EXPLORING THE CONTEXT:
A Small Hotel in Key West

By EDRICK VANBEUZEKOM
B.S.A.D. Massachusetts Institute of Technology, 1981

Submitted to the Department of Architecture in partial fulfillment of the requirements for the degree of Master of Architecture at the Massachusetts Institute of Technology
June 1984

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ABSTRACT

This thesis develops a personal method and approach for designing in a delicate context such as the Key West Historic District. This thesis is composed of two parts. The first part presents observations of Key West, focusing on the form of the physical environment. The observations make no pretense of being a scholarly analysis, sacrificing accuracy of detail for breadth of scope. It is a search for the essential elements of Key West and it is an attempt to understand the spirit of the place as manifested in its form.

The second part presents a series of design explorations for a hypothetical hotel in the Key West historic district. The design projections explore issues of building for growth and change in a delicate context, and the limits of such a context as a reference for design, in the hope that the design may be more deeply rooted in its context.

The presentation of the thesis is primarily in the form of images -- photographs and drawings, maps and diagrams.

Thesis Supervisor: Chester Sprague
Title: Associate Professor of Architecture
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I grew up in Florida in a place where there was hardly any "city" to speak of, rather a continuous sprawl of suburban one-story houses, much like any other part of Florida. On my initial visit to Key West I found for the first time a city in Florida where there was a genuine feeling of place and character. The houses had individual personalities, rich in differences, yet similar enough to create a sense of unity. The streets were pleasant to walk.
Since that time I have returned several times to Key West. I have noticed many new buildings and developments which bear little resemblance to the existing fabric of the city in appearance, quality, presence, and even in the relationship to the street... My concern is that some of these changes to the city present not only a discontinuity with the existing city fabric but also do not provide a basis for meaningful future growth and change in the city of Key West.
Cities are always changing, whether the changes are due to growth and prosperity or decay and neglect. Key West has experienced both extremes:

The wavy ups and downs of Key West's spirits have left their traces on the sand and coral of the small island on which the city stands. On the upswings of its hopes the city has produced what few American cities achieve: a distinctive style of architecture. The downswings of its disappointments have permitted its architectural achievement to remain undisturbed; faded, perhaps, but still there(1).

Key West possesses an incredible collection of nineteenth century wood frame houses. Most of these structures are concentrated in what is now the Key West Historical District. Many of the houses are private homes. Others have been adapted as guest houses, rooming houses, beauty salons, office space, and curiosity shops. Some have been saved from destruction by the arrival of someone with money and desire to save the house for its public importance. The fact that so many of these structures survive and continue to be used attests to both the adaptability of the houses and the ability of the fabric of the city to support growth and change.

Currently Key West is prospering again based on profitable tourist and shrimping industries. As a result the city is growing again. Along with growth comes change, and inevitably new buildings differ from the older wooden houses which form such a strong part of Key West.

\^bid
One can no longer build the same way, nor is it practical when one considers changing economic conditions, social values, and building technologies. New buildings must take on a new form which reflects contemporary users and makers. However, if they are to contribute positively to the collective environment they must maintain ties to the existing architecture and land. These ties go beyond mere image or appearance. They are related to the actual physical form of the city in terms of its use and conscious and unconscious associations. They are related to the spirit of the place.
This presupposes a connection between the underlying structure or form of a place and its spirit or character. Such a connection is made by Christian Norberg-Schulz in his book *Genius Loci*. Norberg-Schulz theorizes that each place in the natural landscape has its own "genius loci" or spirit of the place, which is evident in its structure and which can be partially described in terms of space and character. The most appropriate man-made environments are those which extend and enhance the genius loci, usually through structural similarities, supporting changing individual and cultural interpretations of that particular genius loci.

This theory, in part, is an underlying theme of this thesis.

The difficulty with Norberg-Schulz's approach is that although one can understand the structure of an environment through observation and analysis the actual "spirit" remains elusive and defies precise description. It is mysterious and vague, subject to different individual interpretations. In its most continuous sense it is something mystical and lasting. Perhaps it can best be understood as a "feeling" which comes through familiarity, experience, and intuition much in the way that a musician or audience develops a feeling for a particular type of music.
The first part of this thesis "gathers" observations of the structure and spirit of Key West. The observations are organized from the general to the specific, and begin with the natural landscape, people, and climate. They proceed to focus on the formation of the urban structure with its street grid and large blocks. This is followed by the edges of the streets/blocks, the types of lanes within the blocks, and finally the form of the houses. The observations were necessary to begin to understand the essential qualities of the physical form of Key West.

Certainly not all of the observations lend themselves directly to the design, but they are intended to develop a deeper understanding through familiarity, similar to the way one learns a language. Here it is a visual and physical language of form, in terms of use, character, and associations.
The second part of this thesis is a design exploration for a small hotel in the heart of Key West's historic district. The project is based on an authentic one which is currently under construction. Initially run as a hotel, the intention of the owners is to eventually sell the individual units as condominiums. Thus the form of the hotel, like the old houses of Key West, must be able to accommodate changing uses.
ON THE ROAD TO KEY WEST

It isn't until you pass Florida City and the green sign pointing to Key West that you realize you have embarked upon strange— even forbidding— territory. Miles and miles of desolate road bordered by swamp and mangrove islands announce you are leaving the more conventional Florida tourist retirement world behind. No signs of civilization. No signs, period, save an occasional "For Sale" among the mangroves (What's for sale? the swamp?). No gas stations. No houses. This stretch of Route 1 to Jewfish Creek, you hear later, was until recently called "Death Alley." It was a narrow two-lane road with no shoulders, no where to go if one of the speeding cars from the other lane swerved onto your side. Now they have widened it. But you still feel uneasy.

Finally you hit signs of humanity: motels, gas stations, bar-b-ques, romantically named condominiums, round-the-clock groceries. A sign announces "Largo Key" and the name conjures up a faint memory of the Bogart-Bacall movie of the '40s. But the sights along the highway are totally pedestrian. You shake your head and drive on.

You begin to island hop. For the most part, it's monotonous tangled vegetation, junky-looking restaurants and signs, and a straight flat road. Not exactly what you expected. Not like the gemstone islands of the Caribbean or the Mediterranean.

The keys, you soon learn, are flat. Very flat. The views come mostly on the embankments and bridges. And the longer you drive, the more frequent the bridges.

You have heard a lot about these viaducts. People have exclaimed at their narrowness, their frequency, their length. You have heard that the highway you are on— the Overseas Highway— is built on the roadbed of the old Overseas Railroad, which was destroyed by a ferocious hurricane in 1935. You have to remind yourself that the thin thread of elevated highway you are speeding along is all that divides the Atlantic Ocean from the Gulf of Mexico.

On the bridges you feel a mixture of exhilaration and fear. You become aware for the first time of the huge panorama of sea and sky encircling you. Sparkling blue green, dotted with sandbars, and calm for as far as the eye can see. And above this table of ocean sits an unbroken hemisphere of blue, gray and white. The world of high rises that has hidden the view all the way down Florida's so-called "Gold Coast" is now, definitely, behind you.

Then you hit the three-mile bridge. There is no warning. Suddenly you are on a bridge that just doesn't seem to stop. You can't even see the next island. You know the water on either side isn't very deep, but you know also that this bridge isn't all that wide and some fool truck driver has just passed you at 70 miles an hour. You are happy to see the land beyond, to feel it solid beneath you.

—Key West: The Last Resort

OBSERVATIONS
Natural Landscape

flora and fauna

The Florida Keys were once part of an extensive coral reef which grew along the edge of a limestone platform formed millions of years ago. During the ice ages, the waters receded and the reef died. In the post-glacial period, the ocean level rose again, eroding the reef to a flat terrace. Further erosion over the ages formed the Keys. This coral foundation is the reason why Key West is sometimes called "the rock."
The lower keys are larger than the upper keys, due to mangroves which grew on the lower keys and helped trap sand and debris. The island of Key West is approximately three and a half miles long and one mile wide, and it is virtually flat. The highest point on the island is eighteen feet above sea level which occurs near the center of the historical district (Solares Hill), from which it gently slopes down to the ocean.

