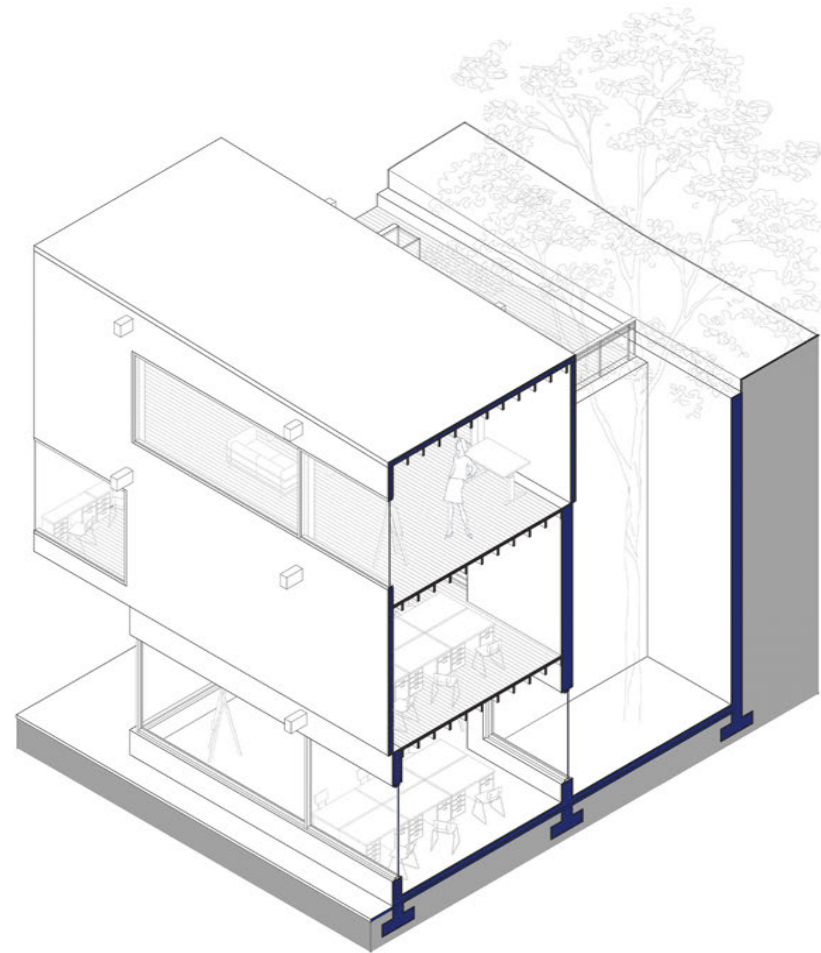




ZACHARY J BEIM

GRADUATE PORTFOLIO



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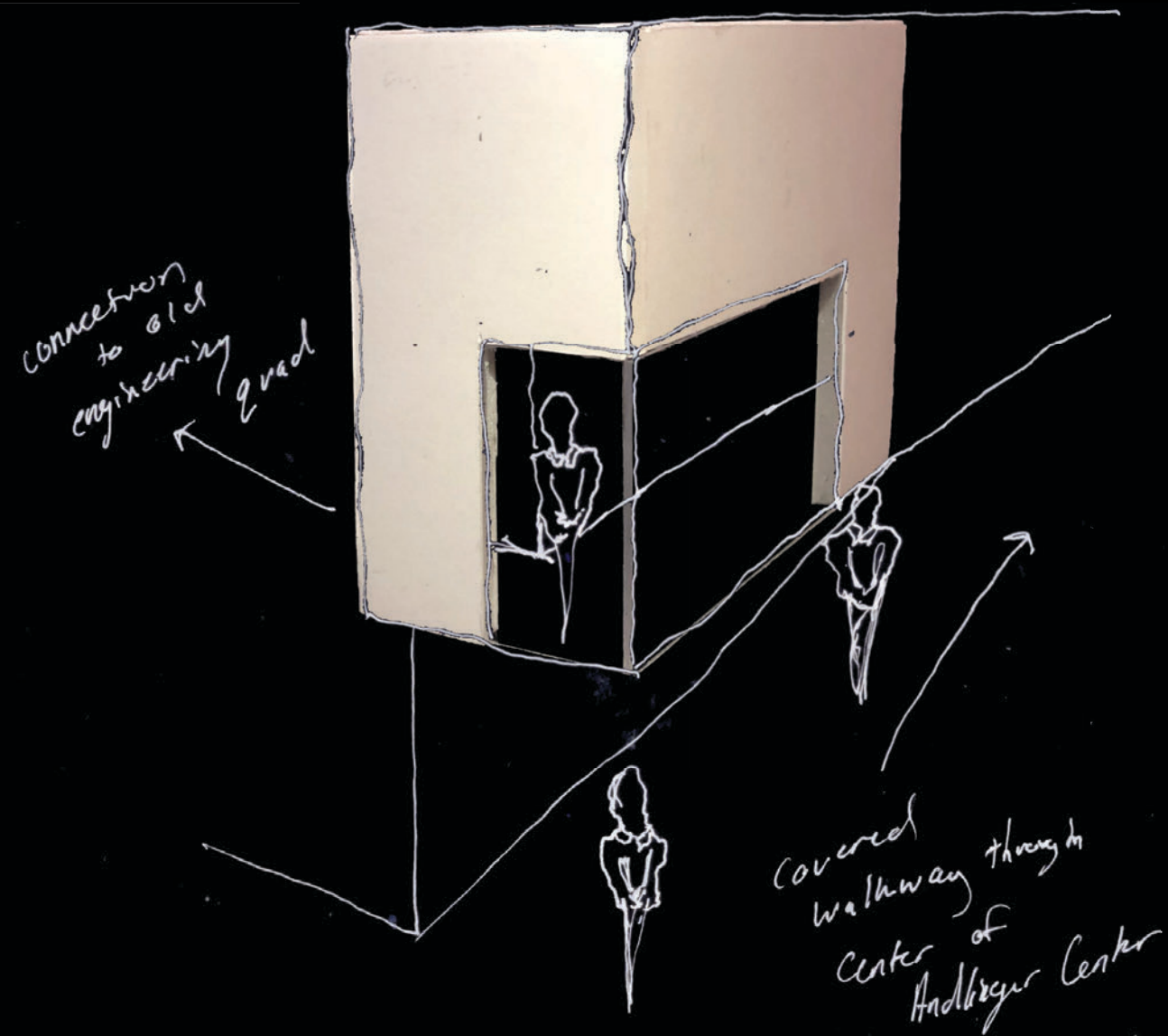
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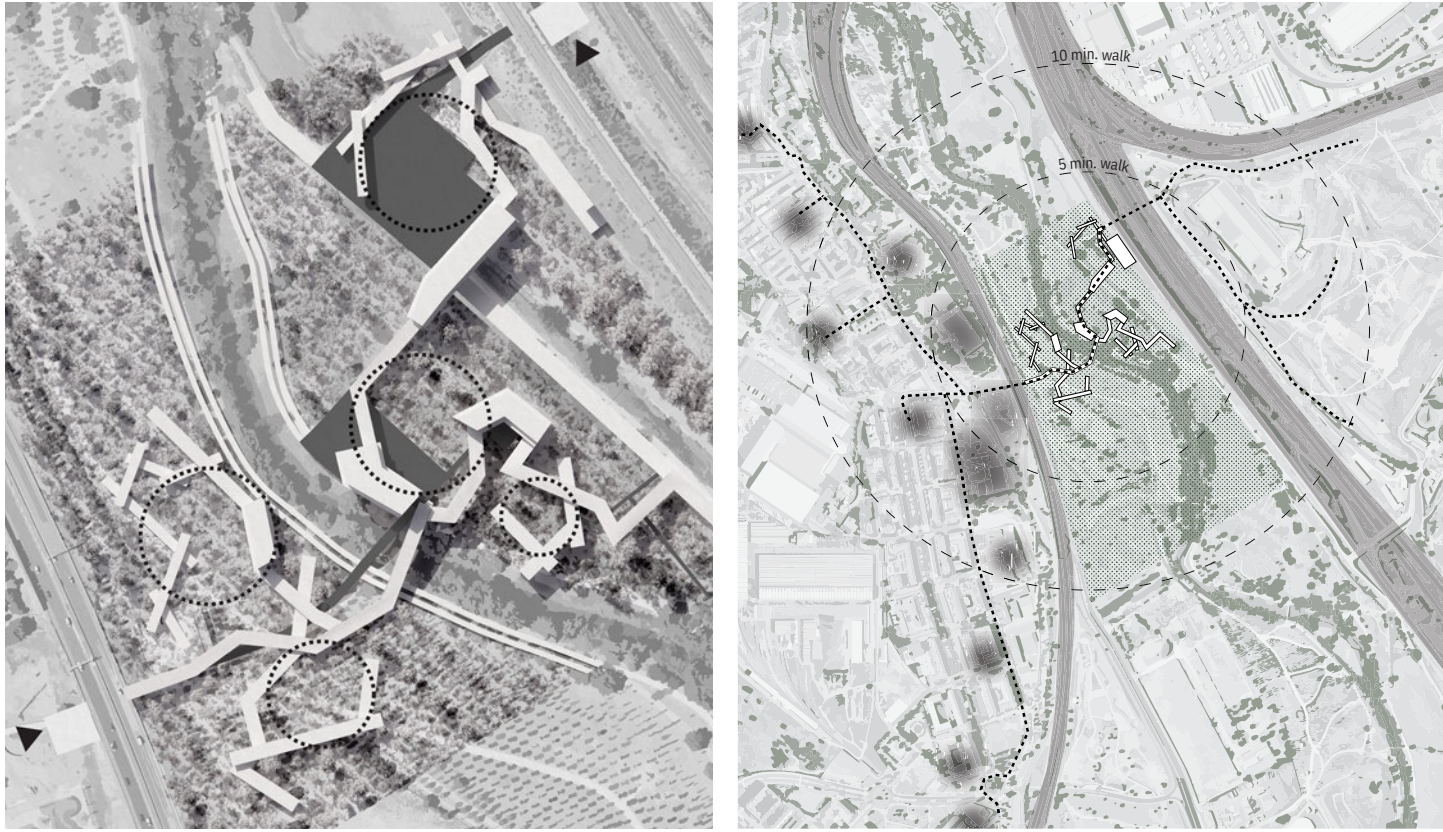
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STUDIO WORK



VILLAVERDE, MADRID, SPAIN

POST-OCCUPATION STRATEGIES UNITING DWELLING AND ENVIRONMENTAL REPAIR WITH URBAN BIODIVERSITY AND INTERSPECIES COEXISTENCE.

THE STUDIO TAKES MADRID’S METROPOLITAN FOREST AS ITS LABORATORY : FIVE TERRITORIAL VOIDS CAUGHT BETWEEN THE BUILT CITY AND ITS PERIPHERY. THE STUDIO PROPOSES TRANSFORMING THESE GREEN FRAGMENTS INTO GRAVITATIONAL CENTERS FOR URBAN BIODIVERSITY, INTRODUCING DWELLING AS A PROGRAMMATIC LAYER AND ARCHITECTURE AS THE INSTRUMENT OF A GENUINE FUSION BETWEEN NATURE AND PEOPLE. WORKING ACROSS THE SCALES OF TERRITORY, NEIGHBORHOOD, AND UNIT, PROJECTS RESPOND TO TWO INTERSECTING PLANETARY CRISES — THE ENVIRONMENTAL DEGRADATION OF URBAN ECOSYSTEMS AND THE URGENT NEED FOR INHABITATION — DISSOLVING THE ARTIFICIAL/NATURAL DIVIDE AND CHALLENGING EVERY PRECONCEIVED IDEA ABOUT HOW, AND FOR WHOM, WE BUILD.

CONNECTIVE CANOPY PROVIDES AN ADDITIONAL PIECE OF INFRASTRUCTURE TO A SITE THAT IS HEAVILY FRACTURED AND HIGHLY MANIPULATED – ONE OF CONNECTION RATHER THAN DIVISION. THE PROJECT LINKS EXISTING COMMUNITY RESOURCES TO AN URBAN FOREST OF GRIDDED POPLAR TREES, CREATING PEDESTRIAN INFRASTRUCTURE THAT DOUBLES AS ADAPTABLE AFFORDABLE HOUSING FOR A HIGHLY TRANSIENT POPULATION ORGANIZED AROUND COURTYARDS AND MEANDERS THROUGH THE FOREST CANOPY. HERE, DOMESTICITY IS DEFINED BY SHARED SPACES, THE FOREST AS AN ACTIVE PARTICIPANT, AND CHANGE OVER TIME.

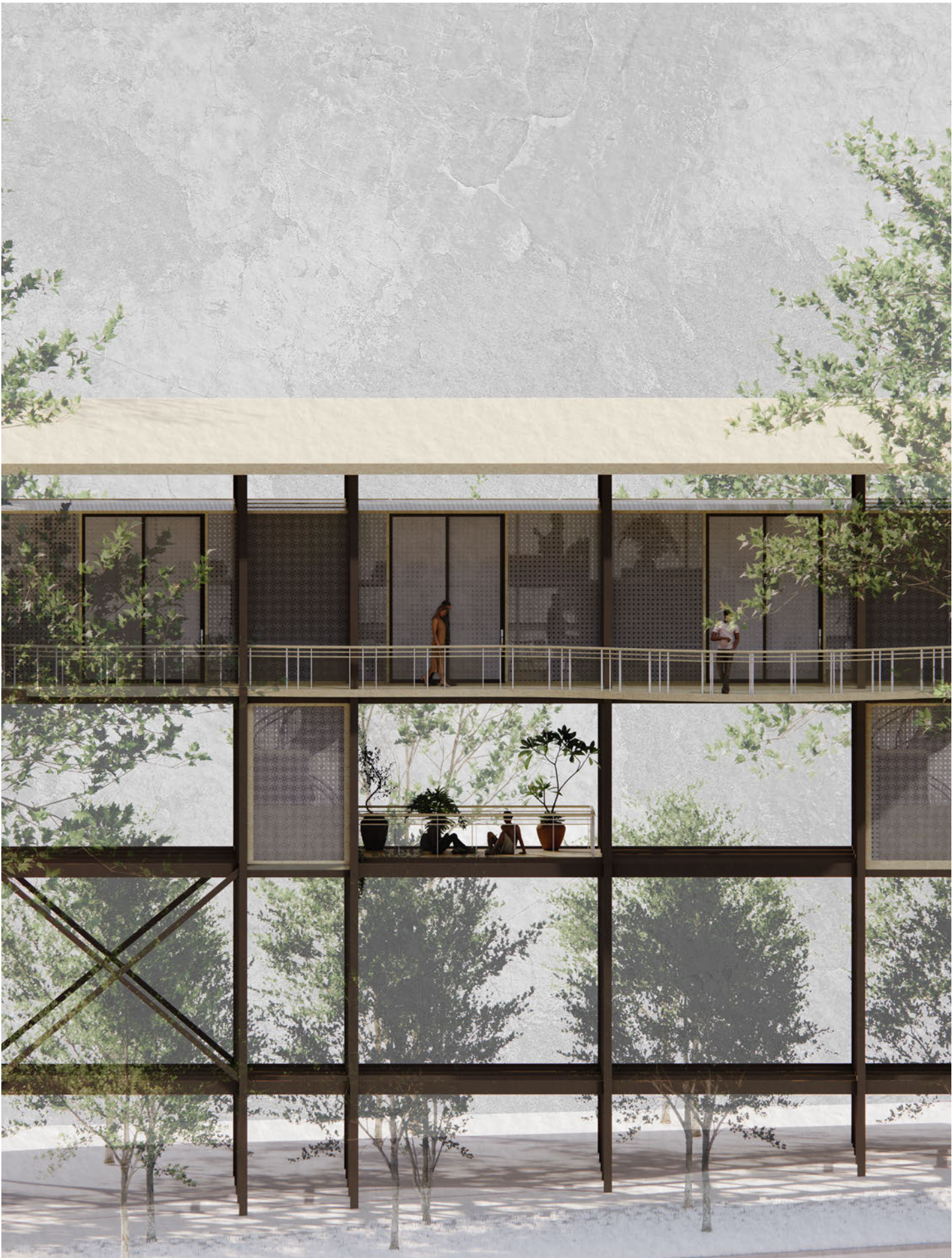
WE REJECT THE ISOLATED PRIVATE UNIT, INSTEAD PROVIDING A GRADIENT OF PRIVATE-PUBLIC BOUNDARY, FROM PRIVATE BEDROOMS, TO SHARED COURTYARDS, TO COMMUNAL PATHS, TO THE FOREST CANOPY ITSELF. POLYCARBONATE ENCLOSURES ABOVE THE WINDING PATH THROUGH THE CANOPY ALLOW THE HOUSING TO MAINTAIN A VISUAL LINK TO THE FOREST, WHERE DOMESTICITY IS DRIVEN BY FLEXIBILITY AND CUSTOMIZABLE PRIVACY WALLS RATHER THAN UTILITY OR DEFINED SPACES.



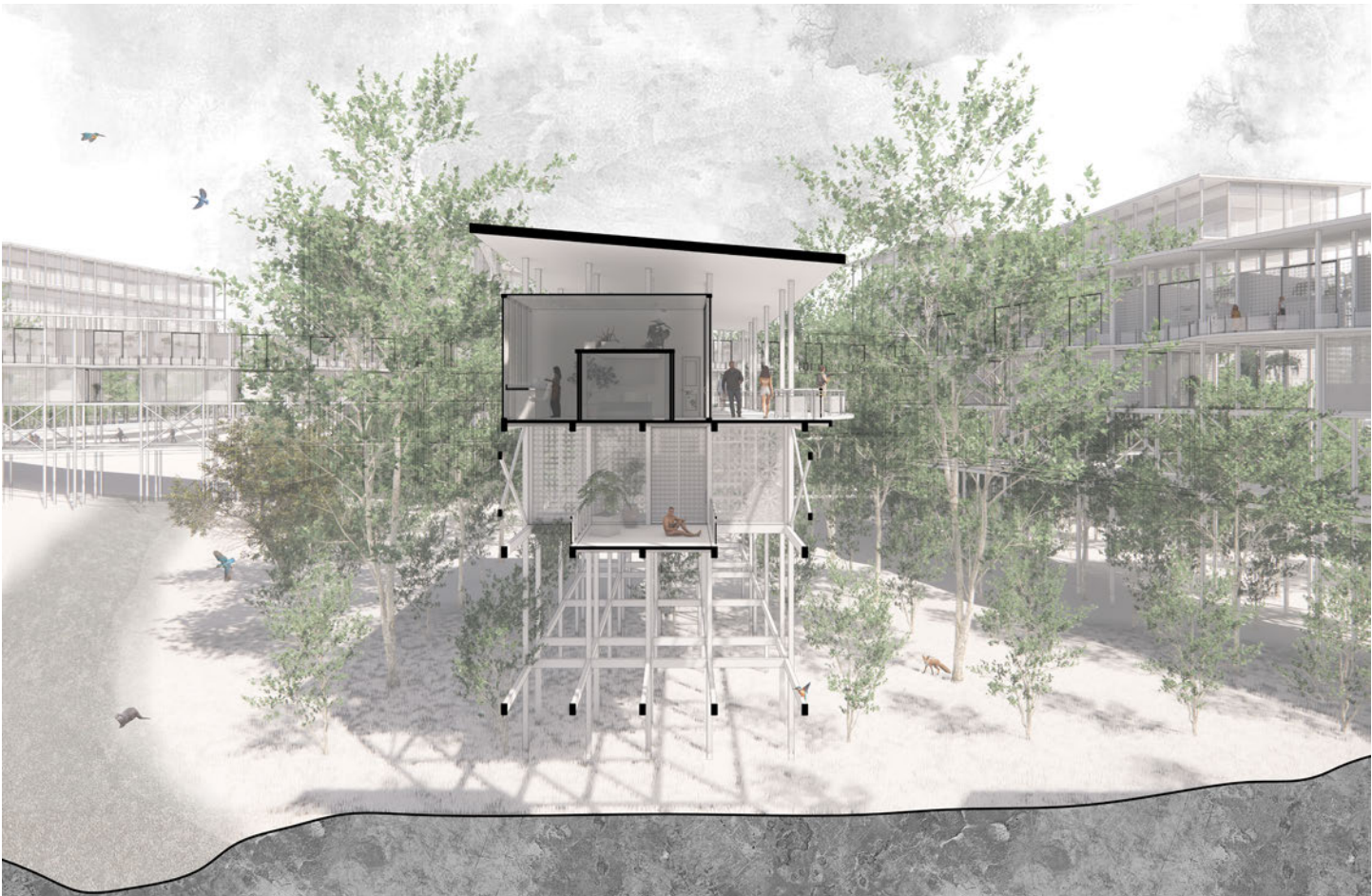
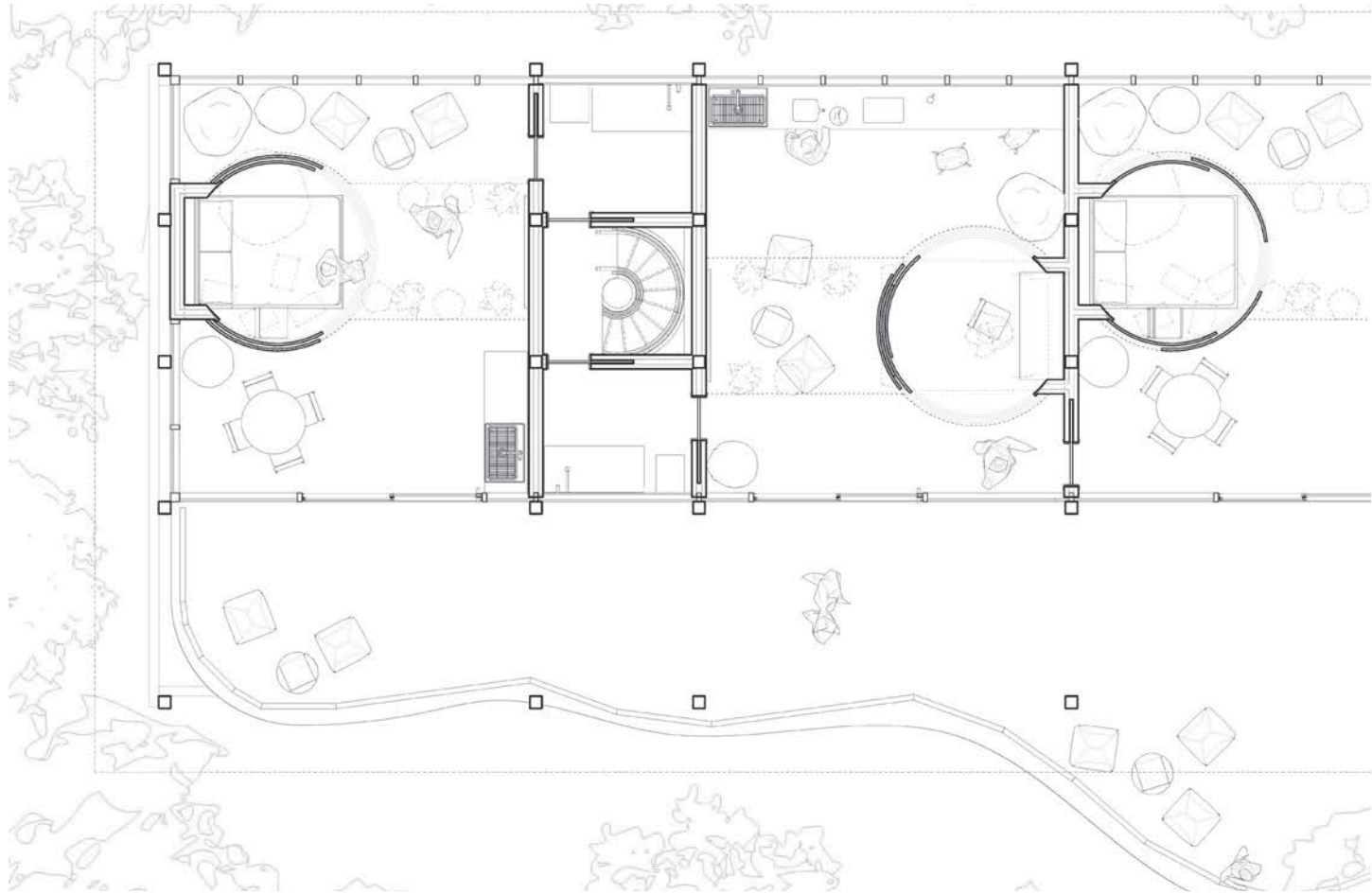
CONNECTIVE CANOPY
NATURALIZED NEIGHBORHOODS TO RESIDENTIALIZE THE
METROPOLITAN FOREST
JUAN HERREROS / AISTYARA SHANNING
PARTNER: HANNAH ZHAO
COLUMBIA UNIVERSITY - ADV VI

