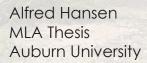
Temporal Awe

Designing for Succession and Emotion in Post-Industrial Landscapes







Introduction

The United States, like many other countries, is a Post-Industrial nation. Many cities were once centered around industrial production sites, and these industrial centers fueled the development of the urban fabric around them. As we have transitioned past this type of growth and economy, and large industrial sites are left vacant in city centers, the field of Landscape Architecture is often first in line to propose new uses for these post-industrial spaces. While this is by no means universal, there several typologies often seen when cities, developers, and landscape architects come together to redefine a post-industrial site. These primary typologies are preservation, remediation, redevelopment, and development into parks and corridors.

In this investigation, I am looking in particular at the last type, the post-industrial park. Industrial landscapes are capable of creating powerful emotions of awe and wonder, which are often missing within the urban fabric. However, the primary typologies I've mentioned rarely engage this aspect of a post-industrial site. As such, this thesis centers around methods to bring a more emotionally engaging experience to post-industrial landscape architecture. It is a response against the ubiquitous trend towards manicured post-industrial landscapes which often evoke the pastoral and picturesque.



Archetypes of Post-Industrial Landscape Architecture:

Preservation - Many Post-Industrial Sites are important to the history of a place or an industrial process, and many of these sites are turned into museums of their former functions. These sites are often carefully manicured and maintained to preserve the structures and the machinery of industry.

Remediation - Industry often leaves behind a history of contamination and pollution. Remediation varies widely in appearance and method, but its focus is often exposing the processes at work to the public, or preventing potential exposure to hazardous materials.

Redevelopment - Re-use and repurposing of structures has become a popular treatment for post-industrial sites with minimal contamination which are conducive to various types of reuse. Often, they are repurposed as housing, art venues and studios, and even offices and restaurants

Parks and Corridors - While many of the previously mentioned methods involve parks, some post-industrial projects attempt to provide a more standard park experience, particularly when the site is located in a dense part of the urban fabric.

Context for Research

My decision to pursue this thesis began with a site and a notion. The site, the abandoned Wester Rails of Alabama Shops in Montgomery, is an important site in both the history of Montgomery and Alabama, and it is rich in potential despite decades of vacancy and decay. The notion is that something more can be done with a post-industrial site, provoking curiosity and awe in those who experience it. There is a unique character to abandoned and historical spaces that is often lost when they are cleaned, cleared, and manicured for re-use.

My investigations were inspired by a number of sources. My initial fascination with the site, its history, and its ruins were strongly influenced by the historical sublime, and sublime landscape painting of the Romantic period. While the sublime proved to be something of an early stumbling block, difficult to define and even more difficult to incorporate into design, but it eventually lead to the realization that what made a sublime landscape compelling was the emotions it could grant a visitor.

Other inspirations were the national and state parks of the United States. The founding of the park system was fueled by a desire to protect natural landscapes which captivate and awe, and to protect and make them available for all. In addition to this similar concept, the methodology of immersion examined in Jones and Hoversten's case study of the visitor experience at Red Rock Canyon was of particular interest.

Through site analysis and research, I began to see the importance of the plant communities within the site, and how their manipulation was integral to shaping the experience of a visitor to the site. Without the plants, there would be no sensation of overgrowth and the passing of time. The books Garden Revolution and Planting in a Post Wild World were both integral to my understanding of how these communities interacted and behaved, as well as how they could be shaped through maintenance. Additionally, the seed for my consideration of the plant community as integral was likely planted by Marris' Rambunctious Garden.



Methodology

In this thesis, my primary method of investigation was design. By weighing different concepts and plan iterations against one another, I was able to move forward to further design decisions and discoveries with each draft. I discovered that my early attempts all leaned towards a manicured, controlled, and picturesque approach, and it was only through repeated iteration that I began to see why, and how I could begin to move beyond it. Throughout the first half of my project time, I struggled with the ability to rapidly iterate and then examine spacial qualities, as the size and complexity of the site made construction of whole-site plans time consuming, and an adequate number of sections and hand-drawn perspectives extremely difficult to produce in a reasonable amount of time.

My largest breakthrough came from a reviewer suggestion to investigate charcoal as a method of drawing, and the memory of a talk regarding the fusion of digital models and physical media. By creating a digital model of the static structures and site contours in Rhinoceros 5, I was able to rapidly produce the needed experiential perspectives that otherwise would have taken far too long if drawn by hand or produced digitally, and likely would not have had the ability to convey spacial emotions as eloquently as charcoal drawings.

Design iteration eventually settled into a focus on maintenance techniques throughout the site, working with its existing communities and character as an untamed space to enhance the perception of the passage of time and history.



