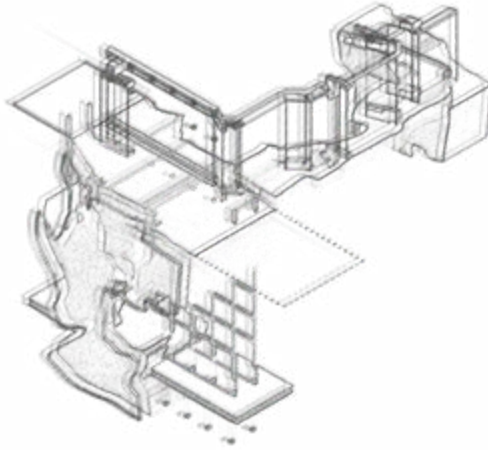
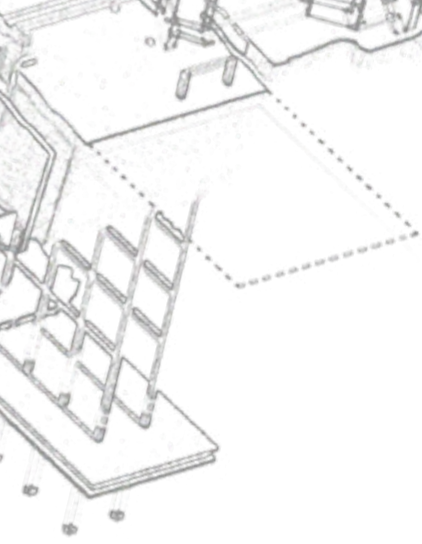


Contents

When the waters forget their way.
A theory in Making.
A well turned inside out.

Between Tries.
Stepwell - D2D.
Matter + Methods Workshop.

Towards Conclusion.

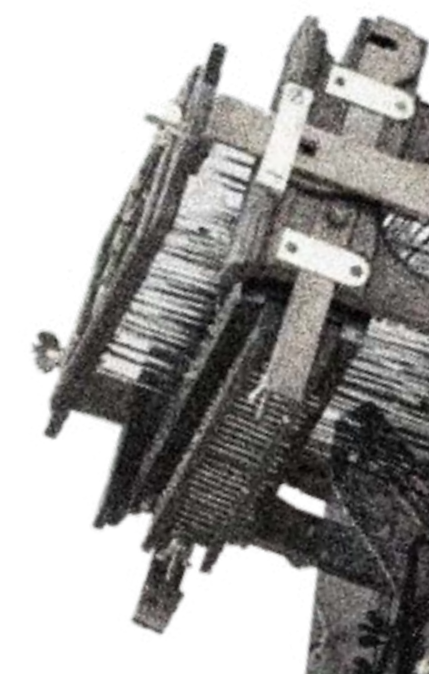


It is a search—an unfolding process where meaning is shaped through the act of making. Between the abstract and the tangible, lies a space where ideas take form not through control, but through dialogue—with material, time, and with the unexpected.

This approach sees design not as a fixed plan, but as an evolving relationship. Each act of construction is an inquiry, where intuition and material reality guide the next step. Rather than forcing a vision onto matter, it allows matter to speak—to resist, to reveal, and to shape the outcome.

In this way, architecture becomes more than the arrangement of spaces. It becomes a lens through which transmutation is observed and enacted. The handmade, the imperfect, the experimental—these are not flaws, but essential parts of the process. They reflect the uncertainty at the heart of all creation, and the beauty that can emerge when control is loosened.

Here, architecture is a philosophy in motion—one that questions, adapts, and responds. It is not the end result that defines it, but the way it comes into being.



Awards + Achievements

Best Thesis Award 2024 : Architecture Alchemy
Developed a theory of Alchemy in Architecutre through experimentation on the “potentiality of matter”.

Equim Parametricized: Winner
Creation of a concept and system for the city of the future, addressing everything from living conditions to essential needs.

Asia’s Young Designer Award 2024-25 : Finalist
Presented work at the AYDA @ Vellore Institute of Technology (India), global challenges through locally driven solutions.

Ethos 17th National IGBC : Jury Commendation Award
Large scale “Urban Insert” for the community to have a better sustainable future.

LIK National Trophy (Team lead) : Winner Citation
Document to Design; adaptive reuse of Stepwell.

ANDC National Trophy (Team lead) : Top 24
Mobile houses for the construction workers that the community can build and celebrate.

SSIP Grant 2025 : Thesis Research
Grant by Government of Gujarat for further research and experimentation in Architecture Alchemy.

Archdais House 2.0 : Top 50
Reimagining housing situations after the pandemic considering the situation of isolation.

Vadnagar School Redevelopment (Built-2025):
Runner Up
Adaptaive reuse project of Government of India, School–Museum project along with Heritage town planning.

Education

10+2 (Science) : Delhi Public School, Chhindwara

Bachelor of Architecture : Anant National University (Valedictorian 2024)
5 years course based in Ahmedabad including Internship (Sem–7) and Research Thesis (Sem–10)

Collaborative Studio : Columbia University GSAPP
Research and Presentation on Water systems and conditions in the peri–urban regions of Gujarat. (Sem–9)

Professional Experience

IIT Roorkee : Reasearch Assistant/Architect
Research and Development of recycled plastic bricks for low cost housing. Project for Government of India. (1.6 Year)

Doro : Architect (Part Time)
Developing multipurpose foldable structure (To be Presented @ Concious Collective by Godrej Design Lab 2025). (4 Months)

ATTO Atelier : Architecture internship
Structure details and rain water harversting system design for residences in Kerela. (2 Months)

P.M. Vadnagar School Project : Core Team (ANU)
Adaptive resuse project (school – museum) + Redevelopment of Vadnagar town as Heritage city (Urban Design). (3 years)

Development 2050 : Internship
Designing Urban hub for Gov. of India, Hyderabad. (2 Months)

Other Works

Matter + Methods : Workshop Organizer and Instructor
Exploration of materials with focus of potentiality and contextual processes.

Exhibition at ATMA House : Artwork exhibit
Artwork on “Journey of a Water Body“ along with research on Waters of Gujarat in collaboration with Columbia University.

Architecture for All - Symposium : Student Volunteer (Management)
Presentations and Panel discussions with Ar. Peter Rich (SA) and Ar. Marina Tabassum.

Department of Moving Image : Designer and Space Deveopment Team Head.
Ideations and Implemenation of Moving Image department at ANU along with Podcasting setup and Machinery analysis.

Act of Making : Founder and Facilitator
Research and Development with the extension of thesis that explores the idea of potentiality of matter.

NIUA event @CEPT : University Representative
Represented AnantU at CEPT for conferences, talks, and collaborative events on Urban design and Architecture for rivers.

Workshops

Earth and Bamboo Workshop : Auroville Earth Institute and Bamboo Center.
Hands on workshop on rammed earth construction and mud construction techniques along with bamboo joineries and structural possibilities.

Ar. Peter Rich’s Workshop : ATMA House, Indology institue and Ahmedabad ni Gufa. (Volunteer and attendee.)
Understanding the spaces and structures of Le Corbusier and B.V. Doshi through sketching mediums and techniques.

Parametricized : Equim.
Parametric design and form exploration on Rhino–3D, Grasshopper, Weaverbird.

Bamboo & Hemp Workshop : Himalayan Hemp eco + GoHemp and Baans India.
Hands on workshop on parametric building with hemp and bamboo–two materials paving the way for an eco–friendly future.

Software Skills

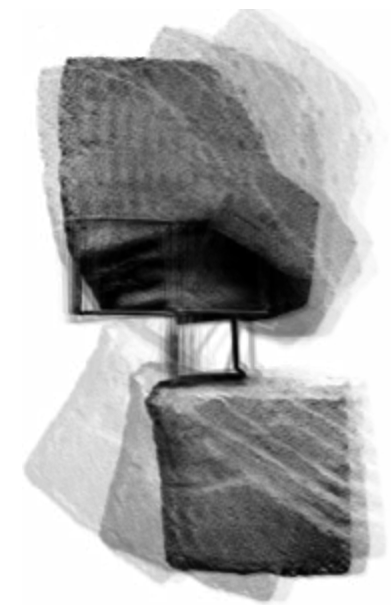
Rhino 3D – Grasshopper
Autocad – Revit
Photoshop – Illustrator – InDesign
Lumion – Twinmotion
Procreate
Sketchup

Interests

Roaming around
Reading Books
Material Collection
Painting – Modeling Sculptures



academic project



When the Waters Forget Their Way

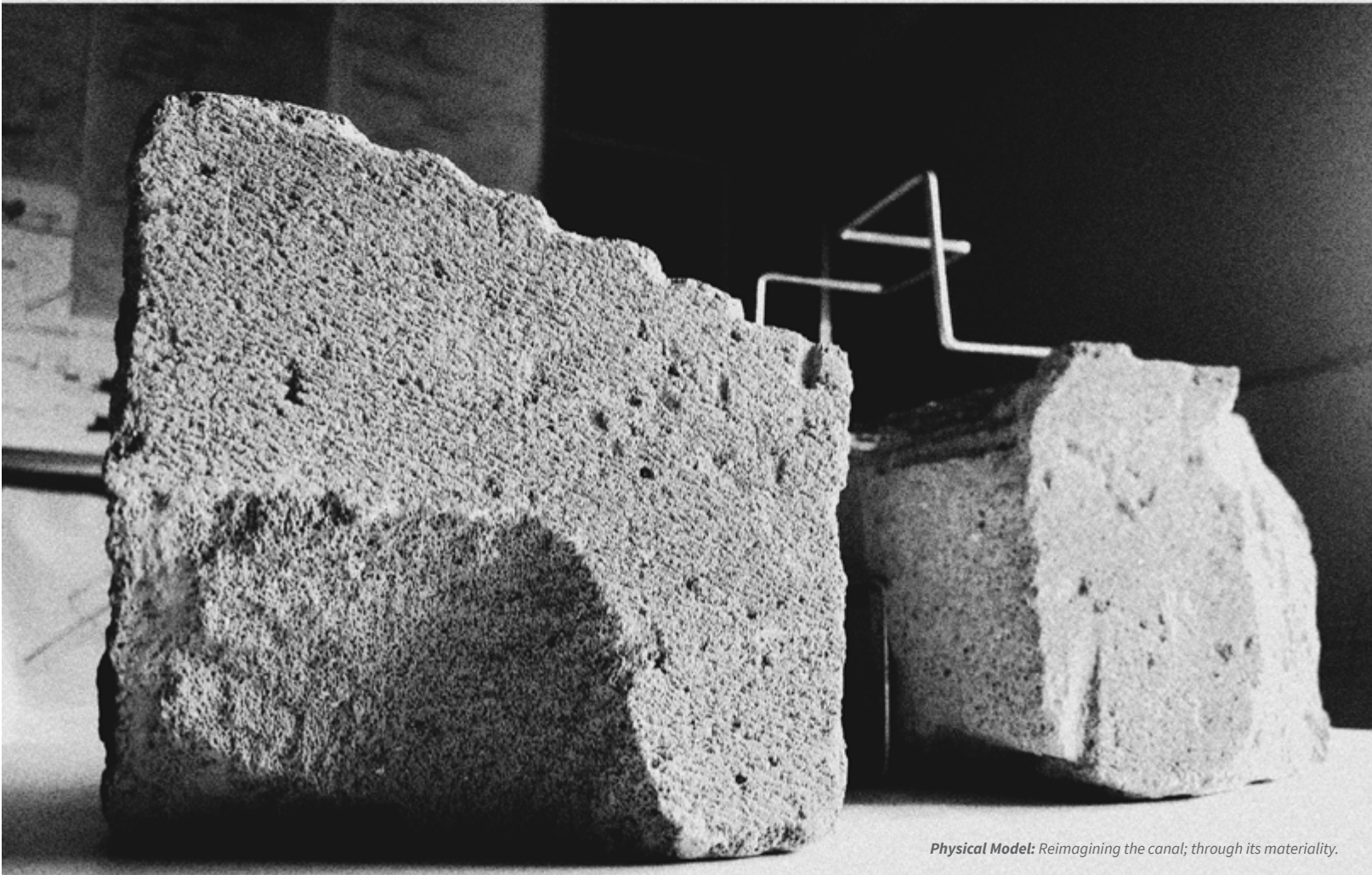
What is public infrastructure? How does its materiality influence its presence and purpose?

This project challenges the rigid linear canal, questioning its form, function, and the significance of its materiality.

It delves into the role of materials in shaping the experience and identity of public structures, opening a discourse on how reimagining materiality can transform infrastructure from purely functional to socially and experientially meaningful.

In the dance between matter and memory, form and feeling, can we reimagine this infrastructure not merely as a conduit, but as a living seam in the city's fabric?

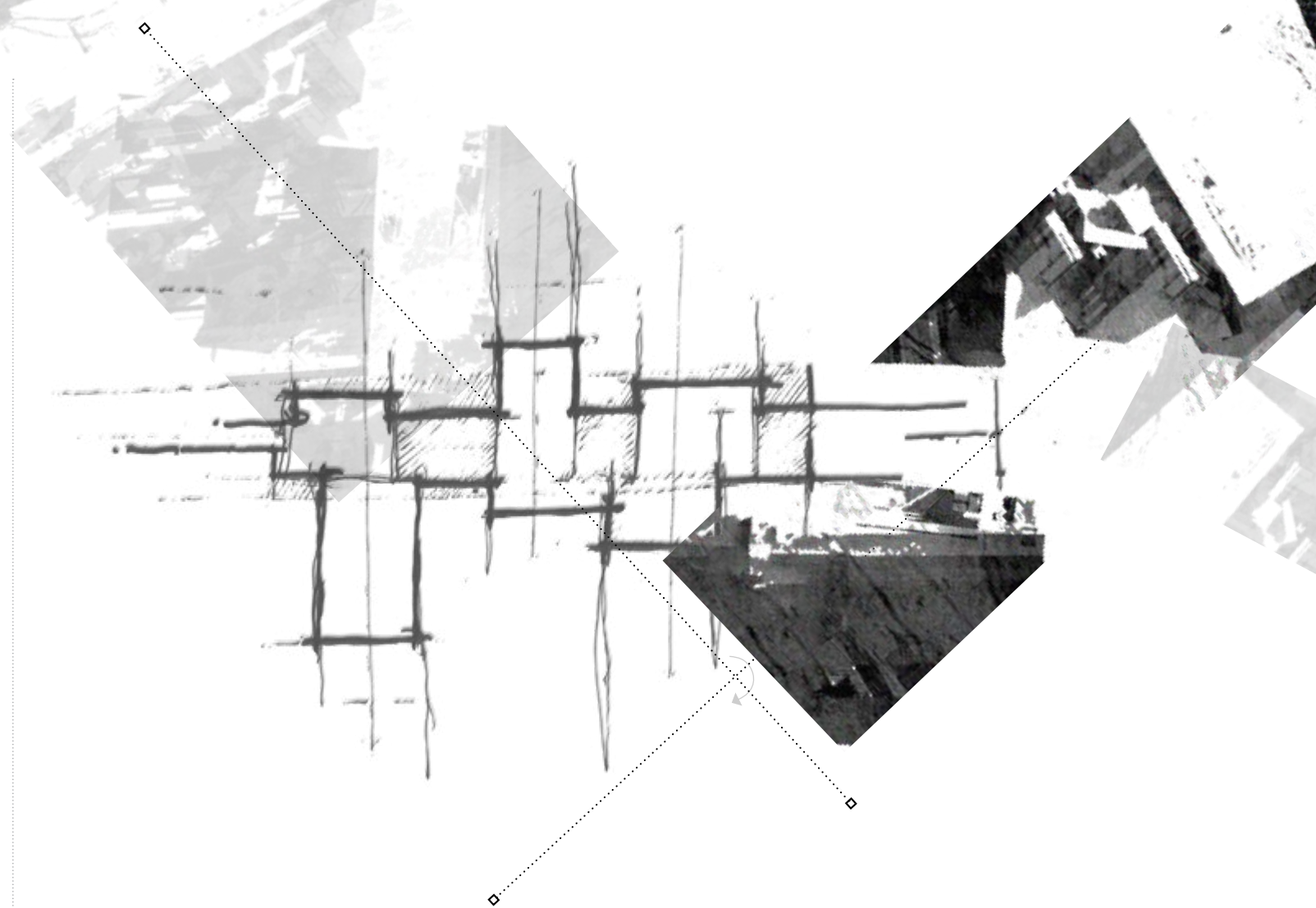
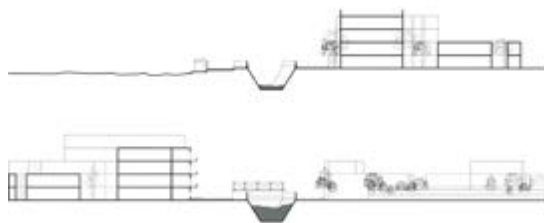
Urban Insert (Canal) Semester 8	17th IGBC Jury Commendation Award + Asia's Young Designer Awards Finalist	Guided by: Prof. Sandeep Paul Prof. Ashish Tiwari Prof. Ujjwal Dawar
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Physical Model: Reimagining the canal; through its materiality.

