Introduction

Any intellectual inquiry is initiated within an a priori contextual base of knowledge and experience from which one begins. The topic of this thesis investigation was formulated from the joining of pre-conceptual, generative experiences with research of existing work, both written and built, which relates to humans’ fundamental interactions with and existence upon the land. Personal experiences are both generative of the questioning contained herein, and contributory to the paradigmatic structure through which the questions have been explored.

This thesis is a dual exploration - first and most directly, of designing a coastal retreat. Secondly, it exists as an inquiry into a set of concerns relevant to a personal architectural existence. The thesis investigation, encompassing a range of related issues which I wanted to explore through the year, existed as reasonably well-defined objectives prior to any notion of a project or program. Yet, those very issues dictated the specific selection of a project and site with which to explore these thoughts in an architectural context. Within the investigation and research of architectural readings of territory and associated phenomenological consciousness lay my strongest curiosity. The project and site provided the avenue of that inquiry.

Presented first are architectural precedents and other generative experiences which led me to choose a particular topic as the subject of a thesis inquiry. This first section primarily addresses the concept of topophilia. Secondly, the project itself is introduced, along with a presentation of the concurrent evolution of the thesis inquiry into areas of phenomenology and temporality, or the temporal condition. Thirdly, as the project unfolded into a functionally responsive proposition, the line of inquiry migrated to the final major tenet of the thesis, that being the prospect-refuge theory; uncovered through study of other’s works, specifically those of Frank Lloyd Wright, the theory helped explain an anthropological origin to many of the desired conditions generative of design decisions.

Substantive

Leonardo Ricci writes about the design of his own house not as a collection of architectural forms or functional solutions, but as a container for certain repetitive life events, such as awakening in the morning. Sverre Fehn, in describing his design of Villa Busk, speaks of showering in the morning sunlight, and at dusk of experiencing a transformation from the intense rays of the setting sun to the warm glow radiating from fire and hearth. Yet another architect, Romaldo Giurgola, in writing about the essence of architecture, offers the following:

... architecture retains the complexities of life, and is founded on them; it develops in a variety of episodes, situations, possible conditions. The relative juxtaposition of those structured elements (walls, surfaces, structures, windows) will convey a sense of the whole; harmonious, because it is related to a purpose; beautiful because it is a poetic manifestation of life. Thus a building is a reasoned fragment, the sign of a presence; its aesthetic, a condition discovered, not a starting point.
... in architecture spaces are designed around people activities.

The architectural proposition contained in this document is one of fragments – fragmentary thoughts, drawings, models and writings. Its result is not so much a singular proposition for building as it is a collection of thoughts about building, and perhaps more significantly, thoughts about inhabiting, about how we dwell in a place.
W.G. Clark describes architecture as “the reconciliation of ourselves with the natural land.” His buildings as well as his writings address the need for architecture to act in deference to the natural surroundings. Clark advocates an architecture of atonement for what is lost, for what man is taking from the land simply through the act of building. He suggests that in some way, through architecture, man must make the place better by facilitating an intensification of the experience of the specificity of that place.

In Clark and Menefee’s design for a modest farmhouse on Johns Island, South Carolina, the simple form of a tower yields to the adjacent horse pasture by accommodating human activities on the site with a minimal perimeter footprint. An attached shed-form on one side of the tower contains service functions of the program. Through material and color distinctions between the primary tower and secondary lean-to, the house provides a mediation of the edge between pasture and forest.

Middleton Inn, near the historic ruins of Middleton Place plantation, exists in deference to its site on a bluff overlooking the Ashley River. Geometrically ordered units enclosed with wooden siding and mullions painted a deep, Charleston green cluster next to simple, large monolithic walls. These walls essentially separate the site, juxtaposing forest - pines, live oaks, and dense lowcountry underbrush - and the vista of the river and marshlands beyond.

Much of Clark’s built work is located near Charleston, in the lowlying tidal areas, the sensually rich environment that permeates the writings of Pat Conroy. The works of Conroy and Clark both embody a notion put forth in Norberg-Shulz’s Genius Loci, most succinctly stated in his reference to a quote from an untranslated work by Willy Hellpach entitled Geopsyché: “Existential contents have their source in the landscape.”
Luigi Snozzi is an architect whose work is intensely related to site. Through critical interpretations of geography, topography, and cultural history of a place, Snozzi precisely identifies particular natural characteristics or remnants of the site’s history. In each project, these elements are extracted and then formulated into clear architectural intentions which intensify one’s perception of the specificity of place.

