# THE INTERFACE BETWEEN PUBLIC AND PRIVATE SPACE <br> A CASE STUDY IN EAST BOSTON 

by<br>Ginn-Shian Hua<br>B. Arch., Tamkang College of Arts and Sciences (1977)

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Signature of Author $\qquad$



Certified by_

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\begin{array}{r}
\text { Sandra C. Howell, Professor of Behavioral Sciences } \\
\text { Thesis Advisor }
\end{array}
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I gladly thank Professor Sandra C. Howell who supervised the writing of this thesis from its beginning to the end. Her constant guidance and refreshing inputs, not least of which is in the preparation, conducting and analysis of the questionaire interviews, never ceased to be of prime importance, and are all deeply appreciated.

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I naturally bear all the responsibilities for any remaining errors in this thesis.

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by
Ginn-Shian Hua
Submitted to the Department of Architecture in September, 1981, in partial fulfillment of the requirements for the degree of Master of Architecture in Advanced Studies


#### Abstract

This thesis is an investigation of everyday life on a residential street of East Boston. The work focuses on 1) the characteristics of the physical environment in both the public and the private territories which characterize the street. 2) the ways in which residents actually use that environment and,


3) what they feel about it and the ways in which they think it could be improved. Methods used to study the nature of the street environment: analysis of the neighborhood form and land use patterns; detailed inventory of the houses which line princeton Street in East Boston. Interviews have been carried out with 18 residents living on the street to identify who they are, to prove the ways in which they use their street and to assess their likes and dislikes with respect to their house environment and specifically the way it relates to the street. Observations have been made of houses particularly facade and front yard treatments to record the different ways in which residents have altered their property and generally taken care of it.

It has been found that the residents generally feel comfortable and at ease in their neighborhood. Yet the relatively high ownership of cars and the small back yards all have contributed to the need for more parking space as well as to the need for socializing space in front of houses.

Suggestions have been made to reorganize the use of the street space between houses to improve these conditions. Wider front yards can be provided as well as wider sidewalks if a traffic lane is sacrified. Also, the addition of back alleys will greatly relieve the parking situation on the street, thereby opening up the street for residential landscaping, for porches to be built at the entrance of the houses.

Thesis Adviser: Sandra C. Howell
Title: Associate Professor of Behavioral Sciences

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## CHAPTER 1 - INTRODUCTION

### 1.1 BACKGROUND

The transitional space between the house and the street is an interface between public and private territories. In residential neighborhoods, the interface includes a semi-private outdoor territory associated with the front of the house, the public sidewalk and the street itself. Streets and sidewalks offer space for a free range of public activities- driving, parking, playing, walking, delivering or collecting goods, delivering mail...etc. While inhabitants need such services, they also want visual privacy within their house and separation from these public activities for security or privacy reasons. So space must separate the public from the private, it may be a wall and an orientation away from the street or it may take the form of a set back or rather deep front yard.

All members of the houshold pass through the space several times a day. The front yard can be assumed to be used for such short range activities as sitting for a brief moment before going in, picking up a few stray leaves from the
ground, or leaning on the gate after collecting the mail. Because they occur on the public side of the house, these activities whether of short or long duration, may influence the character and number of interactions between the people in the vicinity of block. These interactions are not only in enriching the lives of occupants but also in helping to make acquaintances and friends who are more inclined and able to cooperate in such tasks as child supervision and protection of property from vandalism and theft, and who are likely to feel a greater sense of pride toward their street, and of belonging in their neighborhood.

The purpose of this thesis is to investigate the urban enrironment through observation and survey of how the interface is used and how the activities there lead to social interactions. This investigation will lead to some opinions of design ideas which would actually reflect users' needs.

In The Interface Between Public and Private Territories in Residential Areas(1977) Jan Gehl mentions that "A buffer zone with a double function is provided. On one hand, the semi-private territory helps the inhabitants to control their privacy by keeping passers-by at arms's length and makes it easier to maintain privacy while still enjoying the benefit of windows in the street facade. On the other hand, it provides the occupants with a possibility to stay on private territory, yet on the public side of the house". So this stepwise transition from public to private, is important for
protecting privacy as well as for engaging in social activities in a relaxed and easily controlled way.

There are other references concerning the interface space from public to private territories. Community and Privacy(1963) is devoted to ideas about screening off family dwellings and neighborhoods from the sorrounding. In The Death and Life of Great American Cities(1961), Jane Jacobs introduces the idea of street life and a close relationship between the street and the activities in and around the houses bordering the street as important quality features. She points to "the little things of life" and the daily ballet of the streets- on the footpaths, around the doorways, and on the steps in front of the houses-as an easily overlooked but nevertheless very important aspect in knitting houses and households together into communities. In several works published after Community and Privacy, Christopher Alexander goes on to emphasize the importance of detailing the interface between house and street in such a way that people can stay outside in front of their houses or otherwise be visible from the street in order to facilitate across-the-fence contacts.

Yet another approach to the subject is found in Defensible Space(1972) in which Oscar Newman points out that the existence of semi-private territories in front of row houses or in front of stairways in multi-story flats will tend to encourage outdoor activities and to be of considerable importance in keeping housing areas safe with respect to
crime.
All the references mentioned above deal with the transitional area in a descriptive, general or theoretical way. When it comes to the question of what is actually known about the use of such areas, there is hardly any imformation. One of the few references which does deal with the topic in a practical way is Easter Hill Village(1975) in which Clare Cooper presents results of a survey on a public housing scheme in California. The survey, involving interviews with the residents, investigates the use of the fenced-in back yard, the open front yard and the front porch; it examined the relationship between people's physical environment, their behavior and attitude. One interesting thing to emerge from the survey is that a number of things which were observed to happen in the front area were not consciously known about by the residents.

So the methods which try to explore the way of general or theoretical description of studies are important, which will indicate the way the built environment can reinforce or hinder activity patterns and social interactions, especially in the area where private territory meets public territory; which will also demonstrate the differences between what designers think and what residents actually want.

East Boston has been selected in this work because it has a spatial organization which is common to older, stable United States urban working class neighborhoods. Lot sizes
are small and little frontage and open space is provided. Most people live in"three deckers"-three-family wooden frame apartment houses with back porches that look out to rows of laundry and other back porches or "two story"-single-family house. The area also struggles for existence against such foes as Logan Airport, highways and tunnels which have cut deeply into the body but not the spirit of the neighborhood. Many of residents have left for suburbs, so East Boston's population had dropped from 51,150 to 38,900 in twenty years(1950-1970). But people are also starting to realize that East Boston is a pretty good place to live. While walking on the street, one can see the local buildings of another world. Where old women sit at open windows in daily, watching children play on the street , having silent vigil, and waiting for sundown when it would be cooler; where children play on the sidewalk which offers many activities such as riding bikes, playing football, and skating; where the housewives usually sit on their front stairs to communicate to their neighbors while supervising young kids playing. The scene of social daily-life create a close-knit community.

How do Easton Boston residents feel about public open space given the relatively high density and proximity of buildings? What is the use of front interface of each house ? Could any physical improvement supply a more livable environment for the inhabitants? The major goal of this study is to determine the ways of improving physical environment for the

East Boston area without hindering the residents' activity patterns and social interactions.
1.2 OBJECTIVES

The primary objectives of this research are:

1) To describe a particular tissue type in form of uses which is represented by the East Boston street environment.
2) To define the way in which residents of this area use their front space through observation of actual activities and behavior of the residents and through structured interviews of a residential sample.
3) To analyze the extent to which the physical environment may actually caters to these needs and expectations or, on the contrary hinders them.
4) To develop alternative ways in which this environment can be modifiedwith minimum cost and involvement on the part of both residents and the city, and to better relate to needs and expectations.

### 1.3 STUDY METHODS

Once the issues to be explored were defined, an appropriate site within the selected neighborhood was chosen
for fine grain observations of the physical environment and interviews of the residents. The selection was based upon its consistency in form with other blocks in the neighborhood. Houses for observation and interview were selected along both sides of a street since it is known that residential neighboring is most frequent between facing and adjoining households than across back yards.

All forty five units on the block received detailed observation of front space. The observations included physical characteristics of each building, parking situation on the street, and the actual activities and interactions of the residents on this block. The work of observation attempted to define the way in which residents use their front space, and to understand how the physical arrangement is manipulated by the residents and how it influenced residents' activities and behavior. An interview form was developed, pilot tested and revised. This interview attempted to draw out the local residents' attitudes towards their front yard and street spaces and their uses of these areas. Of forty five residential units on the block, residents of eighteen units were personally interviewed. They were selected because they represented a sample of people living in three types of front space and all owners who live on the first floor.

The results of observations were recorded by photographic or graphic means and the interviews were summarized. All the information from observations, photographs and interviews
were then analyzed and reintegrated for suggesting alternative arrangements of the street and the interface space in the neighborhood, using the test block as the example.

1. East Boston Community Development Corporation, Refunding Proposal for the East Boston, June, 1979, p. 46.

CHAPTER 2 - CONCEPTUAL ISSUES RELATED TO INTERFACE SPACE

### 2.1 INTRODUCTION

A good city-street neighborhood achieves a balance between its people's determination to have essential privacy and their simultaneous wishes for differing degrees of contact, enjoyment or help from the people around. This balance is largely made up of small, sensitively managed details, practiced and accepted so casually that they are normally taken for granted.

Several theories in the social-behavioral sciences are relevant to the design of residential neighborhoods. Foremost among these concepts is that of "privacy" and its implied balanced sociality or "social interaction". While each culture embodies these concepts by different rules and behaviors, the built interface between house and street in the United States urban neighborhood particularly tends to either support or constrain private and social behaviors.

The contribution of social and behavioral sciences are in their attempts to establish models or concepts from which planners or architects derive directions while they are
designing living environments to fit existing or future requirements of people. Actually, some designers also try to investigate what social and behavioral issues related to people's expectations when they are confronted with detailed designing points. The scientists found that the ways in which people relate to their living environments were not always what designers expected. The issues which will be discussed below are extremely complicated because they are not merely a question of physical arrangements, but also a matter concerning relationships between people, and because these are changing concepts affected by economic and social circumstances.

This chapter will attempt to formulate a systematic arrangement of the interface space with ideas gleaned from previous studies, especially in the characterization of a relationship between street environment and residents' behavior in East Boston. Armed with this formulation, observations were made on the actual physical characteristics and social behaviors in the residential district, with the view of discovering possible problem areas. Questionnaires were then designed to identify the actual key issues in the interaction between East Boston's residents and their physical environments.

PRIVACY
Privacy was defined by Altman as selective control of access to the self or to one's group. In the housing environment, privacy may be defined as freedom from disturbance by noise and freedom from being overlooked or being intruded upon by other people. The achievement of privacy apppears to depend on individual attitude and experience as well as the physical fact of edge proximity and presence of barriers.

The "visual protection" from neighbors will concentrate on physical aspects of overlooking. Two factors below could be considered.

1) Spacing - to have some distance between house and sidewalk, to reduce to a tolerable level the extent to which the passers-by can see into the house.
2) Design - screening of party walls, fences and shrubbery, disposition of land uses, shape and position as well as size of windows.

Whether or not "overlooking" is resented depends to some extent on the cultural definition of the activity being observed and the social acceptability of the observor. In designing for privacy it would seem that many people feel that "overlooking" into the home should generally be prevented and
window curtains, often of thin fabrics, are seen as an adequate deterrant.

Margaret Willis found that privacy of personal relationships is to be considered not only in its negative aspects of shielding against intrusion by other people, but that it also has a positive side in the sort of relationships which is allowed between the occupants of a house and the neighbors. People have a choice of joining neighbors' gossip or of avoiding the intrusion of neighbors. In the environs of the home the design aspect becomes more important because the problem is how to avoid unwanted social contacts. In many cases this would seem to be more important than not being overlooked.

Finally, the question for future housing is whether the community feeling or the individual sense of privacy will dominate. How people tend to live as a community or as individuals depends on how privacy is defined.

