<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Split Rock Museum</td>
</tr>
<tr>
<td>39</td>
<td>The Bronx Manufacturing Hall</td>
</tr>
<tr>
<td>53</td>
<td>Model Explorations</td>
</tr>
<tr>
<td>61</td>
<td>Desert Rose</td>
</tr>
<tr>
<td>65</td>
<td>The Space Between</td>
</tr>
<tr>
<td>83</td>
<td>Kinesthetic School</td>
</tr>
<tr>
<td>93</td>
<td>DIN-sign</td>
</tr>
<tr>
<td>103</td>
<td>Music-graph</td>
</tr>
</tbody>
</table>
Split Rock Museum

A celebration of the culture, history, and values of the Ramapough Lenape.

ADV IV Studio, Spring 2021

The Ramapough Lenape, known as the “Keepers of the Pass,” have occupied the sacred earth since time immemorial. However, this connection has been challenged by the colonists, the mining and fossil fuel industries, and most recently, by the tribe’s neighbors and the popular media who have painted them with a bigoted, racist brush. Thus Split Rock Museum, located at the site of the sacred Split Rock in Mahwah, NJ, proposes a compound that celebrates and commemorates the culture and history—both cheerful and tragic—of the tribe, while negotiating the rugged and wooded terrain. The museum is composed of four structures: (1) The Marker, which marks the sacred site itself as well as the presence of the Ramapough Lenape; (2) Shelter of the Physical, which holds the historic everyday artifacts of the tribe; (3) Shelter of the Spiritual, which holds the ceremonial objects and artifacts, and (4) Shelter of the Sacred, which holds the sacred objects that only certain members of the tribe can access. Except for the Marker, all shelters are constructed with oak found on site, and canvas, each of which is constructed specific to its relationship to the sacred earth and the elements.

Professor Robert Marino

Created in collaboration with Sonny Han & Cara DePippo
The “Marker”

Shelter for the Physical

Shelter for the Spiritual

Turtle Rock

Split Rock

Shelter for the Sacred
The Bronx Manufacturing Hall

A concept for a manufacturing facility utilizing recycled plastics.

ADV V Studio, Fall 2021

The Bronx Manufacturing Hall envisions a new concept for a portion of the Brooklyn Queens Expressway once it has been decommissioned. The Bronx Manufacturing Hall will act as an incubator for manufacturing startups, specifically those utilizing recycled plastic from the Sunset Park Materials Recovery Facility.

Professor Laurie Hawkinson
Teaching Mentor Tina Marinaki
Currently, all plastics sorted in NYC are transported around the globe to be recycled.

Diagram showing all of the facilities that sort plastic for recycling.

Plastics will be transported via barge from the Sunset Park Materials Recovery Facility.
Rendering of the rooftop park created by the Bronx Manufacturing Hall.

A street view of the Bronx Manufacturing Hall.

Main entrance of the Bronx Manufacturing Hall from the rooftop park.
Section perspective of the Bronx Manufacturing Hall.
Model Explorations

Several models created over the course of my time at GSAPP

The following images show models created during my time at GSAPP that were created for courses other than studio.

Architectural Drawing & Representation I, Fall 2019 | Columbia GSAPP
Professors Joshua Uhl, Bika Rebek, Lexi Tsien, & Zachary White
Teaching Assistant Jack Lynch

Transitional Geometries, Fall 2021 | Columbia GSAPP
Professor Josh Jordan
Desert Rose

Rendering as a tool for bringing a mirage of the imagination to life.

Techniques of the Ultrareal, Fall 2020

Desert Rose is a series of renderings created as the final project for the Techniques of the Ultrareal course taught at GSAPP. The assignment was to create a rendering of the student’s choosing by inventing a unique representational rendering method with the software 3DS Max. My collaborators and I made the decision to create a series of renderings of a unique struc-

Professors Joseph Brennan & Phillip Crupi

Created in collaboration with Henry Black, Adeline Chum, & Benjamin Diller-Schatz
The Space Between

Utilizing outdoor space in the South Bronx to create a sense of community.

