In Search of **Slowness** A STUDY SLOWNESS IN RELATION TO THE BUILT ENVIRONMENT

ROBIN HOWARD JONES

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Chair: Mari Fujita Committee: Daniel Roehr, Ferdinand Ludwig Mentor(s): AnnaLisa Meyboom

GP2 Advisor:

SALA Chair:

ABSTRACT

This graduate project explores how the convergence between living architecture and the concept of slowness can lead to greater social connection within the affected communities. A structured network of slow public spaces is key for cities to effectively address the complex conditions that arise within an increasingly fast culture.

spaces.

The primary methodology is the study of typological connections at multiple scales, materiality and architectural details through scholarly research and investigative analysis.

In order to keep up with rising density cities need to increase the capacity of these public

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The pursuit of slowness in an increasingly busy society is a difficult thing to achieve. How can the infrastructure and urban design of a city support the health of its population and provide space for this pursuit?

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INTRODUCTION

This architecture thesis draws heavily from the field of Slow Culture and how it affects the architectural field and city building. It examines offshoots of the movement such as Cittaslow concerning public spaces and parks and uses it as a guide to evaluating architectural and urban design. For the purposes of this evaluation, Victoria was selected to conduct a case study.

As our city's populations increase and densify, there is a need to develop more parkland to keep up with a sustainable ratio of parkland to the resident. In its most recent parks master-plan, the City of Victoria stated that with increasing densification, the city would need 53 hectares of new parkland over the next three decades to sustain the current per-capita parkland.¹ As there is a limit to the amount of parkland that a city can realistically obtain and keep what do we do when the city becomes densified to the point where the number of residents overwhelms the current park infrastructure. Apart from beautification and amount of green space, parkland's core function is to benefit the mental health of a population. As humanity has progressed through the 20th century and into the 21st, life continues to speed up. The societal push of ultimate multitasking has led to increased productivity at the expense of the mental and physical health of the city. The rise of the Mega-City and the density of its urban fabric and lack of access to nature are directly connected to the decrease of the overall mental health of its region.²

This thesis posits that in combining Slow Culture with contemporary living structures, public space can be developed in which its capacity for occupants increases with time.

ENDNOTES

1 LEES + ASSOCIATES, 2017. Parks & Open Spaces Masterplan. City of Victoria, p.35

2 Peen, Schoevers, Beekman, Dekker, 2010. The Current Status of Urban-Rural Differences in Psychiatric Disorders. Acta Psychiatrica Scandinavica, p.84-93

PART I PROJECT FRAMEWORK

century.

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RATIONALE

To combat the increasing density of Victoria's population in relation to their park inventory, they will need to either acquire more parkland or increase their program densification. While there is a need for open spaces within a city, making more use out of the same amount of land will allow them to accommodate the projected population growth over the next

URBAN HEALTH

Treed green spaces and parks are a major influence on the health of residents within a city. The economic push to increase productivity has come at the expense of the mental health of the city and has produced the concrete jungle that we are now used to.

The rise of the Mega-City and the density of its urban fabric are directly connected to the decrease of the overall mental health of its region. While many studies have been done on this effect, a 2009 report of this phenomenon concluded that city living resulted in an increase of 39% in mood disorders and 21% in anxiety disorders in addition to having a correlated increase in the onset of schizophrenia.¹ Other studies show that a fast-paced lifestyle manifests itself in subconscious ways such as increases in average walking speed in large cities as well as significant correlations to being more at risk of heart disease.²



Figure 1: Bornstein, Helen, and Mark Bornstein. 1976. Diagram Of Walking Speeds In Relation To City Size.

Several factors play into this relationship between health and the urban environment, While preexisting conditions along with social factors and overload all contribute to a decreased state of health, the erosion of protective elements and environmental factors form a significant part of the problem.³ Reduced access to nature along with increased light and noise pollution lead to over-stimulation and high-stress environments.