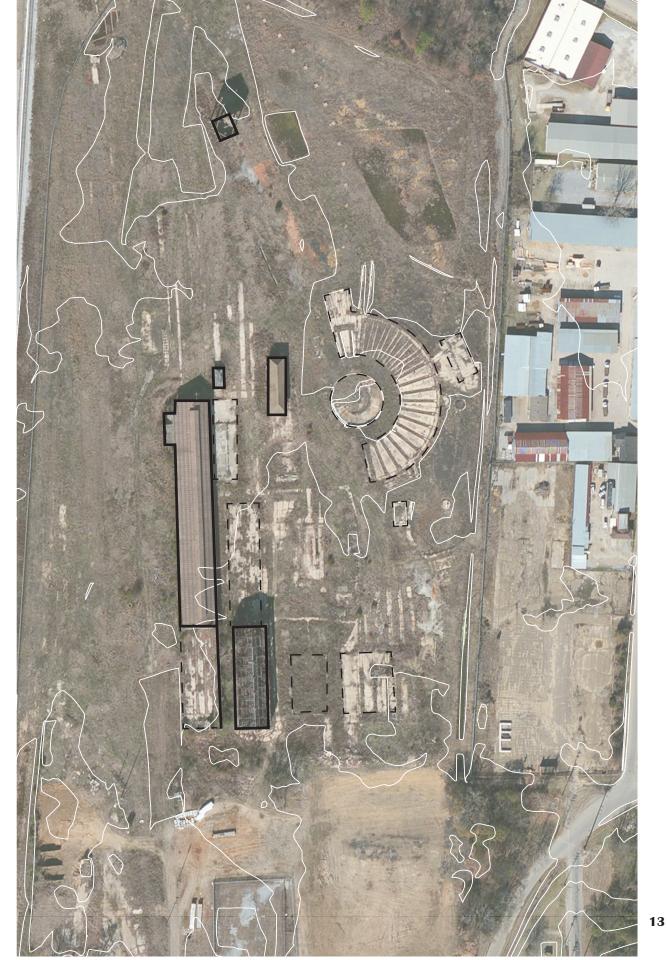
SITE LOCATION

The Western Railway of Alabama's Montgomery Shops, a former production facility for the Western Railway of Alabama, are located just to the north of Downtown Montgomery. The shops were once part of the early railway network that connected the southeast, but have now been out of use for over 50 years. While some structures have been demolished and many components salvaged and reused, several of the main shop buildings remain in varying states of ruin, while numerous foundations remain, primarily in the central part of the site.

Less than a mile from the main area of commercial and entertainment redevelopment in downtown Montgomery, the shops are only a 15 minute walk from the city's old passenger railway terminal turned visitor's center, Union Station, and 10 minutes from the city's Minor League Baseball stadium. However, being just outside of the area of redevelopment, the shops have sat abandoned and largely forgotten, despite initiatives to revitalize Montgomery's historical downtown.

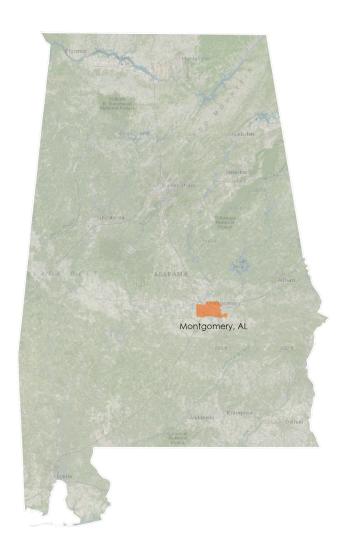
View from the RSA Tower at Dusk





SITE CONTEXT

Located within an eroding former industrial sector on the edge of downtown Montgomery, the shop yard is adjacent to the still-active rails that it was once connected with. Some of the surrounding industry has succumb to vacancy, with a parking lot directly across the road









Site Analysis

Due to the size of the site, and its rich but often difficult to unveil history, much of the research for this project was involved in site analysis. This involved multiple visits to the site, and relied heavily on cross-referencing discoveries made on-site with available historical data and records. I placed heavy emphasis on documentation of the site through photography, as these photographs were important reference for understanding the spaciality of the site as it currently exists, as well as documenting the plant communities, ruins, and its various powerful views and aspects. Historical information was spread widely, as it seems relatively few easily accessed sources exist pertaining to the site as it existed during its functional life.

