NEST&NURTURE

Nest & Nurture is a sustainability-focused interior project inspired by the way birds upcycle natural and discarded materials to build nests. Designed as an eco-educational hub, it teaches students about circular design, climate change, and sustainable living. By reusing an existing building, the project reduces waste and carbon emissions, directly addressing building reuse and resource depletion. The use of reclaimed, biodegradable, and low-impact materials highlights how interiors can support living within the planet's natural limits.

Energy-efficient features like natural ventilation and passive cooling lower energy use, reducing reliance on mechanical systems and minimising environmental impact. Hands-on features like a propagation station promote self-sufficiency and eco-conscious habits.

Overall, Nest & Nurture creates an immersive, inspiring space that encourages users to rethink consumption and embrace sustainability through creativity, education, and nature-based design. It turns the building itself into a tool for change and a model for regenerative design.

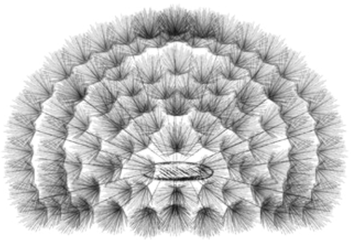
RECLAIMED WOOD FOUND IN HULME

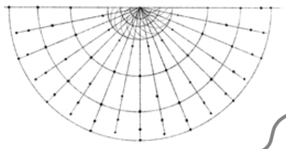
PLYBOO VENEERS SHADE NATURAL

MYCELIUM VEGETATIVE PART OF A FUNGUS

BAUX NATUTAL ACOUSTIC WOOD

POLYGOOD POTPOURRI INDUSTRIAL TUBES 100% RECYCLED



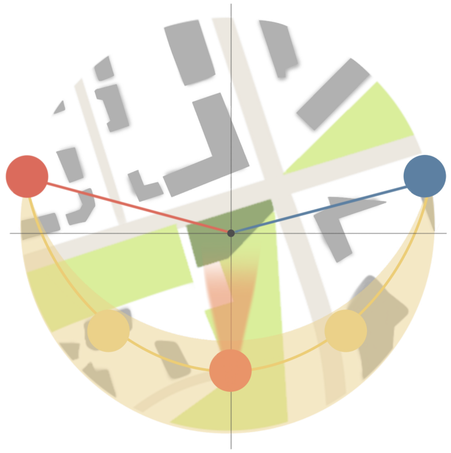


JUNCTION HOTEL 12 . FEB . 2025
DAWN: 06:56:39
SUNRISE: 07:32:46
CULMINATION: 12:23:11
SUNSET: 17:14:24
DUSK: 17:50:34
DAYLIGHT DURATION : 9h41m38s

WINTER

JUNCTION HOTEL 12 . AUG . 2025
DAWN: 05:03:05
SUNRISE: 05:43:13
CULMINATION: 13:14:00
SUNSET: 20:43:36
DUSK: 21:23:28
DAYLIGHT DURATION : 15h0m28s

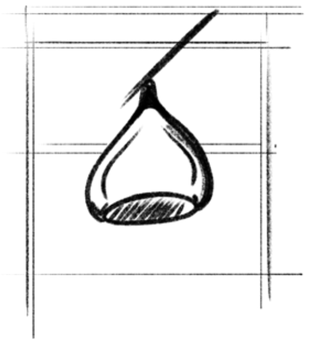
SUMMER

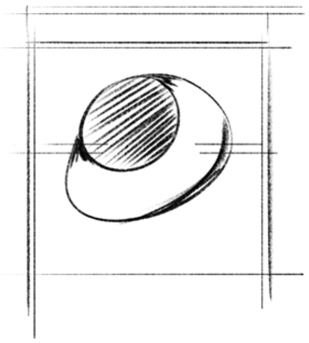


Within Nest and Nurture various plants will be grown, tracking the sun's movement from summer to winter is nesessarry to optimize natural light exposure and ensure sustainable growth throughout the seasons. acording to (Cottrell, 2021) "Sun mapping a garden is essential for planting success." (Cottrell, 2021)

THE SUNPATH

WINTER - SUMMER





Nest concept, designed to be lightweight but durable, with natural textures that blend into the surrounding space.

