

A PUBLIC LIBRARY AND PLAZA FOR THE TOWN OF
MARBLEHEAD, MASSACHUSETTS

Submitted in partial fulfillment
of the requirements for the degree
Bachelor of Architecture

Massachusetts Institute of Technology
13 May 1957

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Dear Dean Belluschi:

In partial fulfillment of the requirements for the degree Bachelor of Architecture, I herewith submit my thesis, "A Public Library and Plaza for the Town of Marblehead, Massachusetts".

Respectfully yours,



William K. Goodwin, Jr. ✓

"Perhaps our only significant innovators up to now have been William LeBaron Jenney, Frank Lloyd Wright, Buckminster Fuller, and one other whom I will not name...."

John Ely Burchard
"Architecture for the Good Life"

It is that unnamed pioneer to whom this thesis is respectfully dedicated.

Acknowledgments

I acknowledge with thanks the assistance of:

Mr. Thomas J. Galvin, chief librarian of the
Marblehead Public Library;

Mr. Raymond Burlingham, Marblehead town engineer;

Miss Anne Martinos who, by graciously adding these
pages to her already heavy typing schedule, saved this
thesis from being late;

the faculty of the School of Architecture and
Planning, for having permanently aroused my curiosity;

and, most important, I think I am very lucky to
have shared the unceasing challenge, criticism, and
camaraderie of the 1957 graduating class.

Abstract

The subject of this thesis is a public library for the town of Marblehead, Massachusetts. It faces on a public plaza, around which are also a new police station and town hall. The plaza is situated 8 feet above the surrounding streets and is entered through narrow alleys--thereby accentuating its ultimate openness. It is intended to be a quiet pedestrian place, unifying the numerous governmental functions placed around it.

The library is fairly large and has an ambitious program of public service. Accent has been on the creation of a pleasant bookish character and on an interesting sequence of spaces, all within the framework of an efficiently functioning plan.

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The subject of this thesis is a public library and public open space for the town of Marblehead, Massachusetts. A new police station and town hall also are arranged about the plaza, but have not been designed in detail.

The Setting

As American cities go, Marblehead is one of the oldest. It was settled in 1632, and incorporated as a town seventeen years later. The first settlers were fishermen from Devonshire and the Channel Islands and their peculiar Marblehead dialect --of which several words remain--is mentioned in several books. The town took an important part in colonial and republican politics--generally a dissenting part, for it was a rough, low-class Democratic town set among the richer Federalist merchant towns.

Marblehead men played important parts in our early history. It was a Marblehead company which rowed Washington across the Delaware. The first vessel of the American Navy was the Marblehead schooner 'Hannah'. Floyd Ireson, mistakenly libeled by Whittier in "Skipper Ireson's Ride" was a Marbleheader, as was Vice-President Elbridge Gerry. Thumbing through Roads' History and Traditions of Marblehead, one finds all the old Marblehead names--Orne, Mugford, Tucker, Bartlett, Broughton, Doliber, and more--often with 'died at sea off

Kronstadt' or 'killed in action aboard the Constitution' or 'died of fever in the Indies' added beneath.

After Mr. Jefferson's Embargo wrote the end to one of our country's most colorful periods, the town steadily declined from the councils of the nation. It shifted to shoe factories for its livelihood and for fifty years a dozen such factories dominated the center of town. But with the gradual centralization of the industry in Lynn and Brockton, aided by the Fire of 1887, this industry too passed away.

In the 1890's the reputation of Marblehead as a yachting center began to spread and the visit of the New York fleet--the pre-income tax steam yachts--became an annual affair. In recent years Marblehead's 'Race Week' has proclaimed it one of the worlds yachting capitals, although today the millionaire's yacht is far outnumbered by the build-it-yourself sailboat.

