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TORREY PINES SCUBA RETREAT

KIM DORNFELD

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TORREY PINES SCUBA RETREAT
La Jolla, California

by

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Professional paper submitted in partial
fulfillment for the degree of

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Kimberly M. Dornfeld

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Dedication

I want to thank my parents, Rich and Joan Dornfeld, for everything you have done for me in the past five years. From driving me out here with a trailer full of stuff in the Fall of '88, to the phones calls "dad, I need some money.", to supporting me through all those tough times where I thought I couldn't do it but you knew I could. And finally, to this day where it all comes together, thank you, mom and dad, so very much for *everything* ! This one's for you!
I love you.

I also want to thank my boyfriend, Scott. You have helped me more than you will know. You pushed me when I needed pushing and comforted me when I was upset. Even though you didn't always understand what crazy things I was doing, it helped just having you around.
Thanks sweetheart!

I especially want to give a big hug and a huge thank you to all my friends at Cheever Hall. WE MADE IT! It has been all-nighters at Cheever, late nights at FAC's, sickening structures exams, good crits (and bad ones),Colombo's and Spectator's, great times in Europe and Vegas, some friends who came and went. But we have been through it all, the good, the bad, and the ugly. I will never forget any of you.
Deanna and Heather, it's been wonderful. Let our friendship never end. I wish you all the luck in the world!
Take care of yourselves!

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Statement of Intent

It is my intent in this thesis is to explore the experience one has in and with the buildings, something so intriguing that you feel a part of the building, not separate. The building and the site meld into one entity. The memories of the place are strong but not quite accurate. There is that fuzziness which occurs as time passes and it fades away. It is a part of the mystery of the ocean, almost like a dream.

"Feeling and dream have no measure, have no language, and everyone's dream is singular. A man is always greater than his works because he can never fully express his aspirations...The first line on paper is already a measure of what cannot be fully expressed." *Louis Kahn*

My thesis is about the transition from land to sea. The transition of buildings on or in the land changing to be about the water. The same idea comes from the transition a person goes through being comfortable walking on land, to being quite awkward on land, to being floating and free in the water. It is about the transition from manmade to natural.

"When the presence of architecture transforms a place with a new intensity, the discovery of a new relationship with nature is possible." *Tadao Ando*

Architecture comes alive with the movement of the land, the sea, the people, the animals, the wind, the sun, and the moon. My thesis has explored these concepts in an architecture that is gentle and unimposing, yet which invokes a response. I have tried use the elements of nature; light, wind, water, fire, and earth, to make poetic architecture that is truly of the place.

"The presence of architecture – regardless of its self-contained character– inevitably creates a new landscape. This implies the necessity of discovering the architecture which the site itself is seeking." *Tadao Ando*

experience
transition
movement

Project Description

This thesis project is a scuba diving retreat in La Jolla, California. I selected this project because of my recent experience in learning to dive and the potential to address architectural issues in relation to this growing sport. My approach to the project is poetic and emotional and attempts to convey my feelings and experiences about diving and architecture.

The ocean has an awesome power over me. It is enchanting, mysterious, romantic, tranquil. It is ominous, violent, frightening, dangerous. The ocean is unpredictable.

the ocean's awesome power;
its crashing waves
its soothing movement
its salty undeniable smell
its immense size
its cooling touch
its warm sandy beaches,
its life—
the ocean has power to tear apart anything in its path
–terrifying
the ocean has power to draw you to it and enchant you
–mesmerizing
the ocean has power to provide and take away
–controlling
the ocean has power to make you smile and be at peace
–serenity

Those are some of the many mixed feelings I get when I am confronted with the ocean. Diving takes one into that world. It is FUN to dive in a new and exciting world. I attempted to create architecture which displays those emotions and feelings.