SOCIAL INTERACTION
Social interaction can be defined as a range of activity encounters with other people. Social interaction describes the ways by which people share activities and responsibilities in their daily life. The question of how to provide spaces for people to have contact with each other is important in architecture.

In many urban residential areas, there are not enough
open spaces or facilities for people to use; most activities occur on the street side. Inhabitants' activities take place in the front of houses: chating with neighbors, observing passers-by, watching children play, watering flowers in the front gardens, washing cars in the driveway, etc.. The more people use the front spaces and the streets and the more time they spend on the public side of the house, the more frequently they have contact with their neighbors and passers-by.

Previous observation in the neighborhood under study indicated that many local children, whatever their age, but particularly the under-fivers, played in front yards, private back yards, access areas and pavements. The reasons why younger children play near dwellings are that their mothers like to keep an eye on what they are doing, but the children under five, themselves, prefer to play in the orbit of their mothers. Children from six to twelve prefer to play in bigger open space, which allows more activities and also includes more children playing together. Social contact spaces are more important as children become older.

One question for the present was about the relateive importance of exterior residential space in front versus back yard. These two area appears to hold different symbolic functions in American society. An understanding of how people use front space and back yard can suggest how people interact with their neighbors.

The crime which many large, urban housing developments endure has led to an increasing search for means of controlling antisocial behaviors, and to a "security state of mind" among residents and housing management. A well-designed security system is one in which there is functioning interrelationship between the various component parts: restrictive barriers, hardware, surveillance equipment, alarms, security personnel, residents, and management.

As part of a security study of multi-family housing in the United States, residents' perception of factors affecting their sense of security and analysis of design factors were undertaken. Residents more often attributed a sense of security to presence of guards than to design factors, but analysis of different development indicated that design factors can influence guards' effectiveness. Recently, human territoriality and surveillance designs, which increase residents' sense of community and strengthen a mutual support structure, have been suggested as an alternative to guards as a means of detering crime.

Any improvement to security involves tradeoffs. One trades unlimited freedom of movement for restricted access to achieve control of residence or building entries; one trades total anonymity for recognition among neighbors to be able to share responsibilities with them. Every modification has its price, and in security it is important to ensure that every
participant share an equal desire for these modifications. The concept of territoriality and surveillance will be disscussed in the next section. The concepts include physical modifications such as hardware devices and restrictive barriers to secure the individual residential dwelling and the multi-family dwelling.

There are four major elements might be considered for securing the house:

1) Fence: The fences which separate adjacent house not only physically prevent movement from one space to another, they also discourage unwanted intrusion by emphasizing a space's "belonging" to particular dwelling units and making salient the spatial and legal norms against intruding into someone else's space.
2) Door: The different type of materials of doors reflect their ability to withstand efforts to force entry by brute strength and to retain security in the locking devices attached. Locks might withstand or seriously delay not only a simple forced entry but also sophisticated criminal attack. Peep-holes are one device installed in an opaque door to allow residents to see and hear who is outside the door without opening it.
3) Window: Windows contain sections of glass; they naturally impose a security problem, but windows located on the first floor also allow fire escape. Therefore, with a new forwards security, designers have come to prefer the use of unbreakable, transparent polycarbonate materials for window constructions; they also have tried to avoid the use of oversized glazed areas on wall partitions on the street side.
4) Lighting: Lighting in a residential development permits adequate visibility and surveillance. An appropriate level of lighting might be provided for each residence as well as for the public neighborhood spaces. Pulblic space lighting requires control of glare and shadow; and needs to be resistant to vandalism.

TERRITORIALITY, SURVEILLANCE AND PERSONALIZATION
The concept of "territoriality" originated in studies of animal behavior, particularly birds. Animals define territorial boundaries, distinguishing their own domains from those of their neighbors with a variety of "markers" including scent as well as visual and auditory cues. Similar types of behavior seem to occur among humans who build fences, plant hedges, and put their names on doors as markers. These "territory" markers can simultaneously serve the purpose of
"personalization", invite "social interaction" and provide points of "surveillance". Human territorial definition, which may incorporate physical boundaries such as short fences separating adjacent apartments, is largely symbolic. Most "markers" do not physically prevent movement from one space to another. They discourage unwanted intrusion by emphasizing a space's "belonging" to particular dwelling units and make salient the spatial and legal norms against intruding into someone else's space.

The advantage of using the concept of territoriality to design crime prevention seems that it is inexpensive, employing psychological rather than major physical barriers. Casual surveillance of individually identifiable spaces is integral to this system of control because it allows those who "own" the space to supervise its use and control the activities within it.

Surveillance is a major crime deterrent and a major contributor to the image of a safe environment. Surveillance also makes obvious to potential criminals that any overt act or suspicious behavior will come under the scrutiny of project occupants. Tying of opportunities for surveillance to territorially defined areas will go a long way toward ensuring that many of the required conditions below will be satisfied:

1) The extent to which the observer has developed a sense of his personal and proprietary rights and is accus-
tomed to defending them.
2) The extent to which the activity observed is understood to be occurring in an area within the influence of the observer.
3) Identification of the observed behavior as being abnormal to the area.
4) The extent to which the observer feels he can effectively alter course of events being observed. Encouraging personalization (painting, decorating, furnishing, modifying one's territory), is a form of "marking" behavior which may lead to greater use of outside areas and provides non-verbal environmental cues to both neighbors and strangers that residents are proud and concerned about their building and development. Such cues, in addition to the possibility of having neighbors physically present, or at least able to observe activities outside their apartment from their inside, were suggested as important ways in which design features can facilitate social behaviors and attitudes important in increasing residents' sense of security and, hopefully, decreasing the actual amount of undesirable or criminal activity.

The benefits of designing for better physical environment are not limited to crime prevention, many additional positive results accompany the increased security gained. No
physical design can guarantee that neighbors will become friends or even acquaintances, but a physical design which encourages a population into regular contacts will provide the opportunity for interaction and friendly cooperation. Good design can also make an environment which provide surveillance opportunities and a sense of territorial responsibility: it will also be an environment in which parents can trust their children to use the open space. The conceptual issues disscussed in this chapter formed the basis for the interviews conducted with residents of East Boston and the observations of use patterns associated with those interviews.

1. Altman, Irwin, The Environment and Social Behavior, 1975, p. 18.
2. Willis, Margaret, The Architects' Journal, June, 1963, P. 1231.
3. The Center for Residential Security Design, A Design Guide for Improving Residential Security, December, 1973, p. 17-35. 4. Altman, Irwin, The Environment and Social Behavior, 1975, p. 103-105.
4. The Center for Residential Security Design, A Design Guide for Improving Residential Security, December, 1973, p.ll. 6. Becker, Franklin D., Journal of Architectural Research, February, 1975, p. 18-24.

## CHAPTER 3 - PHYSICAL DESCRIPTION

### 3.1 BACKGROUND OF EAST BOSTON

East Boston, once an island settled in 1629 by William Noddle, is one of the oldest neighborhoods on the east coast of America. It was originally an isolated agricutural area which supplied fresh meat and wood to Boston for nearly two hundred years. From 1840 to 1865, international shipping spurred the rapid development of the community and the population climbed from 1,455 persons in 1840 to 20,572 in 1865 with large suburban homes being developed on the hills and more modest dwellings built in the area around Maverick Square.

The decline of wooden shipbuilding caused the exodus of skilled craftsmen from East Boston at a time when many Irish immigrants were arriving to take their place. Housing for the immigrants was made available by the subdivision of the existing housing and the construction of tenements. As the population continued to grow and the area began to lose its spacious suburban quality, wealthier families began to leave East Boston. Around 1880, the Breed's Island (now Orient Heights) section of East Boston was opened to develop


Harbor Island, from a 1711 map


Lexington Street, 1910-1912
ment and more expensive single family homes were developed . The pace of development was slow and the last lots were not sold off until 1912. Successive waves of immigrants, primarily Jews and then Italians, pushed the population of East Boston to a peak level of approximately 60,000 which was maintained from 1916 through 1935. The Italian immigrants formed a strong community structure in East Boston which continues to be the area's predominant cultural influence.

After 70 years of ferry service, East Boston was connected to downtown by a subway tunnel in 1905. Both the construction of the Logan Airport(1923) and the Sumner Tunnel(1934) planted the seeds for future community problems; the rapid expansion of aviation and postwar suburban development caused tremendous growth in the use of these facilities. Commuter and airport traffic provided the primary reasons for the development, from 1949-1961, of airport access roads, the
expressway through East Boston and the Callahan Tunnel. The introduction of jet aircraft during the 1960's added a new dimension to East Boston's problems with regional transportation facilities.

From 1940 to about 1970, the East Boston population declined as a result of factors which have affected most urban communities. Contributing to the general pattern of outmigration of families to suburban areas were such factors as increase in automobile ownership, improved highways, a desire for greater open space, the move of some urban industries to modern suburban facilities and the attractiveness of newer suburban schools with large amount of recreation space. In addition, East Boston suffered from the impact of air pollution, noise and congestion created by a growing airport and by increasing commuter traffic as well as from the unpleasant appearance of decling industrial property adjacent to a residential area.

The physical development of East Boston occurred almost entirely within the period from 1835-1915. The major physical changes after that period have been the building of the McClellan Highway and the airport. The way of life of the people, what they expect and need from a residential environment, and the economics of the early industrial base have changed substantially. The area is now faced with adapting the physical environment which it inherited to contemporary needs.

## PHYSICAL DEVELOPMENT 1833-1970



East Boston is a dominantly, white ethnic community and this fact has characterized the area's demographic characteristics since the late l9th century. Driven out of Europe by famines, strikes and revolutions, and attracted by the growing demand for unskilled labor in Boston's burgeoning rail and shipping industries, large numbers of Irish immigrants began moving into East Boston, and by 1860 they had gained numerical predominance. Although their numbers were shrinking by the turn of the century, they maintained political control until about 1940 .

It was the wave of Italian immigrants, beginning in 1905 and surging between 1930 and 1945, which formed the social basis of today's East Boston community. While the pace of this immigration has slowed down and many of East Boston's residents are now second and third generation Italian-Americans, the community still has a decidedly Italian character, with about 80 percent of its 38,900 residents being of Italian origin.

A variety of social characteristics of the East Boston community can be traced to its Italian heritage. Among these are a tendency to have large families, to maintain close ties with large numbers of relatives, most of whom also live in East Boston and remain in the same residence for many years, often for generations. Yet, in spite of these particularly strong family and community bonds, which provide a singularly cohesive social context, the total population of East Boston
has been rapidly declining for several decades.

### 3.2 EXISTING CHARACTERISTICS

## OVERVIEW

East Boston which is situated about two kilometers from the Boston's central business district. It is bounded on the north, west, and south by deep-water port facilities of Boston harbor and on the east by Logan Airport. East Boston is separated from the city proper by this water barrier, but it has direct rapid access via automobile and rapid- transit


LOCATION AND BLOCK PLAN OF EAST BOSTON
tunnels. As such, it is one of the areas of Boston more readily accessible to downtown Boston.

