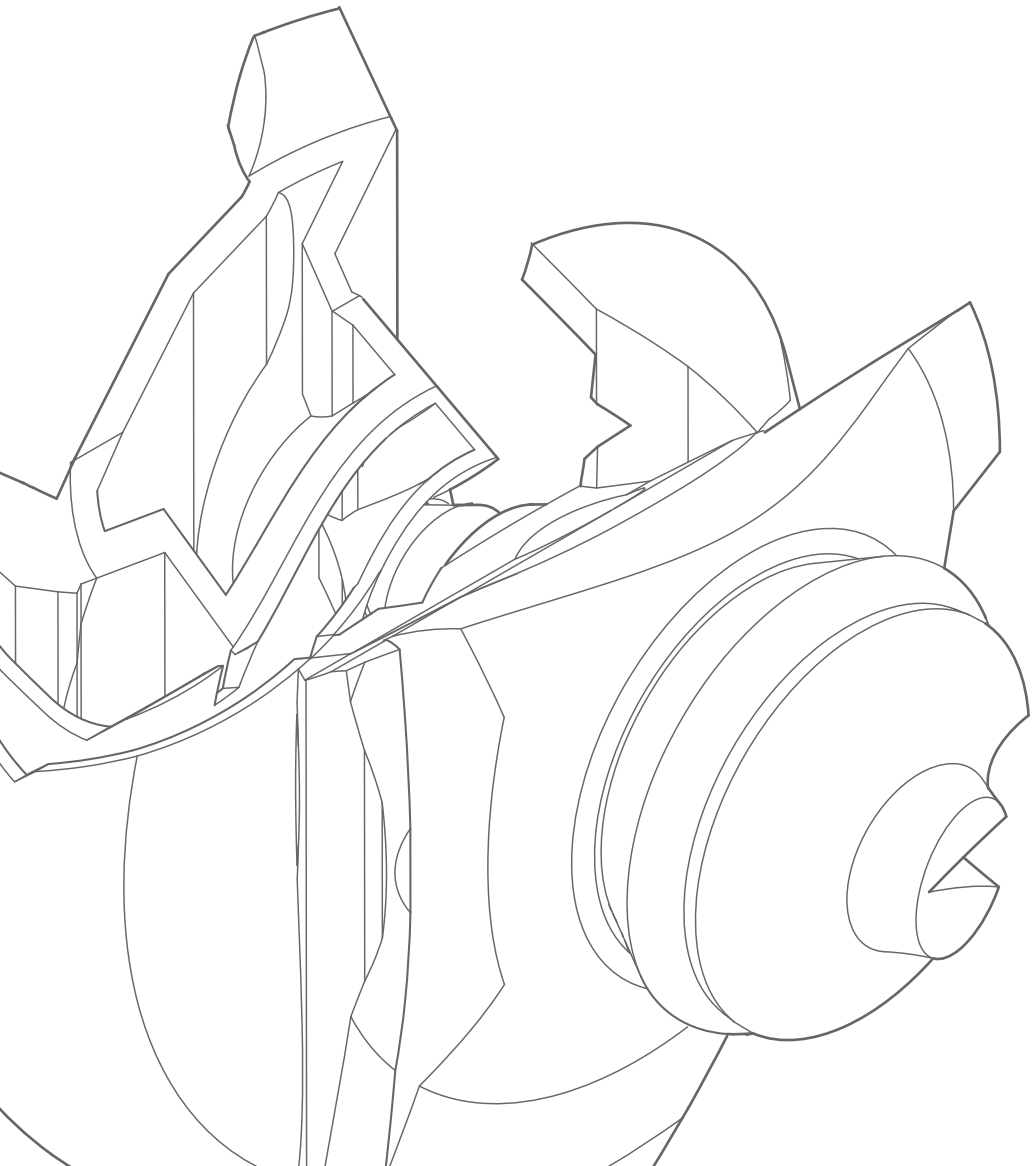
Portfolio of Selected Work
Spring 2021

ROBIN SMITH



EXPERIENCE

Robin Smith
rsmith49@pratt.edu
603-727-6798
Pratt Institute GAUD
M. Arch 2023

Graduate Research Assistant, Material Lab, Pratt Institute, Brooklyn, NY / Sep 2020 - Present

- Researched and requested new architecture and design material samples for the Material Lab collection, with a focus on materials that approach sustainability in innovative ways, such as bio-composite plastics and alternatives to conventional concretes.
- Organized virtual Lunch and Learns for Pratt students and faculty with visiting material suppliers and designers.
- Coordinated the annual Material Lab Prize, which invites Pratt students to submit new designs and materials that repurpose waste.

Project Manager, Construction for Change, Nakaseke, Uganda & Kara, Togo / Jan 2019 - August 2020

- Managed construction partnership with ACCESS (African Community Centre for Social Sustainability) to build new 5400 SF rural medical center and maternity clinic building.
- Led construction partnership with Santé Intégrée and Togolese Ministry of Health to renovate 4 rural health centers, including boreholes, solar installations, medical waste incinerators, sanitary blocks, roof replacements, and general refinishing work.
- Coordinated recommendations for COVID-19 isolation ward with Construction for Change, Ministry of Health and Santé Intégrée.

Project Manager/Project Extern, Orkidstudio, Sachibondu Mission Hospital, Zambia / July 2018 - Nov 2018

- Managed construction of two houses for medical staff of hospital in rural area of Zambia, including excavation, masonry, carpentry, and interior finishing scopes of work.
- Coordinated field team of 20-25 including bricklayers, carpenters, unskilled laborers, electrician and plumber.
- Managed project accounting, progress reports, and scheduling for Housing and nearby Hospital Repairs Project.

Project Manager/APM, AE Greyson, General Contractors, Brooklyn, NY / June 2016 - July 2018

- Managed 5,000 SF renovation of triplex penthouse apartment with both interior and exterior scopes of work.
- Managed 3,000 SF renovation of Upper East Side apartment with high end millwork, stone, architectural metal, carpentry, and painting scopes. Coordinated between field office, architect, subcontractors and vendors to facilitate construction process.
- Led site meetings, issued and reviewed submittals, shop drawings, change orders, purchase orders & RFIs.

Intern, The J. Pilla Group LLC, General Contractors, New York, NY / Jan 2016 - May 2016

- Managed submittal and RFI logs and correspondence with subcontractors and architects.
- Assisted with assembling bid packages by gathering subcontractor pricing and preparing takeoffs.

Land Use Intern, Manhattan Borough President Gale Brewer, New York, NY / June 2014 - Aug 2014

- Attended Community Board meetings to hear concerns and complaints of constituents.
- Researched for Borough President's land use recommendations using ULURP, NYC Oasis and NYC ZoLa.

EDUCATION

Pratt Institute - Master of Architecture / August 2020 - Present

- 3 year professional degree program 2020-2023
- Cumulative GPA 4.0

New York University - Bachelor of Arts, Urban Design and Architecture Studies / May 2016

- Graduated Cum Laude with High Departmental Honors for Thesis on Neighborhood Character Preservation & Small Businesses in the East Village. Minor in Economics.
- Cumulative GPA: 3.76

New York University in Berlin, Germany / Jan 2015 - May 2015

SKILLS

- Rhino, VRay, Revit, Grasshopper, Adobe Illustrator, Photoshop & InDesign, Metashape (3D Scanning), RhinoCAM (CNC Cutting), Ultimaker Cura (3D Printing), Google SketchUp, AutoCAD and ArchiCAD
- Procore Certified, OSHA 10hr (2016), PlanSwift, Microsoft Project, and Submittal Exchange
- French proficiency (Intermediate II NYU - Togo 2019-2020) & German experience (Elementary II NYU - Berlin 2015)

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2–7 HOUSE FOURTEEN
Studio 601 | Parsa Khalili
Fall 2020

This studio explored the creation of an object through a series of digital operations, and the intersection of that object with House 14 on Governors Island.

8–13 SUNSET PARK SCHOOL
Studio 602 | Theoharis David
Spring 2021

This project proposed a middle school on an existing site in the Sunset Park Neighborhood of Brooklyn. The school examined precedents from the Open Air School Movement and the Slot Canyons of the American Southwest.