In the case of Casa Kalman, located on the alpine slope above Lago Maggiore, Snozzi “routes the observer’s attention away from a contemplation of the architectural object toward a concrete experience of the profound relation with ‘the geographical features of the site’.” Juxtaposition of the steeply sloping topography of the site with the horizontal expanse of the valley floor emerges along a horizontal walkway. The adjoining retaining wall transforms to become the main exterior wall of the longitudinally oriented floor plan. The curve of the slope, as an extant geological condition, essentially informs the overall organization of the house. The end of the floor plan facing the valley is warped along the curving slope, generously enabling more desirable views of the lake to be acquired from the interior spaces. By wrapping this retaining wall around the site and connecting to the gazebo, Snozzi frames a very specific view to the lake and subsequently links the house to that larger physical entity of the terrain, that being the lake itself at the base of the valley.
Topophilia

Yi Fu Tuan has written extensively about humans’ affinity for the geographic characteristics of a particular environment. He defines the term topophilia as “the affective bond between people and place or setting.” Experience of place necessarily transpires through the totality of sensory perceptions possessed by humankind, especially perceptions of those conditions unique to a given environment. In The Spell of the Sensuous, David Abram equates perception with participation. Through invoking either cognitive or sensory participation of the occupant with the larger world, architecture enhances one’s perceptual awareness of surrounding conditions. In so doing, architecture can also facilitate a greater understanding of our inherent connectivity to sensory and physical surroundings.

The architectural works of both W.G. Clark and Luigi Snozzi fundamentally acknowledge and address humans’ relationship to the surrounding physical world. In Snozzi’s Casa Heschl, similarly to Casa Kalman, demarcation of human habitation occurs with a curving stone retaining wall aligned along the contours of the slope. Contrasted with this stone element is a linear, monolithic concrete wall. Together the two link the main house to an otherwise isolated entry structure. The horizontal line of the top of the retaining wall, at the easily perceptible height of the waist and of one’s hands while walking along the entry path, simply demands from the inhabitant a certain recognition of the house’s location on this alpine slope. The terrain therefore becomes integral to the experience of entering the house.

This affinity for specific characteristics of natural surroundings is described by Tuan as a diffuse concept, yet it is “vivid and concrete as personal experience.” In an architectural context, Christian Norberg-Schulz’s investigations in Genius Loci explore the implications of the concept of topophilia as it specifically relates to characteristics of both natural and man-made landscapes.

“...There is a property in the horizon which no man has but he whose eye can integrate all the parts, that is, the poet. . . . To speak truly, few adult persons can see nature. Most persons do not see the sun. At least they have a very superficial seeing. The sun illuminates only the eye of the man, but shines into the eye and the heart of the child. The lover of nature is he whose inward and outward senses are still truly adjusted to each other; who has retained the spirit of infancy even into the era of manhood. His intercourse with heaven and earth becomes part of his daily food.”

Ralph Waldo Emerson

The characteristic line of the distant horizon of coastal landscapes accommodates an inherent human yearning for spatial orientation, one which Norman Crowe identifies as being fundamentally tied to our unique existence as the only mammals who move on two limbs and are consequently unstable without subconscious effort.

The curved wall upon the roof of Adalberto Libera’s Casa Malaparte provides a secluded perch where the cliffs of the Capri coast are edited out of view, enabling the inhabitant to become metaphysically linked with the expansive sky, bound only by the line of the distant horizon.
Snozzi’s architectural and planning interventions are the result of a careful searching of cultural, topographical and geographical conditions of the site’s history. From this reading he extracts certain specifically selected remnants which are then formulated into a fundamental construct for the development of an architectural proposition.

Much of his work is located in the small Swiss town of Monte Carasso, south of the San Gotthardo pass and easily accessible from the European Studies center in Riva San Vitale. Beginning in the late 1970s Snozzi reformulated a commission for a new elementary school for Monte Carasso into a fundamental re-analysis of the historical layout of the town. Careful readings of existing conditions of the site revealed a morphological degradation of a former church and monastic cloister from its historical significance as the formal center of the town into an agglomeration of buildings and accretive structures that effectively precluded any identification as a center of settlement. Snozzi’s planning resulted in the removal of these accretions and structures which had grown up adjacent to and actually within the historical cloister, facilitating through a series of commissions the redefinition of a town center. The church and cloister, reclaimed and reconstituted as the new elementary school, once again serve as the primary identifier of center. This demarcation of the town center is enhanced by Snozzi’s planning for physical delineation of a perimeter in the form of a “ring wall,” somewhat reminiscent of the defensive fortification walls which surrounded many European medieval towns. Architectural commissions for a new gym, a bank, the mayor’s house, and expansion of the town cemetery resulted in additional physical elements which clarify the perimeter of the ‘monumental’ public realm, the essence of the town center.