CIRCULARITY WITHIN NATURE

Circularity is a fundamental principle in nature, seen in ecosystems where waste from one process becomes nourishment for another (e.g. fallen leaves decompose into nutrients for soil).

Products can follow a similar lifecycle: designed with reuse, repair, remanufacturing, or composting in mind, instead of disposal.

Natural life cycles (birth, growth, death, decomposition) ensure nothing is wasted—everything is reused in another form.
This pattern of circularity exists everywhere in nature, from water cycles to plant regeneration, showcasing a self-sustaining system.

Mimicking nature's circularity encourages the use of biodegradable, recycled, or upcycled materials that re-enter the cycle instead of becoming landfill.

Designing for disassembly allows parts to be reused or recycled more efficiently, extending the lifecycle of a product.
This approach helps reduce resource depletion by slowing material extraction and encouraging regeneration over exploitation.

Circular design thinking shifts our mindset from ownership to stewardship, valuing longevity and renewal.

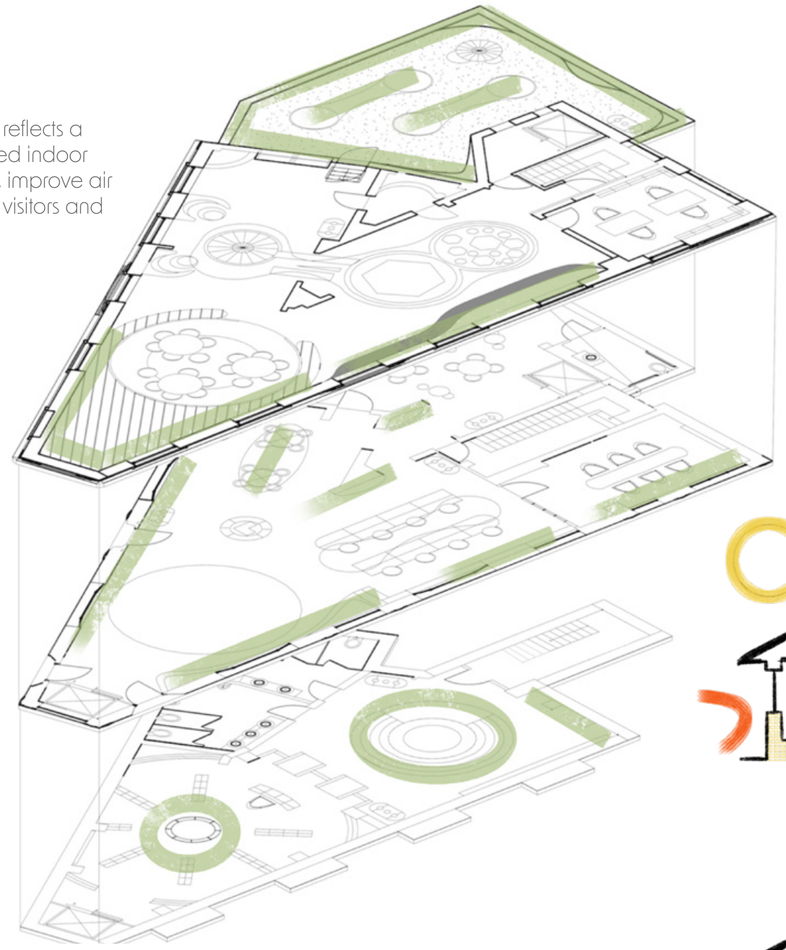
AIR PURIFICATION

The inclusion of air-purifying plants in the building reflects a commitment to creating a healthier, more balanced indoor environment. These plants naturally filter out toxins, improve air quality, and contribute to the overall wellbeing of visitors and occupants.

By integrating greenery throughout the space, the design fosters a calming, sensory-rich atmosphere that aligns with the project's sustainable and educational values (Steve bender , n.d.).

