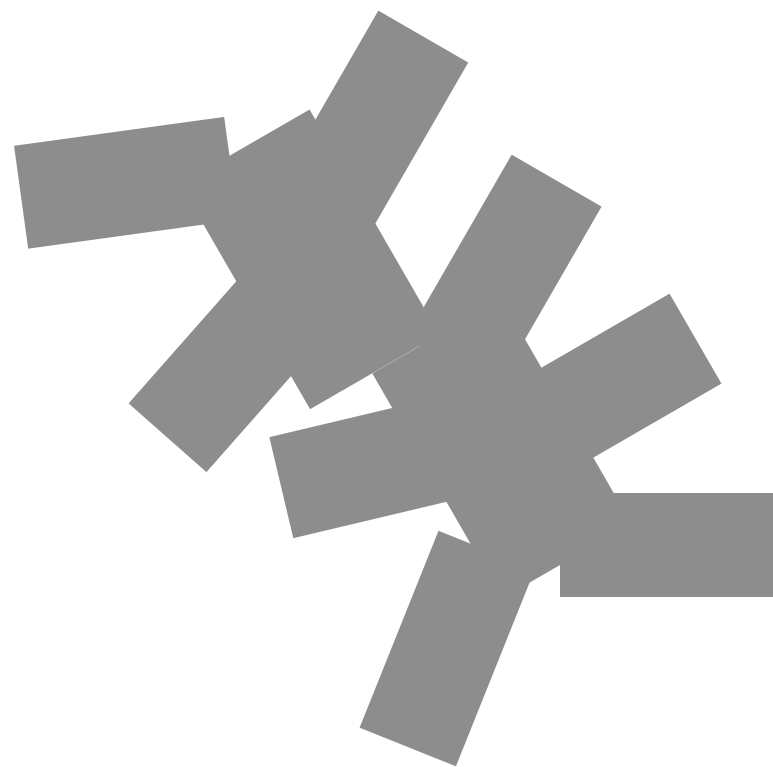








STUDIO PROJECTS



## JAZZ AT LINCOLN SQUARE

Core I Studio, Fall 2020 / Anna Puigjaner

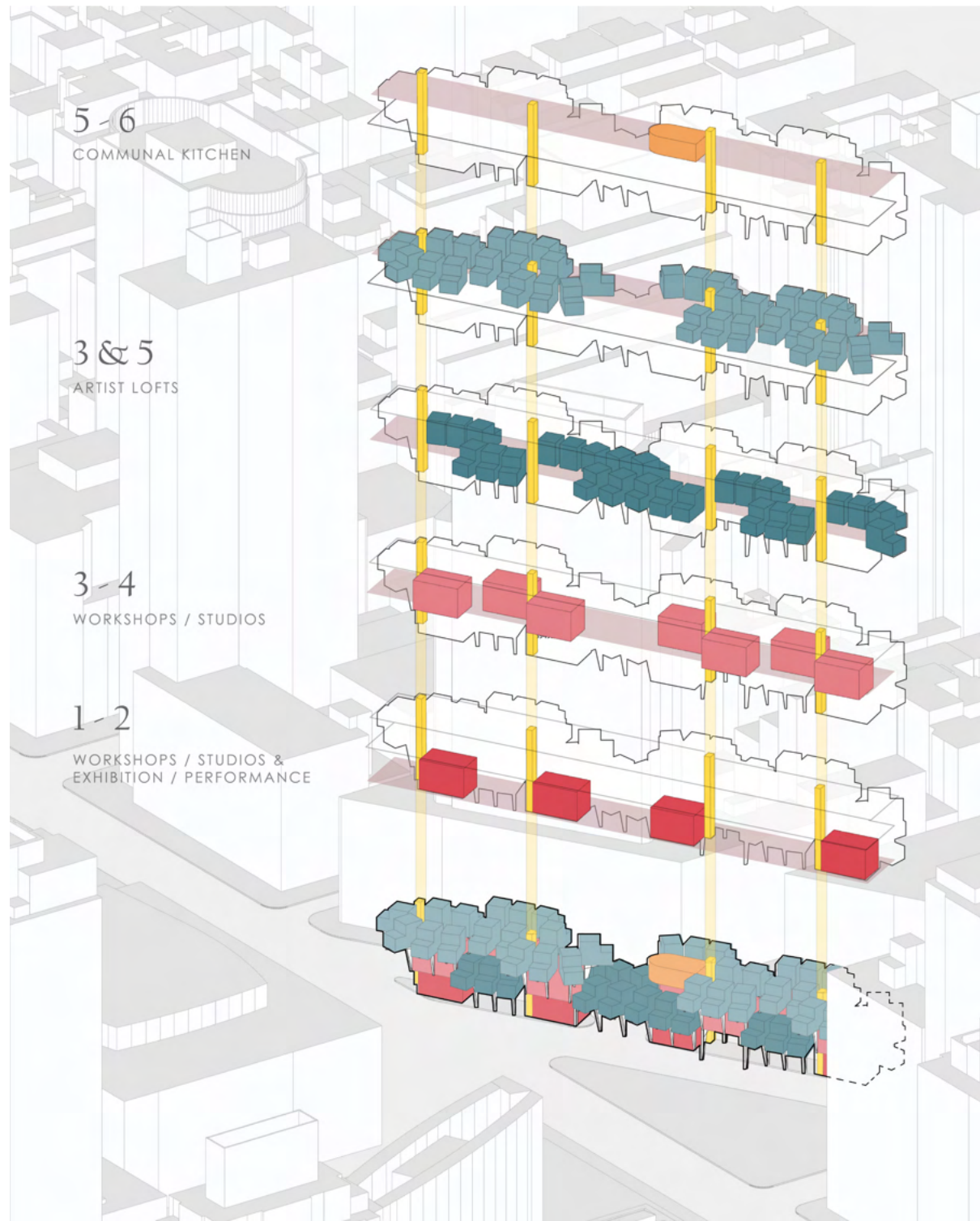
As the birthplace of Bebop Jazz and the Charleston, San Juan Hill (now the Upper West Side) was once rich with local cultural activity. However, due to urban renewal projects throughout the 1950s and ever-increasing rental rates, thousands of former residents were ultimately displaced, leaving the UWS to now be dominated by high-income-earning white populations. This displacement caused the migration of black and hispanic populations as well as the rich smaller-scale cultural productions they had contributed to. My proposal therefore centered on bringing creatives of color back through providing smaller-scale, affordable workshop and artist loft living spaces to support their craft and presence within the city. Expanding along the prime location of Broadway Avenue, this extensive network of creative spaces would both flourish as a cultural ecosystem and re-establish creatives' sense of ownership within New York City.



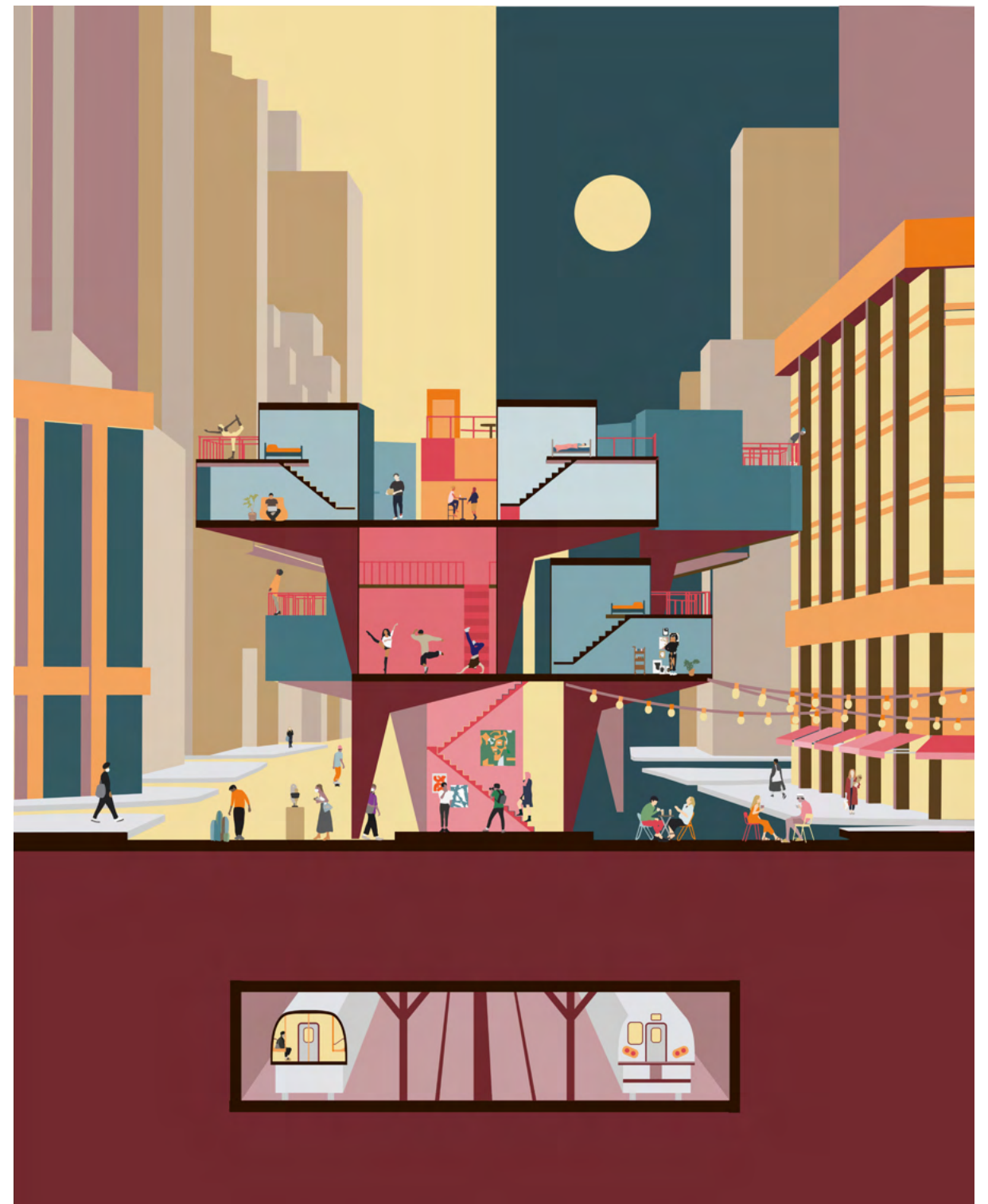


Schematic axonometric of intervention's form, inspired by cubist art and jazz music





Exploded axonometric of programs

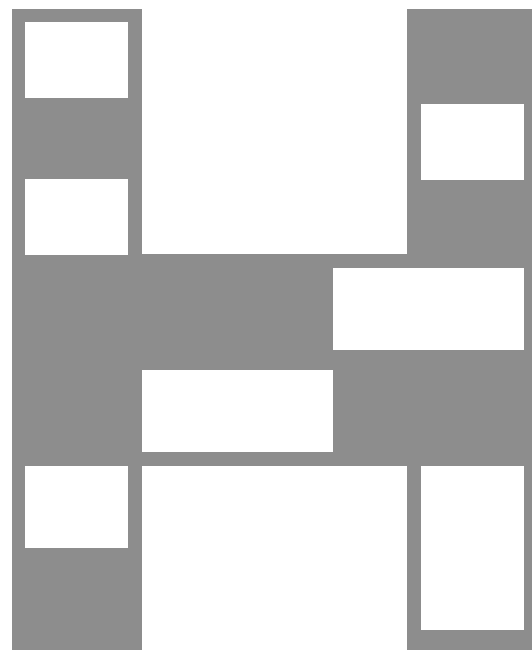


Section perspective





Longitudinal section along Broadway Avenue

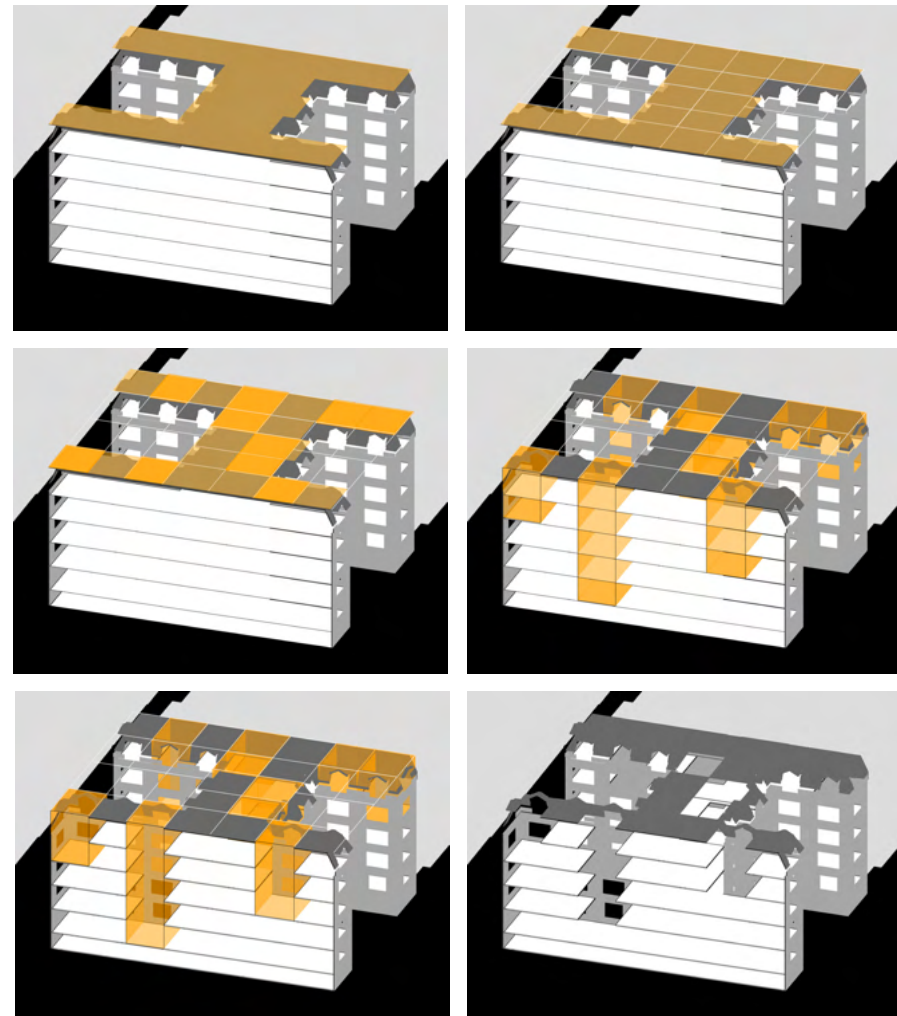


## LEARNING THROUGH GRADIENTS

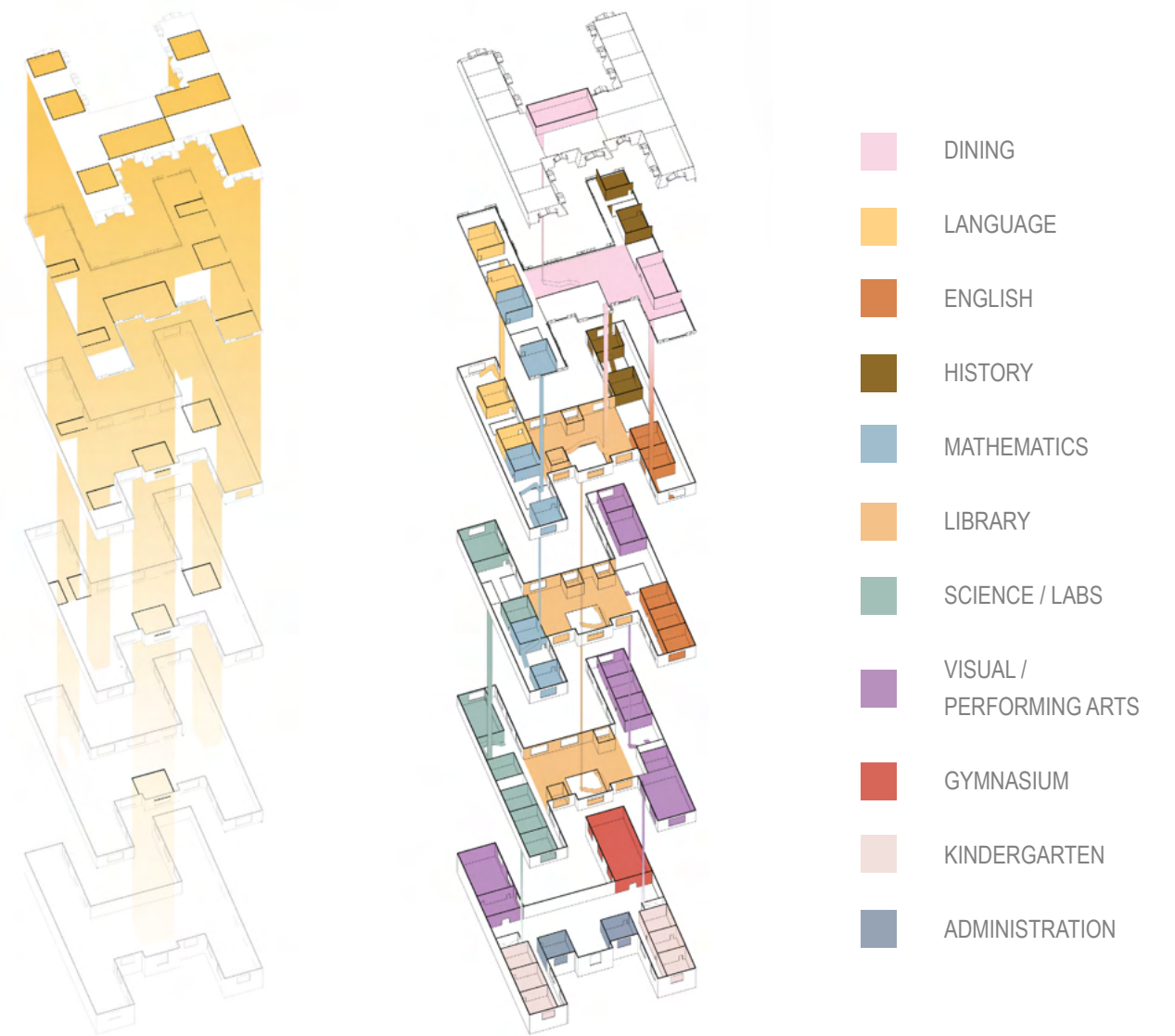
Core II Studio, Spring 2021 / Lindy Roy

Light exists not only in form but also as information. The biological way in which light is processed translates into an educational framework for the school's flows of knowledge. While CBJ Synder's innovative H-plan effectively brought sunlight into PS 64, the building's repeated floor plans, fitted to a symmetrical facade and windows, limited the interplay of light and dark within. This project thus sets out to reveal the gradients of experience that might take place within a school. Through a series of excavated light wells, the redesigned PS 64 is newly exposed to sunlight from above. Using light's qualities both formally as illumination and programmatically as a reorganizing educational framework, the school's interiors house a diversity of environments that are matched to its diverse students.

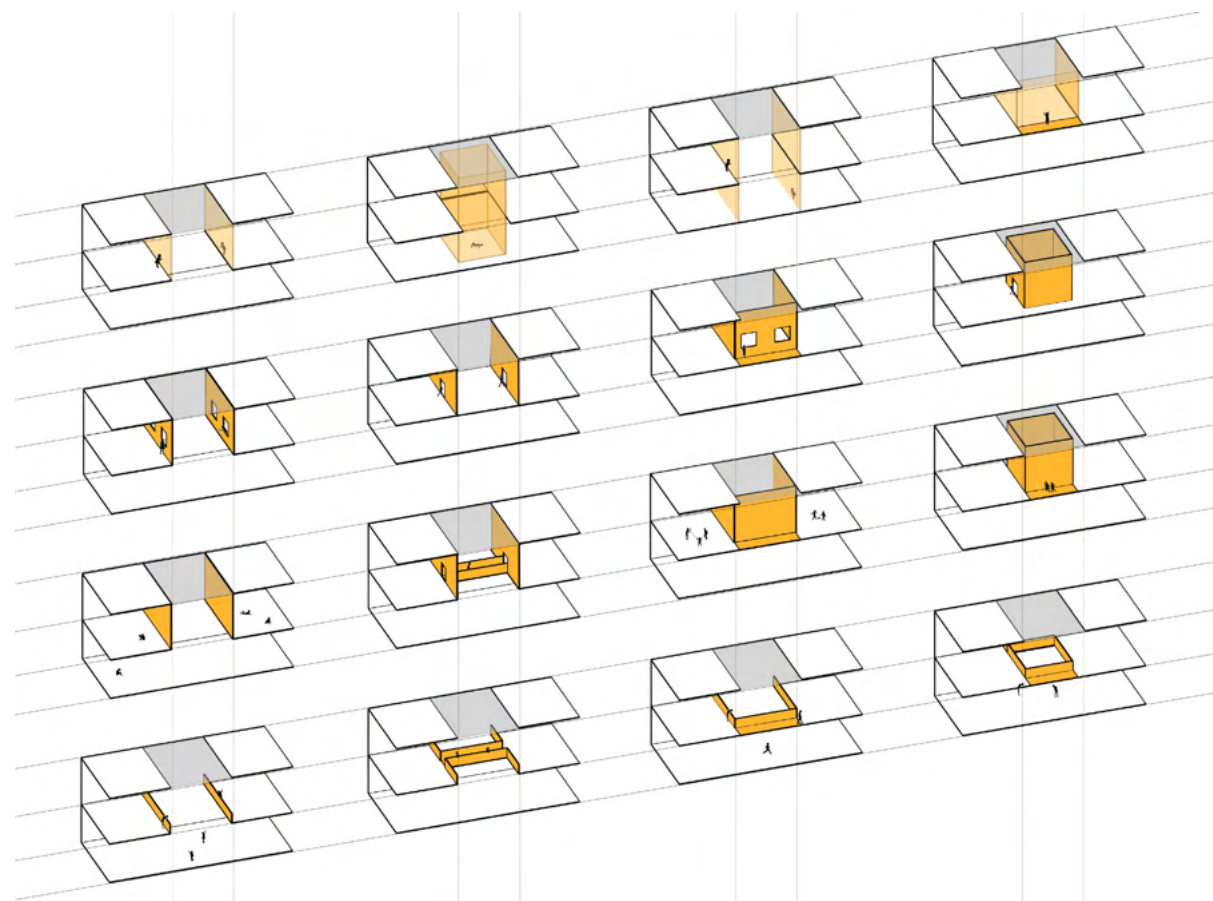




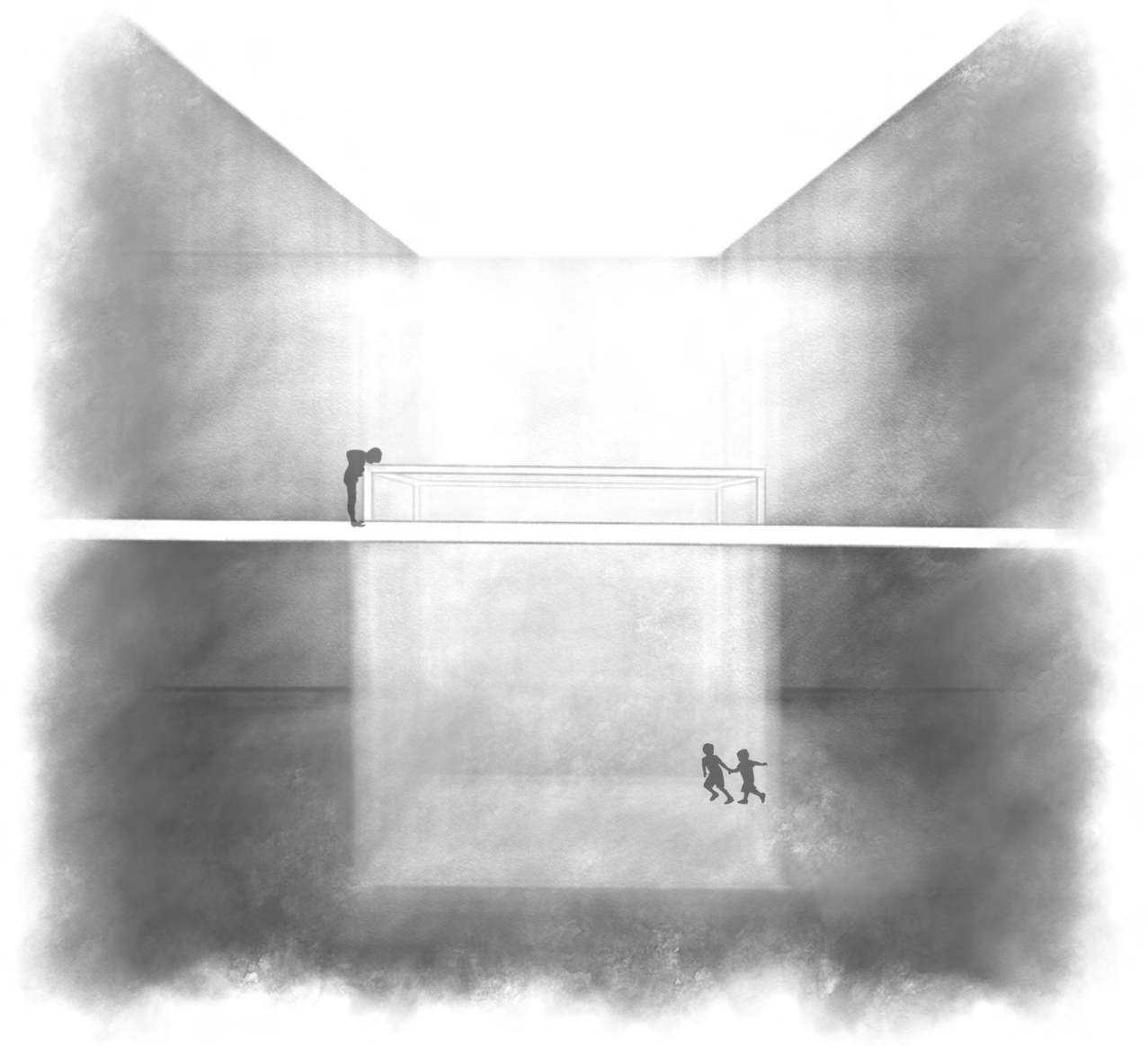
Excavating light wells, carving into the building starting from the roof plane



