

*The Mythos of Dwelling:
A Settlement at Kalaupapa, Molokai*

by
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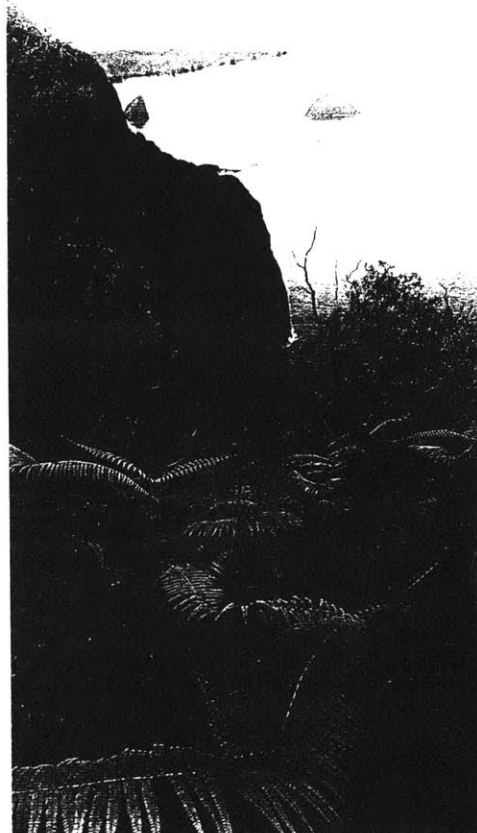
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"...and I said to myself, what a wonderful world"
Louis Armstrong



inspired by Jacqu...

written for Nicholas

C o n t e n t s :

Title Page	1
Contents	5
Abstract	7
Preface	9
Acknowledgments	13
Myth	15
Finding a Situation	23
Imagining a Project	25
Site	31
Dwelling	35
The Project	39
A Sense of Place	65
Appendix - Argument	81
Bibliography	99
List of Illustrations	105

"... The extreme of our setting has the advantage of allowing an examination of these factors, more comprehensive and commanding than any which the ordinary relations of existing events can yield."

Shelly, preface to Frankenstein



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Abstract:

This thesis is the exploration of the physical and metaphorical potential of one of the most beautiful and poignant places in the world. It is Kalaupapa, a peninsula on the North Shore of Molokai, Hawaii, and the site of the infamous Leper colony run by Father Damien at the end of the last century. Here is explored the social issues of compassion to our fellow man and the importance of that compassion in reinforcing an emerging attitude towards life today. The issue of relevancy to this age is further reinforced with the analogy of people with leprosy to people with AIDS and the similar societal treatment they have each received.

The physical manifestation of this social charge is a place - a settlement run by the National Park Service - where we learn about illness, about dealing with the metaphors attached to illness, about life and death. It is a place that must relate to the strength of the landscape and the technological constraints prescribed by the location. Here, the physical manifestation has the explicit charge of helping, rather than hindering, our ability to dwell.

Dwelling has been defined as the physical and existential participation in our life-world. We dwell by gathering a world to us, a world that reflects our underlying beliefs. These beliefs are myths and they are the basis for our lives and for the act of dwelling. I suspect that the myths of today do not allow us to fully participate in our world, but there is hope that a planetary myth is emerging that will make this participation possible. This project tries, with every ounce of strength, to help this myth emerge in the minds of the readers.

Thesis Supervisor:

Imre Halasz

Professor of Architecture

*Do you think you can take over the universe and improve it?
I do not believe it can be done.*

*The universe is sacred.
You cannot improve it.
If you try to change it, you will ruin it.
If you try to hold it, you will lose it.*

*So sometimes things are ahead and sometimes things are behind;
Sometimes breathing is hard, sometimes it comes easily;
Sometimes there is strength and sometimes weakness;
Sometimes one is up and sometimes down.*

Therefore the sage avoids extremes, excesses and complacency.

Lao Tsu, Tao Te Ching, 29

P r e f a c e :

This thesis began with a site and a search for a ground for architecture, a place where I could finally proclaim, "Yes, this is why we are architects and what we do is a very good thing". The site was easy to choose. It was a place that I have visited many times and one that has always moved me deeply. The search for the ground was more involved and belief in the proclamation was hard to find.

Today is an age of pluralistic values, where everything can be justified as being right - sometimes with the only qualification being that the end result has adequately achieved its goals. This is a frightening thought! Who decides the quality of the goals? Our positivistic alternative seems to be the financial bottom line, where the distinct qualities of being right or wrong are, unfortunately, based entirely on cost.

Our values today seem to be tied very closely to public appeal/opinion. The new communication technology - though wonderful in many ways - helps to propagate instant trends and powerfully seductive images. The unfortunate fact is that they also set the "standard" for which the public sees our profession of architecture as we design according to these misplaced values. How can we help it? We are, after all, in a *service* profession. It is an endless loop, and one that produces, for whatever reasons, not just a few narcissistic responses in design.

This thesis, before it talks about "how" to do architecture then, must talk about what we do as architects and the reasons we are doing it. It is not an easy question to answer, and one that confused me thoroughly in the fringes of metaphysics until I remembered my attitudes to the environment as a child and adolescent. It was only through those clear impressions and my recent inspiration by the writings of Heidegger that any sense at all was made of the issue.

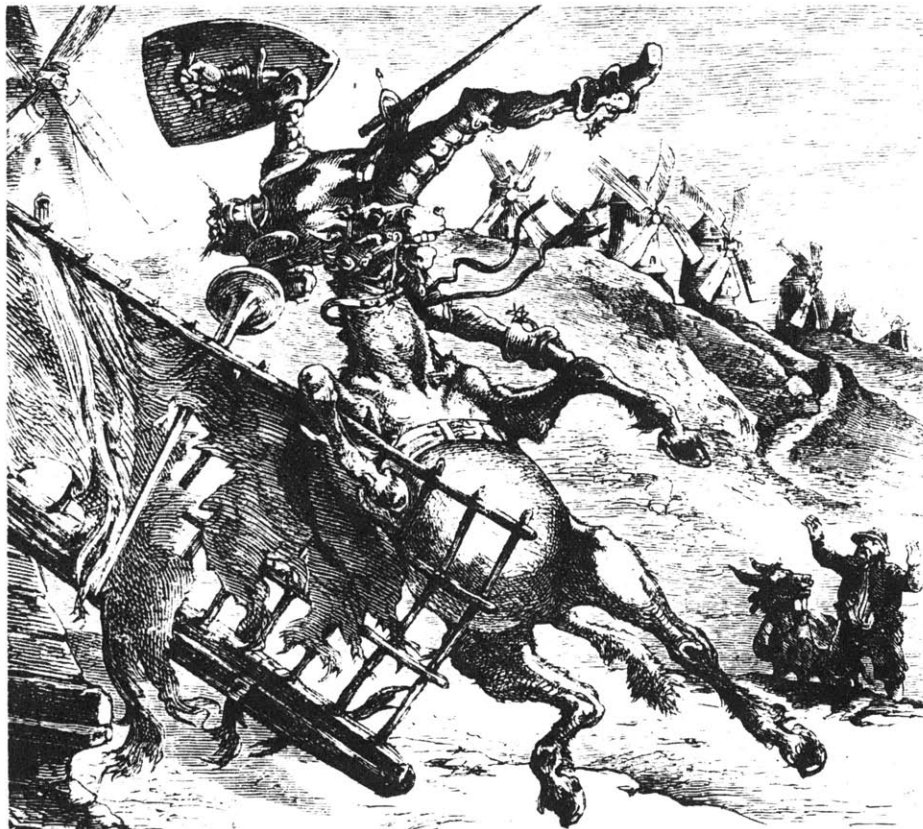
As a child, I remember that I was constantly in a state of wonder at the world outside, and quite secure within my familiar territory. I remember the built environment unfolding itself to me as I grew, not just by sight and smell and the usual senses, but also by my social and, as I understand now, my existential associations. The playground was not a playground without the right people in it. The vacant lot, though seen a hundred times, was just a vacant lot until Dad built a fort on it. With that fort, my playmates and I staked a claim. Years later, a similar claim was made on our old motocross track by a developer putting up luxury condominiums. I would argue that our fort better "staked its claim", but that is another story ... or is it?

"The ultimate aim of the quest must be neither release nor ecstasy for oneself, but the wisdom and power to serve others."

Joseph Campbell, *Power of Myth*

"My position is similar to that of the alchemists of the past, who did not find gold in their search for gold, but some other precious material."

J.J.P. Oud



Heidegger writes of these things in his essay on "Dwelling". He describes the word - and in so doing, the act - by saying that it is the gathering of our world. Dwelling is a wonderful, "non-professional" word that implies both the physical and the non-physical. It is an existential link to the world, and seems to reflect our underlying beliefs. If my diatribe has any truth to it at all, you can see that our environment is in the condition it is today because we do indeed dwell based on our current, underlying beliefs.

What, really, are "underlying beliefs"? I would argue, based on the readings of Joseph Campbell, that they are our myths. Myths are the conventions of the world, and until lately, they have governed the way we live our lives. For reasons explained in the appendix, our myths have become unbalanced about what they tell us of life, and they will not come back in balance until change, or the perception of change, slows down. I am willing, however, to set forth my belief that the time is near for a balanced myth to emerge. It seems to be a myth that relates us back to a collective at the size of the planet and one that will again be the value that catalyzes and measures our daily actions.

This myth, however, will need more than belief for it to emerge. It should be our responsibility as architects to actively advocate for it - and this thesis is a first step towards doing just that. The project tries, at every decision, to reinforce this myth, and to record these steps as a record of the journey. The thesis is presented in the way I thought about my task. It illustrates both process and product as it builds the social institution that reinforces the myth, unfolds a formal resolution to this social charge and finally, describes the place as an inhabitant would experience it. This last task, the seeing of the place from an inhabitant's point of view, allows us the rare opportunity to imagine the exchange between artifact and landscape, to cut vertically through the process and expose all of the issues that informed the making of physical definition. It makes explicit the connection between myth and artifact.

The journey I take is intellectual in its quest for trying to understand why things are as they are as well as experiential in letting the emotions invoked by the place drive part of the decision process. I have set up the age-old dialectic between reason and passion and have played it out as long as I could in this thesis semester. This journey is endless and whatever I find along the way will be as important as the unreachable goal of a complete understanding of my task. I hope you enjoy reading this thesis as much as I have enjoyed writing it.

A c k n o w l e d g m e n t s :

This thesis would not be what it is today without the guidance of Imre Halasz. He, more than anyone, understood my quest and opened the doors that allowed it to reach the stage of the physical. His thoughts guided my hand and reawakened my soul. For this I will always be grateful. A warm thanks is also given to Eric Dluhosch for sharing with me in the formation of the seminal concepts of this thesis; to Nabeel Hamdi for the concepts of participation, opportunities and enablement; to Charles Correa for the insights into myth - into the sacred in this age of the profane. Lastly, I must acknowledge the tremendous debt this thesis has to the teachings of Maurice Smith and John Habraken.

It would not be right to walk away from this thesis without mentioning the critical and emotional support of my thesis cohorts, especially Jonathan Teicher, CF Lin, Steven Shortridge, Wendy Richter and Don Knerr. They saw me through the early times of my rush to finish thesis before Nicholas came to me; and were supportive, though I suspect very amused, in my panic to finish up after what didn't get done before. Likewise, I wish to thank my fellow students in the Visitors Studio for their support and understanding. I would like to think that I was able to be of some help to them in my role as teaching assistant. It was, thesis included, my greatest learning experience here at MIT.

Thanks to friends and family who showed their support and love in many ways. To Mom and Dad for the constant encouragement and for being there when I needed them; to Lois Maddox, Jacque's Mom, for the invaluable help when Nicholas was born - I seriously doubt this thesis would have been finished without the time she spent here caring for us; to David Jedlovec for the ability to calm me down when all seemed lost; to our extended family at McCormick Hall, especially Dawn McKinley, for their caring ways; to Craig and Elane Witte, Tim and Molly Smith and Al and Denise Vallecillo for their help in those hectic weeks after Nicholas joined us, to Craig Witte for his critical response to the thesis; to all of the people who offered help in the final push - too bad I wasn't organized enough to use it all.

My last acknowledgment is the most important. It goes to my wife Jacque. For loving, for caring, for giving - and for sharing with me the miracle of life. It is to her and Nicholas that this thesis is dedicated.



5

M y t h:

I have strong feelings that myths should connect us to our world. They should tell us how to live our life; how to get by under any circumstance; of our place in the cosmos and allow us to somehow sense its wonder. Doing this myths become the first level of conventions between people and serve to relate us to our society - our social order.

It seems that today things are in too much flux for a valid mythology, although the signs are there for something to emerge. What will possibly emerge will not so much be a worship of ancient beliefs in disparate places but, because we are beginning to sense that we are together on this planet, a collective attitude towards this world of ours. It is an attitude that would bring us into harmony with the world and would be a direct reaction to our rapid technological advancement and our emerging moral responsibility to our earth - and each other.

Today, people seem to be coming together into a global village. It seems that our technological advances in communication and media, coupled with our international economic partnerships, are perceptually dissolving both the national boundaries and the isolation that some countries have traditionally felt in this world. We know the world as never before, and we must ask ourselves if we have begun the irreversible process of a world scale cultural synthesis. If so, then I would argue that the move toward a planetary mythos has begun.

Science, the profession that takes much of the credit for driving our thoughts for the last three centuries, has begun to reinforce the formation of the new planetary myth. The findings of the new physics are remarkably similar to the known mystic traditions. They each tell us of the presence of something that will never be discovered - the nothing at the end of the search - explained only by the concept of unity. Is science, ironically, bringing back to us the mysteries of life?

For a planetary myth to emerge, this unity must extend to our relations with our planet. We must again become familiar with our home, the earth, and draw from it our existential necessities of life. In return we must protect it, give back what we can. If we can again put ourselves in a mutually dependent situation, then protecting the earth will naturally become our primary concern. Man was not always alienated from the land; why should he be now? Though we have the technology to control nature in many ways, we must restrain ourselves from doing that and realize that it is time to move closer to the ideal symbiotic environment where man and nature cooperate.

The concept of unity should also extend to our relations with our cohabitants of this planet. If it does, it would tell us of a need to show as much compassion for our fellow man, as we show towards the planet. It is the modern day search for the Holy Grail. The grail search, then, is still valid and can teach us about living in this age just as well as it did in the early part of the last millennium. Heeding its teachings, we should walk the path between polar opposites, always picking the path that does the most good, that sheds the most light. This path should be the check on our actions that make life worth living and bring to our attention - in this thesis - a current situation which desperately needs addressing.





7

"...nature is part of our humanity, and without some awareness and experience of that divine mystery man ceases to be man. When the Pleiades, and the wind in the grass, are no longer a part of the human spirit, a part of very flesh and bone, man becomes, as it were, a kind of cosmic outlaw having neither the completeness and integrity of the animal nor the birthright of true humanity."

Henry Beston, The Outermost House

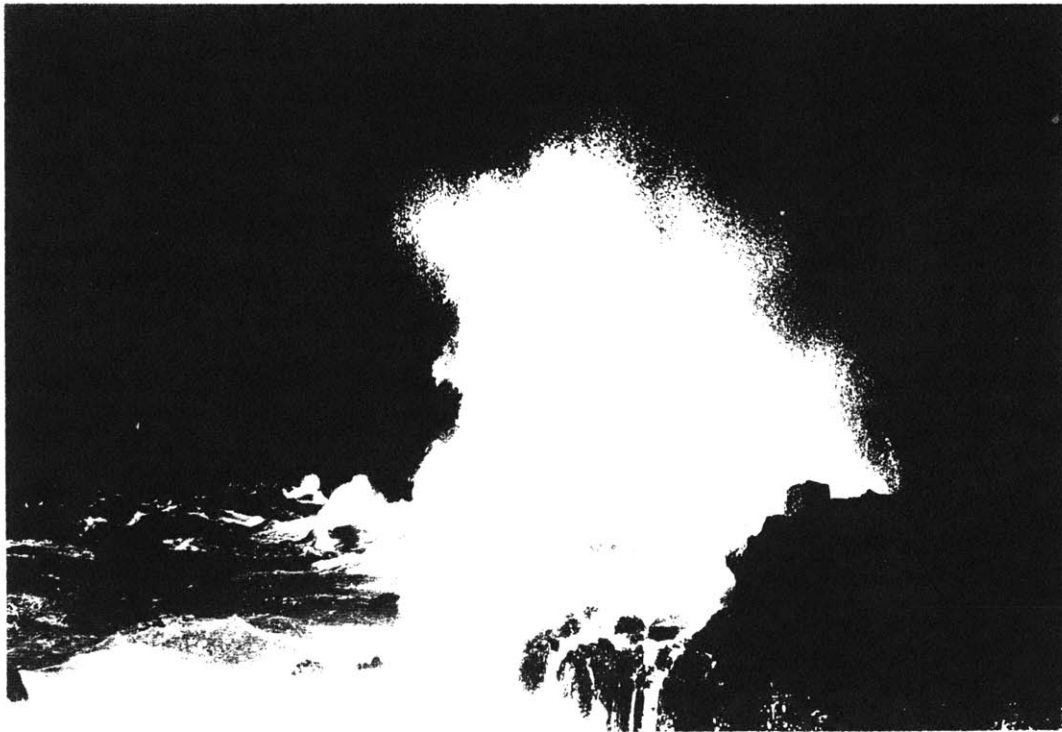


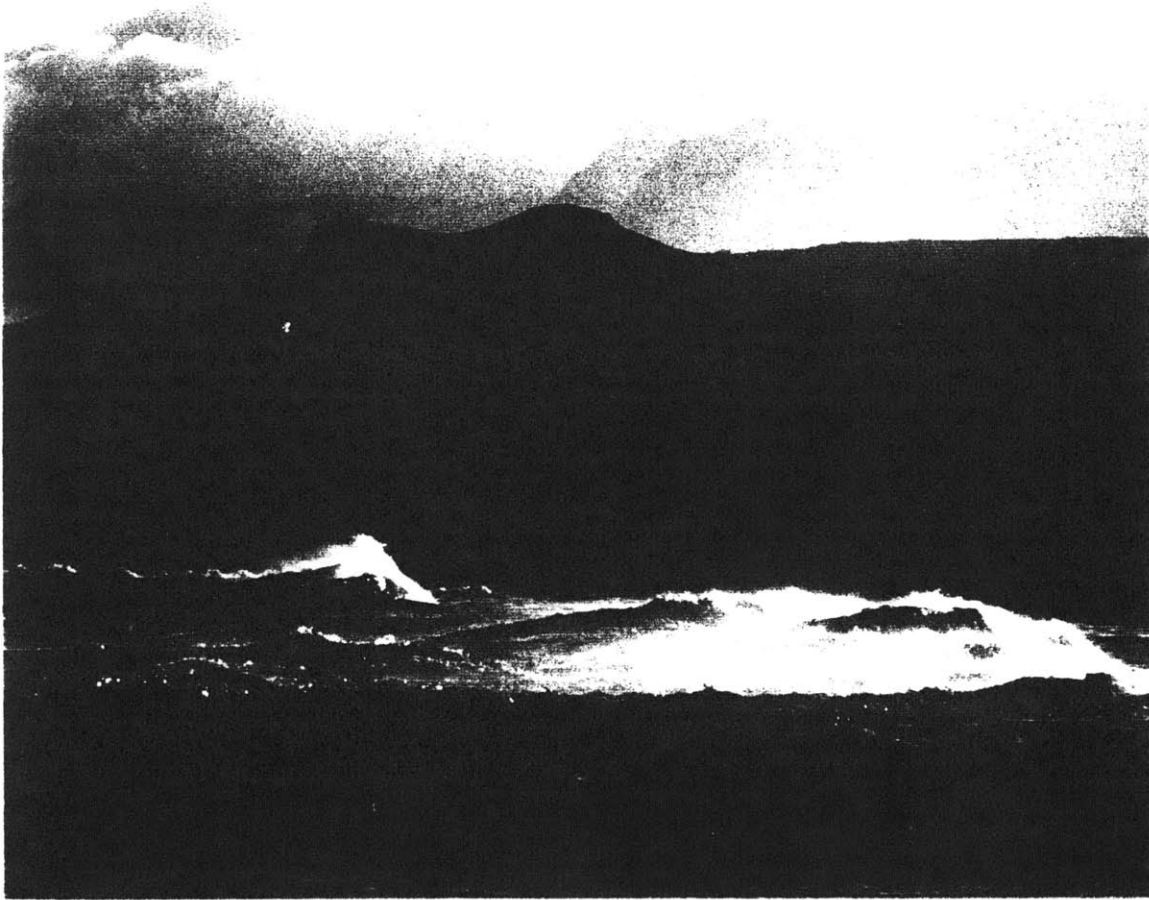
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If we bring home the earth, we have a responsibility to take care of it. We must not kill its song, for its song is us.

Paraphrase from ??? legend.

"In ancient Hawaii, as in all primitive cultures, society was delicately balanced, in subtle equilibrium with the forces of nature, and the actions of men were carefully regulated for the purpose of keeping order in heaven and on earth. Existence was thought of as a unity embracing all aspects of life, but was expressed in a symbiotic dualism: light and darkness; life and death; healing magic and sorcery; and the kapu system that separated the prerogatives and duties of the sexes and the social classes."
Charles F. Gallagher, Hawaii and its Gods p.16





10

"The president in Washington sends word that he wishes to buy our land. But how can you buy or sell the sky? The land? The idea is strange to us. If we do not own the freshness of the air and the sparkle of the water, how can you buy them?"

"Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every meadow, every humming insect. All are holy in the memory and experience of my people."

"We know the sap which courses through the trees as we know the blood that courses through our veins. We are part of the earth and it is part of us. The perfumed flowers are our sisters. The bear, the deer, the great eagle, these are our brothers. The rocky crests, the juices in the meadow, the body heat of the pony, and the man, all belong to the same family."

"The shining water that moves in the streams and the rivers is not just water, but the blood of our ancestors. If we sell you our land, you must remember that it is sacred. Every ghostly reflection in the clear waters of the lakes tells of events and memories in the life of my people. The water's murmur is the voice of my father's father."

"The rivers are our brothers. They quench our thirst. They carry our canoes, and feed our children. So you must give to the rivers the kindness you would give any brother."

"If we sell you our land, remember that the air is precious to us, that the air shares its spirit with all the life it supports. The wind that gave our grandfather his first breath also receives his last sigh. The wind also gives our children the spirit of life. So if we sell you our land, you must keep it apart and sacred, as a place where man can go to taste the wind that is sweetened by the meadow flowers."

"Will you teach our children what we have taught our children? That the earth is their mother? What befalls the earth befalls all the sons of the earth."

"This we know: the earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the strand, he does to himself."

"One thing we know: our god is also your god. The earth is precious to him and to harm the earth is to heap contempt on its creator"

"Your destiny is a mystery to us. What will happen when the buffalo are all slaughtered? The wild horses tamed? What will happen when the secret corners of the forests are heavy with the scent of many men and the view of the ripe hills is blotted with talking wires? Where will the thicket be? Gone! Where will the eagles be? Gone! And what is it to say goodbye to the swift pony and the hunt? The end of living and the beginning of survival."

"When the last Red Man has vanished with his wilderness and his memory is only the shadow of a cloud moving across the prairie, will these shores and forests still be here? Will there be any of the spirit of my people left?"

"We love this earth as a newborn loves its mother's heartbeat. So, if we sell you our land, love it as we have loved it. Care for it as we have cared for it. Hold in your mind the memory of the land as it is when you receive it. Preserve the land for all children and love it as god loves us all."

"As we are part of the land, you too are part of the land. The earth is precious to us. It is also precious to you. One thing we know: there is only one God. No man, be he Red Man or White Man, can be apart. We are brothers after all."