In the centuries before settlers arrived, Key West was covered with woods, mangrove swamps, and natural salt ponds. Now it is covered with a veritable plethora of exotic tropical plants. Some of these are native to the island, but most have been brought by birds, sea currents, and man. There is an endless variety of flowering plants of which some types are always in bloom.\(^3\)
Plants have an important role in Key West, particularly as providers of shade... shading the ground, shading the houses, shading the people. They are life giving, protective, sheltering... The verticals of the trees stand in contrast to the flatness of the land. Diverse leaf forms break up and scatter the intense sunlight. "You should go there, you'll freak out!"

Numerous species of birds populate the Keys, some permanently, many others seasonally. At one time there were deer on the island. There are also raccoons, cats, cats, dogs, and cats. There are chameleons and bugs. Huge cockroaches called Palmetto bugs, termites, and scorpions... This is part of the reason houses are raised off the ground.
The landscape of the Keys has been described as "a land that's mostly water and an earth that's mostly sky." It is a severe landscape dominated by the vast turquoise expanse of ocean and the immense, embracing vault of the sky. Key West is a thin strip of land where one experiences the cosmic forces of the sea and sky.

The power of the sky is evidenced in the warm tropical sun and the drama of turbulent clouds and tropical storms which sweep in from the ocean. The sun creates a monotonous temporal rhythm which is highlighted by the incredible displays of color at sunrise and sunset. Sunsets in fact have become a daily ritual in Key West. Every evening people gather at Mallory Square on the western side of the island to watch as the sun slowly sinks into the Gulf of Mexico.
Sunset

Sunsets happen everywhere, of course, but in most places they aren’t attended like parties. People usually don’t gather for them. In Key West, Sunset (and in Key West it deserves the upper case, just like Halloween does) is observed reverently and faithfully — rather like a mini-holiday — every day of the year that it’s not raining or heavily overcast.

Sunset is also used as an excuse for some people to make money off tourists, but if it weren’t for those people Sunset wouldn’t be nearly as interesting as it is.

Here’s what happens:

Every day about two hours before the sun is scheduled to drop into the Gulf of Mexico, people begin gathering at the Mallory Square pier behind the Waterfront Playhouse near the intersection of Front and Duval streets.

What are you likely to find? It varies. Sometimes it’s little more than tourists walking around the pier taking pictures and looking at each other while a fruit vendor and a sno-cone man wander around trying to make a buck. And most of the time there’s at least one guitar strummer sitting in front of his hat trying to draw a crowd, and sometimes there are as many as half a dozen.

But on most evenings during the heavy tourist season, the pier is a circus. Sometimes literally. A two-man team called The Locomotion Circus frequents Key West and occasionally (when they’re not being hassled by police) puts on a professional juggling and gymnastics act for donations.

Then there are the congo players who rock the pier and everybody on it. The sounds are primitive and savage and you find yourself hanging around and bouncing longer than you figured you would. Impromptu dances are common on the pier, and sometimes two get started on different ends of the pier. While one small mob clogs to the mountain beat of a banjo picker and his back-up washboard player, another crowds gathers madly to the jungle beat of the congoes.

Along the inside edge of the pier a dozen or more mobile "shops" will be displaying handmade jewelry, carved sea-shell knickknacks and other crafty items on blankets and folding tables. Most of the vendors are strictly low-pressure (they’re bending the city’s rules a little just being there), so don’t be afraid of them.

On a good night, the pier pulsates and rocks and everybody gets a good look at everybody else. On another good night, the crowd is smaller and mellow and the experience is more quietly satisfying. Regardless of what the crowd is like, though, the sunset itself is usually the most memorable event on the agenda. In the winter months there is an unobstructed view at the sun as it disappears degrees into the sea. The hula hoop on the pier usually quiets ever reverently just as the sun is about to disappear, and occasionally applause breaks out spontaneously and everybody feels silly but right for some reason.

Lots of people (especially locals) really come to Sunset mainly to see the sunset and not the crafts and music show. During the summer months dozens of people show up for Sunset at a completely non-commercialized spot — the end of Simonton Street about three blocks north of Mallory. The reason is very practical: during that time the earth is positioned so that an island off the Mallory pier obstructs the twilight’s last gleaming. From the Simonton Street pier the view is as good as ever, and at this writing the vendors have seen the light only from one angle.

How About Sunrise?

Key West sunsets are famous of course, but dawns can be just as dramatic.

Our votes for the best vantage points for sunrises are, in order of preference:

- South Roosevelt Blvd., on the curves east of E. Martello Tower
- Smathers Beach pier
- Atlantic end of Duval
People

People who live in Key West are in some ways similar to the fish who inhabit the coral reef: They are colorful and exotic. They are enigmatic, independent, opinionated, yet tolerant of most any lifestyle. This is of course a broad generalization, a bit unfair, but gives one a sense of the sophisticated, cosmopolitan yet isolated small town atmosphere that is prevalent here.

The origins of the large and conspicuous Cuban community go back almost as far as the native "Conch" (pronounced "konk") population, who came here from the Bahamas and from New England. There are mellow blacks as well as a prosperous and increasing gay contingent. Mix in a miscellany of rednecks, hipsters, retirees, military types, artists, social butterflies, and intellectual bums of all races.

It's a town of extremes and contrasts. On one hand, you will see the seedy bars, cracked sidewalks, tacky storefronts, trash and car-filled front yards, barefoot transients. And back-to-back are elegant garden parties, gourmet restaurants, restored old houses, part shops, celebrities hobnobbing in the Chart Room bar. It's all there, a mixture some visitors hate, some love — with few in between. Hemingway once dubbed it the "St. Tropez of the Poor."

Key West, being an end-of-the-road outpost, has always appealed as a jumping-off place for people who want to get away from it all. To come here from those bustling, snowbound northern cities is to realize what a free and easy place the island is. You are quickly reduced to the basics: a two-wheeler (bike or moped) to buzz around the island; cut-offs, tee shirt and sandals to keep cool and plenty of sunshine, sea and breeze to stay refreshed. You can go out and do your thing and nobody much cares — the degree of tolerance for alternative lifestyles makes it a city of individuals and egotists.

As a matter of fact, if you nose around a bit beyond the usual tourist realm, you will see that influence and political favors are about as openly peddled or given away in Key West as in any South American banana republic. The laws frequently are bent to take care of little problems that crop up. The pace of life, too, is distinctly Latin. 'About three o'clock' means anywhere from two-thirty till five to many islanders, and mañana is the favorite time for hard work. Natives do not walk — they saunter if they move at all. The languors of the tropical climate set in quickly. You soon stop trying to decide what to do — you're in one of the best places in the world to do nothing at all and enjoy it.

A Key West transient engaging in a popular pastime.
The population of Key West is approximately 32,000, and fluctuates with the tourist season which runs from Thanksgiving to Easter. More than 40% of the total workforce is employed in tourist-related activities.

Tourists come to Key West for a variety of reasons. Some come to fish, dive around the reef, sail, etc. Others stay in town, rent bicycles and cruise the streets. They stay in guest houses in the Old Town. They stay in large motels which line the waterfront. Some prefer the familiarity of a Ramada Inn or Holiday Inn overlooking the Gulf of Mexico. Some come to ride the Conch Train -- a tacky train tour of the city. Most will browse the shops on Duval Street and visit the open-air bars.
One cannot discuss life in Key West without mentioning the ocean and the coral reef. Both exert a presence in daily activities to varying degrees.

