CONNECTIONS: SMALL & LARGE

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LACTATION PODS
ADV VII: FEMINIST TECHNOSCIENCE
CRITIC: ANI LIU
PARTNER: MARIE CHRISTINE DIMITRI
Lactation Pods

The lactation pods redefine the traditional, sterilized, and hospitalized existing typologies.

These pods incorporate a curvilinear and organic design, promoting inclusivity and genderless spaces for lactation. The goal is to provide intimate and non-institutionalized environments.

The design and project establish various typologies that are separated through three different family groups: the workplace pod, the outdoor public pod, and the indoor public pod.

The typologies range from enclosed, to semi-open, to open, catering to single and multi-user situations.

These lactation accommodations are designed with a spectrum of typologies, amenities, levels of privacy and different lactating “methods”.

The idea is to cater for a variety of preferences. Some pods entourage pumping, and others would encourage breastfeeding. Nonetheless the spaces allow individuals to choose their own lactating methods.

Bottom: models of original 3 typologies. Right: typology matrix
WORKPLACE POD

- **Enclosed / Single User**
- **Enclosed / Multi User**
- **Semi-open / Single User**
WE WILL BUY THE BOOK AFTER GIVING YOUR SIBLING THEIR BOTTLE.
Left: typology fabrication relationship axonometric. Right: lactation pod app.
Full spread: models of the indoor public typology family
Right: still from the Blob animation
The Blob was inspired by the COVID-19 pandemic and how we are affected by a virus unseen.

This project seeks to make intersectionality visible by using attraction and change in color to highlight the overlap between two things, whether that be objects in a field or the landscape itself.

ECOPONICS
ADV V. FUTURECURENT: ENVENING EUDGENT ECOLOGIES FOR JAMAICA
CRITIC: VANESSA KEEH
PARTNERS: AAHANA BANKER + FRANCESCA DOUMET

Right: aquaponic system animation stills
Ecoponics seeks to solve projected climate issues that Jamaica’s East End will face by 2100. It seeks to bridge tourism and local environmental education together.

The project began with the creation of a new self-sufficient climate device that uses aquaponics to clean the water, improve fish population, and provide jobs through agriculture.

These ideas of facilitating community growth through sustainable means was carried out through the project’s three building sites of an ecolodge, crocodile visitor center, and oceanographic research center.
Fish Environment created by BioRock

Acidic Water (H2CO3)
Clean Water (H2CO3) Returned to the Environment

Ammonia (NH4) from Fish Excrements become Nutrients for Crops
BioRock enhances Growth of Coral and Seagrass

Plants receive Nitrites (NO2) as Nutrients and Filter the Water
Clean Water (H2CO3) is Returned to the Environment
Ammonia (NH4) and Water are Pumped up through Pipes

Solar Power is used to Power the System

Left Top: water cleaning, Left Bottom: artificial coral environment
Right Top: nutrient distribution, Right Bottom: solar-powered
configuration and material matrix

Field & Habitats

Life Aquaponics

Lakes & Wetlands

Full spread: configuration and material matrix
Left Top: System and energy diagram
Right Top: Full configuration axon
Right Bottom: Chunk model section
Left Top: visitor center and eco-lodge site;
Left Bottom: oceanographic center site;
Right Top: zone diagram;
Right Bottom: site images
Full spread: Louver system for storm state
Left: during low tide (open shutters, low dock); Right: during storm (closed shutters, high dock)
FLOOD MITIGATION

X-INFORMATION MODELING
CRIC: LUC WILSON, SHOWEIA ZHANG

Right: Iteration of flood mitigation design space
FLOOD MITIGATION

Rise in sea level has highlighted vulnerability to flooding for communities located by the coast.

How can the areas of habitable space and quality of life be protected and maintained during flood events?

The diversion of flooding through the increase in open space, implementation of trees and rearrangement of buildings would increase overall protection for residents while adding to the area’s quality of life.

The Flood Mitigation project measures the potential to grow vegetation through the amount of daylighting to open spaces, the effectiveness of trees as a natural barrier through the percentage of trees to land, and the most unobstructed views according to the rearrangement of the buildings to find the best flood mitigation model that both protects and provides comfort to residents.

**Bottom:** site information in west village; **Right:** inputs and metrics
Left Top: Benchmark Iteration
Left Bottom: Worst Iteration
Right Top: Design Space: Best, Middle, and Worst Iterations
According to the USDA, a **food hub** is a center that collects food from local and regional farmers and food producers. They package, market, and distribute the goods to customers such as supermarkets and restaurants.

A **food bank** also collects, stores, and distributes food, but does so as a non-profit organization. This gives access to those who are food insecure.

In the **Coachella Valley**, 50% of the population is made up of **migrant workers** who tend to the agriculture. Although these people work for food, they are the main users of food banks and food pantries in the area.

If the model of the food bank was hybridized with the food hub, and if all this food could travel from farms south of Salton Sea into the Coachella Valley by railway, could this create a space where locals and tourists alike are bridged together by a space of food and movement?
Traditional Food Hub

Rural

Urban

Food Hub

Highway

Rural Farmers

Regional Producers

Food

Grocery Stores

Restaurants

Community Groups

Schools

Highway

Food

Proposed Hybridized Inclusive Food Hub Model

Hybridized Food Hub/Food Bank

Rural

Food Hub

Highway

Regional Farms

Regional Producers

Food

Real Shop

Urban

Grocery Stores

Restaurants

Community Groups

Schools

Food Pantries

Shelters

Soap

Hygiene

Hybridized Food Hub/Food Bank

Rural

Food Hub

Highway

Regional Farms

Regional Producers

Food

Real Shop

Urban

Grocery Stores

Restaurants

Community Groups

Schools

Food Pantries

Shelters

Soap

THE PEOPLE:

Rural

Food Hub

Urban

The Farmer

The Food Producer

The Restaurateur

The Consumer

The Tourist

The Employee

The Community Groups

The Food Insecure

Left Top: Traditional food hub model. Left Bottom: proposed hybridized inclusive food hub model. Right Top: program diagram. Right Bottom: user diagram.
Left: Floor plan diagram. Right: Floor plan program diagram.
section through train hall, community garden, and market
Left: train hall perspective from south. Right: train hall perspective from north.
DREAMSCAPES
TECHNIQUES OF THE ULTRAREAL
CRITIC: JOSEPH BRENNAN, PHILLIP CRUPI
PARTNERS: AAHANA BANKER, FRANCISCA DOUCET, OMAR DREEQ
Dreamscapes

Dreamscapes is a creation of spaces inspired by classic forms and the warmth of the desert.
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