Interpreting Landscape: Understanding Through a Story of Architectural Experience

Andrew Peter Jonic

Bachelor of Environmental Design
Miami University, 1997

Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Master of Architecture at the Massachusetts Institute of Technology, February 2001

Author:.....
Andrew Peter Jonic
January 19, 2001

Certified by:.....
Jan Wampler
Thesis Supervisor
Professor of Architecture

Accepted by:.....
Roy Strickland
Associate Professor of Architecture
Chairperson, Departmental Committee on Graduate Studies

\

For Melisa
Thank you for all your love and support

Abstract

Interpreting Landscape:

Understanding Through a Story of Architectural Experience

by Andrew Peter Jonic

Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree Master of Architecture at the Massachusetts Institute of Technology.

Since the 1880's the United States government has been constructing buildings on national park land. The visitor and administrative building typologies in the National Park Service have evolved from Army barracks at Fort Yellowstone, to railroad hotels, to the Mission 66 visitor centers, and finally into the present-day interpretive center. Currently, two-dimensional representations within a visitor center, and park ranger interaction beyond, have typically been the devices with which the National Park Service educates the visiting public about a celebrated landscape.

The intention of this thesis is to explore and re-think the design of the interpretive center through the *three*-dimensional use of architecture as the educational link between landscape and human understanding of it. The physical and mental comprehension of a landscape over the course of time is dependent upon the affects external stimuli have on the five senses. The ability of architecture to increase the stimulation of one sense would potentially trigger a memorable experience. Through the designed construction and placement of man-made and natural materials along a path, this thesis aims to generate visitor comprehension through the architecturally heightened experience of singular programmatic and landscape elements. Similar to two-dimensional subject matter, these landscape interventions are open to individual interpretation.

Thesis Supervisor
Jan Wampler
Professor of Architecture

Weir Pond. *Melisa Whelden photograph 10/00*

Thesis Supervisor
Jan Wampler
Professor of Architecture

Readers
Paul Lukez
Assistant Professor of Architecture

Michael McKinnell
Professor of Architecture

Content

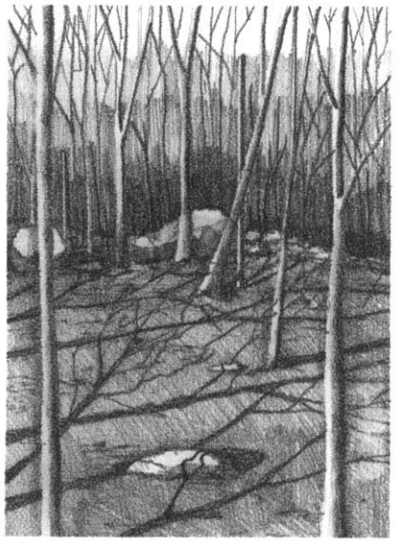
Methodology

I like to think the origins of this thesis began in my backyard as a young boy. The enchanting Connecticut woods surrounding our home contained stone walls, trees, and a glacial topography that would fascinate any child. I often found myself digging in the ground, constructing stone walls, and erecting small perches in trees. Not necessarily buildings nor landscape, these small interventions occupied an elusive domain between architecture and nature. At the age of twelve, I was excited to learn my parents were planning a family trip to visit many of the country's amazing natural wonders. We visited a variety of national parks from Redwood National Forest to the Grand Canyon. Each landscape seemed to be twice as large as what I had experienced in my backyard. I was fascinated by almost everything I saw. I also remember entering many buildings, called visitor centers, to learn about each park.

I returned to these early memories as I determined what to explore for my thesis. Interested in what it meant to design and build in such precious landscapes, I chose to create an interpretive center for the recently designated Weir Farm National Historic Site in my hometown. Before commencing the design, I traveled across the country to fully experience national park landscapes through the various visitor facilities that have been built on national park soil. After understanding the design evolution of the architecturally manipulated visitor experience, I reflected on a new method of interpreting a landscape to a visitor. This thesis is a story of that process beginning with the experience of precedents and ending with my design for Weir Farm.

Introduction

The notion of interpreting landscape in the United States national parks is not a new idea. Since the creation of the first park, designers and directors have been challenged with the problem of how to interpret and present a landscape, natural or historical, to the public. Typically, visitors have attempted to come to an understanding of a place through interaction with park rangers, and two-dimensional graphic media and exhibits. Current technological trends have led park officials to increase the use of electronic media to interpret information. In instances of graphic and electronic media, the visitor is completely removed from the actual landscape they came to visit. Learning results from a "spoon fed" process rather than from an experiential one. Throughout the history of United States national parks planning and design there is little evidence of insight into the use of architecture as an interpretive medium between visitor and landscape. The goal of this thesis is to explore the integration of architecture and program as the means through which a landscape is most effectively experientially interpreted by every visitor. While the ideas put forth might be used universally, site specificity and park content are essential to shaping the interpretive experience within any national park, monument, or historic site.



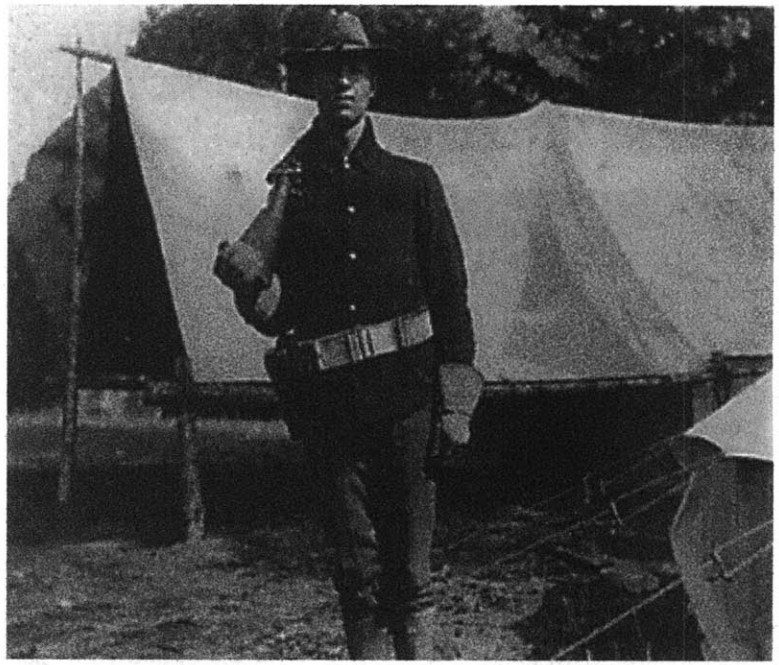
1 History: The Evolution of Design in the United States National Parks

Building on the Land

Over the past 110 years, thousands of structures have been built on precious U.S. national park soil. From the earliest building (constructed by the United States Army) at Yellowstone National Park (1891) to the most recent, erected at Mount Rushmore National Monument (1999), the designed relationship between land, park building, and visitor has changed (throughout the existence of the United States National Park Service). Given the uniqueness and remoteness of sites, builders, architects, and park officials have paid close attention to how park landscapes would be perceived and experienced through the use of man-made constructions. The intention of the following paragraphs is to create a historical framework from which the thesis can be explored.[1] The focus is on the history of architecture in the U.S. national parks and the extent to which man-made constructions have aided in the interpretation of specific park landscapes.

Fort Yellowstone

1872 marked the establishment of the first United States National Park in Wyoming. Named after the yellow coloration of the earth, Yellowstone began to attract poachers, tourists, and souvenir hunters[2]. The earliest visitors sought to exploit the land as well as to appreciate its beauty. The civilian superintendents in charge of keeping order in the park could not handle the amount of visitors due to a lack of funding, experience, and manpower. The first structures erected in any national park were tents and other temporary facilities used by civilian superintendents (fig.01). Initially, there were no facilities available to park visitors. The first structures were used solely to protect the park from abuse by its visitors. Eventually, the government recognized a need for more protection, and in 1886 the Secretary of War sent in the United States Army.



01 1870's Fort Yellowstone army tent

02 Double Cavalry Barracks

03 Troop Barracks today

04 Norris Field Station

Yellowstone was governed by the U.S. Army from 1886 to 1916. During that time the first permanent structures were constructed near Mammoth Hot Springs on the park's northern border (1891). The buildings were simply designed to support the needs of the troops stationed at Fort Yellowstone. Troop barracks, a chapel, and a post exchange were among the wide variety of building types that satisfied the functional needs of the soldiers. The Double Cavalry Barracks (fig.02) was constructed in 1909 by Scottish masons using native sandstone from a quarry between the Gardner River and the Mammoth Campground.[3] Before the masons arrived, other earlier buildings such as the Troop Barracks (1897) were constructed out of wood (fig.03). Only a few structures were erected beyond Fort Yellowstone. The Norris Soldier Station located in the Norris Geyser Basin was one such building. Initially, these edifices were used to support soldiers who protected the park from disrespecting visitors. Over the years, the structures' functions have changed. The Norris field station, for example, was recently renovated and is now a park ranger museum (fig. 04).

While the first buildings ever constructed in a national park came out of a need for protection, the first visitor facilities were built to satisfy the demand for visitor accommodation and economic growth among railroad companies. These new park buildings were known as *railroad hotels*.

Influences on Early National Park Building Design

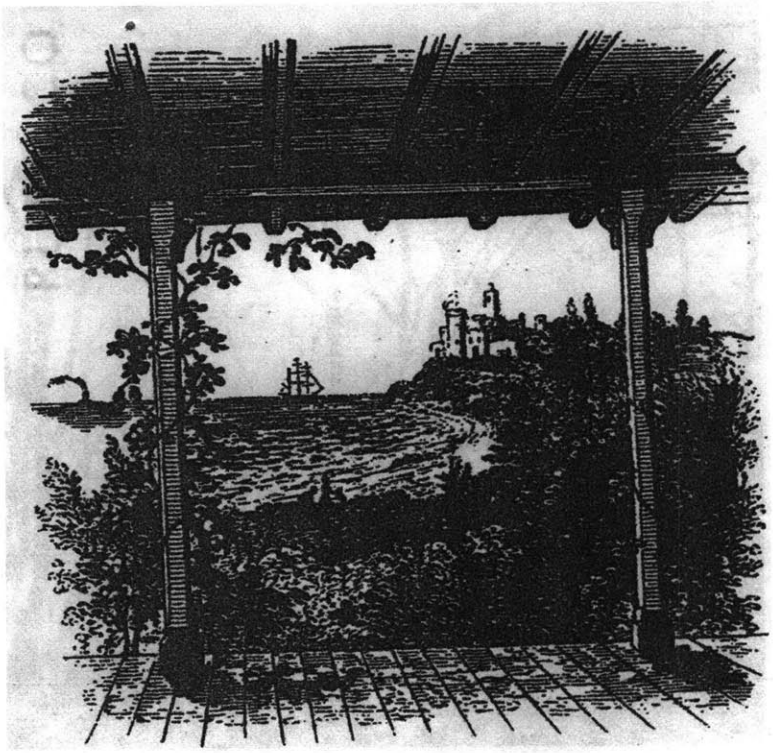
Understanding the experience of visitors in early park buildings requires insight into the origins of their design. The architects of the railroad hotels and early outbuildings of the first national parks were influenced by several architectural styles including Arts and Crafts, Naturalist, and Adirondack. However, it was the writings of Andrew Jackson Downing, and the work of Henry Hobson Richardson and Frederick Law Olmstead, that initially paved the way for the rustic design of the first

park structures.

Andrew Jackson Downing was the first to adapt the ideas and practices of 18th century English landscape designers to American soil.[4] In his writings Downing romanticized about the picturesque qualities of the American landscape and the extraordinary experience of moving through it. His descriptions of Montgomery Place on the Hudson River clearly define the role of architecture in the landscape and its resulting affect on the senses.

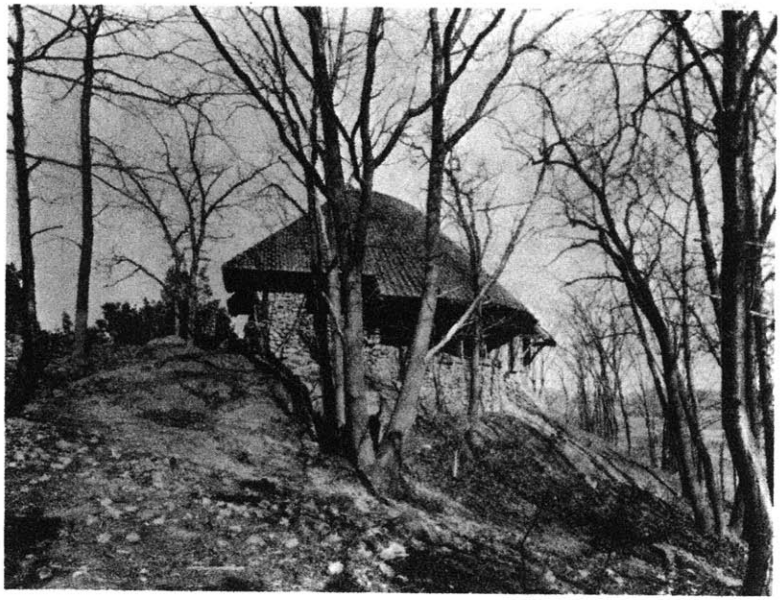
> *"Leaving the terrace on the western front, the steps of the visitor, exploring Montgomery Place, are naturally directed towards the river bank... deeply shaded, winding along the thickly wooded bank with the refreshing sound of the tide waves gently dashing against the rocky shores below, or expending themselves on the beach of gravel it curves along the bank for a great distance... a little farther on we reach a flight of stony steps leading up to the border of the lawn. At the top of these is a rustic seat with a thatched canopy, curiously built around the trunk of a aged tree...at the distance of some hundred yards we found ourselves on the river shore, and on a pretty jutting point of land stands a little rustic pavilion."* [5]

The architecture described by Downing is secondary to the landscape. The minor man-made intrusions simply enhance the beauty of the natural environment and the experience of the person within it. The place Downing describes is *pretty* (picturesque), *little* (unobtrusive in the landscape), and *rustic* (makes use of natural materials). Ultimately, it might frame, or set the visitor up for a view of, the land beyond (fig.05). While Downing's writings were primarily written for those with private landscapes, it was Olmstead who brought the "pleasure landscape" and its architecture into the public realm.



05 Framed view

06 Playstead Shelter, Franklin Park



07 Schoolmaster Hill Shelter, Franklin Park

Designed in the 1880's, Frederick Law Olmstead's Franklin Park in Boston, Massachusetts greatly influenced the architects of early national park buildings. Like the rustic pavilion mentioned in Downing's *Rural Essays*, Olmstead considered his "park furniture" to be secondary to the landscape of the park. Structures would be designed out of need or to accentuate natural features.

> *"The roads and walks of the park have been designed less with a purpose of bringing the visitor to points of view at which he will enjoy set scenes or landscapes"*[6] –Frederick Law Olmstead

For the first time the descriptive writings of Downing and the "rustic" relationship between building and land were being realized in a public place. At Franklin Park, Olmstead hired the renowned architect H.H. Richardson to design the first structures, a few temporary shelters. These shelters do not remain, however, they are assumed to be small, inexpensive, and architecturally, unpretentious.[7] Richardson died in 1886, and Olmstead oversaw the design and construction of the rest of the original structures in Franklin Park. He designed the Playstead Shelter which provided locker rooms to those people using the adjacent field, and a café area on the second floor.[8] The Playstead building had low-lying eaves, weathered shingles, native stone, and a horizontal emphasis (fig.06). It was these distinctive characteristics that enabled the large building to be set into the landscape unobtrusively.[9] Other structures, like the shelter on Schoolmaster Hill and various paths and bridges, fit into the picturesque park (fig.07). Olmstead intended the urban green space to be a "country park" where visitors would simply go to relax and enjoy the scenery. The design intent, materials used, and siting of structures in Franklin Park all inspired a generation of designers of the U.S. national parks. The objective was to generate the feeling that the

visitor was as far from the urban environment as possible. To do so, man-made structures were kept to a bare minimum so nature could be fully experienced. This was the attitude adopted by the designers of the first buildings in the national parks. However, the designers of those first visitor facilities, the railroad hotels, followed architectural styles rather than naturalist theories.

Railroad Hotels

Such national parks as the Grand Canyon and Yellowstone are located in remote areas in the Western states. At the turn of the 19th century the railroad was the fastest and easiest way to travel to these distant sites. Once the tracks were laid, the railroad companies funded and constructed hotels close to primary natural features(i.e. Old Faithful).[10] The idea was a simple one. In order to spark financial growth, the companies relied on constructing attractive edifices as destinations to entice people to ride their trains to the parks. For the first time, the connection between visitor and park landscape was linked by architecture.

Old Faithful Inn

1903 marked the completion of the first rustic style national park hotel, the Old Faithful Inn at Yellowstone. The young architect, Robert Reamer, designed the inn. Reamer used a Swiss influenced Adirondack style to create a building that would accommodate over-night visitors to the geothermal features of Yellowstone's Upper Geyser Basin. The grand rustic building appears to follow neither Downing's ideas nor those of Olmstead. Prominently sited, the shingle style hotel is located a mere hundred and fifty feet from one of the most popular geothermal features in the world, the Old Faithful Geyser. While architects from this era attempted to enhance the landscape, the Inn is clearly superior to the geyser and can be seen from quite a distance, the shingle roof rising above the treetops (fig.09). Reamer did however, attempt to site the

08 Grand Canyon Station and El Tovar

09 The Old Faithful Inn

10 Old Faithful Inn stagecoach entrance

11 Steep roof and dormers

building in a unique, manner. Upon stepping out of, and into, the stagecoach, the first and last view the tourist receives from under the deck of the Inn is Old Faithful (fig.10). Inside, the building is one enormous space with expansion wings heading off to the east (1918) and the west (1928). Within the main space rises an immense stone chimney containing 8 fireplaces. The structural system is composed of lodgepole pines that Reamer hand selected from the forest. The upper floors, crow's nest, and porches all rest within the structural grid.

From an experience standpoint, The Old Faithful Inn is quite direct in its relationship to the geothermal landscape of the Upper Geyser Basin. The prominent siting and majestic scale do not coincide with the personal natural discoveries written about by Downing. Nor does the sheer verticality concur with the horizontal design concepts put forth by Olmstead (fig.11). Instead, the building is a majestic departure from these two precedents that has it's own identity. Besides the initial and final views of Old Faithful from the stagecoach drop off, the building does little to interpret the landscape it is located on.

El Tovar

Oversized elements, prominent siting, and native materials are also elements of El Tovar (fig.08). Located on the South Rim of the Grand Canyon, the El Tovar Hotel has all the characteristics of the rustic architectural style. The building was designed by Charles Whittlesley, funded by the Fred Harvey Company, and completed in 1904. Similar to the Old Faithful Inn, the stagecoach entry faces the primary feature of the park, the canyon. After exiting the train, a visitor would walk a short way up an incline to the entry of the main lobby. Before making a left into the lobby, the view of the Grand Canyon would be revealed just over the edge of the South Rim. Upon both entry and departure, the visitor is left with the lasting image of the canyon. In contrast to the Old Faithful

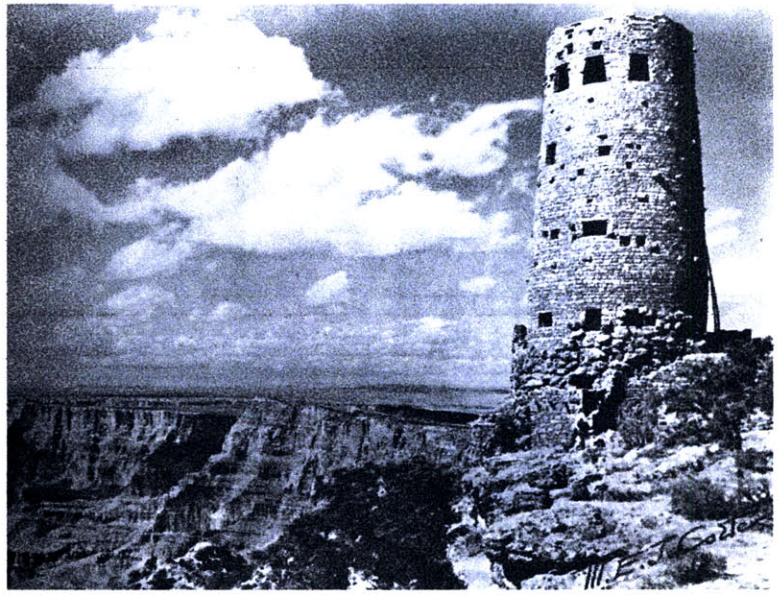
Inn, El Tovar is horizontally massed and does not dominate the skyline. The structure is more or less "discovered" as one meanders along the path of the South Rim.

Ultimately, El Tovar is an object in the landscape with an internal focus. Similar to the Old Faithful Inn, the architecture does little to experientially inform the visitor about the surrounding landscape. Shortly after the completion of the El Tovar Hotel, construction on a completely new series of buildings was to begin on the South Rim. While the inns at Yellowstone and the Grand Canyon showed signs of a convergence of styles, it wasn't until the arrival of Mary Colter at the Grand Canyon that a unique style of rustic architecture in-tune with the work of Downing and Olmstead was realized. For the first time an architect integrated natural, regional, and historical contexts in an attempt to bring the visitor closer to the landscape.

Mary Colter and the Experience of the Grand Canyon

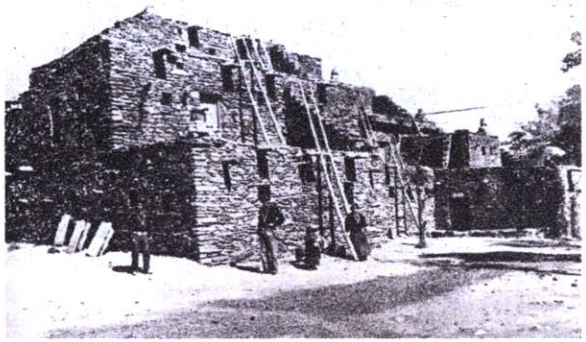
Mary Colter's building designs at the Grand Canyon went beyond the ideas of Downing and Olmstead. She deeply rooted her buildings in the history of the land. Her interest was in rediscovering the regional cultural heritage, not in imitating European styles. The result of this connection to the land and its people is a remarkable architecture that supercedes Art and Crafts, rustic architecture, and other styles of the times. Her buildings are both physically and experientially tied into the landscape. Colter's work at the Grand Canyon is unique because a simple stroll through the Hopi House, the Lookout, or the Watchtower (fig.12,13,14) both subconsciously and consciously inform the visitor about the local landscape and its people through scale, massing, use of local materials and construction techiques, and circulation paths. During the course of Colter's career, the perception of the landscape and rustic architecture changed drastically in the architectural profession.

12 Hopi House



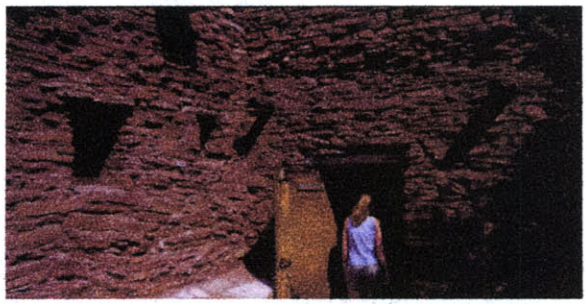
13 1932 The Watchtower at Desert View

14 The Lookout



15 Hopi House 1905

16 Hopi Indians on a Hopi House roof terrace 1905



17 Hopi House entrance

However, her buildings at the Grand Canyon have a timeless quality about them due to their site specific focus and attention to the design of visitor experience in relation to the canyon. Engaging this national park through her structures is very different from the stylized buildings of the railroad hotel era. The Hopi House, Lookout, and Watchtower are all indicative of Colter's skill at interpreting the local landscape with architecture.

1905 marked the completion of both the El Tovar Hotel, and just across the path, the Hopi House (fig.15,16,17). In 1902, Ms. Colter began working for the Santa Fe Railroad Company and thereby was introduced to the Grand Canyon and the Fred Harvey Company. After completing several interior designs, she was commissioned to design the Hopi House where Indian handi-crafts could be sold. Hopi masons were contracted to construct the building out of local stone. Colter studied vernacular Indian dwellings of the region to create a terraced, human scale building where visitors could shop inside and receive sweeping views of the Grand Canyon on the roof terraces. Through the use of architecture, Colter simply told a story of Indian masonry construction and the relationship between Hopi dwelling design and the desert landscape. Programmatically, the Hopi House was very unique. The house was a place where local indians could live, work, and sell their wares (fig.16). In the evening, the Hopis sang traditional songs, and their dancing on the patio at five eventually became a daily event.[11] Ten years after the completion of her first commission, Colter had two buildings open on the South Rim; Hermit's Rest and the Lookout.

