The Future of Food

INSECT RESTAURANT

The Future of Food explores the impending change in the human diet resulting from climate awarness and our economic and political need for sustainable living. On the site of the old Kennedy's Sausage Factory in Peckham, London will be a modern Insect farming facility and Insect restaurant.

Insects are organic, sustainable, and high energy all year round food, providing high protein nutrition eaten in over 80% of countries. They are famously eaten as part of a healthy diet in China and Mexico. The benefits of a high protein diet are extremely important for muscle growth, and optimal health.

Eating insects isn't what you imagine. When prepared correctly they can be of exquisite taste and full of flavour, something your palete is screaming for. Restaurants in London like Yumbug have gained renowned success for their high-quality insect meals like burgers and salads, and if eating insects whole terrifies you, not to worry, you can still enjoy the benefits insects bring through powdered insect meals!

Renowned for its vast agricultural expanses and advanced farming methods, the U.S is the largest food exporter on the planet. Most U.S citizens would feel disgusted by the idea of consuming insects for lunch or dinner, but the value insects provide to our health is equivalently going to help the obesity epidemic and agricultural sustainability. It is the responsibility of those in power of land usage, sustainable futures and public health to implement these changes to society. Not only will this benefit people, but also, the quality of other food sources, economic, social and political productivity, and our planet's overall health.

Image credit @ Julie Torres. The images below are AI-assisted images created with the support of Midjourney.

Beetle soup

Fly strawberry cheesecake

Mayfly Greek salad

Beetle and Mayfly Juice

Cockroaches and Termite spaghetti meatballs

1km radius
We are here

Kennedy's Sausage Factory, 92 Peckham Rd, London SE15 5PY

Photographs from inside the factory

First floor - South

First floor - North

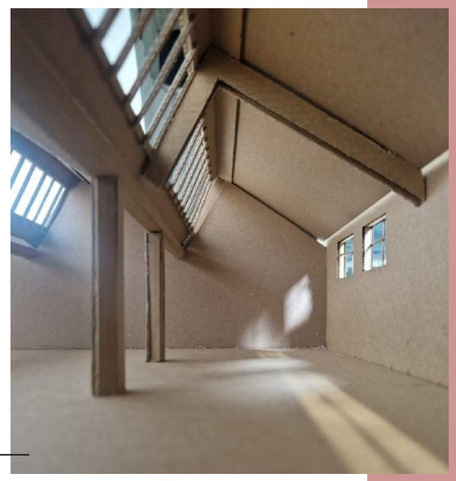
First floor - Southwest

Ground floor - North
Original wall structure

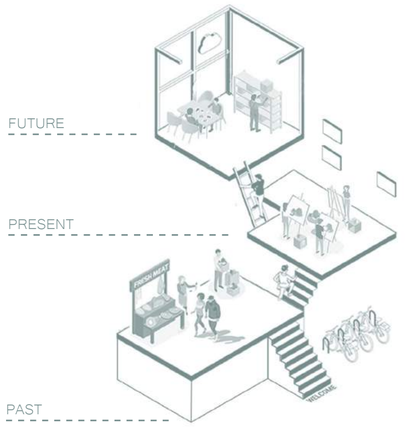
Ground floor - Northeast

Ground floor - Southwest

First floor - West



Ground floor - West



1867
Construction of Firestation

2007
Closure of Kennedy's Sausage Factory

Two former villas on site were demolished

The Factory is turned into art studios

2018
Firestation is rennovated into an art gallery

My proposal
Insect Farming Facility and restaurent

1934
Opening of Kennedy's Sausage Factory

2010
Southwark Council confirms redevelopement plans of the site

2011
Site purchased by Minty Property

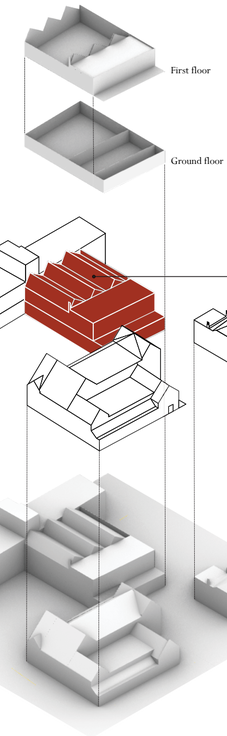
2014
The site is allocated for residential use

