# RE/CREATION OF LAKE BANOOK: PROVIDING PROSPECT & REFUGE IN AN URBAN LANDSCAPE

by

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Submitted in partial fulfilment of the requirements for the degree of Master of Architecture

at

Dalhousie University Halifax, Nova Scotia June 2016

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### **ABSTRACT**

Lake Banook, an urban lake situated in Dartmouth, Nova Scotia, Canada, plays an important role in both community and international recreational activity. Although the lake currently functions well, it could be improved. With careful study and observation, three main problems are highlighted at Lake Banook: disjointed circulation (only intermmitant connection to the water), poor ecology, and unbalanced recreational use.

This thesis demonstrates that prospect and refuge can be used to remediate these main issues through the improvement of the human experience of the landscape. The principles of prospect and refuge are demonstrated through a connection between new and existing structures including a canal, a tower, a retaining wall, a semi-enclosed pergola, a resting place (individual experience) and a gathering space (collective experience). These interventions create a sense of place for the users by highlighting the exquisite urban nature of Lake Banook.

## **ACKNOWLEDGEMENTS**

Thank you to the many people who offered their advice, opinions, and information to aide in the completion of this thesis. Special thanks to Emma MacIntosh for her endless knowledge of paddling.

Thank you to my wonderful supervisors, Cristina Verissimo and Brian Lilley. Cristina, you are an inspiration to aspiring female you exude architects everywhere as intelligence, ambition, and kindness. Brian, thank you for stepping in as my acting supervisor. Your extensive knowledge of paddling, as well as your patience and passion have helped me to achieve a project that I am extremely proud of. Thanks to Austin Parsons, my advisor, for always keeping me on my toes and pushing me to work my hardest.

Special thanks to my friends and family who have supported me in many ways throughout this academic journey. I will never forget your kindness.

# **CHAPTER 1: INTRODUCTION**

#### Thesis Statement

Lake Banook is a well-loved place in my community. It functions as a hub in many ways and is undergoing developmental pressures. This thesis aims to maximize its potential as an urban hub in a natural landscape. To further understand its unique qualities the architectural strategy of prospect and refuge, as developed through the design of a recreation centre, will be investigated.

# **Prospect and Refuge Theory**

We had one favourite spot, deep in moss and last year's leaves, where there were some felled trees from which the bark was all stripped off. Seated among these, we looked through a green vista supported by thousands of natural columns, the whitened stems of trees, upon a distant prospect made so radiant by its contrast with the shade in which we sat, and made so precious by the arched perspective through which we saw it, that it was like a glimpse of the better land. (Dickens 1977, 228)

## Jay Appleton

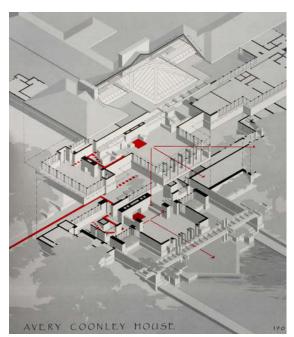
In an effort to explain what it is about landscape that humans are attracted to, Jay Appleton proposed the theory of prospect and refuge. He believes that humans are aesthetically attracted to landscapes that provide an unobstructed ability to see (prospect) and an opportunity to hide (refuge) (Appleton 1975, 73). These characteristics

are seen as complementary and in simpler terms can be described as "to see without being seen" (Hildebrand 1991, 30).

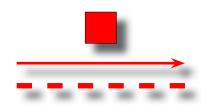
Appleton points out that prospect and refuge has a biological rationale in all species as it is necessary for survival. Species choose conditions that allow them to see without being seen in order to successfully hunt without being hunted (Hildebrand 1991, 31). This innate understanding of survival can be translated into how humans perceive landscapes.

According to Appleton, prospect and refuge can be achieved by varying (i) the objects employed to symbolize prospects and refuges (ii) the manner and intensity with which they symbolize them (iii) the spatial arrangement of the symbols (iv) the equilibrium of prospect and refuge symbols and (v) the physical media by which such an arrangement is communicated to the observer (Appleton 1975, 74). The manner in which these are arranged is crucial to achieving the balance required for the optimal human experience.

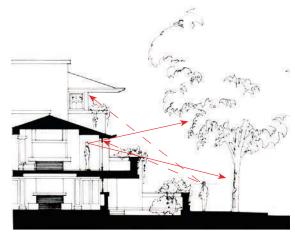
The complementary nature of prospect and refuge and the searching for balance has led to terms such as "prospect-dominant", "refuge-dominant". These terms suggest that one symbol is emphasized over the



Prospect/Refuge diagram of Wright's Avery Coonley House. Drawn by William Hook. (Hildebrand 1991, 47)



Red block representing refuge, red arrow representing prospect, red dashed line representing the pathway or circulation between prospect and refuge.



Wright's Robie House. Diagrammatic section showing sight lines outwards and inwards. (Hildebrand 1991, 55)

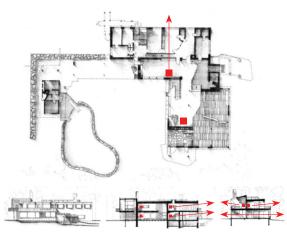
other within the landscape (Appleton 1975, 74). When prospect and refuge are equal, I will refer to it as "prospect-refuge". Varying proportions of prospect and refuge allow users to have an individual experience, even within a collective environment, due to personal preference or affinity toward either prospect and refuge (Appleton 1975, 74).

### **Grant Hildebrand**

Appleton's theory, which was ultimately used for an explanation of how we perceive landscape and landscape art (painting, drawing, poetry), has also been applied to the built form. Grant Hildebrand used Appleton's theory as a post-analytical tool to discuss the architecture of Frank Lloyd Wright's houses. Hildebrand uses plan and section to diagram moments of prospect and refuge within Wright's architecture. Refuge is denoted by a red block, prospect by a red arrow, and the procession or circulation by a red dotted line. In many cases, Wright uses the hearth as a symbol of refuge and uses strategies such as low-lying roofs as an attempt to frame the exterior and create prospect towards nature (Hildebrand 1991, 19).

#### **Precedents**

To gain a better understanding of those who design with nature in mind, the following projects or architects were examined.



Ground floor plan, elevation, and sections of Alvar Aalto's Villa Mairea.



