TOPOGRAPHIES OF HOMECOMING /DISSOLUTION/

FALL 2021 - GSAPP Core 3

Critic: Esteban de Backer

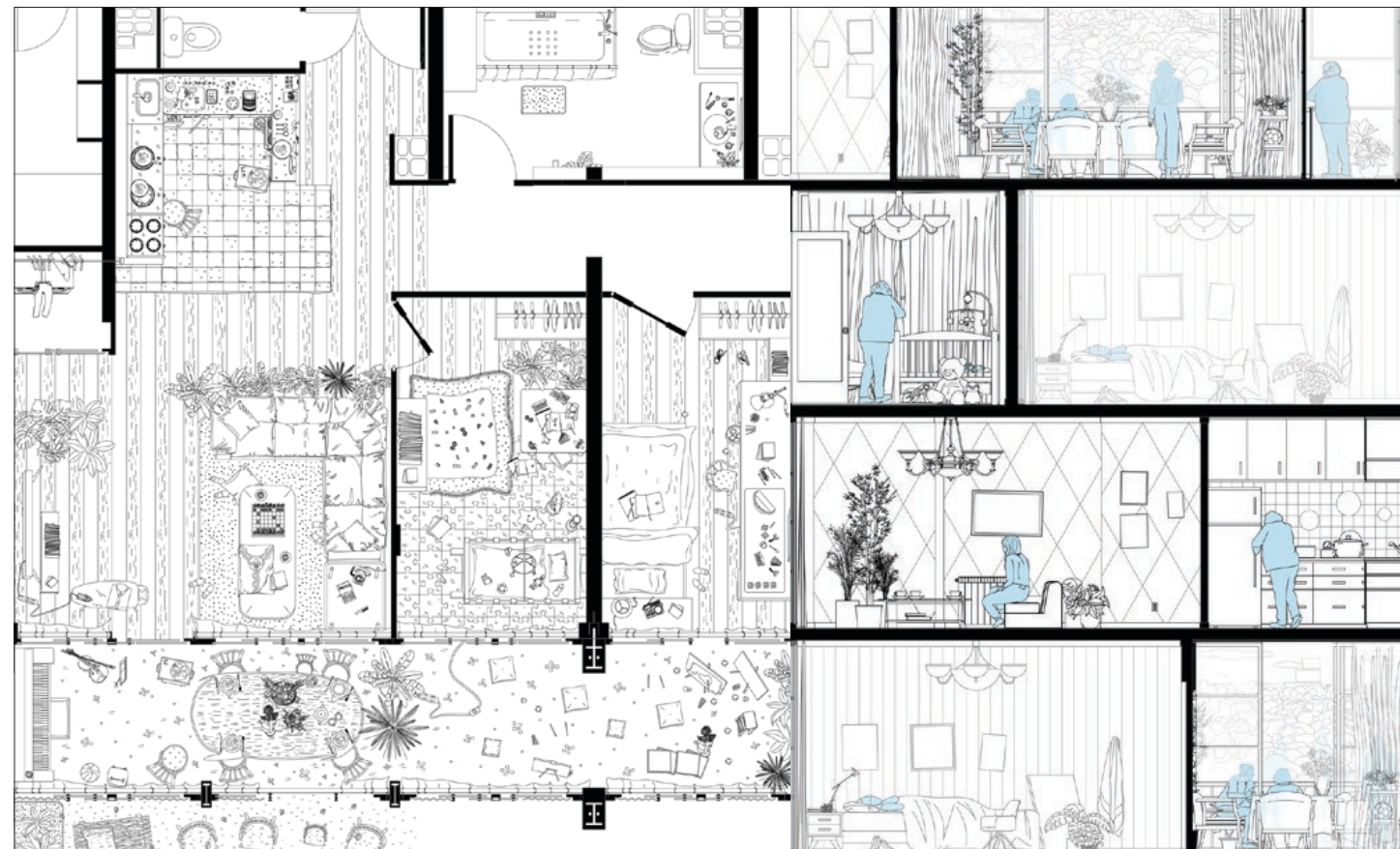
Groupwork with Aaron Smolar

**KoozArch's Best Drawings of March*

We proposed a new social-housing framework in the Bronx that reinterprets the architectural notion of "dwelling" in a broader sense that facilitates and underpins this connotation as an essential dimension of human existence. In contrast to both the modernist dwelling, the cold and homogeneous "machine for living in," and the postmodern purse of pop-cultural signs and mythologies, we respected the human spectrum of atmospheric and emotional needs and increased feelings of comfort and familiarity that could ward off anxiety and homelessness.

Our proposal cultivates unique atmospheres nodes of rigidly articulated programs gradually dissolve into partition-less fields to merge into the fluid urban context, affording a territorial kind of architecture that provides a spectrum of ambiances ranging from a quiescence bedroom to a wistful library table to an aromatic sharing kitchen and a noisy food market. This framework enfranchises people's freedom to define and claim their dwellings and bridges smoothly with its surrounding urban fabric.

A Revisit of Tour Bois-le-Prêtre
Based on Heidegger's Being and Time

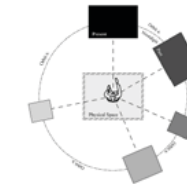


Residents' Existential Space in Tour Bois-le-Prêtre
Digital Illustration

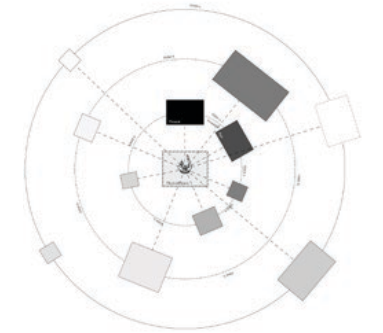
World as Existential Space
A Diagram of One's Spatial Perception & Social Encounter



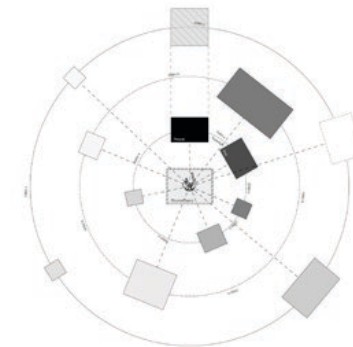
1. One Individual is located at a point in a physical space.



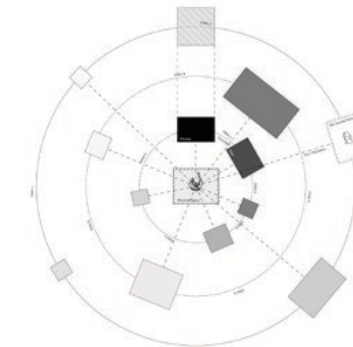
2. At every moment, one implicitly understands possible ways to exist with others that are more temporally and cognitively distant.



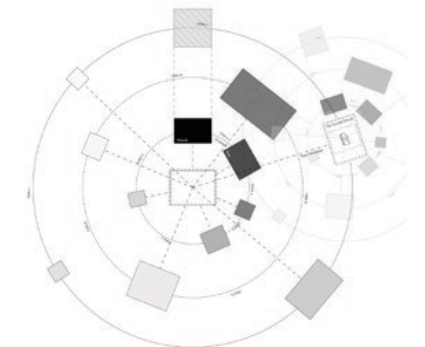
3. These possibilities include others that are more temporally and cognitively distant.



4. The individual perceives its physical space in terms of these cognitive involvements

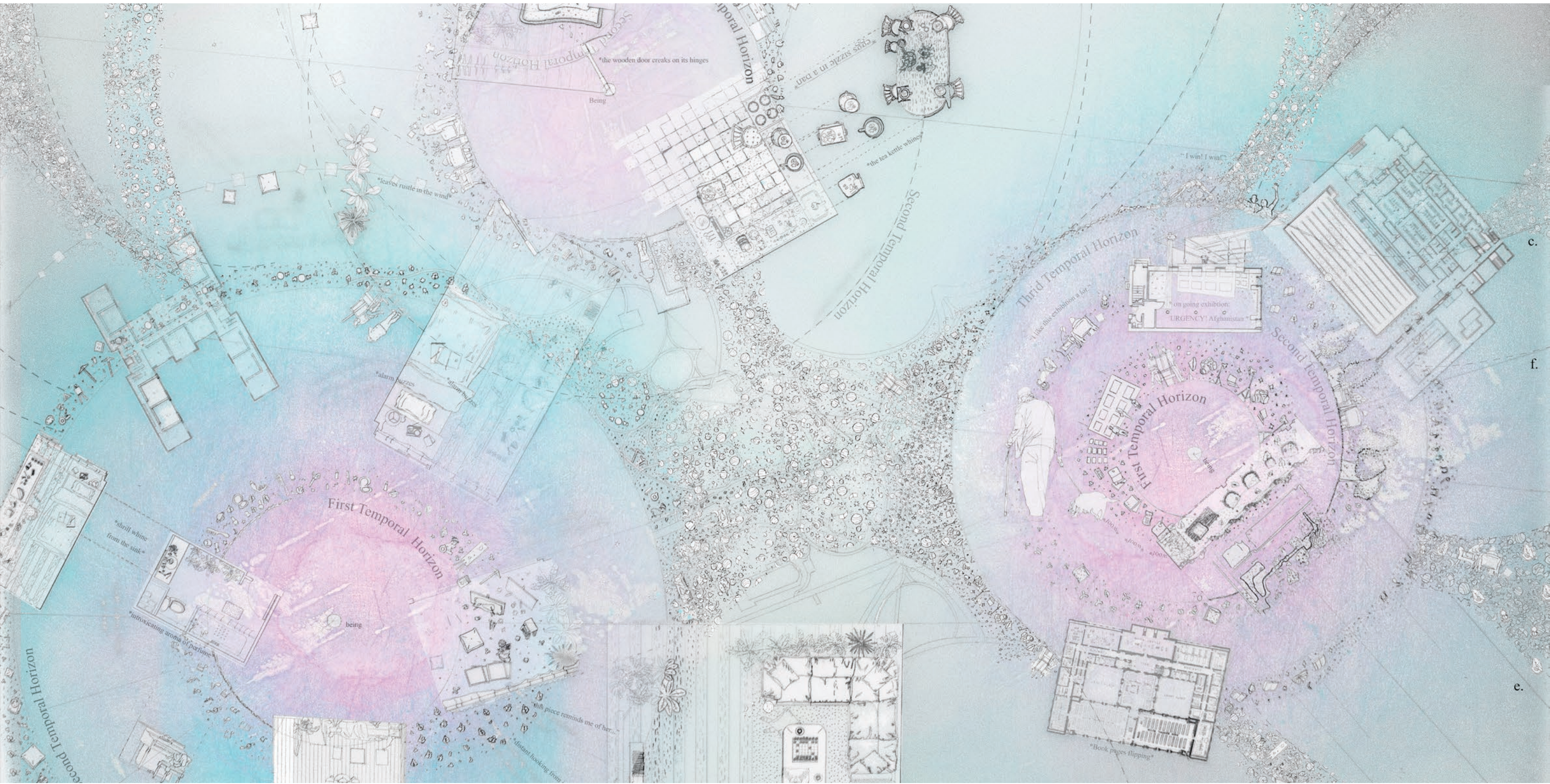


5. Only in terms of these involvements can they encounter others



6. Others reciprocally encounter one in the context of their own possibilities

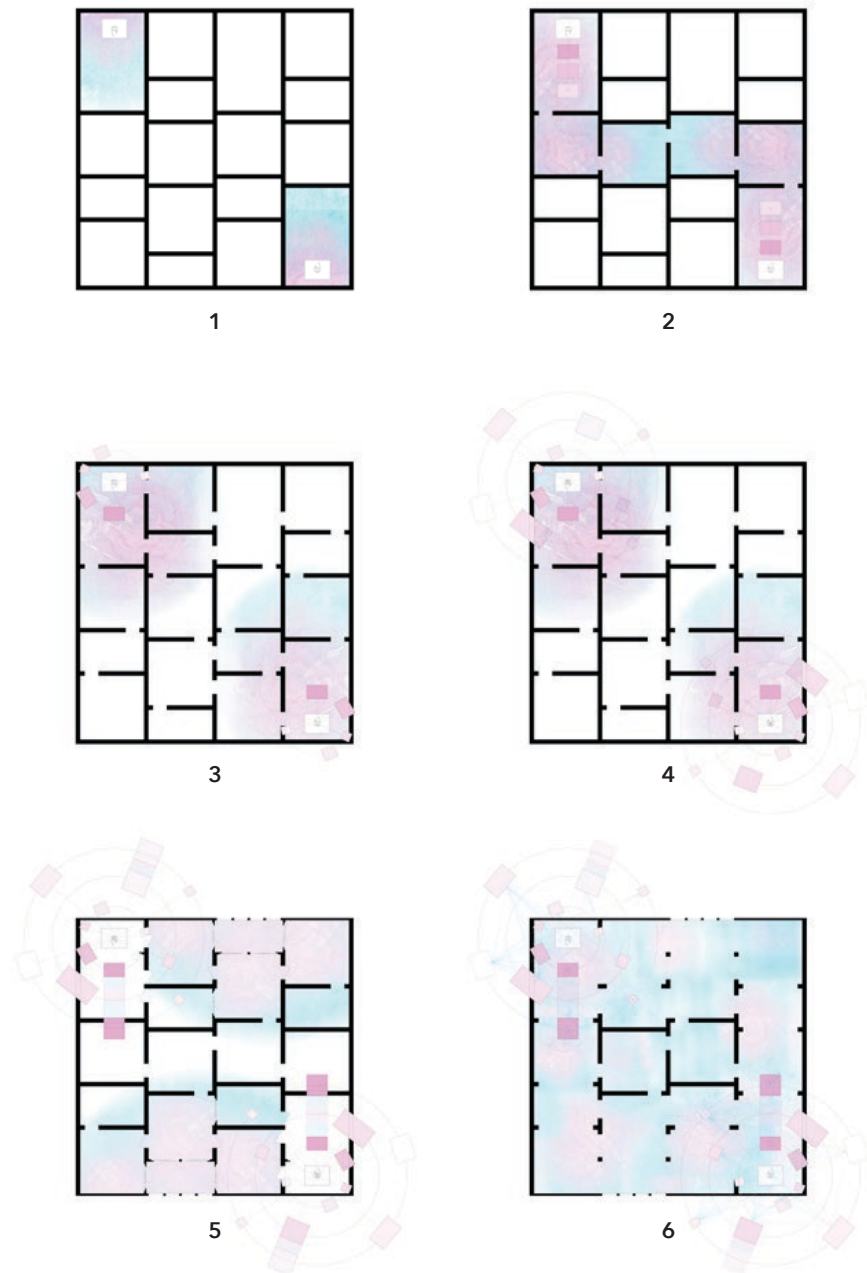
Dwelling and Inhabitation
Drawing a Field of Homeness



Perception of One's Dwelling
2H Pencil on Mylar
Printmaking Bottom Layer
36" x 30"

c.
f.
e.

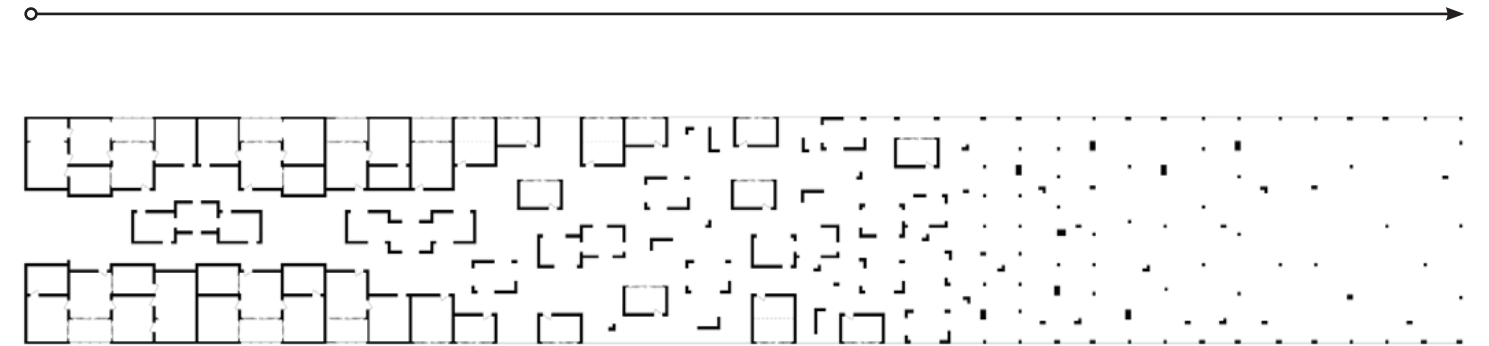
Cultivate the Spectrum of Home Ambiances
Finding Alternative Structural Framework



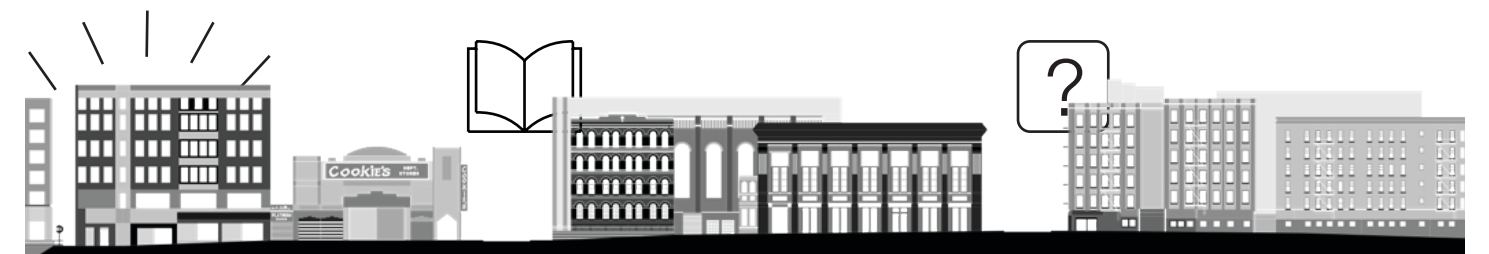
Structural Flexibility and Living Ambiances
Digital Illustration

Rigid yet Flexible Structure Framework
Provides Sense of secure and tranquillity

Fluid Structure Framework
Provides Active and Sharing Type of Living



Secluded, Quiet, and Personal Noisy, Active, and Communal



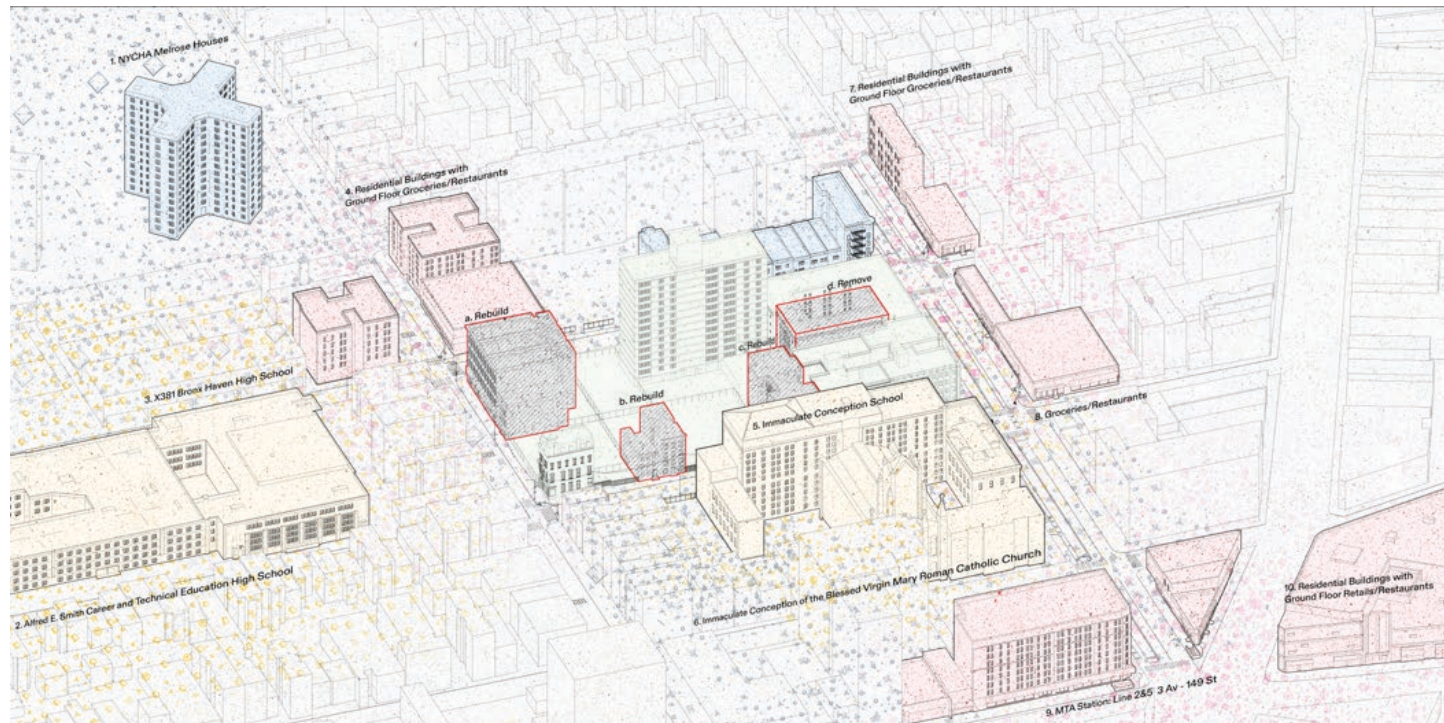
3 Av - 149 St Subway Station,
 Commerical, Noisy, Active

Immaculate Conception School
 Educational, Vibrant, Creative

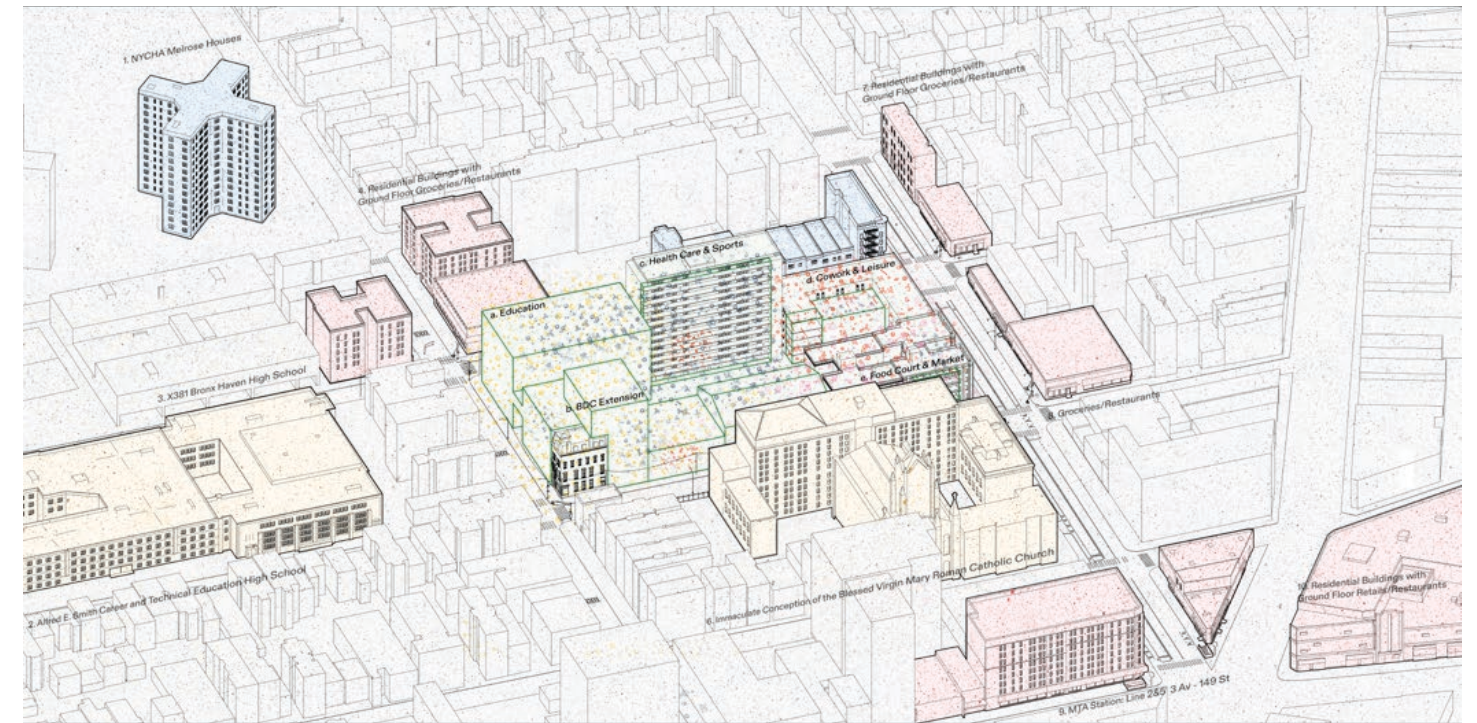
Existing Site
 Residential, Cozy, Comfort

