by

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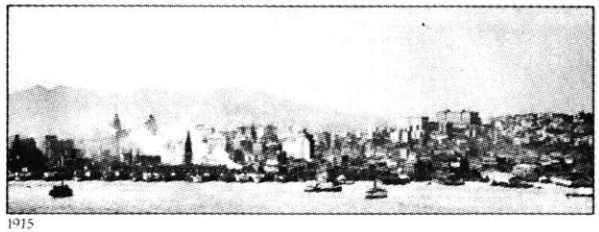
People and Space:
Building a Design and Development Model for a More Meaningful Relationship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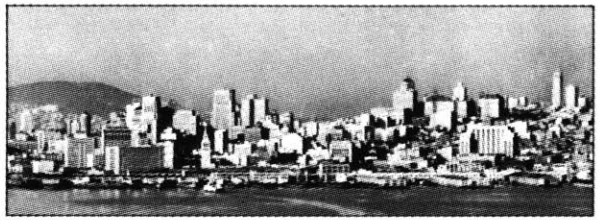
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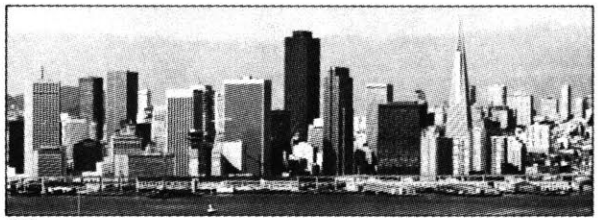
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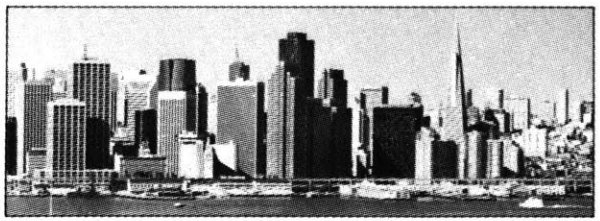
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People and Space:
Building a Design and Development Model for a More Meaningful Relationship

by

Anthony Flanagan

Submitted to the Department of Architecture on February 22, 1991 in partial fulfillment of the requirements for the Degrees of Master of Architecture and Master of Science in Real Estate Development.

ABSTRACT

This thesis is an exploration of architecture and real estate development that seeks to find a method for recognizing and utilizing city structure and uniqueness of place as primary catalyst for change. The concern behind this work is the disparity in contemporary models for design and development, which neither acknowledges nor integrates the existing values of a community. This inquiry attempts to identify and transform the existing framework of the city, allowing for change without losing the continuation of meaningful urban relationships. Thus, this experimentation challenges the conventional approach to design-development ventures which begin with a program and build architecture around use.

At a macro and micro scale, Venice, Savannah, and New York City are chosen to exemplify the arguments of this discussion. They illustrate the issues of autonomy of architecture, collective memory of the city and sensitivity of place, as vehicles to understand the elements which make-up the urban framework. Using San Francisco as the test case, this thesis introduces the possibility of an alternative model for design and development endeavors, attempting to understand the underlying structure of the city through time as a primary generator for decision making.

Thesis Supervisor: Richard C. Tremaglio
Title: Adjunct Professor of Architecture

Acknowledgements

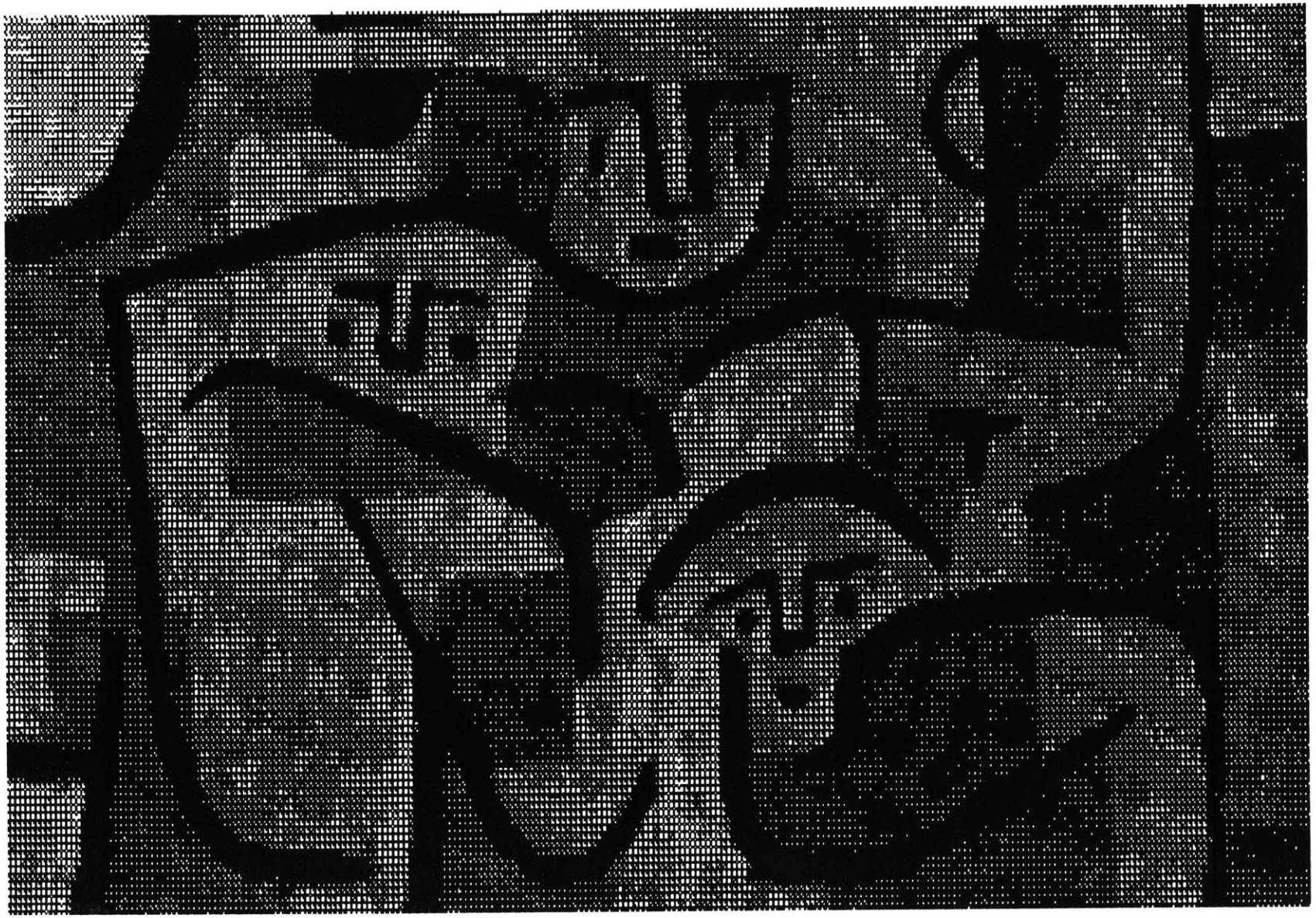
The making of this thesis, of course, involved many people and experiences, who without a doubt, helped to shape my thinking. I sometimes think the most creative and productive moments were the many discussions I had with friends, over a bowl of pasta and a glass or two of wine. It never failed to bring life and enlightenment to the subject. Studying at MIT and the making of this thesis, were exhilarating times in which my colleagues have been both supportive friends and important critics. From all of them I have learned the principles of architecture and real estate development, without forgetting the human element.

For a few people, there is no doubt that they have gone far beyond the call of duty. Although, Marc Louargand is not listed on the cover of this thesis, he was a vital critic of the real estate development efforts. Through all the confusion and frustrating moments in finding the relationships between architecture and real estate development, he provided a generous amount of support and patience. Fernando Domeyko's lasting admonishment was: "Reveal the experience, not the idea. Architecture is not an idea but an experience, so you must connect with the experience." With focused passion and great intellect, he aided greatly to the establishment of a more meaningful thesis and enhanced my sensitivities to architecture. Richard Tremaglio has been the most influential friend and critic of my work. Not only has he been a significant part of this thesis, but also, in shaping my understanding of architecture during the last three and a half years at MIT. He always challenged me to push for the true meaning of architecture and to discover my own beliefs. The broad scope of this thesis brought me to the rediscovery of several cities. In New York, I was greeted by my long time friend Zofia Siuta, who explored the City with me and helped fill the days with energetic dialogue. Her boundless interest in my work, led to her significant participation in the analysis and design portions of this thesis. I am indebted for her contributions to this work.

Lastly, if any success can be recognized in the efforts of my work, I owe it chiefly to my wife, Elizabeth. This thesis would not be a reality without her love and dedication. Elizabeth Scarpelli has continuously supported my interest and academic endeavors even under the extremely difficult conditions of a bi-coastal relationship. I dedicate this thesis to her.

Cover Photo: Downtown San Francisco. All photographs are taken from the same approximate location. From top to bottom; Circa 1915, San Francisco Archives, San Francisco Public Library, 1958 photographer unknown, 1972 and 1986 Stewart H. Bloom, San Francisco.

Contents



Paul Klee, "Earth Spirits" Plan: Review of the MIT
School of Architecture and Planning, Number 9, Spring 1978, Page 4

Chapter I
Introduction

In the recognition that cities are more solid than the makers themselves, the city remains through time, an urban artifact. However intended, cities are experiencing constant re-evaluation by "new inhabitants," reinterpreting old buildings and forgotten neighborhoods with new values, needs, and economic concerns. This presents the question of how to adapt city to change. I would argue that complete reconstruction is not financially practical nor desirable given obvious economic reasons and the necessity for one to maintain some connection to the past. This suggests that if a city's destiny is an evolutionary process rather than a reconstructive one, then the goals of the architect/developer are to understand and reveal the values which exist, the potential it has, and determine how it can be transformed into a new experience without destroying relationships to the past. The challenge, then, is how to identify the meaningful elements of the city which can guide positive change.

This endeavor will be to discover how one can identify the spatial structure of place and through that reading make space which engages the fabric of the city. In Professor Richard Tremaglio's, "City Faces: A Building's Response in an Urban Field," he makes a metaphor between Paul Klee's paintings and the evaluation of design and placement of buildings in the city. He suggests, that like buildings of the city, none of Paul Klee's brush strokes are random. Tremaglio asserts that Klee's, "Line and color are carefully located to convey energy, mood, and a presence, yet never is there an attempt made either to dominate or ignore the context within which these faces appear. Such seems to be the case in his painting, "Earth Spirits," where he has been able to express that which is both universal and specific and describe human emotion with candidness and good humor."

Like the Klee canvas, city form is a spatial field the edges and internal conditions of which define territories and local regions which if successful are interwoven and derive their strength from one another. The city becomes a map of differences implicitly understood, appreciated, and used by those who inhabit the urban landscape."

Tremaglio's observations reinforce the principal interest of this study to reexamine the possibilities of creating urban space which has longevity and integrated substance at the essence of its generation. The focal point of this effort is, therefore, to create a framework for urban integration, longevity and continuity. Tremaglio notes that the best outcome of the development of space, "is to build a reasonable framework within a living field which hopefully becomes place once human input, energy, and imagination are added."

The Intent

The purpose of this thesis is to design a model that will investigate four concerns. The first is to determine the elements which promote a positive interrelationship of people, city and physical environment. Secondly, to explore the interpretation of space through time. Third, to identify and engage the various economic forces which effect physical form. Fourth, to define what and how values are determined in a dialectic struggle between architecture and real estate development. It is my belief that the overlap of these necessarily related forces will become more acutely apparent through the process. Thus, design and real estate issues will be used as a broad filter for determining what and how these concerns can be realized. The real estate portion of this study will be a co-partner to design in determining the ultimate success of this

exploration. Three principal real estate components will be examined: traditional development issues such as development rights and community politics, development precedents such as history, demographics and market interest, and the development proposal which will begin to incorporate aspects from all parts of the study. There will also be an emphasis to establish parameters for a private/public relationship emphasizing their co-dependence. Therefore, the goal of this thesis is to explore the possibilities for an alternative model in decision making of real estate and architectural endeavors.

The Process

The process for this study is a non linear exploration of architectural and real estate development issues. In isolation, many of the components of the process are traditional investigations, however, two principal areas of pursuit provide an opportunity for the crafting of a new, higher level of understanding of the problem. One area of exploration will be to reveal observed conditions present, future and historic. An attempt was made to first understand the existing framework of the City and through new knowledge begin to understand the collective memory of physical form. This was achieved by defining what I term the spatial structure of the city. Although I believe that there are five groups of considerations, to keep on a conceptual level, this study observed the four larger groups. From the largest size these groups were determined to be: the observation of major man-made and natural elements in the landscape, patterns of movement, grid structure and block dimension, lot configuration and textural quality of the block structures and finally the organization of the building itself. The fifth unexplored structure would be the organization and dimension of the rooms within the buildings. This analysis was performed through direct visual

observation and research of the historic development of the City. Ultimately, both history and site observation, began to overlap which formed the basis for understanding the collective memory.

The second area of interest was in allowing the design and the development to form autonomously, without pre-determined constraints such as program. The program or function of the building was determined only well after an investigation of both architectural and real estate issues were pursued. This allowed for both disciplines to gravitate to a more suitable position within their own set of decision tools. In Aldo Rossi's, The Architecture of the City, he contends that one argument for not beginning with function as a generating force of architecture is that, "the concept of classification according to functions, is far too superficial; it assumes an identical value for all types of functions, which simply is not the case." He also suggests that "the principle questions that arise in relation to an urban artifact among them, individuality, locus, memory, design itself...I believe that any explanation of urban artifacts in terms of function must be rejected if the issue is to elucidate their structure and formation." Thus, one thesis of this study, in its effort to affirm the value of architecture in the analysis of the City, is the denial of the explanation of urban artifacts in terms of function.

For the purpose of evaluation and analysis, two existing places illustrating attributes relevant to this study were selected. Savanna, Georgia and Mid-Town Manhattan, New York, were noted as representative models for the exploration of urban systems. These sites were used to principally illustrate, the concept of collective memory, transformation, notions of autonomy and

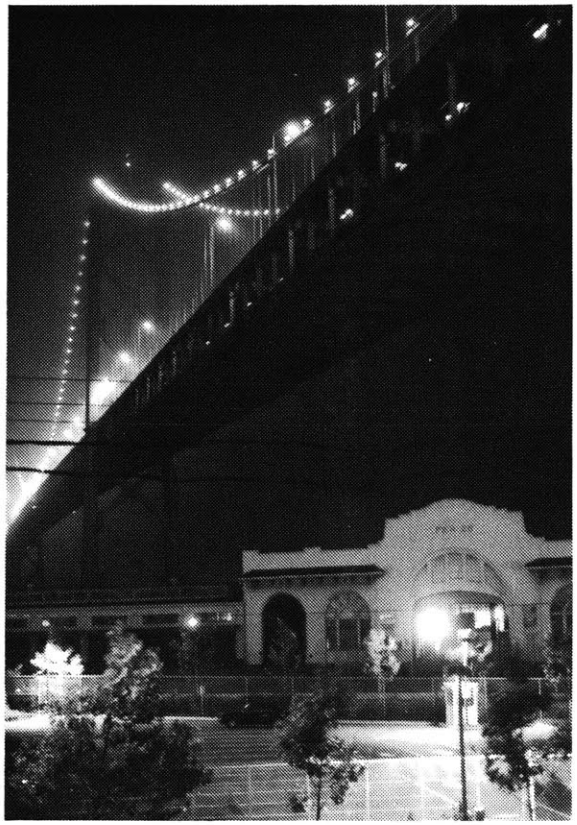
San Francisco Bay edge and the Ferry Building.

Downtown San Francisco

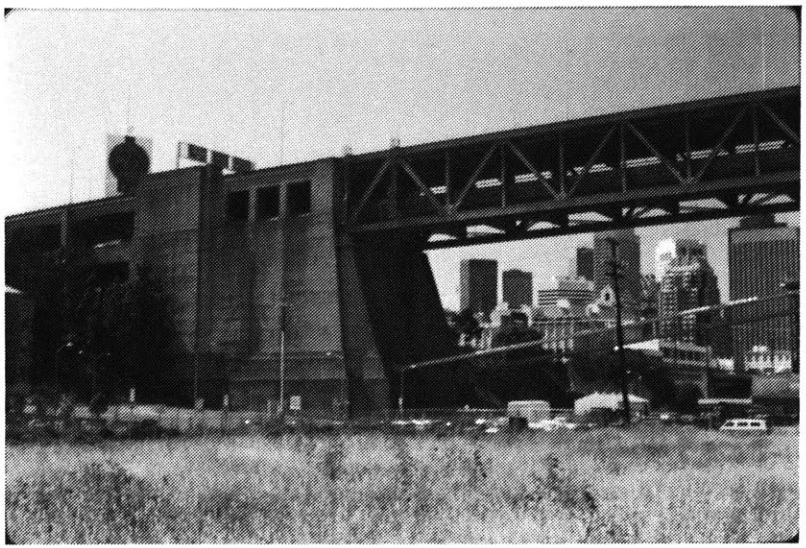
resilience. The investigation begins to set up the rules for establishing a dialogue between the old and the new.

The final critical component to the process was a series of iterations. Each iteration incorporated new information through the discovery and re-examination of new knowledge and various relationships.

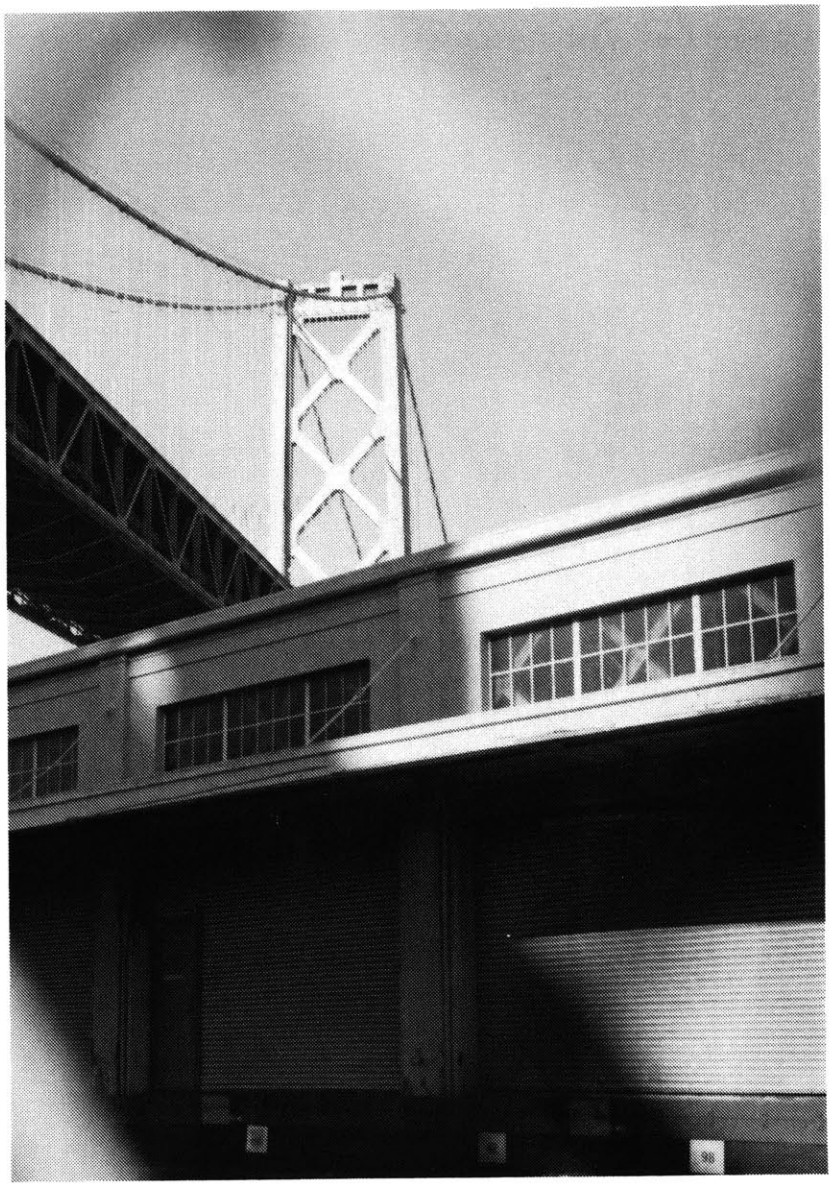
The Study Area



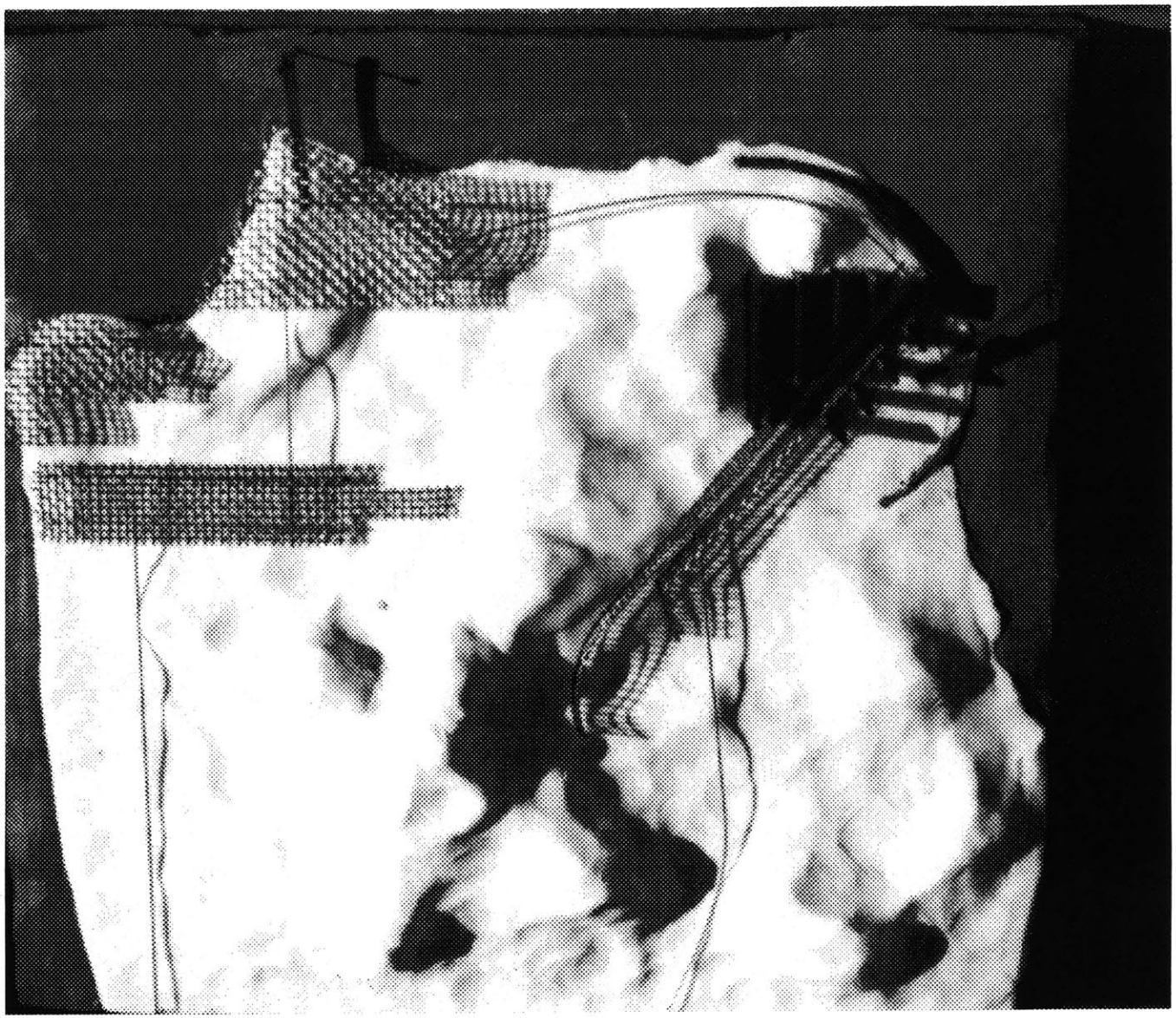
The 17 acre site is located in San Francisco. Known as Pier 30-32, the site is less than one block south of the Bay Bridge. The greatest portion of the site, 13.5 acres, is over the San Francisco Bay while the remaining area is located on land adjacent to the Pier. In Chapter Five, the general geographic description is outlined, therefore, this section will attempt to define more conceptually why the site was selected. Pier 30-32 is an appealing site for several reasons. The site is one of the largest open blocks remaining in San Francisco which has not yet been developed. This is true because of the political nature of the Port of San Francisco, as well as the fact that for a long time this district has been an undesirable and thus forgotten corner of the City. In recent years two forces, the Financial District and Mission Bay have changed the desirability of this area. Pier 30-32 is located between these two forces in the South Beach neighborhood. As a result of these encroaching developments, South Beach has recently experienced increased development and speculation. Unfortunately, much of the new building has completely disregarded the historic warehouse district which surrounds the area and the existing framework which was established over 100 years ago. Thus the site provides an opportunity to address the new and old forces in a region which still maintains some



Sea Wall lot and Pier 30-32, Bay Bridge in the background.



San Francisco Bay Bridge and anchorage.



San Francisco: Primary Elements in the City,
Clay Model

connection to its past.

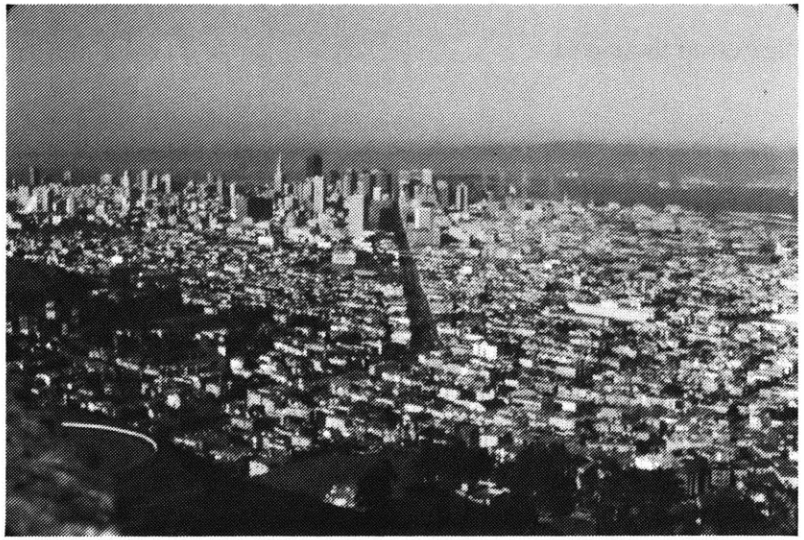
In addition, the edge between water and land offers a special condition and demands an acute awareness of the physical elements. The immensity and solidity of the City, scale of the Bay Bridge, and expansion of the Bay necessitate some form of recognition and an architectural gesture which addresses their presence. Together these form the conditions for exploration and the challenge of an architectural/development venture.

San Francisco Observed

This part of the investigation was conducted through the development of study models, historic research and visual observation of the City. It is not meant to be an exhaustive analysis but rather a method to reveal the essence of place. Two directions were pursued which correspond to information needed for the creation of the design and proposal portions of the study: large size man-made and natural features of the City, and a short discussion of the historic formation of the City. The neighborhood size will be discussed later in the study.

Primary Elements

As the daily fog evaporates over the City, the edges of the peninsula reveal the Pacific Ocean, and Bay which embrace it. Marked by an undulating landscape, its ruggedness defies the relentless street grid that covers most of the uneven surface. The tightly woven urban fabric stretches from edge to edge. It is made up of finely textured pastel structures, only broken by the Financial District which forms its own hill. Market Street, known as "The Slot", divides the north city from the south city which have opposing grid systems. Finally, to the west of the City, is Golden Gate Park which is almost a green extension of



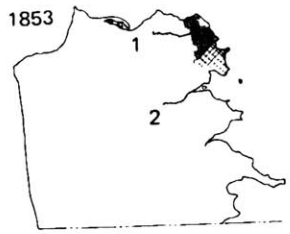
Panoramic views of San Francisco: top left, Financial District and Pier 30-32 (largest pier) below the bridge; top right, Market Street "slot" which divides two different grid systems; bottom, foreground future site for the Mission Bay project (in the foreground).

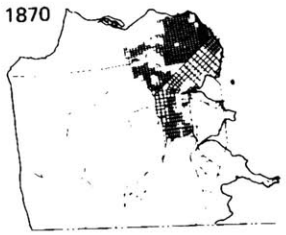
"The Slot", continuing towards the Pacific Ocean. I have heard no one describe San Francisco more eloquently then Mark Helprin in "The True Builders of Cities," who said, "One of the dominate features of San Francisco is a joyous flow - the wind following the contours of the hills, the fog that crosses the terrain like a rapidly advancing army, currents seething through the Golden Gate...For unlike Rome, Paris, London, or New York, San Francisco is dominated by the natural environment. Not only does nature in its inherent qualities and daily operations put a high gloss on the city, bathing it in semi-fantastic light and otherworldly fogs that put the greatest scene designers to shame, it has done things that in other cities are typically the province of other forces. For example, neighborhoods and districts in New York are almost entirely accidental, determined by the collision of patterns of European immigration and pure geographical availability, whereas, with some notable exceptions the districts in San Francisco were determined by geography and the weather."

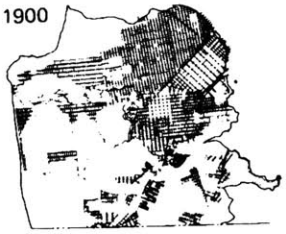
This then describes the "common language" of the City. Its basis is neither concept nor fashion, but is a universal physical constraint and effects the way in which the City is experienced. It defines the web which remains constant in past, present and future and provides the initial tools for an architectural vision.

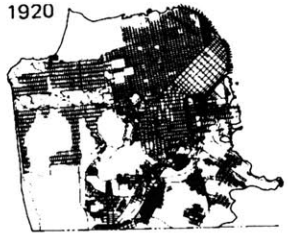
Formation of the City

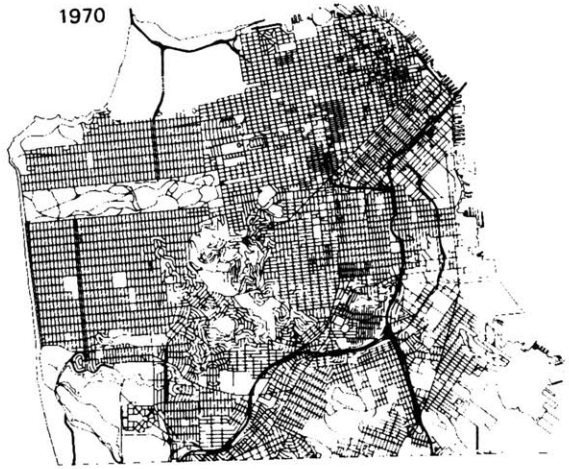
Until 150 years ago San Francisco or Yerba Buena as it was originally called, was little more than a mission, a military outpost and a cluster of canvas structures. By 1848 gold was discovered in the Sacramento River and within a few months thousands came to Yerba Buena which was then renamed San Francisco. In 1848 on the northeastern portion of the peninsula, protected by











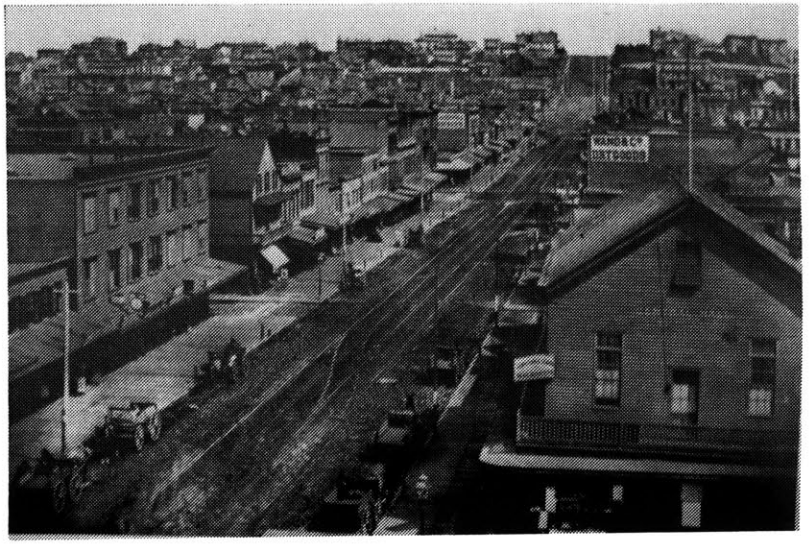
The Transformation of San Francisco
Note: The early roads to the Presidio (1)
and Mission Dolores (2)

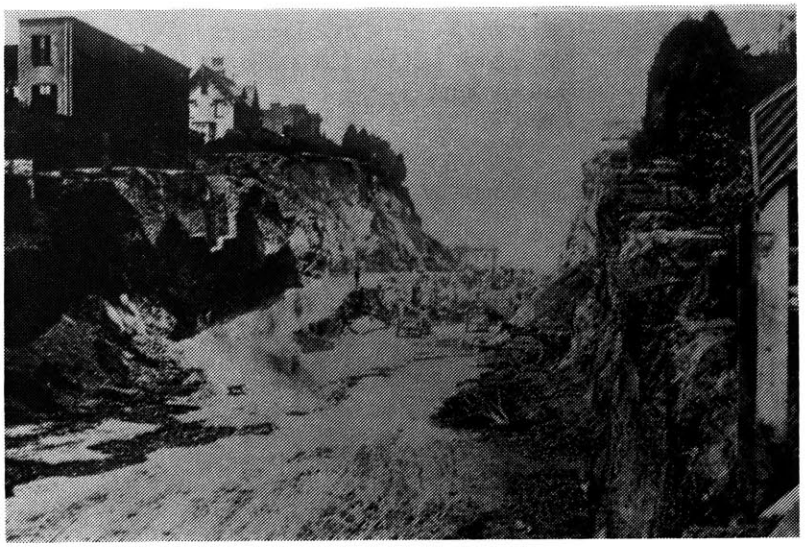
the constant wind and blowing sand, the Village included approximately 860 inhabitants between Telegraph Hill and Rincon Hill . In two years the Gold Rush swelled the population to 34,776 people. This growth turned the wild landscape of sand dunes, marshes and estuaries into a wild city almost over night. The population figures for San Francisco are listed below.

Population Figures for San Francisco, 1850-1990

Year	Population	Rate of Growth
1850	34,776	----
1860	56,802	63%
1870	149,473	163%
1880	233,959	57%
1890	298,997	28%
1900	342,782	15%
1910	416,912	22%
1920	506,676	22%
1930	634,394	25%
1940	634,536	0%
1945	827,400	30%
1950	775,357	-6%
1960	740,316	-4%
1970	715,674	-3%
1980	678,974	-9%
1990	740,800	9%

Source: Hansen, 1973: 461-66, San Francisco Department of City Planning, 1978: 71, and Projections 1990, Association of Bay Area Governments, 1989: 76

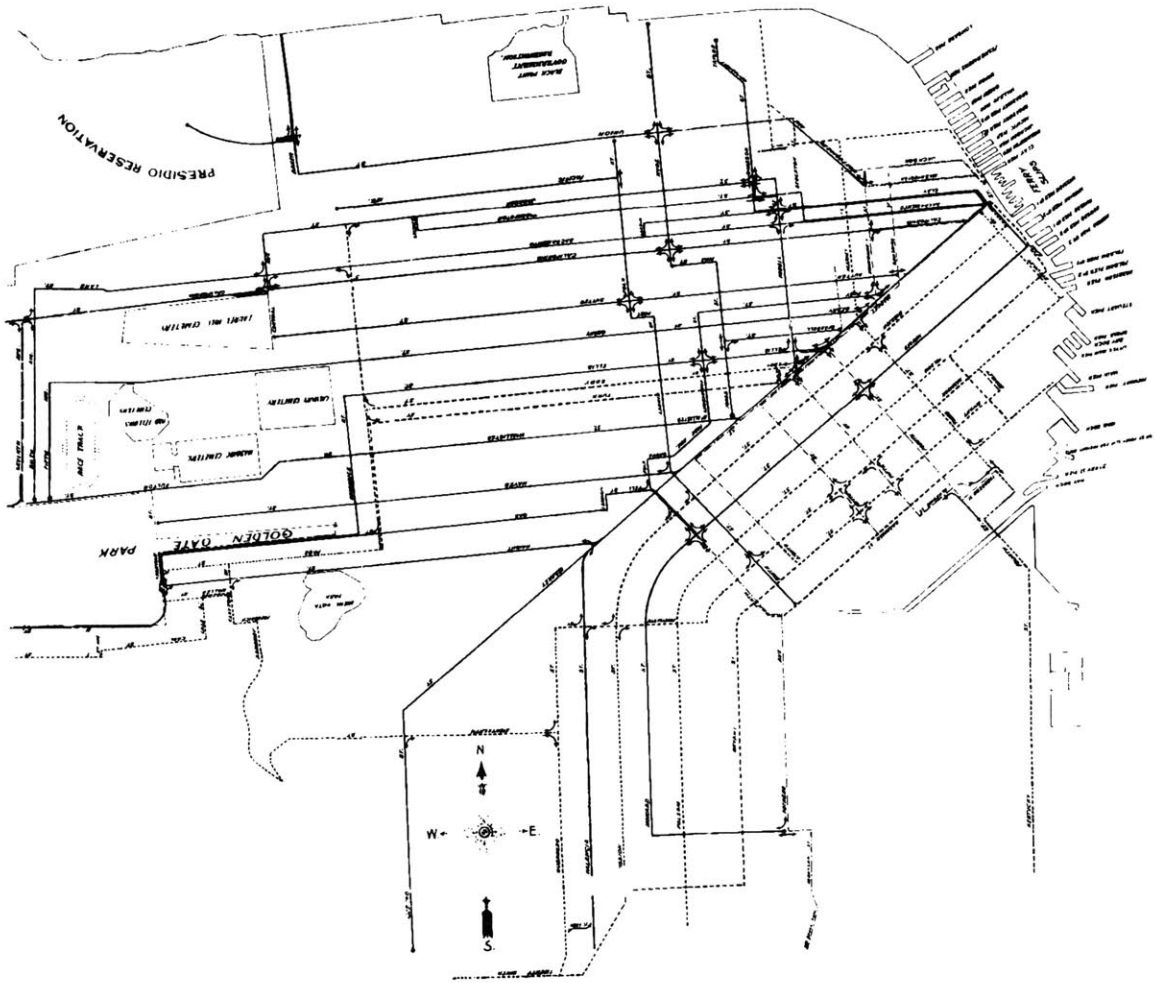




South Beach and Rincon Hill in the 19th century: top left, Oriental Warehouse; top right, Second Street before modification; bottom, the Second Street cut made in 1869 forever changing the future of both Rincon Hill and South Beach.

The development of the area took place somewhat randomly until 1839 when Jean-Jacques Vioget was commissioned by the Mexican government to do the first survey. He used the traditional gridiron layout which was commonly used in Spanish-American Cities. Although the City is undulated by hills and valleys, Vioget laid out his survey as if the land was tabletop flat. During this time it was believed that the most efficient and prosperous cities were flat and that one day the hills of San Francisco would be removed. The width of the streets were principally 16 varas (44'0") and 18 varas (49'6") for the north-south and east-west orientations respectively. These dimensions varied slightly depending on the types of buildings which existed on the street. Blocks were 100 varas (275') by 150 varas (412'6"). Later, Jasper O'Farrell, a civil engineer was commissioned to continue the grid to accommodate increased growth and real estate speculation. North of Market Street blocks continued to follow Vioget's Spanish plan, however, the South of Market block system was made four times larger in anticipation of the need for industrial development and the possibility for high land profits. These blocks were platted with six lots at 100 by 100 varas and were referred to as the 100 Vara Map.

Market Street has always been a defining element for the City and perhaps one of the first man-made paths. Originally, Market Street followed the direction of a sand dune between Mission Dolores and the Bay. The center of the City was Portsmouth Square several blocks from Market Street. Market Street and the sand dune acted as a natural edge to the southern portion of the peninsula defining the outer boundary of the city for some time. Eventually the City grew to a size that required annexing more land to provide a place for commercial and industrial works. The South of Market area was the natural choice for such



Streetcar lines of San Francisco, 1895
Note South Beach docks parallel with north-south streets.

a necessity since it was in close proximity to Mission Bay, the naturally protected port, and was easily accessible to the city by wagons and later, trains. South Beach was the southern termination point of the City and was quickly developed into docks, yards and warehouses.

In the investigation of this study, the direction of the grid system is only partially explained. The Spanish grid follows the traditional cardinal orientation, however, the South of Market grid system does not follow the old system nor the natural contours of the land. Based on my research and visual observations, I suggest one possible explanation for its direction. In the early development of the South of Market there was one fundamental relationship which needed to be made and that was to make a connection between the docks in South Beach and the City. The modes of transportation were simple, principally horse and wagon and then later, trains which required the most direct form of access. A straight line, perpendicular to Market Street was the answer to these conditions. I believe that the direction of the grid in the South of Market is directly related to this phenomena.

Venice, Piazza San Marco, engraving, 1751
(photo: Bibliotheca Hertziana)

Chapter II
The Tale of Three Cities: An Exploration of Urban Systems

As a method for exploring the intent of this study, I have investigated the development and structuring of three notable places: Venice, Italy, Savannah, Georgia and Mid-Town Manhattan, New York. They help to shape the hypothesis of this thesis and provide a locus for reading San Francisco and its neighborhoods. Although any study of urban systems should include sociocultural aspects the focus here will be on the physical environment of these places. Many of the sources for this body of work were obtained through my own visual observation, abstract readings of the city, and several publications written by Professor Stanford Anderson. The primary references are listed in the bibliography. Though these places illustrated are of different histories, densities and geographic delineation, the issue remains the same, that urban forms can be seen to have what is called autonomous form. In this chapter, I will try to present their qualities which will provide the basic framework for the investigation of San Francisco.

In the assessment of these places I will adopt the same assumptions that Anderson makes in his studies: "(1) that the physical environment is neither deterministic nor irrelevant in human affairs (2) that, rather, the physical environment interacts with multiple complex patterns of activity and significance - both for individuals and groups, at any point in time, in certain cycles, and over time." Essentially this suggests that although the effects of the physical environment have an influence on people and the way they interact with place, other factors such as culture contribute to the shaping of physical form. This means that urban structure can affect the way in which space is defined in the city and that over time much of the space will be reinterpreted allowing the structure of the city to influence how reinterpretation occurs. In this way, the

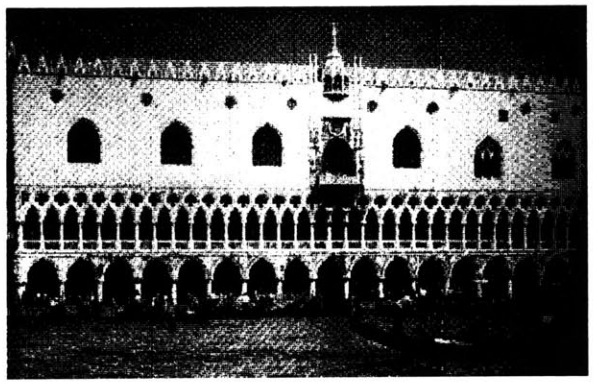
physical form interacts with change and provides a framework for use and growth. Anderson points out the significance in this type of evaluation, " to understand environments and be encouraged to conceive new environments that incorporate valued characteristics."

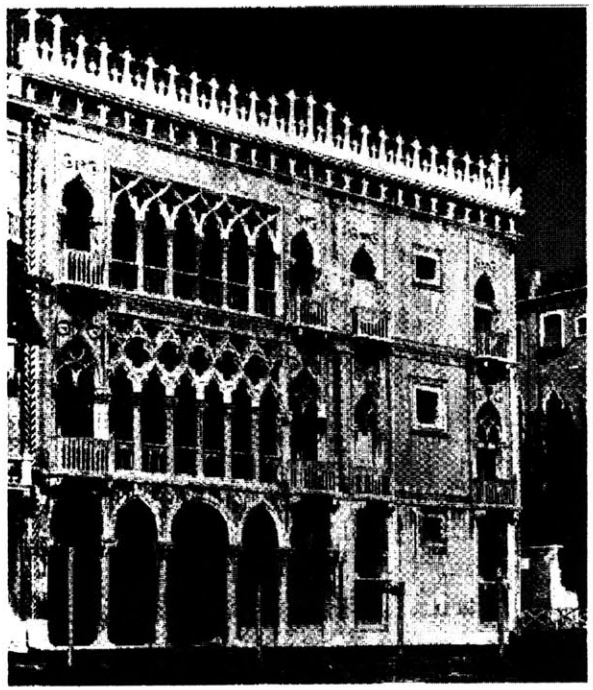
Venice

In this inquiry of urban form, landform, movement patterns, block structures and other elements make up the underlying city structure. Venice provides an intriguing example. Its acute articulation of indigenous conditions is clearly translated in the City. Set in a lagoon, Venice exists only as the result of man's intervention. As protection from Attila, refugees from the mainland created a series of man-made islands. In her book, The Stones of Florence and Venice Observe, Mary McCarthy points out that, "Attila opened the story; refugees, fleeing from him on the mainland, sought safety on the fishing inlets and began to build their improbable city, houses of wattles and twigs set on piles driven into the mud, "like seabirds' nests," wrote Cassiodorus, secretary of Theodoric, "half on the sea and half on the land and spread like the Cyclades over the surface of the waters." Almost no landform existed in the lagoon prior to their intervention. The non structural nature of the islands initiated the use of piers for every weight bearing object in the city. Both institutional and residential buildings depict the quality of this capricious relationship to its base. Through time, the values of the inhabitants changed and so did Venice. Within certain limits, piazzas, islands and buildings were modified to express new values. The essence of the city's structure, however, remained intact and distinctly identifiable as a primary force and ordering of the urban system. The thousands of columns that hold the city above the sea and mud continue to

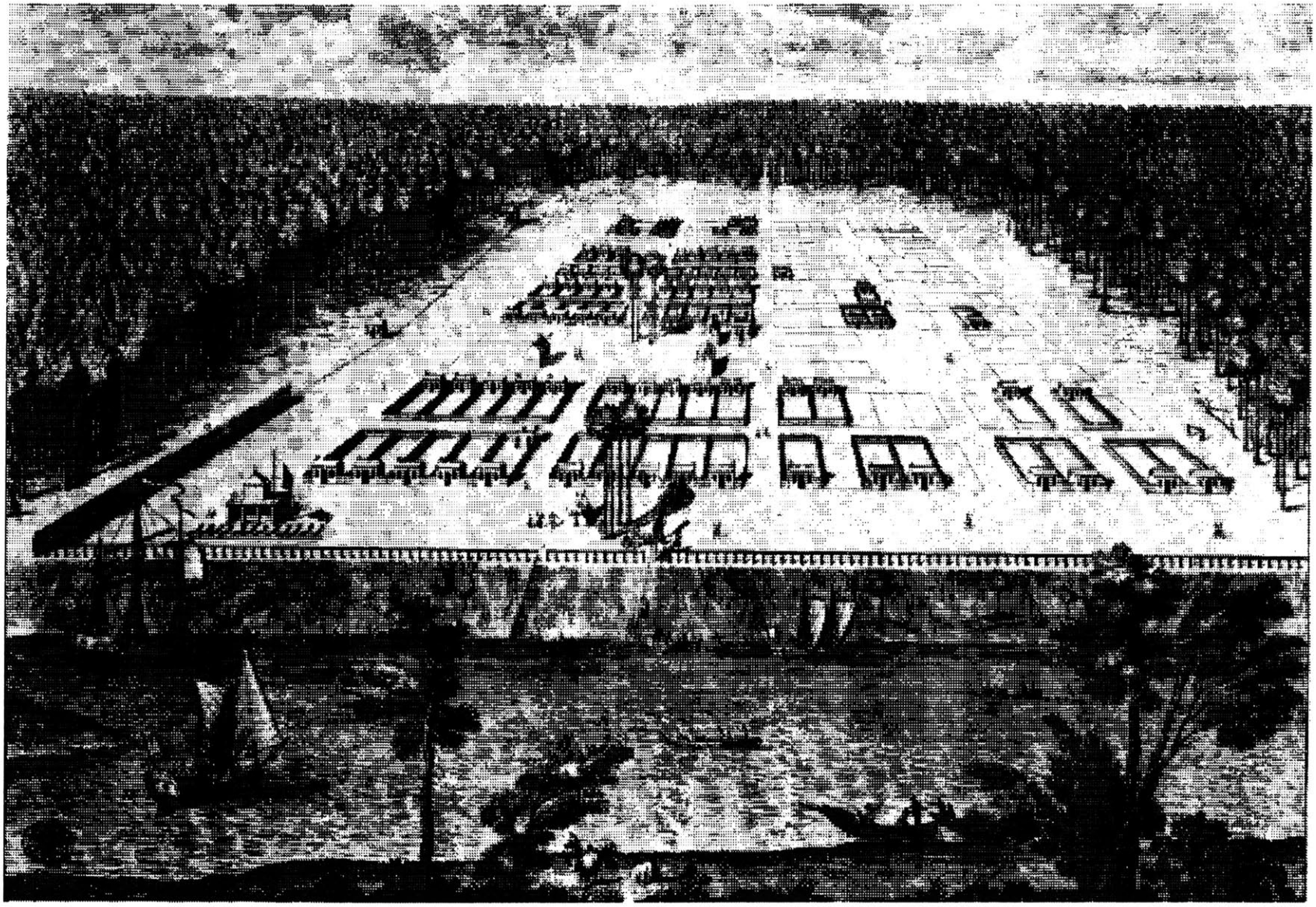
regulate the experience of place. Buildings are standardized by the size and distance columns can be spaced. Unstable ground prohibits the placement of buildings thus allowing for public ways and the size of canals echo the original island locations. Even during the Renaissance, when the values of the times invoked the weightiness of rustication, in Venice, the solution was the dissection of plains into smaller areas and the thinness of walls.