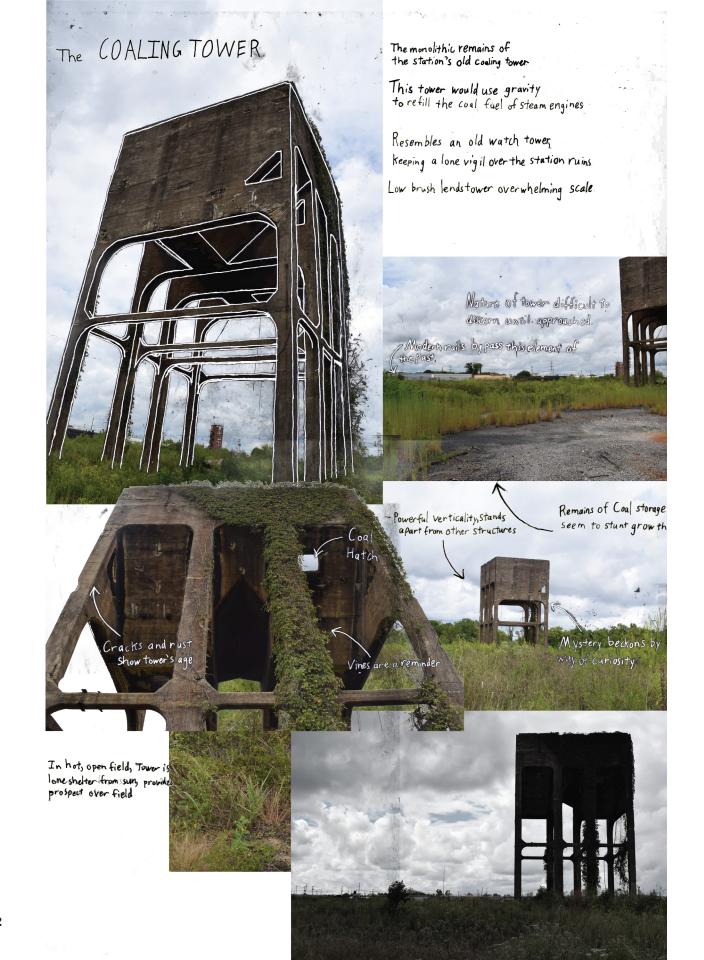


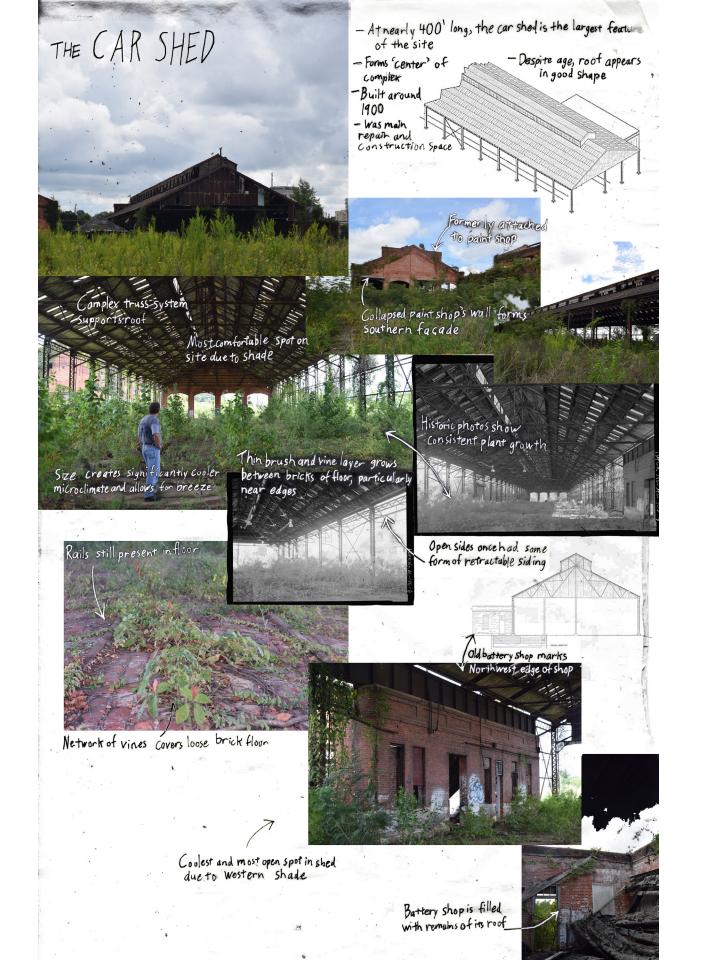


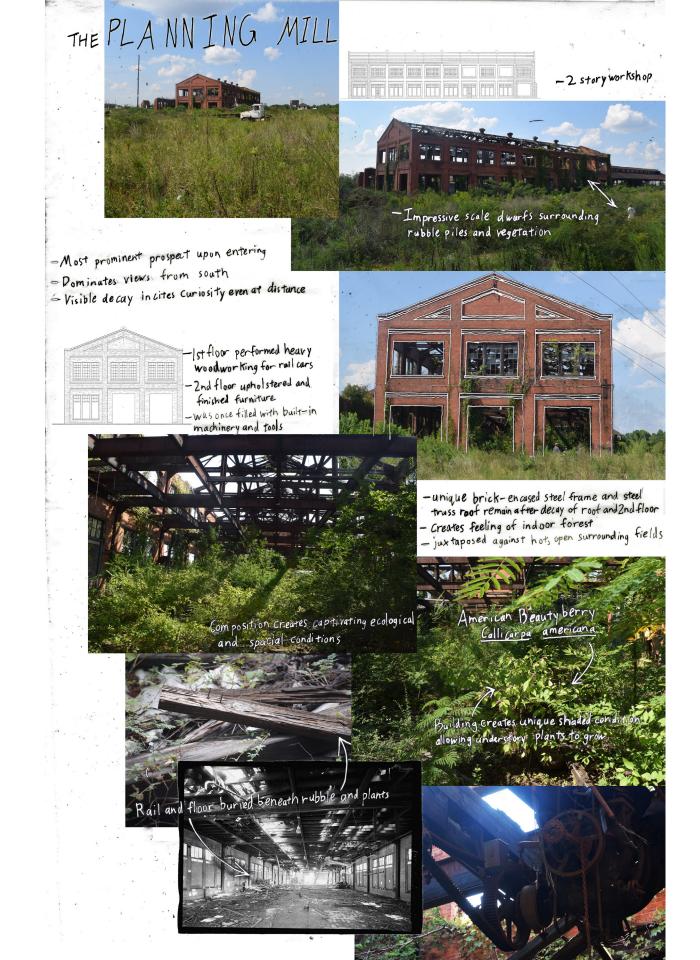


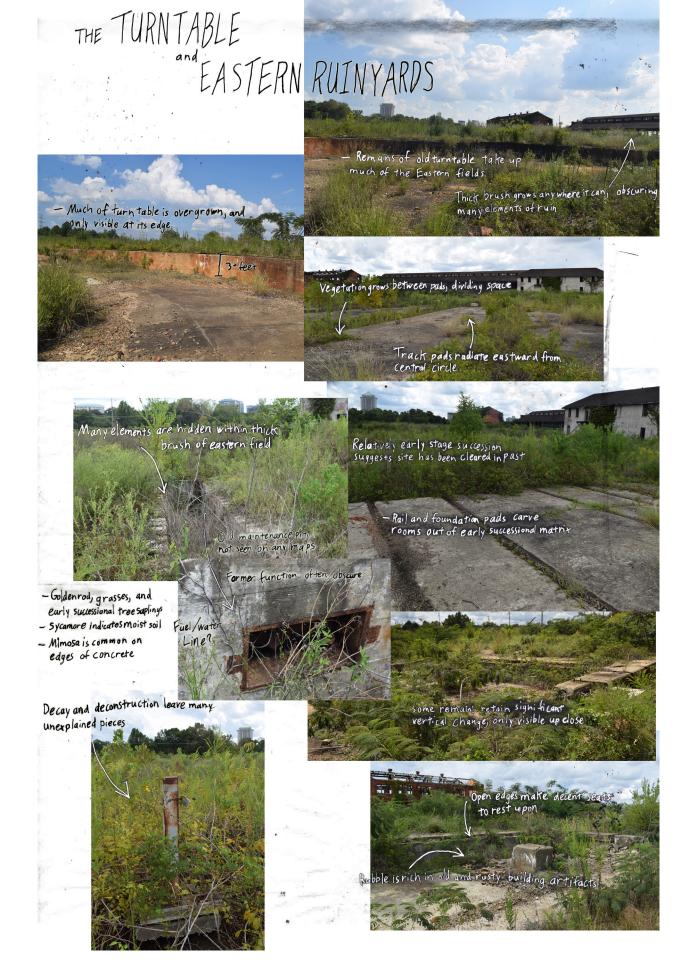












History of Rails in Alabama

Rails have played an integral part in the development of the United States, and Alabama is no different. The railroad, though relatively limited in antebellum Alabama, was extensive and extremely important to the development of the state after the Civil War. The railroad revolutionized travel throughout the state, and it was the hard-fought placement of railroads that allowed Birmingham to explode into an industrial powerhouse in the course of just a few years.

