

matilda terolli

portfolio.

1

DOMESTIC ATMOSPHERES

DESIGNING
SPACE THROUGH
TEMPERATURE,
NOT WALLS.

3

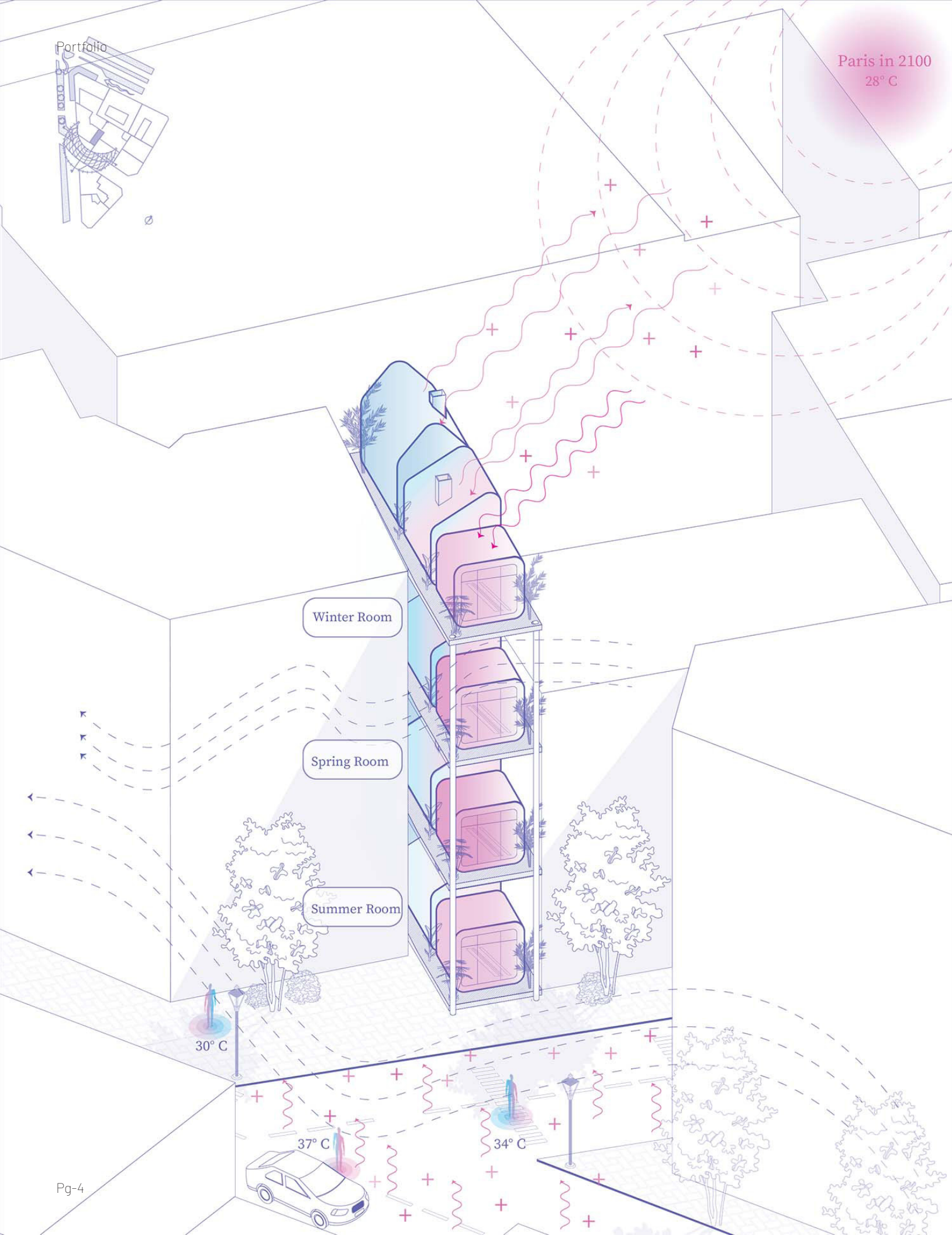
RESIDUAL FUTURES

WHEN WASTE
BECOMES THE
MAP, THE
ARCHIVE, AND THE
RESOURCE.

2

GUTSCAPES GAZETTE

TRACING HOW
BODIES, FOOD,
AND INFRASTRUC-
TURE SHAPE
SPACE.



domestic atmospheres.

Status: School Project

Location: Paris, FR

My Role: Climate Research, Concept Design, Modular System Development, Technical Integration

Additional Credits: Philippe Rahm

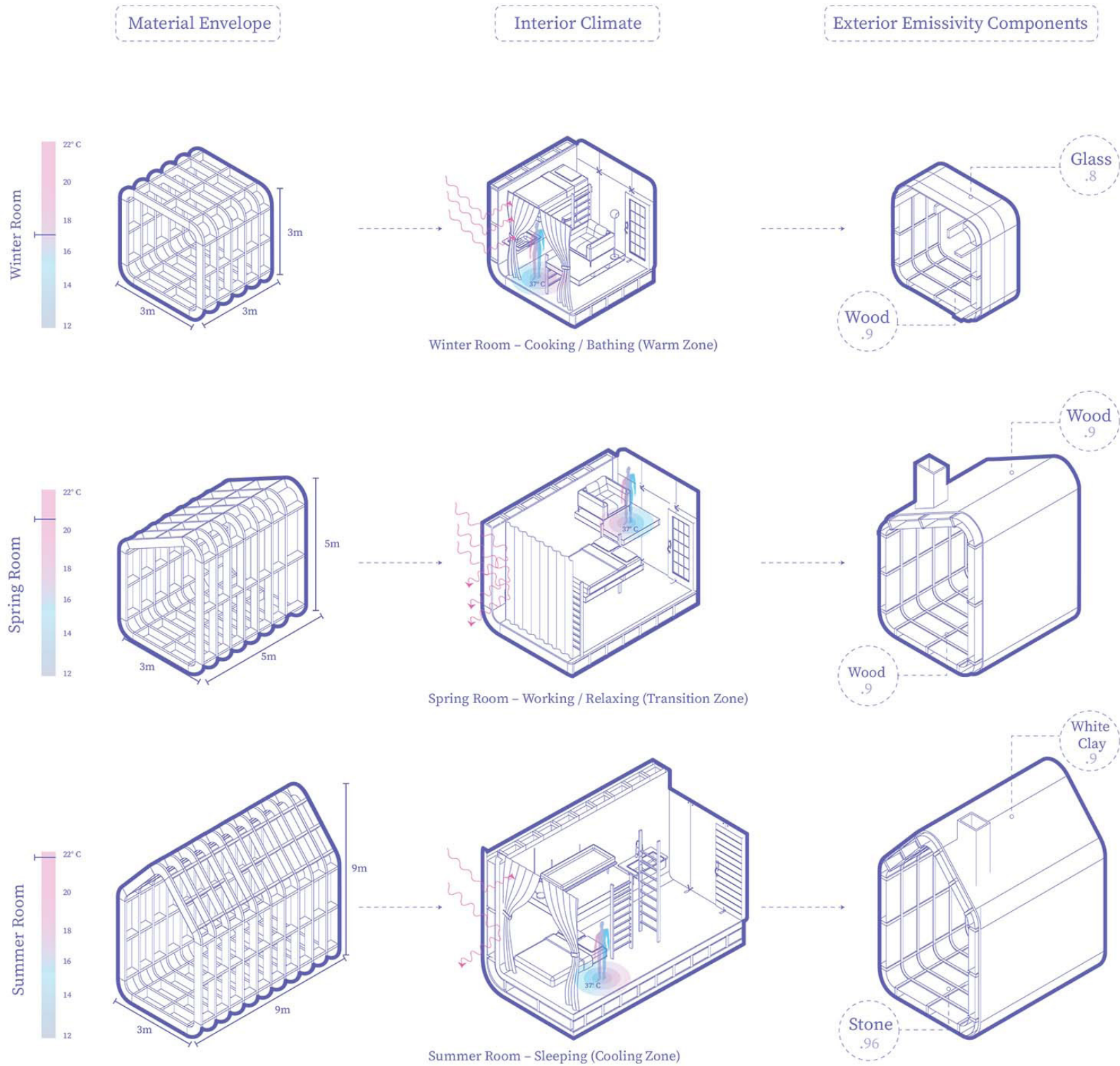
Mariami Maghlakelidze

Coordinates: 48°51' N 2°21' E (Paris, 2100)

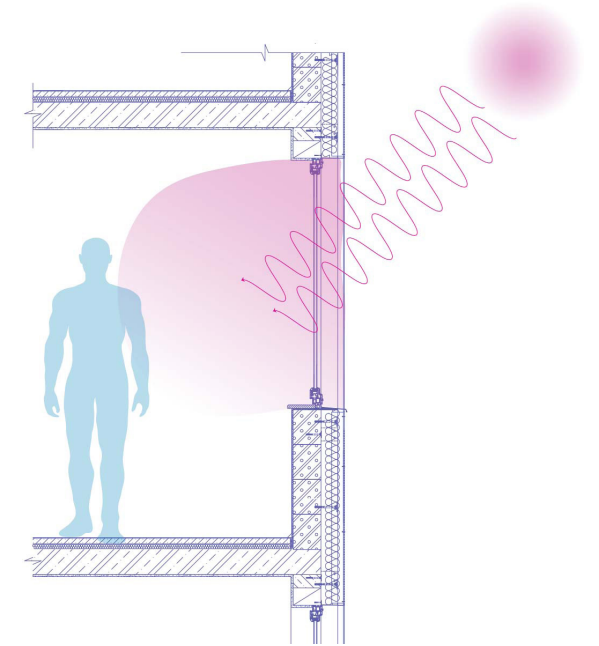
28°C – Humid Subtropical Climate

Due to the Paris Agreement, this project proposes climate-adaptive housing for Paris in 2100, addressing rising temperatures, thermal stress, and the need to reduce building emissions (currently 39% of global CO₂). The design introduces three seasonal volumes with 25 cm insulation: a flat-roofed winter unit for heat retention, a shed-roofed spring unit for cross-ventilation, and a pitched-roof summer unit optimized for cooling.

