DISCOVERY IN LANDSCAPE
Revealing Connections In Place and Journey

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The images contained in this document are of the best quality available.
To Libby,
for unending support and encouragement
and
To Lucy,
for giving me a clear perspective

This is for you

To my parents...Dad and Mom, for all you have given,
and Hedy, Dennis, Tina, Tommy, Johnny, Judy, Margaret and Larry, best friends.

To my teachers at Mass Art, especially Meg Hickey and Tom Chastain, for a strong foundation.

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To Friends in the department who have made these years rich, especially Peck Yee, and to Senior House Folks who have provided a pleasant diversion.

To Tom for all his help in the final rush.

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Discovery in Landscape: Revealing Connections In Place and Journey

by Peter J. Turowski

Submitted to the Department of Architecture on May 10, 1991 in partial fulfillment of the degree of Master of Architecture

Abstract

This thesis is an exploration in sharpening a perception of a stretch of land. It is an attempt to enhance the natural form of land in an effort to reveal connections between the people of a region and the environment around them, thereby establishing a balance, a continuity which has been severed in the modern world. The topic of continuity is a central concern of the thesis.

The project itself is a place of respite which is a place about life rather than a retreat from it. It is administered by an alliance of conservation groups known as "The Coalition for Buzzards Bay", with the place serving as their base for outreach to the community. The focus is on a small region in Southeastern Massachusetts and the project is for the people of that region.

The thesis is organized in three parts, the first a description of the region, the particular site, and the program which will serve the memory of the reader when moving on through the work. The second is a construction of ideas which I find related to the issue of continuity, illustrated with work outside the thesis and pieces of this work itself. The third part is a journey through the site and project illustrating the application of the ideas which are brought up in the previous section.

Thesis Supervisor: John R. Myer
Professor of Architecture
On A Tree fallen Across The Road
The tree the tempest with a crash of wood
throws down in front of us not to bar
our passage to our journey's end for good,
but just to ask us who we think we are

Insisting always on our own way so.
She likes to halt us in our runner tracks,
And make us get down in a foot of snow
Debating what to do without an ax.

And yet she knows obstruction is in vain:
We will not be put off the final goal
We have it hidden in us to attain,
Not though we have to seize earth by the pole

And, tired of aimless circling in one place,
Steer straight off after something into space.

Robert Frost
"The positivist conception of truth is yoked to verification - i.e., something is true when it can be verified through appropriate sense-observations. The matching of hypothesis, theory, and observation results in the identity of truth with procedure. Phenomenologists point out that meaning does not emerge through identification of method and theory. Rather meaning shows itself in labyrinthine ways - sometimes like a sudden light, at other times through slow successive levels of uncovering."

-Joseph Grange

Today in our society, place has become little more than point and location. We measure value of location only by its distance to other points. This is the result of positivist thinking and it has left us lacking essence when defining our place in this world. We fill the void desperately with nostalgic forms in an effort to establish a continuity which we know once existed, but these forms are empty and ultimately meaningless in relation to the complexity of our lives today. Our tendency to separate and codify our knowledge has eluded us. We create nets with which we trap our world for inspection. "In these nets we trap the fishes of the intellect but the sea of wholeness forever eludes [us]...and it is the sea which we ultimately desire." The forms that we replicate with all good intention of establishing continuity are nothing more than fish away from the sea.

CONCERNS AND INTENTIONS
"The world...is not imperfect or slowly evolving along a path to perfection. No, it is perfect at every moment."

-Herman Hesse

Authenticity is what we are after, and "authenticity is the property of connectedness between the perceived world and the believed world, [it is] a condition of integrity in person - environment relationships." Authenticity follows an understanding of our present condition, but, that is dynamic and changing and must be understood in the temporal aspect of being in this world, present past and future - all in one. The retreat must rekindle the essence of the region as a place of origin. It must reveal the similitude between the place and the person, to provide "a base to set down our being and to realize our possibilities, a here from which to discover the world, a there to which we can return." The retreat is a place to think about our condition in life.