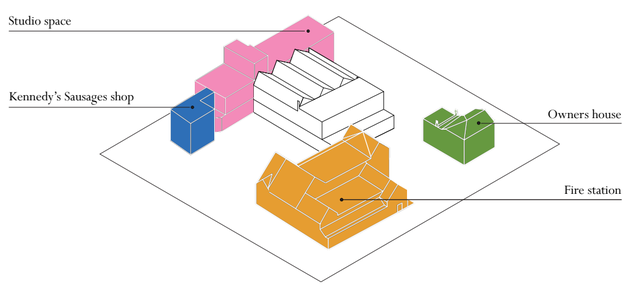
Future
Consent granted by council to built 38 flats + commercial spaces

NORTH

EAST

SOUTH





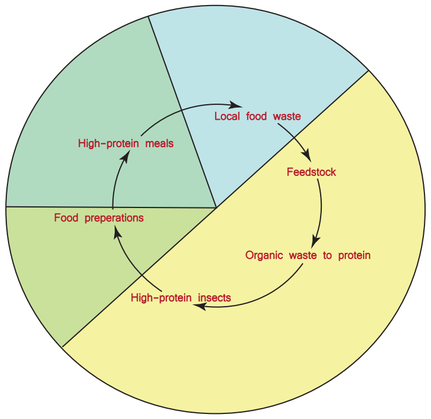
The Natural History Museum, states that 'eating insects will save the world'. Economically and ecologically, it's much more efficient to rear insects than livestock. The United Nations' Food and Agriculture Organization, estimated that the livestock industry could account for roughly 70% of the planet's agricultural land, with as much as 33% of all cropland being used to grow food for livestock. Cultivating insects requires less space, less feed, and generates less greenhouse gas. The Natural History Museum website explains that 'and with the future issues we're going to have, and the energy and land required to maintain our current food consumption, eating insects is going to happen.' Flybox, an Insect farming facility, explains that the solution would be 'a world where food businesses everywhere turn existing organic waste into protein, thanks to insects'. Insect farming facilities are a sustainable alternative to traditional feed production, massively reducing the vast environmental impact associated with farmed animals. The diagram on the right explains the overall function of my design proposal.

Beetle Tiramisu

Cockroach macarons

Beetle, Cockroach, Fly and Mayfly Pizza

Fly omelette

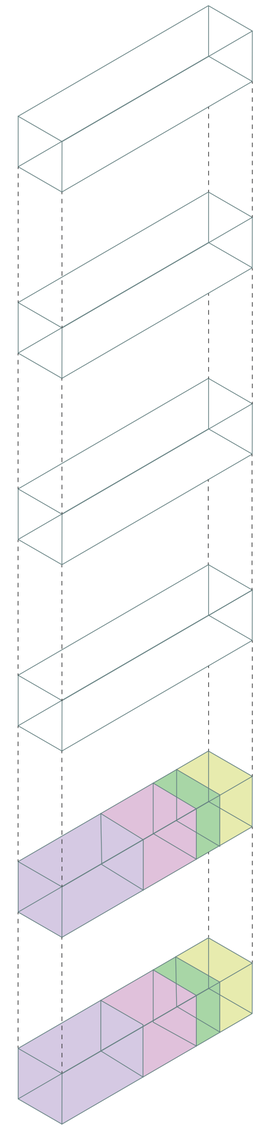


FUNCTION DIAGRAM

- GLOBAL PROBLEM
- INSECT FARMING FACILITY
- KITCHEN
- RESTAURENT

INSECT FARMING FACILITY LAYOUT

The containers (6) of the Insect Farming Facility:



BREED

This container is a a biosecure, compact and power efficient breeding room. 200g+ eggs per day per container.

HATCH

This container focuses on hatching and nursing of seedlings (baby insects).

GROW

This container is a bioconversion container. The user must add the seedlings of each Order type and organic waste (from the restaurent or local food waste)to create high-protein insects. Wait 7-10 days for the climate programme to run it's course.

