

A STUDY OF HOUSING MODIFICATION IN EAST BOSTON

by

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1978

Submitted in Partial Fulfillment
of the requirements for the
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ABSTRACT

This thesis deals with inhabitants' modifications of the 19th century side-hall houses in East Boston, now a predominantly Italian neighborhood. On the basis of the data obtained by a survey and observations, the practical reasons and social and psychological implications of each identified pattern of both interior and exterior modification are analyzed.

Inhabitants modify their houses according to their changing living situations, or special needs that are different in each family. They can correspond with the changing living standard in the whole society and developing technology by constantly modifying their houses. Housing modification functions as an important adaptation mechanism especially for working class people who cannot easily move from one place to another because of financial constraints and the tight social relationships among them in the region.

Modifications are also a means of self-expression for the inhabitants. As they modify their houses they always try to imply their taste and values through the modifications. They try to define their own territories and personalize them through modifications. Modifications are the results of inhabitants' active reactions to such psychological needs, which are quite essential to them.

After all, home modification, which has been ignored by most architects despite its familiarity in the United States, has great significance to the inhabitants, psychologically as well as practically. It enhances the inhabitants' sense of ownership, competence and self-worth.

Thesis Supervisor: Sandra C. Howell
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I would like to express my deepest thanks to the following persons, without whose encouragement and advice I could have never accomplished this thesis.

First of all, I thank my thesis advisor, Professor Sandra C. Howell, who not only made me aware of the importance of social and psychological concerns in building design and led me to the field of the social sciences, but also always encouraged me and gave appropriate advice to me during the entire development of this thesis.

I also thank Professor John N. Habraken, who introduced me to various concepts in housing design such as user participation in the housing design process, the concept of "support" and "detachable unit," and users' control of their immediate environment, all of which became the foundation of this thesis.

I am grateful to Camiro J. Vergara, a sociologist and photographer in New York. His recent work on transformed houses in metropolitan areas had a great effect on my choice of a theme, and his advice during the development of this thesis was always encouraging and helpful.

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I am grateful to my sincere friend, Sawako Matsuoka, who helped me to carry out interviews, which was the hardest part to me. She was always my mental support and without her understanding and unsparing assistance to my work, I could have hardly finished it.

Finally, I would like to deeply thank the major contributors to this work, the home-owners in East Boston to whom I talked during the survey. They cooperated openly with my work to provide data and many ideas which enabled me to write this thesis.

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INTRODUCTION

The first time I was involved in the subject of housing modifications by inhabitants was through an assignment for the class, "Introduction to the SAR Method," offered by Professor J. N. Habraken in the fall of 1978. For this assignment, I had to sketch facades of the homes in a residential area in Roxbury, MA., and analyze which elements of the facades had been modified by the residents. Through the class work, most of which required some observations of an existing residential environment, Professor Habraken instructed us in the fact that his principle of housing composition, with both a durable "support" and a flexible "detachable unit," which could be controlled by inhabitants, was derived from the very existing order in the daily residential environment. Since then, my major interest has been focused on the concept of inhabitants' control of their living environment and user participation housing, which involves the concept.

At the same time, the concentration on user-oriented housing design led my interest to the knowledge of residents themselves, that is, to the social sciences. Why is it important for residents to be able to control their own living environment? This has become my major concern. It was followed by the choice of a group project theme for the course, "Behavior in the Built Environment," offered by Professor S. C. Howell in the fall of 1979; the theme was "House Modification in a Working Class Neighborhood." Each Boston was chosen for the case study site, and we tried to find out what social issues were involved in various aspects of house modifications.

The things that we encountered were very fascinating. Most of the houses, which were built around the turn of the century, have been remodeled by decisions of the owners to the extent that the original conditions of the houses can hardly be recognized. The whole street facade, which was composed of a juxtaposition of various new synthetic materials, such as vinyl siding and artificial stone, cannot be explained by the vocabulary we are familiar with as architects. Moreover, the modifications on the backs of the houses, which could be from vacant lots, showed the various lifestyles of the inhabitants. Many of the back porches were sealed off and used as extensions of the interior. Added terraces for sunbathing, storage sheds, and even swimming pools were observed in backyards.

As the study went on, we realized that modifying houses according to the needs of their living situations had a great importance to working class people who could not easily move from place to place, partly because of financial reasons and their dependence on the tight social structure of the community. My interest shifted from the exterior appearances of modified houses to the relationships among their lifestyles, values, and modes of modification, including interior modifications. What kinds of social, cultural and psychological aspects of their lives can affect the forms of modifications? What do modifications mean to the inhabitants? Following these questions after we finished the term paper, I decided to continue to pursue studies on this subject, "Housing modifications in East Boston," as my Master's degree thesis.

The objective of this thesis is to focus attention on houses in East Boston,

a now dominantly Italian working class neighborhood, and to analyze the social, behavioral, and cultural implications of housing modifications, as well as to analyze the ways in which houses have been modified by the residents.

Geographically isolated from the rest of the city, East Boston has distinctive characteristics as a predominantly Italian working class neighborhood. There are several reasons for choosing East Boston as a case study site. First the relatively homogeneous characteristics of the people in terms of social class and cultural background seem to be suitable for the analysis of the relations between forms of home modification and their ways of living. Second, since it is a part of Boston, demographic data, historical and social information, which form a basic understanding of the area, are easily available. Third, other factors such as the existence of old housing stock that needs physical improvement, people's relatively long-term residency compared with the other areas, and the high percentage of owner-occupied housing units, have made East Boston contain more examples of modified houses than many other communities in the Boston metropolitan area.

This study is an attempt to draw attention to an existing every-day living environment that tends to be ignored by professionals. I will try to find out the things we can learn from the living environment, address the issues involved, and open them to discussion, rather than prove any particular thesis. It seemed to be more appropriate to try first to understand the issues involved in this rather rare theme of inquiry on

modifications; also, there seemed to be more things to learn in this way, rather than employing any particular point of view toward the object.

However, the number of issues which I deal with should be limited; those became clear as the investigation went on. First, the adaptability of nineteenth-century housing will be discussed. Second, the effect of Italian working class peoples' lifestyle on modifications, the symbolic meanings of spaces and elements which are given by residents through modifications, and other social and behavioral factors that influence the forms of modifications will be discussed by clarifying the patterns of modifications. Third, by referring to the priority of house owners' decision-making on house modifications, I will try to explain the characteristics of their value consensus on the living environment.

Some issues are less emphasized because of the limitations of time and energy. First of all, the focus of the investigation is put mainly on modifications by present owners, because it was virtually impossible to get the data to trace the entire modification process of nearly one-hundred-year-old houses which have been inhabited and modified by several different owners. Second, the conversion of a residential building to commercial use is excluded from the subject of this thesis, because such modes of modification contain totally different sets of issues and implications from those for residential purposes. Moreover, issues of durability of the buildings and building materials which may somehow affect the frequency of modifications are less emphasized, since the theme of this thesis is humanistic rather than technical.

Surprisingly, many architects who deal with housing, including myself, have designed it with little knowledge about the living patterns of the people who would live in the buildings or about their value consensus regarding the living environment. These factors have often been ignored in favor of technology, economy, and architects preconceptions. Although the theme of this thesis is housing modifications, I always tried to look for the essential relations between people and housing through modifications. Since the content of this thesis is virtually local and circumscribed, I did not intend to make any generalized statements or practical suggestions, which would immediately be useful for designing new housing, as the conclusion of this thesis. I tried not to make the findings too generalized, but rather tried to respect the particularity of the individual owners and varieties among different owners, because I believe such individuality is an important element of modifications. The contents of this thesis are essentially evaluation-free descriptions by analysis to understand the world as it is. Therefore, I tried to include in this thesis as much original data as possible, in the form of drawings, pictures, and interview extracts, to help readers understand and to leave opportunities for their own interpretations of the data.

I hope this thesis will be of some help for those people who deal with housing in order to understand the significance and importance of inhabitants' active participation in their living environment, and will contribute to them by giving information about relationships between peoples' lives and their dwellings for producing better housing for people.

CHAPTER ONE: BACKGROUND



Neighborhood Characteristics

For understanding population and income characteristics of the area, I quote an excerpt from a brochure issued by the Boston Redevelopment Authority Neighborhood Planning Program.

II. District Profile

Relatively isolated from the rest of the City until the 1950's, East Boston has over the past two decades retained its homogeneity and remains a solid, stable, predominantly Italian neighborhood. The ethnic nature of the community contributes to the sense of neighborhood. Those born in a foreign country or having a foreign born parent make up 50% of East Boston's population in comparison with only 34% of the total City population. Of these, 70% are of Italian descent. Since 34% of the population is under age 20 and are likely to be third generation and therefore not counted as foreign stock in the Census, it is clear that the large majority of the adult population is Italian born or second generation Italian. Moreover, 90% of its adult residents are Catholics. East Boston is also homogeneous in other ways-- 78% of its adult residents are native Bostonians as compared to 53% citywide, 46% of the residents of East Boston have

lived at their present address for a minimum of 15 years. Citywide, that figure is just 26%.

According to the 1975 State Census East Boston has a population of 38,313 reflecting a 1.4% decrease since the 1970 Federal Census. The total population decrease for the City during this same period was .2%. It is interesting to note that an 8% increase was recorded of those over 65 and that the 25-44 year age group increased by 6%. The major population loss in East Boston occurred in the age group between 0-14 years and reflects a 14% decrease.

Although East Boston's median family income in 1970 was 11% less than that for the City, the distribution of income levels reveals that the median is low due to a substantial deficit of upper income residents rather than a large concentration of people at the lower income levels. With 7.1% of Boston's families, East Boston has only 2.1% of those families earning \$25,000 or more. Census data show that many of East Boston's wage earners tend to hold lesser skilled jobs or jobs in which skills are acquired through apprenticeship. This is a reflection of a level of formal education lower than the City average. Statistics indicate that the youth of East Boston continue to spend fewer years in school and consequently have less access to the kinds of professional, technical, clerical and service jobs which are increasing most rapidly in the Boston economy.¹

With such characteristics as relatively low income, a low level of education, and steady skilled or semi-skilled blue collar jobs, most of the residents of East Boston are designated as working class.²

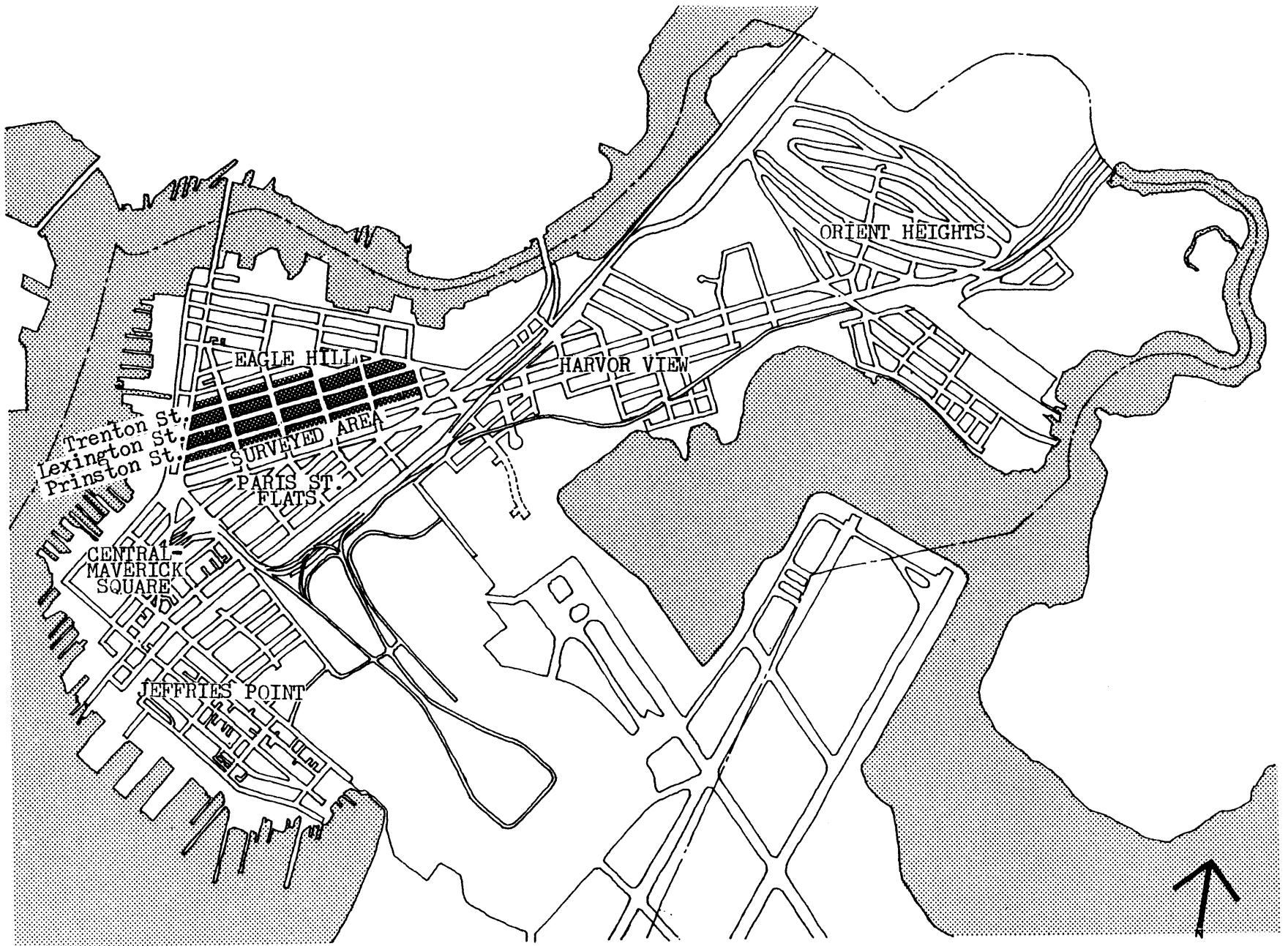
Extended family relationships and relationships between relatives are much stronger than those between neighbors or other friends. Most families have relatives in the proximity of their homes in East Boston or the Boston metropolitan area. It is not unusual for them to visit each other daily.

I don't have that many outside friends, because I have too many of the family being involved with so much of the family. I don't have time to be with friends and everything.

These words of one of the survey participants represent most families' activity pattern in East Boston. Further evidence is that much of the

multi-family housing stock in East Boston is family-occupied. Often the owners are elderly or younger members of the same family that has owned the home for many years, if not for generations.³

East Boston residents consider those people who live in their proximity in the same block on the same street, as their neighbors, usually not more than eight or twelve homes. People know the names of their neighbors, but deny having a day-to-day basic relationship with them, although they say they can expect and give help among neighbors when necessary.



EAST BOSTON , SUB-NEIGHBORHOODS AND THE SURVEYED AREA

Method

Investigation began with the understanding of local characteristics of East Boston. The relevant data about the historical context of physical development of East Boston, the present sub-neighborhood characteristics and peoples' social characteristics, were collected. Talking to one of the community advisors who handle East Boston in the Boston Redevelopment Authority, I had an opportunity to hear the problems and potentials of redevelopment which East Boston presently possesses. At the same time, observations of the exterior of the houses in the whole East Boston area were made in order to address the issues involved in house modifications and to formulate some assumptions for determining the framework of further research. Also, through observations of residents' street activities and occasional conversations with the residents, I tried to get a general understanding of their lifestyle. Some sociological literature about American working class people was referred to for the same purpose. As my pilot study went on, I began to realize that the theme of housing modification involved various issues which might draw interest from different fields of inquiry.

First of all, most of the houses in East Boston were built around the turn of the century by speculative developers and local contractors, and it is quite interesting to see how such pre-functionalism house plans and designs have been adapted to contemporary lifestyles. How do the characteristic space composition and dimensions of pre-functionalism house design influence the inhabitants' present life? What part of the house has been changed by them because of the perceived misfit between the original house design and

their functional needs? Moreover, how does the characteristic lifestyle or value consensus of Italian descent working class people in East Boston affect the modes of modification? What sub-culturally determined symbolic meanings were given by the inhabitants to what elements and spaces by applying decorations and minor modifications? Modification of what elements has priority over that of what other elements? What are the criteria and rationale for such priorities? In order to carry out the investigation with these primary questions, both observation and survey methods were adopted.

The survey took the form of non-directive interviews because I thought these interviews were the best way to get vivid detailed descriptions of people's views on their environment, and also because I wanted to avoid any distortions of their views by the researcher's preconceptions.

However, in order to receive coherent interview data for the investigation of the issues which I addressed earlier. I created a checklist of a minimum of questions which I had to ask each person interviewed. These questions were formulated to provide interviewees with topics for free conversations and to stimulate them to express their views on residential environment, views which were often hidden behind their consciousness because of familiarity. A series of exterior photographs of modified homes in the East Boston area had been taken prior to the interviews and were used during interviews as material to stimulate conversations, as well. All the interviews were tape-recorded and analyzed afterwards. In those cases where I was allowed access to interviewees' houses, not only the clues to indicate the use of the inferior spaces such as

furniture arrangement, symbolic decorations, and small objects were observed and recorded, but also the behavior of interviewees and their family members, and the presence of visitors during the interview were recorded as valuable indicators of their conscious rules of space use in the houses.⁵ Moreover, when it was allowed I made a drawing of the house plan to show the interior modifications and owner's arrangement, which was referred to in the later analysis.

The survey, of homeowners in a sub-neighborhood of East Boston, locally called the "Eagle Hill" area, was conducted over a period of one and one-half months during March-April 1980. To be precise, the interview samples were taken on Princeton Street, Lexington Street, and Trenton Street. I decided to get geographically concentrated samples from one relatively circumscribed sub-neighborhood, rather than from several scattered ones all over the East Boston community, because I thought I might be able to see any influence of residents' mutual relationships on the modes of modification, and because I thought it might give me more opportunities to gain a closer relationship with the residents to receive ample data.

In order to get the residents' maximum cooperation for the survey, the researcher's approach to them should be carefully chosen, since the people in such a tight and stable community as East Boston are always cautious of invasion by any "outsider" who does not belong to the society.⁶ They usually express obvious hostility against any activities called investigations, or try to pretend to be totally indifferent and ignorant, in order to avoid being involved as subjects of those investigations.

In order to mitigate such anticipated residents' negative reactions to the researcher, official letters explaining the notion of a private research project on housing in the area, its purposes, and the researcher's status as a student were distributed to most houses in the sampling site, (Princeton Street, most portions of Lexington Street and Trenton Street) prior to the survey.

All in all, thirty-eight residents were interviewed. Selection of candidates was determined according to several factors that were noticeable on the exterior of homes. First, in terms of the building type, two or two and one-half story side-hall-houses,⁷ a predominant house type in the area, were chosen as major samples, while several houses of other types, such as three-deckers, were also sampled as sources of comparison and references. Equal numbers of single family homeowners and those who had tenants were interviewed. Residents in absentee landlord-owned apartment houses, which were, in fact, quite rare in the surveyed area, were excluded from samples, because they did not have a right to modify their dwelling unit, although I had opportunities to talk to some of them during the survey. The range in age and length of residency of the owners was fairly represented. Eleven interviews were done inside the homes, and in eight of those I could take drawings and photographs of the interior of the homes. The length and the intensity of interviews varied in each case, depending on the availability of the homeowner's free time and his/her degree of interest in the research. They varied from half-hour conversations at the doorway to two and one-half hour interviews over tea and cookies. Some of the candidates were interviewed two or three times on different dates.

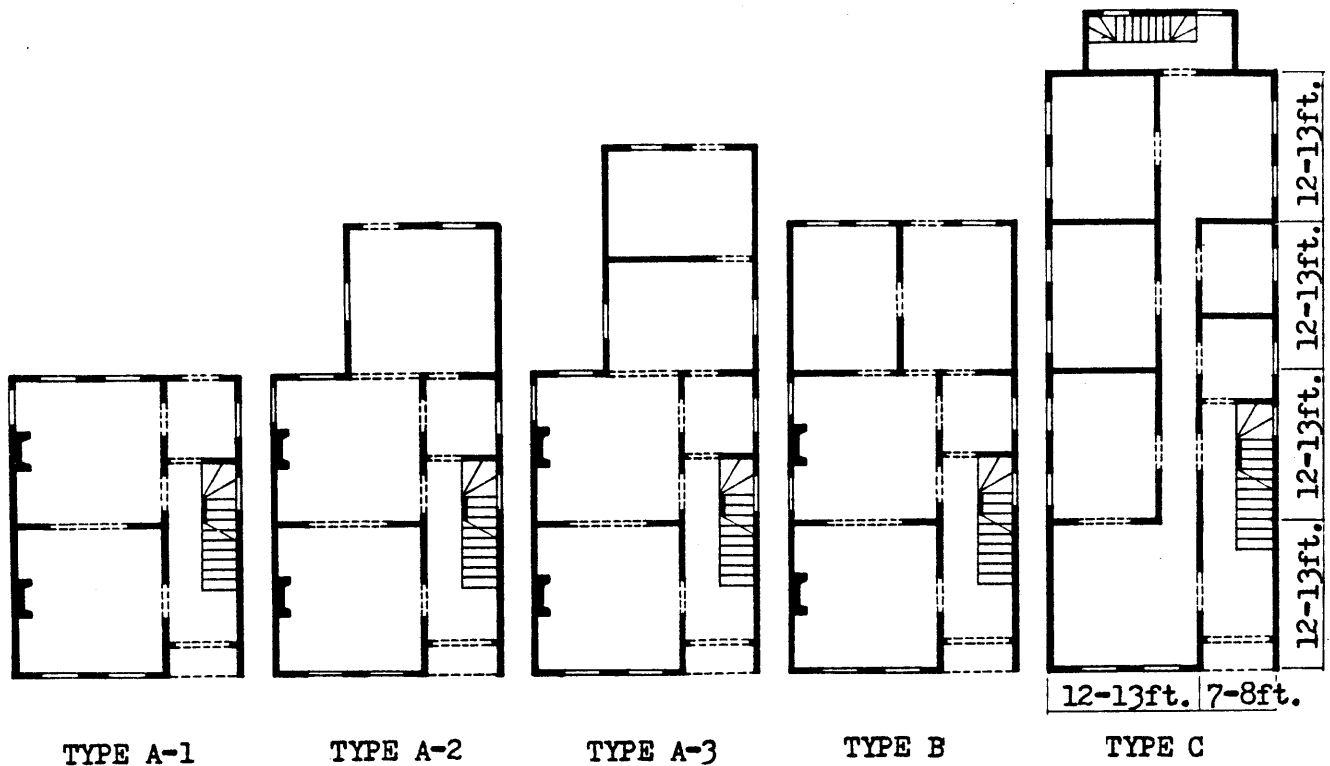
Besides the study data from interviews, residents' general reactions to the researcher were also interesting as indications of characteristics of the tight and stable working class community. For example, while I was walking on the sidewalk, stopping many times to take notes and photographs of the exterior of homes, some of the owners, with suspicious expressions, appeared in their doorways one by one to ask me what I was doing.