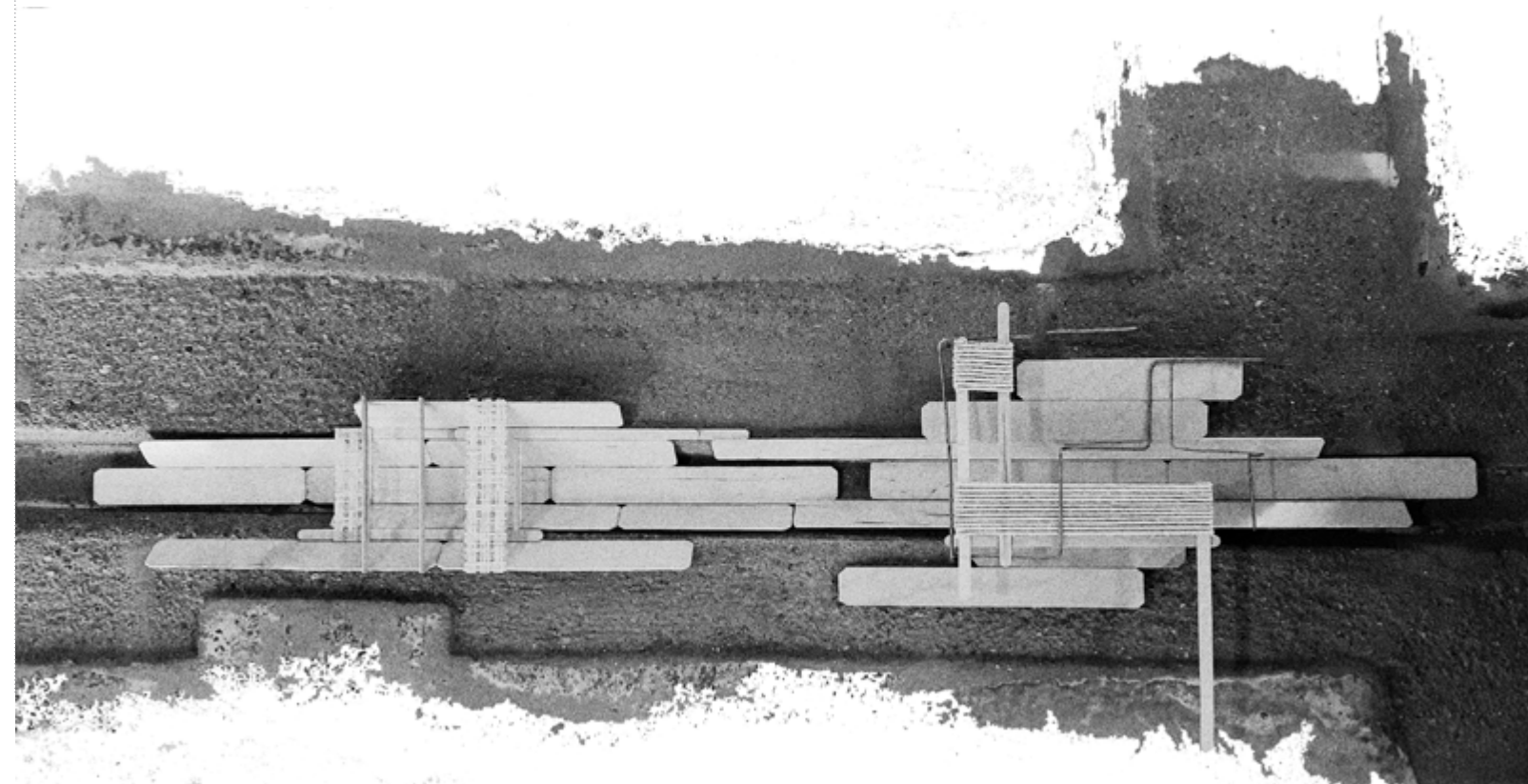


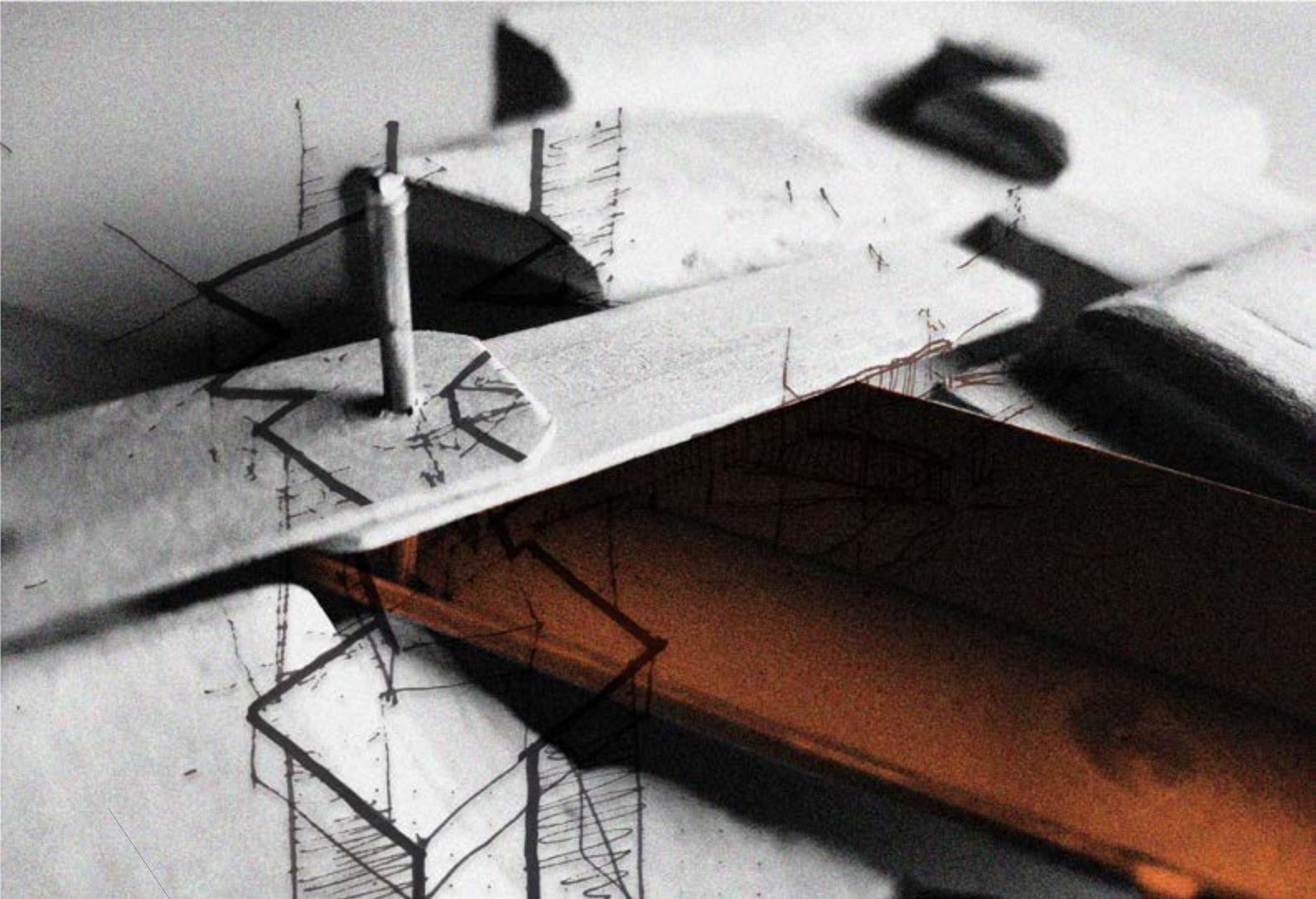
Reimagining the boundary; the **materiality of canal** merges with the **potentiality of the edges**.



Sketch + Physical Model: What stories hide within the rigid bones of this canal—its rough skin, its lost purpose, its silent waiting? Once a thread of life, a vessel of water and passage, it now lies dormant, a quiet trench etched into the land.

Can the echoes of its history still be heard, or has its unyielding material swallowed them all? Is there poetry in its forgotten stones, a whisper in the stillness that calls us to reimagine? What might we discover if we listen closely to the rough embrace of its walls—a promise, a memory, or perhaps a new purpose waiting to be found?



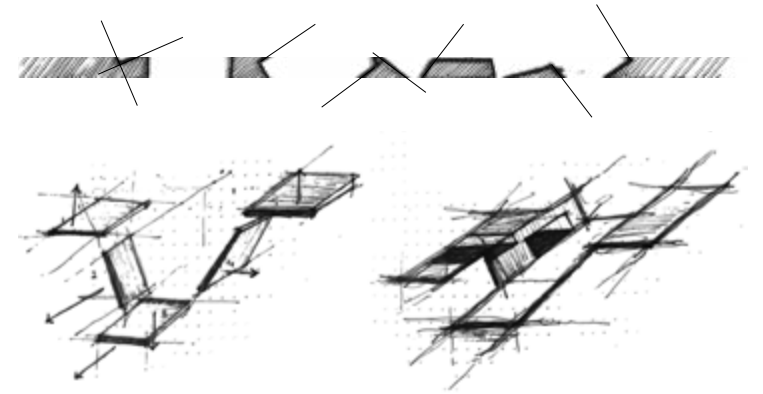
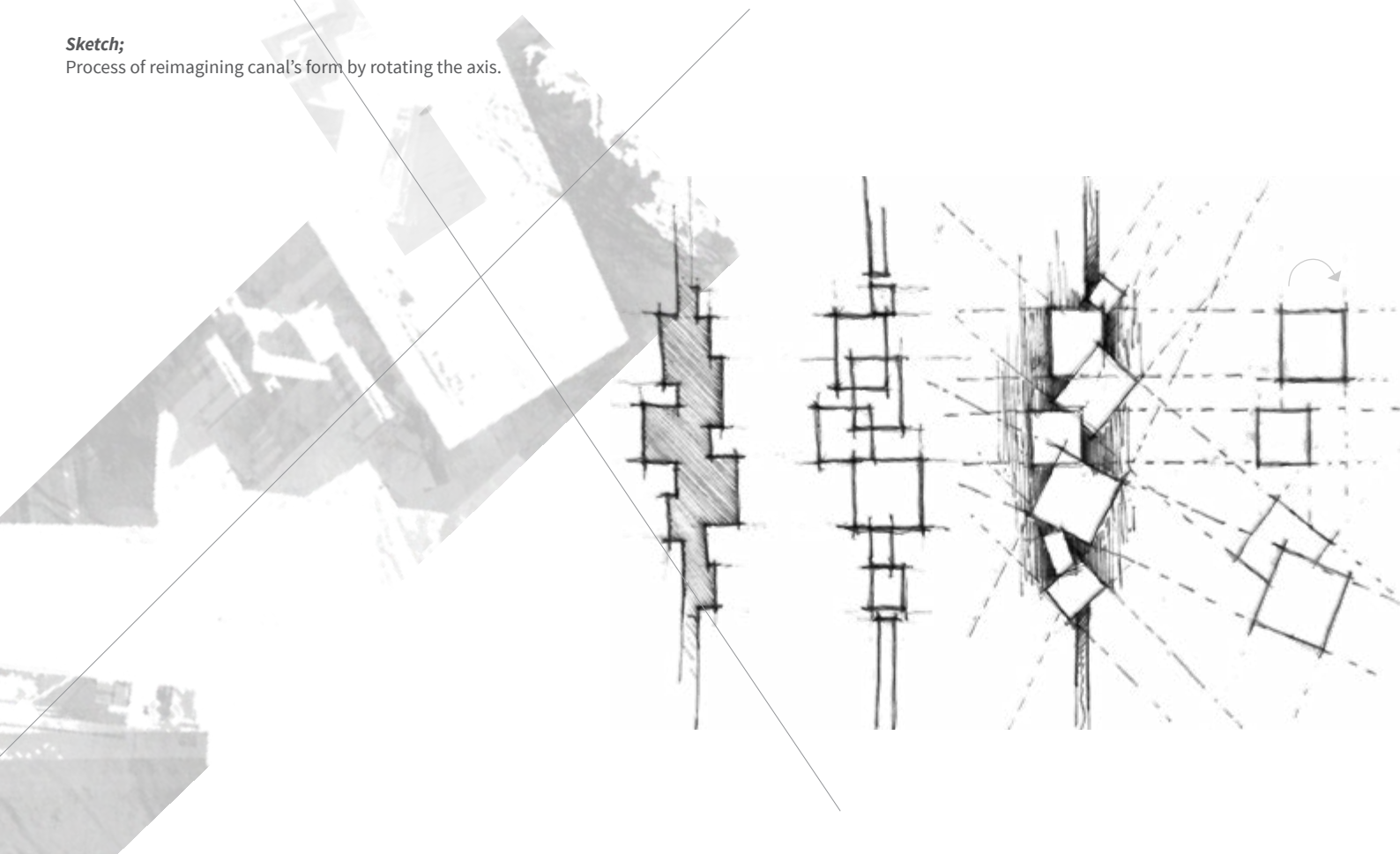


Physical Model;

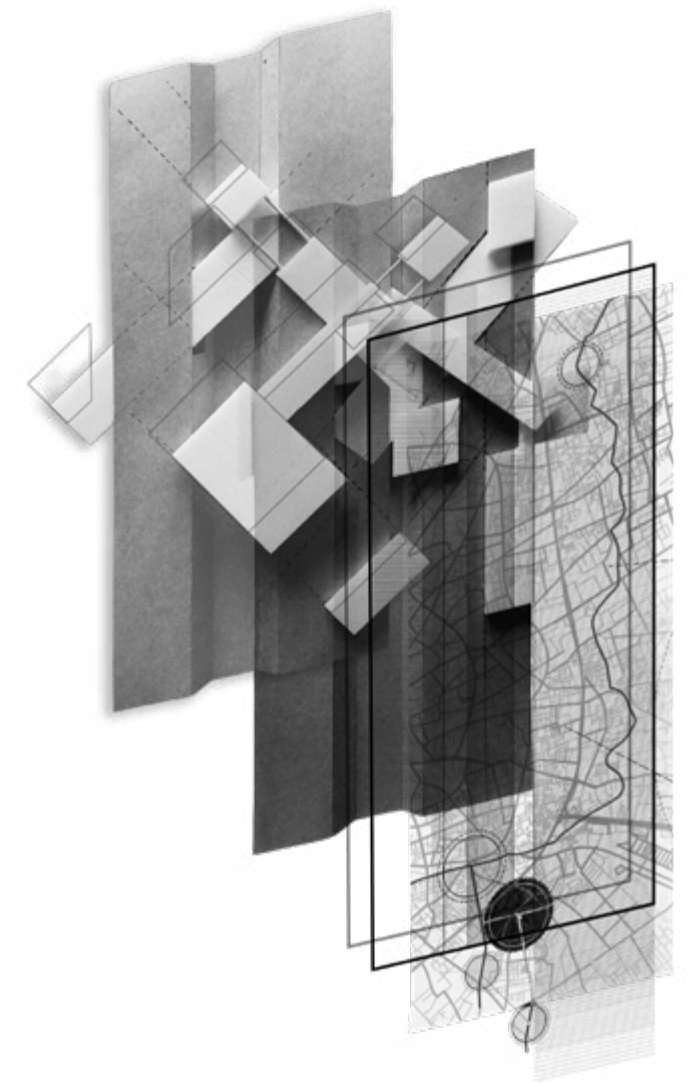
The canal, once a rigid line of control, is reimagined as a branching water channel, weaving through the urban fabric like a living thread. No longer a mere conduit, it becomes a dynamic landscape of purpose and possibility, adapting to the needs of the community wherever it flows—watering gardens, nourishing gathering spaces, and carrying the quiet promise of life wherever it touches.

Sketch;

Process of reimagining canal's form by rotating the axis.



Elements of canal; **reforming the linearity** and structural quality to penetrate the urban infrastructure.



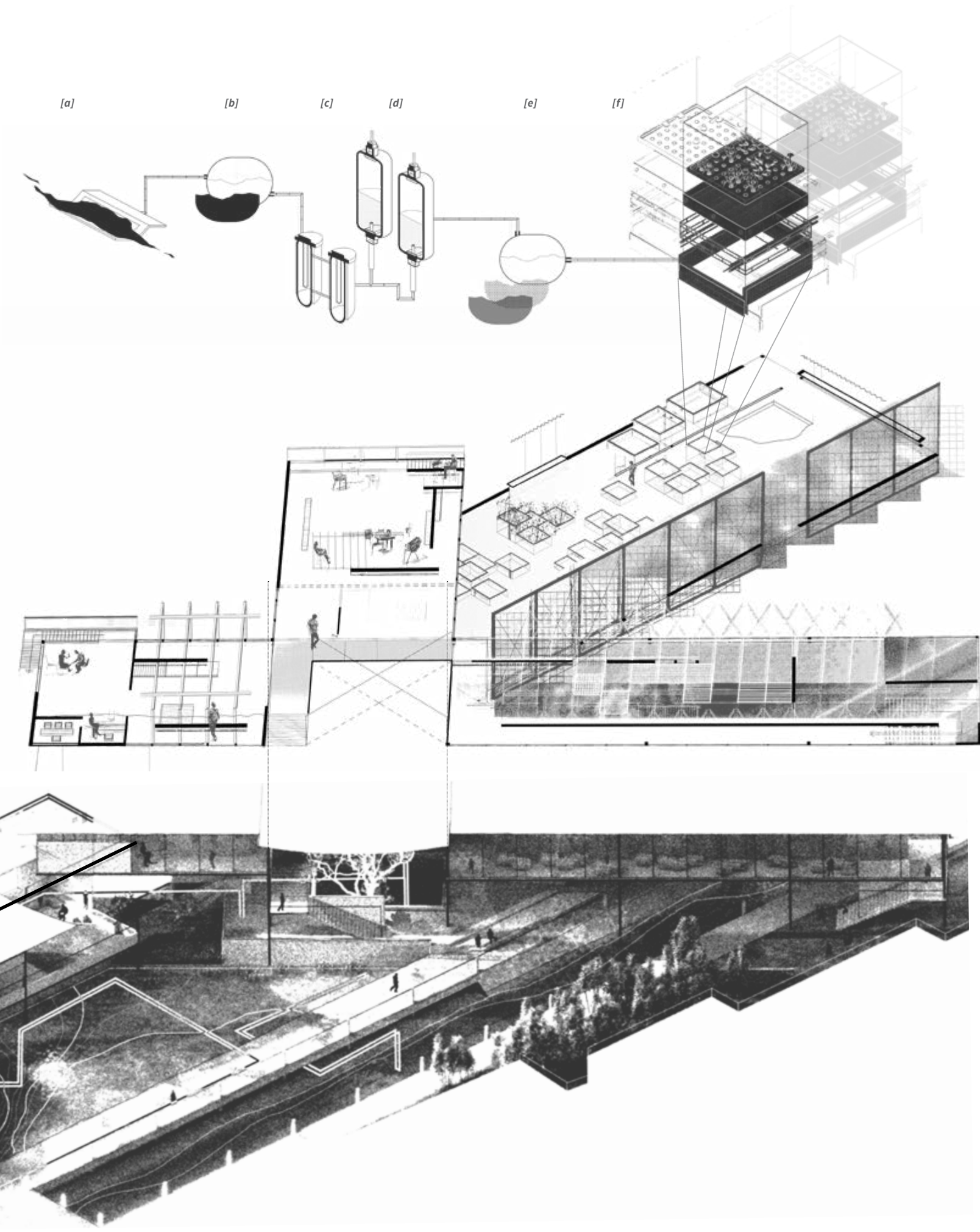
Physical Model: The composition of spaces along and around the canal, set against the urban condition, speaks of the myriad possibilities of form and function. Forms that break free from linearity, and functions that breathe life into those dwelling along its banks.



Spaces formed:

This environment can be envisioned as a dynamic composition of multiple interconnected spaces—each carefully crafted through the manipulation of architectural elements such as walls, columns, roofs, and thresholds. These components come together to create a network of defined areas that stand in striking contrast to the expansive and often undefined openness of the urban fabric.

In this dialogue between containment and freedom, the elements of architecture become not merely physical constructs but mediators of experience, shaping the perception of space within the ever-changing urban environment.



Hydroponics System:

[a] Canal: Flowing water of canal.

[b] Reservoir 1: Water collected from canal.

[c] Filters: Reservoir water filtration before mixing minerals.

[d] Mixing Tanks: Minerals are mixed in two different tanks.

[e] Reservoir 2: Water with minerals is stored and is connected to the hydroponic system.

[f] Modular System: 100 plants and recycled water flowing chamber.