Chief Seattle, reply to the US Government's request to purchase tribal land for the arriving people of the US. 1852. Joseph Campbell Power of Myth

*AIDS is a throwback to the premodern diseases of leprosy and syphilis
It causes terror; it is something unknown; is not environmentally caused; and is seen as
punishment for something;
Susan Sontag, AIDS and its Metaphors*



Finding a Situation:

Why do we show compassion towards each other only in extreme situations; those situations where there is extreme suffering, or over-popularized injustice? Most unusual about this is that sometimes, for some reason, the situations that are the most pathological and most need our compassion are given the opposite. The "victims" are shunned and alienated from society.

There is a line of thought which says that situations are given such treatment not because the cause of the suffering is so terrible, but because our perceptions of the causes and the associated metaphors we attach to the situations are so terrible. Through history, we have been a slave to the mass perception of situations for our decisions on whether the situations are good or bad, right or wrong, and what response we must publicly show. There is a situation that exists today that invokes those kinds of responses. It is a situation brought on by an illness - an illness that so completely changes our perception of the victim that compassion is all but forgotten. It is an illness and a response that seems to remove even the last vestige of hope from the patient. This illness is AIDS.

There can be no question that, to some degree, the metaphors associated with the AIDS virus influence our perceptions of the patient. Some people have a difficult time showing compassion to patients either individually or as a collective. Indeed, there is an 'us-them' situation. It is a disease that has been layered with associations of guilt and punishment, decay and grotesqueness. We show no compassion; we ignore, we alienate.

The reaction of people to this illness, of course, has parallels in history. All illnesses have had metaphors attached to them; some complimentary, such as tuberculosis or syphilis and their associations with creativity, and some bad such as the plague or leprosy and their associations similar to those of the AIDS virus. It is through the parallels with one of these illnesses - leprosy - that we construct a local institution *and* the basis for our project. It is through this look at an ancient disease that we change our attitude to a modern virus.

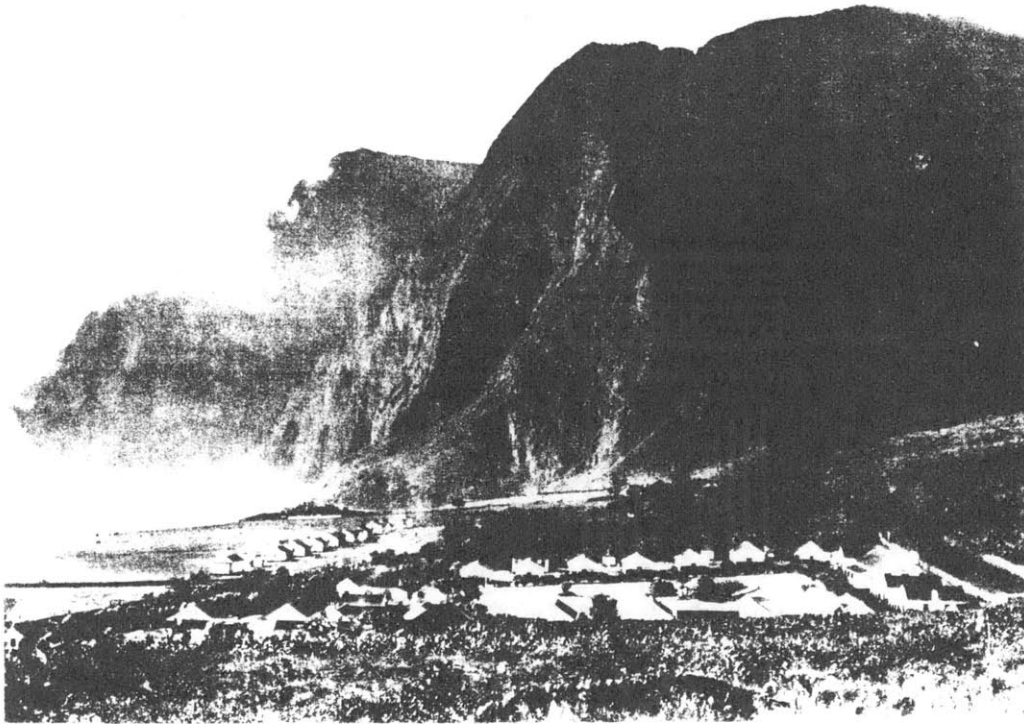
This project is an attempt to help along the emerging myth by appealing to our normative sense of what is good, what is decent. If we understand this, there is a better chance for compassion towards our fellow man to arise, and therefore, a chance for the planetary myth to emerge. We must see the brotherhood of all men and build a social institution for its enablement in today's society.

"... our difficulty or inability to perceive the experience of others,... has become all the more profound the further these experiences are from ours in time space or quality".

Primo Levi, The Drowned and the Saved

"Human memory is a marvelous but fallacious instrument"

Primo Levi, The Drowned and the Saved



12

Imagining a Project:

Kalaupapa is a peninsula on the North Shore of Molokai, Hawaii and is the site of an historically and religiously significant leper colony. No longer the collection of outcasts it once was, it is now a home - of breathtaking beauty - to over 100 remaining patients. These residents are no longer forcibly isolated and are free to travel and have visitors. They have permanent tenure here and may, if they so choose, live out their remaining years in this place they have grown to love. Kalaupapa was declared a National Historic Park in 1980 and is currently managed by Federal and State agencies under a cooperative agreement. The land will come under sole jurisdiction of the National Park Service when the last resident passes away or moves from the community.

Since the inception of Kalaupapa, there has been a community of people facing exile and death together, drawing strength from each other and from the few workers who had chosen to help them. This community, in fact, would not have prospered without the compassion and strong determination of these selfless workers. Exile was perhaps the last step in the patient's alienation from society, and many of them needed these helpers to lead them to rediscover the spirit of life and to advocate for their rights as human beings.

We look in awe at the accomplishments of Fr. Damien. He went into one of the most feared places in the world, and through dogged determination, stubbornness, and a strong compassion for his fellow man, fashioned a community and restored dignity to the residents. The difference between then and now - between leprosy and the AIDS virus - is that today the helpers following the model of Damien must *not* appear after the alienation has taken place but in time to prevent it from happening. Today, we need people to act as did Damien, to go out into society and fight for the acceptance of people with the AIDS virus. It would be wrong for people with AIDS to be outcast from society as happened at Kalaupapa. They must remain a functioning, viable, useful part of their familiar community, even in the face of the current, media induced hysteria. Remaining a part of their community is the goal, and it only has a chance of being reached with the help of trained people, "modern-day Damians", who are able to go out and be the catalyst for community building in an unwelcoming society.

"To truly enter the present as a human being entails being able to exist back into the past as well as forward into the future, to bring what has already been into today and to project the perspective of those remembrances into the hereafter."

Henry Plummer The Poetics of Light p. 143



13

These helpers need special training. Not training in the treatment of the various symptoms, but in the caring for the whole person; a chance to learn about the natural progression from life to death, about compassion, dignity and ways of dealing with the terrible associations we heap on the ill because of our conceptions about their disease. It would be a good thing if these helpers could somehow be imbued with the spirit for life that characterizes the residents of Kalaupapa and were able to experience the lives of these once isolated people in their living community; to learn from the past both of its mistakes and its successes.

This thesis is an exploration of the physical and metaphorical potential of Kalaupapa in its current role as a National Historic Park. Though its role today is only interpretation, its role tomorrow could be something greater; that of education. Not only should it educate the helpers that come to the place for long periods of time, but it should touch the general public - the visitors to the park - as well. It should help us learn from the mistakes we made when we separated the lepers from their loved ones and relocated them to this isolated patch of land. It should help us learn about the life destroying metaphors we attached to leprosy, and to the lepers. The park's role should be to reacquaint us with the dangers of making these same mistakes with the diseases of this century and to build an institution that exposes the metaphors of current illnesses. Perhaps through the understanding that comes with the teaching of the general public, the burden of guilt that people with AIDS currently feel can be lessened and the past injustices to the residents of Kalaupapa can be ameliorated.

This thesis also explores the problem of making available to everyone that which existed only because of its isolation. This isolation not only caused the terrible conditions which first drew Fr. Damien to the peninsula to do his selfless work, but gave us a preserved, near perfect, example of a turn of the century Hawaiian plantation settlement. The National Park is in the tourism business, and it is in their charter to bring this place to our attention. Somehow we must blend the need to bring people here with the need to protect the residents and the environment from undue disturbance. As architects, it also charges us with solving the problem of designing on such a strong site, of relating to the landscape and the past without reverting to arbitrary moves or fashionable imagery. In short, this project commands us to respond to the emerging planetary myth.

It is an education, then, for all of us who wish to build in this current age of fashion, multiple values and existential barrenness. It is a way to find out what is important in life and the true value of our built environment. As builders, it allows us a way to explore the making of an architecture that provides us with existential opportunities; to look again at "traditional knowledge" and to see what is to be learned from it. It is our chance to lose our alienation to the land and to learn again what it means to dwell.

This education of the public can be done largely by the current residents of Kalaupapa and is an opportunity for them to gain back their self respect and dignity by sharing their experience with the world. The project is a chapel, museum and school. It is a training center for those who are helping, and wish to help, people with AIDS. A place to help us understand living and dying in an outcast society, to learn of compassion and the spirit of life.

It is an intervention that fits, and one that reinforces the "...belief that man has the ability to overcome, both spiritually and physically, one of the most distressing public health problems in world history".¹ What could be a better legacy to the many people who have passed through this place?



14

¹Linda Green, *Exile in Paradise*, p.xxxv An historic resource study of the leper colony at Kalaupapa, Molokai.

*Bodhisattva - the present day plural of Damien
They come to build their community,
to strive for the enlightenment of themselves
for the dying
...to stop before they have completely succeeded in this enlightenment
as is correct
so they may go out and spread the way*

*The journey begins with ignorance, and ends with compassion, responsibility and
a gradual changing of world opinion
for the present day Bodhisattva's, the community of lepers
and people with AIDS throughout the world*

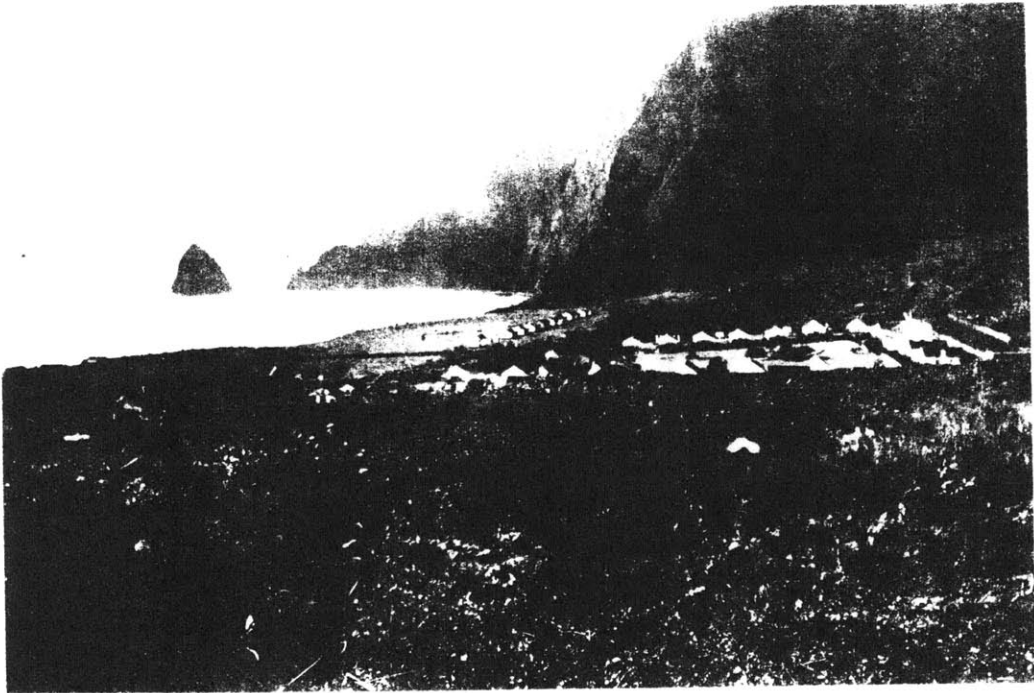
*The existing community is built on one of the most beautiful spots on Earth
with some of its most painful memories.
The site layered in Hawaiian myth
and the Aloha spirit.*

*A community that is at one with the landscape
that is rooted in its time in history
that tells of its construction by humans
of its idiosyncrasies and its record of local decision making,
that is the essence without the image*

*A community that strives for its connection to the world
for its purpose
past, present and future*

*For a promise of giving back what was received
to the people with AIDS
and to our helpers living out their remaining years
all are welcome*

*happy, finally, that we have recognized the "one"
that responsibility can emerge
and they are thus connected to the world.*



15

S i t e:
an island within an island

The island of Molokai is the fifth largest, and most ecologically striking island in the Hawaiian archipelago. It is an elongated island that stretches East-West with a shield volcano at each end of the island. The lava flow from these volcanos formed the island many eons ago. East Molokai rises to 3700 feet and is well watered, West Molokai ranges from sea level to 1200 feet and is rain shadowed.

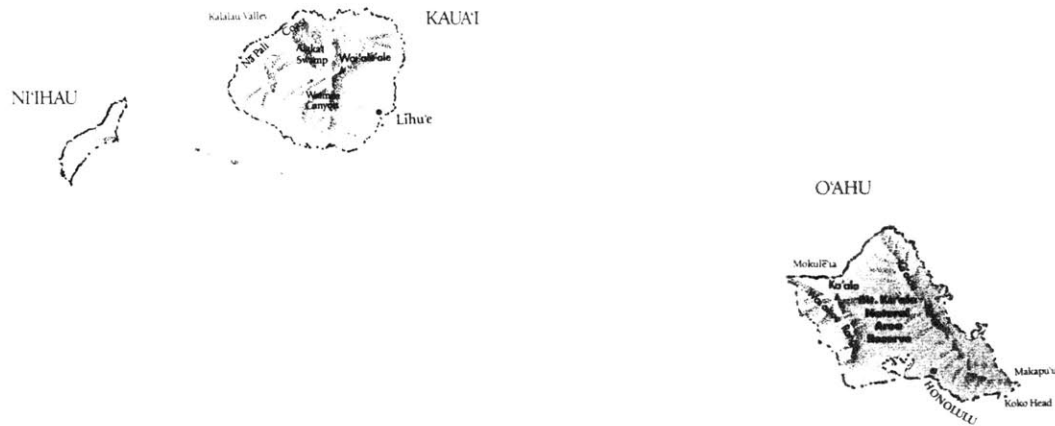
The North and South coasts of the island are just as different from each other as the East and West sides. The south coast is in the wind shadow, has extensive, broad reef flats and is not cut by valleys. The north coast stands as a sentinel in the face of the strong trade winds. There is no fringing reef and the base of the giant sea cliffs receives the full fury of the ocean swell. This side is cut by great amphitheater-like valleys. It is at the mouth of one of these valleys and at the base of the sea cliffs that we find our site - the peninsula of Kalaupapa.

The peninsula of Kalaupapa encompasses more than 10,700 acres, of which only 4,476 are habitable. It is surrounded on three sides by the Pacific ocean and is closed off from the world on its fourth side by cliffs towering nearly 2500' above this inhabited lava shield. Means of access are limited. There is a small airstrip for light planes, a 3.5 mile trail leading down the cliffs from the top and calm waters only during the summer months. Cargo ships venture to this place only then, for in winter the waves approach 30 feet.

There exists a wealth of infrastructure and community buildings; some still in use, some abandoned. The Leeward side of the peninsula has a good climate; plenty of sun, reasonable amounts of rain and light winds. The majority of the existing buildings are on this side.

The windward side of the peninsula is infinitely harsher. The afternoon sun is intercepted by the ever present cliffs separating Kalaupapa from "topside" Molokai. The wind is unrelenting and the rain cold and plentiful. There remain but a few buildings on this side; two important churches and a few, poignant ruins of the once thriving community that was located here during the colony's early days. On this side of the peninsula man was forced to struggle for his existence, and gradually moved his settlement to the leeward side and a more sheltered life.

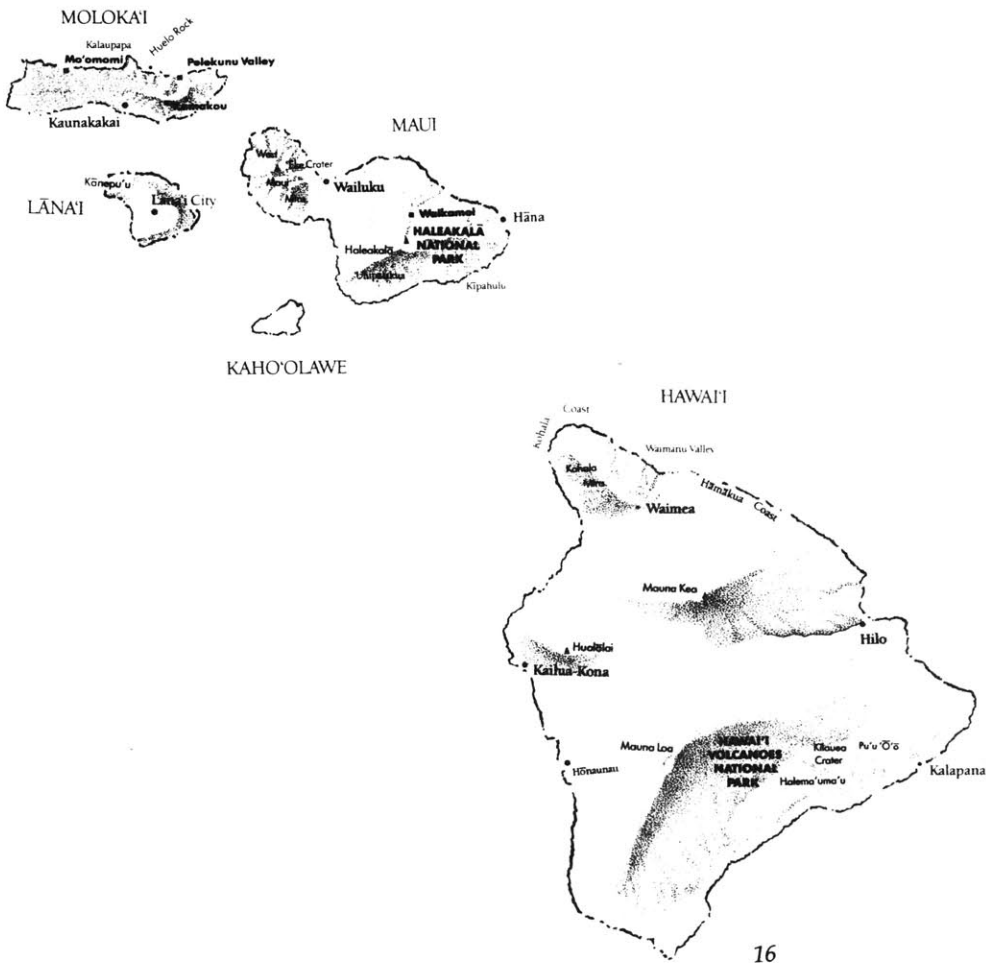
There are three valleys to the east that are partially habitable, and were at one time used for agriculture on a limited scale. They are accessible from the peninsula and receive abundant rainfall.



The peninsula is bisected by a ridge that begins near the cliffs in a dormant crater called Kauhako. The crater is the highest point of the inhabitable shield and reaches a height of 400' above sea level. It was this crater that let forth the lava that formed the peninsula. At the bottom of the crater there is a natural, slightly brackish lake, which in ancient times served as a burial place. There are three other, major burial grounds on the peninsula. One on the leeward side, one near Kauhako crater and one behind the surviving churches of the windward side.

Kalaupapa has never been open to any large scale private development. It is a laboratory of turn-of-the-century indigenous Hawaiian architecture. There have been three or four major phases of construction on the peninsula, all occurring within a short time of each other, and the results of all except the first phase are still standing. Constant attention to these wood framed, metal roofed buildings is a must, however, if they are not to simply disappear through the action of rot and termites.

This, then, is the location. Somewhere on this peninsula is the specific location for the settlement - the manifestation of the planetary myth. Finding the location and determining what we build become our next charge. We must explore what it means to dwell here, and to do this, we turn to the writing of Heidegger.





17

"The ancient Hawaiian belief system produced another kind of duality. On the one hand is found a highly poetic and moving vision of the cosmos, of the concept of man and his infinitesimal place in it, and of the innate harmony of all the living phenomena of the finite and the infinite worlds. On the other hand, there existed a harsh and oppressive social system that evolved as the expression of an involuted and minutely detailed framework of religious proscriptions and obligations that is the obverse of the profundity and refined elegance of the religious tradition at its highest level."

Charles F. Gallagher, Hawaii and its Gods p. 17

Dwelling:

What does it mean to do a project here? We must respond to the local conditions, the past and the environment. We are influenced by the old myths and traditions, by the legends, by the history and by the incredible landscape and environment. A project here is driven by much more than the program.

The early Hawaiians had a mixed horticultural and fishing subsistence base, and naturally found the fertile, windward valleys to their liking. The sea was vital to the lives of the islanders. Ironically it was both a wasteland and their provider. They were, however, first and foremost cultivators of the land. They were bound to this new land and soon grew to know all their plants and varieties; of their planting, tending and harvesting methods and of food preparation. They practiced various kinds of conservation and resource management, had a ban on certain fish at particular times, valued land highly and strove to make the land and sea productive. Their environment was sensitively transformed to produce a new society.

This project must also look at the emerging planetary myth and let it tell us what is important, what regulates, and what controls. Our response to myth and our ongoing participation in our life world is called dwelling. According to Martin Heidegger, we dwell, to a greater or lesser extent, based on this participation - both physically and existentially. This act of dwelling gathers to us a world of meaning.

This world of meaning seems to derive its essence from the coming together of the location of the project with the physical manifestation of the project itself. These two, together, give us a site for this world of meaning.



18

"...still, the ancient Hawaiians managed to find an escape from the rigors of a highly ritualized existence in the naturalness of their lives in a benign climate. ... Life was lived at a simple level that united the soft fertility of the land with the easy sexuality of man. Existence was literally existential, and begetting, becoming and dying were part of the cosmic patterns of the race, expressed and accepted in the chants and legends, repeated again and again. The race was the crux, the only living entity. The individual was nothing, but the communality was all. ... Altogether it was a society built on a fragile frame, ... it carried the seeds of its own destruction, ready to burst open at the first touch of foreign hands, some seeds to blossom forth in new guise, others to crumble into nothingness."

Charles F. Gallagher, *Hawaii and its Gods* p.23

The physical manifestation of the project is a man-made thing. It is artifact, and addresses the question of how, and in what spirit something is made. We can make artifacts in the spirit of narcissism, or in the spirit of custodianship - that of taking care of things. The choice is ours, and it is only our reflections on our current or emerging myths which guide us.

The artifacts built in the spirit of custodianship should allow us opportunities to participate in the life experience. We live, work, study and play in these artifacts and they should be responsive to these activities - to change/adapt when needed. They should be responsive to the forces of the site, try to complete the forms begun by nature, and link us to the special qualities of the place. Wouldn't it be good if our artifacts were derived from, and somehow brought into relief, the qualities that are inherent in life?

The artifact, however, does not work alone, and it is only the placement of the artifact at a location that allows completion of the world of meaning that is gathered to us. The location, likewise, does not exist by itself and is completed by the artifact. The meaning we receive from the location is also dependant on the myths we are living with at the time. Dwelling, we see, begins to tell us of our world by reflecting the essence of the myths guiding our life. For this reason it is important to move to the next step, to view the possible locations for the project while advocating the emergence of the *planetary* myth.