The sidewalks and streets seemed to be no more public places, but to be perceived as part of their own territory, always somehow being supervised by the residents. The people were sensitive about the existence of outsiders in their territory, as I had expected. However, such sensitivity happened to offer extra opportunities to make contact with residents in many cases. As the survey progressed, I realized that the letters distributed earlier were effective, although at first, many homeowners still expressed their reluctance to be interviewed about their own houses. To ask their cooperation, I had to explain to them that this research was private, with purely academic purposes, but not an assessment for homebuyers or city tax inspectors, which they were afraid of and was a first misinterpretation. Once they understood these things, they usually showed interest in the research, and talked proudly about the things they had accomplished in their homes. As far as this sort of survey is concerned, the presence of a young lady who accompanies the researcher seems to be generally helpful to make residents feel less suspicious and to conduct the survey smoothly, especially when the interviewees are housewives. This fact is well represented in a case in the survey when an interviewed elderly lady talked almost always watching my assistant, a Japanese female student, even though questions were asked by me.

Original Houses

Except for the houses in the eastern half of East Boston, the Orient Heights, and Harbor View areas, both of which were developed later, between the 1920's and the 1940's, most houses in East Boston were built during the seventy years from 1840 to 1910 for shipbuilding and industrial workers. The predominant building types vary among sub-neighborhoods because of the differences in the eras when they were developed. One of the oldest areas in East Boston, the Central-Maverick Square and Jefferies Point area, contains many two and three-story row houses amid modern single-family houses and a smaller number of three-deckers. Some brick row houses were built at Maverick Square and Central Square, which have served as the business center of East Boston. The northern portion of the Jefferies Point area, from Maverick Street, and the Paris Street Flats area, both of which were land-filled around the turn of the century, consist of a considerable number of three-story, plainly detailed, wooden structures originally built as tenements. The western half of the Eagle Hill area, where the survey was conducted, is another older part of East Boston. It contains mostly single-family, detached houses, including several mansions of famous old shipbuilders around the top of the hill. The later developed eastern portion of the Eagle Hill area contains many three-deckers. Many of the two-family houses of a relatively new housing type are located on the northern slope of Eagle Hill, which had been cut to collect soil for land-fills and had never been developed as a residential area until 1905.

Although houses in East Boston possess tremendous diversity in the building types, styles, and exterior appearances, the floor plans of these houses are



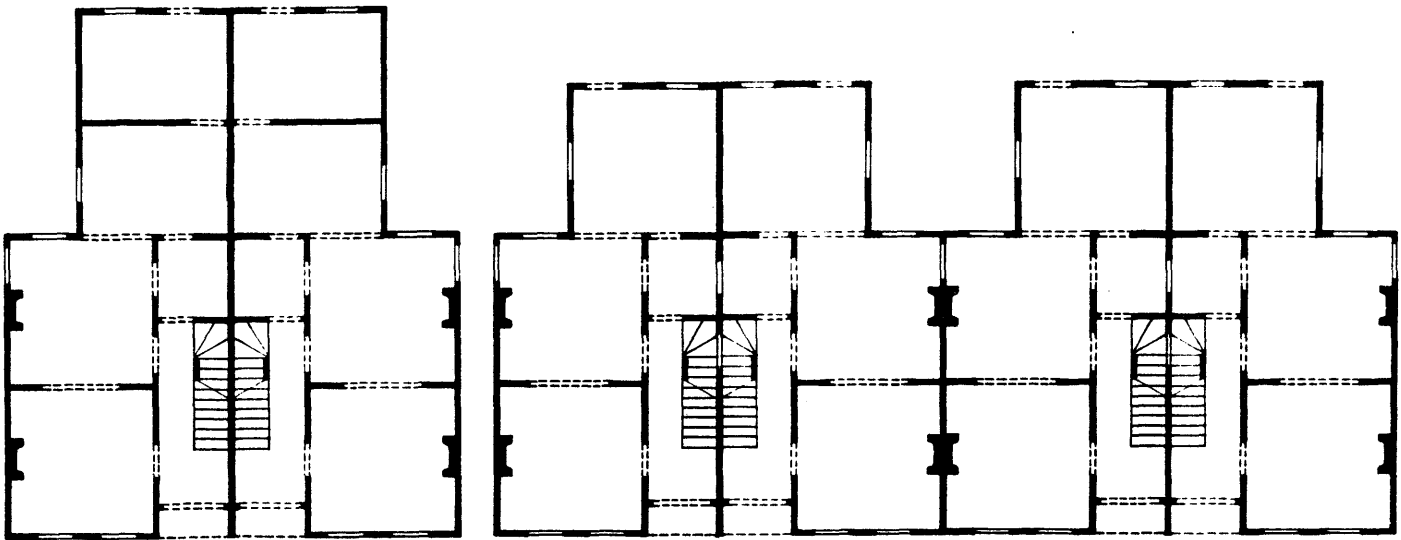
quite uniform and can be classified into three basic types: Type A: side-hall two-room plan, Type B: side-hall three-room plan, and Type C: side-hall four-room plan. The latter two types can be considered as developments of Type A, the side-hall two-room type, derived from the eighteenth century single-family house plan. Plans and sizes of the houses reflect the dimensions of the building lot. The narrow building lot of 15 ft. x 100 ft. (7.5m x 30m), brought the development of only side-hall type houses all over East Boston.

Type A, which was applied to two and three-story houses, has several variations. Type A-1 is regarded as the oldest house plan among them all. It has two major rooms beside an entry-stairhall, a basement kitchen, and box-shaped exterior. Type A-2, which was developed from Type A-1, has a kitchen ell attached to the main volume of the house. The kitchen ell can be two-story to provide another room upstairs. Type A-3 has a long kitchen

ell, divided into two rooms. These types of plan had been adopted for most of the single-family houses built during the period between 1840 and 1900.

Type A-2 or Type A-3 is composed of a main volume, including two rooms and a side hall, and a smaller volume with a kitchen attached to it, while Type B has a kitchen included in the main volume which is 50% longer than that of Type A. Type B was a newer house plan than the Type A series, and was adopted by some of the two-story single-family houses and two or three-story multi-family houses in Each Boston.

The plan applied to most of the three-deckers was Type C. The three-decker was developed as a type of multi-unit housing in the 1870's, and remained in use through the 1920's as an efficient housing type. In East Boston, a large number of three-deckers were built during the period between 1888 and 1915, when the population doubled because of new immigration. The length of the main volume of the three-decker became almost twice as long as that of Type A containing four rooms in a row. The kitchen was located at the end of each floor, usually with a back porch or back stairs added to it. The bathroom was placed on each floor in the space behind the common staircase. The Type C plan was also used for the tenement houses in East Boston. In that case, one floor usually contained two units in the front and the back, and the door to the bathroom was placed adjacent to the common stair hall so that it could be shared by many tenants, even by those of another floor that might not have a full bathroom.



DOUBLE HOUSE PLAN

ROW HOUSE PLAN

These three basic types of plan could become a plan of the so-called, side Hall Double House with hardly any problems when anyone of the three plans was duplicated in a mirror image position. Moreover, Type A plan can be used for row houses by simple repetition of the original plans, although the other two types cannot. All the row houses in East Boston belong to Type A. That is, row houses in East Boston have essentially the same floor plan as those of most single-family houses.

Having been restricted by the narrow building lot frontage and probably by the standard size of lumber at that time, dimensions of interior spaces are quite uniform, despite the difference in the building type and the type of the plan. The width of the small bay, which includes an entrance-stair hall, is about seven feet almost uniformly. Both the width of the large bay, containing the main rooms, and the distance between the right-angled walls and the side wall is in the range of twelve to thirteen feet in each case. In the original houses, a room was in one of two standardized

sizes: 12-13 ft. x 12-13 ft. square, or 12-13 ft. x 10 ft. (1/2 of the whole width) rectangular. Original houses had constant characteristics in terms of the relation to the public space. Normally they had no front yards, but a few transitional spaces between exterior public space and interior private space, such as porches and balconies. Entrance doors and steps were recessed within the volumes of the houses, or the doors were directly adjacent to the sidewalk, with a few steps in front of them. Porches and balconies were hardly seen in East Boston. Double entrance doors and double hung windows, called "one-on-one" and "two-on-two" were the common elements in original houses. Sidings were predominantly wood shingles and clapboards.

FOOTNOTES

CHAPTER I

1. Boston Redevelopment Authority, East Boston: District Profile and Proposed Neighborhood Improvement Program 1979-1981 (B.R.A. Pamphlet, 1979), p. 5.
2. Herbert Gans, People and Plans (New York: Basic Books, 1968), p. 235.
3. B.R.A., East Boston, p. 5.
4. See Bibliography on Sociology/Planning.
5. John Zeisel, "Symbolic Meaning of Space and the Physical Dimension of Social Relations," in John Walton and Donald E. Carns, (eds.), Cities in Change: Studies on Urban Condition (Boston: Allyn & Bacon, 1973), pp. 260-263.
6. Herbert Gans, The Urban Villagers: Group and Class in the Life of Italian Americans (New York: Free Press of Glencoe, 1962), pp. 120-141.
7. Ibid., p. 26.

CHAPTER TWO: EXAMPLES OF HOMES



Example #1

Demographic Data

Owner: Wife and husband.
Age: Approx. 45 years old.
Children: 3 teen-age children
living in the same house.
Length of occupancy: 5 years.
Relatives in East Boston: the
wife's parents and one of her
brothers.

Exterior Modifications

Sidings, porch columns, the
entrance door, the stoop, a base-
ment door, the front fence, a
picture window.

NOTES

The house used to be owned by his mother who was living in the house alone. He took over the house when she died five years ago. He had been living outside East Boston until then, although he spent his childhood in the house. The house was in a devastated condition when he acquired it. He had to spend the whole first year in order to remodel the house to make it livable. A new bathroom was installed first. The kitchen was relocated from the end room to the middle room because it was easier to work with the plumbing in the middle room in connection with the basement where all the service conduits are located. The back rooms were converted into a living room by knocking down the party wall. The basement staircase was relocated. They use the basement mostly as a storage room and laundry room, but they added a shower there recently. The picture window in the front room, where they use as a master bedroom, was his wife's desire, but he didn't really want it. They added closets, but he wasn't satisfied with the locations. He wanted them in his bedroom, but the room was too small. His recent plan was to repair the stair hall ceiling and fix the basement. All the remodeling was actually constructed by his wife's brother who is an amateur contractor, also living in East Boston.

Example #1

Interior Modifications

Structure: removal of a wall between the back rooms

Kitchen: enlargement by relocation, appliances, a linoleum floor, melamine-top cabinets, cupboards, large wallpaper of natural scenery.

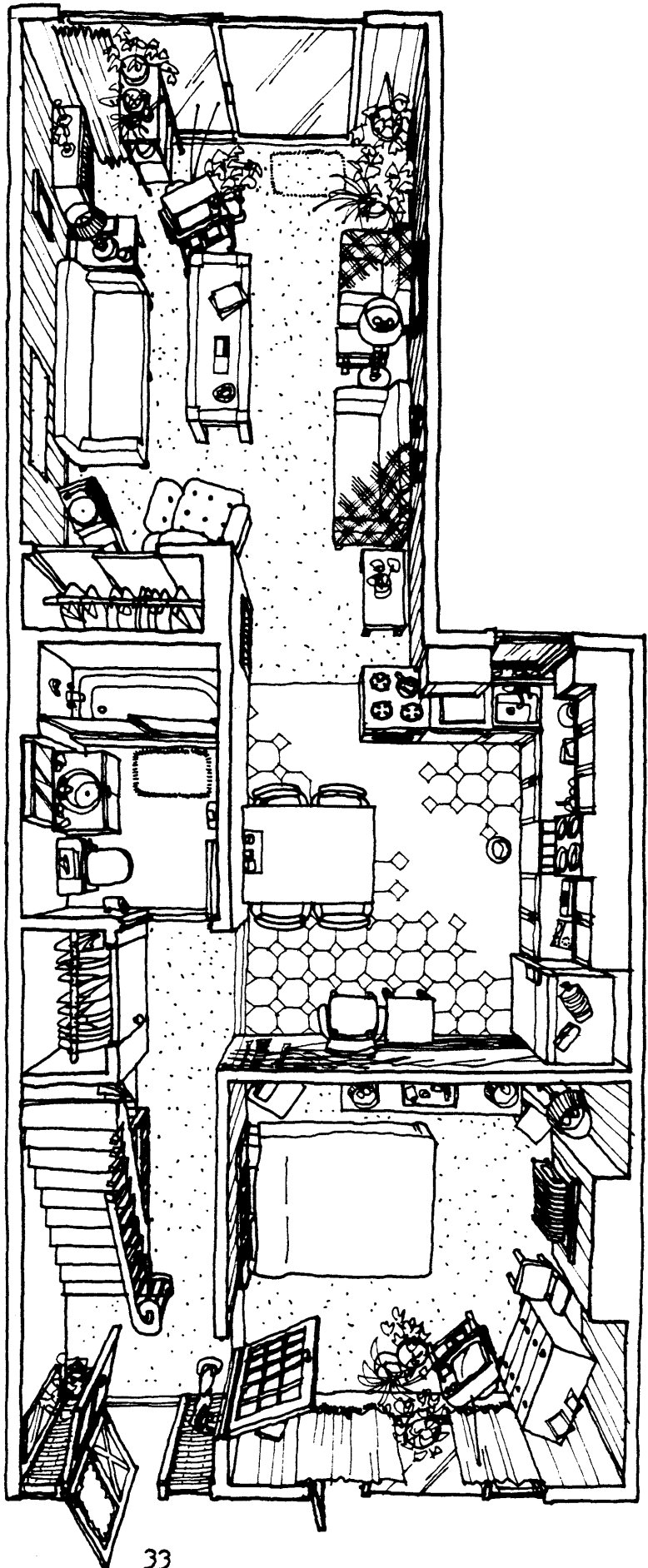
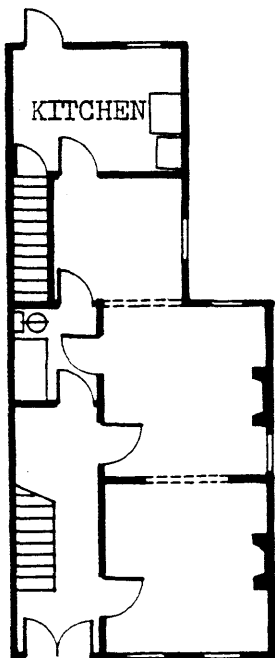
Bathroom: installation of a new bathroom.

Living Rm.: enlargement, paneled walls, sliding doors, a carpet

Bedroom: a carpet paneled walls, a picture window.

Others: the entrance door, additional closets, replacement of the basement staircase, electric outlets, lower ceilings.

The Original House Plan (5 years ago)





Example #2

Demographic Data

Owner: wife and husband.

Age: approx. 45 years old.

Children: 3 children, only one of them is living in the house. The rest are married.

Length of occupancy: 15 years.

Relatives in East Boston: the wife's parents in the same block.

Exterior Modifications

Sidings, roofings, windows, a porch awning, the stoop, the entrance door, the front fence.

NOTES

They had a fire 3 years ago. They had to totally remodel the house with the insurance money. The wife planned most of the remodeling. She likes remodeling and decorating the house. She reads magazines a lot and consulted with a home decorator, her friend, when she planned to remodel the house. She decided to knock down the party wall between the front room and the middle room because she liked openness. She is working at a bridal shop and she loves white, so she put white on both exterior and interior walls. She always wants to be creative and different from her neighbors. She chose white siding because not only she liked it, but also it stands out from her neighbors' houses. She likes to feel as if she was outside when she was inside. That's why she put bond stone exterior siding material on a kitchen wall. She painted it also in white. Besides white she likes orange and other warm colors, so she chose orange carpets and orange sofas. She painted the front door orange, and even her car is two-tone orange and white. The only thing that she is not really satisfied with are the casement windows because she feels it troublesome to clean them. All the jobs were done by local contractors in a short period of time.

Example #2

Interior Modifications

Structure: removal of a party wall between the front room and the back room.

Kitchen: appliances, melamine-top cabinets, cupboards, a linoleum floor, an artificial stone wall finish.

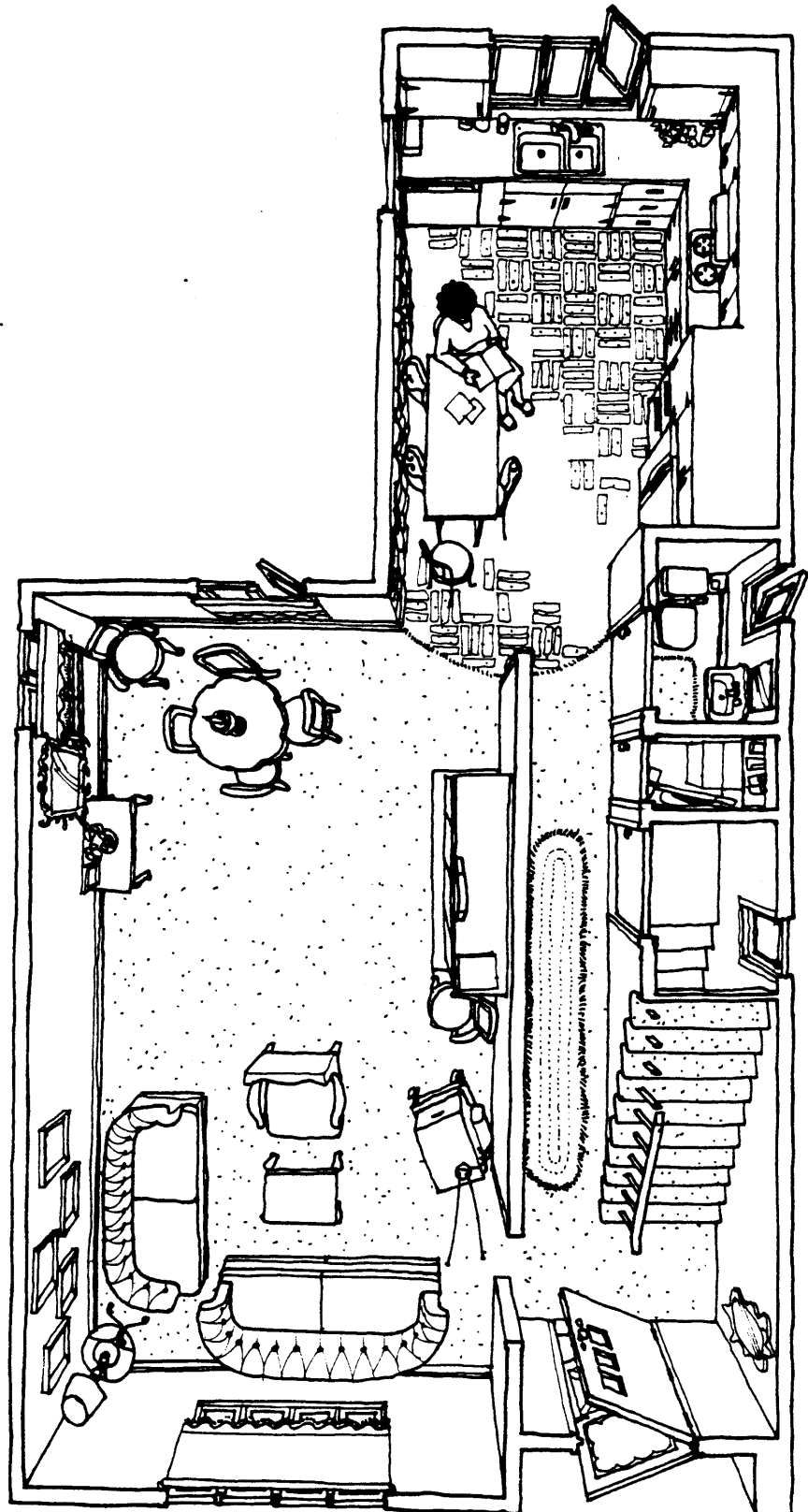
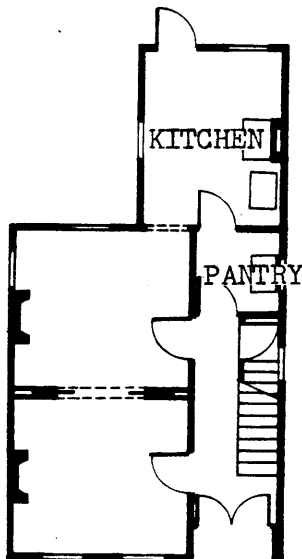
Bathroom: a full bathroom on the 2nd floor, a half-bathroom on the 1st floor.

