MARKINGS: Design Through Circumstances

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This thesis begins as a recording of existing "markings" found on the Massachusetts Cape Cod landscape. The term markings is used throughout to mean: a natural occurrence to the landscape or in human behavior related to the landscape which records a moment in time and space. The design of a summer sheltered place in Truro, Cape Cod is based upon the process implied in my use of the term markings.

The second piece of this exploration is the journey from image to building. The creation of the sheltered place was designed to allow for inhabiting the land without destroying it. This thesis project is a physical and visual recording of that journey.

Thesis Supervisor: Imre Halasz
Title: Professor of Architecture
To my parents for having the wisdom and courage to teach me about the layering of differences and encouraging me to search for my own understanding.

To my brother for sharing and teaching me about his own exciting discoveries.

To Carmen and Elin Corneil, Imre Halasz, Shun Kanda, Andres Mignucci, Barbara Phenner, Michael Singer, Maurice Smith and others for broadening the scope of my sight.

To Bernard for his critical and sensitive eye.
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INTRODUCTION
MARKINGS: Circumstances

This thesis demonstrates and explores a design process as it happened over the course of the semester. For this reason it is presented in chronological form.

Each chapter is divided into sections, and each section is divided into four areas: Sightings, Postcards, Conversations, and Markings. The following is a guide to the content and tone of each area:

Sightings--Visual and written accounts of existing forms and conditions.

Postcards--First thoughts. "Look at the simplest object. But think about the whole universe that it contains. Look."--Antoni Tàpies. Literally postcards 'sent' to myself to highlight a particular issue of new exploration.

Conversations--"Speaking here in the presence of my work, which should really express itself in its own language, I feel a little anxious as to whether I shall be able to find the right approach... But my words do not address themselves to you in isolation, <they> will complement and bring into focus the impressions which you have already received from my pictures..."--Paul Klee. Accounts from conversations and writings as well as paintings, collages, and other 'markings' done by myself, architects, artists, and others.

(Note: HJ refers to myself)

Markings--Drawings, paintings, etchings, collages, and models that I have produced as a sort of period at the end of a particular exploration.

None of these areas of presentation is meant to have more importance than another. The issue is that each kind of 'looking'/exploring adds up to create a more complete understanding.
Antoni TAPIES--The Game of Looking, 1967:
What must we do in order to look at things clearly without trying to find in them whatever people have told us ought to be there, but rather simply what is there? Look. Look thoroughly. And let yourself be carried everywhere by whatever offers itself to your regard and echoes in you. I invite you to play, to look attentively. I invite you to think.
The Cape of present day is the remnant of an ancient coastline, a landscape carved by glaciers and still changing daily because of wind and water. During the Ice Age, glaciers left piles of rocks and pebbles along the New England coast. These piles of once solid bedrock formed ridges hundreds of feet high known as moraines that formed Cape Cod's 'spine'. Slow-melting ice-chunks left rounded pockets, the kettle holes that now dot the Cape landscape with more than 400 ponds.

At the end of the Ice Age, the Cape was left barren, marked only by boulders and pocked with kettle holes. Then seeds sprouted, reforesting the interior; and the sea began its work again. The waters of the ocean rose, fed by melting ice, filling bays and flooding low-lying plains. Waves ground over gravel banks, continually carrying away rocks and stone in the tide, then returning them to shore worn down to smooth pebbles and sand. The relentless ocean eventually created wide borders of sand beach, rearranged harbors and bays, turning sand bars into spits and spits into peninsulas. Finally glacial debris was rearranged to form the hooked arm of Provincetown.

Wind and water continue to carve new cliffs, building large sand dune piles that shift from moment to moment, constantly creating new hills and valleys in place of old. This landscape with its fragile composition is where this thesis begins.

A visible trace/impression on something as a spot, dent, line or visible indication of some quality or property; this is what the Cape landscape is all about. The movement of natural elements and the placement of built forms leave very distinct tracings on the environment. In order to preserve this uniqueness, one must recognize the consequences of moving through and placing objects within this landscape, if the Cape is to continue to exist in its natural course of reacting to its architects—wind and water.
Postcards

When drawing a tree, break off a branch of leaves, mosses or fruits. Draw it on the side and become aware of its structure; how the leaves and mosses are attached. See how they grow... HUANG PO 4th Century Zen Master.

concept

action

token

send and save.