The constant flooding of Venice presents another interesting observation. A phenomenon known to the Italians as *acqua alta* or high water, frequently penetrates the piazzas, the canals spill over the edges and pedestrian ways become tidal pools. Over time, this event has modified the way in which buildings are used and has altered patterns of movement through the city. In his book, On Streets, Anderson notes that, "Temporarily the location, the boundaries, the use, and the meaning of all the basic elements - canals and public ways and built spaces - change. And not only temporarily; the intervals of this periodicity are sufficiently frequent that patterns of use change permanently. Residential use at the ground floor is particularly discouraged." These examples begin to illustrate the connection between the physical environment and human interaction. As Anderson suggest, "In its basic structure, Venice recalls primitive natural conditions; nevertheless, its channels and the stone-walled land that bounds them have long since become artifacts. The canals of late medieval and Renaissance times are simultaneously the product of natural and human energies...Not only water and water-borne vehicles and pedestrian flows but also social and economic and cultural and conceptual energies distribute through the city, each with its own demands and all mutually interactive. Each of these energies laps at or creates different





Top: Venice, The Doges' Palace.
14th and 15th century
Bottom: Venice, Ca' d'Oro. 1427/36



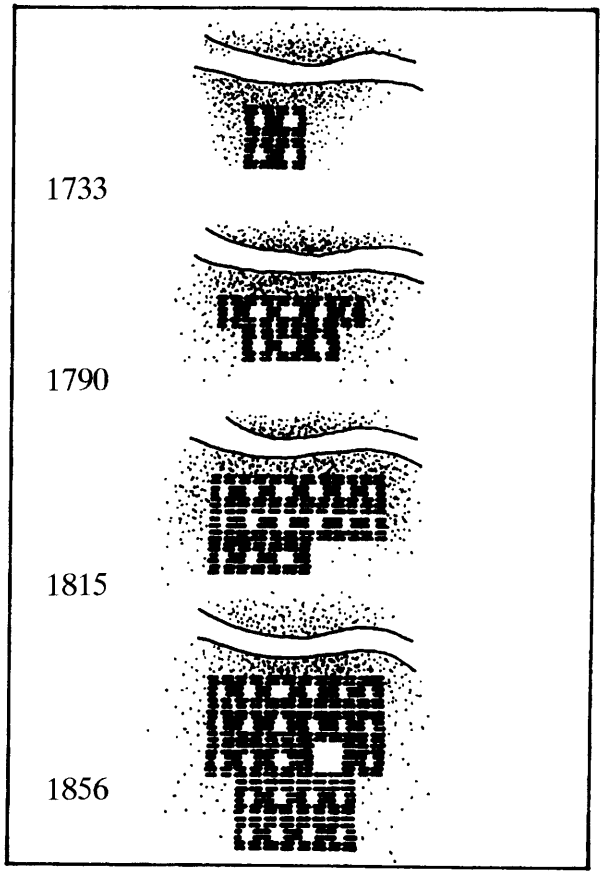
Early Savannah, Plan Review School of Architecture and Planning,
Number 9, Spring 1978, Page 4

boundaries, which may be redrawn again even in short periods of time."

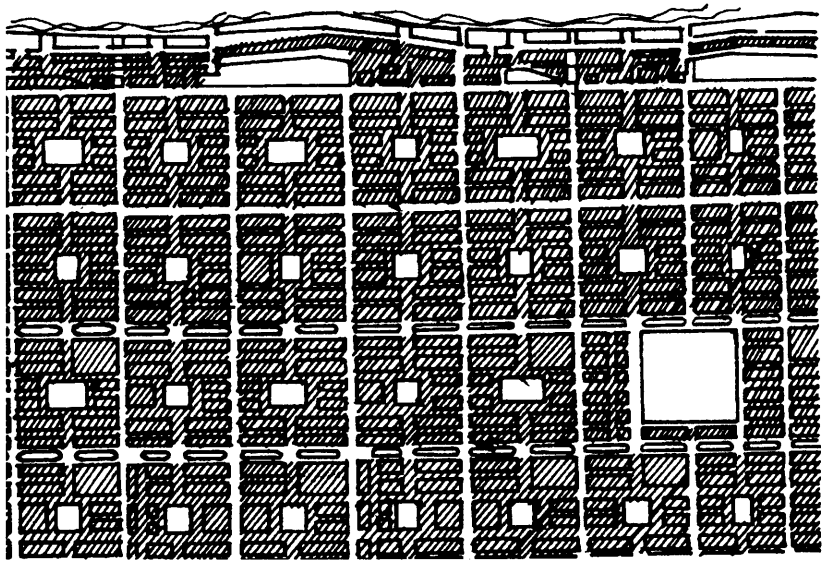
Savannah, Georgia is a city that provides a clear imprint of the forces which shape its structural system. Within its organization, the local configuration, use and general conditions are firmly determined by the overall structure of the city. James Oglethorpe founded Savannah in 1733. The principal structure of the town was the "ward," which was a square with internal streets and a central space. This ward was duplicated immediately one next to the other. For over 100 years this relentless pattern continued. The ward became a social physical unit and in its aggregate form, it established two orientations: one is continuous between the wards and the second is internal towards the central square. As Anderson observes, "It emphasizes that the edges of the units, the mere boundaries of centrally oriented wards, become the only uninterrupted routes through the agglomerated plan. The geometric order alone thus establishes one hierarchy which is internal to the ward and another which evolves in the additive growth of the city."

The commentary so far has focused on the ward without articulating the dimensions, orientation and use. Upon the establishment of an aggregation of these wards the affect of its organization begins to accentuate the potentials and constraints created by its abstract geometry. Remembering that the single ward is central focused, to the east and west are four "trustee lots," used primarily for public use. To the north and south, segments of the ward establish the only continuous east-west access through the city. As the result of its urban structure the north and south edges of the ward maintain the only uninterrupted

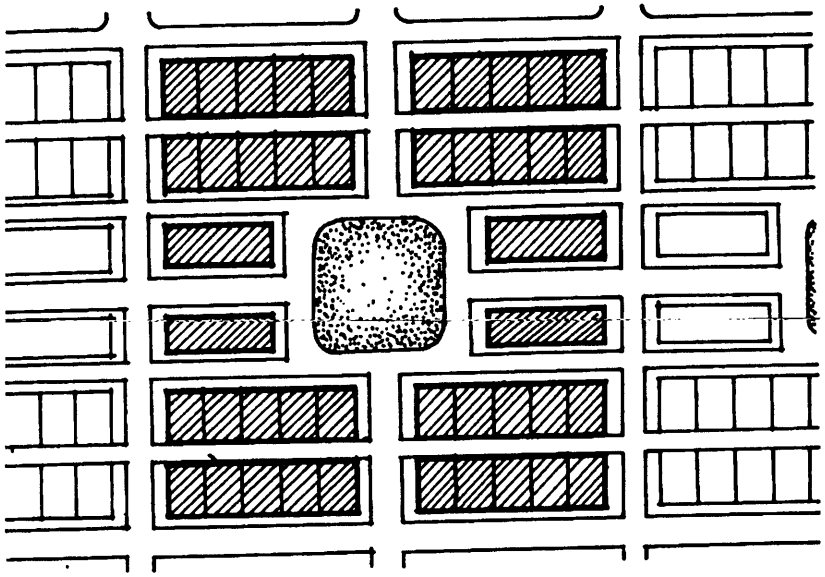
Savannah, Georgia



Savannah, Georgia
Growth of the wards, 1733-1856
(S. Anderson, Zofia Siuta)



Savannah, Georgia, Urban System
Ward grid , Note: River and North up
(S. Anderson, Zofia Siuta)



Savannah, Georgia
Individual ward and central square
Note: River and North top
(S. Anderson, Zofia Siuta)

thoroughfares in the east-west direction while the "thin" dimensional characteristic of the east-west boundaries of the ward maintains a visual connection to the central open space and serves as a sequential interruption in movement. The north-south edges of the ward provides neither exceptional nor immediate access to the center of the ward. Anderson's observations of this phenomena establishes these two components of movement and access patterns as defining, "the preferred role of the north-south boundaries for rapid movement through the system and the east-west boundaries for access to the localized activities of the city. When wards are added to one another,...the east-west boundary streets cease to be mere collections of lots peripheral to the central squares and are rather recognized to be the only streets in the system that are continuously lined on both sides with private development parcels. This characteristic has, in the multiple ward structure of the city, elevated these east-west boundary streets to the role of the most important streets in the city."

It should be emphasized here that the organization and abstract geometry of the city is not purely arbitrary. In addition to sociocultural influences, the geographic organization of natural features contributes to the city's configuration. In its early development there was an emphasis to organize the community along the river. Over time, the string of wards along the waters edge took on distinctive endemic uses relating to water works. This edge of the city, then, was of critical importance to the development of Savannah. Subsequent streets running parallel to the river provided equally important uses; the second parallel street became Main Street and the third parallel street became the "favored location for finer dwellings."

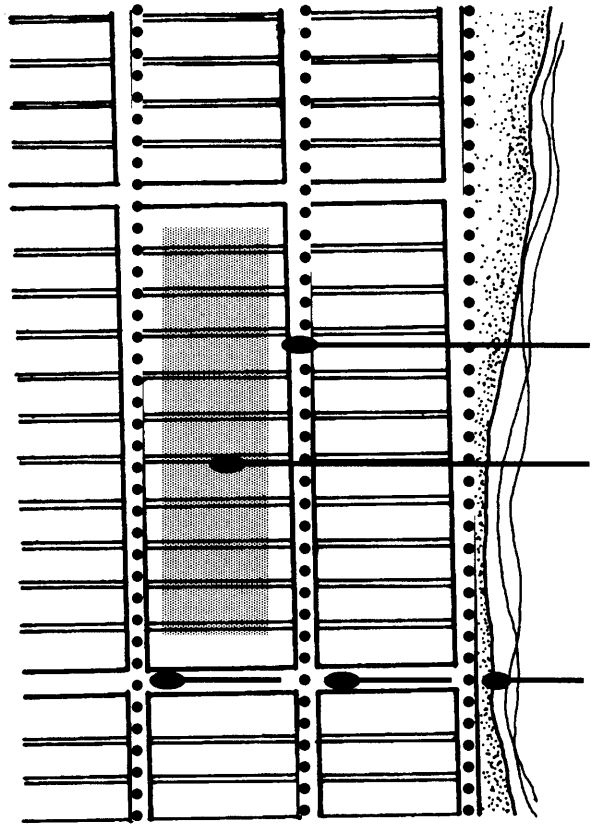
Panoramic of Manhattan, New York, 1990
(Anthony Flanagan)

As defined by this analysis, the patterns of movement in the east-west direction provides continuous opportunities to access related uses, while the north-south patterns of movement provides precipitous access to zones of alternative uses. Given these observations, I would assert that the primary considerations in the Savannah analysis is the elaborate relationship of the city's geometry and its movement patterns, which together, influence and transform each other.

In conclusion, Savannah as a "simple" illustration of interrelationships remains compounded with a multitude of additional influences, all of which affect the spatial structure and life in the city. Savannah can, however, be partially understood by this analysis as Anderson asserts, "Certain impacts on the local life structures can be deduced from overall ordering systems; but, equally, the local use patterns can differentiate the overall order into specific, and possibly evolving, use structures. Superimposed on this dialectic of order and use are the specifics of topography and historical development...No part of the city, at any point in time, can be understood without reference to its organizational, topographic, and historical context. Plans for the future, whether geared to preservation or development, also need such contextual understanding."

Mid-Town Manhattan, New York City

The reason for selecting Mid-Town Manhattan is to emphasize the point that regardless of city size or complexity, that organizational, topographic, and historic elements remain a deterministic force in the shaping of urban form and use. Mid-Town Manhattan is a simple repetitive assemblage of rectangular blocks. The larger dimension of the block runs east-west leaving the north-south dimension substantially smaller, approximately 25 percent smaller in size.

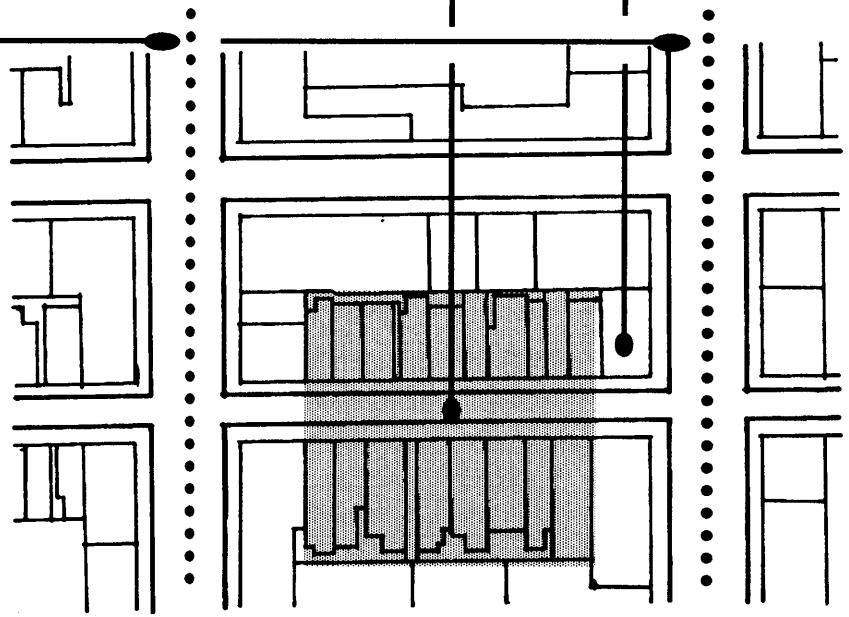


Waterfront

Commercial Zone

Typical inner block zone of residential habitation.

Primary access through Manhattan.



Below: Mid-Town Manhattan, New York Block structure, residential in the center of the block with commercial bordering primary streets. (Zofia Siuta)

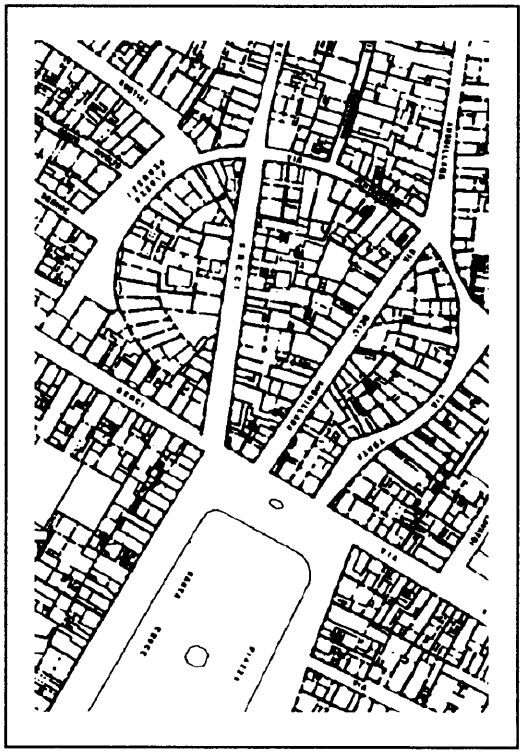
Above: Mid-Town Manhattan, New York Urban system, primary arteries parallel with bay (Top), secondary streets perpendicular to bay. (Zofia Siuta)

As a result this block pattern allows for considerably more streets running east-west. Compounding the north-south flow is the geography of Manhattan which is oriented north-south and narrow to the east and west. This configuration requires the majority of the traffic to run the narrowest length of Manhattan, parallel with the direction of the landform. Given this consideration, from the early development of the city, the streets in the north-south direction were made larger and as a result, commercial development located along these more substantial arteries. Despite the fact that the east-west direction would accommodate more commercial frontage than the north-south direction, Manhattan is strongly directional north-south. Though time has witnessed significant changes in Manhattan, this distinction in street hierarchy has maintained residential sectors and streets of a more human size, while being enveloped in commercial activity. It is clear that if the dimensions of the landform and blocks would have been different, such as the east-west dimensions of the block being much smaller, then this might have ultimately eliminated the internal block residential possibilities in Manhattan. This again illustrates the influence that landform and urban structure have on urban form and its use patterns.

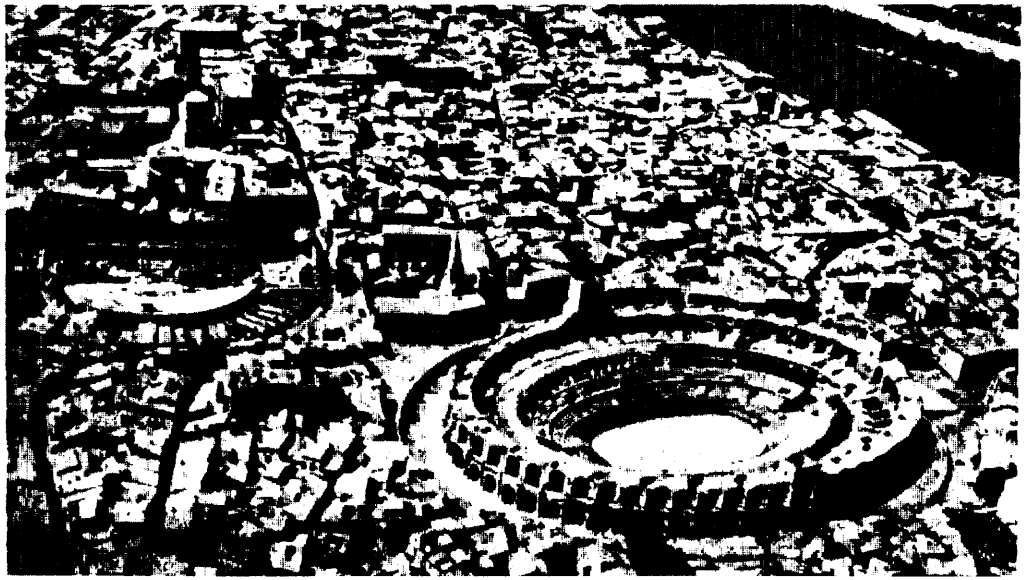
Notions of Autonomy, Sensitivity of Place and Collective Memory

The three cities which have been examined reveal issues which will continue to be addressed in other parts of this study. The subject of architectural autonomy is one of these issues. The emphasis I would like to make is that once architecture is completed and becomes a part of the city, to a certain extent it gains an autonomous nature, free from the creator and ultimately its intended use. How architecture reacts to its use and viability over time is contingent on its ability to establish a dialogue with the city. That is to say, that over time, the

Plan of The Santa Croce district, Florence, indicating buildings constructed on the site of the Roman amphitheater.

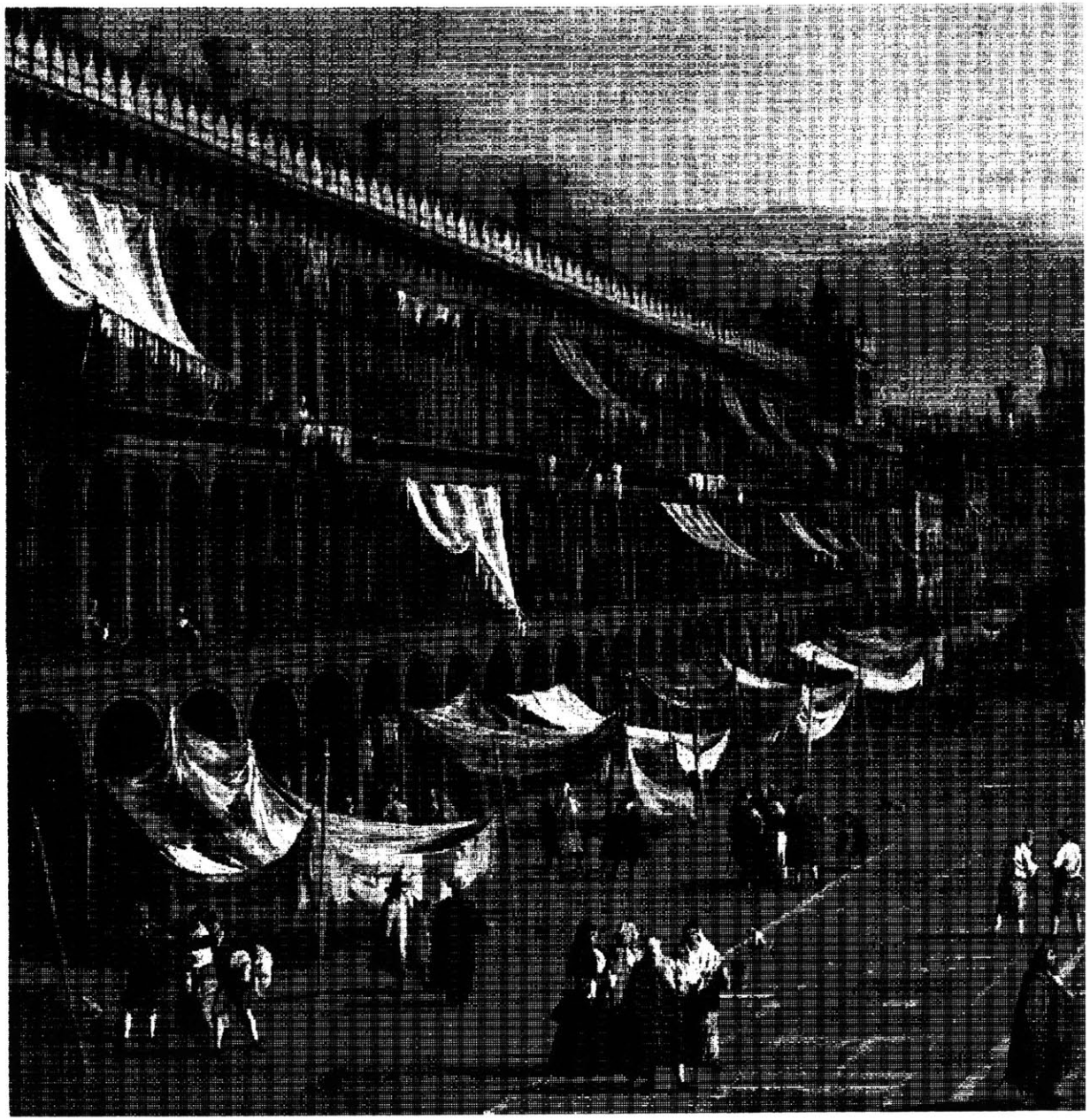


Roman Monuments, Arles, France. Aerial view of the theater and amphitheater.



permanences of architecture establishes the city as an urban artifact and therefore the precision in architecture is not in its ability to accommodate a specific use but rather to many uses over time. In his book, The Architecture of the City, Aldo Rossi suggest that, "Artifacts like the Theater at Arles or the Palazzo della Ragione in Padua tend to synchronize with the process of urbanization because they are not defined only by an original or previous function, nor by their context, but have survived precisely because of their form - one which is able to accommodate different functions over time." He uses another example of the city of Split in Yugoslavia, suggesting that in the precision of form, which is rooted in the forms resilient ability and its sensitivity to place, it can persist through many changes. He confirms that, "The City of Split which grew up within the walls of Diocletian's palace gave new uses and new meanings to unchangeable forms. This is symbolic of the meaning of the architecture of the city, where the broadest adaptability to multiple functions corresponds to an extreme precision of form." This theory extends to not only specific forms, as described by Rossi, but also the entire urban structure such as Savannah and Mid-Town Manhattan. Thus, the establishment of this urban artifact begins to set up a dialogue between the old and the new. The conditions of pre-existing form provides the spatial structure of both support and constraint which must be recognized. Anderson suggests that, "These received conditions of support and constraint affect the new uses and meanings, and preserve, at least in part, the original significance." If recognized, the structure of the city becomes the vehicle to propel the past into the present and the present into the future.

In this study, I will present the argument that the city itself is the collective

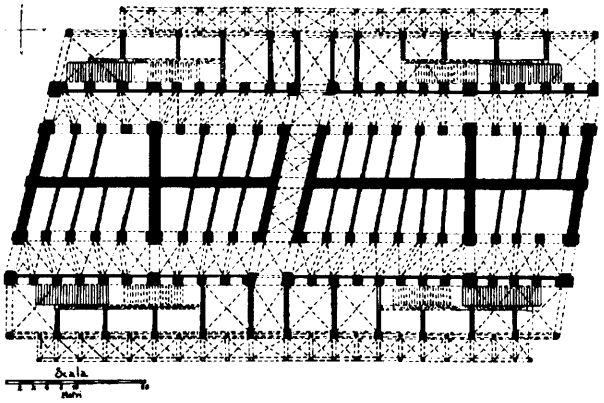


Piazza San Marco, Italy
Mid-18th century
Canaletto(Giovanni Antonio Canal)

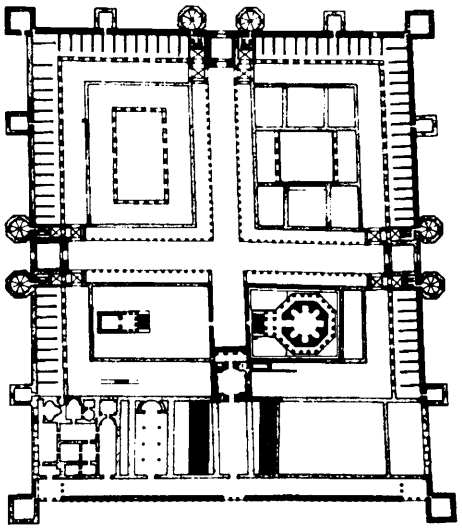
memory of its people and analogous to ones own memory, the city is associated by its participants with objects and places. In my observations, the success in Venice, Savannah and Mid-Town Manhattan comes from the communities' ability to maintain and tap into the sensitivities of place by developing an urban structure which manifests a relationship of object (city and building) to place (neighborhood and landscape). In the case of these three cities, the relationship between its citizenry and place become the city's predominant image. Rossi points out that, "The collective memory participates in the actual transformation of space in the works of the collective, a transformation that is always conditioned by whatever material realities oppose it."

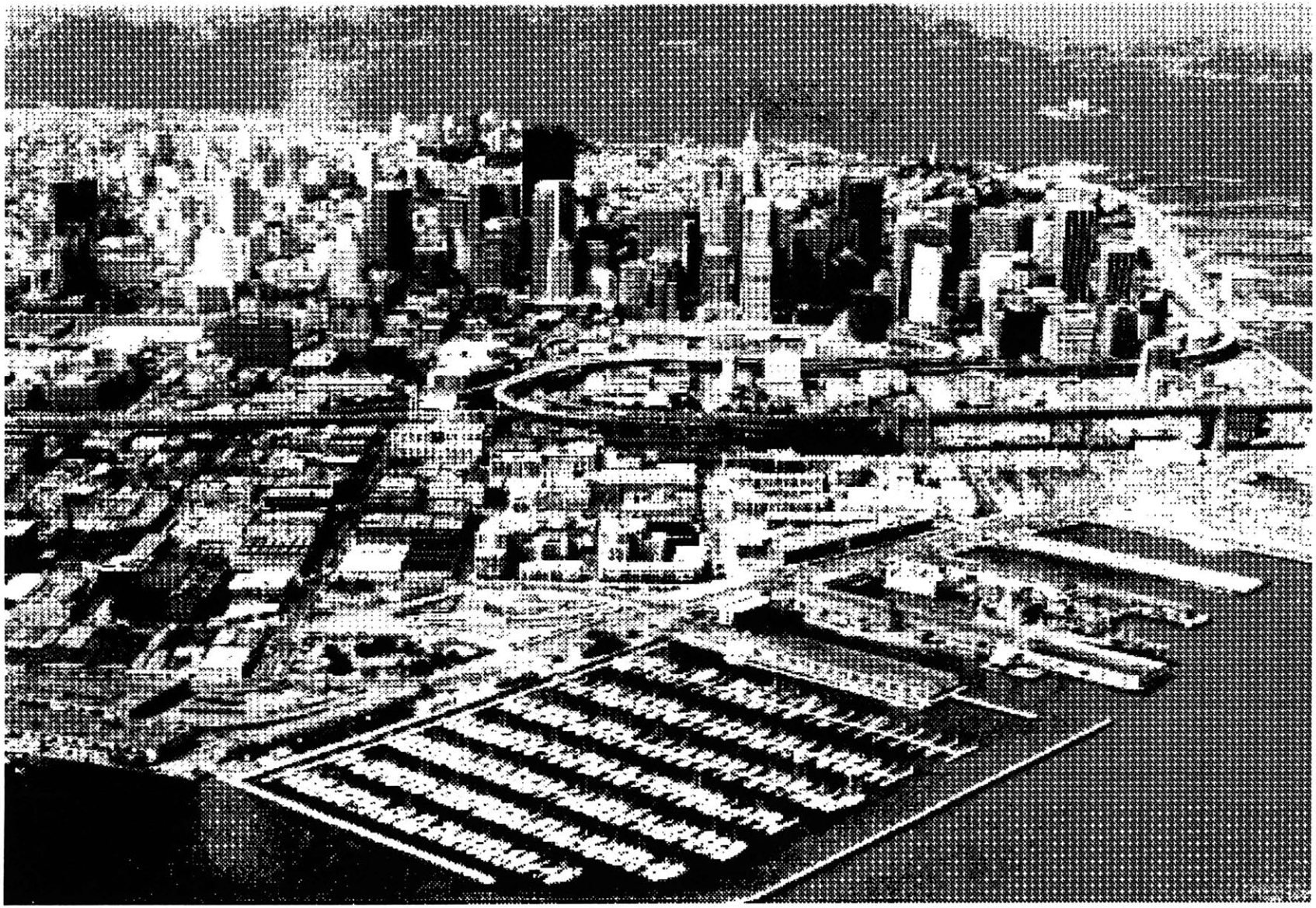
The cities Venice, Savannah and Mid-Town Manhattan, illustrate that communities of significant variation in structure may contain what I have referred to as autonomous character. All of them have qualities which establish an identifiable urban framework but without being completely deterministic of specific use. Also, the system or spatial structure of these cities establishes a preference for types of use within certain segments of each city. This provides evidence that this urban structure is not independent of place. The interpretation of city is modified to conform to conditions of place. In this way the city and objects reveal the unique physical qualities that exist. Ultimately, the urban artifact expresses human values as altered by the uniqueness of place. The challenge then, is to comprehend the characteristics of the physical city and place and to understand how this autonomous structure has served over time.

Palazzo della Ragione, Padua, Italy, ground floor plan as it has existed from 1425 up to today, according to the reconstruction by A. Moschetti. Thirteenth-century walls in heavy black.



Plan of Diocletian's Palace, Split, Yugoslavia, according to the reconstruction by G. Nieman, 1910.





San Francisco Downtown, 1990
(Photo, Ed Brady)

Chapter III
Design Iterations

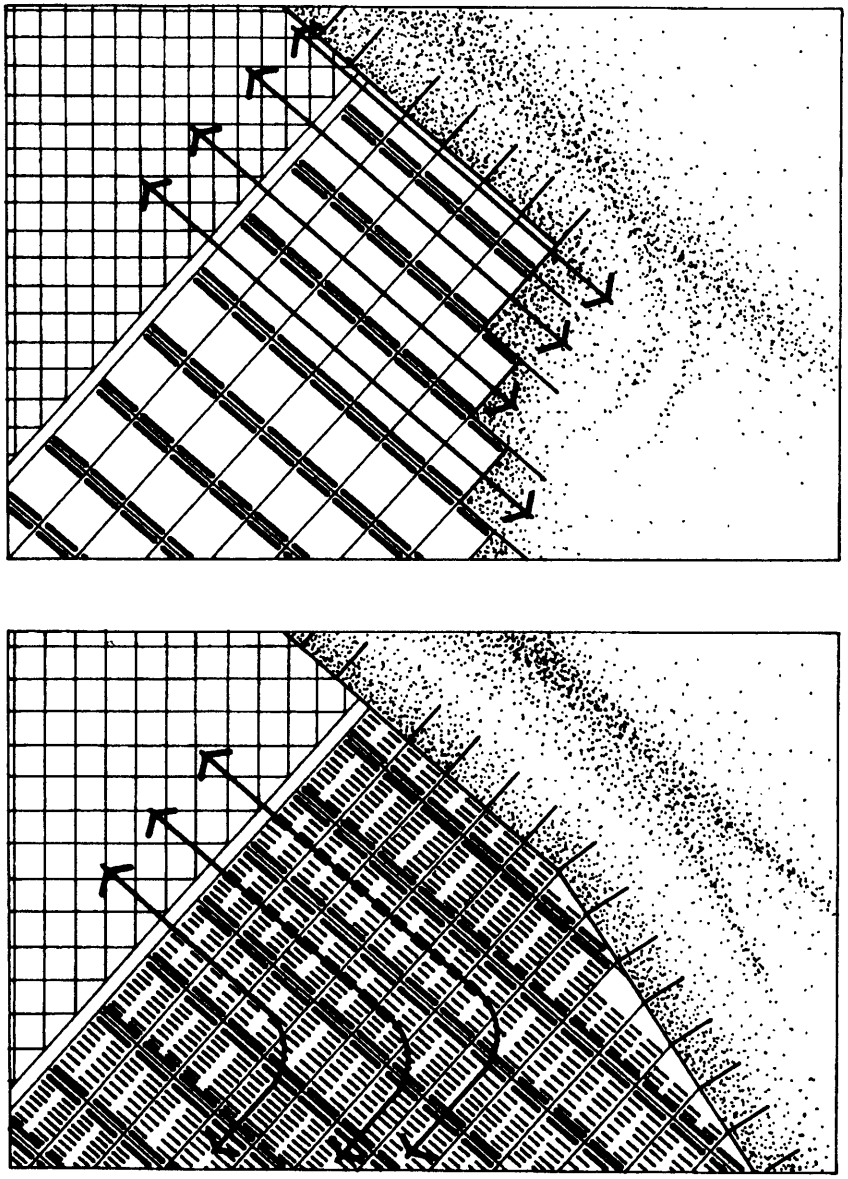
Reading the City: Processes of Transformation

This Chapter will focus on two issues: the discovery of the urban structure and the application of that knowledge to the design process. The same method used for exploring the urban structure of Venice, Savannah and Mid-Town Manhattan will be applied in the reading of San Francisco. For the purposes of this study, most of the discussion will concentrate on the area of the site, Pier 30-32 and adjacent neighborhoods. Again, I want to reinforce that I begin this reading of the city with three assumptions: first, that the urban form is the physical result of the collective memory of its citizenry, secondly, that collective memory is generated and altered by sociocultural values and the uniqueness of place and finally that function is, to a large extent, a product of its relationship with the urban artifact, and therefore, one must attempt to understand and utilize its framework. Ultimately, the two forces used to generate the energy of the design work will be gained through a knowledge of spatial structure and the uniqueness of place.

Notes of Spatial Structure

Much of the history and general description of San Francisco and South Beach has already been discussed in other parts of this study. The purpose of this discussion is to review key abstract and visual observation of the South Beach area and then to synthesize and transform this information so that it can be used in the design process.

A primary observation is the historic transformation of the neighborhood. An earlier discussion revealed the critical connection established during the nineteenth century between the South Beach docks and the North of Market area. This link established a series of north-south street arteries carrying

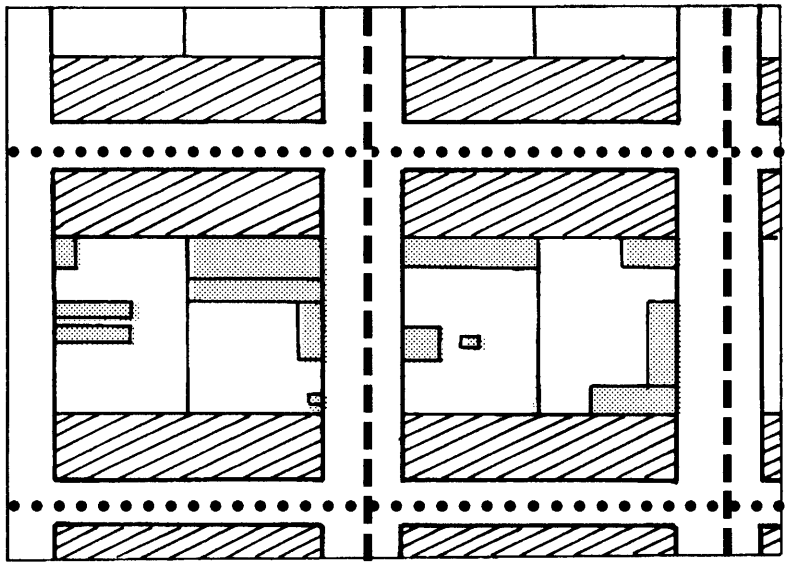


South of Market transformation of movement patterns:
Top, 19th century movement. Bottom, 20th century movement.
(Zofia Siuta)

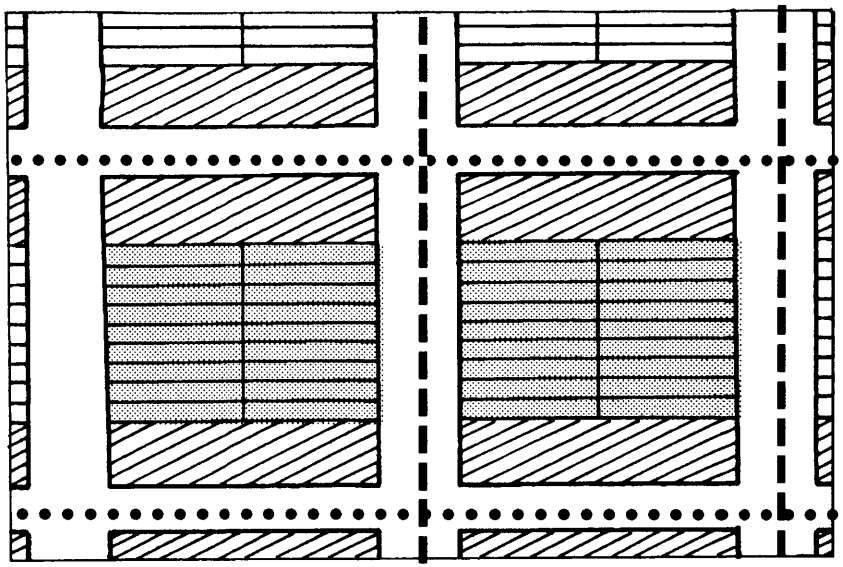
goods to and from San Francisco. The constant flow of movement generated dense development along these arteries creating a continuous impervious wall of warehouses and industrial buildings 3 to 4 floors high. The build up, however, left the middle of these oversized blocks underutilized. Through the twentieth century there were two significant shifts in the City which greatly affected the South Beach neighborhood. Over the years South Beach became less important to San Francisco as a dock and transport area which reduced most of the development along the north-south arteries.

In the 1940's and 50's, continued growth to the west of South Beach meant a shift in the movement pattern in the east-west direction, perpendicular to the old established north-south arteries. The reorientation of the movement pattern allowed a new layer of development to occur opposite the established arteries. Moreover, the new building form was significantly different than the original warehouses. The structures built were greatly reduced in size and had a substantially stronger relationship to the street. Their narrowness meant an increased textural complexity, a greater number of penetrations into the block system and increased pedestrian traffic on the street. Another observation is the street widths. The old north-south arteries were narrow since original traffic was more or less controlled by the use of train spurs and other specialized transport systems. When the east-west shift occurred the use of the automobile had been well established which justified the widening of the streets.

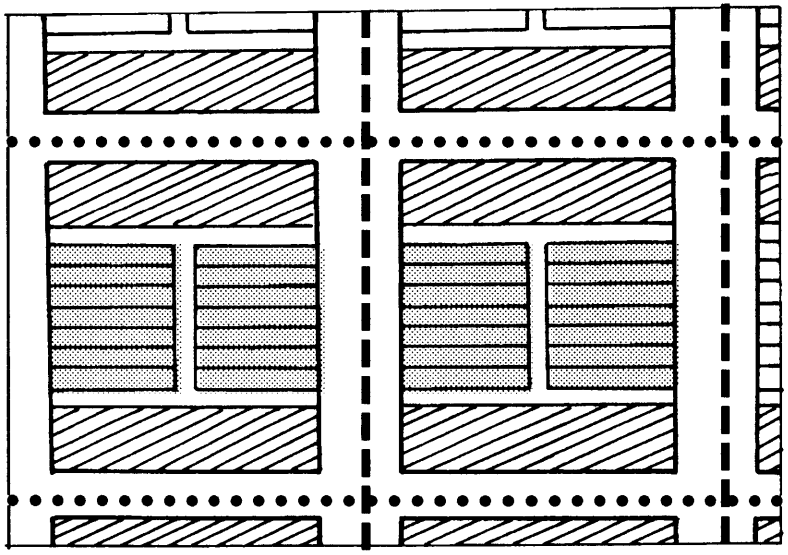
Today, as a result of the size of buildings, narrowness of the streets and lack of penetration along the streets edges, the north-south direction maintains a continuous wall from South Beach to Market Street fortifying a continuous



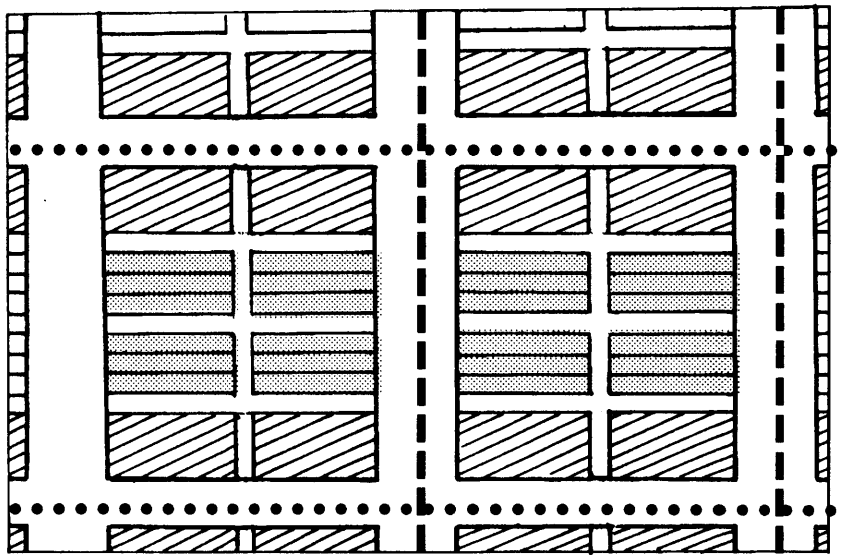
South Beach block structure,1870's



South Beach block structure, 1920's.



South Beach block structure, 1950's.



South Beach block structure, 1980's.

North-South Direction.
East-West Direction.

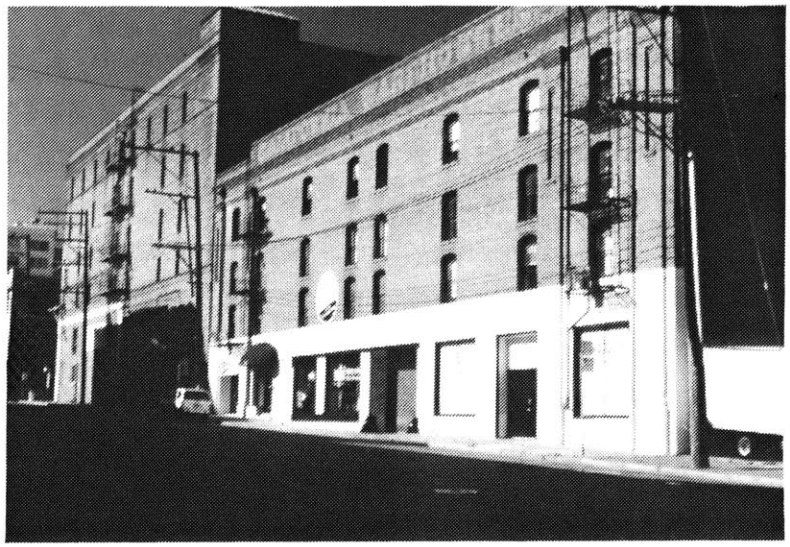
(Drawing's, Zofia Siuta)

urban quality. This tunnel-like character is enhanced by a myriad of flying bridges which appear to extend over several blocks before making contact with the ground. In contrast, the small size of the buildings and wideness of the streets in the east-west direction preserve the qualities of an open field. Their length imply no beginning and no end, but the complexity and human size of buildings suggest a neighborhood quality. This character is strengthened by several towers which act as landmarks for orientation and delineate one neighborhood from another.

Although the east-west streets seemed to extend the entire length of the City, in the north-south direction the streets are quickly terminated by Market Street and the Bay. Their significance seems to be amplified by the size of the wall which continues to grow larger as it gets closer to "the slot." At the streets end, large open spaces displace the beginnings of old Spanish Colonial grid, north of Market. The openness of Market Street allows for the overlapping of two completely incompatible grid systems. Five blocks in the opposite direction the streets open to the expanse of the Bay, one of the few openings along the Bay's edge.

The critical discovery here is that similarly to Venice, Savannah and Mid-Town Manhattan, a recognition of the collective memory provides the initial force for determining the spatial structure of the city and establishes a guideline for new design considerations. It establishes a set of values for the city which can cognitively be ignored or enhanced based on current values and sociocultural determinants.

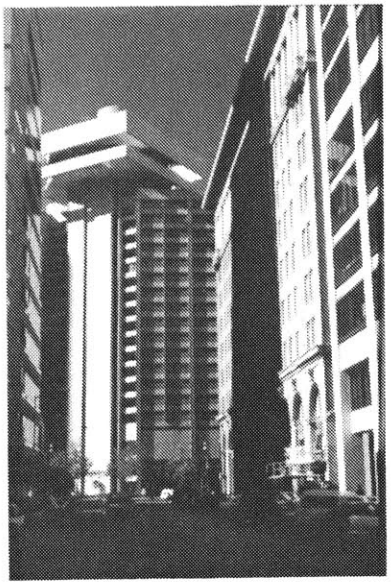
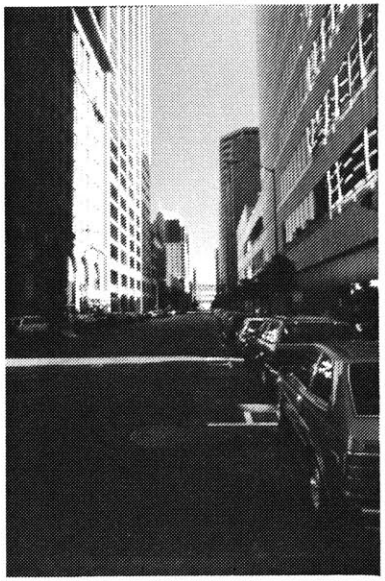
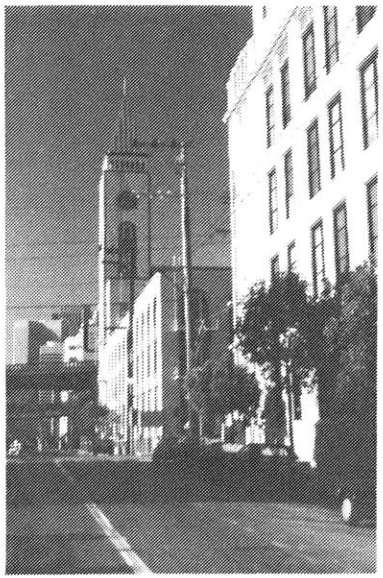
Warehouse wall in the north-south direction

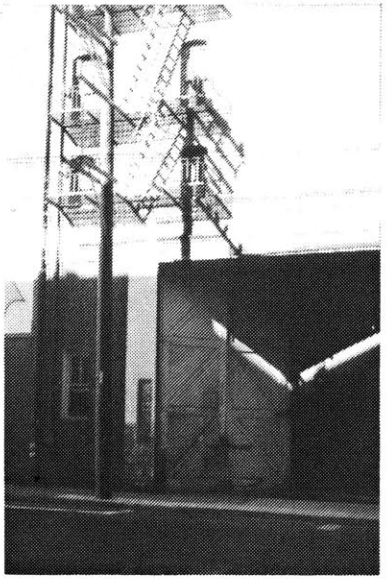
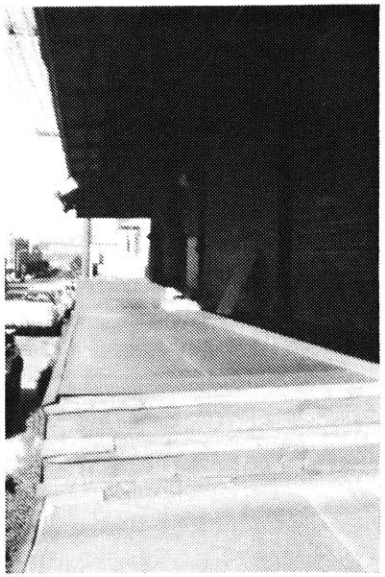


Warehouse wall in the north-south direction

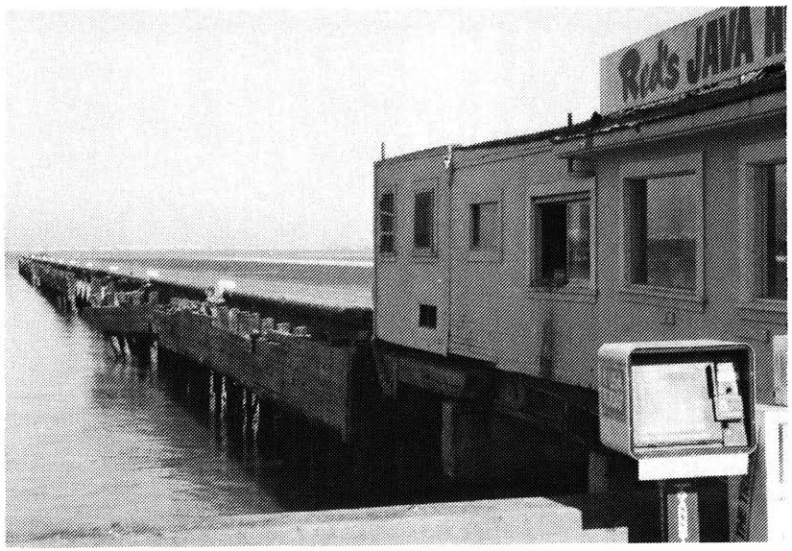
Transition between grid direction: warehouse type building at the end of the blocks.

