

Selected Works

Jacqueline S. Chen

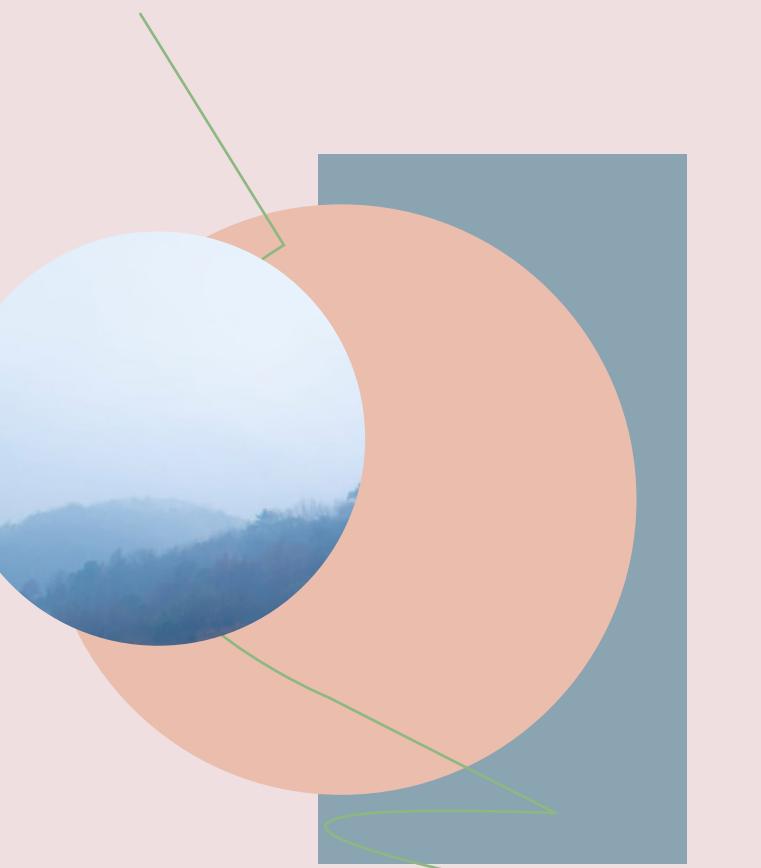


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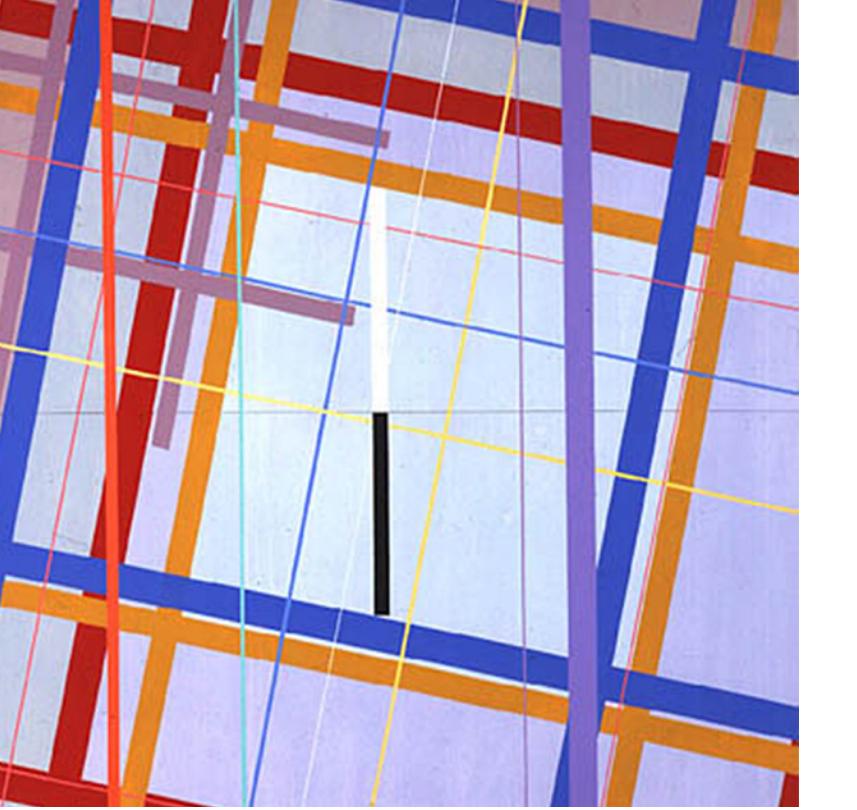
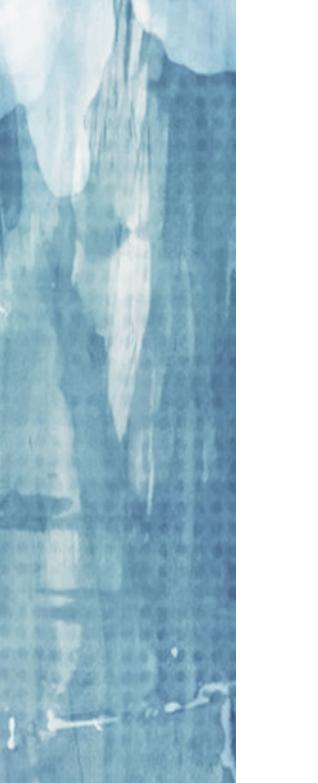
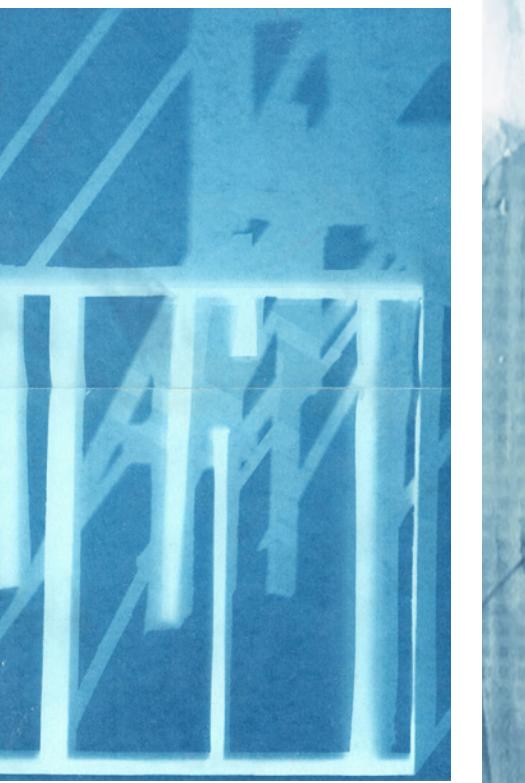
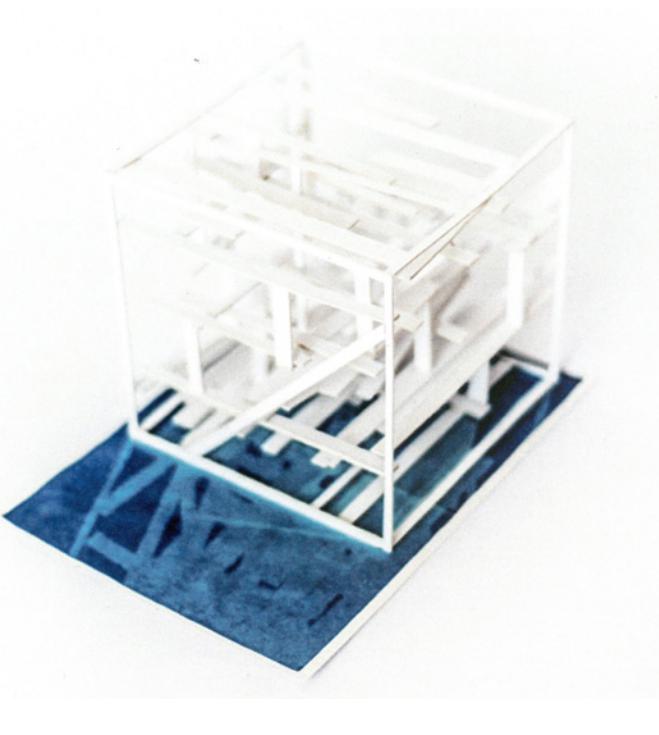
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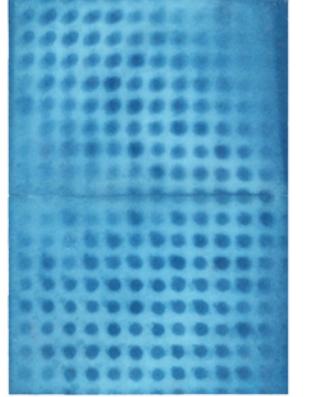
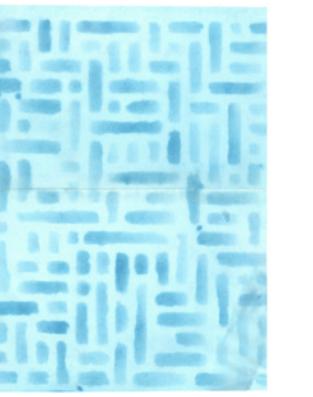
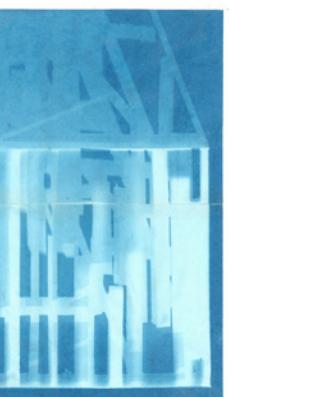
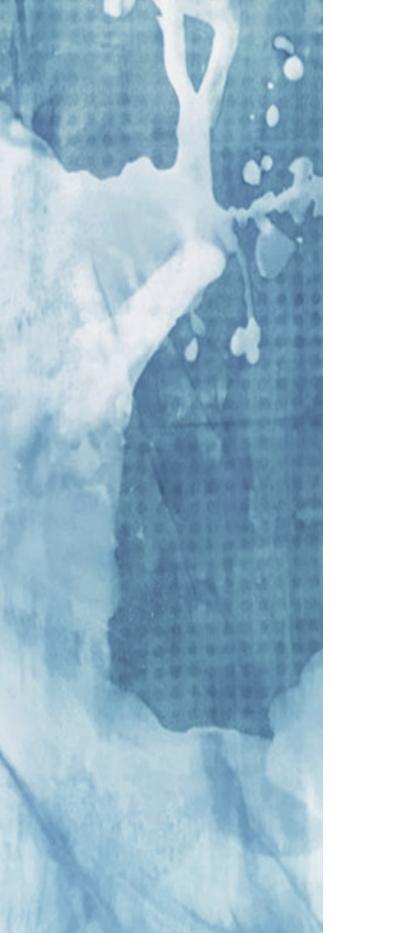
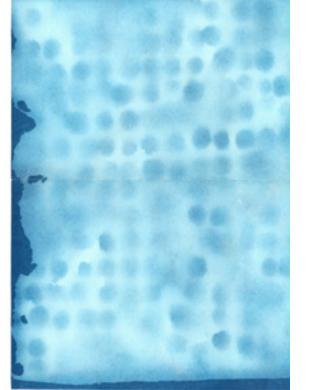
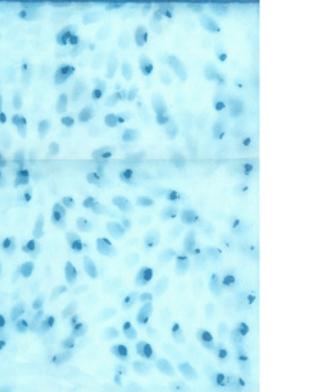
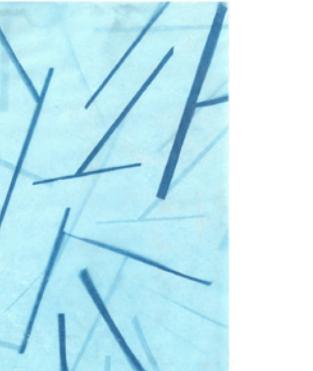


Drift Drawings: Drawn by Light

Inspired by the temporary patterns and reflections casted by windows and blinds, these light studies emerged from the desire to pull away from the idea that drawings are produced only through additive pigments and conventional "drawing" tools. The goal was to create a system of drawing that uses cyanotype as a medium to capture temporary impressions of physical items, exploring the theme of parallax through various geometries and angles. The tool itself has been iterated through different dimensions to create flattened variations of depth under the constraints of Cambridge's winter daylight.

