ROOSEVELT CHAPEL

YELLOWSTONE NATIONAL PARK - WY
Introduction
SONG OF THE UNIVERSAL

1. Come said the Muse,
   Sing me a song no poet yet has chanted,
   Sing me the universal.

   In this broad earth of ours,
   Amid the measureless grossness and the slag,
   Enclosed and safe within its central heart,
   Nestles the seed perfection.

   By every life a share or more or less,
   None born but it is born, conceal'd or unconceal'd the seed is waiting.

2. Lo! keen-eyed towering science,
   As from tall peaks the modern overlooking,
   Successive absolute fiat issuing.
   Yet again, lo! the soul, above all science,
   For it has history gather'd like husks around the globe,
   For it the entire star-myriads roll through the sky.

   In spiral routes by long detours,
   (As a much-tacking ship upon the sea,)
   For it the partial to the permanent flowing,
   For it the real to the ideal tends.

   For it the mystic evolution,
   Not the right only justified, what we call evil also justified.

   Forth from their masks, no matter what,
   From the huge festering trunk, from craft and guile and tears,
   Health to emerge and joy, joy universal.

3. Over the mountain-growths disease and sorrow,
   An uncaught bird is ever hovering, hovering,
   High in the purer, happier air.

   From imperfection's murkiest cloud,
   Darts always forth one ray of perfect light,
   One flash of heaven's glory.

   To fashion's, custom's discord,
   To the mad Babel-din, the deafening orgies,
   Soothing each lull a strain is heard, just heard,
   From some far shore the final chorus sounding.

   O the blest eyes, the happy hearts,
   That see, that know the guiding thread so fine,
   Along the mighty labyrinth.

4. And thou America,
   For the scheme's culmination, its thought and its reality,
   For these (not for thyself) thou hast arrived.

   Thou too surroundest all,
   Embracing carrying welcoming all, thou too by pathways broad and ne
   To the ideal tendest.

   The meaur'd faiths of other lands, the grandeurs of the past,
   Are not for thee, but grandeurs of thine own,
   Deific faiths and amplitudes, absorbing, comprehending all,
   All eligible to all.

   All, all for immortality,
   Love like the light silently wrapping all,
   Nature's amelioration blessing all,
   The blossoms, fruits of ages, orchards divine and certain,
   Forms, objects, growths, humanities, to spiritual images ripening.

   Give me O God to sing that thought,
   Give me, give him or her I love this quenchless faith,
   In Thy ensemble, whatever else withheld withhold not from us,
   Belief in plan of Thee enclosed in Time and Space,
   Health, peace, salvation universal.

   Is it a dream?
   Nay but the lack of it the dream,
   And failing it life's lore and wealth a dream,
   And all the world a dream.
The Universal.

That elusive, difficult to describe quality that Webster attempts to define as "embracing all created things". What architect Malcolm Wells hinted at when once speaking of design and architecture, "...and perhaps most important of all, the creation in our architecture that says at a glance we belong here, we love it here, we have a future here" (Wells, 1981). A quality that needs little or no explanation; there’s something inherent in the design that a person instinctively responds to, is magnetically drawn to, but more than likely can't really say why.

But how do you go about capturing this "universal" quality in a building, or any creative endeavor? Is it even possible to consciously do it, or is it a "happy accident", evident only after a piece of work is completed? With this as a starting point, I began this thesis with a question: What is the "it", what quality (as it pertains to architecture) makes a building great - beautiful, inspiring, and timeless - drawing people to it almost mystically, while others (the majority actually) inspire nothing more than indifference, uneasiness, or downright hostility. And if it is possible to name the
characteristics of the quality, is there any possible way this "universal" quality could be broken down into a set of rules or guidelines?

