

FUTURE HISTORIES

a thesis by Benjamin Ahearn and Carey Moran

Future Histories

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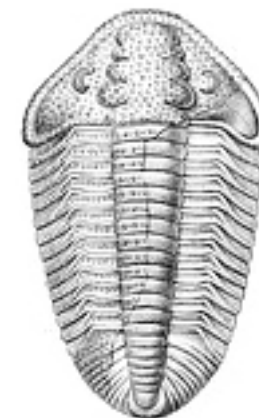
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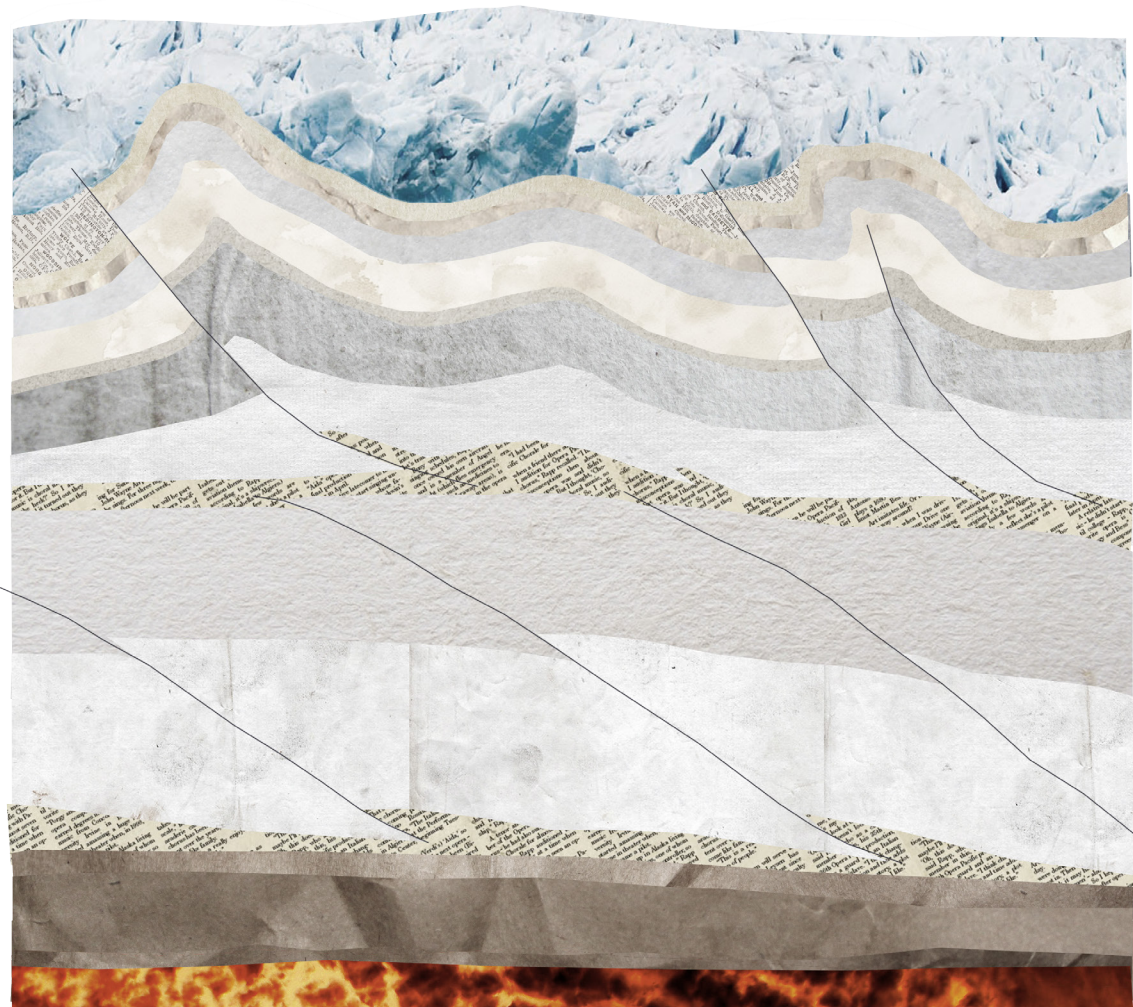
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abstract

This thesis began with a study of Harbor Island, to gain a better understanding of place, both as a spatial, as well as a temporal entity. Expanding our comprehension of time beyond the Anthropocene, has revealed the shortsighted nature of our contemporary constructs. Today, our lust for speed perpetuates this narrow mindset and restrains the imagination. As an alternative, slowness provides the space necessary to let the mind wander. Challenging the permanence of our constructs, decay reveals the passage of time and sparks our imagination about potential futures. This juxtaposition is a lens to critically view our built environment. Rather than providing a solution for how to build in the future, this thesis initiates a paradigm shift in our perception of time and its influence on the way we build.



Dedicated to the trilobites.



<i>Foreword</i>	1
<i>Prologue</i>	3
<i>Introduction</i>	11
<i>1. Ruminations</i>	13
<i>2. Land of Water</i>	31
<i>3. Memory and Dreams</i>	47
<i>4. Methods</i>	59
<i>5. Cairns</i>	71
<i>Conclusion</i>	97
<i>Epilogue</i>	99
<i>Appendix</i>	129

foreword

by Elizabeth Golden and Rick Mohler

This project began as an investigation of an important, visible, but largely unknown site on the downtown Seattle waterfront. The impetus for the investigation was the inevitable impact that climate change, in the form of sea level rise, will have on the site. However, as is occasionally the case with thesis projects and always the case for the best of them, the project became a vehicle in pursuit of a deeper line of inquiry. It prompted an exploration of time, not as an abstraction, but as something understood through space, material and decay. By extension, the thesis muses upon our individual and collective mortality, the longevity of our species and our place in geologic time thus bringing the condition of climate change full circle to its origins.

More importantly, the thesis is an exploration of and an exercise in collaboration. Carey and Ben began in the same studio nearly four years ago. A year later they, together with classmate Kristin Karlsson, collaborated on a student design competition that garnered national attention. Following individual internships in Copenhagen, they chose to collaborate again on their thesis. When asked how they work together by a critic in the thesis final review, they both responded with a blank stare as if to say that it's not how or why they work together, they simply do so. In this respect perhaps more than any other, we find the thesis to be exemplary and something we hope to see more of in the future.

prologue
a manifesto



Today's rapid pace is shortening humanity's perception of time. The acceleration of technology brings the future to us at an increasing rate. Our rapid consumption of the world is casting off the imagination: instant gratification leaves no time for the mind to wander.

fig. 1 Monster, Frank Machalowski



This insular mindset is obscuring our understanding of the big picture.

*fig. 2 Seascapes, Hiroshi Sugimoto
fig. 3 Rock Folds, Martin Eager*



Expanding our awareness of time into geologic scales puts humanity's temporal existence into perspective. Removing our anthropocentric blinders yields an understanding of our place within this greater context.

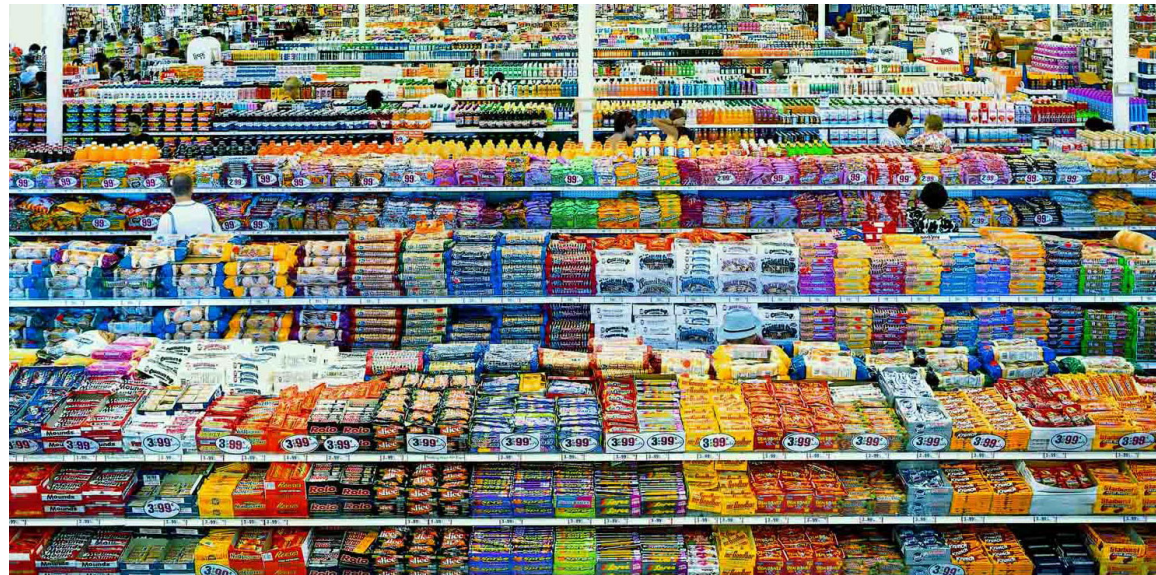


Our constructions will crumble under the cyclical nature of time. It is our collective mind that will transcend the physical.

*fig. 4 Sichuan earthquake, 12 May 2008, 8 magnitude
fig. 5 Ryoanji, Kyoto, Japan*



Deceleration provides oxygen for the mind, sparking the dormant imagination. Cultivating slowness is a catalyst for an altered state of mind. Slow down to look ahead.



The human brain is at the root of both creativity and destruction; through innovation we become less instinctively connected to earth. It is through slowness that we can reconnect.

Recognizing that we are merely an instance in earth's story opens a possibility to design for slowness. Resisting the impulse of speed through cultivating the meandering mind can help us to recover an awareness of place, both in time and space. Considering larger historic and future contexts results in better informed decisions within the present.

fig. 6 Oil Fields #19, Edward Burtynsky
fig. 7 Manufactured Landscapes, Edward Burtynsky
fig. 8 Tree Drawings, Tim Knowles

introduction

a spark



This thesis began with a study of place. Curiosity about Harbor Island led to a comprehensive recognition of the natural and human layers of site, as they exist on both temporal and spatial scales. Delving into the history and potential futures of Harbor Island uncovered the shortsightedness of our constructs. The island is indicative of a greater anthropocentric mindset that fails to respond to the temporality of place.

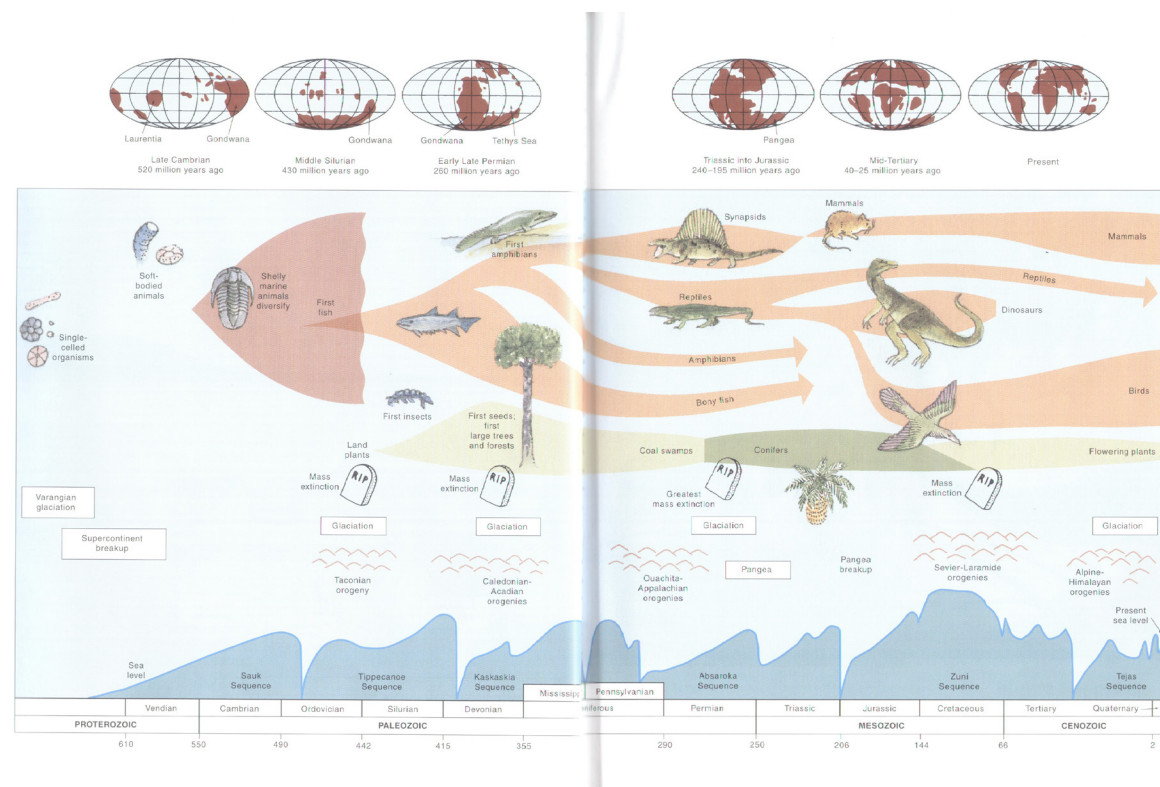
The existence of Harbor Island is both a cause and a manifestation of shortsighted thinking. When the tide flats were filled in to create the island, it was a solution designed to fulfill an immediate need. This hurried inception counteracted the inherent and often inevitable natural cycles of place. Today, the Port of Seattle continues to operate within this anthropocentric paradigm, resulting in short term decisions, perpetuating a rigid approach to constructing.

Advances in technology further accelerate our human oriented progression, distancing us from temporal and physical place. Our rapid consumption is casting off the imagination, thwarting our most valuable tool for envisioning beyond today. Our brains are at the root of this destructive, forward progress, providing the creativity for greater speed, in turn distancing our minds. It is this dormant, imaginative mind that needs to be leveraged against the solution-oriented brain to give rise to change. All it needs is a spark.

Proposed as a deceleration in the very place that perpetuates our acceleration, this thesis uncovers the root of the problem: speed. Harbor Island is a site of goods and commerce that fuels the city, the land is a clear illustration of the efficiencies technology has imposed on us. Engineering the former river delta into a site for industry, the island has become a machine to funnel resources to and from the city. Performing this singular task, Harbor Island is absorbed in supplying a growing city. Ironically, this distances the island from its recipients, remaining at the periphery of our city and our minds. Without easy access to the island, or an understanding of what truly goes on there, Harbor Island is a hole in nearly all Seattleites' mental map. The vast scale and speed of machinery at work alienates visitors, making the island a truly threatening experience.

This thesis is a prompt to slow down, encouraging a curiosity and discovery of place. Spatial thresholds create a pause, and material juxtapositions reveal the passage of time. Experienced in the epicenter of speed, contemplation frees the imagination to wander. Acknowledging the past, present and future allows for informed decisions to be made. Challenging the motives behind our constructs today initiates a paradigm shift in our perception of time and our role we play within it.

fig. 1 Elliot Bay from the air



It is widely known that human existence is only an instance in the history of the earth, yet for most people the concept of deep time is more difficult to comprehend than it initially seems. “An abstract, intellectual understanding of deep time comes easily enough – I know how many zeros to place after 10 when I mean billions. Getting it into the gut is quite another matter.”³ As a means of contextualizing such a massive timescale there have been countless analogies created to relate known lengths of today to the entirety of earth. For example, if the age of the earth were represented in a linear mile, the time humans have existed would be represented in the last inch. In all of these examples, no matter how it is represented, the human race does not come into the picture until the very last instance. The message embedded in these analogies is clear, and they help to provide a visceral understanding of the depth of time.⁴

Our collective lack of comprehension of deep time stems from our anthropocentric mindset. Humans are guilty of a self-indulged, temporal view that places us at the beginning, middle and end. Many of the major world religions perpetuate this myth; some even presuppose that the earth was created specifically for us. These anthropogenic thoughts create blinders on our temporal understanding, restricting a greater

fig. 1 Earth History II

comprehension of time as it pertains to the entirety of earth. Despite our extremely short time on this planet, our human-centric actions have become geologically visible:

Early in the 21st century...some Earth Scientists proposed adding to Lyell’s epochs by distinguishing a new and still current *anthropocene* (“humanly recent”) epoch. This recognized the profound material impact the human species has already had on the Earth, during the geologically minuscule time-span since the start of the industrial revolution.⁵

Even in our recognition of humanity’s brief existence lies this anthropocentric mindset. This new, and still debated, epoch is being misconstrued as humans damaging the earth, not our continued existence. Even as the antagonist, we are at the center.

Ultimately, this restricted comprehension of time is only detrimental to us. Through the geologic study of fossilized records it has been proven that humanity’s existence is miniscule. Similarly, it has also been proven that species can die off just as quickly as they sprang into existence. Yet, today, it would appear that none of this knowledge affects the decisions we make as a species. Plundering our way into an uncertain future seems inevitable; we can barely comprehend tomorrow, let alone the next century or millennium. In the end, the shortsighted decisions we make about the allocation of our resources only negatively affects us, not the planet. While we drive our own species closer to extinction, we will never be able to eliminate the mass of earth. Our planet is guaranteed to outlast us.

While there was every reason to suppose that the Earth’s physical future as a planet would be as lengthy and eventful as its deep past, it seemed less certain that it would in the long run remain habitable by *Homo sapiens*.⁶



Perceived Permanence

Permanence is an illusion that civilizations have sustained for centuries. Threatened by the vulnerability of life, and motivated by our fanatical desire to leave an impact greater than ourselves, we create monuments in the landscape. These constructs are massive in scale and durable in their materiality; they are designed with the intention of thwarting time.

The lust for perpetuity stems from our lack of understanding about time itself. It is an innate human quality to conceive only of time as it relates to us, on both a personal and societal level. As such, it is believed that an object achieves a degree of durability when it outlasts our own lifespan, or progressively, the object attains permanence if it lasts for centuries. Collectively, our anthropocentric mindset constrains us to define objects that endure as being 'permanent.'

As the origin of basic architectural space, the cave dwelling gave rise to the manipulation of earth as a material to create shelter. Eventually, with the progression of civilization humans began transforming the earth for more superlative means including ceremony, religion, defense, and commerce.⁷ These massive structures of stone and dirt, fighting the powers of erosion, are the evidence of our past. Today, our constructions are so distanced from the raw materials of earth that the manipulation of dirt has transferred into the

fig. 2 Moai, Easter Island Heads
fig. 3 Double Negative, Michael Heizer



realm of artists, as evidenced in the recent Land Art movement. Outside of the context of a gallery or museum, these earthworks convey the paradoxical nature of the human relationship with Earth:

The artists' intentions are as diverse as their end results, but all of them contribute to the spirit of our time by enabling us to perceive, as if with newly opened eyes, the scope of humankind's past and potential imprint on the world.⁸

In reality, despite our preconceived notions, nothing physical is permanent. Even the great and stoic mountains of the world are subject to erosion. Through this process the monuments of man and nature alike will be collapsed by microscopic sedimentary particles suspended in a fluid, silently bombarding the world we know today. Erosion *will* level all; it is merely a matter of time.

In fact, the most *permanent* things we have are not the most durable and massive, but rather the most ephemeral and light. These things may elude the physical world, but they have the ability to adapt, responding to inputs, and shifting meaning over time. These ideas will remain relevant, while the objects designed for specificity and efficiency will become obsolete the fastest and result in destruction.⁹ With the physical relic removed, the memory is what endures. There is futility in our constructs; their permanence is a perception, not a reality.