The Lookout is an excellent example of Colter's ability to merge a building with its surrounding landscape both physically and experientially (fig.18). The most important part of the design is the interaction between human, architecture, and land. The building is perched on a singular

stone outcropping over-looking the canyon. The highest point of the "crumbling" rock exterior is located toward the canyon giving the Lookout the appearance that it is "growing" out of the land. The trail around the South Rim runs straight into the Lookout. Once inside, the visitor is given a choice to go up to the lookout porch or down to several viewing terraces recalling the decisions required in traversing the natural walls of the canyon (fig.19). Although the canyon can be seen up and down the south rim, there is something special about viewing it from Colter's Lookout. From afar, the coloration of the stone, undulating rooflines, and terraced nature of the building enable it to blend beautifully into the layered rim of the canyon. Colter went on to design the Bright Angel Lodge in addition to her other buildings on the South Rim (fig.21). Phantom Ranch at the base of the canyon is also Colter's (fig.22). However, her most acclaimed building did not evolve until 1932.

The Desert View Watchtower is Mary Colter's most renowned work (fig.23). Upon receiving the commission from the Fred Harvey Company, she implemented an intensive design process. Ms. Colter spent six months studying the masonry construction of the Mesa Verde cliff dwellings and pre-historic towers found in Colorado. Once the final model was agreed upon, construction began. Colter was on the site daily to hand select the local stone for the masons. She considered the tower a "re-creation", not a copy of an ancient Indian tower. Even today, the experience of the Grand Canyon, through the Watchtower, is celebrated by those who choose to visit. The feeling of moving skyward in a vertical spiral creates the excitement of getting the "ultimate" view. As one ascends the steps, small odd shaped windows frame the canyon and its surroundings (fig.24). Similar to the Lookout, the Desert View Watchtower provides terraces for unobstructed views. The Watchtower is considered by many as Colter's most mature work. Her position on architecture can be summed up in the following excerpt from her

18 The Lookout

19 Viewing terraces

21 Bright Angel Lodge

22 Phantom Ranch

23 The Watchtower today

24 Watchtower windows

25 Norris Museum, Yellowstone National Park

26 Norris Museum entrance

manual...

> *"The primitive architect never intentionally copied anything but made every building suit its own conditions and each one differed from every other according to the character of the site, the materials that could be provided, and the purpose for which the building was intended."* [12] –Mary Colter

During the span of time between Colter's earliest and latest works, many changes occurred in both the parks and in the field of architecture in general. Recognizing the need for infrastructure within the parks, the US Government founded the National Park Service in 1916.

National Park Service 1916

The National Park Service (NPS) set out to create master plans for the design of every U.S. national park. The twofold mission they put forth was intended to protect the invaluable resources of the national parks and make them accessible to the general public. The infrastructure needed ranged from roads to buildings. The goal of the park service was the following:

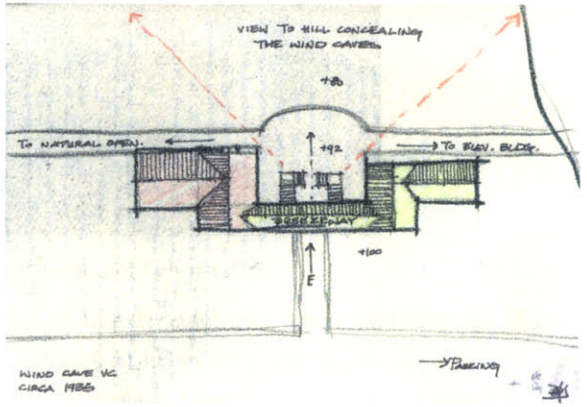
> *"Conserve the scenery and the natural and historic objects and the wildlife therein and... provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations."*[13]

Shortly after the founding of the NPS, architecture in general would be changed forever. Frank Lloyd Wright's "form follows function" theory greatly affected architects around the world. By 1917, the Rustic Adirondack style was deemed obsolete. In the same year, landscape designer Henry Hubbard proposed that the National Park Service adopt

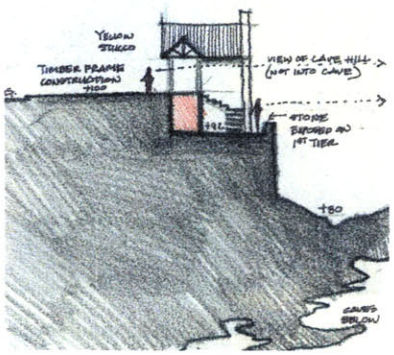
a Craftsman aesthetic. Hubbard's writing in *An Introduction to the Study of Landscape Design*, inspired architects and landscape architects throughout the 1920's and 30's. He considered it the designers' challenge to be able to arrange natural materials to produce a harmony of form, color, texture, repetition, sequence, and balance.[14] Hubbard also continued to expand the ideas put forth by Downing.[15] He wrote about certain architectural features that would have a significant impact on the perpetuation of the Rustic style. One such feature was the terraced garden. The terracing of the land immediately outside the structure provided for an intermediary space between nature and building. By the 1930's, the notion of rustic architecture in the parks had been altered from the early days of the railroad hotel. One example of the drastic change in design is the Norris Museum located in Yellowstone's Norris Geyser Basin. Visually, the building appears extremely "heavy" and thereby "feels" solidly anchored into the landscape (fig.25). The siting of the structure affords a direct view through the entry to the geyser field beyond (fig.26). The stone foundation is exaggerated, tapered, and almost comes into contact with the roof. In following with Hubbard's writing, the land vertically engulfs half of the first floor. In contrast to the Old Faithful Inn, the Norris Museum is horizontally massed and a feeling of "heaviness" rather than "lightness" is conveyed. After a decade or two of developing the "new" rustic style, August Shepherd published a book entitled *Camps in the Woods.* For the in-house NPS designers, the book simply reinforced the notion that the architecture of the Adirondacks should be the ultimate prototype for the architecture of natural areas. Shepherd sums up the relationship of the rustic "camp" building to the visitor and to the landscape.

27 Wind Cave National Park Visitor Center 2000

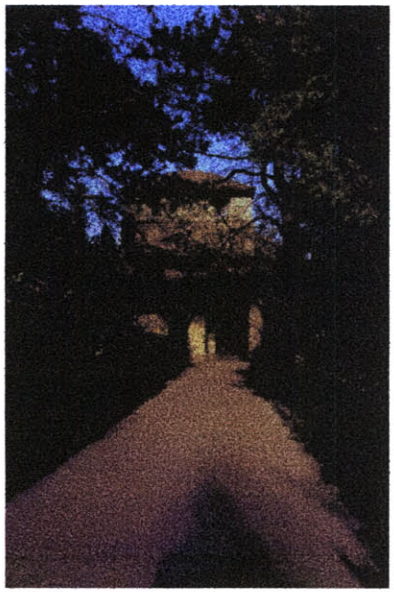
28 Wind Cave outbuilding



29 Wind Cave Visitor Center original floor plan



30 Wind Cave Visitor Center Section



31 Path to the Elevator Building

"Perhaps it might be said that camp buildings should be designed so that one feels no change in environment in going from the woods into a camp or in going out from a camp into the woods."[16]

The newfound importance on siting translated to a unique experience for the visitors to parks. One such well-sited rustic structure is located in Wind Cave National Park in the Black Hills of South Dakota (fig.27). Designed by Howard Baker (NPS Branch of Plans and Design), the visitor facilies and outbuildings were completed in 1935 (fig.28). Seemingly simple, the project provided a "layered" approach to experiencing the focal point of the national park--the cave.[17] Upon arrival, the visitor passed under a breezeway between two yellow stucco buildings (fig.29). The breezeway framed a view of a hillside beyond. Once through the threshold, the visitor had the option of entering one of the two buildings on the left and right, or to descend the stairs to the terrace below (fig.30). The terrace bowed out and returned to form a path moving in two opposite directions away from the main buildings. One path led to the cave's original opening; the other to the elevator building that carried visitors underground into the cave (fig 31). The most interesting aspect of the design is the building's relationship to the "ever-present" hill. Walking the circulation paths always provides the visitor with an awareness of this hill. Unlike many visitor structures, the building at Wind Cave does not have any grand views. Once the visitor is below the surface of the earth, the park ranger leading the tour discloses that the group is standing inside the hill they were looking at from the terrace of the visitor building. Similar to Colter's work, the Wind Cave buildings have a layered experiential approach to understanding the landscape of the park.

The advent of WWII brought a halt to construction in the U.S. national parks. After the war, automobiles became the primary mode of transportation in the United States. This relatively inexpensive mode of travel combined with the increasing popularity of the parks greatly affected the number of their annual visitors. The automobile changed the way the national parks would be experienced forever.

Mission 66

During the period after WWII very little funding was appropriated for national park infrastructure. The railroad hotels, cabins, and campgrounds were not enough to support the throngs of people passing through the gates. In 1955 alone there were 50,000,000 national park visitors as opposed to 358,000 in 1916.[18] An article published in Readers Digest exposed the substandard conditions that existed in the parks, citing facility maintenance, litter, and a general lack of funding. The response by the NPS was the creation of the multi-million dollar program known as Mission 66. The program was to span 10 years beginning in 1956 and ending in 1966, the fiftieth anniversary of the founding of the NPS. Conrad Wirth, the Director of the Park Service, headed the program.

> *"The plan called for the modern standardization of park roads, an increase in campgrounds, an improvement in the sanitary conditions, better housing for park staff, and expanding the interpretive program of the parks through new facilities and increased staffing. The goal was to equip the parks to meet the visitation figures projected for 1966."*[19]

Wirth and the NPS administrators rejected the picturesque, rustic, building typology developed in the pre-war years. A period of experimentation with new materials, programs, and economics had begun. The result produced park buildings relating to both the environment and human experience in an entirely different manner than previous park structures. The most significant contribution of the Mission 66 plan to park architecture and program was the creation of the visitor center. The idea of the visitor center grew out of the Park Service's expansion of the interpretive program. Educating the public about the landscape they were visiting became the central goal of the interpretive plan. Centrally located, the visitor center became the home for education, orientation, and interpretation. The program for the Mission 66 visitor center model typically included the following: an information desk with maps, a schedule of activities, information panels about the parks significant features and layout, museum exhibits, dioramas, relief models, an auditorium, audio-visual slide talks, a bookstore, museum collections, staff workrooms, a library, restrooms, drinking fountains, telephones, and parking.[20] The size of the park determined the scale of program for the visitor center. The NPS hired both in-house and independent architects to design these new building types. By the end of the Mission 66 program, over 100 visitor centers had been constructed.[21]

Prominent siting, materiality, and the relationship to the landscape factored heavily into the change in the national park experience. Rather than picturesque, the new visitor centers offered a modern appearance that was dominant rather than secondary to the landscape. The interpretive qualities of the building in relation to the local land and culture were minimal. The following study of Mission 66 visitor center precedents provides insight into the similar experiences a visitor might have when exploring a diversity of landscapes through this new building typology.

Fort Necessity Visitor Center

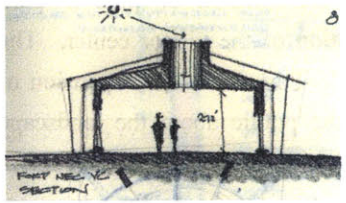
The Fort Necessity Visitor Center is located in Farmington, Pennsylvania. Designed by Ben Biderman of the Eastern Service Center sector of the NPS (Philadelphia), the building was completed in 1967 and supports the Fort Necessity National Historic Site. Fort Necessity was constructed under the orders of Lieutenant Colonel George Washington during the French and Indian War. The 53' diameter wooden fort was built in the middle of a natural meadow. The inability of French troops to reach the fort with gunfire from the surrounding forest was the idea behind the design. The fort exists on its original location; however, the wooden walls are a reconstruction. When Biderman was commissioned, he

32 Approach from parking lot

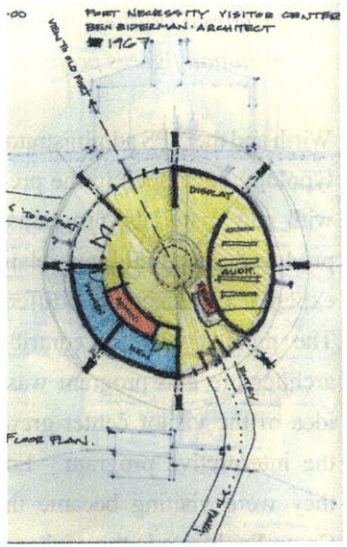
33 Interior view towards the fort

34View of visitor center beyond the fort

created a 53' foot diameter visitor center in the same natural meadow as the old fort. An auditorium, small display space, information desk, restrooms, and an office make up the layout of the building. Like most Mission 66 visitor centers, the experience of the park begins in the parking lot (fig.32). The first image that comes into view is the dark red, cylindrical visitor center up to which the asphalt sidewalk leads. Once inside the front door, a direct view of the old fort can be seen through the windows to the rear of the building as rangers at the information desk offer a welcome (fig.33). The building is an object in an open meadow with nothing more than doorways acting as the transition space between outside and inside. Standard HVAC systems heat and cool the building. The materials Biderman chose are of no significance to the region. The dark red coloration of the vertical wood siding may be a reference to the vernacular barns and farmhouses in the surrounding countryside.



35 Fort Necessity Visitor Center section

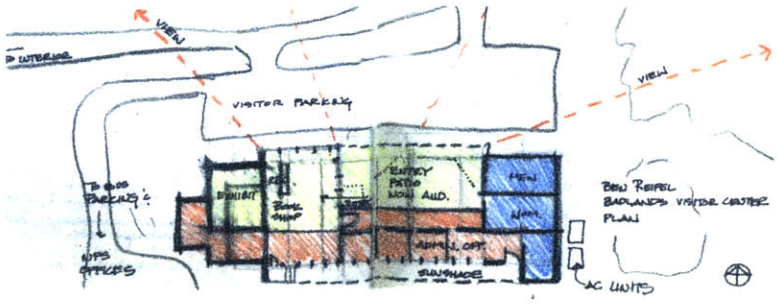


36 Floor plan

As an object, the building is well built and has a unique appearance, unfortunately its relationship to the historical landscape of the park is simple and direct. Besides the view of the fort from the visitor center and its cylindrical form there is little information about the site that the experience of the architecture conveys to the visitor. The initial experience Biderman designed is a physical removal from the site. Thus, the visitor center is more of a *container* for information rather than an *interpreter* of information. The NPS has recently provided funding for a new Fort Necessity Interpretive Center. The new building will be located in the surrounding forest , returning the meadow to its "original" French and Indian War appearance.

Ben Reifel Badlands Visitor Center

The Ben Reifel Badlands Visitor Center in South Dakota represents the "cookie cutter" model of the Mission 66 visitor centers. Two other national parks contain the exact same building. Similar to Fort Necessity, the Badlands building is an object in the landscape with a simple connection between land and visitor, a parking lot, an asphalt sidewalk, and an aluminum and glass door. The structure is oriented in a north/south manner and is accessed from the large parking lot between the primary loop road and the building (fig. 40). One could argue the low-lying, horizontal mass might be an allusion to the encompassing layered landscape rock. However, the building is more of a box than a structure significantly integrated into the Badlands landscape. The park staff works to the south side of the building's interior where the architect did provide an overhang for shading from the sun (fig.38). The rest of the offices are located in temporary structures to the south. The prominence and location of the restrooms is of note (fig.37). Apparently designers of visitor centers in the sixties felt that the restrooms should be accessible from the exterior of the building during off-hours.

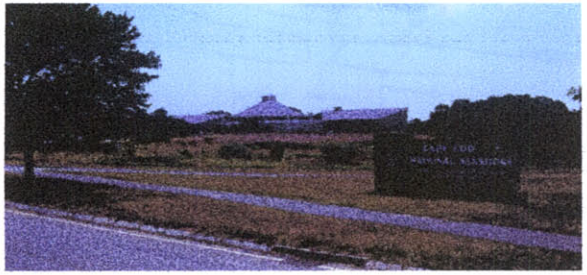


37 Ben Reifel Badlands Visitor Center floor plan sketch

38 Ben Reifel Badlands Visitor Center section sketch

39 Badlands

40 Ben Reifel Badlands Visitor Center



41 Salt Pond Visitor Center, Cape Cod National Seashore

42 Approach from parking lot

43 View of original direct entrance

44 View of Salt Pond and beyond

Cape Cod National Seashore Visitor Center at Salt Pond

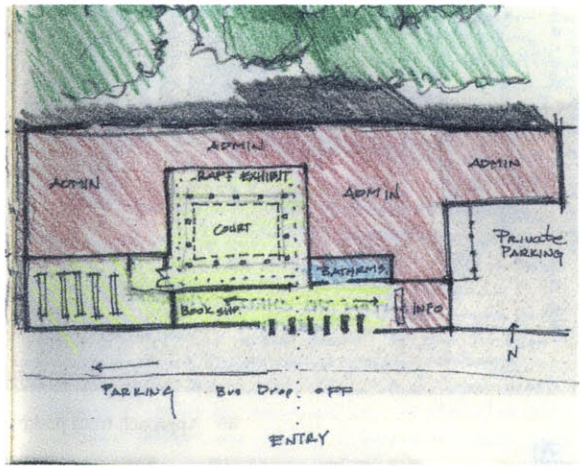
The Cape Cod National Seashore Visitor Center is another building designed by the Eastern Regional Office Architect, Ben Biderman. The Visitor Center was completed in 1965 and is located in Eastham, Massachusetts. The structure is currently being considered for placement on the National Register of Historic Buildings. In typical Mission 66 fashion, the Salt Pond visitor center is prominently sited. It affords a majestic view as it is perched high on a hill overlooking the adjacent Salt Pond. The approach to this building is somewhat peculiar. The Mission 66 visitor centers mentioned thus far have a direct entry from their respective primary parking lot. The Salt Pond path is parallel to the visitor center, not perpendicular. The termination of the sidewalk is marked with low-lying bushes (fig.43). From this point the visitor must turn left into the central space of the building. The view of the Salt Pond and a segment of the National Seashore can be seen from the hexagonal lobby (fig.44). Apparently, a change occurred after the initial building was staked out. In true Mission 66 form, the entry was intended to be perpendicular to the sidewalk. The view from the central space would have been of the local highway, Route 6. During the staking of the original design someone on site questioned why the building wasn't facing the beautiful views of the water. The stakes were then moved and the building took its present form.[22] Biderman's design contains an exhibit space and an auditorium to the left and right of the main lobby respectively. The administrative offices are located to the south of the exhibit space. Ultimately, the building has all the characteristics of the Mission 66 "style"; a single building supporting the entire program organized around a central space with a grand view. Architecturally, the Cape Cod National Seashore Visitor Center does little, other than to provide a view, to interpret the park landscape it is a part of.

Grand Canyon Visitor Center at Grand Canyon Village

The Grand Canyon Visitor Center is another Mission 66 structure. The design was in-house architect Cecil Doty's first (fig. 46). The building is unique from its Mission 66 counterparts because it does not offer a grand view. Upon entry, a courtyard can be seen (fig. 45). The administrator offices and workspaces surround the court on three sides, denying the visitors a view of the canyon. Doty's design does not attempt to integrate the trails running along the ridge of the South Rim. To the front of the visitor center is a large parking lot. The ability of the park visitors to drive to the visitor center, located several hundred feet from the rim of the canyon, creates an immense amount of noise and pollution. The park has confronted the problem and is constructing a new visitor village about a half mile from the edge of the canyon rim. From there, tourists board an electric train that drops them off in the original Grand Canyon Village and other selected points along the rim. The new visitor center is currently under construction.

45 Courtyard

46 Grand Canyon Sout Rim Visitor Center

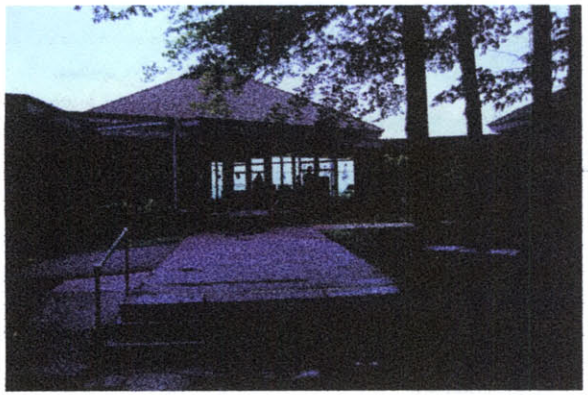


47 Grand Canyon Visitor Center floor plan

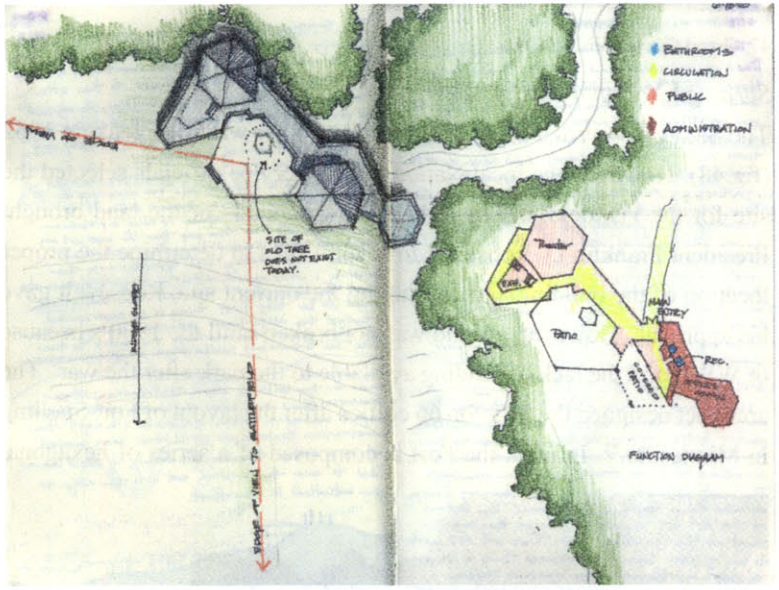
Saratoga National Battlefield Visitor Center

The Saratoga National Battlefield Visitor Center was completed in 1962 (fig.48). However, the local National Park Service officials selected the site for the visitor center in 1940. The caretakers of the land brought President Franklin D. Roosevelt to several sites to determine the proper location of the building. After walking the current site, Roosevelt gave his approval. However, ground was not broken until the 1960's because of WWII and the lack of funding available to the park after the war. The architect designed the Mission 66 edifice after the layout of Fort Snelling in Minnesota.[23] In plan, the Fort is composed of a series of hexagonal

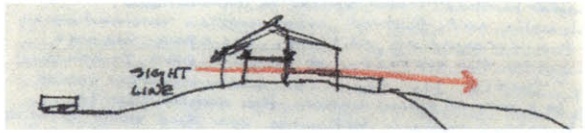
48 Saratoga National Battlefield Visitor Center



49 Approach from parking



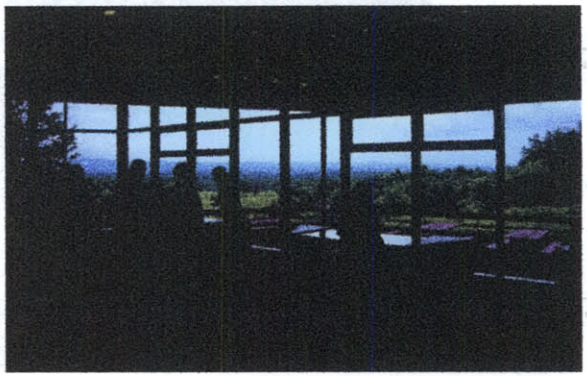
50 Site plan



51 Section

towers linked by one and two story buildings forming the outer walls. Similarly, the Saratoga Visitor Center is made up of 3 hexagons linked with one-story circulation spaces. From the exterior, the hexagons are accentuated with sloped roofs while the connecting spaces are flat-roofed (fig.49).

Again, this Mission 66 visitor center inhabits the boundary between parking lot and celebrated landscape. During the summer the building is hidden behind trees and is unnoticeable from the parking area. A beautifully constructed (local) slate wall and stair lead visitors to the entry of the building. Similar to the Cape Cod National Seashore and the Fort Necessity visitor centers, the entry provides an immediate vista of the battlefield below (fig.52). To the left of the entry is the primary reception space, to the right are the restrooms and a small exhibit area. The hexagonal shaped plan was designed around an existing oak tree that has since reached the end of its life. Unlike many Mission 66 centers, the building at Saratoga does provide both open and enclosed exterior patio transition spaces between the landscape and the building's interior. Overall, the program layout, experience, and relationship to the park are very similar if not identical to the other Mission 66 visitor center precedents.



52 View of battlefield from hexagonal lobby

Old Faithful Visitor Center, Yellowstone National Park

The Old Faithful Visitor Center is somewhat of a departure from the buildings constructed during Mission 66 (1972) (fig.53). The massing of the visitor center is broken down into several programmatic elements, including restrooms, an auditorium, and a central reception space (fig.54). The primary building faces Old Faithful. The intent is to provide an interior viewing space with a direct view of the geyser. Adjacent to the building is Reamer's Old Faithful Inn. In contrast to the Inn, the visitor center is much smaller in scale and cannot be seen from the surrounding hillsides. Like most of the Mission 66 buildings, the visitor center cannot support the vast numbers of people coming to see the geyser. The triangularly massed, building is slated for destruction, and a new, much larger visitor facility will exist in its place. The experience of the present visitor center is a simple one, walk through the door, turn to the right, and there it is, Old Faithful, erupting once an hour (fig.55).