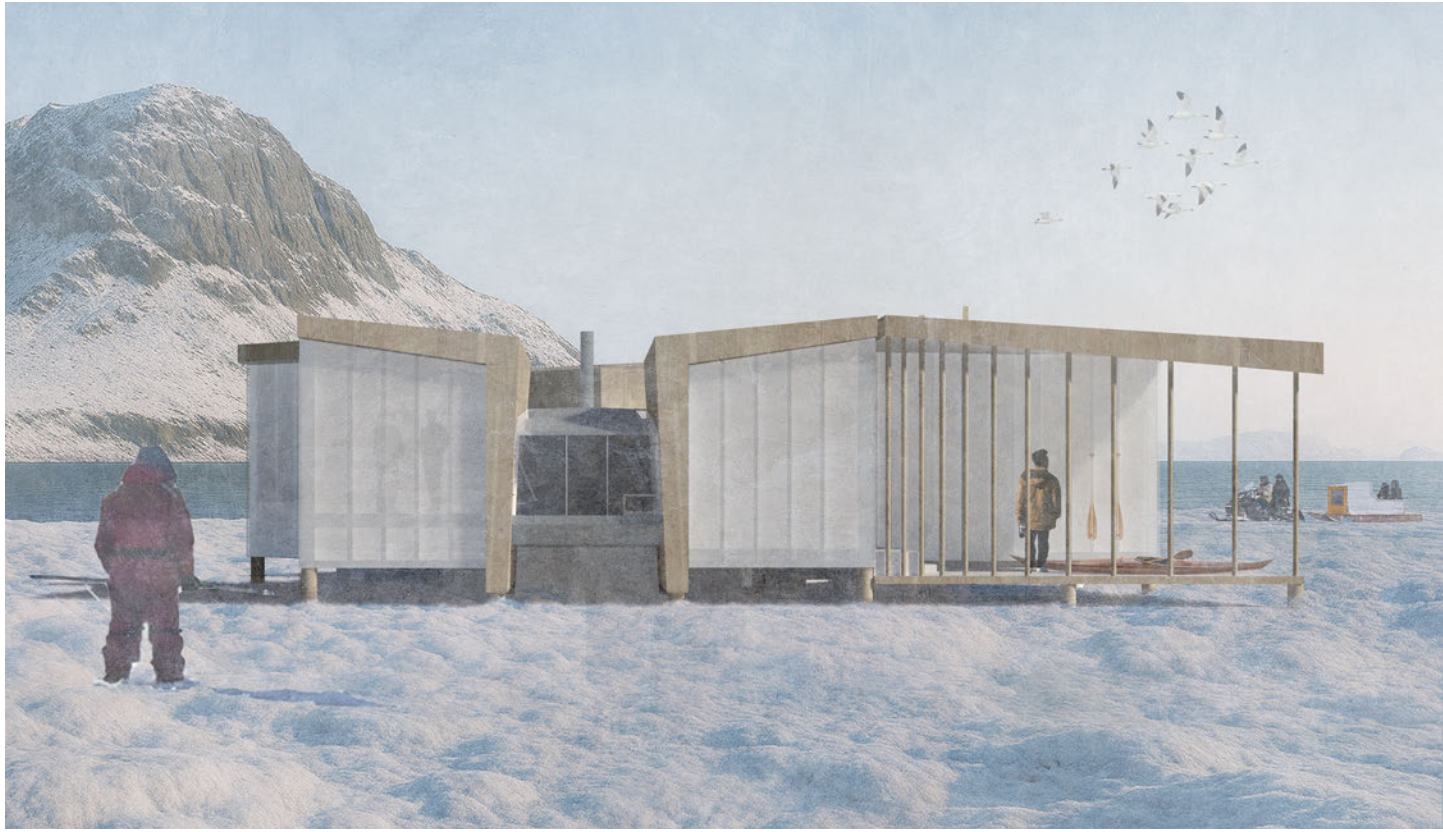


ARCHIVING INUIT MEMORYSCAPE | ARCH 4005



ZACHARY J. BEIM





FOX BASIN, NUNAVUT, CANADA

A SERIES OF HUNTING CABINS, A TYPOLOGY IN DRAMATICALLY INCREASING DEMAND OVER THE PAST TWO DECADES, IS CONCEIVED NOT AS BUILDINGS BUT AS DECENTRALIZED ARCHIVAL DEVICES. THE CABINS ARE SITUATED IN REMOTE AREAS ALONG KNOWN HUNTING ROUTES IN THE FOX BASIN AREA NEAR IGLLOOLIK. EACH CABIN FRAMES KEY LANDFORMS ASSOCIATED WITH INUIT PLACE NAMES, ENABLING USERS TO RE-ENTER THE MEMORYSCAPE THROUGH EMBODIED SIGHTLINES, ENVIRONMENTAL CUES, AND PERSPECTIVAL RELATIONSHIPS. RATHER THAN TRANSLATING INUIT KNOWLEDGE INTO WESTERN ARCHIVAL FORMS, THE PROJECT CREATES ARCHITECTURAL SITUATIONS THAT RESTORE THE HORIZON AS A MEMORY INTERFACE, RE-EMBED PLACE NAMES IN LIVED SPATIAL EXPERIENCE, AND SITUATE THE ARCHIVE BACK INTO THE LAND IT EMERGES FROM.

THE HUNTING CABIN IS DERIVED FROM THE ORGANIZATION OF TRADITIONAL INUIT SHELTERS WHERE THE USER PROGRESSES FROM A COVERED ENTRY THROUGH A FORM OF AIRLOCK, INTO A COMMUNAL AREA, AND THEN FINALLY TO A RAISED, SHARED SLEEPING PLATFORM AT THE REAR OF THE BUILDING. THIS TRADITIONAL LAYOUT IS RE-IMAGINED UTILIZING THE DIRECTIONS OF THE NEAREST PLACE NAMES TO THE SITE. CLT PANEL WALLS NOT ONLY FRAME THE HORIZON IN KEY DIRECTIONS, BUT ACT AS THE CENTRAL STRUCTURE FOR THE THREE ROOMS THAT SURROUND AND CREATE SPACE FOR THE HEARTH.

THIS IS AN INTENTIONAL SUBVERSION OF TRADITIONAL WAYFINDING IN THE SENSE THAT WAYFINDING TYPICALLY OCCURS OUTDOORS. THE ARCHIVE REINFORCES THE CONCEPT OF ANIJAARNIQ (AH-NEE-YAAQ-NIQ) AND ORIENTING AS A FORM OF DWELLING THROUGH DIRECT VISUAL CONNECTION TO THE LANDSCAPE FROM THE CENTER OF THE BUILDING. THE CENTRAL SPACE IS INTENTIONALLY VERTICALLY COMPRESSED AND SIGNIFICANTLY MORE ISOLATED FROM DAYLIGHT THAN THE BEDROOMS, FORCING ATTENTION OUTWARDS TOWARDS THE SOURCE OF DAYLIGHT. THE HORIZON IN EACH OF THE ONLY THREE WINDOWS IN THE CABIN BECOMES THE SOLE SOURCE OF ORIENTATION IN AN OTHERWISE DISORIENTING AND ARTIFICIALLY LENGTHENED SPACE.

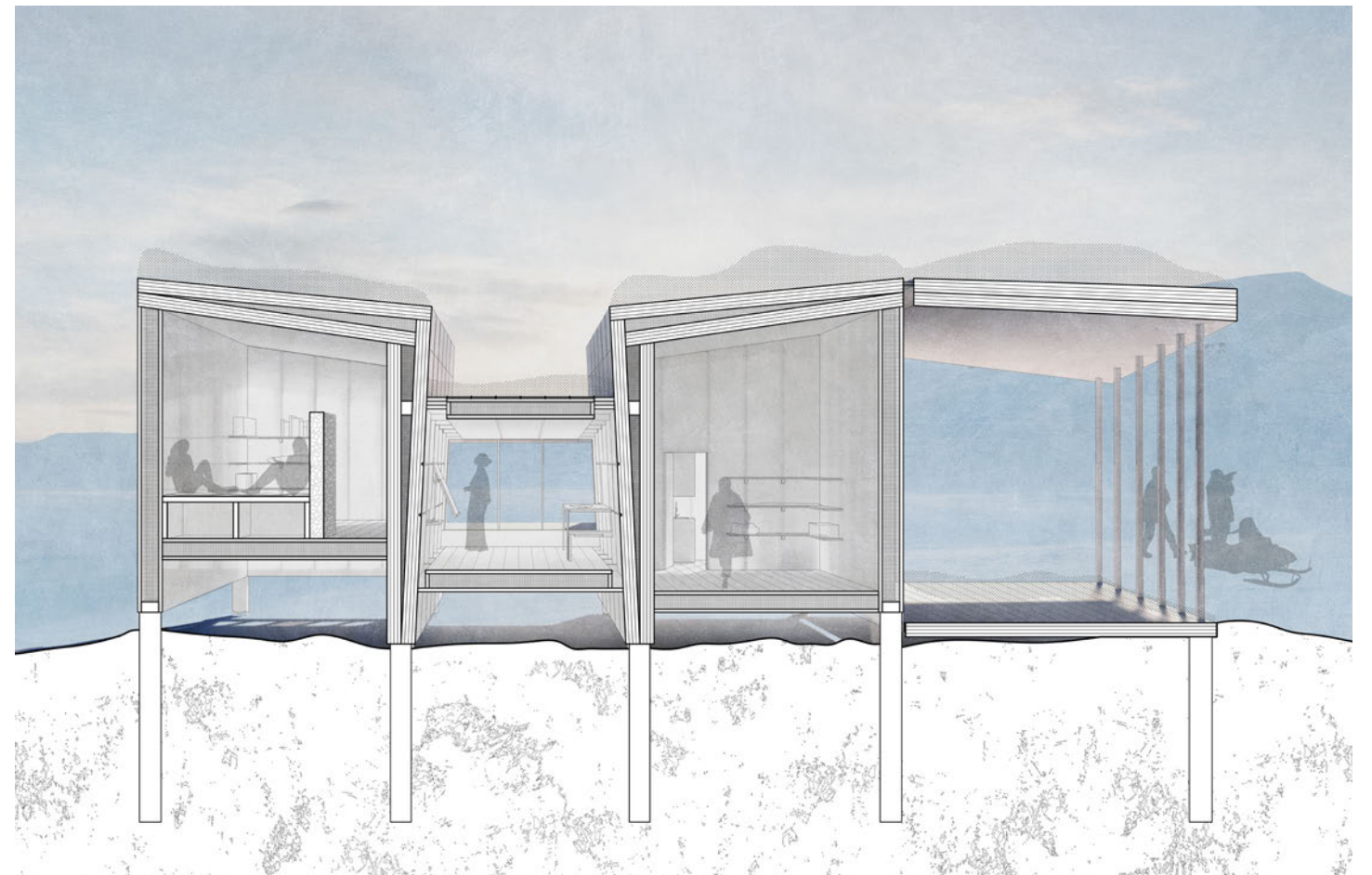
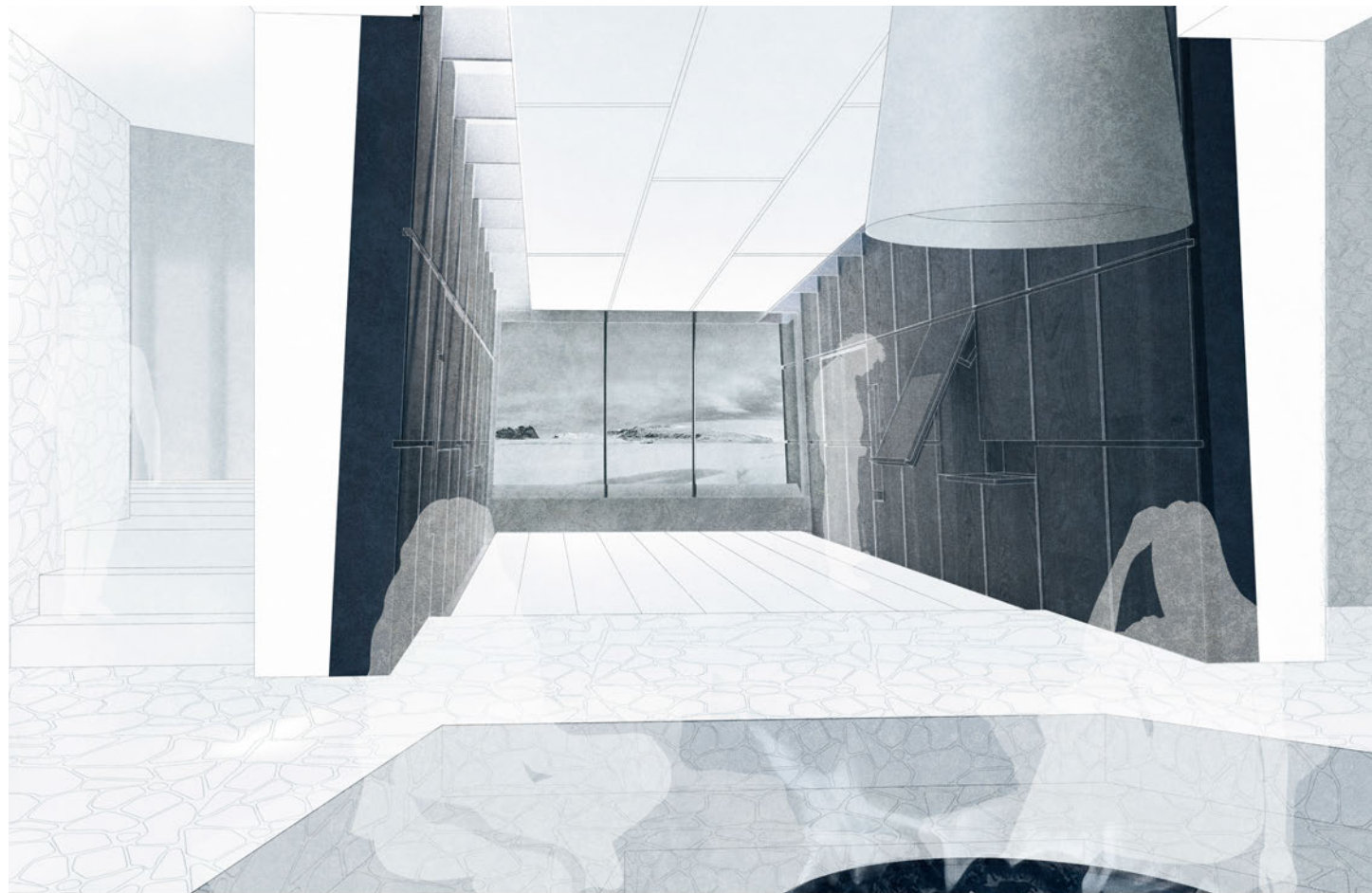
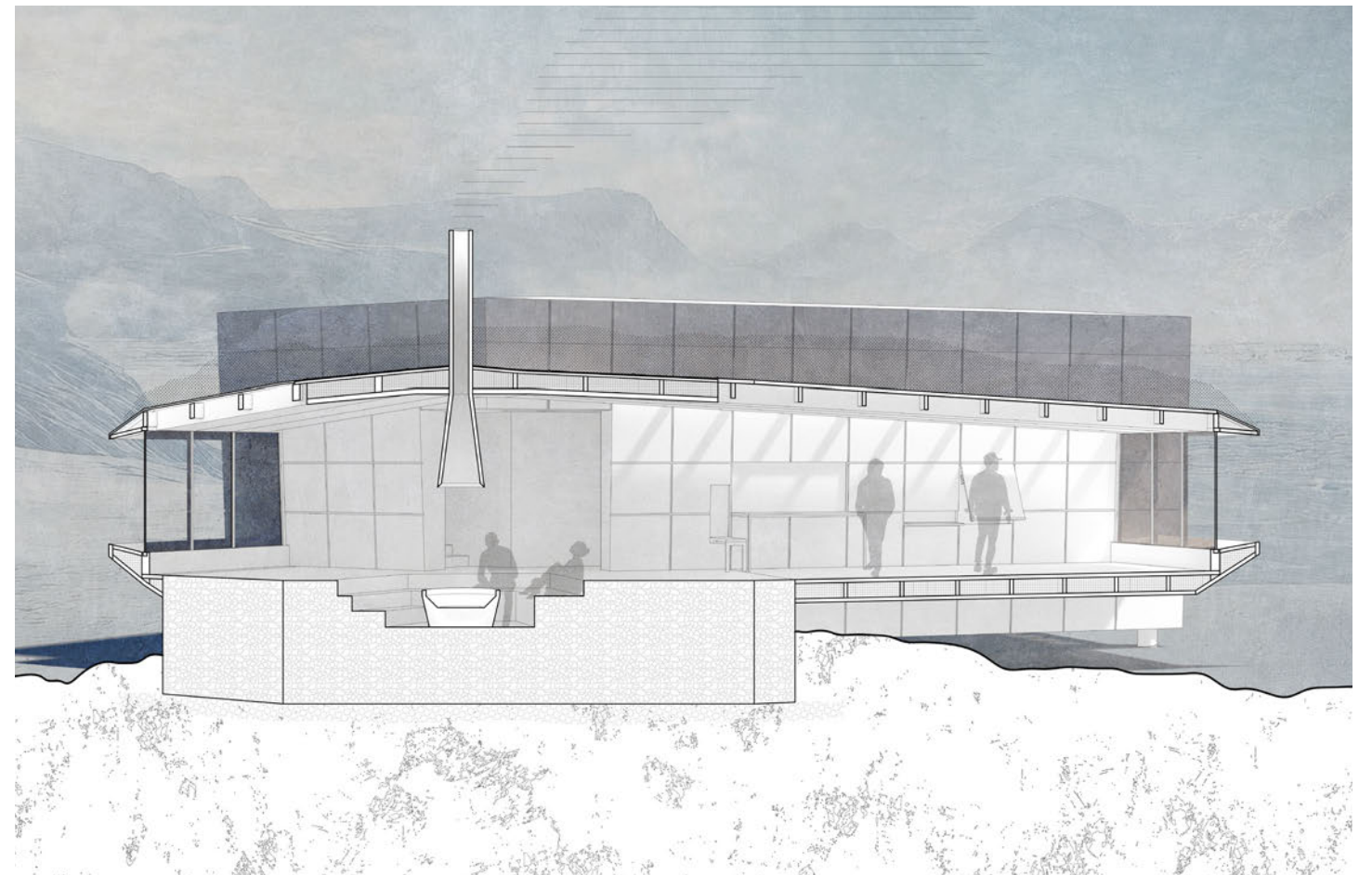


