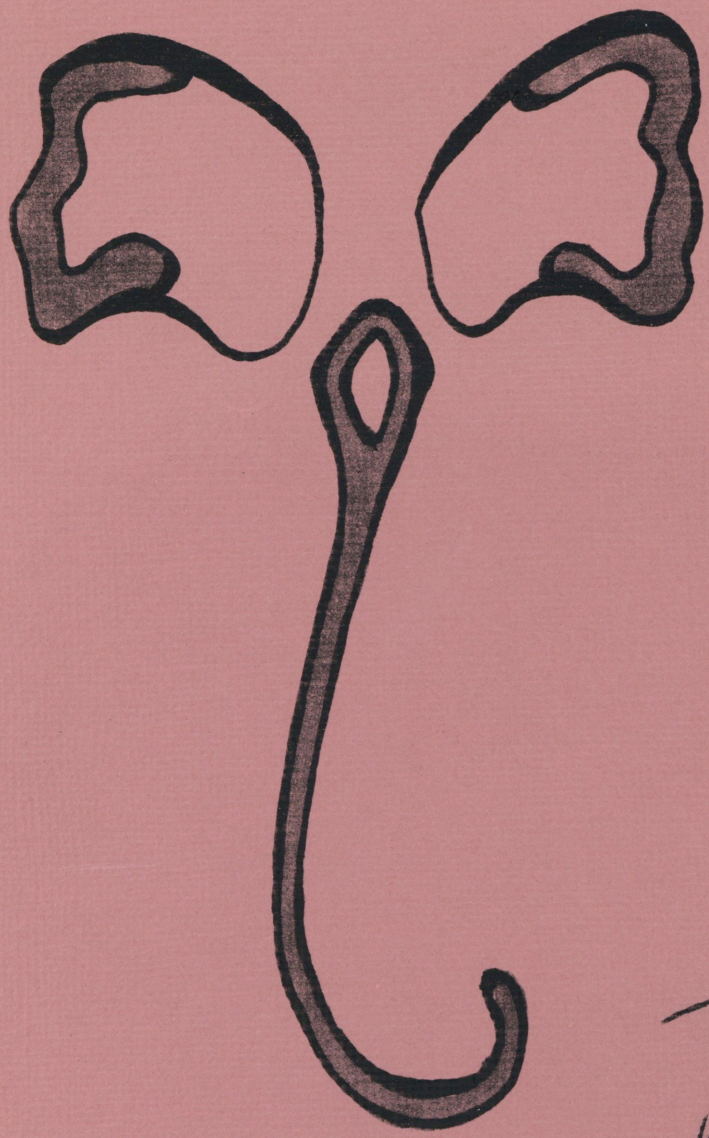


THESIS II

Kathleen Dyer

P378
.D837

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Katherine Dron

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In Retrospect

When I think back on my initial intentions, I realize that the basis for this thesis was not a culmination of what I had learned in the past few years at school. Instead, it was a search for the more playful side of architecture, a side of architecture that I had lost along the way.

I took a word, fantasy ; the creative play of imagination and tried to reconcile it with another word, reality ; all that stuff that makes things work. A balance of rational and irrational parts to create a more meaningful architecture. Similar in kind to Louis Kahn's quote ," Art is where the incredible meets the possible."

Fantasy is part memory , part emotion made tangible by experience . A search in this direction then looks for pieces of the past that have struck a common chord in the dreams and adventures of all people. A few of the pieces I have brought into this project are, the mysterious cave, the uncommon door, the waterfall veil, the isolated beach , and the ever revealing bridge. These elements have been a part of art and literature since the beginning . None are static entities. An architecture in response must flow. It must weave and wind as if spinning its own tale.

I believe this project weaves a tale, through a sequence of dramatic events. Through the hot, barren, desert a road winds up to a lonely door set in the cliff. The door opens into a cool, dusky tunnel which again winds down to a large cavern. The first sight here is of a veil of water struck by shards of light. The road continues through the waterfall , by areas of people in motion, down under the bridge and on out to the sea.

When I show this project to others some of the responses I receive are that it reminds them of a James Bond movie or of the time they were young ,exploring a cave. This was my intent ,to invoke a special part of memory.

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Fantasy

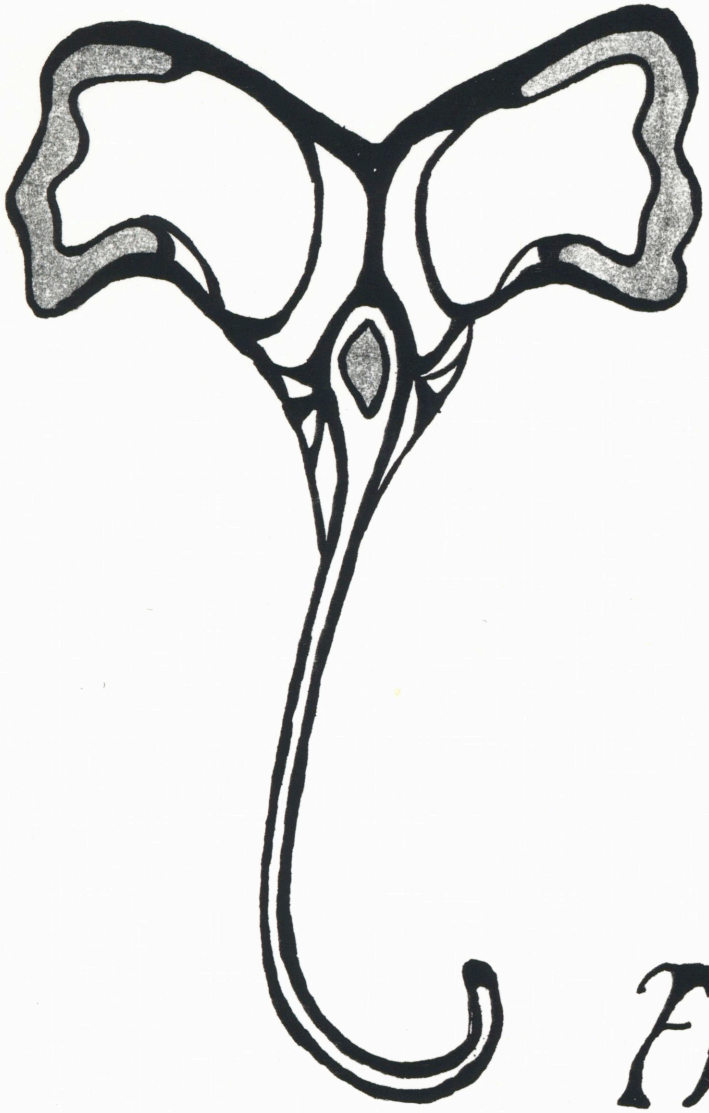
Reality

- The Land
- Vegetation
- Maps
- Statements and Goals
- Program Description
- Flow Diagram
- Program Square Footages
- Miscellaneous

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FANTASY

One summer, while traveling through Lower Baja, I befriended some local Mexican who told me of their favorite place. A small bay on the Gulf side of the Baja Peninsula called San Fransiquita. Later that year, I had a chance to return to that part of the country. After much difficulty, acquiring even the most rudimentary of maps, I set out with a friend to visit San Fransiquita.

About 400 miles south of San Diego, California, a small village holds an obscure, dirt road that leads East out of town. If you're lucky you find it at once. Mexicans do not use street or city signs, they navigate by landmarks, which we eventually discovered. About 10 miles out of our way coming upon a small ranch, we decide we must be lost. Our feeble attempts, with limited Spanish, to inquire directions from the residents, elicits a rapid dialogue that makes no sense to either of us. The Mexican rancher, at a loss himself to communicate, resorts to drawing. Now having little expertise in this area, his sketch was crude. I took one look at this pictorial description and can still remember thinking 'we are miles out in the middle of the Baja Desert, asking directions from a crazed Mexican who's drawing us pictures of daisies!' What joy when we realized that this was a windmill and we must return to it and take the other fork. Six hours and 30 miles later on one of the most remote and desolate roads imaginable, having seen nothing but cactus and crows, we arrive at San Fransiquita.



After traveling so much desert, one hardly expects to find human habitation, let alone a small open-air bar-cafe with cabanas facing the bay. I don't think I have ever enjoyed a margarita so much.

This journey was brought into the realm of adventure by the unexpected element; the sense of discovery of such a place. A place of such contradictions, isolation and comfort, harsh barren land but abounding water. It seemed a good site for some other types of exploration.

We all have adventures; different experiences that are in some way special. This thesis began as a search for this collection of yearnings or fantasy quests. Much like my trip itself, a journey down varying roads looking for the windmill.

There is a series of lectures for John Williams Laurence by the Tulane University School of Architecture. The first lecture is by Louis Kahn given in 1972. He speaks of inspirations, to learn, to meet, to excel and says "It's the fairy tale that is so important. I know if I were to think of changing my profession at this moment I would write the new fairy tales because I know it would be more inspiring than all the technological questions that we think about so much today."[1]

These last thirteen years have not expelled our over-emphasis on technology and its devices. We seem to live in a time where man's inability to deal with his psychic nature, with the human soul has become more appallingly obvious than ever before; affection for realism and aversion to fantasy have become predominant characteristics. I believe gradually that this will change, but for now architecture labeled fantasy is found on the fringes.

If one ventures to construct a complete picture of the architecture of this century, it would include phenomena which do not correspond to the better known, universally recognized trends and which for that reason have usually been ignored. "To preserve the orderly classification, impulses of architectural fantasy were branded as freaks. At best they were called

individualistic or different - because they do not fit. However, if one takes the trouble to examine all those apparently eccentric and isolated phenomena interrelationships emerge that make it impossible to dismiss them with such superficial epithets. Important and logical tendencies begin to appear and occasionally one might even feel that these so-called freakish ideas are concerned with something much more fundamental - and perhaps more important - for the architecture of the future than the exquisite over-refining of accepted and already perfected forms."[2]

Almost by necessity, fantasy architecture exists on the peripheries of modern trends for it is the antithesis of mass production. "Much of fantastic architecture is 'soft architecture', which refuses to use the processes of production, industrial procedures and divisions of labor."[3] Much architecture labeled fantasy is built by untrained individuals. To many, a lifetime project stemming from an inward call to create something special. "The beauty of an object that has been found by chance evokes the creation of artistic forms and herein lies apart from all emotional content its spiritual significance; a naive soul, undeterred by practical considerations, unspoiled by technical schooling received the thing, and its fantasy kindled, depending exclusively on his imagination, he gives shape to a new world."[4]

One definition of fantasy architecture is the physical representations of things that are not actually present. A more poetic form of this idea is Heidegger's description of dwelling, 'Dwelling preserves the fourfold by bringing the presencing of the fourfold into things, the fourfold being, earth and sky, mortal's and divinities.'[5]

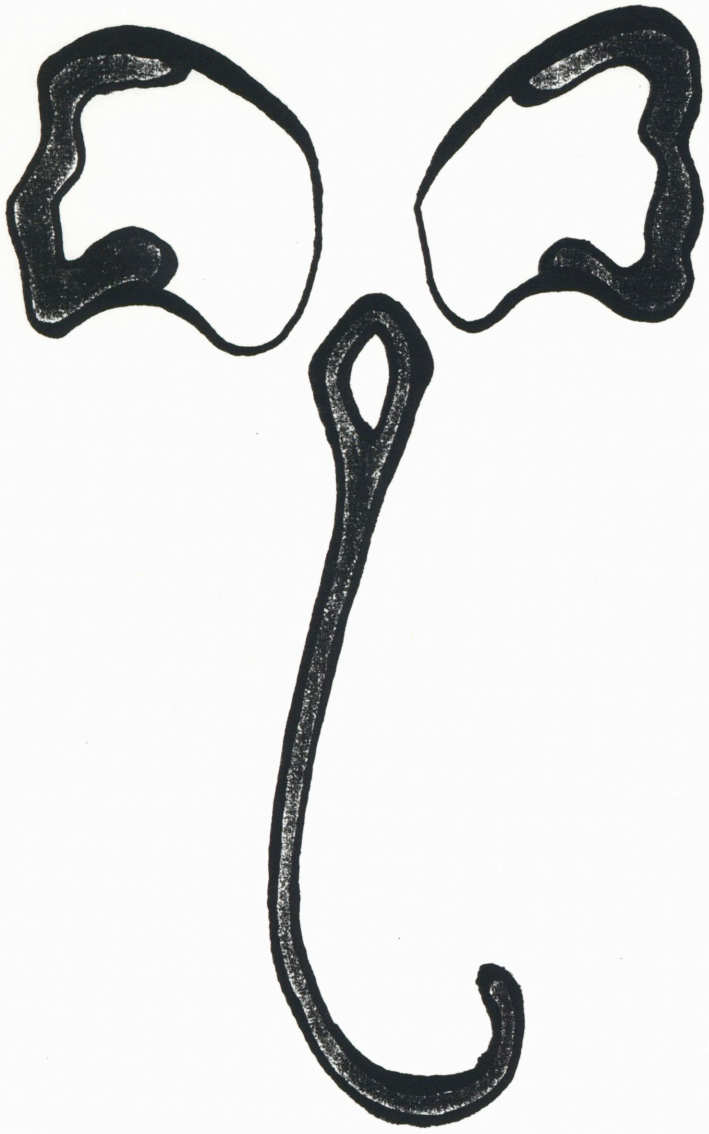
An all encompassing statement which corresponds well with two prominent archetypes in fantastic architecture, the light, airy, skyborne frame and

the dark dense cave. For the fantasy of walking on light, walking with the divinities finds its compliment in the no less mysterious desire for the darkness and the concealed.

Part of fantasy architecture is therefore a representation of inner yearnings to make a connection with these boundless elements.

Gaudi is one well-known architect whose work carries that mysterious, intangible quality of the cave. The charm of his work lies in the indefiniteness of its boundaries, in the elusiveness of its volume which evades description. His surfaces are crusty with mosaic pieces augmenting the natural flow and tactile experience. His structures also spiral into the airy realms connecting earth and sky.

I used the spontaneous technique of collage to represent some of these ideas. The lion symbolized the quest and the subsequent transformation that must occur in order to begin such a journey. The cave and the frame represent the two archetypes, while the door into the hill represents the cave entry as in Arabian Nights. (Collages in Slide Page)



THE LAND

Baja California is a rugged, mountainous peninsula running southeast from the State of California. The climate is similar to Southern California; a bit warmer and drier. Baja is a rich desert land with great forests of strange desert plants; a land of intense sunlight, strong colors, and deep shadows.

"Existentially, the desert is in a very particular way, and its being has to be known as such to make dwelling possible. Islam therefore confirms that the Arab has become a friend of the desert. It is not longer understood as "death," as it was by the ancient Egyptians, but has become a basis for life. This does not mean that the Arab settles in the desert. For settling he needs the oasis, that is an intimate place within the cosmic macro world."[6]

Traditional desert architecture is of thick, masonry walls and low-lying roofs. An environment of long, low horizontals, short tapering verticals, and rough planes of pleasant imperfection. The deep reveals of the doors or windows create extreme chiaroscuro between the dark shadows and brilliant sunlight. Luis Barragan designs with this architectural vocabulary extremely well, using wide walls, brightly colored to avoid the whitewash effect of the Mexican sun.

A constant design factor in the desert is the intense sunlight and the need to modulate this glare. Wright comments, "I suggest that the dotted line is the line for the desert; not the hard line nor the knife edge . . . Sun acceptance in building means that dotted-line in outline and wall surfaces that eagerly take the light and play with it and break it up and render it harmless or drink it in."[7]

In responsive desert architecture, the light is thinned either by diffusing it or slicing it into narrow shafts. A traditional built form that limits intense sunlight is the patio-plaza: an enclosure - "as did the ancient Indians before white eyes found the shelter of an enclosed yard a desirable foil against the intense sun."[8]

Another traditional building concept is density. "A desert village or town ought to be in the settlement pattern which best answers the challenge of the desert, in the dense labyrinth."[9]

VEGETATION

BIZNAGA - This "barrel cactus" grown to a height of over five feet in the central part of the peninsula. Said to be a source of water for the thirsty desert traveler, but its tough interlaced spines defy anything but a heavy sharp tool.