Interior shot of Villa Mairea showing use of local materials and large windows to highlight the nature displayed in the courtyard beyond (Lindman Photography).



Oslo Opera House. Jens Passoth Photography.

#### Alvar Aalto

Aalto's philosophy included nature in the heart of his projects. He believed that "Nature, rather than the machine, should serve as a model for architecture" (Curtis 1996, 29). His design approach considered the integration of nature and that it should be considered an integral aspect of architecture in order to connect the natural with human He stated that "Architecture experience. cannot disengage itself from nature and human factors; on the contrary, it must never do so. Its function rather is to bring nature even closer to us" (Curtis 1996, 346). Alto explored this connection through the use of organic forms, courtyards, large windows, and local materials as seen in Villa Mairea.

#### Oslo Opera House - Snøhetta

The Oslo Opera House was designed with three elements in mind: The Wave Wall, The Factory, and The Carpet. The Wave Wall is the conceptual meeting point of land and sea and also where the public meet art. The Factory is the idea that the space should both be functional and flexible allowing for change in use without affecting the architecture. The Carpet is the "laying out a 'carpet' of horizontal and sloping surfaces on top of the building. This carpet has been given an articulated form, related to the cityscape. Monumentality is achieved through horizontal extension and











Fogo Island architecture by Todd Saunders. Nature highlighted by framed viewports. Photos by Bent René Synnevåg.

not verticality" (ArchDaily 2008). The use of these three elements, connects the building to the natural landscape of Norway and provides a physical connection to the water.

#### Fogo Island - Todd Saunders

Todd Saunders uses architecture to draw users to a specific framed view. His Fogo Island artist studios are a prime example of this. Each studio is designed to be in contrast to the landscape while providing specific views outwards. The studios were built by Newfoundland islanders using traditional materials and techniques (Dezeen 2014). Zita Cobb (Shorefast Foundation), the major investor in the Fogo Island projects discusses the connection between nature and culture:

I think that the way we have started our projects here has something to offer in terms of learning how can a rural place be relevant and how can we forge productive relationships between rural places and urban places. Nature and culture are the two great garments of human life. I think human culture emerges mostly out of the relationship and sometimes struggle between human beings and nature. And so nature and culture largely exist at the periphery of these rural places, whether they are farming places or fishing places, while business and technology largely live in urban places, and so the question becomes how can we use business and technology to serve nature and culture. (Dezeen 2014)

From the study of these precedents, I have found that in order to create buildings that are meant to have a connection to human experience and nature, it is important to use

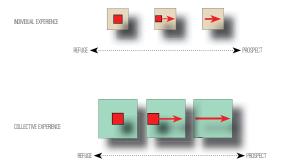


Diagram demonstrating the connectedness of two different user groups that exist at the same site.



Conditions of interventions to achieve balance.



Lake Banook, Dartmouth, Nova Scotia. Site of exploration for prospect-refuge conditions (Hunter Aerial Photography).

traditional and local materials, frame specific viewports, and either be part of the landscape or a contrast to it. These ideas will be further explored within my architecture.

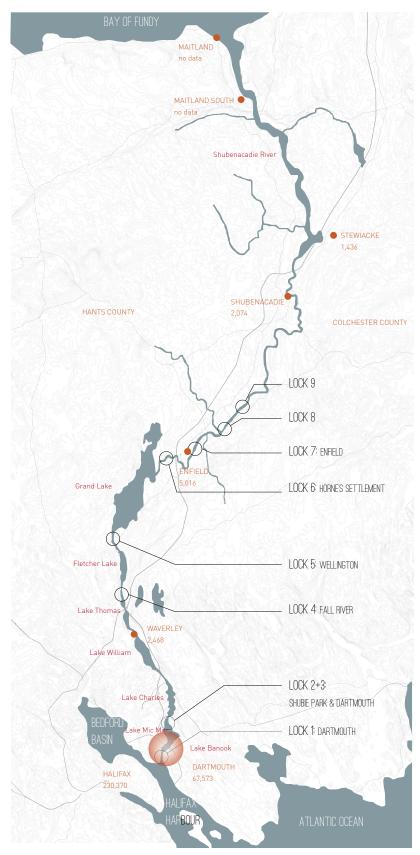
## **Application**

As populations grow and cities become larger, it is important to design with the human experience in mind. Natural landscapes should be carefully intersected with urban environments so that we do not lose our connection to nature. As Appleton and Hildebrand have used prospect and refuge as a post-analytical tool, this thesis explores how prospect and refuge can be used as a generative tool for the design of an urban landscape. It will explore the connection of individual and collective experiences across a range of hybrid prospect and refuge conditions toward a rebalancing of a unique urban landscape.

### Site: Lake Banook

Lake Banook, an urban lake in Dartmouth, Nova Scotia provides the site to test the application of prospect and refuge for this argument. The lake sees a wide range of users that will fall under two categories: individual and collective.

Lake Banook is the first of seven lakes that make up the Shubenacadie Canal, a chain



Map of Shubenacadie Canal with placement of locks.



User groups of Lake Banook. Individual experiences of local users, to collective experiences of local users, to the local paddling community, to the national and international paddling community. Photos by Christian Laforce, No Tumblr Is An Island, Blue Flag Canada, Hockey's Home, Ryan Taplin, Mic Mac AAC, ADCKC, CKC Championships, and Olympics.