Instructors:
Nicholas Pacula
Jeremy Jih

January Term 2018



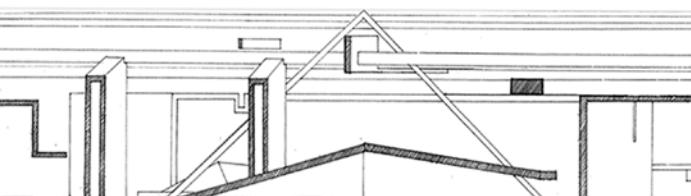
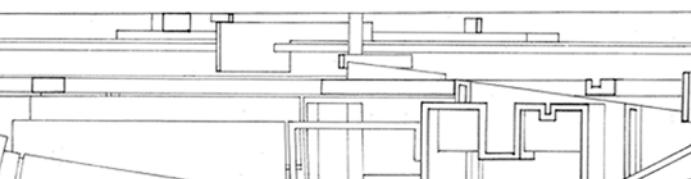
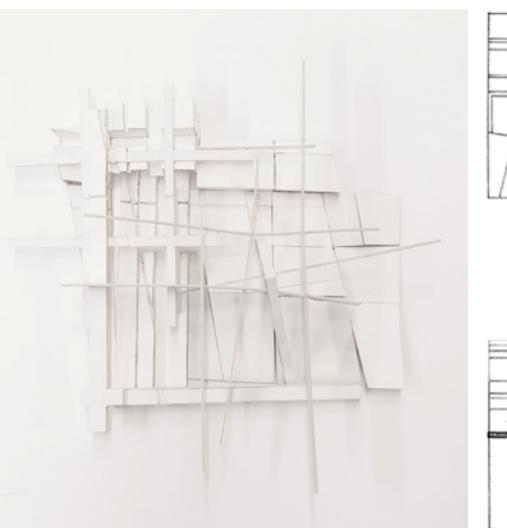
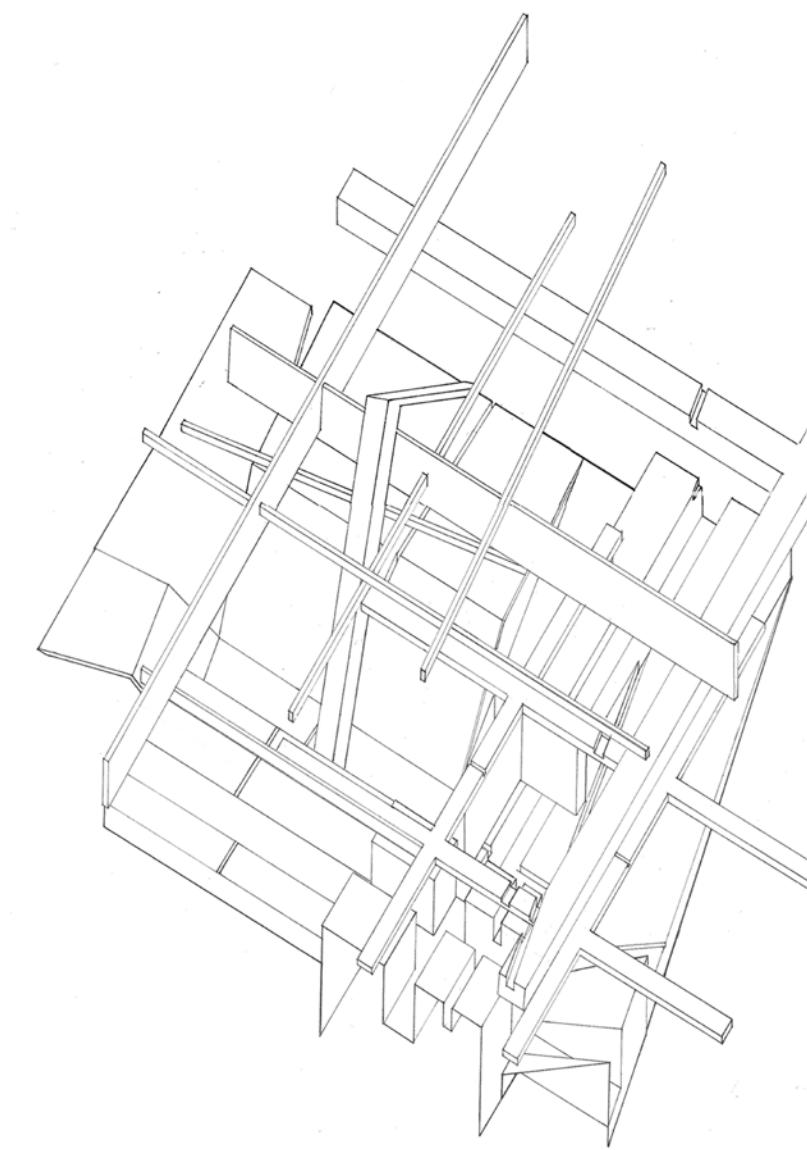
Dictated by Color

Painting: J.S.B. Composition #4 by Robert Slutsky

Completely hand-drawn, cut, and assembled, there's a playfulness to the challenge of finding or intentionally prescribing meaning and logic to what is often perceived to be abstracted madness. While the overall translation of these elements was driven by color, some rules allowed for a greater range of improvisation. For instance, the red elements of this painting, became areas subtracted from objects beneath, whereas the gradient of color in the background informed gradual changes in elevation to create various ramps and further complicate the reading of depth in plan.

Instructors:
Nicholas Pacula
Sam Ghantous

Spring 2018





Free Little Library: Tripod Monsters

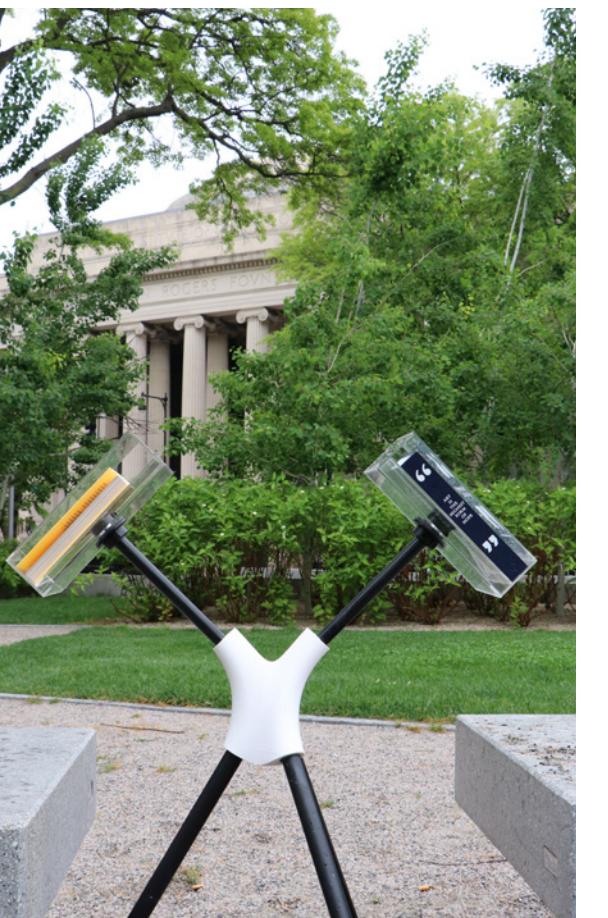
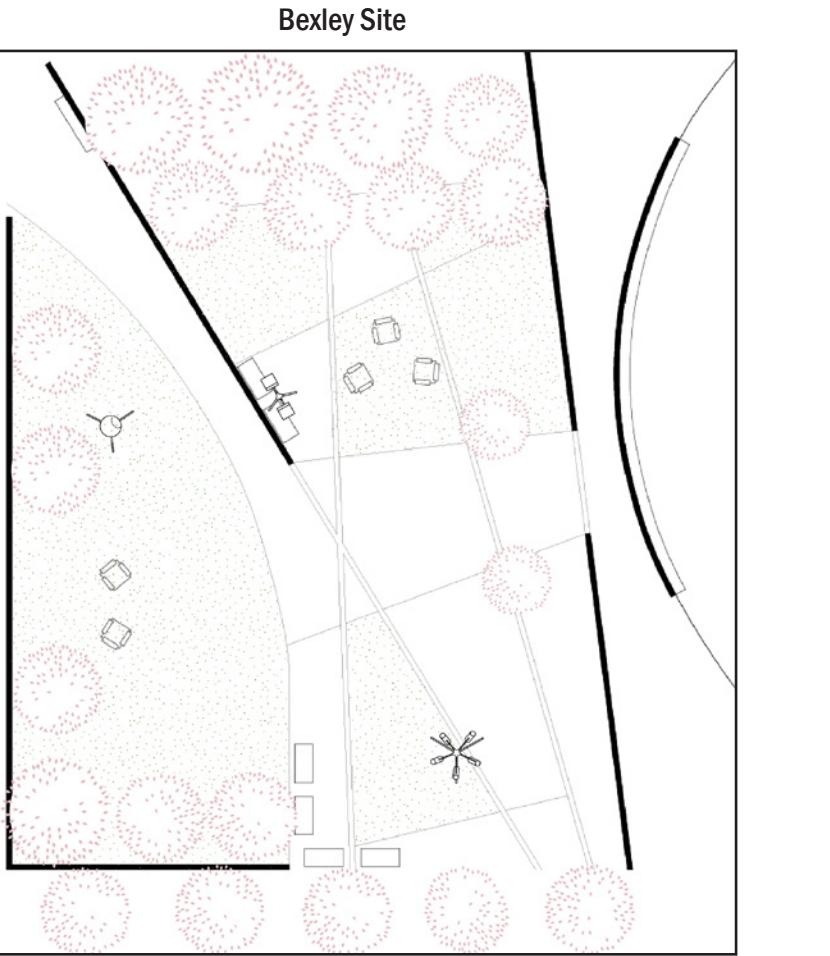
Collaborators:
John Rao
Claire Holley
Tiffany Zhou

Instructors:
Nicholas Pacula
Sam Ghantous

Spring 2018

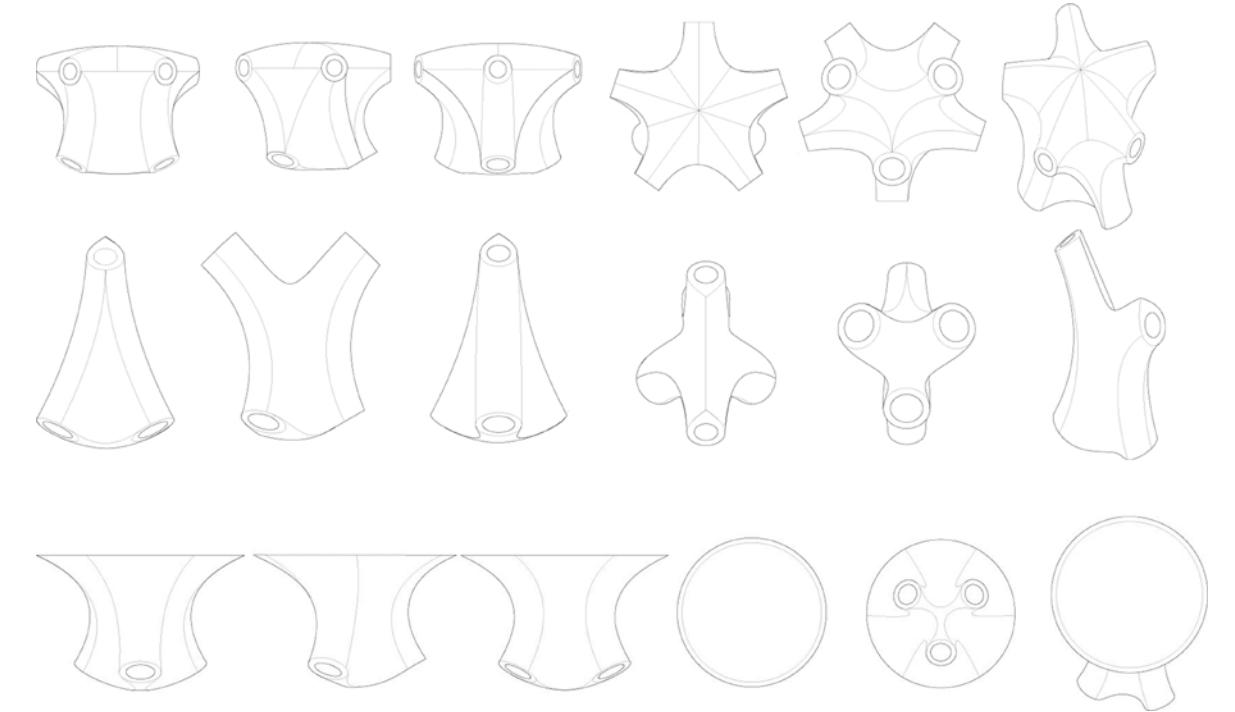
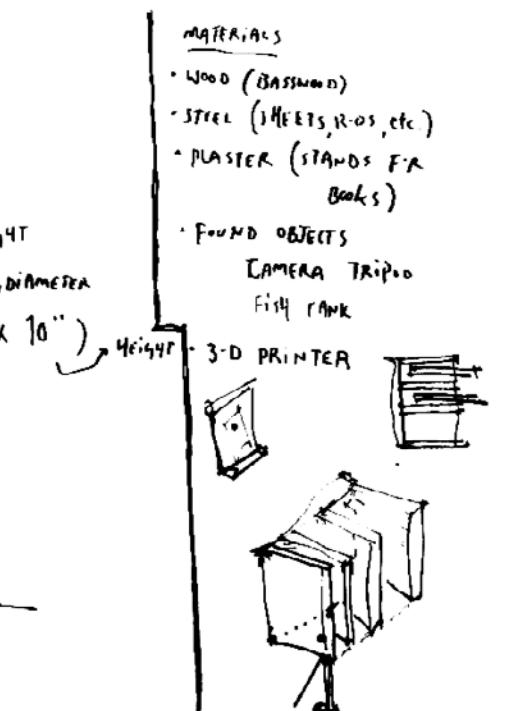
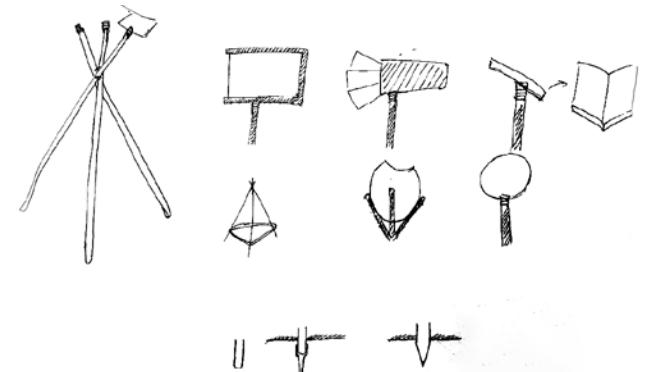
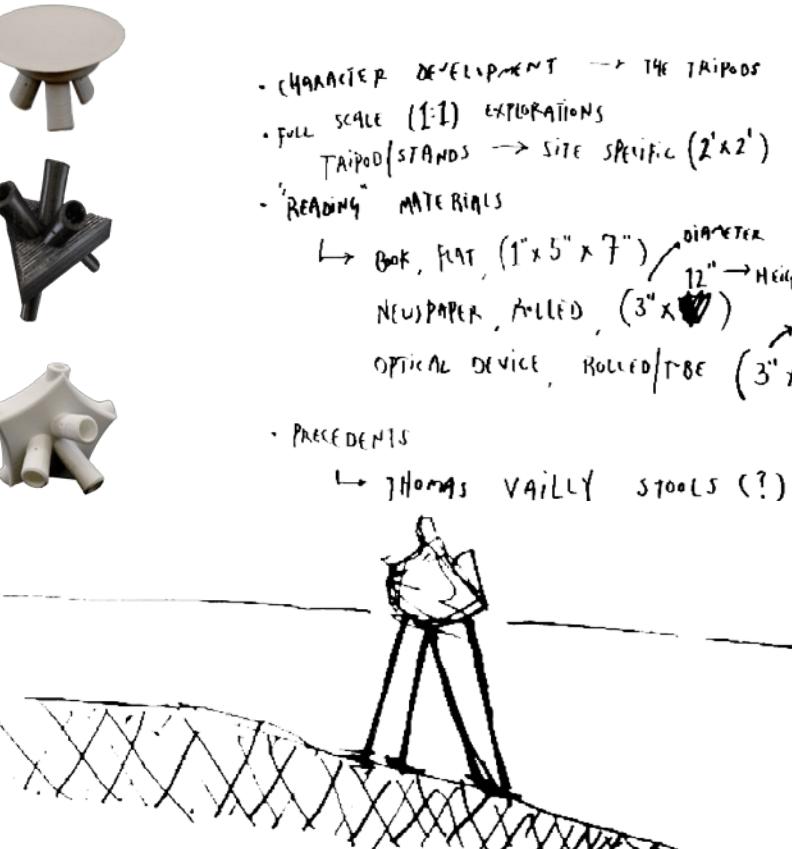


The greenspace across the street from MIT's Mass Ave entrance was the site of one of the Institute's former dorms, Bexley Hall. Since the demolition of Bexley Hall, the newly constructed park lies largely underutilized. The production of a set of tripod libraries become hosts to a variety of literature types dispersed around the green space. The strong character of their form extends as an invitation to others to explore an otherwise static place.