Living room: plastered walls, a carpet.

Bedrooms (2nd floor): carpets, plastered walls, built-in closets.

Others: window sashes, the entrance door with a storm door, a storage, a gas heating system, baseboard radiators, electric outlets, loover ceilings.

The Original House Plan (3 years ago)





Example #3

Demographic Data

Owner: wife and husband.
Age: approx. 50 years old.
Children: 5 children, only one
of them is living in the house.
Length of occupancy: 31 years.
Relatives in East Boston: one of
married daughters and
husband's brothers.

Exterior Modifications

Sidings, roofings, window sashes,
a porch awning, the stoop, the
sealed up entrance recess, the
front door.

NOTES

The house was originally owned by an elderly couple. The present owners were living in the same block, and bought the house 31 years ago when the previous owners left the house because of the financial limitation. The house was in a nearly unlivable condition. There was no bathroom in the house except a toilet in the cellar, and no electric conduit on the second floor. The kitchen on the back with a wood-burning stove was unusable since the roof was caved in. So they closed off the area and put a new kitchen in the middle room, and a bathroom was installed on the second floor. Both of them were done before they moved in the house. Since then they installed a new heating system, electric outlets, new kitchen appliances, etc. The back room that used to be a kitchen was torn down, and a larger room was added instead. The attic was converted to bedrooms. The wife likes changes, and she has decided most of the changes that were made in the house. They change something every year. They have a lot of relatives who frequently visit them, and the dining room takes an important role during such visits.

Example #3

Interior Modifications

Structure: a back room expansion, attic bedrooms.

Kitchen: enlargement by relocation, melamine-top cabinets, cupboards, appliances, a linoleum floor, paneled walls.

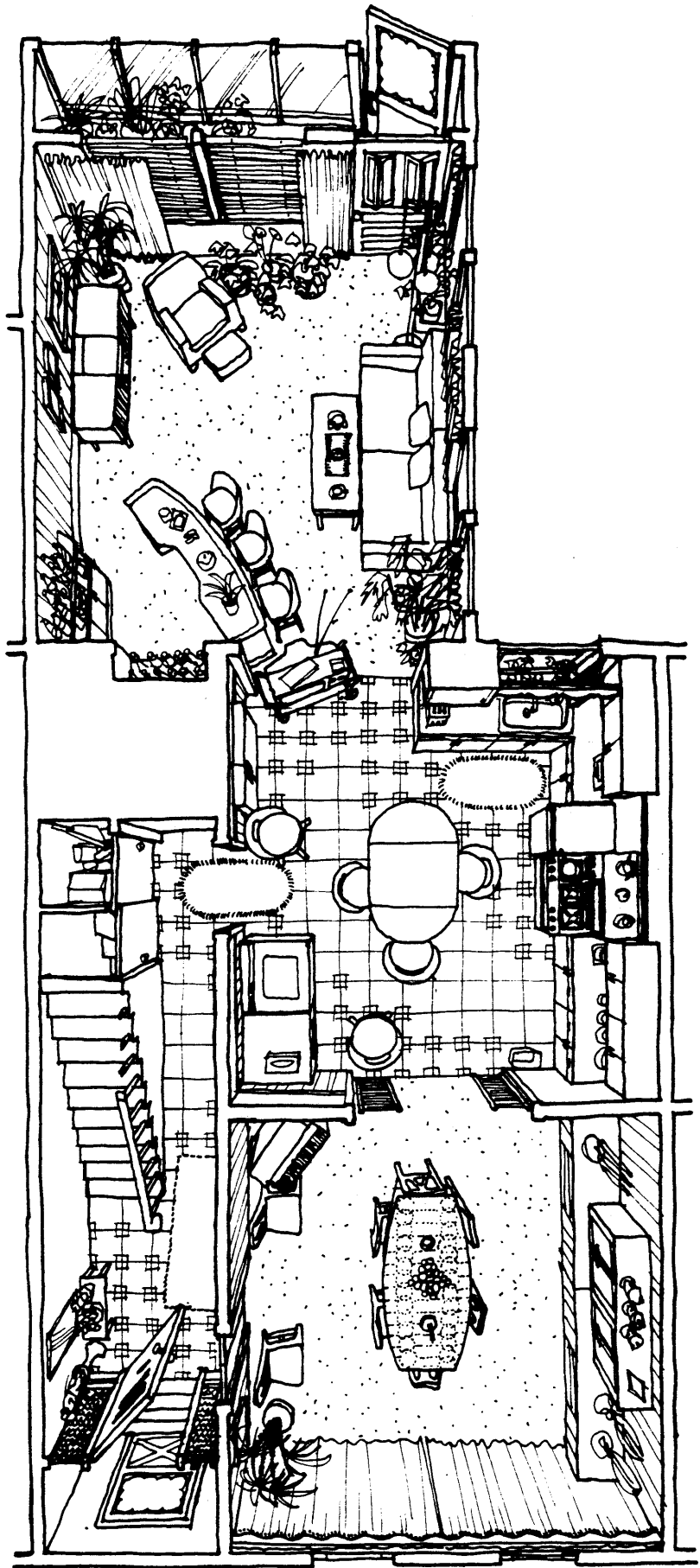
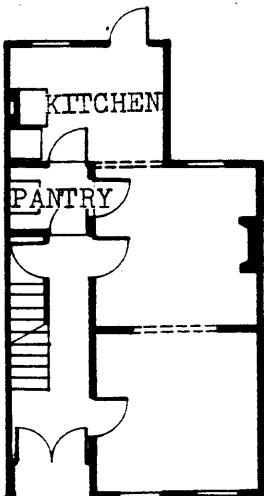
Bathroom: a full bathroom on the 2nd floor.

Living & Dining Room: carpets, paneled walls.

Bedrooms (upper floors): paneled walls, built-in-closets, carpets.

Others: window sashes, the entrance door with a storm door, a storage, lower ceilings.

The Original House Plan (31 years ago)





Example #4

Demographic Data

Owner: wife and husband.
Age: approx. 40 years old.
Children: 2 teenagers and a
small child.
Length of occupancy: 8 years.
Relatives in East Boston: none.

Exterior Modifications

Sidings, window sashes, the
sealed up entrance recess, the
front door.

NOTES

They lived in the next street before they bought the house 8 years ago. The house was fairly deteriorated at the time. It had only a half bathroom on the second floor, no usable kitchen facilities, and few electric outlets. All those things needed to be remodeled before they moved in the house. The roof was reroofed, and aluminum siding was installed on the front and back facades. They were afraid of putting it on the sides of the house because they thought aluminum siding is not protective against fire. The kitchen was enlarged by removing the party wall between back rooms. A new bathroom was put on the first floor, and a new half bath on the second floor. All the window sashes were replaced. Most of those works were done in the first year by local sub-contractors, however they changed something every year since then. They think bedrooms upstairs still need repairs such as putting insulation and wallpapering. Their future plan is to add a family room on the back and to change present hanged ceilings into plaster ceilings.

Example #4

Interior Modifications

Structure: removal of a wall between the back rooms.

Kitchen: enlargement, appliances, cabinets, a storage, a linoleum floor, replacement of the back door & windows, paneled walls.

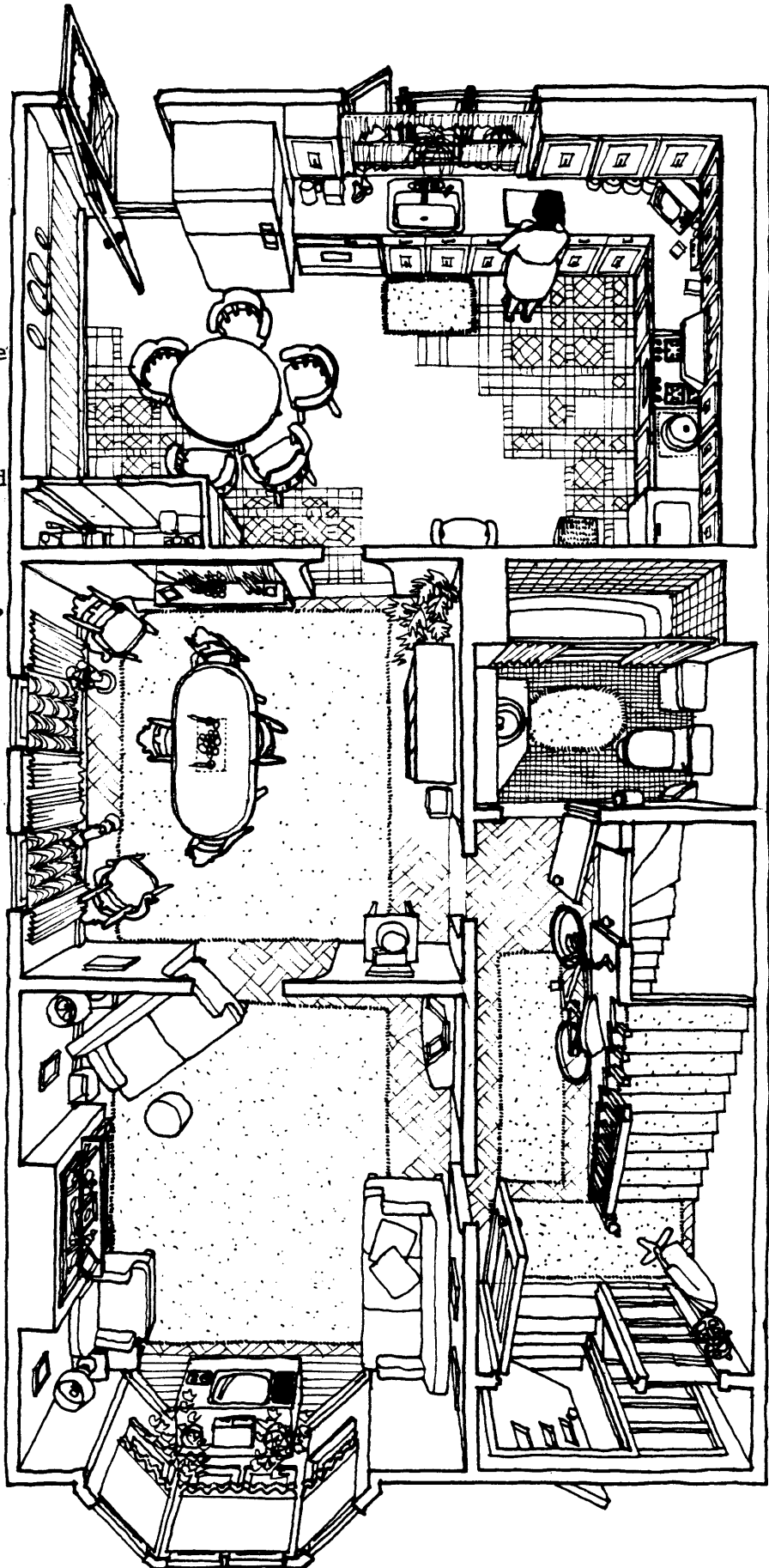
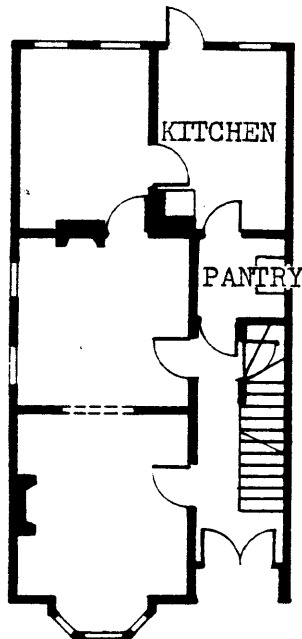
Bathroom: a full bathroom on the 1st floor and a half bath on the 2nd floor.

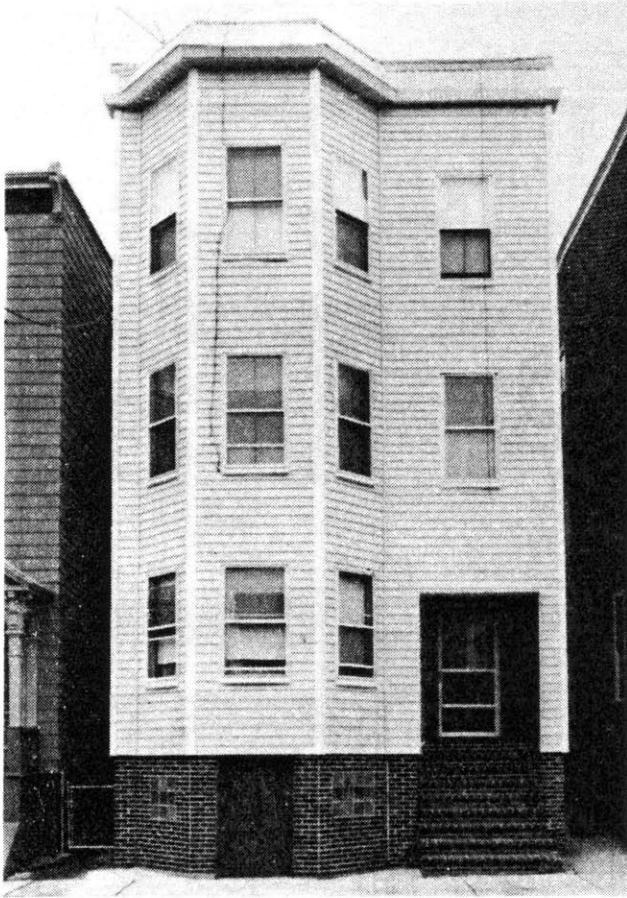
Living & Dining Rm.: carpets, plastered walls, arched doorways.

Bedrooms (2nd fl.): built-in closets, wall-paper, carpets.

Others: baseboard radiators, the entrance door, lower ceilings, electric outlets.

The Original House Plan (8 years ago)





Example #5

Demographic Data

Owner: wife and husband.

Age: 27 years old (husband).

Children: A small girl living in the house.

Length of occupancy: 3 years.

Relatives in East Boston: a wife's brother living in the first floor unit of the same building as their tenant.

Exterior Modifications

Sidings, window sashes

NOTES

They came from Italy and settled themselves in East Boston 3 years ago. They bought an old three-decker and remodeled the first floor and the third floor first to rent them, and they are now in the process of remodeling their second floor unit. A new kitchen, a bathroom, electric outlets, and radiators had to be installed. New siding should be put for renting the apartments. The tenant on the first floor is the wife's sister's family who visit the owner's unit on the daily basis. The husband made a hobby room beside the living room in order to keep his treasures, such as a stereo set, a camera, and fishing rods out of small children's reach. All the walls were torn down and insulated. The master bedroom and the kitchen was enlarged by relocating the party walls. Most of the window sashes, which were spoiled, were replaced by new ones. All those jobs were done by the husband himself since they couldn't afford hiring contractors. He read books to learn how to do the jobs, and his friends helped him. Now he is finishing the dining room and the basement which is a cellar now but will be a hobby room.

Example #5

Interior Modifications

Structure: relocation of party walls between rooms.

Kitchen: enlargement appliances, cabinets, a linoleum floor, paneled walls, a kitchen window.

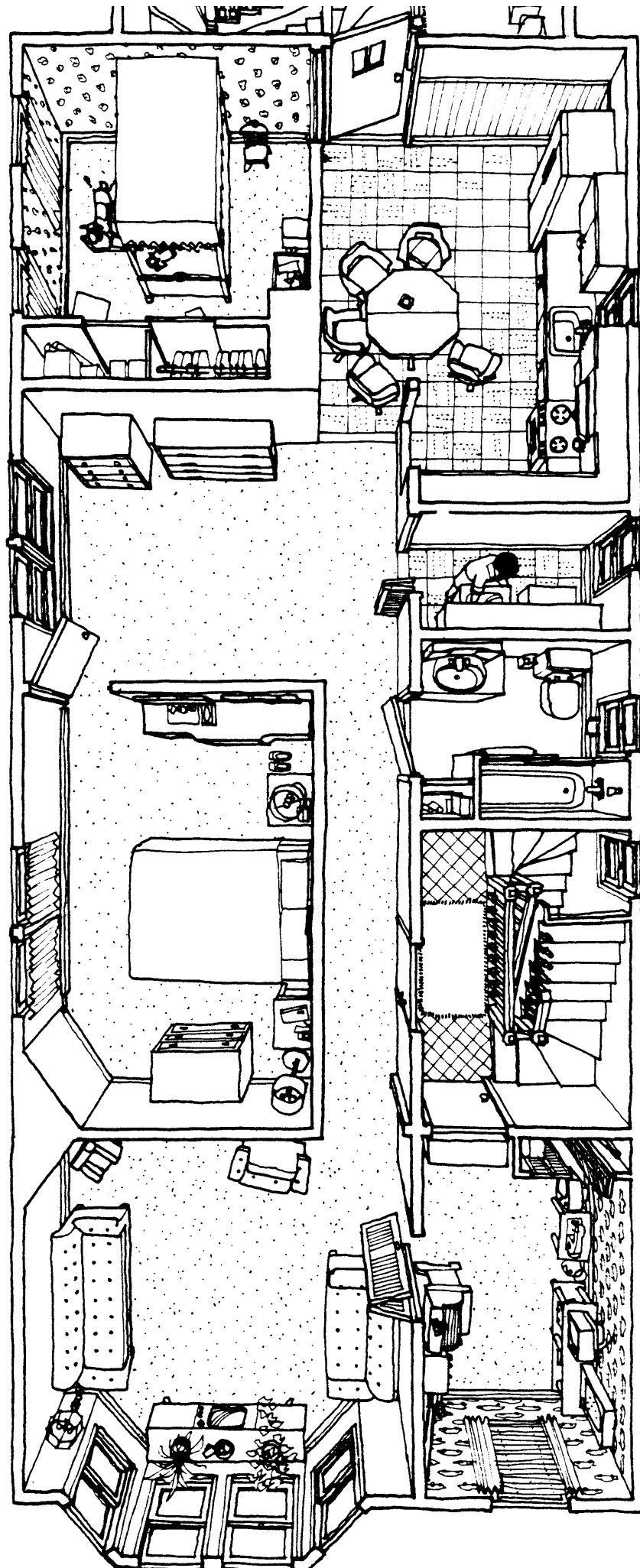
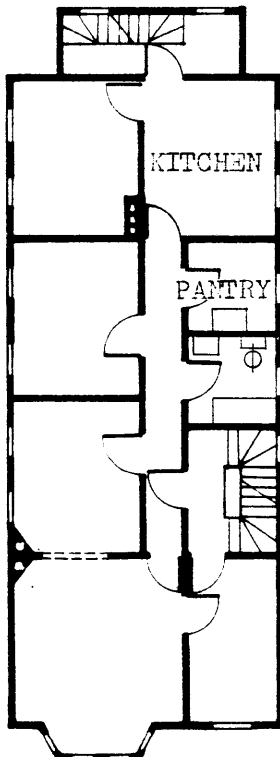
Bathroom and Utility: a laundry room, a full bathroom.

Living & Dining Rm.: carpets, wallpaper.

Bedrooms: carpets, wallpaper, a built-in closet.

Others: new window sashes, baseboard radiators, removal of doors between rooms, lower ceilings, electric outlets, wall insulation.

The Original House Plan (3 years ago)



CHAPTER THREE:

ADAPTABILITY OF 19th CENTURY HOUSE PLAN

Adaptability of the 19th Century House Plan

I had assumed before I started the survey that many houses had been modified in plan because people's present lifestyle did not fit to the pre-functionalism house plans. However, that assumption was proved to be wrong as the survey went on. Few owners knocked down the original major walls, or added new ones, or changed the original side-hall house plans, even though they did change the exterior appearances, interior decorations, and services considerably. None of the owners in the sampled homes replaced or changed the original position of the interior main staircase, or the size of the rooms. The owners always tried to handle their changing needs, produced by the growth of the family and changes of family structure, first by the trade-off of room use between upstairs and downstairs, or between small rooms and large ones. This sort of relocation of functions within a given structure was always prior to physical modifications as a means of dealing with changes and a variety of living situations among the home owners in East Boston.

There seem to be several reasons for this relative lack of major modifications. Firstly, the inhabitants are so much accustomed to living in the side hall house that they do not think of other better alternatives to the plan that could be made with major modifications. Moreover, such major modifications as removing walls are usually regarded both structurally and financially as too risky to do as normal home improvement jobs.

It is true that these factors are responsible for the lack of modifications, but it can also be interpreted that those 19th-century houses themselves are adjustable to the various, changing ways of living. That is, the 19th-century house plans were intentionally designed to accommodate various living situations without major modifications from the beginning, or those plans have the characteristics to provide adaptability. In fact, the adaptability of English Victorian, Georgian houses, and other pre-functionalism houses has been introduced by some architects.

Here, in this section of my thesis, I focus attention on the adaptability of East Boston's side-hall houses, especially those of Type A plan, whose samples I collected in a sufficient number during the survey, and try to explain the factors which produce such adaptability on the basis of the analysis of space use in the samples.