The population declined to approximately 39,000 people but appears recently to be once again on the increase. An Boston Globe survey of East Boston's people and their concerns (August 1971), reported complaints about noise, air pollution, shortage of parks and playground, traffic congestion and parking...etc., yet residents also felt that the area is a socially close-knit community where social interactions with neighbors was strong and pleasant. So a lot of people were starting to realize that East Boston is a good place to live. The people who moved to suburb found that suburban living seemed to have the problems of social isolation and inconvenience of shopping. They could not find corner grocery POPULATION CHANGE BY AGE GROUPS 1950-1970

| Age | 1950 |  | 1960 |  | 1970 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent |
| Under-5 | 5,172 | 10.1 | 4,604 | 10.5 | 3,182 | 8.2 |
| $5-9$ | 8,209 | 16.1 | 3,884 | 8.9 | 3,266 | 8.4 |
| 10-14 |  |  | 3,724 | 8.5 | 3,448 | 8.9 |
| 15-19 | 8,463 | 16.5 | 3,257 | 8.4 | 3,274 | 8.4 |
| 20-24 |  |  | 2,809 | 6.4 | 3,283 | 8.4 |
| 25-34 | 9,361 | 18.3 | 6,052 | 13.8 | 4,365 | 11.2 |
| 35-44 | 6,914 | . 13.5 | 6,217 | 14.2 | 4,318 | 11.1 |
| 45-54 | 5,054 | 9.9 | 5,171 | 11.8 | 5,023 | 12.9 |
| 55-64 | 4,350 | 8.5 | 3,740 | 8.5 | 4,191 | 10.8 |
| 65-74 |  |  | 3,000 | 6.8 | 2,661 | 6.8 |
| Over 75 | 3,629 | 7.1 | 1,387 | 3.2 | 1,889 | 4.9 |
|  | 51,152 | 100.0 | 43,845 | 100.0 | 38,900 | 100.0 |

Source: John Brown Technical Memorandum No. L, October, 1972
stores near their houses when they needed milk or bread. Some also came back to East Boston to buy their sausages and cheeses and tomatoes because large supermarkets in the suburb did not carry the right staples for Italian taste. While the suburban area was considered pretty, residents reported that they never really made friends with their neighbors. They could not go anyplace without a car, people did not offer each other rides, and children had limited playmates. It is interesting to know that an 8 percent increase of population in East Boston was recorded of those over 65 and that the 25-44 year age group increased by 6 percent. The major population lost in East Boston occurred in the age group between 0-14 years and reflects a 14 percent decrease.

East Boston today appears to be a stable community. Most residents live in family groups (91 percent as opposed to 78 percent city wide, with slightly more children that the City average). The median family income in East Boston is somewhat less than that for the City in 1970. This is due more to a comparative lack of upper income families than to a concentration of very low income families. Census data show that East Boston's wage earners tend to hold less skilled jobs or jobs in which skills are acquired through apprenticeship. This reflects a level of formal education which is lower than the City average. Statistics also indicate that the youth of East Boston continue to receive less education in terms of years spent in school and consequently have less access to the
kinds of professional, technical, clerical and "service" type jobs which are increasing most rapidly in the Boston economy.

East Boston has a strong community structure which has been enhanced by a number of factors. Home ownership is high for an urban area. Over 80 percent of residential structures containing l-4 apartments are owner occupied which greatly strengthens the community and encourages a higher level of maintenance and community concern. Both owners and tenants tend to live in the same place for longer periods of time than in other parts of the City. The strong ethnic nature of the Italian community also contributes to the sense of neighborhood.

## NEIGHBORHOODS

East Boston is a peninsula divided into a residential community and an international airport. There are six neighborhoods which have different specific characteristics: Jeffries Point, Central/Maverick Square, Eagle Hill, Paris Street Flats, Harbor View and Orient Heights. The residential area was laid out on the standard rectangular blockgrid plan, with the industrial areas situated on the water front. East Boston has approximately 14,318 housing units with 47 percent of those units in three-family homes. 20 percent of those units are single-family homes and 28 percent are in two-family homes. 80 percent of the $1-4$ unit structures had resident owners in 1970 , and the census records show that 88 percent of


LAND USE OF EAGLE/ HILL


KEY
$\square$ RESIDENTIAL
INDUSTRIAL

COMMERCIAL


PUBLIC \& SEMI-PUBLIC INST.
OADASEN SPACE \& RECREATION

## LOCALITY SERVICES



BUILT AND OPEN SPACES


KEY
the residential structures were built prior to 1939. In residential area, many local stores locate at street corners serve inhabitants in adjacent blocks.

The extreme lack of open space for public use is a matter of high priority in the community. Over the years, East Boston has lost many of the amenities that made this community an attractive and enjoyable place to live. The trees that once lined many streets are now gone, American Field was taken for Postal Operations, and Wood Island, the 65-acre park, has been taken for a runway. As a result of such losses East Boston residents have only half as much open space per capita as the rest of the City.

The introduction of the automobile brought problems to East Boston. The community had to make up to inadequacies regarding road width and placement. However when the existing system is exposed to an increasing number of vehicles the abilities to accommodate those vehicles break down. The circulation pattern in East Boston cannot easily accommodate trucks, cars, buses and taxis all competing for street space. Most local streets are one-way to retain spaces for street parking and to decrease traffic accidents in residential areas. Yet the lack of parking space is one of the major problems in the area.

### 3.3 CHARACTERISTICS OF SELECTED BLOCK

## ORGANIZATION AND METHODS OF OBSERVATION

The neighborhood of Eagle Hill is characterized by three decker row houses which have been occupied by the same families for several generations. The two facing blocks selected for case study represents the typical tissue forms in the neighborhood: buildings on the block lines the streets with three basic types of front spaces. They form a central open space of back yard for each house. The observations will focus on the interface between street and the buildings and the analysis will include typology of building forms and front spaces, parking situation on the street, and the actual activities and interactions of the residents in this space.

Various aspects of the use and physical characteristics of semi-private space are related to the issues of privacy, social interaction, personalization, territoriality, surveillance and security. The building elements of forty five houses on the block such as window, door, fence, stoop, pavement, and first floor level are recorded in detail and graphically presented. The list of exterior improvements of each building will be given to present how inhabitants maintain their houses.

Records of parking situations were carried out at 10 am., 2 pm., $6 \mathrm{pm} .$, on Sunday April 12, and Thursday April 16, 1981, to illustrate the use of street space. The results show

LAND UTILIZATION
SELECTED BLOCK


KEY

|  | PUBLIC ZONE <br> (SIDEWALK, STREET) |
| :---: | :---: |
|  | PRIVATE BUILT ZONE (BUILDINGS) |
|  | SEMI-PRIVATE ZONE <br> (FRONT YARD) |
|  | PRIVATE OPEN SPACE (BACK YARD) |

how residents relate their houses and their cars and indicate whether they have enough parking spaces or not.

Besides, the study of actual activities of residents will indicate what kind of activities occur in front of the building and on the street, how the arrangement of the physical settings does or does not reflect people's activities. The observations were carried out during the day from 9 am. to 6pm. on Saturday April 11, and Friday April 17, 1981. The weather was excellent on both the study days, with warm sunny conditiohs suitable for staying outdoors. The activity information includes a record of exactly where people were and what they were doing, taken at 37 predetermined times and plotted on a plan of the street.

## OBSERVATIONS

While walking through Princeton 'street from Central Square of East Boston, there is a succession of interesting features and themes: the cars parked on two sides of the street occupy most of the street space; the small local stores are located at street corners; the buildings have narrow side yards and passages from the street to the front entrances (or even have no space between the two); the houses surround the central open space subdivided into several private back yards; almost all houses are detached so that the space between two houses could be a side yard or pathway linking the sidewalk and back yard. Each building is so narrow and long that
windows are needed on the sides of the houses for cross ventilation; yet the distance between two buildings is too small to allow light to penetrate through the window.

The street space is an active one: cars constantly are driven and parked on both sides, children play on the street and sidewalk, people walk on the sidewalk,etc. In the front of houses, the level change of each house between the sidewalk and the front door is provided by the stoops which provide sitting surfaces outside for people to talk to their neighbors, and at the same time to watch the activities which happen on the sidewalks and streets. Fences are placed on the boundary lines of most houses to define private territory as well as to avoid having children pick up the flowers. The common decoration of entryways, facades and gardens confirms that there is indeed a variety of opportunities for self-expression and personalization.

Compared to the front space, the back yard represents a quiet and private space, which is fenced in to give a sense of its belonging to inhabitants. Residents use it for growing vegetables and plants, for storage and barbecue, or for young kids to play in. Regardless the condition of the back yard, the primarily concern here seems to be trying to avoid other people's visual access or intrusion from public.

An inventory of each building on the block showed how people use their physical settings and how they had been changed over time. From the interviews of inhabitants, one
learns that different persons have different feelings and attitudes about their buildings: concerns range from preserving heat, expressing personal taste, maintaining security or privacy, to accommodation of specific activities.

FINDINGS
From the observations on Princeton Street, there are three features which came to the forefront: Firstly, there were insufficient parking space for the residents, especially after working hours. Secondly, the front steps and the sidewalks become the natural focal points for children and adults as they seeked playmates or conversation partners; in short, the front space of the buildings become the main theatre of social interaction. Thirdly, the monotony of the original building constructions had since been punctuated with careful attention on the part of residents to details of doorway decorations, hedge cultivations, arrangements of steps, sitings of windows, erections of fecnces, and the maintenance of facades in general. One could not help but noticed that all those individualized development came from the desire of the houseowners for some demarcations of territorial boundaries, and personal self-expressions.

## STREET AND OPEN SPACES



1. The traffic flows in only one direction and parking is allowed on both sides of the street.
2. Drivers on the road sometimes could not see pedestrians crossing because the cars parked along the street blocked their views; and likewise, those walking behind parked vehicles sometimes are not alerted to oncoming traffic.
3. The school yard in the neighborhood is the main playground for children -- the only big open space in this area.
4. The passageway from the front public sidewalk to the backyard is fenced to keep away intruders, and to have privacy in the backyard.

## THREE TYPES OF SPACES BETWEEN BUILDINGS AND STREETS



1. The front door opens directly into the public sidewalk.
2. There is not a distance between the sidewalk and the front window, but the stoop between the sidewalk and the entrance door give a sense of separation of the public from the private space.
3. There is a little space between the building and the public ground. The arrangement of the stoop gives an indirect access to the front entrance.
4. Here there is more space between the public domain and the private compound, which gives rise to the variety of arrangements of the passageway and the entrance.

## INTERFACE SPACE



1. Residents planted flowers on the sidewalk to achieve a more beautiful environment.
2. Here the more delicate garden plants provide an equally aesthetic view, but had to be fenced in on semi-private soil.
3. An unimaginative and narrow access passageway confronts a wide but barren sidewalk.
4. The fences or shruberry hedges on the boundaries are meant to give a sense of territoriality -- to keep away passers-by.

## SCENES IN INTERFACE



1. The woman on the second floor sits by the window and watches the activities outside -- perhaps even with an eye on security.
2. A fenced-in access space can still be an idea sits for accrossing neighbors, or even aimiable passers-by.
3. A more open frontal area creates a more relax atmosphere for young and old alike.
4. The old lady sits outside to enjoy the sunshine; and to be, seemingly, in a world of her own.

## CHILDREN IN INTERFACE



1. For those children playing on the sidewalk; there cannot possibly be bigger cars for toys.
2. A stoop is a good place for a family gathering, or a ball game.
3. Children sit on the steps to discuss their secrets.
4. A lonely child even uses the water hydrant as his vantage point from which to judge the world.

## BACK YARD



1. The fenced backyard offers a playground for younger children in a more private setting.
2. Fire escapes can also be eye-sores, the artifice behind this house can hardly evoke an artistic skein in an observer.
3. Some people use their backyards to hang up their laundry, but some backyards are bare and lifeless.
4. The residents place a barbecue table in the backyard and use it for different functions.

## FACADE



1. The baywindow which projects onto the street provides the residents with more living space as well as a better view of the outside.
2. The setting of the porch here gives rise to the sense of a semiprivate entrance.
3. The residents of these two neighboring units successfully used different colours and materials to personalize their respective habitations.
4. Different types of upper-story constructions provide interesting contrasts in the housing community.
5. The contraption of the portico on the doorway decorate an otherwise unremarkable entrance.

