x STUDIOS
x RAINWATER COLLECTION SYSTEM
FALL 2019, ANNA PUIJGJANER

x (S)MORE SCHOOL
SPRING 2020, BENJAMIN CADENA

x GRADIENTS OF SPACE
FALL 2020, GALIA SOLOMONOFF, W/ AYA ABDALLAH

x GRANITE, BRICK, CONCRETE.
SPRING 2021, ROBERT MARINO, W/ NIKOLAS BENTEL

x SCULPTING OF SPACE
FALL 2021, IVI DIAMANTOPOULOU + JAFFER KOLB

x A MESS, A POETIC MESS.
SPRING 2022, ADA TOLLA + GIUSEPPE LIGNANO

x VISUAL STUDIES
x ADR I
FALL 2019, LEXI TSIEN

x ADR II
SPRING 2020, ANDREW HEUMANN

x MATERIAL THINGS
SPRING 2020, JOSH JORDAN

x 1:1 FABRICATION DETAILS
FALL 2021, ZACH MULITAUAPELE

x ARCHITECTURAL PHOTOGRAPHY
FALL 2019, MICHAEL VAHRENWALD

x TECH
x AT IV - DAMN ARCHITECTS
FALL 2020

x AT V - JUST ANOTHER FARM
SPRING 2021

x OTHER
x GSAPP COLLECTIVE FOR BEIRUT
FALL 2020 +

x TESTIFY4BEIRUT BOOK
AUG 2020 +
STUDIOS
This project aims to give NYC rainwater a life before it joins the sewer system. It provides a modular rainwater collection and filtration system that sits on a building with minimal invasion to the building and its structure. It is here being applied to a brownstone residential complex on Broadway st. This proposed solution filters the rainwater with two separate methods then stores it on the facade, allowing the water to be used by the building’s occupants through taps in front of their windows. The approach also activates the rooftops into public spaces by providing shading and greenery.
Studying Manhattan's infrastructure, it was interesting to see where the sources for everyday uses are, such as water, electricity, wifi and building materials. It was quickly evident that the rainwater that falls on Manhattan is wasted, as 60% goes in a combined sewer system, and 40% gets collected in a separated system, but picks up oils and polluants before getting thrown in the river.
The water gets collected on the public roof, is filtered twice; once with natural plant filters and once with UV lights, then gets stored on the facade.

Each window then has access to two taps; one with single filtered water for uses such as cleaning, and one with double filtered for uses such as cooking. The leftover water gets returned to the city.
Growing up in New York City is not easy, where everything is blown out of proportion, and kids get easily lost in the concrete jungle. The Marshmallow school provides these kids with a cocoon – a home base, a space they can call their own, with their own community and little world that is their classroom. New Yorker kids are offered comfort and a sense of stability. The school is organized by keeping the 2 existing bars from the old structure, and opening them up to programs that can be used by the community, then placing the classrooms in the void between those bars, visible from the outside but accessible from the bars through a connecting egress space, which also acts as additional structure. The classroom units are organized in a way that takes advantage of the southern and northern light, while creating covered outdoor spaces in a landscape that belongs to the city, which connects 9th and 10th street, while isolating itself from the noise of the city.
Individual classroom model that studies interactions at a smaller scale, in response to the NYC macroscale.
The courtyard between the two bars is an extension of the sidewalk and connects 11th and 12th street. The way the classrooms are stacked allow them to all get access to southern light.
This housing complex in the Bronx was designed to help reintegrate displaced people into society. After the Beirut blast in August 2020, 300,000 people were displaced overnight, and had to spend weeks if not months outside of their broken homes. (the last few drawings represent the ghosts of routines in Lebanese destroyed homes). Aya and I decided to take on this challenge and create gradients of space to make easier the return to society of NYC displaced people, such as post-incarcerated, dreamers, immigrants, etc. North side vs south side, balconies etc. courtyards on ground floor, amenities that bleed into one another.
THE ANTI-REALITY OF BEIRUT HOMES.

The Gradients of Space project was created for displaced people to get a chance to reintegrate society. This project took place right after the August 4th blast in Beirut, where 300,000 people were displaced overnight and saw not only their homes, but their entire city and families destroyed in a matter of seconds.

