

# Drawing Meaning



Ethan W. Sims





## Contents:

### Process Map

#### 10 **Part I:** Wondering About the Spaces Between Things

Studies

Beginning With Light

#### 13 **Part II:** Place Is a Holder of Memory Against Forces

Drawing Meaning

#### 23 **Part III:** Explorations

Wandering About the Spaces Between Things

Tectonic Threshold

Room For the Elements

Proportions of the Psyche

A Place for Orphaned Objects

Abstract Study: Composition

Abstract Study: Using Wind Charts

Place Mapping Cities

#### 35 **Part IV:** Drawing Stories

A Tree and It's Seed

Iron & It's Mine

Morphology in Life

Lighthouse of the Atlas

City of Le Griffon

River's Doorway

The Fisherman's House

River Bridge

The Observatory

#### 73 **Part V:** The Chairmaker and His Boat

Sketches

The Chairmaker's Workshop

Grand Rapids Chair co.

The Site of Many Places

The Factory's Modifications

River's Workshop

Inside the Workshop

The Factory's Truss

Journey to the House for the Chair

Chair to House

House for the Chair

Wind Gate

Workers' Houses & Their Dreams

The Boy who Drew Doors

The Woman and The Bird

Coffee and Tea

Roots of Rose

#### 118 **Part VI:** Undrawn Stories

#### 121 **An Artifact and It's Display**

#### 132 **References**



When people ask me what my thesis is about, I sense some feel as if it might be a chore for me to explain. This could not be farther from the truth. I enjoy bringing them some of the things that it has become, telling them the story of my adventures through drawing meaning from architecture, drawing conclusions, and venturing further without dwelling on ideas. What I do tell them is that it is about architecture as a storyteller and as a story place. It generates and provides a place for stories to happen— it is a forum for living. Without being so general, the following is a book of my findings, written a page at a time, talking about one finding after another. It is like a quilt made of many layers and stitches, pieces laying here and there—but it's really not.

The fact that this thesis has been written over multiple times, given different names, shows what an exploration it has been for me. In a sense it is an attempt at an exploration of exploration. It began with certain ideas and fascinations, the attempts to gather them into a coherent understanding have confounded and caused the rewrites, unwrites, erasing, changing, saving over, and other modifications that bring it into the form it presently resides in at the time of this book's publishing. The first half of my thesis consisted of finding a way through place and the meaning that we gather from it. Is it about experiencing? Is it about being close? I found that architecture is about both.

Craft brought the next portion of this thesis' meaning. For it is in the craft that the confrontation of these ideas produce more ideas. It is the age old process which both fascinates, frustrates, and offers a sense of wonder.

The third portion is a quiet and subtle thing. It both destroys and builds up, it is a forum but also is un-governed by any joints that can be seen with the human eye. It consists of the people: with whom conversations bring about a beautiful construction, beautiful construing of ideas, and a plethora of lively things. If I may be so bold, it is what architecture is a simulacrum of.

Little did you know that it did not bother me, I am thankful for our conversation, you know who you are.

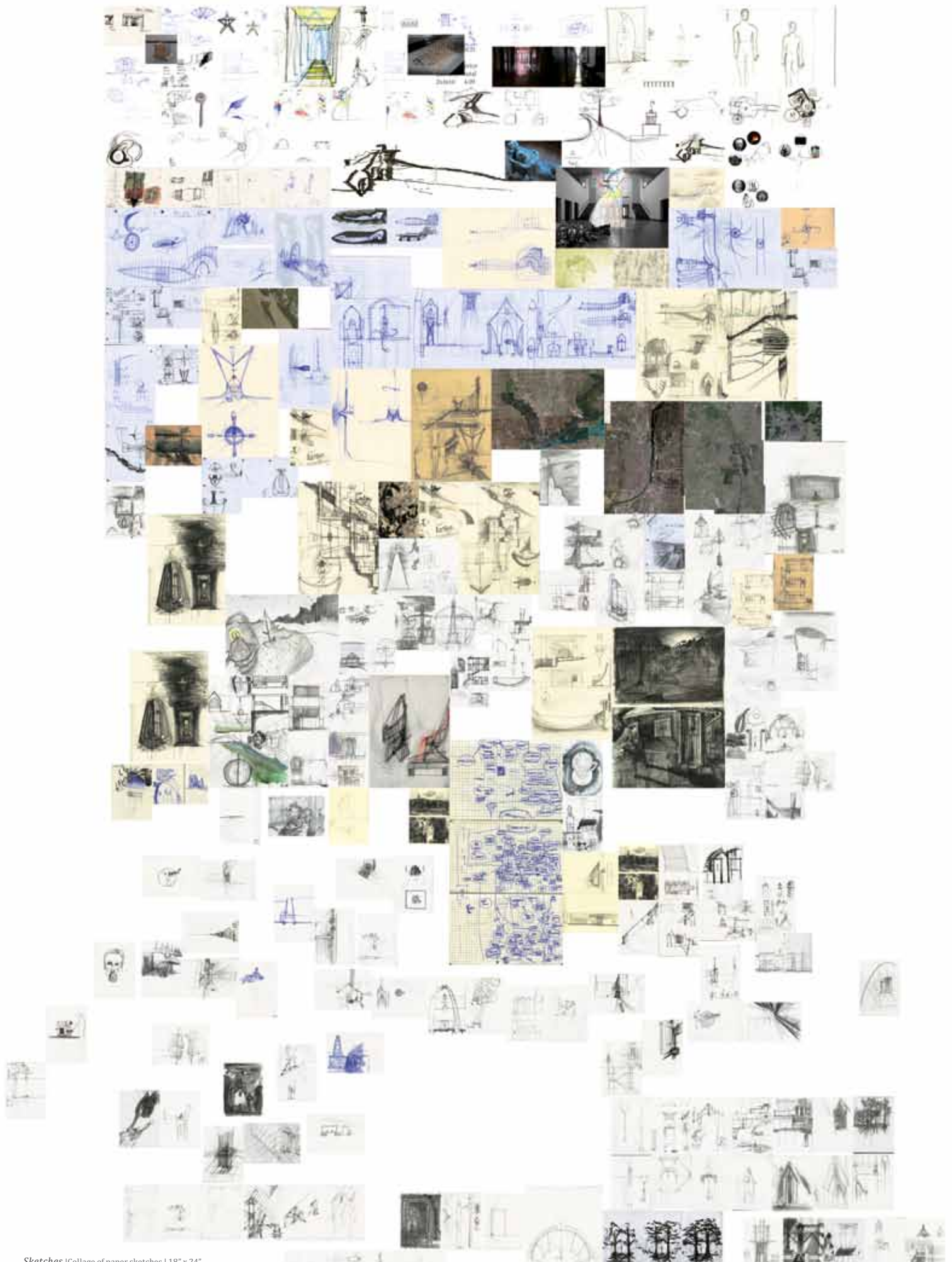
Part I .....“But what is an installation, a physical entity posed to change an entire environment?” He wondered for a moment. “If that is all it is, however, then every physical thing is an installation.”

Part II .....“Indeed.” She said.

Part III .....“For the qualities of an entity constantly draw out our environments as we are drawn into them. Designers, as we know them, take this and imagine, later preparing a drawing of space for others to build and experience.”

Part IV .....Yet, they then realized that the interrelationships of the entities, and mankind relate at different scales. For Humankind folds and unfolds the origami experience as it exhales stories.





Sketches | Collage of paper sketches | 18" x 24"



## Part I:

It all began by Wondering about the space between things.

Space, when it is built, inherits a presence. The Built then becomes a material cornerstone for our experience.

The Built has two facets: Effect and Affect. When it is used programmatically it is effective. On the other hand, the affective Presence of the Built can only be experienced through our wonder or curiosity. The effective use of space is valued highly in Architecture, but the affective part is what teaches us about the presence of the Built. It is the affective, even when prioritized in design, that can easily be lost with time. For, as we use a space, we get used to it. Memory shrouds awareness as space becomes a medium by which to operate thoughtlessly. But when we wonder about a space, we are attentive to its Presence.

The Presence of the Built resembles a nexus of Qualities. Much like knots in a fishing net. Our connection to Presence depends exclusively on these Qualities and their connectedness. They are what affect us by evoking our senses and memory forth to the present. All Qualities brought forth from this nexus are in constant flux- as some are drawn forth others diminish. This ebb and flow of qualities is fundamental for our reception to the Built. The invitation to be affected by certain qualities means to be denied other qualities. These evoked qualities question our memory-formed experiential biases and bring a sense of awe to a space. Yet since its Presence is holistic and unfathomable, even with resolute meditation directed toward the Built, it can never be experienced in its entirety .

In order to access these qualities that help us understand the Built, Entities supplement phenomenological conversation with a space. Entities are the physical vehicle for qualities to be experienced. An Entity also has a distinct and independent existence outside of our own that disrupts and augments perceptions of the Built. This Entity can then be designed using what is known from experience of the effective or affective relationship we share with the Built.

The absence (or presence) of material, the type, order, or color of an installation changes how we perceive and experience the Entity in the Presence of the Built. We are taught through installations the necessary reality of what a space means to us as designers by engaging with it physically by changing it. To design in a way that is tied closer to the Presence of the reality of Space means to confront past meanings that harbor preconceptions while confronting the present space as it stands. Yet, how do the Entities tie to us the Built? What connects them in our minds?

Rudolf Arnheim theorizes space around and in between buildings as being filled with dynamic forces.<sup>(Arnheim)</sup> He discusses mass within a field of energy as an example. Quoting Einstein, he claims that they can be likened to qualitative (affective) spaces rather than quantitative (mass forming) Entities. It is about affect rather than effect, feelings rather than matter. It is within these dynamic spaces that the forces of the Built are felt. This means that there is no such thing as void space, only between space. These interstitial spaces introduce quality into the discussion about space, but also introduce the paradox that there are no mere fillers. Everything gives a cue, a clue that adheres experience to memory.

Perhaps it is not about the Entities themselves, but instead the spaces between them that are filled with visual, and perceptual forces.





*Materials Close to One Another* | Wood, Gum Eraser

## STUDIES

### Beginning with light

As an entity, light reveals materials and spaces between them. Jordi-Safont Tria inspired the consideration that light is an entity inseparable from materials. Materials act like a medium to show us what light really is. The premise of Phenomenology is that in one form of terminology or another, it is about being closer to the things that we dwell around.<sup>(Heidegger)</sup> In order to see them for what they really are, we must separate ourselves from everything we once thought them to be. These theories, though perhaps proposing obvious truisms about life (call it experience if you care to) is that they radically disagree with Descartes' Modernist philosophy that the mind can be separated from the body. This idea redefines the subject, since it relies on the inseparability of the body from the mind. The practice of Phenomenology offers a primal philosophy about reality. It was likened by some to be a venturing into a kind of mysticism. Their description and reflection is the beginning to a process of creating meaning. It questions the source of meaning, claiming that it comes first from experience, not from preconceptions or theories. This breaks the feedback loop in design that is primarily concerned with unquestioned go-to's that are full of fragments and inconsistencies. It goes back to the experience of things. The irony of phenomenology is its transferability from experience to signs and symbols-- not dissimilar to the words on this page being read. It is easy to write about, but it must be a practice if it is to offer anything to the designer.

Bracketing is a term used by Merleau-Ponty to describe ridding the mind (if only temporarily) of preconceptions about an Entity. This is always a relevant aspect to the designer's study of spaces and their crafting. Acknowledging the Subject's ability to decipher the presence of specific things from the multitude of stimulus is a useful tool in design, and it leads to an awareness that precludes the rest of the design process-- before synthesis is observation.

Phenomenology also gives meaning to the post-modern fascination with the spaces in between things. Where the modern idea might be to embrace void and solid, the Postmodern philosophy does not acknowledge any sense of void. When Modernism gravitates toward the quantitative: the masses and their absence, phenomenology embraces the qualitative aspects of it. Experiencing is in some ways like a dance between the masses statements and the spaces filled with dynamic forces that move our minds and bodies. It is from this thought that Merleau-Ponty theorized the body as the center of the subject's experience.<sup>(Merleau-Ponty)</sup> It is from the body Phenomenology offers a closeness through a meditated concentration and awareness of the body form. Yet in practicing phenomenology it is also evident how description does not go beyond a certain point. Heidegger illustrates this in his *Being in Time* where the descriptions seem to studder around etymological origins rather than relatable experience.<sup>(Heidegger)</sup> Its unfathomable wonder is evident in this linguistic barrier between experience and its description.

From these theories there arises a novel idea that the world is not what we once thought it to be. It is not seen through structures of thinking, but through intuition. This is a mode of thinking that the creative individuals are particularly attracted to. It can be noticed from the Architecture of Lebbeus Woods and Stephen Holl, to the Rothko's Paintings and Samuel Beckett's Play *Waiting for Godot*.<sup>(Woods)</sup> This means acknowledging the engaging nature of architecture as nothing less than a political occupation of space. Indeed, the phenomenology offers a path for those seeking to liberate experience from preconceptions, in order to come to a new creation of pre-scientific experiential meaning.

In Rothko's Paintings, it is not the landscape and not the person in the scene. It is not even the scene itself that is the focus of the painting. None of these entities exist to the subject. In the abstraction of color from anything recognizable, the emotional quality of the painting comes forth. The viewer's affect becomes the focus and the scale is of the psyche.

In Literature, Jack Kerouac acknowledges this new sense of qualitative scale. In the United States, when Kerouac was writing stories in scroll form, this questioning of experience was being revisited a cultural answer to Conservatism.<sup>1</sup> Jack Kerouac's *The Subterraneans* presents the reader an opportunity to be immersed in a subject's experience of the Beat movement. This affect can be attributed partially (possibly to a great extent) to his destroying the integrity of traditional prose. His stream of consciousness writing changes the pace and the context of words. And from a syntactical view it is an examination of the connection. It asks how literature holds together. From within the (unified) body and mind interpretation of interstitial spaces happens between both philosophical and narrative mediums.

Though what cannot be avoided in experience is the spatial and tactile memory of the subject. Roland Barthes<sup>5</sup> offers an understanding of this experience (of text) in his discussion of *tmesis*. It means that part of the pleasure experienced in reading is how the eye tears away at the less important details to get to the meaningful and revealing parts of the text. In order for this to happen, text must be seen as more than a word that means something beyond its form.

Saussure's theory about signs brings insight into the experience of reading. According to him, text is broken down into signifiers and signified meanings.<sup>6</sup> This means that the form of the text draws the eye, but so does what the word has come to mean to the reader in the past. Yet, it is not only in reading that this phenomenon happens.

Kenneth Frampton discusses the fundamental tectonic forms that both exist before (in memory) and are embodied within architecture. It is the experience of the tectonic and stereotomic elements in terms of their most fundamental implications that create the experience of architecture to the user. He talks about how the *techne* (stick built) and the *stereo* (the masonry built) are the tellers not just of affect, but of our experiential being. Within the built environment they are latent yet ripe as tellers-- signifying the relationship of the construction to the human body. Proportion, construction, material, light, all come together in the places that gesture what it means to dwell. To him, architecture is an experience filled with metaphor and a place of shelter full of material gestures.<sup>7</sup>

Stemming from Frampton's argument about the role of the building element in the technoscientific era, the corporeal nature of building presents another aspect of building





Left to Right: Painting of Cathedral of Rouen in Morning Light | Das Portal bei Morgensonne, Harmonie in Blau | Painting of Cathedral of Rouen Morning Effect, Cathedral of Rouen, FR

experience: that of the social. Conversations and company form the interaction from which the rest of our existence spurs. Interaction is metaphorical in the way that materials join together. These moments exist because there is space between Entities. As with any composition there is a deeper feeling behind it, a sensation of a holistic structure, of different fashion than the preconceived idea.

This appeals to the pleasure of experiencing art and architecture. There is this same sense of structure that the mind and body work within to interpret Entities and the Built -- even if it is a cat and mouse game between the audience and the creator about the ideas in the medium both are appreciating its beauty. Looking from literature to architecture, the signs become more and more complex. The mediums of the literature are primarily (though not exclusively) the page itself and the text. In painting, the signified is often revealed through all of its signifying elements: medium, method, etc. For buildings the signifiers and signified are both icons (if present) and constructed elements. Yet, this does not carry through in a neat fashion to art and architecture. Contrary to literature the sheer complexity of material experience resembles a constant act that is being performed through the movements of the body, and not only the imagination. Furthermore, it is in the experiencing of the built and crafted world that the means of experiencing literary imagination take place.

## Part II:

### Explorations of experiencing space and its qualities:

In order for the imagination to grapple with the cues from space, light is a quality worthy of consideration. It is occupier of the interstitial spaces, revealing the material masses and dynamic visual forces.

Monet's paintings of the cathedral at Rouen are perspectives on the affect of the signified Cathedral in Rouen, France. They are painted in such a way that the outline of the Cathedral at Rouen gains a different level of presence from one painting to another. The morning light lends a hazy texture to the walls. The many crevices in the climbing Gothic structure are hidden in shadow giving the feeling of a cave in a rock cliff. The rose window is shrouded. The orange hue in the façade presents the sun on the building to the audience. The series of paintings offer Monet's interpretation of the Cathedral in different qualities of light.

De Chirico's explorations of time and light in *The Enigma of the Hour* evoke an



Luis Barragan | San Cristobal Stables | Silverman, Steve.



The Enigma of the Hour. Giorgio De Chirico. / 1910-11. Private Collection.



Afrum, From First Light Series. James Turrell

otherworldly experience of light and form. It disorients the subject's preconceptions of sun and hue saturation.

Luis Barragan's use of color in the equestrian stables acknowledges color as a cultural interpretation of visualized space. Even though De Chirico and Barragan were not professed phenomenologists, they were still able to present physical work that is affective. This is because affect is unavoidable since it consists of the Entities taken into consideration to gesture, imply, and cue the experience-reader of the building. Yet it is the methods used in creating that allow for the control over the quality of the affect.

James Turrell toys with the idea of perception, similar to Rothko. He uses fundamental perceptual elements to create illusions. These illusions both disorient and falsely orient the subject. The lack of distinguishing contrasting elements in *Aten Reign* removes any sense of balance, or of orientation for the space. The subject is at the mercy of the colors and the shades that normally center the subject. His work both creates and modifies perceived spatial volumes. His work pursues the extents to which the emotion and perception of the mind can be altered by space and light. In his *Afrum from First Light*, by projecting light onto a corner, it appears that a cube is floating. The cube is not a cube of solid material projecting light back, yet initially illusion makes it seem so. To the perception of the subject, it would appear instead that it is an actual mass that is floating or fastened in the corner. The space and spatial memory are intertwined in the experience of the user. Marco Frascari notes that it is due to the perceptual vision and tactility of previous experience in spaces that allow for the interpretation of space to happen<sup>6</sup>; again tying memory into the experience of space. This creates a disconnect between the space and memory of spatial language; like listening to an unfamiliar language it offers a sense of dream-like disconnection. It is also an exploration of the dynamic void that Arnheim suggests is qualitative and not quantitative. Since light is not quantifiable, and the experience reveals, clearly light is a qualitative example of a dynamic force.

Turrell's studies using light and space also question what it means to create an installation. If an installation is merely a modification of space with the goal to see the world in a new way, then clearly everything is an installation. This means every speck of dust and rearrangement of furniture. But it is in the awareness of re-modification of space inside architecture that architecture has become a backdrop for its own exploration through installation art. This was where this thesis initial studies of *Tectonic Threshold*, *Proportions of the Psyche*, and *A Place for Objects* came from. (See Part III) The designs consisted of installations and their effect on the presence of the space.

Indeed, it is color that cannot be separated from the subject, nor from the time and space in which it is being perceived.





Gallarus Oratory | Dingle, IR



Alberto Giacometti. *La Forêt*.



Ombra Della Serra

It begs another question that has been answered in multiple ways, and in many fashions throughout the catalogued history of human knowledge. Namely, how the analyzing of the environment changes the way that the environment itself is designed. This has happened during the renaissance through drawings, models, buildings, and writings. Yet in the Scandinavian countries there is with little to no writing done about architecture.

Regardless of the level of documentation, the analysis of the building environment has always happened by those who build, and it is because of this that each culture has its own interpretations as to how to deal with the fundamental forces acting on (from, and within) buildings. This confrontation has happened through the act of constructing. It is the inescapable, elemental, architecture that anchored a historical investigation into different culture's view on architecture, whether they were aware they had a "view" at all.

The communication of architecture is apparent in the sheer fact that other cultures' building techniques can be read in the works that they create.

Semper presents the idea that the stacked stone presents the building's tie to the earth. Its foundation, and the rest of the building, is embedded into to the earth. The tie to experience exists here from a regional material from which the building elements are used. The way that the stones were stacked suggests a specific care for a union of the form and the structure. The monochromatic color and the texture of the stone lifts the Oratory above the grassy area around the oratory while simultaneously tying the structure to the earth.

In the Cathedral at Rouen, it's sheer height and volume in the city gives a whelming sensation of a mountain, or a hill with light shed across it. It became an object of study for Monet's paintings. Though contrary to Semper's difference between the tectonic and stereotomic construction of buildings, the stone of the cathedral at Rouen rises from the earth and the inserted glass into it forms joints for light to pass within. Stone as a building material ties it to the earth, but it also resists fire and the loads of gravity. It is here where the Cathedral presents a kind of anomaly, since the compressive strength of stone allows for the sheer height of the cathedral, yet its material suggests a more lowly, heavy origin. It is in this way that the construction element presents itself as a teller of thought, manifesting the sculptural and spatial logic of those who built it.

The sculptor Alberto Giacometti explores stereotomics in *La Forêt* (French for "the Forest"). The human like figures are presented on a plinth. The plinth itself is crafted with legs that remind the subject of a table gathering the figures and their space. It appears to be pushed into the ground from the weight of the figures, and there is a sense of bending in the middle. It is as if the scene has a deeper psychological weight. The many human figures give the sculpture a sense of being crowded. There is a sense of perspective in the



*Mounds/Landscaping.* Knowth. 9/04/13. [www.knowth.eu](http://www.knowth.eu)



*The wall that went for a walk.* / Storm King, NY. 1997-98. Andy Goldsworthy.

scale of figures from the front of the sculpture to the back. The appearing figure breaks the ground plane into a kind of scenic perception of the women as if entering into a different place altogether. It is here where the forest becomes a place drawing the sensations of the women present in with the memory of the forest. This ties the craft of the statue to Semper's definition of stereotomics -- solid and cut. Ironically, in Giacometti's sculpture, the cutting away of stereotomics deals with trees in their natural state that give a more spatially tectonic feel.

The *Ombra Della Serra* (Italian for "Shadow of the Evening") is an ancient Etruscan statue of a boy that is made of bronze. His extended proportion gives a sensation of the elongation that the sun might project onto a pathway if one were walking away from it. Yet seeing the boy himself stretched in such a way gives a surreal perception of him. This reveals how the normal feeling of scale of the human body offers sense of affective ease. Both Giacometti's *La Foret* and *Ombra Della Serra* present humankind in earth based materials and in organic fashions. Here they are clear relationships of man tied to the meaning of the earth.

Dowth, Knowth, and Newgrange imply a rich history that gives a sense of residing, and cataloging of the forces of nature over time. Being studied by archaeologists, the early Irish settlers created these mounds in relationship to one another for a purpose dealing, at least partially, with the stars. This is apparent during the winter solstice, when Newgrange's dark entryway is lit by the winter sun. Whether a tomb or a place of worship, the astronomical alignment emanates a sense of man's sensitive connection with the workings of the earth. All three sites are places that present the objects of the past as artifacts within their context. Studying these aligned mounds today informs those presently living what it meant to travel, live together, treat the dead, and observe the stars. This was changed by the modifications made afterward, making the initial story less clear, yet the sublime power of stones carved with the paths of the moon and burial mounds suggest a gesture of care attributed to the bodies, objects, and the rituals that took place. These examples of megalithic architecture, rich with stories unknowable provide a sense of place- memory for mankind today about what it means to dwell. There is a relating, a connection that architecture offers as a standing gesture of past and present place.

Andy Goldsworthy presents this same sense of closeness with the earth, using it as the medium by which to communicate craft and dwelling in the earth. His stone eggs present the ebb and flow of the tide using a stereotomic form, relating craft to the earth. In his use of stone in the wandering wall between trees that the craft reveals the trees and the riverside





*Site of Silence* | A. Pomodoro. Grand Rapids, MI. <http://www.arnaldopomodoro.it/en>



*Reservoir with Copper House and Boat* | Walter Pichler. 1981.

since it is outside of the ordinary rock formation. His introduction of craft into the primal (and still ever relevant) construction elements offer insight into the story of constructing forms. Using the same elements which effect and make up all built and designed things, the holistic connection that architecture and sculpture has to the other elements around it is made apparent. It is the presence of the trees in *Wandering Wall* which make the interstitial space instructive to the subject, the presence of the wall gives a sense of meaningful arrangement that questions the nature of a wall. It is an Entity that stakes a claim but does so playfully. It still separates and creates sides, but it also creates nooks underneath its slalom through the trees.

Arnoldo Pomodoro's *Site of Silence* is an architectural work in which volumes hang within the walls. Addition and subtraction of volumes in the site deal with the handling of earth. Volumes descend into the distance and become open spaces for shadows, while the solidness contains a monumental sense of stillness. It deals with the geography in a way that the subject becomes aware of the sunken architecture. The freestanding walls in the center stand out both as objects and as a space: both allowing for the volumes to be experienced underground. His attention to the topography of site evokes a specific tie to the earth that likens it to the site of Newgrange, Dowth, and Knowth. It is in the eroding of forms that the feeling of earth comes forth in the *Site of Silence*, these are present in his other works, but here the topography relates it to the circulation so the subject can feel the erosion descending into the earth.

It is clear that the earth represents a sensation of a tie to a holistic logos through which constructed works memorialize the source of safety and survival. This holistic sensation is a strong tie to perception as it deals meanings and metaphors. It ties the mind's immediate perception through the body to the earth that provides both present experience and a sense of being in the midst of the earth.

Walter Pichler's drawings, sculptures, and his architecture all offer insight into the holistic nature sensation that is seen in the connections existing in the earth. His studies offer metaphorical, pragmatic, and figurative explorations of this structure at different scales. It also evokes a sense of interaction between architecture and sculpture that formally and meticulously gives a place for the object. The level of specificity in the forms allow for the user to interpret the space easily. Each object is seen in its place. The subject becomes an observer of a place belonging to an sculpture, or does the sculpture belong to the space?

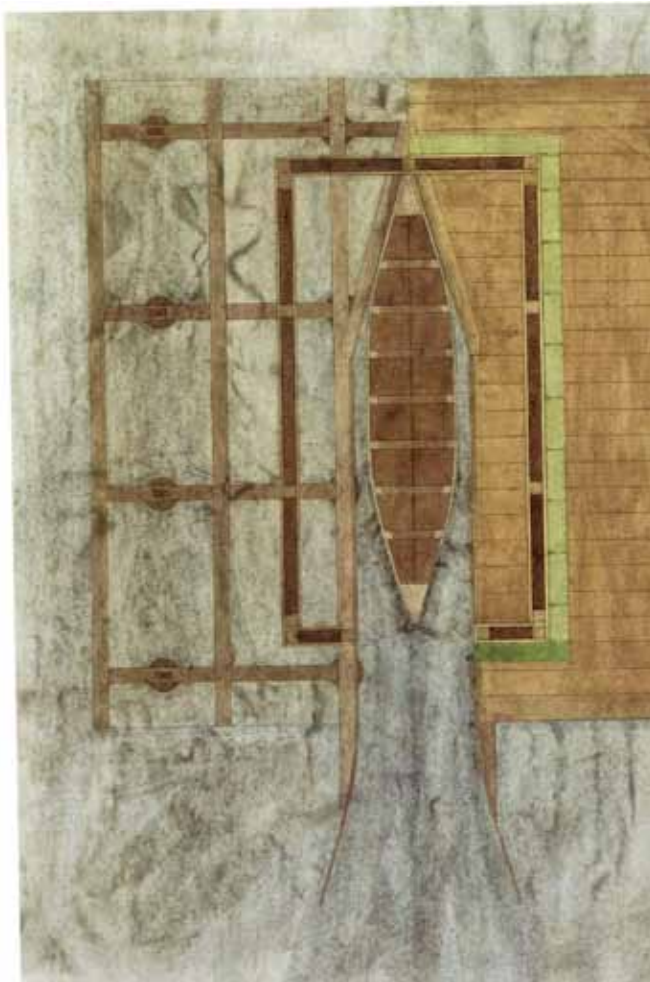
Pichler investigates the boat itself as a form and an object in his *House for the Boat*.



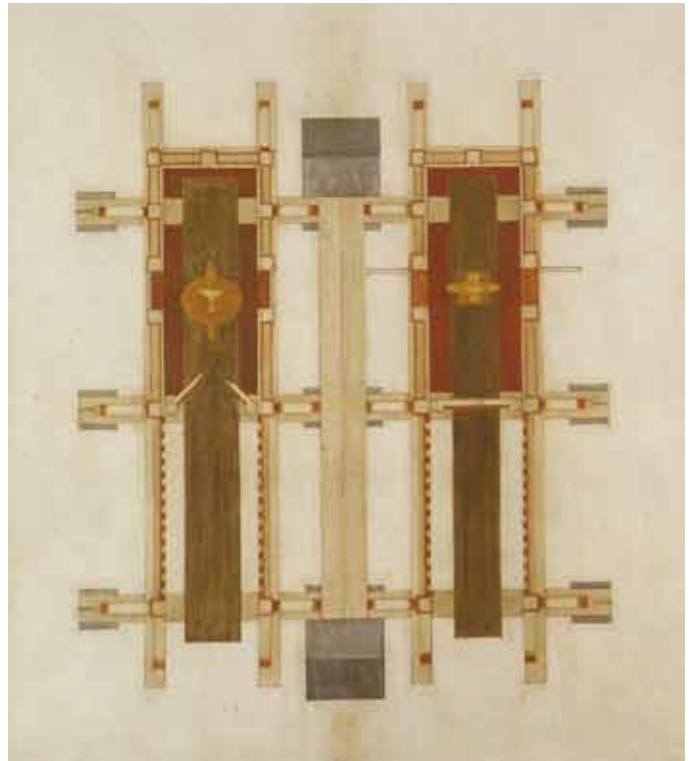
*Door Bolt* | Walter Pichler, 1989.



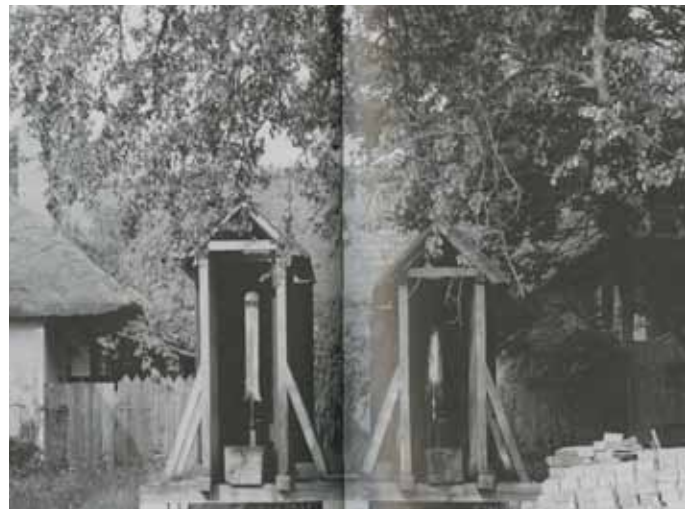
*House for the Torso and the Skullcaps* | Walter Pichler, 1979-81.



*Reservoir with Copper House and Boat* | Walter Pichler, 1986.



*Houses for the Steles* | Walter Pichler, 1986.



*Houses for the Steles* | Walter Pichler. Installation in St. Martin



*Kaupanger* / 12th century, Mica L Reisler.



*Lomen* | Bugge, Gunnar,

He relates these elements to the way that man interacts with objects and to architecture. They all seem to belong together, as seen in nature. Each of his articulated environments present objects, architecture, and their site as characterized, almost metaphorical elements. Each gestures to the other, like dancers on a stage. Whether the reservoir or the boat was first, each exist in a new light in the space that both create. The Reservoir accommodates the landscape and water. And the boat is embraced in the framing's tectonics. It is clearly the Boat's place within the structure of the Copper House. Finally (or initially) Pillars anchor and tie the structure above the water to the ground below. It is in the constructive gestures that Pichler creates places where objects appear to be accommodated, invited even. Is it an artificial representation as to how nature embraces itself?

These gestures display. Display, in its etymological basis, is an unfolding of form. This depicts Pichler's understanding that the constructed sculptures themselves exude a qualitative presence beyond their form. In the photograph the Skullcaps are on the table, and the table on the floor (that is mounded up to support each leg of the table). The photograph also depicts the floor's mounding in front of the window. The floor seems to be made for the window, gesturing for light to be spilled across it. Or perhaps the window was for the floor. It all suggests the holistic nature of how forms dynamically interact within the interstitial space.

These interactions happen at the joints between masses in materials. The Skullcaps and their structure, the structure and the floor, and finally the floor and the window. It is this divide that takes Pichler's work from that of an architect and craftsman into an artistic comment on relationships that exist between the things. The likeness of his sculptures to useful objects presents a new sense of sacredness about the care of crafted things. It is an invitation back into craft itself where the details are formed. These are the details that the subject reads and remembers. The care for each detail invites the sensation of a holistic beauty, of an order that goes beyond convention into a more primal sensation.

The Norwegians had a distinct manner of portraying their perception of space tied to the forest. The forest was a source for materials and a place itself. Wood was also a driver of the method that formed the places. This can be seen in the stave church, where the columns rise from the stone foundations supporting grand volumes supported and sheltered by joists and rafters. It might be likened to walking into a forest. Yet the way that the wood is joined is dictated by its type: the grain length and consistency, the density, and the moisture content are all factors in the construction.<sup>19</sup> These details are the necessary threads of knowledge, a kind of material dialect, that is interpreted from the wood. The stone foundations are also materials through which the solid and the light are brought to a kind of syntactically communicative sense of how dwelling is tied inextricably to the earth. The place of memory



staged awe sits on a structure. It is embedded stereotomically into the earth, while its tectonics reach toward the heavens.

It is in the construction of the building that it embraces a sense of holistic meaning of signs and symbols. Its joining together is a composition. Each piece of wood presents a fundamental element acting with each of the other members. But the building also represents a kind of signifier of other mythologies and places; transcending its joining together. The Stave Church is engraved, carved, and painted in such a way that the building could be likened to a book. Yet it is not a book. It has a deeper meaning dealing with form, place and memory-- beyond representative signification.

Revisiting Barthes theory about literary experience, architecture too can be likened, as Frampton suggests, as an experience filled with metaphor; one like a story itself. It is here where the eye, the ear, the skin, the hair, the clothes, the preconceptions are all played upon by the architect, the crafts-person, the clothing designer are all part of an event. It is here where the experience of architecture is an event. It is a story and a place for stories to happen.

The structures and sculpture give feeling of surpassing the ordinary. A lower roof or a thicker column might be safer, but not nearly as engaging. The cathedrals in France and the temples in Japan offer the drama that present the very underpinnings of worship: of transcendence beyond the everyday, the assumed, and the expected. Each building offers a new place for the experience of the people living there and their own experience: they become sets for interaction and connection in ways that are unpredictable. Though perhaps foreshadowed in the buildings themselves which shade and reveal infinitesimal details.

### Place as a holder of memory against forces

The process of creating a memorial has involved the detail and the philosophical implications of place. It has meant being receptive to what events formed a place and how the meaning of that event can be manifest materially. Here, the details again bring to the present a linking of material experience with allegories or events of the past.

### Drawing Meaning

Someone other than this author wondered whether or not the brain was first or the hand. This wonder suggests that craft cannot be separated from one's mind. It frustrates the Modernist perspective by asking what was first: the Chicken or the Egg? Yet to the Postmodern to tell the where or when is irrelevant, maybe it is about finding more chickens and eggs. Maybe not.

Maybe that is why dreams make life into a kind of story. When the mind cannot explain, it can only listen. There is a sense of resolution in the composure of ideas when they are made into something new altogether a kind of story.

It begs another question: is it the story that makes dreams comprehensible, or is it the dream that makes stories comprehensible? Turrell, here, touches on the nature of wonder when he talks about creating places that are perhaps closer to dreams than to

consciousness in the rest of the built environment. Fascination with dreams has been a tie from the ancient to the modern philosopher, especially with the arrival of Phenomenology. These stories and studies, are ways of wondering about what makes meaning in space.

The first half of this study resulted in 12 drawings that were created while thinking about objects and their places within architecture. In order for these to be created, the places, the objects, and the architecture were all researched. The drawings were a direct result from a number of sketches, hundreds possibly. So far as this process goes, these are inseparable from the larger drawings since they created the basis for each drawing. In a way the drawings were nothing more than practiced compositions of the fertile sketches.

Architecture has implications that reach deeper than programmatic use, it has an affective connection with the memory. This idea was explored through the architectural detail. As Frascari writes, it "Tells the Tale," bringing the user into an interaction with the space. Here they are invited to dwell in the interstitial space between the details. There is also an impression in memory that both architecture and tales create. How this is possible?

Yet the method of hand drawing and sketching is a representation that also impresses itself into the mind. These have allowed me to have an interaction with ideas in a constructive sense somewhere between the built and the idea. Frascari calls the ideas' arrangement Construing— their coming together into an over-arching structure before physical (material) construction takes place. Kenneth Frampton says that the construction element makes up the primary element of connection that the user has with space, that it is indeed a composition made up of finite pieces. These theories have been tested using this method. *The Chairmaker and His boat* became the study that led the metaphorical and narrative investigation of the architectural detail as the meaning generator of place.

This interaction of the drawing and the designer happens in a different way than the audience and the drawing since the designer becomes a member in the conversation able to alter it. Each line, each stroke can be seen through the method of its construction. The creation of a drawing cannot stop here, however, since the romanticism of the method can kill the design. The drawing must be in tension with the composition. It is in the design that the medium obtains its proper place in the process. It is a way of exploring material things (if built) or our understanding of them (if unbuilt). It is always in flux- a dialectic between creating richness and complexity while seeking rest and resolve in the clarification.

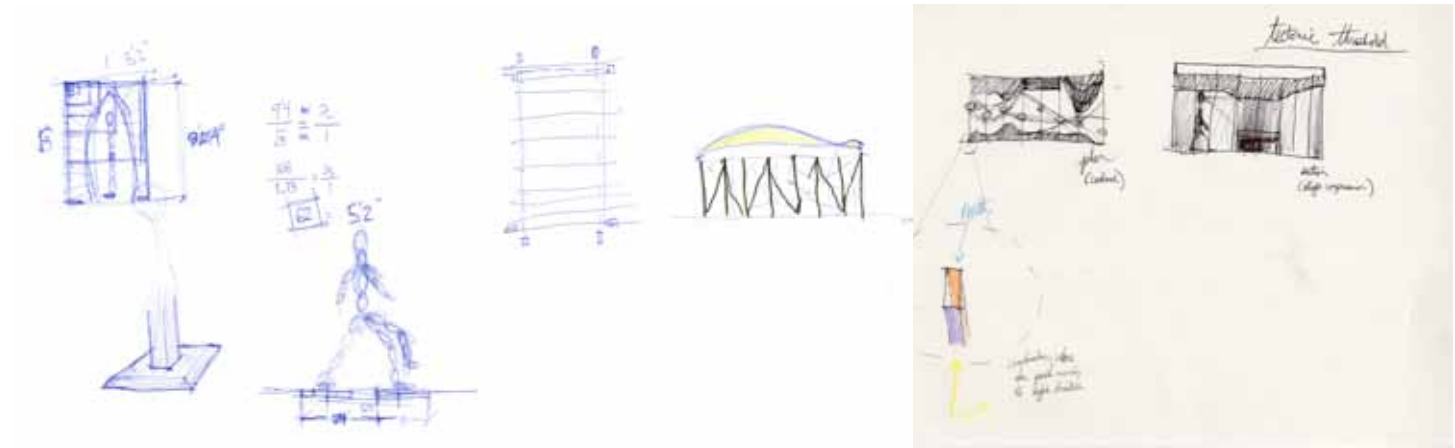
It is through sketching that this process has been brought together. Sketching is about synthesizing the material things: drawings, models, books read, images gazed at -- all studied and reproduced by hand. It is these that have instigated a generation of ideas that can be stitched together. It is in the making, the crafting, sculpting, that things come to be, and it is wonder that perpetuates and inspires. The process is not in the things, but their ideas that never sit still within the person by making things about them. Very much like a river. Very much like a paradox, or a riddle. Like reading a philosopher talk about existence, yet knowing all along what it really means to exist because we cannot separate ourselves from it. It is obvious, yet wonder-ful.

Yet what still puzzles me is how the detail, when it is drawn still is not built, but it nears construction. It is a kind of middle ground where the audience must imagine. An

invitation, perhaps, using memory formed architecture to allow the audience to dwell in the interstitial and imaginative spaces-- not developed as a built piece, but more developed than a construed idea..

James Turrell's process, and the process of many artists, has been an inspiration for this thesis process. His works are might serve as a kind of allegory for the experience of this process. In the exploration of many smaller ideas, searching through both technique and creations, a body of work is created that serves not so much as a compendium but as a documented process toward a greater, fascinating, yet incessantly ethereal idea. He worked in smaller scales and in many locations from Israel to Norway. Yet it is in his currently building explorations in the Roden Crater where many of his works are brought into the same physical proximity. This is directly relatable to nature of the following findings: where the work done continues to generate findings that are only refined through further creation. This process has attempted its own kind of Roden Crater, where a series of works might tell a story together.





## Part III

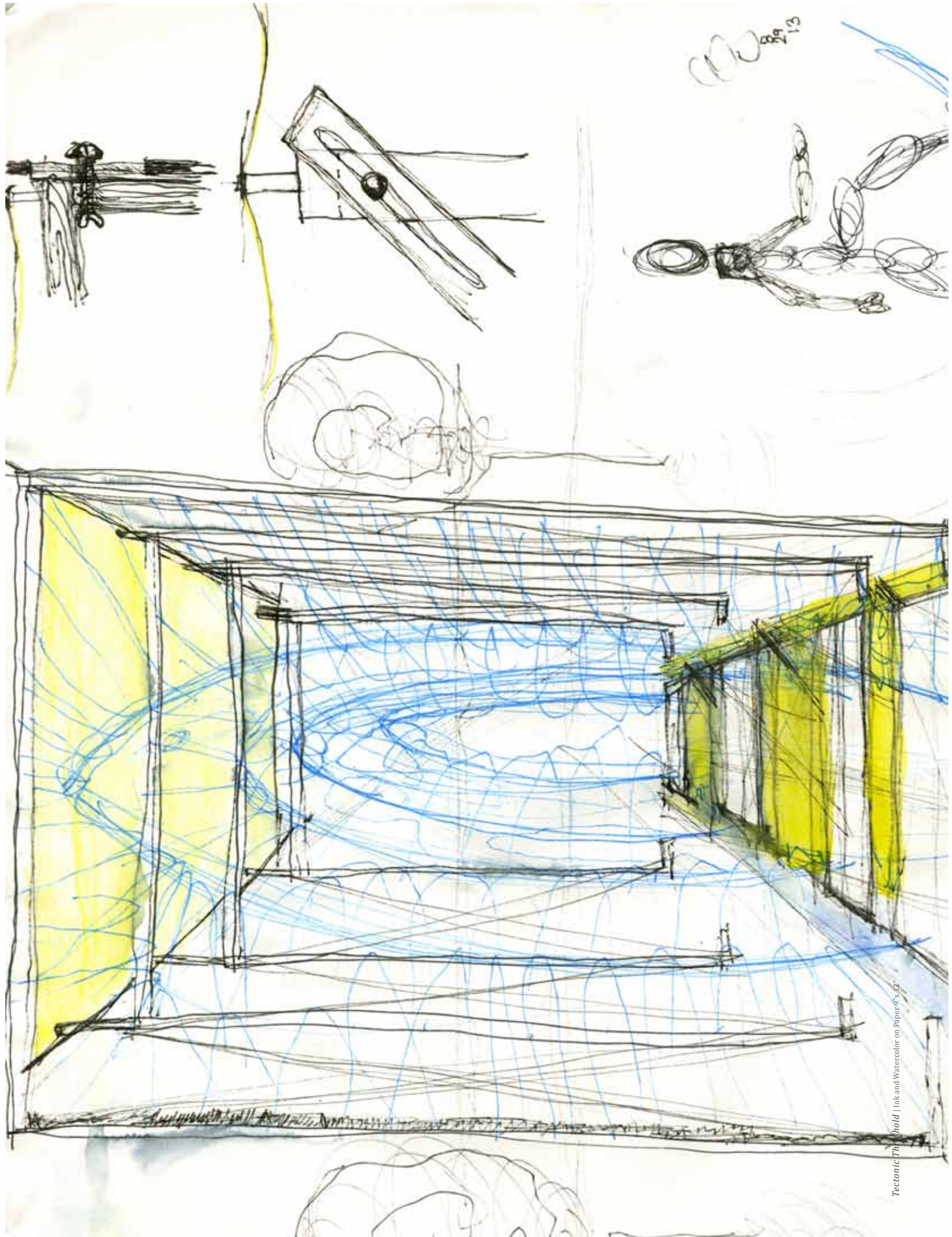
Explorations Wandered about the space between Things.

