THE ROLE OF NATURE AS
SYMBOLIC CONTEXT FOR THE BUILT
ENVIRONMENT.

A CERAMICS FACILITY IN
A MOUNTAIN CONTEXT, MERGING
TWO ART DISCIPLINES:

ARCHITECTURE AND CERAMICS

by

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of the requirements for the degree
of
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INTRODUCTION

The format of this book is such that the topics begin broadly and through successive chapters converge upon where I presently am and eventually will determine the final design. Upon reading what I have written on up to now, I realize that nearly everything is personal, developed through my introspection of the subjects and how little purpose they seem to serve at the present moment. Be that as it may, I also know from past experiences, that it will be of more importance when the design begins to come about.

I also now realize the cloudy nature of writing about the sub-of "art". In order to make any sense out of this project that I've chosen, the things expressed are in terms of my own beliefs and appear in somewhat of a monologue with myself. The thoughts in the sections Man and Art: Struggle and Perception of a Language, Ceramics and Man: Values and On Mountains are developed such that my versions come about and are then reinforced by those who can say it more eloquently than I. Also, the topics and their arrangement will allow me a more continuous line of design thought than the usual random and sporatic one that happens to me often.

These are difficult topics to pin down as witnessed by the questions posed in the opening of On Mountains, but fully realizing this, I still chose to at least attempt them (for my own good) with my very limited expertise. I guess I felt I had to in order to establish personal foundations from which my own design process comes from since I feel more comfortable designing this way;
using subjects and references such as I have, than say, a more pragmatic stand that has its own vulnerabilities.

“One crucial quality of creativity is an ability to hold onto confusion until confusion becomes clear.”

- Seamus Heaney
Simply stated, this is an exploration into how man builds and how Nature 'builds'; the relationships between the man-made environment and the natural context in which it occurs. In other words, responsible architecture. Responsible to both Nature, who came first, as well as man, who must build his places within the confines that Nature allows him.

What follows is a process leading up to the design of a facility that allows for artists to live, work and experience the natural context which is so vital to their medium—ceramics. The natural context in this specific case is that of mountain, as opposed to plain, sea coast, prairie or desert.

The site is located on Casper Mountain, which oddly rises 2430 feet up off the central Wyoming plain five miles due south of Casper, Wyoming. Quite small in scale, length and breadth (just 16 miles long and 4 miles wide), when compared to its companions, the Big Horn Mountains to the north and the Tetons of the Rocky Mountain chain to the west, Casper Mountain and its smaller brother, Muddy Mountain, appear like two giant whales arching their mottled green backs up out of the endless mist green sea of sage, frozen in their migration to the east.

The east-west trending, double-plunging, assymetric anticline of the pre-Cambrian Era has throughout time, altered the orientation and direction of both Nature, (as in the case of the Platte River flow, the relatively more lushness of the river basin floor and the prevailing winter wind patterns), and man, as witnessed by the linear
growth of the city and its parallel asphalt pathway to the north, I-90.

So it seems that, to man, mountains (no matter what scale) have always played the role of obstacle at this intersection of vertical and horizontal; the heavenly dwelling place of the mountain gods confronting the tiny, but industrious, mortals of the flatlands.

Thus, the obligation of the architect and his art—- to sensibly design within the mountain context and merge with the gods, not be obstructed by them. It is this merging, or compatibility if you will, of not only man and Nature, but of art and art,(architecture and pottery) that is the intent of this investigation.

"All of the architectural arts begin in the shaping of the cup and platter, and they end up in a glorified roof."

—John Ruskin
This project undertaken is, as previously mentioned, one of personal interests. It will hopefully reflect my attitudes at this present time in space of my architectural education. The feelings expressed are strictly my own and are most certainly not naive enough to suggest that all the answers are known, for emotions and attitudes change throughout time, with further discovery and experiences.

The project involves pottery—- an art. So to it involves architecture, man and Nature—- again all arts; all complementary artistic disciplines, yet all too sadly, not thought of as inter-related often enough. Sad also, is the fact that of these four, it is only man who tends to separate himself as though somewhat wiser and superior from the rest. This mentality manifests itself in any poorly laid out housing project just as well as in any large metropolitan fabric.

Casper, Wyoming is not free of innocence from this grave error either. With the recent large scale expansion in the oil/gas exploration and production, the population of this area has nearly doubled from 45,000 to 86,000 over an eight year period. Along with this human expansion, so to his by products.

The spread of residential, commercial and light industrial built environments is very evident in the town's fabric, and it changes upon my every return. The highly technical and economical hand of the oil industry has touched nearly everything that once seemed to be natural and self-sufficient within the environment. An example of this irresponsible developmental growth is very evident (not to mention disturbing) along the short and once serene drive from the city's
edge to the foothills of the mountain. Where once, lazy field horses grazed peacefully as part of what seemed right, there is now an 800+ unit residential development thrust onto the gentle rolling hills. With nearly 75% of these units erected in but one summer, to the west of the mountain approach, one was not the least surprised when, with the advent of winter and the blustery winds that are well-known at the base of the mountain, that this linear development of housing acted as a man-made snow fence and causes much havoc with the deposit of snow on the leeward side--- the asphalt road. With some close attention paid to this micro-climate, perception that the ground wind effects were partly responsible for keeping the narrow two-lane road relatively clear of snow and thus in the event of no other feasible site, the developer should have at least "designed" a bit more carefully with this as a consideration.

Another example of man's numbness to Nature occurs in the industrial/commercial region to the north of town. Here, where once existed scattered rural-scale houses and ërms, larger "neighborhoods" of pre-fabricated metal buildings now dwarf the originals in cul-de-sac after cul-de-sac of galvanized roofed boxes upon the horizon. Sadly, the attitude of "time is money" that is so prominent in the oil field becomes quite visible here. With the vast quantities of mechanical equipment utilized in the rugged functions of drilling for oil and gas, the need for quickly erected re-build shops outweighed the responsibility to the environment. Rather than spend the time evaluating the landscape and utilizing sensitive design, both the realtor, who mindlessly gridded off the land, and the owners opted for the quick solution; both being at fault, for as is becoming evident now
and surely in the future with the depletion of the natural resource, these industries and their related transient populations will evacuate the area and leave a dying spider-webbing of tin sheds around the periphery of town.

Thus the desire for this project, a ceramic artists facility in the mountains to the south of town, rising above all the clutter and allowing for the creation of art, in a natural environment, void of the many man-made and man-caused distractions. There is a need for a place, a center if you will, to foster and promote a stimulus for local artistic ability and interests and establish a recognition within a region that is presently more lacking in this discipline than others. Also there is a need to allow for the provision of knowledgable input from beyond the immediate vicinity, as in the case of visiting artists coming to vacation, give workshops and create pottery of their own.

As mentioned earlier, this facility should lend itself to the development of local talent. While not the primary user-intent, it could possibly be utilized by the junior college art program at the base of the mountain to aid the funding and sponsoring of ceramic workshops, as well as student participation in these workshops.

Due to the orientation of this rapidly growing college, pinched in between already established residential and city establishments on the west and east respectively, it seems ironic that the only direction for which growth can occur is towards the south—the mountain.

Be that as it may, the establishment of a facility in the mountains could only enhance the linear progression of the college by providing a place where knowledge and stimulation can occur even though
not part of the college, the two entities can obtain compatibility out of necessity and beneficial dependence.