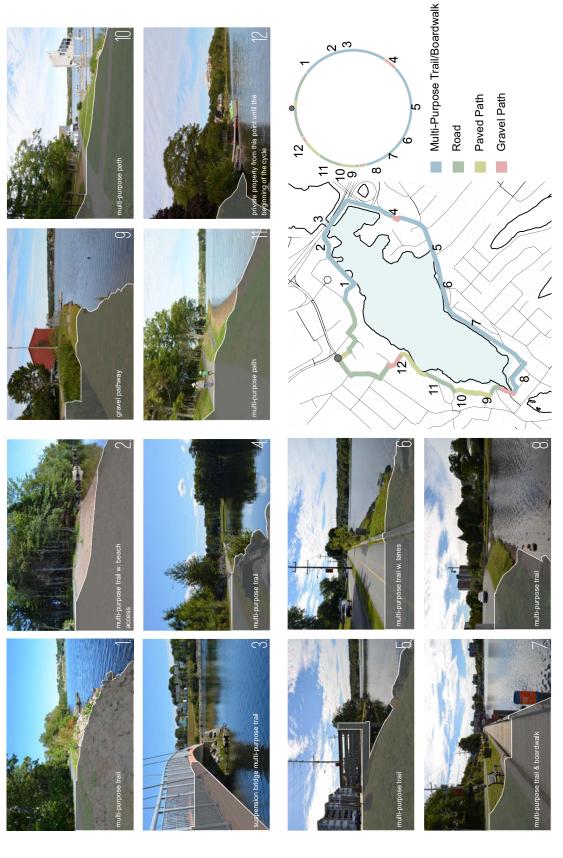
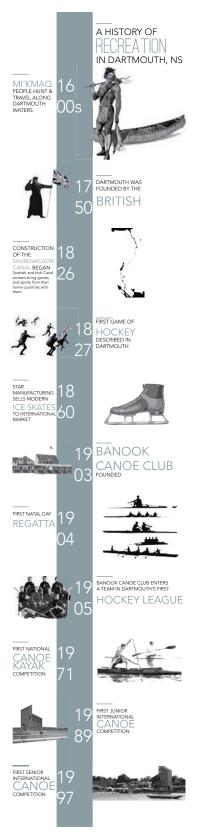


Photo sections of the edge condition of Lake Banook and their corresponding sites on the map.



A timeline of recreation landmarks that occurred on Lake Banook.

of lakes, rivers, and streams that connect the Atlantic Ocean (Halifax Harbour) to the Bay of Fundy. The canal was built based on the waterways the Mi'Kmaq people used as a means to transport goods through the land without having to sail around the tip of Nova Scotia. The Shubie Canal is an example of an interplay of scales as a lake is refuge from an ocean, and a lock is refuge from a lake, with an interplay of prospective views between them.

There is a long history of recreation on Lake Banook as it is home to one of the first established paddling clubs in Canada and is thought to be the birthplace of hockey (Jones 2002). It is home to multiple paddling clubs and is a recreational hub of Dartmouth, Nova Scotia. Multi-purpose trails line one side of the lake that runners, walkers, and cyclists take full advantage of. The international race course is only 1 of 6 racecourses in Canada and is used most frequently. It is used by international, national and local paddlers as Lake Banook is the perfect size and conditions for the typical 1000m race.

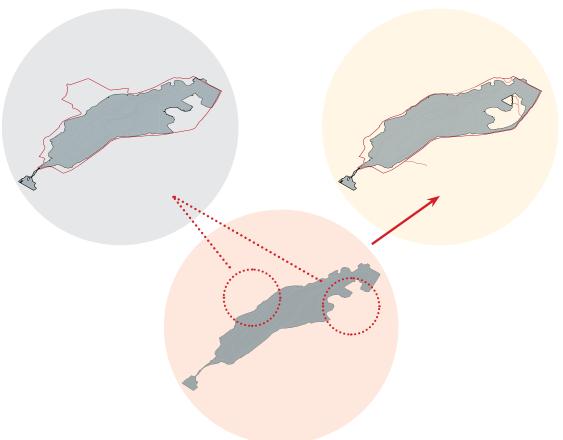
Although the lake is greatly used and operational, there are aspects of the lake that are unbalanced. Connection to the water (or circulation), ecology (water and landscape), and recreational use are not at their optimal potential. Here we have an opportunity to

use prospect and refuge as a generative tool to create balance and improve the human experience of the lake.

#### **Deficiencies**

## Connection to the Water (Pathway)

Currently, Lake Banook's pathway is inconsistent and unbalanced. A multi-purpose pathway where walkers, runners, and cyclists take full advantage of lines one side of the lake. The other side is cut off by a residential neighborhood forcing users to climb steep slopes before they can return back to the waterside to continue the

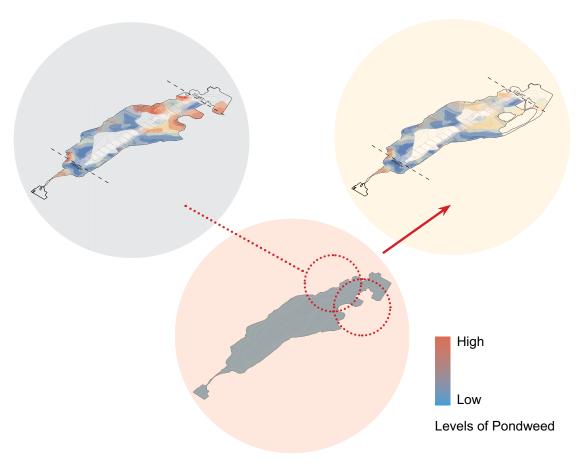


Blue circle represents current conditions of pathway. The pink circle shows areas of opportunity. The yellow circle a balanced version of the circulation.

loop. This unbalanced loop provides areas of opportunity for prospect and refuge to be used as a tool to enhance the human experience.

## Threatened Ecology

Since Lake Banook has a strong paddling community, both at the international and community level, the ecology of the water is often discussed. Pondweed has created issues for boaters and swimmers alike and its reduction or removal method is often debated. The problem areas are shown below in the blue icon. They mostly exist in

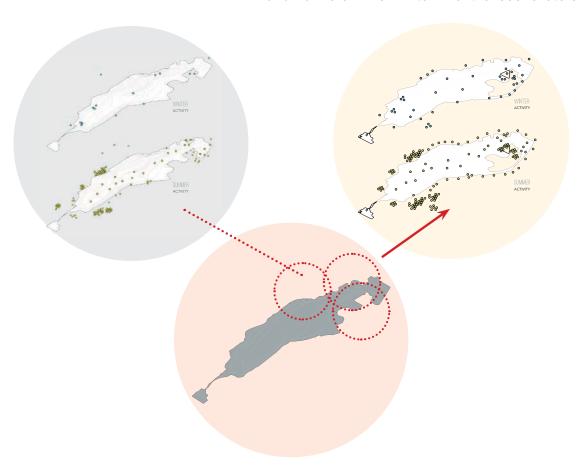


Blue circle represents current conditions of weed growth. The pink circle shows areas of opportunity. The yellow circle a balanced version of the lake's ecology.

the northern part of the lake, most likely due to infilled areas that created stagnant coves. The issues of ecology create an opportunity for a design intervention using prospect and refuge as the driving force through the use of connecting waterways.

