CAMBRIDGE HOUSE AND STUDIO

Client: Professor G. Kepes

Designer: Warren C. Obes

Submitted in partial fulfillment of the requirements for the degree of Bachelor in Architecture at M.I.T.

1949

Author

Department of Architecture

May 16, 1949

Thesis Supervisor
M.I.T. Graduate House
Cambridge, Mass.
May 16, 1949

Dean William W. Wurster
Department of Architecture
Mass. inst. of Tech.
Cambridge, Mass.

Dear Dean Wurster:

The enclosed thesis report entitled Cambridge House and Studio is submitted herewith in partial fulfillment of the requirements for the degree of Bachelor in Architecture.

Sincerely,

[Signature]
ACKNOWLEDGMENTS

I would like to take this opportunity to express my appreciation to professor Kepes for his generous aid in acting as my client. Thanks go also to my thesis advisers and to professor Beckwith in particular for his guidance now and in the past.
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover, street map</td>
<td>I</td>
</tr>
<tr>
<td>Title Page</td>
<td>II</td>
</tr>
<tr>
<td>Letter of Submittal</td>
<td>III</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>IV</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>V</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Site Selection</td>
<td>2</td>
</tr>
<tr>
<td>Block plot plan</td>
<td></td>
</tr>
<tr>
<td>Photographs</td>
<td></td>
</tr>
<tr>
<td>General Requirements</td>
<td>7</td>
</tr>
<tr>
<td>Specific Requirements</td>
<td>8</td>
</tr>
</tbody>
</table>
INTRODUCTION

In choosing a project for my thesis one of the prime considerations was to find a client who had a particular problem to be solved, with whom I could have frequent discussions, and who would be vitally interested in its solution. This, I felt, would help me to realize the more rigid limitations placed on one by a client.

After some research on possible topics I approached professor Kepes with the idea of designing a house and studio for him and he very graciously accepted. This choice of subject and client proved to be very fortunate indeed because professor Kepes was contemplating just such a building here in Cambridge for construction at some future date. In addition, he had located a piece of property which suited his tastes and requirements and which he seriously contemplated buying.

I am doubly fortunate in the fact that I am now in a position to apply the principles learned in visual design to my thesis project under the closer and more personal guidance of professor Kepes. This will serve to point up the relationship between the theory of visual design and its application to the home, and everyday living.
SITE SELECTION

The selection of a site for this particular house hinged on the fulfillment of the following requirements as outlined by the client:

1. Since Professor Kepes does not drive an automobile, the site should be located preferably in Cambridge near the center of cultural and social activity in the Boston-Cambridge area. "Near" infers within easy walking distance of transportation lines to Harvard Square and thence to all points, and possibly within walking distance of the Square itself.

2. It should be located on a quiet, little-travelled street and should be a lot already having some tree cover.

3. It should be located within easy access of adequate hotel service pending periods when there is no room for overnight guests.

4. Adequate shopping service should be within reasonable walking distance.

5. Good and acceptable nursery and elementary schools should be within easy reach.
The site as selected, conforms very closely to all the requirements as outlined. It is located on Raymond Street in Cambridge, half a block north of the former Radcliffe Botanical Garden and halfway between Massachusetts Avenue on the east, and Concord Avenue on the west. The distance to either of these two avenues, both of which contain transit lines connecting with Harvard Square, can be covered in five minutes leisurely walking time. In addition, shops on Massachusetts Avenue at this point are sufficient to supply the everyday household needs. Pleasant hotel accommodations can be found at the Hotels Commander and Continental at ten minutes walking distance. Since the site is only three blocks from the present Kepes residence, the same nursery school and selected elementary schools, which seem to be satisfactory, will suffice.

The lot fronts on Raymond Street, a quiet side street in old Cambridge. Every piece of property around it is built up as shown on the accompanying block plot plan and is shielded from it by a fairly dense tree cover in the front and rear of the lot and relatively thin tree shields on the north and south sides. To the north there is a very pleasant wide expanse of tailored lawn, shrubs and trees. (See accompanying photographs).
VIEW 1.
GENERAL REQUIREMENTS

The following is a list of the rooms required as outlined by the client:

1. Living room, dining room combination
2. Kitchen
3. Laundry, small
4. W.C. and lavatory on first floor
5. First floor storage for childrens things in addition to regular coat closet
6. Bedrooms, three
7. Bathrooms, two
8. Closets and general storage space to be discussed in design stages
9. Studio, for use by both Mr. and Mrs. Kepes
10. Workbench for modest woodworking projects
11. Darkroom
12. Outdoor living space adjacent to the indoor living areas and some of which is covered terrace
13. Childrens play areas indoors and out

In a discussion of the problem, my client expressed the desire for a two story house, and also, after some studies of the relative merits of a detached studio vs one attached to the house, it was decided that the attached studio most fulfilled his needs and desires.
SPECIFIC REQUIREMENTS

Living-Dining Combination

This room should be simple in shape with no "cute" tricks or current clichés used to embellish it. In character it should be quiet and restful with no exciting architectural "creations" in evidence. This should by no means lead to a dull solution but rather to one which is attractive because of its restrained quality.

