BOURGEOIS COMMUNITY

by

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B.A. BARNARD COLLEGE OF
COLUMBIA UNIVERSITY
(1970)

SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
DEGREE OF MASTERS OF
ARCHITECTURE

at the
MASSACHUSETTS INSTITUTE OF
TECHNOLOGY
May 1972

Signature of Author

Department of Architecture
May 12, 1972

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Thesis Advisor

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Submitted to the Department of Architecture of Massachusetts Institute of Technology in partial fulfillment of the requirements for the degree of Master of Architecture

This thesis documents an attempt to design new residential buildings on Sargents Wharf in Boston which are organized in such a way that shared child care and other shared activities are facilitated.

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Visiting Professor of Architecture
PROGRAM:

The site for this project is part of the Boston Redevelopment Authority "Downtown Waterfront - Faneuil Hall Renewal Plan". That plan proposes as one of its "Basic Planning Objectives" "To create opportunities for development of a downtown residential community offering a range of housing types and rentals." This project will provide for the inclusion of new housing arranged in co-operative clusters to fit into this new community.

The principle reason for developing this new housing type is to facilitate child care and child rearing in the city so that both parents and children can live practically and economically while enjoying the benefits of an intensely urban existence. These benefits include, mixed use, dense public transportation, as well as the convenience of minimal distances which allow for walking. The last two advantages tend to free urban residents from dependence on automobiles and in many cases cause them not to feel any necessity to own a private car.

Since the nature of urban life depends so heavily on the larger environment several more of the B.R.A. Planning Objectives should be stated because they are specifically
relevant to the overall development of this parcel.

To encourage productive and intensive use of land.

To provide sites suitable for the construction of efficient, economical buildings.

To promote the preservation and enhancement of buildings in the Project Area which have architectural and historical significance.

To create an area with a mixture of land uses compatible with living, working and recreational opportunities.

To create an area for the development of marine or marine-oriented activities designed to stimulate tourism and symbolize the importance of Boston's historic relationship to the sea.

To provide for the efficient flow of traffic within and through the area.

To improve streets and utilities and the landscaping of public areas.

To provide public ways, parks, and plazas which encourage the pedestrian to enjoy the harbor and its activities.

To develop the area in such a way as to stimulate improvements in adjacent areas.

The building requirements imposed by the B.R.A. are as follows:

Permitted Uses: Residential and General Business

Maximum Building Height: Not to exceed the height which exists for buildings to be disposed of for rehab. adjoining or existing on the site.

Maximum Floor Area Ratio: 2

Minimum Parking Spaces: One for each dwelling unit

Land Use will be maximized as follows:
<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total buildable area of site</td>
<td>213,250 sq. ft.</td>
</tr>
<tr>
<td>Gross buildable area</td>
<td>426,500 sq. ft. plus garage</td>
</tr>
<tr>
<td>Existing building on site to be renovated</td>
<td>25,000 sq. ft.</td>
</tr>
<tr>
<td>General business</td>
<td>35,000 sq. ft.*</td>
</tr>
<tr>
<td>General office</td>
<td>115,000 sq. ft.*</td>
</tr>
<tr>
<td>*B.R.A. requires 2 loading bays</td>
<td></td>
</tr>
<tr>
<td>200 family units</td>
<td>200,000 sq. ft.**</td>
</tr>
<tr>
<td>**B.R.A. requires parking spaces for 200 cars</td>
<td></td>
</tr>
<tr>
<td>Common space in 40 cluster units</td>
<td>76,000 sq. ft.</td>
</tr>
</tbody>
</table>

The complex of 40 clusters will be made up of 200 families averaging 3.2 persons per family. The family sizes break down as follows:

A. 50 single people or couples without children
B. 70 couples with one child
C. 70 couples with two children
D. 10 couples with three children

The housing will be arranged in clusters for groups which include 5 or 6 children. The internal organization of the clusters which will primarily facilitate equal sharing of child care responsibilities will also provide space for some shared adult activities. Childless couples have been included because it is assumed that some couples who elect not to have children will want to live in groups with their adult friends who do have children.
This housing will be designed with relatively high income professionals in mind. It is also tacitly assumed that most couples will have two incomes since the main motive for this housing type is to free women to work full time while their children are young. Therefore economy will only be a relative concern.