53 Old Faithful Visitor Center at Yellowstone National Park

54 Old Faithful Visitor Center restrooms

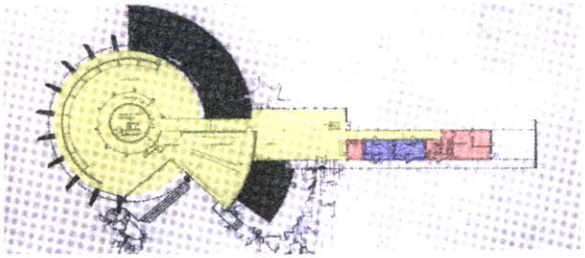
55 View of Old Faithful from the interior

Gettysburg National Military Park Cyclorama and Visitor Center

Richard Neutra's Cyclorama and Visitor Center was dedicated on November 19, 1962. The building has been the subject of controversy from the day the foundations were built. However, upon completion, Conrad Wirth praised the building. Critics approved and claimed the new building represented the idealism that was a part of the modern movement in the 1960's.[24] Presently, the structure is being considered for demolition. The National Park Service's primary concern is the return of the Battlefield and the site of Pickett's Charge to its "original" condition (fig.56).

55 Gettysburg National Battlefield, Cyclorama in the distance

56 Gettysburg Cyclorama and Visitor Center



57 Floor plan

Old Faithful Visitor Center, Yellowstone National Park

The Old Faithful Visitor Center is somewhat of a departure from the buildings constructed during Mission 66 (1972) (fig.53). The massing of the visitor center is broken down into several programmatic elements, including restrooms, an auditorium, and a central reception space (fig.54). The primary building faces Old Faithful. The intent is to provide an interior viewing space with a direct view of the geyser. Adjacent to the building is Reamer's Old Faithful Inn. In contrast to the Inn, the visitor center is much smaller in scale and cannot be seen from the surrounding hillsides. Like most of the Mission 66 buildings, the visitor center cannot support the vast numbers of people coming to see the geyser. The triangularly massed, building is slated for destruction, and a new, much larger visitor facility will exist in its place. The experience of the present visitor center is a simple one, walk through the door, turn to the right, and there it is, Old Faithful, erupting once an hour (fig.55).

Gettysburg National Military Park Cyclorama and Visitor Center

Richard Neutra's Cyclorama and Visitor Center was dedicated on November 19, 1962. The building has been the subject of controversy from the day the foundations were built. However, upon completion, Conrad Wirth praised the building. Critics approved and claimed the new building represented the idealism that was a part of the modern movement in the 1960's.[24] Presently, the structure is being considered for demolition. The National Park Service's primary concern is the return of the Battlefield and the site of Pickett's Charge to its "original" condition (fig.56).

The building sits quietly among the hundreds of soldier memorials on the site of Pickett's Charge. A true "object in the land", Neutra's building removes the visitors from the landscape and "re-locates" them in a unique visitor center experience, the Cyclorama. The rectilinear plan of the visitor center offers an exhibit space, restrooms, and an information desk for visitors. A block of administrative spaces for the park officials is included as well. On the first floor, the circulation path leads to a spiral ramp. As a visitor moves vertically, illumination is replaced by the darkness of a large cavernous space. Eventually, the introduction to the audio-visual show begins with the sound of the moderator's voice. The loud pops of gunfire and shouting voices bounce off of

on the roof of the information/administration block. Unfortunately, settling in the foundation caused significant damage to the waterproofing that forced the large vessel of water to be drained. The pool on the roof was a natural way of cooling the building during the summer months. The integration of a sustainable method of cooling with an architecture that attempts to inform a visitor through experience is unique to National Park visitor centers of this era.

> *"If design, production, and construction cannot be channeled to serve survival, if we fabricate an environment – of which, after all, we seem an inseparable part – but cannot make it an organically possible extension of ourselves, then the end of the race may well appear in sight. It becomes improbable that a species like ours, wildly experimenting with its vital surroundings could persist."*[25] *–Richard Neutra*

Conclusion

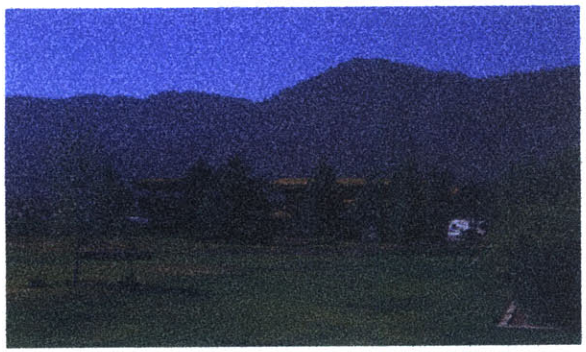
The above explanations of moving through several different Mission 66 visitor centers provides insight into how frighteningly similar the initial experience of vastly different landscapes has become. Tourists park their car, walk through the front entry into a grand central space to witness a beautiful view. Once inside, the visitors can completely remove themselves from the outside world by watching a movie. Alternatively, they can view exhibits, read panels, or buy something at the bookshop. In order to move about the national park, literature and maps can be found at the information desk. The only interaction with the park ranger staff was had through tours or at the front desk. All ranger offices and administrative work was done behind closed doors. Whether it is Saratoga National Battlefield, the Cape Cod National Seashore, or the Grand Canyon, the experience of the landscape through the visitor center is extremely redundant. Modernist designers made no apparent attempt to interpret the actual site with architecture. Mission 66 buildings are a far cry from the intimacy with the land a visitor might experience by entering a building such as Mary Colter's Lookout. Unlike Colter's work, the information within park buildings rather than the contents of the park became "the most important part" of the visitor experience. Over thirty years have passed since the completion of the Mission 66 program. Once again a growing public interest in our nations most precious natural resources has spurned another construction era in our national parks. Many of the Mission 66 visitor centers are being replaced by a building typology now called the interpretive center".

Post Mission 66 and the Interpretive Center

Construction in the National Parks waned after the multi-million dollar Mission 66 program was completed. Today, 44 years after the termination of the program, the National Park Service finds itself trying to keep up with the public's fascination with America's natural treasures. With numbers exceeding 200 million visitors annually, many parks still do not have the infrastructure to support the masses. In the nineties, funding was allocated to renovate and/or build new in many National Parks. Of the parks I visited, all were planning to renovate, add-on, or commence new construction. The following precedents will reveal the differences between the Mission 66 designs and a few new visitor facilities in various national parks.

Jackson Wyoming Regional Visitor Center

On the outskirts of Jackson, Wyoming near the Grand Teton mountains a regional visitor center was constructed in 1975. Although the building cannot be directly compared to the precedents previously discussed because of its regional focus, it should be mentioned for one reason--its sustainable design charactaristics. Similar to Neutra's use of water on the roof of the Cyclorama, the Wyoming Regional Visitor Center has



58 Jackson Regional Visitor Center

59 "Hovering" above wetlands

60 Automobile entrance to Mt. Rushmore National Monument

a sod roof to insulate the "fifth façade" (fig.58). The Jackson visitor center may not have a specific landscape to interpret; however it does have a local and regional landscape to relate to. Sited on local wetland property the building is minimally connected to the ground with posts (fig.58). The sod roof blends in with the earth surrounding the building rendering it almost invisible from the surrounding mountainside. These subtle relationships to the land and climate subconsciously bring the visitor closer to the site. While most visitor centers allude to nature or resemble it in some way, very few used natural resources for cooling, heating, or creating power.

Mt. Rushmore Interpretive Center

1999 marked the completion of the newest National Park Interpretive Center at one of the United States' most storied monuments, Mount Rushmore (fig.59). Previously home to a Mission 66 design the NPS demolished the original building to make way for the Albert Woods Design project. The primary scale difference between the new-generation visitor center and the Mission 66 design correlates with the projected number of visitors. Mission 66 architects designed their buildings based on numbers forecasted for 1966. The new facility at Mount Rushmore was designed to accommodate the masses for decades to come. The new parking structure, for example, contains 1,150 spaces. The objectives for the redevelopment were to:

Enhance the educational experience for the visitors
Better preserve the sculpture and historic artifacts at the Memorial
Provide adequate facilities in response to growing visitation
Make facilities more accessible to visitors with disabilities
Present a more complete history of Mount Rushmore[26]

The entire complex is organized along a main axis running from the automobile entry to the amphitheater at the base of the mountain. The

61 Toll booth entry

62 Pedestrian entry to grand axis

63 Commercialism

64 Visitor Center

65 Avenue of Flags

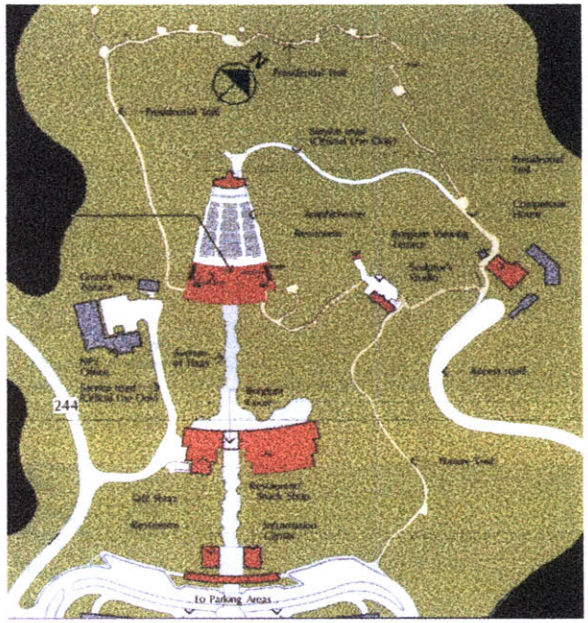
experience of this national monument is extremely federal due to the strong axis, heavy massing, and materials implemented in the design. The program for the complex is dispersed along the central axis. The experience begins from Route 244 where the enormous carved faces of four U.S. presidents can be seen from the road (fig.60). A turn at the traffic lights guides the visitor toward a "toll booth" entry to the parking garages (fig.61). Located on either side of the grand axis, the garages mark the pedestrian entrance. From their parking garage, visitors ascend to the surface and pass through a gently curving arcade. Before reaching

the Avenue of Flags, the restrooms, information center, cafeteria, and gift shop must all be encountered (fig.66). A walk under the canopy of the 50 state flags leaves the visitor with a wide-open view of the four carvings (fig.65). The visitor center rests below the final terrace, and provides yet another view of the sculpted mountain at a lower elevation. An auditorium, exhibit spaces, and another information center are included in the program of the visitor center.

Overall, the building breaks from the customary notion of a visitor center as one building in the land. The program is dispersed horizontally and vertically across the site keeping the focus of the experience on the centralized circulation spine that leads to the carved mountainside. The celebration of the four great American leaders carved into a natural hillside is uniquely American. The "heavy" concrete and granite materials, enormous cafeteria, huge retail store, and grand axis flanked by two parking garages simply highlight this "all-American" experience.

The New Old Faithful Visitor Center

Presently unbuilt, the new Old Faithful Visitor Center is a contemporary attempt by CTA Architects to return to the Rustic Style that dominates the park. Rather than learn from historical precedents, the rendering of the new building appears to be a simple copy of an out-dated style (fig.67). With modern building codes, true Rustic construction cannot take place. Therefore Yellowstone will have a building that attempts to be something it simply cannot be. Although the Mission 66 visitor center may not be able to support throngs of curious people that go to the geyser, the building is unique in appearance and does not try to imitate the past. The opportunity to build so close to a natural park feature is rare. The new design appears to be a missed opportunity to provide a visitor with an unique interpretive experience through architectural intervention.



66 Mount Rushmore National Monument Interpretive Center site plan

67 The "New" Old Faithful Visitor Center at Yellowstone

Conclusion

Over the course of its young history, design and construction in the United States national parks has undergone significant transformations. The growing influx of tourists and changing attitudes towards the design of the visitor experience have been the primary causes for change. Initially, the romantic notion that architecture should support the visitors' organic experience of nature influenced early park designers. Ideas about the rustic relationship between building and land changed between 1916 and the 1940's. There is a significant experiential difference between the design of Reamer's Old Faithful Inn (1905) and the Norris museum (1930's) at Yellowstone. The object in the landscape became more pronounced with the inception of the visitor center and the Mission 66 program. Both world renowned and in-house architects constructed a range of well and poorly designed visitor buildings. The period following Mission 66 was marked by a lack of building until recently. Within the last decade, the large scale, forward looking general planning designs, at Mt. Rushmore and the Grand Canyon have begun to break away from the Mission 66 model. While the master planning of these parks may be positive, with the use of electric trains, busing, etc., the architecture of the visitor center may be regressing. New constructions like the proposed New Old Faithful Visitor Center are in danger of imitating past styles, and proving to be worse than the Mission 66 buildings they will be replacing. This thesis will make a departure from the past and propose a new way of interpreting a National Park, Historic Site, or Monument to a visitor, with architecture.

Endnotes

[1] All historical precedents cited were visited and experienced by the author with the exception of Montgomery Place

[2] . The Yellowstone Association for Natural Science, History, and Education. A tourist brochure available at the Mammoth Hot Springs Visitor Center. pp 1.

[3] Ibid. pp 2.

[4] *Building the National Parks*. McClelland, Linda Flint. Johns Hopkins University Press, Baltimore and London 1998. pp18.

[5] *Rural Essays*. Downing, Andrew Jackson. 1853

[6] Boston Department of Parks. *Notes on the Plan of Franklin Park and Related Matters*. Printed for the department. 1886.

[7] Zaitzevsky, Cynthia. *Frederick Law Olmstead and the Boston Park System*. The Belknap Press of Harvard University Press. Cambridge, MA. 1982. pp. 176

[8] The working drawings were prepared by the City Architect, Arthur H. Vinal who is responsible for the two stone columns that support the roof, roof trusses, and molding details.

[9] Ibid. pp177. Playstead Shelter and all other original buildings have been severely damaged or destroyed.

[10] The term Visitor Center was not coined until the Mission 66 program created.

[11] Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth*. Northland Press Flagstaff, Arizona. 1980.

[12] Ibid. pp19

[13] McClelland, Linda Flint. *Building the National Parks*. Johns Hopkins University Press, Baltimore and London 1998. pp9.

[14] ".pp.74

[15] ".pp.80

[16] Shepherd, August D. *Camps in the Woods*. New York: New York Architectural Book Publishing Co., 1931. pp.49

[17] The Wind Cave Visitors Center has been added on to in recent years. The experience explained is one that might be had by a visitor before the addition was completed.

[18] *Building the National Parks*: McClelland, Linda Flint. Johns Hopkins University Press, Baltimore and London 1998. pp 463.

[19] Ibid. pp 463.

[20] Ibid. pp 466.

[21] Madrid, Christine. *The Emergence of the Mission 66 Visitor Centers*. Master of Architecture Thesis Unviersity of Virginia. 1990's.

[22] From a talk with Mike Watley, a member of the NPS staff at the Cape Cod National Seashore.

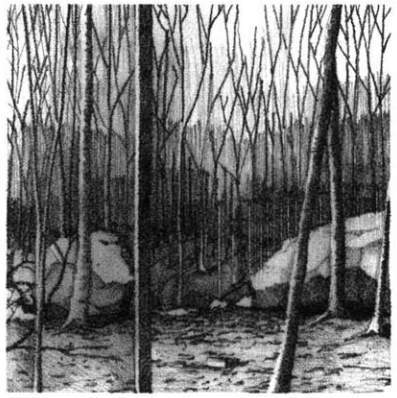
[23] From a talk with a park ranger at the visitor center information desk.

[24] Allaback, Sara, Ph.D. *Mission 66 Visitor Centers, The History of a Building Type*. U.S. Dept. of the Interior, National Park Service, Cultural Resources Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, Washington, D.C. 2000. http://www.cr.nps.gov/history/online_books/allaback/index.htm

[25] *Richard Neutra: Is Planning Possible; Can Destiny be Designed?* Wight, Frederick S. (introduction). UCLA Art Galleries. Los Angeles, CA. 1961. pp8

[26] From the Mt. Rushmore Redevelopment handout

2 Interpreting Landscape



in •ter • pret -vt 1 to explain or translate **2** to construe a silence as contempt **3** to give one's own conception of (a work of art), as in performance or criticism –***vi.*** To explain or translate – **in•ter′preta′tion** ***n.*** –**in•ter′pret •er** ***n.***

There are several ways to either directly or indirectly translate an idea or information to another person. A direct form typically used by the human race is verbalization. However, indirect methods are quite varied. Text and graphic images are ultimate literal ways of conferring information indirectly. For many people these methods work, however, they both take a significant amount of concentration. Experiencing, or immersion is the way, people most effectively learn and remember on a long-term basis. As a visitor to many national parks I have read countless posters, billboards, and placards filled with information, explanations, and dates. I have also spoken with many park rangers.[1] What I remember most are the interactive experiences I had with the park landscapes. Fourteen years ago I traveled to Redwood National Park in California. Today, I could not tell someone the age of the park, or the height of the tallest Redwood. I could however, describe what it feels like to stand on the carpet of pine needles where the daylight rarely reaches or how it feels to swim in the cold waters of the Jedediah Smith River. I was able to remember and understand these aspects of the park because of the ability of the local landscape to manipulate my senses. If this were to occur throughout an entire national park, even from within an interpretive center, the maximum natural experience would be had. Rather than a vocabulary of text, an architectural vocabulary could be used to convey information. Merging architecture focused on site-specific explanatory subject matter with the landscape of the park would result in a memorable educational experience.

01 Redwood Trees

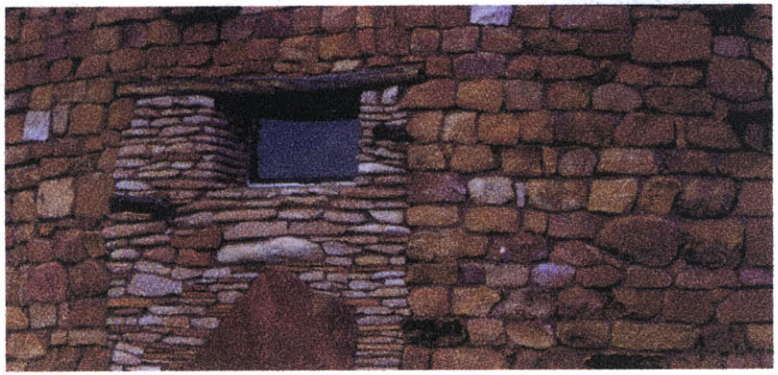
Architecture

An architecture that is capable of interpreting a landscape would ideally integrate the following design considerations:

History and site
Interpretation through three dimensional experience
Simultaneous stimulation of multiple senses
Physical proximity to nature
Landscape as experiential focal point
Architecture as an interpreter of information rather than container for information
Site as building
Integration of site, program, architecture, and visitor experience

History and site

Knowledge of the existing site conditions and history of a national park, monument, or historic site and its larger environs are essential in understanding how to create an experience for the visiting public. Of the visitor precedents in Chapter One, Mary Colter is the one designer who thoroughly researched the immediate and regional culture of the site she was dealing with. Her study and use of Indian masonry techniques not only physically connect her project to the land but also make reference to the local culture (fig.02). Before construction started on the Watchtower



02 Masonry, The Watchtower at Desert View

at Desert View, Colter wrote a hundred page booklet entitled, *Manual for Drivers and Guides Descriptive of the Indian Watchtower at Desert View and Its Relation, Architecturally, to the Prehistoric Ruins of the Southwest*. The text gives a history of the ancient towers and kivas from which she patterned the Watchtower.[2] On the other hand, many of the modernist Mission 66 visitor centers made little if any historical references. The architect must understand the history of the site and be able to figuratively reveal this history in the design. Without historical content and site specificity, an important linkage between site and architecture will be lost.

Three-dimensional Experience

Understanding through architecture demands three-dimensional experience.[3] Circulation, materiality, building systems, sound, light, and dark are the primary components used in composing experience. Instead of video, text, and pictures, these building characteristics become the means by which a designer can physically interpret a landscape to a visitor. Comprehension then becomes a three-step process through intervention, physical interaction, and mental interpretation. An over abundance of two-dimensional media provides the visitor with the two-step method of media intervention and hopefully mental interpretation. The absence of all two-dimensional media in an interpretive center would not be advisable. However, experience in three dimensions should outweigh that of two. Neutra's Cyclorama is successful through the integrated composition of architectural elements with the exception of the inclusion of building systems. If the interpretation of the landscape through the building is greater than the translation of two-dimensional media then an enhanced learning experience would take place. One might argue that the experience of electronic media such as Imax theatres and planetariums can be quite memorable (fig.03). This may be true, however, there is a complete removal of the visitor from the actual site. Interaction with the architecture and landscape ceases to exist as visual stimulation is "spoon fed" to the visitors. The success of three-dimensional experience as an interpretive tool is dependent upon the natural environment, not an electronically fabricated environment.

03 IMAX billboard en route to the Grand Canyon

Simultaneous stimulation of multiple senses of the human body

Three-dimensional experience automatically enables the human body to experience with multiple senses. Physical interaction with architectural space causes the body to respond to several stimuli at once, sparking increased learning and understanding. If certain stimuli are missing, mental and physical comprehension becomes more difficult or perhaps, impossible.

04 Removal from actual landscape

Physical proximity to nature

In the United States, the natural environment is an integral part of visiting a national park. Therefore, the human body must remain physically connected to the natural qualities of that landscape. Moving from 90 degree heat into a 65-degree air-conditioned visitor center is a complete removal from nature. Artificially air conditioned buildings not only alienate the human body from the natural temperatures outside, but also deny the visitor the smells, sounds, temperature, and light that are essential to the national park experience. Ideally, natural cooling enables all of these environmental characteristics to be felt by the body. Supported with natural building systems the visitor will have a more intimate relationship the natural environment through daylighting, heating, cooling, and the building can be fully independent of industrial energy grids. Some national parks are beginning to capture natural energy flows with their buildings to reduce waste and pollution (New Grand Canyon and Zion visitor centers) (fig.04). The new interpretive center at Zion National Park uses wind catchers to naturally cool its interior (fig.05). Architecturally, the wind catchers are integrated into the design, subconsciously or consciously positively affecting the experience of the visitor.

Landscape as experiential focal point

When interpreting a landscape, an importance must be placed on the experience of the *park* as opposed to experiencing the inside of a building. Many of the precedents mentioned in Chapter One place an emphasis on the interior, in the form of auditoriums, windowless exhibits, and internalized offices. When inside, the visitor should be constantly connected in more than one way, with the landscape beyond (natural, historical, or monumental). Positive interpretation through architecture will be lost if the intervention sets the visitor up for building experience instead of landscape experience.

05 Wind catchers at the new Zion National Park Visitor Center

06 Solar panels

Architecture as an interpreter of information not a container for information

Interpretive architecture is not a box where the tourist goes to read a story about a place. Rather, the architecture itself should tell a story. Modernist Mission 66 designs like Biderman's at Fort Necessity are boxes for information. On the other hand, constructions such as the Wind Cave Visitor Center describe a story to the tourist. Some new visitor centers appear to be following in the same mold as the Mission 66 buildings when it comes to dealing with interpretation. A recent article in the *Los Angeles Times* described the new Grand Canyon Visitor Center:

> *"Arizona's Grand Canyon National Park on Thursday (Oct. 26, 2000) will take a giant step toward offering visitors one-stop shopping for information when it opens the $18-million Canyon View Information Plaza."*[4]

The architects of the new building did not hide the fact that figuratively the new complex is one large information booth having little to do with the surrounding environment. The notion of "shopping" for information at a national park is peculiar. People visiting our parks ought to learn through *feeling* rather than through shopping. Commercialism in the parks is understandably necessary for revenue gains, however over-commercialization takes away from contemplative natural experience. Of the precedents studied in Chapter One, the South Rim of the Grand Canyon has the most ideal interpretive buildings in the work of Mary Colter. If a design itself can interpret, then memorable learning can occur without having to "shop" for it.