//Personal Notes//

The ideation, design, and final assemblage process of these pieces were heavily collaborative between all members. Various book mediums were considered, sourced, and surveyed by Jacqueline Chen. Initial prototypes and final cylindrical magazine library's connection detail modeled by Jacqueline Chen. Final 3D central geometries modeled by John Rao, printed and sanded by Jacqueline Chen. Other materials sourced by Jacqueline Chen and Claire Holley. Final drawings made and edited by John Rao and Jacqueline Chen (plan).





Color in Dialogue: White is Also a Color

This cumulative series on collection and translation poises itself on the choreographic force derived from the colors of "unadulterated" found objects.

Instructor:
Michael Stradley

Fall 2020

Field Collage Series

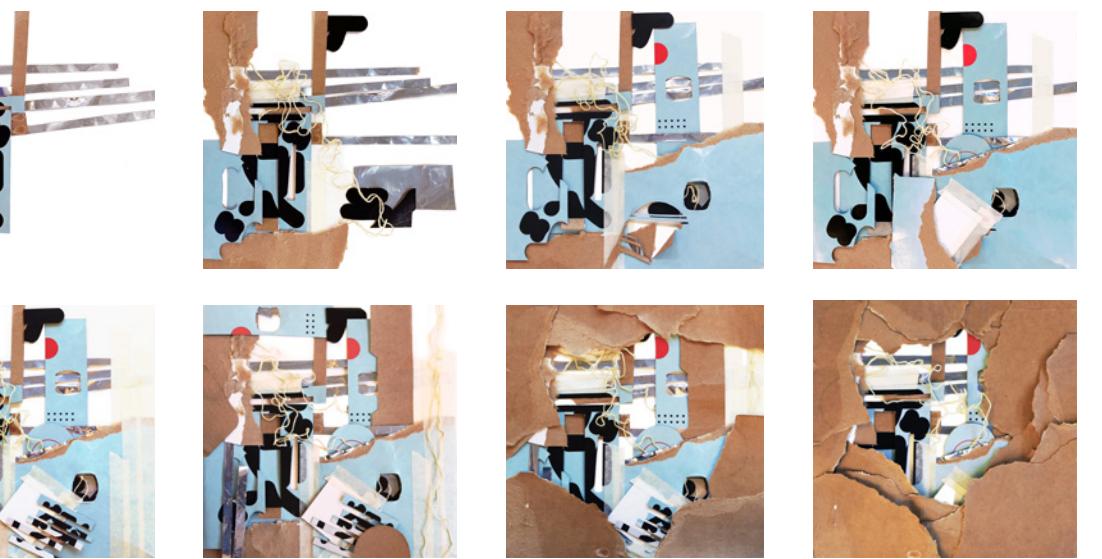
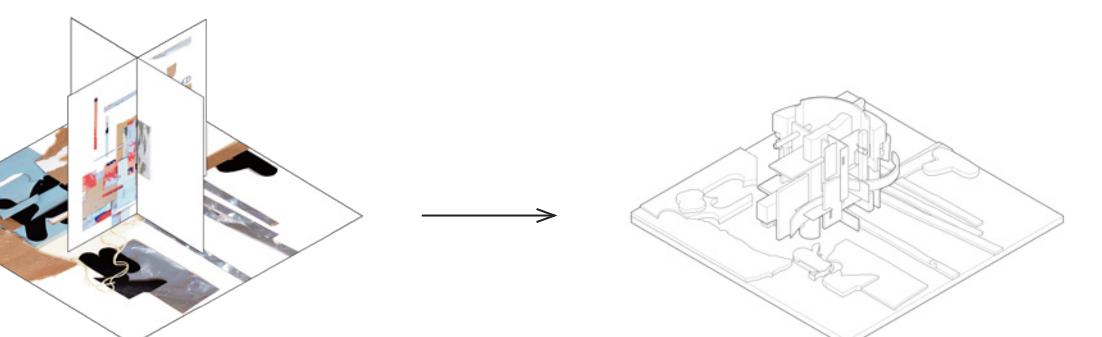
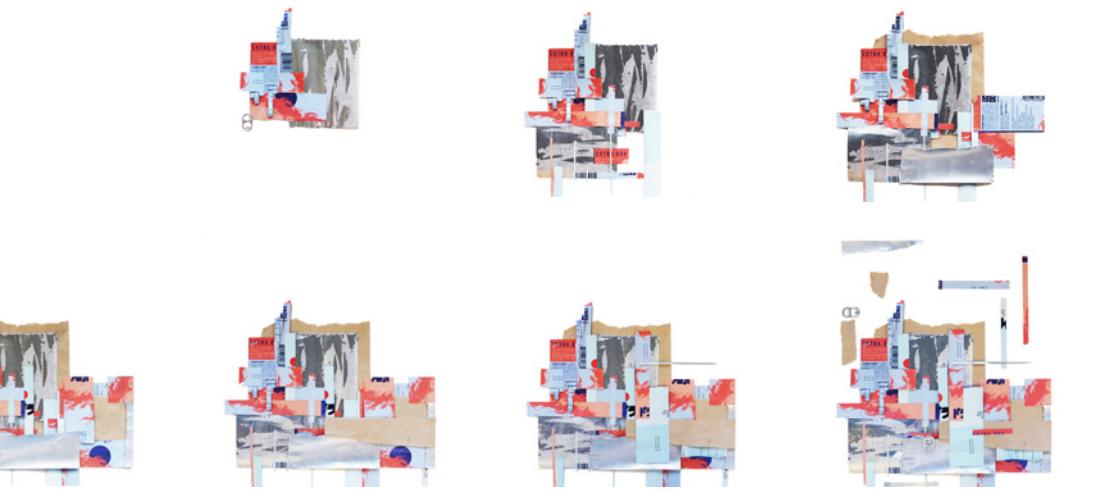
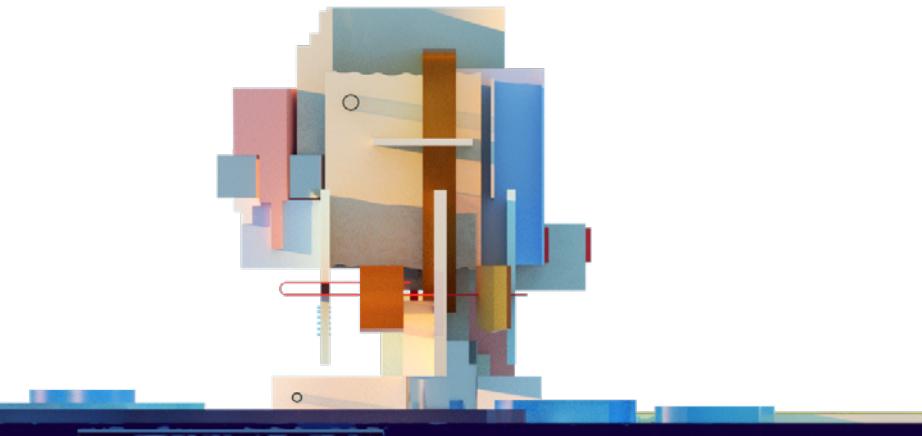
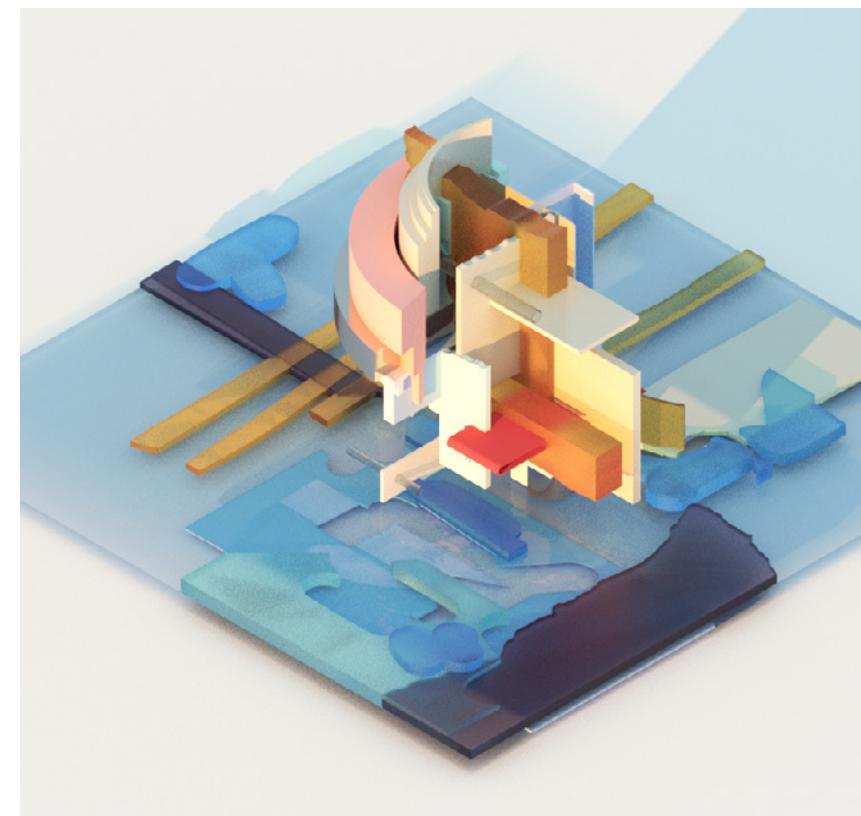
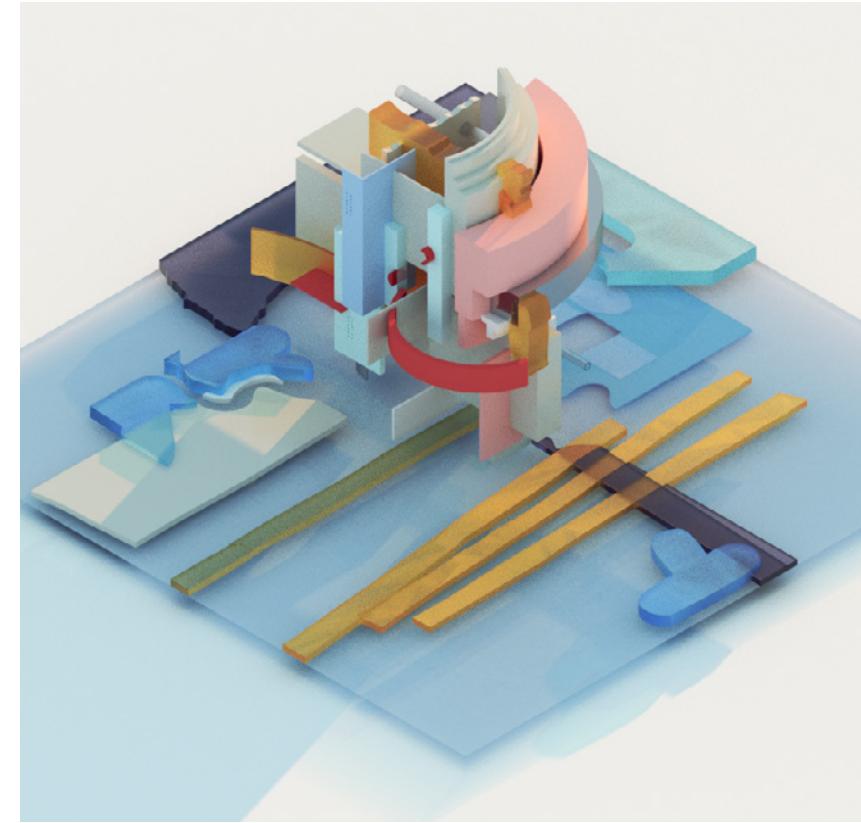