CANDELILLA - Consists of almost leafless gray-green stems 1 to 3 feet high, with thick milky sap. Very common on the central plains where it is sometimes used for making wax for candles.

CARDON - The giant cactus, resembling the saguaro of Arizona, occurs as far north as San Felipe.

CHOLLA - This name is applied to several species of Opuntia with cylindrical branches. Characteristic of the central and southern portions of the peninsula is Pountia cholla which is very green, with widely spaced spines. The joints are easily detached from the plants.

CIRIO - A slender tree with usually unbranched columnar trunks and short, pencil-like horizontal branches which quickly produce leaves after a rain. The yellow flowers are produced in a "plume" at the tip of the trunk. Seen along the road from below El Rosario almost to El Arco. This weird trees grow only in Baja California and in Sonora near Puerto Libertad.

COPAL - A small tree with reddish brown twigs and trunks and usually simple leaves 1 to 1½ inches long, which grown near the Gulf coast. In its aromatic properties and its appearance when leafless, it is very similar to the Torote.

DATILILLO - This tree yucca is abundant on the arid Pacific slope from Punta Prieta southward. It bears huge clusters of creamy yellow flowers.

FRUTILLA - Low, many-branched shrub with sharp spines, often forming thickets. The small but showy red or orange fruits, usually maturing in the spring, are edible but insipid.

GARAMBULLO - The thick-ribbed stems of this cactus are tipped with coarse, hair-like spines. Found only on the Gulf side in the north, but southward it is frequent on sandy plains.

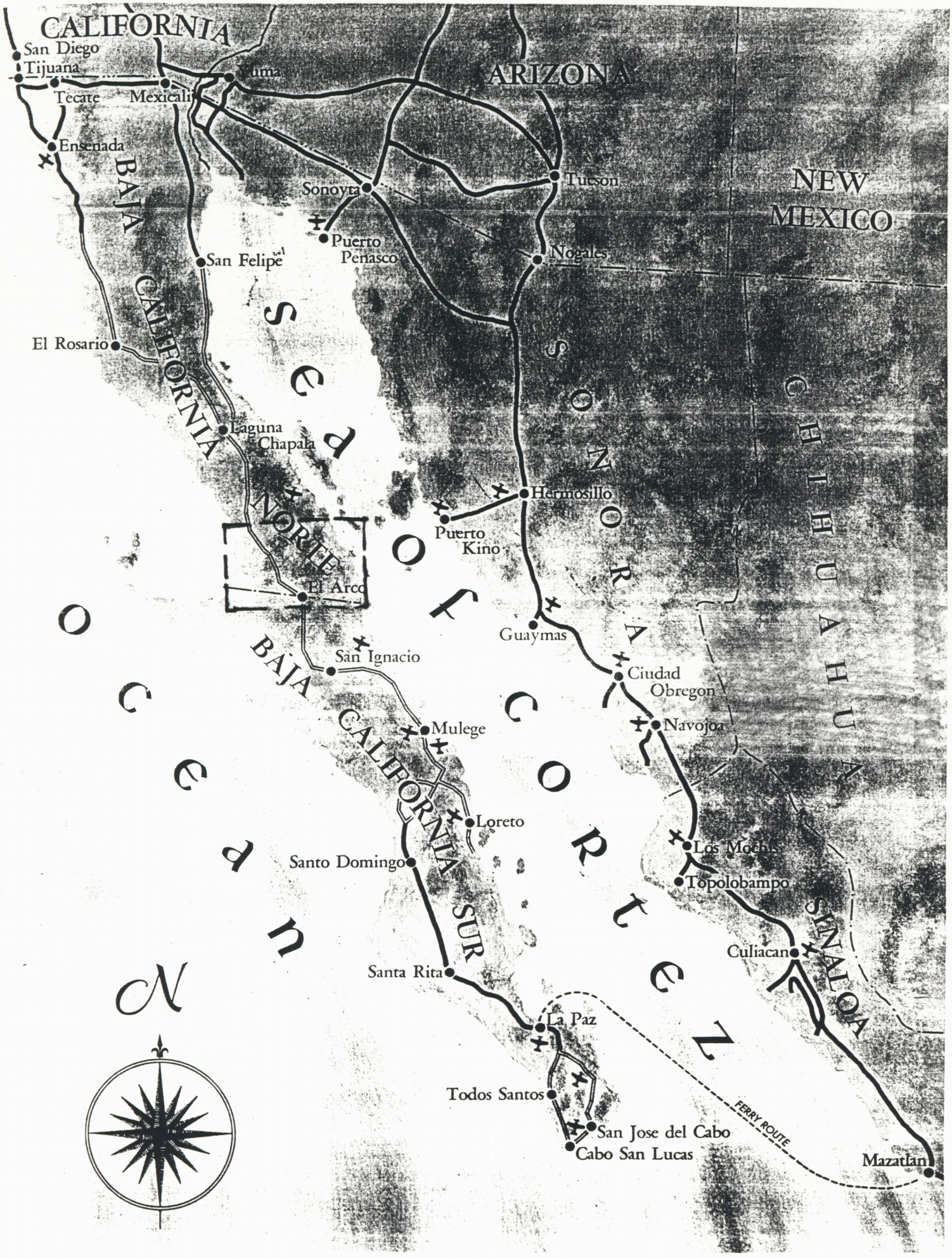
MAGUEY, MESCAL - The century plant. The thick, toothed, sharp-pointed leaves form a rosette. The Indians roasted the heart for food. The typical species of the north: A. deserti in the desert, and A. Shawii along the Pacific coast, give way to several other species of varying size farther south.

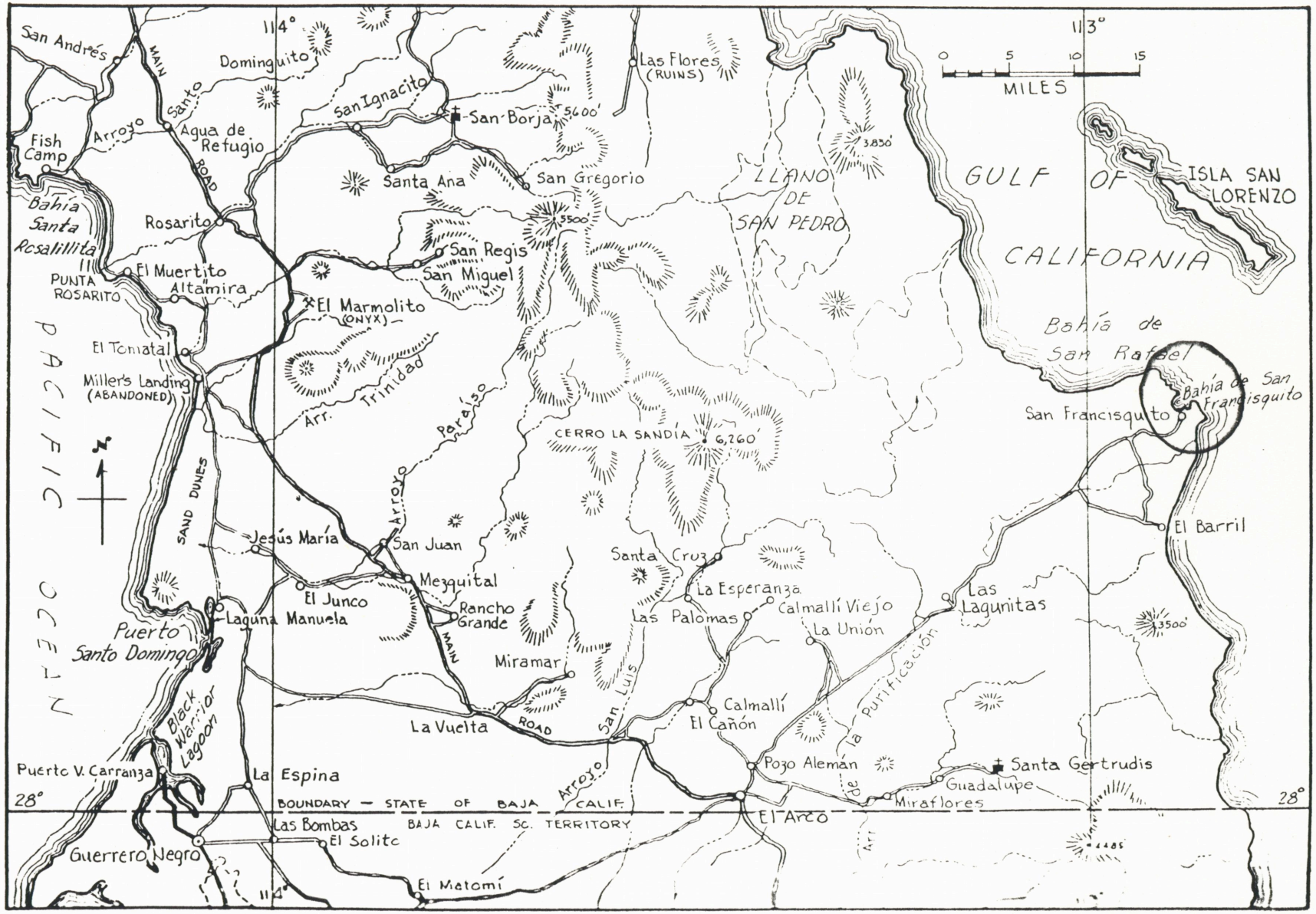
PALMA - The California fan palm (Washingtonia filifera) is found in many canyons on the east side of the Sierra Juárez and Sierra San Pedro Mártir. Often occurring with it is the PALMA CENIZA (Erythea armata) or blue fan palm. In the Southern Territory is found the slender trunked Erythea Brandegeei whose fan fronds are used for thatching roofs.

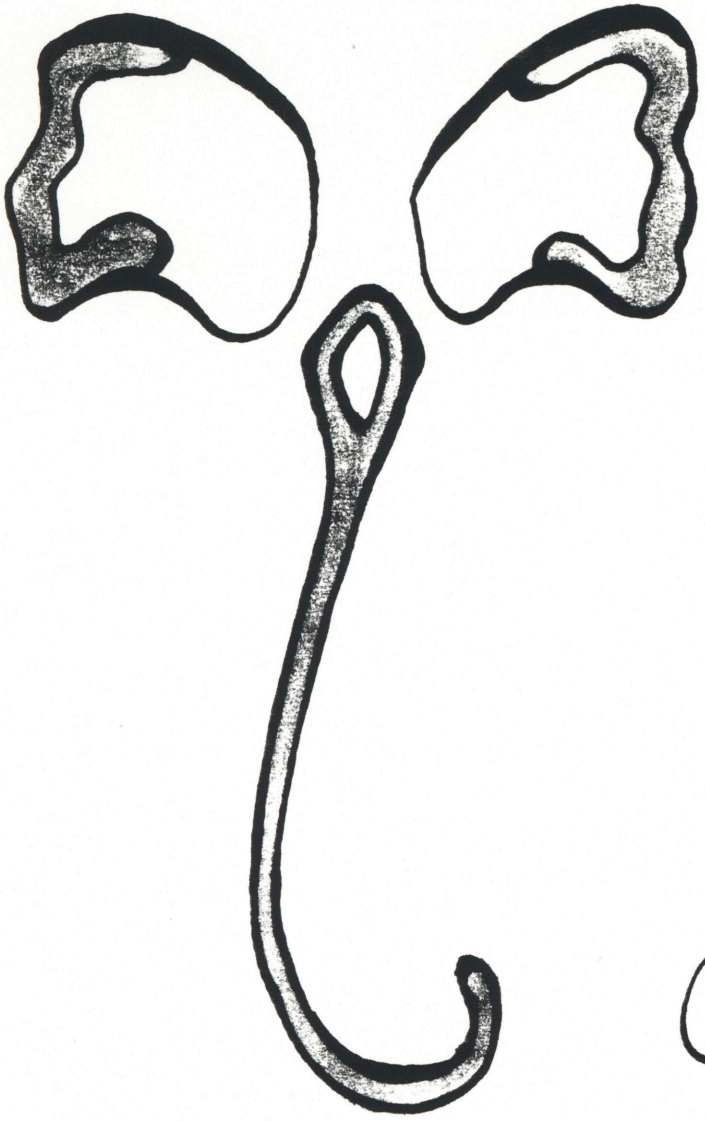
PITAHAYA AGRIA - This cactus with sprawling or erect branches 2 to 3 inches in diameter is common throughout the peninsula. The somewhat acid fruit is edible and refreshing.

PITAHAYA DULCE - This "organ pipe" cactus is common in the southern half of the peninsula. Its fruits, which ripen in summer, are highly prized.

SAN MIGUEL - A showy, red-flowered vine forming dense masses in arroyos following late summer rains.


CALIFORNIA
San Diego
Tijuana
Tecate
Mexicali
Yuma
ARIZONA
Ensenada
BAJA CALIFORNIA
Sonoyta
Tucson
NEW MEXICO
Puerto Penasco
San Felipe
Nogales
El Rosario
Sea of Cortez
SONORA
CHIHUAHUA
Laguna Chapala
Hermosillo
Puerto Kino
NORTE
El Arco
Guaymas
Ocean
San Ignacio
BAJA CALIFORNIA SUR
Ciudad Obregon
Navojoa
Mulege
Loreto
Los Mochis
Santo Domingo
Topolobampo
SINALOA
Culiacan
Santa Rita
La Paz
Todos Santos
FERRY ROUTE
San Jose del Cabo
Cabo San Lucas
Mazatlan
N


San Andrés
MAIN
Santo
Arroyo
Agua de
Refugio
ROAD
Dominguito
San Ignacito
San Borja 5600'
Las Flores
(RUINS)
Fish
Camp
Bahía
Santa
Rosalillita
Rosarito
Santa Ana
San Gregorio
3500'
San Regis
San Miguel
El Muertito
Altamira
PUNTA
ROSARITO
El Marmolito
(ONYX)
El Tomatal
Miller's Landing
(ABANDONED)
Arr.
Trinidad
Paraíso
CERRO LA SANDÍA 6,260'
SAND DUNES
Arroyo
Jesús María
San Juan
Mezquital
El Junco
Rancho
Grande
Laguna Manuela
Puerto
Santo Domingo
Black
Warrior
Lagoon
Miramar
La Vuelta
ROAD
San Luis
Santa Cruz
La Esperanza
Las Palomas
Calmallí Viejo
La Unión
Las
Lagunitas
Calmallí
El Cañón
Pozo Alemán
Santa Gertrudis
Guadalupe
Miraflores
la Purificación
Arr.
3500'
4485'
Puerto V. Carranza
La Espina
28°
BOUNDARY — STATE OF BAJA CALIF.
BAJA CALIF. SC. TERRITORY
Las Bombas
El Solitc
Guerrero Negro
El Matomí
El Arco
Arroyo
114°
113°
0 5 10 15
MILES
LLANO
DE
SAN PEDRO
3830'
GULF OF
CALIFORNIA
ISLA SAN
LORENZO
Bahía de
San Rafael
Bahía de San
Francisquito
San Francisquito
El Barril
PACIFIC OCEAN
N



GOALS

MISSION STATEMENT

Design a resort hotel with creative leisure facilities

at San Fransiquito, Baja, Mexico

FUNCTION GOAL

Provide accommodations and recreational facilities

for 160 people.

FUNCTION GOAL

Respond to individuality of guests



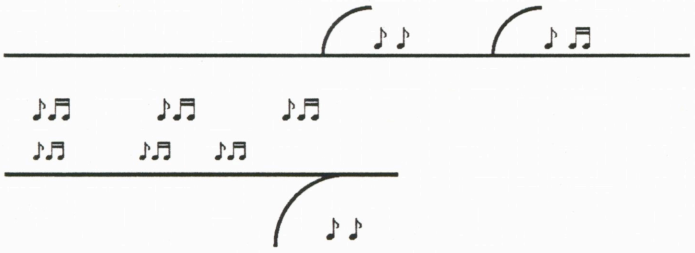
FUNCTION GOAL

Provide private guest rooms.