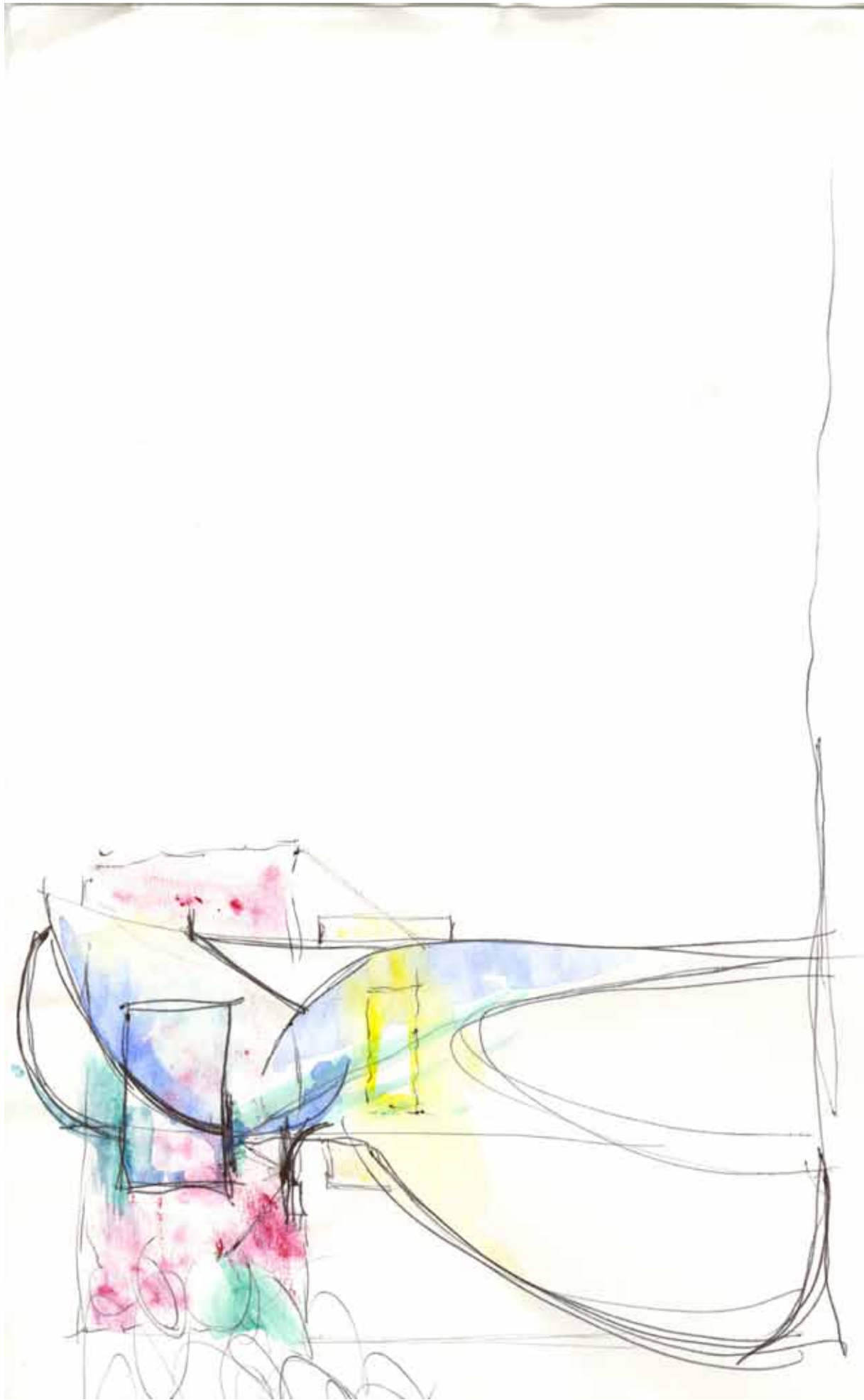
### Tectonic Threshold

Beginning with the body as the access to architecture, proportion cannot be avoided. This investigation was designed in one week, meant to be constructed and then studied through drawing (inspired by Monet's paintings of the cathedral at Rouen). It is made from a series thresholds 9' tall by 5' wide, constructed from 2x4's. It is arranged in succession, and with the addition of the body it can be a procession. On the ground, the subject steps on staggered pavers placed carefully at a 6' tall human stride. The steps venture through a space woven together using beads with string running through them. The yellow fabric reflects in the water below. The beads sway and chatter in the wind. It was meant to be about experiencing the extreme of threshold (that low cost materials could render) by questioning how close it can become to a space itself. But in its simplest form it embellishes the nature of passing through.

### Room for the Elements

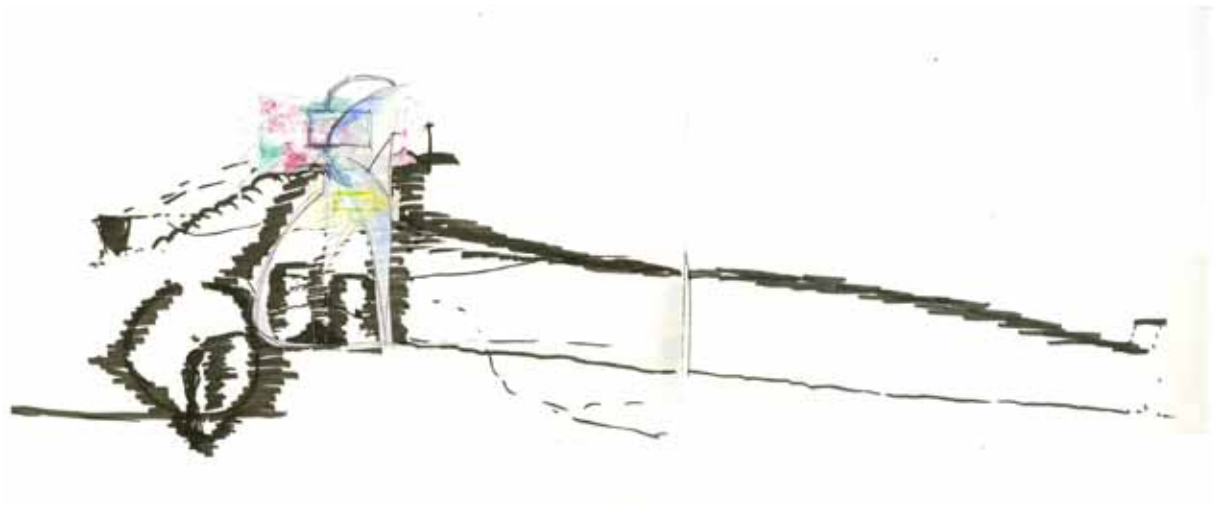
How can a day be experienced in color? A room for the Elements is a space meant to be an observatory interacting with the passing of a day. The arrangement of the out-looking and in-projecting spaces of light and color are meant to draw an awareness of the sun as its rays change the space. The mid-day space consists of a light casting the sun into a pool of cool grey stone, in which the yellow sun shows. The north contains an orange hue light well complimenting the blue light coming in. The east and west have light wells that light travels across, reflecting different hues from the curved stucco surface.





Room for the Elements | Pen and Watercolor 6" x 4"





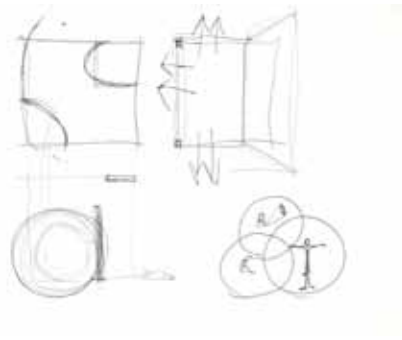
*Section of Proportions of the Psyche* | Collage over sketch



*Proportions of the Psyche* | Model | Clay and Corrugated Cardboard | 3" x 3" x 9"



*Proportions of the Psyche (Conceptual Sketch)*



*Proportions of the Psyche (Conceptual Programming Sketch)*



*Proportions of the Psyche Inspiration*

## Proportions of the Psyche

Entering through the heel, subject travels along a narrow passageway. Eventually passing into a tall room with stairs to the left and to the right. This is the room of elevation. Light pours in down the steps on the right, lighting up the rough stonework onto the dirt floor. This leads to the observatory. To the left, shadow travels up the stairs which circle away into darkness. These lead to the room of introspection. In the current room light passes through into the space in narrow holes in the ceiling. It diffuses into the crevices of the grey stone within. At different times of day the light changes, becoming brighter in either hole.



*Artifact Tree* | Ink and Pastel on Paper



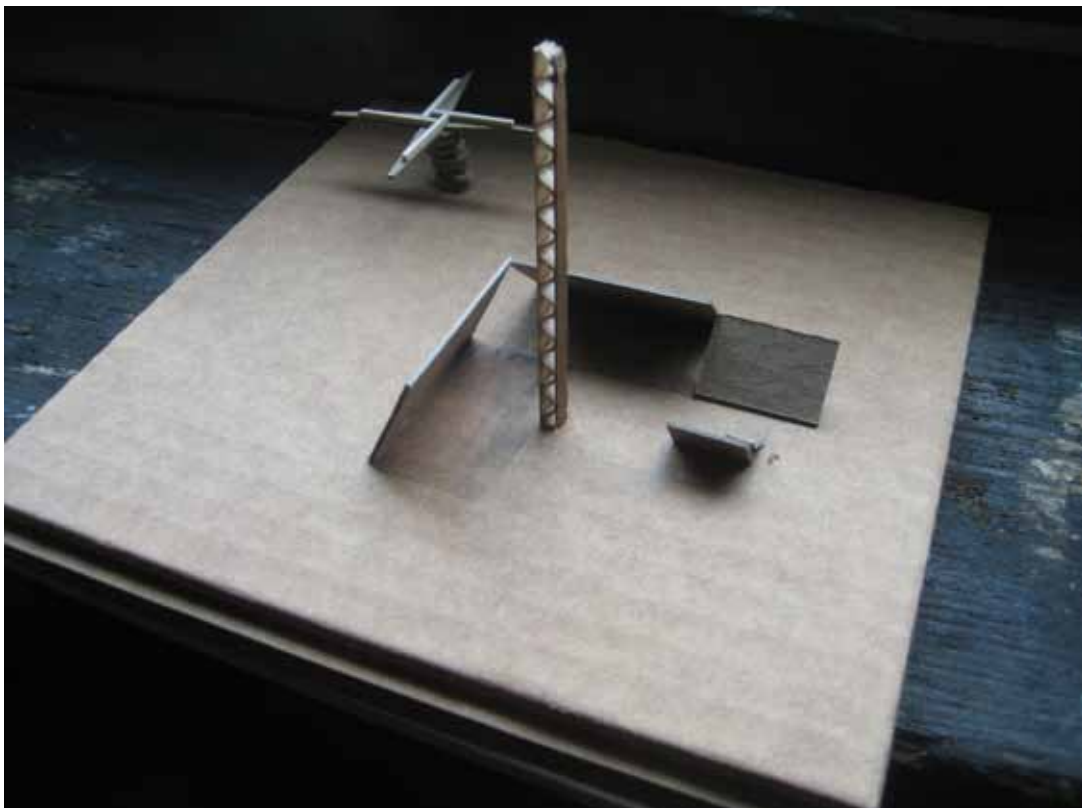
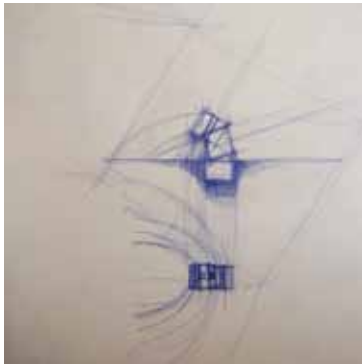
*Room for Artifacts* | Collage



### A Place for Orphaned Objects

The many objects within the museum after it was abandoned before the turn of the 21st century were left to their own ends. What could be done with these objects that represent an 'obsolete' museum style? I began to think of them formally as well as experientially. Could they be recycled and buried into mounds as the Hopewell Native Americans did in this region. Could they be cast in molds and inserted into a new wall in the museum? What about a structure within in which these taxidermied animals (in their wood boxes) could slide? More questions than answers came out of this study.

Process and experience are both vantage points in the motivation for design. How can objects with such history be treated in response to the history and yet also be treated for the creation of certain effect? It seems that there is meaning to the way that we relate to design in both process and experience of that process. It is along this spectrum from which design and space is experienced.



## Abstract Study: Composition

Motivated by this curiosity of design as a tool by which to understand interrelationships brought forth these models. The composition gained dimension (literally, in the z direction). Time on a scale larger than the human life effects the aging of the design. It began as a sketch problem that responded to a windmill, which made various panels move up and down depending on the direction and the speed of the wind. It was meant to break. Harbored in the top of the windmill was a seed. Falling, the blades would break open the pod, shedding the seed to the ground. I imagined the study moving and changing as the landscape washed away the hill, the tree holding the hill.

## Abstract Studies: Using Wind Charts

Composition can be taken into massing to form more complex meanings. This was created using the same composition as a plan-view, yet it was the introduction of mass into each of the distinct elements that created this complexity. The idea of outside forces shaping the design arose out of this study.

Context is a necessity to any substantive investigation. Placing the rectangles over the composition (context) and then blowing them off from it was the test (elements). The wind directions were determined from the wind roses of the three cities from which I gained any kind of substantial meaning while living in them. The rectangles fell in various “compositions” over the “site” (the corrugated cardboard).

Now, what happens when they become masses again? How would each one respond? These questions meant the study was still arbitrary.

## Place Mapping Cities

The concept of place is determined by a meaning structure that is formed in the mind of the subject. Here, this was explored by using Google Maps. Through zooming in and out, the user can gain a clearer (or vaguer) visual of any virtual space (based on Google's own priority) on earth. The zoom tool became the method by which a composition of a series of maps were created. This series of maps illustrated how meaning is linked and prioritized. It explores orientation and time. Bike routes, Vehicular routes, and places of common attendance are all illustrated in a higher definition. While the places surrounding are a zoomed out existence, a vague bit of fabric for a vague memory. Mostly, it illustrated the arbitrariness of existing in a city: relationship to home, preferred throughways, places to avoid, and the unfamiliar.

*Facing Top: Studies of Abstract Composition Using Wind Charts | Left to Right: (Grand Rapids, MI; Detroit, MI; Warsaw, POL)*

*Facing Middle: Study of Experiencing Sun Angle | Pen on Paper*

*Facing Bottom: Windmill and the Wind | Cardboard and Watercolor*

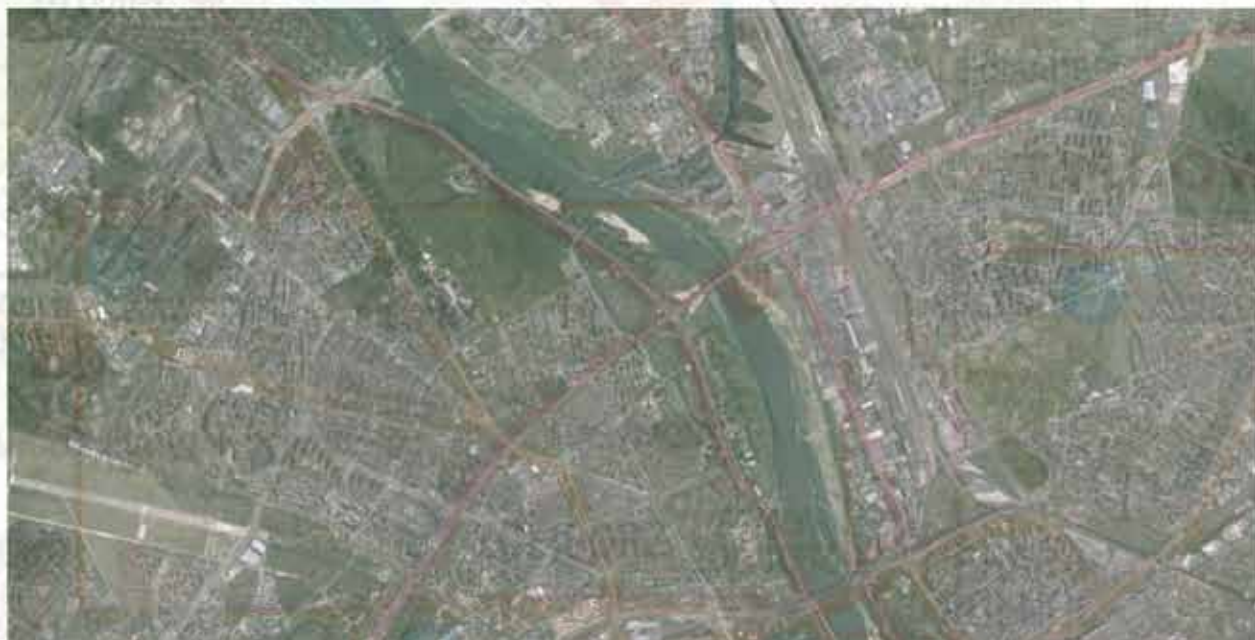
*How might wind might begin to sculpt an entity within the courtyard.  
How would the roof forms sculpt the tree? How could the tree (if already  
existing) sculpt the house?*

*Overleaf Left: Place Mapping of Warsaw, Poland | Collage*

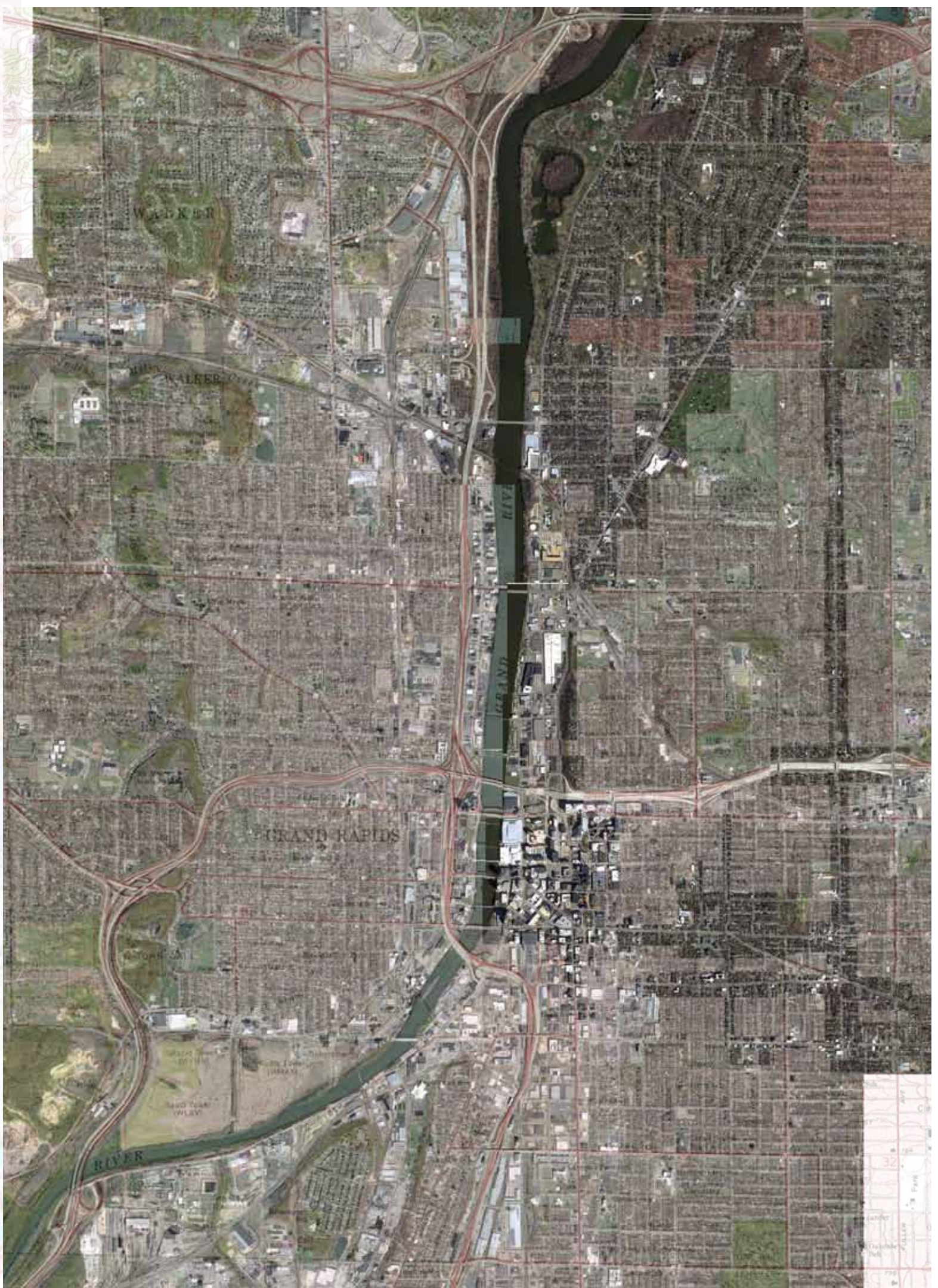
*Overleaf Right: Place Mapping of Grand Rapids, Michigan | Collage*

*Over, Overleaf: Place Mapping of Detroit, Michigan | Collage*

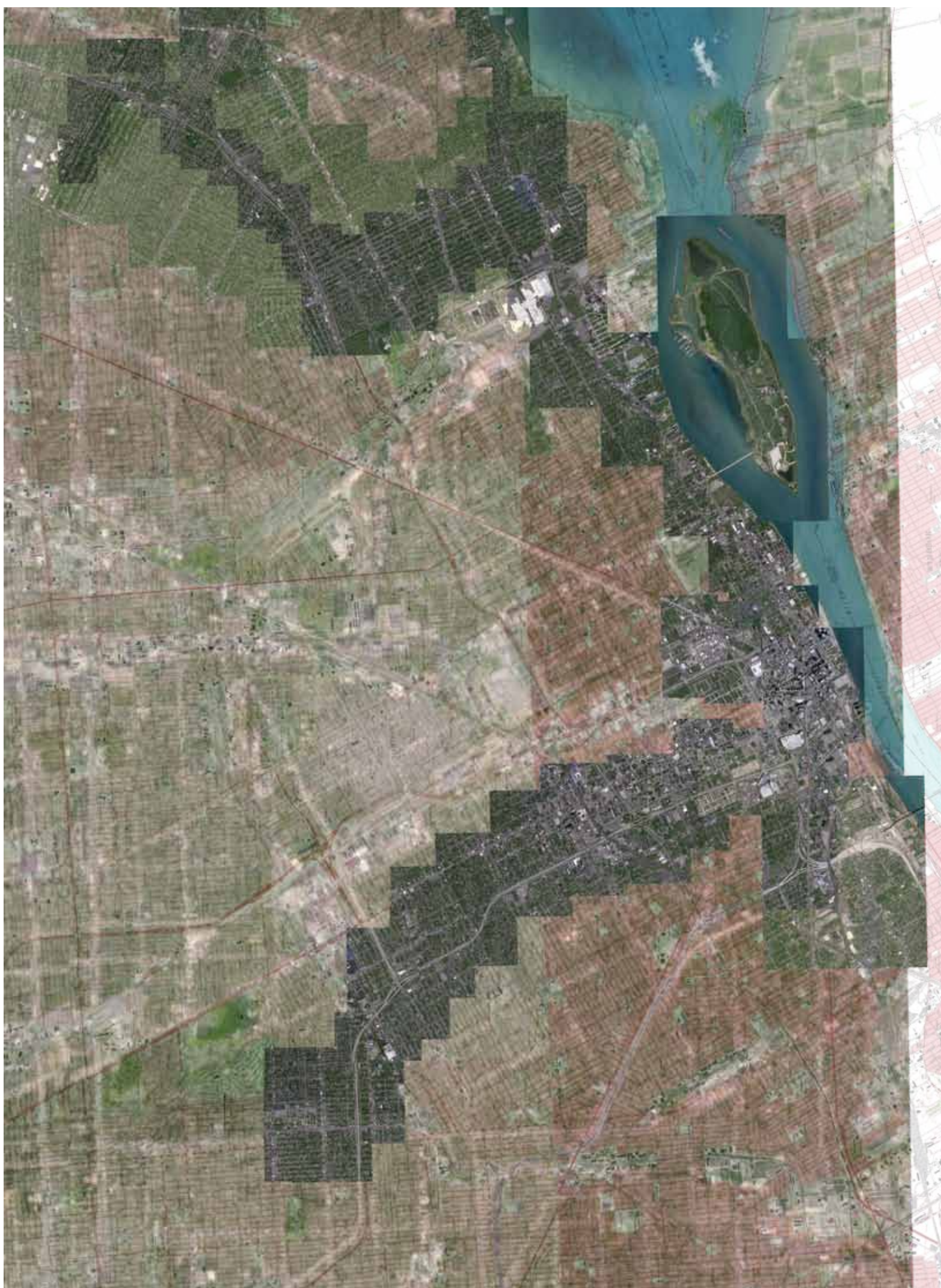














## Part IV: Drawing Stories

The fairy-tales taught growing up include animals as human-like characters with human lessons to teach. Chicken little teaches us about the fears that confront us, leaving decisions up to the listener to gather what it really means that Chicken Little keeps proclaiming that the sky is falling. Perhaps, as anyone can reflect: Chicken Little's fears are not so different from our own in any given area of life. It is here in this memory-formed, imagination driven, connection with a story becomes pedagogical. It is felt in the (not exclusively literary) connection with our present state of being even though it was told and heard many times.

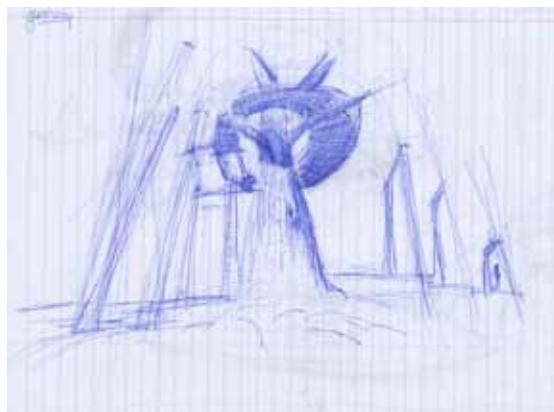
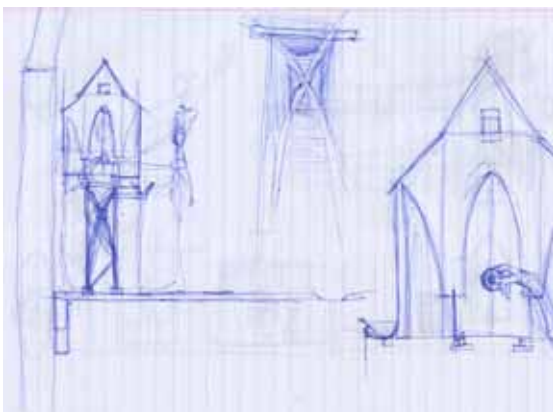
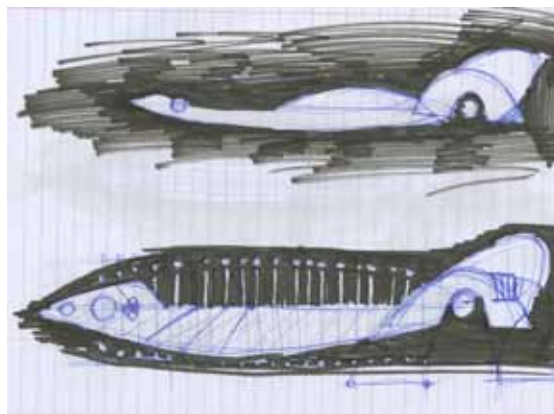
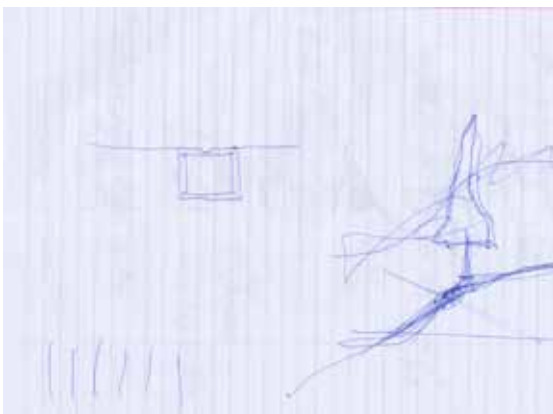
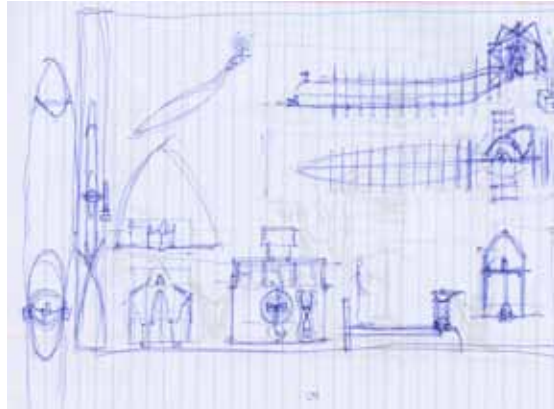
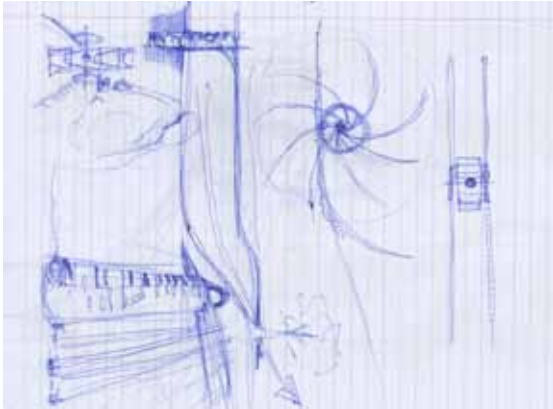
Literature has been used to both explain and relate to events in humankind's past. It is a way to gather meaning by synthesizing events that otherwise would be separate and disconnected. The human mind must connect, it must have components that are related logically in order to follow them and forget them. Life is a changing of forms, ideas coming and going-- presently growing and dying from past to future



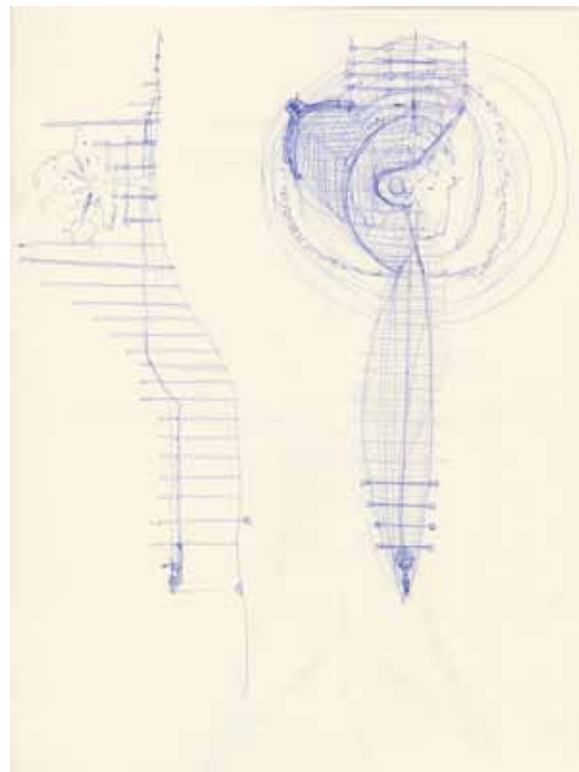
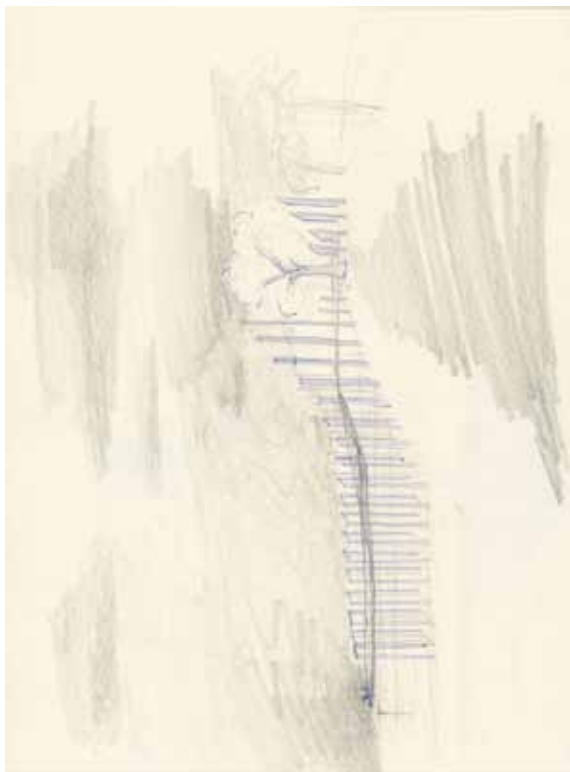
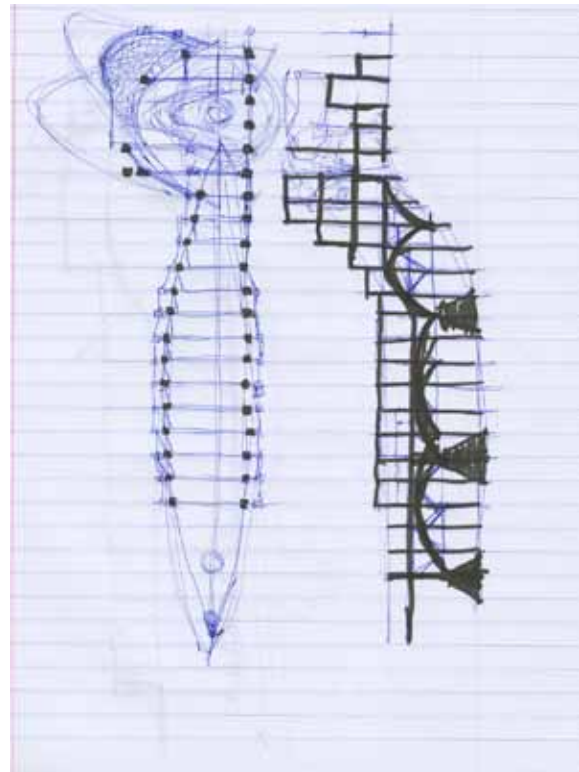
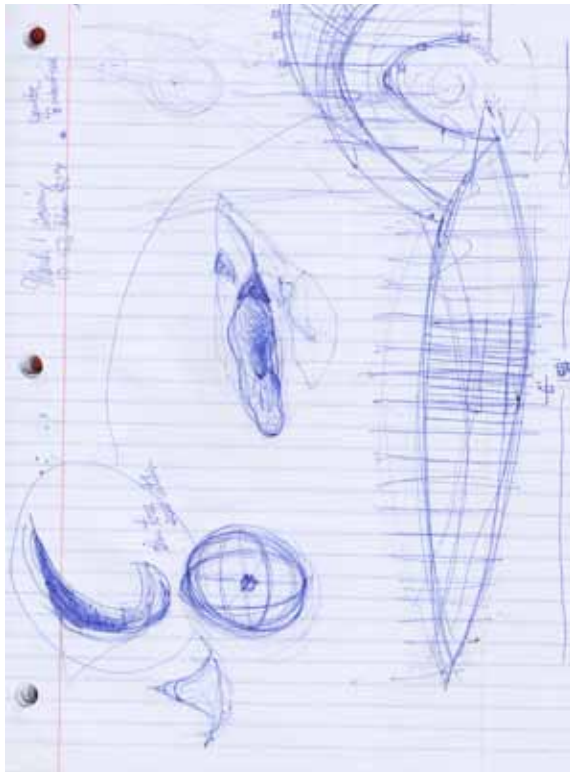


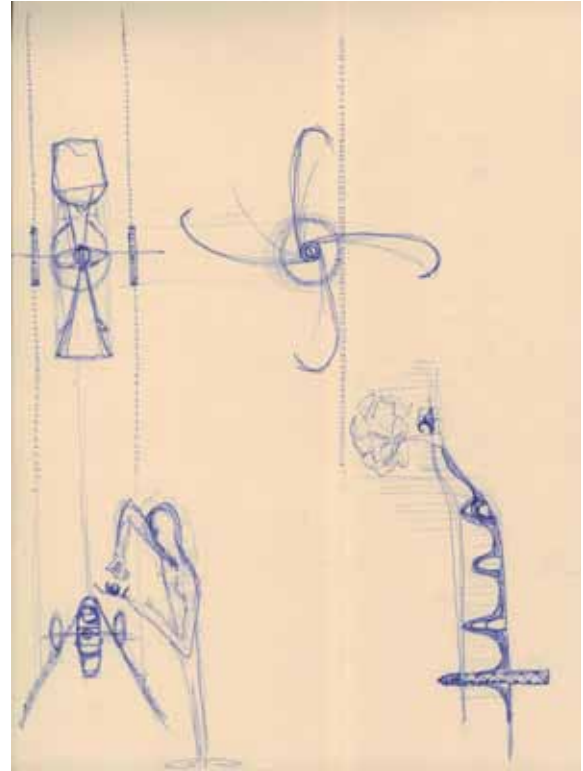
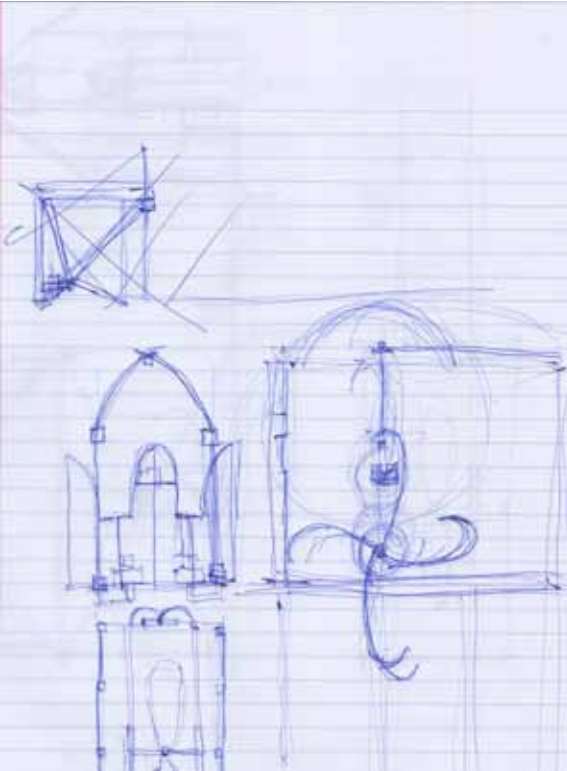
*Site Map of A Tree and It's Seed* | Graphite on Paper | 11" x 17"

## A Tree & It's Seed









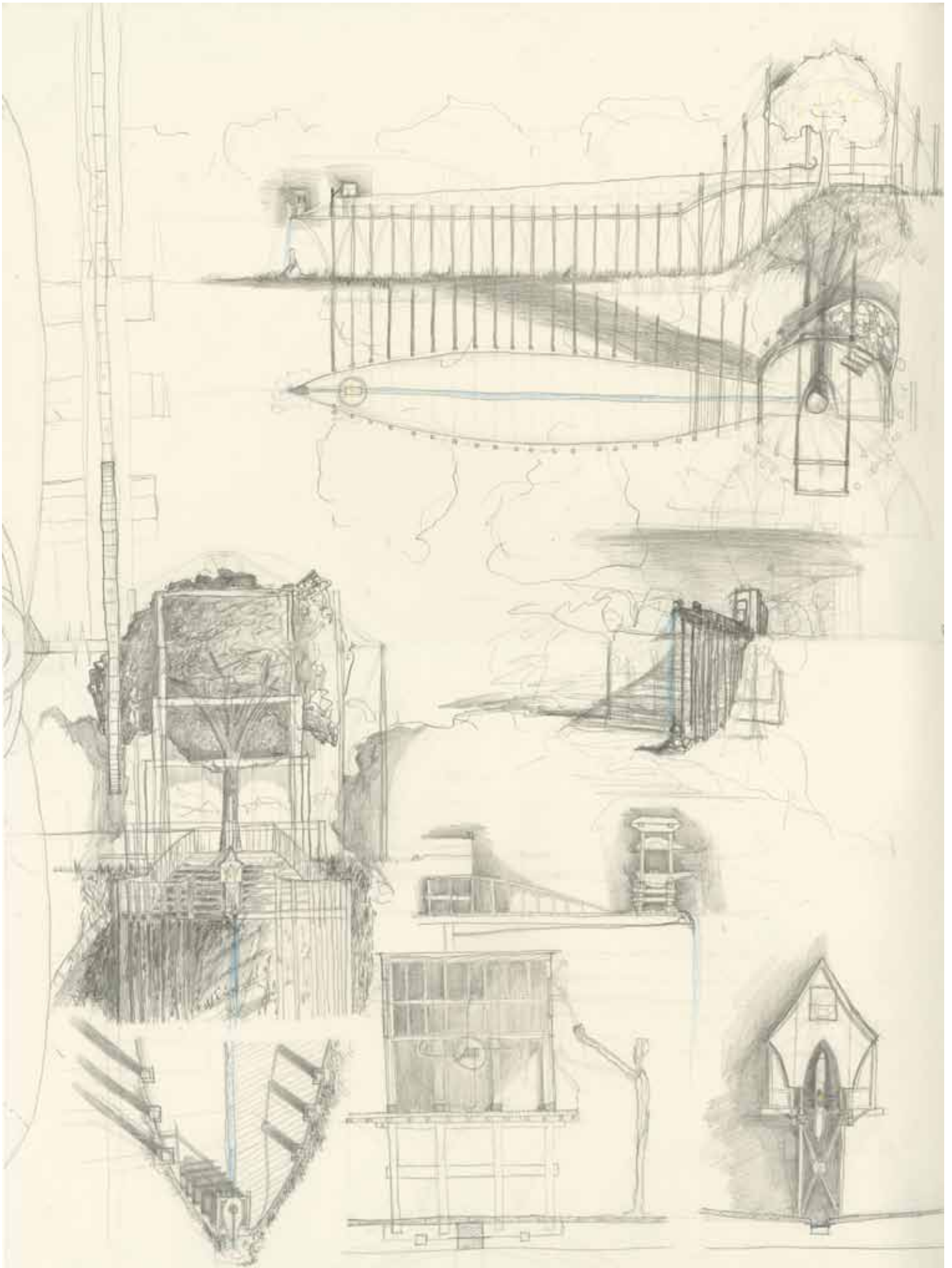
Is a study about the way that humankind interacts with nature. Today, this relationship to the environment is apparent in the media and in the scientific information about its present state. Yet, before information was known about the environment, man responded to nature in such a way that cooperation was both obvious and necessary. This cooperation meant that there is a sensitivity to details which included the blooming and germinating periods of not just agriculture, but any other plant which made even the slightest impact on daily life. A Tree and It's Seed exemplifies the way that the tree can once again become a character in the way that humankind operates.