Organization of school's educational programs, structured according to flows of light and circulation stairwells

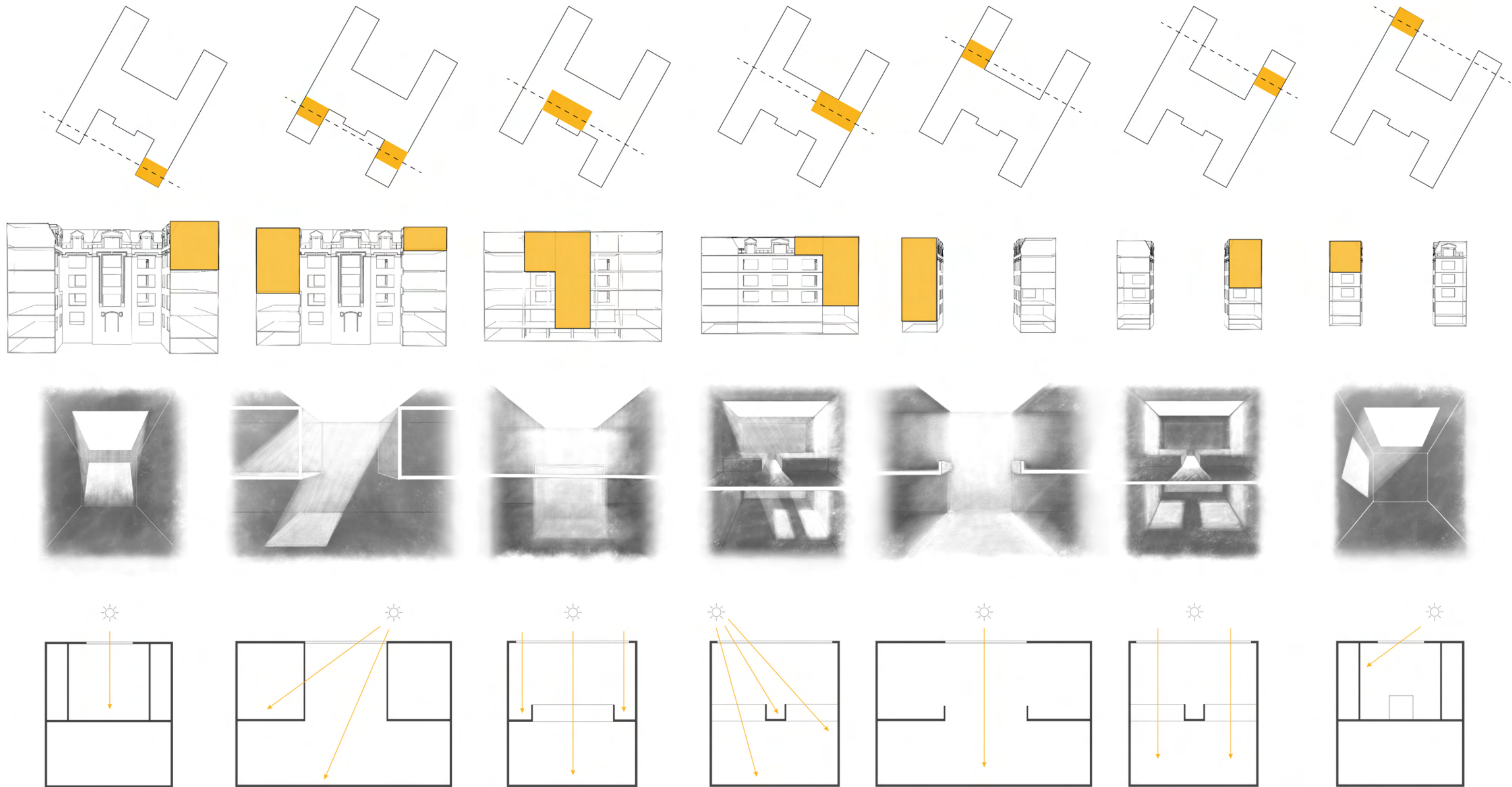


Explored light well interventions: bridged walkways, atriums, and classrooms



Atrium light condition  
*charcoal*

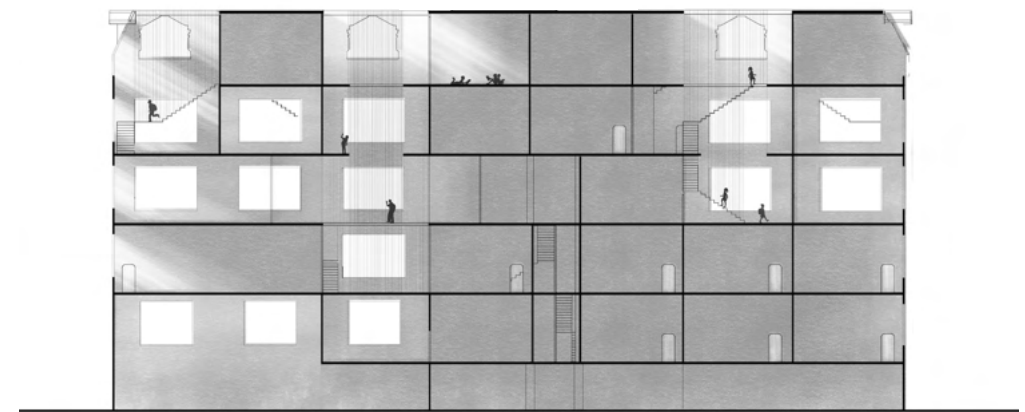
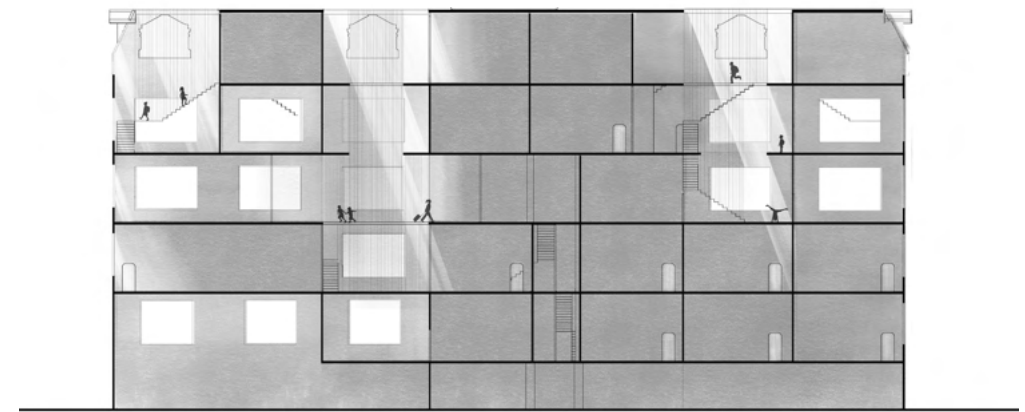
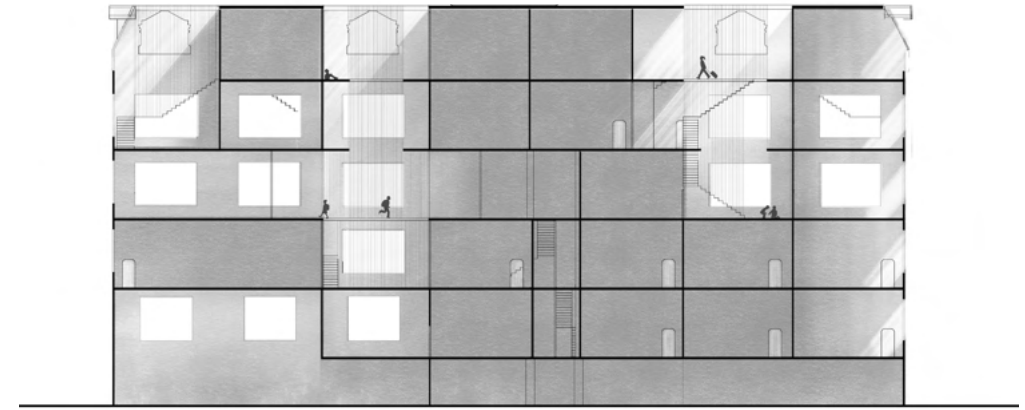




"MRI scans" passing through the building's various lightwells and resulting light experiences  
*charcoal*



Looking up through the library's light-filled stairwell



Gradients of light experiences throughout a school day  
*charcoal*

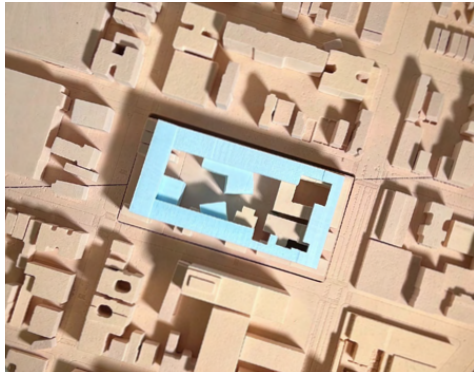




## OUT ON THE PORCH

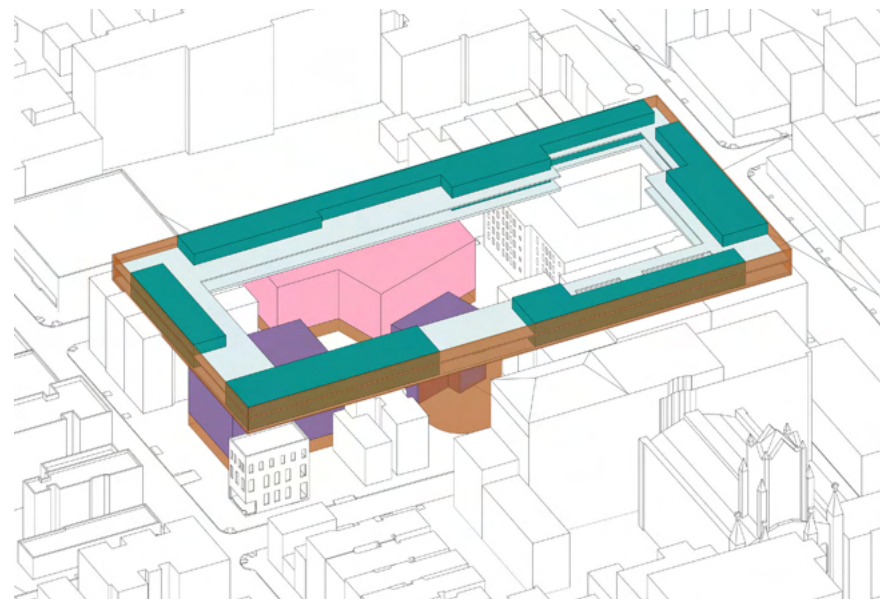
Core III Studio, Fall 2021 / Eric Bunge  
Collaborative project with Linru Wang

The porch has historically served as the outdoor living room, both a threshold mediating between the public and private realms and a gathering space for dwelling. Despite having gone out of style architecturally, the concept of the porch continues to lend itself to communal design. The porch thus becomes the single unifying element for an entire New York City block of differently shaped and sized Bronx buildings. Here we brought to question not only how we might redefine the modern-day porch but also more importantly, how we might offer the Bronx residents a space to redefine for themselves.



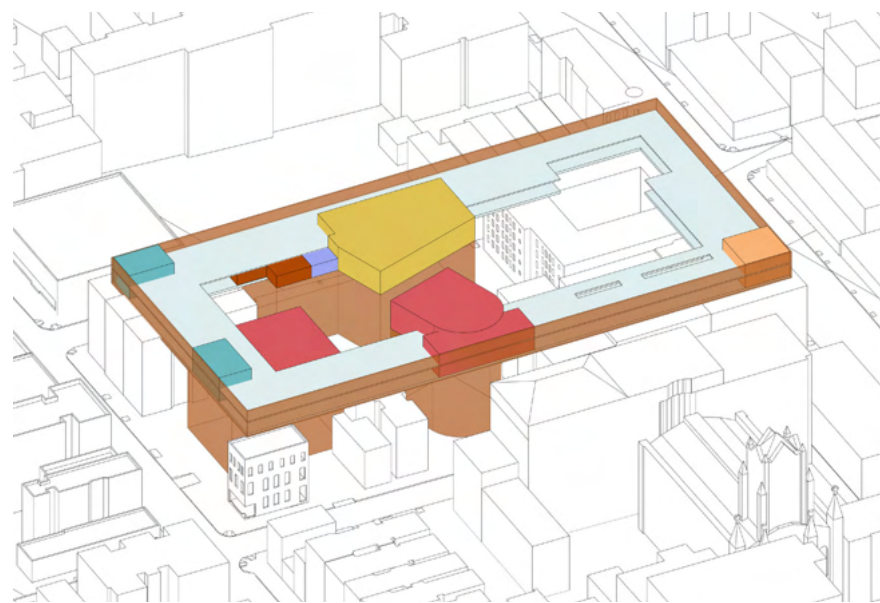
RESIDENTIAL UNITS

- The Porch
- Micro-units, studios, 1-bedroom units
- Multi-family housing (2, 3-bedroom units)
- Senior housing

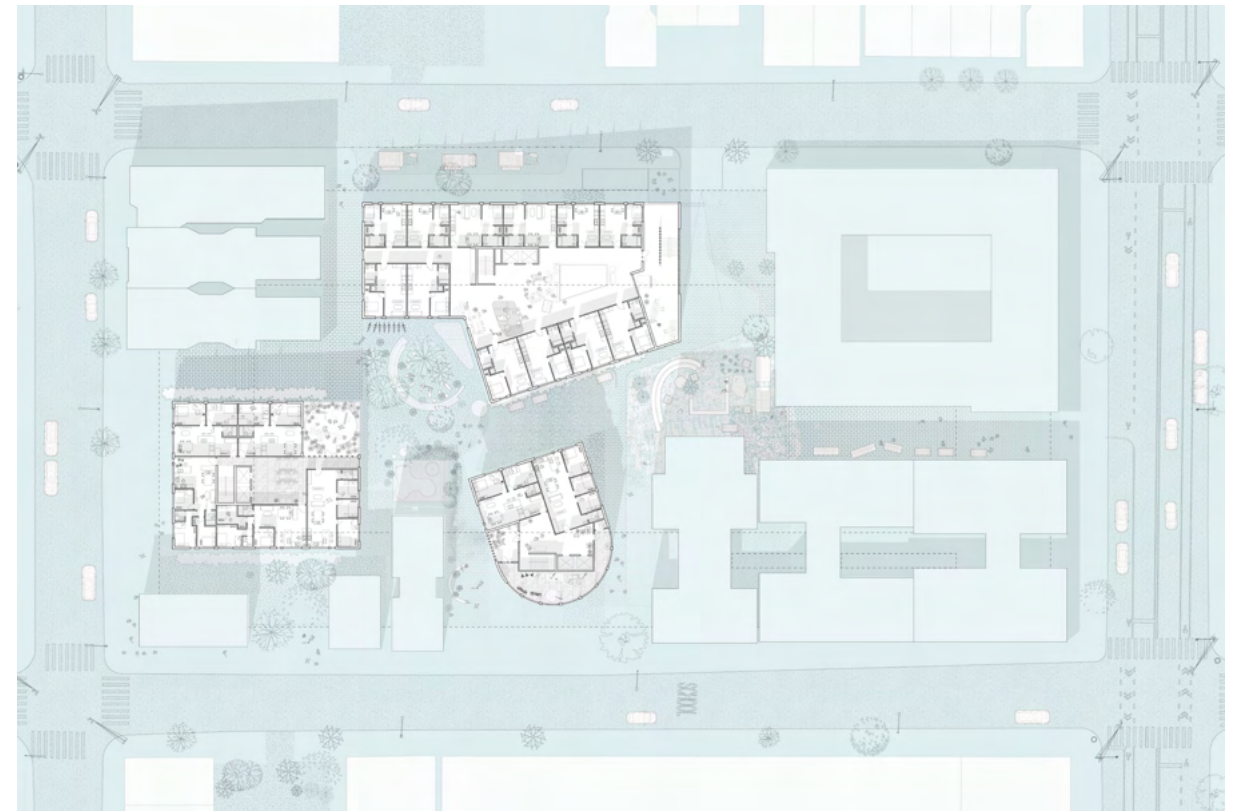


PORCH PROGRAMS

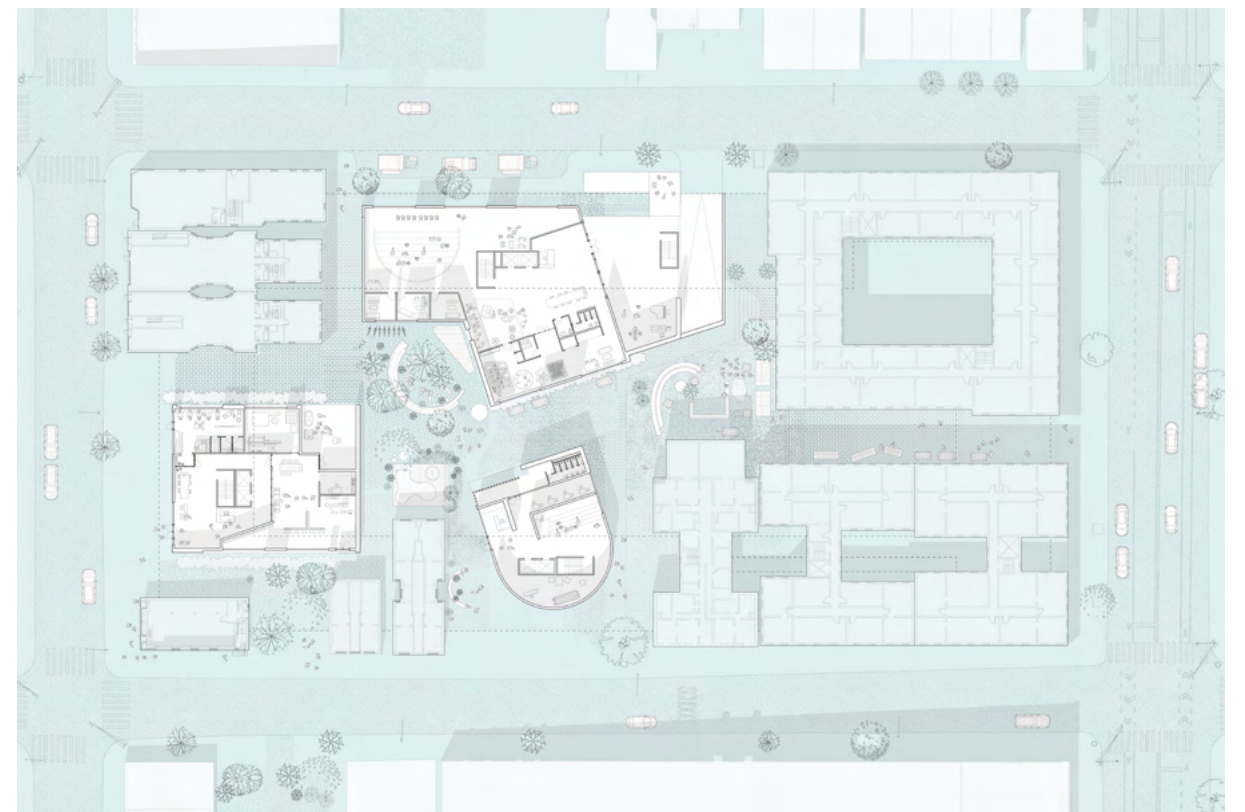
- The Porch
- Games room / Media lounge
- Communal kitchen
- Gym / Sports court
- Barber shop / Salon
- Laundry room