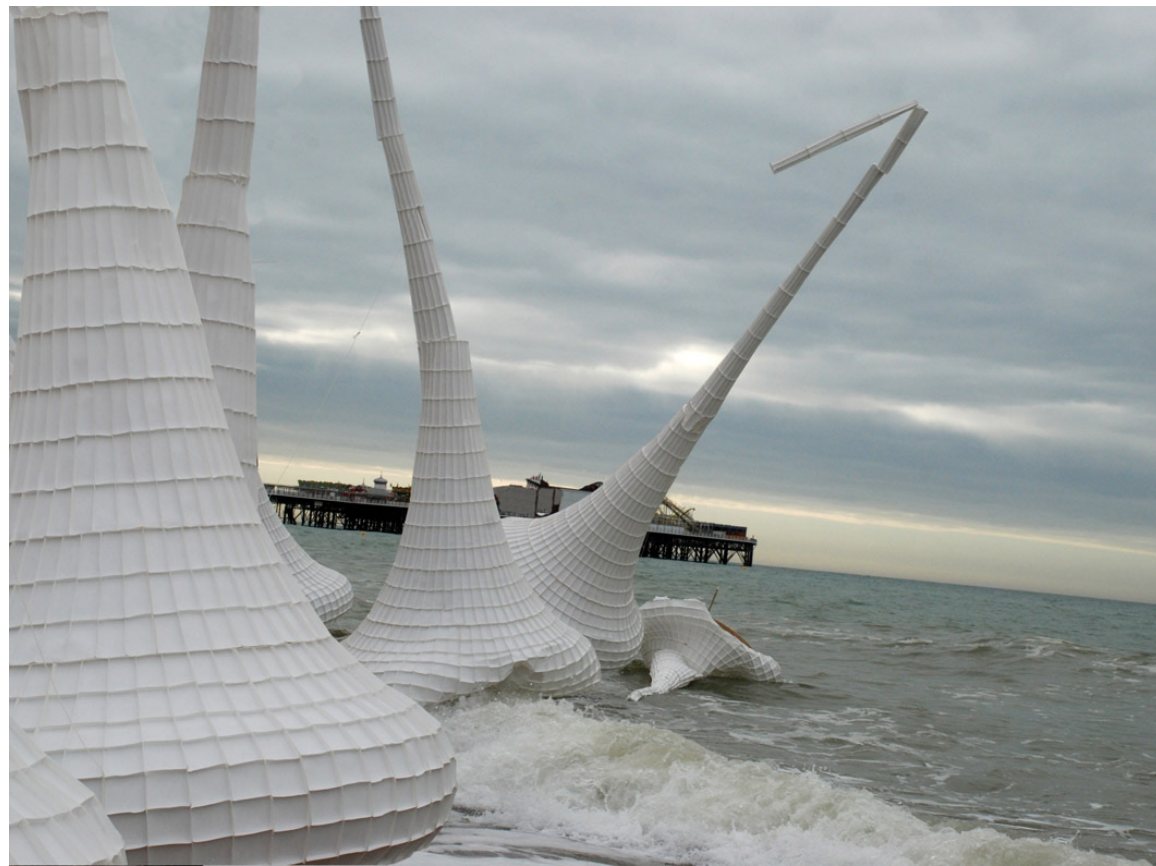


fig. 4 *Collector*, John Grade
 fig. 5 *Elephant*, John Grade

Decay

Decay is a visual and tactile transcript of conversations between humans, nature and time, played out on a particular object's material characteristics. Allowed to continue communications with time, as opposed to its museum counterpart, the deteriorating object is perpetually producing new meanings.¹⁰ Animated through a constantly altering visual state, the object's materiality is thrown into focus. Continually accumulating signs of age, the decaying object becomes "the emotional and existential mirror of our lives."¹¹

Just as humans are constantly changing in time, things left to experience the inevitable decay of time are never finished. Preventing things from continuing to transform, such as preserving an artifact, also arrests its potential for a life of continued meaning. Through physical change the decaying object perpetuates its cognitive value. Capitalizing on the generative power of time, artists today are increasingly regarding artworks as seeds, "seeds for processes that need a viewer's (or a whole culture's) active mind in which to develop."¹² Rather than produce a finished work of art, artists initiate a conversation, relinquishing control and inviting natural decay to play a role in sculpting.

Investigating the natural processes of decay, Seattle-based artist John Grade's sculptures take on a life of their own, always existing in transition. Releasing methodically crafted artworks into the morphing hands of nature isolates its material characteristics. As "vestiges of human presence," Grade's sculptures "conjugate man's mortality and temporality from within the perpetuity of nature, not outside it."¹³ Specifically designed to deteriorate, Grade's sculptures recognize the objects relationship with time, in turn making our own temporality apparent.

Whether it is stone or paper, the objects' decay serves as a means to measure the passage of time. The object itself is perceived as degrading, but this transformative state builds up a continuum of meaning that requires our perception for significance. As records of time that "appear to occupy the borderland between concrete reality and the freedom of a dream,"¹⁴ the decaying object has immense imaginative potential.



Imagination

Just like fire, imagination requires a spark. The flint can take several forms, but without space for oxygen, the fire will never start. It is this breathing room that is essential to the imagination; without ambiguity, innovation would never take place.

Historic Futures

The twentieth-century was a period of collective, optimistic visions of the future, each a reflection of the economic, political and societal systems of the time. Historically, imagining the future served as a means to celebrate and perpetuate humanity's achievements. Saddled with the problems created by yesterday's tomorrow, today's visions of the future are more bleak.

As especially elaborate images of the future, World's Fairs are portals into other worlds. Evolving with progressing technologies, World's Fairs gave its audience a glimpse into other cultures, then the future. Titled "The World of Tomorrow," the 1939 World's Fair in New York embodied a period of hope. Fresh off the heels of the Great Depression, the Fair was optimistic:

The eyes of the Fair are on the future – not in the sense of peering toward the unknown nor attempting to foretell the

fig. 6 1939 World's Fair poster
fig. 7 1939 World's Fair poster
fig. 8 1962 World's Fair poster



events of tomorrow and the shape of things to come, but in the sense of presenting a new and clearer view of today in preparation for tomorrow; a view of the forces and ideas that prevail as well as the machines.¹⁵

From air conditioning and television to the View-Master, the latest technologies on display expressed a sense of wonder and aspiration.

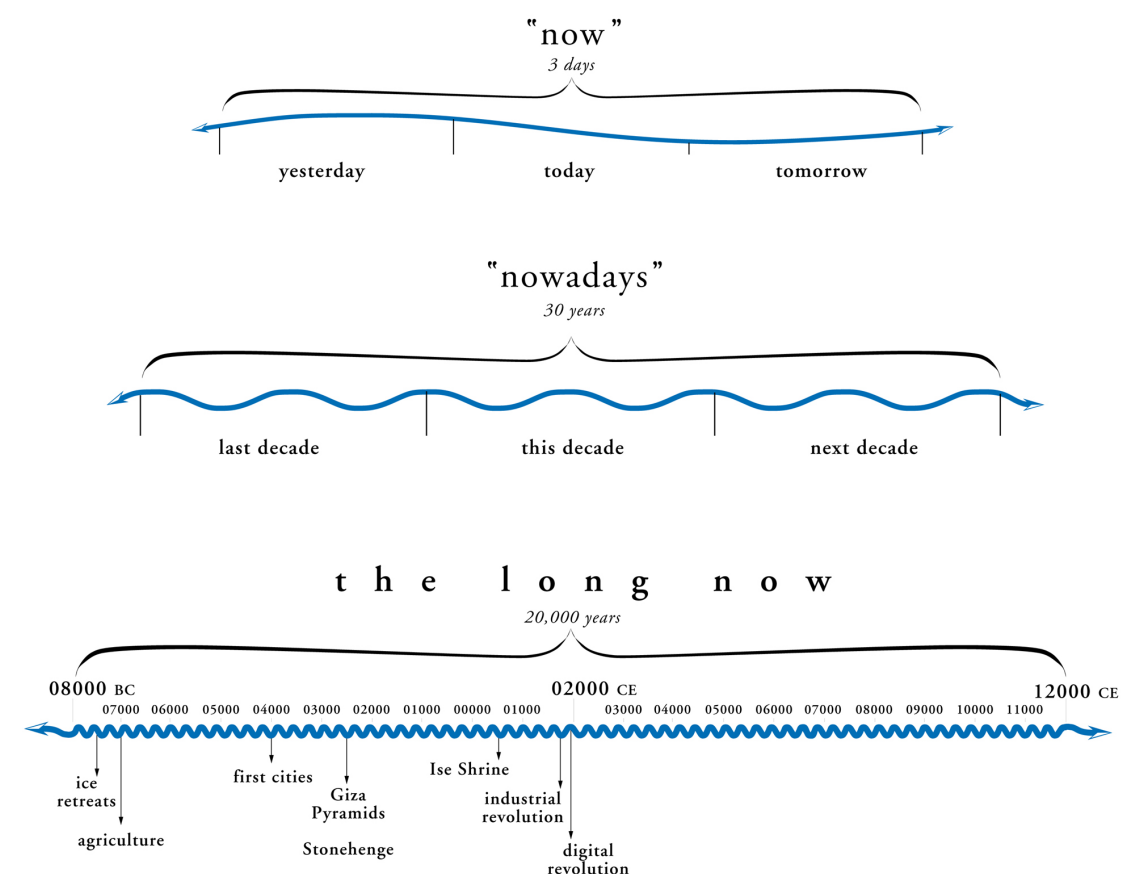
This sense of magic continued into the 1960s World's Fairs, projecting our aspirations into outer space. Having conquered this planet, both the 1962 and 1964 World's Fairs in Seattle and New York, respectively, set their sights on the galaxy. The titles of both Fairs are extremely telling of the time's mindset that there was nothing man could not achieve. Titled "Century 21 Exposition: Space Age Frontiers," the Seattle Fair was designed to "excite the visitor with futuristic visions of scientific progress."¹⁶ Indicative of the effects progress already had on our perception of the world, the 1964 Fair in New York was dedicated to "Man's Achievement on a Shrinking Globe in an Expanding Universe."

Imagining the future is no longer so magical. Our increasing awareness of the issues we have created for ourselves has resulted in solution-oriented futures. The 2015 World's Fair in Milan, "Feeding the Planet, Energy for Life," focuses on developing food sustainability. While these futures are well intended, they are attempting to solve the problems of progress with more progress. Imagination has been supplanted by solution.

fig. 9 1964 World's Fair poster
fig. 10 1964 World's Fair poster

“There is a Clock ringing deep inside a mountain. It is a huge Clock, hundreds of feet tall, designed to tick for 10,000 years. Every once in a while the bells of this buried Clock play a melody. Each time the chimes ring, it’s a melody the Clock has never played before. The Clock’s chimes have been programmed to not repeat themselves for 10,000 years. Most times the Clock rings when a visitor has wound it, but the Clock hoards energy from a different source and occasionally it will ring itself when no one is around to hear it. It’s anyone’s guess how many beautiful songs will never be heard over the Clock’s 10 millennial lifespan.”^b

- Danny Hillis



“The Long Now”

The Clock is real, yet that does not matter. Its power lies in the story, the absurdity. A sustained suspension of belief even after reality is present reveals the Clock’s true purpose: to rotate the brain.

Humans are storytelling creatures. Stories of our past ground us in the present. Tales of the future, though, lift our minds into the clouds. Recently, our minds have been tethered, held down to earth like a balloon in a child’s clenched fist. The Clock exists to loosen that grip, freeing our minds into distant futures.¹ Stretching the limits of perceived timescales, changes the outlook: “Pondering the sublime breadth of this deep time could spark within us a certain sense of awe that could inspire new kinds of reflection on our place in earth’s history.”² Attempting to steer our ideas of the future beyond mere solutions, the Clock uses the almost incomprehensible depth of time as a vehicle for activating our imaginations.

“The Sex Pistols, strictly speaking, were right: there is no future, for you or for me. The

future, by definition, does not exist,”¹⁷ hence the importance of our imaginative minds. Time is asymmetrical; we have knowledge of the past but no influence on it and no knowledge of the future but immense impact on it. This emphasizes the gravity of thinking about the future. Imagining futures far beyond a few generations from now stretches our creative muscles. In the face of such complex world issues, the imaginative mind has never been more important: “Humans are capable of a unique trick: creating realities by first imagining them, by experiencing them in their minds.”¹⁸

The past is ever expanding while the future is compressing. The rapid speed of life delivers the future at increasing rates. Tired visions of “interplanetary colonization, sentient computers, quasi-immortality of consciousness through brain-download or transplant, a global government (fascist or enlightened),”¹⁹ replay in our media, making them feel as if they have already happened. The future is collapsing onto the present. Now that it has arrived, what is the next story we tell?

fig. 11 *The Long Now*

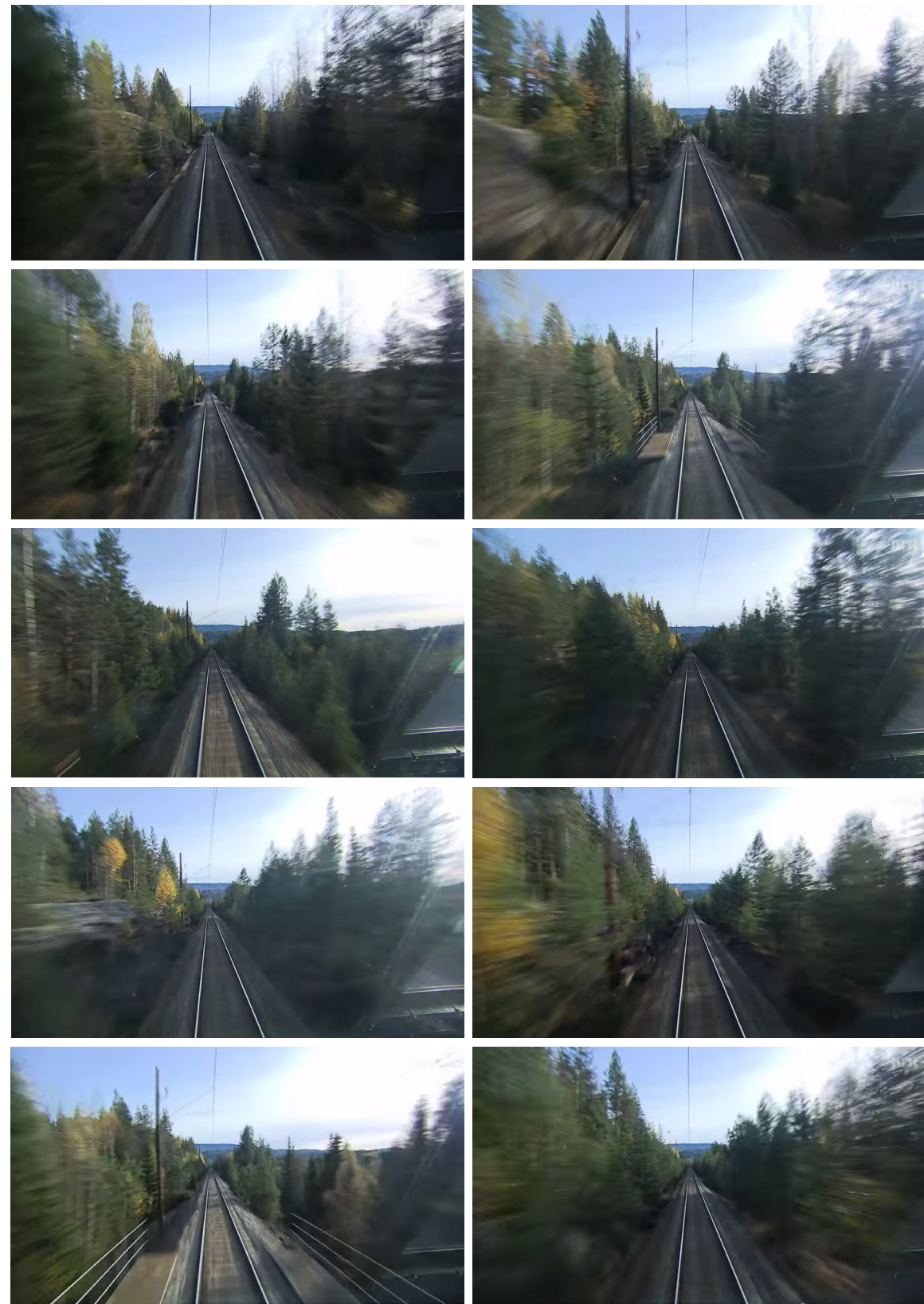


fig. 12 BergensBanen, 5:02:00 – 5:04:00, NRK

Mental Participation

In a society driven by the rapidly produced visual, imagination is falling by the wayside. The pace at which life runs today leaves no room for interpretation. Rather than actively participating, society is mindlessly consuming the world. This rapid consumption is casting off the imagination: instant gratification leaves no time for the mind to wander. Absorbing things at face value is costing our society the ability to think creatively.

Imagination both requires and shuns stimulus: a lack of input fosters creativity. A lack of stimulus can be a stimulant in and of itself. Boredom is a modern invention, and one that has gained a negative connotation. Today's media and technology are being used as a cure to the affliction of boredom. There are some, however, that are working to reverse this behavior, instead viewing over-stimulus as the culprit. Norway's largest media organization, NRK, has started a movement, in the form of a television program known as Slow TV. The program broadcasts an everyday event in real time, with little to no visual transitions. Broadcasts include a 5-day cruise along the west coast of Norway, a 7-hour train journey from Oslo to Bergen and a 12-hour burning fireplace. Seemingly mundane, the program is a foil to the rapidity of today's media:

'Hot media are, therefore, low in participation and cool media are high in participation or completion by the audience.' Slow TV is high-definition in its visual information, yet it gets its meaning from viewers' imaginative consciousness. As entertainment, it is backward: it appears to do its job by casting viewers into their own minds.²⁰

Rather than turn off the brain, Slow TV animates the mind. It is this viewer participation that gives the program meaning: "Instead of drowning out its viewers' inner lives, it seems to want to be a backdrop that can give rise to their own reflections."²¹

Social participation, as the result of imagination, has great potential to shape the city. Urban spaces that encourage creative use by the public are especially meaningful precisely because of this participation: "Waiting' buildings and spaces that are not pre-programmed evidently have an inviting, liberating effect on new users."²² The engaging physical experience in turn affects the perception of place. Active participation employs the mind, connecting both the cerebral and corporeal experiences to place. In *City as Loft*, Kees Christiaanse explains this idea in terms of our consumerist society: "Instead of being consumers, they become producers of spaces who actively contribute to shaping the city. This often leads to strong and permanent links with the specific location."²³ The physical is both the catalyst and the articulation of the imagination.

Slowness

Speed is reactive.
Slowness is reflective.

Speed enslaves us to the clock.
Slowness removes us from the linear constraint of time.

Speed keeps us skipping along the surface.
Slowness submerges us into the depths of our own minds.

Speed is insatiable.
Slowness is receptive.

Modern society is obsessed with progress, an inherently one-dimensional view of time. Advancements in civilization have revved into an autocatalytic state, which we no longer drive. Our default mode is acceleration; constantly searching for the new and improved, to save time and help us find better ways to make more, faster. This accelerated lifestyle ravenously consumes the world, inflicting a multitude of problems upon us, from stress to climate change. So engulfed are we in quickly solving these issues that we have not slowed down to assess the big picture, perpetuating the cycle of addressing symptoms, not the root cause: our rapid pace.

Existing in autopilot has cost us the ability to shift our minds into low gear. Constantly inundated with distractions, “we have lost the art of doing nothing, of slowing down and simply being with our thoughts.”²⁴ Our pondering minds have the potential to yield more creative and insightful thoughts, a uniquely human ability that we have left in the dust. Mirroring our culture of efficiency and production, our thoughts are solution-oriented and willed into existence. Stuck in this singular mindset, we fail to recognize that “some mysteries can only be penetrated with a relaxed, unquesting mental attitude.”²⁵ Measuring our progress against the clock always leaves us craving more time. It is no wonder that patient thought, with unrestricted time as its main ingredient, has fallen by the wayside.