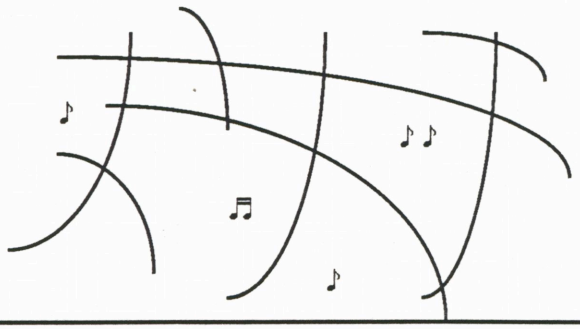
FUNCTION GOAL

Provide areas for formal and random encounters



FUNCTION GOAL

Provide an environment to support the spirit of interplay



FUNCTION GOAL

Provide an organized area of immediate services

HOSPITALITY--

FOOD/BEVERAGES–

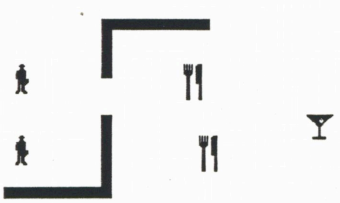
FUNCTION GOAL

Priority relationship

GUEST PARTICITATION

FUNCTION GOAL

Be aware of security problems in food and beverage service areas.



FUNCTION GOAL

Separate flow of quests and employees, where appropriate.

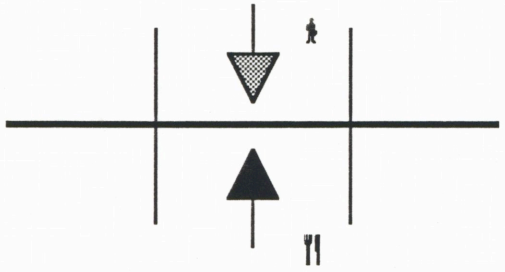


spontaneous

regulated

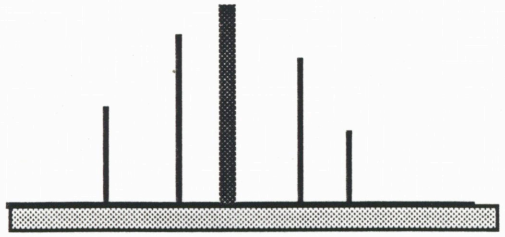
FUNCTION GOAL

Separate the arrival of guests and things.



FUNCTION GOAL

Separate guest and service, vertical circulation.



FUNCTION GOAL

Promote water activities as prime interests.



FUNCTION GOAL

Functional quality less than

50 %

FUNCTION GOAL

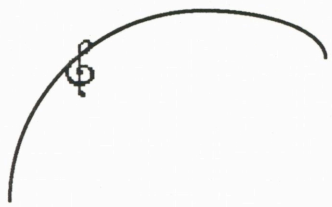
Provide areas for main source of transportation.

GOLF CARTS

EMPLOYEE CARS

FORM GOAL

Enhance the unique qualities of the site by dignifying the bay.



FORM GOAL

Provide an exploratory environment.



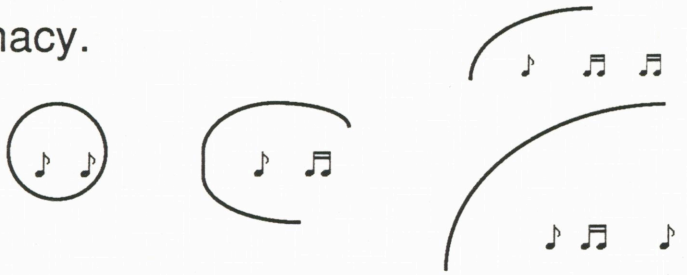
FORM GOAL

Provide ease in access to the bay



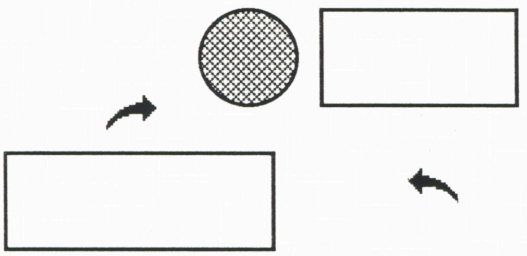
FORM GOAL

Provide an atmosphere with varying degrees of intimacy.



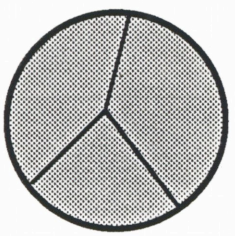
FORM GOAL

Create orientation area with lobby.



FORM GOAL

Centralize immediate services.



PROBLEMS STATEMENTS

- The integration of a large facility and its needed services into an isolated setting with a minimum of disturbances.

- A sense of identity for each room using an appropriate architectural vocabulary for an arid climate.

PUBLIC SPACE

Lobby/Lounge

Activities - registration; billing; waiting; dispensing information, keys, mail; storing valuables

Adjacencies - main circulation; entrance; administration; stores; toilets

Furnishings - front desk - 10', seating, mail boxes, safe deposit boxes; seating

Special Considerations - public/private edge

CONCESSION SPACE

Stores -3-

Activities - shopping; browsing; watching; demonstrations

Adjacencies - entrance; lobby; main circulation

Furnishings - display cases; clothing racks; cashier

Special Considerations - high visibility open; storage

Hair Salon

Activities - cosmetic concerns

Adjacencies - lobby

Furnishings - salon chairs, 2; sinks, 2; hair dryers

GUEST ROOMS -82-

Activities - sleeping; dining; resting; watching outside activities; the Bay Video; reading; bathing; dressing; visiting; storing

Adjacencies - main circulation

Furnishings - king size bed; table; chairs; tub/shower; sinks; seating; clothing storage

Special Considerations - outside private area; views

FOOD & BEVERAGE

Dining Room

Activities - dining; drinking; dancing

Adjacencies - kitchen; outside terrace; toilets

Furnishings - tables; chairs; stage; waiters' station

Special Considerations - dance floor

Open Air Cafe-Bar

Activities - eating; drinking; socializing

Adjacencies - kitchen; pool; larger outside barbeque area

Furnishings - bar; stools; tables; chairs

Special Considerations - view; bay; beach

Bar

Activities - drinking; socializing

Adjacencies - dining room; kitchen; terrace; toilets

Furnishings - bar; stools; tables; chairs

Kitchen

Activities - cooking; preping; washing

Adjacencies - dining room; cafe; employee dining room; small dining room; food and beverage storage; service entrance

Furnishings - ask specialist

Special Considerations - room service

GENERAL SERVICE SPACE

Administrative Offices

Activities - reservations; accounting; billing; customer relations

Adjacencies - lobby; front desk

Furnishings - computers; chairs; desks; file cabinets

Laundry-Linen (1) Housekeeping office

Activities - washing; drying; ironing; folding; sorting; sewing; dry cleaning; storage

Adjacencies - service entrance

Furnishings - washers; dryers; shelves; tables; sink

Employee Lockers (Men's & Women's)

Activities - changing; storing; showering

Adjacencies - employee dining room; service entrance

Furnishings - lockers; toilets; sinks; seating; showers

Parking Areas

Employee Parking - 80 cars

Cart Parking - 40 carts

BEACH - BOAT AREA

Beach

Activities - swimming; sun bathing; diving; sailing; windsurfing; boating

Adjacencies - water

Special Considerations - separate swimming and diving area from boat area; shaded areas

Equipment Storage Area

Activities - storing and dispensing equipment (masks, fins, tanks, fishing poles, windsurfers; umbrellas, chairs)

Adjacencies - boat and swimming area

Furnishings - shelves; air compressor

PUBLIC SPACE

	Square Feet
Lobby	1630
Front Desk	100
Men's Toilet	200
Women's Toilet	240
Bellman's Checkroom	40

CONCESSION SPACE

	Square Feet
Hair Salon	400
3 stores @ 1 x 800 square feet	800
2 x 600 square feet	600
	600
Storage	600

GUEST ROOMS

	Square Feet
40 @ 18' x 36' = 648 square feet	25,920
20 @ 17' x 37' = 629 square feet	12,580
10 @ 15' x 37' = 555 square feet	5,550
12 @ 20' x 37' = 740 square feet	8,880
aux space	21,900

FOOD & BEVERAGE SERVICE

	Square Feet
Dining Room	2,000
Band/Dance Area	400
Main Kitchen	1,200
Private Dining Room	300
Open Air Cafe-Bar	600
Bar	800
Employee Dining Room	400
Storage	
Food & Beverage	600
China, Glass, Silver	300
Receiving Room	250
Garbage	100

GENERAL SERVICE SPACE

	Square Feet
General Managers Office	140
Accounting Office	140
Secretary's Office	100
Laundry Room	670
Housekeeping	
Office	140
Linen	360
Employees Lockers	
Men's	380
Women's	380
Nurses Office	240

MAINTENANCE

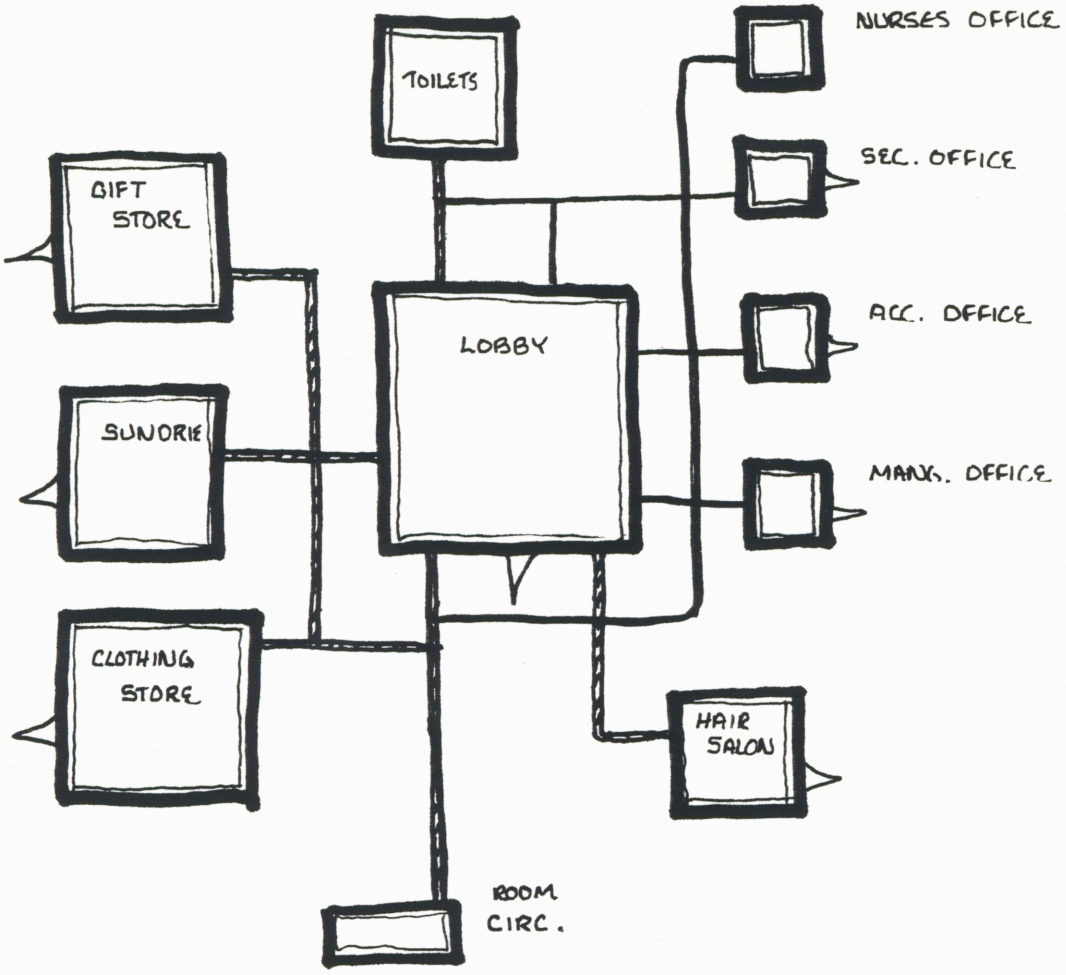
	Square Feet
General	400
Furniture Storage	250
Mechanical	
Boiler	600
Fuel	450
Water Heater	150
Vault	100
Refrigeration	400
Ventilation	400
Maintenance Shop	400

SPORTS FACILITIES

	Square Feet
Change Rooms	
Men's	200
Women's	200
Equipment Storage	700
Swimming Pool	6,000

AIRPORT

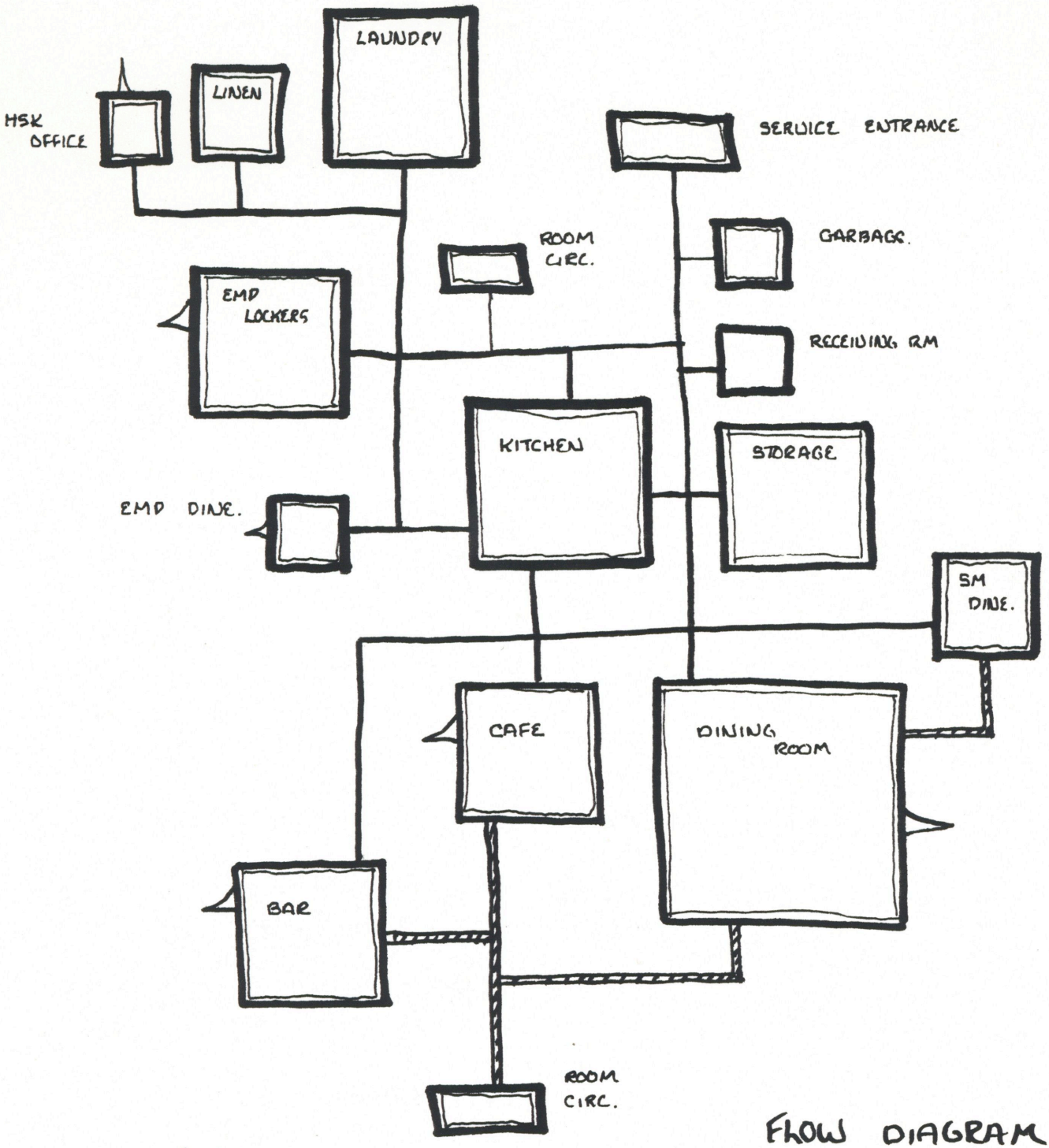
	Square Feet
Lounge	600
Radio Office	240
Reception Area	200
Hangers	
4 @ 900 square feet	3,600
Air Strip	
250' x 2,500'	625,000