SLOW CULTURE

Born out of the Slow Food movement, Slow Architecture strives to find the balance between our fast-paced lifestyle and the decompression of the individuals' mental state. It achieves this through the study of authentic materiality, formal logic, and temporal experience.⁴

First established in 1986, the Slow Food movement sought to reduce the impact and the prevalence of fast food within society, promoting the rediscovering of local cuisines. While the speed of the city has contributed to major advancements in the industry over the last century, the toll it has on the mental and physical health of its occupant needs to be addressed through a re-imagining of the built environment.

With the size of the city influencing even the speed at which we travel, creating havens of retreat within the metropolis becomes necessary to provide a release valve from the pressure in which we live. Slow Architecture, in the form of living structures, can provide and elicit this essential decompression of temporal experience of the built environment.

CITTASLOW

Cittaslow is an organization born out of the Slow Food movement that focuses on increasing the quality of life for residents of towns and small cities by slowing down the pace of life. Made up of a network of 272 towns and cities with less than 50,000 residents, it embraces new technologies and urban design in their support the slow development of the urban environment.⁵

Through Cittaslow, sustainability becomes paramount dictating everything from construction methods to city development and planning to farmers markets.

Parallel to Cittaslow incorporating these principles into the realm of urban planning, Slow Architecture itself has seen a gradual increase in attention within the last couple of decades.

LIVING STRUCTURES

Living Architecture is the embodiment of slow design and architecture. Born out of the rich historical art of tree shaping living structures, living architecture or Arbortecture, are the contemporary manifestation of architecture that is grown instead of built. Some of the best historical examples of these structures are the Living Root Bridges in India. Primarily located in the northeastern state of India, Meghalaya, Root Bridges form an important part of the region's transportation infrastructure. Spanning to a maximum recorded length of 50 meters.⁶

Two contemporary architectural examples of living structures are Baubotanik and Fab Tree Hab. The first currently undergoing research tests while the second is a conceptual project by Terraform One. Both of these projects are formed from living trees and begin to question the current architectural dialogue and construction methods in contemporary architecture. Building with living trees is a construction method that's glacial pace interacts with the meditation space through its visual changes through the year and its lifetime.

*Redacted for digital publication due to copyright. Figure 2: Living Root Bridge; Di Sturco, G. 2018 *Redacted for digital publication due to copyright.

Figure 4: Living Root Bridge; Rogers P. 2015



Figure 3: The Patient Gardener



Figure 5: Baubotanik; Ludwig, F. 2012

LIVING ROOT BRIDGES JING KIENG JRI

Growing to maturity over a span between 15 and 50 years, the construction of root bridges revolves around the use of scaffolding that channels the aerial roots of the region's prolific rubber fig tree or Ficus Elastica. After the site and necessary trees have been selected, scaffolding is constructed over the obstacle between them.⁷ The roots and branches of the tree are then routed along the length of the bridge, being allowed to grow free in the direction chosen direction. As the tree and roots mature, they form a structural lattice-work for the bridge. Eventually, the scaffolding will rot away leaving only the living structure behind.⁸

Through the growing process, the bridge will need regular maintenance to ensure that the proper growth of the structure. This active care is needed for as long as the bridge trees stay alive. Maintaining these structures become a social endeavor, bringing its community together with a shared interest.

Flgure 6: A Young Aerial Root Tied Back; Yadav, P. 2020.

*Redacted for digital publication due to copyright.

Flgure 7: Bird's Eye View; Yadav, P. 2020.

*Redacted for digital publication due to copyright.

Flgure 8: Longest Known Root Bridge - 50 Meters; Yadav, P. 2020.



Figure 9: Growth Diagram of a Root Bridge; by Author

Figure 10: Growth Diagram of a Root Bridge. (cont.); by Author

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1. Peen, Schoevers, Beekman, Dekker, 2010. The Current Status of Urban-Rural Differences in Psychiatric Disorders. Acta Psychiatrica Scandinavica, p.84-93