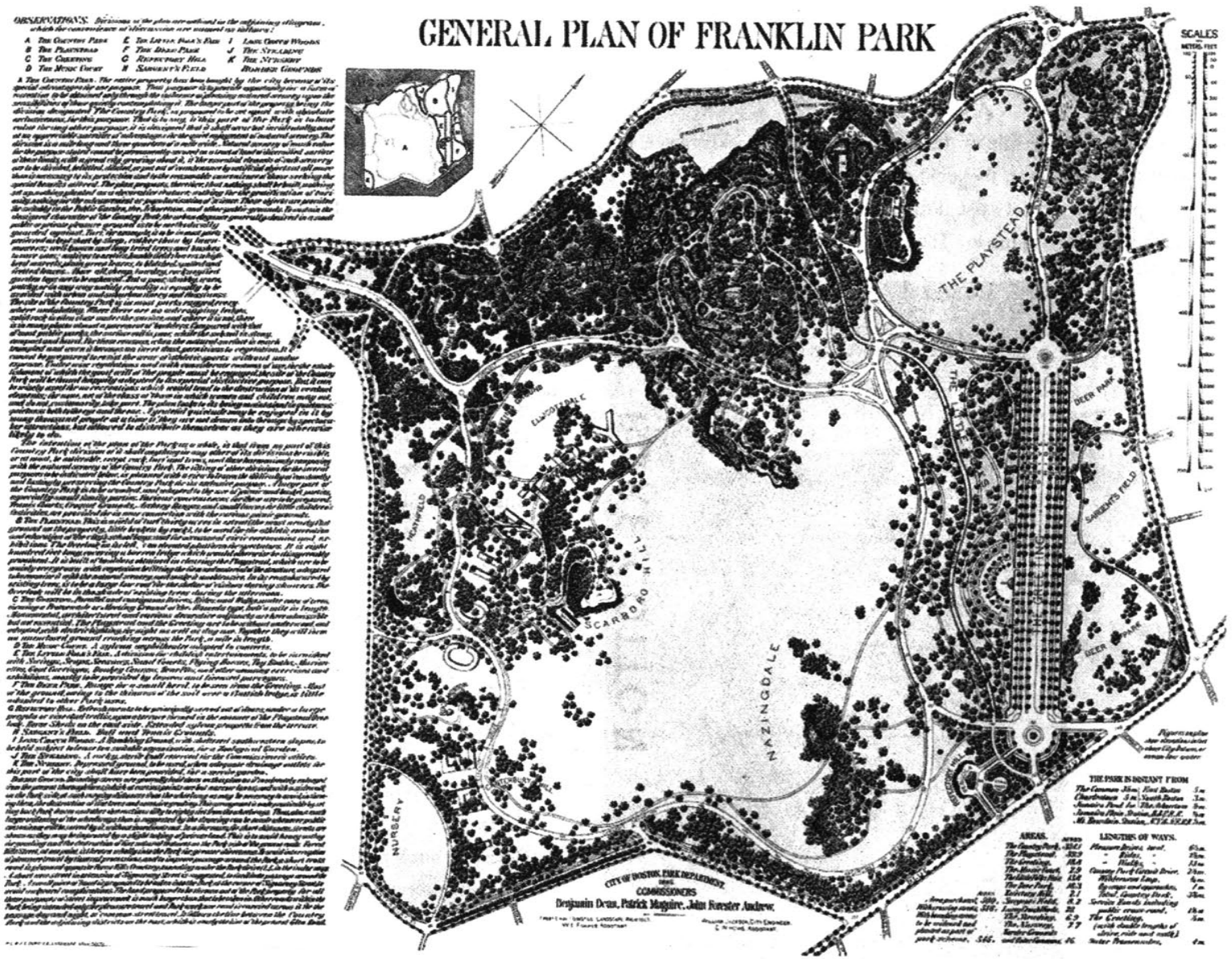
Site as building

National Parks should be considered "buildings" in themselves. The architecture within the park should be dispersed and used to set up and enhance the experience of the larger building. The entire park should be seen as a canvas where intensities of architectural materials and form highlight specific natural or historical park features. Olmstead's Franklin Park represents the precedent that is primarily reflective of this idea (fig.08). A landscape designer, he considered the affect his scheme would have on the visitor throughout the site. Architectural interventions at Franklin Park simply highlight natural features. A continuous vocabulary of architecture forms the link between the places and paths of the natural site.

Integration of site, program, architecture, and visitor experience

The most important factor in interpreting a landscape is the level of integration. A continuity of learning that extends throughout the entire site can exist only through the integration of the above ideas, site, program, architecture, nature, and experience. The design of the visitor experience must be circular rather than linear. The interconnection of history, site, program, and architecture can lead to memorable experiences for any visitor. Although the orchestrated movement through interpretive

07 The scorched landscape of Yellowstone



08 Franklin Park, Boston, Massachusetts

architectural interventions would be focused, the opportunities for multiple interpretations by the visitor are numerous.

Program

Architecture plays the role of the link between visitor experience and interpretation. However, the architecture of any given park would be dead if a program did not exist. Programmatic design is as important as the architecture it gives life to. The following design considerations are necessary for creating a program for interpretation.

09 Grand axis, Mount Rushmore Interpretive Center

Dispersal of program
Selective self discovery
Exposure of administrative workings
Informal active interaction

Dispersal of Program

"Spreading" the program of an interpretive intervention across a site accomplishes several design goals at once. First, the visitor must enter into physical interaction with the natural environment when moving from building to building. Second, a selective and personal exploratory process can occur where the visitor chooses his or her own path to learning about a place. "Exploding" the architecture and program also allows for a reduction in massing of the buildings. In most cases, the Mission 66 model took the form of one building mass regardless of the size of the program. The Albert Woods design at Mount Rushmore successfully dispersed the program along a grand axis (fig.09). The visitor can choose to walk toward the stone faces or can select to zigzag across the central spine to discover the contents of the buildings.

Selective Self Discovery

Dispersing the program across the site also enables the visitor to make choices. This path to self-discovery is individually decided rather than forced. The process of individual selection can lead to varying personal interpretations and multiple ways of comprehending a park landscape. Selecting one's path allows learning to be personal rather than generic, prompting memorable experience.

Exposing the administrative workings of the park

Another important way of re-thinking the role of the program in our national parks is to expose the inner workings of the park staff. Traditionally, the employees have been off limits to interaction with visitors. The exception is those staff members who are specifically assigned to work at an information desk or give tours. Park administrators are typically hidden behind walls or located in separate buildings far away from visitor facilities. The administrative support of each and every national park requires a tremendous effort by park employees. This effort should be celebrated and accessible to the public. Of course, certain workings of a park must remain in the private realm. During my tour of visitor centers I often asked questions that went beyond the realm of the primary focus of the park. On more than one occasion I had to be escorted behind the walls of the lobby to get an answer to my inquiries. Every park ranger or staff member I spoke with was highly knowledgeable and informative. I saw little reason why these people should be hidden. The park staff seemed to welcome inquiries that went above and beyond the typical questions people asked about their park. I believe a chance to interact with the intellectually curious visitor would be a welcomed break from the daily routine for any park administrator. Therefore, the program for interpretive intervention would include the exposure of qualified "behind the scenes" workings of national park administrative functions. Regulating what can be open to public access and what should remain private varies from program to program. Ultimately, the architecture of the interpretive center can be the determining factor which allows staff members to be intellectually "accessed" by the inquisitive public.

Informal active interaction

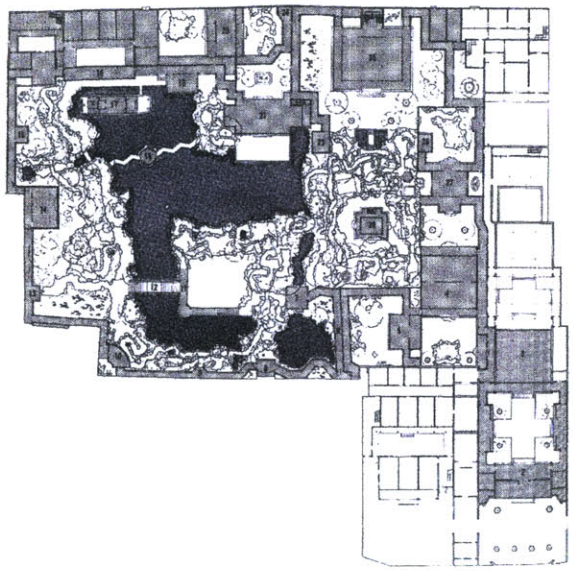
Exposing certain inner workings of a national park through the dispersal of program would act as a catalyst, increasing the amount of lively, productive interaction between visitors. Presently, this type of communication is quite formal and generally occurs with park rangers at an information desk or while on tour. The selective experience of a site would be improved if the program were designed to encourage the occurance of informal give and take. The location of the staff in separate buildings or behind walls retards this concept.

Precedents

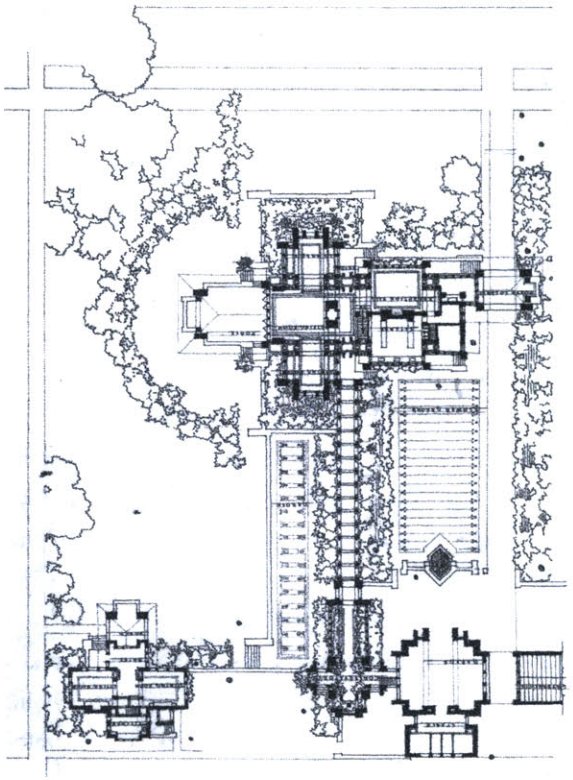
There are very few precedents where the merging of architectural and landscape design have maintained a focus on interpreting a particular natural environment. Many of the ideas expressed in this document deal with the realm that lies between what we usually consider "inside" and "outdoors" in raw, untouched landscape. Traditionally, in the United States, this in-between zone has taken the form of porches, pergolas, and trellises. However, some of the most developed traditional architecture regarding this "gray zone" can be found in ancient Chinese gardens. Unlike interpreting an existing landscape the entire Chinese garden and architecture was fabricated, much like the landscape designs of Olmstead (fig.10). In modern times many architects have tried to design in this marginal area, but the focus has almost always dealt with the transition out of or into a building (i.e. Frank Lloyd Wright, fig.11). The Barcelona Pavilion by Mies van der Rohe is possibly the most well known "building" where the flow of space from inside to outside is truly continuous (fig.12). Also located in Barcelona, Spain are the organic forms of Antonio Gaudi (fig.13). His design for Park Guell occupies this margin between landscape and architecture. On the other hand, landscape designers have typically used natural materials to compose outdoor space. Ironically, it has been an artist, Michael Singer, who has become well known for exploring this place between. His sculptures are created with both man-made and natural materials. As an artist he chose to investigate the affect nature had on his work rather than imposing his art on nature.[5] Michael Singer's work has fluctuated between the

uninhabitable (sculpture) to the habitable (a home). The notion of interpreting an existing landscape through the use of both man-made and natural materials has gone relatively unexplored.

Conclusion

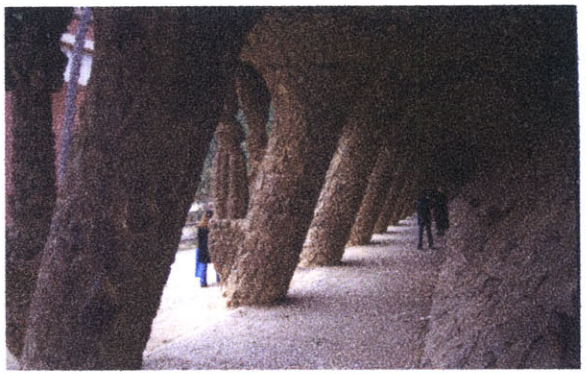


10 Shizi Lin Garden, Suzhou China



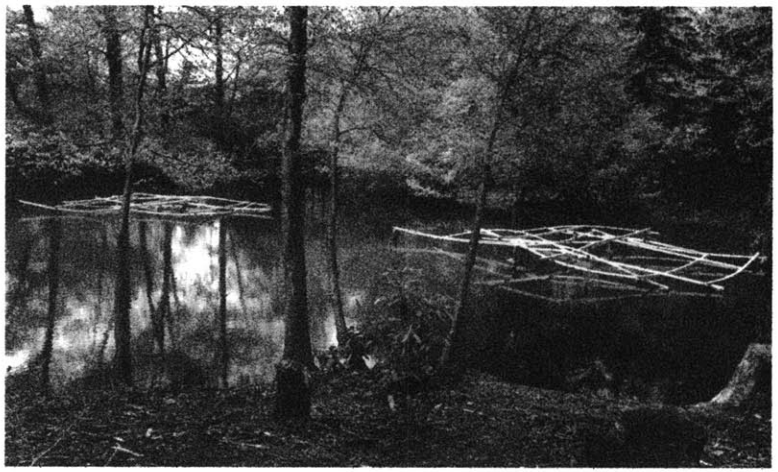
11 Martin House Floor Plan. Buffalo, New York. Frank Lloyd Wright

12 Barcelona Pavilion, Barcelona. Mies van der Rohe



13 Park Guell, Barcelonaa. Antonio Gaudi

The "explosion" and integration of architecture and program are essential to interpreting a landscape. Existing conditions, park content, and history determine the extent to which the architecture and program of an interpretive intervention can be exploded. The provision of understanding as a result of continual experience through architecture and program over time is integral to the interpretation of a national park landscape. The site I chose for exploring this type of interpretive architecture is located in my hometown of Ridgefield, Connecticut. Currently the only National Historic Site in Connecticut, Weir Farm was the homestead and farming land of American Impressionist Painter Julian Alden Weir.



15 *First Gate Ritual Series*, Michael Singer 1976

14 *First Gate Ritual Series* Michael Singer 1979

Endnotes

[1] The terms, national parks and park landscapes refer to all publicly accessible parcels of land governed by the National Park Service (national historic sites, parks, monuments, etc.)

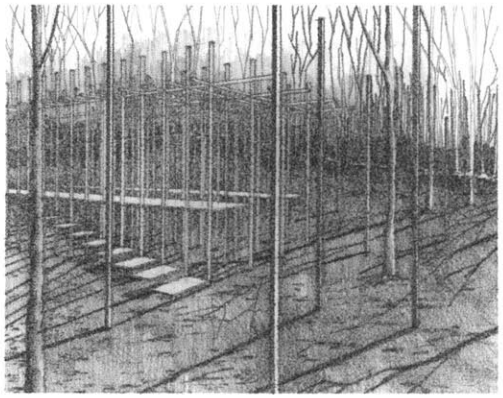
[2] See glossary for definition of three-dimensional experience

[3] Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth.* Northland Press Flagstaff, Arizona. 1980. pp. 69.

[4] "Grander Visitor Center for the Grand Canyon", Iniguez, Lorena, *Los Angeles Times*, October 22, 2000. pp. L3.

[5] Waldman, Diane. *Michael Singer.* Solomon R. Guggenheim Museum, New York, NY. 1984.

3 Weir Farm



Site History

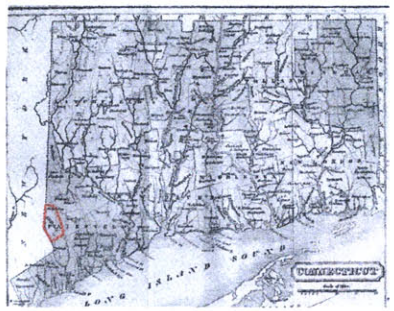
The National Park Service established Weir Farm as a National Historic Site in 1991. Located on the town borders of Ridgefield and Wilton Connecticut (fig.01), the farm has been the home to sculptors and artists for over 100 years. The name of the farm comes from the first artist owner, J. Alden Weir. The property has brief history of ownership before the acquisition of the farm by the Weir family.

Beers Farm

According to the 1995 Historic Structures Report prepared by the NPS, the original dwelling at the corner of Nod Hill Road and Pelham Lane (future Weir homestead) was constructed between the years of 1760 and 1779 (fig.02). The Beers ownership began in 1789. During their stay, the farmhouse was remodeled in the Greek Revival style around 1830.[1] The farm remained in the family's possession until Lewis Beers died in 1861. The National Park believes it was also during this time period that the caretaker's house was constructed (fig.02). The farm was eventually sold to New York art collector Erwin Davis, who then sold the property to Weir in 1882.

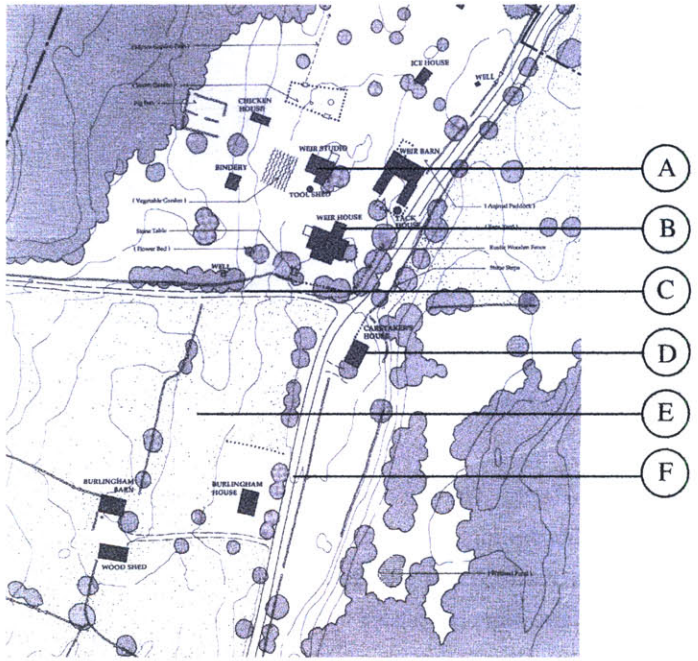
Webb Farm

Located across Pelham Lane (fig.02), the Webb Farm was initially known as Rockhouse Woods and contained a rock outcropping used by Indians and early settlers for shelter. In 1748 the land was granted to John Belden, Samuel Brimsmade, and John Reed.[2] According to a 1782 deed a small dwelling was located on the property. Jared Webb bought a nine-acre parcel in 1832 and proceeded to acquire the remaining 41 acres in 1843. According to the NPS report, the land contained a house and a barn in a deed dated 1843. However, the Webb/Burlingham barn may have been built between 1815 and 1835 due to nail manufacturing characteristics from this time.[3] In 1847 William Webb inherited the



01 Ridgefield, Connecticut

A. Weir's Studio
B. Weir Homestead
C. Pelham Lane
D. Caretaker's House
E. Webb Farm
F. Nod Hill Road



02 1919 site plan

03 John Singer Sargent. *Portrait of J. Alden Weir*, ca. 1890.

farm after Jared's death. The NPS has determined that due to physical evidence, the Webb/Burlingham house was built about 1775. Currently home to the Weir Farm Visitor Center and administrative offices, the Webb house and farm were purchased by Weir in 1907.

Weir Farm

Julian Alden Weir was born on August 30, 1852 in West Point, New York. Interested in painting from his boyhood, Weir attended the National Academy of Design in New York City between 1869 and 1872. Julian's older brother John recognized his talent as an artist. After young Julian's graduation from the National Academy, John persuaded a friend, Mrs. Bradford R. Alden, to fund an education for Julian in Europe. Grateful of his friend's kindness, Weir changed his professional name to J. Alden Weir.[4] For four years between 1873 and 1877 Weir called Paris and the Ecole des Beaux-Arts his home. He excelled in school and traveled extensively throughout Western Europe. Upon his return to the United States, Weir joined the Society of American Artists and the Tile Club. Through the Tile Club he met several longtime friends including architect Stanford White and painters Winslow Homer, William Chase, and John Twatchtman. By 1878 Weir had begun teaching in New York City at Cooper Union and the Art Students League. He also began showing his own work at the American Watercolor Society in 1880. After spending several summers in France Weir fell in love with one of his students, Anna Dwight Baker, whom he eventually married. Weir's attraction to the Connecticut landscape may have begun because of two influences, his then fiancée Anna, and his best friend Twatchtman. Anna's parents resided in Windham, Connecticut where the young couple frequently vacationed during the summer months. His friend Twatchtman settled down in Greenwich, Connecticut because of the town's proximity to New York City. Ultimately, Weir may have come to Ridgefield because of a deal he could not refuse.[5]

In 1882 Weir was offered, by art collector Erwin Davis, 153 acres in Branchville (the name for this part of Ridgefield and Wilton) for a $560.00 painting Weir had bought plus an additional $10. Weir took the offer and quickly considered the property as a place for hunting.

However, the landscape in Ridgefield proved to be quite charming. Possibly Weir's earliest painting of the Branchville landscape is entitled, *Spring Landscape, Branchville* and dated, 1882 (fig.04). During the following years, Weir began developing the property as a working farm. Weir and Anna married in 1883 in New York City and spent some time in Branchville before leaving for their honeymoon in Europe. They loved their newly acquired Connecticut landscape so much they cut their honeymoon short because of homesickness. Upon their return the land became forever known as Weir Farm.

Weir's life at Branchville was filled with artistic inspiration, personal tragedy, and friendly interaction with fellow artists. Early in his career, Weir's art was associated with realism. However, his most well known works, considered part of the American Impressionist movement, were his landscape paintings. It wasn't until 1888 that he first began to truly focus on the landscape around his Ridgefield residence.

After the purchase of the Webb property Weir owned a total of 238 acres of the Branchville landscape surrounding his home. Weir studied, painted, and loved his rural property until death in 1919. During his life at Weir Farm, he had a unique relationship with the landscape both physically and artistically.

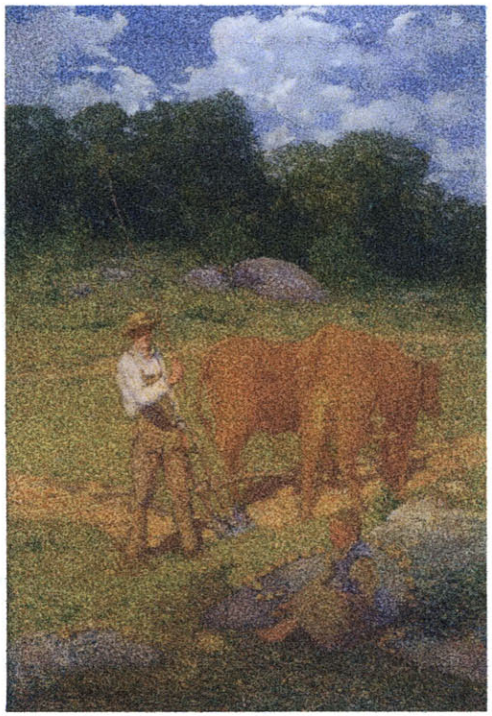
The Physical Weir Landscape

Weir Farm is unique when compared to the majority of United States national parks. Many parks contain precious natural phenomena such as those at Yellowstone, Yosemite, or the Grand Canyon. Considered a National Historic Site by the NPS, Weir Farm contains historic buildings as well as a historic landscape. Unlike the well-preserved natural treasures that dominate the content of the western national parks, Weir Farm represents a landscape that was continuously manipulated by

04 J. Alden Weir. *Spring Landscape*, ca. 1882.

men and women. Functioning as a farm through the Beers and Weir ownerships, the land was stripped of trees and rocks for agricultural purposes. The rolling hills of Ridgefield could be clearly seen from the top of any ridge. Weir carried on an older method of farming using oxen to plow the fields (fig.05). The treatment of Weir's entire property during his ownership can be summed up in the following passage by one of his students.

> *"Few artists of character I have known have escaped the diverting effect of the purchase and development of run down property. It charmed him. He gave much thought, time and energy to its improvement. How he enjoyed clearing vistas, trimming trees well up from the ground revealing beautiful notes and things unseen before. The making of level places for tennis, working with his men who used great red oxen to haul the boulders to one side; the building of the pond with prize money, some of which was generously shared with employees; piling brush here and there and making a bon-fire now and then when the boy in him suggested it... the things made by the faithful Paul found a place in his pictures: sapling fences, rustic arbors, and bridges as well as hen runs, and informal gardens."*[6]



05 J. Alden Weir. *Spring Landscape*, ca. 1882.

In addition to creating Weir Pond, Alden had several architectural landscape interventions built. A summerhouse, boathouse, and wooden fishing bridge were all erected to support activity surrounding the pond. Some of these constructions can be seen in such paintings as *The Fishing Party* (fig.06). Weir's wife, Anna, also continued the tradition of delicately manipulating the land. Her interests were in gardening. In 1886 she planted what may have been the first flower garden at Weir Farm.[7] It wasn't until Mahonri Young's (Weir's son-in-law) time that the garden became known as the Secret Garden (fig.07). Weir's daughters Cora and Ella also may have contributed to this garden on the north side of the property.

After Weir's death in 1919 the landscape surrounding the homestead continued to change. Across the street, Cora designed the Sunken Garden and the terraced gardens adjacent to the Burlingham/Webb buildings. Joe Knoche was the local stone mason who constructed the beautiful stone walls. Mahonri Young's, *Joe Knoche Builds a New Stonewall,* depicts the men working with the local stone (fig.08). According to the Cultural Landscape Report, the walls were completed in the 1940's.

Mahonri Young added another building to the property in the form of his own studio (fig.09). The studio was designed by his son-in-law Oliver Lay and constructed in 1932. Beyond the Young and Burlingham/Webb occupation of the Weir landscape not many changes were made. Instead, the landscape surrounding the buildings was either preserved or left alone. Following the inhabitation of the Youngs, the Andrews did not have a serious interest in gardening or landscaping. Therefore, changes to the property were extremely minimal. The NPS has made minor additions to the landscape and are investigating a number of planning approaches for the future of Weir Farm.[8]

06 J.A. Weir. *The Fishing Party*, 1915

07 Secret Garden 1915

The Artistic Weir Landscape

As a young boy, Alden Weir always had a love of nature. Early on, artist Weir attempted few landscapes. Due to the fact that his training at the Ecole des Beaux-Arts focused on other subject matter.[9] Ironically, the few landscapes Weir did present to his professors were met with high praise. As U.S. cities began to crowd with immigrants in the late 1800's, Weir, like many urbanites, sought the openness and quiet of the rural countryside. Weir's love and artistic study of landscape fervently began after his acquisition of the Branchville property. Also, his friendship with renowned landscape painter John Twatchtman may also have inspired him to begin painting landscapes. Weir confessed to his parents that he wanted, "to see nature simply". Subsequently, in a letter to a friend, he expressed the need to know nature better in order to capture the spirit of a place.