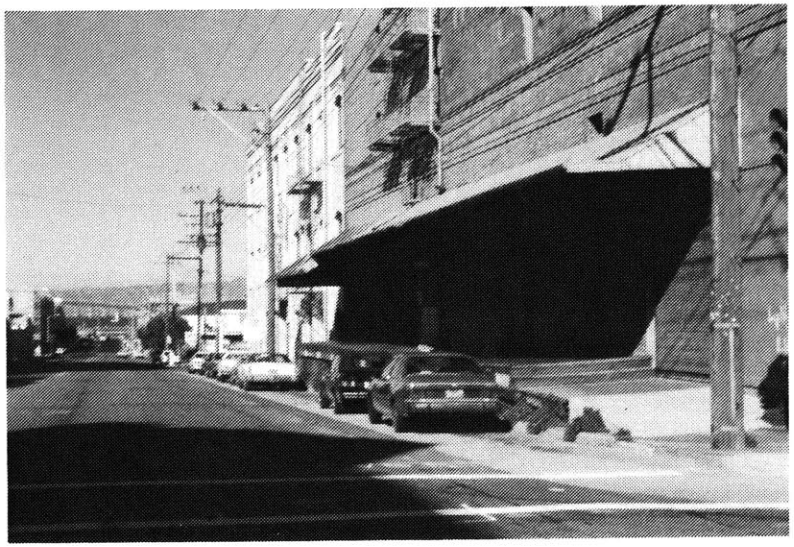
Variation and complexity in the east-west direction

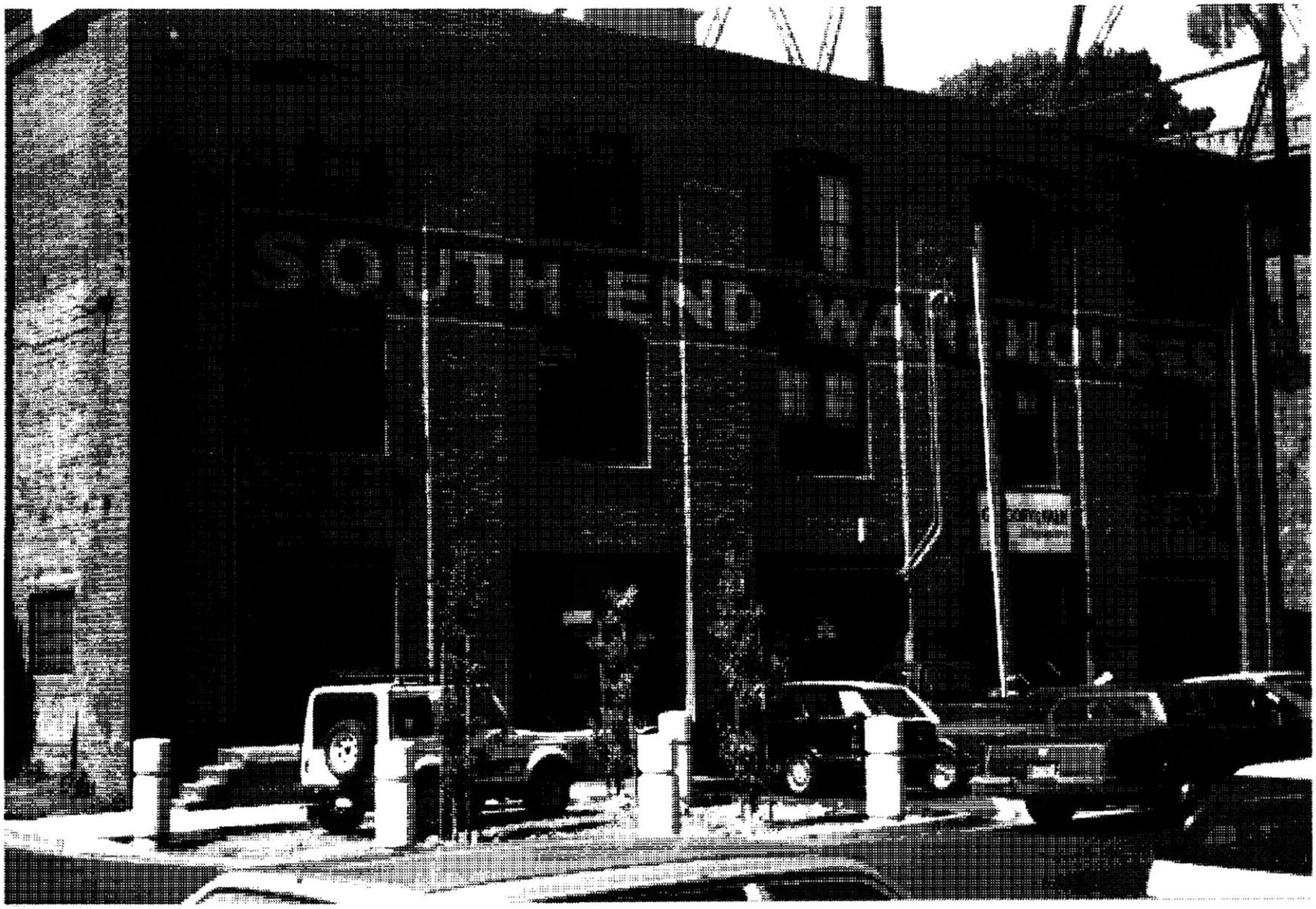



Sequence of neighborhood transformation from Market Street to South Beach.

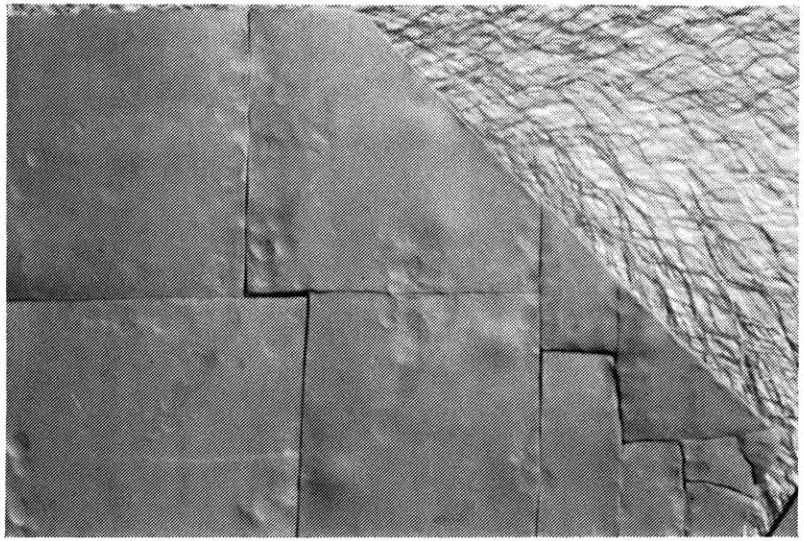


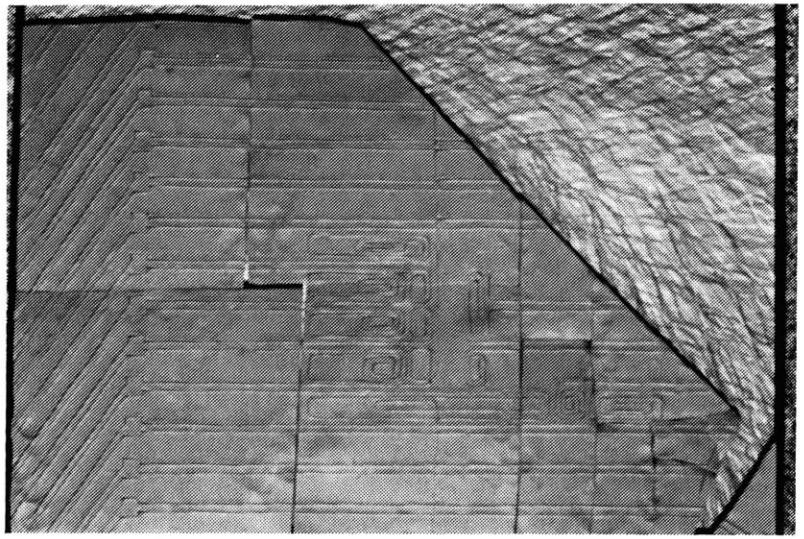


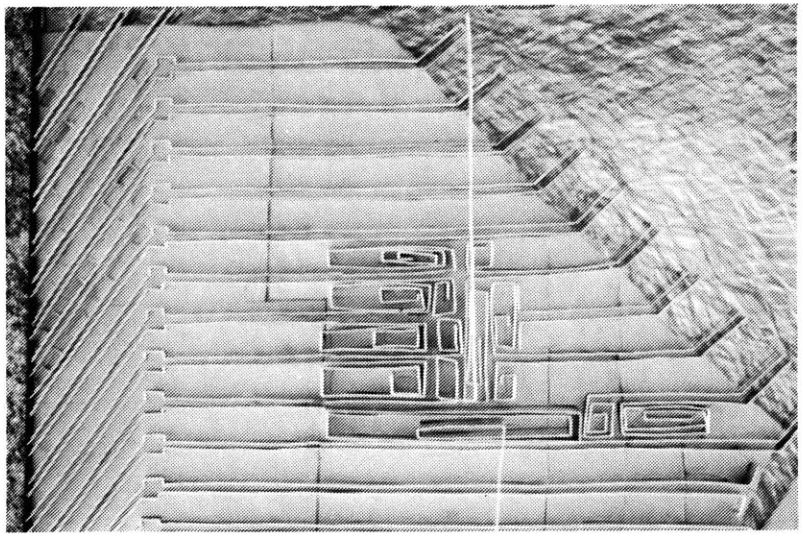
South Beach neighborhood.

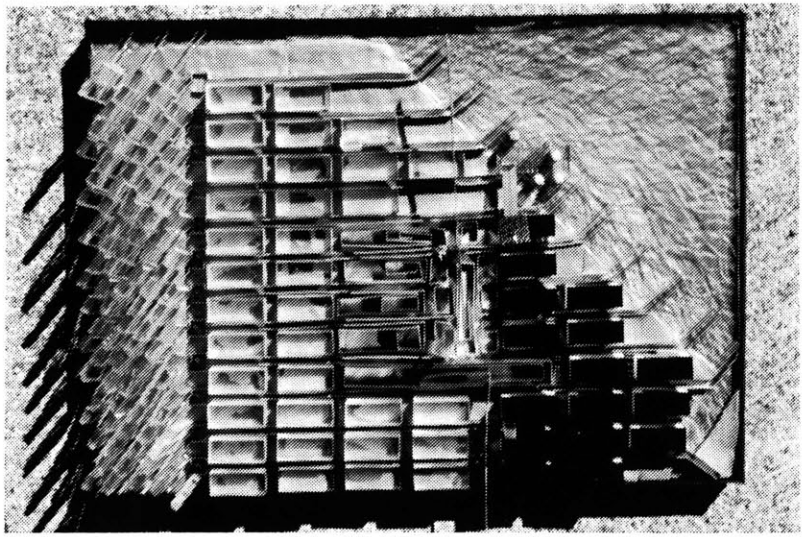


Typical Warehouse form in the South Beach neighborhood.







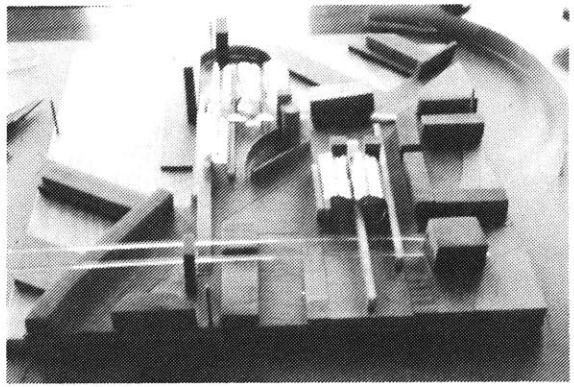


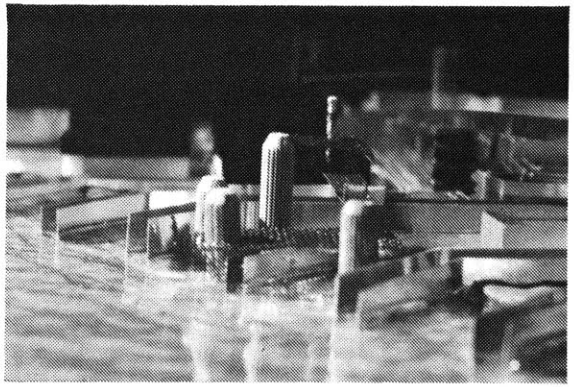
The transformation of an early concept model of the site and adjacent neighborhoods.

Sensitivity of Place

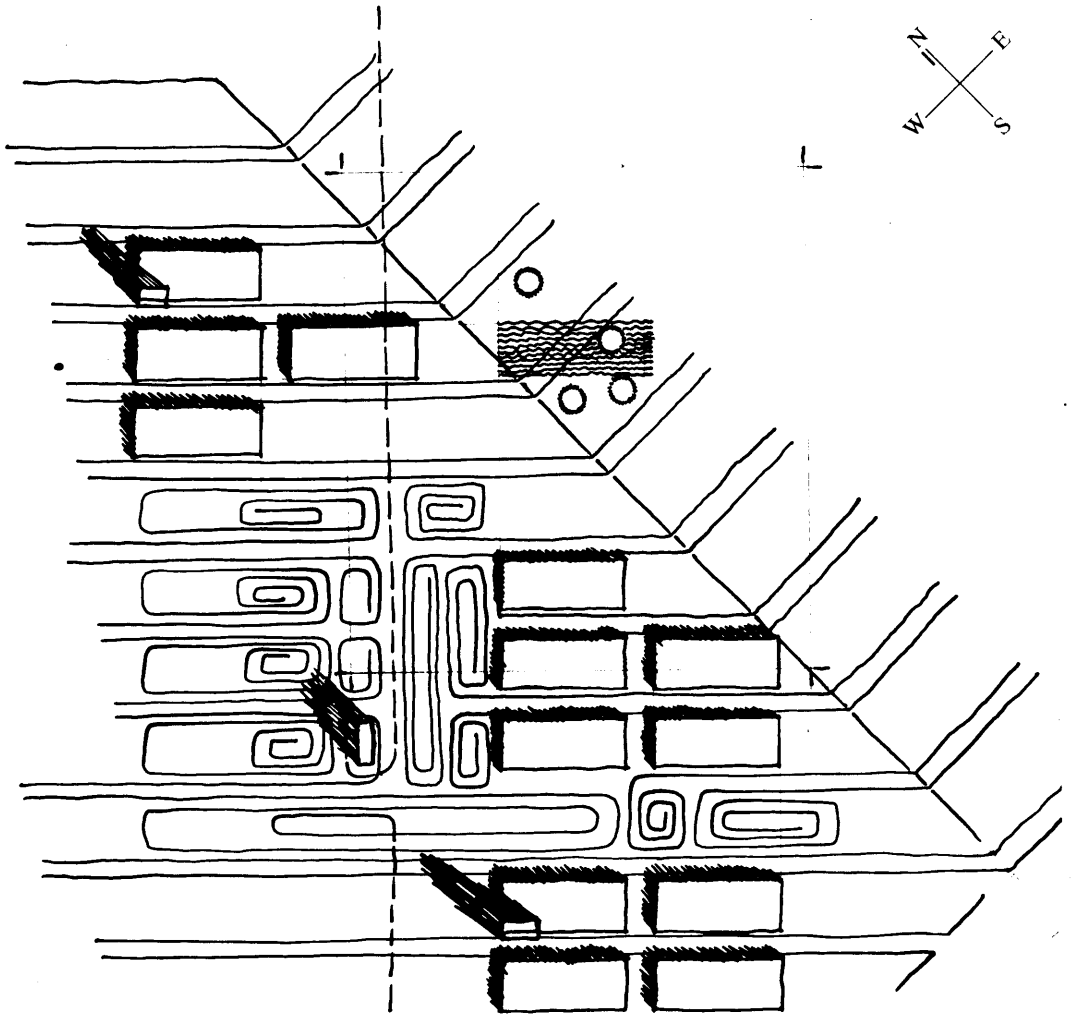
As a co-partner to the knowledge of spatial structure, sensitivity of place is the modifier of collective memory. The uniqueness of place guides the intervention of form through a knowledge of the city and the natural elements of the site. Pier 30-32 accentuates this intervention by its proximity to city, edge and water. Each with their own agenda, their own set of principles yet dependent, establishing the need to address each issue separately and also integrally. An understanding of place reveals not only the expressions and experience of the city and landscape but also the life of place. Fernando Domeyko, asserts that in order to understand place it is critical to, "Reveal the experience, not the idea. Architecture is not an idea but an experience, so you must connect with the experience...architecture is not mental but sensorial." In "The True Builders of Cities," Mark Helprin reinforces the concept of sensitivity of place. Helprin suggests that, "architecture is least of all about ideas. It is rather about sensations, associations, events, apprehensions, recollections, intuitions, emotions, a whole range of things other then ideas." This is not to suggest that an understanding of place comes from the heart, but rather that it is a cognitive awareness of ones sensorial experience of place. The rationale and ordering of this sensitivity comes only after one can grasp the essence of the experience.

At the Pier 30-32 site, I tried to recognize the experience of place which began with two principal elements. The first was the recognition that the site is a continuation of the city fabric and that the events on the site must continue the knowledge of the city. The secondly was that life on the edge between land and water is the experience which must be translated in the architecture. These are





Early study models.



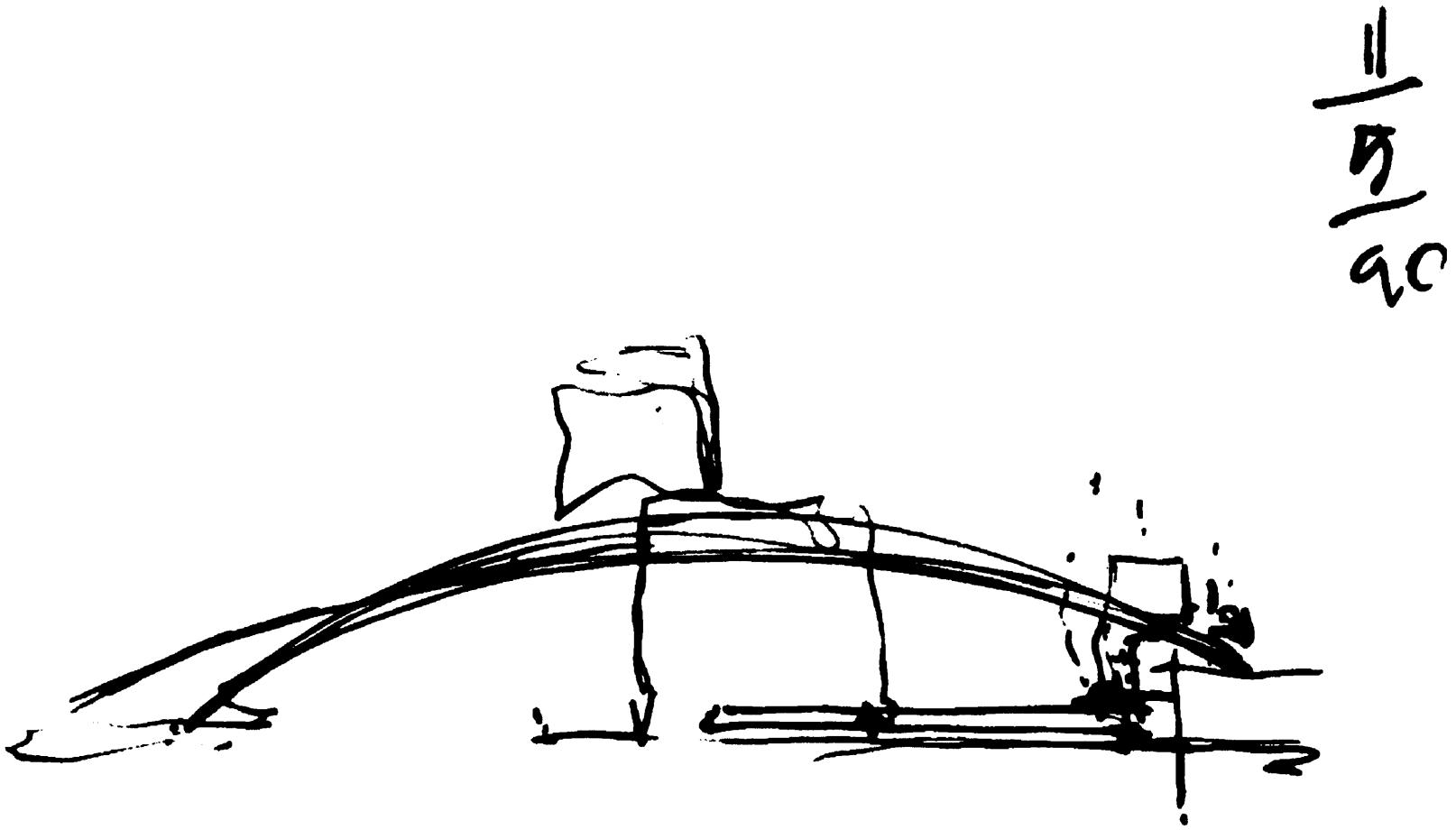
Early concept drawing establishing the first gesture on the site.

the conditions which will began to unify the architecture.

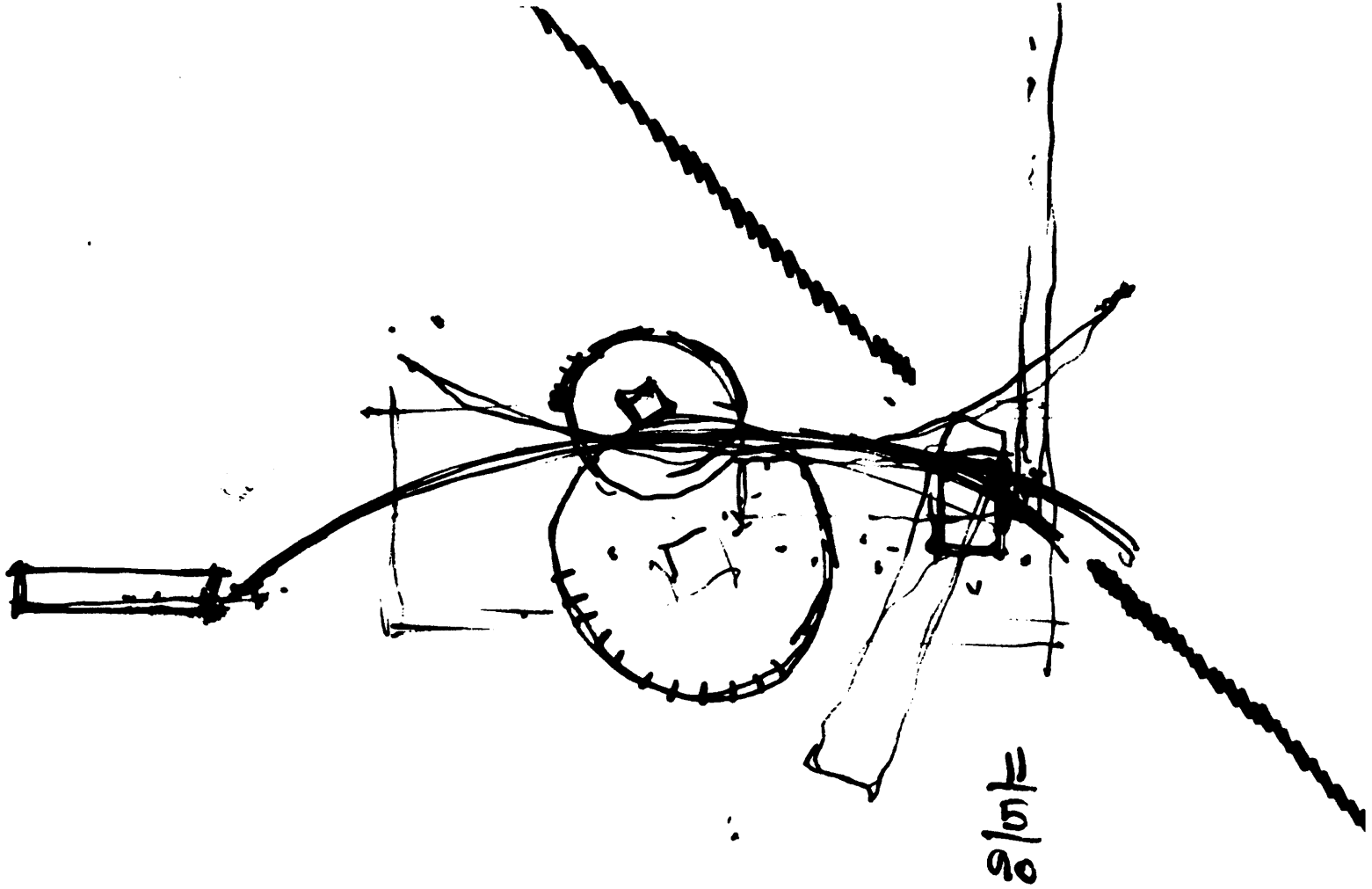
Establishing a Framework: Revealing the Values of the City

In the development of a new building and new experience, it is first important to recognize the existing framework. This new proposal will seek to transform Pier 30-32 without destroying the character of the existing urban artifact. Additionally, an attempt will be made to create architecture where building and site are mutually dependent.

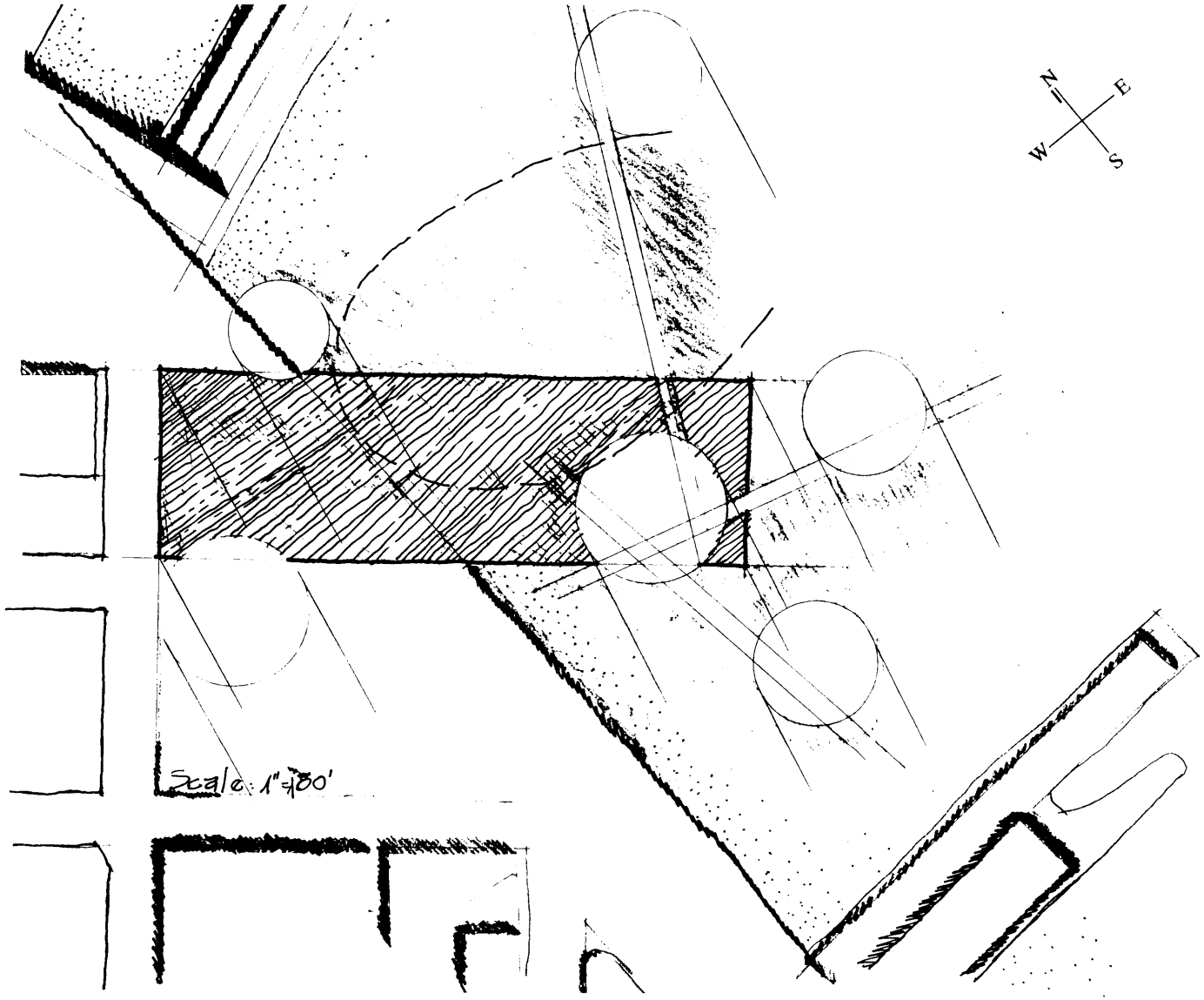
Part of the association of land and water comes from the distinction in their differences. The Sea Wall lot fits precisely into the system of the city. It is bound by the continuation of the grid system and is surrounded by a neighborhood of large monolithic buildings. At the neighborhood size, the consistency of two systems, one running north and south and one running east and west, define the textural variation of the neighborhood. In the north-south direction the blocks are dominated by the large "block size" buildings which meet the edge of the street at relatively the same place and the same dimension. Together the whole block takes on the structure of anchor-like buildings at each east-west boundary. The north-south boundaries are light and variable. The "block size" buildings are structured strictly conforming with the grid as an uninterrupted outline of the block. They establish a relatively uniform and predictable building mass. The surface of the block is relatively smooth due to the lack of building deviation from the heavy box type structure. The pedestrian is often raised about 3 feet from the street level and is shaded by a light steel structure. The east-west direction of the block is dominated by smaller, varied and unpredictable structural configurations and because of this it has a more



Early sketches of connection between land and water (Elevation).



Early sketches of connection between land and water (Plan).



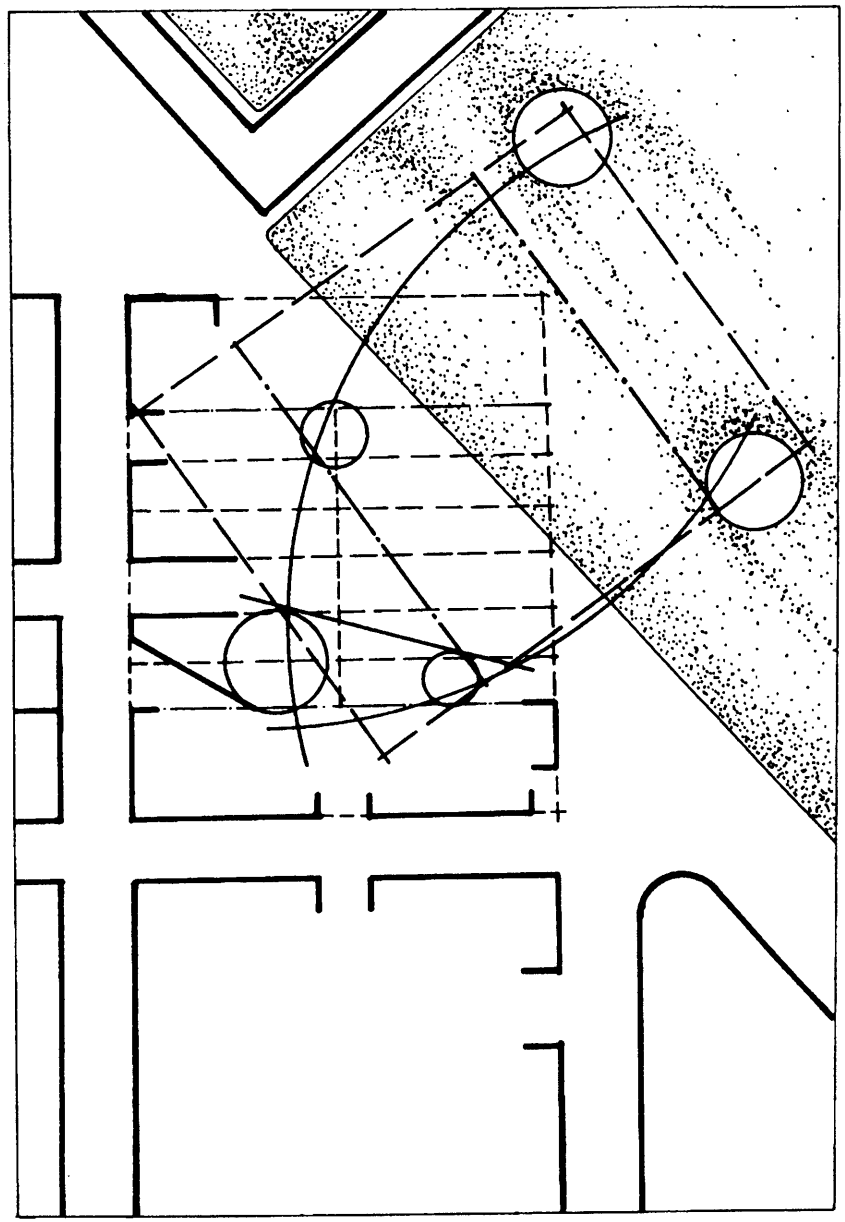
Concept drawing to study the forces of the block system and the establishment of objects as generators of space.

complex textural quality.

The ground floors of these buildings are generally twice the height of the above floors and are periodically penetrated by large oversized doors. Conceptually, the section of the building is a large open floor plan of about 20 feet high. The floor organizes the ground floor for distribution and free movement. All of the floors above are significantly lower, about 10 feet. The upper floors are relatively closed to the exterior.

The edge and water elements of the site are dominated by continuous movement along the edge and the rhythm of finger piers jetting out into the Bay. The issues of dynamics is an interesting one in that several layers of movement are occurring the same time and in parallel directions. In a layered affect, the exposure of the natural elements becomes increasingly amplified as you move to the edge. One under the other, wind, movement of people, cars, and water move in a contiguous current that seems to be generated by the effects of edge. Movement away from the edge out into the Bay produces an interesting experience which differs from the effects of land and edge. The further you move out from the edge the more you begin to loose the direct connection of the land i.e. sounds, scale, surface and movement, yet the force of the city is retained, propelled by its size and complexity.

As the final stone in the wall, the Sea Wall lot is the last open site in the neighborhood. Bridging land to water, the site belongs to both the man-made and natural realm. Given this interpretation, a building on the Sea Wall lot will address the dimensions, textural qualities and movement patterns of the



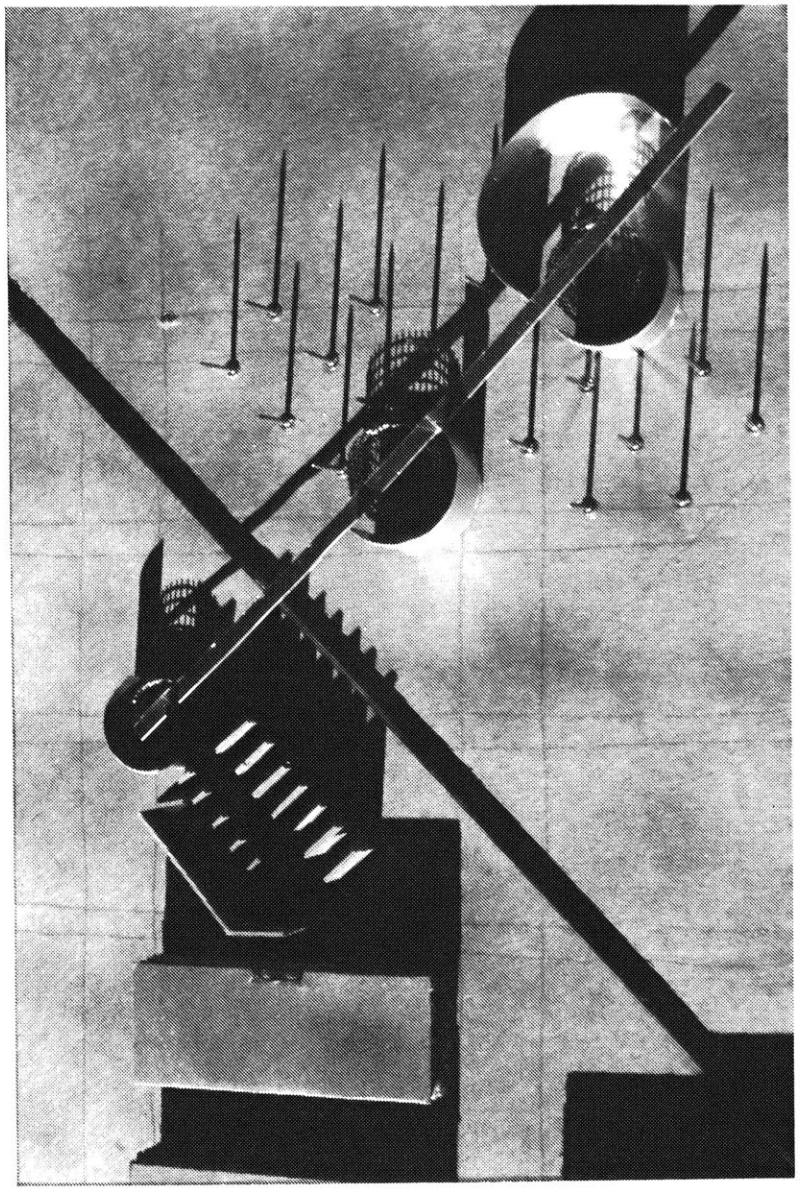
Establishing a framework for Pier 30-32 by revealing the values of the city (Zofia Siuta).

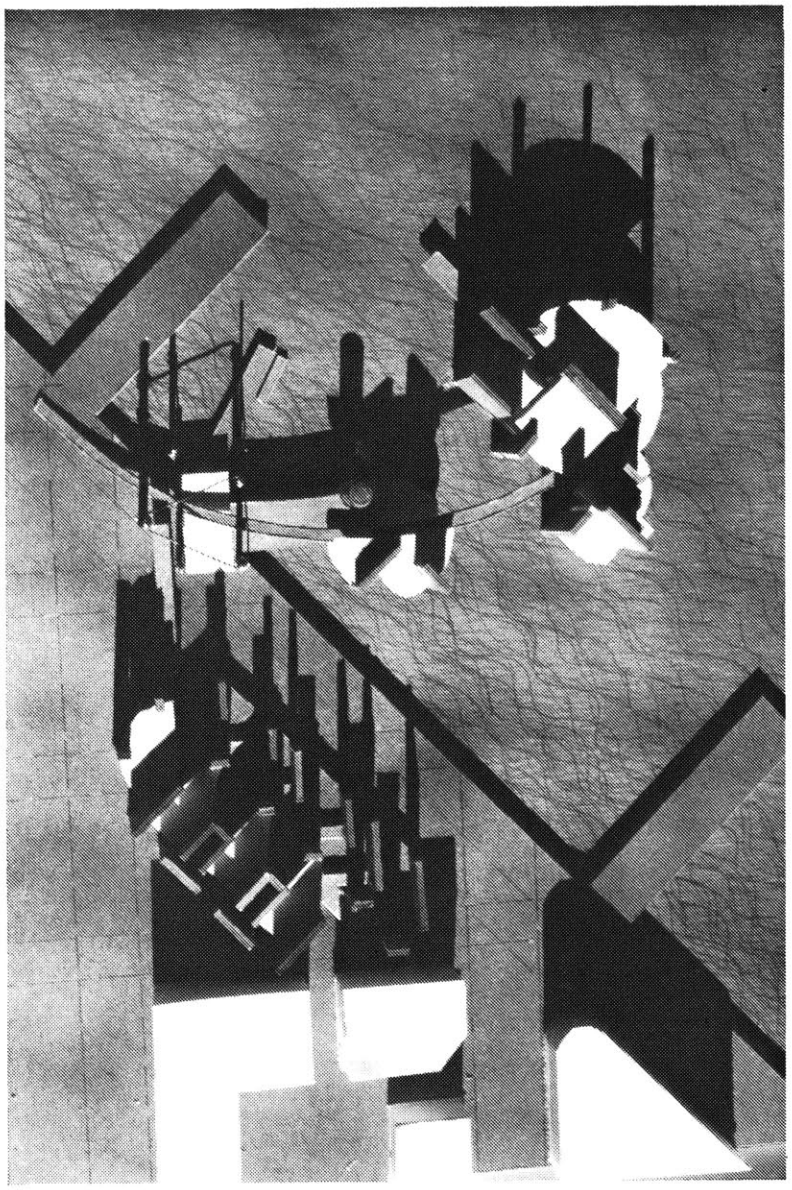
neighborhood but will also set out to revive the connection to the water and the meaning of being on the edge. As the building extends over the water some differences will occur in its configuration and inherent qualities revealing the significance of a changing agenda while maintaining the force of the city.

My initial observations of the water were in response to the randomness or freedom in which the water allows structure to occur. The lack of the grid allows the establishment of a new experience not controlled by the grid. The waters lack of definition can be revealed through the placement of several objects in an seemingly random manner. The placement of these objects are, however, not random but rather structure the field which conditions ones place in space. In this way a group of objects establish a territory for living.

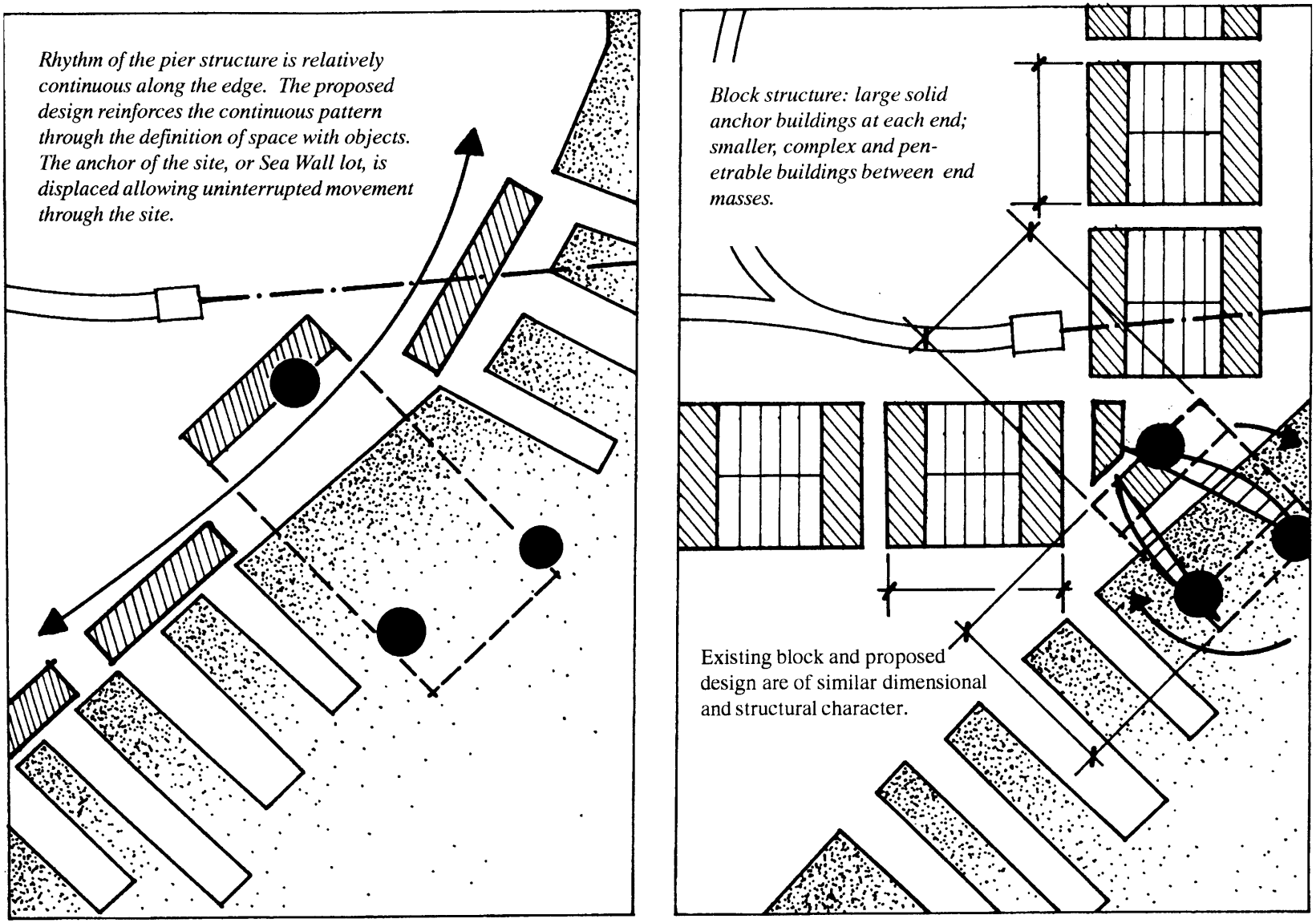
Geometric Order and Building Form

In generating some conclusions from the architecture it is important to emphasize the process of design iterations. Much of the design outcome is not only the process of abstract structuring of the city and visual observation, but a constant recycling, reinterpretation and refinement of new knowledge about place. Through this non linear process it has become apparent that the constraints and opportunities for the development of a new architectural experience have been greatly enhanced. Many of the design models and drawings proved to be misguided by one emphasis or another, however, in the end all contributed to a higher level of understanding of issues, process, and design.

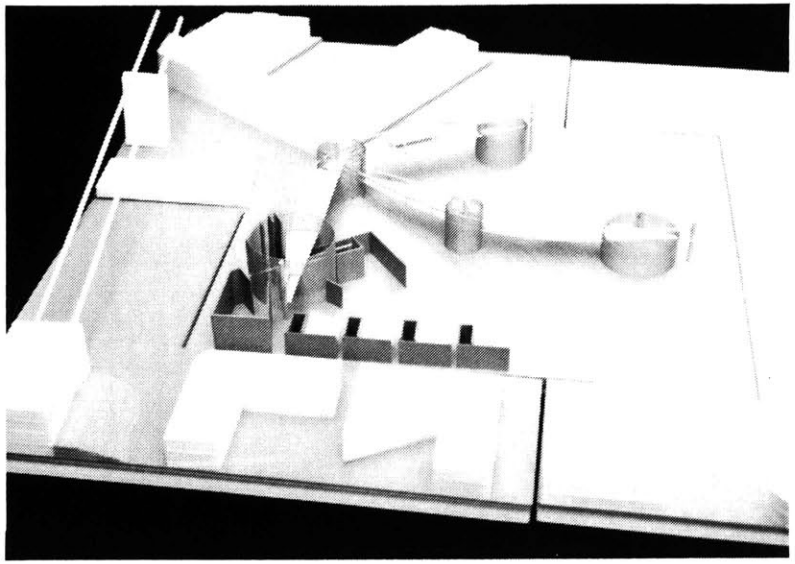


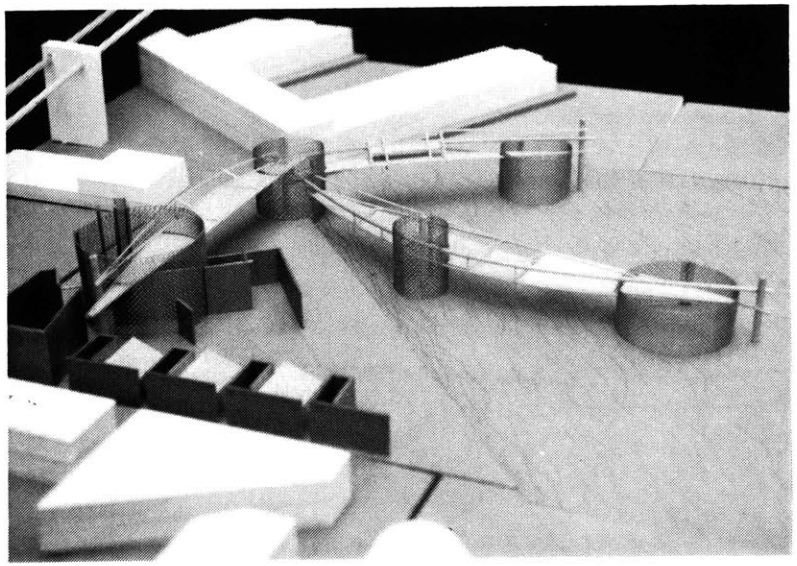


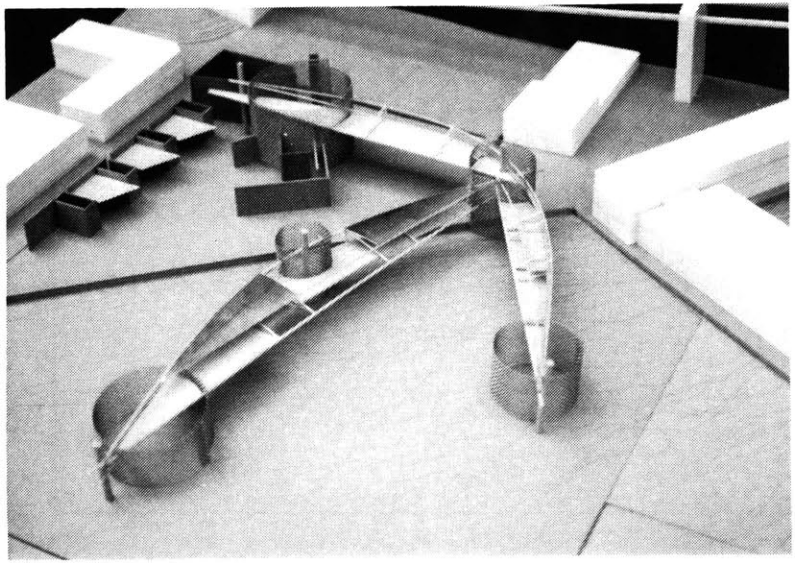
Study models to discover various relationships and connections.



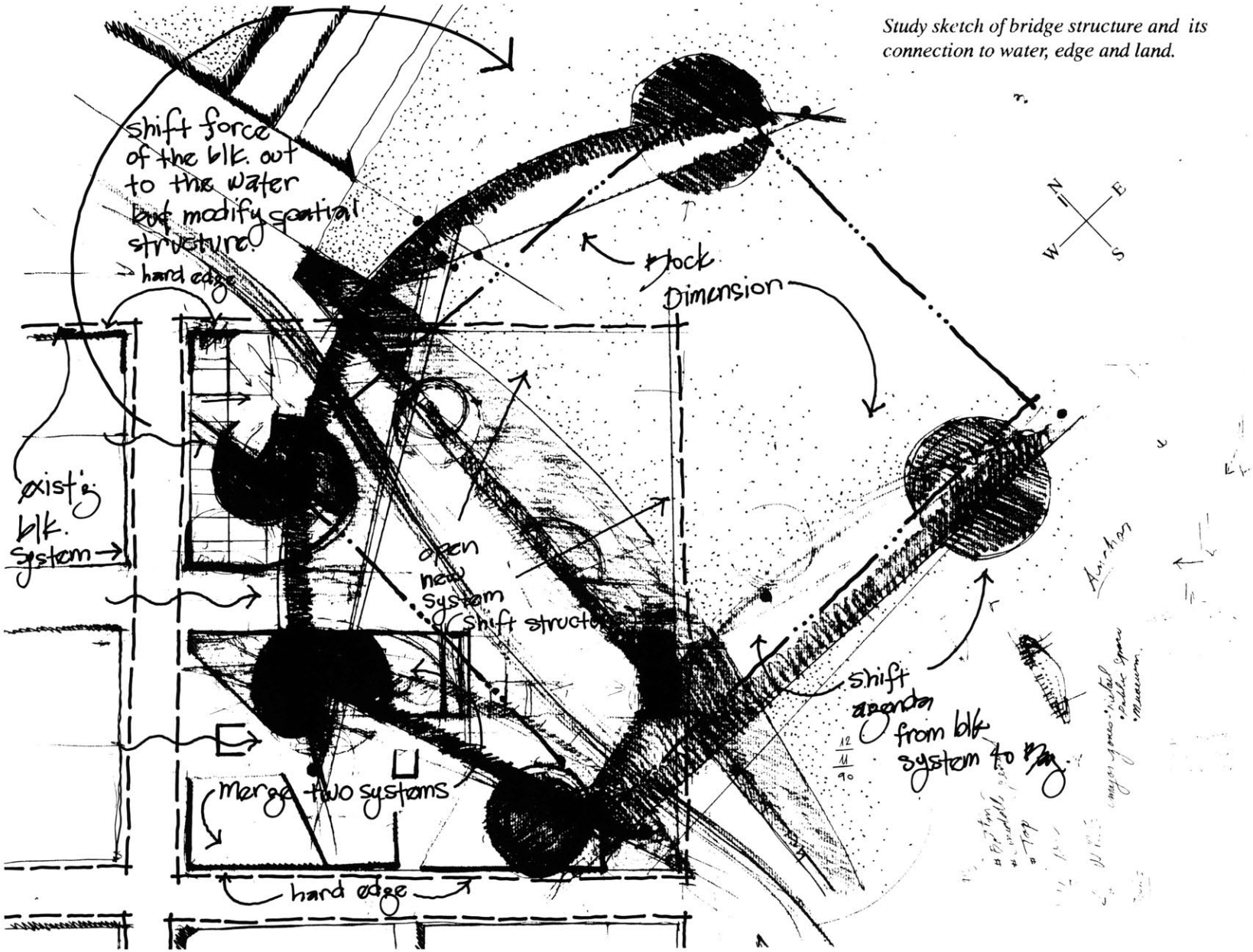
Initial concept drawings in the final design iteration.