2. Levine, Robert V. 1990. "The Pace of Life." American Scientist 78 (5): 450-459.

3. Centre for Urban Design and Mental Health. 2020. How Urban Design Can Impact Mental Health.

4. SLOW FOOD MANIFESTO. 1989. Ebook. Paris: Slow Food.

5. Paquot, Alter architectures manifesto: Observatory of innovative architectural and urban processes in Europe, 2012

6. Rogers, P., 2015. The Undiscovered Living Root Bridges Of Meghalaya Part 1

7. Rogers, P., 2015. The Undiscovered Living Root Bridges Of Meghalaya Part 2

8. Yadav, P., 2020. Living Tree Bridges In A Land Of Clouds. [Blog] NPR, Available here [Accessed 22 December 2020].

With an already low parkland space-per-resident ratio, the City of Victoria is densifying its urban fabric. To balance this new development, Victoria will either need to obtain a large amount of new parkland or seek to 'density' its existing open spaces, possibly both.

RELEVANCY

PARKS AND OPEN SPACES MASTER PLAN

Published in 2017, the Parks & Open Spaces Master-plan attempts to "lay out a road-map to guide planning, management, and investment over the next 25 years".¹ Collecting and analyzing historic park data to use it to create a projection of park use through to 2041. Showing current use, population and park densities and proposed sites of new parkland it identifies key issues and priorities for the development and organization of the parks within the Victoria municipality.

In 2011, 59% of Victoria residents rented their dwelling. The neighbourhoods with the highest rental rates were North Park, Downtown and James Bay (77%, 73%, and 69% respectively). The neighbourhoods with the highest home ownership rates were Gonzales, Oaklands, and Victoria West (70%, 58%, and 49% respectively) (Statistics Canada, 2011). Also, of note, the number of one person households is at nearly 50% and will likely rise.²



The repercussions of these trends are that over the foreseeable future the demand for park space is going to grow, especially around areas that are seeing high rates of densification such as Downtown and Harris Green. To this end, the current projections of parkland-per-resident in 2041 will have decreased by approximately 20% if nothing is done to increase the inventory of land. Currently, Victoria has a park-per-resident, in hectares, the ratio of 2.65 ha / 1,000 residents decreasing to 2.12 ha by 2041. This allocation of parkland is much lower than the average in BC, with similar-sized communities having a median provision of 10.7 ha / 1,000 residents.³

In addition to these challenges, one of the goals set by the Community Plan is to grant greater access to parks through having every home in Victoria be within 400 meters, equating to a 5-minute walk, of a park.⁴

Figure 12: Map of Municple Parks in Victoria w/400m Radius; LEES + Associates, 2017

> *Redacted for digital publication due to copyright.

Figure 13: Map of Playgrounds and Schools; LEES + Associates, 2017

URBAN FOREST MASTER PLAN

Much more focused in scope, the Urban Forest Master Plan, developed in 2013, specifically looks at the development of the tree canopy within the Victoria municipality. The plan examines the current state of the urban forest and lays out the groundwork and ideas for the next 20-50 years of tree development. The report looks at the diversification of the tree species, taking into account climate change and how the current plantings will cope.⁵

The map on the right depicts the tree canopy density in 2011. As seen, the downtown core, Harris Green and Burnside are areas of severe underdevelopment of the urban forest. This is mostly linked to the low amount of parkland within these areas as the current parkland typically has a significantly higher density of trees than any other portion of the city.

Figure 14: Heatmap of Tree Cover; Caslys Consulting, 2011

ENDNOTES

1. City of Victoria, 2017. Parks & Open Spaces Masterplan. Victoria, BC, p.5.

2. Parks & Open Spaces Masterplan p.12

3. Parks & Open Spaces Masterplan p.33

4. Parks & Open Spaces Masterplan p.38

5. City of Victoria, 2013. Urban Forest Master Plan. Victoria, BC.

The specifics of living structures necessitate particular strategies in both tree species and location in proximity to each other, layered on this are the potential architectural programs as the two meld together creating an ever evolving site.

PLANNING

SPECIES

While several species could potentially sustain themselves, grafting together to form the needed structure, the Baubotanik research group has classified species that have worked best in their tests. Birch, Hornbeam, Poplar and Sycamore all fuse together in a process called inosculation, a phenomenon that allows tree branches, roots, and trunks to grow together similar to the process of grafting.²

Through intentional inosculation these trees can be merged, eventually sharing growth rings, and becoming one organism. Being located in Germany, a place with a similar climate, Baubotanik's processes and research in the growing of living structures can be migrated to work on the West Coast.