Seamlessly Weaving the Neighborhood Fabric

A Site Strategy for the Bronx Documentary Center and Surrounding



Absorb Existing Ambiances on the Site
17*11 Inch Digital Illustration

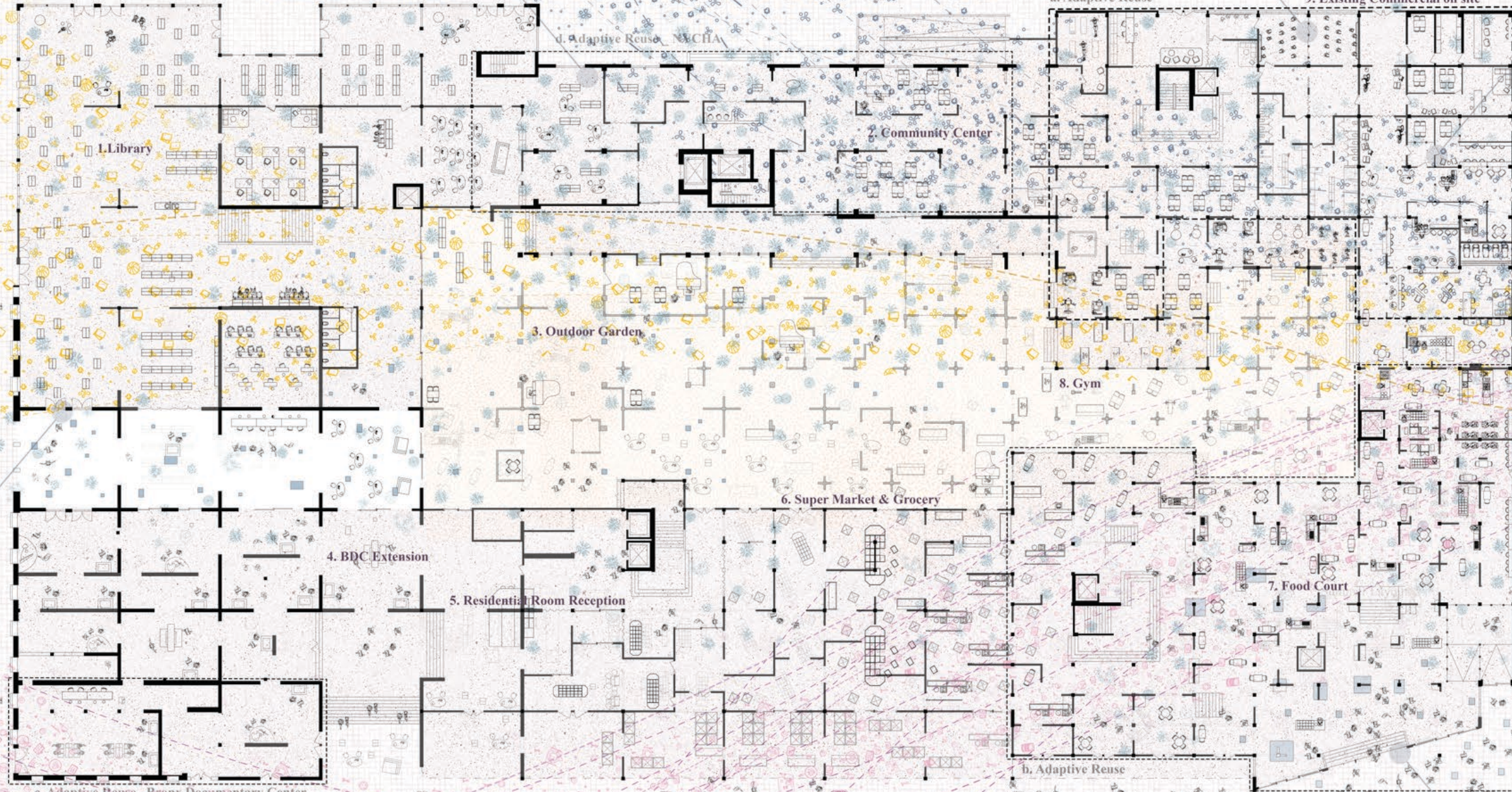


Adapt and Cultivate New Ambiances
17*11 Inch Digital Illustration

Territories of Urban Dwelling
Residential Units as an Extension of the Public Dwelling

* Notes: The Community Center will hold joint programs for the seniors who live in the surrounding communities and children who end classes before their parents arrive home from work. Children will teach the seniors new technology and the senior will cook afternoon-meals for the children who come to the program

* Notes: Dancing Studios are designed to be in a room next to the pedestrian street to provide people a visible urban lively atmosphere.



* Notes: A community library is designed next to the new BDC extension and open to public. It will served as a warm home and a programmed educational institution with diverse after-class activities for numerous students and children who study in the surrounding schools.

* Notes: The existing commercial at the the North-East corner remains its place, while utilizing the newly-designed flexible wall divisions, which bring convenience for both customers and the small business owners, and increase the exposure of the existing small business on the site.

c. Adaptive Reuse - Bronx Documentary Center

b. Adaptive Reuse

* Notes: Food Court and super market are designed to be an urban corner opens to public from 9am-10pm.

Food court is changed into a living courtyard after 10 pm for its residents.

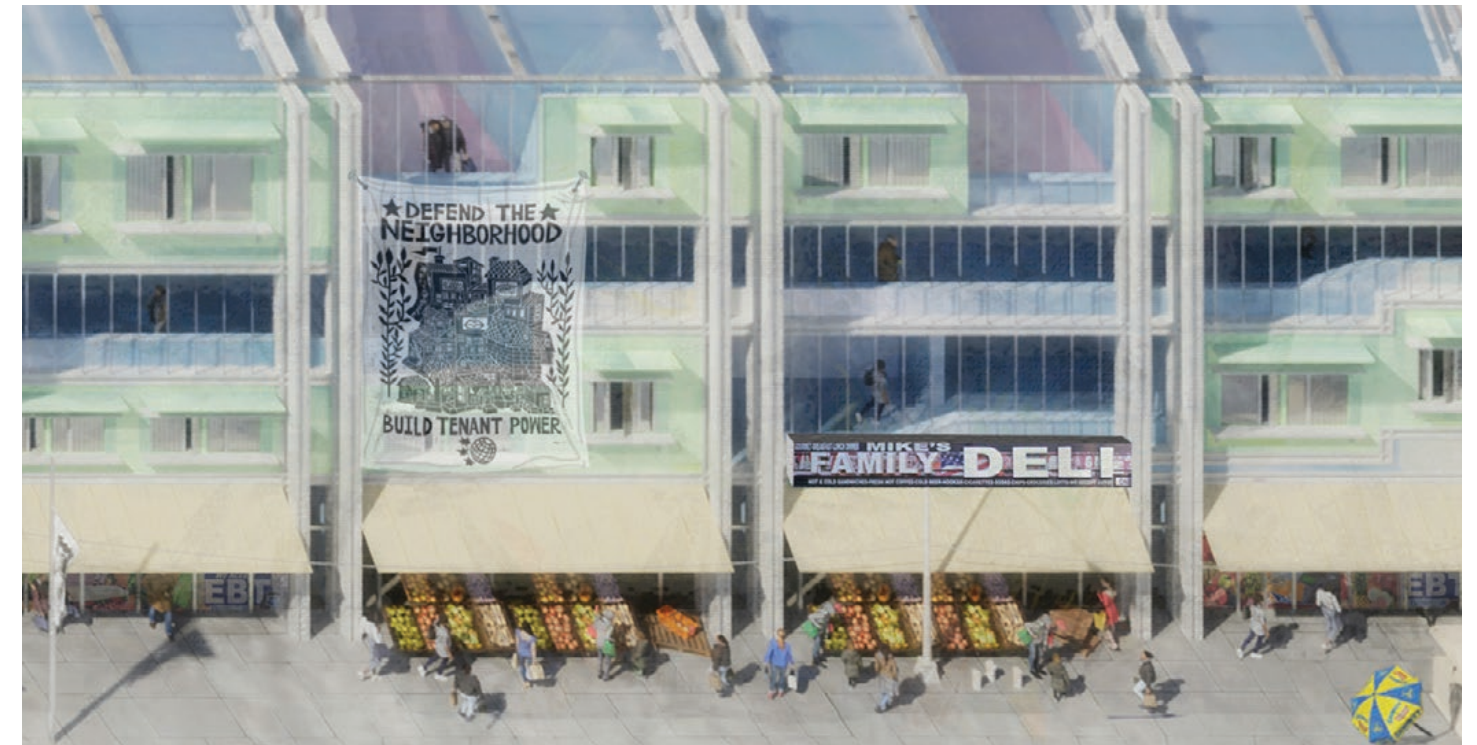
Preserve the Ambiance of Belonging
Protection & Activation of the Existing Programs



Aerial View Digital Render
34*22 Inch Digital Render



After-School Programs
34*22 Inch Digital Render



Relocations of Local Business
34*22 Inch Digital Render

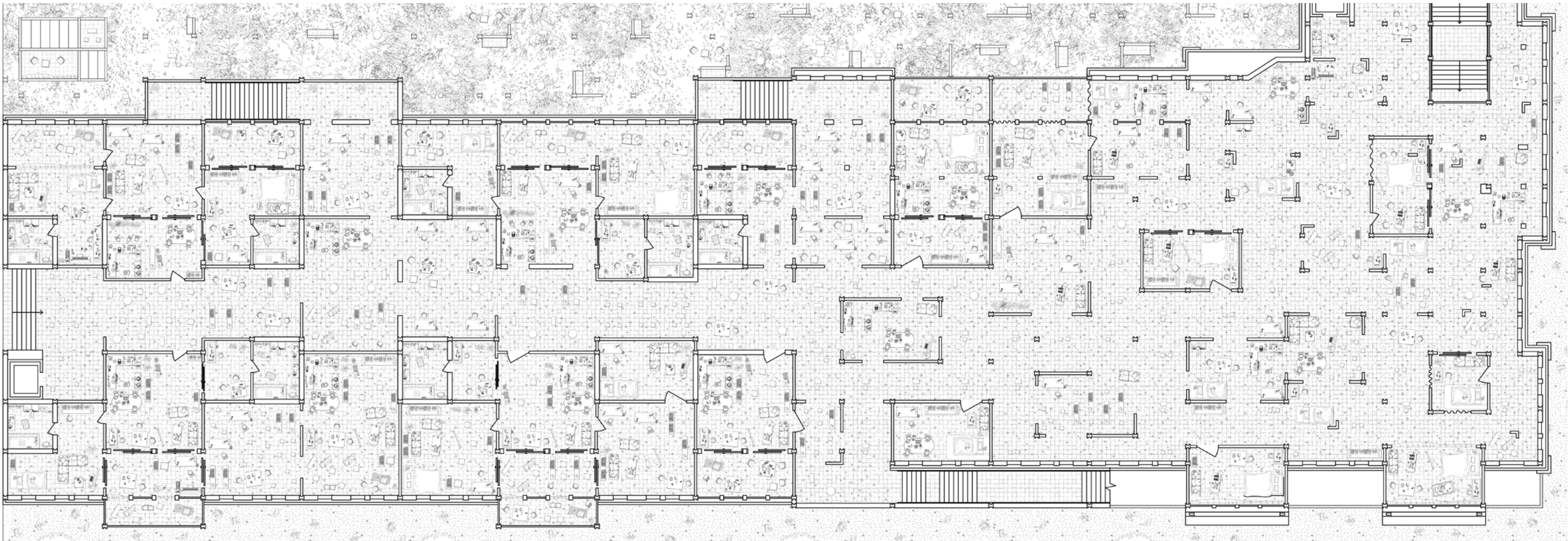


Preservation of Bronx Documentary Center
34*22 Inch Digital Render



Food Court at the South-East Corner
34*22 Inch Digital Render

Unfold the Indoor Ambiance Spectrum
Design in Diverse Home Environments



Upper Floor Residential Plan - South East Corner
Line Plan Drawing

Unfold the Indoor Ambiance Spectrum
Design in Diverse Home Environments

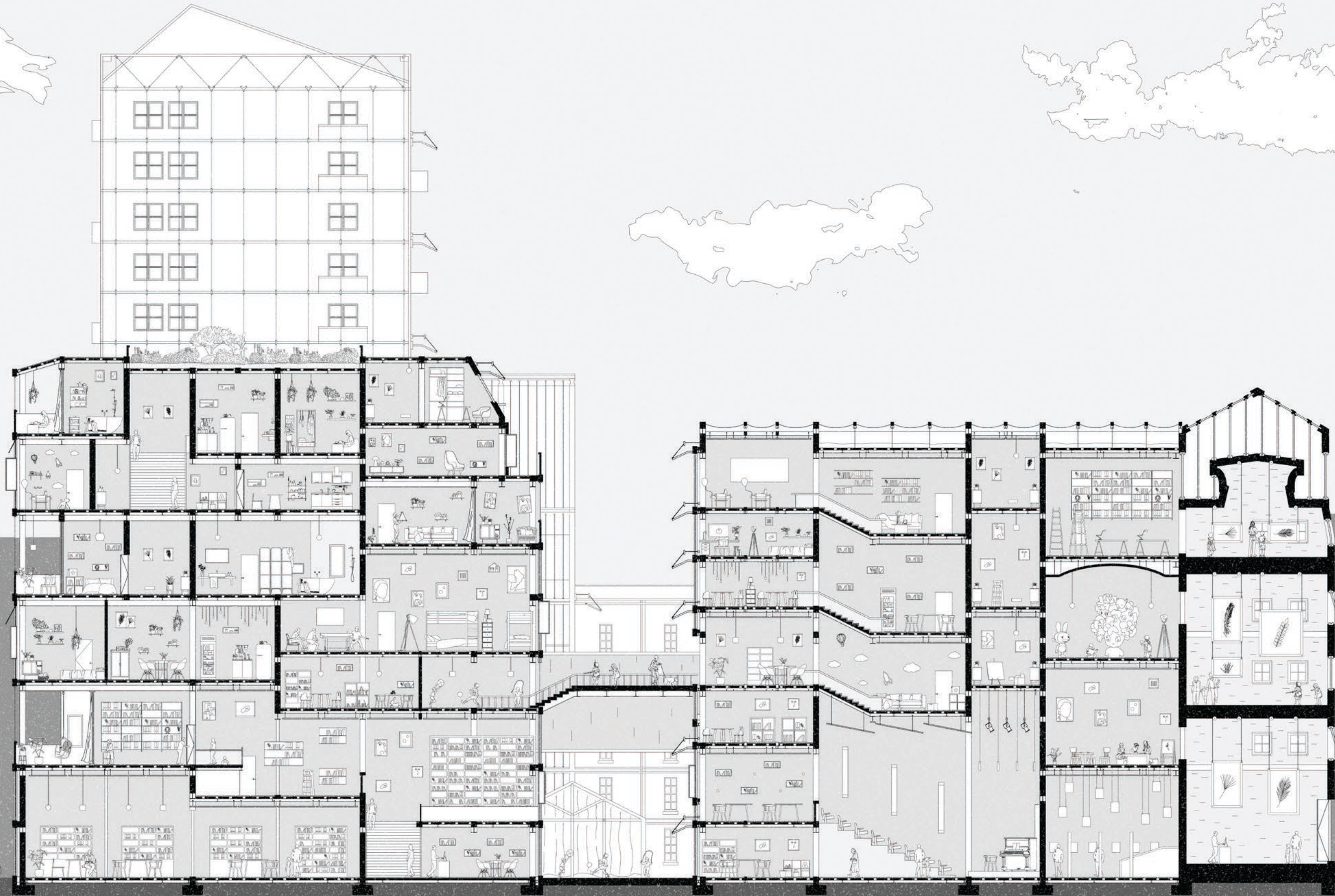


Dissolve Rigid Structural Grid for a Sharing Kitchen
*17*11 Inch Digital Render*



A Sharing Bedroom Designed with Open Structural Framework
*17*11 Inch Digital Render*

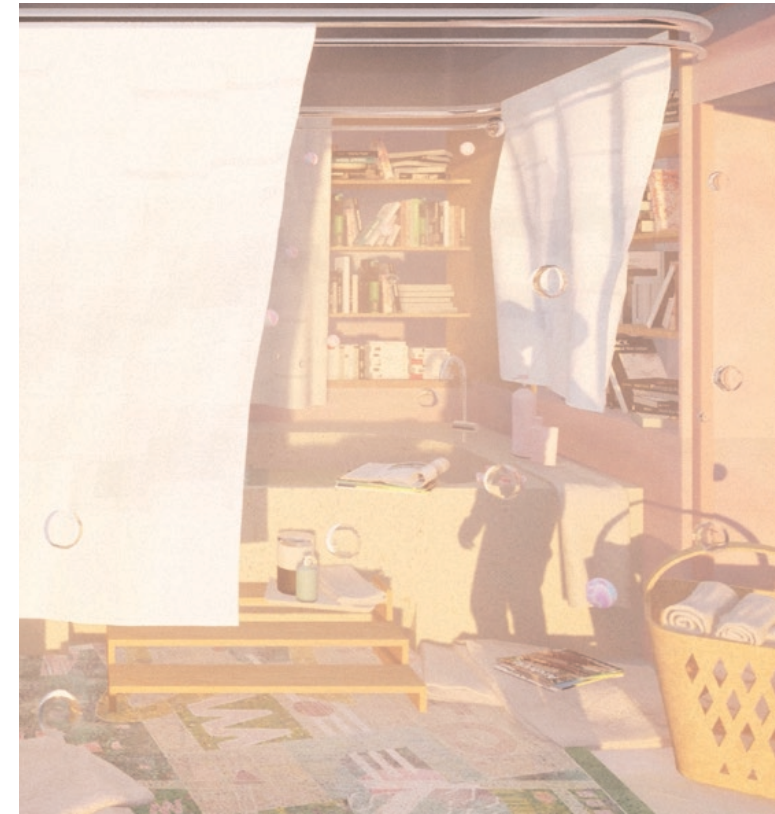
Dissolution of Public and Private Boundary
Sectional Transitions from the Public Ground to Private Dwelling



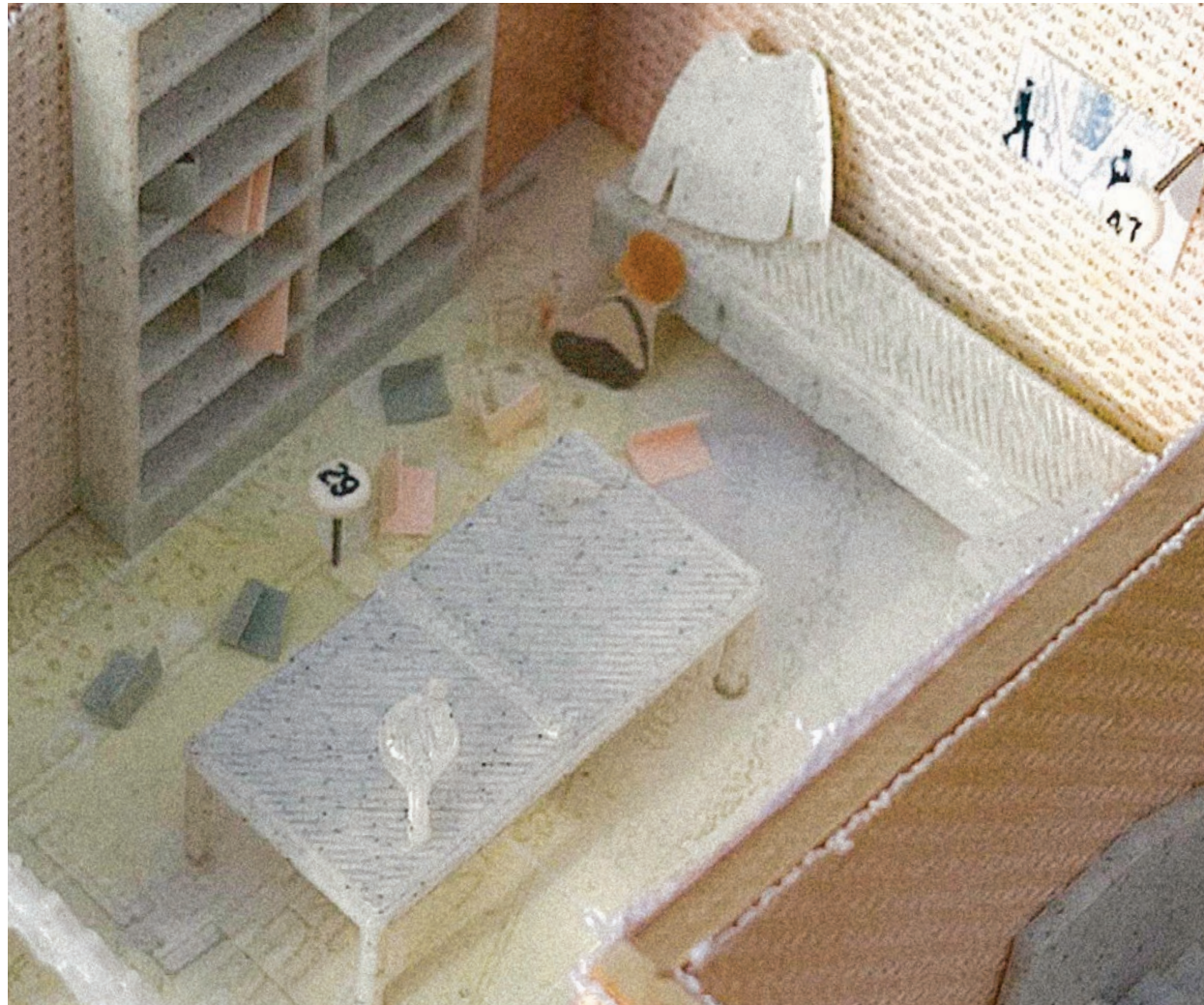
Instantiate the Subtle Spectrum
Various Degrees of Climatic & Emotional Comfort as Ambiances of Well-beings



Glittering Winter
Screenshot from 12-Min Animation
Made by Unreal & Twinmotion



Blossom Spring
Screenshot from 12-Min Animation
Made by Unreal & Twinmotion



Children's After-school Program
12*12*12 Physical Model



North-West Public Library & Educational Programs
12*12*12 Physical Model

SALT ECONOMY /IMAGINATION/

FALL 2021 - GSAPP ADV V
Critic: Elise Hunchuck, Marco Ferrari
Groupwork with Aaron Smolar



Digital Render of the Proposal

17" * 11"

The Nile River's increasing salinity poses an existential threat to Egyptian life, and this ongoing transformation is involved with an array of factors that includes climate change, agricultural activity, and infrastructural intervention. We identify this development as, in part, a problem of value - one that becomes clear in how every possible way of being, by virtue of our situatedness, implicitly circulates salt through a network of mutually reinforcing, entangled processes that we call the 'salt economy.'