Permitting our minds to rove without the constraint of time allows us to dig deeper, into our own subconscious and our environment. Slowness is not only a mental attitude, but also a way of being. Contemplative thought requires a body at rest, without distractions that pull us away from our immediate surroundings. Whether it is receding into our own minds or merely observing the world around us, slowness fosters enduring connections.

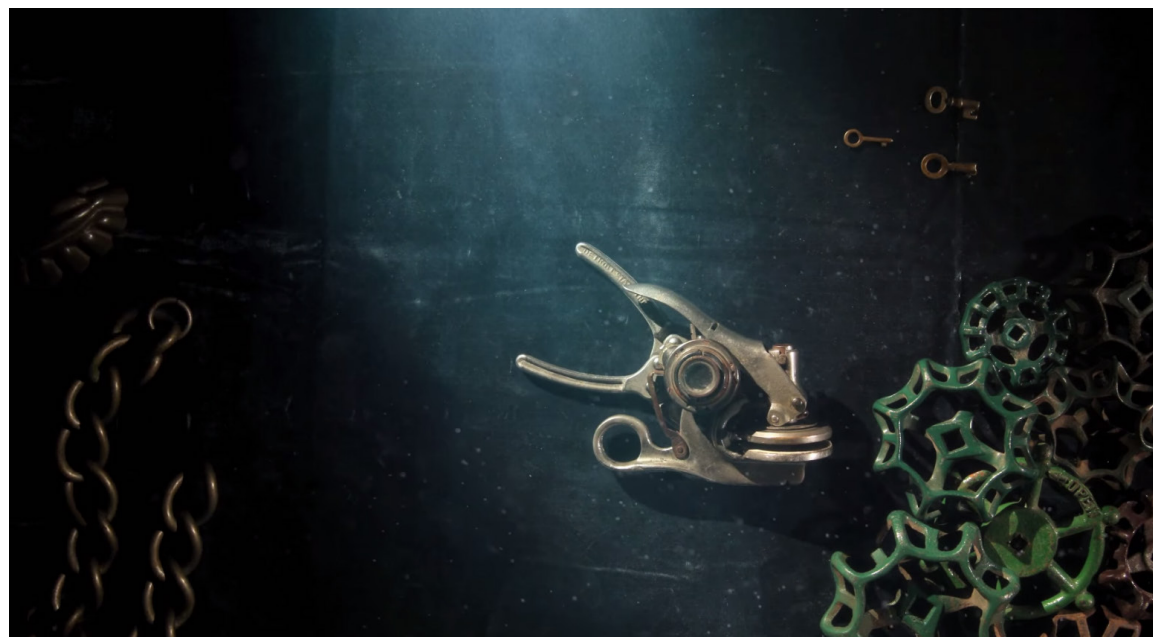


fig. 13 Seascapes: Caribbean Sea, Hiroshi Sugimoto
fig. 14 Deep Sea, PES



fig. 15 *Tied Hairnets no. 1*, Susie MacMurray

“I cannot imagine the future, but I care about it. I know I am a part of a story that starts long before I can remember and continues long beyond when anyone will remember me. I sense that I am alive at a time of important change, and I feel a responsibility to make sure that the change comes out well. I plant my acorns knowing that I will never live to harvest the oaks.”^d

- Michael Chabon

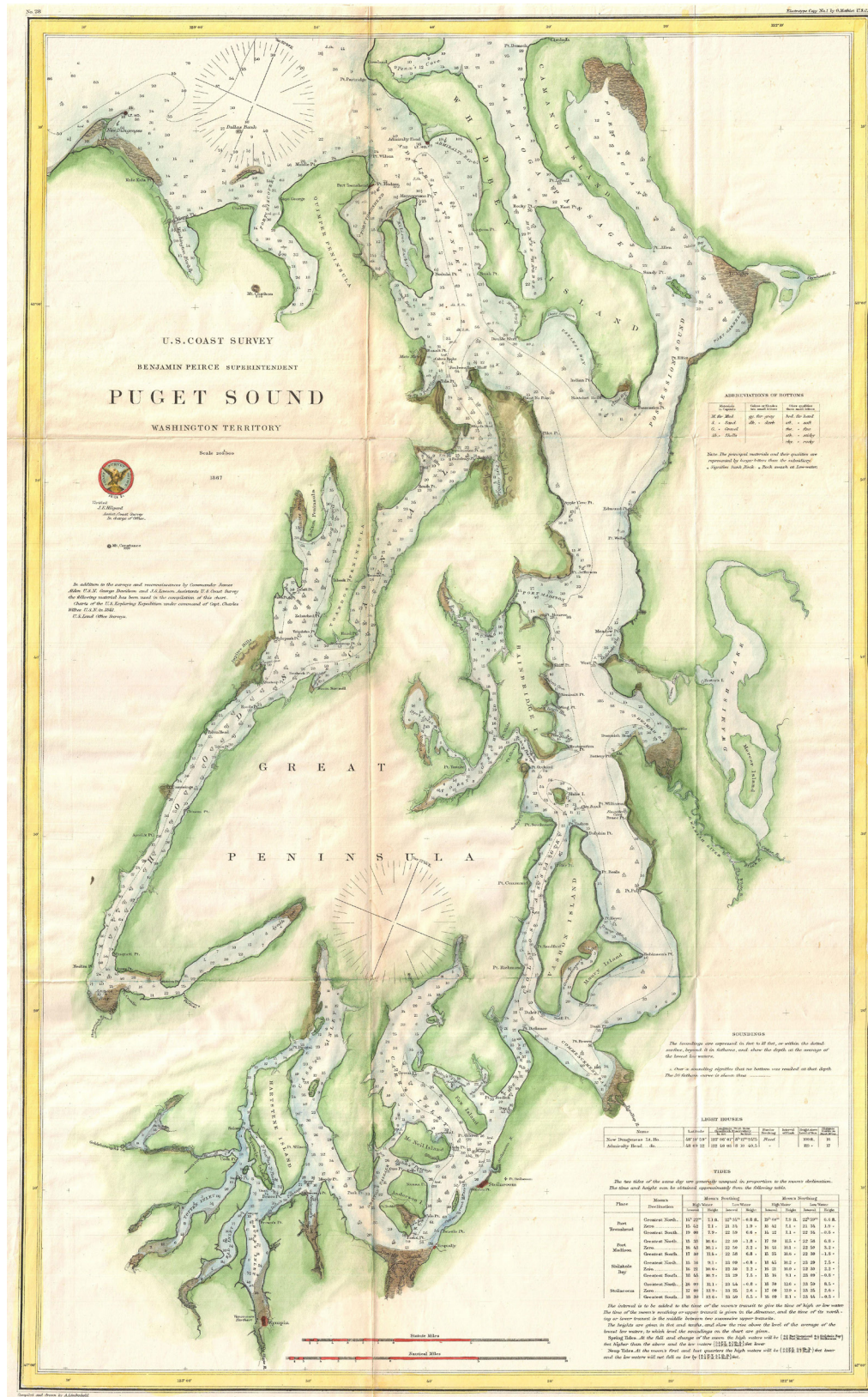


fig. 1 Survey of Puget Sound, 1867

2. *land of water*

A History of Harbor Island

When Seattle was first settled in 1851, the land rose sharply out of the water. The location of this new settlement was no coincidence; it was the convergence of stable, bountiful land along the edge of a protected, deep-water bay. This delicate but irreplaceable shoreline hosted several small piers reaching out into the deep, grappling to connect boats and floating logs to the mainland. As more timber pilings were driven down, Seattle's waterfront began to stabilize itself not only physically but also culturally, as the epicenter of growth and prosperity for this fledgling city.¹ Soon, the rapid development of Seattle began to dominate the natural features that provided the foundation for its very inception. The city was consuming nature, manipulating land for its progressive gain. The necessities of commercial activity and trade dictated the creation of transit routes along the waters edge.² Using bulkheads to support graded fill from the nearby hills, Seattle laid down not only its first commercial corridor, but also its methodology for expansion and the premise of the city's dominance over nature.

Geohistory

When the super continent Pangea broke up some 200 million years ago, the North American Plate began drifting westward.³ At this time, billions of years had already passed in the history of our earth, but this marks the beginning of the creation of Harbor Island, as we know it today. The westward continental drift creates a subduction zone along the west coast of North America, where the Pacific Plate slips below the surface. This is a process overburdened with friction; building up massive forces induces the uplift of bedrock, creating mountains. Periodic releases in friction cause earthquakes, and melted minerals from the submerged Pacific Plate work their way up through the crust as molten lava, spewing from the Cascade Volcanic Arc. Over time, volcanic activity built up a plateau of lava, ash and volcanic debris at the base of the Cascades.⁴ This set the scene for the planet's most recent ice age, which began in the late Pleistocene. During this epoch, approximately 12,000 years ago, the Puget Lobe (of ice) advanced south twice, covering the site of present day Seattle each time.⁵ First, the Possession advance scrapped the surface and retreated, then the Vashon advance came down from the north:

Grooves and striations carved on bedrock and elongated drumloidal hills and flutes indicate directions of movement of Vashon ice. At its maximum, the Vashon ice extended to approximately 25 km south of Olympia. Ice was more than 1,830 m thick near Bellingham and about 915 m thick near Seattle.⁶

After gouging the surface, the Vashon glacier began to recede, in its wake an enormous freshwater lake rose, accelerating the diminishing glacier by calving its edge.⁷ With the glaciers gone, sedimentary movement, vegetative growth and volcanic eruptions began to sculpt the land. Eruptions of Mount Rainer sent deluges of rock, ash and mud cascading down into the glacial grooves below.⁸ This is how the Green River Basin was formed. "The Green River is one of a series of rivers that drains west from the Cascade Range to Puget Sound. Its basin covers 1,240 km² ranging from alpine wilderness headwater to its densely urban terminus at Elliott Bay in Seattle."⁹ As the Duwamish River meanders down from the mountains, its waving channels collect sediments and organic debris from upstream, transporting them down to the delta on Elliot Bay.

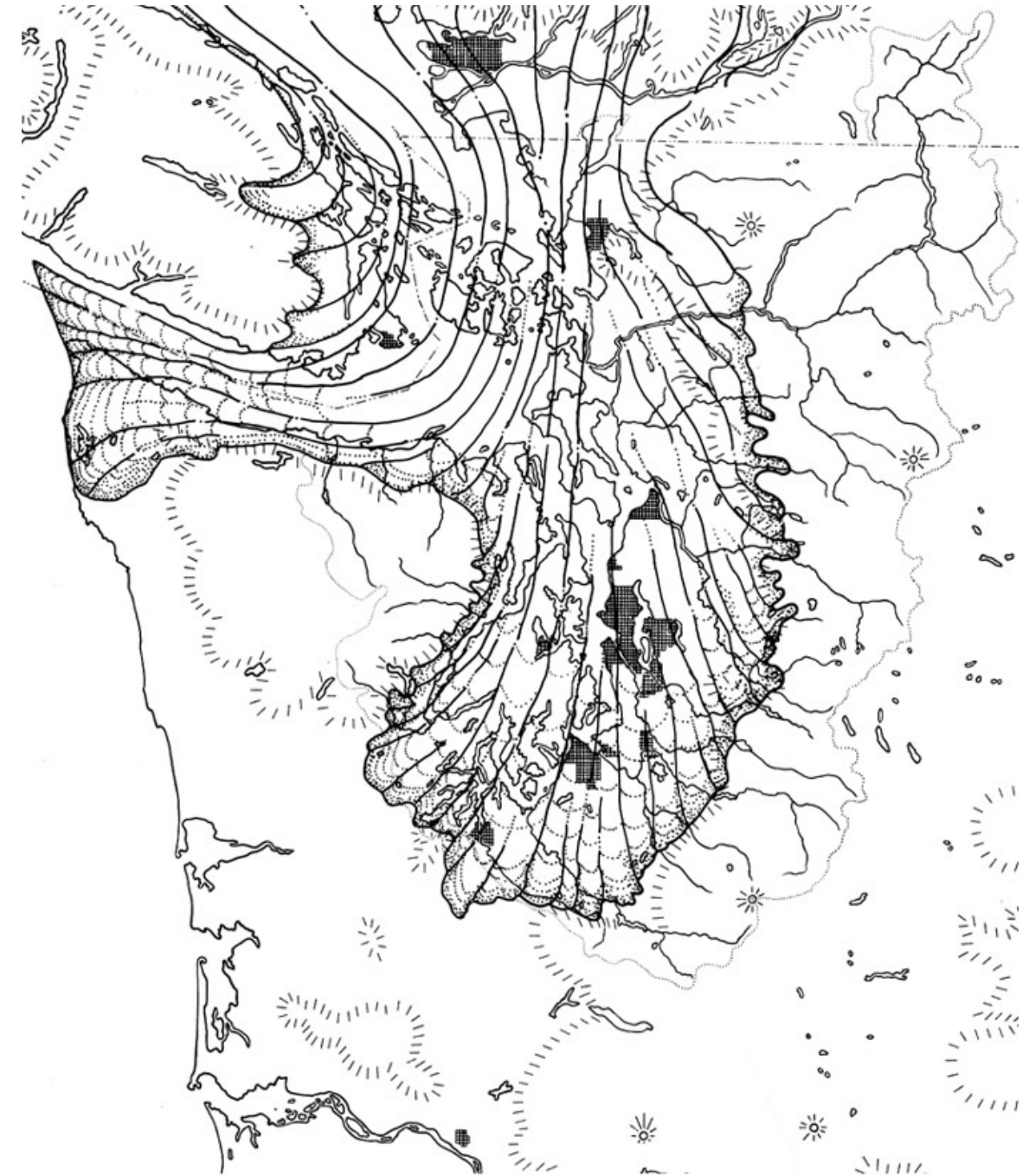


fig. 2 Vashon Glaciation of Puget Sound

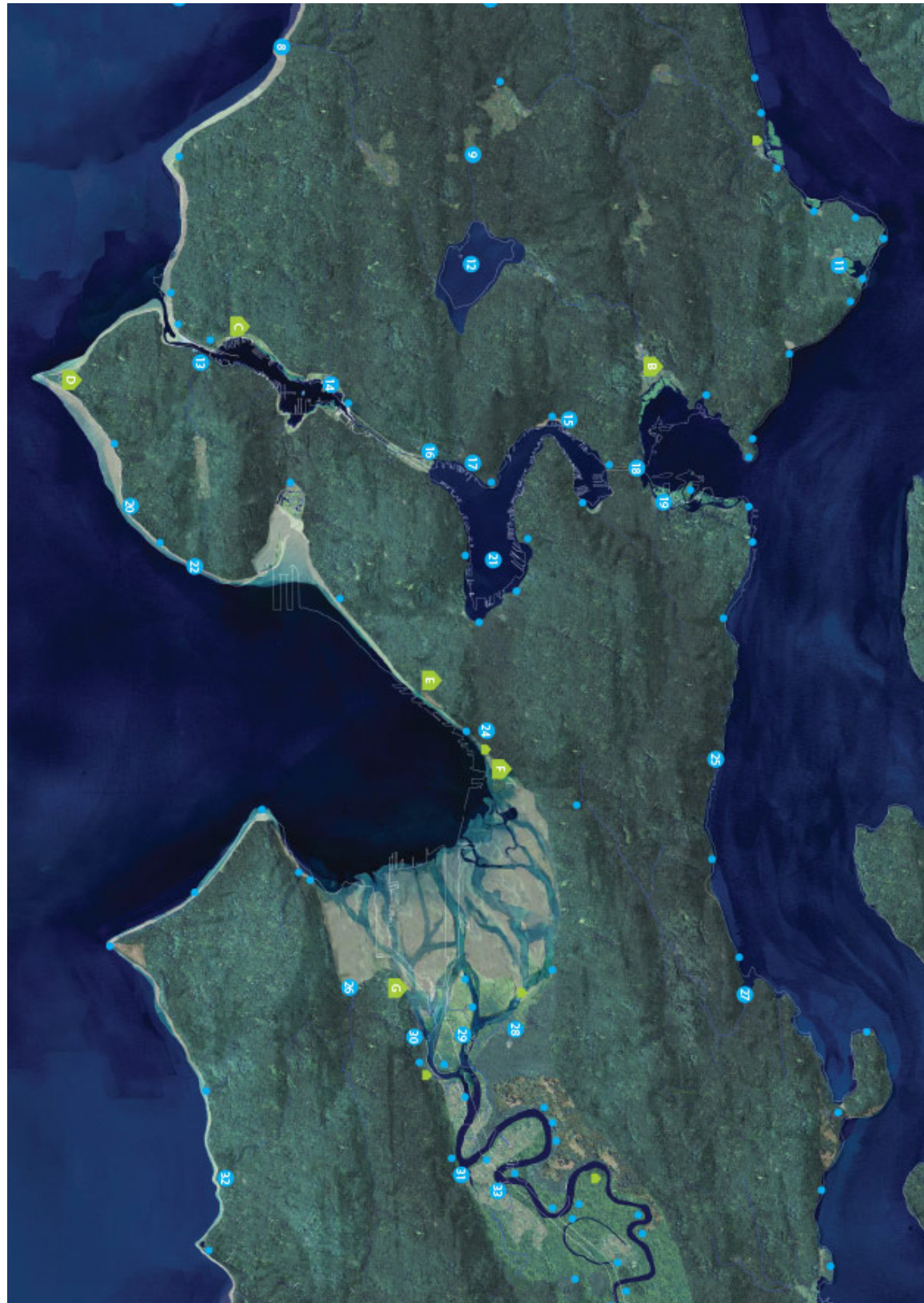


fig. 3 *The Waterlines Project, Burke Museum*

Delta

Long before western settlers came to the region, the site of Harbor Island served as a place of collection and distribution, at the delta of the Duwamish.¹⁰ As the meandering river looped back and forth across the alluvial flood plain, it spread out and slowed down. Once the river reached the delta proper, the main channel broke down and dispersed into a complex network of marshy waterways. These courses changed constantly, shifting with the weather and seasons. As the river fanned out into the delta, the slowing current lost its velocity and began dropping the rich alluvium suspended within the water column.¹¹ This sedimentation demarcated a significant transfer of nutritional resources from the upstream watershed of the Duwamish down to the coastal and marine ecosystems. Here, in the lower and slower aquatic environments, the nutrients provided the basis of life for a diversity of flora and fauna; this provided a bountiful resource of food for the native people. It was a primal landscape, dominated by the cycles of the earth, ever changing, adapting and providing.

The Necessity for Land

In the first 50 years, the settlement of Seattle grew exponentially. Central to the growth was the waterfront; it served as the economic and cultural driver for the region. Critical to this rapid growth was the train, which brought with it great promise and connection to the networks of the nation. In 1887, Railroad Avenue (today's Alaskan Way) superseded First Street's frontage location along the waters edge by building out on a foundation of pilings.¹² The arrival of trains along Seattle's waterfront emphasized the convergence between land and water as the critical zone in which goods were exchanged and modes of conveyance overlapped. With such status, the train quickly and completely dominated Seattle's waterfront, seamlessly linking land and sea-based freight.