For consistency, I use the terms, "a front room," "a middle room," and "a back room," to indicate major spaces on a floor plan of Type A houses. A front room denotes the room in the main volume of the house, adjacent to the street. A middle room is the room in the main volume, adjacent to the backyard, and any space in the small volume, attached to the back of the main volume is indicated by a back room.

As a result of the survey, it was identified that the use of the spaces in Type A houses varied in each family, depending on the family size and the lifestyle. For example, on the main floor, the front room was used as either a living room, a dining room, or a bedroom, and the middle room

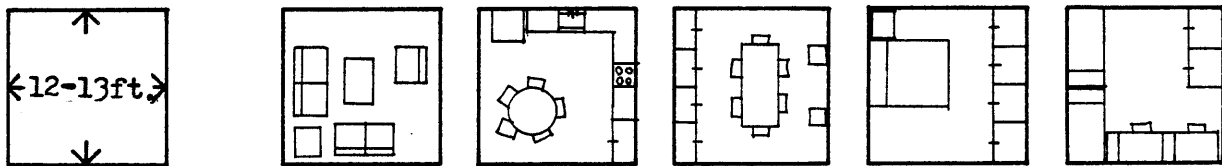


VARIATION OF THE USE (from sampled homes)

or the back room was used as either a den, a kitchen, or a living room. In cases where the front room was used as a bedroom, the opening between the front room and the middle room was closed off by a wall, or screened with a curtain to maintain privacy. However, except in those cases of modifications, the rooms were used in various ways without any modifications.

Room size and space characteristics are the factors which enable a variety of uses of the space. As previously mentioned in the section on Original Houses, room size and proportions were quite uniform. In the case of Type A plan, the front room and the middle room always have the same size and proportion, which is approximately 12-13 ft. x 12-13 ft. square. As far

as average family activities are concerned, this almost standardized room size is, in fact, applicable to various uses, such as a living room, an eat-in kitchen, a dining room, or a master bedroom. Nearly square-shaped rooms allow more variations in furniture and appliance arrangement than those of other shapes.

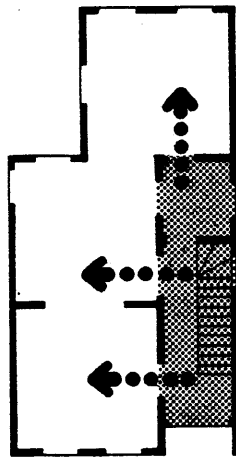


The rooms of the Type A house also have uniform characteristics in terms of light and the relation with the exterior space. If it is a detached house, every one of the three major rooms is adjacent to at least two of the three kinds of open spaces around the house, which are front yard, side yard, and backyard. Even when the same floor plan is applied to a rowhouse, each room has contact with either the front yard, or the backyard. Thus, the conditions of the rooms regarding natural light and the relation with exterior space are fairly equal, if not the same.

This uniformity of size and shape, and the equality of the space character of the three major rooms, enable the residents to use the spaces differently, according to their needs and interpretations. That is, such uniformity and equality least define the particular use of each room. It can be said that this sort of ambiguity in terms of the relation between space and function becomes a key factor for the 19th-century houses to accommodate peoples' various lifestyles and changing living situations,

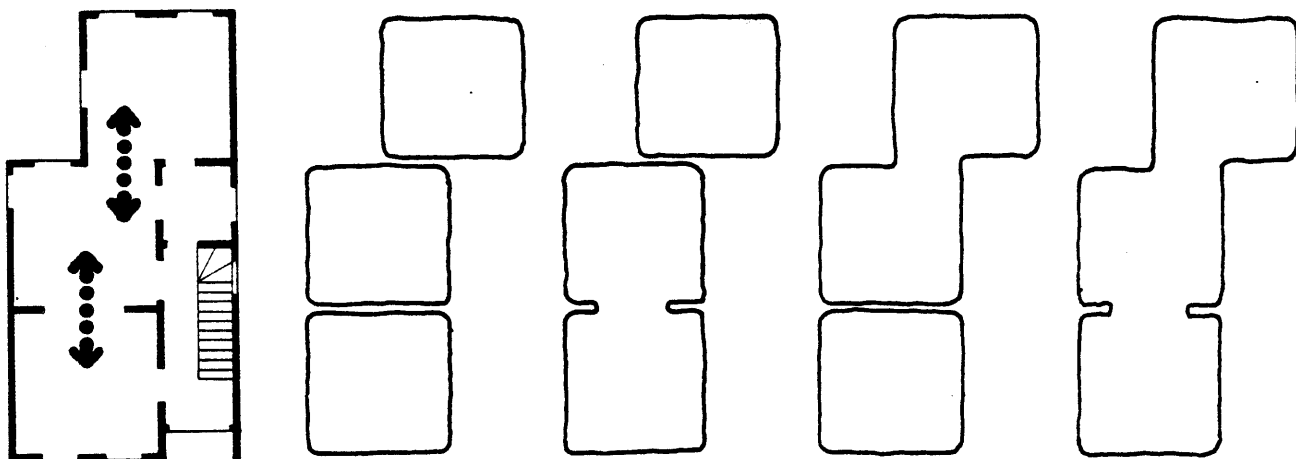
although such ambiguity generally opposes the functionalism principle of modern architecture.

Another factor of the side-hall house's adaptability is its definite circulation space. In other words, the entrance-stair hall is spatially distinguished from main spaces, and located in such a position that it directly connects with the front room, the middle room, and the back room. Therefore, those three rooms have equal characteristics with respect to the circulation from the main entrance, which is equally distributed to each room in spite of slight differences in distance. The publicness of the rooms is virtually less hierarchical in this composition, so that each room has a potential to be a private bedroom or a public living room. In other words, the room use largely depends on the inhabitants' interpretation.



This also is opposed to the functionalism design principle, because according to that principle public places such as living rooms are placed near the entrance and usually open to the circulation space, and private places such as bedrooms are placed distant from the entrance.

In the original house plan of the Type A house, the three major rooms were connected to each other with generous openings. The existence of these openings between rooms also contributes to the adaptability of this house plan. With these generous openings, major spaces on one floor can be interpreted as either three separate rooms, one room with a longer space which has a neck in the middle, or one room with a longest space which has necks at two places. This ambiguous connection between rooms allows various uses of the whole floor and the variations can be achieved relatively easily without major modifications by putting curtains or sliding doors at the necks.

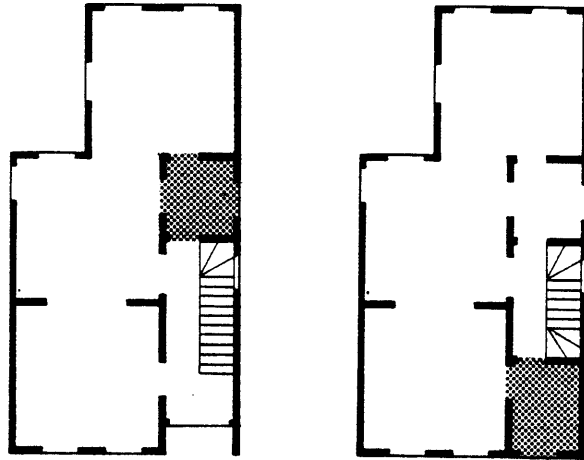


VARIATION OF USERS' INTERPRETATION OF THE SPACE

Those openings have another function when a certain floor is converted to an apartment unit. That is, when the hallway becomes a public circulation space and does not belong to the private domain of the floor unit, those openings provide necessary circulation between rooms in the unit. In other words, owing to the openings, a floor of any Type A single family house can be converted into a one-bedroom apartment unit without any

modifications. In fact, this type of apartment conversion was quite common in East Boston. For the stable, working class home owners in such a densely populated city neighborhood as East Boston, it is very important to be able to convert a part of his/her home into an apartment unit in order to get income after his/her retirement.² The floor plan offers this sort of adaptation.

In addition to those factors, there is another factor to support such adaptability. That is the diverse and flexible use of the small spaces in the small bay. One of the small spaces is the space behind the staircase, next to both the middle room and the back room. Its size is usually about 7 feet x 8 feet. Among the surveyed homes, the use of this space varied considerably depending on the use of the adjacent rooms. The space originally provided a wash room with a sink in it, or a pantry through which one could go to the back room where a kitchen was normally located. However, in many of the present homes in East Boston, the space has been turned into a bathroom, a storage room, or the place to put a refrigerator. (Refer drawings of samples.) This small space is always used as a service space rather than as a main space. Being adjacent to the hallway, the middle room, and the back room, this space can serve either the whole house or each room, depending on the inhabitants' needs. Given its location, the use of this small space is flexible as far as the whole life span of the building is concerned, and it tends to be modified many times in order to accommodate various service function, which are needed by each individual family or at different stages of the inhabitants' life. This flexibility contributes greatly to the adaptability of the house plan.



Another small space in the house which has flexibility in its use is the space upstairs in front of the stair hall. The average size is also 7 feet x 8 feet, although it varied slightly depending on the location of the stair hall. With two doors adjoining to both the hallway and the front room, it can be used as an independent room or an attached room to the front room. In the sampled homes, various uses of this room were observed reflecting the family situations. For example, it was used as a small child's bedroom, a children's playroom, a guest room, a serving room, a hobby room, or a walk-in closet. Unlike the other small space behind the hallway, this space was used neither as a bathroom nor as other mere service space, but rather used as a sort of livable spare room. However, with the same kind of flexibility in its use, this space also plays a role to make the plan flexible to the various lifestyles and changing needs.

As the final factor, I should mention the existence of extra space convertible into a livable space later on, such as an attic and a basement, which contributes to the adoptability of 19th-century side hall houses.

Although not all of the houses in East Boston have attics, many owners who have attics have converted them into bedrooms as the family size grew. The basements were also changed into hobby rooms or family rooms in a few cases. Those add-in spaces certainly offer adaptability.

So far, I have analyzed the possible reasons why the 19th-century side hall house is adaptable to various lifestyles and changing needs. The factors can be summarized as follows:

1. The uniform size, shape, and character of the rooms which do not define particular use, but allow various interpretations of use.
2. The clearly defined circulation space.
3. The non-hierarchical distribution of the rooms around the circulation space.
4. The generous openings between the rooms.
5. The flexibility of the small spaces adjacent to the main spaces.
6. The extra add-in spaces.

The 19th-century side hall house plan that was adopted by speculative developers and built by local contractors may not be regarded as "functional" according to the principle of Modern Architecture. However, it certainly has a potential of adapting to a variety of inhabitants' living situations including their changing needs; in that sense it can be said that the side hall house was a highly successful form of housing for anonymous users, and still has many points from which we can learn.

In addition, it might be interesting to note that some of the factors I analyzed here can also be applied to other vernacular housing types in different cultures, such as Mediteranean or Mesopotamian court houses and English Georgian or early Victorian houses. A study of all these pre-functionalism housing plans may tell us the clear difference in housing design criteria and priority from current plans, and what is missing in the present.

FOOTNOTES

CHAPTER THREE

1. Andrew Rabeneck, David Sheppard, and Peter Tom, "Housing: Flexibility/Adaptability?", Architecture Design (February, 1974), p. 86.
Amos Rapport, "The Personal Element in Housing: An Argument for Open-Ended Design," R.I.B.A. Journal (July, 1968), p. 303.
2. Ibid., p. 84.

CHAPTER FOUR:
MODIFICATIONS: PATTERNS AND IMPLICATIONS

Introduction

For the analysis of the reasons and implications of modifications, patterns of modification were identified, and then the analysis proceeded pattern by pattern. I attempted to classify the patterns according to the factor of modification for better understanding. However, this idea was abandoned because of the complexity of the relation between the identified patterns and their causes. Although the reasoning of a pattern of modification is not simple, it is clear that any pattern usually carries several different reasons and implications, and that the same pattern of modification is sometimes made for different sets of reasons in different conditions by different homeowners.

Therefore, instead of classifying the patterns according to building modification factors, I decided to explain the modifications of the part by part for the purpose of preserving integrity of causes and conditions. In this part of my thesis, attention to each different part of the house, first to the inside and second, the outside. Then I try to identify the patterns of modifications which involve the parts. For each pattern, I try to analyze the practical reasons for such a change, the owners' intentions, the social, cultural, and behavioral implications of the pattern of modification, and the effect of the modification on others.

However, the issues involved were rather different in interior modifications and exterior modifications. With interior modifications, the most important issues are the effect of inhabitants' use patterns on places of major

modification, and symbolic meanings which are given to certain places and elements by the owners through minor modifications, while the issue of owner's intention of self-expression to the public is inherent in exterior modification.

Although the analysis of the reasons and implications of modification is the purpose of this part of my thesis, I do not want to lose the vividness of the inhabitants' life, of which I could catch a glimpse during interviews. So I try to include as many descriptions as possible of the way they live in the houses, whenever these descriptions are related to the analysis of modifications. I also quote interview extracts in context for the same purpose.

Interior Modifications

Kitchen, Enlargement and Relocation

The kitchen appliances of the eleven homes that I was allowed to go inside were all changed by either the present or previous owners during the past thirty years. Among those cases the installation of new kitchen appliances often accompanied the enlargement of kitchen size. The kitchens of seven homes out of the eleven were enlarged by the present owners. The owners of the rest of the homes all expressed the desire for a larger kitchen. The original kitchens, whose size was approximately 12 ft. x 10 ft., were located at the end of the houses of all types of plan, except Type A-1 which normally had a kitchen in the basement. However, they were enlarged by expansions in the back (Type A-1) or knocking down the central party-wall in the back rooms (Type A-2, B, C).

Another pattern of widening kitchen size was to relocate the kitchen to the middle room from the back room. This pattern was observed in two Type A houses out of the seven which had enlarged kitchens. (Refer example #7, p. 00, and #2, p. 00). However, despite the similarity in the final results, the reasons for the kitchen relocation were revealed to be different between those two houses. In the case of example #7, the kitchen was relocated five years ago when the owner took over his late mother's house. The motive of the relocation was not the owner's functional needs, but technical suggestions from an amateur contractor, the owner's brother-in-law, who actually did the job.

M = The kitchen was back there, now the kitchen is right here.
 -- why did you move the kitchen? --

M = Well, a lot easier for what we had to put in--for plumbing. We had a dishwasher to put in, we had a garbage disposal. . . So all the plumbing was easier to work with [here in the middle room than the back room]. That's what my brother-in-law wanted.

It is true that a middle room kitchen has an advantage for a plumber to install modern kitchen appliances, which often require much complicated plumbing work, because the middle room has a basement right under it, and he can work easily in there with a boiler and other main service conduits which are usually located in the basement.

In the other case, in which the owner moved the kitchen from the back room to the middle room thirty-one years ago, it was motivated by the condition of the original house.

F = This wasn't a kitchen. There was a little shed there, (on the back), and there was a little stove, it was a wodd-burning stove . . ., and a sink in there. And when we bought this house, the roof was caved in, so one just closed that area off for quite a few years and we needed a kitchen here.

She added other reasons afterwards,

F = I put the kitchen in the middle . . . because I felt if you came through the (entrance) door . . . not for them walking through a dining room or . . . you know, I had a lot of children, and I didn't want them to run in through other rooms. So I felt this would be a perfect place for the kitchen in . . . because when you enter a home, this is the first room you go in, the kitchen! So I put the kitchen in here.

Whatever the initial condition was, the form of the middle room kitchen helps the housewife to keep the rest of the house clean from children's muddy shoes.

This pattern of modification partly derives from the frequent use of the

front door as a service entry in such a dense city neighborhood. Many social scientists have indicated the fact that the back entry connected directly to the kitchen is more frequently used as an informal entry by both family members and their close acquaintances in daily situations, while the front door is reserved for rather formal occasions. However, in a dense city neighborhood like East Boston, where it is so thickly housed with such little spaces between houses that one can hardly get access from the sidewalk to the backyard, the front door tends to be used frequently as a service entry. In fact, the latter house of the two cases was a row house, so naturally they had no access to the back door from the street. In this situation, it is quite natural for a housewife to desire to have her kitchen closer to the front door both for the convenience of carrying groceries from shopping, and for keeping the house clean from the dirt and snow children bring in on their shoes. Thus, the kitchen relocation from the back room to the middle room can be considered as a form of their adaptation to such a dense urban environment.

As the kitchen was moved to the middle room, the back room was allowed to be used as a living room or a den. As a result, the backyard has become a place for recreational activities rather than a service yard for the kitchen. In the former case the back room was converted into a living room and the back door at the end of the back room was replaced by a wall-to-wall sliding glass door. The backyard was used for playing ping-pong games. In the latter case, the back room was used as a den and a greenhouse was attached to it at the end.

Being large enough to have a set of table and chairs in it, the enlarged kitchen functions as a center of the family's daily activities, whatever position it occupies in the plan. Especially for most of the Italian working class housewives in East Boston, the kitchen is the place where they spend most of the time during a day.

F: Well, I'm mostly in the kitchen all day, you know, once you clean it up and wash it up or everything. And at night, we spend most of our time here. My husband likes to sit in the kitchen to watch television. So, that's why the T.V. is there (in the kitchen). He don't like to sit in the den because sofas are too comfortable. He just falls asleep there.

F: . I live out of my kitchen, you know. I go right into my kitchen (through the back door), and do everything in my kitchen.

It was rather surprising that most of the homes in which I gained access had an additional T.V. set in the eat-in kitchen or in an area right beside the kitchen where they can watch it from the kitchen. This shows us the various activities which may occur in the kitchen as well as the considerable length of time the housewife and other family members may spend in the kitchen.

Another clue to indicate kitchen use is the fact that most of the homeowners interviewed inside their houses showed us directly into the kitchen, not into the living room or the den, and were interviewed, all of us sitting at the dining table in the kitchen. A T.V. set in the kitchen was often kept on even during the interview. In some cases, we saw some friends and relatives being entertained in the kitchen when we visited their homes. Even in those cases, they let us come into the kitchen for interviews. Thus, the kitchen is also regarded by East Bostonians as an informal

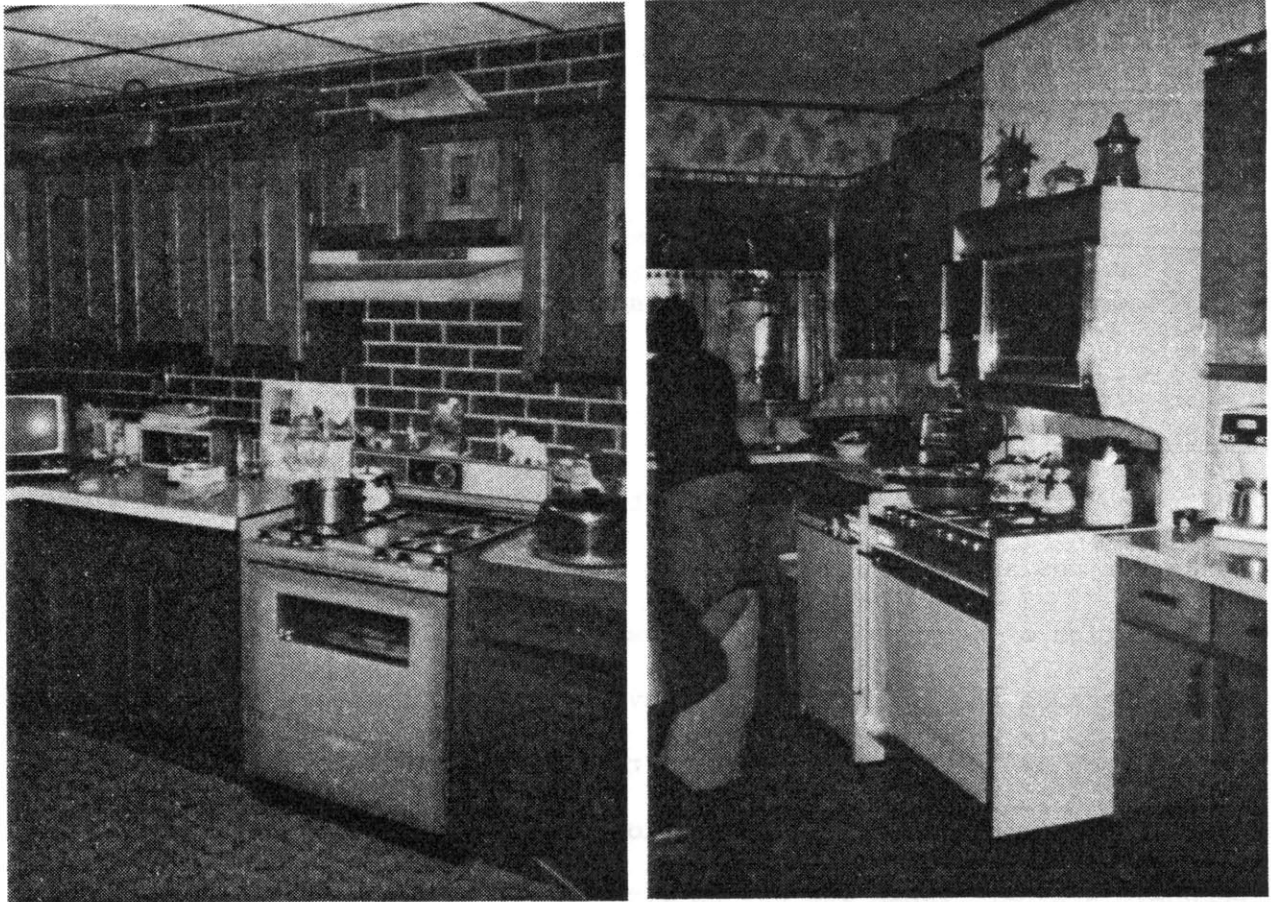
reception place for people other than family members, as well as a center for family activities.