Another aspect of this facility would be the community involvement and recognition, both in artistic and economical appreciations. Since the county has recently completed the first stage (forest cut and roadbase) of a loop road that will eventually allow the community to travel up the mountain, east along the top of the mountain to where it eventually slopes back to the plains and then return north and westward to the town completing the loop. This will allow for a pleasant excursion into the natural context of the mountain that was previously inaccessible to but a few. The site for this project lies just off this route adjacent to the high plateau that exists between Casper and Muddy Mountains. This lends itself not only to mere exposure but perhaps to exhibition capabilities that again may benefit both the artist facility and the community, for it is feared by many and stated by Marguerite Wildenhain that:

"Crafts, as they were known in the eras before the Industrial Revolution, cannot and do not exist today. Since they are not, anymore, an essential part of the economy, they lost their importance in the life of a nation. Instead the crafts have mainly become an artistic endeavor for those who have a deep urge to make personal things with their hands, for all those who are not satisfied with our mechanised way of work and life."

Finally, this project appeals to my own personal needs, allowing me to culminate my past six years here by exploring something appropriate that has not only perplexed and fascinated my interests, but also has frustrated me greatly. My search for an understanding of the art disciplines has haunt me continuously since my exposure to architecture and later, with the advent of my ceramics undertakings,
This is the merger that was mentioned earlier, and it has allowed me to finally break away from architecture and finally get my hands on another aspect of the fine arts. Granted, even though this merger only involves two disciplines, I am beginning to discover much about all the arts as well as grasping so much more with respect to the meanings that artists place in the efforts.

"To be educated is not to be taught, but is to wake up."

-Jean Henri Fabre
"Architects, sculptors, painters, we must all turn to the crafts. Art is not a profession, there is no essential difference between the artists and the craftsmen. In rare moments beyond the control of his will, the grace of heaven may cause his work to blossom into art. But proficiency in his art is essential to every artist. Therein lies the source of creative imagination. Let us create a new guild of craftsmen without the class distinctions which raise arrogant barriers between craftsman and artist. Together let us conceive and create a new building of the future, which will embrace architecture and sculpture and painting in one unity and which will rise one day towards heaven from the hands of millions of workers like the crystal symbol of a new faith."

Just as this proclamation by Walter Gropius, carved in wood at the Weiner Art School by Feininger states, I too, feel a need for a new attitude about the arts and crafts; an entire new way of looking at the crafts that is seemingly fading rapidly in our society today. And thus the rationale behind this ceramics facility. The project can answer the needs stated in the previous chapter, both, generally by means of aiding the overall ceramics discipline, and specifically, by creating the opportunity for a local region to benefit from its presence.

This place will provide the opportunity for artists to gather, live, work and relax together for varying amounts of time in a built environment within a natural context conducive to artistic stimulation and contemplation. Perhaps the label "vacation retreat" may conjure up more real images, but as one local potter implied that he (and his fellow artist comrades) do not differentiate between work and relaxation and visa-versa.

But even so, artists from all disciplines do greatly enjoy
going to other places to co-mingle with others of similar interests. They enjoy the sharing of stories, techniques and criticisms, as well as just seeing old friends and meeting new ones. It is in places such as this that "centers" occur. Centers of life, centers of art and centers of creation. It is times spent in such places that celebration happen that offer relief from the everyday environments that confront the artists at their own personal studios and offer, too, the mental release that may build up in an artist's mind over an extended period of time. Celebrations such as experiencing entirely new environs, meeting people, sharing and cooking new food recipes, telling stories and of course, the all important celebration of pottery; exhibits attended, new discoveries and technologies, helpful hints and the highs and lows of the grand opening of a final glaze kiln and witnessing the results of their hard efforts.

As commonplace and everyday as some of these occurrences may seem to most, they are none-the-less the spice of life that is rarely seized up in today's busy world of existence. This interaction and communication at places different from one's own studio is very important to an artist's frame of mind, no matter how tangible, as so exemplified by the famous potter Bernard Leach's treks to Soetsu Yanagi's pottery in Japan, then back to his St. Ives studio in England; and the results thereof from this exposure in his work.

In addition to these professional artists facilities, there should be a flexibility within the design to take into consideration perhaps, some level of student involvement on a limited basis, say workshops for example. Beyond the workshops, the undergraduate
participation should not be allowed to continue; just graduate level student participation. This can happen by means of extended visitations to the facilities by invitation and through an extension study program of the junior as well as other colleges. This would be pending the development of such an extended graduate program, but again, the opportunity will at least be there.

Justifying this attitude of user-type, I feel that the atmosphere at the pottery should be one of a professional quality versus the more general classroom the colleges tend to foster. This attitude also parallels many of the established artists and graduate students' feelings that were interviewed. The graduate level student will exhibit the professional seriousness and knowledge of the craft along with the established artists in attendance. This pragmatic aspect will also influence the design to a certain degree, with respect to the differences between professional and student.

As far as administration of the facility, the best option of course, since it will not be part of the junior college, may be to allow for local artists to manage the pottery on a yearly rotational basis, allowing them a "leave of absence" from their own personal studios themselves, a mild form of sabbatical. Eventually, a permanent artist--in--residence caretaker or directorship may arise, as in the exemplary case of Curt Weiser at the Archie Bray Foundation in Helena, Montana.
"The course of mankind's progress is not a straight line, but a tortuous struggle, with long detours and relapses into the stagnant night of the irrational."\(^5\)

Man has, throughout time, struggled with and for art; not only in face of society, but perhaps more importantly, in face of himself. From the moment man first gazed at his reflection in the calm clear water of a pond, through today, his art has developed from some intention, whether it was religious/survival oriented or just for mere satisfaction and pleasure. Whatever it be, whatever intention, whatever means of conveyance, man's attempts to give birth to his meaningful artistic expressions, have led him along difficult and obstacle-laiden pathways. This pursuit of content, in turn has been necessary for justifying existence, pure and simple. Existence not only in terms of rationalizing living as a whole, but routine day to day living as well. Existence in this case, being of the conscious nature versus its physical counterpart.

Just exactly where this drive for expression comes from may be debatable, perhaps from primal instincts or perhaps from some intrinsic thing deep within the smallest building block of our biological fabric. Perhaps. The fact still remains---that it is present and maybe moreso in modern man, by means of our more sophisticated and complex logic, than his ancestors who were solely utilizing their expressions for the one basic reason of aiding them in rationalizing their survival. Be that as it may, nature's influences on man and his role perception within the realm of existence is very
evident in his art. Marguerite Wildenhain reinforces this attitude by stating:

"...Nature cannot only help in realizing a goal, but can become a source of development as an artist grows."

Natural influences have dominated man's art as subject matter throughout time, as evidenced in the earliest recorded cave paintings that were done, for obvious ritualistic reasons, depicting the animals that man killed and worshipped for survival—hunter and prey, both elements of nature.

Perhaps then, it is this mystic quality that Robert Vischer made reference to in 1872, that allowed man, artist and survivor, to form an emotional union with external objects. Objects that arouse our feelings and allows us to empathize them through artistic efforts. It is by this mystic quality of existing in a vast natural world that somehow influences man, the artist, and thus allows his feelings while creating, to become the actual content of the work. Mystic and inexplicable for now, perhaps best for now, categorizes the origins of artistic conceptualization.

When one attempts to better grasp the moot subject of what art is and where if originates, perhaps it is beneficial also to consider its offerings within the realm of man's existence, so as not to confuse even more. Art, however expressed, has continually given man a foothold in an uncertain and mysterious world. It has given him the opportunity to rationalize things in his own mind and own way that might not be definable in any other way or any other "language". Art holds deep personal significance for man, not only for the artist
but for the beholder as well, who also then becomes an interpreter.

"Art confirms or denies the efficacy of a man's consciousness, according to whether a work of art supports or negates his own fundamental view of reality."