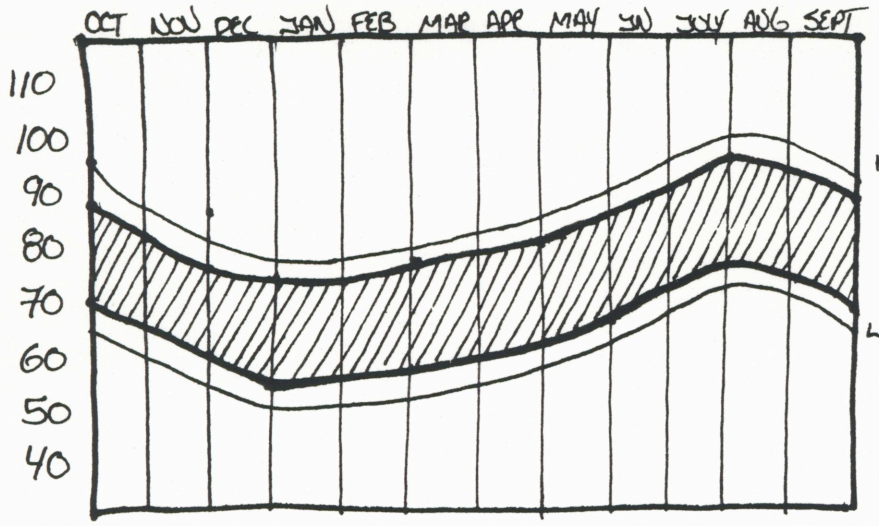
PUBLIC

PRIVATE

FLOW DIAGRAM


LAUNDRY
LINEN
HSK OFFICE
SERVICE ENTRANCE
ROOM CIRC.
GARBAGE
EMP LOCKERS
RECEIVING RM
KITCHEN
STORAGE
EMP DINE.
SM DINE.
CAFE
DINING ROOM
BAR
ROOM CIRC.
FLOW DIAGRAM
PUBLIC
PRIVATE

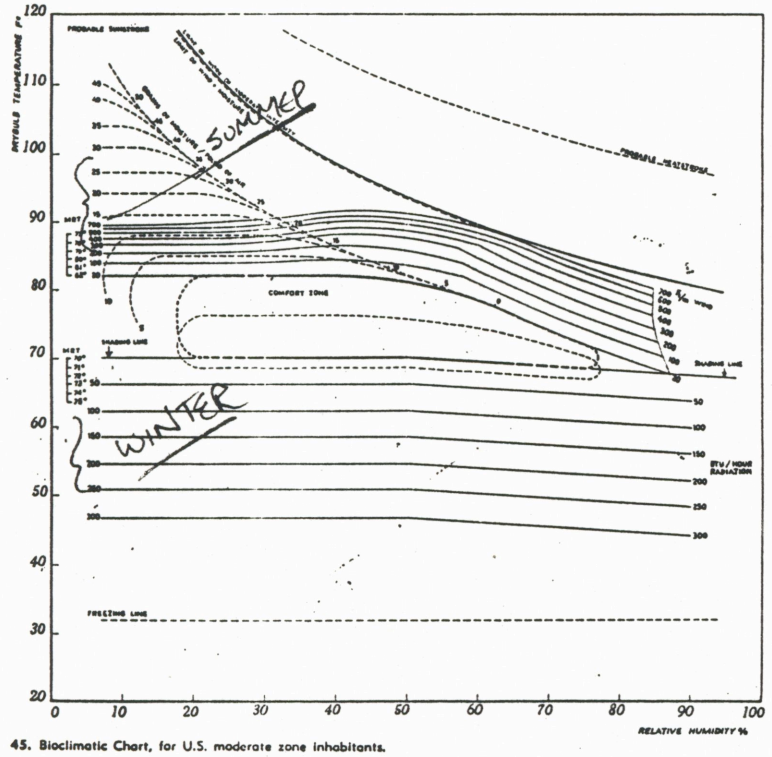
TEMPRETURE



HUMIDITY

20% - 35%

BIOCLIMATIC CHART



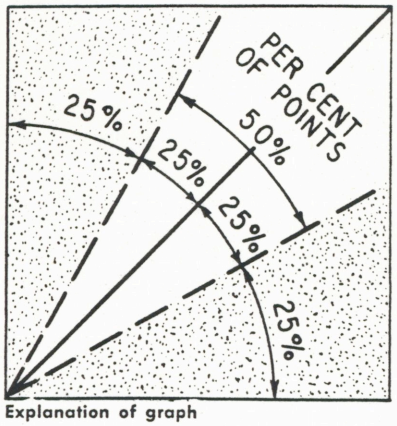
45. Bioclimatic Chart, for U.S. moderate zone inhabitants.

SPACE ALLOTMENTS

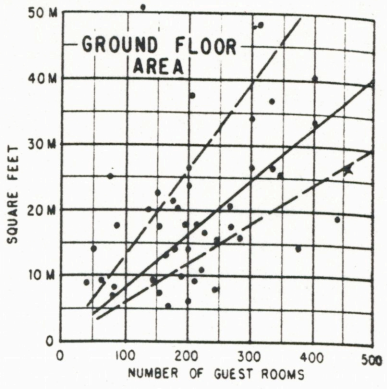
In designing hotels, architects are frequently handicapped by the lack of factual data on space requirements. Too much space results in excessive investment and building-maintenance costs. Too little space makes it difficult for the hotel owners to realize satisfactory profits and, in service areas, causes crowding, reduces speed, and increases payroll.

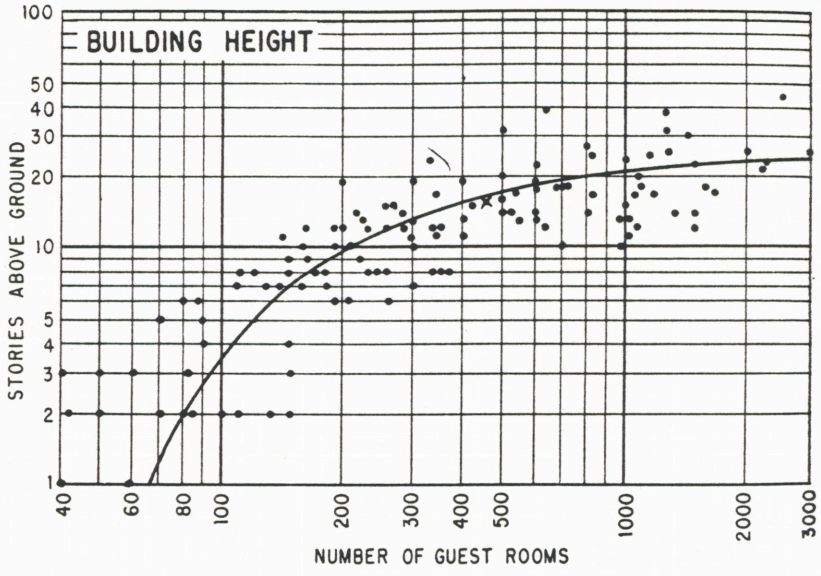
Information on a few hotels can probably be obtained by the architect. However, the data may apply to hotels of the wrong size, possibly of a different type, or designed to meet unusual requirements. Even with a set of complete plans, there is no assurance that the areas shown are the right size or that the building will be well suited to the complex business of hotel operation. Generally, the data collected from the sources usually available are incomplete, unrepresentative, or otherwise inadequate.

In order to obtain space-allotment figures that would be reasonably reliable, the plans of more than 40 hotels were examined. These ranged up to 500 guest rooms in size, were of wide geographic distribution, and all were built within the last 25 years. They were predominantly of the transient, commercial type and were believed to be representative. Although several were in resort communities, this had little influence on the space allotments for the working areas. Residential hotels and apartment houses were not included.



Explanation of graph





ORGANIZATION AND USE OF GRAPHS

In general, each space allotment is plotted on a separate graph, with the total number of guest rooms in the hotel as the base line, for this appears to be the most feasible common denominator. The plotted points (each representing one hotel) often pepper the graph in a widely scattered manner without suggesting a good location for a trend line running through the field of points. The plotted points for the lobby, main kitchen, and boiler room, however, indicate that the size of these areas varies directly with the number of guest rooms. This is a reasonable expectation for other areas.

To arrange the information in a clear and usable form, a solid diagonal line is started at "zero-zero" in the lower left corner of the graph and located by trial to show the median trend running up through the field of the points so that half the points are above the line and half below it. On most of the graphs, two broken diagonal lines are drawn in addition. The upper diagonal line is located by trial so that one-fourth of the total plotted points are above it, and the lower diagonal so that one-fourth of the points are below it. As a result, the fan-shaped area between the two broken diagonal lines contains 50 per cent of the points plotted and may be considered as the usual range of practice.

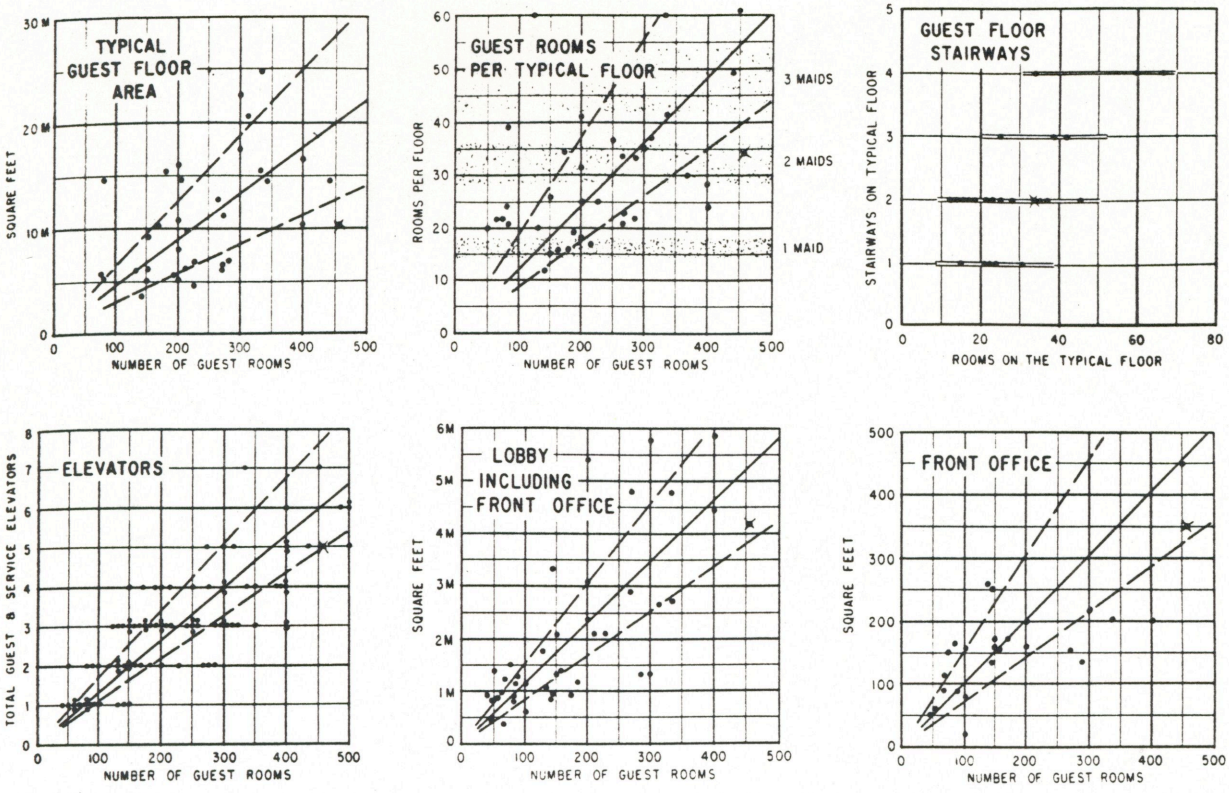
This method of presentation enables the designer to grasp at a glance the relative number of data points, their location, distribution, and trend. He may then determine what deviations from the median value are required for his hotel. The occasional points plotted above the range of the grid are not located to vertical scale.

The generalization that the usual space allotment for the front office is 1 sq ft per guest room is true. By glancing at the graph, however, the designer can estimate the reasonable tolerance above and below this value.

The space allotments for the 455-room Hartford Statler-Hilton Hotel are worthy of special designation and are indicated, where shown, by an X on the data point. The designers, already thoroughly versed in hotel planning and accustomed to attaining high standards of guest comfort and operating efficiency, spent several years of research in planning this structure. The data points that vary appreciably from the median values were for the most part the results of a reevaluation of hotel space requirements, and not due to circumstances peculiar to this hotel.

The method of presentation is such that one or two unusual instances have little influence on the trend line. In contrast, taking an average value might be influenced considerably by one or two abnormally high or low values.

This information is not presented as the final word on space allotments. But it should serve as a reliable guide in



future planning, subject to modifications to meet individual requirements.

GENERAL DATA

Certain general data warrant consideration to give an approximate over-all idea of the typical hotel with any given number of guest rooms.

Building height is indicated by the number of stories above ground. The results of a survey of 125 hotels are shown on the graph, plotted with logarithmic coordinates. The curve rises rapidly, showing the typical 200-room hotel to be 10 stories high, and then tends to level off, showing the typical hotel of 2,000 to 3,000 rooms to be about 25 stories high.

Ground-floor area is shown with the plotted points widely scattered on the graph. The available ground area and the number of guest rooms to be placed on it account for the wide dispersion. In general, the more guest rooms, the greater the ground-floor area. ("M" is the abbreviation for 1,000.)

Typical guest-floor area usually covers about 55 per cent of the ground-floor area, according to the data presented. The guest-floor area may vary greatly, however, depending upon individual circumstances.

Guest rooms per typical floor are shown with a wide dispersion of the plotted points. If there were a standard average-size guest room and a standard percentage addition for corridors, stairways, and the like, then the points on this graph would follow a pattern similar to the graph for the typical guest-floor area, because the area for each data point would be divided by a constant value representing each guest room plus allowances. No such standards exist, however, and therefore the two patterns show no marked resemblance.

Usually each maid is assigned to about 16 rooms, which should all be on the same floor. If feasible, the number of guest rooms on the typical floor should be a multiple of 16 or quite close to it. On the graph, the horizontal bands indicate that one maid would handle from 14 to 18 rooms, two maids twice this number or from 28 to 36 rooms, and three maids three times the number or from 42 to 54 rooms. In more than half the hotels studied, the housekeeper apparently has some difficulty in arranging maid assignments.

Guest-floor stairways tend to increase in number with the number of guest rooms on the typical floor. Regulations limiting the distance from the guest-room door to the nearest stairway entrance usually require a minimum of two stairways on the typical floor. The graph shows that two stairways are usually enough if there are no more than 40 guest rooms per floor. In general, there are about 15 to 20 rooms per stairway.

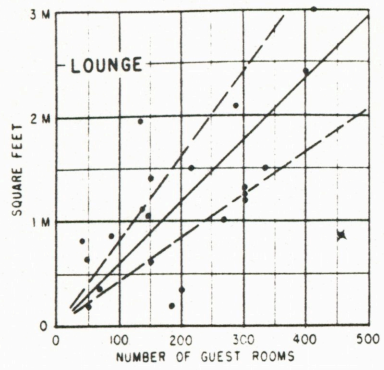
Elevators are provided according to the number of guest rooms. The number of elevators is of course also influenced by other factors such as the height of the building, the speed of the elevators, and the desired average frequency of service. The total number of guest and service elevators is presented on the graph.