Conceived thus, the Nile becomes amorphous, diffuse in space and time, more akin to an atmosphere that forms the background against which all saline exchanges unfold. It also follows that this horizon is not neutral, as has been presupposed under the prevailing value-abstraction lens, which finds the salt economy in terms of an opportunity cost of producing salt in the environment that outweighs comparatively sustainable practices. Rather, our notion of 'economy' returns to its etymological root in the Greek *oikonomia* or "household management," and interprets this concept as a mode of dwelling that is tacitly underwritten by an ethic of care, an imperative toward the stewardship of our collectively constituted worlds.

We accordingly envision a future wherein this latent dynamic - that salt, operating as a currency, renders visible an economy of care - is recognized as the dominant cultural paradigm, and that the extent to which this logic may be actively grasped and experienced is commensurate with the nature of one's attunement. Perhaps in understanding human being as always already situated within these movements, we may begin to assume a more ecocentric orientation toward everyday life.

Navigating Salt Economy
The Ubiquitous Existence of Salt in Ecological Economy



Navigating Salt Economy
*36*240 Inch Sectional Illustration*





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23

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2. SPYDER Installed Near Dam

In July 2019, Ethiopian Prime Minister Abiy Ahmed Ali contracts Israeli defense companies (Israeli Aerospace Industries and Rafael) to install SPYDER-MR Ground Based Air Defense units near the **Grand Ethiopian Renaissance Dam (3)**. Although of debatable effectiveness due to outdated **aerial capabilities (1)**, this show of force supports Ali's October declaration that Ethiopia would leverage military resources to defend the dam after threats emanating from Egypt. As a currency, salt's natural abundance allows countries to rapidly weaponize, escalating existing tensions. Similarly positioned infrastructural projects, then, simultaneously support political adversaries, perhaps warranting further consideration.

4. Soil Salinification and Agriculture

As of 2000, agriculture comprised 90% of Egypt's total water use, 95% of which derived from the Nile, indicating the clear relation between this formation and the tenability of life itself in the Nile River Delta. At the same time, around one-third of Egypt's irrigated land is salt-affected (particularly in the Lower Delta) - a proportion that continues to grow, with catastrophic implications because it is difficult to flush from the soil, where it accumulates. Salinity induces stress in plant cells by inhibiting their capacities to take in water (not unlike **human cells (8)**). Irrigation networks tend to perpetuate this issue by depositing salt that is present in groundwater and intensifying the preexisting salinity. As a result, some have turned to more **sustainable practices (28)**.

11. Egyptian Harvest Festivals

The Egyptian national holiday of Sham Ennessim, which marks the beginning of spring, is often conflated with Easter, and can be traced back to the Shemu (the Nile's "low water" season) festival in Pharaonic times. In these forms, from the Third Dynasty, Egyptian civilization has continuously maintained a holiday to celebrate agriculture and the beginning of the harvest. It follows that these observances are inseparable from salt's preservative capacities for **food (10)**. Traditional celebratory practices today include consuming foods like fesikh - a kind of **salted grey mullet (32)** - and lupin beans, picnicking, and making dyed eggs.

(Excerpt from Previous Drawing's Text Tags)

3. Grand Ethiopian Renaissance Dam

Egypt's water scarcity concerns especially intensified after 2011 as construction proceeded on Ethiopia's Grand Ethiopian Renaissance Dam, which is located on one of the Nile's main tributaries - the Blue Nile. The dam is expected to generate 6,000 megawatts of electricity, which would make it the United States' second largest. Studies have indicated that if Ethiopia fills the reservoir in a projected five-to-seven years, Egypt and Sudan's freshwater flows downstream could be reduced by up to 25%, with catastrophic implications for national water and electricity supplies, especially through intensifying salt's presence. Consequently, salt's recognition as an Egyptian currency allows the country to profit from this otherwise threatening project.

8. Salt's Bodily Impact

Salt enters our water, our food, our mouths, our bloodstreams, and alters our cognition. In human cells, salt induces water volume loss through osmosis, followed by rapid compensatory swelling while organelles are slow or unable to recover, often disrupting proteins or DNA. In medical terms, elevated salt intake is linked to hypertension, stroke, dementia, and kidney stones or failure. Prolonged skin contact during activities like **farming (4)** or **fishing (32)** can cause irritation, lesions, and infections. In this new economy, salt exacerbates these conditions through increased unmediated contact, attesting to the fact that salt cannot be handled as neutrally or abstractly in exchanges as the Egyptian Pound.

12. Nag Hammadi Sugar Factory

Sugarcane was likely introduced to Egypt by the Rashidun Caliphate, and remains one of the country's major cash crops today. Demand requires that the Egyptian government import sugar from Brazil to supplement local production; the country reached 90% self-sufficiency in 2022-2023. This plant, which is now cultivated widely along the Nile, also requires unusually saturated soil, and this groundwater possesses a **high salt content (4)**. The moisture from this standing water endangers **historically significant sites (19)**. Sugar factories also contribute to the Nile's pollution through discharging byproducts like alum and chlorine; in our proposed economy, such factories would be encouraged to hold onto and leverage any salt they produce.

19. Erosion of Antique Monuments

At present, numerous factors contribute to the widespread weathering of historically significant sites that include Hierakonpolis Temple Town near Edfu, Nero's Temple at El-Ashmonein, the Great Pyramids, the **Valley of the Kings (17)**, and temples at Amun, Luxor, and Karnak. As **sea levels (15)** and water tables rise, and **farms (4)** proliferate along the Nile,

26. Building with Karshif

The built fabric of western Egypt's Siwa Oasis is characterized by a vernacular building material called karshif, which is constituted by a mixture of mud and salt. This locally derived tectonic is renewable, facilitated by salt's natural abundance in the Siwan salt flats. This practice is seen as such an integral aspect of Siwa's identity that legislation stipulates for any new construction in the area to imitate this traditional aesthetic. Much of this salt is extracted from a network of salt lakes and pools that forms part of a salt mine, but which have become tourist destinations with natural beauty and healing properties. In this context, a potential liability performs as an asset. In the new economy, a saline material like karshif acquires great value.

28. Adaptation of Farming Practices

Some Egyptian farmers attempt to forestall the effects of **soil salinification (4)** by using earth to elevate their crops, which can necessitate tremendous financial investment, and establish a buffer, employ fertilizers that might help mitigate damage in the near future (but intensify salinity in the longer term), or use less water-intensive irrigation technologies. Other farmers have altogether turned away from cultivating relatively vulnerable crops like tomatoes, eggplants, pumpkins, apples, or other assorted vegetables, toward citrus selections that are less susceptible to salt like mangoes and lemons. As a currency, farmers with salt affected land could trade these deeds to extractive companies, who could then mine salt from these landscapes.

(Excerpt from Previous Drawing's Text Tags)

25. Faience Production

Faience is the world's oldest known ceramic glaze, having been produced in Egypt at least since the pre-Dynastic period (after possibly having been imported from Mesopotamia). This glaze was applied to objects like amulets, beads, tiles, and rings; it was linked to precious stones by virtue of its often distinctive turquoise color - vibrant like **the sun (22)**, a quality that may have informed its associated magical properties, like rebirth, that would transfer to the owner. Faience production depended on - in addition to quartz, lime, and mineral-based colorants - local alkaline salts like **natron (17)**, and such artifacts were fired in a kiln. In the salt economy, faience's value increases in proportion with its salt content.

27. Increasingly Volatile Weather

Concurrent with **rising sea levels (15)** over the last decade, Egypt's weather has become difficult to anticipate. One example of this trend is that the khamsin - an annual sandstorm that typically occurs between March and May, which can last for several days and bring temperature increases of up to 20 degrees Celsius in two hours - has not occurred for four consecutive years. At the same time, **rain (7)** occurs with greater frequency, and the **sun (22)** has intensified. Rising temperatures threaten the Nile's existence, jeopardizing some of the country's more precariously situated settlements and seasonally-based industries, dangerous consequences for a country that is absolutely dependent on this river.

32. Fishing in the Nile River

While facilitating **agriculture (4, 28)** in the Nile River Delta, predynastic Egyptians also exploited this river's fish supply, having been among this practice's early pioneers. From this time, fish has been a dietary staple (particularly specimens like **Nile Perch, bolties, and barbels (9)**), accounting today for roughly 20% of the country's animal protein consumption. Yet, as the Nile's freshwater turns increasingly saline and polluted, these conditions, which are also exacerbated by infrastructural projects like the Aswan High Dam (1970), jeopardize both fishing, as an occupation, and the Egyptian food supply. Recent studies suggest that the **Grand Ethiopian Renaissance Dam (3)** could render twelve fish species extinct that are endemic to this river.

Involve Environmental Awareness In Everyday Transaction
Reimagine the World as Salt is a Currency



Exchange Financial Compensation with High Salinity Soil
(Any activities that will impact salinity come with a economic consequence)
*36*24 Inch Digital Render*



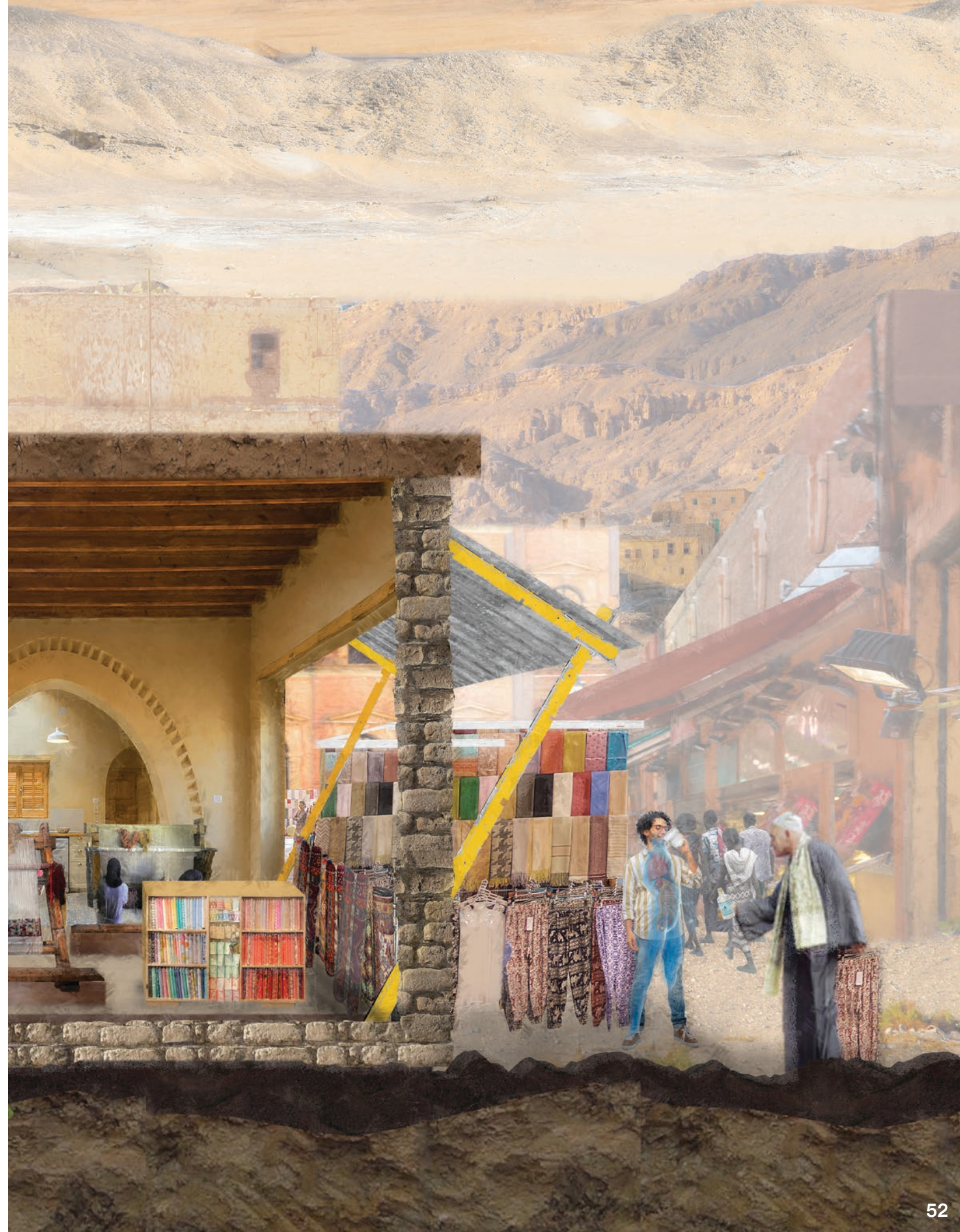
Tendency towards the Small-Scale Nature Economy Replacing Massive Consumption and Extraction
(Family production - consumption units will emerge)
*36*24 Inch Digital Render*



Desalination will be profitable in the short-term and industrialized within a short period of time

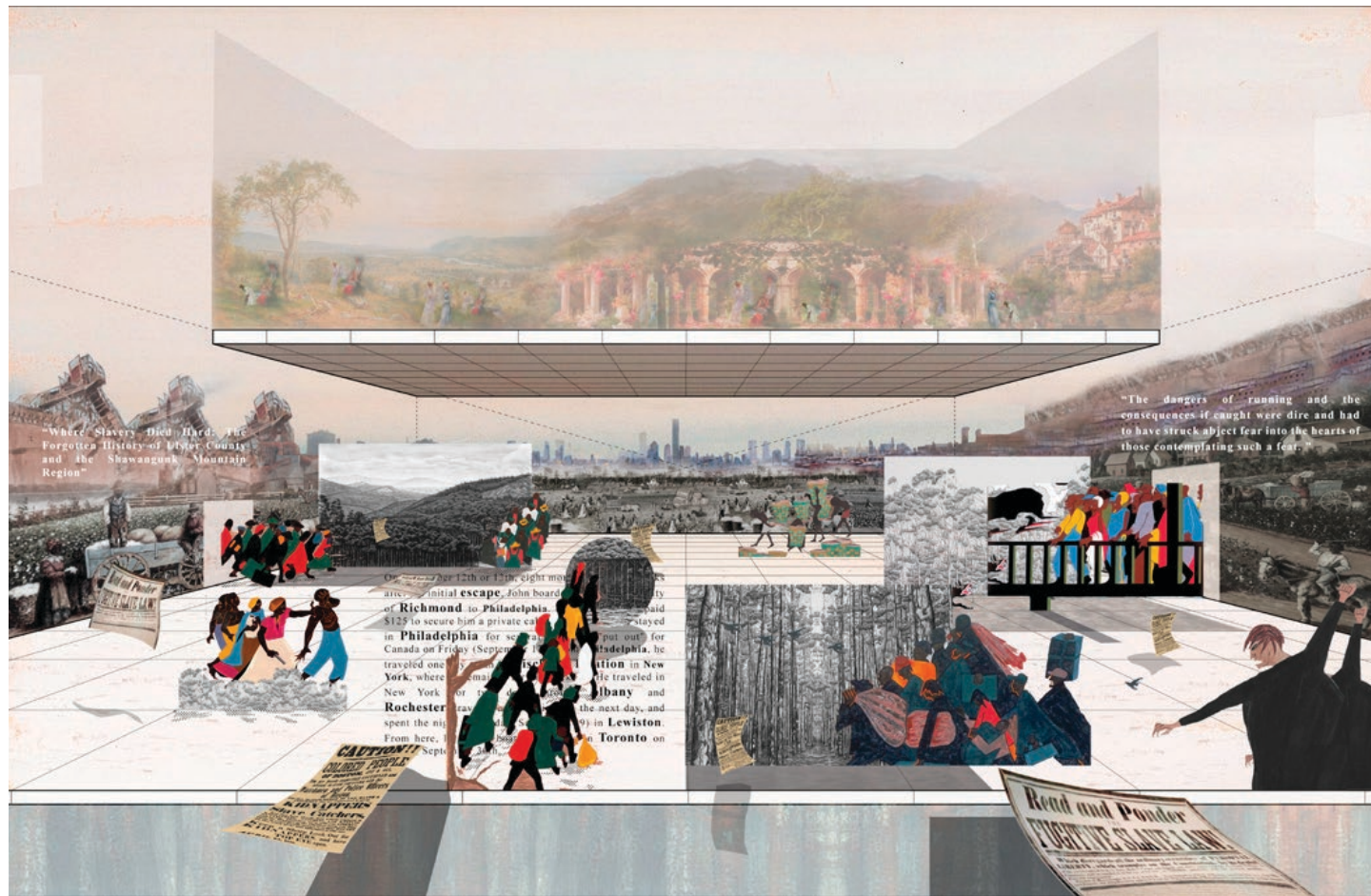


Farmers receive financial compensation based on the salinity level of the soil in the short term.



AFTER THE ODYSSEY /EXCAVATION/

SPRING 2022 - GSAPP ADV IV
 Critic: Nahyun Hwang
 Groupwork with Min Soo Jeon



The Parallel Historical Realities
 Digital Illustration

Historically, on the land of Hudson Valley, nature has been exploited and overly consumed as its resources have been allocated disproportionately from the colonial era to the modern-day. While exploitation and domination towards mother nature were associated with colonialization, slavery, and western modernization, people who were historically oppressed, such as Lenape indigenous tribe and enslaved African American people, also dwelled in the wilderness to seek a free and safe community.

Witnessing both realities, nature has recorded different historicities by texturing its own surface. Different generations of occupiers have left their marks on this land differently as unique shapes and forms of voids, which the trees or other green plants do not cover.

In "After the odyssey," we mapped and traced those voids to the different causes and their unique histories. We found an opportunity to reclaim those voids for historically oppressed African-American farmers and currently suffering immigrants and migrant workers. We designed them into five different programmatic and atmospheric zones—Ritual, history, harvest, dwelling, and restoration.

The proposal provides contemporary significance to the land that had been exploited or cared for and memorized, considering the needs of BIPOC farmers, immigrants, and migrant workers, when it also encourages them to establish their own identity without the conventional constraints given by the urban structure.

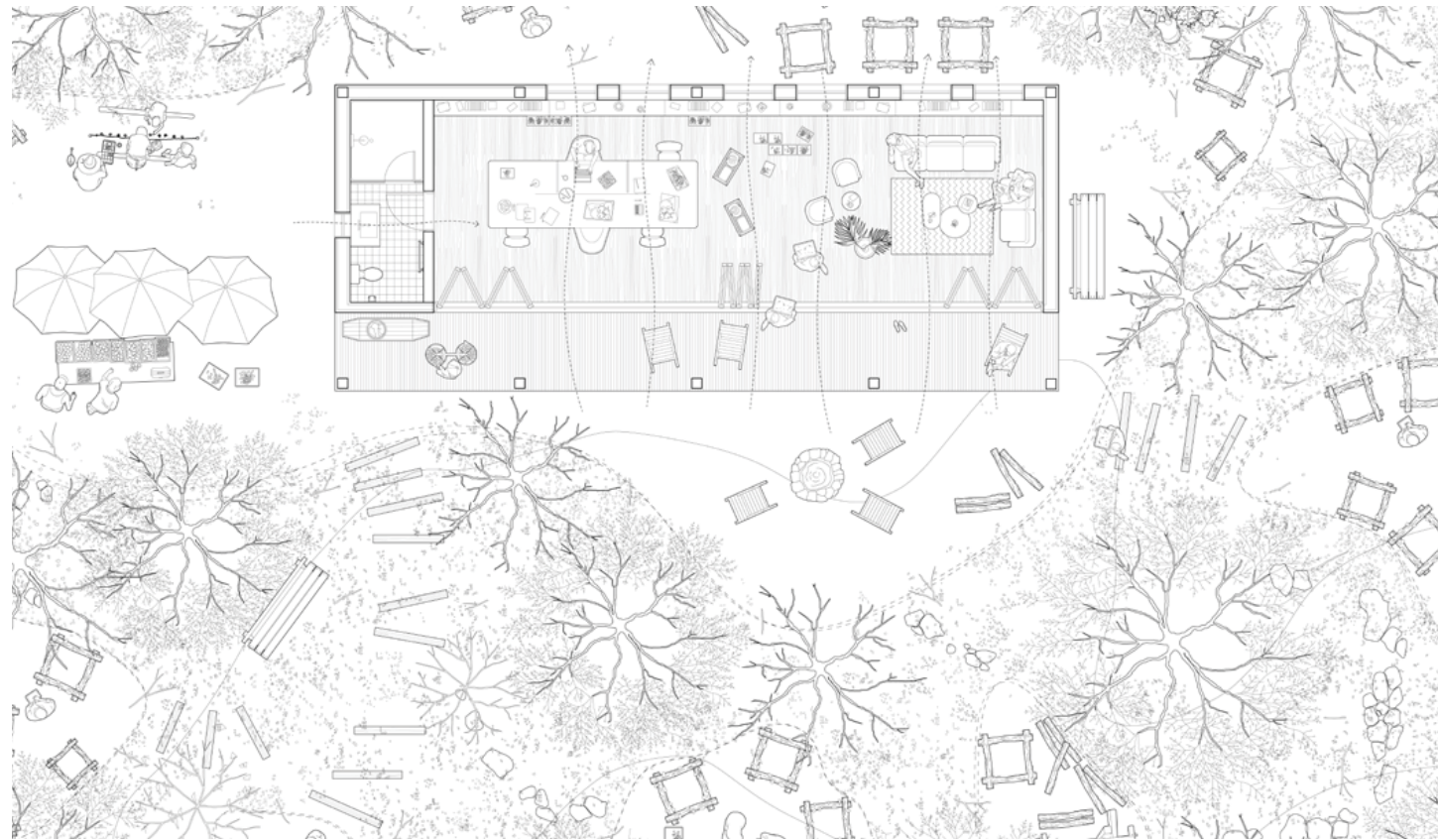
Designing Alternative Communal Living
Nature as Dwelling and Sanctuary for New Hudson River Region Immigrants