WASTE

This container is a semi-automated waste processing container to pre-process material into a feedstock. 10 tons per day capacity.

LIVING HQ

The following HQ containers are climate-controlled living quaters for each high-protein Order that will later be harvested. The quaters are regulated to reflect the ideal living habitate of each Order.

LIVING HQ

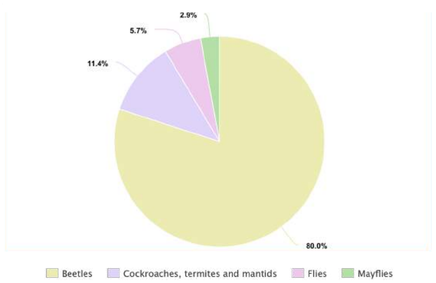
They are also observational glass containers for customers and regulatory employees.

Table 1–Number of edible insect species consumed, in order of importance and by biogeographical region (*adapted from* Jongema, 2017).

Order	Common name	Afr.	Au.	Neartic	Neotrop.	Or.	Pal.
Araneae	Spiders	4	2	0	4	8	0
Coleoptera	Beetles	89	29	18	215	282	84
Dermaptera	Earwigs	0	0	0	0	1	
Dictyoptera	Cockroaches, termites and mantids	4	3	0	6	18	12
Diptera	Flies	5	1	15	12	3	6
Ephemeroptera	Mayflies	2	2	0	2	3	3
Hemitera heteroptera	True bugs	17	4	0	46	54	14
Hemitera homoptera	Cicadas	27	12	12	20	30	26
Hymenoptera	Ants, Bees, Wasps and Sawflies	32	14	23	224	42	51
Isoptera	Termites	34	1	1	18	17	16
Ixodida	Ticks	1	0	0	0	0	0
Lepdidoptera	Butterflies and moths	146	28	11	108	23	93
Megaloptera	Alderflies, Fishflies, Dobsonflies	0	0	0	2	0	2
Odonata	Dragonflies	3	2	1	15	34	7
Orthoptera	Grasshoppers	107	7	14	72	95	33
Phasmida	Ghost insects	0	2	0	1	4	0
Plecoptera	Stoneflies	0	0	2	0	2	5
Phthiraptera	Lice	0	0	0	3	1	0
Psocoptera	Bark flies	0	0	0	1	0	0
Trichoptera	Caddisflies	0	0	0	5	1	4
Total of species		**471**	**107**	**97**	**754**	**618**	**356**

Biogeographical regions: Afr.: Tropical Africa, Au: Australia; Neotrop.: Neotropics; Or.: Orient.; Nearctic: Nearctic; Pal: Palearctic.

