ROBERT A. MAY

The generation of form.

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The Generation of Form



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The Generation of Form

by

Robert A. May, Jr.

A professional paper submitted in partial fulfillment
of the requirements for the degree

of

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Approved:

Advisor

Chairman, Thesis Committee

Director, School of Architecture

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To thank everyone would fill this book, but I especially want to thank these people for all of their encouragement, support, assistance and inspiration.

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Forward

This thesis project was for me a personal investigation into the generation of form. I wanted to analyze the role of various influences and determinates in my design process. I found that for this particular project some determinates became less important, and others had an entirely different role than I thought they would. I also came to the conclusion that architectural form depends more on the thought processes and intuitive base within the architect than any single external form determinate.

Thesis Topic

Creating a resort on the site of Hunters Hot Springs allows for an investigation in the generation of form by the determinates or influences encompassing but not restricted to the following: passive solar design/daylighting/ geothermal energy, regionalism and vernacular models, cultural and associational values, and finally historicism as a thread of continuity from the past to the present.

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1 Introduction

I view form as the concrete realization of architecture. It is through the form that the shape, scale, organization and the space, which is enclosed or displaced, is perceived and more importantly experienced.

I also consider architectural form to carry meaning, as do words in a language. The intrinsic meanings are manifest through the form and the articulation thereof. We as architects give shape to the things we create whether we are conscious of it or not. As humans creating places for other people, our places should reflect the human spirit. As Louis Kahn would have said, "a desire to be."

This paper then is to be an exploration of these ideas and an investigation into the means and sources for the generation of form. The vehicle for the investigation shall be a resort hotel on the site of what once was Hunters Hot Springs.

I chose to redesign Hunters Hot Springs, for I see the design challenge of a resort hotel as an interesting one, because of the historical precedents and other form influences. As I shall explain later, I believe that there is a need or desire for such a facility. I also believe that there exists a potential or opportunity to improve on existing resort facilities, based on what has been done and what could be done

now. Form generation should not only look backward for inspiration, but should also look to the present and to the future as well.

2 Recognizing the need for such a facility

"The landscape of the human inner world of landmarks, co-ordinates, hierarchies and especially boundaries serves, we believe as the only humane starting point for the organization of the space around us, which, more than being perceived, is inhabited by us."[1]



Hunters Hot Springs needs to exist for us. Without human occupation there is no reason to build. Hunters could become a place to arrive at. As a fixed point in space, it becomes a landmark for human activity and a stage for human action.

Architecture is the product of the culture, society and era that produced it. Therefore the built environment is a reflection of our values and thoughts. In the preceding generations we have emphasized mobility, progress, change and freedom at the expense of our heritage and quality of environment. Our identity is defined in terms of the schemata developed, because they deter-

[1] Kent C. Bloomer and Charles W. Moore, Body, Memory and Architecture (New Haven: Yale University Press, 1977), p. 77.

mine the "world" which is accessible.[2] So rapidly has our environment changed that many of our mental landmarks have been lost. For everytime something is torn down and something set in its place, there are people who lose a part of themselves, landmarks in their schemata. At the same time however, new schemata are being created, and hopefully they will be landmarks that will mean something to them.

"The great blank horror of our public environment are the spaces that belong to no one, that are neither private nor public, neither comfortable nor inspiring nor safe, the no places that erode the public realm."[3]

A sense of place is created in part by the notation and articulation of form, which creates an identifiable character and understanding. It can be best explained by Christian Norberg Schulz: "When a town pleases us because of its distinct character, it is usually because a majority of its buildings are related to the earth and sky in the same way: they seem to express a common form of life; a common way of being on the earth. Thus they constitute a genius loci which allows for human identification."[4]

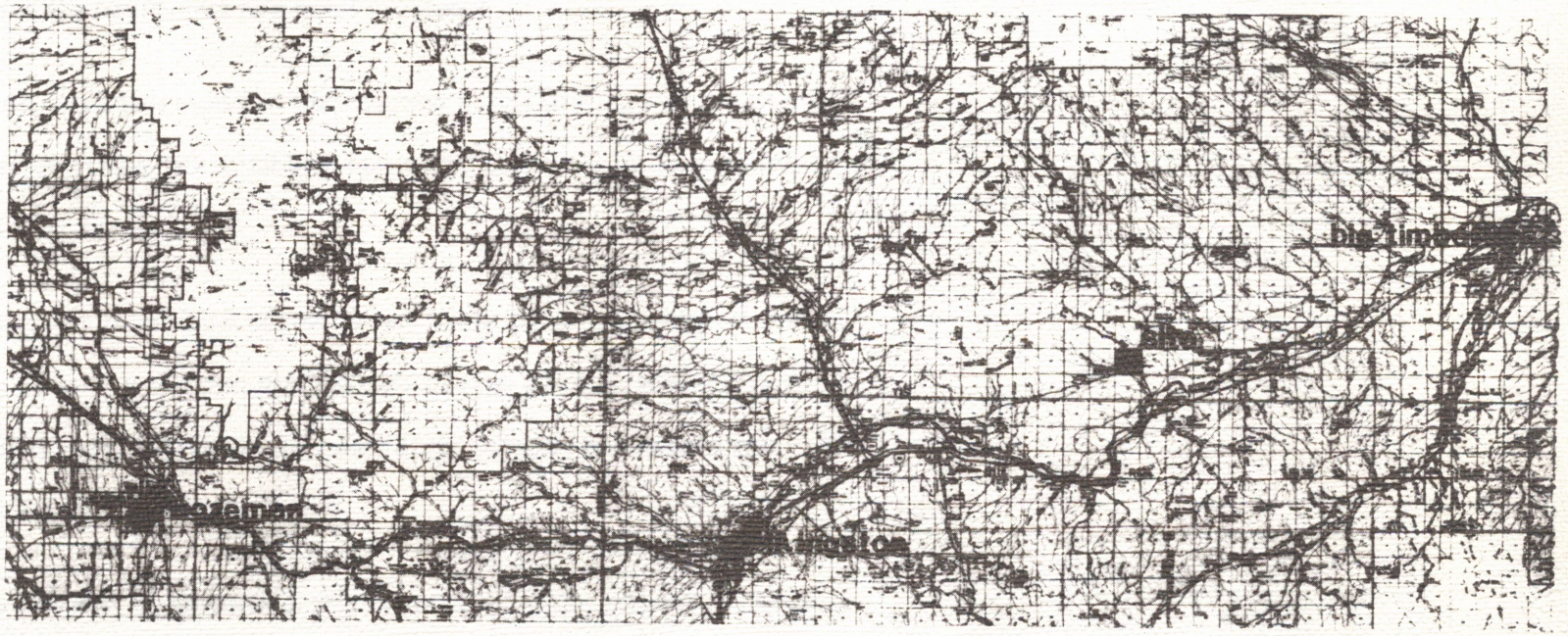
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[2] Charles W. Moore and Gerald Allen, Dimensions, Space, Shape and Scale in Architecture (New York: Architectural Record Books, 1976), p. 21.

[3] Bloomer and Moore, p. 84.

[4] Christian Norberg-Schulz, Genius Loci, Towards a Phenomenology of Architecture (New York: Rizzoli, 1980), p. 63.

3 The selection of the site



The Selection of the Site

If the goal then is to create a place, then it is also important to select the best site. In terms of market feasibility, the Hunter's site has good potential, for a hotel's location is one of the key factors to a hotel's success.[5]

Perhaps the most important aspect in site selection in this case, apart from practical matters such as land costs, site suitability for desired use, etc. . . is the subjective or aesthetic quality of the site.

A site that does not have visual appeal is not likely to be successful in attracting very many visitors. I feel that the Hunter's site has a certain appeal due to the way it symbolizes for me shelter in the midst of the wilderness; there are many site features that will appeal to visitors.

An important element in any site is the presence of water. It may be because of our dependence on it for our existence and survival, but water has an intrinsic fascination to humans. The stream that wanders through the site in its natural quest of gravity adds an element of casualness and charm to the site. The existence

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[5] Nathan Kalt, Introduction to the Hospitality Industry (New York: ITT Educational Services, Inc., 1971), p. 12.

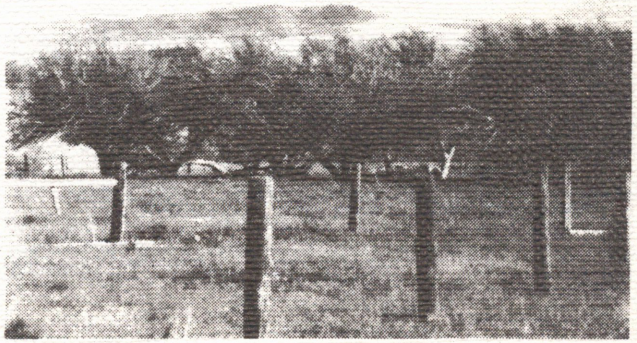
of the hot springs contributes to the special uniqueness of this place, and historically it has drawn man here for its relaxing and therapeutic qualities.

The basic earth forms further elaborate this theme of place. Hunter's is enclosed within the larger valley created by the Crazy Mountains to the northeast, and the Absaroka range to the southwest. Within this context Sheep Mountain provides a transition between the greater surrounding mountains and the hills and dips that become Hunters. These earth shapes form a degree of enclosure from the surrounding valley in which Hunter's resides.



Further enhancing this effect of shelter and place is the vegetation on the site, both natural and man planted. An interesting contrast exists between nature's order of the trees growing along the streams edge and the man made order of the apple tree orchard set in a cartesian grid.

To preserve the essential qualities of the site is a goal of highest priority.

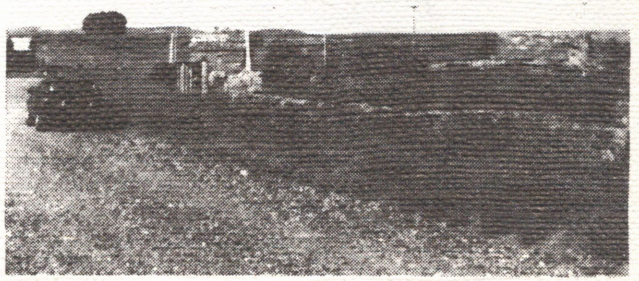


Other important aspects in site selection are: distances from towns, tourist attractions, major freeways and the locations of other resorts with which one will be competing.[6] Taking these factors into consideration, some basic strengths are

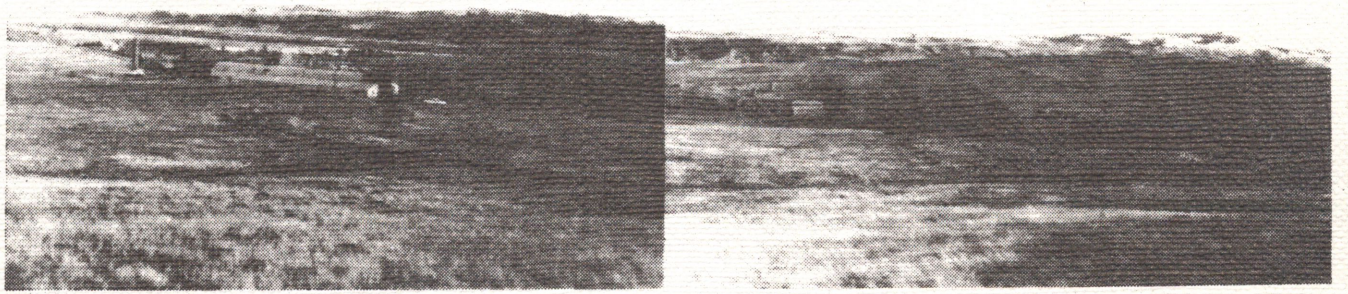
[6] The Architect's Journal, Principles of Hotel Design (London: The Architectural Press, 1970), p. 14.

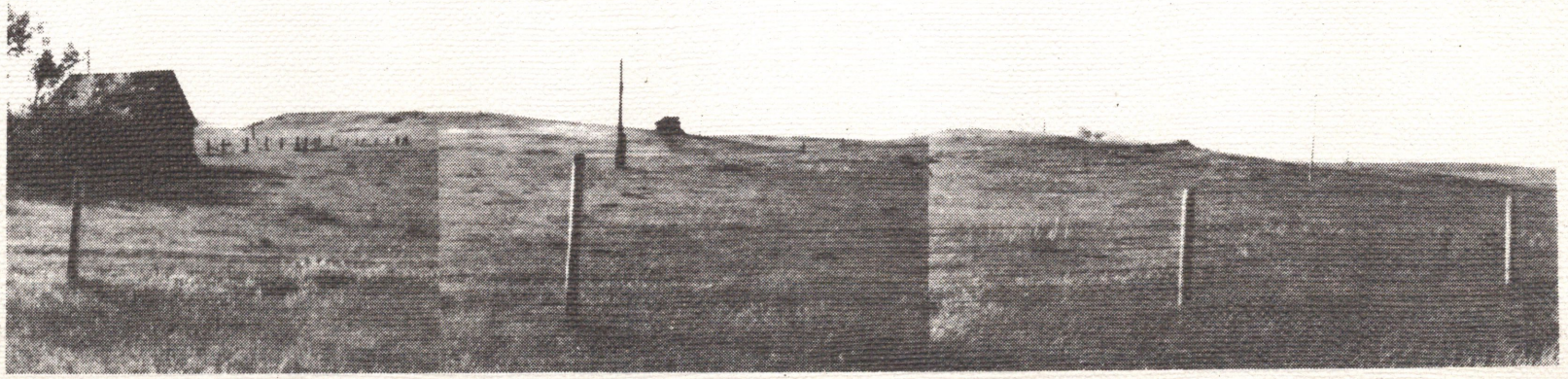
apparent. Hunters is located two miles off of Interstate 90, which is poor for visibility, but desirable in that it provides peacefulness and safety. Like other hot spring facilities in the state, it is not directly on the highway, but the knowledge of the resort can be made known through advertising, travel brochures and by word of mouth. An advantage of being close to I-90, the major east-west route, is the volume of traffic which passes through the area, drawing possible clientele to the hotel. For people entering or leaving Yellowstone Park through the Mammoth or West Yellowstone entrances, Hunters could be a stopping place. Hunters is about 110 miles from Mammoth, and around 140 miles from West Yellowstone. The most important potential market exists in the long and short distance traveler who will make Hunters his destination. As the price of gasoline increases, people living in the state will plan more vacations within the state. An informal discussion with some of the patrons at Chico Hot Springs indicated that people will drive from Billings to enjoy a relaxing swim, a good steak dinner and a room. Located between Big Timber and Livingston, Hunters has the advantage of being closer to both Billings and Bozeman than Chico. In addition, the population of Big Timber is expected to rise dramatically in the next five years due to mineral exploration in the area.





For the vacationer coming to Hunters Hot Springs there will be many things to see and do. The hotel could serve as a base from which day trips could be made. Some of these activities might include exploring the mountains, cross country skiing, fishing in the Yellowstone River, hunting wild game and visiting nearby towns. In addition, on-site assets such as the geothermal springs can be developed to provide swimming. The working ranch may be observed by visitors, and could be a source for equestrian trips.





4 Program

Hotel:

Space	Area	Capacity	Remarks
reception	400 s.f.	1-15	should be highly visible center for information
meeting rooms	2 @ 400 s.f.	1-20	
lobby	2000 s.f.	1-50	
reading room	320 s.f.	1-15	fireplace, chairs, reading lamps, daylighting
solarium	2 @ 500 s.f.	1-15	quiet area
toilet rooms	2 @ 300 s.f.		
office	400 s.f.		
service/laundry	500 s.f.	2-6	to service hotel and restaurant
rooms for guests:			
20-one double bed units	250 s.f.	1-2	daylighting, some private decks
30-two double bed units	275 s.f.	2-4	daylighting
	19,370 s.f.	total	

Hostel:

Space	Area	Capacity	Remarks
sleeping rooms	2 @ 600 s.f.	1-10	separate from hotel, cots and storage for students
toilet rooms	2 @ 300 s.f.		
self-service kitchen	350 s.f.	1-10	
dining	450 s.f.	1-25	
living hall	1000 s.f.	1-25	
	3600 s.f.	total	

Restaurant & Bar:

dining room	1000 s.f.	1-70	informal breakfast, lunch, dinner, ability to open up & eat outside
outdoor dining	960 s.f.	1-50	
dining hall	1200 s.f.	1-50	formal dinner/banquet hall
kitchen	1000 s.f.	20	prepare meals for both areas for food and drink
storage	300 s.f.		

toilet rooms	2 @ 300 s.f.		
bar	950 s.f.		pub like, casual atmosphere, separate
	5050 s.f.	total	

Pool:

changing rooms	2 @ 400 s.f.	1-50	access to indoor pool
shower rooms	2 @ 200 s.f.	1-25	
sauna	150 s.f.	10	
hot & cold plunges	2 @ 100 s.f.	10	
pool	1200 s.f.		
hot tubs	3 @ 100 s.f.		
	3050 s.f.	total	

A. Hotel Operations:

I. Lobby and Reception Area

The lobby is to be the nerve center of the hotel. Since the first impression a visitor receives of the hotel is of the lobby area, every effort must be made to make it as comfortable and inviting as possible. The client requests that these areas be included in the design of the lobby/hall.

a. A relaxing/lounging area with fireplace. Individual reading lamps should be provided.

b. A reception desk, highly visible from the entrance but not overly dominant. The reception desk should be able to handle all customer relations. These will include: checking in and out, handling messages, yielding information, mailing letters, and the keeping of valuables.

c. Although there are to be individual telephones in the rooms, two or three phone booths are to be provided in the lobby. Discretion must be taken into account to allow for privacy and also to insure that the other users of the space are not disturbed.