LVL +300
Aquaponic Space: Ground Floor, with fish tanks

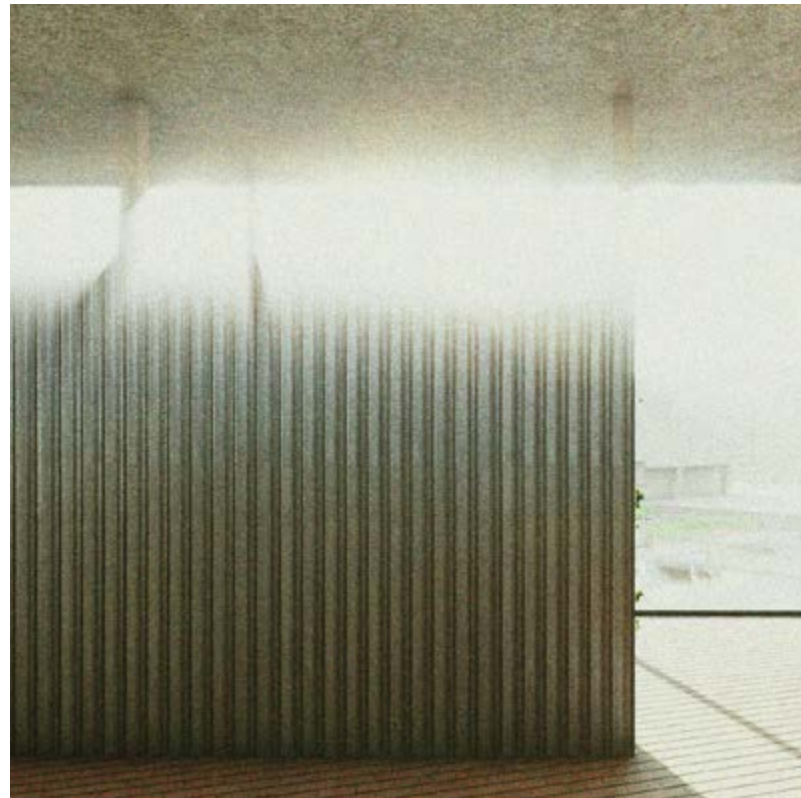
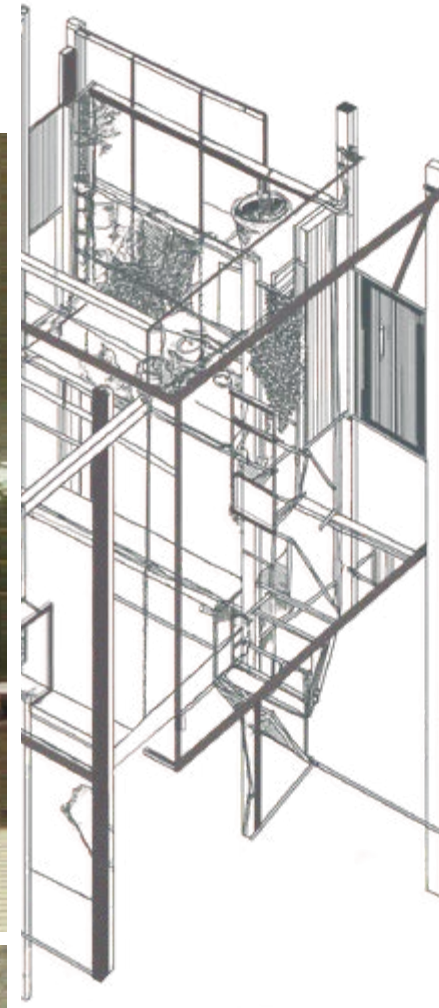
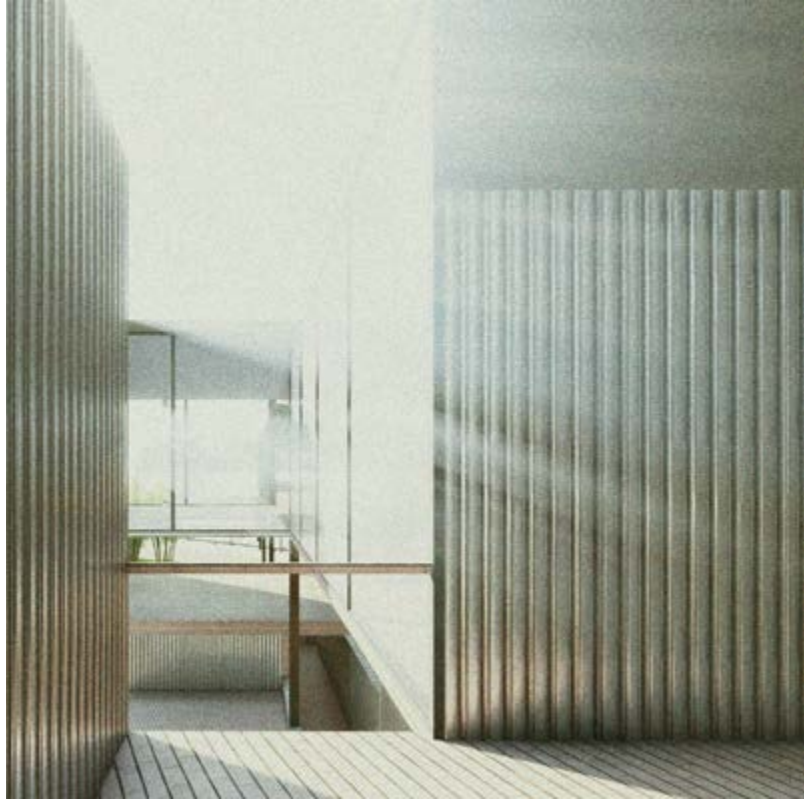
LVL +4500
Agriculture Library: Library and Open space for students.

LVL +4500
Hydroponics Space: Acting as a bridge over canal.

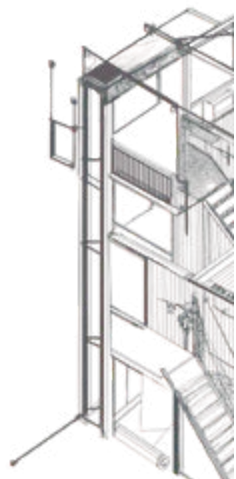
LVL +150
Community Kitchen + Amphitheatre: Space for markets and cafe for the neighbourhood.

LVL +300
Community Courtyard: Public Space to own and utilize

LVL +00
Connecting the Canal: Footpaths around canal with parks



This environment can be envisioned as a dynamic composition of multiple interconnected spaces—each carefully crafted through the manipulation of architectural elements such as walls, columns, roofs, and thresholds.





A theory in making.

The thesis explores the mystical and philosophical concept of matter transmutation within the context of architectural theory and practice. It questions the meaning of matter, material, and the process of transmutation, using examples from various disciplines parallel to architecture, supported by physical models as a medium to generate cases.

The developed hypothesis explores the significant potential of matter through scientific and philosophical theories.

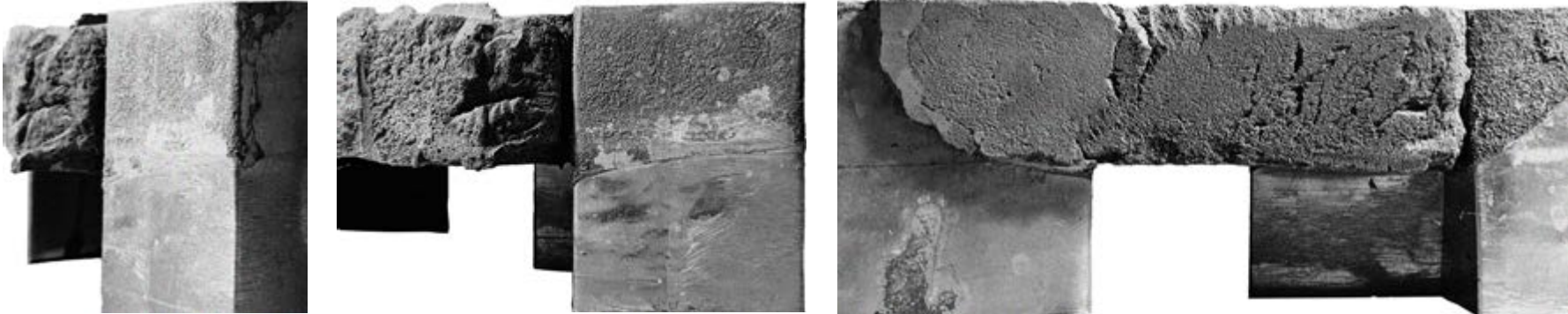
ALCHEMY (noun)
- transmutation of matter; conversion of base metal into noble metal.

change in state
base → noble

material
basic underlying substance
lead & gold

Architecture Alchemy Research Thesis 2024	Best thesis award 2024 + SSIP Grant for research 2025	Guided by: Prof. Snehal Nagarsheth
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thesis





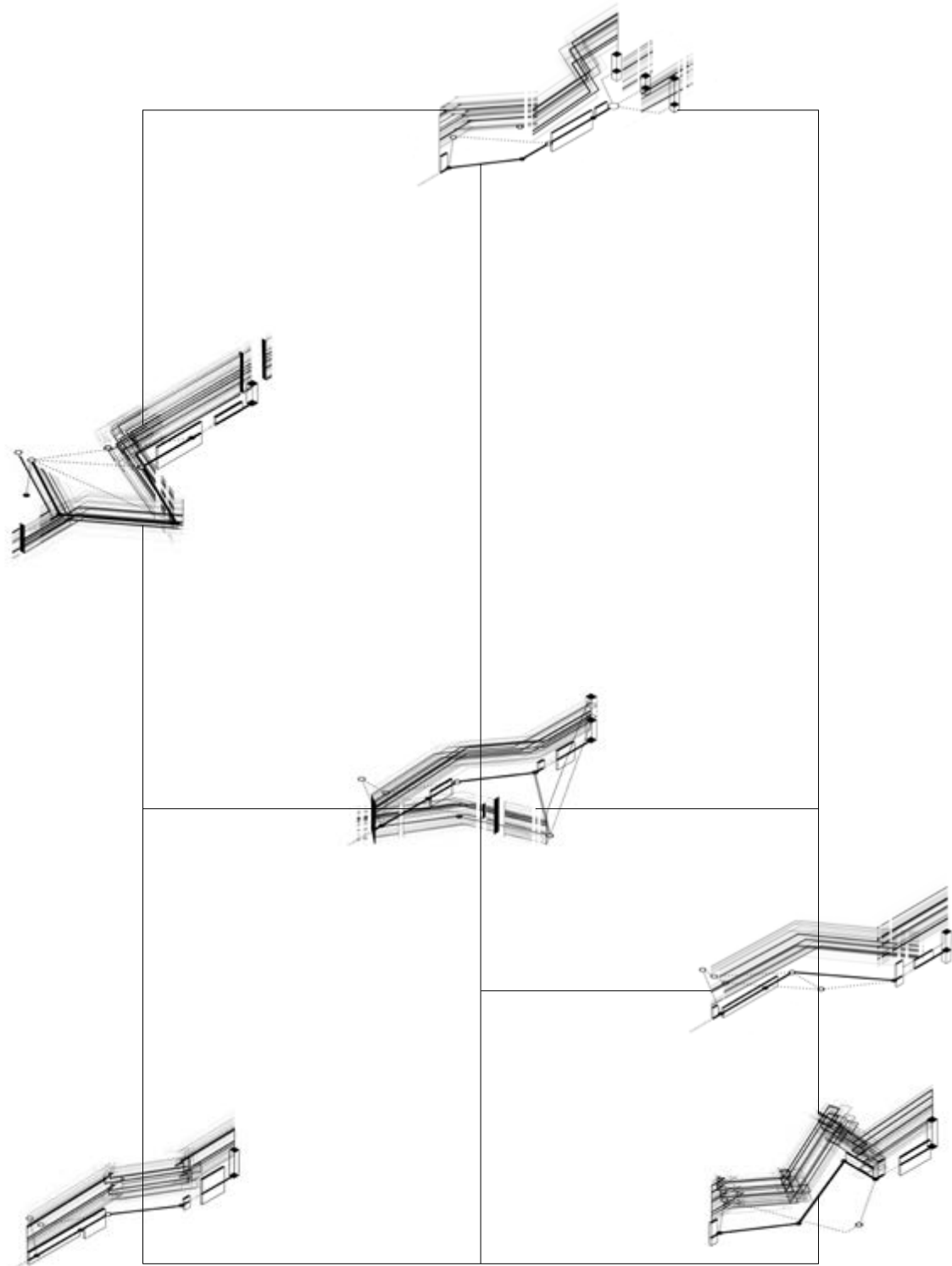
The conditions and examples act as cases and inquiries to delve into the essence of alchemy. This detailed exploration seeks to uncover and define what alchemy represents within the architectural context. Doing so aims to bridge the gap between alchemical principles and architectural practice, finding a deeper understanding and new ways of thinking about the transformation and potentiality of matter and materials.



The philosophies and ideologies have always brought new approaches and perceptions of architecture. It was being referred to as the works of architects, similar to the way poets were looked at, which made architects more important than the architecture and its purpose.

Different times had different factors in focus, in some the idea became the core and in other materials took the center stage. In the race “towards a new architecture”, the ideologies were exploited to its full potential to satisfy the standards of undefined intellectuality. The intentions and the purpose never allowed the process; “the act of making” to be looked at as the core idea of design.

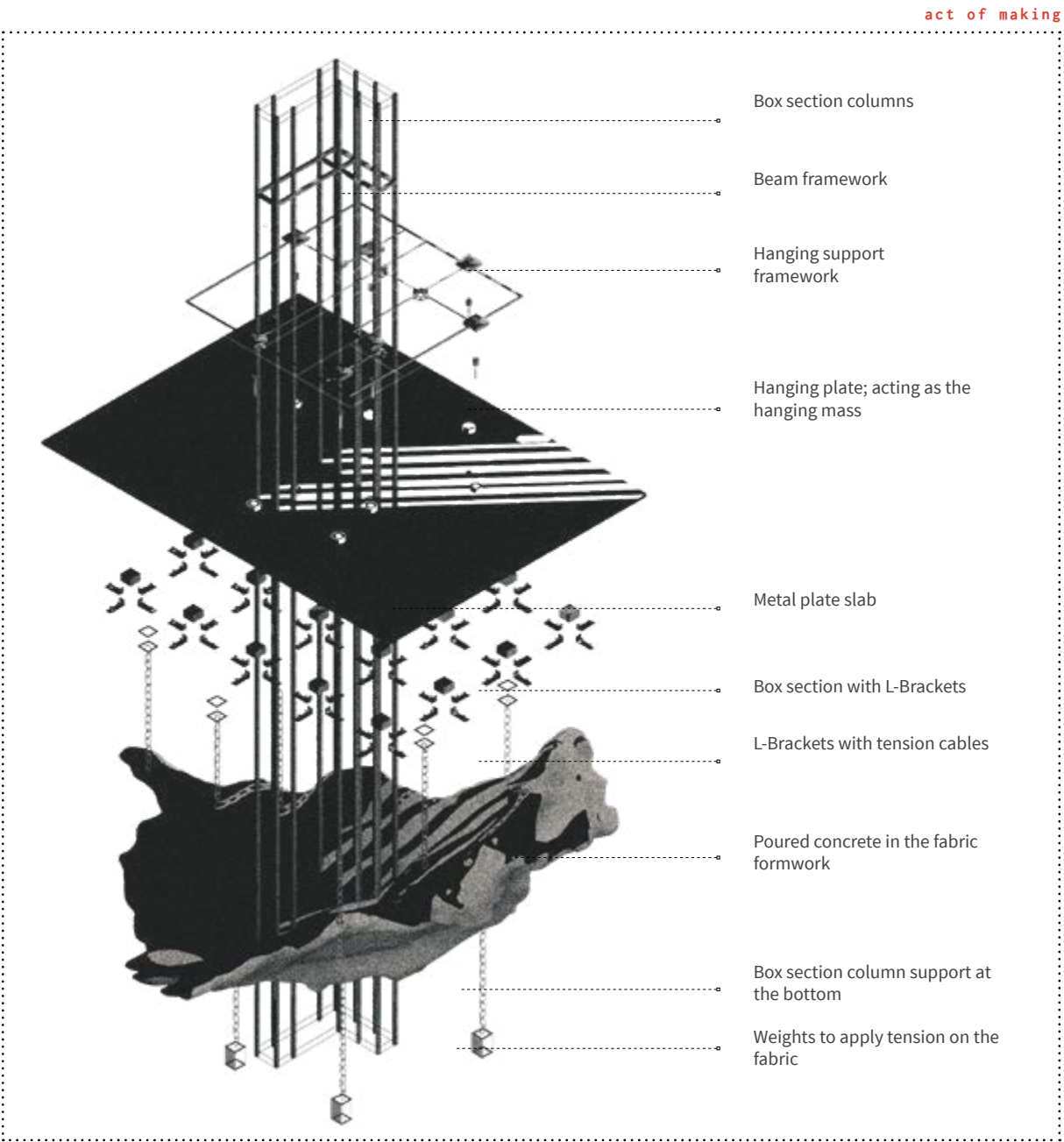
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Elements in Making : 1

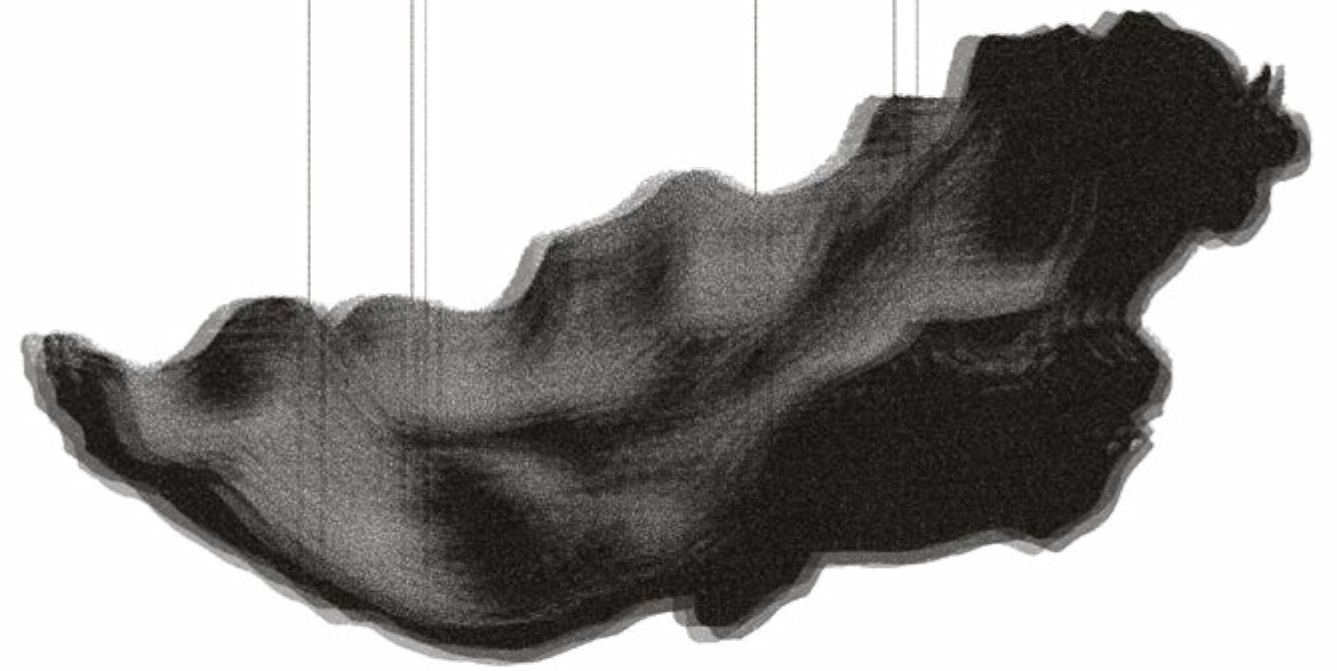
The suspended slab is not merely an object but a testament to transformation—an alchemical convergence of force, gravity, and material will. It is shaped not just by physical pressures but by an unseen dialogue between resistance and surrender, between structure and dissolution.

In its suspended state, the slab transcends its raw materiality, embodying the echoes of its making. It is not just a slab but an entity that has undergone a silent metamorphosis, where weight becomes form and tension becomes meaning. Its existence is not accidental; it is the result of forces acting upon it, shaping its presence and purpose.