Pie chart (%) of Order's popularity eaten in the sites biogiographical region

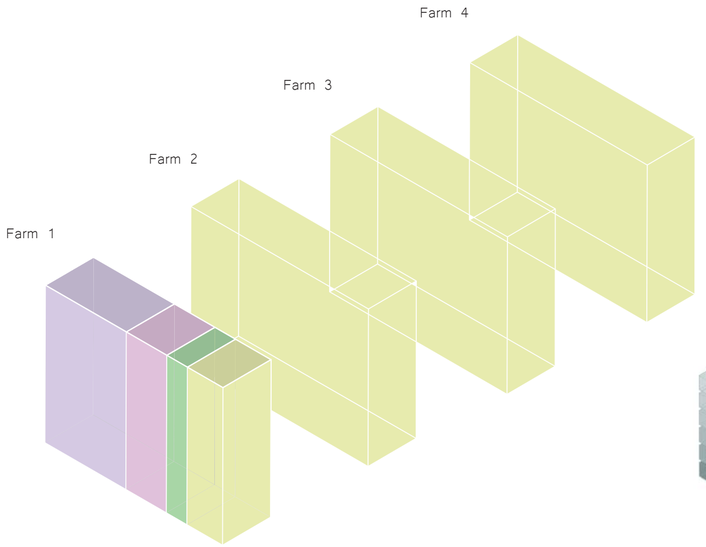


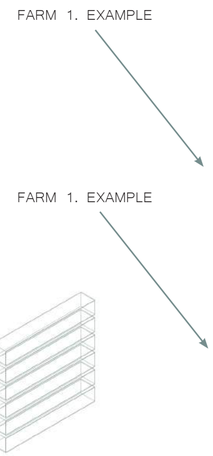
ONLY FARM 1 WILL HARVEST ALL THE ORDERS

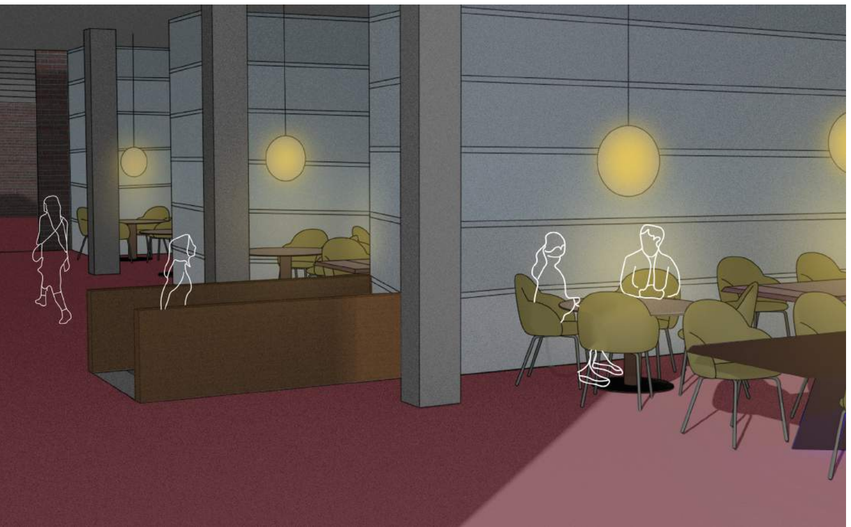
The illustration below shows how much space each Order type will be taking up within the facility. e.g. 3~ of the Insect farming facilities will only harvest beetles, as beetles are 80% more commonly eaten by people in the biogeographical region of the site.

Split vertically (image on right)

The farms (4) will be divided into 6 containers in order to complete each stage of the process. Two of which will be HQ, where the high-protein insects live until consumption. These two containers will be at eye-level too bystanders when they are eating.