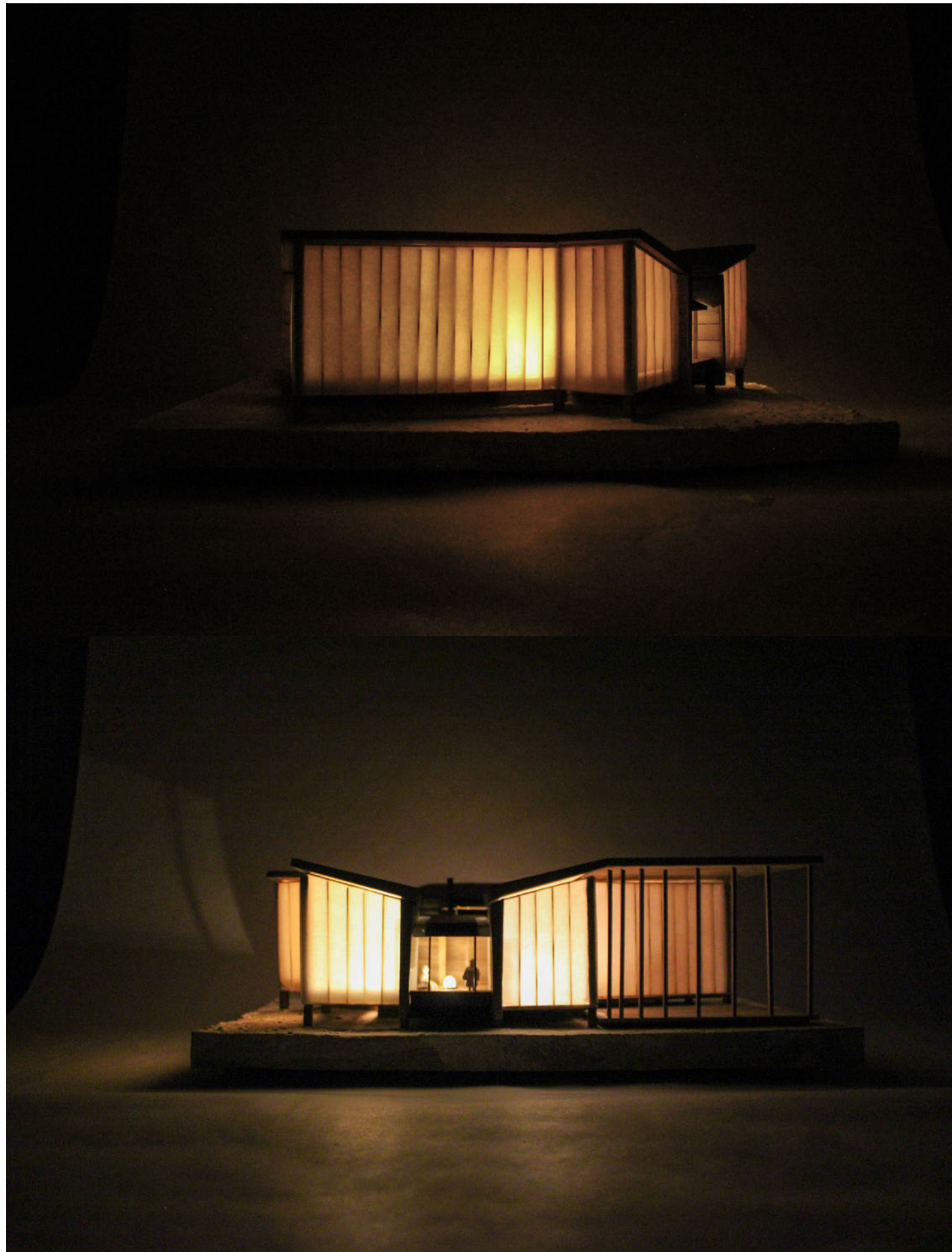
ARCHIVING INUIT MEMORYSCAPE

MELTING ARCHIVES
LESLIE GILL / KHOI NGUYEN

COLUMBIA UNIVERSITY - ADV V



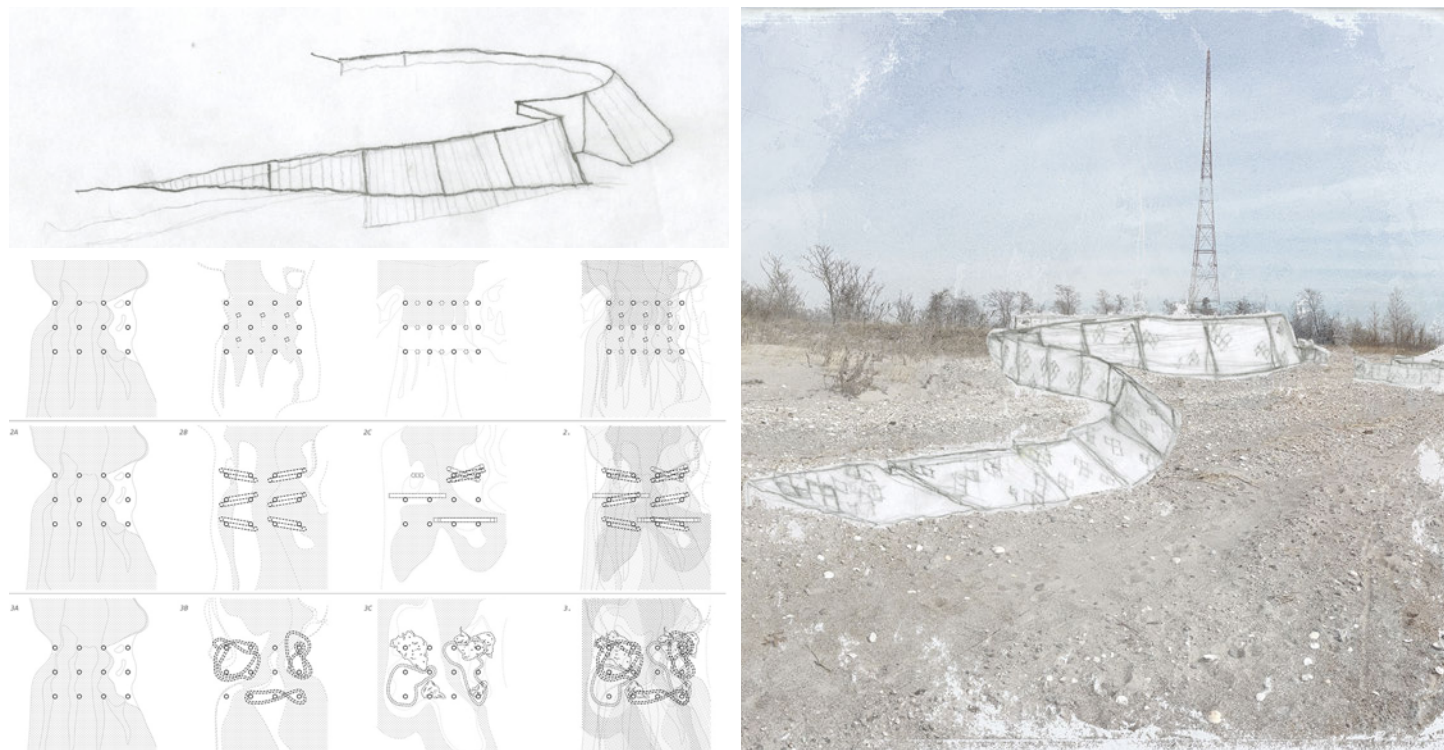




ARCHIVING INUIT MEMORYSCAPE | ARCH 4005



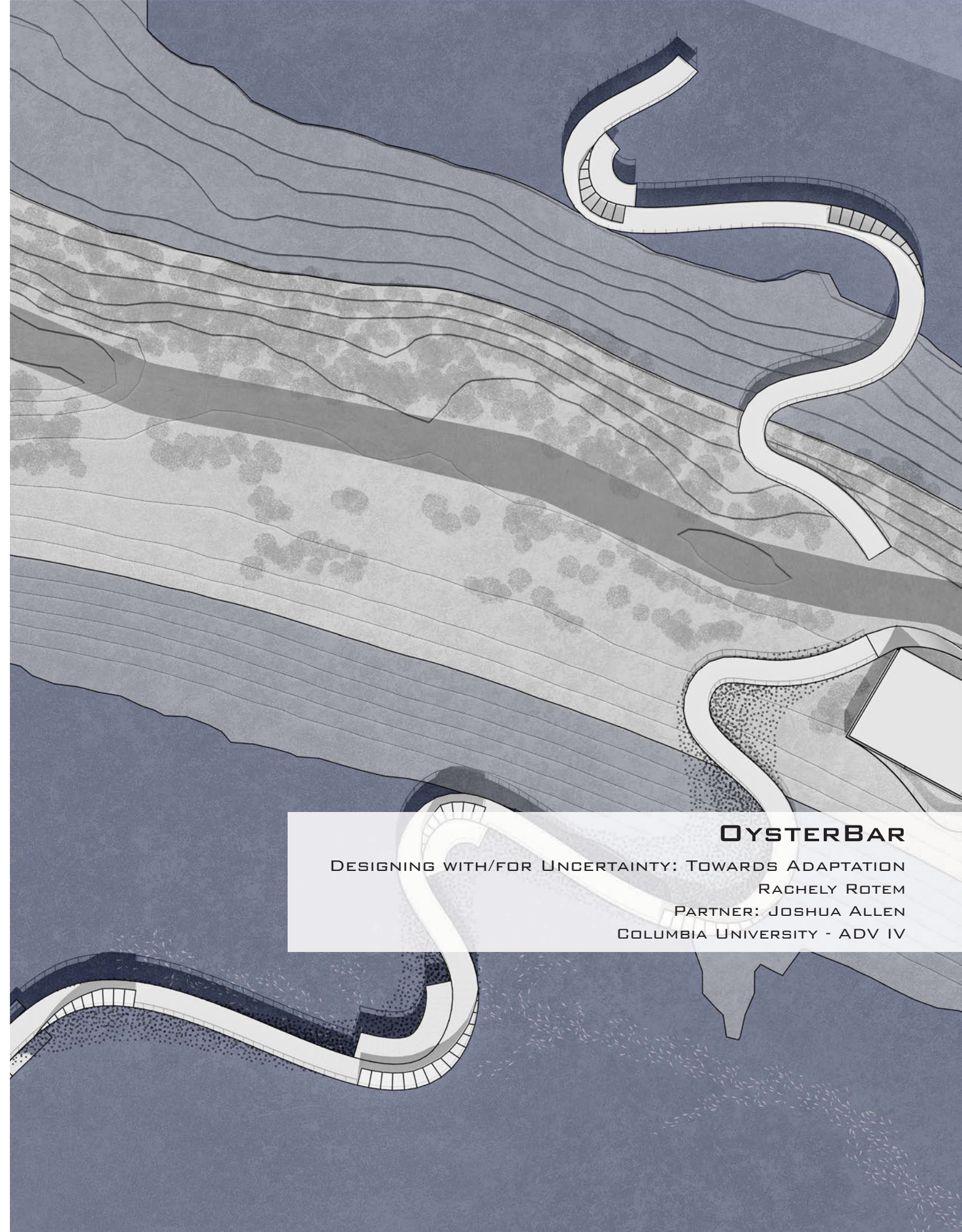
ZACHARY J. BEIM



BRIDGEPORT, CONNECTICUT

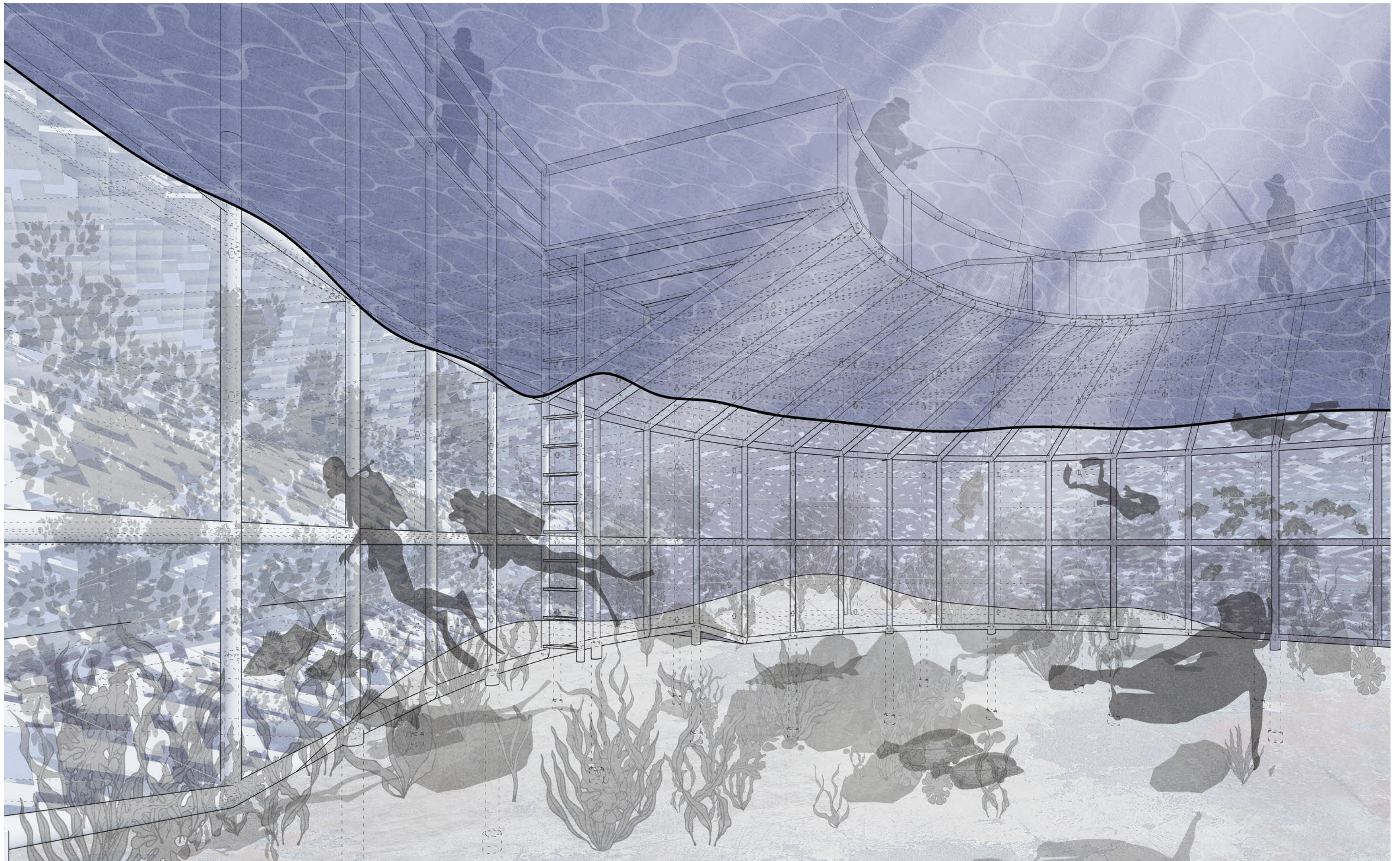
WHAT DOES MULTI-TEMPORAL AND MULTI-SPECIES ARCHITECTURE LOOK LIKE? WE'RE NOT TALKING ABOUT A ZOO TYPOLOGY OR A GREEN ROOF WITH LOCAL PLANT SPECIES; WE'RE ATTEMPTING TO DEVELOP A FORM, BUILDING MATERIAL, AND PROGRAM IN WHICH THE HUMAN ISN'T THE PRIMARY USER. WE PRESENT AN ARCHITECTURE WHICH BUILDS UPON A RIGID FRAMEWORK OF STEEL AND ADAPTED CONCRETE TO EXTEND INTO THE SEA, STABILIZE THE SHIFTING SANDS OF THE BEACH BELOW, AND PROVIDE A HABITAT FOR HUMAN AND MARINE LIFE THAT ENDURES BEYOND TYPICAL COASTAL LIFECYCLES. WE SEEK TO PRESERVE THESE NATURAL LIFECYCLES THROUGH CAREFUL SHAPING OF A MEANDERING STRUCTURE THAT RUNS LARGELY PARALLEL TO THE BEACH, WHICH WILL HELP ABSORB STORM ENERGY AND RETAIN SAND, PASSIVELY REINFORCING THE BEACH AND PROVIDING A HABITAT FOR HUMANS AND WILDLIFE ALIKE.

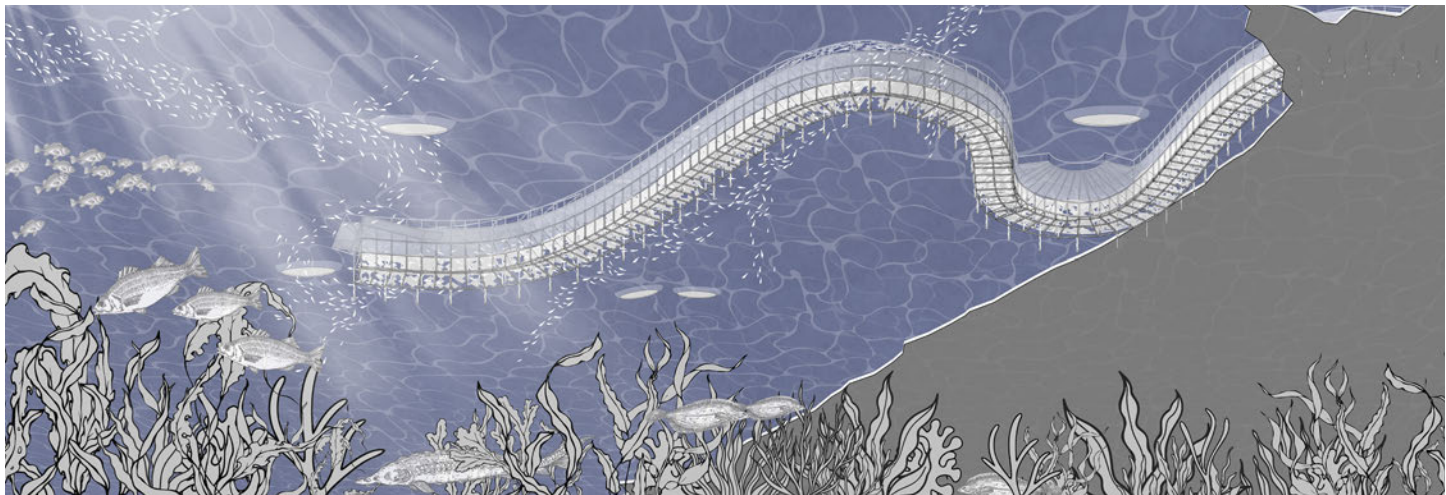
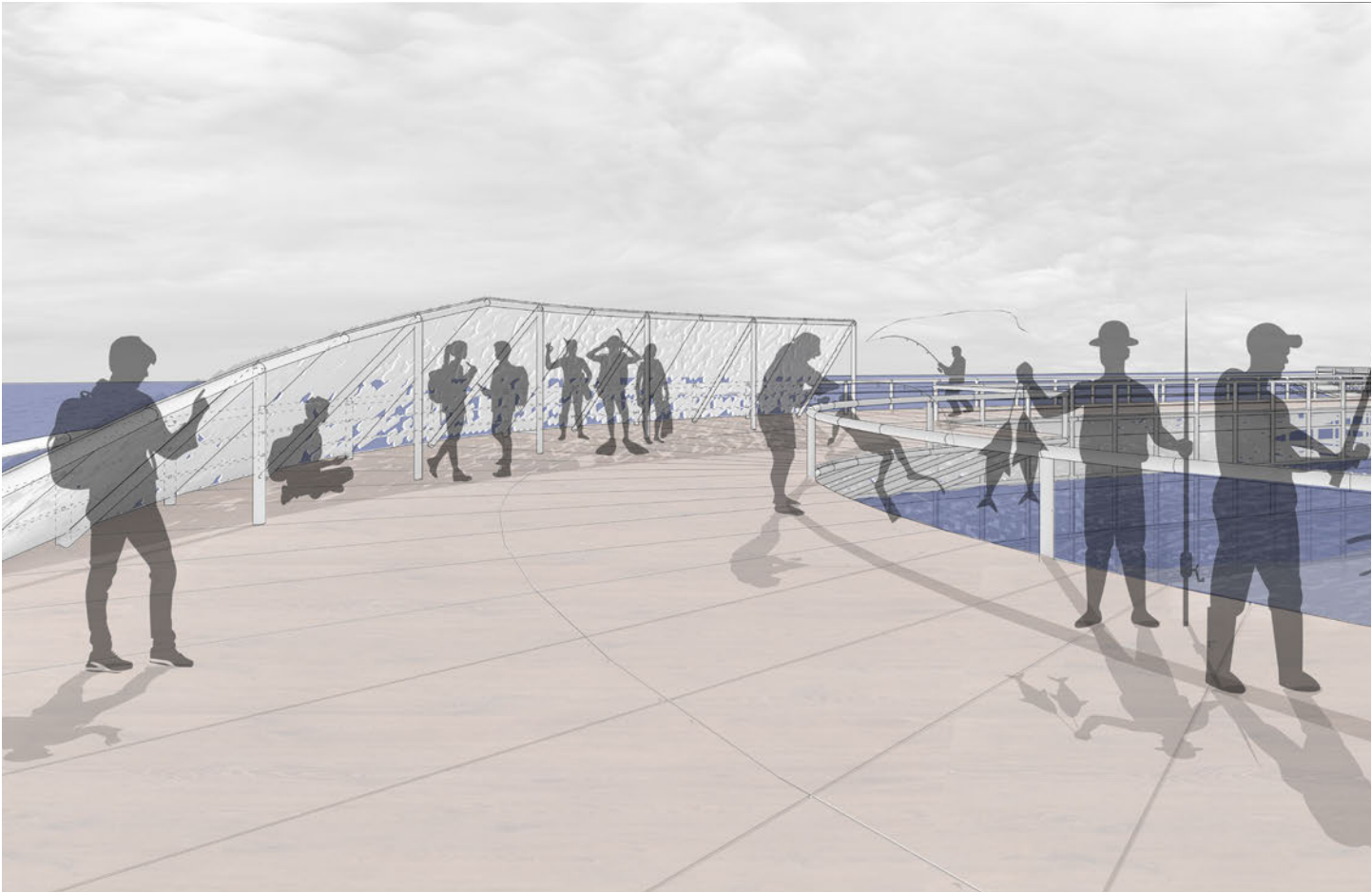
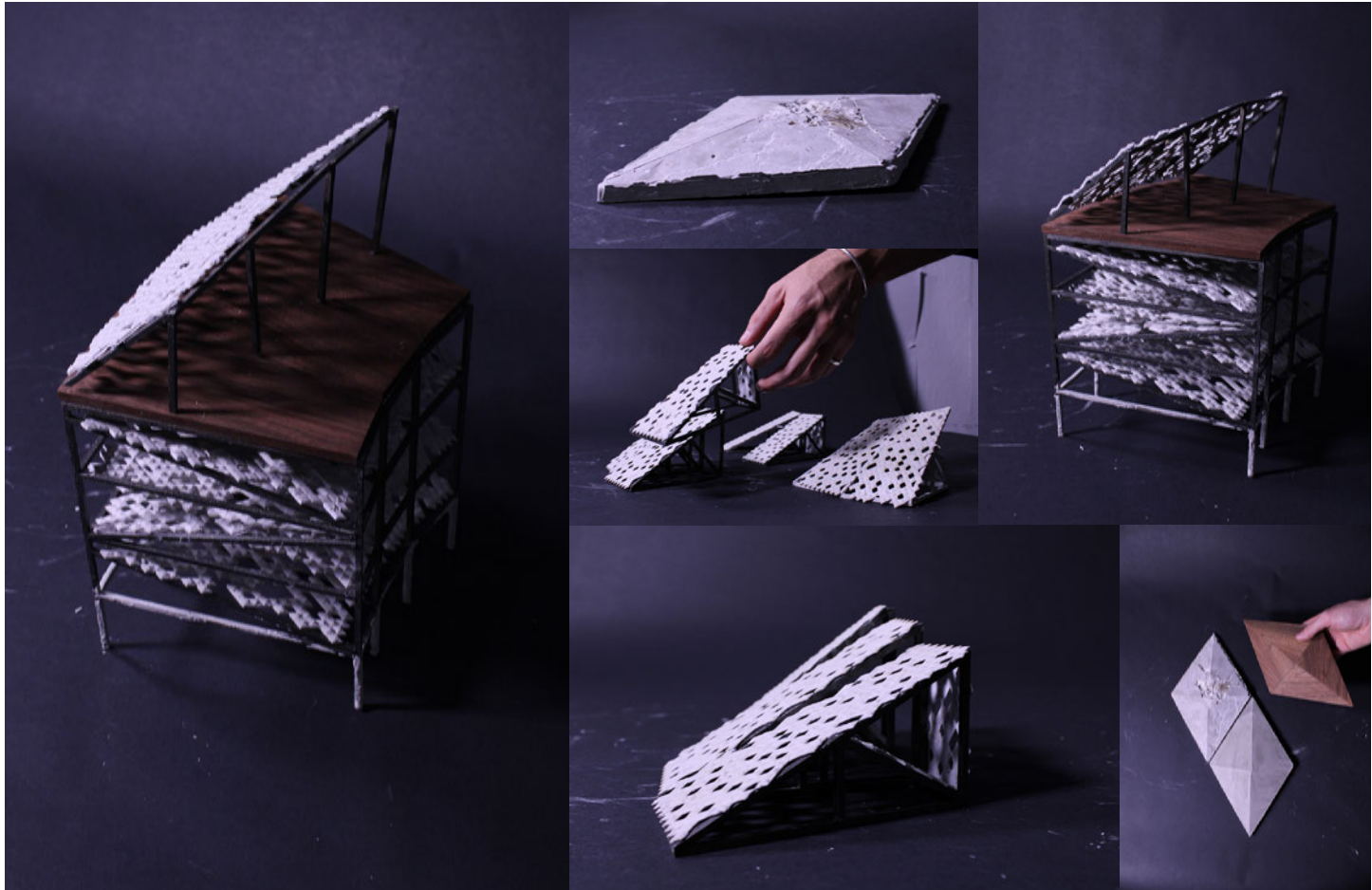
OUR ADAPTABLE FORM USES PREFABRICATED PANELS, MADE ON SITE FROM LOCAL MATERIALS AND USING LOCAL LABOR, WHICH CAN BE APPLIED BOTH TO THIS SITE AND NEW SITES IN THE FUTURE. OVER TIME THIS WILL CREATE NEW HABITAT, REINFORCE THE PENINSULA, AND OFFER RECREATION AND EDUCATION TO VISITORS. AS THE PANELS STACK, THEY FORM A FISHING AND OBSERVATION PIER THAT CLIMBS THE BEACH WITH THE RISING TIDES, DIFFUSING WAVE ENERGY AND HELPING RETAIN SAND AND SLOWING BEACH EROSION. WE INCORPORATE FACILITIES ONSITE TO AID IN OYSTER CULTIVATION AND BUILDING NEW FRAMEWORK ELEMENTS; THE FACILITY IS THEN CAPABLE OF SUSTAINING AND PROPAGATING ITSELF ALONG THE BEACH. THROUGH RESEARCH AND TESTING, WE'VE DEVELOPED A CONCEPT FOR A PANEL THAT IS CLAD IN A POROUS MATRIX OF OYSTERCRETE DIAMONDS AND WILL SERVE AS AN ARTIFICIAL OYSTER REEF BED DESIGNED TO MIMIC NATURAL OYSTER BEDS. THIS IS NOT A SINGLE COMPLETE SOLUTION, BUT A FIRST TEST CASE – A TOOL BOX THAT CAN AID CURRENT AND FUTURE EFFORTS ALIKE TO ADDRESS LOCAL, REMOTE, AND FUTURE NEEDS.