14–17 VANISHING COURSES
Mediums 611 | Joseph Giampietro
Fall 2020

This course surveyed a variety of methods for generating digital, physical and hybrid objects.

18–21 DISTORTED TRANSLUCENCY
Mediums 612 | Hart Marlow
Spring 2021

This project continues to explore digital mediums including 3D scanning, BIM, and parametric design.

22–23 JEFFERSON MARKET LIBRARY
History & Theory 651 | Nicholas Risteen
Fall 2020

This research paper investigated the Library's origins as a courthouse, and it's involvement with the prosecution of laborers and women during the Uprising of 20,000.

24–25 ACCESS MEDICAL CENTER
Construction for Change | Nakaseke, Uganda
2019

A rural medical center and maternity ward built in partnership with ACCESS, Grace Age Contractors, and FNS architects from January - October 2019.

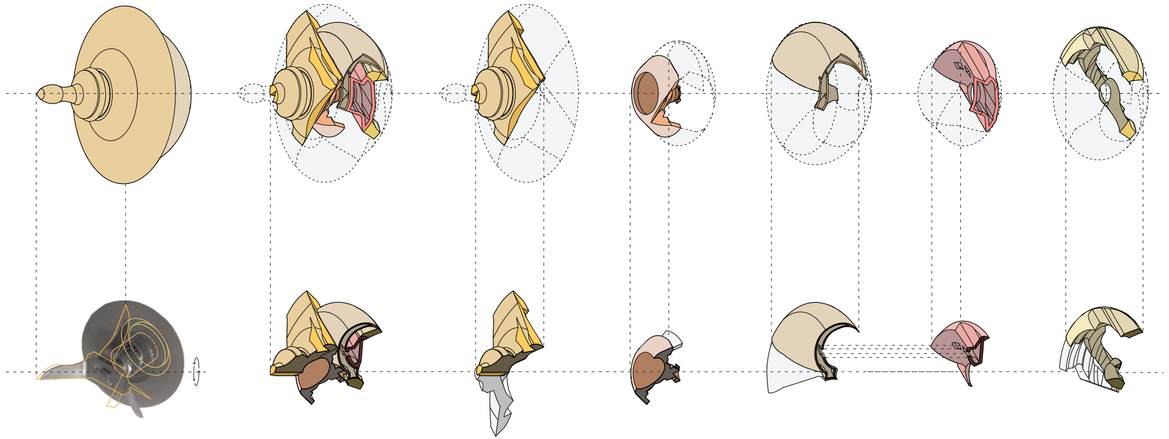
26–27 AE GREYSON
General Contractors | New York, NY
2016-2018

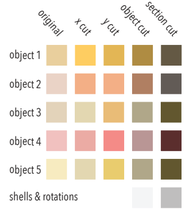
A range of high-end residential renovations across Manhattan, including a Triplex penthouse and a renovation within the historic Former Police Building

HOUSE FOURTEEN

Pratt Institute | Fall 2020
Design Studio 601 | Parsa Khalili



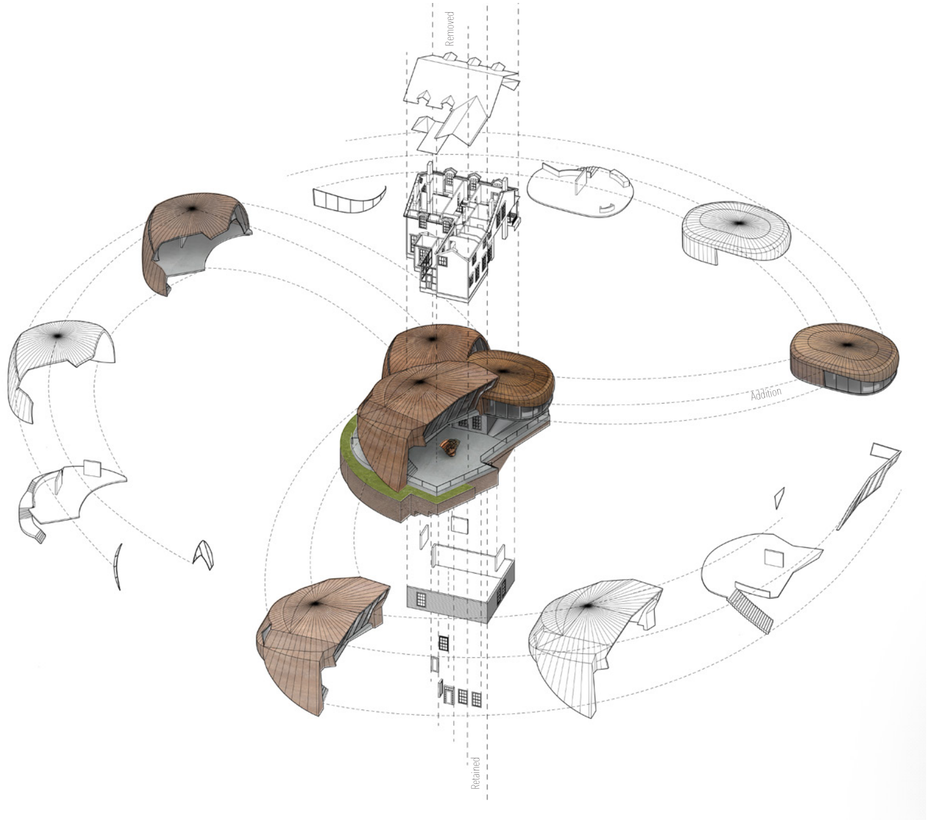




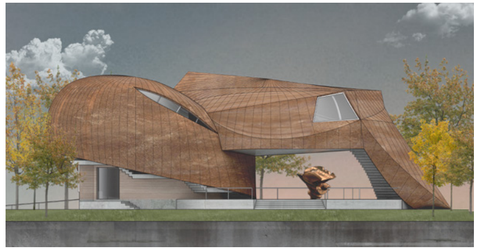
Across: Exterior Rendering
Above: Original Object Generation

This project sought to explore a set of rotational objects that collide and nest within each other to form new volumes and masses. Spaces and divisions were created through the intersections of the sub-objects, with each convergence of masses creating an opportunity to cut away, or to keep. The volumes rotate upwards along a spiraling path, which leads to the public and private circulation through the structure, and also causes the three sub-objects to meet at the core of the building.

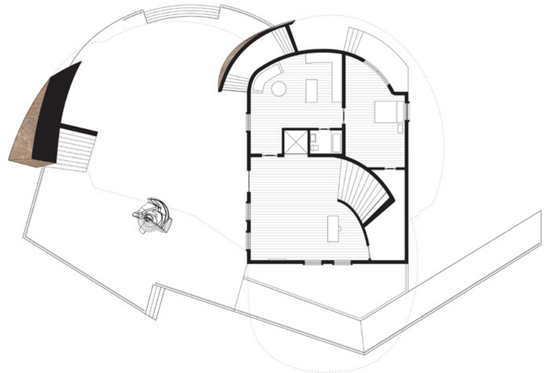
Here, an elevator shaft anchors the added objects to the remains of the house on the first floor. The building is bifurcated between the existing structure on the first floor, which consists of the artist's residence, and the three new elevated volumes, which contain the art spaces and public program. Each object is weighted differently, some more shell like, while others are asymmetrical and bear heavily on the ground.