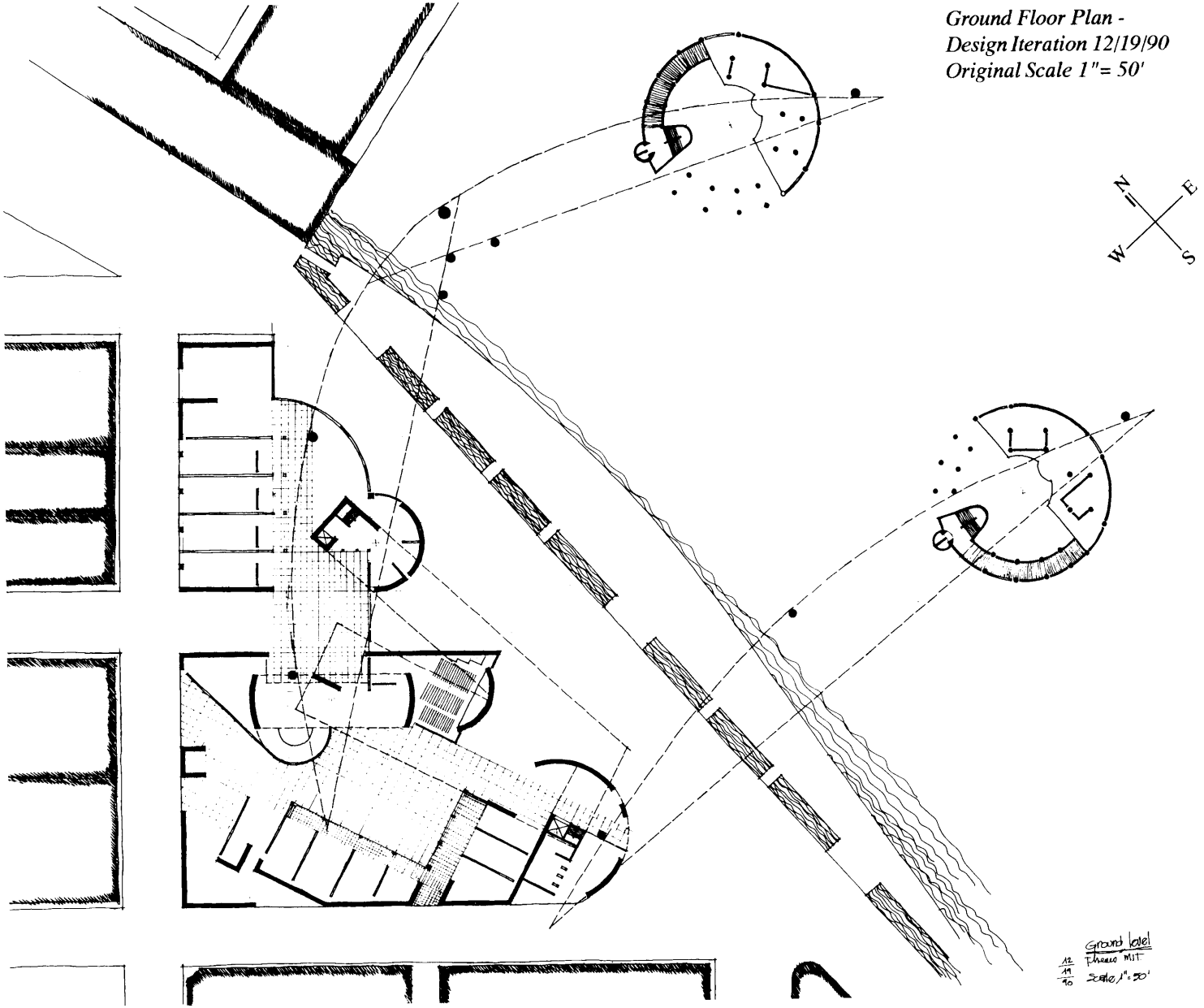




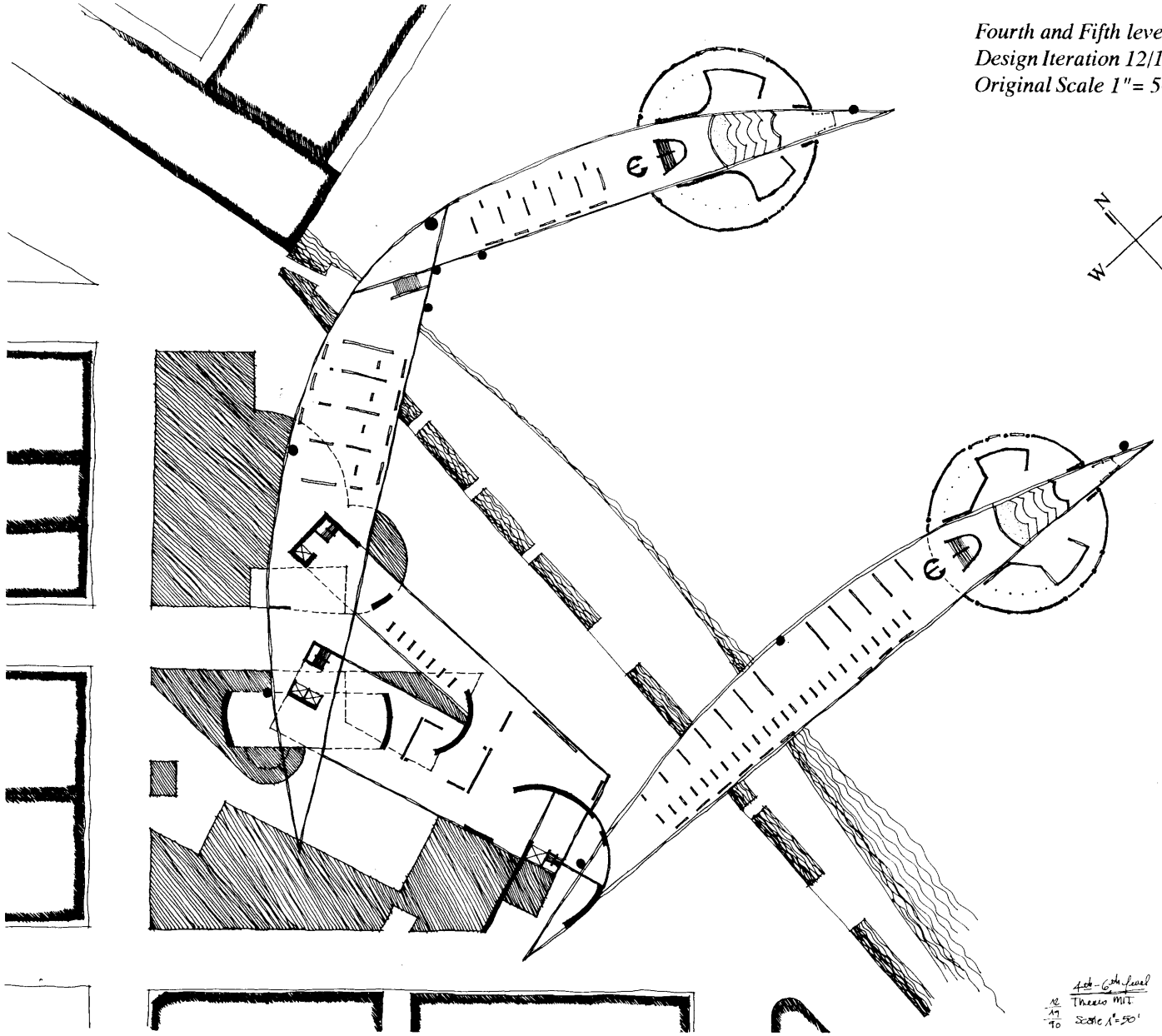
Study model which identifies the various forces of the site and spatial structure of the neighborhood. Scale 1"=50'



Study sketch of bridge structure and its connection to water, edge and land.

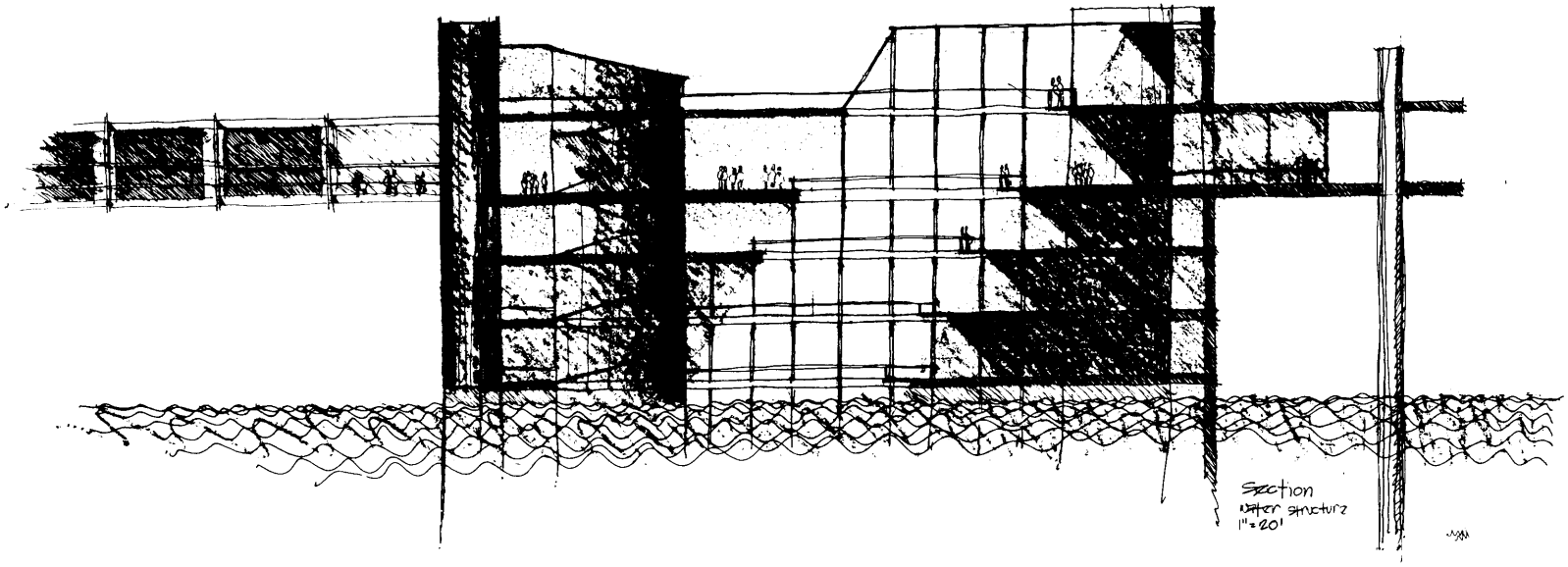


Ground Floor Plan -
Design Iteration 12/19/90
Original Scale 1" = 50'



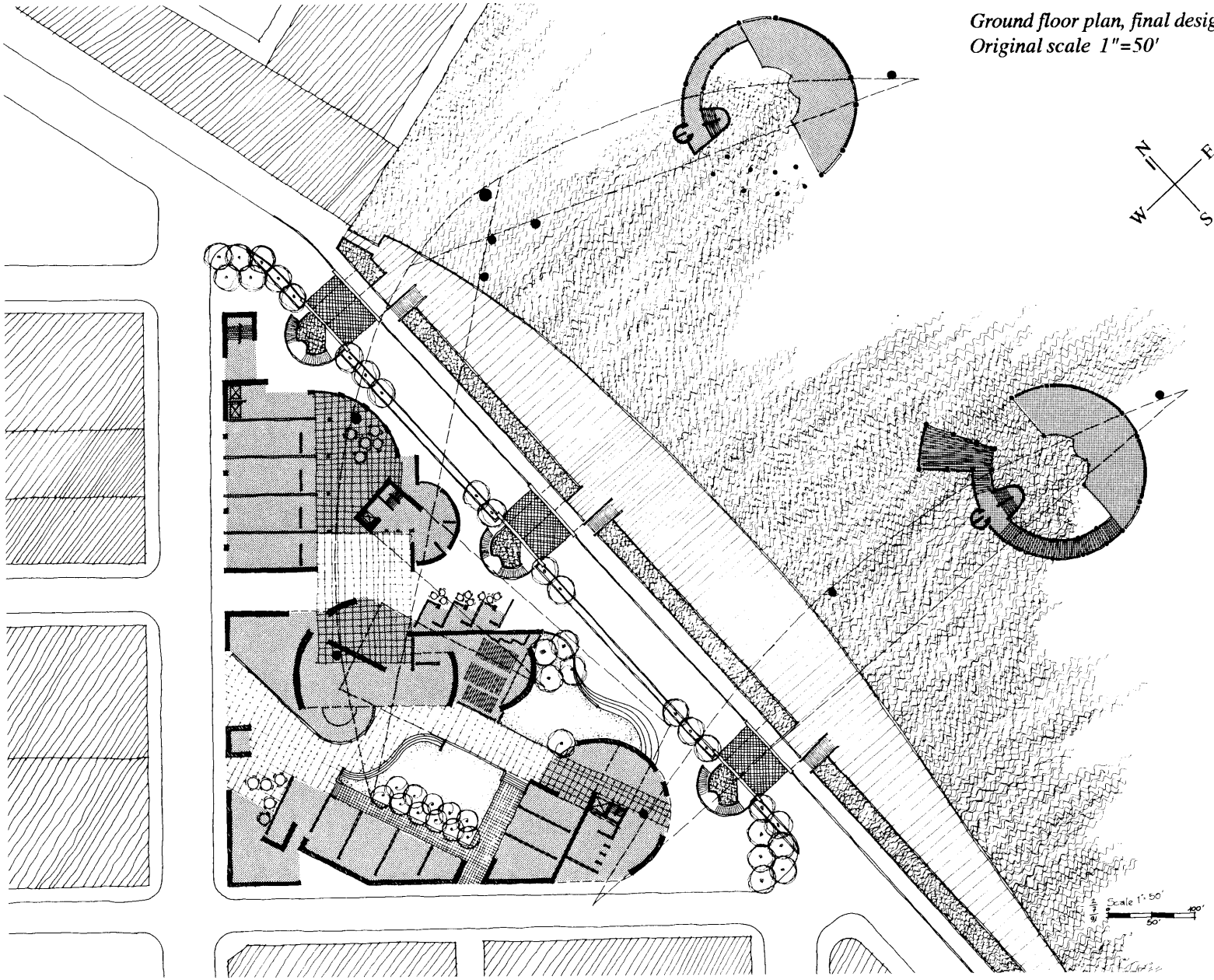
Fourth and Fifth levels Plan -
Design Iteration 12/19/90
Original Scale 1"= 50'

Section of the Tower Structure -
Design Iteration 12/19/90
Oringinal Scale: 1" = 50"



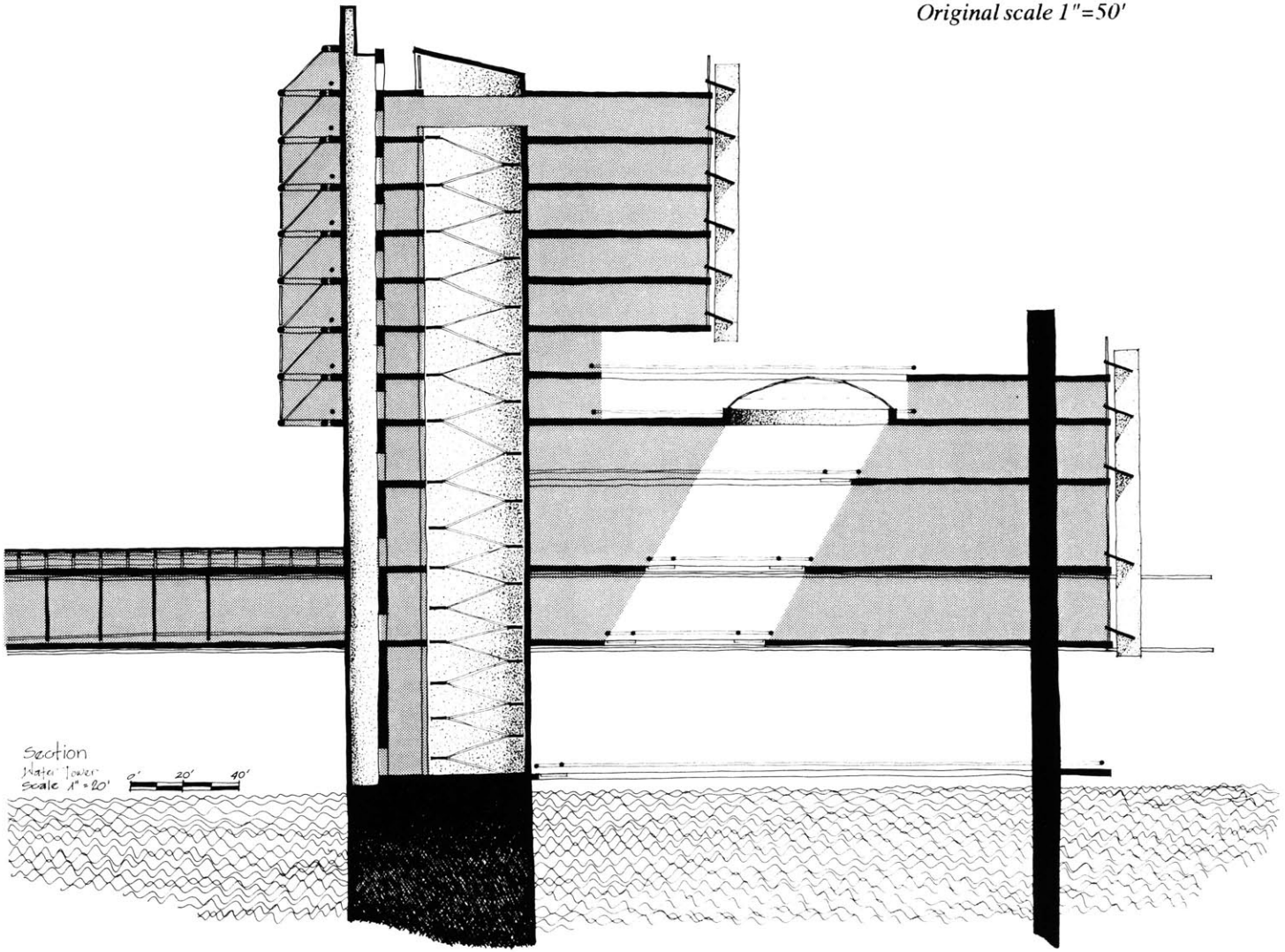
The form of the building is the product of five principal discoveries: the abstract structure of the block system, the configuration of the bridges, the establishment of objects in the water, the vertical modification of the towers, and the complexity of the edge. These discoveries are the transformation of many parts of this study and are therefore the collective memory in and of themselves. It is the culmination or summary of the experience and gained knowledge. With this understanding, I propose a new experience of the elements - one which establishes a dialogue with the new and the existing.

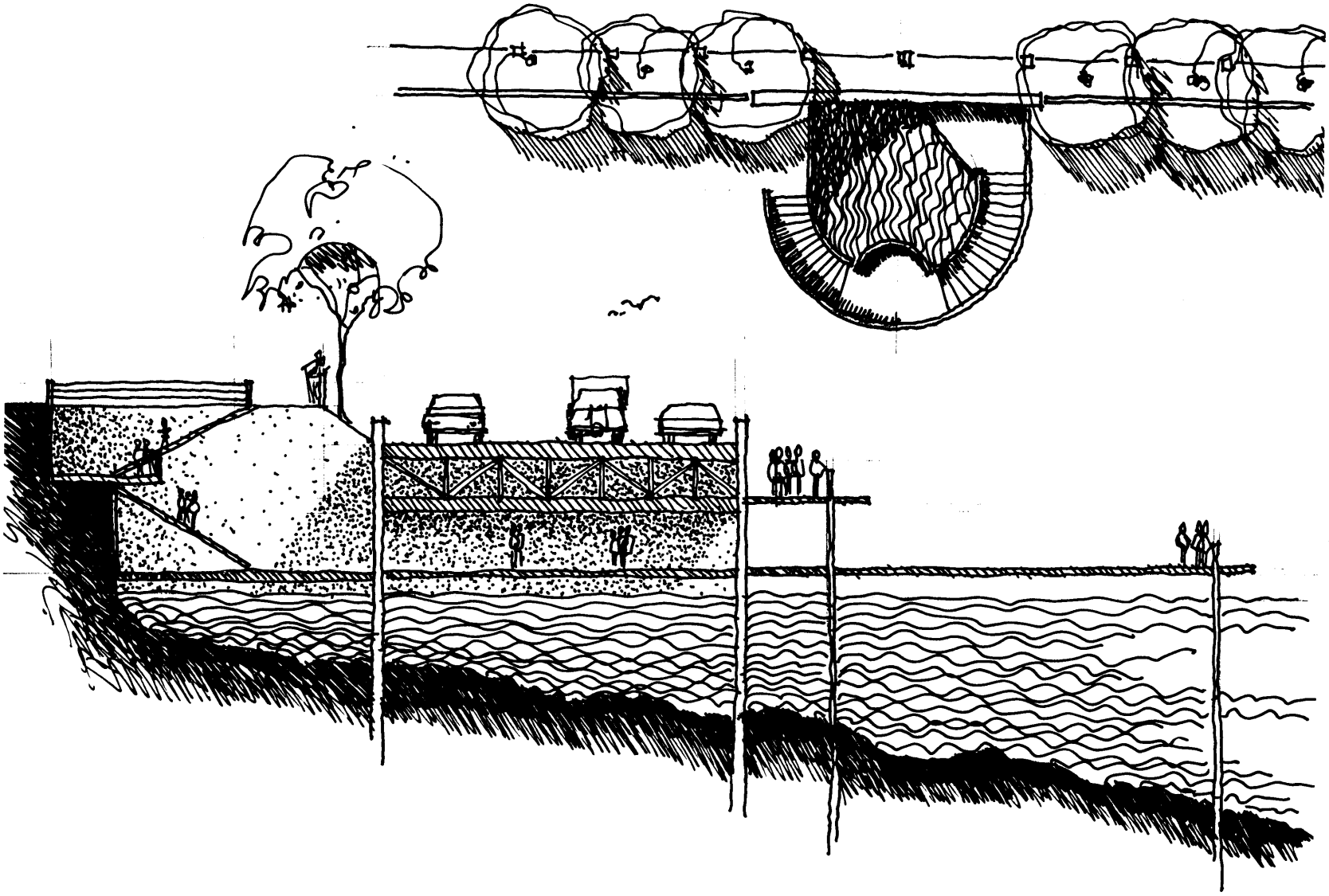
The *abstract structure of the block system* is a transformation of the existing block reading. The design extends the current block system into the Sea Wall lot. Streets which run in the north-south direction are faced with continuous, solid and relatively impenetrable surfaces. Openings that do occur are of a large size reflecting the dimensional character of the neighborhood. In the east-west direction the building configuration continues the complexity of the building front surface. The variability allows for almost random penetration into the core of the block. Where physical penetration is not possible visual access is maintained. The core of the block is open for free access to any part of the building allowing for reinterpretation of the space. The physical configuration of the block system would naturally extend beyond the Sea Wall lot boundaries, however, the continuation of the network is prevented from occurring as a result of the Bay edge. The intent was to, in some way, allow the force rather than the form of the system to extend out into the water. This was achieved through the bridge structure.



Ground floor plan, final design iteration.
Original scale 1"=50'

Tower structure section, final design iteration.
Original scale 1"=50'





Sea Wall lot connection to the water.
Section and Plan.

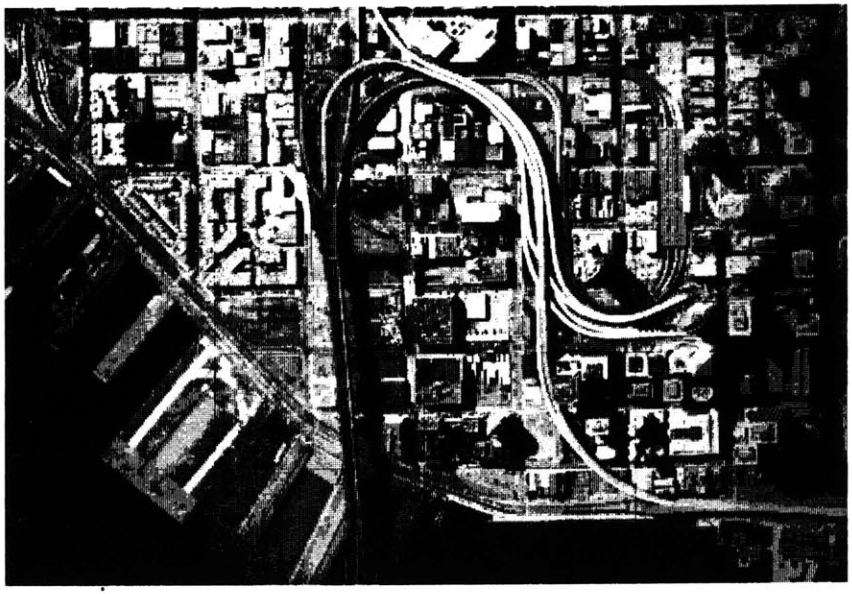
Extending from the Sea Wall lot to the cylindrical towers, the bridge overpasses three zones: land, edge and water. Each zone is addressed in *the configuration of the bridge*. The land is firmly connected to the spatial structure of the City. The building on the sea wall lot is a natural extension of that system which connects to the bridge as an anchor. It is the bridge, however, which completes the force of the block system. Although the bridge is distinctly foreign to the existing form its dimensions are the same as a South of Market block structure. In this way, the formation of the basic "cell" of the neighborhood is maintained. Another consideration is access to the water. The bridge lifts the water access above the street level, maintaining my position that the waterfront should be available to everyone. Bridging eliminates the problem of establishing a visual barrier between the land and the Bay, allowing complete freedom of movement underneath. The final consequence of the bridge is that its removal from the ground level allows the bridge configuration to take on a new agenda. Its three dimensional and dynamic character begin to address the attributes of the wind, movement of the water, and it is a natural extension of the Bay Bridge structure.

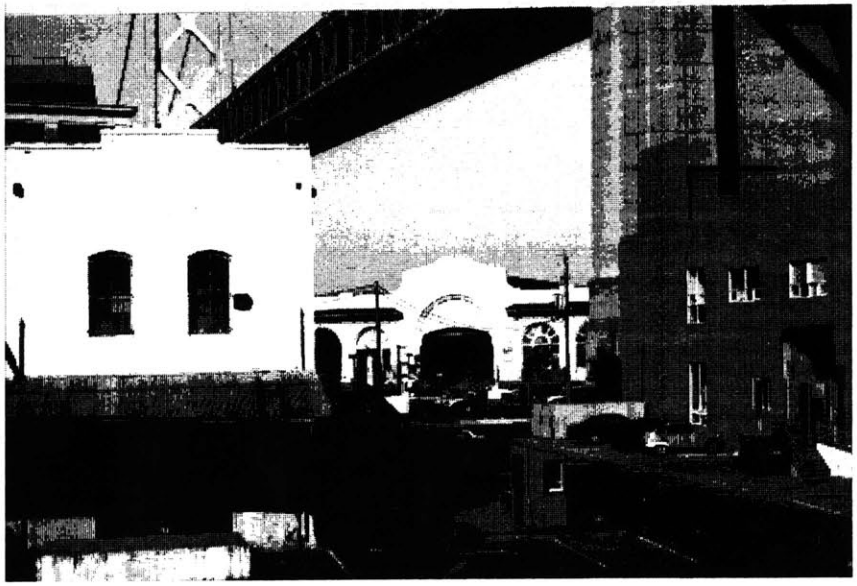
The *establishment of objects in the water* is again an effort to create a new experience which reveals the quality of the Bay. Two factors determine the range of possibilities in this part of the site: dynamics of the water and lack of the grid structure. The continuous movement of the water suggests that a form which allows this action to occur freely would be the most appropriate. The generation on the water therefore is similar to the construction of a ship or a pier in anticipation of a constant force acting against its surface. The other element is the lack of the grid structure. Although the grid system is an intimate part of the Sea Wall lot, the grid has no function in the water and thus exists only in

abstract form. In fact the cylindrical structures which are placed on the land represent the influence of both worlds: land and sea. Combining these two influences locates them on the edge, expressing a change or transformation of the structure. An equally important influence is the rhythm of the finger piers. The organization of the tower structure suggests the continuation of this rhythm, shadowing the presence of the old pier structure. In the transformation of the deck above, the pier is now space open to the water defined by the bridge and tower structures. The vertical section through the tower emphasizes the experiential variation between the top, middle and lower levels of the building. Each level is unique in its connection to the elements. Additionally, a tilted opening just at approximately the center of the structure provides a contiguous understanding of the total volume of the space and acts as a reference for orientation.

The final principal element is *the articulation of the edge*. For several miles the waterfront edge is a continuous stream carrying people and vehicles. From this one position one can move through several districts and neighborhoods gaining a knowledge of the City. As a central component on the site, the edge reinforces the continuation of knowledge. Movement is allowed to occur freely along the edge, serving as a collector that allows the continuation of knowledge of the City. The slight shift outward towards the water is the recognition that one has arrived at a space. This is further distinguished by the arms of the bridges which embrace the edge extension, subtly defining the field.

Together these elements express the basic concept for the generation of form at this site. It is the culmination of many factors of which a multitude of integral and inseparable elements form the image. Aldo Rossi maintains that, "urban science, understood in terms of all the foregoing arguments, is a web composed of many threads whose design appears increasingly clear. If one looks at such subjects as the transformation of the walls of the ancient city, the existing body of archaeological material, the historical center as a part of the city, and finally the city itself in terms of its parts, one can see all these as integral and inseparable elements of an overall formation."





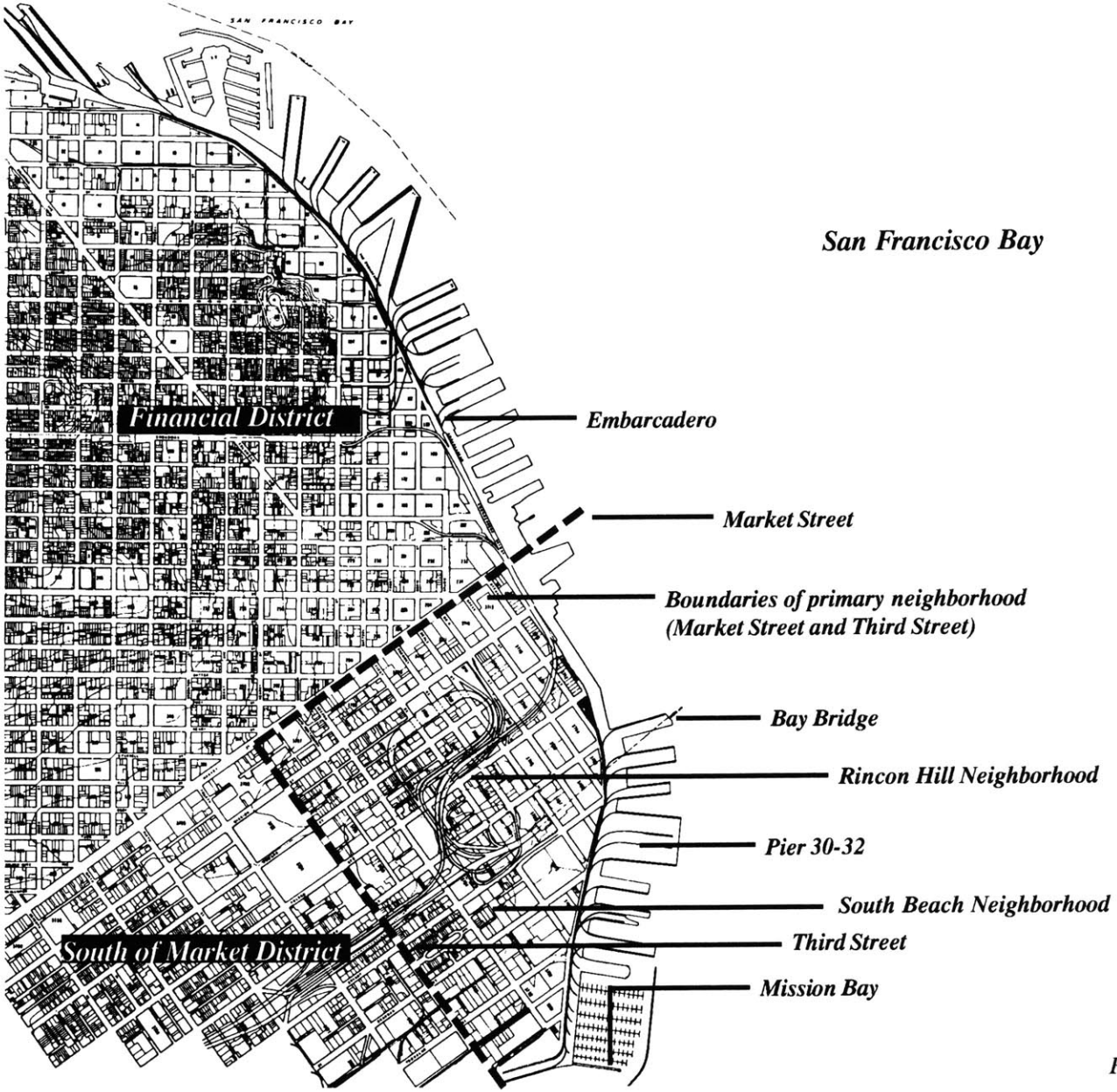
Pier 30-32 and its adjoining sea wall lot have been selected to provide a stage for this study. It is one of the few sites on the waterfront with unobstructed views of San Francisco Bay and over 1000 feet of Bay frontage on it's eastern side. It attracts walkers, joggers, shore fishing and site seeing, although it is largely scarce of people. Coupled with the impact of the Bay is the impressive presence of the Bay Bridge just to the north of the site. It is anchored at Beale and Bryant Streets. The Bay Bridge platform is over 150 feet above sea level, and extends across the Bay for 4.5 miles interrupted only by Treasure Island at mid-point. The Bay Bridge connects San Francisco with East Bay communities such as: Oakland, Berkeley, and Alameda. Less than five blocks to the north of the Bridge, is the beginning of the Financial District with approximately 65.0 million square feet of office space. Four blocks to the south is the Mission Bay site, a newly proposed neighborhood consisting of 313 acres of mixed residential, office and commercial space. To the west is the SOMA district much of which is still low rent, warehouses, artist lofts, and factory outlets. Four blocks to the east is the Yerba Buena Civic and Cultural Center, a newly constructed national center for the arts. Its projected opening is late 1992 to mid-1993. Due to the proximity of the neighborhood to the Financial District and Mission Bay, South Beach commands some of the highest rents in the SOMA district.

The property consists of approximately 17 acres of area of which 13 acres constitute pier structure and the additional acreage on land is the Sea Wall lot. The site is divided by several traffic routes, however, only the Embarcadero is primary with approximately 36,000 car per day. Most of the street experiences a reasonable amount of pedestrian traffic but the primary flow is "commuting"

Chapter IV
Geographic Delineations

The Site:
South of Market and South Beach

Page 71: Top, Panoramic view of the site, looking north to the Bay Bridge. Left, Aerial view of South Beach, Bay Bridge, Rincon Hill and the Financial District. Right, Adjacent lots to the Sea Wall lot and Pier 30-32.

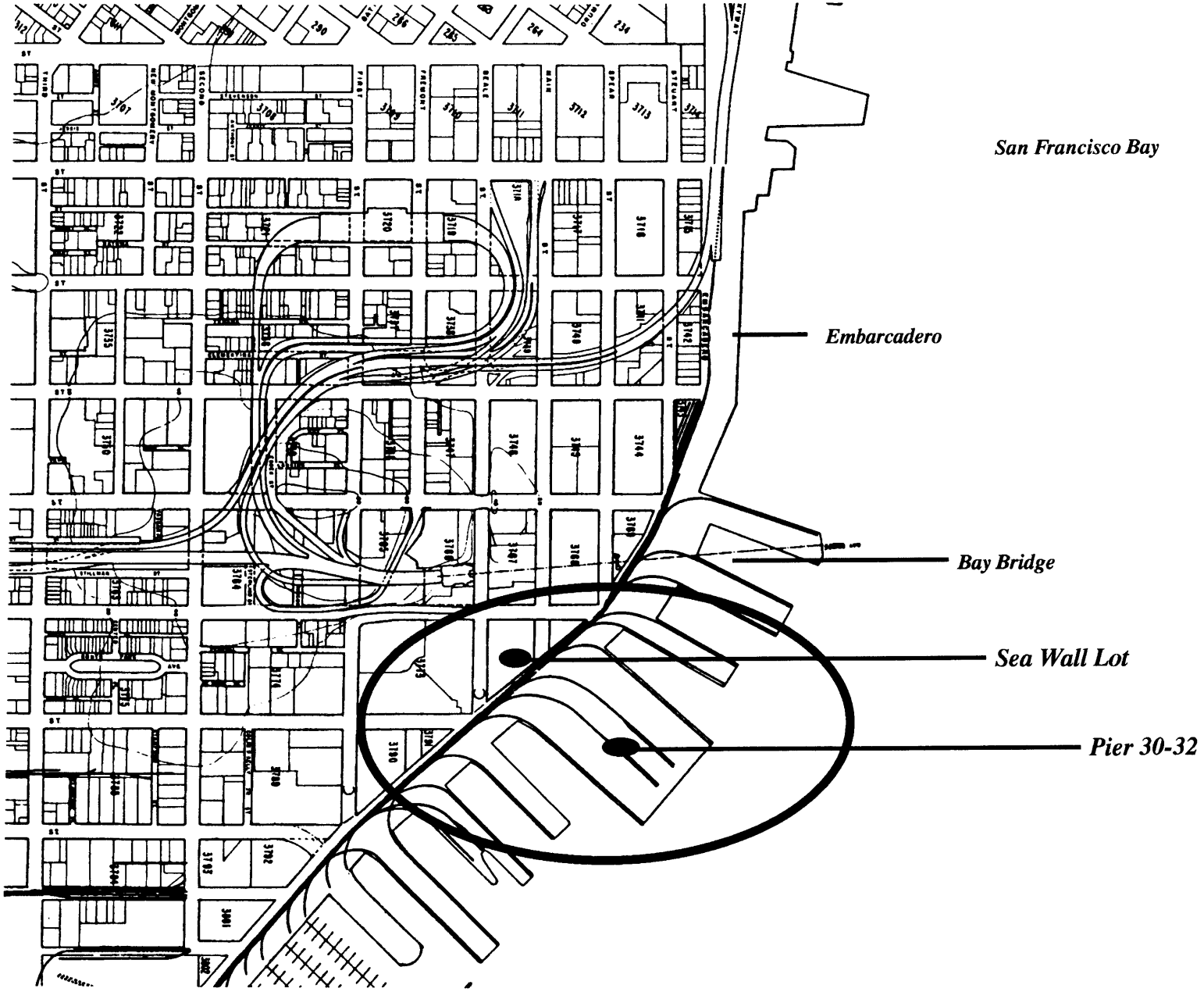


Plan of Downtown San Francisco

to and from the Financial District. Some exception to this pedestrian orientation is again along the waterfront. With the Embarcadero improvements including a light rail system connecting the subway system and Fisherman's Wharf, at the northern end of the waterfront a dramatic increase in pedestrian activity should be anticipated. Until, however, some type of public focus is developed in the area the future of the traffic should remain primarily passersby.

The condition of Pier 30-32 is deteriorating and both developers and the Port of San Francisco assume that the Pier would need to be completely reconstructed to meet safety and earthquake standards. The dimensions of the Pier are approximately 600 feet wide along the waterfront and 900 feet long, extending out into the Bay. These dimensions are similar in size to the SOMA block size, making it a natural extension from land to water. Additionally, Pier 30-32 as one of the largest San Francisco piers, extends far beyond adjacent piers. In fact the distance from land is so great that there is a distinct relationship reversal from the Sea Wall lot to the outer edge of the Pier. The Sea Wall lot is firmly connected to the street and building conditions around it. As you move out towards the Bay, sounds of the City and the impact of the neighboring buildings diminishes to the point of complete reorientation to the activities of the water. Sail boats, cargo ships and tankers of all sizes often maneuver very near the Piers edge. Only the immensity of the Bay Bridge reconnects you back to the City.

At the Sea Wall lot "all roads lead to the Financial District." In reality, bordering roads such as Bryant, Brannan and the Embarcadero move away from the Financial District into the primary residential regions of the City,


San Francisco Bay
Embarcadero
Bay Bridge
Sea Wall Lot
Pier 30-32

However the effects of the Bay Bridge, and large size of the office buildings to the north tend to focus ones attention to the center of the City. Therefore, given these conditions, the overall experience of the site is split between two great features, the Bay and the Financial District. The one fact that both of these two orientations have in common, however, is their monumentality. The site is firmly grounded in this urban context.

The Market Area

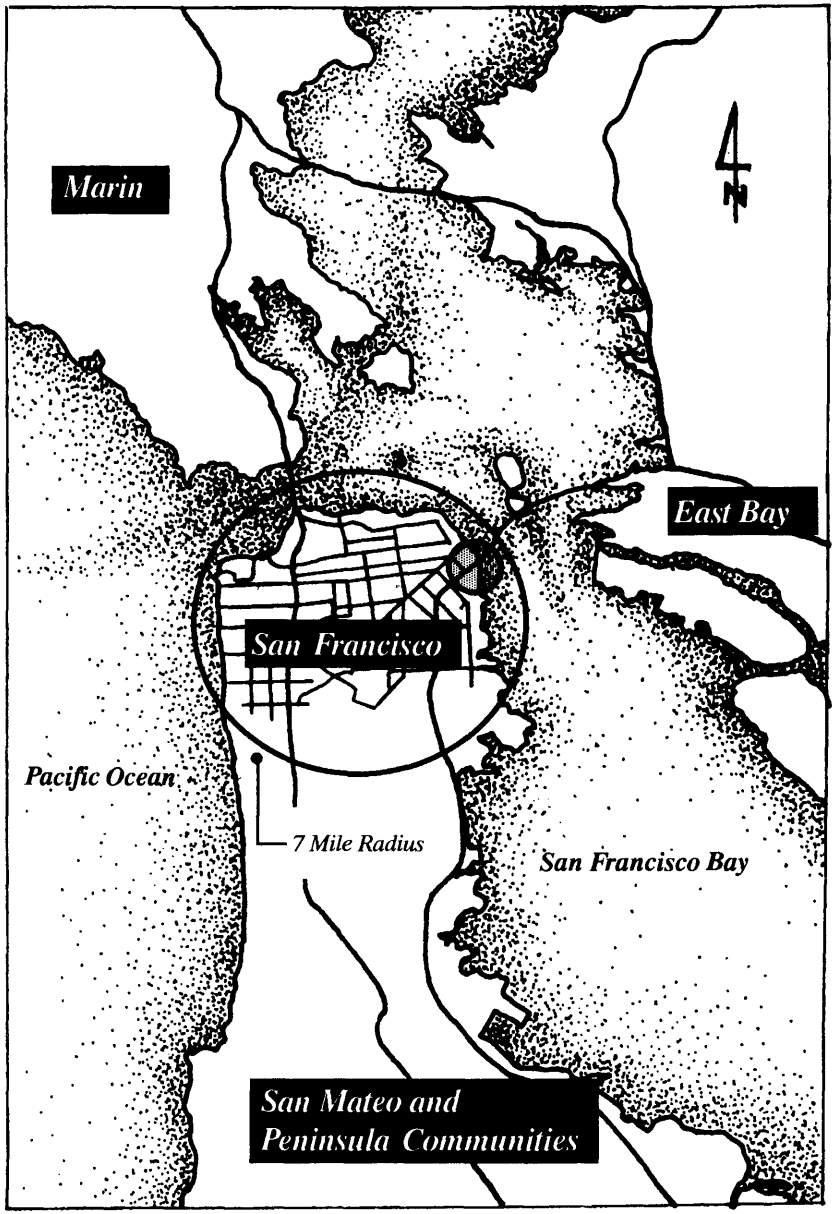
In reviewing the extent and degree of the market area, it should be established that the integration of "unrelated" use for this site suggests almost a three dimensional market relationship. This is due to the two proposed uses on the site, commercial and a Museum/Memorial. Both may interest all groups, such as museum seekers who wish to purchase related material, however, retail may not be the primary intent of the museum participant. On the other side, neighborhood users may be primarily focused on the retail center as a meeting place and a market and be less interested in use of the Museum/Memorial. This dual focused orientation presents a complex relationship between user groups. It should be noted, however, that the site is in urban context and over lapping markets flourish in this arena. In my opinion, this relationship does and can thrive in San Francisco. Additionally, the immense size of the site allows for great flexibility in the way these two groups are related. Based on these assumptions, an attempt will be made to co-mingle these two user groups. Given the above argument, the neighborhood user will be defined as having some different conditions then the community at large and that the foreign visitor is more likely to have similar motives for coming to the site as those in the community. For this reason, foreign visitors and the community will be considered as a single group.

The primary and secondary market area is two-fold and is based on proximity to the site and user interest. For the commercial venture the primary market area is South Beach and Rincon Hill. The secondary market area would be defined as the greater San Francisco community. For the Museum/Memorial the primary market area is San Francisco and the secondary market is the greater Bay Area region. Foreign visitors will be counted as falling into the Museum/Memorial market group. Again, however, since both the commercial sector and the Museum/Memorial sector have over lapping interest there will be a residual user cross over between the various groups. For instance, living in the neighborhood would not preclude the potential use of the Museum/Memorial and visa-versa. The overlap should be seen as a overall positive condition. For the purposes of this study, all users of the site who come from beyond the greater Bay Area will be considered foreign visitors.

For the commercial venture the primary market area is defined by distance, geography and occupants of the neighborhood i.e. office workers and residents. Geographically speaking, South Beach and Rincon Hill are somewhat encapsulated. To the north the frontier of the neighborhood is distinctly organized by the shift in the street grid. Market Street defines this shift and a tightly fitted assemblage of high-rises reinforces the edge. All streets which originate from the site seemingly terminate at this point. To the West the edge is less articulate, however, several natural and man-made features suggest an end to the neighborhood. Third Street is a primary point of entry into the Financial District resulting in very large vehicular flow perpendicular to the Bay's edge. This acts almost as a river prohibiting natural pedestrian

penetration. Additionally, there is a ridge that runs parallel to Third Street gently raising about 50 feet above sea level. The ridge creates a visual and physical barrier into the heart of SOMA. On the Southern edge, four blocks from Pier 30-32 the China Basin Channel permeates the lands edge about 1.5 miles creating a natural barrier to Mission Bay. All of these identified boundaries fall between five and six blocks which is also about the maximum distance pedestrians would normally consider walking before using the car. The occupants are defined in two groups, office workers and local residents. For the most part, the organization of these two groups is defined by landscape barriers primarily because landform and city infrastructure have controlled planning policies restricting use. The Bay Bridge separates Rincon Hill, which is at the northern end of the neighborhood, from South Beach to the south. Pier 30-32 is positioned on the edge of South Beach bordering Rincon Hill. From the top of Rincon Hill down to Market Street the predominate inhabitants are day use office workers with only a small number of apartments located in the area. In contrast, South Beach is predominantly residential apartments with only small amounts of office space.

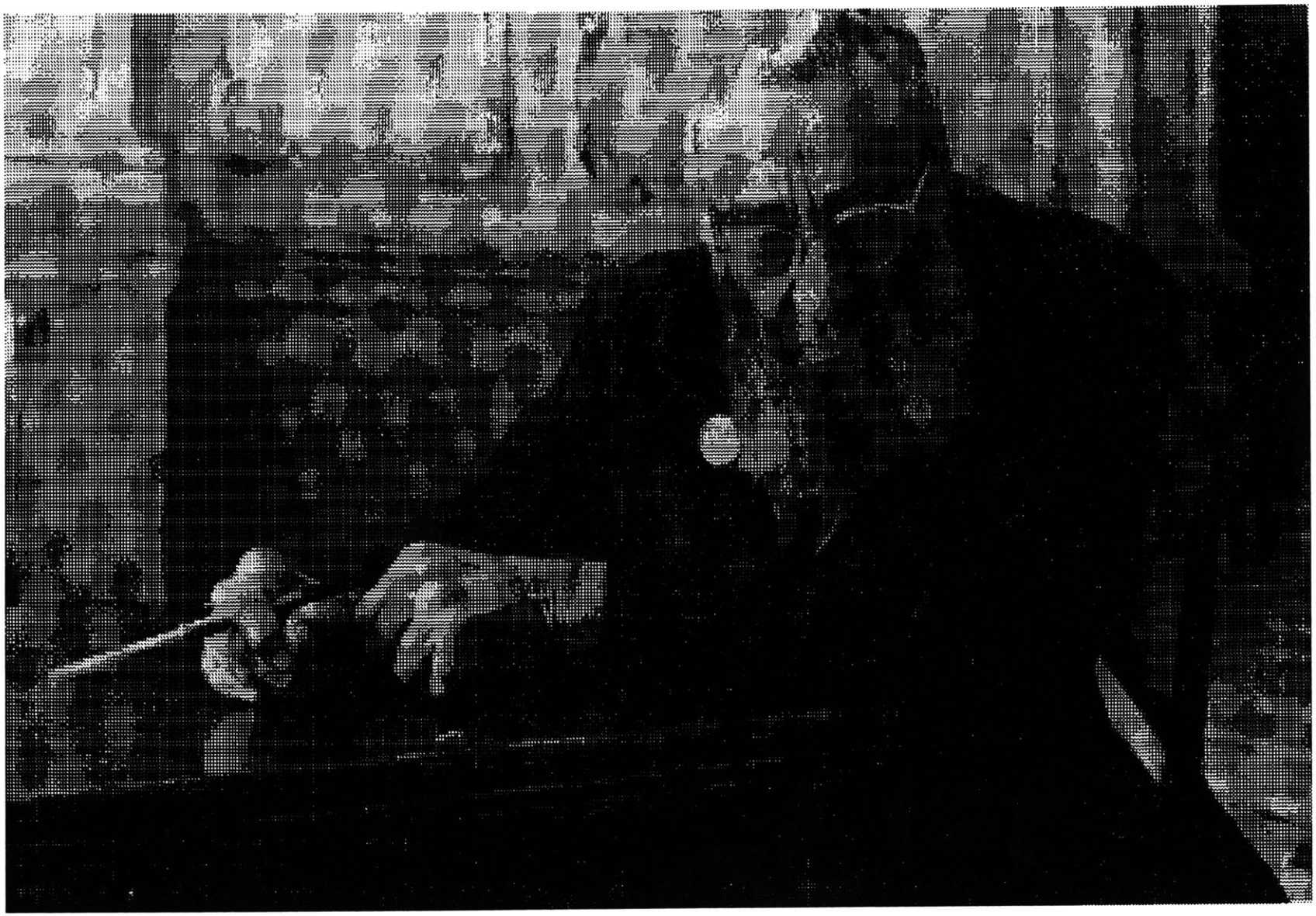
The secondary market area for the commercial venture is greater San Francisco. It encompasses an area of about 7 mile radius with Pier 30-32 at the center. Five major streets provide access to Pier 30-32 from almost all parts of the city. Howard, Folsom, Harrison and Brannan Streets gain access from southerly points of origin and the Embarcadero provide access to the site from northerly points of origin. Additionally, streets adjacent to Pier 30-32 are primarily for local uses. Getting to other locations beyond San Francisco generally is achieved by accessing the freeway system and increases travel time to at least 30



San Francisco amd Bay Area,
The circle near the Bay Bridge is the
Pier 30-32 location. (Zofia Siuta)

minutes or more. For this reason the commercial venture is not likely to be frequented by people beyond the 30 minute perimeter. The exception, however, will be in consideration of the overlap groups who come from beyond San Francisco for the purposes of visiting the Museum/Memorial and may use the commercial facilities.