In the suburban movement of the '20's and '30's, Marblehead ceased to be solely a tight arch-conservative nucleus of nay-saying New Englanders. The nucleus remains, but it has been greatly diluted by an influx of would-be suburbanites. The result is that there are really two Marbleheads--the one, still situated at the northern end of town, steadily declining, not really believing in the newcomers, but none-the-less living off the prosperity they bring; and

the other, with its row on row of Cape Cod dormitories in the swampy southern part, becoming more and more assimilated into the life of the town. Today, with the stimulation of new blood, there is a vigorous social and cultural life--with a town orchestra, choral group, a book review society, and hobby, religious, and service organizations.

It is to this great expansion of the town--from 7106 in 1940, to 13,765 in 1950, to approximately 16,000 today--that the new town government complex is a response.

Today's Problem

At present the various town government facilities are scattered over a wide area. A Victorian Gothic town hall--Abbot Hall--built in 1876, crowns a hill near the harbor, on the site of the old Common. It is no longer anywhere near adequate for its purpose, with a large percentage of its area tied up as corridor and in an auditorium too small for town meetings and too large for anything else.

The water and light departments are housed in rented stores--quite near my proposed site--and the police station has for many years occupied the basement of the old Town House (1732). Much-needed expansion is impossible in both these places and police department especially is quite literally bursting its seams.

A new public library was built in 1955 on a residential site a mile from the town center. Prior to this, the library had been located in Abbot Hall since its founding in 1877, a year after the hall was built. Although its dark oak woodwork, the glowing green student lamps, and the beckoning warren of stacks presented, to the very end, a certain richness and bibliophilic delight--by the last decade the library had acquired such a surfeit of books and historical materials as to seriously hinder its operation. In addition, there was the problem of the painting, 'The Spirit of '76', donated to the town in the 1890's, which hung in the main reading room--the only public place large enough to receive it. The several hundred visitors attracted every summer day constituted a major disturbance.

In this thesis I have elected to design a complex of town government buildings for Marblehead--a town hall, to replace the inadequate Abbot Hall and bring together all the scattered agencies; a police station; and a public library, assuming the new one not built. While there is really no chance of such a project being built, nearly all of the town officials I contacted agreed that it would be a great boon to the town, and that the choice of site was excellent.

The Site

My requirements for the site were three fold. First,

that it be within the business center of town, so that the governmental complex might become an active and busy element rather than, as is the present town hall, seldom visited, coldly forlorn, and strangely out-of-place in a district of houses. I felt that the closer, physically, these functions could be to the everyday existence of the townspeople, the more likely are they to understand their government and participate in it. One has almost to force people into utilizing their library and if it can unobtrusively be placed where they can't miss it, the more effective it is liable to become. Horvitz in his study of distance effects found that withdrawals decreased 6% for each block between the user and the library.

Secondly, I wanted a site that offered some means of setting the complex of buildings off from the neighboring stores. Thirdly, it must be a possible site, with no useful and permanent structures to be torn down. Further it must be easily found by out-of-town visitors and tourist buses.

I selected a block of approximately 2 1/4 acres, situated at the western boundary of the business section, and bounded on all four sides by streets. The main route into town, Pleasant Street, passes along one side. Immediately to the west is a high hill which effectively cuts off the low western sun. At present the Boston and Maine railroad station occupies the center of the block, but is expected to be moved across School

Street within the next few years. A block of stores defines the south-western corner and run-down antique shop, a warehouse, an unused factory, a little-used bowling alley, a garage, and five houses occupy the rest of the site. Were all these buildings removed, the loss to the town through taxes would be \$3100 a year. I propose to tear down all but the corner stores and the five houses, involving a net loss of \$1700.

The block is so situated that a great many people will naturally pass by it on their way to work and shop. Directly across Pleasant Street is a park and the Y.M.C.A. which, in its renovated condition, is becoming a teenage social center.

The elevation of most of the site is 6 to 8 feet above the surrounding streets, which affords an opportunity to separate the group from its surroundings, and to provide a long-range automobile-scale approach along Pleasant Street.

The Program

Having thus arrived at the site, I prepared the following program for the buildings, by means of ten questionnaires given to the heads of the various town departments and by interviews with the librarian and police chief. These figures are selected as those to best serve an eventual town population

of 20,000.