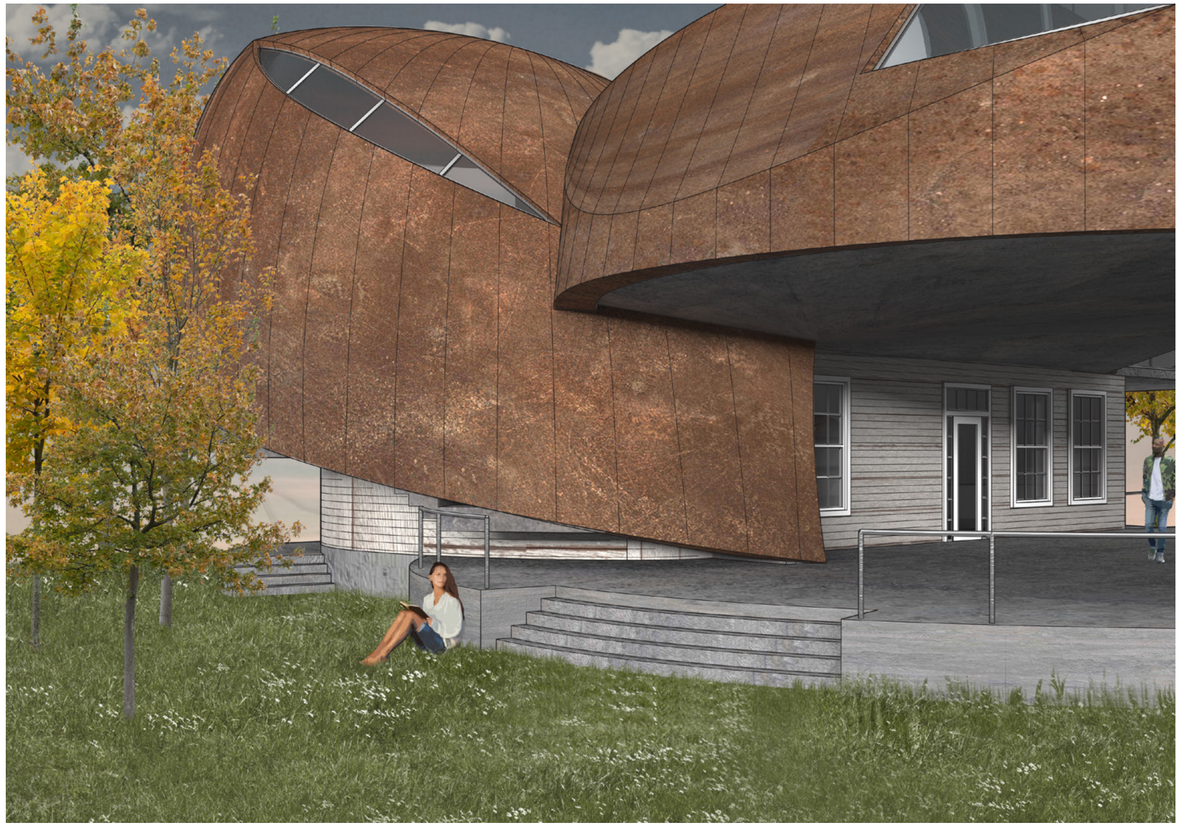


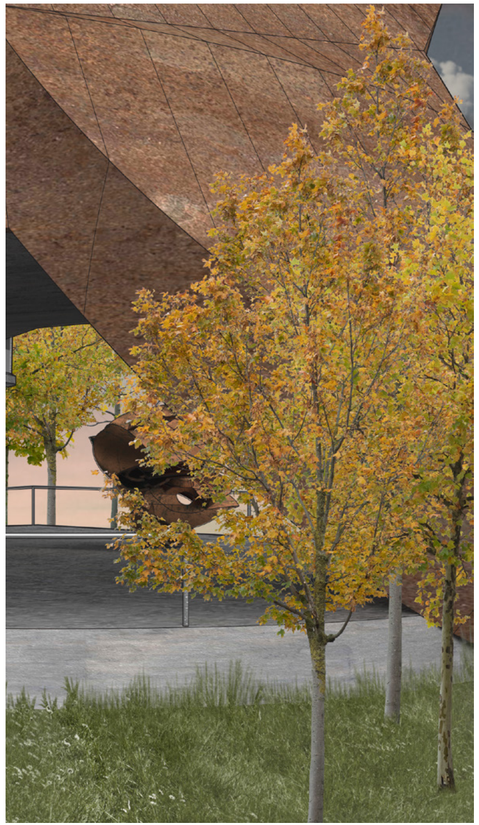


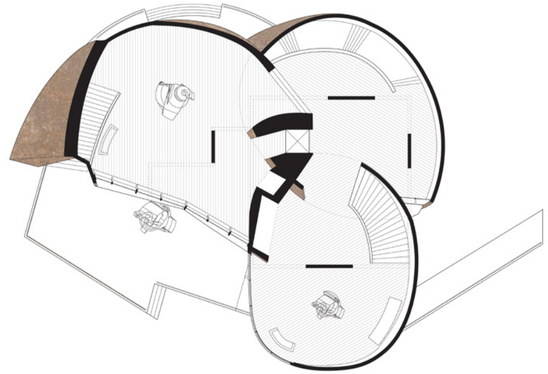


Across: Exploded Axonometric
Left 1: Left Elevation
Left 2: Right Elevation
Left 3: Longitudinal Section
Above: 2nd Floor Plan

The final composition creates a form which is no longer three disparate subjects, but a new form which is compartmentalized based on the divisions of the original three. The fourth object, which consists of the remains of the original house is retained only on the first floor, and in traces through the art display boards of the second floor.