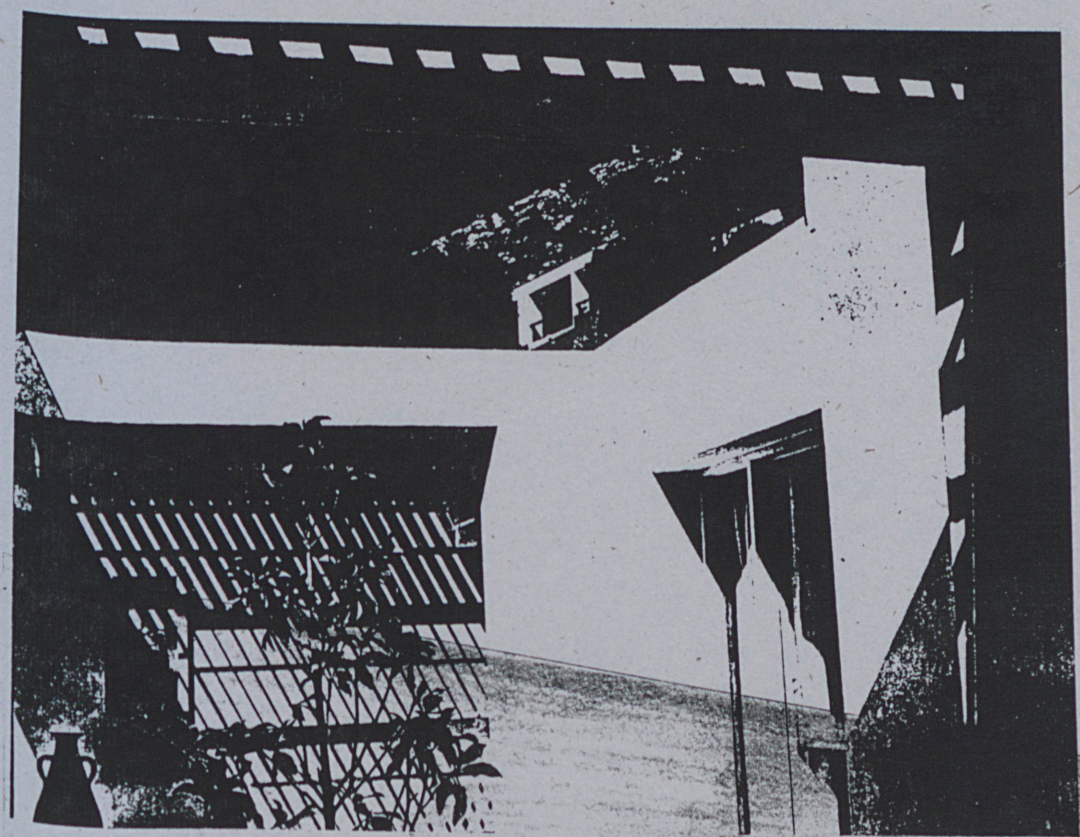
Unfortunately, there are not many places such as this scuba diving retreat existing around the world. This gives me a great opportunity to explore what could be done in a scuba retreat without having preconceived ideas. The number of divers is relatively small, and locations for diving are limited, but are incredible places. Only some people will know what is like to breathe underwater, and to float weightless with the fish and the creatures of the sea. It is the curiosity of the unknown.

Capturing the feeling of anticipation is important to the experience with these buildings and the site. Not only the first time through, but each time one visit the complex. Feelings are altered by the change of light and shadow, the differences between form and void, and subtleties of soft and rough texture.

This dive center is a retreat, a place for people to come and stay or just visit, but to truly leave the world behind. A place to begin an exploration of another world, the under water world. It is a restful place, calm and soothing. Exciting in a peaceful way.

Natural light and ventilation are important factors. *"A space can never reach its place in architecture without natural light." Louis Kahn* Light seems to bring a place alive. The climate is such that it would allow for a very open building. Heating would be only for short periods and could be achieved by passive solar power or fireplaces.

My concept is a strong, massive solid form anchoring the building into the site and a free, light form delicately reaching out to the air and water.





San Diego - La Jolla Underwater Park

The San Diego - La Jolla Underwater Park is a continuing community project to preserve the natural ecology, reestablish the underwater sea life, and maintain the natural beauty of the shoreline. The San Diego - La Jolla Underwater Park was created in 1970 when the San Diego City Council dedicated 6,000 acres of tide and submerged lands owned by the City as an underwater park. The park extends from Alligator Point, La Jolla, in the south to near the northern boundary of Torrey Pines State Reserve. Within the Park there are two special areas created by the California Fish & Game Commission; the Ecological Reserve and the Marine Life Refuge. These two areas are regulated to protect our native natural marine and geological resources. For additional enhancement of fish, invertebrates, and plant habitats, Santa Catalina quarry rock was dumped in 70' of water near Scripps Canyon in 1964 creating the first of 2 artificial reefs. The other reef was created in 1975 and 1979 in 40' of water offshore from the Glider Point.