It is assumed that within every cluster each family will be relatively autonomous. Because of this assumption "family privacy boundaries" should be created within each cluster.

Each family should have:

1. an adult bedroom 12x16
2. family living area 16x24
3. (optional) study 8x12
4. provisions for a full range of kitchen appliances
5. one full bath
6. one additional adjoining room for each child 8x12

Privacy boundaries will be organized so that neither the

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children being cared for or the adult caretakers would be dislocated from their own territory. This would mean that a child from one family could be put to bed in his own bed and an adult from another family in the cluster could be responsible for him and perhaps several other children too without having to leave the meeting he is holding in his own rooms. This assumes that while six children may need an adult constantly on call they do not need the full time attention of that adult.

Each cluster will include a controlled exterior space and 1800 square feet of common space which should include:

- Provisions for a kitchen and a dining room large enough to serve all of the people in the cluster
- Common living space part of which is acoustically isolated
- An entrance from the outside which gives convenient access to each family unit

1. The aim of developing a housing type to facilitate childcare is not simply to give adults independence. It is to provide for children in such a constructive way that they benefit from their parents' freedom. It is assumed that the person taking care of the children each day will be interested in spending some time with the children, at least partially because he has children of his own in the group. Still the children do not need to completely fill the caretaker's day. Hopefully the situations in the clusters will closely resemble the situation of a large family cared for by a mother who is also managing a suburban household. Children in that sort of situation learn to rely on themselves because often no one has time to help them and to cooperate with others because they are often in groups. The major change from a nuclear family is that "mother" becomes
a rotating job. The people rotating into the job are not strangers but a group of people who are generally familiar to the children and who are usually around for dinner. These alternative mothers are also friends of the child's natural parents and could be expected to have somewhat similar convictions. They are at least all committed to the sort of communal sharing which involves child care responsibilities. This means that parents can have some notion that the values and ideas which are being communicated to their children are roughly in accord with their own. As children get older they can be given greater freedom in an extended family situation than they would have in an institutional framework. They could be allowed to determine their own schedules and obligations with the help of their parents and their parent's friends - who incidentally are also the parents of their friends. These clusters are purposely small enough to make special attention the rule rather than the exception. Six children going to music lessons, dentist appointments, or just visiting school friends who live elsewhere, could easily be kept track of by one person. The idea is to give children a strong feeling that they are cared for - providing help and assistance to them whenever they might want or need it. Allowing them to identify their parent's home and their immediate neighbor's homes as places where they are welcome and secure. And at the same time allowing them to be responsible for their own lives within and outside of this secure framework.

2. The State of California Department of Social Welfare issues licences for day care centers in private homes. The stipulations for these licences state that one person may care for 6 children aged 3 to 16 years or 5 children if one or more is under 3 years of age. These numbers include the person's own children. That is if the woman has two children between 3 and 16 she would be allowed to care for 4 more children aged 3 to 16 or three additional children if one of them is under 3 years.
Process:
There were changes made in the original program which sought to maximize the B.R.A. regulations. These changes resulted primarily from the difficulty of reconciling a 60 foot height restriction with a maximized FAR of 2.
The building on the site at 52-58 Eastern Avenue is to be rehabilitated and according to the B.R.A. Waterfront Renewal Plan is therefore to set the height restrictions for the rest of the parcel. This building is only 60 feet high.
Keeping the same amount of commercial space that was specified in the original program a maximized FAR of 2 presumes 200 family units, 40 clusters, and 200 parking spaces. Parking for 200 cars can be accommodated on that portion of the site designated for housing by covering that entire area with parking. However, any scheme to build 200 units of housing is impossible within the roughly 50 feet above the parking.
In trying to establish a new workable program several schemes were investigated.

