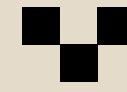




COLUMBIA



21/22

aad

GSAPP





The Wetland Residency  
The Choreography of Care  
Mushrooms at Avery  
Techniques of the UltraReal  
Relax GSAPP

# COLUMBIA

# GSAPP

21/22  
aad



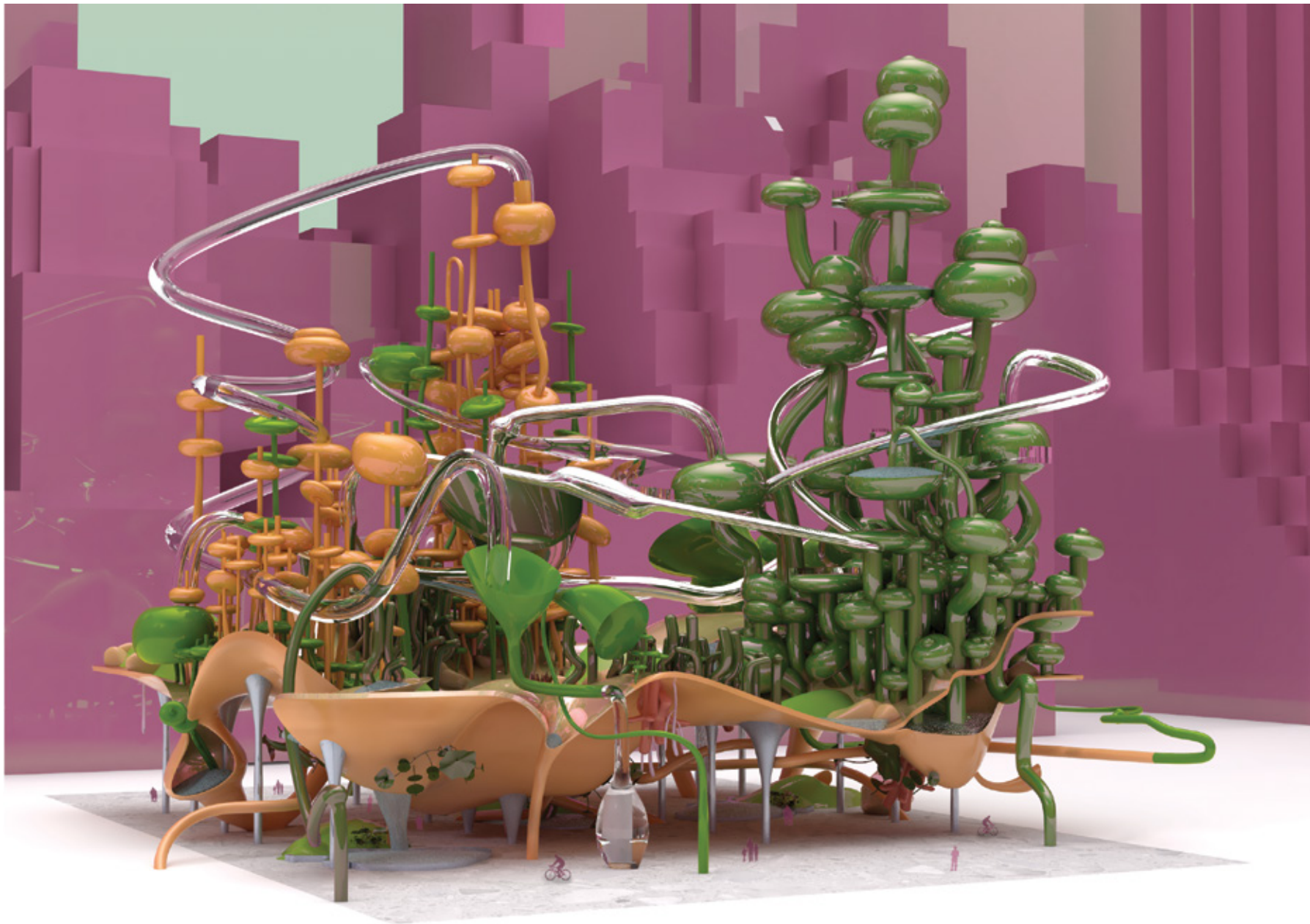
SUMMER 2021

# WETLAND RESIDENCY



COLUMBIA GSAPP / GO WILD STUDIO



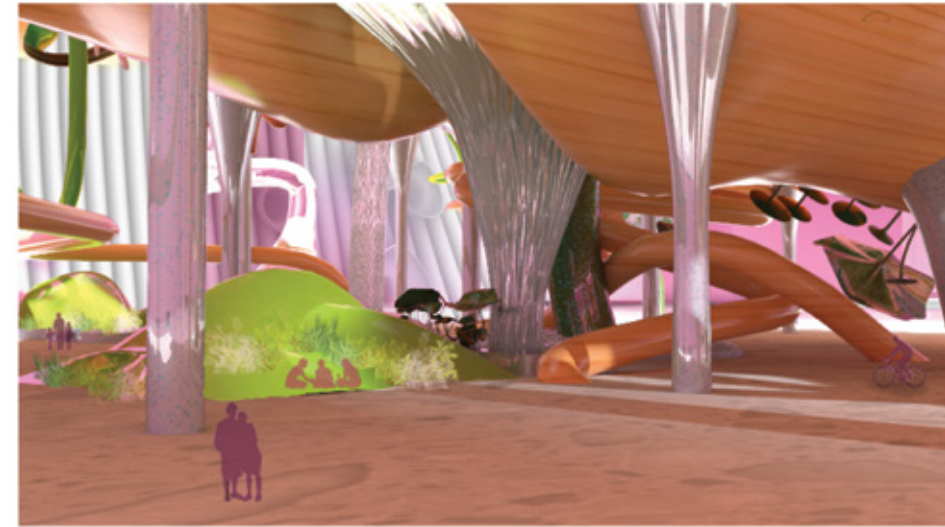
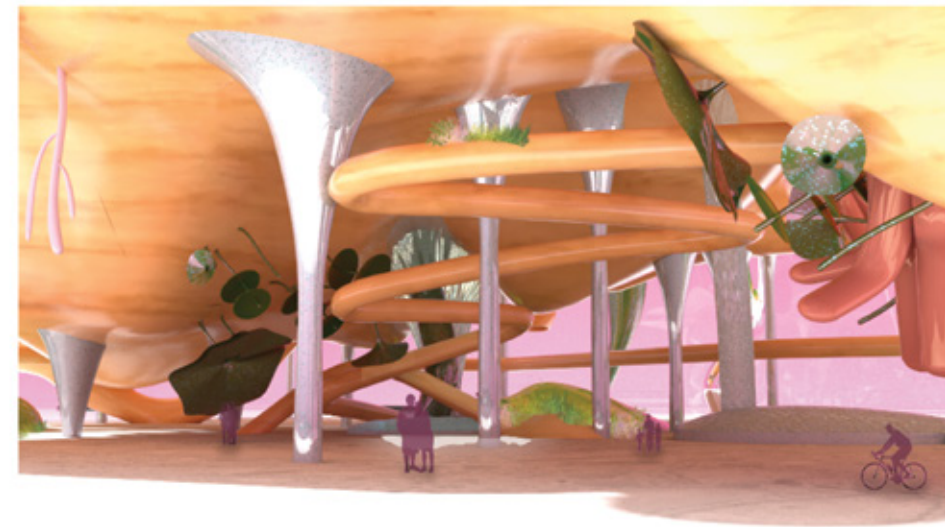
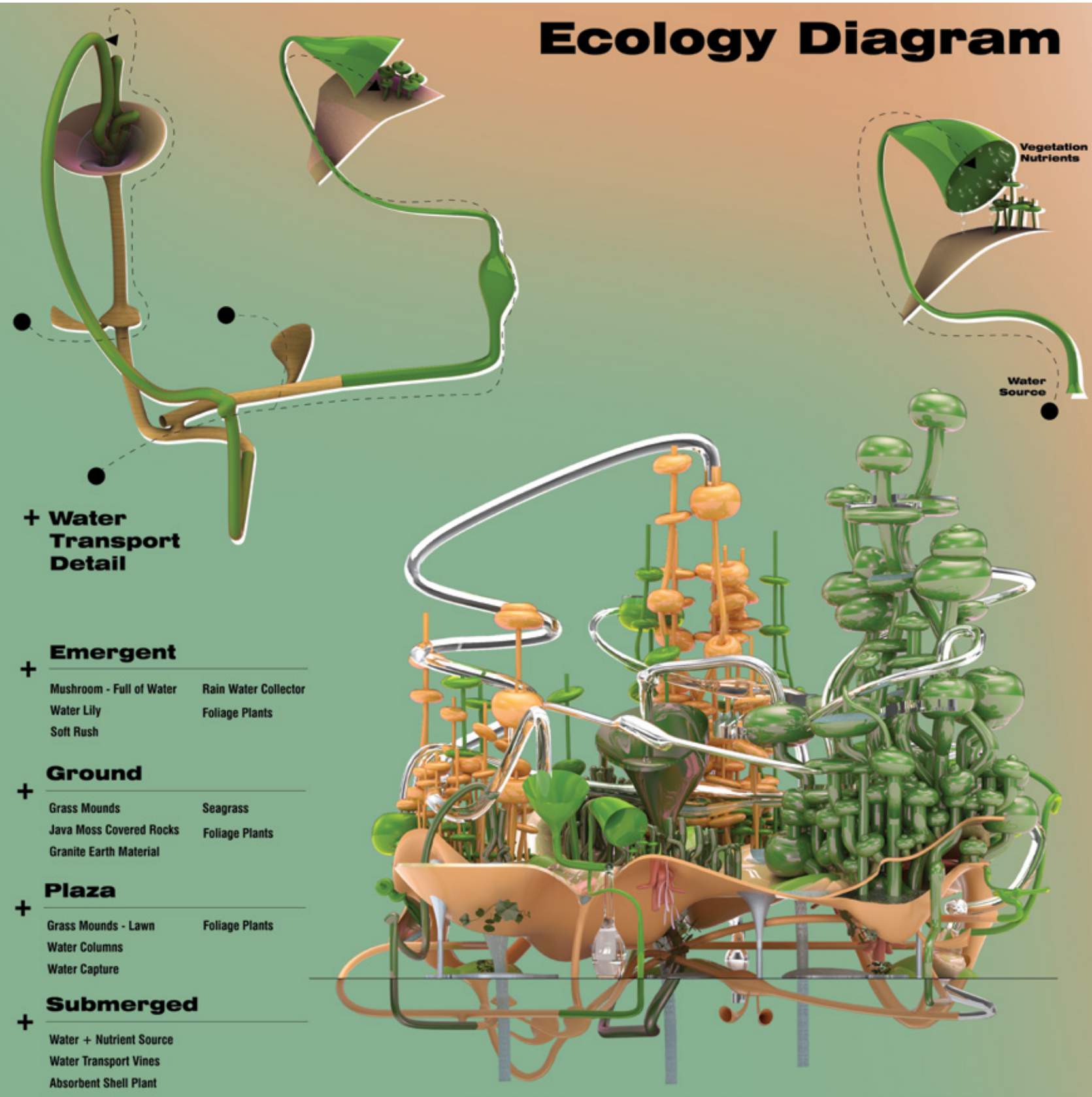


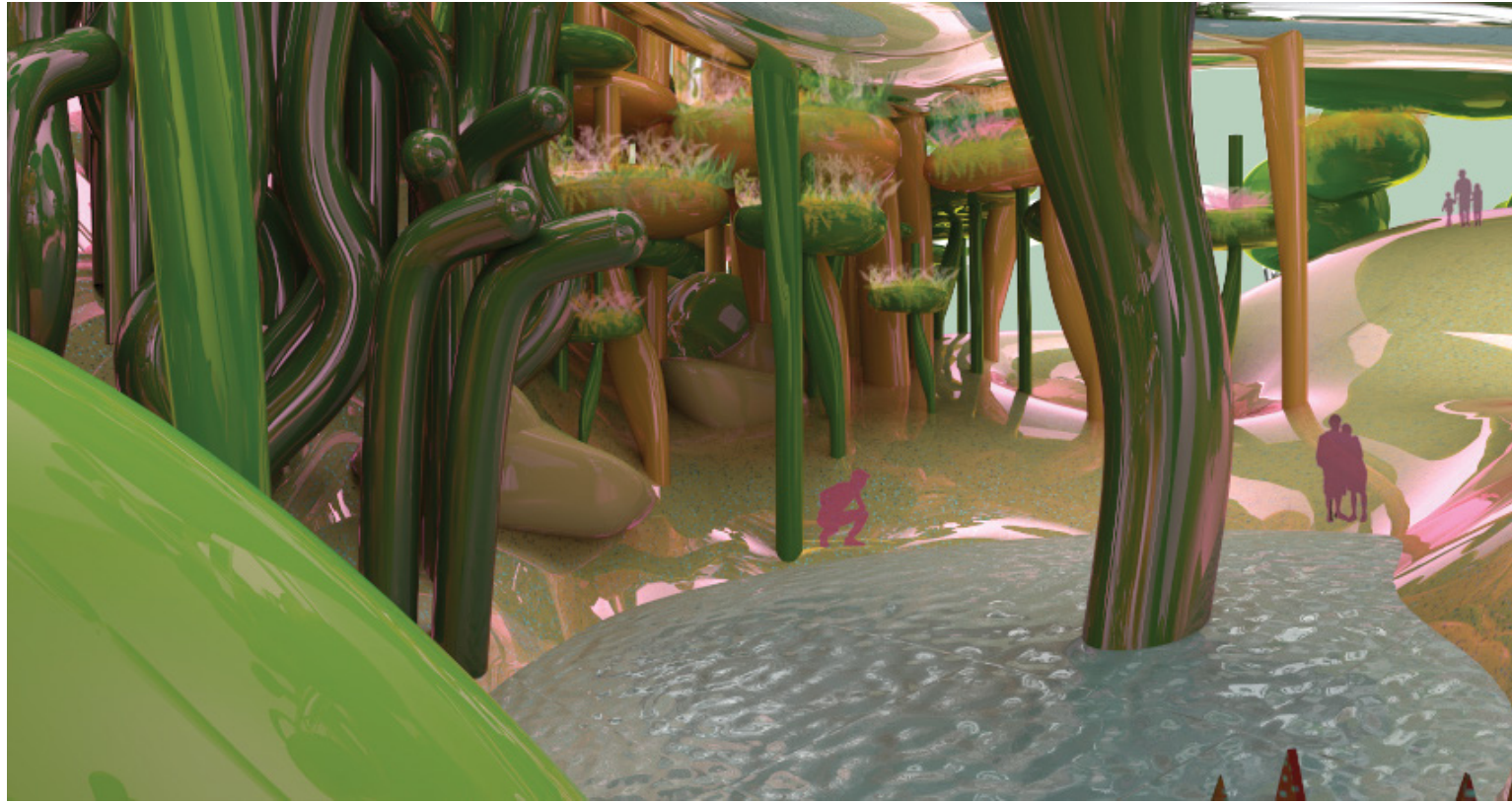
The Wetland Residency a wild vegetated public park, offers residencies and an open public plaza. As one enters the site they are greeted with a large open plaza that offers areas of rest as well as the opportunity to interact with the legs and structure of the site. The legs present four main points of entry to the main level. One travels from the street level plaza to the park level by a pneumatic capsule, sucking one throughout the site. Once at the main vegetation level, visitors are encouraged to weave in and out of the large-scale plant species and becoming completely immersed in nature. One can also rest in the open lawn mounds which present guests the opportunity to view the vegetation without being entangled in it. Some of the vegetation are artificial to cater to the structure and service spaces of the site. Multiple points in the park can transport

one from the main park level to the residencies. The mushroom structures also act as short term stay rooms for visitors. Transportation tubes wrap through vegetation and allow one to travel quickly from one side of the site to the next. For visitors wanting to freely explore they can walk on the main level park. A more controlled experience is presented for the elevated walkways. The site thrives on the relationship between above and below ground. The water or nutrients is swallowed by absorbent vines below ground level, which then is transported upward and feeds the ground vegetation. Some of the large scale mushrooms hold water and nutrients that feed the vegetation that grows on top of it. If a mushroom is not being used for public space, it is full of water feeding the secondary vegetation.



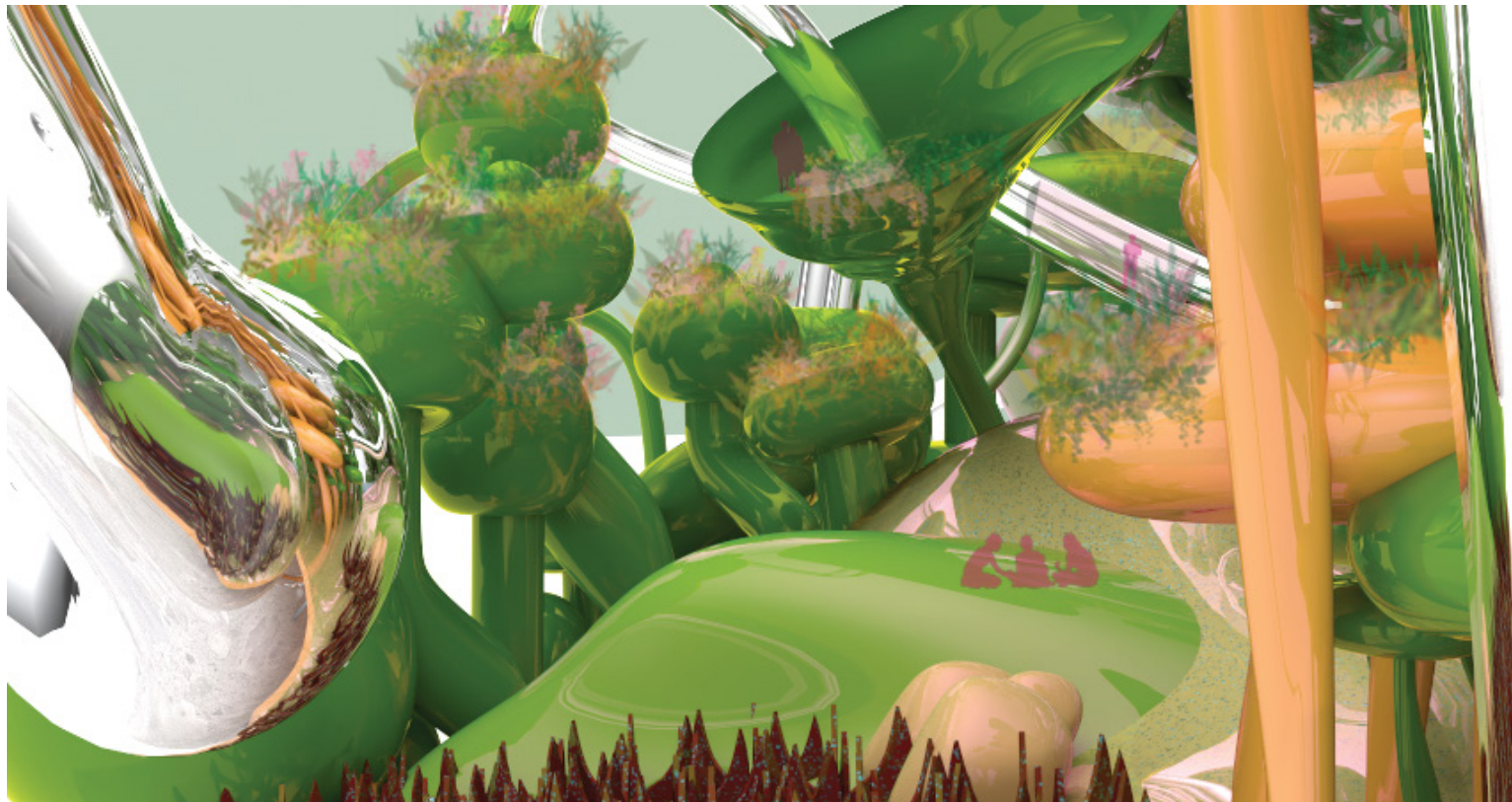
# Ecology Diagram





05.

//WETLAND RESIDENCY



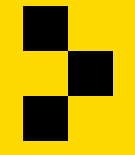
06.