Top: Massing model  
Bottom: Program diagrams



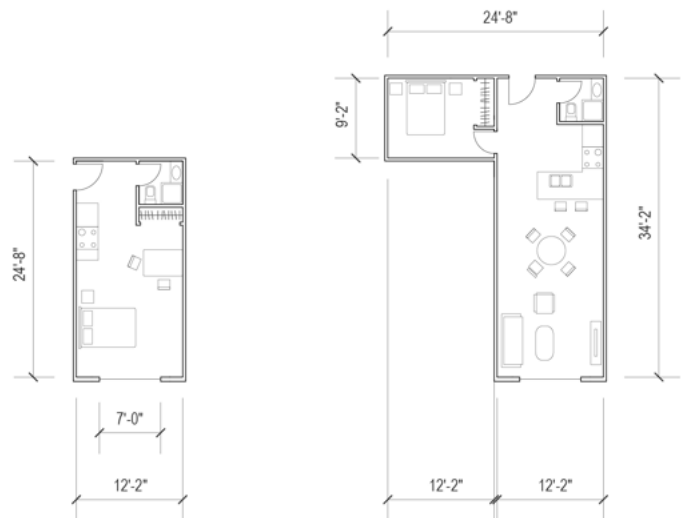
TOWER LEVEL PLAN (FLOORS 2-5)



GROUND LEVEL PLAN

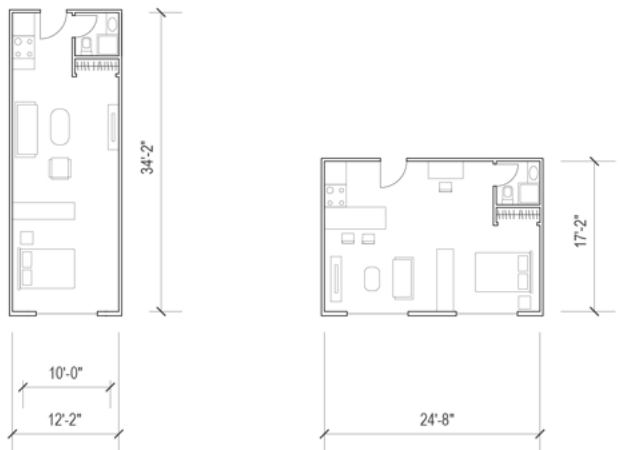
Floor plans / drawings produced with Linru Wang



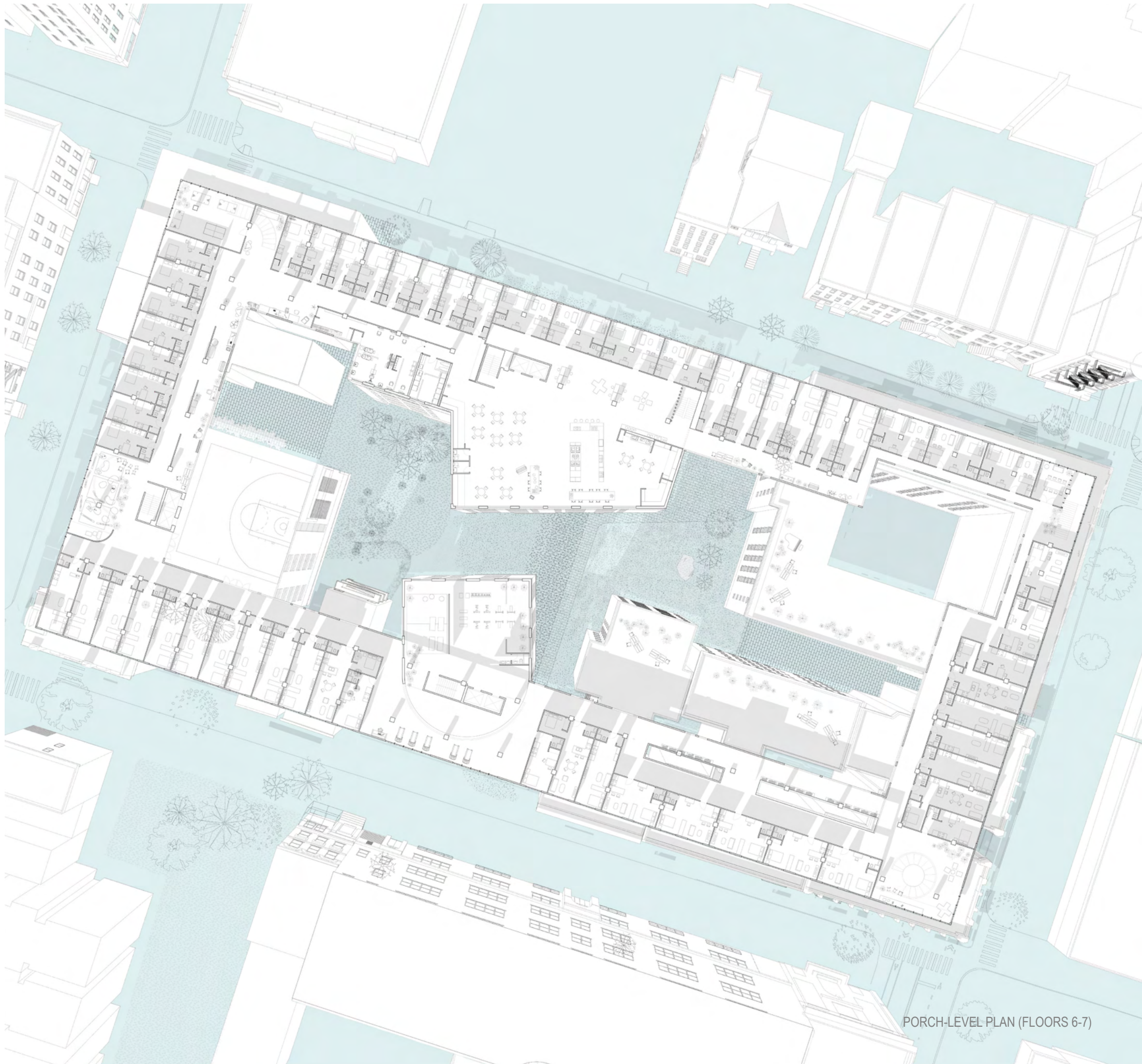


MICRO-UNIT  
300 SF

1-BEDROOM  
530 SF



STUDIO  
415-25 SF



PORCH-LEVEL PLAN (FLOORS 6-7)

Porch-level unit plans + overall porch-level floor plan  
/ drawings produced with Linru Wang





The Porch, exterior (1/16"=1'0) / model produced with Linru Wang  
*laser-cut museum board and chipboard, basswood*

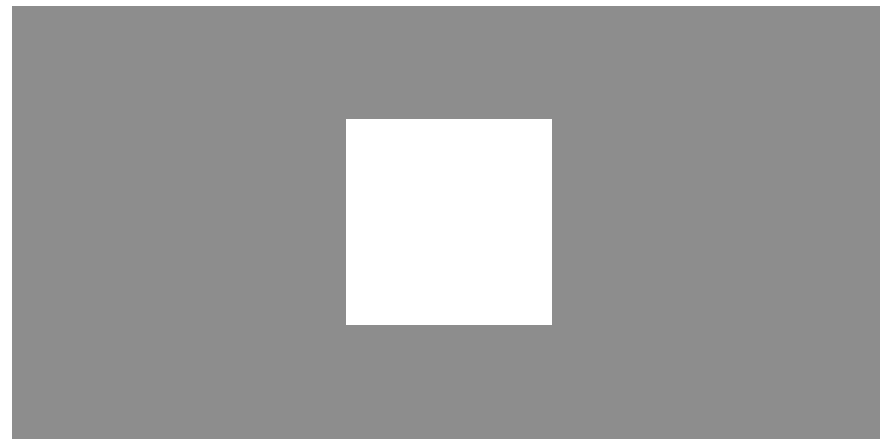


The Porch, interior





Section perspective / drawing produced with Linru Wang

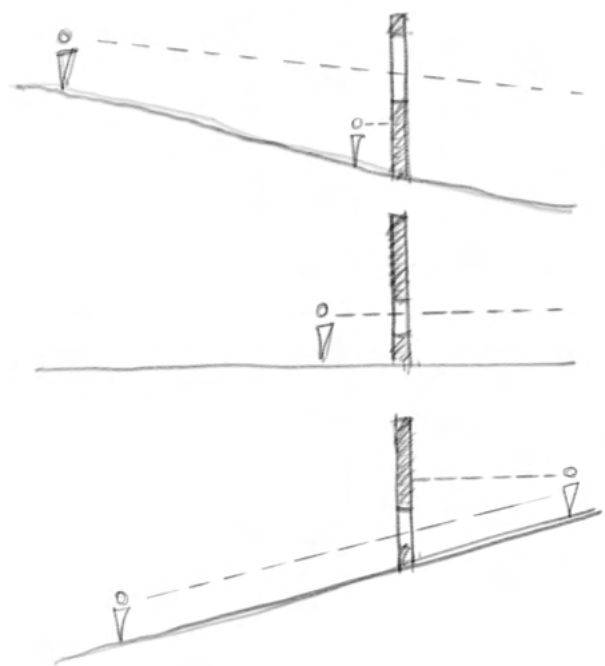


## FRAMES OF VIEW

Advanced IV Studio, Spring 2022 / Robert Marino

Rather than trying to capture or control nature, this nature museum intends only to shape visitors' experience through frames of view. Rammed earth walls made from local soils of the Hudson Valley are positioned to take advantage of the site's natural topography, highlighting key tree species and animal habitats as well as vignettes within the landscape. This nature museum is designed to neither limit nor impose upon visitors' innate curiosities; the entire site is left to the public's disposal, its earth walls only suggesting where one might look towards or explore. Constructed with temporality in mind, the earth walls will ultimately deteriorate over time, allowing for the erecting of new ones throughout the seasons.





Design intent: framing views of Hudson Valley





FORMATION



DURATION



DETERIORATION

Phases of rammed earth construction

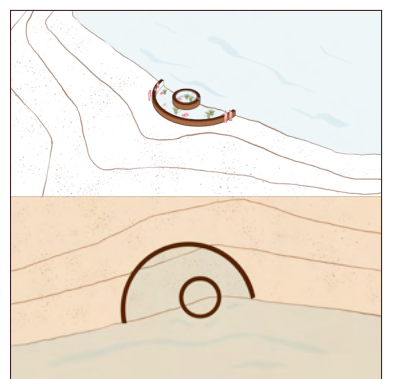
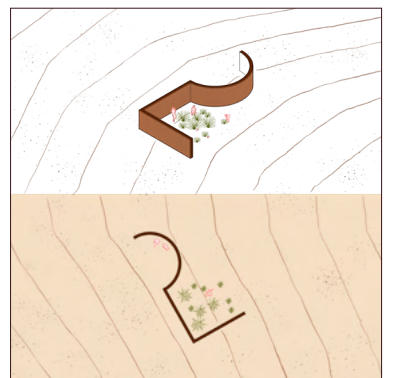
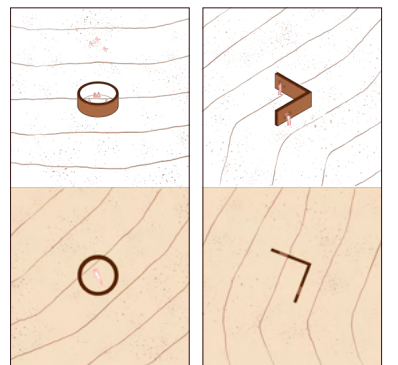
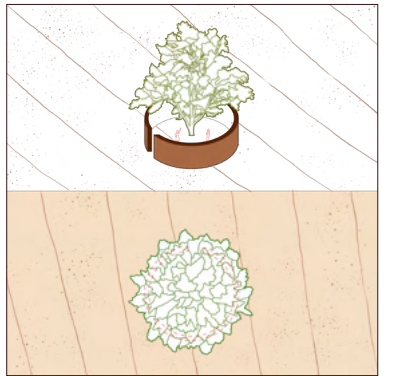
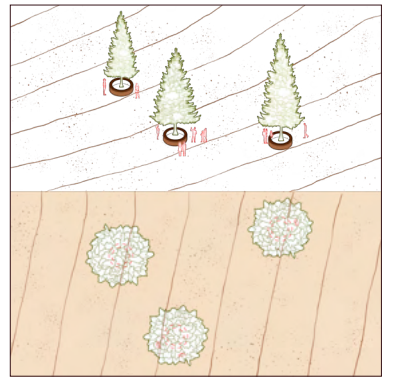


Rammed earth tests  
varying combinations of clay powder, peanut butter powder, soil, sand, water, and cement

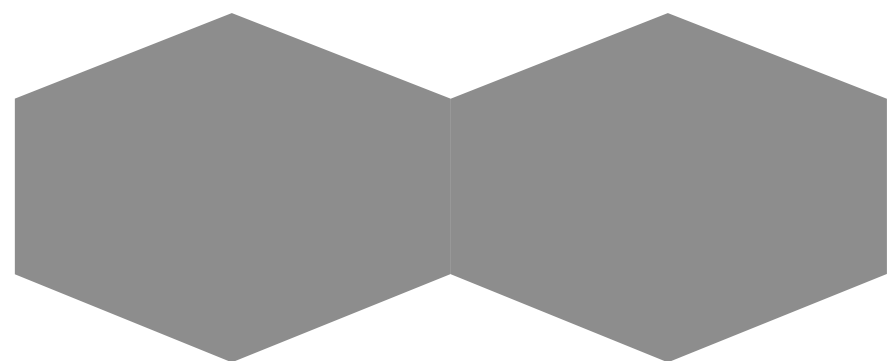




Site plan and section + typology of rammed earth walls





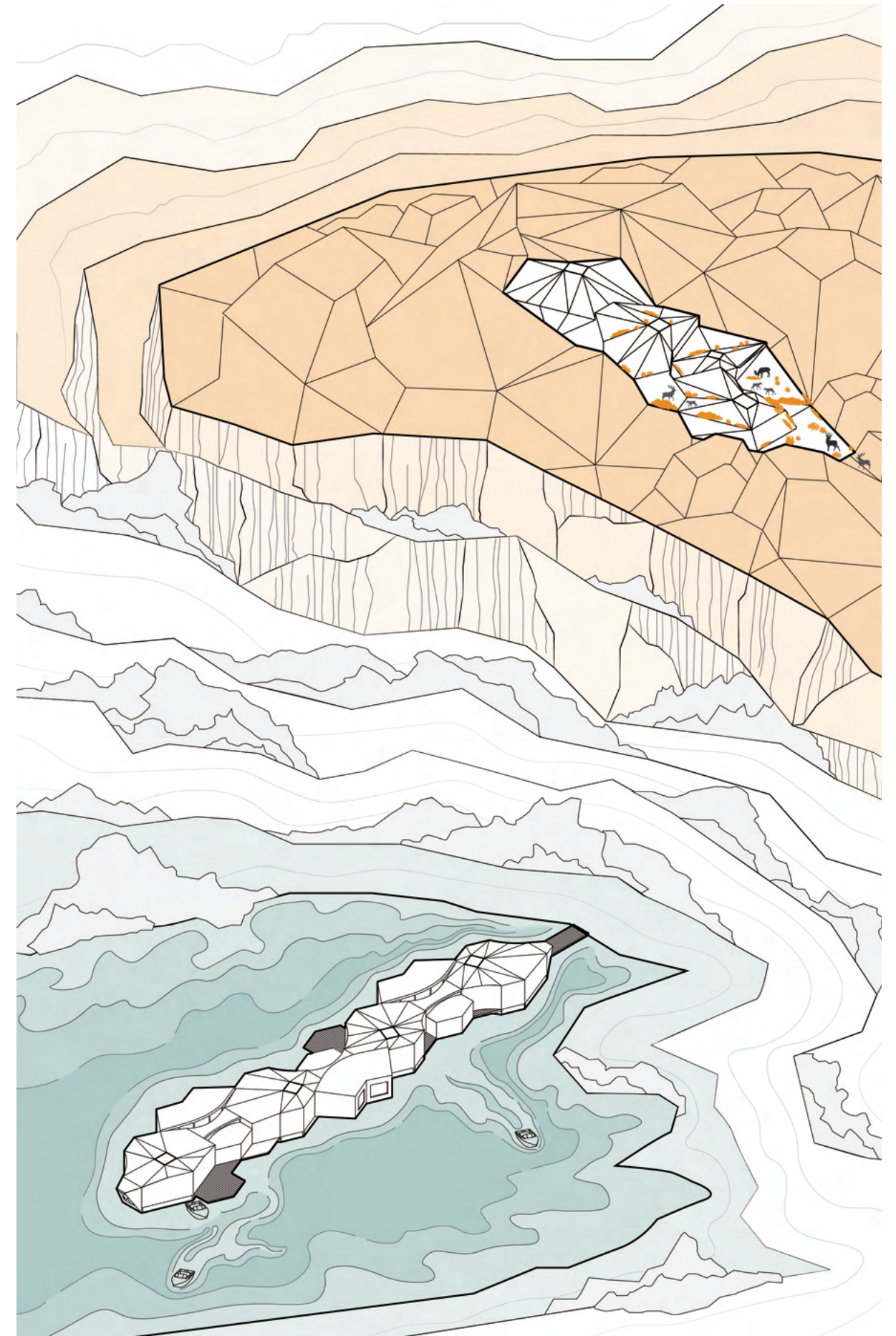
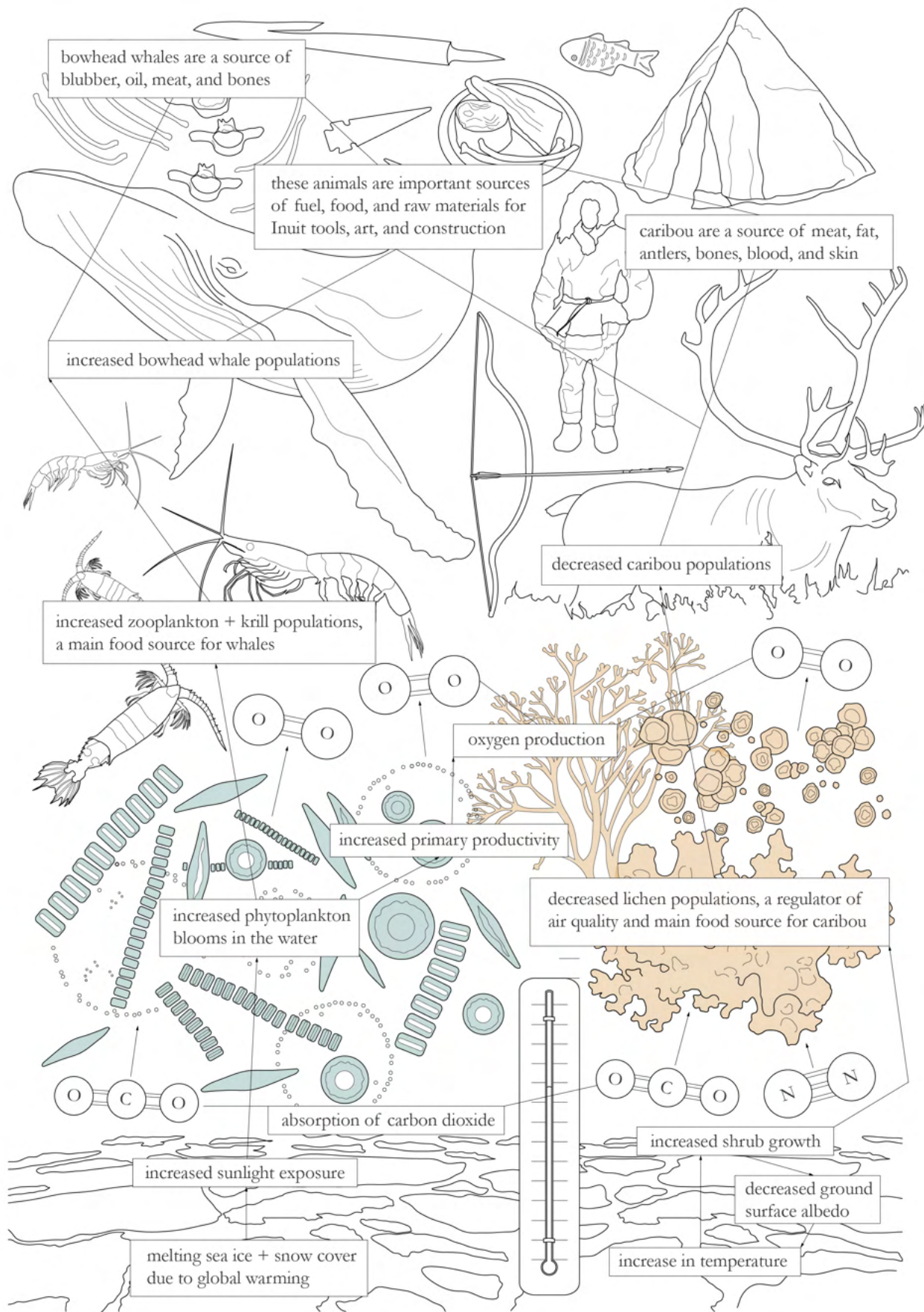


## ARCTIC RESEARCH STATIONS

Advanced V Studio, Fall 2022 /  
Leslie Gill + Khoi Nguyen

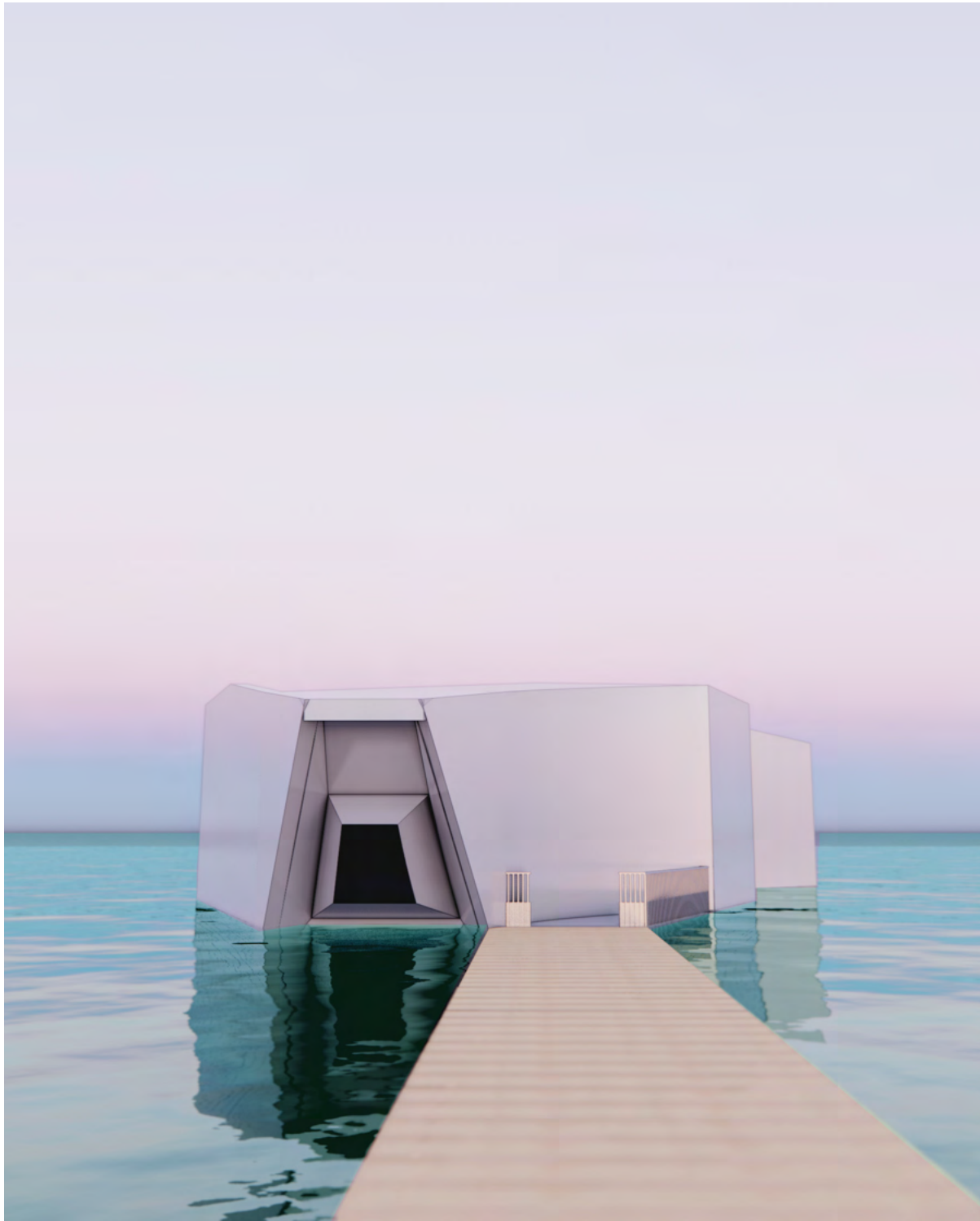
The general public is aware of the vulnerable state of arctic animals such as orcas and seals, however what is overlooked is the critical importance of primary producers, which form the very foundation of the entire food web. Phytoplankton and lichens, in the water and on land respectively, support the wellbeing of animals that are key sources of food, materials, and cultural value for indigenous people. There are limitations in research on these producers and thus, dedicated research stations ought to be designed in order to support on-site data collection while providing a comfortable and immersive living experience for scientists.