The Project:

The project must be large enough to enable at least 150 people to live in its boundaries, to be fed by its crops, to be taught by its teachers. The teachers are those on staff, and the residents of Kalaupapa themselves. The people will stay for periods of at least two months each. There should be provisions for short term accommodations for visitors not in the program.

The Location

Kalaupapa...

A location must be picked that will complete the mission of this place in an existential way. One possibility is to occupy some of the buildings in the existing community of Kalaupapa. It was decided not to do this because the residents of Kalaupapa will lose their much valued privacy and their remaining years here would be in jeopardy of seeming as if they were being played out in a fish bowl. The town of Kalaupapa is not the initial experience for a group of helpers who must learn what it is like to live a life of isolation and banishment. The helpers must feel what it was like in the early days of the leper colony on the windward side of the peninsula.

...Top of the cliff...

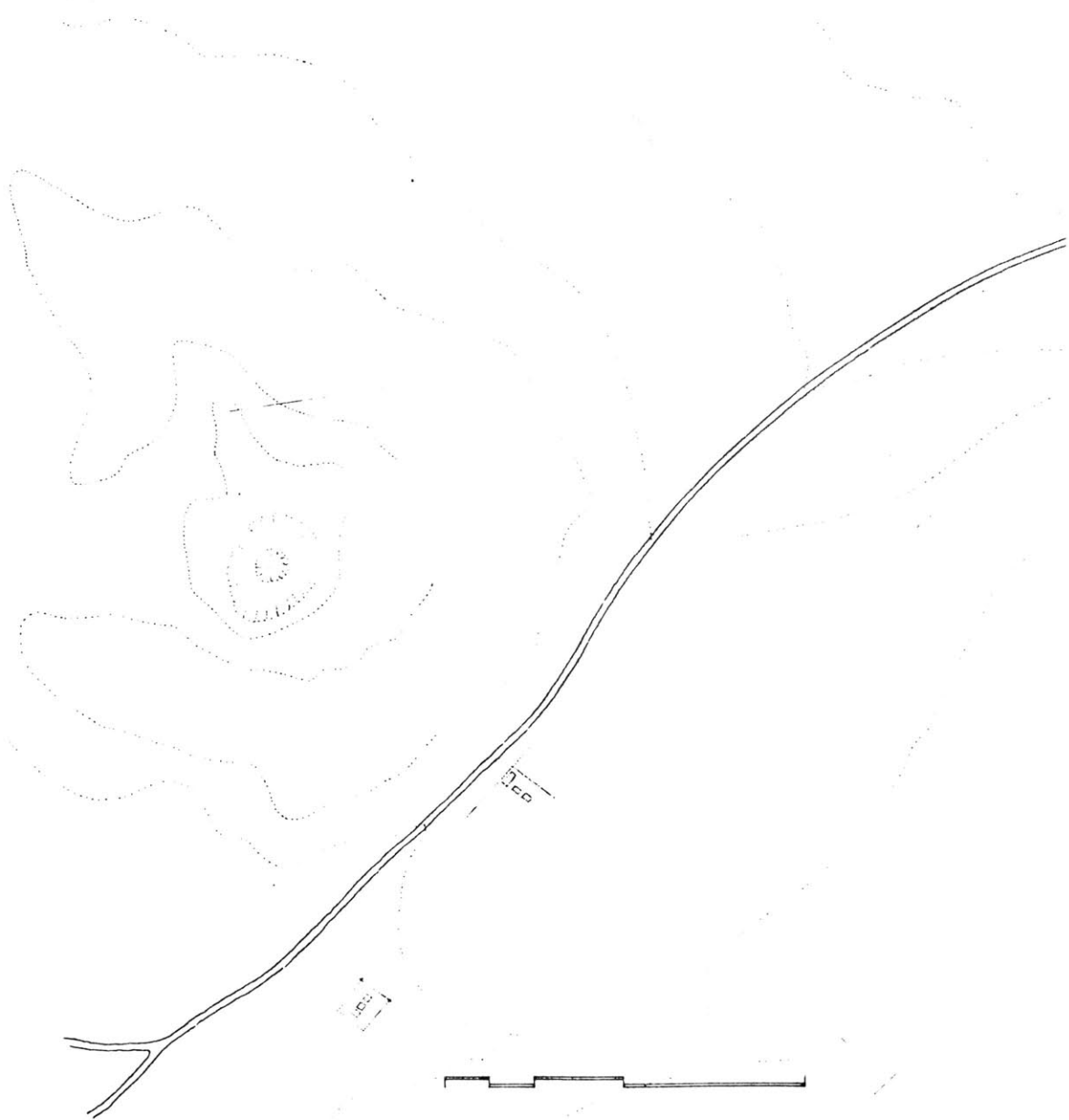
Though the location on top of the cliffs affords us a view of both sides of the peninsula - the early and later inhabitation sites - it is disassociated physically from the activities that went on there. It would be trying to make a new place rather than intensifying an existing one. It is not a location that has any meaning for the social charge and no connection to the local myths and legends of old; it would diffuse the energy of the peninsula.

...or Kalawao.

The Kalawao side of the peninsula gathers to us a sense of urgency. It is the urgency to do something worthwhile for the residents of the peninsula because of their past treatment, to make matters right while there is still time. Here is a place that should be intensified.

There is not much left of the initial settlement of Kalawao. Two churches and a few scattered foundations mark the extent of this old settlement. Somewhere here will be the new settlement, and it will complete the meaning of this place just as this place will complete the meaning of the settlement. It will serve as the entry point to the peninsula as it did in its early years. This will be the helpers' first taste of isolation and, because of the 4000-5000 graves in the immediate vicinity, their first experience of learning about life through an understanding of death.

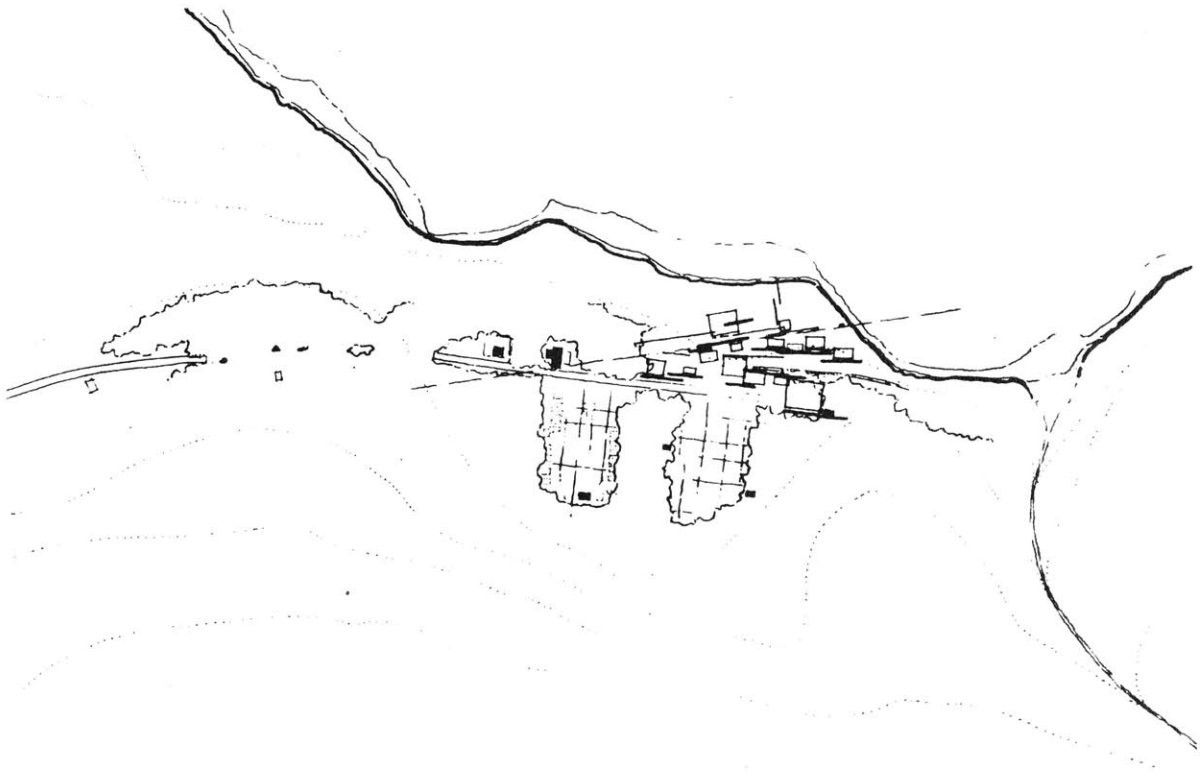
At the present time, we have only historical sites to visit. These tell us something about our past, but we are not connected to them in any personal way. With the emergence of the planetary myth, this site will again begin to mean something to us.



completing the landscape

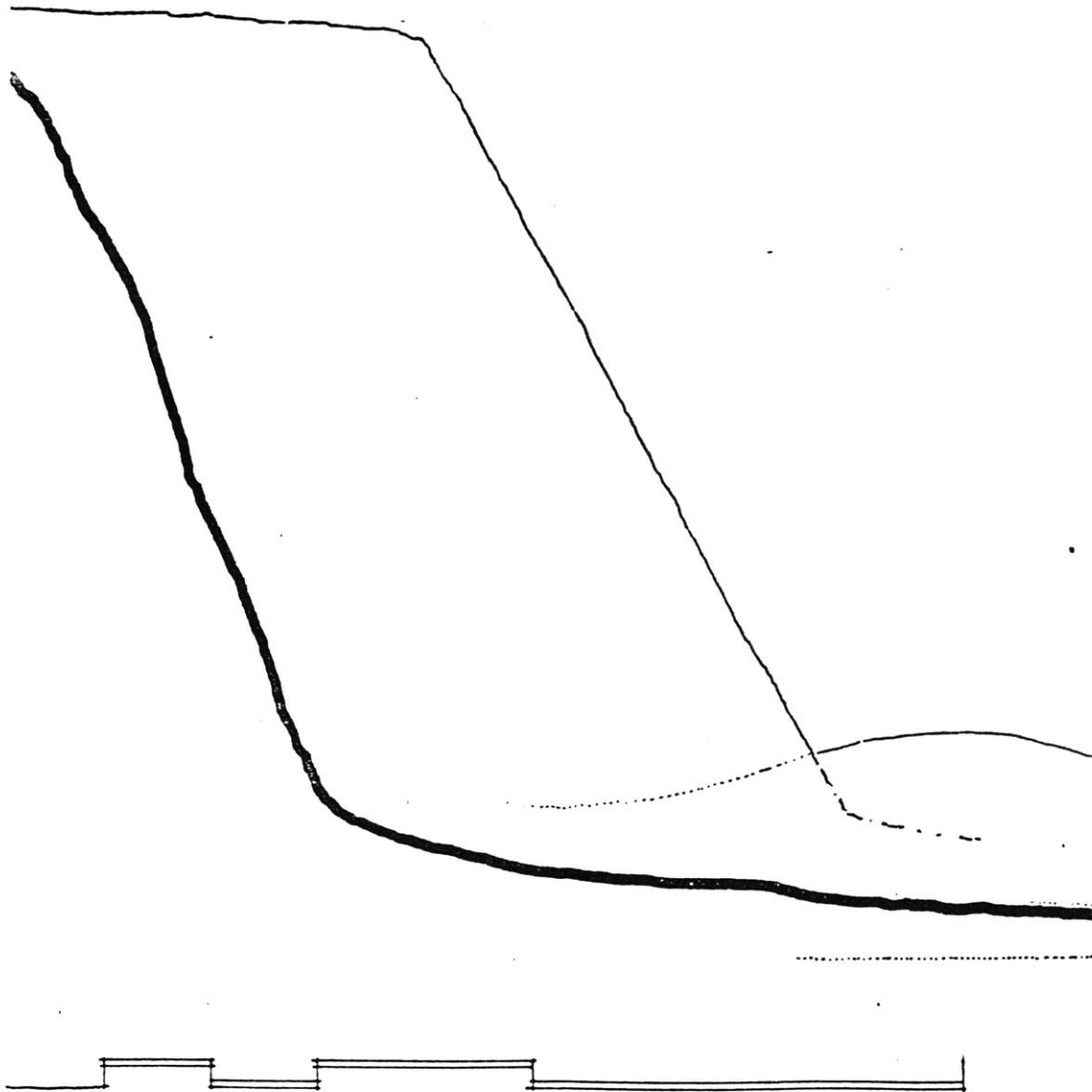
"People claim the land by creating sacred sites, by mythologizing the animals and plants - they invest the land with spiritual powers. Thus, there is built up an organic relationship between the land and the structures we build upon it. We must build with the energy of the site which empowers us."

Joseph Campbell, Power of Myth



Where in Kalawao? It must be a location that *is* of the energy to empower us and that *does* enable the settlement to emerge as an advocate of the planetary myth - as an intensification of nature, a reciprocity between the buildings and the landscape. The life of the settlement should depend on the site forces that work on it, just as the location becomes complete only in combination with the artifact.

The site for this project comes into being when the settlement and the location reinforce each others' tendencies. It does this at the spot of the old leprosy investigation unit at the mouth of the Waialeia valley, at the end of the improved road leading from Kalaupapa.



This place is the spot where the natural demarcation between the cliff ecosystem and the plain ecosystem come together, and an archetypal place where man, here, has typically chosen to inhabit. This is where the lava stratum breaks out from underneath the topsoil, showing itself as the inert mass from which the life-giving topsoil has come. This topsoil has, in turn, received the bodies of the lepers from past years and grown the thick vegetation which offers some protection from the incessant wind. These features become an important part of the settlement and offer the students here an ongoing dialect between life and death and an understanding that one is not possible without the other.

intensification of the road

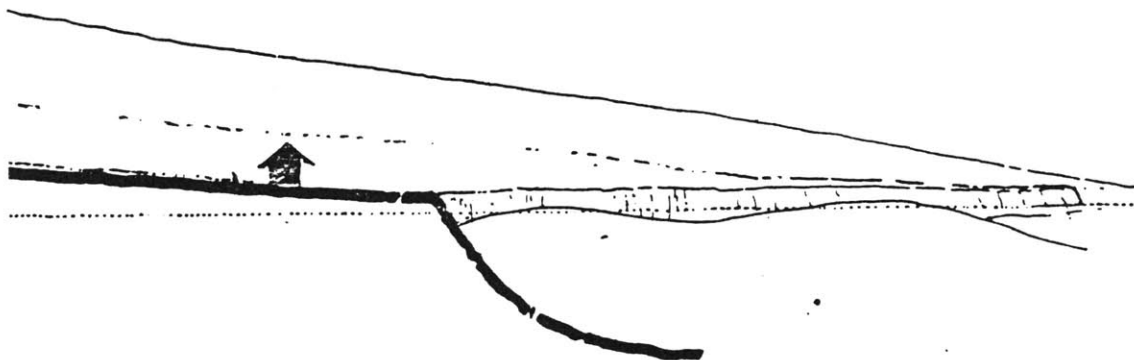
The place here says stop; so we should stop it with formal moves that make this place not just a place along a path, but a place at the beginning of the way. The existing road has a natural stopping point at the location of the ruins. This should be intensified with a lateral move that connects the end of the main road with the foot trail leading to the valleys beyond the settlement.

respect shown to the ocean

We must recognize our urge to build on the exchange between land and sea. It must be a modified urge, however, because the sea here is not a calm and placid body of water. The settlement must be pulled back far enough to survive the ocean's fury, but must still reach out at places to allow us access to it.

continuity of time

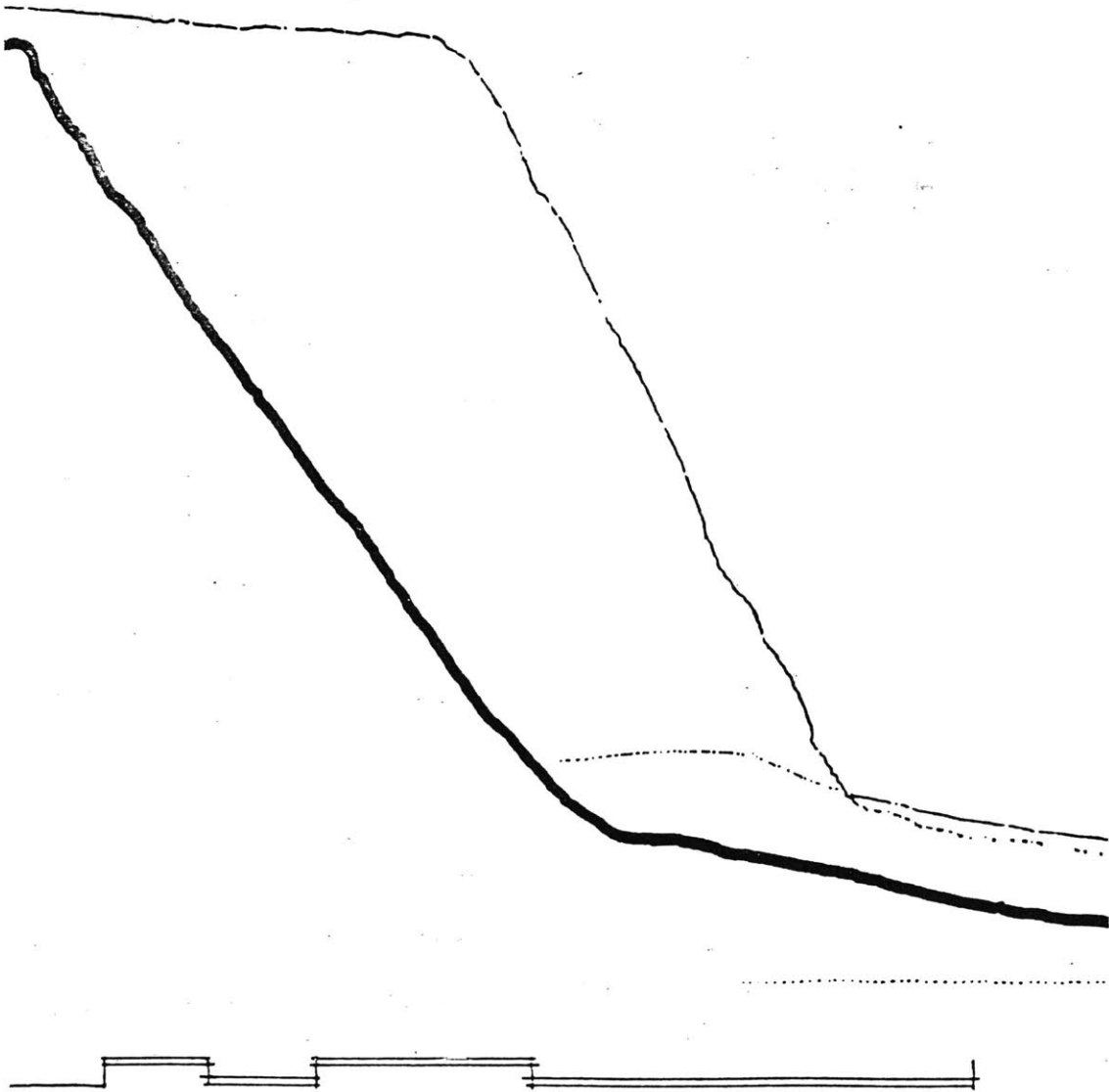
Respect the remaining myths and the important legends. The important myths are reflected in the emerging planetary myth. The volcano must still be seen as a sacred symbol, the ocean still seen as the great force and provider that it is. The myth of the compassionate man is embodied in the legend of Damien.



The Nature of the Artifact

The place composition

Though the purpose of this place is for teaching, there are no classrooms because the learning takes place through the associative actions of the students with the environment and residents. The students' typical day would consist of: the maintenance and tours of the Kalaupapa community on the leeward side of the peninsula; the construction, maintenance, transformation and tour giving of their windward settlement; the tending of the crops; the preparing of food; the publication of printed matter and the communication of information throughout the world regarding the nature and metaphors of AIDS and its viral cousins.



The settlement should be used not only by the students who come here for long term study, but by the visitors who wish to tour a historic site, by archeologists as a base for their digs in the nearby valleys and by the residents of Kalaupapa themselves as a place for reflection and relaxation.

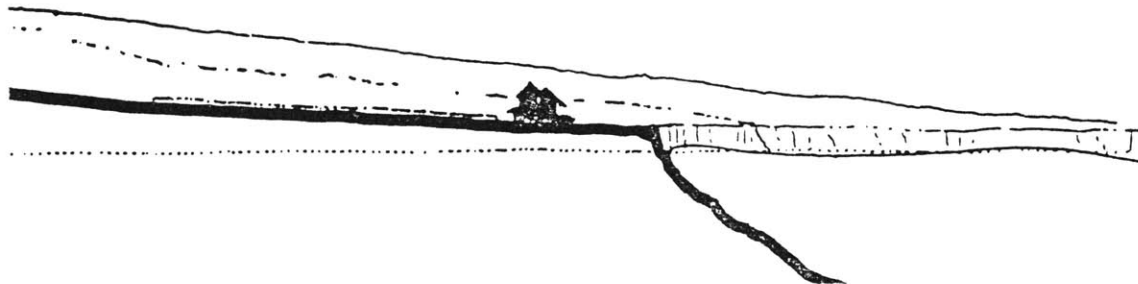
It is obvious that this artifact is a settlement composed of many activities, with each activity needing a place to exist. While it is true that the relation between activity and artifact is not always in an one-to-one relation, there has unfolded a general feeling for the archetypal places that must exist to anchor/tie this settlement to a location.

Settlement centers

The students, residents and visitors alike need a place that gathers them to the most important tasks while here, that of worship, meditation, and the recall of the past in a way that keeps the purpose of the settlement in everyone's mind. The place - a combination of the built and the unbuilt - seems to want to include a chapel, a library/media/communication center and a meeting hall which serves to gather the largest groups. It would seem to be a place in the settlement that retains some sacred qualities, and one that, along with the burial grounds at St. Philomena and Siloama, could become a sacred center.

There are also needs for informal centers. This charge is filled nicely by the activity of gathering and preparing food. The place where this happens is the dining hall and kitchen; with strategically placed agricultural plots as the beginning of this life-giving activity.

The students and visitors need a place to sleep, a place that gathers to them the inner qualities of meditation. These dormitories must become our existential extension into the landscape, our first link to the emerging myth, and a reestablishment of the compassionate soul. The dormitories set up the dialectic between the private and the collective by allowing both. To suffer with, to show compassion, means we must share some activities. But, we must recognize the phenomenon of individuality. We need a refuge/shelter in this world. The private becomes both point of departure and retreat.