//WETLAND RESIDENCY

*the  
choreography  
of care*



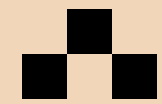
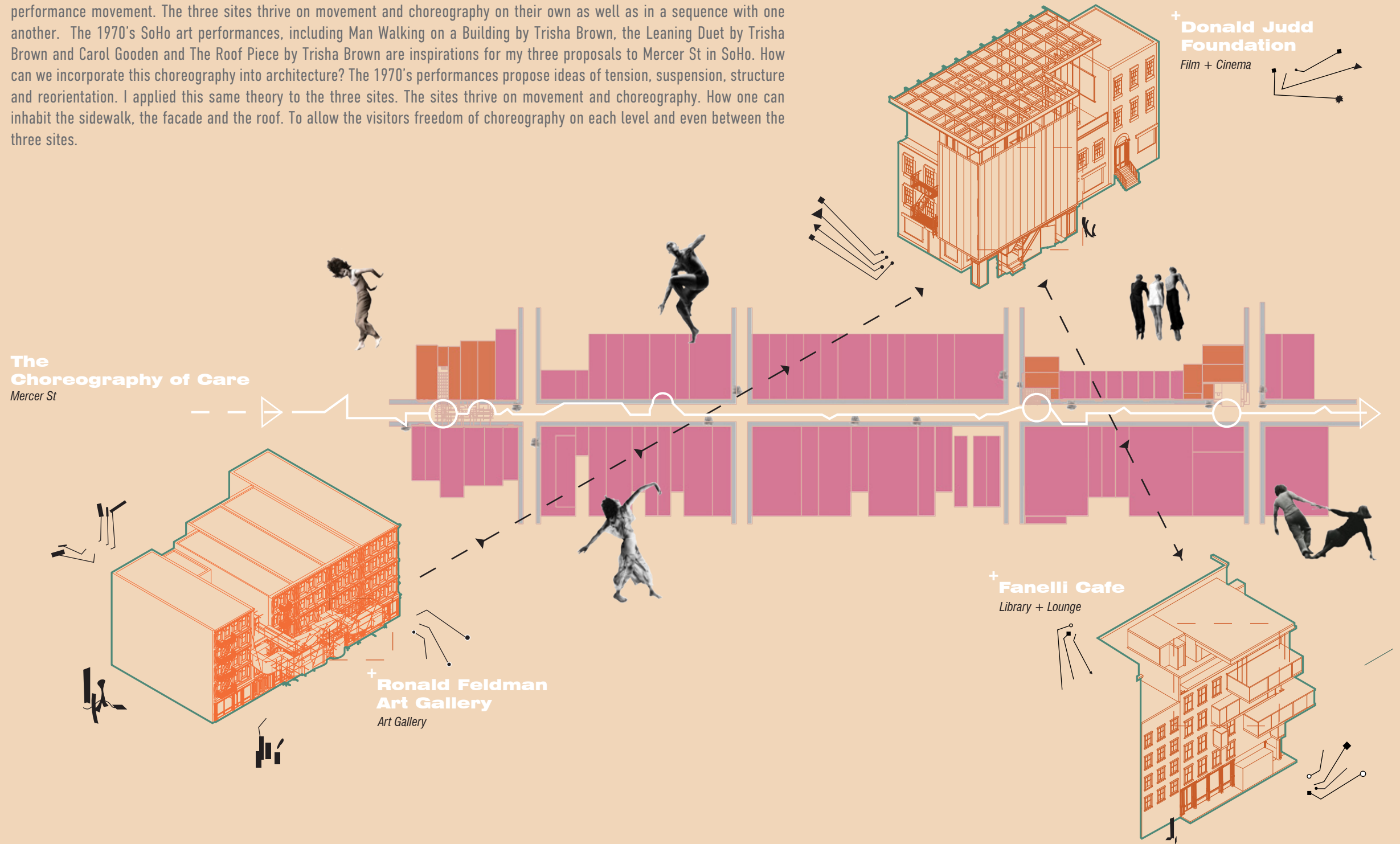
COLUMBIA GSAPP / TRANSMUTATION STUDIO  
SOHO NEW YORK, NY / FALL 2021



INSPIRED BY  
1970s SOHO



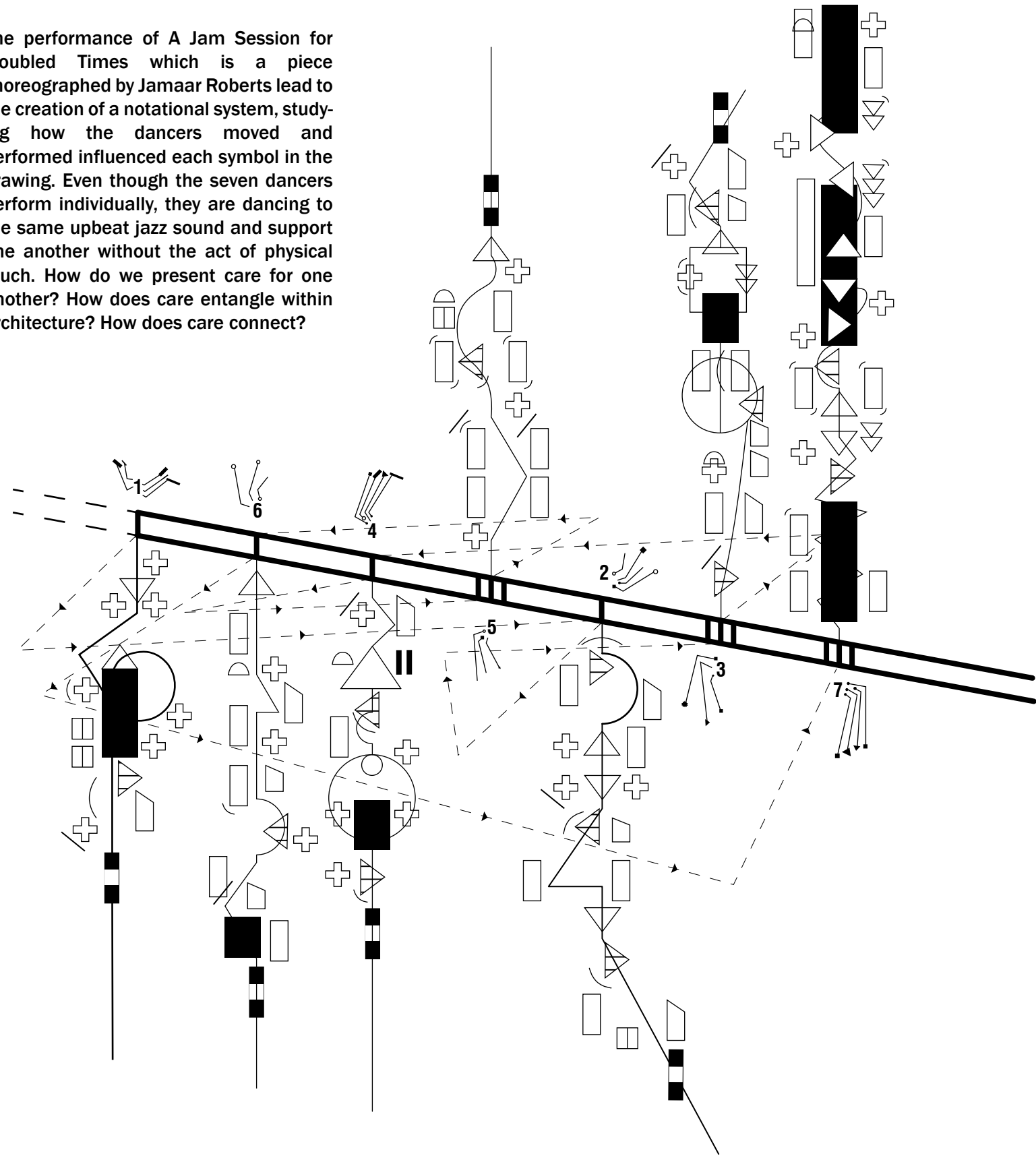
How can we peel back the layers of SoHo to let care naturally seep through? Care in SoHo is currently difficult to find, my proposal seeks to inspire community connection, art, culture, performance and education. Creating an architectural intervention for three historic and important sites on Mercer St that seek to incorporate theories and practices from the 1970's SoHo arts and performance movement. The three sites thrive on movement and choreography on their own as well as in a sequence with one another. The 1970's SoHo art performances, including Man Walking on a Building by Trisha Brown, the Leaning Duet by Trisha Brown and Carol Gooden and The Roof Piece by Trisha Brown are inspirations for my three proposals to Mercer St in SoHo. How can we incorporate this choreography into architecture? The 1970's performances propose ideas of tension, suspension, structure and reorientation. I applied this same theory to the three sites. The sites thrive on movement and choreography. How one can inhabit the sidewalk, the facade and the roof. To allow the visitors freedom of choreography on each level and even between the three sites.



how can we juxtapose the elite, exclusive retail culture of current SoHo with the choreography of care?



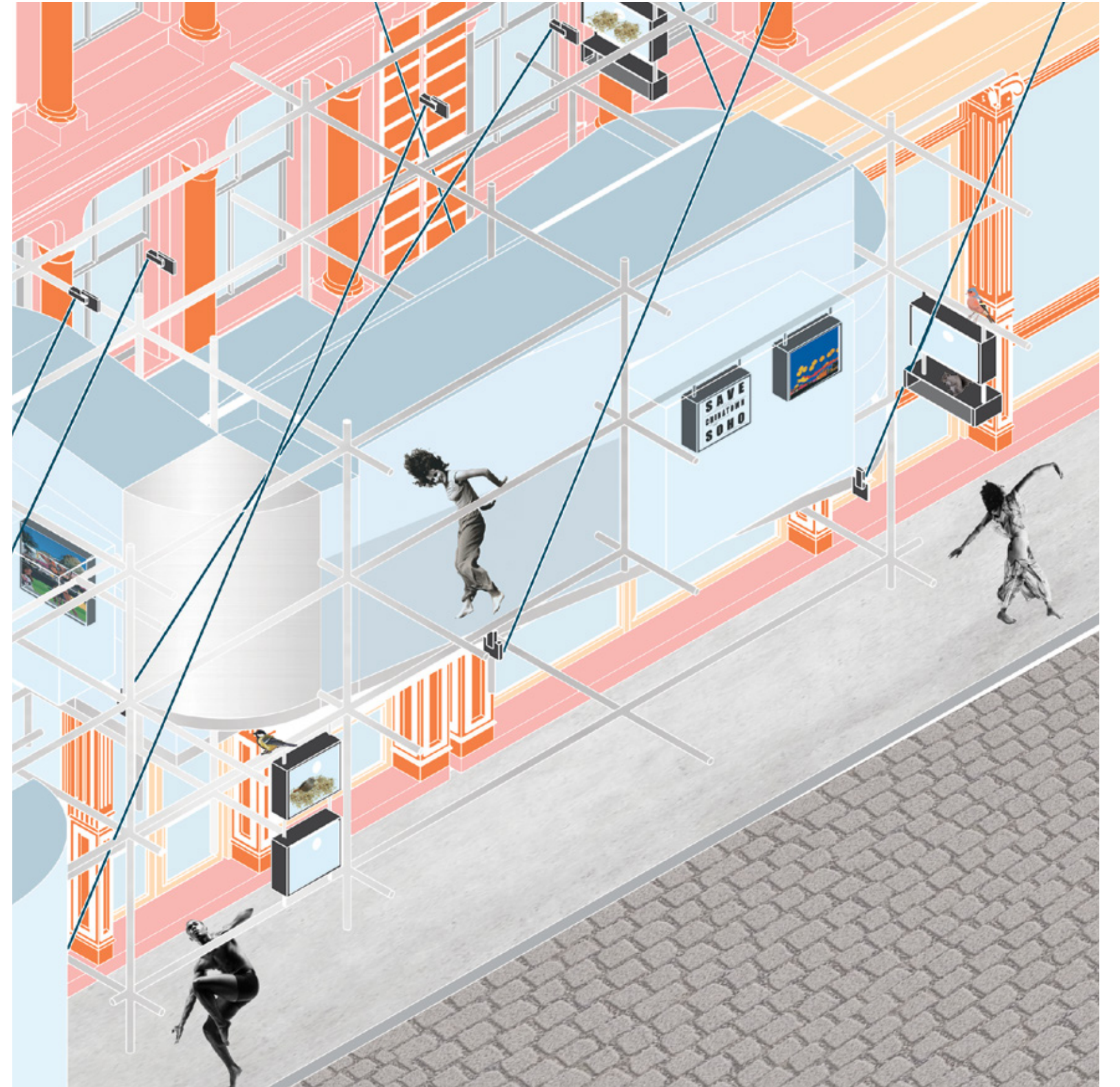
The performance of A Jam Session for Troubled Times which is a piece choreographed by Jamaar Roberts lead to the creation of a notational system, studying how the dancers moved and performed influenced each symbol in the drawing. Even though the seven dancers perform individually, they are dancing to the same upbeat jazz sound and support one another without the act of physical touch. How do we present care for one another? How does care entangle within architecture? How does care connect?





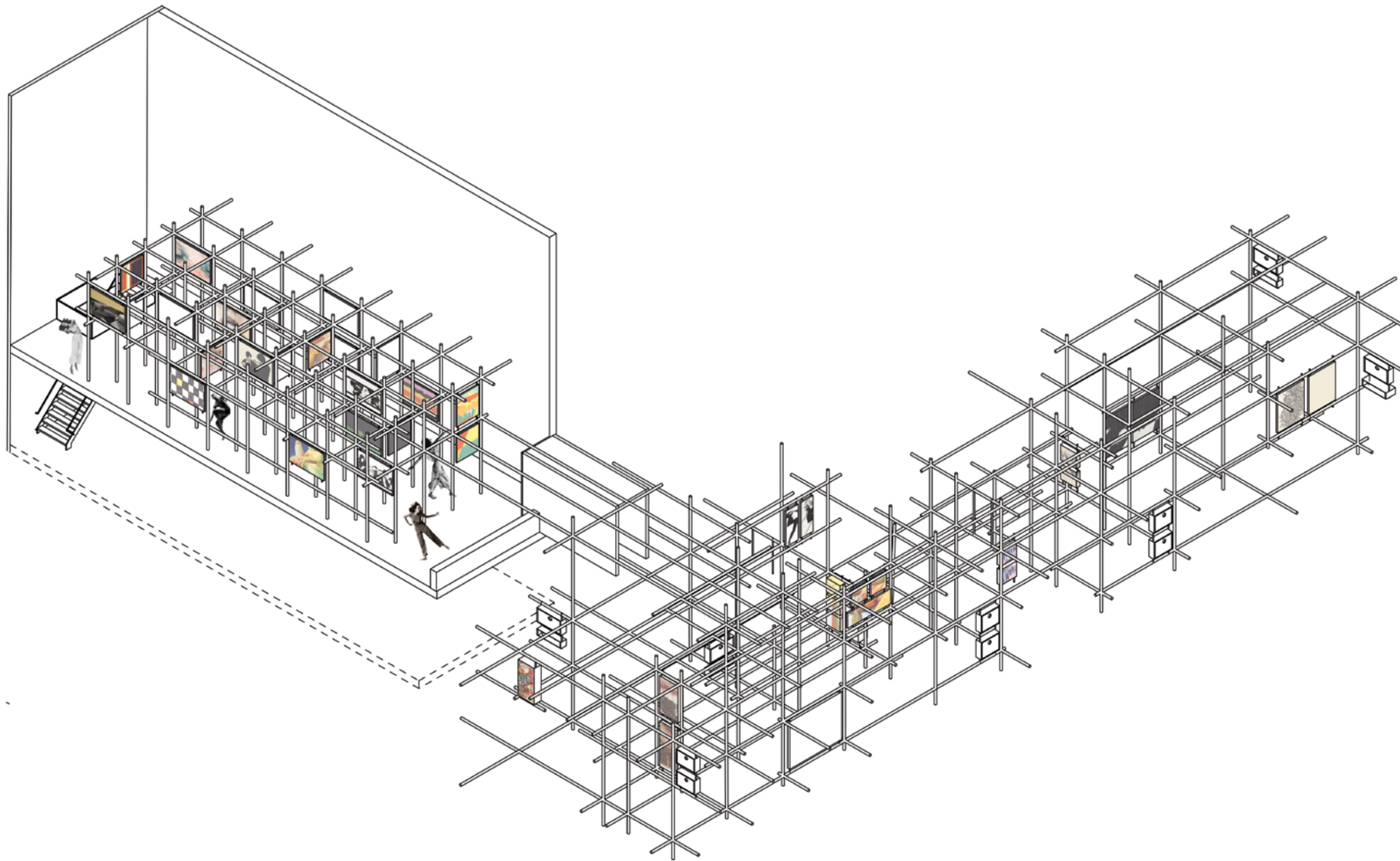
13.

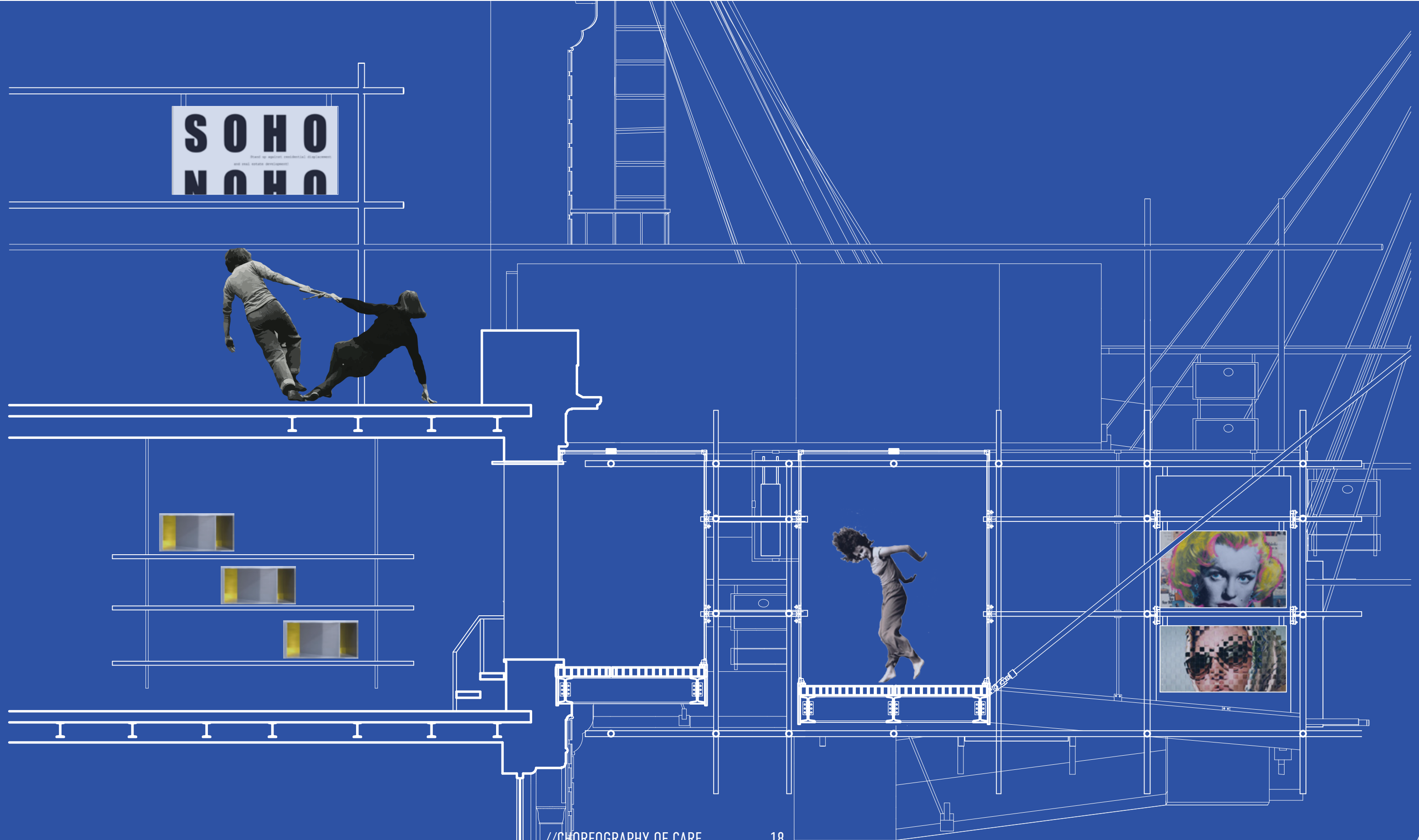
//CHOREOGRAPHY OF CARE



14.

//CHOREOGRAPHY OF CARE





**SOHO**  
STREET OF HISTORIC PRESERVATION DEVELOPMENT  
**NOHO**  
NEW HOUSING DEVELOPMENT





# mushrooms



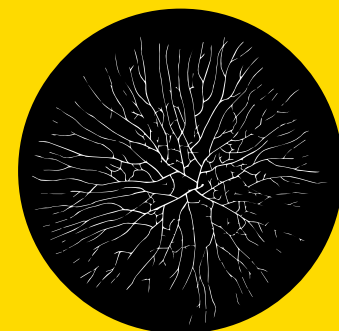
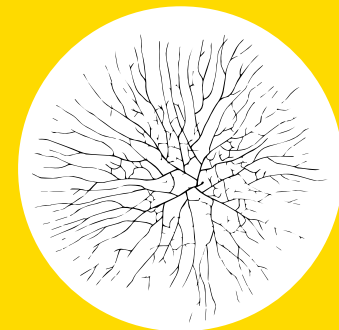
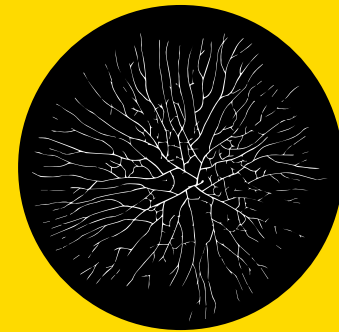
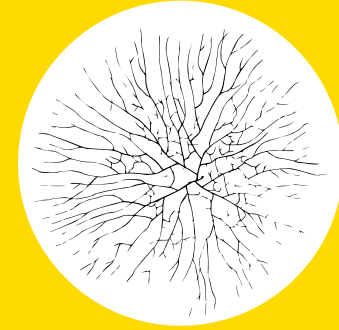


# mushrooms

/məʃˌruːm

a fungal growth that typically takes the form of a domed cap on a stalk with gills on the underside of the cap





**fruiting  
body**

**spores**

**substrate**

**mycelium**



A mushroom is the reproductive structure produced by fungi. It is somewhat like the fruit of a plant, except that the "seeds" it produces are millions of microscopic spores. The spores blow away into the wind and if they land on a suitable substrate that is moist enough, spores start feeding off of that substrate. The spores will then start to form a network of white rooting threads called mycelium which penetrate into the substrate and begin to take it over. A mushroom then sprouts over time from this mycelium. I started the term by growing different species of mushrooms and experimenting with the cultivation process. Most of the mushrooms grow within 5-10 days if you mist 2 to 3 times a day, place in indirect sunlight and keep a decent humidity.