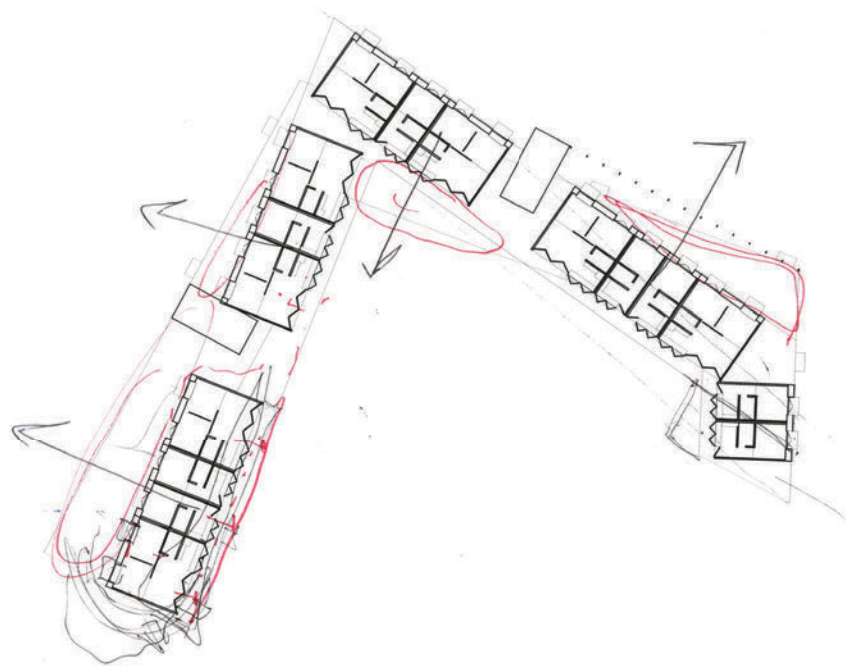
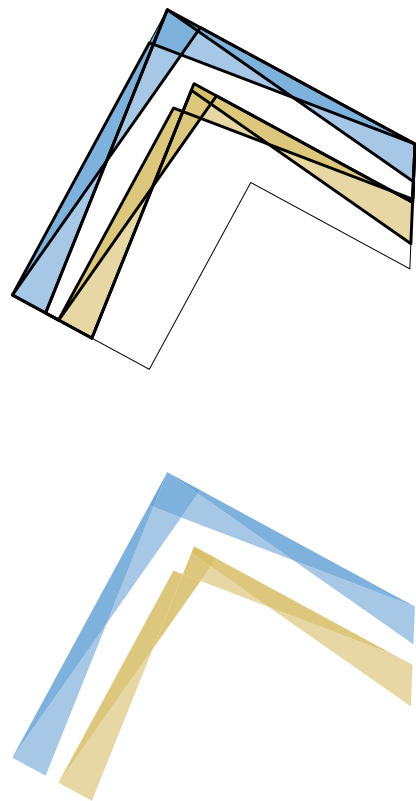


OYSTERBAR

DESIGNING WITH/FOR UNCERTAINTY: TOWARDS ADAPTATION
 RACHELY ROTEM
 PARTNER: JOSHUA ALLEN
 COLUMBIA UNIVERSITY - ADV IV







HARLEM, NEW YORK CITY

CAN WE DESIGN AN APARTMENT COMPLEX IN A WAY THAT FEELS EXPANSIVE, OPEN, AND CONNECTED? CAN WE BRING A SENSE OF SPACIOUSNESS AND COMMUNITY TO RESIDENTS, THROUGH ARCHITECTURE?

THROUGH THE STAGGERING OF VIERENDEL TRUSSES CONTAINING A SINGLE WIDE CORRIDOR OF APARTMENT UNITS, SUMMER AND WINTER GARDENS ARE CREATED ON THE NORTH AND SOUTH SIDES OF THE BUILDING. THESE GARDENS ARE COMMUNAL, SEMI-PRIVATE “STOOPS” THAT CONNECT EACH UNIT THROUGH A SPACE DEFINED BY THE COMMUNITY IT SERVES.

THE UNIT PLAN IS DESIGNED TO “INVITE” OR CREATE A SPACE THAT ENTERTAINS THE POSSIBILITY OF AN INFORMAL GATHERING THROUGH THE DESIGN OF A GRADIENT FROM PUBLIC TO PRIVATE SPACE, UTILIZING THE “UTILITY” SPACES AS A BUFFER ZONE BETWEEN THE TRULY PRIVATE BEDROOM.

ACKNOWLEDGING THE EBBS AND FLOWS OF SOCIAL ENERGY IN PEOPLE, THE DESIGN OF THE “PORCH” ALLOWS FOR USER TO CONTROL THE PUBLIC VISIBILITY OF THE FRONT. GIVING THE USER AGENCY TO CONTROL THEIR PRIVACY. THE IDEA OF EXPOSING THE SLAB WITHIN THE INSIDE OF THE UNIT DEMARCATES WHERE YOUR “HOME” STARTS RELATIVE TO THE UNIT ITSELF BECAUSE OF THE CONTRAST. HOWEVER, RELATIVE TO THE ENTIRE BUILDING, THE SLAB BECOMES A SIMILAR LANGUAGE WITH CIRCULATION SPACE OR “PUBLIC SPACE”. THIS DESIGN OF BRINGING THE PERCEIVED PUBLIC SPACE INTO THE UNIT IS ALSO A SUBTLE GESTURE TOWARDS THE RESIDENT THAT THE ENTIRE BUILDING IS APART OF THE HOME EXPERIENCE BY PULLING THE RESIDENT TO THE SEMI-OUTDOOR “STOOP”.

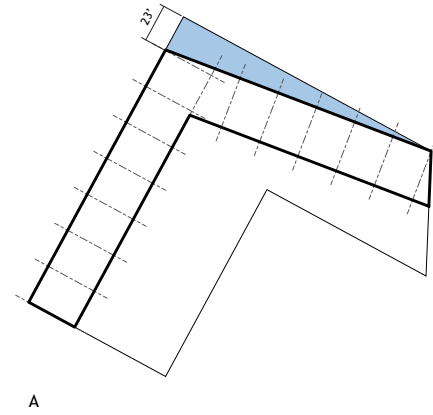
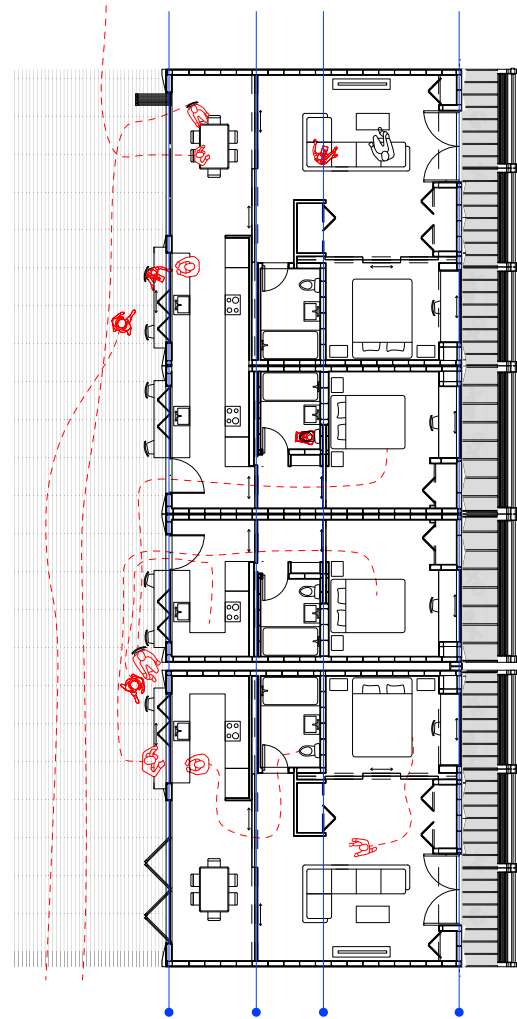
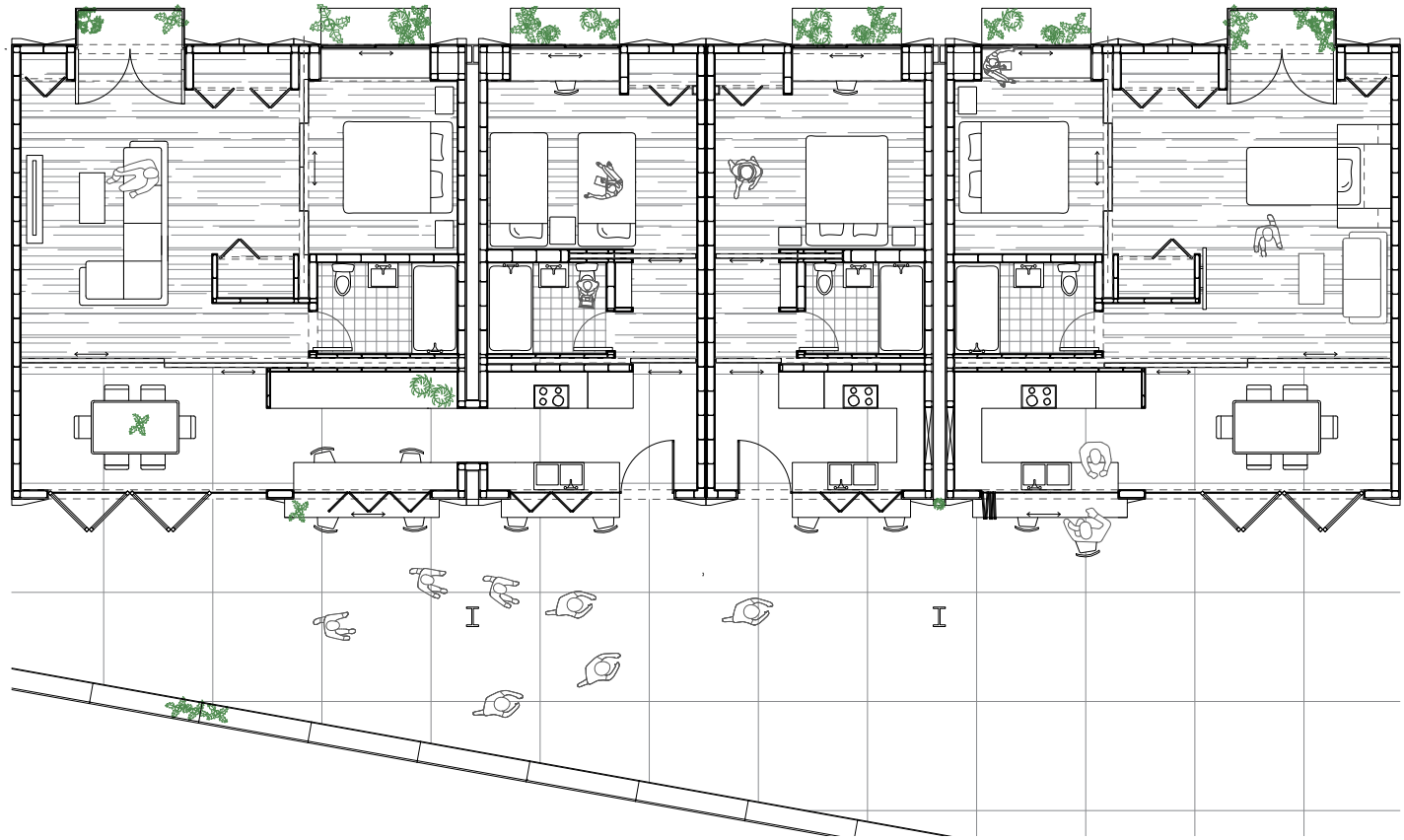


STOOPSCAPES

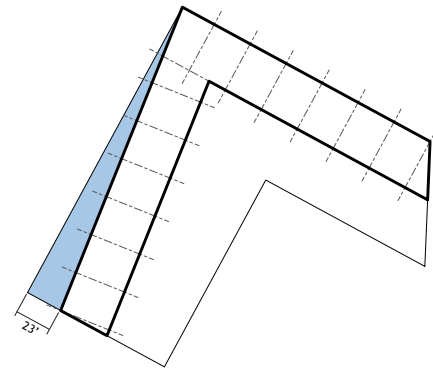
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ERIC GOETZ

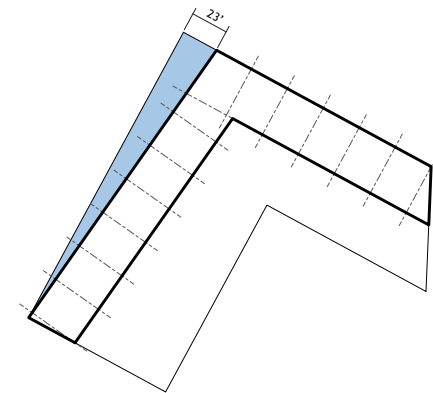
PARTNER: KENTARO KOMAZAWA
COLUMBIA UNIVERSITY - CORE III



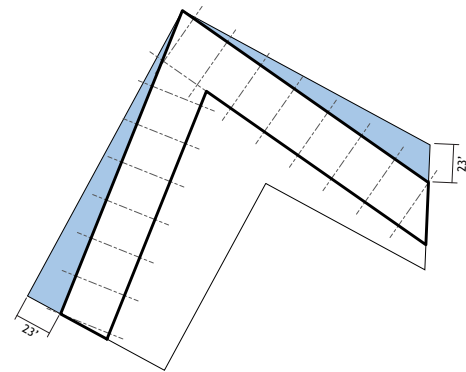
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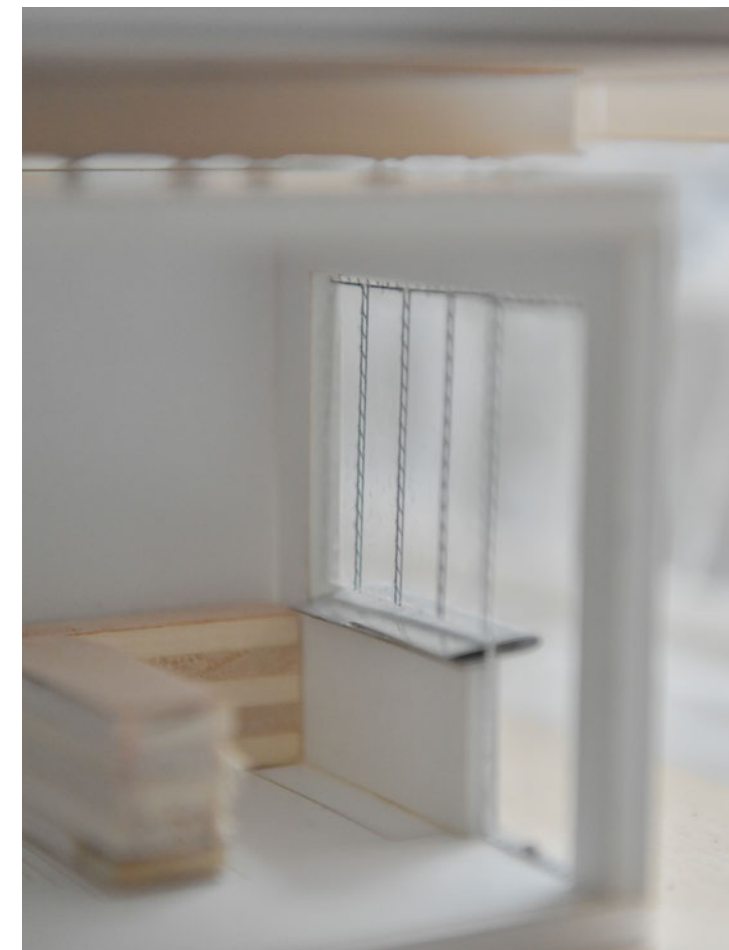
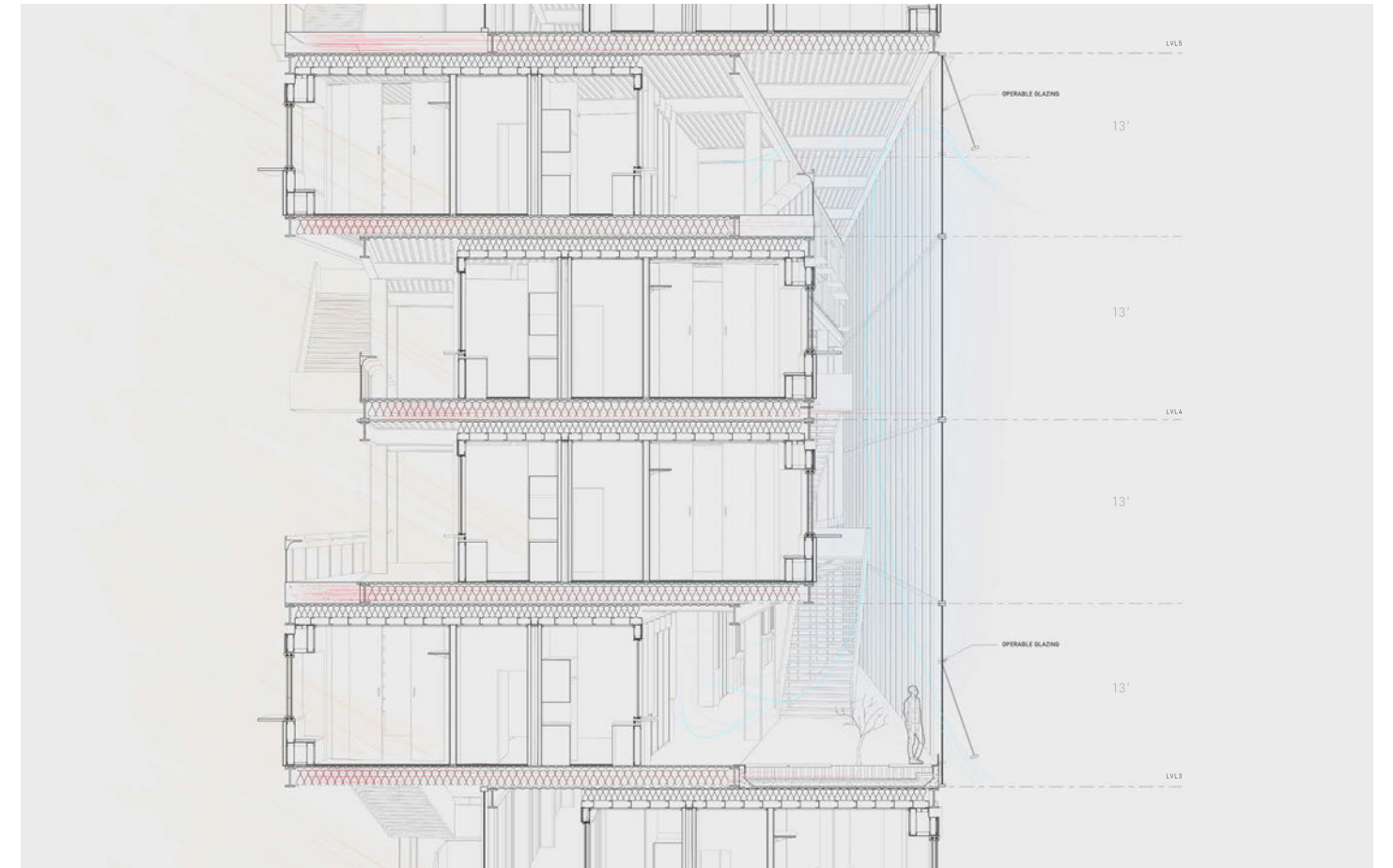