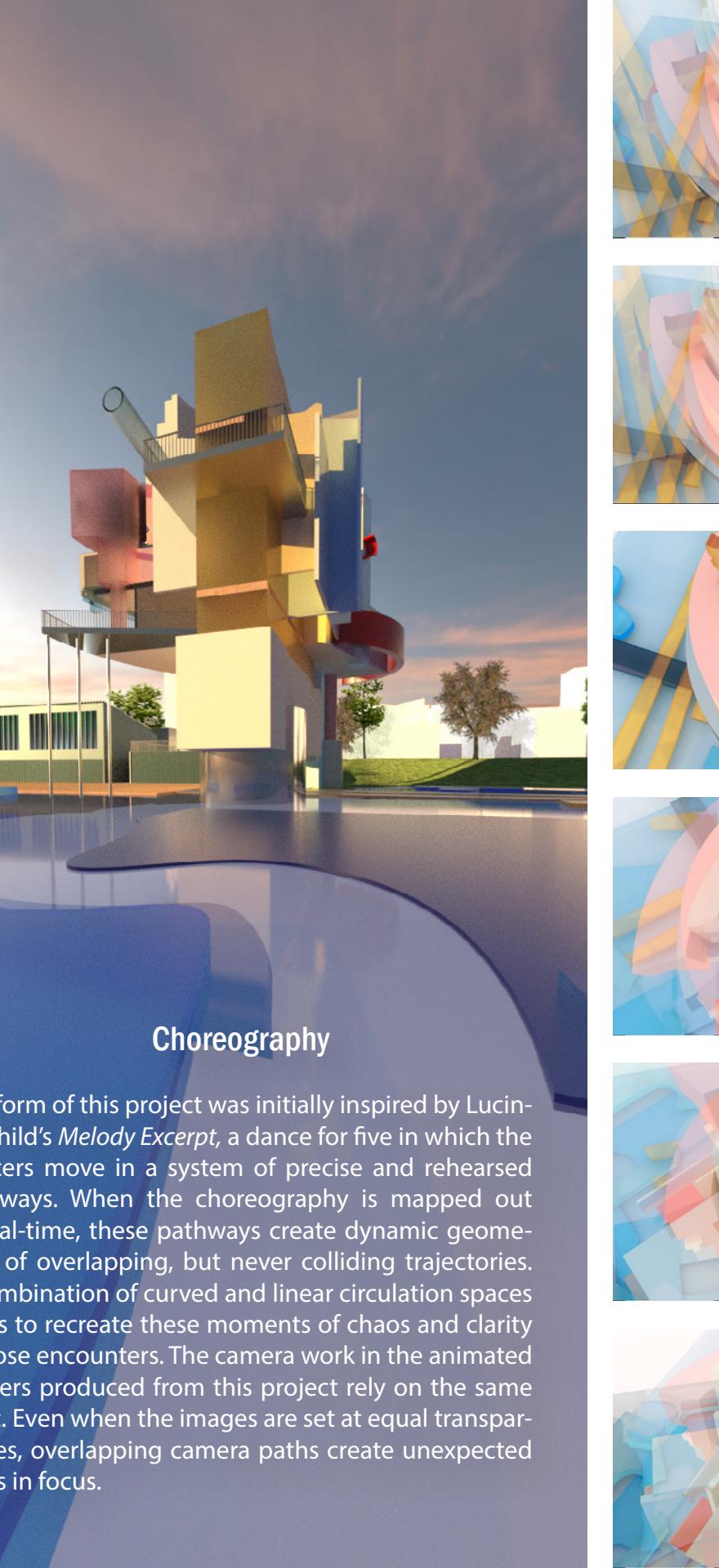
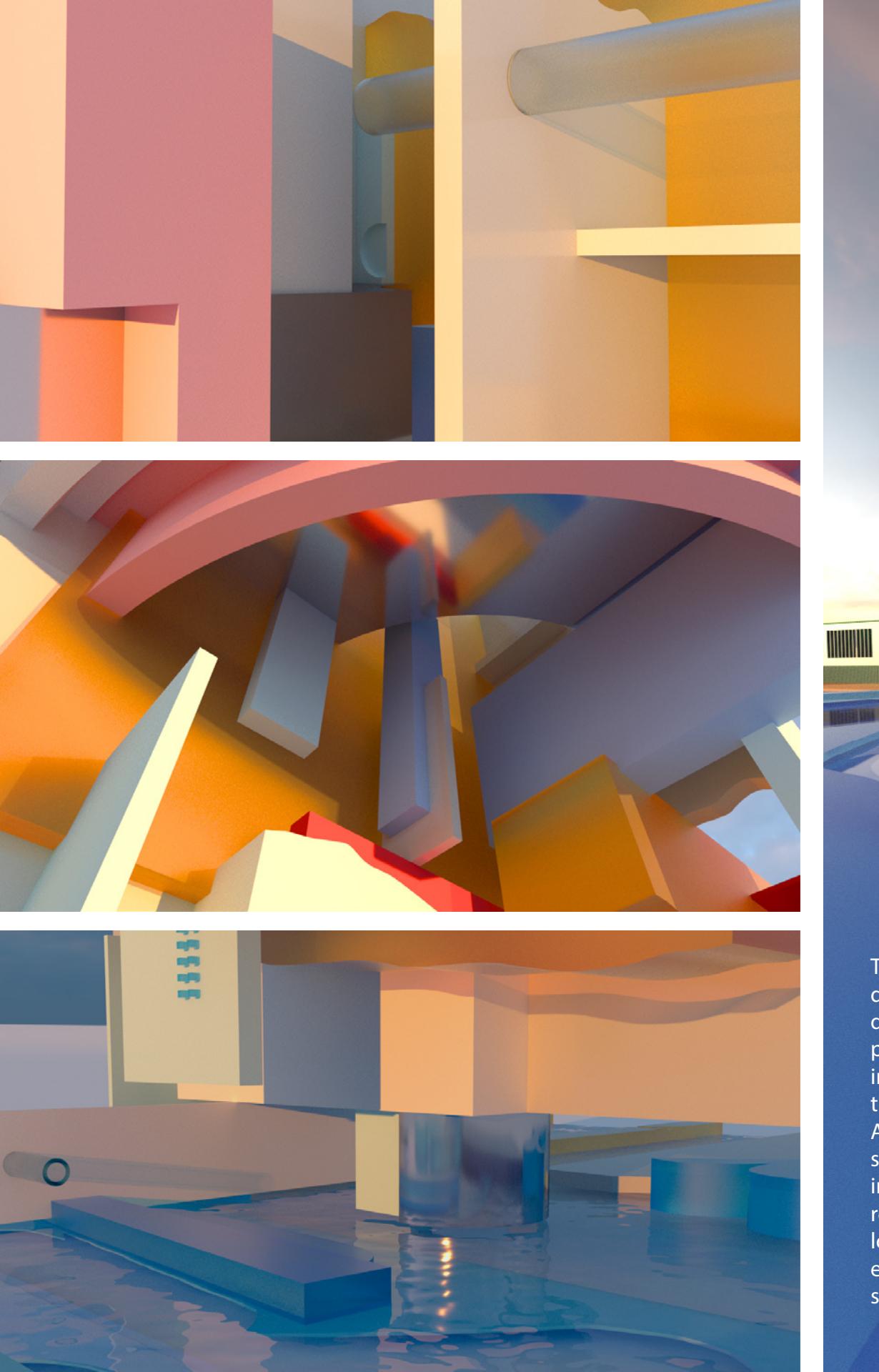
Figure Collage Series



Color

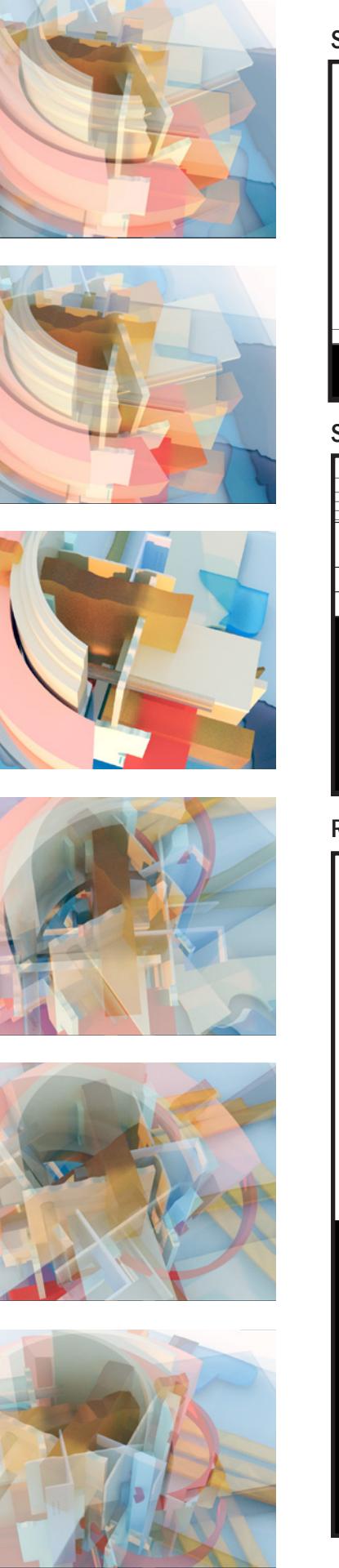
A quality often associated with femininity, emotionality, superficiality, and impurity has been a topic often overlooked in architectural pedagogy. Just as architects obsess over materials in their rawest form, the discussion surrounding color should not cease to exist then. It is imperative to recall that color does not just present itself in the form of swatches. Once the Pantone card is crumpled and altered, color reveals itself to be a combination of textures, reflectivity, and the inherently captivating moments of its imperfections. The chromaphobia and whitewashing of our spatial experiences extend beyond the architecture with social implications in a culture where whiteness has been elevated beyond the spectrum of color.



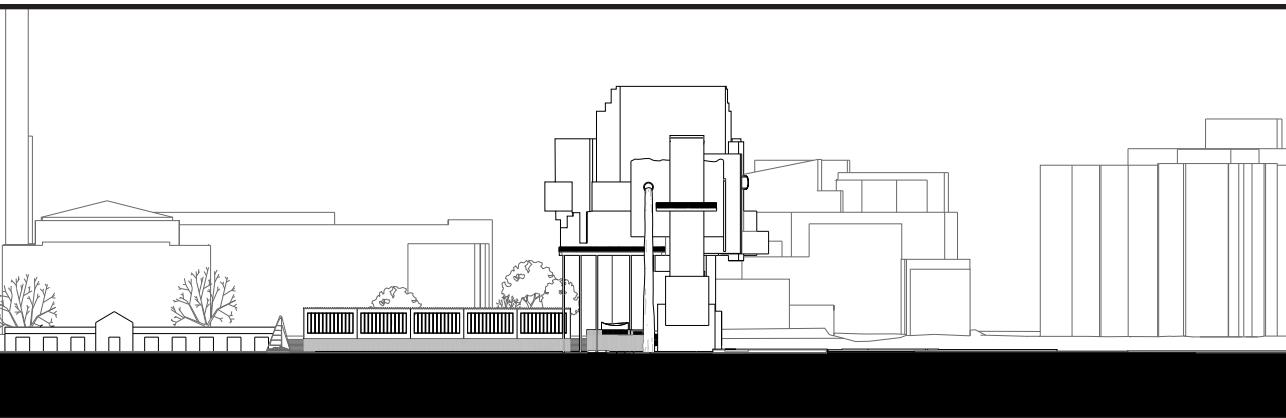


Choreography

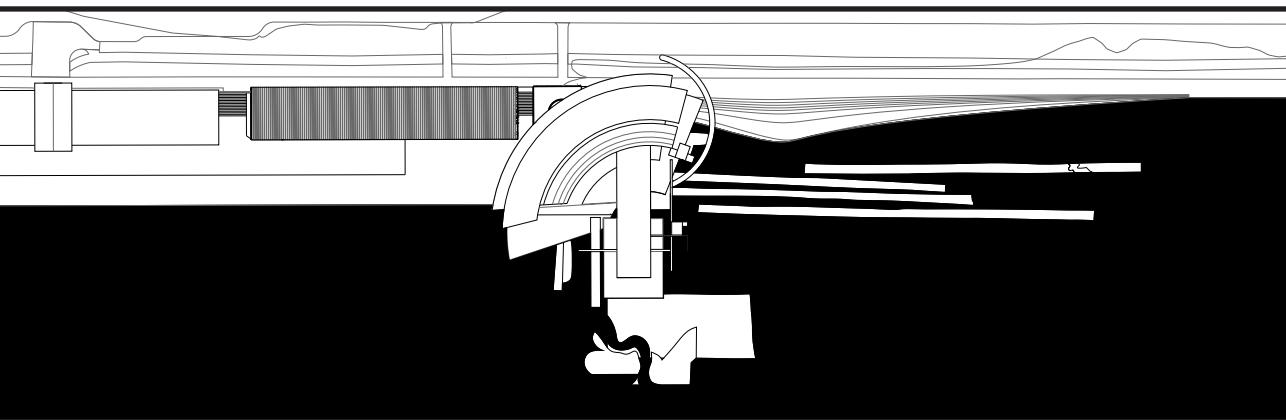
The form of this project was initially inspired by Lucinda Childs's *Melody Excerpt*, a dance for five in which the dancers move in a system of precise and rehearsed pathways. When the choreography is mapped out in real-time, these pathways create dynamic geometries of overlapping, but never colliding trajectories. A combination of curved and linear circulation spaces seeks to recreate these moments of chaos and clarity in close encounters. The camera work in the animated renders produced from this project rely on the same logic. Even when the images are set at equal transparencies, overlapping camera paths create unexpected shifts in focus.