Snozzi’s design for the mayor’s house resulted in a tower-like form, somewhat analogous to defensive towers located at changes in direction of historical town walls and castles, as exist in nearby Bellinzona, where the fortifications were intended to protect access to the San Gotthardo Pass, a main north-south crossing of the Alps. Not only did he incorporate the form of a tower at corners of the perimeter, but Snozzi also aligned a particular portion of the “ring wall” constituted by a horizontal extension of the Mayor’s house to correspond with the alignment of previously existing vineyards. He consequently is able to make the experience of inhabiting a rectilinear, tower-like form responsive to the agricultural conditions of the site while simultaneously accomplishing this redefinition of the historical town center. In so doing he exhibits a clear insistence upon addressing architectural considerations larger than that of a single building.

Snozzi’s work, exemplified by the mayor’s house in Monte Carasso, represents not only great clarity at the scale of an individual building but also a paradigmatic shift, or perhaps a re-declaration of the architect’s range of professional responsibilities. Historically, as noted by R.D. Dripps, it is precisely this notion of the architect as designer of cities, inclusive of individual buildings, which constituted much of the professional realm of architecture from Vitruvian times until the Industrial Revolution. Snozzi’s contributions to architecture of the twentieth century re-invoke the legitimacy of architecture’s capacity as a profession and as a discipline to fundamentally affect the designs of not just individual buildings, but of the resultant urban condition, the built city in its totality.
Visceral Experiences

This thesis evolved from incremental recognition through personal experiences that certain geographic conditions contribute differently to an existential level of comfort. Juhani Pallasmaa writes that “One of the most important ‘raw materials’ of phenomenological analysis of architecture is early childhood memory.” Reflecting on childhood activities, and visceral experiences both prior to engaging in formal architectural study and while so engaged, are described here. These experiences included both the act of inhabiting different topographical and geological conditions, coupled with later research into the architectural and experiential significance of perception.

Sandhills of South Carolina

The terrain was one in which I thrived as a child, spending countless hours outside, primarily knowing the earth as malleable, buildable, but tentative and subjected to forces greater than me. I am a product of my sandbox. In South Carolina, home of the “Sandlappers” of Colonial times, my backyard was my sandbox, for the earth was sand. There was no box, just an endless extent of the terrain of sand, scrub oaks and pines. Deciduous tree species seldom grew very large, for they demanded more water than the permeable sand could sustain. Only the narrow-leaved loblolly and longleaf pine thrived in this landscape.

Having spent the first eighteen years of my life in the sandhills of South Carolina, I grew accustomed to the dry grain of sand and the withering struggle of any trees other than pines and scrub oaks to thrive. The mild topographic undulation lends itself to straight roads and direct views across acres of flat land — not the endless expanses of the plains of the Midwest — extensive but still bound by distant treelines. In the lowlands, a seemingly never ending horizontality existed, a gravitational plane that by its very nature of limiting channelized runoff necessitated an apparent slowness of the passage of time. In the most pristine areas, this slowness manifests itself through the countless cypress knobs, each likely thousands of years old, found in a setting which probably has not changed over that time.

This impression of the passage of time is somewhat analogous to that of the coastal environment. Land that disappears returns, as sandbars and inlets alternately migrate in response to cyclical oscillations of waves and tides.

Durham

The first realization of the distinction of this type of terrain came for me during my first experience of living for considerable time in a substantially different environment, especially in terms of vegetative cover, largely the result of different soil and subsurface conditions. This experience occurred during my undergraduate years, living in an area of rich and fertile soil, and huge, billowing oaks, intermingled with towering pines. Deciduous trees were simply enormous, bracketing the indigenous stones of the early twentieth century gothic architecture of the main quad. The impermeable clays found in the soils redefined the notion of ‘mud’, which I had not known areas blanketed with quickly draining sands. In Durham, my daily encounter with nature came in the form of a walk to class, beginning on the main quad, where huge trees embraced the gothic buildings, each yielding to the towering chapel centered on a high ridge at the edge of the eight-thousand acre Duke Forest. I walked each day past the chapel, along the heavily wooded, winding, downhill path to the north that linked the main quad to buildings along Science Drive. The beauty and crystal-clearness of the Carolina sky was never more evident than in the afternoon walk back up the wooded hillside toward the main quad. In a singular, stunning instant the towering gothic spires appeared through the dense, green foliage as one
approached the chapel from the northwest, the chapel’s
gargoyles and spires radiant in the setting sun,
bracketed by a celestial backdrop of crisp blue sky.