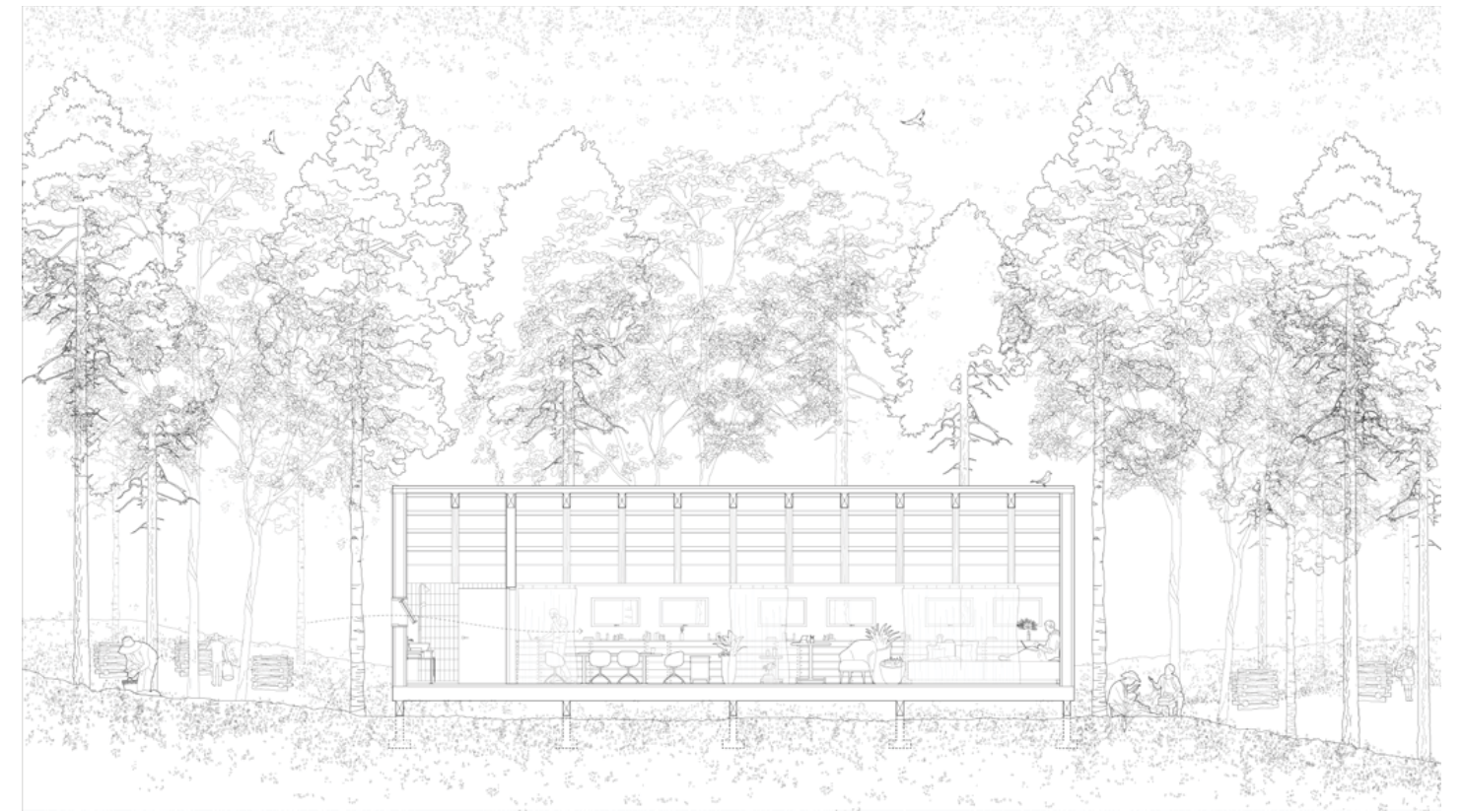
A Community of Dwelling and Care
Digital Render



The Educational Workshop
Agro-Silvo-Pastoral Farms & Foraging Storage



The Educational Workshop Plan
Line Plan Drawing



The Educational Workshop Section
Line Plan Drawing

The Commual Living
Dwelling & shiitake mushroom farms

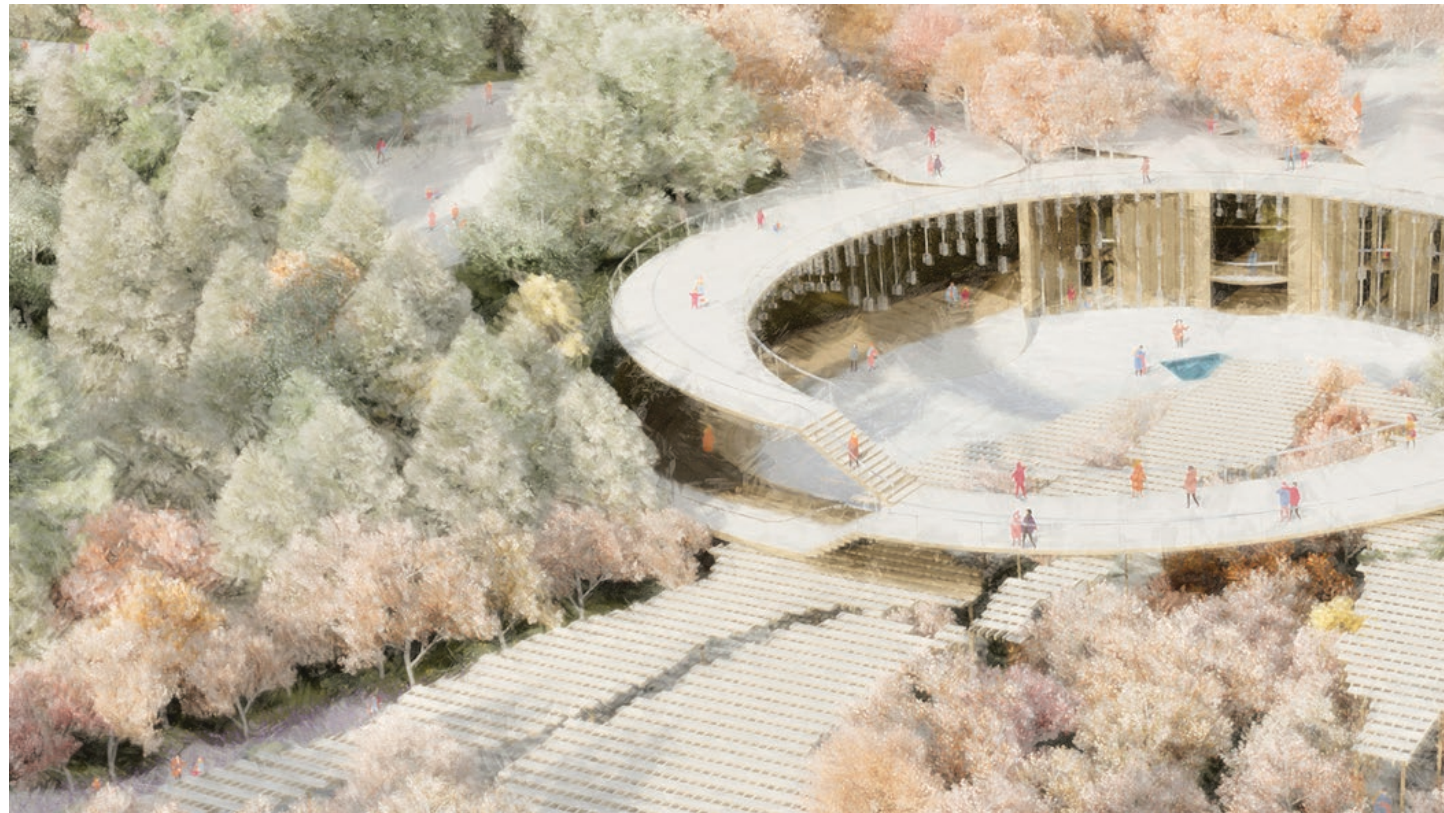


The Commual Living Space
Render



Outdoor Shiitake Mushroom Farms
Render

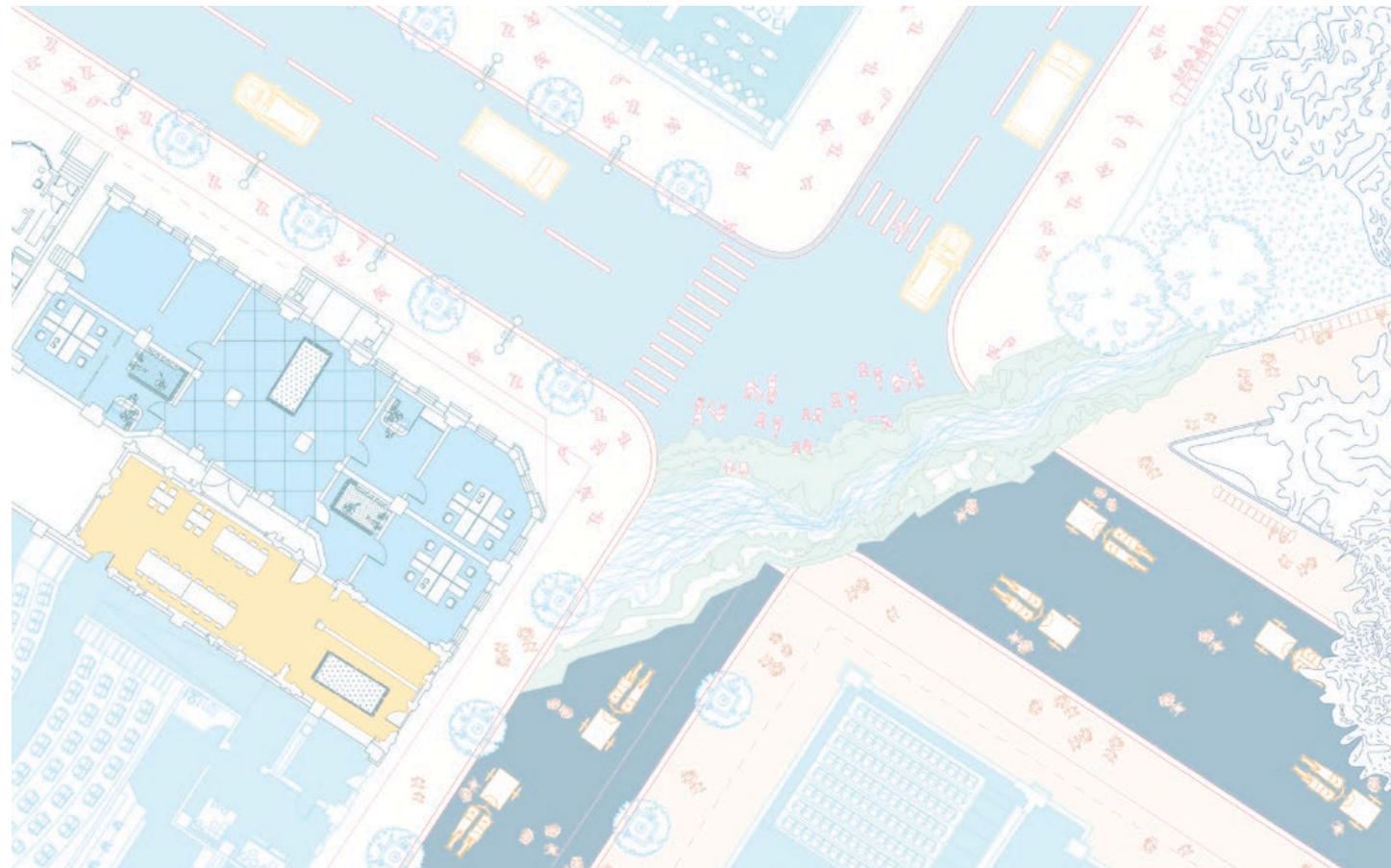
The Caring Shelter
Sactum & Health Clinic



Winter View of the Sactum
Render



Individual Meditation Space in the Outdoor Health Clinic
Render



Historical Layers
Digital Illustration
30" * 25"

REWIND /DEVIATION/

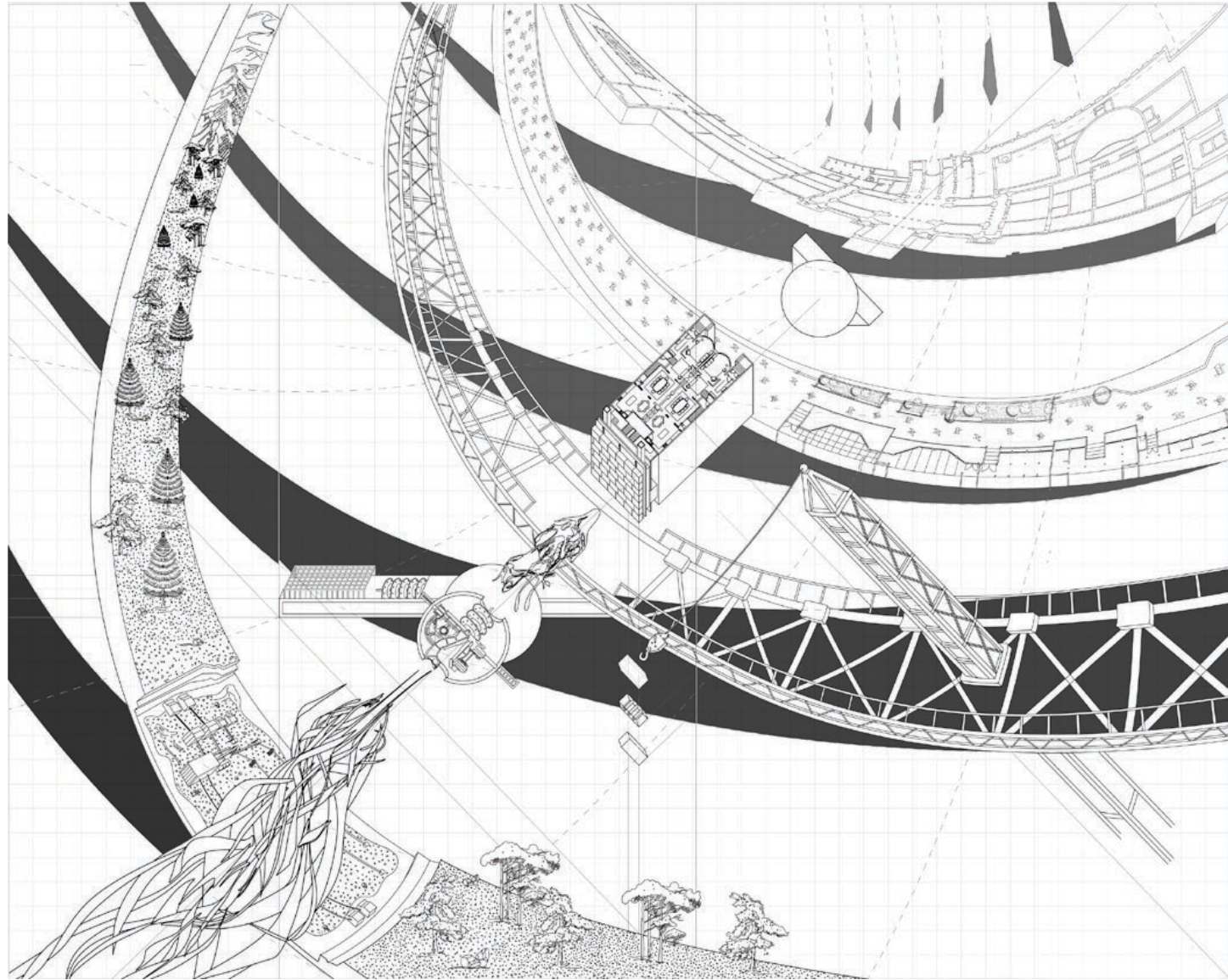
FALL 2020 - GSAPP Core 1
Critic: Amina Blacksher
Individual Work

***Featured on Baunetzwoche Issue #569**

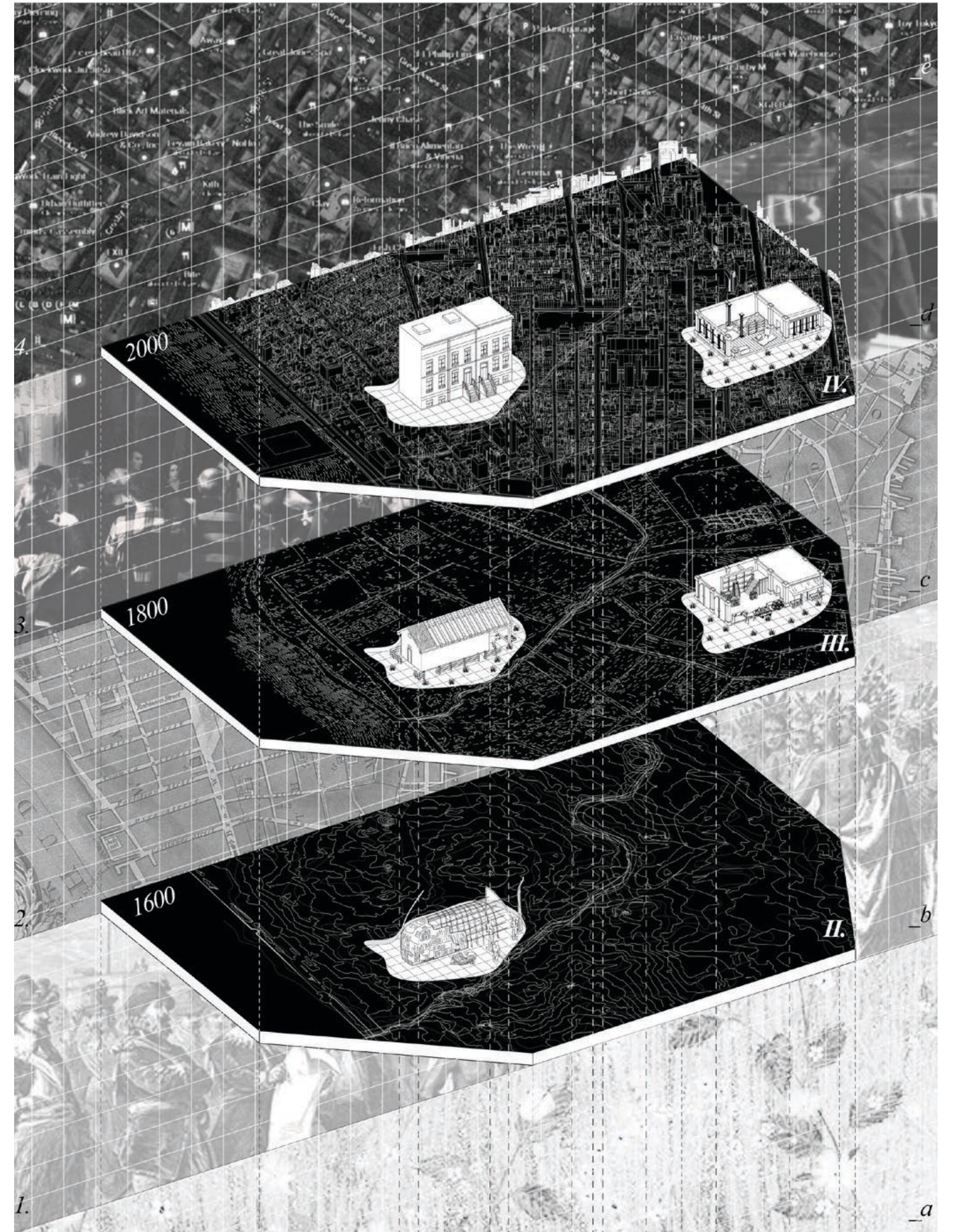
This project, *REWIND*, is a redesign proposal for the Phillip Lim fashion store in Noho, New York. The project takes a close look at the high-end fashion production process and the store designs responsible for selling the final products. It criticizes the current mainstream fashion store design, questioning the role of retail architecture in the traditional inequitable value assigning process. Finally, it re-proposes a new methodology of displaying fashion, which is reversing the conventional display order and exposing the hidden early stage of fashion production instead of the final product.

This proposal is taking a position to challenge the existing value assign process in the fashion industry, raise people's attention to the invisible production process in the high-end fashion industry, and initiate a border discussion on the role of architecture in the systematic disproportional return of labor within a production process.

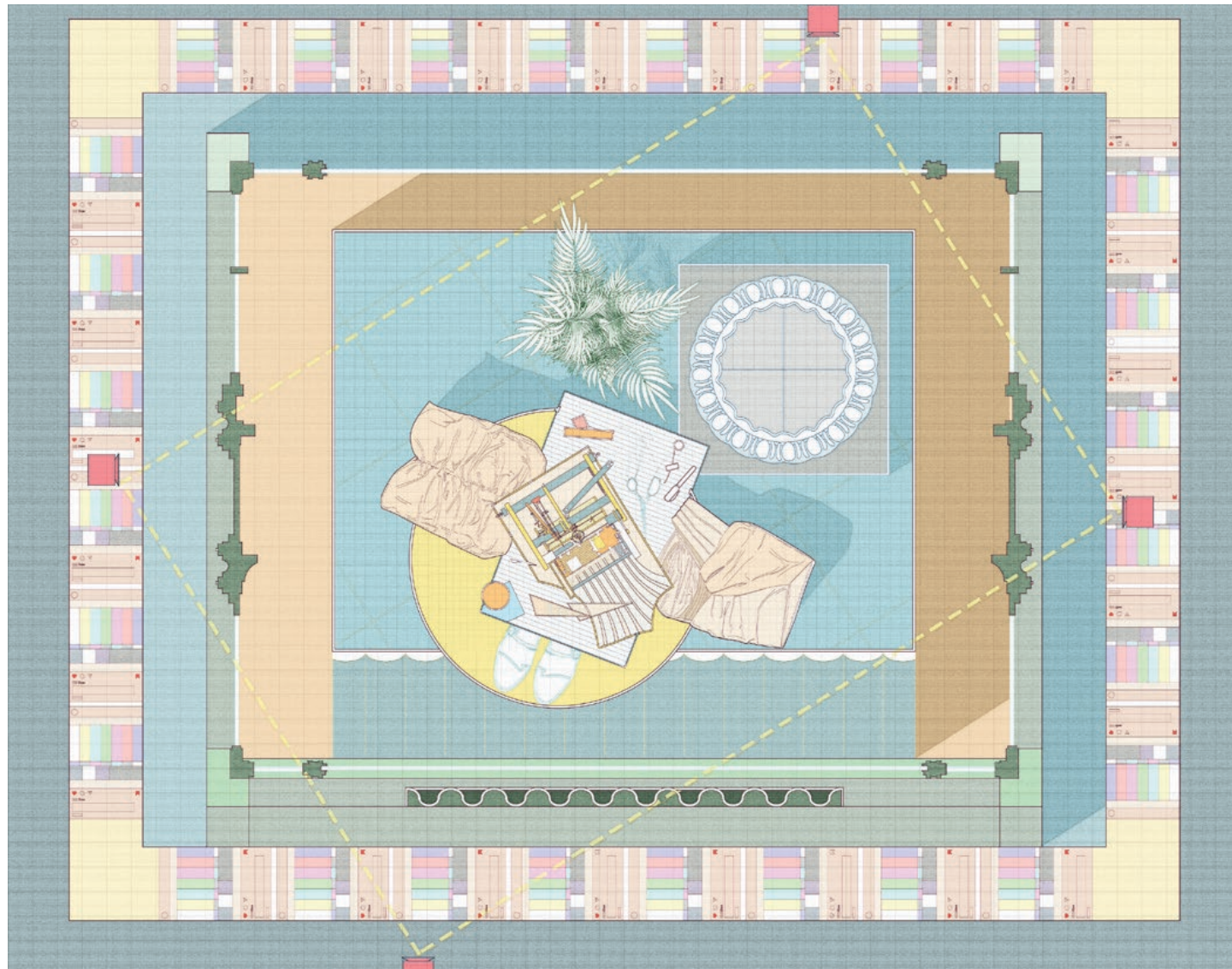
Transformation of Values
Through Production



A Journey of a Brick
Digital Illustration
30"×25"



Unpack the Fabrication of Values
& the Role of Architecture



The Apparatuses of Garment Fabrication
Digital Illustration
30"×25"