Site Description

Location

The site is on the Pacific Ocean north of San Diego, California. It is located at the northern edge of Torrey Pines State Reserve and the San Diego-La Jolla Underwater Park approximately 10 miles from downtown La Jolla and 3 miles from University of California, San Diego.

Site

The coastline around La Jolla varies from steep cliffs to beaches, from slivers of sand to secluded coves to long open coasts. It is an area that has been developed quite extensively. The site is unbuilt, because it is part of a State Reserve. I chose this particular site to explore ways to utilize the beautiful edges of the earth without destroying the pristine beauty of the place.

Access

North Torrey Pines Road is a four lane road traveling north and south, with heavy traffic traveling at moderate to high speeds. Approaching from the south, you travel down a hill

Views to and from Site

Views from the road to the site are blocked by the rise of a hill. Views from the ocean and the beach are wide open. From the site, the views are spectacular to the ocean and up and down the coast line.

Topography & Vegetation

Land has steep cliffs of about 100 to 200 feet high with varying degrees of steepness. The beach levels out for about one hundred feet, depending on the tide. It is a shallow, gradual slope into the water. Farther down the coast near the cove is a very deep canyon of 300 feet. On the east side of the ridge, there are eucalyptus trees, willows and some palms. To the west, there is low, dense shrubs.

Program Description

Hospitality Buildings.....12700 sq. ft.

- Restaurant Seating.....3000 sq. ft.
- Outdoor Seating/Deck.....3000 sq. ft.
- Kitchen.....1000 sq. ft.
- Lounge/Bar.....1500 sq. ft.
- Lobby.....800 sq. ft.
- Reception.....450 sq. ft.
- Retail.....1600 sq.ft.
- Rest Rooms.....600 sq. ft.
- Storage/Receiving.....750 sq.ft.

Cabins

One Bedroom Units.....500 sq. ft.
x 10 units = 5000 sq. ft.

Two Bedroom Units.....750 sq. ft.
x 8 units = 6000 sq. ft.

Four Bedroom Units.....1500 sq. ft.
x 5 units = 7500 sq. ft.

Dive Center.....14825 sq. ft.

Retail Sales.....1350 sq. ft.
Observation Deck.....1250 sq. ft.
Office.....375 sq. ft.
Snack Bar.....250 sq. ft.
Rest Rooms.....400 sq. ft.
Aquarium.....1200 sq. ft.
Classrooms.....300 sq. ft.
x 3 rooms

Rental.....1200 sq. ft.
Storage.....600 sq. ft.
Compressor Room.....150 sq. ft.
Tank Room.....150 sq. ft.
Rinse Area.....600 sq. ft.
Locker Rooms.....900 sq. ft.
Dive Pool.....4500 sq. ft.
Boat Launch & Pier.....1000 sq. ft.

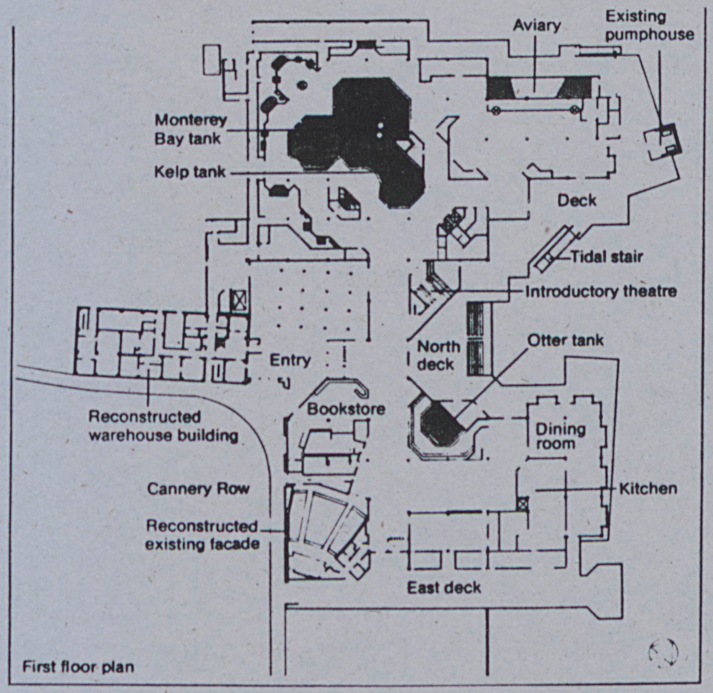
Case Studies and References

The scuba diving retreat I am proposing differs from the normal retail dive shop as follows:

Retail, rooms and recreation are all in one
The focus is on learning
It is one complex which is fully ingrated

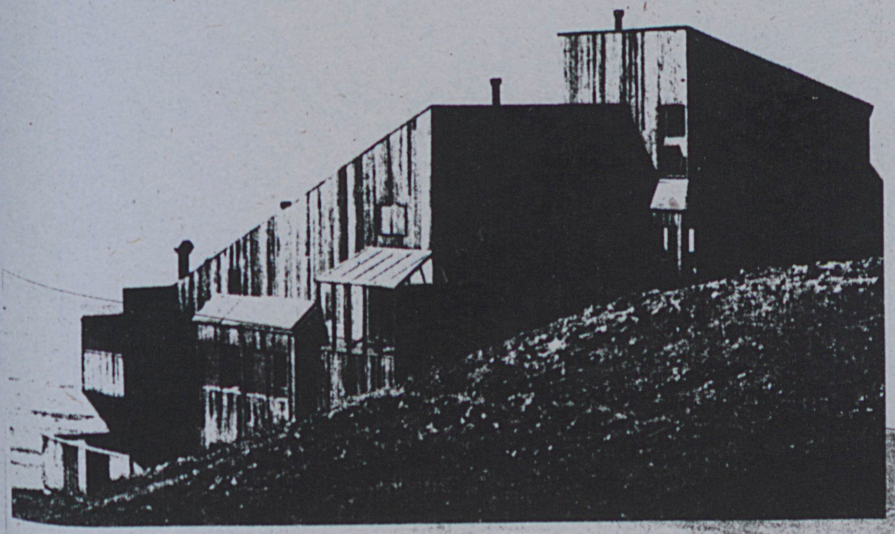
My research included conversations with my dive instructor, the employees at a local dive shop near my site, and other fellow divers. I investigated places that ingrate building and site and are sensitive to nature, such as Japanese architecture which focuses on the experience moving through the building and the land. Then I began looking at resort architecture and architecture without architects, such as the Greek Islands and Italian hilltowns. Landscape and park design offered ideas about relationships of one activity to another.

The following are some specific projects that were researched:



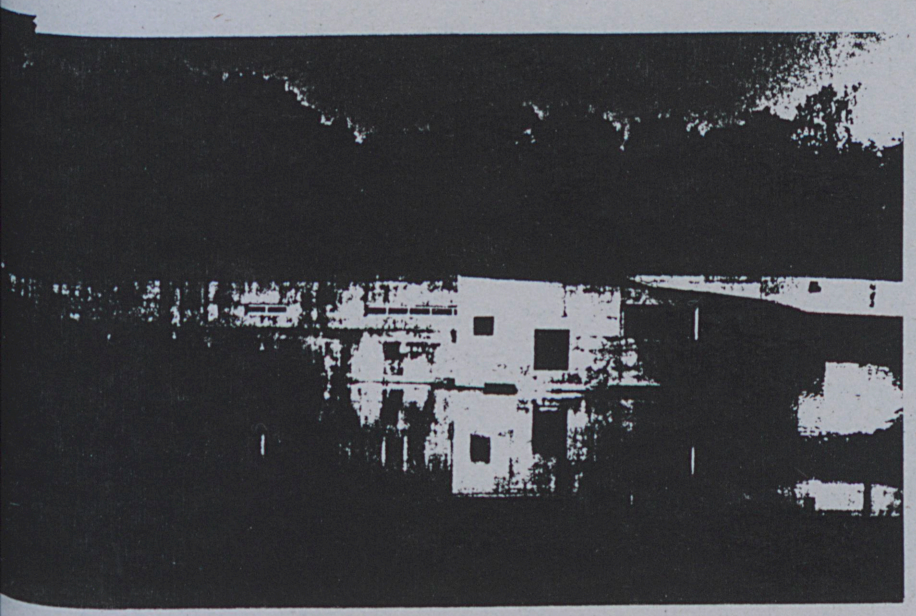
Monterey Bay Aquarium, Monterey, California
Esherick, Homsey, Dodge, & Davis

I looked into the possibilities of going into the ocean and using the existing landscapes. I spoke with Joe Esherick when he was here about his projects and my project and gained some new understanding about architecture.