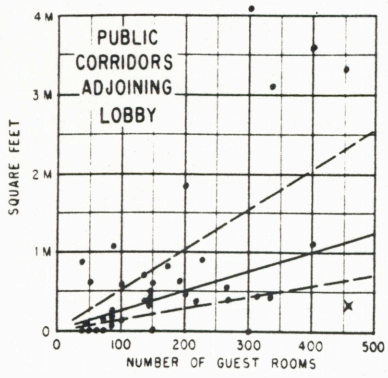
A special study of elevators in 100 hotels showed the distribution between guest elevators and service cars (including short-lift cars) to be as follows:

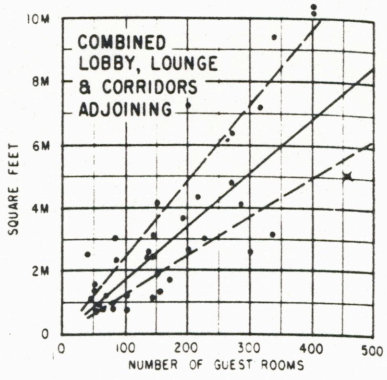
Number of rooms in hotel	*Guest cars per 100 rooms*	*Service cars per 100 rooms*
50–150	1.3	1.0
150–550	0.7	0.5

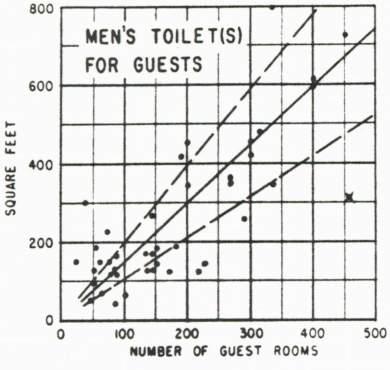
Expressed another way, about 60 per cent of the elevators are guest cars and about 40 per cent are service cars.

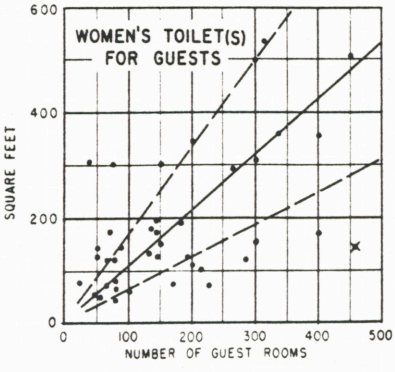
The typical hotel has six main space divisions, classified according to function: (1) Public space, (2) Concession space, (3) Subrental space, (4) Food and beverage service space, (5) Guest-room space, and (6) General-service space. Each division will be considered separately. The percentage of the total area that is productive (revenue producing) space is of special significance. Preferably, at least 50 per cent of the total area should be productive space.

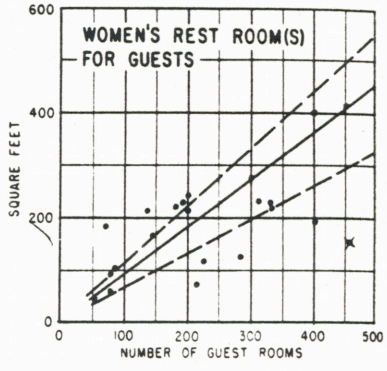












PUBLIC SPACE

Public space comprises those areas that are open to the public as necessary auxiliaries but that generally do not yield a direct profit. Typical inclusions in these areas promoting guest convenience are the lobby, lounge, public toilets, and entertainment rooms.

The lobby including front office is usually assigned about 11 sq ft per guest room. The tendency in recent years has been to reduce the size of this nonproductive area. Formerly, 14 sq ft was not uncommon, but now 9 sq ft is often considered ample. About 40 per cent of the points on the graph do not exceed 9 sq ft per guest room.

The front office is the nerve center or control point for many of the activities of the hotel. The front office, or front desk, has guest-contact stations for the registry, cashier, information, and mail. The average allotment is 1 sq ft per guest room. The specialist in front-office operation and equipment may recommend the dimensions desired for best results. A straight-line counter is generally preferred, with a length of 10 ft for a 50-room hotel, 15 ft for 100 rooms, 20 ft for 200 rooms, and 26 ft for 400 rooms.

The lounge is usually allotted about 6 sq ft per guest room. The graph shows, however, that half the hotels studied use only 4 sq ft and a few even cut this area to 2 sq ft per guest room.

The lounge usually adjoins the lobby so that guests waiting in the lobby can overflow into the lounge. Some designers simply designate the area "Lobby-Lounge" with no demarcation between them.

Public corridors adjoining the lobby are often designed so that the lobby is set back from the street entrance and is reached by one or more corridors flanked by stores, restaurants, or other areas. This nonproductive area is justified if it permits a high return from street-frontage areas. Some layouts require no such corridors. The space allotment is dependent more on design than on the number of guest rooms.

The combined lobby, lounge, and adjoining corridors are quite flexible in the allotment of space. To bring these three nonproductive areas into proper perspective, the sum of the areas is given on the graph. The combined areas show a close correlation with the size of the hotel, with an average allotment of about 16 sq ft per guest room. Some hotels, however, have reduced this nonproductive area to 12 sq ft per guest room.

The men's toilet(s) for guests should be adequate in number, but not excessive. The required space may be divided into two widely separated rooms or simply provided in one location. The convenience of guests and of restaurant and bar patrons should be the chief consideration in planning the location. This facility should not be too accessible to the man on the street.

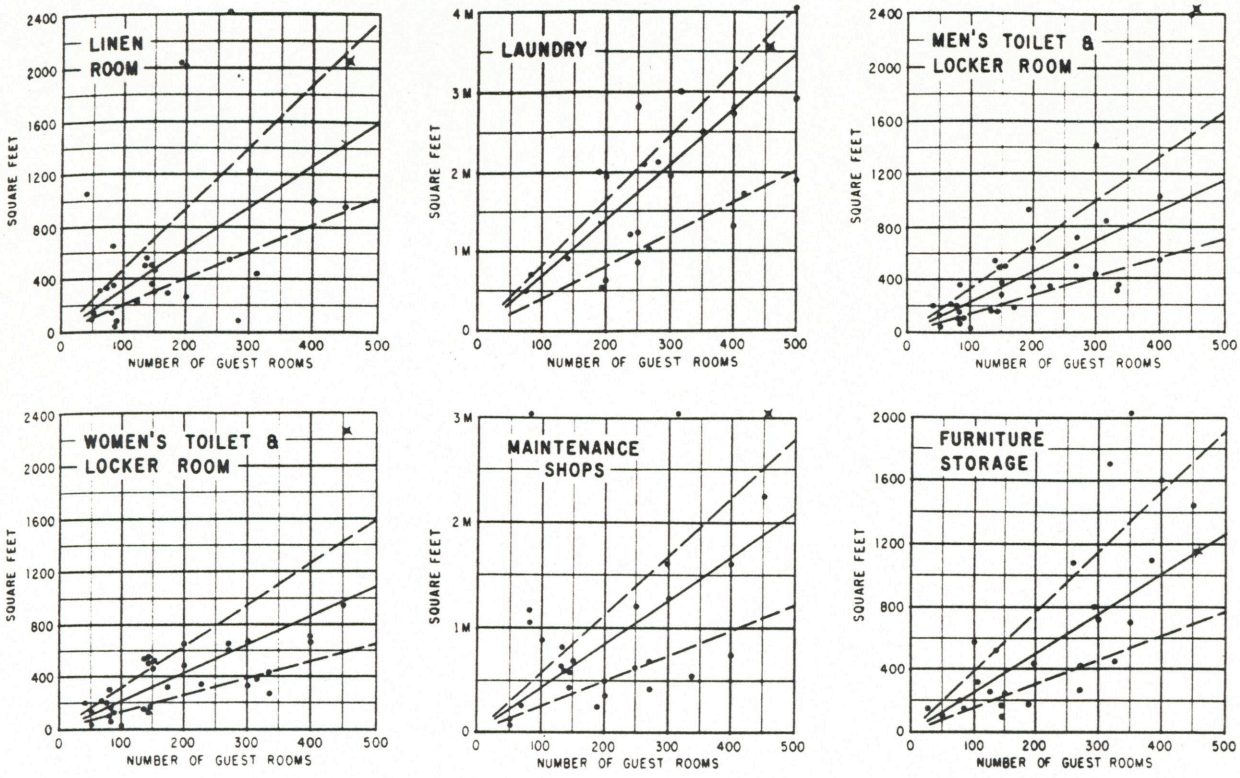
The women's toilet(s) for guests should be provided on the same basis as the men's toilet facilities. In addition, the entrance should be inconspicuous.

The women's restroom(s) for guests frequently precedes the women's toilet. It is an appreciated convenience. The restroom is generally of about the same area as the adjoining women's toilet. The combined allotment for the women's toilet and restroom is typically 1 sq ft per guest room. Some recently planned hotels have cut this figure in half to reduce the nonprofit area.

Entertainment quarters and game rooms are properly classified as public space because they seldom yield an annual profit. Thus, if a ballroom were used only for dances and other entertainment, it would be included under public space. However, since a ballroom is also used for banquets, it is more suitably included under food and beverage service space and will therefore be considered later.

CONCESSION AND SUBRENTAL SPACES

Concession space is for guest-paid hotel services that might be run by the management or sublet on a percentage basis. It may well include a barber shop, beauty



They include executive and administrative offices; areas devoted to the handling and storage of linen; help's quarters; maintenance shops; rooms for housing the mechanical equipment for heat, light, power, ventilation, and refrigeration; and also certain storerooms. Areas related to food and beverage are not included because they have been classified separately.

The manager's office requires a minimum area of about 100 sq ft. (Note that the trend lines on the graph are not drawn through the "zero-zero" point.) This area may well increase slightly with the size of the hotel, but the activities in this office seldom justify more than 200 sq ft. About 140 sq ft is the most common space allotment, regardless of the size of the hotel.

The accounting office should have a minimum area of about 100 sq ft to accommodate one person at a desk with appropriate record-keeping and filing equipment. (On this graph also, the trend lines are not drawn through the "zero-zero" point.) As the size of the hotel increases, more accounting personnel are needed requiring more space. The typical area of the accounting office for a 200-room hotel is shown on the graph as 200 sq ft, whereas for a 400-room hotel it is 300 sq ft.

Quite often the plans do not provide for the accounting office. Since the hotel operator cannot get along without this facility, he is generally forced to adapt one or two guest rooms (along with bathroom, clothes closet, and vestibule) for the purpose. The investment in the bathroom area and plumbing equipment is lost, the potential profit of five dollars per day on the room is wiped out, and the location of the improvised accounting office is often inconvenient. If an effort to economize caused the accounting office to be omitted from the plans, it was certainly misdirected and proved to be very costly.

A linen room is necessary to accommodate the housekeeper's office and the shelves of neatly stacked linens, together with the counter over which the maids receive their supplies. Often the lost-and-found cabinets for articles left in guest rooms are located here. Frequently a sewing machine and mending table are provided. Various employee uniforms are stocked and distributed here. The space allotment for the main linen room is usually from 2 to 4.5 sq ft per guest room, according to the graph, with many hotels favoring the larger value.

A laundry is sometimes operated by the hotel, although frequently the hotel laundry services only flat work and uniforms, and sends out guest laundry. To determine whether the hotel should operate its laundry requires an analysis of the costs of complete linen service, costs of commercial laundering, local wage rates, relative life of linen, availability and costs of space, necessary linen inventory, responsibility of running another department, and other factors. In general, the larger the hotel, the more likely it is to run its own laundry. (For a more detailed discussion of this subject, see section on Hotel and Motel Laundries.)

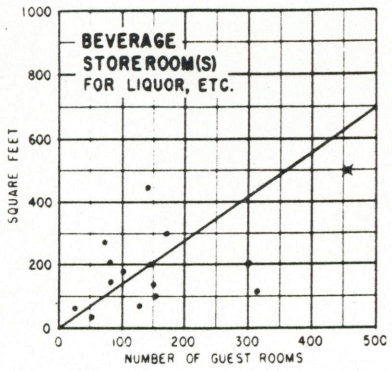
The graph shows that if a laundry is installed, it is usually allotted 7 sq ft per guest room. In a few cases, the allotment is only 4 sq ft per guest room.

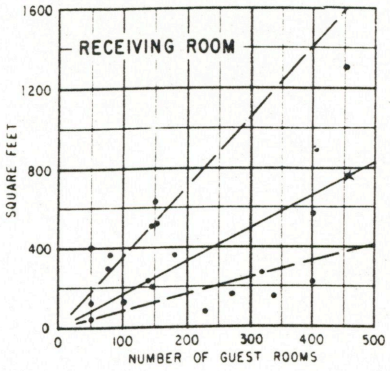
The men's toilet and locker room in the employees' quarters is generally allotted 2.4 sq ft per guest room. Thoughtful planning justifies at least half again as much space, or 3.6 sq ft per guest room. The Hartford Statler with 455 guest rooms allotted 2,550 sq ft, with the ratio being 5.6 sq ft per guest room. There is reason to believe that the average figure results in crowded and unsatisfactory conditions.

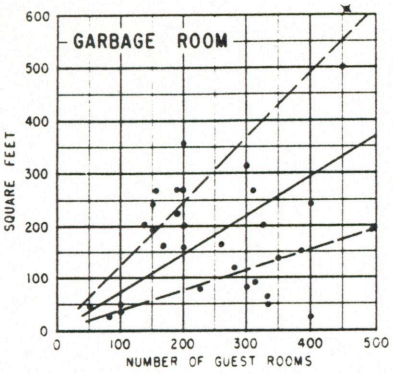
Two separate but adjoining rooms are generally but not always provided. In general, about 35 per cent of the area is allotted for the toilet facilities and 65 per cent for the locker room. The requisite number of toilet fixtures for the size of the staff is the logical but more detailed way to arrive at the solution.

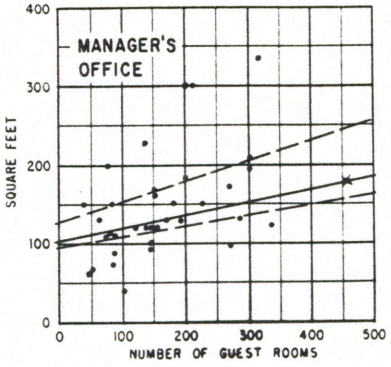
The women's toilet and locker room is usually allotted about the same space as the men's, and should be increased by the same amount.

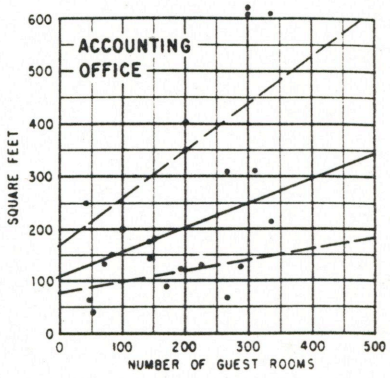
In providing equal space for men and











the service is less frequent in larger storage facilities. Typically, 4 sq ft is allowed per guest room for hotels having the average ratio of food and beverage sales to room sales.

Beverage storeroom(s) should be provided separately from general food storerooms in order to ensure adequate control. Sometimes beverage storage space is provided in the steward's storeroom, generally in a fenced-off area. Wine and liquor are of such value as to definitely warrant separate storage under lock and key. Beer and soft drinks are desirably, but not necessarily, stored in separate rooms. The areas on the plans studied are not always marked specifically; the designation may be beverage storage, or wine and liquor storage, or four separate rooms for wine, liquor, beer, and soft drinks. Whatever the designation on the plans, this area was considered as the beverage storage space in the analysis.

The typical allotment is 1.4 sq *ft* of beverage storage area per guest room, although often this figure was only for wine and liquor. Probably 2 sq ft of total beverage storage should normally be allotted per guest room.

The receiving room is provided for food, beverages, linen, and other supplies which, upon arrival, are customarily checked against delivery slips, weighed, counted, and inspected. These supplies remain in the receiving room until time and manpower are available to take them to appropriate stock rooms. The typical allotment for the receiving room is 1.6 sq ft per guest room, although the graph shows wide variations.

A garbage room is required for quantities of garbage, bottles, cans, and cartons, which accumulate between daily removals or longer intervals over the weekends. Such refuse should not clutter the receiving room or be placed outside the back door. Health authorities object to garbage cans being kept in the kitchen.