An Elm tree releases seeds that are dispersed through the wind. Walking around, its seeds can be seen strewn about on the ground. Finding a seed located in a courtyard is easy, since they are piled up against the stone walls. The walls seem to gather them right where the wind blows them. Stooping to pick up a seed is an act that presents humankind's interaction with nature.

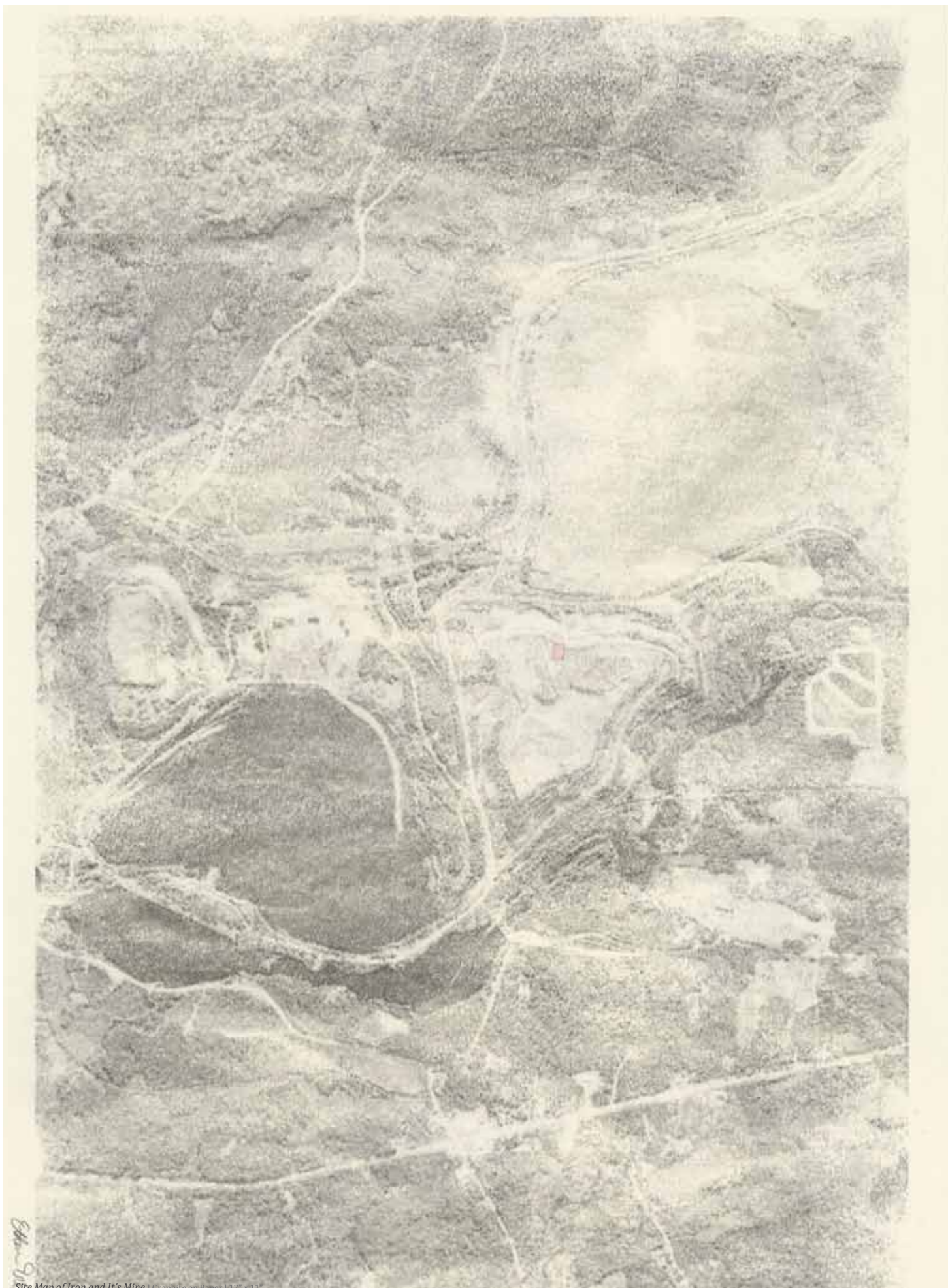
With this act man becomes a changer the tree's seasonal patterns and the placement of its offspring. The other details inherent in this (now) agricultural process can be undertaken by humankind. Ascending the steps, the seed in hand, is placed into a paddled mechanism driven by the wind. It travels toward its new place along a toothed track that spans the entire length of the promenade. Still moved by the wind, this angled track begins the gravitational descent of the mechanism into its house. Placed in its house, the mechanism has its own resting place where it can spin freely (without geared connection) in the wind that passes through it's house. This wind is allowed inside through two windows that are modeled after barn ventilation. The windows open to modify the speed of the mechanism's spinning. Taken from the mechanism, the seed is then carried and placed in its own sphere at the very tip of the promenade. The promenade is dissected with a channel for the water to drain from the lapped deck. The water moves under the seed's pedestal washing over the pile of rocks and burned seeds of the past year.

This culture has a place now if this were to be built. Yet, none have heard or seen it before until now.





*A Tree and It's Seed* | Graphite on Paper 24" x 18"

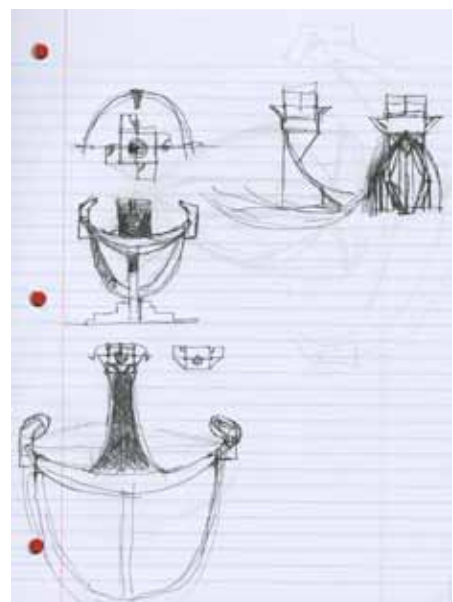
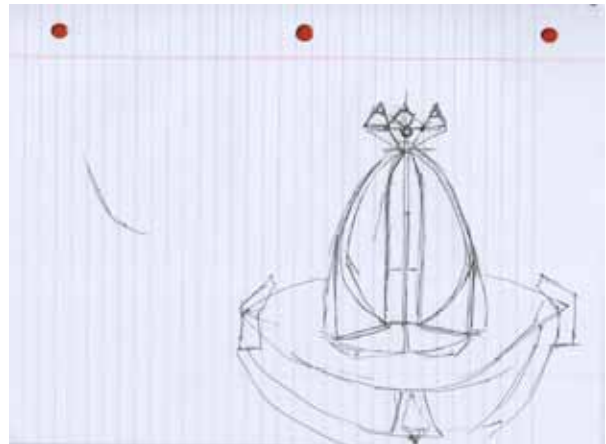
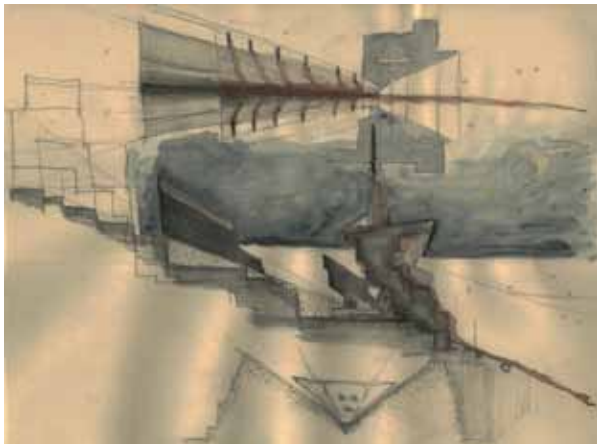


84-90

Site Map of Iron and It's Mine | Graphite on Paper | 17" x 11"



## Iron & It's Mine



In Carl Schmidt's mythology, earth is reveals humankind's existence- exposing the lines which form subdivisions-- worked into and seen from-- but ultimately of the earth. Human's work the earth, the earth reveals their work to them.

Extracting iron from the earth in the 19th century was done (mostly) in two ways: the shaft mine, and the surface mine . The shaft mine created a need for a system by which to entrain air into the earth and to operate an elevator. It was down the long shaft into the earth that the counterweight and belt-driven elevator would run bringing up 16T worth of iron per week.

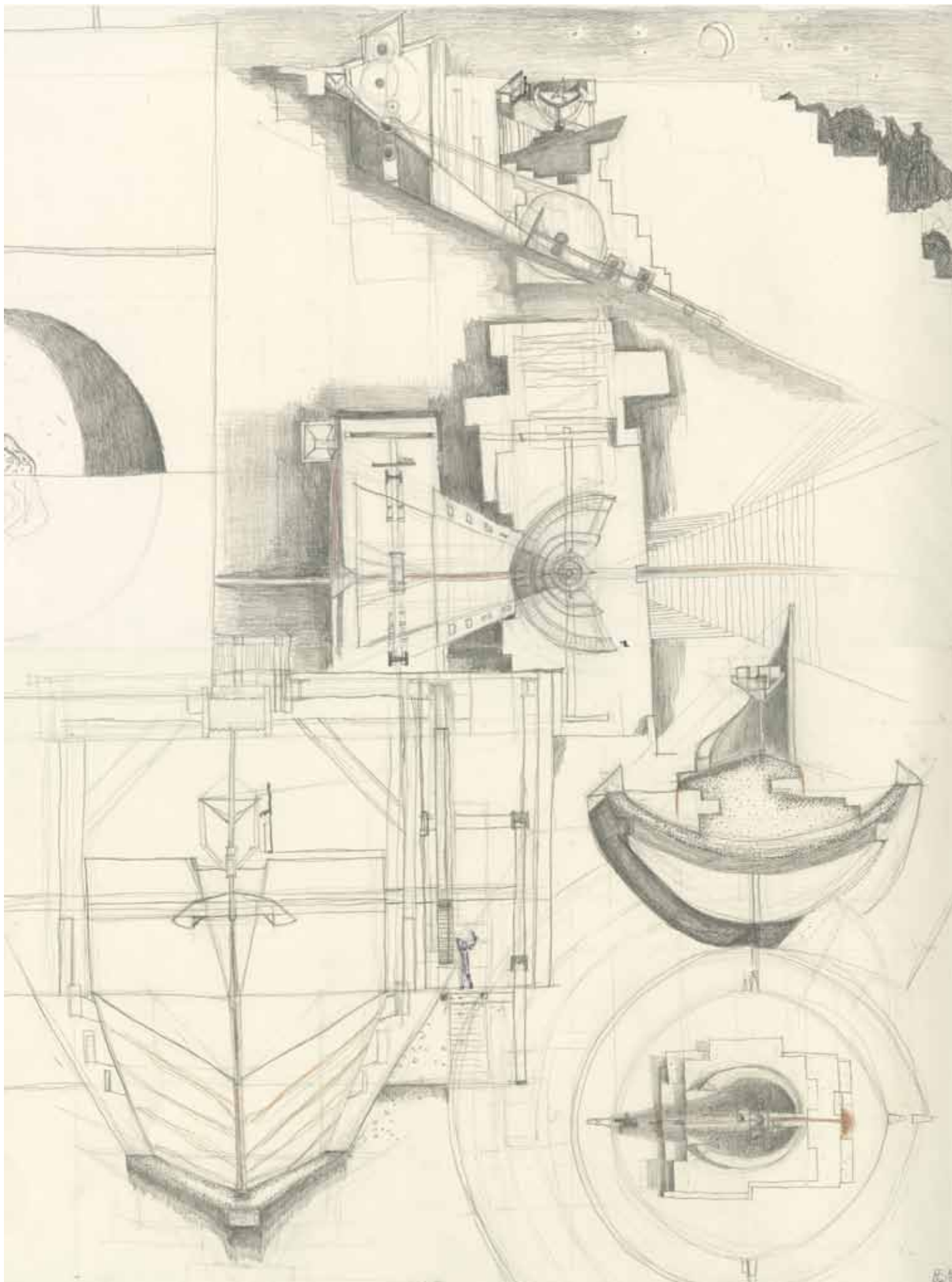
Here a man runs the entire machine by the gearing of a system that lifts a cast block of iron using a reinterpreted pulley system of that day. The mass of the block is the equivalent to one day's worth of work- 80 ft<sup>3</sup> of cast iron. Down the shovel-slope, the station that pushes the iron up operates a plow to push the iron up the hill to the lifting location. This is a simplified tribute to the surface mining process.

On the site, the hole that was once the "surface" is now a lake. The fill pile, (the hill) that was once the inverted surface of the mine, now becomes the site for this process to take place.

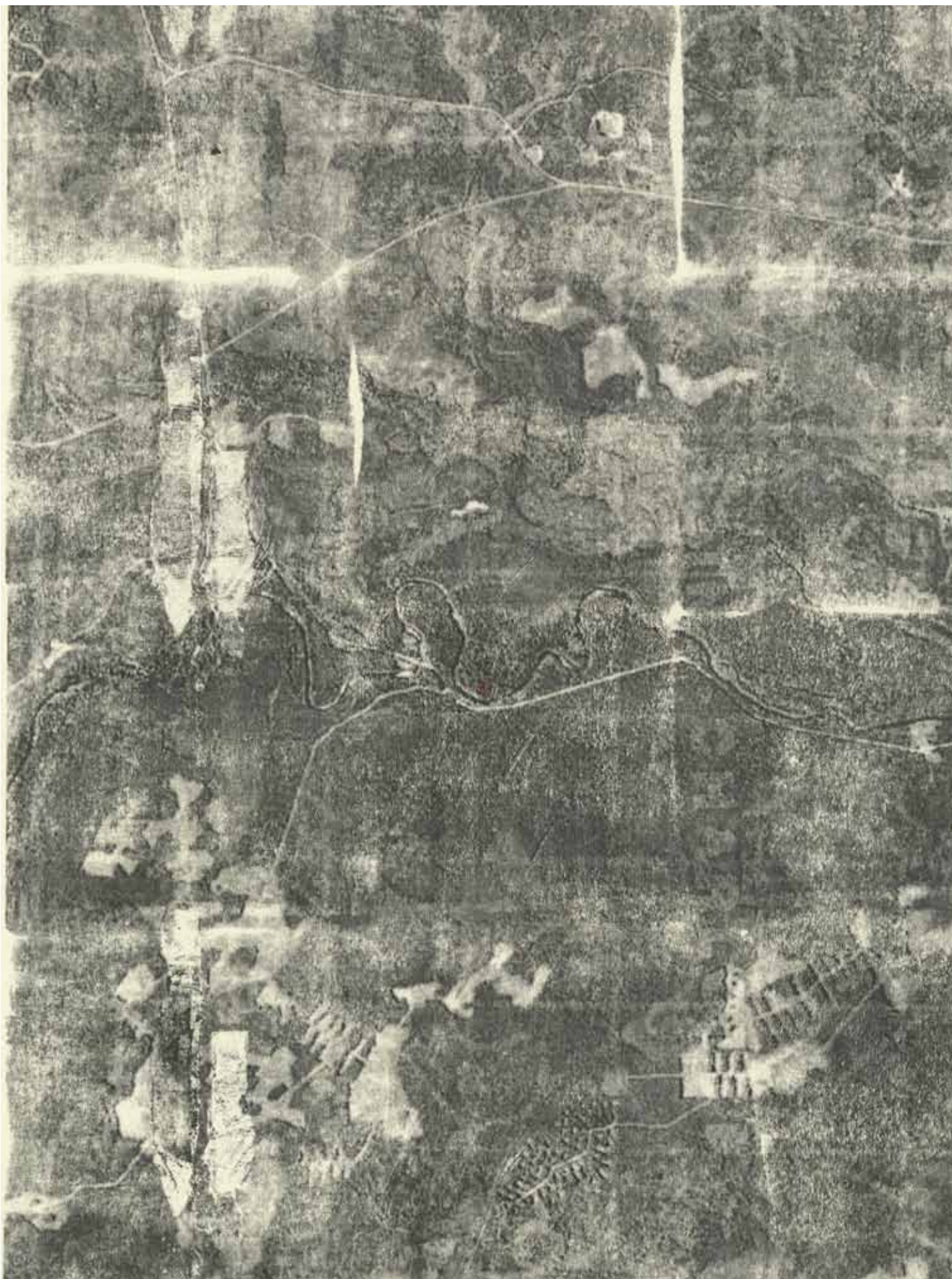
Yearly, when mining season begins the sun shines onto the piece of hematite-a more dense and valuable type of iron. The sun's rays travel between a slit that dissects a curving form that shrouds the block, holding the hematite in shadow. A series of steps and ramps like the rough-hewn terracing roadways that lead out of the pit of the surface mine lead up the archway to this pedestal. At the very top, the display that hinges open to reveal the Hematite can be observed. To the eyes of the subject see the hematite in the rays of the sun.

It is over all of this moved earth that the water pours over rusty iron machines. In streams into channels, it stains the white concrete a ferrous brown hue.





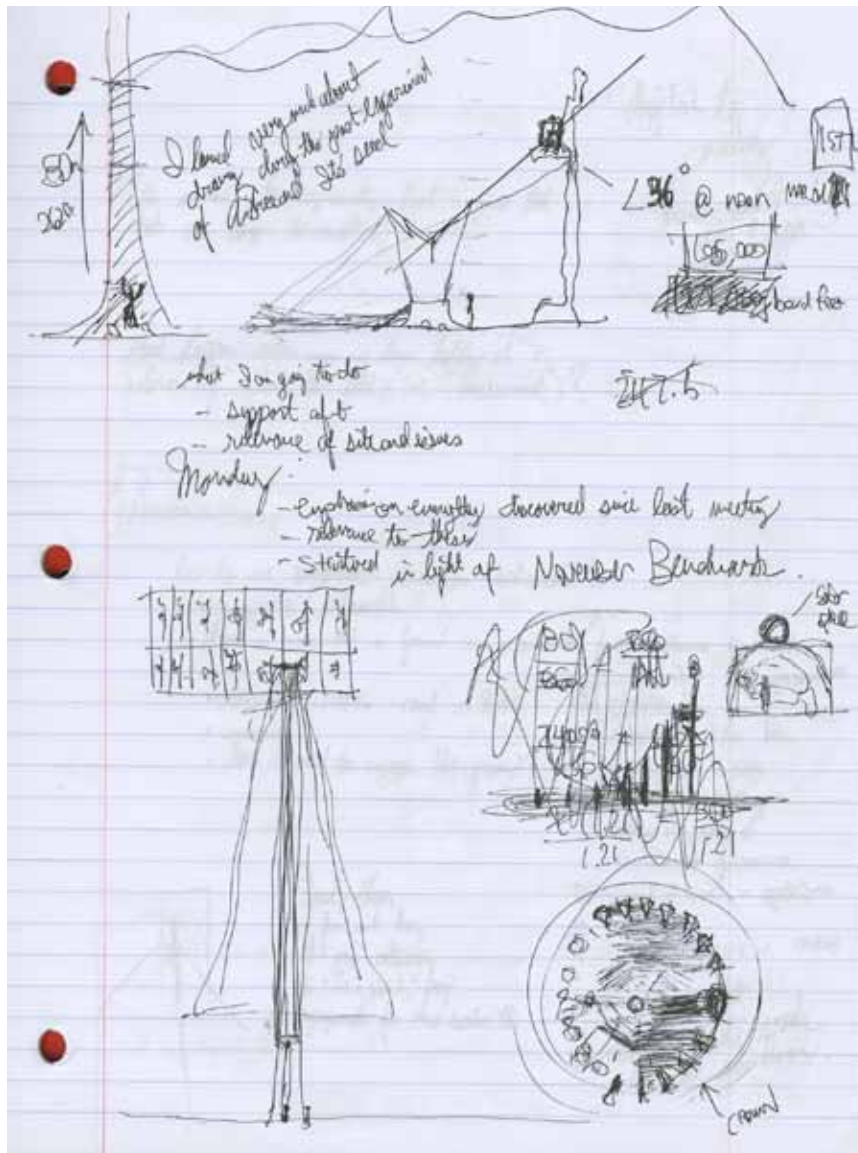
*Iron and It's Mine* | Graphite on Paper 24" x 18"



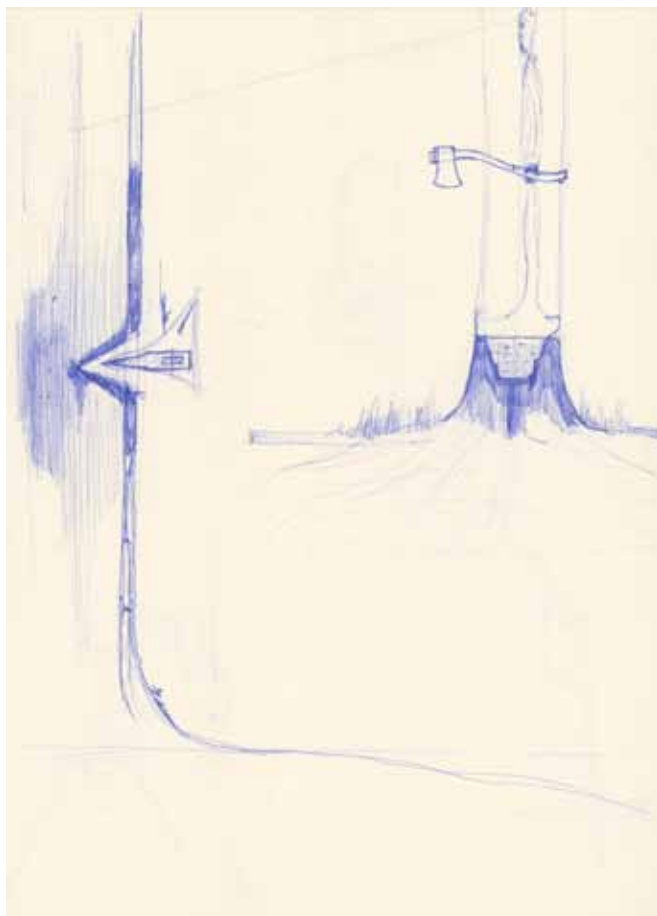
*Site Map of Morphology in Life* | Graphite Transfer on Paper | 11" x 17"



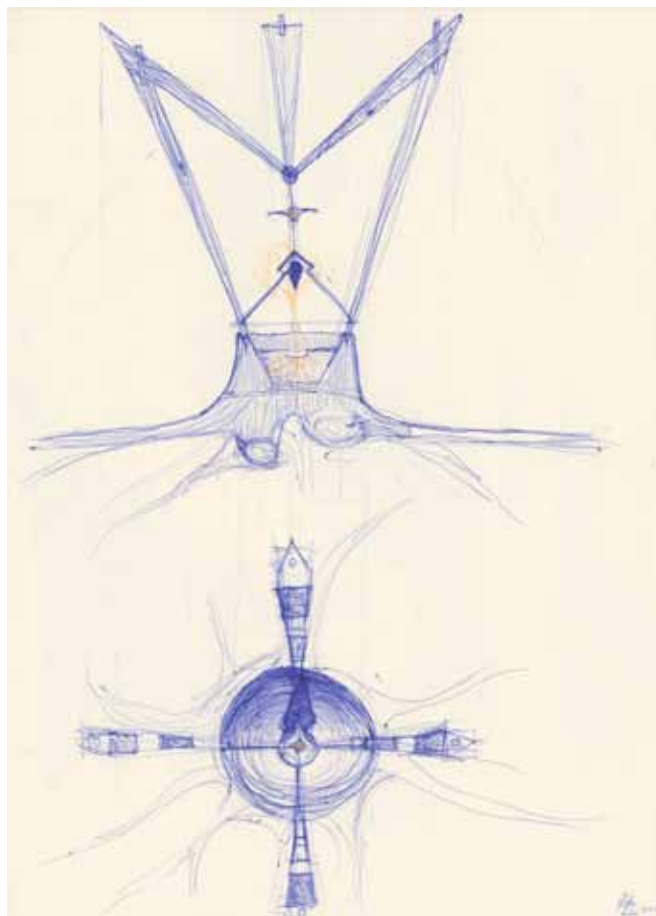
## Morphology In Life



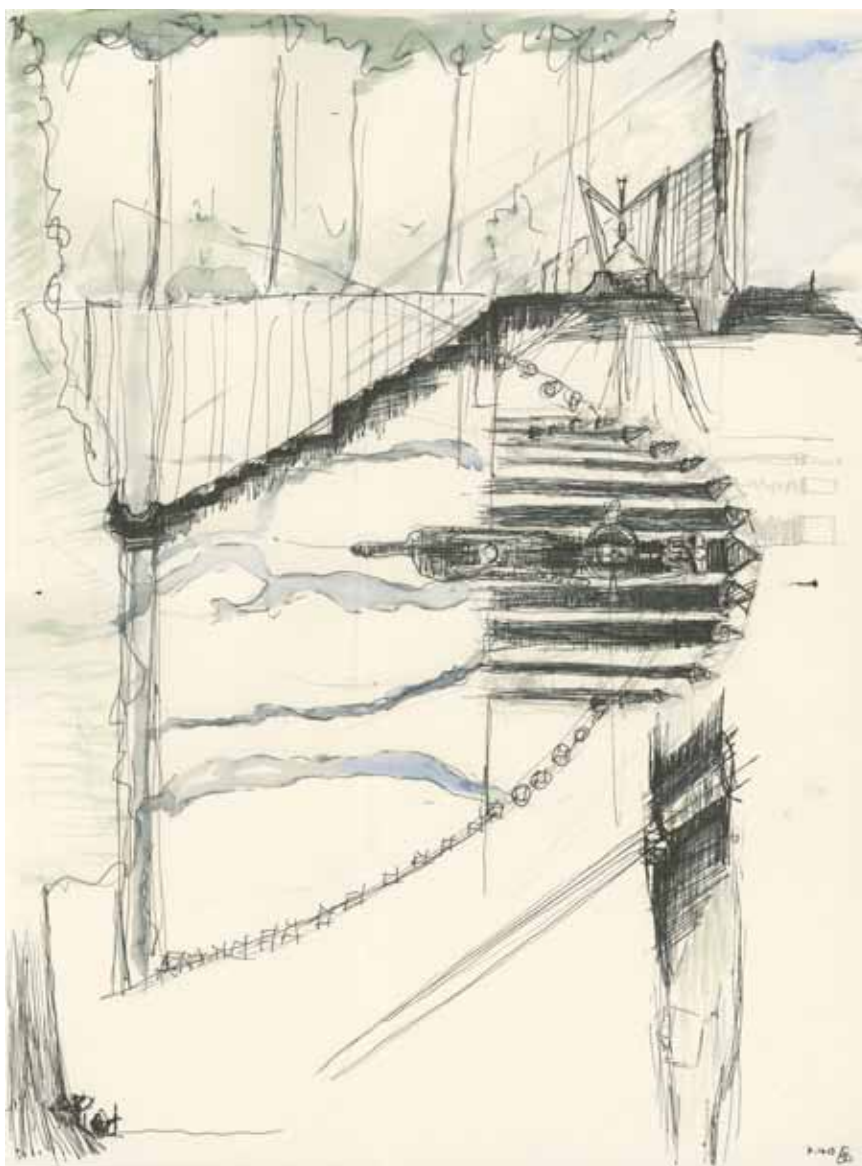




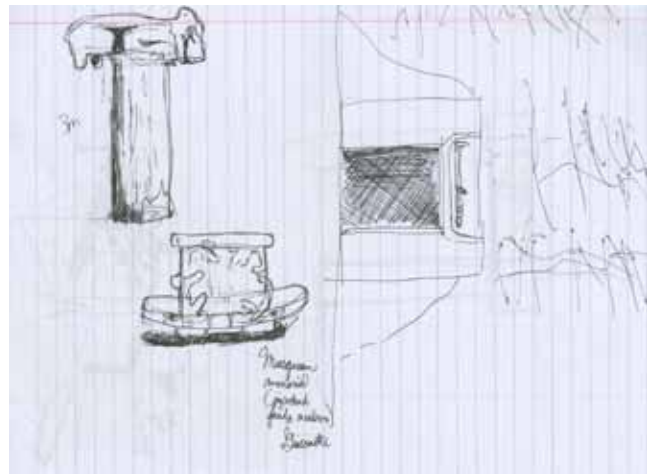
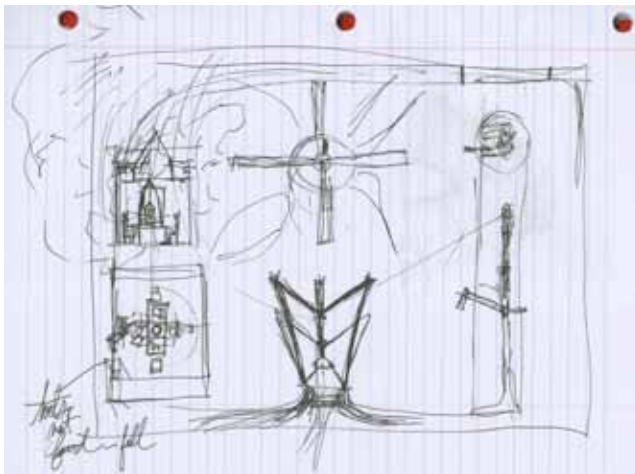
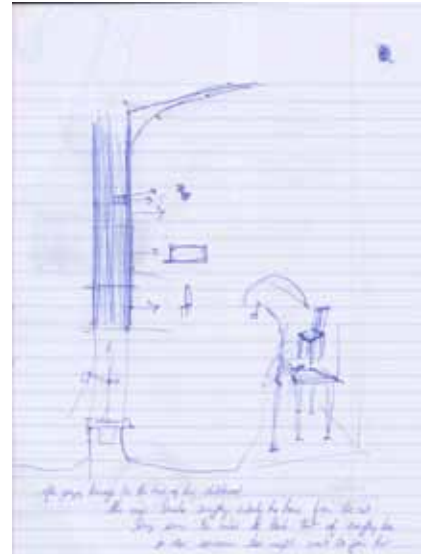
*Morphology in Life Seed Totem* | Pen on Paper | 10" x 8"



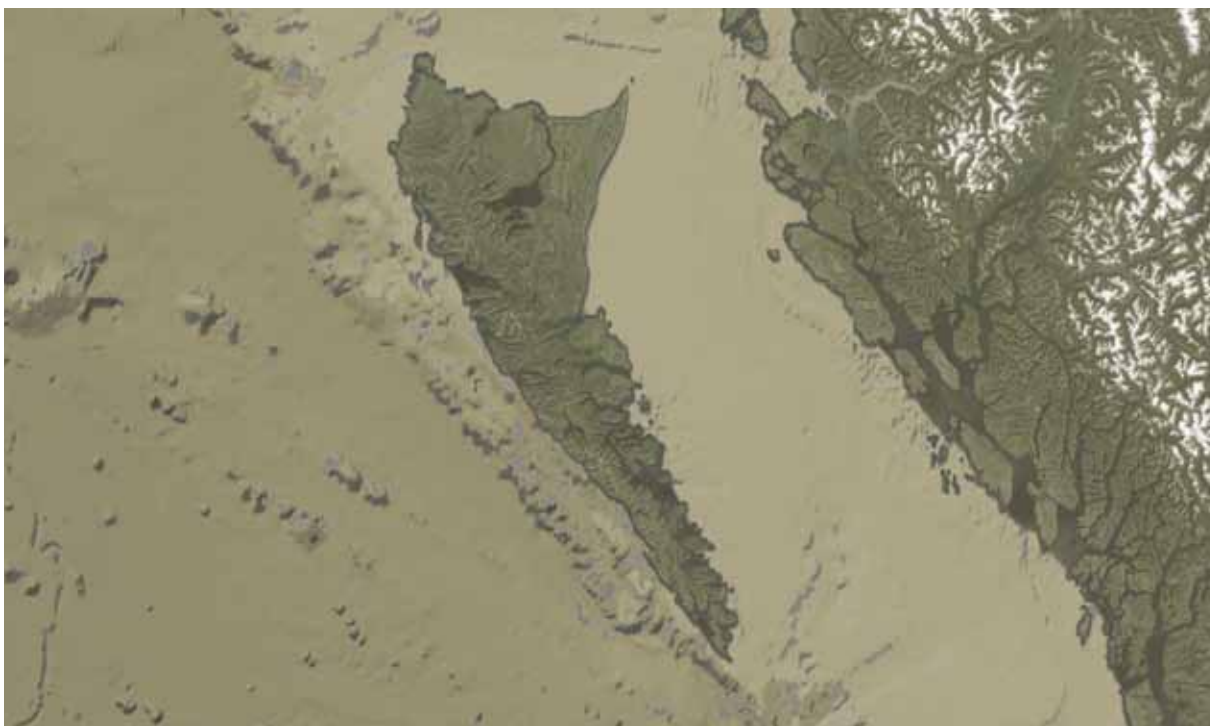
*Morphology in Life Seed Releasing Prosthetic* | Pen on Paper | 10" x 8"



*Morphology in Life* | Pen and Watercolor on Paper | 10" x 8"







*Haida Gwaii, BC* | Google Map Collage



*Haida Dwellings* | George Dawson. commons.wikimedia.com



*Haida Burial Tombs* | Canadian Museum of Civilization



*Sapling Sprouting* | Photograph by Author

*Facing Bottom Right: Haida People Objects and Burial Techniques* | Pen on Paper | 10" x 8"

*Past and present.  
Before and after.  
Measure, stature  
Each place has its time;  
Each time has nooks and crannies  
to dwell.  
Who can tell us  
Of their primal best;  
Their sophistry and jest?*

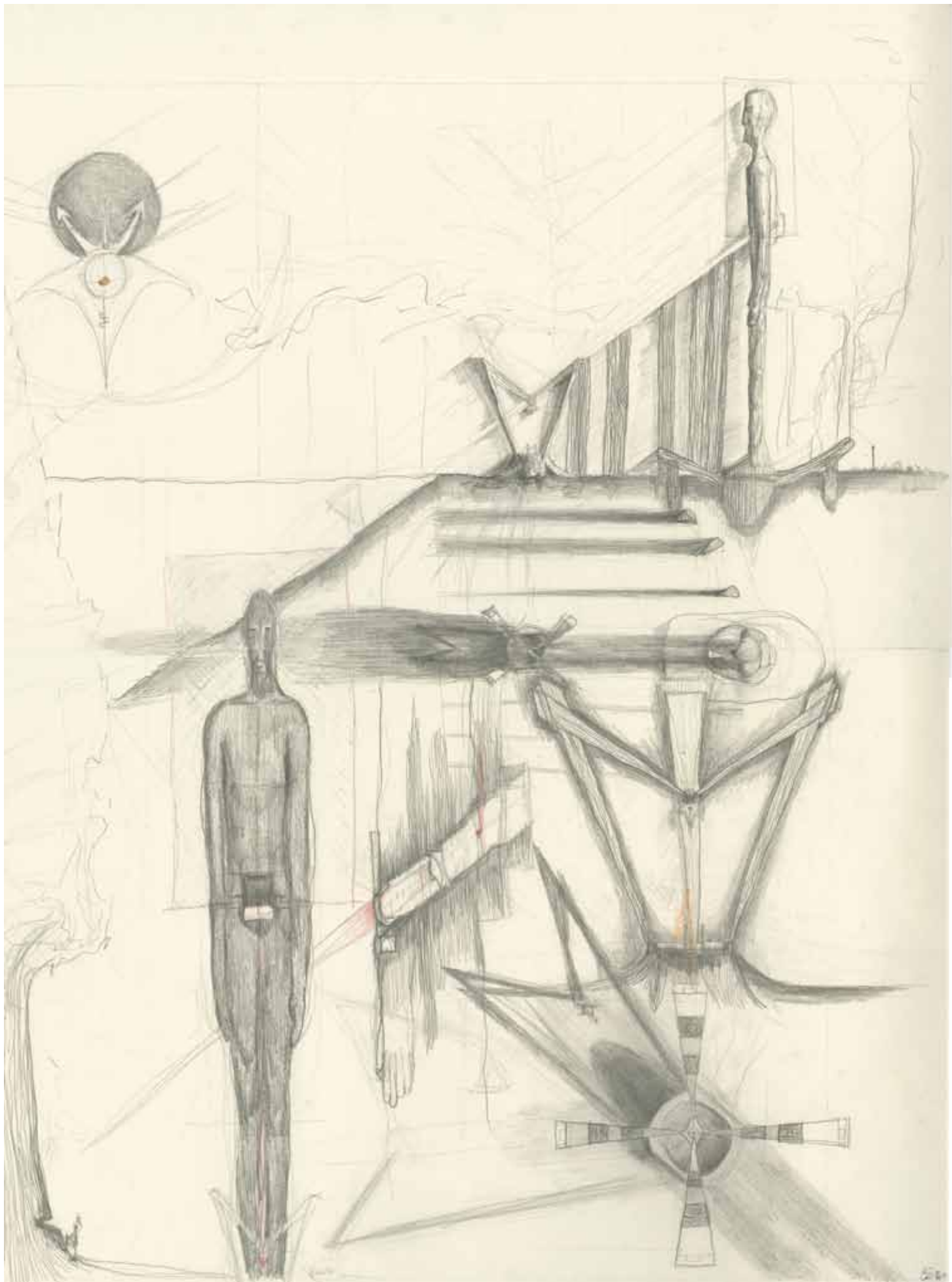
The culture of a place greatly changes it. Haida Gwaii, BC is an archipelago across a great reef west of British Columbia. Its people created the Totem Pole as we know of it today as a method of carving a story. They rely on the sea for sustenance, and settling into 14 recorded fishing villages across the (over 10,000 km<sup>2</sup> archipelago). (Canadian Museum of Civilization)

The totem pole form is an iconic form for the Haida people since it is often on the front of their dwellings, in some cases even becoming the entrance into them. The totem pole form was also incorporated into the treatment of their dead. On a single or double pole, the form of a richly engraved animal or piece of wood would hold the remains in the air. This tale also deals with a tree, a very special tree. The Sitka spruce has been known to grow up to 100 m tall (with 300 m<sup>3</sup>) of volume. That is enough to construct 5 2000 ft<sup>2</sup> builder houses.

One such Sitka Spruce is located on the north side of the island along a winding river. Rather than the typical green hue, its needles glowed golden. Because of this it became known as the Golden Spruce. This tree became a popular attraction to the area, and many wondered about what gave its crown such a golden hue. Until one day a man cut the tree down, for reasons that are not certain. The uproar was immense as search parties were sent out, the chain saw was found, and later the man himself. Yet, mysteriously, he escaped and has not been found since. The wood from the tree was used by a renown luthier to make a guitar. Various other uses were found for the wood. But what does one do with the rest?

From the stump, as is common with forests, the fertility and pH balance creates an environment well suited for the growth of a new tree. A prosthetic fitting into grooves in the stump can hold a seed. This contraption can be balanced so that it is held, just barely, by a ball of wax. The sheer size and amount of wood within this tree could create a 30 m tall totem pole the shape of a human figure with plenty left over. Above the carved legs, burial remains can rest in a box. The box holds open an aperture. Within the opening, a lens that concentrates the light (only) during the beginning day of germination for the Sitka Spruce seed. Only at this time is the light direct enough to pass into the light opening. The lens ignites a fire in the totem, burning the top of the figure but sparing the legs which safely hold the remains in Haida fashion. The lens itself softens the wax, which holds the teetering contraption at bay. The contraption crashes away and the pod slips onto the pegs set just below it, breaking it open and releasing the seed. Here, the seed enters the prepared stump, exposing it to the nutrients and light it needs to (re) grow in a different form.

Researchers took cuttings of the tree back to a lab in California in an attempt to root them. It is said that they succeeded, though actual planting attempts have thus far been unsuccessful.



*Morphology in Life* | Graphite on Paper 24" x 18"

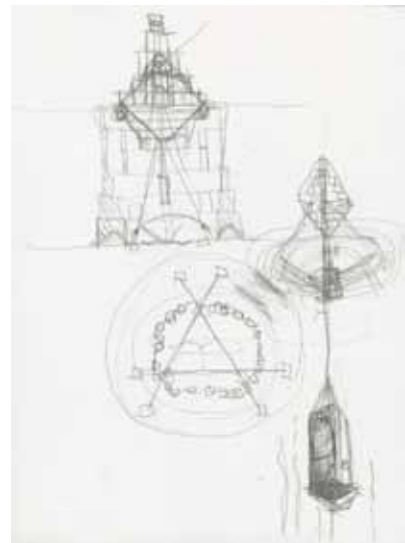




Site Map of Lighthouse of the Atlas | Graphite Transfer on Paper | 11" x 17"



## Lighthouse of the Atlas



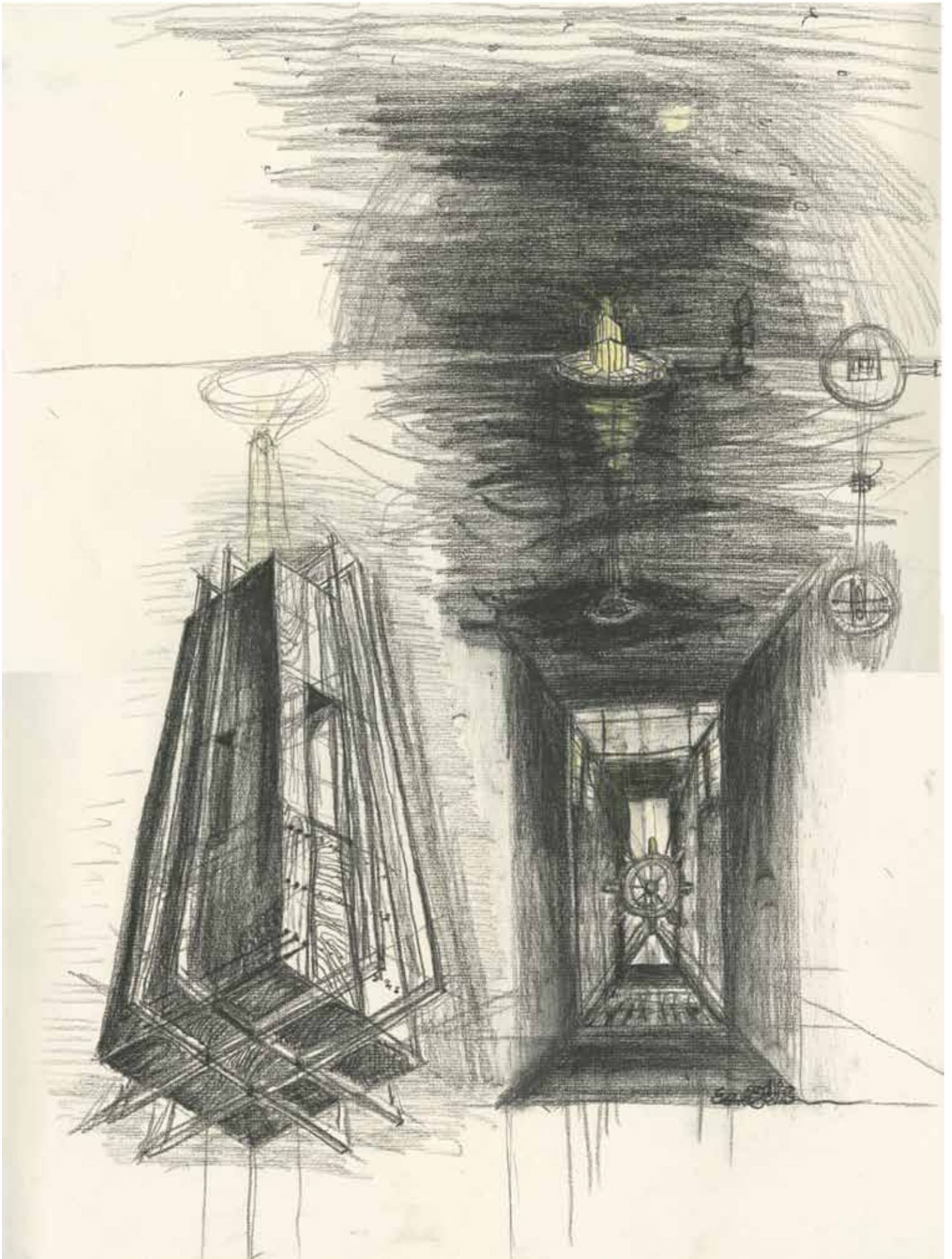
In May of 1839 a 52 foot schooner with limestone intended for Oswego, New York travelled from the Black River quarries. (Davis) The limestone was to build up the U.S. Government Harbor in the port city on the eastern end of Lake Ontario. However, about 2 miles out, a heavy wind caused the load of limestone to shift inside the Atlas. This caused the ship to forcefully collide with the bottom of lake Ontario. It is intended to remain in its fragmented condition in its collision place.