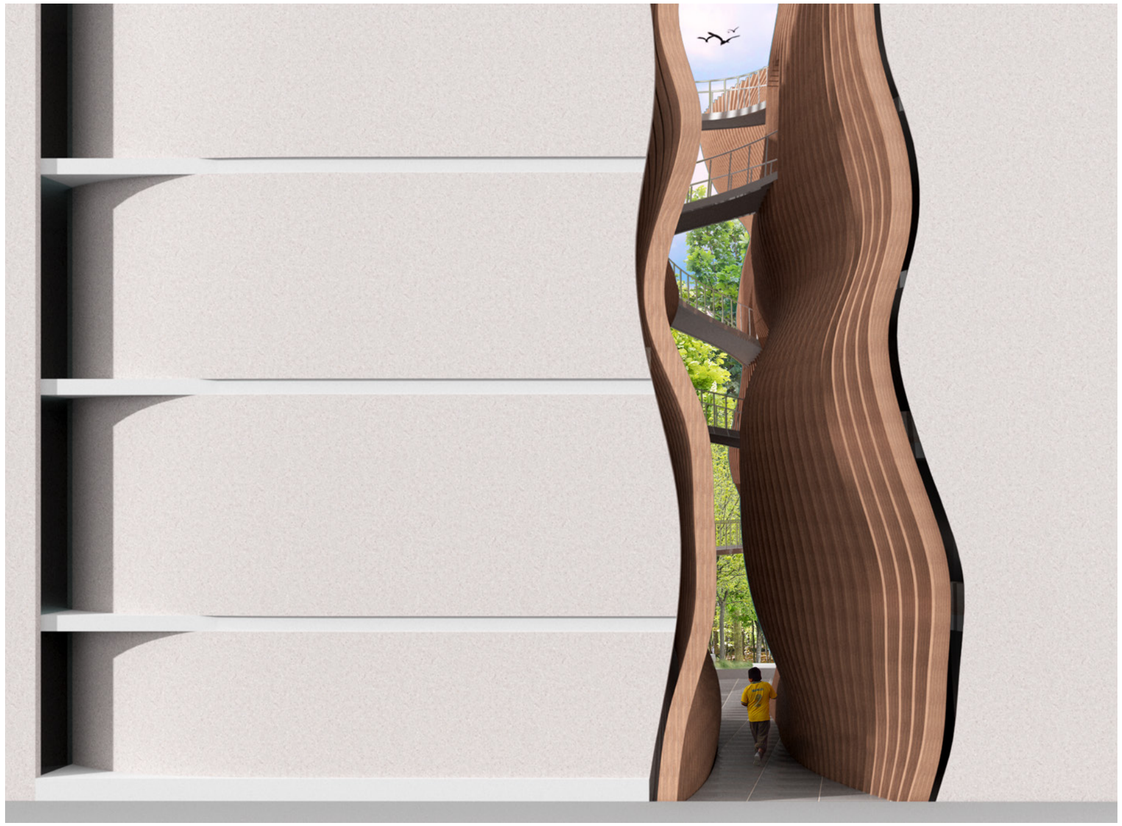


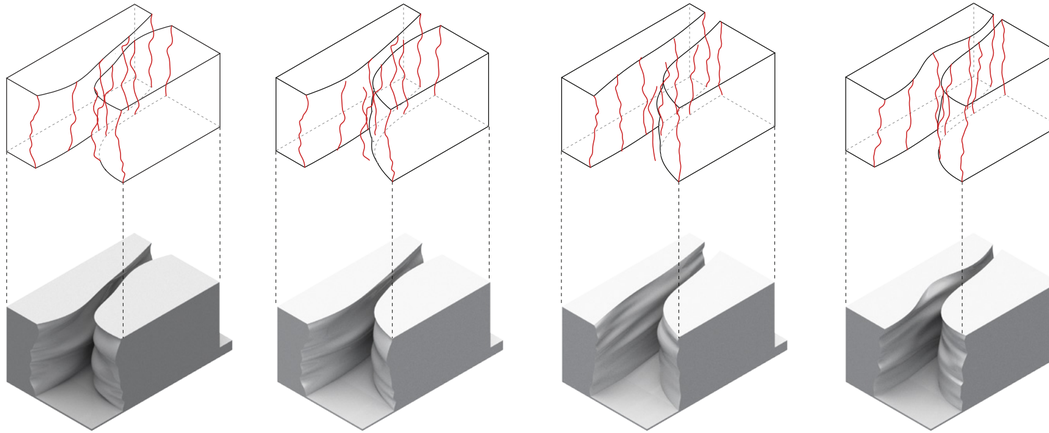
Across: Exterior Rendering
Above: 2nd Floor Plan

Negotiations between new and old, and formal and functional were constant throughout this project. I sought to maintain a fidelity to the original rotational objects through formal operations, while also creating a space that was functional, and embraced the artistic programming of the renovated space.

SUNSET PARK SCHOOL

Pratt Institute | Spring 2021
Design Studio 611 | Theoharis David







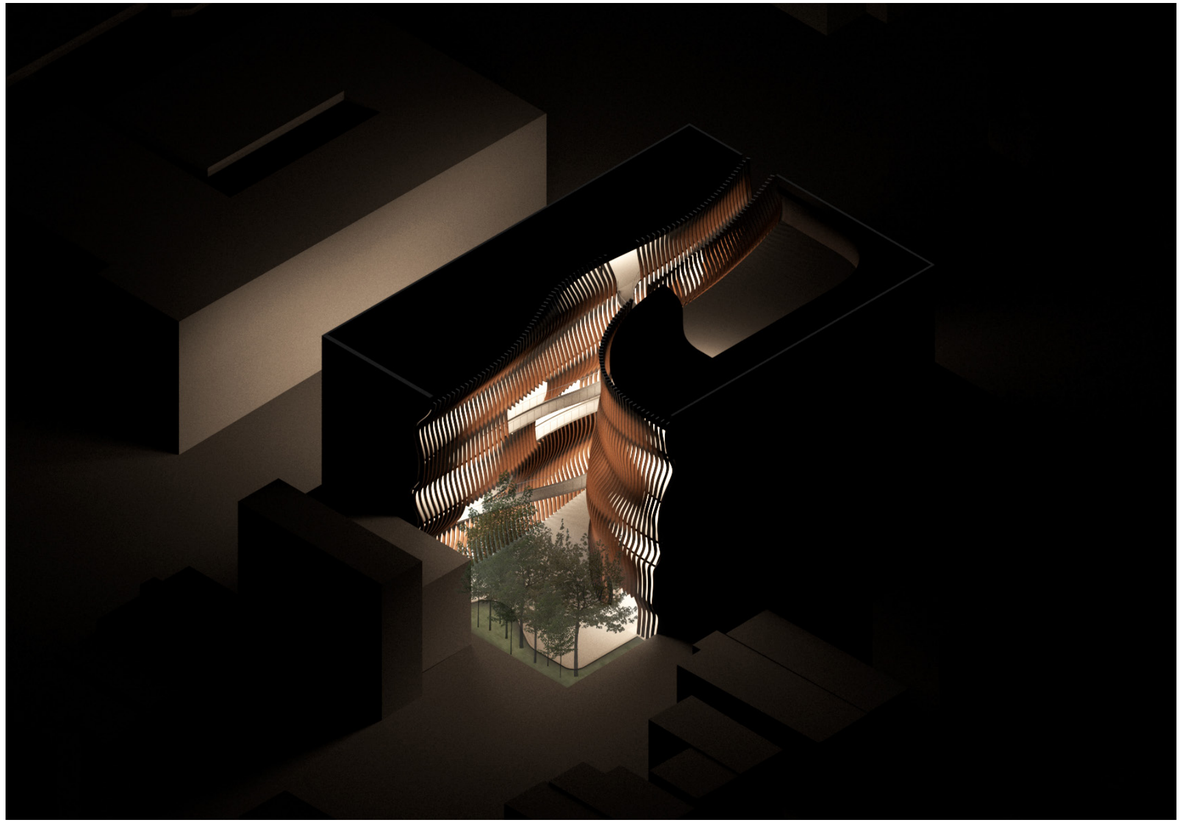
Across: 4th Avenue Entrance
Above: Canyon Form Ideation
Left: Sample Slot Canyon

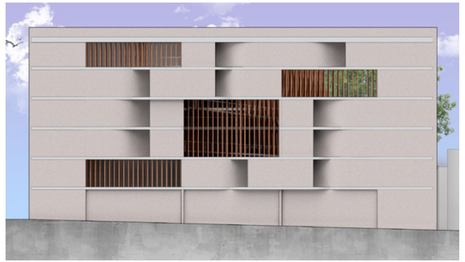
This project sought to create a calm and protected learning environment and outdoor space for the students and residents of Sunset Park. Immediately upon arrival, visitors to the school are drawn down a sloping ramp off of bustling 4th avenue, through a canyon-like passageway, to the back of the site where there is a miniature public "pocket park", off of which all circulation for the students is located.

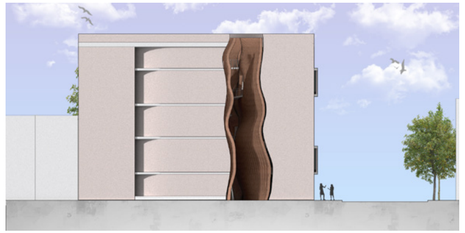
The 100' by 150' site is bifurcated by the canyon-like main passage resulting in a two-part site massing.

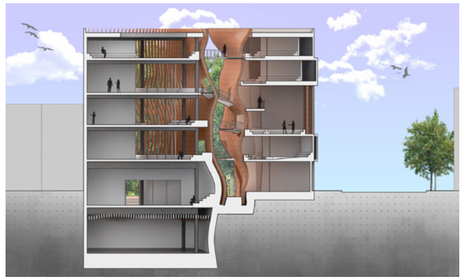
A wooden screen makes up the inner face of each of these masses which allows light and air into the interior spaces of the building, and is punctured by a series of 5 bridges that traverse between the two masses.

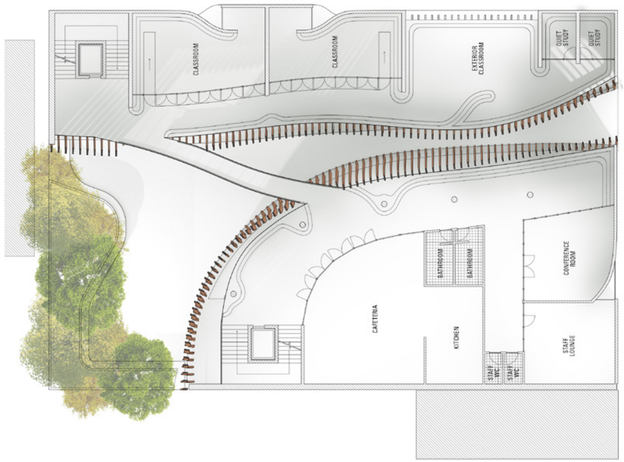
The form of this screen was inspired by the canyon leading to the ancient city of Petra, and the slot canyons of the American Southwest. Silhouettes from these canyons were put through a series of formal operations, resulting in the final undulating screen form