![Diagram Image]

Approximately 15 clusters require parking for 75 cars.
Parking available for only 60 cars.
2. approximately 11 clusters
   requires parking for 55 cars

3. approximately 22 clusters
   with consistent 40' walls
   approx. 18 clusters
   no significant parking
approximately 24 clusters require 120 parking spaces only 42 spaces available

approximately 15 clusters parking spaces for 76 cars
Under-utilized or vacant commercial waterfront buildings and the elevated Fitzgerald Expressway have for the last few decades formed a barrier between the city of Boston and Boston Harbor. Helping to break down this barrier and trying to give people direct access to the harbor has been one of the major goals of the site plan.

The Sargents Wharf parcel is a particularly crucial place to try to restore this connection because it is the closest point on the waterfront to the activity of the North End focused around Paul Revere Mall. The view down Clark Street from Hanover Street will lead directly to the waters edge after the scheduled demolition of the Quincy Cold Storage Warehouse. The plan attempts to strengthen and realize the connection down Clark Street by extending the street across Atlantic Avenue out along the entire length of Sargents Wharf.

A Nineteenth Century granite bulkhead roughly defines the Eastern half of the site along its Southern and Western edges. It has been used to divide the activities on the site. The 150,000 square feet of commercial space has been placed on the bulkhead-enclosed, filled land and the residential buildings are further out into the harbor on new pile foundations. The commercial spaces, which are largely professional offices, will
create activity at the interface between the city and the edge of the site. The housing, on the other hand, is purposely more remote from the street activity in the hope that this will create a calm and residential situation. Public access to the extreme eastern edge of the built site has been provided so that other residents of the city have access to a look out point in the harbor.

The problems involved in organizing the patterns for a new lifestyle were complex. All of the following concerns had to be considered:

1. to provide conventional individual privacy within a family arrangement;
2. to provide family privacy within the cluster (each family ended up with a separate apartment);
3. to try to facilitate communication and sharing as described in the original program;
4. to provide amenities such as sunlight and plumbing to any diagramatic organization of concerns 1 through 3.

The difficulties involved in trying to even represent these relationships in diagramatic form lead to designing this building cluster by cluster in a totally irregular way and to designing only one of the two residential buildings shown on the site plan.
It was designed using 20 ft. square bays with 16 inch square columns and an 8 inch flat slab. This structural system was treated as an existing three-dimensional grid into which any sort of infill could be placed as long as certain structural constraints were obeyed.

The distribution of families described in the original program had to be changed when the new schemes were investigated. In this building there are five clusters:

Cluster one:
1 - one bedroom apartment
2 - two bedroom apartments
2 - three bedroom apartments

Cluster two:
1 - one bedroom apartment
2 - two bedroom apartments
2 - three bedroom apartments

Cluster three:
5 - two bedroom apartments

Cluster four:
3 - two bedroom apartments
2 - three bedroom apartments
1 - three or four bedroom apartment

Cluster five:
2 - two bedroom apartments
2 - three bedroom apartments
2 - three or four bedroom apartments

The space allocations were carried over from the original program.

Because each of the clusters was individually designed they are not only all different but they tend to have even a richer variety
of relationships. There is one roof area which is accessible to three clusters. One cluster has a totally private roof deck off its lounge. There are odd advantages to or deficiencies in one apartment or another. In general, this approach meant that the design never reached an overall level of completion. It does, however, seem to have produced a more varied environment.
SITE PLAN

BOURGEOIS COMMUNE

Levis Wharf

Atlantic Avenue

Clark Street

100

Scale: 1" = 100' 12: May 1972
ELEVATIONS
SOUTH AND EAST

BOURGEOIS COMMUNE

(All text and labels are in capital letters.)
SECTIONS
TYPICAL CLUSTER

BOURGEOIS COMMUNE