from stay low to the ground and move sections not grow to left wind elements.
Henry BESTON--The Outermost House:
East and ahead of the coast of North America, some thirty miles and more from the inner shores of Massachusetts there stands in the open Atlantic the last fragment of an ancient and vanished land. For twenty miles this last and outer earth faces the ever hostile ocean in the form of a great eroded cliff of earth and clay, the undulations and levels of whose rim now stands a hundred, now a hundred and fifty feet above the tides. Worn by the breakers and the rains, disintegrated by the wind, it still stands bold. Many earths composed it, and many gravels and sands stratified and intermingled. It has many colours: old ivory here, peat here, and here old ivory darkened and enriched with rust. At twilight, its rim lifted to splendour in the west, the face of the wall becomes a substance of shadow and dark descending to the eternal unquiet of the sea; at dawn the sun rising out of the ocean gilds it with a level of silence of light which thins and rises and vanishess into day.

Often spoken of as being entirely glacial, this bulwark is really an old land surfaced with a new. The seas broke upon these same ancient bounds long before the ice had gathered or the sun had fogged and cooled.

Mary Heaton VORSE--Time and The Town:
Like an onion, there is here a layer on layer, whorl on whorl...elements have met here and formed a unique place.
The emphasis on the role of the element...

Token = physical manifestation of concept

* A change or change (x arrows)

* a change or change (x arrows)

Creation of a sense of a tone...

- use space in the illusion of a 3-dimensional tool...

- movement through space not just a "brush stroke" on the paper...

- movement in 3-dimensions direction...

- using time, a material not just on top...

- carving out...
Markings

The Cape "forearm"--North Truro
Monoprint
original size: 5"x7"

Contour Study
original size: 10"x30"
The first recorded use of the term "Cape Cod house" is in the writings of Timothy Dwight. He traveled widely in New England in 1800, and recorded his impressions in letters, which noted the houses of the less wealthy inhabitants "generally of the class which may be called, with propriety, Cape Cod houses."

The 'typical' Cape Cod house is one-and-a-half stories high with a steeply pitched roof. They were built low to the ground to ride out the winds and rains. "A short hoist and a long peak," was the builder's guiding motto.

The houses were firmly anchored to the ground by a large chimney, which stood opposite the front door and rose through the ridge line of the roof. It was this placement of the chimney that gave the house its character; a central core that served several fireplaces and decided the location of the rooms and the placement and pitch of the stairs.

There are three basic types of houses that can still be seen on the Cape. The half-house with two windows on one side of the door, the three-quarter house with two windows to one side and one to the other, and the full Cape, sometimes called a "double house", with a door in the center and two windows on either side.

These houses were designed as aggregate forms, intended to be enlarged or made smaller, adapting to the inhabitant's needs.
Conversations

Henry BESTON--The Outermost House:
The house showed, perhaps, a somewhat amateur enthusiasm for windows. I had ten. In my larger room I had seven; a pair to the east opening on the sea, a pair to the west commanding the marshes, a pair to the south, and a small "look-see" in the door. Seven windows in one room perched on a hill of sand under an ocean sun--the words suggest cross-lights and a glare; a fair misgiving, and one countered by the use of wooden shutters originally meant for winter service but found necessary through the year. By arranging these I found I could have either the most sheltered and darkened rooms or something rather like an inside out-of-doors.

Lester WALKER--American Shelter:
Early Cape Cods were built by ship's carpenters as though they were "land boats" made to ride shifting sands and withstand lashing wind and rain storms; they were low and broad. They were built on large hewn oak sills, which steadied the house on its shifting uneven sand site.

THOREAU, after a walk on the beach 1849:
Their garrets were apparently so full of chambers that their roofs could hardly lie down straight and we did not doubt that there was room for us there... The great number of windows in the ends of the houses and their irregularity in size and position...struck us agreeably, as if each of the various occupants who had their cunabula behind had punched a hole where his necessities required it, and according to his size and stature, without regard to outside effect. There were windows for the grown folks and windows for the children--three or four apiece; as a certain man had a large hole cut in his barn door for the cat and another smaller hole cut for the kitten.
Markings

Traditional Cape Cod Houses--1700-1720

"Early Cape Cods were built by ship's carpenters as though they were 'land boats' made to ride shifting sands and withstand lashing wind and rain. Sturdy, they were low and broad. They were built on large, heavy oak sills which steadied the house on its shifting uneven sand site. Inside, the rooms were clustered around a huge chimney that contained as many as four fireplaces, used for heating, cooking, and light."

Lester Walker
American Shutter
FORM: Sightings

Places are defined in relation to other places. Here is relative to there. The project site is particularly highlighted by the there; the dramatic view of the bay as seen through two pitch pine covered hills.