Expose the Production
A Curated Mixed-Realities



Sectional Interior
Physical Model Photo



The Sewing Unit is Collecting Cottons on the Grass
Physical Model Photo

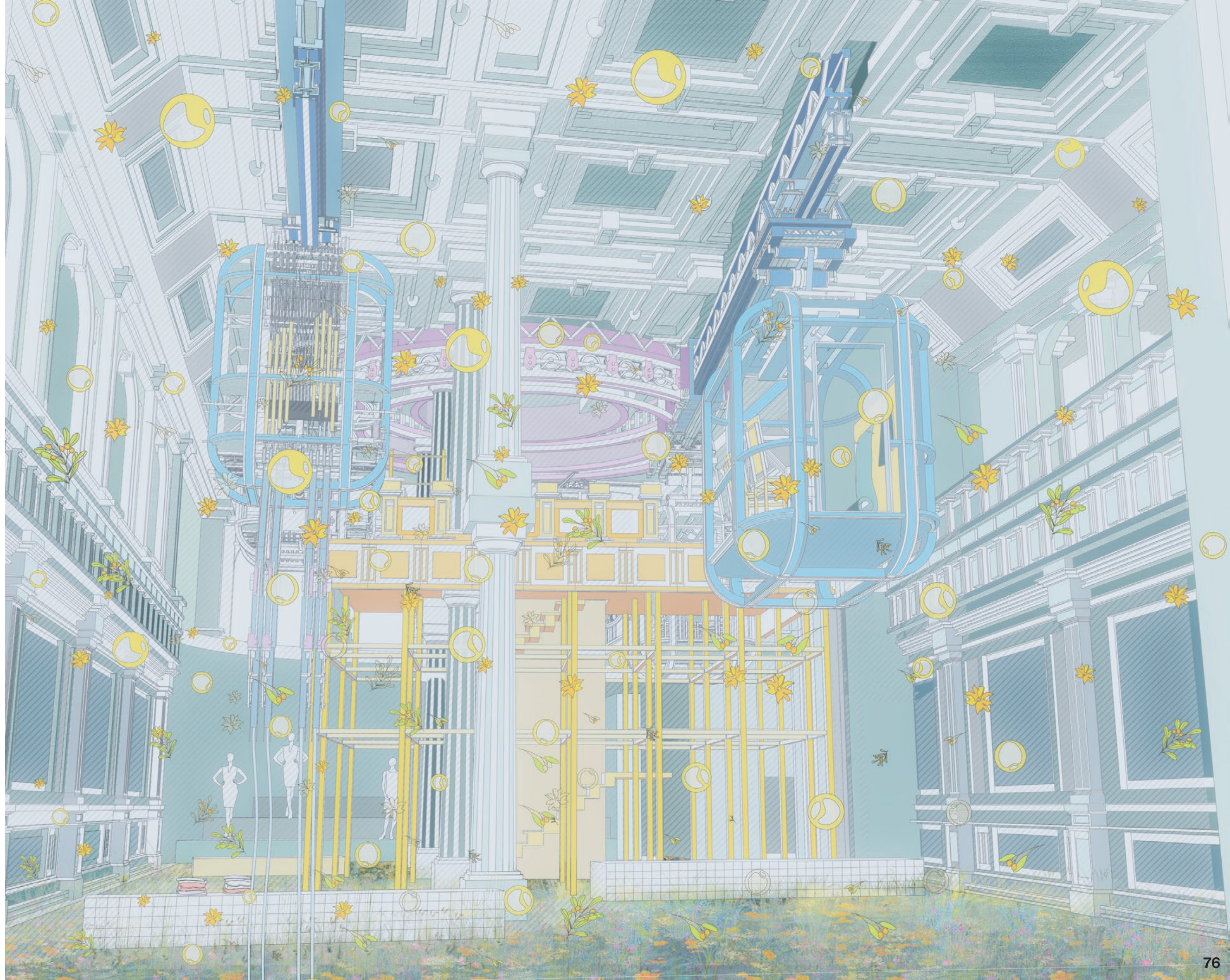


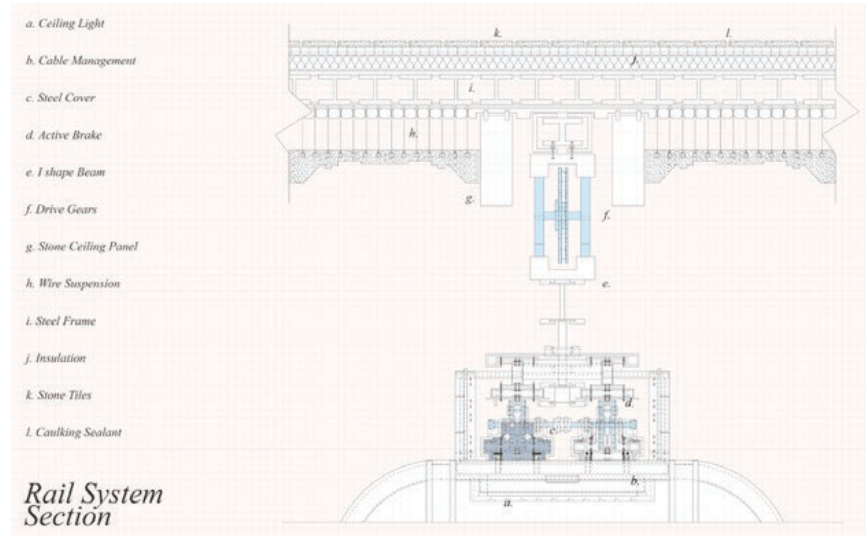
The Sewing Unit
Physical Model Photo



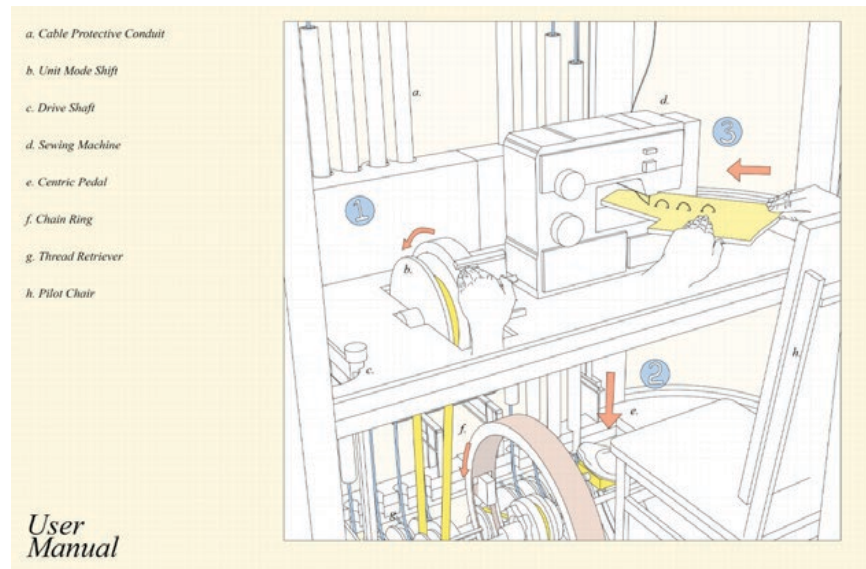
The Sewing Unit
Physical Model Photo

Illustration of Interior
Digital Illustration
30"*25

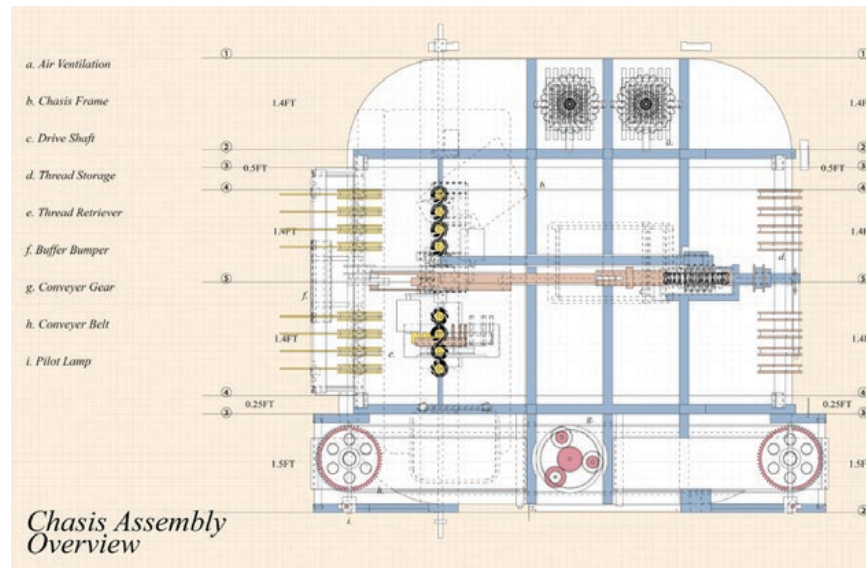




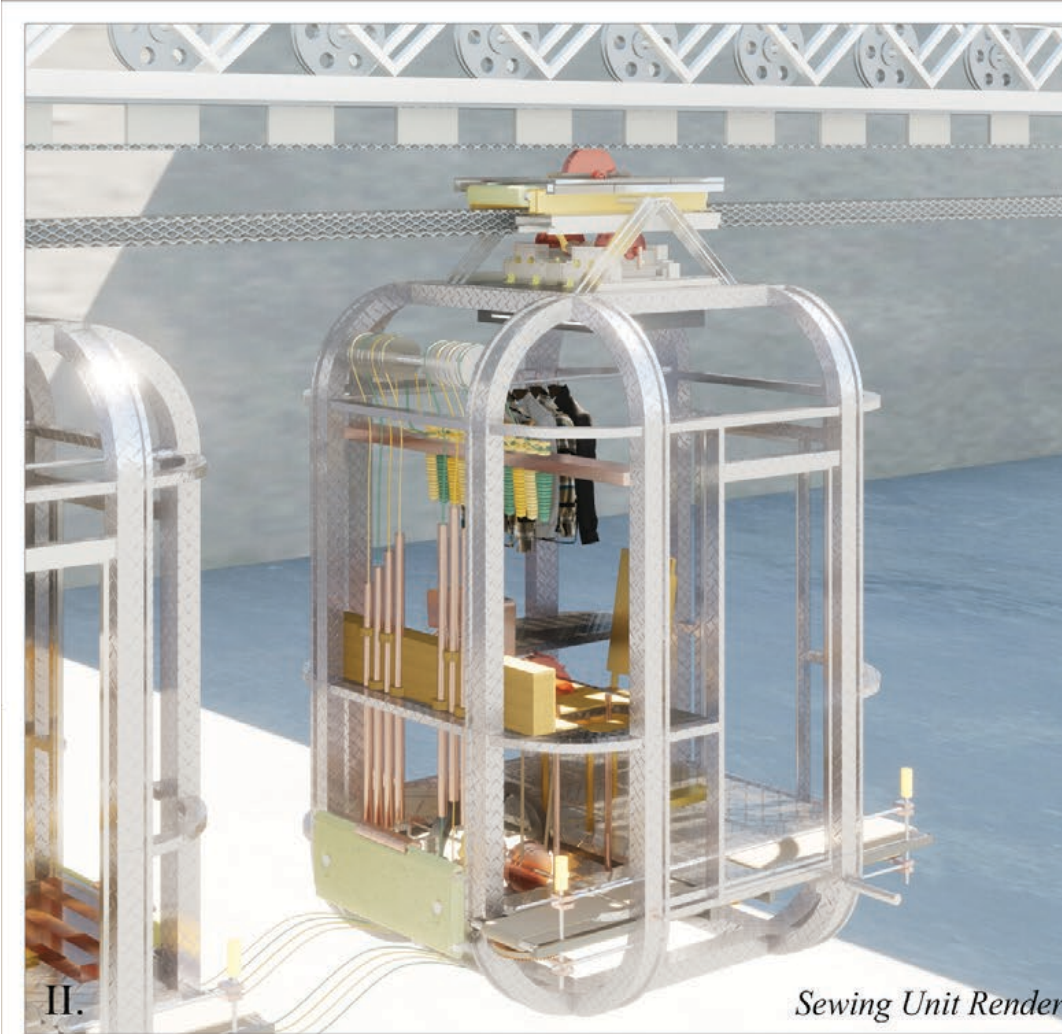
a.



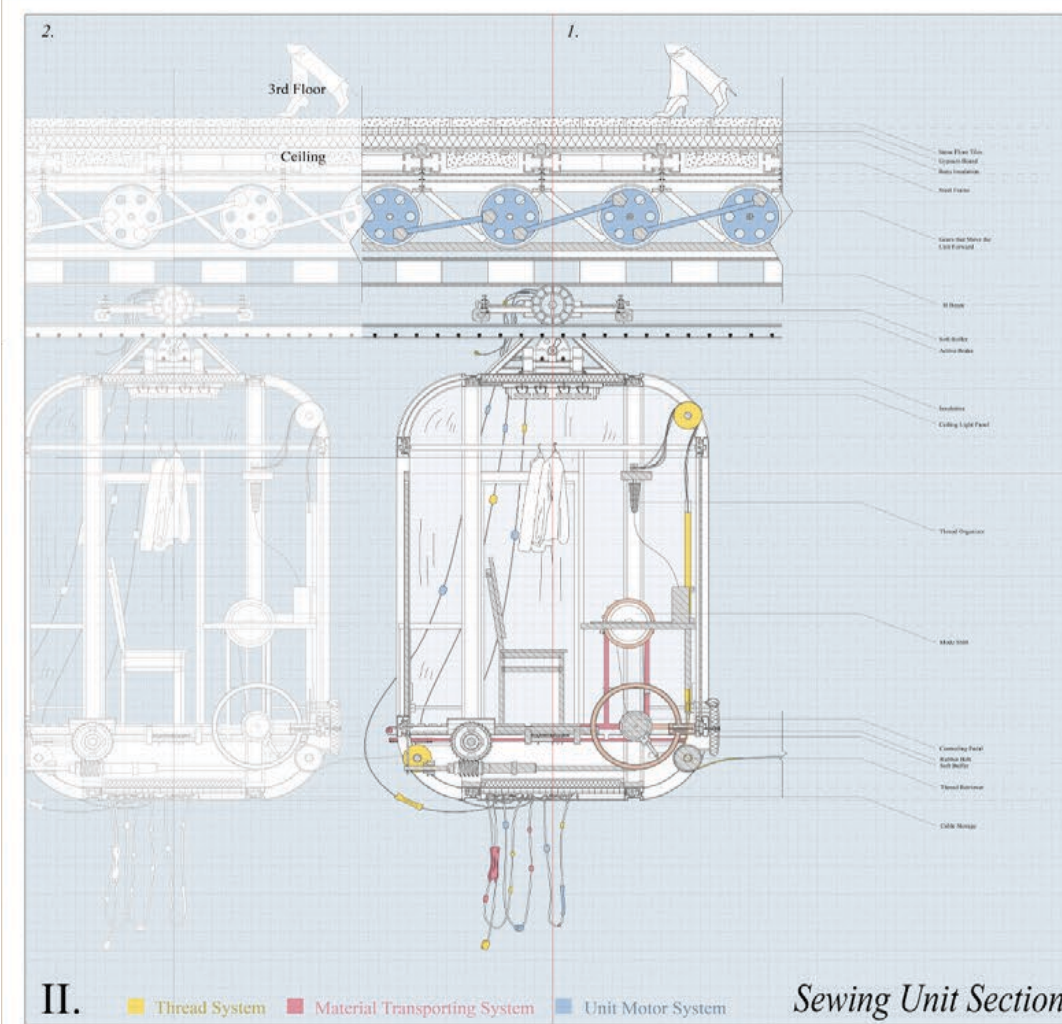
b.



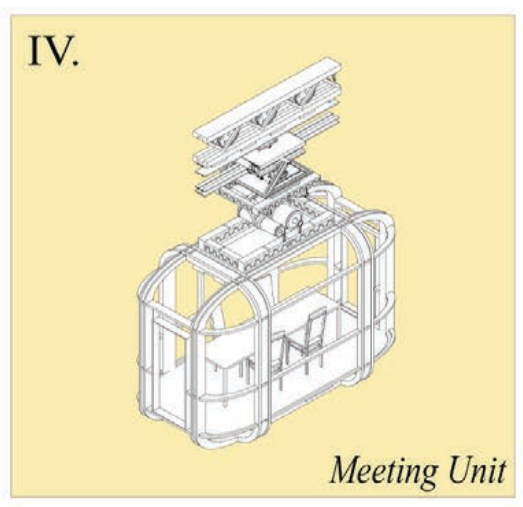
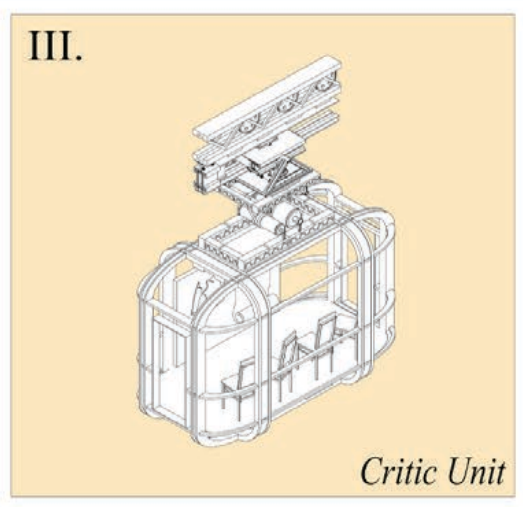
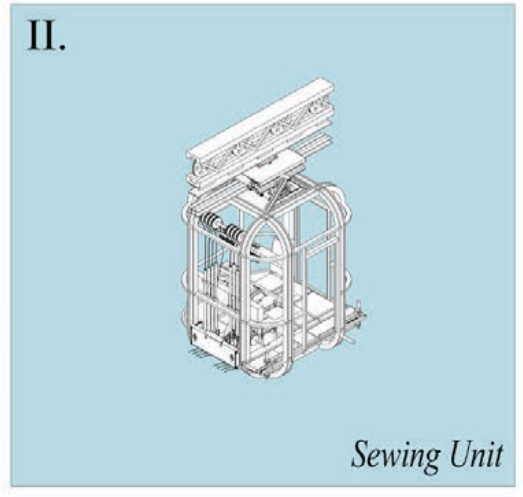
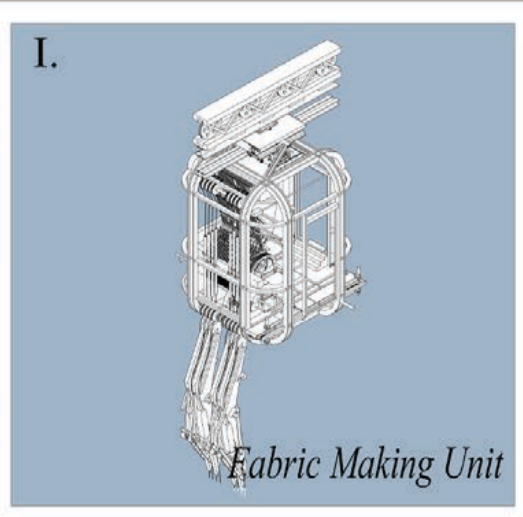
c.



II.



II.





Concert Hall

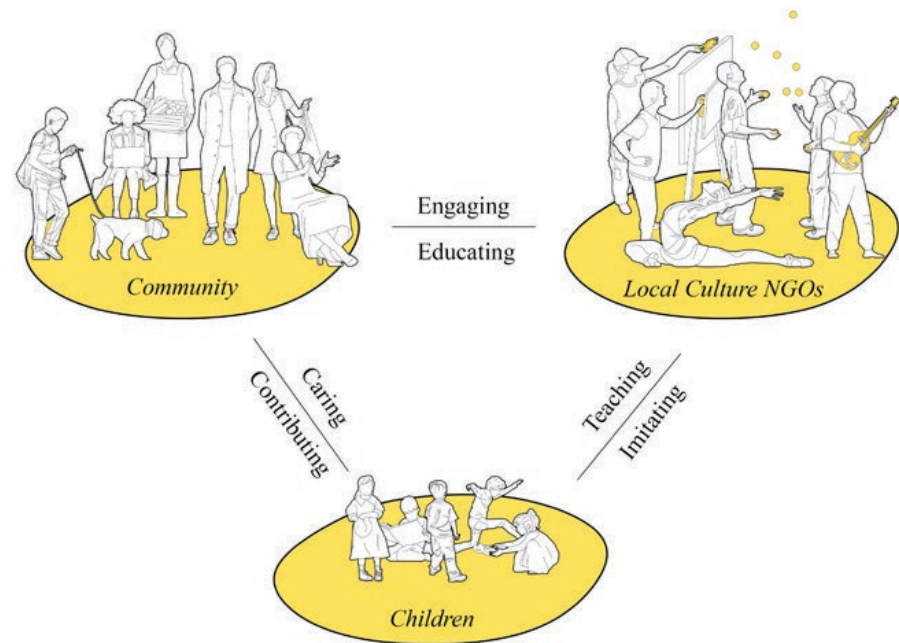
Digital Illustration
17" * 11"

DIALOGUE /COUNTERACTION/

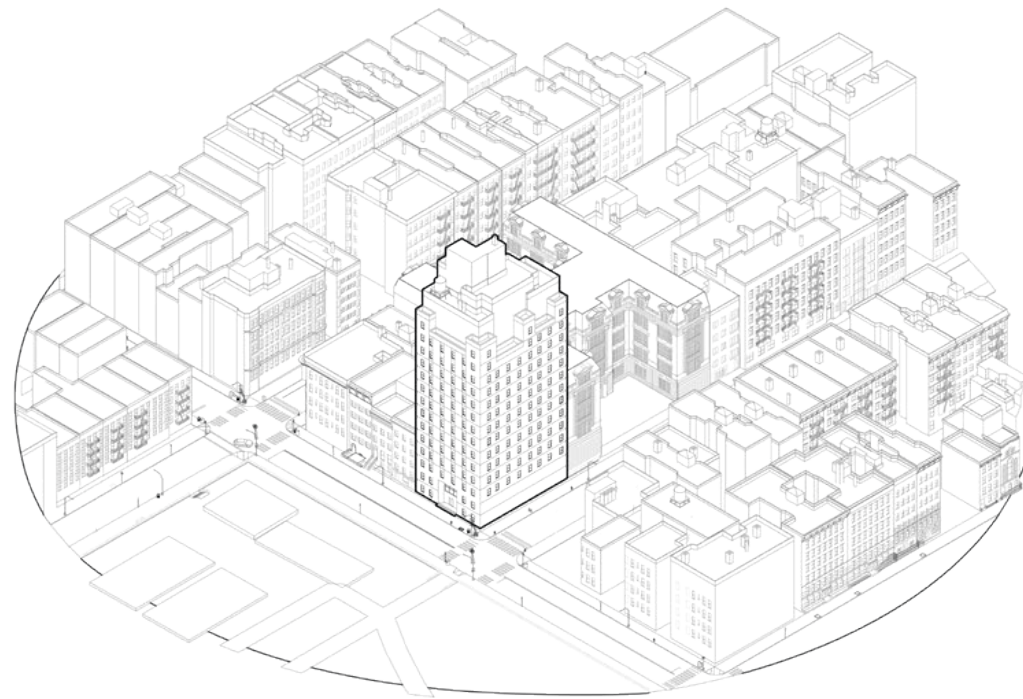
SPRING 2021 - GSAPP Core 2
Critic: Erica Goetz
Individual Work

This architectural design project reinterprets PS 64, combining an existing middle school with an incubator space for community artists and musicians. Inspired by the history of the Christodora House and the challenges faced by local cultural organizations, the proposal aims to foster a triangular relationship between children, local artists, and the community. The design incorporates a central circular spiral staircase, a glass curtain wall, and the preservation of original load-bearing structures. The site plan addresses surrounding context, program distribution, and circulation. Key features include a public gallery, art classrooms, and a main auditorium, promoting community involvement, learning, and collaboration. The project offers a dynamic educational environment that facilitates cultural exchange, empowering artists and enriching the lives of students and the wider community.

