

$\square$ Adaptive Re-Use Cooperative Housing for Chelsea, MA
Conversion of a partially vacant office park to a buy-nothing co-housing development. The project invites material sharing at the scale of infrastructure that maximizes return on investment rather than the illusion of self-sufficient private accumulation.

By reframing domestic life through the lens of shared goods, the proposal takes American consumerism and renders it slowed, contained, and re-ordered. In the act of redirecting waste streams and sharing goods in a circular economy, residents avoid over-consumption of material and energy while also building human relationships, kinship, and purpose - an infinitely valuable and un-commodifiable resource.

I produced all images herein unless otherwise noted. Physical models built collaboratively.
core IV studio, spring 2023
partner: Maddie Farrer
instructor: Jenny French



$24 " \times 72$ "physical model
scale: $1 / 8^{\prime \prime}=1$ '- ${ }^{\prime \prime}$



The mat gesture is reconciled with the metrics of required program and density - 550 beds and ample private and public green spaces are provided to the city. Back alleys connect neighbors in unexpected ways - as different grains collides across the site. Visible - but also tangible - roof lines maintain a sense of human scale









Roof Plan - Residential Units



Typ. Plan - Workshop \& Maker Space


Roof Plan - Residential Units


Typ. Plan - Big Box Cooperative


Roof Plan - Residential Units



Facade
The suburban garage door, inverted and aggregated across the surface of each facade. Put into conversation with the stacked unit behind

The building becomes creature like, spiked and armored when the doors close.
physical model (right) by Maddie Farrer



Cul-De-Sac Flea Market
The figure of the living unit typologically transforms into the
factory sawtooth oculus. In this case, becoming a public flea market
forum for exchange to supplement the material coop of the development




Stitched Together: Installation Photography, Collage
Kenzo Tange Pavilion Installation by Paris Bezanis, Olivia Champ, and Schola Eburuoh. Spring 2023
" 8 hand-made, quilted garments. Each garment is individually unique and constructed by our team of seamsters drawn from across the GSD community. When worn, the garments can be linked together at their edge seams. When multiple garments connect, they produce a large, mobile, "megaquilt" that transforms as participants move and can be constructed in a huge variety of combinations. The different combinatorial possibilities encourage participants to attach and detach, rearrange, and interact with one another, creating space through soft skins and motion."



Tower Facade Folly
Brief: design a facade system for a generic high rise. Outcome: 2 modules, 1 wall, projection... made possible by 2 3D printed pre-cast panel molds... a standardized arched window with lower awning lite is used.
The curved projecting module can be mounted 4 x ways onto the standardized wall panel vertical for east and west orientations, horizontal for north south (solar shade \& planter bed). projections and windows are installed in factory after cast is pulled from mold.


"The production of precast, concrete elements with complex, double-curved geometry is expensive due to the high cost of the necessary molds and the limited possibilities for mold reuse.

Currently, CNC-milled foam molds are the solution applied mostly in projects, offering good aesthetic performance, but also resulting in waste of material, relatively low production speed and fairly high costs per element.

The flexible mold method aims to offer an economic alternative for this state of art technology by allowing repeated reuse of the same mold, and if necessary, reuse in-adapted shape." - H.R. Schipper, 2015



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Harbor Floats: Sheds on the Water
Oyster shacks on floats - where commercial aqua-farmers sort through oysters in preparation for harvesting and export - have "urbanized" Duxbury Bay over the past 15 years. These spaces are in constant flux - moving up, down, and around tidal ocean movements. Attempts to capture these spaces are, consequently, complicated... as seen through anomalies by google earth satellite imagery.
adjacent course: Nonprofessional Practice, Oana Stanescu spring 2023

photocollage: the typical oyster shack on a float, stacked in a precarious condition. duxbury harbor

google earth struggling to capture water. newport harbor, rhode island

google earth struggling to capture boats moving about their moorings in 3D view. southwest harbor, maine.

google earth struggling to capture water. wickford harbor, rhode island

google earth struggling to capture boats moving about their moorings in 3D view. west yarmouth, massachusetts


above: shed on a float study model, rendering left: typical oyster shack on a float, stacked in a precarious condition. duxbury harbor

shed on a float study model, wrapped with google earth imagery of the water, rendering
google earth struggling to capture water. hyannisport, massachusetts

shed on a float study model, wrapped with google earth imagery of the water, rendering
google earth struggling to capture water southwest harbor, maine


above: Duxbury and Plymouth bay. Nautical map sourced from NOAA, numbers index depth of water at low tide. Topography and other labels removed.
left: Duxbury harbor mooring field map /site plan for a shed on a float. Each node is a number indexing a family/vessel. A radius of "private property is set within this area. Commercial oyster floats are located in the southeast corner of the harbor

above: Boston Harbor. Nautical map sourced from NOAA numbers index depth of water at low tide. Topography and other labels removed.
left: Hingham outer harbor mooring field map /site
plan for a shed on a float.