## BLOCK PLAN \& AXONOMETRIC OF BUILDINGS



## INVENTORY OF BUILDINGS


\# 80

## \# 80

1. BUILDING TYPE: Attached three-family apartment house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 7'
3. FENCE: Height: 3 ' above ground, Location: on the boundary line, Material: wrought iron on concrete base
4. WINDOW: Height of sill: 7' above ground Visual barriers: closed window curtains
5. STOOP: Concrete steps with no landing RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: a single door with lock and a storm door, Material: wood for the main door, glass and aluminum frame for storm door
7. THE DOOR ACCESS TO THE BACK YARD: None
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $4 \frac{1}{2}$ ' above ground
10. ENTRYWAY: Pediment with brackets

\# 84
11. BUILDING TYPE: Attached single-family house
12. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $4^{\prime}$
13. FENCE: Height: 6' above ground, Location: on the boundary line, Material: wood slats on concrete base(2' high)
14. WINDOW: Height of bay window: $8^{\prime}$ above ground

Visual barriers: closed roll up shades
5. STOOP: Concrete steps with no landing RAILING: Wrought iron on one side
6. FRONT DOOR: Arrangement: a single door with lock and a storm door, Material: wood for main door and a aluminum frame with glass for storm door
7. THE DOOR ACCESS TO THE SIDE YARD: Height: 6 ' above ground, Material: wood slats on concrete base
8. PAVEMENT: Concrete
9. LEVEL OF BUILDING ENTRANCE: $4 \frac{1}{2}$ ' above ground
10. ENTRYWAY: Pedimet for main door, aluminum awning for secondary door

\# 80
\# 84


\# 90

\# 94
\# 90

1. BUILDING TYPE : Detached single-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 16秐' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 15'
3. FENCE: Height: $4 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: chain-link
4. WINDOW: Height of sill: $8^{\prime}$ above ground

Visual barriers: closed Venetian blinds
5. STOOP: Brick steps with landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: a single door with lock and a storm door, Material: wood for main door and aluminum frame with glass for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 5' above ground, Material: Chain-link
8. PAVEMENT: Stone slabs
9. LEVEL OF BUILDING ENTRANCE: 5' above ground
10. ENTRYWAY: The door is recessed $1 \frac{1}{2} '$ from facade, entry placed with wooden frame
\# 94

1. BUILDING TYPE: Detached single-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 5 $\frac{1}{2}$ ' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 1 '
3. FENCE: None
4. WINDOW: Height of bay window sill: $10^{\prime}$ above ground Visual barriers: translucent curtains
5. STOOP: Brick steps with little landing RAILING: None
6. FRONT DOOR: A single door with lock , Material: wood
7. THE DOOR ACCESS TO THE BACK YARD: Height: $5 \frac{1}{2}$ ' above ground, Material: chain-link
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 5' above ground
10. ENTRYWAY: Overhang of second floor as entrance cover and the front door is recessed $4 \frac{1}{2}$ ' from facade

\# 96

\# 98
\# 96
11. BUILDING TYPE: Detached single-family house
12. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 4 $\frac{1}{2}$ ' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $1^{\prime}$
13. FENCE: None
14. WINDOW: Height of bay window sill: $7^{\prime}$ above ground Visual barriers: closed roll up shades and curtains
15. STOOP: Brick steps with no landing RAILING: None
16. FRONT DOOR: One single door with lock, Material: wood
17. THE DOOR ACCESS TO THE BACK YARD: Height: 5' above ground, Material: chain-link
18. PAVEMENT: None
19. LEVEL OF BUILDING ENTRANCE: 5' above ground
20. ENTRYWAY: Overhang of second floor as entrance cover and the door is recessed $3 \frac{1}{2}$ ' from facade

## \# 98

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 4六' distance between sidewalk and front window: $2^{\prime}$
3. FENCE: None
4. WINDOW: Height of bay window sill: $7^{\prime}$ above ground

Visual barriers: translucent curtains
5. STOOP: Concrete steps with no landing RAILING: None
6. FRONT DOOR: Arrangement: one single door with lock, Material: wood
7. THE DOOR ACCESS TO THE BACK YARD: Height: 4' above ground, Material: chain-link
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $4 \frac{1}{2}$ ' above ground
10. ENTRYWAY: Overhang of second floor as entrance cover, the front door is recessed $3 \frac{1}{2}$ ' from facade


\# 100, 102

\# 104
\# 100, 102

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $3 \frac{1}{2}$ ' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $2 \frac{1}{2}{ }^{\prime}$
3. FENCE: None
4. WINDOW: Height of sill: 41/2' above ground Visual barriers: semi-closed window shades
5. STOOP: Brick steps with little landing RAILING: None
6. FRONT DOOR: Arrangement: a single door with lock and a storm door, Material: wood for main door and wood with window for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 4' above ground, Material: chain-link
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 2 ' above ground
10. ENTRYWAY: The main door is recessed $l^{\prime}$ from facade, the entry placed with wooden frame
\# 104
11. BUILDING TYPE: Detached three-family house
12. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $8^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 6'
13. FENCE: Height: $3 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: shrubs and wire with concrete support
14. WINDOW: Height of sill: 6奖' above ground Visual barriers: closed Venetian blinds
15. STOOP: Wood steps with little landing RAILING: Wood made on two sides
16. FRONT DOOR: Arrangement: a single door with lock and a storm door, Material: wood with glass for main door and aluminum frame with screen for storm door
17. THE DOOR ACCESS TO THE BACK YARD: Height: $3^{\prime}$ above ground, Material: chain-link
18. PAVEMENT: Concrete
19. LEVEL OF BUILDING ENTRANCE: 4' above ground
20. ENTRYWAY: Pediment with brackets, the main door is recessed 2' from facade

\# 106

\# 108
\# 106
21. BUILDING TYPE: Detached two-family house
22. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7'

DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 4'
3. FENCE: Height: $3^{\prime}$ above ground, Location: on the boundary line, Material: chain-link with shrubs
4. WINDOW: Height of bay window sill: 6' above ground Visual barriers: closed Venetian blinds
5. STOOP: Wood steps with no landing

RAILING: Tubular wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between main door and storm door(both are double door), Material: wood for the main door and wood with glass for storm door
7. THE DOOR ACCESS TO THE BACKYARD: Height: $7^{\prime}$ above
ground, Material: chain-link
8. PAVEMENT: Concrete
9. LEVEL OF BUILDING ENTRANCE: $4^{\prime}$ above ground 10. ENTRYWAY: Pediment with brackets

## \# 108

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7 '

DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 7'
3. FENCE: Height: $4^{\prime}$ above ground, Location: on the boundary lind, Material: wrought iron
4. WINDOW: Height of sill: 5' above ground

Visual barriers: semi-closed Venetian blinds
5. STOOP: Concrete steps with no landing

RAILING: Tubular wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between main door and storm door(both are double doors), Material: wood and glass for storm, wood for main door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $6^{\prime}$ above ground, Material: chain-link
8. PAVEMENT: Concrete
9. LEVEL OF BUILDING ENTRANCE: $4^{\prime}$ above ground
10. ENTRYWAY: Pediment with brackets



\# 118

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $4 \frac{1}{2}{ }^{\prime}$
3. FENCE: Height: $3^{\prime}$ above ground, Location: on the boundary line, Material: wrought iron with brick at corner
4. WINDOW: Height of bay window sill: $6^{\prime}$ above ground Visual barriers: closed Venetian blinds
5. STOOP: Brick steps with little landing

RAILING: Tubular wrought iron on one side
6. FRONT DOOR: A double door with lock, Material: wood
with glass
7. THE DOOR ACCESS TO THE BACK YARD: None
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $5 \frac{1}{2}{ }^{\prime}$ above ground 10. ENTRYWAY: Portico

## \# 120

1. BUILDING TYPE: Detached single-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 60' DISTANCE TETWEEN SIDEWALK AND FRONT WINDOW: 60'
3. FENCE: Height: $4^{\prime}$ above ground, Location: on the boundary line and in the
front of house( $6^{\prime}$ far from building), Material: chain-link
4. WINDOW: Height of sill: 6' above ground Visual barriers: closed Venetian blinds
5. STOOP: Wood steps with little landing RAILING: Wood made on two sides
6. FRONT DOOR: Arrangement: a single door with lock, Material: panelled wood with window and curtains 7. THE DOOR ACCESS TO THE BACK YARD: None
7. PAVEMENT: Asphalt
8. LEVEL OF BUILDING ENTRANCE: $5^{\prime}$ above ground
9. ENTRYWAY: Pediment with brackets

\# 120
\# 124
10. BUILDING TYPE: Detached single-family house
11. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7'

DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $5 \frac{1}{2}$
3. FENCE: Height: $3^{\prime}$ above ground, Location: on the boundary line, Material: decorated shape of wrought iron on the brick base
4. WINDOW: Height of sill: $6 \frac{1}{2}$ ' above ground

Visual barriers: semi-closed roll up blinds
5. STOOP: Brick steps with landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: a single door with lock and a storm door, Material: wood with glass for main door and a aluminum frame with glass for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 3 ' above ground(which connect with fence), Material: wrought iron
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 4' above ground
10. ENTRYWAY: Aluminum awning of entrance, the front door is recessed $1 \frac{1}{2}$ ' from facade

## \# 126

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $5 \frac{1}{2}{ }^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $5 \frac{1}{2}{ }^{\prime}$
3. FENCE: Height: $2 \frac{1}{2}$ ' above ground, Location: on
the boundary line, Material: wrought iron 4. WINDOW: Height of sill: 5' above ground

Visual barriers: closed Venetian blinds
. STOOP: Concrete steps with little landing RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: a single door with lock, Material: panelled wood with glass
7. THE DOOR ACCESS TO THE BACK YARD: $3^{\prime}$ above ground, Material: wood slats
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $4^{\prime}$ above ground 10. ENTRYWAY: Pediment



\# 128

\# 130

\# 132, 134
\# 128

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7י DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 7'
3. FENCE: Height: $3 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: wood slats
4. WINDOW: Height of sill: $6 \frac{1}{2}{ }^{\prime}$ above ground

Visual barriers: semi-closed roll up blinds with translucent curtains
5. STOOP: wood steps with no landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors(both are single doors) Material: wood with window for main door and aluminum frame with glass for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 4 ' above ground, Material: wrought iron
8. PAVEMENT: Concrete
9. LEVEL OF BUILDING ENTRANCE: 4' above ground
10. ENTRYWAY: Aluminum awning
\# 130

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $5 \frac{1}{2}{ }^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 2'
3. FENCE: None
4. WINDOW: Height of bay window sill: 7' above ground Visual barriers: closed Venetian blinds
5. STOOP: Brick steps with no landing

RAILING: wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two single doors, Material: wood with glass for main door and a aluminum frame with glass for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 4' above ground, Material: wood slats
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 4' above ground
10. ENTRYWAY: Aluminum awning
\# 132, 134

1. BUILDING TYPE: Attached two-family house
2. DISTANCE FROM SIDEWALK TO ENTRANCE DOOR: $0^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $0^{\prime}$
3. FENCE: None
4. WINDOW: Height of sill: 5' above ground

Visual barriers: closed curtains
5. STOOP: None
6. FRONT DOOR: Arrangement: a single door with lock Material: wood
7. THE DOOR ACCESS TO THE BACK YARD: None
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $\frac{1}{2}$ ' above ground
10. ENTRYWAY: Overhang of bay window of second floor


\# 133

\# 131

\# 127

\# 125

## \# 127

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 3' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 1 '
3. FENCE: Height: $2^{\prime}$ above ground, Location: on the boundary line, Material: wrought iron
4. WINDOW: Height of bay window sill: $4 \frac{1}{2}$ ' above ground Visual barriers: closed Venetian blinds
5. STOOP: Brick steps with no landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors (a double door for main door, a single door for outer door), Material: wood with window for main door, wood with side window for outer door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 7 ' above ground, Material: wood
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 2 ' above ground
10. ENTRYWAY: Alaminum awning
\# 125

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 3' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 1'
3. FENCE: None
4. WINDOW: Height of bay window sill: $4 \frac{1}{2}$ ' above ground Visual barriers: closed roll up shades
5. STOOP: Concrete steps with no landing RAILING: None
6. FRONT DOOR: Arrangement: a single door with lock Material: wood with side window
7. THE DOOR ACCESS TO THE BACK YARD: Height: 7' above ground, Material: wood
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $2 \frac{1}{2}$ ' above ground
10. ENTRYWAY: Aluminum awning
11. PAVEMENT: None
12. LEVEL OF BUILDING ENTRANCE: 2' above ground 10. ENTRYWAY: Aluminum awning


\# 123

\# 121

## \# 123

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 3

DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 1'
3. FENCE: None
4. WINDOW: Height of sill: $5 \frac{1}{2}$ ' above ground