II. Service Areas

Service areas are to be "tucked away" from the public areas, yet easily accessible. Although the design emphasis is to be placed on the public areas, the client wishes these areas to be pleasant and efficient. The client wishes for these areas to be included.

a. An administration office shall provide the following functions: bookkeeping and handling of the cash flow, handling of all security matters and maintaining records.

b. A house keeping office is to assign all cleaning and room linen changes for each day. Since the bookkeeping duties are done at night, this space may be utilized for cleaning operations during the day and bookkeeping at night.

c. A chamber maid's room will be used as a storage area for fresh sheets and cleaning supplies. Close adjacency to the laundry area is desirable so that it does not necessitate the movement of carts through public areas.

d. A laundry room is to handle all linens and towels from the guests' rooms. Additional laundry capacity should be considered to handle loads from the other areas. The types of laundry to be done are: sheets

and towels from guest rooms, uniforms, napkins and tablecloths from the restaurant, and towels from the pools and plunges.

e. It will be assumed that all employees but the management level will commute either from Springdale, Big Timber or Livingston and will work in shifts according to their job descriptions.

III. Guest Rooms

a. The client wishes to provide a variety of options to the customer, for as part of his philosophy he wishes to cater to several segments of the tourist market, such as: the young traveler; the leisure traveler; and the business overnighter. Each set of travelers has different requirements, and the client wishes to accommodate all of them and at the same time, maintain a degree of flexibility in his operations.

b. The client is familiar with the hostels in Europe, and wishes to emulate the spirit of these places. The youthful traveler may come by train, car, bicycle or on foot. He desires no-frill minimum cost lodging and is happy to share his room with fellow travelers with whom he may visit and make friends. There are separate facilities for young men and women. The hostel shall have four basic rooms: the sleeping rooms have

cots on which the hosteler's sleeping bags are placed; the common cooking/eating facilities are to have a self service kitchen, but hostelers provide their own food; and the shower and toilet facilities.

c. The business or overnight traveler desires fairly simple rooms. For maximum cost effectiveness, the client wishes a mix of 20-one and 30-two bed units. Each room shall have its own bathroom and be daylighted. A standard level of quality is to be maintained in the furnishings of these rooms.

d. The last group to be considered is that of the leisure traveler who may stay for a few days to a week or more. He will be more demanding in his accommodations, and the client wishes these units to be more spacious and to be better furnished. All of these units will have features such as window seats or private porches, tables at which to write and a mix of one and two beds, because the client feels that vacationing families with children are more likely to use the two bed units. Every effort will be made to insure that the units are designed in such a manner that they will be easy to clean and maintain, while at the same time offer the highest degree of comfort and quality for the occupants.

B. Restaurant and Bar Operations:

I. Restaurant

Since this is the only eating location for eighteen miles in either direction, a certain degree of flexibility must be designed into the dining facilities.

a. The client wishes to have an informal restaurant in which breakfast, lunch and casual dinners may be served. In favorable weather this area should be able to be opened up so as it can be integrated with a veranda for outdoor dining.

b. A formal dining hall to be used for dinners and a Sunday brunch is to be included with its own bar at one end for banquets and other formal events. It will be assumed that the dining hall and the restaurant will be served by the same kitchen.

II. Bar

A separate bar is to be included to serve drinks for patrons. Since this is an adult only area, a degree of separation and privacy is desirable.

C. Pool and Plunges

I. General Statement

As one of the major attractions of the site, every effort should be made to make these facilities pleasant by being modern, well ventilated and lighted, and easy to maintain. If a satisfactory thermal

seal can be made the client would prefer to have one large pool, one half of it outside and one half inside rather than two separate pools, so that guests may swim from one area to the other. The spaces to be included are: a pool, changing rooms, towel room, showers, sauna and hot and cold plunges.

a. The changing rooms (men's and women's) are to have access into the interior or exterior pool areas.

b. The towel rental room which is located near the changing room distributes and collects towels from this area. A logo on the towels will distinguish them from the hotel's towels.

c. With the use of hot and cold plunges the client wishes to resurrect images of the Roman baths that provided a variety of experiences for the body. Private hot tubs that are rented out by the hour are to be provided for.

5 Code and environmental analysis

The building shall conform to the standards set by the Uniform Building Code (1979 edition). A partial summary of the applicable codes follows.

Occupancy Type	Group	Fire Resistance of Exterior Walls	Openings in Exterior Walls
restaurant	A-3	2 hrs. less than 5' 1 hr. elsewhere	not permitted less than 5'; protected less than 10'
pool areas	A-3	" "	" "
bar	B-2	1 hr. less than 20'	" "
hotel	R-1	1 hr. less than 5'	not permitted less than 5'
Required separation of occupancy		A-3 and R-1	1 hour
		B-2 and R-1	1 hour
		A-3 and B-2	none

Basic allowable floor area (square feet) for building one story in height.

Occ.	1-F.R.	11-F.R.	11-1 hr	11-N	111-1 hr	111-N	IV-H.T.	V-1 hr	V-N
A-3	unlimited	29900	13500	9100	13500	9100	13500	10500	6000
B-2	unlimited	39900	18000	12000	18000	12000	18000	14000	8000
R-1	unlimited	29900	13500	9100	13500	9100	13500	10500	6000

Maximum Height of Buildings in Stories
Types of Construction

Occ.	1-F.R.	11-F.R.	11-1 hr	11-N	111-1 hr	111-N	IV-H.T.	V-1 hr	V-N
A-3	unlimited	12	2	1	1	1	2	2	1
B-2	unlimited	12	4	2	4	2	4	3	2
R-1	unlimited	12	4	2	4	2	4	3	2

Requirements for group R-1, A-3, B-2 occupancies.

Sec. 1204. Stairs, exits and smokeproof enclosures shall be as specified in Chapter 33. Every sleeping room below the fourth story shall have at least one operable window or exterior door for emergency egress or rescue.

Sec. 3302. Number of exits. Every building or usable portion thereof shall have at least one exit, and shall have not less than two exits where required by Table No. 33-A.

Table No. 33-1: Available Square Feet per Occupant and Egress Facilities

Use	Minimum of Two Exits Other Than Elevators Are Required Where No. of Occupants is Over	Square Feet per Occupant	Egress by Means of a Ramp or an Elevator Must be Provided for the Handicapped
Hotel	10	200 s.f.	yes when more than 3 stories
Assembly Areas Conc. Use	50	7 s.f.	yes
Assembly Areas Less Conc. Use	50	15 s.f.	yes
Kitchen-Commercial	30	200 s.f.	no
Locker Rooms	30	50 s.f.	yes

Sec. 3309. Smokeproof enclosures. Where a floor of any story is located more than 75 feet above the highest grade, one of the required exits shall be a smokeproof enclosure.

Sec. 1205. Light and Ventilation. All guest rooms, shall be provided with natural light by means of exterior glazed openings with an area not less than one-tenth of the floor area of such rooms with a minimum of ten square feet. All bathrooms shall be provided with natural ventilation by means of openable exterior openings with an area of not less than one-twentieth of the floor area of such rooms with a minimum of one-and-a-half square feet. All guest rooms shall be provided with natural ventilation by means of openable exterior openings with an area of not less than one-twentieth of the floor area of such rooms with a minimum of five square feet. In lieu of required exterior openings for natural ventilation, a mechanical ventilating system may be provided. Such system shall be capable of providing two air changes per hour in all

guest rooms and in public corridors. One-fifth of the air supply shall be taken from the outside. In bathrooms, water closet compartments, laundry rooms and similar rooms a mechanical ventilation system connected directly to the outside, capable of providing five air changes per hour, shall be provided.

Sec. 1210. Fire Warning Systems. Every guest room in a hotel used for sleeping purposes shall be provided with smoke detectors conforming to U.B.C. Standard No. 43-6. In a hotel sleeping room and in hotel suites, the detectors shall be centrally located on the ceiling of the main room or hotel sleeping room.

The site has excellent potential for development of its geothermal resources for space heating, recreation and agriculture. According to a report published by the Department of Natural Resources, the observed temperature at the surface of the springs at Hunters was 59 degrees C. The calculated reservoir temperature is 78 degrees C. The combined observed flow rate was 5000 liters per minute. The report concluded that the site has great potential for development. There is enough geothermal energy to heat a large pool, hotel and up to 4 acres of greenhouses.[7] Since there is an operating ranch on the site, the greenhouses could be integrated with it and help make the resort self sufficient.

Insofar as the generation of the hotel's form is concerned, geothermal heating will have a minimal effect. Most geothermal systems utilize either floor slabs that are heated, as at the nursing home in Alhambra, or steam-water circulated through pipes or heat exchangers. A positive aspect of having the geothermal energy available is that the building form may be more open than if conventional energy sources were

[7] For the technical information about Hunter's geothermal potential I am indebted to Mike Chapman at the Department of Natural Resources, Helena, Montana.

utilized. Even a passive solar building form does not allow the same amount of freedom in the choices to be made. As heat loss is not such a critical factor in a geothermal system, this will allow a greater use of daylighting as an additional energy saver.

Although heating will not be a critical factor, cooling may be another matter. Therefore the building form(s) should be orientated along an east-west axis for minimizing the winter heating loads and summer cooling loads.[8] According to Olgyay, structures in cool regions such as ours should be orientated slightly off axis to the east (twelve degrees optimum) to lessen the overheated period.[9] Another consideration that Olgyay mentions to assist in the cooling of a building, is that summer breezes should be utilized to create an airflow through the structure.

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[8] Edward Mazria, The Passive Solar Energy Book (Emmaus, PA: Rodale Press, 1979), p. 79.
[9] Victor Olgyay, Design With Climate (Princeton, NJ: Princeton University Press, 1973), p. 61.

The following climate analysis was compiled and written by R. A. Dightman, State Climatologist at the Weather Bureau Airport Station in Helena, Montana. It has been included to give the reader a better understanding of the climate and weather conditions of Livingston and the encompassing area.

This material is available from "Climatography of the United States No. 20-24".

Write: U.S. Department of Commerce, NOAA
Environmental Data Service
National Climate Center, Federal Building
Ashville, NC 28801

"Livingston, County Seat and largest city of Park County, is located on the northwest bank of the Yellowstone River at the base of the foothills of the Gallatin Mountain Range. The climate of Livingston is influenced materially by the location of the city, in the middle of the Upper Yellowstone River Valley, and near mountain groups visible in all directions from the city. The Yellowstone River rises in Wyoming (Yellowstone Lake in Yellowstone National Park) and follows generally a northerly course through a well-defined and in places canyon-like valley until it reaches Livingston. At that point the valley broadens considerably and the river turns roughly east-

ward. The contours of the valley contribute greatly to the more or less famous "Chinook" winds experienced several times each winter in the upper reaches of the Yellowstone Valley, including Livingston."

"As usual in very mountainous areas such as this, precipitation varies considerably with elevation and character of exposure, but Livingston records seem to be fairly representative of the northern Park County portion of the Yellowstone Valley floor. Livingston (and valley floor) precipitation is generally lightest during winter months, and heaviest during late spring and early summer. This pattern of the wettest months usually being those of the first part of the growing season is very favorable for dry-land farming and stock raising in the area. On the other hand, winter precipitation in the form of snow is quite heavy on the higher mountains, and the May-June snow-melt and runoff period usually produces the highest water levels of the year in the Yellowstone River and its tributaries in the area. Annual snowfall in Livingston (45.4 inches) is not very large, and due to the frequent winter "Chinooks," snow seldom lays on the ground in and near the city for more than a few days at a time."

"Summers generally are pleasant. Warm (but rarely hot) days, cool nights, a high proportion of sunshine, and occasionally an afternoon thundershower, make up the usual summer weather pattern. Even though July (warmest month) maximum daily

temperatures average 85.6°, only 10 days of that months usually are as warm as or warmer than 90°. Oppressive humidity is rare, and dense fog seldom occurs. Most summer rain falls as showers, sometimes accompanied by thunder and lightning, and once in a while by some hail. Rains of a steady but gentle type sometimes occur in late spring or early summer, or during the last few days of summer in September."

"Winters generally have some cold spells, but it is during the winter that the remarkable warming effect of the Yellowstone "Chinook" winds is noted. Cold air inversions occur a few times each winter, but they are short-lived in the face of the south-southwest winds that develop, usually a day or two later, blowing downstream past Livingston. Although these winds can become strong at times, they sometimes produce temperature rises of as much as 50° to 60° in 24 hours. Mild winter weather is fairly common. Most wintertime precipitation falls as snow."

"July 31, 1901, the temperature reached the highest of record beginning in 1895, 106°. It should be noted, however, that temperatures as high as 100° have occurred during the year less than half the time since 1895. In general terms, the climate of the Livingston vicinity may be described as a modified continental type. It is important to note, however, that the modification effect is quite strong. A January monthly average temperature of 24.5° such as Livingston's is relatively mild for the area's latitude and elevation. At the Livingston Airport the annual average precipitation (1938-

60) was 14.38 inches—almost an inch wetter than the city location. The average annual temperature at the airport for the same period was 45.3°, about 0.5° cooler than the city average."

"Severe storms, other than very strong winds, seldom occur here. In November 1926, 16 inches of snow fell in 24 hours, and in August 1935, 2.45 inches of rain fell in one day. Tornadoes and/or damaging hail may occur somewhere in the Livingston area in an occasional year—on an average of perhaps once in 5 to 10 years. These storm types are seldom well-developed, however, and—even when they occur—damage is spotty. "Chinook" winds sometimes are strong enough to be troublesome—on occasion reaching gust speeds (about once in 10 years) near 100 m.p.h. But in the words of one native, "Anything loose blew away years ago," indicating that wind damage is infrequent."

6 Form investigations

As hotels in Montana developed in style and conveniences, the veranda became a major element within the form. In addition to aiding in horizontal circulation, the veranda served as a public place to meet with people, exchange ideas and to be seen. Verandas have many purposes; as an exterior space it is an ideal place to eat a meal, oversee the landscape, sunbathe or write a letter.

Verandas can also evoke images of domestic architecture. In houses, porches served the social function of observing activities happening in the street and yard.



1 Hunters Hotsprings before 1909

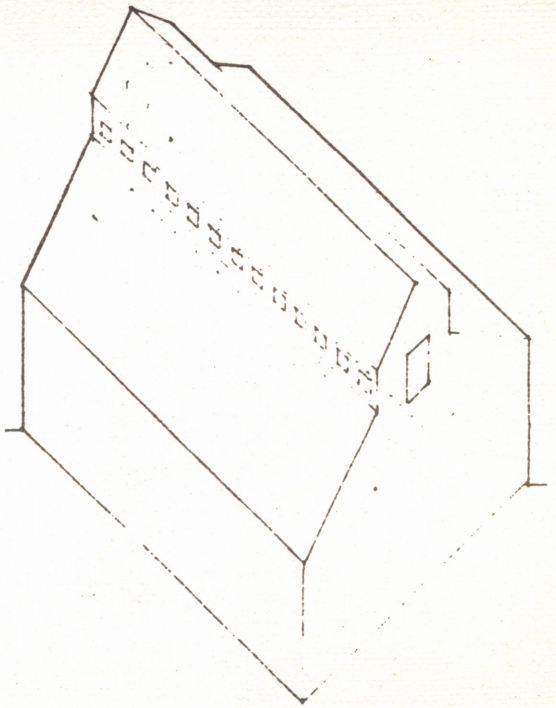


2 Hunters Hotsprings after 1909



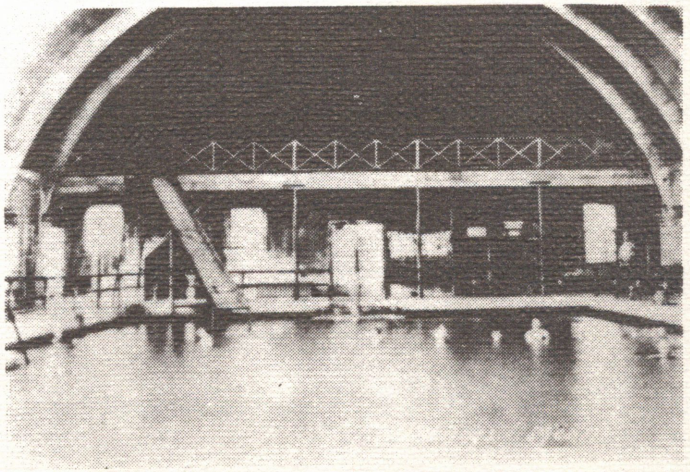
3 Newport Casino, Newport, R.I., 1879

One of the most functional forms that I encountered during my existing facility investigations was the changing rooms/plunges facility at Boulder Hot Springs. The building has gone through some alterations, but the essence of the form exists and functions.