The scale, uniqueness and magnitude of the Museum/Memorial will extend it's market area far beyond that of the commercial venture. Considering the history and demographic structure of the Bay Area, it would be reasonable to assume that the primary market area would extend out to the 7 mile range encompassing all of San Francisco. This would take into consideration that the largest Asian population concentrations are in the Sunset, Richmond, and Chinatown Districts, two of which are located at the western most points of the City. The secondary market for the Museum/Memorial would extend to the greater Bay Area. This area is within a one hour travel time from the site. Access from all points would be achieved by using Interstate 101 from the north and south, Interstate 80, from the east and Interstate 280 from the south-west. Both Interstates 80 and 280 exit into South Beach and Rincon Hill.



"I've lived my life so that I can look any man in the eye and tell him to go to hell." George Woolf (1889-1972), first president, Tenants and Owners in Opposition to Redevelopment. (Ira Nowinski)

Chapter V
Development Issues

Development Rights

The Port of San Francisco has been the host of a myriad of stewards. In the last 100 years the jurisdiction of the Port has been transferred between the State and City of San Francisco several times. Today the authority of the Port is shared between the City and the State. The primary vehicle of the San Francisco waterfront is the Port Commission. Although the Port of San Francisco is a city agency, it is highly regulated by State mandates, thus giving the Port a unique relationship to both levels of government. This relationship allows the Port to make quasi-autonomous decisions about its own destiny, while at the same time diluting the decision making process through the appeasement of two government bodies. Ultimately, the waterfront of San Francisco remains under the control and ownership of a government body and maintains the primary goals of local and national public interest: commerce, and environmental sensitivity.

The primary boundary of Port control is a 7 1/2 mile zigzag pattern of land along the waters edge. It ranges from 500 feet to 100 feet from land to the Bay, and extends out into the Bay to slightly beyond the piers end, approximately 1200 feet. Although there are a number of State mandates effecting the development of Port land, for the purposes of this study we will concern ourselves with a few primary considerations. The San Francisco Bay Conservation Development Commission, known as BCDC, is a State regulator of the Bay's development. As part of their regulatory activities they cover six broad overlapping areas: pre-application assistance to project proponents, application review, analysis, formal action, project monitoring after permits are issued, and enforcement actions. Their review of projects, however, is restricted to only areas in or over the Bay and all land along the water within

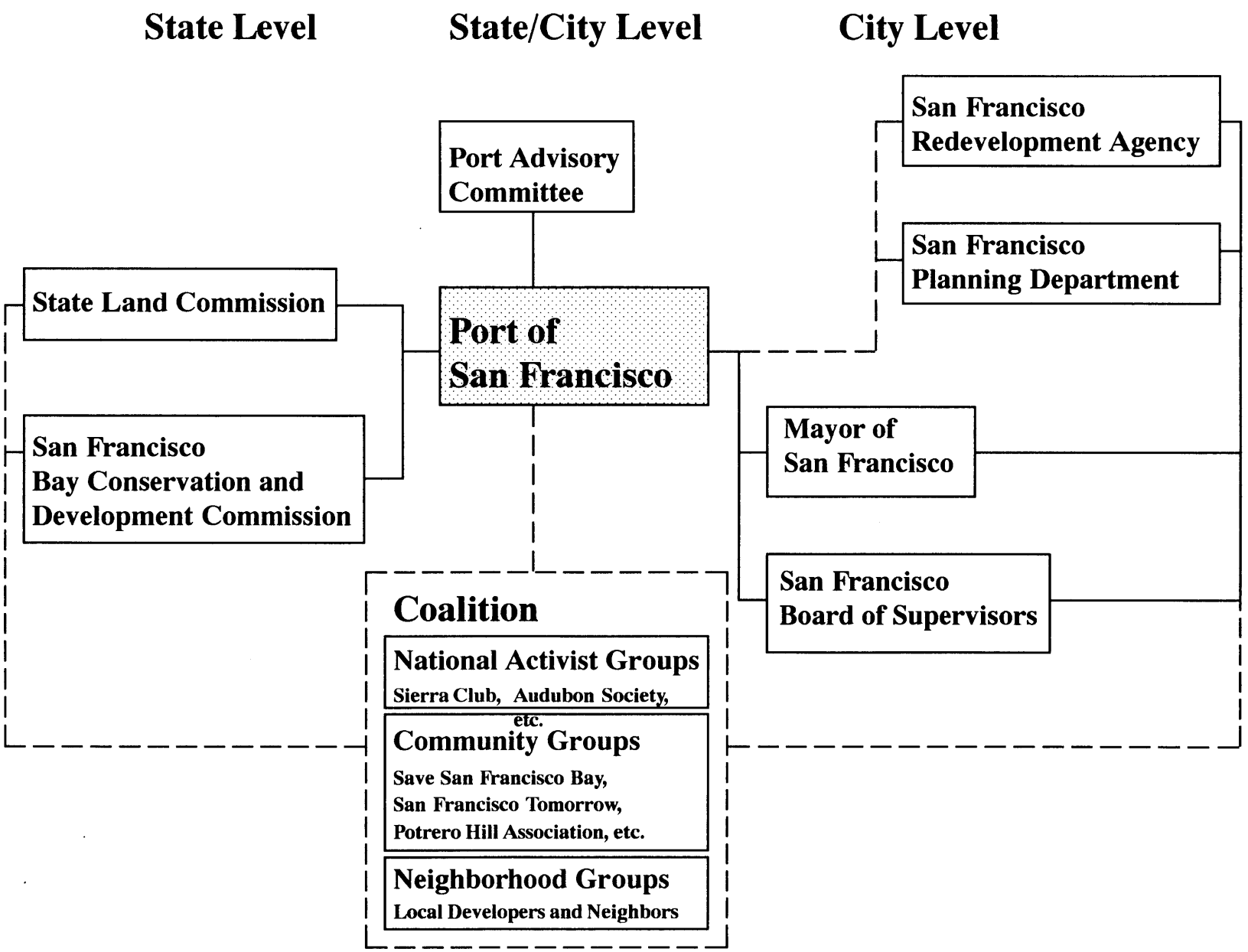
100 feet. This means that about 2.5 acres of the Sea Wall lot adjacent to Pier 30-32 is not under their jurisdiction, however, the remaining 14.5 acres is included in their review. BCDC's 1975 San Francisco Waterfront: Special Area Plan, identifies: maritime, public recreation, or commercial retail (including hotels and cultural facilities) uses for Pier 30-32. As mandated by the State, the Port is not permitted to develop housing or maritime unrelated office space on Port land. All other uses not included in the above list would require legislative action.

Except for housing, the State mandate is by design a vague policy, leaving diverse interpretations. Additionally, past projects indicate that the uses on Port land are as broad as one has deep pockets and influence. The Delancey Street project, completed in 1990, is a great example of policy fluctuation. Just south of the Pier 30-32 site, is a mixed-use development containing 177 residential units and 61,000 square feet of commercial space. Funded and developed by the Delancey Street Foundation, a non-profit rehabilitation organization, they are one of the first housing projects on Port land. Although the State mandate specifically prohibits the development of housing, through the long time influence of the organization and a strong advocacy to develop low cost housing for the "public good," the Foundation was able to remove the housing restrictions. This illustrates that almost any proposal is possible with proper government and community support.

A second consideration is the open space requirement. By State mandate the BCDC requires that in all cases of existing pier modifications for new development there will be imposed a 1:1 building to open space requirement. In

other words, for each square foot of development, 1 square foot, or 50% of the land, must be open space. Given that almost no development on the existing piers is suitable without major pier reconstruction, any proposal for Pier 30-32 must consider this constraint. In the case of Pier 30-32, the pier redevelopment would amount to donating approximately 6.5 acres for open space. It should be noted, however, that in negotiations with the Port of San Francisco this requirement could be deferred. This is due to the Port's surplus of "pier credits" as a result of removing piers in other places on the waterfront. This now allows the opportunity to build out a greater amount of area using the pier credits.

The process for gaining control of a port site is a long and complicated ordeal, requiring dozens of reviews and approvals by dozens of regulators. For the purposes of this study we will not delineate the exact journey, however, the basic understanding of the time and financial elements required throughout the approval process, is critical for the proper development of the financial pro forma. Keri Lung, Manager for Development of the Port of San Francisco, suggested that a large project could take 2-4 years to complete the approval process. During this time, the Port offers the developer "Entitlement Rights" which allows the developer to pursue the approval process but does not allow or guarantee any development rights. Moreover, the Port assumes no financial responsibility for cost incurred during this period. Recently, The Koll Company proposed the development of two adjacent piers, 24 and 26. For the approximately 7.5 acre site, they estimated it would cost nearly $2.0 million prior to receiving development rights for the project. The Port suggested the high probability and danger that during the approval process the original


State Level
State/City Level
City Level
Port Advisory Committee
San Francisco Redevelopment Agency
San Francisco Planning Department
State Land Commission
Port of San Francisco
San Francisco Bay Conservation and Development Commission
Mayor of San Francisco
San Francisco Board of Supervisors
Coalition
National Activist Groups
Sierra Club, Audubon Society, etc.
Community Groups
Save San Francisco Bay, San Francisco Tomorrow, Potrero Hill Association, etc.
Neighborhood Groups
Local Developers and Neighbors

concept could be completely modified by other intermediate agencies and that even the ground lease is determined by the Board of Supervisors not the Port. The lack of control of the project during the approval process and ultimate decision at the end of the process, could present unacceptable deviations. In the event that the proposal becomes undesirable due to modifications, the Port maintains the right to refuse the project at anytime prior to awarding development rights.

Community Politics

The Strategic Plan for the Port of San Francisco identifies a minimum of 50 stakeholders in waterfront activities. Many have an interest in one niche or the other and are not concerned about the specific development of Pier 30-32. For the purposes of this study I have identified the ten primary stakeholders who would influence any decision of change for Pier 30-32.

The State Land Commission is the principal legislative body at the California government level. The mandates which begin to organize the use of the Port are created by this group. They have the ultimate responsibility to maintain the integrity of the Port. As a proxy, much of their policies are made at the recommendation of other agencies such as the San Francisco Bay Conservation and Development Commission who act as "watchdogs" and police of California State law.

The San Francisco Bay Conservation and Development Commission, or BCDC, is a 27-member Commission created by the State in 1965. Their formation was due to broad public concern over the future of the San Francisco

Bay. The McAteer-Petris Act, the Commission's enabling legislation, required the Commission to prepare "a comprehensive and enforceable plan for the conservation of the water of San Francisco Bay and the development of its shoreline." In 1969, the Commission submitted the completed San Francisco Bay Plan to the Governor and Legislature. The McAteer-Petris Act was subsequently amended to give the Bay Plan the force of law. Their primary function is therefore regulating fill and dredging, preserving the Suisun Marsh, regulating new development within 100 feet inland from the Bay, prioritizing uses giving highest priority to water-oriented uses, pursuing planning and policies for the Bay and administering the Federal Costal Zone Management Act within the San Francisco Bay segment.

The Port of San Francisco is a city agency with the responsibility to specifically plan and manage the Port of San Francisco. With much of their scope defined by the State, they are organized by the City to function somewhat independently. Although they have a direct responsibility to the Mayor and Board of Supervisors, the Port district does not fall under the jurisdiction of the San Francisco Planning Department or the Redevelopment Agency. Both of these agencies, however, affected the polices established using the Mayor's office as their voice.

Special interest groups in San Francisco are as varied as there are opinions. These groups are organized to participate at both city and national levels of government, and in the past have formed coalitions, acting as decisive policy makers of civic issues. Often they oppose each other which means that each group must be heard separately. At the national level, the Sierra Club is the

primary interest group. The organizations size and structuring of local chapters has allowed them to work effectively at both the State and City level. Most of the other interest groups act at the local level such as San Francisco Tomorrow, Save San Francisco Bay, Coalition for San Francisco Neighborhoods, SPUR, and Potrero Hill Association. To date, the local groups have been the most effective at shaping the policies of the City and Port of San Francisco. On November of 1990, the San Francisco Tomorrow group took the lead in submitting Proposition H, on the City ballot, which proposed to require the City to prepare a "Waterfront land use plan," and to determine the use of hotels as an unacceptable non-maritime land use. The proposition was approved.

Finding A Consensus

It is no coincidence that there has not been a successfully developed project at the Port in 10 years. It is said that in San Francisco no decision is made without the consent of the entire population. Of course no community can unanimously agree on any public dispute so here lies the problem. For the most part, the Port of San Francisco has approached development with the old fashion method, of "present and defend," projects that are in their interest. Their hope is that they can be sensitive enough and expedient enough in the design and approval process to circumvent opposition. The Port's success record, however, speaks for itself. For almost every development proposal there has been major opposition and in some cases agreements have been made and then broken just before Development Rights have been issued. The Port has expressed that it is not enthusiastic about implementing agreements achieved through compromise. For them, I suspect that compromise offers all sides less than what they had hoped. Given these facts, for any future

development to occur on Pier 30-32, one must begin to understand the methods for breaking the impasse.

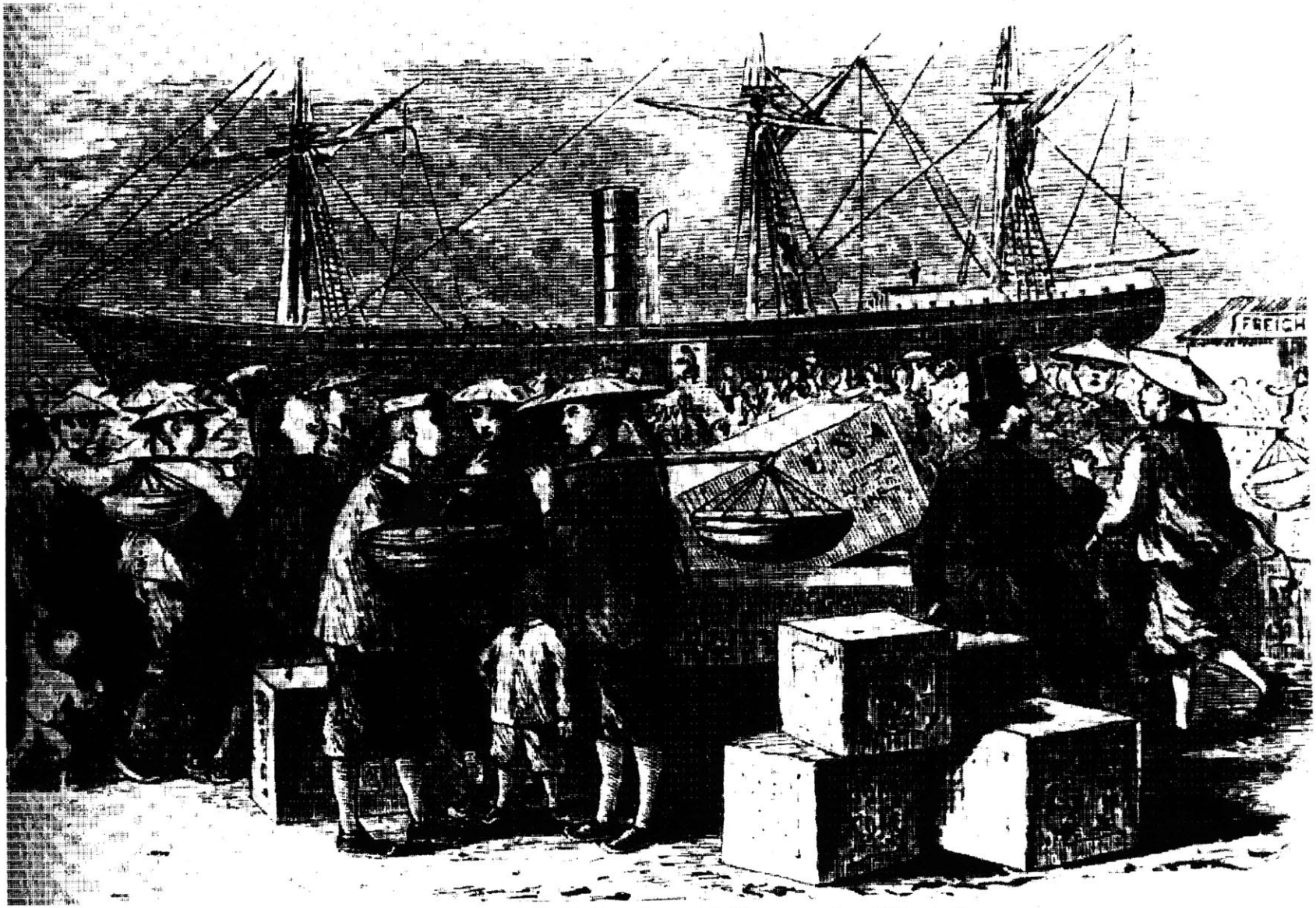
The idea of consensus building through negotiation can be an effective tool for identifying an "all-gain" rather than "win-lose" or compromised solution. In his book, Breaking the Impasse, Lawrence Susskind suggest that, "the only way to avoid stalemate, reduce the need for litigation, and restore the credibility of government is to generate agreement on how to handle the problems that confront us. We argue not for political compromise, but for voluntary agreements that offer the wisest, fairest, most efficient, and most stable outcomes possible. This requires that all stakeholders have a chance to participate directly in any dispute resolution effort."

For any group to enter into a dispute they must begin by clarifying their interest and try to determine the interest not the positions of the other parties. For example the Port has stated that the State mandate is to "further commerce, navigation, and fisheries." This has now been extended to restaurants, hotels, and specialty shops. This is their position, however, their interest is to generate long term stable revenue. Unfortunately, traditional maritime no longer fulfills their primary interest. Moreover, housing, even with public access, is not attractive to the Port because of low profits and the future potential for opposition. These are at the heart of their decision making conscience and must be recognized and put on the table in any negotiation. All of the stakeholders have a unique agenda but until all of the disputants have presented a clear picture of their interest, it is impossible to collaborate on integrative solutions. For a successful development on Pier 30-32 to occur, interested parties must

seek an all-gain resolution. Susskind states that, "all-gain solutions depend on each disputant's ability to invent a way of satisfying his or her own needs while meeting the opponent's needs. This requires cooperation, even in the face of competing self-interests." As fairness is a fundamental component to any successful negotiation, Susskind suggests six ways to ensure fairness in the process:

- Provide a process which is open to the public.
- Determine that all the groups who want to participate are present and given an adequate chance to communicate.
- Identify what technical data is necessary for all parties and give all parties equal access.
- Give everyone an opportunity to disclose their views.
- Evaluate the accountability of the representative with their constituencies.
- Maintain the process of complaint at the conclusion of the negotiations.

Most importantly the participants must have the perception that the negotiated outcome is fair. Susskind argues that "A dispute resolution process open to continuous modification by the disputants is...the approach most likely to be fair." I would add that this approach would also be the settlement with the most long term commitment by all stakeholders.



Chinese emigrants waiting to board ship for Gum San (Land of the Golden Mountain). The voyage from China to San Francisco took two months, on the average. It was a rough passage; the Chinese crowded into the dark holds often suffered from abuse and malnutrition. Many did not reach California alive. (L.M. Dicker and California Historical Society)

Chapter VI
Development Precedents

Program Concept:
An "Ellis Island" of the West

For almost 150 years the greatest flow of immigrants to the west coast is from Asia. For most Asians their point of entry and destination was San Francisco and the Bay Area. This pilgrimage alone has established a 40 percent Asian population in the Bay Area. Today, most Americans, including the Immigration and Naturalization Service and even offspring of the many Asian immigrants, have forgotten the episode of Angel Island and South Beach's Oriental Warehouse where Asians were detained for long periods of time in abusive conditions. These two "golden gateways" are the poor relatives to Ellis Island in New York Harbor. For most Chinese who experienced these places, they were more like prisons then golden doors and not beacons of hope that the Statue of Liberty represented to the 12 million immigrants of the east coast. Judy Yung, co-editor of a book called "Island," said that the lengthy detentions, the extensive interrogations, "were never applied to any other group, only the Chinese because of the Exclusion Act and the 'paper son' controversy."

To be sure, Angel Island and South Beach represent the Ellis Island of the west coast, yet today there is almost no recognition of its existence. This program concept, therefore, is to re-establish the Asian presence and recognize their struggle. The realization of this concept will be in the development of an Asian Museum/Memorial in the approximate location of the first Asian arrivals to the west coast. Although a portion of the port-of-call is now land filled, Pier 30-32 in South Beach near the original site offers approximately 17 acres of area for the Museum/Memorial proposal. Pier 30-32 has a strong connection to the Oriental Warehouse, the original point of entry still stands less than one block from the site. Access to the San Francisco Bay also allows the potential ferry

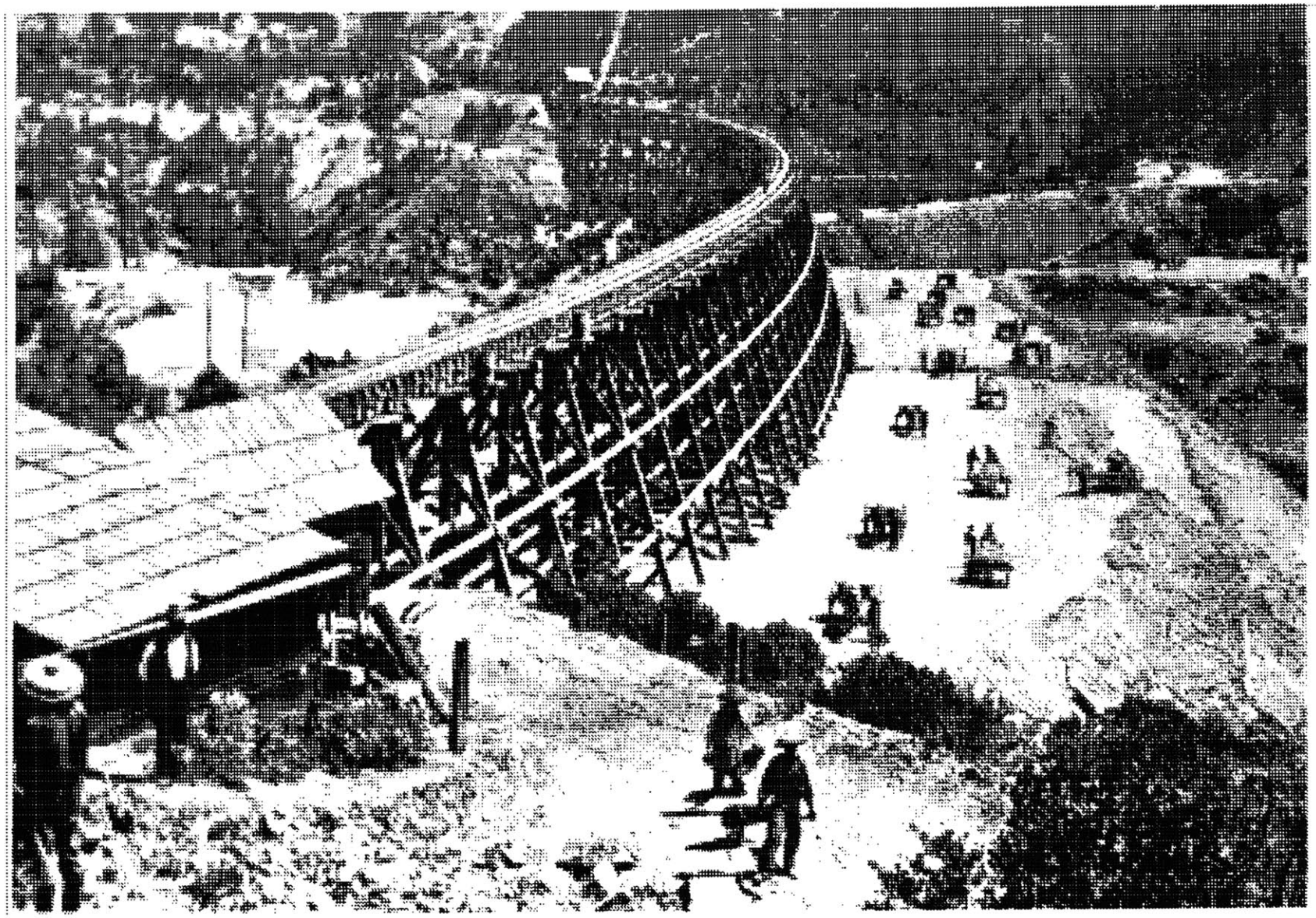
connection to Angel Island, linking the two most significant Asian immigration points of entry on the west coast.

One of the critical elements of this vision is its association with three levels of participants: the foreign visitor, community and neighborhood populations. In addition to the market information and political climate in San Francisco, the site's history, location and size suggest this type of public venture.

Foreign Asian visitors represent 30,000 people daily in San Francisco. The Asian Museum/Memorial would give them the opportunity to better understand their Asian relatives struggle in America. In a politically active San Francisco, this concept offers the community the most publicly advocated amenity, public access to the waterfront. This concept not only provides access but does it in a way that engages the participant. Moreover, this Asian Museum/Memorial responds directly to 40 percent of San Francisco's population and 1.5 million in the Bay Area. Furthermore, the Yerba Buena Cultural Center acts as catalyst between the well established cultural district to the north and SOMA to the south. An Asian Museum/Memorial in South Beach would begin to establish a "cultural necklace" through the City.

The new surge of apartments in South Beach has provided additional units needed in San Francisco. The new development, however, has failed to provide the necessary qualitative elements to form a neighborhood. A sense of public focus has yet to be established in South Beach leaving the streets mostly lifeless during all periods of the day. Market studies indicate the neighborhood lacks maturity and convenient amenities by the fact that South Beach attracts

The South Beach neighborhood on Brannan Street.



Asian railroad workers at Secrettown trestle, in the Sierra Nevada, east of Gold Run. Laborers on the Central Pacific used hand tools and black blasting powder. (Southern Pacific Transportation Company)

primarily young, single people. The Asian Museum/Memorial combined with a sensitively mixed commercial center, will provide a place in the neighborhood for learning, exchange and commerce.

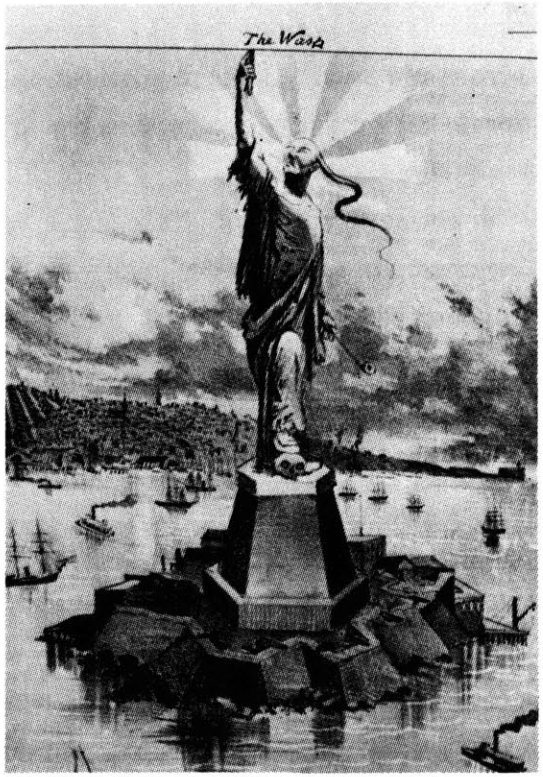
The financial nature of this concept will be to provide a private-for-profit commercial sector and the public-non-profit Museum/Memorial sector. The commercial sector will be financially designed to supplement a portion of the public event and the Museum/Memorial will act as the "anchor" tenant providing the critical mass to sustain the commercial sector's financial feasibility.

The Pacific Basin Connection: The Locus

Annual spending by all visitor activity in San Francisco is estimated to be $3.7 billion, with the combined local and international Asian visitor population contributing $886.9 million or $2.43 million daily. The daily per capita spending by visitors is $140.00 of which 27 percent is spent on food and beverage, 20 percent retail products, 6 percent entertainment and 2 percent on sightseeing. The remaining 45 percent is spent on accommodations and local transportation.

First Arrivals: "Bitter Strength"

The story of the Asian coming to America begins in much the same way as many other groups. For three centuries people have come to New York to seek fortunes, start new lives, and escape oppression. Almost every nation has sent sojourners, immigrants, and refugees. In this way, Americans of Asian descent share a similar background with Americans of European, African and other ancestries. On the other hand, the experience of Asians is unique. As the



Left, Statue of Liberty, New York Harbor.
Middle, European immigrants arrive to Ellis Island.
Right, (1870-1880) Weekly magazines drawings revealed strong anti-Chinese feelings in the West. This vision of the supposed "Yellow Peril" is set in San Francisco.
(The Wasp, May 10, 1876)

Statute of Liberty a symbol of hope for the Europeans in route to New York, for many Asians San Francisco was the destination for fulfilling their aspirations, hope, and prosperity. Beginning in the mid 19th century, at the Wharfs of the Pacific Mail Steamship Company, the first Chinese sojourners made the initial tenuous steps toward their dreams of finding Gum San, the mountain of gold. Waiting on the shores of San Francisco were many exclusionary organizations and factions who fought Asian immigration. On July 25, 1877, 500 rioters surrounded the Pacific Mail Steamship Company with the intent to set fire to the docks. Leaders shrieked about threats of "Yellow Peril" Asians taking jobs from whites and undermining the American value system. Three warships, the Pensacola, the Lacawanna, and the Monterey, anchored off the San Francisco wharfs and 1500 militia battled for three days leaving many dead and wounded.

To this extent the Chinese Exclusion Act was enacted essentially closing the doors for immigration to Asians. It became the model for many additional laws restricting Asians from entering the United States until 1952. Since 1970 almost 2 million Asians have entered the United States, evidence of how American immigration policy has changed. The majority of Asians still make the Bay Area their point of destination which amounts to the coming of an Asian cultural renaissance. Today the Oriental Warehouse and the South Beach neighborhood remains as an artifact of history and bears witness to the collective memory of many.

Asian immigrants in detention at the Pacific Mail Steamship Docks (Oriental Warehouse), San Francisco, and on board the ship Alaska on route to California. (Harper's Illustrated Weekly, May 20, 1876)

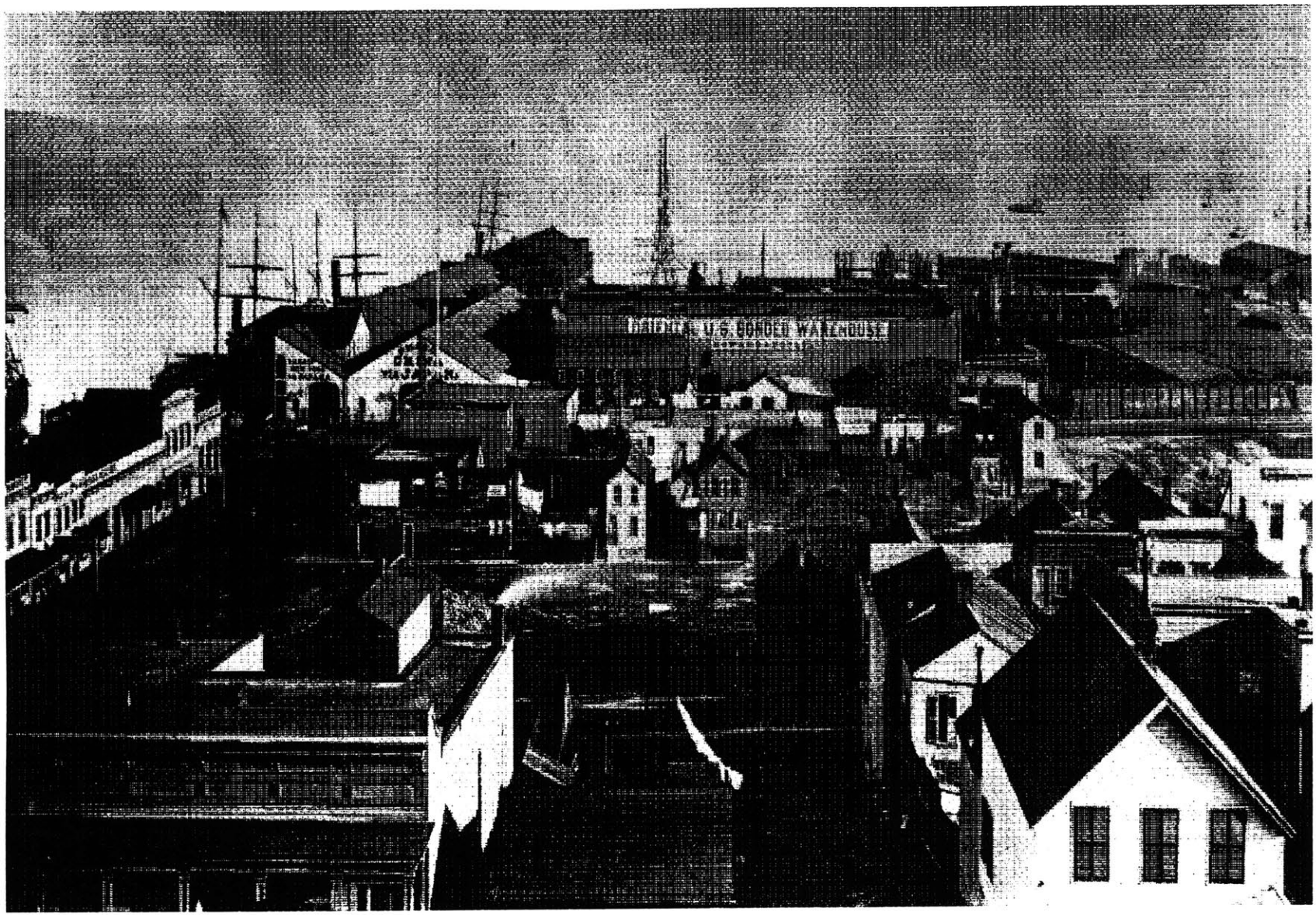
Early Immigration

San Francisco, California, February 2nd, 1848, the American Eagle arrived here from Canton, China. On board were two Chinese men and one Chinese woman, who were looked upon with inquisitiveness by some who had never seen people of that nationality. The observer gave no hint of how the immigrant would contribute to the history, economy, and culture of the American West during the next 152 years. Equally as obscure was the unforeseen hysteria their presence would generate in less than thirty years as the Chinese population grew. Three years later there would be as many as 25,000 Chinese in California and by 1900, 250,000. They were mostly young and eager men responding to calls from Chinese merchants in California. Gold had been discovered at Sutter's Mill presenting opportunities of wealth and work. Both were powerful attractions and in small supply in China. In blind trust they signed documents written in English committing them to work many years in the mines. They accepted loans from Chinese labor contractors or ship owners for passage to California, agreeing to pay the money back with the earnings they had made. Handbills inundated China from 1848 on:

" There are laborers wanted in the land of Oregon, in United States of America. They will supply good houses and plenty of food. There is no fear of slavery. All is nice. The money required for the voyage is $58. Persons having security can have it sold, or borrow money of me upon security."

Their voyage was an example of the tribulations to come. In 1854, 100 of the 500 passengers on the trading ship Liberated, died in damp cargo holds never designed for humans. Others died from malnutrition and abuse.

A newly arrived Chinese immigrant, 19th century.
(Thomas Cronise, Oregon Historical Society)



In 1861 through 1870 South Beach became the primary location for the Pacific Mail Steamship Docks. The Oriental Warehouse built in 1868 on Brannan Street survives today.

Most of the first arrivals entered at the Port of San Francisco and by 1860 the Oriental Warehouse, South of Rincon Hill, was built by the Pacific Mail Steamship Lines (PMSS) for the dual purpose of processing Asian Immigrants and trade goods. PMSS took the lead in establishing regular routes between China and San Francisco. The Burlingame treaty of 1870 increased the numbers of immigrants to 15,000 per year.

Subsequent Asian Immigrants

Japanese Americans:

From 1850 to 1900 the advent of the industrial age prompted many foreign countries to seek laborers. Though Japan's concept of equality with western nations ruled out a "Coolie trade," sending displaced peasants and city people overseas for work was appealing. In spite of protest against their immigration, the number of Japanese in America ballooned from 25,000 in 1900 to over 70,000 by 1910. Most lived in California.

Philippine Americans:

The Immigration Act of 1924 which in this country excluded Japanese, increased America's need for Filipinos. From 1925 to 1929, 24,000 Filipinos entered California to find only hard manual labor. In 1938, Carlos Bulosan, a laborer and writer summed up his understanding of fellow Filipino Americans:

"Do you know what a Filipino feels in America? I mean one who is aware of the intricate forces of chaos? He is the loneliest thing on earth. There is much to be appreciated all around him, beauty, wealth, power, grandeur. But is he part of these luxuries? He looks, poor man, through the fingers of his eyes.

The Oriental Warehouse (center) in 1991. The Delancy Street project is to the left and in the background is the South Beach Marina apartments.

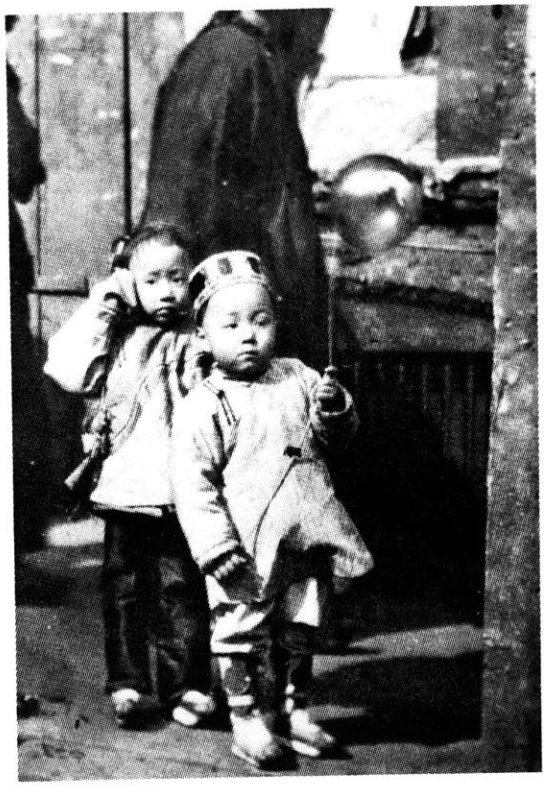
He is enchained, damnable to his race, his heritage. He is betrayed, my friend."

Bulosan's stories emphasized the shattering irony of Philippine residence in America: "Americans treated Fillipinos as inferior while Filipinos, believing in the basic principles of American equality, regarded all Americans as equals."

Immigration law as revised in 1952 allowed the second wave of Philippine immigration. From 1952 to 1965 roughly 2,500 Filipinos a year entered the United States. After 1965 immigration legislation increased quotas and by 1970, 30,000 Fillipinos a year came seeking a new home. Filipinos are presently the largest Asian-Pacific population in the Bay Area, estimated at 400,000 in 1990.

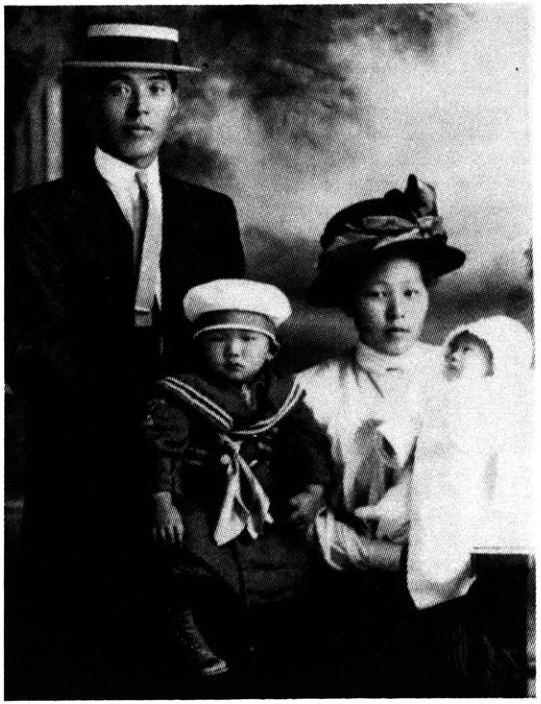
Korean Americans:

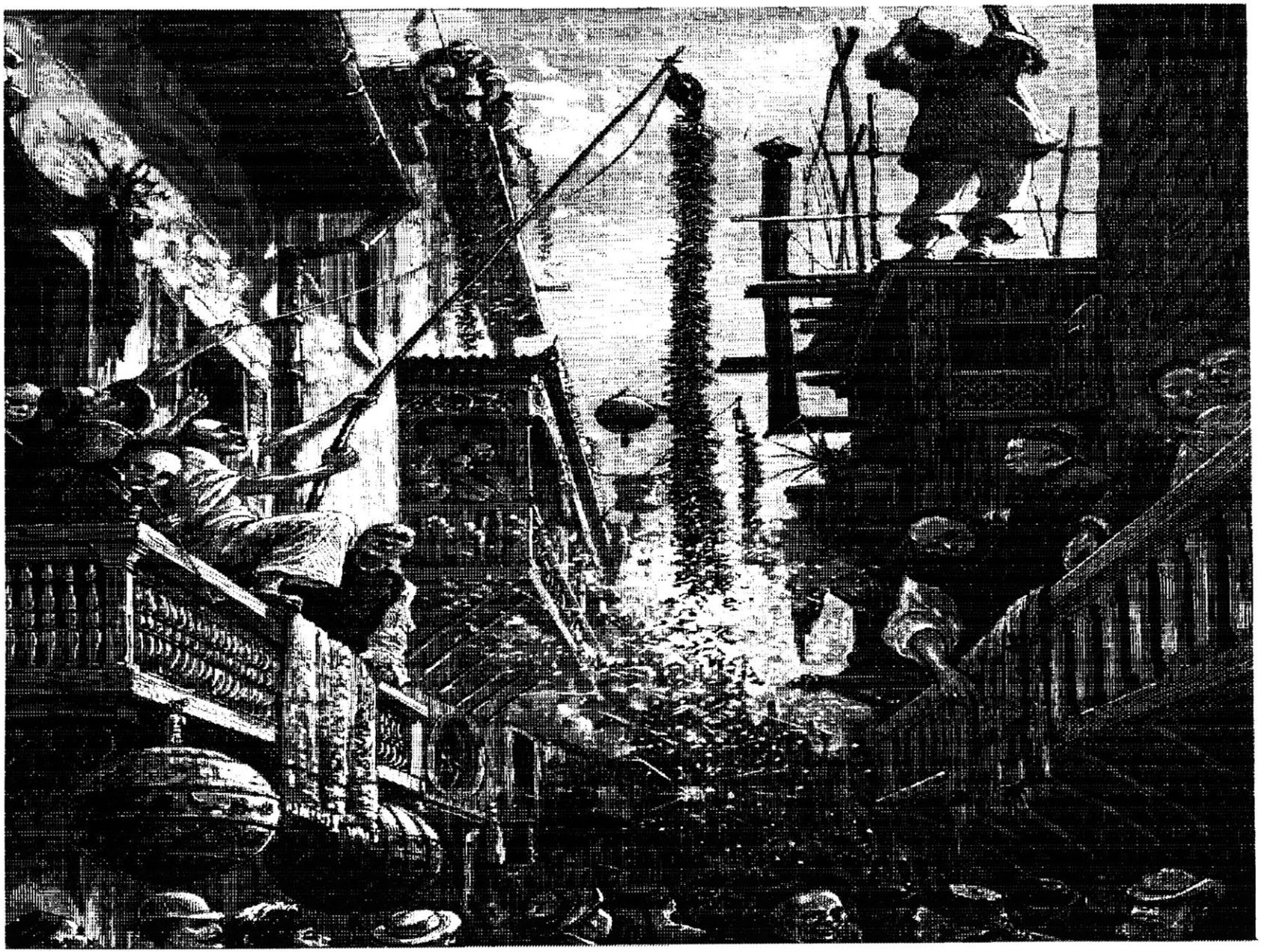
As late arrivals the Koreans began immigrating to the west coast in the 1960's. The 1965 changes in the U.S. immigration policy increased quotas and dramatically increased the number of Koreans entering America. From 1961 to 1964, 10,000 Koreans were admitted, a great number of whom were women and children. From 1965 to 1970, 24,000 entered, including many professionals. The majority of late arriving Korean immigrants were between the ages of 20 and 44 and more formally educated then any other ethnic minority immigrating to America. Prior to 1970 the bulk of the new immigrants followed the pattern for Asian immigration by settling on the west coast. The 1980 U.S. Census Bureau recorded a Korean population of 354,000, five times



For one and a half centuries Asians have come to the New World to seek fortunes, start new lives, or escape persecution. Americans of Asian descent represent approximately 40 percent of the population in the Bay Area, making it the largest Asian community outside Asia (Photos: Thomas Cronise, Oregon Historical Society, University of Washington Special Collections, Bancroft Library, and California Historical Society).

followed the crops during the





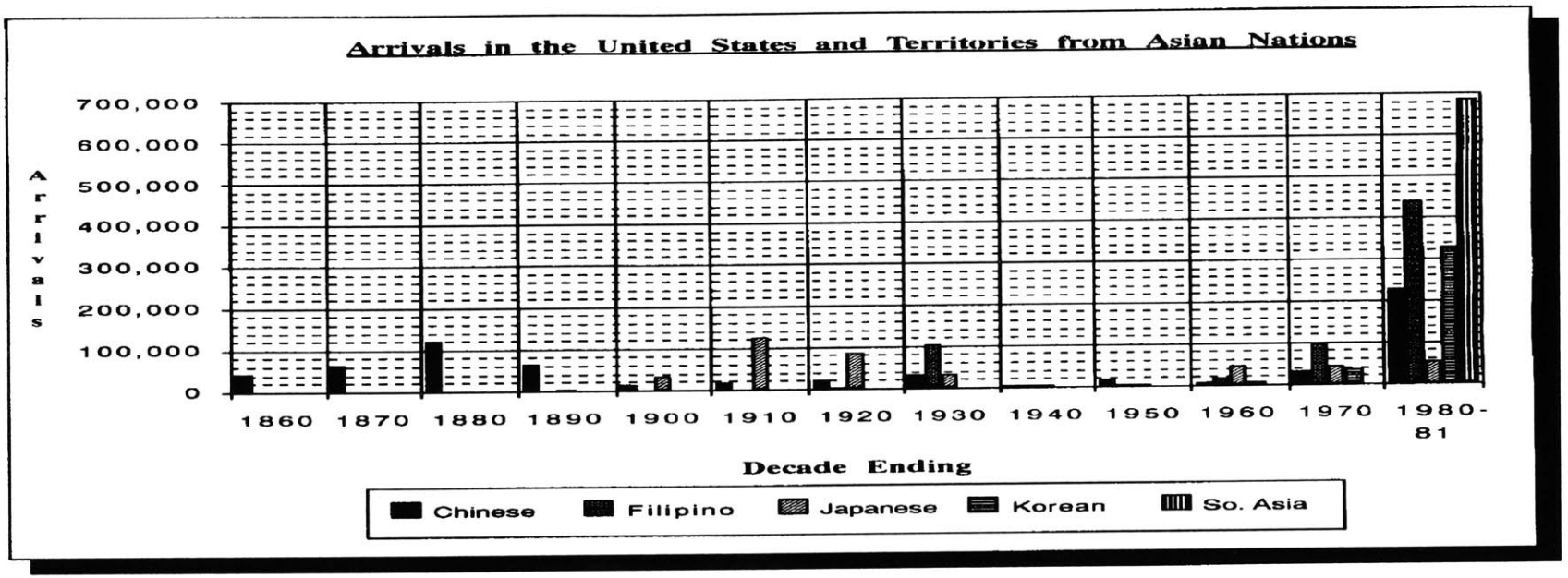
the number in 1970. People of Korean heritage have become America's fourth largest Asian population.