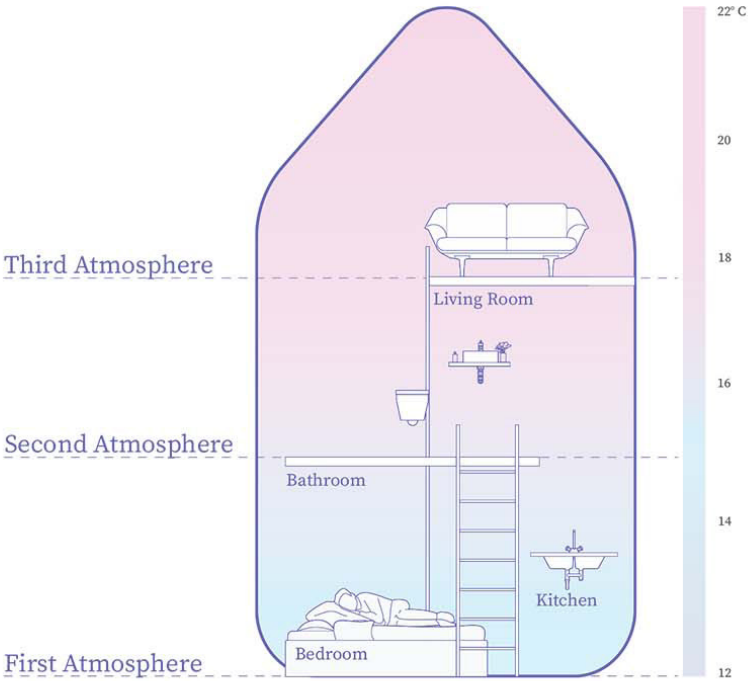
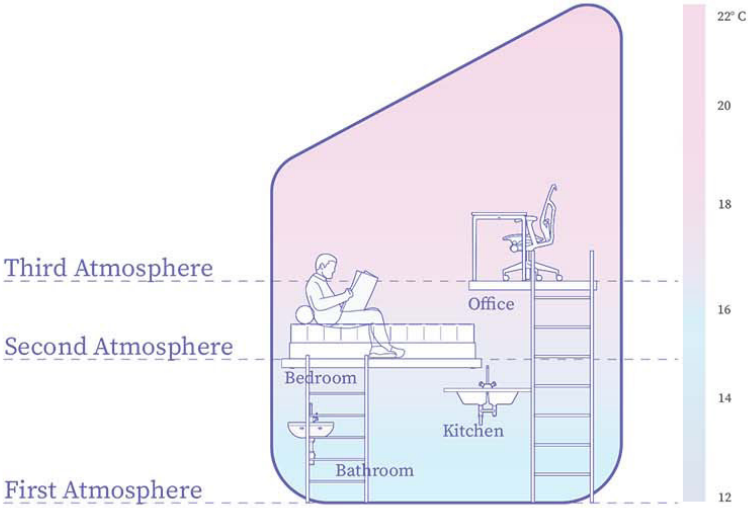
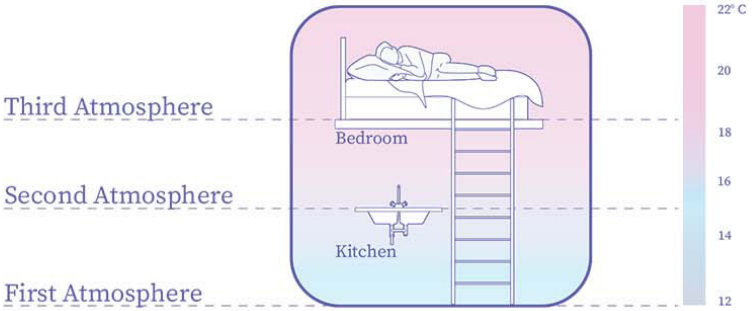
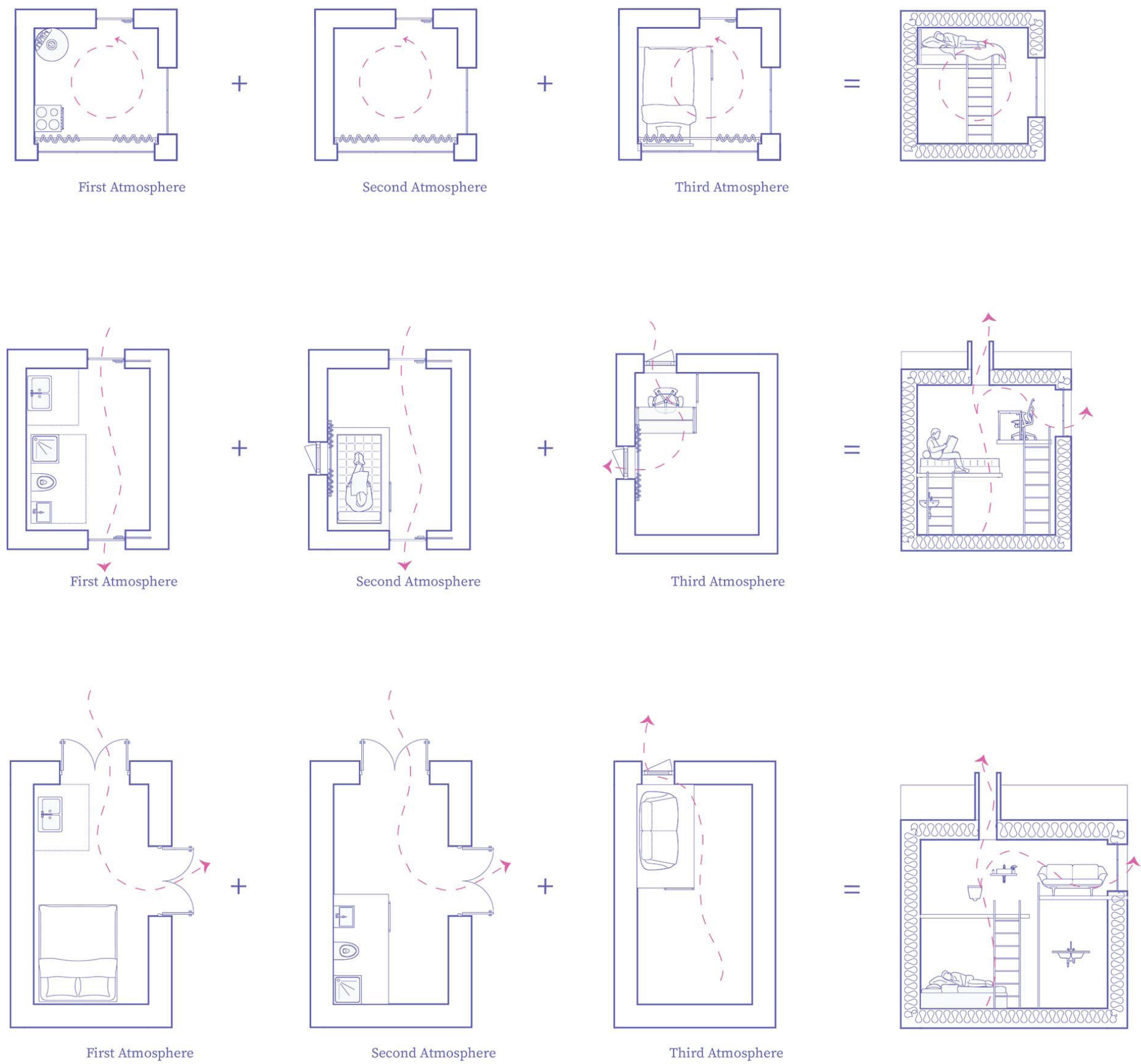
Bedrooms shift vertically with the seasons—highest in winter, mid-level in spring, and ground level in summer – linked by ladders and compact floors. The modular system transforms an existing 5 × 18 × 30 m structure into micro-living units that maintain 20–28°C thermal comfort while minimizing energy demand.

