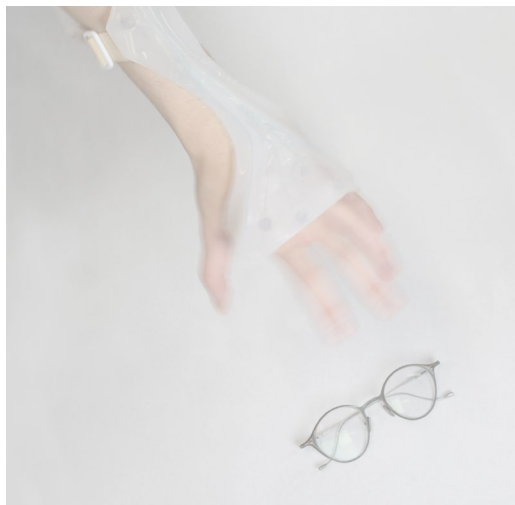
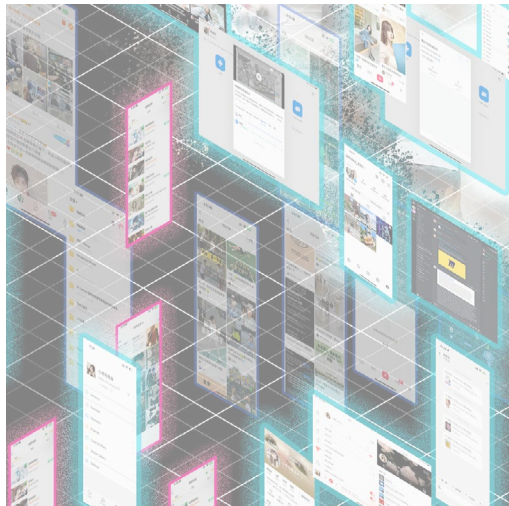


PORTFOLIO
2025

Jieyu Yang

Selected Works 2024-2025
Columbia GSAPP



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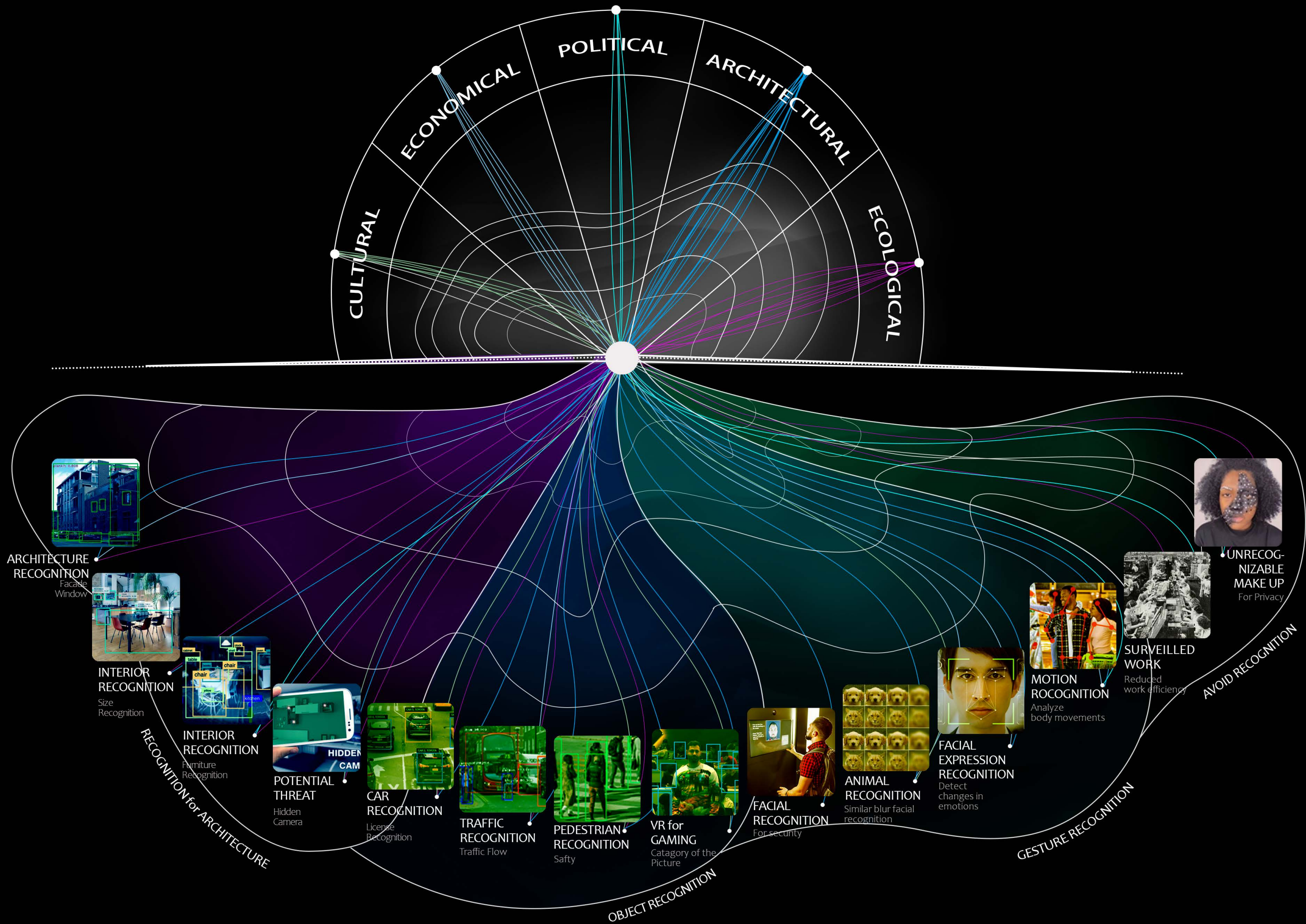
Historical Building Renovation | Studio FA2024

03 Trash-to-Breath

Polykatoikia Renovation | Studio SP2025

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DIGITAL EXPOSURE

An experiment to explore how this digital world **expanded our vision**,
And how we are **unconsciously exposed** in the process.

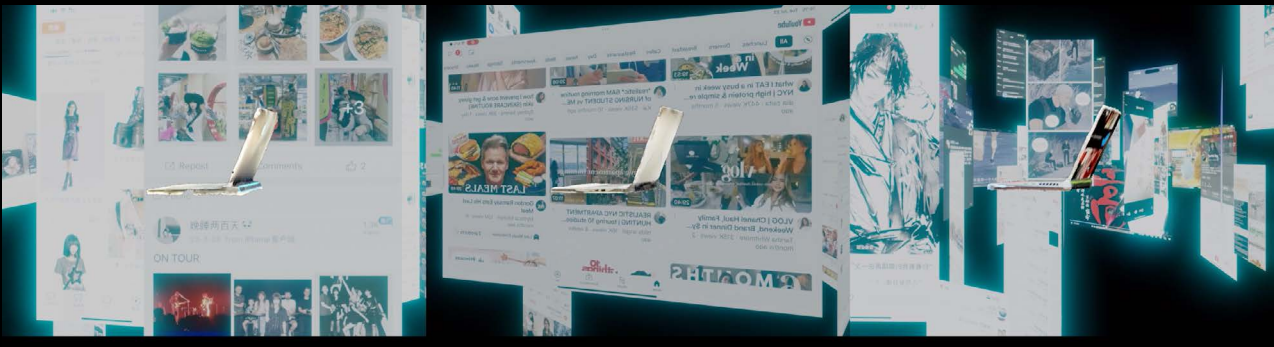
Social
identity
0:00:00



House
in real life
0:02:11



Identity
online
0:00:16



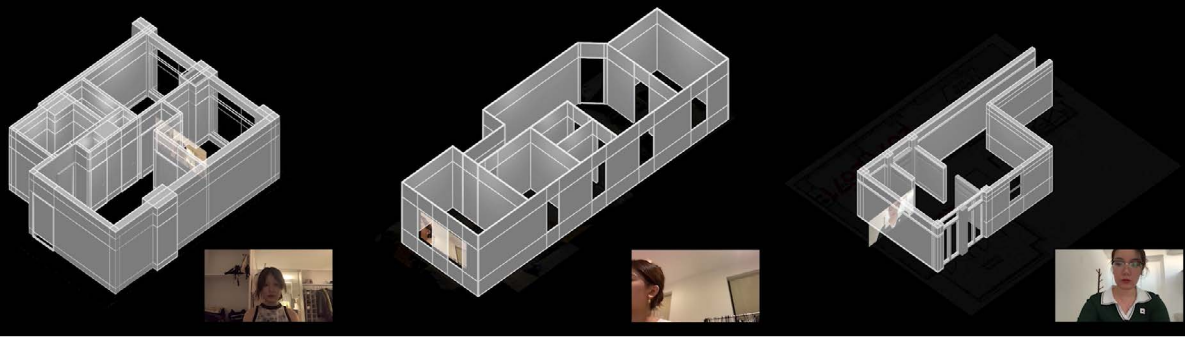
Unreal
online info
about house
0:02:35



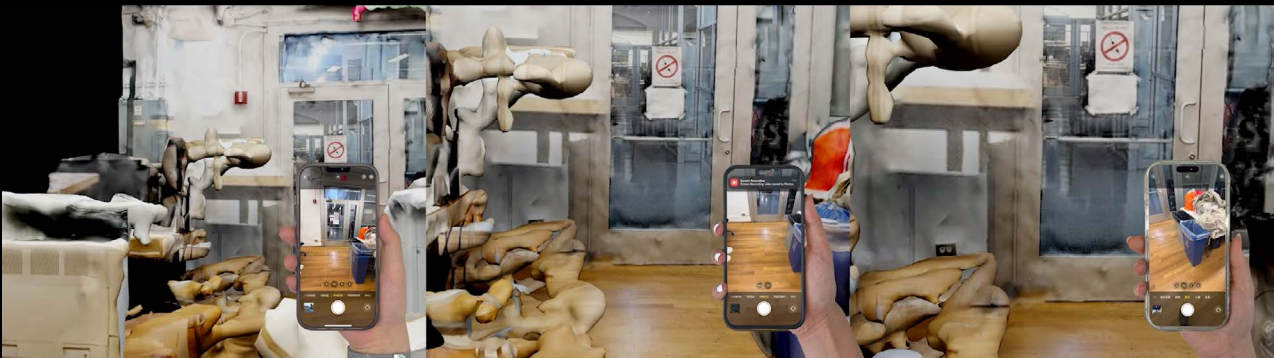
Information
in real life
0:00:50



Unconsciously
exposed
space
0:03:36



From work
space
0:01:20



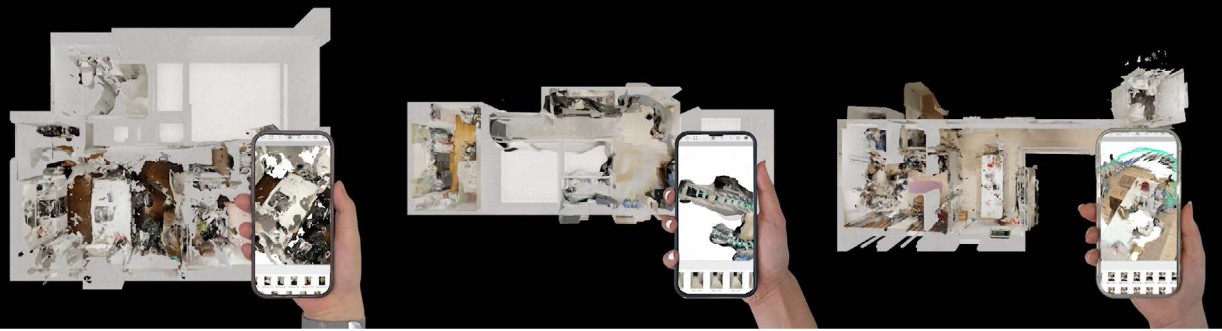
Exposed
pictures in
private space
0:04:05