# cultivating mushrooms



non gmo

## “oyster mushrooms”



#1 mushroom spawn  
#2 mycelium

When mushroom spores mix with soil or another growing medium, a white, root-like substance called mycelium grows.



mushroom substrate



2-3 weeks growth time



high humidity  
low sunlight

2x a day

{ A mushroom grow kit is a block of supplemented sawdust that has been sterilised and inoculated with a live mycelium, cultured in laboratory conditions }

water vapor per volume of moist air



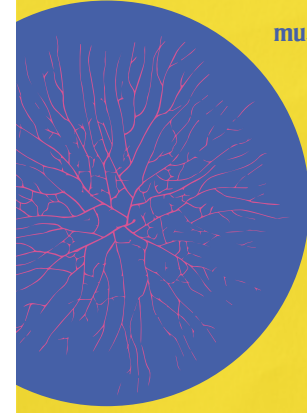
# cultivating mushrooms



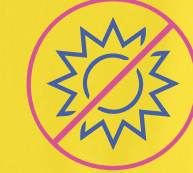
7lbs of organic mushroom mycelium  
#1 mushroom spawn  
#2 mycelium

new york grown

## “lions mane mushrooms”



## lions mane



mist 2-3x a day

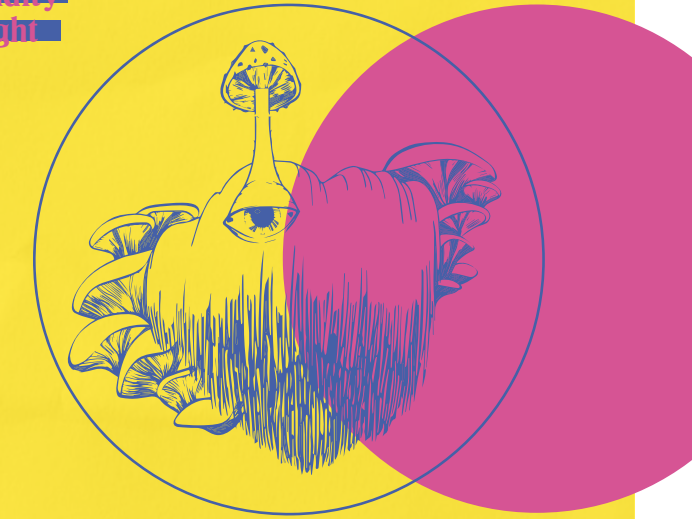


water vapor per volume of moist air

high humidity  
low sunlight

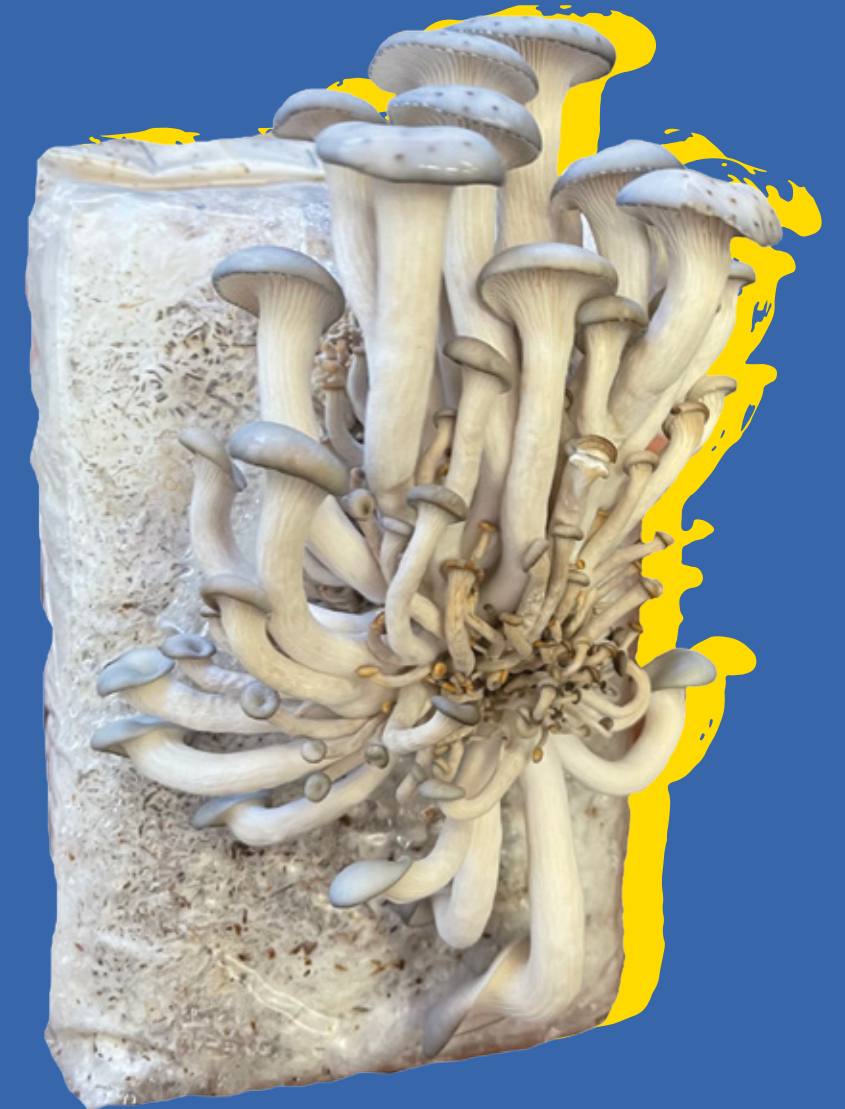
{ A mushroom grow kit is a block of supplemented sawdust that has been sterilised and inoculated with a live mycelium, cultured in laboratory conditions }

10-14 days growth time



# mushroom growth

7-10 days



# creating mycelium brick



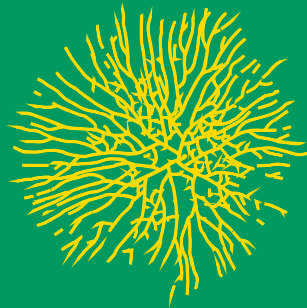
+



clean all mixing materials



+



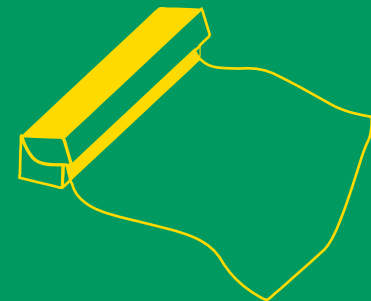
+



mix  
thoroughly



+



place mixture in mold



# mycelium as brick



BLUE OYSTER

LIONS MANE

ANTLER REISHI (1)

ANTLER REISHI (1)

ANTLER R. (2)

ANTLER REISHI (1)

(1)





**bricks  
cooked**

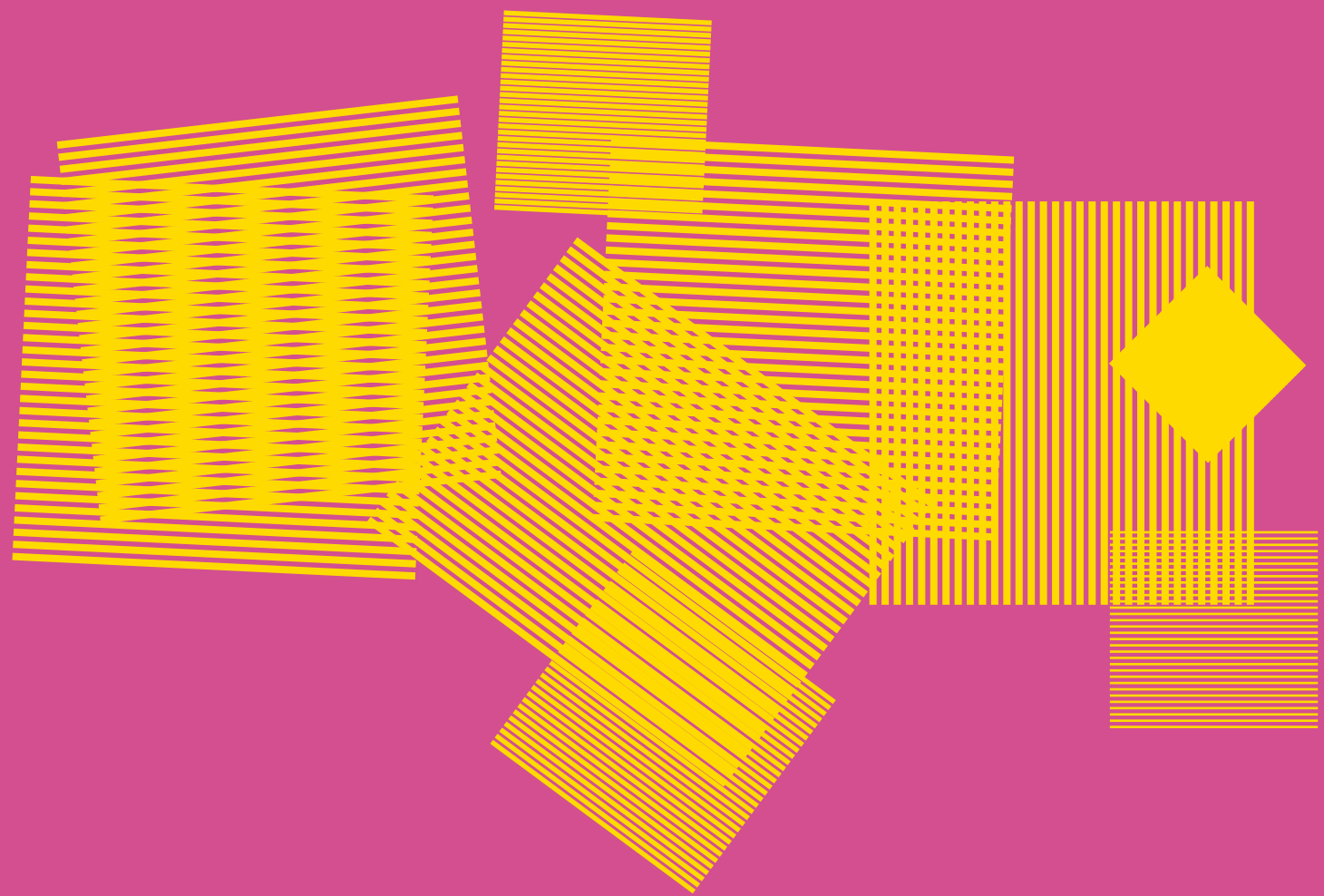
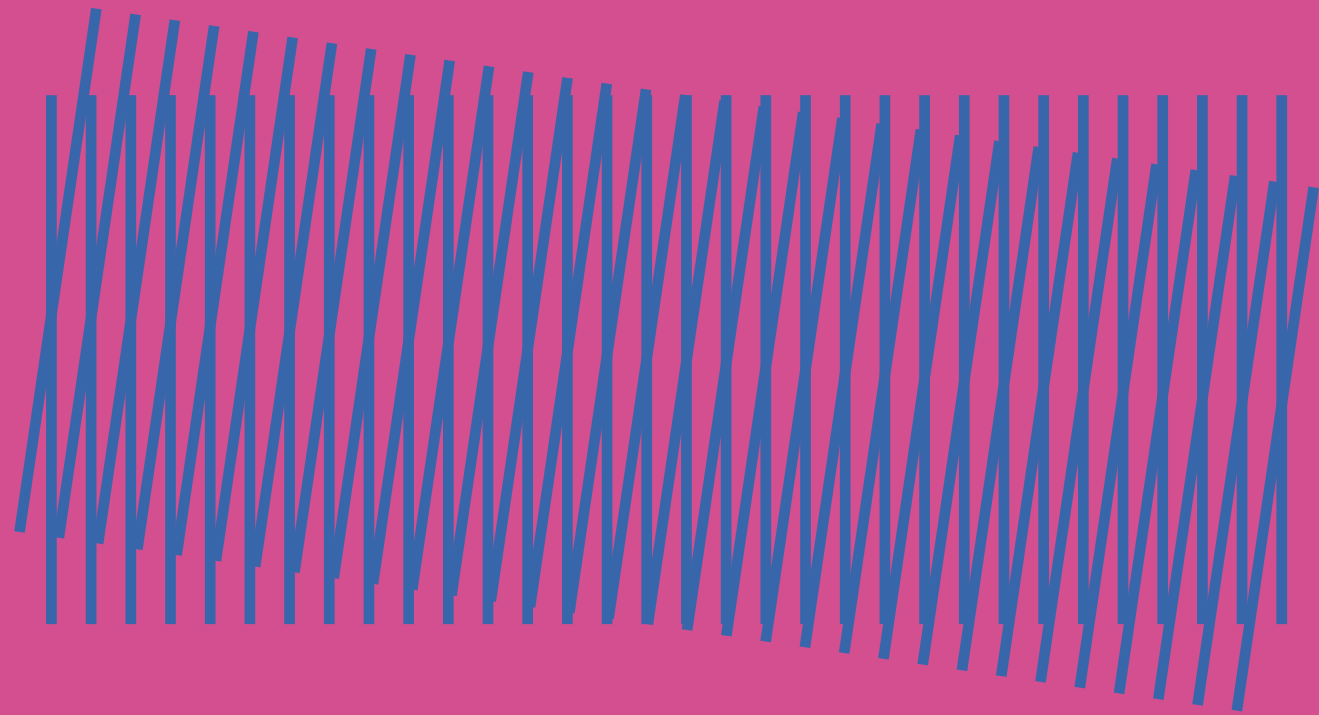
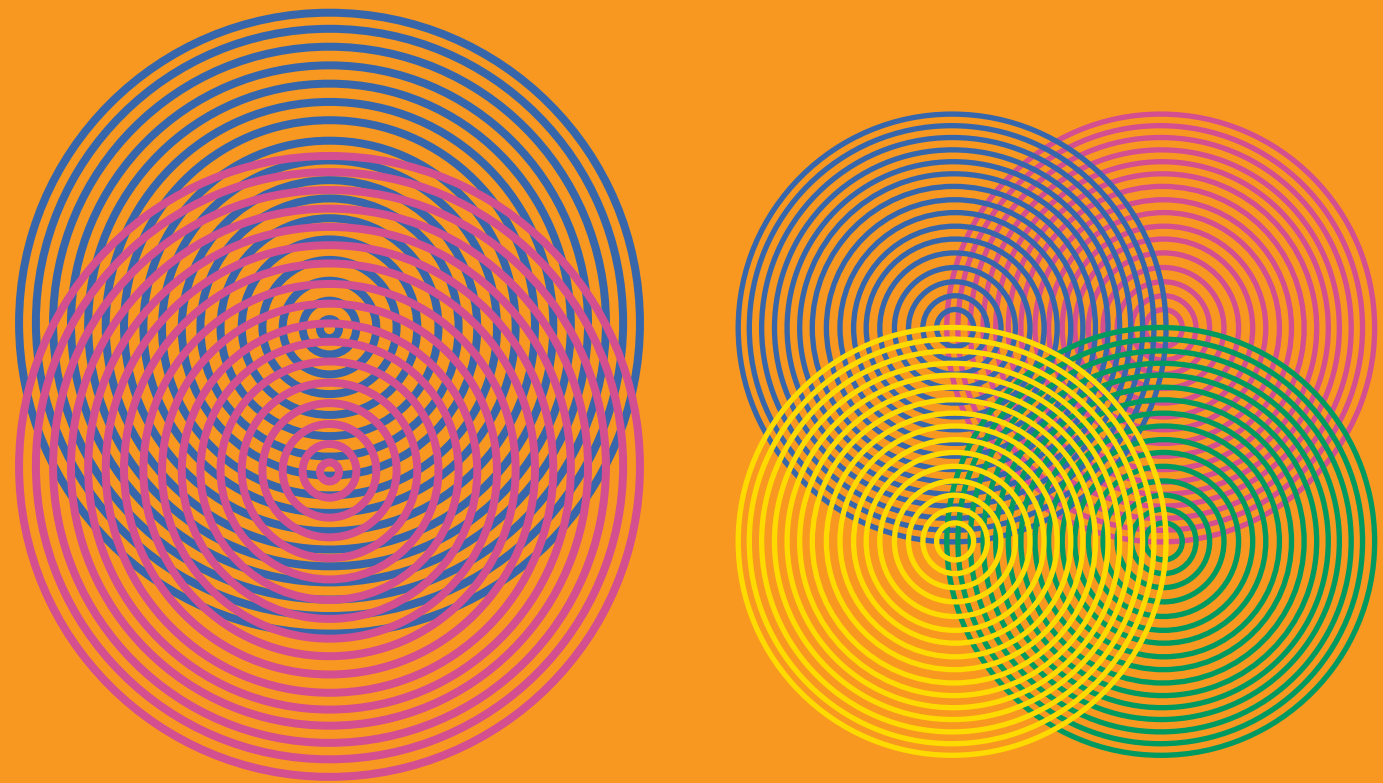
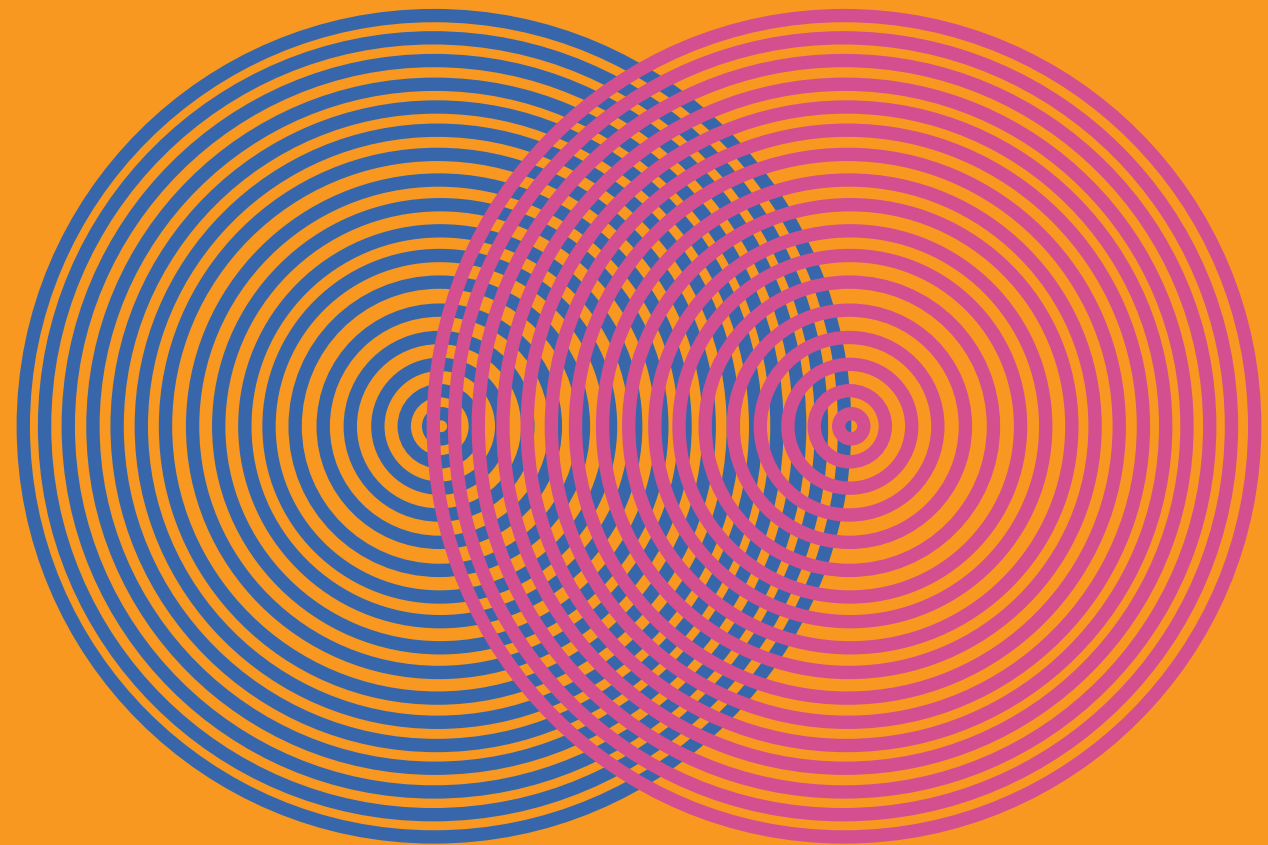


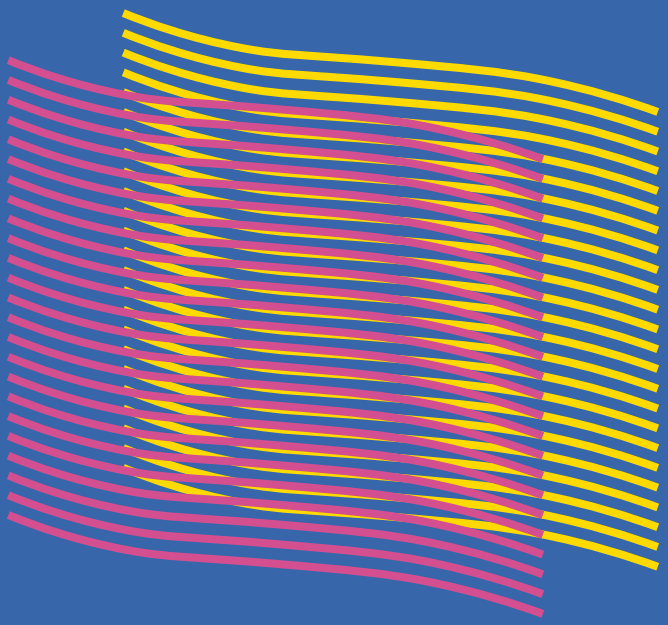
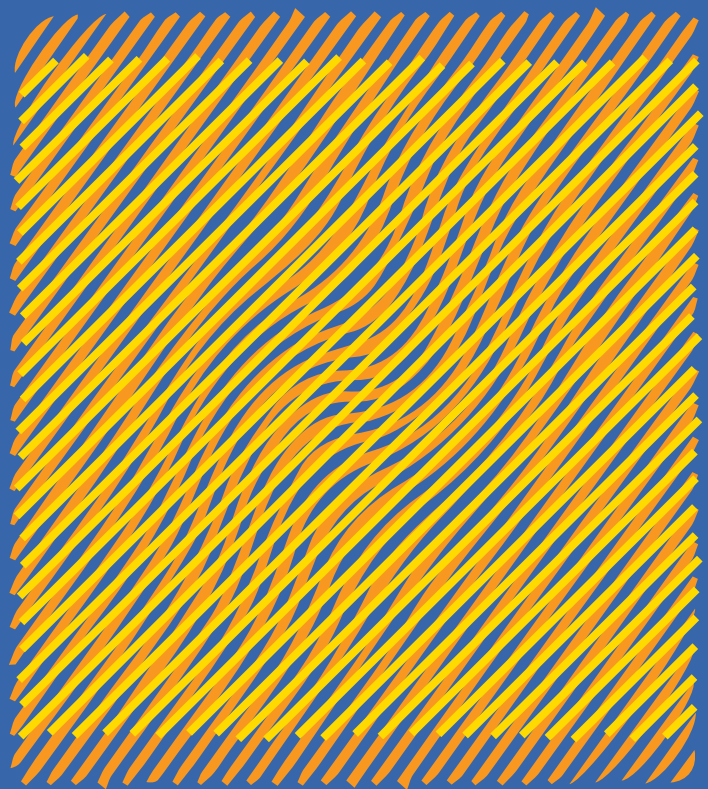
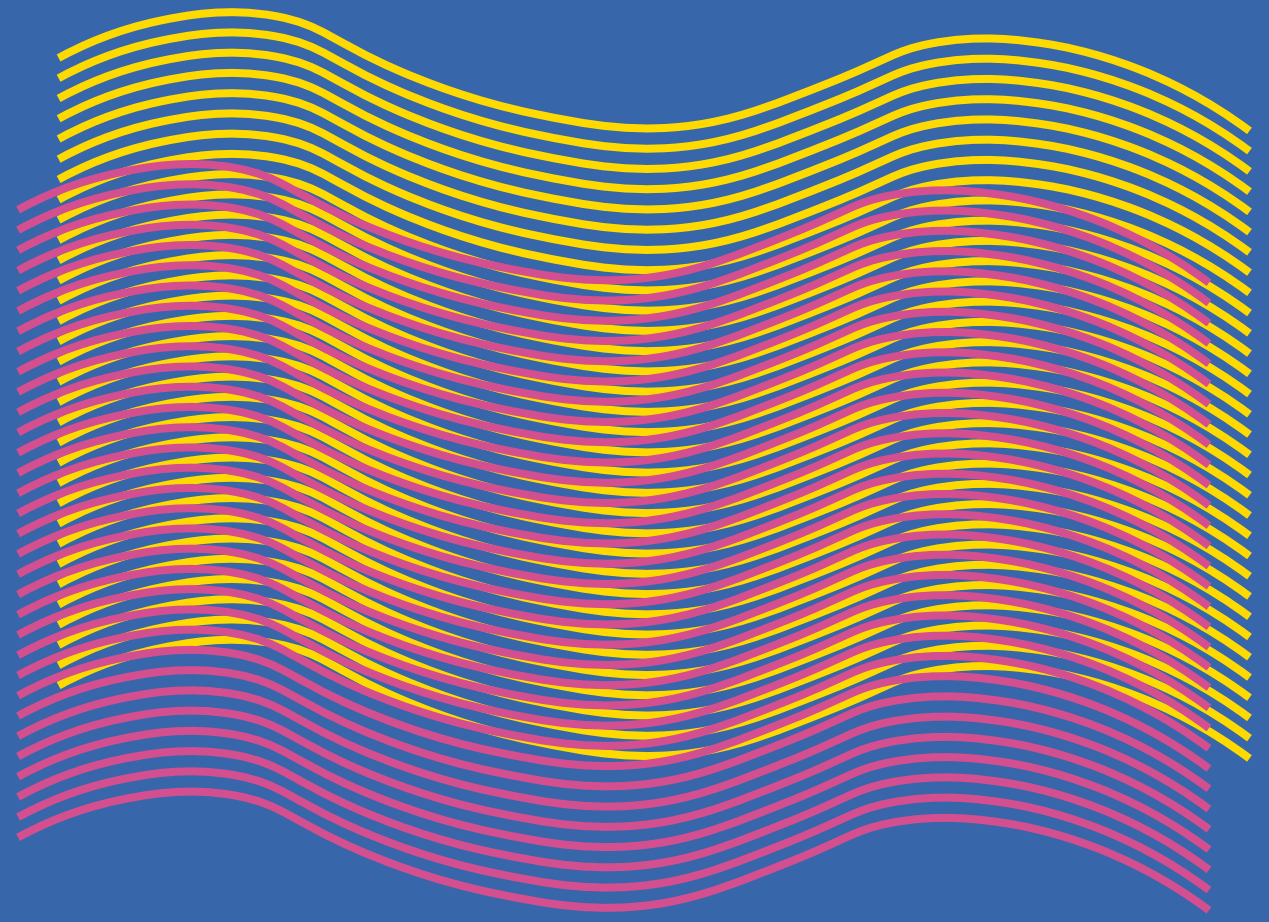
# mycelium brick at avery