Town Hall	
Public lobby and lounge	800 sq. ft.
Selectmen's meeting room (with painting, Spirit of '76, seats for 50)	800
Town Clerk	700
Town Accountant	600
Town Treasurer	740
Tax Collector	600
Board of Health	700
Board of Assessors	700
Town Engineer	1080
Building and Wire Inspectors	300
Electric Light Department	1430
Water Department	900
Employees Lounge	250
Public Toilets	200
Mechanical	1000

Two special requirements must be mentioned with regard to the town hall. The painting, 'The Spirit of '76", of great historic and sentimental value, if of little artistic, has become something of a town symbol and attracts several hundred visitors a day during the summer, arriving in groups of fifty

on sightseeing busses from Boston. There must be a place of honor for the painting and adequate space for these periodic visits.

For some years there has been the custom of ringing all the bells of town for three hours (morning, noon, and evening) on Washington's birthday, Lincoln's birthday, Memorial day, and Armistice day. Although this practice has occasionally caused complaints from newcomers, the older inhabitants invariably counter with thinly veiled suggestions that no one asked them to come to Marblehead in the first place (a reaction very near the surface in all New England), and the custom remains. Consequently a bell tower is a necessity.

Police Station

Waiting and Reception	200 sq. ft.
Control center (radio-telephone, switchboard)	150
General Office	150
Chief's Office (with lavatory)	150
Inspector's Office-Interrogation Room	100
Juvenile Room - Conference Room (with lavatory)	200
Guardroom (with lavatory)	300
Captain and Lieutenant's Office	150
First aid Room - resusitator	100
Supply Room	100

within cell area

Fingerprint - mugshot room (with darkroom)	150 sq. ft.
Men's cell area (4 cells, expandable to 6)	800
Women's cell area (2 cells, expandable to 4)	650
Matron's room (with lavatory)	120
Meeting room	1000
Record vault	200
Lost and found storage	300
Shooting range (15 x 50)	900
Garage for 4 cruisers and ambulance	1200

The main business of the police department is with traffic control and juveniles. No one is kept in the cells longer than one day before being sent to Lynn. The chief considers it important that the three groups using the station --public, police, and prisoners-- have their separate areas and entrances.

Public Library

Lobby and Exhibition space	600 sq. ft.
Circulation desk (with adjacent catalog and reference areas)	800
Adult's Reading Room	1200

Youth Reading Room	1600 sq. ft.
Librarian's Workroom	500
Private Office and Meeting Room	300
Children's Reading Room and Stacks	1200
Local History Collection	300
Stacks (40,000 volumes, increasing ultimately to 80,000)	4000
Meeting room (stage and seats for 100)	1000
Public toilets	200
Receiving room and Bookmobile stacks	1000
Mechanical	1000

The trustees and new librarian are extremely anxious to make the library an increasingly effective force in the town's cultural life. They have noticed the trend for libraries to offer such materials as phonograph records, photographs, slides, and microfilms, as well as the traditional books and magazines.

Plans call for increased coordination with the public schools and will ultimately include a bookmobile to visit the elementary schools during school hours. Within the last few years story hours for younger children and book clubs for the older children have been initiated. A program of book review and popular lectures is aimed at the adult population. A circulating record collection has been started, as well as a film service for community organizations.

In recognition of the growing juvenile problem throughout the country, the library has begun a crash program to build up its youth collection, and expects a much greater use of its facilities by the 14-18 age group. The 1956 town budget allotted \$40,000 to the library--a figure which has grown steadily--and the year saw a total circulation of 100,000 volumes--also a steadily increasing figure. Several community service groups--the Lion's Club, Ladies Club, Garden Club, and Girl Scouts--have contributed generously of their time and money.

The Design of Libraries

Basically a library is a storage place and place-of-use of books and other cultural materials. That library is best that can make available these materials to the public with a minimum of time and trouble. There are five areas, or elements, in the library which must be correctly sized and related in order to secure efficient operation. They are the reading room(s), the circulation desk, the card catalog, the book storage area, and the work area.