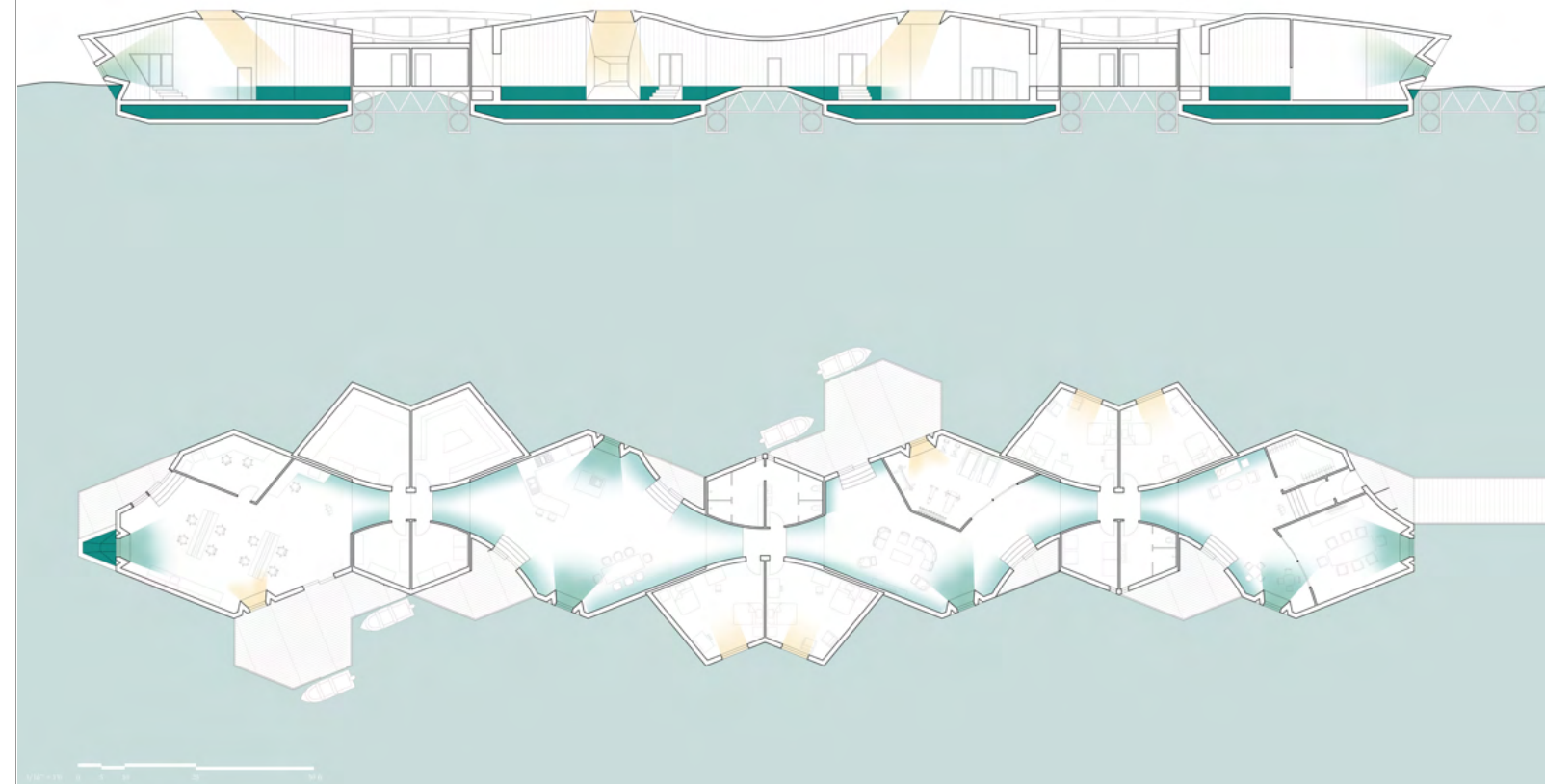
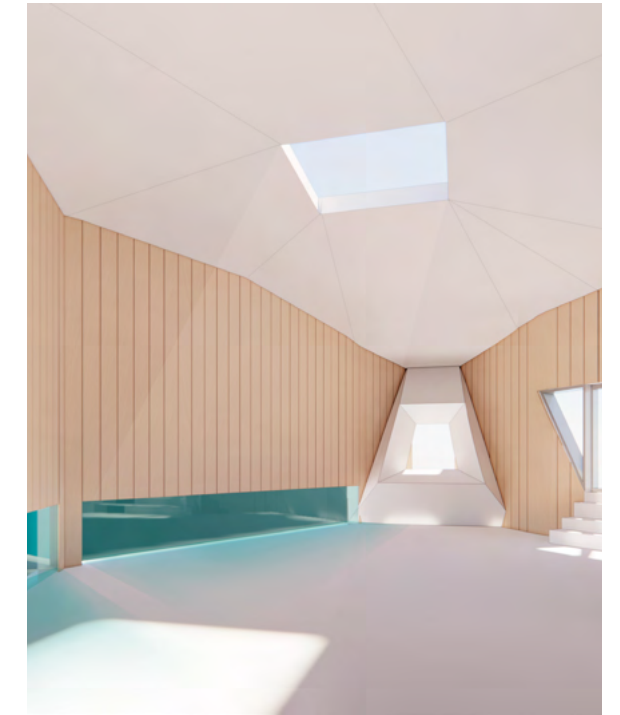


Left: Arctic food chain highlighting importance of phytoplankton and lichens as primary producers  
 Right: Massing diagrams of research stations dedicated to studying phytoplankton in the water and lichens on land





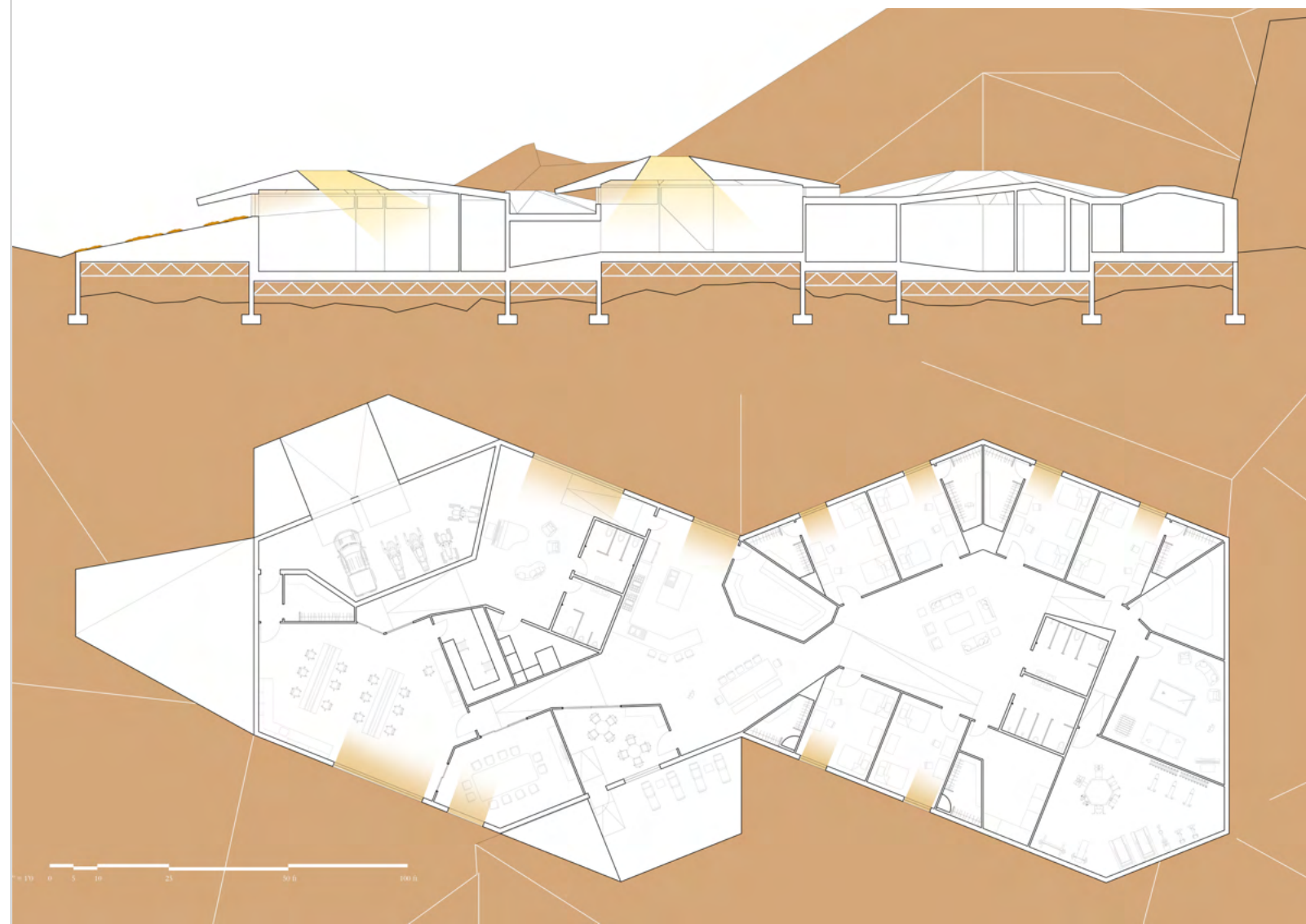
Phytoplankton research station

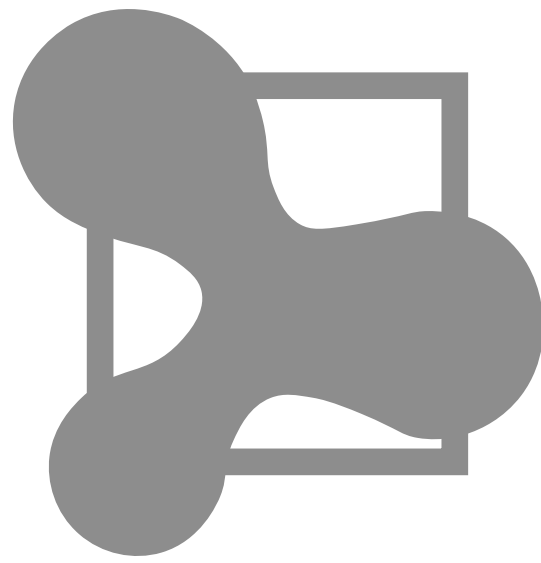






Lichen research station



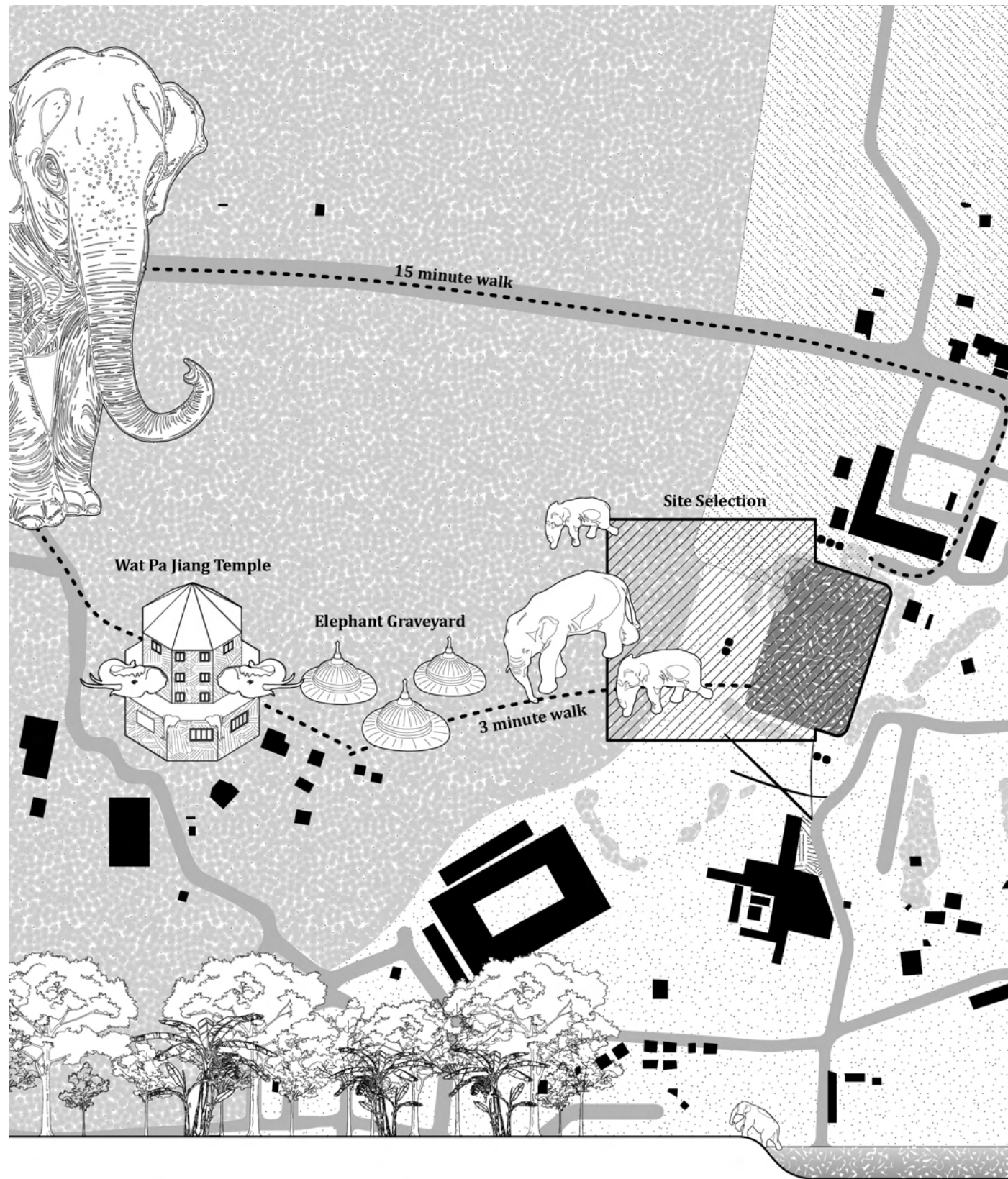


## ELEPHANT TEMPLE

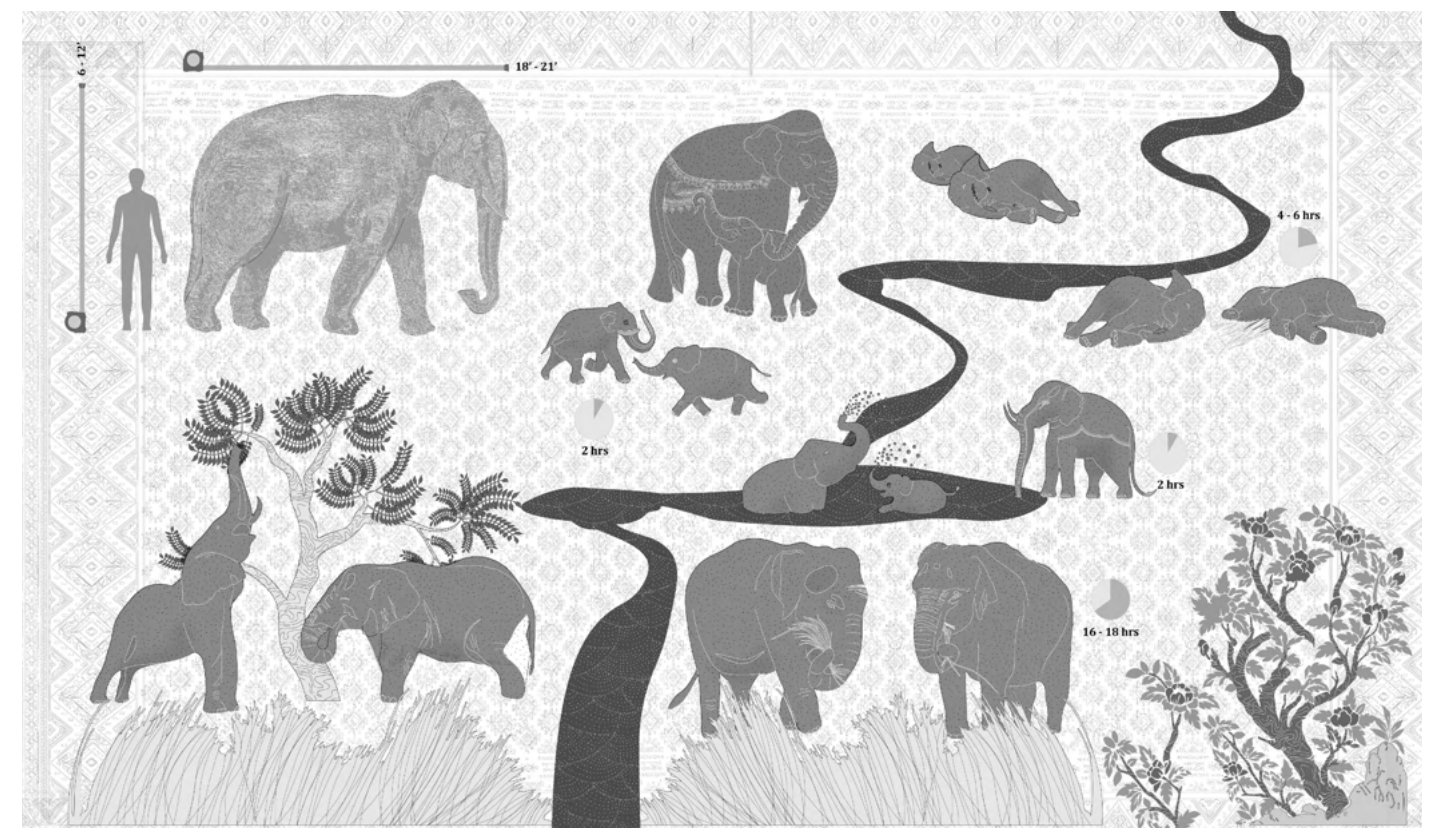
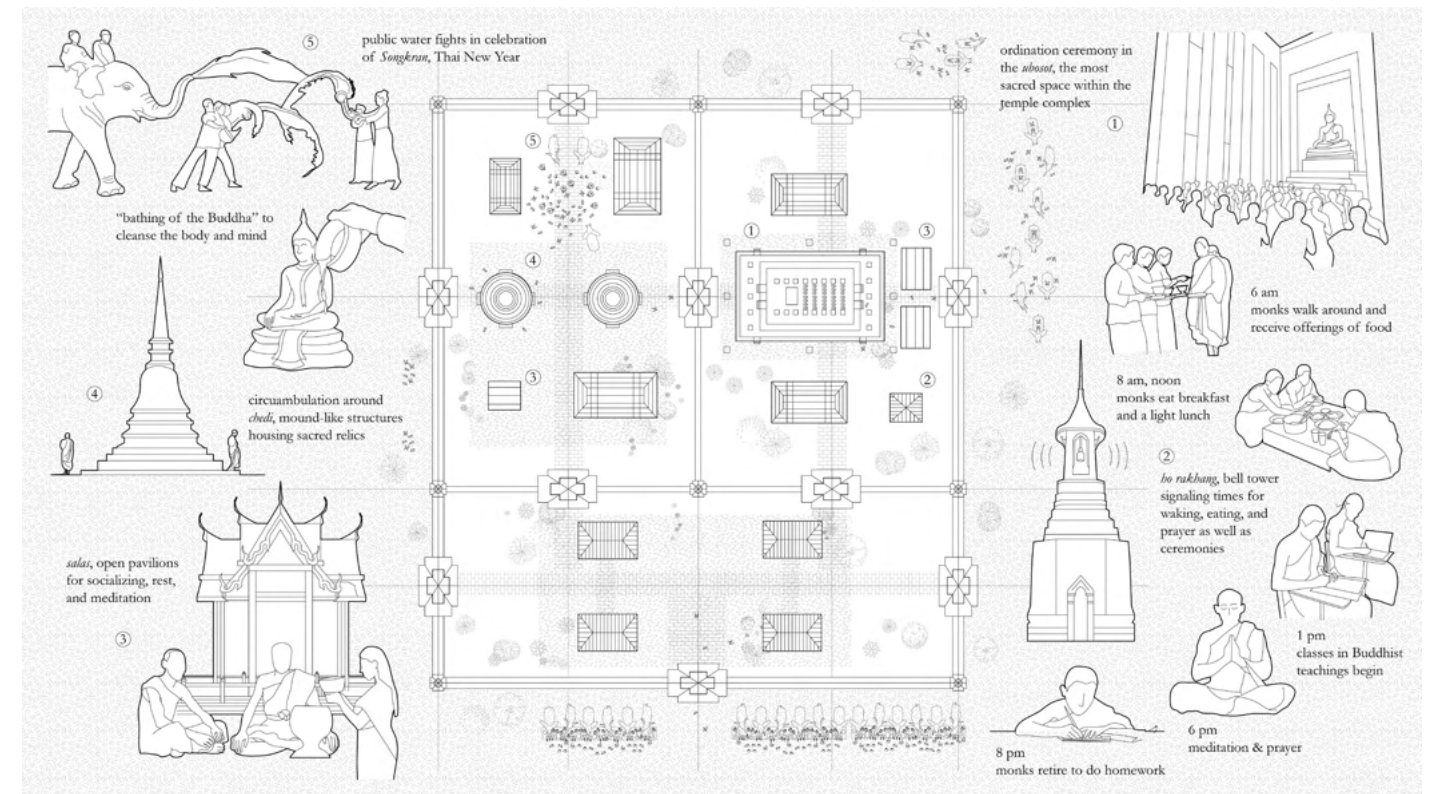
Advanced VI Studio, Spring 2023 / Boonserm Premthada  
Collaborative project with Jacqueline Pothier

The Elephant Temple draws from the traditional layout of the Thai *wat* while also questioning it, reconfiguring its sequencing of spaces to newly emphasize elephant daily life. While non-human centered, the elephant temple is not meant to be completely exclusive against humans. The mutualistic coexistence of elephants and humans is key to the Ban Taklang, “Elephant Village” society, and thus it is important to continue facilitating and supporting an even more harmonious relationship. Ultimately, the elephant temple is not strictly religious but rather a spiritual site. It is a place for elephant playing, socializing, rehabilitating, living, and even dying. It is not a place for humans to worship elephants from afar. It is a place of celebration of the daily rituals of elephants but also their entire lives from birth to death.