History is ripe with examples of architecture that somehow captures a universal quality - from the Parthenon to Medieval Gothic cathedrals to modern day examples such as the Vietnam War Memorial in Washington. All capture a unique essence inherent in their design. Very different projects from very different eras and circumstances, yet all have the power to evoke strong, emotional responses in human beings; "something" triggers inside a person when encountering one of these spaces. With an overwhelming multitude of examples throughout history to choose from, I had to narrow my search considerably. I have always regarded the work of Frank Lloyd Wright as being successful in capturing this universal quality to a very large degree. Being a great admirer of Wright's work for a long time now, I have always been fascinated with his motivations and reasons for why he did what he did. I've endeavored to learn the principals behind his work and to not be content with merely "borrowing" the obvious surface effects of his buildings and applying them to my own. Unfortunately, many designers who should know better are more than happy to stop at that.
"But how in the world do you produce the Wrights-to-be? There is no way. The man's architecture simply can't be packaged and labeled. Nothing is worse, either, than half-baked versions of Wrightian buildings. Perhaps they should never be attempted, and the schools of architecture are probably right in refusing to encourage anything that's too obviously rehashed Taliesin."

MALCOLM WELLS
I feel there is a wealth of knowledge to be mined from what Wright showed us, if we are willing to do some digging and exploring - to learn the principals behind what drove his designs, the result hopefully being new directions in architecture that don't end up looking like a Wrightian "rip-off". So, a second question arose as I dug deeper: Can the values of Wright's work be drawn upon without simply cloning?

Interestingly enough, Wright himself hinted somewhat at this when he stated, "There are enough types and forms in my work to characterize the work of an architect, but certainly not enough to characterize an architecture" (Wright, 1960, p.186). The goal for this thesis then, is to learn, understand, and internalize Wright's design principals and patterns, then to design a structure utilizing those principals, with the final result being a building that is non-Wrightian, but is capable of evoking the same intuitive response as Wright's.

(At this point, I'd like to make clear that I assume the reader is familiar with Wright's buildings, so I won't go into any detail about any one particular design. What follows is meant as a general overview of the basis of this thesis. I'd also like to point out that this is meant as an exploration; you may or may not agree with the findings, but from my perspective, after analyzing the information I uncovered, certain distinct patterns became evident in
Wright's work. These patterns are open to interpretation and are not meant to be absolute. I only would like to state that they make a great deal of sense to me, and feel they hold very valuable lessons in designing successful architectural spaces that people get excited about being in.)

Having focused my study on just Wright buildings, I had the good fortune to happen upon a text that would prove quite valuable in my research. That book is The Wright Space - Pattern and Meaning in Frank Lloyd Wright's Houses, by Grant Hildebrand, a professor of architecture at the University of Washington. In it, Hildebrand sets forth his observations and conclusions as to certain patterns evident in Wright's residential construction that, once he found a successful and pleasing "pattern", he followed that pattern throughout the remainder of his career. Granted, my thesis involves an institutional building and not a residence, but the same principals can apply regardless of the type of building being done. Much of Wright's commercial and institutional work follows the same general patterns found in his residences to one degree or another.

In his book, Hildebrand proposes that there exists six distinct and definite major aspects or "patterns" to Wright's houses. Those aspects are: prospect and refuge, complexity and order, and to a lesser, but still important degree, hazard and mystery. The seed for the research that Hildebrand undertook
was a book written in 1975 by English geographer Jay Appleton entitled *The Experience of Landscape*. In it, Appleton theorizes that there exists a juxtaposition between two complimentary conditions he calls "prospect" (a condition in which one can see over considerable distance) and "refuge" (a place where one can hide or see without being seen). He goes on to say that humans seek out these two conditions because of some inborn, genetically-driven, and deeply-felt need for survival that has existed since the dawn of man and was originally critical to mankind's survival. But such a condition must have been sought, originally, because it was intrinsically pleasurable to our species. In combination, prospect and refuge reinforce one another. Appleton also calls the conditions "cave" (refuge) and "meadow" (prospect), referring to earlier times when hunter/gatherers were the rule, and humans could hunt without being, in turn, successfully hunted. In simplest terms, "cave" has connotations of safety, security, darkness, and a sense of containment; "meadow" conveys images of openness, of release, light, possible lurking dangers and especially vulnerability.