To ascertain the correct relationship between these functions it is necessary to follow the proper progress of books and readers with a library.

A new book:

1. Unpacked--receiving room.

2. Marked as the library's property--work room.
3. Entered in the catalog--work room, card catalog.
4. Classified--work room.
5. Placed within the collection--stack area.

A book returned by a reader:

1. Received by librarian--circulation desk.
2. Either repaired--work room, or returned to the collection--stack area.

A book taken out or read in the library:

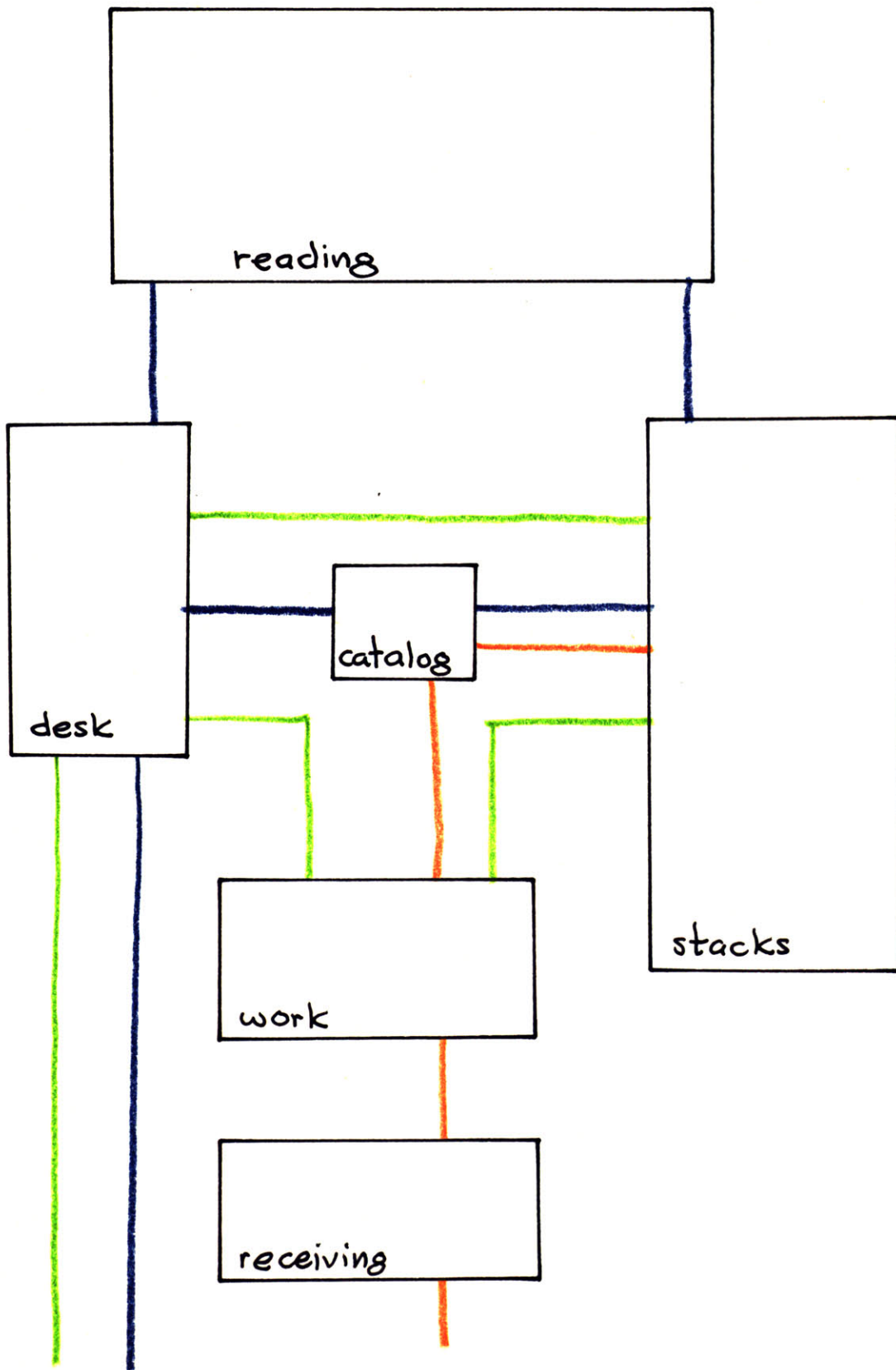
1. Located by the reader--circulation desk, card catalog.
2. Obtained by the reader--stack area.
3. Stamped, or read in library--circulation desk, reading room.