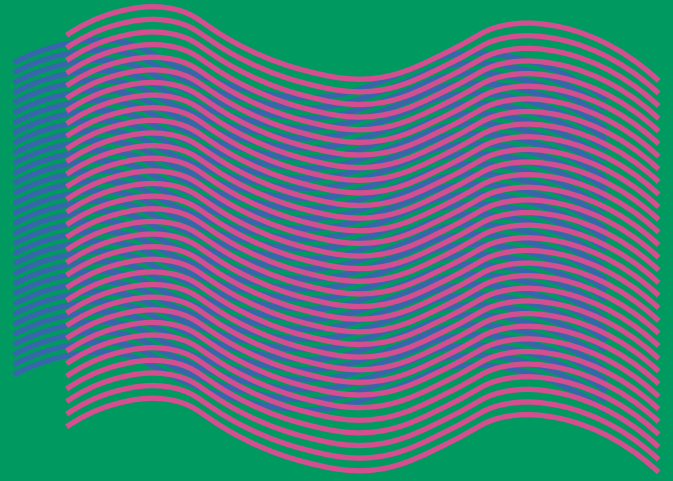
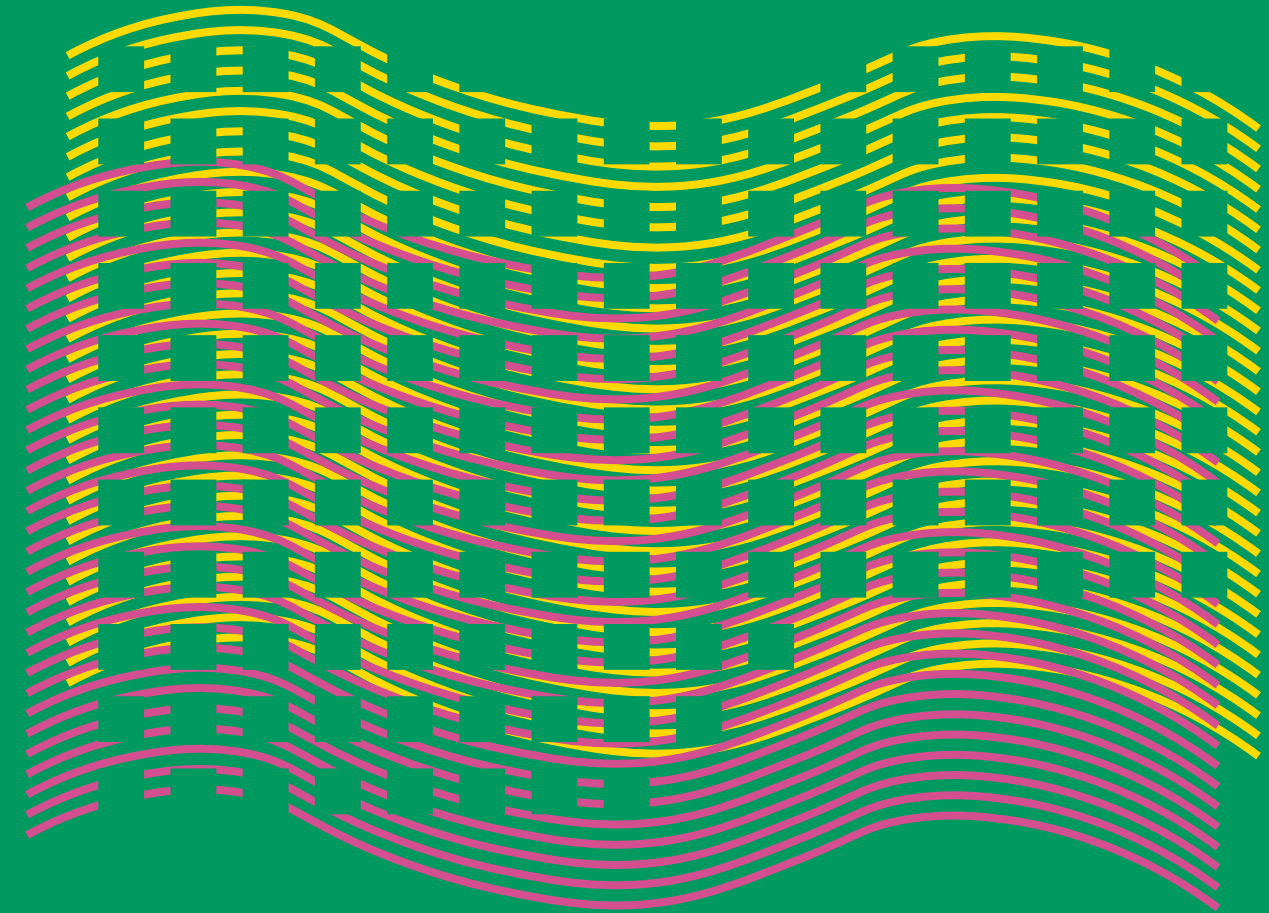
Scaling larger than the household growing practice mycelium is working to improve the environment. Which brings us to the creation of the mycelium brick. A brick made solely from biodegradable materials. The mycelium brick itself is incredibly hard, shatter resistant, and can handle enormous amounts of compression. The goal for my proposal is to scale this into a potential building for Avery. The mycelium bricks can work as means for creating and closing off space and screen systems to reinforce space and lighting patterns.







Kennedy VanTrump

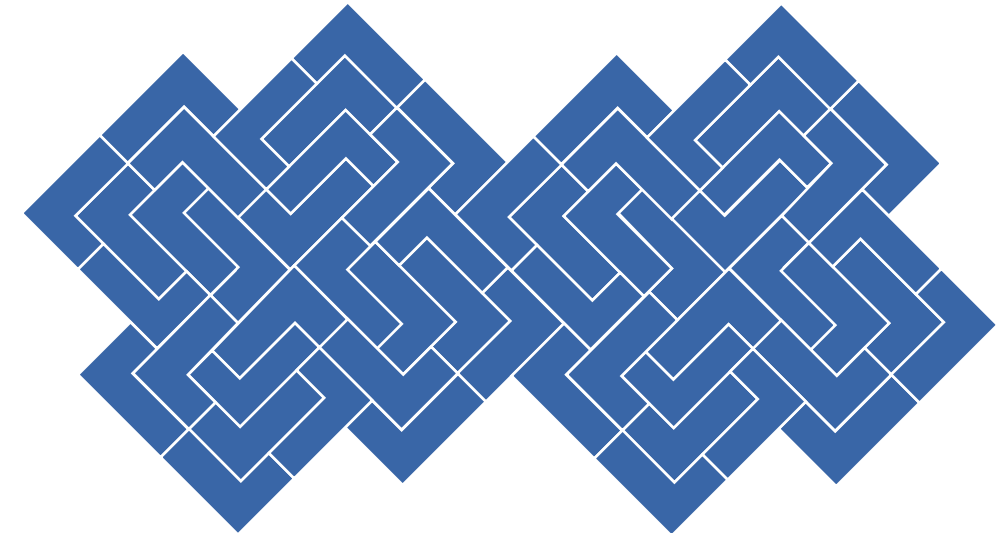
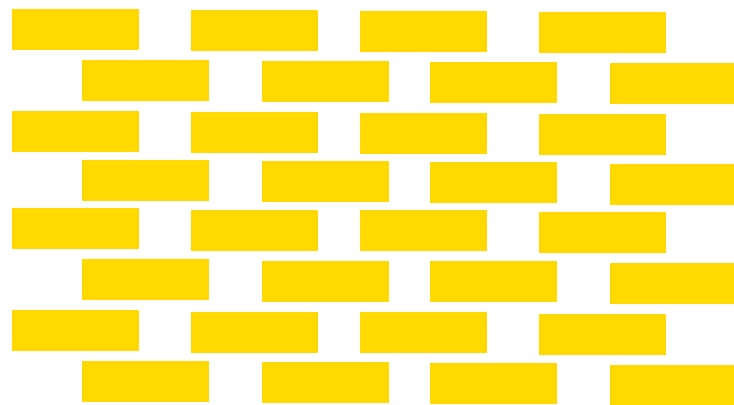
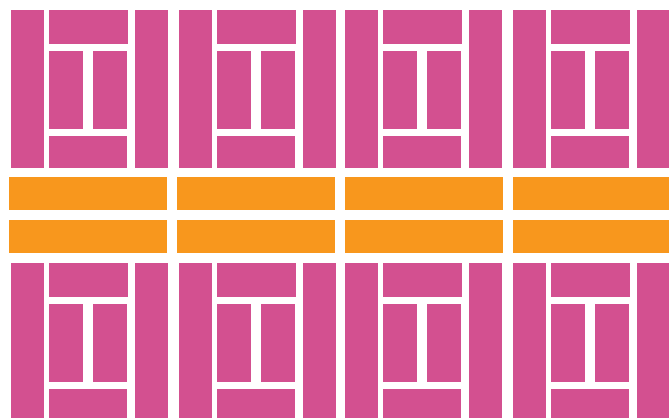
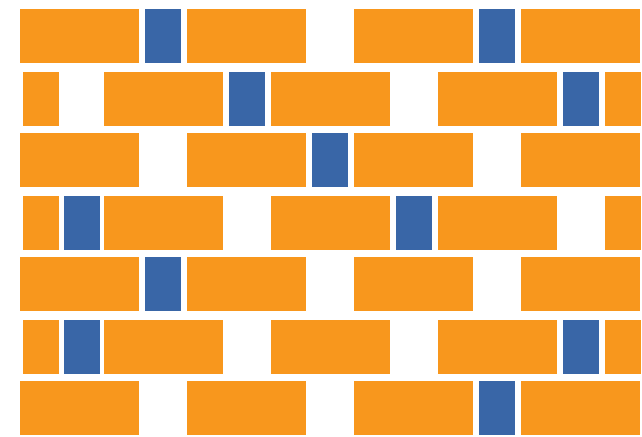
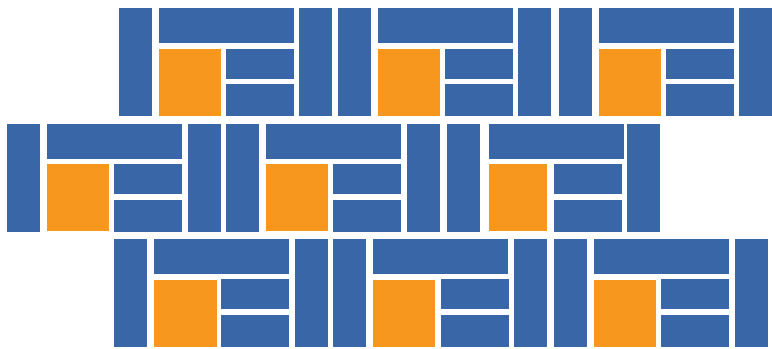
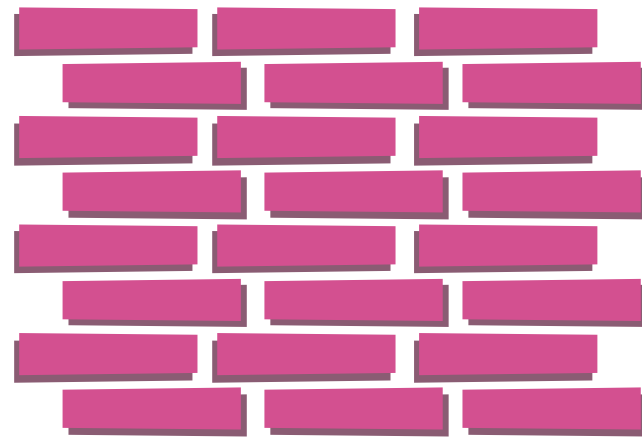
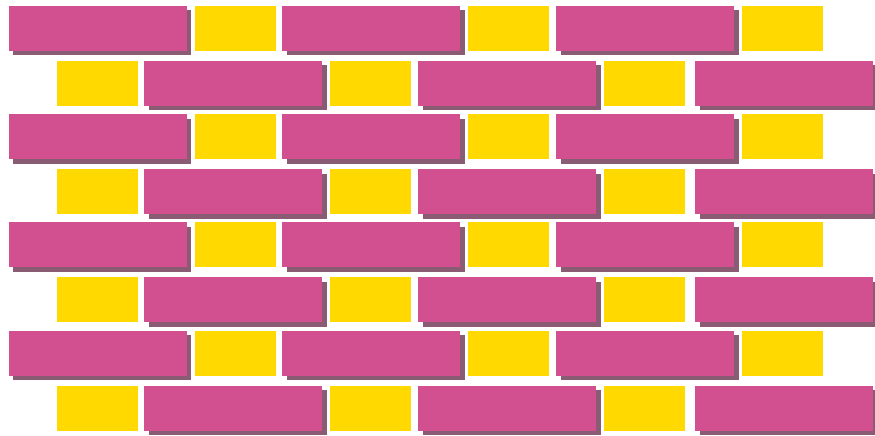


Kennedy VanTrump

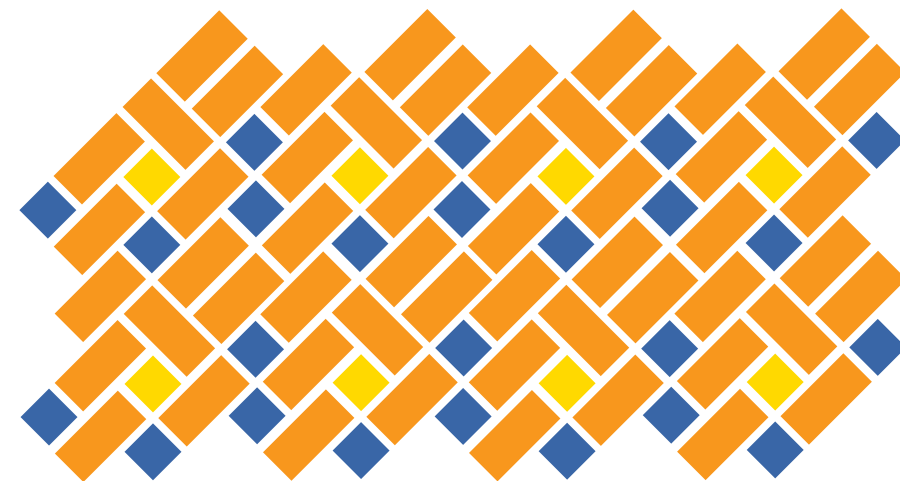
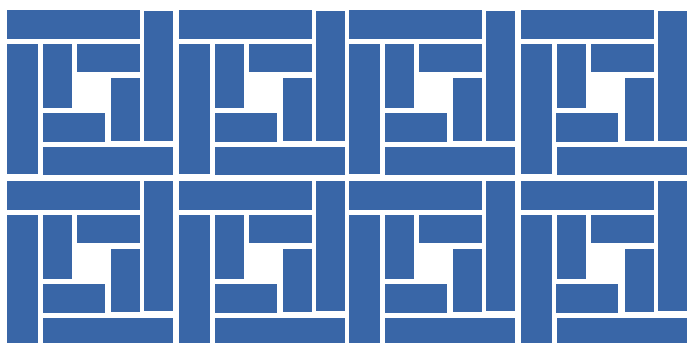
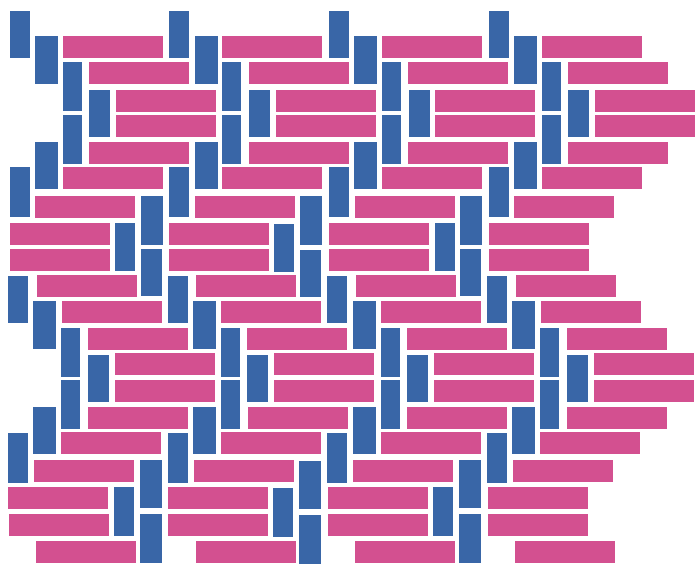
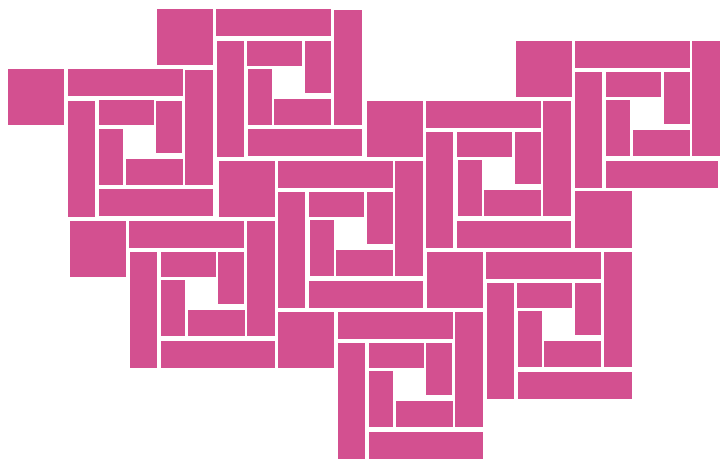
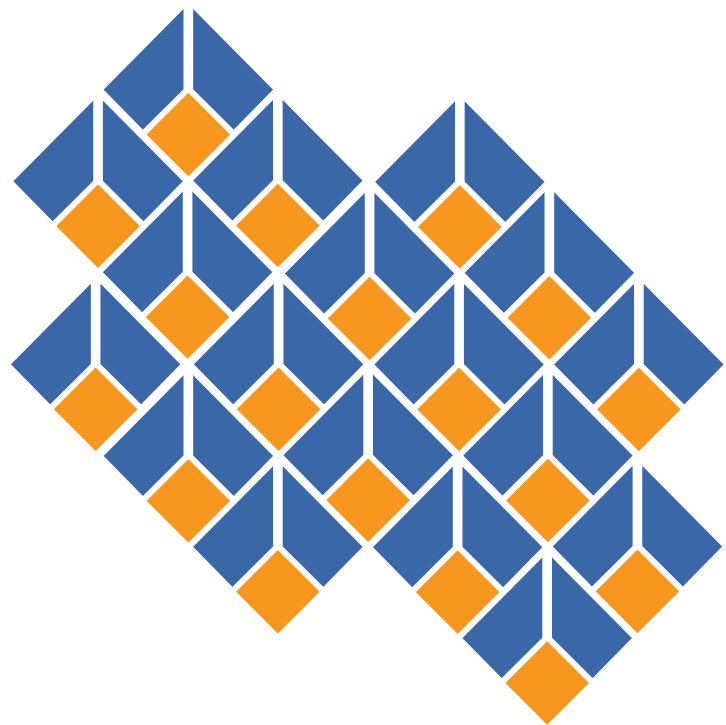
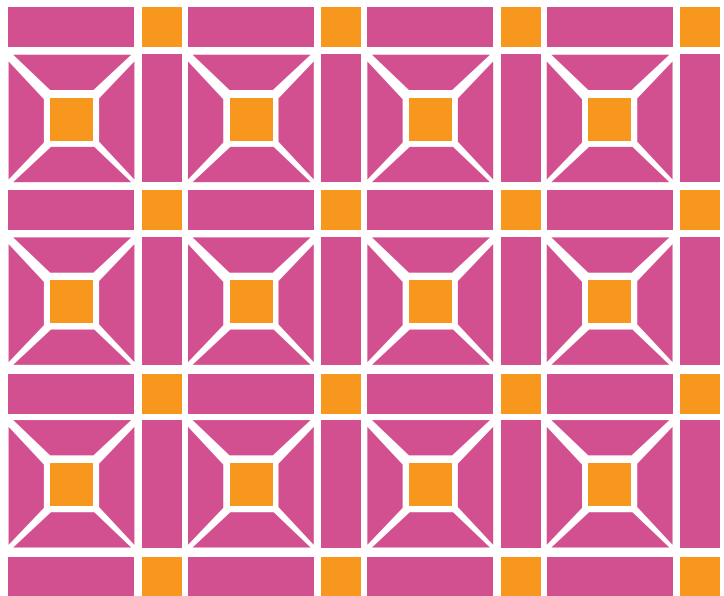