"One of the distinguishing characteristics of a work of art is that it serves no practical material end, but it is an end in itself; it serves no other purpose other than contemplation—and the pleasure of that contemplation is so intense, so deeply personal that a man experiences it as a self-sufficient, self-justifying primary, and often, resists or resents any suggestion to analyze it; the suggestion to him has the quality of an attack on his identity, on his deepest essential self."

Art can, and does give rise to identity. The artist can express himself with it as well as establish his own identity and values. The beholder can then, also gain a foothold with it, either through acceptance or rejection of what is or what wants to be perceived. This parallels Theodore Lipps' attitude of perception; allowing for the enjoyment of the "self" through the beautiful, and the repulsion of "self" through the ugly.

This "self" surfaces when one begins with the process of recognition in an object and it continues to mature when the object, through sensuous translation, becomes associative for the person. Thus, translation, aided by the senses and memory, involves the act of deciphering a language that becomes apparent. This apparentness is to both the consciousness and to the subconsciousness, which perhaps more subliminally takes the message and creates an even deeper
understanding for the person than the routine analysis made by the conscious senses may have.

The language involved here is composed of symbols; as symbols perhaps best categorize our views, experiences and memories within the mind because they allow for the re-ignition of past realities; thus giving new opportunities to re-live past events and values. An example of this in architecture is the Gothic Revival in early America. Symbols let us understand and justify, since they are most obviously no longer real, only elements that allow for retrospection. Architectural symbols are the means through which man's built environment becomes a meaningful end to him. Ceramic symbols are the means by which a potter's meaningful expression and identity are the end.

Once symbols are established, whether in architecture or in ceramics, then the idea or intention can be deciphered (felt or moved) by the viewer. As Carl Jung states concerning the symbol:

"A symbol is a work whenever it "means" more than one sees at first glance."11

This is not to say though, that through symbolic use, art merely remains the same, beholding the same values and being readily apparent for everyone. Symbols and their associative use often demand from both the artist and the beholder, the thoughtful activity of interpreting the available information and intent. Only when this occurs, do the symbols succeed, their user understand and the distinctions manifest themselves. If there be a right or wrong, which is again perhaps debatably moot, I put forth this query believing: where would the ceramic arts, architecture and all the fine arts be if we all interpreted and felt the same about what we saw and experienced?
"...by that action of the hand, it probes and explores beneath the surface and thereby becomes an instrument to discover...now the hand no longer imposes itself upon the shape of things. Instead it becomes an instrument of discovery and pleasure together." 12

-Jacob Bronowski

Values basically display beliefs and worthiness. Man has values as does ceramics. Both man and ceramics are dependant on their own values and on one another; for without man to express his feelings with ceramics as his medium, clay would but remain mere clay as it is found in the earth. Likewise, without clay, the artist would have to rely on another medium to communicate his messages.

The clay that is used in ceramics lends itself to a means of expression quite unlike any other medium, be it natural or man-made. As simple as mud, ceramic art evolves from its plastic state, mouldable and conceivable by man's hands into a rigid and timeless manifestation of expressive and meaningful content, functional or not.

"Things such as this are born, not created." 13

-Shoji Hamada

Also, after being touched by man, clay then receives the third dimension. Volume. Volume that displays the vital qualities of the artist that breathed his self and his perceptions into it. This capacity for volume lends itself greatly to freedom of expression also, in comparison to say, the two-dimensionality of a canvas or the initial stone plug's anonymity from which a sculptor subtracts to obtain final form. Form in ceramics tends to be more additive
Like all artistic attempts, ceramics enables man to reationalize his existence, or at least try to. More so, ceramics allows one a deeper understanding of the natural world, for clay comes from the bowels of the very earth on which we exist. It is extracted, formed, adorned (again with chemical elements of the earth) and then utilized by man, whether functionally or aesthetically.

It is this timeless servitude and humbleness that attracts one to ceramics. A pot has a quiet and seemingly knowledgable quality of subtleness about it that succeeds, whereby other two-dimensional attempts seem to fail. The built environment can emulate these same values that are so well exhibited in pottery, and, coupled with a sensitive understanding of a context, can likewise harmoniously succeed.

Magical and trance-like fixations occur when viewing or handling a piece of ceramics, be it a simple tile or a complex museum piece. A spell that allows thoughts to wander as to who made it, where and what its origins are like, what so inspired its maker to make it as it is, etc. The depth created in a glazed surface conjures up images of many things and places...land and seascapes, mountains, clouds, skies, trees, birds on wing, and all of nature. Likewise, the spontaneity and unpredictability of the effects from the kiln firing spark the very fibers of man's most crucial characteristics—his imagination and curiousity.

"The aim of the craftsman is to make from his chosen material, objects he visualizes in his mind, objects that are beautiful and expressive of what
he feels, sees, knows and thinks; of his total personality." 14

"It is the union of arts, mutually helpful and harmoniously subordinated one to another, which I have learned to think of as architecture." 15

—Marguerite Wildenhain

—William Morris

Why does man travel upwards into the mountains? Likewise, why do mountains have always had a magnetic grip on men, drawing him ever to seek them? Man basically inhabits the horizontal plane of the Earth—the farm, the town, the city. Hence this is why he seemingly undergoes a transformation, a yearning whenever he travels there. Is it the change in altitude or the thinner air or the relative lack of other humans and their tell-tale signs? Perhaps. Even for men who live daily in the mountains, it has been said that every day and night is new and different. Why then do this?

Mountains are the youngest earthly elements (excluding volcanoes), and perhaps because of this they provide new sights and experiences for the human mind and eye that is so accustomed to the usual things that are perceived on the flatter and older alluvial plains on which we basically live. It tends to go beyond the mere biological needs of man—dote of a metaphysical thirst that needs quenched, as witnessed in how historic literary wrote concerning mountains. English poets and authors in the seventeenth century described the mountains in their writing as "ugly" and "nature disfiguring"
"In fearless youth we attempt the heights of art, while from the bounded level of our mind short views we take nor see the lengths behind. But more advanced, behold the strange surprise new distant scenes of endless science arise!" 16

-Byron's Child Harold

Why does man travel upwards into the mountains? Likewise, why is it that mountains have always had a magnetic grip on man, drawing him ever so towards them? Man basically inhabits the horizontal plane of the Earth—the farm, the town, the city. Maybe this is why he seemingly undergoes a transformation, a yearning whenever he travels there. Is it the change in altitude or the thinness of the air or the relative lack of other humans and their tell-tale signs? Perhaps. Even for man who lives daily in the mountains, it has been said that every day and night is new and different. Why then is this?

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and even a "threat to the symmetry of the Earth"! Whereas later in the eighteenth century, the Romantic understanding period, poets praised the glorious slendor of the mountains, "possessing such beauty that was the closest thing on Earth to God himself". These are prime examples of man attempting to explain his place in the vast realm of his world. They display both an understanding and misunderstanding of nature as well as a maturity in rationale. Be that as it may, whether friend or foe to man, the mountains are ever-present and dominant in the context where they occur, as John Ruskin states at some length:

"Mountains are to the rest of the body of the Earth, what violent muscular action is to the body of man. The muscles and tenons of its body are, in the mountains brought out with force and convulsive energy, full of expression, passion and strength; the plains and lower hills are the repose of the effortless motion of the frame, when its muscles lie dormant and concealed beneath the lines of its beauty, yet ruling those lines in their every undulation. This, then, is the first grand principle of the truth of the Earth. The spirit of the hills is action, that of the lowlands repose; and in between these is to be found every variety of motion and rest from the inactive plain, sweeping like the firmament with cities for stars, to the fiery peaks, which, with heaving bosoms and exhaling limbs, with the clouds drifting like hair from their bright foreheads, lift up their Titan heads to heaven, saying "I live forever!". 