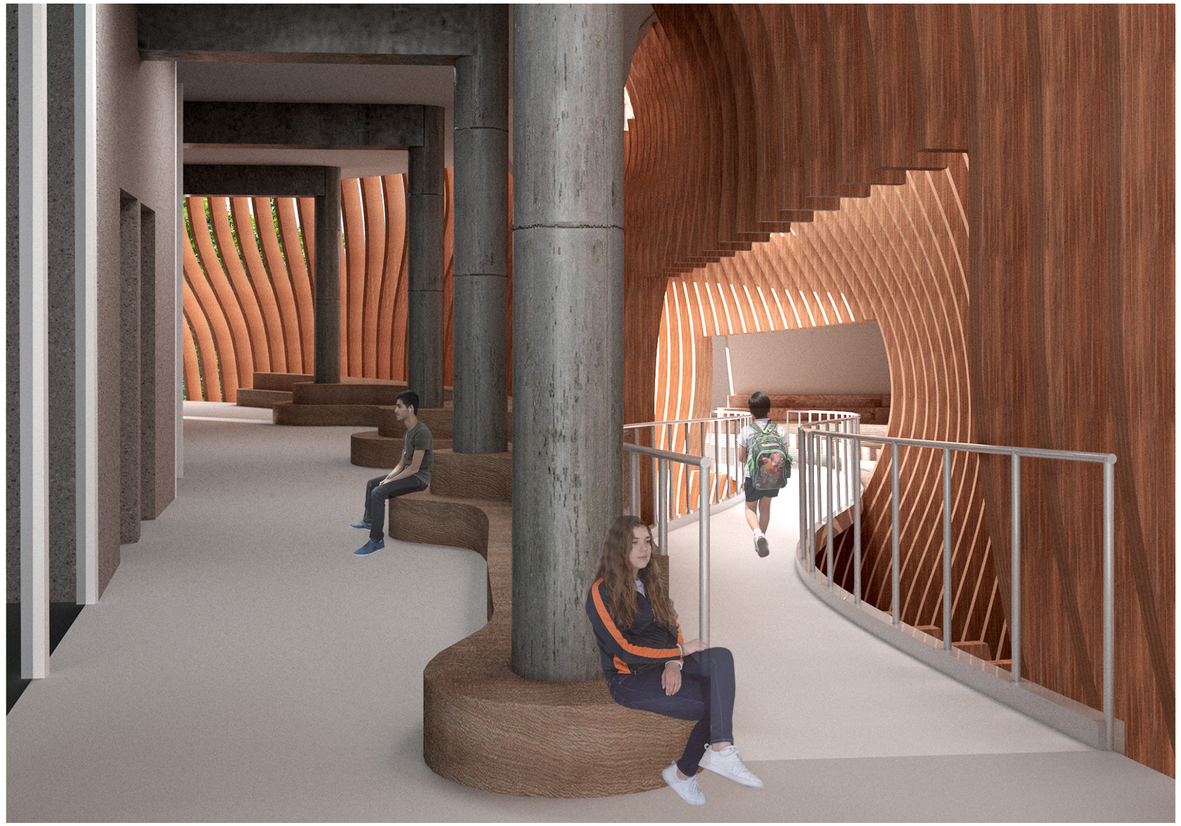


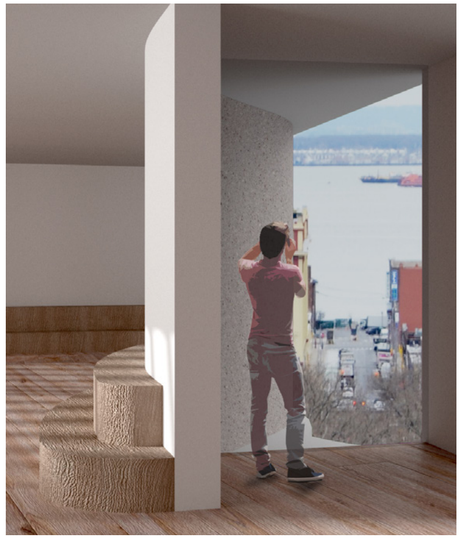




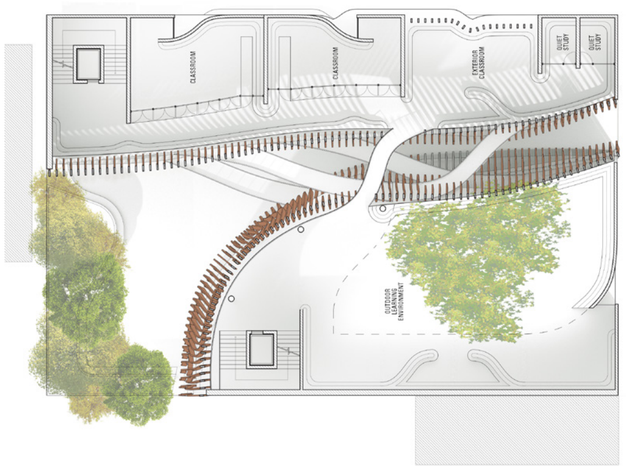
Across: Night Isometric Render
L eft 1: 43rd St Elevation
Left 2: 4th Avenue Elevation
Left 3: Cross Section
Above: 2nd Floor Plan

By Day, I hope that this school can provide a unique outdoor and learning experience to the students and residents of the community. While nearby Sunset Park is outward facing, looking out at the skylines of Brooklyn and Manhattan, the park created by this project is an inward facing and reflective experience that provides an oasis of calm in an otherwise busy neighborhood. By night, the canyon, which was previously shaded and cool, is lit through the slats of the wooden facade, and becomes a river of light that invites students and the community to come and learn and grow here.









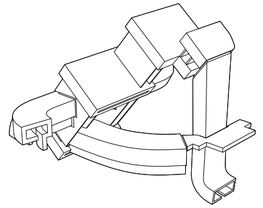
Across: Bridge Render
Left 1: 43rd St View
Left 2: Typical Classroom

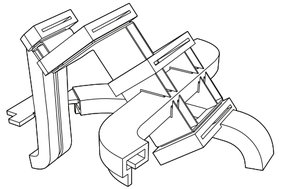
Circulation spaces throughout the school are programmed as semi-exterior functional spaces, where students can learn, socialize, and relax. A series of five bridges traverse the two masses, to connect the classroom and common structures. Sometimes these bridges are horizontal to connect aligning levels, and sometimes they ramp up or down to make level shifts, allowing for the higher ceilings of the five story common building. The typical classroom seeks to blur the threshold between interior and exterior, and the distinction between circulation and learning spaces.

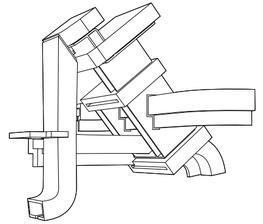
VANISHING COURSES

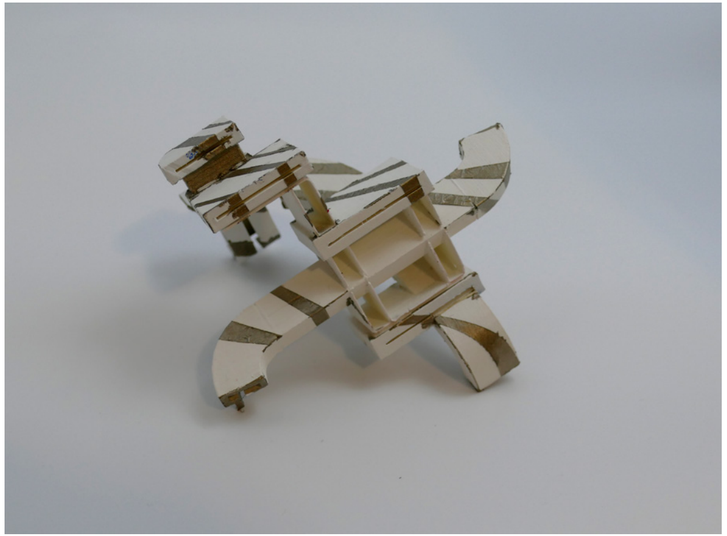
Pratt Institute | Fall 2020
Mediums 611 | Joesph Giampietro