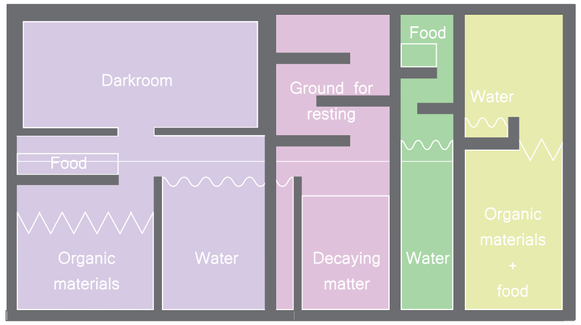




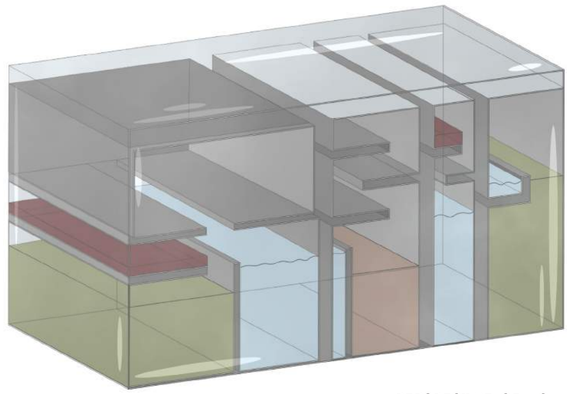


LIVING HQ

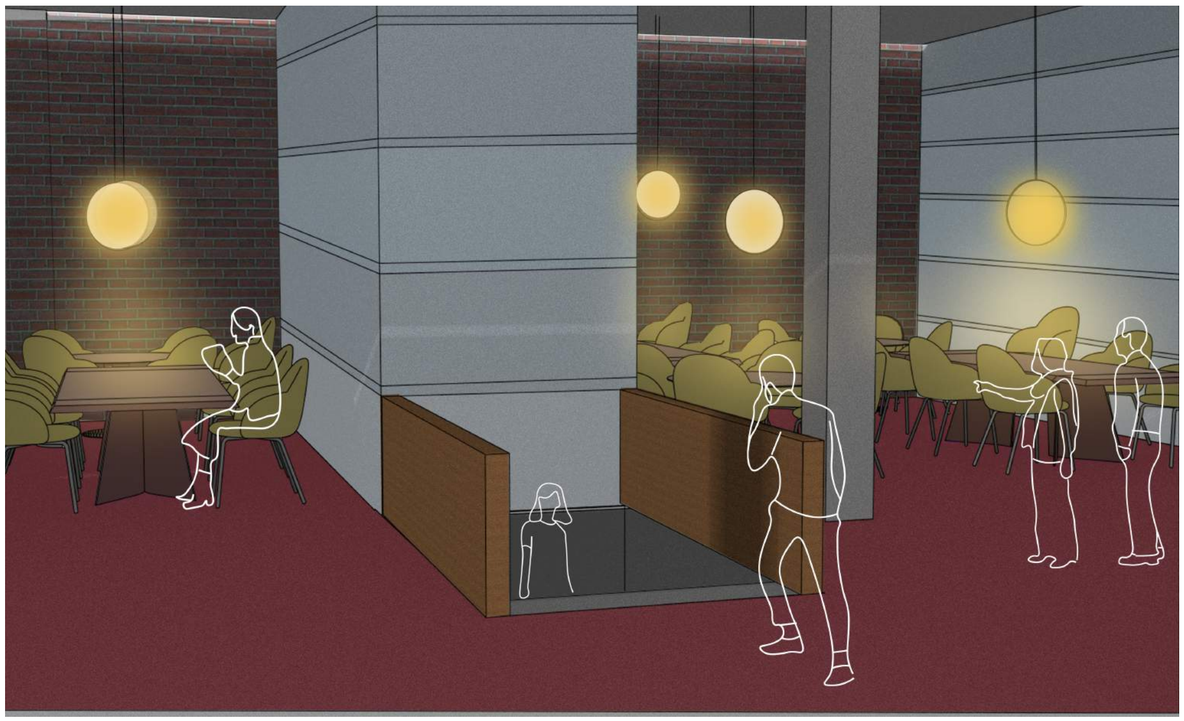
Understanding the habitates for each Order will indicate the rough idea as to what customers will be seeing within HQ, and educate customers as to what they are eating.



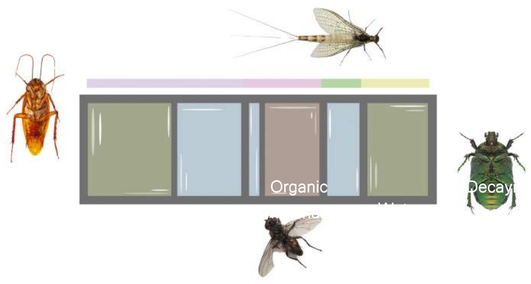
I am merging both containers to make a larger, unified HQ