To home
0:02:10



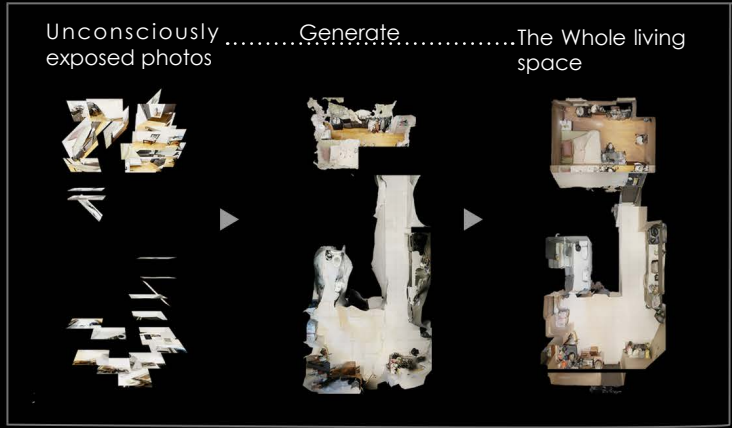
Models
generated by
pictures
0:04:45



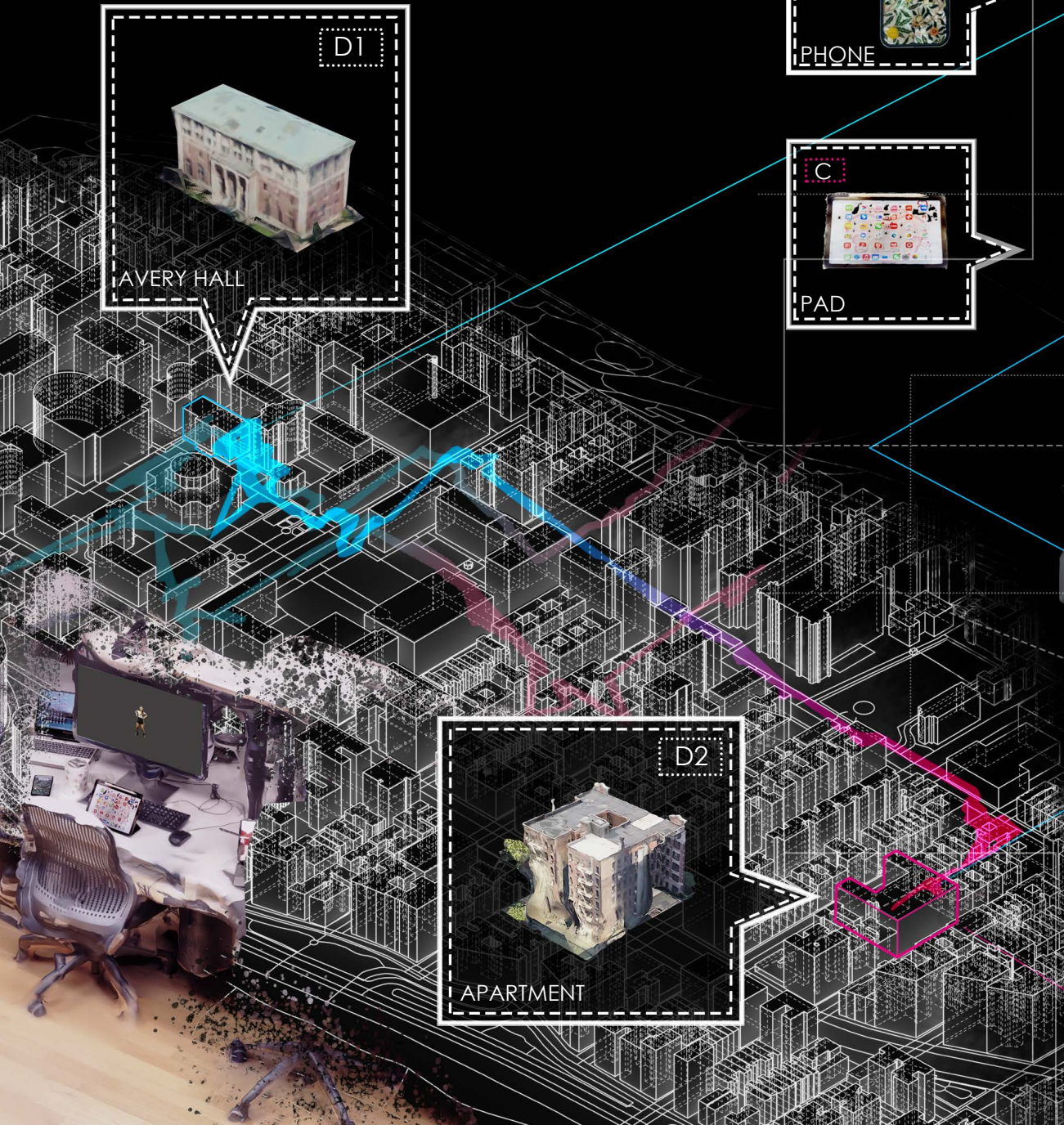
DEVICE EVERYWHERE

World
MAKES Privacy MORE (IN)VISIBLE

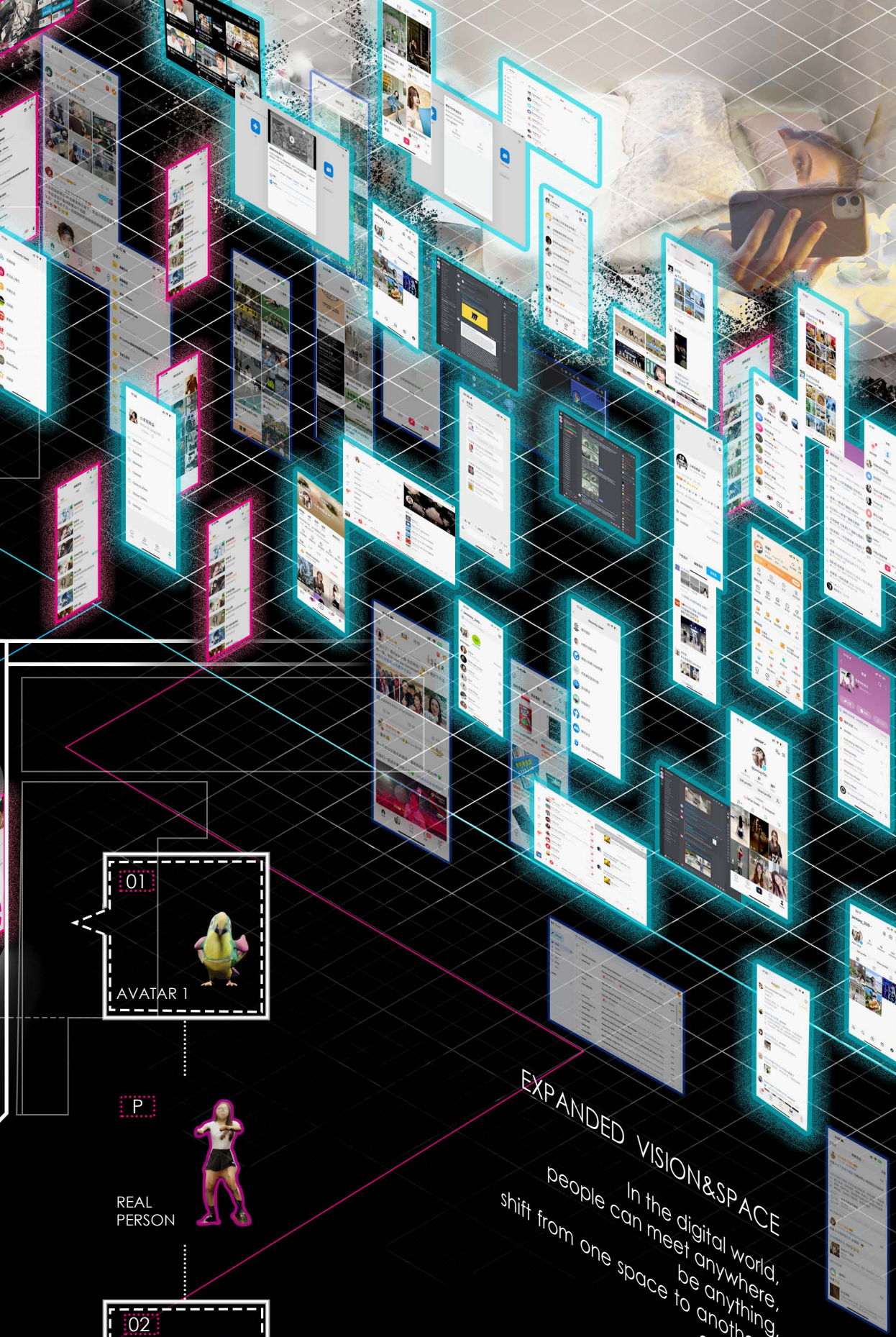
What if we're constantly being watched by devices?



OUR DAILY ROUTINE be exposed



IN OUR HOME



EXPANDED IDENTITY

EXPANDED VISION&SPACE
In the digital world,
people can meet anywhere,
be anything,
shift from one space to another in
a second.