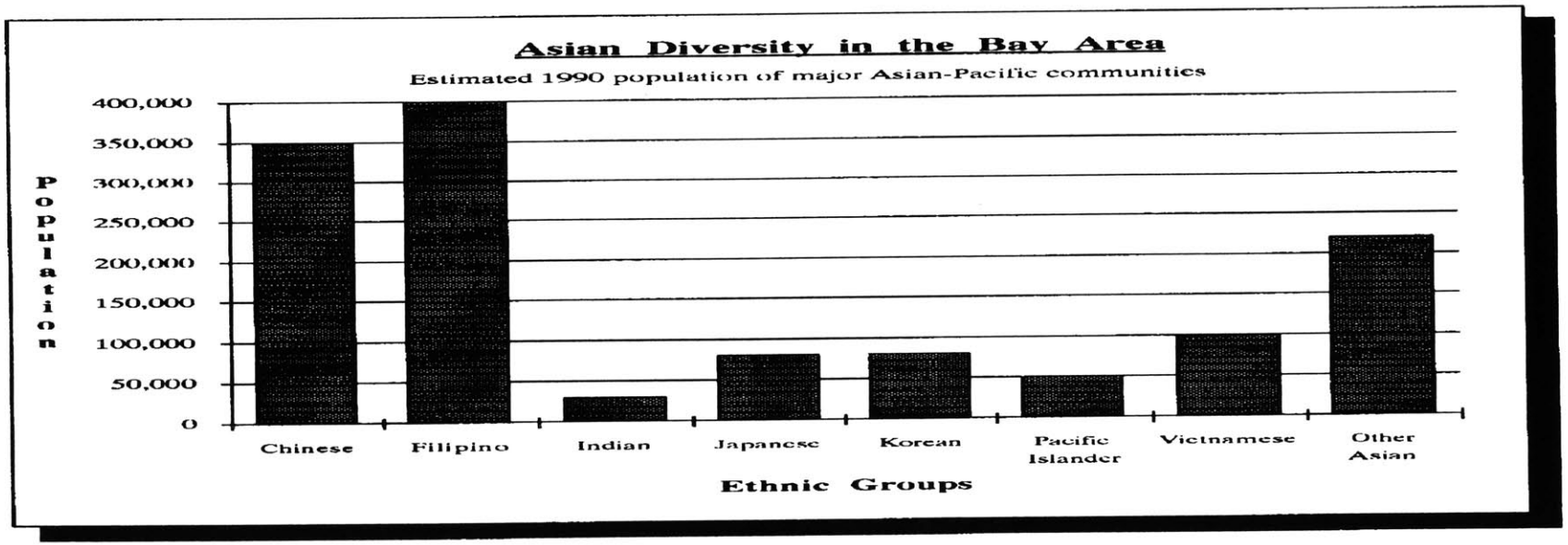
Southeast Asians - Seekers of Refuge:

The United Nations estimate 2,000 people per day try to escape their home countries. In 1980 estimates of refugee populations reached 15.9 million from Southeast Asia and countries such as Cuba, Haiti, Afghanistan, Uganda, the Soviet Union, and Ethiopia. These statistics place more than 550,000 refugees from Southeast Asia in America since 1975. A recent study shows that per population densities, Western states accept the greatest share of sponsorship responsibility, of which approximately 225,000 have located in the Bay Area. The popularity of the West in sponsorship is explained in several ways. Large Asian populations ensure that refugee needs receive media attention and the established communities provide security. Also, refugees are drawn to developing communities of their own ethnic background. Despite the initial government policy in 1975 of dispersing refugees throughout the country, high concentrations of Asians remain in the West. California has the highest concentrations of Southeast Asians, with close to 35 percent of the total population.

Reshaping the Bay Area: An Asian Renaissance

The U.S. Census Bureau is currently assembling the mass of statistics that will provide a window into the new American society. What one will find in the San Francisco Bay Area, is one of the most extraordinary demographic shifts in the 200 years of the U.S. Census. After the numbers are counted, the Bay Area will arise as the Western Hemisphere's first genuine Pacific metropolis, with an

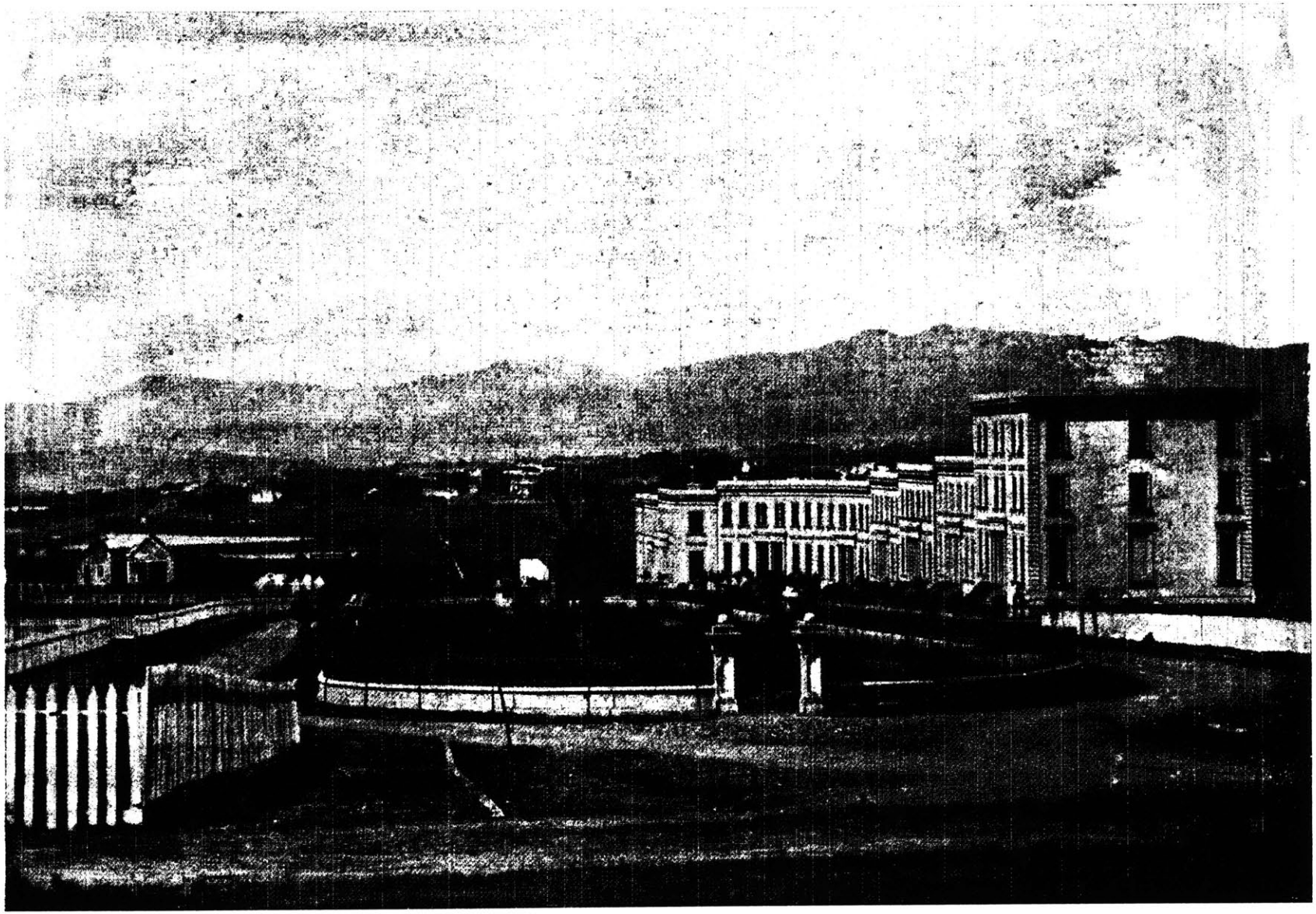

Arrivals in the United States and Territories from Asian Nations
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Arrivals
1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980-81
Decade Ending
Chinese
Filipino
Japanese
Korean
So. Asia


Asian Diversity in the Bay Area
Estimated 1990 population of major Asian-Pacific communities
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Population
Chinese
Filipino
Indian
Japanese
Korean
Pacific Islander
Vietnamese
Other Asian
Ethnic Groups

Asian community as large as many major Asian cities such as Kuala Lumpur, the capital of Malaysia, and every city in the Philippines except Manila. Moreover, the Asian growth rate suggests, that by the turn of the century the Bay Area's Asian population will surpass the size of Singapore which has a population of 2.5 million. Estimates place the Asian population in the Bay Area between 1.3 million and 1.5 million people, six times that of the 1970 Census. This reflects about 25 percent of the projected 5.9 million population in the nine Bay Areas counties - Alameda, Contra Costa, Marin, San Francisco, San Jose, San Mateo, Santa Clara, Solano and Sonoma. This demographic shift establishes the Bay Area as the largest population of Asian's outside Asia.

The Census of 1990 indicates the trend of aging in America however in the San Francisco Asian community, there is evidence to indicate otherwise. From 1980 to 1985 the Association of Bay Area Governments (ABAG) has indicated that San Francisco has had a 17 percent increase in births. The 1980 census counted 3.7 people in every Chinese American family, 4.2 per Filipino family, 4.9 per Korean family and 5.2 per Vietnamese family. The current nation wide figure for all Americans is less than 3.2 people per family.

Based on these projections the locus of Asian American population growth is San Francisco, where long time residents of Chinese descent and Chinese refugees from Vietnam and Cambodia, are the largest single ethnic group by a wide margin. With a population of more than 80,000 in 1980, Chinese Americans in San Francisco approached the combined total of those residents who identified themselves as exclusively of English, Irish and Italian descent, all of which have had substantial migration to San Francisco. As of 1990, the



South Park (1860), one of the first real estate developments in what is now know as the South of Market District

estimated number of Chinese in San Francisco has increased to more than 150,000 leading the San Francisco Asian community of 300,000. This represents 35-40 percent of the San Francisco's 740,800 population. Demographics also demonstrate that the transformation of the Bay Area mounts to far more than the long time residents of the Chinese American in San Francisco. Since the 1960's an increasing number of Filipinos, Southeast Asians and Koreans as well as Southern Chinese have contributed to continual growth in the Bay Area. This recent surge in immigration has found, as shown by Professors James P. Allen and Eugene Turner of California State University at Northridge, that in San Francisco which has the highest concentration of first generation immigrants, there is an 83 percent chance that if two people are stopped randomly on the street they will be Asian but of different ethnic heritages.

Excluding a startling, monumental Asian population shift out of the Bay Area, these effects will prove to establish an Asian renaissance defining the character life in the Bay Area well into the 21st century.

Development Trends and Real Estate Markets: ***Overview - SOMA and South Beach***

The complexity of this urban setting presents the need to delineate the primary components which influence the project site. The user is defined at three levels: foreign and regional visitors to San Francisco and the local neighborhood population. Additionally, several adjacent mixed-use centers have been reviewed which have the potential for competing with this development proposal.

The South of Market area, also known as SOMA, occupies approximately 1000 acres within the City of San Francisco. The district fronts Market Street, San Francisco's, pseudo center, extending to Army Street and in the east-west direction from the San Francisco Bay to the Central Freeway.

Jack London, who lived on Third Street, describe the nineteenth century South of Market as, "factories, slums, laundries, machine shops, boiler works and the abodes of the working class."

One hundred years later, the myriad of people and enterprises in the South of Market is no less interesting then its colorful past. The district has been described as having a sort of underground renaissance begun by artists who took advantage of the low rents on warehouse and loft spaces. As a result this led to the development of nightclubs, restaurants, discount shops, avant garde galleries, museums and experimental theaters. Once considered an area where only the courageous ventured after dark, SOMA today is popular with all age groups.

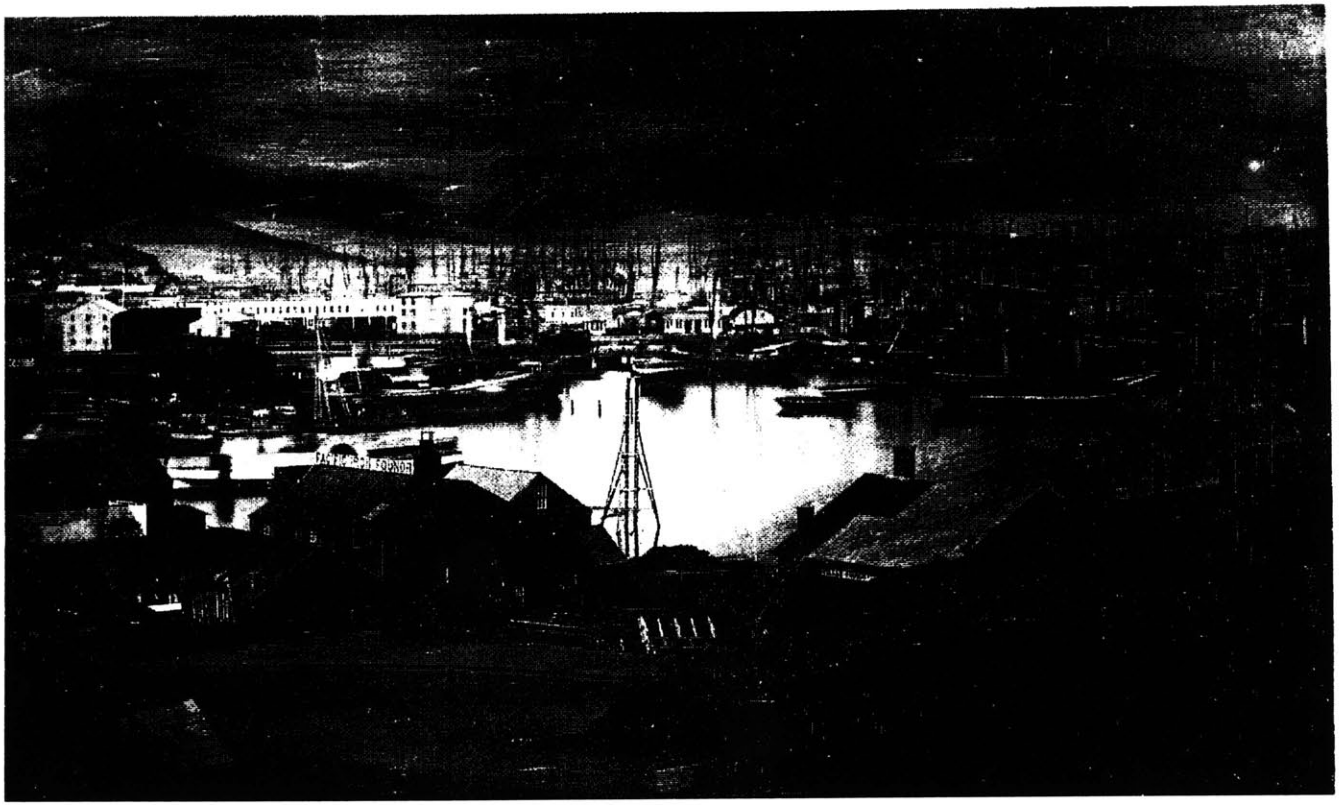
At the north eastern most point of SOMA are the South Beach and Rincon Hill neighborhoods. Combined, they stretch from the Bay to approximately Third Street and from Market Street south to China Basin. This neighborhood embraces an area of 34 blocks and is approximately 367 acres, representing 36 percent of the SOMA district. The future of this area looks bright. Contiguous with the Financial District and the new Mission Bay community, a great deal of projects have been completed in anticipation of establishing a connection with

these two forces. Included in these projects is the $1.5 billion Yerba Buena Cultural and Civic Center slated for 24 acres between Market and Folsom and Third and Fourth Streets. Completion of Yerba Buena is scheduled for Spring of 1992.

Presently there are 9.2 million gross square feet of office space, housing 30,000 office workers, in the market area. Almost 90 percent of this is located within seven blocks of Pier 30-32. In addition, in the Rincon Hill/South Beach area there are more than 2,000 newly built residential units, with a population of approximately 3,500. In the last 5 years 2.6 million square feet of office space, 100,000 square feet of retail space, and 2,000 residential units have been added to these neighborhoods. This represents a 20 percent increase office space and a 50 percent increase in retail space. Residential units have substantially increased by 20 times.

Port of San Francisco

The Port's 7-1/2 miles of waterfront are divided into two major use groups. To the north the waterfront is mostly commercial with Fisherman's Wharf and Pier 39 as the primary facilities. To the south is industrial maritime use such as ship repair, dry docks and cargo/rail facilities. Almost all of the Port is made up of finger docks and was built for a different time and for a different use. The development of the finger docks goes back to the Gold Rush days and were organized to accommodate cargo ships bringing supplies to a rapidly booming city. The process for loading and unloading was a laborious one consisting of mostly small bags, and boxes from wooden ships.



First Street, 1852. Note that the bay comes up to First Street, hence its name. The building on the right is the Vulcan Foundry, established in 1851 by George Gordon, developer of South Park. The building left center is the Pacific Foundry, founded in 1850 by E.B. Goddard.
(A. Shumate and National Maritime Museum)

Today, nearly 140 years later, San Francisco and the Bay Area has developed into the fourth largest metropolitan area in the United States. Bulk cargo has almost completely been replaced by huge metal containers and as a result forced the movement of cargo handling away from the central waterfront to China and Indian Basin, several miles south of the the site. As a consequence of this new technology the old finger piers continue their tenuous existence on the Bay but their cargo handling days are forever gone.

The obsolescence of the finger piers has unequivocally provided the possibility of new interpretations for their use. Currently the Port has chosen to support commercial ventures under a maximum 66 year lease agreement which effectively subsidizes much of the maritime use on the waterfront. Fisherman's Wharf, Pier 39 and the Ferry Building contribute $16.5 million annually to the Port, about half of the Port's total revenues. According to Keri Lung, the Port of San Francisco's Manager of Development, the Port is interested in continuing in this publicly oriented, and highly equitable direction. Considering that the new Embarcadero promenade will cost $5.0 million and the 1989 earthquake cost at least $61.0 million in repairs, the Port is very interested in continued commercial development in the near future.

The Port of San Francisco currently has two proposals in the South Beach Area. Piers 24 and 26 are proposed to be redeveloped as an international yachting, boating, and commercial fishing center. The project is anticipated to comprise of approximately 400,000 square feet of office, commercial, and exhibit space. Additionally, Pier 28 has received an approval for the

redevelopment of an urban public market and retail site. All three piers are located just north of Pier 30-32.

Transportation

The South Beach neighborhood is served by six public transportation authorities which are essentially, all of the San Francisco transportation modes. The furthest stretch to any public transportation terminal is within 15 minutes walking distance from the site.

Freeway access to both highway 101 and the Bay Bridge is available six blocks from Pier 30-32. These freeways connect South Beach with San Jose, Silicon Valley and Oakland East Bay markets which houses 4.0 million of the 7.0 million residents. The Embarcadero roadway which runs through the Pier 30-32 site carries 36,000 vehicles per day according to San Francisco Planning Department.

The Ferry Terminal which serves a significant segment of the North Bay commuter population is located five blocks from Pier 30-32. Approximately 3,200 passengers, or 15 percent of the Marin County commuters, use the ferry according to the Golden Gate Bridge Highway and Transportation District which operates the ferry. An important consideration in the relationship of the Ferry building and the Pier 30-32 site is that the ferry building is within view day or night. Additionally, the walk between the two locations is along one of the few parts of the waterfront which is open to the Bay. This visual connection not only enhances the relationship to the Ferry building but is a

reminder of the accessibility to the Financial District, the Ferry building being the terminus to the District.

The Transbay Terminal, a multicarrier bus center, is located six blocks from Pier 30-32. According to Cal Trans 50,000 people utilize the terminal daily. This transportation network provides service to the entire Bay Area.

Bay Area Rapid Transit (BART) is five blocks from pier 30-32 located at Embarcadero and Market Street and carries 215,000 riders daily between the East Bay and downtown San Francisco.

The Municipal Railway (MUNI), the city's subway and bus system provides twelve different lines to the intersection of Mission and Steuart Streets, three blocks from the site. Additionally, a light rail system is scheduled to be installed along the Embarcadero by 1994. This will run directly through the Pier 30-32 site and provide service from downtown to South Beach and Mission Bay. A station is being proposed at the Pier 30-32 site.

Neighborhood Market

Current census data is not available for South Beach, however, a demographic profile of the Bayside Village Apartments, an adjacent project from Pier 30-32, indicates that the residents of that project are predominantly young, single and are in a moderate income level. The South Beach Marina Management Corporation compiled the following study in South Beach and is believed to represent 90 percent of the residents in the area.

Average age of residents is 34 years.

Age distribution:

51 percent under 31-44
31 percent between 31-44
15 percent between 45-60
3 percent over 60

Average annual per capita incomes are approximately $45,000.

Income distribution:

39 percent $24,000 or less
23 percent $24,000 - $36,000
18 percent $36,000 - $54,000
14 percent $54,000 - $72,000
6 percent $72,000 +

Marital Status:

71 percent single
13 percent single, living with a domestic partner.
15 percent married

Previous residential location distribution:

40 percent elsewhere within San Francisco
41 percent elsewhere in the Bay Area
20 percent outside the Bay Area

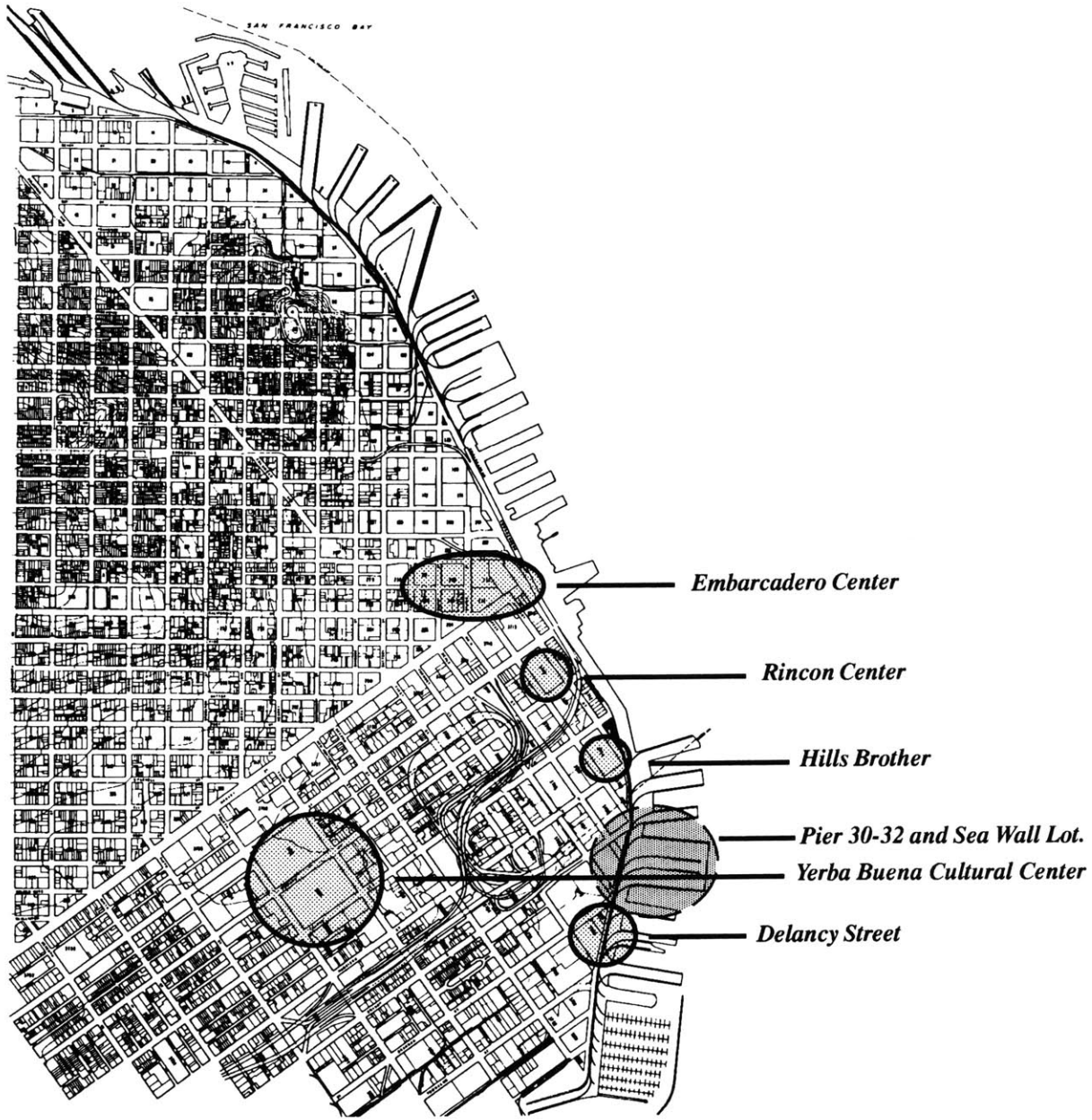
Within the last three years the South Beach and Rincon Hill neighborhoods has experienced major gentrification. New residential apartments and retail development have dramatically increased among a mix of deserted warehouses, blues bars and discount factory outlets. Four major residential/retail projects have just been completed in the neighborhoods adding 1752 new residential units and 95,600 square feet of retail space to the neighborhood. Most of the market studies indicate an anticipation of both retail and office space in the neighborhood as the Financial district moves nearer and the Mission Bay project, just south of South Beach, is established. Todays market, however, indicates that South Beach still maintains a low status level among executives in search of new office space and the retail need is growing but slowly parallel with the increased growth of the local residential market. Currently there are two additional projects slated for construction which will add another 454 residential units to a total of 2206 and 107,600 square feet of retail space. The latest office developed in the area is the Hills Brother project. With 586,000 square feet of office space and retail space, the project is receiving rents of between $28 and $34 per square foot. Other recently developed projects in the area are receiving $24-$27 per square foot for class A office space. Similar to the Pier 30-32 site, the Hills Brother project enjoys the amenities of being on the waterfront and very near the Financial district. As a result projects near the Bay receive rents far higher than most of the South of Market area which averages $15 per square foot for commercial space at a 12 percent vacancy rate.

Four new apartment complexes have been built in South Beach and Rincon Hill neighborhoods all renting at approximately $700 a month for a studio

	A	B	C	D	E	F	G	H	I
1	**Major Projects/Buildings in the Market Area**								
2									
3			NWC Third	SEC Second	SS Mission	NEC Howard	ES Second	NEC Third	NW Folsum
4	**Site**		& Mission	& Stevenson	nr. Second	& Steuart	nr. Townsend	& Harrison	& Spear
5									
6	**Address**		***Mission/3rd***	***51 Second***	***575-595 Msn***	***188 Embarcad***	***625 Second***	***600 Harrison***	***345 Spear***
7	**Project Name**		**YB II**	**51 Second**	**101 Second**	**Bayside Plz**	**S. Beach Ct**	**600 Harrisor**	**345 Spear**
8									
9	**Seller**		**SFRA**	**Conner &**	**Cloverwood**	**NA**	**NA**	**NA**	**Hills Bros**
10	**Buyer**		Griffen	Jaymont	Markborough	Bayside Assoc	NA	Pell	US West
11									
12	**Bought As**		Land	Building	Buildings	Land	Building	Land	Land
13	**Location**		Corner	Corner	Mid-block	Corner	Mid-Block	Corner	Corner
14									
15	**Sale Date**		Pending	12/8/89	6/1/86	1/1/84	4/4/86	11/25/85	12/1/86
16	**Site Size**		32,800	25,776	27,561	12,960	18,906	43,862	151,250
17	**F.A.R.**		**15.2**	**13.6**	**13.8**	**7**	**5**	**5**	**4.8**
18	**Zoning**		C-3-0	C-3-0	C-3-0	C-3-0	M-2	M-1	M-1
19									
20	**Sales Price**		$26,000,000	$15,100,000	$17,915,000	$4,000,000	$7,600,000	$6,000,000	$41,000,000
21	**Demolition Cost**		$0	$773,280	$526,075	$0	$364,305	$0	$0
22									
23	**Total Cost**		**$26,000,000**	**$14,326,720**	**$17,388,925**	**$4,000,000**	**$7,235,695**	**$6,000,000**	**$41,000,000**
24									
25	**Price/SF**		$792.68	$555.82	$630.93	$308.64	$382.72	$136.79	$271.07
26									
27	**Price/SF/FAR**		$52.15	$40.87	$45.72	$44.09	$76.54	$27.36	$56.47
28									
29	**Planned Dev't**		Office/Rtl	Office	Office	Office	Office	Office	Office/Rtl/Res
30	**Amount Planned,**		500,000	350,000	377,525	90,909	175,000	221,931	727,000
31	**Approved or Built**								
32									
33	**Price/Bldg SF**		$52.00	$45.35	$48.85	$44.00	$45.51	$27.04	$56.40
34									
35	NOTE: Demolition costs estimated at $5 per square foot.								
36									
37	Source: Sedway & Associates								

apartments, going up to $3000 for a two bedroom apartment with a view of the Bay. The rents are slightly higher than similar immature residential neighborhoods in San Francisco, but residents feel they are saving time and money on commuting into the Financial District and South Beach is one of two San Francisco neighborhoods that has its own public harbor. As the neighborhood matures it should be anticipated that the income distribution and age group the will also increase. The Financial District is approximately 10-15 minutes walking distance from South Beach and by 1993 the MUNI public transportation system will establish the Embarcadero line with a station at Pier 30-32. Moreover, one of the City's conditions to building in South Beach was that 20 percent of the units be reserved for low-to-moderate income residents which has greatly increased the desirability for residential development in the area. The effect of this new development will be a 3400 residential population increase in the South Beach neighborhood and an increase for retail space.

The recent development has started a new transformation of the South Beach neighborhood shifting it from a warehouse district to a business and residential community. Furthermore, just south of South Beach is the proposed future development of Mission Bay. This 313 acre community will also add to the development suitability of South Beach. Together these new developments embrace the edges of the Pier 30-32 site, making it the natural center of the neighborhood, providing access to the San Francisco Bay and establish a connection to both the Financial District and Mission Bay.



Competitive Retail/Mixed-Use and Cultural Center

Competitive Retail/Mixed-Use and Cultural Centers

There are four major retail/mixed use centers and one cultural center located near the Pier 30-32 site: Hills Brothers, Rincon Center, Embarcadero Center, Delancy Street and the Yerba Buena Cultural Center. The first four centers have a unique market niche serving generally discrete local residents and employee populations located in close proximity. Their success is largely dependent on their ability to meet the needs of residents and office employees in their market area. The Yerba Buena Cultural Center is a major urban art center for visual, performing and media arts. A brief summary of each site follows.

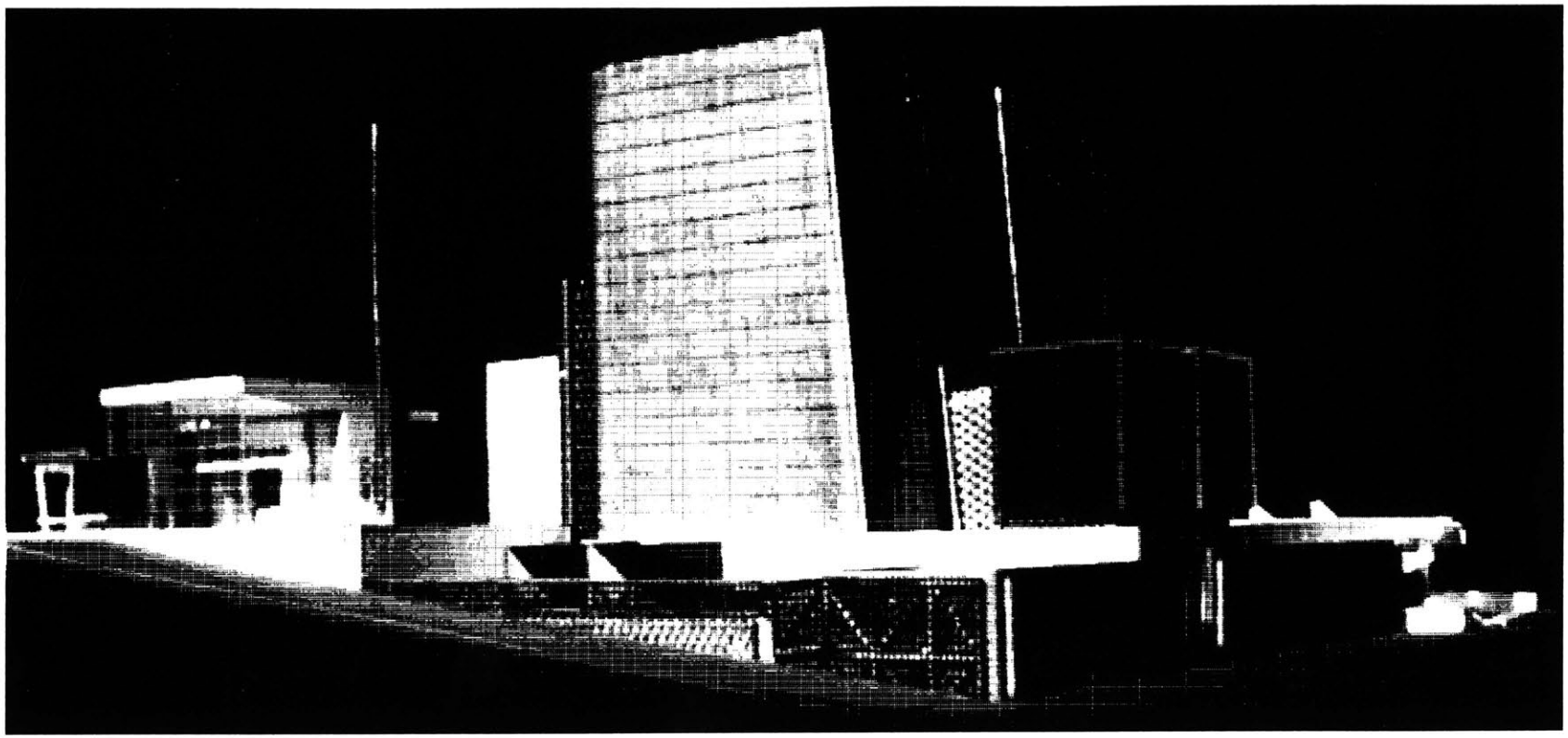
Hills Brothers is a mixed-use project located two blocks from Pier 30-32. The original building is a landmark building and is the Hills Brothers headquarters. It was designed by George Kelham in 1926. Hills Brothers contains 1.0 million square feet of space of which, 40,000 is retail, 546,000 office, 200,000 garage, 100,000 residential and 114,000 is open space. Rent for office space is $28-$34/square foot for 10 year leases and retail space is triple net. The residential space is priced $350-$550/square foot. The completion date is 1990.

Rincon Center is a large mixed-use project located five blocks from Pier 30-32. Rincon contains 80,000 square feet of retail space. The first phase of the project is 44,000 square feet and is connected to the historic U.S. Postal Service. The retail component is primarily an internally focused restaurant and convenience court. Retail space is renting for $25-$27 gross. The second phase of the project is positioned to serve the convenience needs of local office and residents in the area.

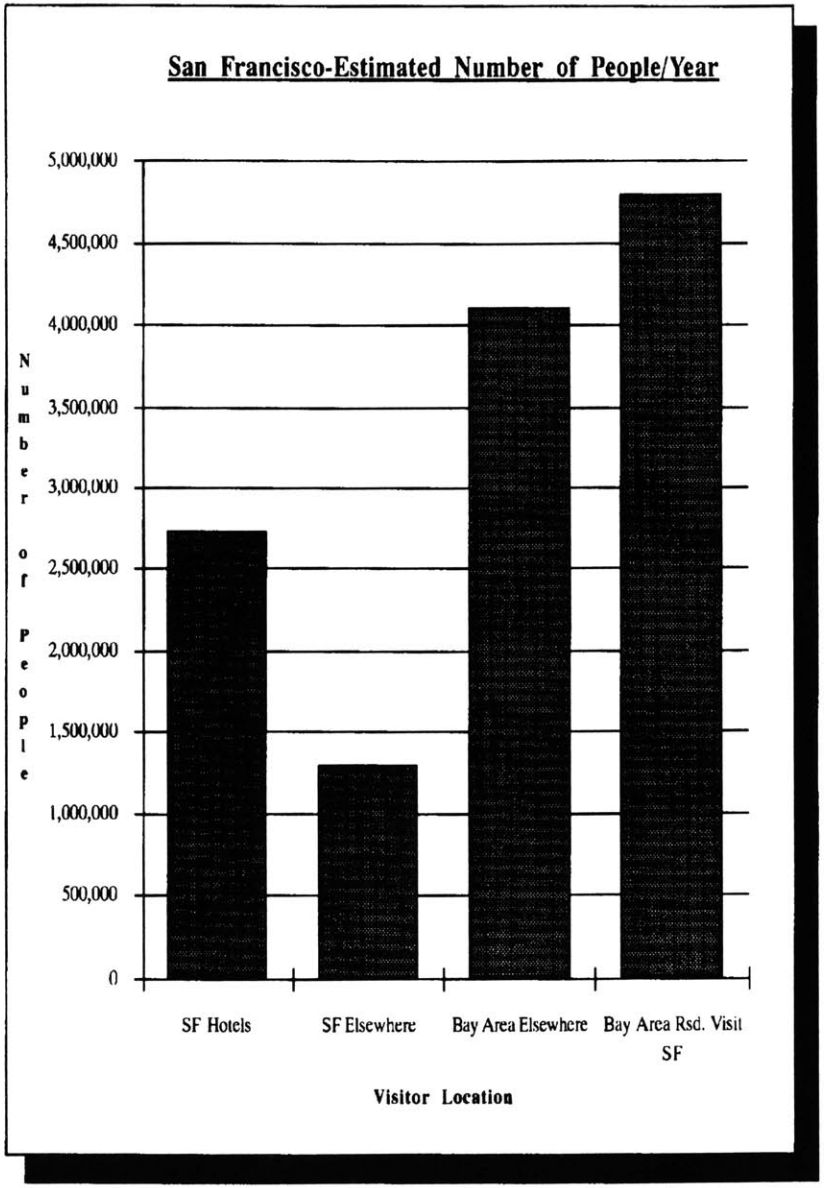
Embarcadero Center is a very large mixed use project located in the heart of the Financial District. It is located six blocks from Pier 30-32 and contains 325,000 square feet of retail in 175 shops over a five block area. The retail component is oriented to comparison goods, convenience goods for office workers and restaurants. Retail space is renting for $25-$45/square foot. The Embarcadero Center also includes 2.2 million square feet of Class A office space above three floors of retail space. Furthermore, the Embarcadero Center includes two hotels, an 803-room Hyatt Hotel and 360-room Park Hyatt.

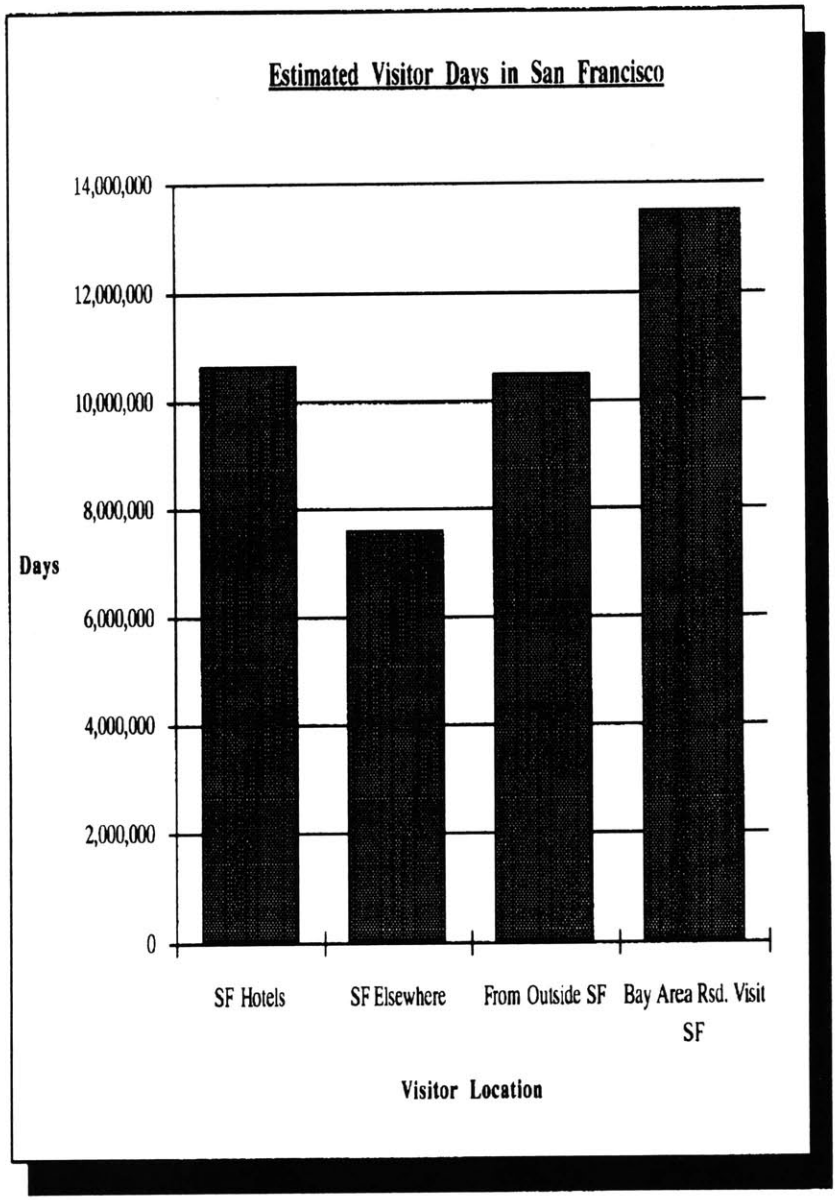
Delancy Street is a mixed-use project completed in the fall of 1990. It borders the Pier 30-32 site and contains 177 residential units and 61,000 square feet of commercial space. The Delancy Street Foundation reported that the retail mix will include a 10,000 square foot grocery market, a 5,000 square foot restaurant, bakery, dry cleaner, possibly several small cinemas, and additional retail shops.

Yerba Buena Cultural Center is the first arts center in the country devoted entirely to the presentation and exhibition of multicultural, interdisciplinary, contemporary art. Five blocks from Pier 30-32 the Yerba Buena Cultural Center will provide a concentration of art facilities which include a 55,000 square foot Visual Arts Center and a 46,800 square foot Performing Arts Center, the new 150,000 square foot Museum of Modern Art and the Ansel Adams Photograph Center. Geographically, it will link the established downtown gallery district with the new SOMA gallery area, which has become a focal point for the City's innovative artistic and business enterprises.



Yerba Buena Gardens Cultural Center,
Performing Arts Center,
Architect: James Stewart Polshek


San Francisco-Estimated Number of People/Year
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Number of People
SF Hotels
SF Elsewhere
Bay Area Elsewhere
Bay Area Rsd. Visit SF
Visitor Location


Estimated Visitor Days in San Francisco
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Days
SF Hotels
SF Elsewhere
From Outside SF
Bay Area Rsd. Visit SF
Visitor Location

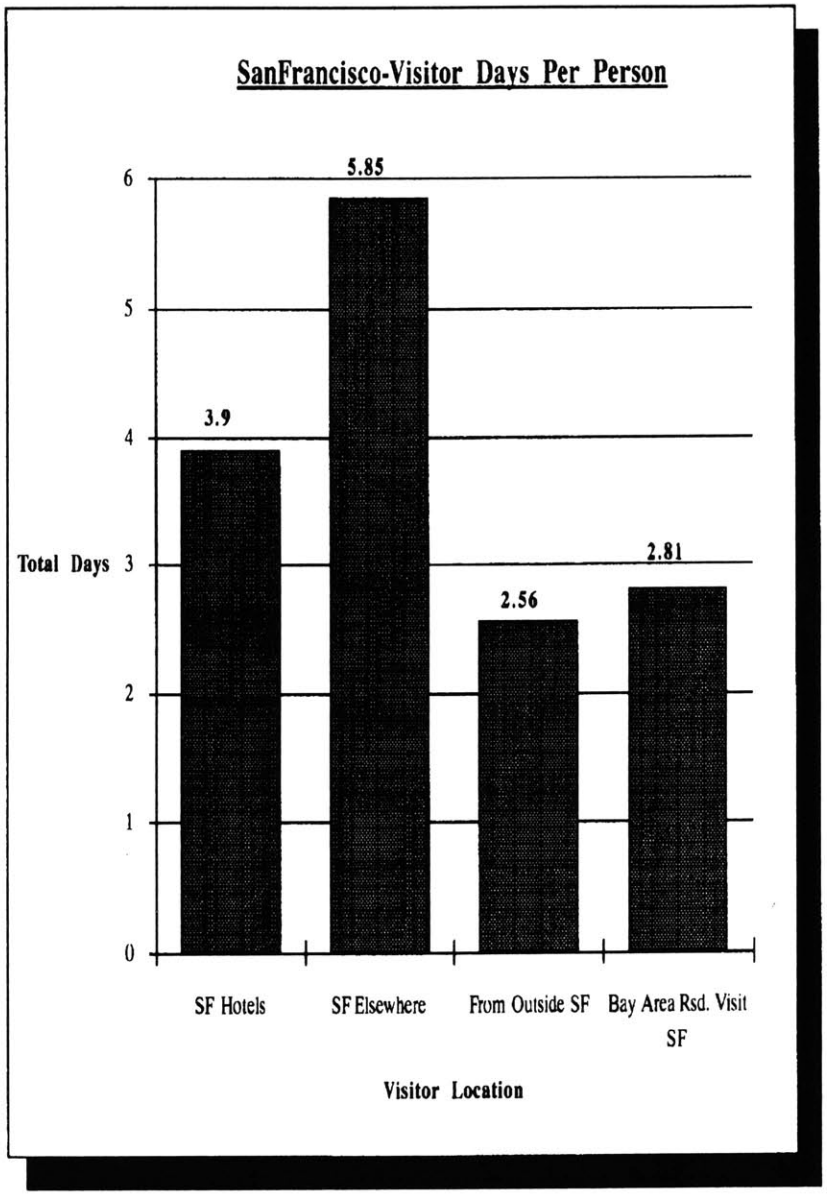
California is one of the leading states in tourism. A primary destination is San Francisco in which the tourist industry generates an average of $10.0 million of trade per day, putting it among the top segments of the local economy.

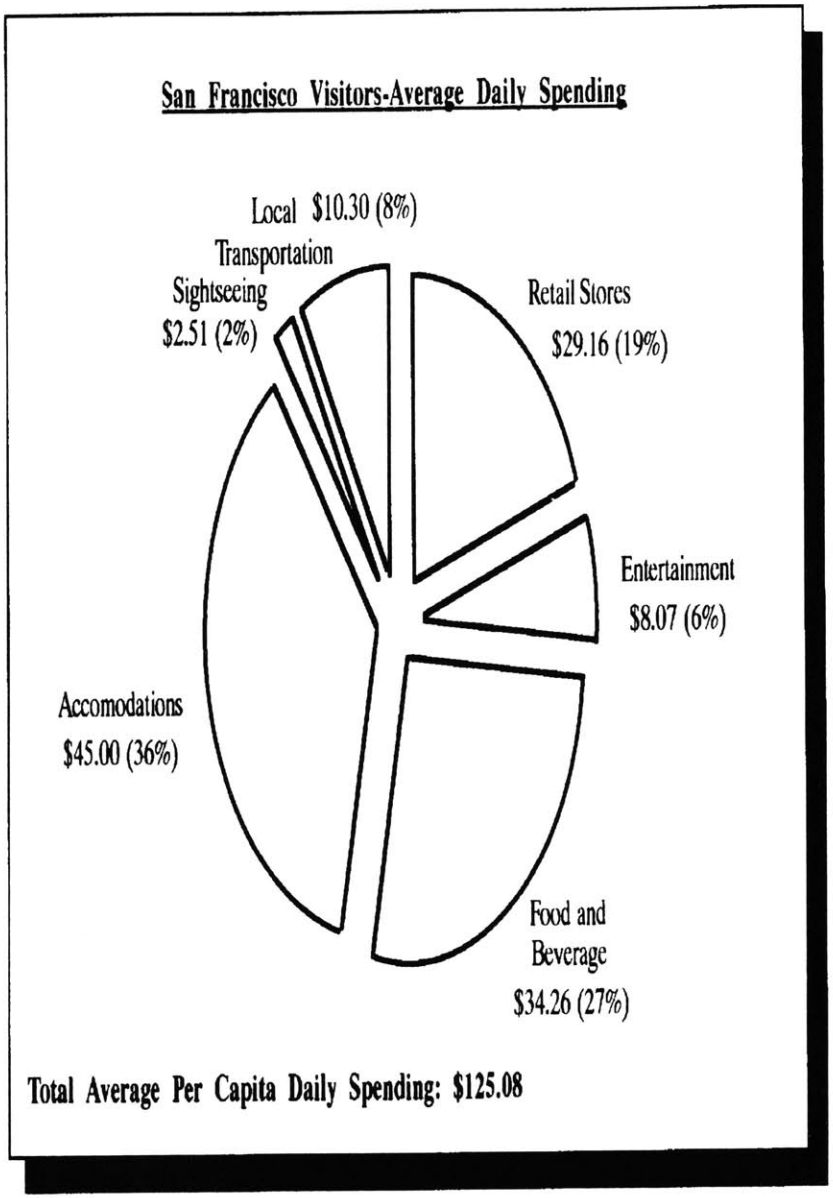
Community and Foreign Visitor Markets:

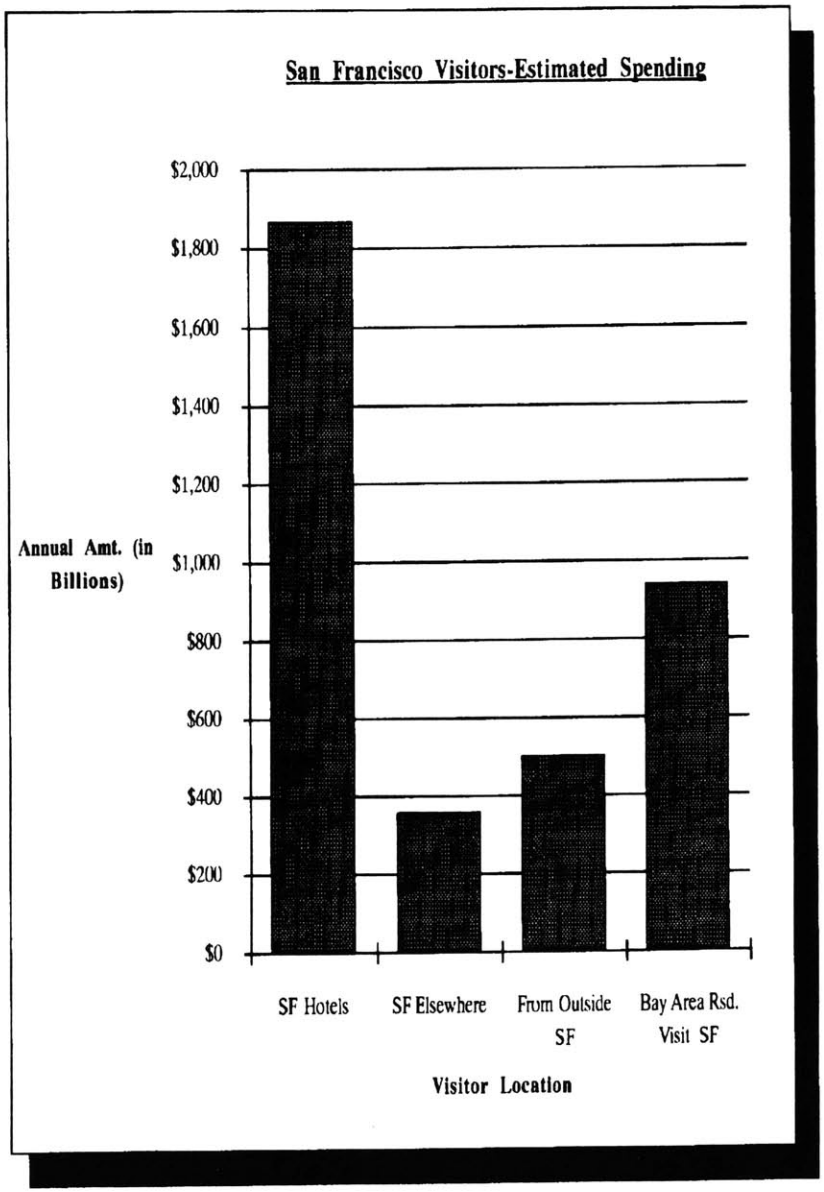
Several elements contribute to San Francisco's desirability as a destination point. The San Francisco Visitor and Convention Bureau's, 1989 Survey of San Francisco's Visitor's Report, supports the global perception about California. It attracts visitors for many reasons, particularly, good weather, cultural diversity, and a diverse landscape. Moreover, San Francisco serves as a primary center for commerce, cultural and international trade on the west coast. Since the mid-nineteenth century, a growing local Asian population has positively contributed to the building of the community which today maintains the largest Asian population outside Asia. Asians represent nearly 40 percent of the total Bay Area population.