- Surface Spirit: a Whiskey Distillery in Roslindale, MA

This urban whiskey distillery explores a tension between the boutique and the mass produced, the singularity and the plurality. The surface is the site of inquiry for the project. It is scaled and draped to express an anxiety towards corporate expansionism while being highly productive. The surface becomes a veil over the entire building and functions as a filter. Envisioned as a copper chainmail, the veil supports the growth of sphagnum moss underneath it on the building's roof. Rainwater is filtered through the moss and purified - and then collected in a 100,000 potable water tank at the building's core. This water is then used to proof down the whiskey spirit.

Core III studio, fall 2022
Instructor: Grace LA



Opening Night, digital rendering
The veil is lifted, illuminating the public plaza for open
and flexible programming. Other bays keep their veils
closed, gently moving in the breeze and filtering light with
a copper-tinted green.


Opening Day, digital rendering
The veil is closed, providing a filter for workers and
visitors alike. The distillery appears like a traveling
circus tent.


Context
Puritan Ice Cream company, a small business that has been a staple to the neighborhood for about a century. Its storage shed conforms to past history, the Stonybrook river - an important trade/water/sewage artery that still connects to the Charles river today. The brook cuts through the distillery site (top image)

The terracotta roof shingles of the auxiliary small shed became a catalyst for the proposed building.


0.5 a watchive

Texas distillery handcrafts whiskey with recycled

## rainwater



Site \& Massing Strategy
Stonybrook river, subject to frequent flooding, was eventually covered over. Water management and recycling became a central theme of the project.

The existing ice cream shed is scaled up in a rather blunt fashion to become the distillery. Limits to corporate expansionism are in full display here, whereby the train tracks at the northern edge of the site abruptly cuts off the building massing.



1/32" Massing Model The distillery massing becomes a peninsula, extending across the railway to bring the arboretum greenery into the post industrial landscape.



1/8" scale physical model
artificial ground and surface is interrogated in
the project: the distillery becomes a peninsula
that extends across the railway to bring the that extends across the railway to bring the
landscape.


The Chop, digital collage rendering
referencing Edward Hopper's "Railroad Train", 1908


$1 / 8^{\prime \prime}$ scale physical model
artificial ground and surface is interrogated in
the project: the distillery becomes a peninsula
hat extends across the railua to a peninsula hat extends, accoss the railway to bring the arboretum

## Sub-slab Drainage Plan

Rainwater is filtered through
the moss roof assembly,
purified, and then collected in
a 100,000 potable water tank at
the building's core. This water
is then used to proof down the
whiskey spirit.

Level 01 Floor Plan
Whiskey production follows a
clockwise sequence beginning in the lower right quadrant of the plan below. Administration i located in the upper right area


Level 02 Floor Plan
A mezzanine level that gives
workers access to equipment.
A strong horizontal datum is
created.


## Level 03 Floor Plan

A public green space with
"boutique" storefronts: some for
local vendors, others operating
strictly as windows into the
production space below.


Long Sections
A strong horizontal datum is
created on the second level
calibrated to align with the
railroad track elevation outside



Nighthawks, digital collage rendering
referencing Edward Hopper's "Nighthawks", 1942

Short Sections
Rainwater is filtered through
the moss roof assembly,
purified, and then collected in a 100,000 potable water tank at the building's core. This water is then used to proof down the whiskey spirit.



Roof Assembly Section Detail
Catenary curves working in tension, self-weight between CLT beams.

A heterogeneous assembly of layers working in tandem to grow moss and filter water to a 100,000 holding tank at the building's core.

above: a copper chainmail veil supports the growth of sphagnum moss underneath it on the building's roof. Rainwater is filtered through the moss and purified - and then collected in a 100,000 potable water tank at the building's core.
right: the stratification of building program


## Typical Building Sectio

Roof and Wall assemblies
CLT / glulam framing sits above an exaggerated concrete foundation system. This shift happens at the second level, aligning with the horizontal datum of the railroad tracks outside.
$\square$


The Rickhouse, digital rendering
A spiral ramp follows the 100,000 gallon potable
water holding tank below into the rickhouse

$32 " \times 49$ " $1 / 8^{\prime \prime}$ scale physical model
A spiral ramp follows the 100,000 gallon potable
water holding tank below into the rickhouse.


Visions Installation: Photography \& Collage
An installation pushing the boundaries of physical materiality by Fernando Garrido \& A la Sauvette Studio. Piper Auditorium, organized by Spain GSD, fall 2022.
"It is composed of a family of ten flags considered almost as living objects. As such we propose ten corresponding devices that 'test' the flags, all similar but with a different 'perceived materiality' in each case.