- Spider Plant (Chlorophytum comosum)
- Snake Plant (Sansevieria trifasciata)
- Peace Lily (Spathiphyllum)
- Aloe Vera
- English Ivy (Hedera helix)
- Bamboo Palm (Chamaedorea seifrizii)
- Rubber Plant (Ficus elastica)
- Boston Fern (Nephrolepis exaltata)
- Areca Palm (Dypsis lutescens)
- ZZ Plant (Zamioculcas zamiifolia)

(Steve bender, 2021).



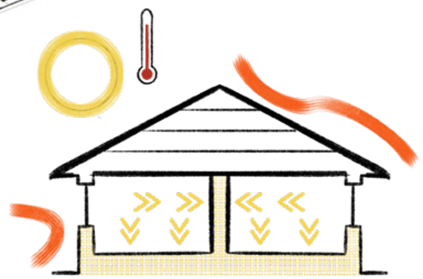
ALOE VERA:
- improves air quality
- good for skin

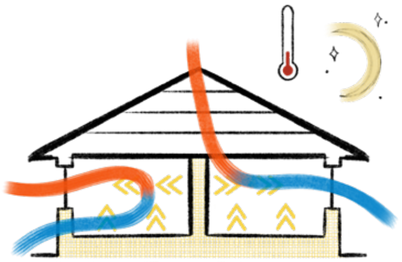
SNAKE PLANT:
- air purifying
- removes toxins

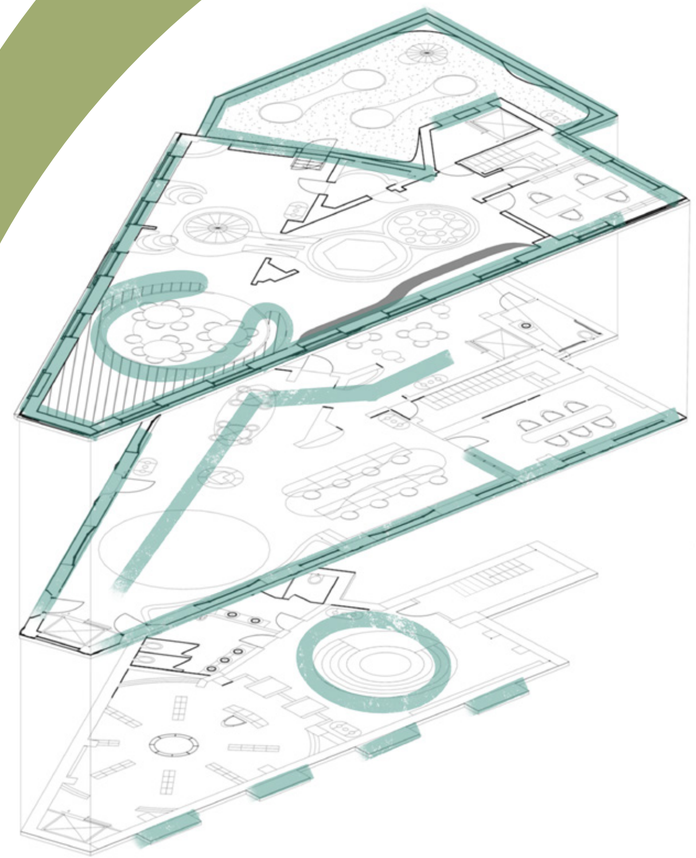
PEACE LILLY:
- purifys and oxeginates room at night