Thus highlighted, the here has much more presence. The clearing’s direction is west, toward the view of the bay, the tip of Cape Cod and Provincetown. It sits 120 feet above sea level then drop 20 feet off to the west, into a gully before it starts up again to a densely pine covered hill.

This building site is located on a two acre lot, a characteristic interior Cape Cod landscape made particularly lush by the forested National Seashore land which surrounds it. On its undulating hills, 12 foot high pitch pines, sweet bayberry with its grey-green berries, beach plum and blueberry bushes and crunchy lichen furnish a dimension that is screen-like against the wide sky...topmost branches of the pines end with wispy needles that filter the sun and wind.
Postcards
Conversations

DEFINITION OF SITE.

(see spirit)
nature - making of -
material order.
spirit of animal world and unseen forces.

"scenery" -

spaces and groupings

balance between natural and man-made.

clear definition between sacred and natural.
The landscape is a force.

- Dimension
- Direction
- Position

Form the rhythm and boundaries of the design which will then
create the terrain.

above to up from here...

26

The land

landforms

DIMENSIONS

measure

RHYTHM

"movement" on site

DIRECTION

BOUNDARIES

built / landscape

PLACES

stepping places
Markings

Site Area and Site
Landscape in profile
original size: 3" x 5"
clay

Landscape
original size: 8" x 10"
corrugated cardboard, sand, wire, brush hairs, gesso and rust flakes
site form
original size: 5"X7"
dry point needle and sand on zinc plate
zinc plate
land etching
original size: 11"x17"
dry point needle on wax mano paper
1/8" scale
HJ- Ideas on technique:
The idea of etching/drypoint is to bring one closer to the movement of the drawn line and decision made. Repeating the action creates a rhythm and a commitment to that action/direction.
DIRECTION: Sightings

looking north
Markings

wind 1
original size: 9\"x12\"
gesso, oil and sand
wind 2
original size: 9"x12"
gesso, oil and brass wire
Direction 1
original size: 5"x7"
handmade paper and ink

Direction Intensified
original size: 12"x16"
**Terracing**

*original size: 3"x5"
brass and wood*

**site directions**

*original size: 8"x10"
handmade paper and brass*
site direction
original size: 5"x7"
dry point needle and clay tool on zinc plate
zinc plate
DIMENSION: Sightings
boundary assignment: one

quest: BOUNDARY, as an element
ground: required (necessary)
relationship between two forces.
how does one define that boundary?

boundary concept of a boundary - type
boundary (form that that concept falls)
[want the line to relate to personal language]

metaphor:

how do you read?

draw "mark making" (2-dimensions)

mark is going to take the form of a mark (atitude-direction)

"meaning "that makes the mark"

"meaning of mark, process and evolution"

CONCEPTS

- element

TOKEN: physical manifestation of concept
MARK: result of action

tool: for making intuitive gestures

BOUNDARY

INTUITIVE

ANALYTIC

The concept of space built by touch is not static. It has to do with movement.

Token related to movement.
HJ to Imre Halasz--4 March, 1987:
I guess what stands out the most about the land is that the trees and other shrubs that are so characteristic to the Cape; like driving in the car and seeing the "cape trees" and knowing you're getting close. Spindly/spiny trees, mis-shapen and people size. They filter light when standing alone and block light when clustered together. Cape trees and shrubs seem to emphasize the singular branch/blossom/fruit. One sees each branch. For this reason I am beginning with "sticks"/branches both vertical and horizontal.
Markings

`sit-e-place`
original size: 6"x8"
handmade paper
site dimensions
original size: 5"x7"
dry point needle and clay tool on zinc plate
zinc plate
ASSEMBLAGES
As mentioned earlier, the surface of the land is fragile yet at present balanced. In order to inhabit this site with built forms, construction would have to occur and that would scar top soil, destroying the ground covers and possibly the shrub plants. The question becomes how to 'mark' and build on the surface without destroying it.

Beginning with the scenarios of going to the beach or camping in the woods, the first action would be to 'mark' a location. This is usually done with a vertical element such as an umbrella pole or tent stake. Next would be to 'prepare' the surface, either by smoothing the sand or placing a blanket down. This series of actions I have observed to be most natural to humans--the marking of territory by vertical elements and then horizontal planes.