Visual barriers: closed Venetian blinds
5. STOOP: Concrete steps with landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors(both are double doors)
Material: wood for main door, wood with window on top for outer door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $6^{\prime}$ above ground, Material: wood
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $1 \frac{1}{2}$ ' above ground 10. ENTRYWAY: Pediment with brackets

## \# 121

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $3^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 1 '

## 3. FENCE: None

4. WINDOW: Height of bay window sill: $5 \frac{1}{2}$ ' above ground Visual barriers: semi-closed shades with translucent curtains
5. STOOP: Brick steps with no landing

RAILING: None
6. FRONT DOOR: Arrangement: the vestibule between two doors(each unit has its own main single door, the outer door is a double door) Material: wood with glass for main door, wood for outer door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $3^{\prime}$ above ground, Material: chain-link
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $2 \frac{1}{2}$ ' above ground 10. ENTRYWAY: Portico

\# 119
\# 117

\# 119

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $3 \frac{1}{2}$ ' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $3 \frac{1}{2}$ '
3. FENCE: Height: $3^{\prime}$ above ground, Location: on the boundary line, Material: wrought iron
4. WINDOW: Height of sill: 9 ' above ground

Visual barriers: semi-closed shades with translucent curtains
5. STOOP: Brick steps with no landing

RAILING: wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two
doors(a double door for main door, a
single door for storm door)
Material: wood with window for main door,
wood door with side window for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $3 \frac{1 / 2}{2}$ above
ground, Material: wrought iron
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 4' abvoe ground
10. ENTRYWAY: Aluminum awning
\# 117

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $3 \frac{1}{2}$ ' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $3 \frac{1}{2}$ '
3. FENCE: Height: $2 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: wrought iron
4. WINDOW: Height of sill: $5 \frac{1}{2}$ ' above ground Visual barriers: semi-closed shades with curtains
5. STOOP: Brick steps with no landing RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors(both are single doors)
Material: wood with window for main door,
aluminum frame with window for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $3^{\prime}$ above ground, Material: wrought iron
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 4' abvoe ground
10. ENTRYWAY: Aluminum awning


\# 115

\# 113
\# 115
11. BUILDING TYPE: Detached two-family house
12. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 4' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 4'
13. FENCE: Height: $3 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: wrought iron
14. WINDOW: Height of sill: $7^{\prime}$ above ground

Visual barriers: semi-closed shades with translucent curtains
5. STOOP: Brick steps with landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors(each unit has its own main door, the storm door is a double door) Material: wood for main door, wood and window with roll up shades for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: 5' above ground, Material: wrought iron
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 5' above ground 10. ENTRYWAY: Portico

## \# 113

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $3 \frac{1}{2}$ ' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $3 \frac{1}{2}{ }^{\prime}$
3. FENCE: None
4. WINDOW: Height of sill: 7' above ground

Visual barriers: closed roll up shades
5. STOOP: Concrete steps with no landing RAILING: None
6. FRONT DOOR: Arrangement: the vestibule between two doors(both are single doors)
Material: wood with glass
7. THE DOOR ACCESS TO THE BACK YARD: Height: 6' above ground, Material: wood
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 4' above ground 10. ENTRYWAY: Portico

\# 111

\# 109

## \# 111

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 4' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $4^{\prime}$
3. FENCE: Height: $3 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: chain-link
4. WINDOW: Height of sill: 4' above ground

Visual barriers: closed roll up shades
5. STOOP: Concrete steps with landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors(both are double doors)
Material: wood with glass for two doors
7. THE DOOR ACCESS TO THE BACK YARD: Height: 6 ' above ground, Material: wood
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $1 \frac{1}{2}$ ' above ground 10. ENTRYWAY: Pediment

1. BUILDING TYPE: Detached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 4' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 4'
3. FENCE: Height: $3^{\prime}$ above ground, Location: inside the boundary line for $1 \frac{1}{2}$ ', Material: wrought iron
4. WINDOW: Height of sill: $4 \frac{1}{2}$ ' above ground Visual barriers: closed roll up shades
5. STOOP: Brick steps with no landing

RAILING: Wrought iron on two sides
6. FRONT DOOR: Arrangement: the vestibule between two doors(both are single doors)
Material: wood for main door and wood with window on top for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $3 \frac{1 / 2}{2}$ above ground, Material: wrought iron
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $2 \frac{1}{2}{ }^{\prime}$ above ground
10. ENTRYWAY: Aluminum awning
\# 115 \# 113
\# 111
\# 109


\# 107

\# 105

\# 103

\# 101
\# 103

1. BUILDING TYPE: Attached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 6' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $2^{\prime}$
3. FENCE: None
4. WINDOW: Height of sill: $8^{\prime}$ above ground

Visual barriers: semi-closed shades
5. STOOP: Concrete steps with no landing RAILING: Tubular iron on two sides
6. FRONT DOOR: Arrangement: each unit has its own door Material: wood and window(one with Venetian blinds, the other with curtains)
for each door
7. THE DOOR ACCESS TO THE BACK YARD: No door from sidewalk
8. PAVEMENT: None
9. LEVLE OF BUILDING ENTRANCE: 6 $\frac{1}{2}$ ' above ground 10. ENTRYWAY: Portico

## \# 101

1. BUILDING TYPE: Attached two-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 7' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $7^{\prime}$
3. FENCE: None
4. WINDOW: Height of sill: $8^{\prime}$ above ground
Visual barriers: closed roll up shades
5. STOOP: Concrete steps with landing RAILING: Tubular iron on two sides
6. FRONT DOOR: Arrangement: a single door with lock

Material: wood
7. THE DOOR ACCESS TO THE BACK YARD: No door from sidewalk
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $6 \frac{1}{2} '$ above ground
10. ENTRYWAY: Pediment with brackedt, the front door is recessed 1' from facade
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $1 \frac{1}{2}$ ' abvoe ground
10. ENTRYWAY: Pediment with brackets


\# 95, 97

\# 93
\# 95, 97

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $3^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: 2'
3. FENCE: None
4. WINDOW: Height of sill: 7 ' above ground Visual barriers: closed roll up shades
5. STOOP: Wood steps with no landing RAILING: None
6. FRONT DOOR: Arrangement: a single door with lock Material: wood
7. THE DOOR ACCESS TO THE BACK YARD: Height: $4 \frac{1}{2}$ ' above ground, Material: wrought iron
8. PAVEMENT: None
9. LEVLE OF BUILDING ENTRANCE: 4' above ground
10. ENTRYWAY: Pediment with brackets, the front door is recessed $1 \frac{1}{2}$ ' from facade
11. BUILDING TYPE: Detached three-family house
12. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: 2' DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $0^{\prime}$
13. FENCE: None
14. WINDOW: Height of bay window sill: $5 \frac{1}{2}$ ' above ground Visual barriers: translucent curtains
15. STOOP: Wood steps with no landing

RAILING: Tubular steel on two sides
6. FRONT DOOR: Arrangement: the vestibule between two double doors, Material: wood for main door and wood with window(with curtains) for strom door
7. THE DOOR ACCESS TO THE BACK YARD: None
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $3 \frac{1}{2}$ ' above ground 10. ENTRYWAY: Pediment with brackets

\# 89, 91

\# 87
\# 89, 91

1. BUILDING TYPE: Detached three-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $4^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $0^{\prime}$
3. FENCE: None
4. WINDOW: Height of bay window sill: 7 ' above ground Visual barriers: translucent curtains
5. STOOP: Wood and concrete steps with no landing RAILING: None
6. FRONT DOOR: Arrangement: a single door with lock Material: wood with glass on top
7. THE DOOR ACCESS TO THE BACK YARD: None
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: 4' above ground
10. ENTRYWAY: Pediment with brackets, the front door is recessed $2^{\prime}$ from facade

## \# 87

1. BUILDING TYPE: Detached single-family house
2. DISTANCE BETWEEN SIDEWALK AND ENTRANCE DOOR: $2 \frac{1}{2}{ }^{\prime}$ DISTANCE BETWEEN SIDEWALK AND FRONT WINDOW: $2 \frac{1}{2}{ }^{\prime}$
3. FENCE: Height: $4 \frac{1}{2}$ ' above ground, Location: on the boundary line, Material: chain-link
4. WINDOW: Height of sill: 4' above ground Visual barriers: closed Venetian blinds
5. STOOP: Concrete steps with no landing RAILING: Wood board on two sides
6. FRONT DOOR: Arrangement: the vestibule between two double doors, Material: wood with window
(with curtains) for main door and wood
with window(with blinds) for storm door
7. THE DOOR ACCESS TO THE BACK YARD: Height: $4 \frac{1}{2}$ ' above
(connect front fence), Material: chain-link
8. PAVEMENT: None
9. LEVEL OF BUILDING ENTRANCE: $2 \frac{1}{2}$ ' above ground
10. ENTRYWAY: Pediment with brackets



## INTERACTIONS \& ACTIVITIES





## RELATIONSHIP BETWEEN ACTIVITIES \& INTERACTIONS



A interesting finding was that the number of interaction was found to correlate with the number of "staying" and "doing" activities in the street space

POSITIONF OF PEOPLE PERFORMING INTERACTIONS \& ACTIVITIES

Saturday, 9am-6pm.

## CHANGE OF PHYSICAL SETTINGS OVER TIME



## THE PARKING SITUATION ON PRINCETON ST.



2 PM


Around 2 pm,the parking situation is available also.

6 PM


After working hours, the parking situation is bad that people have to find a parking space two or three blocks away.

### 4.1 METHODS OF DEVELOPMENT FOR INTERVIEWS

Detailed questionnaires were used to survey the attitude and behavior of residents in selected blocks in East Boston. Considerations for questions to be included in the questionnaire were quided by the conceptual issues discussed in chapter two as well as based on physical observations. The 43-question survey(see Appendix I) was distributed to eighteen houseowners who lived on the first floors of buildings with different types of front space.

The residents were asked to rate the degrees of their satisfaction with the neighborhood, their attitudes toward use of the interface space and backyard, and their feelings about the allocation of parking space.
4.2 SUMMARY OF RESULTS FROM INTERVIEWS

Thirteen important points obtained from the interviews are summarized below:)

1) People have on the average lived for all their lives in the neighborhood.
2) They have lived in the same house for a generation.
3) They are middle income people.
4) They are sociallu close to their neighbors.
5) They spent more time in the front of the house than in the back. (8 hours/week) - primarily for socializing.
6) Privacy and territoriality are expressed with fences and door locks - both items plus windows have been modified by most residents.
7) Secruity is excercised through looking out of windows.
8) Vestibules are favored.
9) Porches would be welcome.
10) Street is not perceived as safe for children to play.
11) Front yard is deemed too small primarily for landscraping purposes.
12) Almost everyone complained about the lack of parking on the street. Parking shortage can be best expalined by the following accounting:

There are 45 houses, along Princeton Street.

There are a maximum of 52 parking sapces if cars are parked along both sides of the street.

There are approximately 100 families with 1.33 cars each or 133 cars on the back.

Correspondingly, there is a shortage of 75 cars along this particular block.
13) Most people expressed the risk to retain their backyard for private use.

### 4.3 SUGGESTIONS FOR IMPROVING THE STREET ENVIRONMENT

Regarding the iterpretation of the observations and interviews, it appears that the spaces in front of the house are an important feature of everyday life--they serve the social life of the neighborhood, they relate to parking which presents difficulties for the residents, and they express the personal space via facade improvements, planting, paving, etc.

Based on the preceding conclusions, there are some suggestions which reorganize the use of the street space available between the front of the houses. These suggestions are directed to increase the private space in front of each house while keeping as much as possible along the street. Lanes reserved for cars are next to a minimum since there is little traffic generated by vehiles other than local ones. Alleys are also suggested to alleviate the parking problem which can be switched to the back yard without condemning

## PROPOSAL 1



## STREET

1. Street Width: Decrease from 34' to 22', allowing parking only on one side.
2. Sdiewalk: Increase from $8^{\prime}$ on both sides to $14^{\prime}$ on both sides. The first 6' from the pavement shall be reserved for pedestrians. The 8' next to residents of each housing unit- for expanding of the front gardens, for addition of porches, or for any other arrangements the residents deem fit.
3. Number of parking space: 23, on one side of street only.
4. Landscaping: Each house has at least $8^{\prime}$ wide of land ofr landscaping which will enhance the beauty of the street environment.