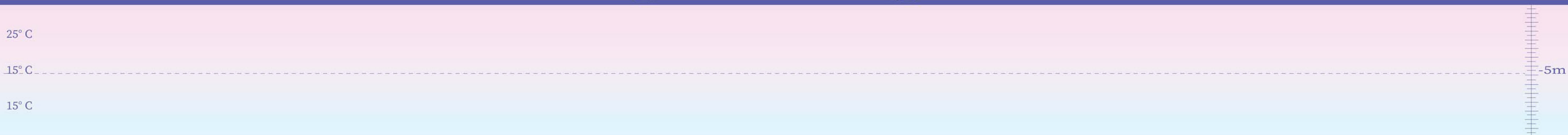
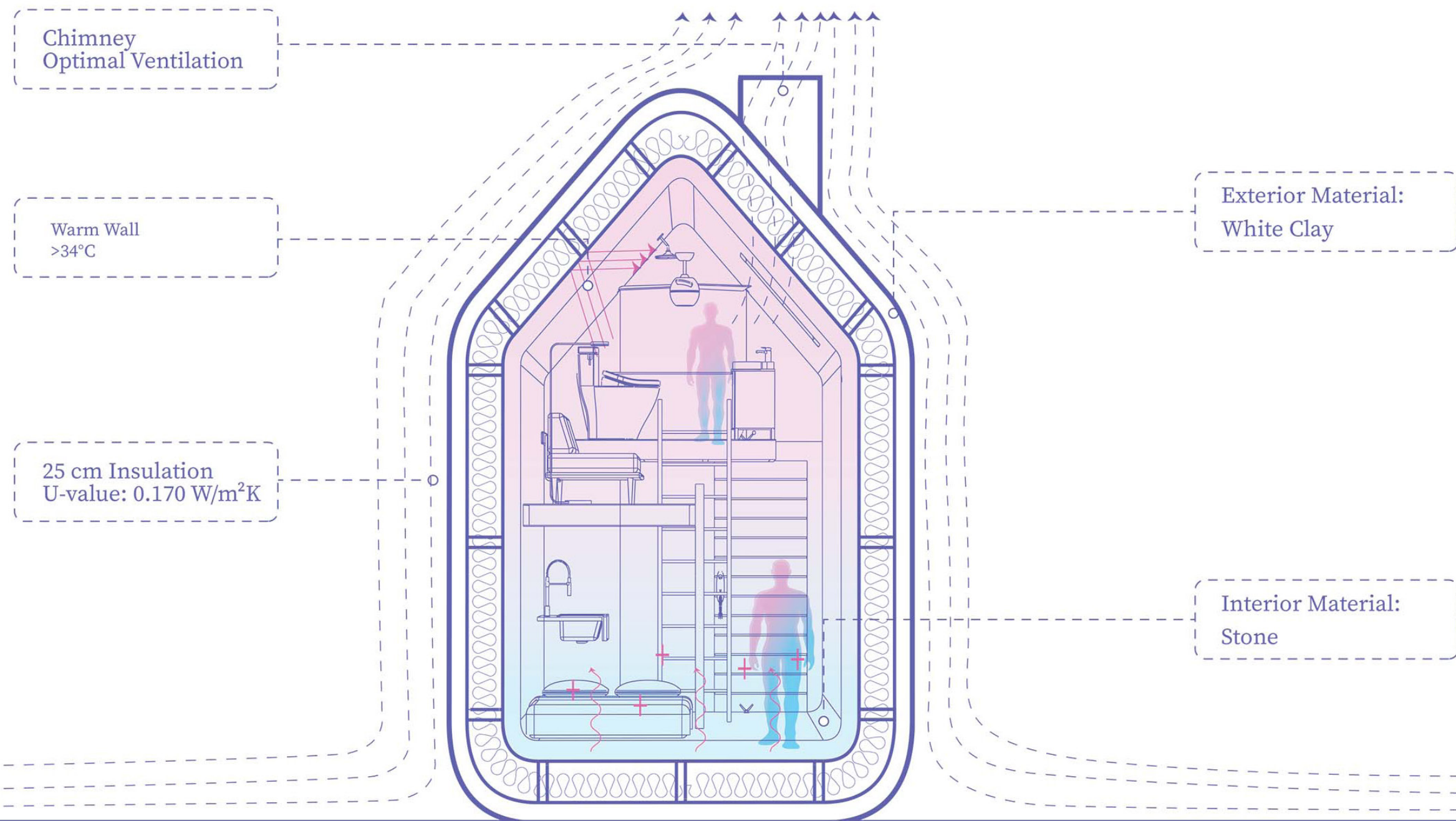
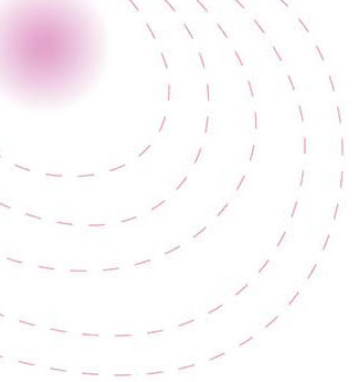


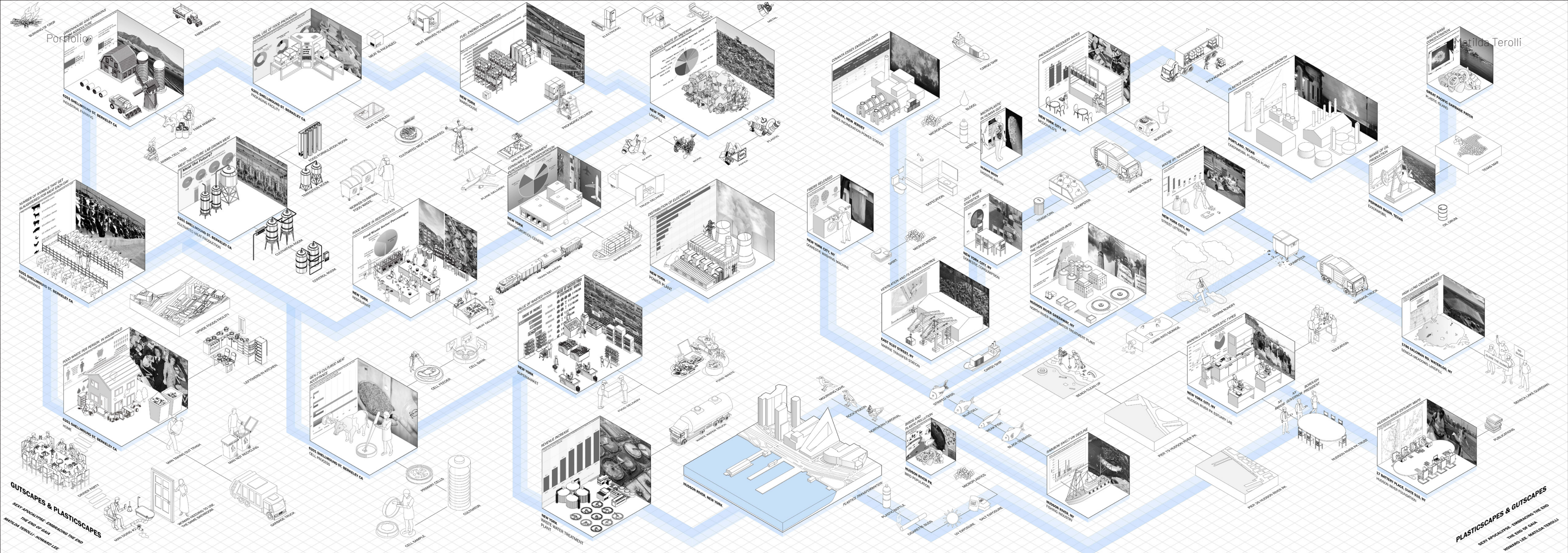
Across the year, the body experiences heat, shade, moisture, and air differently, so the architecture shifts with it. Each room becomes a small climate: winter is warm and enclosed for cooking or bathing, spring opens slightly for working and relaxation, and summer is the coolest space for sleeping. The envelope, interior airflow, and material selection are not decorative choices but thermal tools. High- and low-emissivity materials shape how heat is absorbed, stored, or released, creating comfort without mechanical systems. The section and material diagram reveal how radiation interacts with the human body, showing that climate can be designed through surfaces and form, not just temperature control.



Aluminum	Stone	Glass	Wood
+ 0.04	+ 0.96	+ 0.8	+ 0.9

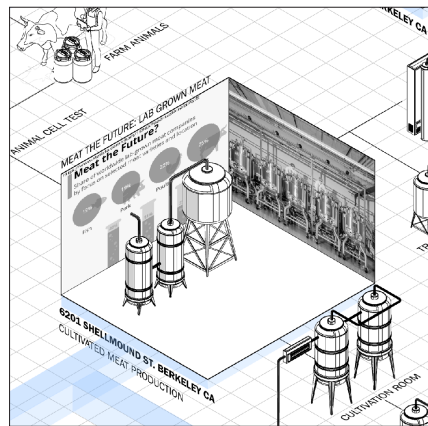






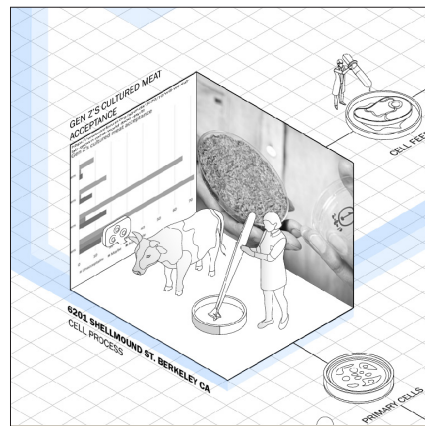
Cultivated Meat Production.