Key West's economy has always depended on the ocean to some degree. Currently shrimping provides a major source of income to the island. Key West serves as a naval base, and coast guard base. And tourism, probably the island's main source of income, depends heavily on fishing, diving, sailing...
Early settlers found that surrounding waters, at worst, provided a livelihood, and at best, brought them wealth. Few family heads arrived without some type of sailing craft, and owners of larger sloops and schooners found wealth in Havana and the West Indies trade. Many fine old homes still standing are built of mahogany brought here by ship's captains who had delivered cargoes to ports of Cuba, Jamaica, and Central America(6).
There are over 600 varieties of edible fish in the surrounding waters. And there's the reef...

The coral reef which extends along the Florida Keys is of the sort known as bank reef. Bank reefs grow along shallow banks formed by the shifting of limestone platforms of the earth's crust. They require warm, shallow waters and sunlight to live. A living, growing form, coral is a highly articulated, strong yet delicate structure.

... Not only is it the home of the most colorful fish and shellfish in the world, the reef itself is alive. It is life surrounded by life, an example of one of the most complex and delicate symbiotic relationships on earth(7).
A school of golden grunts rests in the shade of an elkhorn coral.
Climate

Climate is one of Key West's greatest assets. Geographically it is only thirty miles (less than one degree of latitude) north of the tropics. The island is closer to Cuba (90 miles) than it is to Miami (159 miles). The proximity of Key West to the Gulf Stream gives it a most equitable climate. It is warm and humid with an average annual temperature of 77°F (86°F summer and 72°F winter).

During the summertime temperatures seldom climb above 90°F, while relative humidity ranges from 65% to 80%. The intense tropical sun is moderated by tradewinds from the Atlantic and Caribbean. Wintertimes
### Key West, FL

#### International Airport

#### Eastern

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**Means and extremes above are from existing and comparable exposures. Annual extremes have been exceeded at other sites in the locality as follows:**
- Highest temperature 97 in August 1893; lowest temperature 41 in January 1881; maximum monthly precipitation 73.56 in October 1973; maximum precipitation in 24 hours 7.89 in November 1973.
- For the period March 1956 to date.

**Correction Note:** Higher fastest mile wind speeds published in 1973 and earlier issues were poor gust values.

**Based on records from airport locations for:**
1-1-43 TO 6-10-53 AND 7-1-57 TO DATE.
are generally mild, though temperatures have gone as high as $85^\circ$ (in January) and as low as $41^\circ$. Inhabitants are very proud of the fact that Key West is the only frost-free corner of the continental United States. An average winter day is sunny, humid, and ranges from $75^\circ$ daytime to $65^\circ$ at night. Prevailing winds are from east-southeast during summer and from the northeast during winter, with an average speed of ten to twelve miles per hour.

The rainy season in Key West lasts from May through October. Most of the rainfall is in the form of tropical thunderstorms which usually occur during the hottest part of the day and last for no more than one or two hours. Longer summer rains are usually associated with tropical disturbances. Key West lies in the middle of "Hurricane Alley," and hurricane season lasts from June 1 until November 30. The island has occasionally suffered wind damage from hurricanes but never much flooding, and islanders credit this to the protection of the coral reefs which break up waves before they reach the island. Tornadoes are also frequent in the Keys, as are waterspouts.

A waterspout is a spiral of wind and water originating on the ocean that can reach the size and intensity of a tornado. Some can cause damage even after they come ashore, but waterspouts primarily threaten swimmers and boaters.

8 Key West: The Last Resort
In terms of comfort, the climate allows for exposure to the outside year-round. Tropical weather is very much a sensual skin experience. Shorts, sandals, and a light shirt are all the clothing that is necessary, and even less is better sometimes! Visitors quickly learn the importance of protection from the intense tropical sun, which can burn. It gets hot and humid during the summer, but usually adequate air movement and ventilation are enough to restore comfort. For some people a cool air-conditioned retreat is a welcome relief. For others a soothing dip in a swimming pool is the perfect answer.
Urban Structure

VIEW FROM LIGHTHOUSE about 1900 shows homes and businesses with wood-shingled roofs, chief roofing material. Frequent fires and high insurance rates prompted replacement of wooden shingles with tin as the city's...
When the first settlers arrived in Key West they found a heavily wooded island, strewn with bones which remained from an Indian battle a century earlier, and scattered with a few shallow fresh water wells. Settlement followed the sale of the island in 1822 by its Spanish owner to John Simonton, a trader from Mobile and New Orleans. Simonton and his three partners, John Whitehead, John W. C. Fleming, and Pardon C. Greene, recognized the value of the island's natural harbor and salt ponds. They foresaw its strategic importance as a naval depot, wrecking center, and shipping port.
Settlement began in 1822 on the western corner of the island which projected into the harbor, now bounded by Front, Duval, and Caroline Streets. In 1826 view of the settlement one can see that most of the houses are oriented toward the water. Notice that the roofs run parallel to the shore, with the exception of a warehouse which is perpendicular to the shore. There are fences surrounding private territories; houses appear to be up to the edge of property lines, jealously claiming every inch of property. The front porch of one house even projects into the public way, sharing territory with it. The form of the settlement is gentle and seems to grow from the land.
MAP
OF
the Town of
KEY WEST
together with
THE ISLAND

ORIGINAL PLAT OF KEY WEST, drawn 1829 by William Adee Whitehead, younger brother of one

of the island's proprietors. This plat is still referred to in deeds of today.

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In 1828 Key West received its first charter and in 1829 it was platted by William Whitehead, brother of one of the owners. Whitehead organized the town on a roughly square street grid. Besides being a convenient way to divide the property among the owners, the use of the grid imposed an abstract and rigid geometric order on a vast, open landscape, concretizing the orders of the landscape into a man-made inhabitable order.

It is unclear why the grid was oriented at $45^\circ$ from the cardinal directions. It does not correspond to the larger form of the island although it is within a $10^\circ$ range of the direction of the harbor edge at that
time. My hypothesis is that Whitehead probably registered its position off an existing road, since the island was already partly settled. One of the first trails into the island's interior extended from the harbor area straight to the opposite side of the island. This road was named Whitehead Street, which may indicate its importance. Parallel to Whitehead Street is Simonton Street, while Greene Street and Fleming are perpendicular, Greene Street being close to the harbor (Greene was a ship's captain and built the first wharf and warehouse here) and Fleming being closer inland stretching towarded the salt ponds. (It was Fleming's idea to start a salt business.)
The size of the blocks was large, ranging from approximately 350 by 450 feet to 460 by 480 feet, compared to the size of a Manhattan block (200 feet by 600 feet) and a Back Bay Boston block (540 feet by 240 feet). Most of the early lot sizes were 46 by 90 feet. Orientation of the houses was governed by the street.

The large size of the blocks laid out by Whitehead left much room for growth within the block. Development of each block was piecemeal and with time subdivision of properties became more and more complex, bordering on chaotic. In order to gain access to the interior of the block, numerous lanes and alleys penetrated
the blocks. Some, like Peacon Lane, went straight through, becoming narrow street, while many others remained private cul-de-sacs. The intimacy and diversity of these lanes provided a counterpart to the long straight spaces of the streets.

The original portion of the town as laid out by Whitehead extends as far as Angela Street. All streets were 50 feet wide with the exception of a couple of lanes near the waterfront.

Despite the uniform street widths, a hierarchy of streets naturally evolved. This was in turn reflected in the depth of the edges of the public/private relationship.
DRAWING OF KEY WEST done in 1838 by Francis Conte de Castelnau shows the north side of the island.

In the 1838 views of Key West, the orientation of the houses has reversed from before. Houses no longer face the ocean but now face the streets, the interior space of the city. The space of the street is built by the fronts of the houses, wooden fences, and deeper inland, when it becomes a trail, the trees. In most cases the roofs are parallel to the street but near the warehouse they are oriented perpendicularly, follow-
DRAWING OF KEY WEST by William Adie Whitehead, done in 1838, is looking southeast. It was made from the cupola of A. C. Tift & Co., a warehouse in what is now Mallory Square.