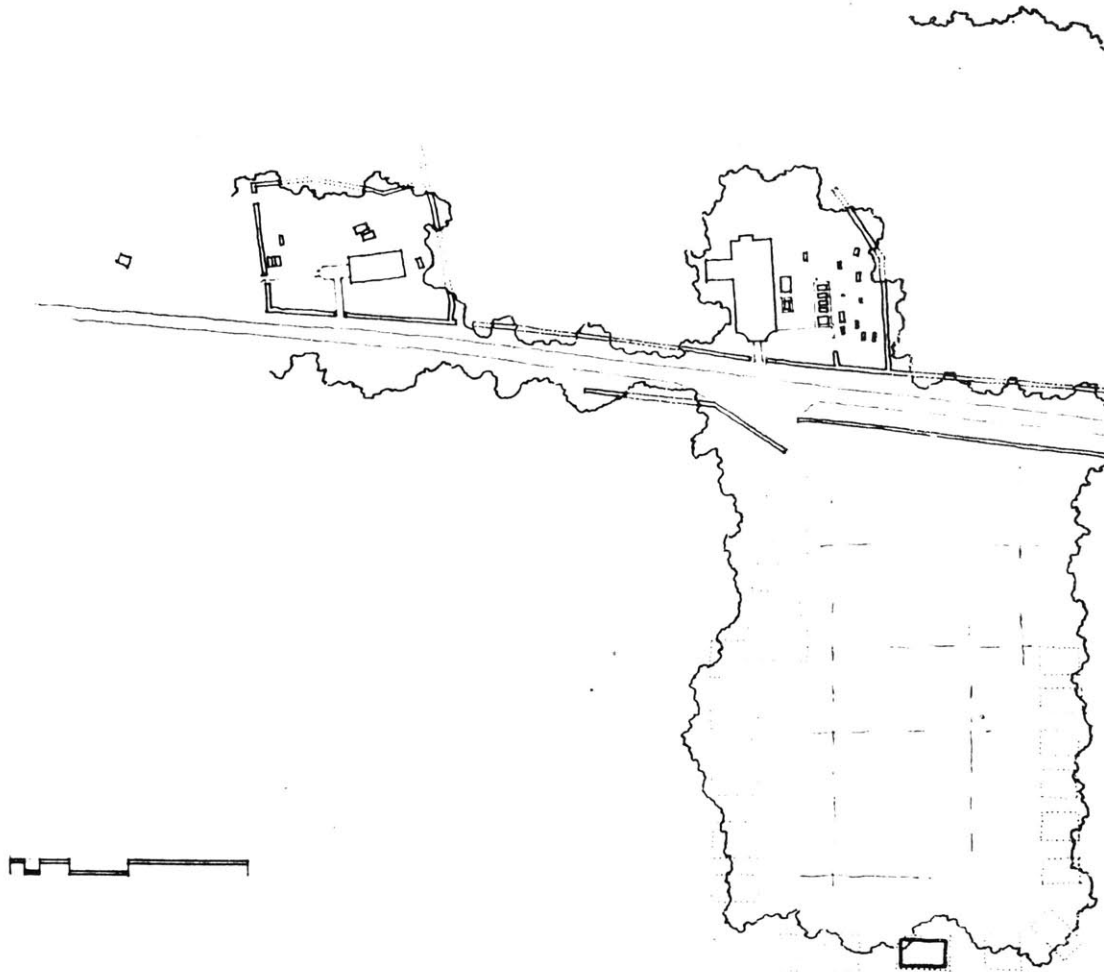


Form and Behavior

Settlement size

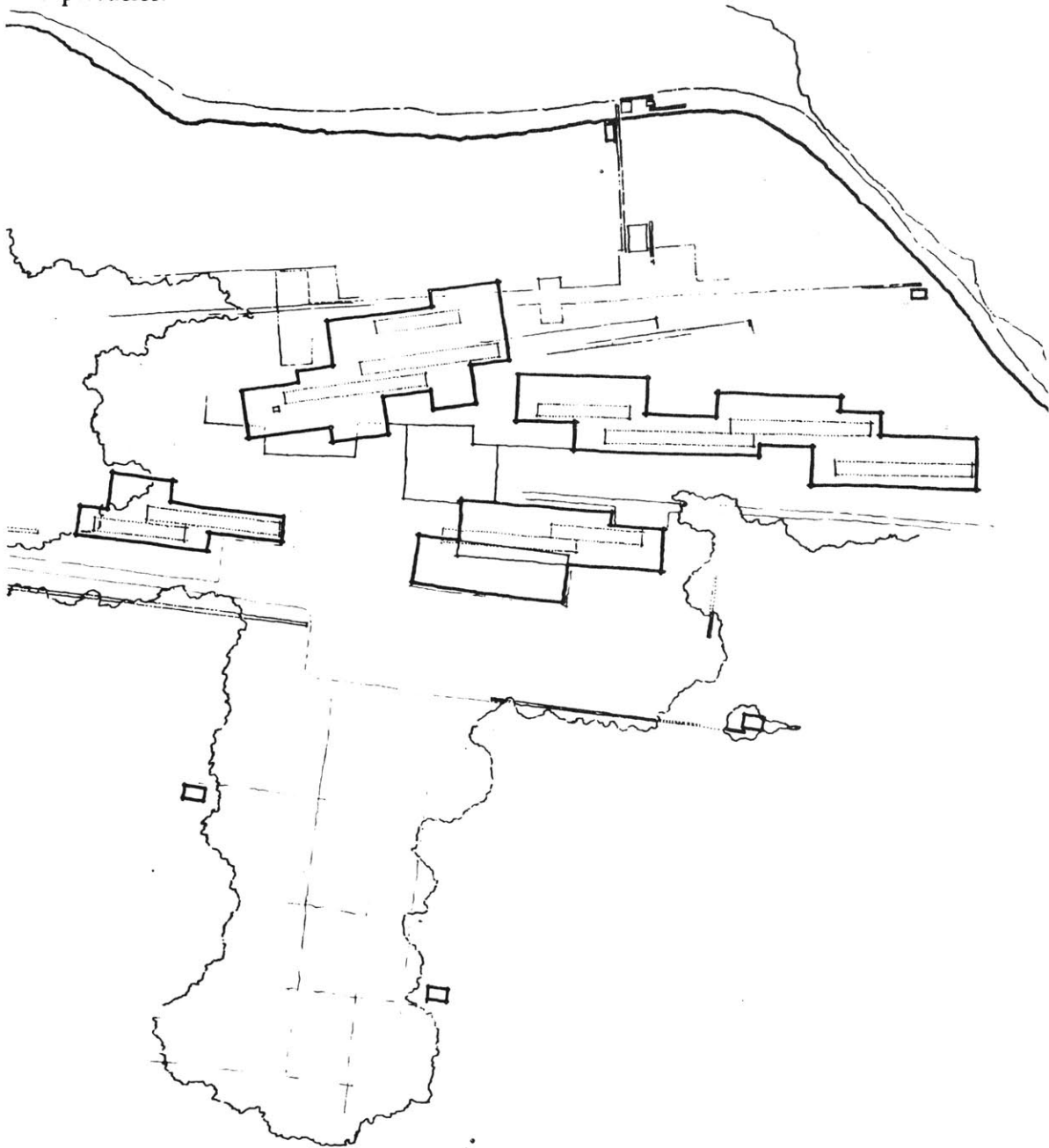
relation to environment/climate

The settlement must complete the decisive moves begun by the climate. The first climatic move is the incessant trade wind from the northeast. At the large size, the settlement must try to protect its gathering places from the wind. This implies an opening toward the cliffs, a closing toward the ocean. The second climatic move is that the sun is blocked from noon by the cliffs to the south. We must somehow allow the sun to penetrate the building without exposing ourselves to the wind. The third climatic move is the passivity of the temperature and weather. There is much need for a building that allows one to participate fully in this environment - we need no more than basic shelter.



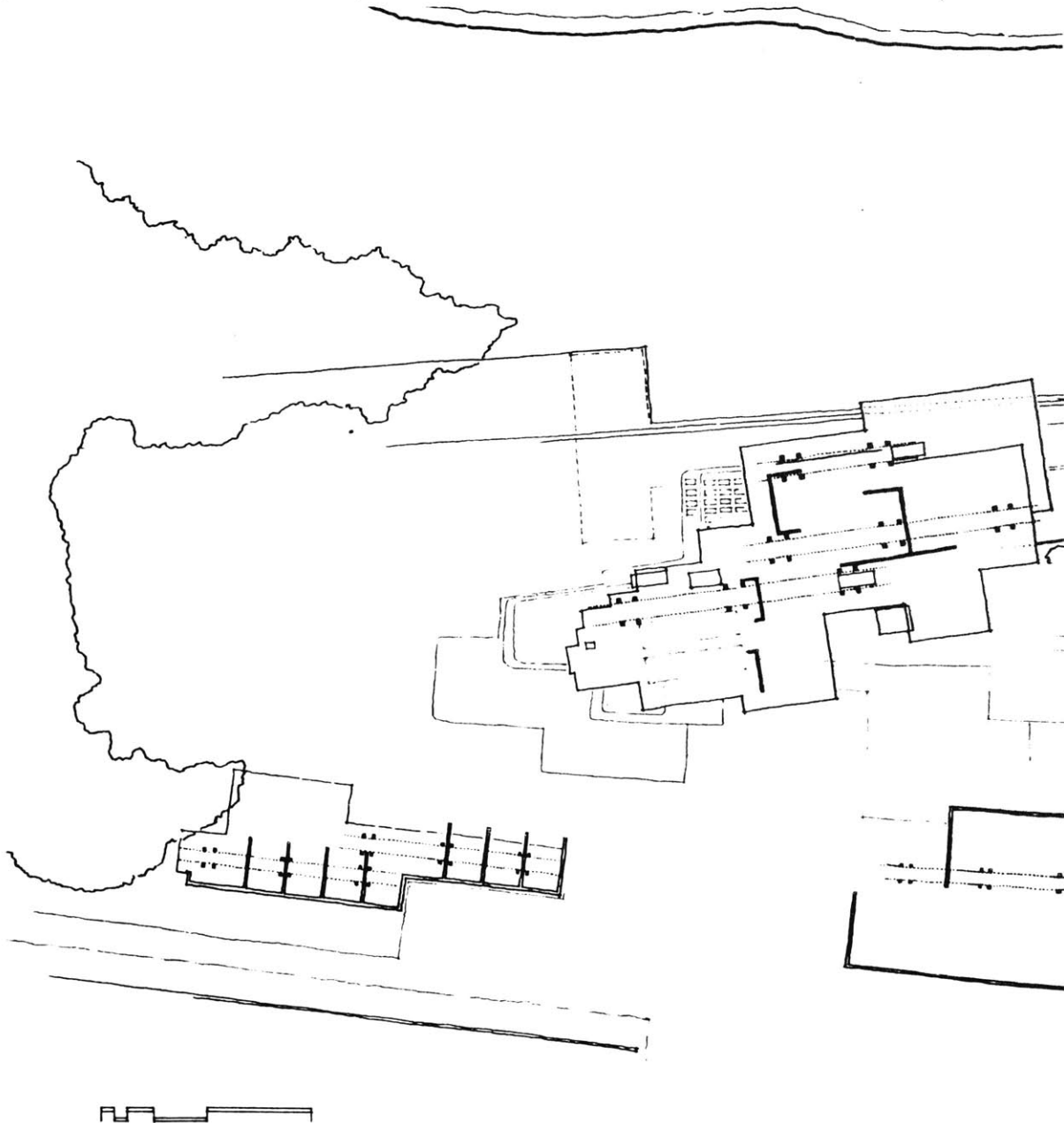
territorial control

At the large size, territorial control is by the land forms and ocean edge. It has controlled mans' site size moves of locating past settlements and cutting of the roads. Locating this settlement will have similar constraints. Furthermore, the road between Kalawao and Kalaupapa will become an organizing element for this settlement at the smaller size. It will provide a zone of registration for the buildings and end in a partial containment set up by both building and landscape. The road sets up the form of the access at the large size and has registered off of it variable use territories such as the agricultural land and the privacies.



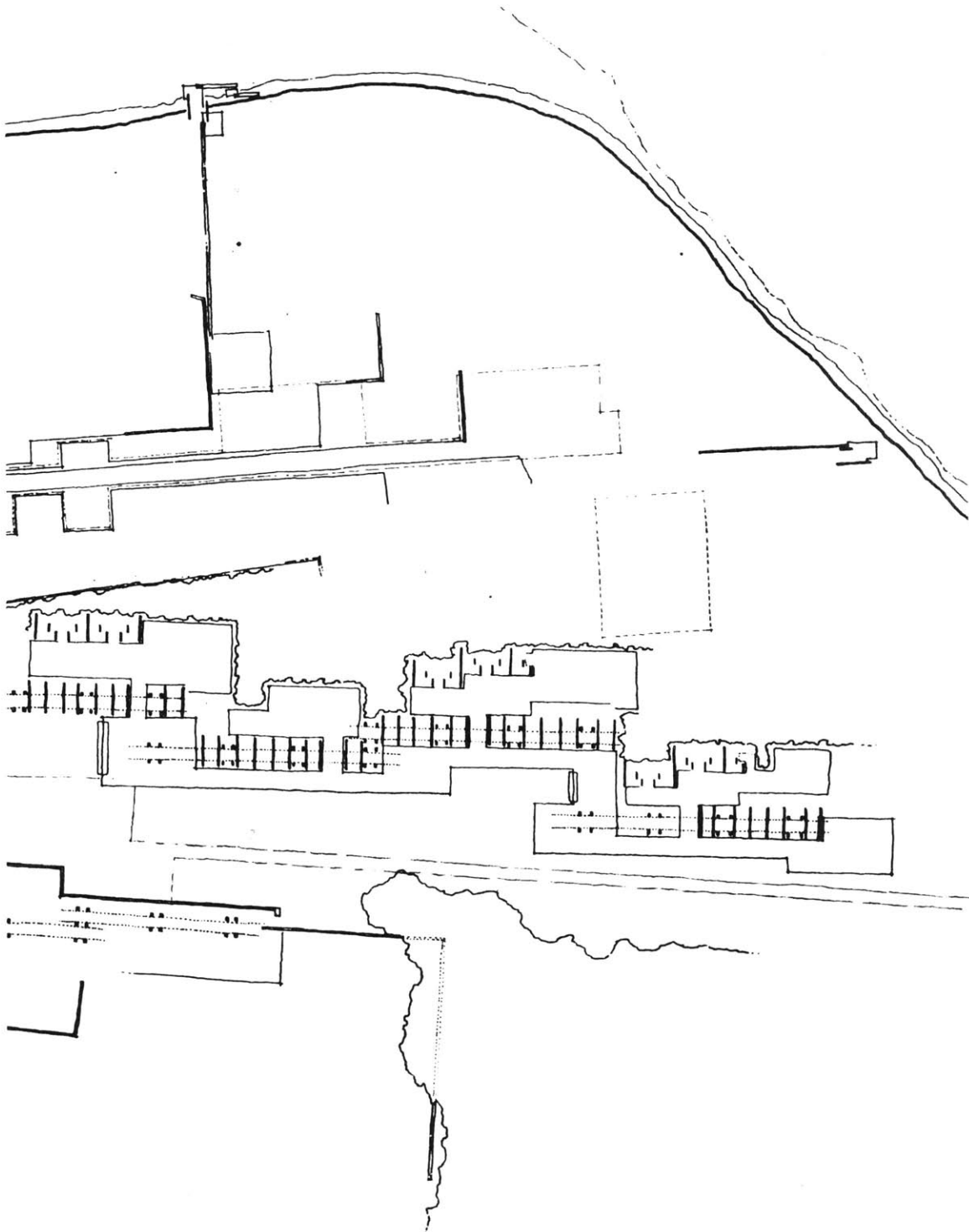
the large collective...

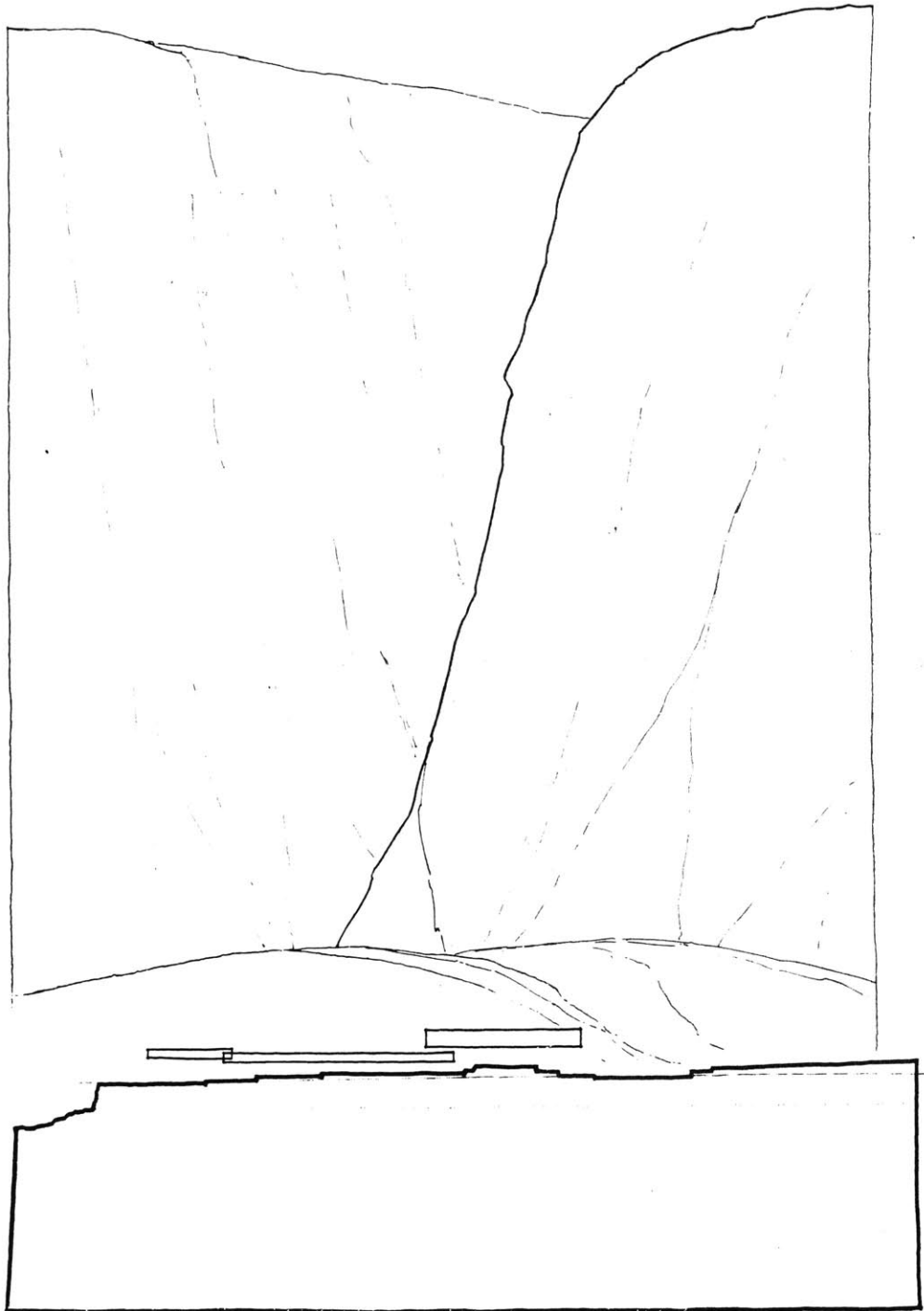
is set up by the response to the climate and the opportunities inherent in the large size access system (road). Here in the west (US) the privatization of man has somewhat precluded the concept of the collective as seen in European squares. We are a society of the automobile and have evolved a system of public places around this concept. The opportunity for a large collective, then, must be inherent in our access systems. The settlement shows this by putting its gathering places between the end of the road leading to Kalaupapa and the beginning of the smaller path leading to the valleys beyond.



the privacies

At the settlement size the buildings are seen as the privacies; the access and large gathering places are seen as the collectives. The behavior of the access collecting the privacies, becoming a collective opportunity itself, is seen at all sizes of the built environment.





access

The access is set up so that movement parallel to the contours unfolds our perception of the cliffs and the sky. Moves lateral to the contours set up the perceptual unfolding of the ocean.

mediating between cosmic and local place orientation

Views of the volcano for the sacred buildings on the site are important. How do we build topographically yet still acknowledge this sacred (geometrical) orientation when appropriate?

The morphology of the settlement is generated from an overlap of the geometrical and topographical systems. In this case, the topographical layout encompassed the possibility for a cartesian direction. In other words, the axis mundi became one of many possible axes, not the only.

completing the landscape

Does man notice nature before he builds? If not, you could argue that the artifact is what enables the natural qualities to appear. Man's hand, then, is necessary for a landscape to exist and building completes the landscape. Our buildings must make the natural structure more precise, complement the existing situation by adding what is lacking and symbolize our understanding of nature.

"The earth is the stage where man's daily life takes place. To some extent it may be controlled and shaped and a friendly relationship results. Natural landscape becomes cultural landscape - an environment where man has found his meaningful place within the totality."

Christian Norberg Schulz, Genius-Loci

The site is strong, landscape almost overpowering, yet still, building and nature complement each other. Nature sets the constraints, it clearly wins. The building is horizontal, responding to the incredible verticality of the cliffs. The form of the settlement mediates between this vertical cliff and the horizontal plain and allows the major elements of earth/sky, cliff/plain to interlock. The settlement is based on the "pi" form family which allows both the registration along the road and contours, and the extension and interlocking with the landscape.

Do we belong to the earth by the power of the groundform, or to the sky by the power of the landscape? Do we build in-ground?; on-ground?; over-ground? Is it vertically open to the sky?; closed to the sky?; Delimited by neutral horizontal line? As classified by Norberg-Shulz:

Base and roof are closed

Base closed, roof open

Base open, roof closed

Base and roof are open (association to ground and sky)

Our base is open to the ground - we are rooted. We are related to the ground through groundform and direction of contours. Our roof is open to the sky, yet we do not reach for it - we know our place in the cosmos. We use the landscape vertical as our relation to the sky. Our place is in the floating middle ground which is our continuity in the in-between.

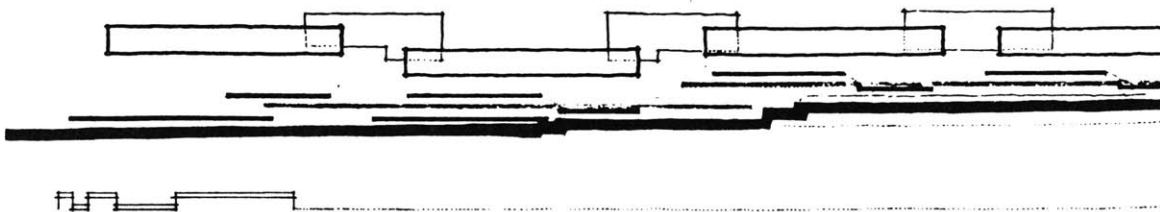
The sacred and the secular; the cosmic and the earth-bound, govern the form of the settlement. If the christian ethos is the cosmic, then the landscape of the volcano, cliff and sea is the place orientated ethos, the earth bound. The settlement centers are formed from a gathering of local site phenomena *and* the cosmos.

Form and Behavior

Building size

mess hall

Forms one of the privacies that demarcate the entry to the settlement. Becomes the informal center, and has a social as well as physical exchange with the natural and agricultural landscape.



workshops

Forms the other privacy that demarcates the entry to the settlement. Its privacies are rooted in the groundform.

chapel

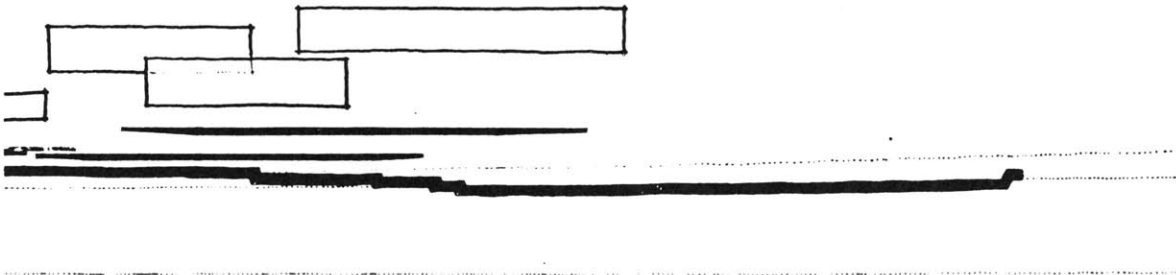
The chapel concretizes our understanding of ourselves in relation to the cosmos according to the emerging myth. In the past, the church was a closed form. It was an internalized experience - no reciprocity with the landscape. It was an internal, general relation to earth and sky. The Christian teachings precluded the acceptance of nature at the same level as us.