MEAT THE FUTURE: LAB GROWN MEAT



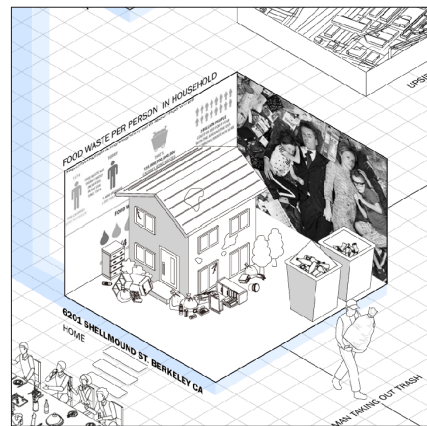
Cell Process.

GEN Z'S CULTURED MEAT ACCEPTANCE



Home.

FOOD WASTE PER PERSON IN HOUSEHOLD



GUTSCAPES

Status: School Project

Location: New York, NY

My Role: Concept Development, Research + Framing, Design + Visualization, Editorial + Writing

Additional Credits: Uriel Fogue

Gutscapes Gazette is a speculative 'mobile food bank' publication that combines news, ideas, recipes, puzzles, stories, and a catalog of parts. Each issue explores food insecurity, urban ecologies, and systems of production and distribution. This edition focuses on initiatives in the Bronx, New York, examining how capitalism shapes not only our neighborhoods but also the way food is grown, circulated, and consumed. Addressing this crisis requires shared responsibility: between governments, non-profits, farmers, supermarkets, restaurants, and individuals.

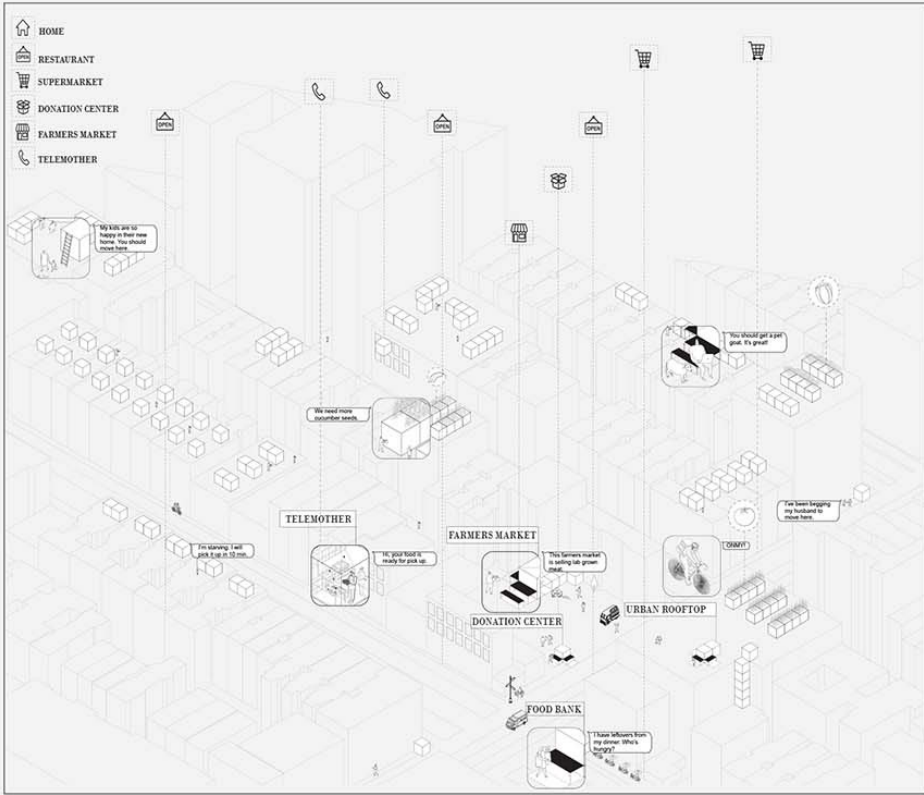
The mobile food banks envisioned in the Gazette function as distributed infrastructures: part meal center, part garden, part communal kitchen. They include rooftop farms, mobile farmers' markets, donation hubs, cultivation labs, and kitchens for collective use.



OUR WORLD IS FACING A MAJOR GLOBAL CRISIS

New Neighborhood Recipe: Revamping Old Buildings into a Fresh Community!

Mobile pop-ups, such as kitchens, food banks, cultivated meat labs, and communal kitchens, enhance community food sharing. They provide flexible spaces for cooking, distributing, and accessing fresh food, build local connections, and address food insecurity effectively.



Fighting Hunger: NYC Food Banks Rise to the Challenge!

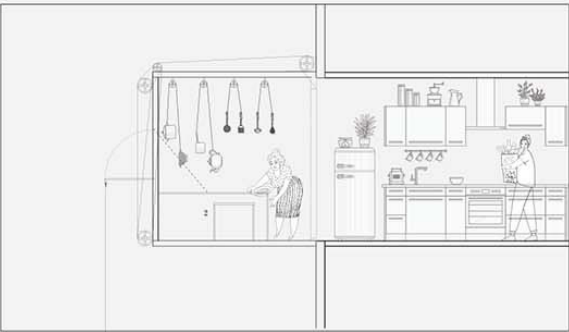
Connie Verducci, Senior Vice President
Bank of America

"Working together with Food Bank gives us the leverage to defeat hunger and put individuals and families on a path to success." - Connie Verducci
Visit www.foodbanknyc.org to donate today.



Elevate Your Space

Add a Mobile Pop-Up Kitchen to Your Apartment and Share Meals with Your Community!



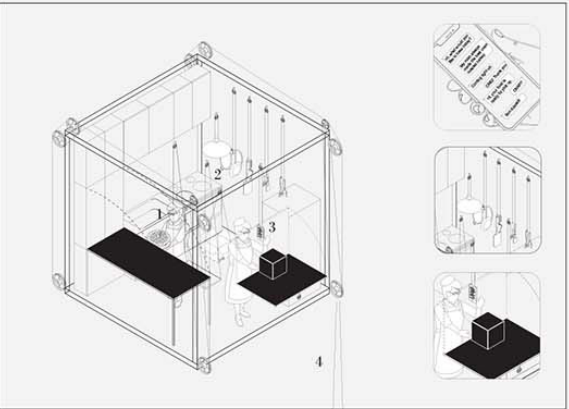
What's the Beef?

Matilda Terolli
Columbia University

This gazette features news, recipes, crosswords, and a parts catalog. This issue explores food insecurity in NYC's low-income areas and introduces lab-grown meat as a solution to reducing food waste. Tackling these issues requires action from all sectors.

Call our Telemother: Fresh meals delivered with a touch of home.