There is also the reference reader who uses only the circulation desk and reading room, and the browser, looking for something to catch his fancy. For him a display of best sellers and books on current affairs is appropriate.

Thus, from the above flow patterns, the four elements of circulation desk, catalog, work room, and stack area must be centrally located. Ideally they all would be at the center.

Design Criteria for Library Spaces

- new books
- returned books
- borrowed books



Reading Rooms

The reading rooms should be naturally lighted and sufficiently set apart from the circulation desk so that the normal noise or returning books will not disturb the readers. Some amount of supervision is necessary, although it isn't necessary that every corner be immediately visible from the desk.

The days of complete library silence are now past and a minimum of talking is permissible. However the need for visual and acoustic privacy is as important as ever. The reader wants to feel serene and secluded with his book, not as an intruder in a busy thoroughfare. This basic psychological need is somewhat at odds with the principles of open planning and with the need for the librarian to be able to maintain order.

In large city, university, or specialized libraries the periodical or reference collections would be segregated in separate rooms especially equipped for their particular clientele. In a middle sized library, such as that of Marblehead, sections of the main reading room would be assigned for specialized collections and approximately defined with shelves or counters.

Stacks

A good deal of the history of library science is involved

with the physical relationship between book and reader. Certainly the ideal situation would be as close and free as possible. In a small library the books can be placed about the reading room, but in larger ones some arrangement of concentrated stacks is unavoidable. In college libraries the trend is toward open stacks, but in the large public library, because of the less predictable nature of the average reader, the closed system prevails. Such a closed system is at best inferior to an open one, and at worst a complete bottleneck. Open browsing privileges is really the only civilized way to run a library. It is best if the stacks can be easily supervised by the librarian to prevent their use as trysting places.

Standard book stacks are manufactured in three foot increments, for a seven tier stack height. With an allowance for cross aisles, a figure of twenty volumes per square foot is reasonable.

Circulation Desk

The desk should be so located as to supervise the reading room, to receive returned books with a minimum of disturbance for readers, to register new readers, to stamp books being taken out, and to offer assistance to readers. In a small library, one desk, with one or two librarians, should serve all these functions. There must be adequate counter space and

storage for books awaiting return to the stack:

Catalog

The card catalog is simply a filing cabinet within which the entire wealth of the library is catalogued, as comprehensively as possible. As it, with the circulation desk, is the heart of the library, it must be located where it can be easily reached from both the reading room and work areas. Reference works and various bibliographies and indexes serve as extensions to the card catalog and should be placed near it.

Workroom

The amount of workspace required for a library is generally under-estimated. In this room are performed library services such as ordering new books, classifying and marking new books, making out catalog cards, and making minor repairs on old books, as well as routine clerical work. A great deal of counter and temporary book storage space is required, as well as proximity to the card catalog and the stacks. Since several people would be spending their whole day in the workroom, natural light and a pleasant outlook are important features.

Accessory Areas

In addition to the five spaces mentioned, there are

several other necessary elements. Public toilets are required although they are always a maintenance problem. An office for the librarian and a trustees' meeting room would be located near the workroom. A receiving room is necessary for book deliveries and might also serve a bookmobile. Some libraries have book repair rooms, although this function is increasingly being done by private concerns. Many new libraries have outdoor reading areas for use in the summer.