2 Dovey, Kimberly, "The quest for authenticity and replication of environmental meaning", in Dwelling, Place and Environment, New York, Columbia University Press, p.47
3 Ibid
Southeastern Massachusetts is bordered by Buzzard's Bay to the south, Cape Cod to the east, Rhode Island to the west and the metropolitan Boston area to the north. The region is the broadest lowland plain in New England south of the Penobscot River in Maine and north of the Long Island in New York. It is a land rich with water in the form of tributaries, swamps, bogs, ponds, and lakes.

The urban core area of the region is the City of New Bedford which is one of the largest active fishing ports in Massachusetts today, with a struggling textile industry and historic whaling past. It is the largest city on Buzzards Bay. The livelihood of its people has always depended on the water, either as a source for food or a source for generating power for use in the local textile manufacturing companies.
The surrounding rural areas are also reliant on the water system, having incorporated the myriad ponds, swamps and streams into the making of bogs suitable for the growing of cranberries which are indigenous to the region. (The cranberry is one of only four fruits which are native to North America). The sandy soil which was deposited by the melting glaciers thousands of years ago provides ideal conditions for the cranberry crop. The low, sandy flats of the region are in contraposition to the dense clay soil of the drumlins which were also formed by the retreat of the glaciers. The water is crystalline because of the filtering quality of the sand. Its presence is in every corner of the region, and the region's reliance on it is critical.
Recently New Bedford and the region have undergone difficult times, the worst of which has been the discovery of one of the most concentrated PCB deposits from industrial waste in the Achushnet River Estuary which opens to the city's harbor and the bay itself. The cranberry industry also has been criticized for its use of pesticide to protect the crop, which has tainted the water in the region. Acid rain is yet another problem which is taking its toll on the water systems in the region. These problems have heightened concern with environmentalists and conservation groups about the fragility of the water system which is habitat to many species and critical to the productive livelihood of the people of the region. There is a need to organize a concerted effort to educate the people of the region about the importance of water as a resource.
The Coalition for Buzzards Bay, an alliance of conservation groups has banded together to ensure the safe stewardship of the region into the future. The intention is to develop an educational center and retreat open to the public which can inform the people of the region about their critical dependence on the water resources in the area. Their concerns focus on the expansive web of water in the region with the realization that ultimately, no body of water is isolated from another. The situation of the Achushnet River Basin attests to this, as well as the situation with the spread of pesticide from the bogs into ground water, streams and brooks which carry the poison to all corners of the region.

The program begins with a small administrative space for use by the various groups which are members of the coalition. This includes office space, as well as visitor facilities which would be posted by coalition members. There is also need for a small library as a place for research or leisurely reading, with
information and literature available that relates to the mission of the coalition. There are classroom spaces for use by the coalition to provide educational workshops to the public. There is a large meeting area, which is used for general public seminars or entertainment, available to any party through reservation. There is a boat house and dock facility which is a place for storage of canoes that can be borrowed for a day trip down the river or for an extended stay. There is an observatory tower for star gazing and contemplation, and exhibits which display archaeological finds from the region as well as aquatic life. Finally there is a retreat which is remote from the other activities and provides places for a person or a group to spend an extended time exploring in the wilderness.

- Office/Administration 800 S.F.
- Visitor Center/Toilets 1,500 S.F.
- Classrooms, 2 @ 1,000 each 2,000 S.F.
- Large Meeting 3,000 S.F.
- Library/Reading 500 S.F.
- Boathouse/Docks 2,000 S.F.
- Exhibits 1,600 S.F.
- Observatory 200 S.F.
- Retreat Cabins, 15 @ 500 each 7,500 S.F.
SITE

The site for the retreat is at the heart of the region where three towns come together to share the extensive resource of fresh water lakes in the area. The towns are Lakeville, Middleborough and Rochester, and the site is along the shore of Great Quitticas Pond and on Great Island which sits in the pond. Presently there are no funds in the city to provide controlled surveillance of the area and therefore it is off limits to the public. The land is owned by the City of New Bedford which has made an effort to acquire all abutting property to the lake in order to protect the pond as a reservoir. The City is providing the land to the Coalition for the retreat and in return for controlling recreation.