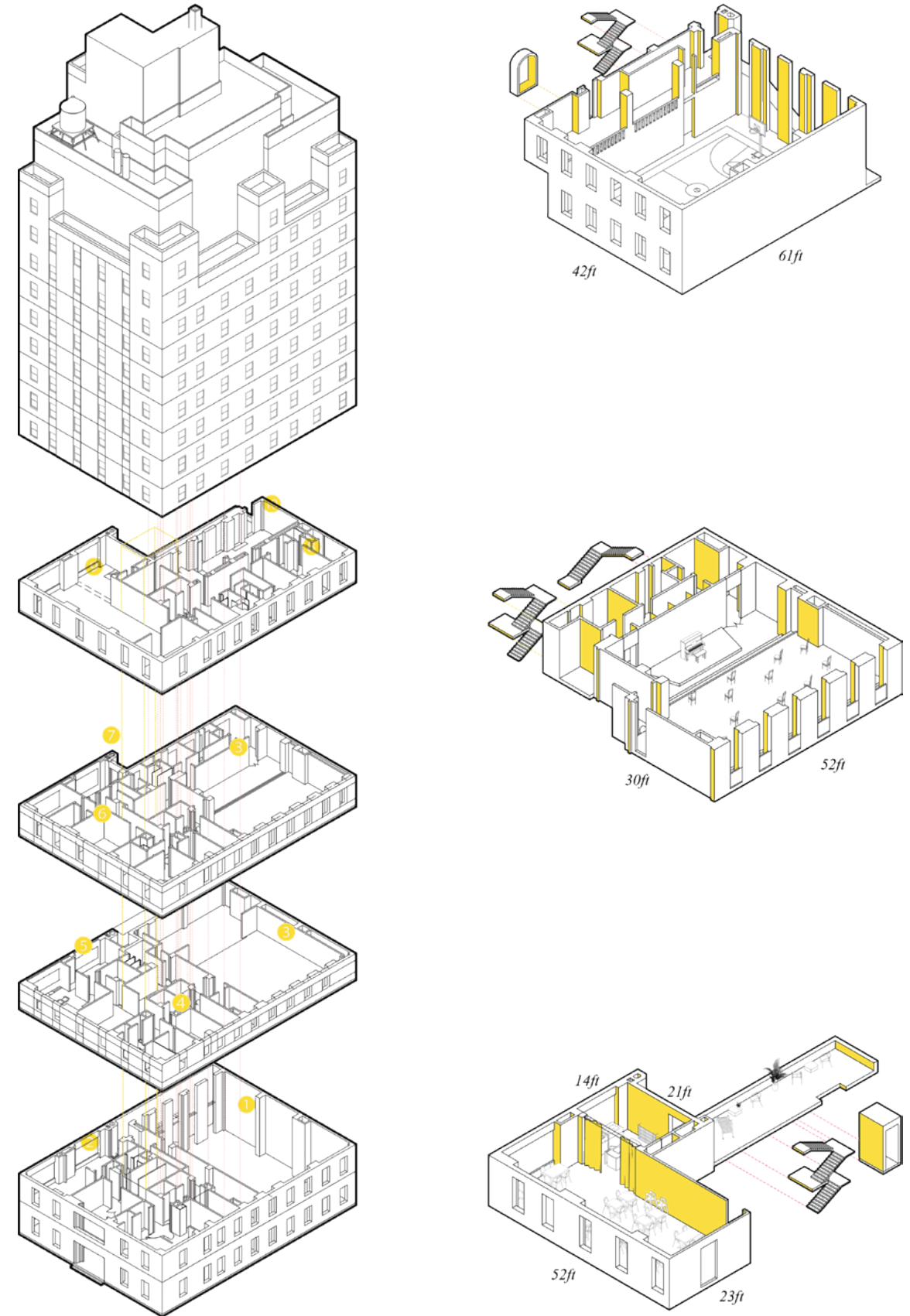
The Indoor Public Space History
Programs and Public Accessibility Analysis - Christodora House



How Different Parties Utilize Christodora House
Digital Illustration

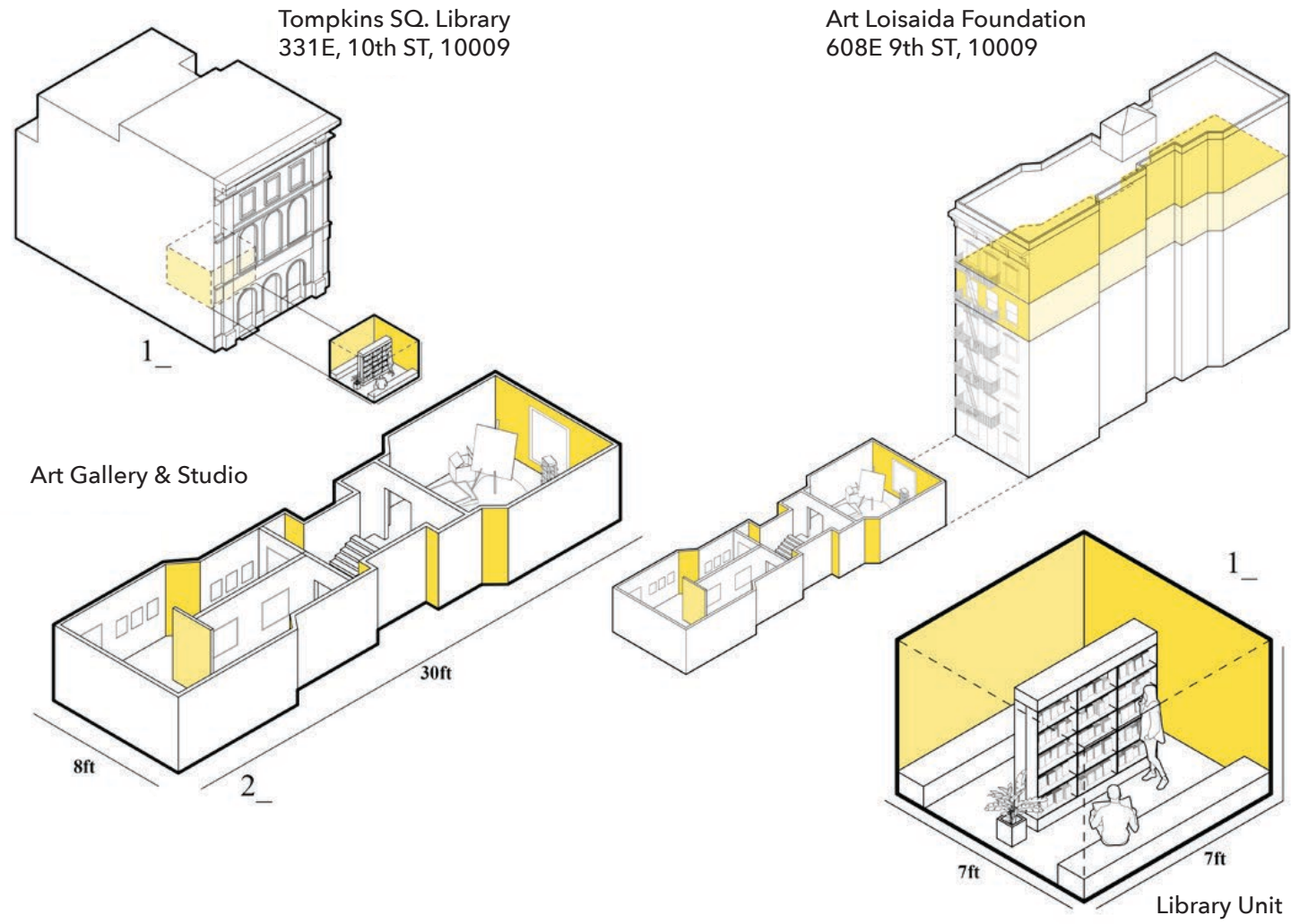


Christodora House and P.S. 64
Line Illustration

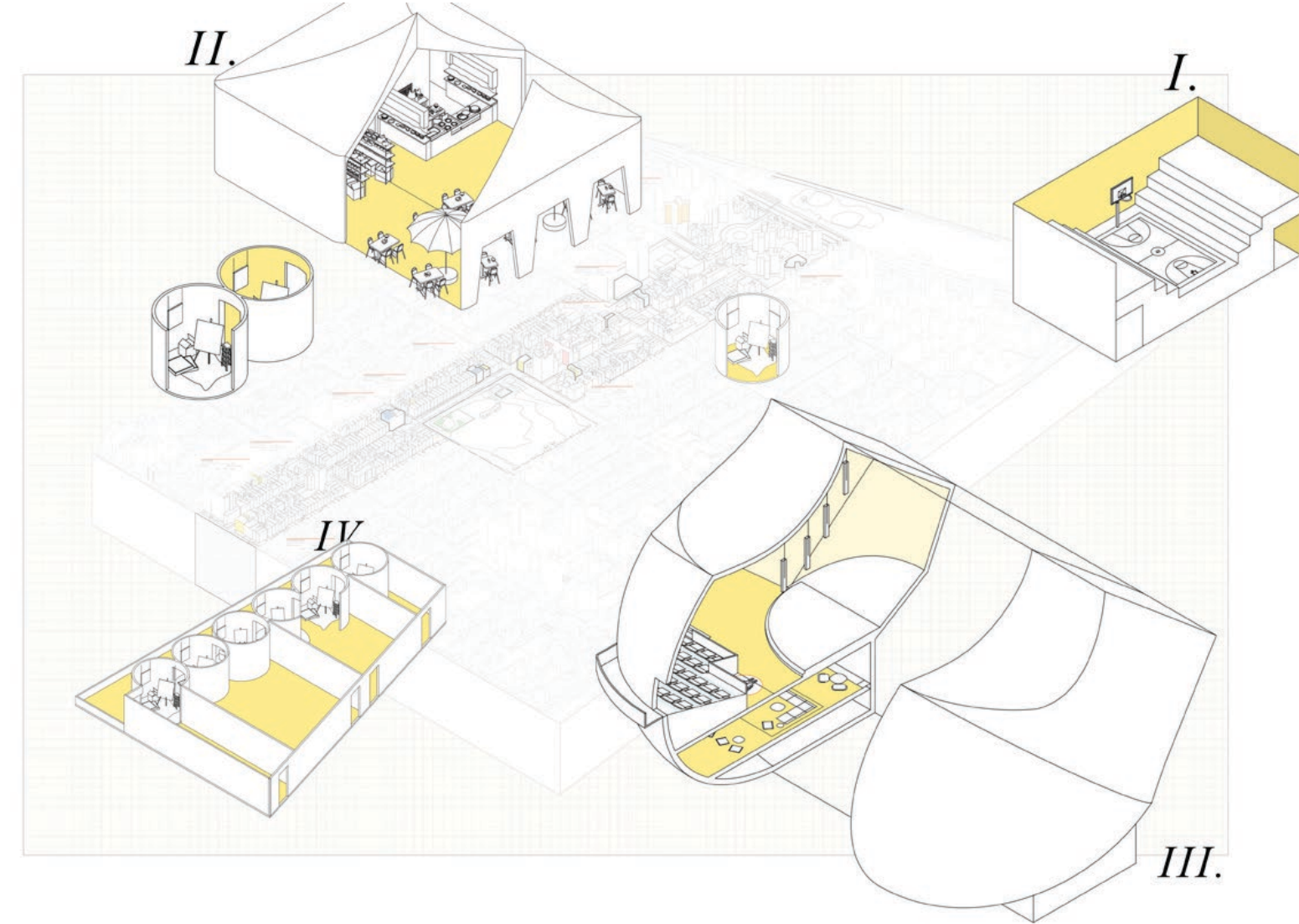


Christodora House Indoor Public Spatial Usage
Line Diagram

The Missing Program Puzzles
Designing Spatial Volumes According to the Community Needs



Public Programs that Already Exist in the Community
Digital Illustration



Public Programs that Need to Fill into the Community
Digital Illustration

Shaping Triangular Connections
Design and Compose Spaces for Children, Artists, and the Community



Newly Designed Spatial Cluster with the Missing Community Programs
Physical Model



Public Programs that Need to Fill into the Community
Physical Model

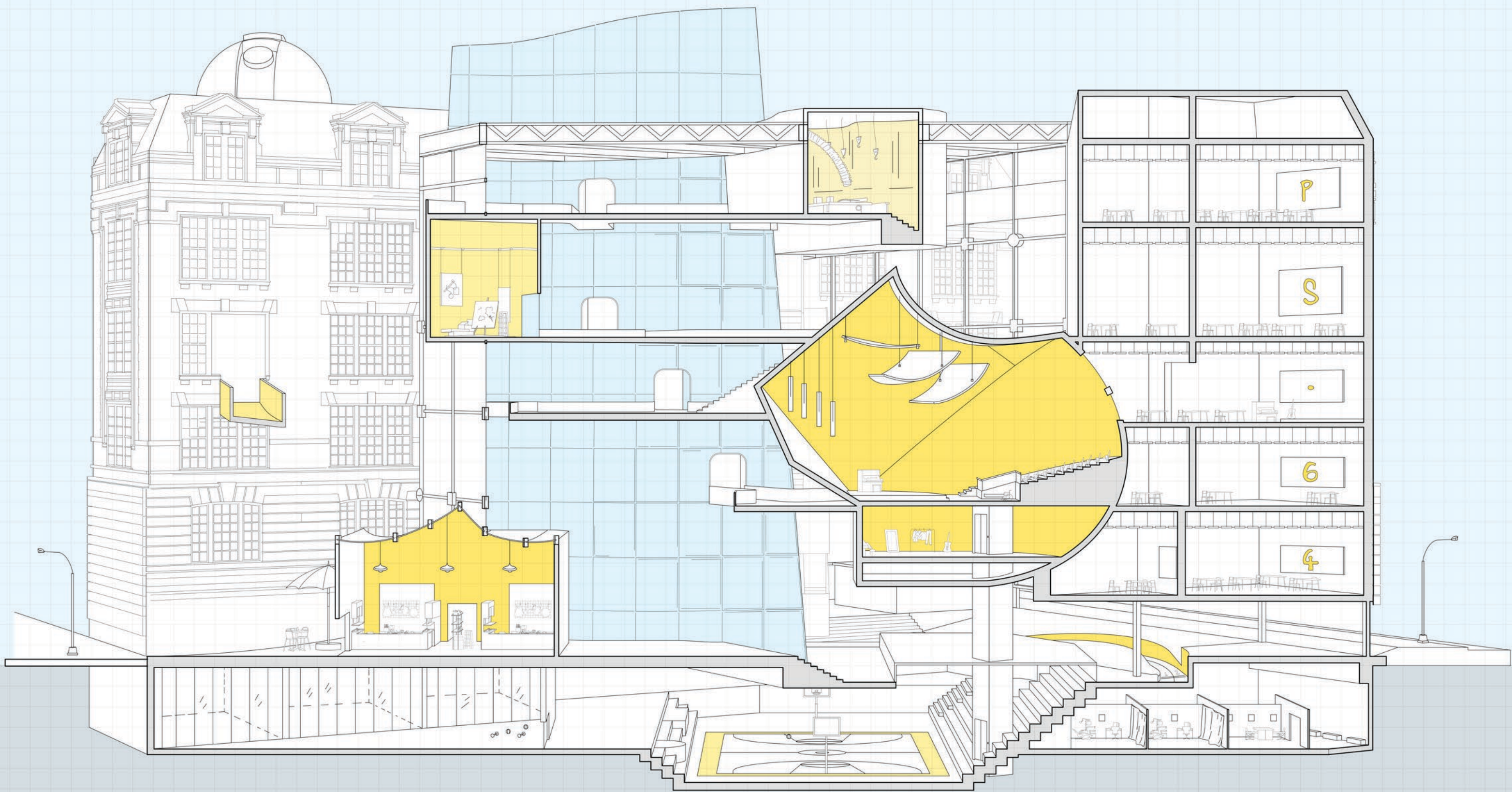


Newly Designed Spatial Cluster Penetrating the Existing Facade
Physical Model



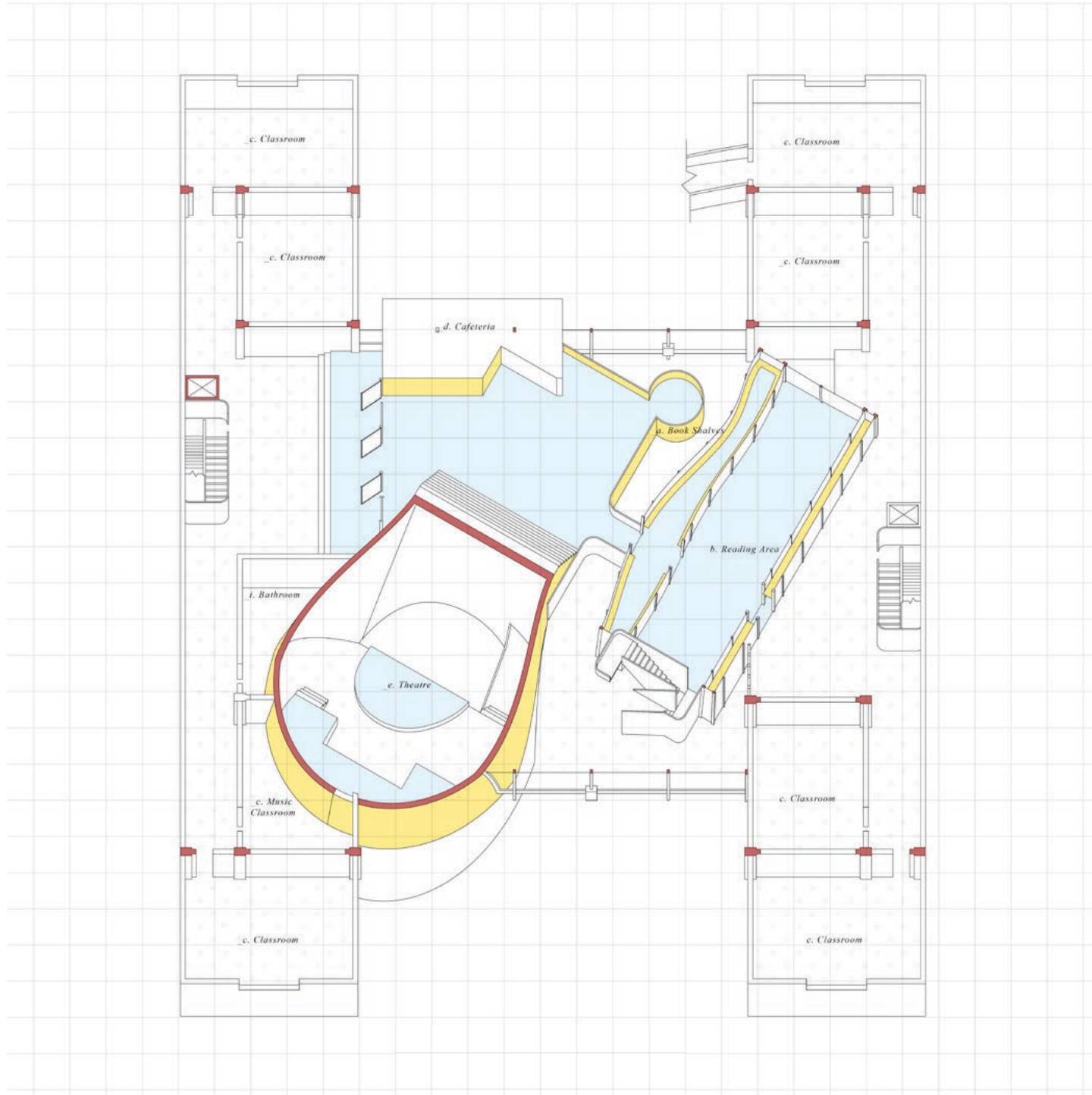
Aerial View
Physical Model

Fostering a New Territory of Knowledge Exchange
Sectionally Implant the Missing Dialogues

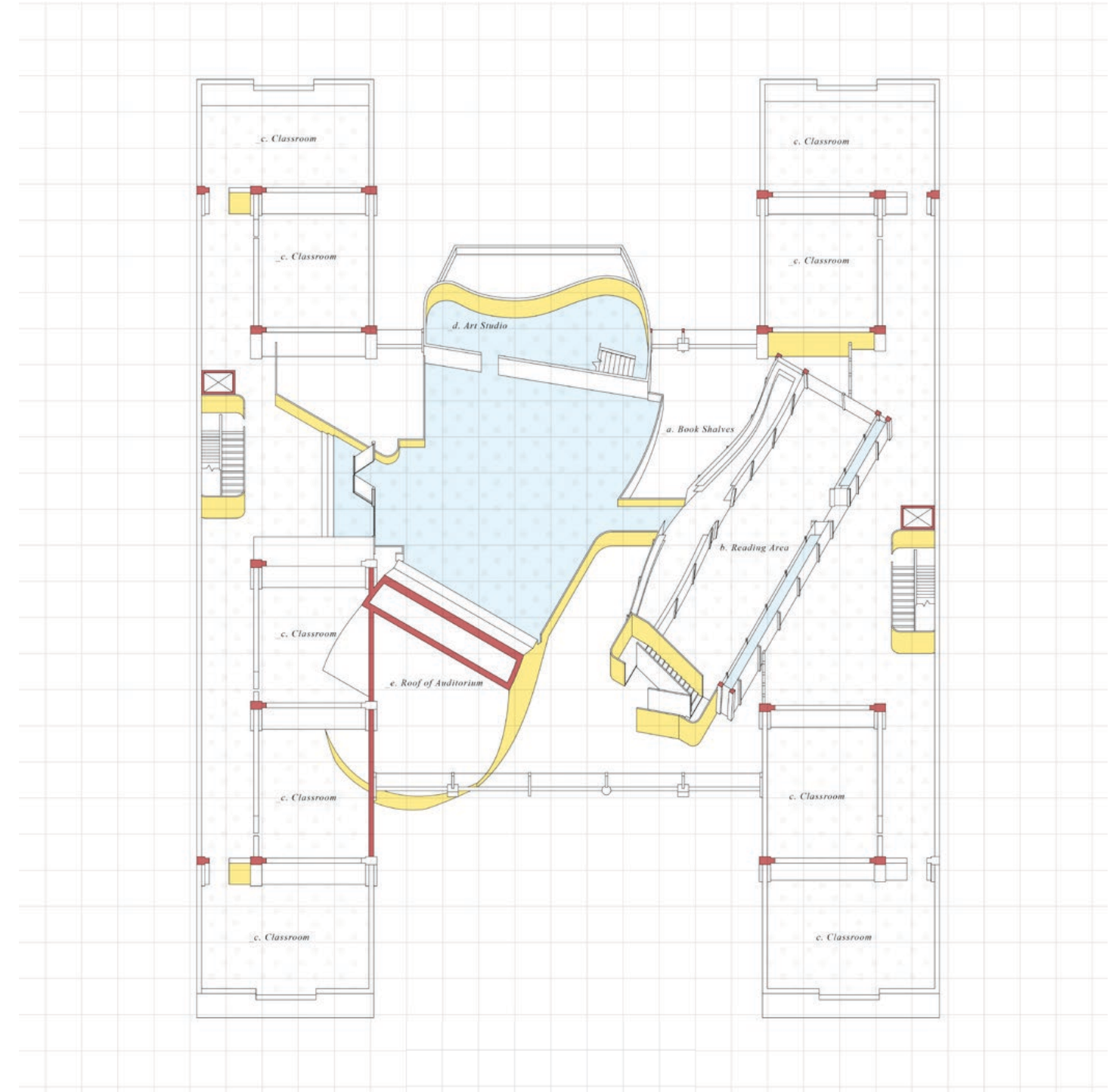


Perspective Section
Digital Illustration

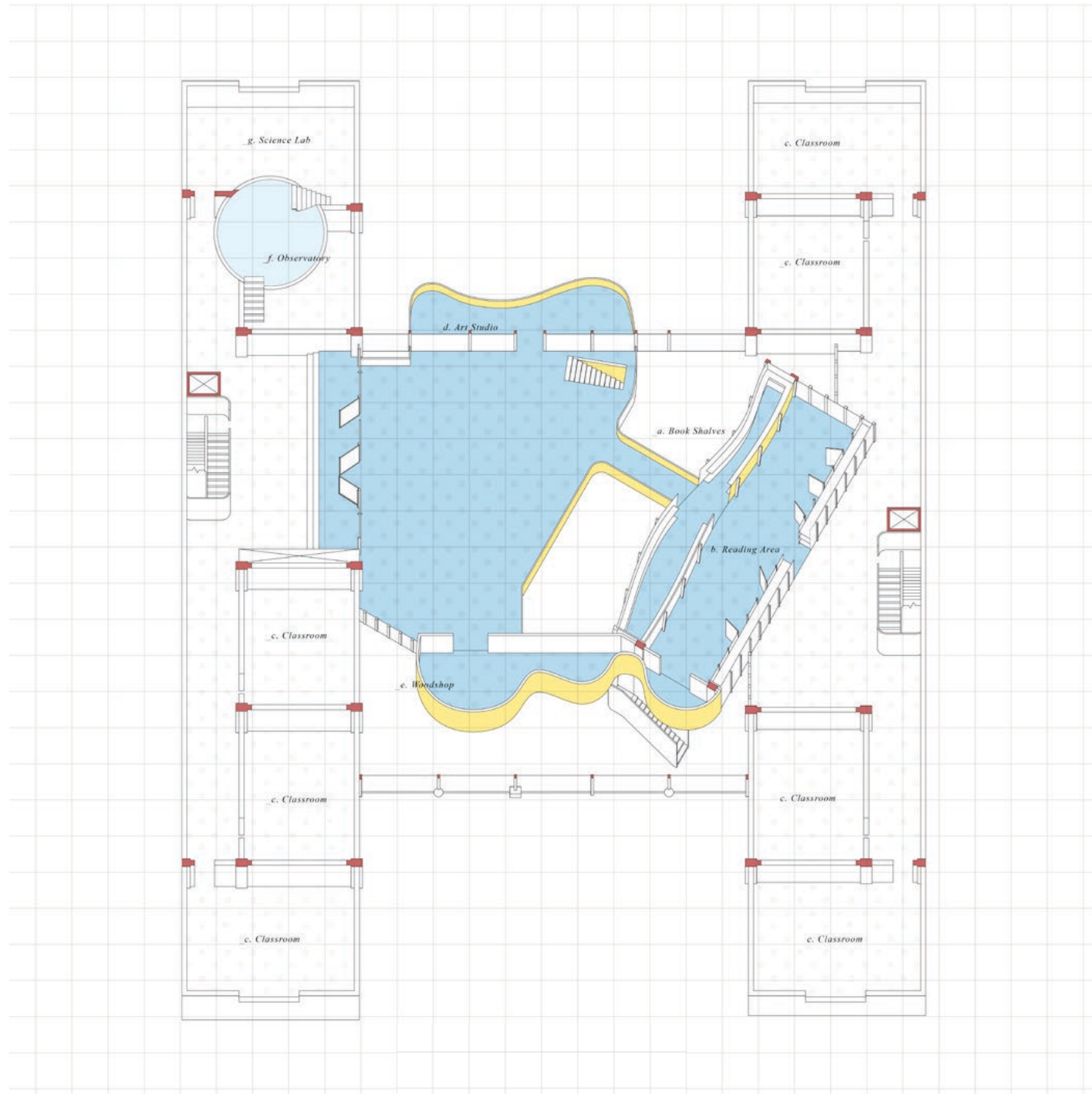
Fostering a New Territory of Knowledge Exchange
Penetrating Conventional K-12 Pedagogies with Community-driven Learning