F: We like the kitchen . . . I mean entertaining in a living room, if you had a dining room attached to it, I could see that. You can sit in the living room. But, I think you eventually have to get up to sit at the (dining) table to have a coffee, don't you. So stay there and have it!

Kitchen Appliances

The reasons for the enlargement of kitchen size are usually needs of space for new appliances and a dining table, as well as for other activities. Installation of new kitchen appliances is one of the most costly modifications, because the owners normally have to hire contractors to install them, which are already expensive by themselves. Therefore, the existence or absence of this type of modification largely depends on the family's economic status. Those who put up with thirty to forty-year old appliances or a small, basement kitchen were all elderly owners with financial limitations. Except in those instances, however, the owners usually put a relatively large amount of investment into kitchen appliances rather than the other parts of the house. The melamine-top cabinets and the sink with elaborate woodwork, which is matched well with that of the cupboard, the large size refrigerator-freezer, the gas stove and oven, and an innovative labor-saving device, the dishwasher, were regarded as elements representing a "modern kitchen" by most of the homeowners in East Boston. A washing machine and a dryer were also placed in the kitchen in some cases.

Since the kitchen is used as an informal social setting for family



members and others, those kitchen appliances are considered by housewives in East Boston not only to be utilitarian devices, but also to be a part of room decorations like furniture, to express their taste and preference by careful choices of colours, styles, and models. Moreover, the neatly completed modern kitchens are regarded as symbolizing the economic stability of the family and the housewife's ability as a wife, a mother, and a housekeeper.

Kitchen, Decorations

As I mentioned earlier, it is quite natural for East Boston's housewives to try to keep their kitchens as clean and attractive as possible, because the kitchen is not only the place they spend most of their time in a day,

but also the place where they are involved in various types of informal activities among their family members and others.

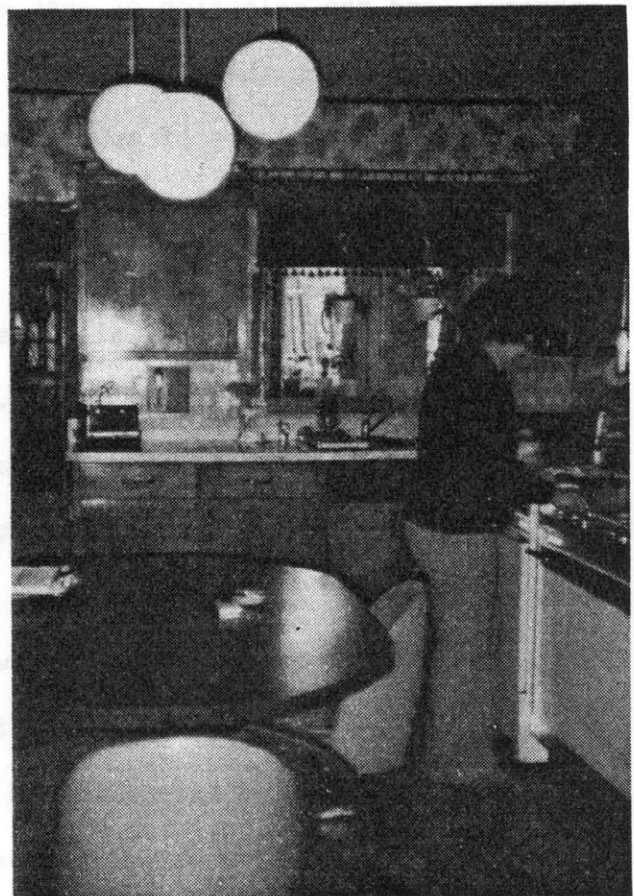
Cabinets and cupboards are regarded as the most influential elements upon the atmosphere of the kitchen. Housewives are quite conscious of the selection of finish materials and styles. The same criteria as for choosing furniture seem to be often applied for the selection of cabinets and cupboards, and those with elaborate wooden panel work were considered to be most valuable of all.

An easy-to-clean linoleum floor is an indispensable element for the "modern kitchen." The market offers a number of variations in colors and patterns, and the selection of what housewives like from them becomes a means of expressing their own tastes and preferences. Carefully coordinated to the colours of appliances and walls, bright colours, in general, were the choice of the housewives of the sampled homes.

The way of dealing with the walls was varied among the homes, reflecting individual housewives' ideas, tastes, and intentions. Using different kinds of materials such as wooden veneer panels, wallpapers, ceramic tiles, linoleum flooring material, brick-patterned exterior wall material, and some others, they tried to make them highly personalized as well as easy to clean. While the characters of the wall finishes of other public places in a home, such as the living room and the dining room, are usually plain and neutral, the finish of kitchen walls often has a special purpose of expressing each housewife's distinctive taste and some particular desires.

F: I want to feel like I'm outside when I'm inside. That's why I put this wall. (A side wall, white painted bond stone finish; example #2, p.35)
I don't want wallpaper, (because) everybody has wallpaper. So, I bought some red stone at a cheap price and I painted it in white.

There were other examples of the same kind of kitchen wall modification with exterior finish material in several homes. In one home, (example #1, p. 33) a wall in the kitchen was finished with a wall-to-wall piece of wallpaper of the color of photographed forest scenery, which made one feel as if he was in an exterior space. Adoption of such exterior materials and exterior images for the kitchen wall modification might be just a fad or because of the incidental availability of those materials. However, those examples can also be interpreted as expressions of the housewives' unrealiz-



able dreams of escaping from daily housework in the kitchen.

Kitchen windows also are an element to which many housewives pay much attention in terms of modifications and decorations. A window in front of the sink is what many housewives desire to have. In most of the sampled homes, they have placed a window in front of the sink either by making a new window or by placing the sink at the existing window. Most of the walls are taken up by appliances and cabinets, so that the modified kitchen usually has one window which is carefully decorated and personalized with curtains, plants, and other small things of the housewives' memories and sentiments. Housewives pay special attention to the small area around the sink where they stand most of the time during their kitchen work. This small area is the focal point in the kitchen, and they try to create a highly personalized small world of their own there.

Therefore, for most housewives in East Boston, the kitchen seems to be a personal place at home where they can be queens, and can express themselves almost as they want.

Living Room, Den, Dining Room

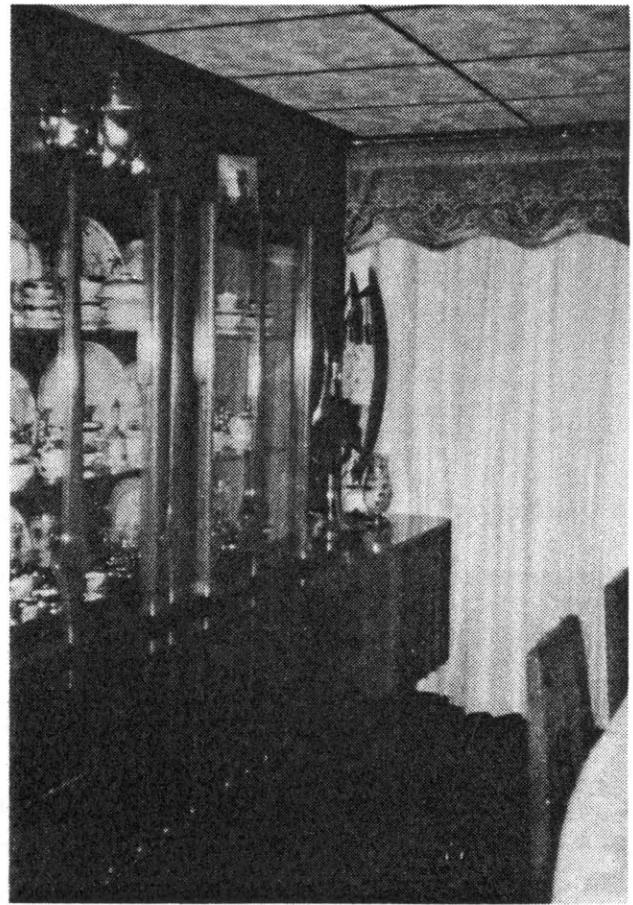
Public places in the house besides the kitchen are classified into three kinds: livingroom, den, and dining room. The kind of public places and the number of rooms for those purposes were varied among the sampled homes. Various examples of the composition of those different public places were observed, such as a house with just a living room, a living room and a den, a dining room and a den, a dining room and a living room, or with all of

those three. In spite of this variety, the size and the shape of the rooms of original houses have rarely been changed. As I mentioned earlier in the section on Adaptability of the 19th-Century House Plan (pp. 45-54), the standardized room size, approximately 12-13 ft. x 12-13 ft., was applicable to any of those uses, although some of the owners expanded their backroom in order to have a larger living room.

The number of rooms used as public places in a home usually depends on the family size and the total number of rooms the house has. Their decision regarding the number of rooms they use for public purposes is solely a matter of trade-off with the number of bedrooms they need. Depending on the criteria of the owner, the proportion between public area and private area in a house can be arranged differently, even among families with the same family structure. The adaptable characteristics of the original house plan make this sort of adjustment by trade-off possible. However, the size of an enlarged kitchen is almost the same among the sampled homes despite the variety in the use and total size of other public areas in the homes. The kitchen always occupies a certain amount of space, because of its highest priority in the public area. This indicates the fact that a large kitchen is most essential for the homeowners in East Boston, while they regard the function of other public places such as living rooms and dining rooms as rather supplementary.

Dining Room

Ways of using rooms in the public area of a home, except the kitchen, largely seem to depend on the kinds of intra-family, as well as inter-



family activities. It is influenced especially by one of their social characteristics, the close relationship among relatives, which involves frequent mutual visits. Adapting to such an activity pattern, many homes have a dining room besides the dining area in the kitchen, and the dining room is the place where the homeowners in East Boston entertain their guests. The room which is adjacent to the kitchen and nearer to the front entrance is normally used as a dining room, and the kitchen and the dining room are always connected by a generous opening. A dining room usually has the most formal arrangement in the house, with such elements as a wall-to-wall carpet, elaborate wooden chairs and a dining table, often with a point lace tablecloth on it, a cupboard which contains special tableweares and other treasures, a floor-to-ceiling drapery on the windows, and a chandelier or

similar kind of lamp. The dining room is not used frequently in daily situations, but used on special occasions such as the celebration of holidays, birthdays, and when they have guests.

F: I use it when I have guests, holidays . . . well, I use it always on holidays. If we have a graduation, a birthday party, something like that, we use it. If we have a special guest to come, or if family is going to be all here, naturally we're not going to sit at this table, (in the kitchen) so, I use that, and we put children here!

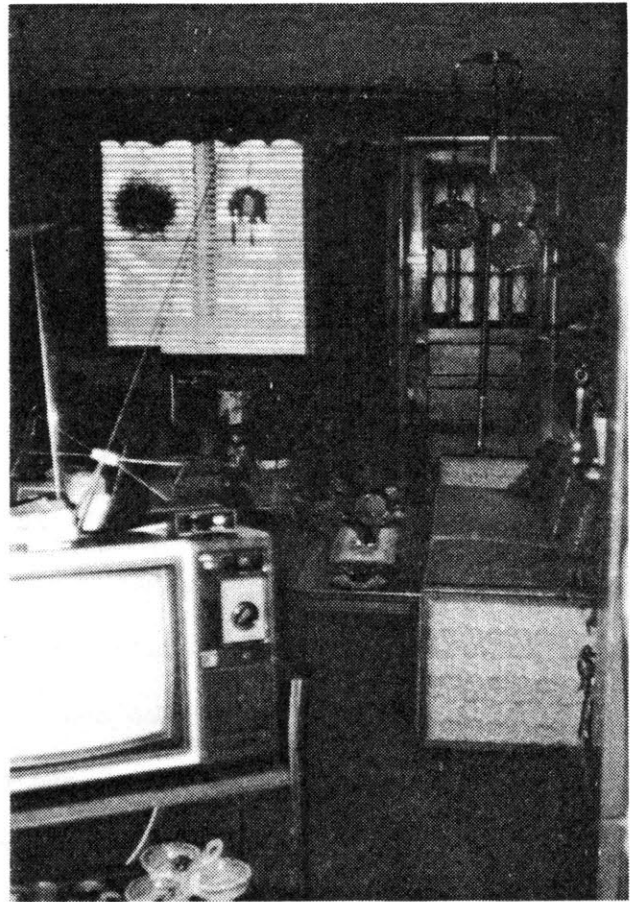
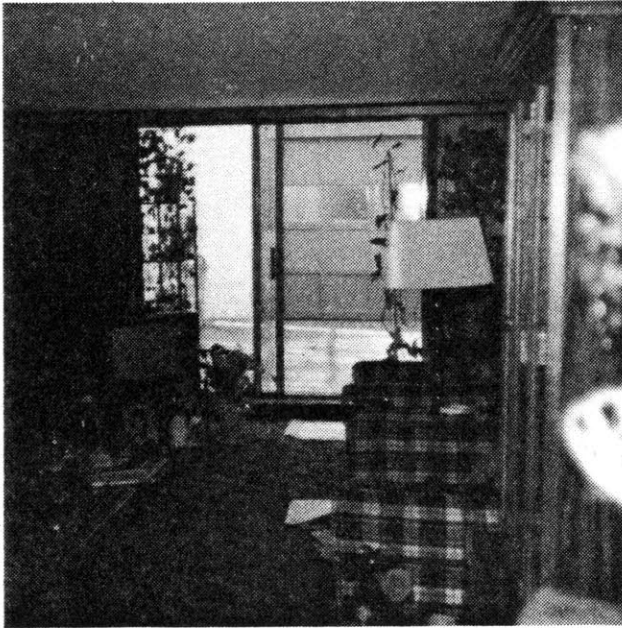
A dining room as a place to entertain guests seems to be indispensable for the owners who come from a big family and are often visited by relatives and grown-up children with their families. Moreover, such use of a dining room indicates that meals play an important role in their social life.

F: I use it quite often, yes I do.
I like to entertain . . . I think, because I came from a big family. My mother always liked to entertain, even though she had a big family.
So, we usually call this house "the hotel" . . . or we call it "the restaurant," you know, everybody has a nickname for this house, because we always have so many people in and out of the house all the time, you know, weekends and everything. So they call it everything, . . . we always have somebody.

Den

'Den' is a quite common word among the residents in East Boston. In a Type A or Type B house, a living space that is next to the kitchen and located either in the middle or back room is called a den, while it is called a living room if it is the only public area except the kitchen, or if it is located in the front or middle room and is not adjacent to the kitchen.

When a home has a den, it is used only among family members as an informal



and intimate gathering place. While an eat-in kitchen serves as a center of family activities in daytime, a den is the place where the entire family can sit together after supper to relax. A T.V. set is essential for the room, where there are usually other devices for relaxation such as a hi-hi set and a rocking chair. In some cases, the den in the back room was partially used as the housewife's hobby room to grow plants, taking advantage of the immediate access to the back yard. A greenhouse was added to it in one case, and a wall-to-wall sliding glass door was put at the end-wall in another case.

In the sampled homes, the interior decoration of the den was usually simple, and took less attention than the rest of the public areas. The furniture

and carpets were less valuable compared with those of a living room, and they were often those items which had been previously used in the living room.

Living Room

Compared with a den, a living room usually has more formal characteristics, although its use and formality differ in each home depending on the existence and the absence of other kinds of public places in the home. In the case where the home does not have a den, it is used like a den as a major informal gathering place for the family members. However, in one house where they had both a den and a living room, most of the family activities take place in the den, and the living room had the character of a formal reception room like a dining room.

The use of a living room varies also depending on whether there are small children in the family. In the majority of the sampled homes where there were small children, the living room was used rather as their playroom. It was especially true with the child-raising young couples who had nearby friends and relatives of about the same age with small children. During their frequent visits, the parents always occupy the kitchen, watching T.V. and chatting, while letting their children play in the living room. As the reflection of such living room use, the small room next to the living room was converted into a children's toy room in one case, or a storage room in order to keep adults' treasures such as a stereo set, a camera, and fishing poles away from their children in another case. In most of those homes with small children, the living room was furnished with fewer pieces of furniture,

simply decorated, and normally wallpapered.

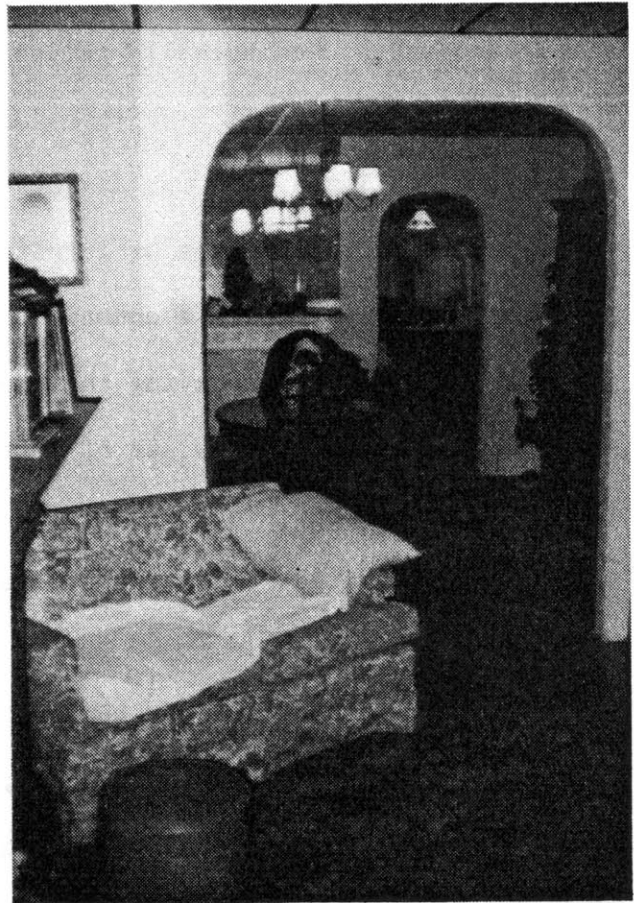
However, as children grow up, living rooms are arranged more carefully by the owners with more pieces of furniture and decorations. The expansion of a den or a family room is a common modification at this stage of the family's growth. Accompanying the expansion, the furniture in a living room is often replaced by a new set of more elaborate furniture and is moved to the new family room. Then the living room loses the role as a center of the family activities and gains a more formal character instead.

Furthermore, for a child-free retired couple, most of their daily activities take place in the kitchen and the den, if they have one, and the living room becomes a rarely-used formal reception room where they like to put photographs of their children and other family members, and preferred memorabilia.

Thus, the use and character of a living room differs considerably in each family and in each stage of family growth. However, the residents' needs for such variety and changes are usually satisfied by changing furniture, carpets, and decorations, and rarely lead to major modifications of the size and shape of the spaces.

Relation Between Public Places in the House

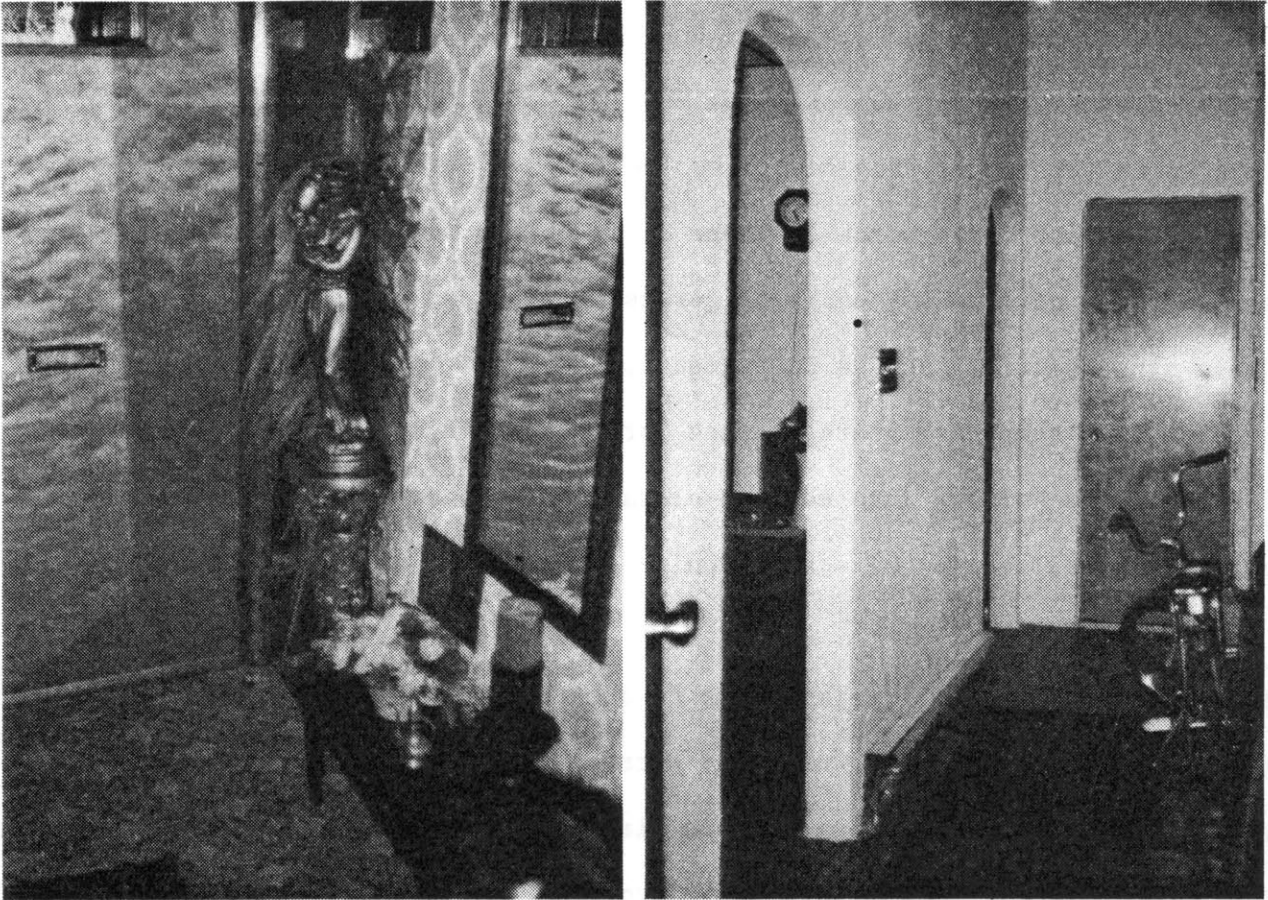
In cases with more than two public places in a house, the opening between those rooms is usually left open without doors. In the eleven homes to which I gained access, only one owner put in a decorative screen to make the opening between the kitchen and the dining room narrower, but otherwise



there was no case in which the openings between public places in a house were modified to be closed off. Especially to the housewives in East Boston, it seems very important that the kitchen is connected with other rooms by generous openings either in order to watch their small children play in other rooms or to get visual communication with their guests and families in other rooms during their work in the kitchen. For use as a public area, the original floor plan, which has ambiguous spatial relationship between main rooms, was accepted by the residents in East Boston without any major modifications.