The new myth says different. Our churches should reflect the gradual coming into line of our religions to this new myth. They should tell of our relation to the Earth and Sky in an explicit, external way. The form however should allow both internal reflection and external interaction.

orientation/gathering hall

This is the portion of the settlement that has the responsibility to link the sacred center of the chapel and the graveyard back to the secular of the rest of the settlement. It does this by exchanging with the groundform of the graves and by becoming that portion of the access that exchanges with the major gathering place.

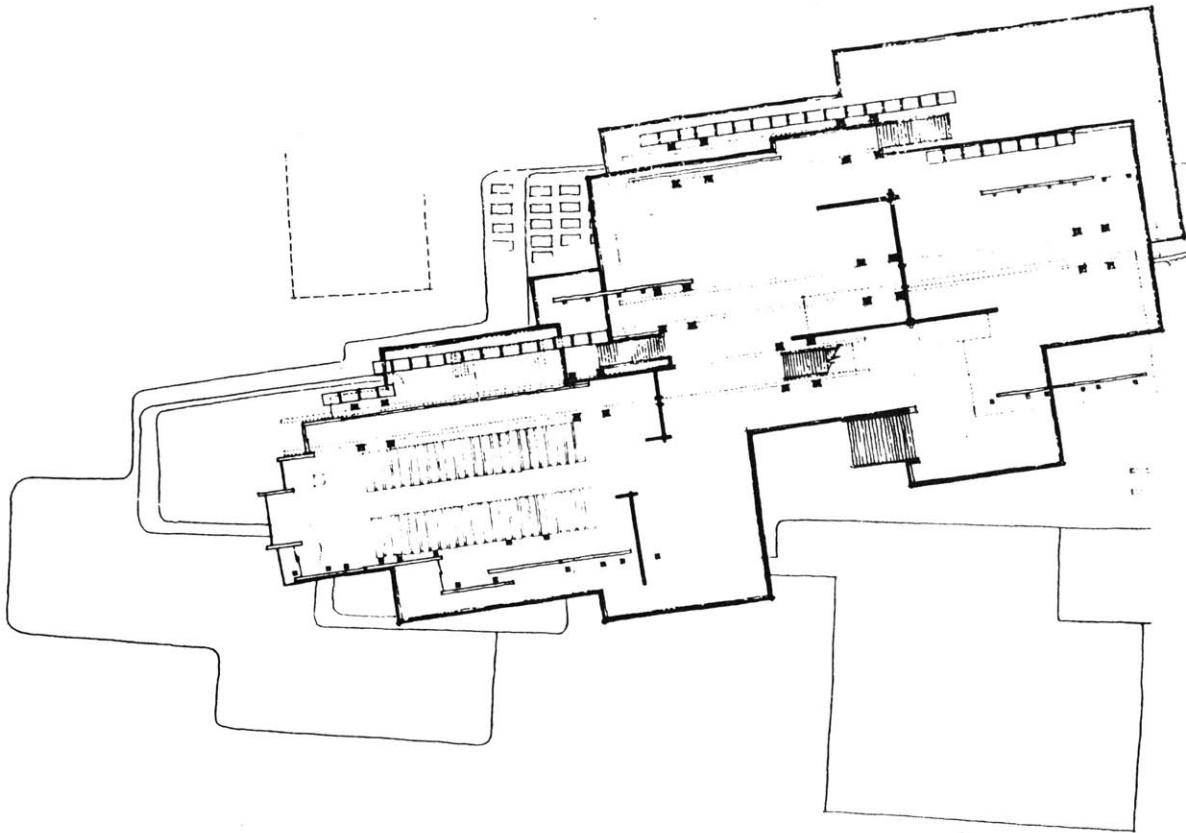
It also has the responsibility to form the protective back to the settlements large gathering place.



chapel - cont.

The center of christian life is where the meaning of life is revealed. The following of Christ at one time translated into a longitudinal axis leading to the altar. Our church is the center of Christian life, but its altar is not at the center, the landscape is. Just as the landscape was the center of the ancient religions, so too is it with the emerging planetary myth.

A sacred / symbolic system is overlaid on the secular system. This is the point of overlap between the topographical and the geometrical orientations. The church must relate to the site specific icons, our perceived order of the cosmos and the topography - the landscape. In other words, we must bring unity to the site through reacting to the duality of nature/cosmos.



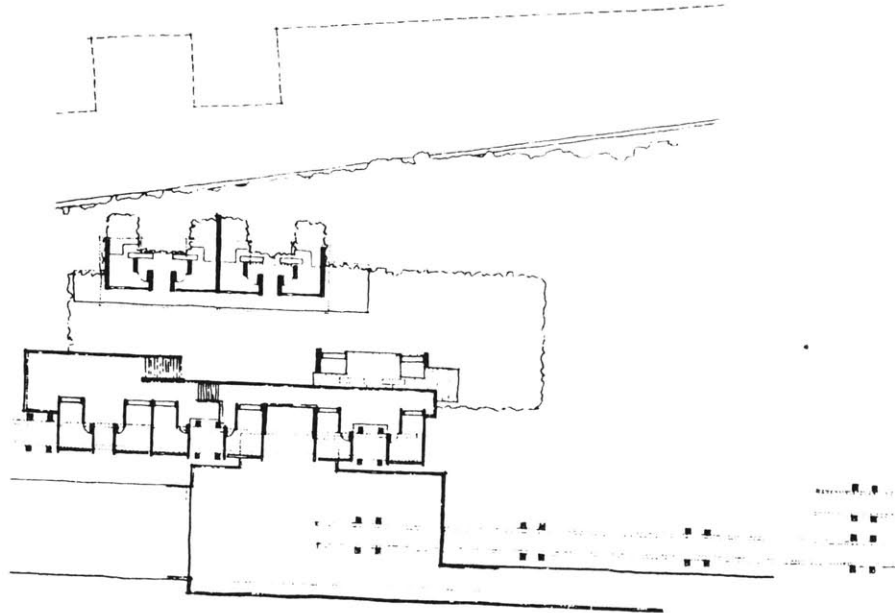
dorm

The dorm is the manifestation of the individual in the realm of the collective. From our shelter we venture out to the either the landscape or to our next sized collective. Placed around a local center, the private places of the dorms form the permeable exchange that anchors us to the landscape. It is the edge that gathers to us the phenomena of the site.

There must be a range of habitation opportunities inherent in the dorm - from completely sheltered inside, to partially - or non - sheltered outside. There must be a range of public and private responses possible with the workings of the closure. These privacies are then aggregated to a small size collective.

"...if we take the fundamental questions of architecture to be those concerned with human beings - with determining what environmental qualities are fit for and nourishing to people both individually and collectively - then our search cannot help but acknowledge and explore the developmental possibilities of this symbiotic phenomenon"

Henry Plummer, *Poetics of Light* p.61



Materials / Systems

There are a number of required responses that are set up by various reasons that are not specific to a particular building. These responses (behaviors) are found in the materials and the inherent opportunities of the various systems. They are specific only to a particular deployment and the overlap with other systems.

Material decisions

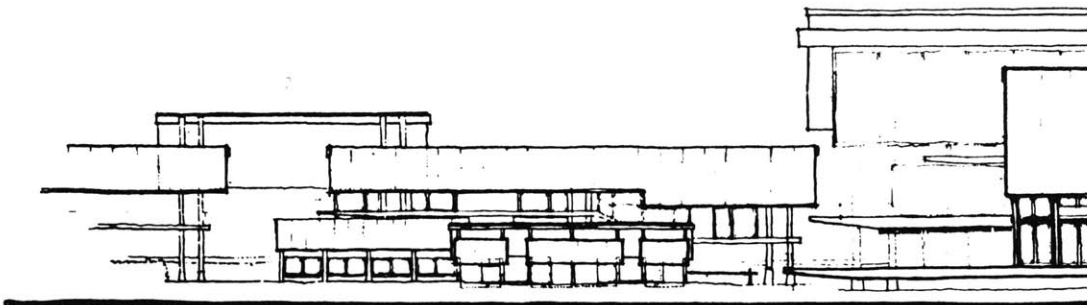
life cycle of the buildings

These are permanent buildings, but, like all buildings, they will eventually return to the composite materials from which they came. There should be something left as a reminder. This something should be of the inert mass that also forms the base of the island - the lava rock.

site constraints

Access to site ...Everything must be shipped in on the twice yearly boat, or flown in with very light private aircraft. Material must be light weight, easily handled by workers.

Availability of materials...If materials are not locally available (only stone is available) then a coordination problem will result. Use off-the-shelf materials, available from the nearby commerce center of Honolulu. Labor too, must be flown in for the project. A temporary camp must be set up for the workers.



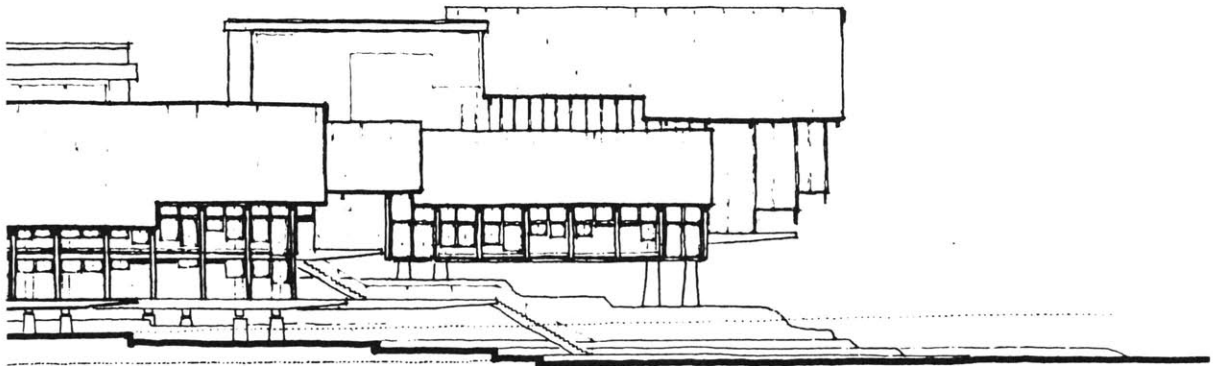
Construction process and local knowledge base...This is not the site for experimentation with building techniques and complex processes. We do not control nature on this site. There is a small local knowledge base in association with the buildings that are existing. It would be a good thing if we could build on the existing conventions so the entire community feels a part of this process. The existing residents cannot be alienated again.

Environment - Climate ...The climate is tropical; it is damp, windy, sunny, humid. The materials must work with these forces, must intensify the good site forces, must negate the bad. So must the buildings.

Energy required/Energy available...The peninsula has its own power and water supply. It is adequate, but not superfluous. The construction process and the building operation must fall within reasonable limits.

Economy of means...There is a small amount of money available to do this project. The economy of means, however, is perhaps not as important as the economy of maintenance.

Maintenance ...The climate/environment and the appropriateness of technology and material/finish options suggest a low maintenance building. Dependant on intended life of the building.



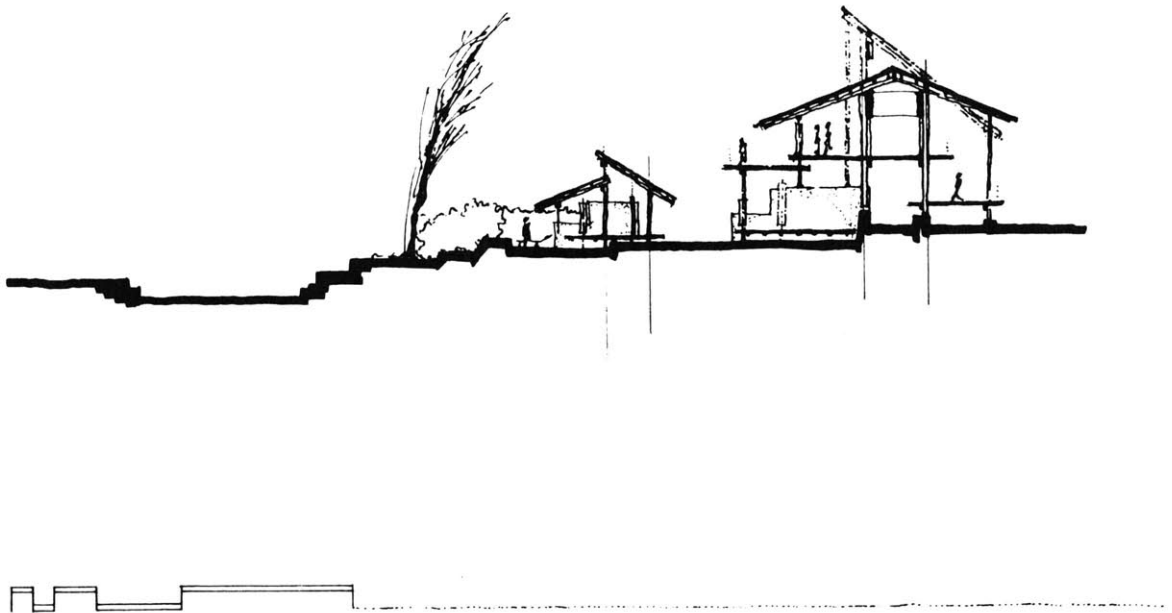
Systems

groundform

The old myths were of the earth. The strength and compassion of the Hawaiian people depends on their old myths - myths that was never completely destroyed with the coming of the outsider. It would be good if the emerging myth builds on these old myths of the earth.

Groundform is also of the earth. It is of the lava rock that forms the base for this island. Just as the old myths outlasted the imposed order, so too will the groundform outlast the imposition of other materials. It will be what is left after all is gone - it will be both memory and ruins and could be the beginning move for future intervention.

The lava datum lives a life of its own at the frayed edge of the peninsula where it appears from under the topsoil. As a system it should also have a life of its own. The rock forms low garden walls or privacy walls which become either the base for further building systems, or as an enclosure within which other systems form further territorial definition. Likewise, it berms up to reach for the underside of the structure and acts as retaining walls for the precious topsoil of the peninsula.



"Each world is a cosmos of possibility within the liberating discipline of the wall. Constructing the wall, therefore, is not the act of denial or exclusion but rather the giving of potential - the essence necessary for building a place."

George Barnett Johnston, "Architecture and Alchemy" p.15 in the J.A.E. Winter 1988.

sticks

The primary and secondary structure is of posts, beams and light weight frame.

Territorial definition is nearly impossible with this system, although opportunities exist to make a coarse grain screen with dense deployment. Its primary purpose is to support the horizontal planes above and below and to span over the groundform.

closure

Zones of closure

- windward side: deep zone, opportunity to baffle/tame the strong wind and allow habitation where normally there would be none.
- leeward side: shallow zone, less fierce than the windward side.

Territorial opportunities

- small privacies
- mid size collectives.

Operable screens sets up exchange between in and out

privacies

Light weight

Territorial opportunities

Operable, Removable

Single wall construction or single ply panels fitting in a fine grain screen. Sliding panels similar to shoji screens.

landscape - plantings

Sheltering

Makes largest dimensional moves

roof

Horizontal

Habitable / Territorial

Sheltering

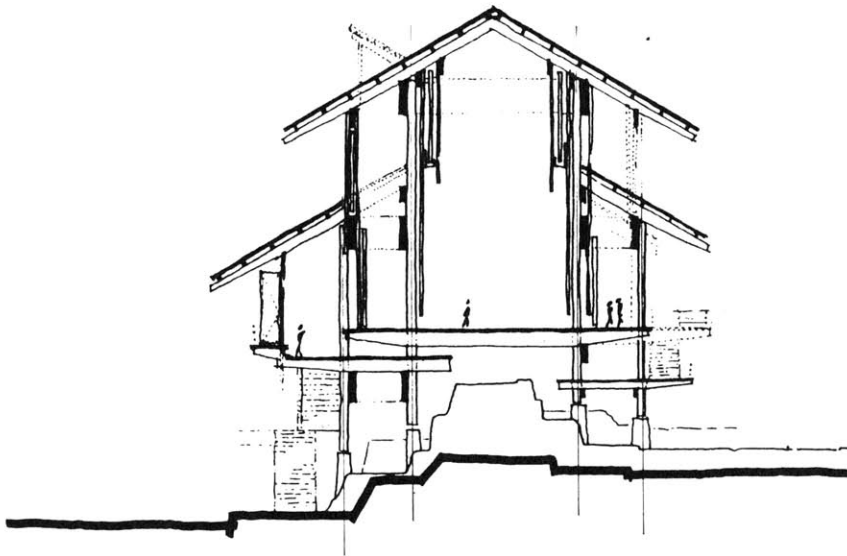
Extending

light

We must let light in to the hearts of the buildings and yet keep out the wind - they are from the same direction.

"...We are awakened through an optical pushing and pulling, prodding and nudging, inflection and deflection. Yet beyond this encircling vivacity, an optical field also enhances by liberating people to imagine and very often to take action."

Henry Plummer, *The Poetics of Light* p.75

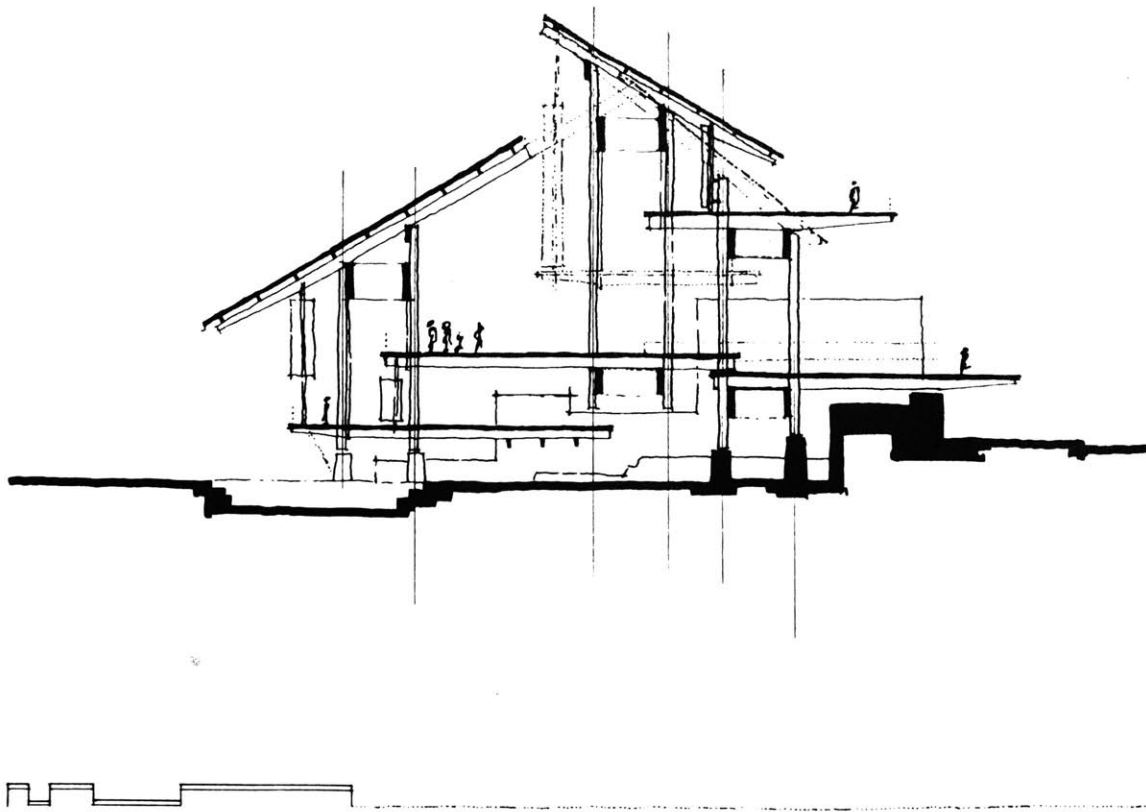


"...each sphere of light a microcosm of surprises that await our discovery and exploration. Inflective light becomes a catalyst which inspires and motivates locomotion in space, imaginative transports and even sublimated dreams of entry to realms beyond."

Henry Plummer, The Poetics of Light p.75

"...bright elements in our visual field appear to advance and expand as dynamic figures and surge with newfound energy and power. Thereby they take on a spirited existence."

Henry Plummer, The Poetics of Light p.11





20

"In the remote evolutionary past of our planet, all living creatures must have developed precisely in phase with the great cosmic forces of life - the sun and moon, the seasons and tides. Mans' basic anatomical structures, physiological processes and psychological urges can still be traced back to that time eons ago"

Henry Plummer, *The Poetics of Light* p.143

"...Conversely, the more we can recapture and nurture those ancient biological longings and psychic satisfactions in our daily world, the more we are likely to feel human and alive"

Henry Plummer, *The Poetics of Light* p.145

"... such light grants us a spatiotemporal future by offering unfixed optical parts which may take and act out through space and time, empowering us to participate creatively in our life-world, rather than remain alienated as submissive spectators or neutral machines. We are given opportunities to respond and act 'in', 'through' and in relation 'with' the world, to move and settle with some personal initiative and human dignity, to envision and perform deeds that reaffirm our selfhood and thus engage in the most human and live activities we know - freedom, creativity and play".

Henry Plummer, *The Poetics of Light* p.75

Light brings into presence things. *"... luminous matter has a general capacity to turn the physical world into beings for us, giving our surroundings a pulse and a soul."*

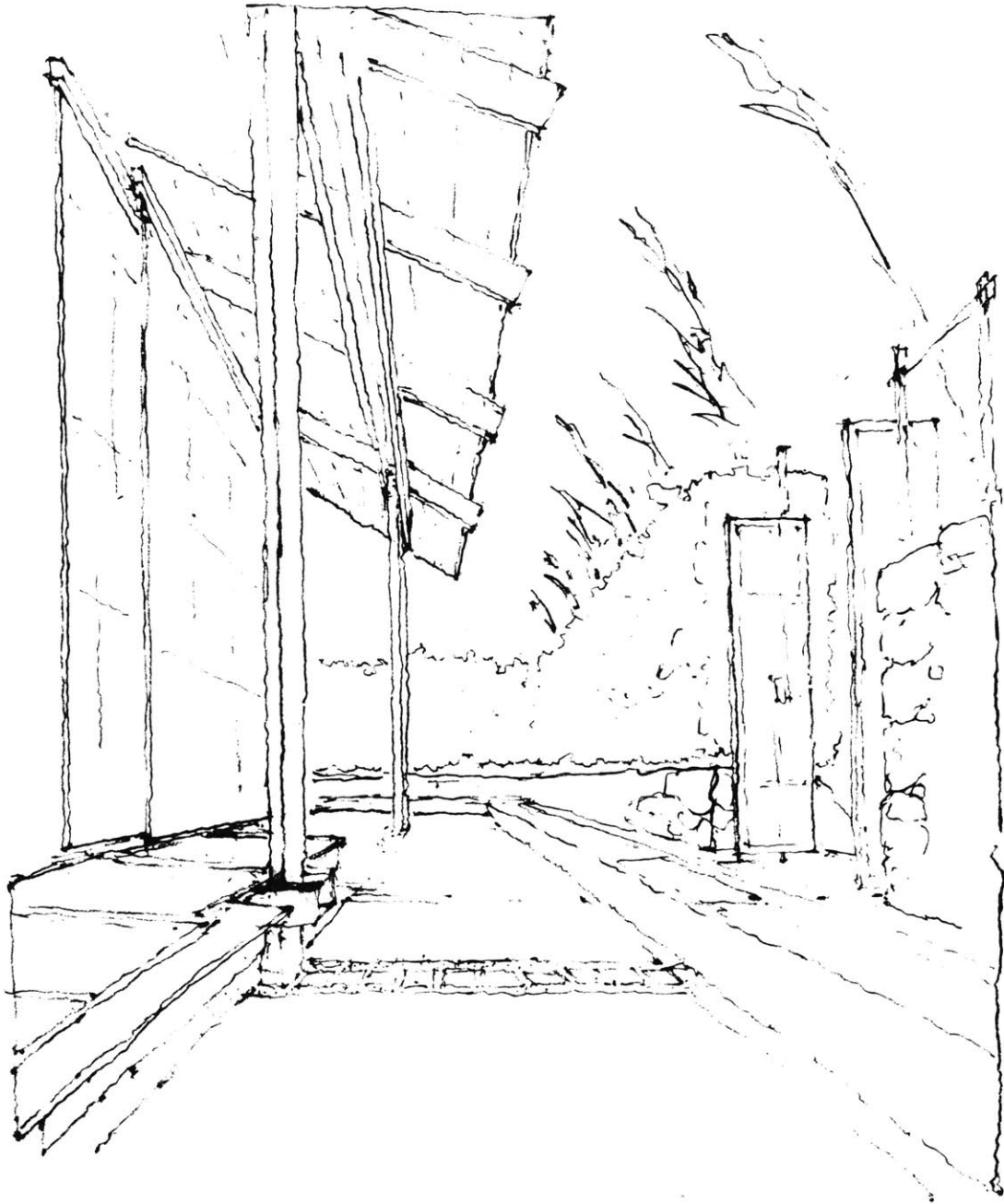
Henry Plummer, The Poetics of Light

"Where there is light there is life"

Henry Plummer, The Poetics of Light p.11



21



A Sense of Place:

:

morning

I woke up this morning and looked straight into the eyes of a rather large gecko. It was lying motionless, only three feet from my side-turned face, and waiting patiently for the nearby fly to move just a bit closer. I had watched the lizard try this maneuver many times, and he always came up short. Sure enough, the fly hesitated but a moment longer and took off, buzzing merrily about in the still air of the rafters of the roof shelter behind me - his sound lost in the background noise of the crashing surf. I turned on my back and stretched, nearly tipping the small cot over in the process. I rubbed the sleep from my eyes and looked up at the sky.