By the end of the nineteenth century, the citizens of Seattle began to fear for the fate of their central and bountiful waterfront as the privatization of land by the rail companies was already underway. This prompted the city and its residents to create a public committee to oversee the operation of this valuable resource, thereby creating the Port of Seattle.¹³ Although the Port of Seattle now owned all of the land along Seattle's waterfront, they were obligated to lease the property to the business that were already established. This created a stagnant situation with major rail companies, including Northern Pacific and Great Northern, controlling a majority of the waterfront. At this juncture, Seattle's existing frontage property was almost completely developed, and with the Panama Canal set to open in just a few years, the newly created Port of Seattle was eager to boost the shipping capacity of the city and handle the anticipated boom.¹⁴ With the central waterfront already occupied and effectively out of control of the port, the city began to set its sights on the land, or rather salt marsh, to the south: the Duwamish River delta. In this thriving tidal ecosystem, the city of Seattle envisioned the eventual democratization of their waterfront through the utilitarian creation of land with direct connection to the water.



fig. 4 Spokane St. Viaduct from Beacon Hill, c.1890
fig. 5 Greater Seattle and Vicinity, 1908

Island as Utility

Beginning in 1902 with the first phase of the Denny Hill regrade project, and culminating in 1911 with the channelization and dredging of the Duwamish River, massive amounts of diverted soil were used to fill in the existing tide flats and create virgin land ripe for industry and shipping.¹⁵ Central to this newly created land was a massive island, aptly named Harbor Island. This new land formation was sited for significance, bisecting the mouth of the Duwamish River into East and West Waterway's and providing direct frontage to the deep waters of Elliot Bay to the north. The inherent properties of an island, being surrounded by water on all sides, and this island's adjacency to downtown, maximized waterfront property created by filling the delta. The creation of Harbor Island was an exercise in economic and industrial efficiencies, developing an opportunity for Seattle to capitalize on its natural resources.

The newly created land along the Duwamish River was planned as an industrial extension of the existing city grid.¹⁶ Zoned within the industrial corridor, the perimeter of Harbor Island was one of the few exceptions to the grid where the streets angled, idealized for ships and trains to converge. This anomaly reflected the value of the land-water edge condition. The angled streets provided an efficient, utilitarian solution to a functional constraint.

Seattle saw its highly engineered waterfront as a powerful marketing tool, capable of luring in lucrative, global shipping companies. This led to a frenzied attempt in 1911 to develop Harbor Island in one full sweep, creating the largest shipping terminal facility on the west coast. Ultimately, the development fell through, and General Hiram M. Chittenden, then Commissioner of the Port, depicted the feeling of the time by saying: "In due time, the north shore of Harbor Island will come to its own, but to go there now is simply to force an unnatural growth."¹⁷ It is as if he understood that enough artificial growth had already occurred with the creation of the island itself. Now the virgin land needed to develop slowly, fulfilling its utilitarian role in a more natural manner. This allowed the island to serve as Seattle's industrial tabula rasa, expanding when the time beckoned.



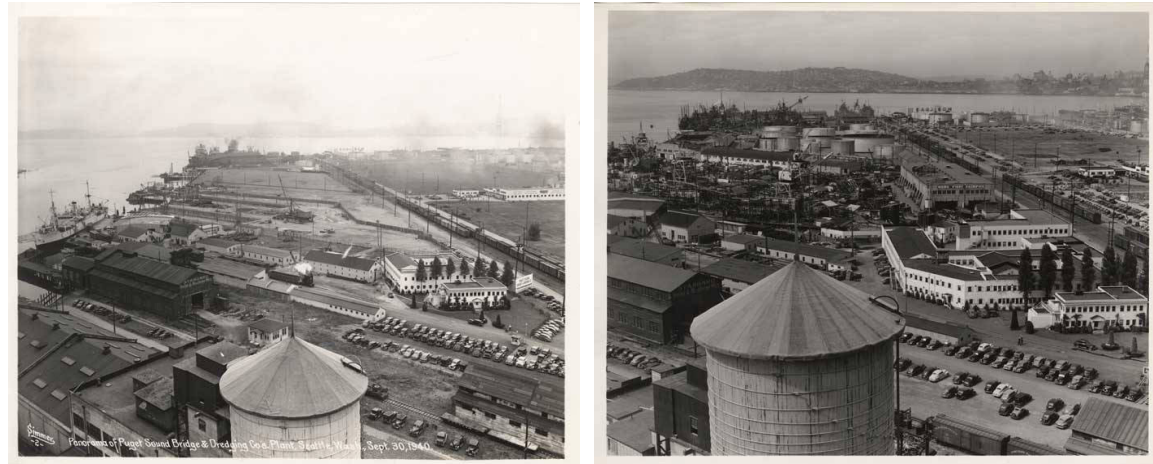
fig. 6 *Dredging the Duwamish, 1922*
fig. 7 *Island as a Machine*



fig. 8 Duwamish Delta 1875 to 2015



fig. 9 Duwamish Delta 2015 to +10' sea level rise



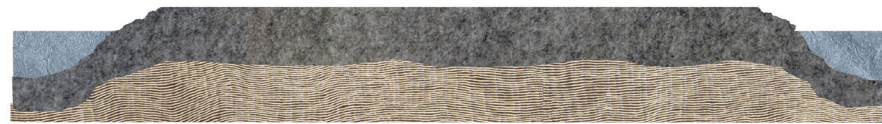
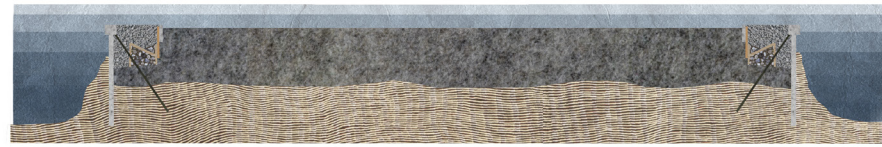
Boom and Bust

In the beginning, the pragmatic inception of Harbor Island proved well suited for shipbuilding, a flourmill and, of course, freight terminals. Each industry took root around the perimeter of the island; an industrial harbor was created in Seattle.

Over time, a developmental pattern of boom and bust occurred on the island. The First World War fueled the initial development and established several businesses, some of which still exist today.¹⁸ However, with the Great Depression, many of Harbor Island's economic ventures went bust, and the island sat idle. During this economic downturn the northern tip of Harbor Island was transformed into a tent city; the land provided a foundation for shelter.¹⁹ World War II brought another period of growth, and in the subsequent years the grid of plots on Harbor Island filled out again. Throughout these cycles of boom and bust, Harbor Island has existed as opportune land, receptive to economic demands.



fig. 10 Looking north from Fisher Flouring Mill, 1940
 fig. 11 Looking north from Fisher Flouring Mill, 1943
 fig. 12 Harbor Island from above, 1977



“To truly know this place would be to value both human history and ecological process, and to understand that both have contributed to making it what it is today.”^a

- Peter S. Alagona

Water over Land

Today, the island is in jeopardy. As a static plane just four feet above the water, the land has a limited and predictable threshold of resistance to sea level rise. Once that level is breached, the island will be compromised and the result will be catastrophic for all invested industries. As a means of counteracting this oncoming threat, the Port of Seattle has conducted feasibility studies for the creation of a larger, more substantial structural bulkhead to solidify the edges of the island.²⁰ Unfortunately, this structurally heavy-handed solution merely strengthens the static plane that is the island; there is still no flexibility in its threshold.

As Seattle grew, the industrial waterfront sprawled to meet the needs of a city on the rise. Now, contaminated with the scars of industry, Harbor Island is no longer a virgin landscape, but one engrained in the city, a place of use and utility.²¹ However, damaging the ecosystem does not mask the fact that Seattle’s geologic features predominate the constructs of man. As the city of Seattle continues to develop and learn, the natural cycles of this historically important place should inform the future.

The transitory nature of Seattle’s land-sea boundary remains inexplicably important to the growth of the city. How can Harbor Island facilitate the change happening around it in a more dynamic way? What functional and cultural value can the engineered river delta continue to assume? Grounded in a history of planned opportunity, Harbor Island has previously, and continues to hold, great potential for Seattle. It should now be leveraged as a vehicle for change.

fig. 13 constructing an island



fig. 1 *The Monument/Ruin of Industry, Na Li*

3.

memory and dreams

Extracting the Future from Industrial Relics

Changing technologies, economies and societies have rendered many industrial buildings obsolete, leaving ruins in their wake. Lands of action have become static. What was once a world of rational dynamism is now derelict, severed from the narrative of urban evolution.

Long admired by artists and architects, the grain silo is one of these industrial typologies to have fallen into disuse.¹ Rather than be demolished in the constant search for the new, these structures have remained as uninhabited shells, its survival perhaps due to the respect for their monumentality and the nostalgic quality they elicit. The silo's original function, though obsolete, has shaped its role in society today. Physically deteriorating, the symbol of the silo is what endures.

Simultaneously a hymn to the human spirit and a parable of disaster, Seattle's abandoned Fisher Flouring Mill embodies the "boundless optimism"² of the artificial Harbor Island and provides a glimpse into its future. As a monument to its industrial past, the relic is a premonition of the working island's fate.

Grain Silo as Utility

The birth of the grain silo is intimately tied to utilitarian necessity. Everything from the location, materiality and form are a direct result of function. Examining the silo's history of utility provides insight into its current status within society.

Although appearing as an isolated object in the landscape, the grain silo is, in fact, a part of a larger network. Built to process and ship grain, the specific siting of the Fisher Flouring Mill was a result of the ideal conditions between intersecting rail and boat transportation. In 1906, before Harbor Island was even created, Oliver David (O.D.) Fisher surveyed the bustling activity of the growing community and “thought on a grander scale, extrapolating the scene before him in terms of much larger issues concerning world trade and commerce.”³ Recognizing the significance of the site, O.D. Fisher established Fisher Flouring Mills in 1910 and completed the facility in 1911, just two years after the construction of Harbor Island. As one of the first industrial businesses on the island, the mill's opening on June 1, 1911 was coordinated as part of the city's “Progress and Prosperity Day,”⁴ showcasing Seattle's industrious achievements. From the beginning, the mill has symbolized the progression of a small town on the edge of nowhere to a booming city at the center of global trade and commerce.

Indicative of larger, global connections, the urban grain elevator is “rarely an integral part of their urban landscape.”⁵ The urban silo, while formally dominant in its site, is removed from the spatial patterns of the city. Integral to the city's economy but not its inhabitants' daily lives, the Fisher Flouring Mill lives a removed life on Harbor Island. While the siting ties the mill in its context, the overall formal geometry is derived from the internal functions. Dealing with such large quantities of grain, the mill's sheer size keeps it from being physically integrated into the city.

The massive size of the Fisher Flouring Mills is indicative of its purpose as an urban grain elevator, a regional collection point for grain. The act of storing defies time, which is reflected in the materiality of the structure, concrete combats both rot and fire. Contributing to the resilience of the silo structure are deep and redundant pile foundations, which provide stability in the waterlogged soils atop the Seattle Fault Zone. As pure geometric forms, free of adornment, the mill is described as “towering cylinders of cement reaching to the sky,”⁶ this mill is a monolith. More expensive to tear down than to leave abandoned, the intended longevity of storage has left the silos of the Fisher Flouring Mill in a virtually unaltered state.



fig. 2 Fisher's Blend Flour logo

fig. 3 Fisher Flouring Mill postcard, c.1915

fig. 4 Fisher Flouring Mill postcard, c.1950

“Fast forward now 60 years, and the building is an eerie tomb, a sprawling catacomb of emptiness and decay, with dark passageways that open up into huge open silos. The silence is deafening. Around every corner, on every wall, are reminders that this is a boneyard of industry, a place where old Seattle optimism and audacity got old and curled up to die.”^a

- Eric Johnson

Grain Silo as Symbol

Today, the grain silo serves as a symbol, recalling a collective memory of security, connection and exchange.⁷ The perceived necessity and benevolence of the silo might account for its longevity in the landscape, despite its abandonment. Designed for a specific function, the grain silo is composed of pure geometry, assuming a sculptural quality. The silo is experienced as an object in the landscape, highlighting its form.⁸ Its inner workings unknown to the passerby, the grain silo’s sculptural form elicits meanings beyond pure utility.

Hailed as an icon of modernism, the grain silo’s function today is symbolic.⁹ These associated, sociocultural meanings stem from the silo’s original utilitarian functions:

Formally the grain elevator has changed little over its 150-year history yet, it is interesting to note, the perceptions and representations of the building type are extremely varied. From the functionalist admirations of the turn of the century to a nostalgic fondness at the end, the grain elevator has demonstrated its ability to transcend its utilitarian label and exhibit the timelessness of its architectural features.¹⁰

The enduring, primary form of the silo is a vehicle for expressing what Aldo Rossi calls the “collective memory.”¹¹ Rossi believes that “we frequently continue to appreciate elements whose function has been lost over time; the value of these artifacts often resides solely in their form.”¹² The silo stands as a monument to its industrial past. Built to contain the products of hard work, the operating silo served as a visual affirmation of human presence in the landscape.¹³ The simple act of storage denotes excess, implying stability. The silo as an artifact embodies a collective memory of prosperity. The physical form of the grain silo now functions as an agent for social interpretation; cultural meaning has surpassed utilitarian purpose.

The Fisher Flouring Mill stands as a testament to its industrial past, but it is also an omen for the future. Beyond the memories of its role in Seattle’s growth lies a warning of the futility of progress. Both created and abandoned by advancement, the mill symbolizes the hollowness of progress.

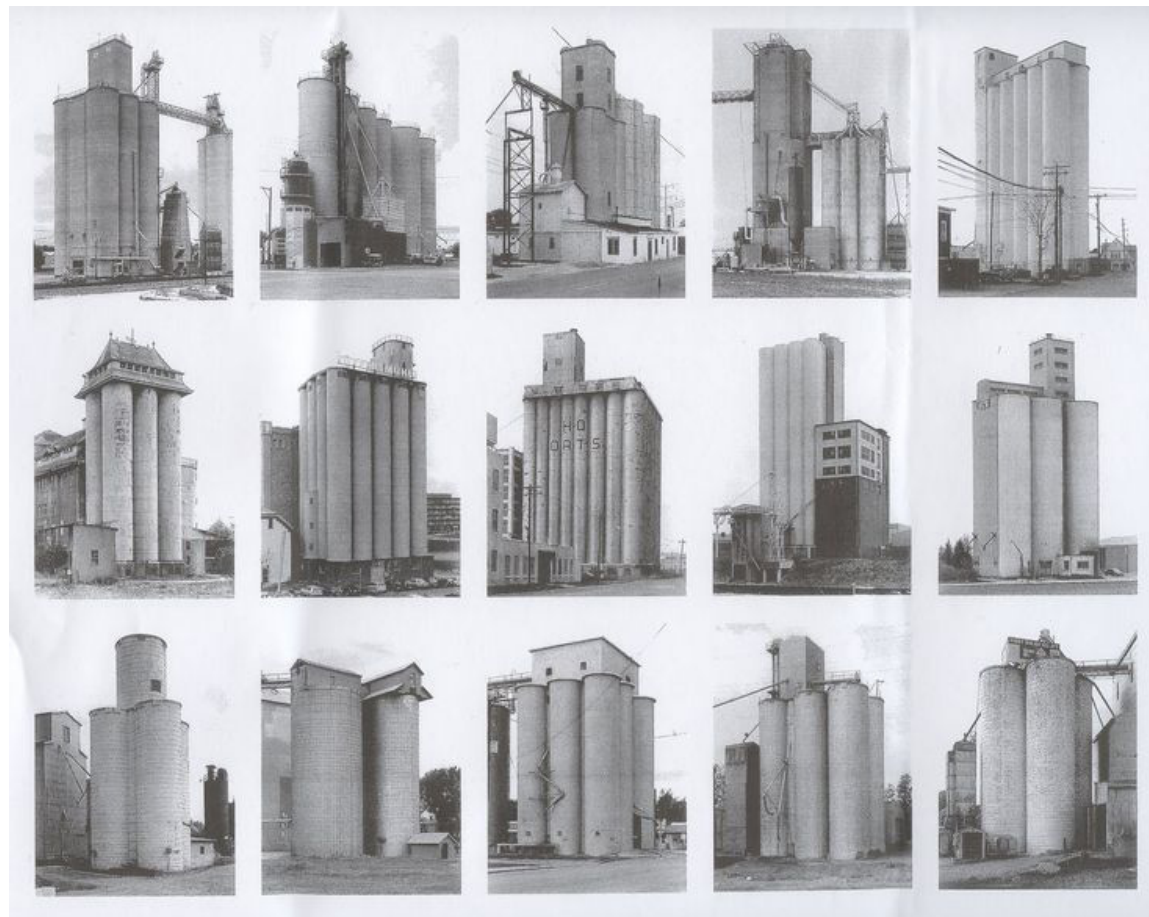
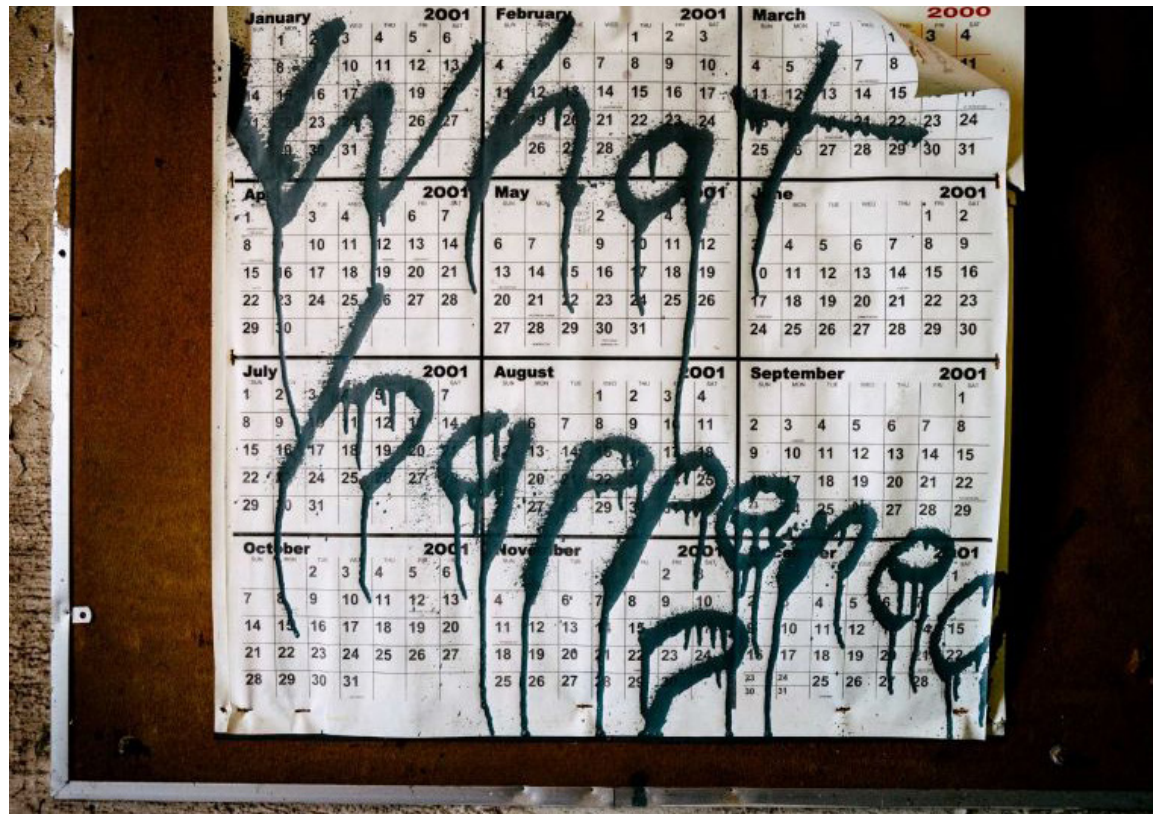


fig. 5 silo typology study, Bernd & Hilla Becher



“Maybe their value is best served in decay—to challenge our aesthetic sensibilities and consumerist tendencies in the name of progress. Or maybe the true value of these spaces is simply in their ability to inspire our child-like enthusiasm for these wondrous facilities that now stand dormant, remnants of an endangered industrialized empire.”^b

- Aaron Asis

Grain Silo as Ruin



The Fisher Flouring Mill perhaps remains a symbol of optimism in the minds of most Seattleites, if it is even on their minds. Our current, removed perspective continues to render the mill as a magnificent monolith, failing to get to its underlying significance as a decaying ruin. Experienced viscerally, however, the atmosphere created by its deteriorating state elicits additional interpretations and social opportunities. The urban ruin is an expression of chaos, providing alternatives to the maintained cityscape.