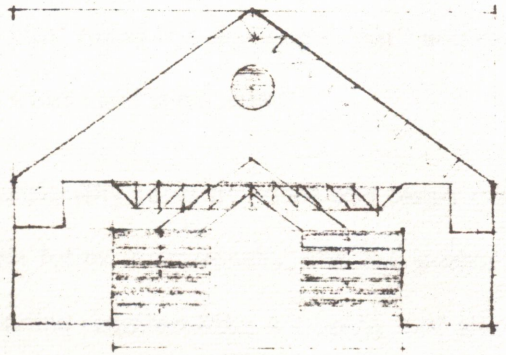
As can be seen from the sketch, the principle that the form was based on is the utilization of a clerestory for lighting and ventilation. The simplicity of the form is deceiving, for one would not be inclined to think that it could work so well.

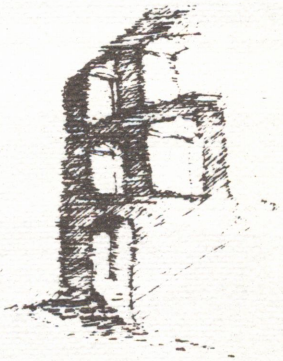
A major problem in any hot spring facilities is the control of humidity, which combined with dark spaces promotes the growth of mold and fungus. This form helps alleviate that by venting the high humidity into the clerestory by a series of horizontal windows that can be opened or closed when needed. A prevailing breeze that goes through the clerestory space creates a low pressure area that draws air from the lower spaces. In the absence of a breeze, natural convection draws the hot humid air up and out. At the same time whether the air system is closed or open, the spaces are bathed in natural light. Lighting is an important element in a swimming facility as was illustrated by the Roman baths. For a long time people have found it healthful to bask in the sun's rays while bathing.



4 Hunters Hotsprings

In reference to the Roman baths, an early Roman writer, Seneca, had this to say, "Nowadays people regard baths as fit only for moths if they have not been arranged that they receive the sun all day long through the widest of windows, if men cannot bathe and get a coat of tan at the same time . . ."[10]





[10] Sidfried Giedion, Architecture and the Phenomena of Transition (Cambridge, MA: Harvard University Press, 1971), p. 165.

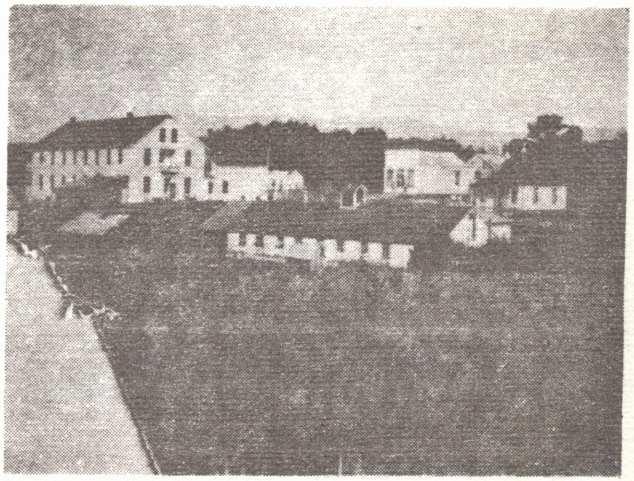
The roof form is one of the most important elements in depicting the character and image that a building or series of buildings conveys. In addition, similar roof forms can tie a group of buildings together visually. "The roof plane is a building's prime sheltering element, protecting its interior from the climatic elements. Its form is determined by the geometry and materials of its structure, and the manner in which it spans across space and bears on its supports. As a visual design element, the roof plane is a building's "hat" and can have a significant impact on the building's form and silhouette."[11]

Traditionally roofs of hotels and resort hotels in Montana have either been hip or gable forms. Functionally, this can probably be explained in terms of climatic and spanning requirements. A sloping roof allows for snow and rain to be shed, hence smaller spanning members may be used. I also think that the existing roof forms can be explained in terms of what they may have meant to the traveler. Symbolically they suggest shelter and evoke a sense of security from the elements. In later examples studied, further meanings may be proposed.

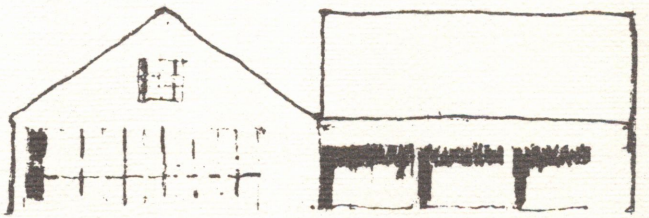
[11] Francis D. K. Ching, Architecture: Form, Space and Order (New York: Van Nostrand Reinhold Company, 1979), p. 42.



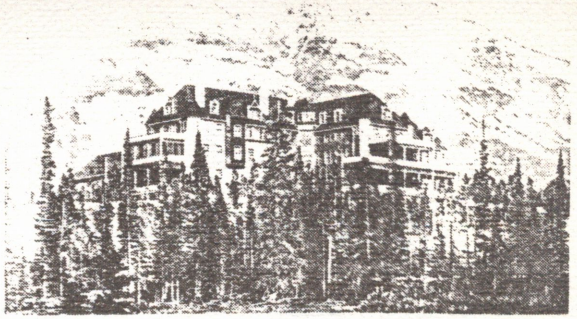
5 Victor Newcomb House, Elberon, N. J., 1880



6 Hunters Hotsprings

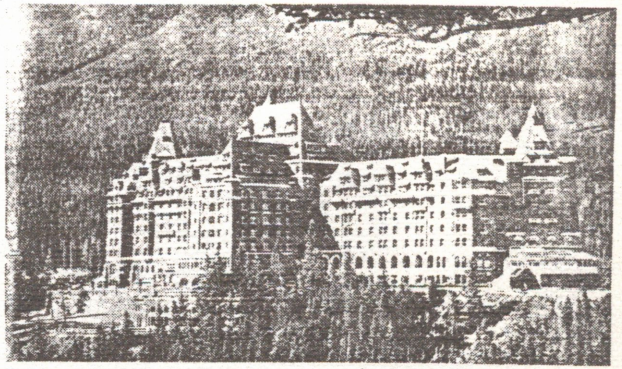


Some of the early examples show a form resemblance to that of boarding and domestic houses. At the climax of stylistic development, romantic images of castles and chalets were suggested. As castles for the common man, one could feel aristocratic and affluent. In reference to the railroad hotels built by the Canadian Pacific Railroad, specifically Banff Hot Springs, Kalman, the author of The Railway Hotels and the Development of the Chateau Style in Canada had this to say about the roof forms. "The steep hipped roofs; pointed finialed dormers, corner turrets and oriels seem to have been freely derived from a medieval castle, and it was such a romantic structure that Price (the architect) wished his hotel to be viewed."[12]



7 Banff Springs Hotel, Banff, Alberta, 1886-1925

After the turn of the century the roof form of hotels changed. This was partially due to programmatic changes brought on by economics and the automobile. In order to compete with the roadside camps, which were rising in popularity, more emphasis was placed on the convenience of access to the room from the car which was parked just outside.[13] Instead of everything being contained under one roof,



8 Banff Springs Hotel, 1926

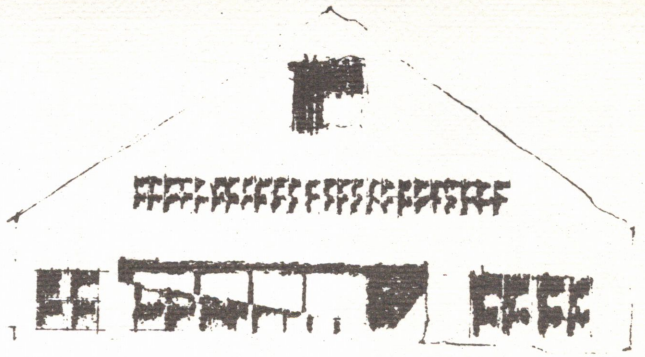
[12] Harold D. Kalman, The Railway Hotels and the Development of the Chateau Style in Canada, University of Victoria Maltwood Studies in Architectural History Number One. (Victoria, B.C.: The Morriss Printing Company Ltd., 1968), p. 26.

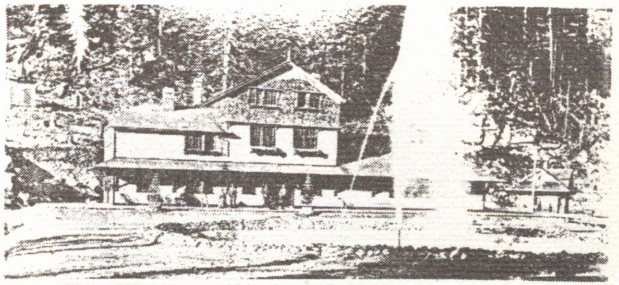
[13] Nathan Kalt, p. 9.

the roadside motel evolved into cottages or cabins, which were separate and self contained. The next step was to connect the units together under one flat roof with the cars still parked outside. Under the influence of the modern movement, horizontal building forms prevailed. Such has been the loss of the roof as a symbolic form, giving both image and meaning to a hotel.

The hotels that have survived from earlier eras, such as Old Faithful Inn and Banff Hot Springs Hotel, which employ the encompassing roof theory, create a lasting image and are still, today, exciting places to visit.

The roof form as a communicator of information has given way to the sign, which is better suited to highway speeds. However, once off I-90 the approach to Hunters will be a slow one. Therefore, the necessary information can be read from the building and not from a sign. It is the meaning and imagery of the hotel that is important in establishing the character of this place. I feel therefore that the roof form will play a major role in achieving this.

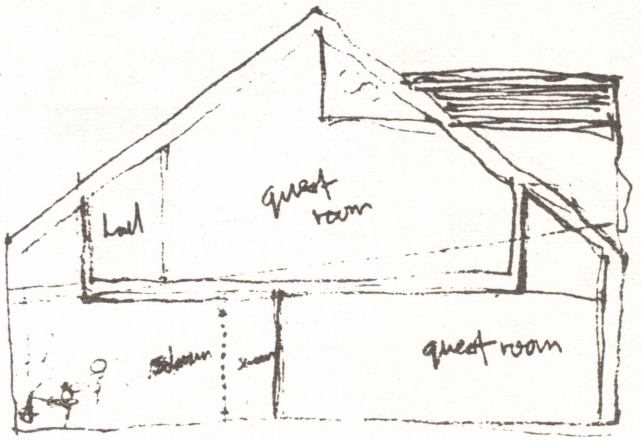


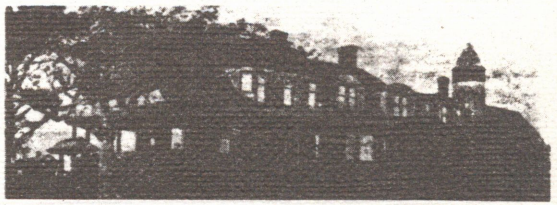


9 Glacier House, Glacier, B.C. 1886

Functionally the dormer form allows deeper penetration of light and space, thus allowing another floor of occupancy within a building. Symbolically dormers imply a sense of domesticity, a quality that I consider desirable in a resort hotel. Dormers may also contribute to the articulation of a roof form, by breaking up masses with a scaling device that is tangible and measurable in terms of the human body.

Dormers usually have windows, and as Charles Moore pointed out, a window implies the memory of someone behind it looking out.[14] In a place such as a resort hotel, someone who arrives to the place may imagine one of those dormers as a perfect space from which to assess and view the landscape. Upon settling in, the guest may identify with the room behind the dormer, knowing that there is his special place or territory within the organization of the whole.

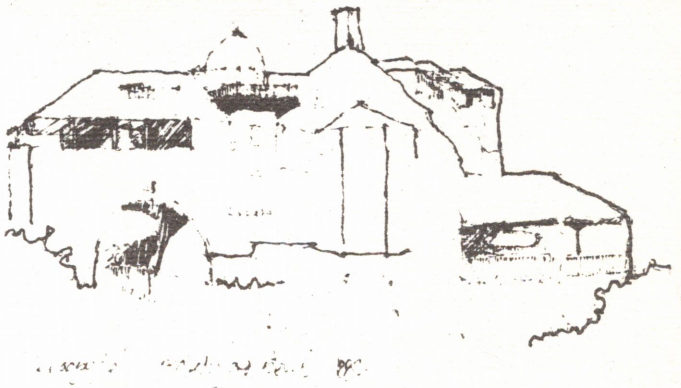




10 Lyman C. Joseph House, Newport, R.I., 1882

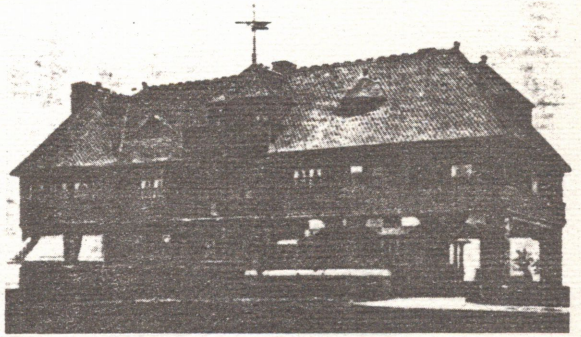
[14] C. Moore and G. Allen, Dimensions, Space, Shape and Scale in Architecture, p. 21.

As a form element, the porte cochere functions in several graceful ways. First, it acknowledges and integrates the presence of the automobile as it did the carriage. The important sense of arrival by car is recognized and allowed to happen but at the same time the automobile does not dominate the scene, as is so typical of the interaction between architecture and automobile.



It has been suggested by Moore and Allen that America is a "sea", and that we arrive to destinations by our land yachts to islands of civilization.[15] Moore carries the analogy to the point of describing suburban houses as each being separate islands with the "mooring" being the driveway.

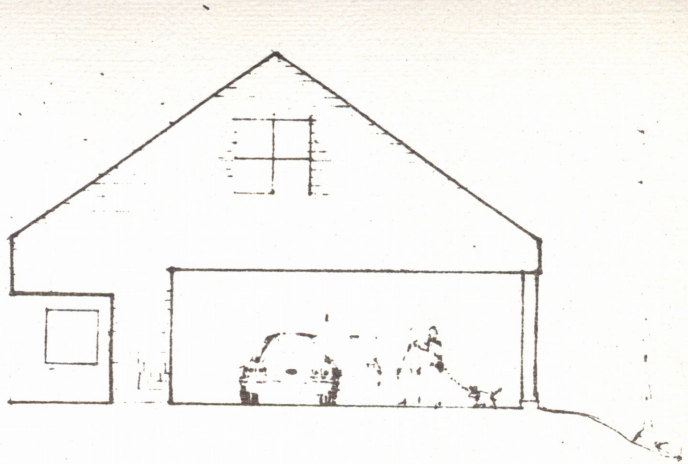
Therefore if we are to accept the automobile for what it is, ways must be found to accommodate them but not allow them to dominate. The popularity of the auto has been the death of the formal approach to a building. I find it annoying and dangerous to approach the main entrance of a building from a vast parking area, as a pedestrian stripped of any safety. Instead of ignoring the problem, I see the porte cochere as part of the solution. When guests arrive by car, they will experience a se-



11 George F. Baker House, Seabright, N.J., 1884

[15] Ibid., pp. 109-110.

quence of events culminating in the passageway of the porte cochere. They have arrived; protected from the climate they unload passengers and luggage. The car then is inconspicuously driven and parked in a lot, to be forgotten until needed and summoned. A path will lead to the hotel from the parking area so that a pedestrian approach may be taken in order to more fully experience and perceive the complexities and nuances of this place. "The entry way therefore becomes an extraordinary sensitive region of the house boundary, a landmark which must respect and reinforce the feelings and identity of both the inside and outside communities."[16]



[16] K. Bloomer and C. Moore, Body Memory and Architecture, p. 46.

7 Site history



hunters hot springs
existing and historic context

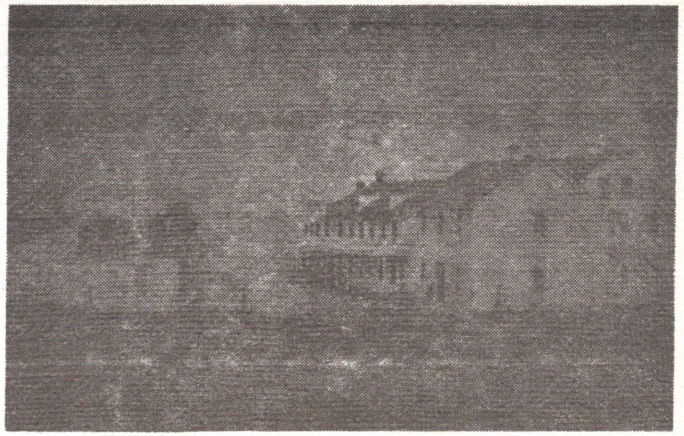
1. dam and cabins (1864) dr. hunter
2. hotel no.1 (1885) cyrus mendenhall
3. store & post office
4. school
5. hotel no. 2 (1889) james murray
6. bottling plant
7. hotel no. 3 1909)
8. pavilion
9. stone wall
10. motor pool garage
11. heating building
12. farm
13. orchard
14. hot & cold springs
15. cold spring
16. hot spring

10 50 20 100

The Hunters Hot Springs site has a long history dating back to the use of the springs by weary, nomadic indians. According to an article in the Great Falls Tribune, an emigrant, Dr. Andrew Jackson Hunter, staked a claim to the area in 1864.[17] In 1870 he constructed a dam which formed a pool, mixing water from the hot and cold springs. Near this site he constructed a few cabins.