> *"I think that the canvasses I have have a more consistent truth. I have not changed in any way not even in the subjects chosen but it is my hope and desire to get close to Nature, to know her character more intimately, but I will be old, old, old before I can do even the little I do without her assistance."*[10]

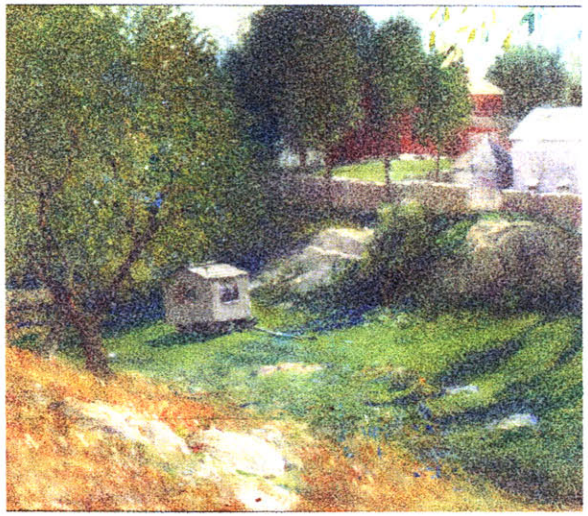
Weir made a concerted effort to get to know his landscape. This is evidenced by the variety of paintings done in each season of the year (fig.10). During the winter months, oxen dragged Weir around in the Palace Car. This "car" was the name of Weir's one room studio on sled runners where he could paint, sheltered from the elements. This winterized vehicle can be seen in, *The Palace Car* (fig.11). Both he and his wife Anna loved the natural environment. The nature they enjoyed the most was neither raw wilderness nor an artificially contoured and planted landscape, but plain old New England farmland and its hills, streams, and woods. The Weir's recognized the opportunity nature

08 *Joe Knoche Builds a New Stone Wall,* Mahonri Young 1940's.

09 Weir's Studio

10 Weir. *Winter Landscape,* 1897

Weir. *Early Spring at Branchville,* 1897



11 J. Alden Weir. *Landscape: Branchville,The Palace Car,* early 1890's

afforded them for contemplation in all seasons and in any leisure hour.[11] Through painting, Weir mastered the ability to capture the spirit of a place through the simplification of nature into basic elements. He was able to transform the everyday into paintings and drawings that eloquently described his rural farm in Branchville. He often artistically edited the landscape in front of him to compose a painting. However, he did not abstract the scene so much that the painting no longer resembled a specific place. A conscious effort was made to keep away from distorting reality beyond recognition. In *The Laundry*, Weir adds towels, enhances and simplifies color, and skews the view of the homestead to create a painting containing depth and intrigue (fig.12).[12] Although Weir significantly altered the reality of his subject matter, the location from where he painted can still be easily understood (fig.13).

Weir's body of work created on the Branchville property was the combined result of his ability to selectively edit the landscape before him and continually return during different times of the year to come to a

12 J. Alden Weir. *The Laundry*, Branchville, 1894.

13 Weir's point of view today

greater understanding of his landscape. Weir's farm was not a preserved one; rather a continuously changing place marked by architectural and landscape interventions. Weir edited the landscape both artistically in his paintings and physically on his farm. Weir Farm was not just the subject matter for his paintings but was frequently the basis for discussion and reflection among his contemporaries. His friendships with John Twatchtman, Childe Hassam, and Albert Pinkham Ryder brought a variety of visiting artists to the Weir residence that gave their own artistic impressions of the Branchville Farm (fig.14,15).

Architecture at Weir Farm

While art and art history are the focus of Weir Farm, there exists a rich architectural history as well. Over the years, the landscape was continually altered with architectural interventions to the north side of his home. In 1885 the construction of Weir's Studio was completed.

14 Childe Hassam Road to the Land of Nod, 1910

15 Albert Pinkham Ryder. *Weir's Orchard*, 1885-90.

Soon after in 1888, the first story of the house and the attached sun porch were expanded westward. Only temporarily satisfied, Weir decided to significantly add-on and further alter the homestead. He chose architect Charles Platt for the commission whom he most likely knew through his circle of connections within the New York art scene.[13] Platt began his career as an artist and later became an architect and landscape designer. The construction of Platt's design was completed in 1901 (fig16,17). Also of note are Weir's friendship with Stanford White, of the nationally recognized firm McKim, Mead, and White. Weir had the architect paint the phrase, "Here shall we rest and call content our home" over the front door of the house. The quote comes from a letter Weir's step brother sent to him in 1883 regarding the beauty of his then new acquisition in Branchville. The final addition to the Weir home was completed in 1911. He commissioned McKim, Mead, and White to design a dining room extension to the north side of the house (fig.18). Architect F.J. Adams created the design. Stanford White and another of the original founders had passed away by this time.

16 Weir home and studio, 1900-34

17 Weir home 2000

18 McKim, Mead, & White dining room addition

Following Weir's death, the final major addition to the site was Mahonri Young's studio. As mentioned above, the studio was designed by his son-in-law Oliver Lay and constructed in 1932 (fig.20). The Andrews did not add any structures to the landscape at Weir Farm.

19 Weir Studio

Weir Farm Today

Today, Weir Farm is open to the general public and administered by the National Park Service. The temporary visitor center is located in the Burlingham/Webb residence. It houses NPS staff offices as well as space for the orientation of visitors (fig.21). The public portion of the visitor center includes a front desk and enough space on the walls for a few small artworks to be exhibited. There is a connecting room that has very minor exhibition space, a monitor for viewing a movie about Weir, and a space for models. A small parking lot has been created on the opposite side of Nod Hill Road for the park staff and daily visitors. All buildings

20 Young Studio

and outbuildings on the farm are discussed in a tour given by the park rangers. Both the Young and Weir studios are accessible during the tour. Doris and Sperry Andrews continue to reside in the Weir homestead and will do so until their passing. The homestead will then be opened to the public for tours. The studios still hold artworks awaiting proper documentation and preservation.

21 Weir Farm visitor center

22 Numbered post

In addition to the tour and the visitor center, the public is encouraged to walk the several miles of trails that meander through the Weir Farm Property as well as the adjoining Weir Preserve. These trails are always open and a trail guide can be purchased at the visitor center information desk. Entitled, the Painting Trail Guide, the visitor can view selected sites where Weir sat to paint or draw. Along the path, the sites are marked with numbered 4x4 posts (fig.22). The paint trail ends on a promontory overlooking Weir Pond where Weir painted *Afternoon by the Pond.* From this point the visitor can either return to the historic buildings or can continue to stroll through the woods along several trails. Each individual path is marked with its own color of paint on various trees. Remnants of a few of Weir's architectural interventions can be found along these trails. The concrete dam below the level of the pond can still be seen today (fig.23). Further along the path, stones have been set into the hillside forming stairs (fig.24). The Weir Pond facilities, such as the pavilion on the island, boat dock, and boathouse have vanished with time. The fishing bridge has also disappeared and been replaced with a composite recycled plastic boardwalk (fig. 25).

Since Weir's death, man-made intrusions on the immediate Weir land have been minimal. In the eighty-one years after his passing, the dormant farm has gone through significant natural changes. New trees and

23 Concrete wall in the woods

24 Stone steps

25 New bridge

undergrowth have completely covered the open fields to the east of Nod Hill Road. The meadows Weir painted in *The Fishing Party* are barely recognizable. During the Weir years, he and his family could view Long Island Sound in the distance from the second story of their home. Today, the trees have entirely blocked this view. The general decline of agriculture in the region has transformed the environs of towns like Ridgefield from wide-open farm land to overgrown fields. The changing natural environment and continuing presence of visiting artists gives further evidence that Weir Farm is, and has always been an active, intellectually lively place.

The Weir Farm staff is currently in the planning stages of determining the future of visitor experience at this newly named National Historic Site. The NPS is considering several planning options which include a variety of alternatives from building a new interpretive center to renovating the existing Burlingham/Webb buildings. The staff is intending to keep alive the tradition of encouraging artists in residence. Plans are currently in order to renovate the shed adjacent to the caretaker's home for artist use (fig. 26). Master plans for the entire site differ based on the extent of funding, perceptions, and goals the NPS staff has set for the future.

26 Caretaker's shed

Endnotes

[1] Child Associates, Inc. Landscape Architecture and Zaitzevsky, Cynthia Ph.D. *Cultural Landscape Report for Weir Farm National Historic Site: Volume 1, Site History and Existing Conditions.* Library of Congress Cataloging-in-Publication Data. 1996. pp.3 1830 is an undocumented date estimated by the NPS.

[2] Ibid., pp. 4

[3] Ibid., pp. 4 Noted in Volume III of the Weir Farm Historic Structures Report

[4] Ibid., pp. 9

[5] Ibid., pp. 11

[6] "American Artists Close," *The New York Times*, 15 June 1889, 4.

[7] Child Associates, Inc. Landscape Architecture and Zaitzevsky, Cynthia Ph.D. *Cultural Landscape Report for Weir Farm National Historic Site: Volume 1, Site History and Existing Conditions.* Library of Congress Cataloging-in-Publication Data. 1996. pp. 89

[8] See "Weir Farm Today".

[9] Cummings, Hildegard. *J. Alden Weir A Place of His Own.* Fusscas, Helen K. Larkin, Susan G. The William Benton Museum of Art, The University of Connecticut. Storrs, Connecticut. 1991. pp. 25

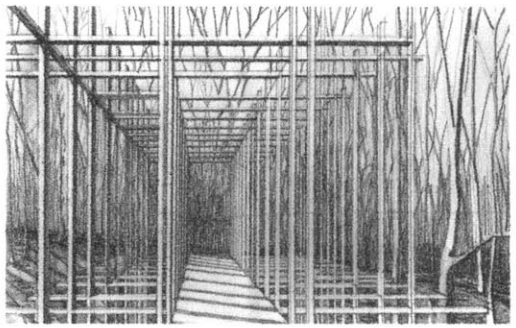
[10] Ibid. pp. 30 From a letter to Wood, Nov. 30, 1902; JAW Papers. AAA, roll 125.

[11] Ibid. pp. 17

[12] Ibid. pp. 32

[13] Child Associates, Inc. Landscape Architecture and Zaitzevsky, Cynthia Ph.D. *Cultural Landscape Report for Weir Farm National Historic Site: Volume 1, Site History and Existing Conditions.* Library of Congress Cataloging-in-Publication Data. 1996. pp. 67

4 An Interpretive Design for Weir Farm



Program

The National Park Service staff at Weir Farm is currently considering a program, similar to the one below, for a new interpretive center for visitors. For the purposes of this thesis the program was expanded and altered with the ideas generated through the design process.

Function	Square Footage
Reception, orientation to story and facilities	140*
Permanent and temporary exhibit and art display	1,058**
Exhibit preparation space	1,168
Meetings and programs	1,500
Restrooms	278
Sales	400**
Curatorial support, storage, library & research space	3,000
Receiving	200
Staff meetings	514
Break room and kitchen	978
Offices	1,714**
Total	10,950 ft sq

* This number represents the square footage of the orientation space located on the entry path. The entire site is being used for the explanation of "the story".
**Additional spaces for these programmatic functions will be made within the Burlingham/Webb residence or any of the outbuildings on the Burlingham/Webb side of the property line.

Site

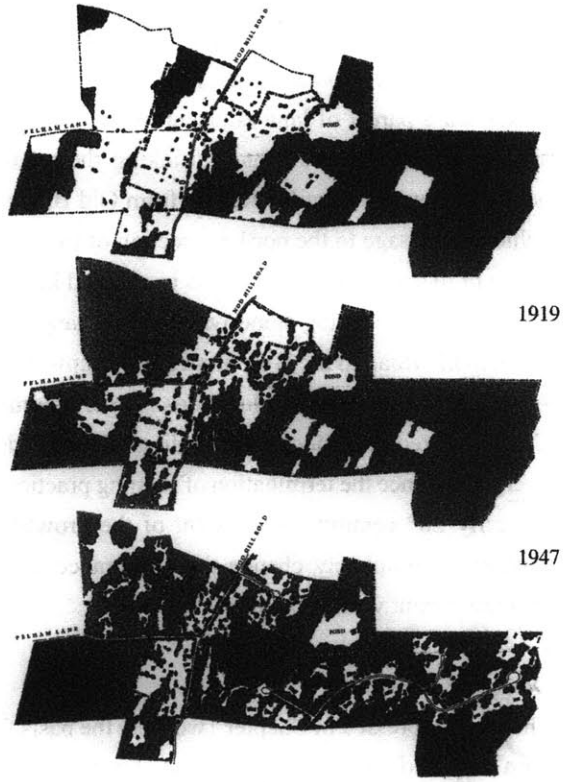
The site is located on a portion of the Ridgefield/Wilton border in Fairfield County, Connecticut. The National Park Service has recently purchased a parcel of land adjacent to the Weir property as a potential site for an interpretive center. Linking the adjacent properties are a network of walking trails. Access from Old Branchville Road provides vehicular passage to the northern section of the property. The boundary of the property used for this thesis is outlined in red (fig.12). The black lines represent existing stone walls. The change in elevation from Old Branchville Road to the Weir homestead is upwards of one hundred feet. A walk between these two locations is over one mile. As mentioned in Chapter Three, the once grassy rolling hills of Ridgefield have become overgrown since the termination of farming practices in the region during the early 20th century. The extent of the growth has been significant enough to completely change the appearance of the landscape and to obscure distant views (fig. 02).

Design Methodology

The ideas expressed in Chapter Two were the basis for my design process for a proposed interpretive experience for Weir Farm. Creating a project that inherently contains all of these qualities is the goal of the process. The following paragraphs reveal how the design fulfills each idea.

Architecture

Weir Farm is a place with rich artistic, architectural, and landscape histories. The most important is the life of Julian Alden Weir and the affect the Branchville landscape had on his artwork. Second, Weir's role in starting the trend of artist visitation to the farm was equally significant. The continuous influx of artists both during and after Weir's life truly makes Weir Farm a unique place in relation to other national parks, monuments, or historic sites. Today, visitors travel to Ridgefield to see



01 Vegetation growth

02 View towards Weir Pond before 1915

the actual subject matter of hundreds of works of art, to learn about the life and art of Weir, and to possibly witness artists actively interpreting the Branchville landscape. Viewing Weir's works of art and the landscape he painted is unique for visitors to this National Historic Site. However, conveying the essence of an artistic perception of landscape would be the ultimate learning experience for a visitor. This appreciation of the land at this site may not occur in one day or possibly ever. However, the opportunity at this historical place for architecture to play a major role in teaching or interpreting this way of perceiving landscape is tremendous. Combined with the likelihood of interacting with artists, staff members, and fellow tourists, a visit to Weir Farm would be powerfully moving, and unlike any other in the country.

As the designer, understanding the methods Weir used to present the landscape in his artwork was pertinent. I first paid a visit to Weir Farm and stood at the general locations noted in the Painting Trail Guide and compared his paintings to what exists today (fig.03). Glancing back and forth between the present day view and Weir's paintings I was able to understand the artist's approach. Through painting, drawing, and etching, he celebrated what most people might consider everyday scenes. Weir enhanced the landscape by simplifying the color, shapes, light, and shadow within a framed view. Through his selective editing, composition, and simplification, the landscape Weir knew and cherished can be easily understood by anyone viewing his paintings. Second, I took two images, a Weir painting (*The Laundry*) and a photograph of the his studio, and tried to copy them using pastels (fig. 04). I found the painting much easier to re-present than the photo because Weir had already simplified the landscape for me (fig.05). From these studies, I thought the design of any new architectural interventions ought to focus on the simplification of actual ephemeral qualities of the Branchville landscape: views, light, sound, and touch. Through the heightened

A Existing view

J. Alden Weir. *Spring Landscape*, Branchville

B

J. Alden Weir. *Webb Farm*

03 Painting Trail Guide comparison study

C

J. Alden Weir. *Path in the Orchard*

D

Albert Pinkham Ryder. *Weir's Orchard*

E

J. Alden Weir. *The Palace Car*

F

J. Alden Weir. *The Truants*

03 Painting Trail Guide comparison study

G

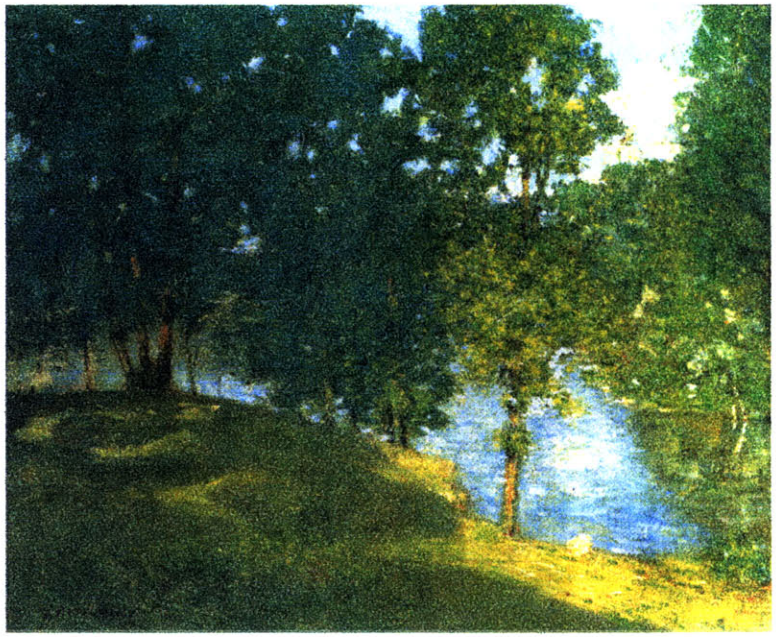
J. Alden Weir. *The Fishing Party*

The path to the pond, after 1896

experience of each of these characteristics, the visitor might come to an understanding of the landscape as a composition of individual parts. However, like artists who create their own impression of Weir Farm, the personal interpretations of each visitor would be just as valuable. This continuous architectural intervention would provide a variety of intensities where visitors would have the opportunity to pause, like Weir did, and reflect upon the wonder of the natural environment surrounding

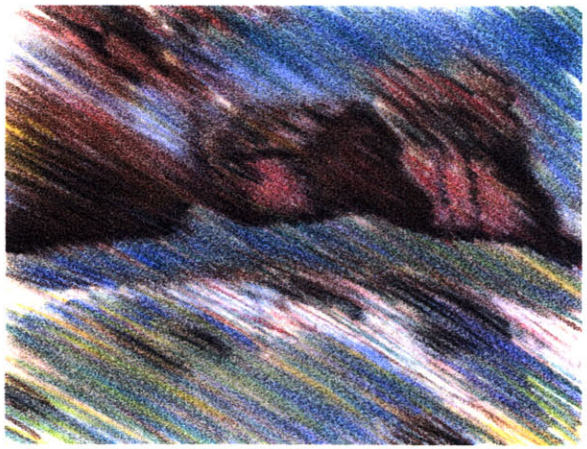
03 Painting Trail Guide comparison study

H



J. Alden Weir. *Afternoon by the Pond*

04 Pastel study



05 Pastel study

J. Alden Weir. *The Laundry*

Weir's Studio

them, in any weather condition.

The creation of such a unique interpretive experience requires an understanding of the local landscape. When visiting the site, I looked at the landscape and found it was simply composed. Earth, tree trunks, and a canopy of leaves and branches primarily made up the ablsolute basis of "architectural" elements of the natural landscape (fig. 07). The repetition and seemingly random placement of these components

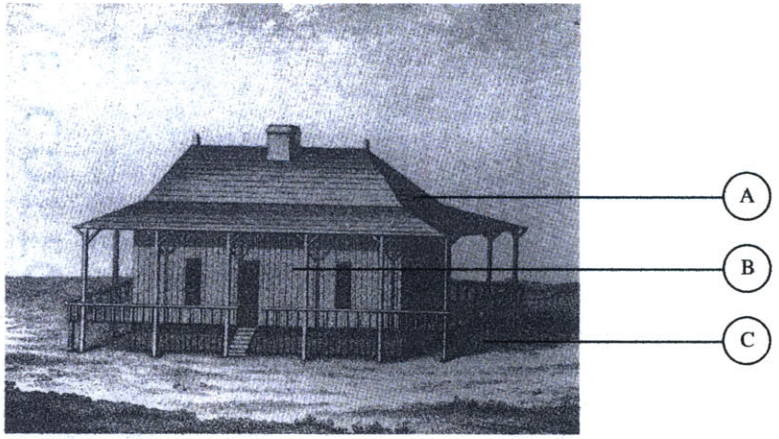
combined with the ephemeral qualities of light, wind, smell, and sound form the landscape of Weir Farm. I then considered what purely man-made forms represent these elements of nature. Foundations, posts, and a roof comprised the other end of the spectrum (fig. 08). I discovered on one of my walks around the Weir property that a combination of elements from both these extremes had been used to build the Burlingham/Webb shed (fig. 06). A stonewall made of rocks becomes the half wall that supports the wooden structure for the rest of the shed. Rather than only making up the foundation the stone wall trails off into the field where it becomes part of the greater experience of the farm.

The natural components of canopy, trunks, and earth are more specifically comprised of rock, eroded materials, and trees respectively. For the interpretive "center" I used copper, laminated posts, and cut slate to form the structure on the northern end of the property.[1] From this end of the site, the highest intensity of materials transforms from the most man-made to the most natural. Around the historic buildings, completely

06 Burlingham/Webb shed

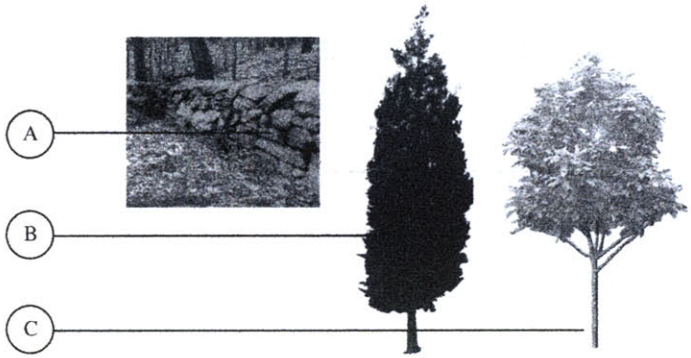
07 Landscape components

A. Canopy
B. Trunk
C. Earth



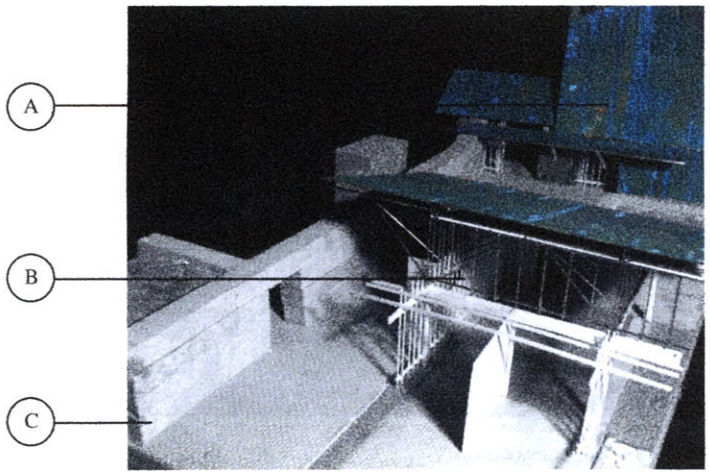
08 Man-made components

A. Roof
B. Post
C. Foundation



A. Rock
B. Evergreen
C. Deciduous tree

09 Landscape elements



10 Architectural elements

A. Copper
B. Laminated post
C. Slate walls

natural materials are used to shape the experience of the visitor (southwest of the new interpretive "center"). Evergreens, deciduous trees, and rocks make up the vocabulary of elements (fig.09). These elements were not randomly selected but are site specific. A visitor walking the trail around the historic buildings of the site may not notice that their experience is being composed. These interventions would be used solely to frame views of Weir's subject matter and to provide a place to sit and contemplate(fig.52). Between the two extremes a combination of natural and man-made materials fade into one another and intensify to shape composed experiences of specific ephemeral aspects of the landscape (sound, light, views, and touch).