Nearly half of the plans studied in the basic survey had no area designated as the garbage room. Plans of additional hotels were consequently studied to give more data points on the graph. The typical allotment for the garbage room of 0.75 sq ft per guest room is generally satisfactory. The use of garbage- and trash-disposal equipment will also influence the size of the room.

GUEST-ROOM SPACE

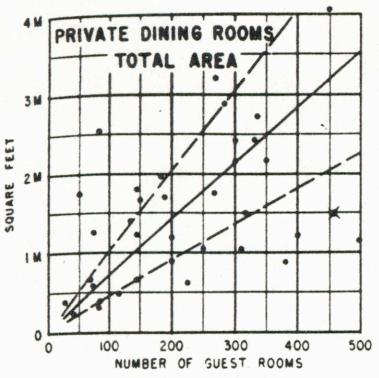
This division includes the guest rooms together with guest bathrooms, clothes closets, and entrance vestibules, the sum of which is the area that the guest rents. Also included are the necessary auxiliary areas found on the typical floor, such as guest corridors, stair wells, elevator shafts, and maid's closets. Any parlors (usually part of a suite) are included. If provided, sample rooms for the display of merchandise are also considered guest-room space, regardless of their location.

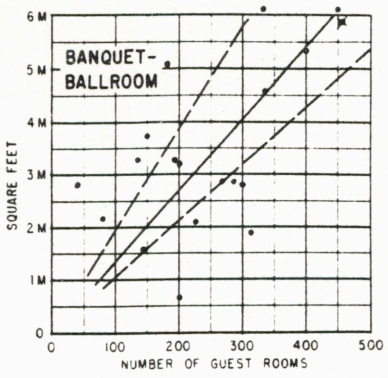
A schedule is customarily prepared stating the approximate total number of guest rooms. This is subdivided to give the number and approximate size of each type of room desired, such as single, double, and twin beds, and any sample rooms. Decision must be reached on what proportion of the rooms of each type is to be of the conventional and of the studio styles. King-length beds versus those of standard length must also be considered. Unless stated otherwise, each guest room has a three-fixture bath and a clothes closet.

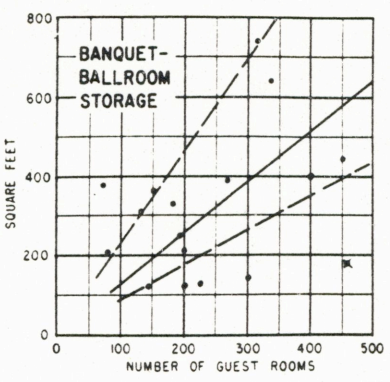
These problems of guest-room space must not be considered trivial; indeed, the main reason for building a hotel is to rent guest rooms, which are the unquestioned source of greatest profits. Every mistake, every omission, and every point of excellence is multiplied by the number of rooms constructed. Extremely careful planning is warranted for it pays big dividends.

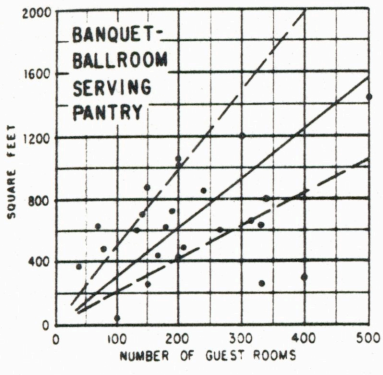
GENERAL SERVICE SPACE

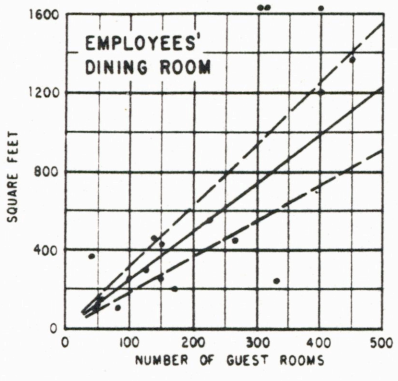
This division, classed as nonproductive space, includes those areas for general administration, operation, maintenance, and storage that are not otherwise classified.

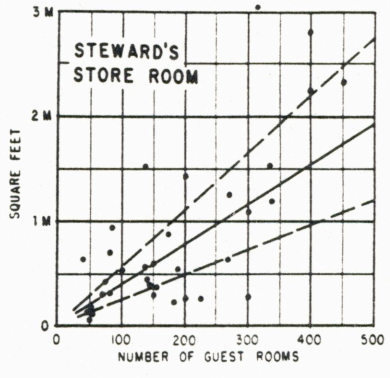












business that the bar and cocktail lounge will handle in view of the characteristics of the community and the type of patronage likely to be attracted. The space allotment should then be altered proportionately.

The number of private dining rooms indicated on the graph does not include instances in which the banquet hall is divided into smaller dining areas by folding walls or sliding partitions. Most hotels that serve food have private dining rooms, with an average of one room for 80 guest rooms. The use of private dining rooms depends more upon the demand in the particular community than upon the number of guest rooms.

The total area of private dining rooms is typically 7 sq ft per guest room, but variations are extremely wide. The seating capacity is often estimated at 10 or 11 sq ft per seat. However, much depends upon the right dimensions to accommodate the desired layout of tables, chairs, and aisle spaces, which have certain minimum sizes. If the room is large and its dimensions are right, 9 sq ft per seat is a possibility. Small rooms with random dimensions may require nearly twice as much area per seat.

The typical private dining room has an area of 600 sq ft, for the graphs show that 6 of them have a total of 3600 sq ft. If several private dining rooms are provided, it is usual to have the sizes increased progressively to care for various size groups. For example, capacities of 15, 25, 40, and 70 seats would provide a good variety. There is a decided advantage in having private dining rooms adjoining and separated by folding, sound-absorbing partitions.

The banquet-ballroom was provided in half of the hotels studied. It is generally used more frequently for banquets than for dances. The probability of its operation being financially successful is often a serious question. If provided, the allotment is usually from 10 to 20 sq ft per guest room.

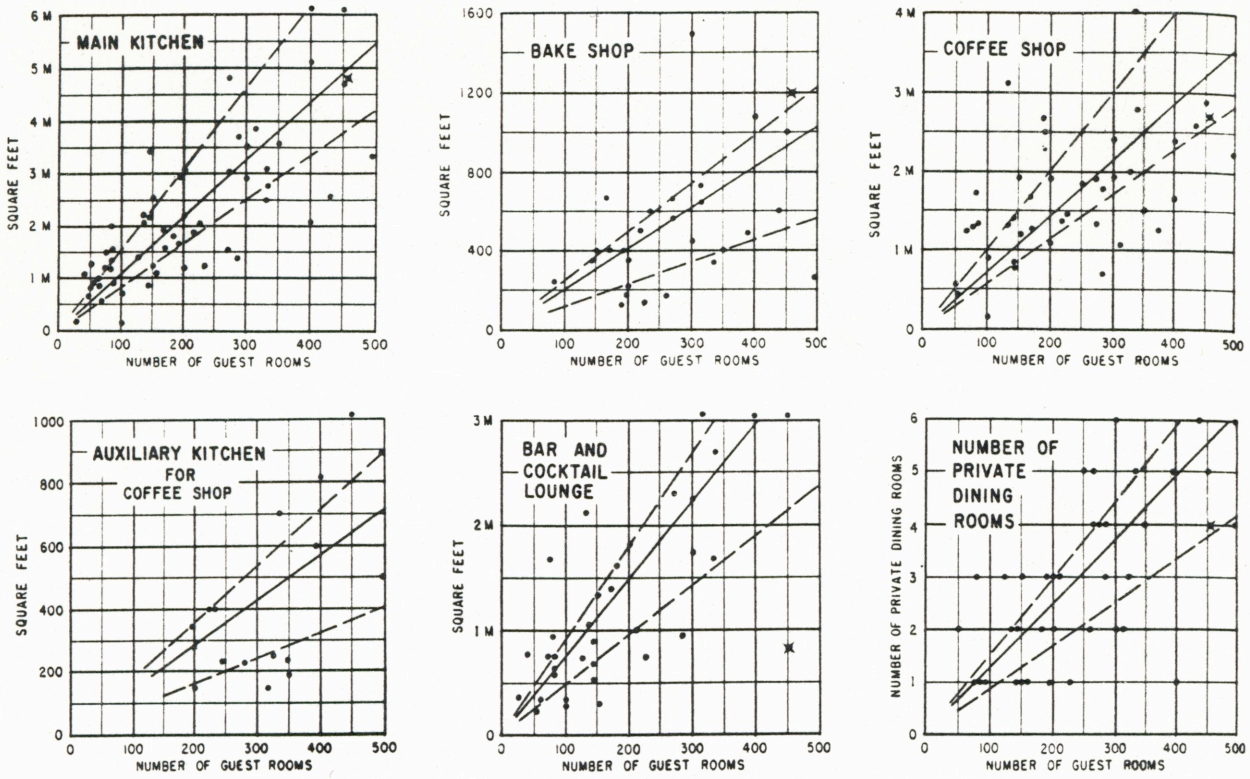
A banquet-ballroom foyer is recommended. The size is usually one-sixth to one-third of the banquet-ballroom area.

Banquet-ballroom storage, preferably adjoining the banquet hall, is required for chairs and tables. This storage area is typically about one-tenth of the size of the banquet hall, as may be determined from the two graphs.

The banquet-ballroom serving pantry is often simply a food-assembly and pick-up area. Pantry space is sometimes provided within the main kitchen if adjacent to the banquet hall. In other instances, a separate room is provided adjacent to the banquet hall, with plate warmers, hot-top serving tables, refrigerators, serving counters, coffee urns, and sometimes dishwashing facilities. Occasionally, cooking equipment, such as broilers, is included and the area is then known as the banquet kitchen. Obviously, the requisite space allotment per 100 banquet seats varies with the function of the pantry. The typical ratio assigns to the pantry an area equal to 23 per cent of the banquet-hall area, but in a dozen separate investigations the ratio was from 12 to 38 per cent.

An employees' dining room is provided for the bellmen, maids, elevator operators, and the like. (Other employees such as the staff from the front office and the accounting department usually eat in the coffee shop.) Seats are usually provided for half of those on hand for the noon meal, since all do not eat at one time. Food service is often cafeteria style with a simple menu. The necessary space including the serving counter should be determined on the basis of 18 sq ft per seat and the number of employees to be seated at one time. If this is not feasible, the graph shows that 1.4 sq ft of employees' dining room is the typical allotment per guest room, a value that is generally satisfactory.

The steward's storeroom provides the storage space for dry foodstuffs, canned goods, vegetables, dairy products, and meat. Platforms, shelves, refrigerators, and freezers are needed. Deliveries are usually made at least three times a week, although



be drawn, however, because of fragmentary data on the scattered uses of these areas.

FOOD AND BEVERAGE SERVICE SPACE

This division includes all areas used for the receiving, storage, preparation, and service of food and beverages for guests, the general public, and employees. It includes the receiving area, storerooms for food and beverage supplies, china, glassware, and silver, and also the kitchen, restaurants, banquet hall, private dining rooms, employees' dining area, food service pantries, bar, cocktail lounge, and garbage room (sometimes with an incinerator).

The main dining room area should not be determined merely on the basis of average data. The probable demand for a main dining room should be estimated with care, for, at best, profitable operation is especially difficult. The difficulty is due to the necessity of long hours of operation at slack load together with competition from other restaurants. About 16 sq ft per seat is required for the dining room. The allotment varies from 18 sq ft for de luxe dining rooms to 14 sq ft for popular priced places. The typical allotment of 16 sq ft of main dining-room area *per guest room* is not especially helpful in planning.

The main kitchen should be sized for the work load. In addition to the main dining room, the main kitchen may also have to service the coffee shop, the banquet hall, private dining rooms, employees' meals, and room service to guests. Such conditions apply to the Hartford Statler, for example, where the kitchen is 33 per cent *larger* than the main dining room. If the kitchen is to service only the main dining room, however, its area is customarily 40 to 45 per cent of the dining room area. In two of the hotels studied the kitchen serviced only the coffee shop; in two other hotels, it serviced the coffee shop, private dining rooms, and, presumably, employee meals.

It was not feasible in analyzing and presenting the data to separate the kitchen work load into its several types of components and their sizes or the number of persons served.

A bake shop, of one type or another, is usually provided. In many of the smaller hotels, the baker occupies a corner of the kitchen. If a separate bake-shop area is provided, the typical allotment is 2 sq ft per guest room. However, it is preferable to size it for the work load. If a separate bake shop is provided, its area is usually equal to 20 per cent of the kitchen area.

The coffee shop provides quick food service at moderate prices. Of the 46 hotels analyzed, 63 per cent had a coffee shop. About 7 sq ft per guest room is the usual allotment.

The area required per seat in coffee shops is about 18 sq ft per seat for counter service only, (this area includes the counter), 16 sq ft per seat for both counter and table service, and 14 sq ft per seat for table service only. Frequently about one-third of the seats are at the counter.

An auxiliary kitchen for the coffee shop is customarily provided if the coffee shop is remote from the main kitchen. Under these circumstances, the auxiliary kitchen may be "backed-up" by the main kitchen, which prepares such heavy-duty items as roast meats, or it may have complete facilities for cooking almost everything on its menu. The auxiliary kitchen is generally from 20 to 25 per cent of the area of the coffee shop. However, the extra kitchen payroll and equipment required make it desirable to plan so that an auxiliary kitchen is not needed.

The bar and cocktail lounge may be separated, adjoining, or combined. Sometimes one area is shown without the other. For each hotel analyzed, the data point shows the total area. No data point is shown for any of the several hotels that had neither bar nor cocktail lounge.

If the area is provided, 7.5 sq ft per guest room is the typical allotment. However, it is well to estimate the amount of

FOOTNOTES

[1]Louis Kahn, Lecture, Tulane University

[2]Ulrich Conrads and Hans Sperlich, The Architecture of Fantasy (New York: Frederick A. Praeger, 1962)

[3]Michael Schoyt, Fantastic Architecture, Personal and Eccentric Visions (New York: Harry Abrahms, Inc., 1980), p. 6

[4]Ulrich Conrads and Hans Sperlich, The Architecture of Fantasy (New York: Frederick A. Praeger, 1962), p. 9

[5]Martin Heidegger, Poetry, Language, Thought (London: London Press, 1961), p. 161

[6]Christian Norberg-Schultz, Genus Loci - Towards a Phenomenolgy of Architecture (London: Academy Editions, 1980), p. 45

[7]Ralph Paracher, Desert Architecture (Phoenix: Parr of Arizona, 1967), p. 63

[8]Christian Norberg-Schultz, Genus Loci - Towards a Phenomenolgy of Architecture (London: Academy Editions, 1980), p. 116

[9]Ibid., p. 116.