...ing the direction of main public access. Many of the lots contain several buildings, some of which are for kitchens, wash houses, and cisterns, while others are additional houses, since families tended to cluster together in one lot.
Early in the settlement of Key West, the US Navy claimed large portions of the island's edge, building first on the north and western flanks of the harbor, and later building a series of fortifications on the southern shore of the island. This further interiorized the growth of the city, which gradually pushed across the island.

Growth of the city was steady through the rest of the nineteenth century, and was generally built upon the original principles of organization, with most of the innovation taking place at the level of the house as new styles were developed.
The gridiron system of streets and blocks, as laid out by Whitehead, provided a collective spatial structure with a wide tolerance for individual variation which became an important characterizing element of Key West. The densely built streets, narrow lanes, tropical vegetation, and limited public access to the waterfront combined to focus the city inward, surrounding the space of the city and giving it a feeling of enclosure and definition, in contrast with the world of the surrounding landscape.

The degrees of enclosure within the city are related to degrees of privacy. Mallory Square, location of the original harborfront and one of
the main gathering places, opens out on one side to the ocean. Duval Street, the main commercial/retail street of Key West, extends straight across the island and opens out to the Atlantic on one end and the Gulf of Mexico on the other. On the other hand, the most private space -- the interior of the blocks -- is strongly enclosed.
Economic misfortunes led to a period of very little to no growth in the first part of this century, culminating during the Depression with bankruptcy for the city in 1934. Over the next few years the Federal Emergency Relief Administration was called in and, with four million hours of volunteer labor, proceeded to clean up the city and make it attractive for tourists.

As Key West began to grow again it became necessary to pass the first zoning and land-use ordinance, in 1940. Up until then builders had followed an implicit system of rules or agreements which governed the space of the streets and the form of the houses. Streets and houses -- the most basic built elements of the city -- were instinctively understood.

By the 1950's the city was undergoing rapid change, and in 1960 a preservation foundation was formed in order to prevent destruction of the historic houses of Old Town Key West. Key West continues to grow, and an understanding of the structure of the streets and houses is essential if the historical district is to grow without losing its value.
Physical Form

The following sections comprise a study of the actual physical "built" form in the historic district of Key West. The various sections focus on the form of the streets, lanes, and houses, and the elements and spaces which define and connect them. The observations are organized into two parts: (1) the streets, and (2) the houses.

The observations begin with a look at the form of a typical residential street. A portion of William Street is presented in plan, sections, and elevations. The drawings focus on the range and vocabulary of street edge conditions and houses.
A brief typology of lanes follows, looking at various ways of building within the blocks.

Next, a series of images are used to discuss some of the important elements and qualities of the street edges in terms of form and light.

A brief discussion of the character and spirit of the houses introduces the next set of observations. The observations begin with a description of the construction and form of the old houses excerpted from the guidelines of the Old Island Restoration Commission (OIRC).
This is followed by a short summary of the styles of houses classified in *Portraits: Wooden Houses of Key West* by Sharon Wills and Lawson Little. The collection of housetypes which follows begins to classify different housetypes by their form. This is supplemented with measured drawings of some of the houses.

The observations end with a look at some of the important formal elements and characteristics.
This is the 400 block of William Street, between Fleming and Eaton. It is in the heart of the residential district of Old Town, and typifies streets in this area.

The basic structure of the street is fairly simple -- street frontage for lots averages approximately 46 feet/lot. The dimension of houses which face the street lies within a consistent range, from a maximum of 46 feet to a minimum of approximately 22 feet, with the average between 24 and 32 feet. The street has a rhythm, controlled by the houses, fences and trees. The stronger continuity of one side makes variations on the other side more tolerable and interesting.

The space between houses becomes either a courtyard, a driveway, or just a narrow separation of houses with plants, trees, and/or fences. The houses are all located toward the street edge of their lots with set-backs from the sidewalk ranging from a few inches to approximately twelve feet.

Trees and plants play an important role in giving form to the street, shading sidewalks and houses, softening the sunlight, and partially obscuring views of most everything. Large trees highlight the composition of light and dark along the street, marking places along the street with their shadows.
The richness of the street comes from the individual variations of house forms and the variety of edge conditions which make the transition from street to house.
Passover Lane, across from the cemetery, is one of the narrowest lanes. Houses are very close to the path on one side, while plants form a dense wall on the other side. It has a strong sense of privacy.
This is Peacon Lane, an example of a lane which goes all the way through a block, becoming a through street. However, its narrowness and scale combine to give it a more private and quiet feeling.
Hunt's Lane is typical of the narrow cul-de-sac lanes which are most common. Passage into the block is narrow, making the parking and courtyard within much more private.
The entrance to Sheppon Lane is very narrow, marked by the setback of one house from the street. Houses face the backyards of houses on Margaret Street, which are in turn screened from the alley by dense vegetation and a fence. Parking is at the end of the lane.
Another narrow cul-de-sac. Again the entrance to the lane is a narrow passage (approximately sixteen feet) between the houses along the street.
Another cul-de-sac, Love Lane, penetrates deep into the block. Houses line both sides of the lane and face each other.
b. edges
The form of the street edges is composed of sidewalks, fences, low walls, plants, trees... It is also made of houses: steps, porches, columns, ballustrades, wooden trimwork and brackets, windows, shutters, walls... It is a 3-D screen world with the elements combined in various ways to generate a range of public/private, light/dark, and open/closed conditions.
A tight edge, with cars between houses. Here the separation of sidewalk and road is minimal and feels weak.

A spatially deep edge, built with layers of screens.
This house forms a framework which contains a juxtaposition of entrances—commercial and residential. The store reaches out into the public realm. The residential entrances are recessed from the street.
From the street the porches and roofs of the houses add up to something larger than one house, forming a strong spatial community.
A screen world...
The system of physical form is one of screen enclosure, layered space and sky cover. It is "built" by trees and plants, porches, columns, fences, ballustrades, etc. The screens have a vertical emphasis while there is a horizontal emphasis of cover.
The street edge is the public/private interface, a zone of exchange... Individual territories (lots) have boundaries marked by low walls, fences...
Sometimes the exchange is an actual shift in boundaries...
Vegetation is used extensively to shade the houses. Plants screen the light, giving it form, texture, and color. They also provide visual privacy to the house.
The form of the light becomes incredibly rich as it is shaped and filtered by the elements.
A world of screened light...
The houses of Key West exert a delicate presence on the island. Raised off the ground, they allow the land to continue undisturbed beneath them. With their thin columns and formal front to the street they are like well-behaved guests. Their relationship to the land is similar to that of the coral reef. They are sturdy elegant structures, engaging the environment and teeming with life of all sorts. They are alive.
The presence of the sky is reflected in the way people have built in Key West. Protection from the sun and rain is a primary necessity for living in Key West. It is manifested in the broad verandahs, supported by slender columns and large sheltering roofs which cut geometric shapes into the sky. The elaborate "gingerbread" brackets and ballustrades scatter the light. They are playful, cut into varieties of shapes: geometric, curved, floral, nautical... They seem spirited, celebrating the union of sun, sky, and earth... invoking them with their forms.
Yet one also notices that the forms of the houses are frequently spare, economical, finely crafted, tight as a ship. These houses were built by ship's carpenters,

made by men without formal training . . . who probably solved the detail of design as they built . . . Because they worked in Key West, the carpenter-architects brought with them memories of vessels and seaport homes from their own past . . . Widow's walks from New England; roof scuttles for ventilation, from ships . . . long overhanging eaves connected to underground cisterns from the West Indies . . . from time to time a suggestion of contemporary styles: Classic Revival columns and Federal fanlights . . . Gothic Revival gables and window bays; from Creole New Orleans wrought iron trellises and ballustrades, reproducing these, with tropical fecundity of imagination, in wood(9).
An eyebrow house.
Economical, functional houses and elaborate houses with complex forms all seem equally at home in Key West. A closer examination of their forms will help to understand the essential elements and qualities of the houses. The following description is excerpted from the Preservation Guidebook for the Old Section of Key West, published by the OIRC(10).