The flags 'suffer differently' as the devices interact with them. By putting them in tensions, piercing them, stretching them, hanging them, we showcase an organic spectrum and its mode of artificial preservation that range from an extremely flesh-like and organic appearance to its overly artificial preservation."

$\square$ a People's Palace for Charlestown, MA
This community pavilion is a dowel-laminated timber demonstration project that has a shelf-life of +/- 5 years. It shall be disassembled and reshipped at the discretion of the responsible municipality Presenting the project in the spirit of an IKEA furniture piece creates a dialogue around the building's assembly, re-use (or waste?), and accessibility. Is architecture akin to a shelf?

## PEOPLE'S PALACE










Jewel Box: A Sports Shed for the North End, Boston MA
This Community Sports Shed interrogates spectator - actor relations. Formally, it is a pyramid inside a box. By inverting the conventional typology of a stadium (where seating hugs the perimeter), a pyramidal bleacher form offering panoramic views is created at the core of the building.
core II studio, spring 2022
instructor: Angela Pang





The inversion of actor - spectator relations constituted a reconfiguration of the locker and shower room typologies. Normally isolated to the core of a building, these programs are located along the Jewel Box's glassy perimeter. Privacy is maintained by means of a continuous retaining wall that is offset from the building's footprint to produce a deep light well and reflecting pool.


Copper gutters and drainage pipes become (functional) ornaments that are embedded within the wall assembly. These pipes are at once shower heads and rain leaders

The work of watercolor painter Lauretta Vinciarelli was referenced and collaged in the building's representations.


Ordinary, Except: a Textile Artist's Studio \& Residence
The design brief called for an articulated approach to architectural typology as mutable, open-ended, contextual, and programmatic - giving ordinary conditions the capacity to become exceptional

The domestic turret, found all over this Cambridge neighborhood, was the formal catalyst. Sweep2s produced the iconography of the New England saltbox and cape house, which were collided into two neighboring triple decker homes

Physical Models built collaboratively. I produced all imagery herein
core I studio, fall 2021
partners: Lizzie Kripke \& Finn Rattana Hok
instructor: Ritchie Yao



Qualities of the gable house and triple decker typologies
are hybridized - producing unique spaces for textile artists
to live and work.





The gable and block appear at
odds with one another, impossible
to distinguish which one was the
parasite. The entanglement betwee
living and working affirms this
tension.


Jump Cut: Thick Thin Dolmen
The site presented two seemingly incompatible sections and prompted a building design that wove the two together. This elementary school proposal uses the triangle and half-round geometries as elemental building blocks: both have formal and spatial qualities of thickness and thinness associated with them.
core I studio, fall 2021
instructor: Ritchie Yao

given section 1

given section 2



L3


L2


L1



[^0]

Living Single, Living Together
This speculative duplex is the spatialization of a fraught relationship between two residents. It shadows Robert Eggers's "The Lighthouse" (2019) screenplay. If Dafoe and Pattinson are enchanted by the roaring light at the top of the spire, then the actors (one by land, one by sea) of this duplex are enchanted by the desire to see the opposing landscape (land, sea)
core I studio, fall 2021 instructor: Ritchie Yao



[^1]

The double helix stair, here presented as an nalog to the mythical lighthouse typology is inserted into the two entangled brick skeletons. above: stills from "The Lighthouse" (2019)


Apertures are produced by a brick screen, parametrically configured via grasshopper, and decrease in size as one moves up the duplex stairs. This makes parallels to the blackout poetry method (left).


[^2]

Flounder on a Silver Plate
Brief: explore how the topological properties of complex geometries may invent new architectural types... use projective techniques of complex surface discretization to subdivide into planar quads.
"Flatfish are the most asymmetrically-shaped vertebrate to ever live on earth." Our proposal: "complete" the other side of a flounder with a prosthetic implant

3D model built and analyzed collaboratively, drawings and photographs herein produced by me.
course: Projective Disciplines, Arch Representation II, fall 2021 partner: Jonathan Caron
instructor: Iman Fayyad


plan and section drawings


Flounder on a Silver Plate, Still Life photograph with neural filter


[^0]:    Composing triangles and half-rounds into different assemblages produced different
    configurations of thick and thin spaces. These were then translated into
    different programmatic functions - from unconventional playpens without walls to
    open air classrooms along stairways.

[^1]:    The duplex becomes a machine of torture in that it
    seduces each actor to ascend the stair with the hopes
    of getting a glimpse of the other side - but this dream
    falls apart at the penthouse.

[^2]:    The double helix stair, unrolled in section. As the actors
    ascend up the duplex, spaces compress. The anticipation of
    seeing the other side at the top makes the smallest space
    the most powerful.