Caught “in between rejection and disposal,”¹⁴ the mill has been dislodged from the functional cycle of the city. This interruption in associated meaning draws attention to the essential characteristics of the ruin, namely its materiality. De-contextualization offers an opportunity for unconventional activation:

At first somewhat disturbing, this confrontation with the materiality of excess matter offers opportunities to engage with the material world in a more playful, sensual fashion than is usually afforded in the smoothed over space of much urban space.¹⁵

As opposed to the familiarity of maintained urban spaces, the decay of the ruin provides an unfamiliar landscape of constant transformation. Disorder leaves room for imagination,

fig. 6 Fisher Flouring Mill, Jordan Stead
fig. 7 Fisher Flouring Mill, Jordan Stead

both of the mind and body.¹⁶ Whether it is imagining the previous, bygone life within the structure or creatively navigating the chaotic space, the historical layers of the ruin provide a framework for imaginative interaction. The potential for these unfamiliar structures, like the Fisher Flouring Mill, is an untapped resource within the city.

The embodied history in the ruin gives us a tangible connection to our past. Visible layers become important in building up an understanding of place. Created over time, the value of the Fisher Flouring Mill today lies within its patina: “You can’t just paint patina on. Patina is real life, memory, generations.”¹⁷

Just as patina cannot be recreated, the resulting atmospheric quality cannot exist without the patina. Intangible emotions are both elicited by and understood through physical entities: “It links the feeling that emerges from an atmosphere with complementary symbolic meanings. Atmospheres are not read in a semiotic sense, but are grasped through a comprehensible form of perception.”¹⁸ The tangible becomes the embodiment of atmospheric qualities, intertwining the built and the visceral into one. Although the atmospheric is spurred and understood through the physical, it cannot be recreated through it:

Atmospheres are not objects and are thus also not ‘located’ in space in the way that objects are. They swathe a location and make it into a situationally special place...One falls under the spell of an atmosphere through the medium of a bodily sensation and not via any rational action. Within it, one does not perceive oneself to be a material body in a space alongside other material bodies; instead, one is in an atmosphere in the way that one is in sunshine, in rain, or in darkness. Surroundings of this type cannot be objectively captured. They are ephemeral ‘circumrealities.’ One senses them as something ‘on one’s own felt body, but not as something belonging to the felt body.’¹⁹

Strong visceral reactions to the atmosphere of place do not stop with the corporeal. The body serves as a medium for transferring the atmospheric into mental stimulus.

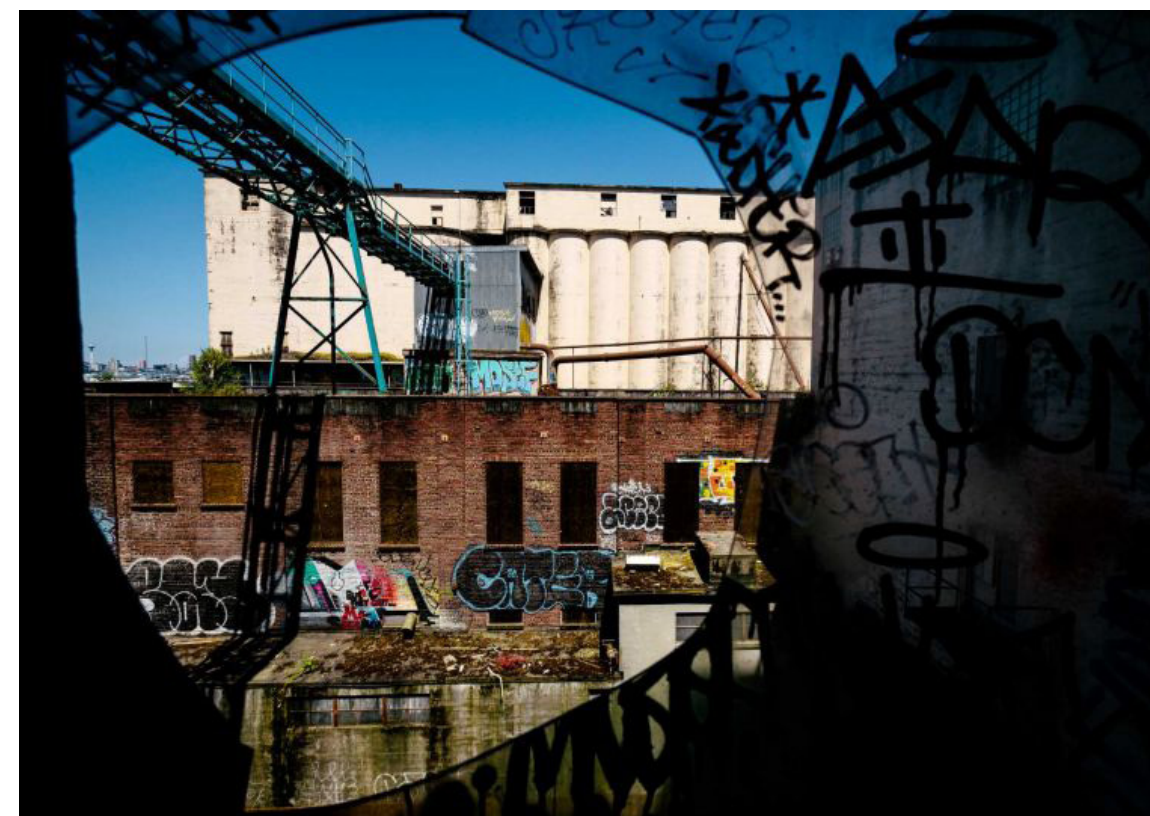


fig. 8 Fisher Flouring Mill, Jordan Stead
fig. 9 Fisher Flouring Mill, Jordan Stead



fig. 10 monolith

“In each city, they have a significance that influences the city’s character; they refer to the past and are anchored in the collective memory.”^c

- Martina Baum

Grain Silo as Lens

With such a rich history of utilitarian and social meaning, what is the next phase in the Fisher Flouring Mill’s evolution? Strategies for reactivating a highly revered structure cannot ignore its evolution from a living machine to a symbolic artifact.

Cities are the combination of both material and immaterial evidence of the ever-expanding past. Not only does the built fabric of the city continue to layer upon itself, so do the intangible networks of movement and knowledge. Urbanity, as characterized by Martina Baum in *City as Loft*, is the continual layering of the past, in which “new and unexpected networks are starting to arise out of combination of old ones.”²⁰ She goes on to argue that if abandoned buildings are “appropriately converted, they can remain as an active part of the urban structure and as a node in the network of relationships, interlacing and movement in the urban space.”²¹ Activating disused industrial buildings, as suggested by Baum, goes beyond an engagement with the physical, into the realm of the immaterial.

Immaterial and material qualities of the grain silo are deeply entwined. The Fisher Flouring Mill is embedded with cultural meaning that grew from its original utilitarian function and form. Even its current role as a ruin provides dynamic interpretations of its physical state. As a remnant of the past, the mill has the potential to tie back into urban networks in a way that not only articulates its history but also uses its present symbolic status to spark the imagination about the future.

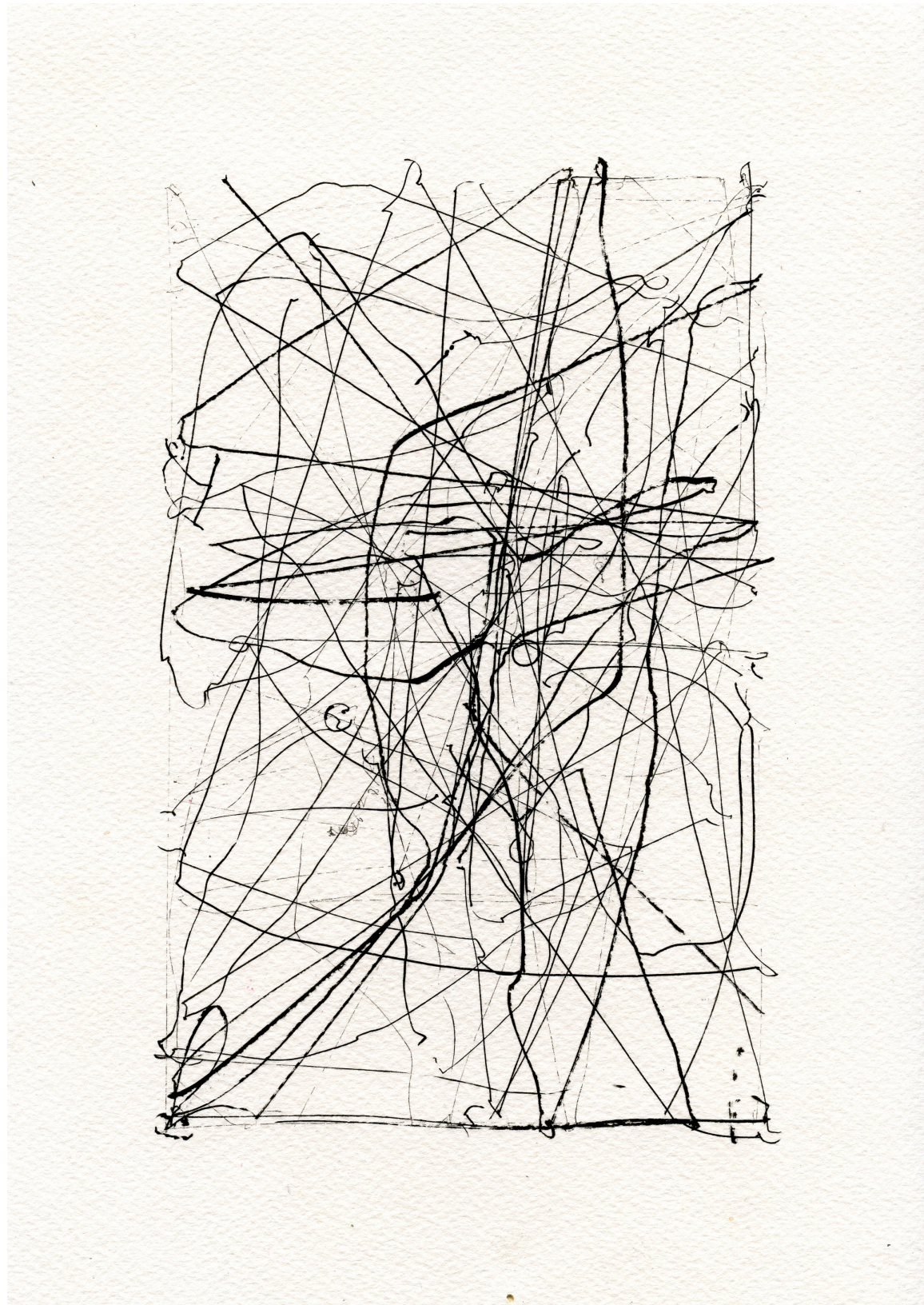


fig. 1 futility of progress

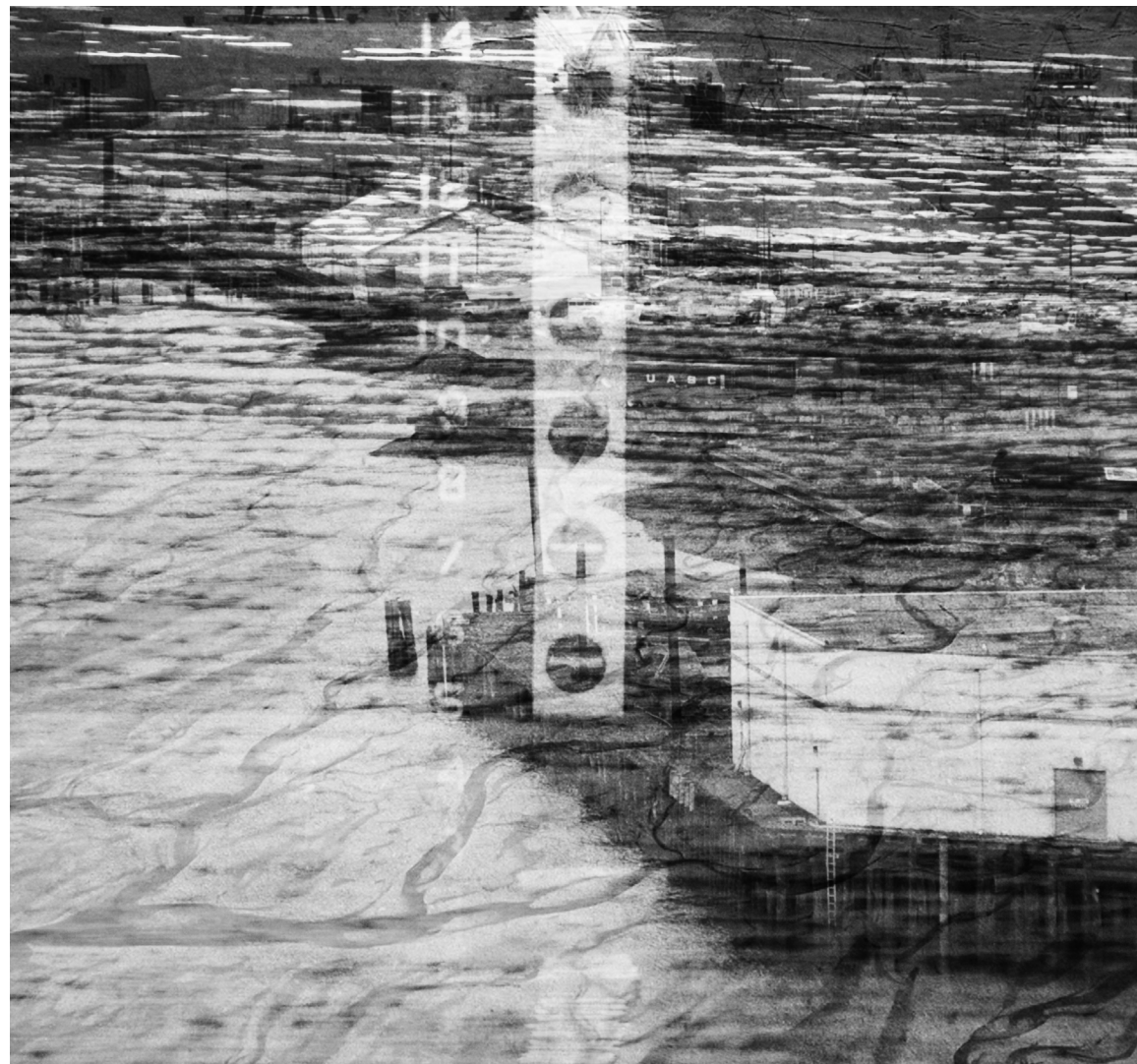
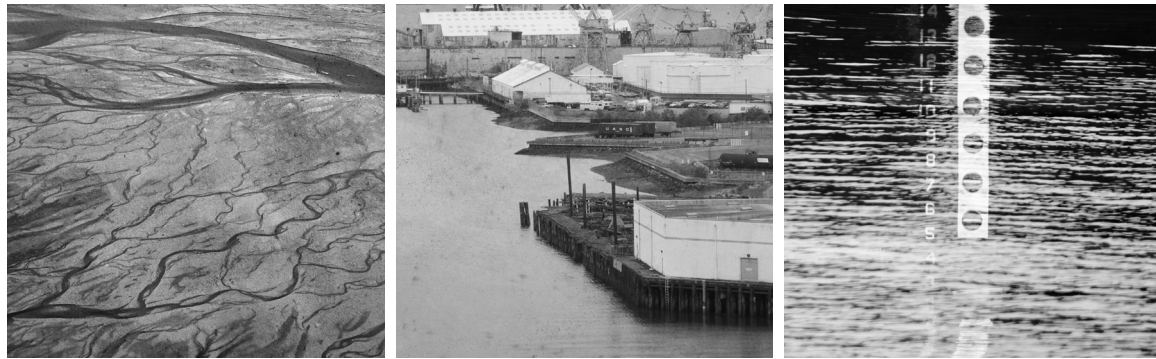
4.

methods

“In the war against the cult of speed, the front line is inside our heads. Acceleration will remain our default setting until attitudes change.”^a

- Carl Honoré

This thesis advocates for the necessity of a paradigm shift in our collective perception of time. Today’s society is consumed by fast-moving, forward progress. Acceleration has disconnected us from place, cast off the imagination and perpetuated a shortsighted mindset. To combat society’s rapid pace, this thesis proposes recovering an awareness of place to alter our perception of time. The following definitions have been extrapolated as a design strategy to address the challenge of revealing place and sparking the imagination.



place

\ˈplās\ *noun*

- a. a particular part or region of space; a physical locality, a locale; a spot, a location Also: a region or part of the earth's surface
- b. relative position in a scale or series

Throughout this thesis, place is referred to as both a spatial and temporal entity. Space and time are intricately intertwined; affecting each other, both contribute to the character of place. The natural and human transformation of the physical place alters our perception of time. The rate of natural decay relative to our lifespan reveals a more cyclical temporality. Our ability to manipulate the physical place with exceeding ease, accelerates our linear perception of time.

fig. 2 place composite



fig. 3 Instar, Christopher Colville
fig. 4 Harbor Island postcard, c. 1912

monolith

\ 'mä-nə-, lith \ *noun*

- a. a single great stone
- b. a massive structure; immovable; solidly uniform
- c. an organized whole that acts a single unified powerful or influential force

A monolith is a construct that humans perceive to outlast them. In this thesis, Harbor Island and the Fisher Flouring Mill have been identified as monoliths. Both are massive in size and exude the impression of permanence. This perception is based on the concrete solidity and durability of the material. Its heaviness is read through the cold, hard surface and its massive size. The monoliths will inevitably decay over time through the process of erosion. Our impression of their permanence stems from our anthropocentric blinders, which limit our comprehension of time to a few short generations. The permanence is only a perception, not a reality.