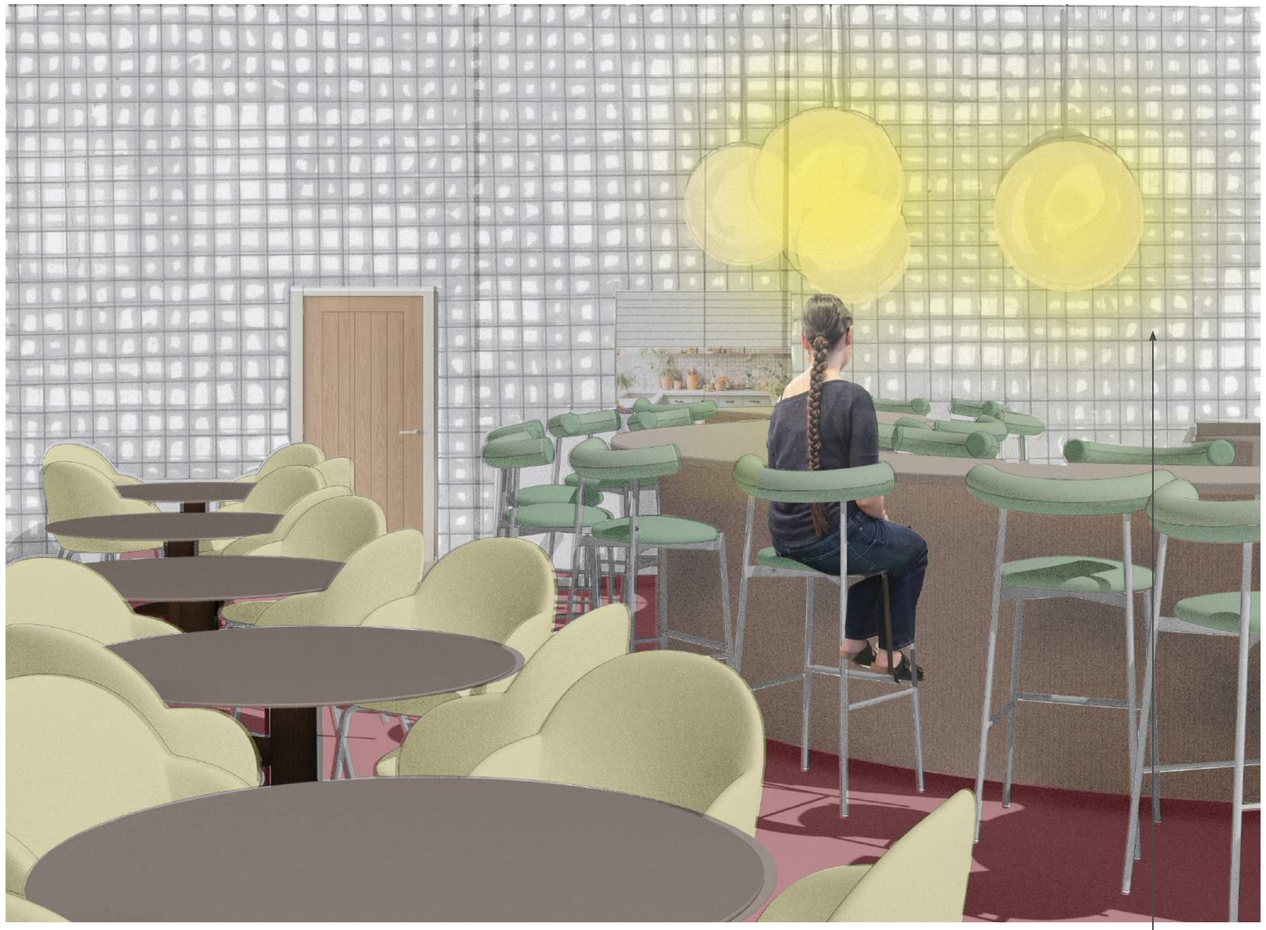
PERSPECTIVE OF HQ



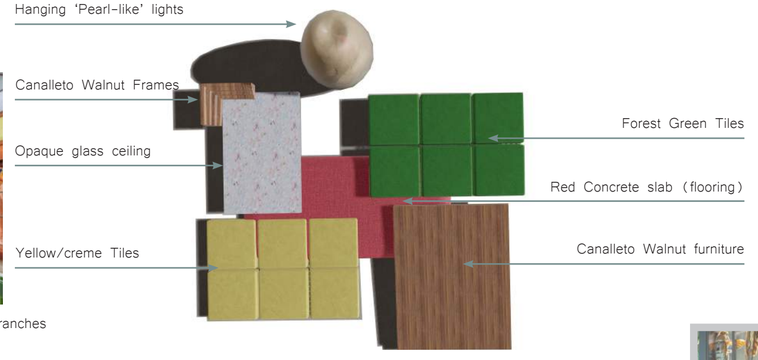
Insects need to be in a controlled enviroment. The north side of the factory, where the Insect farming facility will be, will have no windows and no natural light. Alike to insects - diners will be eating close to darkness. The aim is to submerge the factory to ressemble closely to a natural insect habitat.