Figure 15: Hornbeam Carpinus Betulus



Figure 17: Sycamore Platanus Occidentalis



Figure 16: Birch Betula Papyrifera



Figure 18: Poplar Populus Trichocarpa



PROGRAM

A multi-level park embedded in the structure provided by the site's planting, these living pavilions provide a framework for community growth. They will encapsulate a variety of programs as the site requires and evolves. In addition to the typical parks program, program-specific spaces will be created. Fixed

meeting spaces reading spaces storage spaces equipment spaces meditation spaces



Figure 19: Treed Courtyard Spacial Diagram; by Author

Flexible gathering spaces performance spaces market spaces exercise spaces

ENDNOTES

1. City of Victoria, 2017. Parks & Open Spaces Masterplan. Victoria, BC, p.14.

2. Parks & Open Spaces Masterplan p.12

3. Parks & Open Spaces Masterplan p.33

4. Parks & Open Spaces Masterplan p.38

5. City of Victoria, 2013. Urban Forest Master Plan. Victoria, BC. Three sites have been selected for further considerations. All located near the downtown core, they look to fulfill the need for an increased density of parkland in neighbourhoods that are becoming more populated.

SITE



VICTORIA, BC

The provincial capital of British Columbia, Victoria has one of the strongest economies in the province including advanced education, government, r & d, tourism, and technology.¹ Falling behind on its parkland-per-resident ratio, it is an ideal site to experiment with this new vision of flexible green space.

A small city amid expansion, the retaining of its community focus and culture as it moves forward will be crucial to the retention of identity and place. The state of surrounding parks and green space influences both the economy and quality of life within the area. As such, tourism and community engagement both stand to gain through the construction of these structures through the resulting pilgrimage that will happen to these spaces.

Using Victoria's Community plan and the Parks and Open Spaces Master-plan to specify deficiencies in the network of parks and and the areas that have needs for future park locations, three potential sites were selected to farther analyze.



ROCK BAY

Set just outside of Victoria's Downtown in the Burnside district, is Rock Bay. The site has been flagged as a potential park in the OCP with the surrounding area planned for mixeduse residential and light industrial. The long term vision for Lower Rock Bay is as part of a new mixed-use urban village that will incorporate the area's industrial nature within the town fabric.¹

The area is a juxtaposition between tree-lined streets and heavy industry. Forming the core of Victoria's industrial sector, the development of Lower Rock Bay will be a deciding factor in how more green space will be added to the city's inventory. A major part of the waterfront is currently a staging site for an aggregate and concrete company. This along with the heavy industry that this site has historically been home to has made the site's waterways the most polluted in BC.²

Figure 21: Rock Bay Figure Ground Study; Victoria GIS + by Author



the Parks Masterplan in placing all residents in

the city within a 5 minute/400 meter walk of a

park or public space.

Figure 22: Plan of Lower Rock Bay highlighting roadways and on-site buildings: Victoria GIS + by Author

*Redacted for digital publication due to copyright.

Figure 23: Aerial View of Lower Rock Bacy; Google Maps, 2020

*Redacted for digital publication due to copyright.

Figure 24: View from Pembroke St Looking North; Google, 2020

*Redacted for digital publication due to copyright.

*Redacted for digital publication due to copyright.

Figure 26: View from Government St Looking West; Google, 2020

Figure 25: Aerial View of Lower Rock Bacy; Google Maps, 2020



PIONEER SQUARE

A historic park located next to Victoria's Christ Church Cathedral, Pioneer Square has a long history of public use. Founded in 1855 as a public cemetery, the space was used as such until 1873 at which point the land had too many problems and had filled up with some 1300 interments.

After falling into disrepair for the next 30 years, the site was finally converted into a public park in 1908. Currently, the park is inhabited by 74 mature trees, forming a dense canopy over much of the site. Of these plantings, only 20% are native species with less than 40% of the overall trees being in good health.³

The park's proximity to downtown as well as its proximity to the Fort St greenway, the cathedral and being located in the Harris Green district of Victoria mark the site as a destination.