02 Tales on Puppet Truss

Puppet Museum | Historical Building Renovation

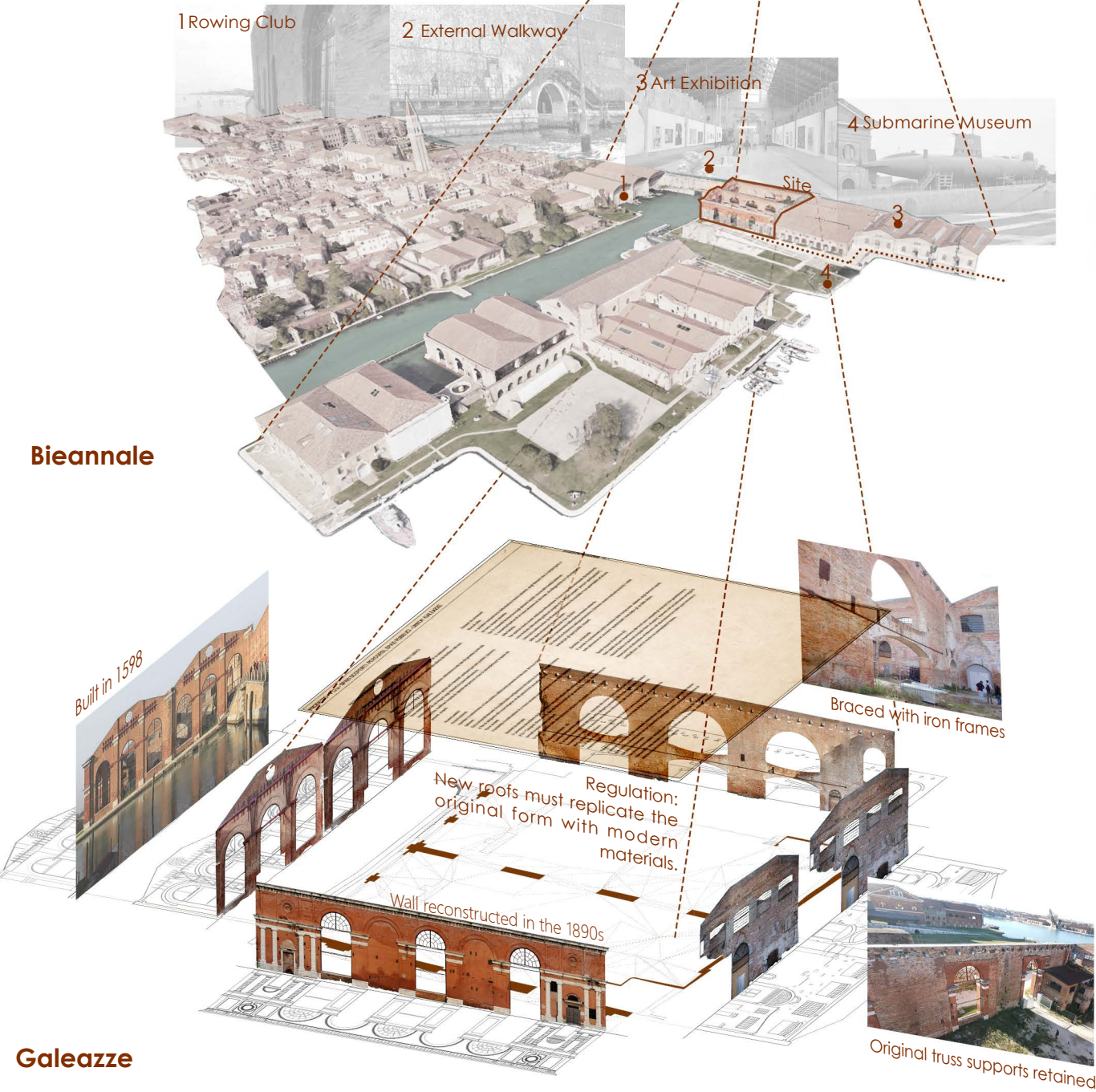
location: Venice, Italy
Period: Fall Semester | Year 2024
Project Type: Individual work
Instructor: Mark Rakatansky, Jorge Otero-Pailos

Background

"Galeazze" originates from a type of warship that once embodied the maritime glory of the Venetian Republic. Now located near the Biennale, a global stage for showcasing art from around the world, this historic site, once a center of Venetian craftsmanship, is reimagined as a vibrant space celebrating diverse puppet traditions and reviving its cultural vitality.

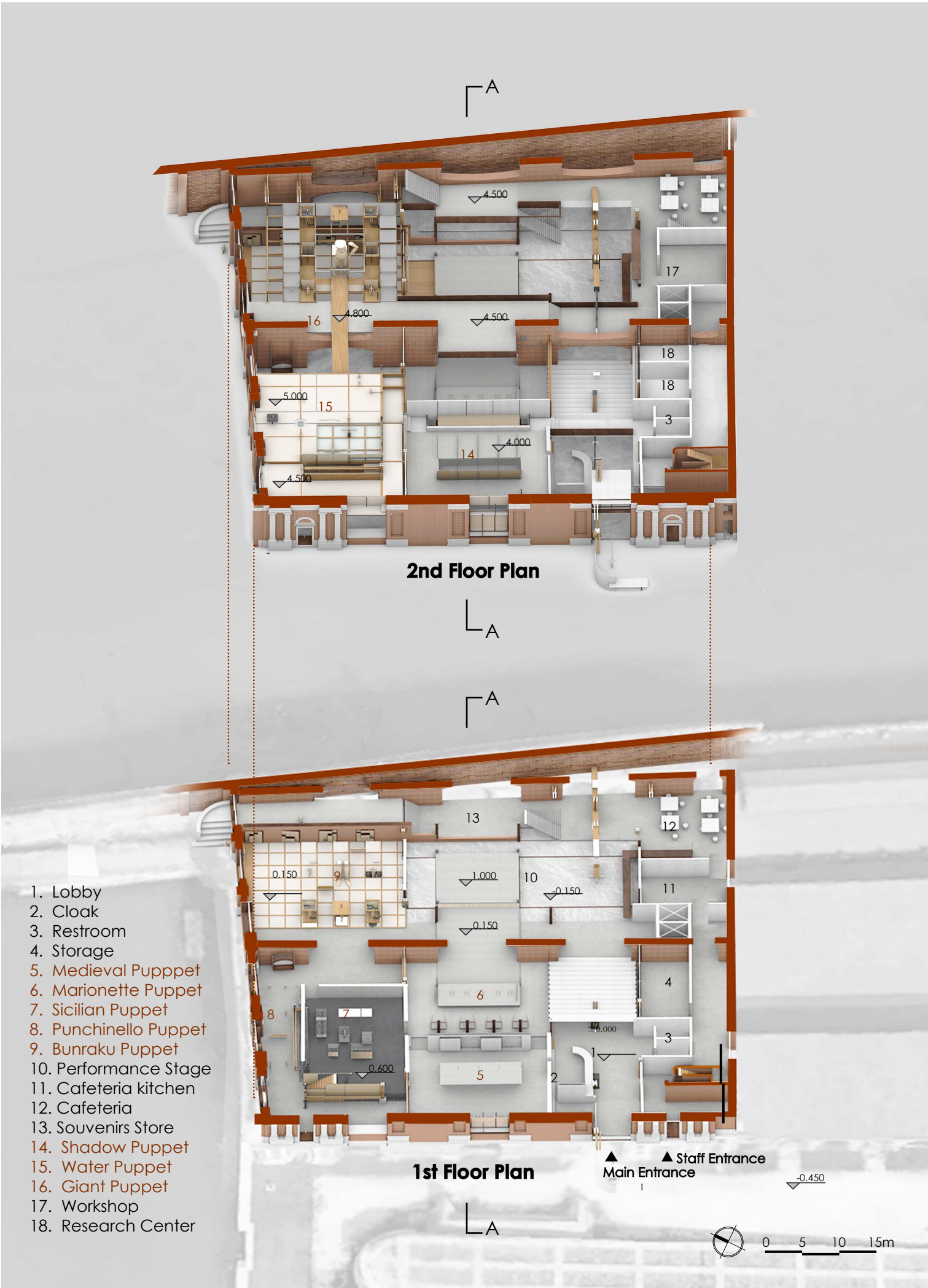
Venice

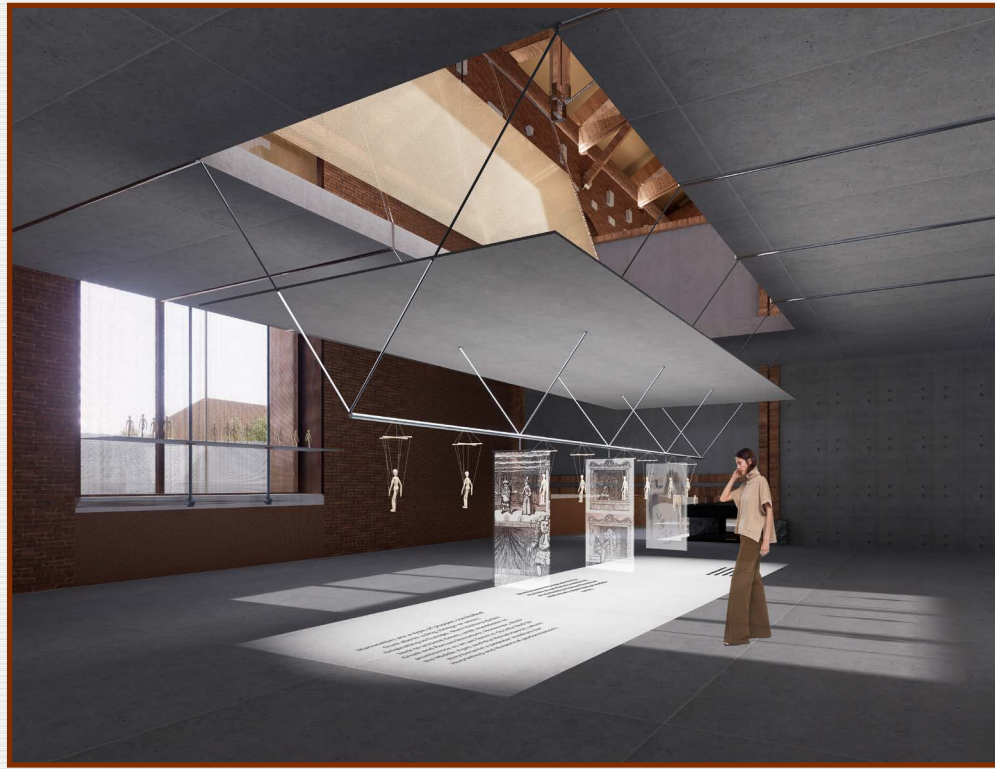
- Arsenale
- Biennale



Galeazze

- 1. Lobby
- 2. Cloak
- 3. Restroom
- 4. Storage
- 5. Medieval Puppet
- 6. Marionette Puppet
- 7. Sicilian Puppet
- 8. Punchinello Puppet
- 9. Bunraku Puppet
- 10. Performance Stage
- 11. Cafeteria kitchen
- 12. Cafeteria
- 13. Souvenirs Store
- 14. Shadow Puppet
- 15. Water Puppet
- 16. Giant Puppet
- 17. Workshop
- 18. Research Center