Above is a plan that shows what
poeple will be seeing inside the container when looking up into HQ



LaoDao restaurant one of Kennedy's Sausages 9 branches

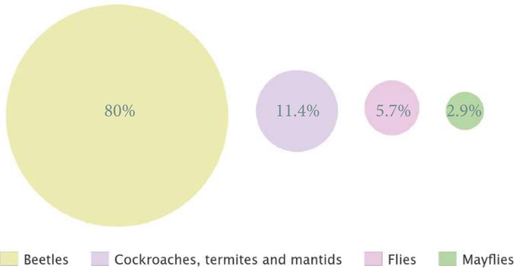


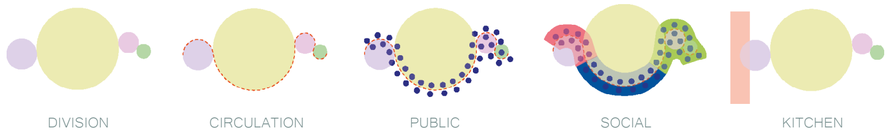
Insect wall

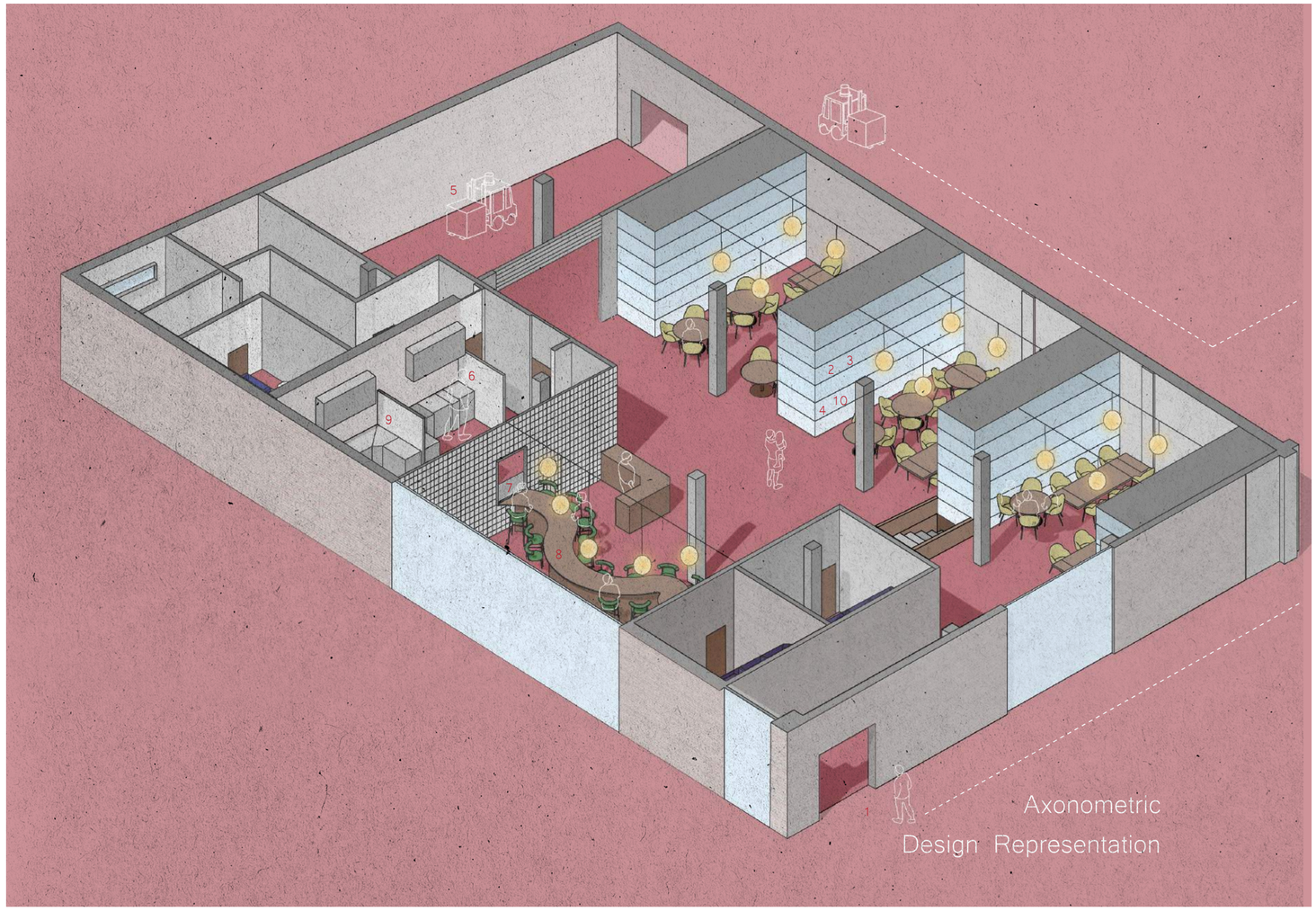
Precedent: Marlène Huissoud

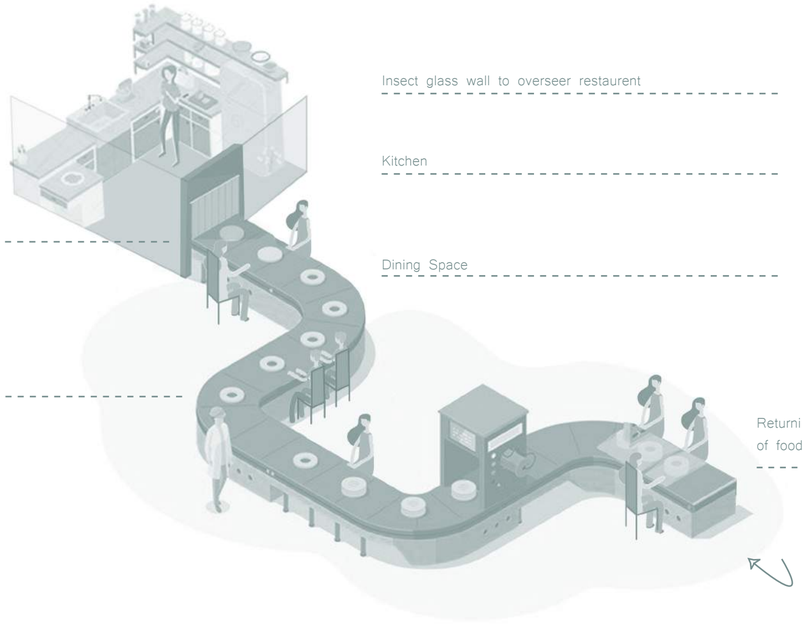
Graduate designer Marlène Huissoud used Propolis a material made by bees and silkworms to craft a series of vessels and furniture. Marlène Huissoud, who comes from a family of beekeepers, sourced by-products of natural processes to create the items in her From Insects collection. Huissoud also describes her products to give off an 'insect-like smell'.

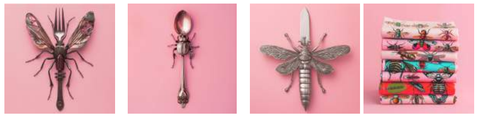
"I am interested in the viability of utilising insects and their waste streams to create future craft artefacts," Huissoud told Dezeen.











Scan me to find out more!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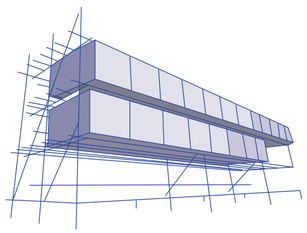
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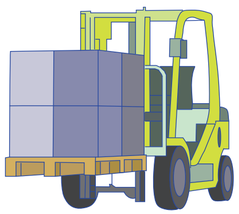
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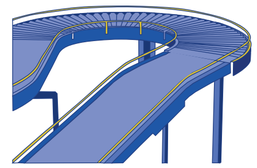
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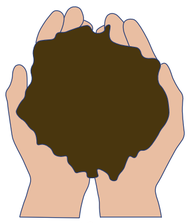
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