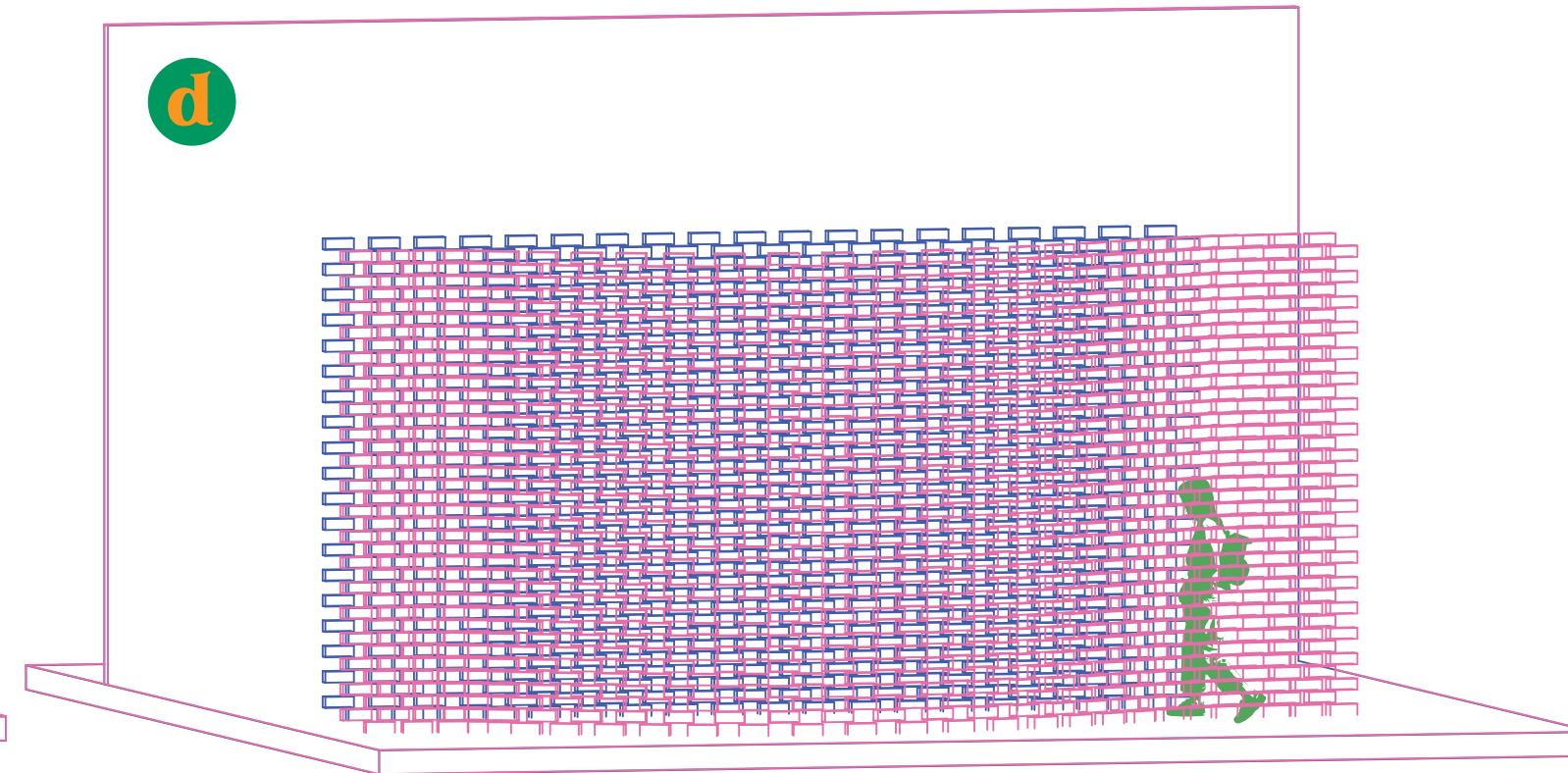
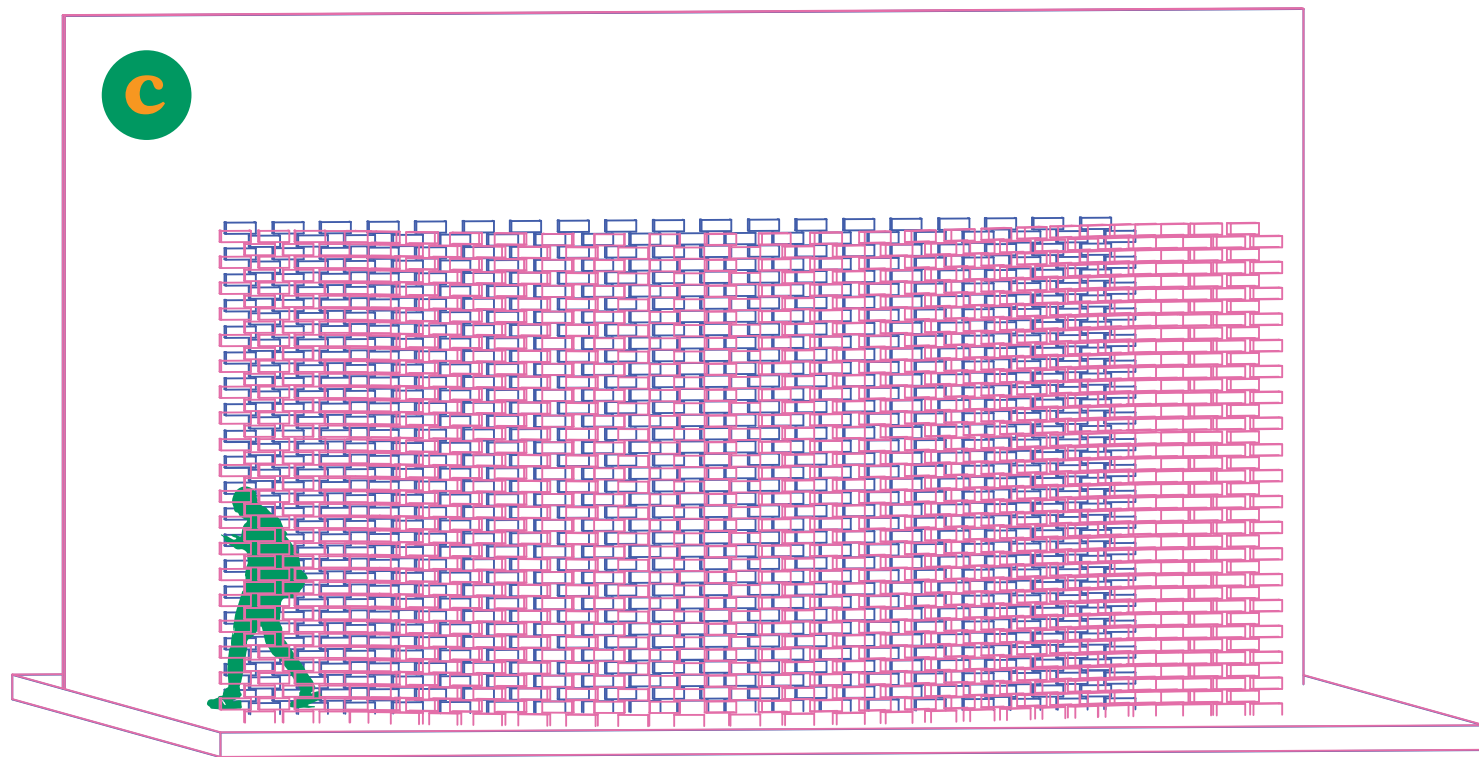
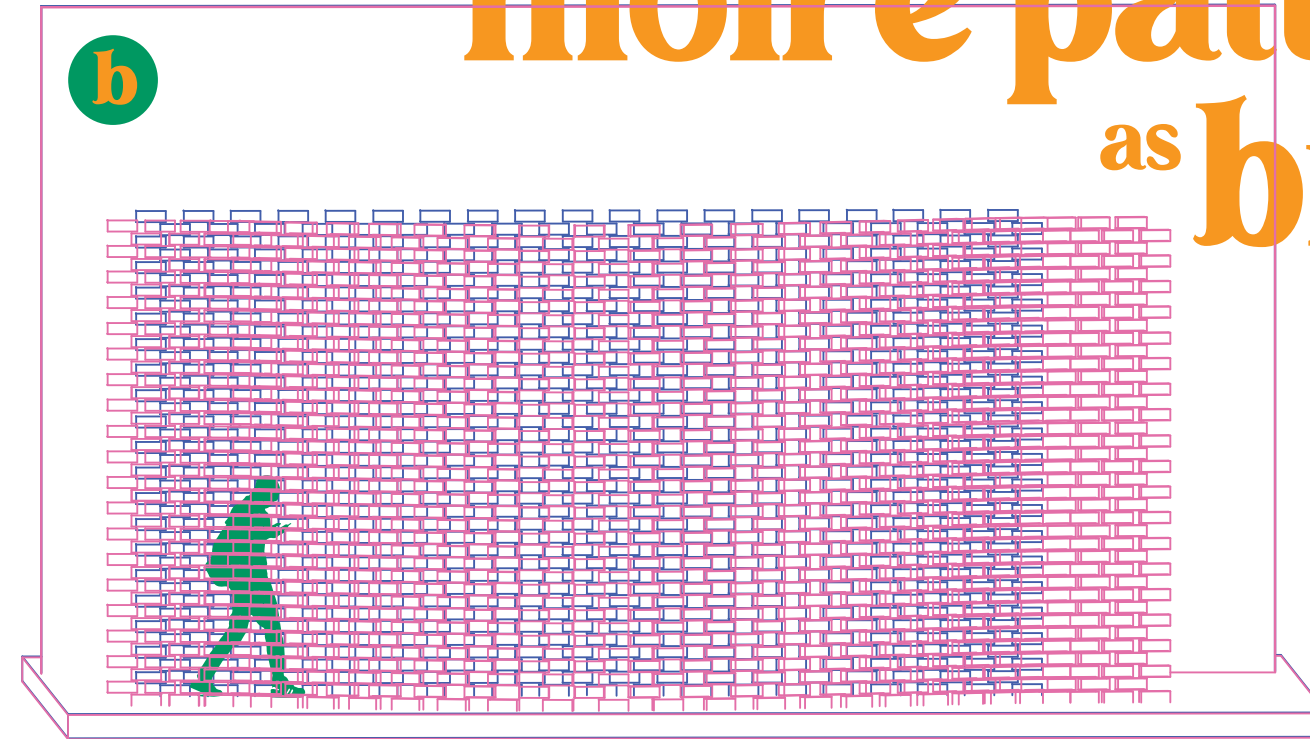
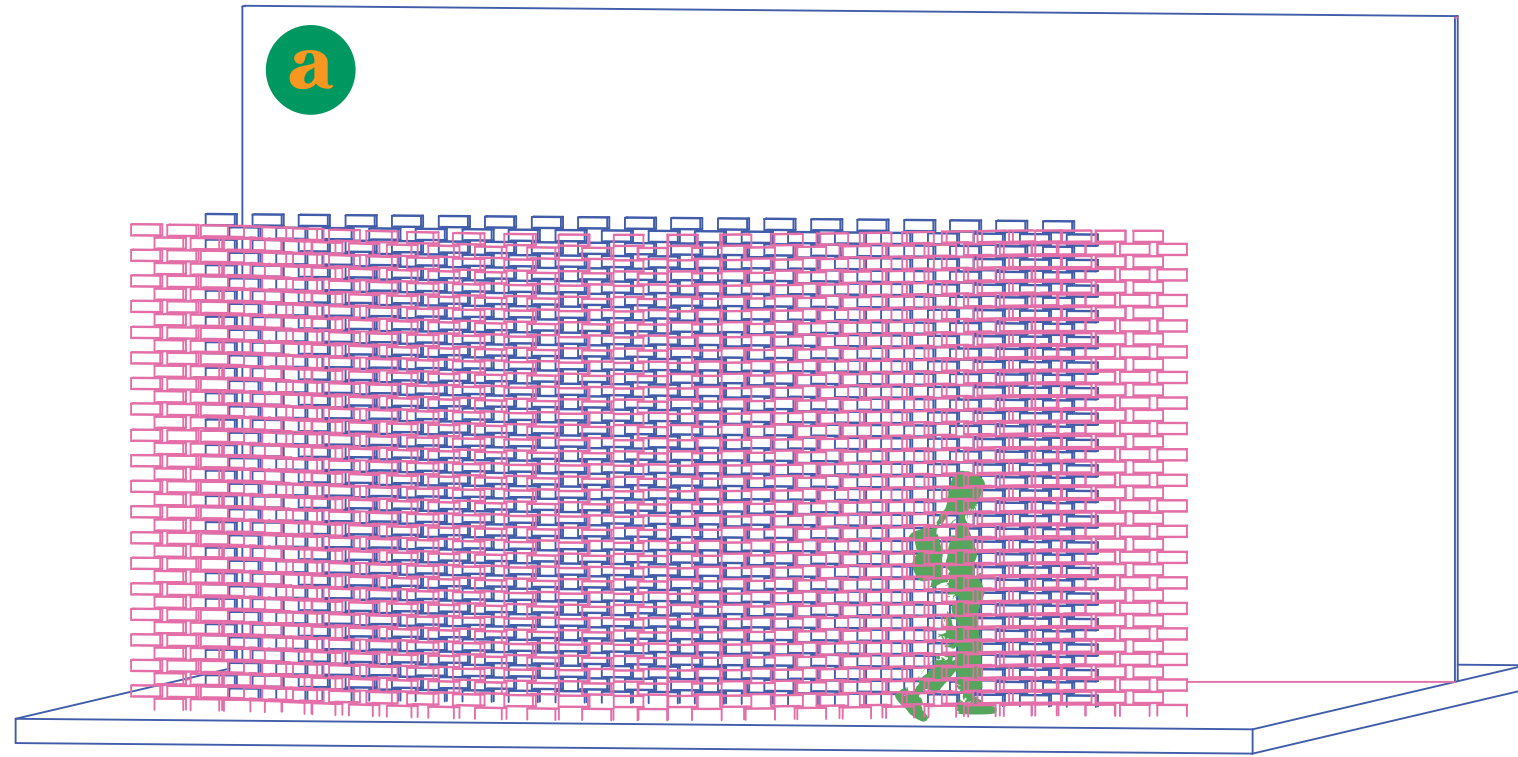
# brick as composition



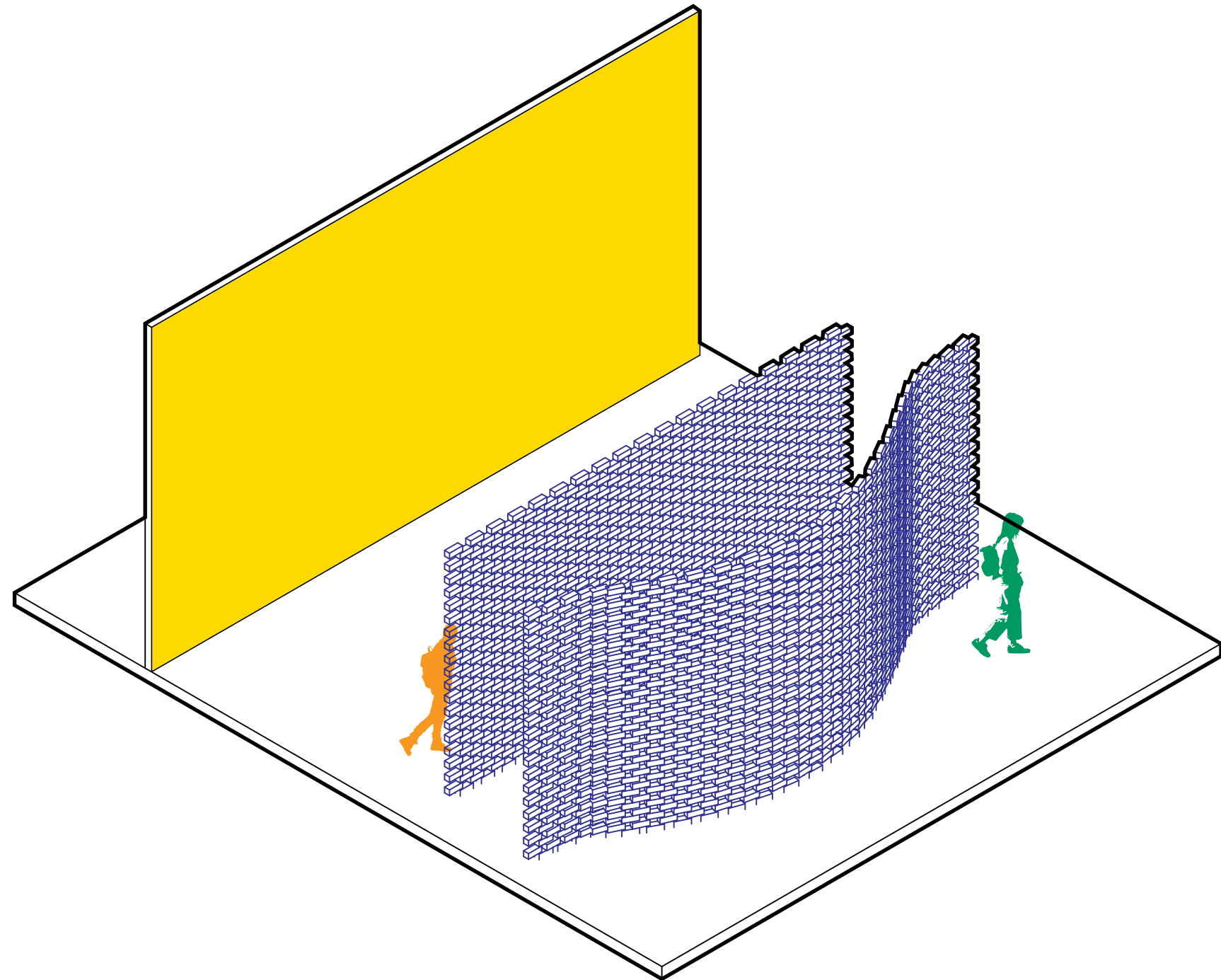
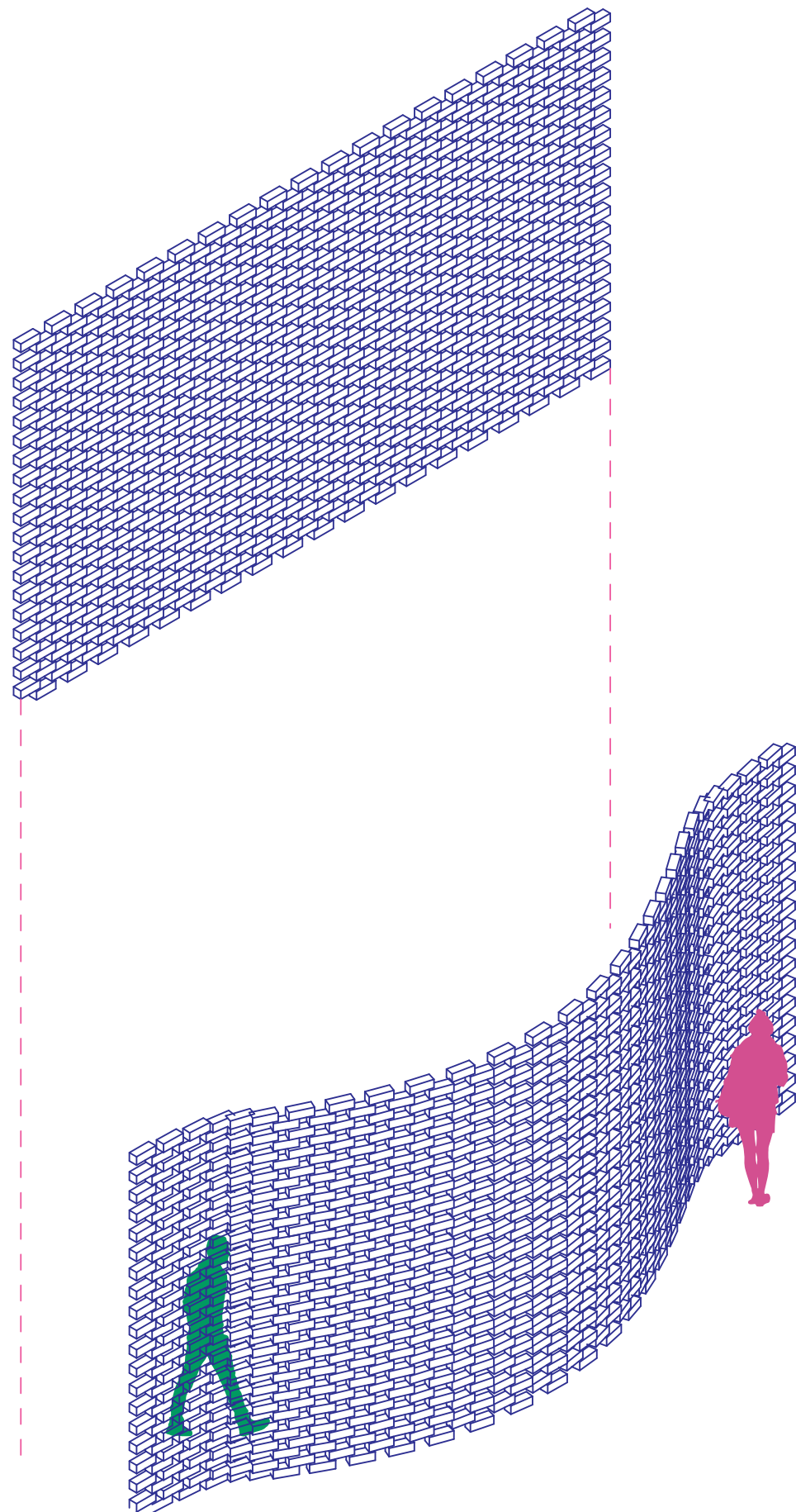
# brick as composition