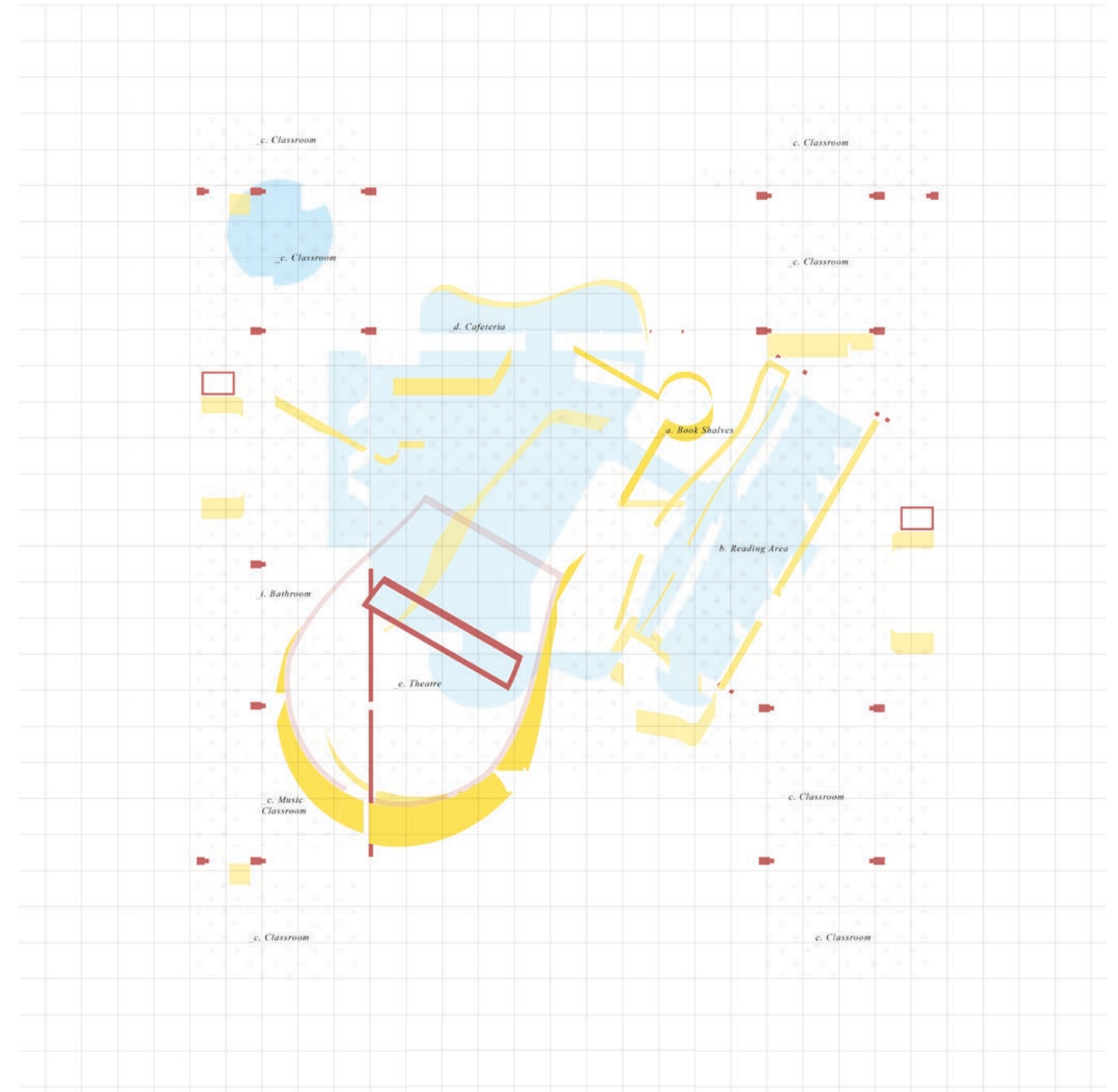
3rd Floor Plan
Digital Illustration



4th Floor Plan
Digital Illustration



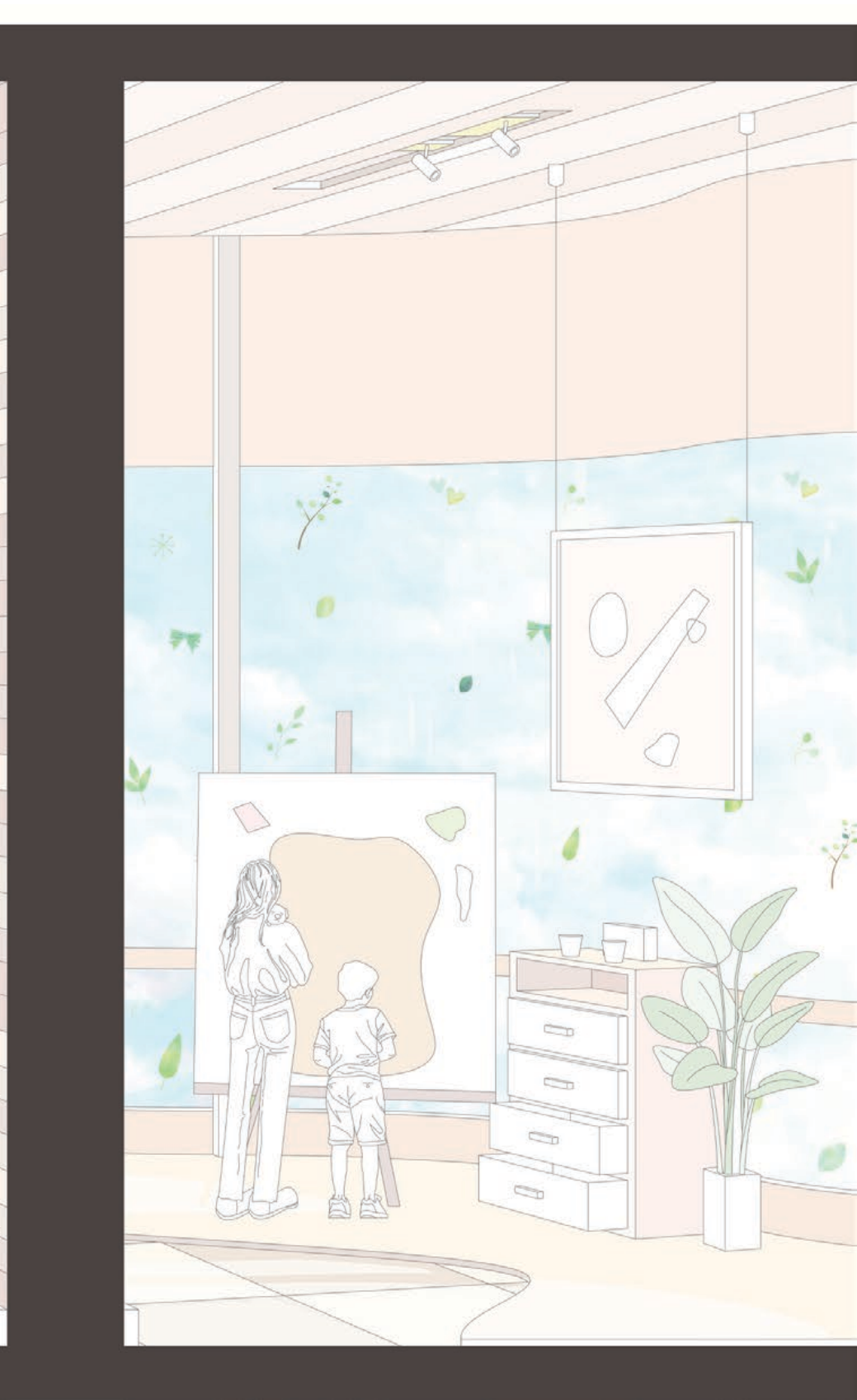
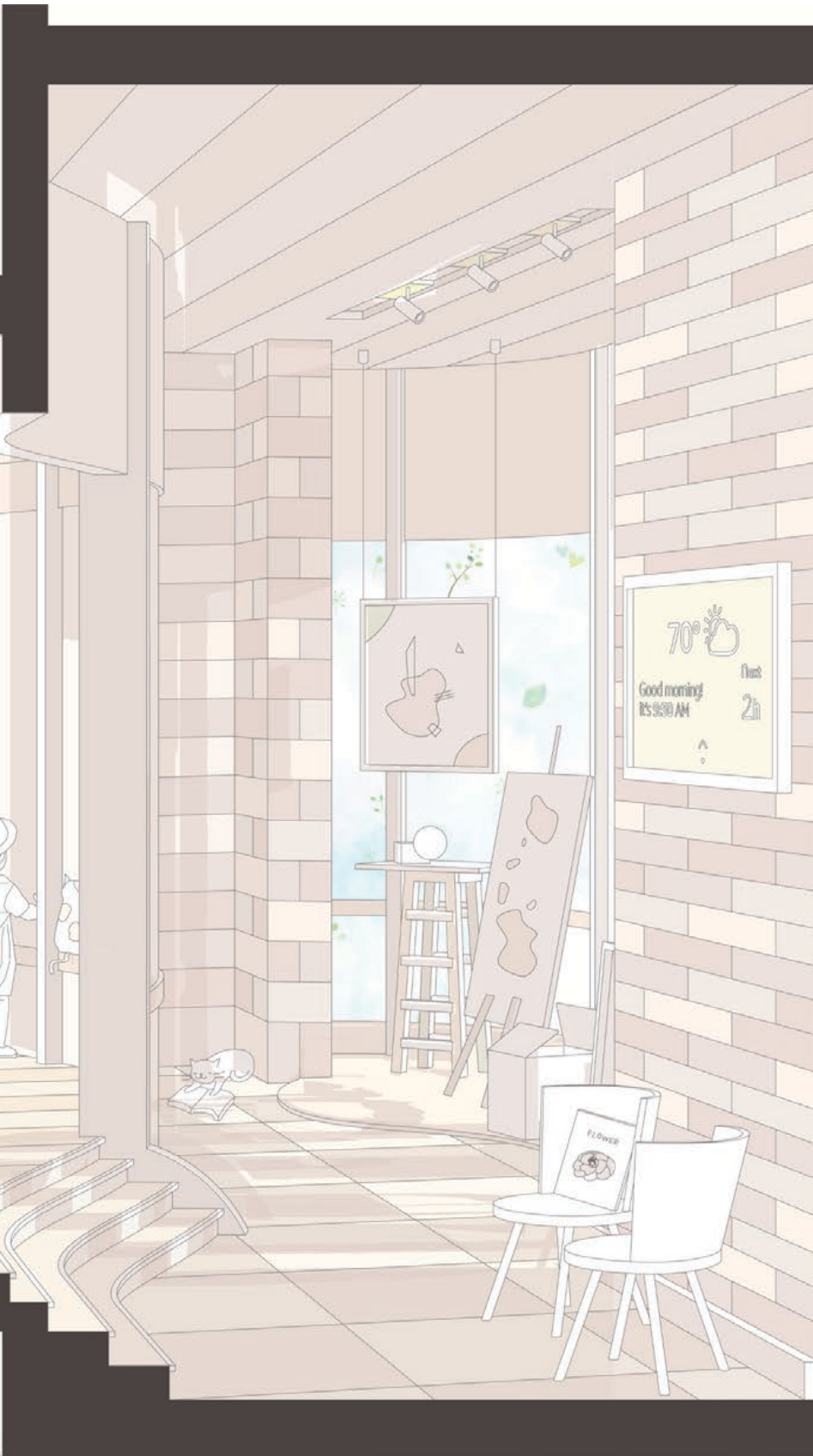
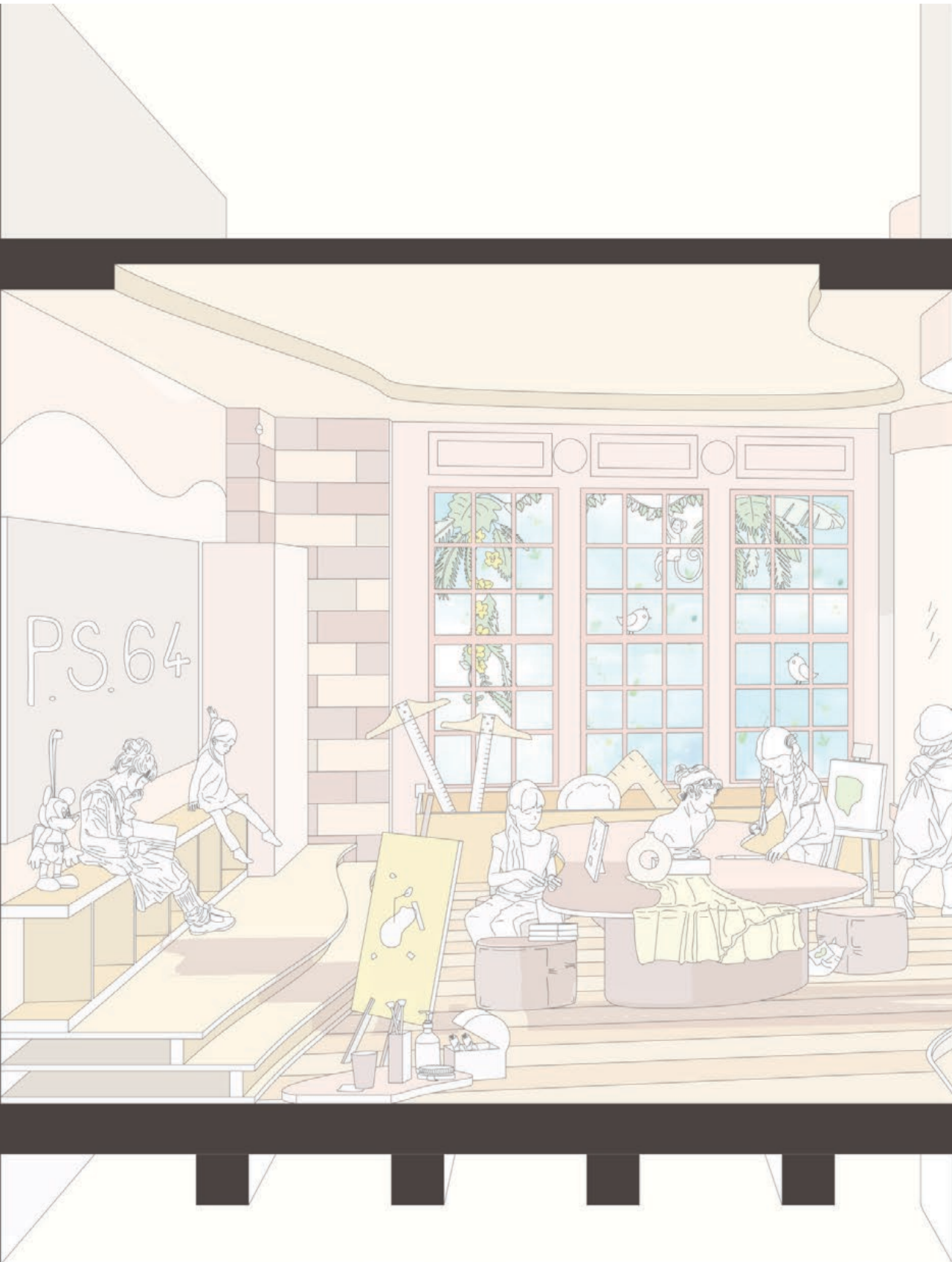
5th Floor Plan
Digital Illustration



All Floor Diagram
Digital Illustration



Music Hall
Digital Illustration



Art Studio
Digital Illustration



Community Gallery
Digital Illustration



P.S. 64
Render
30" * 25"

P.S. 64 /COUNTERACTION/

FALL 2021 - GSAPP Architectural Technology IV
Critic: Berardo Matalucci
Group Work: Sam Velasquez, Anya Ray,
Magan Dang, Eleanor Birle

The project involved optimizing a public school design and developing a DD package. Within the process, I was mainly responsible for visualizations, facade design, daylighting optimization, sustainable stragy analysis and deliver technical drawings for CD and DD package by using Grasshopper, Rhino and Revit.

I created a grasshopper script to generate window openings on the stone veneer facade, based on the intensity of annual solar radiation. Additionally, the shading patterns on the bridge's glazing panel were designed according to sunlight intensity.

Enhance the Dynamic Learning Environment
Design a Sustainable and Aesthetic Public School

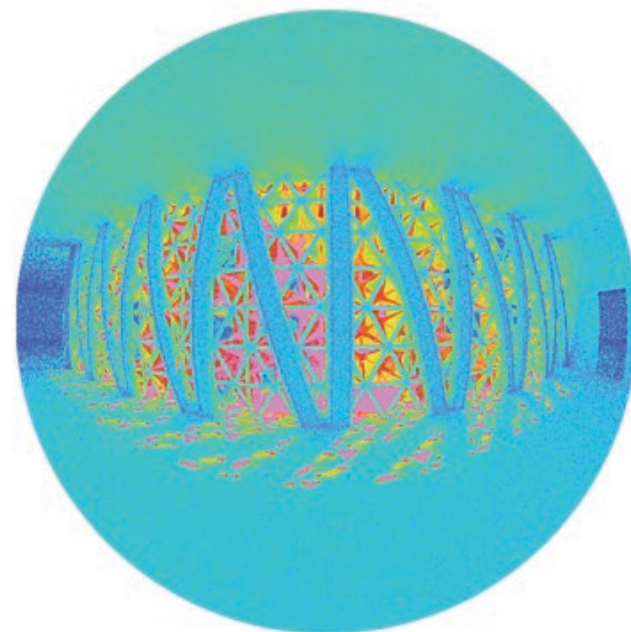
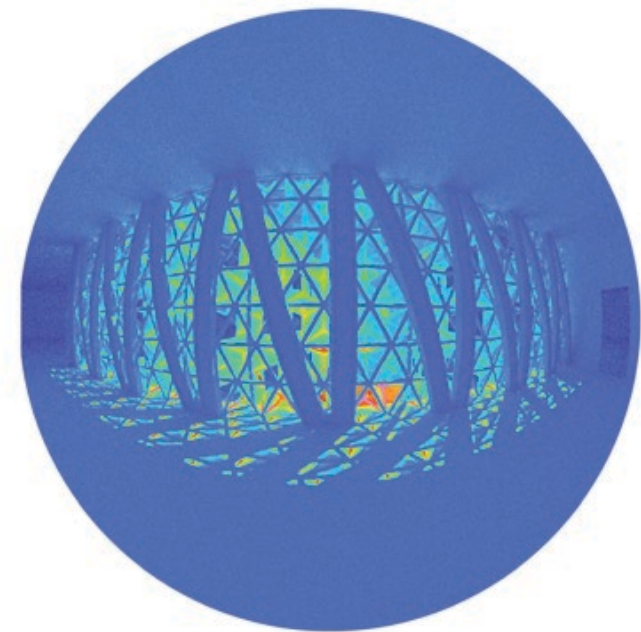
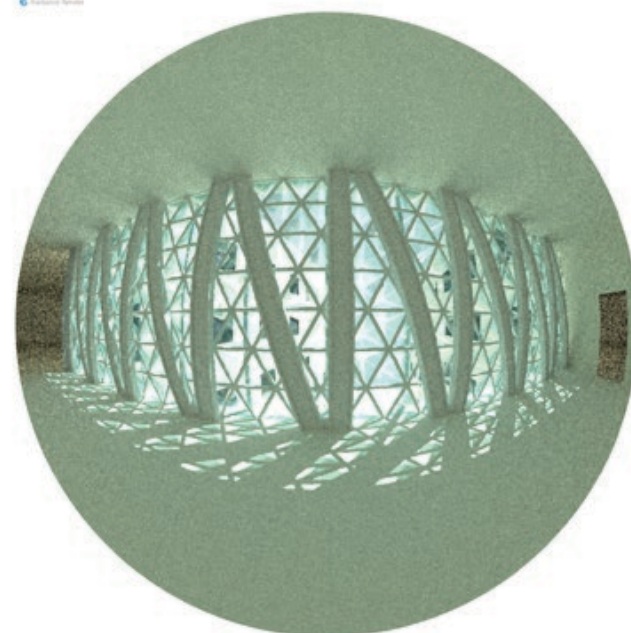
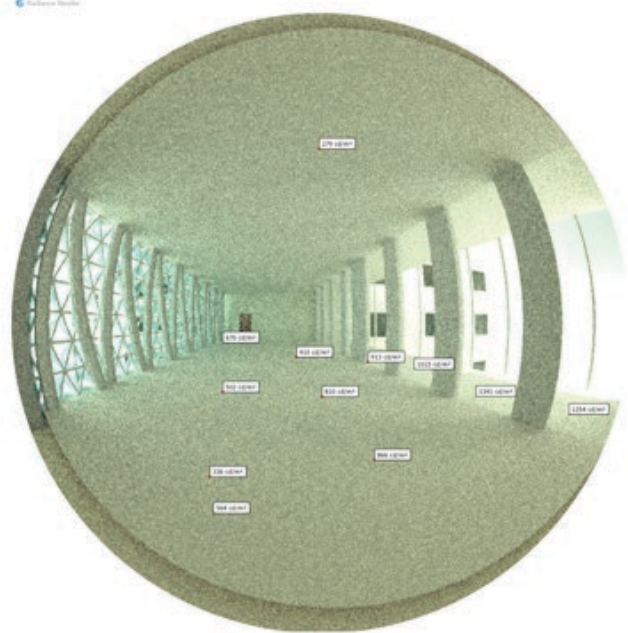