#### Unbalanced Recreational Use

The south end of the lake is heavily occupied in the summer months with the paddling clubs in full operation. Swimmers line Birch Cove Beach on the west side while the multi-purpose trail on the east side is occupied with bikers, walkers, and runners. The winter months see skaters



Blue circle represents current winter and summer activity use. The pink circle shows areas of opportunity. The yellow circle a more balanced use of Lake Banook.

shoveling snow to create their own ice rinks and footpaths form to make an easier walk from one side to the other. With all this said, there is a major lack of activity in the north and north-west ends of the lake. Graham's Grove, a park on the north-east side of the lake is also underused.

# **Opportunity for Design**

With these three deficiencies of Lake Banook, it has provided a grounds for general areas of interventions. The interventions that follow are derived from a personal understanding of the lake and how it is currently used.

## **CHAPTER 2: DESIGN**

## **Experiential Sequence: Perimeter**

At the beginning of my research phase, I set out to explore the intricacies of Lake Banook. I walked its perimeter, I swam in its waters, I kayaked its race course, I biked its multi-purpose path. I spoke to those who lived in the area as well as numerous paddlers and swimmers that had a deep understanding of the lake and its surroundings. I truly wanted to know Lake Banook for all its wonderful qualities along with its deficiencies. Although my experience of living near Lake Banook my entire life has been a positive one, I began to recognize the opportunities for improvement that existed around the perimeter of the water. I also found new places within its constraints that I wanted to highlight.

The following are minimal architectural interventions within the landscape that are used to highlight different aspects of Lake Banook and create different sets of human experiences through prospect and refuge. Some of the following are existing structures meant to highlight an aspect of prospect and refuge that will be used later on at a more focused site (Graham's Grove).

#### The Canal

The canal is an existing structure in the southern

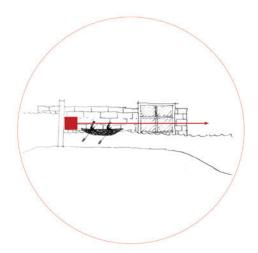


Diagram of a canal lock system. The lock is a symbol of prospect-refuge.

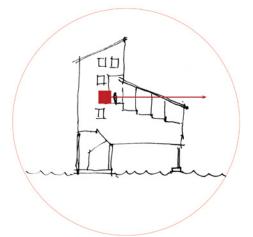


Diagram of the Judges Tower. The tower is a symbol of prospect-refuge.

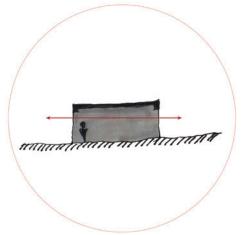


Diagram of a pergola. The pergola is prospect-dominant.

point of Lake Banook. Although it is no longer operational, the lock is an example of a prospect-refuge symbol. The narrow, stone walls of the lock provide a sense of security while the doors opening onto a new body of water represent prospect.

## The Judges Tower

The next structure in the sequence is the existing Judges Tower. The tower has an iconic shape, immediately recongizable by all. The tower also represents a prospect-refuge situation. It offers refuge due to its isolated location in the water while also offering prospect in terms of the unobstructed view of Lake Banook.

# The Pergola

The pergola is a minimal intervention to highlight a discovery in the landscape. For example, an interesting viewplane became apparent when looking south. The Judges Tower and the steeple of St. Peter Church in the distance were framed by two trees. The pergola is a device to frame the specific view ahead. This minimal intervention is prospect-dominant and is about the individual experience of discovery and provides a moment of reflection.

## The Retaining Wall + Path

The retaining wall is in response to the issue of connection to water. As one walks around the lake, the residential neighborhoods on the west

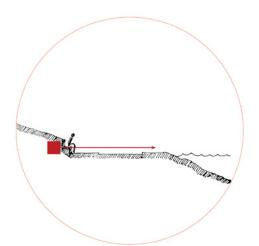


Diagram of the retaining wall. The wall seating is prospect-dominant.

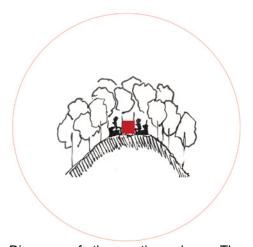


Diagram of the resting place. The seating structure is refuge-dominant.

side of the lake cut users off from the waters edge and the pathway becomes unclear (creating a large detour). A solution to this problem is the idea of a retaining wall/seating at the shoreline. The retaining wall could be designed high enough that the residential owners don't lose their own sense of refuge or prospect while creating a continuous path around the lake. The retaining wall also could provide seating that creates a sense of refuge (having something at ones back) while focusing the view outwards towards the lake (prospect).

## The Grove

As part of one of my initial explorations of the site, I came across a hill that I had never explored before. I went off the prescribed pathway and walked through some thin but tall trees to the top of the hill. At the peak, the land flattened out and I felt as though a unique experience could be achieved in this spot. Although the trees were still bare from the winter before, there was a sense of being in forest. Even though Lake Banook has plenty of trees around its edges, there is no other spot near the pathway around that has this sort of effect. This space, in its natural state is refuge-dominant. Creating a minimal seating structure in this forested area allows an individual experience that is about reflection and rest.