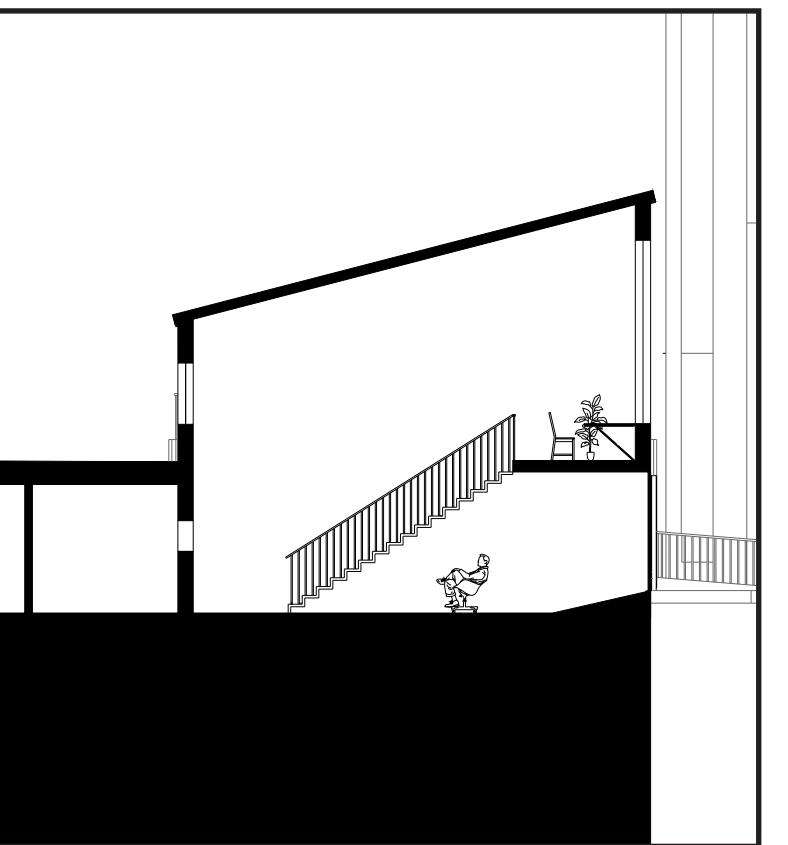
Site Elevation



Site Plan



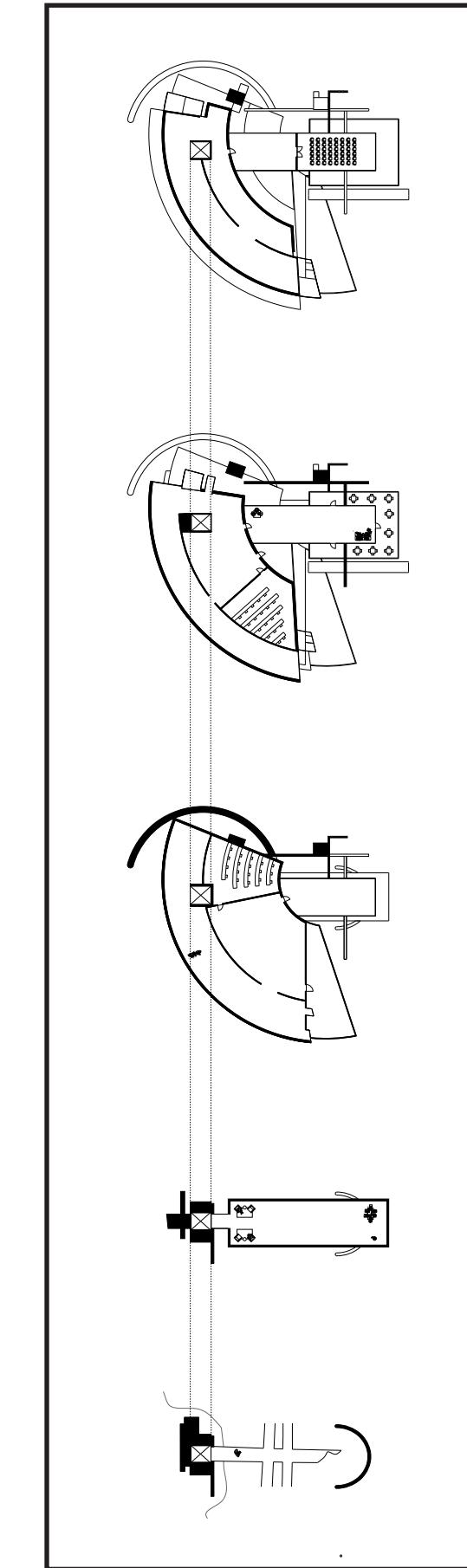
Residential Section



Final Program Synopsis

In pursuit of increasing engagement with MIT's waterfront, this project takes advantage of the existing sailing pavilion to attract new audiences. The tower, whose form takes on a collage of simple geometries and translucent and reflective materials, partners itself with a residential space that blends into the existing context to harbor and cultivate a community of artists. By increasing interaction with the space through a multitude of perspectives, collaged effects, and learning spaces, this proposal imagines itself to be a place to exhibit and promote the trans-disciplinary nature of the arts at this technical institution.

Exhibition Space Floor Plans



Fenway Victory Garden Seed Bank: Capturing Preciousness in Exhibition & Preservation

Instructor:
Daniel Marshall

Collaborator:
Dongnyung Lee

Spring 2020

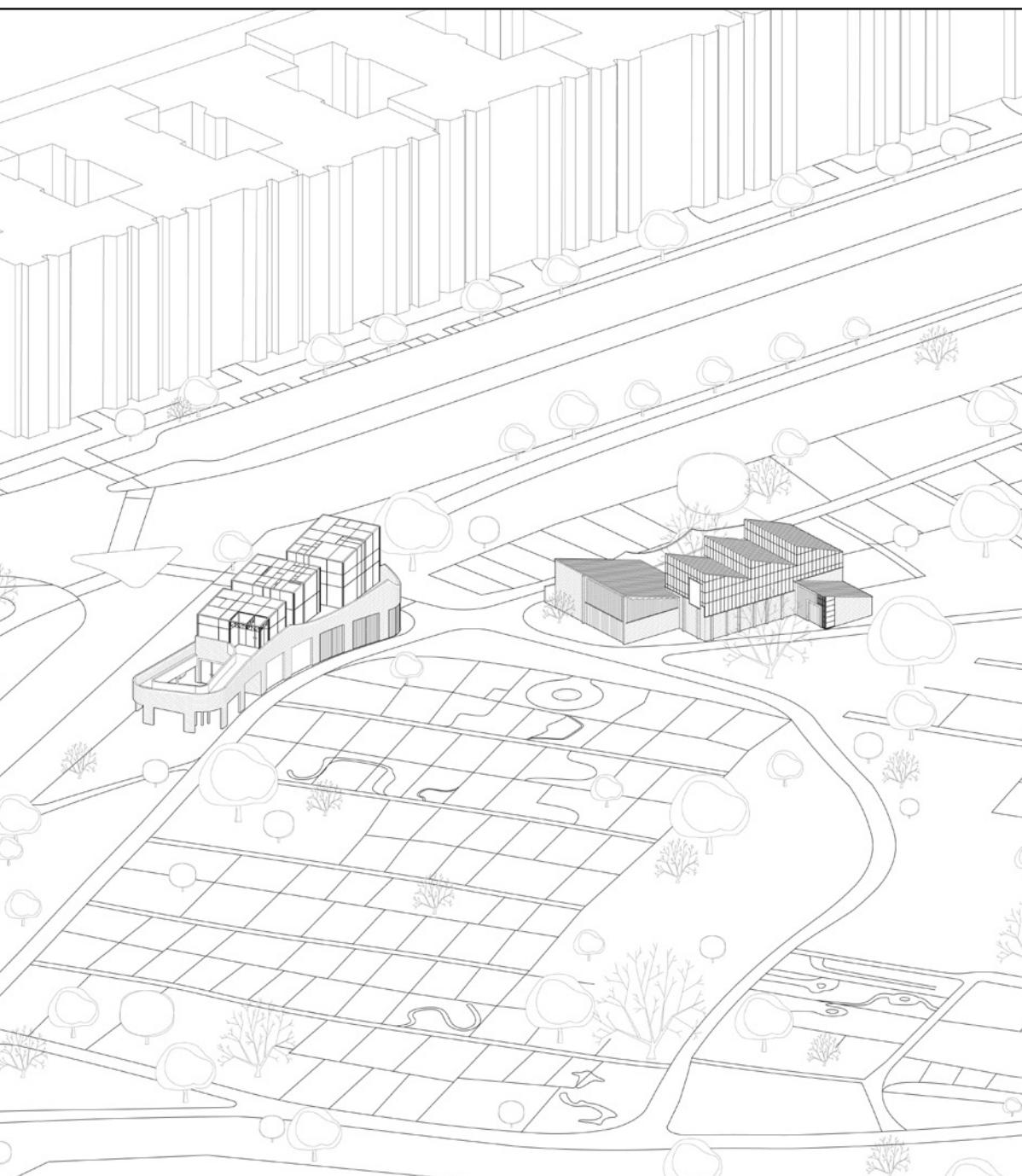
Overview

The Fenway Victory Gardens features a collection of 500+ plots tended by a roughly equivalent number of community members living across Boston's neighborhoods. Its founding during the midst of WWII is rooted in efforts of local cultivation and community engagement. To celebrate the exchange of knowledge, a seedbank could allow the passersby to learn about the site's history and help the gardeners to sustain an atmosphere of collaboration with one another.

The proposed intervention situates itself near the pedestrian entrance of the Fenway Victory Gardens. It features two buildings that are conversing in mutual materiality, form, and modes of presentation. Given the community oriented nature of the site, the choice in material focuses on and takes into account the modular character of the cinderblock to facilitate the participation of the gardeners in the building's actual construction. The buildings also employs other materials like white steel and wood to allow for greater range in lighting and exhibition potential. The recognizable triangular greenhouse form implies a connection to its purpose of housing plants and the choice in separating the seed bank into two buildings was a result of the varying programmatic requirements. The first building acts as an exhibition greenhouse and meeting hall that greets any visitors interested in learning about the Victory Garden and its history. The second building, which is slightly tucked by the existing plots, features a seedbank, research center, and workshop that generates a space in which the already invested community of gardeners is offered more privacy in the physical exchange of seeds and knowledge.



Site Perspective



Building 1



Building 2



Demarcating a formal entrance to the Victory Gardens, Building 1 (left) and Building 2 (right) create a curious moment at the crossroads of two sidewalks in which the passerby quickly find themselves caught at the threshold of a charming community.

Building 1: Exhibition and Meeting Hall

Note: Ideation and design of overall project was heavily collaborative and discussed. **Images for this building and parts of the site perspective were produced by Dongnyung Lee.**



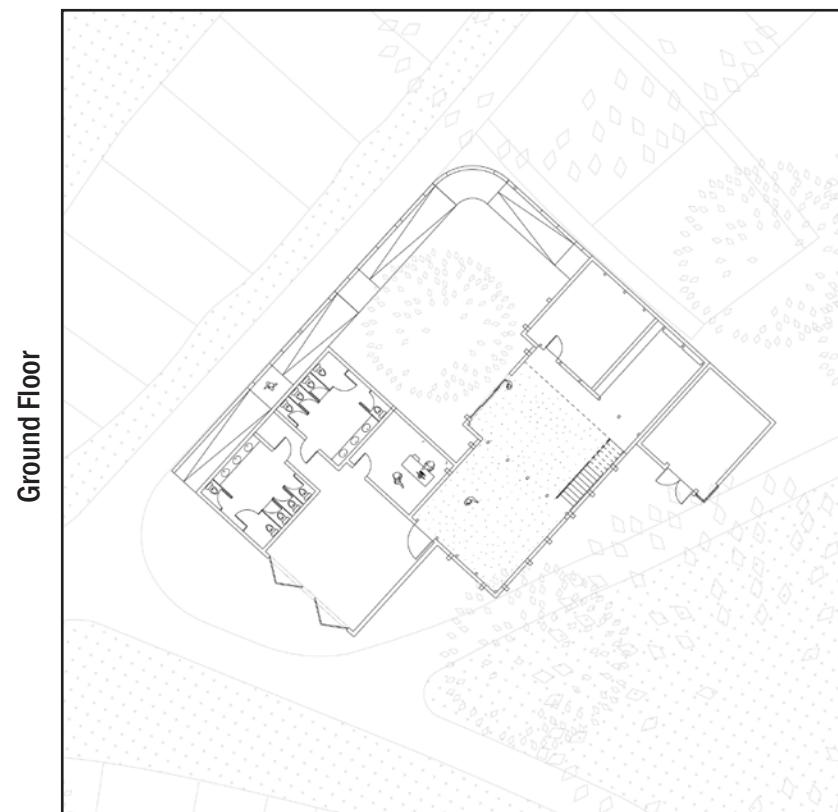
Building 1 primarily seeks to draw public attention to and promote new traditions within the garden society while limiting physical intrusion onto the existing community. The top floor consists of three greenhouse exhibition spaces each teaching a different temporal representation of the local biodiversity of the past, present, and future with the potential of making remarks on climate change and future risk. Below the greenhouses is a meeting hall that allows members of the garden society and other community members to convene. In order to connect the two spaces, hanging platforms exhibit plants from the floor above and extend natural light into the meeting hall.



Building 2: Seed Bank, Research, and Workshop



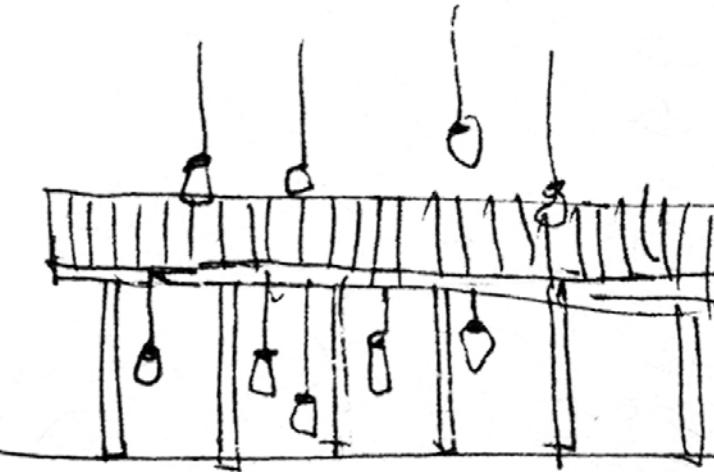
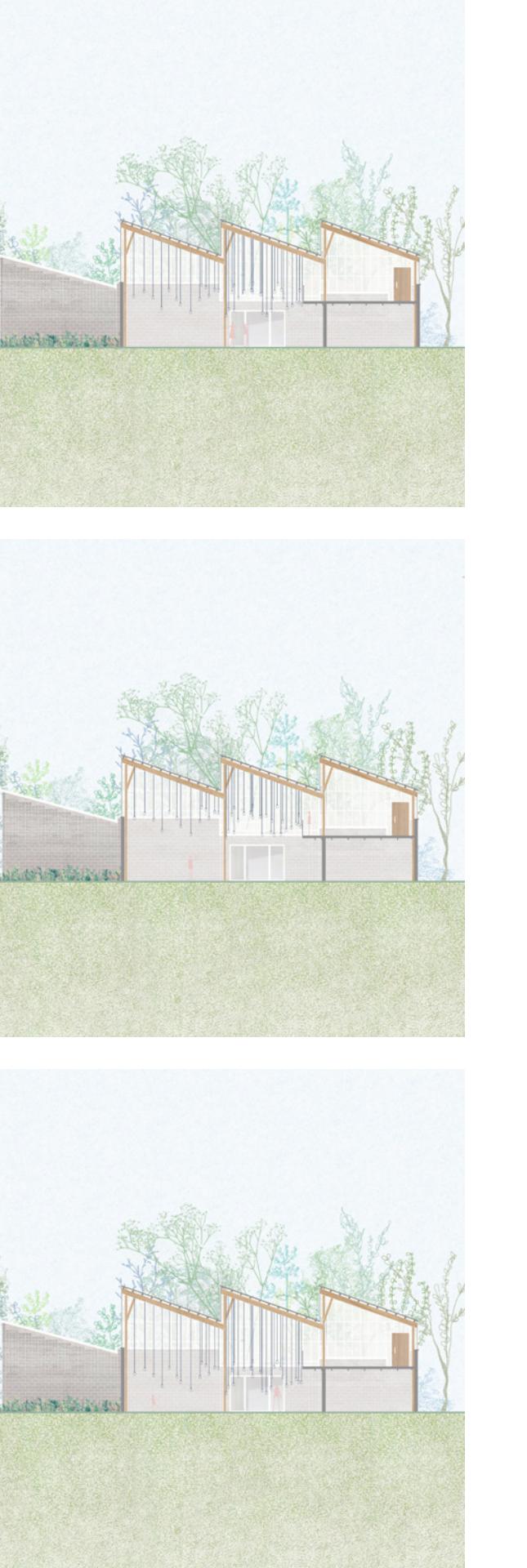
Building 2 operates as a seed bank. While it is mostly used for the preservation and exhibition of seeds, offer spaces for research and workshops for the construction of garden equipment etc. The activity of lending and storing seeds that have been harvested and cycled through the numerous eclectic plots can create a self-sustaining ecological system centered around the Victory Gardens.