Hildebrand finds a striking correlation to Wright's buildings. He "began to recognize that Wright had developed with consistency and richness an architecture that stimulated powerful, genetically driven responses of Homo
This idea of prospect and refuge comes into play in a very major way in virtually every home he did (with the only exceptions being the temporary desert camp Ocatillo, and the permanent Taliesin West campus, although they took some of these principals in new and different directions).

Wright’s houses weren’t perfect. The well-known stories of leaky roofs and details that won’t work are legendary. His furniture was impossible to sit in, and the arrangements of it that he insisted on were many times static and just plain unreasonable. The spaces themselves usually overpower anything that goes on inside them—in a way they almost become museum pieces meant to look at, but not live in. But what was it about these houses that, despite some obvious negatives, clients (and the general public for that matter) valued them so highly, so many were built—that so many people are immediately intrigued and drawn to them? Something about them, some universal quality, transcends the problems and engenders a special, compelling appeal towards them, a devotion if you will.

Hildebrand goes on to assert that preferred architectural experiences tend to be relatively rich in both complexity and order, again correlating with Appleton’s findings that these characteristics have a certain survival value as
well as a pleasure stimulus. Complexity and order constitute a mutually complimentary pair (as do prospect and refuge) and again, can be viewed in the context of having its basis in biology. There is a deep-seated human tendency that preferred environments "seem to exhibit some combination of "diversity, structural complexity, novelty, incongruity, or surprisingness" in conjunction with some perceived order or resolution........to cohere a rich complexity within a pervasive order" (Hildebrand, p.29). The survival aspect enters the picture by humans being able to recognize not only members of their own species in order to survive, but being able to differentiate between those members. Being able to discern an environment suitable for habitation from one that is not was also quite necessary.

Basically, people feel comfortable with likeness and difference. Being able to place something in a category or ordering it, then finding variations in the category while still maintaining the original integrity of it is something humans love to do. As an example, say someone likes to collect salt and pepper shakers. They collect hundreds, thousands even, each different and unique in its own way. But the underlying common thread is still there - the are all still salt and pepper shakers despite their variations, and the person collecting them can never seem to get enough of them. ".....Given the pleasure basis of survival
behaviors we, as a surviving species, derive a built-in delight in such categorizing and differentiating. From this, it is a short step to an explanation of the familiar observation that experiences or artifacts ranked very high in aesthetic value usually exhibit high levels of both complexity and order (Hildebrand, p. 30).

The fifth major characteristic of Wright's work is that of "hazard." Hildebrand prefers the term "threat." Whichever way you wish to name it, the terms imply danger or, as usually associated with architecture, daring or the dramatic. Typical hazards could include societal intrusiveness, hostility, climatic, fire, or earthquakes, but in general, these don't directly affect the design of a building (and if they do, it is usually in the structural sense).

The hazards that concern us most deal with water and high places. Although they may not directly threaten, they have the power of suggestion of danger. Rushing water or fear of being on a high ridge or bluff will always have a "tangible and apparent presence." Herein lies the appeal of strolls along cliff edges, or of sailing in choppy seas. More to our purposes, we all know the intensification of pleasure brought about by rain pounding on the roof while we are tucked up safe in bed, or by the storm raging outside while we are gathered around a fire. In each case we are programmed to find excitement in
the presence of discomfort and even danger; we also find an intuitive pleasure in its dramatization of the value of security" (Hildebrand, p.94).

The last condition of fundamental human appeal is that of "mystery". Generally speaking, it is enforcing a sense that an even more interesting space lies beyond the space a person may be presently experiencing (i.e. sensed, but unseen). Somehow, through manipulation of forms or "screens" of one sort of another (be they columns, walls, or half-walls), they tend to block off a view either to an adjoining interior room, or to an exterior view. You see spaces beyond spaces but are not quite sure what lies in that next space. If you desire to find out what is beyond, you must initiate an investigation. You must move deeper into the space to find out what is going on.