BOSTON FERN:
- good for restoring moisture non toxic

NATURAL VENTILATION & PASSIVE COOLING

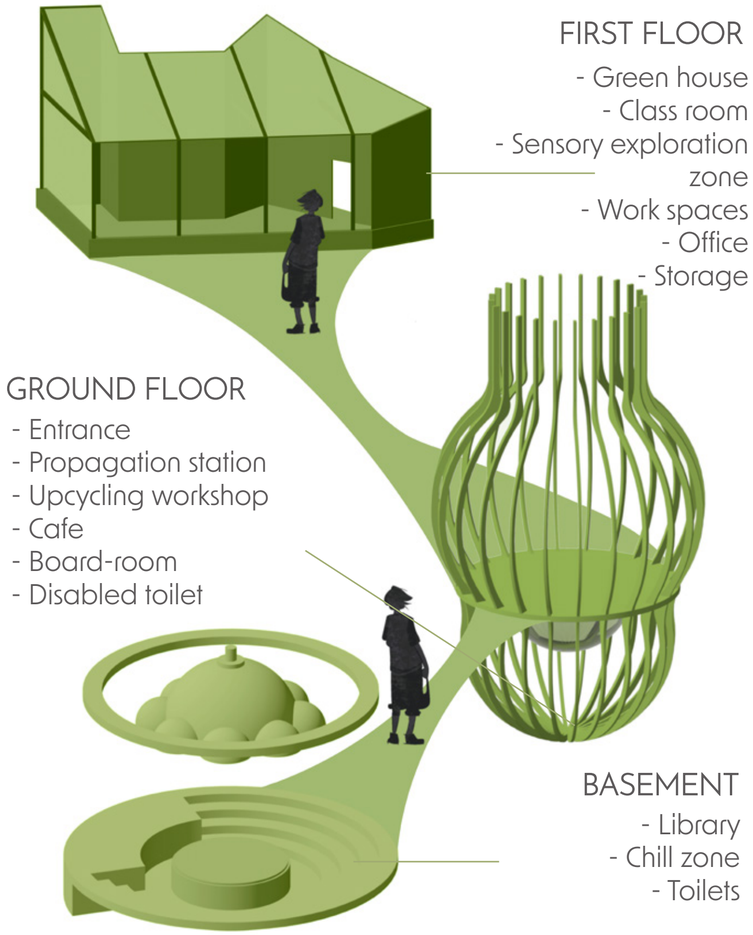




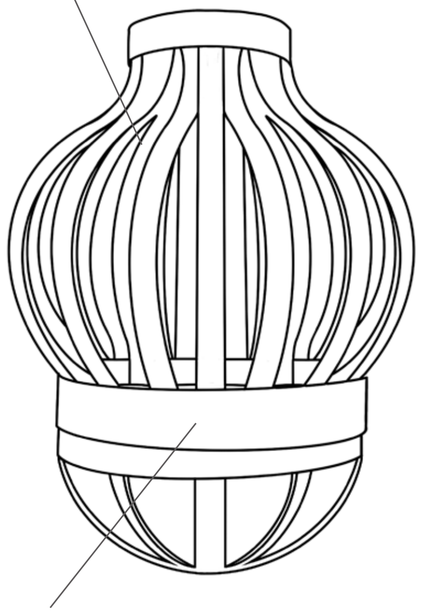


In the design of the building, natural ventilation and passive cooling strategies will be incorporated to reduce the reliance on mechanical HVAC systems. By strategically placing windows, vents, and openings, the building will encourage natural airflow and temperature regulation, allowing cool air to flow in and hot air to escape (Historic, 2024).

This approach not only minimises energy consumption by decreasing the need for air conditioning but also improves indoor air quality, providing a healthier and more comfortable environment for occupants. By harnessing natural airflow, the reliance on mechanical ventilation and cooling systems is significantly reduced, lowering overall energy usage throughout the building. Additionally, the building's layout will optimise airflow patterns to ensure that each space benefits from passive cooling, further supporting long-term energy efficiency and sustainability.

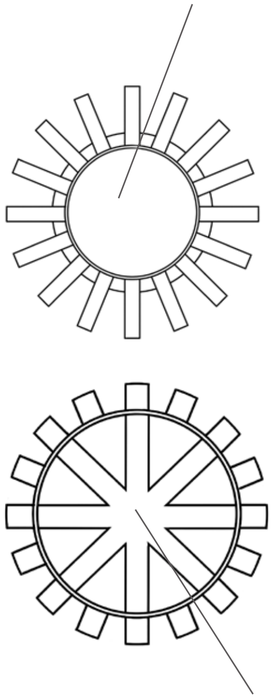


Educates visitors by example, showing how waste materials can be transformed into something purposeful and beautiful.