Hallway

Although none of the owners in the sampled homes drastically modified the



entry-stair hall, characteristic of the original house many of them removed the doors between the hall and the public places such as the kitchen, living room, and dining room in order to gain a certain openness of space in the house. This pattern of modification was not observed in the homes whose stair hall was unheated, or whose owner had a tenant in the house. However, in other cases it was a fairly common pattern of modification. Some of the openings were changed into arch-shapes, or added decorative screen doors to indicate the entry to a formal dining room. The owners always try to control the relation between spaces and the circulation from the entrance by modifying existing openings between rooms before they modify major structural elements such as walls.

The large hallway of the side hall house mainly functions as a circulation space, whereas in East Boston homes it also works as the place where they hang their wet coats, drop dirt from their shoes, and keep children's dirty bikes and hockey sticks. Those dirty things would normally be put in the entrance porch, back entry or garage in suburban situations, but in a dense urban setting such as East Boston, the front hallway is used of necessity as temporary storage space for those things. To alter the floor finish of the hallway into easy-to-clean linoleum, or to put a long floor mat in the hallway is the adaptation to such hallway use.

In spite of those utilitarian needs to use the hallway, many owners still hope to keep their hallway neat and attractive, since it is the first place one enters in the house and the last into the house, and the last place one leaves. Some owners had mirrors on the walls of their hallways, or put some decorations such as statues and artificial flower pots. For others, lamps in the hallway and the handrail at the staircase were the alternative means of expressing their tastes.

Bathroom

In the same way as kitchen modifications, bathroom modifications, which need costly plumbing work, are considered as one of the major home improvement jobs by the owners. However, being necessitated by the technical superannuation of appliances, the bathroom is one of the places in a house which tends to be modified many times. Every sampled home received major bathroom modifications, such as relocation of the bathrooms and installation of all new appliances, at least once during the last

thirty years. Some of the bathrooms were given additional modifications such as re-flooring, tiling, and some appliance exchanges. For example, one owner abandoned a basement bathroom to install a new three-piece bathroom on the second floor thirty-one years ago, and then changed the sink into a cabinet sink five years ago.

Most of the basement bathrooms of the original single-family houses have been relocated to the first and/or second floors. The number of bathrooms and their position in a house vary in each family; for example, a single-family home can have a full bath on the main floor and a half bath on the bedroom floor, or a half bath on the main floor and a full bath on the bedroom floor, or just a full bath on either floor. However, they are positioned in the small space behind the hallway with few exceptions.

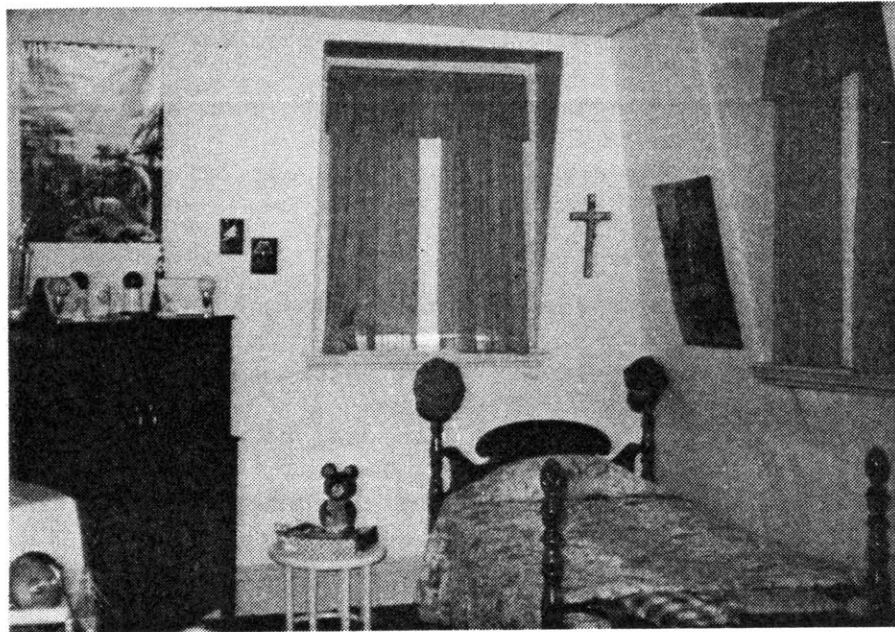
Because of the limited size of the space (approximately 7 ft. x 8 ft.), a typical bathroom contains no other appliances than a sink, a bathtub, and a toilet. In terms of size, the bathrooms are minimal, but most owners try to give as much home atmosphere as possible to their bathrooms by paying special attention in selecting the colors and styles of appliances, tiles, floor materials, and other bathroom goods. For most of the owners, especially housewives, the neatness and cleanliness of their bathrooms like those of kitchens, are also a point of pride.

Bedroom

I mentioned earlier that one reason for the adaptability of the original house plan is the uniform size and character of the rooms, by which the room

use is less defined. The lack of built-in closets is another characteristic of the original house plan to enhance its adaptability. Namely, without built-in closets, which indicate the room use as bedroom, any room can be used as either, for example, a living room or a dining room. However, when the rooms are used as bedrooms, the lack of closet space becomes a problem as far as the present average living standard is concerned. Additions of built-in closets in bedrooms were therefore noticed in many sampled homes. A typical way of adding built-in closets is to modify the party-wall between the front and middle rooms in order to make two closets on both sides, although this method makes one of the rooms smaller. The standard room size of the original house plan (12-13 ft. x 12-13 ft.) is usually too small for a master bedroom with a built-in closet in it; consequently, in some sampled homes, they had closets outside the master bedroom, or converted a small room adjacent to the bedroom into a walk-in closet. Thus, the lack of storage space is one of the major troubles of these 19th-Century houses.

There were a couple of cases of enlarging bedroom size by modifying party-walls. In one case, it was because of a king-sized bed, and in the other case, the purpose was "to make furniture comfortable." In both cases, increasing amounts of furniture in the bedroom affected the modifications. In terms of decoration, bedrooms usually receive the least worked-out treatment in these homes. Bedrooms are probably given the lowest priority as subjects of home improvement jobs. Besides built-in closets, wallpaper and carpet were the most elaborate sorts of modifications in the sampled homes. Otherwise, most decorations of bedrooms were simple. Probably, bedrooms



are more important for teenagers in junior or senior high school than for their parents, since bedrooms are not only their sleeping places, but also where they entertain their friends, and they can express their own tastes. Some of the teenaged children's bedrooms in the sampled homes were carefully decorated by them with curtains, posters, pin-ups, etc. They often had their own T.V. set and in some cases a stereo set, as well, in their bedrooms.

Attic

The large attic is a characteristic feature of the 19th-century, pre-functionalism houses, although not all the houses in East Boston have attics. Some of the sampled homes had bedrooms in the attics. This pattern of modification was quite popular in East Boston where "big families" were predominant. However, because of the sharp population decrease during the past several decades, (approximately 57,000 residents in 1940 to 39,800 residents in 1970) most of those added bedrooms in the attics are vacant

now. Those houses normally have original stairs to the attic, which makes the bedroom addition easily achieved. Such major modifications as lifting the roof to get more bedroom space in the attic are rare in East Boston.

Generally speaking, the owners of a single-family house added bedrooms in the attic as the size of the family grew. After the children grew up and left home, the bedrooms in the attic were used as spare rooms where relatives and guests can stay. There was one owner who told us of her plan to add bedrooms in the attic and convert the upstairs into an apartment unit at the time of her husband's retirement. The existence of such unfinished add-in space certainly becomes a factor of the house's adaptability.

Basement

The basement is also a characteristic feature of such an old housing type. All of the thirty-eight sampled homes had basements; only two of them were utilized as livable space. One was used as a kitchen for a retired elderly couple, and the other had been changed into a kind of hobby room. Most of the others were left as cellars. The conversion of the basement into a livable space is not a common pattern of modification in East Boston. The demand for such conversion is quite low, owing to the population decrease.

In the cases where the basement is utilized as livable space, it usually contains a recreational place such as a game room, a rumpus room, or a hobby room. For example, a retired male home-owner, who voluntarily

coaches a youth baseball team and a football team, had a room for this voluntary work in the basement of his three-decker. The house has a high basement, and he modified one of its windows into an entrance to the basement so that he can enter it directly from the side walk. He said:

M: This is my room. This is mine . . . because I'm involved with football and I'm involved with kids' baseball. So, what we have here is . . . we have meetings here, I do all my paper work here. Then when I have a fight with my wife, I come down here, and I lock up the door.

--So, this is a kind of your study room . . .--

Right, right . . . well, it's a 'get away room', I call it. Shut the doors and get away from everything, you know. . . like a couple of my friends come and we spend whole evening down here.

Besides this house, another example of basement conversion was observed in the same neighborhood. In this case, a billiards table was placed in the basement, and several adolescents were hanging around the basement door. Moreover, the basements of a couple of homes, which have high basements, were converted into garages with structural modifications of



the front parts of large bays.

However, those examples of modifications are still rare as far as the whole Eagle Hill neighborhood is concerned. In most of the homes, the basements are used as a place to install a boiler, and to store, for example, used furniture, seasonal decorations such as a Christmas tree, and snow shovels. In some homes, they use the basement as a laundry or a dry room, taking advantage of the heat which is radiated from the heating systems; however, recent diffusion of dryers mitigates the importance of basements as such places.

Some of the possible functions of the basement of East Boston houses, for example, as a storage, would be met by garages in the suburban situations. However, in a dense urban situation such as East Boston, the basement often carries important service functions which make the rest of the space in the house work appropriately, as well as offering opportunities to add leisure spaces. Whatever the reason for using the basement, the direct entry from the sidewalk enhances the utilization of the space.

Heating System

Modification of heating systems and radiators is one of the most common types of modifications in the sampled homes despite the high cost of their installment. Among the thirty-eight sampled homes, only one owned by an elderly lady, had no central heating system. All the other homes installed central oil-heating systems during the past thirty to forty years. Moreover, four of them have been converted into gas-heating

systems. Regarding radiators, about half of the home owners in the sampled homes changed their cast iron radiators into newer copper, baseboard-type radiators.

These changes on heating systems are considered to be one of the major home improvement jobs by the owners, and usually received high priority among other kinds of modifications. Achievement of better thermal comfort is essential in the area which has long and harsh winters such as Boston. At the same time, the homeowners' chief concern regarding heating systems is their running cost and efficiency. Energy cost saving becomes the main purpose of recent modifications of heating systems. Being affected by both changing energy sources for home heating and the development of energy-related technology, the heating system and its plumbing are the most flexible parts in the house.

Ceiling and Insulation

Energy cost saving, as well as achievement of better thermal comfort, is one of the major interests of home owners recently, and they seem to try almost any kind of improvement job for that purpose. Other than modification of the heating system, interior modifications for that purpose include new lower ceilings and insulation materials.

In most of the sampled homes, the high ceilings (approx. 9-10 ft. high) of the original houses were lowered by one to two feet with suspended ceilings. The owners commonly hate high ceilings, because it costs more to heat rooms with high ceilings. As the original plaster ceilings get old and

cracked, they usually put new suspended ceilings underneath instead of trying to repair the original ones. Energy cost saving generally has higher priority than the spaciousness of the rooms among home owners in East Boston.

Installation of insulation materials in the walls and roof plains is another way of saving energy; however, it is a much less common type of modification in East Boston's homes, because it requires destruction of wall surfaces. Although it is less effective, the insulation of walls is more commonly achieved by means of changing the exterior siding material, which is easier than putting insulation in the walls, and has other advantages for the owners such as easy maintenance and a changing exterior image.

Electric Conduits

Increasing use of electric appliances at homes required many owners to add new plug receptacles. This is a kind of modification which was hardly visible to the researcher, but noted by the owners as an essential improvement job. Usually a professional electrician has to be hired for this modification, and the work often involves destruction of small parts of walls. Therefore, although the modified elements are small, this modification is considered troublesome by the owners.

Apartment Conversion

To convert a three or two and one-half story single-family house into an owner-occupied apartment house is quite popular in East Boston. As

their children grow up and they retire, many owners convert their houses into owner-occupied apartment houses, each of which normally contains the owner's unit and an apartment, to get income after their retirement. In many cases, tenants are a family of one of the owner's adult children or the owner's relatives. Even if they are not, the relationship between tenants and the owner is kept familiar by mutual trust and friendship.

An original single-family house with either Type A and Type B plan is relatively easy to convert into an apartment house. It can be done without major modifications of the building structure. For example, the first floor, which is used as the main floor of the single-family house, becomes a one-bedroom apartment unit if the front room is used as a bedroom. Upstairs, the original bedroom floors can be converted into a three or four-bedroom apartment unit with modifications of the attic, installation of a kitchen in the back room or the middle room, and, if necessary, a bathroom in the space behind the staircase. It is very rare in East Boston that an attic or a basement is converted into an apartment unit.

It is also rare in East Boston that the main entry of a single-family house and the first floor hallway are modified along with the apartment conversion in such a way that each dwelling unit has its entrance door on the facade like a multi-family house. To share an entry hall is considered rather natural both by the owner and the tenants, whose relationship is much more family-like than the normal relationship between a landlord and the tenants. However, one owner in the sampled homes

added a door at the end of the staircase on the second floor in order to prevent small children of his tenant downstairs from breaking into the owner's upstairs unit.

The owner occupies either the upper floor unit or the first floor unit, depending upon each owner's situation. Four out of eight owners of the sampled owner-occupied apartment houses lived on the first floor, and the other four occupied upstairs units. Use is restricted by the size of a one-bedroom unit. All four owners who lived on the first floor were elderly owners who have their grown-up children as tenants upstairs. On the other hand, the owners who live in the second floor units were not necessarily elderly owners, but those who have relatives or non-family members. They mentioned as the reasons for occupying the upper floor unit that it had more rooms than the first floor unit, they felt secure and quiet, and it was easy to maintain the unit on the second floor, since the tenants and others would not walk in the hallway there. But for one early middle-aged owner who had acquired a house five years earlier and rented his first floor to a tenant, the initial reason was rather different.

M: We once lived on the first floor. We fixed the first floor first. But, we ran out of money, so, we rented the first floor first. We couldn't rent the second floor because it was in bad shape. So, we decided for ourselves suffer for two years and at least get the rent from the first floor.

The owners of single-family houses also spoke about apartment conversion. Some of them mentioned it as their future plans, and some of them in the negative sense that they would never have tenants. This tells us that

apartment conversion is such a common pattern in the area that most of the homeowners have it in mind, whether they desire it or not. It has an especially great significance for an aged owner who can convert a part of his home into an apartment in order to get income after his retirement. Such apartment conversion enables the owner not only to stay in his house all his life, but also to keep a close but independent relationship with the younger generations of his family by having them as his tenants in the house. The characteristics of the housing type which allow this pattern of inhabitation by both generations may have partly contributed to the existing stability and tightness of the East Boston community.

Exterior Modifications

Siding

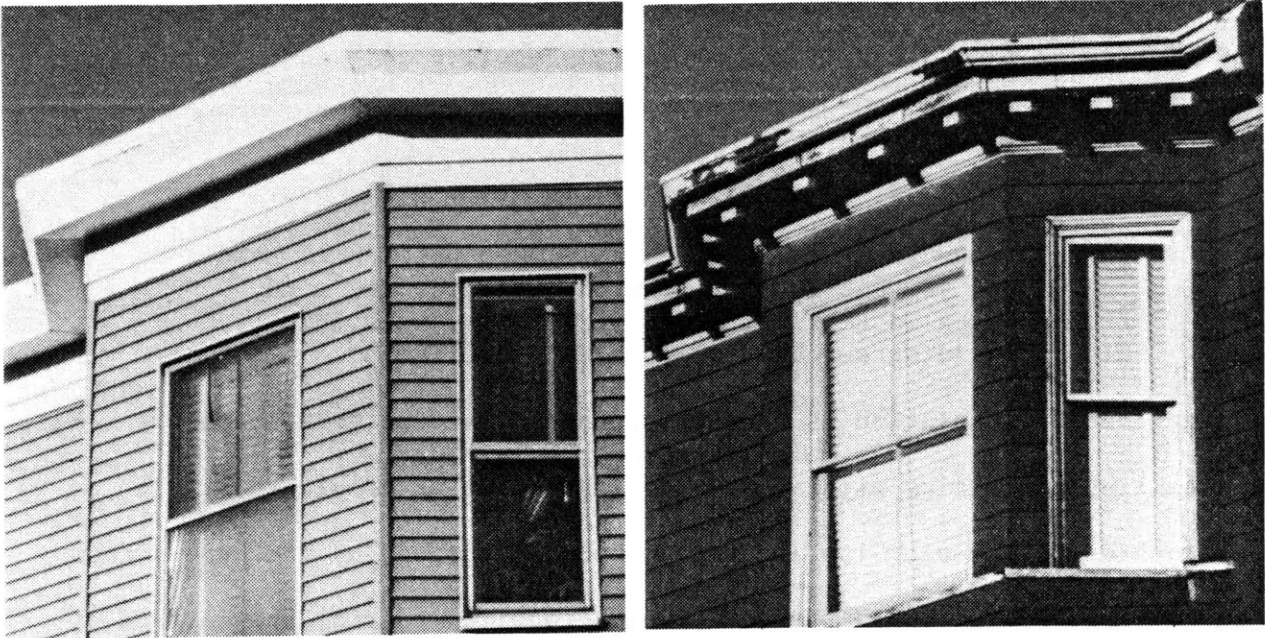
Few houses still maintain their original sidings, which are wood shingles and clapboards, after one hundred to one hundred forty years. About two-thirds of the houses in the Eagle Hill area of East Boston have had their siding materials modified. In most cases the original wood shingles and clapboards were replaced by asphalt shingles, which became popular thirty to forty years ago, and most of them were again covered with aluminum or vinyl siding in the last ten years. Installation of aluminum or vinyl siding has become increasingly popular in East Boston neighborhoods. For example, 45% of all the Princeton Street homes have this type of



siding. Siding with a kind of artificial stone called bond-stone is also popular; however, this material is usually used supplementally and rarely covers a whole facade or a house.

Since installation of new siding such as aluminum or vinyl sidings is a costly modification which needs professional labor, the owner, often does not install them on all the surface of the house at once, but piece by piece. In the case of a detached house, siding of the sidewalls is often neglected, especially when the houses on both sides stand so close that one can hardly see the side walls from the sidewalk. It is not a rare case that owners put new sidings only on the front facade and the side walls back one or two feet from the edges, while they retain the old sidings on the back facade and the rest of the side walls. Even the siding of a facade is often remodeled piece by piece. For example, only the facade of the upper floor unit where the owner lives was remodeled in one case, and bond stone is often added only on the lower part of a facade afterward. This piecemeal process of siding modification causes juxtaposition of various materials, which seems to become a new style that characterizes the street-scape in East Boston.

Installation of new siding materials usually is accompanied by modification or distortion of the original house's architectural design context. The original details of ornaments such as dentils, window trims, cornices, and brackets are removed or covered up with new siding materials. Consequently, the character of the houses becomes simpler. The steeper roof plains of a mansard-type roof are usually finished not with roofing



materials but with siding materials in recent modifications. It was revealed in the interviews, however, that this simplification of the original architectural details and distortion of the original design context was usually not the owners' decision but the local contractors'. For the local contractors, installation of new aluminum or vinyl sidings automatically includes modifications of details and context without the owners' specifications. On the contrary, to the concerns of city gentrifiers, most of the homeowners or local contractors in East Boston are not interested in preservation of old housing architecture at all, but they rather admire such a simplified and modified character of a remodeled house as a "modern look."