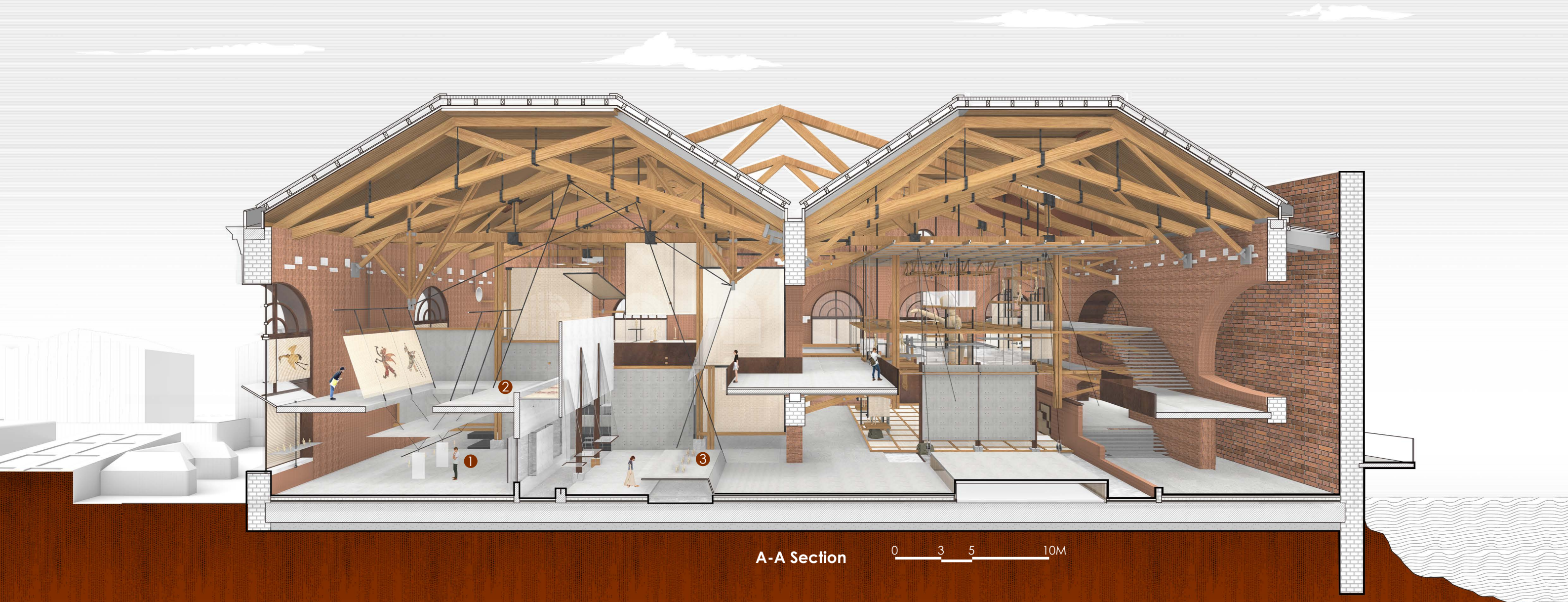
① Marionette Puppet



② Shadow Puppet



③ Medieval Puppet

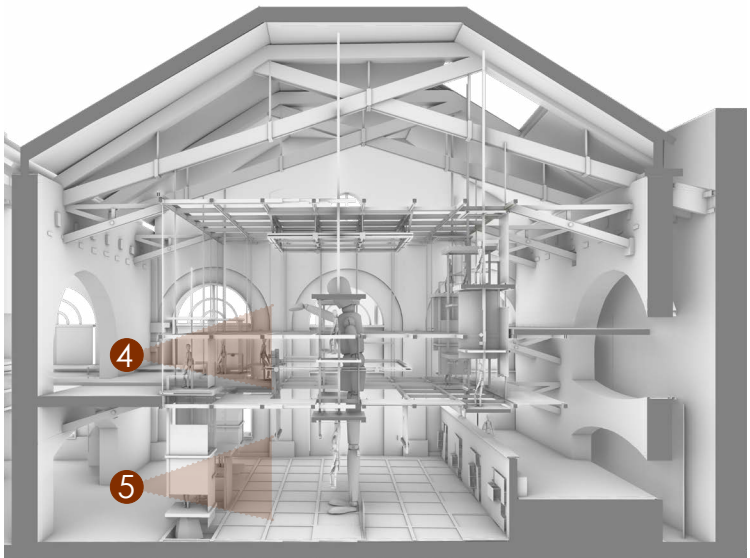
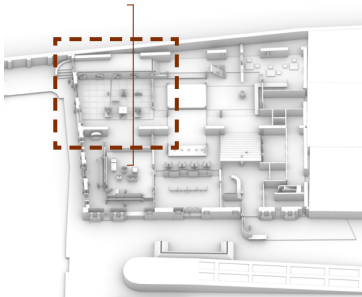


Space Controlled by Strings

The entire building, including the walls, floors, puppet display platforms, and even the puppets themselves, is suspended and controlled by the roof trusses and cable structures, mirroring how puppets are manipulated with strings and rods.



4 Giant Puppet ▶



5 Bunraku Puppet ▶





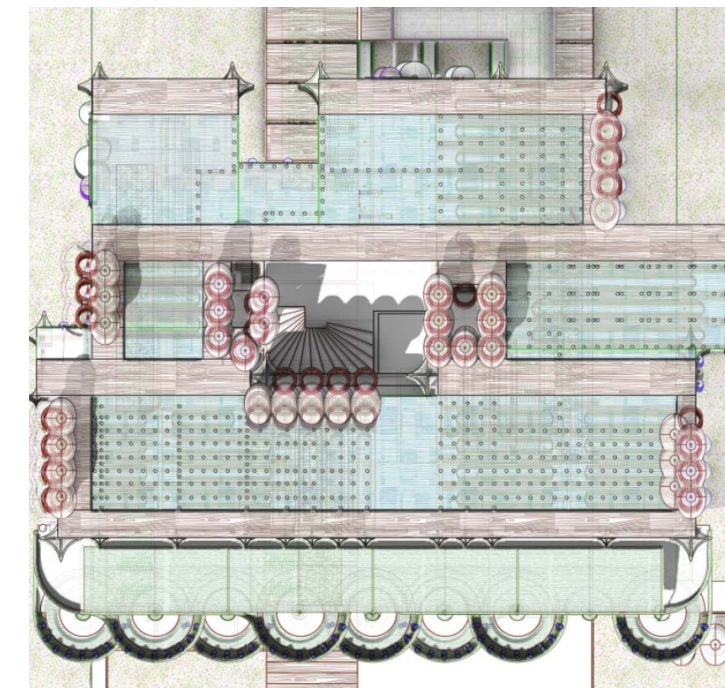
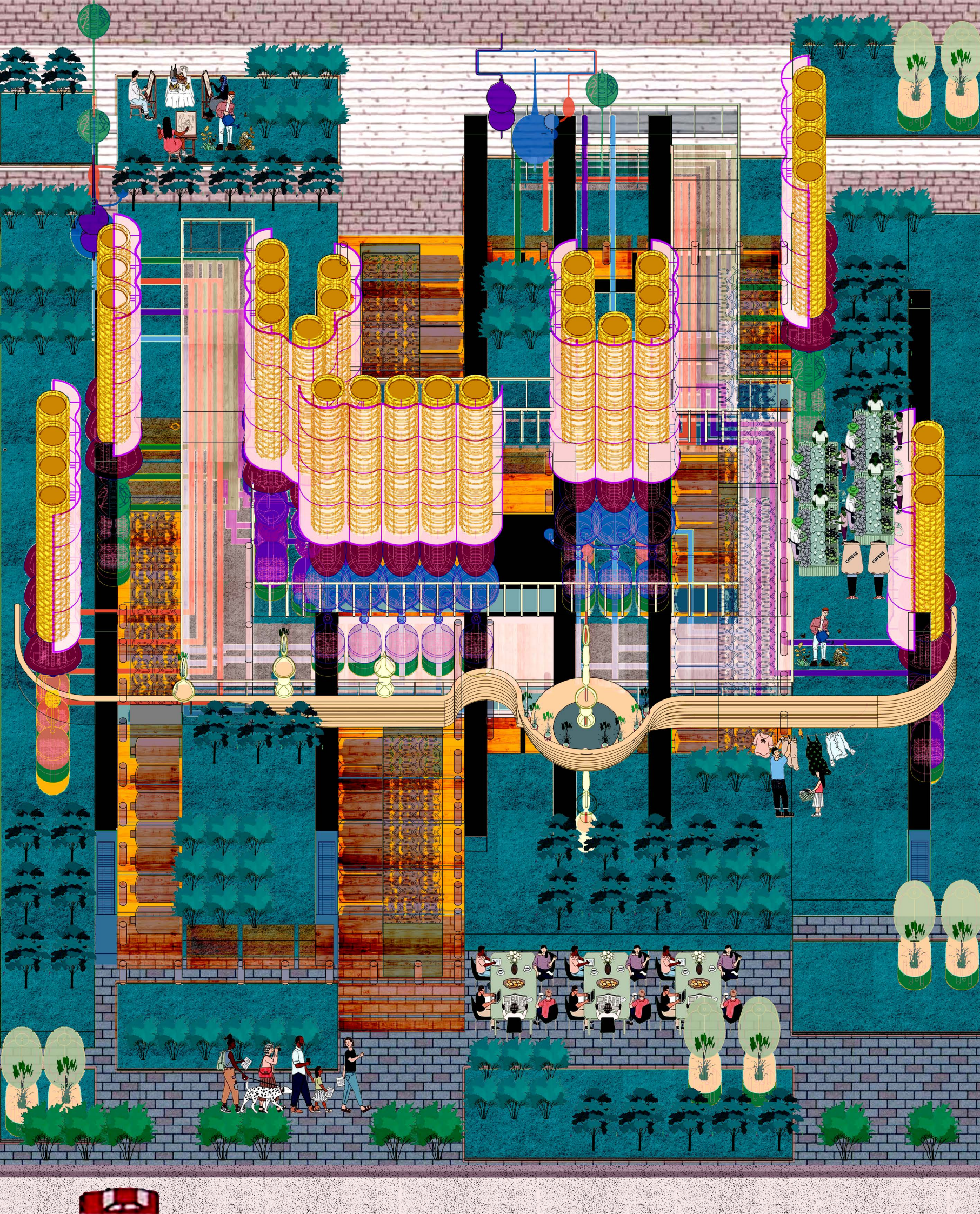
Punchinello Puppet



Sicilian Puppet



Water Puppet



03 TRASH-TO-BREATH

MicroGrid | Polykatoikia Renovation

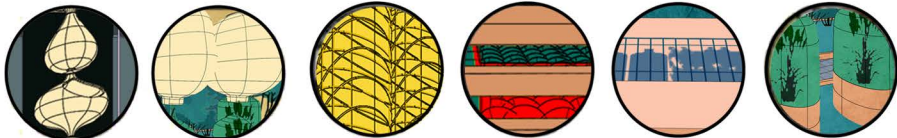
location: Athens, Greece
 Period: Spring Semester | Year 2025
 Project Type: Group work with Yüewen Jing
 Instructor: Lydia Kallipoliti

THE GARDEN'S THERMAL ENGINE

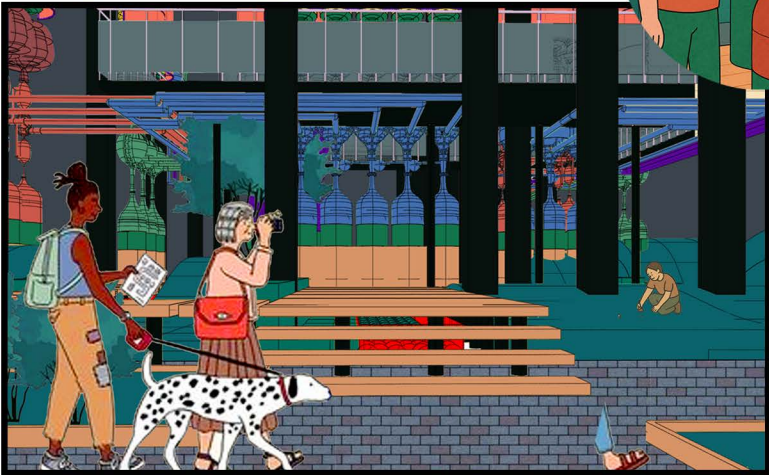
HOW A VENTILATION NETWORK WORKS



Walking through the park after work always cheers me up!



