WORK SAMPLE
ACADEMIC WORK
Wuthering YMCA
Cultural Sea Center
What Theater?
Fictional Graphics. Real Tectonics.

PROFESSIONAL WORK
Powder Mountain House
National Museum of World Writing
Sunset Towers
Located along the East river, the YMCA proposal occupies the edge of Williamsburg waterfront. As a reaction to the privately owned public space in the BIG architects’ proposal, I was interested in this idea that the YMCA will give up a portion of their land to be completely public in the form of a greenspace. Therefore, the provocation is to vacate 5 acres of land in front of the YMCA footprint, to be used as grazing land for free roaming cattle. The placement of a pastoral greenspace in the urban fabric of Williamsburg undermines the contemporary positions on land development. It is attempting to resist the issues of late stage capitalistic development driven by land value and the luxury real estate. As a nod to the Wheatfields by Agnes Denes, the paradoxical presence of the bucolic landscape in an urban setting questions the recent history of development as the unchecked totalizing forces of urbanism escalate density, land value, and inequality.

The YMCA itself is a long horizontal bar stretching to the full length of the site, flanked by narrow and tall residential towers. The foregrounding of bucolic landscape monumentalizes the building’s presence on the site. From a distance, the facade of the YMCA and the figure of its towers resonates with the Manhattan skyline on the horizon. As one crosses the grass that buffers the YMCA from the rest of Brooklyn, the opacity of the facade dissolves, revealing layers of transparency and reflectivity. Standing before the polycarbonate pane, the image of Brooklyn behind prismatically shifts between glimpses of athletes inside and vistas of the East River. Inside, the lively surface of the swimming pool foregrounds the waters beyond. The facade therefore becomes a mitigator for planes of sight, and a site of convergence between the YMCA and the rest of the city.
As the seasons change, so does our clothing. We adapt our bodies to the weather and the seasons. As winter arrives, our jackets get thicker, padded with wool and lined with cotton or fur. With the arrival of summer, those layers are shed in favor of thin, breathable fabrics that let breezes cool us. Yet, the buildings that we occupy everyday are static, requiring energy-intensive temperature modifications to create an artificial, comfortable climate.

A new seaweed production facility and community activities center in Bar Harbor centers cultural knowledge and ecological expertise of the indigenous Wabanaki population. As an expansion of the Wabanaki Youth in Science (WaYS) program at the University of Maine, this new coastal space directly challenges traditional building technologies by proposing a construction approach using found and foraged materials. A collection of culture-and food-oriented organizations are planning on sharing the space to expand the reach of their individual efforts through mutual support.

Rather than sourcing materials from distant, disconnected places, we should be looking at our local resources first. Between renewable and recycled options, new steel, rubber, and plastic ought to be our last resort. As with dressing ourselves, this building is layered cyclically, seasonally with insulation that is foraged locally: seaweed. Found in the nearby ocean waters, it will be dried and stacked on the building exterior to provide winter warmth, and the coming of spring will mark the removal of the layers to be composted as farm fertilizer for the center’s partners. Unlike standard buildings that only get attention after a physical issue, this center will depend on its stewards for its layering and unlayering to encourage a deeper environmental awareness.

As we take care of the land, it takes care of us.
ELEVATION.
AXONOMETRIC.
PLAN.

2019
Core I Drawing Exercise
Instructor: Hans Tursack
Located at the center of Jamaica Pond island, the artificial land sits embedded in an excavated land. Existing park is excavated to produce the architectural surface that resembles a park: A park within a park defined by collection of follies, trees, and street lamps. This project takes on ephemeral approach to the typology of performance stage. Here, the performance operates at the cosmic level. It is about watching the stars reflected on the pool of water collected in the inverted planetary surface. In the Domain of the Great Bear by Mel Bochner and Robert Smithson, the Planetarium refers to things other than its physical form. The mirror column with the mirror ceiling facing the textured surface that connotates the surface of Mars create a panoramic visual that surround the viewer with lights, textures, reflections.

The tower engages with the ground by pressing it down with mass heavier than itself. Its walls are very thick poche - out of scale, like a medieval castle tower. The protrusion attached to the liner surface almost refers to a sort of a medieval torture device. The violent characteristic is subdued with a dull truncated tower form. With these initial readings, it’s easy to dismiss the form as a straightforward massing. The tower, however, produces an ephemeral affect that resembles star-gazing at night. The protrusions are actually truncated cones with holes that filter in light through the thick poche.