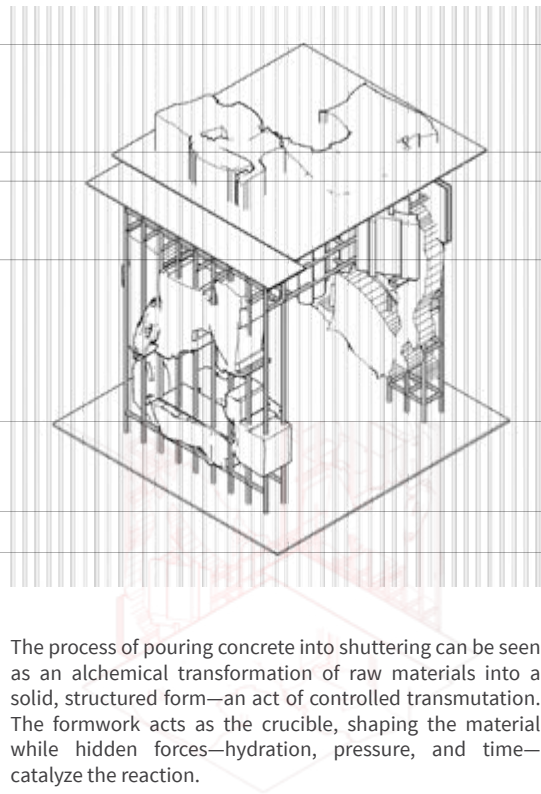
What gives a space its sense of divinity?

This section captures the sacredness of rainwater as it cascades through stone. The underside of the suspended rock remains cool to the touch, inviting human interaction. As water seeps along its rough, natural texture, it becomes a sensory convergence of elemental forces—earth, water, and air—united in a quiet, tactile moment.

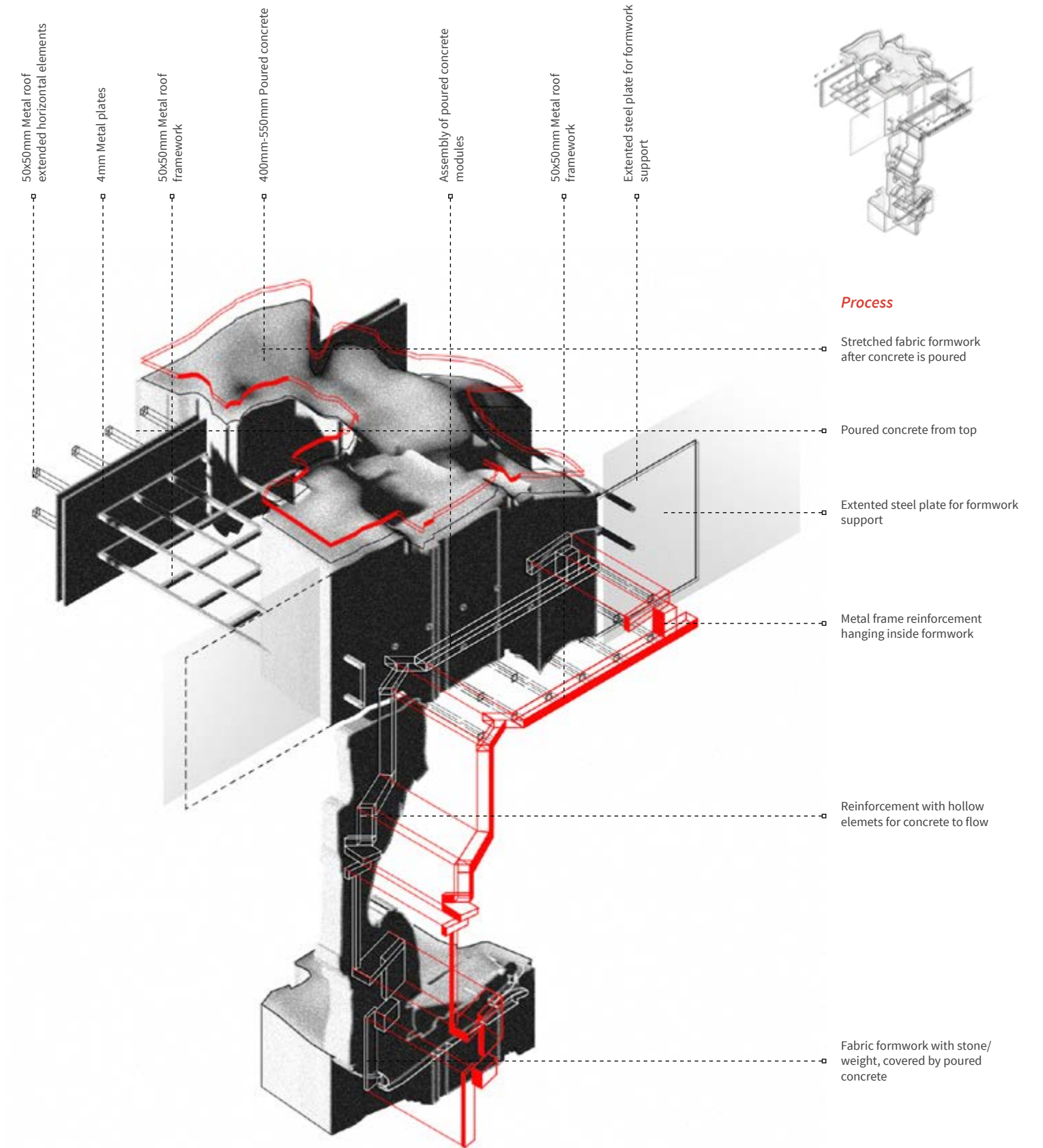


Beyond its tangible form lies a deeper essence—a philosophical threshold where matter ceases to be inert and instead gains significance. It is no longer just a mass suspended in space but a narrative of becoming, a record of interaction between what is given and what is made.

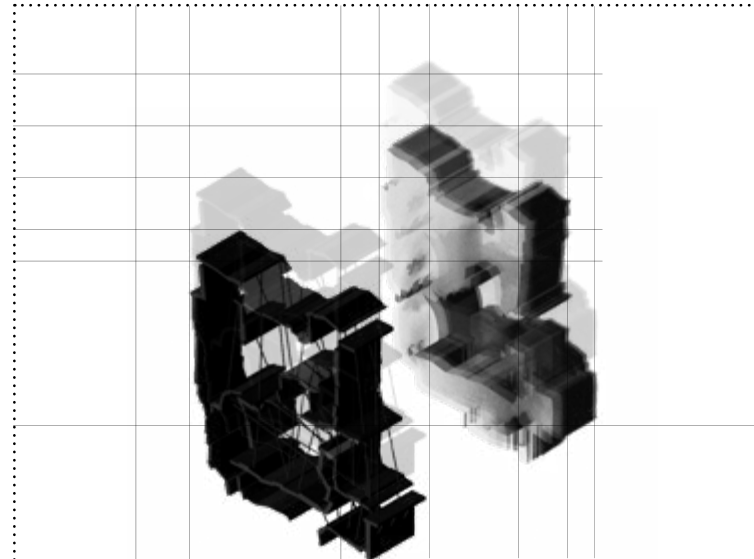
Elements in Making : 2



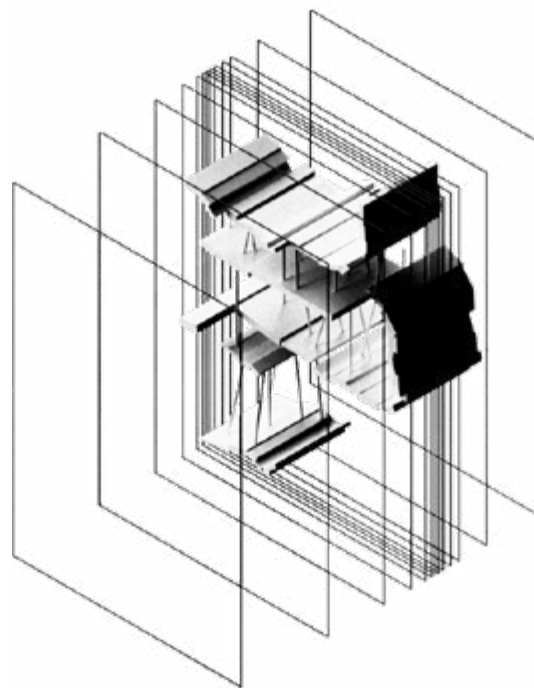
What was once fluid and formless emerges as a monolithic wall, embodying both permanence and the memory of its own making. This duality, where liquid becomes stone, is the essence of an architectural alchemy, revealing the invisible process of transformation within the built environment.



The monolithic wall, once transmuted, becomes more than mere matter—it embodies a quiet metaphysics, where potentiality solidifies into presence, and identity emerges from transformation.

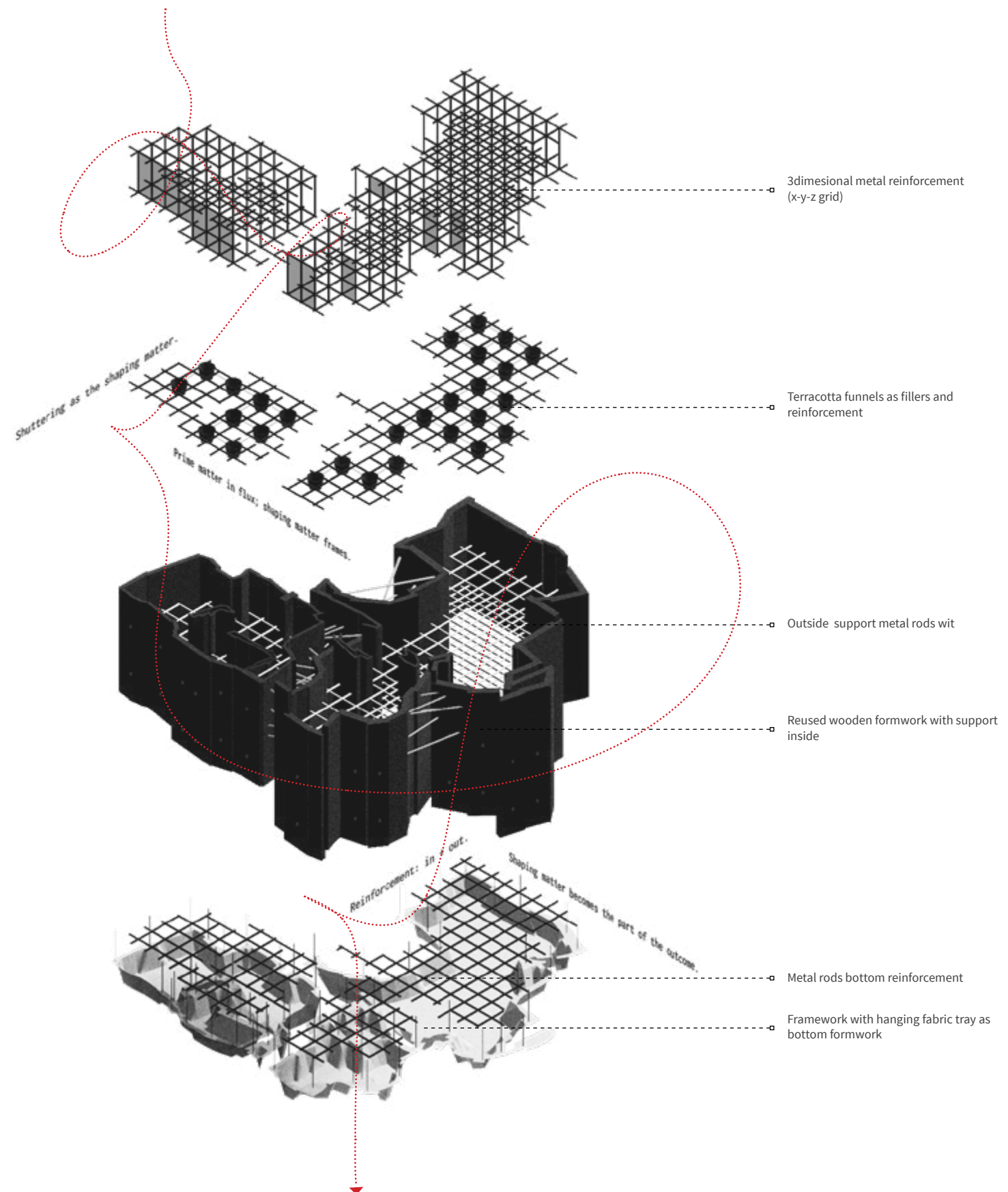


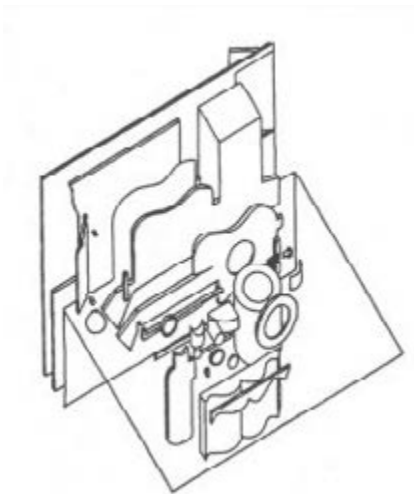
Formwork acting as a shaping mat; breaks the fluctuation and makes the matter static.



Matter, in its primal form and its shaped manifestations, constitutes an integral aspect of the structure. The matter that undergoes shaping functions as an independent entity, serving as a formwork or mold.

This formwork not only provides the necessary framework for the structural matter to take its desired form, but it also acts as an inner reinforcement, ultimately merging with and becoming an inseparable part of the final structure.





A Well Turned Inside Out

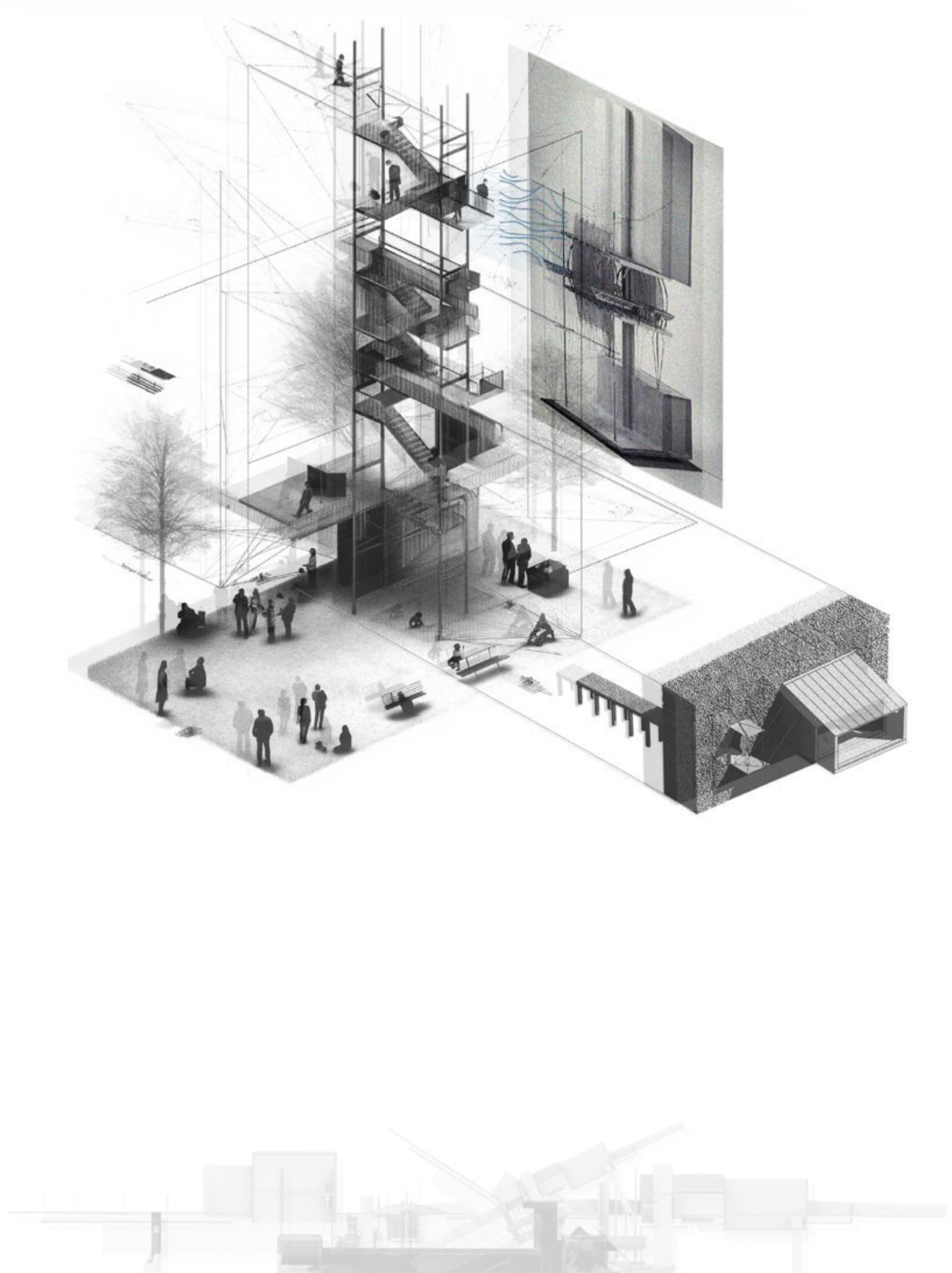
Layering in Architecture: Designing Around the Overlooked