IV. OLD TOWN KEY WEST ARCHITECTURE

Although Key West was settled by persons from many different areas, it is the settlers who came from the Bahamas who are credited most often with having established the island's architectural style. The "Conchs", as they were known, found Key West to be much like the Bahamas they had left. Here, too, the sun shone bright and hot, fresh water was scarce, tides and wind could be heavy—and destructive in time of hurricanes. Knowing these things, the Conchs built carefully and well.
Their building material was wood: mahogany and other hardwoods from the Upper Keys, pitch-rich pine from Pensacola and other ports (today frequently called “Dade County Pine”), cedar from Cedar Key. Often it was a gift of the sea: wood swept ashore from a ship that had gone down in a storm, or salvage from a vessel stranded on a reef.

The Conchs built their houses on wood posts or piers of stone quarried on the island. While the height of the piers might vary from house to house or builder to builder, their function was the same: to keep the house above the ground so that high tides, heavy rains, and storm waters could not flood the dwelling, and providing good circulation of air preventing wood rot.

A secondary and less obvious function of the piers was to reduce wind pressure on the side of the house during hurricanes. Wind could blow under, as well as over and around the sides of the building--thus lessening the chances of the houses being blown off their foundations.

Sills laid upon the piers or posts were mortised and tenoned (cut so that they fit within each other), then pegged together. In some cases posts or piers were notched and fitted snugly against the sill and into the bedrock at opposing angles to better resist the wind.

Posts were tenoned to fit into the sills and rose as balloon framing to support the horizontal beams which would carry a second story, full or half, and the rafters of the roof. At every place where the heavy wooden framing of the house came together, it was carefully cut and joined together -- much in the manner of fine furniture.

Square edged boards or tongue-and-groove lumber were used over 3 by 4 inch or larger posts to cover the interior walls, and clapboard siding, vertical siding or board and batten were used on the exterior of the house. In the attic, where the rafters met at roof peak, mortise and tenon joints were usually clearly visible, along with the wooden pegs that secured them.

The peaked, or hip roof so typical of the “Conch house” helped keep it cool. The roof either provided a layer of air insulation (if it was blocked off by the ceiling of the room), or allowed the hot air to rise and be drawn off by the gable openings or scuttle openings (hatch-like openings in the roof). Wooden shingles were used on the roof until the 20th century, when metal shingles and crimped sheet metal gradually replaced them.
The roof served another function as well. On this island where fresh water was so scarce, it was vitally important to catch and save the rainfall. Gutters would collect the rain water as it ran off the roof, and downspouts carried it into a cistern where it could be stored and used as necessary.

Cisterns, square or rectangular tanks, were generally built of masonry or brick. Customarily, half their depth was below ground level, giving them a basement-like appearance when they were empty. Sometimes they were located under a dwelling, sometimes as a separate structure with its own shingle roof and gutters.

Two other buildings were usually found in the yard of an early Key West Home: the out house and the cookhouse. Due to its warm climate year-round, Key West had few fireplaces used for heating purposes. Most of the chimneys visible in old drawings or photographs were attached to the cookhouse, where the cooking was done in a fireplace or with wood charcoal stove.

Double-sash windows with six panes of glass in each sash were popular, and were often hung with shutters. Louvered shutters, commonly called 'blinds', were more popular than solid ones for they could be used as a cooling device as well as a storm covering. With the louvered blinds over the opened window, air could circulate while the hot sun was kept out.

Porches were common, and by shading the side of the house also helped to cool it. Usually the porch extended along the entire front of the house, either cut in under the main roof of the house proper or attached with a shed roof. Sometimes the porches were built around two, or even three, sides of the house as well. An upstairs porch always had a balustrade and usually there was one on the first floor.

In the very early years there was little or no wooden “gingerbread” decoration. Balustrades had square wooden balusters or graceful tapering spindles. Porch posts were just square-cut timbers with the edges slightly beveled.

Wooden fences of rounded dowels or pointed pickets along the boundaries of the lots repeated the vertical lines of the balustrade and served as a harmonious link-up between buildings of various heights.

The great fire of 1886 destroyed many of the buildings of the early settlement. When rebuilding took place, the houses kept the basic features of the architecture as established by the colonists from the Bahamas. Increasing prosperity, however, allowed many of the residents to build larger and more elaborate houses and to trim them according to the taste of the day—which was fanciful. However, under these Victorian touches many were basic or traditional buildings.

By the end of the 1800’s, the wooden houses of Key West had blossomed with the ornately turned spindles and elaborate cut work which many think of today as being an essential ingredient of a “Conch house.”
The houses of Key West share common traits and themes. A wide variety of individual interpretations of the houseform exist, and one finds that there are certain types which predominate. The book *Portraits: Wooden Houses of Key West* by Sharon Wells and Lawson Little (11), gives a general classification of the houses according to their style and period of construction. The following is a brief summary of the types:

1. Bahamian influences -- includes most of the oldest houses on the island, typified by two houses on William Street which were actually built in the Bahamas originally.
2. Classic Revival architecture, including:
   a. "Most abundant are those side hall plan buildings in which the gable forms the main front of the house. The facade is crowned with a classic pediment; ..."
   b. "... houses where a pedimented gable dominates the facade but does not include the main entrance. Two-story balconies parallel the street and often an exterior staircase is visible. A central hall plan is typical. Porches and balconies are enclosed by carved balustrades ..."
c. "Thirdly, the 'eyebrow' house is a bit of domestic architecture unique to Key West. It is characterized by a series of 'eyebrow' windows set beneath a heavy roof overhang. Porch posts rise starkly . . ."

d. "Finally, there exist smaller, classically inspired wooden houses . . . These one-story residences have a recessed apron porch and trace their lineage to Creole cottages of the Louisiana bayou region."
e. "Many other buildings are difficult to categorize, yet retain certain classic allusions: a harmonious scale and proportion, details reminiscent of Greek orders, rectangular transoms over doorways, simple molding, the ubiquitous porches and balconies."

3. Queen Anne Architecture -- "These houses are characterized by a deliberate complexity and generally follow an asymmetrical or rambling plan. Ideally, each facade is different in height and appearance and may display a multitude of shapes, colors, and features. Attached towers or turrets, projecting bays, ornamented gables, balconies or porches decked with wooden filigree, dormers, bargeboards and a richness of decoration trim denote a Queen Anne structure."

4. Cigarmakers' cottages, Shotgun houses -- "Such houses were characterized by balloon frame construction and a shotgun style configuration. . . . Tracing its roots to West Africa and the French Caribbean, the shotgun plan was transported to the United States . . . particularly in the southern Gulf Coast region . . . Each of these single story, one room wide buildings usually incorporates a side hall plan
with three rooms, one behind the other. A shotgun structure sits with its roof ridge perpendicular to the street and its front door on the gable end. Generally a two or three bay porch, incised or attached, lines the facade; a simple slat ballustrade may also be found . . . "

5. Frame Vernacular houses -- "Many of the structures fall into no formal category of style . . . These . . . manifest a plain facade with shuttered windows and lack of stylistic or decorative detail. Most are one and a half stories, rectangular in plan with a gable roof . . . The simple flat facade is proportioned into three bays . . . A ballustradeed porch covered by a shed roof may wrap around more than a single side . . . "
This section presents a range of typical houseforms. They are organized into groups which have similar characteristics of form. The basic house is a boxlike structure, usually dominated by the roof form and the verandah or porch, which acts as either an extension of the house or as part of the larger framework of the house.

The houses are first classed by the type of roof — ridge or main roof parallel to the street, perpendicular to the street, or neither. These classifications are divided according to the type of porch-recess (integral with the large roof) or extension (separate roof element), then sorted by size.

The advantage of this "typology" is that it emphasizes the thematic elements and forms and shows that it is the particular assemblage and choice of elements which gives each house its different character.

Form encourages or hinders ranges of particular uses/associations. Understanding the associative "behavior" of form, then, permits the selection, assemblage, and deployment of built definitions to support use-intentions.