P.S. 64
Render
30" * 25"



Sustainable Strategies Study
Digital Illustration

Optimized Bridge's Glazing
Parametric Glazing Shading Patterns

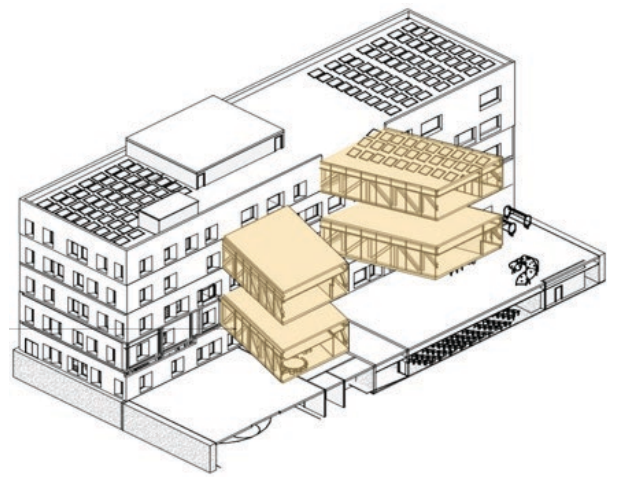
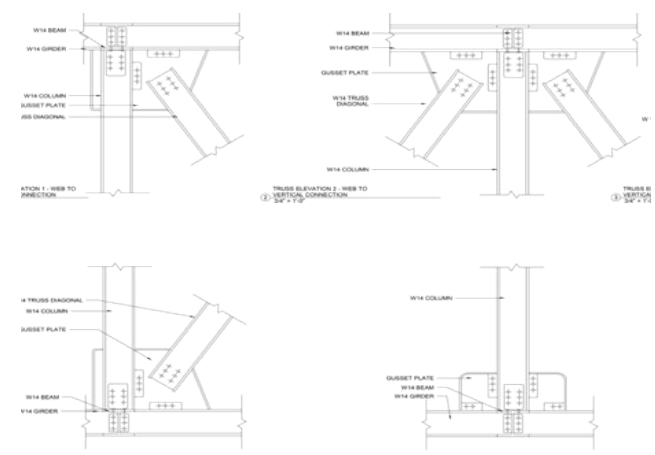
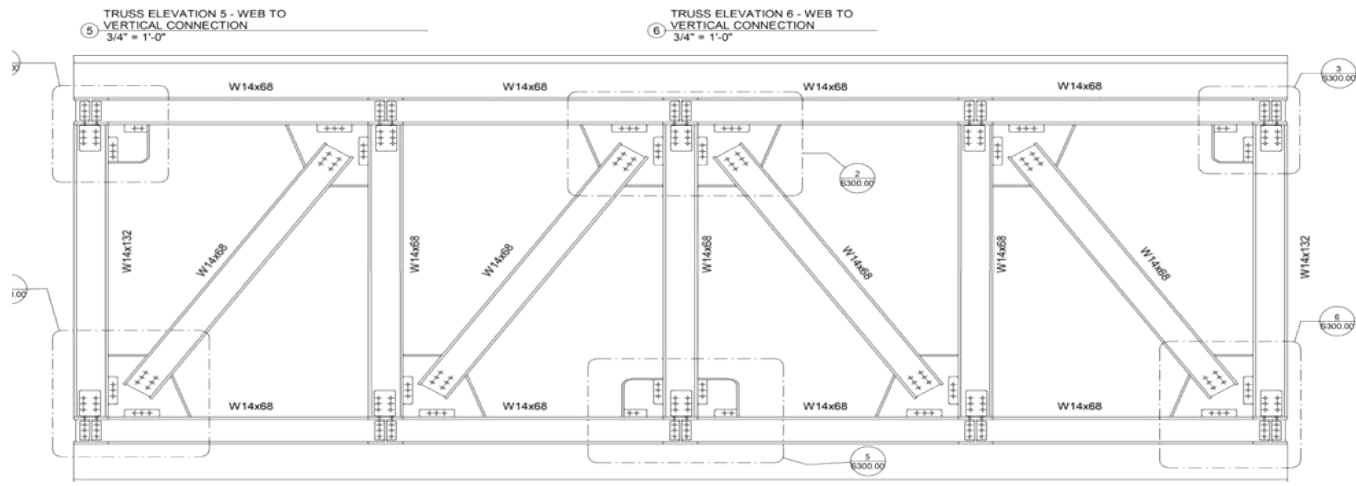
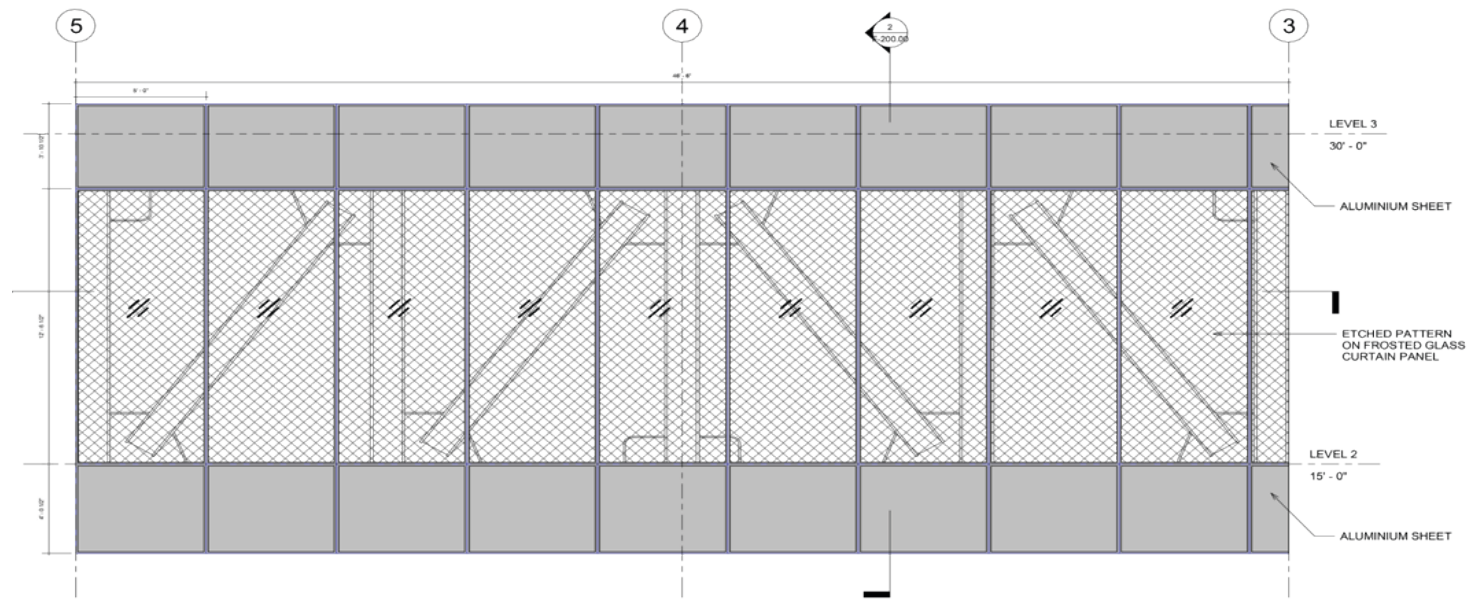


Day Lighting Analysis & Parametric Facade Design
Climate Studio & Grasshopper

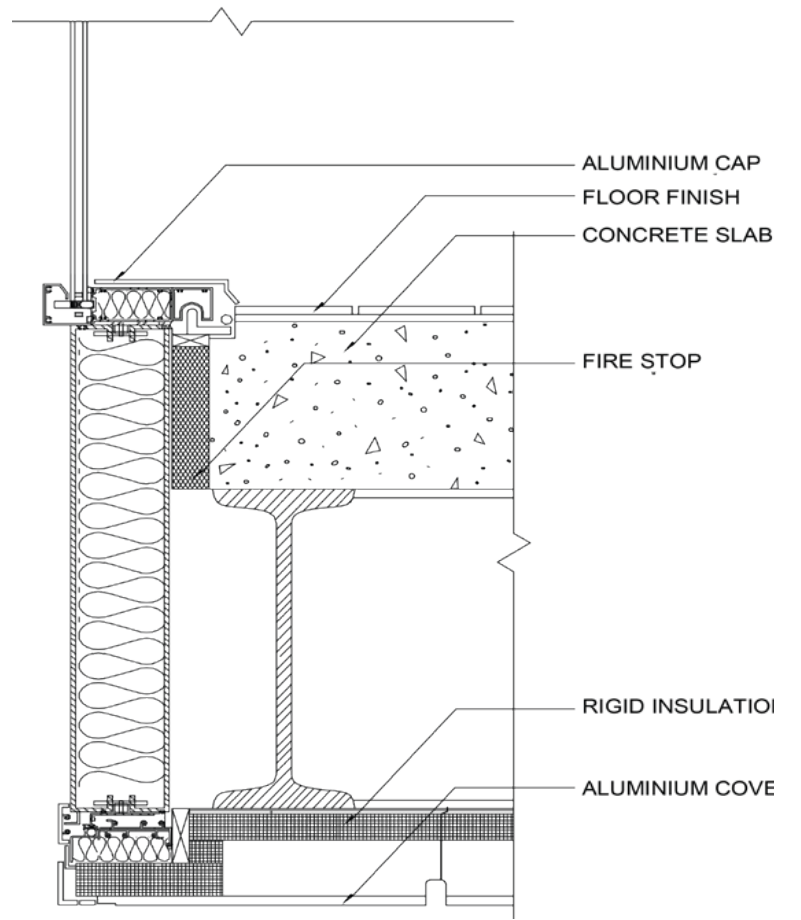
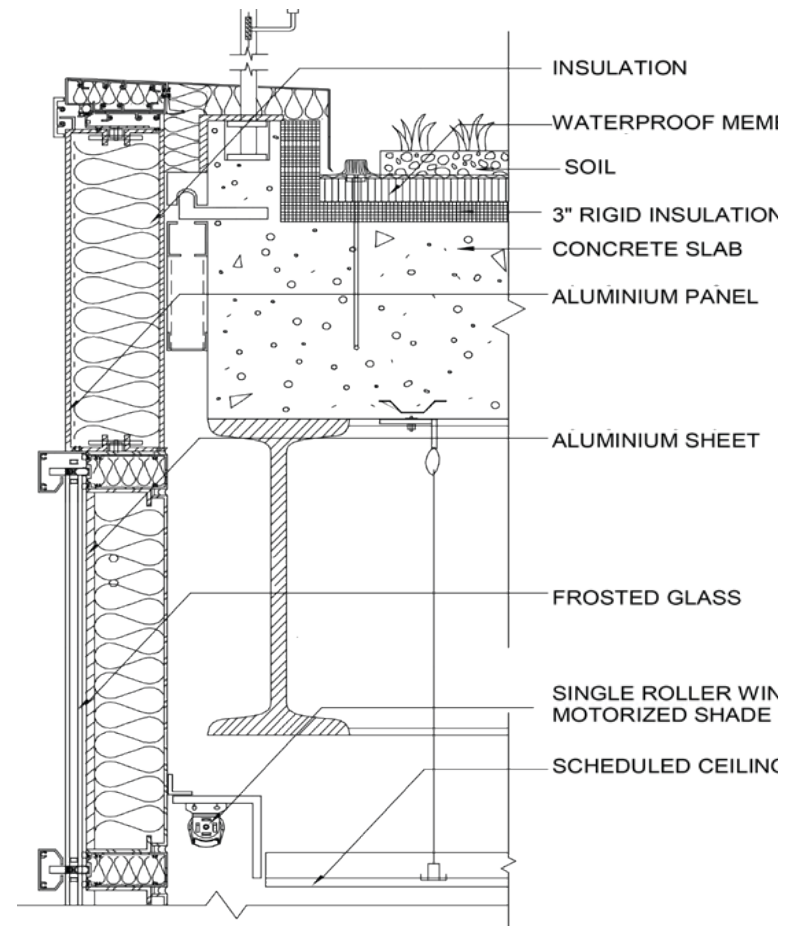
Denser Dark Patterns to Absorb the Light

Denser Light Patterns to Reflect the Light

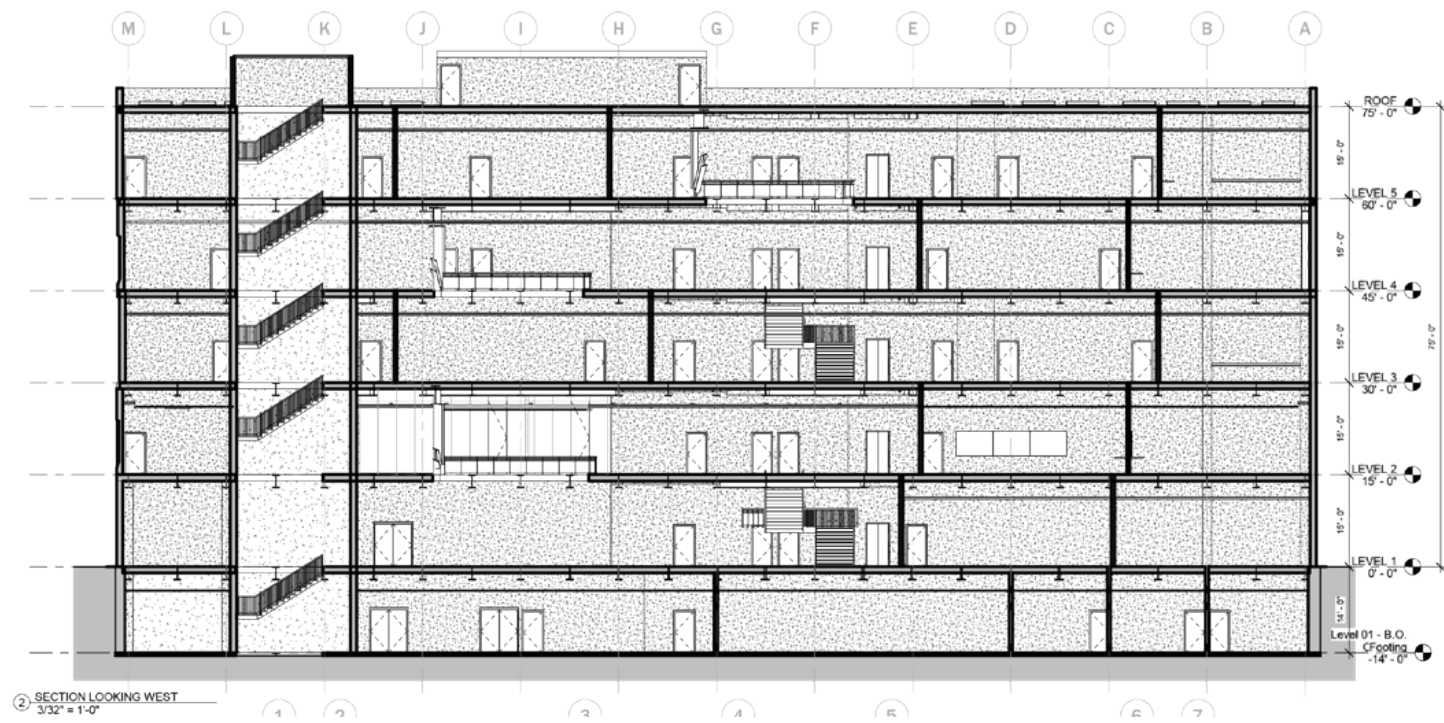




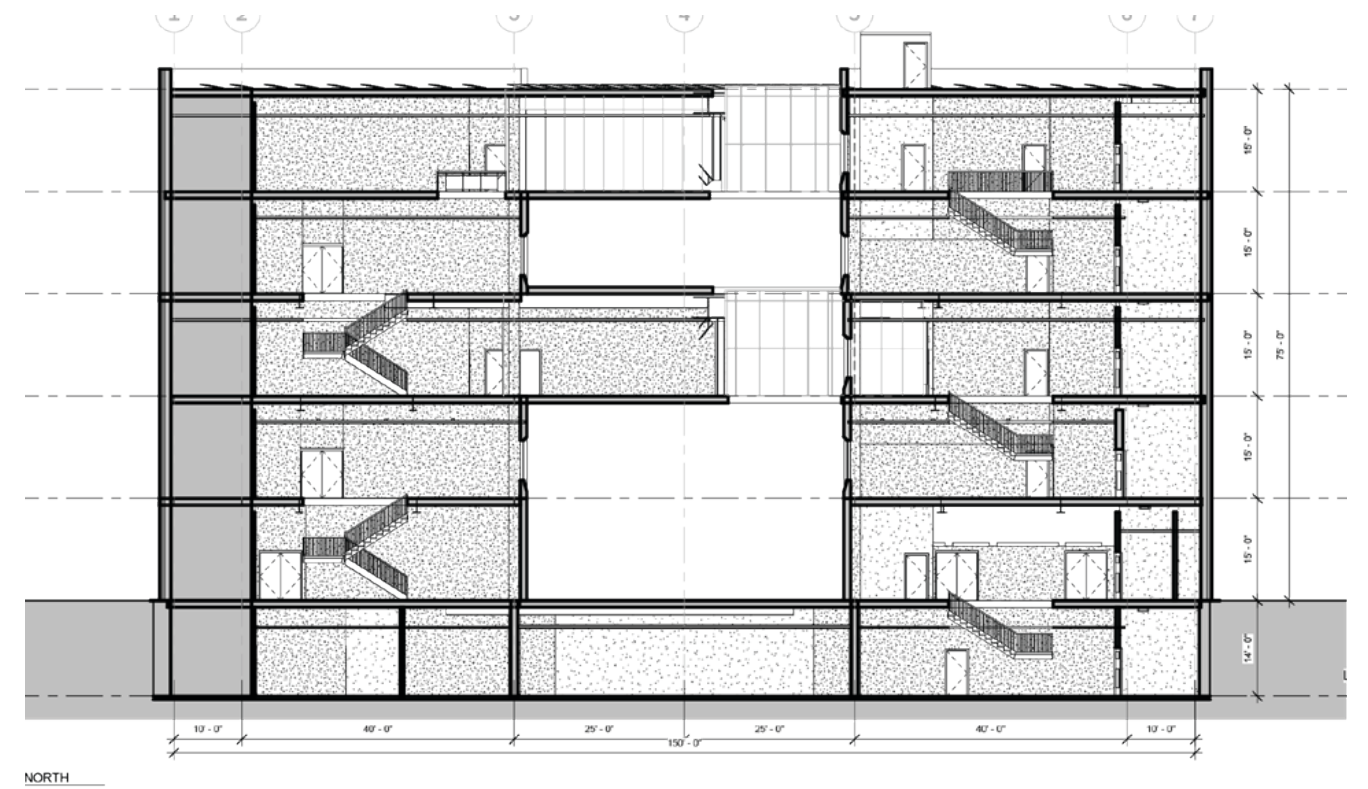
Bridge Elvation & Joints Details
Line Drawing



Bridge Section
Line Drawing

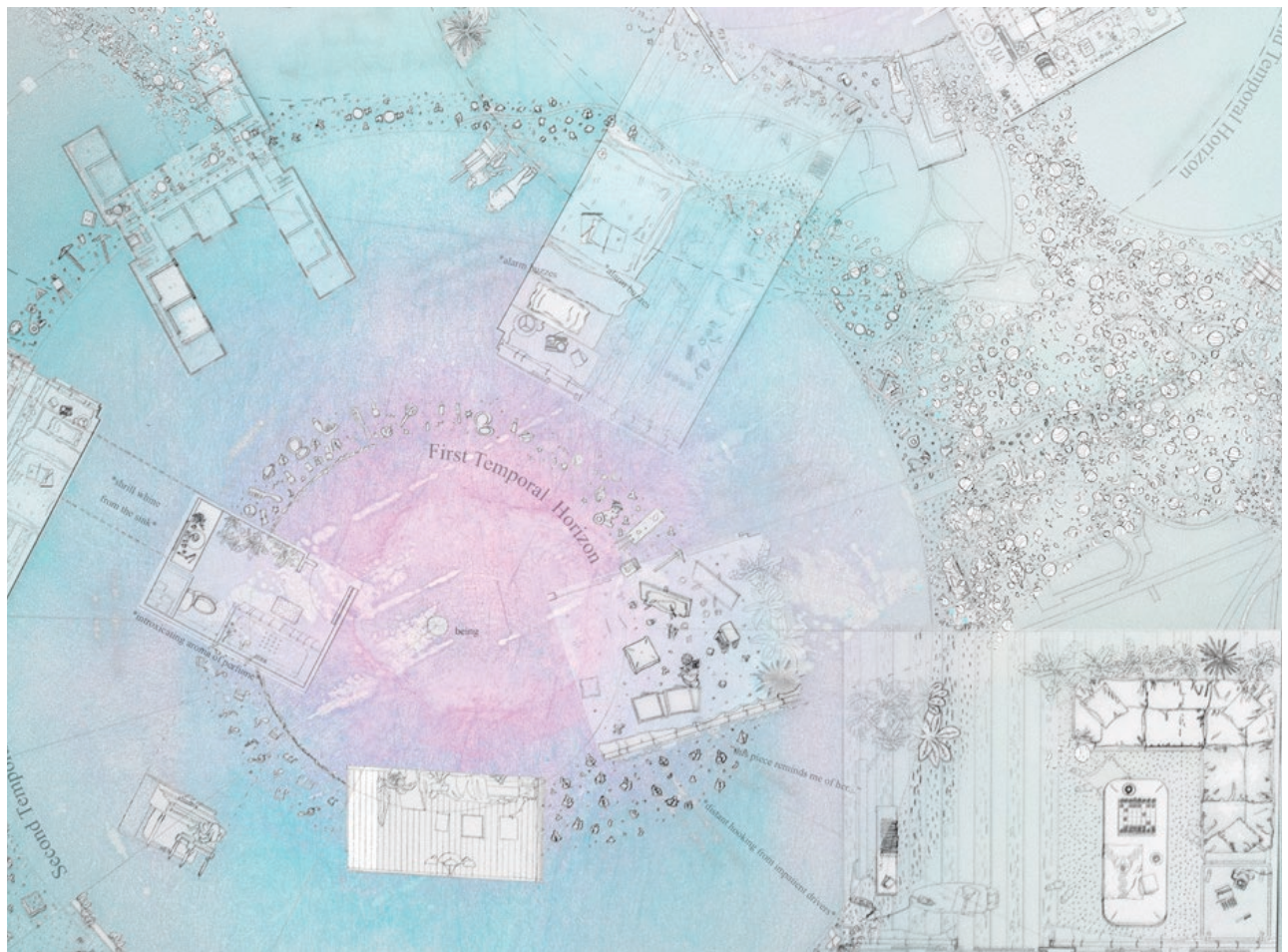


Section Looking West
Line Drawing



Section Looking East
Line Drawing

NOISE



2020-2023