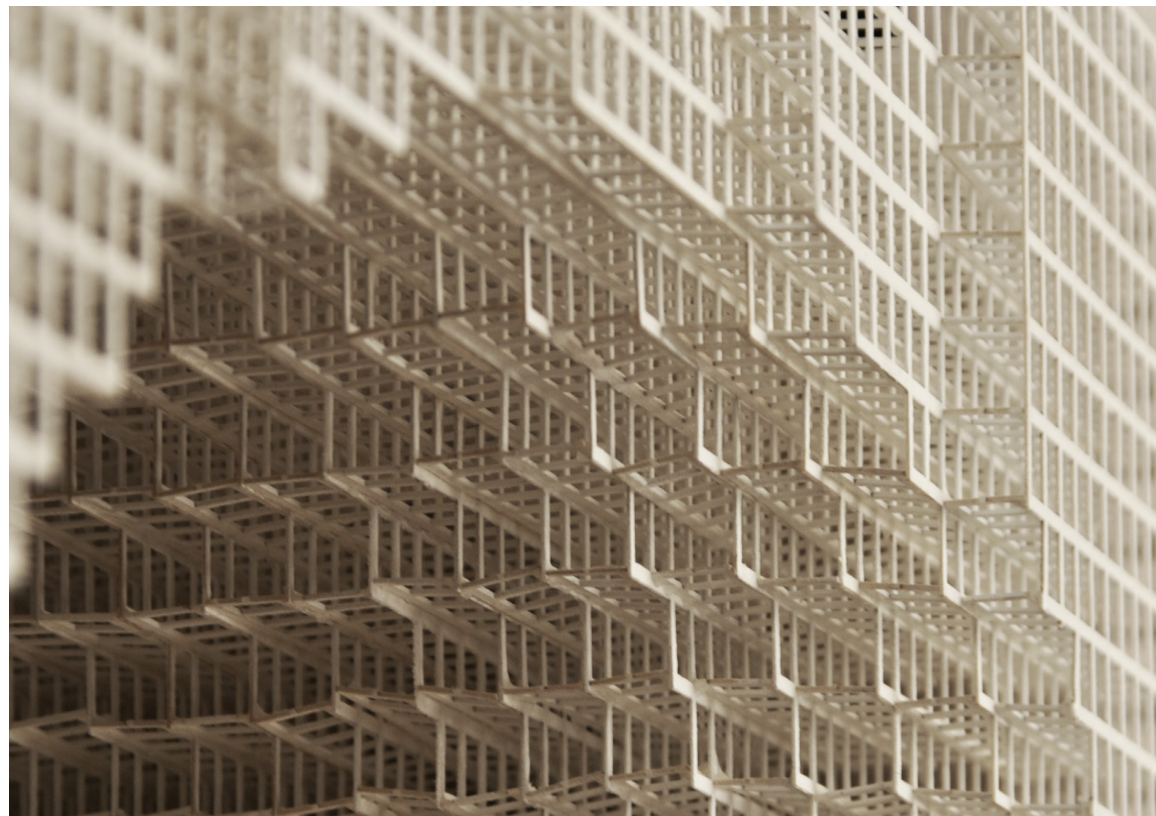


fig. 5 Prostho Museum, Kengo Kuma
fig. 6 tissue

tissue

\`ti-(.)shü, chiefly British `tis-(.)yü\ noun

- a. mesh, network, web
- b. an aggregate of cells

The tissue is an ephemeral construct. In this thesis, the tissue is the additive element, foreign to Harbor Island. Its wooden structure is light in both size and mass, exuding warmth and comfort to the touch. We associate with the tissue. As a complex conglomeration of parts, it is analogous to the societies we exist within today. Yet, this tissue invites decay. Not even the redundancy of its structure can compete with the eternalism of earth. Through the decomposition of the tissue we can gain an insight into humanity's brief temporal existence.



fig. 7 rock cairn, National Park Service
fig. 8 proposed cairn network on Harbor Island

cairn

\ 'kern\ *noun*

- a. a heap of stones piled up as a memorial or as a landmark

In this thesis, the cairns are a way-finding network, both physically and mentally guiding a visitor through place. Each cairn is a threshold. Consisting of ephemeral tissue in juxtaposition with an existing monolith, the cairn leverages their differing rates of decay to measure the passage of time. The cairn reveals both human and geological temporalities, challenging our perceptions of permanence. Carving a space for pause invites contemplation.



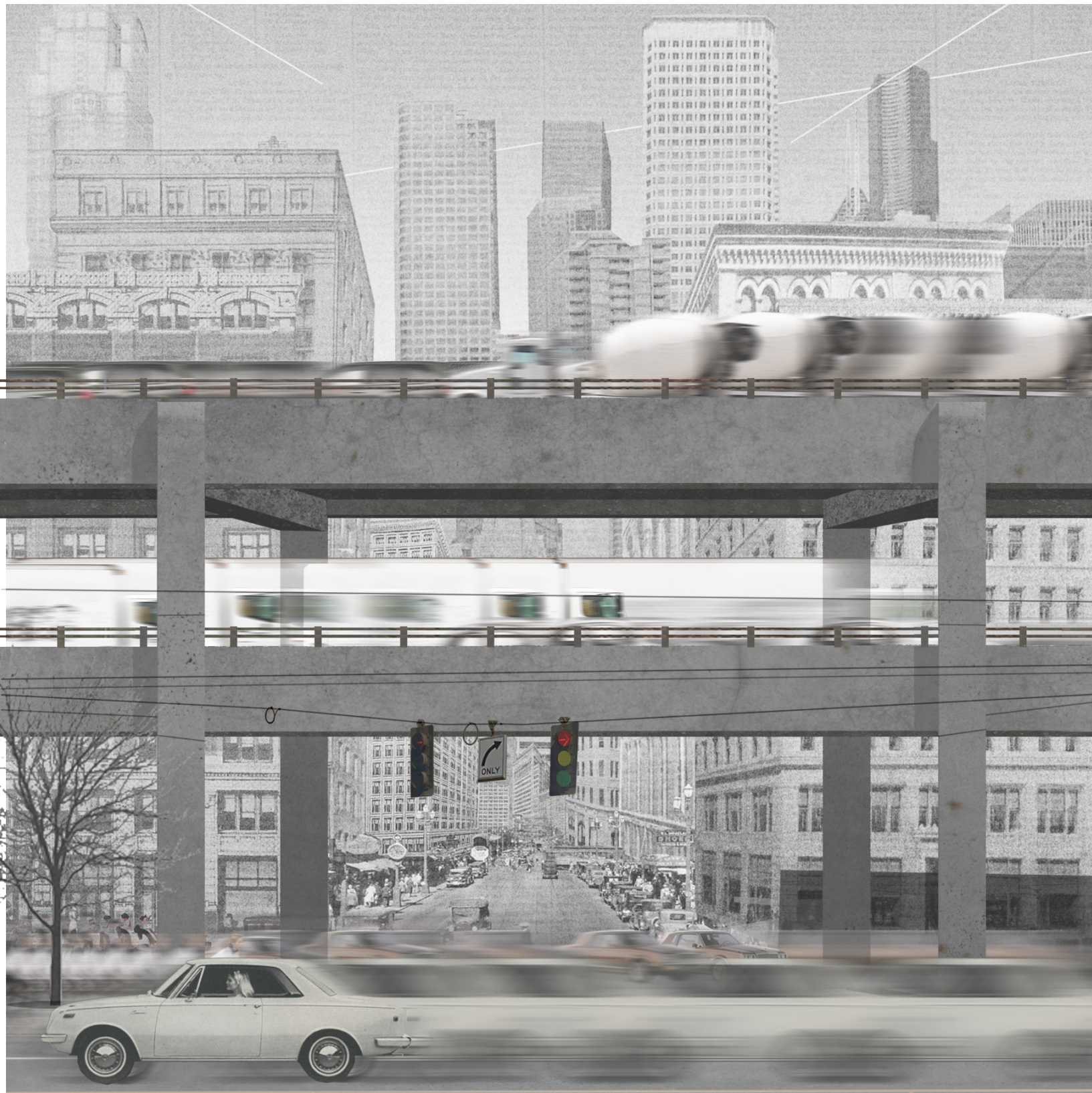
fig. 9 *Double Negative*, Michael Heizer
fig. 10 *Bruder Klaus Field Chapel*, Peter Zumthor
fig. 11 *non-sign II*, Lead Pencil Studio

threshold

thresh·old \ 'thresh-, hōld, 'thre-, shōld\ *noun*

- a. border, limit (of a region); the line which one crosses in entering
- b. the magnitude or intensity that must be exceeded for a certain reaction or phenomenon to occur

This thesis uses physical and immaterial thresholds to restore an awareness of place. As points of convergence, physical thresholds juxtapose temporal and spatial qualities to challenge our current perceptions. Different variations of the physical thresholds occur throughout the project: scratch, frame and lens. A scratch carves out space from the monoliths to create an eddy. With physical movement slowed, lenses focus the gaze while frames serve as a rigid datum to register change against. Immaterial thresholds are crossed as visual and visceral stimuli, revealed through these physical thresholds, are converted into mental reactions. Harnessing the innate curiosity of humans, all of these thresholds seek to reveal contradictions for imaginative inspiration.



5.
cairns

The Approach

It begins with a threshold. The viaduct delineates the compact layers of the city and the vast space of Elliott Bay beyond. The way to Harbor Island is via the water. A new water taxi stop links the island to the greater city. Waiting for the water taxi on the city's edge creates a pause, revealing the rush of the city. Framed by the static threshold, the speed at the root of our shortsightedness is illuminated.

fig. 1 confronting the city



Upon leaving the congested waterfront, the water taxi moves out into the bay, the city receding in its wake. The speed is left behind; control of pace is surrendered to the boat. Through this removed approach on the water, the thin mirage of Harbor Island stands in contrast to its hilly surroundings. Its formal difference in the landscape alludes to the island's constructed history. The approach via water taxi provides a critical initial perception of the contrast between Harbor Island and the rest of the city.

fig. 2 mirage of industry



The current inaccessibility of the island has left a hole in our mental map of Seattle. Harbor Island's sheer size is virtually unknown.

fig. 3 scale comparison with Lake Union, a mental hole
fig. 4 threading through



As the water taxi approaches Harbor Island, only the north edge is seen, veiling the interior. The monolith remains a mystery, ripe for investigation. As a means of discovery, a way-finding network threads through the island. The network is a connective tissue, which attaches to constructs that are perceived to be permanent. As one massive construction, the island itself is a monolith. Engaging this land with a temporal tissue registers the passage of time and reveals the island's instability.



Dropped off in this strange place the immediate scale is overwhelming. Lost in a landscape of machines, concrete and steel, this place feels foreign. Ironically, Harbor Island was built to convey goods for the city, yet its physical manifestation is not welcoming to its recipients.

fig. 5 human and machines
fig. 6 cairn refuge

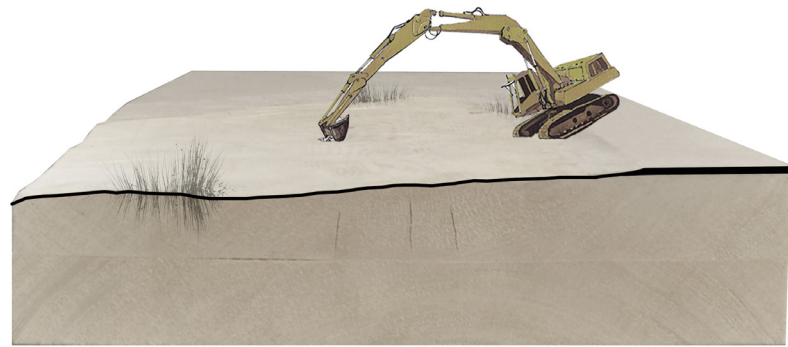


The most familiar construct in this landscape is a small patch of green. A place of refuge from the harsh environment around: a cairn.



*fig. 7 pavement and tanks
fig. 8 barbed wire*

*fig. 9 rails and mill
fig. 10 contained cranes*



Island Cairns

It starts with a scratch. The surface is peeled back from forgotten, unused spaces on the land. Digging down reveals the island as fill, expanding upon our understanding of the land's composition. The scratch emphasizes the island's vulnerability and reiterates its static, planar surface. Removing the hard crust provides a foothold for ecological growth, a vital function of the river delta, long since removed from the site. This is an indication of what was and what will be.

The scratch provides a physical buffer against the harshness of the site. A tissue insertion creates a refuge, allowing one to sit and relax. Immersed within the activity of industry, the refuge makes just enough space to observe, reflect and imagine.

The cairn serves as a marker, to navigate the landscape and register change. Comprised of wood members, the inserted tissue is vulnerable to decay, measuring the passage of time in relation to the land of concrete and steel. Markings on the pole indicate future sea level rise, sparking the imagination of a submerged island. As a future remnant, the cairn is a recording device, a physical symbol of transformation by humans and nature alike.

fig. 11 scratch
fig. 12 a cairn



Today, the markings call out the cairn amidst the chaos of the site. Used as a series of observational points on the ground, the island cairns provide a lens through which the activity of the island is revealed.

Experienced in sequence, the cairns stitch together a network leading to the mill. As the culminating cairn, the omnipresence of the mill has gravitational pull.



fig. 13 cairn network

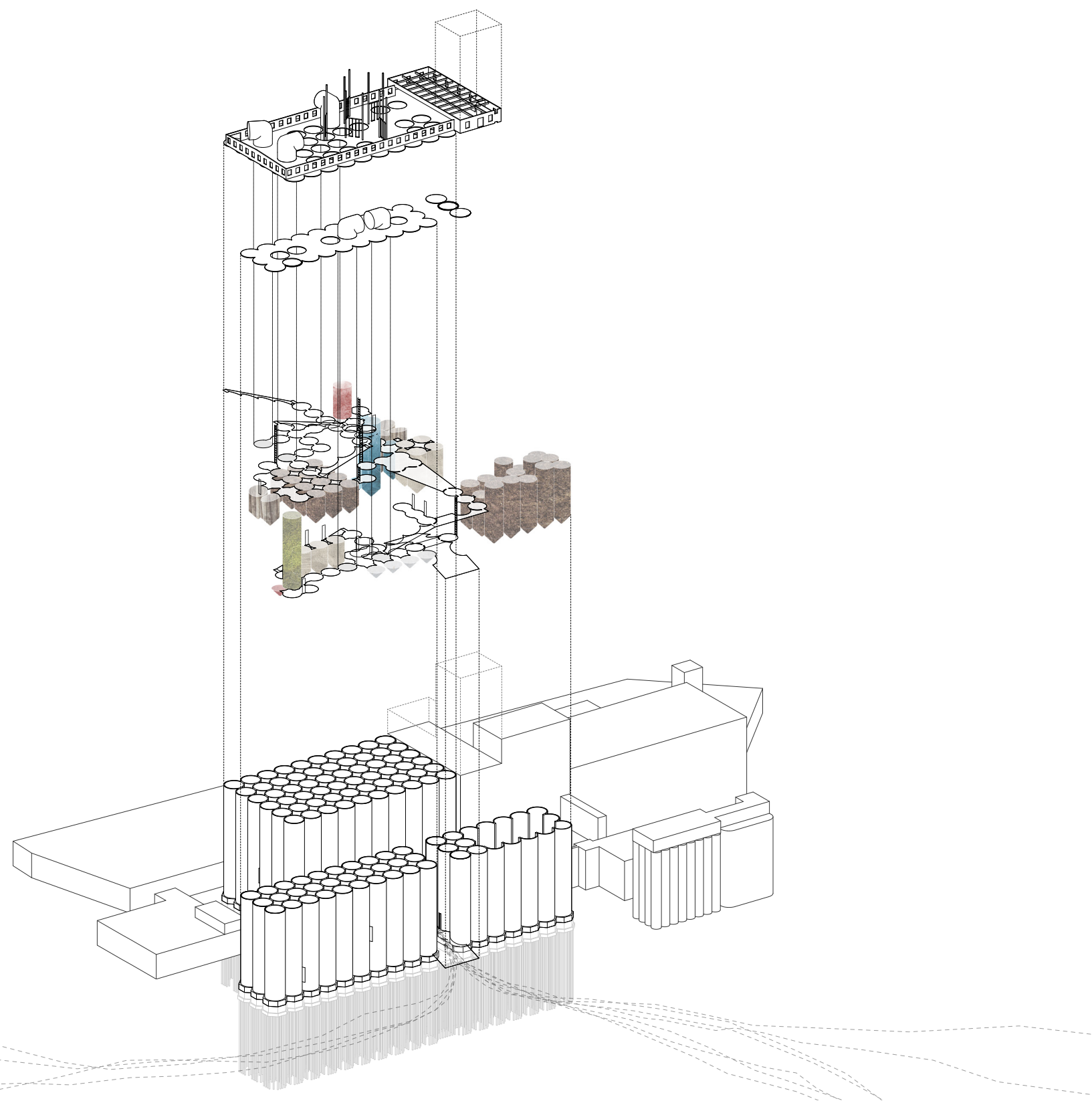


fig. 14 maze of mental stimulus

The Mill Cairn

Continuing the process of deceleration and discovery, the mill is an extension of the network. In contrast to the overwhelming experience of travelling through the vast island landscape, the mill leverages its inherent spatial qualities for isolated experiences. The silos provide a series of introverted spaces for contemplation, woven together by the connective tissue. The way through the mill is self guided and randomized prompting curiosity and creating opportunity for discovery.

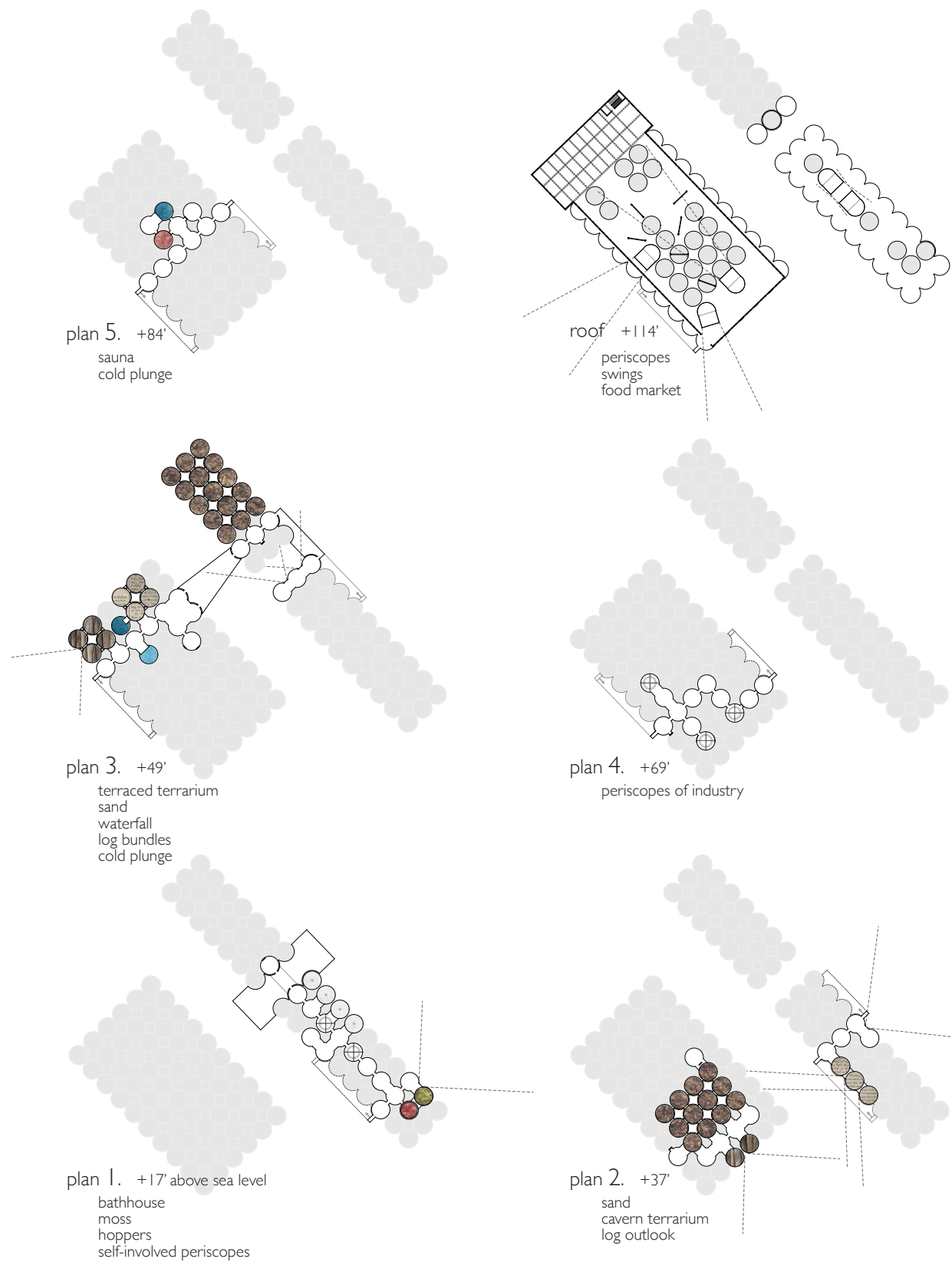


fig. 15 mill cairn plans
fig. 16 silo lens



Comprised of focused, sensory inputs, the mill is intended to provide a backdrop for the visitor's own imagination. The silos isolate, filtering out the chaos of the context. The sheer size of the tubes shields from distractions, giving rise to one's own reflections.

Within each tube, the fill is brought into focus, providing the minimal stimulus necessary to spark the imagination. Each fill is informed by the effects of its material qualities on the atmospheric character. They are designed as places for mental recreation, not bodily movement. Be it temperature, texture, light or sound, visceral reactions convert these sensory prompts into mental stimuli. It is the visitor's presence that ties together the space and stimuli. The importance lies not within the tube or the fill by themselves, but rather the effect of their combination on the mental experience.

