CHILDREN'S PERCEPTION AND VALUE IN THE URBAN ENVIRONMENT

by

Eugene Darwin Cizek

B. Arch. Louisiana State University (1964)

Submitted in Partial Fulfillment of the Requirements for the Degree of Master in City Planning at the Massachusetts Institute of Technology July, 1966

Signature of Author

Department of City and Regional Planning, July 15, 1966

Certified by

Thesis Supervisor

Accepted by

Chairman, Departmental Committee on Graduate Students
To My Parents

Darwin and Matilda Cizek
ACKNOWLEDGEMENTS

I wish to thank the following people for their assistance in the writing of this thesis:

   Donald Appleyard, my thesis advisor
   Staff and children of the Roxbury Y.M.C.A.
   Sears Roebuck Foundation, A.I.A.F.
   Foundation and M.I.T. Scholarship Fund
   Marcia McMahon
   Mina Harrington
   Jean McBeth
ABSTRACT

CHILDREN'S PERCEPTION AND VALUES IN THE URBAN ENVIRONMENT

by

Eugene Darwin Cizek

Submitted to the Department of City and Regional Planning on July 15, 1966, in partial fulfillment of the requirements for the degree of Master in City Planning at the Massachusetts Institute of Technology.

PROBLEM:
The lack of knowledge and understanding of the planner regarding the interaction of man and his environment; specifically related to the child of urban poverty whose needs and values of the environment have not been sufficiently considered.

OBJECTIVES:
To determine the elements and relationships most valued in the environment by the children and to see if they can be classified categorically in some manner. To determine the criteria by which children evaluate elements and relationships in their environment. To investigate the effect of activity on the children's perception and values in their environment. And to develop methods of interviewing and categories of data which can be used as a basis for further study and investigation.

PROCEDURE:
A general survey was made of the relevant written material and the poverty areas of Boston. Hypotheses were formulated for investigation. A preliminary interview was given in four contrasting areas of poverty with the selection of one area for intensive research over a period of ten weeks. A center of activity in the area was chosen in which interviews were given and observations made. A series of questionnaires were developed and administered. The results of these actions were evaluated and served as the basis for this thesis.

RESULTS:
The elements and relationships valued in the environment by the children were determined and categorized. The criteria for evaluations were determined and ranked by individual characteristics and by functional and perceptual connotations. The effect of activity was investigated. The methods of research and study used and the interviews developed were found to be successful.

The appendices present details and copies of the interviews, suggestions for further study and implications for planning.

Thesis Supervisor: Donald Appleyard
Title: Associate Professor of City and Regional Planning
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedication</td>
<td>2</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>4</td>
</tr>
<tr>
<td>Abstract</td>
<td>5</td>
</tr>
<tr>
<td>List of Tables</td>
<td></td>
</tr>
<tr>
<td>Lists of Maps and Illustrations</td>
<td></td>
</tr>
<tr>
<td>I. Introduction</td>
<td>6</td>
</tr>
<tr>
<td>II. Methods of Research and Study</td>
<td>28</td>
</tr>
<tr>
<td>III. Washington Park Evaluation</td>
<td>51</td>
</tr>
<tr>
<td>IV. Evaluations and Criteria</td>
<td>69</td>
</tr>
<tr>
<td>V. Elements Evaluated</td>
<td>95</td>
</tr>
<tr>
<td>VI. Activity and Value</td>
<td>117</td>
</tr>
<tr>
<td>VII. Structure and Value</td>
<td>131</td>
</tr>
<tr>
<td>VIII. Change and Value</td>
<td>141</td>
</tr>
<tr>
<td>IX. Conclusion</td>
<td>146</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>A. The Interviews</td>
<td>158</td>
</tr>
<tr>
<td>B. Suggestions for Further Study</td>
<td>190</td>
</tr>
<tr>
<td>C. Implications for Planning</td>
<td>203</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>One: Characteristics of the Children</td>
<td>37</td>
</tr>
<tr>
<td>Two: Evaluations Per Photograph</td>
<td>63</td>
</tr>
<tr>
<td>Three: Activity Responses, Interview F</td>
<td>66</td>
</tr>
<tr>
<td>Four: Elements Evaluated and Criteria</td>
<td>71</td>
</tr>
<tr>
<td>Five: Children’s Activities</td>
<td>119</td>
</tr>
<tr>
<td>Six: Places Used by the Children</td>
<td>122</td>
</tr>
<tr>
<td>Seven: Elements and Activities</td>
<td>124</td>
</tr>
</tbody>
</table>
LIST OF MAPS

<table>
<thead>
<tr>
<th>Map</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>One:</td>
<td>Location of the Area of Study</td>
<td>54</td>
</tr>
<tr>
<td>Two:</td>
<td>Location and Changes of Activity Foci in the Roxbury-North Dorchester GNRP</td>
<td>55</td>
</tr>
<tr>
<td>Three:</td>
<td>Location and Description of Projects in the Washington Park Renewal Area</td>
<td>56</td>
</tr>
<tr>
<td>Four:</td>
<td>General Conditions of the Study Area</td>
<td>57</td>
</tr>
</tbody>
</table>

LIST OF PHOTOGRAPHS AND ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Numbers</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 8</td>
<td>Washington Park Evaluation Photographs</td>
<td>62</td>
</tr>
<tr>
<td>9 - 15</td>
<td>Children's Drawings of &quot;My House&quot;</td>
<td>99</td>
</tr>
<tr>
<td>16 - 29</td>
<td>Children's Drawings of &quot;Summer Activities&quot;</td>
<td>127</td>
</tr>
<tr>
<td>30 - 39</td>
<td>Children's Maps of &quot;My Neighborhood&quot;</td>
<td>136</td>
</tr>
<tr>
<td>40 - 41</td>
<td>Photographs for Interview L &quot;New versus Old&quot;</td>
<td>189</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

A major problem facing the planner today is his lack of knowledge and understanding regarding the interaction of man and his environment. Increased population and urban concentration have made it evident that although man knows much about manipulating his physical world, he knows very little about the effect of these manipulations on the people who inhabit it. The purpose of this thesis was to investigate certain aspects of this problem. It was concerned with children's perception and values in the urban environment. It was limited in scope to children between the ages of seven and eleven who reside in a poverty area of Boston.

Considering the scope of the thesis and the limitations of time, the primary objectives were:

1. To determine the elements and relationships most valued in the environment by the children and to see if they can be classified categorically in some manner.

2. To determine the criteria by which children value elements and relationships in the environment.
3. To investigate the effect of activity on the children's perception and values in the environment.

4. To develop methods of interviewing and categories of data which can be used as a basis for further study and investigation.

In addition to the primary objects, there were two areas for secondary consideration. One was to investigate the effect of change in the urban environment on the children and their reactions to it. The other was to investigate the degree to which the children structured their environment and the implications of it.

In considering the children's perception and value in the urban environment, the terms of consideration must be defined. Perception referred to the act or process of responding to stimuli in the environment. Value referred to choice and preference, "what the child liked or disliked." The urban environment was limited to the environment with which the child was familiar, his neighborhood, community and the Boston Area; the degree of familiarity was set by the area chosen for study but was not determined until after the research, study and evaluation had been completed. The frame of reference thus included seven to eleven year old children who resided in a poverty area in the City of Boston, and who were asked to evaluate their environment as related to the objectives of the thesis.

Necessary background information was acquired through a survey of the written material felt to be relevant to the objectives and scope of the thesis. Most of the readings dealt with the developmental and growth characteristics of the seven to eleven year old
and the effects of his interaction with the environment. The results from the survey were organized as they related to the research and studies: The organization included:

A. General Development
B. Perception
C. Structure
D. Elements Perceived
E. Representation
F. Problems of Interpretation
G. Children of Poverty
H. Value

A. General Development

Seven to eleven year old children represent the period of child development which is most significant from the standpoint of the socialization processes. The influence of the environment and society is much more significant than for the preschool child. The behavior patterns and characteristics which develop during this period will continue through adolescence and will determine the kind of adult the child will become.

The child of this period is at the age of "Industry versus Inferiority." He has acquired a sense of direction and purpose to his life and now must bear the frustrations of learning the ways and technicalities of society. The industry of the child must be directed toward a method. The sense of inferiority must be complemented with a sense of competence. The proper development of
method and competence will equip the child for the problems and frustrations of adolescence, the age of "Identity versus Role Confusion." The values of the children focus on the things of society and the roles they will play in it. They are concerned with how to manipulate and "work" things. They often concentrate on a particular object or person such as an automobile or a policeman; they think about how it would be to drive the automobile, and what it would be like to be a policeman. As their skills of reading, writing, and drawing develop, they use these faculties to further explore the people and elements of society and to express their findings verbally and graphically.

The children begin to think of school as a culture in itself. This becomes one of their major interests and is joined by the family organization to become the two major foci of their life. The idea of school and home is often qualified by other places of activity and interest. Thus a community center, park, store or other activity oriented place becomes a part of the child's world. These activity foci are often considered as a part of school or the home, or as independent entities; much of this depends on the orientation and development background of the child.  