Figure 27: Pioneer Square Figure Ground Study, Victoria GIS + by Author



Figure 28: Plan of Pioneer Square with Mature Tree Locations, Victoria GIS + by Author

Between servicing the residential neighbourhood to the west and the commercial district to the east, this site hosts a highly varied user-base. Nearby development on Fort st will only increase this already busy park.

*Redac publication

Figure 29: View from Quadra St

*Redac publication

ted for digital due to copyright.
Looking South; Google 2020
ted for digital due to copyright.

Figure 30: View from Meares St Looking Southwest ; Google 2020



CHINATOWN

Set in between Fisgard and Herald streets near Victoria's Chinatown, this infill project would seek to remediate a small, paved parking lot that currently runs the width of the block connecting to both streets. Framed on either side the project would inhabit the long space, creating a journey through its length.

Historically an ostracized community, Chinatown was never considered for park development. Today the area is a patchwork of heritage buildings and large parking lots.

Figure 31: Chinatown Figure Ground Study, Victoria GIS + by Author



Figure 32: Plan of Infill Site Through Center of City Block, Victoria GIS + by Author

This area of Downtown Victoria is sorely lacking in green park space, especially when considering its current residential population and historic siting. This site would allow for the living structures to be in a relational dialogue with the built environment of the downtown city.

Figure 34: View from Fisgard St. Looking North; Google 2020

*Redacted for digital publication due to copyright. *Figure 33:* View from Humbolt St. Looking South; Google 2020

ENDNOTES

1. City of Victoria, 2020. Official Community Plan. Victoria, BC.

2. Pollutiontracker.org. 2020. Pollution Tracker -How Polluted Is Your Ocean?. [online] Available here [Accessed 21 December 2020].

The act of being slow in a fast environment is a conscious decision in which living architecture can be an emissary of in relationship between park and city.

PRECEDENTS

BAUBOTANIK - PLANE TREE CUBE

(con)fusing trees and architecture Ferdinand Ludwid 2012

A project in the Landesgartenschau Nagold exhibition, the Plane-Tree-Cube explores the nature of meditative viewing structures and growing architecture. A technically complex project, a system of Plane Trees were disbursed around the perimeter of a structural steel structure which provided a frame on which the plants can grow. Pleached and grafted together, they form a continuous web across the exterior of the structure, eventually growing to support the resulting architecture. In this way, as the project grows, the steel structure will be removed leaving only the platforms held by the network of trunks.

A viewing structure, the project becomes a point of pilgrimage, within the town that it is situated. Constructed of 4 levels with an atrium-like courtyard in the center, its leafy walls provide muffling to its surroundings without completely cutting it off from its surroundings

The constructed tree provides both the structure and the envelope of the building, a constantly evolving shape that will continuously grow.



Figure 36: Plane Tree Cube - View of Young Structure; Ludwig, F 2012



Figure 37: Plane Tree Cube - Ground-plan; by Author



Figure 38: Plane Tree Cube - Tree Growth Diagram; Ludwig, F 2012



Figure 39: Tree to Metal Connection *Figure 40:* Tree to Tree Connection Ludwig, F 2012 Ludwig, F 2012

FAB TREE HAB

Inter-dependency between nature and people Terreform ONE

2005

An experimental project by Terreform ONE, Fab Tree Hab attempts to fully integrate human habitation and nature. A grown building that has low costs (environmental and monetary) and is sustainable. With a growth period of between five and seven years, the home "becomes indistinct and fits itself symbiotically into the surrounding ecosystem". The original concept was for a new design for Habitat for Humanity,

Inspired by India's living root bridges, the growth process is as much part of the design as the final object. The project relies on pleaching, a process in which certain trees can be shaped and woven, together fusing to create a single organism made out of multiple saplings. The woven crisscrossing branches provide structure for the walls while the main trunks are used as beams, grown over the roof. In a slow construction process, the continual growth becomes as important to the project as the outcome.