A house can become the memorial for this find, shedding light on the wreck. A modified Fresnel lens rotated to shine into the water toward the wreck reexamines the use of light from warning to elucidating. The keeping of this house and its light can be operated similar to how a lighthouse along the shore would, with an attached domicile. The wind causing the shift of the load of limestone, can now operate a sail driven domicile that rotates around the house of the light.

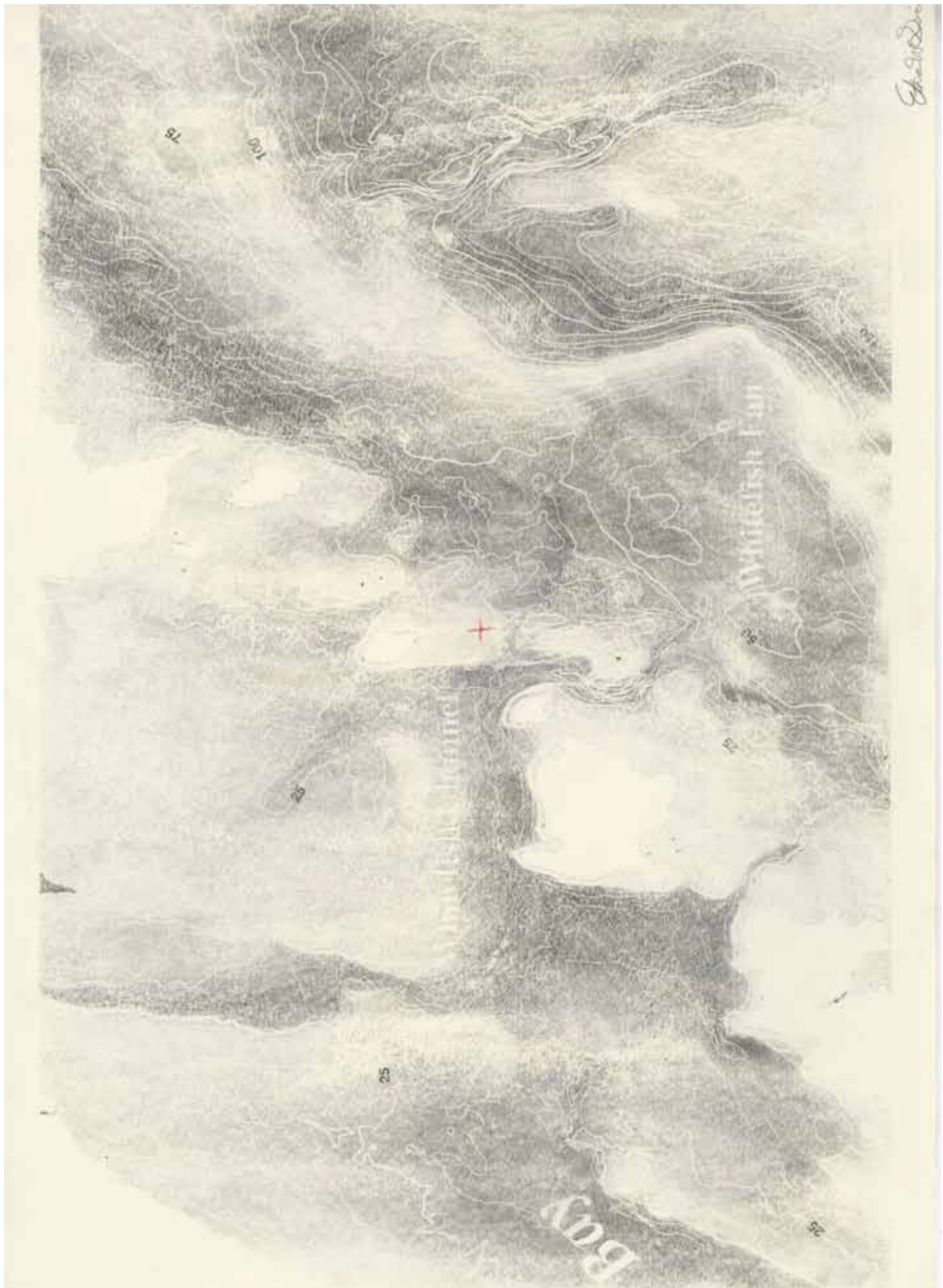
Cables that anchor the floating structure to the site of the crash landing. The limestone reacting with the water creates a cement-bond, so arches over the wreck can be anchored with the addition (and compacting) of the limestone each year around the Atlas wreck.

Suspended between Atlas' remains and the lighthouse is the limestone that shifted inside of the atlas. Formed by wood and tied with cables it creates a cement-bonded volume. Inside of this cement-bonded structure, the wheel of the Atlas is displayed as the most in tact artifact found amongst the wreckage. The wheel is used to draw the doors open which let what little light can travel through the turbid Lake Ontario water onto its rungs and handles.





*Lighthouse of the Atlas* | Graphite on Paper 24" x 18"



Site Map of The City of Le Griffon | Graphite Transfer on Paper | 11" x 17"

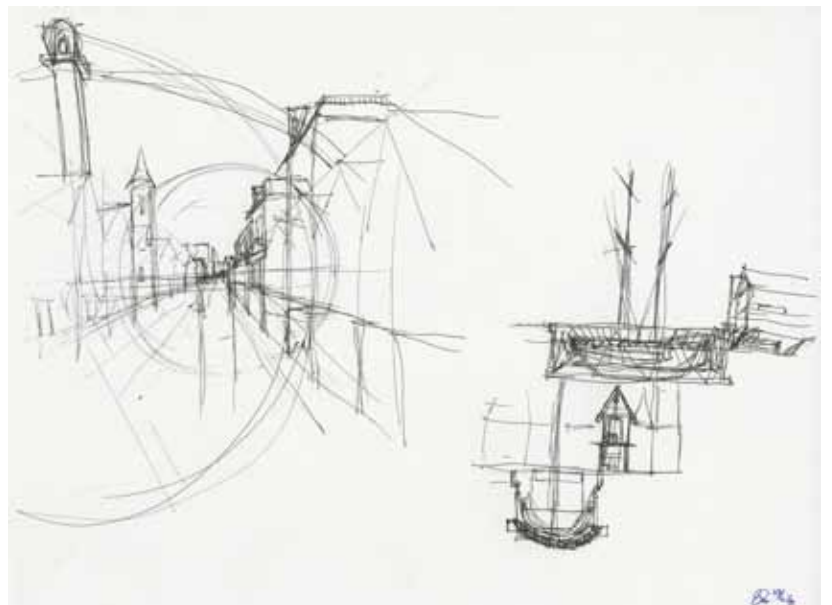
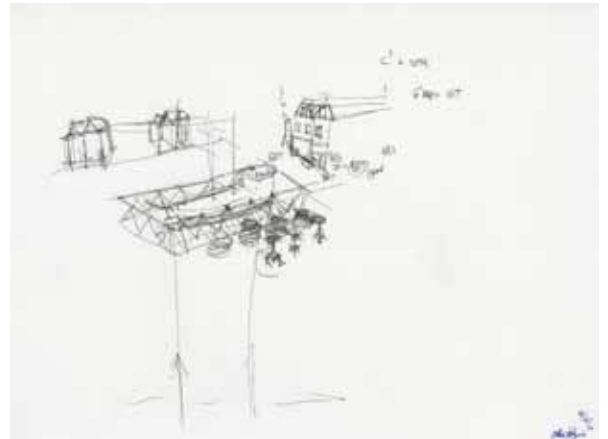
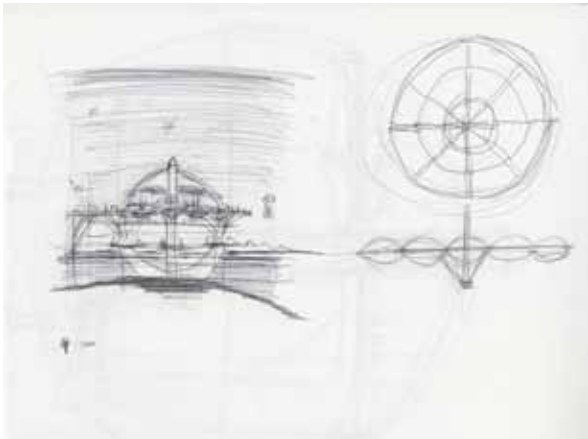


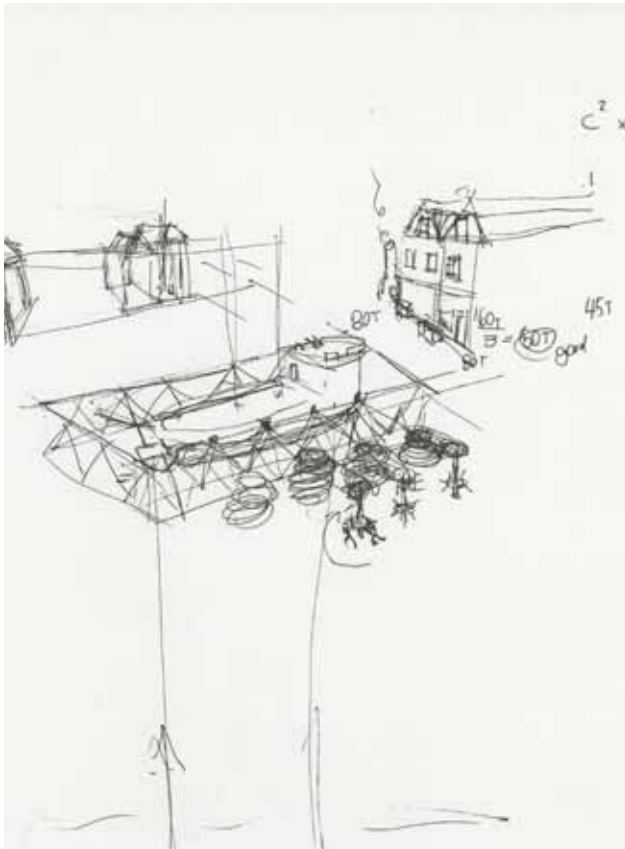
## The City of Le Griffon



*Searching for Le Griffon* | Graphite on Paper | 10" x 8"







*Hoisting the Searching Vessels and Rope Calculations* | Pen on Paper | 10" x 8"



*City of Le Griffon Composition* | Graphite on Paper | 10" x 8"



*Calculations of Population and Liziagne, FR* | Pen on Paper | 10" x 8"



*Central Fresnel Lens Display* | Pen on Paper | 10" x 8"

La Salle watched optimistically as Le Griffon set out on the 18th of September 1679.

The ship itself was completed in the wilderness near the Niagra falls in that very year. Along its voyage to Washington Harbor, it stopped in Detroit to pick up one of La Salle's Lieutenants and 5 men. Later it stopped in St. Ignace for supplies, men, and a second vessel (with the intent to construct a fort).

After setting sail from Washington Harbor Le griffon was never seen again by La Salle. Legend speaks of mutiny, scuttling the ship and taking the cargo consisting of furs, even hijack by the Natives. One myth says that it sailed into a crack in the ice, fulfilling the curse of an Iriquois prophet.

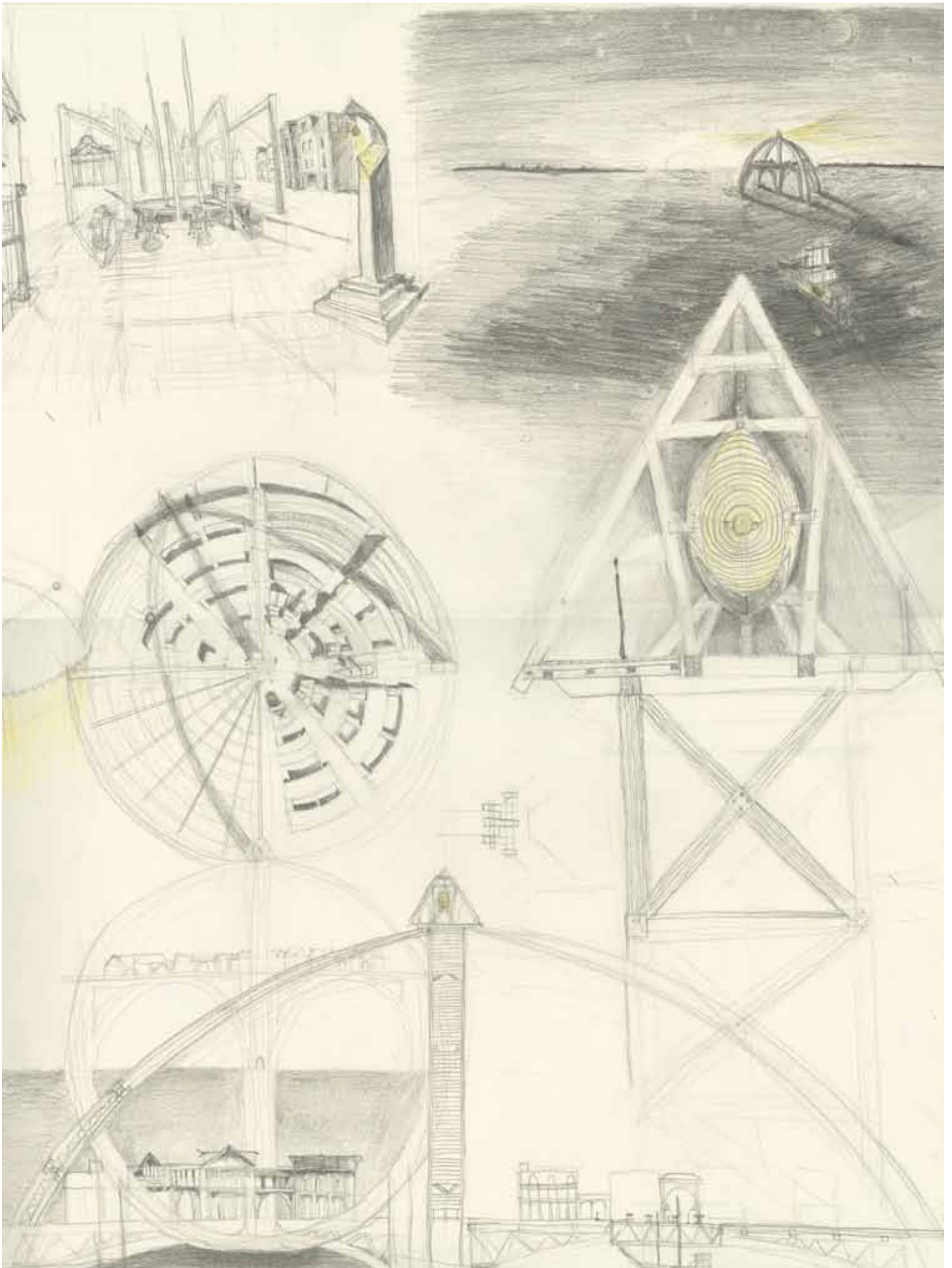
If found today it would be the oldest shipwreck in the Great Lakes by nearly a century.

A few case studies (roughly) shed light on the idea of what (the modern idea of) planning a city would entail. Its formation would have centered on the search for Le Griffon. From 15 men on board, the amount of people that 334 years (very roughly) generates is about that of a small city. In France: Sainte-Lizienne is about the proper size. The layout of the city was taken from a study of Zamosc, a defensive plan for town that was planned during the 16th century.

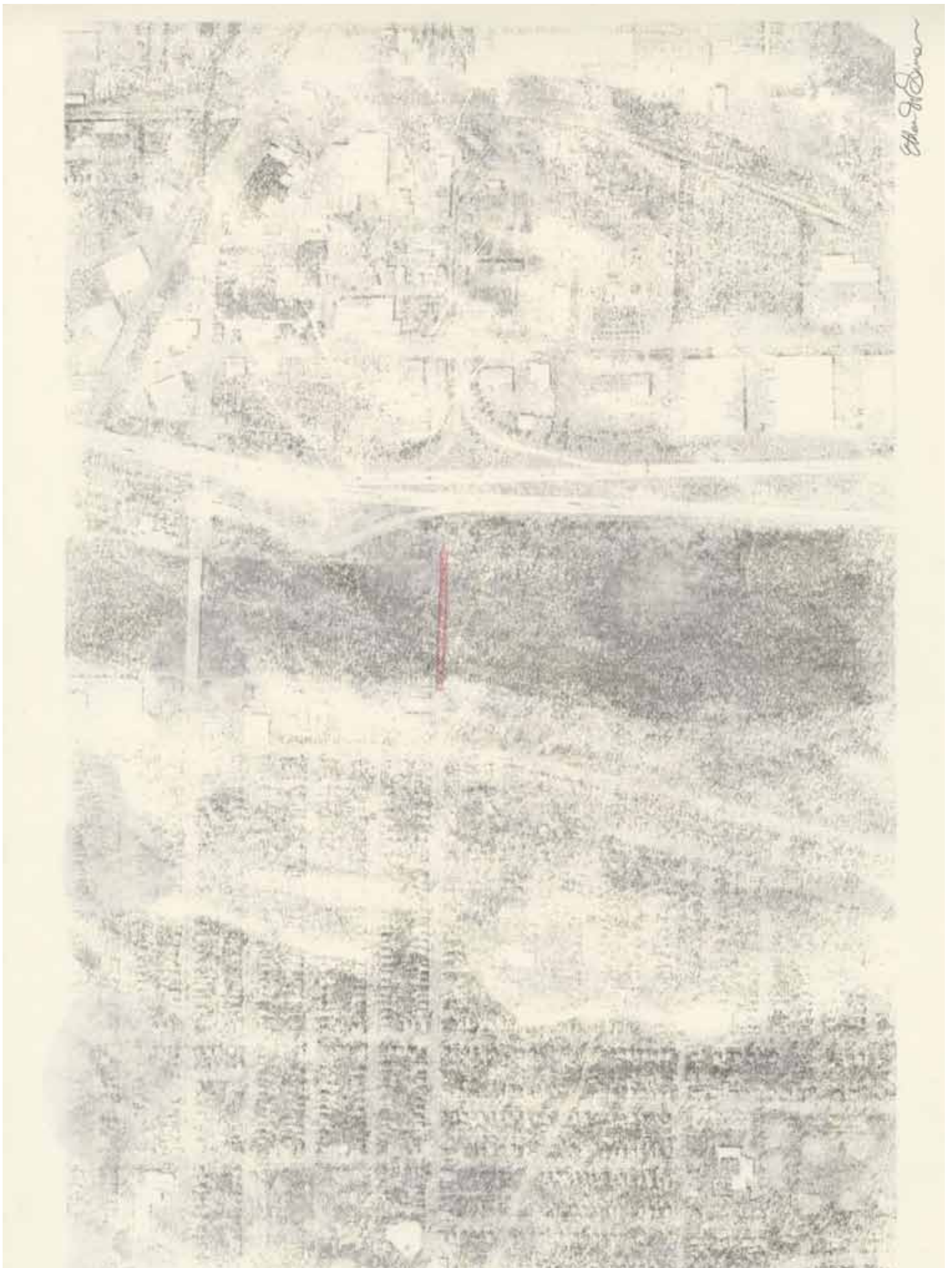
The city of Le Griffon is laid out on a disc connected at the cardinal points to the structure which ventures from the bed of Lake Michigan. Through this disc a tower gathers the four trusses, serving as an orientation point, calling home the searching vessels. The city itself is located just north east of Washington Island, near to the speculative site of Le Griffon's resting place.

The technology for the searching vessels is the Fresnel lens, the same lens that calls the ships home. Only in order to make use of it, the lens is inverted to shine into the water. Each vessel is modified to accommodate this technology. Upon arriving at the city the ships are installed along the at the cardinal points of the city- their masts become a part of the cityscape. The general characteristics are driven by the construction of nautical vessels, the engineering techniques of wood truss bridges, and the movement of the sun. The placement of the city is on one of the shallowest depths of Lake Michigan. It is also on the political border of Michigan and Wisconsin. The defense against the attacking sea is the other force which shaped the subsurface structure of the city.



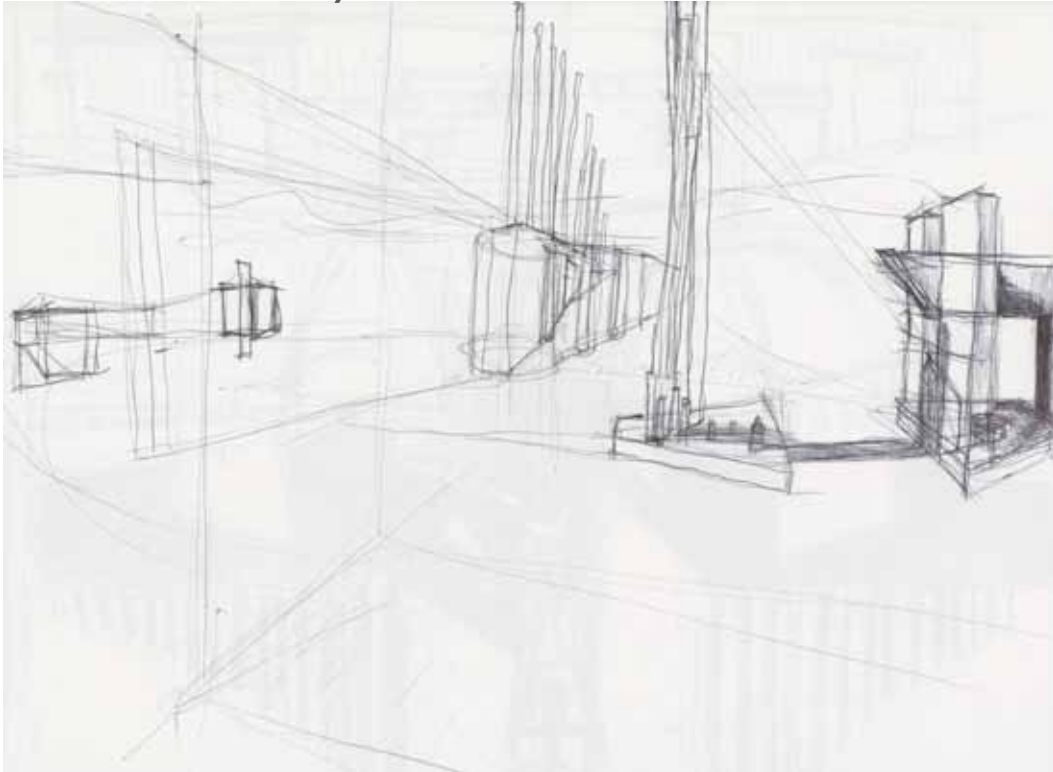


*The City of Le Griffon* | Graphite on Paper 24" x 18"

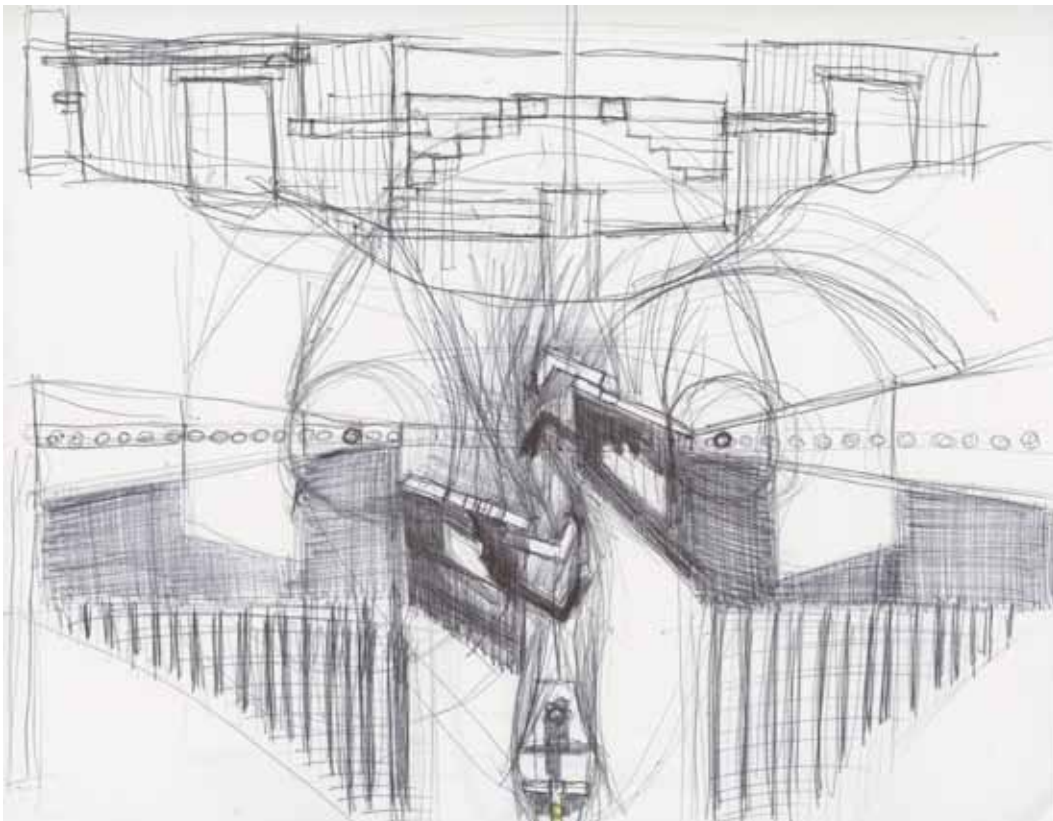


*Site Map of The River's Doors* | Graphite Transfer on Paper | 11" x 17"

## *The River's Doorway*



*The River's Doors* | Pen on Paper | 10" x 8"



*Plan of the River's Doors* | Graphite on Paper | 10" x 8"



In Michigan, the logging industry boomed in the mid 19th century. Logs traveling inland were transported to tributary rivers and into the Grand River.

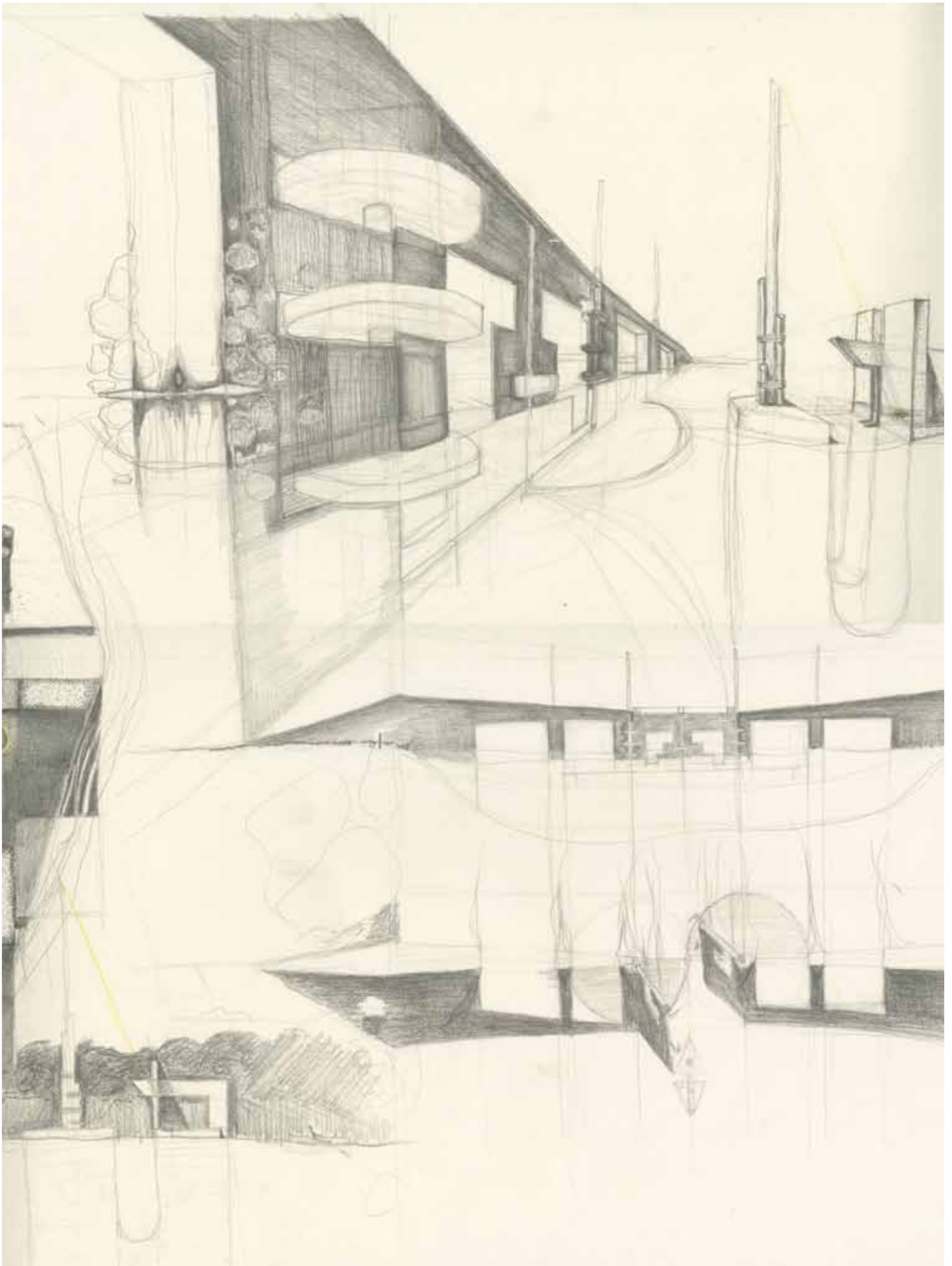
The Log boom was a tool by which the lumber barons regulated their valuable wares during this industrial boom. It allowed the river “drivers” to stamp the logs belonging to the various companies. (White) Yet, after heavy rains the logs began to bypass the smaller log booms upstream. Soon, the situation got out of hand.

The Log Jam of 1883 might have meant the absence of the city of Grand Rapids as it is today. It was the Furniture Capital of the United States of America in the late 19th century. It's economy could not have handled such a loss had the logs broken loose and scattered into Lake Michigan. 7 miles worth of logs backed up east down the river from Grand Haven. The logs already destroyed Grand Rapids' many bridges, the last of which was newly constructed of iron.

A log boom in Grand Haven was said to be the savior of the operation. This was a tale of heroism and innovation. One of the tactics consisted of digging trenches around the booms upstream. The other was to tie ropes (borrowed from a barge company) around piles that were driven into the riverbed. When the rush of the logs from Grand Rapids came (carrying a twisted iron bridge with them) the many logs scattered across the sides of the river into the bayous but did not make it to the Lake.

The design of river doors is a tribute to this event. The concrete formed using deep grooved wood forms and tree bark holds the doors in the center of the Grand River. The doors are made from iron, but function in the same manner as the old booms made from lashed together piles. The perforations in the iron doors allow for the water flow to continue even when closed. The openings to the sides divert water and traffic around the doors near the banks of the river. The closing of the doors allows passage over the river as a pedestrian bridge.

June 20th the sun is at a (very similar) angle to that day in 1883. At noon the piles, lashed together and driven into concrete, are not tall enough to hide the sun from the cross cut of wood from that event. The old growth wood lights up (normally in shadow) within the structure that is made of intersecting concrete forms and wood.



*The River's Doors | Graphite on Paper 24" x 18"*



*Site Map of the Fisherman's House* | Graphite Transfer on Paper | 11" x 17"



## The Fisherman's House



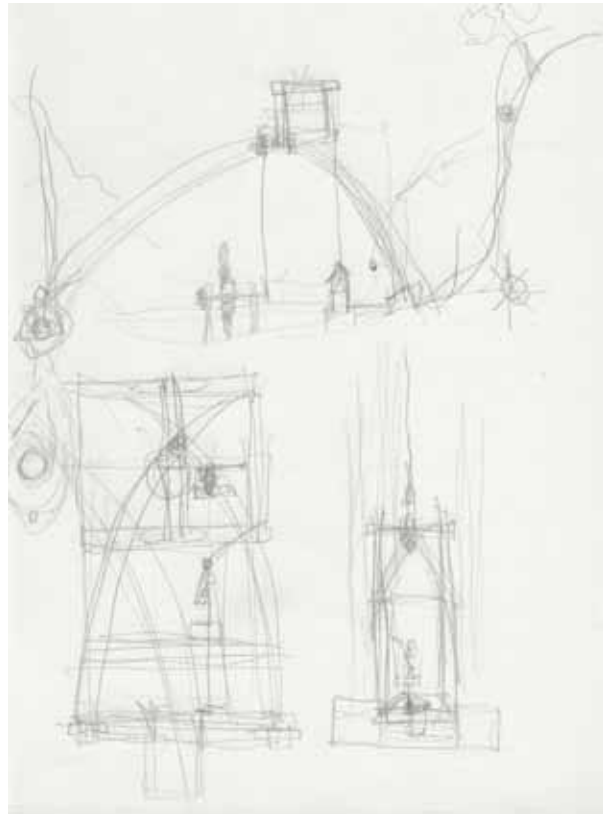
*The Working's of the Elevator* | Graphite and Colored Pencil on Paper | 10" x 8"



*Initial Sketch* | Pen on Paper | 4" x 5"



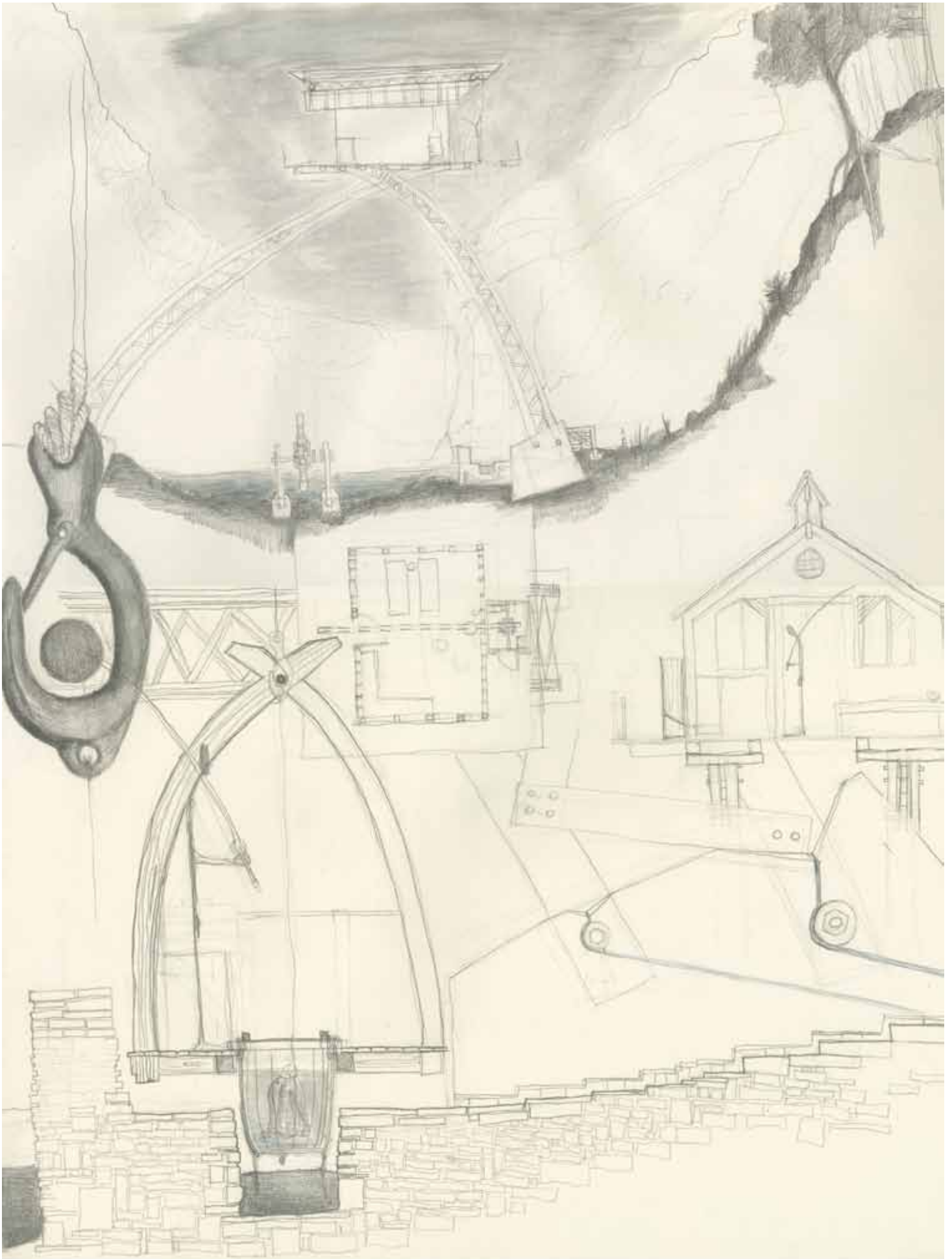
*The River's Current and the Fisherman's House* | Graphite on Paper | 10" x 8"



*Searching for Le Griffon* | Graphite on Paper | 10" x 8"

One meandering road east of Manistee leads to a bridge crossing. North of this bridge is a special fishing spot where one man thoroughly enjoyed. He enjoyed the sun overhead, the wind as it sailed through the trees, and most of all the feeling of the stream as it made the fishing line dance in the rapids. As he grew older the spot, at the base of a ravine, became more and more difficult to maneuver along. If that wasn't enough a dam was built that changed the river immensely. But the man faithfully fished the spot. One morning another man came by and began fishing nearby. The Fisherman saw that he wasn't very good. By the end of the day since the young man didn't know where to fish, he looked longingly at the old man's haul but had none of his own. That isn't the only thing that the young man noticed, however, the old man's body wasn't going to carry him and all of his fish up this ravine. The young man offered his body, the old man gladly accepted the help and offered him a fish at the top of the ravine. The river can become a method of converting energy and structural forces. The flow itself, can be harnessed by driving a pulley that can run an elevator. Trusses can lift the Fisherman's house to the level of the top of the ravine. The beam running down the center of the dwelling can offer a spectacle of the power of the river through structure. The elevator holds the fish in the floor, and a chair holds the Fisherman after a day of standing on his way up to his dwelling.

I carried his fish  
He is too old now  
What force carries me up?  
Who can know how?  
To his house they go,  
One home with me now.  
I will be fed, but never caught.  
I am the elevator, poor man,  
Now I am fed, by poor man.  
Old old trees, slope steep,  
River now, dams and silt  
Meandering is my path,  
Meandering is hers  
Flowing viscous sand blinding fish raising standards now.  
I am hungry, he is full,  
Fish in a barrel, the river passes by,  
Never the same river  
One old man once said  
Once upon a time



*The Fisherman's House* | Graphite on Paper 24" x 18"





*River Bridge* | Charcoal on Paper 24" x 18"

## *River Bridge*

The River Bridge is about a dried up riverbed, a boat, a crossing, and a gateway. Crossing was once the main issue but now it is the gateway. The crossing arches converge. On this crossing is a house for the boat that used to cross to the other side.





*The Observatory* | Charcoal on Paper 24" x 18"



## *The Observatory*

The definition of observatory speak to what it means to design one. It speaks about a place for the observation of natural phenomena. Depending on the definition of “natural” this idea of observing transcends a mere building, even the way telescopes that reach to the heavens. The Observatory questions the viewing of stars, the crashing of the seas, shipwrecks, and the introduction of nature into a building-scape.

What do you see?