The bodily activities of the children of this age group reflect their growth and development. The seven-year old is variable in the intensity of his activity; he does certain things very intensively for a period of time and then will leave it. As he grows older, this sporadic interest will gradually become more stable. The eleven-year old works and plays hard most of the time; ex-
haustion becomes the reason for stopping and resting instead of the behavior traits of earlier years. Activities which involve much body movement are popular. Bicycles and other vehicles for riding and "driving" are most favored. There is also an increasing interest in group efforts; the seven-year old is more interested in himself and in perhaps another person, but the eleven-year old has reached the point of orientation for team games and for learning to perform skillfully. The bodily activities reflect the growing concern of the children to explore, learn and experience as much of their world as they can. 

The seven-year old is leaving his past habits of tensional outlets and remains rather free; his play is spontaneous and not too emotional. The eight year old begins to sporadically fall back into his early habits and is beginning to develop the tensional outlets of the older child. From the age of nine and on, boys begin to develop individual tensional outlets; this is combined with all forms of "letting off steam" such as wrestling, fighting and running. The nine-year old girl begins to wander around the house, restless and moody; she cannot sit still and varies from joining the boys in a wrestling match to being completely withdrawn. Both boys and girls from the age of ten are showing some of the tensional outlets of the adolescent; girls being more precocious in this respect than boys. 

The child's interest in the family is very strong. The changes which occur in family relations are those related to the child's feeling a "need" to be a part of the family. There is some variety in this feeling, but generally as the child ages he becomes more
independent and does not feel that he needs his family as much. The family is important to the nine-year old, but in practice he would rather be away from the family, on his own or with his own friends.\textsuperscript{10} This attitude of independence grows as the child enters preadolescence and becomes a major conflict and frustration.\textsuperscript{11}

The values and growth characteristics are further reflected in the things the children from seven to eleven like to play.\textsuperscript{12} The seven-year old has a more limited range of interests than the eleven-year old. He participates more in solitary play. He likes to collect, swap and play games such as library, post office, train and school. His interest in swimming is often strong. The differences in play orientation between boys and girls become evident. Girls during this period become more directed to playing house and other things associated with the woman's role in society. The boys begin to utilize tools to fix things around the house, to build structures and to play war games, cops and robbers, and commandos. From nine to eleven the child works and plays to the extreme. He is busy with his own activities and plans very carefully what he is going to do. Individual differences between children develop and become apparent. Some children tend to limit their play to more indoor activities and others to more outdoor activities. Mental versus physical orientation also begins to develop in the eleven-year old.

Another characteristic of the seven to eleven year old children in regard to this thesis is their responsiveness to reason.\textsuperscript{13} The seven year old is in a transition stage. It is now somewhat easier for him to make up his mind, to make choices and to
make simple decisions; this is especially true if both alternatives appeal to him. It is difficult to change his mind, but he will occasionally listen to reason and change his attitude without becoming temperamental. He has standards and is trying to live up to them; he must be appealed to ethically. The eight year old makes up his mind easily. He is more confused about the little decisions, and in general knows what he wants. He can listen to reason and change his attitude, but he does like to have his own way. By nine years of age, the child is able to make up his mind quickly and change it in response to most reasons. This flexibility and more open-mindedness continues through the age of ten and begins to be tempered with the confusion and frustration of preadolescence. This latter trait develops at a varied age level and depends on the precocity of the child.

Knowledge of spacial definition and location are enlarging concerns for the seven year old. He has just left the feeling and sense that he is the "center of the universe;" this transition began when he was six years old. He is becoming more aware and understanding of relationships throughout the whole community. He is interested in details about the grocer, policeman, fireman, garbage man, etc. He is interested in having his own place. He realizes that there are other places beside his home, school and adjacent community. He shows marked improvement in his understanding of geographic orientation. As the child grows from seven to nine so does his ability to find his way around; he can take bus trips alone and go for walks. His interest is widening to include many community problems and concerns such as health, life, property, commercial
activities, manufacturing, agricultural industries, transportation, weather, animal life, plant life and holiday and seasonal activities. He is developing a strong sense of details for things, places, activities and people. All of these facets of growth continue through the ages of ten or eleven years. Once the child reaches preadolescence, his attention to detail concentrates on self-identity and role playing. His interests focus on the attitudes and activities of his peer group. He leaves the world of childhood.

B. Perception

The child's perception of his environment involves his interaction with it. As he grows and develops his ability to assert himself, his perceptual development expands; it is a continuous and quantitative versus qualitative process. The children of seven to eleven years are in that period of development which is most involved with the environment. The child of seven has sufficient muscular and motor abilities to interact intensively with his physical world; his desire to explore and manipulate furthers the interaction. He is "phenomenistic in the sense that his cognitive structure is so organized that the surface appearances of things are over-attended to; his thought is dominated by the environmental properties which strike him first." "He fails to relate in a logical way successive cognitive impressions; thus heaviness and lightness are successively invoked as explanatory principles with no thought to the contradiction involved, as though the need to reconcile opposing impressions were not a characteristic of his cognitive structure."
Although the child is phenomenistic, he has begun to see symbolic materials and elements. This is especially evident in the ways in which he expresses himself graphically. His ability to verbalize is not so symbol oriented; the seven year old has just begun this aspect of his development. His use of symbols in understanding and speaking will develop as he grows older.\(^{25}\)

C. Structure

The operations involved in children's measuring and structuring (organizing and locating of parts) of their environment have their roots in perceptual activity (the visual estimates of size, shape, etc.) and are not fully elaborated until sometime between the ages of eight and eleven; this depending on the amount of composition involved in the operation itself.\(^{26}\) The reference system which the children use is one which reflects their familiarity with it and their ability to envisage it.\(^{27}\) They learn to describe changes of position within their reference system by using landmarks and eventually develop a comprehensive system of these reference points and the paths which connect them.\(^{28}\) Main buildings, squares, bridges, rivers, streams, their own school and their home are the landmarks which go together to form the system.\(^{29}\)

Jean Piaget has done much research in this area regarding the child's formation of his reference system. He finds that children below the age of four or five cannot be questioned.\(^{30}\) Between four and seven, the child cannot maintain his interest in the experiment unless he is stimulated and interested in the questions
themselves. Thus seven years is the minimum age at which questions and interviewing can begin on a more comprehensive level.\(^{31}\)

The major problems the child encounters in structuring his perceived environment relate to his distortion of distances. This is due mainly to his egocentric illusion which he acquires in the course of habitual journeys.\(^{32}\) These journeys are seen unidirectionally, and the children fail to equate the distance to a place with the distance back; the end points of the journey cannot be compared.\(^{33}\)

When objects are held together by strong interest, the distance is dismissed altogether.\(^{34}\)

D. **Elements Perceived**

With the changing attitudes, values and growth characteristics of the seven to eleven year old children, one wonders what he selects to look at. Little study has been made to determine if there is a hierarchy of things perceived by children. It is an area often mentioned in readings but not in specific categories of elements. An interesting project of Alvin K. Lukashok and Kevin Lynch resulted in a list of things and elements people remembered from their childhood.\(^{35}\) Since they are elements remembered, then it seems logical that they must have been vividly experienced. This listing is presented in the order of descending rank of importance:

1. Lawns
2. Other ground surfaces
3. Topography
4. Wall materials
5. Trees
6. Mass transport
7. Color
8. Families/house
9. Sense of space
10. Water
11. Cleanliness
12. Crowdedness
13. Awareness of a neighborhood
14. Play in waste areas
15. Order and maintenance
16. Traffic
17. Shopping
18. Historical association
The study shows that the primary elements remembered include trees or lack thereof, ground surfacing, hills, water, street-cars, space, physical marks of social status and sound. The secondary elements include buildings, traffic, schools and playgrounds. Although this study only concerned asking adults what they remembered, it seems relevant as a list for comparison when seeking to determine similar responses from the children. It is difficult to determine what difference in effect the passage of time has on elements which one sees at present and which one remembers from the past.

E. **Representation**

A major activity of the seven to eleven year old is representing and expressing what he sees and experiences. These activities represent a major source of information and a major technique for interviewing and are therefore relevant for consideration. Children see more than they draw but their representation is conditioned by their stage of development and their evaluation of the thing being drawn. The child is very conscious of detail; a major attribute of his perception "consists in the formation of perceptual concepts, in the grasping of integral features of structure."

He is also conscious of color; the color the child gives to the trees in his pictures is hardly a specific shade of green selected from the hundreds of hues found in the trees; it is a color that matches the overall impression given by trees." We are dealing with an invention and not an imitation. "Representation never produces a replica of the object but its structural equivalent in a given medium."
For centuries children have produced drawings in a similar manner. "The development of pictorial form relies on basic properties of the nervous system, whose functioning is not greatly modified by cultural and individual differences." It is for this reason that the drawings of children look essentially alike throughout the world, and that there are such striking similarities among the early (prehistoric children's art) art products of different civilizations.

"The young child spontaneously discovers and accepts the fact that a visual object on paper can stand for an enormously different one in nature, provided it is its structural equivalent in the given medium." The psychological reason for this striking phenomenon would seem to be, in the first place, that in human perceiving and thinking similarity is not based on piecemeal identity but on the correspondence of essential structural features; secondly, that an unspoiled mind spontaneously understands any given object according to the laws of its context." The seven to eleven year old has the unspoiled (less conditioned by society and the adult world) mind and the ability of spontaneous reaction.