TEMPERATURE

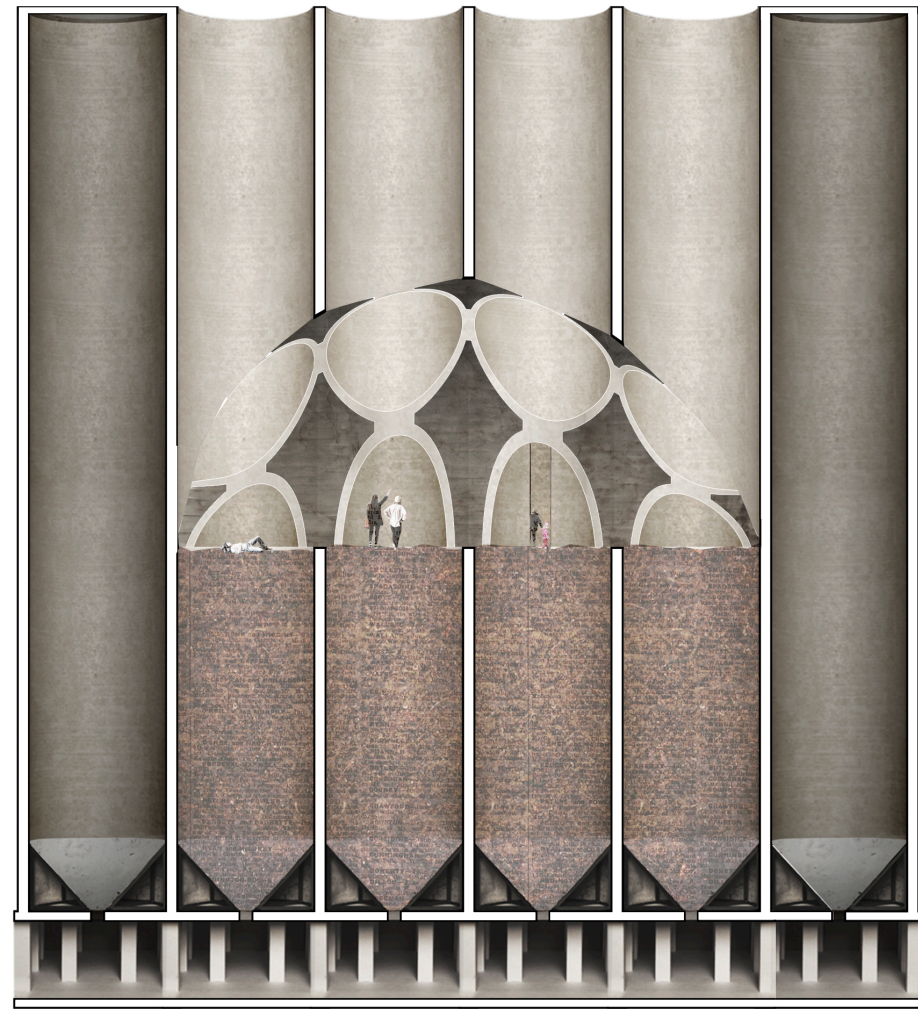
SIGHT

SOUND

TEXTURE

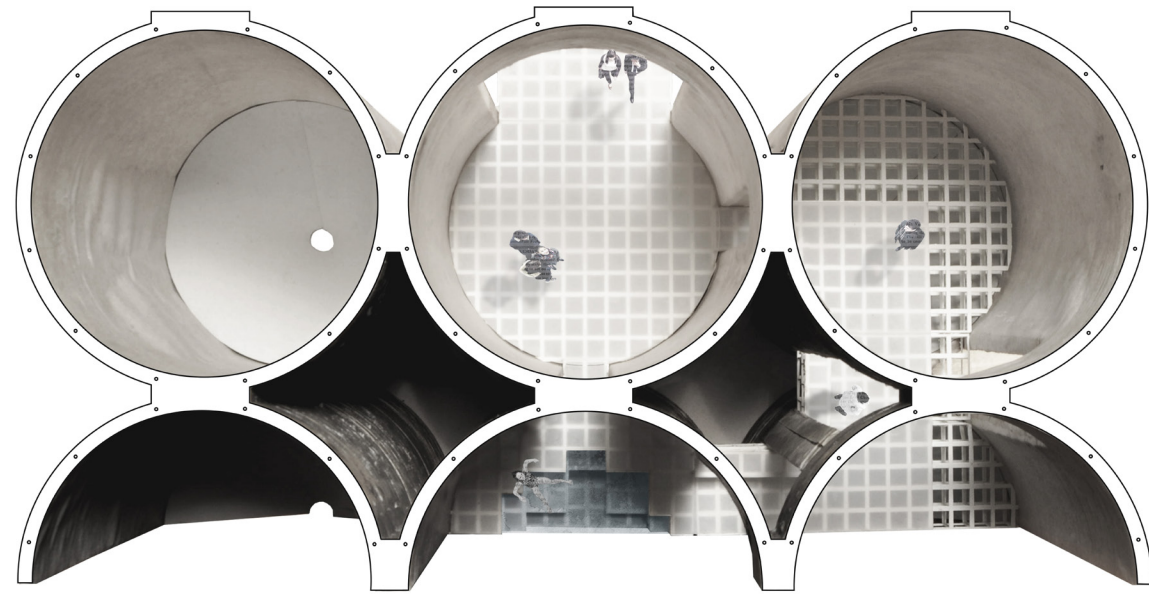


fig. 17 tube taxonomy



Carving the monolith opens up space for active contemplation within the stoic and forgotten industrial relic. A greater understanding of the mill as a collection of containers is gained through this subtraction. The carved interiors emphasize the specific forms created for the silos original utilitarian function, reiterating its current disused state. The act of carving instigates the process of erosion, exposing a weakness in this symbol of industry. As a remnant within an industrial landscape, the mill foreshadows Harbor Island's inevitable decline. Creating a foothold for mental pondering, the spaces within the mill challenge the perceived permanence of these constructs. The unique spatial character of these clusters encourages one to linger. Combining the stimulus of fills within carved spaces creates an eddy for pause. The tissue is a means for stitching together this network of eddies.

fig. 18 cavern terrarium
fig. 19 terraced terrarium



Filling out the silos, the tissue expands as a scaffold for movement or pause. As a means to provide occupiable space in which to remain and contemplate, the framework can be manipulated to suit both the needs of the circulation and the eddies.

The redundant, fine-grained construction of the tissue highlights its ephemeral qualities. One's perception of the scaffold is constantly altered through movement. Bridging between the silos provides a confrontational view of the monoliths. The inevitable decay of the scaffold over time is measured against the perceived permanence of the concrete silos.

Clinging to the silos, the tissue is dependent upon the monolith for support. The adaptable nature of the tissue conforms to its context, creating infinite variation for movement. Traversing along the exterior wall of the silos provides a secure vantage to the sprawling industrial landscape below.

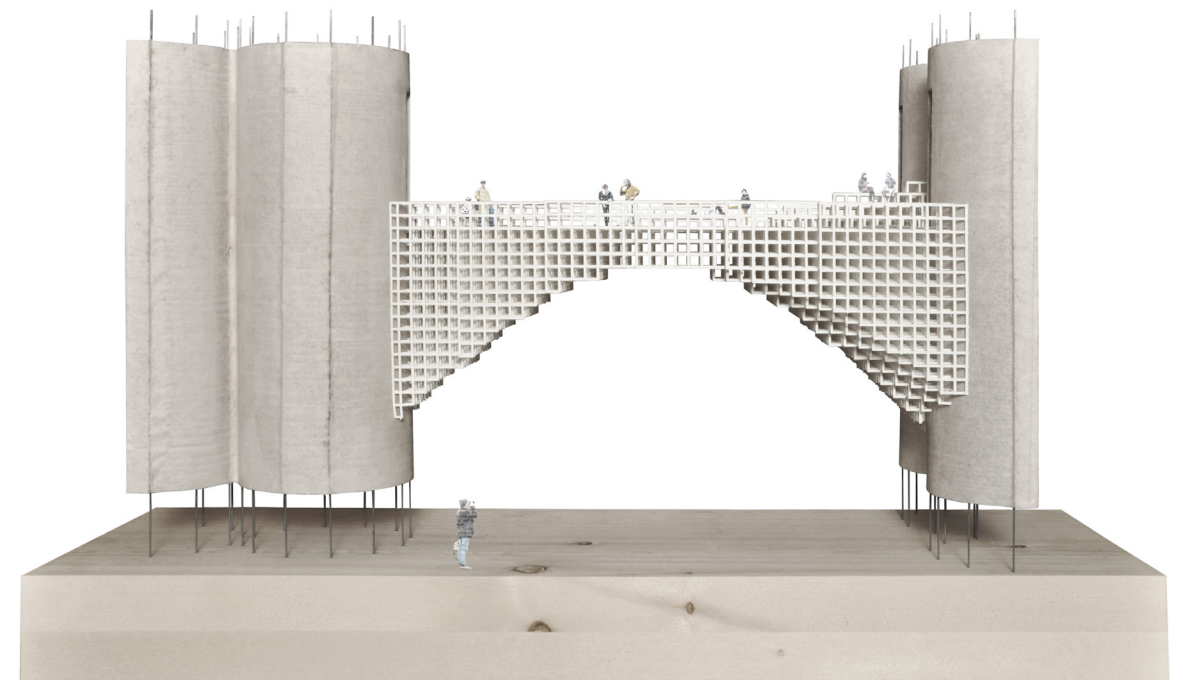
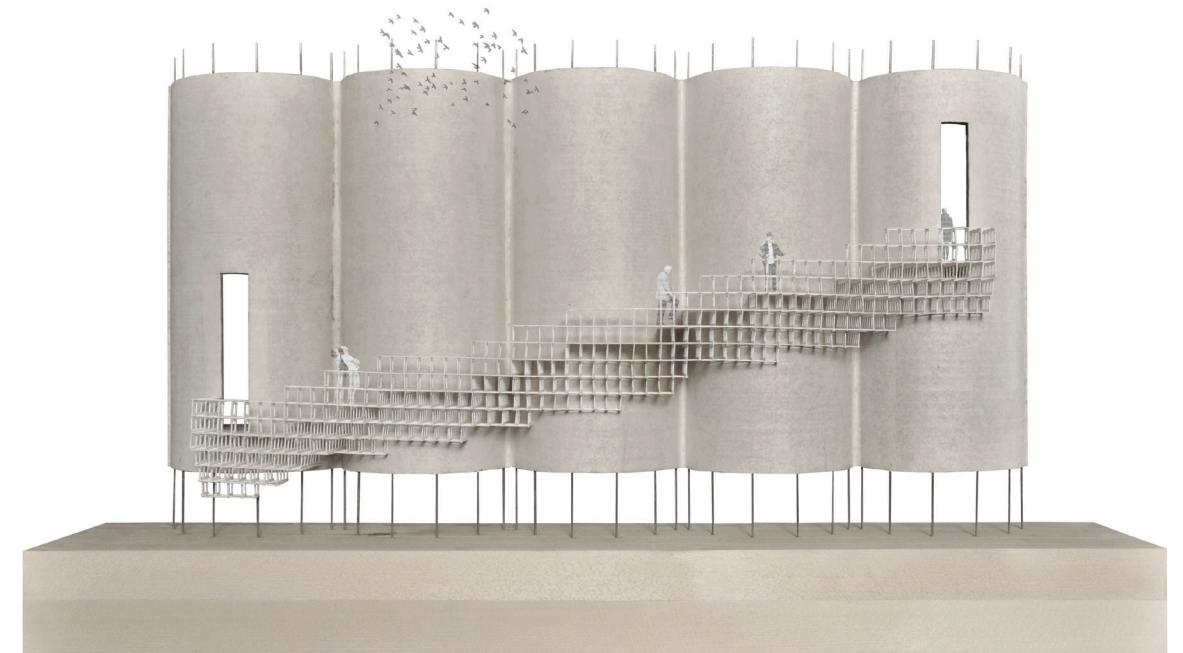


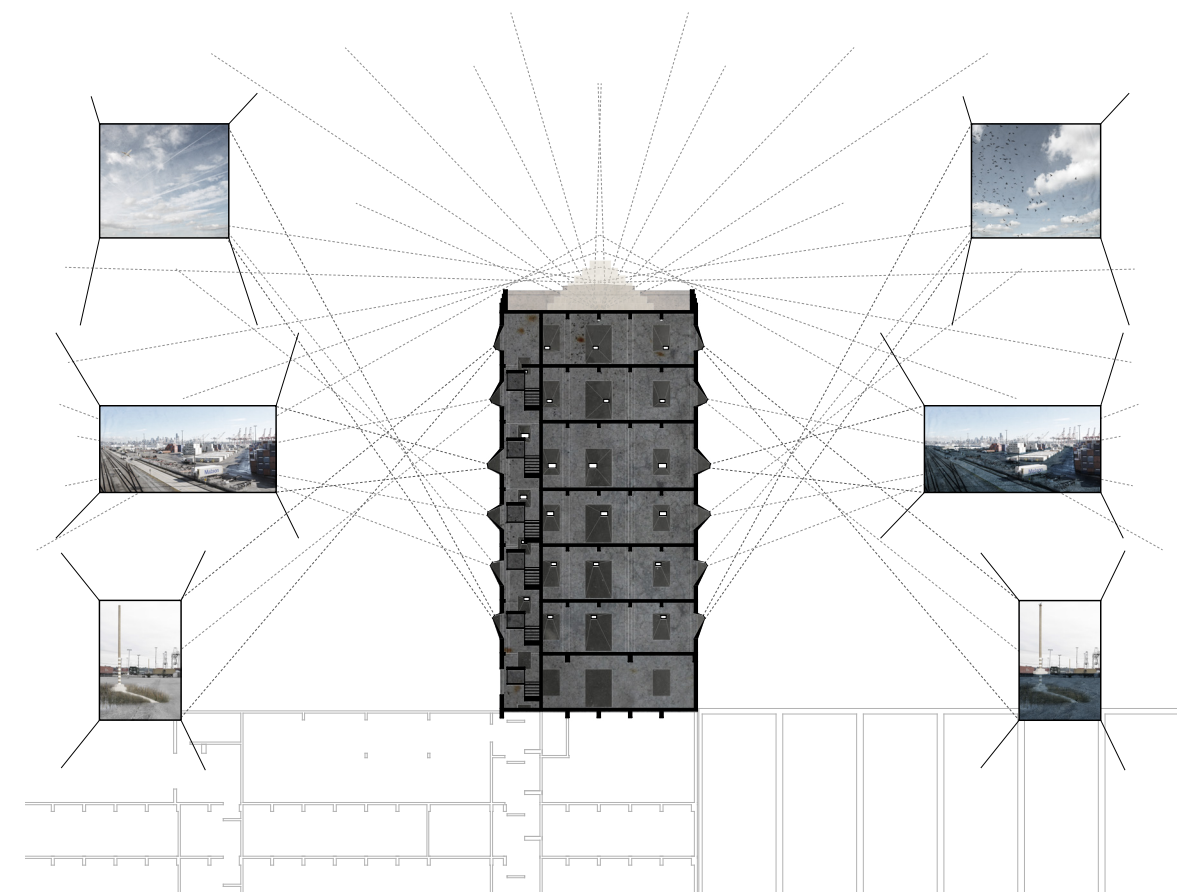
fig. 20 bathhouse eddy
fig. 21 clinging tissue
fig. 22 bridging between



The maze of movement, manifested through the scaffold, ultimately leads to the former head house. The roofscape is a reflection of the experiences within the tubes underneath. Protruding from the top, the periscopes connect above with below, channeling views back into the tubes. A landscape of swings builds upon glimpses outside of the silo walls. The meditative oscillation between the stoic foreground and the accelerating city beyond reveals the datum of the island's static constructs. As a transition into the tower, the roofscape begins the process of re-emerging oneself into the greater context.

The tower re-introduces Harbor Island, now contextualized within the city. A greater vantage on the place is gained not only through the height, but also through one's prior contemplative experience. The progression upwards offers focused instances of the island below. Distanced through the lens, views out transition from the sky, void of context, back

fig. 23 roofscape
fig. 24 tower apertures



to the city, eventually pointing towards the site below. Apertures attach to the existing casement windows, limiting light and view. The resulting darkness inside the tower requires a pause, to allow the bright spot of light to materialize into a scene beyond. The fixed frames serves as registers of future transformation to the static datum's of the island, continuing to challenge the permanence of our constructs. At the pinnacle of the tower, the light and full view explodes. The view is all encompassing.

Isolated experiences throughout the island and mill coalesce into a holistic understanding of place. The network of tissue serves to connect and reveal the monoliths, questioning their constructions. Viewing the island with an understanding of its history, while simultaneously imagining the future, develops an informed perspective on place.

conclusion

a warning



fig. 1 submerged land

Harbor Island is emblematic of modern society's driving impulse for progress. As both a result and cause of this advancement, the island's existence reveals the linear progression we operate within. Progress, like a parasite, feeds off society's insatiable appetite for improvement. Never satisfied, we constantly seek solutions at an increasing rate, a self-sustaining system with short-term benefits and long-lasting, negative effects. This calculated mindset cannot look beyond the outer limits of the immediate issue at hand. Efficiency has switched off our imaginations.

Looking only one step ahead intensifies blindness to the real problem: our rapid pace. As the complex issues of today continue to build, it becomes increasingly imperative to assess the bigger picture, namely that operating under a sense of anthropocentrism is only detrimental to us. This shortsighted and self-involved mindset has altered our perception of time.

Using the island as a decelerator, this thesis serves to illuminate the issues of our rapidly moving society. Exposing the vulnerability of even our most massive constructs is a means of catalyzing a paradigm shift in our perception of time. Shortsighted construction is not restricted to Harbor Island, it is endemic of all modern society.

Scratching away the surface is both literal and metaphorical. Simultaneously revealing histories and indicating possible futures holds potential for the *architecture* and the imagination to expand our awareness of time.

Marking what was and what will be, the cairns provide an alternative measurement of time that oscillates between the past and the future, rather than move linearly through it. Intended to render visible the transformations of place, they provide a lens through which to critically view our built environment. Constantly changing within the landscape and our minds, the cairns continue to produce meaning.

This thesis does not provide a solution for how to build in the future, rather an altered way of thinking about it. The project is an exercise in restraint, to resist the immediate physical urge to build our solutions. Curiosity and discovery are encouraged as a means of sparking the imagination. Considering both the past and the future temporalities of place leads to informed decisions today.

We must slow down to look ahead.



fig. 1 big boats

epilogue

daydreams

The Levees

The bilge pump roars in my ears, rattling my brain. I'm ready for this day to be over. Typically I really don't mind being down in this dark, wet pit. I know it sounds pretty terrible, but in reality I never usually think twice about it. Today though, today, is different. The hangover from last night's game certainly didn't help start this day right, but that was just the beginning. Now I'm standing here, working the gantry, with my entire left side soaked and a sore elbow. I *hate* it when one of the ships bounces off the bumpers overhead, sending a wall of water cascading down on us. What do those guys up there in that ship think anyways? How would they like it if my mistakes caused them misery?

Shit, I should try to cut them some slack. It's probably really windy above the levees, or something. I'm just really letting it get to me today. I actually am happy to have this job. Our city has invested so many resources to construct the seawalls and levees to hold the water back. Shows just how important industry is to this place, and here I am, directly reaping the benefits. It's just this damn bilge! I know it keeps the water out of the port, but I swear it's getting louder every hour.