There was just a hint of light in the air and the stars were slowly losing their intensity. I could see a square of sky framed by my 6 foot high shrub enclosure. The tops of the ironwood trees were moving in and out of the frame as they were buffeted by the incessant sea breeze. Inside my room the air was gentle but thick with the scent of the mock-orange blossoms that had sprouted on my shrub overnight. The bees would be anxious for this nectar.

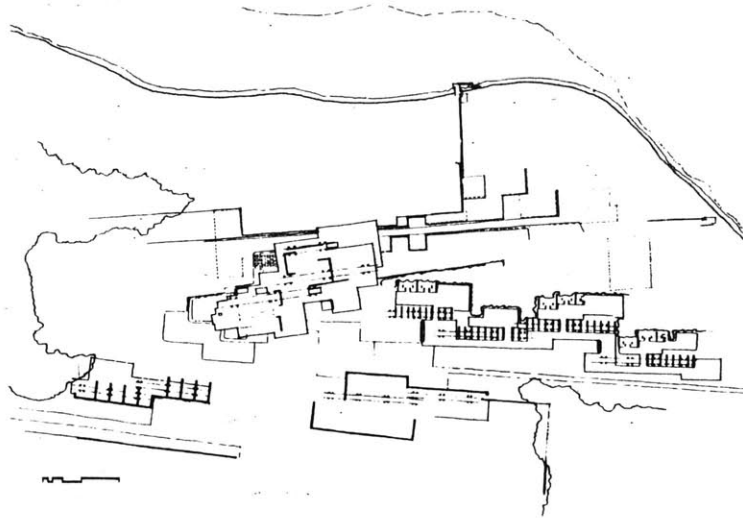
Not yet wanting to start the day, I tilted my head back and surveyed the rest of my room. It is a room only eight by sixteen feet and divided into two sections. The section by the entry - it is more like a wall that can completely open up to the outside - was empty save for a writing table and lamp, a straight backed chair, a small dresser and my suitcase.

The back section, where I sleep whenever the weather permits, is open to the sky. It is separated from the front section by two sliding panels that offer protection from the heavy rains that occur here from time to time. The floor level is two feet lower than the floor inside. There is enough room for the cot, and the overhang of the sheltering roof is large enough to protect me from any light drizzle coming from the cliffs during the night. The roof is metal, copper I think, and is framed of smooth, milled lumber. I can make out the framing in this early light only because of the slight glow from the shutters at the peak. The roof shelter is supported by posts and beams, some of which come down to the ground, some of which rest on the thick, lava rock walls that separated me from my neighbors. Though still mostly in shadow, I could see the roughness of these walls made from the rock found on this building site. It is a great contrast to the softness of the tatami mats set on the oiled hardwood floor inside.

I swung my legs off the cot and placed them on the ground made of stone pavers and the ever-present grass growing in the crevices between the rocks. It is a smooth stone, and is set in a pattern that seemed to draw me in to the soft tatami mats. I began to hear voices in the gathering place outside my shelter, so I followed the advice of this pattern and went inside.

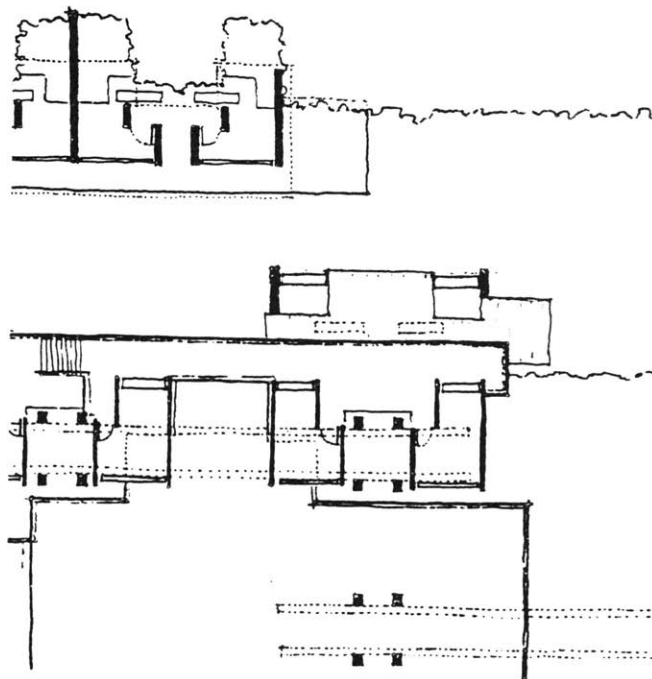
I dressed quickly in this half light of dawn. I grabbed my journal and, bypassing the more private entry behind a portion of lava rock wall, opened the sliding panels of my front wall. I stepped outside onto the wood walkway raised above the ground and looked under the eave of the still sheltering roof. I could see a great cliff rising behind the second floor of rooms belonging to my cluster of buildings. It was a small vignette, but it dominated the gathering space of the small community to which I belonged.

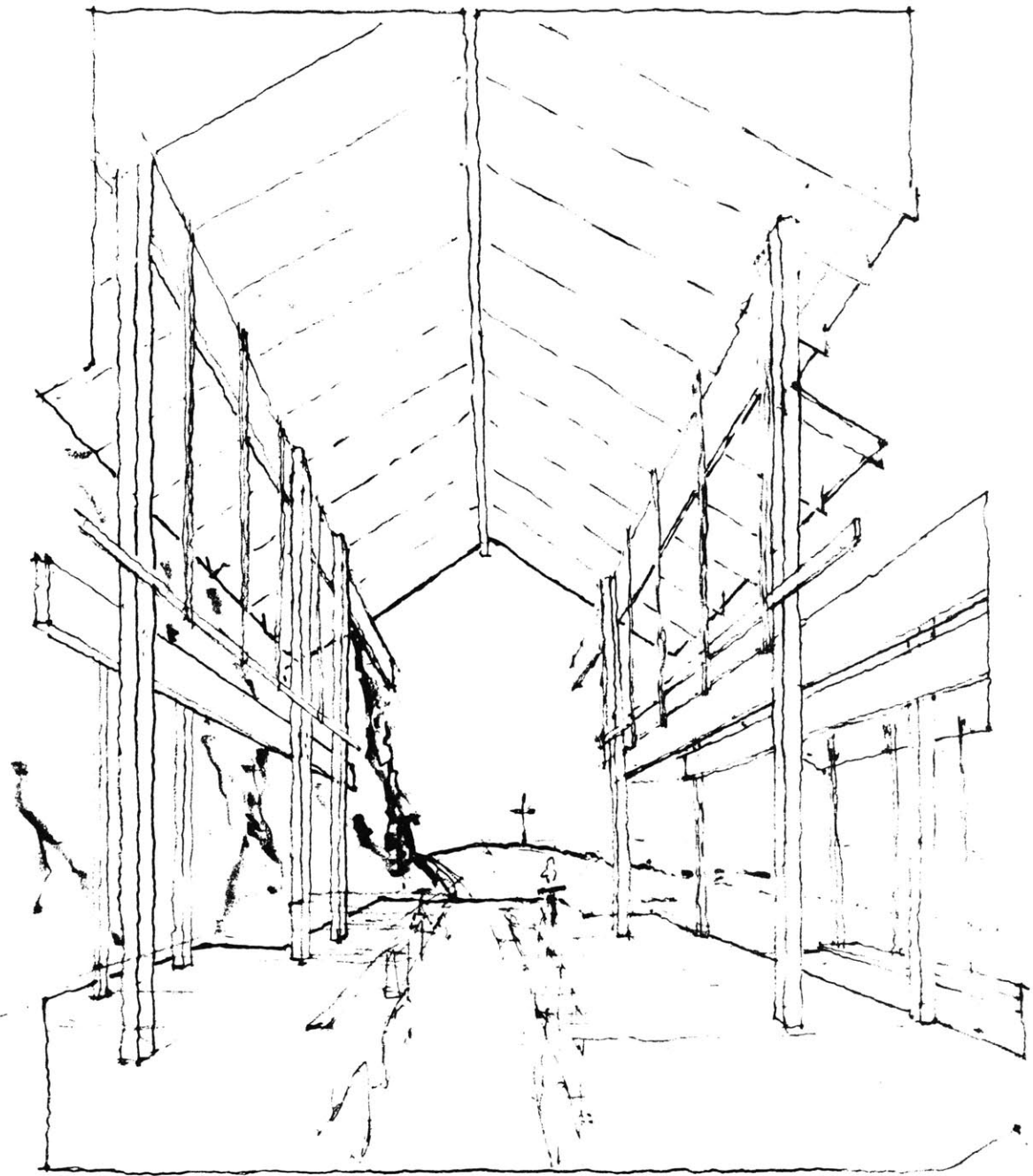
I could see at least fourteen rooms from my vantage point on the walkway. These rooms were in various stages of undress; some were all buttoned up, some had all the walls pushed back. I watched one of my cohorts push a wall panel out and fasten it so that it formed an overhang to his sleeping patio. It occurred to me that these buildings were designed to be dressed and undressed by their inhabitants, that both humans and the buildings have light, flexible clothes for the climate.



All of our dorm rooms have a view of the ocean and open up to our gathering place. I feel as if we are all neighbors in a small community, inevitably coming into contact with each other as we come and go from our rooms. The rooms on the second level above me are reached by the set of stairs next to the showers. Those of us on the ground level have entrances directly off our community space. I like this arrangement and it gives us a chance to share the collective life. We use this gathering place for everything. We relax here, share in the days experiences and are able to discuss planning strategies for our communities back home. I particularly like it as a place to sit in the early morning, to listen to the sounds of the ocean, of the wind, of the birds. The view of the ocean is incredible and the cliffs form a natural protective back. I get a different feeling here than in the gathering place for the whole community. Here it seems to be just me, my small community and the landscape. At the settlement's center it is a larger collective voice and I feel closer to the global concerns which drew us to this place.

The sky to the east was taking on the telltale glow of sunrise and I could finally see the cliffs as more than just purple shadows. Soon the entire peninsula would be be turned an orange color of magnificent richness. I jotted a few notes in my journal and moved to the chapel to see the coming of the sun.





going to the chapel

I followed the stream of people going to morning services and, like them, I was absorbed in the spectacle of the unfolding dawn. The light was making the building come alive. The shadows were strong and they alternated with the sunlight wherever it streamed through the openings in the weather screens along the pathway or through the spaces between the buildings. The weather screens had their own inherent patterns of translucency and opaqueness, patterns that were enhanced whenever one screen stood in front of another and by the degree of openness of the outer louvers. It made for an exciting play of light on the building.

So totally absorbed in this play of light was I that I did not notice the stairs to the chapel until I was upon them. I walked up the stairs and as I reached the top I moved out to the railing with a few of my fellow students and paused, as I always have, to admire the view and listen to the sound of the ocean. Behind us the cliffs responded with a fire of their own, reflecting the early morning sun. I turned and after a few steps I could see the altar of the chapel silhouetted against these bright cliffs.

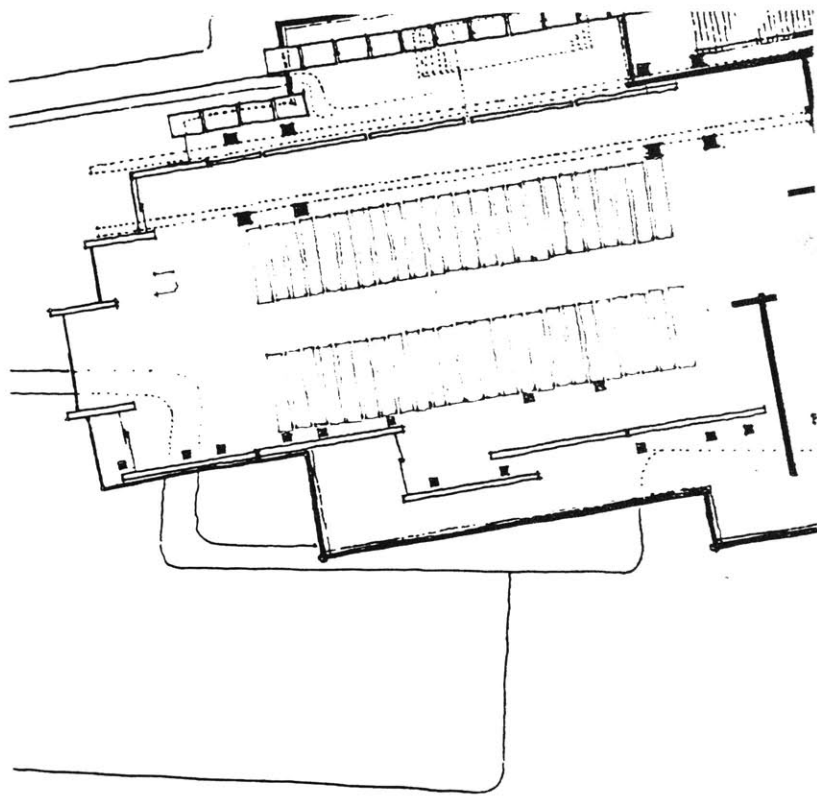
This hint at the inside of the chapel is just a tease. The real revelation is not the altar but the landscape. The entire front of the chapel is open to the west, and my eyes naturally fell on the glowing mound of Kauhako crater in the distance. It makes its presence felt throughout the length of the chapel and I could see other people stopping a moment to reflect on what was in front of them. Poised on the rim of this crater is a cross, a larger replica of the one placed there in 1948 during an Easter vigil. It seems today the true altar of this place and it is framed by the cliff to its left and the ocean to its right.

At the entry, the light pours in to the chapel from above. It seems to set the topmost timbers afire and glints off their metal connectors. The sun leaves stripes of white intensity across the floor of the chapel and seems to light the hair of the celebrants who are in its path. The light loses its intensity over the chairs as the roof becomes sheltering. Here it directs my thoughts inward, and it is not until I see the light pouring through the west end of the chapel that my thoughts are again of the outside.

The walls however, are as diaphanous as those of our rooms. They are made for opening. The shutters are open above and the sliding panels are open on the leeward side of the building. The weather screens on the windward side, the side facing the ocean, are the only ones that are closed. I walked to one of the screens and pulled it open.

The shutters pulled to each side of me and formed a private porch four feet in depth and six feet wide. I stepped up to the railing and looked out at the ocean. My view was directed and my attention was not disrupted by the goings on around me. I could hear again the unseen pounding of the ocean against the base of the cliffs ahead of me. The smell of sea air contrasted with the incense that was just lit. My eyes were battered with the intensifying light of the sun. It was a private moment and yet it was mixed in with the sounds of the service starting behind me. The voices in the congregation gradually rose in volume until the pounding of the surf became but a bass accompaniment to the songs. The sounds of this celebration lifted me from my silence and I joined in, lifting my voice in the songs of our mission.







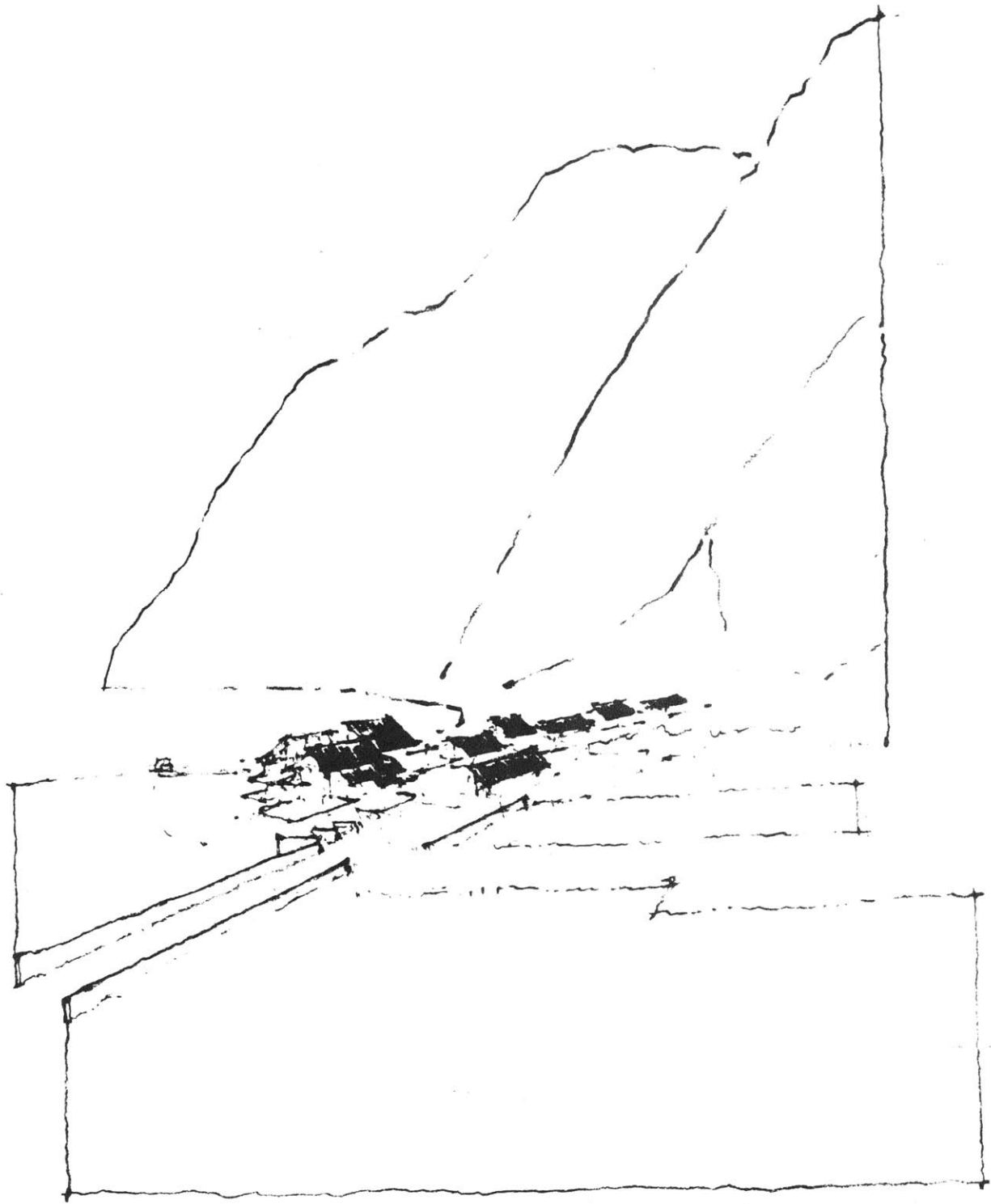
walking to Kalaupapa town

I left for the other side of the peninsula at mid-morning with a group of people who also had work to do there. The road leading to Kalaupapa is not paved; it is not flat; but it is also not long. It begins at the entrance to our settlement near the dining hall and opposite the cultivated land where we grow our fruit. As we passed our crops I could see the activity of the pickers and smell the ripeness of the mango, banana and passion fruit. It was an air as pungent as the still air of my flower blossomed bedroom.

The road leads past St. Philomena's church and the old ruins of the Baldwin house. The rock walls that border the road seemed to mark off the boundary between what we maintain and what we allow for nature. Even then, the tree canopy above has become so thick as to blur this boundary. The road is deeply shaded and the sun striking the top of this foliage pierce through and spot the road with white. At breaks in the foliage I could sometimes glimpse the cross I saw from the chapel this morning.

The wind made its presence felt as the road gently climbed in elevation to pass over the central ridge. Though it is a moist wind, wet with the drops of the sea, it seems to leave everything just a little brittle, just a bit inhospitable. The road, though no longer restrained by the lava rock walls of the lower elevation, seems to follow some internal force as it makes its way between the cliffs to our left and the volcanic mound to our right. Along the roads edges I see marks of past human settlement. These marks are but reminders of the past, our continuity of time. They are building ruins and graveyards.

The biggest graveyard of all is the volcanic crater to our right. It is the geologic point of birth of the peninsula, at one time letting forth its lava to form the shield of the land. It is also the place where both ancient and modern man have taken upon themselves to lay to rest their dead. It is an archetypal burial mound, seemingly recognized by modern and ancient alike and watched over by the cross seen this morning from the chapel. I wondered if it was because of this association with the burial mound that the volcano commands such presence from our settlement below and why I was so moved by the sight of it during morning services. My thoughts were still in trying to understand the mysteries of life and death when we topped the ridge and our destination came into view for the first time.