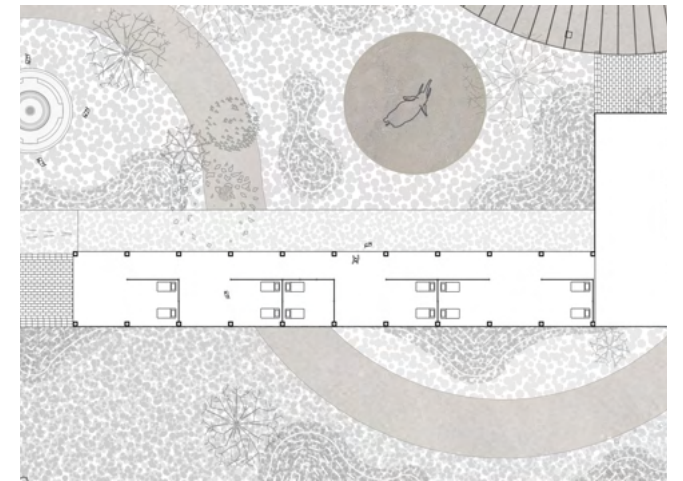
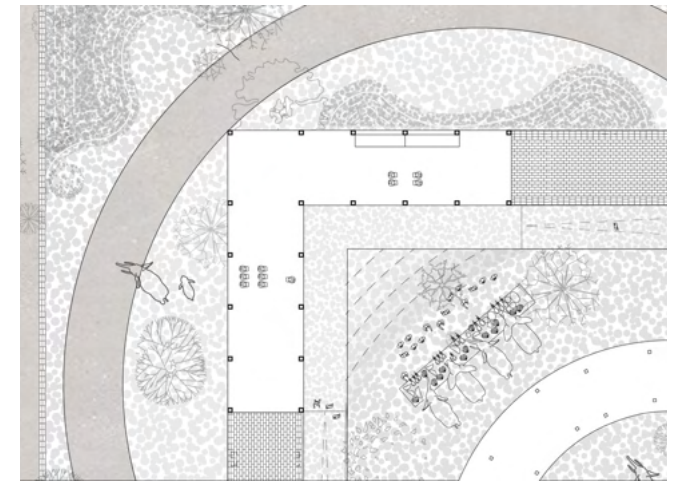
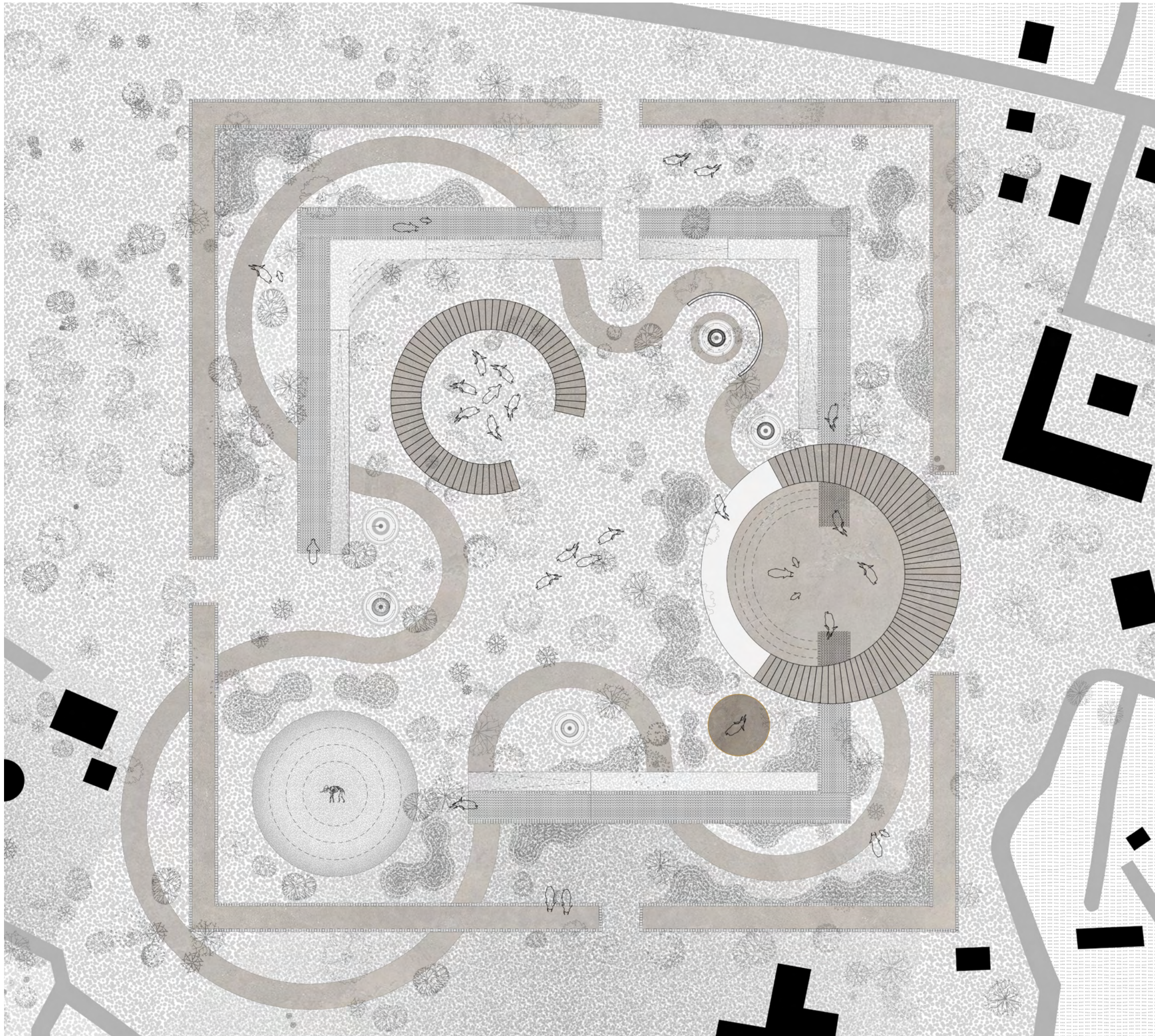


Site map of Ban Taklang, "Elephant Village" in Surin, Thailand / drawing by Jacqueline Pothier



Research drawings studying traditional Thai temple architecture, monk rituals, and elephant activities / drawings produced with Jacqueline Pothier





Left: Elephant Temple overall plan  
Right: Monk education and residential spaces



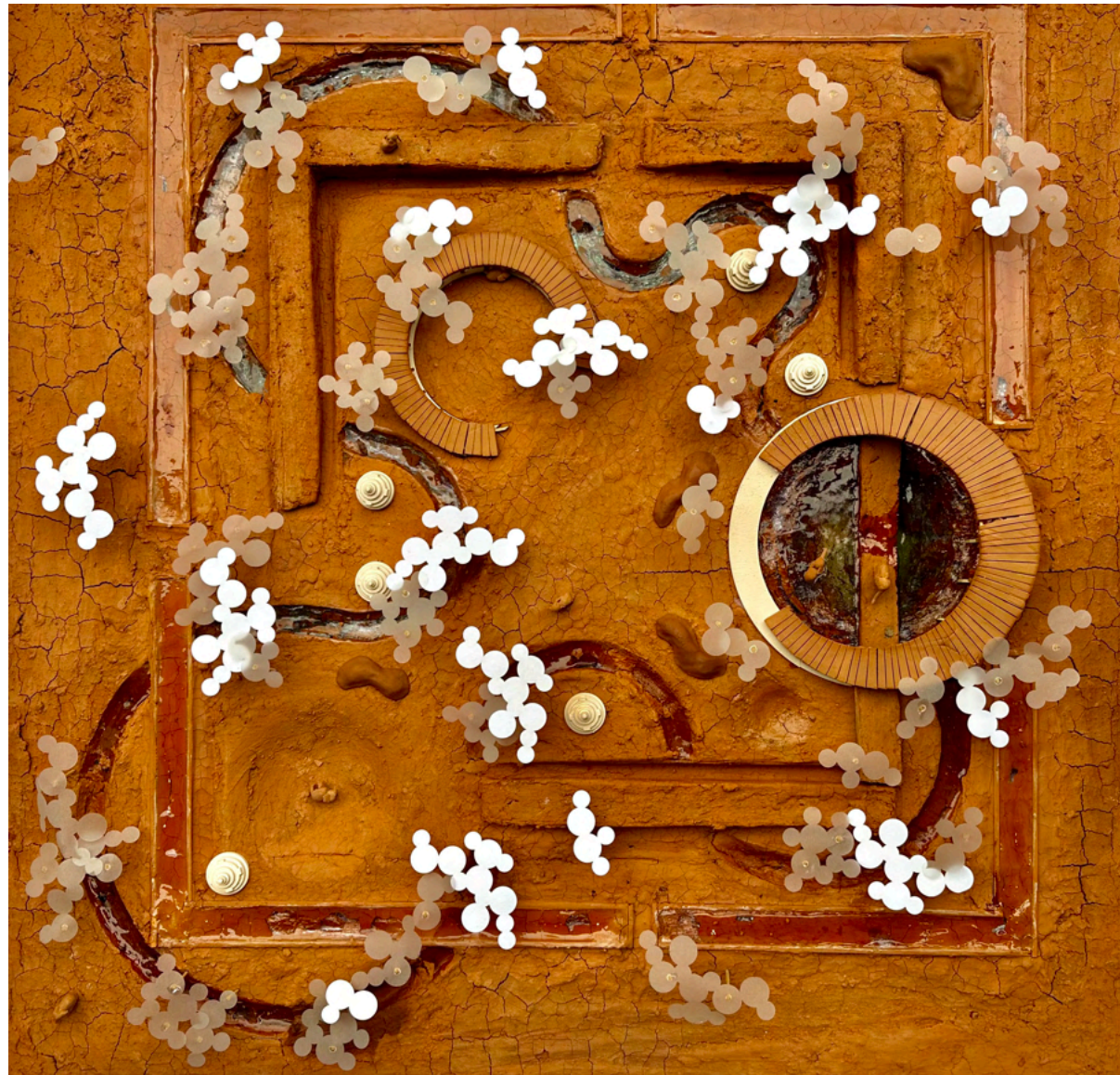


Material palette / drawing by Jacqueline Pothier



Elephant dung bricks made on site





Site model

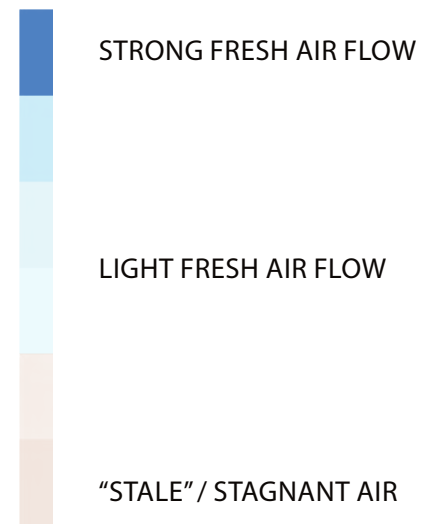


Elephant temple vignettes / drawings by Jacqueline Pothier



OTHER COURSEWORK

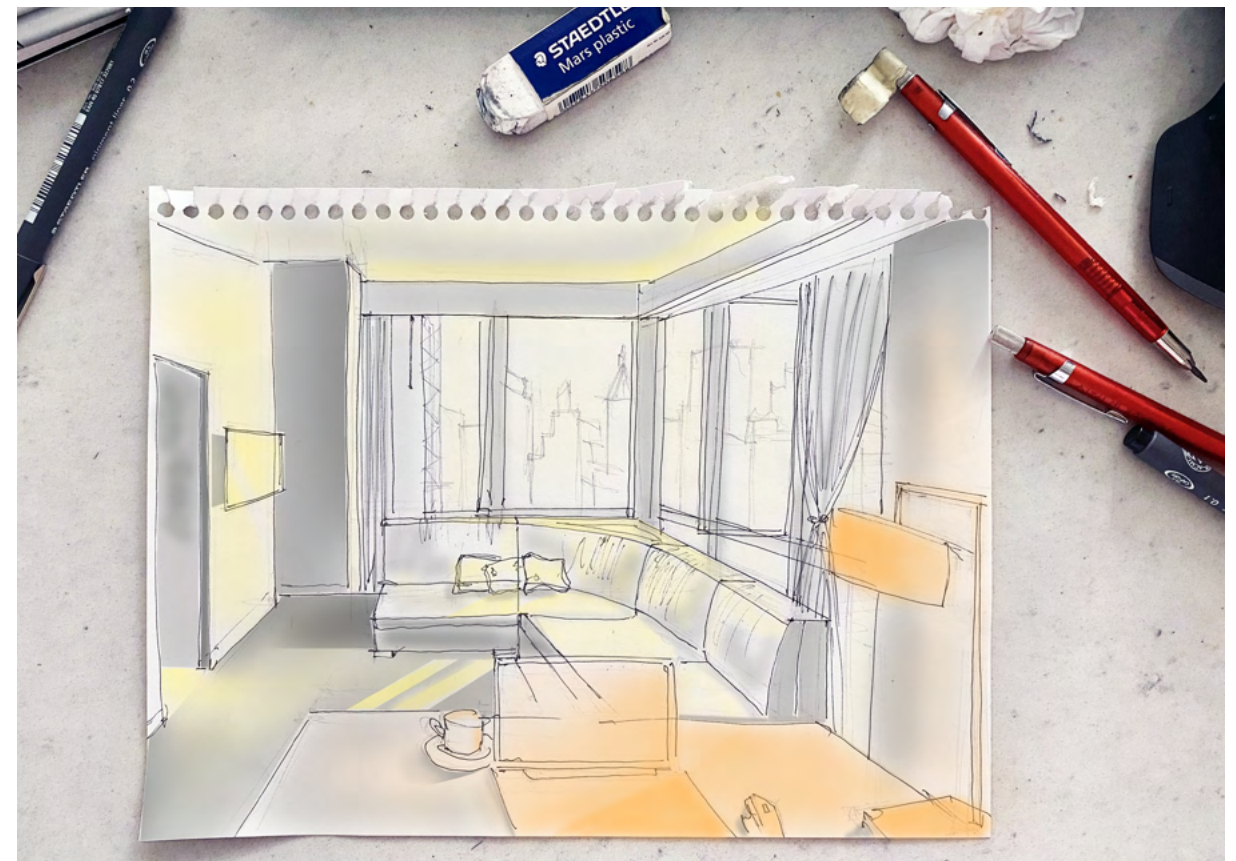




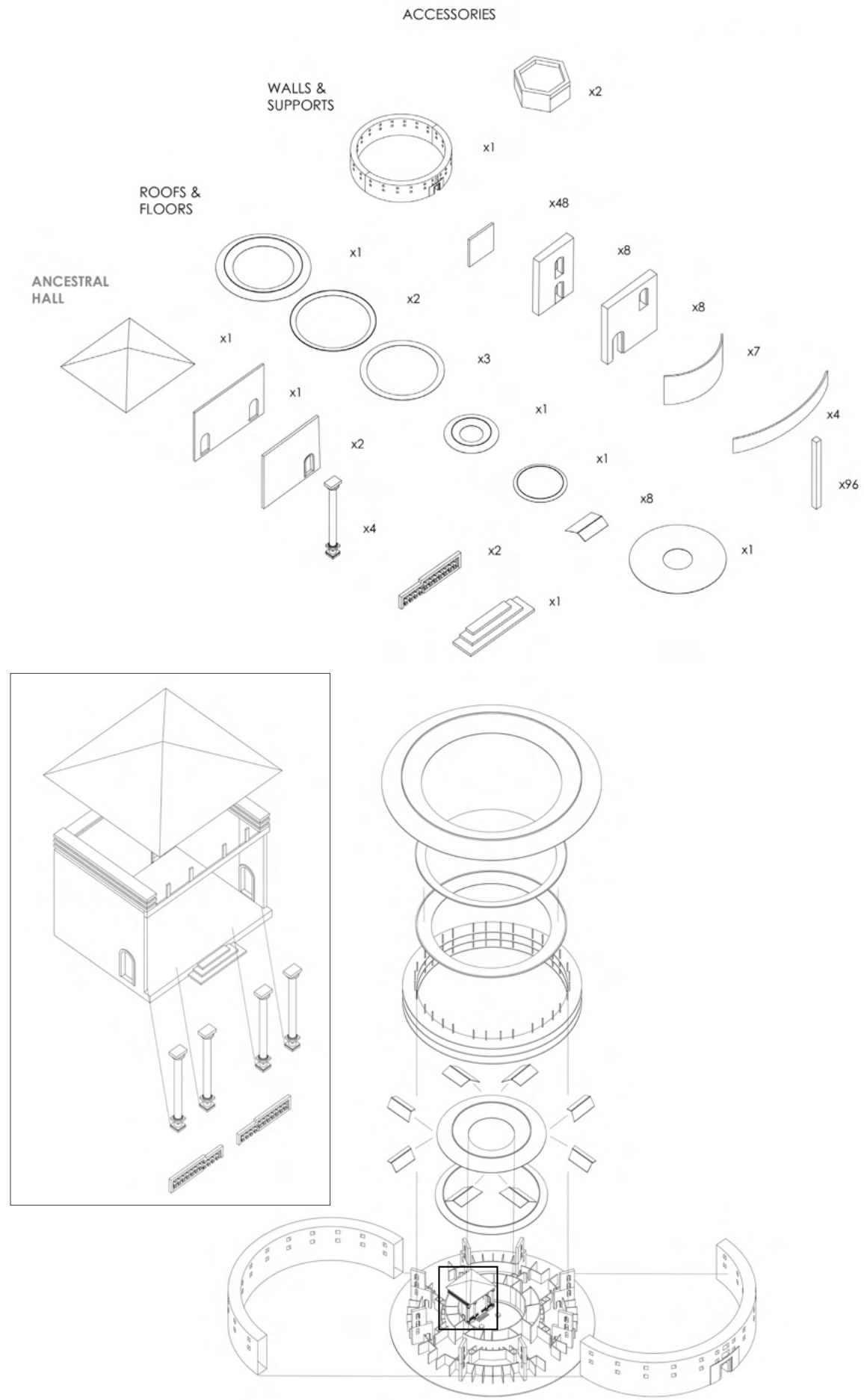
Fresh vs stale air flow study within apartment unit

## APARTMENT ENVIRONMENT STUDY

AT I, Fall 2020 / Lola Ben-Alon



Study of natural light, shadows, and artificial lighting



Top: Zhencheng Lou kit of parts  
 Bottom: Exploded axonometric of assembly

## FUJIAN TULOOU

ADR I, Fall 2020 / Lexi Tsien



Zhencheng Lou panoramic interior views



### Thomas Jefferson's Monticello

In 1767, self-trained architect Thomas Jefferson began drafting plans for Monticello, his plantation residence that would eventually take 40 years to complete by the hands of a few skilled artisans and hundreds of slaves.<sup>1</sup> Situated on inherited land from his father, Jefferson's new home was designed to cater to his public and private lives, "maneuvering" between the image he hoped to present to the outside world while providing respite from "the great theater of Action" of daily happenings.<sup>2</sup> Despite the functional intentions Jefferson had for his home, however, its architecture would eventually be embedded with social implications he might not have anticipated. Beyond an exemplar aristocratic country house, Monticello serves as an "intimate reflection" of the power dynamics of 18th-century plantation life between the servant and the served.<sup>3</sup>

Monticello, meaning "little mountain" in Italian, was Jefferson's "tabula rasa," constructed from scratch from the ground up atop a cleared hilltop with its associated structures built into the mountainside.<sup>4</sup> Construction officially began in 1769, however after returning in 1789 from his service as Minister to France, Jefferson, inspired by the architecture he witnessed abroad, embarked upon remodeling plans.<sup>5</sup> He had spent much time in Paris admiring the construction of the Hôtel de Salm, a one-story building with a dome which ultimately influenced the new design of his Monticello. Similarly to the homes he had witnessed in France, Jefferson aimed to create the impression that Monticello was only a story high, though it actually rose three stories.<sup>6</sup> Despite covering 11,000 square feet of land and comprising an extensive series of

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<sup>1</sup> Gabriel, "Thomas Jefferson and Architecture", 36.

<sup>2</sup> Dalzell, "Constructing Independence", 544.

<sup>3</sup> Anthony, "The Big House and the Slave Quarters", 15.

<sup>4</sup> Boulton, "The Architecture of Slavery", 263.

<sup>5</sup> Gabriel, "Thomas Jefferson and Architecture", 36.

<sup>6</sup> Dalzell, "Constructing Independence," 376.

## QUESTIONS IN AMERICAN HISTORY

QAH I + II, Fall 2020 + Spring 2021 / Lucia Allais, Ateya Khorakiwala



43 rooms,<sup>7</sup> Monticello was designed with a certain “playfulness,” made to look “insubstantial” and seeming to disappear into the surrounding landscape when viewed from a distance.<sup>8</sup>

Claiming Andrea Palladio’s “I Quattri Libri del’ Architettura” as his architectural “bible,” Jefferson looked to incorporate into his new home the “rational, mathematically perfect ratios of the orders” that he was so drawn to.<sup>9</sup> Monticello was thus designed in the English classical style with fundamental Palladian elements all throughout. The entablatures built on the building’s façade were also introduced throughout the interiors, placed above doors and windows within the rooms.<sup>10</sup> These, along with the building’s porticoes, served as more than mere architectural ornaments; not only did they contribute to the “dignity” of the house, but they also bespoke the architectural classicism characteristic of European buildings.<sup>11</sup> Through the combination of European and American elements, Jefferson, “in effect, created a new architectural language, with its vocabulary taken from classical formalism and its grammar derived from vernacular building practices”.<sup>12</sup>

However, in contrast to the uniformity with which the building’s façade was constructed, the interiors were far more complex and unique. The exterior was limited to being designed within the Doric style, while the interiors were created with more diversity: removing the intricately-carved columns and pilasters allowed for the varied decorating of each room within any of the Doric, Ionic, or Corinthian styles.<sup>13</sup> Additionally, while the exterior was composed of a “rhythm” of cornices, friezes, and columns, the rooms inside were less symmetrical, instead following a more distinct “grammar” comprising a range of ceiling heights and variety of shapes

<sup>7</sup> Monticello.org, “House FAQs”.