More particular to the age span under study, one finds that it encompasses two basic stages of representational development and orientation. The seven to nine year old is symbol oriented, and the nine to eleven year old is analyzing the symbol. It is a situation of developing complexity. The symbol represents man and society. The seven to nine year old looks, analyzes and draws each "one thing or idea" which represents to him a particular aspect or quality of man and society. The nine to eleven year old expands this
symbol; he adds more details and parts to it; he analyzes the relationships and tries to portray his increased understanding and skill.\textsuperscript{45} For example, the seven to nine year old will draw the same symbol for man to represent fat men, skinny men and tall or short men. The nine to eleven year old will actually make the differentiations in size and probably include some detail about the clothes worn or some other distinguishing characteristic.

The beginnings of awareness of the social world and its many complexities is overwhelming for the seven to eleven year old; he concentrates on the overall picture, the figure scheme.\textsuperscript{46} This stage of development is characterized by two main features: "the use of a standardized formula for representing the human figure and the use of a base line to indicate space relationships among objects in a picture."\textsuperscript{47} Also significant in development at this time is the expanding nature of the child's social experiences. "Children at this age draw isolated figures less frequently and reveal their growing interrelationships by picturing groups of people, both children and adults, and interactions between children and things."\textsuperscript{48} The child at this period settles on his own specific formula for drawing familiar objects, especially people. "This formula - the 'schema' or scheme - expresses the individual child's concept of human beings in a way that is temporarily satisfying to the child."\textsuperscript{49}

As the child grows he deviates from his scheme only when it proves inadequate for expressing either general concepts or some particular experience.\textsuperscript{50} When a scheme is repeated without variation for a long time it is a sign of a lack of growth.\textsuperscript{51} The second important characteristic of the child's representation at
this stage is his systematic indication of space relationships.\textsuperscript{52}

The child develops a consistent way of relating objects to one another.\textsuperscript{53}

This relationship usually involves a "base line," a line which is generally parallel to the bottom of the page and relates all the objects on the page.\textsuperscript{54} This base line is the symbol of the earth.\textsuperscript{55} The base line becomes slanted to represent the slope of a hill; it twists and turns to present a winding pathway.\textsuperscript{56} As the child approaches nine years of age, his drawings become more and more complex; the degree to which a child is able to represent complex spacial and social situations reflects his inventiveness.\textsuperscript{57}

"When boys start to make thoughtful, precise drawings of boats and airplanes and trains, and girls draw ladies' faces or dresses or houses with the carefully indicated details, it is evident that they are leaving the free and spontaneous expression of the six to nine year period and are embarking upon the more strenuous and inhibited phase that characterizes children between nine and twelve years of age.\textsuperscript{58} The changes which occur are outgrowths of physical and psychological developments which occur at this time, especially those related to the control and coordination of the small-muscle movements and a greater consciousness of sex differences.\textsuperscript{59} Both boys and girls prefer to play with little things rather than big things.\textsuperscript{60} These characteristics are reflected in the "analysis qualities" of these children's drawings. The nine to eleven year old has found the symbol for his representation and he is analyzing it, expanding it and making it a product of greater detail and understanding.

The nine to eleven year old is conscious of sex differences
and makes these differentiations in his drawings.  

His "gang" consciousness, or greater social dependence, often expresses itself artistically in a conformity to peer group tastes and conventional standards.  

"Along with the physical and social changes comes an increasingly analytical attitude, evidence of the child's greater intellectual maturity."

"Drawings and paintings begin to reflect a more adult and critical attitude toward self expression; for instance, more naturalistic proportions are used, along with greater differences in size between objects, and color is used less freely and more literally, than in the early period."

Perspective begins to appear; "as it is suggested, the ground line of the schematic period disappears and becomes a ground plane."

"Houses, trees, figures and the other elements of the picture are placed on the ground plane, often the objects overlap one another, and the sky comes down behind, meets the ground plane, and creates a horizon line."

F. Problems of Interpretation

This discussion of the children's means of representation inherently brings to light the problems to be found in interpreting their drawings. One must determine the stage of development of the child. Age is a good indicator, but this cannot always be relied upon for the individual background, level of education and degree of retardation or precocity must also be considered. Verbal explanation of a drawing by the child artist can reveal much more information and meaning than is seen at first inspection. One must learn
to look at the drawings through the eyes of a child, and when possible
get the description of the artist and his colleagues. Often other
children's comments and explanations are useful when attempting to
discover the meaning the child had in mind when producing his
drawing. 67

When the child is at the symbol or schematic stage, the
interpreter must be conscious of the details of the drawing. The
child will use his "common symbol" for buildings and will give it
more identity through the additions of such things as flags, smoke-
stacks, different kinds of roof shapes, signs, symbols and indications
of building materials. One must try to find what different "addi-
tions" mean to the individual child, as the child's individuality
comes into use at this point. A flag on a rectangular shape (a
typical building symbol) may signify a school to one child and a
city hall to another. Such symbols as crosses and steeples usually
indicate that the building is a church; these are two of the few
which can be so easily determined.

The drawings of the nine to eleven year old are more
explanatory and lucid, but the interpreter must still be cautious
about making judgments without first learning about the artist or
the background and development of his particular group. The tight
and meticulous drawing may represent hidden fears and frustrations
of the artist and not reflect his true feelings at the outset
investigation; the interpreter must be sensitive to these differen-
tiations. 68

The child comes to know the visual world more comprehensively
by drawing, painting, writing and talking about it. These modes of
expression provide an insight into children's feeling and ideas. The
use of artistic expression in interviews represents a twofold accomplishment; the child learns something about what is being considered in the interview, and the interviewer has a means for determining what the children's reactions are. "The contents of a child's pictures, the way they are drawn and painted, and the changes that occur in the pictures over a period of time all provide new avenues for knowing the child." Psychiatrists have found that the child does not censor his drawings in the same way he censors his speech; consequently many of the symbols that appear help us to better understand the children, their problems and their values.

G. **Children of Poverty**

Since the environment plays such an important and determining role in the lives and development of the children from seven to eleven years, it is an area of study needing consideration. And since these children will condition their later life patterns and habits by their experiences and development with the environment, it seems especially relevant that the children of poverty should be studied. If America is going to relieve her cities of their slums, then she must realize that the needs and desires of the children must be considered and accommodated. How these children of poverty see, use, value and represent their environment becomes an important issue for planning.

Children have so far been discussed in general with no indication of the special problems of the children of poverty. A causal relationship has been determined between poor housing and
distorted growth and development in the poverty child. This relationship is one of a more indirect nature meaning that the decay and functional inadequacies of the poverty environment contribute to such problems as lack of self evaluation and motivation, not as the direct causes, but as the result of economic and social deficiencies. The condition of the environment affects ability to improve one's circumstances; "evidence makes it clear that housing affects perception of one's self, contributes to or relieves stress, and affects health." The inadequacies of the educational system found in poverty areas contribute to the retardation and lack of development of the children. The overcrowdedness of the home is continued in the school. The lack of attention which the child at this stage of development needs is continued in the school. Thus the two major foci of the child's world are both inadequate to meet his needs.

The child's ability to respond to his environment is both a positive and negative attribute. He is affected more intensely by it than the adult; this results in graver conditions when the condition is inadequate, but also means that he can be helped more readily by improvements. In several studies made regarding the effect of change in housing location and condition, it was found that "even when their parents are not responding at all, children change their feelings about 'the whole of life' - a change particularly noticeable in school." Other factors of poverty living which affect negatively the child's development are mental stress (caused by such factors as crowding, dilapidation, cockroaches, a high noise level, social isolation and inadequate space), poor health (the higher disease rates poverty areas), satisfaction (degree of
satisfaction to situation has an overall effect on attitudes) and psycho-social deviations (high rates of mental illness, prostitution, promiscuity).

Deprivation of visual and other sensuous stimuli for perceptual development is thought by many behavioral scientists to be a major factor in the retarded intellectual development of the slum child. Martin Deutsch says that the urban slum and its overcrowded apartments offers the child a minimal range of stimuli. The sparsity of objects and lack of diversity of home artifacts which are available and meaningful to the child allows him few opportunities to manipulate and organize the visual properties of his environment. This contributes to his deficiency in organizing and discriminating the nuances of his environment. The child of today is faced with a complex world full of diversity in perceptual experiences; the slum child's inability to respond in the ways competition decrees makes his deficiency an ever-increasing one.

H. Value

The object, organization and activity orientations of the children show that the child expands his scope and understanding of his environment and society as he grows. His likes and dislikes change. His needs change also. The element or relationship which the seven year old likes or dislikes depends to a great degree on his needs and his exposure to other choices. The question of what the child values is important because in determining his values, one can see in some respect what understanding the child has of his needs and
what his desires are to satisfy them.

This brings forth the definition and issues of value. The definition of value is not one on which there is complete agreement by the behavioral scientists.\textsuperscript{86} It is often defined as an attitude toward an object, a preference of qualities or relationships, a rating of things in regard to personal desirability and others.\textsuperscript{87} The definition as given in the beginning of this chapter is perhaps too simplistic, but purposefully so. The question of choice, preference, like and dislike were used rather profusely in the readings surveyed. Therefore these questions combined with the objects, elements and relationships of the child's perception are used to define the term.

