Randy Nguyen Crandon Harvard GSD Design Portfolio reverse chronology 2021-2023

core studio req'd course extracurricular





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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"x 72" physical model scale: 1/8" = 1'-0"





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



Typ. Plan - Distribution Warehouse







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."

Brief: design a facade system for a generic high rise. Outcome: 2 modules, 1 wall, 1 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 4x 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.

course: Cases in Contemporary Construction, spring 2023 instructor: Eric Howeler

"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

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

google earth struggling to capture water. hyannisport, massachusetts

Relate

shed on a float study model, wrapped with google earth imagery of the water, rendering

google earth struggling to capture water. southwest harbor, maine

Relate

shed on a float study model, wrapped with google earth imagery of the water, rendering

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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.

At Old Humble Distillery, owner Joe Breda uses Texas rainwater to create three varieties of whiskey - Straight Whiskey, Special Reserve and Boomtown Bourbon.

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 arboretum greenery into the post industrial landscape.

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





1/8" scale physical model

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

EGRESS STAR



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.



tandem to grow moss and filter water to a 100,000



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 Section 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.





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



32"x 49" 1/8" 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."











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?

core II studio, spring 2022 instructor: Angela Pang













V1



V2













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



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12 21







A camera obscura, made using found objects - a cigar box, door peep hole - emulates discovering the neighborhood and building. Different slides can be inserted into the apparatus to view.

The building's enclosure is defined by a modular, curved glass assembly that exposes unadorned, semi-translucent foam behind it. Athletes can freely run into the shed's upholstered finished walls. These movements and impressions of the body are abstracted and seen from the exterior.









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

Project







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





Project











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





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







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given section 1
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given section 2

Project











Project





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.



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





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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.





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





PLEASE



YOUNG





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).



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.


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





Oceanic Ichthyology plan and section drawings



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