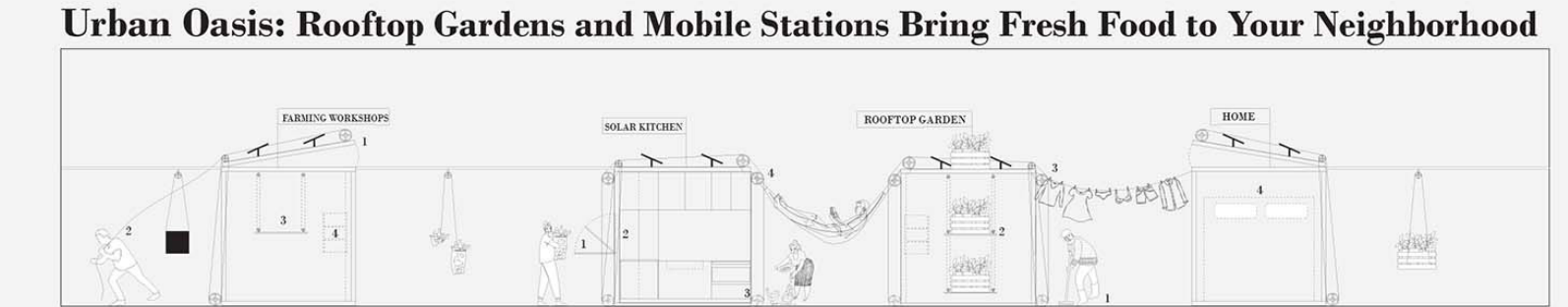
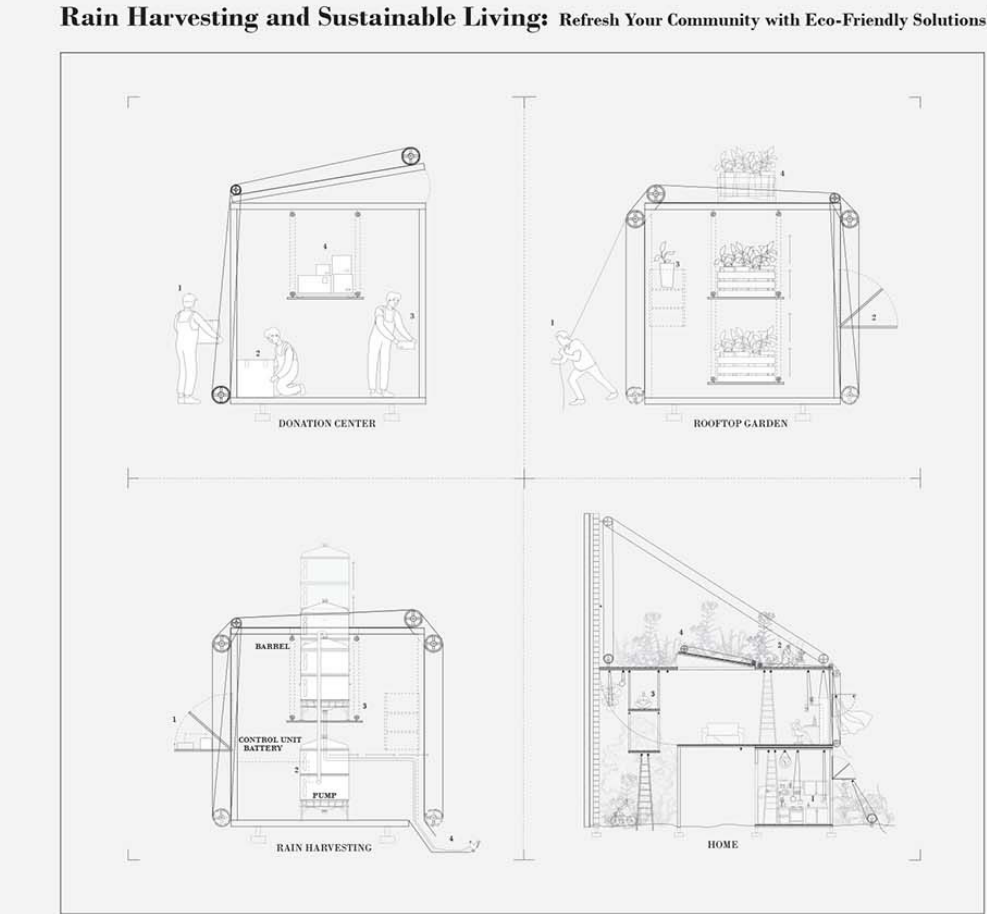
Craving home-cooked meals? Call our "telemother," pick your favorite dish, and choose pickup or delivery!



Mobile Station Madness: Unpacking the Pulse of Portable Power in the Kitchen!

Matilda Terolli
Columbia University

New York City is grappling with a significant environmental challenge, as residents generate an average of 200 pounds of organic waste per person each year. This highlights the city's need to improve sustainability and reduce landfill contributions. Local initiatives, including composting programs and educational campaigns, aim to encourage composting and minimize food waste. To further support these efforts, a new portable kitchen design has been introduced. This innovative solution facilitates easier composting at home, helping residents manage their organic waste more effectively and contribute to the city's environmental goals and waste management resilience.



The Great Garbage Showdown:

Compost vs. Trash – Who Wins the Green Tug of War?



COOKING

What to make this week with lab grown meat. How about a lab grown meat burger?

MEAT-O-METER

Analyzer for breakfast, lunch and dinner.

KEY STOPS

URBAN ROOFTOP GARDENS
DONATION CENTERS
MEAT CULTIVATION LABS
FARMING WORKSHOPS
COOKING WORKSHOP

WHERE TO EAT

MOBILE FARMERS' MARKETS
MEAT CULTIVATION RESTAURANT

WHERE TO STAY

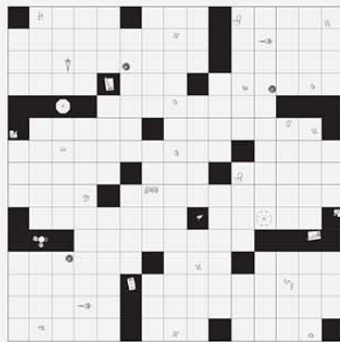
HOME

FROM PETRI TO PLATE

Matilda Terolli



Customizable Mobile Station Menu: Tailor Your Setup for Optimal Food Distribution!



Across

1 Impact of food insecurity
5 Synonym for inadequate food supply,
often due to economic or environmental
factors
7 The direct effect of insufficient food, often
linked with food insecurity.
9 Often a root cause of food insecurity,
where individuals lack the resources to
obtain sufficient food.
11 A prolonged period of abnormally low
rainfall leading to water shortages and
potential food insecurity.

Down

- 1 Opposite of having enough food to meet one's nutritional needs.
- 2 Condition caused by poverty, leading to hunger and malnutrition.
- 3 An organization that distributes food to those in need, often addressing issues of food insecurity.

The Crossword: A Site of Mobile Stations

DONATION CENTERS



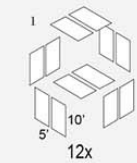
MEAT CULTIVATION LABS
URBAN ROOFTOP GARDENS
FARMING WORKSHOPS
MOBILE FARMERS' MARKETS