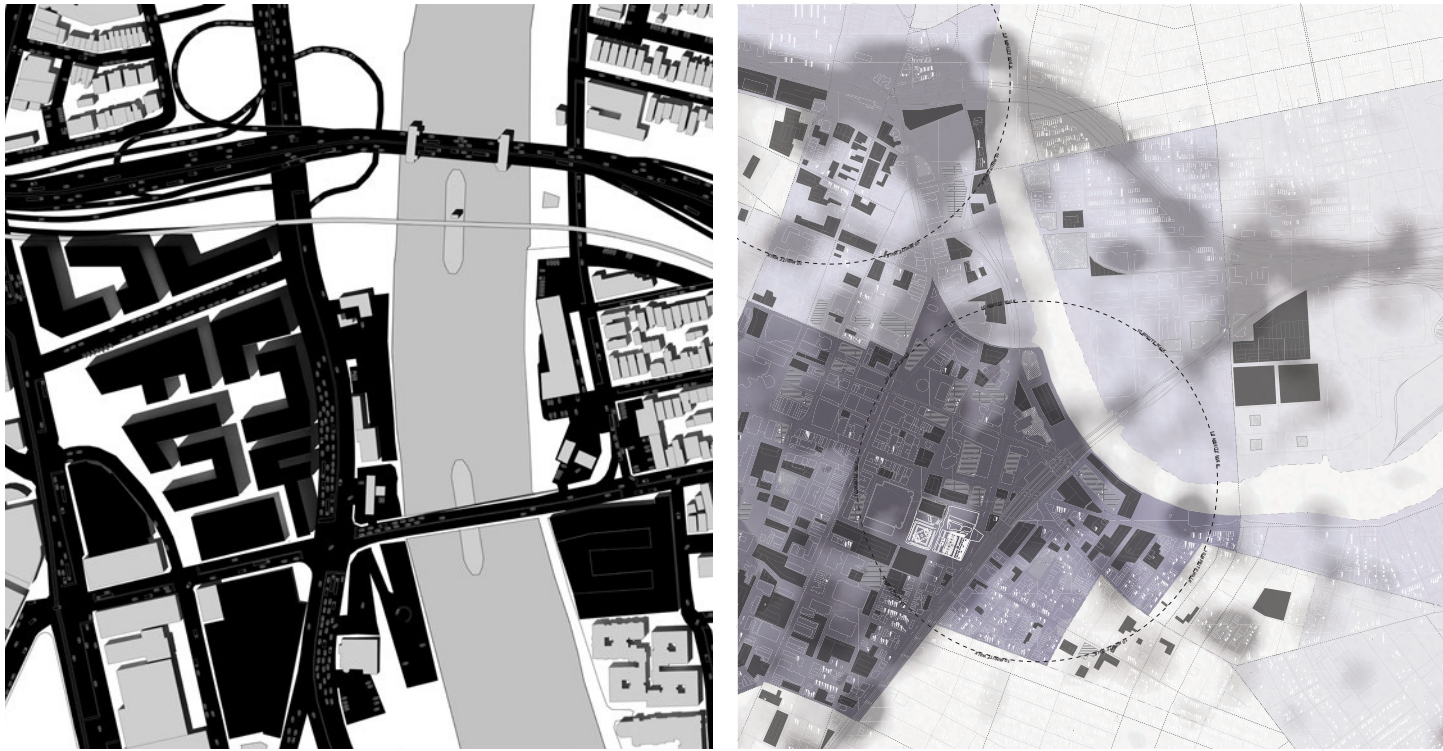
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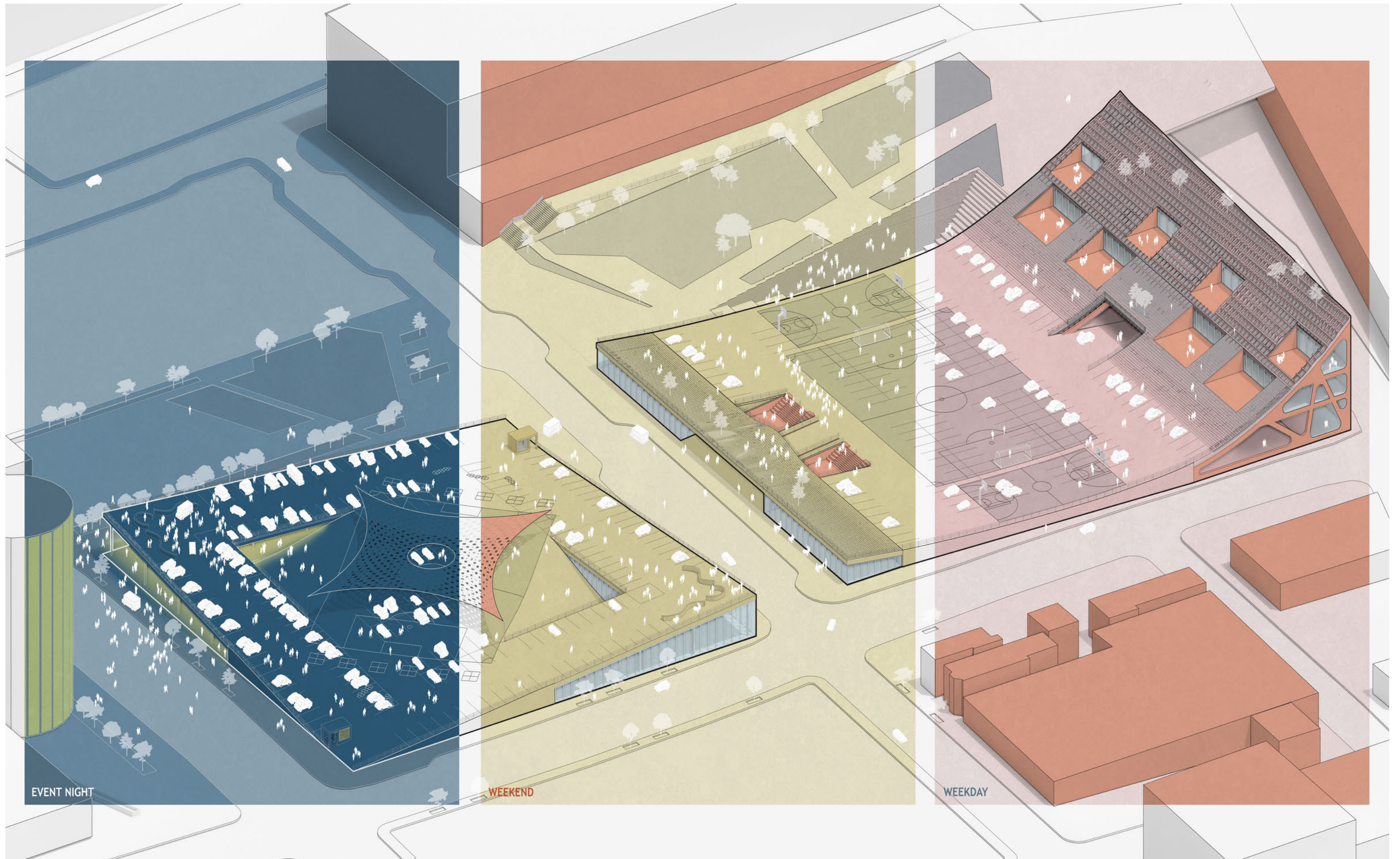
NEWARK, NEW JERSEY

WHILE ROUGHLY HALF OF THE RESIDENTS OF NEWARK UTILIZE PUBLIC TRANSPORTATION AS THEIR PRIMARY MEANS OF TRAVEL AND DO NOT OWN A VEHICLE THEMSELVES, THE CONSTANT INFUX OF COMMUTERS AND THE QUESTIONABLE PRIORITIES OF URBAN DESIGNERS HAVE RESULTED IN A FRICTION BETWEEN PEDESTRIANS, VEHICLES, AND THE INFRASTRUCTURAL SYSTEMS THAT SUPPORT THEM. PARKING DOMINATES THE GROUND LEVEL OF THE MAJORITY OF THE CITY AND CREATES A SPRAWLING NETWORK OF MOMENTS OF DAMAGE. THIS FORM OF PRIVATE LAND BANKING OFFERS NOTHING TO THE LOCAL COMMUNITY.

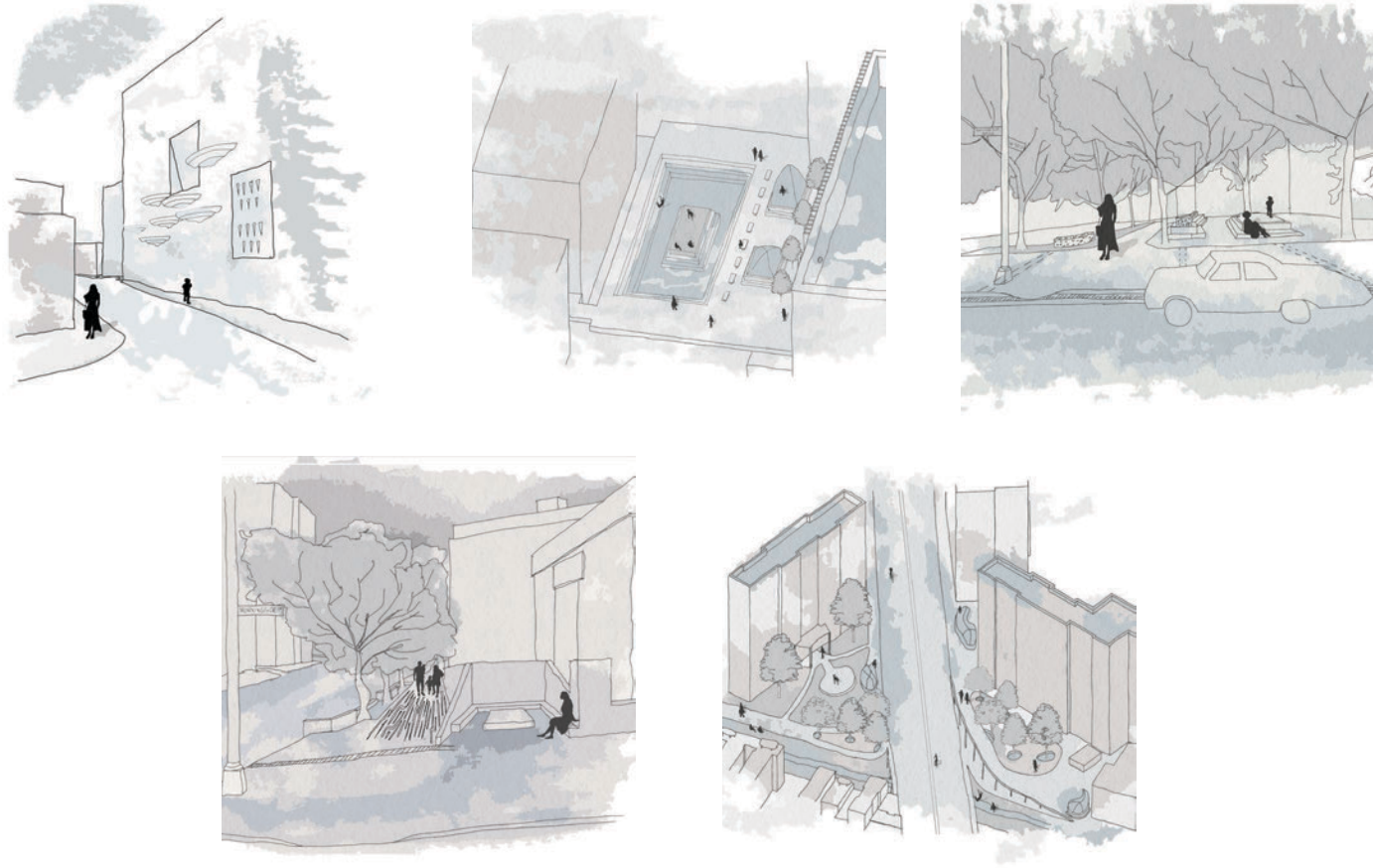
ALL PARKING IN NEWARK MUST BE UNDERSTOOD AS A TEMPORAL CONDITION, HOWEVER IN THE VICINITY OF THE PRUDENTIAL CENTER THOUSANDS OF SURFACE PARKING SPOTS SIT EMPTY UNTIL THE OCCASIONAL EVENT. DURING CONCERTS OR SPORTING EVENTS THESE LOTS ARE ENTIRELY FILLED WITH DOUBLE PARKED VEHICLES, YET RARELY WILL EVEN REACH HALF CAPACITY DURING THE WORK WEEK AND CAN HOLD LESS THAN A DOZEN VEHICLES ON WEEK-ENDS.

MY PROJECT TARGETS A WORLD WHERE PRIVATE LAND BANKING AS OBSERVED IN NEWARK TODAY HAS BEEN DISINCENTIVIZED, AND YET THE DEMAND FOR PARKING REMAINS. IT IS AN ATTEMPT AT A NEW TYPOLOGY THAT UTILIZES THE TEMPORAL NATURE OF PARKING AND MANIPULATION OF THE GROUND PLANE TO CREATE A SITE WHICH DIRECTLY INTERFACES WITH PEDESTRIANS WHILE RETAINING SURFACE PARKING AS NECESSARY AND INTRODUCING A NEW TYPE OF PLINTH THAT MEETS NEEDS OF FUTURE CONSTRUCTION WHILE PROVIDING A MEANS OF CONNECTION TO THE COMMUNITY.







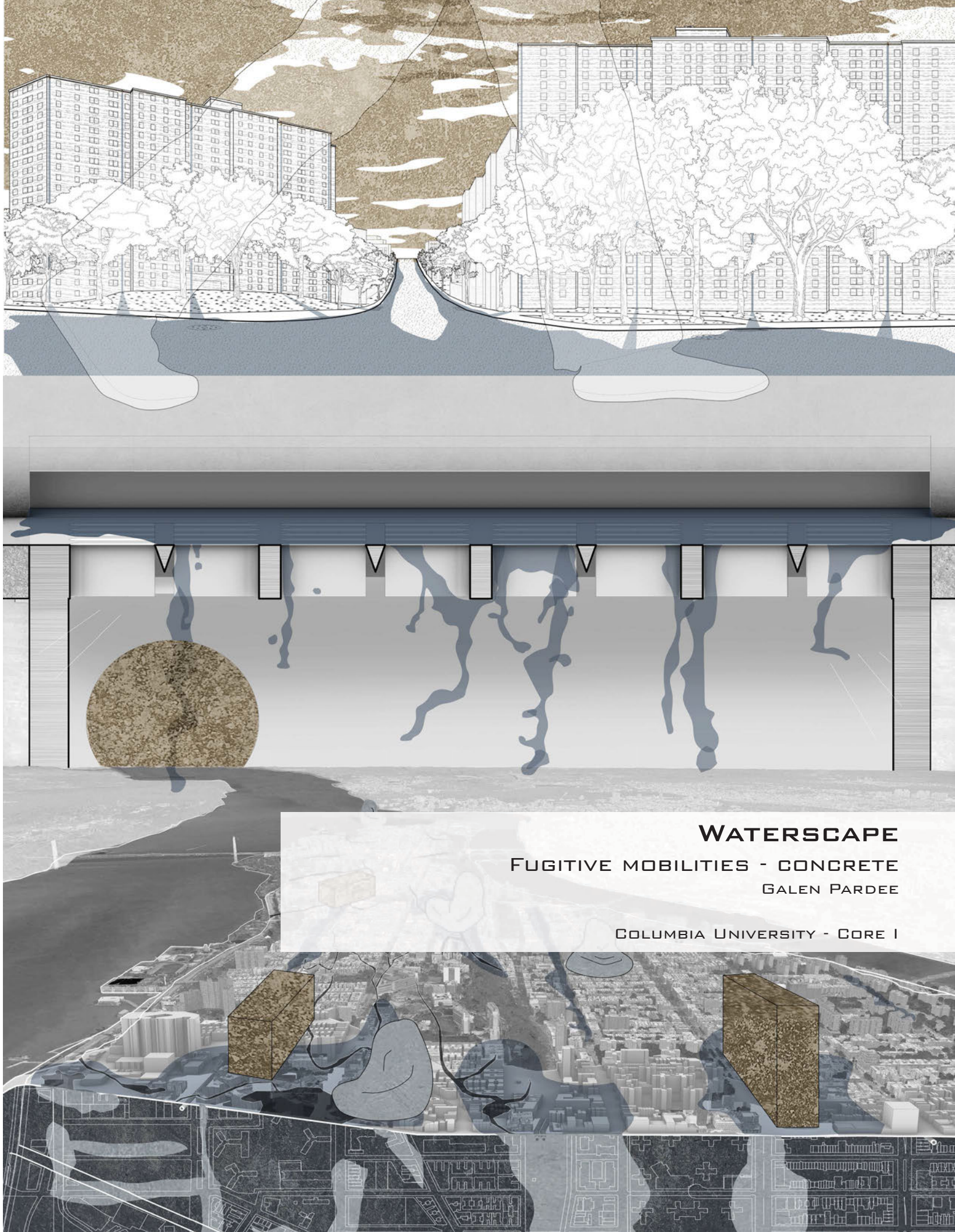


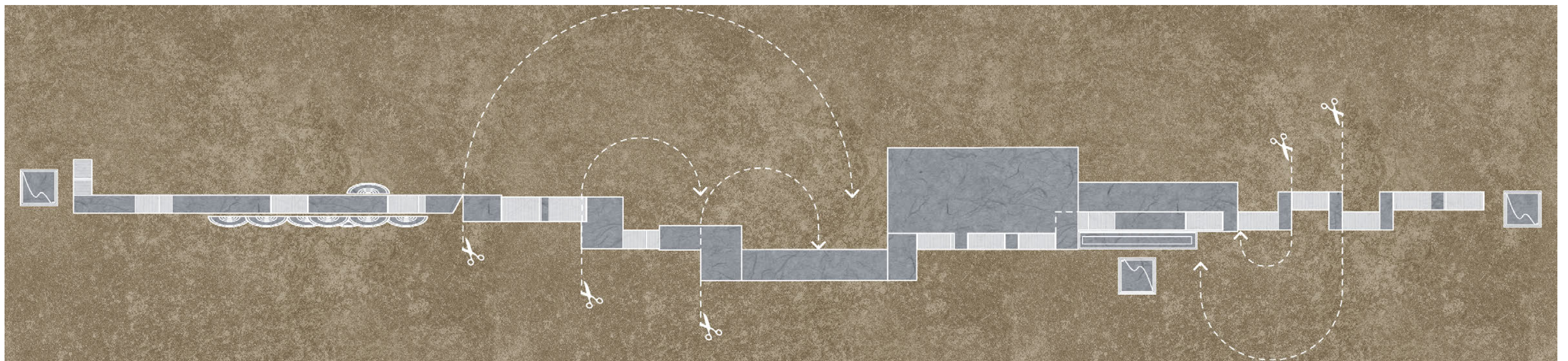
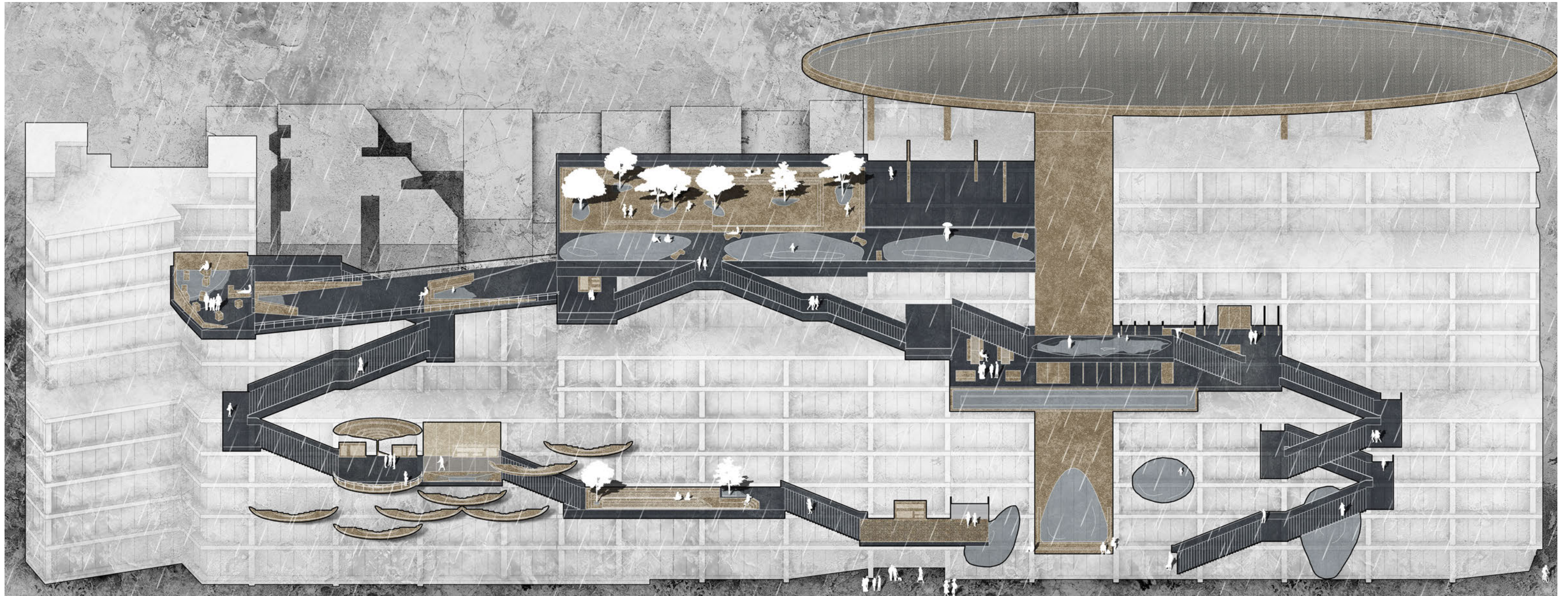
HARLEM, NEW YORK CITY, NEW YORK

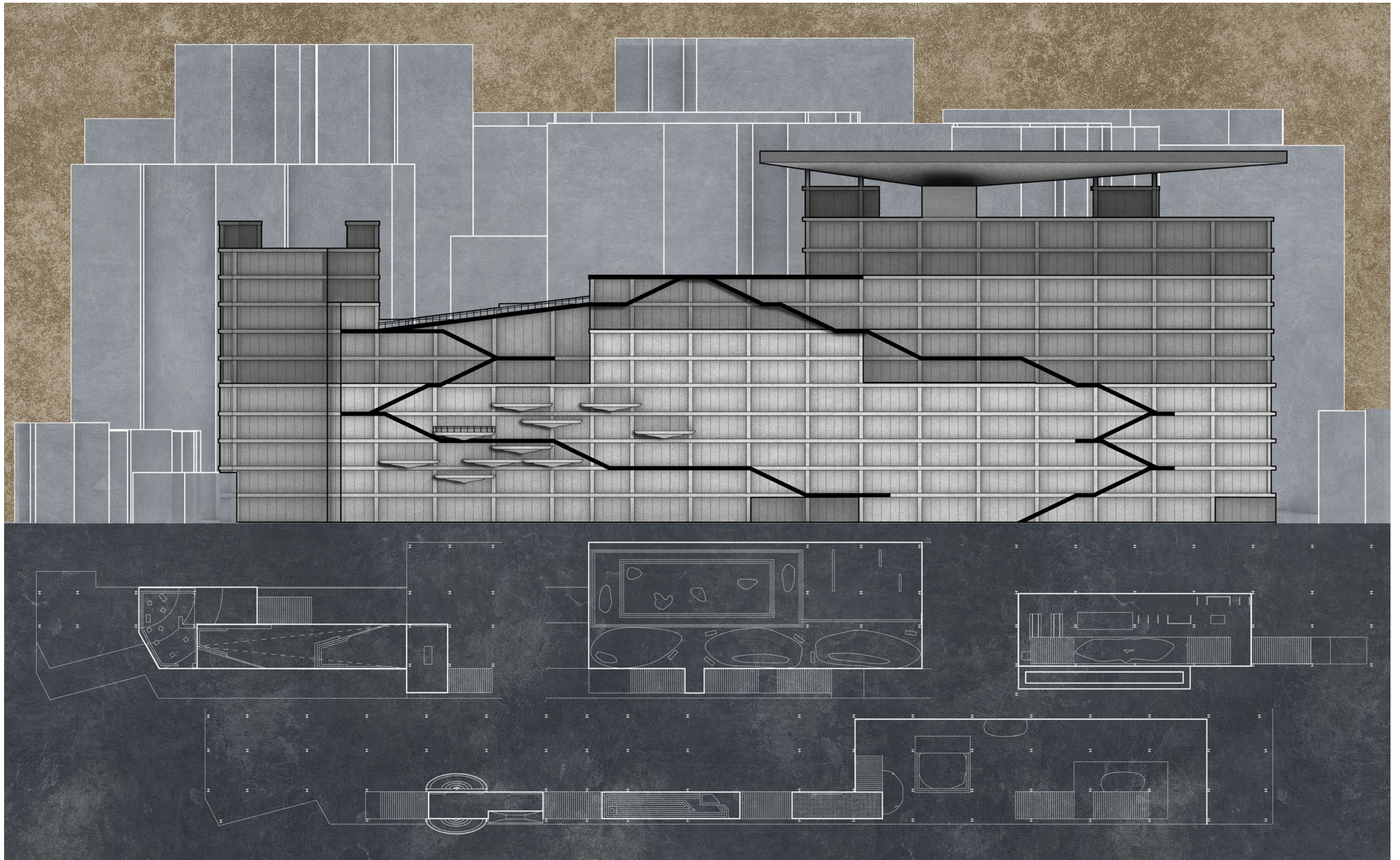
NICKNAMED THE CONCRETE JUNGLE, NEW YORK CITY IS A SPRAWLING NETWORK OF NON-POROUS SURFACES THAT REQUIRES AN EVEN MORE COMPLEX NETWORK OF DRAINAGE SYSTEMS TO ACCOUNT FOR THE SURFACE RUNOFF PRODUCED.