In 1885 Cyrus B. Mendenhall purchased the site and constructed the first hotel on the south side of the stage road. As an attempt to start a village, he also constructed a store, post office and school on the north side. The original hotel had forty rooms and was strangely enough heated by coal, which was hauled from the Springdale train station.

The ownership of the springs exchanged hands again in 1898, this time to the Butte millionaire, James A. Murray. Mr. Murray enlarged the hotel and enclosed the pool underneath a roof. Also added was a bottling plant. In 1889 Mr. Murray built a 100 room hotel on the north side of the road that was heated by the springs. Known as the upper house, most of it was razed to make way for the new resort that was



12 Hunters Hotsprings



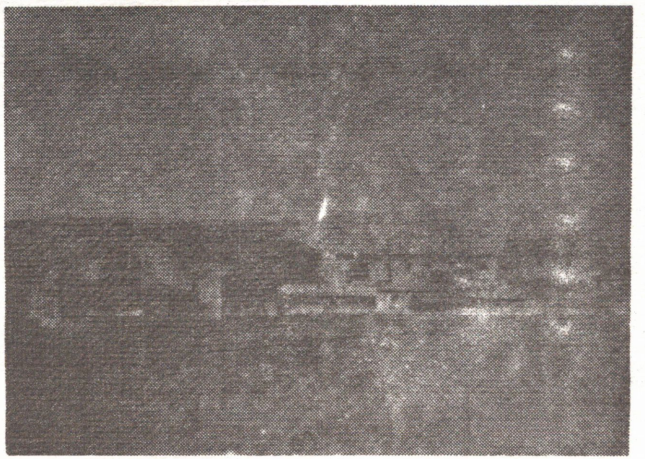
13 Mineral water labels

[17] Josephine O'Keane, "Flower of State's Society Took Advantage of Resort's Opportunity for Gaiety", Great Falls Tribune, 25 November 1956, p. 7.

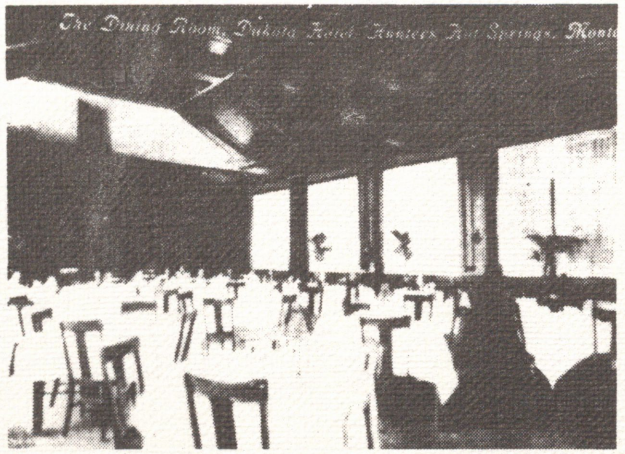
built in 1909, which was the most modern and stylistically exotic. The hotel offered the utmost in luxury and comfort until its demise in a fire in 1932.



14 South side of hotel



15 North side of hotel



16 Dining hall



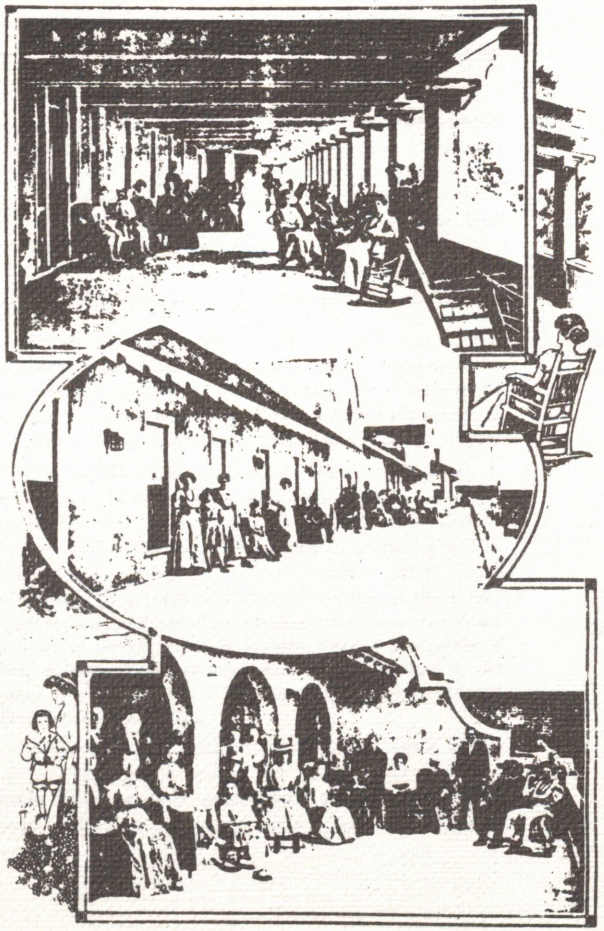
17 Lobby

The following is a copy of a travel brochure that was published by the Northern Pacific Railroad as an inducement for travelers, and a letter dated June 1909 which describes life at Hunters. They are included here to give the reader a better understanding of the original resort. Both were found in the State Historical Library.

"Ho, ye pilgrims, seeking pleasure
Or for health, in vain,
Listen to me, while I truly
Tell where both to gain."
—Book of Legendary Poems, by P. W. Norris.



IN THE ROCKIES OF MONTANA



Enioying the Sunshine and Mountain Air

Hunter's Hot Springs

IN "The Last of the Mohicans" Hawkeye, the wonderful scout and hunter, after having rescued his friends from an acute situation as Indian captives, leads them a short distance away from the scene of combat and halts for a frugal repast. Carefully removing the leaves and the clay from a secluded spot, he uncovers a hidden spring of sparkling mineral water. Noticing that the Indians had but recently refreshed themselves there, he remarked that "the sknaves well know the vartue of its waters." He further descants upon this fact, stating that few if any among the several tribes that frequented the region were unaware of the spring—in after years noted as one of the well known Ballston Springs—and its medicinal qualities.

The fact that the Indian of untutored mind should be able to appreciate the value of thermal springs may strike us at first as strange and inconsistent. But the Indian, and particularly the Indian of the wilds unchanged by contact with the whites, lived very close to Nature and learned many of her secrets. The homely truth spoken by Cooper's hero is matched by a similar knowledge common to the tribes in the West. The Rocky Mountain region, of which Yellowstone Park is the center, is well known as one of great thermal activity. While the Indians did not frequent the park as a whole in large

numbers they did visit parts of it, and it cannot be doubted that they did to a considerable degree resort to the mouth of Boiling River, between Gardiner and Mammoth Hot Springs and near the latter, for the beneficial and pleasurable effects of the hot baths, even as did the whites who followed them, in the early days.

Hunter's Hot Springs Known to Indians

At Hunter's Hot Springs, on the main line of the Northern Pacific Railway near Springdale, Montana, are thermal baths widely known throughout the Northwest as being most efficacious. These springs, before the advent of the whites, were well known to the Indians of the region.

The closing years of the Civil War found Dr. A. J. Hunter of Missouri, financially ruined. The Montana gold-fields were then attracting attention, and Doctor Hunter and family, in 1864, started for them by way of the "Prairie Schooner Limited" route. After divers adventures they reached the beautiful valley of the Upper Yellowstone, and while out hunting the Doctor ran across a band of several hundred Indians camped at a group of hot springs. These springs were much frequented by the many tribes of red men in the region, who well understood their healing properties.

Eventually the Doctor, knowing the value of the waters, became possessed of the springs, gave them the name they now bear, established a sanitarium, and lived there with his family through many trying frontier experiences.

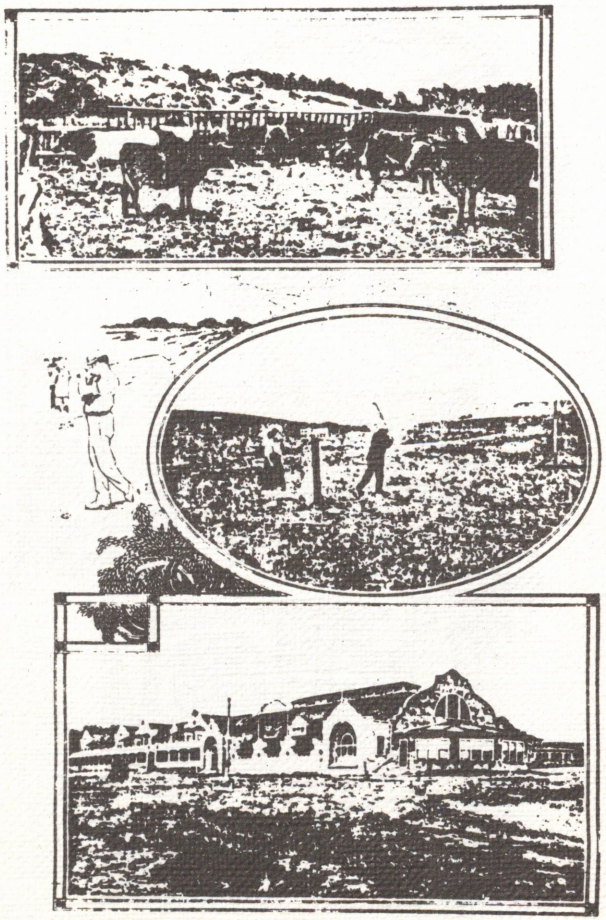
These springs were popular, not only among Indians and white men, but the animal kingdom appreciated them, as well. Five thousand elks in one band, passing by the waters of the Yellowstone River within sight of the springs, once visited the warm waters, to quench their thirst.

Location of Springs

These springs are but twenty miles east of Livingston, and are about 1,000 miles from St. Paul, Minneapolis, Duluth and Superior. They are easily reached from Glendive, Miles City, Billings, Helena, Great Falls, Butte, Dillon, Missoula, and other Montana points. Spokane is only 500 miles distant. That the springs are popular with North Dakota people is proved by the large number from that state who visit them. Transcontinental travelers and those visiting Yellowstone Park find these springs a delightful stopping place en route. Auto busses meet all trains, day and night. The springs are beautifully situated among the foot-hills of the Crazy Mountains, a snow-capped outlying range of the Rockies, with the Yellowstone River two miles away in plain view. They are now owned by Mr. James A. Murray, a well-known resident of Butte, and are leased and managed by Mr. John H. Davidson, formerly of St. Paul, Minn.

Character of Grounds and Altitude

The area of land connected with the springs and hotel comprises two square miles of upland prairie, extending from Springdale, the railway station, northward to the foot of the Crazy Mountains. The surface is more or less undulating and, while naturally attractive, has recently



1. Fresh Milk is one of the Many Attractions. 2. An Excellent Golf Course provides much Sport. 3. Hunter's is thoroughly Homelike.

HUNTER'S HOT SPRINGS

been greatly improved and embellished by a landscape specialist. At the point where the hotel stands the elevation is about 4,500 feet above sea-level. A fine view of the Absaroka range of mountains just north of the Yellowstone Park boundary is had from the hotel porches.

Analysis of the Hot Springs

There are three distinct groups of hot springs, numbering twenty-seven individual springs and having a combined flow of 90,000 gallons per hour. While these three groups are within a hundred yards of each other, the analyses and temperature of the waters make it probable that they originate from entirely different subterranean sources. The springs are known as the Upper, Lower and Hidden springs. Owing to the abundance of water in the Upper Spring and the fact that it has a lower temperature than the others, it only has been drawn upon for the water used in the bath-houses. The Upper and Lower springs are each protected by picturesque kiosks, or spring-houses, for the shelter of those who come to drink the waters. The following is the analysis of the water of the Upper Spring:

Temperature	148° Fahr.
CONTENT	Gr.
Magnesia, Carb.	3.85
Ferrous, Carb.	.16
Calcium, Carb.	1.63
Potash, Chloride	2.10
Sodium, Chloride	.15
Potash, Sulph.	1.68
Sodium, Sulph.	1.38
Magnesia, Sulph.	7.07
Calcium, Sulph.	1.53
Silica and Alum	2.21
Total Mineral Matters	21.76



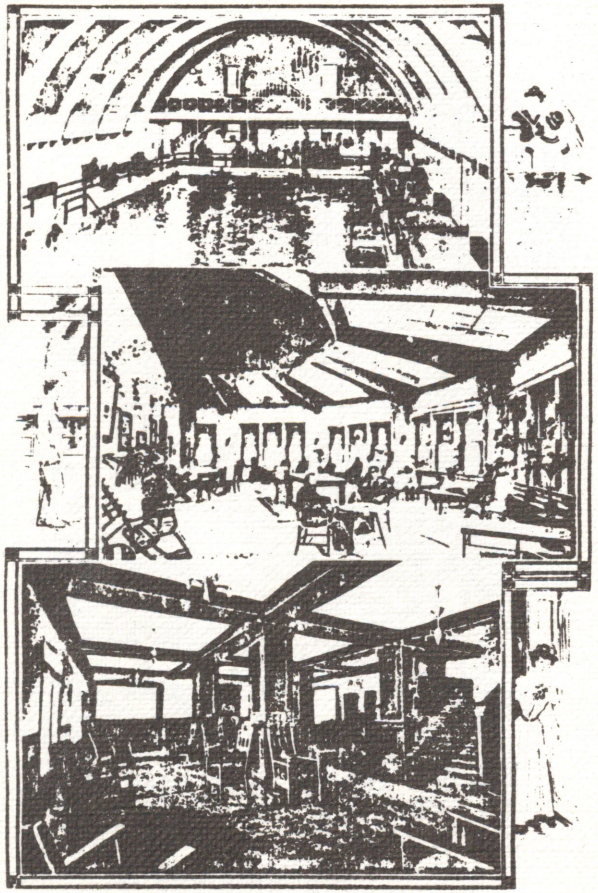
1. Music for those Musically Inclined. 2. As Cozy as You Please are the Rooms Ensuite. 3. Quenching Thirst at the Sparkling Springs.

HUNTER'S HOT SPRINGS

While the waters at Hunter's are delightful simply for baths alone, it is their medicinal value that renders them specially desirable and valuable. For rheumatism, skin, kidney, liver, stomach and nervous diseases they probably cannot be excelled and their reputation for successful results in the treatment of these diseases is widespread.

The New Dakota Hotel

There are two hotels at Hunter's. The upper, or old hotel and until recently the principal one, will hereafter be devoted to special uses. The new hotel, the Dakota, is a beauty. Of the mission style of architecture, 454 feet long by from 100 to 200 feet in depth, the main two-story building with its fine wings, is a long, symmetrical, attractive structure, amply capable of accommodating 300 guests. The building is thoroughly homelike, with every room an outside one. It is, of course, steam heated, electric lighted, supplied with hot and cold running water in nearly all rooms, intercommunicating telephones and is furnished in hard woods. Rooms may be had with or without private bath and there are rooms en suite for those who desire them. An independent water system provides good fire protection. The east wing, or end, of the building is devoted to bathing and swimming. There is a large and very fine plunge, or swimming pool, 100 by 50 feet in size with all modern accessories, including a gymnasium and forty dressing rooms. There are separate men's and women's departments with the usual and necessary attendants, manicurists, hair dressers, masseuses, etc. The baths are under the supervision of a physician and sick and well patrons are properly segregated *where necessary*.



1. The Swimming Pool—Now for a Plunge! 2. The Solarium—Sunny and Bright. 3. The Parlors—Restful and Inviting.

HUNTER'S HOT SPRINGS

Hard by the baths is the Solarium, semi-circular in form and of sixty feet radius, well supplied with palms and greenery, where one can lounge or write or read at all hours of the day, as inclination prompts.

The Solarium is also a place of gathering and entertainment in the evenings and is most enjoyable and popular at all times.

The hotel is managed on the American and European plan, with a grill room in the basement enabling guests to enjoy special table service. Buffet and billiard rooms are at hand for those who desire them.

Excellent Cuisine

The table at Hunter's, in quality, variety and liberality meets the approval of its patrons. The springs enjoy the advantage of having a farm and ranch from which are obtained the larger part of the produce used. A well-kept herd of milch cows keeps the table supplied with fresh, pure milk and cream. Specially home-fattened beef, pork and mutton provide the meats, the gardens supply an abundance of vegetables and pure-bred poultry furnishes the eggs and broilers. Pure table water is piped from a cold mountain spring.