In accordance with the expanding concept of library service, many are building collections and establishing programs far afield from the traditional areas. Some collect heavily in local history and have quantities of photographs and microfilmed records and newspapers to be protected. As the library is generally the only public building of a cultural nature in the community, it may be called upon to house travelling or local exhibits. Nearly all progressive libraries have some sort of music program--either with separate listening rooms or with table top phonographs equipped with earphones. The table top setup has the advantages of greater economy and flexibility. Many libraries have programs of educational films and lectures and allow their auditoriums to be used by local groups. By making such rooms available more people are brought into the library and made aware of its facilities.

Mechanical Equipment

Air conditioning is growing in demand, not only for

comfort but also because the moisture content of the air and its freedom from sulfur dioxide are important in the preservation of books. An added advantage in that it excludes much air-borne dirt, an important point with so many hard-to-clean books.

Moon and Spencer recommend the elimination of glare sources, reduction of contrasts, and the employment of low brightness ratios. They maintain that where fluorescent lamps are used they must be completely shielded, so as not to project their images, and that surface reflectances should be much higher than are normally achieved.

Sound reduction is a necessity. Shapes that will focus sound should be avoided and, in the reading room, a good deal of absorption provided. This may be achieved with acoustic tile and soft flooring materials.

The Solution

The solution consists of three buildings--town hall, police station, and public library--around a plaza. I decided upon separate buildings, rather than one large one, for three reasons: one, the sheer bulk required by one building; two, the great difference in functions between the three problems; and three, the three building scheme offered an opportunity to enclose a space.

I envision the plaza as a sort of minor Acropolis, set as it is 8 feet above the surrounding streets. It would be

entered on all but the south side through comparatively narrow passages, to accentuate by contrast the openness of the plaza. There being no building along the southern boundary, a person climbing the steps at the main approach finds the whole plaza in sunlight. The entire surface would be paved and given direction and areas of concentration by the planting of trees.

The buildings would be unified by a common roof line, the predominant use of red brick in plain, patterned, and perforated walls, and in their similar character--brick rectangles, largely windowless on the walls they present to the plaza and with broad glass entrances set back into the buildings. It is my intention that each individual building be subordinate to the complex as a whole. The quiet brick walls wouldn't challenge the bell tower as central eye-catching focus of the space.

The main automobile approach to the site is along the southern boundary. Cars will be travelling about 25 m.p.h. and will first see the plane of the stone wall beside the entrance steps--set at nearly 90 degrees to the street--when nearly 200 yards away. As they approach, the street will broaden, the steps will appear to the left, and the front of the town hall--the most monumental of the three buildings--will rise above the cross wall. Although the building complex itself will be above and to the side of the road, I think the shock effect of the cross wall and of the tree-overhung stone pedestal will be enough to indicate its presence.

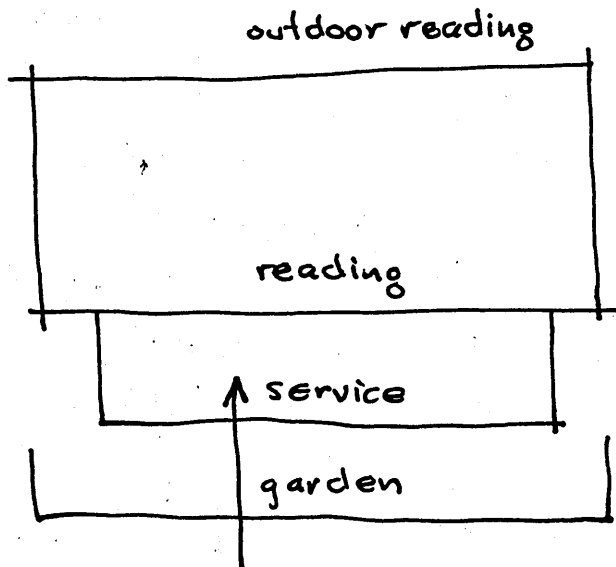
The town hall was placed at the corner of the site in a position to appear at the end of the main business street. The police station, which required a contiguous garage, was placed against the parking lot, and the library was put at the northern boundary of the site, where it presides over the whole plaza and where the reading rooms can overlook a comparatively quiet residential street.