WHILE RISING SEA LEVELS HAVE DRAWN THE ATTENTION OF THE PUBLIC IN RECENT YEARS, THE IMPACT OF CLIMATE CHANGE ON OTHER INFRASTRUCTURE HAS BEEN LARGELY IGNORED. AS THE CLIMATE CONTINUES TO WARM, NEW YORK CITY IS RECEIVING 10-20% MORE ANNUAL PRECIPITATION THAN 100 YEARS AGO, AND SEVERE STORM PRECIPITATION HAS INCREASED BY 70%. THE CITY'S CENTURY OLD INFRASTRUCTURE CANNOT ACCOMMODATE THE INCREASE IN RUNOFF - CSOs DUMP RAW SEWAGE INTO THE NEAREST RIVER DURING EVERY STORM WHILE MANY PARTS OF THE CITY EXPERIENCE FLOOD DAMAGE MULTIPLE TIMES A YEAR.

WATERSCAPE IS CENTERED AROUND THE CONCEPT OF THE WATER SQUARE - PUBLIC ARCHITECTURE DESIGNED TO FLOOD DURING STORMS AND SLOW THE RELEASE OF RUNOFF INTO WATER MANAGEMENT SYSTEMS. THE PROJECT UTILIZES THE EXISTING TAYSTEE LAB, A NEW CONSTRUCTION STRUGGLING TO FIND TENANTS, AS A PLATFORM FOR EDUCATION REGARDING NEW YORK CITY'S RUNOFF PROBLEMS. THE FRONT BAY OF THE STRUCTURE HAS BEEN REWORKED INTO A PATHWAY THAT SHOWCASES VARIOUS SYSTEMS OF TEMPORARY WATER RETENTION IN A TRADE SHOW FORMAT. THE DESIGN OF THE PATH ALLOWS FOR EACH OF THE INSTALLATIONS TO FUNCTION AS THEY WOULD IN ACTUAL APPLICATION WHILE VIEWERS INTERACT WITH THEM, THUS DEMONSTRATING HOW THESE STRATEGIES COULD BE USED TO BENEFIT BOTH CURRENT AND FUTURE PROJECTS.









EXPLORATIONS



TOMBA BRION, TREVISO, ITALY

CARLO SCARPA’S ARCHITECTURAL LEGACY IS OFTEN SUMMARIZED THROUGH HIS METICULOUS ATTENTION TO DETAIL IN PRECISELY CALIBRATED JOINTS, STEPPED REVEALS, AND THE DIALOGUE OF CAREFULLY CHOSEN MATERIALS. HOWEVER, FOCUSING EXCLUSIVELY ON DETAIL RISKS OVERLOOKING THE DEEPER CONCEPTUAL ENGINE OF HIS WORK: DRAWING AS A PHENOMENOLOGICAL AND ATMOSPHERIC PRACTICE. SCARPA’S DRAWINGS ARE NOT NEUTRAL, TECHNICAL INTERMEDIARIES; THEY ARE ACTIVE, EXPLORATORY ACTS OF PERCEPTION IN WHICH COLOR BECOMES A PRIMARY MEDIUM FOR SENSING SPACE, LONG BEFORE IT TAKES ARCHITECTURAL FORM.

THIS PROJECT BUILDS UPON SCARPA’S ATMOSPHERIC DRAWING PRACTICE THROUGH A SERIES OF DIGITAL PAINTINGS DERIVED FROM HIS ORIGINAL COMPOSITIONS. RATHER THAN REPRODUCING HIS LINEWORK OR COLOR PALETTE, THE METHOD ISOLATES THE CHROMATIC FIELDS EMBEDDED WITHIN SCARPA’S DRAWINGS AND TRANSFORMS THEM INTO COLOR-BLOCKED COMPOSITIONS. THIS PROCESS INTENTIONALLY REMOVES LINE, GEOMETRY, AND REPRESENTATIONAL ANCHORS IN ORDER TO REVEAL THE ATMOSPHERIC LOGICS THAT HIS DRAWINGS ENCODE BUT DO NOT ALWAYS EXPLICITLY DESCRIBE. IT IS AN INTERPRETATION OF SCARPA’S DRAWINGS IN AN EFFORT TO MAKE PLAIN THE INTENT BEHIND THE DRAWINGS THAT IS OFTEN OVERLOOKED.

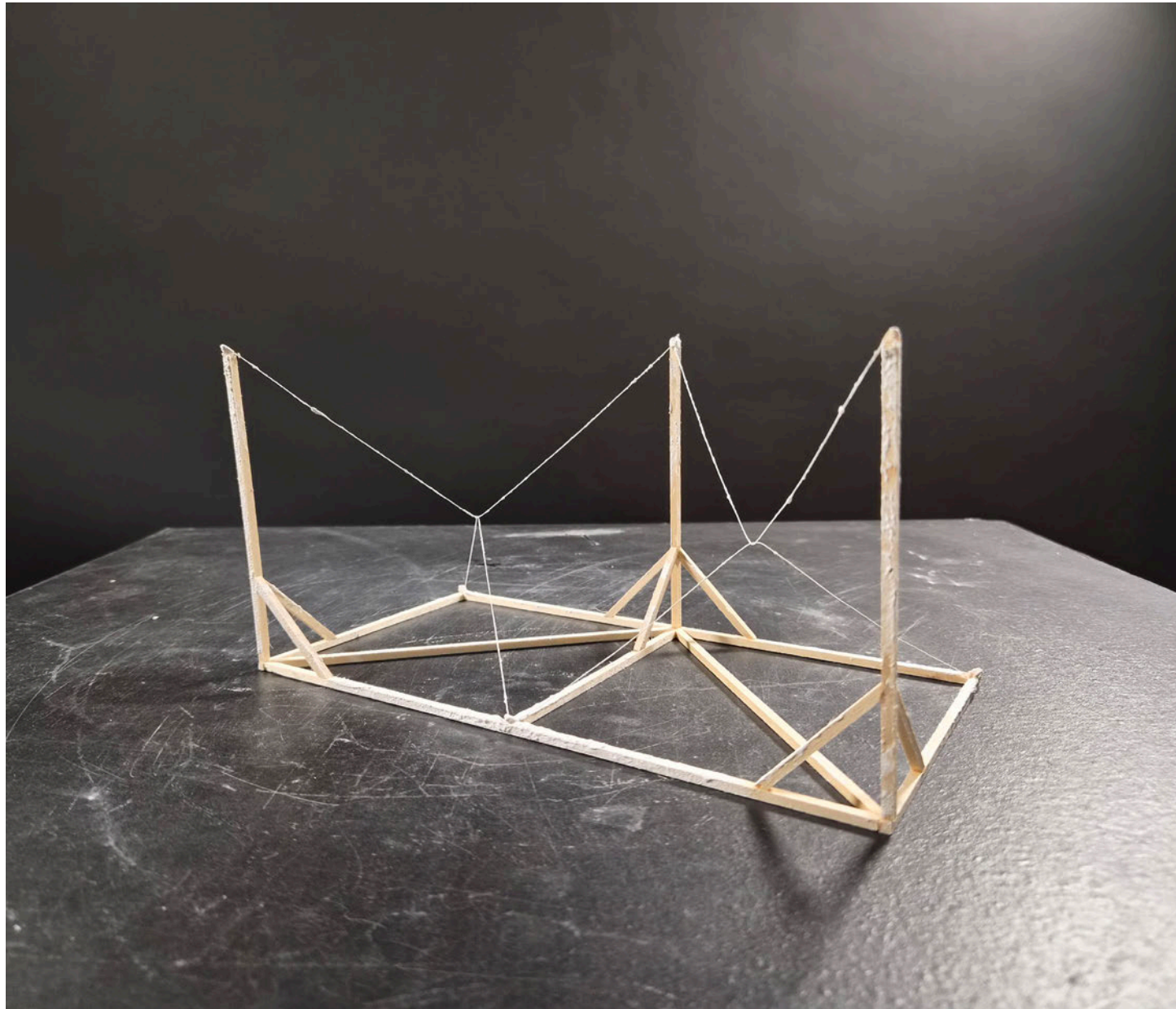


COLOR AS POETIC INTERPRETATION:
READING ATMOSPHERE IN CARLO SCARPA’S DRAWINGS

ARCHITECTURE APROPOS ART

STEVEN HOLL

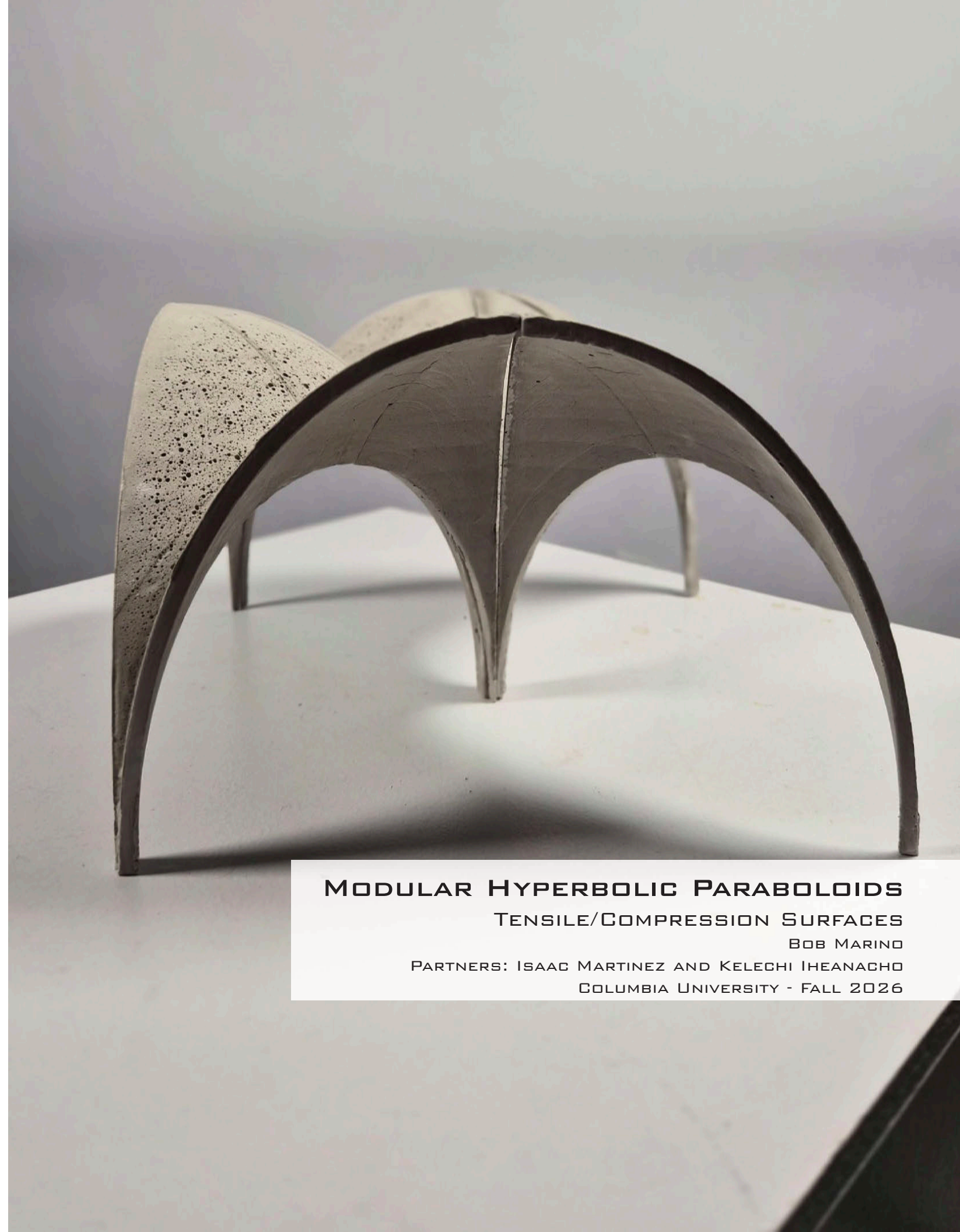
COLUMBIA UNIVERSITY - FALL 2025



LOCATION UNSPECIFIED

THIS PROJECT INVESTIGATES ARCHITECTURAL FORM THROUGH THE RELATIONSHIP BETWEEN TENSION AND COMPRESSION. THE PROCESS BEGAN WITH A LIGHTWEIGHT WOODEN FRAME AND SUSPENDED STRING NETWORK USED TO MODEL THE FORCE TRAJECTORIES OF AN ANTICLASTIC SADDLE SURFACE. PLASTER WAS APPLIED DIRECTLY ONTO THE TENSILE ASSEMBLY, ALLOWING THE GEOMETRY TO EMERGE THROUGH GRAVITY, MATERIAL BEHAVIOR, AND STRUCTURAL EQUILIBRIUM. ONCE CURED AND INVERTED, THE HANGING MEMBRANE WAS TRANSFORMED INTO A SELF-SUPPORTING COMPRESSIVE SHELL.

THE RESULTING SURFACE WAS DIGITALLY RECONSTRUCTED AND TRANSLATED INTO A FABRICATED MOLD SYSTEM PRODUCED IN THE WOODSHOP. USING THESE MOLDS, A SERIES OF CONCRETE SHELL FRAGMENTS WERE CAST AND ASSEMBLED INTO A MODULAR STRUCTURAL SYSTEM CAPABLE OF GENERATING LARGER SPATIAL CONFIGURATIONS THROUGH REPETITION AND AGGREGATION. THE PROJECT EXPLORES THE RELATIONSHIP BETWEEN ANALOG FORM-FINDING AND DIGITAL FABRICATION WHILE EXAMINING HOW MATERIAL BEHAVIOR AND STRUCTURAL LOGIC CAN GENERATE ARCHITECTURAL FORM. DEVELOPED WITHIN THE CONTEXT OF TENSION/COMPRESSION SURFACES IN ARCHITECTURE: TACTILE METHODS FOR ARCHITECTS, THE WORK DRAWS UPON PRECEDENTS ESTABLISHED BY FREI OTTO, HEINZ ISLER, AND FELIX CANDELA.



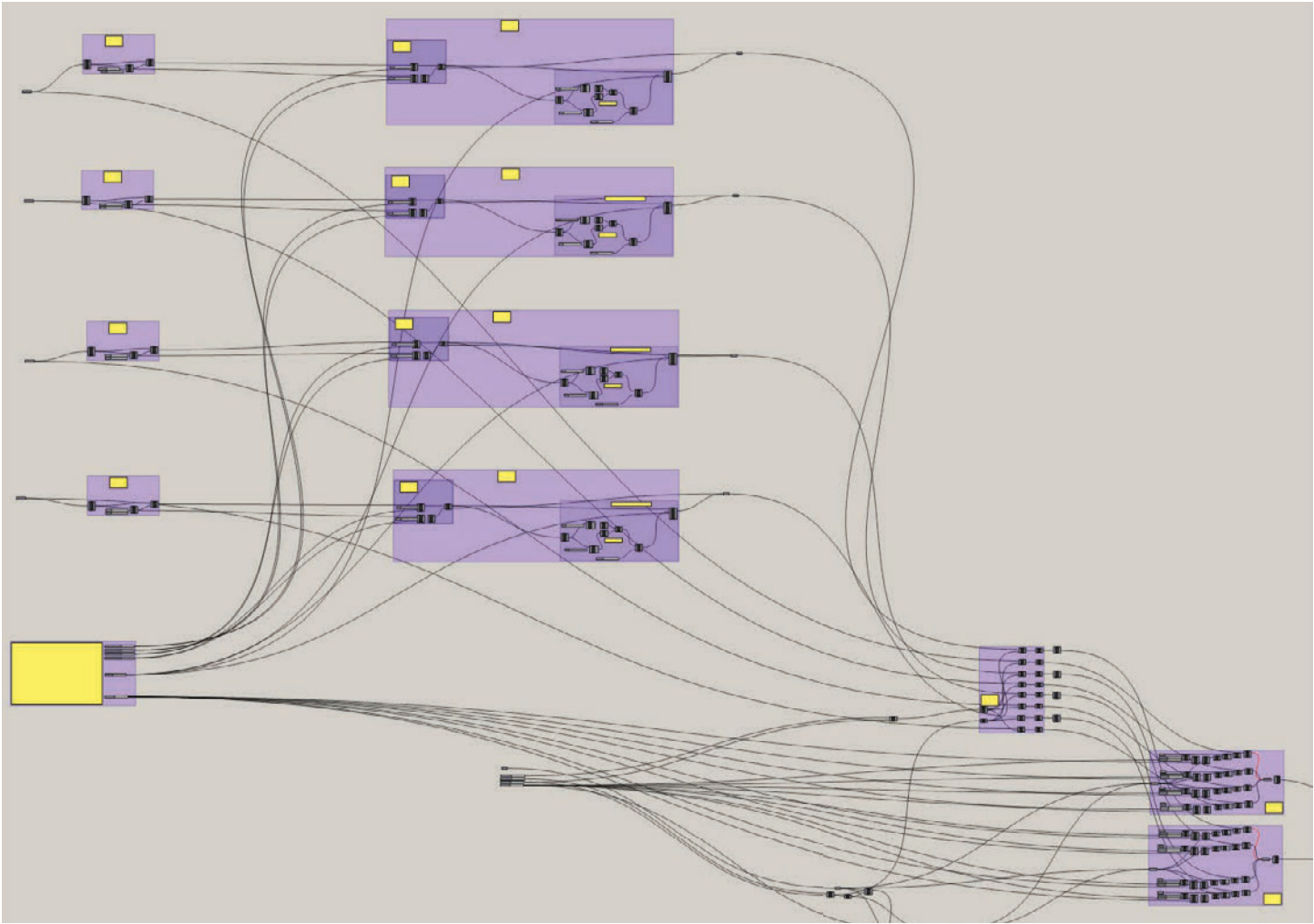
MODULAR HYPERBOLIC PARABOLOIDS

TENSILE/COMPRESSION SURFACES

BOB MARINO

PARTNERS: ISAAC MARTINEZ AND KELECHI IHEANACHO

COLUMBIA UNIVERSITY - FALL 2026



LOCATION UNSPECIFIED

OPTIMIZING SOLAR GAIN AND VISUAL PRIVACY IN FACADES THROUGH MULTI-OBJECTIVE ALGORITHMS USING RHINO, GRASSHOPPER, AND WALLACEI

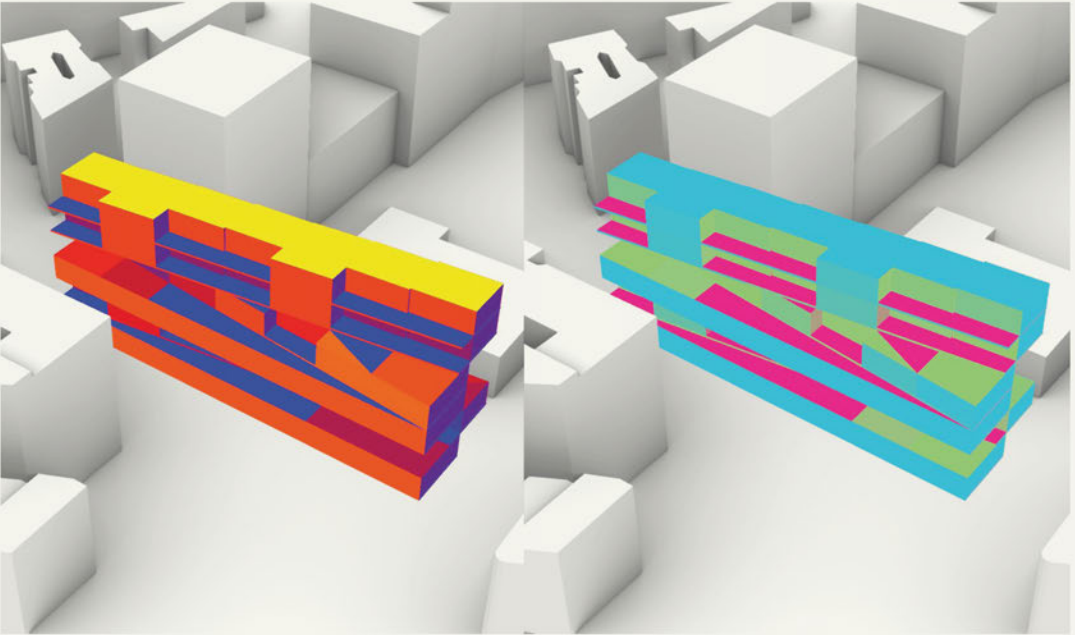
FACADES IN BUILDINGS ARE SIMULTANEOUSLY THE BUILDING’S ENVIRONMENTAL FILTER AND ITS PUBLIC FACE. PARTICULARLY IN THE HOME, IT IS THE SURFACE THAT NEGOTIATES BETWEEN ITS RESIDENTS’ INTERIOR LIVES AND THE EXTERIOR ENVIRONMENT. THE TENSION BETWEEN COST-EFFECTIVENESS, ENVIRONMENTAL RESPONSIVENESS, AND UNIT DIVERSITY OFTEN LEADS US TO RELY ON REPETITIVE HOUSING MODULES, LEAVING THE RESULT STERILE.