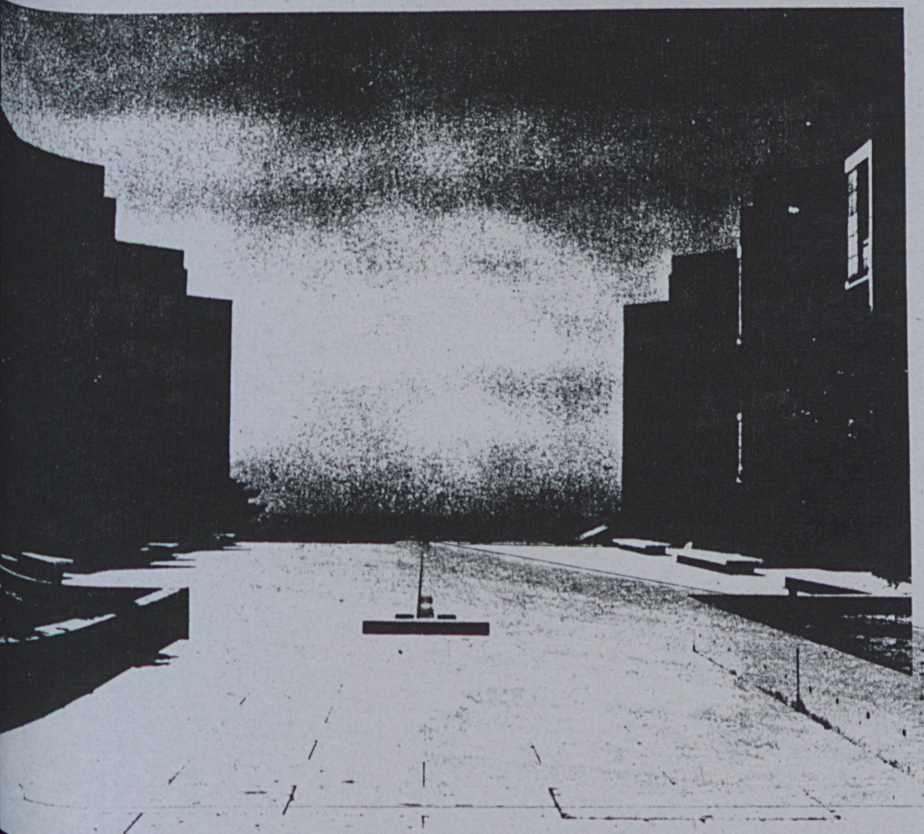
Sea Ranch Condominiums, Sea Ranch, California
Moore, Lydon, Turnbull, & Whitaker

I explored the forms and materials used in this project and adapted some of them into my project. Landscape was integrated with the buildings.



Rio Grande Nature Center, Albuquerque, New Mexico
Antoine Predock

In this project, Predock focused on the sequence and the movement of the building. From this examination of his building, I determined my sequence of approach, entry, views, circulation, and space.



Salk Institute, La Jolla, California
Louis Kahn

Just down the road is the Salk Institute, which I visited it when I was in San Diego. My idea of securing the buildings into the site with a massive form and then letting a light piece grow from it came from studying Kahn works. Light is so important in his works and I became aware of its importance in my project.

Process

- Site selection and visit
- Writing and reading... poems and different architects
- Diagramming with abstract drawings on canvas: emotions and feelings of the place
- Sequencing the experience
- Two dimensional design as plan and section in relationship to more diagrams
- Three dimensional design and form generation
- Experimentation with alternative media sources



Conclusion

I must say that my thesis process certainly was a learning experience for me. It had frustrations and successes. I feel like some of my goals were achieved, such as designing buildings that integrate with the site, and other goals were lost along the way, like truly representing the experience. I guess to accomplish that I will have to build it someday.

I feel that the buildings I designed do go through a transition from being on land to sea. And only through architecture can that transition be made.

Architecture is such a personal thing. People, who are not in the field, will not understand it, but the ones you love will accept it and you. You are exposing your very soul to the world, and it's scary. Now I know I can do that without fear of failure. Because when you do what you love and fall in love with what you do, it is right.

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