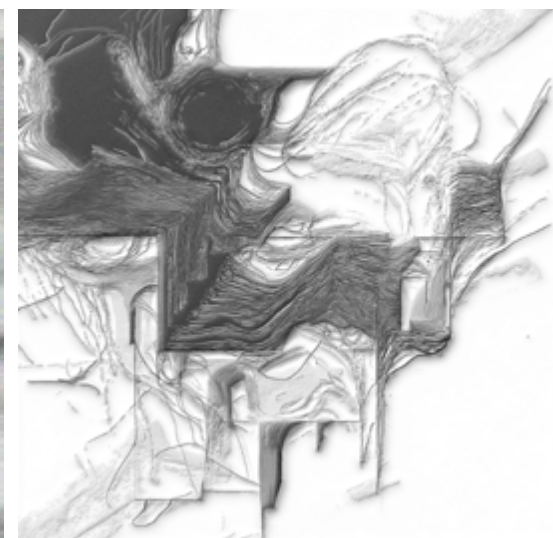
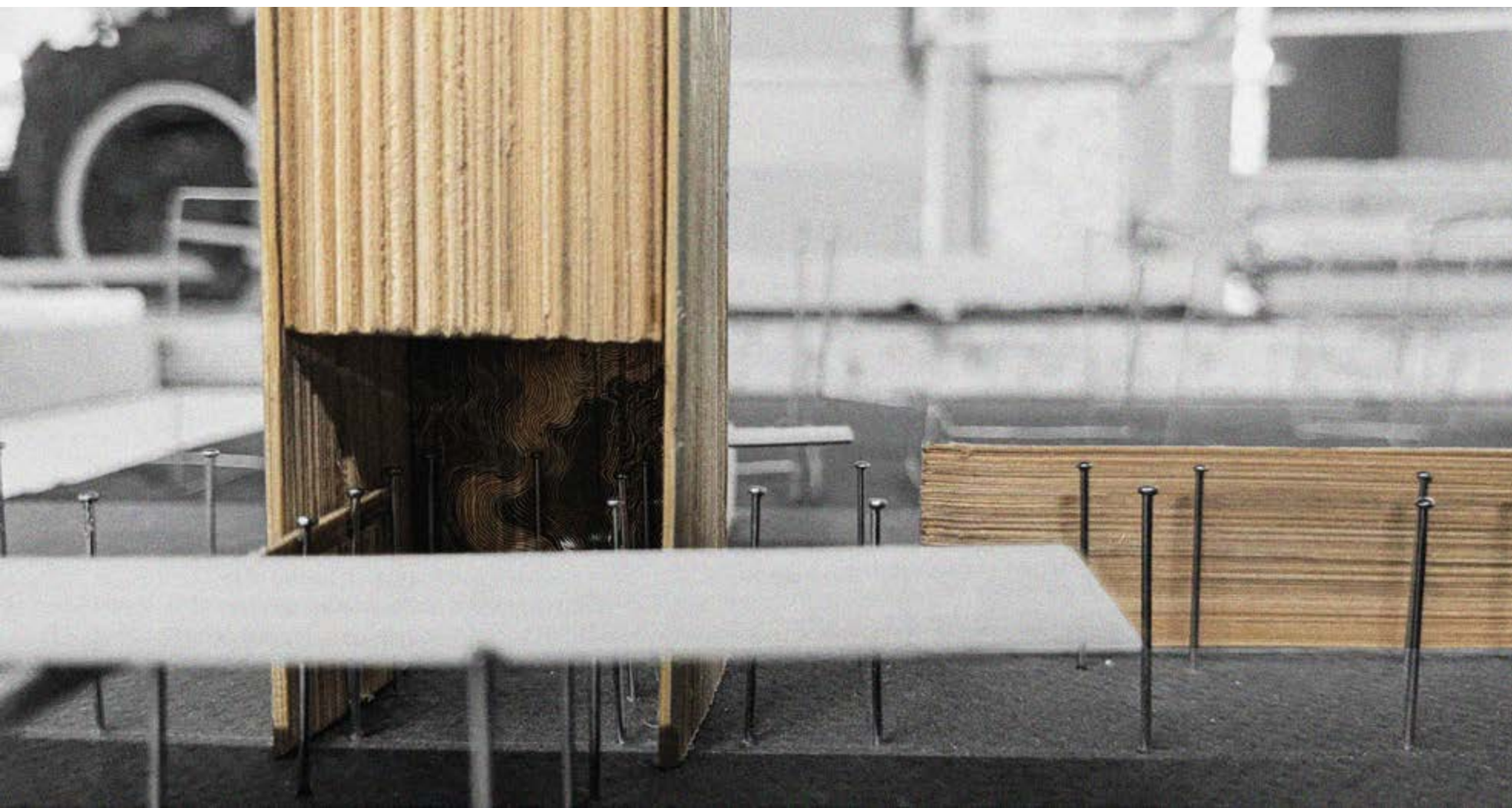
This project reimagines conventional water systems as vibrant community spaces—especially within peri-urban regions, where every fragment of land holds potential in shaping the social fabric.

Overhead water tanks have long been part of our infrastructural landscape—functional yet invisible, rarely considered as spaces with the potential for community engagement. This project envisions a shift: transforming these utilitarian structures into places where water is not only stored, but celebrated—spaces where community life can unfold.

The design is grounded in the concept of architectural layering. Each element—function, accessibility, social interaction, climate, and culture—is treated as a distinct layer. When these layers intersect and overlap, they generate spaces that are not merely functional, but meaningful. Not just wanted, but deeply needed.

Water Systems Peri-Urban	Collaborative Studio GSAPP + Gujarat local water systems	Guided by: Prof. Shehal Nagarsheth Prof. Ashish Tiwari
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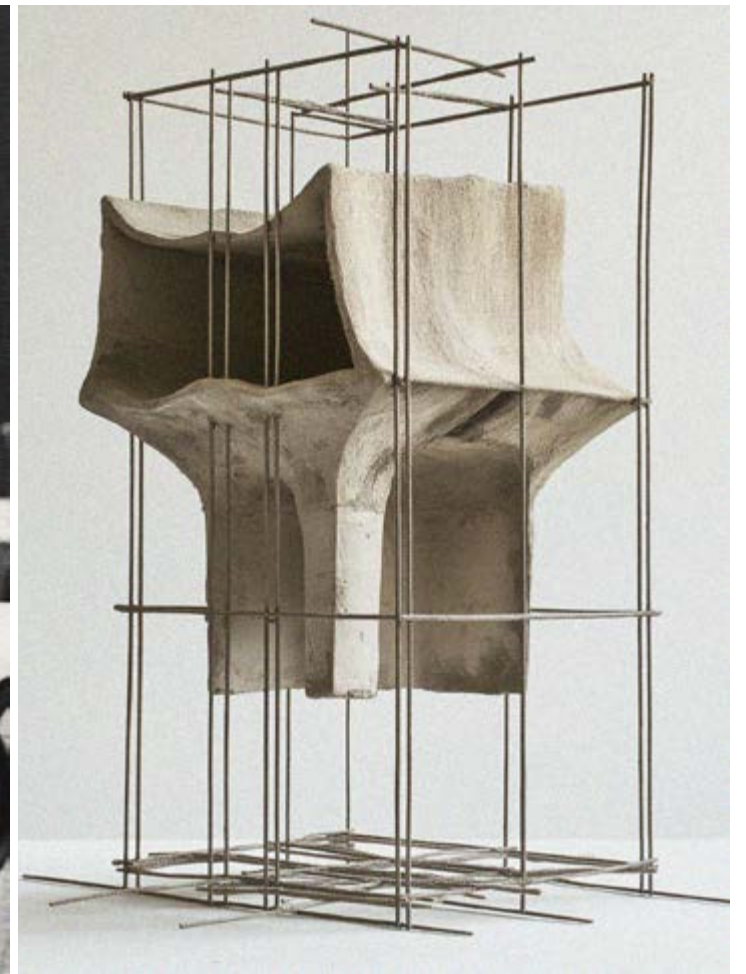




Physical Model (1:100): Water systems (tank) shape the surrounding spaces within an urban environment. The tank transcends being a mere container, becoming a vital piece of public infrastructure that actively serves the community.

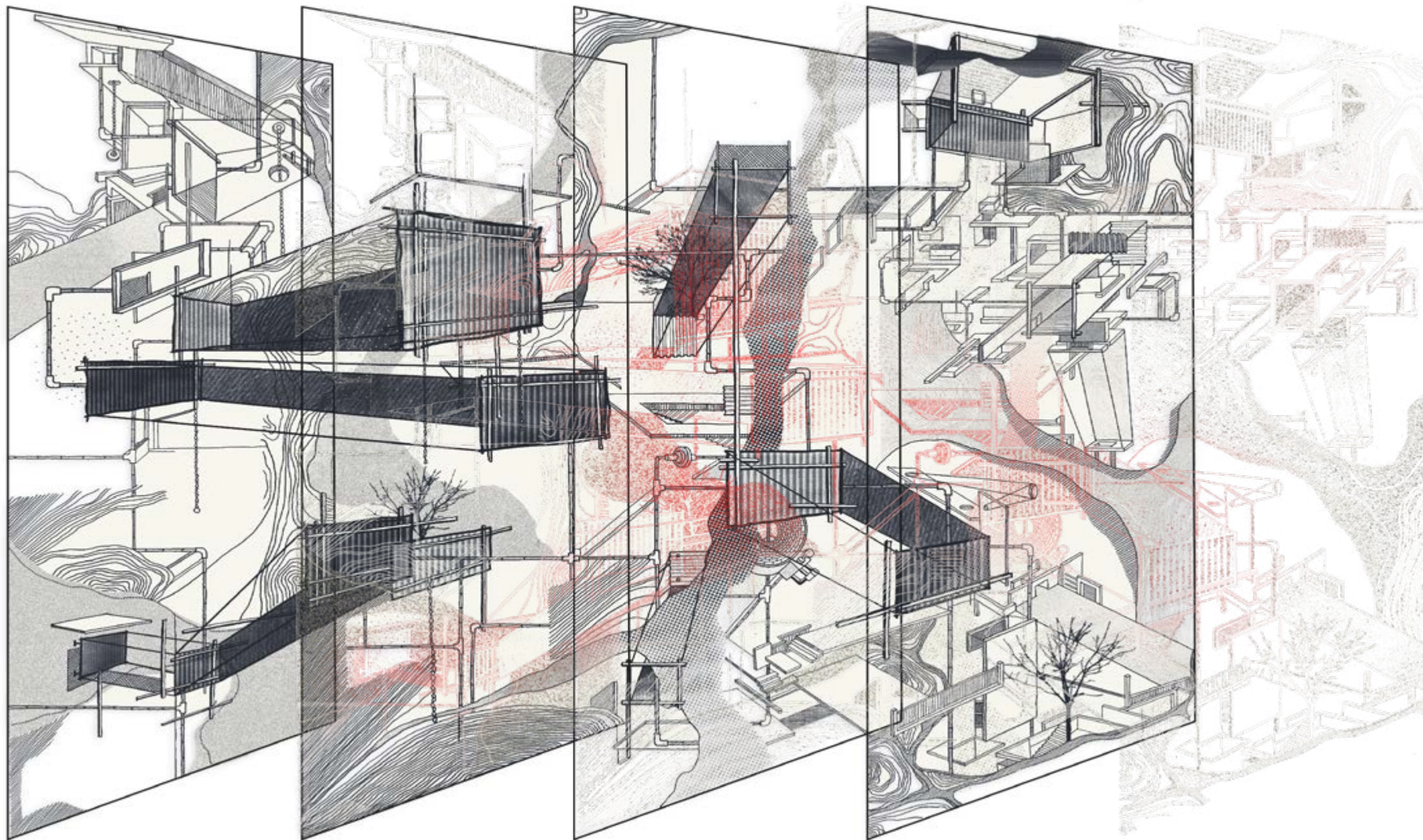
Sketch: Water travels from a natural reservoir to a human-made one, weaving itself into the life of people and structures as it flows, nourishes, and integrates with the urban fabric.

The wire symbolizes the uncertainty and fluidity of spaces — spaces that exist beyond fixed forms or designated functions. It captures the ambiguity and open-ended potential inherent in the creation of environments.....

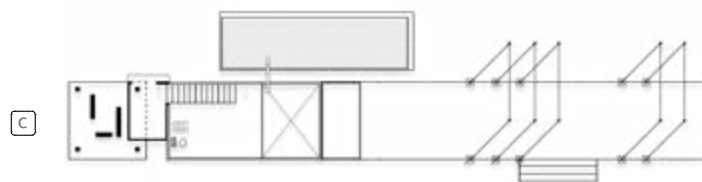
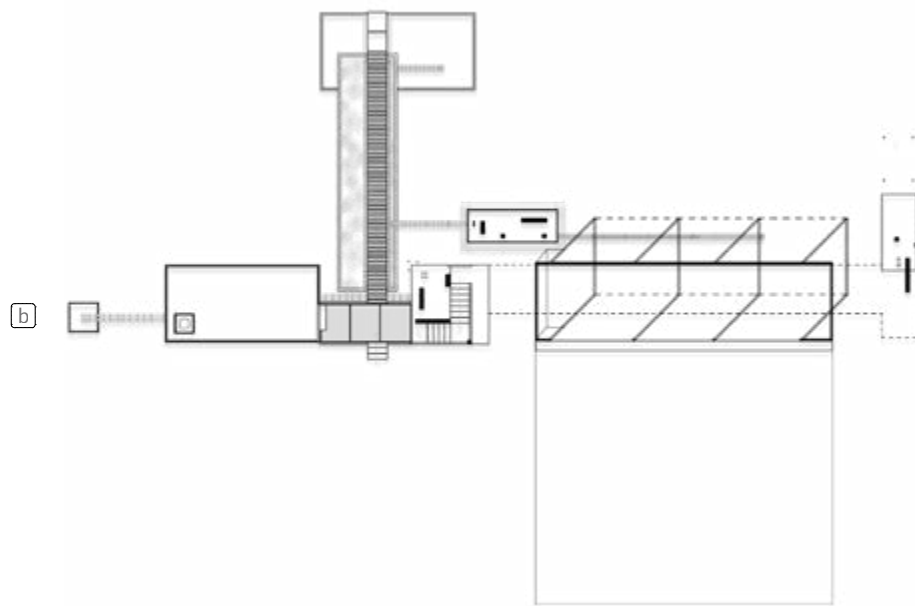
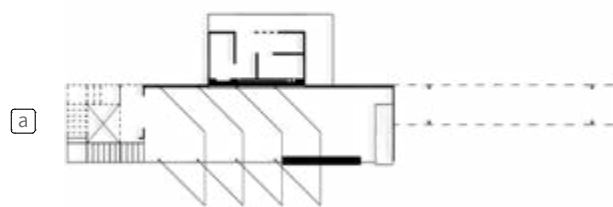
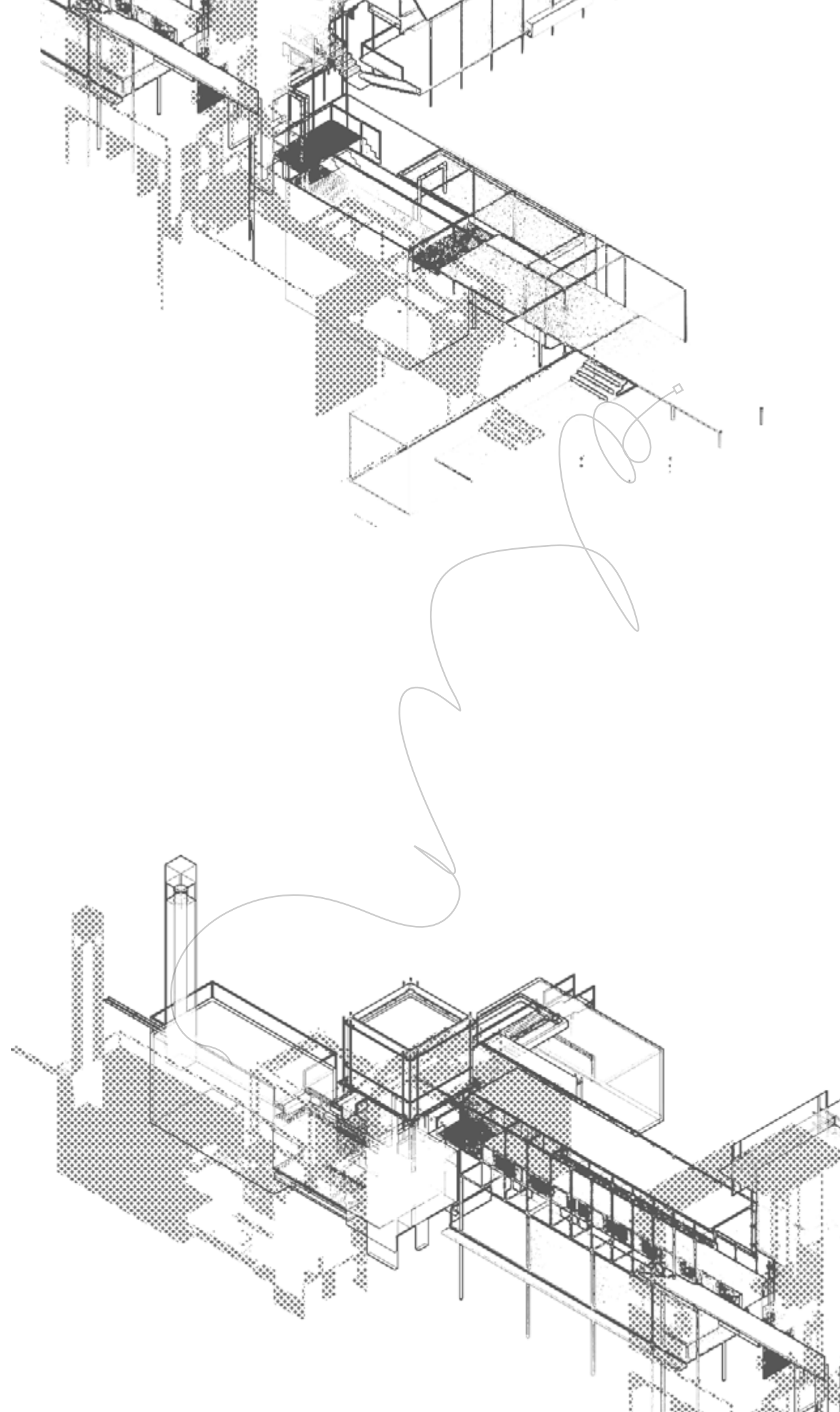


Physical Models (1:50): The system fluctuates, shaping spaces around it. These spaces transform into architectural elements that frame and define the openness.

.....reflecting how architecture can transcend rigid definitions and embrace the in-between, the undefined.



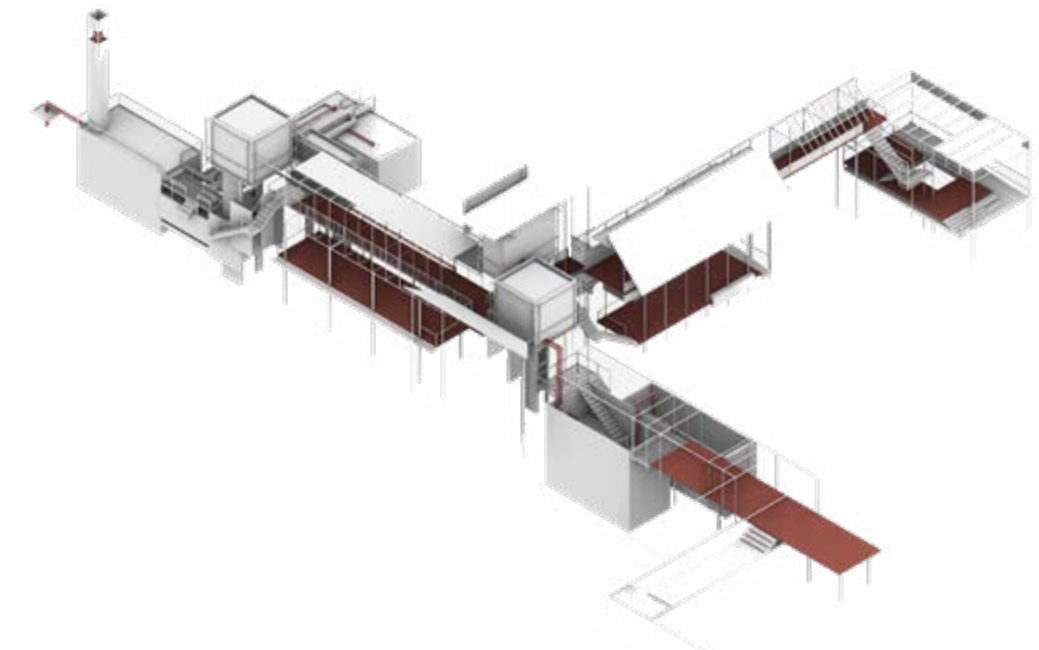
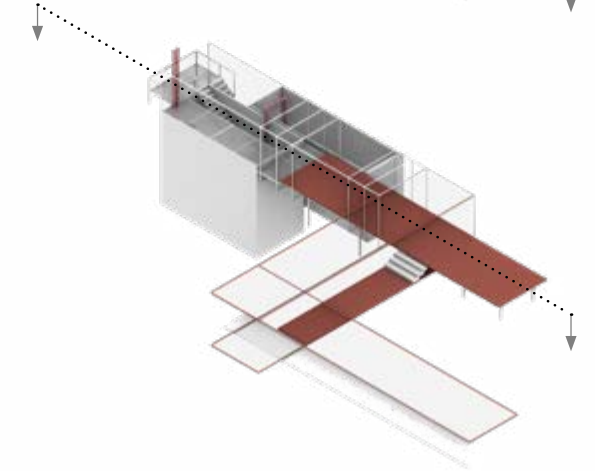
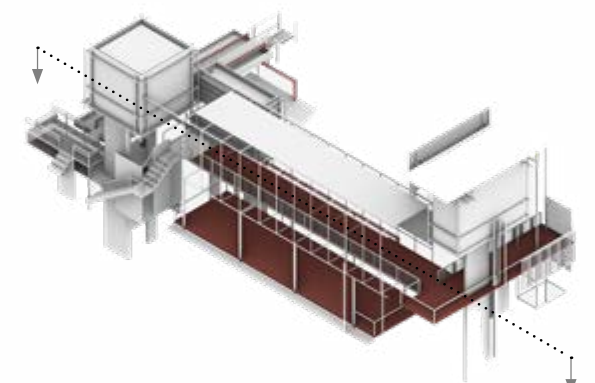
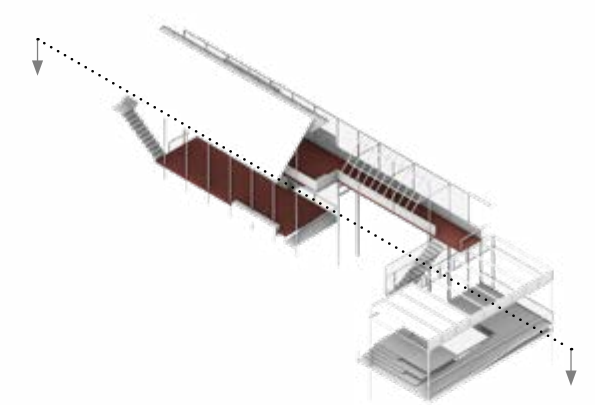
Sketch: Each stratum suggests a moment in time, a trace of memory, or a veil between the **seen** and the **sensed**. The sketch does not depict a singular form but a gradual unfolding—where lines blur into shadows, and one space breathes into another. It reflects a world where architecture is not built all at once, but sedimented like thought: one idea laid carefully upon the residue of another.