Economies, fortunes, and even entire towns rose and fell on the tides of the railroad, and the great steam locomotives pulled behind them cargo and passengers, but also fortune and change, bringing unprecedented speed to shipping and transportation. It could be said that Alabama and the majority of the United States were carried on the backs of straining, coal-powered behemoths during this period, as much of the country's late 19th and early 20th century industrial might is owed to the transportation power of the railway. It is no wonder that railway terminals came to look as much like grand palaces as they did transportation hubs, and after their less refined formative years, passenger trains became sleek, ornate, and luxurious.

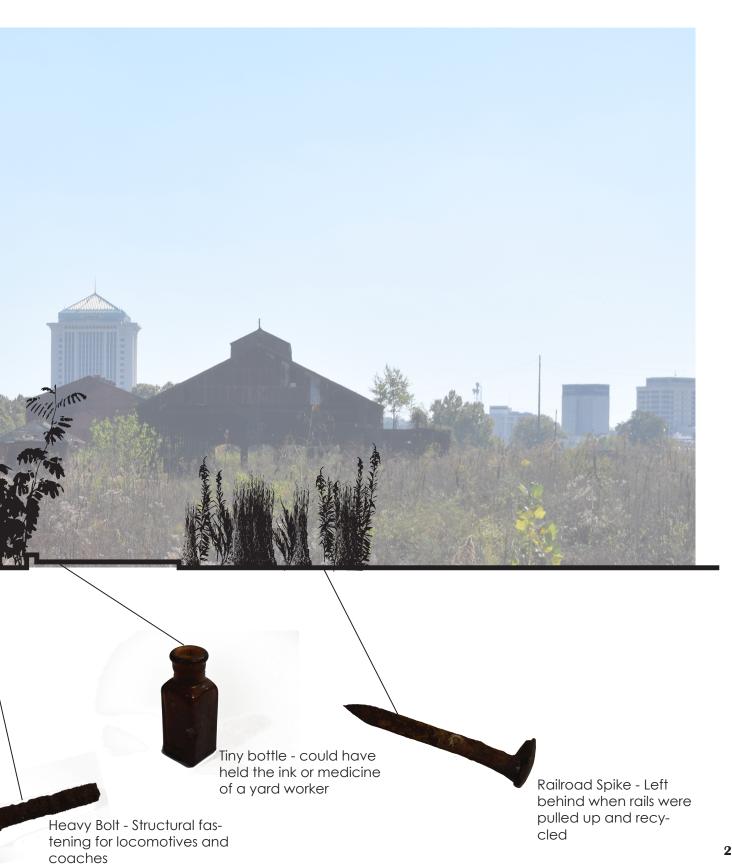


However, this golden age was relatively short. Soon after Railroads connected the country, the automobile began to rise to prominence, and with the completion of the interstate system, offered much more flexibility in terms of both private and public transportation than trains ever could. Though many lament the loss of most of the country's passenger routes, a sentiment almost assuredly laced with nostalgia, they were simply unable to compete, and instead transformed to service mass shipping.

With the waning of the golden era of rails, railway stations slowly started to go dark, and today, most have either been removed or preserved by a shift to a new purpose. The production of passenger coaches ceased, and the passenger cars and locomotives were slowly consolidated, repurposed, and phased out and recycled. Just as the palatial terminals went dark, so did the production facilities. While nostalgia for the past strength of railroads drives many to pursue their revival, it is perhaps more important to respect the influence and importance they once held. The artifacts that remain of this era should be venerated as an integral part of the development of Alabama.



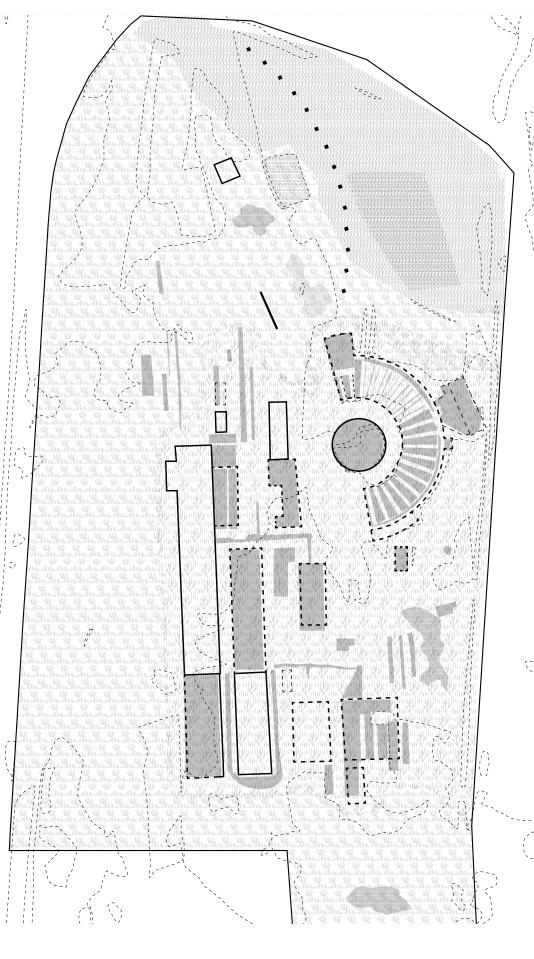




Plant Communities and Structural Remains

The compilation of site analysis discoveries into a single base drawing to underlay later iterations was integral to making informed design decisions in the context of the site as it is currently. This compilation of site analysis includes existing plant communities, contours, foundation remains, and structural outlines. While each plant community was rich in species diversity, I primarily differentiated between the communities by the most abundant and dominant species, and the presence of woody species.