Man desires unions and relationships in his life. They allow for foundations and the grasping of the meanings of life. Starting and ending points. In mountains, man can find this union, with both himself, by means of introspection in a setting pure, and with his environment, by escaping into the quiet solitude offered by untouched places. This one to one relationship affords man a mirror
to reflect upon himself and his place.

By reflecting on pure and yet unaltered environments, man can also formulate how his built places may occur within that context. Architecture cannot surpass Nature, nor can it ever enhance it more than when it appears by itself; but it can merge into a compatible partnership that allows man to build his places within the orders established by Nature.

If man must build his world, and he does since he no longer dwells in caves, then these natural orders become vital to take account, lest it fail and be incompatible.

"What I'm trying to make clear is that if in a city we had six vacant lots available for youngsters to play ball on, it might be development to build houses on the first and the second, third, fourth and even on the fifth, but when we build a house on the last one, we forget what houses are for. The sixth house would not be development at all, but rather...stupidity."

-Roderick Nash

Not all architecture occurs in pristine and idyllically natural places, but when it does, it must complement the Nature that is present. Again, what needs to be complemented are the orders of Nature, unlimited as they are, if man is to make his presence. Perception and utilization of these orders varies, as do the many people who view Nature, and thus are obviously displayed in their built structures and relationships which also vary---from complementary to insulting.

The natural orders of this specific mountainous site for the ceramics facility range from the patterns of vegetation cover and
drifting snow in the winter to topographic features and views available, to name a few. These elements are going to influence the final design of the facility in terms of massing, openness and closeness, solar gain, daylighting, roof planes and their orientation and circulation.

In this project, this pre-conceivability remains evident, yet alters somewhat. These alterations occur mainly in terms of form as it relates to the specific functions of the spaces, dictating the content and purpose of the spaces.

Site and environmental characteristics dominate the form and overall orientation of the structures. The occurrence of strong wind patterns, north sloping topography and areas of deep snow drifting also; the less edged boundaries become very influential.

Existing mountaineous vocabularies of form and materials become repetitive, applicable and seemingly inter-changeable from site to site. Therefore in order for diversity to occur, a re-thinking and assessment must happen with respect to such items as function, site isolation and the imagery desired. Past and present shelter designs very appealing and are rich from which to draw upon for research, both aesthetically and structurally. They provide examples of what is required in order to properly design for the environmental specifics known to higher elevations such as greater snow accumulation and lesser amounts of daylight.
When man goes into the mountains, I feel he has a pre-conceived image of the built environment he expects to encounter. This is more than likely due to past experiences as well as a general vernacular vocabulary of materials and forms that a mountain context allows to occur.

In this project, this pre-conceivement remains evident, yet alters somewhat. These alterations occur mainly in terms of form as it relates to the specific functions of the spaces, dictating the openness and closeness of the spaces.

Site and environmental characteristics dominate the form and overall orientation of the structures. The occurrence of strong wind patterns, north sloping topography and areas of deep snow drifting along the tree edged boundaries become very influential.

Existing mountainous vocabularies of form and materials become repetitive, applicable and seemingly inter-changable from site to site. Therefore in order for diversity to occur, a re-thinking an assessment must happen with respect to such items as function, site isolation and the imagery desired. Past and present shelters become very appealing and are rich from which to draw upon for research, both aesthetically and structurally. They provide examples of what is required in order to properly design for the environmental specifics known to higher elevations such as greater snow accumulation and lesser amounts of daylight.
SPATIALLY

Compactness, tightness and economy become important in built space for obvious reasons; the less breaks and directional changes that occur in the enclosing perimeter wall decreases the chance of heat loss and drafts and increase the comfort zone inside.

With the emphasis in the horizontal, the vertical then takes on new importance.

STRUCTURALLY

Structural honesty and simplicity reinforce the reasons just mentioned. Elaborateness can weaken the environmental quality of the interior, but more importantly perhaps for this project, a simple and strong set of structural systems used in the buildings best aids in resisting the live loads that are particular to this site. SnowL.L. = 100 psf. windL.L. = 25 psf.

MATERIALS

It is the vocabulary of materials utilized in mountainous shelter that most likely conjures up the images and pre-conceived notions that we have become familiar with. To just what extent these materials and their effects have on our senses is what is important here. Visually, the indigenous qualities of the mountain come about through the use of rock, unfinished logs and rough sawn timber. Tactile awareness is perceived in much the same manner, and due to the compactness of interiors, material texture and colour are heightened.

It is the combination of these physical properties along with
such factors as isolation from society and its amenities, ruggedness of terrain and severity of climate that establishes a mountain ethic that becomes evident as well as desired by those who seek it.

**ROOF GEOMETRIES**

In the built environments of mountains, roof configurations become the most important structure and form-giving element. Structurally, it carries the loads of snow as well as sheds it, deflects winds and gives shelter directly adjacent to the building from the rains that fall overhead, much like the canopy of a tree alters the immediate space below at its base.

The pitch of roofs varies as does the geometries of the space they enclose. They are highly functional as well as being aesthetic and vocabulary generators.

**EFFICIENCY**

Due to the limited amount of actual amounts of sun received in the mountains, i.e. late sunrise and early sunset, the need to economize fenestration and make spaces more energy efficient, especially during the long colder winter months, becomes additionally important.

This site specifically has a bit more wind occurrence than other more sheltered places in this general area. This additional inconvenience of a wind chill load upon the built environment causes building mass, orientation and grouping of spaces according to function to become important, lessening this load.

Heating sources are the most logical when placed within the spaces themselves, without direct contact to an exterior sur-
face that becomes a convective link to the outside. Also, if massive enough, they will continue to radiate heat and maintain a warmth within the space when use is discontinued.

REALMS

"...the mountain, thus, belongs to the earth, but it rises to the sky. It is "high", it is close to heaven, it is a meeting place where two basic elements come together. Mountains are therefore considered "centers" through which the axis mundi goes...a spot where one can pass from one cosmic zone into another."

M. Eliade Patterns in Comparative Religion p.100

Thus is the feeling towards the mountains as well as the ceramics facility...occurring in a realm.

The built environment then becomes an object within the overall realm, with its own personal characteristics, existential spaces and sub-realms occurring within. Of these sub-realms, architectural objects such as fire hearths, stairs and roofs become space generators and centers of activities themselves. They begin to dictate and establish how the places order themselves, together and separate, into an overall scheme. These objects then become thematic elements that give identity to each individual occurrence.

IDENTITY

In the realm of a mountain context, the identity of places becomes, at times, often difficult to ascertain; again due to the previously mentioned factors. Repetition occurs. Thus the need for this place to take on its own identity. An identity
that will distinguish it from other complexes of similar scale and different nature that occur roughly in the same region. These are various church camps and are all basically in the rustic log motif.

The artists using this facility help to reinforce this idea of identity giving to a place. This parallels John Ruskin's manifesto in *The Seven Lamps Of Architecture* on worker involvement and happiness, making a place successful or mot. More important though, is the actual and unique identities of the artists themselves. Just as the work created by an individual has its own style and is representative of that person (regardless of a signature), so can architecture take on identity. How a person orders and exists within a space, neat or clumsy, as well as decorates, gives this identity reality.

This can change throughout time with different personalities modifying the architecture in their own way. This way, the built environment changes seasonally, thus giving it a sense of user involvement and celebration of life's activities.

**PATH**

"Any path is just a path, and there is no affront, to oneself or to others, in dropping it if that is what your heart desires... look at every path closely and deliberately. Try it as many times as you think necessary, then ask yourself and yourself alone, one question: Does this path have a heart? If it does, the path is good; if it doesn't, it is of no use.