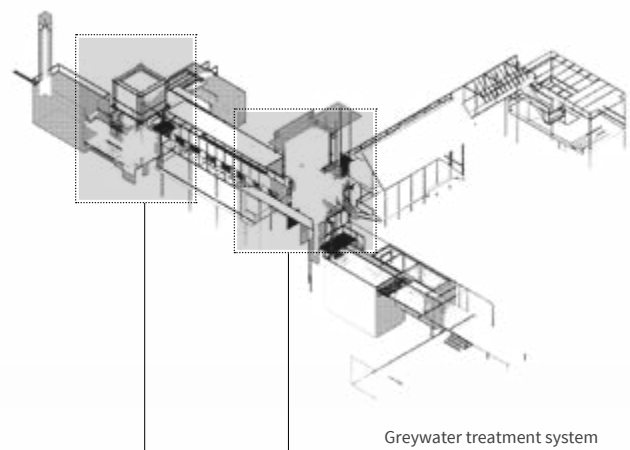


(a). One connects the school's open ground to the central core through a bridge. On the school side, a pavilion invites students to claim it as their own, leading to a semi-open, movable classroom accessible via the bridge.

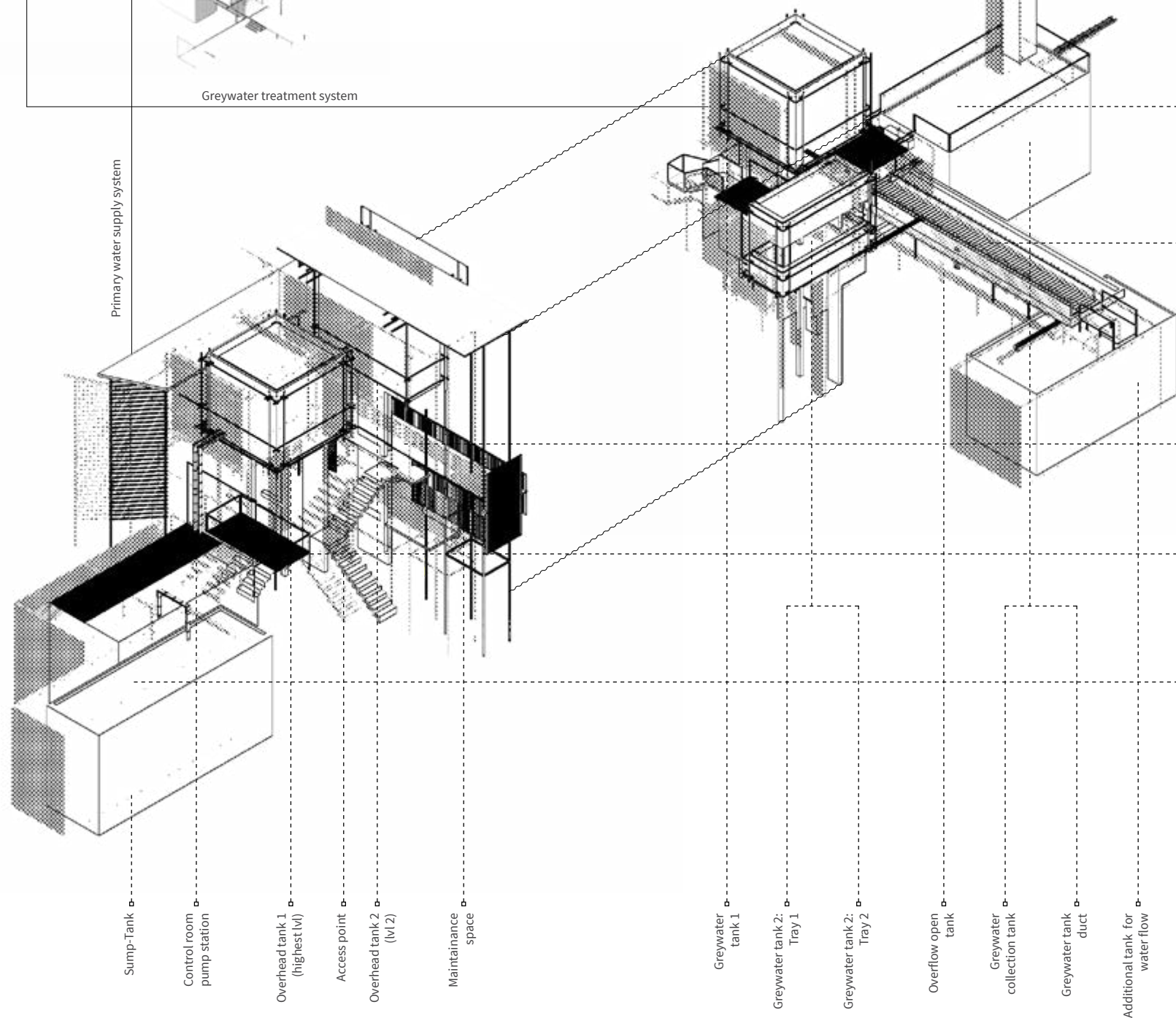
(b). The other space functions as an informal community hub, accommodating local gatherings, events, and temporary markets.

(c). Extended platform with architectural elements defining the spaces. These spaces are functionless for the people to adapt and make it their own.





Greywater treatment system



Primary water supply system

Sump-Tank

Control room
pump station

Overhead tank 1
(highest lvl)

Access point

Overhead tank 2
(lvl 2)

Maintenance
space

Greywater
tank 1

Greywater tank 2:
Tray 1

Greywater tank 2:
Tray 2

Overflow open
tank

Greywater
collection
tank

Greywater tank
duct

Additional tank for
water flow

+ 740mm Storage tank as public space;
stage for local festivals

Connecting bridge above open vegetation
treatment tray

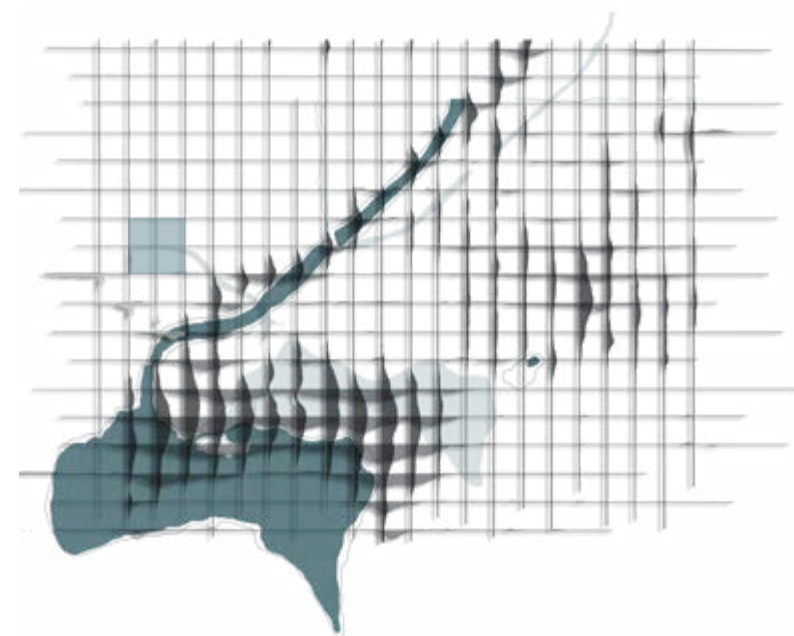
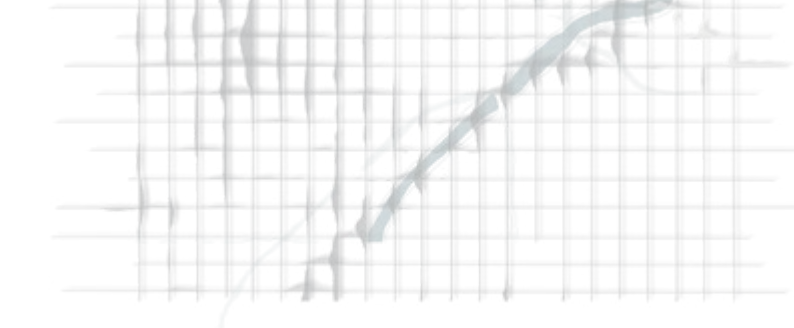
Adaptable maintainance space; elevated
platform market space

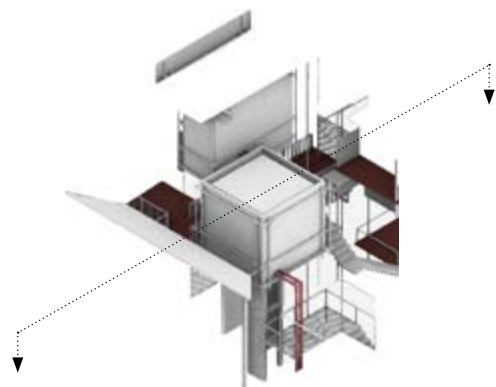
Open service pipes with steel platform
with playspace for children

Water storage framing open spaces to
form playground

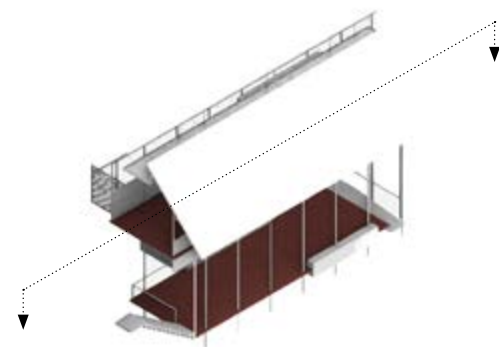
Water Systems: Storage and Treatment

Water systems integrated with greywater treatment act as vital urban catalysts that extend beyond their functional role. These systems are designed not just for sustainability and resource management but also to generate spaces that invite interaction, contemplation, and gathering. As treated greywater flows through sculpted channels, filtration gardens, or stepped terraces, it helps carve out public zones that are both ecologically productive and socially engaging. This dual function transforms water infrastructure into a spatial and environmental experience—anchoring the building within a living, breathing urban ecosystem.

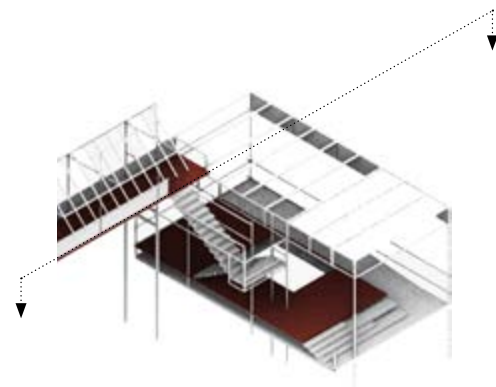




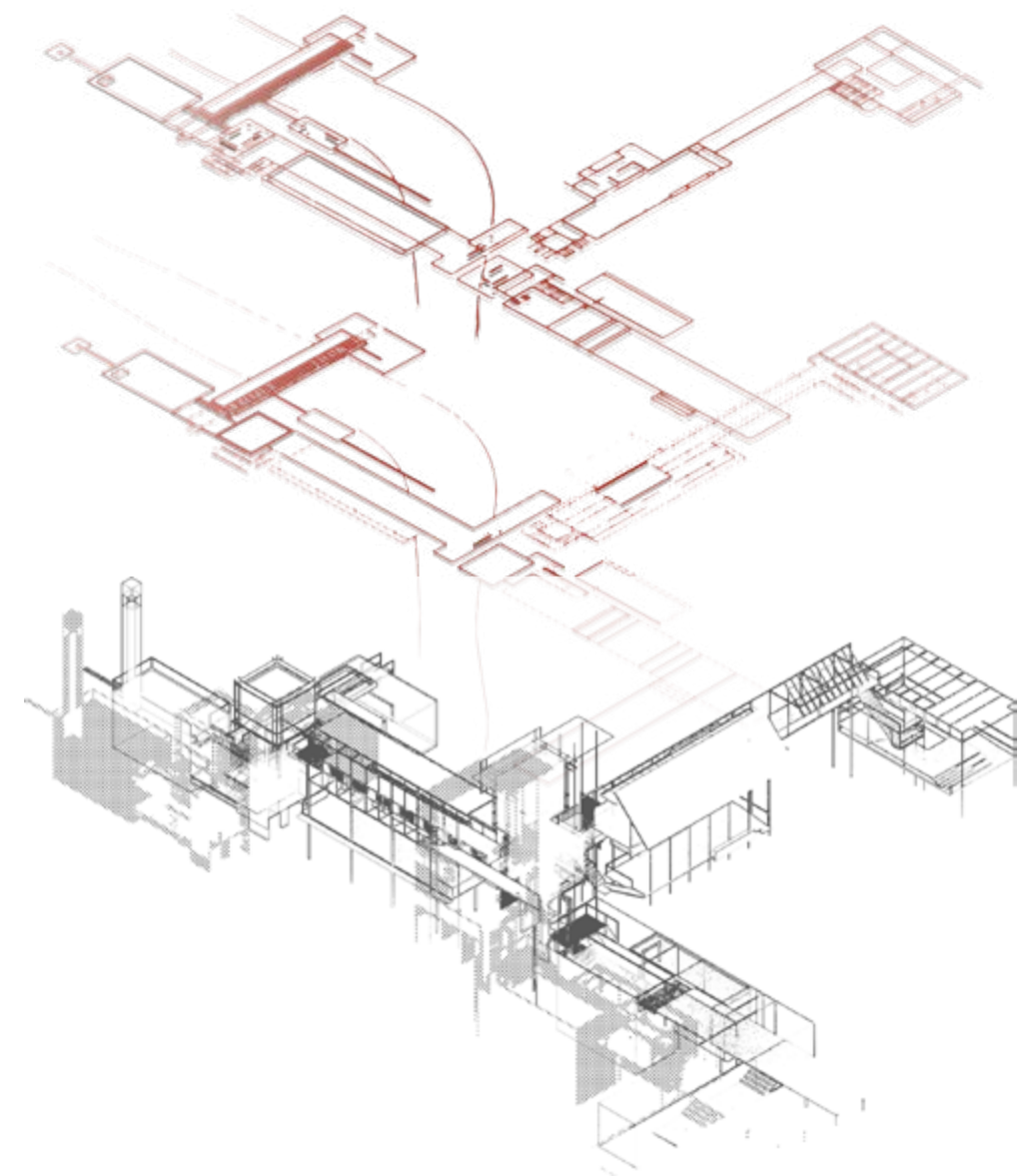
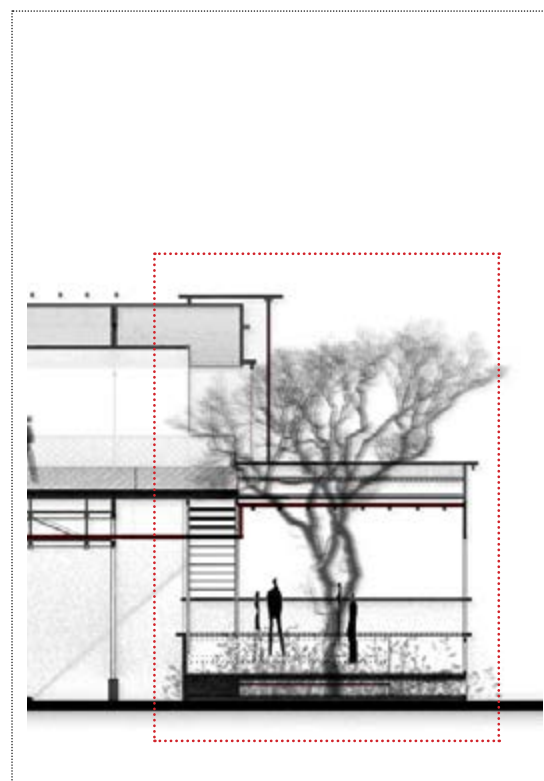
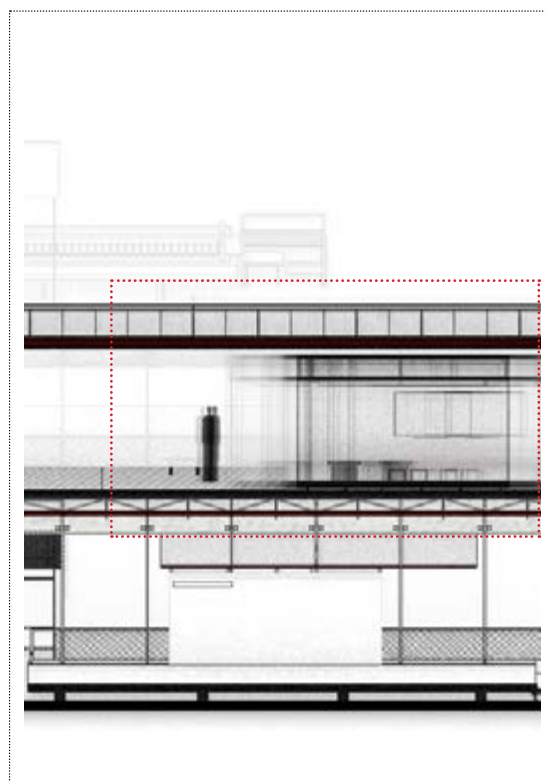
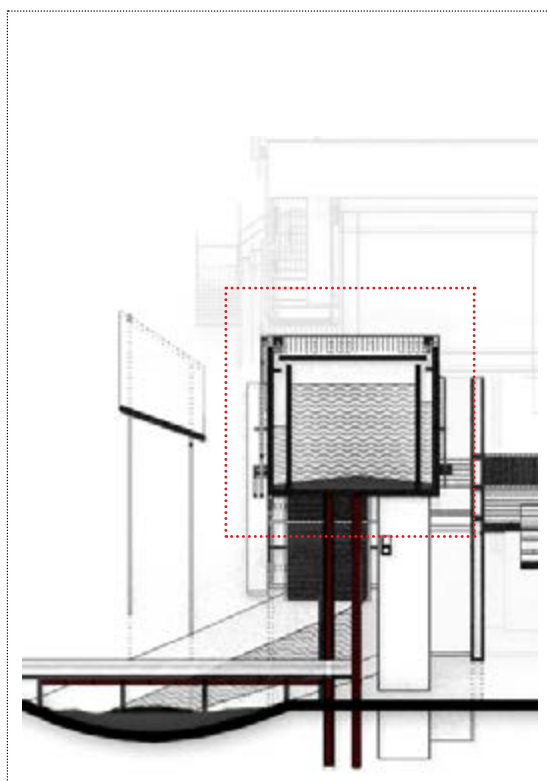
Section 1: Shows the water tank with service area and a public space. There are spaces formed around the tank at different levels.