GUTVERKNÜPFER

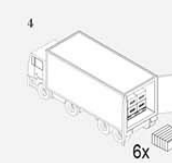


ASSEMBLE

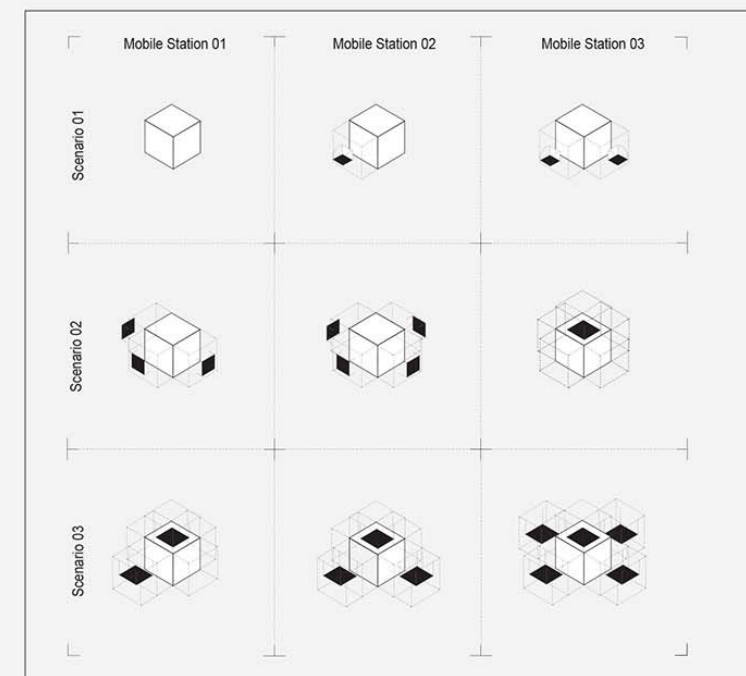
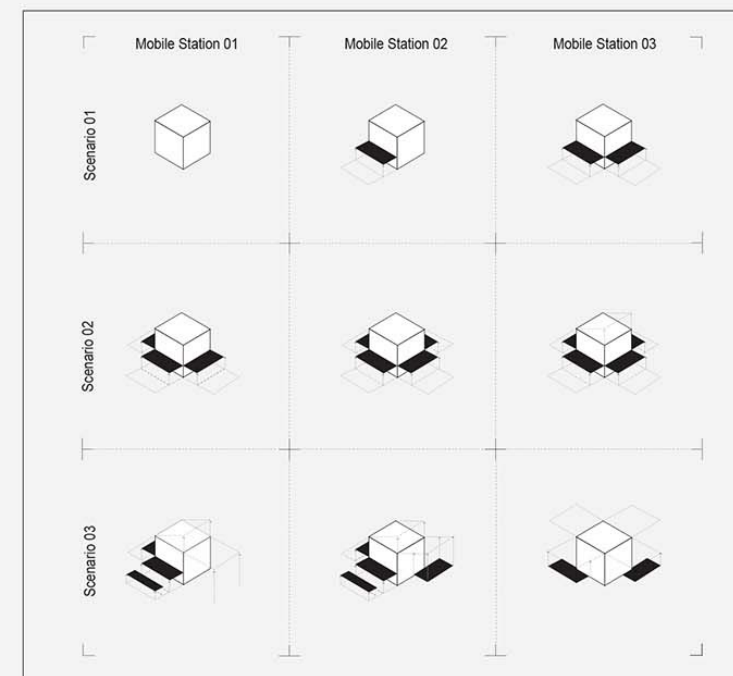
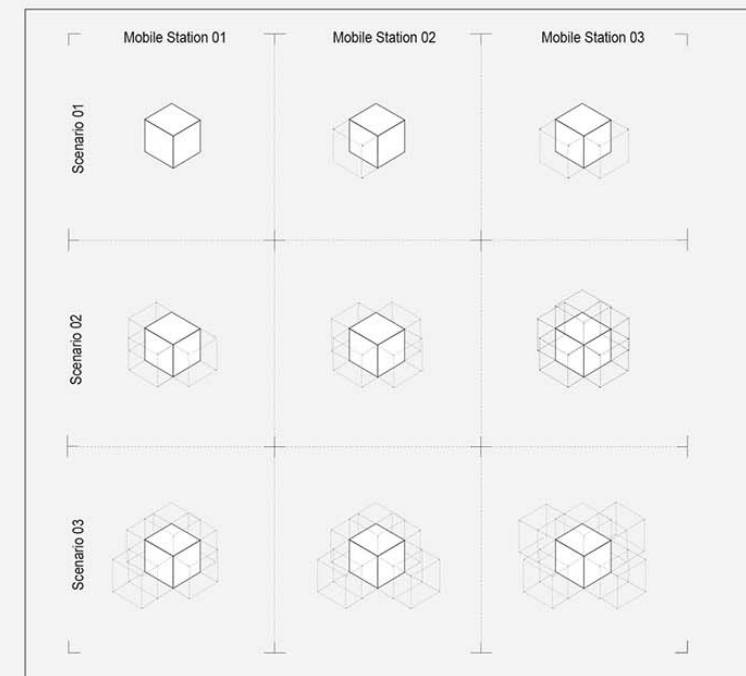
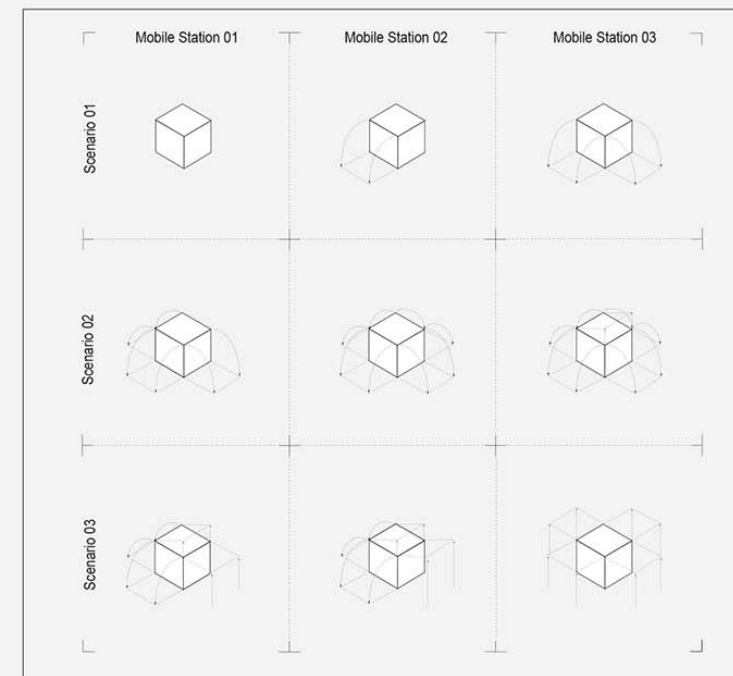
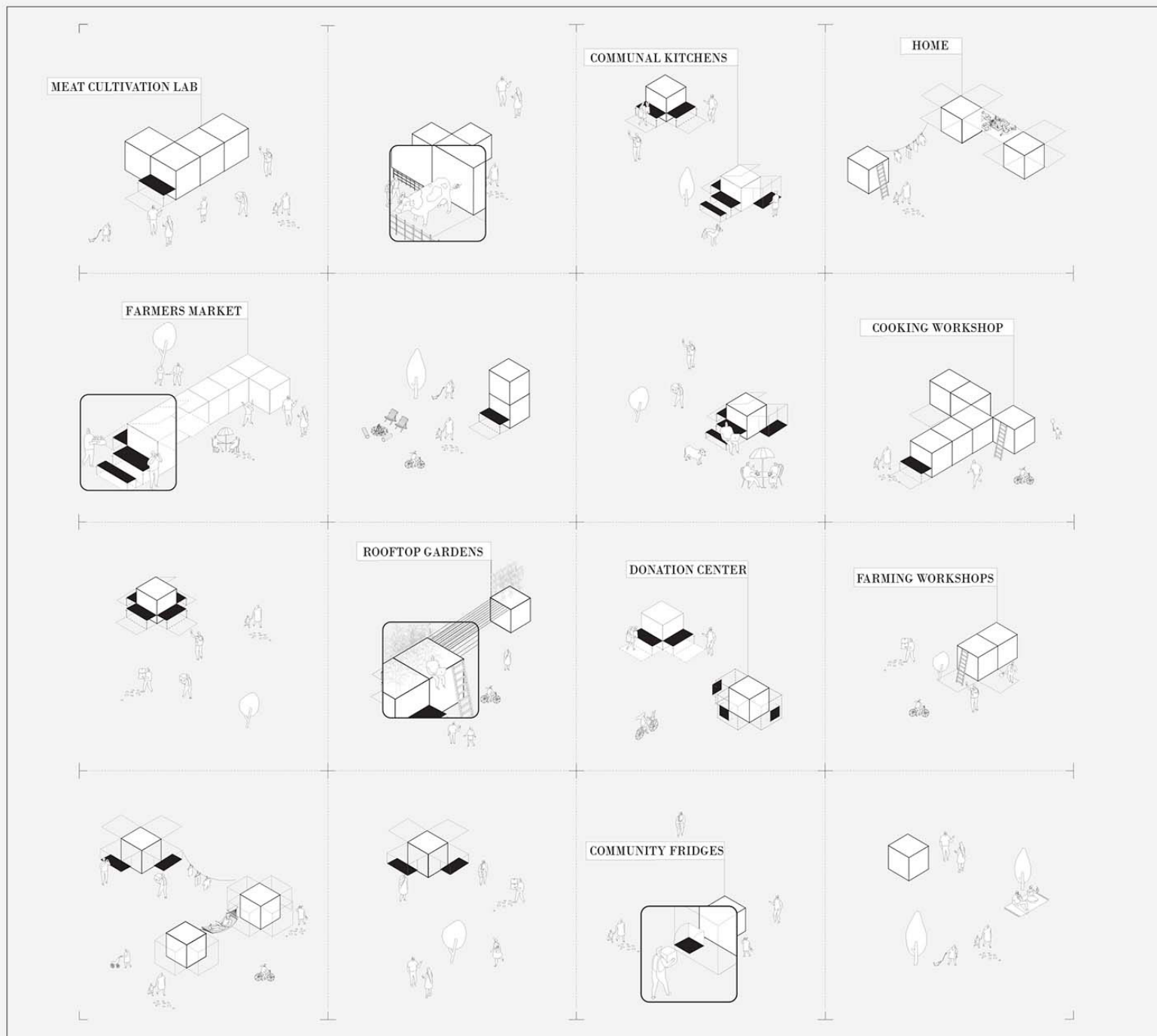
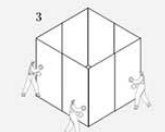
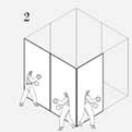
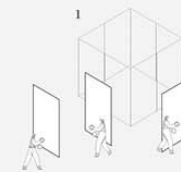