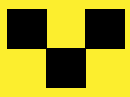


# moire pattern as brick

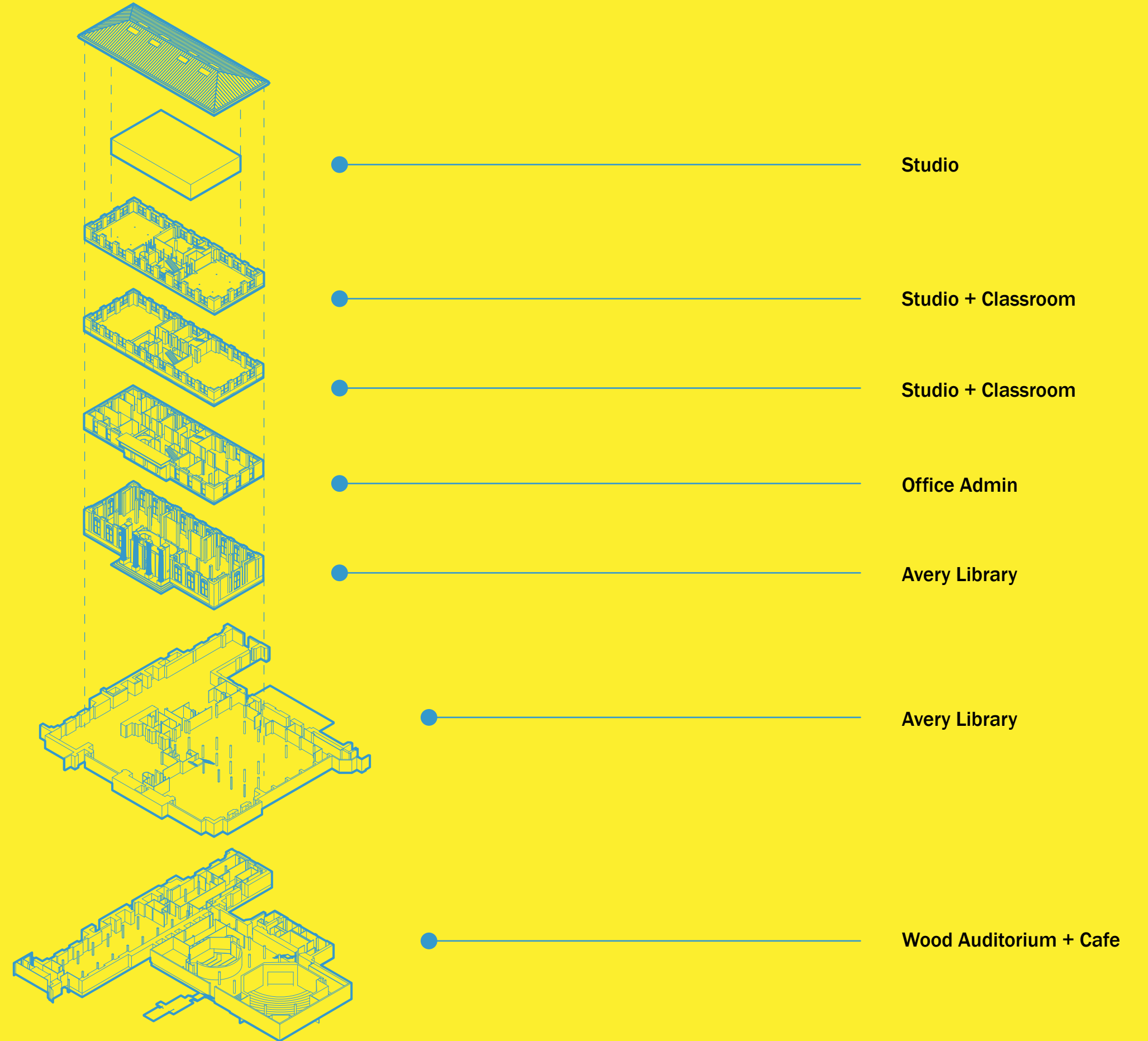
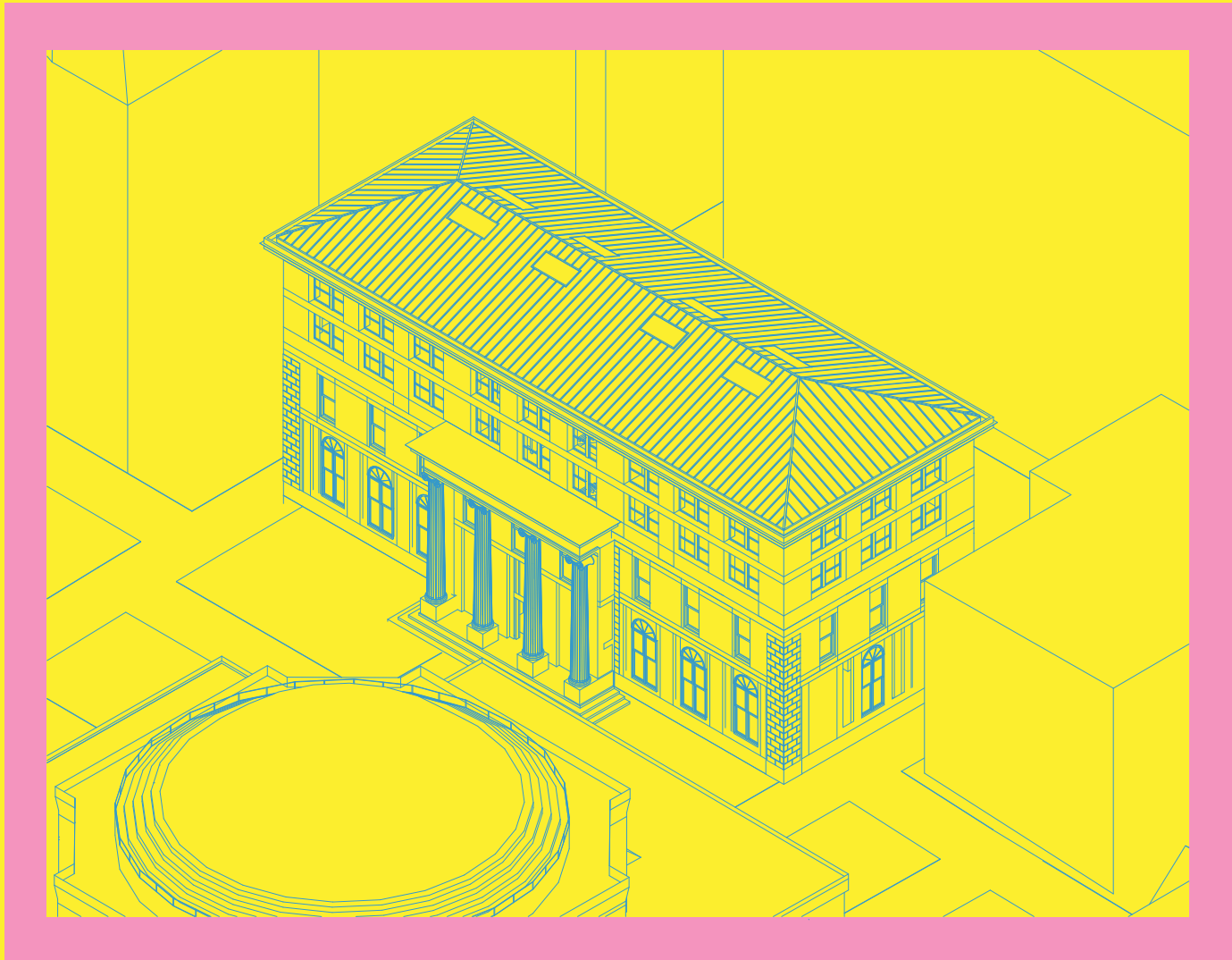


# moire pattern as brick



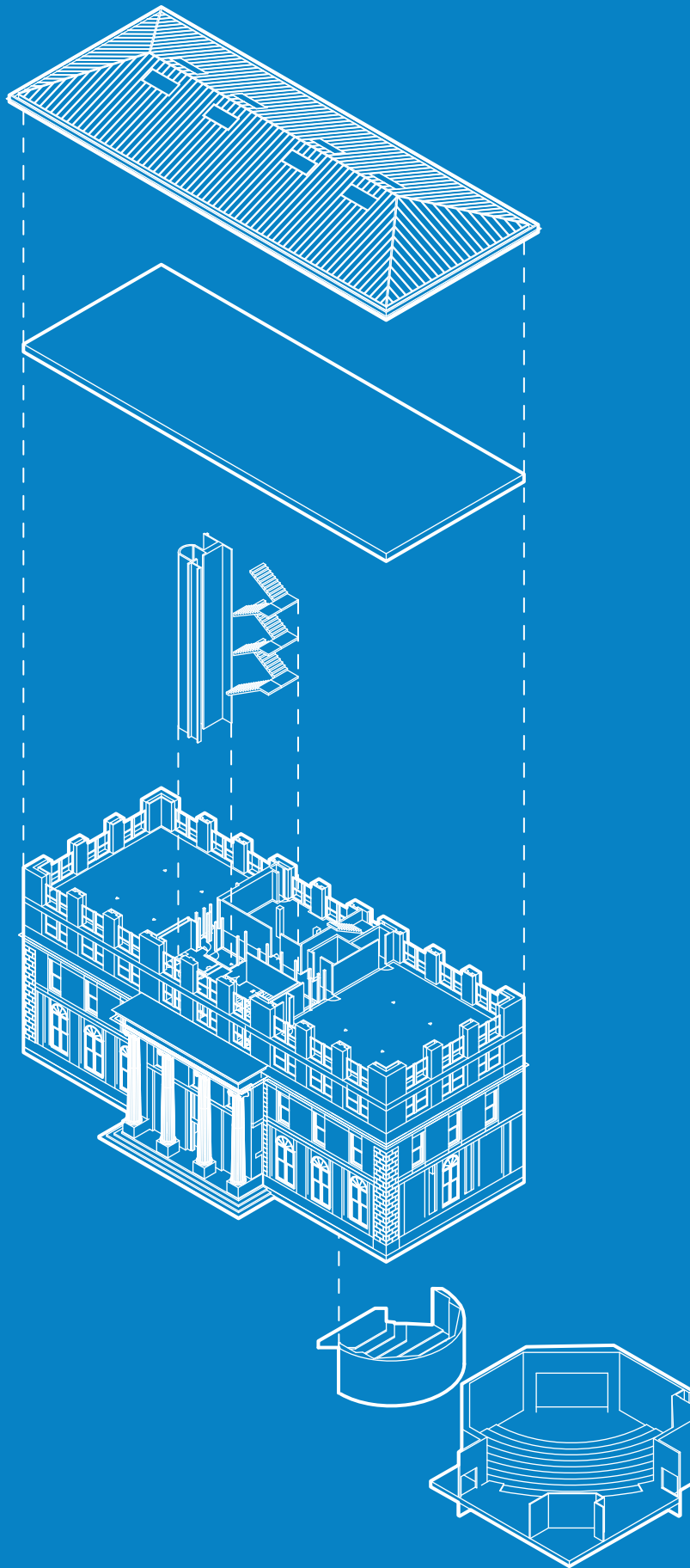


# Avery Hall Current Program

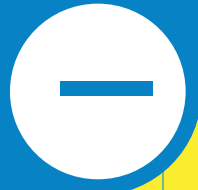


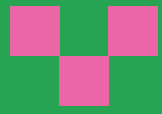


# Avery Hall Subtractions



- ————— *Remove Roof*
- ————— *Remove 7th Floor Studio*
- ————— *Remove Main Core*
- ————— *Remove Auditoriums*

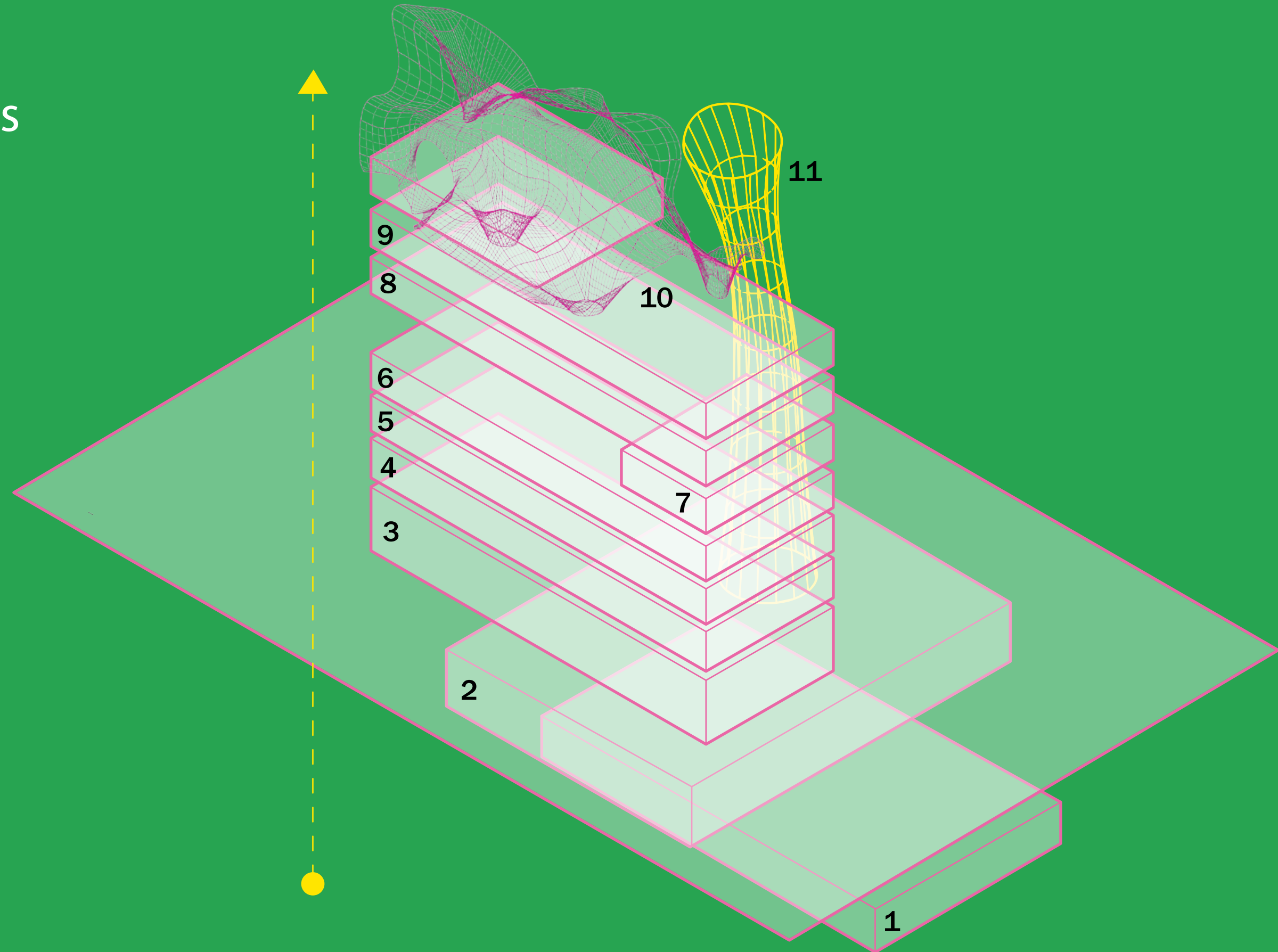




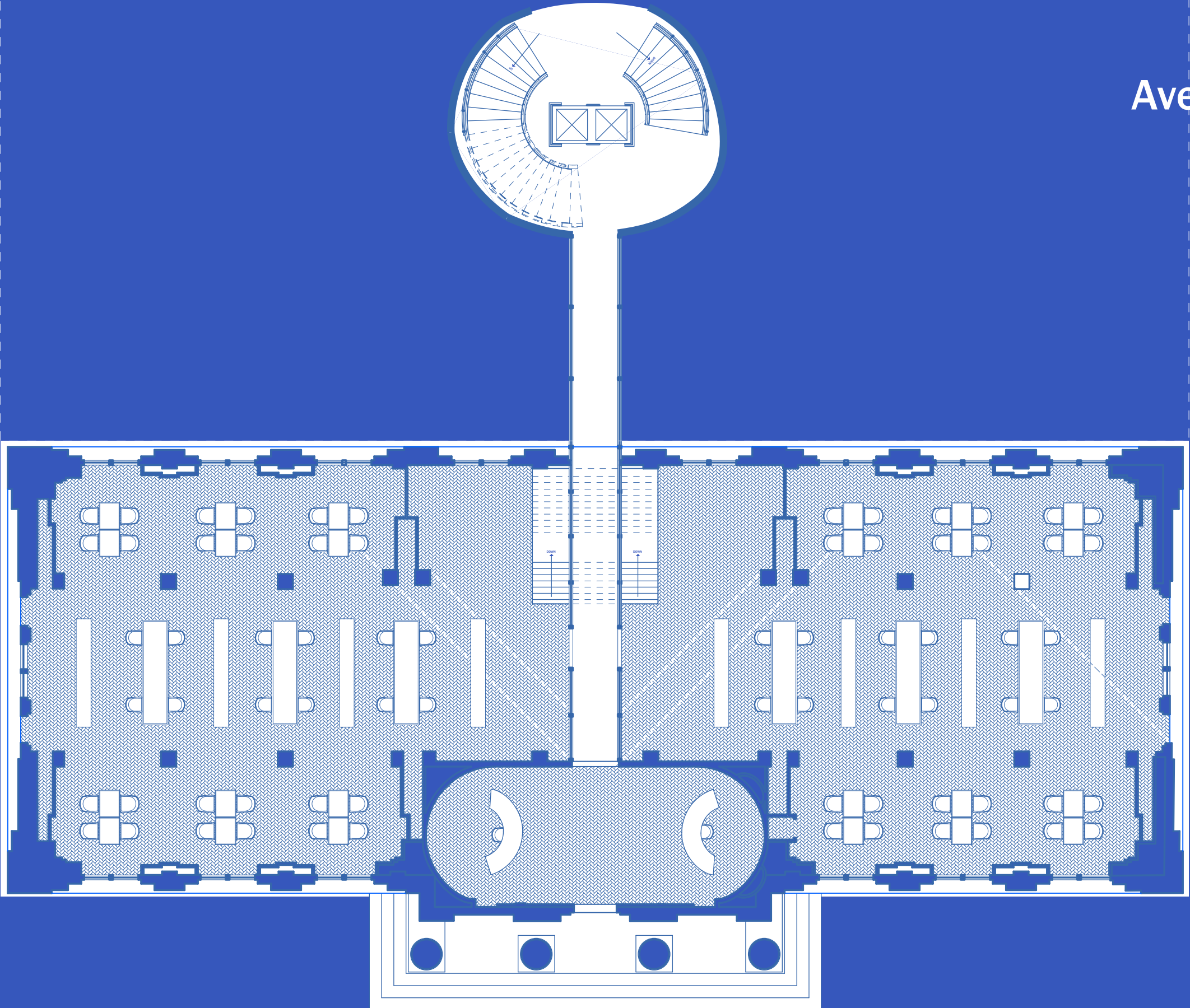
# Avery Hall Additions

## *New Program*

- 1 - Student Workshops**
- 2 - Avery Library**
- 3 - Avery Library**
- 4 - Studio**
- 5 - Studio**
- 6 - Studio**
- 7 - Mushroom Farm/Cafe**
- 8 - Classrooms**
- 9 - Gallery + Exhibition**
- 10 - Rooftop / Auditorium**
- 11 - New Circulation**