<sup>8</sup> Dalzell, “Constructing Independence,” 376.

<sup>9</sup> McLaughlin, “Jefferson and Monticello”, 54.

<sup>10</sup> McLaughlin, “Jefferson and Monticello”, 89.

<sup>11</sup> Dalzell, “Constructing Independence,” 551.

<sup>12</sup> Boulton, “The Architecture of Slavery”, 261.

<sup>13</sup> McLaughlin, “Jefferson and Monticello”, 89.

aside from rectangles.<sup>14</sup> Jefferson’s exploration of the architectural process allowed him to “break out of the box” as he sought to achieve a balance “between order and irregularity”.<sup>15</sup>

Skilled artisans were hired to lead the construction, however, it was largely the slaves who built Monticello. Slaves were trained in all sorts of trades, fulfilling the necessary occupations from being brickmakers and masons to carpenters and painters.<sup>16</sup> Even children were employed within Jefferson’s nail factory.<sup>17</sup> Jefferson’s plantation not only provided the labor but also the materials used for construction. Bricks, providing structural stability and architectural flexibility, were made on-site for use within the building’s curved and straight surfaces.<sup>18</sup> The bricks were used in arches throughout the entire building, forming “wide, graceful portals” at the entrances and in the piazzas that served to both display the Palladian orders as well as provide the building’s structural framework.<sup>19</sup> Although Monticello was essentially a brick house, most of it was actually constructed from wood. Lumber from Jefferson’s 10,000 acres of land was harvested for Monticello’s windows, floors, roof, stairs, and decorative interior work.<sup>20</sup>

Beyond an archetypal home for Virginia’s colonial elite, Monticello was also a physical expression of Jefferson’s contradictory values: that although he found slaves “repugnant,” he relied upon them for the maintenance of his property.<sup>21</sup> In designing his home then, Jefferson’s designation of public and private spaces also attempted to “rationalize his relationships with his family and his slaves”.<sup>22</sup> His placement of the slave quarters in the south colonnade symmetrically across from the horse stables equated the value of the slaves to livestock.<sup>23</sup> By

<sup>14</sup> Boulton, “The Architecture of Slavery”, 265.

<sup>15</sup> Boulton, “The Architecture of Slavery”, 267.

<sup>16</sup> Dalzell, “Constructing Independence”, 549.

<sup>17</sup> Anthony, “The Big House and the Slave Quarters”, 14.

<sup>18</sup> McLaughlin, “Jefferson and Monticello”, 79.

<sup>19</sup> McLaughlin, “Jefferson and Monticello”, 80.

<sup>20</sup> McLaughlin, “Jefferson and Monticello”, 84.

<sup>21</sup> Dalzell, “Constructing Independence,” 551.

<sup>22</sup> Boulton, “The Architecture of Slavery”, 269.

<sup>23</sup> Anthony, “The Big House and the Slave Quarters”, 14.



removing any signs of slave service and the “lower activities” of slave life, Jefferson “effectively rendered the slaves invisible” and was able to keep the slave labor from intruding upon “the spirit of a home”.<sup>24</sup> For instance, he designed the main parlor to open out onto a broad lawn, preventing the slaves from “intruding on the atmosphere of ease and relaxation”.<sup>25</sup>

Finding his slaves “annoying,” Jefferson even employed devices of his own invention to further obscure their activities to the public.<sup>26</sup> He designed a rotating door with semicircular shelves for the slaves to bring food from the kitchen while remaining unseen as well as narrow, hidden stairways for slaves to reach the house’s upper floors discreetly.<sup>27</sup> A network of secret tunnels, “cryptoporticullis,” leading to and from the slaves’ quarters ran underneath the public terraces where visitors would gather for events.<sup>28</sup> These, in addition to even the smallest devices, such as a ladder folded to be disguised as a pole, “all gave the impression that the house was managed not by people who performed work” but as if by “abstract and invisible natural laws”.<sup>29</sup> All aspects of the Monticello estate, from the arrangement of buildings to the circulation between spaces, made visitors “only aware of the mansion house and the comfort it suggested,” elevating the image of Jefferson while subordinating the presence of the slaves so integral to supporting his livelihood. In addition to hiding these signs of service, Jefferson also segregated areas of private domestic life by physically separating them from formal entertaining areas, masking anything that would be considered “disagreeable”.<sup>30</sup>

Despite the image Jefferson might have wanted to project or the claims he made of his beliefs, the architecture of his plantation home tells a complex narrative that reveals more than

<sup>24</sup> Anthony, “The Big House and the Slave Quarters”, 14.

<sup>25</sup> Anthony, “The Big House and the Slave Quarters”, 14.

<sup>26</sup> Anthony, “The Big House and the Slave Quarters”, 17.

<sup>27</sup> Anthony, “The Big House and the Slave Quarters”, 17.

<sup>28</sup> Boulton, “The Architecture of Slavery”, 279.

<sup>29</sup> Boulton, “The Architecture of Slavery”, 279.

<sup>30</sup> Boulton, “The Architecture of Slavery”, 279.

his aesthetic preferences and social status. Jefferson’s Monticello succeeded in his goals of self-sufficiency, however not without the slave labor taking place within the plantation. The construction of Monticello shows that although a structure can be manipulated in order to enforce a certain image and hide harsher realities, the social implications nevertheless remain embedded within its architectural legacy.



Priscilla Auyeung

Questions in Architectural History II

### The Architectural Image as Symbol, Icon, and Commodity

In the mid-twentieth century, technologies such as computer-aided design software led advancements in architectural innovation, opening doors for the development of new forms that could not have been achieved before. Not only were these architectural renderings significant in realizing impressive structures, they, along with photographed images, were effectively used to market architectural projects to the public both before and after their completion. More than mere forms of representation, these mediums framed curated architectural images to create a sense of spectacle, showcasing the structures' unique geometries while offering viewers the promise of a transformative experience. The mass production, distribution, and consumption of these images through the press and digital media platforms eventually embedded such projects into pop culture, transforming the architecture and even their respective imagery into cultural icons. Frank Gehry's Guggenheim Museum in Bilbao was one such iconic project that not only showcased the potential for computer-aided design but also symbolized a brighter future for the city and its inhabitants. However, while the image of the Guggenheim Museum became partly synonymous with Bilbao's financial successes, it also exemplified the architectural image's ability to obscure harsher realities.

### The architectural image through photography

Existing first in sketches and drawings, a new kind of architectural image began to rise through the medium of photography. Through the adjusted camera view, perfected with selected angles and processes of enlargement, a photographer could misleadingly present "fragile and

uncertain architecture as credible, dignified, even inevitable," protected from the "adverse effects of time, weather, and use."<sup>1</sup> Experiencing photographed architecture in this way, a viewer would be presented with more than a mere snapshot of the physical structure; also captured was a specific sensation, a crafted sensory experience subject to the viewer's own interpretation. Due to this, philosopher Walter Benjamin considered photographic reproductions "forgery," arguing that photography's access to beyond what the naked eye could capture breached architecture's objectivity.<sup>2</sup> A physical built structure was therefore considered the "original" and most "authentic" because of its ties to its unique cultural context and geographic location.<sup>3</sup> However, as the photographed image was more readily accessible to the public, the built architecture's aura -- the "subtle but distinct sensation received in the presence" of it -- would be devalued as a new identity formed around the architectural image.<sup>4</sup>

### Architectural design and innovation through digital technologies

Computer-aided design software saw its origins in aircraft design in the 1940s.<sup>5</sup> The principles that were employed in making hand-crafted templates for airplanes' complex curves eventually served as the basis for the mathematical definitions in further developed CAD systems in the 1950s and 60s.<sup>6</sup> Though these programs were initially specialized for and limited to automotive and aircraft manufacturing, the transfer of information between these systems was standardized in the 1980s.<sup>7</sup> By then, other design disciplines as Architecture were able to adopt

<sup>1</sup> Daniel Naegele, "Object, Image, Aura," *Harvard Design Magazine*, <http://www.harvarddesignmagazine.org/issues/6/object-image-aura>

<sup>2</sup> Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction" (1935), 51.

<sup>3</sup> Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 50.

<sup>4</sup> Naegele, "Object, Image, Aura."

<sup>5</sup> Kouppas and Allen, "Computer Aided Design: Past, Present, Future," 7.

<sup>6</sup> Ibid.

<sup>7</sup> Kouppas and Allen, "Computer Aided Design: Past, Present, Future," 9.



the use of CAD software, the fast-developing technology offering innumerable possibilities for design and innovation within the built environment.<sup>8</sup>

These digital technologies enabled and facilitated the production of new radical architectural designs and imagery. Similarly to the effects of the photographed architectural image, digital renderings were also removed of the contextual elements that Benjamin argued attested to architecture's authenticity. In fact, the limitless possibilities for digital manipulation further alienated the architecture from reality, because architecture in digital form essentially had the power to exist in any place and era. Like with photographs, the creation and distribution of these kinds of architectural images fostered a new aura around the visualizations themselves. Hovering between realism and surrealism, the architectural image possessed a "hypnotic authority."<sup>9</sup> Whereas photography occurred after the completion of a project, the advantage of the digital rendering was its distortion of time. Often distributed even before the construction of buildings, these images served as a powerful marketing tool for generating a kind of "celebrity culture," the "iconicity" that brought fame to architectural works and their designers.<sup>10</sup>

### Case study: The Guggenheim Museum in Bilbao, Spain

#### Background

Bilbao was chartered in 1300 as an industrial town, eventually becoming a major international port city as well as a center for iron and steel production in the 1920s.<sup>11</sup> By the mid-1970s, however, postindustrial economics had caused Spain to suffer "financial atrophy,"

<sup>8</sup> Kouppas and Allen, "Computer Aided Design: Past, Present, Future," 10.

<sup>9</sup> Simone Brott, *Digital Monuments: The Dreams and Abuses of Iconic Architecture*, (United States: Taylor & Francis, 2019), 2.

<sup>10</sup> Brott, *Digital Monuments*, 18.

<sup>11</sup> Joan Ockman, "New Politics of the Spectacle: 'Bilbao' and the Global Imagination," essay in *Architecture and Tourism: Perception, Performance and Place*, edited by D. Medina Lasansky and Brian MacLaren (Oxford: Berg, 2004), 229.

resulting in the diminished image of the city and a loss in tourism.<sup>12</sup> Thus, the city's leaders set out in the 1980s to revitalize the city, starting with a \$1.5 billion program that involved the preservation of historic structures as well as the construction of new cultural and public facilities.<sup>13</sup> Many of these new projects were to be commissioned from internationally-renowned designers such as Norman Foster and Santiago Calatrava, whose impressive reputations and celebrity status would hopefully improve the reputation of the city.<sup>14</sup>

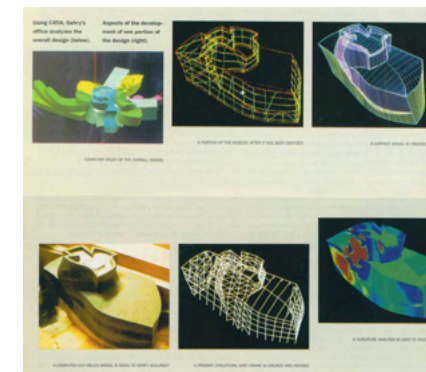


Fig. 1. Frank Gehry and Associates, computer generated designs, surface models, and models. *Computers, Cladding, and Curves: The Techno-Morphism of Frank Gehry's Guggenheim Museum in Bilbao Spain*.

#### The museum

The development of a new museum was one of 71 considered actions for the city to initiate in order to stimulate economic growth and cultural activity.<sup>15</sup> The hope was that, in the same way Frank Lloyd Wright's Guggenheim in New York City proved to be as much of a spectacle as the art it housed, an architect would achieve the same for one in Bilbao.<sup>16</sup> The image of the new museum would revamp Bilbao's pre-existing image of being a fallen city and transform it into that of a thriving cultural center.

<sup>12</sup> Brott, *Digital Monuments*, 27.

<sup>13</sup> Ockman, "New Politics of the Spectacle," 229.

<sup>14</sup> Ibid.

<sup>15</sup> Beatriz Plaza and Silke N. Haarich, "The Guggenheim Museum Bilbao: Between Regional Embeddedness and Global Networking," *European Planning Studies* 23, no. 8 (2015): 1459.

<sup>16</sup> Henry Petroski, "Engineering: Bilbao," *American Scientist* 86, no. 4 (1998): 320.



Impressively, Guggenheim Bilbao was completed on schedule and even below budget, largely due to the use of computer-aided design and manufacturing in its development.<sup>17</sup> The curvature of Gehry's design and its metal cladding material made the developing structure ideal for manipulation through CATIA, which was originally used for the production of the Boeing 777 but later provided the foundation upon which Gehry's own "Digital Project" 3D software was built (Fig. 1).<sup>18</sup> The software-created model of Guggenheim Bilbao thus became a digital sculpture, which Gehry could instantaneously carve and remold. Not only was this software then used to produce updated physical study models, but it was also optimized for the manufacturing and assembly of the building's parts for construction.<sup>19</sup>



Fig. 2. The Guggenheim Museum in Bilbao Featured on the Cover of The New York Times Magazine, <http://www.phs.poteau.k12.ok.us/williams/APAH/readings/Gehry,%20The%20Miracle%20in%20Bilbao,%20NY%20Times%20mag.pdf>.

### *The Image of Guggenheim Bilbao*

It is with these technological developments that such complex curves not previously achievable could be developed and realized. In addition to producing the architecture and imagery, technology helped to distribute the images as well. News and imagery of the project

<sup>17</sup> Petroski, "Engineering: Bilbao," 323.

<sup>18</sup> Paul Kouppas and Jonathon Allen, "Computer Aided Design: Past, Present, Future," in *Design & Designing: A Critical Introduction*, ed. Steve Garner and Christopher Evans (Oxford: Berg, 2012), 107.

<sup>19</sup> Petroski, "Engineering: Bilbao," 323.

were quickly circulated through mass media platforms, as the museum's opening coincided with the rise in the Internet and social media.<sup>20</sup> This also occurred in the press as the *New York Times* featured the museum on its magazine cover, "bathed in glittering yellows, whites, and reds," the building an awe-inspiring, "white titanium whale at sunset" (Fig. 2).<sup>21</sup> The featuring article's author, Herbert Muschamp, heralded the building as a "miracle in Bilbao."<sup>22</sup> The museum was even featured in music videos and a James Bond movie, solidifying its place in pop culture.<sup>23</sup>

In contrast to the remnants of the city's historical steel-making factories, which remained as "haunting, pitiful reminders" of Bilbao's past, the new museum stood proudly as the spectacle "transforming the left bank's wasteland."<sup>24</sup> As "image accumulation fuels increasing demand for place, which reinforces a brand," the mere silhouette of the Guggenheim Museum became a recognized symbol representing the new Bilbao and an exciting future for modern architecture.<sup>25</sup> The utilization of technology therefore allowed architects to create what they could not before with just their hands, and the public to experience what they could not with their own eyes.<sup>26</sup> The museum's "virtual twin" became the more accessible and feasible mode of architectural consumption.<sup>27</sup>

Eventually, the Guggenheim Museum came to be more than an arts center or tourist destination. This single structure was able to "capture the popular imagination -- globally and locally, high brow and low," its complex curves and shiny cladded metal becoming symbols of economic growth and urban renewal.<sup>28</sup> Considered the only other "post-war building to challenge

<sup>20</sup> Plaza and Haarich, "The Guggenheim Museum Bilbao," 1469.

<sup>21</sup> Joseba Zulaika, *Guggenheim Bilbao Museoa: Museums, Architecture, and City Renewal in a Global World* (Reno: Basque Studies Center, University of Nevada, Reno, 2000), 116.

<sup>22</sup> Herbert Muschamp, "A Masterpiece for Now." *The New York Times Magazine*, September 7, 1997.

<sup>23</sup> Irene Nero, "Computers, Cladding, and Curves: The Techno-Morphism of Frank Gehry's Guggenheim Museum in Bilbao Spain" (dissertation, 2004), 4.

<sup>24</sup> Zulaika, *Guggenheim Bilbao Museoa: Museums, Architecture, and City Renewal*, 116.

<sup>25</sup> Plaza and Haarich, "The Guggenheim Museum Bilbao," 1469.

<sup>26</sup> Brott, *Digital Monuments*, 19.

<sup>27</sup> Ibid.

<sup>28</sup> Ockman, "New Politics of the Spectacle," 227.



the Sydney Opera House in emotional resonance and immediacy of recognition,” the new Guggenheim Museum became the spectacle the city wanted in order to put itself “back on the map.”<sup>29</sup> Since witnessing the building in person could not have been replicated, those unable to physically visit were able to experience the museum vicariously through the seductive imagery shared in the press and online.



Fig. 3. One of Frank Gehry's Sketches of the Guggenheim Museum in Bilbao, *Guggenheim Bilbao*, <https://www.guggenheim-bilbao.eus/en/the-building/frank-gehry>.

#### The “Bilbao Effect”

Once the museum was completed and inaugurated in 1997, the revenue from tourist visits as well as the resulting redevelopment of the surrounding urban areas made the project a financial success.<sup>30</sup> Within its first year of opening, the museum attracted more than a million visitors, bringing \$160 million in revenue into the local economy.<sup>31</sup> The completion of the museum initiated new retail and hospitality amenities such as hotels, cafes, and restaurants, as well as transportation services, creating 4,500 new jobs.<sup>32</sup>

With Gehry's growing celebrity status and the museum's newly established iconicity, Guggenheim Bilbao became its own brand. Referring to his own freeform line drawings as “scribble,” Gehry may not have anticipated that his indecipherable preliminary sketches would

<sup>29</sup> Plaza and Haarich, “The Guggenheim Museum Bilbao,” 1460.

<sup>30</sup> Brott, *Digital Monuments*, 27.

<sup>31</sup> Ockman, “New Politics of the Spectacle,” 229.

<sup>32</sup> Melva Joseph, “The Bilbao Effect - Impact of Frank Gehry's Guggenheim.” *Rethinking the Future*, <https://www.re-thinkingthefuture.com/fresh-perspectives/a862-the-bilbao-effect-impact-of-frank-gehrys-guggenheim/>

become recognizable icons of their own. His sketch's entangled lines, drawn with “adventurous spirit,” effectively captured the dynamic sense of movement introduced to the riverfront site in Bilbao (Fig. 3).<sup>33</sup> The building's “sinuous silhouette,” embedded with “aqueous metaphors of fish, windblown sails and water,” soon came to be featured in the Guggenheim Bilbao's advertising and even the museum's affiliated merchandise.<sup>34</sup> The same exact sketch has now been digitized as a sort of logo to be incorporated on the front of shirts offered by the museum shop (Fig. 4). A ring, another product offered by the museum store, explores an artistic take on the building's form, reducing its complex shape while maintaining the building's iconic, recognizable curves (Fig. 5).



Fig. 4. T-shirt featuring one of Frank Gehry's hand-drawn sketches. <https://tienda.guggenheim-bilbao.eus/en/sketch-t-shirt>

Fig. 5. Methacrylate ring inspired in the shapes of the Guggenheim Museum Bilbao building. Designed by Catalina D'Anglade exclusively for the Guggenheim Museum Bilbao. *Guggenheim Bilbao*. <https://tienda.guggenheim-bilbao.eus/en/anillo-guggenheim-bilbao-light>.

Beyond the measurable economic gains, there was also the psychological benefit to Bilbao's people in the form of a newfound sense of pride.<sup>35</sup> These successes became globally known as the “Bilbao effect,” the promise that the development of an architectural project could

<sup>33</sup> Paul Keskeys, “Architizer,” *Architizer*, <https://architizer.com/blog/practice/tools/how-architecture-is-born-frank-gehry/>.

<sup>34</sup> *Ibid.*

<sup>35</sup> Joseph, “The Bilbao Effect - Impact of Frank Gehry's Guggenheim.”



effectively revitalize a city, and that the implementation of “showy architecture” within a city’s urban plan could offer “economic uplift for cities down on their luck.”<sup>36</sup>

#### *Consequences and critique*

The successes of the Bilbao museum, however, did not come without consequence and critique. Iconic images circulated in brochures and the press failed to convey the urban complexities that surrounded the development and aftermath of the Guggenheim Museum. One question arose regarding what the museum was truly a symbol of: design critic Edwin Heathcote commented that the museum did not actually honor nor contribute to Bilbao’s local culture, denouncing the museum as a “transnational corporation’s franchise” merely owned by the Basque administration but managed according to the interests of New York’s Guggenheim foundation.<sup>37</sup> Additionally, the commodification of the museum into marketable products through consumable goods, as those offered by the museum gift shop, alienated the museum from the context in which it existed. The iconicity of the building’s form and the recognizability of its curves spoke even more to how the public’s experience of the museum and Bilbao had become mediated through aesthetics and commodities.

The truth of the “Bilbao Effect” had also been brought into question, with critics wondering how much of the city’s successes could accurately be attributed to the museum.<sup>38</sup> The successes of Bilbao catalyzed a trend in which other cities tried to feed into the “Guggenheim fever” and replicate Bilbao’s transformation by commissioning well-known architects to build unique cultural landmarks of their own.<sup>39</sup> Over a hundred cities reached out to the Guggenheim

<sup>36</sup> Rowan Moore, “The Bilbao effect: how Frank Gehry’s Guggenheim started a global craze,” *The Guardian*, <https://www.theguardian.com/artanddesign/2017/oct/01/bilbao-effect-frank-gehry-guggenheim-global-craze>

<sup>37</sup> Ibid.

<sup>38</sup> Joseph, “The Bilbao Effect - Impact of Frank Gehry’s Guggenheim.”

<sup>39</sup> Cosme del Olmo, “The ‘Guggenheim Effect’: Pride and Prejudices,” *Green European Journal*, November 25, 2017, <https://www.greeneuropeanjournal.eu/the-guggenheim-effect-pride-and-prejudices/>.