-Maurice Smith
The house is one of two houses known to have been built in the Bahama Islands. Its age is not known, however, it was dismantled and brought to Key West in 1847 by Captain Richard Roberts.
The simple squared pillars and balustrades of the porches are said to be cedar, while the small six paneled window sashes and their frames are of mahogany. The house's siding is handplaned clapboard in various widths of white pine. Their beaded lower edges are identical to the wood used in the older houses of the Bahama Islands. Although the ceilings are low, the interior rooms run the width of the house and the placing of the doors and windows allows for a maximum circulation of air. The walls are sealed with hand planed white pine board of various widths, some being 18" wide. The floors are heavy ship planking.
A Bahama-style house. The additional vertical elements of the facade add to its screenlike effect. They originally held bugscreens, which were later removed, leaving the vertical "sticks."
N.E. ELEVATION

FIRST FLOOR PLAN

SECOND FLOOR PLAN
The John Lowe Jr. House, a large Bahama-style house with a captain's walk.
The Geiger Audobon House.
The oldest house on the island,
built in 1825.
The home of the Hans family. It has an interesting variation in plan, with the kitchen at the front of the house, bringing the less private part of domestic life out toward the street. The backyard serves as a very private outdoor "living room."
Bob Hans reading in the swimming pool under the shade of a palm.
A creole type of cottage.
The island city house (left), one of the largest wood buildings on the island. Next door, a typical house with porch extension.
611 Margaret Street. The form of the addition and subdivision of rooms on the first floor has resulted in inadequate through ventilation.
The Southernmost House.
The Tift-Hemingway House, where Ernest Hemingway once lived and worked. Unusual in its stone construction, iron posts and ballustrades. It resembles New Orleans architecture.
Sensitive new construction by architect Tom Pope with continuous surface walls enclosing the most private interior space and an open structural framework with screen infill.
Walls as infill.
The stone piers act as an extension of the ground, elevating the surface of the ground to make it habitable and more private. Most houses are raised no more than two or three feet above the ground, so that the "virtual ground" or floor of the house remains continuous with and associates with the land.
In general, the building system of the houses forms a spatial framework composed of stone piers, columns and beams, walls, floors, and roofs. Additional spatial elements include doors and windows, shutters, louvers, roof scuttles, ballustrades, and various other screen-like elements.
Traditionally, walls have a role primarily as continuous surface spatial definition, with "punched hole" openings (doors and windows). When they are infill walls tend to become more screenlike, filtering the light and allowing air to flow through. As a surface walls have little depth on the exterior, except for that provided by screen elements such as shutters.
The stick-like framework of columns is an important characteristic of Key West houses. Early houses, as previously described, were built with a post and beam structural framework, with walls and screen elements acting basically as infill. More recent construction methods utilize a combination of stud wall (platform frame) construction and post and beam, a very versatile system.
Porches both shade the houses and serve as outdoor extensions of the house. They are a transition zone from inside to outside, serving as entrance and porch.
The ceilings of porches are frequently painted blue or green (the color of the ocean waters) to help soften reflected light. Shutters are frequently painted black or dark green -- colors which absorb the light rather than reflect it.
The world of roofs in Key West is primarily a continuous surface type of form family. Their form is not flat like the walls, however, but angular, interacting spatially with the sky. Most interesting are the ways in which the roofs are inhabited (a major reason for their form), from small openings like roof scuttles to room size elements like dormers, captains' walks, and turrets.
The world of roofs. View out from a roof scuttle.
The screenlike elements of the house, along with the roofs, are probably their most characterizing form, giving them the appearance of standing or rising. Porches or verandas behave as deep spatial screens made of columns, roofs, and floors, which are enhanced by the use of smaller (handsize) screen elements such as ballustrades, gingerbread, brackets, etc.
Jig cut corner brackets with sculpted column
This house, on Eaton Street, is an example of new construction which attempts to be sensitive to the context through use of materials, colors, and construction. However, it lacks the open stick-like screen form of the traditional houses, becoming instead boxlike and closed, clumsy, and not very Key West.
New construction by Bob Hans which exhibits characteristic structural framework and steeply pitched ininhabitable roof.
DESIGN
PROJECT

The Eyebrow House.

A type of a House.
The Site

The site for the design study is located on Truman Avenue in the middle of the Key West Historical Preservation District. It is zoned for commercial uses and is currently the site of the Key Lime Village Motel. The motel consists of a two and a half story eyebrow house, eight small wooden cottages, and an "L" shaped concrete motel wing. For the purposes of this design study it will be assumed that only the eyebrow house remains.
Access into the existing motel site is directly off of Truman Avenue along a narrow ring road which winds back to Truman. A light green block wall runs the length of the site along Truman Avenue, with openings at entrance and exit.

The site is noted for its lush vegetation and contains an extensive array of tropical flora; a huge sapodilla tree is central to the complex. Chevalara, oleander, ficus, palms of several varieties, azalea, and frangipani are some of the varieties of well-developed plants that exist.
The two and a half story Classic Revival structure on the site is one of approximately 50 eyebrow houses on the island, and is a "certified" structure of the Historical District. It is currently used as the main building for the motel and contains an office, lobby, rest room, and laundry room at ground level; six motel rooms on the second floor, and a two-room apartment on the third. The first level is built of stone or limestone with piers which support the wooden upper levels. The walls of the upper house are balloon framed. This particular construction is not very common in Key West but it can be seen in Louisiana plantation homes of the same period.

The house was built in 1883 by Charles Maloney, son of Walter Maloney, one of Key West's key early figures and author of the first history of the island. The house served as a residence for the family until 1924 when it became the Cactus Terrace Motor Court. Originally the first floor contained a kitchen and dining room, with bedrooms on the second floor, which were reached by a wide
flight of stairs on the front of the house. These were later replaced by the current stairs and fire escape.

The building has four bays, which is unusual in that most houses in Key West have an odd (3, 5, 7, etc.) number of bays. The porch originally wrapped around two sides of the house.

The site lies in a block bounded by Truman Avenue and Olivia, Elizabeth, and Windsor Lanes. All of the buildings on the block are wooden houses. A group of houses on the northeast corner of the site and bounded by a concrete block wall is known as Carleton's Compound. These houses have a collective parking area in the interior of the block. The rest of the interior of the block is a heavily vegetated "hammock." Unlike most blocks in Key West there are few buildings inside the block except for those of the Key Lime Village Motel.
The location of the site is very desirable. It lies within two blocks of Duval Street, the main tourist/commercial street of Key West. Perpendicular to Duval Street is Truman Avenue, one of the main traffic arteries leading into Old Town Key West and in fact is the last stretch of US Highway 1 which extends all the way from Fort Kent, Maine to Key West.

A variety of commercial and residential uses line most of Truman Avenue. The commercial uses are mainly clustered around Duval, Simonton, and White Streets, the major cross-island streets. In between, there are a number of large old houses set back from the busy street. The design site is a gap in one of these stretches, and presents the opportunity to strengthen the continuity of Truman by continuing the rhythm of the houses.

Some of the houses are used as guest houses or hotels, such as the three houses next to the site -- the Red Rooster Inn, the Richards Guest House, and the Siboney Inn. Directly across the street from the site stands the church and convent of Mary Immaculate, which includes a stone wall along the length of the street edge.
The program for the design study comes from a project of which I first became aware while I was searching for a Key West-related thesis topic.

I obtained more specific information from John Maes, one of the owners/developers, and from Tom Pope, the architect for the project.

The owners see the project as an example of responsible development in the historic district, one which is friendly toward the context and which attempts to revitalize and strengthen it through its financial structure and use. They would like to integrate the hotel into the rest of the block with the possibility for expanding to eventually include the other houses on the block.

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**Program**

We are happy to announce a new project, THE VILLAGE, and would like to make it available firstly to our Eden House family.