The dining area should be contained in the smallest possible space preferably with one end of the table placed directly against the service wall of the kitchen with an adequate opening into the kitchen through which food can be passed and which can be closed when not in use.

The fireplace should be located such that it can be seen from the dining area with ease as well as facilitating a gracious arrangement of furniture around it in the living area without being constantly aware of the dining table from this zone.

The scale of this room should preferably be modest and a figure of about 500 sq. ft. might be aimed at as the optimum.

This living area should definitely be a dead end room and not a connecting link between parts of the house and must also be adjacent and accessible to an outdoor space which includes a covered terrace.
Entrance and Foyer

Access to the house should not be directly into the living area but rather, into a foyer, the size of which should be kept to a minimum. This foyer will in essence be the connecting link to all other parts of the house. It shall give access to the living room, kitchen, powder room and studio and shall contain the stairs leading to the second floor and the basement. Space should be provided herein for a coat closet and a closet used principally for the children's clothes and outdoor equipment. It would also be desirable to provide cover over the entrance for protection against the weather.

Kitchen and Laundry Combination

The kitchen is not to be one which is loaded with gadgets but is to contain just the essential items necessary for preparing a meal and should be designed to make this preparation as effortless as possible. It is thought that since the bulk of the laundry is to be sent out, it might be wise to include the laundry in with the kitchen and use this space as a possible play area for the children when they take a notion to play in the kitchen while a meal is being prepared. This would tend to keep them from being under foot while still having them in the same room. An outside service door should be provided in this room for deliveries, garbage disposal etc..
Powder Room

This first floor bathroom is intended for two specific uses. First, it is to serve the family during the day and in such a role should be easily accessible from indoors and out, including the studio and the basement. Such access should be direct and should not necessitate the crossing of any intermediate living space in order to reach it. Second, it is to serve as a powder room for guests and as such should be out of sight and hearing of people in the living room.

The equipment shall include a water closet, lavatory, make-up shelf, and storage space for guest towels and the various articles necessary for impromptu everyday child care.
Bedrooms and Baths (Second Floor)

The general requirements called for three bedrooms with the client expressing a specific desire for a private bath attached to the master bedroom. The other two bedrooms would be used by their daughter and infant son and would best serve their purpose as combination sleeping and play rooms if it were possible to make one large room of them merely by withdrawing a flexible screen wall which separates them. In connection with the furnishings in the children's rooms, it was thought that a special treatment of all furniture within a child's scale would be preferable especially if it is temporary, thus lending itself easy to change with the changing needs of the children. These bedrooms would therefore serve as the children's own private living and playing area to do with as they pleased. This area would be particularly useful in inclement weather and during periods of illness common to children. The bathroom which will serve the needs of the children should be tastefully equipped to store the various impediments generally necessary for child care.

A linen closet and a large storage closet for odds and ends like light luggage, hanging space for out of season clothing etc should be provided opening off the hall.
This studio space is the part of the project about which my client was most concerned as to location within the house, orientation, size and function. These requirements were as follows: The room is to be easily accessible and yet isolated enough to discourage any annoyance prompted by the children in particular. The floor level of the studio should be raised above ground level to a point which will tend to minimize outside visual distractions such as playing children or peering eyes. The floor area, in order to meet the optimum requirements, should measure 16' x 24' with a minimum ceiling height at the window wall of 12'. This ceiling height requirement is prompted by the fact that Professor Kepes works on large canvasses and in order to get an even distribution of light on the canvass and to avoid the imperceptible gradation of light intensity from top to bottom of the canvass, such a large window is necessary. Similarly, a fairly low window sill height is also necessary. A rather long, high and narrow space should be provided for canvass storage. Otherwise, this room will merely be a space in which my client and his wife can work in seclusion, Professor Kepes painting and Mrs. Kepes doing illustration work. The only requirements for Mrs. Kepes will be an adequate desk on which to work and some storage space. A preference was stated for a small fireplace in the studio flanked by a pair of studio couches. Orientation of the room should be due north.
**Basement Planning**

The basement should be planned to contain four areas of different function as follows:

1. Furnace room
2. Well equipped dark room
3. Work bench for modest woodworking projects and small home repairs
4. General storage area for the usual family accumulations.

It is felt that although this basement activity has no direct relationship to the studio, it would be sound planning to have them so physically related as to form a work section of the home. It might also be wise to include a separate outside entrance to the basement to facilitate the everyday storage of the children's larger play things such as bicycles, wagons etc..