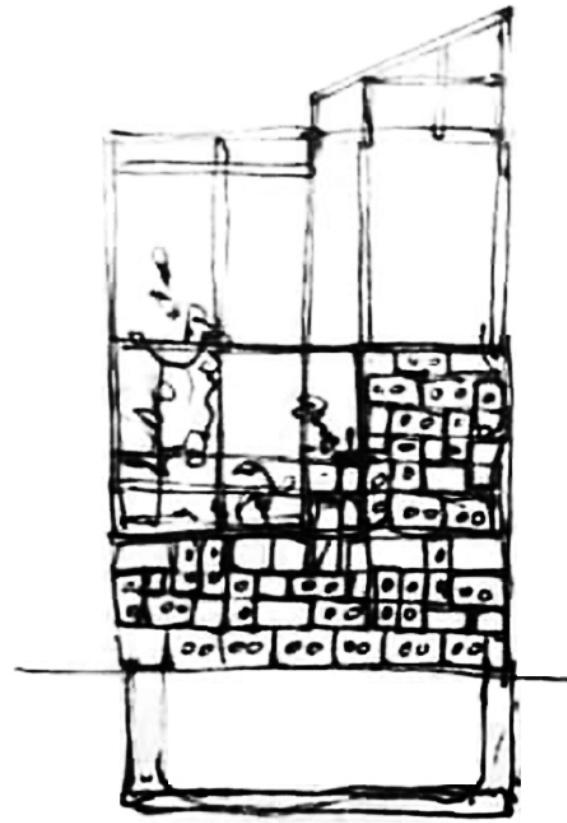
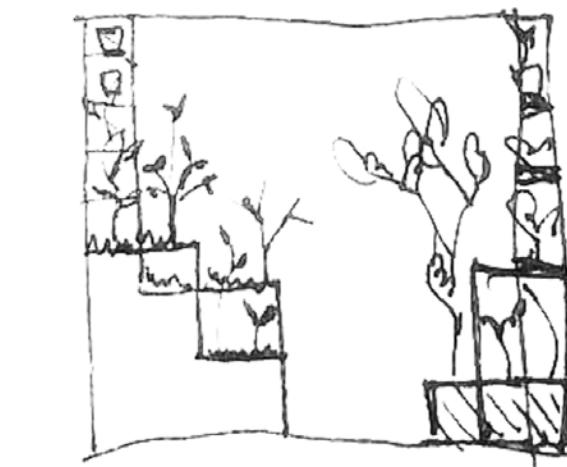
Preservation Practice

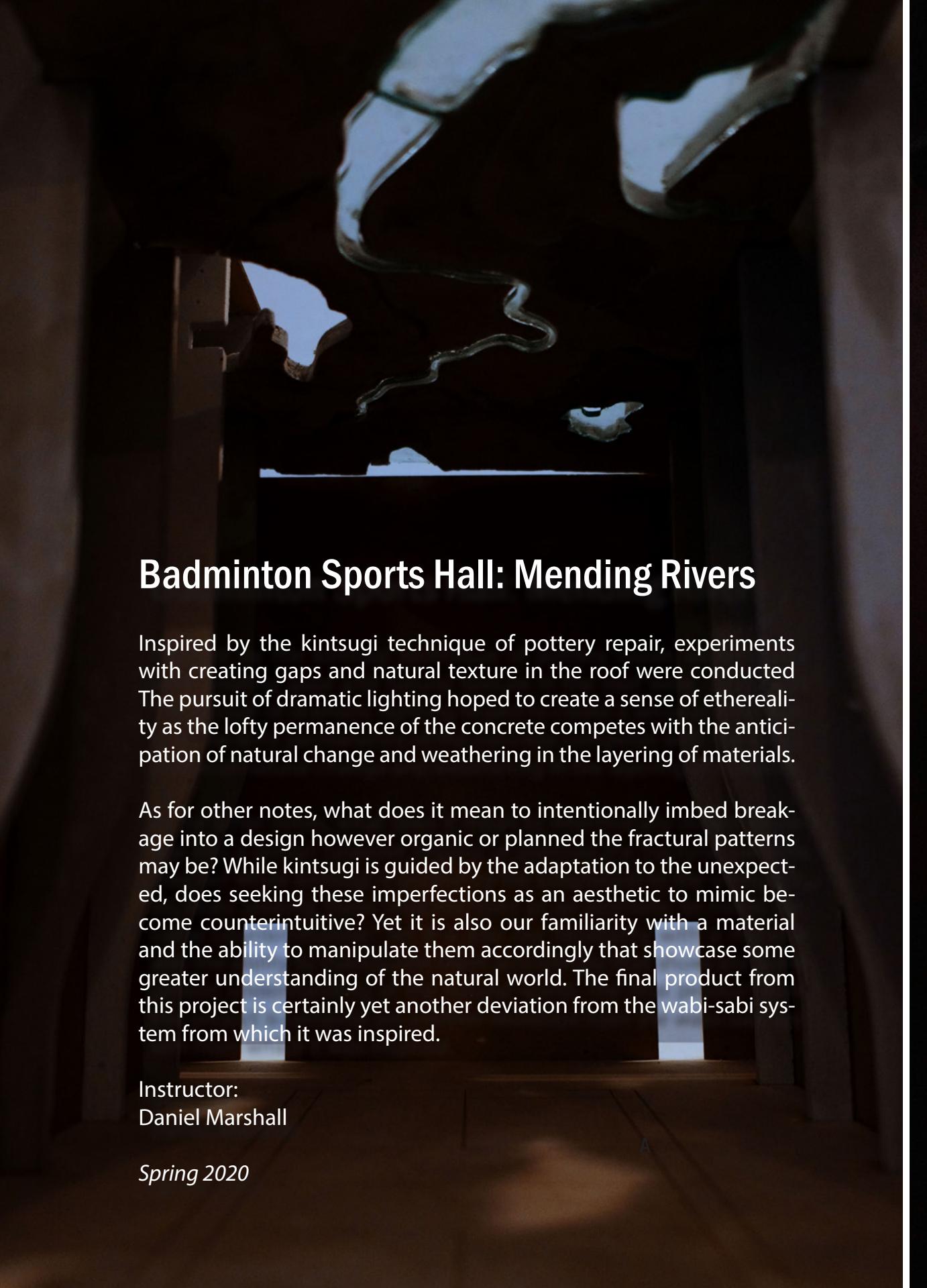
In order to lengthen the lifetime of a seed, which varies between species, several factors that counter germination must be regulated (temperature, air, moisture/humidity, and light). During off season months, the seed bank requires little additional heat, while AC may be needed to maintain cooler temperatures inside during the warmer months. The use of air-tight jars will help seal out air and moisture. While the transparent jars may introduce light, UV protectant sealant may be coated on the jars to extend the longevity of the seeds. The exhibition of jars, at the same time, help promote the handling and exploration of various species amongst the gardeners. These seeds hope to be used and replaced regularly each year. Seeds that may be more sensitive to these conditions or require further preservation for future research, however, can then be catalogued separately in medicinal cabinets or other at the back of the seed bank.



Precious Objects

To fully embrace the irregularity of the individually crafted plots on the site, exhibition in this project bases itself around the notion of precious objects. As such, the objects of interest in both buildings are presented by suspending them mid-air. The seeds in the library, for instance, are encased in glass jars that can be lowered for greater access or raised for distanced adoration as light bleeds into the interior of the building.





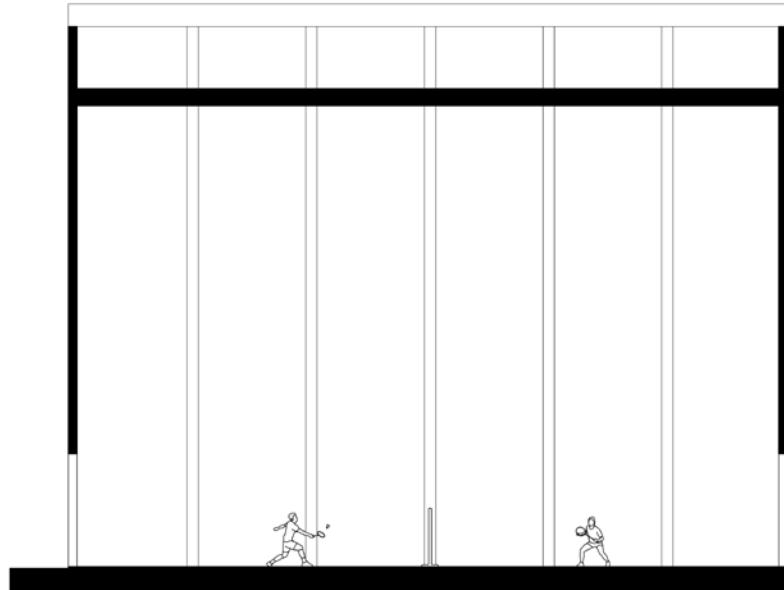
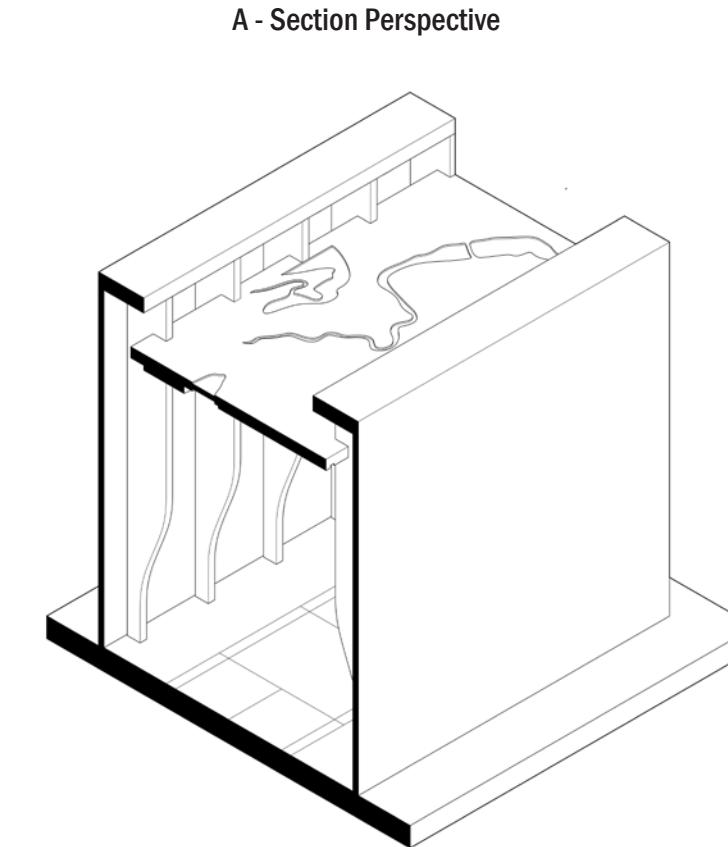
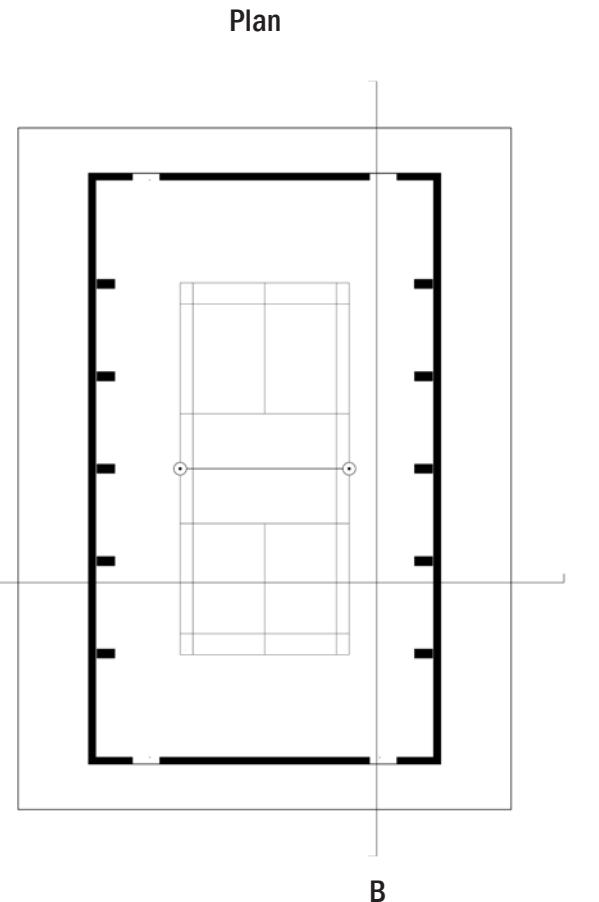
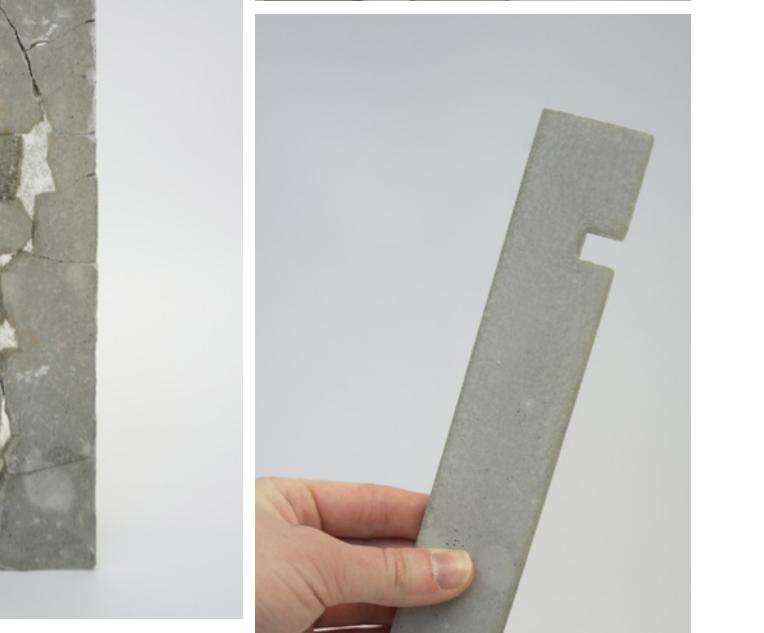
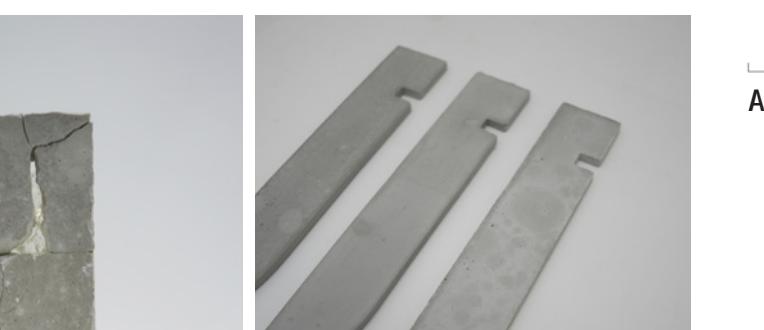
Badminton Sports Hall: Mending Rivers