Once again, the "mystery" component has it's basis in biology; "For the behavior induced has a survival value. Either danger or delight may lurk in the suggested but unseen environment, and it is useful to the creature to find out which one it is. The stimulus is the suggestion but not the immediate revelation of distant spaces. The response is exploration to seek knowledge or information about those spaces. Thus the information-seeking component of our makeup is brought into play, driven and rewarded by the pleasure we find in deploying it" (Hildebrand, p.91).
Hildebrand states thirteen characteristics that are true of Wright's "pattern", and each, in varying degrees, reinforces or creates the feeling of prospect and refuge, the comprehension of complexity and order, and perhaps the apprehension of mystery and hazard. These occurred most notably during the Prairie house period, and while not all of the houses contained all thirteen aspects, most of them had at least ten of them. What were the basic building blocks Wright used? Hildebrand lists them as follows: "The major spaces are elevated well above the terrain they overlook. The fireplace is withdrawn to the heart of the house and to the internal edge of the room it serves. Its withdrawal is emphasized by a low ceiling edge and flanking built-in seating and cabinetwork. The ceiling forward of the fireplace zone sweeps upward into the roof, echoing its form. The distant edges of the ceiling then return to a low elevation like that near the fire. There are interior views to contiguous spaces seen beyond architectural screening devices. Glass and glazed doors are located on walls distant from the fire. A generous elevated terrace lies beyond. The exterior consists of deep overhanging eaves, an evident central chimney, broad horizontal groupings of window bands, and conspicuous balconies or terraces. The connection from exterior to interior is by means of a long and circuitous path" (Hildebrand, p.25).
One of the most important aspects of applying these various characteristics, and this is critical, is that Wright knew just how much of each condition to include - how much is too little, how much is too much. He knew, instinctively, the right amounts of each to include in his designs. The degree to which they appear in Wright's work is unique; other residential architecture possess some of these traits to one degree or another, but not like Wright's. He knew what to leave in, what to take out, and how much of each condition to include. Therein lies his genius.

Were the patterns consciously followed or not? No one knows for sure, but it's safe to say that among Wright's contemporaries, none were able to obtain such a level and richness of manifestation as he did - his way was stronger and more enduring than that of any of his peer's work. Again, many were content to take the surface effects of his buildings and simply apply them to their own--without ever fully understanding the reasoning behind why Wright did what he did.

"Some terms used to describe architectural form and space, such as low and tall, or closed and open, represent mutually exclusive conditions. But the terms that have dominated this discussion of Wright's houses are not of that sort. An increase in complexity need not mean a decrease in order, nor does an
increase in prospect have to be accompanied by a decrease in refuge. As we have seen, those houses possess a great deal of both complexity and order, and numerous and rich reduplications of both prospect and refuge" (Hildebrand, p.146).

"The pattern, as exemplified in these and the many other houses by Wright that embody it, works its hypnotism by presenting conditions of habitation like those which, as a species, we have from our earliest beginnings found to be magnetically appealing. The exteriors of his houses convey rich symbols of both refuge and prospect, which irresistibly draw us to their interiors. They are reached by the narrow passageways through which, in our deepest ancestry, we withdrew from the world of the chase into the cave or grove, the protected and protecting sanctum. There, gathered around the fire hearth, seeing without being seen, we viewed and view the hunting ground beyond, and move from chamber to chamber within the filtered light of the narrow, overbowered forest path. Both the forms and the spaces are complex, far more so than in usual dwellings of similar size. But the relationships that reveal themselves around us, although atypical in terms of usual architectural experience, are intrinsically repetitive. The constant ceiling edges recall the external eaves under which we passed on entry - and so on, through the whole series of irresistible
manipulations. Through half a century Wright continued to use, through endless permutations, these devices of prospect and refuge, complexity and order. They worked, and still work, with enormous effectiveness, because they stimulate those responses that are a part of why we are here" (Hildebrand, p. 165).

With that, I was ready to begin.