THIS PROJECT AIMS TO BUILD ON OUR COLLEAGUES’ PREVIOUS WORK TO IMPLEMENT MULTI-OBJECTIVE GENETIC ALGORITHM OPTIMIZATION. RATHER THAN ‘DISCOVER’, WE USE WALLACEI FOR GRASSHOPPER TO OPTIMIZE FACADE CONFIGURATIONS THAT BALANCE TWO COMPETING OBJECTIVES: MAXIMIZING SOLAR GAIN FOR UNIT FACADES AND MINIMIZING VIEWS FROM NEIGHBORING FACADE VIEWPOINTS. WE EXPLORE THIS THROUGH A PARAMETRIC HOUSING MODEL THAT INTRODUCES VARIATION VIA UNIT DEPTH, RECESSION, AND UNIT STACKING LOGICS.

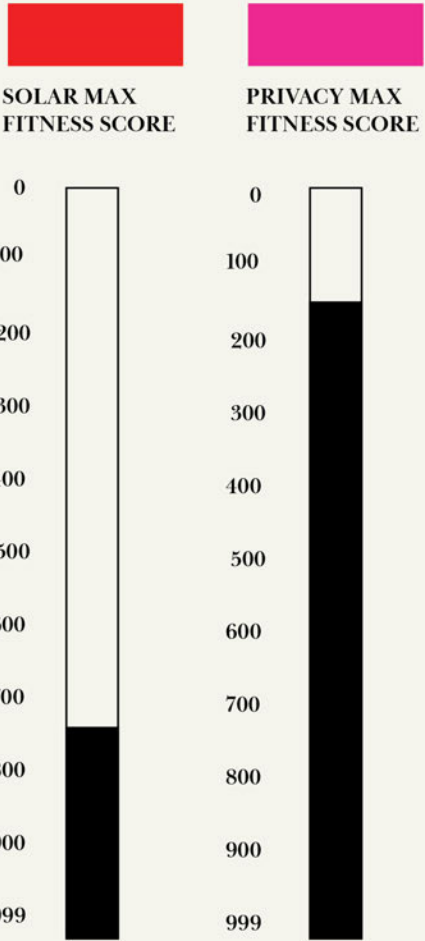
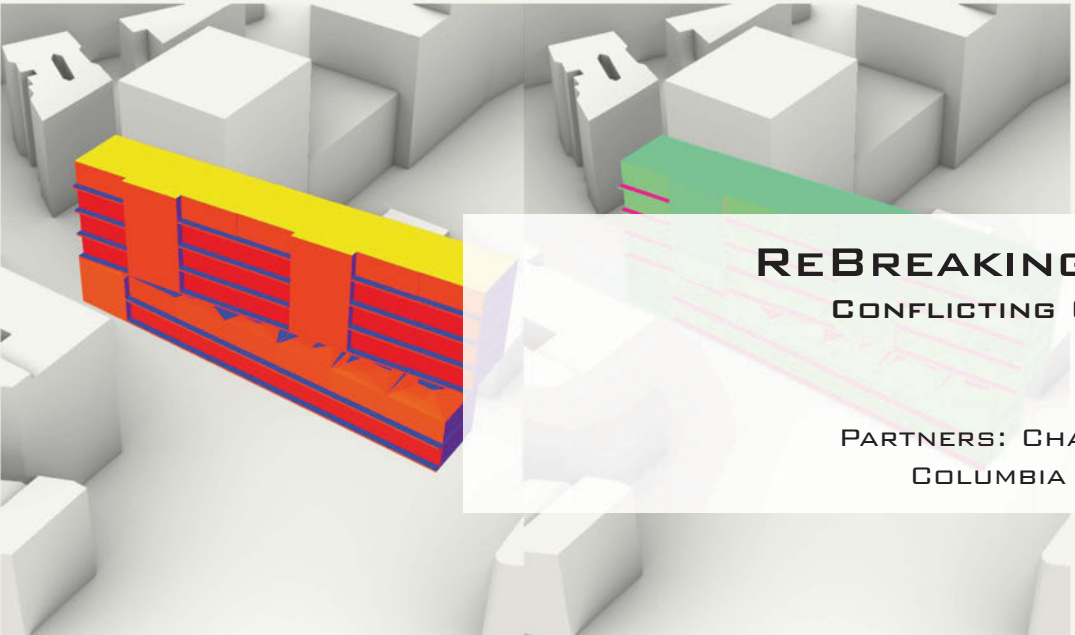
THESE PRODUCE A DESIGN SPACE WIDE ENOUGH TO SURFACE UNEXPECTED RESULTS THAT ARE SIGNIFICANT IN TERMS OF PERFORMANCE. SUCH A RANGE OF OPTIONS WOULD BE DIFFICULT TO ARRIVE AT THROUGH MANUAL ITERATION ALONE. ULTIMATELY, WE CAN FIND DIFFERENT ITERATIONS OF A GIVEN DESIGN BASED ON DIFFERENT WEIGHTS OR PREFERENCES FOR THE OBJECTIVES, THEREBY INTRODUCING DIVERSITY TO BOTH MODULARITY AND OPTIMIZATION.

THUS, OUR PROJECT SEEKS TO TREAT THE FACADE NOT AS A FIXED OUTCOME BUT AS A SEARCH SPACE. THE EVOLUTIONARY SOLVER, USING PARETO FRONTS AND PARALLEL COORDINATE PLOTS, MAKES GENERATIVE DESIGN A TOOL FOR UNDERSTANDING HOW CONFLICTING OBJECTIVES IMPACT DESIGN AND NEGOTIATE WITH EACH OTHER WHEN WE EMPHASIZE DIFFERENT WEIGHTS.

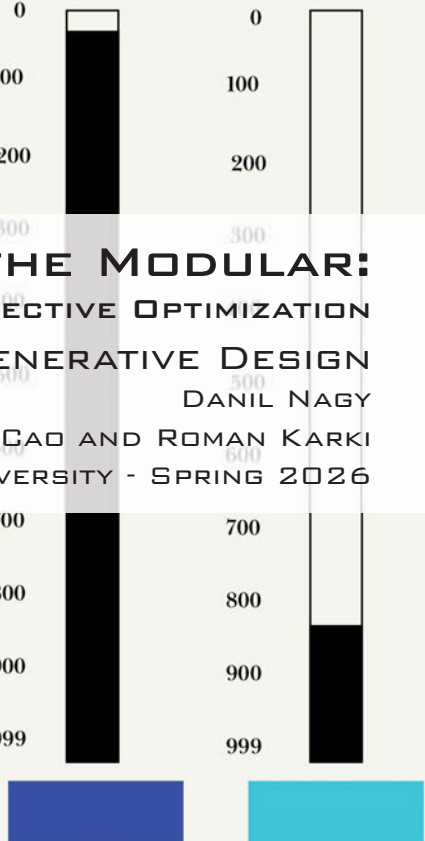
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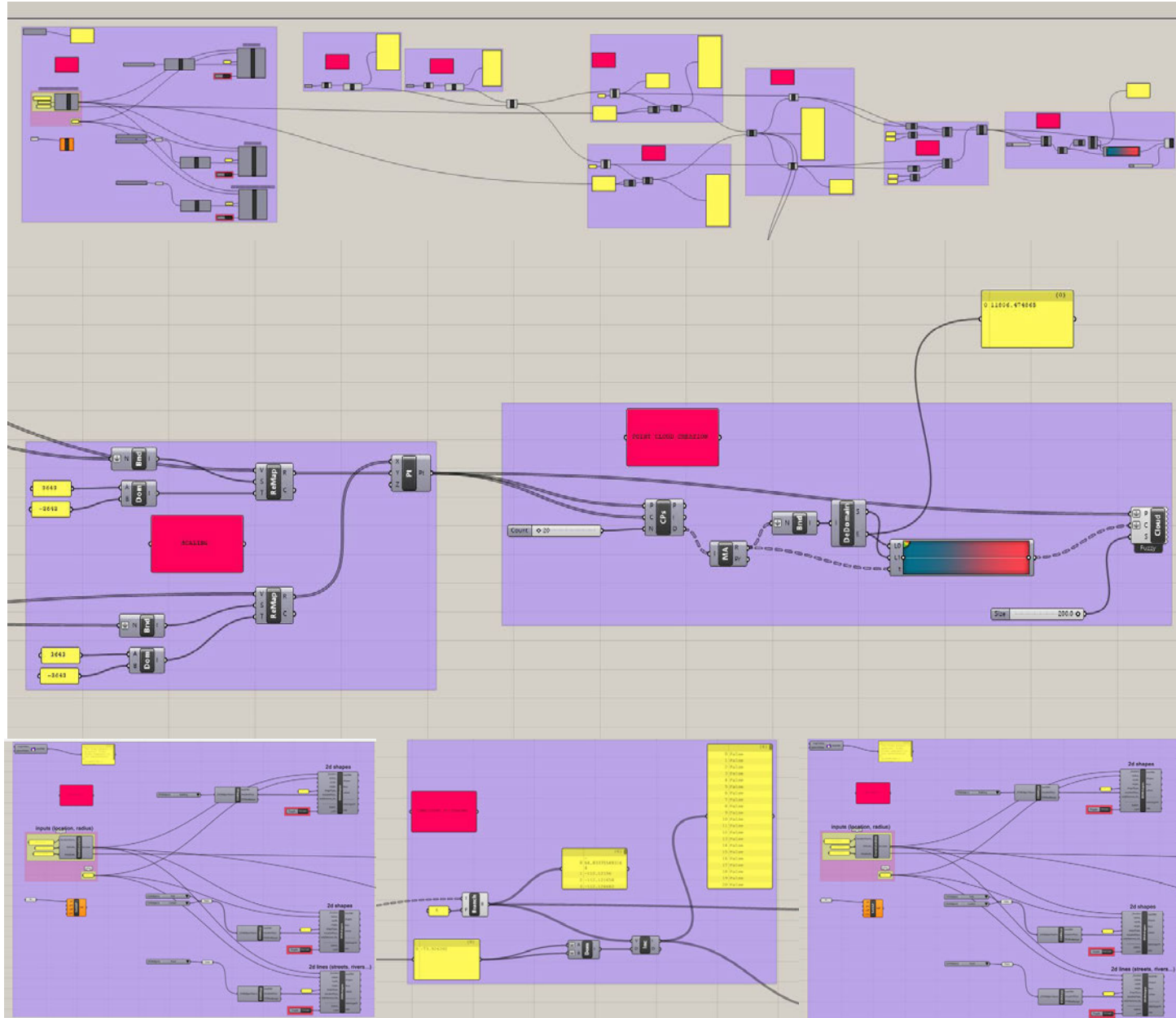


GEN :25
IND:9



REBREAKING THE MODULAR:
CONFLICTING OBJECTIVE OPTIMIZATION
GENERATIVE DESIGN
DANIL NAGY
PARTNERS: CHANG CAO AND ROMAN KARKI
COLUMBIA UNIVERSITY - SPRING 2026

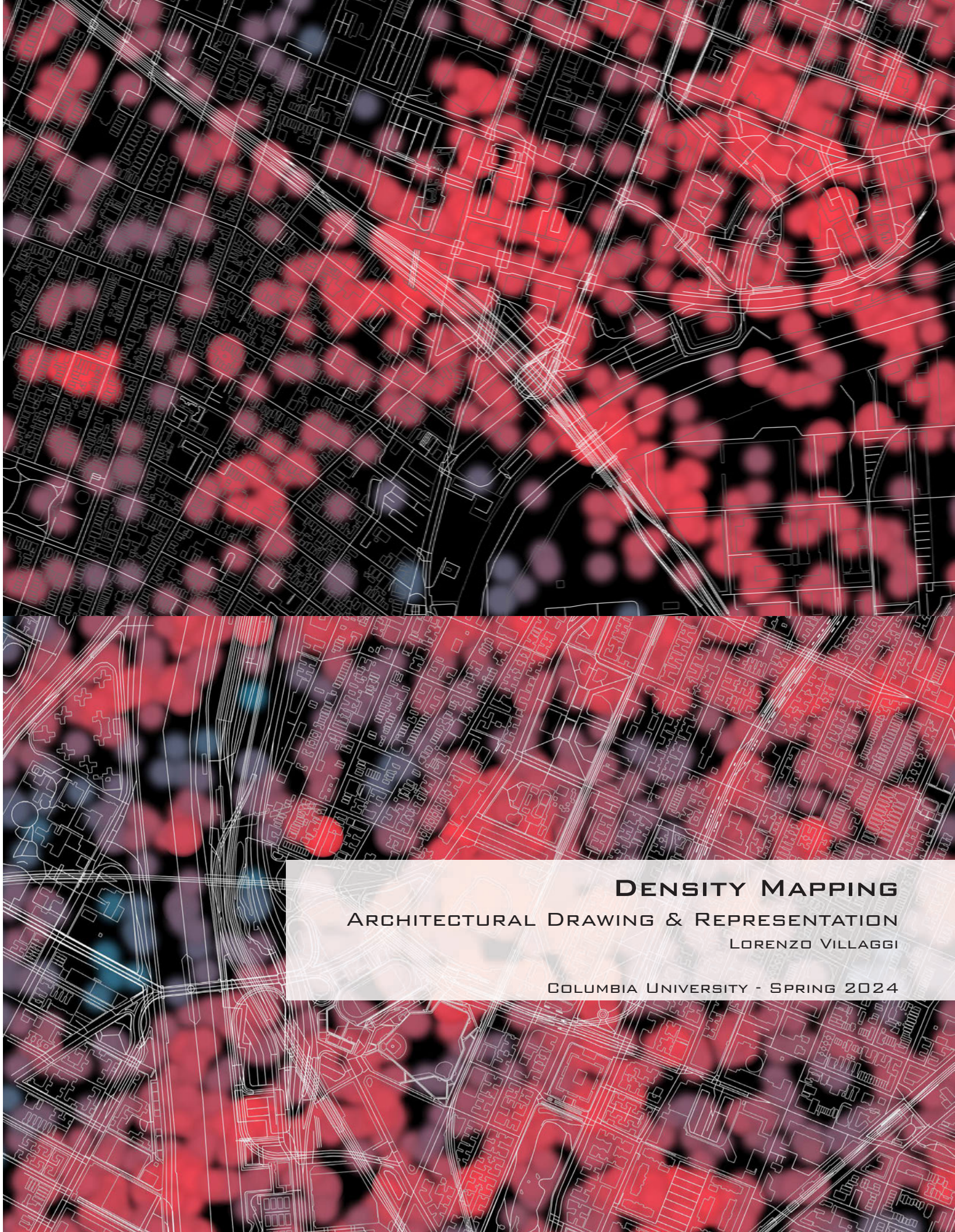




LOCATION UNSPECIFIED

UTILIZING PARAMETRIC DESIGN, BOTH ANALOGUE AND DIGITAL, STUDENTS WERE TASKED WITH DEVELOPING A DRAWING MACHINE.

THIS MOVEMENT DENSITY MAPPING MACHINE WAS CREATED UTILIZING GRASSHOPPER. THE USER INPUTS THE COORDINATES OF THE DESIRED SITE, AND THE SCRIPT PULLS MAPPING BASE LAYER INFORMATION FROM OPEN SOURCE GIS DATA WITHIN A 1.5 MILE RADIUS. THE HEAT MAP DATA POINTS ARE PULLED FROM CELLPHONE RECORDS AVAILABLE TO THE PUBLIC AND PLOTTED ON THE MAP UTILIZING THE ESTABLISHED COORDINATE SYSTEM. THE USER CAN ALSO CHOOSE TO FILTER THE HEAT MAP BY TIME OF DAY IF DESIRED AND ADJUST COLORS AS NECESSARY. GIVEN THE PROMINENCE OF CELLPHONES, THIS PROVIDES AN ACCURATE PICTURE OF POPULATION DISPERSEMENT WITHIN A GIVEN SPACE AT A LEVEL OF DETAIL THAT TYPICAL POPULATION MAPS UTILIZING CENSUS DATA ARE LACKING.



DENSITY MAPPING
ARCHITECTURAL DRAWING & REPRESENTATION
LORENZO VILLAGGI

COLUMBIA UNIVERSITY - SPRING 2024



ESSAYS / THEORY

AN EXCERPT FROM

TRUTHFUL INHABITATION:

RUSKINIAN AUTHENTICITY IN MODERNIST ARCHITECTURE

TOPOGRPAHIC MODERNSIM

LUCIA ALLAIS

COLUMBIA UNIVERSITY - SPRING 2025

I. Introduction

John Ruskin’s writings on art, architecture, and landscape emphasize a moral imperative at the core of visual and spatial representation. For Ruskin, the truthful depiction of nature is not merely an aesthetic principle but an ethical obligation or a test of morality. In the third edition of *Modern Painters*, he insists that misrepresenting natural forms is a kind of deceit, a willful distortion of divine creation. “All great art,” he writes, “is the expression of man’s delight in God’s work, not his own.”¹ The artist, or by extension the architect, must become a translator of landscape, conveying its richness, irregularity, and inwrought history with humility and care. In the fifth volume of *Modern Painters*, he expands this concept while taking aim at the artists themselves, stating that the abandonment of attentiveness to the landscape by the artist “must end in deformity as it began in falsehood”, and that “those artists who, day after day, could so falsely represent what was forever before their eyes, when it was to be one of the most important and attractive parts of their picture, can scarcely be expected to give with truth what they could see only partially and at intervals.”² Ruskin’s moral argument insists that buildings participate in the land rather than just existing upon it. When architecture ignores this relationship and begins abstracting, flattering, aestheticizing, or most often outright ignoring the terrain it occupies, it ceases to be truthful. How then, when an architect does not utilize the projective value of a site and begins a project in falsehood, can the architecture truthfully or morally contribute to the progression of the field towards the answer to the question, *What is Architecture?*

Architecture today faces a crisis of truth. Amidst accelerating environmental degradation, cultural homogenization, and speculative development, buildings of the last hundred years have increasingly become tools of erasure. They are rendered as images, optimized for circulation rather than habitation, disconnected from the earth beneath them and the benefits that can be afforded to architecture that works with its site. In such a context, the stakes of truthful representation are not only formal but ecological and political. To build without attention to site is to contribute to a global condition of placelessness. To build with real, situated, and critical attention is to resist that condition. In this light, Ruskin’s theory of authenticity becomes newly relevant. His suspicion of abstraction of natural elements and his emphasis on craft and fidelity to nature offer a counter-model to the dominant tendencies of modern, and in many cases contemporary, practice. He urges us to consider not only how buildings look, but *how they lie or tell the truth* – about their materials, their sites, and their labor.

The premise of Ruskin’s theory of authenticity, his commitment to truth in representation, and deep respect for landscape’s contribution to art and architecture offers a generative lens for evaluating how modernist architecture has engaged with the terrain it occupies. Modernism is frequently critiqued for many reasons, but here we will focus on the critique of its detachment from site – its formal abstraction, industrial materials, and universalizing aspirations are often seen as antithetical to place-based practice. Yet such readings risk flattening modernism into a monolith and ignoring its internal contradictions. While some modernist works did indeed sever ties to local context, others reimagined site as something to be reengaged on new terms. This paper traces that spectrum utilizing a framework developed from Ruskin’s understanding of truth in landscape.

To do so, it examines three key projects: the Marseille Transporter Bridge, Le Corbusier’s Notre-Dame du Haut at Ronchamp, and Luis Barragán’s Casa Pedregal. Each of these buildings establishes a different kind of relationship to the land it occupies – one infrastructural, one symbolic/aesthetic, and one material. Through these case studies, a series of questions can be asked: When does architecture’s relationship to site align with Ruskin’s notion of moral authenticity, and when does it constitute a kind of aestheticized manipulation or abstraction? What does it mean to inhabit a site truthfully, not just in

terms of tectonics or materials, but in terms of perceptual, ethical, and ecological engagement? By placing Ruskin in conversation with architectural modernism, a broader questions arises: What happens when buildings are viewed as agents within topographic systems rather than formal objects? How can Ruskin’s insistence on moral attention to the land sharpen our reading of architecture’s responsibilities today? Rather than dismissing Ruskin as premodern or sentimental, the aim here is to recover his thought as a vital critical lens that challenges us to reimagine what it means to build truthfully in the modern world.

II. Theoretical Framework: Ruskinian Ethics of Site

To understand the aforementioned theoretical framework, it is important to briefly touch upon Ruskin’s architectural writings outside of topography and landscape. At the heart of Ruskin’s architectural philosophy lies a theory of truth, one that connects aesthetics to ethics, perception to material, and making to morality. In *The Seven Lamps of Architecture*, Ruskin outlines “The Lamp of Truth” as the foundational principle upon which all good architecture rests. Truthfulness, as he defines it, is not a matter of stylistic transparency or formal simplicity, but an honest relationship between construction, materials, and representation. Buildings must neither disguise their structure nor imitate the appearances of other forms or substances. Veneers, false joints, superficial ornamentation, and imitation stone become moral violations – manifestations of vanity, deception, and detachment from the real.³ A building tells the truth when it reveals its process, honors its materials, and acknowledges its setting. Conversely, architecture that prioritizes visual coherence or symbolic abstraction over material clarity becomes both misleading and ethically suspect.⁴

This understanding of Ruskin’s general architectural approach to truth serves as a background for the aforementioned framework developed primarily from his writings on art in *Modern Painters* V, particularly in the chapter “Of the Truth of Earth”. To blend his approaches to truth in architecture and truth in landscape is to say that buildings must be attuned to topography formally, ethically, and in a manner which brings connections to the site by foregrounding both cultural implications and the projective value of a site. Architecture, for Ruskin, participates in the truth of the land. A building that bulldozes its site flat, ignores the orientation of light or the logic of geology, and fails to utilize the site to the benefit of the architecture commits a kind of violence against the earth and begins in falsehood. Conversely, a building that acknowledges slope, material availability, and regional character while putting them to use to better the architecture itself begins to inhabit ethically. This is not a call for literal mimesis – Ruskin is not asking buildings to resemble rocks, but for a mode of building that engages with the land’s processes, textures, and histories.