Figure 41: Fab Tree Hab - Material and Structure Growth, by Author



Figure 43: Fab Tree Hab - Gowth Timeline; Terreform ONE, 2005

Figure 44: Fab Tree Hab - Wall Section; Terreform ONE, 2005

TREE HOPPER

A transitional temporal space in one's commute OCTO

2017

Originally the 'Tree hopper' was aimed to support the city (and it's inhabitants), overwhelmed with permanent rush and luck of time, due to significant commuting and inefficient urban space organization. However, while the design process, the concept evolved to become an inspiring 'vehicle', with potential to be both local and even global solution.

A proposed project envisioned as a place of rest and inhabitation within the context of the commute and workplace burnout, Tree Hopper is a project that exists on the transitional temporal experience between commuting and work.

The project states that "on average, commuting and work occupy 20% of our time" As such the proposed city layout would have a Tree Hopper situated not more than a 12-minute walk from anywhere in the city.

Using a host tree, a mesh structure and service core would hold up the tree tents allowing for its inhabitants to disconnect from the frantic city.

Figure 45: Tree Hopper - Render View; OCTO, 2014

*Redacted for digital publication due to copyright.

Figure 46: Tree Hopper - Locations and Walking Distances; OCTO, 2014

*Redacted for digital publication due to copyright.

Figure 47: Tree Hopper - Plans - Elevation - Section; OCTO, 2014

*Redacted for digital publication due to copyright.

Figure 48: Tree Hopper - Axonometric Cutaway; OCTO, 2014

BIRCH MOSS CHAPEL

A chapel with utmost transparency Kengo Kuma 2015

> Envisioned as an obliteration of the chapel into Karuizawa's white birches. Kengo Kuma's Birch Moss Chapel defuses the form of the chapel structure into the surrounding birch grove. The close spacing of the trunks allows for an evolving experience of the avenues of movement and sightlines as one moves around the project.

> Materially this project seems to cheat at its intent but provides an insight into how a structure can be integrated with a 'living' building component. A complete steel structure, the columns have been wrapped in the trunks of birch trees completely hiding them from view. Creating an illusion of nature under the glass roof.



Figure 49: Birch Moss Chapel - Elevation; by Author



Figure 51: Birch Moss Chapel - View from Outside Chapel; Kengo Kuma, 2015

*Redacted for digital publication due to copyright.



Figure 52: Birch Moss Chapel - Plan, by Author

ENDNOTES

1. City of Victoria, 2 Victoria, BC.

2. Pollutiontracker.org. 2020. Pollution Tracker – How Polluted Is Your Ocean?. [online] Available <u>here</u> [Accessed 21 December 2020].

1. City of Victoria, 2020. Official Community Plan.

FRAMWORK SUMMARY

Contemporary architectural dialogue and green building design should look to the practices and concepts of Living Architecture as a guidebook for future development in the construction of Biofilic Cities. How can these aspects be extrapolated into the built environment? How can these structures gain a footing in the fast contemporary world? Through the combination of traditional and contemporary arts of tree shaping and inosculation, living structures can densify the park environment adding places of refuge and a greater variety of programs. Creating natural growing habitable structures will allow for increased usage out of the current and future parks; growing to accommodate increasing population levels and public space demand.

These public spaces encourage local pilgrimage and generate community involvement through the cyclical maintenance of the structure. Used as infill projects, these living structures can be planted for the remediation of sites and their surrounding environment.

of trees creates a barrier to noise pollution ence.

tecture.

These slow-growing projects encapsulate a measure of time outside our temporality, providing places of meditation and rest within the concrete jungle. Multi-level structures, the web

while giving its inhabitants a unique experi-

Adding to the Victoria's Urban Forest these spaces will provide areas of decompression within the built environment adding to the evolving discourse between nature and archi-

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PART II PROJECT **DESIGN**



As this thesis posits questions about slowness, relating to both the processes of the site and the temporal experience of the user, it is necessary to define its counterpart. Traditional construction on the West Coast often revolves around the heavy use of concrete, retaining walls, foundations and the like make for a high use of concrete when building a park.