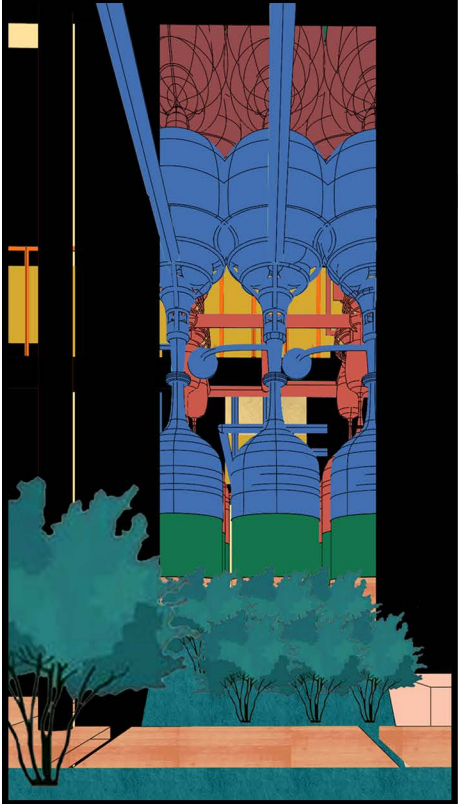
Each generator is partially exposed, allowing residents to observe the decomposition process through translucent panels—turning waste disposal into a moment of awareness and interaction with the system.



Walking through the park after work always cheers me up!



GENERATOR STEP 2 IN GARDEN



The second stage of decomposition takes place beneath the garden, generating a large amount of heat—approximately 40 to 70°C. This heat is transported through a network of pipes to various chimney-like ventilation shafts, which then distribute it to residential units to facilitate natural ventilation. These generators are connected to the underground processing system through multiple layers of pipework.



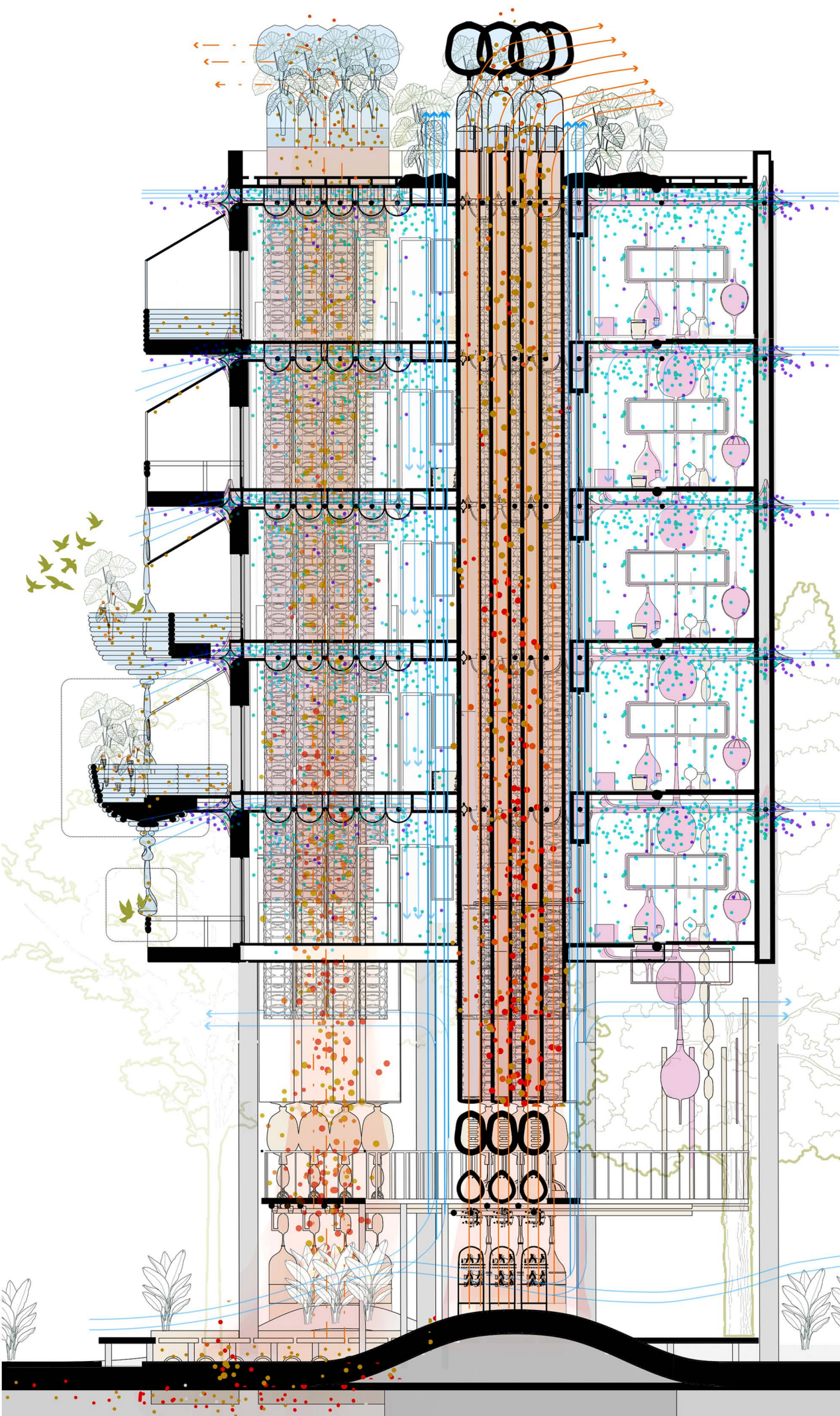
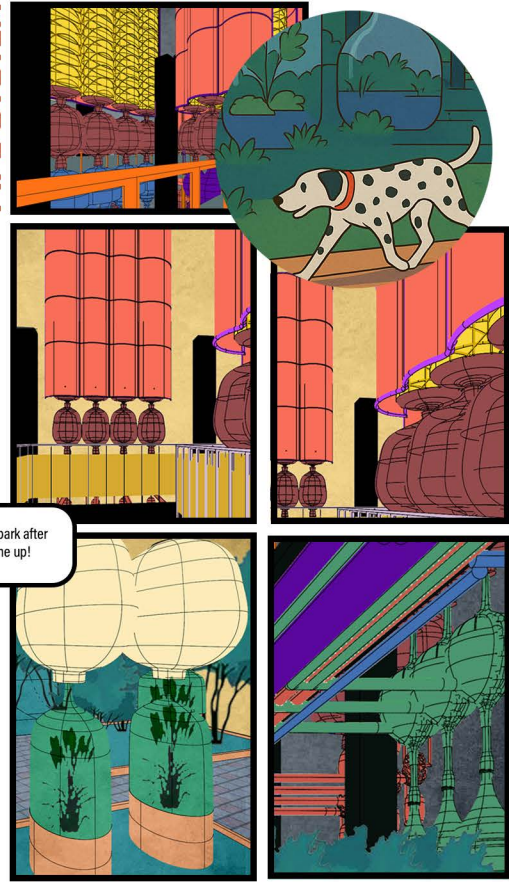
Walking through the park after work always cheers me up!



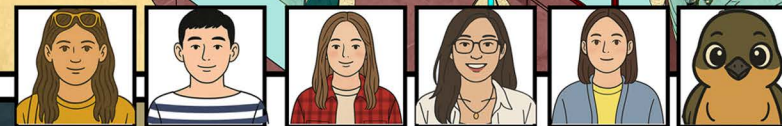
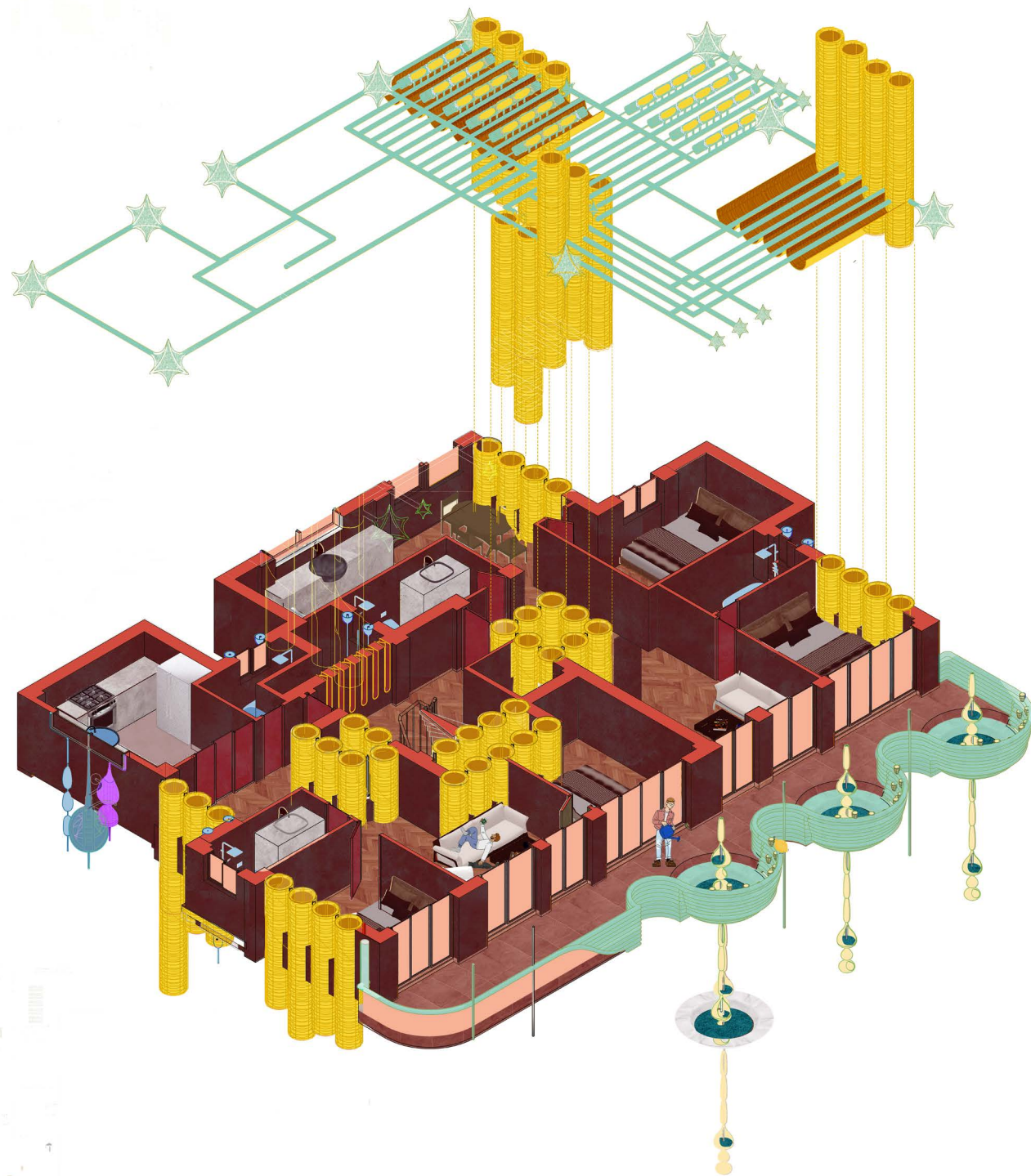
Walking through the park after work always cheers me up!