"In the future, whatever the source of our creativity, we have the potential to build buildings... that will not only accommodate our functional needs, but will stand as models for the best of our ideas. We have the power and responsibility to shape new forms in the landscape—physical and spatial forms that will nourish and express that all-important intangible of the human condition at its spiritual best. As architects, as transformers of the landscape, we MUST."

FAY JONES
An anonymous donor has pledged financial support for the construction of a non-denominational chapel to be located in Yellowstone National Park. The site chosen is on the northern end of the park approximately one mile north of the Tower Junction/Roosevelt Lodge intersection. It will sit above the junction of the Yellowstone and Lamar rivers with access via a bridge across the Lamar river. On-site parking will be available, although it will be on the south side of the Lamar, and the chapel will be on the north side.

The structure will be known as the Roosevelt Chapel in honor of Theodore Roosevelt - namesake of the nearby lodge, and an early advocate and supporter of Yellowstone. The donor has named the project, and has established certain criteria for the building (i.e. what the design should accomplish). The structure itself should blend with the landscape, and at best, should almost become one with its surroundings. A visitor to it should ultimately lose sense of where the land ends and the building begins.

As crucial as blending with the surroundings are, the most important element, and central to the experience of visiting the chapel, is the quality of light and how it enters the building. A diffused, soft light is required in the main sanctuary, with direct light penetrating openings during various times of the day. Visitors should never have sunlight directly in their eyes, but
nonetheless, the space should be flooded with warm, glowing light. Reflected light is highly desirable, adding an other-worldly dimension to the project.

The chapel will sit on the west side of a natural bowl. This bowl will be utilized the most during the peak tourist months of June, July, and August for outdoor services and gatherings. With an abundance of vegetation to the north, quiet, individual areas for personal contemplation should be considered - a visitor could conceivably be very much alone even though many other park visitors are quite close by.

As stated earlier, the chapel will be non-denominational, with services typically occurring Sunday mornings for park guests and at any other times deemed useful. The National Park Service, which would own the building, would also utilize it for their own meetings and conferences as needed. In the future, the space could also be used for guest speakers, or possibly even musical or dance performances. In light of this, it will become much more than just a chapel; it essentially becomes a multi-use facility.

It has been determined that in order to carry out all of the special required functions (and because of the nature of what goes on here), the chapel will need to be on two levels. The following criteria have been established as requirements:
On the lower entrance level:

1) An office for a park service employee that will include a reception/information area. This office will be manned from 6 a.m. to midnight during the summer months.

2) A multi-purpose room to be used by park visitors for special occasions and meetings, as well as the park service staff.

3) An elevator to the main level of the chapel.

4) Storage/utility/maintenance areas for the building including enough storage for a portable P.A. system and small stage, chairs, and lawn equipment, etc.

5) Reading room/lounge. This will also have a dual purpose as an area to be used by visitors for special occasions, as well as day-to-day usage.

6) Restrooms easily accessible from outdoors.

On the upper level:

1) Lobby/entrance area. Should incorporate restrooms as well as the elevator from below.

2) Fireplace; to be a focal point of the entry and sanctuary, as well as a welcoming element.

3) Main sanctuary/meeting space. Should accommodate 200-250 people in a sloped, theatre-type layout to accentuate the natural hillside contours. Handicapped seating should be made available.

4) Altar area. A relatively small area for a speaker or performer with an almost stage-like feel to it. A small choral group may also need to perform in this area at some time so space should be allotted for it. Handicapped access should be provided via a stair lift.
5) Adequate access to outdoor terraces and plazas. Easy and effortless access is a must. During good weather, doors will be left open to facilitate the flow of visitors.

Each floor should be approximately 6,000 s.f. in size.

Immediate outdoor area:

1) The bowl near the entrance should remain as is as much as possible. A bell tower should also be incorporated as a welcoming element.
The Site
The site chosen for Roosevelt Chapel is near the north boundary of Yellowstone National Park. It is in the Tower-Roosevelt area, approximately one mile north of the Roosevelt Lodge on the highway to Cooke City. This site was chosen for several reasons. First, this portion of the park has always been a favorite of mine; on my first visit to Yellowstone, Tower/Roosevelt was what I experienced first, and it holds a special place in my heart. Aside from its natural beauty, this area has a wonderful and welcomed tranquil quality about it. Much of it seems removed from the hub-bub of the rest of the park, thus offering an atmosphere of solitude, introspection, and time for reflection.