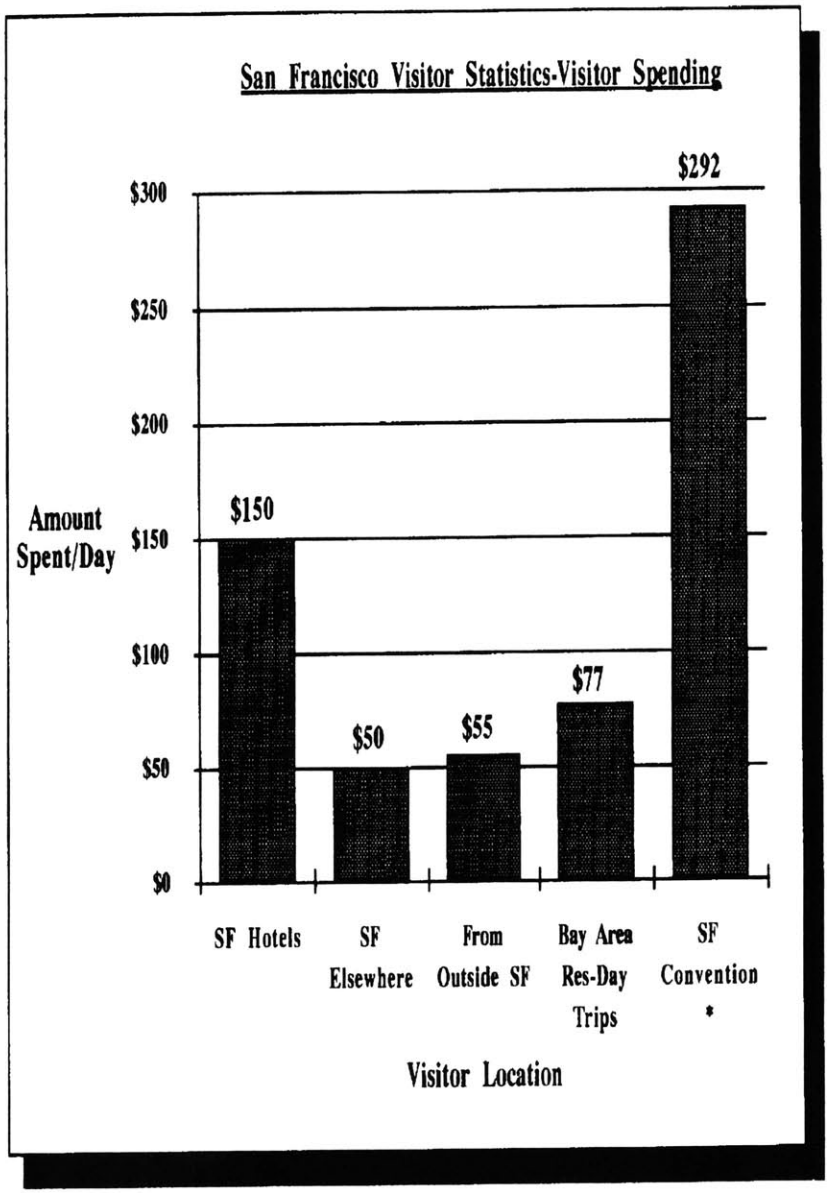
San Francisco Visitor Activity

As an Asian cultural center, San Francisco draws a significantly large proportion of Pacific Rim tourists. Pacific Rim visitors amount to 31 percent of the total tourist activity, or 2.5 million visitors yearly, with Japanese ranking in the top 5 of the international visitor groups. Additionally, there is a large percentage of local and regional Asian visitors. Activity patterns in San Francisco are primarily dispersed among markets, restaurants, cultural and sightseeing events. Of the approximately 20 sites of interest identified in the 1989 Survey of San Francisco's Visitors Report; Fisherman's Wharf and Chinatown ranked at the top with 87 and 72 percent interest respectively. It is

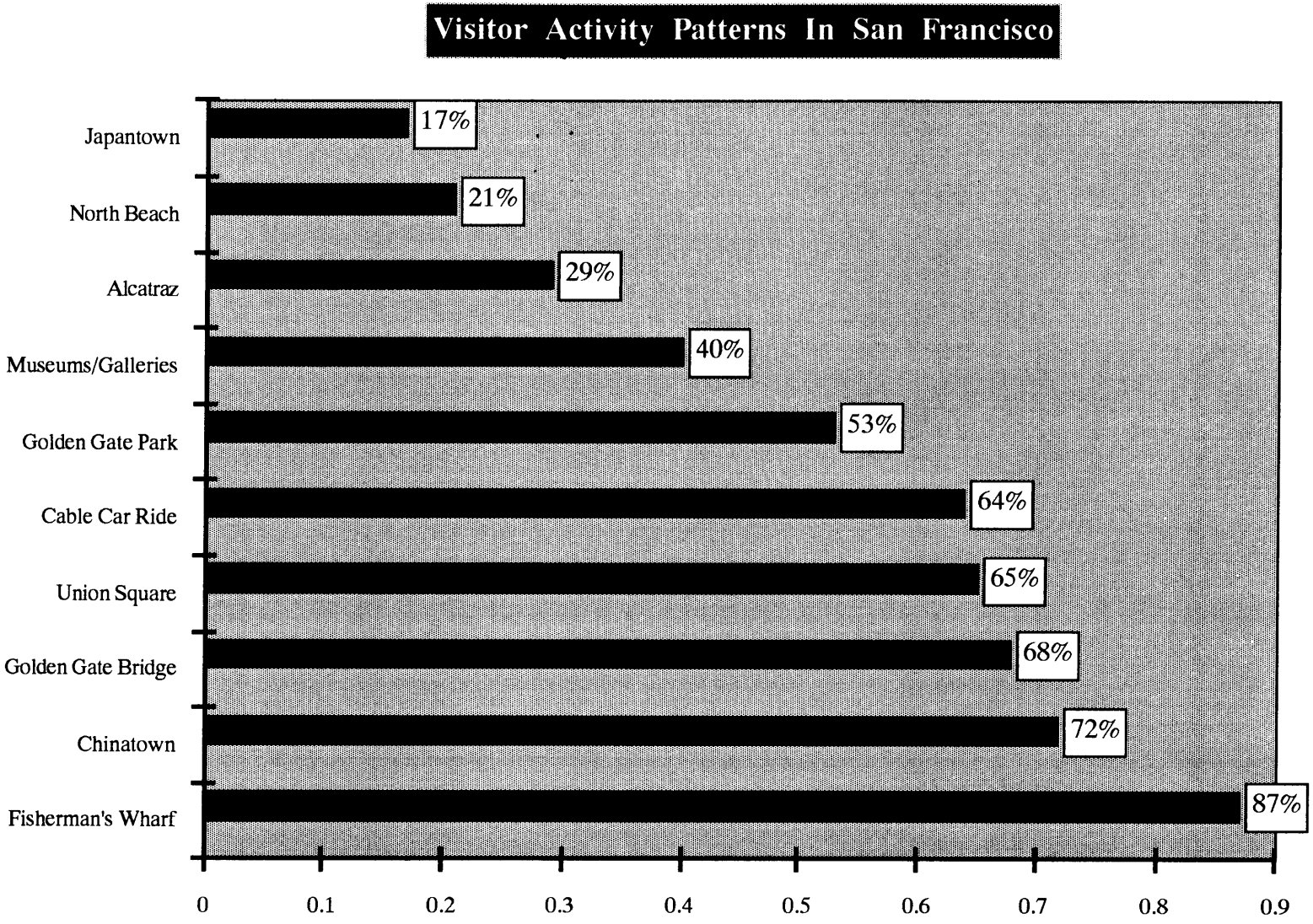

SanFrancisco-Visitor Days Per Person
Total Days
6
5
4
3
2
1
0
5.85
3.9
2.81
2.56
SF Hotels
SF Elsewhere
From Outside SF
Bay Area Rsd. Visit SF
Visitor Location

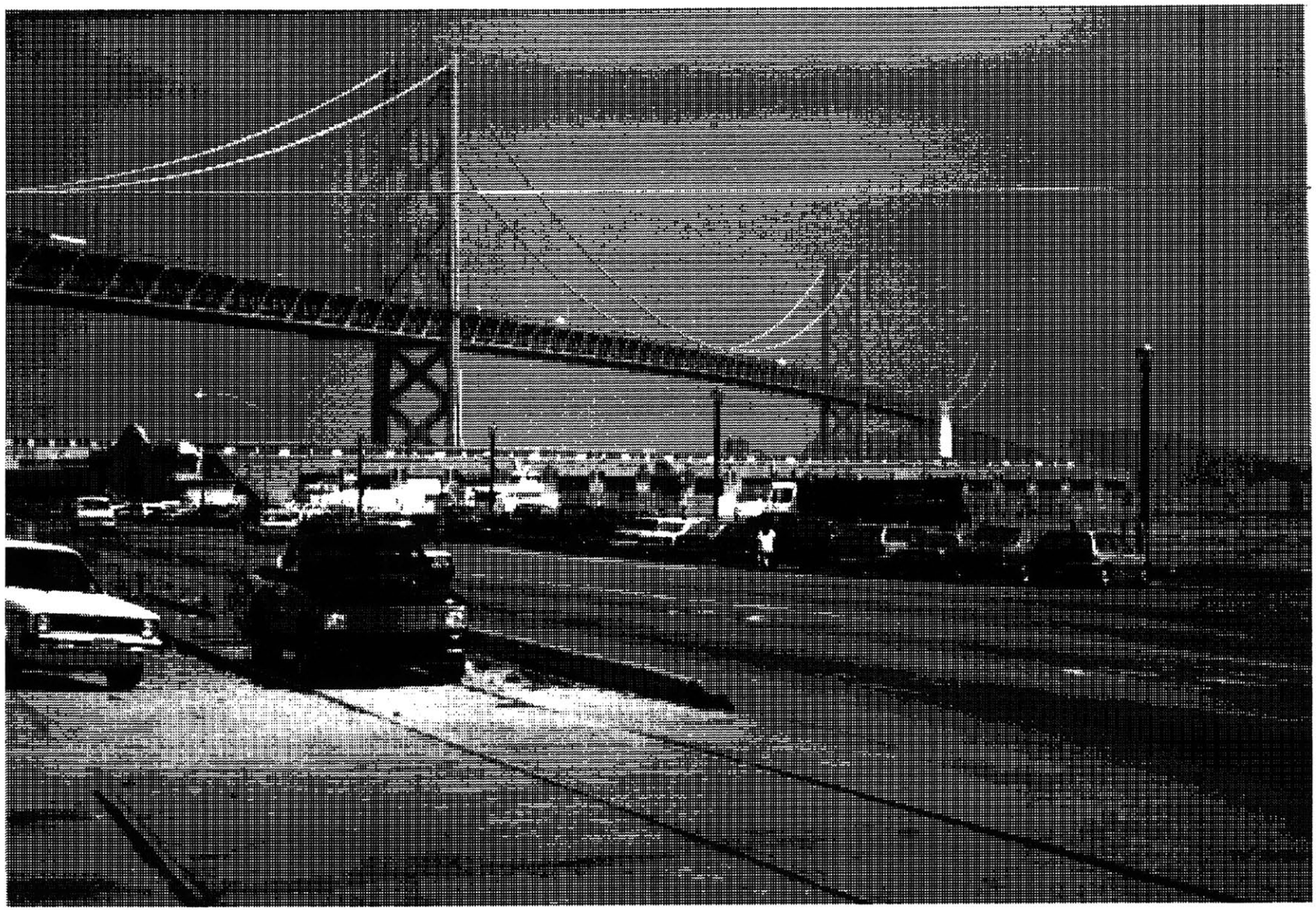

San Francisco Visitors-Average Daily Spending
Local $10.30 (8%)
Transportation
Sightseeing
$2.51 (2%)
Retail Stores
$29.16 (19%)
Entertainment
$8.07 (6%)
Accomodations
$45.00 (36%)
Food and
Beverage
$34.26 (27%)
Total Average Per Capita Daily Spending: $125.08


San Francisco Visitors-Estimated Spending
$2,000
$1,800
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
Annual Amt. (in Billions)
SF Hotels
SF Elsewhere
From Outside SF
Bay Area Rsd. Visit SF
Visitor Location


San Francisco Visitor Statistics-Visitor Spending
$300
$250
$200
$150
$100
$50
$0
Amount Spent/Day
$150
$50
$55
$77
$292
SF Hotels
SF Elsewhere
From Outside SF
Bay Area Res-Day Trips
SF Convention *
Visitor Location

estimated that there are approximately 42.2 million visitor days per year in San Francisco. This is determined by the number of visitors multiplied by the average number of days they spend in San Francisco producing an estimate of visitors days. This is equivalent to an average daily visitor population in San Francisco of approximately 115,000 people and an average individual visit lasting 3.3 days. Asian visitors from outside the Bay Area represent approximately 24,400 of the total daily visitor population and 5300 Asian visitors are from the Bay Area region, totalling almost 30,000 Asian visitors daily in San Francisco.


Visitor Activity Patterns In San Francisco
Japantown
North Beach
Alcatraz
Museums/Galleries
Golden Gate Park
Cable Car Ride
Union Square
Golden Gate Bridge
Chinatown
Fisherman's Wharf
17%
21%
29%
40%
53%
64%
65%
68%
72%
87%
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9



South Beach near Pier 30-32, 1990.

Chapter VII
Development Proposal

Program

This proposed program is an attempt to develop a test scenario for an alternative development model. This program analysis has been created to demonstrate the validity of knowledge of the city and sensitivity of the site as co-generators of space. In this model, urban knowledge plays an equal role in developing space with traditional development tools such as politics, market analysis, program and financial structuring. The study program was not predetermined prior to the generation of space but rather the reverse. This is not to suggest that one method is more correct then the other, but that in this reorganization towards an alternative development model, one might provide space which serves both community and capitalistic venture in a more integrative and sensitive way.

Identifying existing models which manifest the beliefs of this study has been difficult. In fact, there are limited individual projects that exactly illustrate all of the issues addressed in this work. Several specific projects, however, begin to recognize issues of public good and effectively begin to utilize the spatial structure of the city. The Yerba Buena Cultural Center (San Francisco), Quincy Market (Boston), and South Street Seaport (New York) make some reference to portions of this study. In an effort to further delineate the principles of this work we should briefly examine the contents of these projects.

On 87 acres the *Yerba Buena Cultural Center* serves as a physical and cultural hinge between the old guard and the avant garde. Beginning at Market Street the project provides a link between North of Market, the older well established cultural center and South of Market, a mecca for experimentation. Their physical form accentuates both of the districts differences, one being very

dense, permanent and controlled while the other somewhat sprawling, unstable and flexible. As a hinge to both these worlds the Yerba Buena Cultural Center has a difficult task. It's primary vehicle for connecting to the framework of the city is established on three levels: the density and configuration of the structures are in relationship to the adjacent block system, the edges of the project address the continuation of the street, and the provision of a large public open space establish the independence required to negotiate the shift in the urban system.

As a public-private venture each provide necessary components which support each other. The commercial aspect of the project encompasses several high-rise office buildings, a hotel and retail facilities. To a great extent the proceeds from the commercial sector supplement the cost of operations for the public sector of the project. The proceeds were obtained through land sales, development rights fees and a special tax to the developer.

Both *Quincy Market and South Street Seaport* share similar physical connections to the city as the Yerba Buena Culture Center but also incorporate existing historic buildings into the development. Both convey a somewhat sterilized version of the past, blending historic buildings with modern commercial ventures. They did, however, achieve a monumental task of revitalizing the downtown and returned public life to old city districts. Additionally, they provided a critical mass which accelerated commence not only for these projects but also the neighborhood.

This study proposes similar attributes as Yerba Buena, Quincy Market, and South Street Seaport developments without the recreation of Disneyland-like

South Street Seaport developments without the recreation of Disneyland-like qualities that seem to characterize the latter two projects. This proposal suggest the firm anchoring of authenticity and local sensitivity as fundamental generators of form and program.

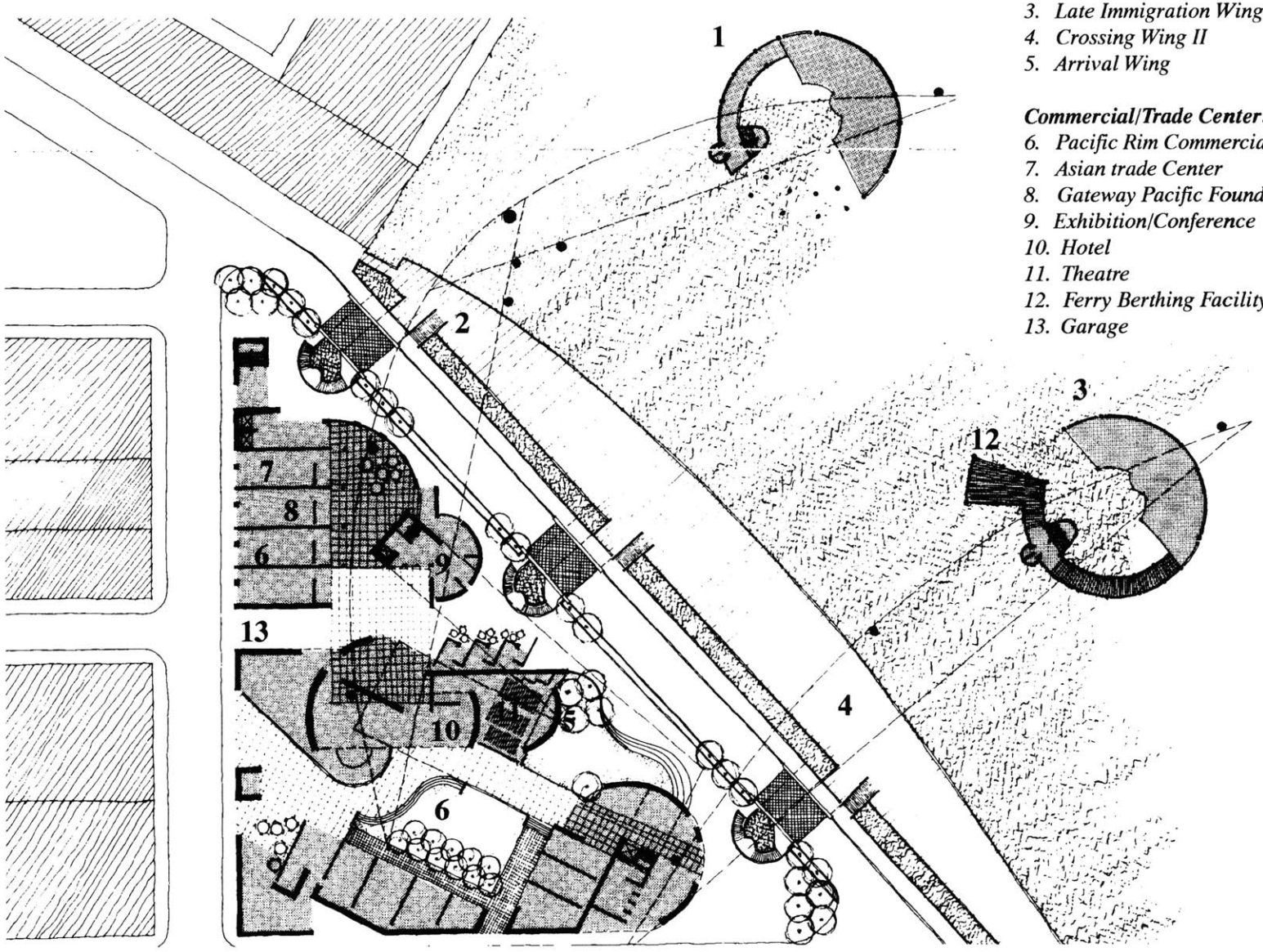
As an initiating process, I have chosen to take an almost naive approach to the more or less apparent outcome and instead, focus on the process in which two worlds can be determined and integrated. The results of the following initial program becomes, therefore, less important then the way it was conceived. Secondly, the term "Initial Program" suggests change and the incomplete or evolving nature of any program. Although, this study does not continue beyond the initial program it is important to recognize the instability of economics, trends, community interest, etc. and therefore it should be recognized that all programs are "temporary." This is not to say that this program vision is predetermined to last for only five to ten years but that change is inevitable. Given this condition, the reliability of architectural and financial resilience will be the primary test, not the initial program, to determine the success of any future state.

Initial Program

This program is structured with two primary components: a Museum/Memorial and a Commercial/Trade Center. The Museum/Memorial which is a public institution by nature will be financially integrated with the Commercial Trade Center as a private-public venture. The Commercial/Trade Center will be a private venture in which a portion of the proceeds will be diverted to maintain a percentage of the construction and operation cost of the Museum/Memorial.

Initial Program

Museum/Memorial	Square Feet	
Early Immigration Wing I	100,000	
Crossing Wing I	40,000	
Late Immigration Wing II	85,000	
Crossing Wing II	30,000	
Arrival Wing	20,000	
Museum Total	**275,000**	Sq. Ft.
Commercial/Trade Center		
Pacific Rim Commercial Center	150,000	
Asian Trade Center	608,000	
Gateway Pacific Foundation	50,000	
Exhibition/Conference	62,000	
Support Facilities	8,000	
Hotel(150 Rooms)	122,000	
Theatre(650 seats)	15,000	
Ferry Berthing Facility	30,000	
Garage(550 spaces)	193,000	
Com./Trade Total	**1,208,000**	Sq. Ft.
	==========	
Total Building Area	**1,483,000**	Sq. Ft.
F.A.R. (Total Site, 17 acres)	**2.00**	
F.A.R. (Total on land, 4 acres)	**6.51**	



Museum/Memorial:

1. *Early Immigration Wing I*
2. *Crossing Wing I*
3. *Late Immigration Wing II*
4. *Crossing Wing II*
5. *Arrival Wing*

Commercial/Trade Center:

6. *Pacific Rim Commercial Center*
7. *Asian trade Center*
8. *Gateway Pacific Foundation*
9. *Exhibition/Conference*
10. *Hotel*
11. *Theatre*
12. *Ferry Berthing Facility*
13. *Garage*

The institution will act as a contributing "anchor tenant" providing much of the critical mass necessary to sustain a viable commercial center. It will, however, not generate the total population necessary relying rather on other neighborhood and community forces as described in Chapter VI.

Asian Museum/Memorial

The program for the Museum/Memorial is to tell the story of Asian immigration to America. Additionally, an Asian Cultural, Art, and Natural History Center will be included at the Museum/Memorial. This Museum/Memorial will divide primary Asian immigrants into five groups: Chinese, Japanese, and Korean exhibits in Wing I, and Philippine and Southeast Asian exhibits in Wing II.

In relationship to ones orientation to city, land and water, so follows the organization of the Museum/Memorial. Divided into three parts the Museum/Memorial anchors the entry and introduction on land, then bridges the extent of the institution out over the Bay to two primary structures. The northern structure contains the story of northern hemisphere Asia i.e. Chinese, Japanese, and Korean, while the southern structure contains the story of southern hemisphere Asia i.e. Philippines and Southeast Asians. The organization of the institution will be interpreted through the story of Early Immigration (Wing I) and Late Immigration (Wing II), the Crossing, and Arrival. The arrival portion of the institution will be land based, the crossing portion will be contained in the bridges and both early and late immigration exhibits will be located in the structures in the Bay. The Cultural, Art, and Natural History collections will also be located in the tower structures in the Bay.

Commercial/Trade Center

The primary emphasis for the commercial center is to create a viable market place which considers participants of three different interest groups: the neighborhood, the San Francisco community, and the foreign visitor. The tenant mix and collective association of uses will be organized in reference to off site adjacencies. This organization of uses, however, will be contained within the framework of the primary structure which is pre-established by design conditions. The Commercial/Trade Center will be referenced to existing streets and newly established pedestrian streets. In this way the Center will be a continuation of the City fabric maximizing and strengthening the benefit of known activity. The following is a description of the principal components to the Commercial/Trade Center.

The *Pacific Rim Commercial Center* is dedicated to highlighting products, foods, and cultures of the Pacific Rim nations. It includes retail shops specializing in representative information, products, handicrafts, art galleries, gift shops, restaurants and cafes, and space to accommodate people watching and exhibits. Moreover, public oriented services such as a Post Office, sundries, etc. will also be included. The Center will be sited entirely on the Sea Wall lot occupying the ground floor of the building. Included in the Center will be a *Film Theater* of 650 seats. This will be the first theater within a ten block radius of the site. The theater agenda will be oriented to the neighborhood residence.

The *Asian Trade Center* will include a variety of facilities, services, and staff resources to facilitate global trade activities between San Francisco and the Pacific Rim. It will integrate conference space, research and telecommunications services to support trade development offices. National showcases for services and products available for export, travel, relocation, and translation services will be included at the Center. Most of the Asian Trade Center will be located on the second, third and fourth floor with some presence on the first floor. The ground floor exhibit space will also be shared by the Trade Center for major exhibitions. The Asian Trade Center on the site will be directly above the Pacific Rim Commercial Center located on the Sea Wall lot.

The *Gateway Foundation* will be a major long term tenant in the Asian Trade Center and a catalyst for activities. For this reason some history of the Foundation and scope of their participation in the project is appropriate. The Foundation was founded in 1985, in response to the need to establish new cooperative approaches toward achieving sustainable development within the United States and the poorest regions of the Pacific Rim. The Foundation also provides independent services facilitating learning about system dynamics, with an emphasis on local and global community welfare and environmental concerns.

Currently, the Foundation is looking for 50,000 square feet of office space and this study proposes the establishment of its world headquarters on this site within the confines of the Asian Trade Center. Additionally, it will offer programs in various locations throughout the site. They will occupy nearly 10-20 percent of the space within the Asian Trade Center. In addition, the

Foundation will be responsible for developing and managing conference and telecommunication services for the Asian Trade Center. The Foundation's programs will include a floating exhibit illustrating the natural, social and economic systems of the Bay Area which can travel around the region. Moreover, the Foundation will provide training, fund raising and other technical assistance to Third World organizations in the Pacific Rim engaged in self-help community development.

The *Exhibition and Conference* area will be a shared facility. The use of this space will be devoted entirely to the presentation and exhibition of Pacific Rim and Asian commerce, history, art and cultural activities. The programming will reflect the diverse cultures that converge in the Bay Area. The location of the facilities will be located on the most public part of the Sea Wall lot, adjacent to the Embarcadero. From this location a visitor can understand and experience the total organization of the site. In this way it will serve as a public introduction to the Museum and Commercial Center.

The *Support Facilities* will provide infrastructure, servicing, and administration of the tenants and buildings. The organization of this space will be distributed throughout the site as required. No attempt will be made to hide such uses but rather integrate them into the building and site to co-exist with other uses. This will better illustrate the entire workings of the site, increasing the activity and energy of the experience. This would also be in keeping with the street life which currently exist in Asian communities of San Francisco.

A combination of interviews with private developers, city officials and market

study data indicate that a *hotel* could be considered for this project. Several facts about the location of the site and competitor hotels support this proposal. The site presents four primary amenities. The Sea Wall lot provides one of the few unobstructed views of the San Francisco Bay of which only one other hotel can state this claim. Secondly, the hotel provides accommodations for foreign visitors which make up 80% of the Museum attendance, or 3700 people daily. The hotel has convenient access to a multitude of public transportation modes including a light rail station which will stop at the site. The light rail system will make a direct connection to Fisherman's Wharf and a near direct connection to Chinatown. The site also is situated in a neighborhood which is an emerging activity center linking the nearby financial district to the new Mission Bay neighborhood. Additionally, hotels near the Bay command a daily room rate of $216 which is considerably higher than the rates proposed for this hotel. All of the existing hotels along the Bay are larger than this proposed hotel, however, it is recognized that they benefit greatly from their mature neighborhoods which has not yet completely emerged for the South Beach neighborhood.

The hotel will provide luxury accommodations and service facilities to the general public and groups participating in events of the Museum and Center. Although there is great opposition to the development of a hotel on the Bay the location of the hotel is proposed to be built on the Sea Wall lot, no closer than 100 feet to the Bay edge. In this way, the hotel is not subject to political opposition and BCDC jurisdiction. The hotel is recognized as being essential to the financial vitality of the Museum/Memorial and the commercial sector. In 1990 the Port of San Francisco researched the hotel market in San Francisco and found that the annual hotel occupancy rate is 73 percent and among the

highest in the nation. The current projections of hotel development in San Francisco through 1993 is 2,500 rooms, roughly a 10 percent increase, but occupancy rates are expected to maintain at a steady state during this period.

The *Ferry Berthing Facility* will be provided for the purpose of connecting Angel Island to Pier 30-32. Angel Island is the 20th century component of the Asian Immigration experience and therefore of considerable importance. The use of ferries will fortify the connection between the historic experience and the exhibited experience of the Museum/Memorial. The site for loading and unloading of passengers will be performed at both the Early Immigration and the Late Immigration buildings. The operations and ownership of the ferries will be by an independent contractor.

The *Garage* will be a double level underground facility. Each level will provide 275 parking spaces, approximately 2 cars per 1000 square feet of building space. Additional parking will be found at nearby garages such as the Hills Brothers public garage or in parking which will be developed in association with the 1992 Embarcadero Parkway project.

Financial Structure

The financial concept for the project is to create a public-private partnership, emphasizing the interdependent relationship between the museum/memorial and commercial facilities. The implementation of this concept will be achieved through pursuing several objectives. The partnership will be developed in the form of a 50/50 partnership in which both the developer and the Port

contributes an equal share of equity. For the Port, equity will be created through floating bond issues and the developer will provide an equal amount of equity through the purchase of the four and a half acre Sea Wall lot. The financial objective will be to maintain a long term holding posture by both parties, emphasizing the importance of a stable and continuous cash flow from the operations. Although the developer maintains the option to liquidate their assets, preference will be given to the developer who's interest is in long term commitment to the project rather than a quick turn over and "back-end" appreciation profits.

This interdependent relationship will be further sustained by sensitive space and use planning. Both the museum and the commercial functions will be co-mingled in two ways. First, by creating a tenant mix which is complimentary not only to other tenants but also the museum activities, and secondly, by extending various activities and exhibits beyond their formal "boundaries," allowing the museum to establish a presence on the street level and visa-versa. The deal structure has 10 primary highlights regarding financing, development rights, ownership and management. In this proposal, the developer and the Port offer equal contributions which together form the possibility for both commercial and museum facilities to exist.

The Developer offers six conditions which call for the modification of land use policies and collaborative financing. A focal point of the deal is the developers purchase of the four and a half acre Sea Wall lot at market rate. The proceeds of the land sale will partially finance the total project. The land will be purchased up front as a contribution of equity to the deal. The developer will request for

one and a half years worth of annual quota for office space as described in Proposition M-mandated annual ration system, and that this project will be exempt from the City's yearly space quota contest. The Developer will get to convert a maritime specified use site, to offices, retail and hotel use, giving them the right to construct approximately 1.2 million square feet of commercial/trade space. These proposed uses will provide the "engine" which will facilitate the public portion of this project. The required use variance will apply only to the Sea Wall lot. Additionally, all permanent commercial/trade facilities will be restricted to 100 feet away from the bay edge, minimizing the jurisdiction of the San Francisco Bay Conservation and Development Commission and other State agencies. Moreover, the developer will have the right to utilize the depreciation tax benefits for the entire project. Finally, the land purchased by the developer will revert back to the Port in fifty years at a predetermined pay back amount. In exchange, the will Port pay 100 percent of the interest on the permanent loan.

The Port gets the guarantee of an immediate land sale of the Sea Wall lot at market rate. This will contribute to the financing for construction of the project. Additionally, the Port will finance a portion of the construction, operation and maintenance of the public facilities through the issuance of bonds. The bonds will be serviced by the revenue generated from the project. Under the financing arrangements, the Port will receive revenue from service bonds. Through the use of land sale proceeds and the issuing of bonds the City can build a public facility without drawing on tax revenue. Furthermore, as an equal partner, the Port will share the management responsibility and financial risk with the developer. Finally, the Port will minimize its contribution of staff and project

overhead by designating the developer to provided design, construction management, marketing and operation expertise for all parts of the project.

Financial Pro Forma

The purpose of the financial pro forma is to provide a test scenario combining the program and financial structure. It provides a dialogue between concept with financial viability. This financial model is also a test of time, identifying risk and expected outcome. Ultimately, it contributes to the information necessary to make development decisions. The data and assumptions used are the result of a series of interviews with private developers and city agencies which had constructed, proposed or overseen development interest in the South Beach area. The Port of San Francisco, Koll Development Company in connection with Hills Brother and the San Francisco Sailing Center projects, the Delancy Street project, Yerba Buena Cultural Center, and Forest City Development in connection with Bayside Village provided considerable data for the development of this pro forma. All of the information was based on current and future market considerations in the South of Market area.

The pro forma is divided into five major components: Development Cost and Parameters, Development Assumptions, Construction and Permanent Financing, Revenue and Expense Analysis, and Projected Cash Flow from Operations. The inquiry forecast the financial potential through the year 2005. This takes into consideration a two year approval process, three years of construction and the first ten years of operation. Given the goals of the deal no anticipation of sale has been calculated into the pro forma.

The *Development Cost and Parameters* are a set of variables connected to the physical design and construction of the project. The categories include land acquisition, hard and soft development costs and scale parameters. Of particular concern is the determination of the land cost. Three sources were used to identify the most appropriate market price: the FAR or potential density of the site, the market value of adjacent land of newly completed projects such as Hills Brothers, and the specifics of this deal. The price of the land as a function of future value creation was not considered.

The *Development Assumptions* are significant variables which consider debt and equity, growth rates, operating expenses and revenues. In reviewing the pro forma several key assumptions should be substantiated.

The revenues for office and retail are based on the review of several new projects in the neighborhood. The Hills Brother project is of particular value because it shares many of the same attributes of Pier 30-32 such as density, location and proximity to the waterfront. The Hills Brother project is currently leasing office space for $28-$30 per square foot and the retail space is approximately the same but with the added condition of a triple net lease requirement. Although the rent rate should be higher given that the project will not operate until 1996, the laggard market condition suggest a more conservative rent forecast. Given this consideration, the pro forma retains the $28 per square foot for office space and $32 (triple net) per square foot for retail space.

A major revenue source for the Museum is daily patrons. The current and potential visitor statistics is discussed at length in Chapter six, however, some explanation is necessary to fully understand the pro forma assumptions. The 1989 Survey of San Francisco's Visitors Report, indicates that there is currently an Asian visitor population of 29,700 per day. On the average these visitors remain in San Francisco for 3.3 days. I take the position that a portion of these Asian visitors will spend one or a part of one day at the Museum/Memorial. Although the study shows that 87% to 72% have an interest in visiting Chinatown and Fisherman's Wharf, both relatively near Pier 30-32, the pro forma uses 55% as the total participation level. This participation level is based on two primary issues. First, it is anticipated that the project will require a marketing and introductory period prior to its establishment of a primary San Francisco event. The second reason for using a low participation rate is the current lack of support events in the neighborhood. As the neighborhood matures it would be probable that the participation rate would increase. In this study no groups other than Asians have been included as patrons to the Museum, although it would be anticipated that additional groups will attend. It should also be noted that much of the operation cost for the Museum/Memorial is not represented in the pro forma. It is proposed that the Museum's Board of Director's will establish a capital campaign to raise the additional funds for equipment, programming underwriting and endowment. The cornerstone of the ongoing funding will be acquired in two ways. A leasehold subsidy is supported by the participating Asian Artist and other exhibit clients who will use the facilities and programming grants from various foundation, corporate, government and individual sources.

The *Construction and Permanent Financing* is based on the principal loan amount of $168.8 million. Its estimated that the construction period will last 36 months and that the permanent financing will be based on a 30 year fixed interest rate loan. Both the Port and the developer will participate equally in servicing the loan.

The *Revenue and Expense Analysis* tracks the yearly income and expense of the project. The analysis combines both the commercial sector and the Museum sector of the project, however, the net operating income is partitioned into three parts: commercial, museum and combined income.

The *Projected Cash Flow from Operations* considers three essential components: direct cash flow from the project, tax on income and returns. The pro forma has been divided into three segments which better identifies the cash flow and risk of each participant. As a government owned/nonprofit facility the Museum is not burdened by tax compensation. The commercial venture is subject to tax consideration, however, the Port will organize tax increment financing, which will allow the developer to be tax-exempt during the construction period. requiring a before tax and after tax return projection. All of the projections indicate the respective internal rate of return and net present value amounts.

	A	B	C	D	E	F
1	**Development Proforma**					
2		**Unit**	**Line Item Cost**	**Cost/GrSqFt**	**% of Total Cost**	
3	**Land Acquisition**					
4	Purchase Option	Each	411,642	2.10	0.19%	
5	Exercise Price	Each	41,164,200	210.00	18.69%	
6						
7		Total Land Cost	$41,575,842	$212.10	18.88%	
8						
9	**Hard Development Costs:**					
10	Pier Demolition	Each	2,000,000	1.35	0.91%	
11	Museum/Memorial	Each	34,375,000	125.00	15.61%	
12	Commercial/Trade Center(Shell & Core)	Each	78,520,000	65.00	35.65%	
13	Tenant Improvements(Commercial Center)	Each	22,290,000	24.00	10.12%	
14	Garage	Each	5,790,000	30.00	2.63%	
15	Contingency	5%	6,859,250	4.63	3.11%	
16			---	---	---	
17		Total Hard Cost	$149,834,250	$249.97	68.03%	
18						
19	**Soft Development Costs:**					
20	Architecture & Engineering	5%	7,491,713	5.05	3.40%	
21	Development Fee	5%	7,491,713	5.05	3.40%	
22	Legal & Accounting	Each	1,000,000	0.67	0.45%	
23	Insurance	Each	250,000	0.17	0.11%	
24	General Marketing	Each	500,000	0.34	0.23%	
25	Leasing Commissions	Each	1,620,000	1.09	0.74%	
26	Overhead	2%	2,996,685	2.02	1.36%	
27	Contingency	5%	7,491,713	5.05	3.40%	
28			---	---	---	
29		Total Soft Cost	$28,841,823	$19.45	13.09%	
30			==========	==========	==========	
31	TOTAL DEVELOPMENT BUDGET		$220,251,915	$269.42	100.00%	
32	**Scale Parameters**					
33		**Unit**	**Line Item**	**Range Names:**		
34	Site Area(Total, 17 Acres)	Square Feet	740,520	TOTAREA		
35	Site Area(Sea Wall Lot, 4.5 Acres)	Square Feet	196,020	SEAWAREA		
36	Gross Building Area	Square Feet	1,483,000	GBA		
37	Museum Building Area	Square Feet	275,000	MUAREA		
38	Commercial/Trade Building Area	Square Feet	1,208,000	COAREA		
39	Floor Area Ratio(Total)	FAR	2.00	TOTFAR		
40	Floor Area Ratio(Sea Wall Lot)	FAR	6.57	SEAWAFAR		
41	Efficiency Factor	Percentage	85%	EFF		
42	Useable Square Footage	Square Feet	1,260,550	USEABLE		
43	Net Rentable Area(Exc.Museum)	Square Feet	1,147,600	NRA		
44	Garage	Spaces	550	GAR	193,000	Sq. Ft.
45	Retail Building Area	Square Feet	150,000			
46	Office Building Area	Square Feet	743,000			
47	Hotel	Square Feet	122,000			

	A	B	C	D	E	F
49	**Development Assumptions**					
50						
51	**Equity**			**Operating Revenues**		
52	City Agency:			**Office Lease:**		
53	o Bond Issues	41,575,842		Market Rent	$28.00	
54	o Land Sale to Developer	41,575,842		Occupancy Rate	90.00%	
55	Developer:			Lease Term	5	
56	o Equity-Developer	41,575,842				
57						
58	**Loan and Capital Interest**	*Take-Out*	*Constr. Loan*	**Retail Lease:**		
59	Loan Amount	137,100,231	137,100,231	Market Rent	$32.00	(Triple Net)
60	Interest Rate	10.00%	10.50%	Occupancy Rate	90.00%	
61	Points	2.00	1.00%	Lease Term	5	
62	Term (Year and Month)	30	36			
63	Accured Interest for Perm. & Constr.	130,823,256	31,416,699			
64	Bond Interest	17,461,854		**Hotel:**		
65	Bond Rate	4.00%	Yearly	Rooms	200	
66	Bond Issue	20	Years	Daily Rate	$150.00	
67	**Growth Rate**			Return Rate	30.00%	
68	Market Rent	4.00%	Yearly	Occupancy Rate:		
69	Real Estate Taxes	2.00%	Yearly	1996	68.00%	
70	Operating Cost	3.00%	Yearly	1999	70.00%	
71	General Inflation	2.00%	Yearly	2002	75.00%	Years
72	**Financial Rates**					
73	Prime Rate	9.00%		**Museum:**		
74	Sales Capitalization Rate	9.00%		SF Asian Visitors/Day	34,241	***
75	Holding Period(After Completion)	50 years		Average Visit Days	3.3	
76	Effective Tax Rate	28.00%		SF Visitor Atten.	55.00%	
77	Corporate Tax Rate	40.00%		Museum Visitors/Day	5,707	
78	**Operating Expenses:**			Ticket Sales:		
79	Real Estate Taxes/Sq. Ft.(Com. Only)	$1.50	Yearly	1996	$12.00	
80	Operating Cost for Commercial/Sq. Ft.	$2.50	Yearly	1999	$15.00	
81	Operating Cost for Museum/Sq. Ft.	$1.50	Yearly*	2002	$20.00	
82	Operating Cost for Hotel	N/A	**	2005	$25.00	
83	Reserve for Replacement	1.00%	Yearly			
84	Leasing Commissions	10.00%	1st year rent	**Garage:**		
85	Payment in Lieu(Yearly Pmt. by Museum)			Spaces	550	
86	**Tenant Improvements:**			Daily Rate:		
87	(For Office Space Only)			1996	$11.50	
88	5-Year Space/Per Sq. Ft.	$24.00	1 time per tenant	1999	$14.00	
89	**Taxation Variables:**			2002+	$16.50	
90	Depreciable Life(Base Building, Tls)	31.5	Years	Occupancy Rate	90.00%	
91	*Approximately 50% of the Museum operating cost will be					
92	provided through an annual endowment.					
93	**The general operating cost of the hotel					
94	are included in the operating cost for commercial use,					
95	specific hotel cost are assumed by the operator.					
96	***The SF Asian Visitors number is based on the current					
97	visitor population of 29,700 over 15 years at a 2% growth rate.					
98	Other visitor groups are not accounted for in this study.					

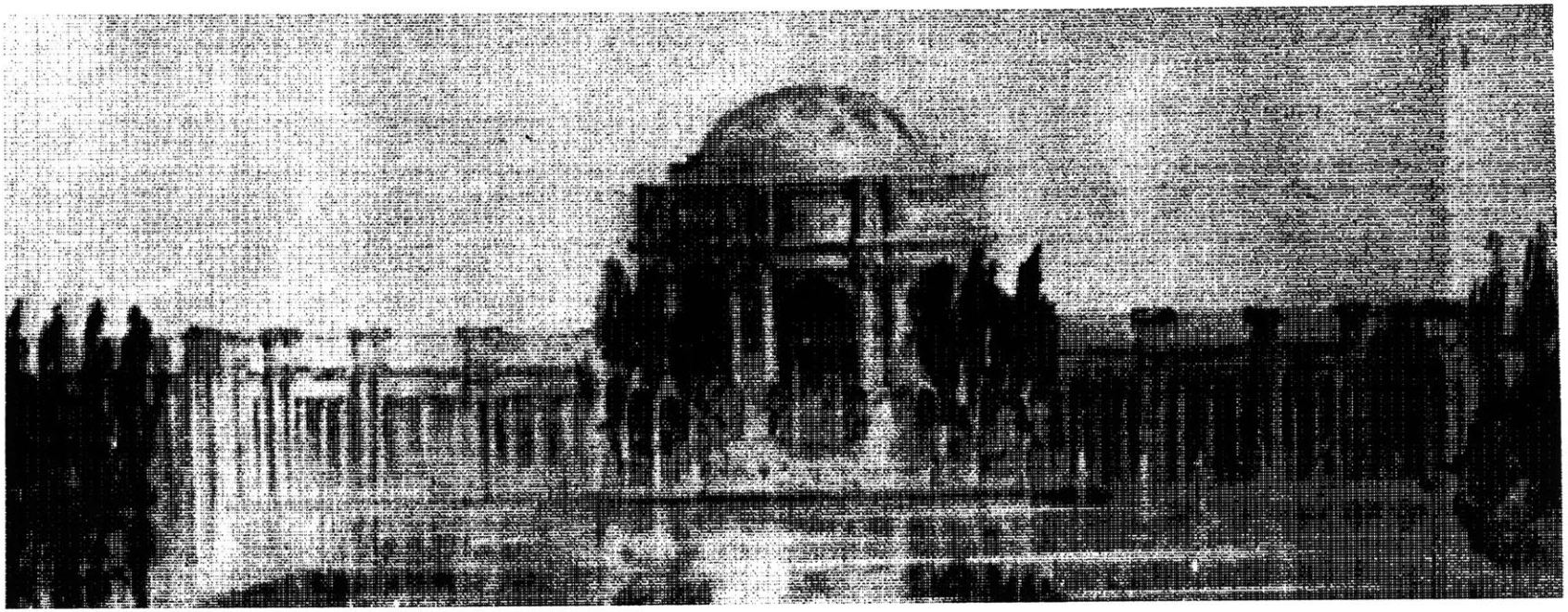
A	B	C	D
Construction Financing			
Equity	**83,151,684**		
Principal	**137,100,231**		
Interest Rate	**10.50%**		
Points (as a % of principal)	**1.00%**		
Points (dollar equivalent)	**1,371,002**		
Construction Period Expenditures	**177,056,073**		
Month	**Begin Balance**	**Draw**	**Accrued Inter.**	**End Balance**
1	1,371,002	4,918,224	33,514	6,322,740
2	6,322,740	4,918,224	76,841	11,317,805
3	11,317,805	4,918,224	120,548	16,356,578
4	16,356,578	4,918,224	164,637	21,439,439
5	21,439,439	4,918,224	209,112	26,566,776
6	26,566,776	4,918,224	253,977	31,738,977
7	31,738,977	4,918,224	299,233	36,956,434
8	36,956,434	4,918,224	344,886	42,219,544
9	42,219,544	4,918,224	390,938	47,528,707
10	47,528,707	4,918,224	437,393	52,884,324
11	52,884,324	4,918,224	484,255	58,286,804
12	58,286,804	4,918,224	531,527	63,736,555
13	63,736,555	4,918,224	579,212	69,233,991
14	69,233,991	4,918,224	627,315	74,779,530
15	74,779,530	4,918,224	675,838	80,373,592
16	80,373,592	4,918,224	724,786	86,016,603
17	86,016,603	4,918,224	774,163	91,708,990
18	91,708,990	4,918,224	823,971	97,451,185
19	97,451,185	4,918,224	874,215	103,243,624
20	103,243,624	4,918,224	924,899	109,086,747
21	109,086,747	4,918,224	976,026	114,980,998
22	114,980,998	4,918,224	1,027,601	120,926,823
23	120,926,823	4,918,224	1,079,627	126,924,674
24	126,924,674	4,918,224	1,132,108	132,975,006
25	132,975,006	4,918,224	1,185,049	139,078,279
26	139,078,279	4,918,224	1,238,452	145,234,956
27	145,234,956	4,918,224	1,292,323	151,445,503
28	151,445,503	4,918,224	1,346,665	157,710,393
29	157,710,393	4,918,224	1,401,483	164,030,100
30	164,030,100	4,918,224	1,456,781	170,405,105
31	170,405,105	4,918,224	1,512,562	176,835,891
32	176,835,891	4,918,224	1,568,831	183,322,946
33	183,322,946	4,918,224	1,625,593	189,866,764
34	189,866,764	4,918,224	1,682,851	196,467,839
35	196,467,839	4,918,224	1,740,611	203,126,674
36	203,126.674	4,918,224	1,798,876	209,843,774
	Total	***177,056,073***	***31,416,699***	

H	I	J	K	L	M
Serial Bond Schedule					
Bond Issue	**2,078,792**	**(20 year issue)**			
Principal	**41,575,842**				
Interest Rate	**4.00%**				
Bond Maturity	**1 per year**				
Accured Interest	**-17,461,854**				
Year	**Begin Balance**	**Payment**	**Accrued Inter.**	**Amortization**	**End Balance**
1	41,575,842	-2,078,792	-83,152	-2,161,944	39,413,898
2	39,413,898	-2,078,792	-166,303	-2,245,095	37,168,803
3	37,168,803	-2,078,792	-249,455	-2,328,247	34,840,556
4	34,840,556	-2,078,792	-332,607	-2,411,399	32,429,157
5	32,429,157	-2,078,792	-415,758	-2,494,551	29,934,606
6	29,934,606	-2,078,792	-498,910	-2,577,702	27,356,904
7	27,356,904	-2,078,792	-582,062	-2,660,854	24,696,050
8	24,696,050	-2,078,792	-665,213	-2,744,006	21,952,045
9	21,952,045	-2,078,792	-748,365	-2,827,157	19,124,887
10	19,124,887	-2,078,792	-831,517	-2,910,309	16,214,578
11	16,214,578	-2,078,792	-914,669	-2,993,461	13,221,118
12	13,221,118	-2,078,792	-997,820	-3,076,612	10,144,505
13	10,144,505	-2,078,792	-1,080,972	-3,159,764	6,984,741
14	6,984,741	-2,078,792	-1,164,124	-3,242,916	3,741,826
15	3,741,826	-2,078,792	-1,247,275	-3,326,067	415,758
16	415,758	-2,078,792	-1,330,427	-3,409,219	-2,993,461
17	-2,993,461	-2,078,792	-1,413,579	-3,492,371	-6,485,831
18	-6,485,831	-2,078,792	-1,496,730	-3,575,522	-10,061,354
19	-10,061,354	-2,078,792	-1,579,882	-3,658,674	-13,720,028
20	-13,720,028	-2,078,792	-1,663,034	-3,741,826	-17,461,854