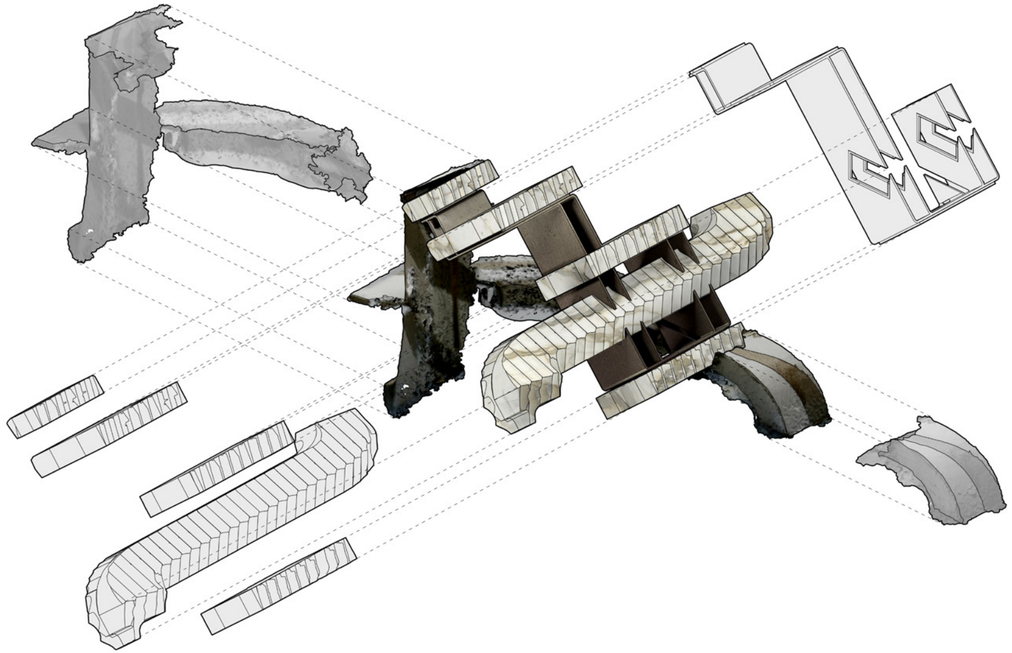




Across: Composite Model
Left 1: Drawing 1
Left 2: Drawing 2
Left 3: Drawing 3
Above: 3D printed Model

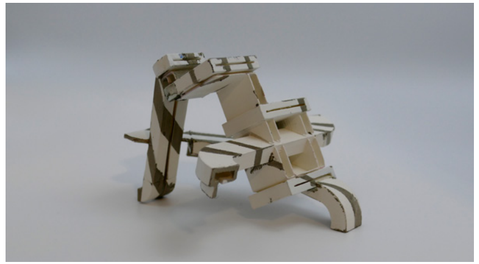
This project is titled Vanishing Courses, because it began as a series of collaged images of brickwork. These collaged images were used to create a three-dimensional object, which was modeled in Rhino, 3D printed, digitally CNC cut, and scanned using photogrammetry. The goal of this project was to explore the different means and methods available for digital and physical creation of objects, and how each methodology produces different versions of the same base form.

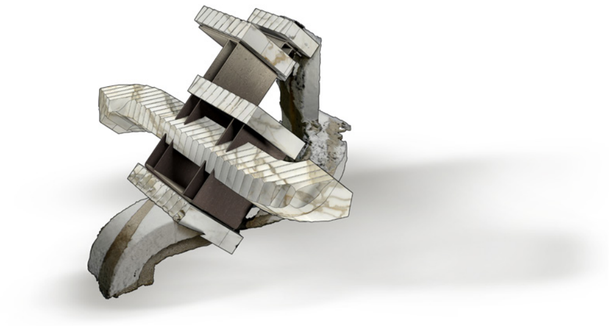
These forms are produced at varying degrees of fidelity to the original model, and each method of fabrication or representation also produces secondary effects, which are often more visually stimulating than the pure modeled form. For example, the photogrammetry scan results in a globular, and distorted version of the object, while the digital CNC cutter leaves a scalloped pattern along the path of the cutting head. These are further abstracted by the meshes created when digitally modeling these outputs.









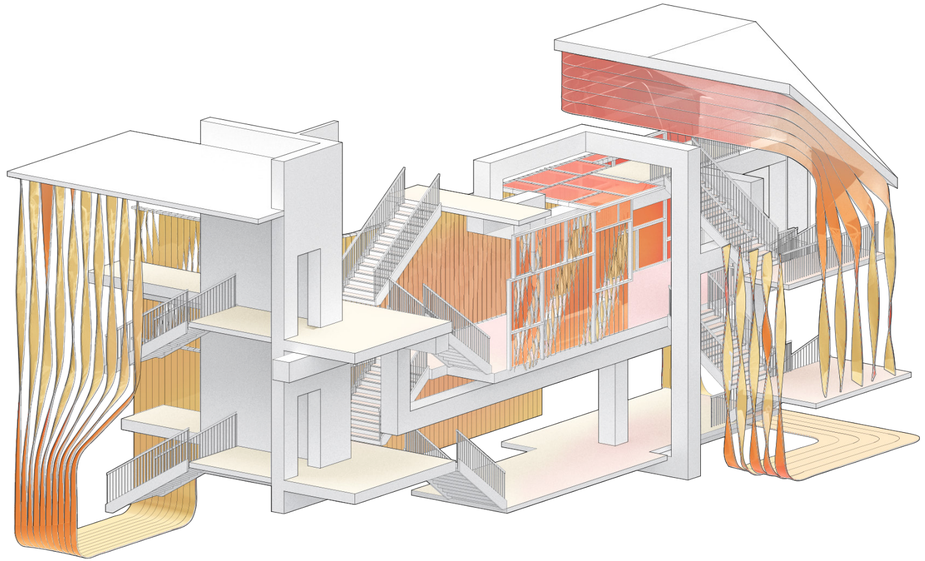


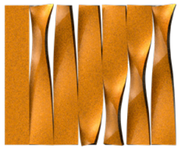
Across: Exploded Axonometric
Left 1: Model Photo 1
Left 2: Model Photo 2
Left 3: Model Photo 3
Above: Composite Model

The Final Phase of this project involved creating a hybrid model of the digital and physical versions of the object. The resulting object was an amalgamation of all the means of representation, rendered as a single form which maintains the base structure of the collaged brickwork, but has gained all the secondary effects of the different fabrication techniques explored along the course of the project.

DISTORTED TRANSLUCENCY

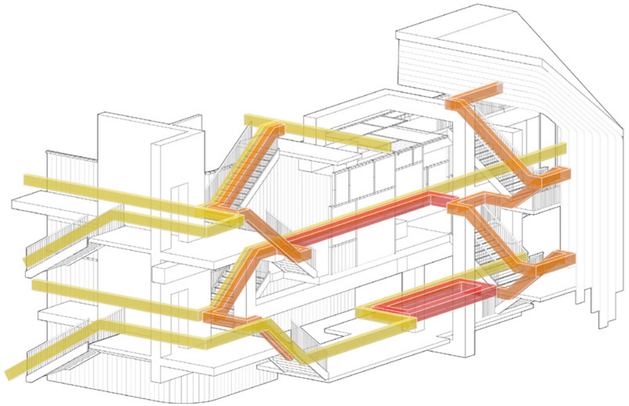
Pratt Institute | Spring 2021
Mediums 612 | Hart Marlow