-Carlos Castenada

*The Teachings Of Don Juan*

In the mountains, where environments are at times extreme and
of a different character than normally accustomed to, and where scale and direction are sometimes mis-construed due to uniformity in texture and repetition of objects, the actual physical path way tends to lose significance. What does become significant though, is the idea of departure and arrival; the departure, the journey between and the final arrival at destination. It is this sequence that becomes important to the traveller and not so much the actual manifestation of the path (especially for a short distance). The sensuous participation of the encountered terrain along with the freedom of choice offered by not actually constructing a path from one point to another, truly gives meaning to "path".

What gives form to departure and arrival is what gives form to path. Departure and arrival become goals, both mental and physical, and path then becomes the process to obtain these goals. Just as a traveller chooses an object on a hill at the horizon or within a vast open field and surges forward with that goal in mind, (even though it be an intermediate goal), he eventually will arrive at his destination.

In this specific project, path becomes evident only at the immediate foot of the buildings—a platform to receive and send off. It is then that the architecture itself becomes the formal construct that serves as departure and arrival goals (objects). Also, architectural elements become the objects to strive for.
A. GENERAL

The site for this project is situated along the upper ridge face of Casper Mountain, near the eastern mid-section, north of the city of Casper, Wyoming. It is about 5 miles from the city to the base of the mountain, and then about 5 more miles to the site. Casper has a present population of about 96,000 and an elevation of 5319 feet above sea level. The site has an elevation of 7805 feet at its highest point sloping down to 7720 feet at its lowest.

B. TEMPERATURE RANGES

(*Mazria p. 429)

WINTER design temperature: +5°F.
AVERAGE winter temperature: 33.4°F.
SUMMER design temperature: 74°F.
AVERAGE summer temperature: 71°F.
TOTAL degree days*: 7638d.d.

NOTE: These temperatures vary towards the negative end of the scale due to the wind chill factor taken into account.

C. TOPOGRAPHY

The site slopes to the north from 7805' to 7720', beyond this point the face of the mountain drops off sharply to the foothills.

D. VEGETATION

The primary vegetation cover on the site consists of:

TREES: Mountain Aspen
       Spruce Fir

These are layered around the edge of the site, with the aspen occurring at the inner edge and the spruce beyond that outward from the site's center.
GROUND COVER: Sage brush is abundant along the periphery, with many species of mountain flowers and wild broad leaved grasses.

E. WINDS

The prevailing summer winds are from the south-southwest and the prevailing winter winds are from the north-northwest down on the plains, but up on the ridge of the mountain, the winter winds are predominantly from the west-northwest. This is due to the geological structure of the two mountains that act in deflecting the usual north-northwest winds and funnel them easterly.

Winter wind is not as prominent on the mountain as it is down in the city and foothills. This is due to the deflection and protective nature of the large stands of tall fir trees. This site however, is a bit more exposed than the normal due to its proximity to the wind corridor between the two mountains. (wind psf @ 20)

F. SOLAR

SUMMER DESIGN ALTITUDE ANGLES:

<table>
<thead>
<tr>
<th>Time</th>
<th>Altitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 a.m.</td>
<td>16°</td>
</tr>
<tr>
<td>June 21</td>
<td>12 noon</td>
</tr>
<tr>
<td>6 p.m.</td>
<td>16°</td>
</tr>
</tbody>
</table>

WINTER DESIGN ALTITUDE ANGLES:

<table>
<thead>
<tr>
<th>Time</th>
<th>Altitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 a.m.</td>
<td>4°</td>
</tr>
<tr>
<td>December 21</td>
<td>12 noon</td>
</tr>
<tr>
<td>4 p.m.</td>
<td>3°</td>
</tr>
</tbody>
</table>

G. LAND TYPE CATEGORIES

Casper Mountain is mainly composed of private land with Bureau of Land Management public use designated parks.
H. UTILITY AVAILABILITY

ELECTRICITY: easily accessable due to the nearby existing service mains that are presently serving structures in the vicinity.

WATER: see hydrology

I. HYDROLOGY

The site is located over the abundant north flowing Madison anticline aquifer. Provisions for a well pump facility should be made in the program. A ceramics workshop requires a good deal of water for its functions as well as the bathhouse.

J. ROADS-CIRCULATION

East End Road is currently a packed dirt road from where it leaves Bear Trap Meadow Park. This road runs easterly along the ridge and is adjacent to the site to the south.

SUMMER: easily accessable - all modes
WINTER: access is somewhat more limited, although at times, due to the wind, vehicular access is possible. Otherwise, snowmobiles, shoes and cross-country skiing to the site are feasible. The Bear Trap Meadow parking facilities allow for long term parking in the winter.

Parking on the site is possible in the summer months

K. MOUNTAIN USE

WEEKDAY: low to medium year round
WEEKEND: medium to heavy year round
<table>
<thead>
<tr>
<th>SPACES</th>
<th>AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN HALL</td>
<td>2100s.f.</td>
</tr>
<tr>
<td>COMMONS</td>
<td>500s.f.</td>
</tr>
<tr>
<td>DINING</td>
<td>500s.f.</td>
</tr>
<tr>
<td>KITCHEN</td>
<td>250s.f.</td>
</tr>
<tr>
<td>PANTRY</td>
<td>130s.f.</td>
</tr>
<tr>
<td>REST ROOMS</td>
<td>100s.f.</td>
</tr>
<tr>
<td>SMALL DISPLAY GALLERY</td>
<td>250s.f.</td>
</tr>
<tr>
<td>MECHANICAL</td>
<td>160s.f.</td>
</tr>
<tr>
<td>CERAMICS STUDIO</td>
<td>3225s.f.</td>
</tr>
<tr>
<td>RAW MAT'L. STORAGE</td>
<td>225s.f.</td>
</tr>
<tr>
<td>MILL STORAGE</td>
<td>400s.f.</td>
</tr>
<tr>
<td>MILL</td>
<td>250s.f.</td>
</tr>
<tr>
<td>WORKSPACE</td>
<td>1200s.f.</td>
</tr>
<tr>
<td>GLAZE ROOM/ MIX</td>
<td>300s.f.</td>
</tr>
<tr>
<td>KILN ROOM</td>
<td>550s.f.</td>
</tr>
<tr>
<td>DRYING VAULT</td>
<td>200s.f.</td>
</tr>
<tr>
<td>GEN. STORAGE</td>
<td>200s.f.</td>
</tr>
<tr>
<td>LIVING QUARTERS</td>
<td></td>
</tr>
<tr>
<td>SINGLE UNITS</td>
<td>8@ 100</td>
</tr>
<tr>
<td>DOUBLE UNITS</td>
<td>2@ 150</td>
</tr>
<tr>
<td>BATH HOUSE</td>
<td></td>
</tr>
<tr>
<td>支持</td>
<td></td>
</tr>
<tr>
<td>WELL PUMP AND STORAGE HOUSE</td>
<td></td>
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**PROGRAM**
<table>
<thead>
<tr>
<th>PLACE:</th>
<th>MAIN HALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC:</td>
<td>COMMONS</td>
</tr>
<tr>
<td>SQ. FT.:</td>
<td>500²</td>
</tr>
<tr>
<td>USE:</td>
<td>GATHERING and RELAXATION. LECTURING and SOCIALIZING.</td>
</tr>
<tr>
<td>ADJACENCY:</td>
<td>RELATIVELY WITHIN CLOSE PROXIMITY TO BOTH THE STUDIO AND CARETAKERS QUARTERS</td>
</tr>
<tr>
<td>LIGHTING:</td>
<td>NATURAL and ARTIFICIAL</td>
</tr>
<tr>
<td>AIR HANDLING:</td>
<td>NATURAL VENTILATION CAPABILITY</td>
</tr>
<tr>
<td>FLOOR:</td>
<td>WOODEN INSULATED</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>LARGE FIREPLACE AND HEARTH, LOUNGE CHAIRS AND SOFAS</td>
</tr>
<tr>
<td>ACTIVITY:</td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td>POTENTIAL FOR FUTURE EXPANSION</td>
</tr>
</tbody>
</table>
PLACE: MAIN HALL