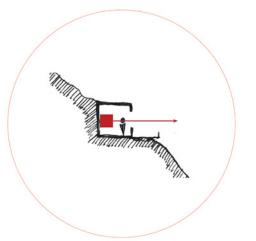


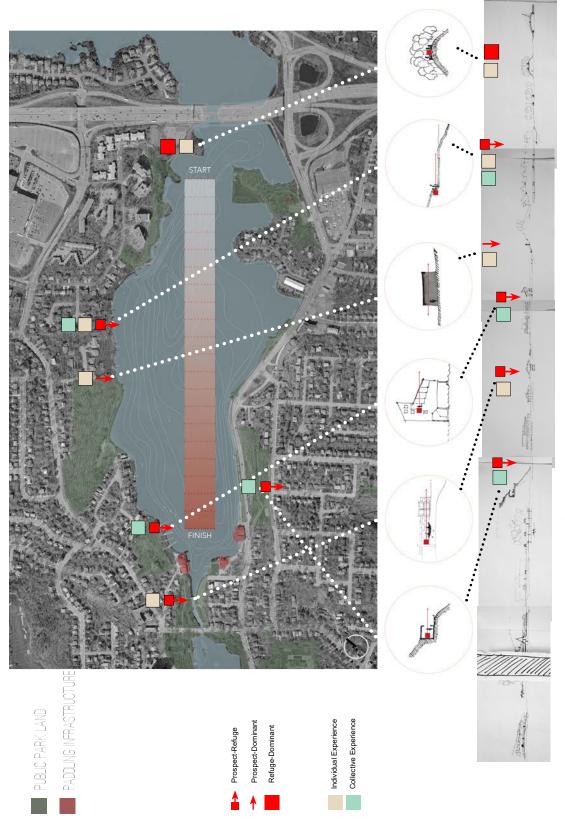
Diagram of The Cave. The intervention is symbolizing prospect-refuge.

#### The Cave

The final stop on this sequential journey is at Silver's Hill: a concrete bleacher situated in the side of the hill that overlooks the finish line of the paddling race course. This spot is really only collectively used on race day. Throughout the rest of the year, only a few people at any given time might be occupying the space. This area provides an opportunity to make something greater. A collective gathering space that the community could use year-round and on race day could be carved out of the side of the mountain. This could be in the form of some sort of eating establishment as we typically gather for food. This space would symbolize prospect-refuge and be about a collective experience.

# **Experiential Sequence: Graham's Grove Park**

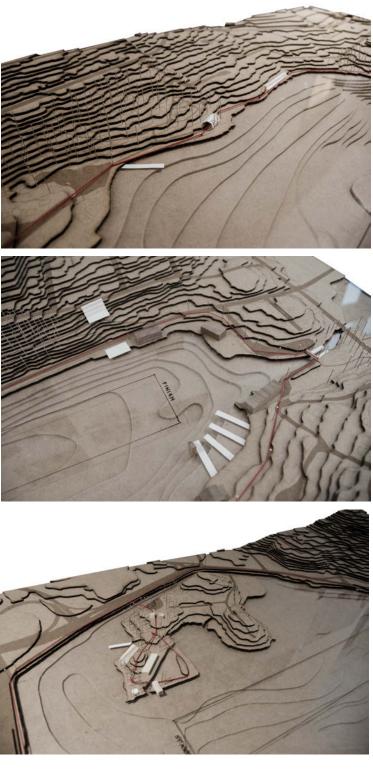
The minimal interventions and their ideas of prospect and refuge found around the perimeter of the lake are forming a sequential experience through the landscape that offers users collective and individual experiences. These experiences are all exhibiting some form of prospect, refuge, or both. These ideas will now be used as a generator for strategizing a recreation center on Graham's Grove Park, an underused park in the northeast corner of Lake Banook. Every idea of intervention that occurred around the



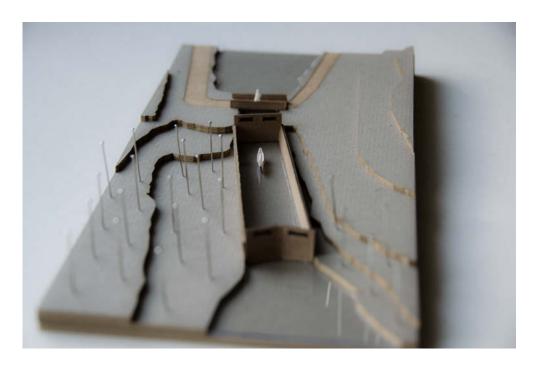
Sequential experience diagram of the perimeter of Lake Banook. Base map from Google Earth.

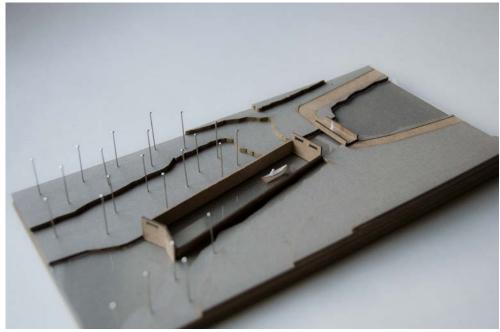


Site model of Lake Banook with new strategies. Model is made of masonite.

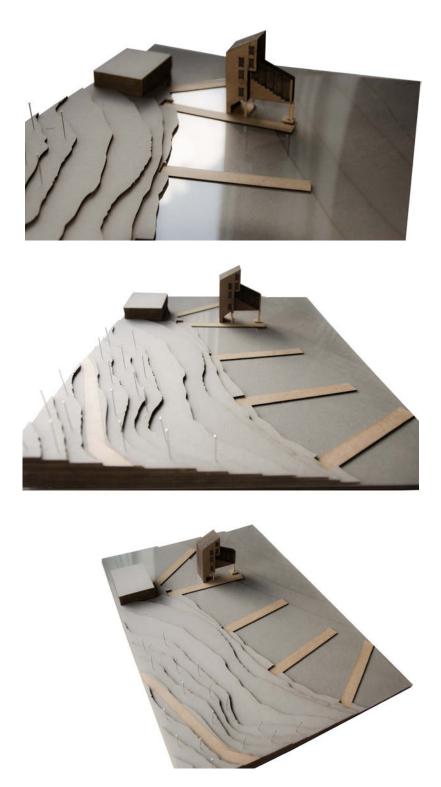


Site model of Lake Banook with closeups of interventions. Top: The Pergola (Prospect-dominant). Middle: The Cave (Prospect-refuge), The Canal (Prospect-Refuge), The Tower (Prospect-refuge). Bottom: Graham's Grove Island Strategy (see pg. 28).





Model of the canal located at the southern side of Lake Banook. The canal represents an individual experience that is a symbol of prospect-refuge.



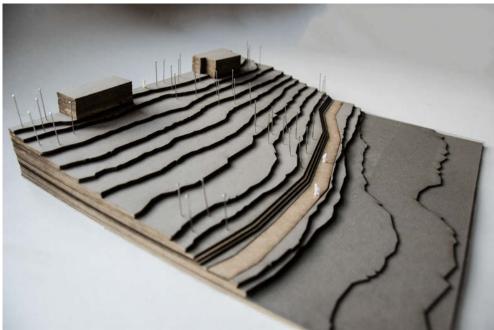
Model of the existing Judges Tower located at the southern side of Lake Banook on axis with the finish line of the paddling racecourse. The tower represents a collective experience and is a symbol of prospect-refuge.