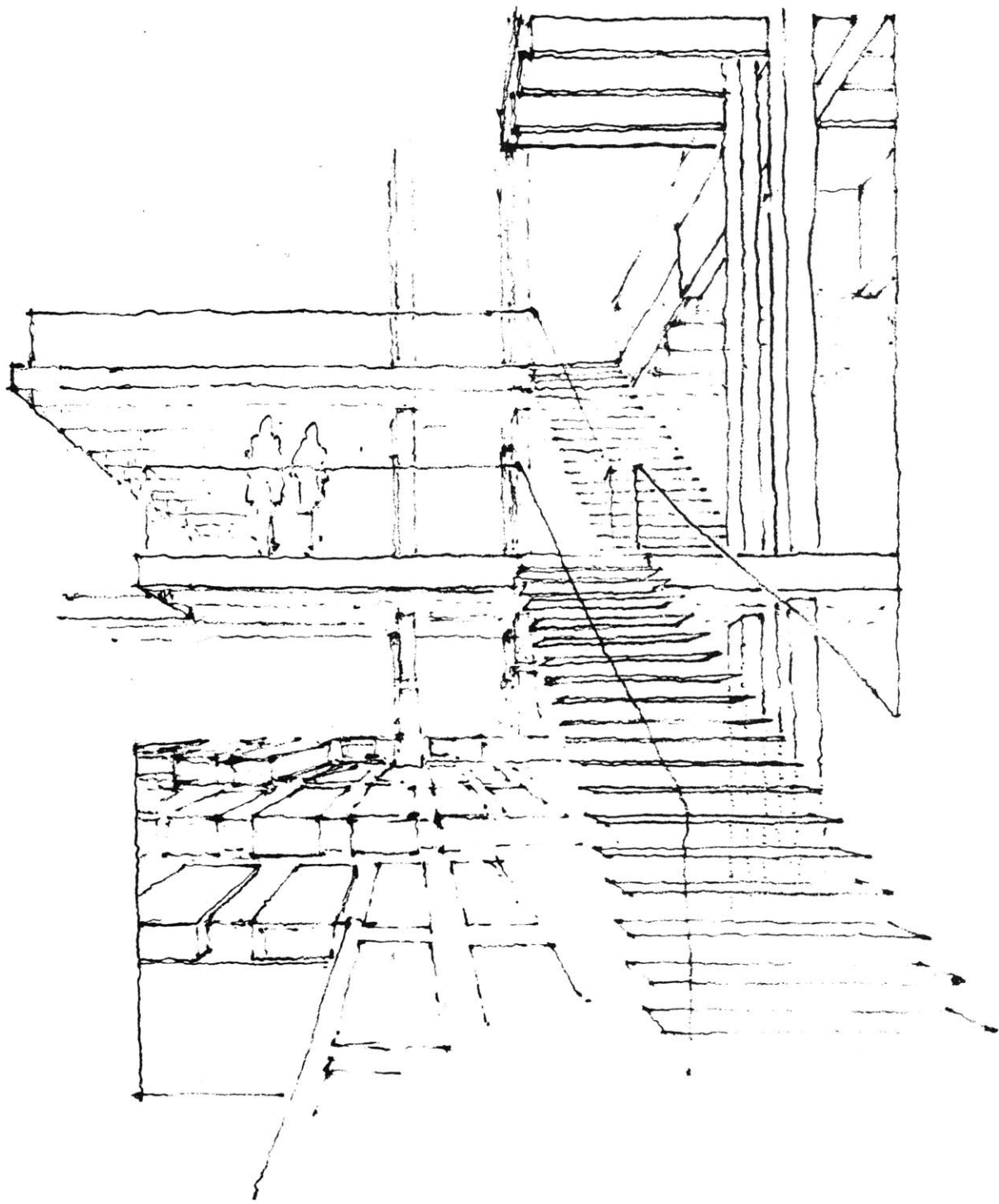
walking back to the settlement

It was late afternoon when we left Kalaupapa-town for the settlement. The sun had long ago sunk behind the cliffs and the peninsula was entirely in shade. The climb to the top of the ridge was not a strenuous one though the dryness of the earth left a thirst in my mouth. I could see the afternoon clouds building up on schedule over the cliffs in the valleys to the east of the settlement. It would be good if this side of the peninsula received some of that rain.

Our first view of the settlement was not until we were some way down from the crater on the windward side of the peninsula. Through the salt suspended air I could see the soft green patina of the copper roof as a line of demarcation. It stood between the dark green foliage and the brown of the lifeless lava rock forming the base of the peninsula. It seemed to mediate between the two, letting some of the lava into the courtyard as paving, and some of the living grow past it to offer to us inhabitants privacy and shelter from the wind.

I perceived the settlement as something with a life of its own; imagining its' paths as tendrils of human habitation tentatively reaching out to the immensity of the ocean and trying to contain the fertile soil of the cliff base. One of the paths is highly geometric and it was not until we came closer that I realized it is echoing the shape of, and built upon, the ruins of an old building exposed in an archeological dig. The settlement seems anchored here to its location. Anchored to place and to time by the life of its inhabitants.

The sound of the surf came to me again just as we were losing it from sight, as we were buried in the lowland vegetation that populates this side of the peninsula. I once again smelled the fragrant blossoms along the road and heard the wind as it blew through the trees. The sound of the surf gradually grew louder as we reached the end of the road at the settlement. We followed the lava rock walls past the workshops and came to the entry to the settlement. As we began our walk down the slight incline to the chapel I again glimpsed the ocean through the diaphanous structure of the buildings. Sound and sight were briefly reunited.



walk to the sea

The time after dinner was a time for reflection. The day's work was finished, the chores around the settlement were complete and it was a brief and special time for ourselves. I was drawn to the ocean to see close up what had been taunting me from afar on my way back from Kalaupapa-town. I soon found myself walking toward the path.

The stairs lead down from the orientation hall to a mid-level overlooking the new graves of those few lepers whose resting place had been disturbed in the archeological dig. All of the old graves were unmarked, and there were countless thousands buried in this location during the leper colony's early days. The apparent sacrilege of disturbing the resting place of a few is somewhat, though not totally, made up for in the fact that this place now becomes a shrine - a place where remembrance can actively be reinforced.

I descended a second flight of stairs to the level of the graves. The new crypts were of dry-laid lava rock and mounded tops, terraced out of the lava rock retaining walls under the building. They were in three tiers, echoing the stacking of the bodies that are buried in this area. There was a small green lichen growing in the crevices of the lava rock and in small patches of the crushed rock mounds. But that was all. Life was clinging to this rock just as it does to the rock of the islands. In time the mounded rock will weather to a finer grain, will become as supporting of life as the topsoil is on the peninsula. It seems to complete the cycle of death to life.

I noticed a pattern in the way the ground is used. It is either lifeless lava rock or life giving topsoil. The topsoil is bermed and supports sheltering shrubs and ironwood trees. The lava rock is support - as laid up walls - or as the base on which the building sets its feet. It is bermed only over the crypts.

I walked over to the path to my left. I notice that the base of the path is lava, that it gently slopes to the sea. All of the topsoil has been scraped from this path, started by the archeological dig on the old leprosy investigation station located here at the turn of the century. The sides of the path are terraced again into three levels, each two feet high. The levels become both memory and resting place along the walk.

As I made my way along this path I could not help but think of the layers of habitation that has taken place here and the feeling that our settlement will fare better than the old leprosy investigation station. We are learning to treat with compassion here. The people running that station never did, much to the consternation of the priests and sisters who devoted their lives to taking care of these patients.

I arrived at the ocean without quite remembering the rest of the walk, so absorbed was I in my thoughts. The ocean was dull gray, having lost its emerald qualities when the sun set. The horizon was unbroken save for the movement of the swells and for just an instant I forgot I was on land; imagining myself on the high seas in a small cork of a boat. I smelled only sea air and the pungently, sweet smell of land was forgotten for the moment. For the briefest of times, I was lost in these peaceful dreams.

I turned around to look at the settlement. It was dwarfed by the cliffs towering above it, yet it held its own in the way it stretched out horizontally over the landscape. The roof again seemed as a mediator, though this time the participants were the vertical moves of the cliffs and the horizontal moves of the lava base. The meandering caves, the strong ridge line, the reaching up to capture the light; all combined to provide the middle ground lacking in the natural landscape.

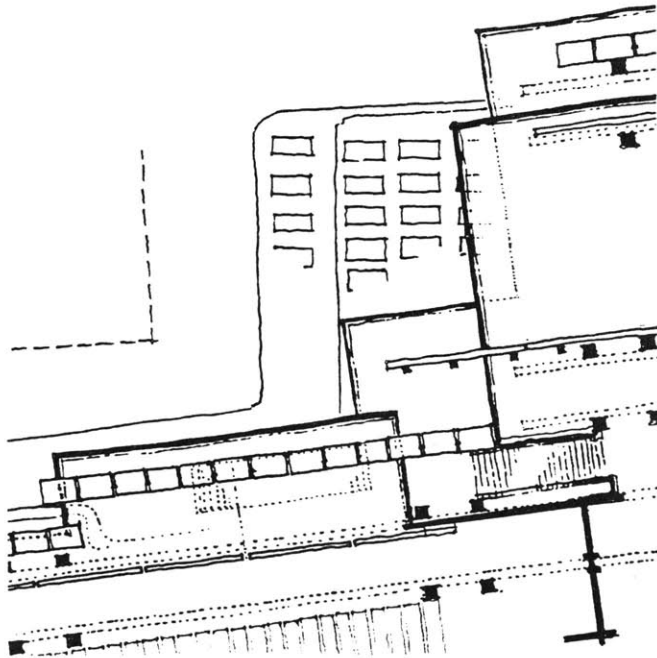
I was barely cognizant of the freshening breeze and the distant flashes of lightning as I began to make my way back to my room.



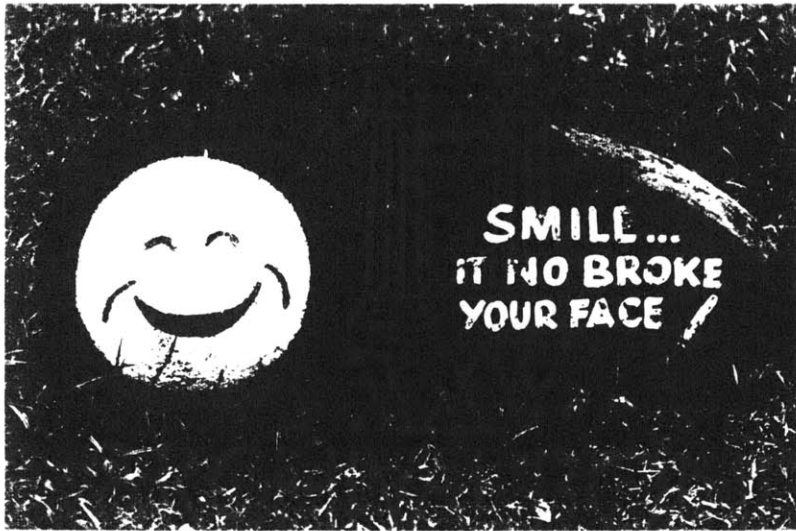
bedtime

I reached the safety of my room just as the last of the cool night rain soaked through my clothes. I stood dripping on the front porch, fumbling with the door latch as the rain ran off the eaves, the gutters not able to handle the deluge. Lightning was my flashlight as I went inside.

It took but a minute to pull closed the last of my weather screens and make my room comfortable for a dry night. I stripped off my wet clothes, dried myself and laid down on the cot. The chains used as downspouts were dancing with the energy of the gushing water and the splashes were making funny patterns on the translucent screen to my little garden bedroom. The lightning was splashing the interior with light and leaving its own patterns on the ceiling. I fell asleep listening to the sound of the rain on the sheltering, metal roof.



PAU



Appendix: *Argument*

Why am I writing this thesis?

The myth of the human quest. I need to believe in the myth that we can do some good as architects.

Base an architecture on the normative, not the descriptive aspects of "things that matter".

Descriptive - Gallop polls, public/mass opinion

Normative - What ought to matter; What justifies our concerns. Hopefully its not solely an intellectual construct.

What kind of thesis is it?

A polemic

The project is utopian in character, with all its possible problems of being:

wrong

misleading

but it is also a:

goal

inspiration

critical framework

a position, right or wrong

response to a non-narcissistic set of beliefs (belief in an emerging convention)

*"The poet's eye, in a fine frenzy rolling,
Doth glance from Heaven to Earth; from Earth to Heaven;
And as imagination bodies forth
The form of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
a local habitation and a name"*

William Shakespeare

A Midsummer Night's Dream

Act V, Scene 1

Lines 12-17

p. 108

Signet Classic 1963.

The myths of the modern age - the vehicle for the polemic - are explored in this thesis. Hawaii is a land steeped in ancient myths, historic legend and modern economic stress; it is a place that saw its entire cultural system crash around its head less than 50 years after being "discovered" by the European. It is a site that allows an exploration of the connection between myth and dwelling, and a site that has been a microcosm of the global conflict between freedom and constraint. Because of its stakes, the project forces us to question what we know, and address the unavoidable metaphysical issues. It is a project that appeals to myth and to the legend of Damien for its generative moves.

These slippery first thoughts form the core of my thesis. It is about my readings in Heidegger; about dwelling and technology, their changing definitions and their implications to our profession. It talks about various ways of participation in our life world. It speaks of the "act" of building - of tectonics defined as structure, construction and materials - and makes us confront directly the current view of architecture as commodity. And finally, it asks us to understand myth as the basis for dwelling, that without myth there would be no dwelling and that to be without myth would, perhaps, be the strongest, most complete prison yet imagined.

What do I see as the responsibilities of an architect?

To solve problems in the built environment; to leave it no worse than we found it...

"...we do not improve our situation through great plans, but by taking care of what is close to us, that is, of things".

Christian Norberg-Schulz, The Concept of Dwelling

...and to enable us to dwell in the current age.

What does it mean to dwell? Dwelling should be similar to the way Heidegger describes it when he speaks of the fourfold and our relation to the earth and the cosmos. Dwelling is, however, only a reflection of our myths. The myths of today are different than the ones of his times. I would argue that today they are less about living with the earth and more about economy of means and personal freedom. For better or worse, our built environment reflects today's myths.

Dwelling should be our existential link with the world. To do this it should reflect a set of myths different - better - than we have now. These myths would keep us in touch with the world, the environment, by relating us to the collective of the planet. All we can do, as architects, is adopt a position that reflects these non-existent, or at best, emerging myths as if they were already here and part of society. Maybe in this way we can do some good in the world.

Accepting that position, how does it effect the way we practice?

The architect is not omnipotent in his design decisions...

I realize that what has been put forth as the ideal is not shared by the collective. Even if it was, architects cannot today play god, although sometimes it is necessary to put forth a strong position.

We don't try to change with broad strokes what can only transform over time...

Social engineering / experiments have no place in architecture. We should only hope to build such that any social change could be accepted by our built environment with minimum amount of redesign.

...and so it follows that we must accept that the complexity of layers of behavior in the built environment is necessary and we should strive to build for worlds of definition - for opportunities through complexity and variability.

There is no 1:1 relationship between form and use.

It is not the metaphysical and the poetic that drive the making of physical form. It is the physical form that, through its behavior, can enable a reasonable range of existential concerns. Physical form should enable "dwelling", and we can thus build our operative system, in part, from recognizing the existential opportunities inherent in form behavior. We must participate creatively in our life-world rather than remain alienated as spectators.

It is a strong, altruistic position. Would this position be accepted in society today? Can a practice be modeled with this as a driving force?

It would not be easy because,

We are in a service industry that follows market pressures.

It is not necessary to design anything any better because what is out there is perceived as being "good enough".

Architects have given away all of their responsibilities in the building process and have become pawns to the real powers in the real estate industry

our current condition(s)...

As stated by the quote from Shelly in the abstract, this is a project which attempts to understand the normal by first studying the pathological. This is especially important today, because our understanding of the normal is in a state of transformation which has

already begun to replace our existing notions of necessity and order in the world. There is an ancient idea that there is some degree of correspondence between the structure of man and the structure of the world. In fact, man has always structured his current view of the world (his model) by what he knew about it. Today, we are in a scientific quandary. Physics is telling us that the world is not as we have always thought. Our old model of the world is obsolete and we cannot construct a new one that explains the fantastic discoveries in the laboratories. Truth is stranger than fiction, and mysticism is seen as being closer to the truth in science than the established patterns of thought. Where is our reality?

It is shifting. Shifts of reality have normally occurred when someone assimilated many far reaching, and seemingly disparate, ideas and created a vision - an image - of them for our use. We framed our view of the world on this image given to us by the media of the day, and it was not until technology caught up to this image that reality became actual. In this way, image often acted as an inspiration, an utopia, towards which we aspired (ie, we aspired to the reality that underlies the image). Today, the reality shift is happening faster than ever before. We have no time to technologically or philosophically catch up to the current vision before the next one is upon us. We exist in a *virtual* reality, dependent totally upon the image to know ourselves and the world in which we live. We value the images more than the underlying reality of which we have no understanding. The problem lies not only in that we no longer know of the essence of the image, but that we attribute to the real thing the qualities of the image¹. It is a profound shift in perception.

We are entering the "Third Wave", the information age, and images have never been so coveted. They are substitutes for firsthand experience and are indispensable to the health of the economy, the stability of the polity, and the pursuit of private happiness². Images not only stimulate consumption, they are *the consumed* and, as such, are controlled by the ever-present market forces of mass media and public opinion/trend analysis. The consumption of images, the freedom to "choose", is unfortunately equated with freedom itself³. (Insert the word "information" for "image" and read this paragraph again. Information is power, and control is the new operative principle!)

¹Susan Sontag, *The Image World*, in "On Photography, p139.

²Ibid, p135.

³Ibid, p157.

Deriving our sustenance from image has its price. We are gradually seeing a disappearance of cultural boundaries because of the easy transportability of images and conventions throughout the world. If nothing changes, all people will eventually find an incredible array of similarities among themselves - a common base for personal exchange. In one sense, this might be a good thing, but we will also see attempts at a cultural renaissance in the practice of the dogmas, symbols, myths and ceremonies of the past. Unfortunately, these myths will have long before lost their reality and, not being forcibly believed, the practice could easily fall into the trap of becoming a stage play - a pastiche.

If we take a critical look at architecture we will find that it too exists in the image world, and as such, is perceived by many as a commodity. In that sense, architecture is similar to fashion design or the auto industry. This shift in perception destroys the ancient understanding of architecture as process - as the act of building - and changes totally the forces to which it is answerable. It moves from the specific forces of site and program to the generic forces of market and cost-benefit analysis. This universal application of the generic (the abstract) over the place oriented has led us inexorably to a built environment that is alienating and banal.

...sets up a narcissistic response by the citizens. The phenomenon is the individualization of America and its major symptom is the lack of conventions.

messages from society:

Consume!

Grow!

Do what you want!

Amuse yourself!

Susan Sontag, AIDS and its Metaphors

*"The working of our economic system depends on encouraging people to defy limits ... Capitalism makes us into connoisseurs of liberty - the infinite expansion of possibility."
Susan Sontag, AIDS and its Metaphors*

All advocacy claims to offer some increment of freedom. In the U.S., and now developed countries, freedom is identified with "personal fulfillment" It is a freedom practiced / enjoyed alone"

Joseph Campbell, Power of Myth

A root cause of this symptom is that the myths we live under today can be seen as either unbalanced or non-existent.

In the U.S. we have no ethos (conventions). We are held together by laws, by prescriptive codes. We value freedom, and freedom, as we define it, prohibits conventions and ordering systems. We are a society of individualists.

Joseph Campbell has pointed out that the sociological myth (in U.S.) is stronger than the non-existent nature related one. He has broken the functions of myth into four categories.

1. mystical function - Realizing the wonder of yourself and the universe and experiencing awe.

Can we experience awe in this image and information rich age? Possibly only in the most advanced experimental physics and that is not open to most of the citizens.

2. cosmological dimension - the shape of the universe. The world view according to science; the mystery comes through.

Though in experimental physics the mystery does come through, there is no clear model of the universe or our place in it. Science is not telling us about the cosmological dimension. This is leaving a gap in our understanding since science took over the job religion used to have in providing the underlying beliefs of society.

3. sociological function - place dependant aspect of myth. It supports and validates a social order.

This says that different myths for different ideas are all O.K. It stresses a pluralistic value system (values). Everything is OK and it reinforces our individualistic tendencies.

4. pedagogical function - myths teaching the individual how to get by, how to live life under any circumstances.

This implies that we have rites of passage and/or societal rituals that are used for answering our most important questions. The argument for not having myths of passage is that this is a growth centered society and that it is counterproductive to look back for the answers. The counterpoint is to look at the gangs of youths patrolling the streets today. Since society does not supply the myths of passage, they must be provided for by other means. Very often this means in-groups working with their own rules, which may be in conflict with the rules of society.

How does this influence the built environment and our concept of "dwelling"?

We must realize that dwelling is but a window to our myths...

A building is but something that brings into being some unseen phenomena - it gives this unseen phenomena its presence. A building is the place that gathers our world, that allows dwelling to take place. Dwelling brings into being our myths.

The centers of myth in this age is the office building. In the middle ages it was the cathedral, castle and cottage. Today it is commerce and individuality, yesterday it was religion and convention.

This country is about the privatization of life, and this is what is most important to the citizens. Our buildings may not provide many of the existential opportunities we think are required for life, but they satisfy our urge to be private and it can be said we dwell as per our current myths. Is this becoming a common phenomenon throughout the world? Read again Thomas Paine.

With the identification of myth as a basis for the concept of dwelling, also comes my most searching question. How can we (re) interpret the definition of dwelling given to us by Heidegger? His definition was penned in an age that was not so far removed from the myths that are reflected in his fourfold.

...and this window is never more explicit then when we look at the fourfold.

As defined by Heidegger, dwelling is: Our ongoing participation in our life world gathering to us a world of meaning. The essence of this world of meaning is derived from the artifact and its location, which give us a site for the fourfold. The fourfold talks of our relation to the world. Again, I would argue that it is the window to our myths.

Myths are shared knowledge and, as such, they can be talked about. Heidegger's fourfold is a way of talking about / describing our myths.

The things which we hold most important are talked about by Heidegger when he talks of the fourfold. It is defined as the Earth, the Sky, Divinities and Mortals. He states that we preserve the fourfold in its essential being by dwelling and that the "thing" in which we dwell has in it the essence of the fourfold - the essence of both the metaphysical *and* the physical.

The Earth - Man dwells in that he saves the earth.⁴ We save not by controlling nature, but by intensifying it.

This is an attitude best seen in America's transcendental movement, and unfortunately one not seen today. We are still too eager to rape/exploit the land for commercial purposes.

The Sky - Man dwells in that he receives the sky as sky.⁵ It is an acceptance of the world as it works, of the seasons and of the cosmos.

It must be an acceptance, not the full understanding that we want, and the one that physics cannot now provide. We no longer know our place in the cosmos.

Divinities - Man dwells in that they await the divinities as divinities. They wait for intimations of their coming and do not mistake the signs of their absence.⁶

In a way, the same reasons that cause us to control nature and pull our hair out over the workings of the world, are the same reasons for our loss of religion today. We have shifted (quite naturally) from a science of understanding to a science of manipulation. The more knowledge we have the more control we have, over nature and people.⁷ This empirical thinking caused the retreat of the old religious orders. In its place, came our dependence on images.⁸ Go back to the old religions? Never. They have not changed with the ages, they are no longer life serving; they are vestigial.

"God against man. Man against God. Man against nature. Nature against man. Nature against God. God against nature - very funny religion!"

Dr. D.T. Suzuki

Mortals - Man dwells in that they initiate their own essential nature - they are capable of death as death - in dwelling so that there may be a good death.⁹

This is simply the living of life and embodying within it all that is important. That which is important in life is the essence of the fourfold. But, we do not know how to live anymore because we do not know death. We are isolated from it; we believe we are eternal. The most important thing is money, not the act of living, of loving, of life.

⁴Ibid, p328.

⁵Ibid, p328.

⁶Ibid, p328.

⁷E.F. Schumacher, *A Guide for the Perplexed*, p53-54.

⁸Susan Sontag, *The Image World*, in "On Photography, p135.

⁹Martin Heidegger, *Building Dwelling Thinking*, In "Basic Writings", p329.

It is obvious from the definitions of dwelling that we are currently alienated from many of the things which Heidegger deemed important for dwelling. We are homeless and don't know it! That is the point. If we don't know it then possibly we are indeed dwelling according to the myths of the day.

These are the relations that we form to the world that must be fulfilled before we can say that we dwell. They are not dependant on our location or particular culture, though they might be modified by them. Our interpretation of these relations are, of course, are based on the myths we live under at the time. As our myths change, so does the way we dwell.

" However hard and bitter, however hampering and threatening the lack of houses remains, the real plight of dwelling does not lie merely in a lack of houses.... The real dwelling plight lies in this, that mortals ever search anew for the essence of dwelling, that they must ever learn to dwell".