The area is of particular importance because the lakes there serve all of the surrounding towns and cities with drinking water. The other ponds are Assawompset Pond, Little Quitticas, Long Pond, and Snipatuit Pond. These ponds are also the spring fed and are headwaters for all of the brooks, streams and
rivers which run eastward toward Buzzard's Bay. It is felt that
the notion of these extensive water bodies as the source for all
the water in the area make it particularly suitable for use with
such a program.

In addition to being the source of drinking water and the spring
to all water in the area, with the presence of extensive
pumping stations and a filtration plant, which add to the
educative quality of the program, the site has particular
significance in its history as a winter retreat for the ancient
hunting and fishing people of the region, and later the
Wampanoag Indian Tribe who once inhabited the region
before the settlers arrived from Europe. Adjacent to the site is
the Royal Wampanoag burial ground, and the site of some of
the oldest local archeological discoveries of Native American
architecture dating to 2,500 B.C. The presence in memory of
these people and their revery for this place as one suitable as a
winter resting ground and for burial of their noblest members
suggests that use of the area for retreat would be continuous
with the place's past.
"The accurate rendition of an individual place reveals the multi-dimensional beauty of the extended realm."

- Esther Jacobsen-Leong

Continuity is understanding our condition in life, it is the desired harmony between us and our world. If the lack of continuity exists, then the need to establish an understanding of our condition in life is critical. This project is aimed at that, the intention to educate about continuity through the experience of a place in journey.

The retreat involves us in a journey toward understanding the context in which we live. Context is dynamic and changing, therefore continuity between person and place requires an understanding of the cyclical time aspect of life. Context is the social world in which the individual dwells, and therefore must take into account the condition of the individual relative to the collective whole. Context is the natural, wild world, which can be unpredictable. An understanding of the condition of this unpredictability nature is required. These three elements, time, individual and nature are further defined below, with clues about how they can affect the form and program of the retreat.

A CONSTRUCT FOR CONTINUITY
EXPERIENCING

Time in Architecture

In the modern world distance and time is shrinking. Today the world seems smaller than ever before. We have leaped so far forward in the advancement of science in the last few hundred years that we are naturally severed from the past because we are not able to comprehend it. We don't have the patience for it. Our newly defined ways rely fully on the here and now. We ignore the patterns and continuities which slowly evolved over generations of time, imperceptible, slowly giving meaning to our existence and shape to our world. At our present pace, it seems that beliefs will barely make it through a generation without changing. The retreat offers a potential connection and relies upon the clarity of the passage of time in the place to reveal this. There is the presence of the river.

Plan view of post molds from habitations at Assawompset Pond. An encampment of six circular structures averaging 36 feet in diameter was built by hunting and fishing people between 2500 and 1800 B.C.
"the water continually flow[s] and flow[s] and yet it [is] always there; it [is] always the same and yet every moment it [is] new."

Herman Hesse

There are also the native trails which followed the contours of the terrain in order to avoid natural obstacles such as steep grades and bogs. These were in many instances adopted as the roads of the colonial settlers and have been adapted over time to accommodate travel by modern means. Even today the site is reached by these roads. Movement through the site should accommodate the land similarly.

There is also the issue of permanence versus temporal. Today we produce throw away architecture. We build things purposely not to last. But, how can we convey the message of our existence to future generations? We must leave our mark behind, build as though the present matters.
"...who constructing the house of himself or herself, not for a day but for all time, sees races, eras, dates, generations, the past, the future, dwelling there, like space, inseperable together."