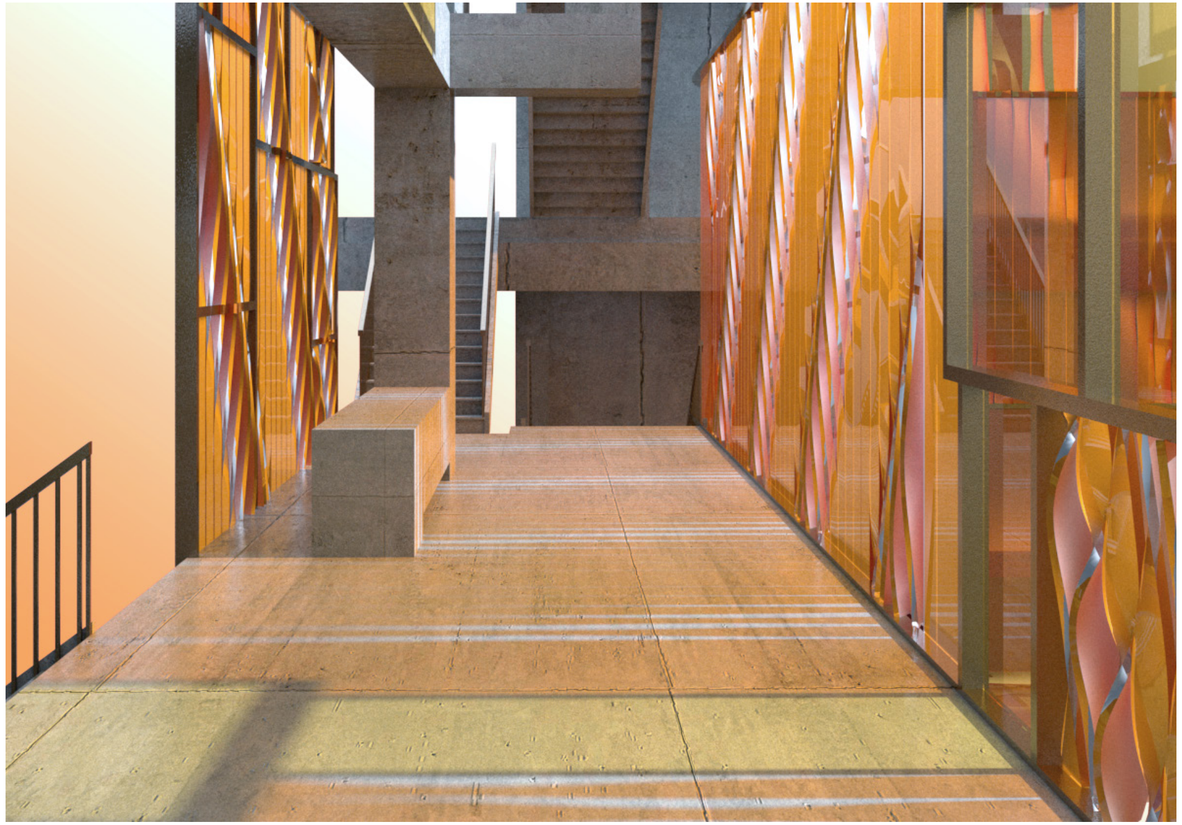




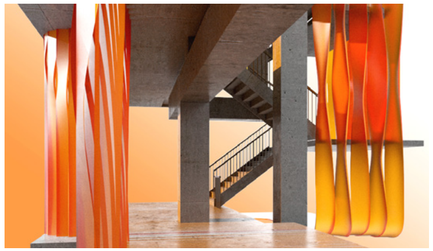


Across: Composite Parametric Model
Left 1: Parametric Exploration 1
Left 2: Parametric Exploration 2
Left 3: Parametric Exploration 3
Above: Circulation Diagram

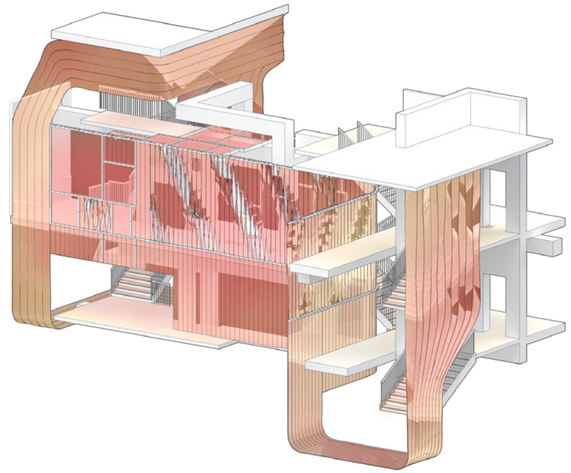
Distorted Translucency began with a series of 3D scans of Higgins Hall, the Pratt studio building. These scans were then modeled in Revit, to create a set of building blocks to assemble an interiority. Once assembled, I created a circulation diagram that sought to order the assembled parts into paths of program, passage, and vertical circulation.









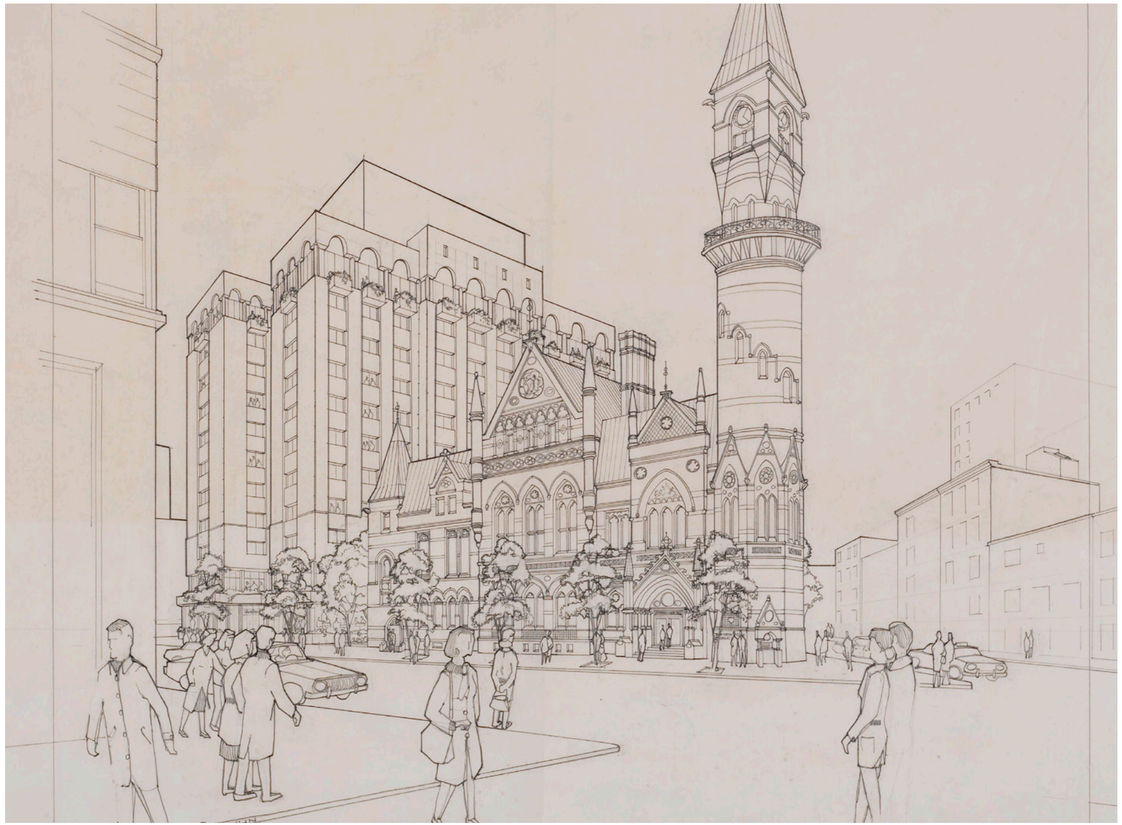


Across: Interior Render
Left 1: Interior Render
Left 2: Interior Render
Left 3: Interior Render
Above: Isometric Render

This project also provided an introduction into parametric modeling, and after a series of abstract parametric explorations, I applied these operations to the original channel glass facade from one of the chunks that had been modeled. Through parametric manipulation, the facade becomes an undulating, translucent ribbon-like structure, that guides the occupant along the paths of circulation outlined in the diagram above.