The issues of value become critical for the slum child who quite often has not had the choices available to him for preference. His general lack of perceptual development or his distorted perceptual development will continue, increase and limit his abilities to function in economic and social positions as an adult.\textsuperscript{88} The choices which he is able to make and the changes he accommodates will not contribute toward his improvement unless the choices and changes in the environment are improvements. The child learns by adjusting to new situations and circumstances, but the chance for adjustment must come while he is still developing and growing intellectually.\textsuperscript{89}

By determining the values of the poverty child toward his environment, one can begin to see how changes should and could take place. The elements he evaluates and the criteria he uses for evaluation will present a framework for positive changes.

From the reading material hypotheses evolved which will be investigated in the thesis research and study; they were:
1. The children are able to make evaluations of choice and preference regarding elements and relationships of the environment. Ability increases from seven to eleven.

2. Those elements and relationships of the environment with which the children have the most interaction are the most evaluated. Thus, the home, school and activity foci and their related development will be the elements most evaluated by the children.

3. A major factor in the perception and value of an element or relationship is its ability to hinder, allow or promote activity by the children.

4. The problems and conditions of poverty are major factors in the children's perception and value of the elements and relationships in the environment.

5. The elements "remembered from childhood" by adults are, in general, the elements most seen and evaluated by the children in their environment.

6. The children are symbol oriented in their evaluations and tend to rely on overall conditions, qualities and attitudes. For example, they develop a symbol for what they think "newness" is and implies.
The emphasis of this thesis was on the field research and studies. The objectives, survey of the written material and development of the hypotheses were used to provide a framework and background for the research and investigation in the field. Patience, observation, recording and evaluation became the main activities for the remainder of the thesis experience.
CHAPTER II

METHODS OF RESEARCH AND STUDY

After establishing the objectives and hypotheses for consideration, the following procedure was followed:

1. A field survey was made of the Boston poverty areas using photographic recording, observation of children's behavior patterns and places of play and discussion with area residents.91

2. Four areas were selected for further study due to their homogeneity of social, economic and ethnic characteristics and their contrast of physical, environmental character. Each area also had some kind of community center facility through which interviews and observations could be made. The four areas selected focused on Cooper Community Center in Roxbury, Harriet Tubman House in the South End, Columbia Point Public Housing Project Center in South Boston and (Washington Park) Y.M.C.A. in Roxbury.
3. A general interview was given involving mimeographed questionnaires and map drawing. The children were observed while participating in the interviews.

4. The Washington Park Area in Roxbury was chosen as the location for further study over a period of ten weeks.

5. Arrangements were made to work at the Roxbury Y.M.C.A. with a group of children from seven to eleven years of age. The work centered around an art class which I taught each week for two hours on Thursday afternoons. The class had a threefold purpose: to help the children in their art experiences, to help them to better understand their environment and their use of it, and to provide research information which became the basis for this thesis.

6. The staff of the Roxbury Y.M.C.A. were very helpful and interested in the work I had undertaken. Discussions with them proved to be of great value during the entire experience. Background data on the children was obtained, but could not be used explicitly in the writing of this thesis.

7. Informal discussions were held with the parents of many of the children. This contributed greatly to the understanding of the children's problems, behavior patterns and values.
8. Interviews and discussions occurred with the children. Gradually friendships developed which enabled me to become more than the art teacher or social worker.

9. The field work was completed, data was tabulated and evaluations were made.

The exploratory nature of the thesis was necessary in order to grasp a larger view of a neighborhood or community than behavioral science usually provided. The procedure which evolved emphasized the need to look at a problem in a general way. After initial investigation, the results would be used to determine what should and could be changed during the next exploration. The interviews developed reflected this "try and reconsider" approach. The mind and manner of the child was not easily coped with by standardized and unvarying procedures.

The methods of research and study employed field surveys, observations, discussions, and interviews. Each of these was discussed in order to show the context from which the thesis discussions; data and conclusions evolved.

A. Field Surveys

The field surveys examined environmental conditions such as density, building styles and character, degree of cleanliness, presence of blight and decay, signs of change (as new construction or vacated buildings), functional composition and mix, presence of traffic
and congestion, amount and types of open space facilities, presence of people and ethnic composition. The surveys were made by walking and riding in the areas on a weekday and on the weekend. The results were recorded through written and photographic means.2

The children's general use of the environment was observed, including his activities and places of play. The kinds of games and activities were recorded. Speculation was also made as to the kinds of activities possible in the environment.

After the selection of Washington Park as the area of further study, the area was traversed usually each Thursday before the art class and at other times during the week. A week and a weekend night were also surveyed, but due to the ages of the children, relevant activity was not found.

B. Observations

The children were observed during the field surveys, general interviews, Roxbury Y.M.C.A. art classes and interviews and the many walks which were taken in the Washington Park Area. Much time was spent at the Y.M.C.A. just standing and watching the children as they spent their after school hours. Another major period of observation occurred before class when the early arrivals appeared. Because they were fewer in number, they were much freer in their talk and actions. They usually helped to arrange the tables, chairs, crayons and paper for the afternoon's activities. They did not feel that they had to "perform" for their peer group and behaved more calmly. The extra attention I could give because of fewer numbers also
contributed to the more relaxed situation.

After art class provided another special period. The children who stayed to help clean and carry the art materials downstairs were often the ones who created the greatest disturbances during class. Several of the boys and girls did a complete "about face" in attitude and actions when class was over. Many would ask to be given time to complete their class or interview projects. Thus the two-hour class was usually extended to three or four. The results of the "after hour" periods produced very useful data and extended meaningful friendships.

C. Discussions

The casual questions asked children during the field surveys about "what they did?", "where they played?", and "what they liked and disliked about their neighborhood?" provided a major portion of the basis for the general interviews. The children were usually very friendly and answered quite spontaneously. Their only response to the camera and picture taking was, "Take my picture, Mister?" A quick photograph was often the open door to a lengthy discussion. This was especially helpful when children met on a walk appeared in art class during the first few periods. Familiarity became a major factor of communication.

Discussions with the staffs of the various settlement houses and community centers during the general interviews provided much information about the social and economic conditions and problems of the children. The interest reflected by the personnel in determin-
ing ways through which the children could better learn to experience and use their environments stimulated much interesting discussion. The special interest of establishing some type of "environmental use" program at the Roxbury Y.M.C.A. allowed much freedom in the content and procedures used in the art classes.

Discussions with parents provided some of the happiest and most painful experiences of the research period. One could see the children's characteristics reflected in their parents. Children with special behavior problems were usually much more understandable after a meeting with the parents, or parent as the case usually turned out to be. The family problems of the poverty children were acute. Many examples mentioned by Alvin Schorr in *Slums and Social Insecurity* were made most vivid when personally encountered. Similarly the joy brought when a family was undergoing social and economic betterment was also experienced.

D. Interviews

The interviews were given to the children of the four areas selected. They were limited to children between and including the ages of seven to eleven years. The social and economic characteristics of all the children was similar with the exception of Washington Park where approximately twenty percent were middle class or middle class oriented; the other children came from lower and working class environments. The intelligence and academic achievement levels varied from exceptionally bright to major retardation. Several of the children who did not do well in school (had repeated at least one grade) did very well in the art and interview work.
The brightest child had much facility in drawing and writing, but behavior characteristics kept him from making the contributions that he could; other children not nearly as bright or as old usually were more diligent in their efforts to complete their projects.

The children from homes where the parents were anxious for their children to learn and accomplish were the ones most well behaved. Some parents (usually the mother) brought their children to the Y.M.C.A. for activities and talked with the staff members involved; these children normally had the least difficulty in adjusting to the hectic and noisy conditions of the surroundings.

In the general interview fifty-seven children were used for all four areas. The interviews were given at the respective activity centers previously mentioned. The place of interview was always a large room with tables and chairs. A factor contributing to the ease with which these interviews were executed was size of room or sense of enclosure. If the room was too small, then the closeness and high noise level made the children too much aware of each other, and talking, arguing and fighting could evolve. The children needed room to write and draw, but the opposite situation of giving the interviews in a very large room (assembly area in an activity hall) gave the children too much space. Even the use of dividers did not help to confine their attention and movements. The presence of other children and adults moving through the interview area was the second major factor of disturbance. These problems were overcome, and the interviews did produce useful results.

The general interview served as a preliminary investigation which allowed initial thoughts and hypotheses to be tested. It
showed that children responded well to mimeographed questionnaires that dealt with their activities and places of play and to the map and picture drawing.

It showed that children could be tested in groups, but that this caused limitations as to content and complexity of questions asked. The objective of developing group interviews made the situations encountered very helpful in determining the obstacles and problems to be overcome. The interviews were given in existing situations that could be used by others interested in the problems; this made the results seem more useful for they reflected both the problems and the means which were used to overcome them.

The Washington Park children will be discussed in more detail for their work was used as the major source of data and information. The art class at the Roxbury Y.M.C.A. provided a medium through which extended studies and observations could be made. It became a weekly activity for the children to attend, and thus contact could be continued for longer periods of time. Increased familiarity with the children resulted in freer expression by them.