## ALLEY

1. Building Demolished: One building in each block.
2. Width of Alley: 16'
3. Pathway: The pathway opens into Brooks Street at one end and


## ADVANTAGES:

1. There are more parking space for the street.
2. Renovations required on the sidewalks and pavement would cost the least among the three proposals.
3. The sidewalk extensions would serve as focal points for neighboring contacts.

## DISADVANTAGES :

1. Parking on both sides would make it difficult for drivers to spot pedestrians who, emerging from behind parked cars, begin crossing the street.

## PROPOSAL 2



## STREET

1. Street width: 34'
2. Sidewalk: $8^{\prime}$ on each side of the road, but at some points this is extended by another area of wideth 9'. Thus cutting into space normally used for parking. These extensions would create spaces 17' in width, which would be suitable for children to play on and for adults to mingle with neighbors.
3. Number of parking spaces: 36 cars in tandem.
4. Landscaping: Decorations of the sidewalk extensions will serve to attract residents to these communal grounds.

## ALLEY

1. Building Demoloished: A total of three buildings in the two blocks.
2. Width of Alley: 16'
3. Pathway: Alley opens into Brooks Street at one end and Marion Street at the other.


## ADVANTAGES

1. Lower cost because fewer buildings are to be demolished.
2. Leaving the residents to decide on the arrangements of their front space shall add variety to the landscape of the neighborhood.
3. Parking on only one side of the road would reduce the chance of accidents due to pedestrians crossing the street from behind parked cars and thus and being in the full view of drivers on the road.

## DISADVANTAGES:

1. There is a decrease in the number of available parking spaces along the street.

## PROPOSAL 3



## STREET

1. Street Width: 34'
2. Sdiewalk: $8^{\prime}$ on each side of the road, but at some points this extended by another area of width 9'. Thus cutting into space normally used for parking. These extensions would create space 17 ' in width, which would be suitable for children to play on and for adults to mingle with neighbors.
3. Number of parking spaces: 37 cars at 45 to the curb, on one side of the street only.
4. Landscaping: The arrangement of slanting parking lots breaks the monotony of the landscape. The triangular areas on the sidewalk which is next to each parking lot shall be alternatively planted with trees and installed with seats or benches.


## ALLEY

1. Building Demolished: One building in each block.
2. Width of Alley: 16'
3. The pathway opens into Brooks Stteet at one end and Lexington Street at the other.

## ADVANTAGES

1. Lower cost because fewer buildings are to be demolished.
2. The arrangement of slanting parking lots breaks the monotony of the street line.
3. The sidewalk extention would serve as focal points for neighboring contacts.

## MODIFICATIONS IN BACKYARD



Residents could have choice of parking their cars in backyard or along the street. Even they have parking space for children playing, planting and people could keep their backyard private.
completely the backyard space which residents favor.

### 4.4 CONCLUSION

East Boston is a socially close-knit neighborhood with a physical environment developed over a few centuries. Many unco-ordinated constructions in time past combined to create the rather unorderly neighborhood of the present. The most pressing issues how are in the allocation of parking spaces to the convenience of residents, and the development of public open areas to meet the social needs of young and old, all with due consideration for safety and security in the neighborhood. Surveying the availability of uncovered areas at the street level for the entire living community, there also exists an inbalance in the utilization of backyards as compared to spaces at the front of buildings for the outside activities of the residents. This research strove to deal with design issues always in the light of the residents' own expectations of and aspirations for their social living environment. Three alternative proposals are formulated to create an improved living environment without hindering the community's activity patterns.

## APPENDIX I

QUESTIONNAIRE

1. Address $\qquad$
2. Sex $\qquad$
3. Age $\qquad$
4. Occupation $\qquad$
5. Approximate income of your family? $\qquad$
6. How many people are there in your family? $\qquad$
Number of children under 15? $\qquad$
7. How far is it from your living place to your working place?
8. How many cars do you have in your family?
9. a) How long have you lived in East Boston? $\qquad$
b) How long have you lived in this house? $\qquad$
10. What were your reasons for moving into this house? (check as many as applicable)
$\square$ Quietness $\quad \square$ Economic situation $\quad \square$ Size of house
$\square$ Location $\quad \square$ Friends/relatives here
$\square$ Appearance of house
$\square$ Others(please specify)
11. a) Do you expect to move out to another place within 5 years?

b) Why? $\qquad$
12. How much do you like living in your present residence?

Very much Not at all
$\begin{array}{lllllll}\square 1 & \square 2 & \square 3 & \square 4 & \square 5 & \square 6 & \square 7\end{array}$
13. About how many hours a week do you spend outside your own house? What for?

14. How would you describe your front yard and back yard in your words?

Front yard: $\qquad$
Back yard: $\qquad$
15. Why did you or did'nt you build your fence around your house? (check as many as applicable)
$\square$ To define my property
$\square$ To keep out intruders
$\square$ To have privacy from neighbors
$\square$ I didn't because it was already built before $I$ moved in
$\square$ It is not necessary
$\square$ Others(please specify)
16. What do you use or have now to protect your house?
$\square$ Fences
$\square$ Big front yard
$\square$ A dog $\square$ secured door lock
$\square$ Others(please specify)
17. What about a higher and more solid type of fence built in front of house that people could'nt see through?
$\square$ Would like $\quad \square$ Wouldn't $\quad \square$ Indifferent
Why? $\qquad$
$\qquad$
18. Do you think you have enough privacy inside your house from outsiders?
$\square$ YesNo

Please explain: $\qquad$
19. Do you prefer to have a vestibule for your front entrance?
$\square$ Yes No Why? $\qquad$
$\qquad$
20. How much do you like the outside appearance of your house?

| $\square$ Alot | $\square$ Quite a bit $\quad \square$ Only a little |
| :--- | :--- |
| $\square$ Not at all $\quad \square$ Neither like nor dislike $\square$ Don't know |  |

21. How would you like having a covered front porch on your house?
Like very much
Dislike
$\begin{array}{lllllll}\square 1 & \square 2 & \square 3 & \square 4 & \square 5 & \square 6 & \square 7\end{array}$

Why is that? $\qquad$
$\qquad$
22. What would you use a porch for?
23. Is the street noisy when you are at home?
In the day time: $\quad \square$ Yes $\quad \square$ No

In the evening: $\quad \square$ Yes $\quad \square$ No
Comments: $\qquad$
24. How safe do you think this street is (in terms of traffic accidents)?
Very safe
Not safe at all
$\square 1$
$1 \quad \square 2$$\square 4$
57
25. How dangerous do you think it is for pedestrian crossing the street when cars are parked here?

| Not very dangerous |  | Very dangerous |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square 1$ | $\square 2$ | $\square 3$ | $\square 4$ | $\square 5$ | $\square 6$ | $\square 7$ |

26. Do you think the fact that children playing on the street here is particularly dangerous or not?

27. How do you feel about children playing on the sidewalk in front of your house?
28. Where do you think it is best for children to play?
a) 3-6 years old.
$\square$ Back yard $\square$ Indoor $\square$ Front yard $\square$ Entrance $\square$ Sidewalk $\square$ street $\square$ School $\square$ Park
b) 7-14 years old.
$\square$ Back Yard $\square$ Indoor $\square$ Front yard $\square$ Entrance $\square$ sidewalk $\square$ Street $\square$ School $\square$ Park
29. If you had to choose between living in a pretty and attractive neighborhood where the people were not friendly, or in an unattractive neighbor where the people were friendly, which would you prefer?
$\square$ Attractive/not friendly $\quad \square$ Unattractive/friendly
30. In the past week, where was the most frequent place from which you communicated with your neighbors?
$\square$ Your neighbors'HousesYour houseSidewalk
$\square$ Back yard
$\square$ Front entrance
$\square$ Other place
31. a) Do you often watch the activities going on in front of your house?
$\square$ Yes $\quad \square$ No
b) If yes, what activities do you mostly watch?
32. How many people do you know by name in this block?
$\square 0 \quad \square 1-6$7-12 13-18口19-24 $\square 25$ or more
33. Where do the three families live whom you visit most often?
$\square$ Next door
$\square$ Two doors downFarther along row $\square$ Across street or court Across back yard $\square$ Farther away
34. Since you moved in, what have you changed in the front of your house?
35. What are you going to improve in uour front space in the future?
36. Do you think you have enough front yard space?
$\square$ Yes $\quad \square$ No
37. If yes, the reason why people would not want more space?
$\square$ Serves no function
$\square$ Wastes moneyMakes land shortage worseHas close interaction with neighbors
$\square$ It requires too much care
$\square$ Others(please specify)
38. If no, what would people use more space for?
$\square$ To separate public space from private
$\square$ To supply space for inhabitants and children's activities $\square$ To plant flowers or vegetables for appearance $\square$ Others(please specify)
39. What is most important for you about your front space?
$\square$ Security $\quad \square$ Privacy $\quad \square$ Safety $\square$ Survelliance
$\square$ Space makes it clear where my property begins and ends
$\square$ Differrent from my neighbors and made it myself
$\square$ Space to meet my neighbors
$\square$ Planting
$\square$ Others(please specify)
40. If you had limited funds to do any of the following things to the front of your house, which would you like to do first?

| $\square$ Fence $\quad \square$ Gardening | $\square$ Railings on stairs |
| :--- | :--- |
| $\square$ Steps $\square$ Windows | $\square$ Painting of facade |
| $\square$ Porch $\square$ Passage way | $\square$ Decoration |
| $\square$ Doors $\square$ Mailbox | $\square$ Others |

41. Please help me fill out your opinions about what is good or needs improvement in particular parts of your property.

| PART OF PROPERTY | EXCELLENT | SATIS- <br> FACTORY | NEED <br> IMPROVEMENT | WHAT IS ESPECIALLY GOOD <br> Or <br> WHAT NEEDS IMPROVEMENT? |
| :--- | :--- | :--- | :--- | :--- |
| FRONT DOORS |  |  |  |  |
| ENTRANCE PORCH |  |  |  |  |
| FENCES |  |  |  |  |
| DECORATION OF <br> OUTSIDE FRONT |  |  |  |  |
| PAVEMENTS |  |  |  |  |
| SPACE FROM DOOR <br> TO SIDEWALK |  |  |  |  |
| LEVEL OF ENTRANCE <br> FROM SIDEWALK |  |  |  |  |

42. Do you have problem of parking?
$\square$ Yes $\square$ No
If yes, what is that?
43. If you had to choose between having a parking space in your back yard (but then you could not do your gardening there), or having a parking problem but have your own private back yard, which would you choose?
$\square$ Parking space/no private back yard
$\square$ No parking space/private back yard

## APPENDIX II

INTERVIEW RESPONSE AND ANALYSIS

For each question asked, the responses of the eighteen residents $I$ interviewed are recorded and in the accompanying tables. In most cases (and unless otherwise noted), responses are expressed as numbers and percentages. In some cases the percentage of the residents who are male is distinguished from the number and the percentage of those residents who are female. The final line of figures gives the total number of responses, since each person may have given one or more responses. Accordingly, the total number of responses recorded in the bottom line of a table may exceed 18 if more than one response is obtained from any person interviewed.