-Walt Whitman

Site model showing swale, earth mound, bog, reservoir and pond. We move through the site in relation to the land features.

Saw Mill on the Mattapoisett. A place where dories for whaling ships in New Bedford were once constructed.

Mill at Eastover Farm in Rochester.
"To see a world in a grain of sand
And heaven in a wild flower,
Hold infinity in the palm of your hand
And eternity in an hour"

- William Blake

Individual and Collective

The diminished presence of an authoritative voice or figure in our lives, whether political or religious, has left us only with ourselves and our intuition and ability to reason to guide us. This freedom to execute our own judgement is so new that we naturally seek guidance and find it in the very definition of our society as Capitalistic. The guidance is based on comparison and contrast - elevating contrast as something desirable, something which sets us apart from the rest...better, best, bigger, newer etc. It is one which fosters individualism in the place of individuality, individuality being in the Lao Tze sense of organic unity. It is our perceived world and we are living fully in it without digging deeper to understand a "believed world". The retreat can provide us with examples of interdependence which establish unity.

"The actual difference between such 'ism' and true individuality is the difference between...selfishness and selfhood"

Frank Lloyd Wright
The definitive paths require all visiting the site to go the same course. It is a shared experience.

Cabin retreats are clustered in three, with a collective gathering where water can be taken from the well. People come together here.
Man and Wilderness

In the wilderness lies the unknown human. Or at least for centuries it was this notion and the fear of the unknown which gave the common purpose for man to forge a relationship with the wild world around him, by defining permanence with boundaries in "what would otherwise be an amorphous stretch of land." Boundaries stabilized relationships.

It was not until the advent of science that man began to sense a superiority and dominance over nature. Before science, the wilderness was feared and was viewed as the opposite of paradise, it was considered the consequence of man's fall from divine grace. With science man was capable of controlling its "evil". This false sense of security and the view of our righteous dominance over nature has led us to desecrate the very earth which gives us life. The possibility exists now to establish a balance where science can bring us closer to nature rather than separate us further, a place which witnesses both the fierceness and the benevolence of natural world.
"The real trouble with this world of ours is not that it is an unreasonable world, nor even that it is a reasonable one. The commonest kind of trouble is that it is nearly reasonable, but not quite. It looks just a little more mathematical and regular than it is; its exactitude is obvious, but its inexactitude is hidden; its wildness lies in wait."

Gilbert Chesterton

In a survey of historical and archaeological resources in Southeastern Massachusetts the hypothesis is presented that the region was suitable for habitation 12,000 years before the second period of the Stone Age (Paleolithic era). The sea levels continued to rise rapidly until ca. 5000 B.P., therefore it is considered likely that evidence of a more ancient culture of the land has been irretrievably lost below the depths of the Atlantic ocean. The retreat can reveal this aspect of the power of the earth, which might nurture us or ultimately wield its force against us.

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1 Massachusetts Historical Commission, Historical and Archaeological Resources in Southeast Massachusetts, Massachusetts Historical Commission, 1982, p.36
2 Jackson, John, Discovering the Vernacular Landscape, New Haven, Yale University Press, 1984, p.15
3 Massachusetts Historical Commission, Historical and Archaeological Resources in Southeast Massachusetts, Massachusetts Historical Commission, 1982
Approaching New Bedford from Fairhaven
Journey Begins

The site is reached from the city via roads which are modernized from the original paths of the natives who first dwelled here. The Indians, in making their way through the land, followed the contours of the terrain, avoiding hills, swamps and bogs to accommodate the easiest travel. To this day the quality of moving around these geographical obstacles, when passing through the countryside, is strong perceptually.

Where we begin our journey lies another order. The high ground of New Bedford, which rolls down to the Achushnet River is overlaid with a grid. We can see nearly to the horizon in any direction. Looking east we see the city of Fairhaven which lies across the harbor. It too is laid on a grid pattern.