The installation of new siding is usually motivated by troubles caused by the natural wear of the old siding. Many owners mentioned the problems of wooden shingles against wind and rain. Especially the edges

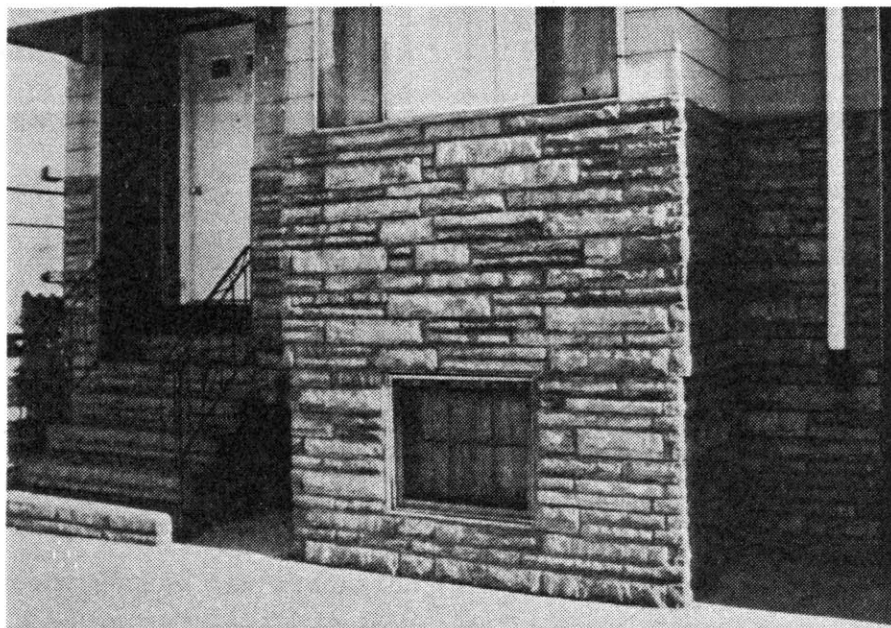
of sidings at the window frames are easily spoiled and caused troubles in many cases.

M: We put up new siding because, you see, the shingles . . . there is nothing for draft through here, see. And the walls around the windows were leaky when water hits hard . . . when you get south east wind, you see, the wind from the sea is terrible here So, with this aluminum siding we cured all the rain problem.

To get better insulation is another purpose of siding modifications.

Installing new siding with a layer of insulation material beneath it is considered a easier job and more commonly accepted by the owners than installing insulation in the wall, which requires tearing the surface of the walls. Brightly colored sidings are preferred by the owners recently because they are more efficient than dark colors in terms of heat radiation and absorption. Energy cost conservation is still their concern here. Ease of maintenance is another attraction of new siding materials. Aluminum siding and vinyl siding are both washable and do not need any future painting, which is increasingly expensive recently. For the majority of the homeowners in East Boston, one of the most important things about houses is that it costs less to maintain the buildings, not the pure nature of the siding material, nor its originality.

Modification of the lower part of a facade with bond store siding material is a characteristic mode of modification which is also uniformly common in this area. However, the reasons for such partial siding are different from those of aluminum or vinyl siding. Causes of deterioration of the lower part of the facade are man-made as well as natural wear. Since there are no front yards and the facade is within easy reach of



passers-by, the new siding materials are particularly vulnerable to denting by children on their way to school and just through normal street play. The main reason for this modification is to protect the ground floor facade against such abrasion and vandalism.

M: That's to protect . . . , you know, children sometimes . . . then go over there and start fooling around aluminum siding and spoit it. So, I put this. They call it Colorado stones. Quite a few have this here.

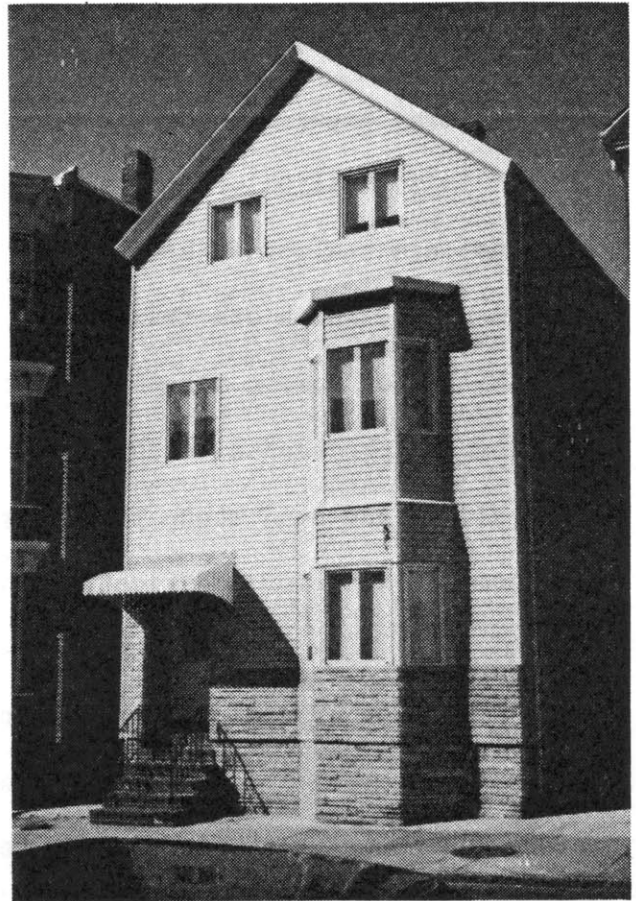
In East Boston, where there are fewer public open spaces than in the city on average, streets and sidewalks became major outdoor play areas for children and teenagers, and being barely exposed to the sidewalk, the houses' ground floor facades often become a part of their playing facilities or objects of their challenges. For example, two entrance stoops across the street from each other become very suitable goals for their street hockey, and for small children who have plastic triangles, it seems most exciting to drive them fast, bumping and smashing their rear tires onto every edge of the bay windows projecting to

the sidewalk. Home owners modify the lower portions of the facades because of those children's street activities. Especially in areas around schools in East Boston, children's vandalism against private and public property has been an increasingly serious problem in the last ten years.

Besides these causes and practical reasons for siding modification, installation of new siding is considered by the owners as a primary means of expressing their views toward neighbors and neighborhood identities among them. For example, since the change of siding is most obvious from the outside, installation of aluminum or vinyl siding is regarded by the owners in East Boston as almost a sub-culturally determined symbol of "keeping up" the properties; and for most of the owners, whether an owner "keeps up" his property or not is an important criterion in evaluating him as a good neighbor. Most of them think that each owner should be responsible to keep up his property to contribute to the beautification of the neighborhood. Their common hatred toward absentee landlords is a reflection of such a view.

F: You see, the majority of people do take pride (in their properties), and when you're happy in your neighborhood, you do the best to keep it together, you know. But I found that over the years a lot of those landlords, we call slum landlords, . . . they buy a piece of property for practically nothing. What I mean by nothing means five thousand dollars or ten . . . Houses are broke down and all they do is . . . they don't paint it, but just rent it to people that come in and out. That's their shame. This place was much more beautiful.

A great concern of a typical home owner in East Boston is whether or not the whole block or the street is kept up by collective individual



owners' efforts. Therefore, those homeowners who do not participate are less respected. Most of the owners feel responsible for keeping the public exterior of houses in good condition, or at least worry that their own houses might look worse than their neighbors. Siding is the element which most reflects such owners views toward their neighbors, since it affects the character of the face of the house, the facade. Sometimes, installation of new siding gains high priority among other modifications because of such owners' consciousness of their neighbors.

The words "keep up," which owners use to indicate exterior modifications,

mean mainly to maintain the house in fair condition, and do not mean austentations exterior modifications. The community does not value extreme individualism of exterior finishes with novel forms and materials. When they use the words "keep up" in an admirable sense, they imply certain norms, which are fairly well defined among them either by the availability of common materials at the time on the local market or by the existence of precedents in the local area. In East Boston, aluminum or vinyl siding and bond stone patchwork on the lower part of the facade are the modes of exterior modification which represent those norms.

While the kinds of siding material are usually limited according to the norms of the area, the right of an individual homeowner to choose the color of siding freely seems to be reserved by an unspoken concensus. While the use of common materials such as aluminum/vinyl siding implies the neighborhood or community identity, the choice of the color is the chief means of expressing individual owners' identity or particular taste and preference. Some of the owners, especially middle-aged housewives, expressed quite clear preferences on colors, and usually those preferences were formed through the evaluation of the precedents in the area.

F: I chose white because I liked it . . . because very few people use white. I like it. You noticed a lot of homes are gold and green . . . and black and red. Those colors make me sick! I don't like them. It's too dark and morbid. I like bright things.

The chosen color is sometimes the result of compromise between the owner's preference and a practical consideration for easy maintenance.

I like white, but here, white . . . forget it. I needed some color because we have a lot of factories around here. . . . If you noticed the gold is dirty already . . . if you put white . . . the color will be filthy in no time. But I didn't want it too dark. So, I chose the gold. I figured that the color would be better than white here.

The majority of the homeowners who put on new siding recently chose bright colors. Among all colors, "the earth tones" and "natural colors" such as light green, beige, light gray, and tan are most popular colors in East Boston.

For those owners who do not have particular preference on the color of siding, the existence of precedents in the same area affects their decision in a great deal. It is common that they "steal" the colors from their neighbors' houses. Even when they have their own preferences, those preferences are not exclusively for the colors of the houses, but also apply to their daily goods, such as clothes and appliances. As a result, the same color of the siding of a house often appears on the furniture, the carpets, the linoleum floor, the refrigerator, etc. It is even not rare that the color of the siding is same as that of the owner's car.

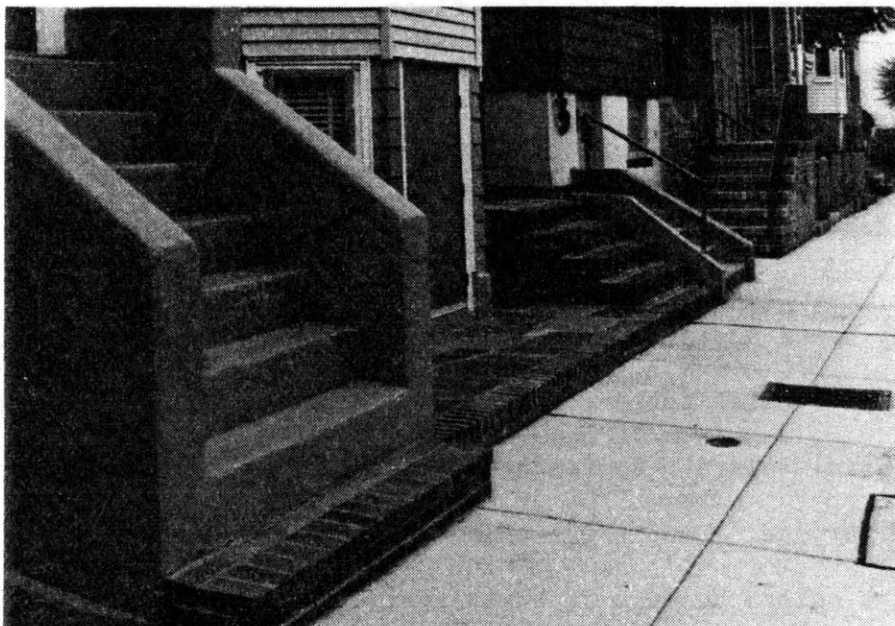
Roof

Almost every house has been re-roofed at least once since it was built one hundred to one hundred forty years ago. Few houses retain the original roofing material, slate. Roofing is a modification with a purely maintenance purpose. Owners who change the roofing material tend to choose bright colors because of their energy saving concern. Insulation

of the roof plain is a common type of improvement for the same purpose. Major modification on the roofing structure, such as a lifted roof, is quite rare in East Boston.

Front Yard

The depth of the average transitional space between the sidewalk and the house in East Boston is as small as three feet, so that it is hard to call it a front yard. Some owners abandoned the space and paved it as a part of the sidewalk. However, many owners try to personalize the small space as much as possible, or try to define the boundaries of their own legal territories, although both personalization and territorial definition are often achieved simultaneously. Fences are the most common means of modifications for these purposes. They not only enclose the territories, but also their various styles and materials offer opportunities for individual owners' self-expression. To differentiate the small space by

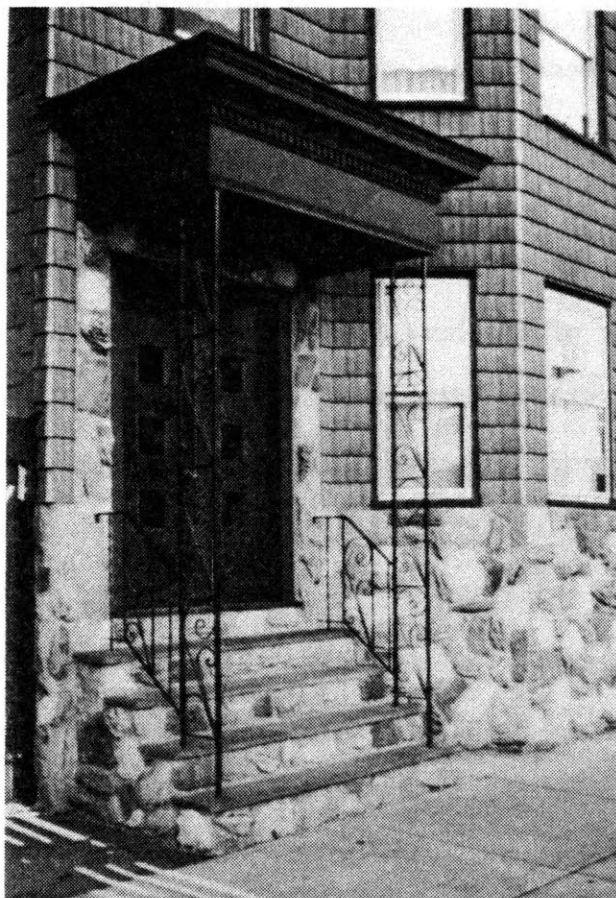


paving it with different material from the sidewalk is another common way to express territoriality.

Porch and Stoop

Most of the porches of houses in the surveyed area were somehow modified either by present or previous owners, although not all the houses have porches. The typical modes of modification are the removal of the entire porch and the replacement of porch columns. Light metal awnings were often installed instead of wooden porches.

A possible reason why the porches have been modified so extensively is that the original wooden porches are easily spoiled being exposed to the



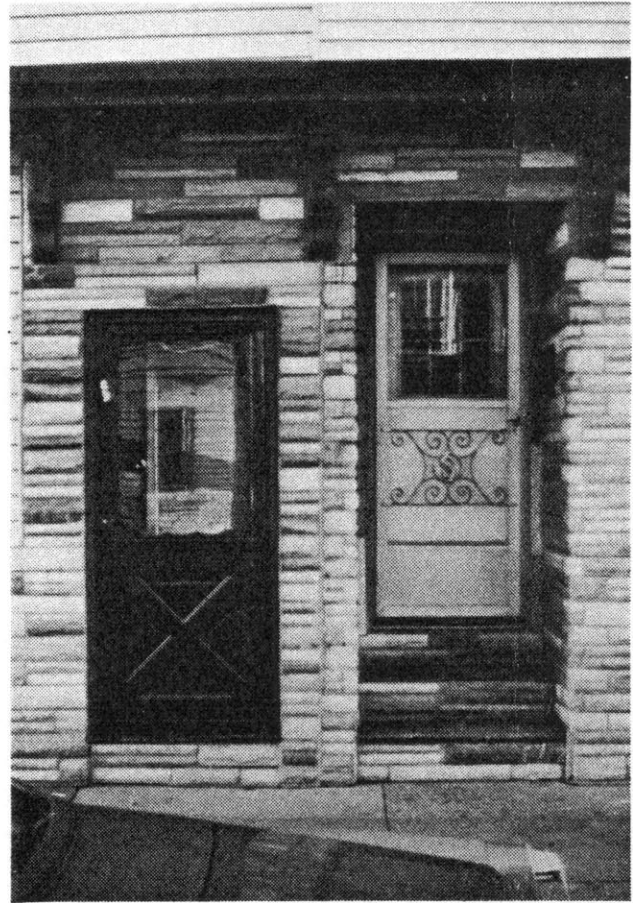
rain and wind. Most of the owners would rather remove the old porches than pay money for periodical painting jobs to maintain them. Although the original porches often contain fine old architectural details and ornaments, they are normally considered by the owners as out-dated white elephants, which are costly and troublesome to maintain. In cases where porches are saved, most of their original wooden porch columns have been replaced by wrought iron columns called "Italian wrought iron." Despite the name with "Italian," this mode of modification is not only quite popular in Italian communities, but is also seen in other neighborhood of different ethnicities. However, such modified iron columns are now several decades old and regarded as old-fashioned. A latest fad in porch modification is to put up light metal awnings. Most of them are, however, insufficient shelters against rain, and vulnerable to the weight of snow. They work rather as decorations to add a modern image to the appearance of homes.

Usually associated with porch modifications, the modification of stoops was observed in most of the homes. The original wooden stoops were usually replaced by stoops with more durable material such as brick, mortar, and bond stone. Those modifications were necessitated by the natural wear of wooden stoops, but also can be means of self-expression. Some owners modified their stoops in such a way that the direction of access became parallel to the sidewalk. With this type of stoop, which was observed on some of the homes that have high basements, the territorial boundary at the sidewalk is more clearly defined than it was with the original stoop.

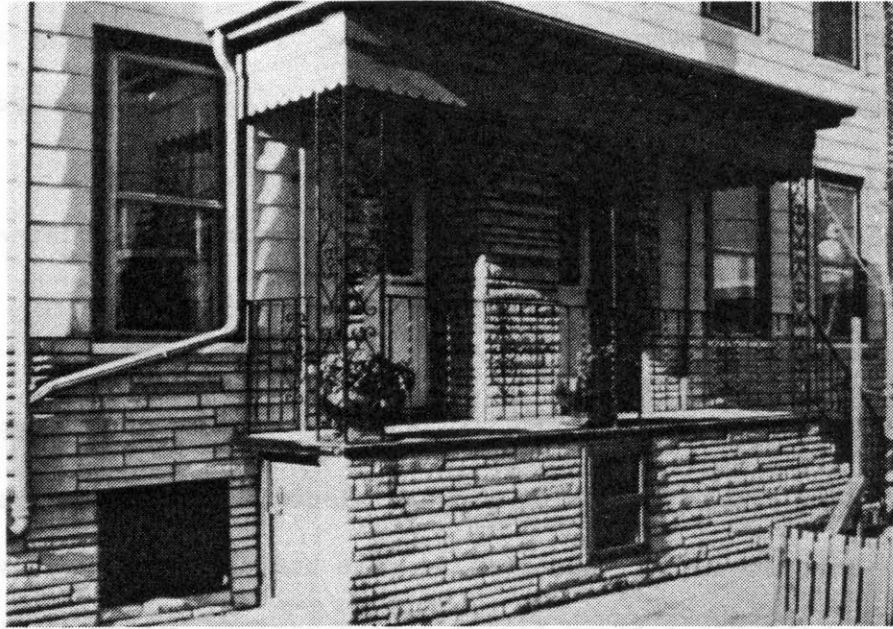


Doorway

Most houses in the surveyed Eagle Hill area originally had recessed entrances; however, many of them are now enclosed with additional doors. In most cases, an aluminum storm door that can be locked, but is usually left unlocked, is used. The practical purpose of this pattern of modification is to save energy by preventing cold drafts and to eliminate the recess which may have been regarded as a potential crime hazard at night. However, it also can be interpreted as the result of a rather natural desire of the owner to try to enlarge the private territory. With this modification, the recessed doorway space that is a part of street space becomes a private space which is occasionally used as a place to put kids' outdoor toys and snow shovels.



With or without the entrance recess, the original double entrance door has been replaced by a single door in many cases. Most of the owners consider the double door drafty, heavy, and out-dated. Installation of the new front door sometimes gets high priority among other exterior modifications as a means of expressing the owner's individual identity to the public. It is not a rare case that an owner change the front door first of all the exterior elements soon after he/she acquires the house. Even when the front door is not replaced, the owner tries to personalize it as much as possible with various sorts of minor modifications and decorations such as painting it in various colors, putting plastic openwork decoration on the pane, or putting on a decorative street number, a door knocker, and a name plate. Like the porch and the stoop, the doorway



is a part that tends to be extensively modified by the owner in various ways that not only differentiate the house from others, but also carry certain symbolic meanings given by the owner .

Window

Windows are also elements that have been modified in many cases. The primary purposes of the modification of windows in most cases were the achievement of better thermal comfort and energy cost saving. Installment of storm windows has been a predominant mode of window modification in the area. The original wooden window sashes were replaced with better insulated aluminum ones in some homes, and various new types of windows such as casement "Anderson" windows and ones whose panes can be detached to be cleaned have become increasingly popular among home improvers in East Boston.