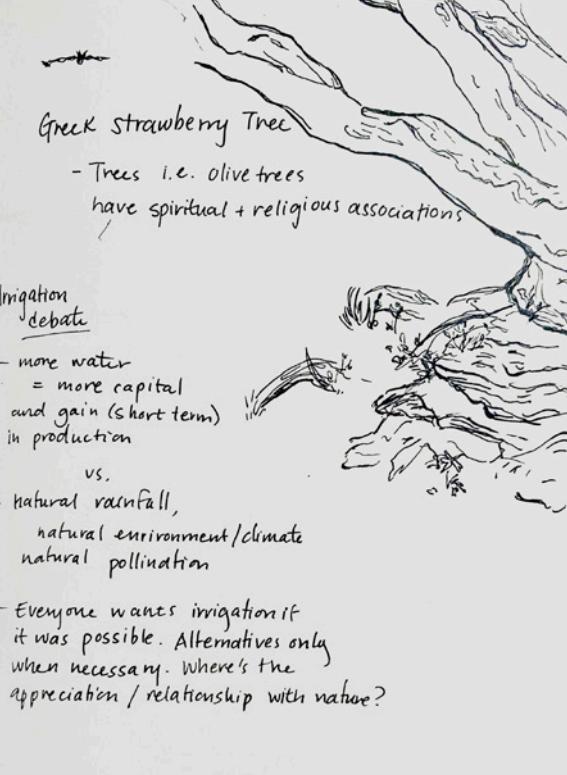
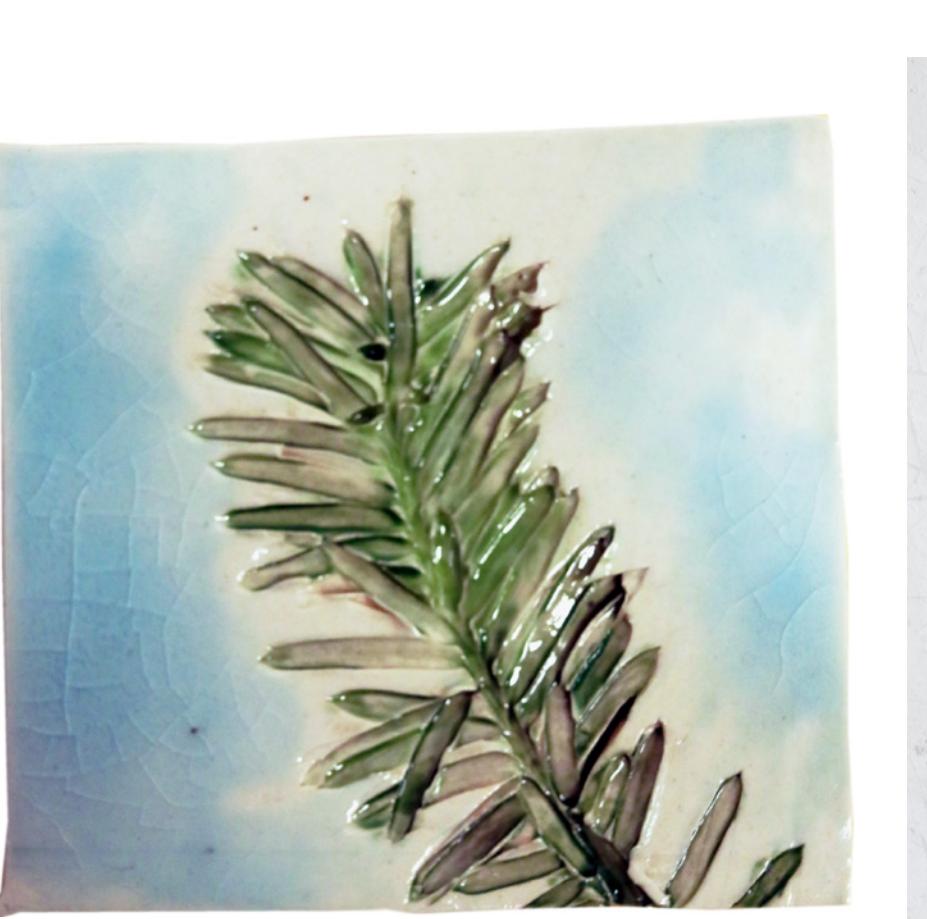
Inspired by the kintsugi technique of pottery repair, experiments with creating gaps and natural texture in the roof were conducted. The pursuit of dramatic lighting hoped to create a sense of ethereality as the lofty permanence of the concrete competes with the anticipation of natural change and weathering in the layering of materials.

As for other notes, what does it mean to intentionally imbed breakage into a design however organic or planned the fractural patterns may be? While kintsugi is guided by the adaptation to the unexpected, does seeking these imperfections as an aesthetic to mimic become counterintuitive? Yet it is also our familiarity with a material and the ability to manipulate them accordingly that showcase some greater understanding of the natural world. The final product from this project is certainly yet another deviation from the wabi-sabi system from which it was inspired.

Instructor:
Daniel Marshall

Spring 2020





Fragmented Impressions of Home

The purpose of these tiles is to create high fidelity records of native plants collected in the local landscape. Separating the plants into its leaves, root systems, stems, flowers, etc. can allow for the rearrangement and creation of abstracted representations of the natural surroundings. This project comes from the understanding that in historically rich regions like the West Bank, the land often becomes closely linked to one's identity and cultural narrative.

Instructor: Nida Sinnokrot

Spring 2019



A Reflection on the Palestinian Museum's 2019 Exhibition on Intimate Terrains: Representations of a Disappearing Landscape.

The tiles were imprinted with plants collected on my daily route to class from Baker House to Media Lab. They were glazed with a self-mixed pigmented cone 5 crackle celadon. If the project had been produced onsite at the Sakiya Residency in Ramallah, Palestine, the act of directly sourcing the clay from the land, as with the native and locally significant flora, would have perhaps prescribed a greater visual, tactile, and intimate connection to the landscape I remember.





Poppies in the Mist
The Borderline Mural and Animation Project
Painter and Animator
Fall 2017 and Spring 2018

Case of the Missing Soil

The 16th century western origin of the herbarium system is rooted in the collection and documentation of a plant's medicinal usage. As this mode of collecting, preserving, and cataloguing was advanced and expanded in use by Carl Linnaeus in the 18th century, the one element that remained missing from the plant's representation was the soil.

By comparison, the Badianus Manuscript is a significant Aztec herbal manuscript that features illustrated plant representations and details of their various medicinal uses. While the physical plant in the herbarium may preserve its physical parts in high fidelity, these watercolor illustrations are able to capture the essence of the substrate and other contexts in which the plant can be sourced from. Some illustrations even feature the insects that interact with the plant and form symbiotic relationships.

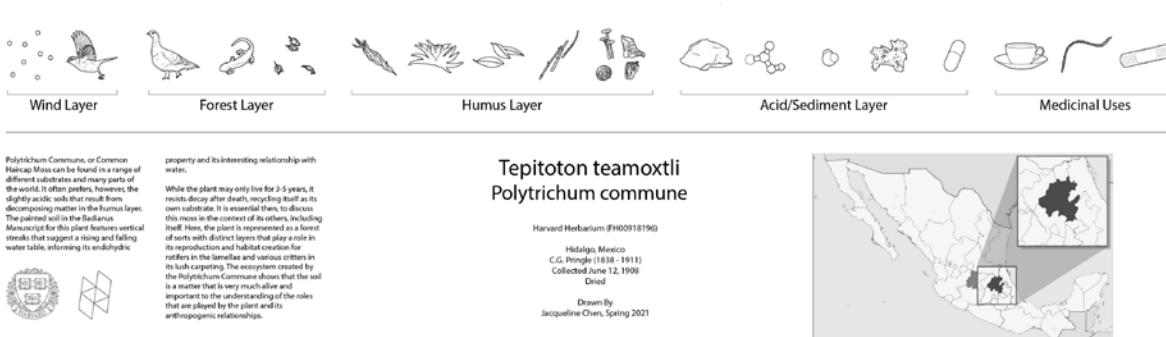
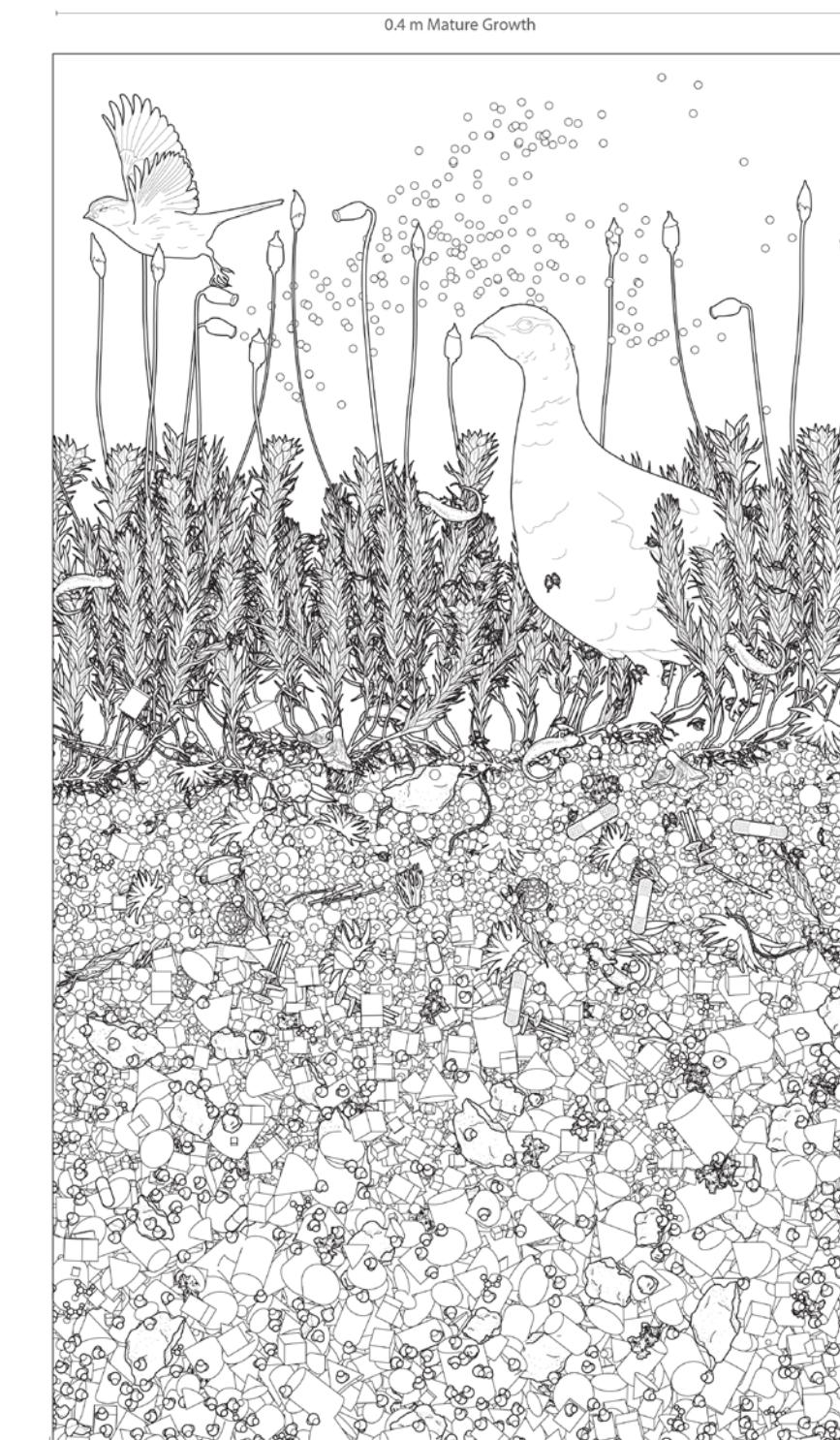
Soil carries significant context in which the plant interacts with the rest of the ecosystem, yet most western botanical representations feature the plant removed from this context. As we look into the plants collected from the Mezquital Valley, we might consider what is represented by the herbarium sheet and the illustration from the Badianus Manuscript to build a drawing with a more comprehensive or revealing narrative of the plant.

Polytrichum Commune, or Common Haircap Moss, is a distinctively tall moss found in a range of different substrates. It often prefers the slightly acidic soils that result from decomposing matter in the humus layer. The moss, known by the Aztec for its uses in treating external inflammation and mouth sores, exists in the Badianus Manuscript simply as a drawing for a *Polytrichum* type moss. The painted soil in the text features vertical streaks that suggest a rising and falling water table. This type of soil habitat informs the endohydric property of the moss, which adapts it for changing climates. Overall, the plant has quite an interesting relationship to water. Its leaves curl around the stem during dry seasons but hosts an ecosystem of rotifers in the lamellae when it accumulates moisture. While the plant may live only for 3-5 years, it resists decay after death, recycling itself as its own substrate.