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DELIVERY



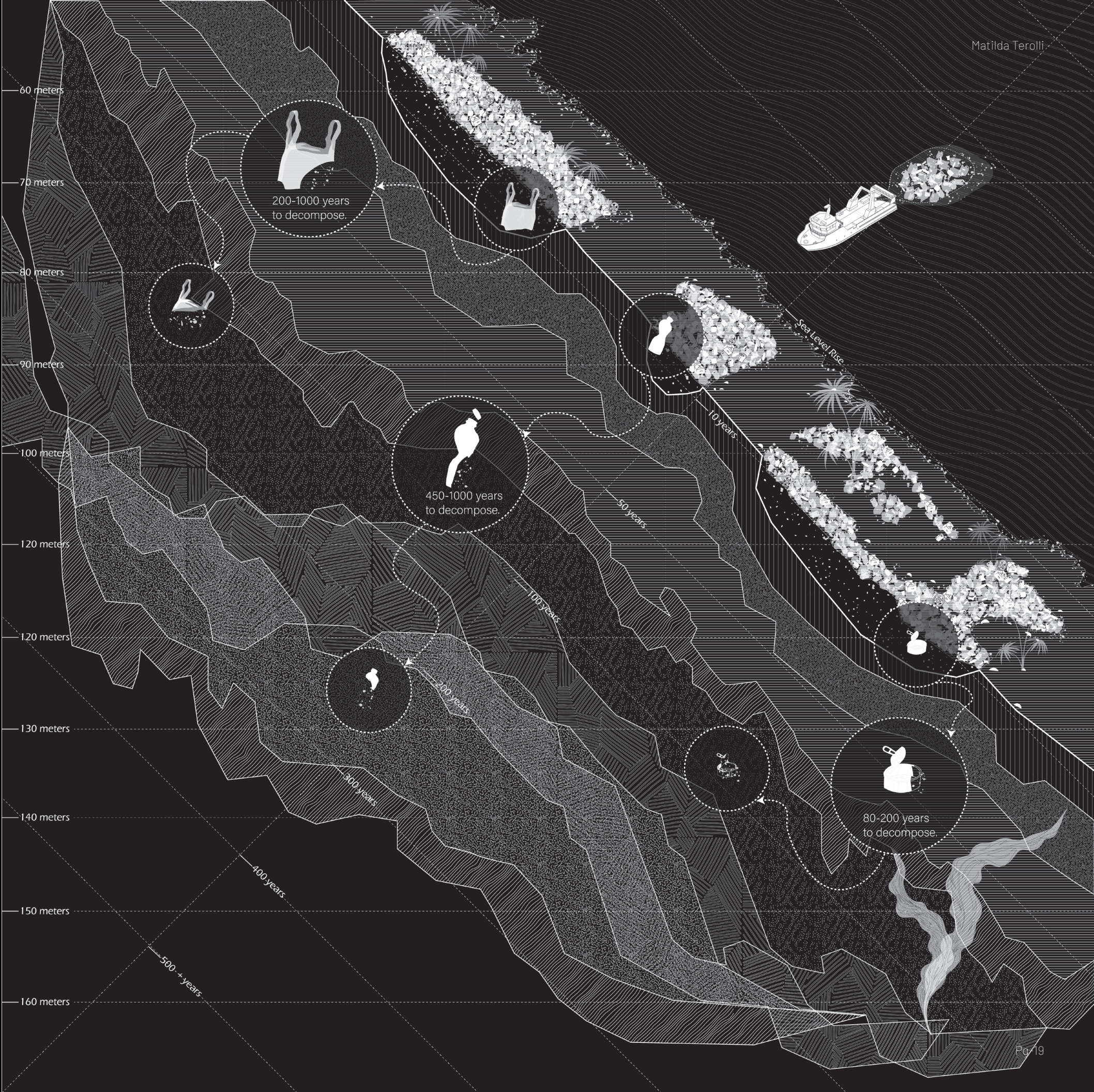
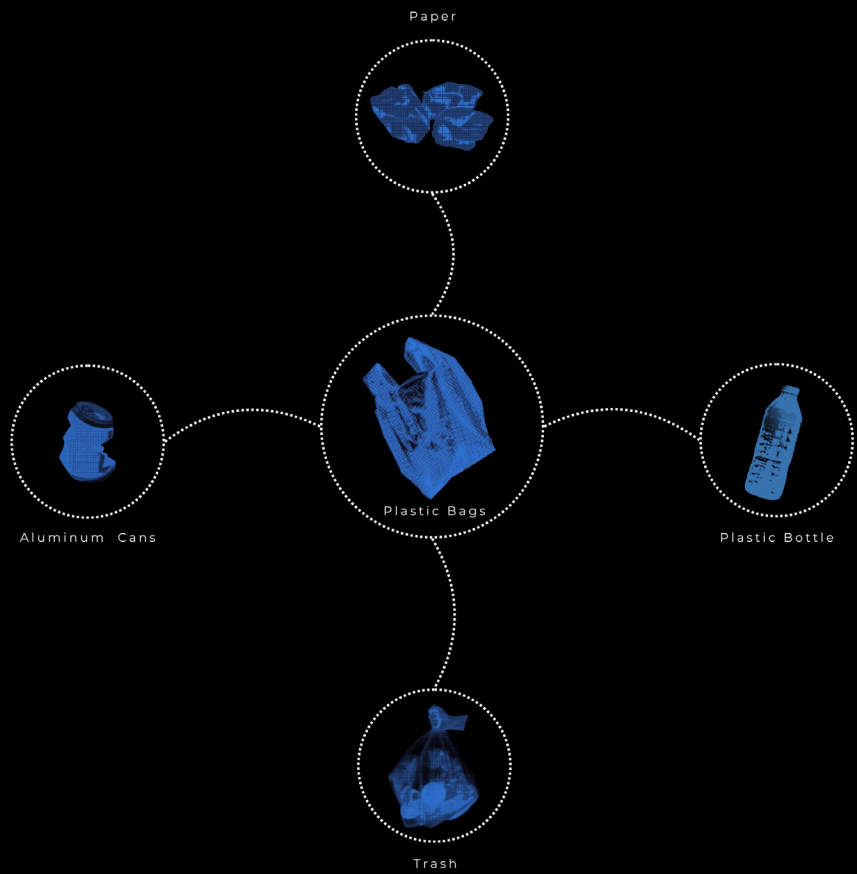
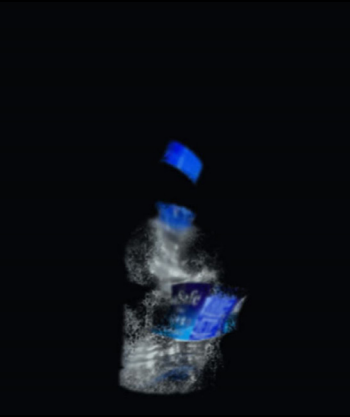
ON SITE ASSEMBLY



Residual Futures.

Status: School Project
Location: Funafuti, Tuvalu
My Role: Concept Development, Research & Framing, Design & Visualization, Editorial & Writing
Additional Credits: Marina Otero Verzier, Dan Miller

In Tuvalu, waste becomes more than debris, it is a record of global dependency, climate vulnerability, and daily survival. The project develops a protocol to document waste as material and memory, working directly with local collection systems, landfills, and communities. Through mapping flows, filming processes, and collecting thermal and material data, waste is reframed as sediment and archive. Rather than an endpoint, it becomes a tool for design, resilience, and new spatial strategies in a disappearing landscape.



How can collecting waste become an act of repair?

As a class, we developed the Data Mourning Agency in Tuvalu: a collective protocol for cleaning and documenting waste where water is scarce. Using sand, coconut husks, and leaves, we cleaned and photographed each fragment, then transported the collected material back to the U.S. for further study and reuse, ensuring nothing was left behind.

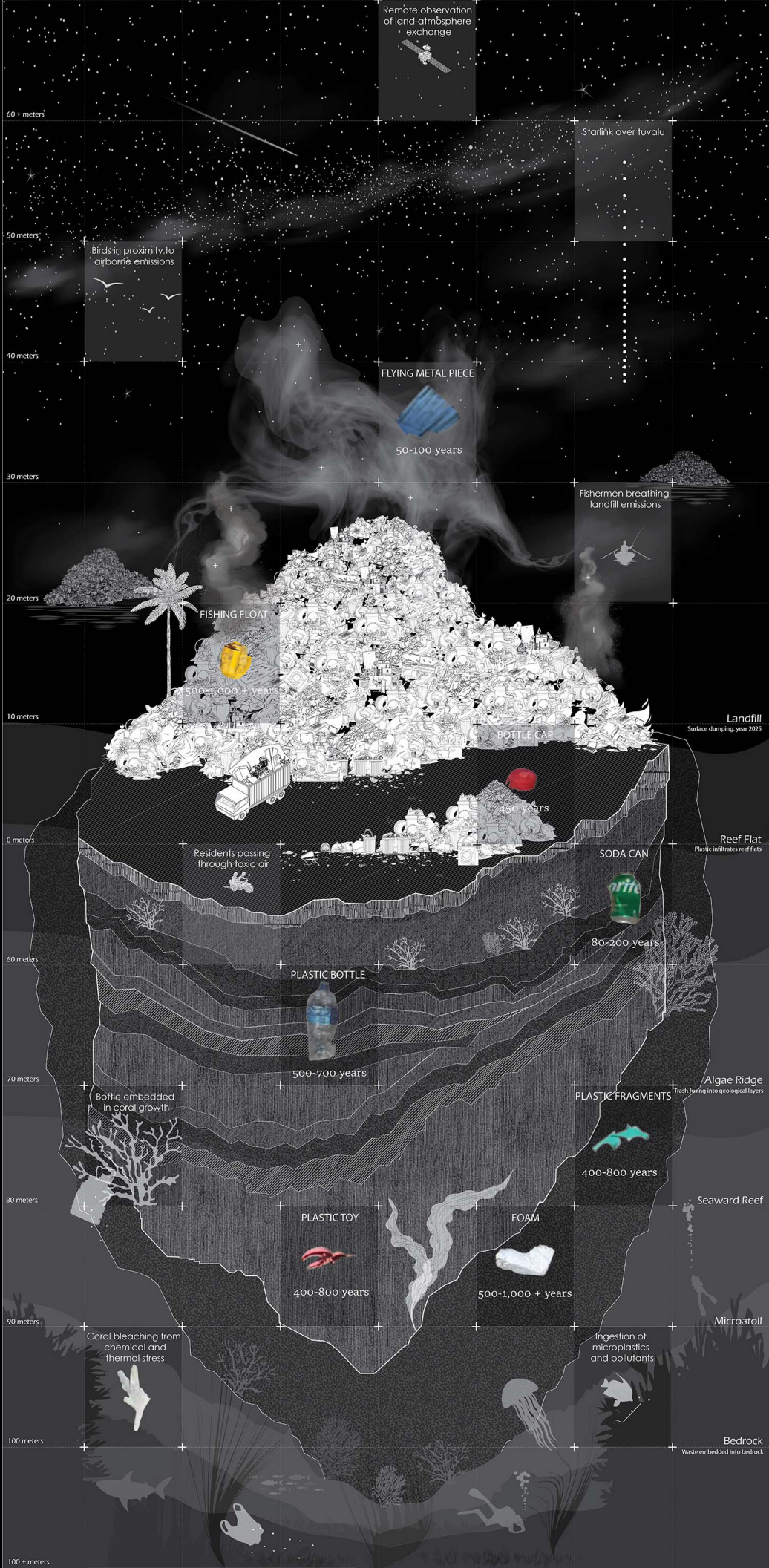


What happens when what we throw away lasts longer than the land we live on?