The major community is a very early successional mix of grasses and herbaceous plants, with little permanent woody growth. This community indicates repeated mowing and disturbance relatively recently within the site's history, and is most notably dominated by goldenrod. The second most abundant community is a mix of herbaceous, semi-woody, and some relatively young pioneer tree and shrub species. This community is still dominated by goldenrod, but is beginning to enter a more shrublike stage of succession, obstructing views and creating a more dense, congested, and difficult to traverse community. Other distinct but smaller communities include seasonal wetlands dominated by Joe Pye Weed, a wet meadow, dense with showy crotalaria, and physically and chemically disturbed soils upon which only tough plants such as andropogon species of grass and a few small herbaceous species can survive.



Site Photography































Process Work

Early attempts emphasized detailed control over smaller human-scaled implementations within the ruins, somewhat rooted in the garden traditions of the late picturesque and landscape movement that eventually transitioned into the Landscape Sublime. While I discovered that small scale interventions are important in key areas, detailed and garden-like specificity on a whole-site level was both impractical from a design perspective, and also restrictive of program.







Detailed Spaces

Early attempts emphasized detailed control over smaller human-scaled implementations within the ruins, somewhat rooted in the garden traditions of the late picturesque and landscape movement that eventually transitioned into the Landscape Sublime. While I discovered that small scale interventions are important in key areas, detailed and garden-like specificity on a whole-site level was both impractical from a design perspective, and also restrictive of program.





With this realization, I shifted to less intrusive methods, attempting to devise small and generalized details that would 'not detract from the character of the site.' The fallacy in this line of thinking should have been apparent to begin with-it paralyzed my ability to iterate and test different design strategies. However, it was through this failure that I began to realize that I should turn my focus towards strategies that engaged the whole site, with the intention of immersing visitors within it, and allowing for more natural and unrestricted programming.

These methods focused almost entirely on small spaces, and the details of path and wayfinding, rather than addressing the site as a whole. This focus lacked both the broad tactics needed to address the whole site, and may have been more appropriate at a later stage in planning.

Process design for the planning mill. The mill, overgrown inside with numerous small trees and shrubs, gives the almost surreal feeling of a forest understory within the structure of a building rather than beneath a forest canopy. This plan attempted to lead visitors through the vegetation via path, without clearing the tense density of the space.

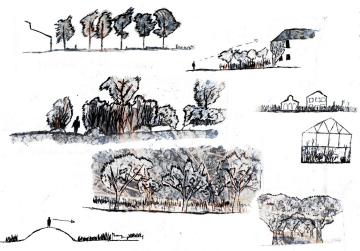




The Big Picture

The latter half of my thesis was spent in a whole-site approach. Inspired by the temporal aspects of the site, I began looking at its aspects beyond the currently existing structures and ecology. Drawing on my references, I was inspired to look at succession and plant communities in a new light. Initial efforts examined different control strategies for plant communities within the site, and testing these against each other. Early exploration pitted more traditional picturesque, open design strategies associated with maintained early succession and intentionally placed plantings against embracing the tense, obscuring and uncanny spaces of shrub and early woodland stages of succession.

This method of pitting design strategy against design strategy provided some progress, showing a tendency for more carefully placed glimpses rather than standard views from all angles. Obscurity of path began to become important, as it became clear that the act of traversing the site was integral to engagement with it, and by removing some of the strict clarity of what was the proper path, a certain exhilarating uncertainty began to emerge.



A series of sketched sections investigating different spacial arrangements and layouts. The ability to communicate the real feeling of a space was largely lacking in these, and the need for a quick way to display spacial feelings was a hindrance in this stage of my thesis project.

Charcoal Revolution

The shift to charcoal drawings revolutionized my ability to communicate spacial feelings through drawings. This method was a fusion of digital and traditional drawings, allowing me to quickly but accurately display and weigh different spacial feelings against each other. The base model of the site was constructed in Rhinoceros 5, and exported, cropped, and printed upon craft paper, which I was then able to draw over using several types of charcoal. The moody, dark nature of the drawings and charcoal as a media was perfect for conveying emotions as well as spacial senses, and this breakthrough and subsequent investigation was one of the most productive phases of my research.

The following series of drawings are the primary products of this phase, and with them in mind, I was able to realize the power and importance of a more urban-wild oriented treatment of the site, though it would not be until the end of my project that I came to this realization.



An early drawing highlighting the axis towards the coaling tower from the alley between the last remaining wall of the painting mill and the planning mill. This shows proposed overgrowth of the vegetation, save for a small path, creating a sort of tenseness that an open vista would lack.











Slightly different technique, testing charcoal over a photoshop rendered view of the planning mill, with the tiny forest inside allowed to continue its growth.



Investigating the potential of allowing a woodland to grow amongst the foundations of former shop structures





Successional Plan

Experimentation with controlling and encouraging later stages of succession within the site. This plan was developed along side some of the later charcoal drawings in the first set of charcoal explorations. I also began considering program along with succession, carving out more strongly controlled spaces within the maintenance scheme. As might be expected, darker colors meant less periodic maintenance, with the darkest shade of gray allowed to transition all the way to woodland. Areas of importance for the rhythm of moving through the site were also given importance here, and some were proposed with an elevated mound.

While the idea of carving out controlled spaces within a less maintained matrix would remain, I soon dismissed the idea of vista points within the site-these were a holdover from the picturesque and sublime landscape approach, and were out of place and of limited functionality.



Physical Model

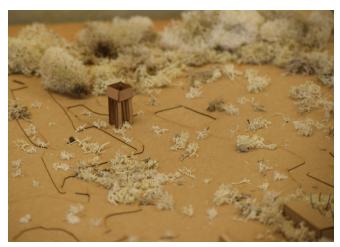
I tested this plan of mixed levels of succession on a physical model. The model itself allowed for a more complete and realistic view of the proposed spacial conditions, and through this my ideas developed further. I began to question the need for any control of succession at all, as the shifting, changing nature of untamed ecology speaks strongly to the fading of this historical post-industrial site from economic relevance. There is a strong sense of timeless awe in the process of a wild reclaiming a once strictly maintained productive space, slowly growing to embed the remains of industry within it.