With the installation of new windows, the size of the windows is often

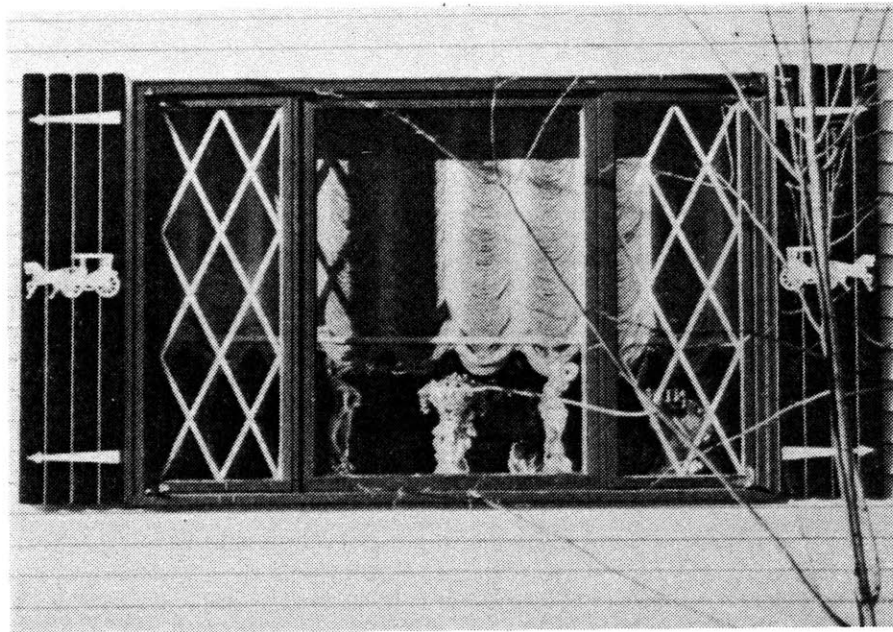
reduced. For many homeowners, energy cost saving is practically more important than getting bright rooms, and to get standard-size window sashes at lower prices has a much higher priority than preserving the original design context of the building. Some owners have eliminated the side window of the front room for the same purpose.

While some owners hate large windows because of the heat loss, other owners love them. Installation of picture windows is another type of window modification which is observed in some homes. To modify two double hung windows on the first floor facade into a picture window is the most common case in East Boston, although there are several other examples in which picture windows have been put on both the first and second floor facades, or on the back of the house. The reason for the installation of a picture window was more sentimental than practical in most cases.

Three houses in the samples had picture windows, but the owners installed them not because they wanted views from inside or because they needed more light, but because they simply liked the style or the-way they look from outside as well as inside with drapes and curtains.

F: Oh, I love it! That's all the style now. It's nice, you see, how nice it looks with curtain and drapes.

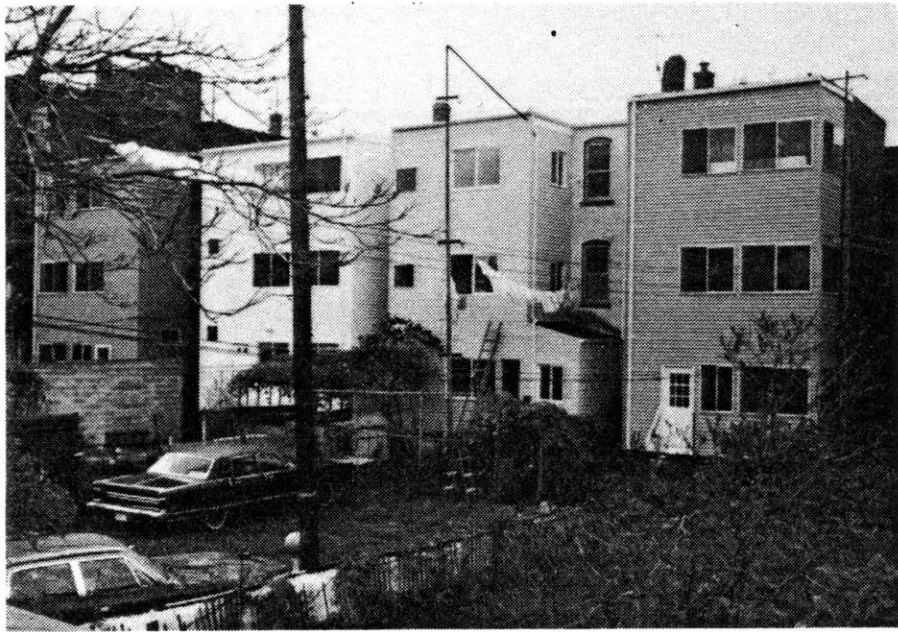
For the residents of East Boston, windows on the street are not only openings to get light and air from the outside or to get visual communication to the outside world, but are also elements through which they can express their taste. Curtains, drapes, and decorations on the window sill are especially popular ways of self-expression or showing-off to passers-by. Shutters and plant boxes are other common examples of ways



to give a touch of individual taste to the appearance of a house.

Backyard

The ways owners modify their backyards are so varied that the common patterns of backyard modifications can hardly be identified. How to use the backyard totally depends on the owner's decision. Some backyards are used as service yards for storing things, drying wet clothes and growing vegetables. Some of the houses which have wide side yards to drive through have garages in their backyards. Some owners put high fences around them to have well tended gardens. Swimming pools were observed at some homes. Many homes have benches and a table, and sometimes an added brick barbeque pit, in their backyards. Dining in the backyard during the summer season is common in the area. The back porches of a number of three-deckers in the area have been enclosed.



CHAPTER FIVE: DECISION-MAKING

Introduction

So far, I have discussed each mode of modification made by owners in East Boston. In the following section, however, I focus attention on the homeowners themselves, rather than the modifications, and try to explain their decision-making mechanism and criteria for house modifications. First, I pick out two kinds of owners, the housewife and the husband, and talk about their roles in the decision-making on house modification and differences in their interests. Second, the issue will be discussed: what type of modifications, or modifications of what elements are more important for them than others. Finally, I will discuss the significance of modifications, i.e., the things which owners' active participation in changing their environment bring to them.

Decision-Makers: Wife and Husband

About the same number of housewives and husbands, of various ages, were interviewed during the survey. Wife and husband were interviewed simultaneously in some cases. It seems rather obvious as a result of those interviews that there are some unspoken agreements between wife and husband regarding the right to decide to make modifications to the house; and there are rather clear differences of interest on house modifications between wife and husband.

Whether the wife or the husband becomes the decision-maker on house modifications seems to differ in each family depending on the age of the

owners and whether the husband has manual skills for home improvement jobs. Among present elderly owners, and in cases where the husband is handy and enjoys working on his house, it is usual that most of the decisions on house modifications have been made by him, while his wife's role in the decision-making has been supplementary. Especially for the generation of elderly people, to keep up the house's physical condition is regarded as a husband's duty; therefore, husbands who do not have the skills to work on their houses are obliged to feel rather small among them.

Accomplishments on home improvement by skillful husband are always things about which a wife feels pride, although she sometimes complains of the fact that she has had little to say in the decisions on house modifications.

The following are the words of an old lady talking about her husband's accomplishment.

F: This was originally a doctor's house. It was beautiful.
. . . He did a lot of work, he did all the way outside, sidings, but you should see inside it's really beautiful.

--Did he do everything by himself?--

By himself, by himself. Every room was paneled, he put a bathroom, he did all the plumbing work by himself. He was an amateur but he did accomplish quite a lot.

--Is that usual in this area that a man works on his house?--

Of course it is! Didn't you know that Italian people are gifted with their hands?. . . and noted for that? You didn't know that?

--No, I didn't . . . --

Now, you know! Sure! They are talented. He could do everything, everything . . . only the thing he couldn't do was tile. He didn't ceramic the bathroom there. . . . My son's out, he helps me washing windows though. It was a really beautiful house. It had the most beautiful porch on the street up there. I hated to spoil the looks of the house, but that's what happened, he decided to change it over.

In another example, an elderly widow told me that she did not know the reasons for modifications on her house because everything had been decided and done by her husband. Thus, for most of this older generation, house modification jobs are usually taken care of by husbands.

However, the custom that husbands take responsibility to maintain the physical condition of homes is no longer so common for most of the middle-aged homeowners in East Boston. Instead, most of the decisions about home improvement and decorations of the home are usually made by the housewife. It is quite usual that a middle-aged housewife is quite familiar with not only cooking or domestic jobs but also various ways and fashions of home improvement and ways to spend less money to keep up her home, mainly through articles in home magazines sold at grocery stores such as "House Beautiful" and "Better Homes". In many cases she has established her own particular taste and preferences on both the interior and exterior of homes on the basis of knowledge from previous experience and those magazines, and as far as the family budget allows, she is usually quite enthusiastic about modifying her home according to that taste and preferences. For example, it is not rare that a housewife shop around several home improvement markets in the suburbs until she finds a wallpaper or the patterned floor linoleum that she likes. Middle-aged housewives are probably the strongest consumers as well as taste-makers in the home-improvement market. On the other hand, relieved of most of the rights on the decisions about house modifications by his wife, a middle-aged husband regard the home improvement job as neither enjoyment nor hobby, but something he is obliged to do. It is not a generation in

which his wife complains about his lack of manual skill. Although many of the middle-aged husbands in East Boston took over their fathers' skills on self-help house maintenance jobs, they generally prefer to hire contractors or ask friends and relatives to do the jobs, instead of wasting their precious leisure time by doing them themselves. However, recent labor cost increases obliged them to do it themselves.

It is becoming increasingly popular in East Boston for persons in their twenties or thirties, the so-called young or younger middle generation to acquire old houses in the area and remodel them as they like. Among those young couples, decisions on house modifications are usually made by agreement between the wife and the husband. They both are quite equal decision-makers. Usually economically constrained, the homeowners in this generation have to do most of the home improvement jobs by themselves. They almost abandon the idea of hiring local contractors to do the jobs because of recent high labor costs, which they cannot afford. Even though they might be economically more constrained than the older generations, they are also quite enthusiastic about making their homes with their own ideas and with their own hands. The husbands read various do-it-yourself textbooks to become amateur experts in home improvement jobs, and some of those who have skills in such technical jobs as plumbing, electric wiring, installation of window frames, and insulation are very proud of the fact that they have saved a lot of money by doing them by themselves. An example of the way to acquire these skills to save money for a home improvement job, is the case of one young owner who, with his limited budget, hired a contractor to install just one new window frame on his

three-decker, and installed the rest of the windows afterwards by himself by initiating the contractor's skill that he had observed carefully. By the way, a standard size double-hung window frame costs five to seven hundred dollars, and the labor cost to install it is an additional five hundred dollars, which they can save by do-it-yourself.

Despite the fact that the roles of wife and husband as decision-makers differ between generations, as I have mentioned, the subjects of interest in home improvement jobs are different between wife and husband. The differences were clearly expressed especially when wife and husband were interviewed simultaneously. They are reflected in the topics that each of them discusses.

The husband's interests are usually durability and efficiency of materials and appliances, while the wife's interests are color and style as well as practicality. Color and style seem to be more important for the housewife as means of self-expression and personalization. For example, when they choose a siding material, the husband would chiefly care about insulation efficiency, durability and fire-proofing, while color would be very important to the wife. Therefore, it is likely that the ultimate choice of color and style of certain modified elements is always decided by the wife even though the initial decision to modify the element is made by the husband, or by both because of necessity. For example, a decision about the installation of a new bathroom or its location could be made by the husband or by agreement of both wife and husband, while in such things as the color of the appliances, the style of the bathtub, and the floor

pattern, the wife usually has the priority of choice.

In the same sense, such minor modifications as decorations of the house are usually the wife's interest. Especially styles, colors, and arrangements of such interior elements as furniture, wallpaper, wall decorations, carpets, and curtains are more important for the housewife, who spends most of the day at home, in the sense that she can express herself by choosing them, or refresh herself by changing them. Even on exterior modification, the elements which have self-expressive meanings such as picture windows are always the wife's favorites and likely decided by her. Related to his interest in durability and efficiency of materials and appliances the husband's other chief concern is how to minimize the cost of maintaining the building in a habitable condition. For the husband, a new heating system should be efficient enough and new windows should be well insulated so that it costs less to maintain the house in a habitable condition. Energy cost saving devices are the subjects of his chief interest. On the other hand, the wife's concern is to minimize the labor, as well as the cost, of maintaining the house. It is as important for her that new windows are easy to clean from inside as well as that they are well insulated. Naturally, labor saving devices and maintenance-free materials are her chief interests.

Regarding particular places in a house which are considered the territory of wife or husband, the occupant of that territory possesses priority in decisions on modifications. For example, kitchen modifications are usually decided by the wife, while the addition of a family room is usually the husband's decision.

Priority

Before I begin to talk about the priority among patterns of modifications I should mention the fact that the sequence in which a house is modified does not necessarily represent the hierarchy of the owner's needs, but rather the way an owner modifies his/her house is extensively influenced by the physical condition of the house and the economic condition of the owner. That is, modification is always the result of compromise between the owner's needs and other economic and physical constraints. In particular, whether one pattern of house modification is prior to another depends largely on the economic condition of the owner. For example, an elderly owner in the sample installed aluminum siding only on the front facade of her house recently, despite the fact that she did not have any central heating facility; however, this sequence of modification does not simply mean that the siding was more important to her than the heating system, but that she could not afford the installation of a new heating system and the siding was the best improvement she could afford at the time. In other words, economic condition is always prior to needs, and every decision about modifying a house is made within the financial limitations of the family. The owner's decision-making on house modification is a complex process which involves various needs and constraints. Therefore, the effect of economic and physical constraints, as well as the priority of needs, should be taken into consideration for analysis of priority among patterns and kinds of modification.

Despite the complexity of needs and constraints in the decision-making process, and the differences of each situation, owners in East Boston seem

to share some basic criteria, which together generate a common sequence of modifications that were identified in the samples. For example, interior modifications are generally prior to exterior ones, if the conditions of the interior and the exterior are the same. It is usual that owners of a nearly-acquired house modify the interior first to make it livable before they take care of the exterior. Within a limited budget, most owners try to improve the quality of interior space; therefore, it is not rare in the area that a home has a well-maintained interior and a rather devastated exterior. This pattern of sequence is primarily a reflection of their priority of needs; that is, the interior space is more important than the exterior of the house, because they live in the house, not outdoors. However, it does not mean that they do not care about the exterior at all, but it is totally a matter of priority within a limited budget. Another reason mentioned by owners was the fact that most of the exterior modifications such as installation of new windows or siding are expensive jobs that usually require hired professionals, while interior modifications are easier to handle as piecemeal work by themselves. Some owners do not want to improve the exterior of their house for another reason, a tax increase. They are afraid that a higher tax would be assessed because of visible improvements to the exterior of the house.

Among neither modifications, improvements of services such as the bathroom, heating system, and electricity generally receive high priority. Enlargement and modernization of the kitchen usually get high priority, as well. Furthermore, both interior and exterior modifications to achieve better thermal comfort and to save energy cost, such as installation of

storm windows, storm doors, insulated siding, new radiators, and lower ceilings, are considered essential by most owners.

Modifications for the purpose of beautification and self-expression always have lower priority than those for practical purposes. Even as modifications of some elements work as means of self expression, they are usually necessitated by practical purposes. For instance, although the purpose of wallpapering is decoration of a room, the condition usually accompanies some practical necessities which motivate the owner, such as that the previous wallpaper was pealed or smudged. In another instance, a homeowner who has newly acquired a home is likely to express his/her identity to his/her neighbor by changing his front door; however, in order to do that the owner has to convince him/herself that the door is in a physically deteriorated condition, even though it is actually not too damaged to work. In other words, it is quite rare that the owner modifies his/her home for purely expressional purposes, but most of the modifications are triggered by practical purposes.

On the other hand, even when the owner modifies an element for practical purposes, he/she always try to personalize the element through modification as far as it is visible in daily life. For example, installation of a new bathroom is a modification that is normally necessitated by practical needs, and the use of the bathroom itself is rather more utilitarian than that of other parts of the house; however, many owners, especially housewives, seem to be as enthusiastic about choosing styles and colors of their bathroom appliances and floor patterns as they are about the

decorations of their living rooms. In another instance, the purposes of the installation of aluminum siding are usually practical ones such as energy saving and reduction of the maintenance cost; however, by choosing the colors and textures, many owners try to express their tastes and personal images about ideal homes like "bright and healthy."

Thus, for the homeowner, the chief means of personalization and self-expression through house modifications is the selection of products which have his/her favorite colors and styles in the market. This is analogous to the fact that he/she expresses him/herself by wearing favorite clothes which he/she chooses from the products on the market. The owner expresses him/herself within the variety that the common market provides, and he/she rarely expresses him/herself in an original way which extends beyond the variety. This can be said about house modification as well as about the clothes he/she wears. In other words, the owner's freedom of self-expression is fairly circumscribed either by the availability of products or by the fad which the market produces. Resemblance of ways of modification in each home in each period is the result of such an effect of the market.

In terms of the criteria of product selection, practicality gets higher priority than any other factors. For most of the homeowners in East Boston, the most important concerns are that the product is durable, easy to maintain, and less costly; and the decision about color and style becomes comparatively less important, although they are concerned about them. Moreover, they are almost totally indifferent to whether a material

is a real thing or a fake, or whether a product is original or an imitation. At least they can bear it even if the thing is a fake and an imitation as far as it is reasonable, durable, and good looking to them. A good example is bond stone, which is quite popular in East Boston. Owners consider this a fine, reasonable, efficient material which fits their needs and they do not look down upon it as imitation stone. The same thing can be said about aluminum/vinyl sidings which are fake clapboards.

Significance of House Modifications

Although this topic is not directly related to decision-making, I want to discuss the things which owners' modifications to their homes bring to them, borrowing this space at the end.

The fact that an owner can control his/her living environment by means of modifications has great significance to him/her in some respects. One is the practical aspect of house modification. Family size and lifestyle differ in each family, and different needs can be fulfilled by the adjustment of the building with modifications. Moreover, with modifications the owner can correspond with the changes of needs in each era. Various kinds of changes can be anticipated: family growth, increasing demand for leisure space, changes of the living standard, and, most of all, changes energy resources and the development of related technology, which is not only most unpredictable, but also has the strongest effect on their life. Owners have to modify houses in order to adapt to the changing society. Especially for working class people, such as those in East Boston, who live in the same place for generations, this function of

modification as an adaptation mechanism is extremely important.

In addition to this practical function, modifications somehow enhance a sense of ownership. As the owner modifies his/her house in order to make it practically fit to his/her families' lifestyle, he/she also tries to define his/her own territory and personalize the things in it as much as possible by applying his/her taste and preferences through modifications. It is doubtless that the more an owner modifies his/her house, the more he/she comes to feel that the house belongs to him/her. In most cases, the house is the only asset he/she possesses, and therefore it should not only be lived in, but also taken care of by him/her. Modifications are in a sense the means of expression of his/her sense of ownership and his/her affection for his/her own properties. The stability of East Boston's residential neighborhoods, which is considered one of the indispensable conditions for "good neighborhoods" by the residents, largely depends on the individual possession of such a strong sense of ownership, which is partly enhanced by the owner's own active participation in modifying his/her dwelling space.

Furthermore, modifications enhance the owner's sense of competence. During the survey, many owners told that they felt they had accomplished something whenever they did home improvement jobs. Modification of the house by the owner him/herself usually implies the owner's desire to accomplish something as well as to save on construction costs. Even in cases where the job was carried out by a contractor, the physical results of modification bring a sense of achievement to the owner as far

the decisions were made by him/her. Not only major modifications, but also such minor ones as changing curtains and the arrangement of furniture and room decorations become effective means of "feeling important in a house," as well as being refreshing themselves for most of housewives. A house itself can be a resource for learning to carry out effective behavior which may enhance an individual's competence and self-wroth. To modify one's own house certainly offers the opportunities.

CONCLUSIONS

Conclusions

Although the contents of this thesis were written within a fairly circumscribed context, a neighborhood in East Boston, the phenomenon of house modifications by inhabitants is so common in the United States recently that one can observe examples in any urban or suburban residential neighborhood.

Despite such familiarity, the phenomenon has been intentionally ignored, objected to or criticized by those who received traditional architecture educations. The reason for such objections is partly because people's ways of using materials are incompatible with the principle of Modern Architecture, and people easily mix or distort the traditional architectural styles and contexts; and partly because the home improvement industry, which architects tend to think vulgar, intervenes strongly in the background.

However, I believe that what we have to learn from the observation and study of the phenomenon are various essential, practical and psychological needs of people which are implied in the forms of modifications, and the importance of the inhabitant's active participation to build their own living environment.

Moreover, in cases where some existing urban residential environment is to be modified by means of either redevelopment or rehabilitation, we,

as planners and architects, should understand various social aspects of the people who live there, i.e., their social interaction patterns, class and status characteristics, value concensus, toward a built environment, etc. I believe that what we should do before we draw any line on the drawing paper is to understand the ways people live in their existing environment, ascertain what are their essential activity patterns and values to be preserved, and what problems of theirs are to be solved by our proposals.

This thesis was written partly as my own exploration of one way to understand people's lives, and partly as a manifestation of the necessity of housing design on the basis of a fresh understanding of the social and behavioral aspects of people's lives.

However, the way such information about people's life should be utilized and reflected in actual design is another issue, to be studied as a continuation of this thesis. Our criteria to evaluate their activity patterns and their present environmental settings also should be carefully, but firmly, established in order to utilize the information to produce a better residential environment. A further large scale survey is necessary in order to get a more consistent explanation about working class people's inherent activity patterns and their relations to their dwellings, and some comparative studies of other working class neighborhoods may clarify ethnic influences on the activity patterns and the use of dwelling space.

Since the theme of this thesis is house modifications by inhabitants, the contents of this thesis will be useful to those who deal with user participatory housing or flexible/adaptable housing, by giving information about which parts of a house tend to be changed in what ways for what reasons. However, I do not want the contents to be interpreted too generally. I should mention that these findings are virtually context specific and not necessarily applicable to new development in another context. Some of the contents may be useful to draw some practical suggestions for the design of new housing, but I would rather that they inform how it is essential and important for people to intervene in their housing process through the description of the results of peoples' enthusiasm to build their own homes in the existing situation. Finally, I hope this thesis will somehow contribute to those who deal with housing design in order to produce better housing for people, and I wish this study will be a part of the accumulation of future studies of this kind.

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