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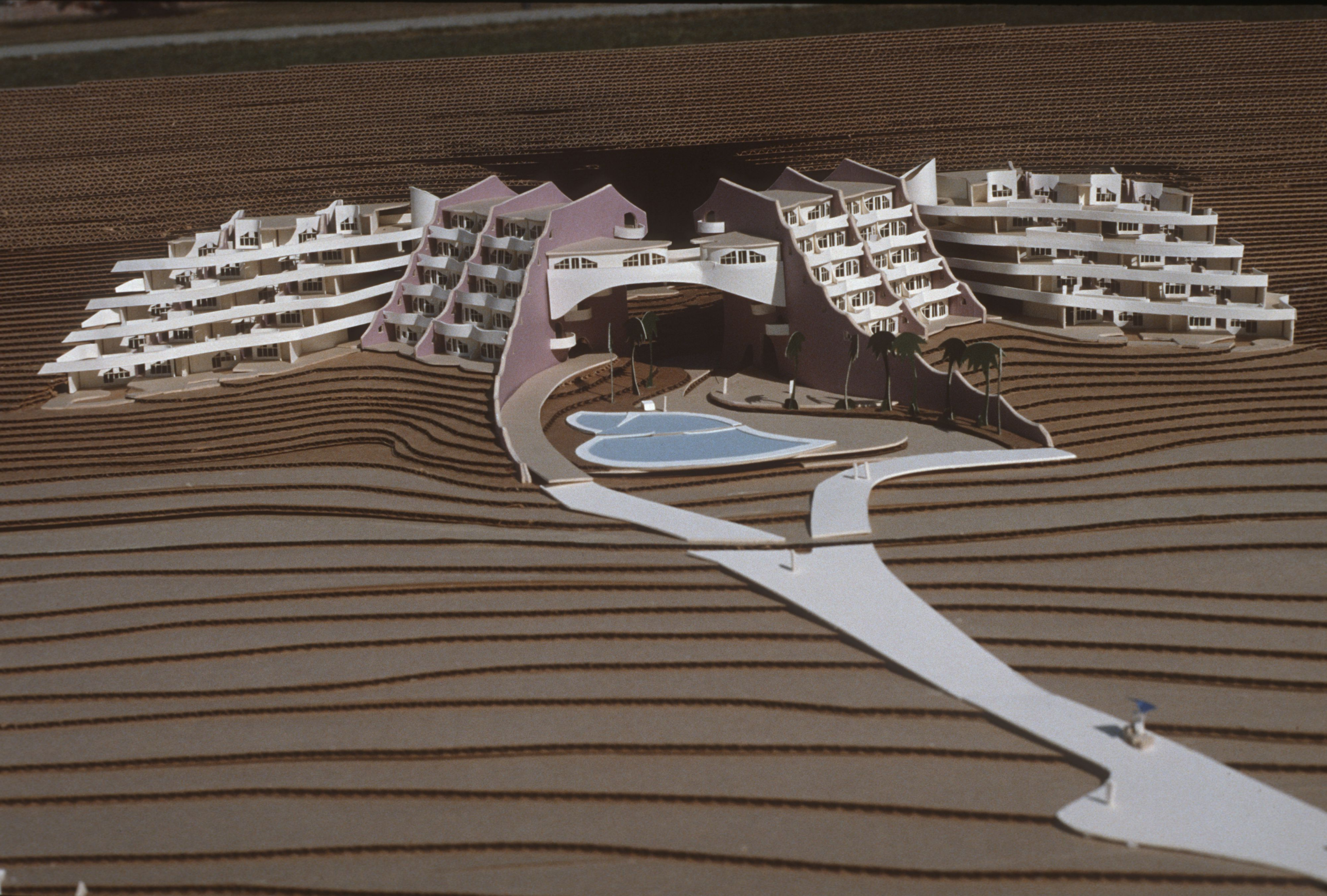
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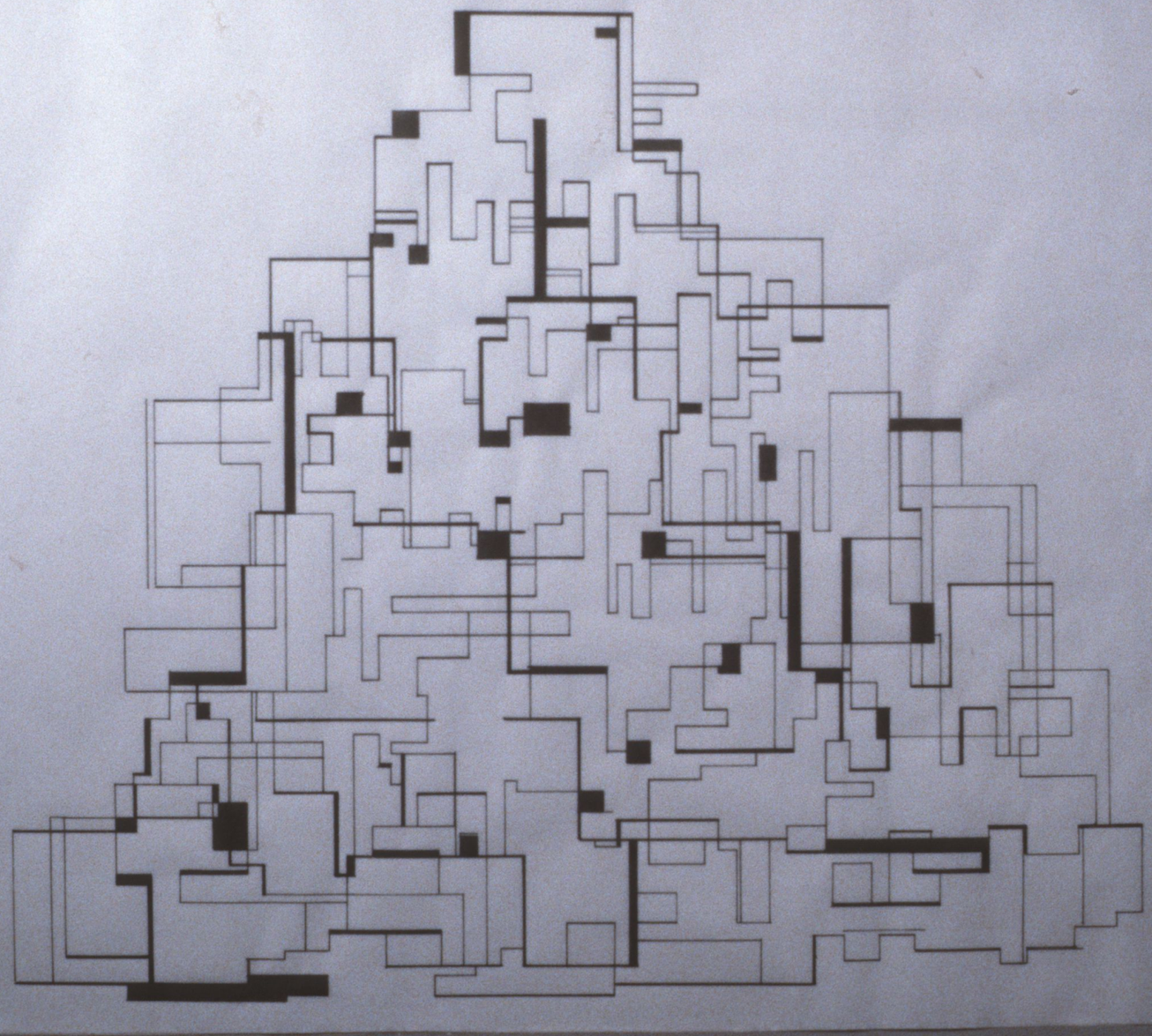
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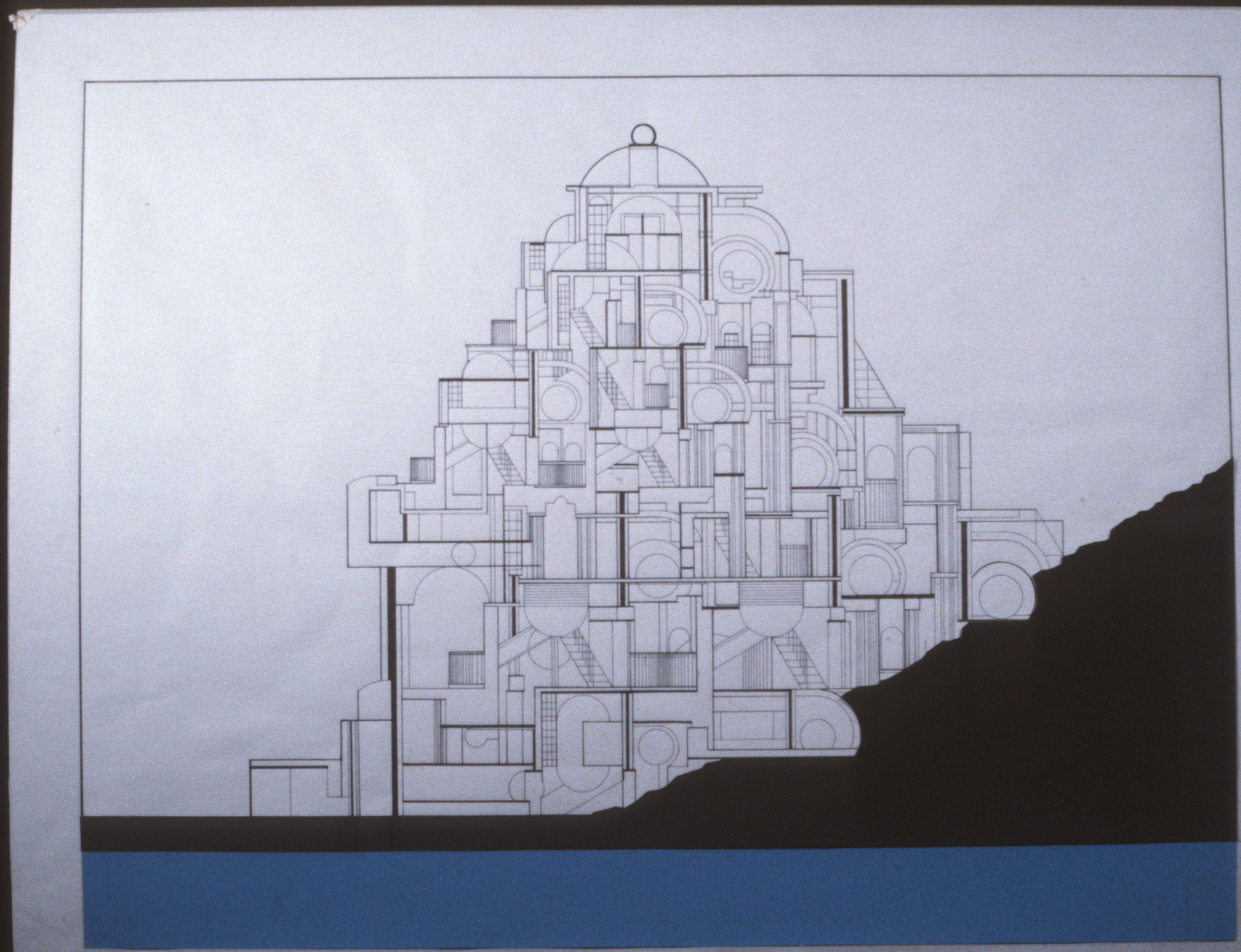
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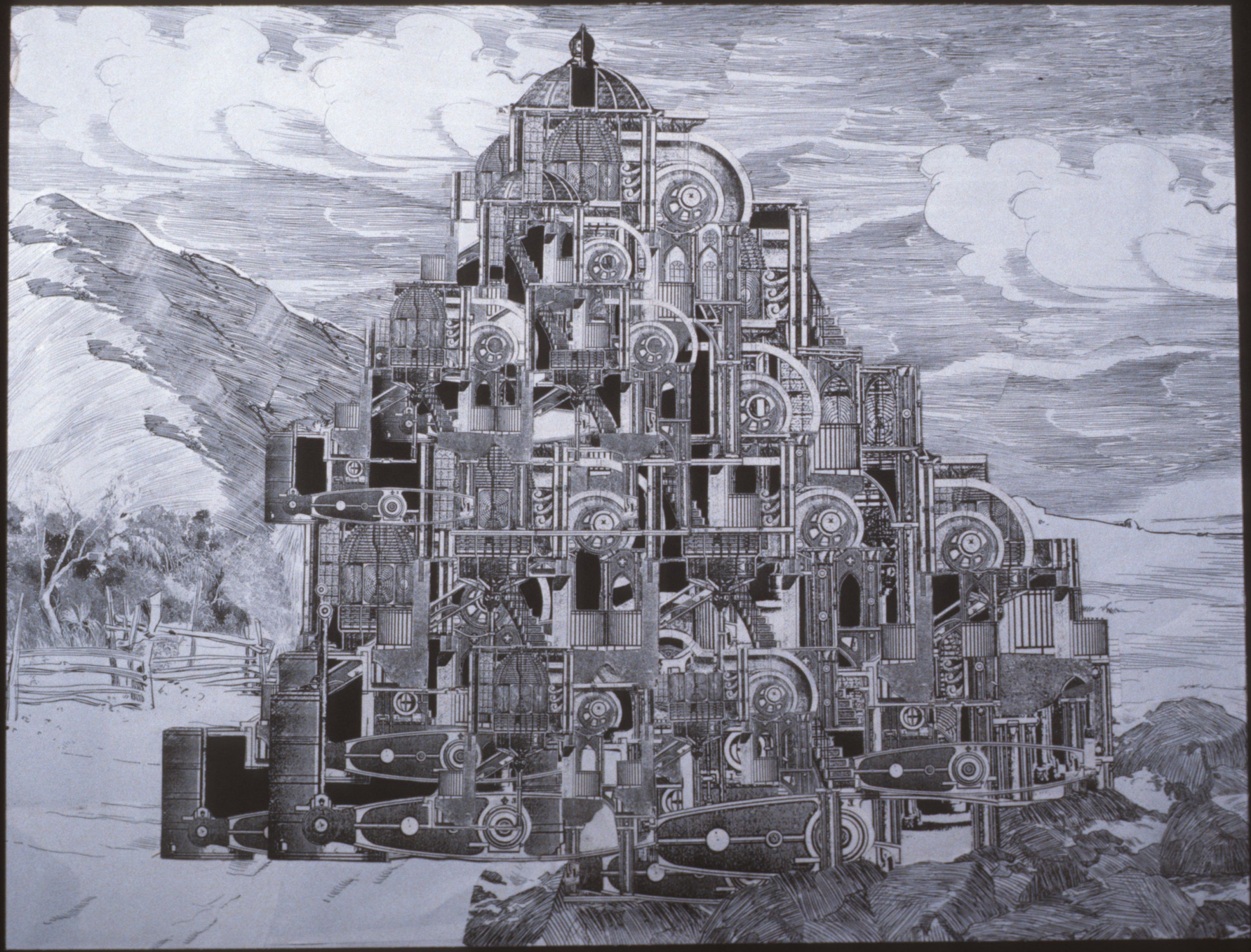