Stars in plays and events

Trees play in concrete tents

Moonlight makes objects before shadows

Heavy cathedrals hold wood that plays

The sea attacking land

Its battle song in waves

The moons serenity in placid dreams

Stairways ascend into courtyards

Ceilings now made of night sky

Ships sail aimlessly under dangerous dark skies

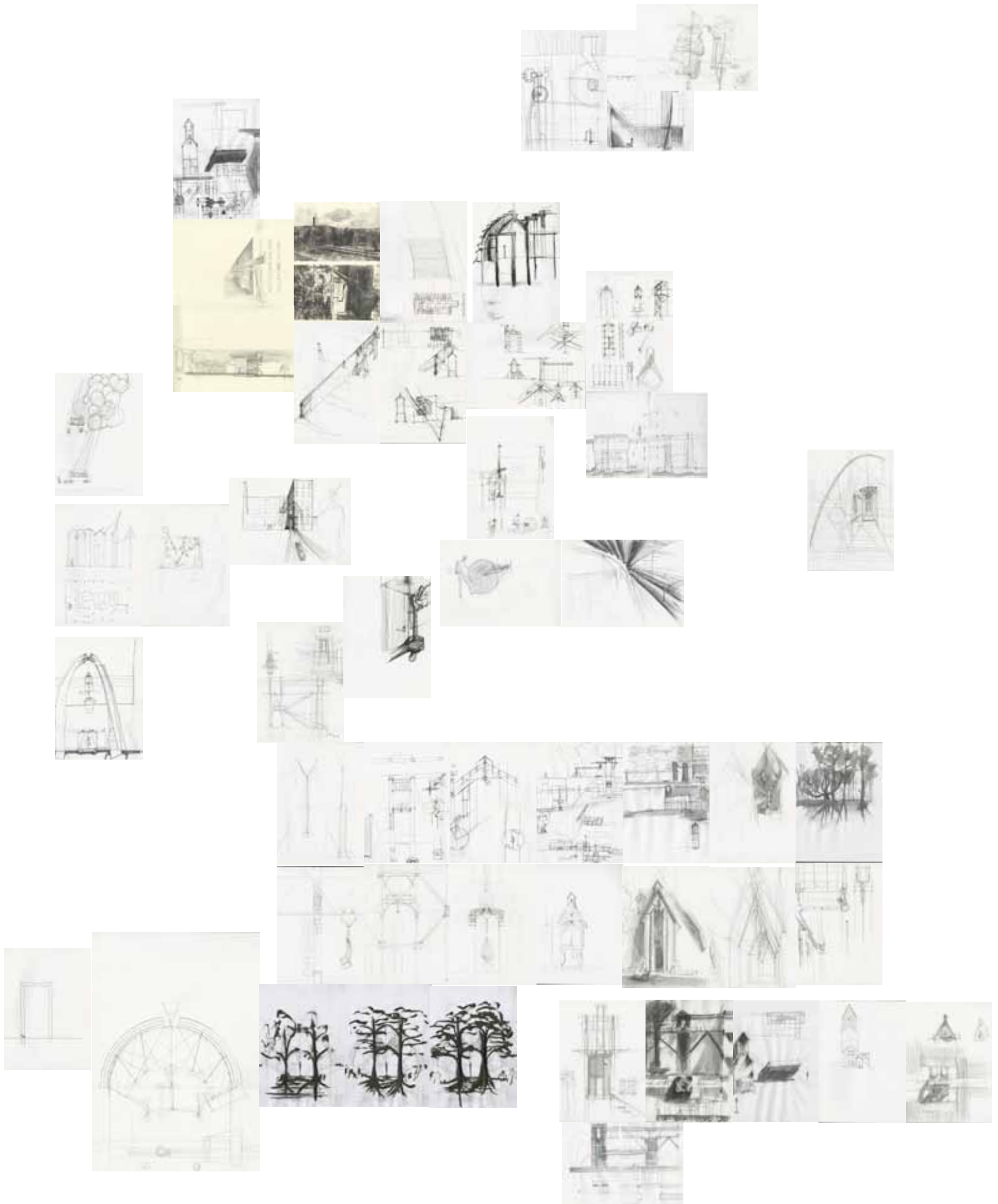
Wrecked on rocky shoals heeded in daylight

Now hidden in seas shadow abyss

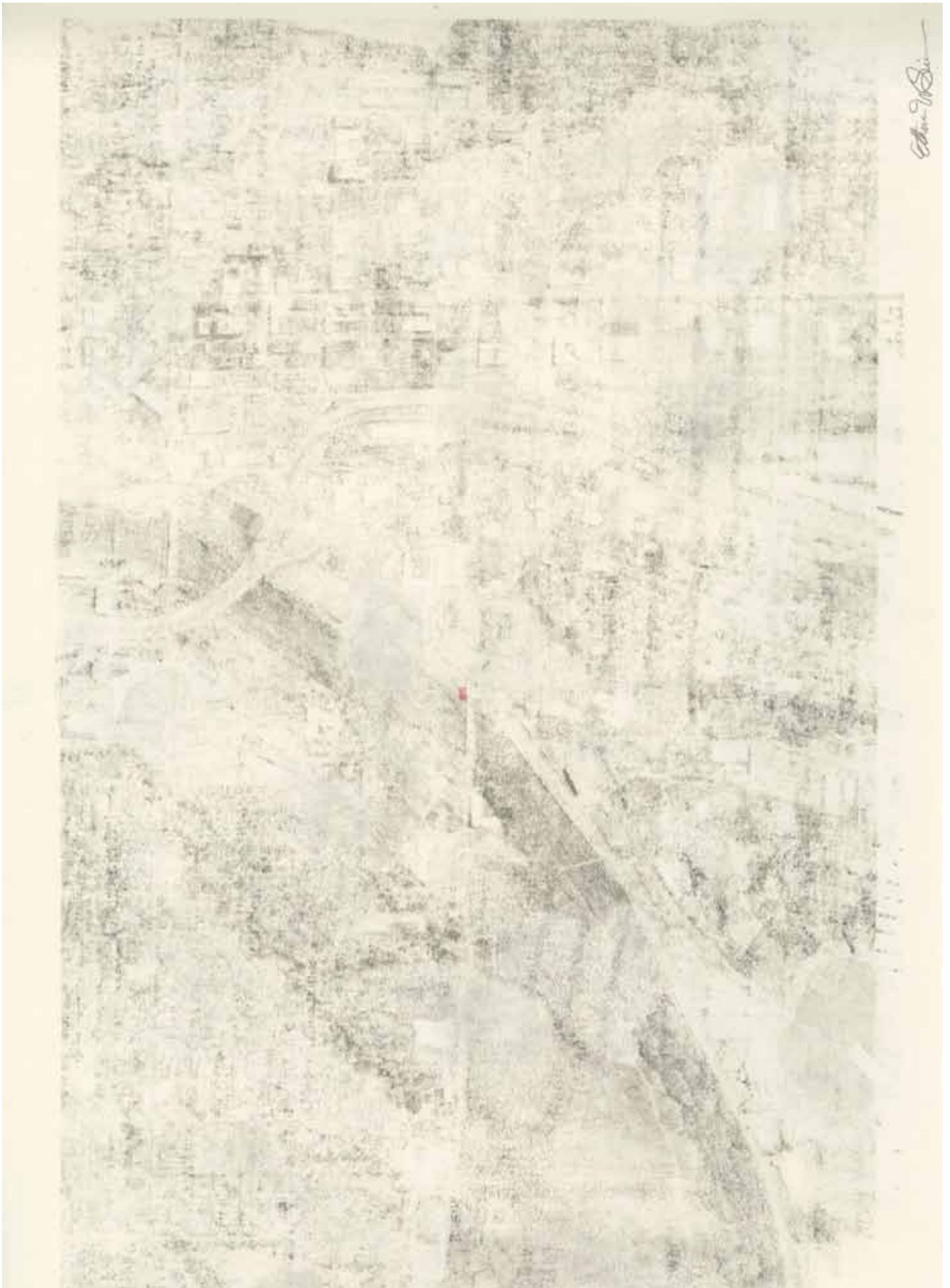
Tear hulls and open mankind



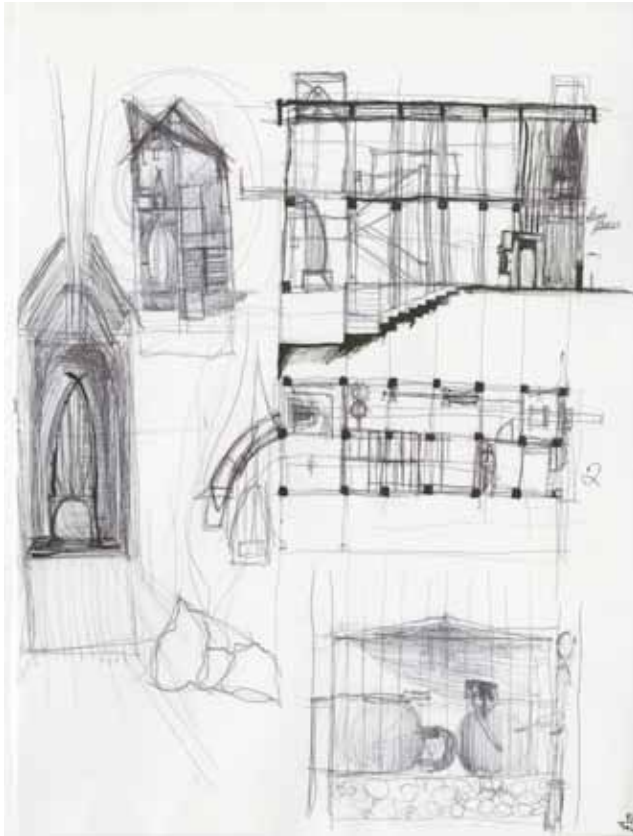
## Part V: The Chairmaker and His Boat



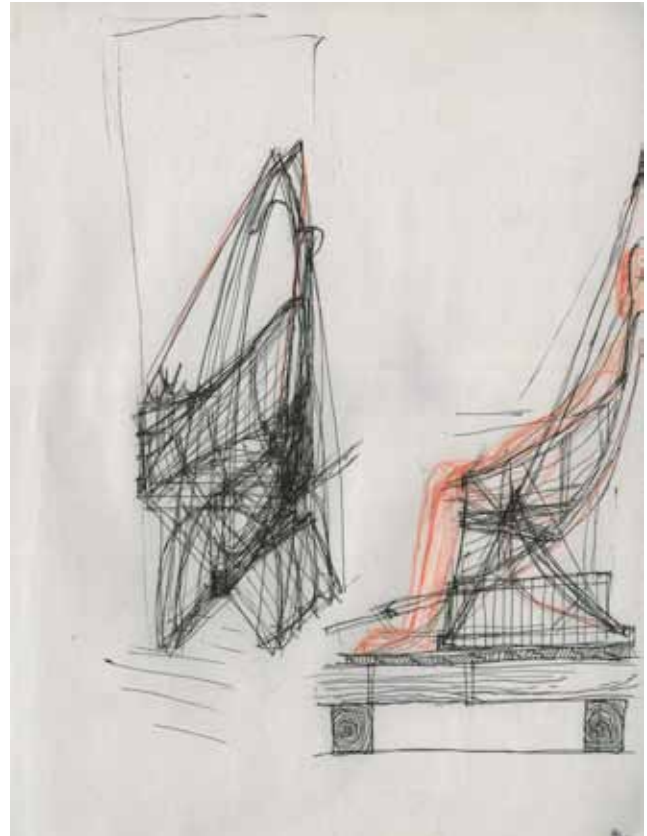




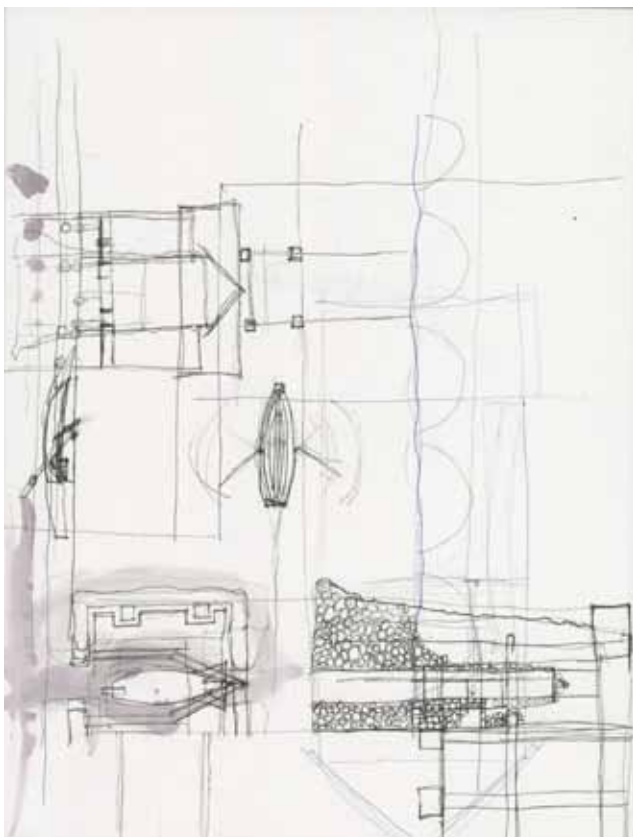
*Site Map of the Chairmaker and His Boat* | Graphite Transfer on Paper | 11" x 17"



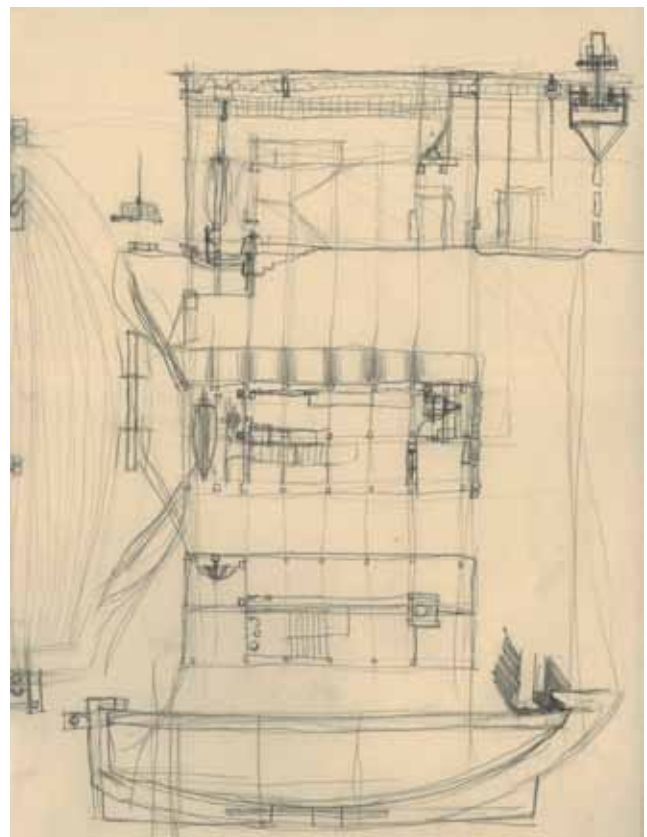
*Presentation of Chair and Workshop* | Pen on Paper | 10" x 8"



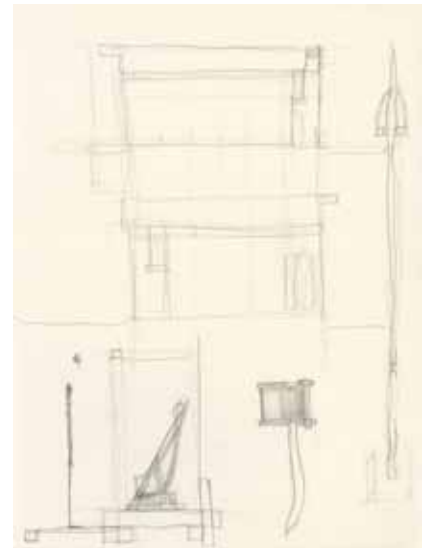
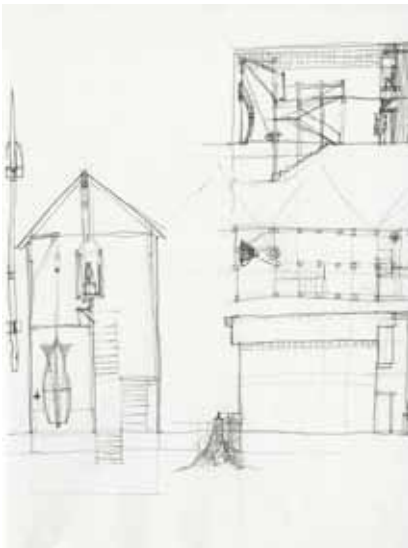
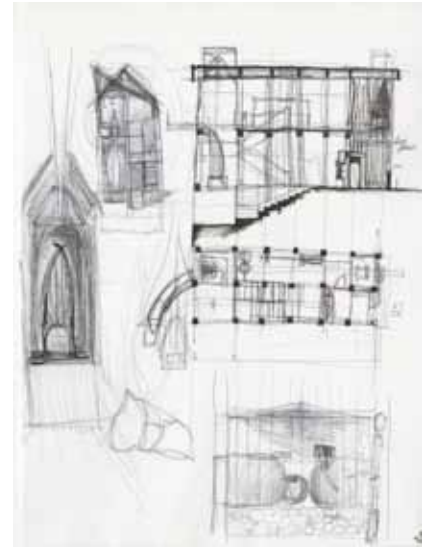
*Presentation of Chair Detail* | Graphite on Paper | 10" x 8"



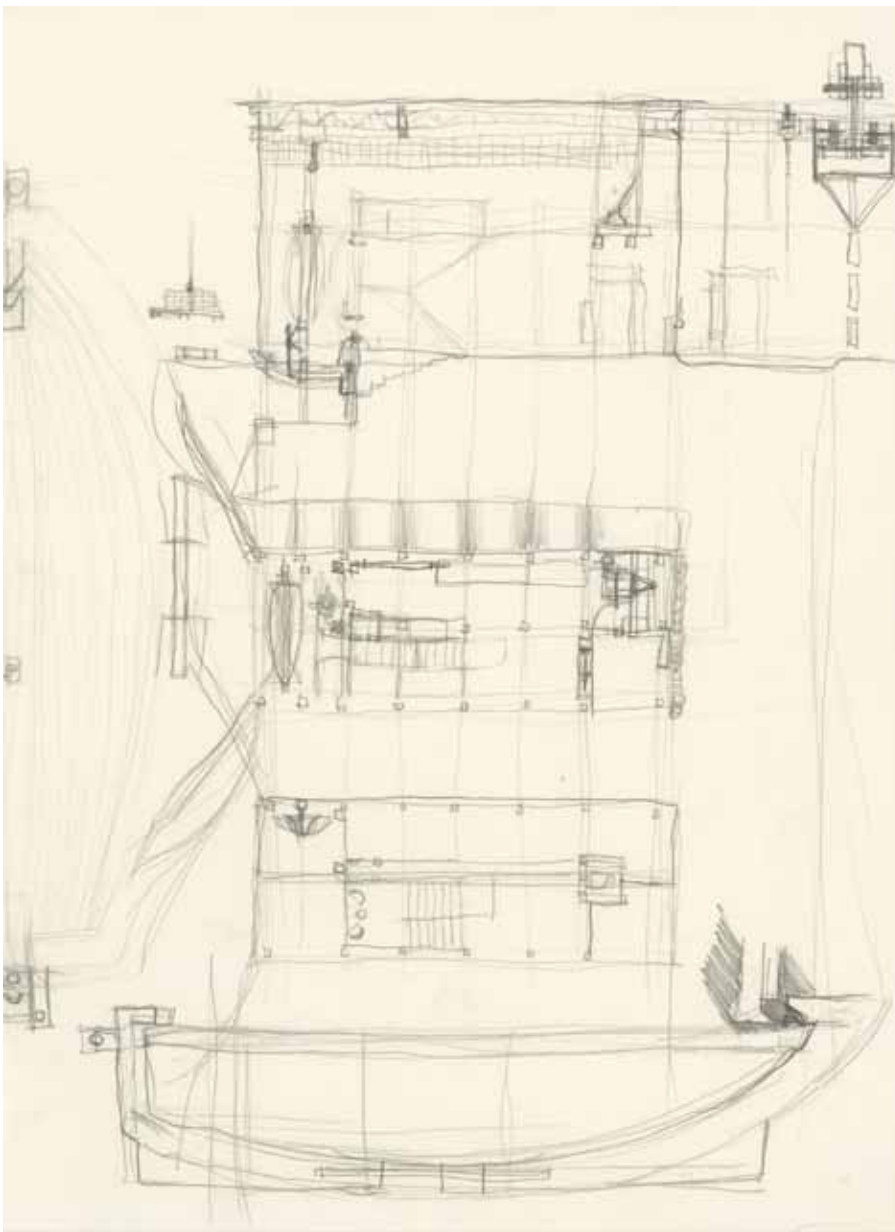
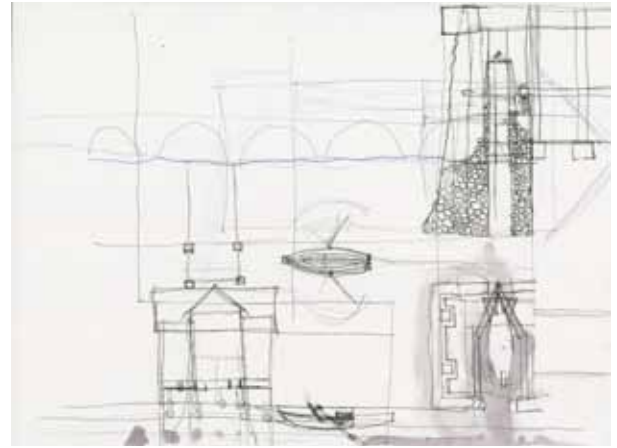
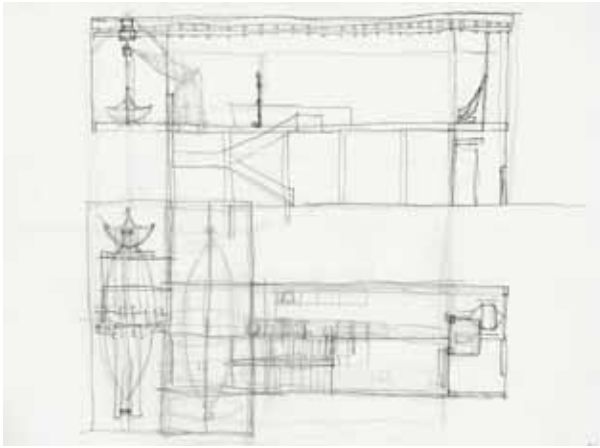
*Chairmaker's Boat after Flood Consideration* | Pen and Wine on Paper | 10" x 8"



*Detail of Boat and Oar Placement* | Graphite on Paper | 10" x 8"







The river (as transporter) and craft change the way that a building responds as a workshop. The wood, milled nearby upstream can be carried down the river to the maker's shop. The form of the building is modified by the truss running down the center of the gable. The beam itself holds a gantry by which the wood is transported into the working area on the second floor.

The boat display consists of an arm. It rotates the boat into its storage and display position using a pulley. In order for this to happen while still in the water the keel slides between two wooden arms. The Chairmaker then secures the boat against the base of the rotating arm. Here, the Chairmaker can attach the load of wood (used as a seat) to the boom, ready to be hoisted out of the way of the arm. The Chairmaker connects the rope at the end of this arm to a pulley rope which gathers the arm into a vertical position, securing the boat and tying it off. The oars (removed from the boat before hoisting) can be hung along the wall on display pedestals.

On the second floor, the stairs lead up to the work level. The flow of work is dictated by the movement of wood along the assembly workspace. The end closest to the river is where the hewing takes place. The axe is the tool used to shape the various pieces to be assembled. Next the pieces are riveted together. The last step, the wood (now a chair) is conditioned and set to dry. Once it is finished drying, the boom hoists the chair into the alcove. The alcove is an environment that can be manipulated using a Dutch-Style shutter system on the north wall. The study of the Japanese alcove, or Tokonoma, revealed a different method of unfolding the experience of a chair as an artifact on display. It is in this environment that the Chairmaker reveals his craft.

## *About the Chairmaker and His Boat*

The Chairmaker and his boat is about a creator and a process. He works from a building that houses his space for crafting, and his boat. His boat is the way of transporting the material, but also his leisure and (cannot help but be) his inspiration. He creates the chair.

This story is not beginning, nor is it ending in these drawings, it is suspended in stratified drawings. It roughly takes its place from the history of Grand Rapids. The factory itself is the remnants of a building once used to create chairs, and the neighborhoods surrounding it were housing for the factory.

The chair, once created, moves down the truss and into its house. Once in its house, it is there for the experience of others. The house rises from the forest– the place where the materials which made it grow. The trees that made the material, are now making places for the people in the neighborhood to spend time, to rest, to be at ease, to recreat(ion)e.

The forest is very much about people and their recreation

It is about trees and their recreation

It is about a chair and its creation

It is all a story about the Chairmaker *and the awakening of the people to their own dreams.*

The boy who drew doors *now has a safe place, so he can face the dangers that life presents.*

The Woman is able to be with her bird. *(has a mechanism that allows her to feed the bird that flew away and began instead to live in a tree in her backyard.)*

Coffee and Tea now have Cream and Sugar.

Roots of Rose bring fragrance to life

The trees cut down

The chair made

The rest of the tree becomes a place

The neighborhood, clothed

Kids again in wonder

Stars opened

Hot days shaded

Places made, chairs given away



There is forest there that took the place of the old break area gardens. Growing, from seeds, Oak, Pine, Birch. The acidic smell of acorns, the lively pines, the quiet pale birch trees. This is a somber place, happy things happen and sad things too. Quiet routines happen, tears cried, rendezvous here and there. All inside the trees and out of doors. The tops of grasses float in the breeze, up and down, swaying. Years and years and years, growing.

The workshop's truss running along the wall carries the roof, carried by the columns into the earth- the wood, once a tree, becomes the gathering of earth, water, air; and the sun grew it all. The workshop is a place where the trees from the forest go. The trees change place, moving from becoming a living architrave, nave, roof, and feast—into the workshop.

When they are cut down, each stroke is felt by the Chairmaker. He knows the tree before it is under his vision. For the tree's were once living columns, roofs, windows, opened for the breeze. Instruments of the wind, moving sculptures, growing deep and strong in the elements and forces which whip and shape life. Each piece of these nourishing and hardening, grasping and reaching effects are felt with the axe. Each year, each season, each bird that lived, ate, and died in its branches unknown to him. How does a tree die. Or does it ever.

Each strand of lignin becomes something with the axe. It is recomposed into a new material symphony around man, to help him understand. A chair is sculpted, shaved, cut, bent, anchored. Each of these steps are drawn together with the seasons of the trees glorious struggle.

The chair is displayed in light: revolving, changing with the seasons, shrouded in darkness and bathed in light. It is carried by the Truss that structures the workshop and the old factory. It is part of the workshop.

The rest of the tree will become an attic for the stars or a dancing stage. Or open up the dancing stars to the human stage. The Chairmaker will choose a house in the neighborhood, and build a place of wonder into, onto, within. Drawing the need to live with the hunger to wonder. The tree will clothe the neighborhood in a fashion that the forest clothed moments of time in a timeless acknowledgement of everything it means to draw breaths and bleed on this earth. This way the neighborhood and the workshop, the factory, the forest can become one together.

The Chairmaker becomes a giver of place. Of living to provide for the needs of the people who can easily forget that they can wonder and wander beneath the stars, and cry at the dancing of their children. That their heart's majesty deserves a porch to enjoy a summer day on. Just as the forest was, the chair and the rest of the tree becomes a way to make sense of life, through enjoying, through, building upon, through adapting, and reaching out and drawing near.



*Axe and Wood* | Ink on Paper | 9" x 12"

Each tree has its own story that becomes a part of a transformation to become a new place. This new place is intimate with the people nearby and with the Chairmaker himself, each craft speaks of care to the people around him, the thought for not only the need to breathe, but the need to dream.

Inside the forest of black trunks and silhouetted leaves is a swaying that drowns out the sound of the road. The trees are very tall, too tall to be a part of the city, careful saving keeps them there. The torchlight flickers on the pine needles, laughter and dancing happens under the reaching boughs.

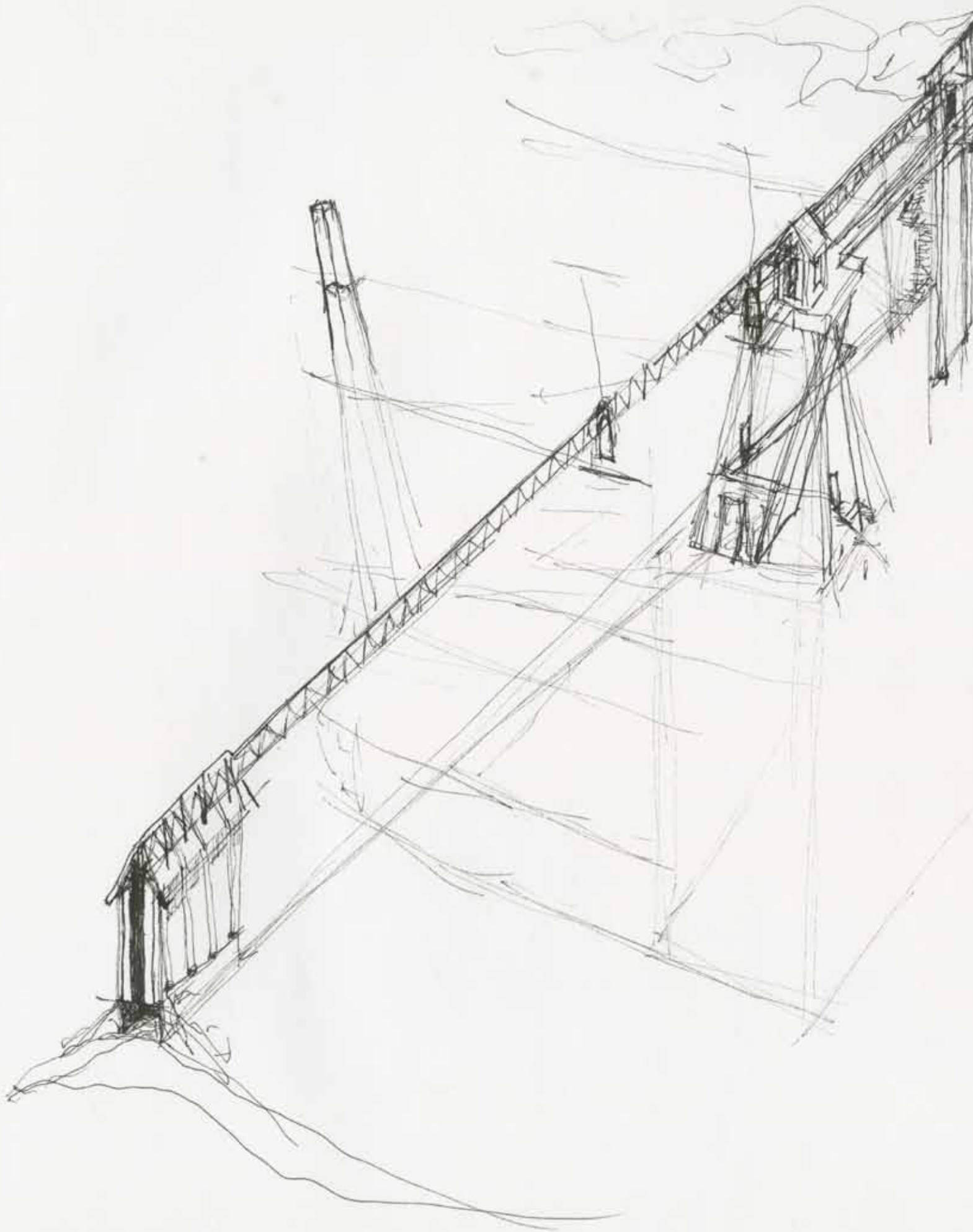
The path into the forest is worn in the middle where an opening in the wall greets the people. On either side pine needles, thick as topsoil spill over the path. Roots reach out of the ground and form steps in the pine needle wake. An opening, where the largest of trees grow tall creates a great hall where the ground is covered in brick, with moss peaking out from the cracks. Benches and a low wall embrace the center of these trees, a fountain spills out onto the brick, a trough carries water from a distant place. A tower, holding water, is dark against the grey sky.

The wall around the outside is made up of old limestone pale-tan and cut. The stones make themselves out into the sidewalk. Where the stones are, there too is moss. The streets, the stores, in each place the bricks lay, like words whispered by factory walls.

The entrance gate is an archway of about 10 feet. A half circle greeted by a capstone of hewn stone. Within this, great heavy gates swing with ease inward. The bronze, twisted and meandering between scenes and recesses, gears and openings; into them, the forest can be seen. The seam runs down one side, so that the door is the size of a stooping person. The larger gate is opened fully from time to time when there is a gathering in the forest.

There was no better place to look at stars than on the roof of the old factory. The trees below clapping in the midnight breeze made a symphony to which the moon solemnly watched. And the stars moving and meandering like thoughts forming poems in the minds of infinite distances.





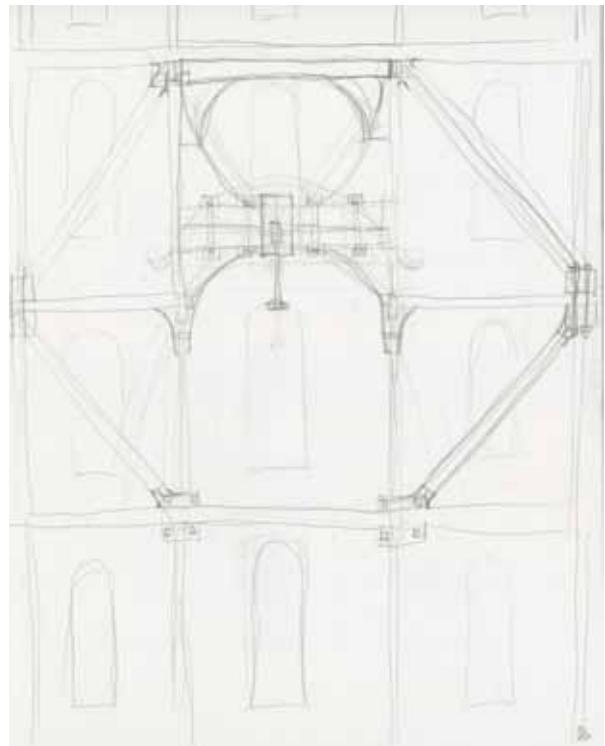
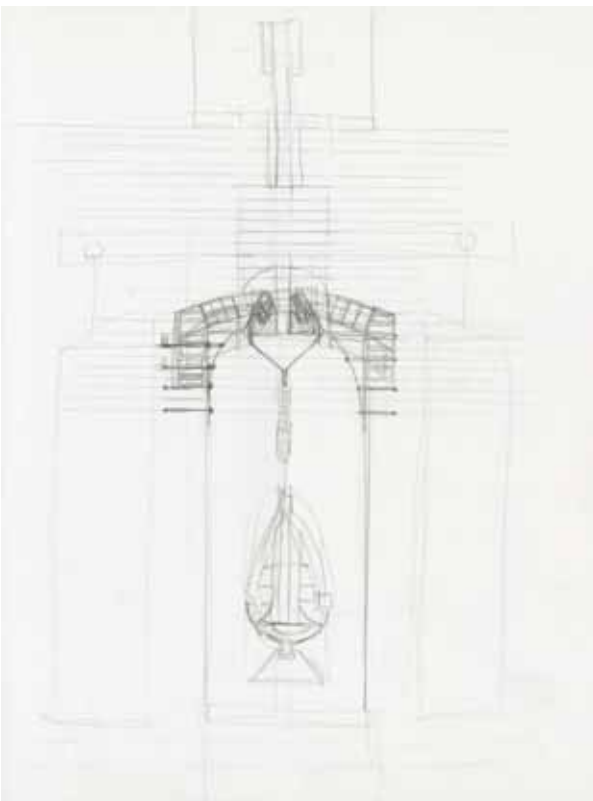
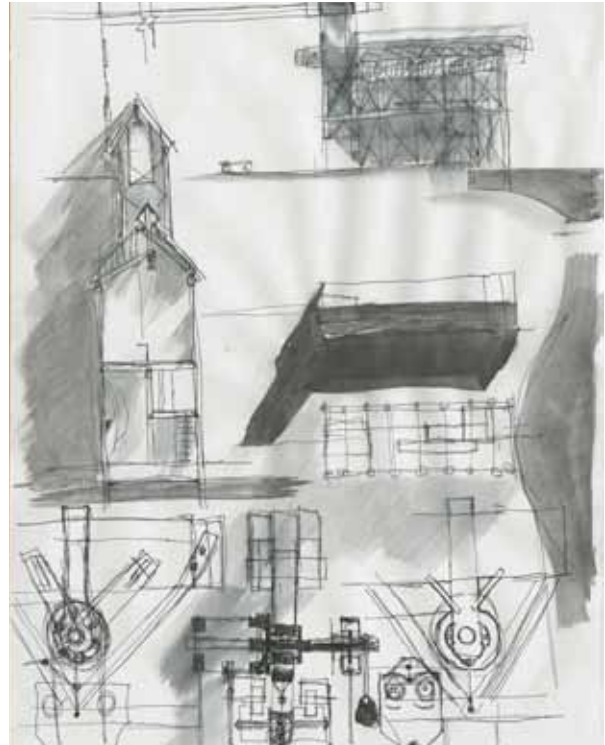
## Site

The Chairmaker and His Boat has always been in it's site, that's what they say. There was always a river that the workshop could dwell by, reaching into its shore. This is telling that a Chairmaker, one familiar with the dialects of wood, would build such a workshop. He also dwells within it. The boat, the construction from wood and joinery, and the idea of each thing having its place carried through the investigations from many previous stories. Lighthouse of the Atlas and the Search for Le Griffon, the Fisherman's House and Morphology in Life all had interweaving concepts which determined the forms and investigations of different languages spoken in architecture. This site is about a place through which to elaborate on the story and the architectonic methods by which the Chairmaker and His Boat are made possible. The most important aspect is the generative properties of the design-- it is from these bones that the site becomes even more relevant to the crafting and telling of this story.

Discovering the details of the factory was like reading a book. Though much was shrouded in the cloud of decay and time-forgotten modifications, some clearer details could be read in the current existence of the factory as an object. Since its construction in the 1870's, it has had a level added to the southern leg, it has had multiple ventilation shafts added using windows as openings to become a flange for monumental stacks with rusty age that stains its Wisconsin brick walls. It had also been modified for the transport of goods within it (picture of beam running through doorway). To surmise that the structure of the walls might be modified against collapse from the lack of tuckpointing and repair would not be out of the question since C-Channels have been bolted through the walls and steel belts have been tightened around the attrition worn chimney. Old openings were filled with new brick, newer brick was added arbitrarily within other newer openings, and doors were closed using masonry while others were opened up in other parts of the wall. (see picture of the quilted building). Each of these forces changed the overall factory into a new object.

It is here where the factory's current form, texture, and mass was clearly modified for the function within and without its walls. This changes the feeling of its presence. The way the body senses the factory is perceived through the jolting contrast of arbitrariness and perceived order. For each opening, its use, like a favorite pair of jeans, has been patched for use. The ground has been growing ever since-- with moss and flaked brick, it has a new skirt from which it emerges from the concrete ground. In order to continue this factory conversation, the Chairmaker's workshop intersects the factory in a surgical manner, respecting the majority of the structure, but incising formal openings where deemed necessary for the function of the workshop.

The workshop reaches over the river with its unifying truss. It is from this truss that the transport of materials happens in both directions. It transports materials and crafted items through the workshop from the river through the factory to the edge of the forest where the house for the chair is built. As wood is harvested from the forest it will be carried on a cart through the factory into the bottom level of the workshop. There are places for the wood to be seasoned and stored in the factory, and when the wood is ready to be crafted it will be seasoned again (this time in the house for the chair) to maintain the proper moisture content within the place of its use.





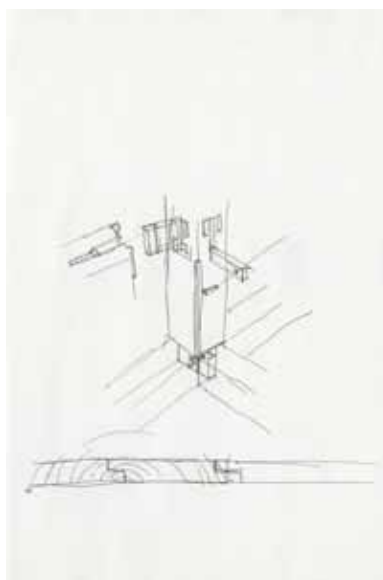
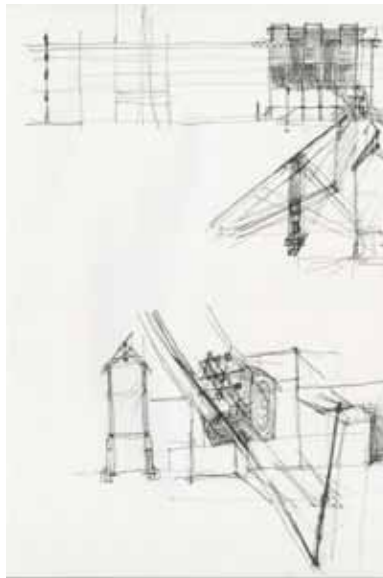
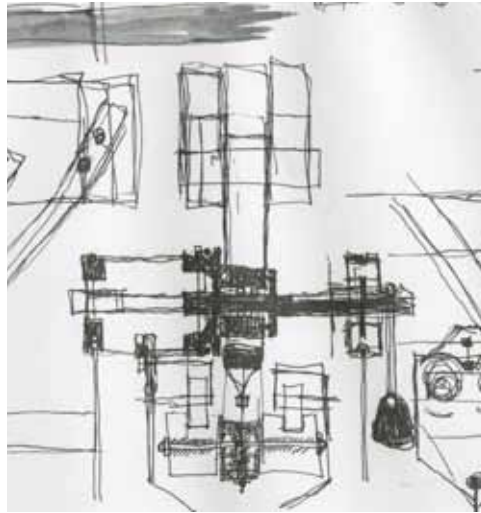
## The Workshop

*In the Viking ship construction, the structure is added after the strakes are joined (lapped and scarfed). Is the structure to provide a place for the human being inside to sit, or was it to resist the folding pressure of the water?*

The consideration of a boat (as an object and as thing in which to dwell) must have been considered by the Chairmaker in design of the workshop. Indeed, architecture has much to learn from the construction of boats. The structure of the workshop itself must work in a unity that stems from each individual component. There is a kind of modern idea that the skin and the structure can be separated easily through brute force materials and technology, but in working with wood that notion is impossible. But it is because of this that the method of wood tells the tale of the forces of gravity and load. By acknowledging them a finesse happens in these unavoidable joints.

After careful consideration of the Chairmaker's Workshop, the joints utilized were of Japanese and Norwegian origin. It turns out the Japanese practice of joinery is a philosophical pleasure as well as geometric, volumetric, and pragmatic consideration. The best puzzles that entertain-- by bending the mind rather than the material-- are proof of this sense of pleasure from visual and spatial coherence. The mortise and tenon is one of the simplest joints that illustrates this concept: as a piece of wood is used as a volume but also as an element that can be carved into. This is done in order to fit a piece to the edge and contour of another element. The joint takes two different structural components with different load bearing capabilities to be voided and filled (working together) to become one. With each new volume carved out of it, a new place for a solid form arises this sculpting of space *ad infinitum* adds strength and variety to the structure. In this detail the properties of wood are exploited down to the very lignin that likens trees to grass. These include a close attention to the grain pattern, since the grain pattern illustrates the tree as an organism responding to forces. This particular joining technique is utilized throughout the Chairmaker's workshop and the beauty of it is that each connection uses its initial philosophical premise-- as a careful creation and skillful filling of voids to create a stronger connection than using outside material without modification. It is structurally a pervasive and pragmatic concept, but also allows for the consideration of tight tolerances that create moment, and hinged connections.

The Norwegian building technique, as displayed in the joining together of the stave church, pervades the physical environment that the Norwegians experienced. The very form of the churches begins to call forth the form of their longboats. The lapping of the siding, the masses of walking space and wondering space, and the very texture of wood are like styles that artists and poets utilize in their expression of ideas. It is in the trussing, the column to floor interaction, and the ornamental details are unavoidably structural and multifunctional. The wooden building component is a chicken-and-egg scenario whenever a joint is used, it cannot merely have one use or one expression. This calls forth from memory how the tree grows, but in a way that is contrary to the idea of modern ("clear", "true") expression in a building. Long horizontal windows in Le Corbusier's *Villa Savoye*, are set inward from the facade to express the lack of traditional lintel. Yet this is at the



expense of expressing the actual forces of bending that are happening above each voided window space. For above the window each member is in greater stress toward the middle, and the 90 degree connection on either side of the window does not hint at this. It is here where the stave churches introduce members to express the needed racking prevention from wind. This happens in the form of contoured members, called *quadrant brackets*, <sup>(Holan)</sup> that look similar to the gunwale that goes over the lapped strakes (composing the sides) of the boat.

The study of boats is inseparable from the Chairmaker's workshop since it is in their consideration that the workshop itself must have been conceived. The river called forth a boat as a device to carry material and provide enjoyment, but it also carried with it a corollary of pragmatic considerations. These included the consideration that the structuring of the boat being vital to its form and performance in the water. As it deals with its storage inside the workshop, the arm which stores the Chairmaker's boat, must fit around the keel and can then respond best to the lapped strakes running along its sides. Each piece is vital to the overall use and form of the whole.

Wind loads become a concern for a structure of this size especially considering the angle of its adjacency to the water. There is a cable that connects on either side of the truss strut that runs down a channel along the length of the column to counter the lift that would pull the roof from upward from its foundation.