Martin Heidegger, "Building Dwelling Thinking" in Basic Writings

Poetry speaks in images and poetry is what really lets us dwell. When we speak, we create an image which reveals a world. Images disclose the nature of things as interdependent parts of the mirror play which is the world. Each of the fourfold is a mirror of the other. The image lets the invisible be seen.

Given that myths must constantly transform to remain valid, what are the current myths transforming to and how will it effect the way we dwell?

What will the emerging myths tell us, and will they be based on the same multiplicity of values that have infiltrated our society today? If they are, I would suspect that there would not be much change in the built environment and our alienation to the world around us would be further entrenched. It is my hope that the transforming of myth in the world is bringing us closer to a collective vision of this world and therefore, an interpretation of dwelling that works with the earth rather than against it.

The emerging myth seems to be moving to one that takes the planet as our largest collective.

Joseph Campbell states that any emerging myth must deal with the issues that form the archetypal myth of the human quest:

Maturation of the individual, from dependency to adulthood to exit, from birth to death. ie, rites of passage.

We must relate to our society, but it must be the **planetary** society, the larger collective.

Relate our society to the world of nature and the cosmos.

The most important part of this myth is that it references the individual back to the planet, not his local group. There is a reference to the larger collective which automatically brings the custodianship of this collective to the forefront of everyone's mind. Nature rises to a higher level and in some aspects becomes a rallying point for the collective.

It would influence how we dwell...

Man has not always been alienated from the land. There was a time when the earth contained all that was necessary for life and we did not search for things outside of it. Our gods, our myths and our rules for living flowed easily from the myths of creation that surrounded our place. We were connected to the land and in it we had our existential grip on life. This grip was, and should still be, an essential part of the act of dwelling - of being in this world.

We must be called to a deeper awareness of the act of living. We must be alert, we must participate in our life world and seek the experience of being alive.

This emerging myth is influencing a return to the life of the cultivator. This is hinted at by Christian Norberg-Schulz when he talks about dwelling in the country and in the city. In the country, we will belong to the earth. It will be a vernacular serving the life of the cultivator. In the city, we will dwell between earth and sky, a gathering life, but we will still have the heart of the cultivator. Our inner person who dwells in the soul will be in accord with nature no matter where the body might be.

I cannot help but ask if Heidegger anticipated a return to a planetary myth when he penned his definition of dwelling. It would be all too easy to write him off as a dreamer, waxing poetic over a time long gone, but what he says is very similar to the scenarios of the emerging myth.

See Buddhism for a current planetary myth. It sees all things as Buddhist things. Know what is, then act in the brotherhood of all of it.

...and how we make architecture.

Architecture can be seen as an interdependent system in this world. We are not egocentric enough to think that our rules/attitudes about design/living are to be imposed on all. We let our decisions of the built environment be layered on society and let/expect the physical manifestation of these decisions to transform over time, to be adapted to fit the current time and place. Don't wait for the full truth. Make our decisions based on what we have. Try to toe the middle line. We live with nature and do not control it.

This planetary myth is emerging because,

A global village is forming,

There is a coming together through modern technology (communication), and economic convenience.

Through science we have a continuing shift in world-view from geocentric (earth centered) to heliocentric (sun centered). Man is removed from the center. Through media, we have extended our horizons which has,

"...cleansed our perception of ourselves and the universe, and opened the doors to both wonder and terror"

Joseph Campbell, Power of Myth

Science has rejoined us to the ancients by expanding these horizons. It has, in fact, been the major cause for us to see the connections between science and myth. Through science, we have rediscovered mysticism. We have discovered things that suggest other things that will never be discovered, and have had to answer puzzling questions with answers that are reminiscent of the teachings of mystic beliefs.

National boundaries are dissolving and becoming blurred; through the information passing through the tightest boundaries; because of the formation of common markets; because of the ease (necessity) of international trade (the corporation must be international to survive).

Trying to keep a culture intact today is about as futile as trying to keep a blood line pure. Both will eventually either cross pollinate or turn mutant.

Travel and media have made known an entire range of different cultures. The exposure to a culture different than yours will inevitably begin to transform your culture - your shared body of knowledge. This is true when you look at how other countries perceive the US. The U.S. is still the model for the free man. Although we are starting to see the limitations of our present system, other countries still look toward it as a goal.

Basing all societies on capitalism has no option but to homogenize the culture throughout the world. This drives an associated value system that could soon become generic. Other countries also see the trappings of our society (the single family house, the auto, the gridded city, etc.) and copy them in the hope that they can too enjoy the good life. Reference Thomas Paine "as goes America, there goes the world"

...and with it, shared conventions at the planetary size.

One such shared attitude is reason. The age of the enlightenment has thrust us down this path of reason. But... look at the new science. Mysticism has re-emerged as a shared attitude.

We must make sure that this synthesis of world cultures goes smoother than that of Hawaii, where there was an overthrow of the existing political structure and a total collapse of their belief structure. The end result of the Hawaiian experience is certainly not a bad one, though it was certainly a painful journey.

A shared body of knowledge can indeed become the norm, but not at this time. It will take some time to synthesize our current information, to find a direction, to let the need to have this shared knowledge grow within the public. It is possible in this economically competitive age, just as it was in the 1920's. The value system must take a turn to that which is most important. People, family, not business. (can competitiveness and the planetary myth coincide? Yes, if it is profitable for it to happen. At least for now. Reference the actions taken by the state of Alaska re: the tanker spill. It will cut off the oil to the US for the good of the environment)

A counter move is in progress. It is the voluntary setting of limits - itself an exercise in freedom - but still a reactive situation.

Joseph Campbell, Power of Myth

Partially dependant, of course, on cyclical trends.

The trends (of public opinion/perception) are swinging back to a time period about 30 years ago. We had a conscious back then. Public opinion might do some good here - help the myth transform.

There is some argument that a myth analogous to a planetary myth is the one that appears on any isolated place. We should look at archetypal isolated places - islands far removed from other civilizations.

The analogy of the island is the same behavior as the planetary myth, but at a smaller size.

The unfolding of the metaphor of Easter Island as a place destroyed because it did not have a planetary myth. (analogy to spaceship earth)

- Total collapse of society from using up the environment (monuments to the Gods used up the resources)
- When you wipe out the environment, you wipe out yourself
- Parallel with our usual conflicts over resources.
- Existing orders are overthrown, it became every man for himself.

We can also reference the Hawaiian islands. It is the most isolated piece of land in the world, supporting a civilization that flourished, unknown to the outside world, for 15 centuries. It is a place nearly destroyed because its planetary myth was torn apart by the western explorer and profiteer. It is a place that, as a closed system, existed in a tight balance of man and nature. Its near downfall was similar to Easter Island, not as pathological, but just as damaging.

its old myth - the attachment to the land

its problems with the introduction of the new faith (christianity)

- social structure collapse because of interference from outsiders
- gods thrown out (baby thrown out with the bath water)
- social structure overthrown
- commerce all powerful, strips the environment
- new gods

its union of the polar opposites of christianity and the old myth

the survival of the Aloha spirit

the synthesis of new ways and old

In the long run, the Hawaiians needed this outside interference to survive because of overpopulation, overly structured social order etc...

"For a brief period ... Hawaii became something unique in human history: a land in limbo, without any formal, organized religion. The breakdown of the elaborate socio-religious belief system of the past had brought a sudden and total collapse of belief and left a yawning spiritual vacuum."

Charles F. Gallagher, Hawaii and its Gods p.49

"People who live on islands are hospitable to imported thoughts as well as to strangers and the gifts they bear. Islanders must be hospitable in their isolation, else they will languish and die, as much from a lack of new thoughts as from a deficiency of such treasures as gasoline and paper towels."

quote by O.A. Bushnell

Charles F. Gallagher, Hawaii and its Gods p.7

What will we do on this planet? There is no "outside" to save us. We are truly alone with our problems.

The idea of a planetary myth is not so outlandish a thought if we think about the shared mythical themes found throughout the world.

There is a commonality of themes in world myth. "There is a constant requirement in the human psyche for a centering in terms of deep principles". Sharing of themes between:

- The Apache Indians
- Roman Catholic
- The Eastern Religions

Look at various myths of creation for examples. Read Joseph Campbell.

Why hasn't this planetary myth yet emerged?

Our religion, through the bible, greatly influences our existing (and past) myths. Joseph Campbell has stated that a pro-nature myth is doomed to failure because of it. See Genesis..."and you shall be masters of the world/nature..." Also because of the ousting from the Garden of Eden. If we reject the idea of the Fall in the Garden, man is not cut off from his source. But... how can we deny our faith? (maybe it is set up for eternal conflict between nature and man?)

The bible is our influence. It is a myth from a different era and is not in accord with our concept of the universe, or with the dignity of man. It is a myth that has not changed.

This myth will also take some time to emerge because we are a patriarchal society and are not ready to accept a matriarchal (cultivating) myth.

The responses (physical and non-physical) that will advocate this position.

We must re-interpret the fourfold. This will serve as our guide.

Earth - Advocates for the saving of the earth. It does not say that we should control nature, but live in harmony with it. Reattachment to it. Gaia. We are part of a larger society on a planetary size. There will always be an urge to dwell upon it. Spaceship Earth. We are relating our society to the world of nature.

Sky - Advocates for the acceptance of the world as it is. Accept the mysteries of the world. Live and let live. We relate our society to the world of the cosmos. The Aloha spirit on a worldwide basis.

Divinities - A universal religion, based on the essences of all existing religions, emerges when people take the metaphors of religion for what they are, and not as dogmatic facts. The bible is interpreted differently. The god(s) teach us how to live our life under any circumstance. We are warned of our dependence on images as a replacement for the divine (thing vs. a belief). This collective belief allows us to relate to our larger society.

Mortals - Advocates for dwelling, for living life to its fullest, for not waiting for death. The maturation of the individual. We know we are not eternal. We participate in our life world (are we not the caretakers of our happiness?) and know the wonders of nature, of family, of friends. (dwelling becomes an enabling move for this to happen). This category is again the constant check on the working of the fourfold in relation to our current myths.

We must learn how to dwell when the image is the commodity

Given architecture's current perception as commodity, we must either redefine the concept of dwelling, or prove that the idea of dwelling as stated in our re-interpreted fourfold can coexist with the idea of consumer product. If we accept that the ideas of process and product can coexist, we must ask the question if it is the *image* of dwelling that becomes the relation into which we enter and if it is the *image*, not the *actual* that becomes our commodity. The market forces that influence commodities then will also influence the image of dwellings. We must prove that the obvious result of these forces, the gradual alienation from the things which are most important in life, can be modified positively by our physical forms. We must show that life participation can be enabled by reasonable form behavior, and that reasonable form behavior is not totally dependent on program or technical constraints and is not hindered by our acceptance of the market forces that shape our environment.

media

We can be reattached to some of the things from which we are alienated by a change of attitude through media. If knowledge is power, it can be used for a noble - conscious - use rather than the alienating way it is currently used.

local myth - remnants of culture

This is the goal of any project. We should exchange with the landscape, recognize the myths of the site and build on patterns of human behavior, for they are the key to reasonable design. We should advocate the idea of location as a precursor to dwelling, taking care to tread ever lightly between the actual essence of the location and the artificially constructed, market driven image. Is St. Louis really the gateway to the West? We should know where the metaphoric line lies and the implications of crossing over it.

compassion to people, to place

The Holy Grail is, in essence, the search of the path between the two paths. The spiritual path between pairs of opposites. The search for unity, not duality.

The grail is the union of what has been divided. The joining of nature and spirit that was separated by christianity.

The grail also represents the fulfillment of the highest spiritual potentialities of the human consciousness.

An authentic life that is lived in terms of its own volition that carries it between pairs of opposites.

The natural opening of the human heart to another human being.

One must have a heart capable of love not just of lust. We must suffer things for love. We must suffer "with". This is compassion.

It used to be that (in the bible) love and compassion were reserved for the "in-group". The "out-group" was to be treated rather harshly. Today, there are no more out groups...or are there? Look at the people who suffer from AIDS, or the poor. In this image driven economy, these people cannot be of the "in-group".

The question is, do we identify ourselves with the planetary society or to our in group? We must organize the planet so that we think of ourselves as one world, but without losing sight of our individual interests. Is the idea of the common market a step in this direction?

At which level do we choose to live our life? Through the sex organs? Through the quest for power? Or through the giving oneself to others; the opening of the heart?¹⁰ It is obvious that the animal level, that of the power quest, is where this country is at now. The planetary myth will be helped to emerge if we simple open our hearts to each other and to our planet.

¹⁰Joseph Campbell, *The Power of Myth*.

unity

This search for unity, at its essence, is what the planetary myth entails. It greatly influences our concept of dwelling - of being in this world - because the act of dwelling is about the gathering of your world to you. Gathering your world is about your path between opposites. Dwelling is how we live our life.

Duality is harmful to this myth. We are striving for unity. Duality has been a part of our myth since our expulsion from the garden of eden. Our whole religion is set up with this duality in mind - we are always torn between our natural wants and what we should do. When duality becomes stuck on good and evil, heaven and hell, it becomes self referential - egocentric (human race vs. rest of world) - and the earth is left out of the loop. We can't fight our religion, our tradition, so we must therefore search within it, for the path between polar opposites.

To recap:

Dwelling is a thing that gathers the fourfold.

The fourfold is a reflection of our perceived existence at this time, in this place and will be thought of now as part of the emerging planetary myth. It is a myth of unity, reflected in the fact that each of the fourfold is known by the others; one is all.

The fourfold gathers our world - our myth - through the thing which allows the site and by the dualities through which we must find the way. The fourfold, in fact, sets up the very dualities we must overcome (unify) if we are to dwell according to the emerging myth.

Bibliography:

Alexander, Christopher

The Production of Houses, New York, New York: Oxford University Press, 1985.

The Timeless Way of Building, New York, New York: Oxford University Press, 1979.

Alpers, Antony

The World of the Polynesians: Seen through their Myths and Legends, poetry and art, Auckland, New Zealand: Oxford University Press, 1987.

Bach, Richard

Illusions: The Adventures of a Reluctant Messiah, New York, New York: Dell Publishing, 1977.

Beckwith, Martha

Hawaiian Mythology, Honolulu, Hawaii: The University of Hawaii Press, 1987.

The Kumulipo: A Hawaiian Creation Chant, Honolulu, Hawaii: The University of Hawaii Press, 1981.

Boulding, Kenneth E.

The Image, Ann Arbor, Michigan: The University of Michigan Press, 1961.

Bloom, Allan

The Closing of the American Mind, New York, New York: Simon and Schuster, 1987.

Bloombaum, Milton and Gugelyk, Ted

Ma'i Ho'oka'awale: The Separating Sickness, Honolulu, Hawaii: University of Hawaii

Foundation and the Ma'i Ho'oka'awale Foundation, 1985.

Blyth, R.H

Zen and Zen Classics, New York, New York: Vintage Books, 1978.

Brand, Stewart

The Media Lab: Inventing the Future at MIT, New York, New York: Viking Penguin, Inc., 1987.

Bushnell, O.A.

Molokai, Honolulu, Hawaii: The University of Hawaii Press, 1982.

Caldenby, Claes and Hultin, Olof (eds.)

Asplund, New York, New York: Rizzoli, 1985.

Calvino, Italo

Mr. Palomar, New York, New York: Harvest/HBJ, 1985.

Invisible Cities, New York, New York; Harvest/HBJ, 1972.

Cameron, Ian

Lost Paradise: The Exploration of the Pacific, Topsfield, Massachusetts: Salem House Publishers, 1987.

- Capra, Fritjof
The Tao of Physics. Boston, Massachusetts: Sambhala Publications, Inc., 1984.
- Carver, Norman F.
Iberian Villages: Portugal & Spain, Kalamazoo, Michigan: Documan Press, 1981.
- Chang, Amos Ih Tiao
The Tao Of Architecture. Princeton, New Jersey: Princeton University Press, 1956.
- Cooke, Richard A. III
Molokai: An Island in Time, Honolulu, Hawaii: Beyond Words Publishing, 1984.
- Crimp, Douglas (ed.)
Aids: Cultural Analysis, Cultural Activism. Cambridge, Massachusetts: MIT Press, 1987.
- Daws, Gavan
Hawaii: The Islands of Life, Honolulu, Hawaii: Signature Publishing, 1988
- Droege, Peter (ed.)
Places, MIT Press Journals, Cambridge, Massachusetts, Volume 5, Number 3, July 1988.
- Eliade, Mircea
Cosmos and History: The Myth of the Eternal Return, New York, New York: Harper & Row Publishing, Inc, 1954.
- Fleig, Karl (ed.)
Alvar Aalto, Zurich, Switzerland: 1963.
- Gallagher, Charles F.
Hawaii and its Gods, New York, New York: Weatherhill/Kapa, 1975.
- Green, Linda
Exile in Paradise: The Isolation of Hawai'i's Leprosy Victims and Development of Kalaupapa Settlements 1865 to the Present, Denver, Colorado: Branch of Planning Alaska/Pacific Northwest/Western Team, US Department of the Interior, National Park Service, 1985.
- Habraken, N.J.
Transformations of the Site, Cambridge, Massachusetts: Awater Press, 1983.
The Appearance of the Form, Cambridge, Massachusetts: Awater Press, 1988.
Supports, London, England: The Architectural Press, 1985.
- Heidegger, Martin
Building Dwelling Thinking. in *Basic Writings,* David Farrell Krell (ed.), New York, New York: Harper & Row Publications, Inc., 1977.
The Question Concerning Technology, in *Basic Writings,* David Farrell Krell (ed.), New York, New York: Harper & Row Publications, Inc., 1977.

Herbert, Nick

Quantum Reality : Beyond the New Physics., New York, New York: Doubleday, 1985.

Hitchcock, Henry-Russell

In the Nature of Materials, New York, New York: Da Capo Press, Inc., 1979.

Hubbard, William

Complicity and Conviction: Steps Toward An Architecture Of Convention.
Cambridge, Massachusetts: MIT Press, 1980.

Jencks, Charles

Architecture 2000: Predictions and Methods, ????

Kaufmann, Edgar, (ed).

An American Architecture, Frank Lloyd Wright, New York, New York: Horizon Press, 1955.

Kirch, Patrick Vinton

Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory. Honolulu, Hawaii: University of Hawaii Press, 1985.

Kolakowski, Leszek

Metaphysical Horror. Oxford, U.K.: Basil Blackwell Inc., 1988.

Matthiessen, Peter

Nine-Headed Dragon River. Boston, Massachusetts: Shambhala Publications, Inc., 1987.

McHarg, Ian L.

Design with Nature, Garden City, New York: Doubleday, 1971.

McMurrin, Sterling James

A Plan for a Metropolitan State Hospital: Imagery as a therapy for an institution.
Master of Architecture Thesis, MIT, June 1988.

Mendel, Alfred O.

The Living Thoughts of Thoreau, New York, New York: Longmans, Green and Co., 1939.

Metzger, Charles R.

Thoreau and Whitman: A Study of Their Esthetics. Seattle, Washington:
University of Washington Press, 1961.

Meyer, John and Margret

Patterns of Association: connections between the inner and outer landscape.
Cambridge, Massachusetts: first draft - manuscript, 1978.

Minsky, Marvin

The Society of Mind. New York, New York: Simon and Schuster, 1985.

Naisbitt, John

Megatrends: Ten New Directions Transforming our Lives, ????

Nitschke, Gunter

'MA' The Japanese Sense of Place. Architectural Design Magazine, March 1966.

Norberg-Schulz, Christian

Existence, Space and Architecture. New York, New York: Praeger Publishers, 1971.

Genius Loci: Towards a Phenomenology of Architecture, New York, New York:

Rizzoli, 1980.

The Concept of Dwelling: On the way to figurative architecture, New York, New

York: Rizzoli, 1985.

Plato

The Republic, New York, New York: Random House

Plummer, Henry

The Poetics of Light, a+u extra Edition, Tokyo, Japan: a+u Publishing Company,

Ltd., 1987.

Rapoport, Amos

House, Form and Culture. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

The Meaning of the Built Environment: A Nonverbal Communication Approach,

Beverly Hills, California: Sage Publications, Inc. 1982.

Cross-Cultural Aspects of Environmental Design, in Human Behavior and

Environment: Vol 4, Environment and Culture, Amos Rapoport (ed), New York, New

York: Plenum Press, 1980.

Sociocultural Aspects of Man-Environment Studies, in The Mutual Interaction of

People and Their Built Environment, Amos Rapoport (ed), Paris, France: Mouton

Publishers, 1976.

Rowe, Colin and Koetter, Fred

Collage City, Cambridge, Massachusetts: MIT Press, 1978.

Rudofsky, Bernard

Architecture Without Architects, Garden City, New York: Doubleday & Company,

1964.

Ruusuvuori, Aarno (ed)

Alvar Aalto, Helsinki: The Museum of Finnish Architecture, 1978.

Rybczynski, Witold

Home: A Short History of an Idea, New York, New York: Penguin Books, 1987.

Saint Exupery, Antoine de

The Little Prince, New York, New York: Harvest/HBJ, 1971.

Schumacher, E.F.

Small is Beautiful: Economics as if People Mattered, New York, New York: Harper
and Row, Publishers, 1973.

Shilts, Randy

And The Band Played On, New York, New York: Penguin Group, 1988.

Smyser, A. A.

Hawaii's Future in the Pacific: Disaster, Backwater or Future State?, Honolulu, Hawaii: East-West Center, 1988.

Sontag, Susan.

On Photography, ?????

Aids and Its Metaphors, New York, New York: Farrar, Straus and Giroux, 1988, 1989.

Sprague, Elmer

Metaphysical Thinking, New York, New York: Oxford University Press, 1978.

Smith, Maurice

Fragments of Theory/Practice, Space and Society, No. 18, September 1982, MIT Press.

Tafuri, Manfredo

Architecture and Utopia: Design and Capitalist Development, Cambridge, Massachusetts: MIT Press, 1987.

Thompson, Vivian L.

Hawaiian Myths of Earth, Sea and Sky, Honolulu, Hawaii: The University of Hawaii Press, 1966.

Thoreau, Henry David

Walden, New York, New York: Holt, Rinehart and Winston, Inc., 1961.

Toffler, Alvin

The Third Wave, ????

Venturi, Robert

Complexity and Contradiction in Architecture, New York, New York: The Museum of Modern Art, 1977.

Vickery, Robert L.

Sharing Architecture, Charlottesville, Virginia: University Press of Virginia, 1983.

Wilhelm, Richard.

The Secret of the Golden Flower, New York, New York: Harcourt, Brace & World, Inc., 1931.

Ziff, L. (ed.)

Ralph Waldo Emerson: Selected Essays. New York, New York: Penguin Books, 1982.

Illustrations:

- cover Daws, Gavan. *Hawaii, The Islands of Life*, 1988
2 Author Nicholas!, 1989
3 Cooke, Richard. *Molokai, An Island in Time*, 1984
4 Campbell, Joseph. *The Power of Myth*, 1988
5 Ibid
6 Cooke, Richard. *Molokai, An Island in Time*, 1984
7 Daws, Gavan. *Hawaii, The Islands of Life*, 1988
8 Cooke, Richard. *Molokai, An Island in Time*, 1984
9 Ibid
10 Ibid
11 Hawaii State Archives. From: Green, Linda. *Exile in Paradise*, 1985
12 Ibid
13 Ibid
14 Ibid
15 Ibid
16 Daws, Gavan. *Hawaii, The Islands of Life*, 1988
17 Cooke, Richard. *Molokai, An Island in Time*, 1984
18 Daws, Gavan. *Hawaii, The Islands of Life*, 1988
19 Cooke, Richard. *Molokai, An Island in Time*, 1984
20 Plummer, Henry. *The Poetics of Light*, 1987
21 Cooke, Richard. *Molokai, An Island in Time*, 1984
22 Author Kalaupapa Settlement, 1985