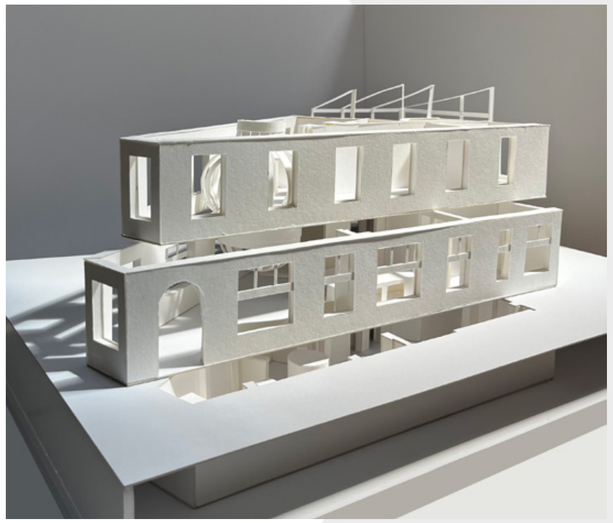


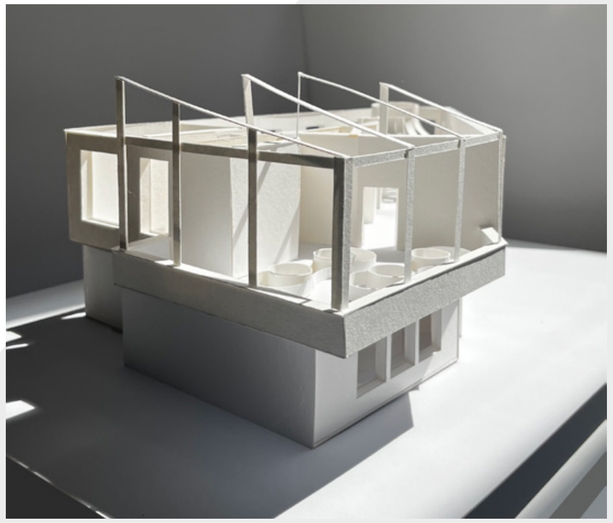
Reflects nature's circular lifecycle and instinctive resourcefulness.

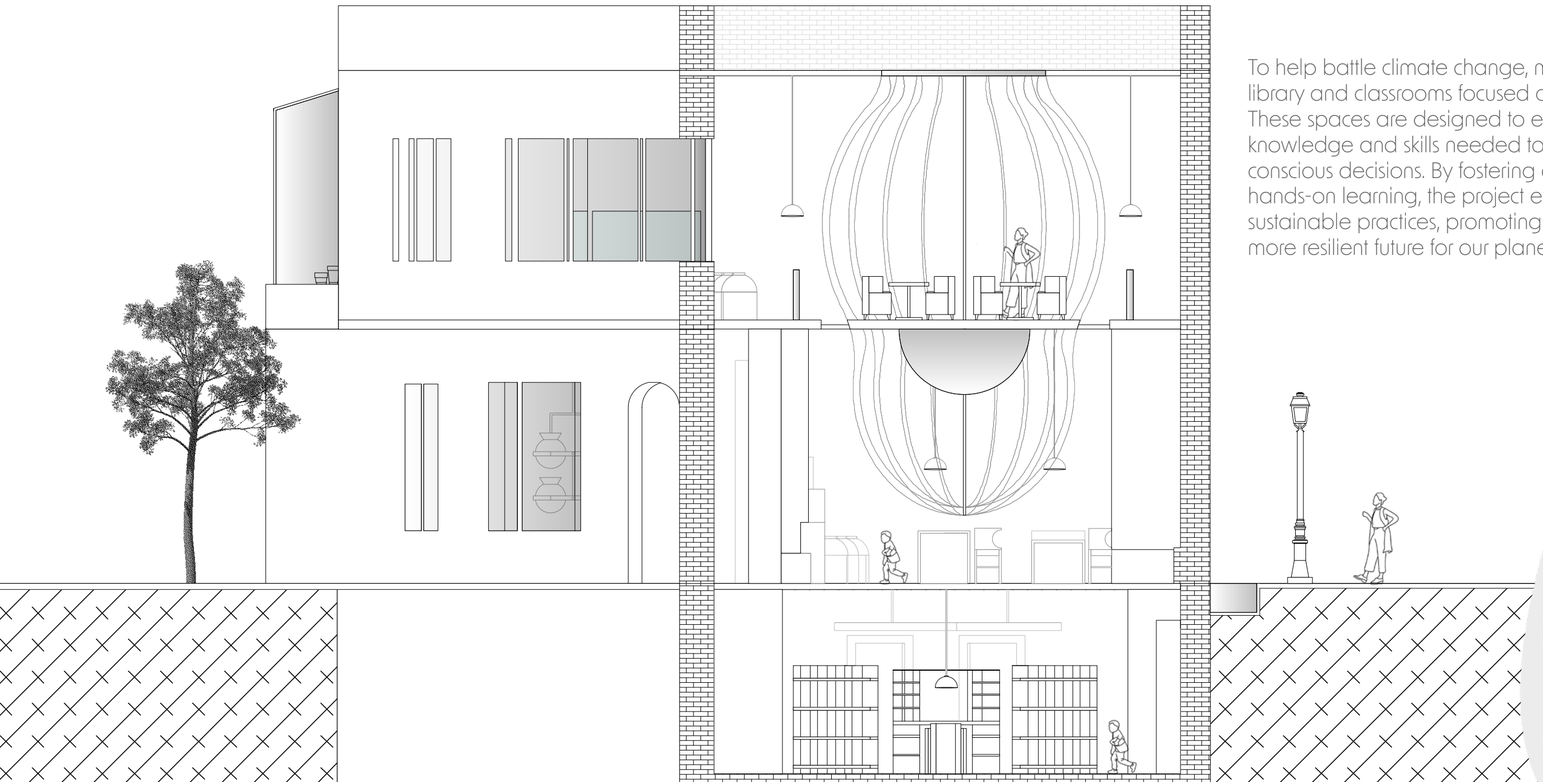
Constructed using repurposed and reclaimed wood, echoing the birds' use of discarded materials.