This framework resonates closely with Kenneth Frampton’s later articulation of *Critical Regionalism*. Writing in the 1980s, Frampton calls for an architecture that resists the homogenizing effects of globalization by rooting itself in “the tectonic” and “the topographic.” He argues that buildings should mediate between universal technique and local culture through materially grounded, climatically responsive design as opposed to nostalgia or revivalism.⁵ Frampton’s insistence on terracing rather than leveling, on filtering local light rather than depending on artificial glare, echoes Ruskin’s earlier demand for attention to landscape’s specificities. The very rise of critical regionalism comes from a desire to provide authenticity to architecture, as discussed by Alan Colquhoun, stating, “Thus, there were two traditions leading to regionalism, one stemming from classicism and the other from romanticism; one figural and combinatory, the other functional and holistic... In romantic theory, imitation ceases to be the representation of external forms and becomes the revelation of an inner, organic, and indivisible structure. In a corresponding movement, historicism forbids the artist the freedom to combine, mechanically, as it were, different historical forms as if they were lying ready-to-hand in the same historical space.”⁶ While not directly addressing how architecture meets site...

¹ John Ruskin, *Modern Painters*, Volume III (London: Smith, Elder & Co., 1856), 15.
² John Ruskin, *Modern Painters*, Volume V (London: Smith, Elder & Co., 1860), 266-267.
³ John Ruskin, *The Seven Lamps of Architecture* (London: Smith, Elder & Co., 1849), 45.
⁴ *Ibid.*, 49–50.
⁵ Kenneth Frampton, *Towards a Critical Regionalism: Six Points for an Architecture of Resistance*, 26–30.
⁶ Colquhoun, Alan. “Regionalism II.” In *Essays in Architectural Criticism: Modern Architecture and Historical Change*, 286–289

AN EXCERPT FROM

ATMOSPHERE, IMMERSION, AND ARCHITECTURE:

READING ARCHITECTURAL ATMOSPHERE THROUGH EMANUELE COCCIA

NERVOUS SYSTEMS

LINDY ROY

COLUMBIA UNIVERSITY - SPRING 2026

... A few pages later, this relationship is condensed into one of the chapter’s central formulations: “To penetrate the surrounding environment is to be penetrated by it.”⁷ Atmosphere therefore exceeds both the niches organisms carve out for themselves and the limits of immediate perception. Activity and passivity become inseparable. Bodies shape environments while simultaneously being shaped by them.

Coccia uses swimming as an intuitive example because immersion destabilizes the boundary between subject and medium. Water presses against the swimmer while the swimmer displaces water through movement. At a microscopic level, water and any contaminants within the water are absorbed into the body through mucous membranes or the skin itself. The body is never fully separate from the environment surrounding it. This condition becomes ontological in *In Open Air*. Every living being exists through forms of reciprocal environmental exchange. Read through this framework, existing theories of embodied perception begin to take on new significance. James J. Gibson’s ecological theory of perception, for example, rejects detached visual observation in favor of bodily engagement with environmental conditions. “Natural vision,” Gibson writes, “depends on the eyes in the head on a body supported by the ground.”⁸ Perception emerges through movement, orientation, texture, depth, and environmental interaction rather than isolated visual representation. The eyes do not see by themselves, but rather are a part of a system immersed in surroundings and entangled with other senses. Vision can therefore be understood as something impossible to isolate from the atmospheric medium.

Juhani Pallasmaa’s critique of modern architecture similarly resonates with Coccia’s understanding of immersion. Pallasmaa argues that contemporary architecture has increasingly become “the retinal art of the eye,” flattening architecture into image and spectacle.⁹ Against this tendency, he describes architecture as fundamentally multisensory:

“Every touching experience of architecture is multi-sensory; qualities of matter, space, and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscle. Architecture involves seven realms of sensory experience which interact and infuse each other.”¹⁰

Pallasmaa’s descriptions of forests and Japanese gardens become especially significant through Coccia’s framework because they describe environments experienced atmospherically rather than compositionally. He writes that these spaces are “invigorating and healing because of the essential interaction of all sense modalities reinforcing each other; our sense of reality is thus strengthened and articulated.”¹¹ Humidity, filtered light, texture, smell, and sound combine into a continuous sensory field. Perception unfolds through prolonged bodily immersion rather than detached observation.

This multisensory understanding of immersion also appears in environmental psychology research surrounding restorative environments. Roger Ulrich’s studies on stress recovery suggest that bodily states respond rapidly to environmental conditions such as layered depth, diffused light, vegetation, and spatial complexity.¹² These responses often occur before conscious interpretation, reinforcing Coccia’s understanding of atmosphere as a medium that continuously shapes bodily experience. Coccia’s writing ultimately expands these phenomenological descriptions and scientific observations by positioning immersion within a broader ontology of atmosphere. Environmental experience is no longer simply sensory or psychological. Atmosphere becomes the medium through which bodies and worlds continuously produce one another.

III. Architecture as Atmospheric Mediation

Coccia’s discussion of plants carries important implications for architecture because plants alter atmospheric conditions simply through existing. Their existence transforms the medium surrounding them. He writes:

“One cannot exist in a fluid space without modifying, by this very fact, the reality and form of the environment that surrounds us. The life of plants constitutes the most surprising proof of this, in light of the cosmogonic consequences they have had on our world. The existence of plants is, by

itself, a global modification of the cosmic environment, in other words of the world that they penetrate and by which they are penetrated. It is already by existing that plants modify the world globally without even moving, without beginning to act.”¹³

Later in the text, this idea expands into a broader conceptualization of world making:

“‘To be’ means, for them, to make world [faire monde]; reciprocally, to construct (our) world, to make world is only a synonym of ‘to be.’ Plants are not the only living beings to experience this coincidence: organisms display it in an even more obvious manner. One must then generalize this find and conclude that the existence of every living being is necessarily a cosmogonic act and that a world is always, simultaneously, a condition of possibility and a product of the life that it hosts.”¹⁴

Read architecturally, these passages suggest that buildings also participate in shaping the conditions of experience surrounding bodies. Architecture modifies airflow, light, acoustics, humidity, thermal conditions, and sensory orientation continuously. Buildings structure immersion. Spatial experience emerges through environmental mediation rather than formal image alone.

The writings of Peter Zumthor and Steven Holl become especially revealing when interpreted through Coccia’s conception of atmosphere. Both architects describe atmosphere phenomenologically through light, material, sound, tactility, and emotional immediacy. Coccia expands these descriptions beyond phenomenology by positioning atmosphere as the medium through which environmental relations themselves become possible. In *Atmospheres*, Zumthor comments on the connection between atmosphere and our emotions, defining it as something sensed bodily before it is interpreted intellectually:

“I enter a building, see a room, and – in the fraction of a second – have this feeling about it. We perceive the atmosphere through our emotional sensibility – a form of perception that works incredibly quickly, and which we humans evidently need to help us survive. Not every situation grants us time to make up our minds on whether or not we like something or whether indeed we might be better heading off in the opposite direction. Something inside us tells us an enormous amount straight away. We are capable of immediate appreciation, of a spontaneous emotional response, of rejecting things in a flash.”¹⁵

Material, sound, temperature, and proportion produce environmental conditions that shape perception almost immediately. Zumthor’s description resonates strongly with environmental psychology research suggesting that emotional and physiological responses to environments occur rapidly and often pre-consciously.¹⁶ Movement through *Therme Vals* occurs through gradual atmospheric transitions rather than abrupt spatial separation. Narrow stone corridors compress the body before opening into larger chambers filled with reflected light and humid air. Sound shifts continuously between echoing pools and acoustically dampened passages. Temperature becomes spatialized through movement between cold and warm baths. Stone absorbs moisture and sound differently throughout the day. Light moves slowly across surfaces through narrow openings. The body becomes increasingly aware of humidity, tactility, echo, and weight while moving through the building. Architecture operates less through visual composition than through calibrated environmental variation unfolding over time – the built environment is in conversation with the atmosphere itself and is experienced atmospherically through prolonged bodily immersion.

Steven Holl’s writing similarly describes architecture through changing environmental conditions rather than static form. Recalling his first experience within the Pantheon, Holl writes of architecture’s “forceful capacity... to engage all the senses.”¹⁷ The shaft of light entering through the oculus transforms the interior continuously throughout the day. Atmosphere becomes temporal and environmental rather than fixed. Holl’s descriptions of the Zen gardens at Ryoanji align even more closely with Coccia’s understanding of immersion. Holl describes how “textures, smells, and sounds all combined” into a single environmental field.¹⁸ The experience of the garden unfolds gradually through movement and sensory adjustment rather than immediate visual comprehension. Humidity, filtered light, the sound of gravel underfoot, shifting shadows across stone, and the silence of surrounding walls all contribute to an atmosphere sensed continuously through the body...

⁷ Emanuele Coccia, *The Life of Plants: A Metaphysics of Mixture* (Cambridge: Polity Press, 2018), “In Open Air.”
⁸ James J. Gibson, *The Ecological Approach to Visual Perception*, Boston: Houghton Mifflin, 1979.
⁹ Juhani Pallasmaa, “An Architecture of the Seven Senses,” in *Questions of Perception: Phenomenology of Architecture* (San Francisco: William Stout Publishers, 2006).
¹⁰ Ibid
¹¹ Ibid
¹² Roger S. Ulrich, “View Through a Window May Influence Recovery from Surgery,” *Science* 224, no. 4647 (1984): 420–421.
¹³ Coccia, *The Life of Plants*
¹⁴ Ibid
¹⁵ Peter Zumthor, *Atmospheres*, Basel: Birkhäuser, 2006.
¹⁶ Ulrich, “View Through a Window May Influence Recovery from Surgery”
¹⁷ Steven Holl, “Archetypal Experiences of Architecture,” in *Questions of Perception: Phenomenology of Architecture* (San Francisco: William Stout Publishers, 2006).
¹⁸ Ibid

AN EXCERPT FROM
COMPILED WRITINGS ON CONTEMPORARY THEORY
THE CONTEMPORARY (IDEAS AND CONCEPTS FROM 1968 TO THE PRESENT):“SCHOOLS?”
BERNARD TSCHUMI

COLUMBIA UNIVERSITY - SPRING 2025

Session 05: Heterogeneity, Disjunctions, Fragmentation
(From the Concept of Deconstruction to the Bilbao Effect)

For: Disruption of Envelope Through Site

“In recent years, the modern understanding of social responsibility as functional program has been superseded by a concern for context. But contextualism has been used as an excuse for mediocrity, for a dumb servility to the familiar. Since deconstructivist architecture seeks the unfamiliar within the familiar, it displaces the context rather than acquiesce to it. The projects in this exhibition do not ignore the context; they are not anti-contextual. Rather, each makes a very specific intervention. What makes them disturbing is the way they find the unfamiliar already hidden within the familiar context. By their intervention, elements of the context become defamiliarized... Each project activates some part of the context to disturb the rest of it, drawing out previously unnoticed disruptive properties and making them thematic... this estrangement sets up a complicated resonance, between the disrupted interior of the forms and their disruption of the context, which calls into question the status of the walls that define the form”

Mark Wigley, “Deconstructivist Architecture,” in Deconstructivist Architecture (New York: Museum of Modern Art, 1988), 17–18.

Blurring the line between inside and outside, public and private, has become a cliché used by every unimaginative architect (myself included). The problem isn’t necessarily the concept, but the wanton application of the concept to mask unconvincing forms and lack of connection to the site. Using the inherent flaws in the building as points of disruption, probing, and torture resonates with the disruption of the site, questioning the solidity of the walls. This provides a thorough and thought-provoking purpose to the use of the cliché. It sets an example for how such overused moves and forms can be productive within a design rather than a crutch for a lack of rigor in applied theory.

Against: Putting Everything Into Boxes

To dismiss the shift from the emphasis on functional program to a concern for context as “an excuse for mediocrity, for a dumb servility to the familiar” is both incredibly reductive and largely undeserved. In fact, I would argue this is in direct contrast with the overarching themes in Wigley’s later writings relating to what it means to be human and how we experience the material world. The crux of this movement was that connection to site and context allows a means of utilizing space to curate experiences, feelings, and even theory made physical. Perhaps the forms generated were not as strikingly uncanny and fragmented as the works of the Deconstructivist exhibition, but they accomplished similar goals through materiality and ephemeral moments. In the sense that they both present a new way of experiencing architecture through a variety of senses and utilize space as their medium, I would argue that the movements aren’t very different at all. This speaks to a larger problem within architecture: The idea that we need a name or -ism for every exploration of space implies that lines must be drawn and everything must neatly fit these often arbitrary categories. If we value exploration of space and architecture as a theory rather than a material field, this dismissive attitude towards new explorations that often have not yet completely developed is contradictory and only serves to limit possibilities.

Session 07: Minimalism and the Art of Construction
(From the “Dutch Corner” to the Swiss Baths to SANAA)

For: Architecture as Intangible and Introspective

“The eclectic excitement of postmodern style collages was as suspect to them as the formal complexity and theoretical bias of Deconstructivism. They counteracted the conceptual ‘external’ referencing of architecture, i.e. the referral to systems ‘foreign’ to architecture, with an introspection based on ‘intrinsically architectural’ values”

Ilka Ruby and Andreas Ruby, “Essential, Meta-, Trans-. The Chimeras of Minimalist Architecture,” in Minimal Architecture (Munich: Prestel, 2003), 17-18.

“I believe that architecture today needs to reflect on the tasks and possibilities which are inherently its own. Architecture is not a vehicle or a symbol for things that do not belong to its essence. In a society which celebrates the inessential, architecture can put up a resistance, counteract the waste of forms and meanings, and speak its own language”

Peter Zumthor, Thinking Architecture, 3rd ed. (Basel: Birkhäuser, 2010), 19.

These quotes distinguish Minimalism from past movements because it looks inwards in an attempt to redefine architecture and its values. But how is this really different from what every movement tries to accomplish? What exactly is the essence of architecture that Zumthor wants architects to follow? To quote Boullée, as referenced in Architecture and Disjunction:

“One must conceive in order to make. Our forefathers only built their hut after they had conceived its image. This production of the mind, this creation is what constitutes architecture, that which we now can define as the art to produce any building and bring it to perfection. The art of building is thus only a secondary art that it seems appropriate to call the scientific part of architecture” (Boullée, Essai sur l’Art).

If the essence of architecture is a production of the mind, it must be linked to that which influences and moves us, including things that could be viewed as external such as literature or pop-art. If this is the essence of architecture, any movement that questions our understanding of architecture is inherently introspective, regardless of where it draws inspiration. This questioning is what drives the field forward, avoiding stagnation and keeping our architecture alive and valuable to our everyday lives. I don’t mean to disregard the intended meaning of these passages in regard to Minimalism, but perhaps in their attempt to establish a better architecture they also highlight what defines a successful architectural movement – even those that might appear in opposition.

Against: Further Division of Architecture

“This deceptively simple yet complex synthesis, simultaneously uniting the polarities of ‘architecture versus art’, ‘tradition versus innovation’, and ‘nature vs culture’ is largely absent in the work of Herzog and de Meuron, who seem to insist on being recognized as artists rather than as architects, that is to say as artist/architects rather than craftsmen/architects who happen to practise the art of architecture rather than art as such ... Thus architects have constantly shifted their ideological ground from science envy to art envy and back again... that is to say electing to practise as either architect/engineers (Renzo Piano) or as architect/artists (Frank Gehry)”

Kenneth Frampton, “Minimum Moralia: Reflections on Swiss German Production,” in Labour, Work, and Architecture (London: Phaidon, 2002), 327-331.

Division of labor in modern architecture has weakened the position of the architect – why do we insist upon further division? We’ve already delegated so much of the work to develop the building itself that if we continue to make distinctions between “artist/architects”, “craftsmen/architects”, and “architect/engineers”, the architects themselves may cease to exist. Development of a concept requires an architect to weave between the roles of an artist, scientist, engineer, craftsman, historian, linguist, and philosopher, among many others. This is the beauty of the field and what makes us invaluable to society: we have a unique ability to condense the work of varying roles into a singular concept to be made physical. An “architect/engineer” or “architect/artist” is far less valuable, and at that point, it would make no difference to drop “architect” from the phrase altogether.

ZACHARY J. BEIM

Session 08: Ideological and Ecological Envelopes (Single and Double Conceptual Envelopes)

For: Light Modernity as Tactical Sublimation

“Lightness is the message of his primal scene as a designer, a childhood memory of an awning of sheets billowing in the breeze on a Genoese rooftop, a vision that conjures up the shapely beauty of both classical drapery and contemporary sailboats as architectural ideals. For Piano, lightness is thus a value that bears on the human as well as on the architectural: it concerns graceful comportment in both realms”

Hal Foster, “Light Modernity,” in *The Art-Architecture Complex* (London: Verso, 2011), 61.

The problem with “lightness” in contemporary architecture is the lazy deployment of the concept as a stylistic crutch by firms chasing the aesthetic of innovation without substance. Certain aspects of Piano’s work demonstrate how lightness, when rooted in material intelligence and tectonic logic, can move beyond visual dematerialization into an active negotiation between local craft and global systems. The Menil Collection’s roof trusses do more than simply filter light; they translate Houston’s glare into a luminosity more appropriate for its galleries, proving that technological refinement can amplify rather than erase place. This strategic lightness utilizing highly studied details to heighten sensory engagement is fundamentally different from the universalizing lightness of modernist glass boxes. When treated as an operational tool rather than a formal trope, lightness becomes a way to oppose the “banal cosmopolitanism” that has proven itself to be one of the biggest detractors of the global style.

Against: The Banal Cosmopolitanism of Lightness

“Hence the allusion to the floating world in the Hermès store in Tokyo, the village huts in the cultural center in New Caledonia, the spire in the tower planned for London, and so on. Beck calls this phenomenon ‘banal cosmopolitanism,’ and, like Rogers and Foster, Piano is adept at its architectural expression”

Hal Foster, “Light Modernity,” in *The Art-Architecture Complex* (London: Verso, 2011), 66.

To claim that Piano’s light modernity represents meaningful mediation between global and local is to ignore how thoroughly capital perverts such gestures. The Tjibaou Cultural Center’s abstracted Kanak huts misses the ‘critical’ in ‘critical regionalism’ and functions more as architectural virtue-signaling – a sleek, state-sponsored apology that aestheticizes indigeneity while maintaining Western technocratic control. Local particularities become decorative motifs slapped onto what are ultimately variations of the same glass-and-steel universal language, creating a sense of extractivism rather than an emphasis on locality. Worse, the rhetoric of sustainability surrounding these projects often serves as greenwashing for massive carbon footprints (see: Kansai Airport’s artificial island). What both Beck and Foster call “banal cosmopolitanism” is really architecture’s version of algorithmic placemaking, providing just enough local flavor to satisfy Instagram while maintaining seamless corporate functionality. Here, lightness is more of a marketing strategy than design philosophy. Even the most exquisite detailing can’t disguise architecture’s complicity in the flattening effects of globalization, which claims universal relevance while reducing local identities to consumable aesthetics and serving the same wealthy clients.

Session 09: The Post Critical and the Iconic (From Blobs to Blogs)

For: Architecture as Concept Manifest

“An example of a question: What makes this particular construction ‘architecture’ rather than just a building? My answer (contradicting Nicholas Pevsner): A bicycle shed with a concept is architecture; a cathedral without one is a building”

Bernard Tschumi, “Some Notes on Architectural Theory,” lecture delivered for 2000+: *The Urgencies of Architectural Theory*, Columbia University, New York, 2014, 75.

When I completed my undergraduate architecture degree in 2020 during the heart of the pandemic, I was one of the few of my peers fortunate enough to land a job with a firm I had previously interned with. The typology that allowed them to continue hiring during such a difficult economic period for most other firms was industrial work. I understood this area to be an amalgamation of soulless, banal boxes for capitalistic companies – something that was hardly architecture and certainly not the type of work I imagined for some of my first buildings. Instead, I found a firm that was committed to proving that the concept is what turns a building into architecture. I began to question my own understanding of architecture, driving me to enroll in Columbia GSAPP with a newfound interest in theory.

The warehouse is a typology based on simplicity and efficiency while maximizing storage space in the available buildable area. It is no secret how to do this, and there is no reason to depart from the norm and reinvent the wheel. The truly interesting part of industrial design is finding a moment to inject meaningful style that often inherently creates a disjunction with the program. It is the ability to define the project with a concept that says, “this isn’t just another precast box; look again”. Whether the concept is based on integration with agrarian vernacular in the Lehigh Valley or the ascension and descension of flight paths from a nearby airport, a warehouse with a concept can undoubtedly be called architecture in a typology dominated by buildings. To someone who understands the nuance, turning a warehouse into a work of architecture is arguably more impressive than a design for something such as a museum, which is expected to have a concept and often to be art itself. It is no easy task to weave a concept into such a highly specific and standardized typology, relying on small moments and a constant negotiation between the design concept and the program. To do so successfully earns a building the title of “architecture”.

Against: Projective Architecture as Strategic Ambiguity

“Rather than looking back or criticizing the status quo, the Doppler projects forward alternative (not necessarily oppositional) arrangements or scenarios. A projective architecture does not make a claim for expertise outside the field of architecture nor does it limit its field of expertise to an absolute definition of architecture. Design is what keeps architecture from slipping into a cloud of heterogeneity”

Robert Somol and Sarah Whiting, “Notes Around the Doppler Effect and Other Moods of Modernism,” *Perspecta* 33 (2002): 75.

The refusal to “look back or criticize the status quo” might sound like an architectural liberation, but it’s actually a quiet abdication of responsibility. In recasting critique as outdated and oppositional as passe, the projective turn shifts architecture away from resistance and toward accommodation – not of complexity, but of power. The promise of projecting “alternative scenarios” rings hollow when it disavows historical accountability and sidelines architecture’s potential as a critical medium. This ambiguity is further encoded in the way Somol and Whiting position “design” as a safeguard or the bulwark that keeps architecture from dissolving into a “cloud of heterogeneity.” But what exactly is being held together, and why? Here, design is framed not as a tool for political or cultural clarity, but as a kind of formal duct tape: flexible enough to absorb multiplicity, yet rigid enough to protect disciplinary identity. It’s a rhetorical move that evades the hard work of defining architectural values. Instead of confronting the messiness of context, design becomes an alibi for indeterminacy – a smoothing agent that enables architecture to perform engagement without ever taking a position. In this sense, projective architecture buries ideology under layers of mood, atmosphere, and style. The fear of “slipping into a cloud” reveals a projective architecture that wants the aura of engagement without the discomfort of confrontation. Ironically, in its effort to stay grounded through design, it loses the ground entirely and substitutes strategic ambiguity for critical accountability.



THANK YOU