SPECIFIC: DINING

SQ. FT.: 500

USE: eating

ADJACENCY: KITCHEN and COMMONS

LIGHTING: NATURAL and ARTIFICIAL

AIR HANDLING: NATURAL VENTILATION CAPABILITY

FLOOR: WOODEN INSULATED

EQUIPMENT: DINING TABLES and CHAIRS

ACTIVITY:

REMARKS: POTENTIAL FOR FUTURE EXPANSION
PLACE: MAIN HALL

SPECIFIC: KITCHEN

SQ. FT: 250

USE: FOOD PREPARATION and CLEAN UP, UTENSIL STORAGE

ADJACENCY: DINING and PANTRY

LIGHTING: NON-CRUCIAL NATURAL AND ARTIFICIAL

AIR HANDLING: EXHAUST FANS @ OVEN/RANGE

FLOOR: CERAMIC TILE

EQUIPMENT: OVEN/RANGE, SINKS, CABINETS/COUNTERS and LARGE TABLE

ACTIVITY:

REMARKS: FLOOR TO BE FINISHED W/ CERAMIC TILES DONE BY THE ARTISTS THEMSELVES AS WELL AS THE COUNTERTOPS.
PLACE: MAIN HALL

SPECIFIC: PANTRY

SQ. FT.: 130

USE: FOOD STORAGE and REFRIGERATION

ADJACENCY: KITCHEN

LIGHTING: ARTIFICIAL

AIR HANDLING: UPDRAFT EXHAUST FAN

FLOOR: CERAMIC TILE, INSULATED

EQUIPMENT: REFRIGERATOR and PREZZER(S)

ACTIVITY: 

REMARKS: TILES TO BE DONE BY THE ARTISTS AND FINISHED BY SAME.
<table>
<thead>
<tr>
<th>PLACE:</th>
<th>MAIN HALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC:</td>
<td>REST ROOMS</td>
</tr>
<tr>
<td>SQ. FT.:</td>
<td>100</td>
</tr>
<tr>
<td>USE:</td>
<td>personal hygiene</td>
</tr>
<tr>
<td>ADJACENCY:</td>
<td>DINING and COMMONS</td>
</tr>
<tr>
<td>LIGHTING:</td>
<td>NATURAL and ARTIFICIAL</td>
</tr>
<tr>
<td>AIR HANDLING:</td>
<td>NATURAL</td>
</tr>
<tr>
<td>FLOOR:</td>
<td>CERAMIC TILE</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>LAVATORIES AND TOILETS</td>
</tr>
<tr>
<td>ACTIVITY:</td>
<td>GATHERING and VIEWING OF WORK BY BOTH ARTISTS and COMMUNITY</td>
</tr>
<tr>
<td>REMARKS:</td>
<td>CLIVUS MULTRUM SYSTEM</td>
</tr>
</tbody>
</table>
PLACE: MAIN HALL

SPECIFIC: SMALL EXHIBITION GALLERY

SQ. FT: 250+

USE: DISPLAY CERAMIC WORK DONE AT THE FACILITY

ADJACENCY: COMMONS and ADMINISTRATION

LIGHTING: NATURAL AND ARTIFICIAL

AIR HANDLING: NOT CRUCIAL

FLOOR: WOODEN INSULATED

EQUIPMENT: TRACK LIGHTING

ACTIVITY: GATHERING and VIEWING OF WORK BY BOTH ARTISTS and COMMUNITY

REMARKS: ALLOWANCE FOR EXPOSURE TO OUTSIDE DURING WARMER SEASONS w/ CAPABILITY OF BEING ENCLOSED DURING COLDER MONTHS.
PLACE: CERAMICS STUDIO

SPECIFIC: RAW MATERIAL SHED

SQ. FT.: VARIABLE, SEMI-OPEN TO OUTSIDE

USE: STORAGE OF RAW EXCAVATED LOCAL CLAYS

ADJACENCY: MILL STORAGE

LIGHTING: NATURAL

AIR HANDLING: NINE

FLOOR: NATURAL GROUND COVER UNDER POLYVINYL TARP

EQUIPMENT:

ACTIVITY:

REMARKS: ALLOWANCE FOR EXPOSURE TO OUTSIDE DURING WARMER SEASONS W/ CAPABILITY OF BEING ENCLOSED DURING COLDER MONTHS.
PLACE: CERAMICS STUDIO

SPECIFIC: MILL STORAGE

SQ. FT.: 225

USE: storage of manufactured sacks of materials
      storage of miscellaneous small equipment

ADJACENCY: RAW MATERIALS SHED, MIXING ROOM

LIGHTING: NATURAL and ARTIFICIAL

AIR HANDLING: NATURAL VENTING

FLOOR: WATERPROOF CONCRETE

EQUIPMENT: PALLETTES

ACTIVITY:

REMARKS:
PLACE: CERAMICS STUDIO

SPECIFIC: MILL

SQ. FT.: 400²

USE: MILLING OF NATURAL CLAYS, i.e. CRUSHING, PREPARATION, etc. MIXING OF CLAYS

ADJACENCY: STORAGE BINS, MILL STORAGE, THROWING SPACE

LIGHTING: NATURAL AND ARTIFICIAL

AIR HANDLING: DUST FILTERING EXHAUST VENTILATOR

FLOOR: CONCRETE INSULATED

EQUIPMENT: CRUSHER, MILL, BALL MILL SINKS

ACTIVITY:

REMARKS:
PLACE: CERAMICS STUDIO

SPECIFIC: WORKSPACE

SQ. FT: 1400±

USE: PREPARATION OF CLAYS, WEDGING, THROWING, HANDBUILDING, SLIPCASTING

ADJACENCY: MILL and DRYING ROOM
GLAZING ROOM and KILNS

LIGHTING: NATURAL and ARTIFICIAL

AIR HANDLING: NATURAL VENTILATION

FLOOR: VARIABLE: CONCRETE AND WOODEN, BOTH INSULATED

EQUIPMENT: LARGE WEDGING TABLES, SMALLER USE TABLES, ABUNDANT SHELVES,
MANUAL & ELECTRIC THROWING WHEELS, 50 GAL. BARRELS

ACTIVITY:

REMARKS: THIS SPACE SUBJECT TO QUANTITIES OF DUST AND DIRT AND DAMPNESS
PLACE: CERAMICS STUDIO

SPECIFIC: GLAZE ROOM

SQ. FT.: 400±

USE: STORAGE AND PREPARATION OF CHEMICAL ELEMENTS USED IN GLAZES

ADJACENCY: WORKSPACE and RAW MATERIALS STORAGE

LIGHTING: NATURAL and ARTIFICIAL

AIR HANDLING: DUST FILTERING EXHAUST VENTILATION

FLOOR: CONCRETE INSULATED

EQUIPMENT: LARGE TABLES, ABUNDANT SHELVING, SINKS, 1-150 cu. ft. GAS FIRED KILN, 1-150 cu. ft. OIL/SALT FIRE KILN, 1-200 cu. ft. DOWNDRAFT WOOD FIRE KILN

ACTIVITY:

REMARKS:
PLACE: CERAMICS STUDIO

SPECIFIC: KILN ROOM

SQ. FT.: 550--600

USE: firing of biscuit and final glazed pieces

ADJACENCY: WOOD SHED, WORK STORAGE

POSSIBILITY OF ISOLATED LOCATION FOR SAFETY PRECAUTIONS

LIGHTING: NATURAL and ARTIFICIAL

SEE SPECIALTY SECTION

AIR HANDLING:

FLOOR: CONCRETE INSULATED

EQUIPMENT:

2-30 cu. ft. ELECTRIC KILNS
1-150 cu. ft. GAS FIRE KILN
1-150 cu. ft. OIL/SALT FIRE KILN
1-200 cu. ft. DOWNDRAFT WOOD FIRE KILN

ACTIVITY:

REMARKS:
<table>
<thead>
<tr>
<th>PLACE:</th>
<th>CERAMICS STUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC:</td>
<td>DRYING VAULT</td>
</tr>
<tr>
<td>SQ. FT.:</td>
<td>250²</td>
</tr>
<tr>
<td>USE:</td>
<td>TO ALLOW WET PIECES TO SLOWLY DRY IN A DAMP ATMOSPHERE</td>
</tr>
<tr>
<td>ADJACENCY:</td>
<td>THROWING ROOM</td>
</tr>
<tr>
<td>LIGHTING:</td>
<td>ARTIFICIAL</td>
</tr>
<tr>
<td>AIR HANDLING:</td>
<td>NONE</td>
</tr>
<tr>
<td>FLOOR:</td>
<td>WATER IMPERMEABLE SLATE OR TREATED CONCRETE</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>SHELVES, WATER SUPPLY</td>
</tr>
<tr>
<td>ACTIVITY:</td>
<td></td>
</tr>
<tr>
<td>REMARKS:</td>
<td></td>
</tr>
</tbody>
</table>
PLACE: CERAMICS STUDIO

SPECIFIC: GENERAL STORAGE

SQ. FT.: 300²

USE: FOR STORAGE OF GENERAL ITEMS, KILN FURNITURE, etc.

ADJACENCY: KILN ROOM and WORKSPACE

LIGHTING: NATURAL and/or ARTIFICIAL

AIR HANDLING: NONE

FLOOR: WOODEN INSULATED

EQUIPMENT: NONE

ACTIVITY: NONE

REMARKS: THIS UNIT IS FOR SLEEPING AND PRIVATE PURPOSES SUCH AS WRITING, DRAWING AND READING. HEATING BY WOOD FIREPLACE w/ ELECTRIC BACK-UP.
PLACE: LIVING QUARTERS

SPECIFIC: SINGLE UNITS

SQ. FT.: 150±

USE: PERSONAL

ADJACENCY: BATHHOUSE

LIGHTING: NON-CRUCIAL NATURAL and ARTIFICIAL

AIR HANDLING: NONE

FLOOR: WOODEN INSULATED

EQUIPMENT: SMALL FIREPLACE, BED and DESK/TABLE

ACTIVITY: STRICTLY FOR SLEEPING and PRIVATE PURPOSES SUCH AS WRITING, DRAWING AND MEDITATION.

REMARKS: THE INTENT OF THESE UNITS BEING SEPARATE AND PERSONAL TO ALLOW FOR INDIVIDUAL PRIVACY AS OPPOSED TO LIVING GROUPED TOGETHER.

HEATING: BY WOOD FIREPLACE W/ ELECTRIC BACK-UP.
PLACE: LIVING QUARTERS

SPECIFIC: DOUBLE UNITS

SQ. FT.: 225-300

USE: PERSONAL, MARRIED COUPLES and/or FAMILIES

ADJACENCY: BATHHOUSE

LIGHTING: NON-CRUCIAL NATURAL and ARTIFICIAL

AIR HANDLING: NONE

FLOOR: WOODEN INSULATED

EQUIPMENT: SMALL FIREPLACE, BEDS and DESK/TABLES

ACTIVITY: STRICTLY FOR SLEEPING and PRIVATE PURPOSES SUCH AS WRITING, DRAWING AND MEDITATION.

REMARKS: THE INTENT OF THESE UNITS BEING SEPARATE AND PERSONAL TO ALLOW FOR INDIVIDUAL PRIVACY AS OPPOSED TO LIVING GROUPED TOGETHER.

HEATING: BY WOOD FIREPLACE W/ ELECTRIC BACK-UP.
PLACE: BATHHOUSE(S)

SPECIFIC: SHOWERS, LAVATORIES and TOILETS

SQ. FT.: 315²

USE: PERSONAL HYGIENE

ADJACENCY: LIVING QUARTERS and CERAMICS STUDIO

LIGHTING: NON-CRUCIAL NATURAL AND ARTIFICIAL

AIR HANDLING: NONE

FLOOR: CHANGE AREA: WOODEN INSULATED
SHOWER and TOILETS AREA: ROUGH SURFACED CONCRETE INSULATED

EQUIPMENT: WATER HEATER, TOILETS, SHOWER EQUIP. SINK BASINS
BENCHES and HANGERS

ACTIVITY: TYPICAL

REMARKS: CO-ED CONSIDERATIONS
CLIVUS MULTRUM SYSTEM
PLACE: SUPPORT (PHYSICAL PLANT)

SPECIFIC: WELL PUMP HOUSE

SQ. FT.: 100±

USE: TO PUMP UP GROUND WATER FOR CERAMICS STUDIO AND MAIN HALL FOR BATHHOUSE(S) AND KITCHEN PURPOSES

ADJACENCY: PLACEMENT AT OPTIMUM ORIENTATION AS DETERMINED BY GEOLOGICAL REPORT.

LIGHTING: ARTIFICIAL

AIR HANDLING: NONE

FLOOR: INSULATED WOODEN

EQUIPMENT: PUMP AND RELATED EQUIPMENT TO HANDLE CALCULATED CAPACITY

ACTIVITY:

REMARKS:
As mentioned in the opening explanation, the design is intended to explore the relationships between how man and nature build. This relationship(s) becomes even more crucial in the mountains as opposed to say, the urban context, where nature is not always evident or even present, as the need to build and yet preserve the qualities of the environment that existed before without destroying the setting for others to enjoy.

The most important characteristic of mountains is their close quality that plays opposite their vastness. This closeness is a natural occurrence that has evolved mostly through climatological and geological forces. The tightness in their tree patterns and grouping is evidence of this.

For man-made environments this becomes a learned knowledge to appreciate this closeness when attempting to merge with the landscape. His environment must maintain the quality of the mountain context (closeness) yet still be evident as man-made.

To begin with, the site planning dictated a great deal of the final placement of the larger buildings (main hall and studio). Two previously existing constraints also became influential; the climate of course, and ironically, the presence of another structure. The combination of snow and wind together causes intense drifting just inside the southern perimeter of trees. These snow drifts can accumulate to depths of 20 feet and more, not impossible to design for, but inconvenient. The other con-
straint of the existing family cabin that occurs, tucked into trees at the southwest corner of the site, influenced the ceramics facility out of respect for their privacy and maintainance of their view corridor by not encroaching and blocking it. Pure and simple.

Thus the bulk of the facility occurs at the west north-west edge of the site, opposite and downhill from the existing cabin and the major snow drifts.

The first building that visually and physically greets upon arrival is the Main Hall. This building is where one begins to perceive the way in which the complex orders itself both internally and externally. The approach to this building is straight on and from above, and as it projects out from the trees, the roof form dominates the structure and becomes the conscious effort put forth that begins to regiment the interior through opacity and transparency in the roof. This is then reinforced by the lesser wall planes and their virtual solidity.