Beneath the surface, waste settles into layers like geology, moving from land to reef to seabed, eventually becoming part of the earth itself. Each material decays on a different timeline: plastic bottles outlast coral reefs, aluminum cans outlive coastlines, and fragments sink deeper than memory.

This section reveals how discarded objects do not disappear, but slowly transform the landscape, the ocean, and the future of the island.

What we throw away quietly re-shapes the future of the landscape.



What traces of us survive when our materials outlive us?

Collected from the island's shores, these objects reveal an anatomy of endurance. Each piece - flattened, faded, or fractured, retains the stubborn permanence of its material.

Together they form an accidental archive, mapping the collision between human habit and oceanic time.

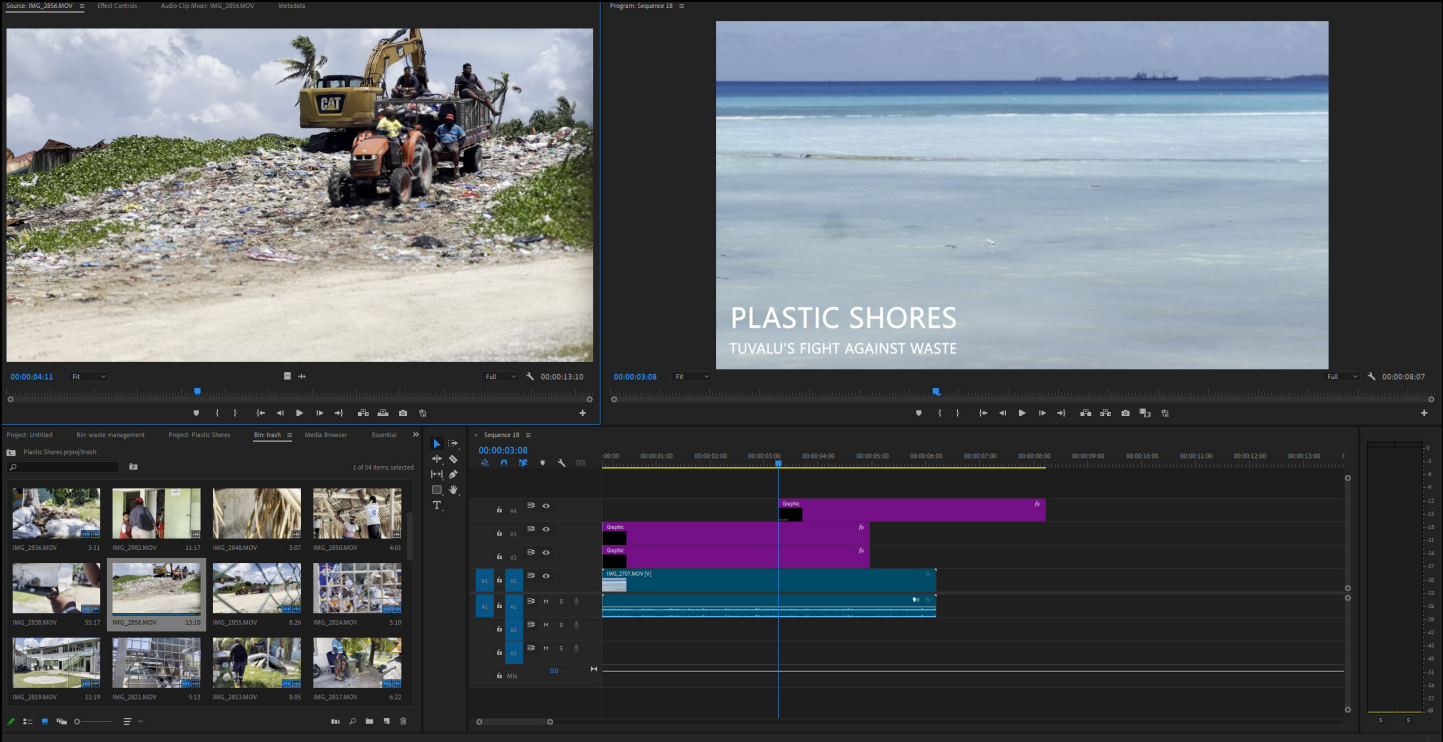
What was once useful becomes geological; what was once trivial becomes testimony. Through cataloging and imaging, the fragments expose a quiet truth: disappearance is a myth, and waste is a record of who we are and what we leave behind.

Plastic Shores

Plastic Shores documents Tuvalu’s waste infrastructure through a series of site visits with the local Waste Department.

From neighborhood collection routes to informal dumping zones and finally the island’s main landfill, the film traces how materials move, accumulate, and transform.

What begins as daily routine unfolds as an ecological narrative, revealing how waste shapes both land and memory in one of the world’s most fragile environments.



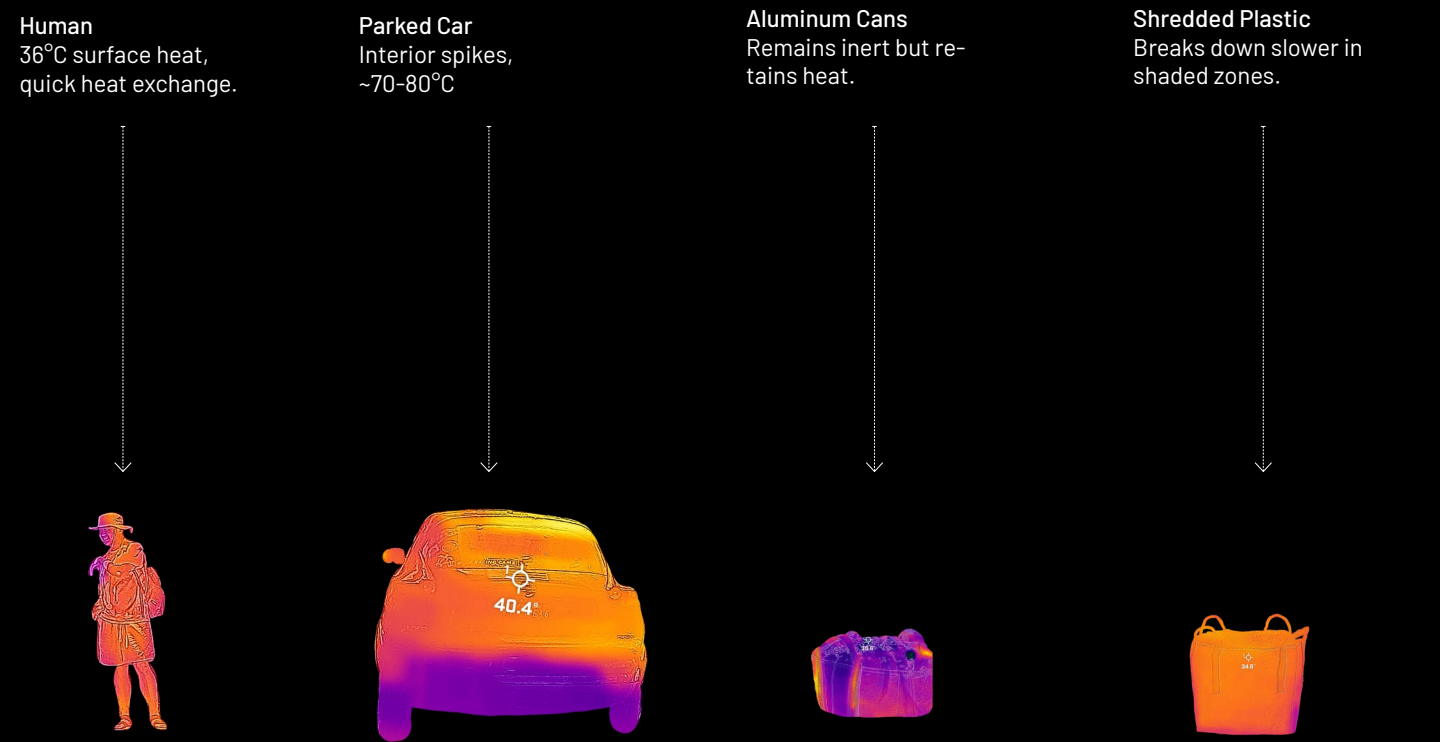
Example of a short film/documentary I created in Tuvalu, 2025.

What does heat reveal that sight cannot?

Thermal imagery was used to study how materials across Tuvalu absorb, retain, and release heat.

The scans revealed invisible patterns: aluminum holds warmth long after exposure, plastics cool slowly in shade, and human and material temperatures merge under intense sun.

Through heat, the landscape’s material behavior becomes visible—showing how



Field documentation from Tuvalu: Thermal Imagery Scans, 2024

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