Program

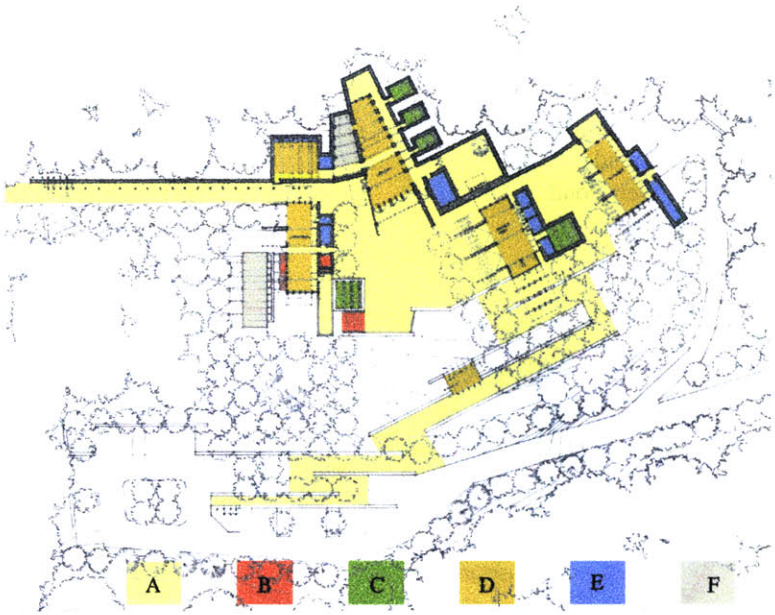
The "explosion" of the architecture across the site also requires a dispersal of the program. At the northern end where the highest intensity of new construction is located, the park staff works in a number of buildings including a kitchen, exhibit preparation workshop, research library, and an art curators' workshop (fig.16). Offices and meeting rooms are located on the lower level of the curator building. All services are situated in heavy stone masses to the north side of each building, maximizing insulation. The exhibition of Weir paintings is dispersed across this portion of the site in singular rooms. With the exception of the kitchen, all the buildings have at least one room to display artworks (fig.21). The idea is that the visitor will "happen" upon these rooms and be able to view the artworks individually in silence. Additional exhibit space will be refinished in the buildings on the Burlingham/Webb property. Ideally, all of the buildings mentioned above will be open to the public so the visitors have a chance to interact with park employees.

The landscape between the two "heads" of the site is where the architectural vocabulary will extend to "present" the visitor with focused

interpretive experiences. Several intensities of intervention occur throughout this portion of the farm. In geographic order from the interpretive "center" to the historic buildings, the visitor will pass through interventions that focus on views, touch, sound, and light. Included, are the framed views of the paintings currently listed in the Weir Farm Painting Trail Guide. Other paintings will be highlighted as well (i.e. *The Laundry*). These architectural interventions will help the visitor to see, hear, and touch singular elements of the landscape. The ephemeral characteristics of Weir Farm will always exist, however the visitor may never fully appreciate them unless they are highlighted with architecture, both man-made and natural. The sharp focus of these interventions fade as one traverses the land from the north end of the site to the historic buildings.

In keeping with the tradition of an active haven for artists, selected outbuildings would be renovated for artists-in-residence housing and/or studios. Similar to the northern end of the property, visitors would be encouraged (by the architecture) to interact with the artists. If staff members or artists choose not to offer themselves to the public then the doors of either the new or old buildings can simply be closed.

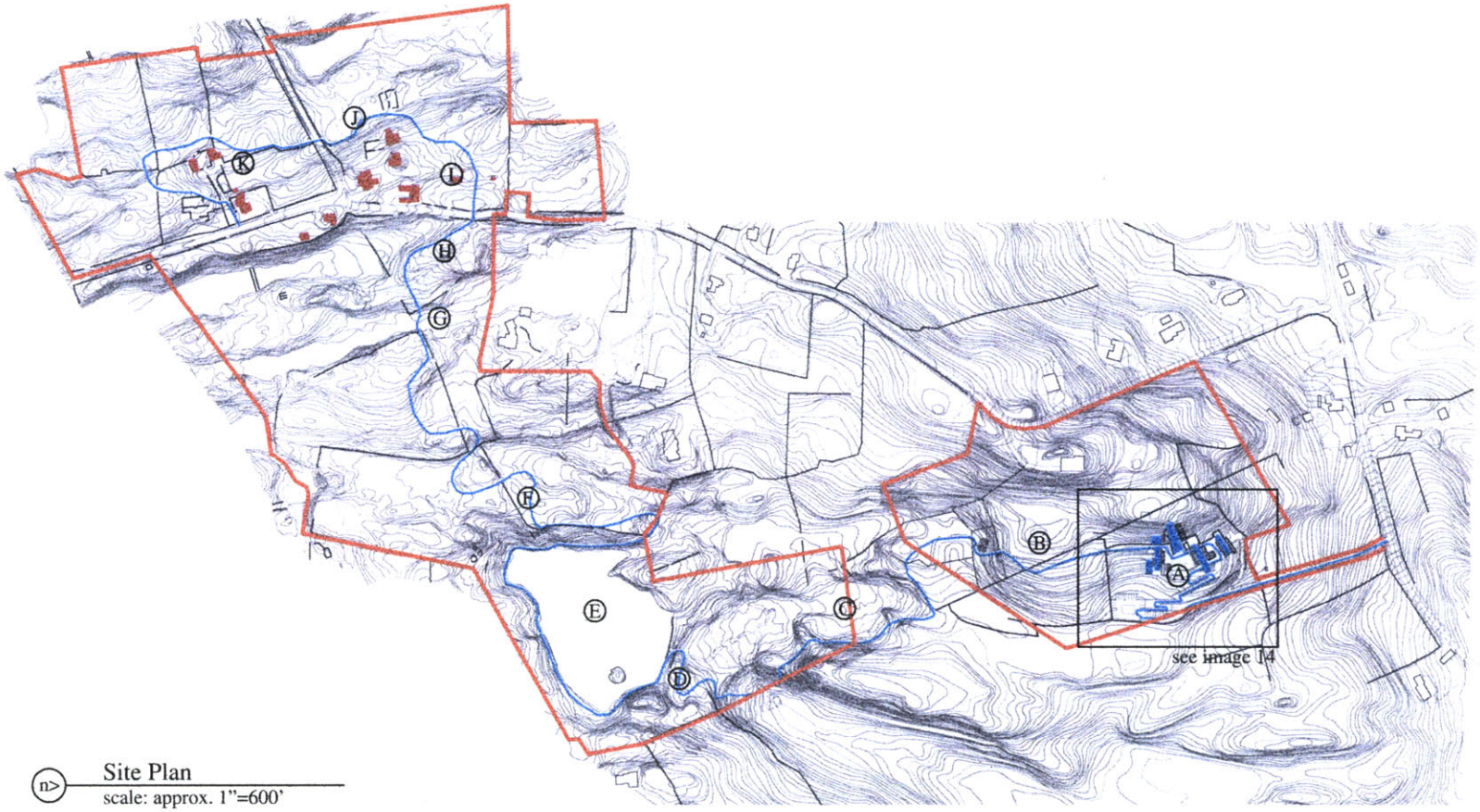
The following passage tells the story of the experience a visitor might have at Weir Farm after the interpretive architectural interventions have been constructed. The images coincide with the description of the experience in the text.



11 Program

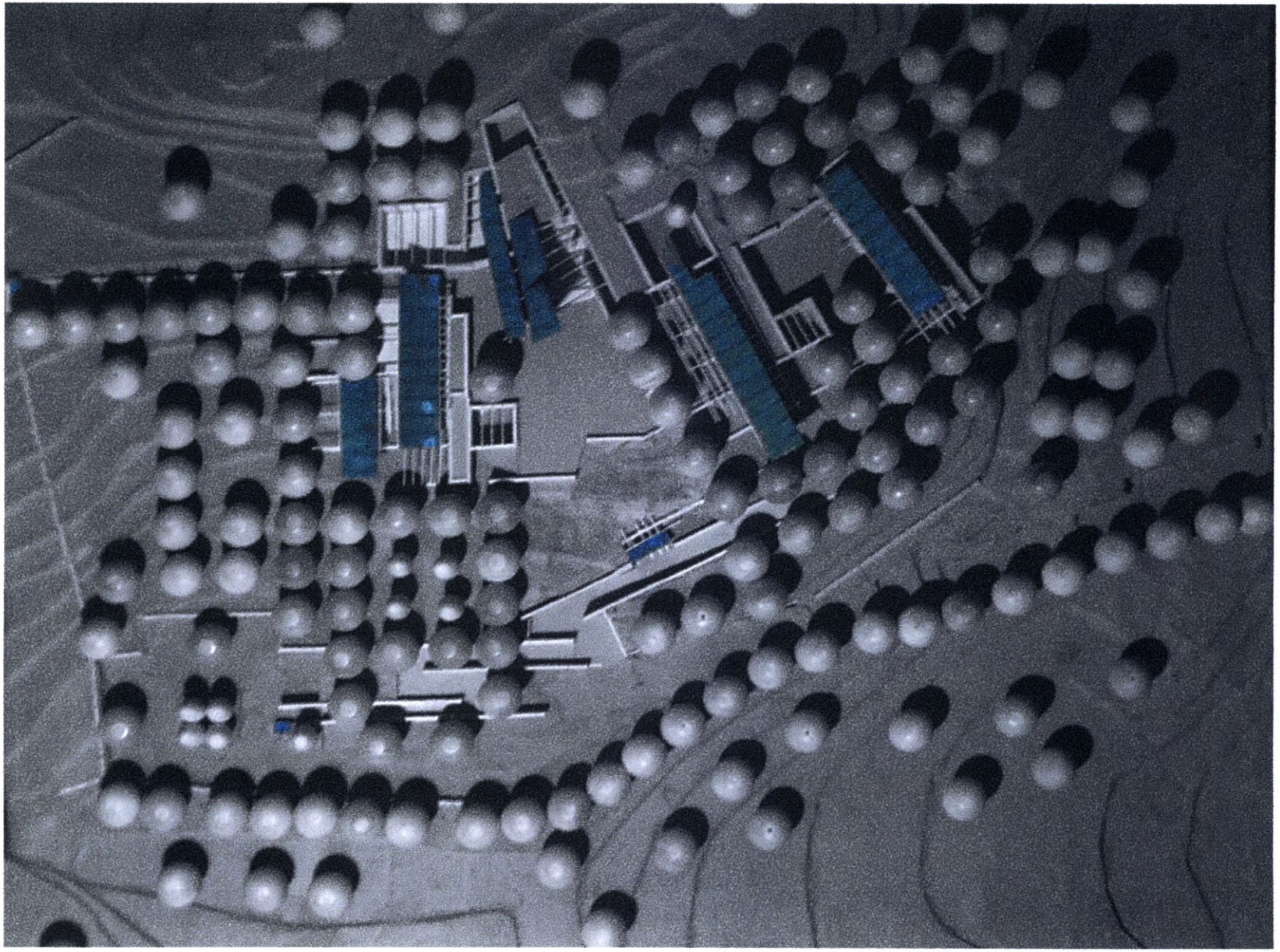
A. Paths and places
B. Vertical circulation
C. Exhibition
D. Staff workspaces accessible by the public
E. Services
F. Staff private offices

A. Staff interpretive workshops
B. View
C. Touch
D. Sound
E. Weir Pond
F. View
G. View "the bridge"
H. Light
I. View
J. View
K. Weir home, studios, outbuildings
L. Webb/Burlingham buildings



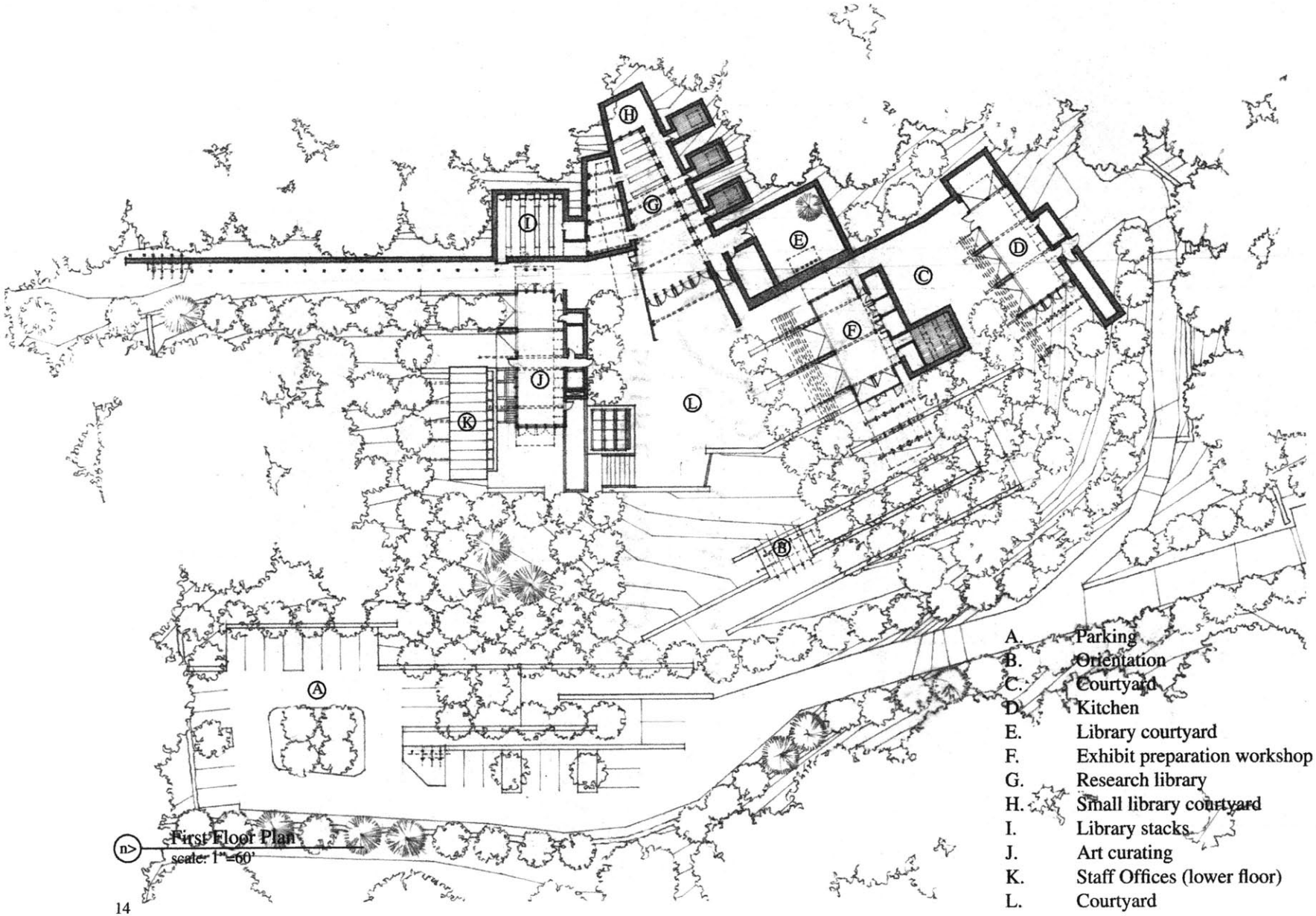
n> Site Plan
scale: approx. 1"=600'

Note: Trails connect both properties. There is no evidence on site of the property divisions.
The blue trail is the path described later in this chapter



14

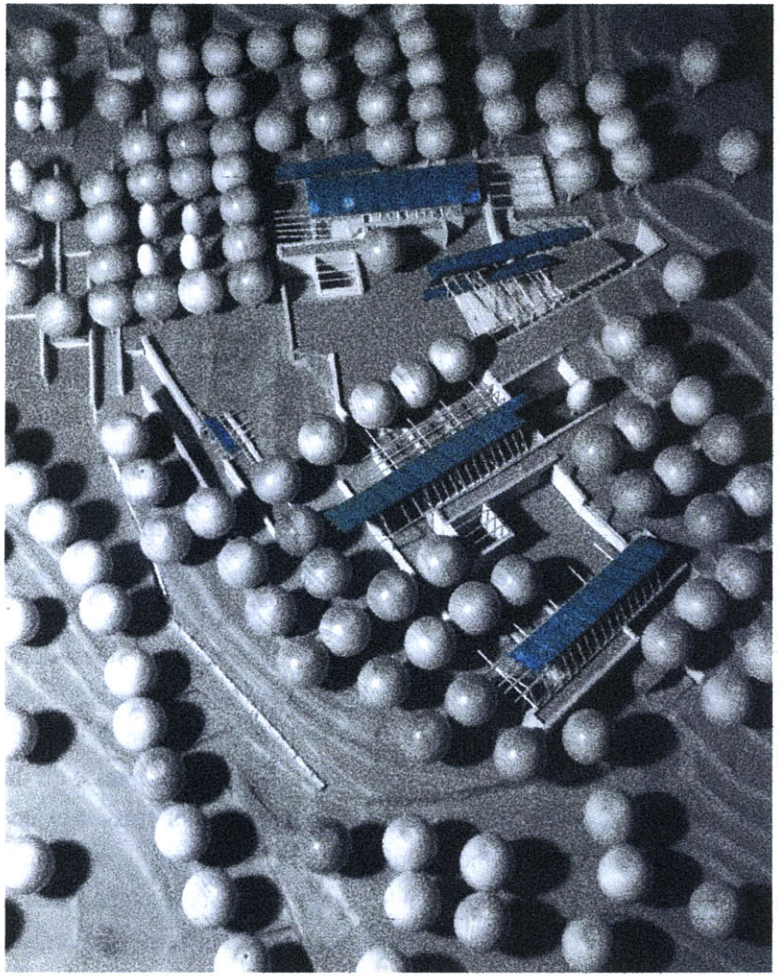
Site model



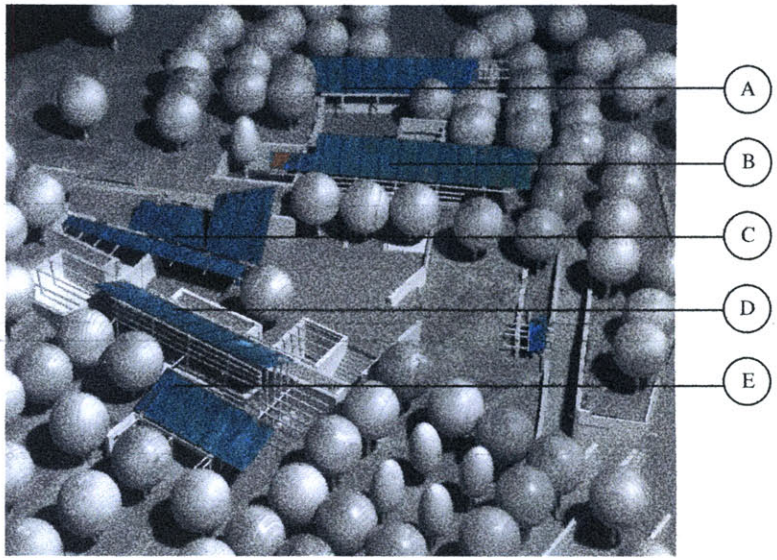
First Floor Plan
scale: 1"=60'

A. Parking
B. Orientation
C. Courtyard
D. Kitchen
E. Library courtyard
F. Exhibit preparation workshop
G. Research library
H. Small library courtyard
I. Library stacks
J. Art curating
K. Staff Offices (lower floor)
L. Courtyard

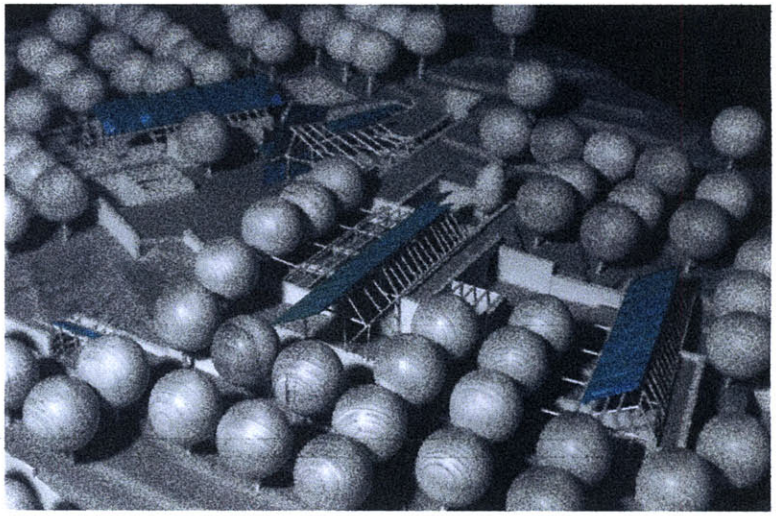
A. Kitchen
B. Exhibit Preparation
C. Research Library
D. Art curator workshop
E. Staff offices



15



16



17

18 View of entry from Old Branchville Road

19

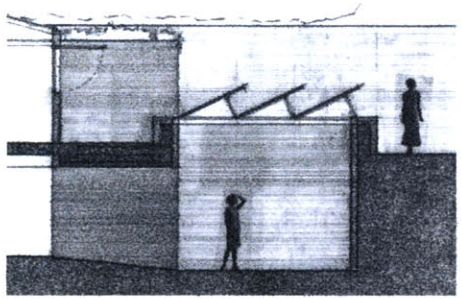
20

Understanding Through a Story of Architectural Experience

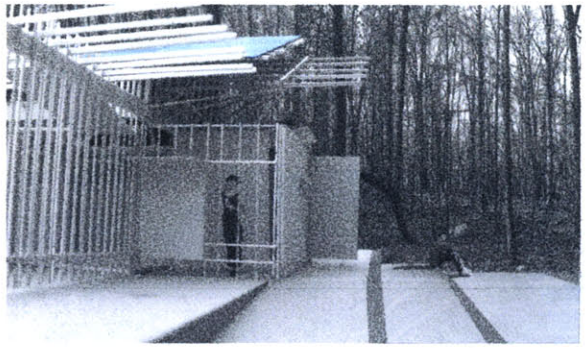
The majority of visitors to Weir Farm National Historic Site arrive by car. The entrance to the site is located on Old Branchville Road and is marked by copper, laminated posts, and cut slate. Parallel parking is available along the road as the visitor drives up the hill during periods of heavy visitation. However, during a typical day parking would be available at the top of the slope nearest the beginning of the path. Upon reaching the crest of the hill, views of the most concentrated new architectural intervention can be seen through the trees. The slate walls that line the pathways are initially encountered in the parking lot as retaining walls. Once the car is parked the visitor follows the slate wall to the stonedust path leading up a gentle grade.

The tall, horizontally laid slate walls, slick to the touch, hide the view to the buildings and shape the path that leads to them. Planted trees, replacing the ones cut down during construction, also line the pathway and help to guide the visitor. Around the second turn, and behind the measured repetition of alternating tree trunks and laminated posts, the slate wall steps back revealing a point of orientation where a park ranger informs the visitor about experiencing Weir Farm. A brochure is provided that reminds the visitor of their options and describes the history of the farm. The pathway continues and begins to elevate the visitors vanishing viewpoint above the slate wall. Meandering up the slope the buildings are just a few feet away. Another turn in the path contrasts the feeling of walking below the canopy of the trees with the underside of a copper roof. Thin stainless steel roof trusses extend beyond the envelope of the building and lightly touch the "floating" copper. To the right, several slender laminated posts reach upwards to support the exposed portion of the stainless truss. The posts then replace tree trunks as the visitor moves out from under the copper roof to the

natural canopy of the trees. To the left, the intensity of light and aromatic smells welcome the visitor to a courtyard space lined on two sides by slate walls and another side by open wooden panels reaching eight feet in height. North light illuminates the space where a cook is preparing food for resident artists. The visitor can stop and chat or decide to continue forward. Opposite the dining area, another courtyard can be seen through a passage between slate walls, beneath the cover of another copper cantilever. Upon moving through the passage, natural sounds fade away as footsteps echo off the slate. Emerging from the short passage, the visitor has the choice of entering the library to the right or walking into the exhibit preparation studio on the left. During warm weather either of the buildings can be accessed at any point. For winter entry, a small door is located on the narrow western façade of the exhibit preparation workshop and on the eastern wall of the library. Upon entry, a large workshop is seen where site staff members maybe preparing an exhibit at several worktables. The visitor can choose to interact with them or continue with their explorations of the site. The staff might suggest to the visitor to turn around and walk into a small passage in the northern, slate clad wall. The opening leads the person into a small chamber filled with north light. Within the space a slate "bench" is extruded from the ground welcoming the visitor to sit and study the exhibited painting in front of them (fig.21).