Model of the pergola intervention, located on the western side of Lake Banook in Birch Cove Park. The pergola represents an individual experience and is a symbol of prospect-dominance as it is designed to focus the users eyes towards the Judges Tower and St. Peter Church steeple.

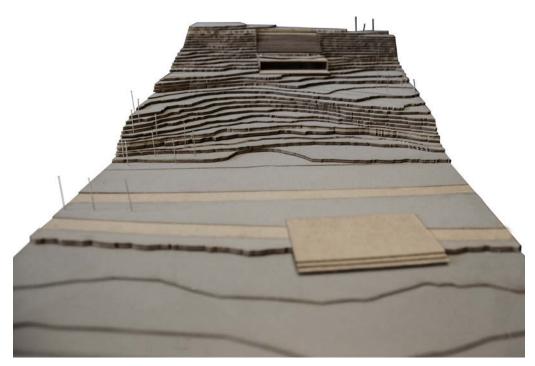




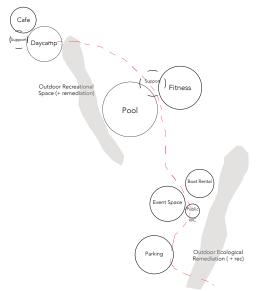
Model of the retaining wall and pathway intervention, located on the western side of Lake Banook. The retaining wall represents a collective or individual experience that is prospect-refuge.



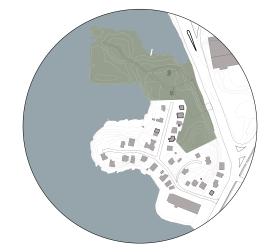
Model of the Grove intervention, located on the north-western side of Lake Banook. This intervention is about an individual experience that is refuge-dominant.



Model of the Cave intervention, located on the easterm side of Lake Banook and is in line with the finish line of the racecourse. This intervention is about a collective experience that is prospect-refuge.



Graham's Grove Programme Diagram.



Current conditions of Graham's Grove Park.



Implementation of canals and pathway.

perimeter will be applied to the urban strategy of the recreation center on Graham's Grove. This center comes out of a lack of facilities for the international user groups and as one of the major opportunities.

## **Programme Generation**

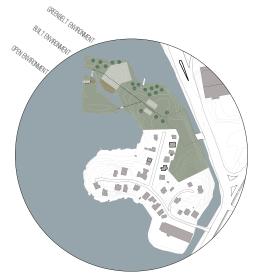
In the interest of balancing recreational use, the programme seeks a dynamic balance between local and paddling communities. This is done by including facilities that both groups will find useful. Some facilities shade toward the local use and some to the paddling community. The primary method of transposing the ideas developed at the lake scale to the site scale, is through the circulation path. The circulation path is taking into account local topographies and investigating moments for prospect and refuge in both collective and individual experiences. A zoning arises of this analysis that directs the general location of the architecture. The need for an indoor swimming pool and fitness facility is the main focus of the rest of the thesis. At the community level, a public boat rental facility, along with a flex space that could be used for meetings or sport, along with a daycamp, skating rental shop, and cafe will be part of the intended strategy but will not be as fully developed.



Circulation Diagram of Graham's Grove Park.



Site diagram of Graham's Grove and building form placement.



Site diagram of Graham's Grove representing the connection of landscape environments with the built environment.

## Site Strategy

Graham's Grove Park operates as a boat launch for the community, as well as a dog park. It used to exist as two islands known as the "Tittles". With the construction of the circumferential highway, the islands received a significant amount of infill and became connected to land (see site plan p. 19). Over the years, the coves created by the infill have become stagnant and full of pondweed. The implementation of a canal system through the island and adjacent to the road would allow water to flow more freely, possibly reducing the amount of pondweed and fostering a better environment for healthy water and aquatic species.

The current landscape conditions give clues to the urban strategy and positioning of programme. Following the landscape, the northern part of the newly formed island is lined with trees and therefore will remain as part of a greenbelt environment. The opposite end of the park is mostly flat and grassy. This will remain as an open environment. The area where these two environments meets will be bridged together by the built environment. The recreational buildings prescribed to this site will fit in along this strip.

# The Pergola

As Graham's Grove currently functions as a public park, there is parking lot at its entrance. The pergolas are meant to bridge the parking



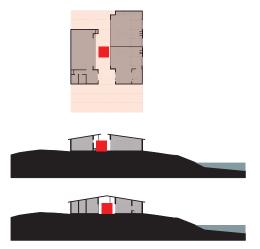


Sketch model of the Graham's Grove Park site used to figure out building placement and terrain. Made with card and clay.

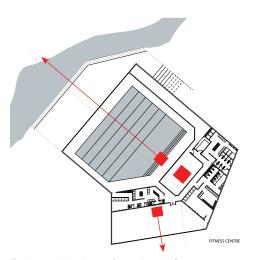




Render of seating near the boathouse and pergola. An individual refuge experience is displayed here.



Plans (top) and sections (bottom) demonstrating a refuge-dominant space. In section, public washrooms and flex space on the left and public canoe/kayak rental on the right.



Schematic plan of pool and fitness center. Areas showing prospect-refuge and refuge-dominant space.



Sectional Diagram showing areas of prospectrefuge and an area that is refuge-dominant.

lot with the first set of buildings in Graham's Grove as an informal landmark. These pergolas are meant to offer both prospect and refuge as they guide the user toward the next stop on the sequential journey through the park (prospect) but also provide seating and a resting area (refuge). This intervention is derived from the pergola on the perimeter of Lake Banook.