The interviews were done between 3 and 6 in the afternoon on the following days in 1981: March 15; March 22; March 25; April 6; April 13; and April 18.
2. Profile of residents by sex:

| Sex | Number | Percent |
| :--- | :---: | :---: |
| Male | 9 | 50 |
| Female | 9 | $\frac{50}{18}$ |
| Total | 18 | 100 |

3. Profile of residents by age:

| Age | Number | Percent |
| :--- | :---: | :---: |
| Under 30 | 5 | 27.8 |
| $30-50$ | 5 | 27.8 |
| Over 50 | $\underline{8}$ | 44.4 |
| Total | 18 | 100.0 |

Average age of respondents: 44.9
4. Residents' occupation:

| Occupation | Number | Percent |
| :--- | :---: | :---: |
| Manager \& Administrator | 4 | 22 |
| Private Storeowner | 1 | 6 |
| Skilled Worker | 1 | 6 |
| Unskilled Worker | 2 | 11 |
| Housewife | 6 | 33 |
| Retired | 2 | 11 |
| Unemployed | 2 | 11 |
| Total | 18 | 100 |

5. Approximate income of your family?

| Income | Number | Percent |
| :--- | :---: | :---: |
| $0-10,000$ | 4 | 22.2 |
| $10,000-15,000$ | 5 | 27.8 |
| $15,000-20,000$ | 2 | 11.1 |
| $20,000-25,000$ | 3 | 16.7 |
| Over 25,000 | 1 | 5.6 |
| Unknown | 3 | 16.6 |
| Total | 18 | 100.0 |

6. How many people are there in your family? Number of children under l5?

Number of Children

| Under 15 | Number of Family | Percent |
| :--- | :---: | :---: |
| 0 | 10 | 55.6 |
| 1 | 3 | 16.7 |
| 2 | 4 | 22.2 |
| 3 | 1 | 5.5 |
|  | 18 | 100.0 |

Average number of housemembers in a family: 3.5 people
7. How far is it from your living place to your working place?

| Working Distance | Number | Percent |
| :--- | :---: | :---: |
| 0 (miles) | 10 | 55.6 |
| $1-3$ | 4 | 22.2 |
| $3-5$ | 1 | 5.6 |
| $5-10$ | 3 | 16.6 |
|  | 18 | 100.0 |

8. How many cars do you have in your family?

| Cars in Each Family | Number | Percent |
| :--- | :---: | :---: |
| 1 | 13 | 72.2 |
| 2 | 4 | 22.2 |
| 3 | 1 | 5.6 |
| Total | 18 | 100.0 |

So each family has 1.33 cars in average.
9. a) How long have you lived in East Boston?

Average length of stay for respondents is 38.7 years.
11 out of 18 respondents said they were born in East Boston.
b) How long have you lived in this house?

Average length of stay for respondents in present house is 16.8 years.
10. What were your reasons for moving into this house? (check as many as applicable)

| Reasons | Responses | Percent |
| :--- | :---: | :---: |
| Quietness | 1 | 3.0 |
| Economic Situation | 2 | 6.1 |
| Size of House | 2 | 6.1 |
| Location(Convenience) | 11 | 33.3 |
| Friends/Relatives Here 10 | 30.3 |  |
| Appearance of House | 3 | 9.1 |
| Others | $\frac{4}{12}$ | $\frac{12.2}{100.0}$ |
| Total | $33^{*}$ |  |

* More than one response

The important fact which cannot be neglected is that most people selected "location" and having "Friends/Relatives in the neighborhood" as the reason to move into their houses (63.6\%). "location" here means convenience-residents in East Boston can buy food stuff at the corner store of the block.This response indicates that East Boston is a socially tightly-knit neighborhood. People were born in the neighborhood (61.1\% of respondents were born here), so they are concerned about others and the environment in the vicinity.
11. Do you expect to move out to another place within 5 years?

| Responses | Number | Percent |
| :--- | ---: | ---: |
| Yes | 5 | 27.8 |
| No | 12 | 66.7 |
| I don't know | 1 | 5.5 |
|  | 18 | 100.0 |

For those who responded "Yes" to the last question, 4 out of 5 explained that they would like more space, the last one would prefer a better educational environment.

From twelve people who answered "No", two explained that they were born there. Three of them (25\%) said that they could not afford moving out. Three of them (25\%) say they are too old to move out. Three of them (25\%) gave no reason. And one of them explained he doesn't want to move just because he has familiar neighbors to talk to.

Comparing the income with their answers: for the respondents who expected to move out within five years-- two of them had income in the range $\$ 15,000-20,000$ a year, two were in the range of $\$ 20,000-25,000$, one was over $\$ 25,000$. So it can be deduced that those who were in better economic condition have a higher tendency to move to other places.
12. How much do you like living in your present residence?

12 out of 18 (66.7\%) answered "very much"
Average score from total responses was 1.5
13. About how many hours a week do you spend outside your own house? What for?

| Front space: | Hours | Number | Percent |
| :--- | :--- | :---: | ---: |
| 20 hrs | 1 | 5.6 |  |
|  | $15-20$ | 1 | 5.6 |
|  | $5-10$ | 6 | 33.3 |
|  | $1-5$ | 6 | 33.3 |
|  | 0 | $\frac{4}{22.2}$ | 100.0 |

Average length of stay in front of house for each respondent per week is 7.9 hours.

Back Yard:

| Hours | Number | Percent |
| :--- | :---: | ---: |
| 20 hrs | 3 | 16.7 |
| $10-15$ | 3 | 16.7 |
| $5-10$ | 3 | 16.7 |
| $1-5$ | 6 | 33.2 |
| 0 | $\frac{3}{18}$ | $\frac{16.7}{100.0}$ |

Average length of stay in the back yard for each respondent per week is 6.8 hours.

In total, there were 6 respondents who spent much more time in the front than in the back yard. 4 respondents who spent equal time in the front space and in the back yard, and 6 respondents who spent more time in back yard than in the front space. So it is clear that front spaces and back yards played an important role in their leisure time.
14. How would you describe your front yard and back yard in your words?

| Respondence | Front Space | Back Yard |
| :---: | :---: | :---: |
| 1. | Noisy | For growing plants |
| 2. | Plain grassy | Grassy with vegetable garden |
| 3. | Very clean | Very clean |
| 4 | Noisy | Quiet |
| 5. | Do not exist | 24 x 24 sq-ft not paved |
| 6. | ```People sitting outside``` | Growing vegetable |
| 7. | Good for socializing | Private |
| 8. | Built up with fence | Gardening |
| 9. | Parking cars, growing plants | No answer |
| 10. | For meeting friends | Growing plants |
| 11. | Do not have one | Very small |
| 12. | Do not exist | No answer |
| 13. | Do not use | Used in summer ofr pool and garden |
| 14. | For parking | Do not exist |
| 15. | For parking | Do not exist |
| 16. | Has fresh air | Little garden |
| 17. | Children's place and social area | Private space for growing vegetables and flowers |
| 18. | Do not exist | A medium sized yard about to be cultivated with vegetables and flowers |

From above descriptions, most people used the front yards for sitting, meeting friends, parking space, growing plants, and playing -- these activities are good for socializing. And most people used their back yard as a private space for growing plants and vegetables.
15. Why did you or did'nt you build your fence around your house? (check as many as applicable)

Built fence:

| Response | Number | Percent |
| :--- | :---: | :---: |
| To define my property | 7 | 41.2 |
| To keep out intruders | 8 | 47.1 |
| To have visual privacy  <br> from neighbors  <br>  $\frac{2}{17}$ | $\frac{11.7}{100.0}$ |  |

Didn't build fence

| Response | Number | Percent |
| :--- | :---: | :---: |
| It was already built <br> when I moved in | 6 | 100.0 |
| It is not necessary   <br> Total $\frac{0}{6}$ $\frac{0.0}{100.0}$ <br>   $\quad$$23^{*}$ |  |  |

> * More than on response

It is very interesting to find out that nobody answered "It is not necessary". The most important reasons for building the fences are to keep out intruders, and then to define their properties.
16. What do you use or have now to protect your house?

| Responses | Number | Percent |
| :--- | :---: | ---: |
| Fences | 12 | 32.4 |
| Big front yard | 2 | 5.4 |
| A dog | 6 | 16.2 |
| Secured door lock | 16 | 43.2 |
| Others | $\frac{1}{2 *}$ | $\frac{2.8}{100.0}$ |
| Total | $37^{*}$ |  |

* More than on response

Twelve out of 18 respondents use fences and 16 out of 18 respondents use secured door locks as their tools to protect their houses.
17. What about a higher and more solid type of fence built in front of house that people could'nt see through?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Would like | 1 | 5.6 |
| Wouldn't like | 12 | 66.7 |
| Indifferent | $\frac{5}{18}$ | $\frac{27.7}{100.0}$ |

The primary reason why they would'nt like to build a higher and more solid fences is because they wanted to look outside through windows. If the fence was higher, it would interrupt their vision. (l0 out of 12 respondents provided the same reason)
18. Do you think you have enough privacy inside your house from outsiders?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Ves | 15 | 83.3 |
| No | 3 | 16.7 |
| Total | 18 | 100.0 |

$83.3 \%$ of the respondents said that they had enough privacy even though the distance between the building and the sidewalk was so small. The reason why they had privacy was because they had relatively high windows ( 4 of 15 responses), another reason was that they had curtain ( 5 of 15 responses) to interrupt visual access from outside.
19. Do you prefer to have a vestibule for your front entrance?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Yes | 14 | 77.8 |
| No | 4 | 22.2 |
| Total | 18 | 100.0 |

The most professed reasons why they prefered to have a vestibule are: for security ( 7 out of 14 responses), for visual privacy ( 3 out of 14 responses), for preverving heat ( 3 out of 14 responses) and for keeping interior clean (1 out of 14 response).

Some gave reasons for having just one door so as to avoid letting people hide between two doors and to save space.
20. How much do you like the outside appearance of your house?

| Response | Number | Percent |
| :--- | :---: | :---: |
| A lot | 3 | 16.7 |
| Quite a bit | 10 | 55.6 |
| Only a little | 0 | 0.0 |
| Not at all | 0 | 0.0 |
| Neither like nor dislike | $\frac{5}{18}$ | $\frac{27.7}{100.0}$ |
| Total | 18 |  |

From the above, most people seemed to like the outside appearance of their houses quite well. One might infer that they are likly to keep their interest on outside decoration, since they already did much repairing on their outside space.
21. How would you like having a covered front porch on your house?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Like very much |  |  |
| 1 | 8 | 44.4 |
| 2 | 4 | 22.2 |
| 3 | 2 | 11.1 |
| 4 | 2 | 11.1 |
| 5 | 1 | 5.6 |
| 6 | 0 | 0.0 |
| 7 | 1 | 5.6 |
| Total | 18 | 100.0 |

Average level of like and dislike for covered front porch is 2.33
22. What would you use a porch for?

All of the residents said they would use the porch for sitting outside and watching people pass by. (one out of eighteen houses had porch)
23. Is the street noisy when you are at home?

In the day time: In the evening:

| Response | Number | Percent | Response | Number | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 4 | 22.2 | Yes | 3 | 16.7 |
| No | 14 | 77.8 | No | 15 | 83.3 |
| Total | 18 | 100.0 | Total | 18 | 100.0 |

Most residents did not think that the street was noisy. The interesting thing I found was that $60 \%$ of the people did not even care about the noise caused by airplanes. I think they had already adjusted to this enviornment.
24. How safe do you think this street is (in terms of traffic accidents)?

| Response Scale | Number | Percent |
| :--- | :---: | :---: |
| Very Safe |  |  |
| 1 | 2 | 11.1 |
| 2 | 2 | 11.1 |
| 3 | 8 | 44.5 |
| 4 | 5 | 27.8 |
| 5 | 0 | 0.0 |
| 6 | 0 | 0.0 |
| 7 | 1 | 5.5 |
| Not safe at all |  |  |
| Total | 18 | 100.0 |

On a scale of 7 , the average level of street safety on this block is 3.17
25. How dangerous do you think it is for pedestrian crossing the street when cars are parked here?
Response Scale Number Percent

Not dangerous

| 1 | 2 | 11.1 |
| :--- | ---: | ---: |
| 2 | 5 | 27.8 |
| 3 | 4 | 22.2 |
| 4 | 2 | 11.1 |
| 5 | 2 | 11.1 |
| 6 | 1 | 5.6 |
| 7 | 2 | 11.1 |
| Very dangerous |  |  |
| Total | 18 | 100.0 |

On a scale of 7, the average level of danger for crossing pedestrian because of parked cars was 3.4.
26. Do you think the fact that children playing on the street here is particularly dangerous or not?

| Response | Number | Percent |
| :--- | :--- | ---: |
| Not dangerous |  |  |
| 1 | 1 | 5.6 |
| 2 | 2 | 11.1 |
| 3 | 0 | 0.0 |
| 4 | 4 | 22.2 |
| 5 | 3 | 16.7 |
| 6 | 4 | 22.2 |
| 7 | 4 | 22.2 |
| Very dangerous |  |  |
| Total | 18 | 100.0 |

On a scale of 7 , the average level of danger for children playing on the street is 4.9.