Rates

HOTEL AND BATHS

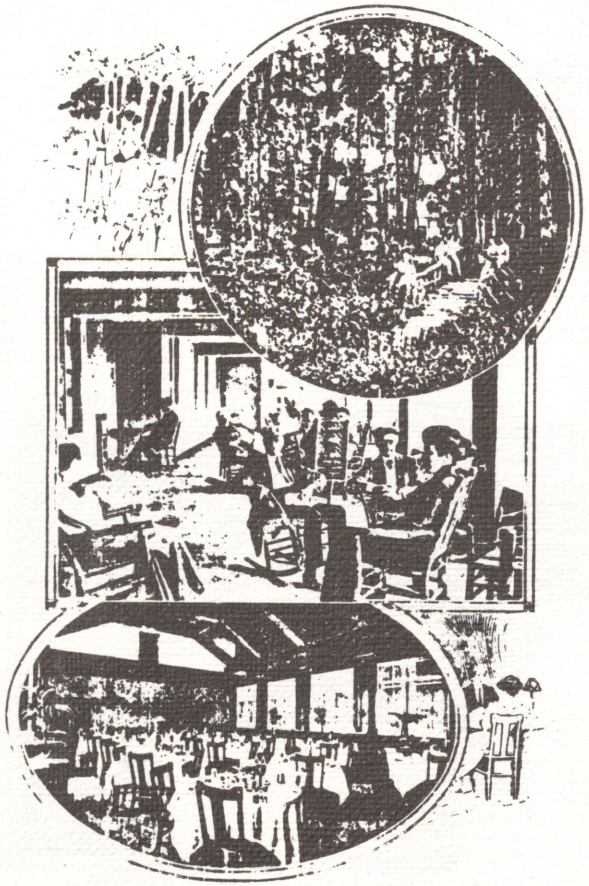
The following will indicate the rates in effect:

HOTELS, American Plan.

Upper Hotel, per week $17.00
Dakota Hotel, per week ..... 17.00 up to 50.00

European Plan Rates furnished upon request.

15



1. In the Cool Woods. 2. A Rocker and a Favorite Magazine.
3. The Dining Room is most Inviting.

HUNTER'S HOT SPRINGS

Special rates for parties will be furnished on application. Hotels are conducted on American and European plan.

BATHS

Baths, including vapor, treatment, plunge or tub, blanket sweat, shower and needle bath and general body massage, each	$ .50
Natatorium	.25
Salt Glow, with or without massage	1.00

Rates on special forms of baths or massage made upon application to Mr. John H Davidson, Proprietor Hunter's Hot Springs, Montana.

There are two physicians, nurses, a chemical laboratory and a modern operating-room in connection with the springs.

The Climate

The climate of the locality is most healthful and invigorating, devoid of rain, cyclones, etc. In winter the periods of cold are short, owing to the dry atmosphere and but little rainfall. Intense and prostrating heat in summer is unknown.

Outdoor Sports

Recognizing the fact that much was necessary in outdoor diversions, the management has given particular attention to this feature. New golf links, pronounced by experts to be the best natural course in the state have been provided and can be used the year round. There are plenty of natural hazards with just enough "easy holes" to make it ideal for the average player. Two very fine tennis courts with complete equipment offer healthy exercise for those who are fond of this sport. The State Tennis Association holds its annual meeting and tournament here.



1. Thirty, Love! 2. With the Mountains Watching Over.
3. The Trout are Biting!

HUNTER'S HOT SPRINGS

The management has recently arranged to have a number of well broken saddle horses and ponies for the exclusive use of guests. The adjacent canyons, mountains and valleys offer splendid fields of exploration for those who are fond of riding. Automobiles can be rented at the hotel.

The beautiful grove facing the Upper Hotel has been fitted up with swings, settees, hammocks, rustic bridges, a dancing pavilion, and has been otherwise improved and beautified, and is a most attractive playground for children and an outdoor resting spot for everybody.

Hunting and Fishing

The region about Hunter's Hot Springs is a great hunting and fishing resort and many old patrons of the place make annual pilgrimages here to enjoy this class of sport. The mountain streams afford excellent trout fishing, and the Yellowstone, flowing through one end of the estate, always is good for a string of trout.

By annual restocking from the Government hatcheries the supply of trout is never diminished. Already 130,000 have been distributed in the past two years.

Located in the center of a rolling country, the region will always remain an open range, more or less, and lying near the borderland of the great National Game Preserves, the hunting at Hunter's Hot Springs offers satisfactory sport. There is duck shooting in season, and grouse, sage hens and prairie chickens may be had in plenty. Outfits for hunting parties are obtainable at reasonable rates, and every assistance in the way of guides and equipment is at the command of the visitor.

HUNTER'S HOT SPRINGS

How to Reach Hunter's Hot Springs

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ST. PAUL, MINN



Cuttle Bros.
Proprietors and Managers

Hunter's Hot Springs
Montana

June 30, 1909.

Dear Genevieve:

Well we are here at last in the foot hills of Crazy and Sheep Mts. back to the simple life. It is so restful and sort of grand. Imagine if you can a stucco about two blocks in length with plain cottages, a country store and postoffice and two two-story hotels on opposite sides of the stucco one - the smaller farther up the hill than the other and you have Hunter's. Just back of the buildings on the east side of the road is a little winding stream



Cattle Bros.
Proprietors and Managers

Hunter's Hot Springs
Montana

well shaded, along which is a path and rustic bridges at intervals. Here too is a pretty little grove in which there are some nice big swings and benches.

Back of the buildings on the west side are the hot springs and bath houses. The water is too hot to bear my hand in and is soft and clear. two or three of the springs have little houses over them and people drink from them. the water is strong & excellent for rheumatism and



Hunter's Hot Springs
Montana

to taste. The spring from which I took a drink this morning is the one shown on the paper. The mountains proper are twenty or twenty five miles away but look to be perhaps two miles and while they are not snow capped as Mt. Hood and St. Helens were (and are I presume) there is snow laying in the gullies and ravines. It looks odd it has been warm enough here to melt all the snow in the country and at the distance the mountains appear to be one



Hunter's Hot Springs
Montana

would think all the
snow would have been
gone long ago. The air
is so clear that dis-
tances are deceptive.
Now I have described
our little settlement
imagine if you can
no other for fifteen
miles at the east and
twenty at the west. Big
Timber is the name of
the nearest eastern town
and Livingston on the
west. We are two miles
from the railroad (N.P.)
Shingdale is the station.
It consists of a combina-
tion [illegible]



Cuttle Bros.
Proprietors and Managers

Hunter's Hot Springs
Montana

rail road buildings and another house were all I saw when I was there this afternoon to see to getting Blair home which came in by freight.

On the drive home this afternoon we saw two coyotes, the first I have seen outside captivity. I suppose they were on the track of a big band of sheep that were driven past here this morning, the men said there were thousands of them being taken up to the hills from the shearing pens.

The west end of the hotel



Hunter's Hot Springs
Montana

which is an addition
to the one on the east
side of the road is not
finished. When it is we
will have electric lights
now we have lamps
which are a curiosity
to the children, when
they went to bed tonight
they wanted to know how
to find out their lamps and
both wanted to blow it.
We have three very pleas-
ant rooms off the parlor
which is like a simple
country one. Florence
appropriated the big front
room of the suite and
back of had with cretonne



Cuttle Bros.
Proprietors and Managers

Hunter's Hot Springs
Montana

distance between our
Doors and my rooms
both good size. I will
send you a postal showing
them or their location
rather, there is a nice
piazza both on the first
and second floor.

Ben is so busy taking stock
which has not been done
before his time that I
have scarcely seen him.
He has been here about
three weeks, we came
last night.

I got your papers also
the same one from Aunt
Fan. Maude Adams must
have made quite a hit
with the road.



Hunter's Hot Springs
Montana

I also see that you have had some 92° weather, we have too but there was a good breeze all the time so we have not minded it, you know we have just a dry heat and not the awful sticky kind. I got the Steamer Soldier too, it has some pretty scenes. Aunt's the boats much larger than those of my time?

I am getting sleepy so will close for tonight.

With love to you

Fannie.

Why doesn't Bud get to write us letters? I said letters from him and Mama.

8 A scenario

The following is a scenario that was written prior to and during the design process as an attempt to better visualize what one's actual experience of staying at Hunter's Hot Springs could be like. To actually take possession and imagine being there helped clarify the project and the image to strive for in the design process.

Upon the final approach and up the drive we arrive to this place between earth and sky. From the vastness of the open sky we glide under the protective wing of the porte cochere. We sense a feeling of enclosure and shelter from the environment. At the same time our senses are heightened by a cool breeze. As we are directed into the lobby we notice people sunning themselves on the veranda; some are engaged in conversation, and some are playing chess.

The lobby is a pulsating place. As the business center of the hotel, it is a hub of activity. Directly ahead of us is the registration desk. The height of the large hall makes the space an exciting one in which to be. As we walk towards the desk, flashes of long forgotten images fill my mind. The sparkle of the brass keys each set in its own wooden slot suggest a simple elegance. The large stuffy chairs by the fireside look comfortable; I make a mental note to check them out later.

Upon signing in and receiving my key, I proceed through the lobby to the corridor that leads to my room. The corridor is a pleasant surprise, for instead of being dark and monotonous the hallway is sunny and varies along its path.

In contrast to my usual expectations of hotel rooms, I find that the room has been decorated simply and tastefully. The drawn shades give the room a cool and restful atmosphere. Upon opening the drapes the lighting changes; the room is flooded with sunlight, which is bright and cheerful. A window seat has been provided; I sit down in the seat and feel the warmth of the sun on my shoulders. As I assess the landscape from my private perch; a feeling of drowsiness and relaxation sets in. There will be plenty of time later to explore; time for a rest.

Upon wakening I venture into my bathroom for the first time. I take a cool shower to wake myself. I quickly dress for I now feel hungry. Back down the hallway, through the lobby and past the desk I walk. Directly ahead of me is the restaurant. I am directed to a table by a window where I wait for my friends to arrive. We have a light snack not wanting to stuff ourselves before a swim.

After our lunch we walk from the restaurant to the changing rooms. Enclosed passage ways allow us to avoid walking outdoors on such a cool day. The changing rooms and pool are another surprise and are counter to my expectations. Although warm, they are well ventilated and are light and cheerful. From the privacy of the changing facilities I pass through another walkway to a wonderfully sunny, almost transparent building. The humidity allows for potted plants and trees to grow, add-

ing a lushness to what otherwise might be a stark, sanitary environment. Stepping into the hot water a feeling of delight and sensual pleasure encompasses me. Since the temperature outside is cool, the garage-like door mechanism is closed. I swim under water momentarily to reach the outside. As I surface I notice steam coming off of the water, yet I have remained perfectly warm in the transition from indoors to outdoors. Friends have told me that it is quite exhilarating to jump in the snow and then jump back in the pool, but I find my spirit too relaxed for such activities. After my swim I decide to lounge by the pool side. The concrete floor is warm because water from the pool is circulated through it in tubes during the winter.

After dressing I decide that it is time to do some exploring. I walk back through the passageways to the hotel and discover that a variety of rooms have been provided for my use. There is a reading room with bookcases and a fireplace. Going down the hall to another wing of the hotel I discover a sun room with a deck outside. As I walk down the hall I notice other things, such as niches with windows from which to observe beaucoup de choses. Near the entrance is a small gift shop that sells postcards, Hunter's Hotsprings tee shirts and other memorabilia. I buy a few cards to use later. Across from the gift shop I find stairs that lead up to a pub. Deciding that a cold beer would be to my liking, I walk up to the bar and ask for a Moosehead. In a case I see various imports that look familiar. Not too bad of a

selection I think to myself. Hearing laughter over the music, I look over to discover that my friends have already discovered "my" pub. The setting sun is casting an orangish light through the leaded glass windows that scatters a pattern across the wooden floor. As I join my friends I think to myself what a nice place in which to relax. Over the course of a few beers it is decided that we should go fishing for trout tomorrow. My friends want to get up early, but I want to sleep in; I tell them that I will join them later.

I decide to return to my room before we go to dinner. We will all meet by the fireplace in the reading room at seven o'clock. Down the hall and up the stairs I walk. Perhaps it was the beers, but I notice the smoothness and warmth of the wood railing as I walk up the stairs. Upon entering my room, I unload my pockets of matches and postcards. It may seem silly to some, but I like to save books of matches to remember places by. Again I look out my window. It is dark. To my left I see where I was swimming earlier. The building appears to glow; it is so transparent. Straight ahead I see the building that I am about to go to now. Although similar in shape to the pool facility and to the hotel, it has its own identity and character. I can see candles flickering on the tables near the windows. To the right I see the passageway that is lighted up. It connects all of the pieces together. I change into my

favorite sweater and sport jacket. I think to myself that it is too bad that I will have to leave the day after tomorrow; the weekend has gone by so quickly.

9 Basis for form generation

"One of the oldest traditions in architecture is tradition itself. The use of understood and proven precedents which are partly repeated, partly modified to make a new building."[18] The goal is not to make a pastiche of building elements, but to interpret what has been done and to see how it applies to the situation at hand.

Every building is implicitly attached to the era that produced it. For any given period of time there are different issues raised, and a different standard for judging buildings by. There is often a reaction against the standards set by the preceding generation or movement.[19] This is as true today of the change in attitudes towards Late Moderism as was the reaction of Mannerism which stemmed from the coolness of the Renaissance.

The Modern movement considered ornament and proven forms to be unnecessary, even decadent. There now appears to be a somewhat fragmented movement back to the richness and diversity of "pre-modern" architecture. Ornament and form are the communicators of cultural ideas and aesthetic intentions. This in part explains the increase in the popularity of historic preservation, which seeks to maintain the fabric





18 Hemenway House Manchester-by-the-sea, Mass., 1883

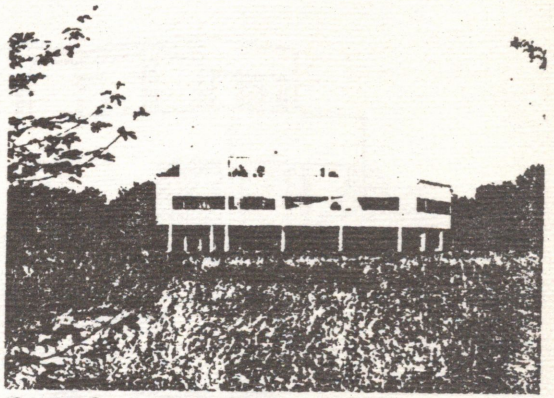
[18] K. Bloomer and C. Moore, Body Memory and Architecture p. 25.

[19] Steen Eiler Rasmussen, Experiencing Architecture (Cambridge, MA: The M.I.T. Press, 1974), p. 59.

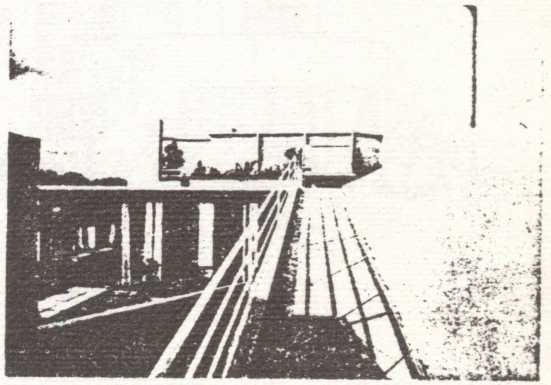
of culture. Christian Norberg-Schulz points out that we must study the language of architecture, and learn how to let it "speak". "When we in this way reinstate architecture as an art, we may reach beyond the superficial quantification of functionalism and the arbitrary codification of semiology, and make our places become alive."[20]

The complexities of life and society today require an approach that is more pluralistic, for functionalism by itself does not fulfill all of the needs of the eye, body and mind. Functionalism in part stemmed not from the function but rather from other references of the era, that of Cubism and the machine aesthetic.[21] For if functionalism truly followed function, those who followed its idiom would have recognized that vernacular forms evolved because they work in the situation that they are in.

Le Corbusier's views on form were closely related to those of the Cubist and Purist art movements.[22] "Our eyes are made to see forms in light; light and shade reveal these forms; cubes, cones, spheres, cylinders or pyramids are the great primary forms which light reveals to advantage; the image of these is distant and tangible within us,



19 Villa Savoye, Poissy, France, 1929



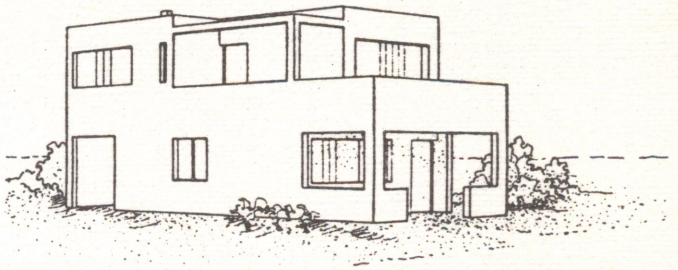
20 Villa Savoye

[20] Christian Norberg-Schulz, "Kahn, Heidegger and the Language of Architecture," Oppositions 18 (Fall 1979), p. 46.

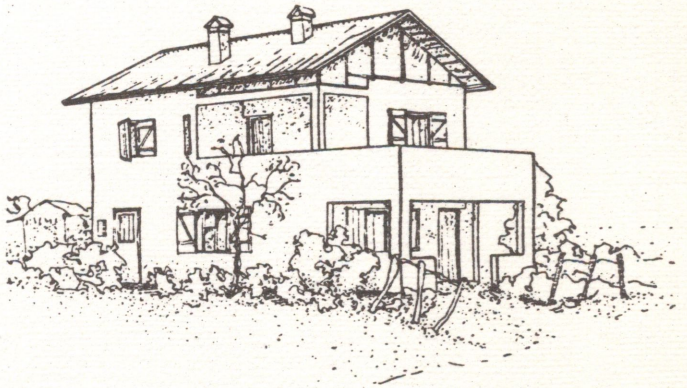
[21] Mario Gaudelsauas, "From Structure to Subject: The Formation of an Architectural Language," Oppositions 18 (Fall 1979), p. 7.