A unique, immersive space for workshops, environmental lessons, and creative activities.





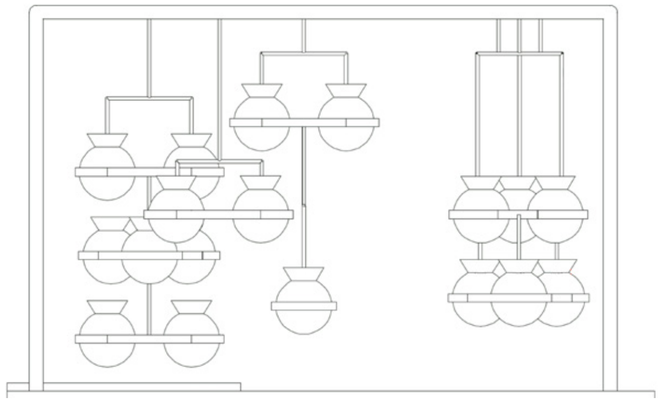


To help battle climate change, my project includes a dedicated library and classrooms focused on sustainability education. These spaces are designed to equip future generations with the knowledge and skills needed to make informed, environmentally conscious decisions. By fostering awareness and encouraging hands-on learning, the project empowers young people to adopt sustainable practices, promoting long-term change and a better, more resilient future for our planet.

PROPAGATION
GROW AT HOME

The propagation station is a hands-on learning space where visitors can discover how to grow household herbs using simple methods like cuttings, seeds, or divisions. It promotes self-sufficiency and sustainable living by offering step-by-step guidance on techniques such as water rooting and soil planting. Visitors can take home easy-to-grow herbs like basil, mint, parsley, rosemary, and thyme, perfect for everyday kitchen use. By learning to grow their own herbs, people can reduce reliance on shop-bought options, cutting down on packaging waste and food miles—thereby lowering carbon emissions linked to transport and industrial agriculture.

This practice also helps tackle resource depletion by encouraging localised food production and reducing the demand for mass-grown herbs that often rely on intensive farming, water use, and synthetic fertilisers. Teaching people how to grow their own herbs at home supports a more circular approach to food consumption and fosters greater environmental responsibility.