There were limitations in the situation at the Y.M.C.A. which must be considered when analyzing the data and reaching conclusions. The art class was open to all children of the Roxbury Y.M.C.A. from seven to eleven years. The importance of repeated attendance was stressed but was not compulsory. Interviews were given as a group, and this reduced the amount of attention the child could receive in regard to answering his questions about the material on the questionnaire, helping him in spelling words and in general encouragement. It was possible for other children to come into the
arts and crafts room where the classes were held; this had a disturbing effect. Discipline problems varied from period to period; one could never tell what a particular session would be like beforehand; this necessitated some kind of general picture drawing activity at the beginning of the session to determine the tone of behavior for the rest of the period. The art class overlapped another class, and thus certain children often were late in arriving. The class was held from three to five in the afternoon; this meant it occurred after a hard day's work at school. The children were tired and they wanted a change of pace and activity. This worked both positively and negatively in regard to the interviews, depending on how their content attracted the children's interest.

Even with the limitations, a major problem of repetitive attendance was successfully handled. I had been told at the beginning of the session that I could not expect full attendance. The children must become interested if they are to be expected to return regularly. Some children would come often but not consecutively.

A total of fifty-one children attended the twelve sessions over a period of ten weeks. Eight of the sessions involved interviewing, and the remaining four were used for art activities such as drawing pictures for their parents, making cards for the holidays that fell within the period, looking at books and magazines and for general discussion.

Two of the sessions were held on a Saturday and a Tuesday toward the end of the research experience. There were special interview sessions in which the children were told that they were working on interviews, and that they were helping me by providing information
to write a paper; these two sessions proved to be most successful.

The children for these two major interview periods (each two hours in length) were selected from the total group, especially those who had attended at least five times, or who were suggested by the staff. The purpose was to get a typical sample of the kinds of children in Washington Park. The sample which resulted was felt to be representative. Ten of these children (five girls and five boys, ages seven to eleven years) were used as the data subjects in the development of the thesis information tables. These children had all completed Interviews E, F, G, H, I, J, K, and L which will be discussed.

Out of the fifty-one children who attended at least one full session (children who came in for partial periods were not counted as full time participants), twenty-one attended at least five of the sessions. The following table was developed:

| TABLE ONE |
| AGE, SEX and ATTENDANCE |
| CHARACTERISTICS OF THE CHILDREN |
| Age: | 7 | 8 | 9 | 10 | 11 |
| Sex: | G | B | G | B | G | B | G | B | G | B |
| Times Attended | | | | |
| 9 | | | | | 1 |
| 8 | 1 | 1 | 1 | 1 |
| 6 | 1 | 1 | 1 | 1 |
| 5 | 2 | 2 | 1 | 2 | 2 | 1 |
| Col. tot. | 3 | 1 | 1 | 3 | 3 | 3 | 2 | 2 | 2 | 1 |
| Age tot. | 4 | 4 | 6 | 4 | 3 |
Of the ten children used as data subjects, the five girls included:

1 - 7 year old
2 - 9 year olds
1 - 10 year old
1 - 11 year old

The five boys included:

1 - 7 year old
1 - 8 year old
3 - 9 year olds

This composition weights the reactions to the nine year olds. Considering the range of development represented by the children, it was felt that it could be considered typical of the children of Washington Park.99 Differences due to age and sex were not generally reported. The group was treated as a composite using total reactions and results. A major reason for this was due to the fact that age was often not the determining factor in a child's ability to respond to the interviews; his level of development was more important. Many seven year olds could verbalize and draw better than nine year olds; this was typical across all ages. The child who had the greatest facility for expression was nine years old, but his temper and behavior characteristics restricted his contribution. Sex differences were found to be typical for children of this age level.100 The girls liked and drew some things exclusive to them, and the boys did similarly. Initial result tabulations were made by sex but were aggregated for the remainder of the work. Where age or sex was especially significant, it was given mention.

Interview techniques included mimeographed questionnaires,
map and picture drawing activities, photographs for evaluation, group discussion, individual conversation and tape recording. All were successful except the latter. The tape recorder was brought to the first class session, and the children asked such questions as, "Who are you going to turn the recording over to?" or "Are you going to give it to our parents or teacher?" They were very skeptical as to how I would "use" what they said, and thus their reactions were inhibited. The other distraction it afforded involved the children's wanting to sing into the microphone "like the recording stars." The recorder was not used again until the eighth week when sufficient trust had been established. The noise level of the classroom did not produce very audible recordings and so use was not continued. The recorder would probably have worked much better in a smaller group, but even then, it would have been an inhibiting factor.

Copies of the mimeographed interviews and related material are included in Appendix A. Suggested changes and additions in content and approach are included in Appendix B. Interview A was used in four areas; the other interviews were used exclusively at the Roxbury Y.M.C.A. in Washington Park.

Interview A - "General"

The purpose of the general interview was to determine the responses of the children to mimeographed questions and map and picture drawing. The mimeographs involved two questions: "When you play, do you do any of these things?" and "Do you play in any of these places?" There were spaces on the sheet for the child to mark a line in re-
The children used pencils to mark their responses. After the questionnaire they were asked to draw a map of their neighborhood. If the child had difficulty in drawing the map, he was asked to draw a picture. The interview took approximately one hour.

The results showed that the children responded enthusiastically to the questionnaires and drawing. The seven year olds often had difficulty in reading and would have to be helped on particular words. They showed that the scope and complexity of the interview could be increased. Results from Interview A in the Washington Park Area are included in Appendix A. Twelve children were interviewed in Washington Park. For all four areas a total of 57 were interviewed.

Interview B - "Your Neighborhood"

Twenty-four children were asked to draw a map of their neighborhood. If the child did not know what was meant by neighborhood, it was explained as the "area around where you live and play." The purpose of Interview B was to determine the children's concepts of where they lived, what these included and what their abilities were to represent them. This provided a basis for the picture drawing activities and the descriptive discussion which followed. They were asked to draw their house or "where they lived." They described the liked and disliked qualities of their neighborhoods and homes and talked about the houses of their neighbors and friends. Results were written down. (Time duration: 2 hours.)

The children's ability to draw and talk about their environment became apparent. Interview B showed that questions could be asked concerning particular environmental details and qualities;
especially if the children could actively participate in the interview by drawing, coloring or writing.

Interview C - "Perception and Places to Play"

The purpose of Interview C was to determine the responses the children would make when shown a photograph and asked to list the things they saw. After the listing the children were asked to mark the things they liked and tell why. The ten children were given lined paper and pencils before being shown the photograph.

The results showed that the blank sheet of lined paper was not as effective as one which looked more "important" such as the mimeographed sheets of Interview A. The children hesitated in the writing and constantly erased their work. It showed that the children saw practically everything in the photograph, including vague hints of cloud in the sky. When asked to evaluate, the children responded quickly. This activity took approximately one hour. The slower and younger children had more difficulty in writing and seemed hesitant to hand in their sheets, but when assured no grade would be given, they responded. The first child to finish suggested that a grade be given, but the majority of the other children vetoed the suggestion. The photograph used was included in Appendix A.

Interview D - "Summer Activities"

The purpose of Interview D was to determine the kinds of activities the children liked and what they felt the physical require-
ments for the activities to be. Thirty children over two class
sessions were asked to draw pictures of things they liked to do.
Summer was the season chosen because the weather was warm and the
children kept talking about how much they wanted summer to arrive.
They said that winter was "okay," but it was too cold, and there
weren't enough things to do.

The children used large sheets of newsprint paper (12" x
16"), colored pencils, crayons and regular pencils. The development
characteristics mentioned by Daniel Mendelowitz\textsuperscript{103} were seen first
hand. The characteristics of age versus level of development became
apparent. Lists of activities, details and elements were made from
an examination of the resulting drawings; these were used in prepar-
ing the interviews which followed.

Interview E - "Housing Type and Playground Choice"

The purpose of Interview E was to determine the children's
preference for housing types and playgrounds. Ten children were
given two mimeographed sheets. The first sheet contained two
groups of pictures; the first, five different housing types; the
second, two playground choices. The children were asked to choose
the kind of place they would "most like to live and tell why. A
similar request was made for the playgrounds as to play preference
and why. Housing type choice was quickly made, but playground choice
was difficult as they liked most qualities in both. This led to
discussion about their choices.

The second sheet was a sketch of a group of town-house
like residences located around a large and busy play area. There was also a taller, apartment structure with balconies. A wall surrounded the area for car parking. The play area had trees, swings, play sculpture, swimming pool, grass areas and undivided areas of pavement. The children were asked if they liked the place to live; what they liked and why. They were asked to make the surfacing "like they would prefer for it to be." This resulted in a determination of their preference for surfacings and its relation to types of play activity. It also involved much discussion about space and the need for a variety of types to suit all their activities.

**Interview F - "Washington Park Evaluation"**

The purpose of this interview was to determine the evaluations by the children of their surrounding environment. Fourteen children were shown eight photographs of the environment around the Roxbury Y.M.C.A. They were also given mimeographed sheets which listed numbers corresponding to the numbers on the photographs (4" x 6" in size mounted on a larger backing of white cardboard). They were asked to respond to eight questions by marking a "yes" or "no" for the first three and writing a response to the remaining five. The questions were:

"Do you like the place in the picture?"

"Do you know the place?"

"Would you like to play there?"

"What would you like to do if you were in the place in the picture?"

"What do you like about the picture?"
“Why?”

“What do you dislike about the picture?”

“Why?”

After evaluating all the photographs they were asked to chose the one they liked and the one they disliked the most and tell why. They were also asked to list the things they saw in the pictures, but this became too long an activity and was not finished; it was too repetitious an activity added to the already lengthy interview.