The following series of drawings illustrates the ghost of life in the pictures that I received from friends and family of their destroyed homes. The routines that are no longer in spaces that used to feel safe.
We took a very hands-on approach to this project. We started the semester by making arrowheads using different techniques. I had to cast mine out of chocolate in a mold made of snow since I was stuck in the mountains in quarantine in the middle of a snow storm. We then decided to make this project as realistic as possible, including the ramapough tribe in the building process, so we took a micro to macro approach to the project and looked at the available materials on-site. We first designed an L shaped brick that can be replicated and stacked in different ways to make unique walls with openings for light and air. We then looked at ways to cast using clay as a mold for the canopy's columns, and finally decided to excavate in the mountains to keep the museum as part of the mountain, and leave the granite exposed for flooring and exhibition.
The clay collected from the sweetwater prayer camp nearby is transported to the site, and the L-shaped bricks are made on site after the initial casting of the concrete. Those bricks are then used to make the facade.
This project looks at granite with a different lens than its usual architectural uses. Through the Noguchi museum, I looked at the sculpting of the stone, its ephemerality and preciousness. Creating an intervention within Penn station resonated from these ideas - sculpting glowing granite clouds as a soothing space to take a break from Penn station. The clouds are placed in different directions to explore transparency and opacity, as well as a play on privacy. Translating these ideas into a larger civic building, a new entrance to the platforms, I carved spaces out of granite sheets to creates different kinds of spaces and unique connections between them. I explored the ephemerality of a civic space, the illusion of granite as a light material, a balance between density and airiness, the sculpting of a space, transparency vs opacity which allows for different directions to take advantage of the acoustic qualities of the stone, and create a space that is sheltered from chaotic New York City.

Adv V Studio
1 ROCK, 5 OBSTRUCTIONS
SCULPTING OF SPACE
We started the semester with the first obstruction - intervening in Penn station with 40 tons of granite. I wanted to create a space that removes itself from the chaos of Penn Station. I proposed slicing the granite block into very thin pieces, then cutting them in a way that they would accordeon into floating clouds that emit light.
The next obstruction was a granite addition in between Penn Station and Moynihan Hall. This new building will provide a new access to platforms while also providing a variation of pleasant spaces.

Large sheets of thin granite are placed on a structure for easier carving. These spaces are sometimes enclosed and sometimes not. The sheets are placed 2' apart and sometimes alternate.
Detailed section of the Noguchi Museum and the sculpting of a granite piece.

Granite sheets structural support

Detailed section of my proposed building's sculpting of space.
The makergraph studio asks us to look within ourselves to think about the way we design as individuals, designing four 18x18x18 objects made out of 4 materials - plastic, wood, metal then fabric, speaking respectively of head, torso, hands and legs. I approached this studio designing self portrait pieces. A mess, but a poetic mess. My plastic piece reflects on my ADHD, my head as a chaotic place where so many things happen, where thoughts bend, transform and intertwine, a soft and unique space where anything could happen. My wood piece represents my ribcage that holds an explosion of emotions, my metal hands as my tools for making, with flexible joints, sharp edges, like a swiss army knife that can do multiple things, and my legs as flexible, flimsy but not fragile, not much muscle there, imperfect yet solid joints. I take this new approach to making, similar to my approach to life, open and free, discovering as I go. I appreciate and embrace the imperfections, admire the layers of complexity, and make the best out of what I find.
I am this book, this book is me, every object is a reflection of myself and the way I function.

A mess, but not a messy one - a poetic mess. One that connects with people and their fragilities.

My head is a chaotic place where so much happens at the same time. All interconnected in a weird way, but it works as a cozy place for rogue thoughts, a protective layer of bubbles for when my head’s in the clouds.

My chest - a ribcage with exploding emotions, so many emotions, overflowing out of my ribcage to expose itself to the world, a certain rawness or lack of filter.

My hands - my machine for living, my tool for making, for holding, not created equal but working together as a team. Functional, efficient, sharp.

My legs - flexible, flimsy but not fragile. Not much muscle there, messed up knees due to hyper flex joints, imperfect yet solid joints. They allow me to move, to get from one place to another, they take me on adventures.

How do I translate all these as objects? A mess. A poetic mess. New ways of making rough but beautiful joints. I re-tangle connecting cables to hold bubble wrap together, take the most imperfect pieces of wood with the most interesting stories, and highlight their imperfections instead of hiding them. I then find random and unrelated scraps of metal, and connect them in new ways to tell a new story. A failed weld - why try to hide it, it is now part of what makes this object so great. Finally, I take something generic - socks, and sew them together to create a soft and malleable form, that I then explore into its many potentials.

I take this new approach to making, similar to my approach to life, open and free, discovering as I go, open to changes, flexible to unexpected circumstances. How do you make the best out of what is given? Appreciate the process and the faults.

Does it matter if it’s not perfect? Actually on the contrary, imperfection would make it even more beautiful, more interesting to look at, better to admire the layers of complexity.

Every corner holds a surprise, the more you look, the more you discover, just like me. A mess, a poetic mess, in which I find and highlight humor, brightening a day, putting on smiles.

This book is my self portrait - my head, my chest, my arms and legs are not just body parts but are a part of who I am. This book and these objects allow you to see through me - my thoughts, my humor, my perspective.

Is this really who I am? Or is that just how I make?