## The Gathering Space

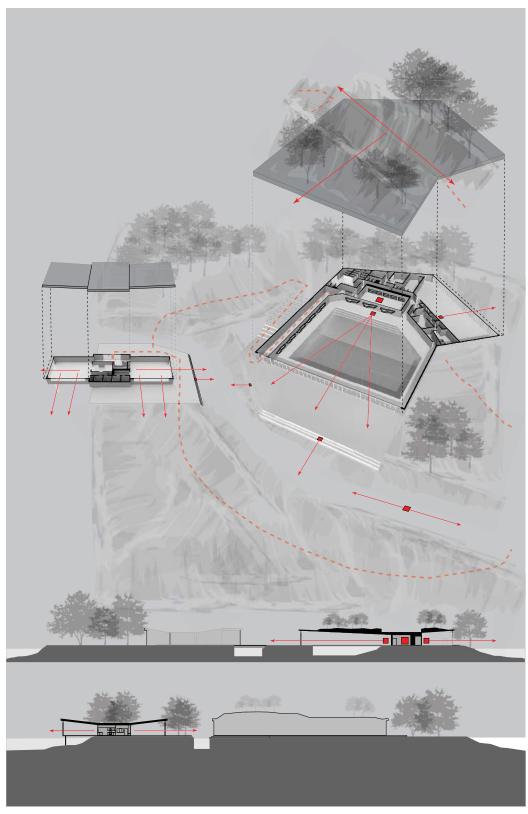
The first programmatic building to arrive at is actually essentially two buildings working together to create a sense of refuge. These buildings are a canoe/kayak rental for public use and a public washroom and flex space (yoga studio, meeting room, etc). In section, this building is pulling qualities from the resting place (individual experience) around the perimeter but is essentially a gathering space for groups to meet at (collective experience). The buildings will interact with the forms of the pergolas that are before it.

### **The Recreation Center**

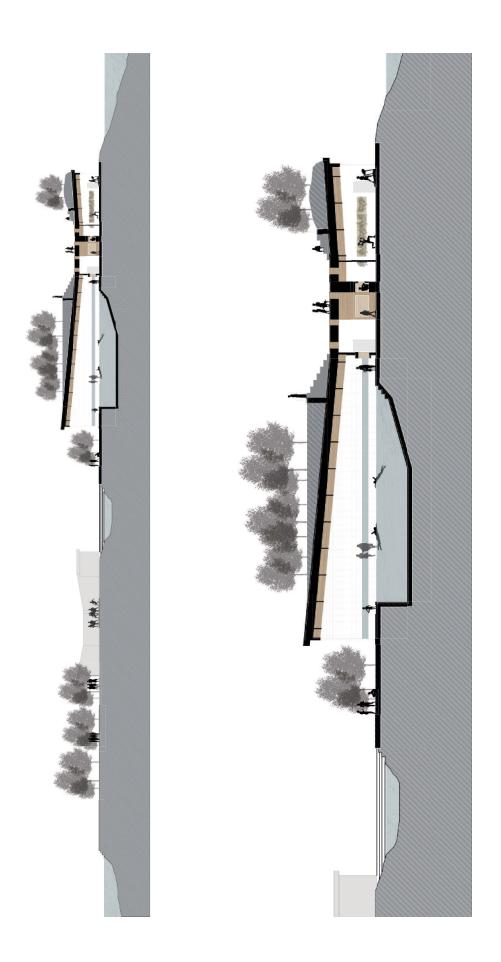
As the pathway moves you through the gathering space, it takes you up a hill. Within this hill is the recreation center. This building houses a 25m swimming pool and a fitness center. At the core of the building, the lobby sits. This building is about both prospect and refuge, but separate experiences of it.



Rendering of Recreational Facility (middle) and daycamo/cafe (left) from the water.



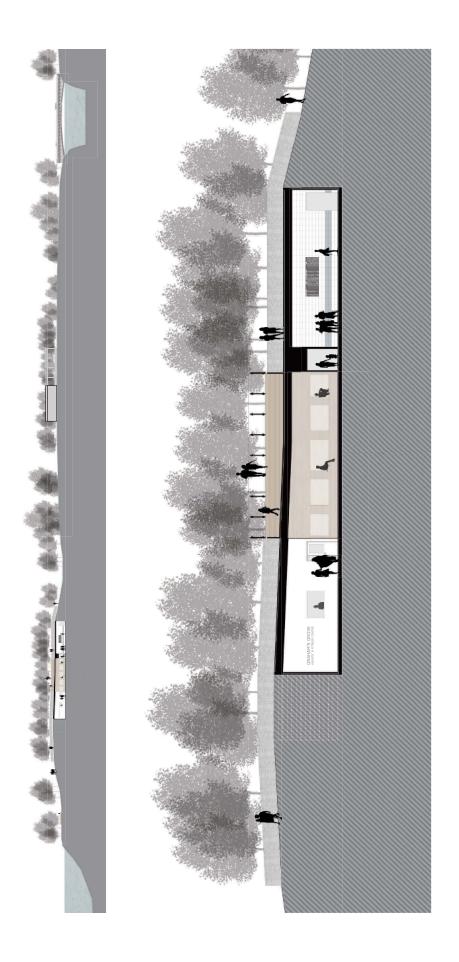
Diagrammatic Axonometric describing prospect-refuge relationships between the Recreational Facility and the Daycamp/Cafe Facility, as well as the canal that runs between them.



Longitudinal section of the Recreational Facility that houses an aquatic and fitness centre. This building provides users prospect-dominant, refugedominant, and prospect-refuge hybrid spaces while providing much needed facilities for both the local community and the paddling community.



Close-up of longitudinal section showing areas of refuge, prospect and prospect-refuge.



Cross section of the Recreational Facility that houses an aquatic and fitness centre. This building provides users prospect-dominant, refuge-dominant, and prospect-refuge hybrid spaces while providing much needed facilities for both the local community and the paddling community.



Wall Section models of Recreational Facility building. As you progress deeper into the building, the walls become thicker representing a more refuge-dominant space, whereas the walls closer to the outdoors are more prospect-dominant.

It could be said that the swimming pool and fitness center areas are prospect-refuge and the lobby is refuge-dominant. This building is playing on the idea of the gathering space from the perimeter. The gathering space is carved out of the side of the hill, and this recreation center is within the hill poking out from both sides.

### The Deck

The deck extending from the pool side towards the canal steps down into the canal mimicking the nature of the retaining wall idea from the perimeter sequence. Here, users experience a sense of both prospect and refuge as the stairs at their back provides refuge and the views outward provide prospect.