Marblehead is quite famous for the character of the old town and today its major industry, after yachting, is tourism, that last resort of bypassed places. The rocky old town is marked with narrow streets that tumble and wind past the small scaled fishermen's cottages--now often converted into apartments and summer houses. Precipitous streets lined with hollyhocks lead up to the windswept burying ground, and to the old town common, now occupied by the old town hall. This hill, with clustered roofs and full-grown elms climbing and culminating in the red brick bell tower is a symbol of the town and may be seen far out to sea. It is such an atmosphere that draws many thousands of tourists every summer.

Unfortunately, my site is not in the old town but rather on the edge of the business center--similar in its neon, extruded aluminum, and Carrara glass to thousands of others. The houses along the rear of the site and two and three story apartment houses of no particular character of interest. I have chosen, therefore, to treat the governmental

complex as a thing apart, raised on its pedestal and turned inward toward its plaza.

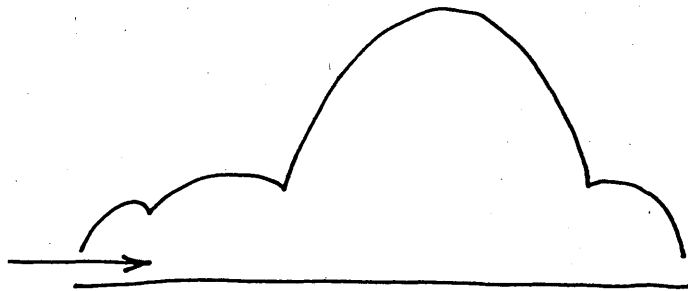
As for the library, having already decided upon its orientation, facade and entrance location from the plaza considerations, I hit upon a general layout scheme of four elements.



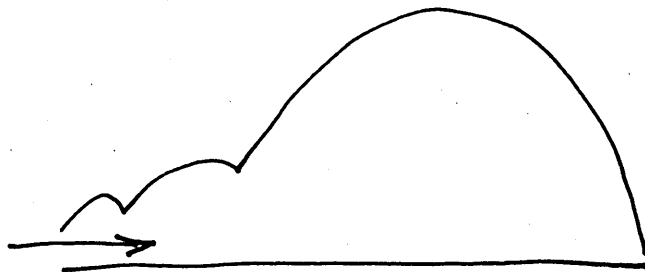
The first is a screened garden court, acting as a semi-enclosed transition between the plaza and the building itself. The flowers would be tended by members of the Garden Club--just as is done today at the new library--and there would be one or two pieces of sculpture. I have in mind the same spirit as in the planting, and sculpture around the town hall at Aarhus.

The second element is for the service functions, the third the reading room itself, and the fourth the outdoor reading spaces.

Such an arrangement presents an interesting sequence of spaces as the building is entered. First there is the slight enclosure of the perforated brick walls of the entrance court, then the 9'-6" high lobby, which in turn is reduced to 8'-0" as one passes under the overhead gallery and then bursts up and out into the high toplighted reading room. Finally and very important, the reading room is again brought down to 8'-0" under the gallery across the room. Thus the main element is not the end of the sequence; it is only the climax; it is balanced across the room by a space similar to that through which one has just passed.



rather than



At Harvard's Lamont Library there is an interesting innovation by which the best books in each field are placed in convenient alcoves for browsing. In the Marblehead library, I would place, at either side of the circulation desk, one or two such alcoves with collections on Today's Problems, The Home, Recent Fiction, and the like.

The stacks themselves, rather than being placed in a single block with its concomitant restrictions on the plan, are lined around the perimeter of the reading room, on two levels. Such an arrangement allows easier supervision of the stacks, takes advantage of the height of the room, makes for pleasanter browsing than a heavy enclosed stackroom, and gives the reading room the distinctively bookish character one might expect in a library. Although storage is spread over a greater area than in a central stack, with the normal staff of six and with efficiently scheduled operations, this should be no additional trouble.

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