**Blacksburg**

Blacksburg is situated in complex, rolling topography. Roads outside of town are never straight horizontally or vertically. Stormwater runoff often disappears into the underground karst geology, confusing the notion of water simply running downhill or meandering dispersedly across broad plains. The flow of water through these underground caves defies the learned logic of surface flow. Channelized flow occurs through rocky creeks, the rapids abruptly altering the course of water, supplying incessant sounds of crashing water. Topographical conditions of the New River Valley are an agglomeration of rapidly undulating hills interspersed between abrupt and prominent ridgelines.

These reflections about conditions of terrain only acquired architectural potential through work and study in another land, the Ticino region of Switzerland.

**Riva San Vitale**

Riva San Vitale, Switzerland sits in a flat valley south of Lake Lugano. The valley is oriented nearly north-south, with the eastern and western sides of the valley bracketed abruptly by Monte Generoso and Monte San Salvatore. The horizontality of the valley forcefully presents itself through the adjacency to the lake and in the perfectly straight main road extending the from west to east, from the main piazza in Riva across the valley to the town of Capolago, where it abruptly turns to the south at its encounter with the train tracks. The rail line forms yet another directional and orientational demarcation within the valley as it hugs the eastern shore of the lake, extending southward to the towns of Mendrisio and Chiasso, as the alpine valley yields to the Lombard plain.

As a pilot and a civil engineer, the character of the land has always been a preeminent concern, especially in a quantitative, scientific recording of its shape, its topography, accompanied by subjective, intuitive readings. It was through this eyepiece that my level of comfort relative to the natural setting of Riva became evident. The valley in which Riva sits is oriented nearly north-south, and from Capolago on the eastern edge of the valley to the central piazza in Riva to the west, the total elevation change is less than the height of a person. The horizontal line of the valley, and its alignment in the cardinal directions, connected it as a partially cosmic landscape condition to the memory of the landscape of my childhood. Particularly due to the unseasonably warm and uncharacteristically sunny weather during our stay, climatic conditions added considerably to the phenomenological comfort I experienced in this place. I naturally had an affinity for the horizontality of the valley, despite its boundary. Presumably, the orientation of the valley along a nearly north-south axis added to my level of comfort.
Generative Experiences

Conroy’s opening line of *The Prince of Tides*, quoted in the preceding abstract, is of seminal and paradigmatic importance in my personal, intellectual and emotional interests, all of which inform the act of exploring an architectural proposition. In his continuing prologue, Conroy immerses the reader in the full spectrum of human senses. He transports the reader into an imaginative world intensely dependent upon sensory perception, a poetic narrative descriptive of a specific environment.

Upon cursory analysis of the notions put forth in Norberg-Shulz’s *Genius Loci*, the Ticino region of Switzerland may seem quite dissimilar from the sandy, silty lowlands and tidelands of the southeastern United States. However, the experience of staying in Riva for several months, inhabiting a much different geological condition from the Carolina sea islands and the sandhills of my childhood, opened the door for a deeply personal and reflective consideration of the architectural potential afforded by phenomenology of place, by a perceptual reading of the terrain.

Prague

The opportunity to travel to Prague during the longer stay in Riva San Vitale intensified an intellectual curiosity first triggered at a subconscious level through earlier experiences of inhabiting differing terrains. Impressions and memories of dwelling in specifically distinct natural environments, characteristic experiences which Malcolm Quantrill describes as greatly contributory to one’s existential comfort in a given place, emerged or perhaps, matured, into a deeper intellectual curiosity during this journey to Prague, largely due to the analytical framework established by Norberg-Shulz.

*Genius Loci* contains several photographs and diagrams showing the significance of topography and climate on the city’s development through history, particularly of the ridge to the northwest, site of Hradcany palace. From this ridge, one overlooks the original quarters of the city clustered on either side of a large curve in the Charles river, near the centuries-old Charles Bridge. Reading not simply the architecture itself, which exists as an unparalleled depth of layering, of building upon building spanning eleven centuries of settlement, the visit to Prague also provided an opportunity to study the historical layout of the city, most notably in terms of surrounding natural conditions.

I returned to Riva with a newly engaged analytical tendency, one supportive of my inherent interest in reading terrain, perhaps ingrained as a child and strengthened through experience as both an engineer and pilot. James Turrell speaks about the contribution of his experience as a pilot to his studies of the qualities of light. For me, flying small planes provides both the opportunity and necessity to read terrain, to read the earth as a full-scale map. From the airborne altitude of a single engine aircraft, visible connection to the ground below is simply the most basic and inherent form of navigation. Norberg-Shulz provided an intellectual link between my experience with the land, terrain, and topography, upon it and above it, and the discipline of architecture.