Comparing questions \#24, 25 and 26, the average score for question \#26 was highest. It implied that people were much concerned about the safety of children playing on the street.
27. How do you feel about children playing on the sidewalk in front of your house?

| Response | Number | Percent |
| :--- | :---: | :---: |
| It does not <br> matter | 11 | 61.1 |
| Good | 1 | 5.6 |
| Bad | 6 | 33.3 |
| Total | 18 | 100.0 |

Out of those who felt it was bad, 2 people thought children would break windows; 2 people thought it was dangerous for children to play on the sidewalk, and the other thought children playing were noisy. But in total, $61.1 \%$ of respondents did not care about children playing on the sidewalk.
28. Where do you think it is best for children to play?
a) 3-6 years old.

| Response | Number | Percent |
| :--- | :---: | :---: |
| Back Yard | 16 | 53.3 |
| Indoor | 3 | 10.0 |
| Front Yard | 4 | 13.3 |
| Entrance | 0 | 0.0 |
| Sidewalk | 4 | 13.3 |
| Street | 0 | 0.0 |
| School | 2 | 6.7 |
| Park | 1 | 3.4 |
| Total | 30 | 100.0 |

b) 7-14 years old.

| Response | Number | Percent |
| :--- | :---: | :---: |
| Back Yard | 4 | 11.8 |
| Indoor | 0 | 0.0 |
| Front Yard | 3 | 8.8 |
| Entrance | 0 | 0.0 |
| Sidewalk | 6 | 17.6 |
| Street | 0 | 0.0 |
| School | 9 | 26.5 |
| Park | 12 | 36.3 |
| Total | 34 | 100.0 |

From a), most people (l6 out of 18 respondents) thought the backyard was a good place for $3-6$ years old childern to play.
from b), 12 out of 18 respondents thought a local and the school yard were good for $7-14$ years old children to play.

I think the reasons why they chose the back yard and the park were because they thought the back yard offered a more private and safer place for youngest children to play: and because it was near kitchen, parents could easily supervise them. Older children needed more space for more active play, and they needed friends to play with.
29. If you had to choose between living in a pretty and attractive neighborhood where the people were not friendly, or in an unattractive neighbor where the people were friendly, which would you prefer?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Attractive/Not friendly | 5 | 27.8 |
| Unattractive/Friendly | 13 | 72.2 |
| Total | 18 | 100.0 |

From the interviews, the reasons why they would choose unattractive/friendly environment was because the situation in East Boston was a friendly but physically crowded environment, They felt they would prefer this kind of environment. For those who would choose the attractive/not friendly, the reason was that it was hard for them to define friendly or not friendly- it depended on your attitude such as how you treat your neighbors.
30. In the past week, where was the most frequent place from which you communicated with your neighbors?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Your neighbors' houses | 1 | 3.4 |
| Your house | 2 | 6.9 |
| Sidewalk | 9 | 31.0 |
| Back Yard | 6 | 20.8 |
| Front Entrance | 9 | 31.0 |
| Other places | 2 | 6.9 |
|  | 29 | 100.0 |

From above, the most frequent places foe people to communicate with neighbors were sidewalks and front entrances (62.0\% of responses). Back yard was a good place to talk to neighbors while they were working (20.8\%).
31. a) Do you often watch the activities going on in front of your house?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Yes | 10 | 55.6 |
| No | 8 | 44.4 |
| Total | 18 | 100.0 |

b) If yes, what activities do you mostly watch?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Children playing | 9 | 50.0 |
| People walking | 3 | 16.6 |
| Checking the weather | 1 | 5.6 |
| Checking shose car parked <br> in front of house | 1 | 5.6 |
| Others |  |  |
| Total | 18 | 22.2 |
| 100.0 |  |  |

From a), $55.6 \%$ of respondents often watched the activities going on outside. From b), what they usually watched were the activities outside the houses. But two of the motivations for people to look outside were interesting (checking the weather and whose car parked in front of the house). It appeared that some people were concerned about their parking space.
32. How many people do you know by name in this block?

| Response | Number | Percent |
| :--- | :---: | :---: |
| 0 | 0 | 0.0 |
| $1-6$ | 0 | 0.0 |
| $7-12$ | 3 | 16.7 |
| $13-18$ | 5 | 27.8 |
| $19-24$ | 5 | 27.8 |
| 25 or more | 5 | 27.8 |
| Total | 18 | 100.0 |

From above information, most people knew many neighbors by name on their block. The reason was because they had lived there for a long time and East Boston was a friendly enviornment.
33. Where do the three families live whom you visit most often?

| Response | Number | Percent |
| :--- | :---: | ---: |
| Next door | 9 | 24.4 |
| Two doors down | 6 | 16.2 |
| Farther along row | 4 | 10.8 |
| Across street or court | 4 | 10.8 |
| Across back yard | 2 | 5.4 |
| Farther away | 12 | 32.4 |
| Total | 37 | 100.0 |

While the relationship between people were not limited to their immediate neighbors (32.4\%). The families whom people visited most often lived within the block and most next door (24.4\%)
34. Since you moved in, what have you changed in the front of your house?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Door | 5 | 11.9 |
| Fences | 6 | 14.3 |
| Planting | 2 | 4.8 |
| Window | 7 | 16.6 |
| Stair | 8 | 19.0 |
| Railing | 1 | 2.4 |
| Painting | 2 | 4.8 |
| Siding | 4 | 9.5 |
| Entrance roof | 1 | 2.4 |
| Pavement | 3 | 7.1 |
| Shingle | 1 | 2.4 |
| None | 2 | 4.7 |
| Total | $42^{*}$ | 100.0 |
| * More than |  |  |

The important elements which most people had changed after they moved in were doors (11.9\%), fences (14.3\%), windows (16.6\%) and stairs (19.0\%). These elements were related to the security and safety of house.
35. What are you going to improve in uour front space in the future?

| Response | Number | Percent |
| :--- | :---: | ---: |
| Front door | 2 | 10.5 |
| Planting | 2 | 10.5 |
| Window | 2 | 10.5 |
| Fence | 1 | 5.6 |
| Cleaning | 1 | 5.6 |
| I do not know | 1 | 5.6 |
| Nothing | 10 | 52.7 |
|  | 19 | 100.0 |

Ten out of 18 respondents did not seem to plan to improve their front spaces in the future. The important reasons were because they had already fixed many items after they move in, another reason was that some of them thought that they were too old to spend any money on the houses, and the other reason was that they did not have enough money for repairing.
36. Do you think you have enough front yard space?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Yes | 5 | 38.5 |
| No | $\frac{13}{18}$ | $\frac{61.5}{100.0}$ |

61.5\% of respondents said they did not have enough front space.
37. If yes, the reason why people would not want more space?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Serves no function | 4 | 57.1 |
| Waste money | 0 | 0.0 |
| Makes land shortage <br> worse | 0 | 0.0 |
| Has close interaction <br> with neighbor | 0 | 0.0 |
| It requires too much <br> care | 2 | 28.6 |
| Others | 1 | 14.3 |
| Total | 7 | 100.0 |

38. If no, what would people use more space for?

| Response | Number | Percent |
| :--- | :---: | :---: |
| To separate public space from <br> private | 4 | 22.2 |
| To supply space for inhabitants <br> \& children's activities | 6 | 33.3 |
| To plant flowers or vegetables | 7 | 38.9 |
| Others | $\frac{1}{18}$ | $\frac{5.6}{100.0}$ |
| Total |  |  |

Responses to question \#37 and 38 revealed how people thought. People who thought they had enough front space said the front space of the house served no function (57.1\% of "yes" responses), and they also thought a larger space would use more space for growing flowers (38.9\% of "no" responses) or for activities ( $33.3 \%$ of "no" responses).
39. What is most important for you about your front space?

| Response | Number | Percent |
| :--- | :---: | ---: |
| Security | 8 | 21.0 |
| Privacy | 10 | 26.3 |
| Safety | 3 | 7.9 |
| Surveillance | 0 | 0.0 |
| Space makes it clear where |  |  |
| my property begins and ends | 3 | 7.9 |
| Different from my neighbors | 2 | 5.3 |
| Space to meet my neighbors | 4 | 10.5 |
| Flanting | 5 | 13.1 |
| Others | $\frac{3}{7 *}$ | $\underline{7.9}$ |
| Total | $38^{*}$ | 100.0 |

* More than one response

From above responses,"Privacy" "Security" were most important for the front space, and "planting" and "space to meet my neighbors" are minor factors for front space.
40. If you had limited funds to do any of the following things to the front of your house, which would you like to do first?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Porch | 2 | 8.3 |
| Doors | 4 | 16.7 |
| Gardening | 1 | 4.2 |
| Windows | 1 | 4.2 |
| Railings on stairs | 2 | 8.3 |
| Painting of facade | 8 | 33.3 |
| Decoration | 4 | 16.7 |
| Others | $\frac{2}{24^{*}}$ | $\frac{8.3}{100.0}$ |
| Total |  |  |

* More than one response
$33.3 \%$ of the respondents said that they would like to do painting of facade first, and $16.7 \%$ of responses showed that the decoration of house is important also. In other words, it indicated that people had already done some work of improving security, privacy and sfety of front space. So nobody chose fences, steps, passageway and mailbox as their immediate improvement elements.

41. Please help me fill out your opinions about what is good or needs improvement in particular parts of your property.

| Items | Excellent | Satisfactory | Need <br> Improvement | Number of Response |
| :---: | :---: | :---: | :---: | :---: |
| Front door | 5 (27.8\%) | 7 (38.9\%) | 6 (33.3\%) | 18 |
| Entrance porch |  | $1(100.0 \%)$ |  | 1 |
| Fence | 6 (46.1\%) | 6(46.1\%) | 1 (7.8\%) | 13 |
| Decoration of outside front | $3(17.7 \%)$ | 9(52.9\%) | 5 (29.4\%) | 17 |
| Pavements | 7(38.9\%) | 11 (61.1\%) | 0 | 18 |
| Space from door to sidewalk | $6(33.3 \%)$ | 6 (33.3\%) | 6(33.3\%) | 18 |
| Level of buliding | 7(41.2\%) | 10(58.8\%) | 0 | 17 |
| Front garden | 1(11.1\%) | 5 (55.6\%) | 3 (33.3\%) | 9 |

From above, what most people were not satisfied with their front doors (33.3\% of respondents thought it needed improvement), decoration of outside front(29.4\% of responses), and space from the entrance door to sidewalk(33.3\% of responses). They were satisfied with their fences, pavements (which were just resurfaced in 1979) and the level of building.
42. Do you have problem of parking?

| Response | Number | Percent |
| :--- | :--- | :--- |
| Yes | 15 | 83.3 |
| No | 3 | 16.7 |
| Total | 18 | 100.0 |

There was a serious parking problem in this block. 83.3\% of respondents answered that they usually had to park their cars two or three blocks away. The reasons why they had parking problems were that there were many cars for each family (four of them suggested) and that there was not enough parking space for each block (ll responses).
43. If you had to choose between having a parking space in your back yard (but then you could not do your gardening there), or having a parking problem but have your own private back yard, which would you choose?

| Response | Number | Percent |
| :--- | :---: | :---: |
| Parking space/no private <br> back yard | 3 | 16.7 |
| No parking space/private <br> back yard <br> Total | 15 | 83.3 |

It was surpriseing to find out that $83.3 \%$ of respondents think they prefer to have no parking space but have private back yard. The reason were that they needed a space which belonged to them that they could do their private work or play on it. The back yard is the only space that people can have their own privacy without other people's interruption.

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