A mess, a poetic mess -
ADR I asked us to pick a building and stick to it for the three representational assignments: drawings, a physical model and an animation. I chose the MASP by Lina Bo Bardi, and I wanted to highlight the different components of that building including the main structural elements that hold the whole building together. The animation tells a story of a building that dreams to get out and see the world. The MASP gets out from its site and dances to “Fly me to the moon” at it passes postcards from around the world. It then returns to its site and becomes the postcard.
THE DANCING MASP ANIMATION
This community center in the bronx went through SD and DD phase in revit. I was the designated structural expert in the group, so explored the feasibility of giant trusses, the space framed roof, a hung and elevated basketball court, along with all the other structural challenges of this building.
STICK BUILT CURTAIN WALL
WT-1
GFRC PANEL RAINSCREEN
WT-2
STICK BUILT CURTAIN WALL WITH OKALUX INFILL TO ADD OPACITY AND TO REDUCE LIGHT. CURTAIN WALL IS EMBEDDED INTO THE STRUCTURAL STEEL TRUSS. OPERABLE WINDOWS BELOW THE ROOF.
GFRC PANEL RAIN SCREEN CLADDING ON CMU WALL WITH PUNCHED WINDOWS.

USING GFRC FOR CONCRETE EXPRESSION.

WALL SYSTEM DESCRIPTIONS

Scale
1/8" = 1'-0"

Project number
F - 1.11

Mikaela Pharon
Danielle Nir
Nikolas Bentel
Alexa Greene
Yiheng Lin

FACADE SYSTEM DESCRIPTIONS

DAMN ARCHITECTS

No. Description Date
1 SD REVIEW 10/27/2020
2 DD REVIEW 12/01/2020
ADR II was all about explorations. The first assignment consisted of spending some time in a place and making a drawing of it. I spent time at Boqueria wine bar and documented their bar. In the first drawing, I represented the difference between making a gin and tonic and pouring a glass of wine. We then went back to the same place to make a grasshopper drawing. I went back to Boqueria and watched the bartender as he made drinks. The second drawings is a repertoire of all the drinks that this bartender made in an hour. The third drawing was another grasshopper led exercise. This one represents all the realities that were suddenly shattered by the rise of covid.
THE BARTENDER AT BOQUERIA
(BOTH MADE USING GRASSHOPPER)

SHATTERED REALITIES
STUCK BETWEEN A ROCK AND A HARDWOOD

TENNIS THE MENACE

THE FIST KISS
a covid response to greeting and kissing
The 1:1 Material class asked us to make a wall 5’x2’. Gustavo and I approached it first as making a material tray, with samples of materials available at GSAPP that you could take on and off the wall. To support the white MDF wall, we created a crazy wooden structure that would double up as a support and point of contact for each tray that we would take out, and attach these trays magnetically to the structure. We attached the wall to the structure using screws that we had express themselves on the face of the wall, and used a continuation of the same screws that would be the magnetic elements to attach to. The structure behind also doubled up as a bookshelf for everyday objects. It now sits in my living room.
Our project “Just another Farm” explored the possibility of having an urban farm in Brooklyn all while protecting the surrounding neighborhoods from imminent floods. The enormous raised landscape rises above a market space that allows for different events to happen underneath. Our project is divided into two parts; the landscape part on the waterfront which collects water and produces food, and the rooftops on the other side of Kent avenue, which collect energy with both solar panels and a walkway paved with energy steps.
This class approaches photography from “objective” to “expressive” and explores notions of the iconic, the narrative and digression in architectural photography. Through a series of projects that look at a building, the outside environment, people using space, and more, this class asks us to get a deeper understanding of how to show a space through a lens.
3 - WATCHU LOOKIN AT

4 - STUDIO OR STORAGE
After the blast in Beirut in August 2020, Lebanese students and alumni from GSAPP came together to form the GSAPP Collective for Beirut. Since then, we have been meeting every week to develop a few projects that bridges GSAPP and Beirut. Our first and biggest event was a lecture series in the Fall 2020 where we invited over 20 people from both the architecture world and outside, both faculty and professionals, and put them in conversation to discuss some imminent topics regarding Beirut. Since then, we have been working on several smaller projects that are quickly evolving.
On August 4th 2020, I was injured in the Beirut Blast, and escaped miraculously after my home was completely destroyed. I was in shock, and kept repeating my story to people who would ask, as if to convince myself that it was real. A lot of Lebanese people shared this trauma and had the same need to share their story.

A few days later, I started an Instagram account called testify4beirut, as a platform for the people to hear and be heard, to share their pain and raise their voices against this crime that was committed, to bring all the testimonies in one place, to never forget.

Over the next year I accumulated over 350 written testimonies, 50 visual testimonies, and a lot of photos from the victims themselves. I partnered up with Aya Abdallah who was taking the GAP class at GSAPP at the time to make this initiative into a beautiful book, a historic document that will forever be a part of our identities. The book was launched in Beirut in December 2021, and gained a lot of press attention. All profits were donated to the Lebanese Red Cross.

AUG 2020 - DEC 2021