This happens at the porte-cochère upon initial arrival. The roof canopy is evident but there are no side walls. The end wall is but a storage shed in the middle and structural columns at each side. The void between the columns and the shed allows for the stacking of firewood which will change in volume seasonally much like the forests and thus opening and closing that elevation throughout time; close and opaque in the winter (w/ re-stocking).
This details aids in buffering the rest of the building from the initial wind chill that would occur without it. During the warmer months, the stock of wood lessens in volume and opens the end of the main hall, revealing more.

It is under this canopy that the entry to the hall appears, as porch over and walkway beneath become integrated under the roof. This path takes one to the entry which occurs slightly before mid-point and where the grove of aspen begins.

The building is essentially solid along this path except for the windows that read only as windows. The entry reveals itself as a simple transparent air lock, a break in the opacity of the wall that is carried up into the roof. Upon entering the foyer one is at a decision point (the small gallery). To the left is the commons gathering space, dominated as well as created by the massive fireplace, a realm integrated with a stepped egg-crate partition wall that also allows for the display of works.

To the right is the common dining and kitchen space, also using a double faced fire hearth as a space divider that allows for warmth and gathering while eating meals on one side and cooking on the other side. Hearth becomes evident as one of the thematic elements that will carry through the other spaces accompanied by its vertical chimney counterpart.

Directly opposite the entrance is a mirror image air lock and exit that takes one out to the otherside of the main hall and it is here that the remainder of the facility reveals itself: the bath house occurs down a line under the canopy of the roof, sim-
ilar to that of what occurred at the entrance. From this exit, that also serves as an entrance when reversing one's journey, the mass of the studio and kiln shed with the chime tower become visible. Again this view is from above and the roof of the studio continues to be the ordering element, with the verticals of the stacks and the chime tower being the thematic elements.

From a simple platform, one can depart from and journey freely to the studio. Dividing and dominating the void between the two main buildings is a massive dead spruce tree that serves as an intermediate object (goal) to strive for along the "path"; even though the selection of a route is open to the individual. Upon arrival at the studio, entry is perceived by the gap that occurs both in the roof and wall surfaces. Entry is also perceived well before arrival, on the journey down. This type of entry again offers protection from the wind at arrival.

(I might add here, that these breaks at the roof and walls, denoting entry, become lighted beacons in the intense darkness of night that occurs in mountains. This again signifies arrival and departure)

To the left of the entry, again, the functional spaces of storage and mill act as a volumetric buffer zone for the more active studio space that occurs to the right of the entry. Separate and at the farthest point from all the spaces in the facility, is where the kiln building occurs which is pinned down by the chime tower. This then terminates the limits of man-made space and allows nature to continue on as before.
Natural light occurs in this space from above and at the ends of the gables as well as from the transparent entry break at the roof. The studio has a highly vaulted ceiling to help ease the narrowness of the linear interior. This steeply pitched roof aids in wind deflection and snow shedding also. At certain points along the roof, the structure slowly reveals itself; first by being covered with glass so as to allow light, and eventually becoming completely exposed roof members open to the exterior.

Both buildings are lighted from the north and the south sides at the walls so as to balance out the effects in an otherwise opaque building exterior. This allows the artists at least one side view of constant exposure to the aspen groves. The ends of the studio (of which the kiln shed originally was) are hipped down so as to return the structure of the roof back to the ground. Both ends of the studio building are without walls of full height. Partial walls at ground level give slight protection, but mainly allow for natural ventilation. The west end is where the naturally excavated raw clay is stored for aging. The east end of the kiln shed is also open since the tanks for storing the gas fuels occurs here.

As implied in the previous chapter in identity, through the programming process and from the onset of this design, documentation of the artists in attendance was sought to be through a different and unique way rather than the usual mundane and meaningless manner of signing a guestbook. Rather I wanted the architecture itself to take part in the documentation process.
This would then afford the chance for the buildings to achieve an ever changing character and involve the participants. This documentation takes the form of either a ceramic signature tile by the artist to be installed onto one of the many exposed concrete surfaces of the living spaces, or the design of a set of chime bells that would be installed in the tower and thus give form to the breezes that are ever-present, casting their melodic notes into the forest.

Along the same lines, at certain living quarters, individuals would be allowed to develop their own individual chimney pot to be temporarily installed at their cabin while they were in attendance. This gives that specific cabin even more personality and becomes a marquee for all to see. This is just another attempt to involve the users. Firing and glazing all the tiles required for the fire hearths and kitchen counters might be another way. This can all occur over a period of time, but this is what will give the ever-changing spirit to the place that most closely resembles that of the mountain and forest.

As for the vocabulary of materials utilized in the buildings, 12" buff colored structural clay block is the main component of the two large structures' walls. The choice of this material is dual in reason. First is indicative of the many uses of clay in architecture and it is very wear-resistant and durable. Next the 12" thick module allows for the stability required to take the 12/12 pitched roof, is capable of being well insulated and gives opportunity for the actual wall thickness to consciously reveal
itself to the user at all the openings.

The thick reveal of the walls allow for the system of composite insulated sandwich shutters to hinge close at the windows for night and cold weather retention of heat. With the glazing occurring at the inner plane of the well, the inner surface of the composite panel then too becomes a surface for tile mosaics to happen, revealing themselves to the inside when closed and to the outside when open. Yet another opportunity to allow the building to be decorated, while addressing the functional needs as well.

The artist's living quarters are their own personal retreat while in attendance. Each artist occupies a single space to him/herself. The spaces consists only of facilities for sleeping, reading, writing, drawing and a wood stove. Eating and bathing occur at the main commons building.

The living quarters are the smallest and most vernacular of all the buildings at the facility. This is due to the imagery of pre-conceivement and intimate scale that allows the senses to become fully aware of the space's character. The quarters are essentially log cabins in material and form vocabularies. The difference appears at the entry canopy. The canopy is held and framed by stepped concrete wall/columns. This is the surface that acts as the canvas on which the ceramic artists begin to personalize the cabin itself, thus changing its appearance over the years.

Artists are eclectic and this framework at the canopy, along with some exposed structure, allows them to do to their cabin what they feel free to. This then encompasses both temporary and
permanent time frames as well as seasonal ones of the site.

Thus, the living quarters all become the same and different simultaneously. Close proximity displays the differences and distance reveals the sameness.

Another factor(s) that gives difference to the cabins is initiated by their individual placement and orientation on the site, sun exposure, surrounding forest cover and relationships to the other buildings of the facility. In this way, the architecture begins the process of personalization and the users complete it.

* * *

This project was an attempt to understand the orders of nature in the mountains where the built environment encounters some of the most extreme and severe climatological factors available. The mountains have always been important to me and there has always been one out my window, towering above and giving me the security of a mother.

The site chosen may not be the most desirable, but I chose it for the challenge and the need to gain further knowledge. (What happens when we run out of south facing sloped sites?!?) Reflecting back on the process and thought that went into this design, I have found that almost my entire effort was caught up in designing for the most inclimate winter conditions possible. Perhaps this was my intuition and familiarity coming to the surface sub-consciously. When the weather is pleasant, the mountain opens itself and draws people outdoors as much as possible, but when it is poor, indoors and secure is where man wants to be.
The ateliers...occupy quarters in old buildings where cheapness and dirt keep company. A crowd of students is not a desirable neighbor; they sing much, often through the night. The walls of the rooms are decorated with caricatures and pictures until the dark somber tone is attained that accords well with the dirt, dishevelment and confusion of the place. The lighting is by candle, each man furnishing his one or two candles that are stuck to the board on which he is working. The air of the room is close, for there is no ventilation. Silence never prevails. Jokes fly back and forth, snatches of songs, excerpts from operas, at times even a mass may be sung, yet amid the confusion and babble---strange as it may seem---work proceeds.


8. Ibid, Rand, p. 24

9. Ibid, Rand, p. 16


17. Ibid, Nicolson, backpiece.


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