Because the plant lives in an environment that is generated by the itself in multiplicity, we begin to understand why the herbarium sheets collected for the *Polytrichum Commune* never feature a singular specimen. It is essential then, to discuss the plant in the context of others, including itself. Here, the plant is represented as a forest of sorts with distinct layers that emphasize the cycle of reproduction and habitat creation. The lush carpet created by the *Polytrichum Commune*, among the various soil characters, shows that the soil is a matter that is very much alive, active, and important to the understanding of the roles that are played by the plant and its anthropogenic relationships.

Instructor:
Seth Denizen (sethdenizen@princeton.edu)

Spring 2021 (Harvard GSD)





Architectural Prescriptions

A collection and analysis of COVID influenced design and experiences. This was a personal exercise on writing, reflecting, book formatting, and designing printed media. Co-directed and standardized by Jacqueline Chen and Yi Yang. Separated into booklets (Medical, Lifestyle I, Lifestyle II, Home, and Work & Education) totaling 164 pages of written, reformatted, drawn, and redrawn media. Topics include togetherness, choreography, food insecurity, homelessness, grief, etc. 50-60% of all text were significantly written and/or edited by Jacqueline Chen.

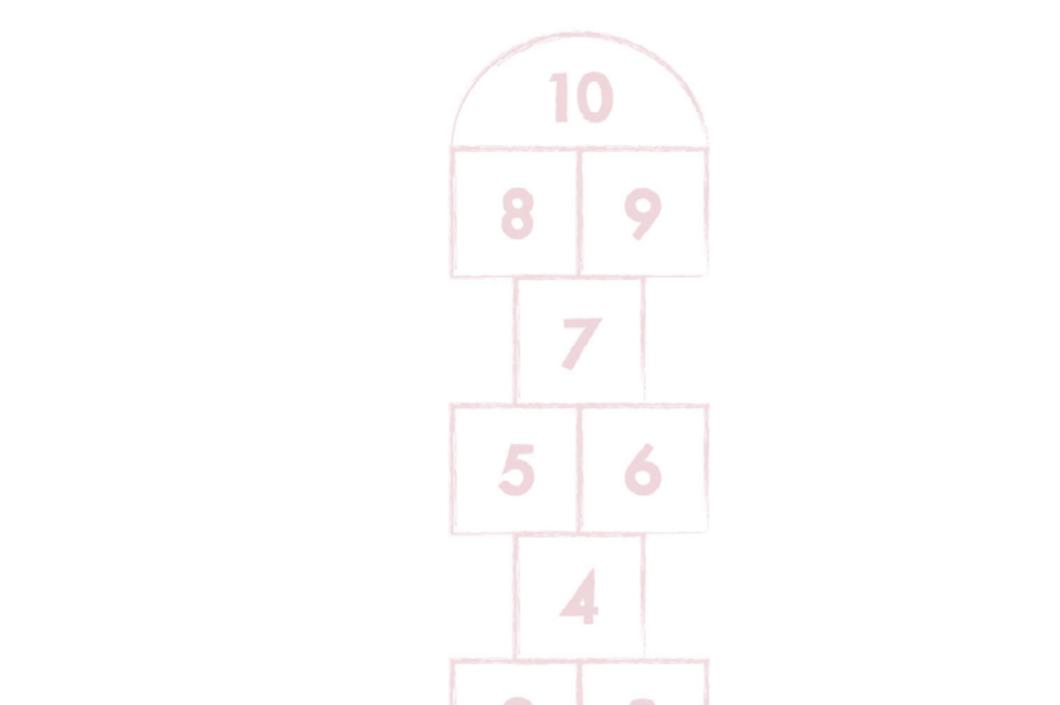
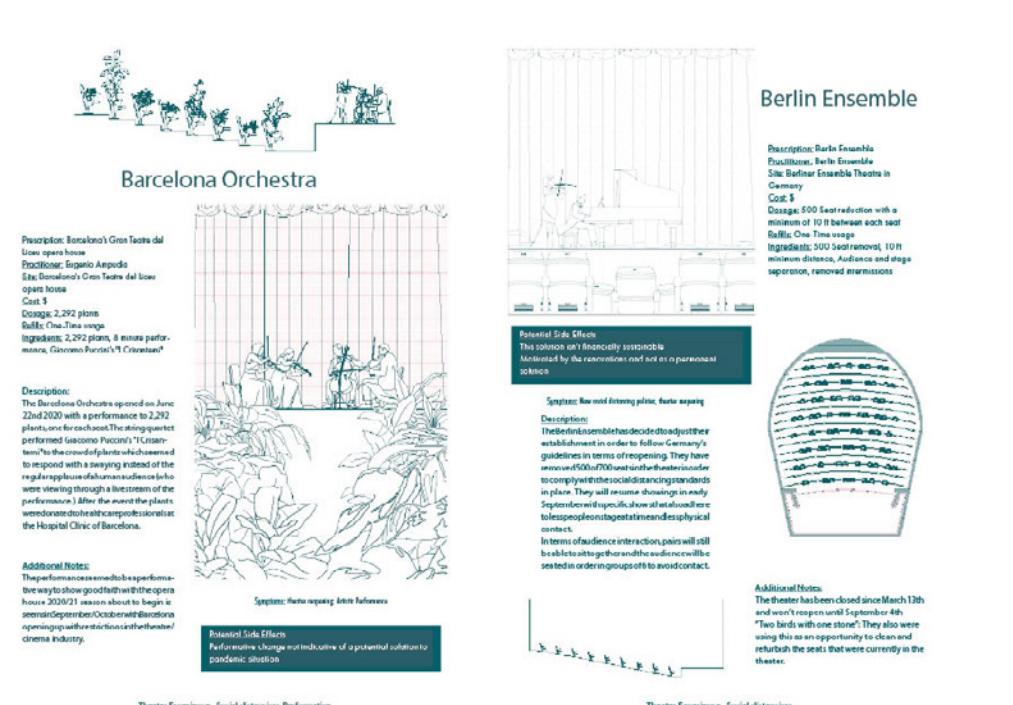
Collaborators:

Yi Yang
Caleb Amanfu
John Rao
Dongnyung Lee
Catherine Chen

Summer 2020 - Fall 2020



Select spreads and pages where significant research, writing, images, formatting, and editing were completed by Jacqueline Chen.



The stay at home mandate has forced many to re-evaluate the meaning of home. Some have realized that the social outings and work commute was what deservedly defined their home experience, others have been thrust into a new type of space all too long. The ones that have remained or found themselves lacking a residence to call home during this pandemic. There is a shared discomfort among many to return to the home conditions, new jobs for designers and architects have been appearing because people are unable to work from home. Just as ergonomic chairs have seen an increase in sales, the home has had an increase in popularity for temporary and old home improvement projects. Spending a whole deal of time in a single space has allowed people to realize and to deal with neglected parts of the home including updates on WiFi, television, and spaces to work and teleconference from. The discussion on homelessness, however, requires a

more in depth look at how design has both sought to help the homeless and also brought to light the irony of new construction and its dialogue.

Japanese architect Shigeru Ban, who has a history of using recycled cardboard tubes to address the housing needs of the elderly, developed a paper partition system to respond to the pandemic through the Voluntary Architects' Network (VAN). Ban's project brought forth a temporary solution and understanding for the homeless population who were unable to find a place to stay in their cities. These types of sites are commonly played by an unlearning of COVID care. Within the local jurisdiction, how has there not been more prominent designs or even attempted designs focusing on the underprivileged during this crisis? When considering the underprivileged during this crisis, one of the most important issues is the lack of access to basic necessities like clean water and sanitation. One such effect of the pandemic is the increase in concern surrounding hygiene. Several design projects have brought forth ways to combat this issue including soap dispensers and sanitizing stations. Soap and cleaning supplies have been redesigned to facilitate the repetition of the task and transformed into objects to bring joy. Because isolation has brought out the best in us, and that is essentially soap is ripe. True to the purpose of bringing a sense of hope, the simplicity of the design still brings intrigue to a normally mundane task.



The simplest representation of choreographic design is hop-scotch, a game deeply rooted in a collective childhood. During quarantine, a number of people have brought this game back to the sidewalks in front of their homes, hoping for a passerby to bask in a moment of joy as they put the chalked lines to use. Similar line based designs have been implemented to delineate explicit and assumed rules of movement and personal space in public spaces, often doused with the same playful character as a game of hop scotch.

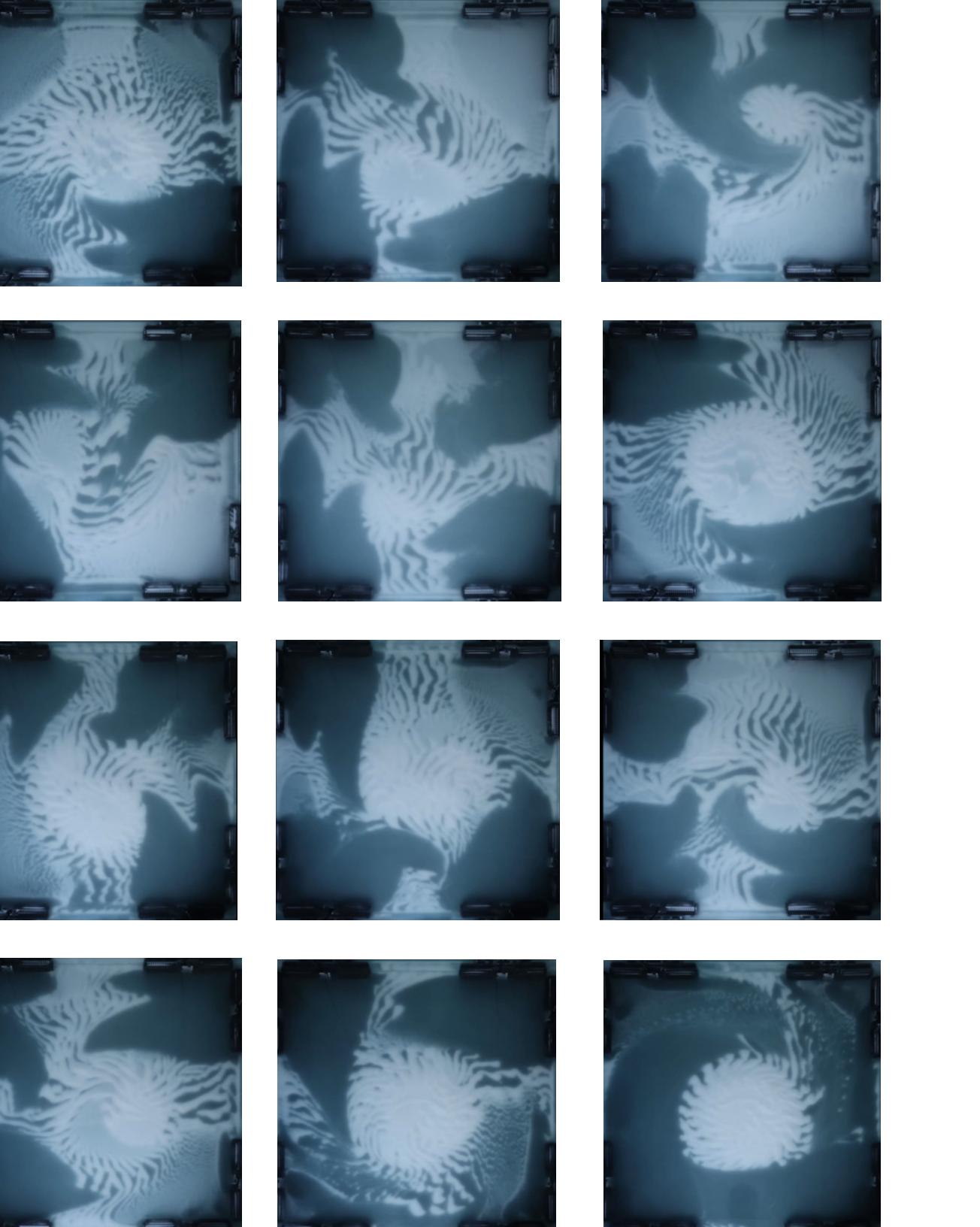


Venice Biennale: Self Organizing Sand

This exhibition is part of Self Assembly Lab's ongoing *Growing Islands* research in the Maldives. The project only hopes to evoke an interest in sediment transport and these sediment starved patterns created by using various gyre pump configurations. As we think about these patterns, how might they inform us about natural sand accumulation processes and sand bar formation? How do we then design in a way that complements these processes to aid efforts in coastal resiliency? Designed and programmed by Jacqueline Chen and Christina Kim in LUA.

Collaborators:
Self Assembly Lab
MIT: Christina Kim, Jared Laucks, Skylar Tibbits

Spring 2021



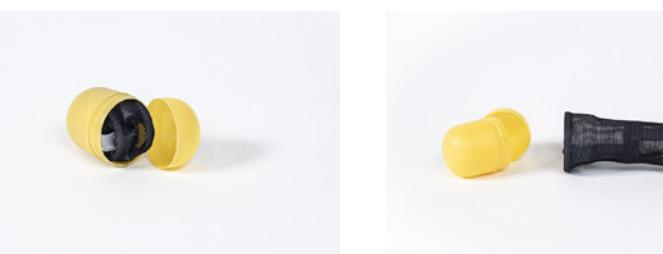
Ferrero Smart Toys

Used materials that respond to modes of manipulation including temperature, light, and folding to prototype various toys for Ferrero Company's Kinder products.

Collaborators:
Ferrero Group
Self Assembly Lab
MIT: Hamilton Forsythe, Karen Chen, Michael Tan, Schendy Kernizan, Jared Laucks, Skylar Tibbits

Fall 2020

Magnus Effect Glider
(Prototyped and tested by Jacqueline Chen and Hamilton Forsythe)



Jumping Textile Circular Glider
(Prototyped and tested by Jacqueline Chen, Hamilton Forsythe, Jared Laucks, and Skylar Tibbits)



Bistable Giraffe
(Prototyped and tested by Karen Chen)



Heat Activated Fiber Sheep
(Prototyped by Jacqueline Chen)