The building location, at the junction of the Yellowstone and Lamar rivers, affords an unparalleled site in terms of beauty, serenity, and a prospect-dominant siting of the building. The entrance, off of Highway 212, is at an existing fishing access. This highway remains open year-round (the only one inside the park that does) thus providing year-round access to the chapel. At some point in the past, a road existed down near the rivers to what will become a new parking area for visitors, so access to the immediate area would be quite simple to construct. A broad, flat area near where the rivers merge could provide enough parking, at least initially. If more were required, a remote lot near Roosevelt Lodge could be employed with "shuttle" service utilizing draft
horses already housed at Roosevelt. (The lodge is the headquarters of most of the equestrian facilities in Yellowstone). The on-site parking would sit just to the south of the Lamar river, and east of the Yellowstone river. A bridge would be constructed over the Lamar river to the chapel itself. This bridge would serve as an important transition to the pilgrimage-like experience of walking to the chapel. Aside from offering spectacular views of both rivers, a visitor would come in close contact with the rapid-running water, their first contact with a "hazard" aspect of the experience as discussed earlier. The bridge, while normally being restricted to pedestrian use, would nonetheless be constructed in such a way that vehicles could cross it if need be. Maintenance and emergency vehicles would of course need access to the structure itself; handicapped visitors as well could utilize a small parking lot much closer to the base of the chapel if the lot provided proved to be too long of a distance for them to travel.

The building itself is sited on the west edge of a naturally occurring bowl, oriented slightly on an axis that runs northwest to southeast. Rock outcroppings are numerous, prominent, and beautiful - most notably at the southern and eastern portions of the area. The bowl is situated at the base of a medium-sized hill, with elevations changing rapidly to the north/northeast.
Pine and aspen trees are in abundance on the entire site, mostly following the slope of the hill. Sagebrush covers nearly all the ground in this portion of the park, and its fragrance dominates the scene. Winds can get gusty at times, but the site of the chapel is tucked far enough back into the bowl so that it avoids the brunt of them. Southern exposure is optimum on this site; there are few trees and no large mountains to the south adjacent to the site, but are across the valley and quite a distance away. Early morning sun should not present a great problem for early morning activities (at least during the peak visitor months of summer). Because of the thrust of the hill on the east side of the bowl, as well as additional mountains to the east, and a profusion of coniferous trees, direct sun would not hit the chapel until nine or ten in the morning, which by then should be high enough in the sky to not present much of a problem.

The path leading to the chapel from the parking area rises gradually but continually, eventually terminating at the base of the building. Since the chapel sits so high on the rim, the remainder of the bowl will stay more or less intact, with the chapel's altar area cantilevering out over it to a certain degree. This provides a natural outdoor amphitheater that will be utilized for park service employees and visitor gatherings as weather permits. With its
close proximity to the forested area on the slope of the hill, it will provide a protected setting for contemplation, picnics, meetings, services, etc.

Reaching the main entrance to the chapel will be via a set of winding stairs that will eventually lead a visitor to near the top of the west rim of the bowl, affording an excellent view in almost every direction. Directed views (made possible by carving away a portion of the hillside) along the entrance path will enhance the experience. Entering the chapel from the west, the building cascades down the hillside, the seating following the natural contours. Excellent views of the surrounding mountains and river valleys will be afforded to virtually all persons attending a service in the chapel.

"I sought some enduring qualities, something of the timeless qualities... I certainly never sought the novel or the bizzare... I've never been interested in shock as a means... Fads or trends are almost always misleading.... I am trying to do work in a process that is based on time-honored principals."

FAY JONES
View looking north, from highway entrance
Close-up views of the building site
Views looking east, up the Lamar River valley
Bibliography