	A	B	C	D	E	F	G
168	**Permanent Financing**						
169	**Principal**	**137,100,231**					
170	**Interest Rate**	**10.00%**					
171	**Amoritization Term**	**30**					
172	**Points**	**1.00**					
173	**Annual Payment**	**-14,543,489**					
174							
175	**Required Debt Service Coverage**	**1.10**					
176	**Morgage Constant**	**10.00%**					
177		**Year**	**Begin Balance**	**Payment**	**Interest**	**Amortization**	**End. Balance**
178		**1**	137,100,231	-14,543,489	13,710,023	-833,466	136,266,764
179		**2**	136,266,764	-14,543,489	13,626,676	-916,813	135,349,951
180		**3**	135,349,951	-14,543,489	13,534,995	-1,008,494	134,341,457
181		**4**	134,341,457	-14,543,489	13,434,146	-1,109,344	133,232,113
182		**5**	133,232,113	-14,543,489	13,323,211	-1,220,278	132,011,835
183		**6**	132,011,835	-14,543,489	13,201,184	-1,342,306	130,669,529
184		**7**	130,669,529	-14,543,489	13,066,953	-1,476,536	129,192,993
185		**8**	129,192,993	-14,543,489	12,919,299	-1,624,190	127,568,803
186		**9**	127,568,803	-14,543,489	12,756,880	-1,786,609	125,782,194
187		**10**	125,782,194	-14,543,489	12,578,219	-1,965,270	123,816,924
188		**11**	123,816,924	-14,543,489	12,381,692	-2,161,797	121,655,127
189		**12**	121,655,127	-14,543,489	12,165,513	-2,377,977	119,277,150
190		**13**	119,277,150	-14,543,489	11,927,715	-2,615,774	116,661,375
191		**14**	116,661,375	-14,543,489	11,666,138	-2,877,352	113,784,024
192		**15**	113,784,024	-14,543,489	11,378,402	-3,165,087	110,618,937
193		**16**	110,618,937	-14,543,489	11,061,894	-3,481,596	107,137,341
194		**17**	107,137,341	-14,543,489	10,713,734	-3,829,755	103,307,586
195		**18**	103,307,586	-14,543,489	10,330,759	-4,212,731	99,094,855
196		**19**	99,094,855	-14,543,489	9,909,485	-4,634,004	94,460,851
197		**20**	94,460,851	-14,543,489	9,446,085	-5,097,404	89,363,446
198		**21**	89,363,446	-14,543,489	8,936,345	-5,607,145	83,756,302
199		**22**	83,756,302	-14,543,489	8,375,630	-6,167,859	77,588,443
200		**23**	77,588,443	-14,543,489	7,758,844	-6,784,645	70,803,797
201		**24**	70,803,797	-14,543,489	7,080,380	-7,463,110	63,340,688
202		**25**	63,340,688	-14,543,489	6,334,069	-8,209,421	55,131,267
203		**26**	55,131,267	-14,543,489	5,513,127	-9,030,363	46,100,904
204		**27**	46,100,904	-14,543,489	4,610,090	-9,933,399	36,167,506
205		**28**	36,167,506	-14,543,489	3,616,751	-10,926,739	25,240,767
206		**29**	25,240,767	-14,543,489	2,524,077	-12,019,413	13,221,354
207		**30**	13,221,354	-14,543,489	1,322,135	-13,221,354	0
208				***10 Year Total:***	***130,823,256***	***-14,611,638***	

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Revenue Analysis	Construction Year 1(1993)	Construction Year 2(1994)	Construction Year 3(1995)	Operating Year 1(1996)	Operating Year 2(1997)	Operating Year 3(1998)	Operating Year 4(1999)	Operating Year 5(2000)	Operating Year 6(2001)	Operating Year 7(2002)	Operating Year 8(2003)	Operating Year 9(2004)	Operating Year 10(2005)
City Agency:													
o Bond Issues	41,575,842	0	0	0	0	0	0	0	0	0	0	0	0
Developer	41,575,842	0	0	0	0	0	0	0	0	0	0	0	0
Office Leases	0	0	0	18,723,600	18,723,600	18,723,600	18,723,600	18,723,600	19,472,544	19,472,544	19,472,544	19,472,544	19,472,544
Retail Leases	0	0	0	750,029	750,029	750,029	750,029	750,029	817,531	817,531	817,531	817,531	817,531
Hotel Income	0	0	0	2,233,800	2,323,152	2,416,078	2,633,525	2,870,542	3,128,891	3,566,936	4,066,307	4,635,590	5,284,573
Museum Income	0	0	0	24,995,930	24,995,930	24,995,930	31,244,913	31,244,913	31,244,913	41,659,883	41,659,883	41,659,883	52,074,854
Garage Income	0	0	0	2,077,763	2,077,763	2,077,763	2,529,450	2,529,450	2,529,450	2,529,450	2,981,138	2,981,138	2,981,138
Total Revenues	83,151,684	0	0	48,781,121	48,870,473	48,963,399	55,881,516	56,118,534	57,193,329	68,046,345	68,997,403	69,566,686	80,630,640
Percentage Change	N/A	N/A	N/A	N/A	0.18%	0.19%	14.13%	0.42%	1.92%	18.98%	1.40%	0.83%	15.90%
Expense Analysis	Construction Year 1(1993)	Construction Year 2(1994)	Construction Year 3(1995)	Operating Year 1(1996)	Operating Year 2(1997)	Operating Year 3(1998)	Operating Year 4(1999)	Operating Year 5(2000)	Operating Year 6(2001)	Operating Year 7(2002)	Operating Year 8(2003)	Operating Year 9(2004)	Operating Year 10(2005)
Construction Cost	62,365,553	69,238,452	76,868,768	0	0	0	0	0	0	0	0	0	0
Operating Cost/Commercial	0	0	0	2,869,000	2,955,070	3,043,722	3,135,034	3,229,085	3,325,957	3,425,736	3,528,508	3,634,363	3,743,394
Operating Cost/Museum	0	0	0	206,250	212,438	218,811	225,375	232,136	239,100	246,273	253,661	261,271	269,109
Tenant Improvements	0	0	8,916,000	8,916,000	0	0	0	2,229,000	2,229,000	0	0	0	2,229,000
Leasing Commissions	438,157	438,157	438,157	438,157	0	0	0	152,176	456,527	0	0	0	0
Real Estate Taxes	0	0	0	225,000	229,500	234,090	238,772	243,547	248,418	253,387	258,454	263,623	268,896
Reserve for Replacement	0	0	0	487,811	488,705	489,634	558,815	561,185	571,933	680,463	689,974	695,667	806,306
Payment in Lieu(Port Only)				2,499,593	2,499,593	2,499,593	3,124,491	3,124,491	3,124,491	4,165,988	4,165,988	4,165,988	5,207,485
Total Expenses	62,803,709	69,676,608	86,222,924	15,641,811	6,385,305	6,485,850	7,282,487	9,771,620	10,195,427	8,771,848	8,896,586	9,020,913	12,524,191
Percentage Change	N/A	10.94%	23.75%	-81.86%	-59.18%	1.57%	12.28%	34.18%	4.34%	-13.96%	1.42%	1.40%	38.84%
Net Operating Income-Commercial	0	0	0	11,093,129	20,445,621	20,444,840	20,983,391	18,739,221	19,402,548	22,367,107	23,205,570	23,660,983	21,911,342
Net Operating Income-Museum	0	0	0	22,046,181	22,039,547	22,032,709	27,615,639	27,607,692	27,595,354	36,907,390	36,895,246	36,884,790	46,195,106
Net Operating Income-Total	0	0	0	33,139,310	42,485,168	42,477,550	48,599,029	46,346,913	46,997,902	59,274,497	60,100,817	60,545,773	68,106,448
Percentage Change for NOI Total	N/A	N/A	N/A	N/A	28.20%	-0.02%	14.41%	-4.63%	1.40%	26.12%	1.39%	0.74%	12.49%
Overall Projected Cash Flow From Operations	Construction Year 1(1993)	Construction Year 2(1994)	Construction Year 3(1995)	Operating Year 1(1996)	Operating Year 2(1997)	Operating Year 3(1998)	Operating Year 4(1999)	Operating Year 5(2000)	Operating Year 6(2001)	Operating Year 7(2002)	Operating Year 8(2003)	Operating Year 9(2004)	Operating Year 10(2005)
Net Operating Income-Commercial	0	0	0	11,093,129	20,445,621	20,444,840	20,983,391	18,739,221	19,402,548	22,367,107	23,205,570	23,660,983	21,911,342
Net Operating Income-Museum	0	0	0	22,046,181	22,039,547	22,032,709	27,615,639	27,607,692	27,595,354	36,907,390	36,895,246	36,884,790	46,195,106
Less Debt Service:													
-Interest on Perm. Loan(Museum D/S)	N/A	N/A	N/A	13,710,023	13,626,676	13,534,995	13,434,146	13,323,211	13,201,184	13,066,953	12,919,299	12,756,880	12,578,219
- Bond Service				-2,161,944	-2,245,095	-2,328,247	-2,411,399	-2,494,551	-2,577,702	-2,660,854	-2,744,006	-2,827,157	-2,910,309
Before Tax Cash Flow	N/A	N/A	N/A	17,267,344	26,613,396	26,614,307	32,753,485	30,529,151	31,219,016	43,546,690	44,437,512	44,961,735	52,617,920
+Amortization(Principal)	N/A	N/A	N/A	833,466	916,813	1,008,494	1,109,344	1,220,278	1,342,306	1,342,306	1,476,536	1,624,190	1,786,609
-Depreciation(Const.+Tls/Period)	N/A	N/A	N/A	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828
Net Taxable Income(Commercial only)	N/A	N/A	N/A	6,305,768	15,741,606	15,832,507	16,471,907	14,338,671	15,124,026	18,088,585	19,061,279	19,664,345	18,077,124
Tax On Income(40%)	N/A	N/A	N/A	-2,522,307	-6,296,642	-6,333,003	-6,588,763	-5,735,469	-6,049,610	-7,235,434	-7,624,512	-7,865,738	-7,230,849
After Tax Cash Flow(Commercial Only)	N/A	N/A	N/A	8,570,822	14,148,978	14,111,838	14,394,628	13,003,752	13,352,937	15,131,673	15,581,059	15,795,245	14,680,493
Cash Flow(Museum)				5,757,481	5,709,369	5,665,220	11,215,422	11,179,792	11,145,316	20,508,430	20,493,673	20,488,658	29,813,273
Equity In:													
-Developer	-41,575,842												
-City Agency	-41,575,842												
Total Return	-83,151,684	0	0	14,328,303	19,858,347	19,777,058	25,610,050	24,183,544	24,498,253	35,640,103	36,074,732	36,283,902	44,493,766
Percentage Change	N/A	N/A	N/A	N/A	38.60%	-0.41%	29.49%	-5.57%	1.30%	45.48%	1.22%	0.58%	22.63%
Overall Internal Rate of Return:	16.97%												
Overall Net Present Value	41,088,263												

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
298	**Museum Projected**	Construction	Construction	Construction	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating
299	**Cash Flow From Operations**	Year 1(1993)	Year 2(1994)	Year 3(1995)	Year 1(1996)	Year 2(1997)	Year 3(1998)	Year 4(1999)	Year 5(2000)	Year 6(2001)	Year 7(2002)	Year 8(2003)	Year 9(2004)	Year 10(2005)
300														
301														
302	Net Operating Income Total	N/A	N/A	N/A	22,046,181	22,039,547	22,032,709	27,615,639	27,607,692	27,595,354	36,907,390	36,895,246	36,884,790	46,195,106
303														
304	Less Debt Service:													
305	-Interest on Permanent Loan	N/A	N/A	N/A	13,710,023	13,626,676	13,534,995	13,434,146	13,323,211	13,201,184	13,066,953	12,919,299	12,756,880	12,578,219
306	-Amortization(Principal)	N/A	N/A	N/A	416,733	458,406	504,247	554,672	610,139	671,153	738,268	812,095	893,305	982,635
307	- Bond Service				2,161,944	2,245,095	2,328,247	2,411,399	2,494,551	2,577,702	2,660,854	2,744,006	2,827,157	2,910,309
308	Cash Flow from Museum Operations	N/A	N/A	N/A	5,757,481	5,709,369	5,665,220	11,215,422	11,179,792	11,145,316	20,441,315	20,419,847	20,407,448	29,723,943
309														
310	Equity In:													
311	City Agency:	41,575,842												
312														
313														
314	***Total Return***	41,575,842	0	0	5,757,481	5,709,369	5,665,220	11,215,422	11,179,792	11,145,316	20,441,315	20,419,847	20,407,448	29,723,943
315														
316														
317	Museum Internal Rate of Return:	15.61%												
318														
319	Museum Net Present Value	15,770,261												
320														
321														
322														
323														
324														
325														
326														
327	**Commercial Projected**	Construction	Construction	Construction	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating
328	**Cash Flow From Operations**	Year 1(1993)	Year 2(1994)	Year 3(1995)	Year 1(1996)	Year 2(1997)	Year 3(1998)	Year 4(1999)	Year 5(2000)	Year 6(2001)	Year 7(2002)	Year 8(2003)	Year 9(2004)	Year 10(2005)
329														
330														
331	Net Operating Income Total	N/A	N/A	N/A	11,093,129	20,445,621	20,444,840	20,983,391	18,739,221	19,402,548	22,367,107	23,205,570	23,660,983	21,911,342
332														
333	Less Debt Service:													
334	-Interest on Perm. Loan(Museum Only)	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0
335														
336														
337	Before Tax Cash Flow	N/A	N/A	N/A	11,093,129	20,445,621	20,444,840	20,983,391	18,739,221	19,402,548	22,367,107	23,205,570	23,660,983	21,911,342
338	+Amortization(Principal)	N/A	N/A	N/A	416,733	458,406	504,247	554,672	610,139	671,153	738,268	812,095	893,305	982,635
339	-Depreciation(Const.+Tls/Period)	N/A	N/A	N/A	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828	5,620,828
340														
341	Net Taxable Income	N/A	N/A	N/A	5,889,035	15,283,200	15,328,260	15,917,235	13,728,532	14,452,873	17,484,548	18,396,838	18,933,460	17,273,149
342														
343	Tax On Income(40%)	N/A	N/A	N/A	2,355,614	6,113,280	6,131,304	6,366,894	5,491,413	5,781,149	6,993,819	7,358,735	7,573,384	6,909,260
344														
345	After Tax Cash Flow	N/A	N/A	N/A	8,737,515	14,332,341	14,313,536	14,616,497	13,247,808	13,621,399	15,373,288	15,846,835	16,087,599	15,002,082
346														
347	Equity In:													
348	Developer	41,575,842												
349														
350														
351														
352	***Total Return***	41,575,842	0	0	8,737,515	14,332,341	14,313,536	14,616,497	13,247,808	13,621,399	15,373,288	15,846,835	16,087,599	15,002,082
353														
354														
355	Commercial Internal Rate of Return:	18.75%												
356														
357	Commercial Net Present Value	26,344,259												



Palace of Fine Arts, Panama-Pacific International Exposition, San Francisco, 1913. Charcoal drawing by Bernard Maybeck. Since its conception the Palace of Fine Arts designed by Bernard Maybeck has undergone many different uses while the building form maintains its original configuration. The Palace has become a primary urban artifact for San Francisco. (Photo: Hans Gerson)

Chapter VIII
Conclusion

A Dialectic of Use and Structure

The struggle between use and structure serves as a meaningful discussion to illustrate the tenuous relationship between design and development. The usual process of the design-development effort, engages in first identifying a program or selected use followed by a design to service the program. To much disappointment, the results of this process is a short lived "successful" development and an architecture with little or no value to the city or future use.

The overriding conclusions are that architecture and development are to a great extent autonomous from each other, each working with a different set of criteria and agenda. The critical element of the architecture is to recognize the collective memory, sensitivity of place and spatial structure of the city. In fact, an architecture which is sensitive to its own principles for any given site my not be suitable for development. Whereas the real estate developer's interest is in defining and responding to market, political and economic demands, in any given time. Unfortunately, this thesis and my observations suggest that in the effort to facilitate these independent agendas, the ultimate physical form far too often responds to the latter, at the risk of further isolation and dissection of the city structure.

In response to its own autonomy, real estate development endeavors to create a building based on market needs. Every market has a quasi pre-established size, density, and set of configuration requirements for the building. One could say that each market has a set of internal associations independent from city structure. Therefore, an architecture based purely on a real estate agenda is one primarily determined by program established by a market demand. In effect, the building life is directly associated to the use of the building. In any given

series of years, the highest and best use of the site can shift, for example from office to residential space, modifying the physical form of the building without regard to other criteria. In this scenario, the life of the building is contingent on the length of the market. Buildings based on market demands, often require significant and costly modifications in order to acquire new uses. As a result of short fluctuations in the market, buildings created in direct association with market trends, have a built in obsolescence.

The architectural process explored in this thesis, bases the physical form of the building on the knowledge and interpretation of place, and spatial structure of the city. It suggests a continuation of the city or a city made up of a succession of associations. This approach considers one scenario, and has one "market" in mind, that market is an understanding and transformation of the city structure. This knowledge of the city serves as the generator of the physical form, autonomous from use. Over time that physical form will evolve with the changing of the city, maintaining a resilience which is not contingent on use, and therefore, resisting major modification over time. This suggests that the physical form, although meeting the needs of place and city structure, may in fact not meet the needs of the real estate agenda.

Both architecture and real estate development have a different agenda and criteria. Based on the arguments set in this thesis, the question is how and do architecture and real estate development come together? I would say that one approach to the problem using this method, is to first identify the autonomous qualities of each. The independent disciplines should first be allowed to establish a set of conditions based on separate agendas. In this way, the

autonomy of each can occur simultaneously. Then decide if one can sustain the other. By virtue of its resilience over time, the developer may benefit greatly from this kind of building. A quality that can sustain and participate in the life of the city. What this means to the developer, is that there is potential for a sustained value. This kind of architecture is also sympathetic to the development whose goals are long terms gains.

A positive point here, is that the building that allows itself to be configured based on sensitives of place and spatial structure of the city, has a greater potential for a long life and so does the potential for a stable and sustained income. Also, because the building is resilient, as a result of its sensitivities to the community, the building's ability to change given different uses is achieved at a lower cost. As in the examples of Venice, Savannah, and Mid-Town Manhattan, in this scenario, over time, the building may receive a multitude of uses. In fact this process is most likely to result in a building whose structure can facilitate a multitude of uses and change over time while sustaining the minimum amount of modifications to the overall framework of the structure. Therefore, reducing the cost of operations and increasing the legitimacy of the physical form within a community.

In an environment of increasing political, and economic sensitivity to the lack of resources, the development and political costs are going to be greatly increased in the future. Building this alternative design-development model for a more meaningful relationship, offers the possibility for negotiation and the tools to mitigate the new challenges of our communities.

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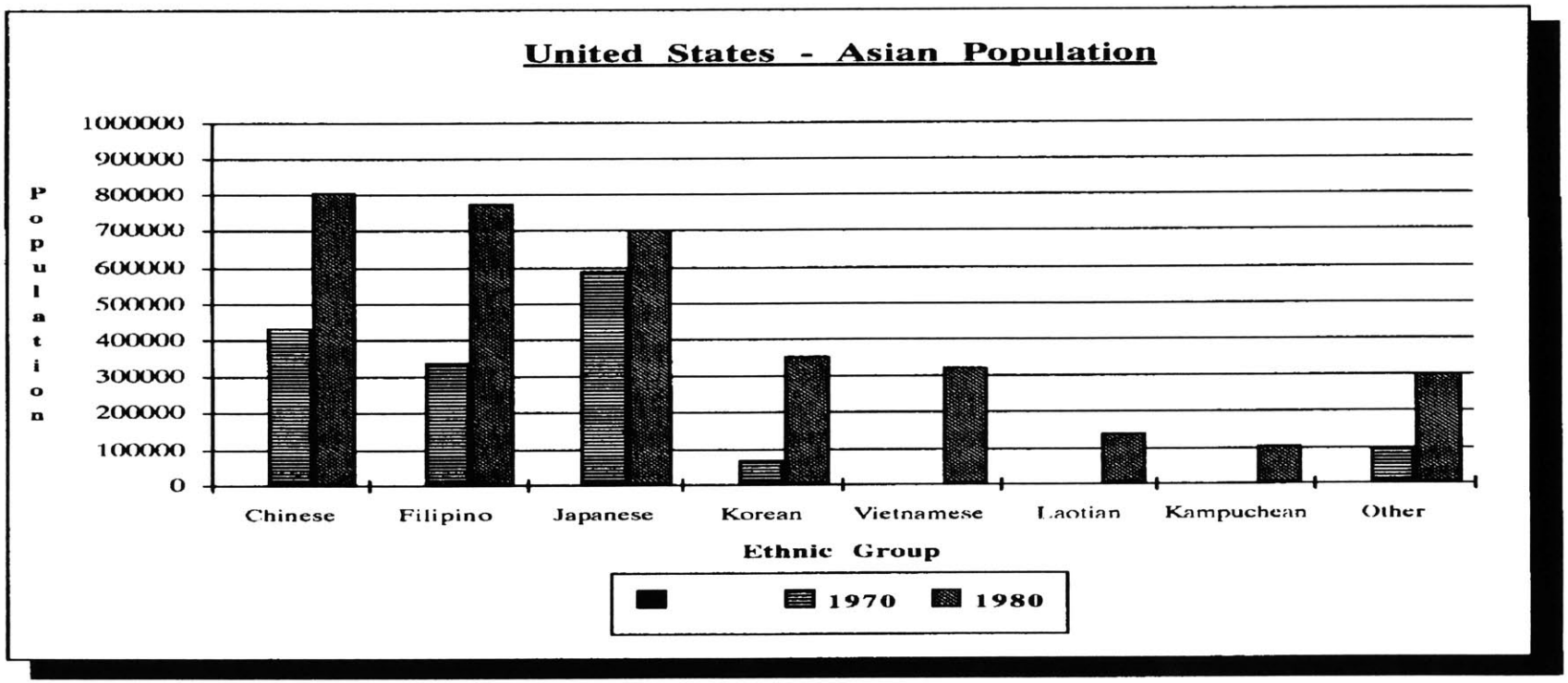
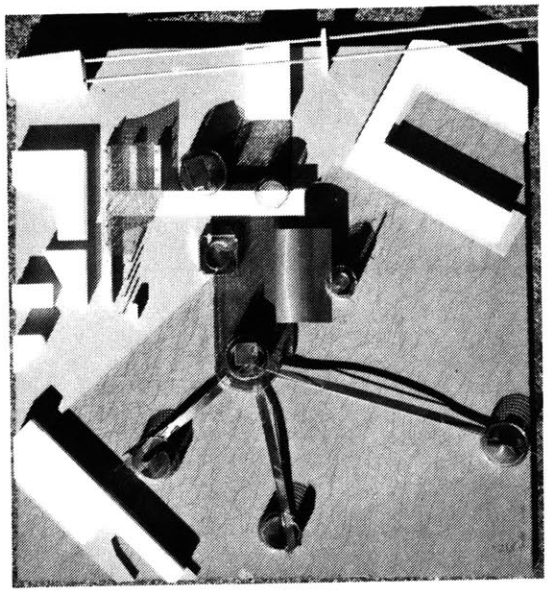
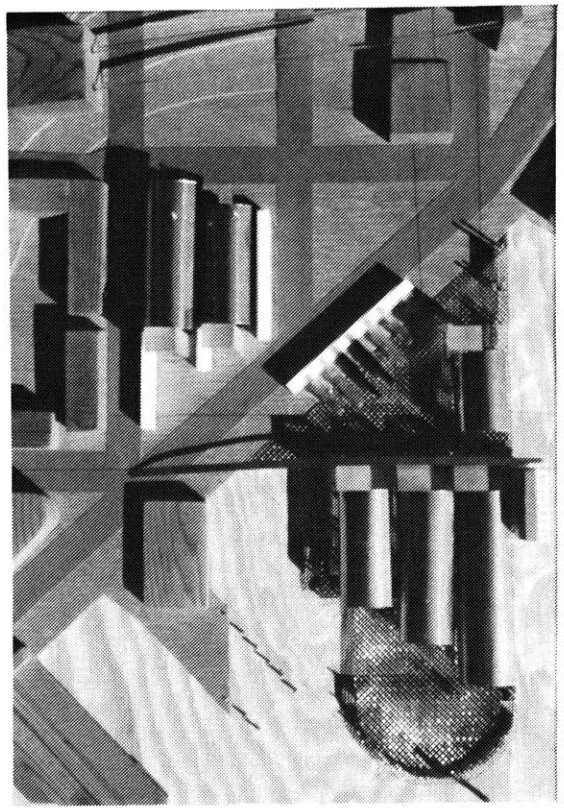
Appendix

	A	B	C	D	E
1	**United States - Asian Population**				
2					
3					
4	**Ethnic Group**		**1970**	**1980**	**% Change**
5	Chinese		433,000	805,000	186%
6	Filipino		337,000	775,000	230%
7	Japanese		587,000	701,000	119%
8	Korean		69,000	354,000	513%
9	Vietnamese		N/A	322,000	N/A
10	Laotian		N/A	141,000	N/A
11	Kampuchean		N/A	102,000	N/A
12	Other		100,000	300,000	300%
13					
14	**Total**		1,526,000	3,500,000	

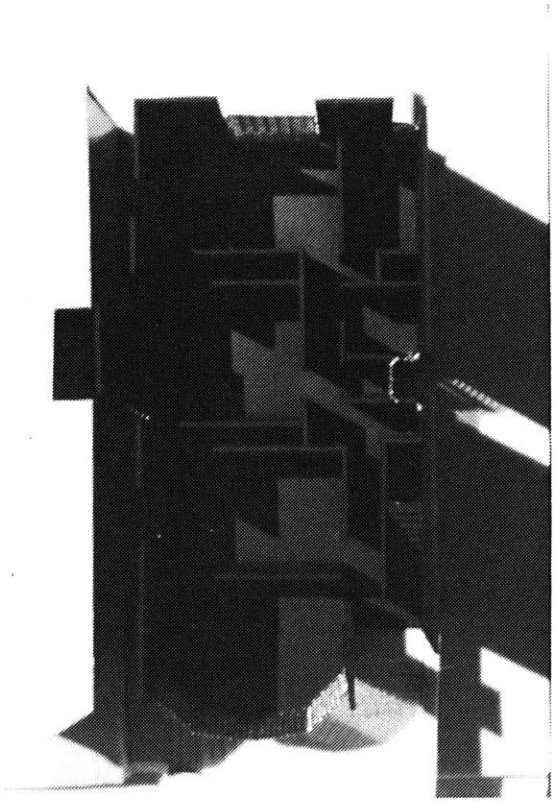


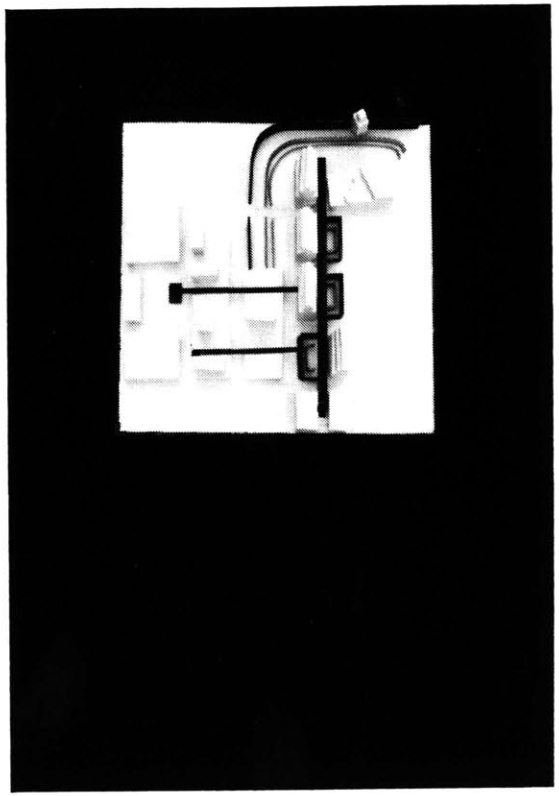
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Arrivals in the United States and Territories from Asian Nations														
Ethnic Groups	**1860**	**1870**	**1880**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**	**1980-81**	**Total**
Chinese	42,000	64,000	120,000	62,000	15,000	18,000	21,000	30,000	3,000	17,000	8,000	33,000	229,000	662,000
Filipino	N/A	N/A	N/A	N/A	N/A	N/A	4,000	102,000	4,000	4,000	18,000	96,000	441,000	669,000
Japanese	N/A	N/A	N/A	2,000	30,000	125,000	85,000	33,000	2,000	2,000	46,000	41,000	53000	419,000
Korean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5,000	34,000	330,000	369,000
So. Asia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	685,000	685,000
Total	42,000	64,000	120,000	64,000	45,000	143,000	110,000	165,000	9,000	23,000	77,000	204,000	1,738,000	2,804,000



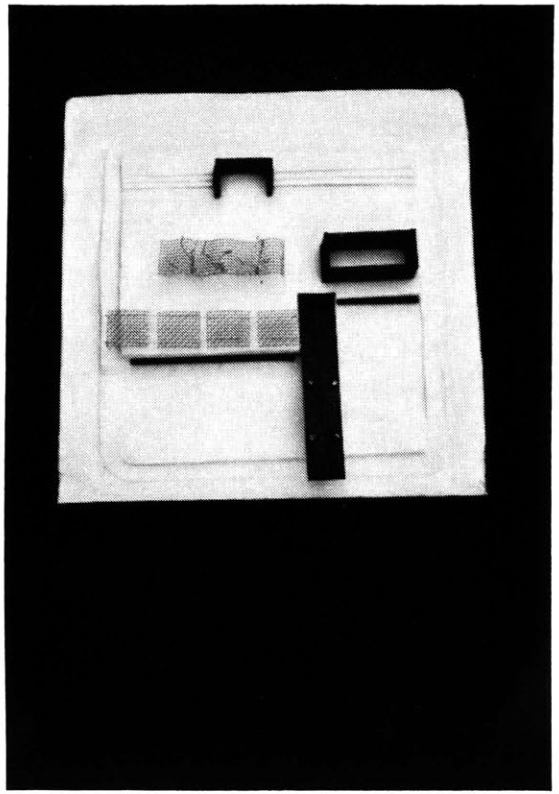


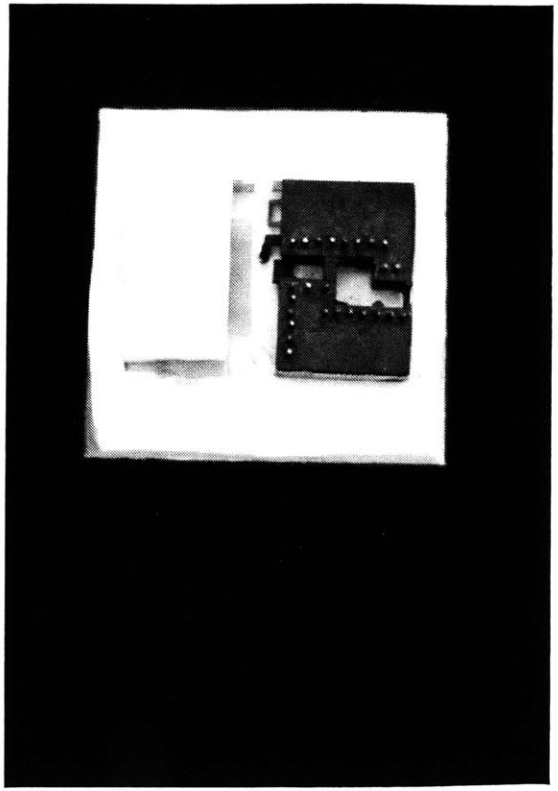
The following pages are illustrations of early design studies.

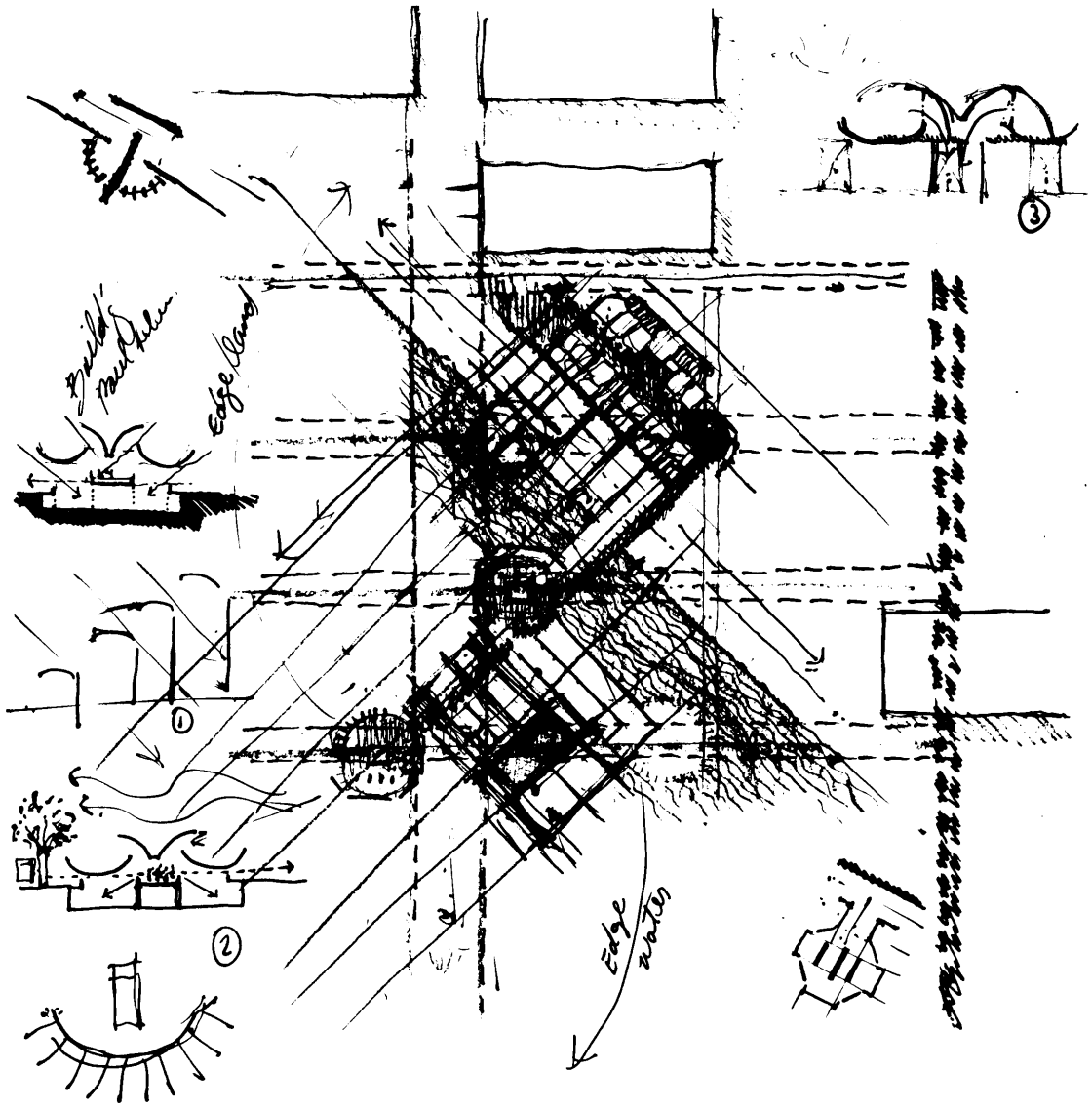




Early study models of various existing San Francisco places.



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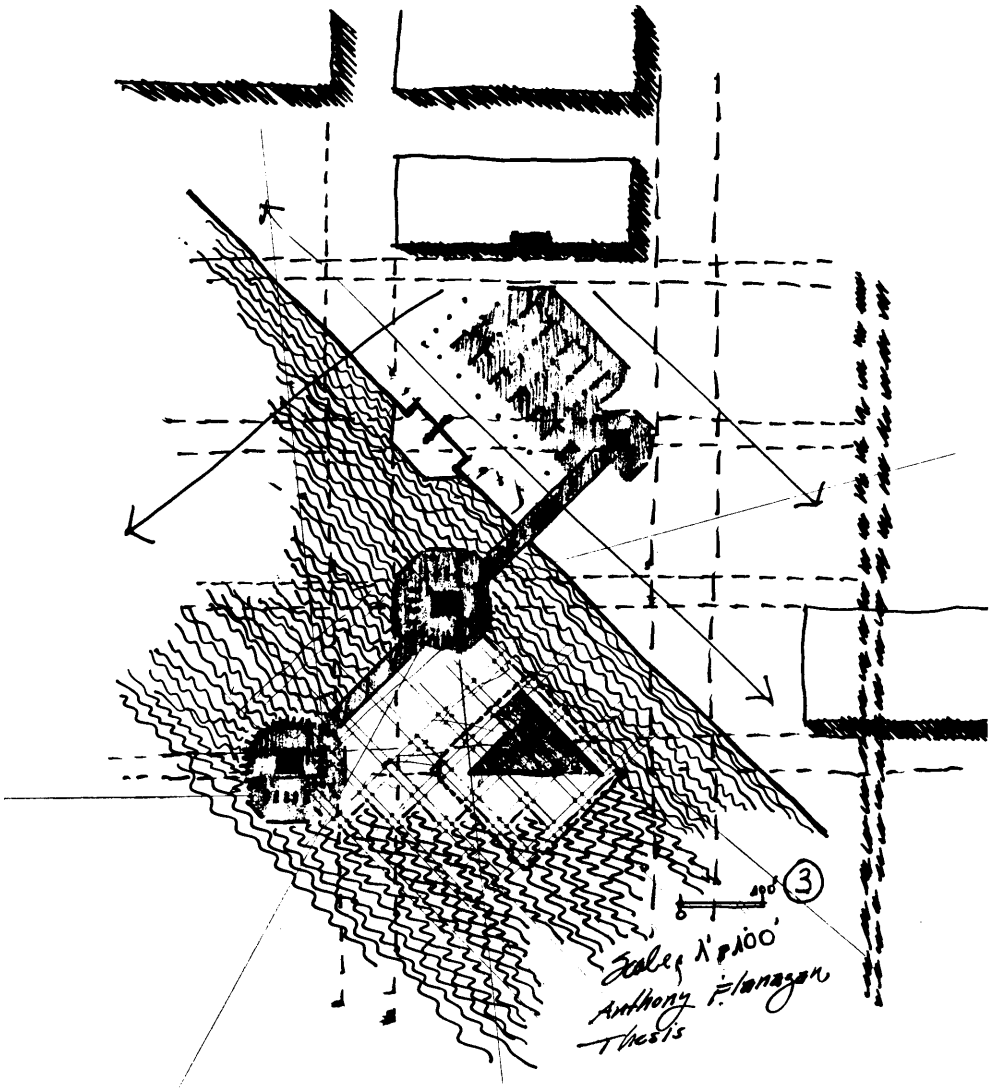
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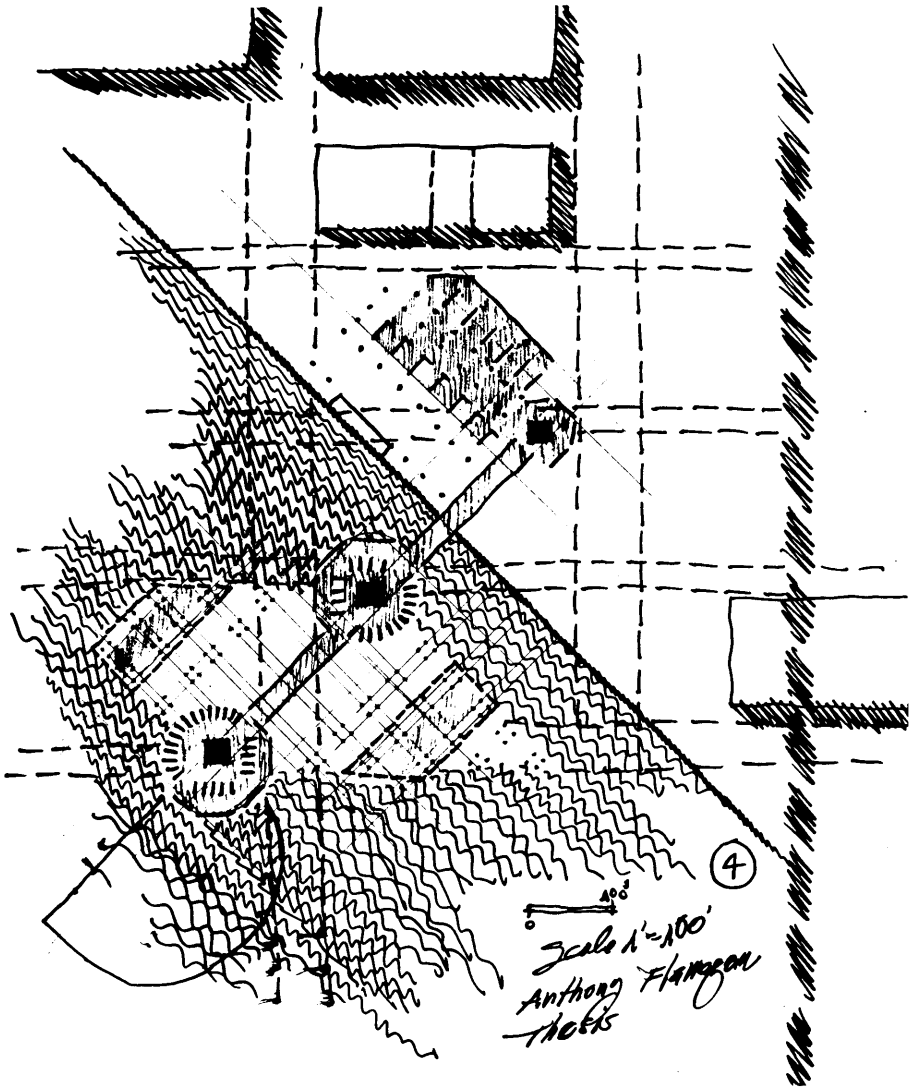
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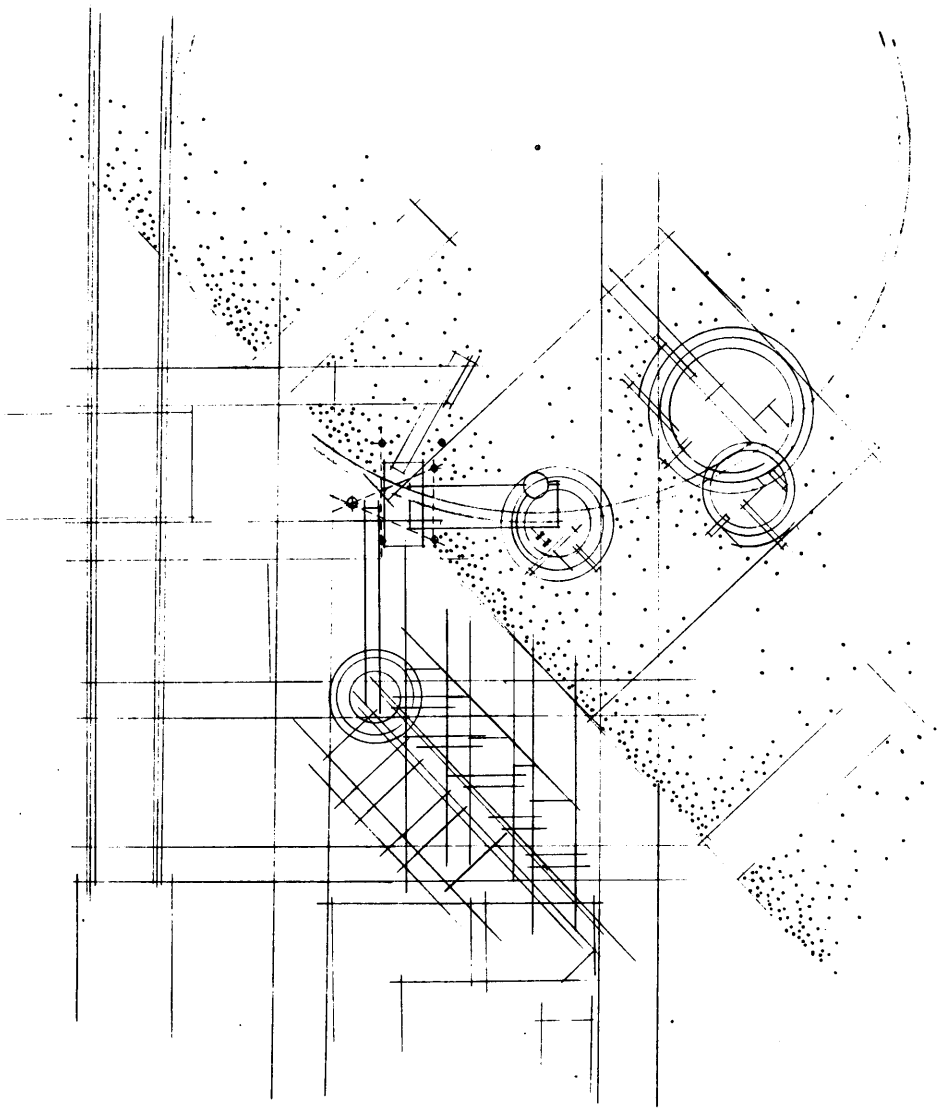

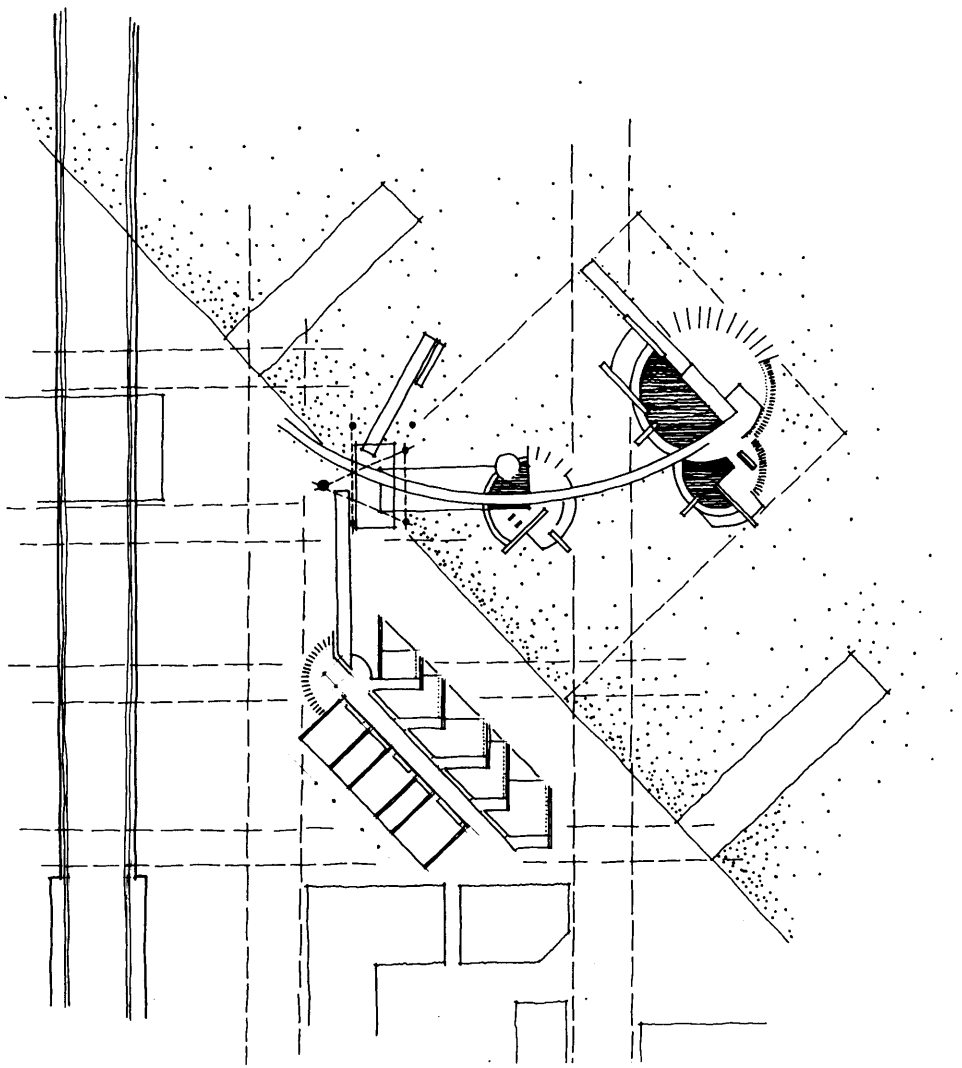

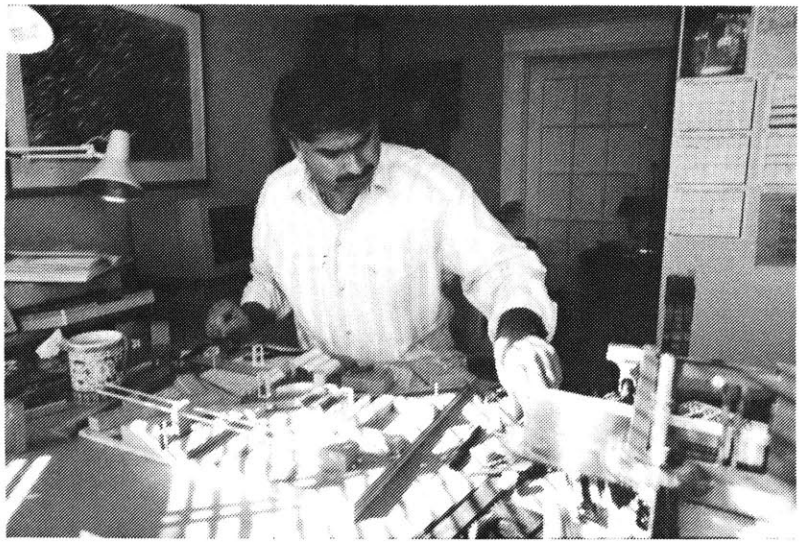

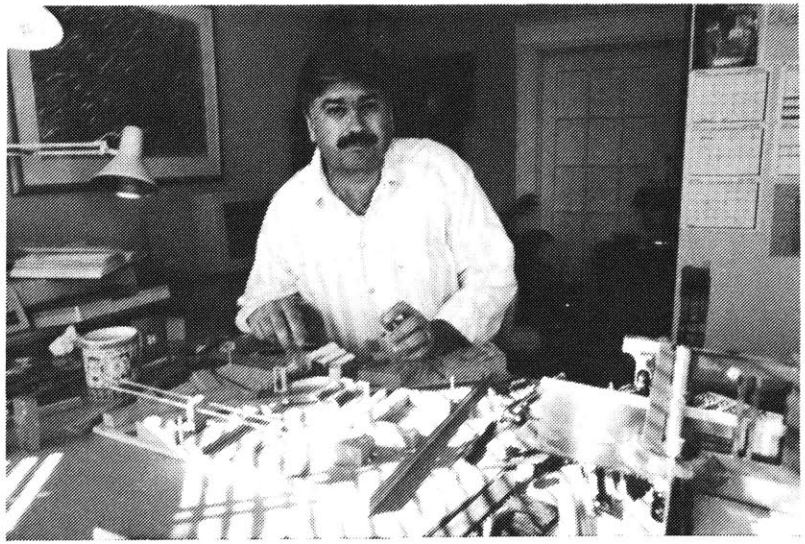

Ciao a Tutti!