Avery Level 3 -  
Avery Library + Connection Walkway

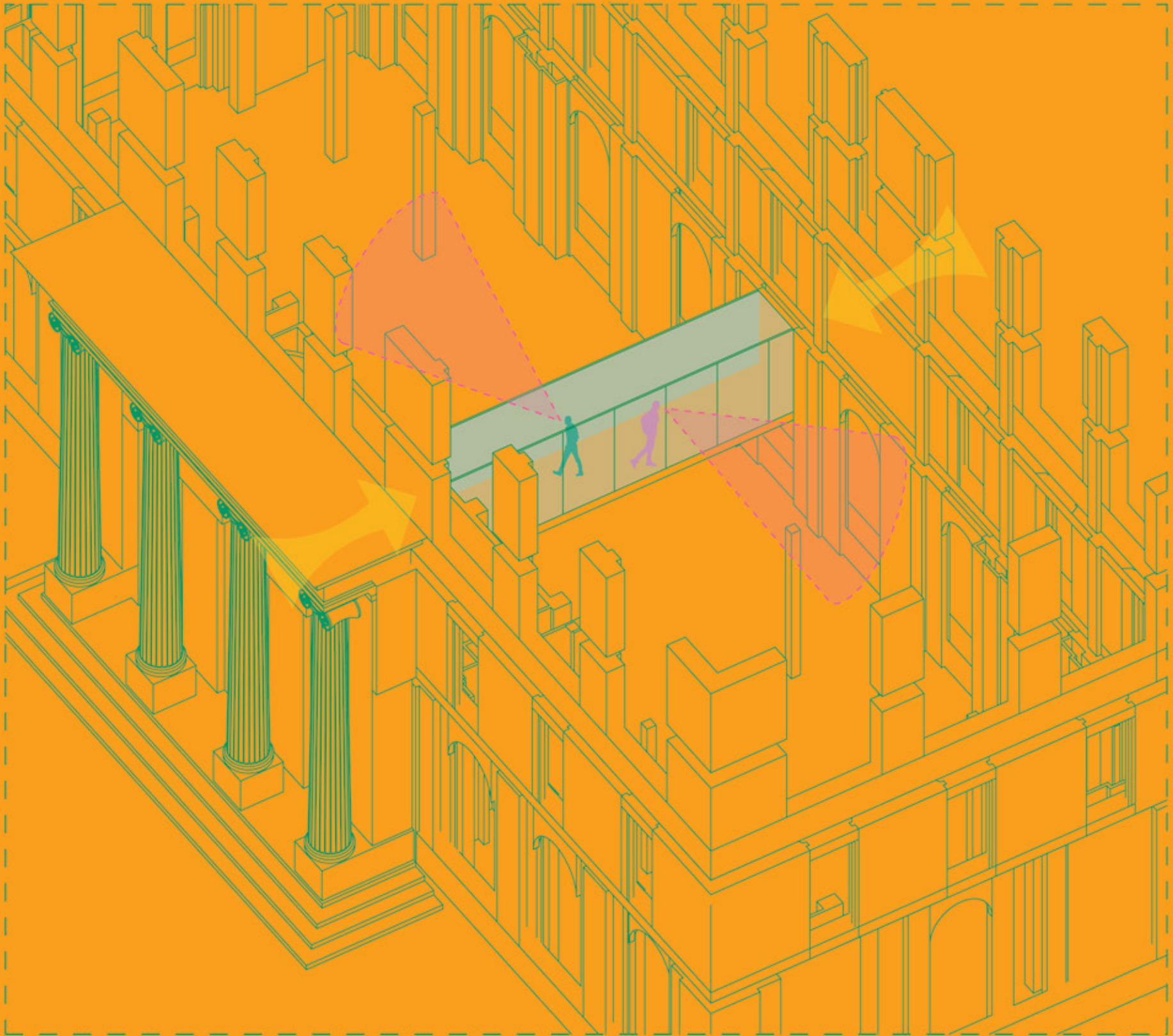


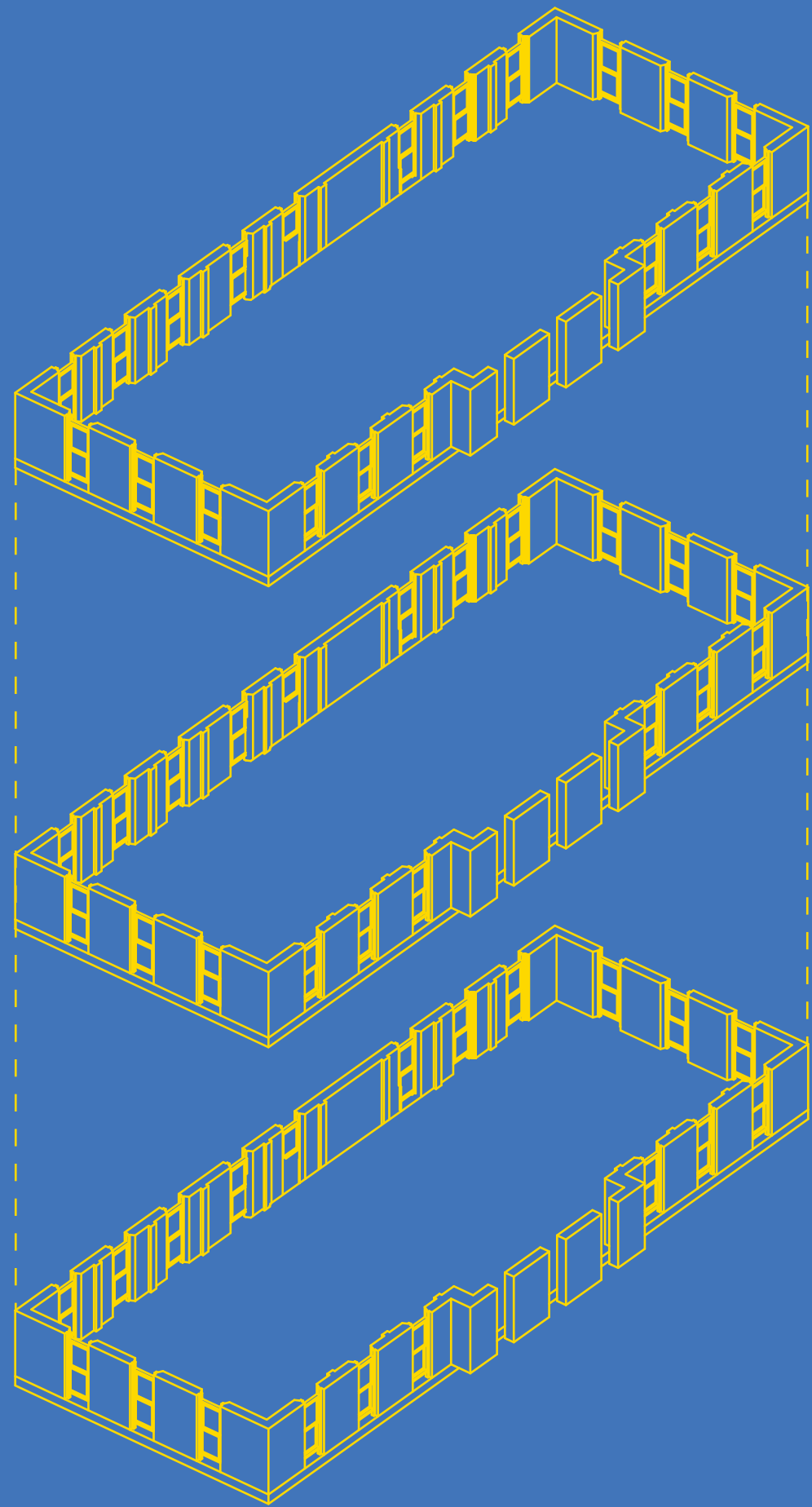




# avery additions

Avery Library Walkway

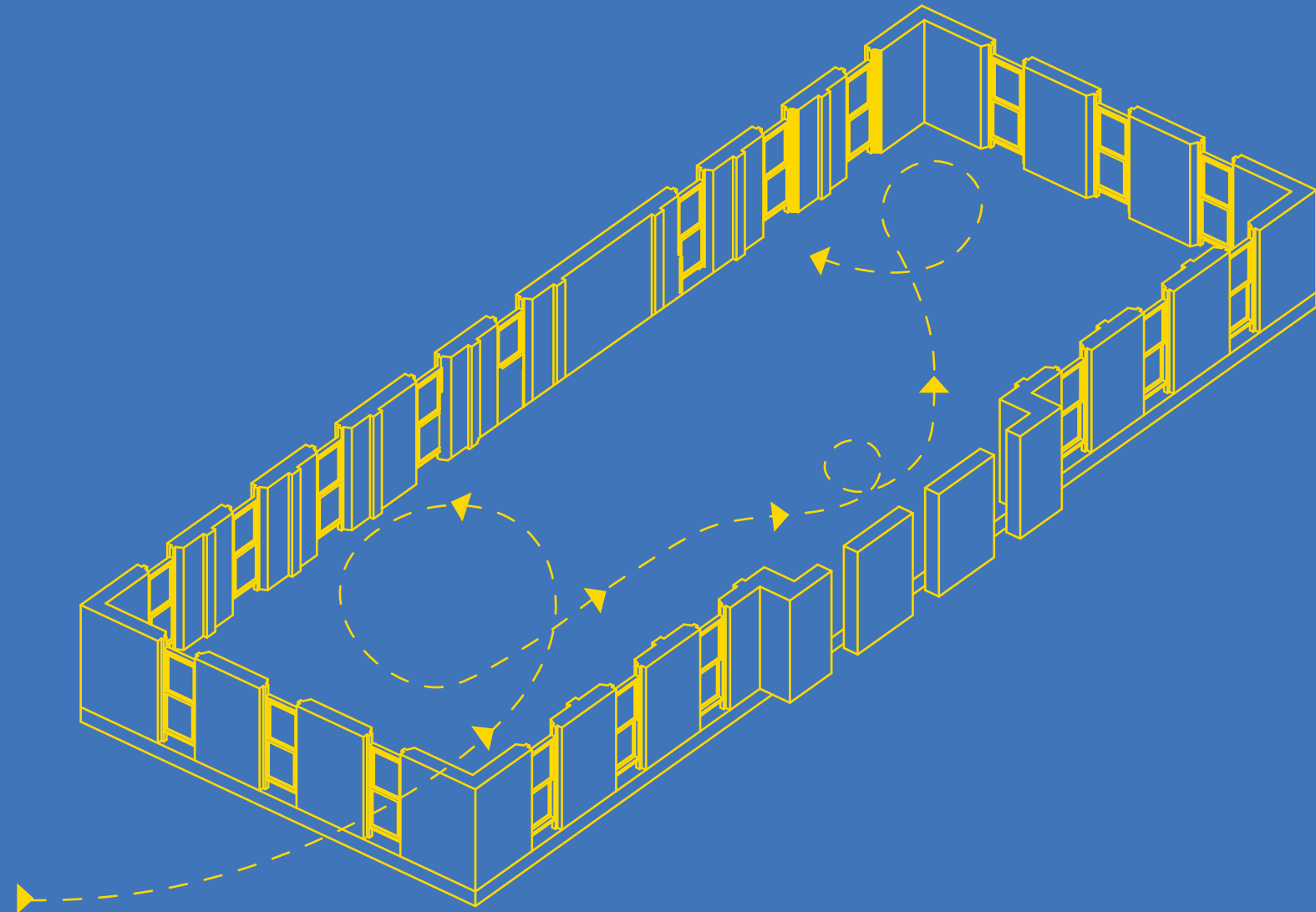




6

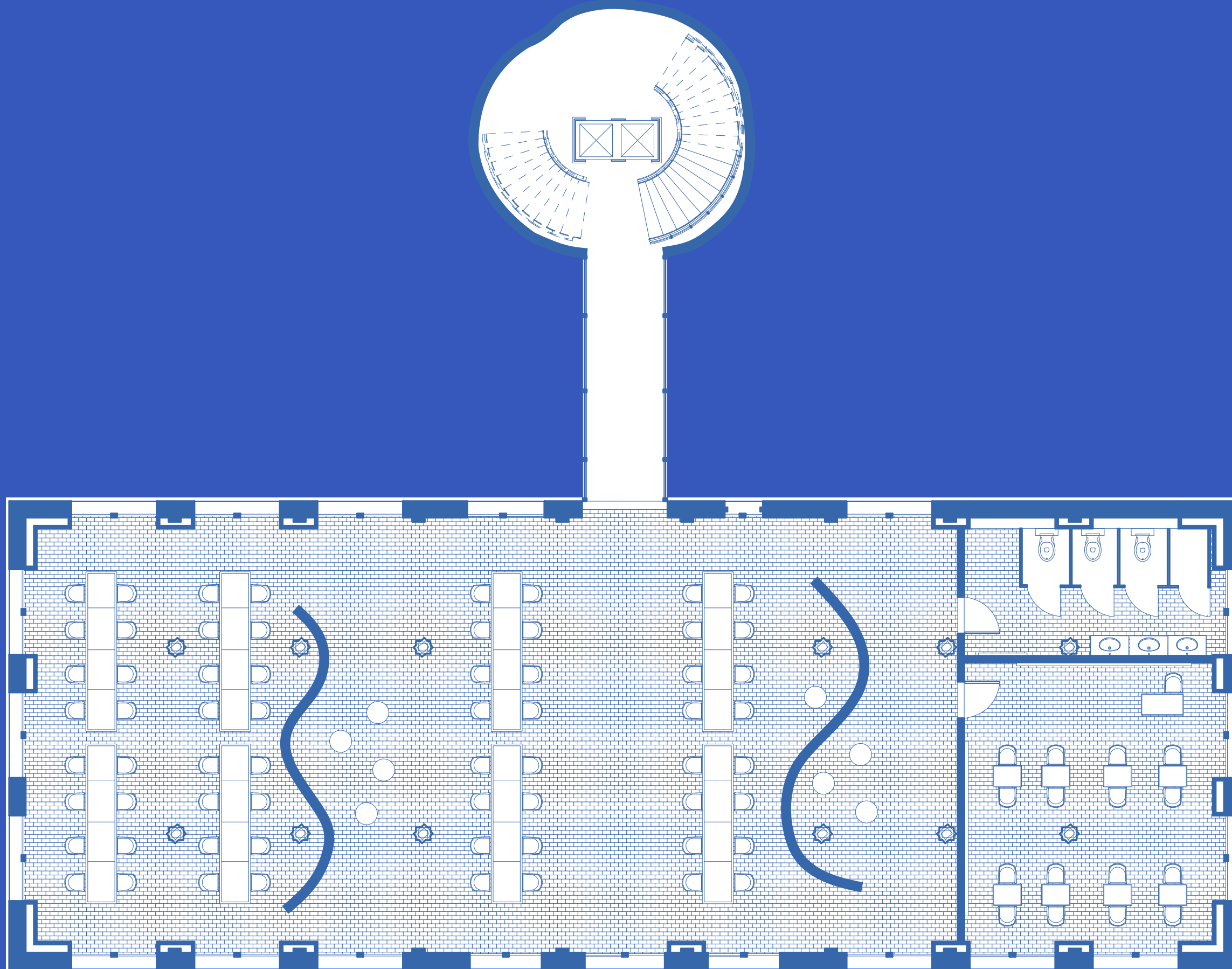
5

4



avery 4,5,6 studios

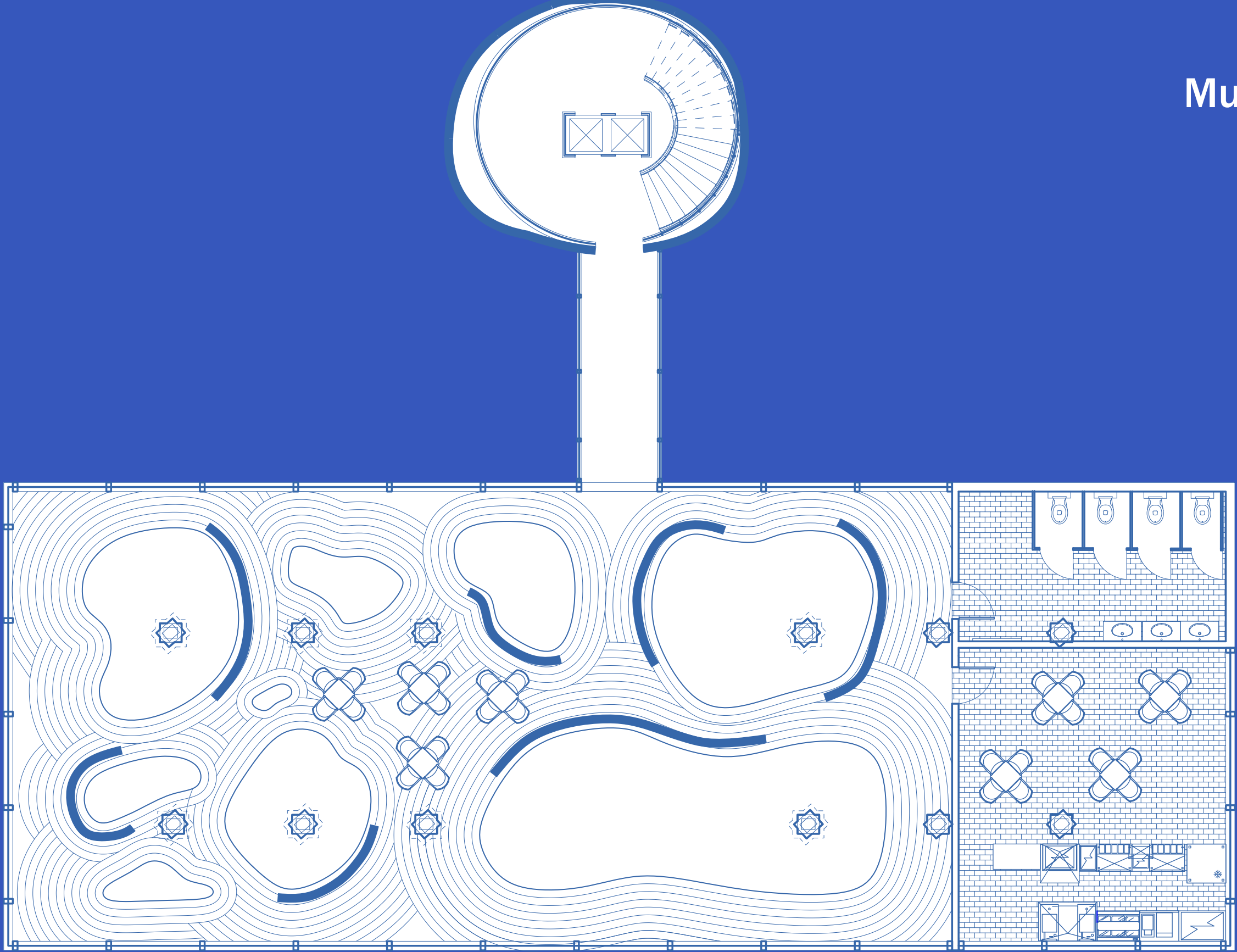
Avery Level 4 + 5 + 6 -  
Typical Studio



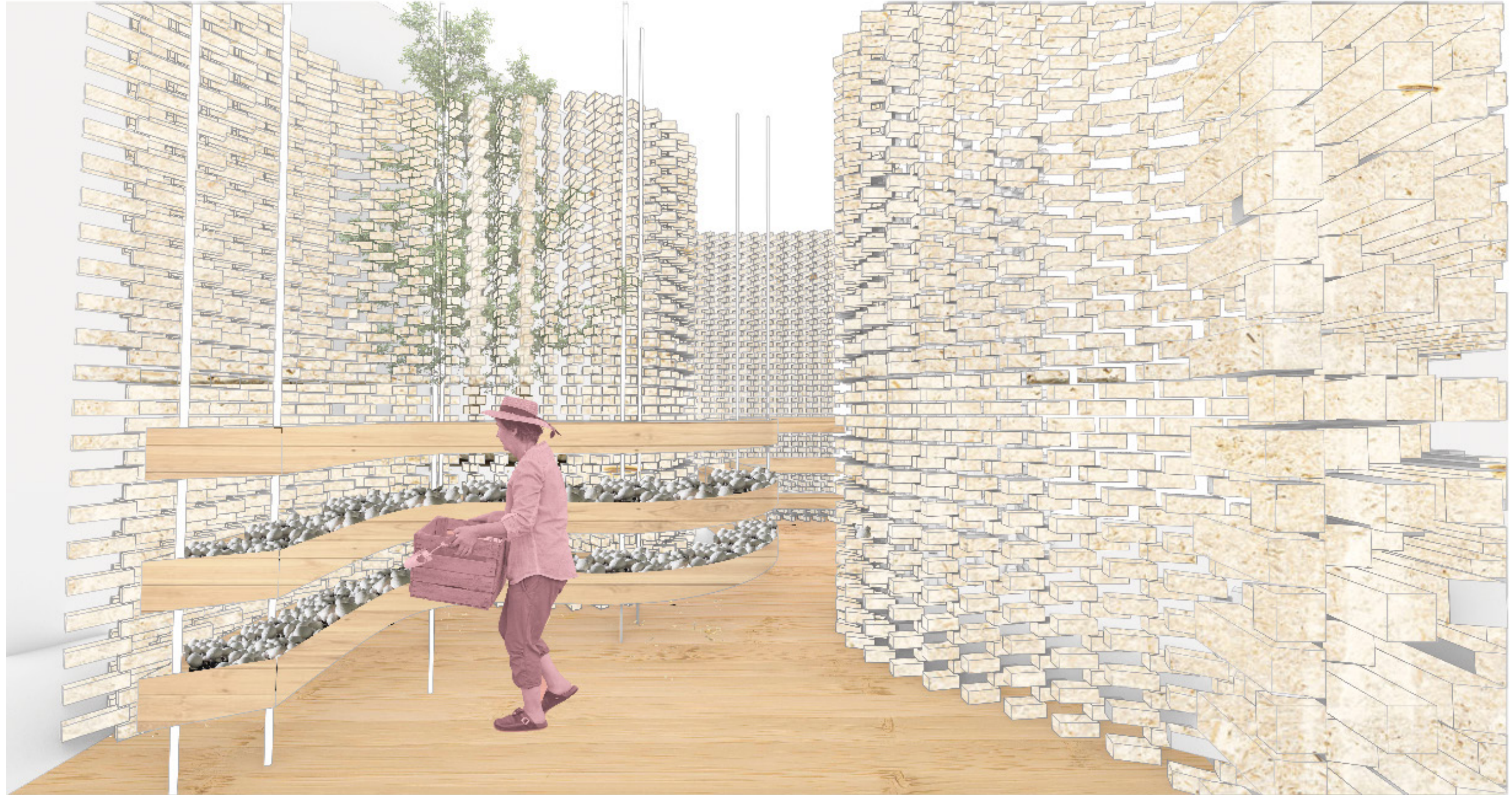


Typical Studio

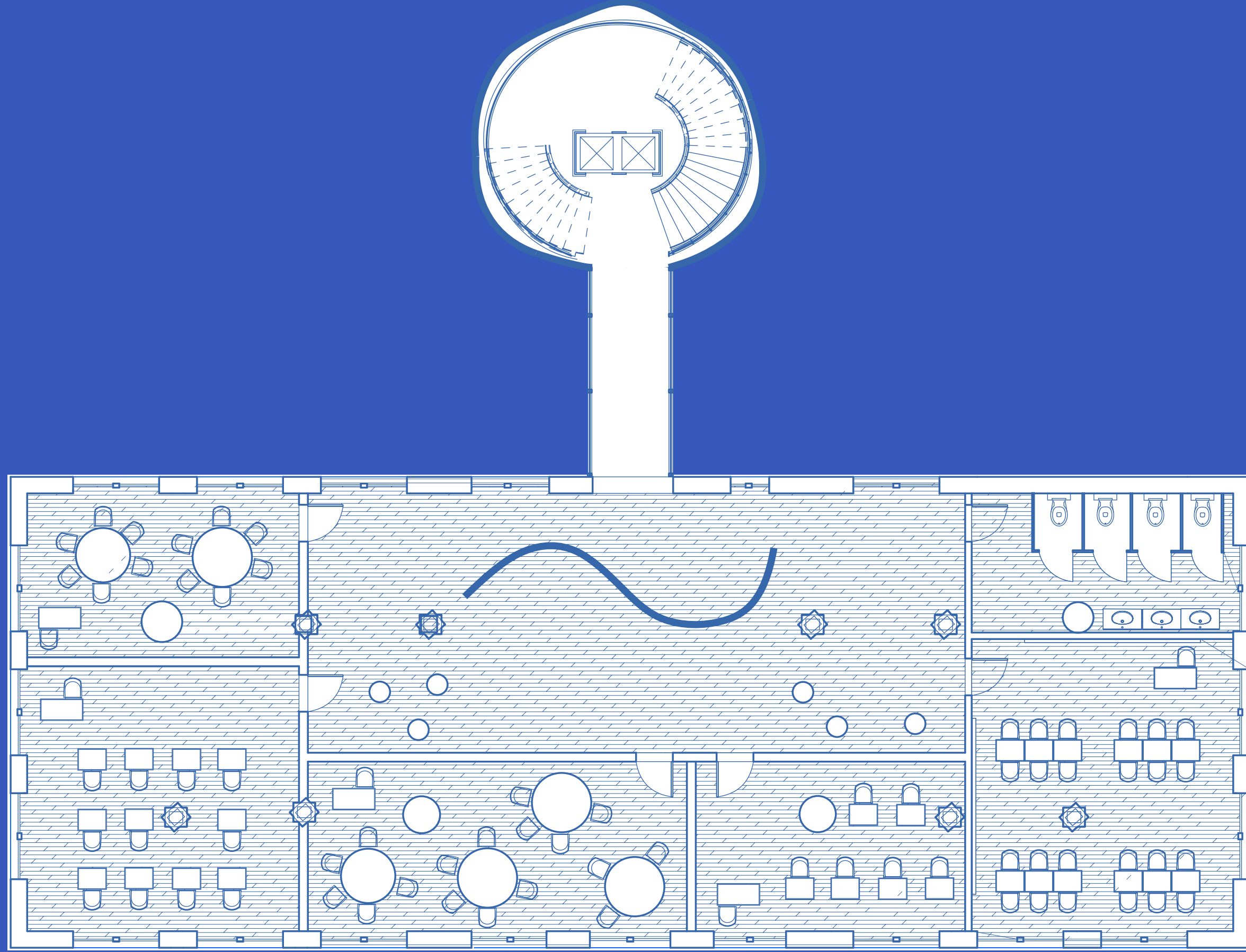
Avery Level 7 -  
Mushroom Farm + Exterior Lounge



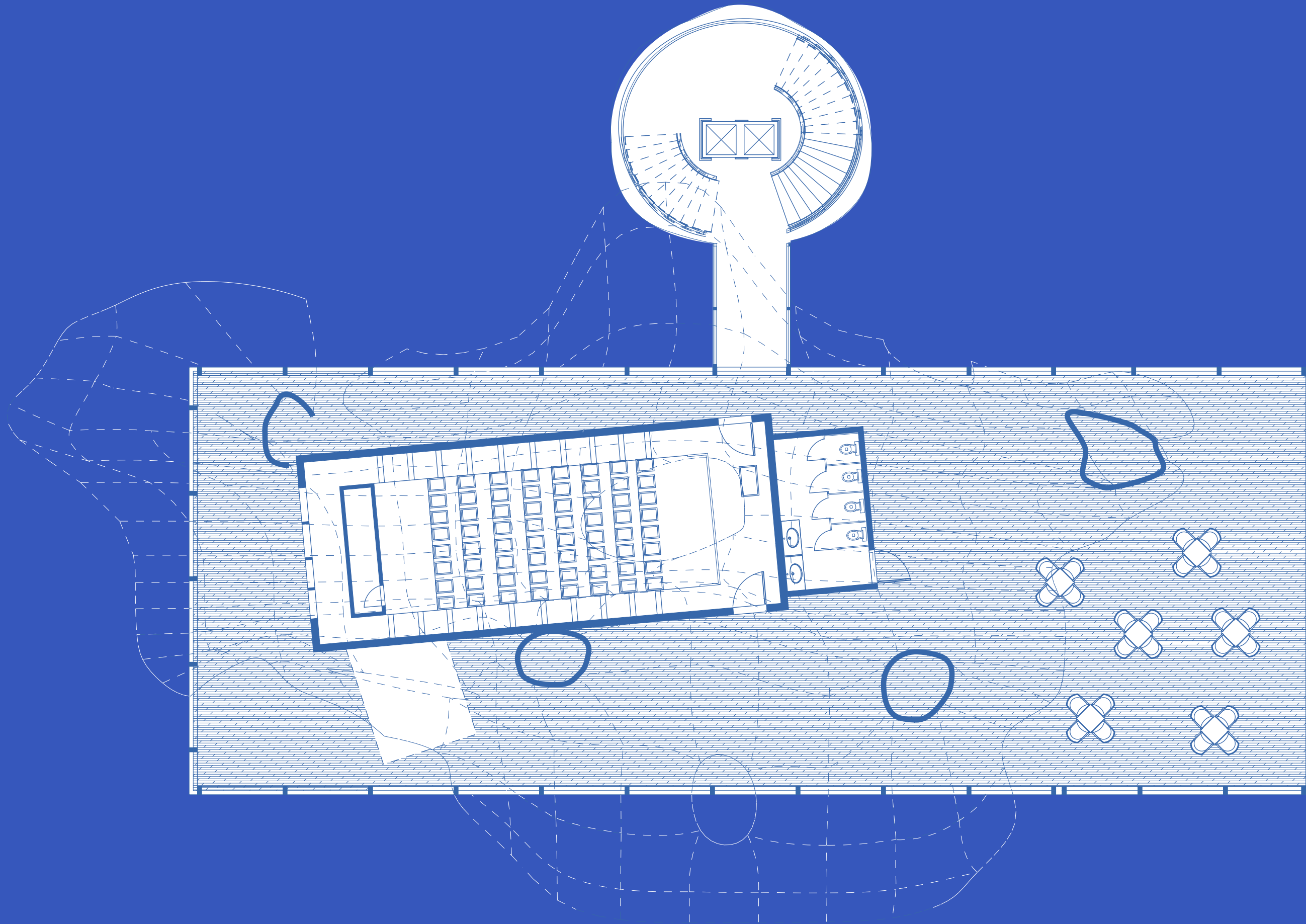
The mushroom farm requires student and faculty help to become successful. GSAPP could partner with the surrounding neighborhood to offer courses on mushroom cultivation and building. Since the common brick can be formed into many different compositions, the structures have the ability to be changed throughout the years. The farm will help create new interior walls and screens. Students or local community members can disassemble the structures and compost the bricks, using the resulting soil to create more mycelium bricks.