Boston, Massachusetts
2019
Performance Stage
Instructor: Hans Tursack

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a. Section Isometric view.
b. Section Isometric plan cut.
a. Inverted planetarium artifact.
b. Inverted planetarium with mirror column.
c. Glass is fogged with occupants inside.
d. Tower with glass exterior reveals the liner structure.
a. Isometric view of both the tower and the landscape.
As investigation into the thresholds of graphic influence when mapped onto a surface, it is an attempt at a study of genealogy of suggested tectonics to real tectonics.

The first artifact: an apparent surface projection is also an agent in tectonics, splitting a massing into two chunks, creating a figural joint. The line bifurcates the reading of the whole into discrete elements. Graphic to tectonic. Hidden tectonic - exposed graphic. Form as graphic.

The second artifact: as an exploration of multiple techniques, this elevates the status of graphic tattoos to technics of reconstructive workflow. Originally produced with the analog process of vacuum-forming, the artifact is without a digital copy. It is 3-D scanned with photogrammetry and the graphic tattoos take role in coordinating, scaling, and surgical reconstruction of the surface in discrete parts.
a. Original plastic surface.

b. Original plastic surface is removed.

c. Removed area is restored with a 3D printed piece coordinated with the graphic drawing mapped on the surface.

d. Two pieces in comparison. On the left, original surface and on the right, the PLA reconstruction.

e. Shot of the reconstructed artifact.
POWDER MOUNTAIN HOUSE

Eden, Utah
2017- Ongoing
5,500 SF
Private Residence
Role: Project Designer for SD and DD
Team: Garet Ammerman, Xavier Ramirez, Chris Arth

Located on Summit’s Powder Mountain, an ultrawide, stealthy massing perches on top of its ground object with a small footprint, giving off an impression of weightlessness. The mass is a composite of chunky, interconnected, program boxes fused together with glance cuts and tattooed tectonics. Notably, the fusion with the slicing plane produces a vast, nearly wall-less interior while staying under the 35’ maximum height limit specified by the zoning code. Its skin is a patchwork of matte and glossy composite aluminum panels that avoids the generalizing effects of a uniform subdivision and alignment to the mass edges. The interior contains a ubiquitous nested figure made of black welded steel plates that fulfills multiple functions, like a Swiss Army knife. It serves as the main circulation with network of staircases, mezzanines, a massive fireplace that echoes its presence in the expansive living room, bookshelves, and walk-in closets.

In my role as a project designer, I played a critical part in the realization of the massing and the nested figure. In addition, I was solely responsible for producing all the axonometric and take-off drawings during the DD phase, actively engaging with the project manager in preparing bidding documentation set.
a. Human eye perspective of the house, showing the detached mass. (Credit: Garet Ammerman)

b. Envelope unroll drawing.
a. Isolated view of nested figure (early design) (Credit: Xavier Ramirez)

b. Structure axo showing steel members.

c. Foundation axo showing foundations of building, driveway, and venue space.

Rammirez (early design). (Credit: Xavier

Professional Work Tom Wiscombe Architecture
Located along Songdo Park, the National Museum of World Writing reconsiders the ancient figures of old castle plans for their potential in expressing contemporary architectural language. The obscure, multifaceted figures extracted from castles are re-sampled and lodged into a featureless, abstract bent shaped box and the composite mass is cut underneath, creating tension with the ground. Its silhouette reads as fast transition between flat, continuous form and high, discrete towers distinguishing the programmatic distribution of the project. The figures are embedded as a composite entity, but their connections are expressed clearly as joints, giving away to a toy-like scale as if the building could be assembled in few 3D printed chunks. A patchwork of tattooed seams break up the surface while avoiding the generalizing effect of uniform subdivision. Instead, the matrix of autonomous figures slip on the surface as it wraps the mass, partitioning different skin conditions of double layer louvre system and opaque aluminum panel system.

Inside, a vast special collection space opens up and the figures are revealed, penetrating the poche of the bent box, creating an internal world in tension with the outside reading of the mass as a unified whole. The permanent collections for the museum resides in the intimate spaces of these figures with unusually tall ceiling height like a sanctuary. The circulation is embedded in the poche and hidden from direct view, encouraging curiosity about the floating entities and meandering inside the project.

My main role in this project as an Architectural Intern involved in solo production of a 1:200 scale 3D printed model for the competition entry. Other roles included assisting in production of diagrams, plans, sections, and renders.
a. Exterior render showing public plaza and the deferred landing of the museum’s mass onto the ground. (Credit: Dylan Weiser)

b. Scale model of the museum.