The interview was rather complex for the children, but they responded very well. Their answers to "like" and "dislike" came quickly, but the "whys" were more difficult. The results became a major data source for the thesis and the basis for the following chapters. The results showed what the children liked and disliked about their area and why. Some elements needed further questioning in a more uncomplicated and specific manner. Interview F showed which areas needed further investigation.

The interview took approximately one hour and was the major accomplishment for the children during the special sessions. If repeated, it should be condensed in length by showing fewer pictures that concentrate on more specific details.

The photographs used were black and white. Color was avoided to eliminate that one very powerful characteristic. Even then, the children talked about the color of something, but no specific references were written by them in their responses. The photographs also lacked any scenes with large numbers of people, but the children did talk about activities which took place during the morning and evening rush hours in the areas photographed. They also
"read" themselves into the picture and pointed out their residential areas if they could be seen in the pictures. Further discussion will follow in Chapter III.

**Interview G - "Space"**

The purpose of Interview G was to determine if the children could respond to abstract sketches of kinds of spaces, and what their responses would be. Eleven children were asked to pretend that they were the person shown in a series of twelve mimeograph sketches which showed the basic outlines of a kind of space. They were then asked to list the activity they would do in the space and what they liked and disliked about it and why. Sketches nine, ten, eleven and twelve involved choices; these were used to determine preference and value for trees, proportion of space and type of outdoor, "natural" space. This interview proved to be most difficult as it was generally too abstract for the seven and eight year olds; it also was too long. It did, however, result in data which proved useful when trying to determine criteria used by children in evaluating space and spacial characteristics.

In repeating the interview, the drawings should be less abstract. The use of slides, movies or three dimensional models would probably be more effective. The models would be easier to comprehend and would not have the extraneous details of existing situations.

**Interview H - "Play Activity"**

The purpose of the interview was to determine the kinds of
activities of the children and their location. Eleven children were given a mimeographed list of eighty-nine activities and were asked to mark the appropriate box in response to: "When you play, do you play any of these things?" Then they were asked to mark the things they liked to play the most and the things they did not play, but would like to play.

After the main portion of the interview the children were asked other questions about type and location of play, but the great length of the preceding part had removed their enthusiasm for this last section. The entire interview should be condensed and limited to categories of kinds of play and activities with a few examples. Another approach would be to give the interview in parts by categories of activity and include photographs of places to play - both those familiar to the children and others not familiar, perhaps using some of very different character from the children's environment to eliminate the biases of familiarity.

Interview I - "Places to Go"

The purpose of Interview I was to determine what places the children went and their evaluation of these places. It also showed the degree of localization of the child and his general areas of activity. This information was used to determine relationships of value and familiarity, the general structure patterns of the children's environment and the kinds of places and activities to which they were exposed.

Twelve children were given a mimeographed list of forty-
eight places to go and were asked to mark the correct box if they had gone there, and if they liked or disliked it greatly. The children were also asked what were their most liked and disliked places in the neighborhood.

The shortness of the interview and the content proved to be popular with the children. An interview of this type could be combined with Interview H to perhaps reveal a more complete picture of where children play, what they play, and how they value the place and activity. More concern should also be made to devise means of separating values associated with an activity from the place of activity.

**Interview J - "Elements of the Environment"**

Interview J was used to establish the children's criteria for evaluating certain elements and characteristics of the environment. It was also used to repeat certain questions from previous interviews where answers were still wanting.

Twelve children were given two mimeographed sheets containing questions of preference and value related to fences, walls, ground coverings, building materials, presence of people and traffic, animals, steps, kinds of buildings, types of residence, and size of space and asked to make choices, list elements and state their reasons for value. The children enjoyed the interview as it contained sketches to look at and choices to make. The questions were simple and short and resulted in useful responses of value.
Interview K - "Design Your Place to Play"

The purpose of Interview K was to give further indication as to the kinds of places to play valued by the children and what their reactions would be if told they could have a place to play "just as they wanted it." Ten children were asked the question: "If you could have any place to play just as you wanted it, what would it look and be like?" They were then asked to draw a picture or plan of it.

The results were not unlike places they could have and probably reflected what they had become familiar with. The differences occurred in increased presence of natural features; they also made such comments as: "The pavement would have to be smooth and not all torn up like it is around my house."

Interview L - "Old versus New"

The children had been talking about and choosing everything "new" when given the choice. The purpose of Interview L was to see if a choice between two similarly interesting buildings, both in good physical condition, would result in the choice of the newer one.

Ten children were shown two photographs (in color, but found in black and white in Appendix A) and were asked to give their preference and why. Both photographs were of English Inns. One was a richly carved historic structure with window boxes of bright red geraniums, and the other was of contemporary design and construction. The children chose the contemporary building.

The second part of Interview L involved a "connect the dots
picture" which the children were told to complete. The connected dots revealed the outlines of buildings. The children were told it was a street of houses and to finish the pictures as they liked. Informal discussion occurred concerning how each child would finish the picture. After they had finished, they were shown the picture in various stages of completion which I had previously prepared; the taller structure on the right was shown as an older house with shutters and "typical" New England details. The other structures were shown in various stages of "modernity." The children's drawings had reflected similar details although not as detailed or complete. They just referred to the "big old house" with its pitched roof and the "newer houses all for one family" with a "walled-in backyard." The children decided that the newer houses were better, and that they would prefer to live there.

Both parts of the interview have possible future uses as neither method was sufficiently exploited. The "connect the dots" idea could be used to introduce many elements and qualities for preference and avoid the influence of details. It also allowed the child to participate more actively and yet did not leave him so lost as asking him to draw certain things did at times. Care must be taken in the indication of building materials and the style of a building under evaluation; as both factors were associated with the children's prejudices and biases.

Interviews A, B, C and D were of a more exploratory nature and contributed to the development of the other interviews. Interview F was used as the basis for determining the elements evaluated by the children and their criteria for evaluation. Since it was limited to the area around the Roxbury Y.M.C.A. to control for
familiarity, additional information was needed to complete the discussions. The other interviews, field surveys, observation and discussion provided the necessary supplementary material.
CHAPTER III

WASHINGTON PARK EVALUATION

The Washington Park Area referred to in this thesis was part of both the Washington Park Urban Renewal Area and the adjacent area, all part of the Roxbury-North Dorchester General Neighborhood Renewal Plan. The area for study thus contained development which was in the project execution stage of planning and surrounding development which appeared to be in a state of varying decay. The area was one of contrasts with the focus of greatest contrast occurring in the area around the intersection of Bower Street and Warren Avenue, the location of the Roxbury Y.M.C.A. which served as base of operations for the thesis research and study.

The area contained several new residential developments, including Charlame Park. There was a new Zayre's store being constructed. Several large areas of land were in various stages of vacancy. With the exception of one of the vacant areas, there was no evidence of the changes to take place. Warren Avenue served as a boundary between the Washington Park Urban Renewal Area on the west and the eastern portion of the GNRP. The west side of the avenue
was being renewed and redeveloped, and the east side was continuing in its present state of decay.

Maps are included which explain the location, changes in activity centers, description of the new development and general condition of the area.

MAP NUMBER ONE: LOCATION OF THE AREA OF STUDY

This map describes the location of the area of study, the boundary lines and the Roxbury Y.M.C.A.

MAP NUMBER TWO: LOCATION AND CHANGES OF ACTIVITY FOCl IN THE ROXBURY-NORTH DORCHESTER GNRP

This map shows the location and conditions of change in the activity centers of the study area. The small drawing at the top left corner of the page shows the relationship of the Roxbury-North Dorchester GNRP to the Boston Area.

MAP NUMBER THREE: LOCATION AND DESCRIPTION OF PROJECTS IN THE WASHINGTON PARK RENEWAL AREA

This map shows the location and general description of the various projects being undertaken in the Washington Park Urban Renewal Area. The following areas are described:

B-1 is a new development of row housing with pitched roofs, brick and wood shingle vertical surfacing and little private yards for each of the units.

C-2 is the location of Charlame Park, the favorite residential development of the children interviewed. It is made of brick with flat roofs; it has rather large, unobstructed parking areas in the center of the complex with private laundry yards to the rear of each unit.

C-3 is a new development of row housing of the same type and character as B-1.
C-4 is a vacant and trash laden area awaiting the construction of new housing; no indication was given as to its character.

D-1 is a vacant area awaiting the construction of housing; it appears to be a part of the Zayre's complex.

F-1 is a large commercial area; the new Zayre's facility presently being under construction.

H-6 is the location of the Y.M.C.A. complex containing a large concrete structure, fenced patios and grassed play fields.

MAP NUMBER FOUR: GENERAL CONDITIONS IN THE STUDY AREA

This map shows the general physical conditions found in the study area. The numbers indicate the position from which the photographs used in Interview F were taken.

The results of Interview F were used as a major source for determining the elements and relationships evaluated by the children and their criteria of evaluation. The photographs used in the "Washington Park Evaluation" were of areas to which all the children had been exposed and which were adjacent to the grounds of the Roxbury Y.M.C.A. The photographs reflected the characteristics of an area undergoing rapid change. They showed examples of all the contrasts and qualities of the area.

The photographs are presented with description. Each is described from left to right. Map Number Four located the position from which they were taken.