Section 2: Shows the semi-open spaces formed beside the tank, also acting as a bridge between the student's pavilion and core space/system.

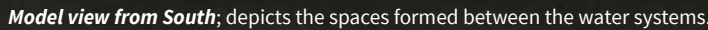


Section 3: Shows the student's pavilion for the Primary and High School beside the site. The pavilion acts as a connector between the tanks and the neighbourhood.

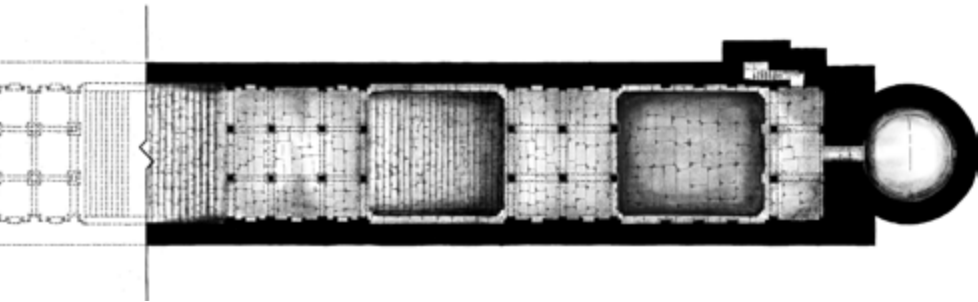


Architecture without function.

Section: Spaces are formed and designed according to the water systems, which includes a greywater treatment plant and overhead water tanks. These spaces are reimagined considering the peri urban development in Indian towns where the public spaces are lacking and the dark spaces are formed around the service architecture. Water pipes are used to divide open grounds that allows the community to adapt the architecture and its elements.



IV



Stepwell Documentation - Winner Citation

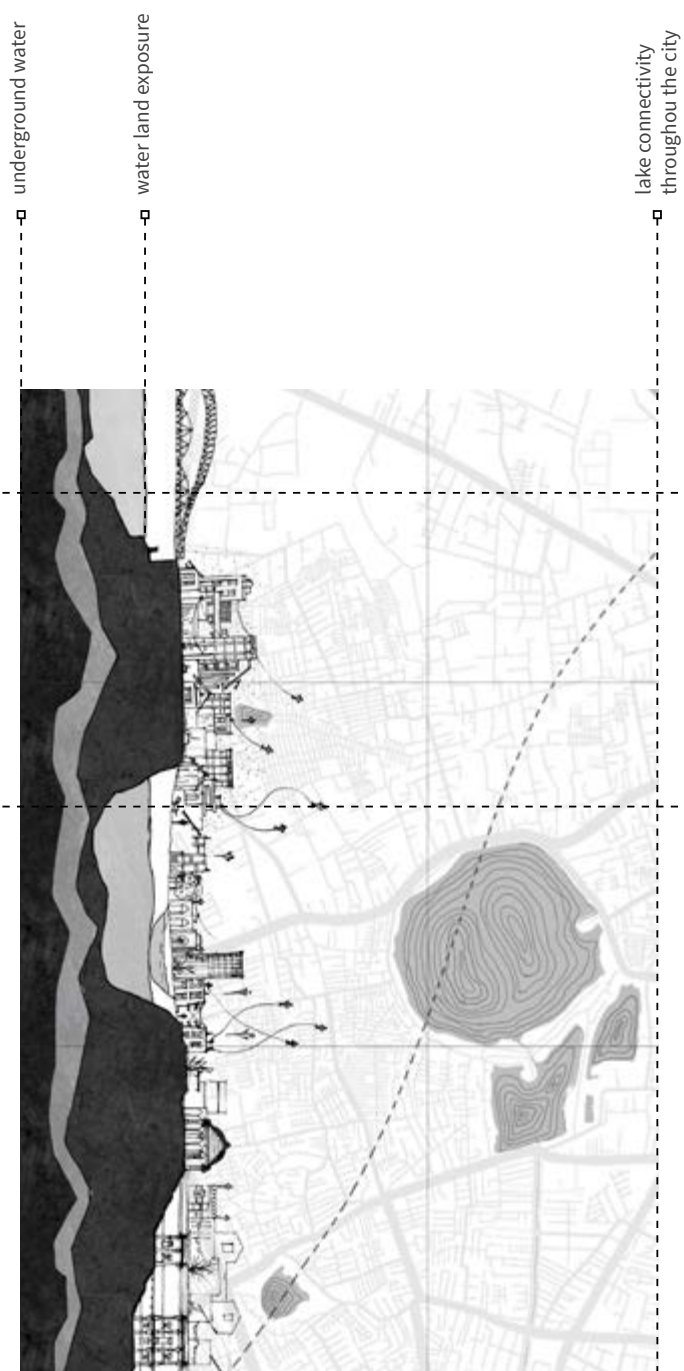
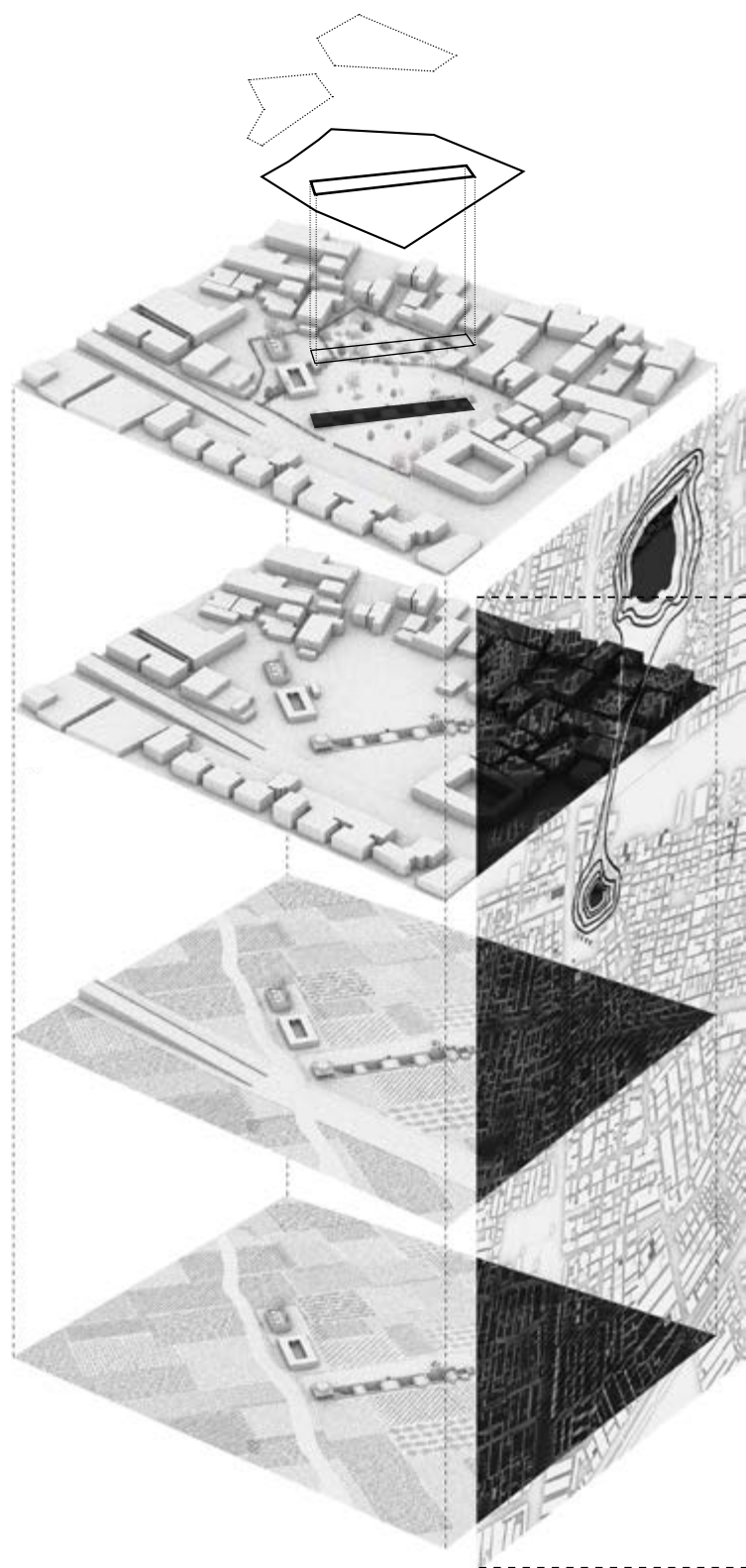
Louis Khan Trophy is an annual design competition organized by the National Association of Students of Architecture (NASA), India, that encourages participants to reinterpret heritage through the lens of contemporary design thinking.

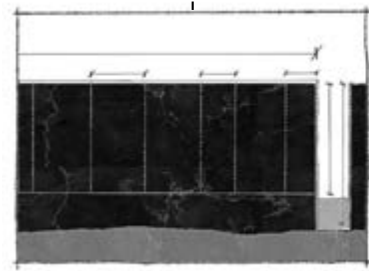
Our entry focused on the Jethabhai Stepwell, a lesser-known yet culturally rich architectural landmark located in Ahmedabad. This historic structure, layered with intricate carvings, spatial sequences, and forgotten narratives, stands as more than just a water reservoir—it is a silent witness to centuries of community life, ritual, and resilience.

The exploration uncovered how the stepwell has shaped the identity of its surrounding neighborhood, not just as a utilitarian structure but as a shared cultural space. Architecturally, the stepwell is a harmonious fusion of Hindu and Islamic design elements, symbolizing the interwoven religious and cultural histories of the region. Arches, columns, motifs, and craftsmanship from both traditions coexist—creating a space that reflects the spirit of unity and coexistence.

Through careful documentation and interpretation, the design proposal sought to celebrate this blended heritage, breathing new life into the forgotten stories embedded in its stone.

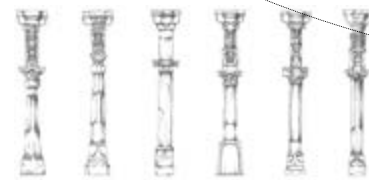
<i>LIK National Trophy 2023 (NASA India)</i>	<i>Winner Citation + Documentation and Design</i>	<i>Role: Team Lead (Group Work)</i>
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Four trenches, separated by 4- metre wide baulks, were dug parallel to each other.

4



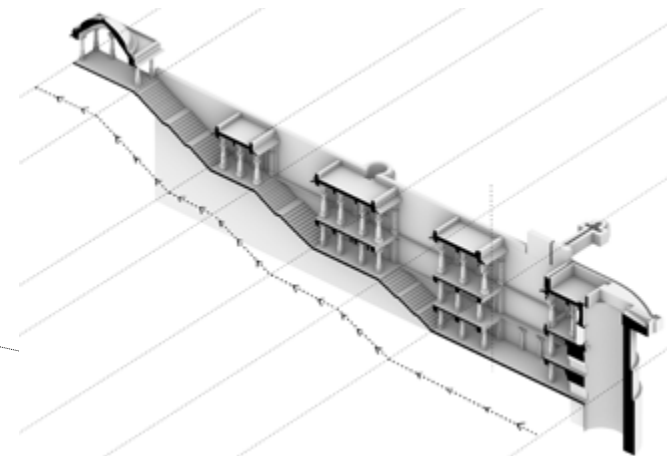
The pavilion part of the stepwells are excavated first as they structurally bear the Exterior load.

5



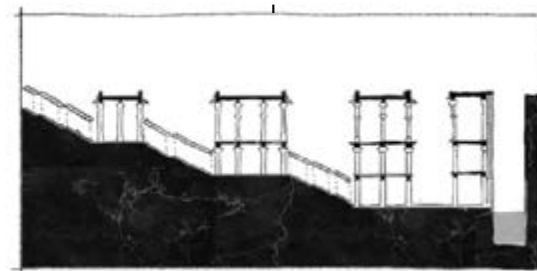
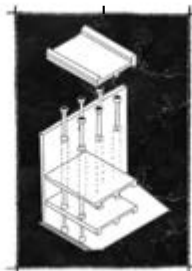
According to the analysis, first retaining walls are built and then pavilions are built.

6



First the retaining wall is built adjoining which stone pillars and beams are added with a platform on the top and the pavilions are formed based on the ledges.

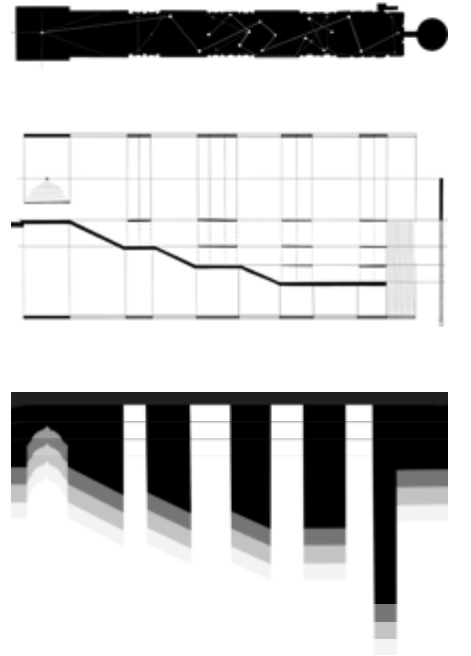
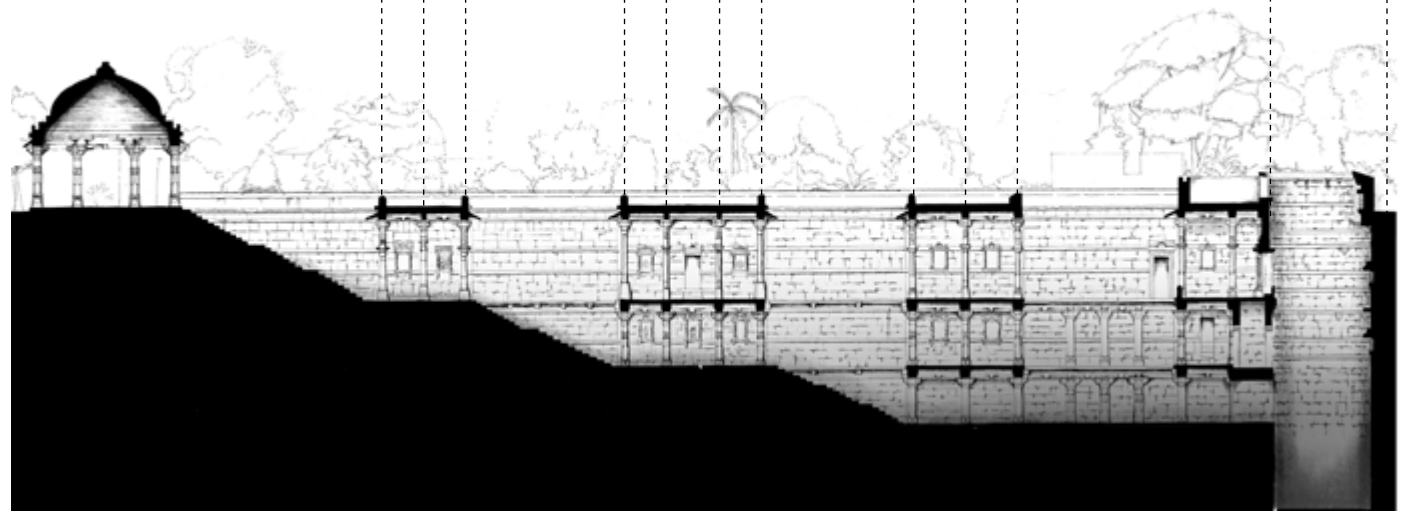
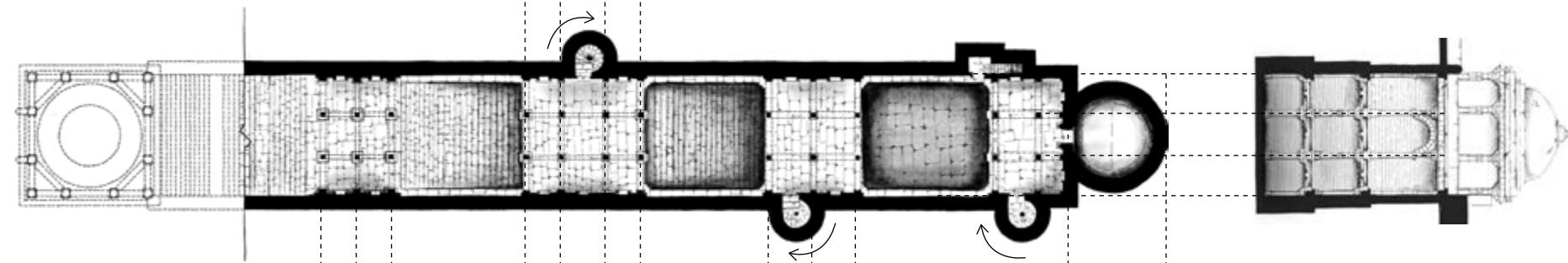
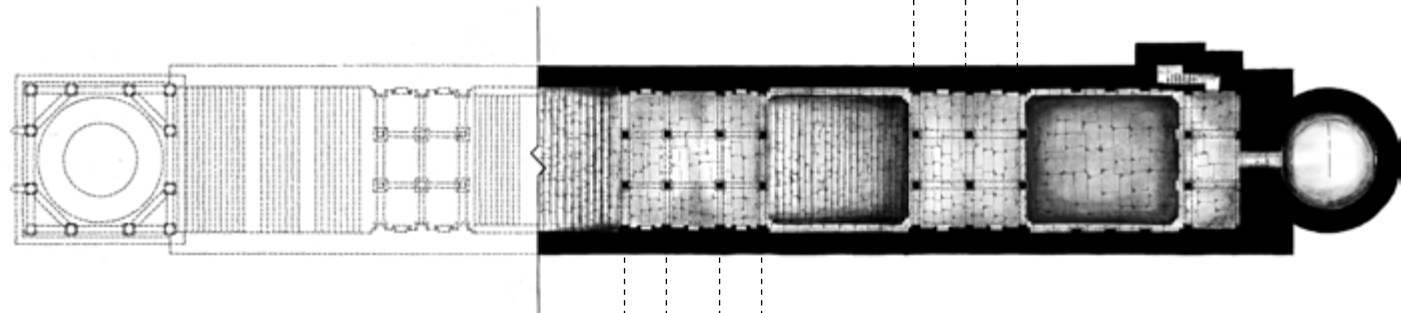
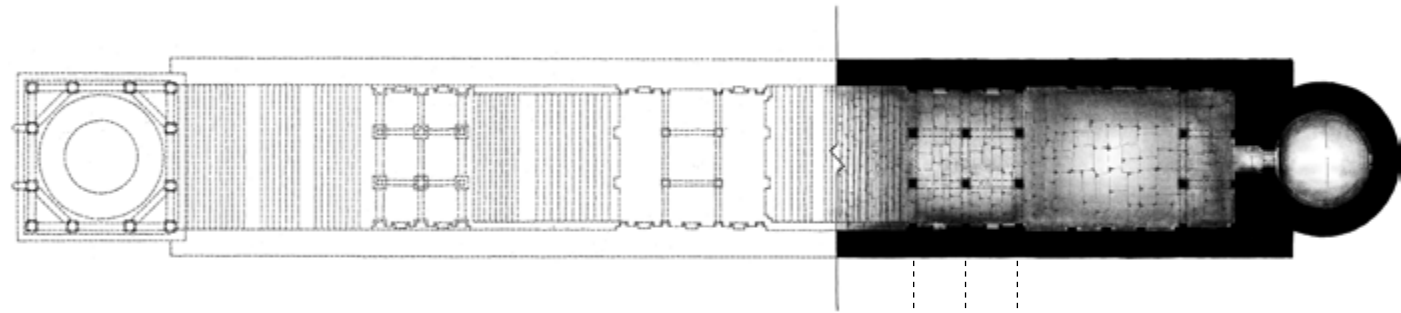
7



1 A cylinder trench is dug to the height of one man. At every such depth, the diameter decreases. When the underground stream of water is reached, excavation is stopped.