Foundation looking to found new museum branches, and a city in Poland even contacted Gehry to build a Bilbao museum replica as their new concert hall.<sup>40</sup> The building’s titanium-clad, flowing curves became a dominant aesthetic and symbol of modernity, with attempts to mirror the same image around the world.<sup>41</sup> Despite other cities’ enthusiasm, however, none of their projects were able to produce the socioeconomic and environmental improvements that Bilbao had.<sup>42</sup>

Critics had gone so far to call the “Bilbao Effect” a “myth,” but in fact, Bilbao’s case was more accurately deemed a “one hit wonder,” which owed much of its success to coincidence and luck rather than a straightforward, reproducible formula.<sup>43</sup> One advantage other cities had not considered was that the political consensus of Bilbao’s leaders facilitated the city’s long term planning.<sup>44</sup> Another factor separating Bilbao’s successes from the attempts of other cities was the latter’s emphasis on a single architectural project rather than a comprehensive urban plan.<sup>45</sup> Gehry’s design was indeed a highlight of Bilbao’s revitalization efforts, and likely its overemphasis in the media was responsible for other cities’ misconceptions. However, the museum was just one of many measures the city of Bilbao employed; initiatives also involved a new airport, metro, green spaces, and other infrastructure designed to attract tourism and also accommodate Bilbao’s inhabitants.<sup>46</sup> Thus, while the “Bilbao Effect” had been misleading, it was not necessarily false; rather, the iconicity of the museum and its famed designer overshadowed the complex factors that contributed to Bilbao’s success story.

<sup>40</sup> Ibid.

<sup>41</sup> Brott, *Digital Monuments*, 31.

<sup>42</sup> Cosme del Olmo, “The ‘Guggenheim Effect’: Pride and Prejudices.”

<sup>43</sup> Joseph, “The Bilbao Effect - Impact of Frank Gehry’s Guggenheim.”

<sup>44</sup> Cosme del Olmo, “The ‘Guggenheim Effect’: Pride and Prejudices.”

<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

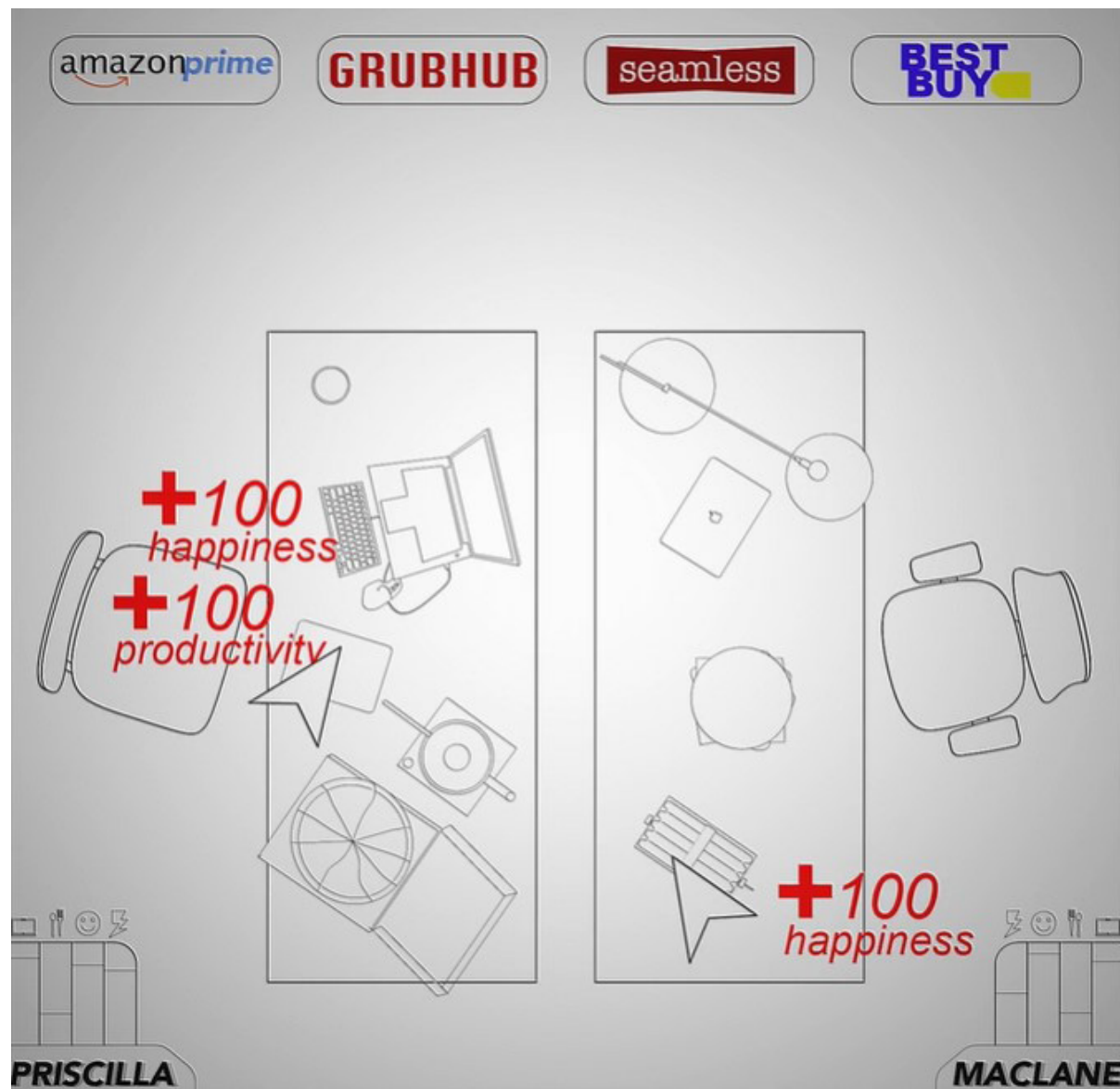
## Conclusion

Digital softwares and media platforms played an integral role in the development of architectural innovation and marketing. As with the case of The Guggenheim Museum in Bilbao, the mass circulation of photographs, drawings, and renderings transformed the building into a symbol for the city's new beginnings as well as an international pop culture icon. The mere outline of the museum's shape became immediately recognizable, so much so that it could be featured as a branded logo on sold commodities. Combined with Frank Gehry's own rising celebrity status as "starchitect," the museum and its urban effects rose to fame, with news of its radical aesthetics and attributed socio-economic successes so widespread that other global cities attempted to replicate them.<sup>47</sup> However, while the image of the Bilbao museum promised a new and improved reality for the city's inhabitants, it also obscured socioeconomic disparities and issues of poverty and gentrification the city still had yet to address. As effective as the architectural image was in capturing a momentous event, it also alienated the featured architecture from the full context of its surrounding social and economic conditions.

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<sup>47</sup> Plaza and Haarich, "The Guggenheim Museum Bilbao," 1460.

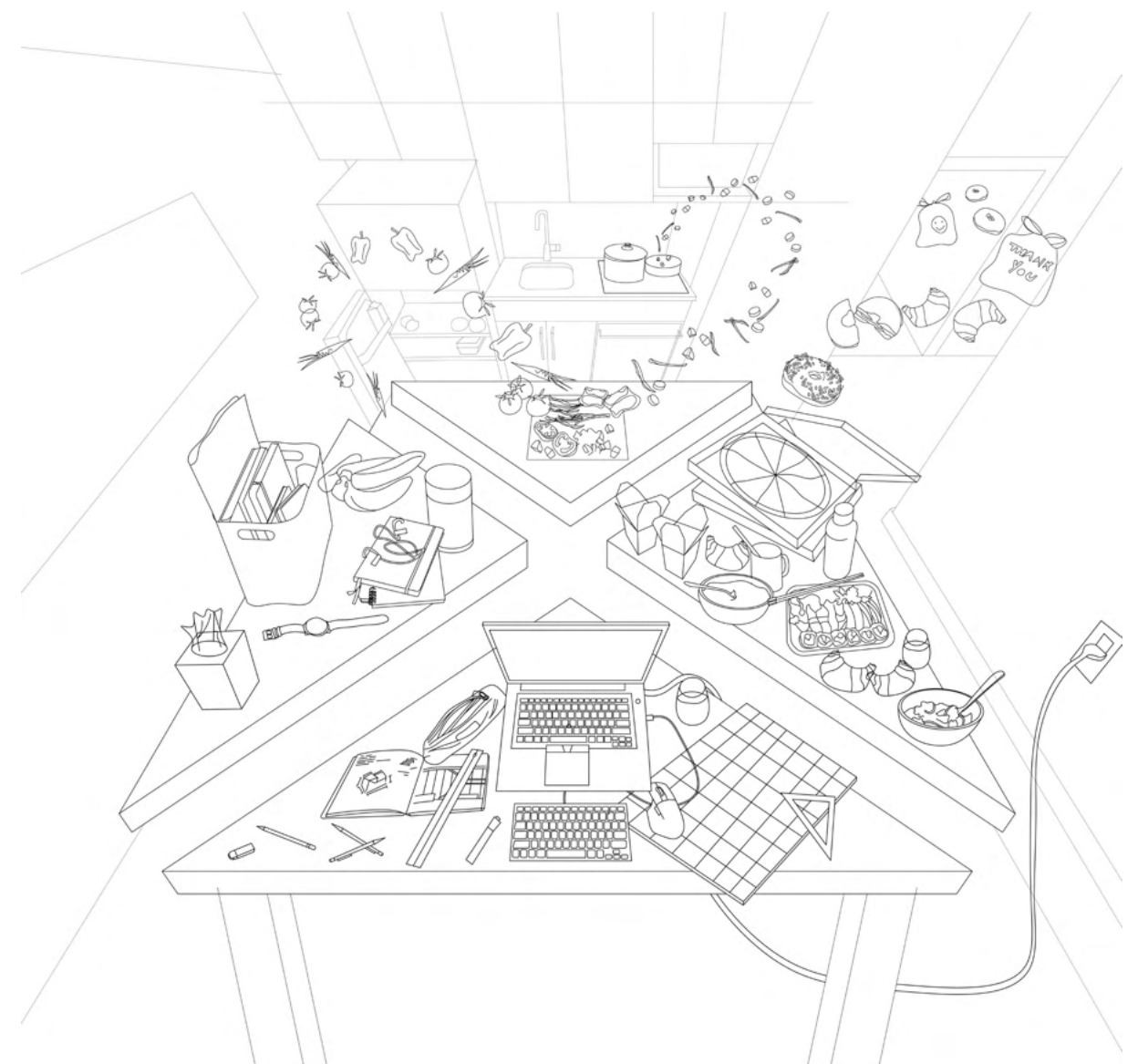




Daily routines, food and product consumption designed as a video game  
/ animation produced with Maclane Regan

## FOOD + FLOWS

ADR II, Spring 2021 / Violet Whitney



Organized chaos: apartment kitchen counter as workspace, food preparation and consumption areas, and storage

Priscilla Auyeung

Feasting + Fasting

Donuts and Diaspora:

The Rise of Cambodian Donut Shops in Shaping the American Dream

Almost 80% of the independent donut shops in California are owned by Chinese-Cambodians.<sup>1</sup> This is largely due to the influence of Ted Ngoy, who, now deemed the “Donut King,” had started his pastry empire after fleeing the Khmer Rouge rule of Cambodia during the 1970s. While Ngoy is credited for popularizing the now well-known pink-colored donut boxes, his impact goes far beyond the dessert’s packaging. In addition to defining his own American Dream through selling donuts, Ngoy helped to also provide others political asylum and economic opportunity. The history of donut shops is complex, and an analysis of their cultural significance involves an understanding of the political climates surrounding their rise as well as their importance in defining immigrants’ conceptions of ethnic identity and success. This paper thus takes into account concepts of opportunity, labor, community, and ownership in its investigation of how the donut shop shaped the assimilation of Asian refugees and immigrants into their new American lives.

The Khmer Rouge regime began in 1975 when their troops stormed and claimed Phnom Penh, Cambodia’s capital.<sup>2</sup> Determined to create a “new Cambodia,” Khmer Rouge leader Pol Pot renamed the country Democratic Kampuchea and set out to disrupt and restructure

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<sup>1</sup> Seth Mydans, “Long Beach Journal; From Cambodia to Doughnut Shops,” *New York Times*, May 26, 1995, sec. A, p. 10,

<https://www.nytimes.com/1995/05/26/us/long-beach-journal-from-cambodia-to-doughnut-shops.html>.

<sup>2</sup> Sucheng Chan, “Cambodians in the United States: Refugees, Immigrants, American Ethnic Minority,” *Oxford Research Encyclopedia of American History*, September 3, 2015, <https://doi.org/10.1093/acrefore/9780199329175.013.317>.

FEASTING + FASTING

Feasting and Fasting, Fall 2021/ Ateya Khorakiwala



Cambodia's social order.<sup>3</sup> Immediately, Phnom Penh and other major urban areas were evacuated; residents were sent to work in the countryside while educated Cambodians or any professionals such as teachers, engineers, and doctors were identified and executed.<sup>4</sup>

Cambodians began to flee in three separate waves, the first of which was assisted by President Gerald Ford's task force created in preparation for the flow of refugees to the United States.<sup>5</sup>

Southern California quickly became a major destination for these refugees, and Long Beach soon became known as the "Cambodian capital of America," now home to the largest population of Cambodians aside from the country itself.<sup>6</sup> This was partly influenced by the small groups of Cambodian students there who were able to study at universities in Los Angeles and Long Beach due to arrangements made in the 1950s between the Cambodian government and the university campuses.<sup>7</sup> Even when Cambodia severed their diplomatic relations with the United States, these former students stayed in California and went on to become sponsors for many first-wave refugees.<sup>8</sup> They even went on to found the Cambodian Association of America, which played an essential part in helping incoming refugees in later years.<sup>9</sup> Although there had not yet been any Cambodian communities established in the area, these students and the aid they provided laid the foundation for a sense of ethnic familiarity within Southern California.

Another major contributor to the establishment of Cambodian communities within Southern California was the leadership of refugees like Ted Ngoy. He had arrived in California on one of the earliest refugee flights in 1975 with his wife Suganthini, their three children as well

<sup>3</sup> Thomas Clayton, "Building the New Cambodia: Educational Destruction and Construction under the Khmer Rouge, 1975-1979," *History of Education Quarterly* 38, no. 1 (1998): 1-2. <https://doi.org/10.2307/369662>.

<sup>4</sup> Ibid, 2.

<sup>5</sup> Chan, "Cambodians in the United States: Refugees, Immigrants, American Ethnic Minority".

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

as adopted nephew and nieces.<sup>10</sup> After finding an American sponsor then entering the donut business to become the first Southeast Asian trainee at the well-known chain, Winchell's, Ngoy became the first Chinese-Cambodian to buy a donut shop in 1977.<sup>11</sup> As Ngoy and his family began to make a living for themselves, they were able to expand and purchase more shops, which they were then able to lease to other refugee families to help set up their new American lives as well. Once Pol Pot's rule was overthrown in 1979, more Cambodian refugees fled to the U.S. seeking political asylum.<sup>12</sup> Previously on the receiving end of sponsorship, Ngoy himself had now become a sponsor, helping over a hundred families through financial loans, housing, and importantly, their own donut shops.<sup>13</sup> By sharing the successful business model of the privately-owned donut shop, Ngoy was not only assisting others in earning a living; he was also effectively passing on a new way of life and a form of stability to others, who like him, had come from a place of instability. Through this, Ngoy's family helped to establish a profitable business model for other Cambodian refugees, thereby further assisting them through paving a path for assimilation into their new American lives. It is in this way that Cambodian-owned donut shops proliferated so greatly through California and came to dominate the market, pushing even their original sponsor, Winchell's, from their top spot in the donut industry. For a Cambodian community of such "recent vintage" and without established social and economic resources, these kinds of informal relations were key in forming the strong ethnic community that persists there today.<sup>14</sup> The shared socioeconomic circumstances, educational and cultural backgrounds as well as traumas led to the bonding of these refugees in their success as well.

<sup>10</sup> Vibeke Venema, "The Donut King who went full circle - from Rags to Riches, Twice," *BBC News*, November 28, 2020, <https://www.bbc.com/news/stories-54546427>.

<sup>11</sup> Gen Leigh Lee, "Chinese Cambodian Donut Makers in Orange County: Case Studies of Family Labor and Socioeconomic Adaptations," *The State of Asian Pacific America: Reframing the Immigration Debate: A Public Policy Report* (1996): 211.

<sup>12</sup> Venema, "The Donut King who went full circle."

<sup>13</sup> Ibid.

<sup>14</sup> Lee, 207.

As thousands of private, family-owned stores took over the 1980s economic scene, donut shops started to become a reliable, easily-shared business model, especially for the Cambodian refugees.<sup>15</sup> One main reason for this was the low barriers to entry in operating a donut shop. For instance, workers and shop owners did not need to be fluent in English to make or sell donuts.<sup>16</sup> Additionally, although the work was intensive, the skills necessary to carry out the labor could be easily learned.<sup>17</sup> Regardless of educational background, these skills could also be easily shared with other family members, whose assistance became even more heavily relied upon as the donut market became more saturated. As in the case of Southern California, donut shops there operated for increasingly long hours, resorting to the increased labor utilization, perhaps even “exploitation,” of shop owners’ own families in order to remain competitive.<sup>18</sup>

The ability for shop owners to depend upon their own labor as well as the labor pool consisting of immediate family members was key to the survival of their businesses. Not only did doing so allow for these donut shops to employ as few workers as possible, thereby minimizing labor costs, sourcing labor in this way also allowed shop owners to operate with maximum flexibility. Taking advantage of unpaid family labor meant all family members could be expected to work as long as necessary and carry out the most mundane tasks: Christina Nhek, having grown up assisting at her relative’s Long Beach donut shop, recalls her time was spent only ever “cleaning things” and folding donut boxes.<sup>19</sup> Other forms of familial labor took place outside of the shops as well and were also crucial to the smooth operation of the businesses. Usually taken on by the women in the family, tasks such as childcare and housecleaning were

<sup>15</sup> Lee, “Chinese Cambodian Donut Makers in Orange County,” 206.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

<sup>18</sup> Erin M. Curtis, “Selling Donuts in the Fragmented Metropolis,” *American Chinese Restaurants*, (2019): 65.

<sup>19</sup> Ibid.

just as essential as they allowed those working in the stores to continue doing so for as long as possible.<sup>20</sup>

The ability to rely upon unpaid labor was not limited to only members within a family but also extended beyond to other Cambodians. Additional labor often came in the form of Cambodian apprentices, who usually worked for free in exchange for the benefit of learning the business and acquiring the skills to eventually run their own.<sup>21</sup> Whether the labor was sourced from immediate family members or other Cambodians, there seemed to be an unspoken understanding justifying their unpaid efforts. With family members, even Cambodian children understood their direct roles in helping to ensure their family’s survival. They were aware that their dedicated efforts would go towards not only securing financial stability for their families but also as an investment in themselves and their own futures. The income often allowed shop owners to pay for their children to receive higher education.<sup>22</sup> Susan Chhu’s three children, who had worked at Sunrise Donuts while growing up in Southern California, were all able to eventually secure white collar careers.<sup>23</sup>

Similarly, there perhaps was also an innate understanding amongst workers who, though not associated with shop owners directly by blood, shared a bond that was forged through being of the same ethnic identity. Having fled the same horrors back home and come to a foreign country to face the same socioeconomic challenges, refugees were able to form a dependable network amongst themselves and fellow Cambodians. Together, the benefits of low-to-no cost, familial and ethnic labor as well as the lack of language and skills barriers turned owning and operating a donut shop into an “entrepreneurial niche” for Cambodian refugees seeking

<sup>20</sup> Curtis, “Selling Donuts in the Fragmented Metropolis,” 66.

<sup>21</sup> Ibid.

<sup>22</sup> Lee, “Chinese Cambodian Donut Makers in Orange County,” 206.

<sup>23</sup> Curtis, 66.



self-employment.<sup>24</sup> The donut shop came to be understood across generations and amongst ethnic Cambodians as a “collective venture,” to which all were in contribution to “ensure immediate survival and afford upward mobility to future generations.”<sup>25</sup> Coming from the harsh political climates of their homeland, entry into the donut business offered to refugees a sense of familiarity as well as new opportunities for financial independence and cultural assimilation.

There are some intriguing parallels that could be made between refugee immigrant experiences like Ngoy’s and the horrors that were taking place back home in Cambodia. It could be said that Ngoy’s success as the “Donut King” came from the exploitation of his own family members and fellow Cambodians; after all, it is with their labor contributing to the operations of his 60 owned donut shops that eventually allowed for him to become a millionaire.<sup>26</sup> The dichotomies between the rich and poor, the exploiter and exploited, were the very social dynamics that the Khmer Rouge claimed to fight against, the apparent reasons for a war that had caused all these refugees to flee in the first place.<sup>27</sup> However, his achievement of his American Dream undoubtedly helped others to redefine and achieve their own. Those who worked for him or other shop owners understood that by doing so, regardless of the wages received or hours of labor committed, they were receiving business skills training and networking opportunities in return. Additionally, these labor relations allowed for Cambodian refugees and immigrants to connect with one another and strengthen community ties. Thus, while the relationship between shop owners like Ngoy and employees may be viewed as exploitation, the very exploitation the Khmer Rouge intended to combat, this co-dependence and co-reliance amongst them could also be seen as a form of solidarity.

<sup>24</sup> Lee, “Chinese Cambodian Donut Makers in Orange County,” 206.

<sup>25</sup> Curtis, “Selling Donuts in the Fragmented Metropolis,” 66.

<sup>26</sup> Venema, “The Donut King who went full circle - from Rags to Riches, Twice.”

<sup>27</sup> Clayton, “Building the New Cambodia,” 4.

There also exists a parallel between the involvement with agricultural and industrial practices between the Cambodians who had been left behind and those who had escaped. As the Khmer Rouge heavily emphasized the importance of modernized agriculture as a foundation for social change, hundreds of thousands of Cambodians were sent to work in the fields where many died due to hunger or being overworked.<sup>28</sup> Although the Cambodian refugees who fled managed to escape the harsh conditions of agricultural work back home, many of them involved in the donut business did not stray far from related practices. In fact, not only had Cambodian refugees become donut shop owners and operators, but many of them had also become donut ingredient and baking machinery suppliers. Ngoy’s own nephew, Bun H. Tao, eventually became one of the most prominent bakery wholesalers after founding his own supply company, B & H Distributors, which directly provided fellow Cambodians the necessary machinery and mixes to run their own donut shops.<sup>29</sup> It is interesting to consider this correlation. Cambodians back in the home country fought to survive in the fields as part of the Khmer Rouge’s agenda for a revolution; simultaneously, the Cambodian refugees in America were leading their own revolution, taking ownership of all processes of the donut industry from running their own shops to even handling the machinery and the doughs, sugars, and other ingredients that went into the prefabricated mixes.

The development of Cambodian-run donut shops helped to solidify a sense of ethnic community that had not previously been in Southern California prior to the arrival of refugees. Though generic in its original design, the American donut shop was a medium through which Cambodians could embed their own cultures and also make their own. Instead of only following standardized donut recipes, some shops personalized theirs to offer special flavors.<sup>30</sup> This

<sup>28</sup> Clayton, “Building the New Cambodia,” 2.

<sup>29</sup> Curtis, “Selling Donuts in the Fragmented Metropolis,” 67.