Photograph One:

From the intersection of Townsend and Humboldt Avenues,
MAP NUMBER ONE: LOCATION OF THE AREA OF STUDY

ROXBURY-NORTH DORCHESTER GNRP* AREA
& WASHINGTON PARK URBAN RENEWAL AREA

<table>
<thead>
<tr>
<th>BOUNDARY</th>
<th>ACREAGE</th>
<th>1960 POPULATION</th>
<th>FAMILIES</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNRP AREA</td>
<td>1,700</td>
<td>82,247</td>
<td>23,000</td>
<td>GENERAL PLANNING</td>
</tr>
<tr>
<td>RENEWAL AREA</td>
<td>502</td>
<td>25,922</td>
<td>6,467</td>
<td>PROJECT EXECUTION</td>
</tr>
</tbody>
</table>

ACREAGE 1960 POPULATION FAMILIES

1,700 82,247 23,000
502 25,922 6,467

ROXBURY-NORTH DORCHESTER GNRP* AREA
& WASHINGTON PARK URBAN RENEWAL AREA

GENERAL NEIGHBORHOOD RENEWAL PLAN

BOSTON REDEVELOPMENT AUTHORITY
MAP NUMBER TWO: LOCATION AND CHANGES OF ACTIVITY FOCI IN THE ROXBURY - NORTH DORCHESTER GNRP
MAP NUMBER FOUR: GENERAL CONDITIONS OF THE STUDY AREA

Legend:
- NEW DEVELOPMENT
- UNDER CONSTRUCTION
- SUB. A. EDITION
- VACANT AREA
- OLD, MOURNING PLAN

Key:
- ROXBURY H. HALL
- HISTORIC SITE
- CIVIL WAR MONUMENT
- HOSPITAL AND MORTALITY SERVICES
which is at the top of a hill and the highest point in the area, one sees: a large area of vacant land awaiting the continuation of the new street and new housing development, an old and decaying red brick school, the Prudential Tower in the distance, a church tower and an area of houses undergoing partial clearance and rehabilitation, the new street which turns to the right and intersects with Warren Avenue, Charlame Park which begins at the intersection of the new street and Humboldt Avenue, and another new residential development on the hill with the stained, wooden fences that step up the hill.

Photograph Two:

The area awaiting the continuation of the new street and housing is in the foreground; the torn earth is covered with trash such as bottles, cans, paper and broken tree limbs. The houses are old and decaying. The hill is rather steep and offers many little "valleys" which could be used for play. The trees are bare and shaggy; many have been broken by the clearance and construction. The area was desolate looking and always deserted when visited. There was no indication of what the new development would be or look like.

Photograph Three:

An asphalt topped playground is adjacent to Charlame Park with swings, slides and see-saws. The area of old rehabilitated housing is in the background. Laundry yards for the first row of units of Charlame Park are seen; the fencing is made of small, vertical, weather bleached poles. The fence of the playground is
chain link. The area in the foreground is trash laden; it was once clean and grass covered, but too frequent use has destroyed it. The children must watch for the pieces of broken glass and bricks. The sidewalk is smooth, clean and new and affords a favorite place to play (roller skate, skate boards, coasting, sledding and others).

Photograph Four:

The new area. One can see: Charlame Park and its parking lot, the small hill once grassed but now torn and dirty, the new street with its lights and straight, smooth sidewalks, the Roxbury Y.M.C.A. in the distance, an old rehabilitated red brick building behind the playing fields and new residential development on the slope of the hill with wooden fences for enclosure. Very small, newly-planted trees line the street.

Photograph Five:

A backyard area at Charlame Park provides a variety of spaces, mostly occupied by laundry poles. The once grassed area at the base of the fence is trash laden. A variety of building materials are seen: weathered wood of the fences, red bricks of the walls, aluminum eave copping, cemesto-plaster board panels between the aluminum framed windows. The old houses in the background are contrasting in materials, design and condition. The ground surfacing is limited to asphalt and worn out grass areas.

Photograph Six:

An area of construction shows the contrasts of the old and
new and the stages in between. Charlame Park is adjacent to the old housing area which is surrounded on three sides by land in varying degrees of vacancy and redevelopment. The red brick tower of the Boston School of Business is seen in the background. The new Zayre's store is under construction with building materials, workmen and noise spread throughout the large complex. Zayre's is a brick covered, steel framed building and of similar design and style to Charlame Park.

Photograph Seven:

The old Area fronts Warren Avenue which is the boundary line between the old and new development. The street is filled with cars. It is under construction and will soon have six lanes for increased traffic. The old buildings contain stores on the first level and apartments above; they are directly across from the new Zayre's development. This business district is in the process of dying; some stores are closed, vacant and boarded up. The only new buildings on that side of the street are a filling station and a liquor store. The store windows are filled with signs advertising products and prices. The sidewalks are broken and jagged; the street has almost returned to gravel. There are always people standing around, watching the traffic and talking. To the right, behind the stores, is a decaying residential area with small yards, broken fences and countless children playing wherever they find space.

Photograph Eight:

This is a continuation along Warren Avenue moving southward. Standing in the vacant lot one sees two men waiting at
the bus stop. The lot is typical of those in the area; it is neither clean nor dirty and seldom attracts the children for play. Across the street stands Westminster Motors with its vacant showrooms and boarded windows. Cars are parked in front of the service station which occupies the corner site. An old fire station is on the rise of land and marks the entrance into an area of different character. From this point, trees line Warren Avenue and front old, multi-story residences.

Turning right, off Warren Avenue on Townsend, one passes a large school with well kept and tree shaded play areas. Continuing past the school one comes to Humboldt Avenue and the position from which Photograph One was taken.

The results of Interview F were tabulated to form Table Two, Evaluations Per Photograph. This table lists the responses made by the children to the photographs and questions. The initial questions: "Do you like the place in the picture?" and "Do you know the place?" were used to see what overall value they gave, and whether they remembered it or not. Since all the children had seen the areas photographed, it seemed strange to have as many negative responses regarding "knowing it." Considering that the children live in different locations of the community, use different modes of transportation to get to the Y.M.C.A. and use different travel routes, their reactions become more understandable. Another question: "What would you like to do if you were in the place in the picture?" gave some indication of the child's actual or desired use of the
INTERVIEW F
WASHINGTON PARK EVALUATION
**TABLE TWO**

**EVALUATIONS PER PHOTOGRAPH**

<table>
<thead>
<tr>
<th>ELEMENTS EVAL.</th>
<th>Total Like (+)</th>
<th>Total Dislike (-)</th>
<th>Total + and -</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like (+) Dislike (-)</td>
<td>+ - + - + - + - + - + -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Questions:</td>
<td>10 2 8 9 11 8 2 6 4 8 2 7 5 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like Place?</td>
<td>9 1 6 4 5 5 8 2 7 3 6 4 9 1 10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Elements Eval.:**

- **Houses:** 15 2 2 6 1 9 8 8 6
- **Playground:** 5 11 1
- **Turn-up Earth:** 5 2 7
- **Fences:** 2 3 1 3
- **Grass:** 9
- **Field:** 9
- **YMCA:** 9
- **Street:** 1 1 4 2
- **Close to YMCA Street:** 5 2 7
- **New Area by Old School:** 4 2 7 7
- **Trash:** 6 6
- **Boarded-up Store:** 6 6
- **Space:** 3 2 5
- **Sidewalk:** 1 5 1
- **Stores:** 5 5 5
- **Bus Stop:** 5 5 5
- **Fire Station:** 5 5 5
- **Sand:** 5 5 5
- **Field:** 5 5 5
- **Yards:** 1 1 4
- **School:** 2 2 4
- **Girl on Bike:** 4 4
- **Vacant Lot:** 4 4
- **New Area:** 4 4
- **Car Station:** 4 4
- **Gates:** 3 3 3
- **Used Cars:** 3 3 3
- **Tall Building:** 3 3 3
- **Prudential:** 2 3 3
- **Truck:** 1 1 2
- **Close to Street:** 1 1 1
- **Hills:** 1 1 1
- **Beer Store:** 1 1 1
- **Truck:** 1 1 1
- **Cables:** 1 1 1
- **Everything:** 8 4 1 4 2 7 15 22
- **Nothing:** 3 7 4 5 3 1 2 3 2 2 11 21 32

**Column Tot.:** 26 13 10 17 20 13 10 11 20 12 27 18 20 10 26 13

**Total Eval./Photo.:** 39 27 33 51 32 45 30 39 30 1
area. The responses for this latter question were not included in Table Two and were listed separately.

In Table Two, the elements evaluated by the children are listed vertically using the names given by the children. They are listed in order of frequency mentioned. For example, houses were explicitly mentioned or listed by the children seventeen times in the evaluation of Photograph One; fifteen mentions were responses to "What do you like in the picture," and two mentions were responses to "What do you dislike in the picture?" Houses were the most mentioned element with a total of fifty-seven like (+) and dislike (-) responses.

Horizontally, the photographs are listed by number and with columns for like and dislike.

Total evaluations are listed by like, dislike and like plus dislike. From the table the total number of evaluations per photograph and the total number of evaluations per element can be determined.