Return to Charcoal

A brief return to charcoal confirmed some of my emerging suspicions regarding maintained levels of succession. There was nothing less compelling about these sketches, situated later in successional phases. As such, I decided that my final plan must instead focus on the maintenance of the site through the stages of succession, carving out spaces for undefined program and use within it, as well as working with the conditions of the foundations and disturbed soils to create spaces and accessibility, without bringing a manicured sense of control to the site, which would detract from the wild, timeless feeling of the place I was pursuing.







Final Iteration

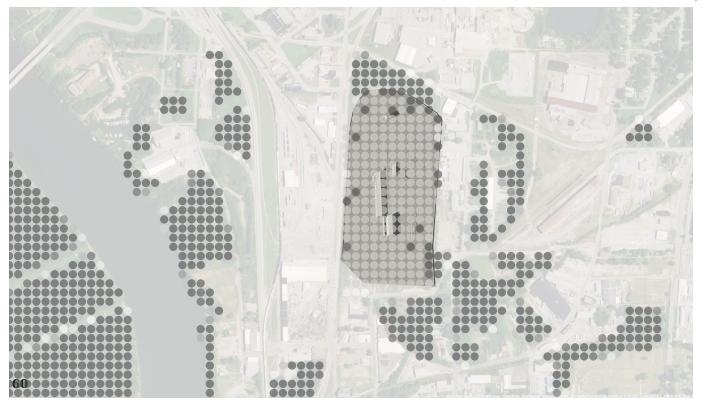




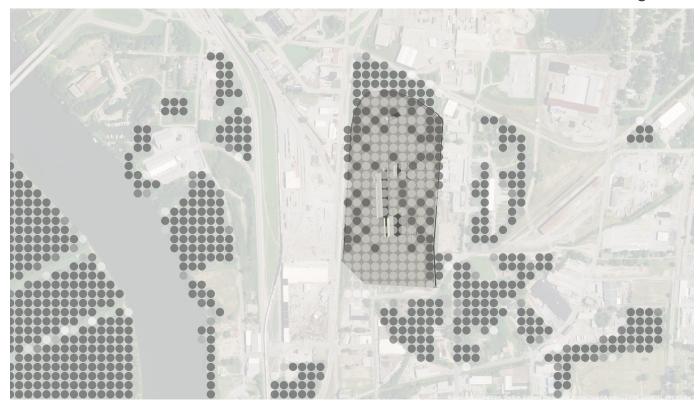
Ecomovement

This brief series of context maps shows surrounding repositories for later successional species, and examines how they are likely to move across the site as time passes, starting with early colonizers mostly at the edges and moving inward.

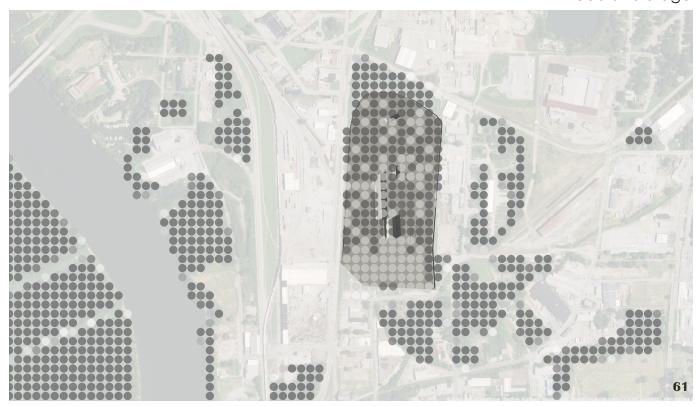
Meadow Stage



Thicket Stage



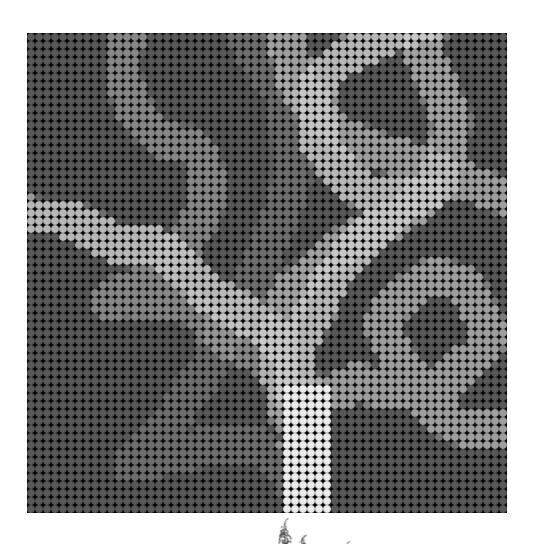
Woodland Stage



Shifting Path Network

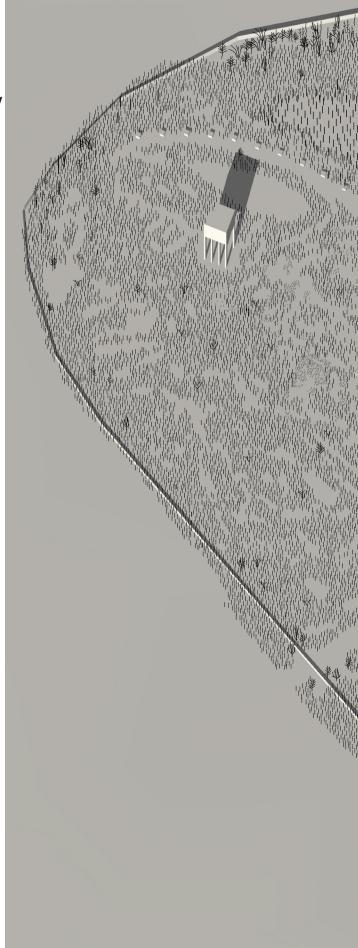
Meadow Stage Path Control: Yearly alteration of path bushhogging creates a system of poorly defined paths which necessitates a departure from the well-defined paths used to enter the site. This creates varying levels of maturity and passability within the meadow complex.