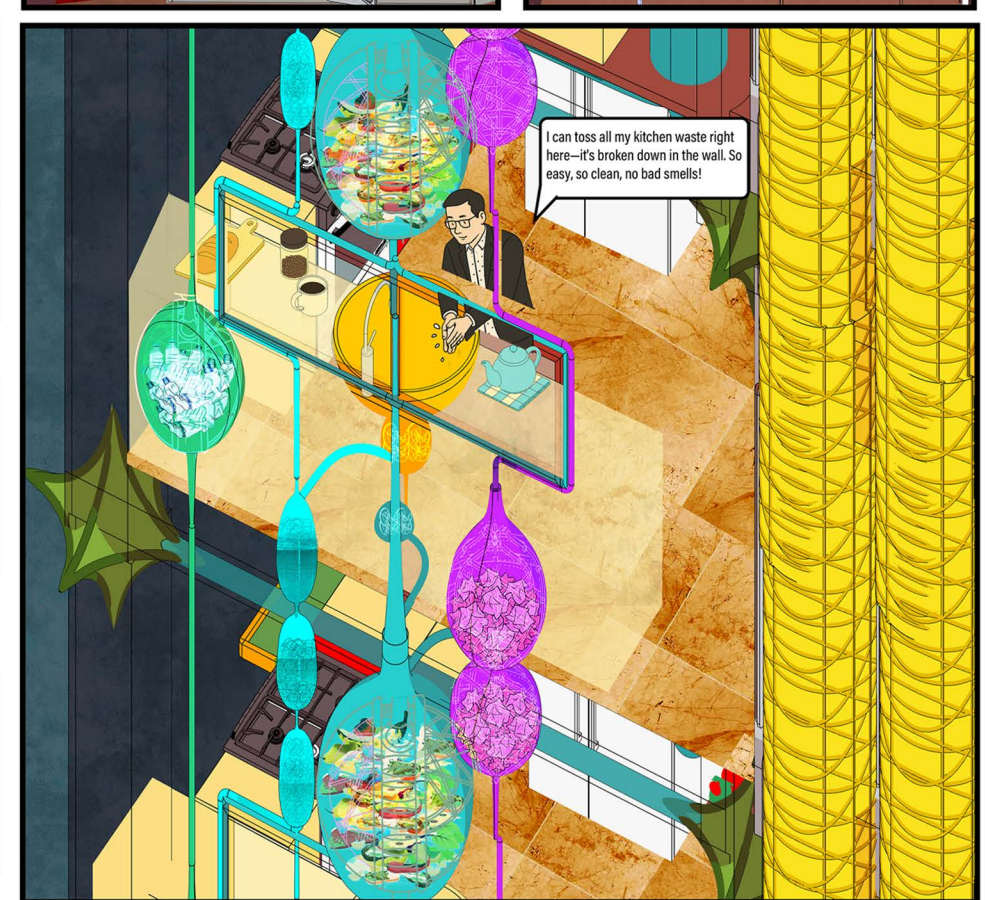
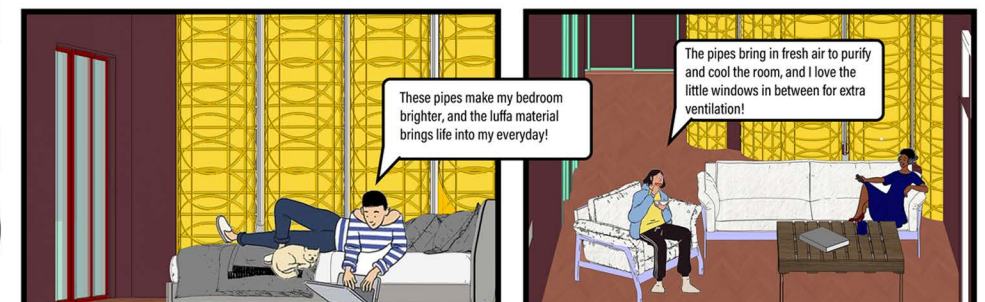
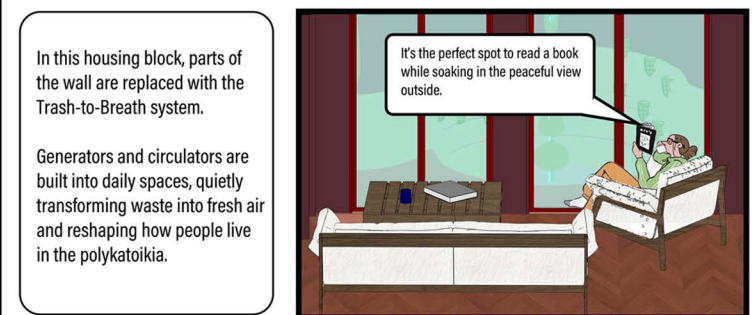
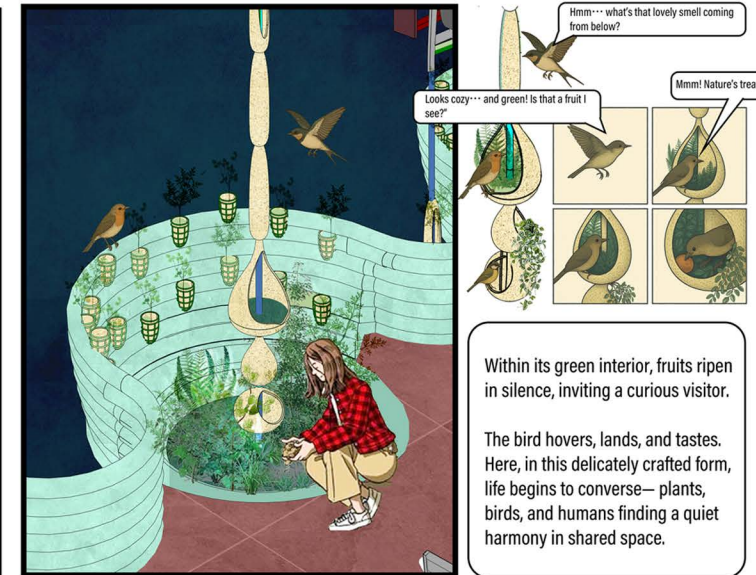
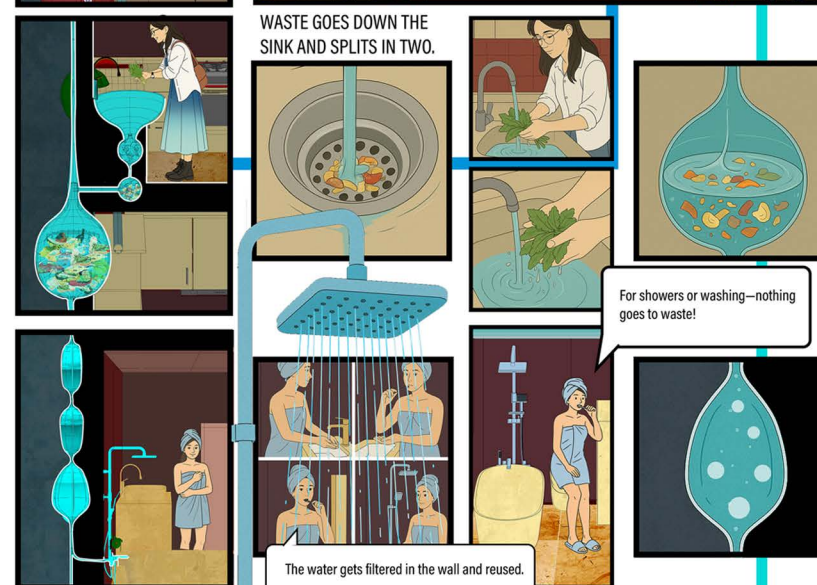
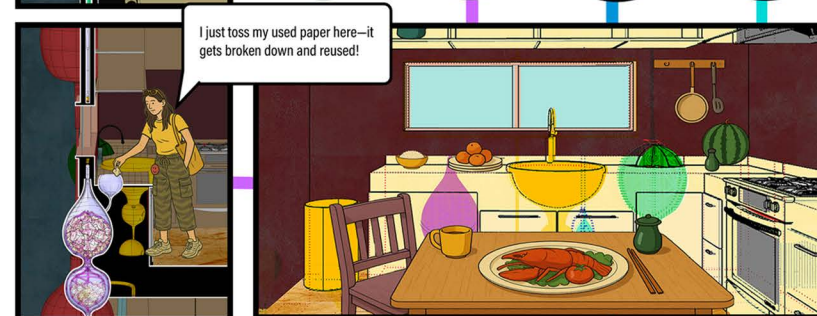
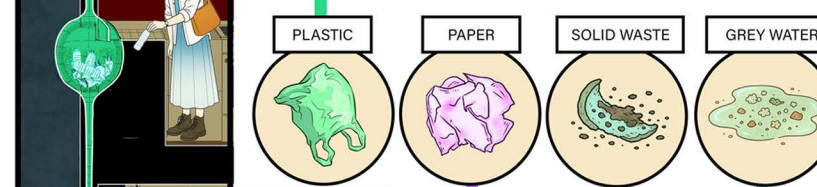
PIPE SYSTEM