### The Canal

The canal inserted on Graham's Grove is drawing from the principles of the Shubenacadie Canal System locks. The canal provides a safer place for younger kids to try out canoes or kayaks, or a frozen pathway from a building to the rest of the lake for families to skate on. The canal symbolizes both prospect and refuge.

#### The Grove at the Park

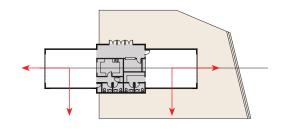
This seating area is similar to the grove around the perimeter. It is meant for a more



Rendering of the Grove at the Park. An individual refuge experience is demonstrated here.



Top: Render of Daycamp/Cafe building with deck. Bottom left: Render of interior of cafe overlooking starting line of the racecourse. Bottom right: Decking that overlooks Lake Banook.



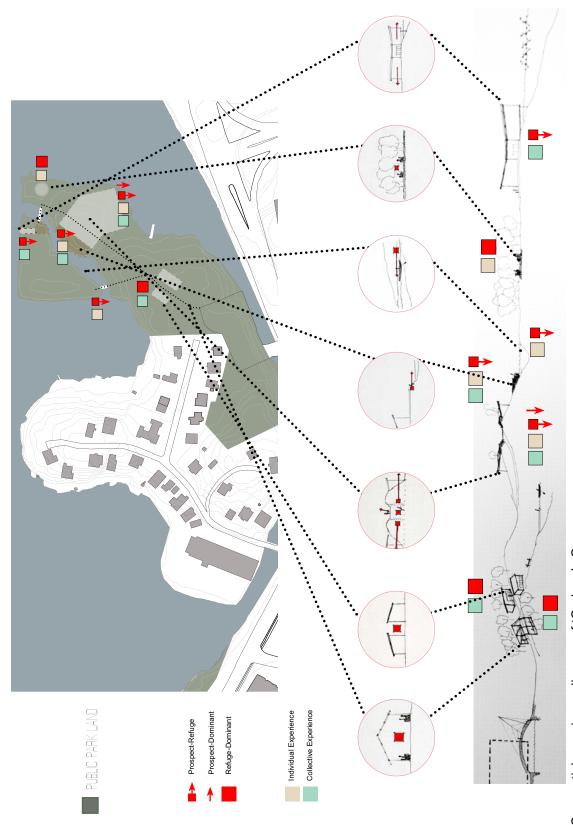


Plan (top) and sectional (bottom) diagram showing prospect-dominant building.

individual experience of refuge at the edge of Graham's Grove Park.

## **The Horizontal Tower**

The final building in the sequence is a daycamp/skating rental shop/cafe. The daycamp overlooks a deck that reaches into the canal. The cafe overlooks the starting line of the racecourse. This building is prospect-dominant and draws on principles from the Judges Tower. Although this building lays horizontally across the land, it reaches into the water and provides an ultimate viewplane of the lake.



Sequential experience diagram of tGraham's Grove.

# **CHAPTER 3: CONCLUSION**

# Prospect, Refuge, & The Human Experience

In a city, it is not often that we can maintain large areas of greenscapes and natural conditions with the amount of developmental The occurs. international push that racecourse on Lake Banook has, in one way, been a bit of a blessing for this Dartmouth community. Since building heights affect the wind patterns on the lake, the paddling community has a certain amount of control of the development around the lake. That, and the natural hilly terrain has allowed the area to remain fairly natural. With Appleton's idea that we are naturally attracted to prospect and refuge situations, it is easy to say that with no interventions, people would seek out these areas in the natural landscape. In Hildebrand's post-analytical discussion of Wright's architecture in terms of prospect and refuge, he often mentions Wright's focus on nature through architecture. This thesis is an attempt to find areas of opportunity in the landscape and apply interventions that could highlight the human experience of the landscape of Lake Banook. This will be discussed further in terms of methodology, scale, and balance.

## Methodology

We've seen Appleton and Hildebrand apply the theory of prospect and refuge postanalytically. This thesis attempts to use it as a generative tool. When an urban landscape exists, I think that using prospect and refuge as a generative tool can be extremely beneficial to a community that already has a strong appreciation for nature. Too often, the built form is designed with little or no regard for the site it belongs to. In fact, every site has a potential for prospect, refuge, or both within the architecture. Designing with nature in mind is essentially an attempt to allow users to have positive experiences both outdoors and indoors while amplifying connection to the site.

I believe that using prospect and refuge as a generative tool enhances the human experience and allows users to have a more connected experience to the site. It is important to mention here that the pathways connecting the interventions are just as important as the buildings themselves. The circulation helps sequence prospect and refuge experiences, as seen in the experiential section diagrams. This will be discussed further.

### **Scales**

One of the biggest challenges of this site

is that it has two scales of user groups: Collective (International paddling community, National paddling community, local paddling community, etc) and Individual (every day users). The goal here is to create individual experiences of prospect, refuge, or hybrid of prospect-refuge, while also creating collective experiences of the same nature. Depending on the time of day or events that are occurring at the lake, the experience may change for the user. The spaces take on a more flexible quality in that they accommodate flux that occurs at the site This works well for a community that sees huge spikes in use during events over time.

## **Balance**

Once again, it is important to reiterate that balancing areas of prospect, refuge, or a hybrid of prospect-refuge in a collective (or individual) environment is a critical aspect of this approach. Appleton discusses that some people are more attracted to areas of refuge, some to areas of prospect, and some seek out areas that provide both. Creating interventions along the site that provide different combinations of experience will attract a wider range of users and will also offer an aspect of discovery. Since human emotions change, a person who typically seeks out prospect, may occasionally need a place of refuge.

# Variability and Unexpected Consequence

Depending on the scale of an event, the scale of experience varies. This causes unexpected consequences. The original individual experience may take on a collective experience. This variability is all part of the flexibility in balance.

## The Architecture

This approach allows for a finer reading of site, encourages integration of architecture and landscape, and emphasizes the boundary conditions of the architecture (the in-between spaces). It allows for a more deeper understanding of the needs of the recreation community and is not just about providing facilities, but places for experience. The flexibility in experience of spaces allows for change over time.

# **Further Study**

The materiality of the framing/screening devices, which should be considered essential to the character of place, could be further studied. Materiality can change the intention of a space and should be further explored, starting with local materialities.

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