"We are born with organs of perception that provide us with our only means for experiencing the world. These organs include the senses of smell, sight, hearing, taste and touch, but also the sense of balance and of rotation, which the semicircular canals of the inner ear reveal to us."

Jamake Highwater
Moving northward, away from the sea the grid eventually dissolves into the landscape, and buildings become secondary to the order of that more natural world. The landscape's rhythm provides intermittent vistas. We see five hundred yards to the road bend, where there again unfolds another vista. Unlike the city where we can imagine the extended grid as the whole in our minds, this landscape slowly unfolds itself around us. As we move through it, it reveals its secrets to us.

Arriving at the site, our first glimpse is through the trees to a turn of the century pump house sitting on a causeway which juts out into the water. The place is strictly utilitarian, but it seems a desired destination, as though some secret lay beyond the door at the end of the path. To our right we see the more recently constructed filtration plant where water is purified before being pumped down to the city for drinking. The building is pure machine. We can stop to see the workings here, or we can move on directly to the retreat.
Moving onward we can cast our eye back. The filtration plant is hidden behind the trees and we see only the pump house sitting at the culmination of the long arcing road upon which we just traveled. We are almost there. We see the watery landscape through a veil of trees now, before descending again into the woods. We look westward now, and see what ancient people must have seen when choosing this location for the burial of their deceased.

Through the woods we travel with views alternating on our left and right, water, then marsh and wood again. We cross a causeway through the marsh and ascend into the dark woods of tall pine. Here we leave our car and begin the journey by foot.
The site and program is organized on three courses. We enter the first course from where we left our car in the woods. Along this stretch of path we find the Coalition's administrative space, the large meeting area, the classrooms, the visitor center, and a pavilion for picnicking. Along the mid span of the path we find a cranberry bog and a grassy mound of earth, an island becoming. At the end of the path we find the library/reading room which sits on piers in the water. This journey is through a constructed landscape. It is a microcosm of the true river journey. It is a precursor to that journey, an intensification into 200 yards, the experience of the river which in actuality is an 8 mile stretch. This path takes us from beginning to end, from spring to sea.

At the end of the first path, the sea, we are taken up by another course which presents to us at one end, the earthly world, at the other, the celestial. We enter this journey nearly at the quarter point. The path is tenuous. It extends 100 yards to our
left and 300 yards to our right. Left, and along between the lake and a retained reservoir, the path rises slightly and culminates at the position of a house. It is the caretaker's cottage, a humble abode in the earthly world. Right and bounded by lake on both sides, the path, a narrow dike, descends slowly to a point just above water level, then splits, becoming more a dam structure and descends further on one side to an underwater observatory. On the opposite side it culminates at a tower, reaching skyward, the boathouse reaching outward to the river.

The third and final course of the site is a journey on the water. This comprises two journeys, one for the visitor who takes a canoe and moves to the river for a day trip along the Mattapoisett to Buzzard's Bay, the other for the extended visitor, staying in a cabin retreat on the island, making the short trip to the dock there. The break from land path to water course to reach the island and the river is symbolic of breaking from the earthly world. The memory of the retreat stays with us and unfolds in real dimensions as we make the river journey.
The first Group of buildings which we come upon are the visitor center, meeting room, administrative office, classrooms and pavilion. These buildings are clustered along a narrow channel of water. The channel is the virtual river. It begins at a well/spring at the entry point to the place. The buildings sit like rocks along the stream, their foundations shaping the river, directing its flow and our movement. The roofs hang like tree canopies over the rocks and the stream. It is a cool and dark place, a place of mysterious beginnings. We smell the earthy wetness of this place. We feel the mossy ground compress under our feet. The water is quick along this passage. We move in rhythm with its flow.

Beyond we move out into sunlight, into the middle span of river. We wind our way along the bog and the mound here and slip slowly with the water now, along through this broad landscape. Perhaps we run through the tall grass to the top of the mound and down again and then move to the edge, where the earthen path becomes pier.