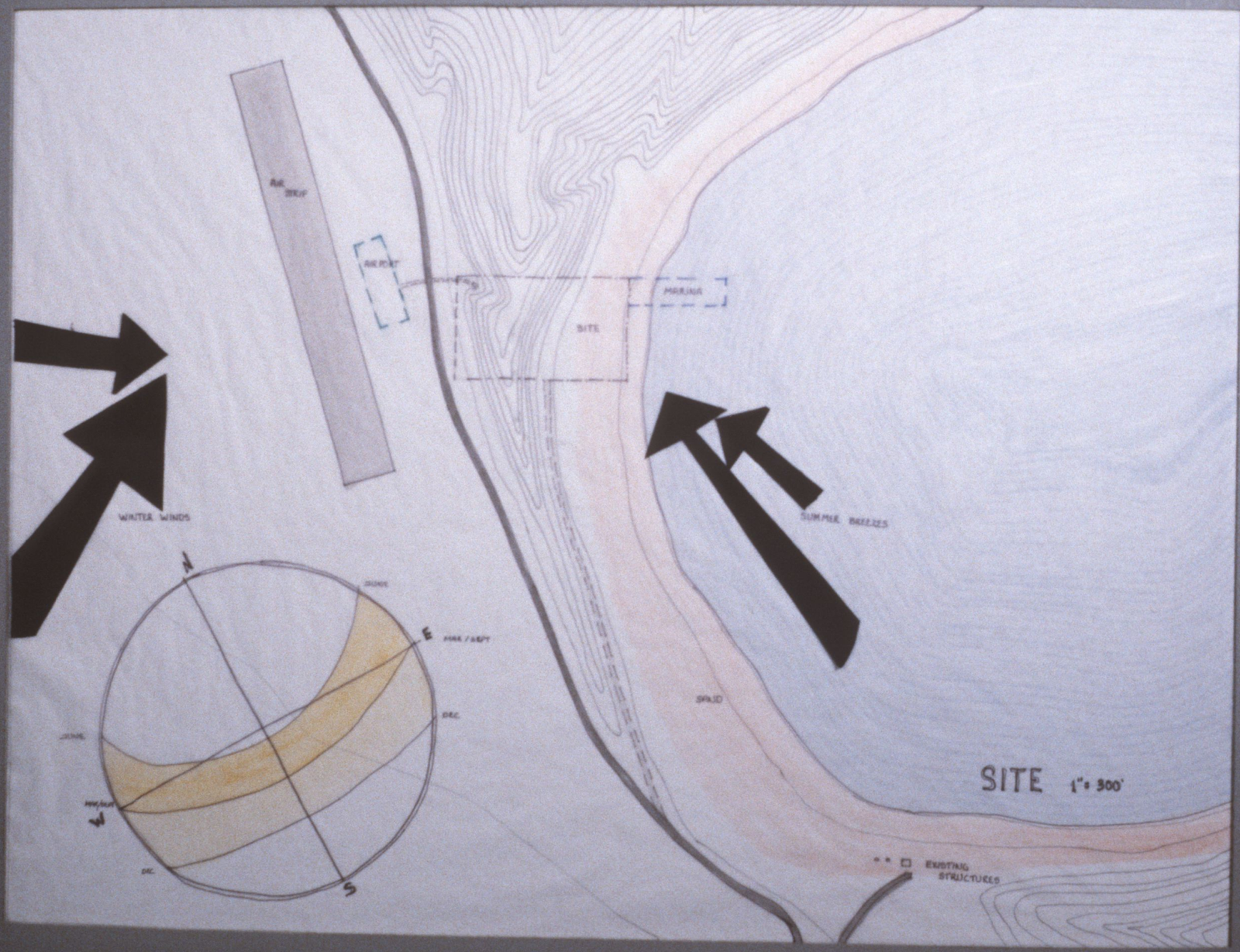




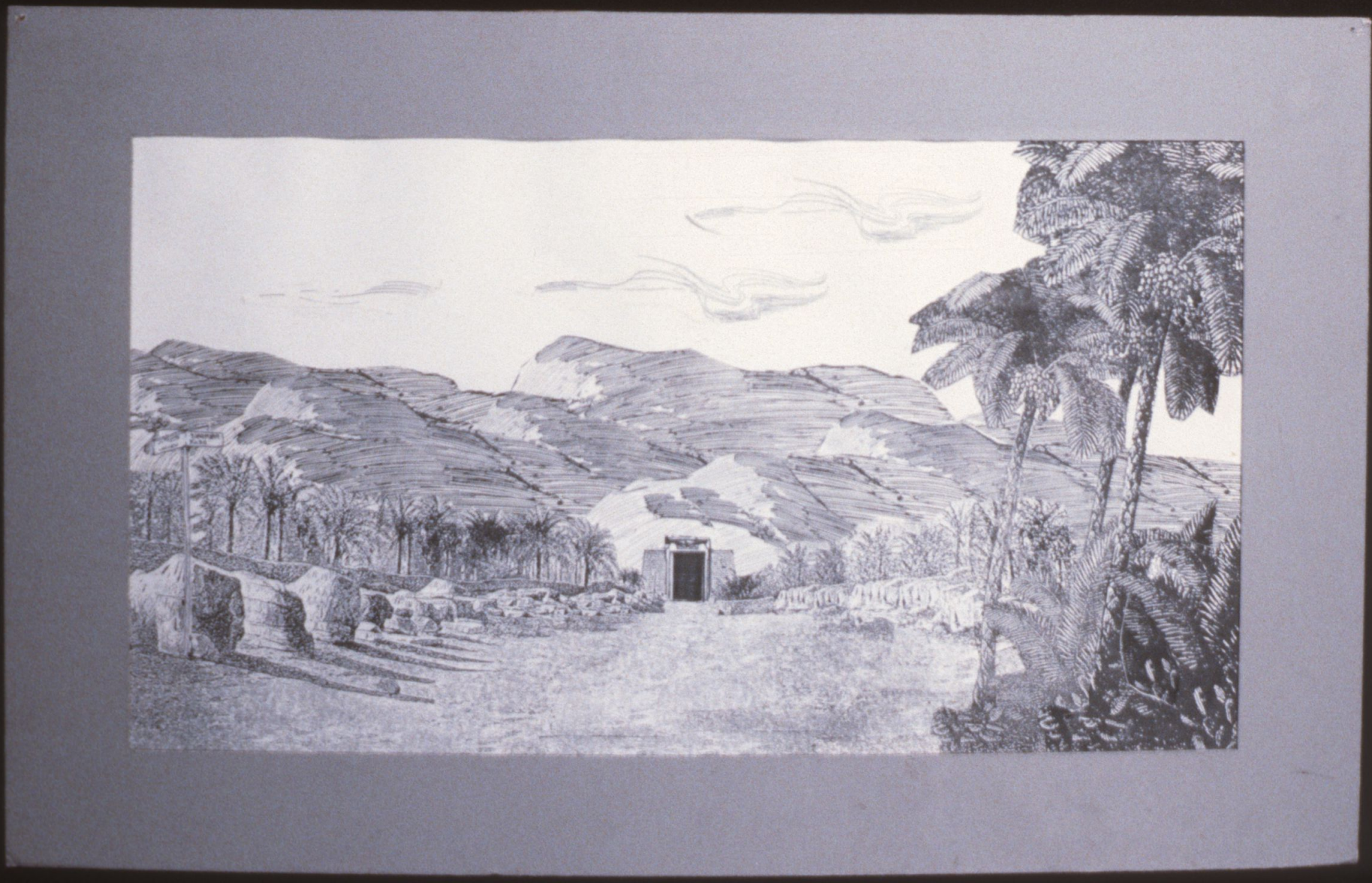







WINTER WINDS
SUMMER BREEZES
SITE 1" = 300'
EXISTING STRUCTURES
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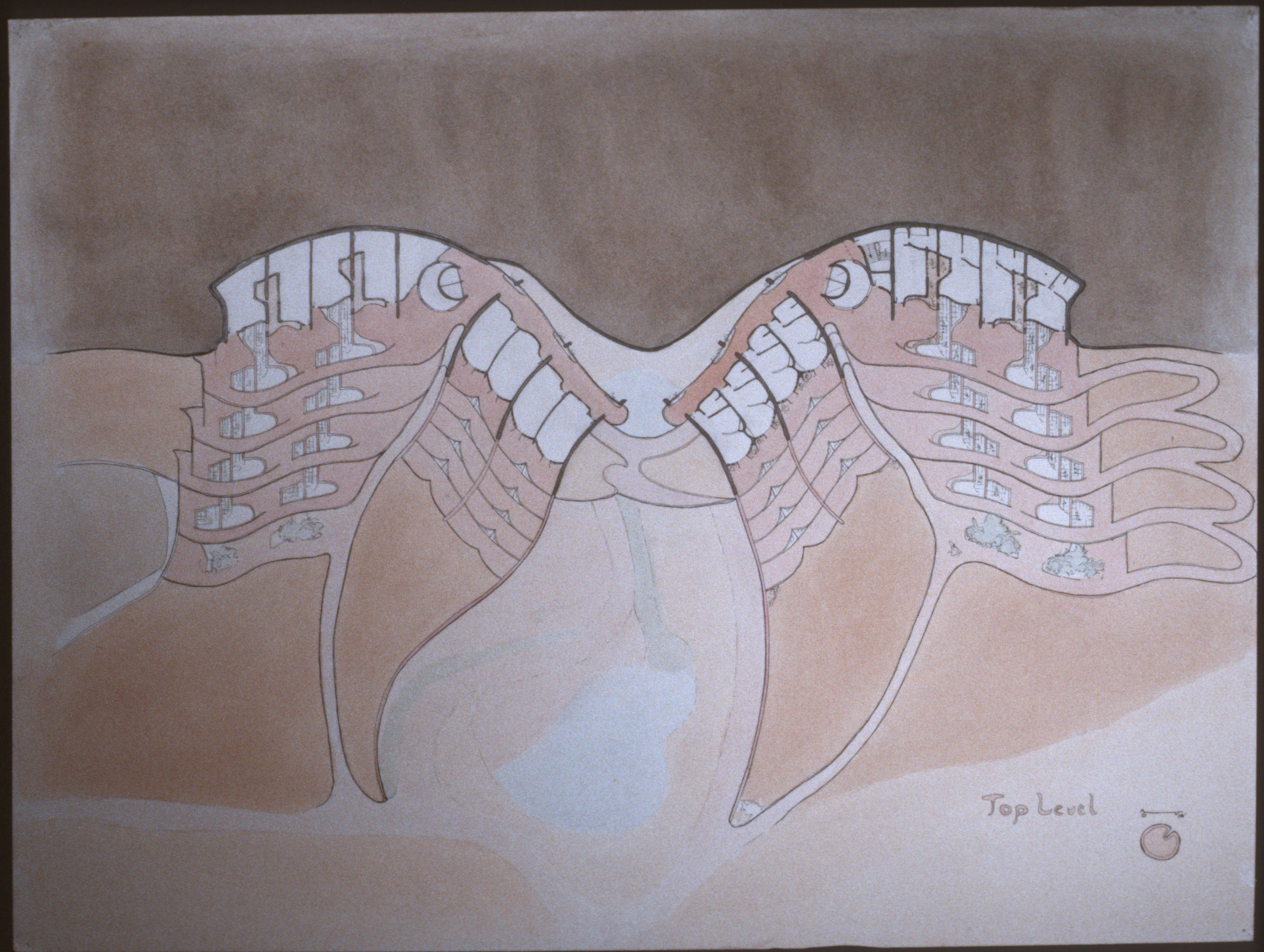






Cave Interior

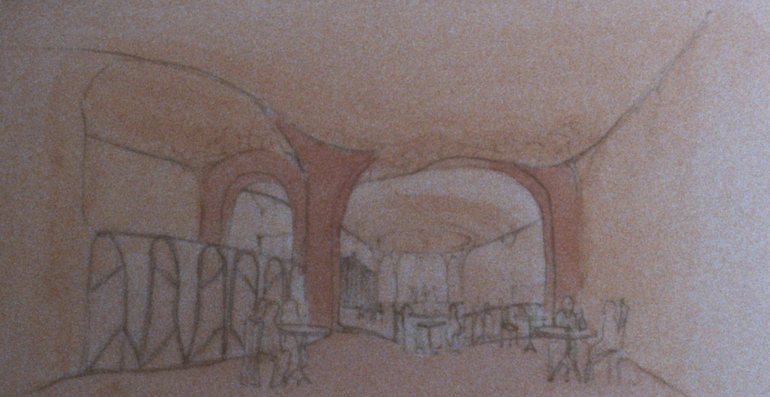
Beach Level


Top Level

La Mariposa



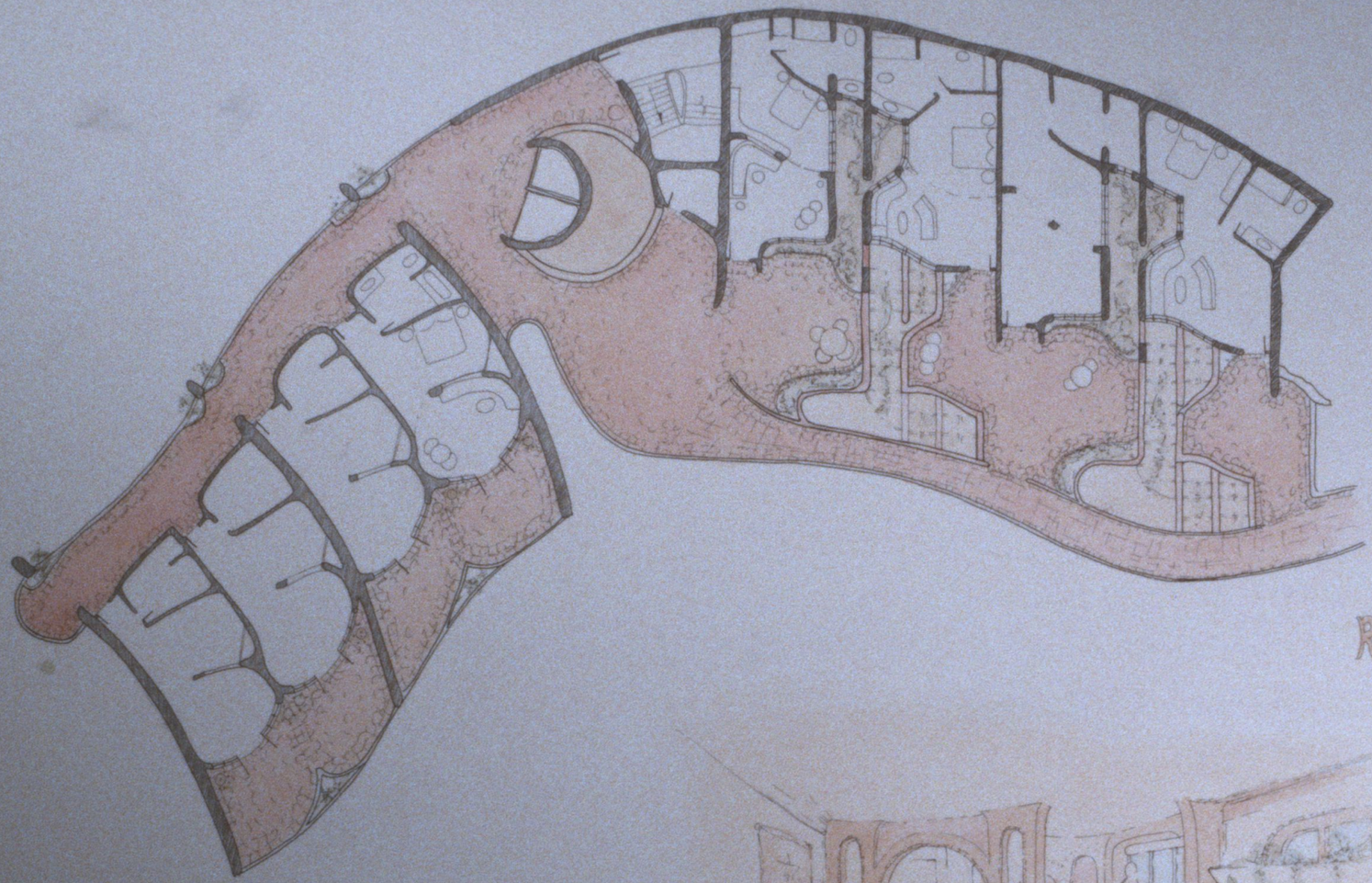
Section



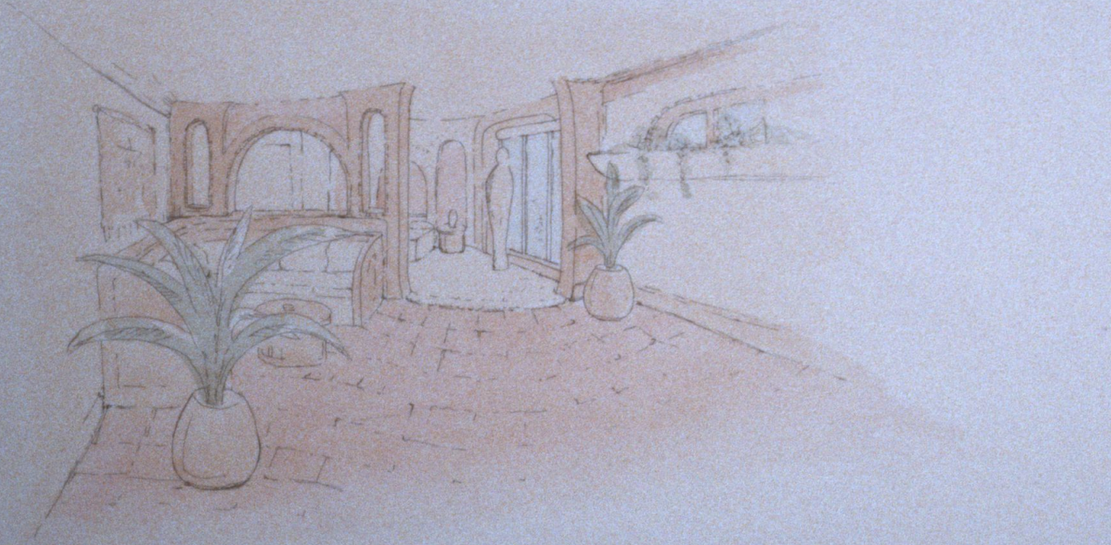
Restaurant



Site



Room Plan



Room Perspective

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