[22] H. H. Arnason, History of Modern Art (New York: Harry N. Abrams, Inc., 1977), p. 214.

and without ambiguity."[23] Le Corbusier therefore substituted his own meanings, images and forms for those which had been held previously. As seductive as these forms were, their content and meaning for some of their occupants was lost. Although Villa Savoye succeeded with its rich imagery of being a ship in a field with private places in which to sun oneself, the same forms and elements when applied to worker's housing in Pessac and Lège had different results. "But the carefully constructed dreams that Le Corbusier had forged were either not recognized or not accepted by those who came to live there. These people looked instead for confirmation of their own image of a house. Over the years they have transformed Pessac's abstracted imagery into a much more domestic vernacular."[24]



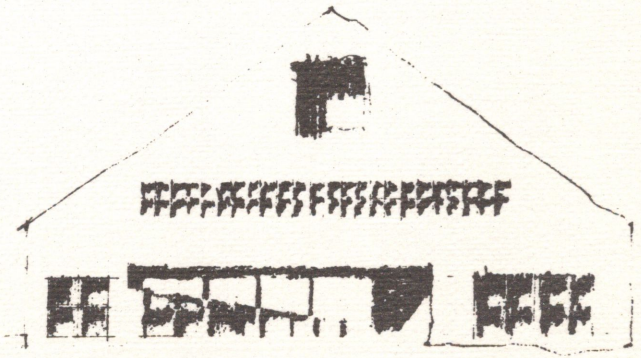
21 Housing at Pessac, before



22 Housing at Pessac, after

I have certainly been influenced by Le Corbusier in my own development, for I admire his purity of form and crispness of line. In my own work, I see myself as using both modern and romantic precedents to create my own expression.

Our dependence on artificial means of heating and lighting our buildings led to a further abstraction of architectural form. Not only did our buildings not have to respond



[23] Le Corbusier, Towards a New Architecutre, Trans. Fredrick Etchells (New York: Holt, Rinehart and Winston, 1960), p. 31.

[24] Charles W. Moore, Gerald Allen and Donlyn Lyndon, The Place of Houses (New York: Holt, Rinehart and Winston, 1974), p. 140.

to what our conceptions and understandings of what form meant, they no longer had to respond to the site and to the environment in terms of lighting or heating. When energy appeared to be an endless supply and cheap, any "box" could work as well as a traditional form. ". . . U.S. Engineers had devised a technology that would make the modern style of architecture habitable by civilized human beings."[25] "In fact, modern man for a long time believed that science and technology had freed him from a direct dependence of places."[26] A by-product of this freedom was a loss of the importance of form as an indicator of character and region. Combined with the standardization of the industrialized world and the corporate need for instant recognizability, it is easy to understand the development of "everywhere U.S.A." and at the same time the "nowhere" quality of our environment, and hence the reaction against it.

Therefore, in the case of this hotel I feel it is necessary to again use the language of architectural form to denote a sense of value, meaning and place. We must choose a sub-language of architectural forms that represent a "selection" from architecture

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[25] Reyner Banham, The Architecture of the Well Tempered Environment (Chicago: The University of Chicago Press, 1969), p. 164.

[26] Christian Norberg-Schulz, Genius Loci, Towards a Phenomenology of Architecture, p. 18.

which gives or discloses the identity of a place.[27] I feel compelled to mention again that this "selection" of architectural form will have dichotomous sources, because our understanding of forms is affected in part by our internal schemata with which we compare and judge our world by.

"It seems useful to regard design as choreography of the familiar and the unfamiliar—the chance to massage our sensibilities with shapes that are likely to be familiar to us (whatever their spent connotation to our lives) and shapes or relationships full of surprise, which calls us to attention and response, readying us for choice."[28]

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[27] Christian Norberg-Schulz, "Kahn, Heidegger and the Language of Architecture," p. 46.
[28] C. Moore and G. Allen, Dimensions, Space, Shape and Scale in Architecture, p. 15.

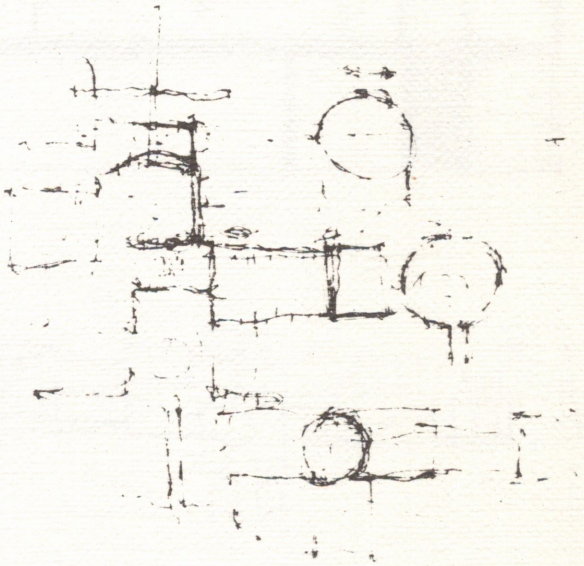
10 The role of the tangible and intangible in the generation of form

As mentioned earlier, form generation should look not only backward for inspiration but to the present and the future as well. Thus far the discussion has been focusing on the more tangible influences and determinates of form. Programatic requirements, historical precedents, technological restraints and advancements all helped indicate the general trends of this project.

Form generation also looks inward to the architect. I discovered for myself that any number of "form determinates" will develop a design only so far, and that there are no set formulas. I feel that the concept of an idea and the thought processes (including the intuitive) are the things that help a building cross the line into the realm of architecture.

I found this project to be an interesting and introspective adventure. I watched myself as I designed, and I shall attempt to document the thought processes and how the hotel came to be.

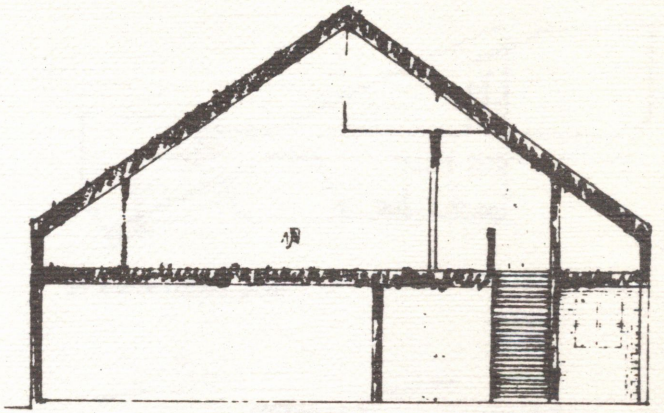
From the onset of the project I had an interest in the Shingle Style and the works of architects like Peabody and Stearns; McKim, Meade and White; and William Ralph Emerson. I was intrigued by the way in which they generated form, and I admired





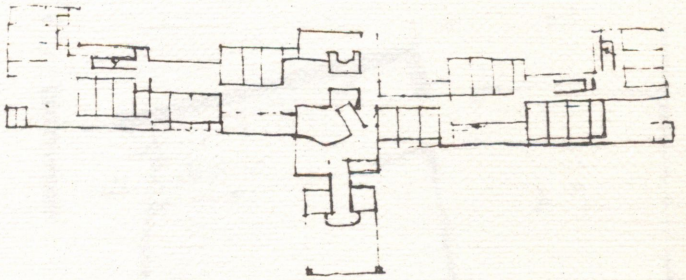
23 Elberon Casino, Elberon, N.J. 1885

the "skin" qualities of the sheathing materials. As diverse as some of the elements were, the buildings had a continuity of surface, which helped them read as a whole. In my own project, I felt that this idea of skin and layering was worth exploring.

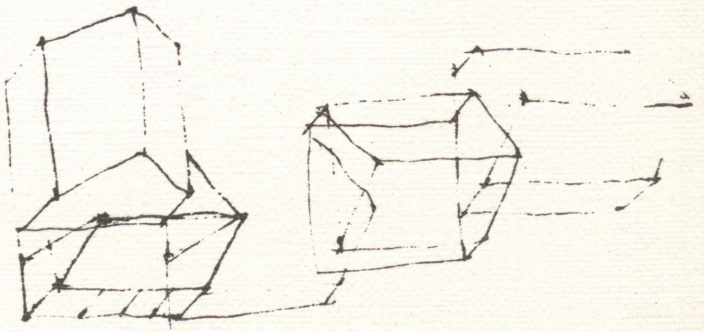


In looking at early hotels in Montana, I saw that all had either hip or gable roof forms. Seeing these as appropriate precedents, I resolved to explore some of the possibilities. My early studies had long, hipped roofs. As I progressed further I found that for this particular project gabled roofs offered more flexibility.

I began thinking about the aspects of domesticity and houses as they applied to a hotel. Although simpler in function as compared to a house the rooms dictated specific kinds of relationships and circulation. To think about all of the rooms comprehensively, initially, brought too much regularity. To think about all of the rooms individually brought too much variety. Therefore, I began to think about the rooms collectively in groups or families. I explored how these groups or "houses" could be connected together and discovered that the gable roof offered opportunities for new relationships of familiar shapes. Although some of these new relationships created some pragmatic conflicts, I felt that they could be resolved through careful detailing.



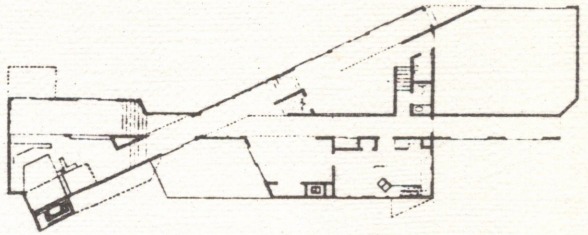
The aspect of circulation became very important in holding the project together. The circulation as well as the sheathing enabled the diversity to happen within the



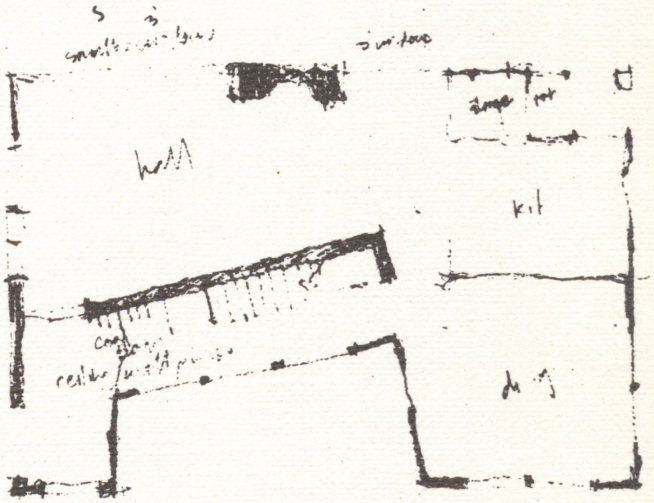
ordering of the whole. In reference to the Stern House, it was said, "if you see a corridor as nonroom, as wasted space, then this house is wasteful. If you see it as a room stretched, an empty stage for moving as well as resting, then there are rich chances for improvisation."[29]

By making the entire structure of the hotel generous enough, I found that there were many options in the composing and choreography of the public spaces, which did not need to be as regulated as the sleeping rooms. Within the structure some spaces became very discrete and defined in both function and space; and some became undefined, open or unspecific with the intention that uses will be chosen by those who come to occupy and claim this place.

At the onset of this project I made known my intentions to create a place, and to investigate the generation of form. I feel that I have made some discoveries along the way, and although in another project I could come up with something entirely different, I feel that the approach would be similar.

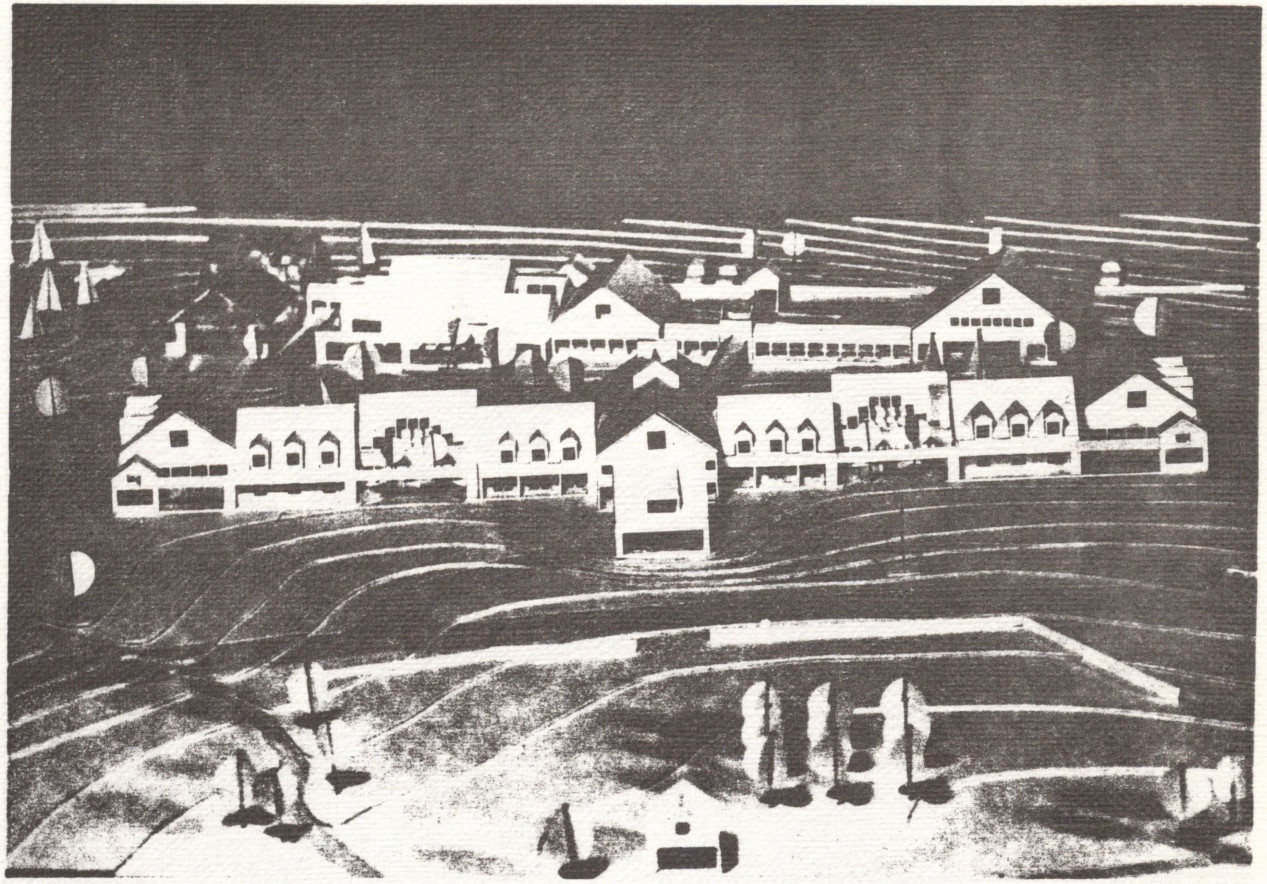


24 Stern House, plan

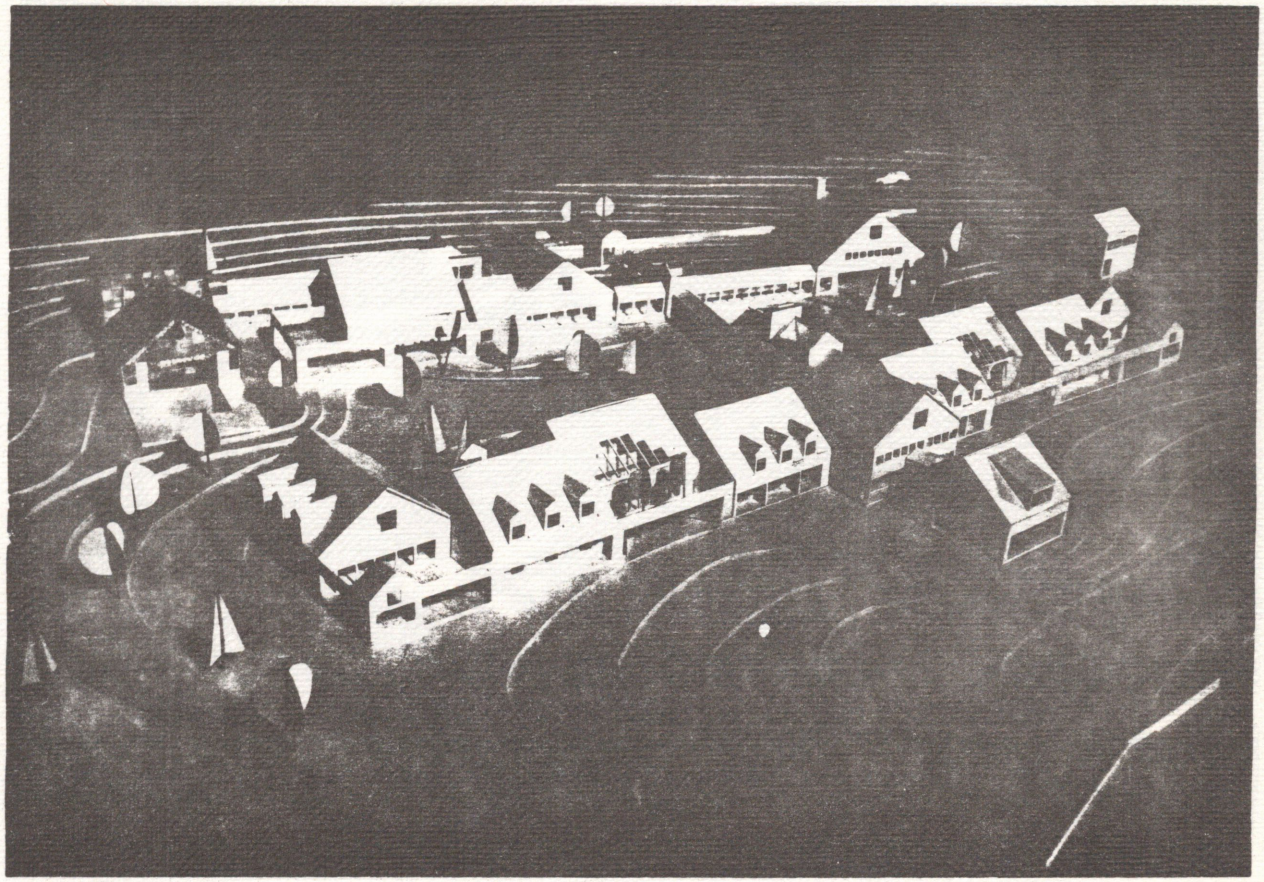


[29] C. Moore, G. Allen, and D. Lyndon, The Place of Houses, p. 102.