Core III Studio, Fall 2020

The Space Between fosters a sense of community by utilizing a stepped terrace system that allows for density on site, while still creating an abundance of outdoor space for each of the project’s units and a large central gathering space for the project’s inhabitants and the South Bronx community.

Professor Adam Frampton

Created in collaboration with Cara DePippo
Central courtyard space throughout the year
Floor plans detailing apartment transformation

Renderings displaying apartment transformation
Physical model showing a section cut through the project
Kinesthetic School

Providing children with an environment that fosters each child’s curiosity and sense of self.

Core II Studio, Spring 2020

Kinesthetic School embodies the belief that the factory model of education still practiced in many schools today doesn’t adequately prepare children for the lives they’ll have after school. This method of education was supposedly formed to prepare children for the ‘real world’ of the time, which was viewed as getting them accustomed to working regular shifts sitting at desks or stations in factories. However, our current model of education doesn’t adequately prepare children for today’s world with its growing innovation in technology and increasingly complex problems. With rising opportunities in creative fields, our schools should move away from a pedagogy centered on memorization, and towards developing creativity and helping students understand the methods by which they themselves learn.

In the past, the popular thinking was that we are all either auditory or visual learners, but recent research by the National Institute of Health suggests that up to 30% of the population are kinesthetic learners. The world is long overdue for an awakening in our approach to education.

Professor Benjamin Cadena
Teaching Assistant Andrew Keung
Kinesthetic learning is a learning style in which learning takes place by the students carrying out physical activities rather than listening to a lecture or watching demonstrations.
Kinesthetic School will provide children with an environment that will foster each child’s curiosity and sense of self, thus developing their growth into the future leaders whose creative thinking and compassion will solve the problems of tomorrow.
Section through school play area displaying active play platforms

Section through school wing showing break-out learning wall

Exploded axon of Kinesthetic School showing the design’s various elements
The primary goal of this project is to dampen the loudest noise caused by the elevated 1 Subway line, the screeching trill of subway cars braking to a stop upon entering the station, and will then utilize this new sound enclosure to create a public space for Inwood’s residents.

**DIN-sign**

Din (ˈdin) noun: a loud, confused noise; a continued loud or tumultuous sound; noisy clamor

Core I Studio, Fall 2019

**DIN-sign**’s primary goal is to dampen the loudest noise caused by this elevated train line, the screeching trill of subway cars braking to a stop upon entering a station and will then utilize this new sound enclosure to create a public space for Inwood’s residents.

The public park system throughout New York City is today viewed as one of the city’s greatest assets, but in the midst of our busy daily routines, parks can often be out-of-sight and out-of-mind. DIN-sign utilizes the spatial opportunity created by dampening noise from the 215th Street Subway Station and uses it to provide the residents of Inwood with a park space that is not only highly accessible to them, but engages them at the most stressful moment of their day: their commute.

Professor Joshua Uhl
Teaching Assistant Angela Sun
The elevated subway line through Inwood has long been the bane of the neighborhood’s residents, but DIN-sign will take this element that has long driven residents to flee from 10th Avenue and transform it into a space that brings them together, thus enhancing the neighborhood’s interior and the lives of its residents.
The primary goal of this project is to dampen the loudest noise caused by the elevated 1 Subway line, the screeching trill of subwaycars braking to a stop upon entering the station, and will then utilize this new sound enclosure to create a public space for Inwood’s residents.

DIN-sign creates a variety of public spaces for visitors to the 215th Street Station. Upon entering the station to the west, one is greeted by a sunken seating area that is covered by the station’s diaphanous canopy. To the east, the top level of the station houses a set of gathering stairs that serves as a larger public space looking towards the Harlem River. From the top level of the subway station, visitors are offered the opportunity to traverse the length of the subway enclosure, paths that contain small lookouts for those seeking a space for personal introspection or for individuals looking to have an intimate conversation.