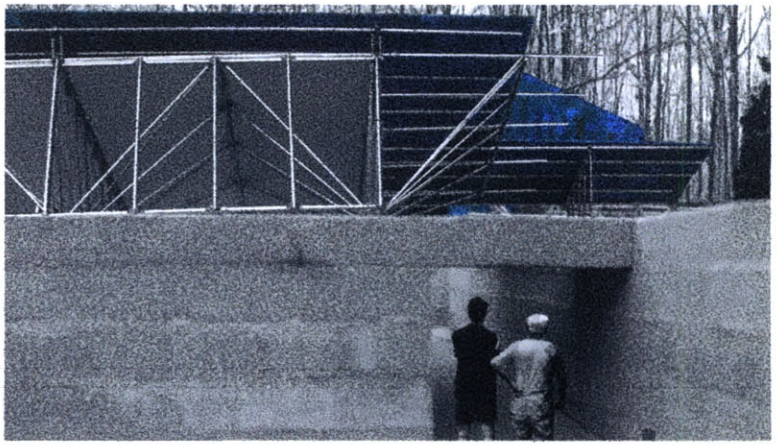


21 Exhibition space

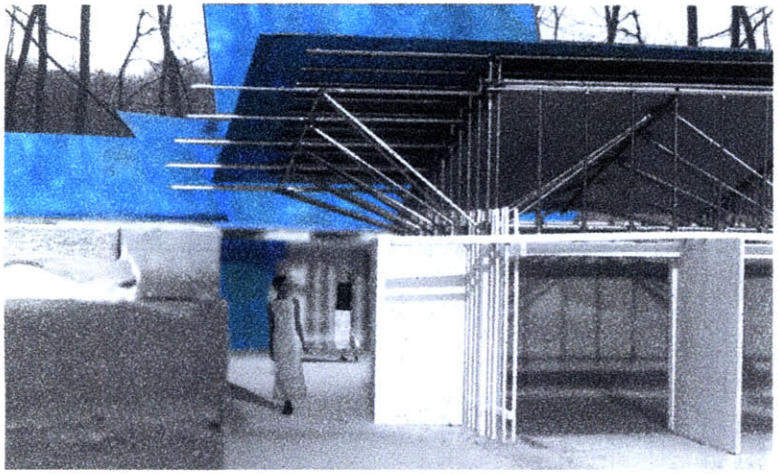


22 Corner of xhibit preparation building

23



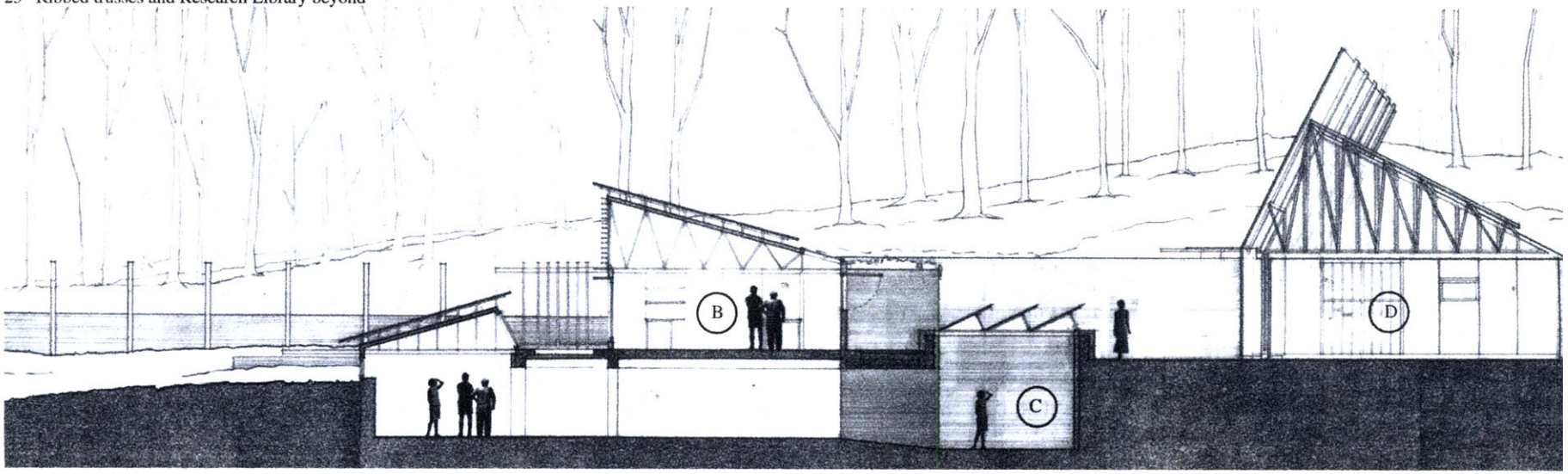
24 Passage to main courtyard



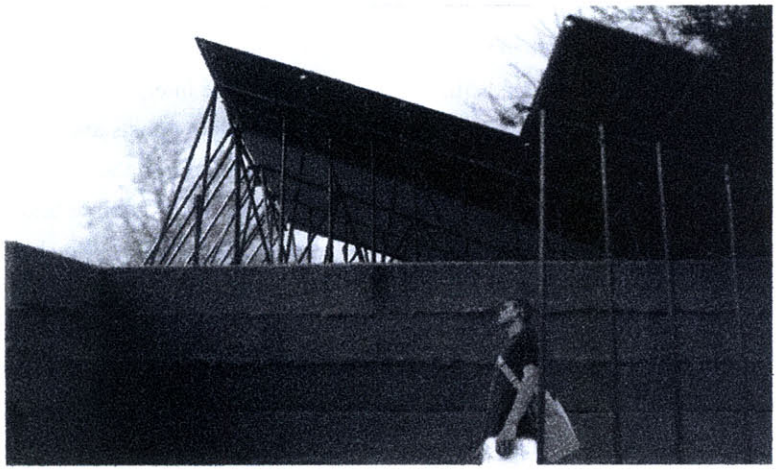
25 Ribbed trusses and Research Library beyond

The library to the western side of the second courtyard houses the volumes accumulated by the staff. A "working" library, the building is a place where active administrative and public research occurs simultaneously. Similar to the other structures, the building has a heavy mass to the north that houses all of the building services, restrooms, and storage. During the winter months the radiant floor heating is activated and the slate floor and walls absorb the heat. To the south, moveable panels allow visitors to enter the space during the warmer months of the year. Rib-like stainless trusses fly over their heads. The north light coming through the thin network of steel illuminates the space.

From the library, the path leads the visitor south, under a copper canopy where another paneled entrance is found. If entered, the visitor would find staff members researching, studying, and documenting art works. The elevator and stairs lead to private offices and another small exhibition



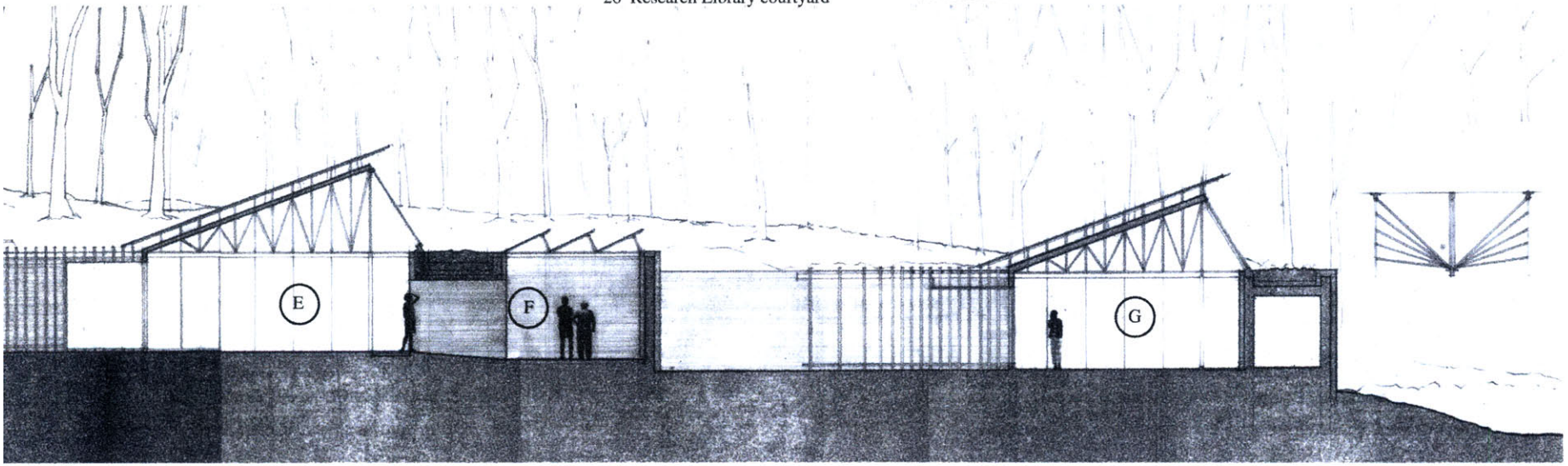
28 Interpretive "center" section



26 Research Library courtyard

27 View from main courtyard

A. Offices
B. Art curators' workshop
C. Exhibit space
D. Library
E. Exhibit preparation space
F. Exhibit space
G. Kitchen



29

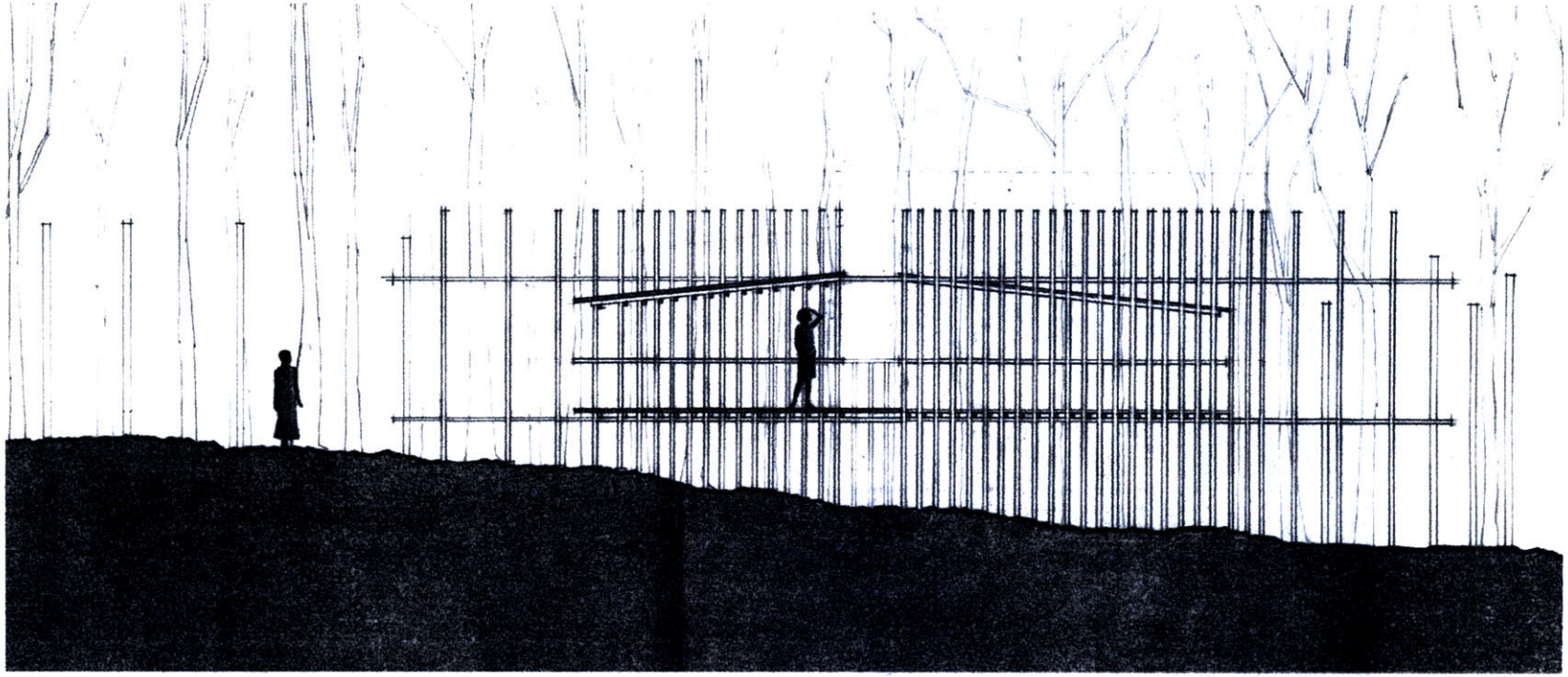
30

31

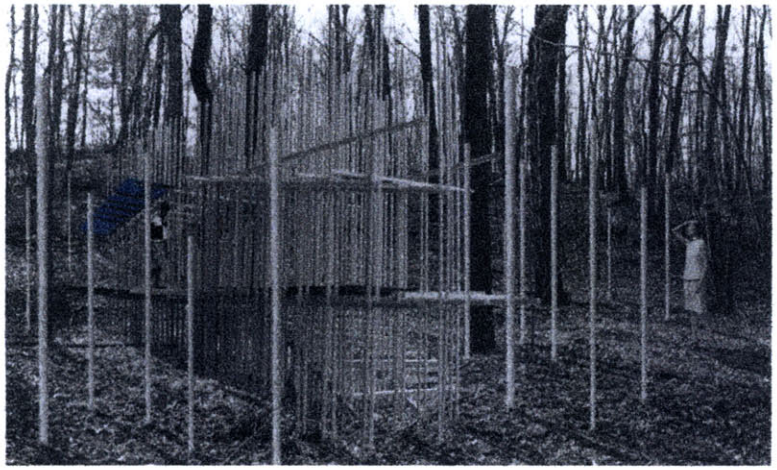
space. Meeting rooms for the staff are also located on this lower floor. Any, and all of the buildings can be closed to the public at anytime. However, they are designed to welcome visitors and the fresh air, smells, light, and breezes of Mother Nature to enter the structure.

The path gradually changes from the hard surface of the courtyard to earth. A line of posts leads the visitor away from the interpretive center and into the woods. The trail is marked sporadically by posts and every so often by an evergreen tree. About an 1/8 of a mile into the trees the visitor comes upon a ridge where the posts intensify in number and a break in a stone wall is flanked by two large boulders. At the threshold shaped by the boulders, many elongated posts can be seen among the long slender trunks of the trees. A closer look reveals wooden beams delicately supporting horizontal strips of copper. As the visitor moves around the posts, they encounter a set of steps integrated into the vertical grid of wood. When ascended, the views from within the network of slender posts, beams, and copper are framed by the repetition of vertical elements. Whether it is a cloudless day or raining, the structure becomes the perfect place to sit, read, paint, or just reflect (fig.33).

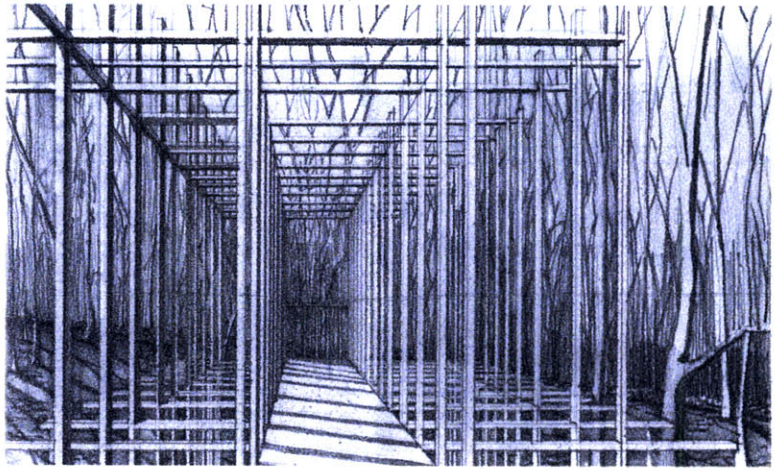
32 Framed view structure



33 Framed View Section



34



35 Framed view

36 Touch

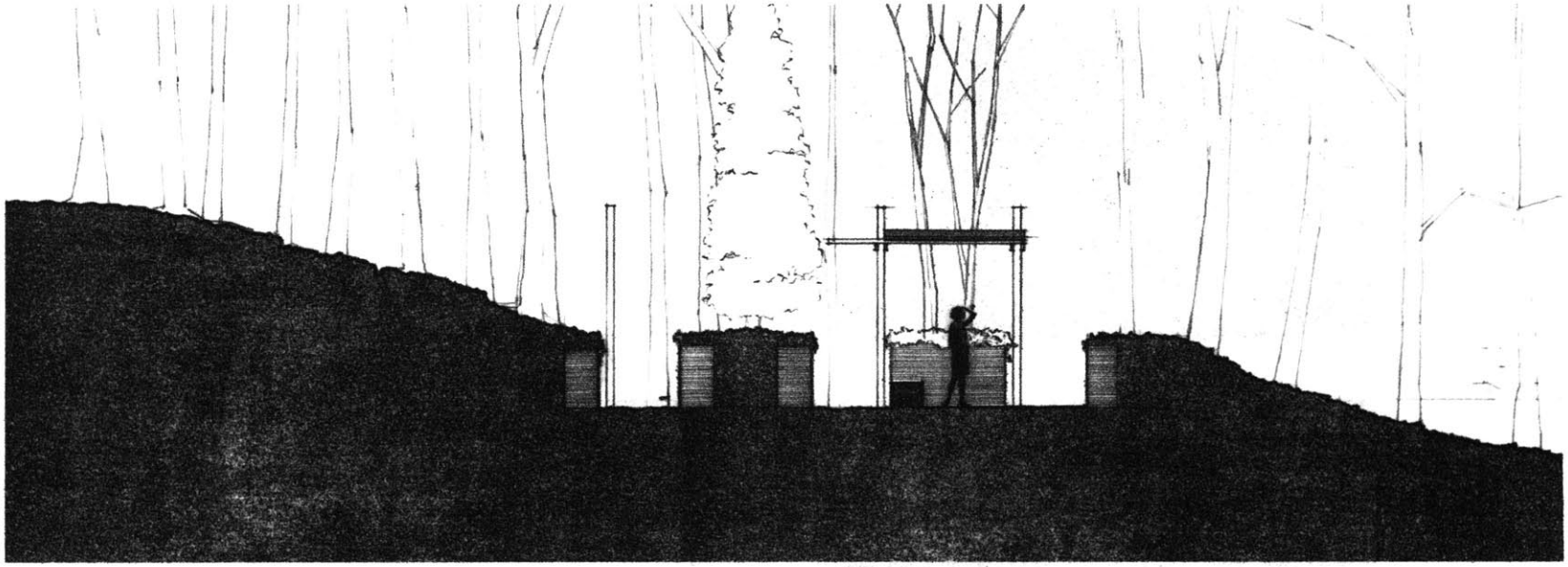
37

38 Sound

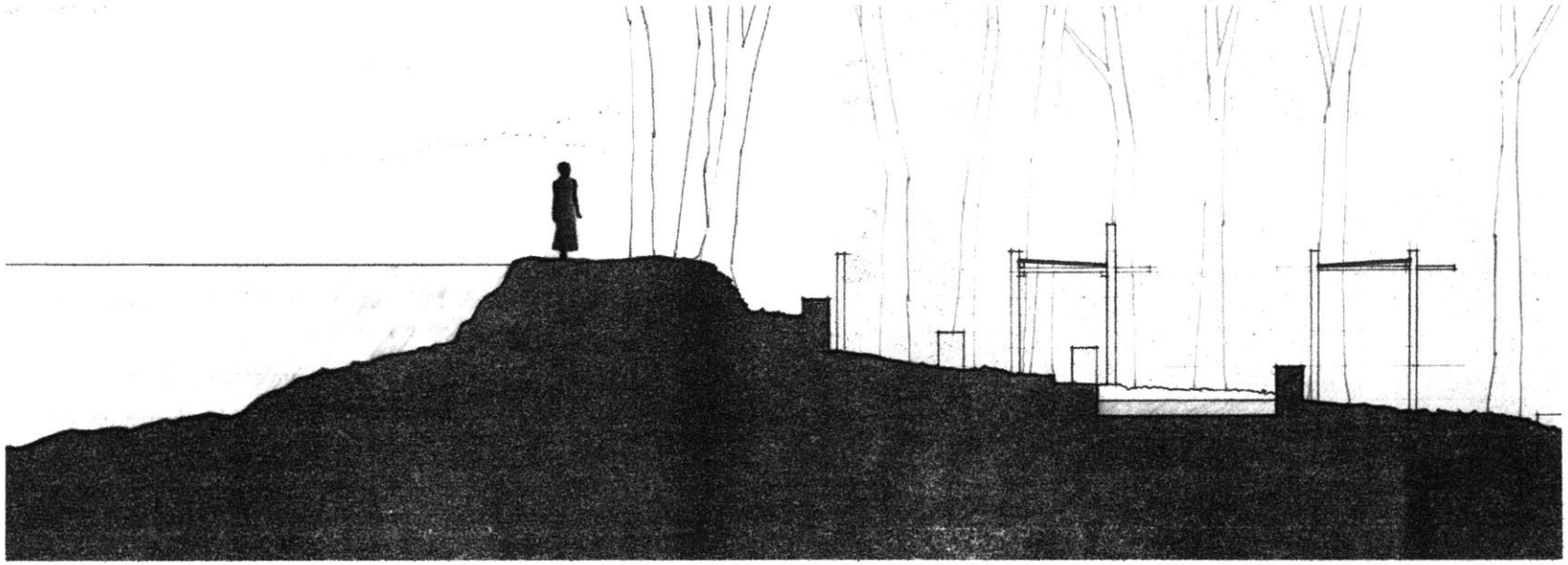
The posts trail off from the viewing structure again leading the visitor along the path. Every once in a while the posts support a piece of copper confirming the way to the historic buildings. Smooth pieces of slate are also noticeable at the base of these posts. Eventually, the landscape becomes steeper and the path winds around a rock outcropping. The land on either side of the path increases in elevation while the trail itself remains at the same level. Holding back the leaves and earth, smooth slate walls beckon the visitor to touch them. At the top of the ridge the land is shaped by these hidden walls, the number of posts increase, and again the visitor becomes aware of the presence of copper overhead. If the visitor chooses to rest here, the smoothness of the stone in contrast to the roughness of the weathered land will be noticed. At this point the post are no longer laminated and, although squared off, have begun to resemble the trees from which they came (drawing 04).

Further along the path, the sound of water can be heard trickling through the natural terrain. Over the next ridge, the spot known as "the waterfall" is discovered. Again, a rectangular shape emerges from the moss and

39



40 Touch Section



41 Sound Section

43

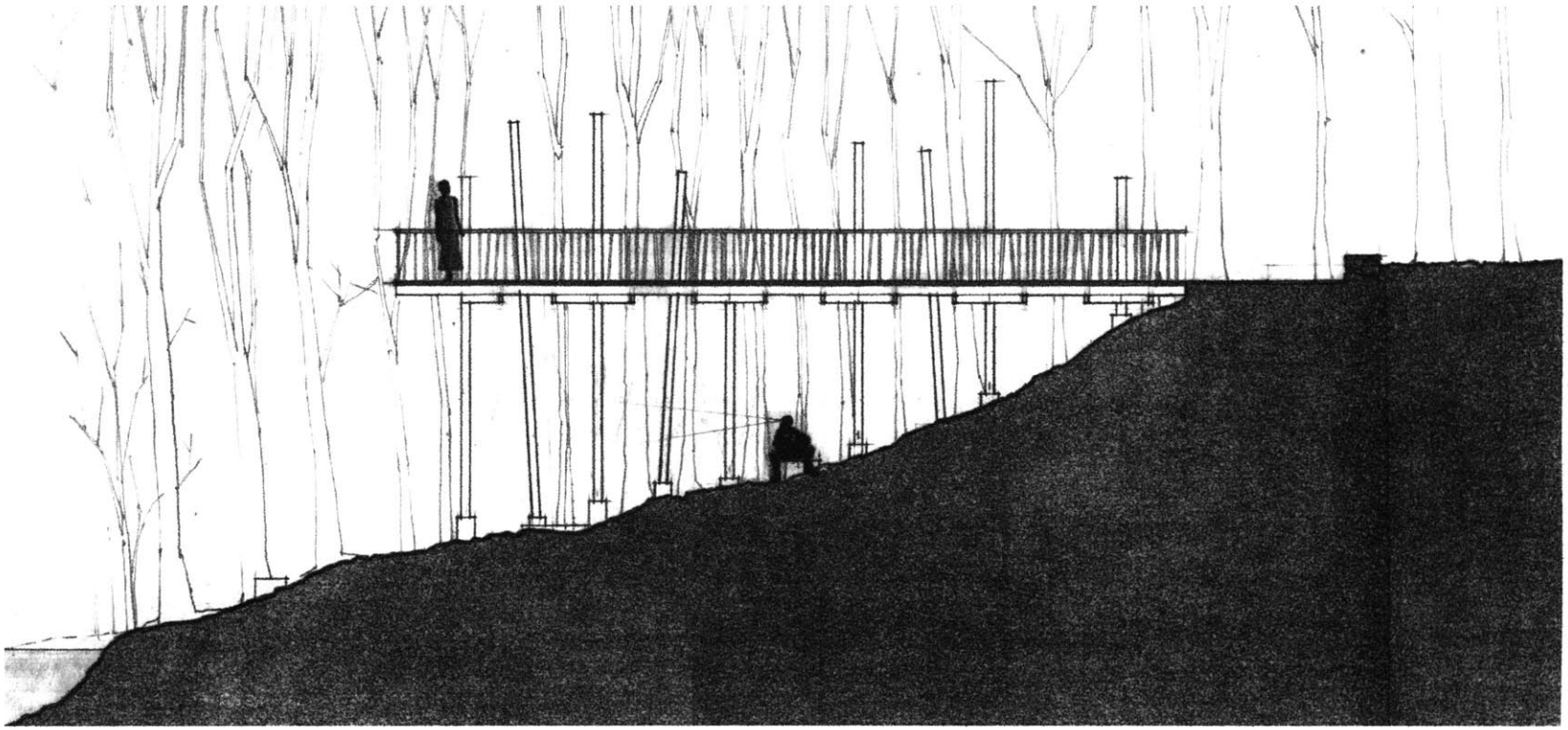
44

45 Framed view

leaves providing a place to sit. As the visitor pushes on, these long, linear, slate and rock forms increase in number. The weathering of the slate gives the appearance that the stone has been a part of the land for some time. The sound of the small brook fades away and an another trickling sound becomes more audible. The visitor can now see Weir Pond through the trees. The linear slate interventions channel a small amount of water that falls over a grooved portion of the dam. The intensified sound of water accompanies visitors as they walk, up to the pond. The path meanders around the southern side of the water. From this vantagepoint the island where Weir painted *In the Summerhouse* can be witnessed. Following the earthen trail and the sounds and sights of the pond, the visitor almost circumvents the body of water before moving up the slope. Prior to climbing vertically in elevation, the number of posts again begin to multiply. Slender slate and rock walls intersect the ground plain and provide support to the large vertical members as well as a place for the visitor to sit. A rectangular plane of copper soars overhead in the direction of the pond. Known as the "bridge" the intervention high above provides shelter at the lower elevation (fig.46).