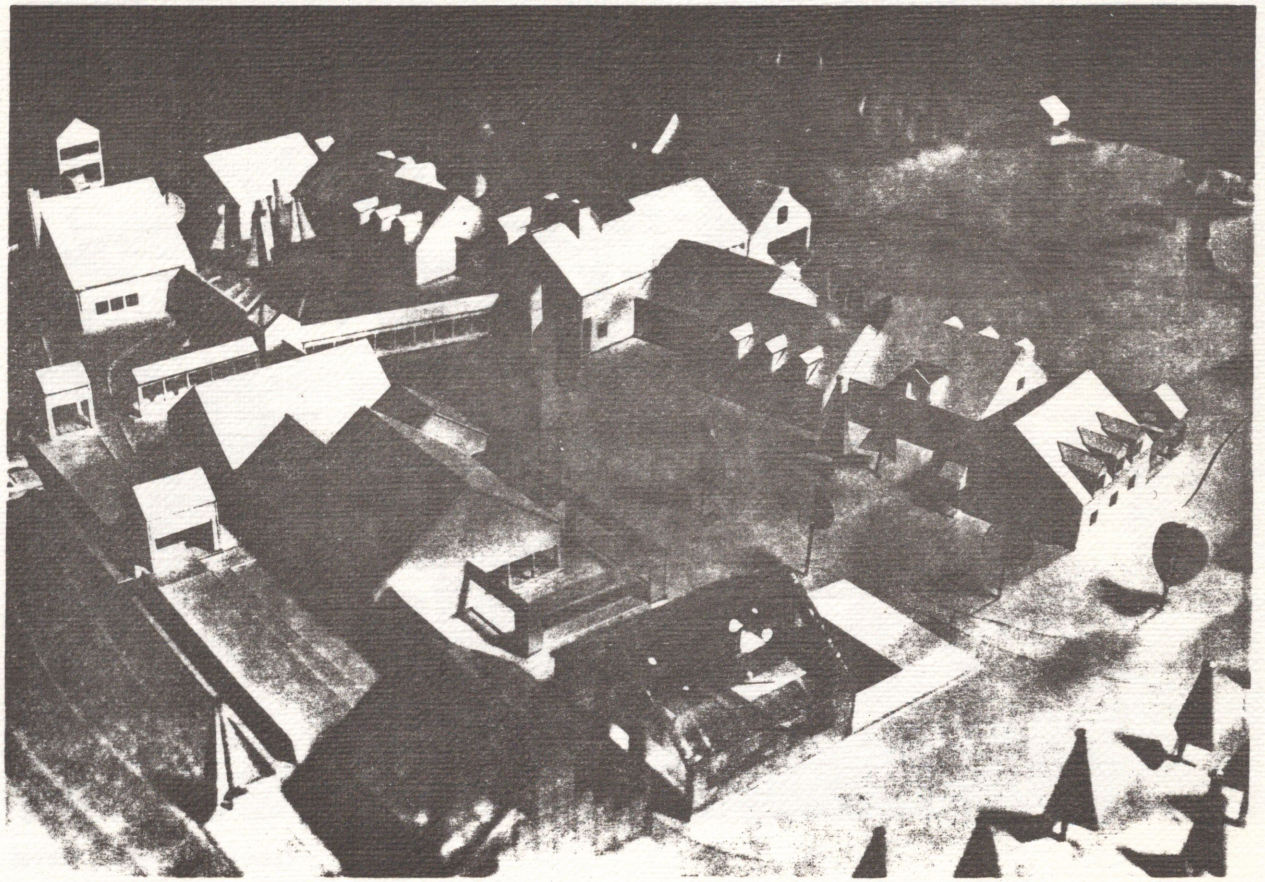
11 Design development



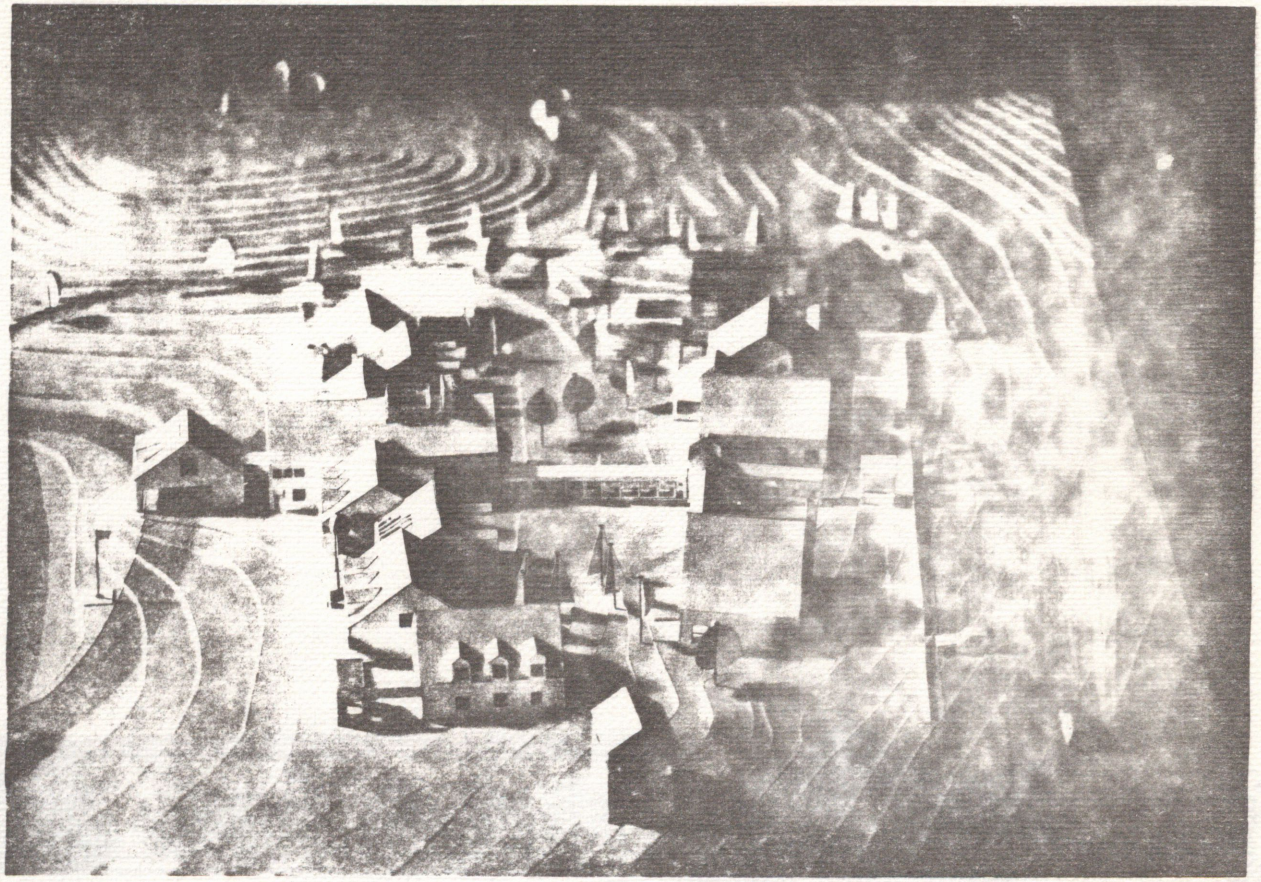
Model from the south



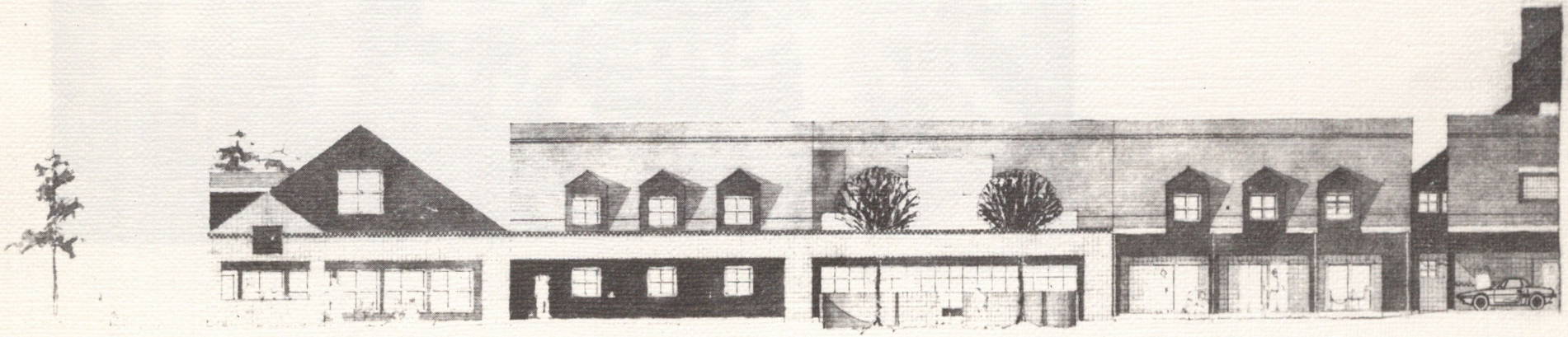
Model from the southwest

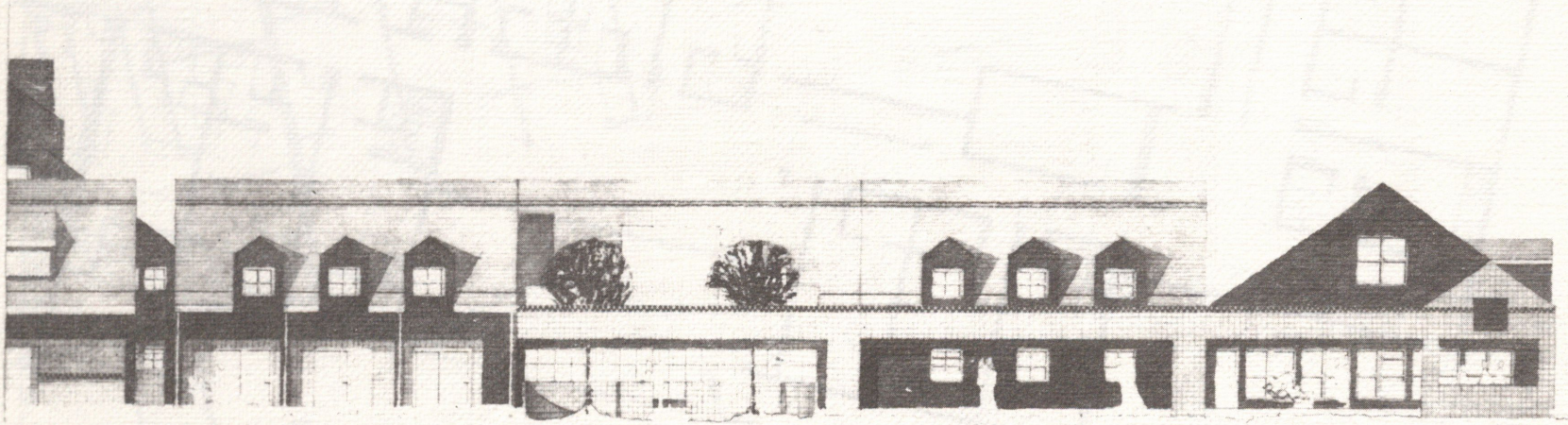


Model from the northwest

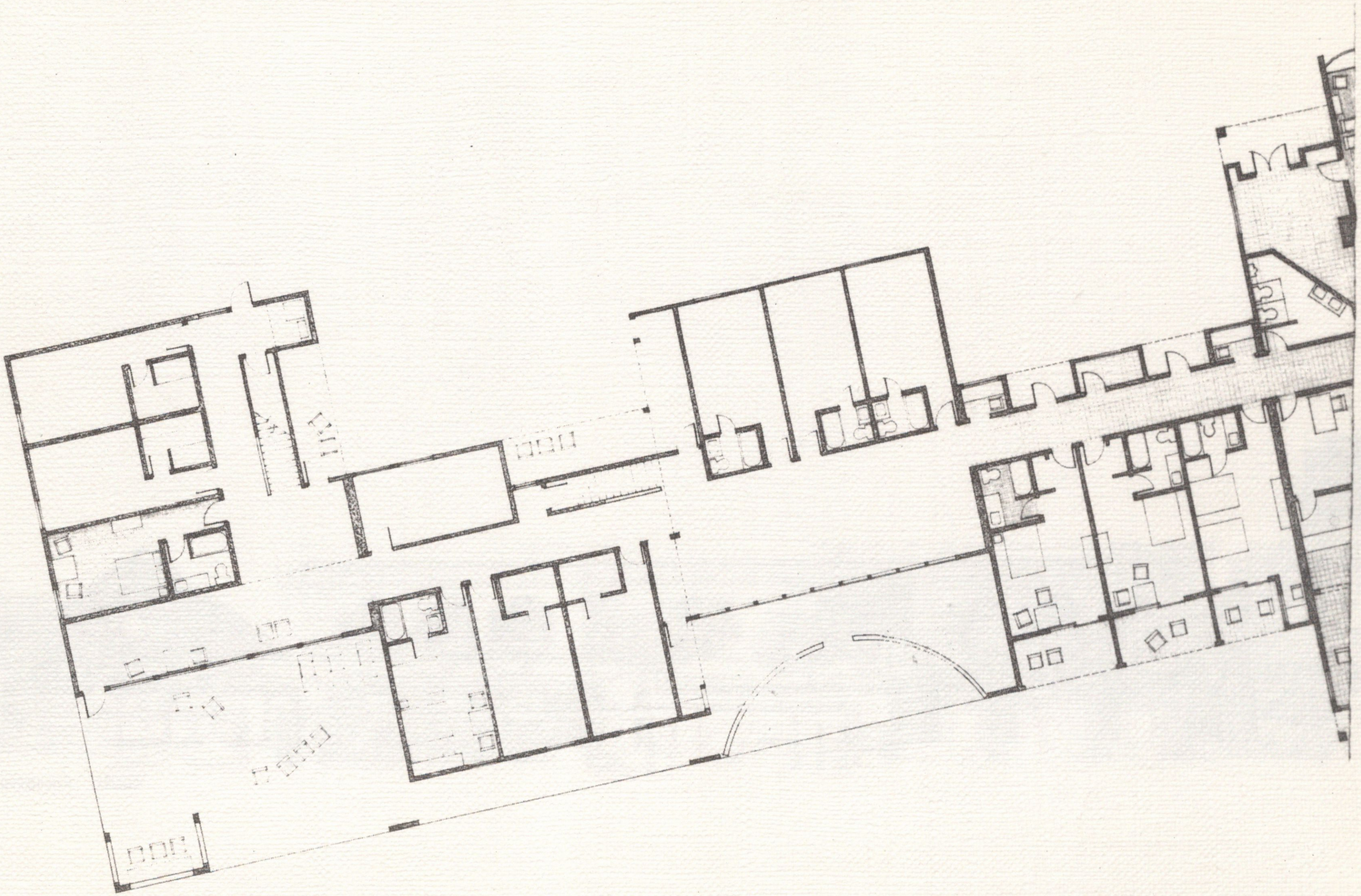


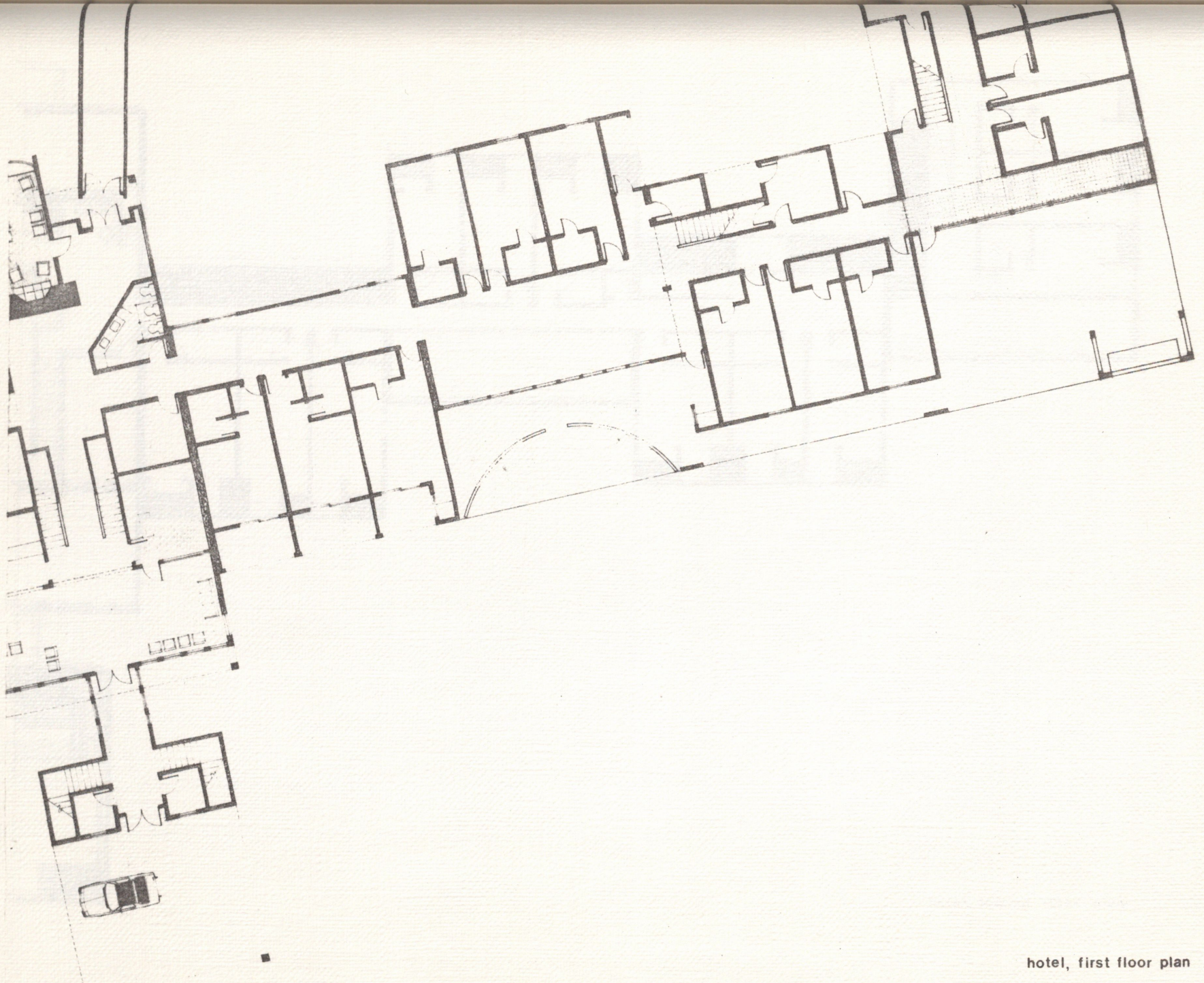
Model from the east



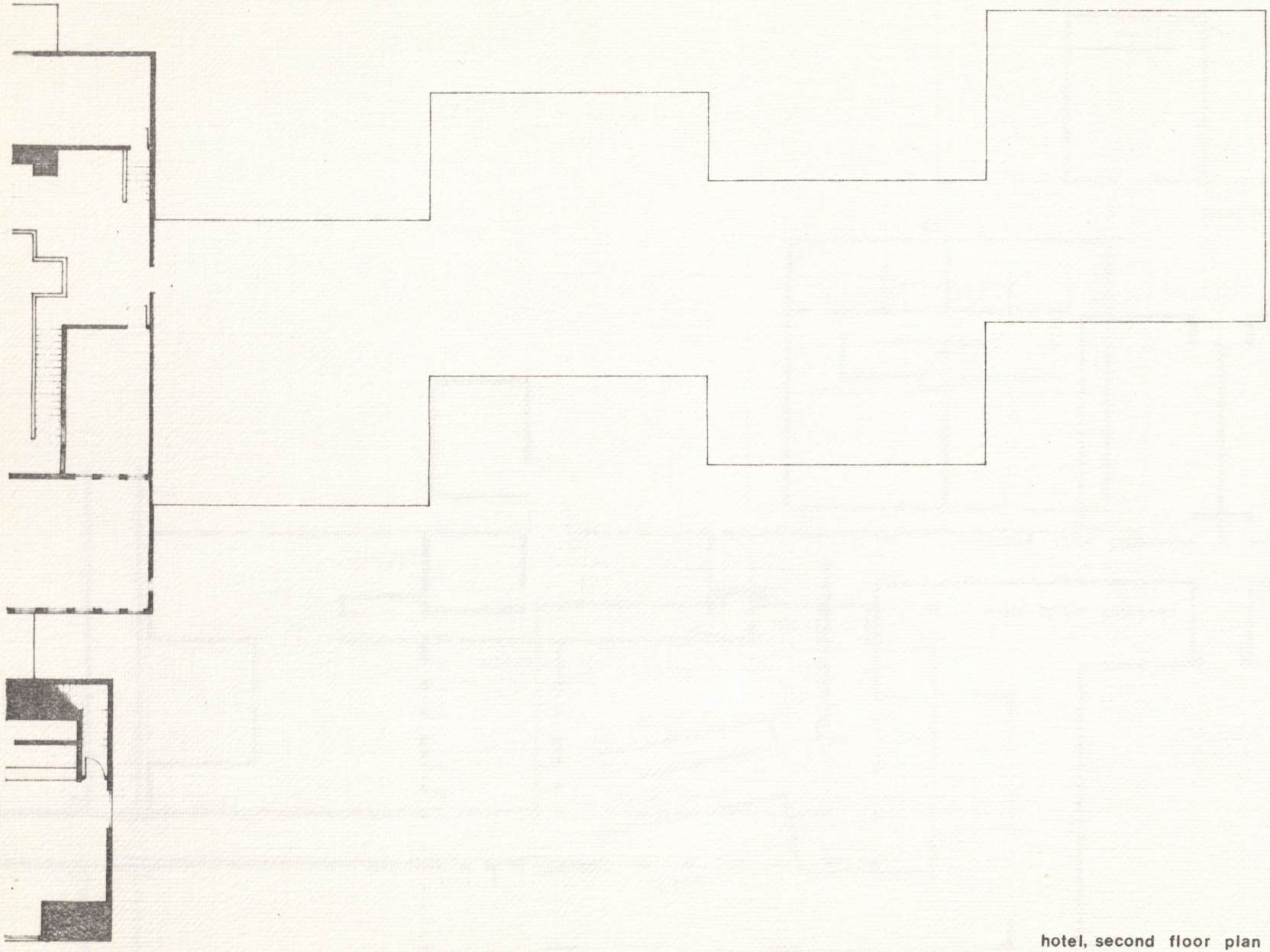


south elevation

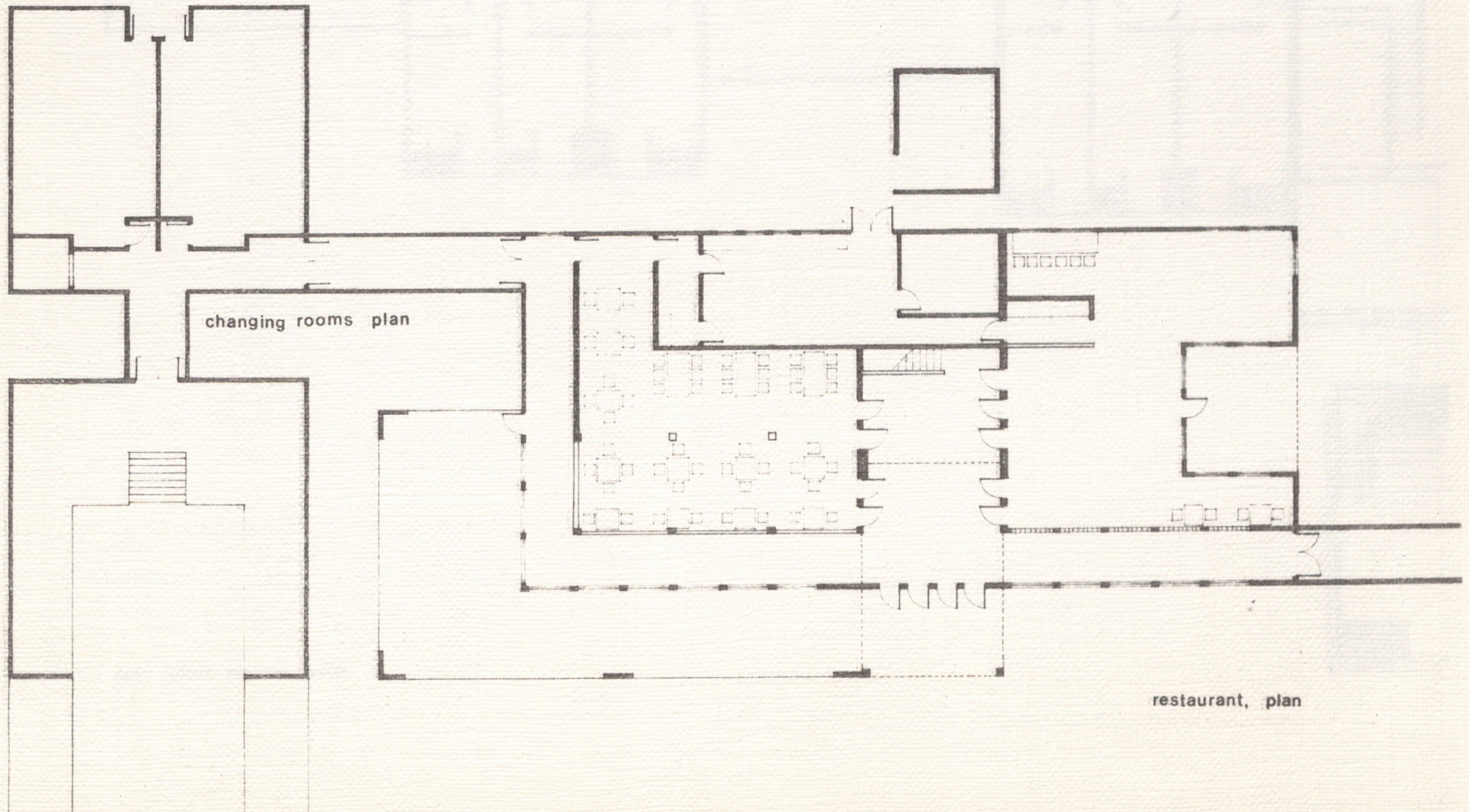