JEFFERSON MARKET LIBRARY

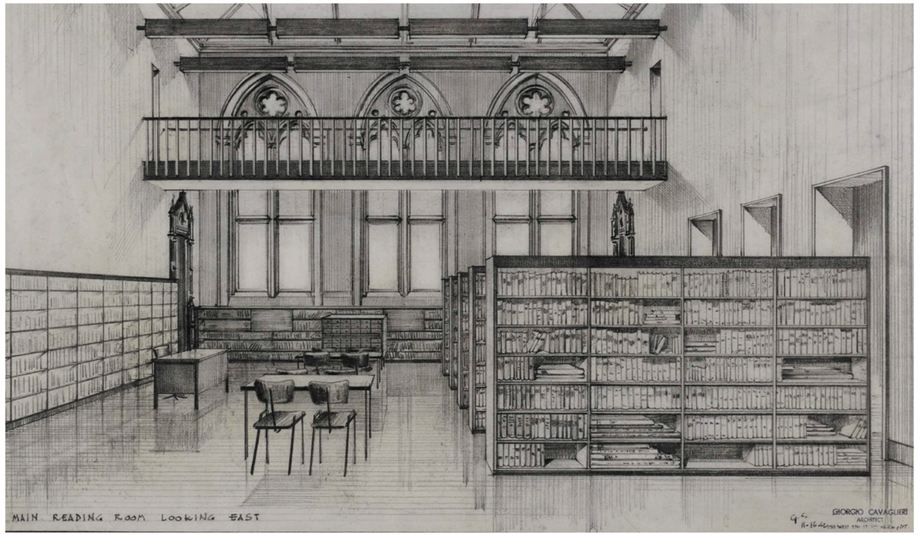
Pratt Institute | Fall 2020
History 651 | Nicholas Risteen



The Women's House of Detention was demolished in 1973. A current day passerby would be hard pressed to recognize the ghosted footprint of the 12-story Art Deco prison which occupied the southern half of the block at Sixth Avenue and West 10th Street from 1929 until 1971. Today, a verdant community garden has taken its place, and what was originally the Jefferson Market Courthouse at the northern tip of the block has been converted into The Jefferson Market Library. However, the community-oriented nature of the block today is a far-cry from the compound's origins, and this paper will investigate the library's past function as a courthouse and the adjacent prison (1875-1929) and House of Detention (1931-1971) that accompanied it through its carceral past.

The Jefferson Market Courthouse, designed by Frederick Law Withers and Calvert Vaux, was constructed from 1875 to 1877. The structure, which is clad in a multicolored façade of red brick and limestone is built in the High Victorian style, and the tower, located at the apex of block rises 150 steps to the bell "Old Jeff". When designing the building, Vaux and Withers drew heavily on William Burgess' entry for the London Law Courts, and the exterior assembly of the castle of King Ludwig II of Bavaria, Neuschwanstein. It's a striking building, who's architecture is atypical of the neighborhood, and when first built the tower would have given firefighters a 360-degree view of the surrounding Greenwich Village.

From 1875 to 1929 the courthouse was accompanied by the Jefferson Market Prison, also designed by Vaux and Withers. The pair of buildings bore witness to several famous cases, including the prosecution of female strikers during the Uprising of 20,000 and the trial of Mae West for her role in the Broadway Musical "Sex". By the late 1920's the courthouse was being almost exclusively used for the trial of women, and after the demolition of Jefferson Market Prison in 1929 it was replaced by the Women's House of Detention.



Across: Giorgio Cavaglieri drawing of the Jefferson Market Library with the Women's House of Detention behind.

Above: Giorgio Cavaglieri drawing of renovated Main Reading Room.

Text: Abstract from Final Paper "The Jefferson Market Library and the Women's House of Detention".

When it was first constructed, the Women's House of Detention was heralded as a revolution of prison architecture. A New York Times article from 1931 wrote that the architects, Sloan and Robertson, had set a new standard for modern penology, and that the Women's House of Detention would serve as a model for new prisons around the country. In reality, however, The Women's House of Detention improved little for the quality of life of the inmates. In her "Prison Memoirs", published by the Village Voice in 1970, Angela Davis recalls the "squalor and degradation" of the House of Detention, writing that after just a few hours in the prison she "felt as though she had been thrown into a nightmare." The House of Detention was closed in 1971 and demolished two years later.

The courthouse had fallen into disuse in 1958, but after a local preservation effort it was designated a library in 1961 and renovated by the architect Giorgio Cavaglieri. After the renovation, however, traces of the courthouse remain, including the heavy brick barrel vaults of the basement level, and the frieze over the main entrance, depicting the trial from Shakespeare's Merchant of Venice.

While an astute observer can find hints of the Library's past in the existing architecture, the Women's House of Detention has been thoroughly scrubbed from the built form of the block. While the building was a black mark on the neighborhood's history, the eradication of the prison also obscures the stories of the women who were prosecuted and incarcerated there. This paper will examine the experiences of these women at the Jefferson Market Courthouse and Women's House of Detention.

ACCESS MEDICAL CENTER

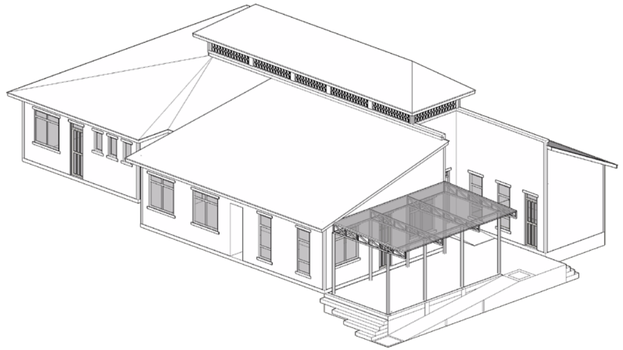
Construction for Change | 2019
Nakaseke | Uganda











Across: Completed Medical Center
Left 1: Carpenters installing ceiling lathe
Left 2: Women in Construction training
Left 3: Interior Photo
Above: Axonometric view

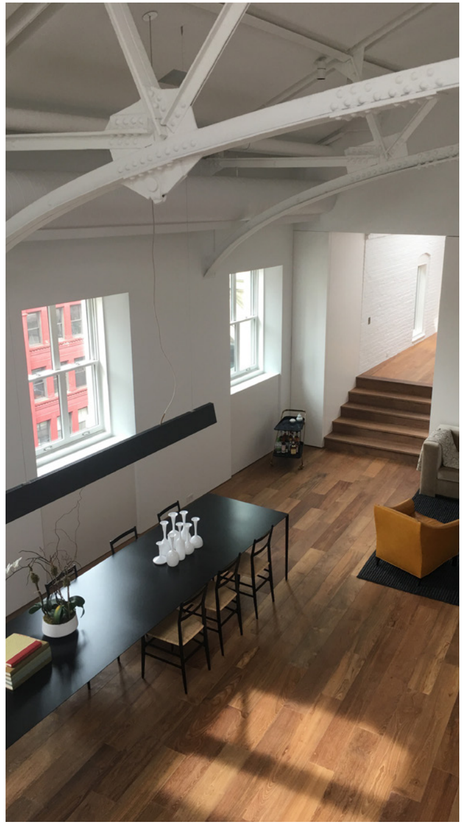
This building serves as the primary medical clinic and maternity care center for the rural community of Nakaseke and the surrounding villages. It also provides spaces for several programs at ACCESS including early childhood education, family planning services, and community health research. As Construction for Change Project Manager, I worked side by side with the local architect and contractor to monitor the construction and to help manage the project.

The dominant element of the building is the raised clerestory above the central hallway. Originally designed without the perforated Pompeii brick, we were able to modify the design to allow for improved natural lighting and ventilation to the main corridor. In an area with frequent power outages and no mechanical cooling, this design element allows staff and patients to remain comfortable during even the hottest months of the year.

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Across: Triplex Penthouse Terrace / Tim Haynes Architects
Left: Historic Former Police Building Renovation / Selldorf Architects
Above: Upper East Side Renovation / Tim Haynes Architects

To execute a project at AE Greyson, you have to understand every facet of the build. These projects often include a wide range of trades from custom millwork and architectural metal, to plumbing and electrical. While at AE Greyson I was immersed in the world of New York luxury construction, and spent afternoons traversing the boroughs to visit stone yards and metal shops, gaining an understanding and appreciation for all the diverse roles throughout the construction and design process.