"Whoa!" - I catch myself right before I get a good taste of pavement, that curb came out of nowhere. Guess I really shouldn't be walking around as I ogle the giant cranes unloading that behemoth of a boat. *How much bigger can those things get?*



fig. 2 earth measure

Earth Measures

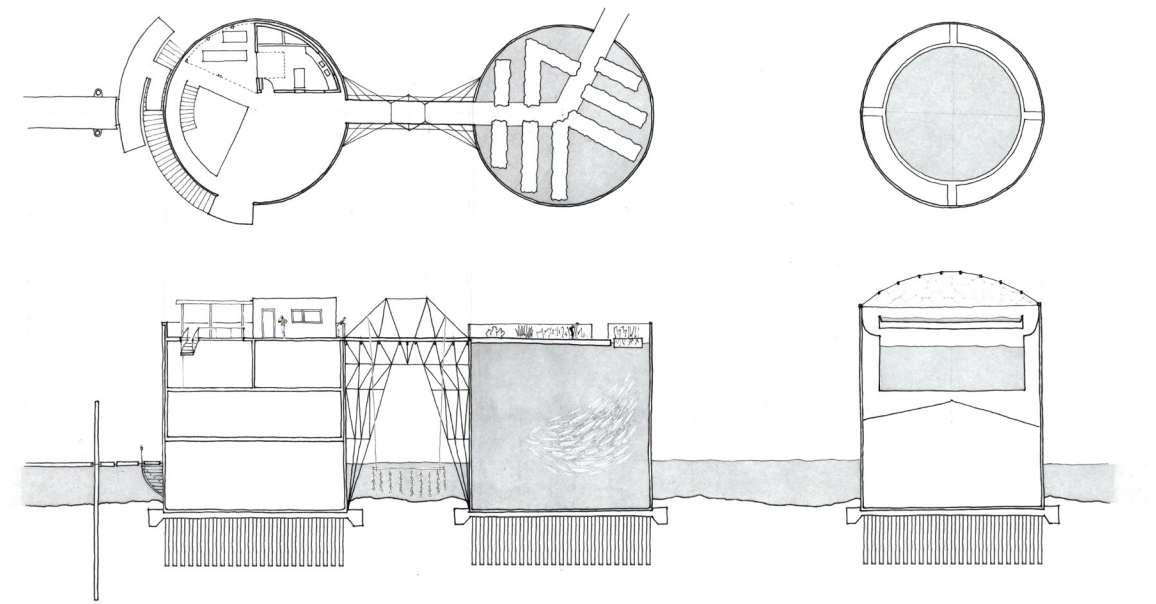
It has been two full years since the great Cascadia earthquake rocked the city and things are finally starting to get back to normal. Well, sort of. My illusion of stability vanished as quickly as it came. After all, the whole reason I'm spending my Saturday out here is to escape the dust and noise from all the demolition on my block. It's crazy how many compromised buildings are still being torn down, but I suppose my old house looked fine before it got demolished. Man, I really was lucky.

This place is such a bummer these days. Everything feels so bogged down, and just look at the toppled cranes, it's so sad to see them lying all curled and twisted on the ground. Of course the great mill is still standing, look at that thing towering up ahead, how come I've never noticed it before? Regardless, these striped poles are curious, I wonder why they are the only ones still standing. They must go down really deep into this muddy mess if they survived that quake. It's cool how they all lean a little bit. It's almost as if they are measuring the movements of the earth, each degree of lean registering the distance of the jump underground.

"Beep, beep, beep, beep" - the incessant tone of a truck backing up grabs my attention, forcing my head around. Shut it buddy, you're ruining my daydream. I actually thought that one was going somewhere. *Really though, how come I've never noticed that mill before...*



fig. 3 mooring
fig. 4 aquaponic tank farm



Tank Farm

It's always a welcomed break to leave the farm for a day. Life doesn't come easily out there. Everyday is tough work trying to squeeze by our self-sustained life. It's calming to know that I can get some relief so close to the tank colony.

Slipping into the water, the heat melts me from the inside out, rendering my body useless. I love this feeling.

For years now I've dreamt of living off the land, providing for myself right in the middle of the city. Yet, this place has really challenged me the past few months. Don't get me wrong, I wouldn't change a thing. I guess I just never realized how many things I used to take for granted. Luckily, the shift rotation is next week. It's going to be so nice to just look after the desalination tank for the next three months. Pulling up the long lines all day might just be the most exhausting job out there. My shoulders are worked.

Ever since Geir set up the World Institute of Slowness in this mill, the city has really changed. It's not that everyone just rolled over and accepted it. In fact, the city has a more divided feel these days. Some people have no regard for what we're trying to do. Oh well, such is the way the world works.

"Waaaaaaaaaaa!" - the bawl of a train outside reverberates down the inside of the silo, shattering the silence. I'm always surprised at how meditative these baths are. I can really get lost in here. My fingers are so shriveled now - I think I've been here too long. *I should really get going...*

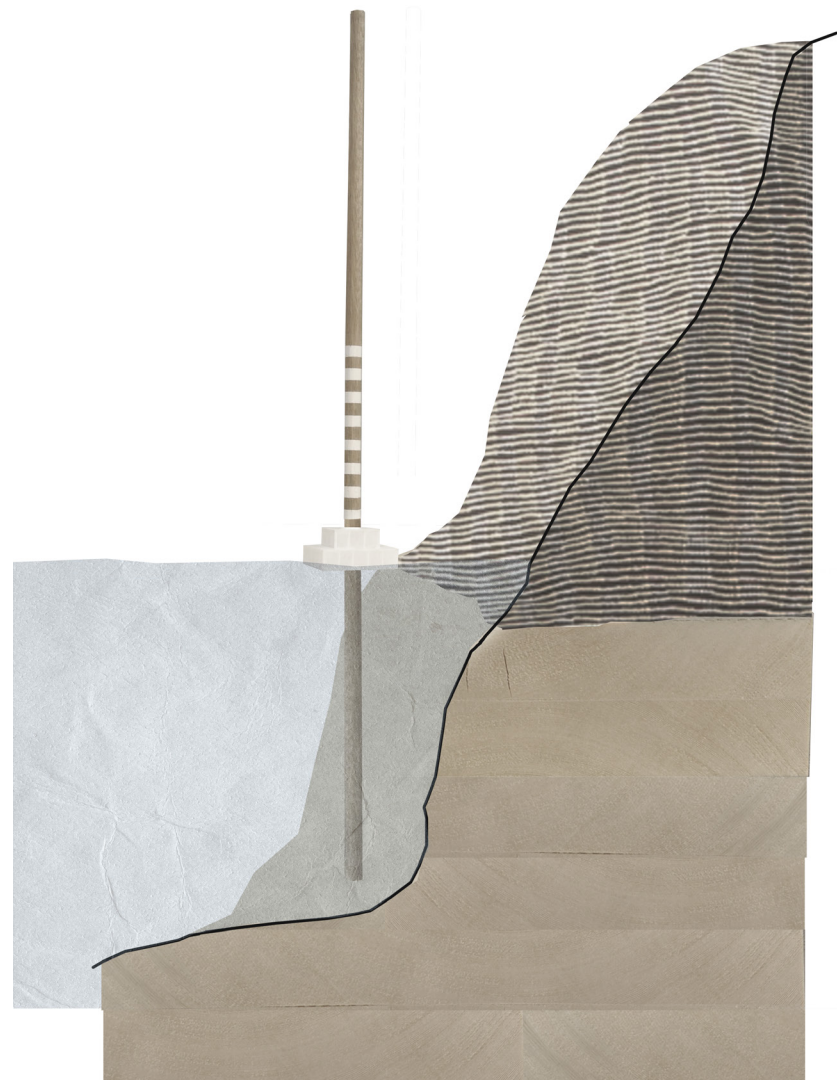
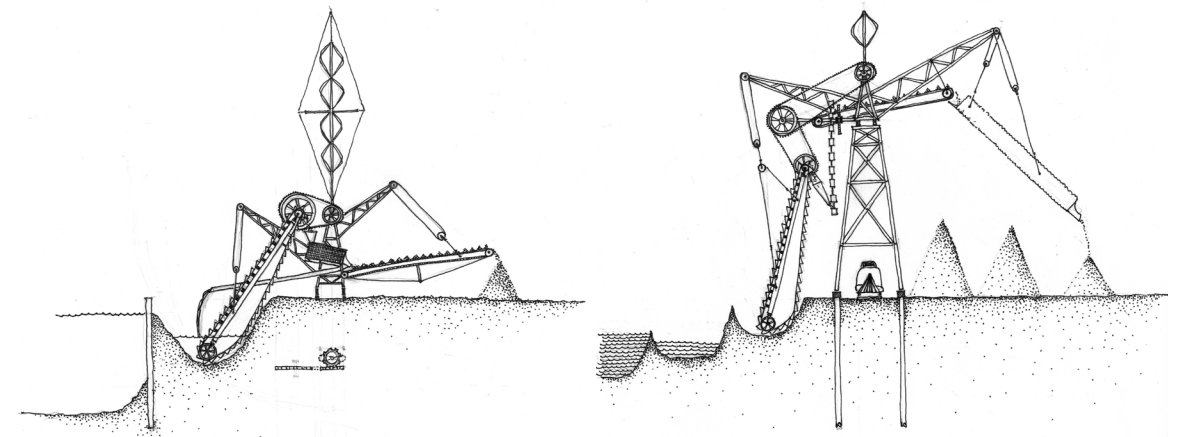


fig. 5 earth relocation
 fig. 6 dredger no. 1
 fig. 7 dredger no. 2



Dredgers

Slowly and silently, the train emerges from the mist. Gliding across the top of the trestle, vortices of turbulence curl off in its wake. It's one of those sublime mornings when the stillness of the air lets the steam over the water linger, growing thick and dampening all sound. In the distance I can barely make out the dark silhouette of the ridge through the dense fog. I know it's there, it's just hiding. The train is slowing down, closing in on the end of the line.

Ever since they started working out there, I've watched the formidable ridge grow, moving outward, gaining new ground everyday. It took me some time to realize what those crazy contraptions were doing on the island – they looked like bizarre spiders scratching away at the ground. Dredgers, at least that's what they call them in the newspaper. Some sort of steampunk sailor's maniacal dream. I'll admit they are pretty mesmerizing to watch, churning away, day and night, with no humans in sight.

It is a crazy idea this whole trestle erecting, dredge digging, ridge building operation. None of it made any sense until the floods started happening, and happening frequently. Now that the water has been here for a while, it's all making sense. The port just keeps...

"Look, look! It's happening!" - My grandson is so full of energy, tugging at my arm. He loves coming out here to watch that train bridge go up and down. It is a magnificent old structure – it reminds me of my childhood, balancing on the bank of the river. *Too bad the river won't be here for him.*



fig. 8 artifact

Museum of Industry

Gripping the chain link fence, my eyes scan across the scene in front of me. A truck sits idle in the middle of the road, it looks as if its driver just up and left. Gone are the days when it sped around the yard, delivering supplies to all the different departments. Overhead, the cranes stand like sentinels, searching for the energy that once buzzed through them. I love those dusty old blue machines, balancing with that little cabin, perched atop a tower, on rails. Who thought of that anyways? They make such nice sculpture, pointing toward the sky – a testament to the bygone days of manufacturing here.

The wooden building obscuring the docks has really seen better days. The weeds can be seen growing out from its broken windows. The seasonal floods that sweep through have ravaged the place. Somehow, the iconic roof form has held up, probably not for much longer, though. This whole island is fascinating. I'm so glad that after the industry shut down and left, the city decided to open it up to the public. An eerie museum of industry, frozen in time. I just really wish we could get behind these fences. I realize all the dilapidated buildings are probably not safe, but it would be so much cooler to walk around in there. I've heard stories of people breaking in to take pictures, urban explorer style, but of course that's...

"Bang" - the door closes. Wait, what? A man just got into the truck. It really was idling? Throwing it in gear, the truck speeds off around the corner, probably to make another delivery in the shipyard. Well, it seems that for now the industry is doing just fine, continuing to produce. *How much longer can this last, though?*



fig. 9 turbine pile

Tech Oasis

This, is the best part of my job. It's not the free lunch buffet or the open office, not the shares in company stock or the on-site gym and dry cleaning. Nope, the morning boat ride is still the best. Seriously though, is there a better way to wake up than hurtling across the bay in my brand new methane powered jet boat? I mean, this baby's got it all. Leather air-suspension seats, the newest accelerator pumping out 380 gigatorques, and these sweet, sweet hydrofoils floating me along, just above the water. No coffee can even get close to this rush, but I'll probably have one at work anyways.

Retracting the foils as I dock onto the lift, the hull is cradled from underneath and raised swiftly out of the water. At the top, I climb out, never touching the water on my commute. Crossing the sky bridge from the parking raft to the headquarters, I can't help but admire the flotilla HIVE[®] has created out here. I like to think that this amazing floating campus represents our true place as the country's leading tech firm. I mean, this place screams innovation. Who else could have pulled this off, and made so much out of the submerged industrial corridor? It makes perfect sense too, this area used to be the industrial backbone of the city, until the ocean covered it all. Now we've totally reinvented it into an amazing showcase of technological prowess.

"Harbor Island landing!" - crackles a voice over the intercom. Whoa, I gotta get off this ferry, it's already my stop. *Ha, whats a gigatorque anyways!?* I guess it makes sense?



Boomerang

These tide flats had an island once. It sprang up and disintegrated in the blink of an eye. A massive monolith of dirt and rock. The delta levels the irregularities. Saltgrass creeps up the river. It's blurry again, the land and water merge.



fig. 10 history's future

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Figure List

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prologue

- fig.1 *Monster, Frank Machalowski*
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- fig.2 *Seascapes, Hiroshi Sugimoto*
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- fig.3 *Rock Folds, Martin Eager*
<http://www.runic.com/gallery/cornwall/millook/millook-haven-geology-2.jpg.php>
- fig.4 *Sichuan earthquake, 12 May 2008, 8 magnitude*
<http://www.ealuxe.com/most-expensive-natural-disasters/>
- fig.5 *Ryoanji, Kyoto, Japan*
http://photo.net/photodb/photo?photo_id=5499156
- fig.6 *Oil Fields #19, Edward Burtynsky*
http://www.edwardburtynsky.com/site_contents/Photographs/Oil.html
- fig.7 *Manufactured Landscapes, Edward Burtynsky*
<http://levyaa.com/wp-content/uploads/2013/03/R-EcoJ-EBMarket.jpg>
- fig.8 *Tree Drawings, Tim Knowles*
http://art.uts.edu.au/wp-content/uploads/IncidentalData_TimKnowles_HawthornOnEasel.jpg

introduction

- fig.1 *Elliot Bay from the air*

1. ruminations

- fig.1 *Geologic Cross Sections of the McConnellsburg Quadrangle*
Penn State University Libraries Digital Collection.
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- fig.2 *Earth History II*
Michigan Technological University Geological and Mining Engineering and Sciences. http://www.geo.mtu.edu/svl/GE3320/MISC/earth_history_II.jpg

- fig.3 *Moai, Easter Island Heads*
<http://hdwpics.com/moai-hdw593715>
- fig.4 *Double Negative, Michael Heizer*
<http://gracefulspoon.com/blog/tag/nevada/>
- fig.5 *Collector, John Grade*
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- fig.6 *Elephant, John Grade*
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- fig.7 *1939 World's Fair poster*
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- fig.8 *1939 World's Fair poster*
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- fig.11 *1964 World's Fair poster*
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- fig.12 *The Long Now*
The Long Now Foundation.
<http://media.longnow.org/files/2/LongNowDiag.jpg>
- fig.13 *BergensBanen, 5:02:00 - 5:04:00, NRK*
https://www.youtube.com/watch?v=z7VYVjR_nwE
- fig.14 *Seascapes: Caribbean Sea, Hiroshi Sugimoto*
<http://www.sugimotohiroshi.com/seascape.html>
- fig.15 *Deep Sea, PES*
<https://www.youtube.com/watch?v=AK18bdUEWSs>
- fig.16 *Tied Hairnets no. 1, Susie MacMurray*
<http://www.susie-macmurray.co.uk/?images=hairnet-drawings>

2. land of water

- fig.1 *Survey of Puget Sound, 1867*
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- fig.2 *Vashon Glaciation of Puget Sound*
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- fig.8 *Duwamish Delta 1875 to 2015*
- fig.9 *Duwamish Delta 2015 to +10' sea level rise*
- fig.10 *Looking north from Fisher Flouring Mill, 1940*
Puget Sound Bridge & Dredging Company, July 8, 1940. Digital image. Museum of History and Industry, Digital Photo Archive. N.p., n.d. Web. 12 June 2015. <<http://digitalcollections.lib.washington.edu/cdm/singleitem/collection/imlsmohai/id/7318/rec/1>>.
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- fig.12 *Harbor Island from above, 1977*
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- fig.13 *constructing an island*

3. memory and dreams

- fig.1 *The Monument/Ruin of Industry, Na Li*
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- fig.2 *Fisher Flouring Mill postcard c.1915*
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- fig.3 *Fisher Flouring Mill postcard c.1950*
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- fig.5 *Fisher Flouring Mill, Jordan Stead*
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- fig.7 *Fisher Flouring Mill, Jordan Stead*
Ibid.
- fig.8 *Fisher Flouring Mill, Jordan Stead*
Ibid.

4. methods

- fig.1 *futility of progress*
- fig.2 *place composite*
- fig.3 *Instar, Christopher Colville*
<http://christophercolville.com/new-gallery/>
- fig.4 *Harbor Island postcard, c. 1912*
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- fig.5 *Prostho Museum, Kengo Kuma*
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- fig.6 *tissue*
- fig.7 *rock cairn, National Park Service*
<http://www.nps.gov/care/planyourvisit/trailguide.htm>
- fig.8 *proposed cairn network on Harbor Island*
- fig.9 *Double Negative, Michael Heizer*
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- fig.10 *Bruder Klaus Field Chapel, Peter Zumthor*
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- fig.11 *non-sign II, Lead Pencil Studio*
<http://www.designboom.com/art/lead-pencil-studio-non-sign-ii/>

5. cairns

- fig.1 *confronting the city*
- fig.2 *mirage of industry*

- fig.3 scale comparison with Lake Union, a mental hole*
- fig.4 threading through*
- fig.5 human and machines*
- fig.6 cairn refuge*
- fig.7 pavement and tanks*
- fig.8 barbed wire*
- fig.9 rails and mill*
- fig.10 contained cranes*
- fig.11 scratch*
- fig.12 a cairn*
- fig.13 cairn network*
- fig.14 maze of mental stimulus*
- fig.15 mill cairn plans*
- fig.16 silo lens*
- fig.17 tube taxonomy*
- fig.18 cavern terrarium*
- fig.19 terraced terrarium*
- fig.20 bathhouse eddy*
- fig.21 clinging tissue*
- fig.22 bridging between*
- fig.23 roofscape*
- fig.24 tower apertures*

conclusion

- fig.1 submerged land*

epilogue

- fig.1 big boats*
- fig.2 earth measure*
- fig.3 mooring*
- fig.4 aquaponic tank farm*
- fig.5 earth relocation*
- fig.6 dredger no. 1*
- fig.7 dredger no. 2*
- fig.8 artifact*
- fig.9 turbine pile*
- fig.10 history's future*

Endnotes

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appendix

model porn

porn

\pôrn\ noun

- a. television programs, magazine, books, etc. that are regarded as emphasizing the sensuous or sensational aspects of a nonsexual subject and stimulating a compulsive interest in their audience

As opposed to a computer model, which requires the lens of the author to view, the physical model exists on its own. Requiring a certain level of abstraction, the three-dimensional model encourages creative interpretation by the viewer. This cognitive connection between object and viewer gives unique access to the author's intentions. While the product is invaluable in communicating the design intention, the act of producing the model is our main interest. Channeling our mind's eye through our hands both requires forethought and spontaneity. Allowing room for error gives rise to development - it is in this process that the model's true value lies.