Seating areas at each end of the tube create a unique space that transforms the repetition of subway trains entering and exiting the station by providing a unique vantage point that turns the activity into a spectacle. On the level of the subway tracks, subway users are provided with covered pavilions that alter the experience of waiting for the subway from a monotonously routine part of their day to an opportunity to look out over the Inwood Neighborhood and the Harlem River.

DIN-sign utilizes a geodesic structural frame to lighten the overall mass of the subway’s new sound enclosure. It is wrapped in a transparent canvas fabric that allows light to penetrate the interior of the enclosure during the day, while also allowing light from the station’s interior lights to bleed through the material at night. An acoustic dampening system on the interior of the structure enables the tube to dampen sound from subway trains.

The elevated subway line through Inwood has long been the bane of the neighborhood’s residents, but DIN-sign will take this element that has long driven residents to flee from 10th Avenue and transform it into a space that brings them together, thus enhancing the neighborhood’s interior and the lives of its residents.

Role: Sole Designer

ARCH 4001     Fall 2019     Columbia GSAPP
Professor: Josh Uhl
Physical model from early design phase

Floor plans

Study model images utilized early in the design process
Music-graph

Upcycling objects into instruments as part of the Makergraph Studio.

ADV VI Studio, Spring 2022

Musicgraph is a musical instrument I created during the Makergraph studio. It is entirely composed of upcycled objects that have been modified to enhance their musical properties.

Professors Ada Tollia and Giuseppe Lignano
Teaching Mentor Jesse Catalano
The process of taking a conventional object, and attempting to exploit its properties.

Can I act on an object to give it a unique sound? How will this change its perception?
The bicycle valve applied to the top of the bottle allows pressure to be adjusted. This allows the sound of the bottle to be controlled, and thus tuned to a specific note.
The PVC Organ Pipe is variable in the notes it creates based on the amount of pressure the user applies when stepping on it.
The performance of the piece.
TOP SOLO CUP CAP

HOT GLUE SEALANT

EXTENSION SPRING

HOLE CUT TO ENABLE SPRING PLUCKING

HOT GLUE SEALANT

BOTTOM SOLO CUP CAP
TOP REED

BAMBOO POLE

UPPER LIP
LOWER LIP
REED TONGUE
REED TONGUE
WIND SUPPLY

BELLOWS
The new wooden object once assembled.
Grommets and string work to secure the fabric jersey around the body of the drum.
The earlier stitched together fabric piece becomes a adornment to decorate the drum.
JERSEY DRUMHEAD

TAPE SECONDARY DRUMHEAD

FABRIC FASTENING HOOKS

FABRIC DRUM SLEEVE

FIVE GALLON BUCKET DRUM BODY

STRING + GROMMET ROPE FOR TUNING
Crescendo!
i've seen you before,  
back when we were young,  
but they wanted to hide us away,  
as if our song shouldn't be sung,  

but mother earth, she claims all walls,  
and just when the story has an end,  
the dawn will bring a new day,  
and we'll be born again.

i've got my bumps bruises,  
all of these scars i try to hide,  
i can tell your heart too is breaking,  
but we're not sure why,  

is something missing from you?  
have you lost a piece?  
maybe life is the pursuit of who we are,  
and we only begin incomplete.

all of these pieces of our world,  
if they could sing, what would we hear?  
has the steel of the city lived a life before,  
it found its way to us here.

if someday i pass from this earth,  
will i come back again,  
will the song that leaves my lips today,  
become another note of the wind?

cast aside on the streets now are you?  
to a forgotten corner where the light is dim,  
so much beauty lost in this world,  
but does anything really have an end?  

what will it take to appreciate every piece,  
from every scrap to each word that's said,  
what if we could pull the world together,  
with just a single thread?