THE FIRST COURSE
"As we move, so the landscape moves, always there, insight but out of reach."

Edward Relph
"The thread of life [runs] onward, so that if you look closely you can see the singing reptile in the bird, or some ancient amphibian fondness for the ooze where the child wades in the mud."

Loren Eisely
Leaving our car we enter into the first course of the journey. We pass over a well, the symbolic spring and source of the water here. Above us is a spillway which gathers rainwater from the roofs and channels it to the stepped well below. Here the water from ground and sky mingle. The copper lining of the spillway patinas over time, and stains the well below. The green of the patina slowly travels down the stepped well, marking the passage of years of time.
From above the well and below the spillway we can see along the water channel to the landscape beyond the ravine. We cross a bridge, under and over which water flows. We enter the visitor center where we are greeted. Here we can find information about the retreat and other regional interests.
We move beyond the entrance and the Visitor Center along the curved wall of the back of the stage. This directs us downward to the center where the water channel runs. From here we will always be traveling along water. The beginning of the axial journey is marked by a pool which fills with water from the gutter of the classrooms and ground water run off.

From the mound further out in the landscape we can look back and see the directional force of the water. The two spillways above and the water channel below direct the movement of water and us through this landscape.
Beyond the bog and the mound the path becomes a pier. We see the water gleaming through the spaces between the boards here. We approach the reading room which is beyond the intersection of the second path, sitting on piers in the water. One piece of the dike wall moves out and upward through the pier structure, providing a perch upon which we can sit and read.

The curved roof opens southward, capturing light and reflection from the water that might be good for reading with, or daydreaming. Closed to the north, the roof guides our eye down toward the water. Here there is a dock where we can tie our boat when we come back again.
From the reading room we begin a new journey along a narrow dike to the boathouse, the observatory and the underwater exhibit.

THE SECOND COURSE
Boathouse Plan

Under water Observatory Plan

1. Administration
2. Dock
3. Boat Hangers
4. Deck
5. Observatory
6. Exhibit
Along the wall of the descending path we find archaeological artifacts exhibited along a stratified wall. The stratification separates the materials according to eras.
The two roofs spill rain water toward the center where there is a space between the dike and the dock for the water to fall into the pond. We move along the path, covered by the canopy. Rain water sheers down between the path and the dock except at the vertical supports. We move from the firm ground of the dike between the vertical supports to the docks. Once again we are above the water. We can see and hear the water through the spacing of the boards. From the dock we move further still to the floating dock beyond the boat hangers, and finally into our canoe as we wind it down into the water from the hanger.

To the left we move down into a chamber below the surface of the water. Here we see the story the pond has to tell. Is there life here? Will there be life here when we visit next time?
Retreating to the island is retreating to the wilderness. Its edge is untamed and hostile. A cove is cut out of the edge to receive us. Here we find a dock where we can leave our boat and a path which cuts through the scrubby brush of the edge, leading us up underneath the canopy of the pines. Once in, we move along the central path which is heavily shaded by the dense canopy of pine trees. The path is intersected by smaller paths which run perpendicularly toward the water, down which we see an open glade full of sunlight. The glade is terraced earth, the collective place for a cluster of three cabins. The well for drinking water is here.

From the glade we move to individual cabins which are organized themselves along a path connecting the glade to the water and sky. The cabins nestle into the earth, the heart and hearth of the home there. They project upward above the tree canopy. A place for meditation there, released from the earthly world, perched up in the light by day, amongst the stars by night.

THE THIRD COURSE
Second Floor Plan

Roof Plan
Model of Retreat
Model of Retreat
This thesis was a vehicle for me to see more clearly a place, the region that is very familiar to me. My intention was also to bring the reader to see the beauty in the place which I have always seen. The issue of continuity is broad, and the construct which I used was solely for my use in defining the mission of the program of the design. I hope you enjoyed the trip.

So long. I'm going home now.


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