2 At this point, a wooden wheel with a cross bar is lowered into the excavated well, where the soil is already moist and sluggish. The wheel is of the size of the diameter of the well at that depth and abuts the excavated sides of the trench.

3 Once the wheel sits horizontally on the soil, layers of brick masonry are piled up on it. The wheel settles easily on the wet soil and the soil under is carefully removed gradually till the actual stream strikes the depth and the water starts gushing into the well.



Like Rani Ki Vav, which is next to the Saraswati River, and Adalaj ni Vav, which is close to a lake, historically stepwells were constructed close to an existing water supply; in this case, Jethabhai's stepwell is close to the Isanpur lake. There's a clear water connection seen on the map, as there is a strong connection formed with Sabarmati River- Chandola Lake - Isanpur Lake -and ultimately the Jethabhai's Stepwell.



Matter + Methods Workshop

This hands-on workshop delved into the exploration of bamboo as a dynamic and versatile material. Participants were encouraged to move beyond conventional applications, reimagining bamboo as formwork, wall panels, woven systems, and structural components. The workshop was not merely about crafting—it was a deeper inquiry into the latent possibilities of the material when pushed through process, pressure, and precision.

Through a series of experimental exercises, bamboo was tested, bent, woven, and joined—revealing both its limits and unexpected strengths. Alongside bamboo, other natural and industrial materials were introduced. These were not assigned fixed roles, but rather approached with a spirit of chance, intuition, and trial-and-error. Materials were treated as active participants in the design process—reacting, resisting, and sometimes even dictating the outcome.

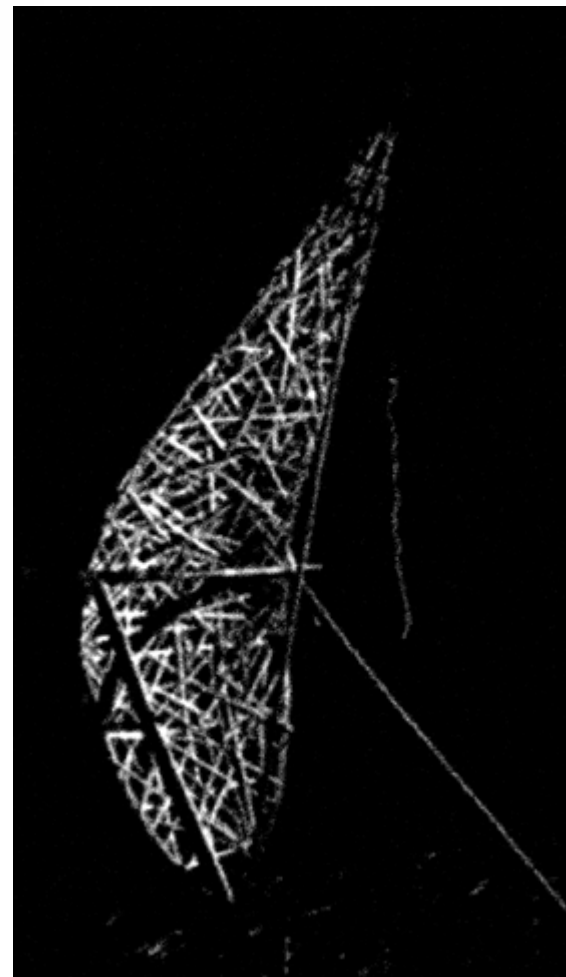
In this space of uncertainty and making, participants discovered new material behaviors, hybrid systems, and novel forms. The workshop became a field of alchemical experimentation—where the process of transformation was as valuable as the final artifact.

<i>Workshop</i> <i>Bamboo+Methods</i>	<i>Dhanaulti</i> <i>Uttarakhand, India</i>	<i>Role:</i> <i>Organizer and Facilitator</i>
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Img 1



Img 2

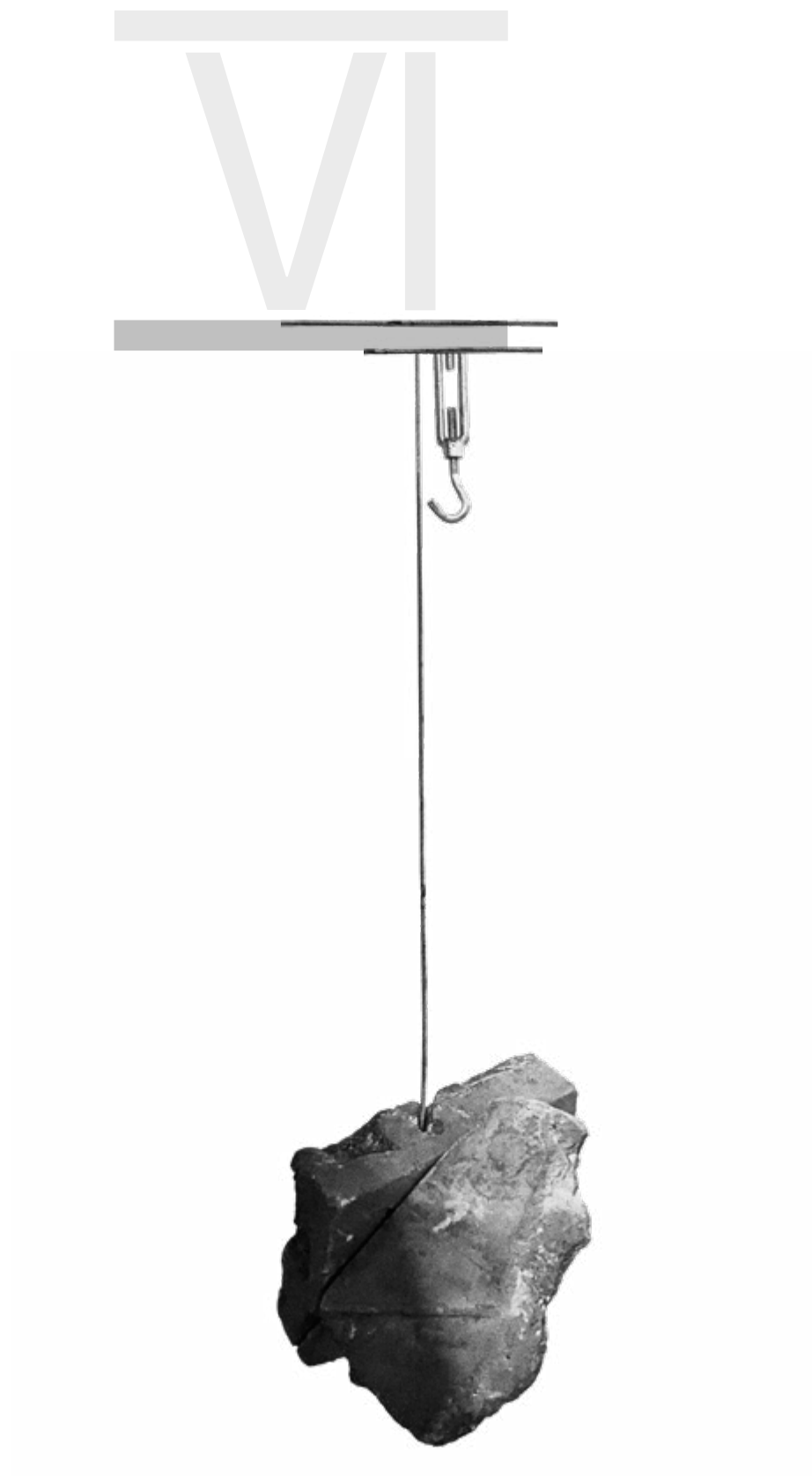


Img 3

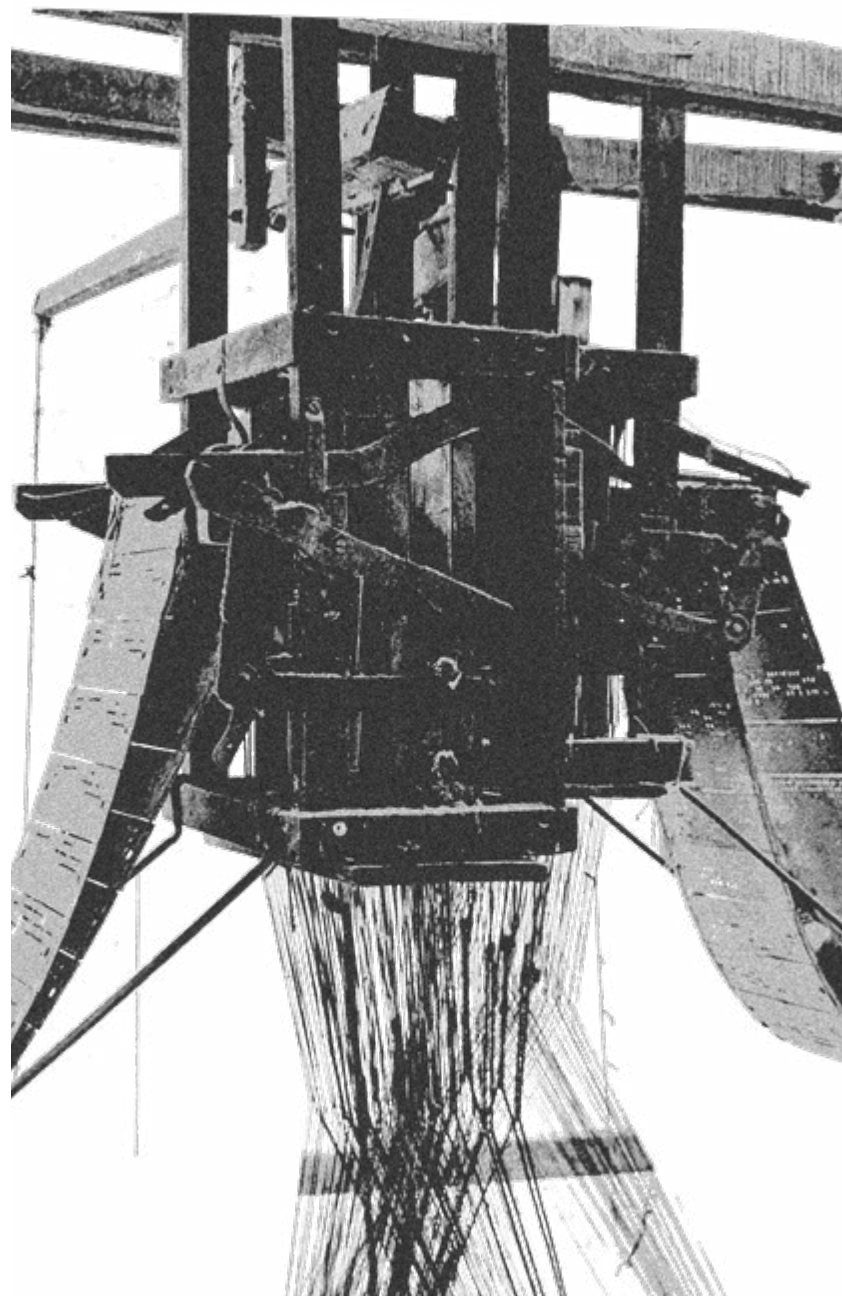
Img 1: Bamoo used as formwork for concrete base.

Img 2: Weaved Bamoo structure used as a backdrop. The weaved structure is a self standing unit with double curve shaping the form.

Img 3: Raw bamoo structure built by 10 participants in Northern India.



A constellation of models, born of matter shaped by place and time—each an echo of hands in search.
They are woven with threads of thought, stitched through shifting theories.
Like relics of futures not yet written, they invite the eye to interpret, the mind to imagine anew.



Threading Logic: Jacquard Loom in Architectural Making

Photo Diagram: The Jacquard loom—one of the earliest devices to use binary logic—wove not just textiles, but a quiet revolution.

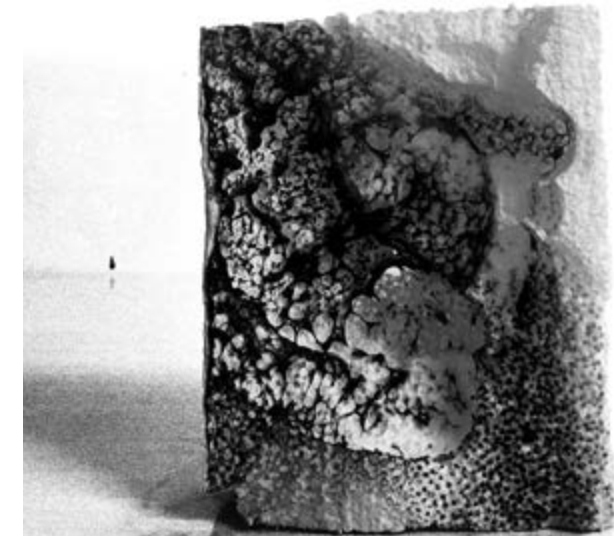
Through a system of punched cards, it encoded presence and absence, thread and gap, action and pause. What appears to be a simple binary becomes, in its repetition and layering, a tapestry rich with nuance. It is in this dance of opposites that the loom whispers something essential about making—about how structure emerges from sequence, and how code can be felt through the hand.



Imagined Render

The elements of architecture are reimagined through the philosophy and process of the Jacquard binary loom—a theory that redefined the relationship between mass and void, plane and fold. The wall above emerges from this very in quiry: What if the fundamental elements of architecture were crafted on a loom, threaded through code, material, and memory?



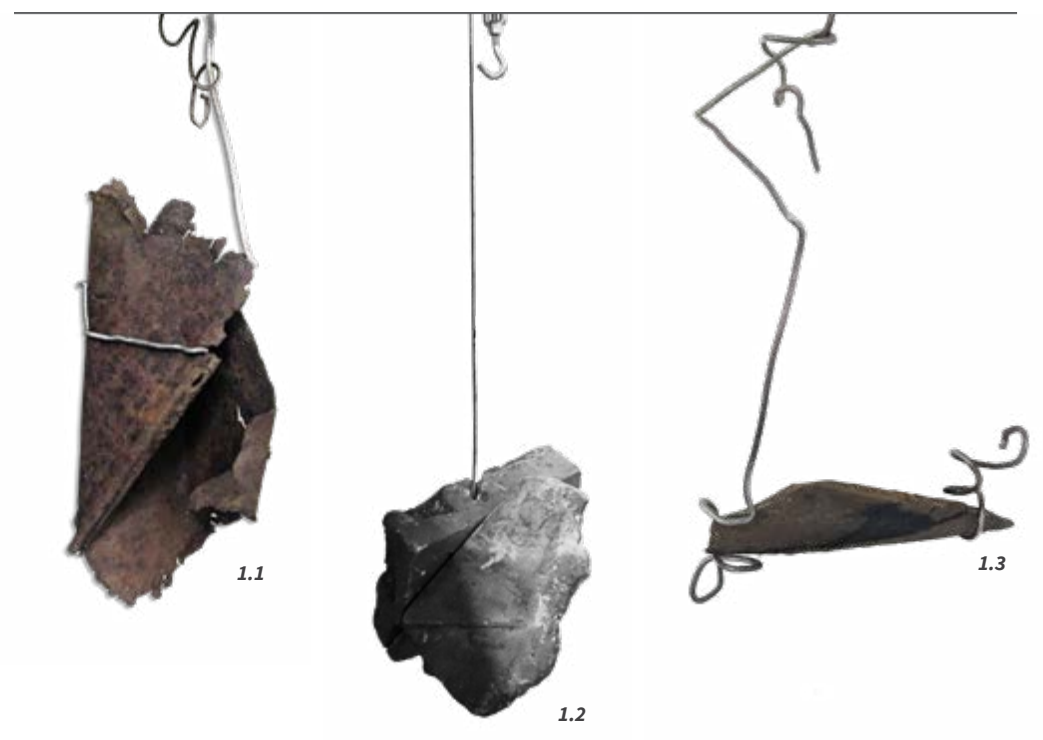


Models + Diagrams:

The texture of a material is not fixed—it is result of its journey through transmutation. In the process, matter confronts its own limits. These limits, whether structural, thermal, or temporal, begin to etch themselves onto the surface, altering its grain, density, and expression.

Sometimes, the material resists and fractures—its texture ruptured by forces beyond its threshold. Other times, it yields, adapting and reshaping under pressure, heat, or time. Thus, the texture becomes a record of negotiation—between what the material was and what it is becoming.

It is neither entirely in control nor entirely passive; it is shaped by the forces of process and shaped into them—a dialogue of endurance, failure, and adaptation.



Models 1.1 + 1.2 + 1.3: Suspended matter—where wire and weight converse. The attached mass responds with its own rhythm and resonance, revealing how material properties unfold through their application.

Model 2.1: Carving through presence, it explores the paradox of addition through removal—the subtractive as a means of forming mass.





Wood That Burned, Stone That Stayed

The burnt wood and the stone rest side by side—each cloaked in a similar charred hue and rugged texture, yet worlds apart in essence. The wood, now charcoal, speaks of transformation through fire—a material consumed, altered, and left behind as trace. The stone, untouched in its core, endures unchanged, holding its permanence within the same visual skin. This juxtaposition mirrors the alchemical dialogue in craft and architecture: where materials are not just passive elements, but active participants in a process of becoming. One surrenders to change; the other resists it—together revealing how matter holds memory, philosophy, and potential in its very grain.