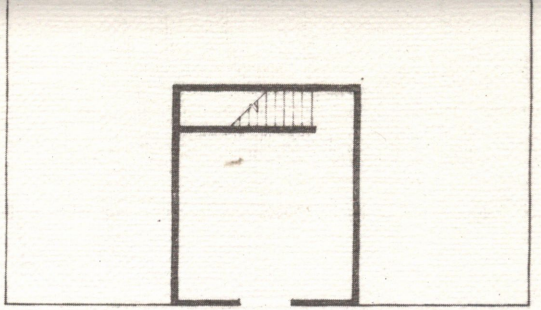


hotel, first floor plan

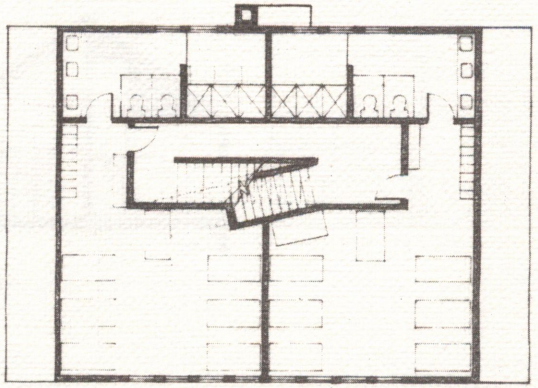


hotel, second floor plan

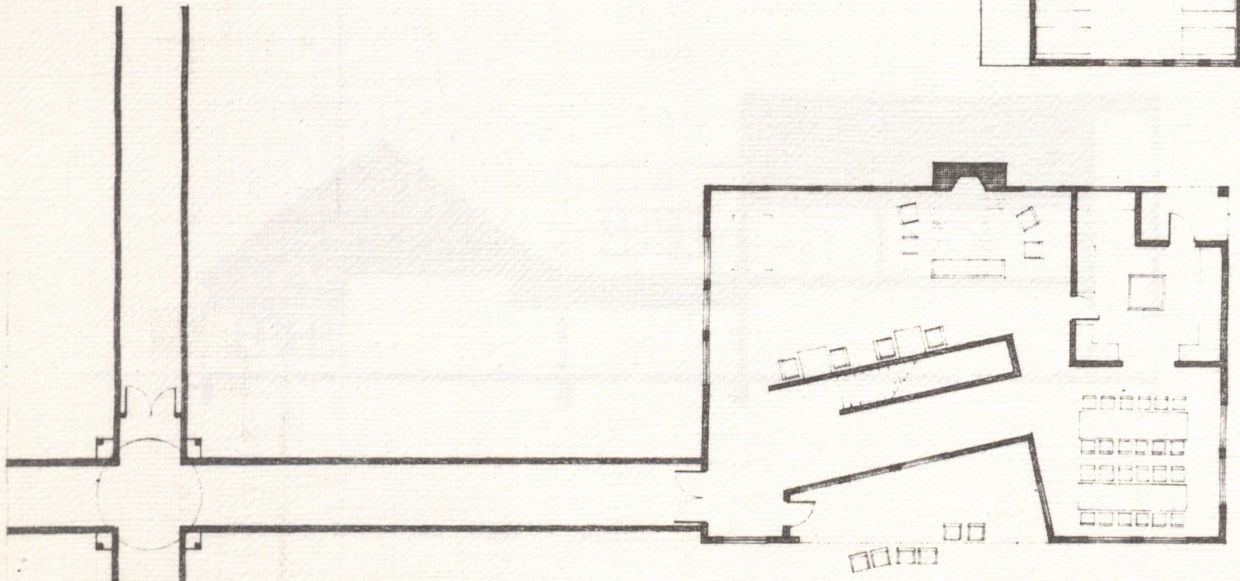

changing rooms plan
restaurant, plan



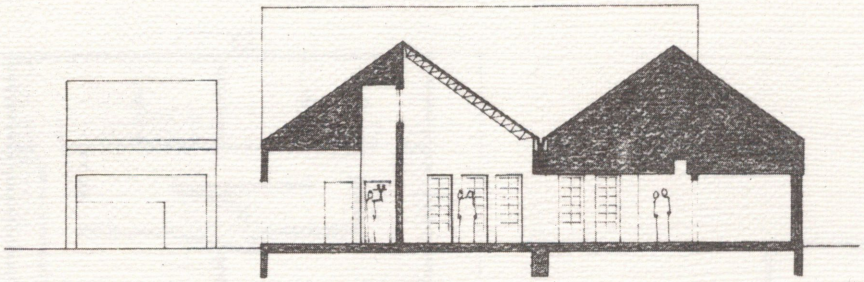
third floor plan



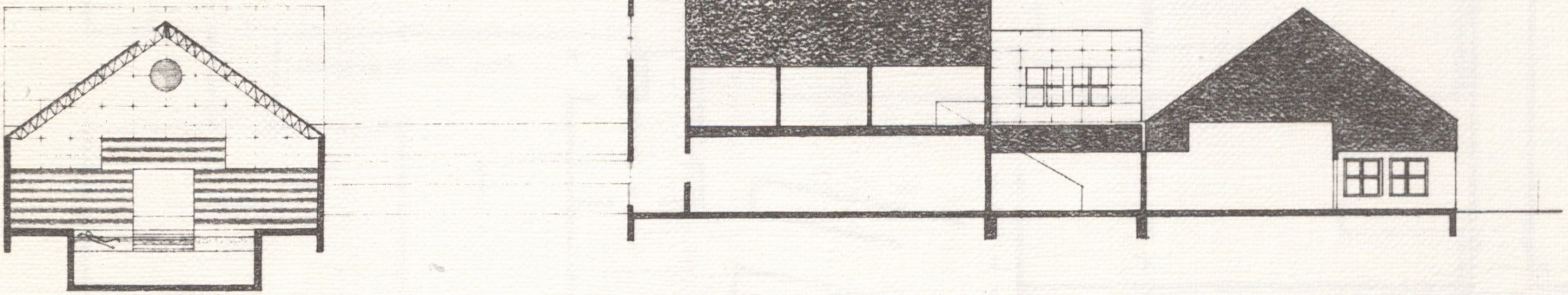
second floor plan



hostel, first floor plan



section through restaurant



section through pool and restaurant

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