Following the path around the pond and back up the slope, the linear structure can be seen protruding from the steep hillside. Once atop the ridge the visitor can look out at the pond through the framed view afforded by the "bridge". The trees and posts to either side of the copper-walking surface rise up to focus the view of Weir's *Afternoon by the Pond* painting. This is the second of several points along the path where the design intervention signifies a place of importance in regard to Weir's art works. The bridge welcomes the visitor to walk out among the trees and "float" above the landscape Weir painted (fig.45).

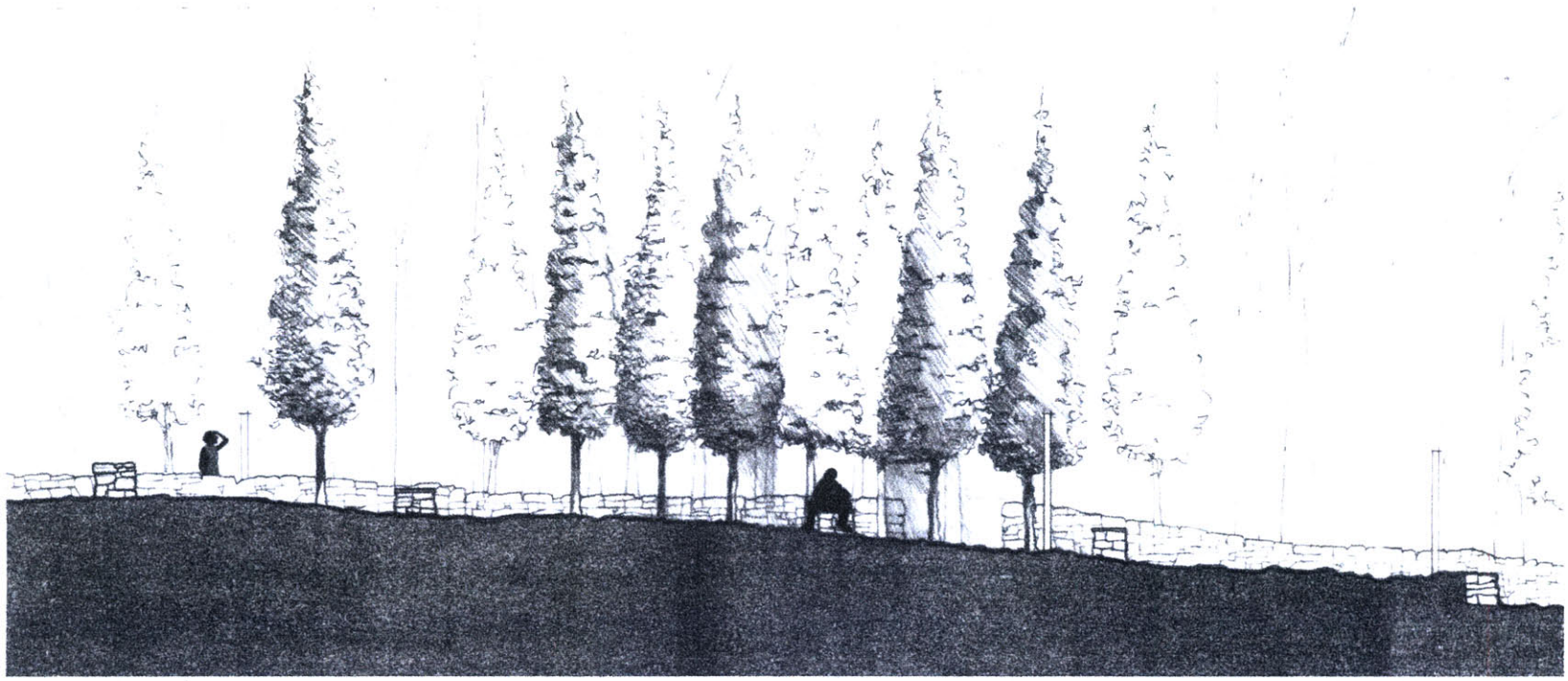
At this point in the journey the number of evergreens has increased significantly along the path in comparison to the number of posts which



46 "The bridge" Section

47

48 Light



49 Light Section

have all but faded away. A "field" of evergreens can be witnessed through the numerous deciduous trees dotting the old farming grounds. Planted in a grid, some trees have been removed to reveal outdoor rooms opening to the sky. Curiously, the visitor walks into the densest part of the "forest" to find one of these spaces filled with natural illumination from above. The evergreens shelter the space from sound and form a "window" to the sky. Upon exiting the space the evergreens fade away and several red shapes can be made out in the distance. The historic buildings are not far off.

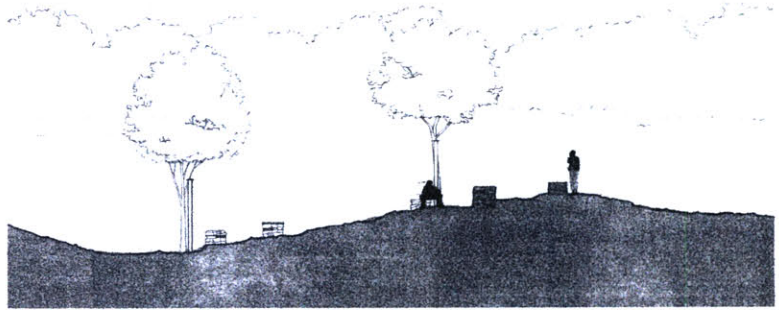
50

The ground begins to be moisture laden and a copper plate between a break in a stone wall marks the beginning of a recently constructed

51

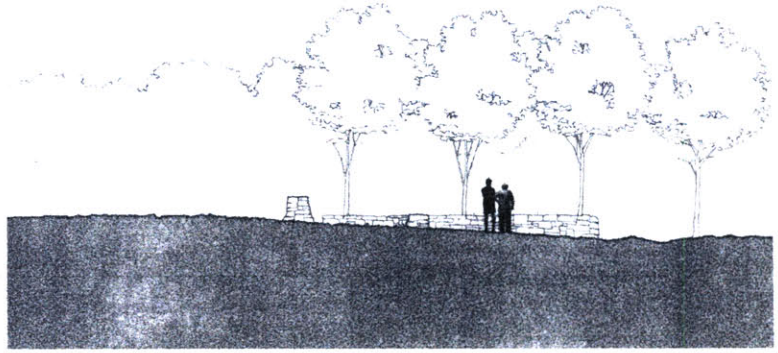
52

53 Framed view of *The Palace*

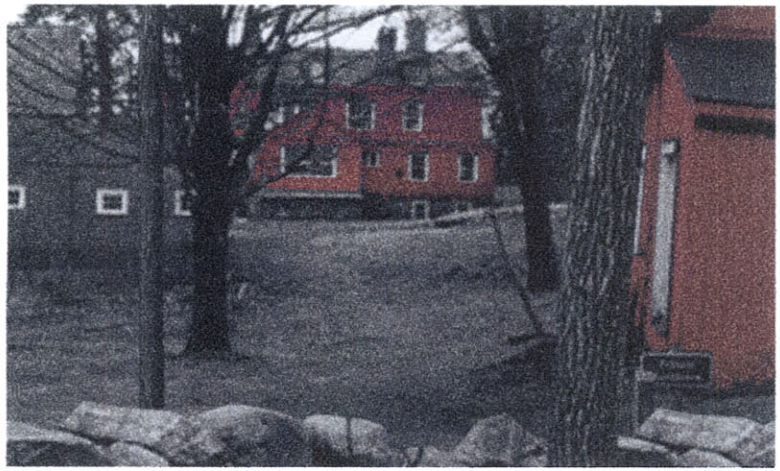


54 Framed View section

bridge. The bridge is adjacent to the former site of the fishing bridge Weir painted. On the next earthen swale, a few posts and several trees form two lines. Linear stonewalls running parallel to the alternating man-made and natural columns tempt the walker to rest (fig.52). Once seated, a framed view of another Weir painting can be seen. It is the *Palace Car.* The vocabulary of trees and rocks lead the visitor across Nod Hill Road and on to the immediate property of the historic homes, barns, and studios. At this point the remaining architectural interventions simply highlight and frame the views of selected Weir artworks (fig.55). The path guides the visitor around the Young studio, down to the site where



55 Framed View Section



56 Framed view *Path in the Orchard*

57 Framed view *Webb Farm*

Weir painted *The Laundry*, and across Pelham Lane. The remaining two viewing spots are called out with trees and rocks. Finally, at Burlingham/ Webb residence is where visitors are met by a staff member and can tour the historic property, homestead, studios, and outbuildings. Some have been refurbished and house artists-in-residence. Similar to the opposite end of the site, visitors have the opportunity to interact with artists and park staff members. After individual exploration at this end of the site the visitor is encouraged to take a different path through the woods to their car or return to the parking area by shuttle bus.

The experience described above is only one--frozen in time. The experience of Weir Farm is new and different every time one visits. The annual changing of seasons in New England offer the visitor a new and different experience from the forest-like landscape of the summer, to the gray bleakness of winter; from the awakening spring to the crisp colorful beauty of the fall. To fully understand and appreciate the landscape of this national historic site, one must do as Weir did, and repeatedly immerse oneself in it at each season of the year. The architectural and landscape interventions proposed in this thesis act as a static reference point to the dynamism of the changing seasons and the beauty of the place. Ideally, over time, the weathered interpretive interventions, program, and the historical and natural landscapes will merge to become one and provide the visitor with a harmonious sensory learning experience.

Endnotes

[1] In this case the term center refers to the highest intensity of new construction on the Weir property where the majority of the staff will work.

Conclusion

The ideas expressed in this thesis are an investigation into an area of architecture that has been minimally explored. Neither entirely architecture nor landscape, there is a realm between the two which can aid in the harmonious interpretation of our country's national parks. The National Historic Site at Weir Farm is in itself a fascinating place because of its history and is truly unique when compared to the rest of the landscapes governed by the National Park Service. Like the uniqueness of the site itself, there is the potential to make the interpretive experience of Weir Farm revolutionary when compared to the classic models of national park interpretive facilities.

As I designed the interpretive experience of Weir Farm, questions regarding other parks continuously arose. How might these ideas be applied to a National Park or Monument? What would it mean to interpret Devil's Tower, the entire landscape of Yellowstone, or an urban historic site? I came to the conclusion that each National Park, Monument, and Historic Site has its own personality and site specific circumstances. Interpretive "centers" across the country should reflect the incredible natural and historical diversity of each park. It is unfortunate that from the Mission 66 program, a "cookie cutter" model of initial interpretive experience evolved. The appearance of the buildings from this era may differ, however the experience of the landscape through them is frighteningly identical and shortsighted. An investigation into older visitor buildings like those at the Grand Canyon, Wind Cave, or Yellowstone encouragingly reveal some attempt by their respective designers to create unique interactive relationships between architecture, visitor, and landscape. Today, commercialization, electronic media, and the habit of our society to "spoon-feed" an over-abundance of information threaten the natural experience of the parks which should be provided to visitors. The National Park Service is in the unique position to use these incredible sites to develop a model of revolutionary design that involves the complete harmonious integration of program, environment, architecture, and experience. These models can then influence designers of buildings and experiences outside the realm of the United States national parks. Architects hired by the National Park Service should not be designers of buildings, but the designers of interpretive landscape experience through architectural intervention.

Resources

Glossary

Experience
The apprehension of an object, a thought, or an emotion through the senses or the mind.**

Intensity
The amount of light, sound, objects, etc.

Interaction
To act on one another.*

Interpret
To explain or translate. To construe as contempt. To give one's own conception of, as in performance or criticism.*

Intervention
The strategic placement of man-made and natural materials in the landscape.

Ephemeral
Lasting one day. Short lived; transitory. (i.e. light, views, sound, etc.)*

Fifth Facade
The roof of a building or shelter

Landscape
A natural or man-made environment. (i.e. urban landscape, historical landscape, desert landscape)

National Park
Any parcel of land governed by the National Park Service and accessible by the public.

Railroad Hotel
A hotel designed specifically to entice the public to visit the national parks to increase revenue for railroad company's around the turn of the 19th century. (i.e. El Tovar, Old Faithful Inn)

Three dimensional experience
Apprehension through multiple senses, more than two (i.e.walking in a hallway).

Two-dimensional experience
Apprehension through minimum sensory stimulation (i.e. reading a paper)

Understand
To perceive the meaning of. To assume from what is heard; infer. To be informed.*

Visitor center
The term, visitor center, was coined during the Mission 66 program. A building designed to be the informational hub of a national park.

**Webster's New World Dictionary.* Warner Books. Neufeldt, Victoria, editor in chief. 1990

***The American Heritage College Dictionary, Third Edition.* Houghton Mifflin Company, New York. 1997.

Image Credits

Note: Unless mentioned below all drawings and photographs are by the author.

1

01. No photographer mentioned. From page 2 of *The Army Years 1886-1918*. The Yellowstone Association for Natural Science, History, and Education.. A tourist brochure available at the Mammoth Hot Springs Visitor Center.
02. Ibid. Image on cover
05. Unknown source
06. The Playstead Shelter, Franklin Park, 1889. Photograph. From City of Boston, Doc. No. 15-1890. 176.
07. Schoolmaster Hill Shelter as built, 1897. Photograph. From Francis W. Chandler, ed., *Municipal Architecture in Boston*, 1898.
08. Grand Canyon Station and El Tovar. Photographer unknown. From pp. 96. Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth.*. Northland Press Flagstaff, Arizona. 1980.
13. Grand Canyon Station and El Tovar. Photographer unknown. From pp. 79. Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth.*. Northland Press Flagstaff, Arizona. 1980.
15. Hopi House 1905. Photographer unknown. Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth.*. Northland Press Flagstaff, Arizona. 1980. pp. 15.
16. Ibid. pp. 16
22. Phantom Ranch, 1922. Photographer unknown. Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth.*. Northland Press Flagstaff, Arizona. 1980. pp. 15.
57. Plan of Cyclorama and visitor center. Boesiger, W. *Richard Neutra, Buildings and Projects.* Editions Girsberger, Zurich, Switzerland. 1959. Pp. 192. (plan colored by APJ).
65. Avenue of Flags photograph by Bill Groethe, First Photo
66. Site Map by Wyss Associates Inc., Rapid City, South Dakota
67. APJ photograph 07/00 Rendering by CTA Architects

2

01. Redwood treetops in Muir Woods, California. Photograph by Melisa Whelden November 2000.

04. The "Meaning of Rushmore" exhibit. South Dakota Tourism.
05. Zion downdraft cooling towers. Larry Kilborn 04/10/00
06. Solar panels at Zion Visitor Center. Robb Williamson / PIX09162.
08. Site plan: Franklin Park, Boston by Frederick Law Olmstead, 1885
10. Shizi Lin, the Lion Grove. Suzhou, China. Plan. Ya-Sing Tsu, Frances. Landscape Design in Chinese Gardens. McGraw-Hill Book Company. 1988. Pp. 200
11. The Martin House, Site plan. Frank Lloyd Wright.
14. Singer, Michael. *Ritual Series 5/79. 1979.* Spruce branches and jute rope. Wilmington, Vermont
15. Singer, Michael. *First Gate Ritual Series. 1779.* Oak, phragmites, rocks, jute rope and spruce branches. Wilmington, Vermont.

3

01. "Map of Connecticut", from *Connecticut Historical Collections: Containing a general collection of interesting facts, traditions, biographical sketches, anecdotes, etc. relating to the history and antiquities of every town in Connecticut, with geographical descriptions*, John Warner Barber, 1837.
02. Period Plan 1919. Prepared by Child Associates Inc. Boston, MA. July 17, 1995.
03. John Singer Sargent. Portrait of J. Alden Weir, ca. 1890. Oil on canvas, 25"x20.5"
04. J. Alden Weir. *Spring Landscape, Branchville,* 1882. Watercolor on paper, 5" x 6.75".
05. J. Alden Weir. *Ploughing for Buckwheat*, 1898 (retouched ca. 1912). Oil on canvas, 48.5" x 33.75"
06. J. Alden Weir. *The Fishing Party,* ca. 1915. Oil on canvas, 28" x 23-1/8".
07. View of Secret Garden. Photograph ca. 1915 (WFNHS-HP No.162)
08. Mahonri Young. *Joe Knoche Builds a New Stone Wall.* (c.a. 1940's). Etching.
09. Peter Margonelli. *J. Alden Weir's Studio.*
10. J. Alden Weir. *Winter Landscape*, 1897. Oil on canvas, 12"x18".
11. J. Alden Weir. Early Spring at Branchville, 1888-90. Oil on canvas, 20.25"x25.25".
12. J. Alden Weir. *The Palace Car,* early 1890s. Oil on Canvas, 20" x 24".
13. J. Alden Weir. *The Laundry, Branchville*, ca. 1894. Oil on canvas, 30-1/8" x 25-1/4".
15. Childe Hassam. *Road to the Land of Nod,* 1910. Oil on canvas, 24"x30".
16. Albert Pinkham Ryder. *Weir's Orchard, ca.* 1885-90. Oil on canvas, 17-1/8"x21".
17. Weir house, studio, etc., from the rear. Photograph ca. 1900-1934 (WFNHS-HP No. 8).

4

01. Site Evolution: Comparison Inventory: 1919, 1947, 1994. Prepared by: Child Associates Inc.
02. Fence along Nod Hill Road in front of Weir's house. Photograph, before ca. 1915 (WFNHS-HP No. 90)
03. J. Alden Weir. *Spring Landscape, Branchville,* 1882. Watercolor on paper, 5" x 6.75".
    J. Alden Weir. *Webb Farm*, n.d. Etching and drypoint on paper, 5-15/16"x7-7/8".
    J. Alden Weir, *Path in the Orchard*, before 1900. Oil on wood panel, 16"x12".
    Albert Pinkham Ryder. *Weir's Orchard, ca.* 1885-90. Oil on canvas, 17-1/8"x21".
    J. Alden Weir. *The Palace Car,* early 1890s. Oil on canvas, 20" x 24".
    J. Alden Weir. The Truants, 1895. Oil on canvas, 29"x38".
    J. Alden Weir. *The Fishing Party,* ca. 1915. Oil on canvas, 28" x 23-1/8".
    Path to the pond, after 1896. Weir Farm National Historic Site private collection.
    J. Alden Weir. *Afternoon by the pond*, 1908-1909. Oil on canvas. 25-1/16"x30".
04. J. Alden Weir. *The Laundry, Branchville*, ca. 1894. Oil on canvas, 30-1/8" x 25-1/4".
05. J. Alden Weir's studio, photo by Peter Margonelli.
08. Unknown source.

Bibliography

Books

1. Boesiger, W. *Richard Neutra 1950-60 Buildings and Projects.* Editions Girsberger. Zurich, Switzerland. 1959.

2. Boston, Massachusetts Department of the Parks. *Notes on the Plan of Franklin Park and Related Matters.* Printed by the Department of the Parks, Boston, MA. 1886.

3. Child Associates, Inc. Landscape Architecture and Zaitzevsky, Cynthia Ph.D.*Cultural Landscape Report for Weir Farm National Historic Site: Volume 1, Site History and Existing Conditions.* Library of Congress Cataloging-in-Publication Data. 1996.

4. Cikovsky, Nicolai Jr., Milroy, Elizabeth., Spencer, Harold., Cummings, Hildegard. *A Connecticut Place: Weir Farm: An Amercian Painter's Rural Retreat.* Pressroom. Hong Kong. 2000.

5. Cummings, Hildegard. *J. Alden Weir A Place of His Own.* Fusscas, Helen K. Larkin, Susan G. The William Benton Museum of Art, The University of Connecticut. Storrs, Connecticut. 1991.

6. Downing, Andrew Jackson. *Rural Essays.* G.P. Putnam, New York, New York. 1853.

7. Everhart, William C. *The National Park Service.* Westview Press, Inc. Boulder, Colorado. 1983.

8. Grattan, Virginia L. *Mary Colter: Builder Upon the Red Earth.* Northland Press Flagstaff, Arizona. 1980.

9. Haley, Jacquetta M., editor. *Pleasure Grounds: Andrew Jackson Downing and Montgomery Place.* Sleepy Hollow Press, Tarrytown, New York. 1988.

10. Krutch, Joseph Wood, editor. *Walden and Other Writings by Henry David Thoreau.* Bantam Books, New York. 1962.

11. McClelland, Linda Flint.*Building the National Parks.* Johns Hopkins University Press, Baltimore and London 1998.

12. Shepard, August D. *Camps in the Woods.* Architectural Book Publishing Co., Inc. New York, New York. 1931.

13. The Yellowstone Association for Natural Science, History, and Education. *The Army Years 1886-1918.* A tourist brochure available at the Mammoth Hot Springs Visitor Center.

14. Waldman, Diane. *Michael Singer.* The Solomon R. Guggenheim Foundation, New York, 1984.

15. Wirth, Conrad L. *Parks, Politics, and the People.* University of Oklahoma Press, Norman Oklahoma. 1980.

16. Young, Dorothy Weir. *The Life and Letters of J. Alden Weir.* Yale University Press, New Haven, Connecticut. 1960.

17. Zaitlin, Joyce, AIA. *Gilbert Stanley Underwood: His Rustic, Art Deco, and Federal Architecture.* Pangloss Press, Malibu, California. 1989.

18. Zaitzevsky, Cynthia. *Frederick Law Olmstead and the Boston Park System.* The Belknap Press of Harvard University Press. Cambridge, Massachusetts. 1982.

Articles

1. "American Artists Close," *The New York Times*, 15 June 1889, 4.

2. "Grander Visitor Center for the Grand Canyon", Iniguez, Lorena, *Los Angeles Times*, October 22, 2000. pp. L3.

Web Sites

1. http//:www.mission66.com

2. http//:www.nps.gov

3. http//:www.nps.gov/wefa/

4. http//:www.cr.nps.gov/history/online_books/allaback/index.html

5. http//:www.nrel.gov/buildings/highperformance/zion/.htm

Acknowledgements

I would like to thank all the professors and teachers who have greatly influenced and inspired me over the years. This thesis is a culmination of many years of learning from excellent professors and teachers at every level.

Fairfield Prep	Frank Bramble
Miami University	Catherine Cresswell
	Tom Dutton
	Jose Garcia
	Fuller Moore
	John Reynolds
MIT	Michael McKinnell
	Jan Wampler
Harvard	Ann McGhee

Thank you to everyone who put me up for the night(s) on my cross-country trip last summer. I would not have been able to make the trip without your hospitality and kindness (in order of visitation).

Saratoga Springs, NY	Timothy and Kathleen Young
West Middlesex, PA	Paul McCann
Chicago, IL	Tarek Gamal El-Dine
Madison, WI	Loren Osgood
Jackson, WY	Russ Isaly and Kathryn Meier
Salt Lake City, UT	Mike McAllister
San Francisco, CA	Jose and Laura Figueirinhas
Los Angeles, CA	Chris Jonic
Los Angeles, CA	Henry and Nancy Steifeling
Los Angeles, CA	Ben Chung
Denver, CO	Matt Kennedy and Kyle Kreischer
St. Louis, MO	Stephanie Halpin and Brian Kolman
Cincinnati, OH	Kyle Christoph
Piqua, OH	Neda Zarraby and her family
Columbus, OH	Carter Bean and Brittany Kistler

A tremendous thank you to Markus Elkatsha for joining me on our cross-country experience.

I would like to thank the entire staff at Weir Farm for letting me into the visitor center to ask questions during off-hours. A special thank you to Roy Cortez for granting me permission to use Weir Farm as the grounds for the exploration of the ideas in this thesis. Thanks to Cliff Laube, Michael Singer, and Anne McGhee for travelling to Boston to participate in my final review.

I would like to thank the Goldsmiths for allowing me to take photographs of their property. I hope your wishes are granted.

Many thanks to the following people who helped in the producing this thesis:

Model makers
Markus Elkatsha
Melisa Whelden
Proof readers
Carol Jonic (mom)
Melisa Whelden

Thank you mom and dad for supporting me throughout my education and helping to fund my architectural explorations.

Finally, I would like to thank Jan Wampler for advising me, hiring me, and mentoring me during my years at MIT.