The decision was made to protect the existing surface from re-surfacing and instead build above it by creating an additional surface that would only 'touch down', marking territories with vertical elements and spanning with a deck system to create the 'prepared' horizontal surface from which to build up. This would then leave the natural surface to continue to move with its inherent behavior and the built surface to exist and respond to its own behavior. Furthermore, by not placing this new surface directly onto the land one is able to understand the natural surface as the first layer of building and the built surface as the second, thus again being able to experience the here and the there.
snow patch on the site

raised decking

pitch pine bark
HJ to Michael Singer--20 Feb., 1987:
Like footprints in the sand and waves leaving their mark, is it possible to create a house that leaves "marks" in the surface when it closes for the winter or when windows and doors are opened and closed?

This would take careful "preparation" of the surface/ground and though as to the inherent or wanted behavior of building materials, forms and elements.

Expanding and receding, carving out space for itself (the built forms) in the landscape (natural or built). Deliberate movement and choice of placement.

Differences between closed form (traditional Cape) and open forms (screens...). What is the difference in their mark? Like the footprint--the base /heel of the foot is a "closed" form mark and the toes, as a group or repeating forms, are an "open" mark because they are letting some of the surface "through".

water jade--Kepes

large ochre with footprints--Tapies
The sense of space built up by touch is not static. It has to do with movement over and around surfaces.
site area
original size: 4"x6"
repidograph on trace
First attempt at marking territory and direction of the site.
SCREEN: Sightings

Three-dimensional screens were selected as a means of creating built form that allows for inhabiting the land, and at the same time having the vegetation and surface of the land continue to be a visual and physical part of one's experience even after going 'inside'. Exterior and interior vertical markings and horizontal planes now become screens.

Slated deck surfaces are created which parallel the movement of the land surface as one approaches the shelter. These horizontal planes just above the original land surface enable one to walk toward the shelter without destroying the surface of the land and to freely choose 'inside' or 'outside' space--always having the accompaniment of the unique features of Cape land.

Traditional Cape Cod fencing set into dunes and other shifting land surfaces to mark territory and protect the land contours from blowing sand are vertical screens following similar design principles.
Carl Larsson's home

old pier--bay side

fishing nets--Norway

fishing nets--Provincetown

Japanese fence

dune fence

the hammock*

Provincetown*
Conversations

Layering another element over boundary.

TOOLS
- building
- deck
- path
- screw post
- closure marking (boundary)
- wall
- wall
- wall

Elements
- box for sand mixture
- plastic mixture

Intuitive -- Analytic

Process

In Intuition between two of course =

Building the rules -- analytic
Playing -- intuitive

Wicker chair

Town creek
screened layers
original size: 5"x7"
monoprint

The layering of marks over time/reflecting time--process and evolution.
Markings
Screen Installation on Site
original size: 20"x30"
1/8" scale
Screens
original size: 20"x30"
1/4" scale

Layers of horizontal and vertical screens forming the built layer.
Vertical markings which earlier were used as territory boundaries are now transformed into a structural system of columns. Horizontal screens in places become solid planes for interior surfaces and the roof of an emerging shelter.

A primary vertical screen is developed from a set of dimensions that is deployed to create semi-closure, and in places solid vertical panels were inserted in the screen for complete closure. This 'play' of solid planes and screens--both vertical and horizontal--was designed to organize interior spaces.

All interior spaces include a solid plane which receives the light and shadow that the screen plane conduits. The constant movement of light and shadow during the course of the day, captured by receiving planes throughout the interior space, enables inhabitants to understand the three-dimensionality of the space. One is able to be sheltered in the spaces between interior solid and screened planes, and at the same time experience the natural sheltering of the outside environment.
Postcards
Maurice SMITH--Particular associative habitable(built) environments:
We must decide at every move whether we are appropriately developing continuities and intensifications or discontinuities and transformations--contradictions. Do we intend the environment to be a series of short-term theatrical events, or should we be contributing to a larger continuity of variables?

Tapies' interest in architectural elements seems to have developed out of a desire to redefine in his art the boundaries, enclosures, openings, surfaces and matter of his world.

His reflection on the nature of matter and spirit...walls, doors, windows revealing signs of their place and time. ...Where the process, image and form read like successive stages of becoming. He identifies with the layers and imprint suggesting ongoing construction or repairs.
Markings

Transformation of screen instillation
1/8" scale
ROOF MASS
SECOND FLOOR PLAN
vertical screens moving from built landscape through house
screens and solid planes moving through house and out again
direction of movement/access
layering of screens

site and shelter entries
built and 'unbuilt' territory exchange
Building Direction
screened shelter
Sheltered Place Territory
shelter—solid and screened planes


David UPDIKE--The Little House:

...The function of the little house, I now realize, was less in its finished form than in the making, and its construction served as an agent of transformation...