## *The Ridgebeam and It's Structure*

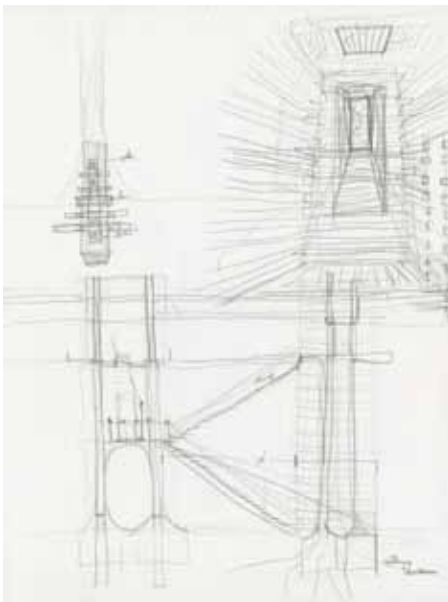
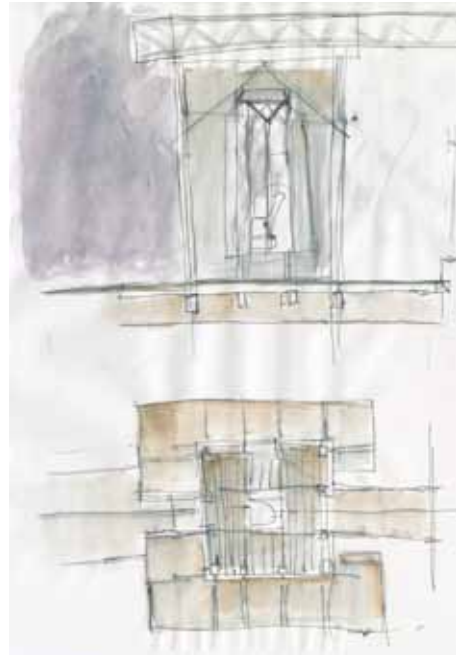
The ridgebeam has always been a part of the workshop. Before its conception as a craftsman's place, it was unified by its reach over the river. This ridgebeam has the purpose of forming a component in the structure of the roof, but it also has a carrying component. At its base, the rails that are connected on either side of the webbing allow for the gantry to travel along the entirety of the building without interruption.

This allows the Chairmaker to pull heavy materials along the building without the need for extra material handling operations. It also transports the chair from the place of its conception through its construction into the place where it is housed. This is done through a pulley system that allows for the vertical movement from the boat to the working floor. The pulley system also allows for the the gantry's movement along the beam from either end of the ridgebeam.

## *The House for the Chair*

The chair has its place in which it unfolds. It sits in a house on the other side of the factory. The truss transports it through the third floor window openings on the west and east sides of the factory. The beam will be set into the brickwork using other fastening and strengthening lintels to make up for the loss of homogeneity that the masonry would otherwise provide. This way of wounding the building is consistent with the other modifications made to the factory.

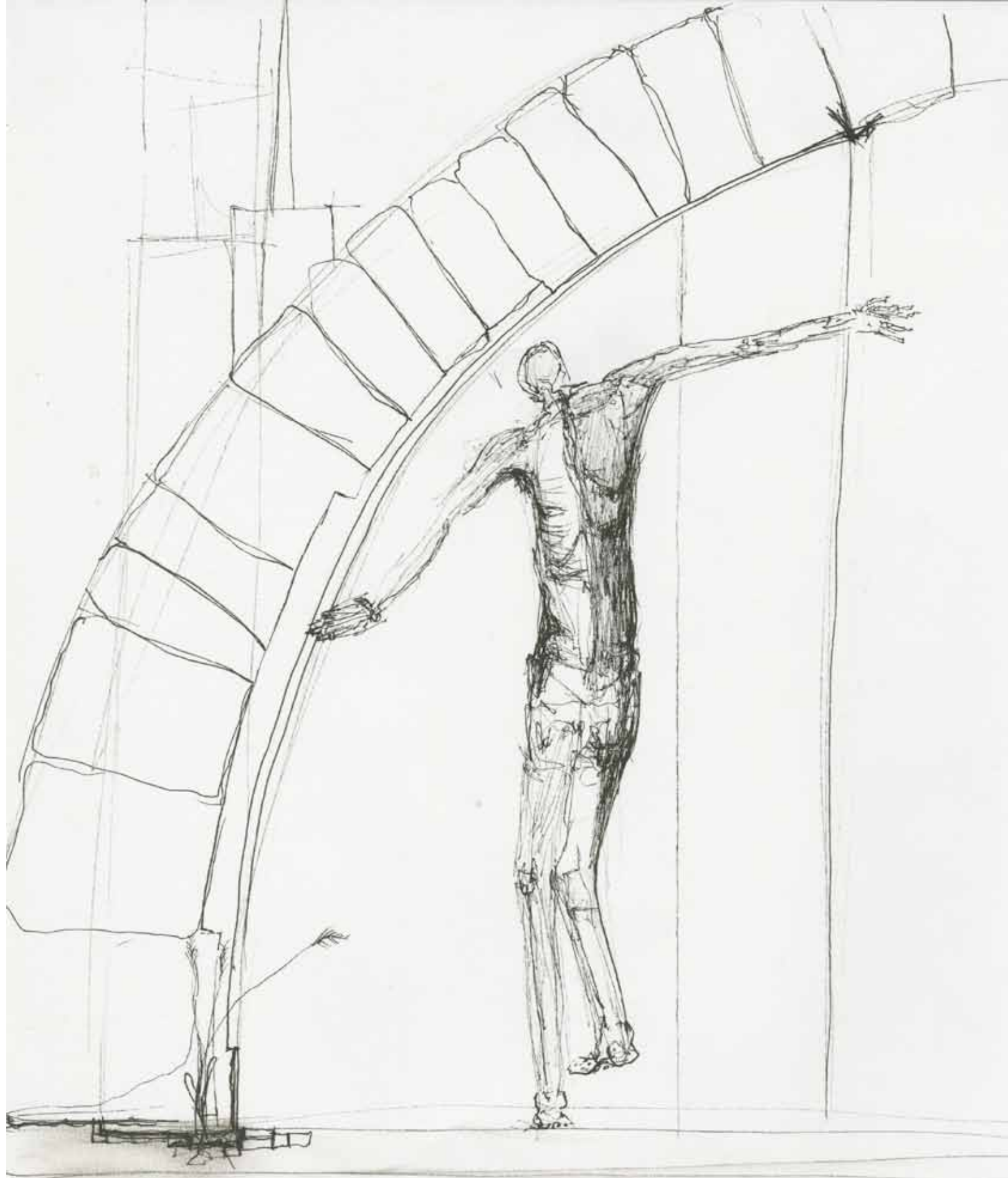
The house itself sits three stories high and allows for the cart to move through it on the ground level from the forest (transporting wood) into the workshop. The chair sits on a series of beams without floorboards so that it can be observed from below as the journey is made from the exterior of the house. The journey to the chair from the outside continues through the house along the walkway through the Walkway Lookout. A version of Frascari's example of the formal joint seems to have been an exploration of the Chairmaker. The walkway enters through volume just as the tenon would pass through the mortise create a functioning connection in two pieces of wood. Circulation is here explored in a formal and not just a programmatic fashion. Once the threshold is passed on the other side of the volume I can walk straight to the chair as it is displayed in its house with axial views in and out.

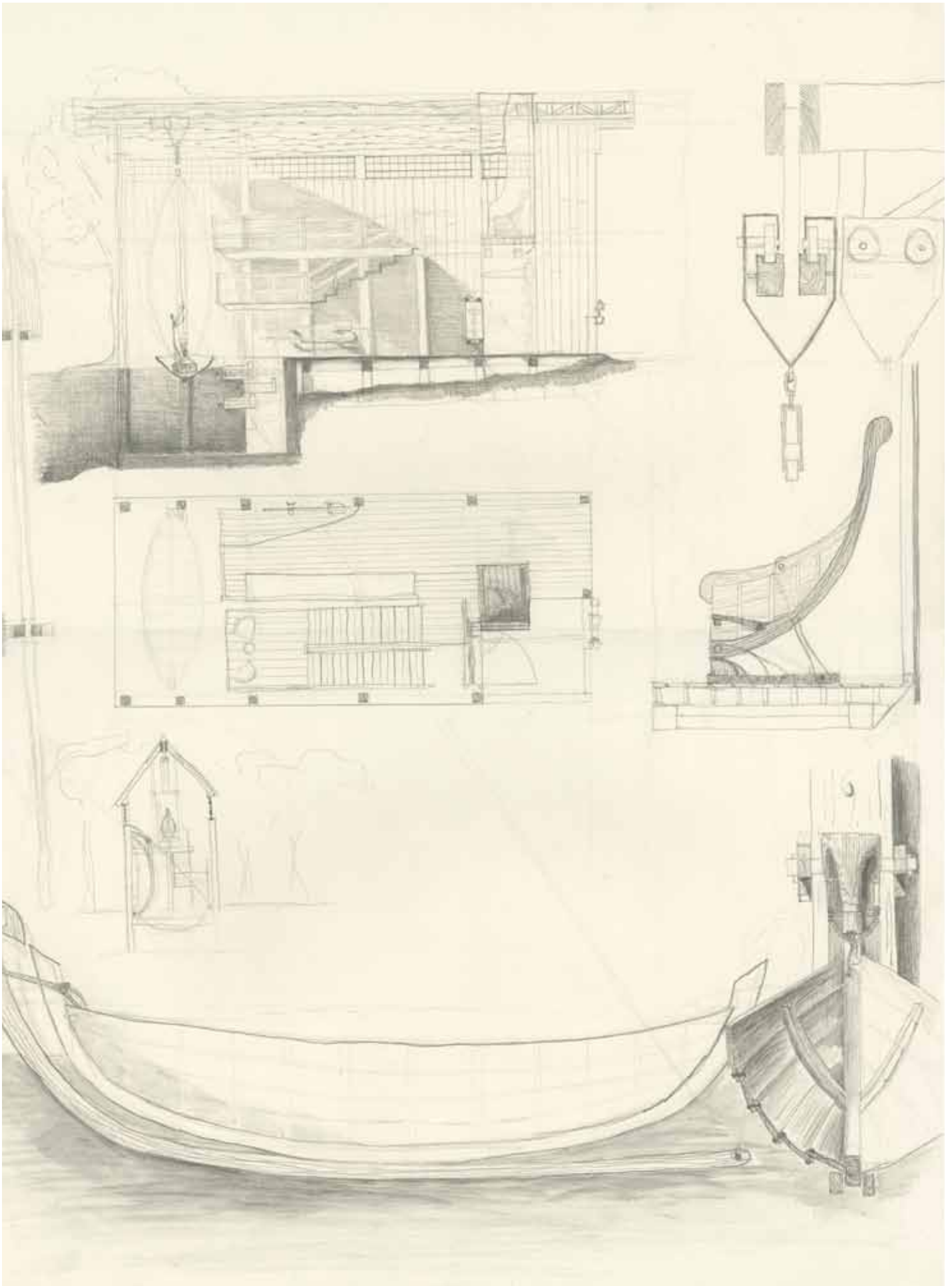




The following series of drawings are about the Chairmaker and His Boat:

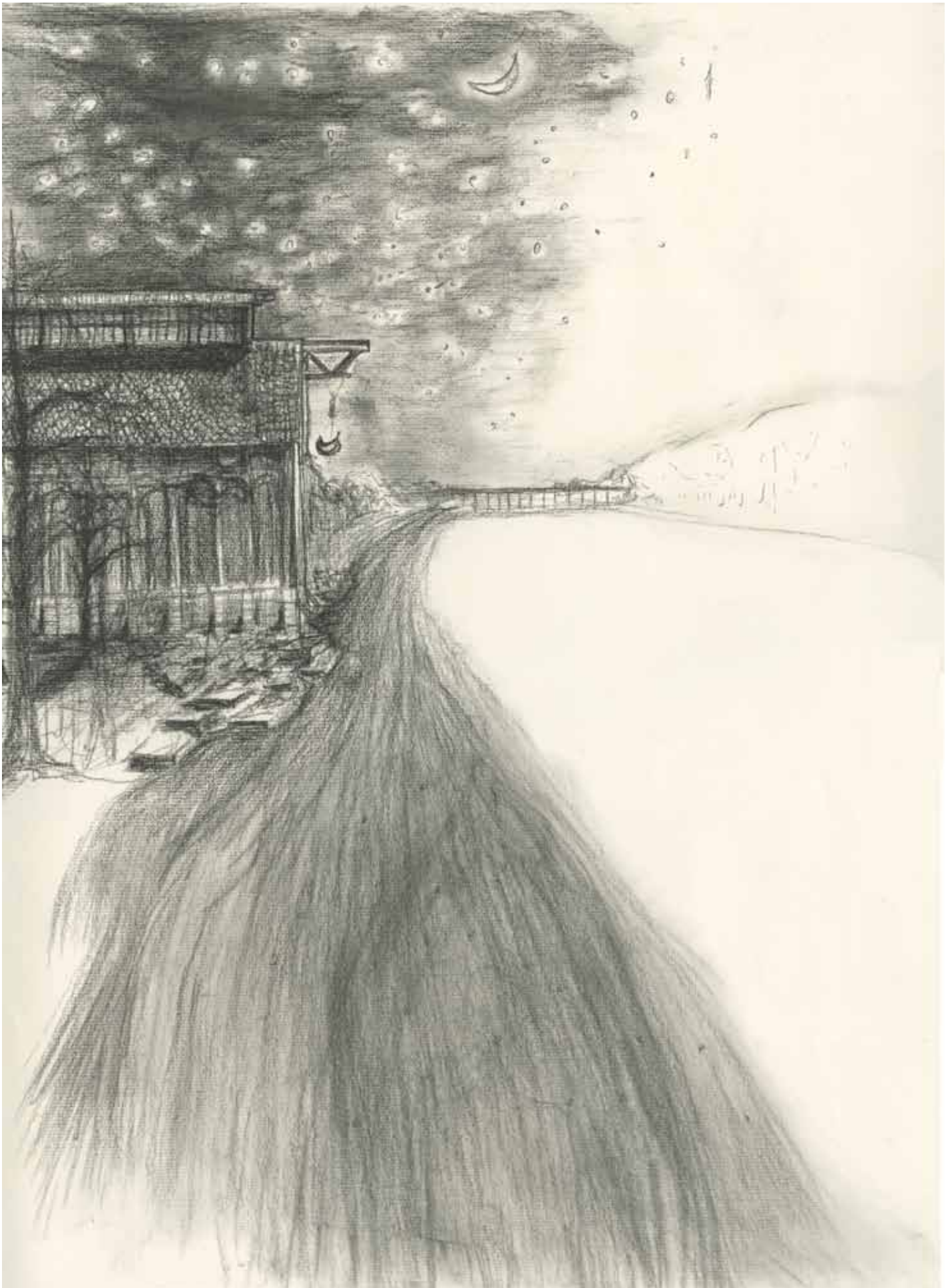
The Chairmaker and His Boat  
The Chairmaker's Workshop  
Grand Rapids Chair co.  
Site of many Places  
River's Workshop  
The Factory's Modifications  
The Workshop and It's Truss  
The Truss & The Factory  
Journey to the Chair  
Chair moving to House  
House for the Chair  
Wind Gate  
The Worker's Houses and Their Dreams



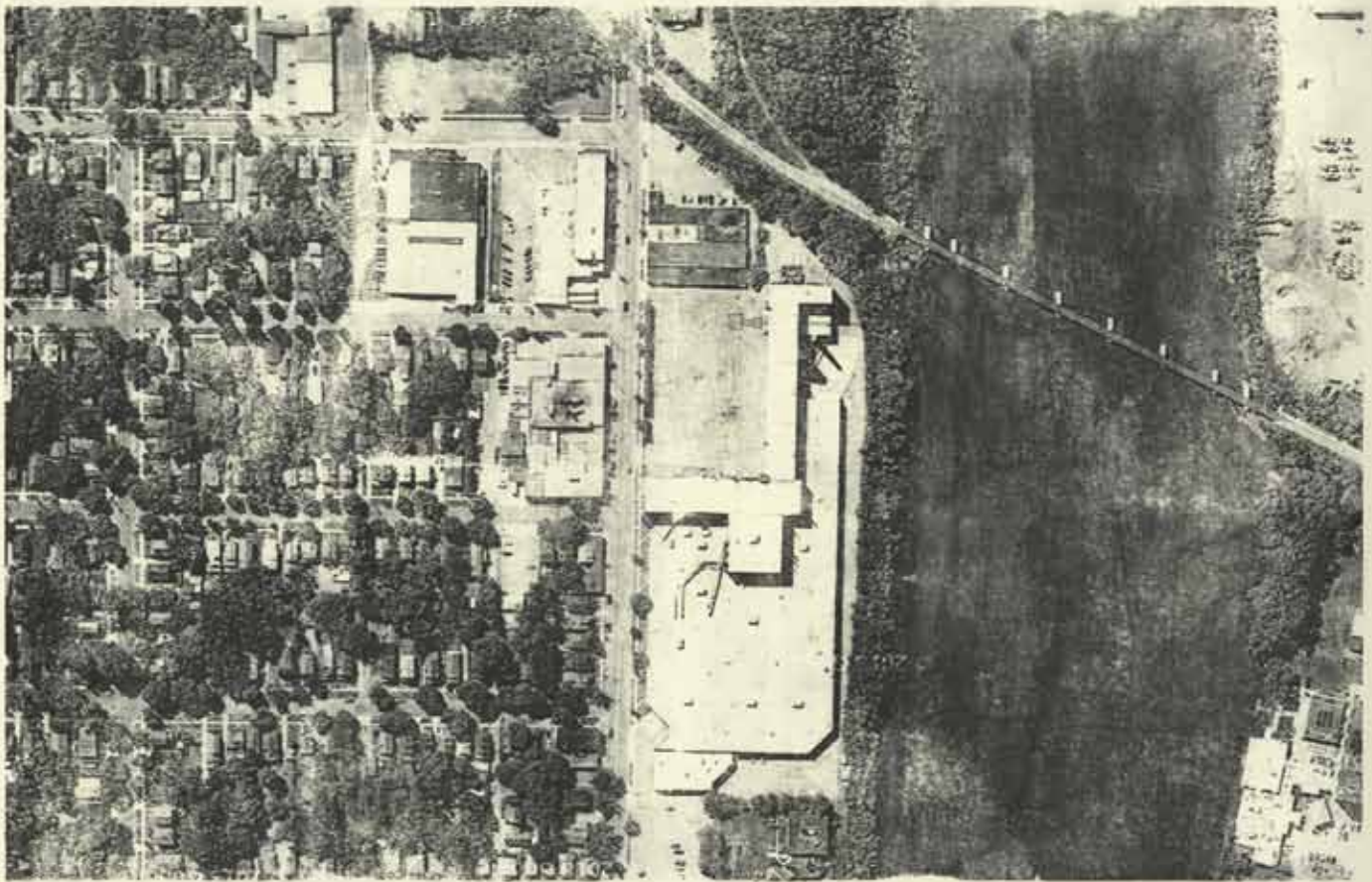


*There Once was a Chairmaker*





*His Workshop is near the River*



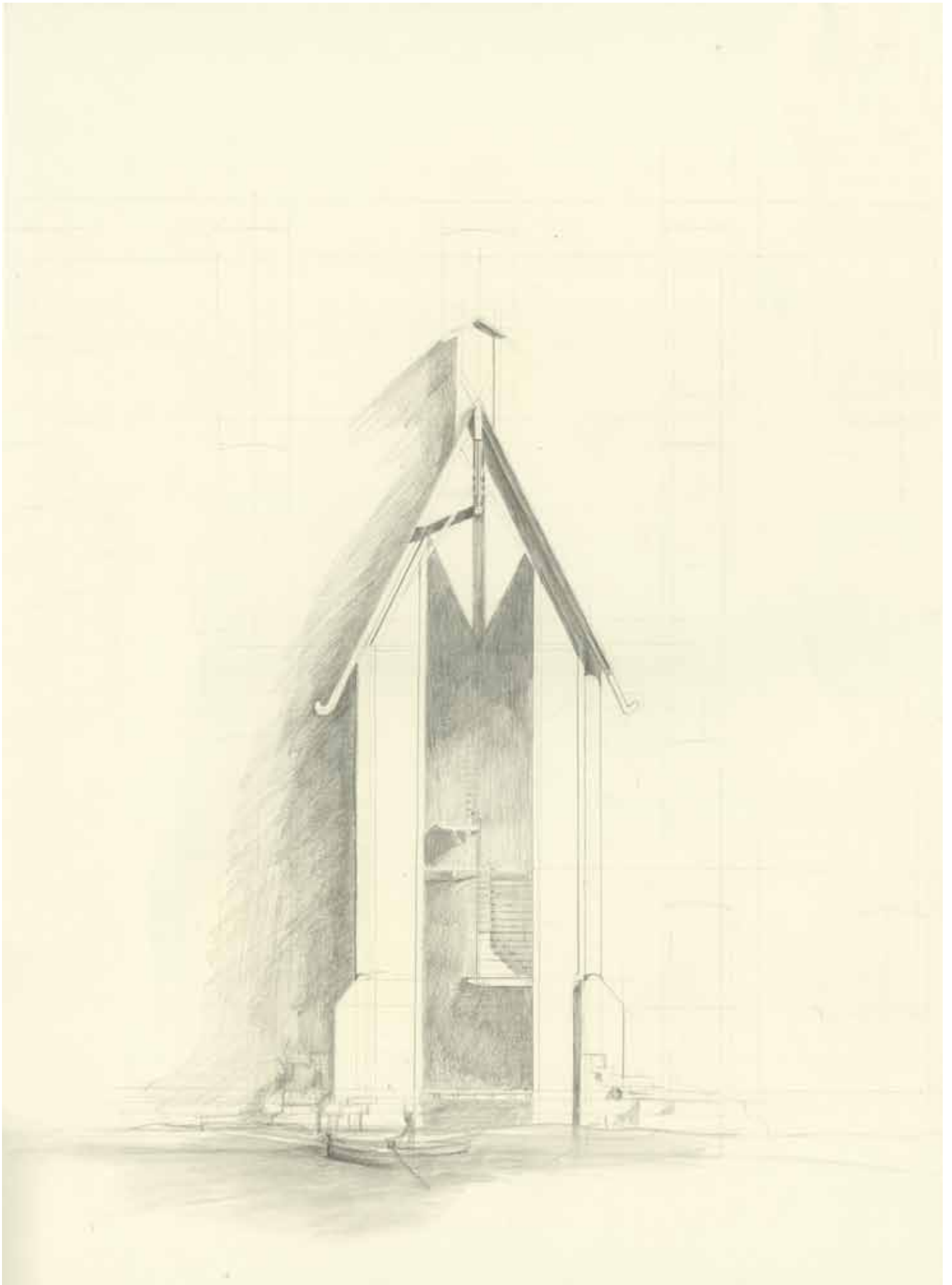
*In 1870 a Factory's presence was established*



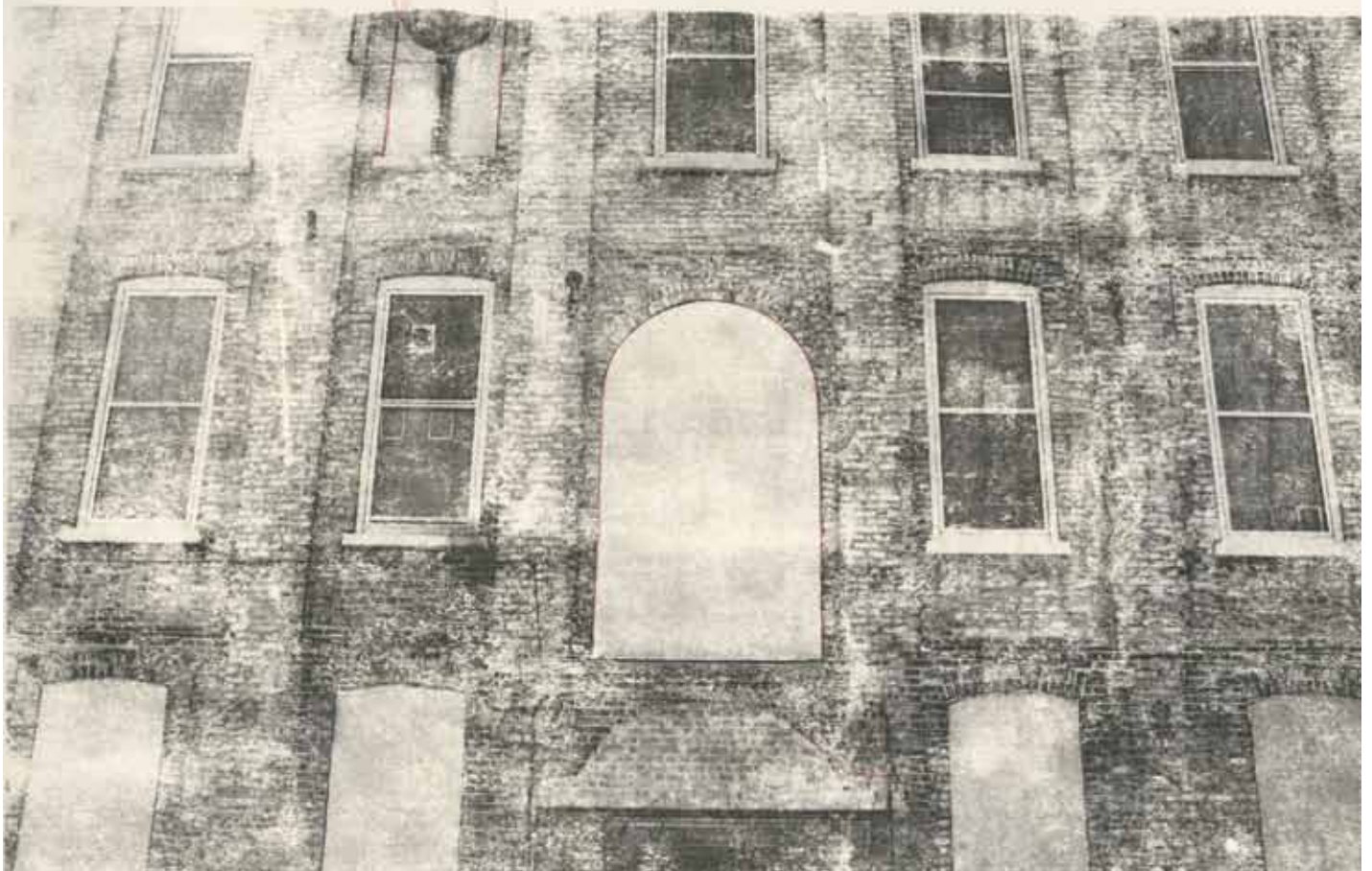
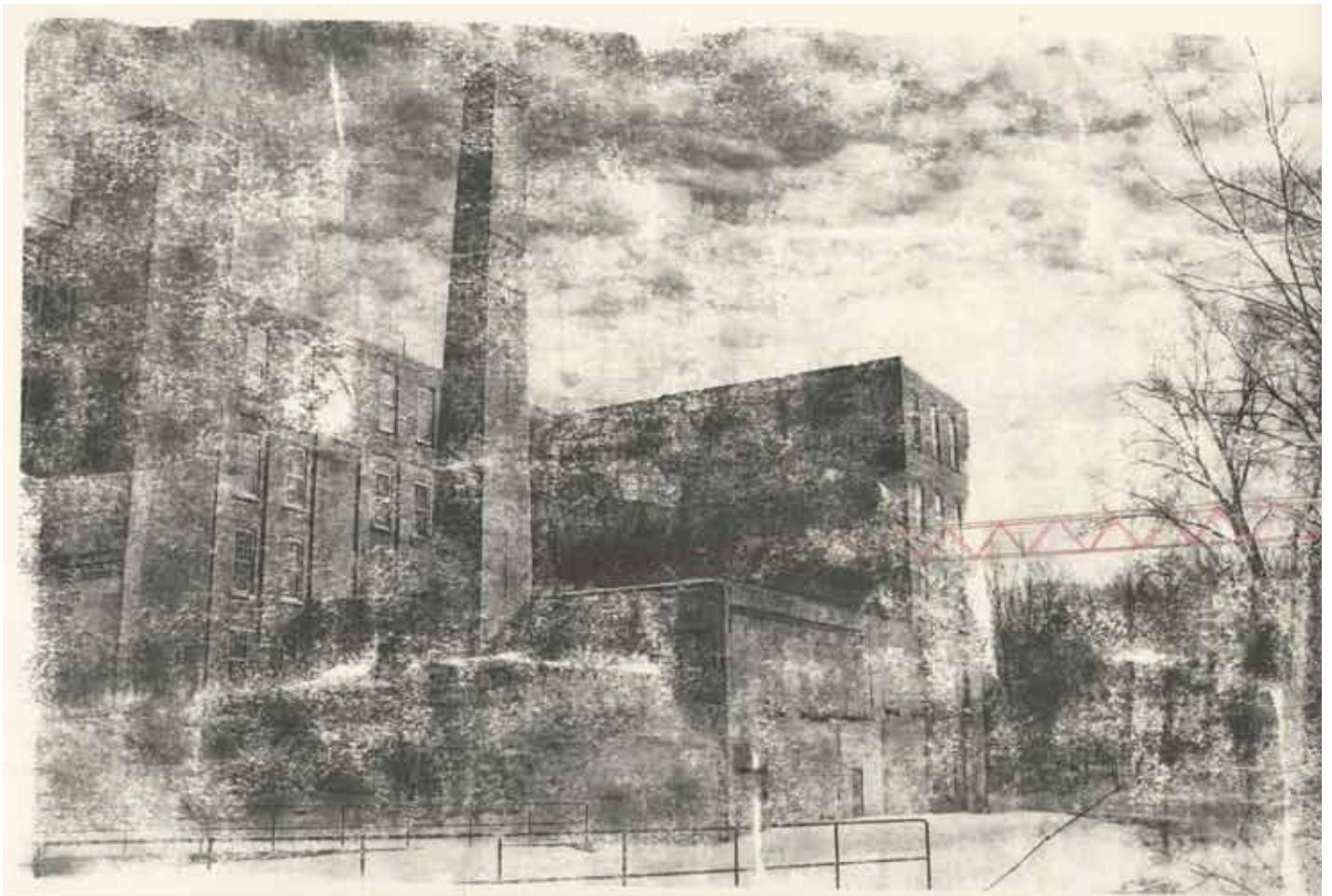


*Outside, trees paint shadows on dry rustling (at times damp sleepy) leaves.*

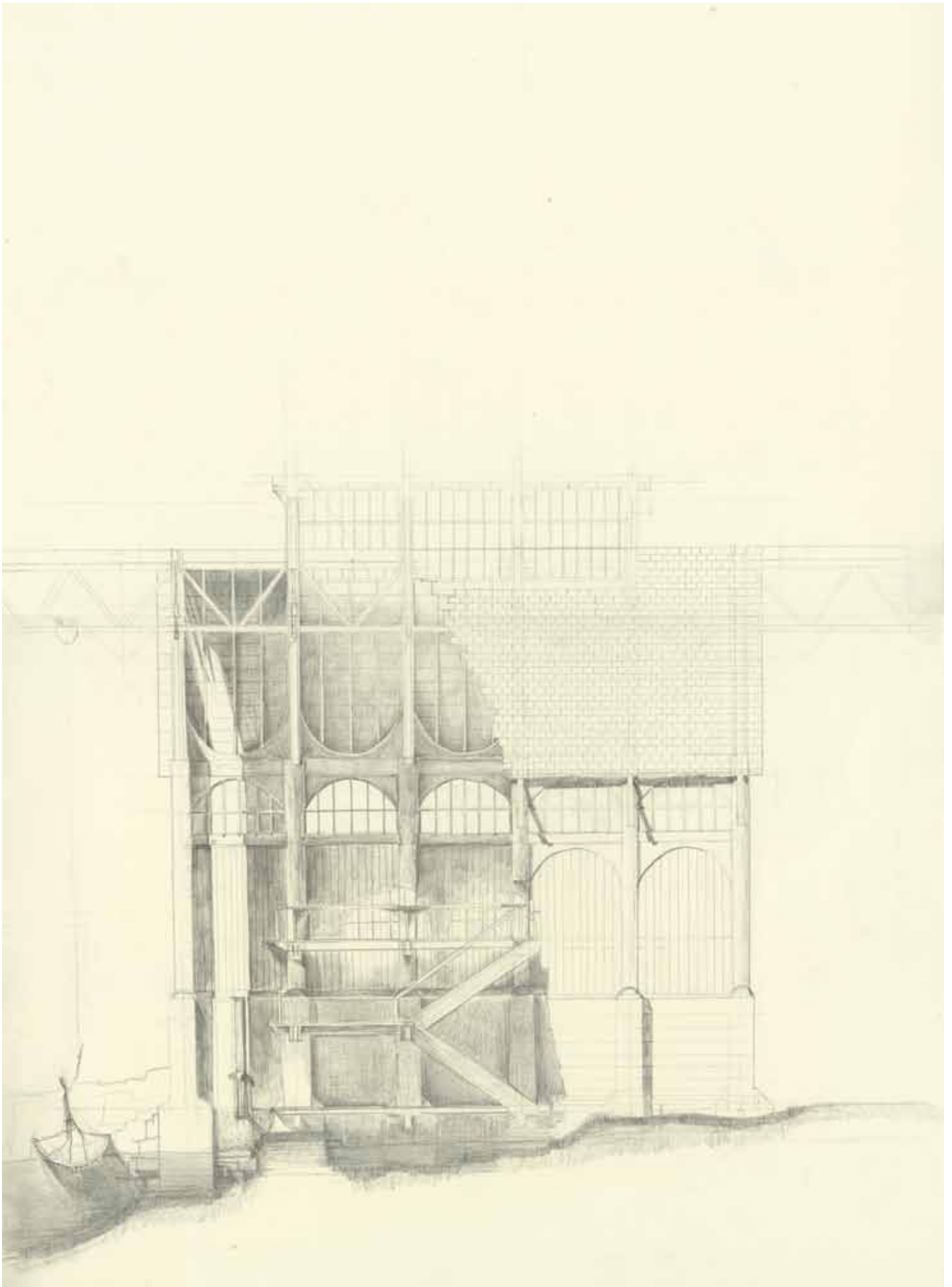




The River carries the Chairmaker and his materials

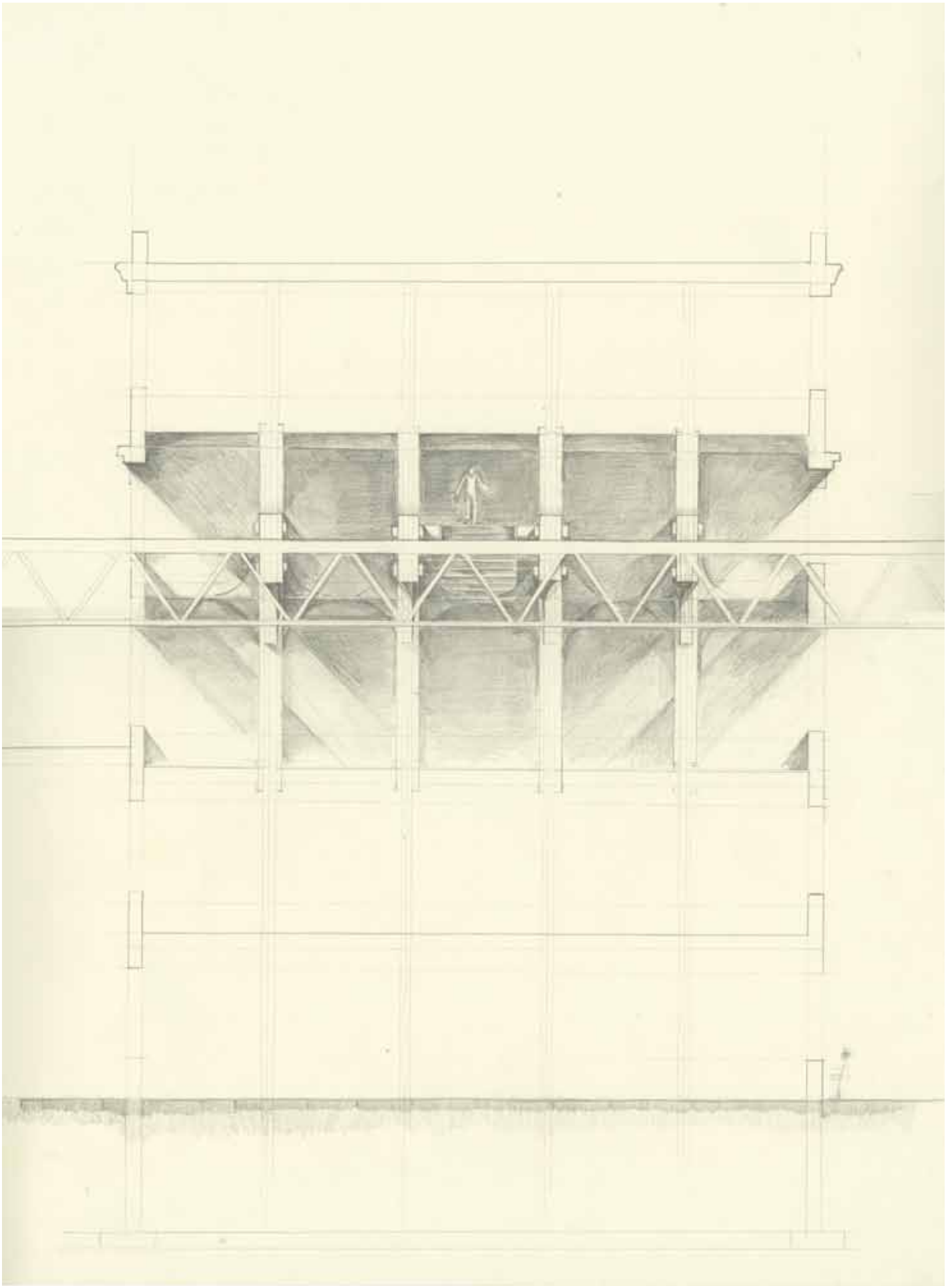


*The Factory was modified many times, now it helps carry the Chair.*

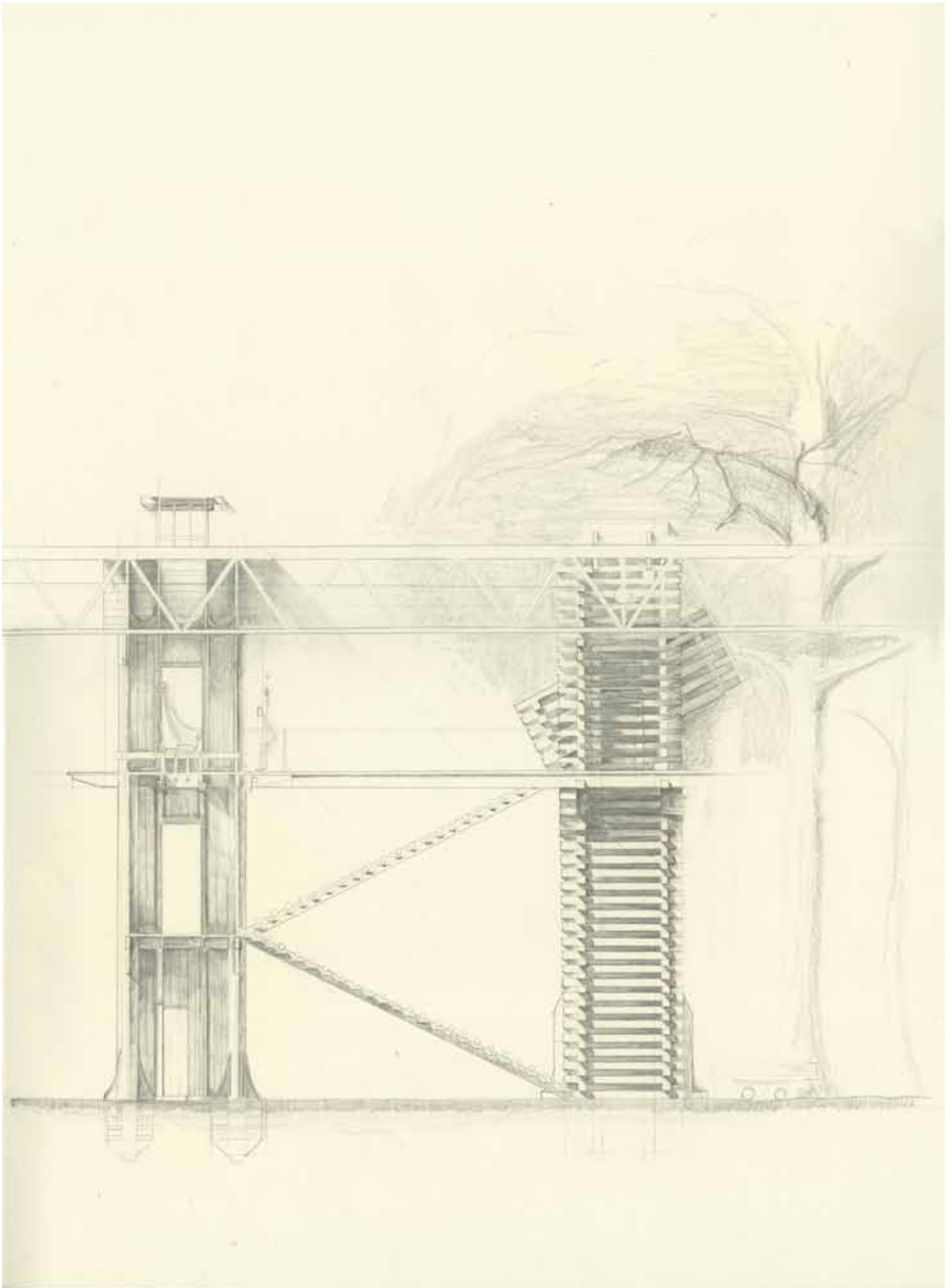


*The Chairmaker hoists wood into the place of changing it's meaning*

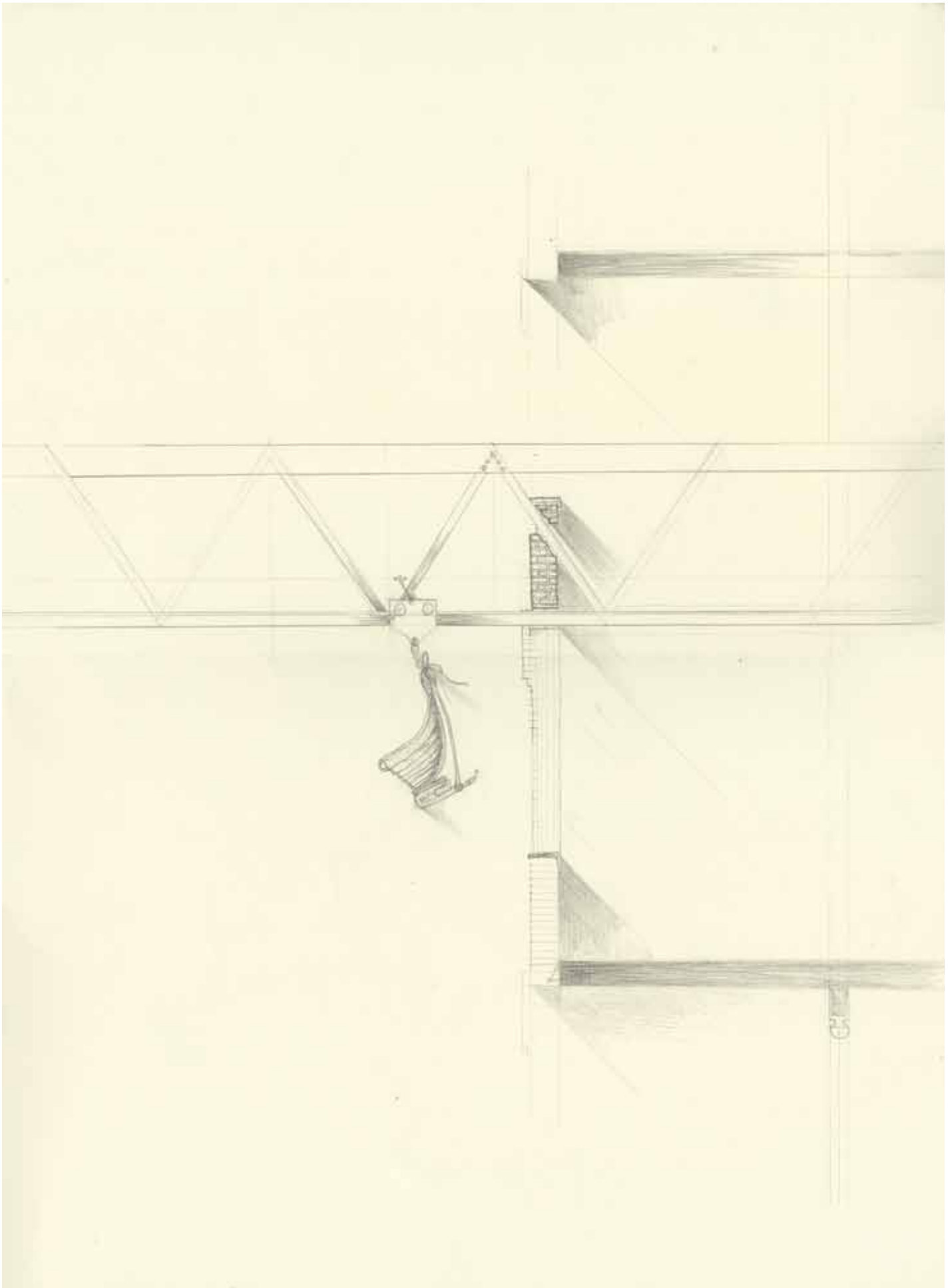




*The Factory holds the Truss, which holds the Factory too.*

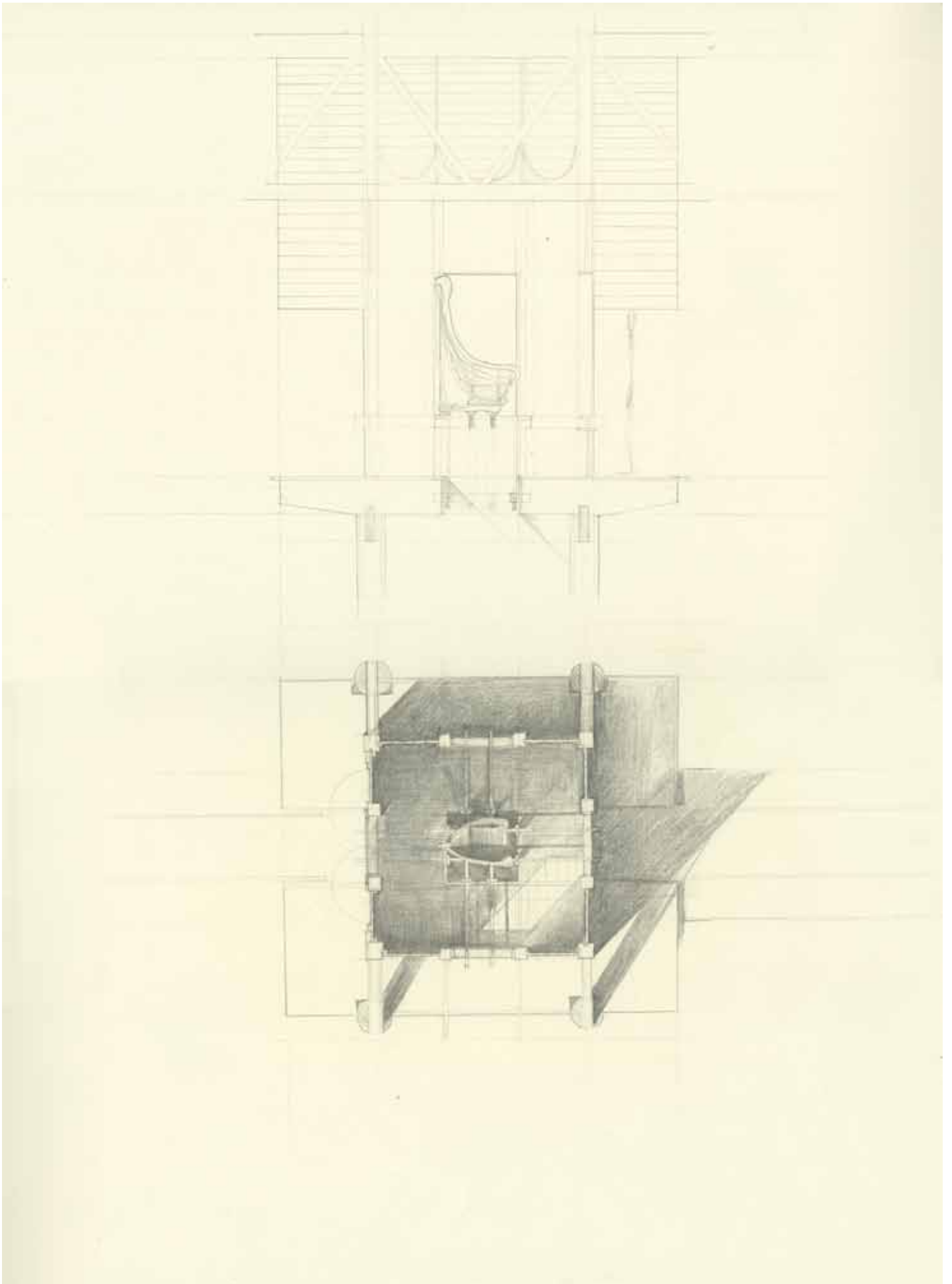


*Walking by, stacking wood, forming in Forest-Place, and finally the House.*



*Tree - to - Wood - to - Chair. The Gantry carries it inside, outside, and back inside again.*