With THE VILLAGE we are building a community with the intimacy of the Eden House yet the privacy and ambiance of a Key West Conch village. On Truman Avenue nestled among lush, mature tropical growth, we are constructing thirty-six lovely Conch cottage units. They will be spread over an acre of land with private decks, sleeping lofts, kitchens, ceiling fans and air conditioning, cable TV, swimming pool and club house with two bicycles for each unit; all situated in the heart of Old Key West.

We are selling the individual units. This is clearly not a time share but the ownership of one unit per person; however, we will operate THE VILLAGE as a first-rate hotel with that same Eden House charm.

If you are planning a trip to Key West and the combination of THE VILLAGE atmosphere along with an affordable investment with income and tax advantages to go with your suntan appeals to you, please return the enclosed card and we will be happy to send you our VILLAGE brochure.

Thank you for your past patronage and we look forward to hearing from you soon.

Sincerely,

Mike Eden
Eden House
Financing for the project was an important determinant for its programming. Under a limited partnership the owners will operate the project as a hotel for five to seven years, after which they will sell the individual units as condominiums. Thus the hotel must be able to change uses from hotel to housing -- and its form must identify with a larger collective place (hotel) and individual "houses" or apartments.

For tax purposes, the design by architect Tom Pope utilizes all of the existing structures on the site (25% tax credit on renovation of historic structures, 15-20% on others in the historic district, 0% on new construction). Pope's design involves moving sixteen of the cottages on the site and adding to each one a sleeping loft and bathroom. He converts the motel wing into eight one-bedroom units and the eyebrow house into eight one-bedroom units. Also included are the existing pool, a new bar/clubhouse by the pool, a new office for the hotel, a caretaker's apartment, a small laundry room, and maid's storage. There are twenty parking spaces provided on site with the rest of the parking leased from the church across the street.
In the good 'ol summertime

Three bicyclists pedal Key West's favorite mode of transportation in the summer sunshine. Intermittent rains brought on by the season do not deter the hundreds of two-wheel fans, who brave potholes and automobile traffic to ride in the open air.

Some of the amenities which the hotel could provide include: a swimming pool, places for suntanning, outdoor showers, cooking and laundry facilities, also private/quiet to public/open outdoor rooms (porches, pavilions, etc.) and perhaps a bar and cafe/snack bar.

Because of its location, the hotel for the design exploration would appeal to tourists interested in staying in the Old Town and getting away to relax in the tropical climate, perhaps exploring various aspects of Key West, such as the architecture of Old Town, the shops, the bars and restaurants, the coral reef, the fishing . . . or perhaps doing nothing at all.
In order to gain a better perspective on the tradition of hotels in Key West, I found it helpful to look at some examples. There are many types of hotels on the island, from a Holiday Inn to small guest houses.

The Jefferson Hotel, which unfortunately no longer exists, was the main large hotel in Key West for a long time, and served as the home base for reporters covering the events leading up to the Spanish-American War. It looks like a huge version of a typical Key West house, with its porches facing the street. Its tower probably provided guests with a spectacular view of Key West.
The Casa Marina Hotel, currently operated by the Marriot chain, is another example of a large hotel. Built in the 1920's, this elegant Spanish Renaissance hotel surrounds a large outdoor collective space which faces the Atlantic.
The Sea Isle Motel and Garden Apartments are located on Windsor Lane near the site of the design study. The buildings surround a private collective area which is divided into two parts. The front portion serves as parking while the very private interior court contains a pool and other common facilities. According to guests at the hotel, the atmosphere within was intimate and relaxed. The front of the motel fits in well with the street. Unfortunately the same cannot be said of its ugly backside along Jefferson Lane.
The Eden House is a guest house on Fleming Street. It has a quiet, relaxed atmosphere -- rooms with ceiling fans (no air conditioning), porches, and a swimming pool. At the back of the hotel there is a small restaurant which opens onto a garden patio, offering both indoor and outdoor dining.
The Pier House Motel is one of the better recently constructed (1960's ?) projects in Key West. It has air-conditioned apartments which surround its collective space (pool, beach, and bar) an a restaurant which extends out into the Gulf. The form
of the hotel is interesting to note. It is an additive form, constructed of concrete block walls, with large roofs shading individual balconies. In some ways it is very different from the older Key West architecture, yet with the help of tropical vegetation it seems to capture some of the same spirit.
Before the use of air-conditioning, Islanders depended on relatively simple means to control the climate. Shading and ventilation were the primary means of adjusting to the tropical sun, heat, and humidity. With the advent of air-conditioning, residents were for the first time able to significantly alter the humidity and temperature of their dwellings. Air-conditioners allowed residents to isolate themselves from the external environment in a dehumidified, cool, indoor environment.

Why bother living there at all?

Although air conditioners have been installed in a number of the homes in Old Town Key West, the majority still depend on natural means of cooling. Electricity is too expensive. An examination of how these houses deal with the climate will provide valuable clues for designing.
In many ways, the form of the houses has been determined by the climate, as discussed previously. The spatial organization of the houses is another important factor.

The two most common house plans in Key West are the central hall or parlor plan, usually three bays wide and one or two rooms deep; and a side hall plan, two or three rooms deep and one room wide. There are a number of other variations, however the basic principle is to gain unobstructed cross ventilation.

Other factors which help keep living spaces cool are high ceilings, often with ceiling fans, and openings in the roof which allow hot air to escape and make the space underneath the roof habitable.
Since cross ventilation is crucial, problems arise when additions to the house block the passage of air, necessitating the use of air conditioners to cool the house. In many early houses, kitchens and bathrooms, which require good ventilation, were simply separate structures from the main house, consequently no problem. With the help of exhaust fans it became possible to move the kitchen and bathrooms to the interior.

The more successful attached additions in terms of comfort are those which allow air to pass through, either by virtue of their openness or by their orientation with respect to the rest of the house — adding to the long direction or extending out from the short direction, only partially increasing the depth of the house.
As a further reference for designing for the Florida clinte I have turned to an MIT thesis by Steve Boyington (M. Arch. 1981). In his thesis, Boyington develops a strategy which allows a house to open up like a pavilion during pleasant weather and to close up into a thermally conditioned box during periods of uncomfortable weather. The climate of central Florida for which he gears his study is very similar to that of Key West, except that it is colder in central Florida during the winter.
Boyington analyzes three houses which use similar strategies: The Florida Cracker House (an indigenous Florida architecture), the Japanese house, and the Budge residence designed by MLTW. He then develops a series of reference patterns for "creating" dwellings for warm, humid climates and incorporates these patterns in a design for cluster housing. He finishes with an analysis of the various approaches (shown here in diagram form) and a projection for what the next step might be. He concludes:

If the box were placed beside the pavilion rather than within it, these problems [dwelling can never be totally open to breezes, limited amount of exterior edge available to the box] might have been avoided. In my study the breezeway serves only as entryway; expanding this area into the more open living spaces of the pavilion would have enhanced cross ventilation, and would have allowed more light, view, and controlled winter sunlight into the conditioned space of the box.
The basic approach of the design projections followed an iterative process. By this process I worked simultaneously on the design and the observations. Each stage of the design was followed by evaluation and criticism which helped to focus on important issues and problems. These issues were then explored in the documentation of observations. Conversely, the observations provided ideas and principles for the design. Each design study focused on specific issues rather than a comprehensive study, in order to deal with a wide range of issues and generate a stronger set of decisions for each issue. At some point these decisions were synthesized into a more comprehensive plan, which in turn generated further studies.

Site Studies
Freed from the constraints of reusing the motel wing, cottages, and pool, the approach to the design builds upon the basic principles of the actual project.

The hotel must have the ability to change into housing, and therefore it must be able to grow incrementally. Also, it must be able to expand within the block, either by adding existing buildings or new buildings.