Mint thrives in partial shade and spreads quickly, best kept in pots.
Basil prefers full sun and regular watering; great for windowsills.
Rosemary likes well-drained soil and is drought-tolerant once mature.
Parsley grows best in moist, rich soil and is a biennial.
Thyme is hardy and low-maintenance, ideal for dry environments.
Holistic Wellness: Many herbs also have medicinal and aromatic properties, aligning with the nurturing and wellbeing goals of the building. This combination of environmental education and wellness reinforces the building's broader aim to address climate change through everyday sustainable practices.
(UC Agriculture and Natural Resources, 2025)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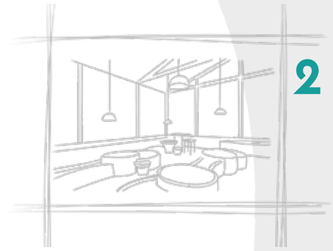
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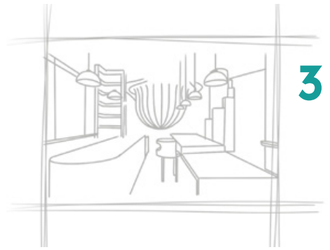
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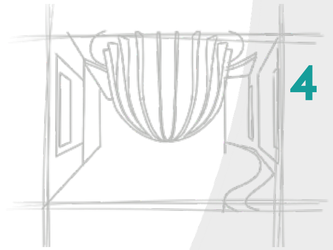
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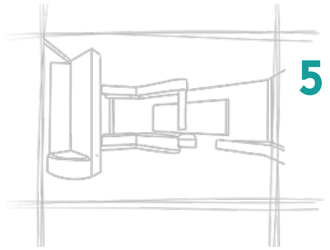
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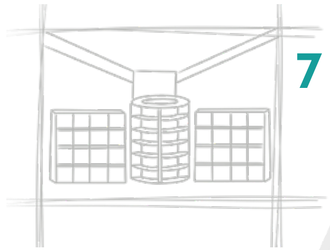
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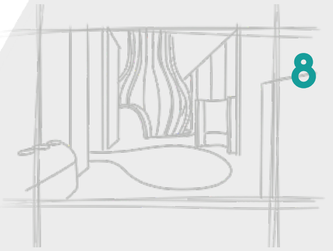
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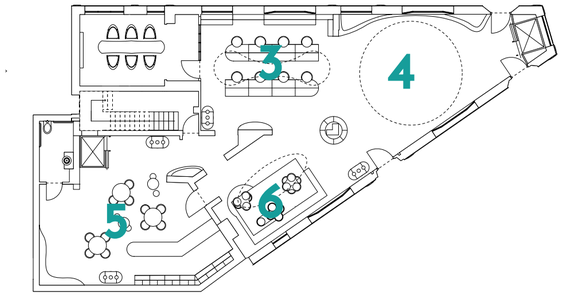
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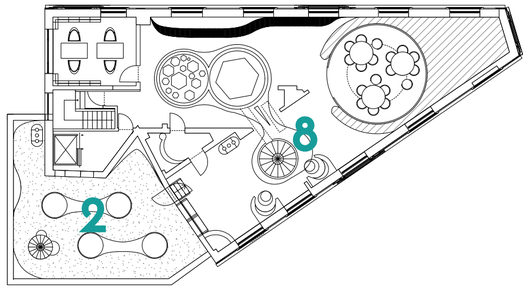
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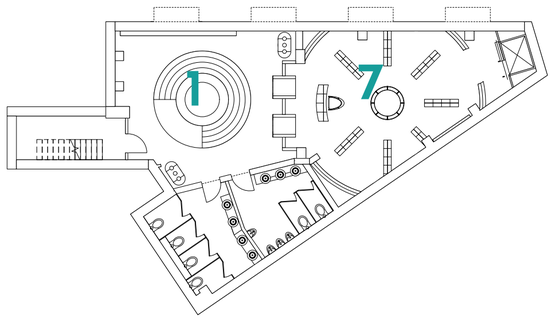
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