TRADITION VS SLOW





Figure 57: 3+ YEARS

Instead of concrete, and other imported materials, this project delves into the notion of extreme sustainability and how as part of slow design, this sustainability both informs and dictates the major design decisions of the project.

The core belief in this radical form of sustainability in a public park revolves around bring as little to site as possible. This serves multiple purposes, reducing transportation of supplies and the carbon footprint of the project while also being a significant community initiative to both educate and illustrate Slow in everyday life.

In the left example, this typical 2-3 year project of accessing the ocean by the way of constructing a large concrete retaining wall and subsequent stair is the opposite of what this project is trying to **achieve** and serves as a visual marker for what this project is attempting.

THE CONCEPT

Extrapolating on these notions of slow construction and high levels of sustainability, the design concept for the park is a process in which the continual disassembling, construction and evolution of the site, informs public use and interaction with the various pieces of the design. Broken down into general time frames, the primary concept revolves around the evolutionary process of park making and the impacts of Slowness within that.

This evolution starts with the industrial site's current use, a aggregate and concrete plant. The project revolves around respecting the heritage of the industrial zone while also bringing the site into a new life. Through both new construction and planting, and deconstruction and re-purposing of the sites original structures it gets transformed while keeping its ties to its past.

By slowly replacing the traditional elements with organic structures the site becomes a synthesis of natural and man-made. Using specialized tree cultivation methods, primarily inosculation. The binding of trees together, a structure is grown that connects the manmade to the garden.













Figure 62: 75+ YEARS

SITE ANALYSIS

The current site topology consists of three major elements. A large warehouse building on the eastern side of the site, the concrete plant and the large swathes of concrete block walls that make up the boundary conditions to parts of the site as well as holding spaces for aggregate. Evolving from these site conditions, the site will be divided into three main regions. The Forest, the Courtyards and the Meadow. The zones work to provide unique experiences of the site depending where you are, intensifying the existing site as they build on what is already there to evolve the region as the park matures. The forest, grown on the southern portion of the site provides a natural barrier to the park, separating it from the city noise and traffic while also providing a source of lumber for future construction. The meadow, bounding the norther portion of the site contains the greenway that will pass through the site as well as providing space as a dog park, casual sports games and a lawn that the community can inhabit. Last is the courtyard, as the heart of the site it is most protected from the city's noise and contains the decommissioned concrete plant consisting of raised and lowed gardens and courtyards. The areas of the site will be connected through a series of paths and walkways that are constructed and evolve over time.









Warehouse

Concrete Plant

Concrete Block Walls





Figure 64: Figure Ground

Figure 65: Site Diagram

SOIL GENERATION

As the site is covered with gravel The first process is the creation of soil. As a core component needed in the remediation of the hard pan gravel surfaces on site, topsoil will need to be generated. We can greatly speed up the topsoil creation through specific plant-ing and then subsequent plowing under the vegetable matter at the end of summer. Tuber plants, specifically Lupinus will be used in the initial stages on the park as they are hardy and can produce working levels of topsoil within 5-10 years



0+ YEARS GRAVEL | DIRT | CONCRETE GRASSES



1-8 YEARS DIRT REMEDIATION | LUPINUS



8-25 YEARS 25+ YEARS PLANTING OF NURSERY | FOREST YOUNG TREES | HARVESTABLE LUMBER

Figure 67: Soil Generation - Long Term

The initial years of the park will be dedicated to this creation of topsoil as all following processes depend on it to grow. The cyclical nature of the Lupinus growth and subsequent plowing begins the first measure of time on the site.

The soil growth will be slow for the first few years as the **ground** lacks many nutrients that are necessary for plant growth. But as the years pass, the soil will generate at higher rates until the tillable soil has been saturated.







Winter | Year O+

Figure 68: Lupinus + Soil Growth - Year O



Spring | Year 5+



Summer | Year 5+



Fall | Year 5+



Winter | Year 5+









Winter | Year 8+

Figure 69: Lupinus + Soil Growth - Year 5

Figure 70: Lupinus + Soil Growth - Year 8



SITE PLAN 0+ YEARS

The site as it is today, home to mounds of gravel and sand, the concrete plant central to all pro-cess that take place here.