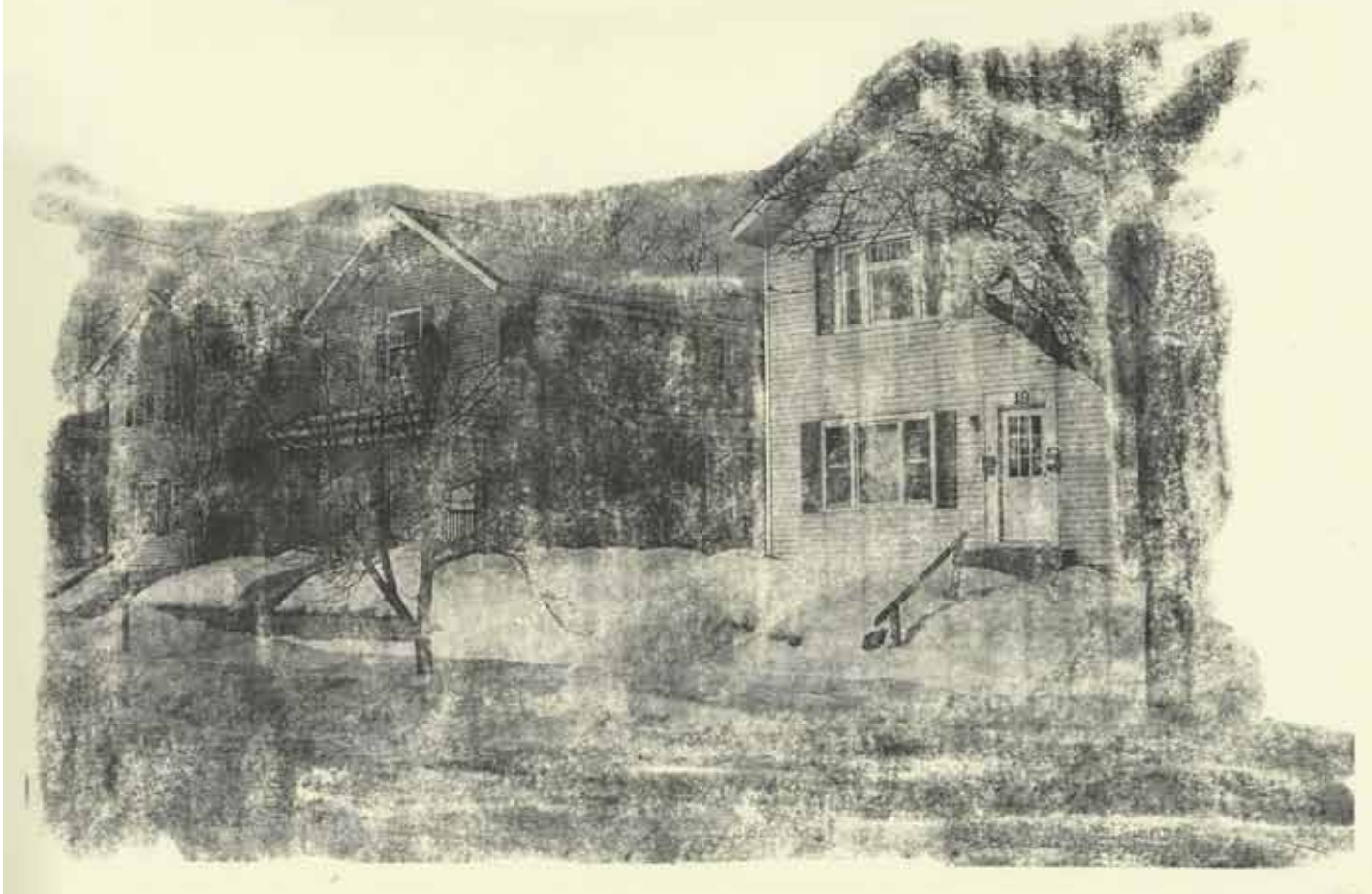




*The Chair sits.*

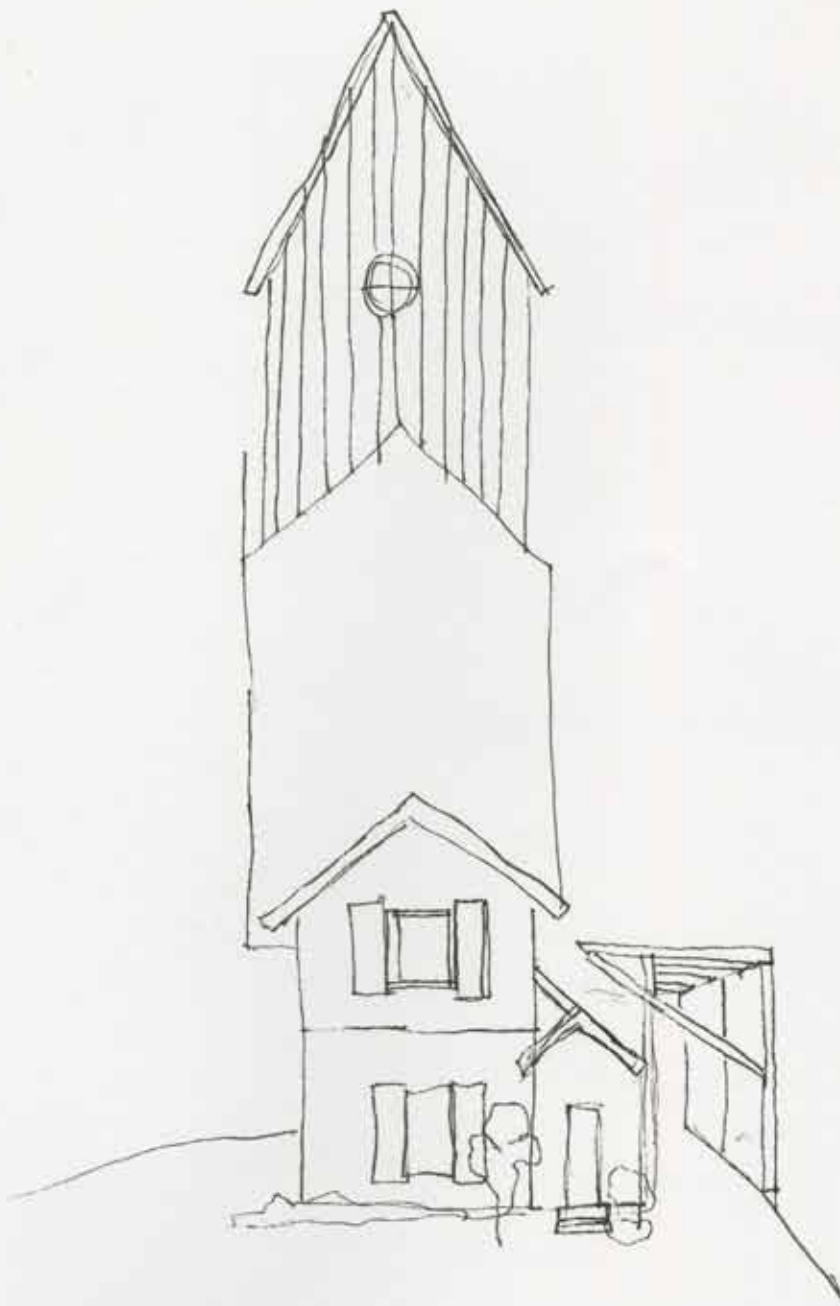


*Swaying wind turns stone into a place to pass through.*



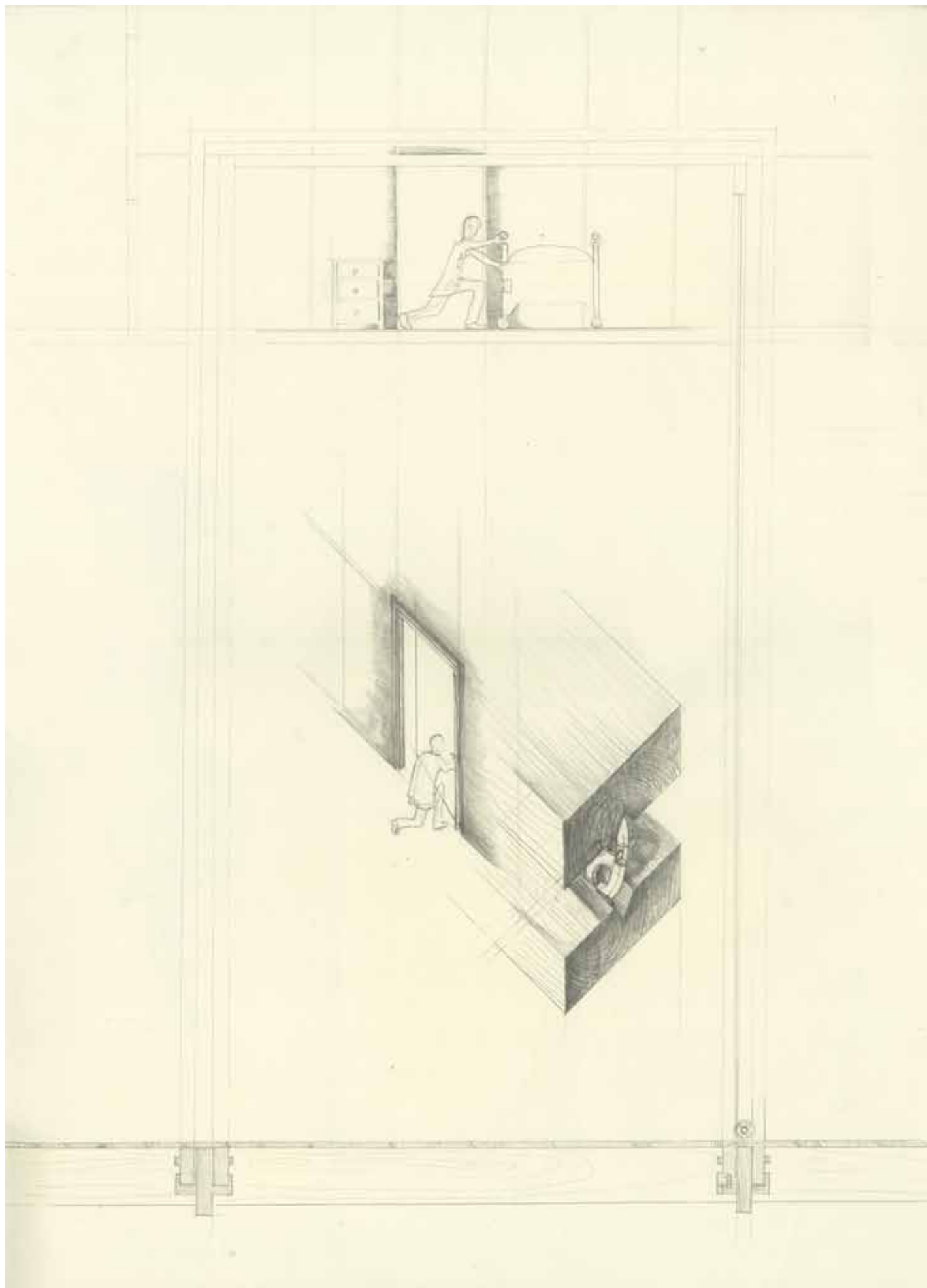
*People dwell in the houses nearby, each have their own wonderful story.*





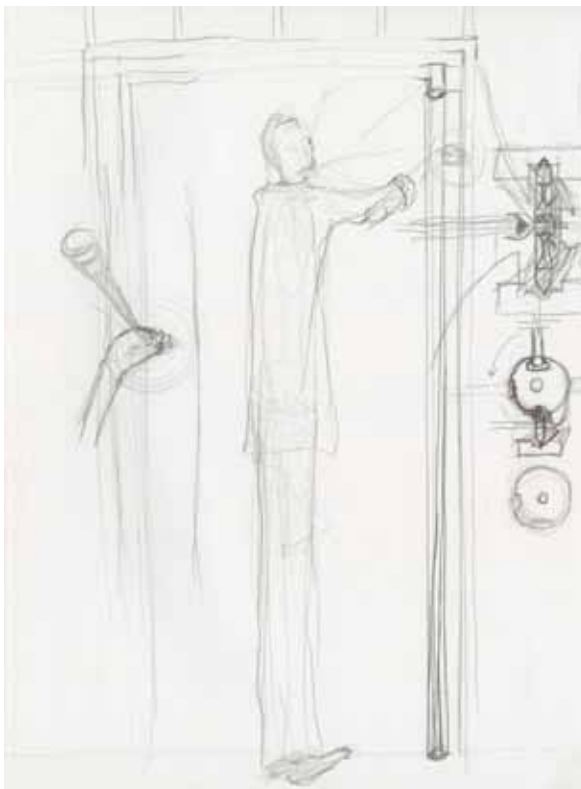
***Part VII:***

He would row at night sometimes and often until sunrise. He often dreamt about all of the places he would prepare.



## The Boy Who Drew Doors

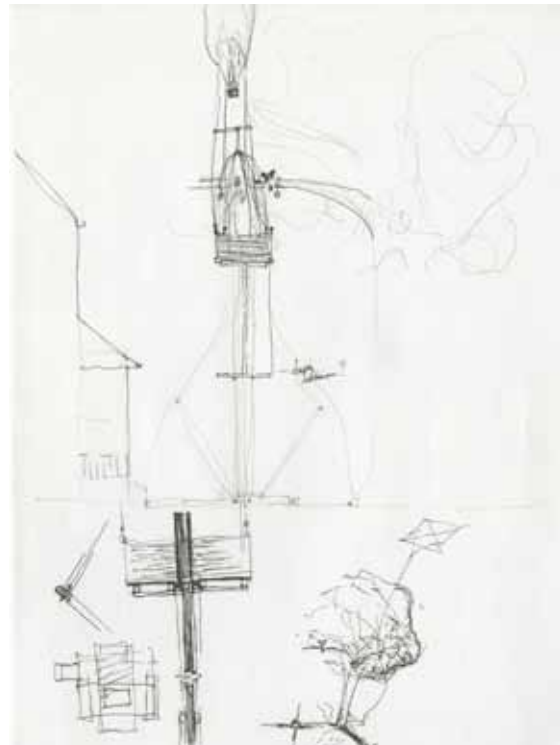
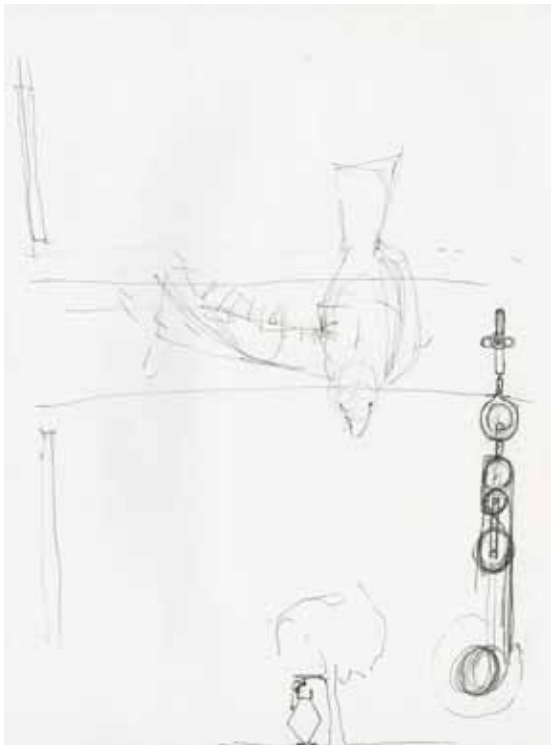
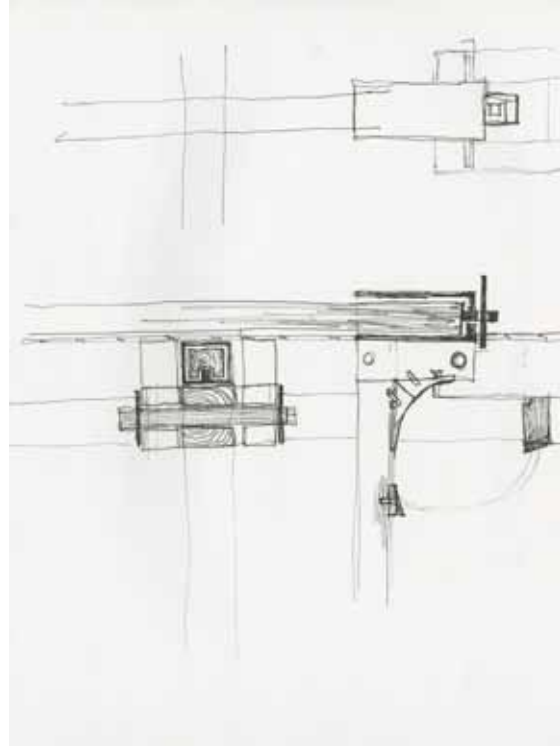
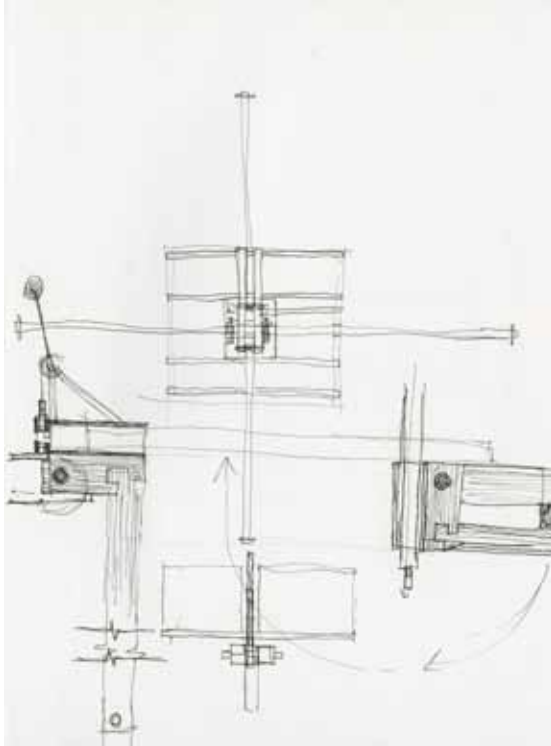
*lived in an orphanage, never having recollection of his parents. One of his favorite bedtime story was about a boy who had a magic crayon that could draw doors and windows into new places. One hazy moonlit night he drew a door into a place. Inside, there was a picture frame resting on the ground. Within its frame was an image of his parents. On difficult nights he could tell his parents all about his difficult days.*

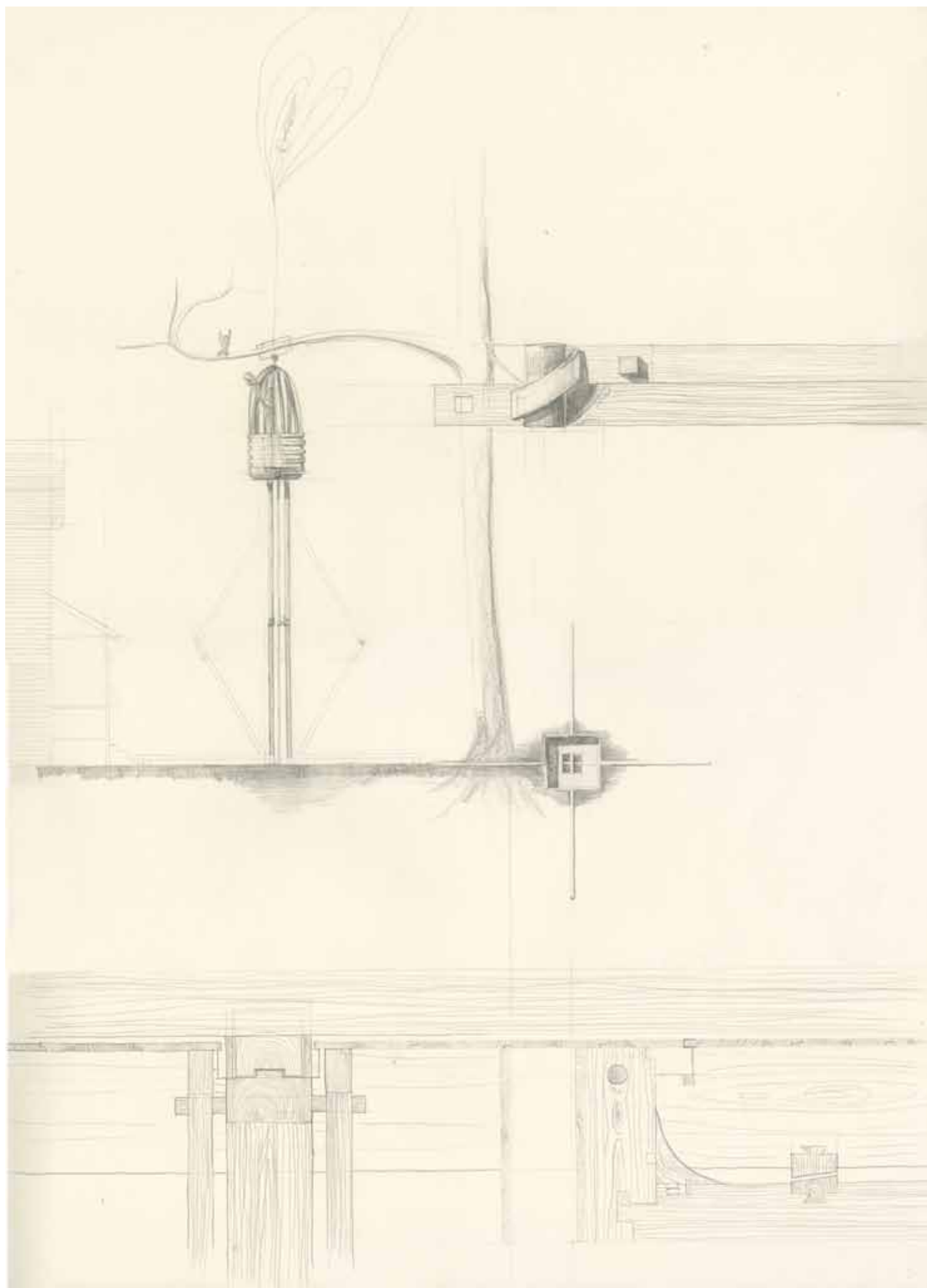




## The Woman & The Bird

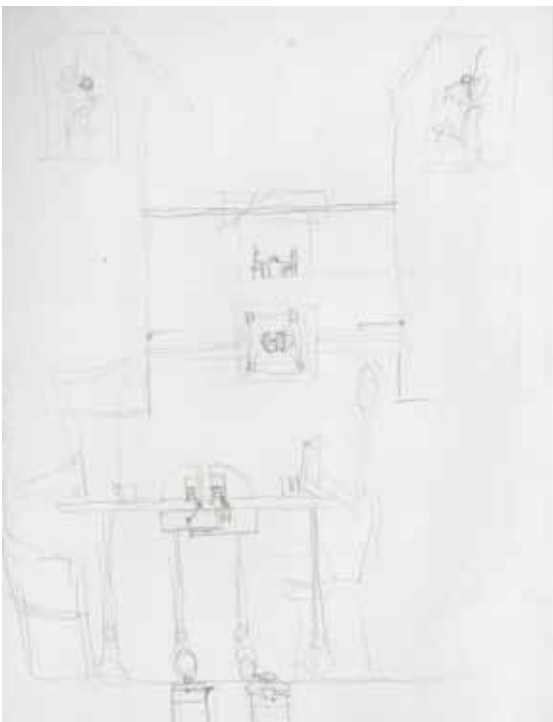
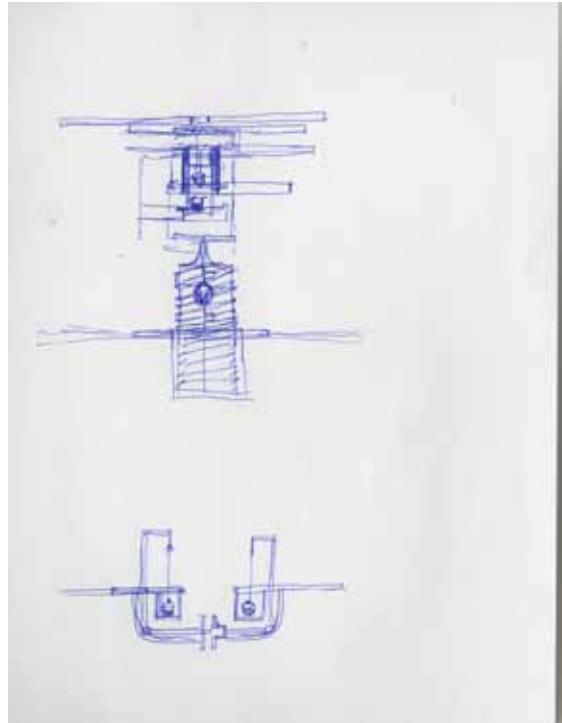
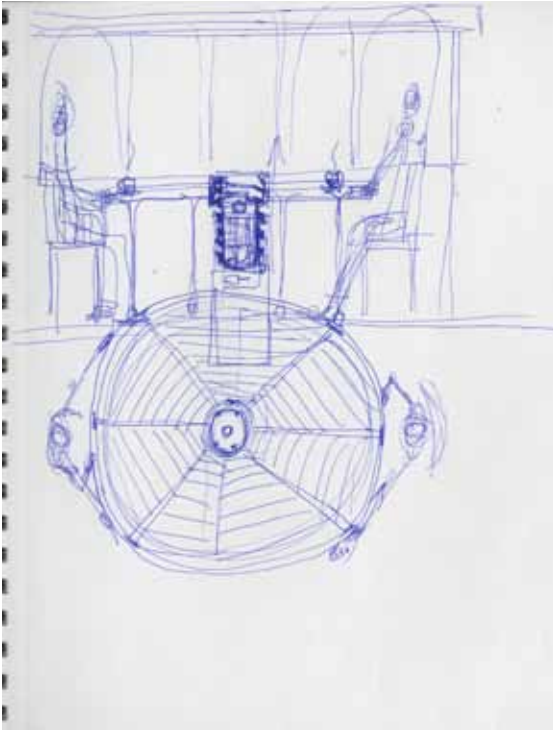
*The Woman once kept the Bird in a cage. It escaped, they found a common meeting place.*



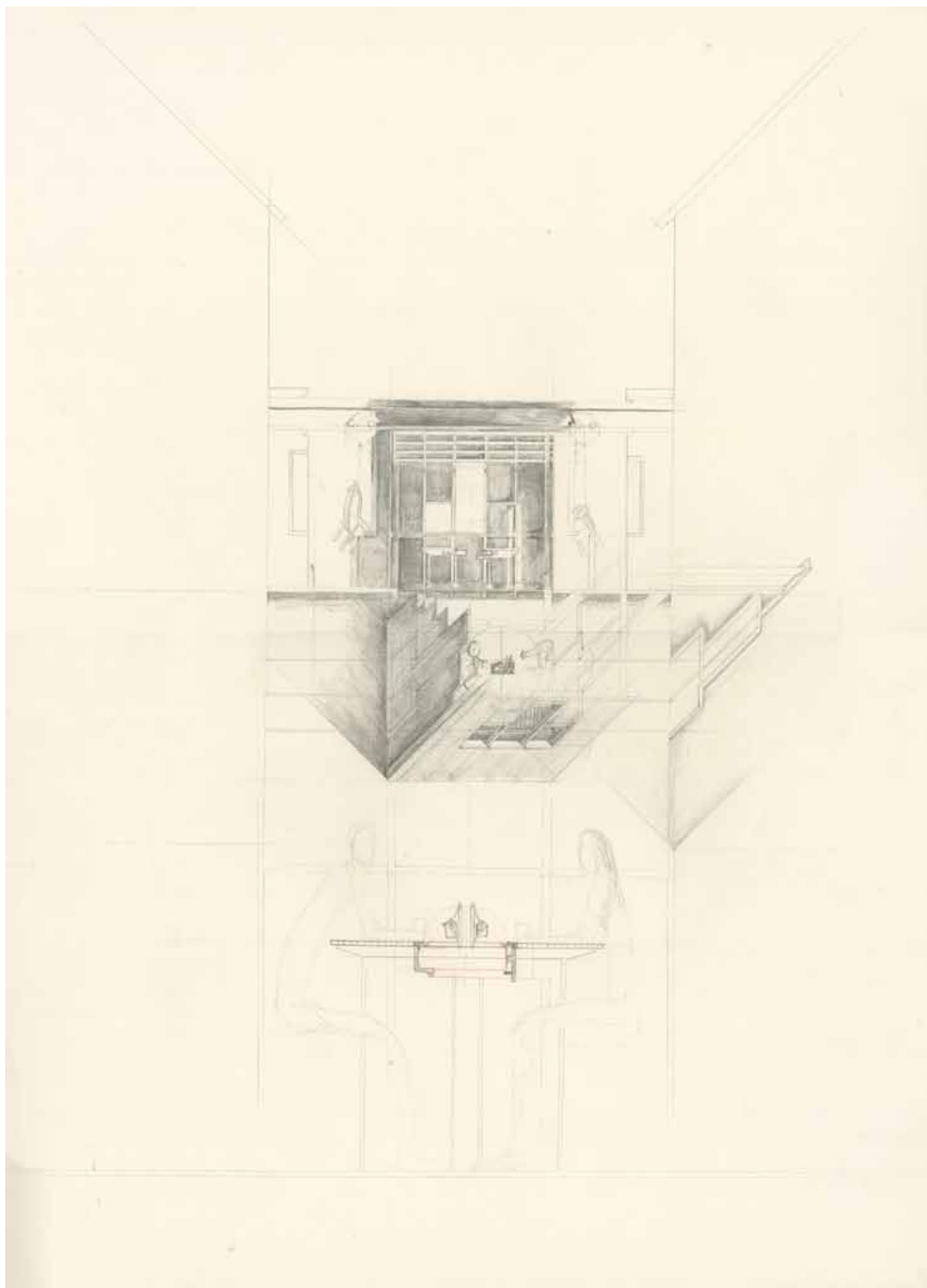


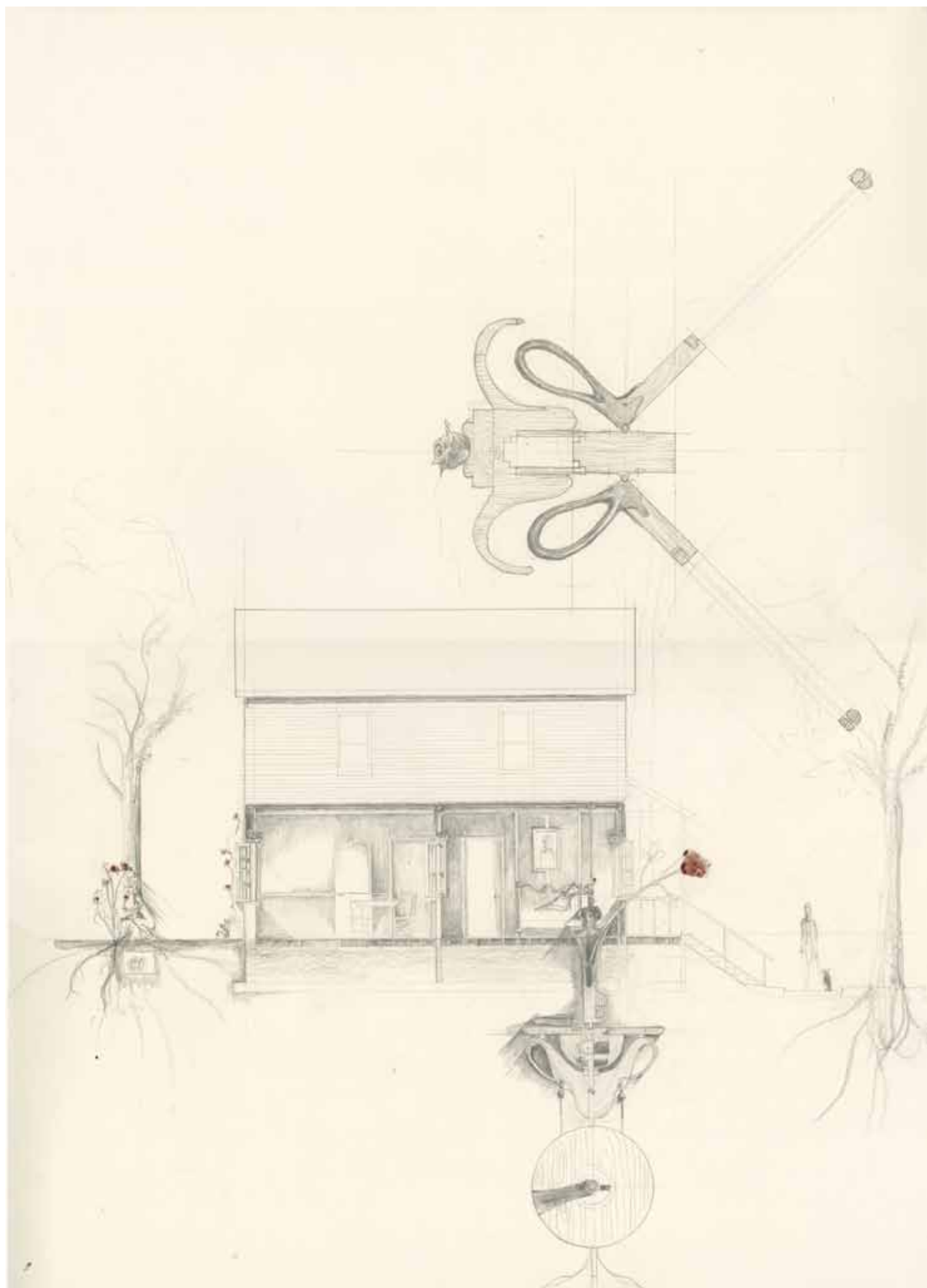
## Coffee & Tea

*Once their silhouettes were company, together they meet with cream and sugar.*



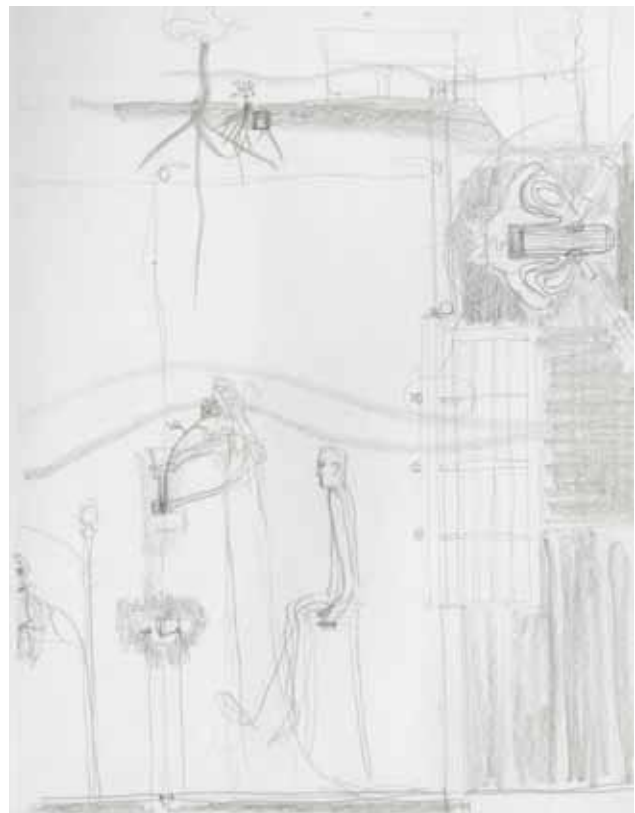
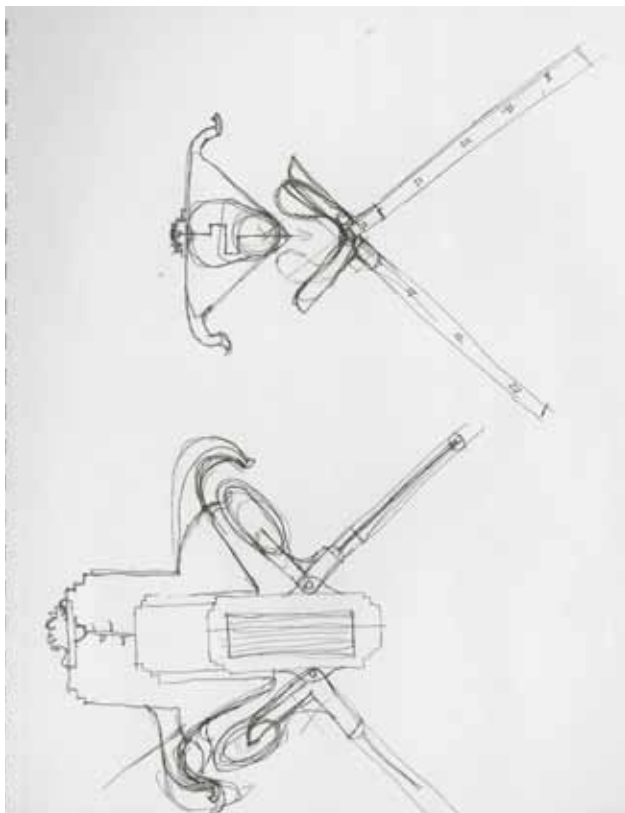
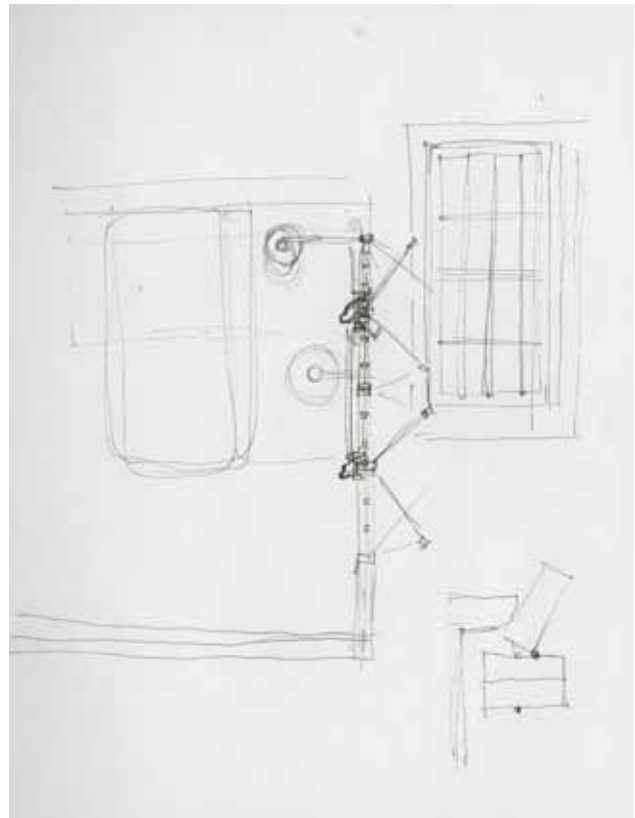