<sup>30</sup> Ibid, 71.

individualization also presented itself in shops' decorations, for instance through Cambodian art on display or the dedication of space to Buddhist shrines.<sup>31</sup> Cambodian refugees had an opportunity through their donut shops not only to redefine their futures but in a way, their past as well. While other immigrants may have wanted to preserve their cultures, Cambodians "had to resuscitate their culture from memory" due to the destruction carried out by the Khmer Rouge to Cambodian society.<sup>32</sup> These donut shops were opportunities to escape "Pol Pot time," a chance to revisit and newly introduce Cambodian dance, music, and religion.<sup>33</sup>

Finally, the unique labor pool of these donut shops were in reflection of the unique demographics in which these stores arose. The utilization of Asian and Latino labor mirrored the majority Asian and Latino populations which had dominated the Southern Californian neighborhoods in which they lived.<sup>34</sup> The concept of ownership was therefore not limited to the act of purchasing and running one's own business; ownership also took place in the form of personalizing what had originally been standardized. Despite coming to a foreign country with limited skills and resources, Cambodian refugees effectively combined "the uniformity of a franchise with the necessary specialization that a sprawling, fragmented metropolis demands."<sup>35</sup> All this was achieved while making their businesses their own, their shops ultimately becoming a reflection of their hardships as well as the "conscious processes" by which they "negotiated not only social capital, labor, finances, risks, and insecurities, but also place."<sup>36</sup>

While the complex histories behind Cambodian-run donut shops in California may remain largely unknown, their lasting impact is clearly visible through the continued proliferation of pink-colored pastry boxes, which had at the time been a key identifier for

<sup>31</sup> Curtis, "Selling Donuts in the Fragmented Metropolis," 71.

<sup>32</sup> Chan, "Cambodians in the United States: Refugees, Immigrants, American Ethnic Minority".

<sup>33</sup> Curtis, 71.

<sup>34</sup> Ibid, 70.

<sup>35</sup> Ibid, 71.

<sup>36</sup> Ibid.

Southern Californian shops and now become associated with donut businesses everywhere.

Although white cardboard was the standard, Ngoy, determined to be as affordable as possible, was keen to find a cheaper option and therefore decided upon boxes made from leftover pink cardboard stock that he was able to purchase at a lower price.<sup>37</sup> Saving the few cents per pink box proved financially significant, especially considering the large amounts of boxes the shops would go through.

These boxes held symbolic importance as well, with the pink color being "a few shades short of red," a lucky color in Chinese culture which Ning Yen, Ngoy's business partner at the time, had wanted in their boxes in order to bring fortune to their community of refugees. This pink color would also offer a hopeful contrast to the typical white, which is associated with death and mourning.<sup>38</sup> In this way, the significance of the pink box goes beyond its visually-appealing and cost-saving benefits. The pink box had inadvertently become a connection between refugees' two homes, its mix of white and red colors reminiscent of the refugees' connections with the traumas left behind in Cambodia and the new opportunities sought after in America. The pink box came to be embedded with emotional ties, the mere process of assembling them a moment of nostalgia for Susan Lim, who, having grown up in a donut shop run by Cambodian refugees, reminisces about how folding hundreds of the boxes was initially tedious but then became meditative for her.<sup>39</sup> The selling of donuts in pink boxes have also become tradition, with Lim continuing to use the same ones after taking over her parents' shop that they had bought back in 1984.<sup>40</sup> Ultimately, the longevity and perseverance of the pink box are tied deeply to its roots: for

<sup>37</sup> David Pierson, "Why Are Doughnut Boxes Pink? The Answer Could Only Come Out of Southern California," Los Angeles Times.

<sup>38</sup> Ibid.

<sup>39</sup> Ibid.

<sup>40</sup> Ibid.



mere consumers, the eye-catching color hints only at the sweetness that lies within, however for the shop owners and workers, the pink box evokes more bittersweet memories.

Coming to a foreign place, where these refugees had to face not only the challenges of how American society perceived and treated them but also the remnants of their own history and hardships, the donut shop became a socioeconomic equalizer and medium for re-defining ethnic identity. Through American sponsorship like that of donut chain Winchell's as well as that of other Cambodians, refugees were able to not only earn a living for themselves but also continue to support the livelihoods of their ethnically-related peers. Even with the physical distance from the war taking place back home, Cambodian refugees nonetheless had ties to their ethnic and cultural origins. The iconic pink boxes, initially intended to be red for good fortune, instead could be perceived as a mix of blood-like red and the white used for mourning. As social relations were challenged and destroyed in the home country, it became even more imperative for Cambodian refugees abroad to rely upon one another for survival. Although budding Cambodian communities did not yet have the longevity to have developed formal social and economic organizations, the informal networks formed through the rise of mom-and-pop donut shops unified Cambodian refugees and immigrants through their shared trauma and success.

## *Mom's Pickled Daikon* 醬蘿蔔

Recipe source: Wing Wong, Frank Auyeung  
Translated by: Priscilla Auyeung

### INGREDIENTS

For pickling:

1 large daikon  
Salt

For daikon mixture:

¼ apple, diced  
¼ asian pear, diced  
2-3 garlic cloves, sliced  
2-3 red chili peppers, sliced

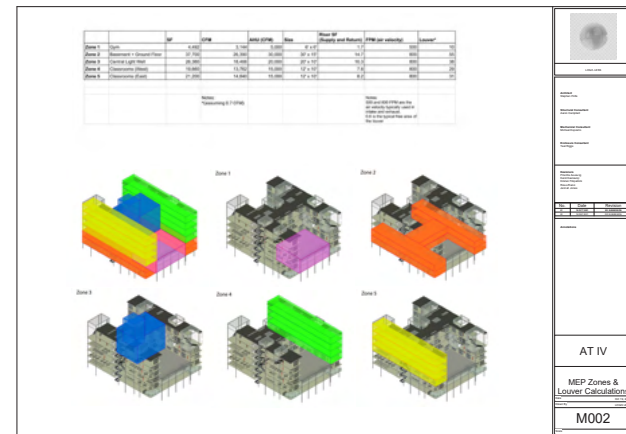
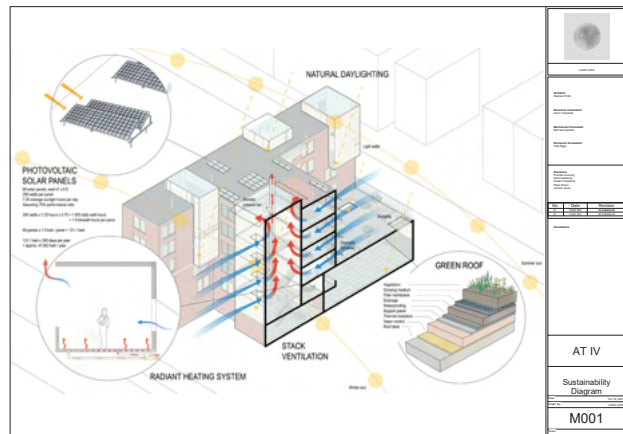
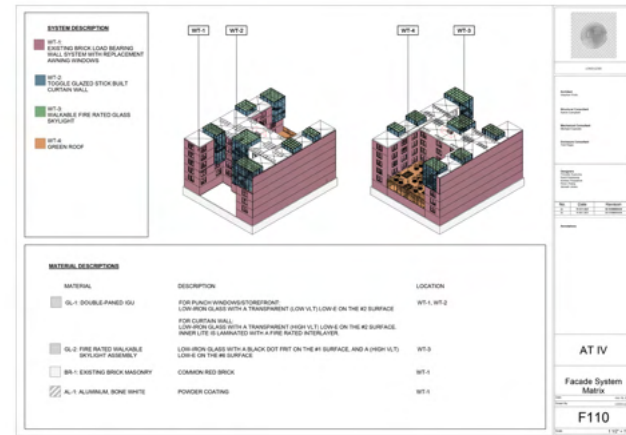
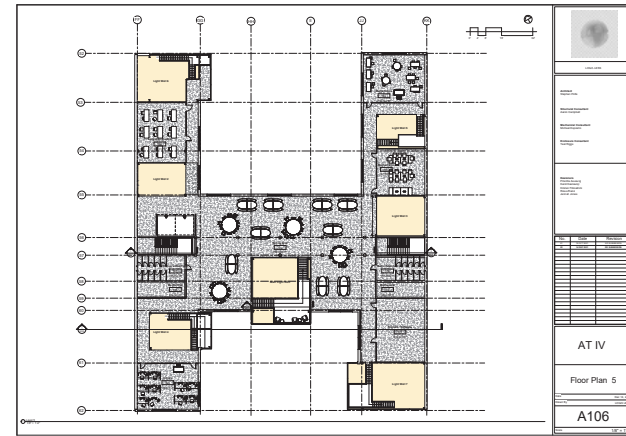
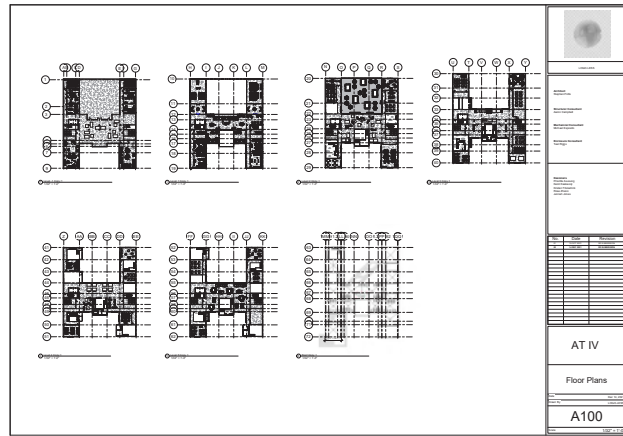
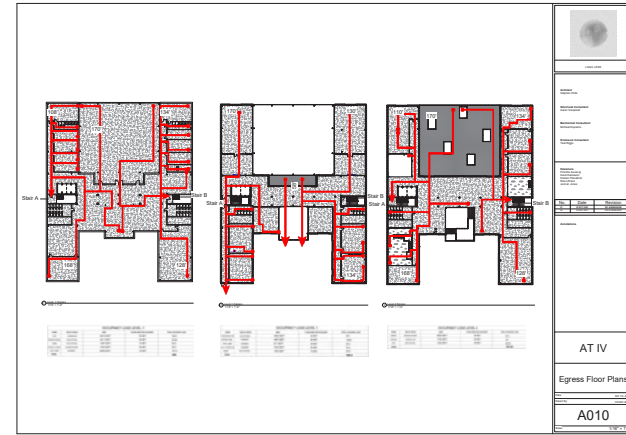
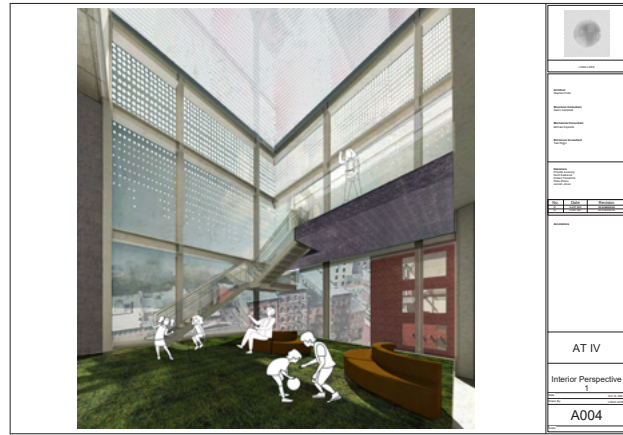
For sauce:

1 spoon honey  
1 spoon white sugar  
2 spoons oyster sauce  
3-4 spoons water  
½ spoon Maggi seasoning sauce  
5 spoons regular soy sauce  
5 spoons vinegar

For garnish:

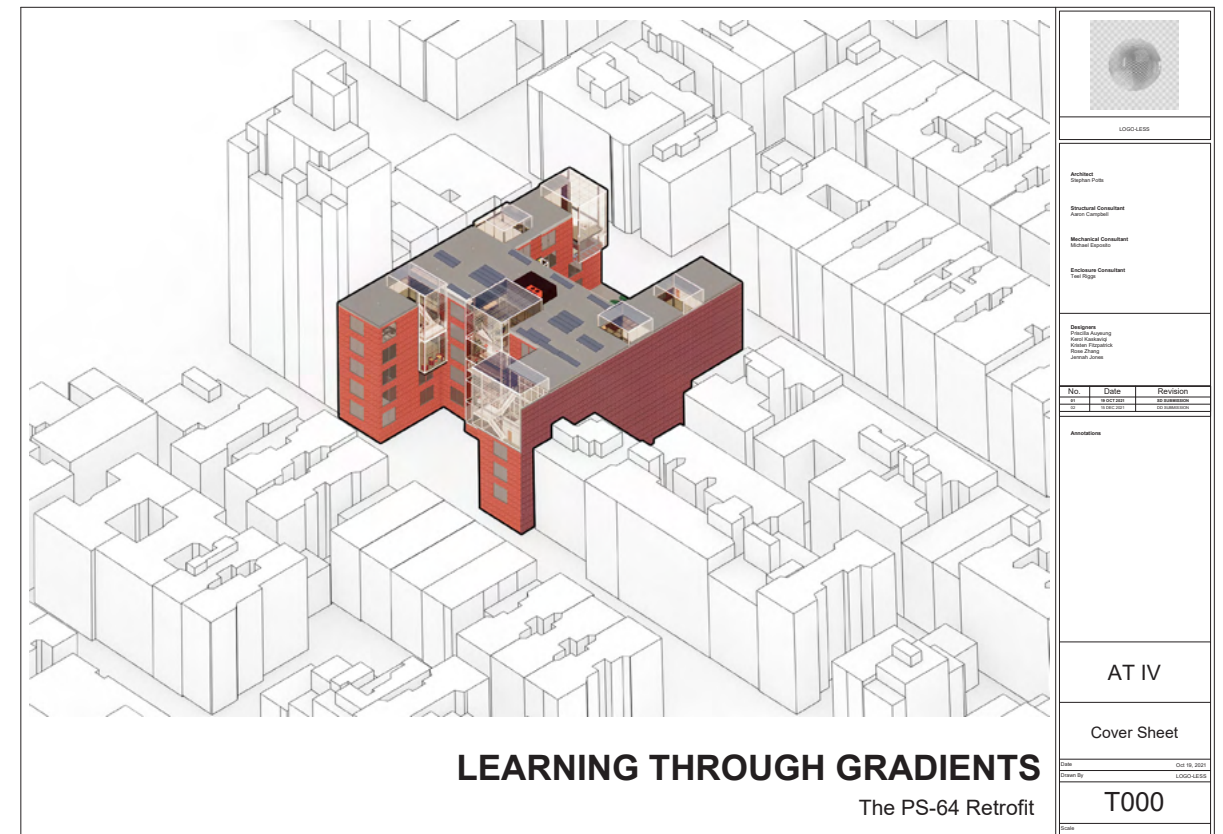
1 small lemon, sliced  
Cilantro, chopped  
Red chili pepper slices





# LEARNING THROUGH GRADIENTS

AT IV, Fall 2021 / Berardo Matalucci  
Collaborative project with Kristen Fitzpatrick, Jenna Jones, Kerol Kaskaviqi, Rose Zhang

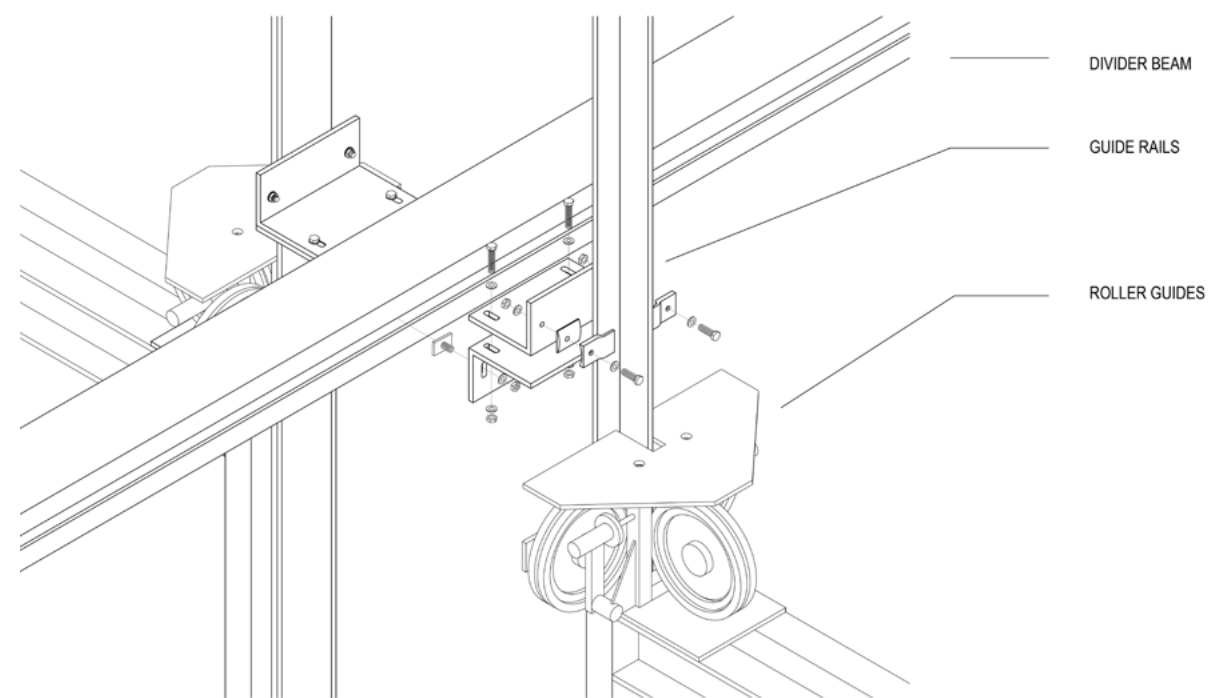






## ELEVATOR CAB

AT V, Spring 2022 / Nicole Dosso  
Collaborative project with Joan Du, Isaac Khouzam, Zida Liu







## THE WEB

The Outside In Project, Spring 2022 / Galia Solomonoff + Laurie Hawkinson  
Class collaborative project



Photo by Hazel Villena

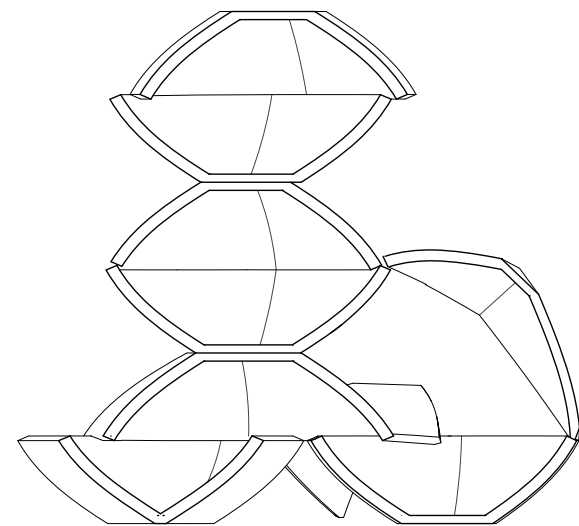
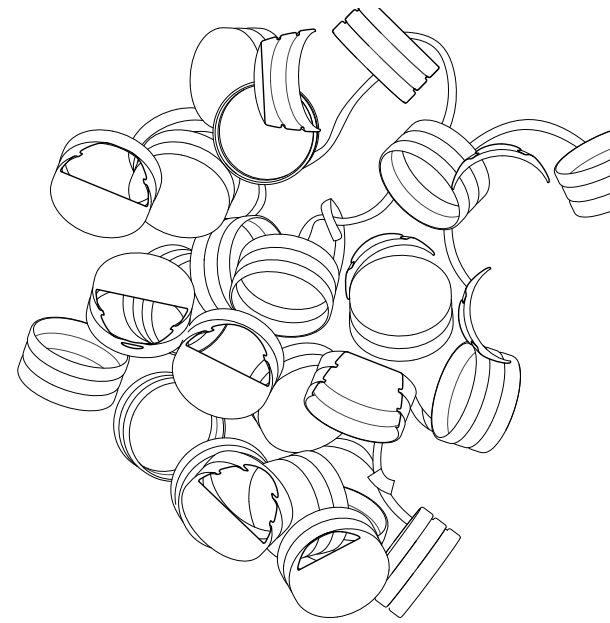
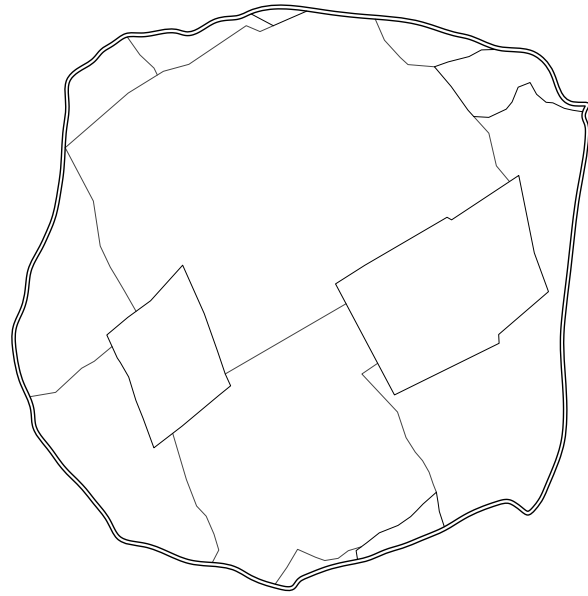




## CHIPRI TILES

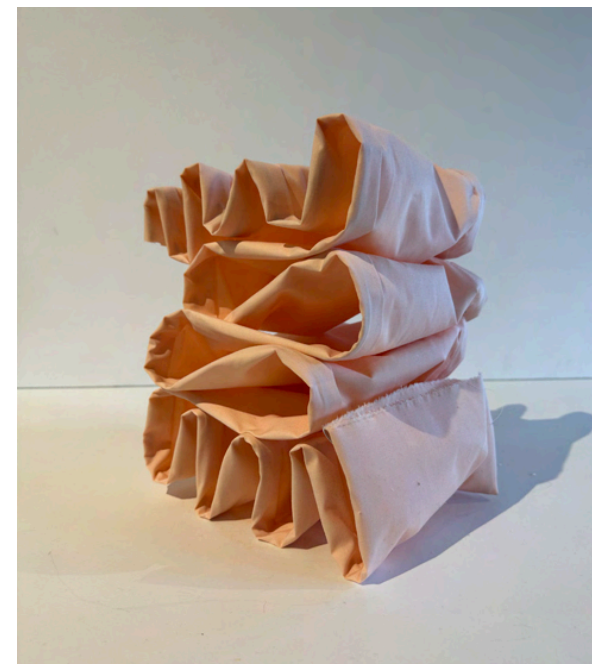
Transitional Geometries, Fall 2022 / Joshua Jordan  
Collaborative project with Chi Chi Wakabayashi





## MAKE

Make, Fall 2022 / Ada Tolla & Giuseppe Lignano







Sprouting microgreen bricks  
/ produced with Yifei Yuan + Clara Zhao

## MAKING WITH EARTH EXHIBITION

Making with Earth, Spring 2023 / Lola Ben-Alon  
Class collaborative project