The hotel, by the nature of its location, must have a sensitive relationship to the context. The form of the hotel must associate positively with Key West if it is to be worth visiting.
It has the basic collective and private amenities, such as pool, clubhouse, sleeping lofts, etc. Some of the other goals/intentions of the projections were: (1) to generate a range of possibilities in terms of places and qualities (private, public, closed, open, quiet, shady, sunny, cool, warm, wet, dry, etc.). Outdoor spaces could include a variety of "rooms," each with a different ceiling -- from the open sky to trees, trellises, balconies, roofs, cabanas, pavilions; (2) to take advantage of the climate in terms of comfort. The goal of the design was to provide natural cooling/ventilation to each apartment; (3) to reestablish the rhythm and continuity of the street (Truman Avenue).
Access into the block and future growth within the block are interrelated. The design explored different options for accessing: several cul-de-sac lanes with parking areas similar to Carleton's Compound, or a lane which moves through the block with more options for parking. Precedent in Key West is pretty much "anything goes," and either possibility could work in this case.
The form of the hotel plans for both possibilities. Its form establishes a pattern of buildings surrounding a "courtyard," making a lane which goes through the block along the back edge of the hotel. The lane bends toward the northwest corner of the block, providing a pedestrian and bicycle path alternative to Truman, and leading towards Duval Street and downtown Key West.

This lane could then serve as the public space/street to connect all the houses on the block if or when the hotel expands into the rest of the block.

The curved form of the lane has no direct precedence, however there are lanes like Carsten's Lane which pass through the block with a bend along the way. This lane combines the shift (a result of a local condition) with the straight continuous quality of Peacon Lane into a more subtle form.

Parking can then occur along the lane, similar to Peacon Lane, along the edges, underneath hotel buildings, or in a large covered parking area.
Initial passes at site organization drew on the precedent of other hotels in Key West, surrounding the interior space of the site with buildings. This evolved into three different overlapping systems of collective space. The largest is oriented around the huge Sapodilla tree, which defines a large shaded space in the middle of the site. This space serves both as part of the collective access system and as a control plaza. In a sense, it is the lobby of the hotel.
The second collective space contains the swimming pool, with the bar located nearby. Locating the pool near the eyebrow house gives the historic house added importance. Early studies located the pool at the rear of the site, far from Truman Avenue. The problem with this lies in the noise which could be generated by pool related activities, destroying the quiet nature of the interior of the block. Locating the pool in front of the eyebrow house allowed better views of the house and was the most efficient use of that space. The pool area is screened from Truman Avenue by a portion of the existing concrete block wall, vegetation, and a system of cabanas which face the pool and house.
The eyebrow house itself becomes a special focus of the site, and contains the bar/snack bar and restrooms on the ground level, a function/banquet room on the second floor, and the existing caretaker's apartment on the third floor.

The other so-called collective open space of the hotel is the access. This includes vehicular access to the hotel and pedestrian access in and around the hotel.

Vehicular access moves through the hotel in the same way as before, along a narrow ring road. A number of parking spaces are also provided for check-in, deliveries, etc. It is not expected that most guests will use their cars much while in Key West. Parking is shaded by a system of trellises.
Pedestrian access moves along a "street" which is registered off of the buildings which line the back edge of the site. Trellises and plants interact with the edges of buildings and path, providing a range of shaded/unshaded, light/dark spaces.

The access interlocks with buildings through a system of breezeways which move into and through the buildings and a system of pavilions which step out from the buildings into the path. The breezeways define space between basic units of building. They provide access to the units while allowing breezes to flow between buildings. The advantage of the breezeway is that it allows the front porches to function as more private outdoor territories. Also, it allows another edge of the buildings to open up to breezes and expand out into the breezeway.
Initial design passes for the individual units/apartments focused on the building system and issues of comfort and privacy.

Building Studies
The building system is based on the traditional Key West systems. The primary structural system is composed of a combination of wood post and beam framework and platform frame (stud wall) construction supported by concrete or masonry piers. Secondary structure for the porches and roofs is also wood. Infill systems include wood stud walls; wood railings; windows (casement and awning); roll-down shutters; jalousie window type shutters; wood screen elements; and roof scuttles. An alternative structural system utilizes concrete floors, columns and beams with the same wood secondary structure and infill systems.

Comfort was dependent on providing natural ventilation and shade. the houses of Key West provided clues and principles which became part of the design. The advice of architect Tom Pope was to make the units as open as possible (like a pavilion). The difficulty arises in compromising the needs of the hotel units' visual and acoustic privacy with the need for openness.
Traditional houses in Key West were examined in the observations, and it was found that the basic principles of Key West houses depended on a combination of solid walls with screened openings to admit breezes, and the use of dormers, roof scuttles, and gable-end windows to ventilate the steeply pitched roof. Also, porches or verandahs serve as outdoor rooms, exposed to the breezes and shading the edges of the house.

These systems could be made better by improving the ventilation of the roof with continuous roof vents and larger room-size dormers. Another possible way which was explored involved fragmenting the roof form, opening it up more. Variable closure -- movable panels, shutters (rolling and jalousie), shades, etc. are also used to provide optional amounts of openness.
Another characteristic of Key West houses is the depth of the house—one or two rooms, allowing for cross ventilation. Problems arise when additions to the house block the flow of air. Expansion of the apartments could occur in the long direction of the building, combining two units to make a larger one. Whenever two rooms are oriented one behind the other, an attempt was made to displace the edges, helping to direct breezes deeper into the apartments. Lining up the kitchen and living room helps to ensure cross ventilation, since these spaces are least likely to be closed off from the rest of the house.
Individual units were combined to make larger aggregate "bits" (buildings) which were approximately the size of a large house. These are not really discrete buildings, being connected to each other by the breezeways and verandahs. The "bits" are deployed as part of the larger hotel organization by aggregating them into larger runs of building according to systems of access and spatial definition.

The size of the bits helps to set up a rhythm of size. The continuity of the verandahs also helps tie the bits together into a collective whole.
At various stages the design projections explored different scales of intervention. Most of the midterm studies focused on building what seemed the maximum possible density. The size of these projections exceeds the current allowable height restrictions on the island. The reason for doing this was simply to explore the limits of how much building could possibly work on the site. These sizes were later discarded in favor of smaller, lower, more humanly scaled buildings.
Synthesis
Summary - Reiteration

At the midterm review stage the major problems identified were:

1. The image of the buildings. The assimetrical and fragmented form of the roofs was considered the main difficulty, being very different from the traditional gable roofs. The roofs did not have the same profile which seems so characteristic of Key West, nor the same feeling of shelter.

2. The breezeways did not yet do enough to make them a strong part of the design. The breezeways needed to be more usable "places" rather than just passageways.

3. More articulation of the elements was necessary.

4. The impact of car access needed to be softened, perhaps with the use of trellises to shade parking, and careful use of paving materials.
The next step in the process had two primary possibilities. One would be further development of the overall site organization, elements, and spaces. The other possibility was the exploration of the problem of image through closer study of the hotel building elements. I chose the latter course.
The last few studies started with a quick sketch redesign of the breezeway and unit plans. Next elevation and section studies of the "bits" explored building elements and image. First passes at elevations tried to use more traditional symmetrical roof forms and building forms, with mixed results. Personally I was unhappy with the form, although not all critics agreed.
My "final" pass at the design attempted to discard all preconceived notions of what the image should be. I turned back to two of the earliest designs which I simply liked better than the others.

A quick sketch shows the sort of image I had in mind. The form of the buildings needs to be more like this:
Conclusion

In conclusion, obviously the next step is to develop a vocabulary of building elements from the last few studies and synthesize them into a "complete" site design. Unfortunately, no time remains. Perhaps someone else will come along to refine and develop the ideas and issues which have evolved in the process. The intent of the design projections was not to complete a building but to explore issues related to its context.

The success of this thesis lies in the method and approach which has evolved towards developing an attitude about building in cities like Key West.
There had been a time when the settlement had made a profitable living from the wrecking of ships, either through the changing of lights or connivance with unscrupulous captain... Then there would be a time of riotous living with most of the community in a daze until the purchased rum was gone. After that the residents sat moodily in the sun and waited for something to happen.
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