## Roots of Rose

*A woman who is bedridden once loved the fragrance of roses growing from the soil. Now her garden was handed down to her daughter. She missed their fragrance and the fresh air. The vase that holds the roses her daughter takes inside to her is the key. Pulling the vase down to the bedside table opens the windows during each and every spring and summer into her bedroom. (And fall too when it is warm enough). The fresh breeze carries with it the smell of the roses warmed in the sun. Inside, her daughter cares for her and her grandson listens to her stories. And she cares for them too.*



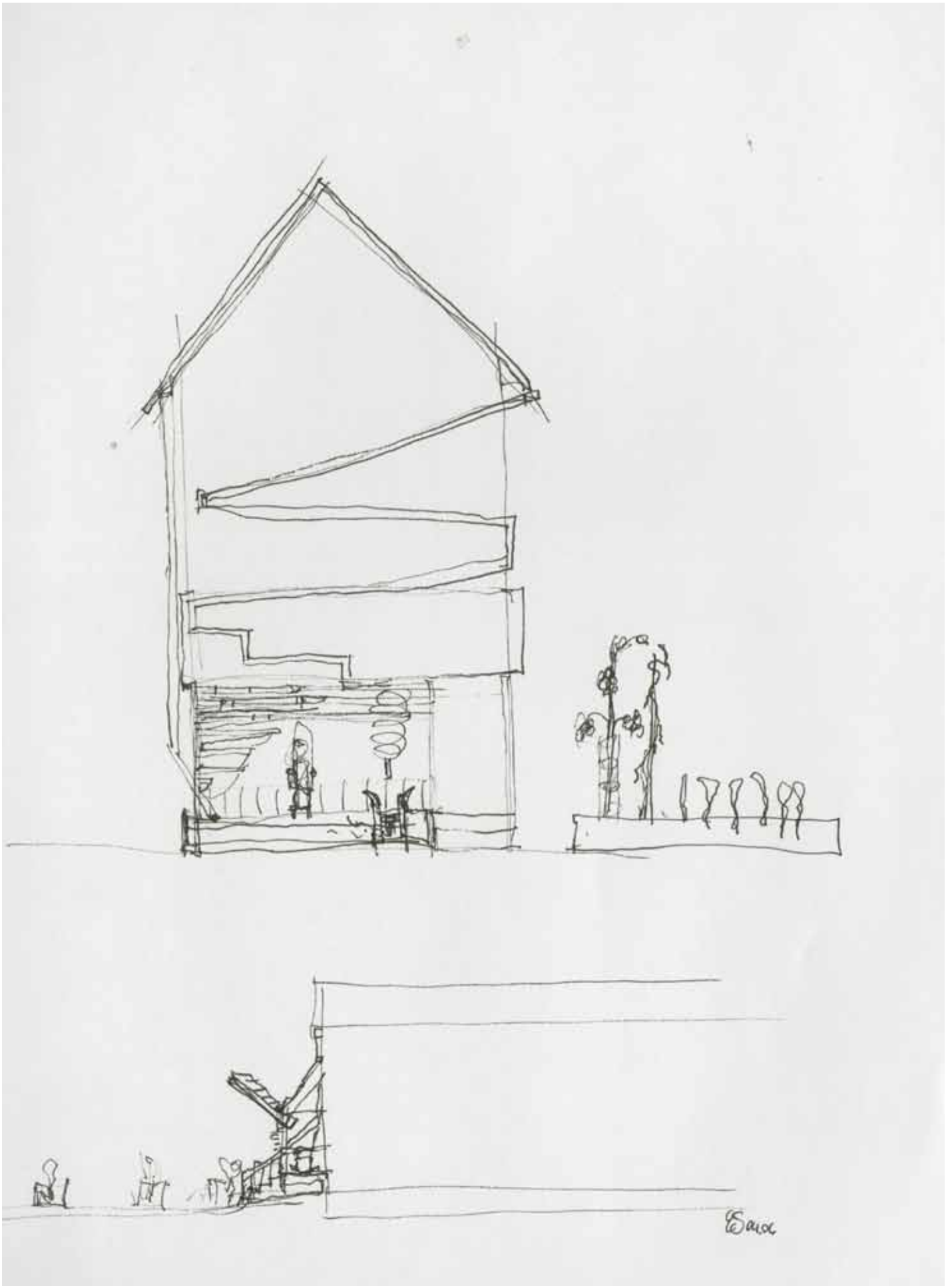




The Bear's House

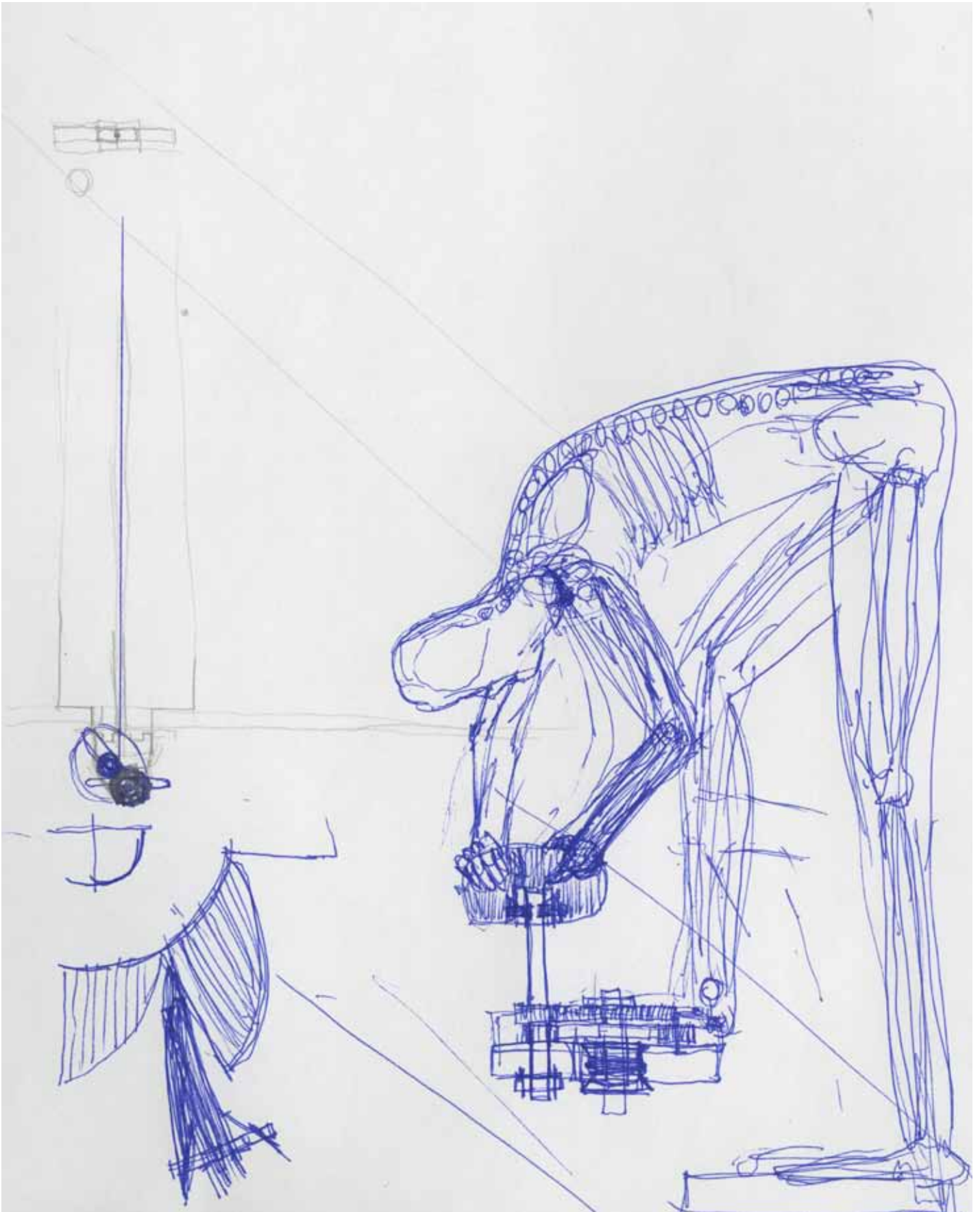


The Boy and His Mouse



Enox





## **The Stair Tuner**

*One day ascending the stairs to visit the Chair in its House, I realized they have paddles on either side of the step. Soon after, I saw a man spinning these paddles. I soon realized that he was adjusting the tension that pulls the stringers together on either side of the steps.*

## *An Artifact and Its Display*



*"In order for an object to find its place in this new setting, the architect must dwell within the object, just as words dwell within the soul of the actor" -Sverre Fehn*

Traditionally, ancient Chinese urns were placeless in society. This was not out of the ordinary, however, because Chinese culture as a whole was meant to pass mostly through writing instead of material things. Even today, the Chinese artist Ai Weiwei flaunts his attitude toward ancient objects<sup>1</sup> by having himself photographed while painting them with bright colors, only later to shatter them into fragments on the floor. In dealing with artifacts, by obliterating them on the ground or presenting them on a pedestal, we manifest care (or lack thereof) through thought given to their display. Yet, the artifact does not need to be so revered (by another) as an ancient urn in order to consider its display.

### Opening:

Oftentimes, objects are treated as mere ends to daily life that are set in a tight cocoon of preconception- using them for convenience or practicality.<sup>2</sup> As we use them, we get used to them. Often objects are placed, for their readiness according to use. This sheds insight into how we see objects as things of use; but how do we see artifacts? It seems they have specific qualities beyond mere use. These qualities are what fascinate anyone interested in artifacts. It is the designer's aim to call forth these qualities to the experiencing subject. This is the two-fold phenomenon of the display of artifacts. First, it is the artifact, next is its display. Within this phenomenon, the designer works to present a view specific to the artifact that is best fit for the subject's experience of it. This is choreographed much like a dance, the designer is the choreographer, the dancer is the subject, and the music is the display (and artifact).

The following method will consist of first investigating the artifact. The proper display can be designed only after the qualities of the artifact are manifest to the designer. This method will be illustrated through the use of specific examples of phenomenological investigation. First this will happen by describing the display of various artifacts, then describing the encounter of their display. This encounter will include responding to (previously formed) questions, journaling, utilizing imagination, and recalling from memory. This back and forth, between questions and encounters, will draw out common characteristics as to how this encounter appears. These characteristics include: differentiating objects and artifacts, and the reconstitution of meaning to the subject. It will also include an investigation into: the levels of intensity involved in the artifact's insight (simplistic to complex), and the artifacts treatment (typical to atypical). These methods all unfold their meaning through a subject's experience.

The obvious end of this investigation is to design relevant displays for artifacts. The applications of this phenomenological study of the display of artifacts ripple out into the (complex nexus of) relationships that exist in material reality. A change in the placement of an artifact has enormous implications on the subject's experience. However, this is not merely limited to artifacts at a small scale. It is relevant to decisions that face architects internationally: the placement of a much more complex artifact- a building. Because of this, display is noteworthy for any professional considering the many cues of material reality. If this view of every design is novel, it is proof of a great need for designers to continually enter into the lived world<sup>3</sup> (Koukal D. R., 1999) to better understand the things and subjects



they design for.

### Scene 1: The Object into Artifact on Display.

In order to better understand how the display an artifact appears to a subject, the nature of how an artifact appears different from an object must first be examined. As some artifacts engage me, I imagine how their creation might have responded to what technology or materials were made available. Some artifacts are remarkable in the way these materials come together, while others contain a wealth of knowledge about craft from a single material. Whatever these many qualities of the artifact are, the consciousness of their creation is a key element in distinguishing an artifact from the broader category of an object. For, to be called an object a material thing needs to only appear to the mind in general, whereas an artifact is a product that has insight or new consideration to offer. When I walk by a mechanical pencil, it is manifest to me as an object. To see it as an artifact means that there is, included in its manifestation, a consideration for it's being made. This is something phenomenologist's call reconstitution of meaning. The meaning of what an entity is changes to the subject. In regards to the artifact it happens when the meaning of an object changes from something of use, or to dispose of, into something that has its value in its instructive qualities. Some elements that might formulate this insight include its assemblage of various materials. For example, the way the metal wraps around the plastic to form the clip of the mechanical pencil. Another example might be the different moving parts which seem to present a resulting fruit of their movements- the ticking out of the graphite. This reconstitution of meaning varies according to the subject. Because of this it could potentially appear to the subject as a piece of litter. As discussed above, the reconstitution of meaning often deals with cues that the subject receives from its display.<sup>4</sup> (Koukal D. 2006)

So how then would the display of an artifact appear to me? Display in general appears to me through a special treatment and arrangement of materials. This means that the designer of the display gains a hand in communicating his or her personal experience of the artifact to the subject. In the case of the mechanical pencil, if it is leaning in a coffee mug next to other objects, appears to be as being worthy of consideration as much the rest of the pens and pencils in the mug. I could look through each one of them, but their composition next to one another makes it feel like a task. Perhaps their accessibility as equally valued objects of use resulted in this particular treatment. So then, context must be an important factor in the consideration of display. A display often appears more poignant when the treatment is atypical. For example, if the pencil is placed on a series of wooden rungs on an open spot on the wall, the pencil will appear to me in its farness from my reach. This proclaims that the object is not merely for use- that it may in fact, be an insightful artifact. I know part of this specialness appears to me because it is set aside. A consideration as to its being aside is what invites the subject to experience wonder as this mechanical pencil is seen for the material composition and other factors dealing with its creation. Perhaps it is the light passing over it, or its being put safely away from normal activity. This of course leaves room that the subject may not reconstitute it's meaning as an artifact, it may simply remain an object. It may even descend into a level of litter if the same mechanical pencil is placed near to a garbage can.<sup>5</sup> We have potential objects and artifacts flowing in rivers to

the dumps. So then display can never force interaction, yet it takes a subject interested and motivated to truly be close to things.

## Scene 2: The Urn in It's Place.

Museums surely have laid claim to the industry of display. They have curators with connections to worlds of instructive and interesting things for the masses. Yet, museums also present a possible misconception: that because someone else decided it is worthy of treatment that it becomes an artifact. This of course is not true. For the ability of a subject to reconstitute meaning is based purely on their experience and memory rather than another's suggestion. Here the consideration of an urn in a museum can be explored to further understand how reconstitution of an object into an artifact can appear to the subject.

An urn sits on a shelf with a flood-light casting a warm glow upon it. As I approach it I can see that it has dark and light colors (orange and black perhaps). I have seen plenty of similar shaped objects around the house. A vase for instance, would have flowers in it. Yet venturing closer to the urn I can see that it has strange brushstrokes and pictures of men and women walking in one direction. I can see that the handles are twisted like ropes. It makes me want to touch the rough, clay-like material. The room is silent, I feel a desire to ponder, to take my time with it. Others walk by and observe, walking close and then venturing farther away to see it from different angles. I begin to see different textures in it now, it's orange hue is more glossy, reflecting the flood-light faintly off from it. It's round shape is in its varied forms. The bottom the middle and the top are treated differently according to the ground, the air, and the space above it. My eye travels along the strokes in the clay, making known its formation. I begin to think about how I have experienced a similar material, whether clay from the earth or a vase in the shape of this one. Not knowing very much about pottery, these qualities about the urn are considered- how they came to be. This includes imagining the creator's process. There are many more questions that I am unsure of: about the glaze, the way it is stored, and what goes inside of it. These are questions from my memory. Before, it was simply an object: an urn on the shelf. But now it is an artifact: the urn of (some place in some country made by some tribe or civilization). After reading the label, I walk away with a memory of the artifact's crafted stillness and how my hands want to handle it, what the maker wanted its experience to be. Walking away with more questions seems to be a product of the presence of an artifact. Yet, its meaning is in these questions. For example, its use then was for the storage of ashes. But I could still (personally) use it to store things inside, or use it as a decoration.

A reexamination now of the shelf on which it was placed can better elucidate the appearance of its display. It was presented on a shelf, at eye level, on a dark wall. The light shined on the matte paint, the room was small and silent. I feel the desire to venture close since the lighting is lower. The shelf is a different material from the wall and the artifact on top of it. I see how it is smaller than the artifact, not overpowering. It is thin, supported with an angle bracket that is hidden in the shadow of the thin metal oval. I see how the displaying material does not overwhelm the urn, in fact I want to see the urn now. My attention waivers from the shelf back to the urn. I see how others do not comment on the display, but on the

urn itself. The light seems to shine on the urn from an angle onto the urn's matte and glossy surface. So then, it appears that the display is for the artifact, it invites the subject in service to the urn. Without the display being there at all, or had it been overwhelmingly bright colored or large in scale, it would have taken away the mysterious yet careful presenting forth of the urn. So then the display is about presenting certain qualities that are not immediately apparent. Reflecting on the display as it relates to the urn I am able to see how it invited me to pay attention this urn through its gesture. It did this partially by visually directing my eyes. Also, the plaque presents data that is meant for me to relate this artifact to myself. The urn's age, craft, materials, and its relative proximity from Detroit, Michigan (etc.) all relate its physical presence here to a cognitive understanding that I have of made things and who makes them. It invites me to think about the commonalities between similar artifacts, and I begin to reconsider them (all) in my mind.

So what role then does placement play? If this very urn sits on the ground behind someone's house I would consider it a lower priority in my mind. I would not consider its crafted qualities so much as its use as a container for water, or a mere decoration for the backyard atmosphere. I could stoop down and have a closer look at the engraved scene, or look at the bottom to see if it was purchased at a hardware store. Its placement says this to me. It is placed where objects that do not have the meaning of being insightful, but useful, sit- next to the yard refuse and the hose coiling mechanism. This pays homage to the fact that the display also adds a level of priority to someone who has not experienced it before.

Objects are manifest incessantly; they are also used and placed incessantly. But the placement of the object still reveals its level of display. This is perhaps difficult to separate out since objects are the things often closest to body and mind. Since they are so close, what Husserl refers to as the natural way of living (Koukal D. R., 1999) can take over any desire to manifest care after their use. This can seem automatic, but an examination of the way they are placed, or treated, can present a state of consciousness to alter this attitude. An object such as a coffee mug is placed back in the cupboard (or left out), and the treasured watch is tucked away safely (or left out). Perhaps the watch is considered with care in its treatment. Yet, it seems that a mug can even offer a level of insight that can elevate it to an artifact.<sup>6</sup> Regardless of which carries a more complex level of insight, this often automatic consideration of 'back' and 'away' are essential because they speak to the place where they belong. It is from their place that they manifest their qualities in different levels of light and proximity from nearby objects or litter. This manifestation is the basis of the display of artifacts. Placing the watch away speaks to how it is not for the direct experience of another subject. Placing the mug back allows it to be in its place, whether in darkness or light, for re-use (as object) or consideration (as artifact). It can go either way.

In order to get closer to what display offers artifacts as insightful objects, the experience of display's accessibility is worth venturing into. The level of invitation that artifacts offer appears to fall along a spectrum- from insisting to restricting. I will use the display cabinet to illustrate this. As a display cabinet appears to me against the far wall I am drawn to the outline of its form. Behind framed windows the dark shelves cast shadows on three objects. Each object: a plate, bowl, and toy mouse is open to a level of exposure. The colors of each entity individually engage me differently, the intricacy of the form of the lighter colored

mouse draws my eyes to it. A number of factors, including the shelves deep color present a sense of hand craft, the cabinet doors frame each artifact at eye level, and the color of them determine how inviting this toy mouse feels to me. These cabinet doors aid in showing atypical placement (on a shelf instead of away in a box)- this sets the toy mouse away from the common toys as objects of use. It is also away from the activities of the normal use of the room. This makes it feel natural to observe the form of the mouse for its qualities the worn colors and its posture. The glass doors over it offer an invitation to peer within. A cabinet that has no glass feels more restrictive, telling me to look but not touch. The nature of the cabinet doors says that to open it means crossing into a new boundary. The glare on the glass makes me want to draw nearer. So then, certain treatments of the wood, the height, and the transparency of the doors determine how much the display cabinet invites display. Whether restricting<sup>7</sup> or inviting, clarity or obscurity, the display engages with my body in a way that choreographs the movements around the artifact.

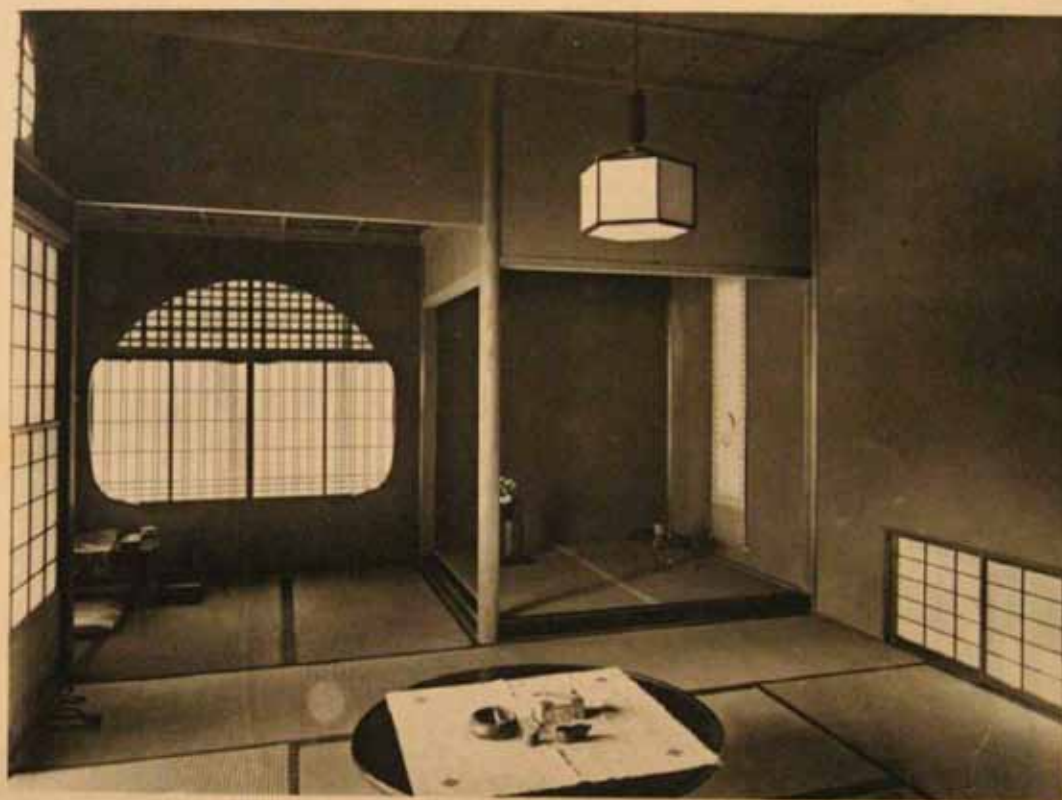
The study of language also has insight to offer about accessibility to the artifacts around us. The root of the word display means to unfold. This means that the artifact, as with a piece of paper, has many folds. There are spaces in these folds, yet these spaces are not literal. Instead, they are illustrative of the accessibility of experience itself. Experience with anything material has characteristics that are not immediately apparent. For example, it took time to realize the characteristic of the sheen on the urn in the museum. Our perception of the world is an unfolding process, this suggests a possibility that display is a method by which to choreograph this unfolding. This is where the designer comes in as one to design the unfolding. As with the box for the watch, away is a message that appears to the subject. It appears to keep it from the experience of another subject. This hiding of its presence embeds the experience with a new way in which the watch appears- as an object (or artifact) to be kept safe. Display can also become a placement for the experiential unfolding of the artifact's meaning- whether hidden away or presented openly. The toy mouse was displayed within the cabinet, from the cabinet's characteristics the subject receives cues to unfold the meaning of it as an artifact. The mechanical pencil is placed on wooden rungs, suggesting the pencil is to be lifted from them. They also open up the pencil to the air and light. These are all displays<sup>8</sup> which engage with the artifact in a way that suggest its use or insight. The qualities invite the subject to create meaning.

Take the mechanical pencil as an example. Due to its seemingly typical nature among the subjects who might encounter it, it may seem to have little insight to offer in the field of writing utensils, or mechanical movements of a simple machine. Yet, an artifact always has something to share. This means that the pencil, no matter how "typical," can still offer insight as a working artifact. For example, it can offer insight into an industrial process<sup>9</sup> - of the modern<sup>10</sup> making. The pencil's body has a sharp and faceted texture, a precision, as well as a plethora of information about how it was made purely from its characteristics. The tip screws on and off, the button at the base end pushes out the lead. It is from these that the subject can begin an inquiry about their meaning.

Imagining a chair (once ordinary) placed next to the "reverential" ancient vase in a museum under lights or the mouse behind glass is obviously an atypical place for an object of use. If I were to encounter it there I would be ready to see it in a new fashion, for it is set



客間・十一帖 土井高禮氏邸（東京都所蔵） 中村朝太郎氏設計



aside- where an artifact of insight might be placed. This means that even a simple chair can be treated in a way that invites admiration, curiosity, even wonder. The Japanese Tokonoma offers another perspective on the nature of display as a place for unfolding meaning.

It is an alcove that is meant to be darker than the rest of the room. Yet, it remains a place for the treasures of the Japanese homeowner. Envisioning an object in a dark space, my eyes must first adjust. As I approach the chair in a Tokonoma I am able to see it, but I see more of its silhouette. I then begin to recognize that it has a shiny glaze, within this glaze are very subtle reflections from any remaining light source. Yet, the silhouette is still most apparent to me. I notice the texture of the chair in the alcove. I see its joints, I see where it is lighter from use. The deeper shadow in the grooves of wood show me its wear. It is also set away from me, as with the cabinet, so I cannot sit in it. This chair being set apart from any other object draws my focus solely to it. I wonder about this place, my body feels a tension between the chair as an object I use typically and its atypical placement. The backdrop of the wall is less apparent. I begin to surmise its construction, its purpose at one time. I see how the wood grain looks to me now, and the joinery. I want to see the warm glow of the wood in the cool shadows. I see the scuff-marks where it was used, but not broken. Though very worn, it is intact, I see it as being well-built. So then, I am instructed about its sturdiness, the craft is something that I must be closer to in order to notice. So what could this inform me about the display of an artifact? Is it still a display even though it shrouds the artifact, rather than bathing it in light? If it is still about unfolding, then the unfolding of its qualities happen beyond mere awareness of details in bright light. It affords intimate connection with the artifact that still reveals instructive qualities, thought (quite literally) in a new light.

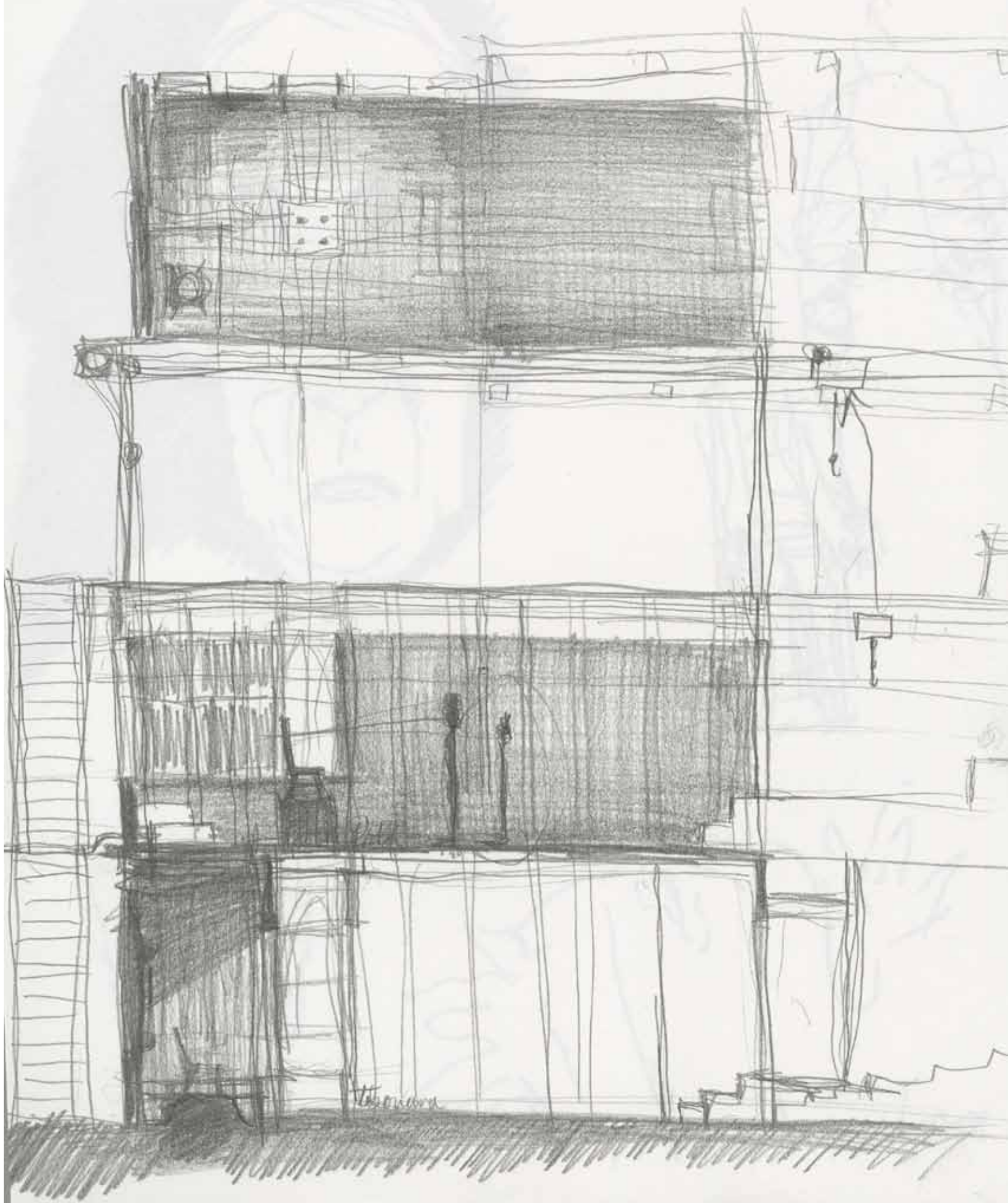
So then, the display deals with the folds of the object. The distance of the body is considered and the capability of the eyes can be taken to their extreme for a greater tension. Similar to social bodily proximity it is closeness and not merely view, which affects me. The cabinet and alcove both deal with these factors by celebrating intimacy with the object, while perhaps hiding some other qualities (like details). The urn in the bright light seems to offer a different experience. The urn is bathed in light, every speck of sand has its own shadow now, the dimples, the designs, the colors; all emblazoned as they are washed in bright light. I can stand farther away and see it. If there were Plexiglass around it, it would ironically draw me nearer since I must see past the glare that forms on its surface at a distance. Similarly, the mechanical pencil on its rungs offers a different experience dealing more with the view of its details. Perhaps this is where the display speaks about the preservation of the artifact rather than its experience.<sup>11</sup> It tells me not to touch it, but it does say to look. So then, it still deals with the unfolding happening through viewing the washed colors and painted scene. The alcove, through shadow, reveals the texture and finish. In a glass box the same chair would show detailed dirt and stains, but also the joinery and the interlocking of the chair. It reveals the depth of the varnish and the size of the members. So then, the display of the chair varies in that the way it unfolds the object drawing out different qualities.

#### Place 4: Re-considering the Artifact

The exposing happens through their unfolding of the artifact's qualities. This deals with

their display. Because of this, the use of display as a choreographing of bodily experience is an obvious tool for the designer. After perceiving the unfolding qualities of display, the designer must re-consider the artifact itself. What qualities of this artifact ask to be called forth? How is the experience of this artifact in light and in darkness changed? Which affects me most? How long do I wish to preserve this artifact? These questions, as discussed above, provide insight into the various spectrums, along which the nature of the artifact falls. This nature allows for a second entity to be introduced. This second entity, display, might be a pedestal if the designer desires an open and obvious connection to the lighting, or it could be along the lines of the Tokonoma where the object experienced is set in mysterious shadow.

This dialectic between the artifact and its display is in a tension of many forces. The body feels this tension, like a string held taught between two hands. Within this the subject can be invited to experience the artifact in a new light: as artifact, as treat-ed, as made, as instructive. However the subject can also consider it a mere object of use, and even litter. Here the designer comes into play, deciding its proper display. Some manners of display, briefly elucidated above, are examples of considerations the designer can choose from. This insight was brought forth through phenomenological investigation into the qualities of the artifact that incessantly recede and come forth. These include the reconstitution of meaning from object to artifact, the spectrum of complexity, the spectrum of invitation, the spectrum of proximity, and the implications of other environmental qualities. As demonstrated, these qualities are not right or wrong attempts at a solution, but matters that are up to the designer to settle. The designer may decide how the artifact will be presented- in a way that attention can be drawn to the insightful forces,<sup>12</sup> which created, aged, sculpted, or simply used it. This is insightful and instructive to anyone relating to its being made. It only makes sense that an artifact, whether for the few or for the masses, should be considered with a designed assembly for unfolding. Once these qualities are unfolded, the consideration of the experience of this urn, mechanical pencil, toy mouse, or chair can be care-fully designed and imagined. This display enhances the perception of the user to perceive clearly, or subtly, the invitation to venture into the artifact as the designer first experienced it.





## Endnotes

1. As a sign of oppression, not for what it really is disconnected from signs and opinions.
2. This problem does not deal with practicality, but with place.
3. Husserl, refers to the world where every experience is about creating and synthesizing meaning.
4. This is because objects are treated for use and not for an unfolding of insight about something.
5. This perhaps deals more with the way we deal with the things around us, and our susceptibility to be swayed by outside forces. It perhaps creates an argument for why marketing works so well.
6. For the object's well being is not a fully fundamental part of its display. This might seem extreme, but display is not concerned with safety so much as its unfolding. Yet safety might be considered with an object, whose later use is necessary.
7. The sense of restrictiveness shrouds the artifact in a level of curiosity. It presents my body to become a tool of inquiry as to what is so valuable. This curiosity can also appear in the treatment of objects solely for safety. This deals with memory about how to combat wear, rather than the proper experience of its qualities. However, safety too is an essential structure in the phenomenon of display that can vary from secluding to endangering the artifact.
8. Displays also have an unfolding of their own characteristics. It is up to the designer to sculpt these characteristics in the direction of the artifact.
9. This suggests that instructive qualities also appear to fall along a spectrum. That is to say that the instructive qualities, which constitute the insight (of those interested), may be more or less intense (to my consciousness) depending on the entity. On one end is the simplistic object, the other end of the spectrum is the complex artifact.
10. This, too suggests that the age of the pencil does not constitute it as an artifact, contrary to the typical appearance of artifacts the way that museums offer their experience.
11. This is where safety conflicts with the structure of the spectrum of invitation. The Plexiglass here could lead to a level of restrictiveness (but not intimacy) rather than insisting that it be experienced. This is a fragment between the best experience of artifacts and their actual placement in society- where the opportunity for their harm becomes more prevalent.
12. Or people.
13. Concluding Remarks: It is most apparent here that this study of the display of artifacts need not stop at the scale of a chair, or any museum scale. It can be taken into much farther-reaching fields dealing with the composition and assembly of materials. Architecture must deal with these same essences of exposure, material, lighting, shadow, as well as other desired qualities, which are too numerous to name here. Some concepts of this choreography of the invitation can perhaps even be extended to the scale of entire cities.
14. References:
15. Koukal, D. (2006). *Detroit Detritus*. Dichotomy , 1-15.
16. Mallin, S., & Neimanis, A. An Unpublished Manuscript on the Method of Body Hermeneutics. In D. R. Koukal (Ed.).
17. Ruishû, K. S. (1933). *TOKONOMA-SHÛ IV*. Tokyo Showa:8, Japan: Kyôyôsha.
18. Sverre Fehn. (1997). New York, NY: The Monacelli Press, Inc.

## References:

1. Arnheim, Rudolf. *The Dynamics of Architectural Form*. : based on the 1975 Mary Duke Biddle lectures at the Cooper Union Berkeley : University of California Press, c1977.
2. Merleau-Ponty, Maurice. *Phenomenology of Perception*. London: Routledge&Kegan Paul, 1962. [Originally Published in 1945]. Translated by Colin Smith. Preface.
3. Heidegger, Martin. *Being and Time*. Albany, NY: State University of New York Press, 2009. [Originally Published in 1927] Translated by Joan Stambaugh.
4. Aleksandra Wagner. *The Nature of Demand*. Part of *Radical Reconstruction*. 1997. Princeton Architectural Press. New York, NY. "For an architect, to be means to occupy (and to do so consciously) the limit of a former knowledge and to claim it as a site. Rather than the sum of how's directed to others, the method itself an extension of limits- is for Woods the ways and why's."
5. Barthes, Roland. *The Pleasure of the Text*. Hill and Wang. 1975. p 10
6. Chandler, Daniel. <http://users.aber.ac.uk>. Referencing: Saussure, Ferdinand de ([1916] 1983): *Course in General Linguistics* (trans. Roy Harris). London: Duckworth. 04/24/2014
7. Frampton, Kenneth. *Rappel a l'ordre*. From *Architecturally speaking : practices of art, architecture, and the everyday*. London ; New York : Routledge, 2000.. 178. 9/10/2013
8. Frascari, Marco. *The Tell the Tale Detail*. From *Theorizing a New Agenda for Architecture*. Princeton Architectural Press. New York, NY. 1996.
9. Safont-Tria, Jordi. *The Autonomy of Color*, from Stephen Holl's *Color Light Time*. P 20. 8/27/2013
10. Kerouac, Jack. *The Subterraneans*. Grove Press. New York, NY. 1958.
11. Selz, Peter. *Mark Rothko*. 9. Museum of Modern Art (New York, N.Y.) 9/24/2013
12. Sterritt, David. *The Beats*. Oxford University Press. 2013.
13. See Case Studies "Claude Monet's Cathedral at Roen"
14. Barragan, Luis. *San Cristobal Stables*. Silverman, Steve. Archdaily 8/28/13. [www.archdaily.com](http://www.archdaily.com)
15. *The Enigma of the Hour*. Giorgio De Chirico. 1910-11. Private Collection. Modern Art II-Test I. 8/28/13. [www.studyblue.com](http://www.studyblue.com)
16. Holan, Jerri. *Norwegian Wood*. p15. 1990. Rizzoli International Publisher. New York, NY.
17. Steven Holl [videorecording] : the Nelson-Atkins Museum of Art, Bloch Building, Kansas City, MO / produced by Checkerboard Film Foundation ; produced by Edgar B. Howard ; directed and edited by Tom Piper. As in Stephen Holl's writings which suggest a strong tie to phenomenology both in

language and in approach to material as seen in modern architecture documentaries.

18. Nash, David. Forms into Time. Abrams. October 1, 2008.
19. Canadian Museum of Civilization. Haida Gwaii. 2010 йил 1-April. 2013 йил 2013-October <<http://www.civilization.ca/cmc/exhibitions/aborig/haida/havhg01e.shtml>>.
20. Davis, Carlo. Atlas, Oldest Commercial Shipwreck In Great Lakes History, Discovered Near Oswego (PHOTOS) . 2013 йил 29-July. 2013 йил 20-October <[http://www.huffingtonpost.com/2013/07/29/atlas-oldest-commercial-shipwreck-great-lakes\\_n\\_3672342.html](http://www.huffingtonpost.com/2013/07/29/atlas-oldest-commercial-shipwreck-great-lakes_n_3672342.html)>.
21. La Salle-Griffon Project. An Exposition of Historic Significance: The Search for the Elusive Le Griffon. 2010. 2013 йил 18-October <<http://greatlakesexploration.org/expedition.htm>>.
22. Michiganartifacts.org. Michigan Iron Mines. 2013 йил 16-October <<http://www.miningartifacts.org/Michigan-Iron-Mines.html>>.
23. WHITE, STEWART EDWARD. THE GREAT LOG JAM. FRANK LESLIE PUBLISHING HOUSE. <<http://catskillarchive.com/rrextra/lgjam.Html>>.
24. Wikipedia. Kiidk'yaas. 14 July 2013. 10 October 2103 <<http://en.wikipedia.org/wiki/Kiidk%27yaas>>.
25. Woods, Lebbeus. Michaelangelo's War. 2012 йил 22-may. 2013 йил 10-december <<http://lebbeuswoods.wordpress.com/2012/05/22/michelangelos-war/>>.

## Images:

1. Painting of The Portal of Rouen Cathedral in Morning Light. Claude Monet. J. Paul Getty Museum. 8/28/13. [www.getty.edu/art/gettyguide/](http://www.getty.edu/art/gettyguide/)
2. Painting of Kathedrale von Rouen (Das Portal bei Morgensonne, Harmonie in Blau). Claude Monet. 1893. Musée d'Orsay. 8/28/13. The Yorck Project: 10.000 Meisterwerke der Malerei. DVD-ROM, 2002. ISBN 3936122202. Distributed by DIRECTMEDIA Publishing GmbH.
3. Painting of Rouen Cathedral Facade (Morning effect). Claude Monet. 1892-1894. Museum Folkwang. 8/28/13. The Yorck Project: 10.000 Meisterwerke der Malerei. DVD-ROM, 2002. ISBN 3936122202. Distributed by DIRECTMEDIA Publishing GmbH. Gallarus Oratory. 6th-9th cent. Dingle Peninsula. Barbara McMahon. 2002. 9/06/13.
4. Photograph. Cathedral. Rouen, France © Monceau. 9/25/08. <[www.flickr.com](http://www.flickr.com)>
5. Luis Barragan | San Cristobal Stables | Silverman, Steve. Archdaily 8/28/13. [www.archdaily.com](http://www.archdaily.com)
6. The Enigma of the Hour. Giorgio De Chirico. | 1910-11. Private Collection. Modern Art II-Test I. 8/28/13. [www.studyblue.com](http://www.studyblue.com)
7. James Turrell. Afrom, From First Light Series | <http://jamesturrell.com/artwork/first-light-afrom/>
8. Kaupanger | 12th century. Mica L Reisler. 15 July 2010. 9/06/13. [www.commons.wikimedia.com](http://www.commons.wikimedia.com)
9. Bugge, Gunnar; Mezzanotte, Bernardino. Stavkirker. Grøndahl og Dreyers Forlag AS. Oslo. 1993
10. Google Maps
11. 1950 Medium: Painted bronze Dimensions: 23 x 23 5/8 x 19 in. (58.4 x 60 x 48.3 cm) Classification: Sculpture Credit Line: The Muriel Kallis Steinberg Newman Collection, Gift of Muriel Kallis Newman, 2006 Accession Number: 2006.32.18 Rights and Reproduction: © 2011 Artists Rights Society (ARS), New York. [www.metmuseum.org](http://www.metmuseum.org)
12. Ombra Della Sera, Guarnacci Museum. Volterra ,Italy. 300 B.C. Flickr.com. Karen Walker
13. Site of Silencel, Pomodoro. 1999. Grand Rapids, MI. ©Vaclav Sedy. [wikipedia.com](http://wikipedia.com)
14. Roden Crater, Acton. James Turrell. Arizona. USGS. 9/13/13. [www.wikimedia.com](http://www.wikimedia.com)
15. Giacometti, Alberto. La Foret. 1950 Medium: Painted bronze Dimensions: 23 x 23 5/8 x 19 in. (58.4 x 60 x 48.3 cm) Classification: Sculpture Credit Line: The Muriel Kallis Steinberg Newman Collection, Gift of Muriel Kallis Newman, 2006 Accession Number: 2006.32.18 Rights and Reproduction: © 2011 Artists Rights Society (ARS), New York. [www.metmuseum.org](http://www.metmuseum.org)