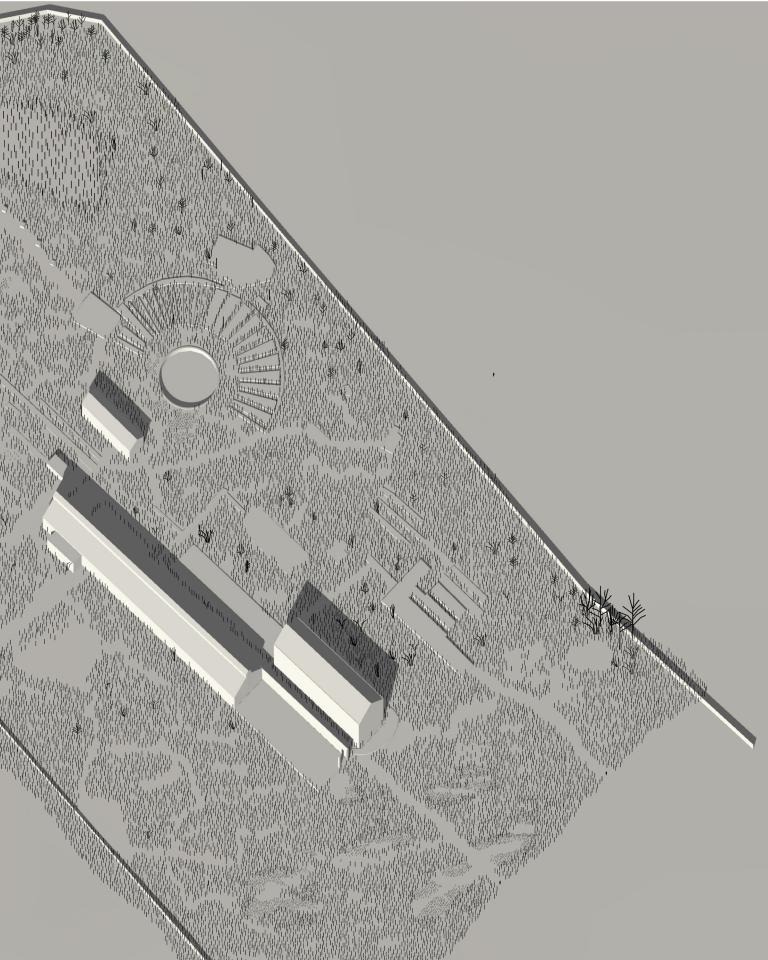




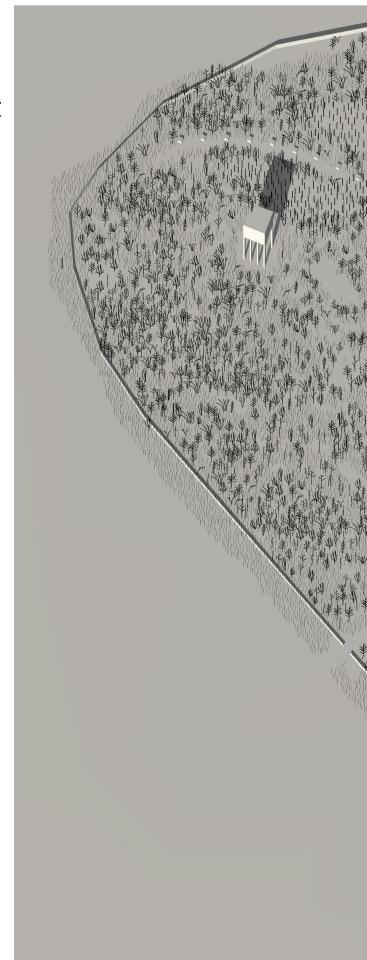


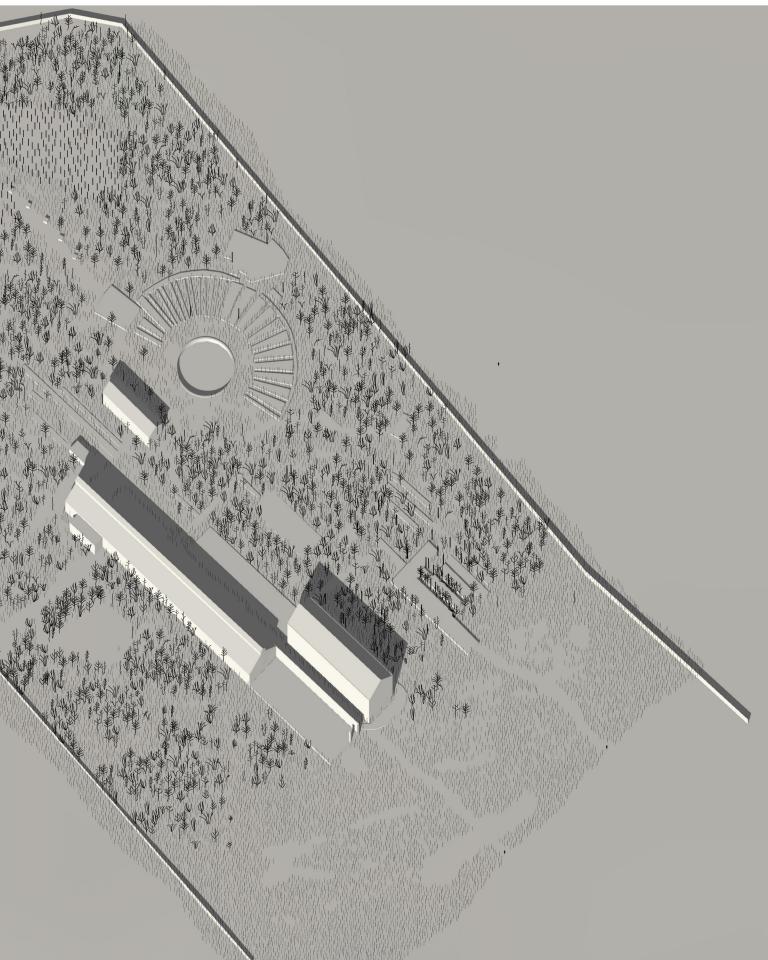
Axonometric Plan - Meadow



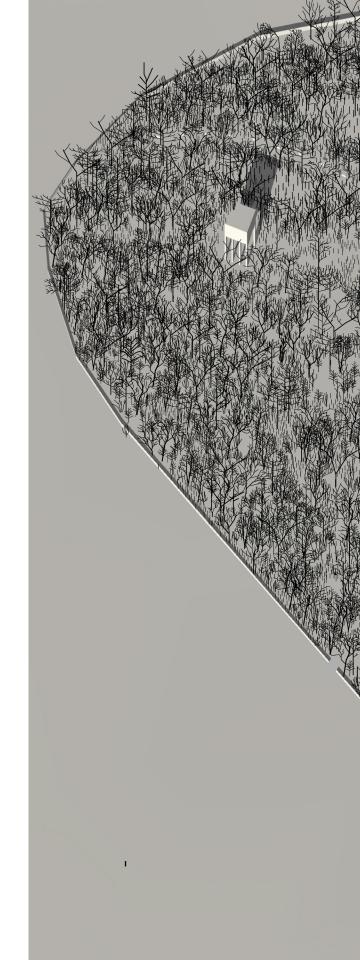


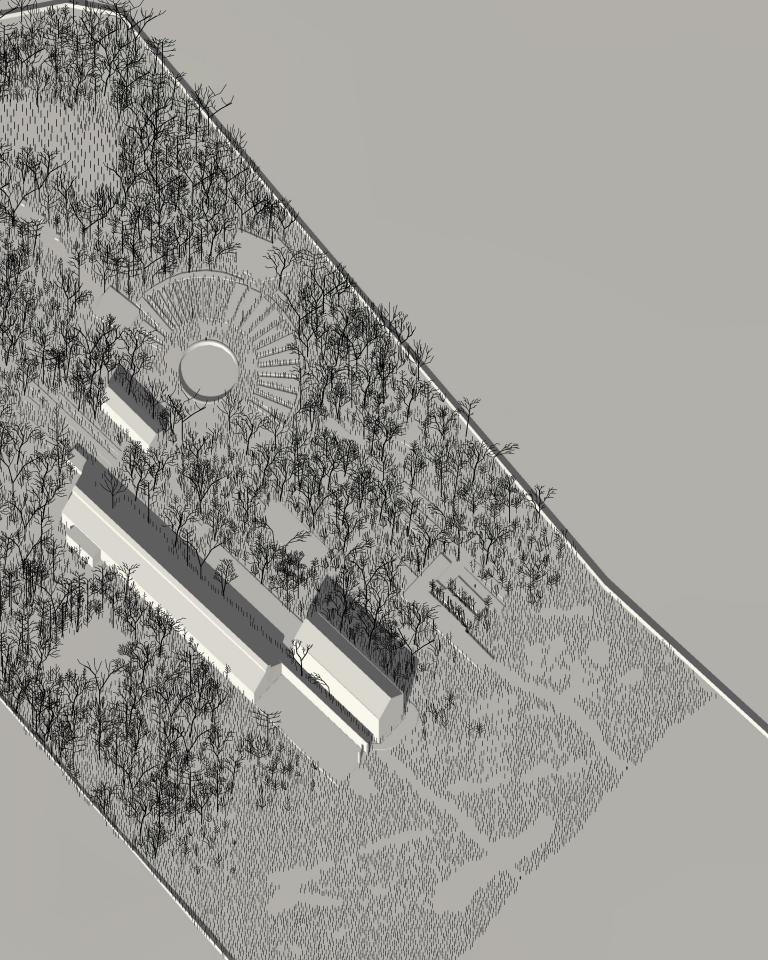
Axonometric Plan - Thicket





Axonometric Plan - Forest





















Conclusion

Through this thesis, I have come to the conclusion that an urban-wilds treatment of a Post Industrial site is a powerful way of bringing an emotional and engaging landscape that differs from the norm of traditional parks into the urban fabric. The importance of temporal aspects of the site is paramount, and immersing visitors in active, unrestrained succession and unpreserved, aging structures of industry is necessary to truly unlock the feelings that these spaces can impart upon visitors.

That said, this investigation is far from complete. As has been my modus operandi for the length of my thesis research, more iterations are necessary. More sites within different ecological zones should be examined as well, so that a series of maintenance-with-succession strategies can be devised. As my largest breakthroughs occurred in the artistic inquiry into charcoal as a medium, I feel that different methods of representation should also be tested, and a more iterative approach to charcoal drawing is also in order. Tests in which lighter tones such as white are the majority, in contrast to the mostly black tones of my charcoal work, may be useful. Testing different sizes and scales of drawing may also be useful.

More research should also be done regarding the cost-effectiveness of such a strategy. At the outset of my thesis, one of my interests in a less manicured and controlling strategy was the reduction of costs, making parks such as this one more available to municipalities lacking funds, which is a very common case, particularly in locations which economic downturn has followed the departure of industry.

In reflection, were I able to reset the clock with the knowledge I now hold, my initial investigations would be far less limited in scope, and I would much more quickly divorce myself from the notions of the sublime and picturesque, leaving the internal debate on which is which, and what they mean to artists and philosophers, and instead throwing myself into further ecological research, and further readings and understandings of Urban Wilds as places, which would have allowed me to much more quickly reach some of my final conclusions, and put more time into iterations and the craft of plans through time.

In my career, I will undoubtedly further pursue this topic, as succession and horticulture are two of my greatest interests, and the desire to create of emotionally engaging spaces is what has driven me throughout my education in Landscape Architecture.

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