# Avery Level 8 - Classrooms



# Avery Level 10 - Auditorium + Rooftop







*brick vaulting*

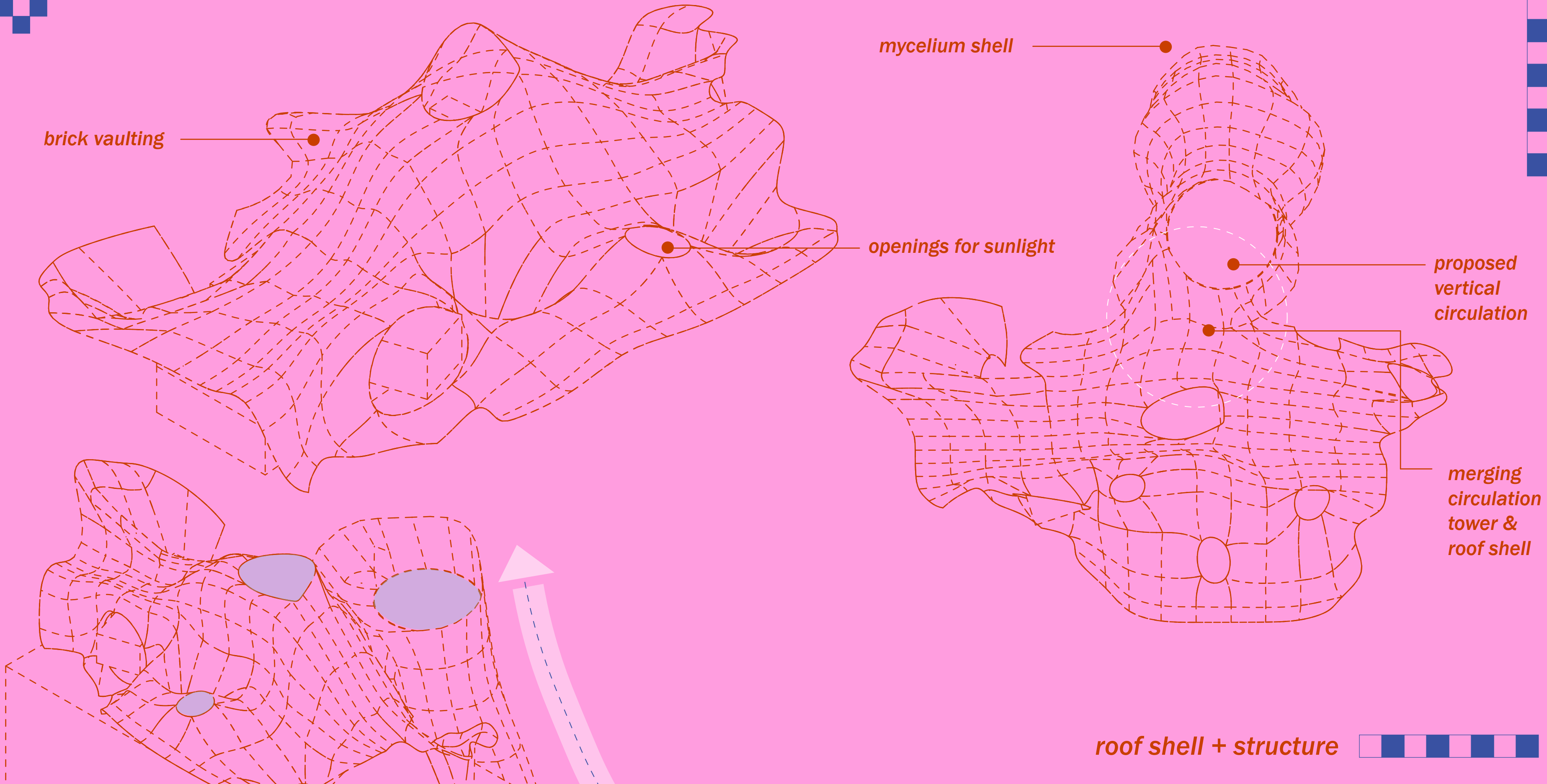
*mycelium shell*

*openings for sunlight*

*proposed  
vertical  
circulation*

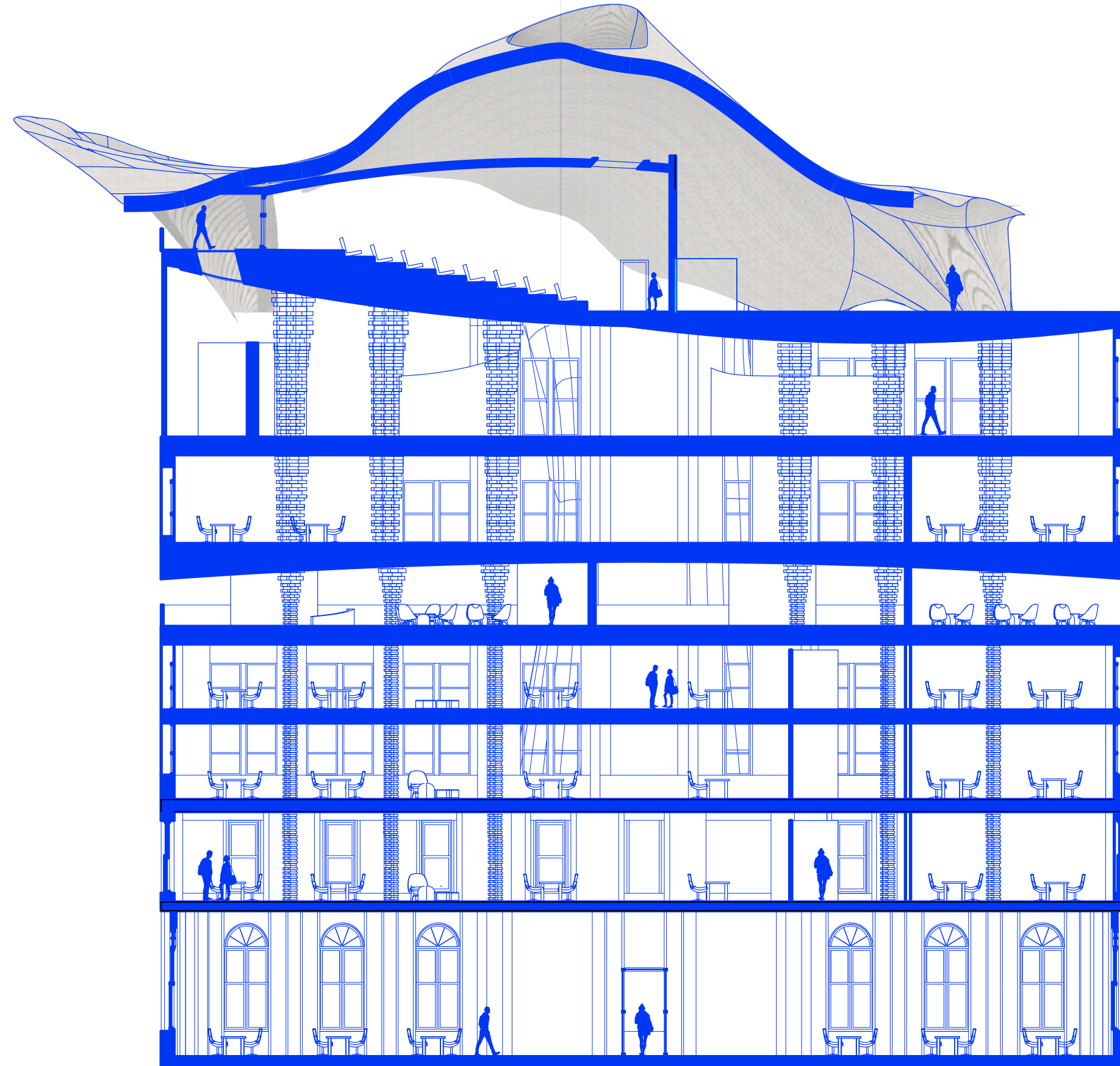
*merging  
circulation  
tower &  
roof shell*

*roof shell + structure*





*section a*



Keeping the integrity of the Columbia campus brick structures while leaving a smaller footprint and increasing community involvement. The goal of the proposal is to create a space of exploration, transformation and presentation. A showcase of the GSAPP building practices that will lead to a healthier future.





**Columbia University GSAPP**

**In Collab with : Han Kuo + Jerry Schmit + Qingfan Wu**

**Modeled and Rendered in 3ds Max / Vray**

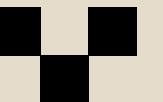
# *Techniques of the ultra*

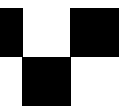
We find a site that is grounded with a shimmering body of water, yet completely abandoned. One villa still stands alone in the massive site, asking for discovery. The excessive plants, trees and worn materials are symbols of the weathering and time that has passed. The large relics draw in a curious group of wanderers, who make this piece of land their home. The glimpses of new, fresh colors and finishes are a peek into the changes the current community has made. The overall goal of the site is to focus on how small scale the new community is compared to what stood before. The site will completely transform its character as years progress.

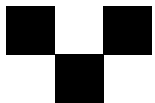
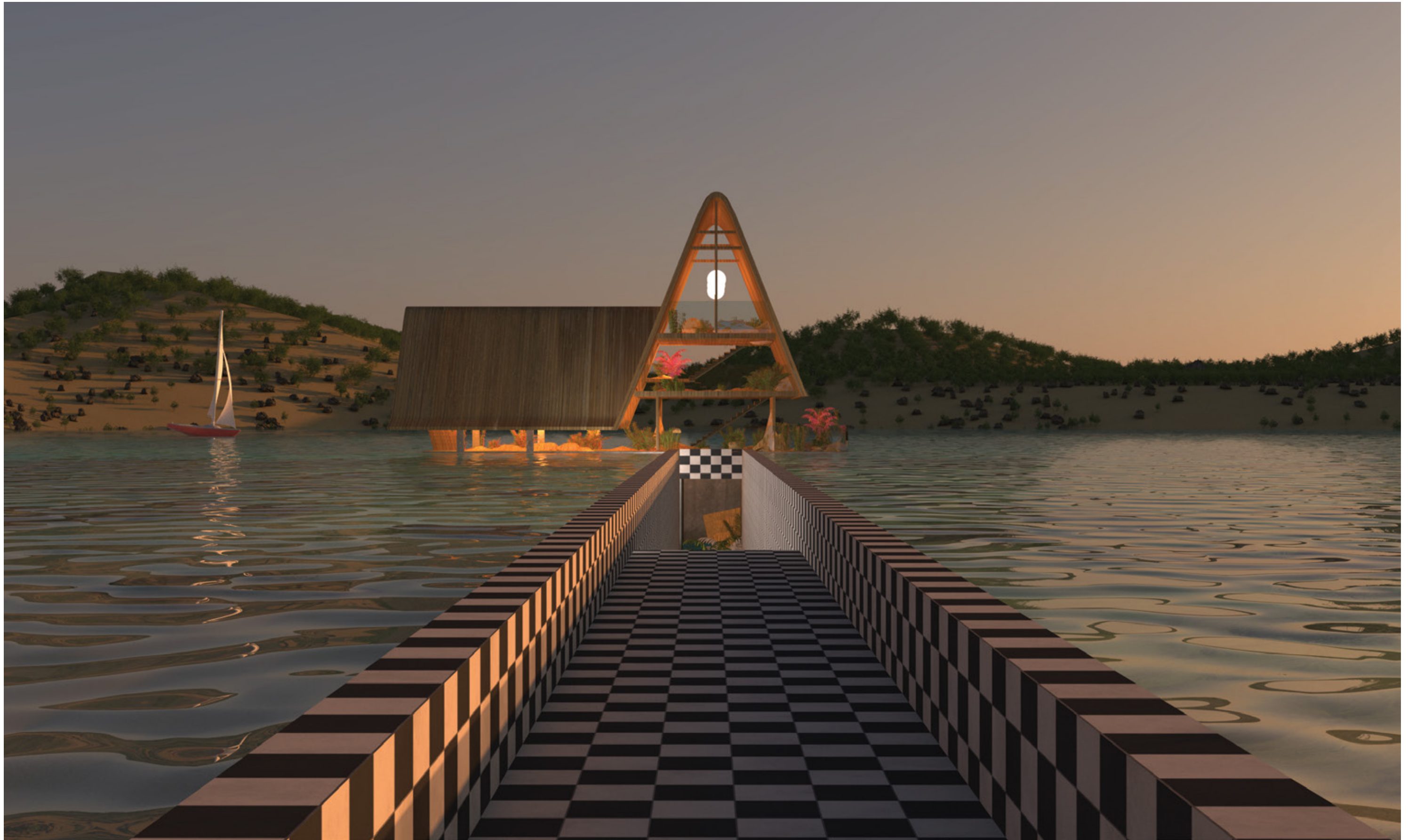
# ULTRA

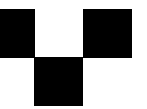


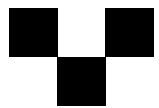
**Spring 2022**







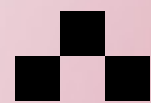






Spring 2022

# *relax gsapp* *- relaxation station*



Spring 2022



RELAXXXX



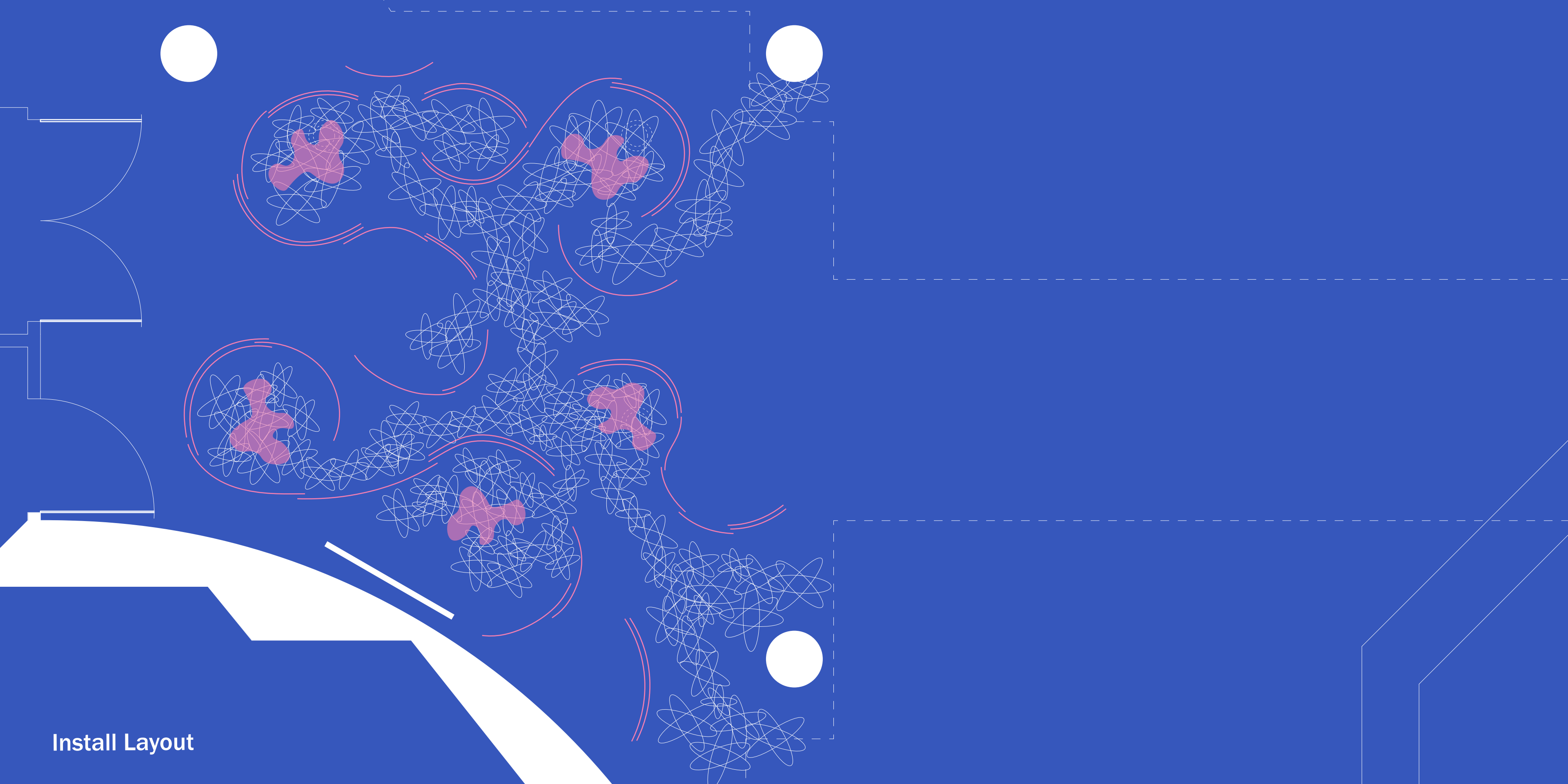
Spring 2022

*In Collab With :*  
*Eric Hagerman*  
*Katerina Papoutsas*  
*Laurin Moseley*  
*Mudong Jung*  
*Zhanhao Fan*

Spring 2022



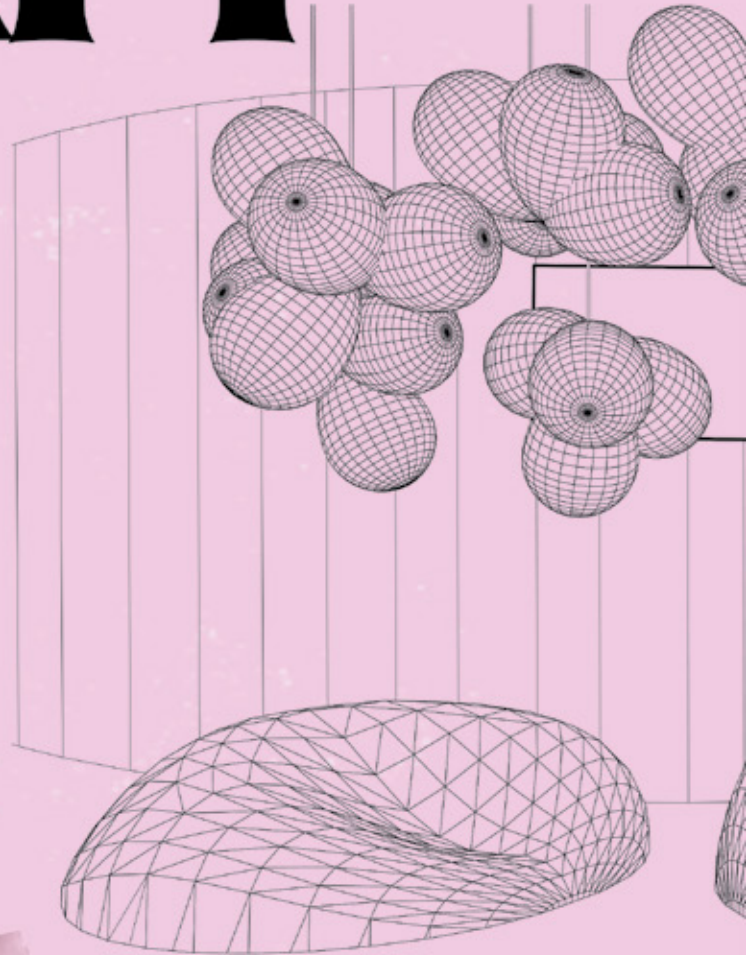
**Our installation is proposed to transform the current underutilized common study space of Avery 100 to a relaxation area for Columbia GSAPP students. An opportunity for one to take a break in between courses or their studies to relax, reduce their levels of anxiety and increase their state of mindfulness. Relaxation can be triggered in many ways, but we will be focusing on comfort, lighting, sound, and visual aspects. An installation of nylon bags will create a "cloud", connected to the ceiling, to create the feeling of decompression. At the same time, light fabrics will differentiate and enclose the space, creating smaller private spaces. The screen located in the space will display images/videos for visual relaxation, while a QR code will enable the visitors to manage the music they will listen to. Posters and signs will advertise the station all over the GSAPP building, attracting students to experience the GSAPP Relaxation station and its dynamics.**



Install Layout

# RELAX GSAPP

@ AVERY 100



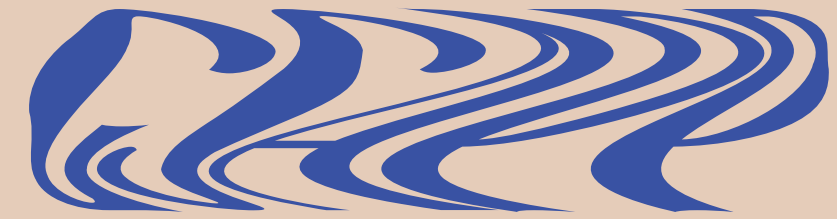
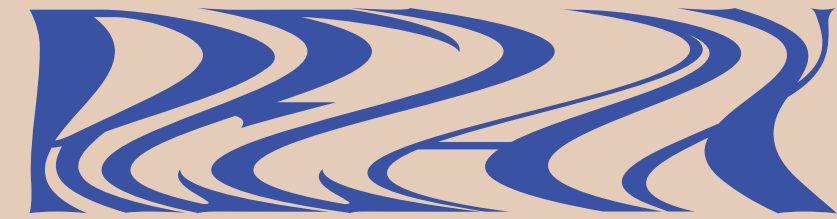
ERIC HAGERMAN  
KATERINA PAPOUTSA  
KENNEDY VANTRUMP  
LAURIN MOSELEY  
MUDONG JUNG  
ZHANHAO FAN



GSAPP RELAXATION STATION @ AVERY 100

2022

GSAPP RELAXATION STATION @ AVERY 100



RELAX

GSAPP

RELAX

GSAPP

GSAPP RELAXATION STATION @ AVERY 100

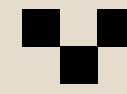
GSAPP RELAXATION STATION @ AVERY 100







COLUMBIA



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