The Lupinus are planted.







SITE PLAN 10+ YEARS

At this point, the soil on site should be ready for the beginnings of the planting of the park.

The nursery and forest are created at some point during the soil remediation allowing them to mature as the future processes on the park depend on their development.

Along with the creation of the these plantings. the greenway is completed for the city providing a thoroughfare for the non vehicular traffic between downtown and northwestern Victoria. Off of the greenway a trail is created, connecting to the old pier and providing an initial public access to the site

The concrete plant is slowly being shut down, decommissioning and deconstructing over the course of the initial growth of the park.

THE NURSERY

Following this process a nursery will be created taking up a portion of the inner storage area on site. Young trees will be either planted or left in their sacks depending on how the soil generation process is proceeding. Located within the eventual courtyard they are largely protected from the concrete block walls that bound the space.

SITE PLAN 25+ YEARS

By now, inroads have been made in the forms of pathways through the meadow and A boardwalk has been created connecting the pier walk back down to the city, providing a round trip of approximately 1 km.

Starting at a parking lot forest pathways lead into the site eventually connecting up to either the top or bottom, they then continue either to **the** greenway or to the two courtyards that have been created between the inner and outer portions of the site.

Trees have been planted along the greenway, providing a soft barrier between the two zones.

By now, the forest and nursery should be growing well. This signifies the initial harvesting of wood from the forest and the creation of raised platforms that begin to lift the park in the vertical direction.

THE MILL

At the same time as the nursery, the forest will be planted to the south, eventually to be sustainably harvested, providing lumber for construction taking place on site. At this point the site will become self sufficient.

This Lumber will be then used to create a series of raise platforms and walkways, in their own way mimicking the catwalks of the site's previous usage. These walkways make use of both the lumber and the concrete block walls that will be moved as necessary to provide structure.

Lifting the occupant above the ground creates a new datum at which ones experience of space and time subtlety shift. Crafted from the lumber harvested from the forest, the platforms make use of the existing concrete block walls which provide their initial supportive structure. Then surrounded with saplings grown in the nursery, the platforms are enveloped in the resulting canopy. Over time, the saplings will grow and intentionally inosculate providing a structural base in which the platform will eventually rest.

SITE PLAN 50+ YEARS

Further growth of the forest and nursery trees lead to the creation of extended platforms, or catwalks, that connect the three sections of park together. Meeting up with the paths as well as whats left of the concrete plant they provide a separate experience travers-ing the site with various viewpoints along the route.

At this point, the nursery is in the midst of being decommissioned drastically shrinking in size as the major need for it has gone. Farther along in the process of deconstruction and decommissioning, the concrete plant has become publicly accessible creating the initial access point into the heart of the site through the construction of the new overhead walkways.

In keeping with the other evolution taking place on the center of the site, the large ware-house building is undergoing the early stages of redesigning. The site, needing a covered performance space, necessitates a redefining of the building's current role.

Warehouse being renovated into an open-air pavilion supported by a series of large timber glulam beams with

supported by a series of large timber glulam beams with

. Decommissioned concrete plant in the midst of platform and catwalk construction, connecting the various parts of

Raised walkway & platforms constructed out of site sourced lumber. Providing views into the harbour and city

Semi-mature forest, able to be harvested for lumber to

SITE PLAN 75+ YEARS

By now the majority of the initial vision of the park will be completed, still growing and evolving but at a reduced rate and as needed responding to community demands.

The nursery has drastically reduced in size by this point which allows the central portion of the site to be fully realized. A series of courtyards flow into one another creating overlapping spaces that interact with the walkways above. The Concrete plant is now a viewing platform that serves as a hub for traversing the site.

The renovated warehouse has become an open air pavilion, the center of performance space in the park. Incorporating the design language of the rest of the park, the warehouse strives to balance its industrial heritage with its new artistic purpose.

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APPENDIX

Relational Context

Thanks for Reading