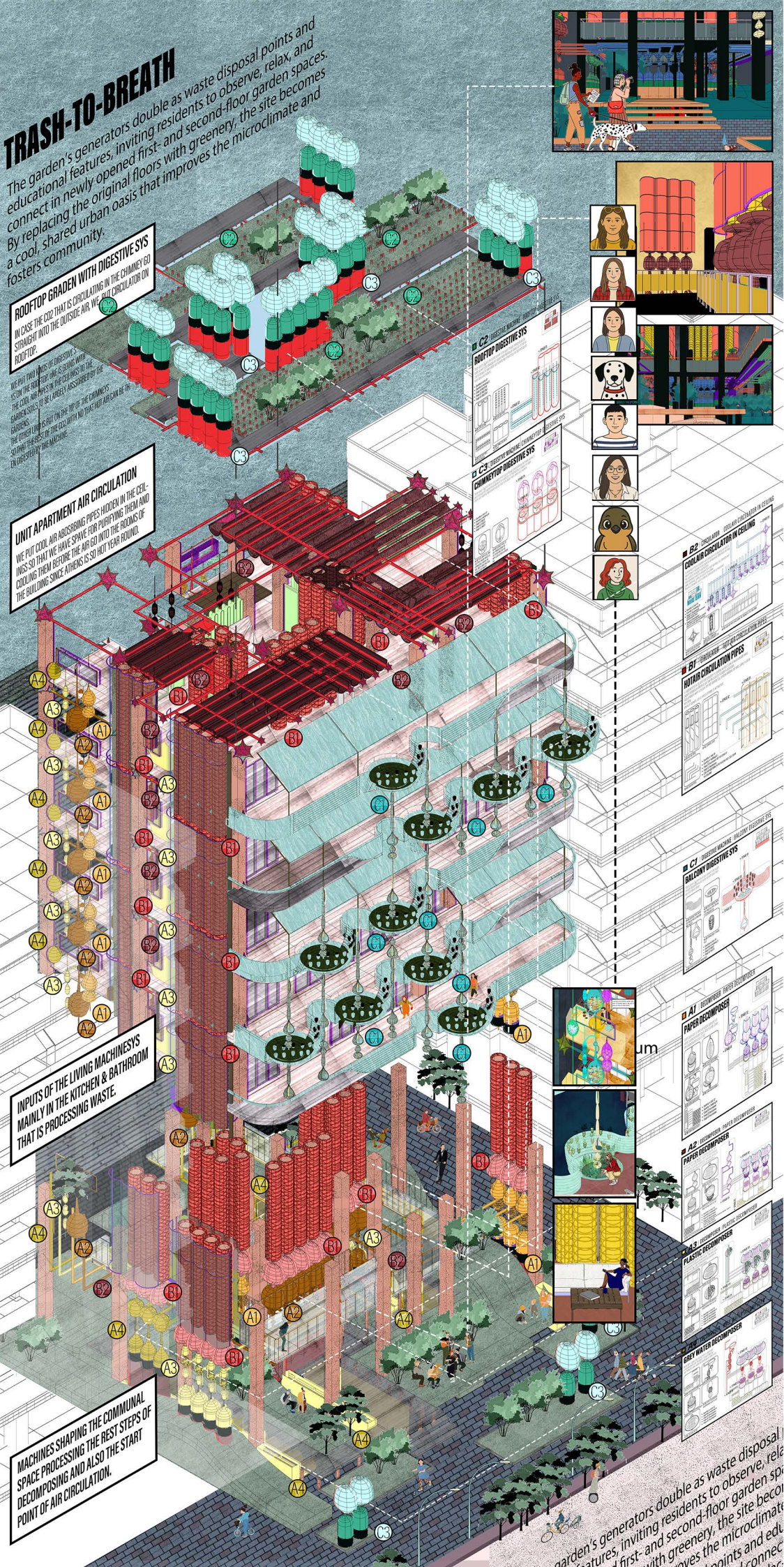


WHAT HAPPENS IN EVERY UNIT INTEGRATED INTO EVERYDAY LIFE

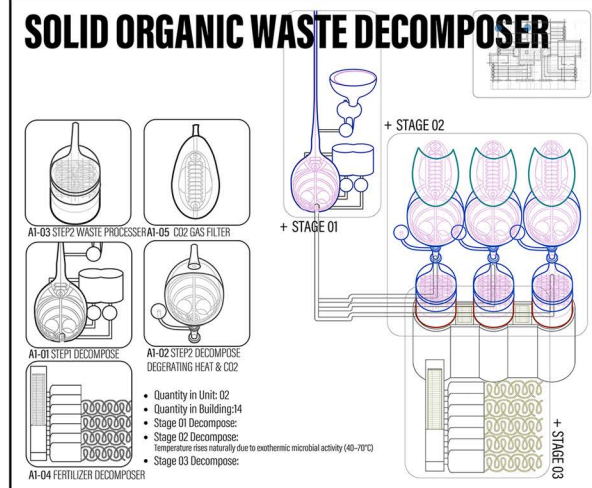


GENERATOR COMPOSITION

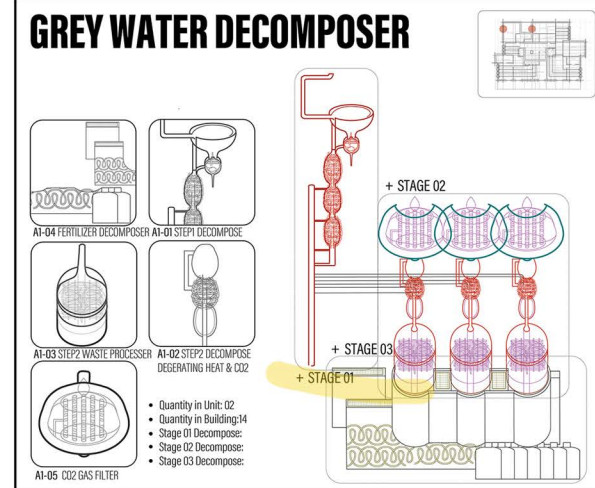




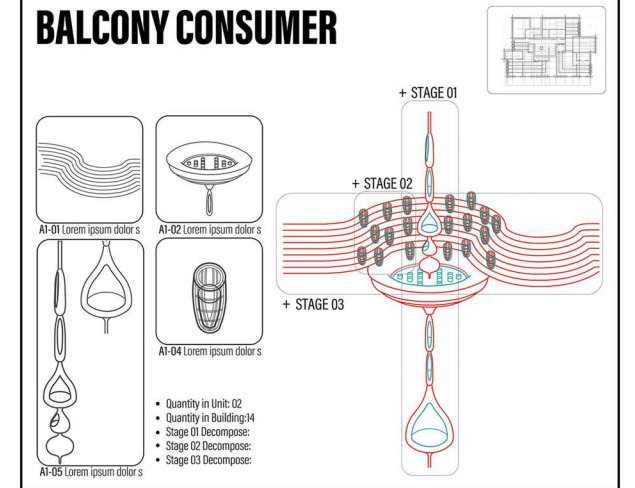
A1 : DECOMPOSER | SOLIDWASTE DECOMPOSER



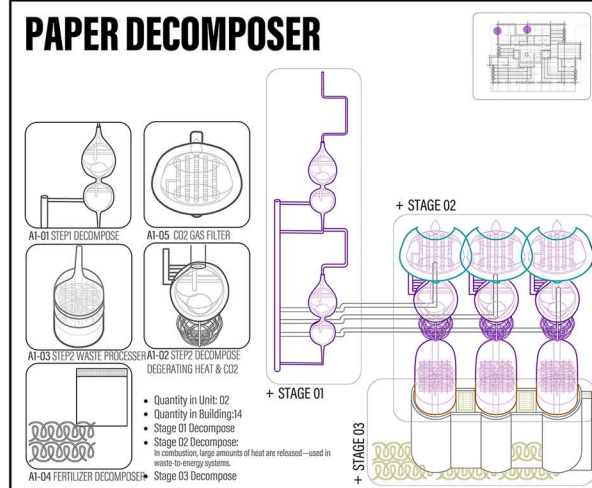
A4 : DECOMPOSER | GREY WATER DECOMPOSER



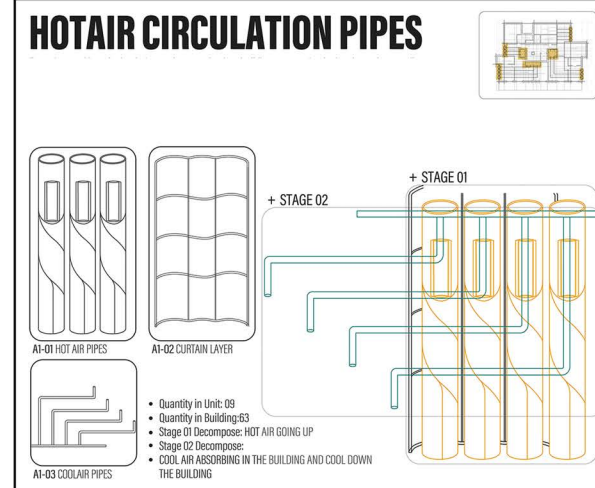
C1 : DIGESTIVE MACHINE | BALCONY CONSUMER



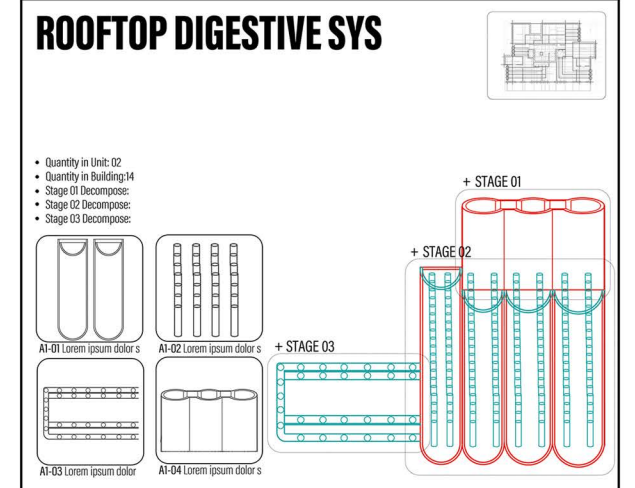
A2 : DECOMPOSER | PAPER DECOMPOSER



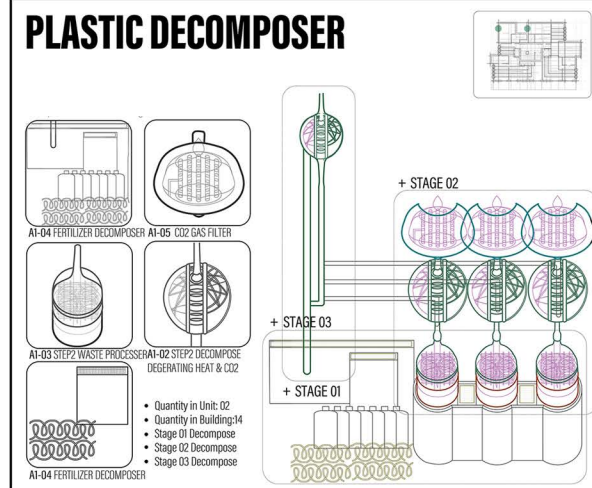
B1 : CIRCULATOR | HOT AIR CIRCULATION PIPES



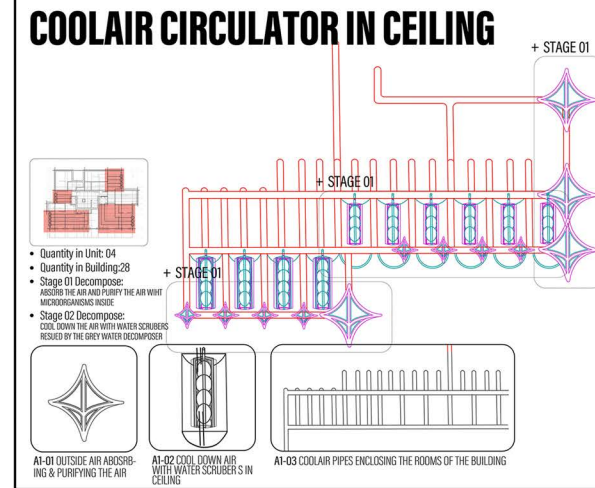
C2 : DIGESTIVE MACHINE | ROOFTOP CONSUMER



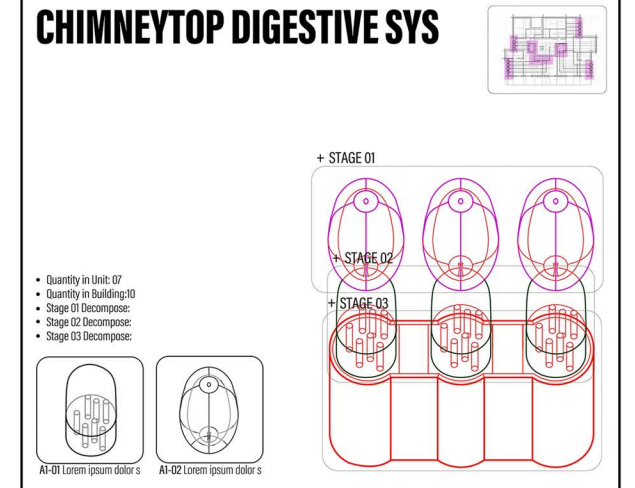
A3 : DECOMPOSER | PLASTIC DECOMPOSER



B2 : CIRCULATOR | COOLAIR CIRCULATOR



C3 : DIGESTIVE MACHINE | CHIMNEYTOP CONSUMER





04 REACH WITH TREMOER

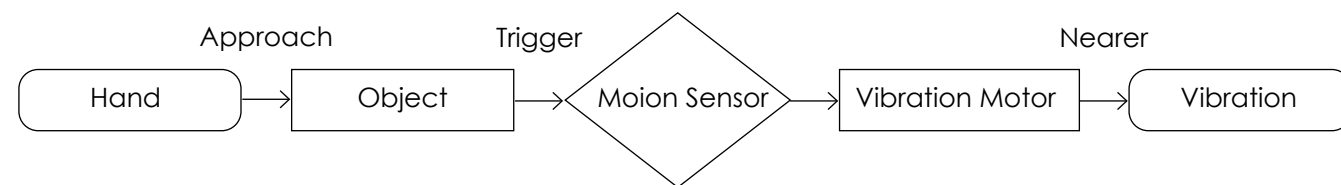
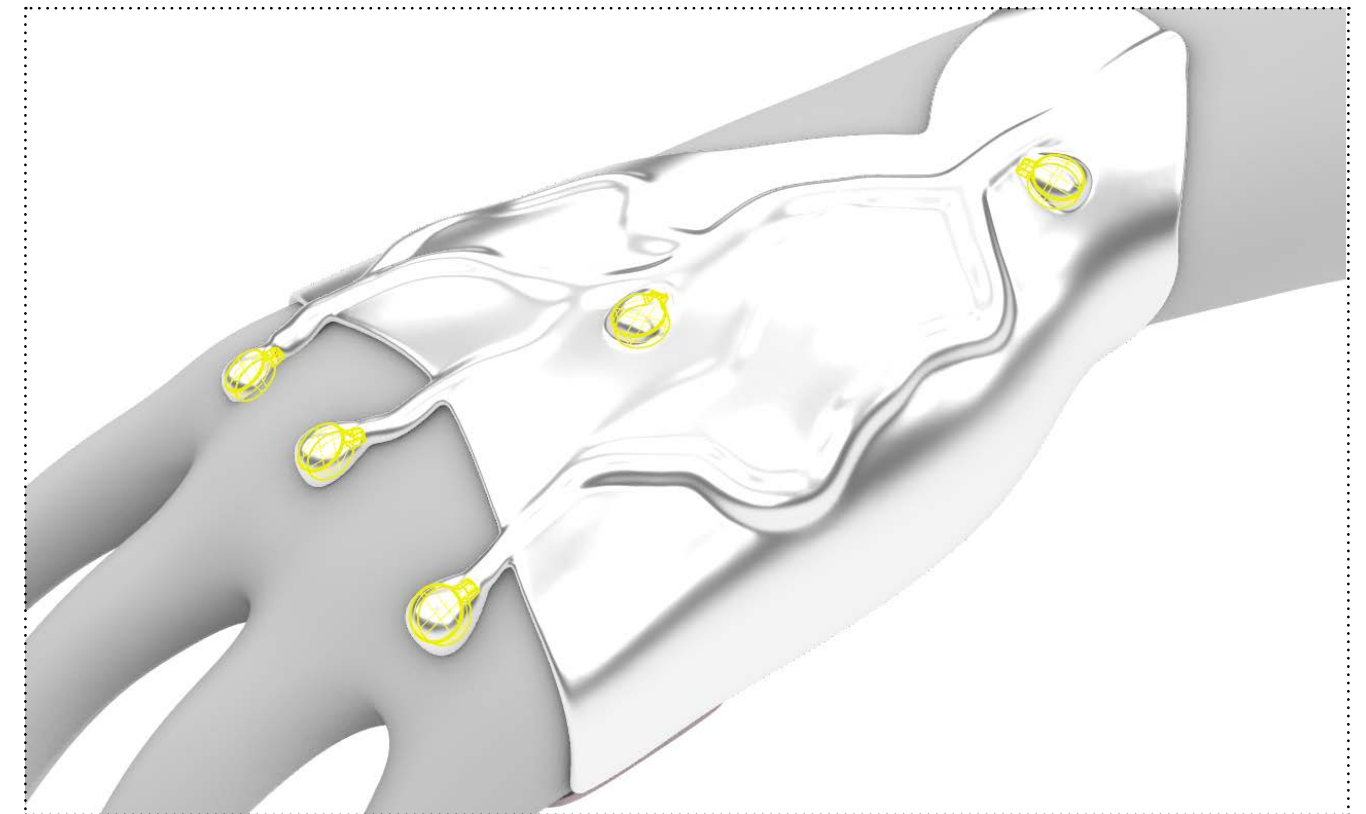
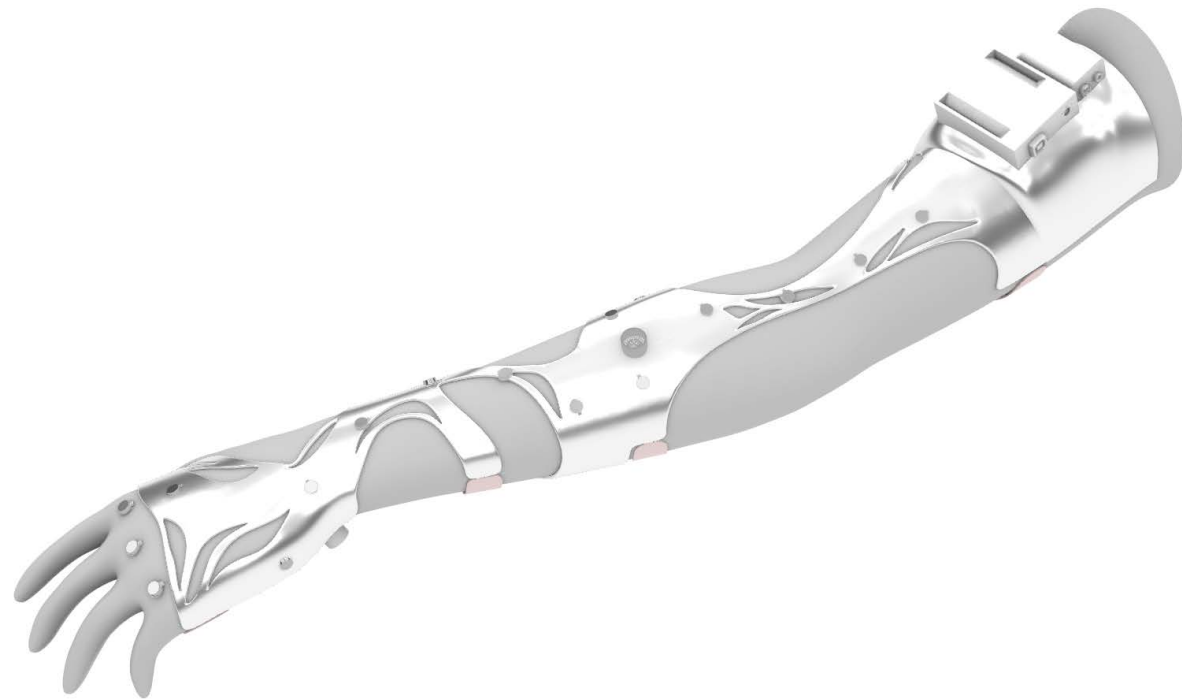
Sympathy-Driven Wearable Experience

Course: Making Sense

Period: Spring Semester | Year 2025

Project Type: Group work with Linhao Zhou, Yinhui Dong & Zhuofan Song

Instructor: James F. Nanasca



The design process began with experiments using an Arduino, motion sensors, and vibration motors. The system mimics the uncontrollable shaking associated with intention tremor by triggering vibrations as a hand nears an object. Early iterations focused on sensor placement and timing, eventually positioning the sensor in the palm to enhance realism.

The system operates via proximity sensors embedded in the palm that detect the distance to nearby objects. As the hand approaches a target, vibration motors are activated, simulating the onset of tremor. These components are powered by a microcontroller and battery in the wearable shell. The fabrication entailed extensive digital modeling, mold creation, silicone casting, and electronic integration—the final wearable features are adjustable elastic straps for comfort and fit while maintaining flexibility at key joints.



