Cultivating Culture | Cultural Cultivation

creating spaces of (ex)change

Ruby Sleigh | PS Transitional Territories
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Problem Statement

Tactics & Approach

Programmatic Response

Site Selection

Design Response

Reflection
"in order to navigate the anthropocene, we must understand the ideology which created it, and who"

- Davis & Todd, 2017
Borders of Extraction

land | sea
Segregated Spaces
production | consumption

Image: NIMBY 1, Atlas of Places, 2018
Monocultural Production

anthropocentric landscapes

Image: Feedlots, Mishka Henner, 2012-2013
Plankton population under pressure

Salmon farms

Shellfish farms

Projected invasive species due to farming

1:10 000 000 @ ATLAS, 2018
Scales of Extraction

quantity, quantity, quantity
One or Many?
reframing perceptions
Tactics & Approach

architecture as activism

"Change is cumulative. For each person who reaches a pivotal shift in behaviour, there has been a series of stories, moments and interactions leading them to this decision. Activism must take the form of a series of gentle, guided and repeated messages."

- Dr. Melanie Joy, Beyond Beliefs
RESEARCH QUESTIONS

How can the **agency of design** be utilised to facilitate a new infrastructure for food production and consumption, moving from **exploitation to co-existence** and encouraging a **shift in our perception** of other animals?

1. What are the needs of other animals within our environments and how can these be (re)built into human-shaped scapes of coexistence?
2. How can design be used as a form of activism, creating value for the structurally undervalued and enabling changed individual perceptions?
3. How can we learn from the coming urbanisation of the sea in order to better inform and transform our urbanisation of the land?
Infrastructural/Technical
- physically enable change

Socio-Spatial
- visual & physical adjacency or intersection

Cultural/Aesthetical
- influence cultural shifts
Territory

Farmed Salmon occupy an average of 200m diameter pens.

Wild Salmon travel up to 3220000m annually to spawn.

Salmon farms function as a monoculture, dominating the local ecosystem.

Kelp beds support life from up to 260 different species at all trophic levels.

Diversity

Mineral Balance

Equivalent of 9.4 million peoples’ sewage pollutants released by Shetlands farms.

Sea plants absorb contaminants, nitrates and CO$_2$, cleaning the seas.

Sustenance

Sea vegetables provide 24% protein, along with plentiful vitamins & minerals.

Salmon comprise 25% protein, along with plentiful vitamins & minerals.

Protein Sources

plant-based vs animal-based
Kombu Culture
a new connection to food
Programmatic Response
infrastructural | cultural | socio-spatial

“If we are to destabilize any essentiaised correlation between territory and terra, just as much as we are to interrogate the seeming indifference of urbanization over both land and sea today, it may be in constructing new historical geographies of power that we can best grasp the political spaces and technologies of our world in the present.”
- Dr Ross Adams, Mare Magnum, Urbanisation of Land and Sea
Infrastructural/Technical Response
(Infra)structure Provision
Aesthetical/Cultural Response

signs of transition
Socio-Spatial Response

thresholds for change
"It's not so much that Shetlanders choose the traditional over modern life, it's the aspects and scale of modernity that gets here. People want the excitement of the modern, they just want it to be our modern."

- Magnus, fish processing plant manager, Shetland Isles
Inland fresh water

2000 fishing vessels, carrying over 57000 tonnes of pelagic fish per year

£57 million worth processed fish exported to EU and globally

Impacts of Food Production on the Shetland Isles

- Inland fresh water
- 2000 fishing vessels, carrying over 57000 tonnes of pelagic fish per year
- £57 million worth processed fish exported to EU and globally
- Salmon farm
Topography and Program
a lack of accessible culture

01 NAFC Marine Research Centre
02 Historic pier and workshops
03 Fishing harbour and boat repair
Geology and ground conditions, Scalloway

01 Rock
02 Mud
03 Sand
04 Shells
05 Brown Earth and Limestone
Proposal

cultural (ex)change
Territorial Strategy
reclaiming space
Intervention Composition
embedded experience
Cultural Cultivation
creating spaces of exchange
Section A
the shore edge

bar/cafe
terrace
pop-up eatery units
dock for delivery
Water Edge

the journey ahead
seasonal prefab units slot in
step eating space

Water Edge
gradual introductions
Intersections

spaces of co-existence
Drying Tower

reflection on reflection
Processing

the route of production

washing
dehydration & dessication
cooking
packaging
fertiliser production
biofuel production
storage & depot
Longevity
permanent infrastructure
Longevity
seasonal infrastructure
Articulation
key section, plan, elevation
Processing (Detail A - internal wall-floor & door head)
scale 1:5

1. Trench base
2. Sheet metal drainage layer
3. Timber framing
4. Concrete set for in-situ door, stainless steel
5. Loose substrata
6. Steel frame
7. Timber framework for wall
8. Glass panel
9. Concrete floor
10. Concrete infill
11. Precast concrete
12. Precast concrete
13. Precast concrete
14. Precast concrete

Process: Precast before concreting slab
Access

Visitor route
Access

producer & consumer intersections
view into production spaces
Section

a play of levels
Teahouse | Detail B - window base

text 1:5
1. Triple-layer laminated safety glass
2. Silicone compressive seal
3. Stainless-steel webbed window frame, bolt anchored to concrete
4. Waterproof membrane to tie around window frame
5. Heat-absorbed exposed concrete inner leaf
6. 100mm rigid insulation
7. Removable concrete lip, keyed to drain
8. Bearing strip
9. Cast-in-place concrete surface
Construction Diagram

sequencing
Integrate terraces
Embeddedness
co-existence with the reef
Reef Module
a balanced production

base module

connector module sits between pyramid units

galvanised steel spool holder sits in uppermost 2 layers

next layer stacks
Uppermost layers used for harvesting.

Lower layers difficult to access, securing habitat against overharvesting.

Reef Module: a balanced production system that varies rock infill to create pedestrian access, or vary permeability.
Reef
embedded landscape
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From Sea to Land
repeated messages
“Behind the power of every movement we have seen, every call for change, every group is made up of each of us”