The children were asked to list what they would do if they were in the place in the picture. The following reactions were given:
<table>
<thead>
<tr>
<th>Number Responding</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Photograph One:</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Play there</td>
</tr>
<tr>
<td>1</td>
<td>Live there</td>
</tr>
<tr>
<td><strong>Two:</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Move away</td>
</tr>
<tr>
<td>2</td>
<td>Climb the trees</td>
</tr>
<tr>
<td>1</td>
<td>Play army</td>
</tr>
<tr>
<td>1</td>
<td>Nothing</td>
</tr>
<tr>
<td><strong>Three:</strong></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Play in park</td>
</tr>
<tr>
<td>2</td>
<td>Swing</td>
</tr>
<tr>
<td>1</td>
<td>Play soccer, jump rope</td>
</tr>
<tr>
<td><strong>Four:</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Go to Y.M.C.A.</td>
</tr>
<tr>
<td>1</td>
<td>Run up and down hill</td>
</tr>
<tr>
<td>1</td>
<td>Play football in field</td>
</tr>
<tr>
<td>1</td>
<td>Play baseball, tag</td>
</tr>
<tr>
<td>1</td>
<td>Walk</td>
</tr>
<tr>
<td><strong>Five:</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hang out laundry</td>
</tr>
<tr>
<td>2</td>
<td>Nothing</td>
</tr>
<tr>
<td>1</td>
<td>Climb fences</td>
</tr>
<tr>
<td>1</td>
<td>Run through gates</td>
</tr>
<tr>
<td>1</td>
<td>Visit people who live there</td>
</tr>
<tr>
<td><strong>Six:</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Nothing</td>
</tr>
<tr>
<td>2</td>
<td>Watch men working</td>
</tr>
<tr>
<td>1</td>
<td>Buy things at Zayre's</td>
</tr>
<tr>
<td>1</td>
<td>Move away</td>
</tr>
<tr>
<td><strong>Seven:</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Nothing</td>
</tr>
<tr>
<td>3</td>
<td>Play</td>
</tr>
<tr>
<td>1</td>
<td>Cross street to Y.M.C.A.</td>
</tr>
<tr>
<td>1</td>
<td>Go to store</td>
</tr>
<tr>
<td>1</td>
<td>Leave</td>
</tr>
<tr>
<td><strong>Eight:</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Play in vacant lot</td>
</tr>
<tr>
<td>2</td>
<td>Catch a bus</td>
</tr>
<tr>
<td>2</td>
<td>Play ball</td>
</tr>
<tr>
<td>1</td>
<td>Leave</td>
</tr>
<tr>
<td>1</td>
<td>Nothing</td>
</tr>
</tbody>
</table>
The children were also asked to list the picture which they most liked and most disliked. Six of the children most liked Picture (Photograph) Four because:

1. "The houses are new and clean and have everything you need there, even furniture that all matches."
2. "You can do lots of things in the playfield, and it is clean."
3. "The Y.M.C.A. is new, pretty and has lots of things to do."
4. "There is a lot of grass and it is nice to play on."
5. "If I lived there, I'd be close to the Y.M.C.A."

Three of the children most liked Photograph One because:

1. "The brick houses are nice and new; they have more room and backyards."
2. "I have been there a lot."
3. "The playpark has lots to do."
4. "The school is just across the street."
5. "The Prudential is new and tall."

One of the children most liked Photograph Two because he could play army and run up and down the hills.

Nine of the children most disliked Photograph Two because:

1. "It is messy, dirty, beat up, and you could get hurt there."
2. "The houses are old and beat up."
3. "It is ugly and in the way."

The same child who most liked Photograph Two disliked Photograph Five the most because: "I hate fences, all they do is get in your way."
Washington Park was an area of change and served as a good focus for the thesis research. The contrasts were perhaps too great in some aspects, but it did provide a wide range of situations for exploration. The fact that the most liked and disliked features were across the street from each other made the children aware of the changes occurring and the choices they had - at least as far as responding to the interviews.

The photographs used were of an area common to the children and typical of the physical conditions and character to be found in their Roxbury. However, the following elements were not present: an intense shopping street, a park filled with trees and other natural features, high density housing (of vertical tower type), areas of single family homes with yards and many others.

Because of the conditions described, the tables and lists should be considered with the photographs in mind. Because there were residential developments in the majority of the photographs, there would be some weighting in the results toward residences, but criteria were used which were common to many elements. The intent of the interview was to explore the children's evaluation of their environment.

The tables and data of this chapter were used in the following chapters to discuss the elements evaluated by the children and the criteria for their evaluations.
CHAPTER IV

EVALUATIONS AND CRITERIA

A study conducted by Hans and Martha Muchow explored the "world in which the child lives" and the "space which the child experiences." Their findings did much to support the idea that the perceived world of the child is closely associated with the things of his environment that he uses and values. The use and interaction between the child and his environment are not always those of kindness and ease, but often of resistance. "An environment that was always everywhere congenial to the straight way executions of our impulsions would set a turn to growth as surely as one always hostile would imitate and destroy."106

The environment of the child of poverty offers considerable resistance, and perhaps provides him with greater sensitivity to what its effects are than his "better off" counterparts. The values that resulted from the thesis research lend support to these ideas.

In Interview F, the children were asked to list what they liked and disliked in the photographs shown them. They were also asked to tell "Why?" they liked or disliked the element mentioned.
Their responses to the question of "Why?" composed the definition of their criteria for evaluation as used in Table Four: Elements Evaluated and Criteria.

The photographs of Interview F were limited to the environment around the Roxbury Y.M.C.A. to which all the children had been exposed. The degree of familiarity recognized by the children varied, but most of them extended and inferred beyond the information given in the photograph. Children who had previously said they did not "know the place in the photograph" recognized it after further analysis and inspection. The children tended to "enter" the scenes of the photographs and talked as if they were in them.

The elements of the children's evaluations from Interview F have been categorized and listed in relation to the criteria used for evaluation to develop Table Four. The elements evaluated were grouped by type and listed horizontally according to the number of evaluations per type. The criteria for evaluation in Part A of Table Four were paired where relevant (as clean/dirty, new/old) and listed vertically according to the number of evaluations per criterion or criteria, if paired. Each criterion was qualified as to whether it was used in response to a question of "liking" (+) or "disliking" (-). Totals were given according to + and - evaluations.

The evaluations and criteria used in Table Four were taken from the children's explicit responses in Interview F. Some of the elements were grouped into related categories and will be explained. The criteria were also grouped into related categories. An example, criterion "strong" represents the children's responses
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Visual</td>
<td>+</td>
<td>34</td>
<td>8</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>87</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Visual</td>
<td>-</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>13</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>33</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean</td>
<td>+</td>
<td>19</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>60</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dirty</td>
<td>-</td>
<td>13</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>60</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allows Play</td>
<td>+</td>
<td>11</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>20</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hinders Play</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>20</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td>+</td>
<td>21</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>20</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old</td>
<td>-</td>
<td>11</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>20</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe</td>
<td>+</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dangerous</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety of Choice</td>
<td>+</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>25</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Choice</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td>+</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inaccessibility</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Adequacy</td>
<td>+</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>37</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Inadequacy</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet</td>
<td>+</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>+</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td>+</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't Know</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot. / Col.</td>
<td>137</td>
<td>137</td>
<td>45</td>
<td>45</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot. / Col.</td>
<td>37</td>
<td>37</td>
<td>14</td>
<td>14</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot. / Col.</td>
<td>104</td>
<td>104</td>
<td>45</td>
<td>45</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot. Eval.</td>
<td>555</td>
<td>555</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Functional - F -
| Allows Function | + | 11 | 12 | 9 | 2 | 5 | 21 | 4 | 7 | 7 | 5 | 2 | 4 | 5 | 10 | 3 | 9 | 1 | 4 | 9 | 2 | 132 | 154 |
| Hinders Function | - | 6 | 1 | 2 | 1 | 5 | 2 | 6 | 1 | 2 | 1 | 5 | 2 | 6 | 1 | 2 | 1 | 5 | 2 | 1 | 22 |

Perceptual - P -
| Positive P | + | 34 | 8 | 9 | 2 | 3 | 4 | 2 | 3 | 4 | 7 | 9 | 81 | 110 |
| Negative P | - | 3 | 2 | 5 | 5 | 13 | 12 | 1 | 1 | 5 | 6 | 6 | 52 |

Combined F + P
| Positive FP | + | 34 | 27 | 27 | 2 | 5 | 9 | 4 | 6 | 6 | 3 | 2 | 137 | 247 |
| Negative FP | - | 24 | 14 | 14 | 11 | 3 | 13 | 12 | 4 | 6 | 6 | 3 | 2 | 137 | 247 |

Tot. F / Col. | 11 | 12 | 9 | 2 | 5 | 22 | 9 | 9 | 7 | 5 | 2 | 6 | 5 | 5 | 12 | 4 | 3 | 9 | 1 | 1 | 4 | 13 | 2 |

Tot. F / Col. | 37 | 10 | 9 | 5 | 2 | 3 | 5 | 4 | 13 | 12 | 2 | 5 | 13 | 15 |

Tot. FP | 56 | 20 | 27 | 27 | 2 | 4 | 11 | 3 | 9 | 13 | 12 | 4 | 8 | 1 | 3 | 3 | 5 | 14 |

Data Source:
Interview F.
of "strong, won't break and can take a beating."

Part B of Table Four also qualified the criteria with functional (F), Perceptual (P) and combined functional-perceptual (FP) connotations. These qualifications were based on whether the child used the criterion to judge an element's ability to allow or hinder function, to respond to more perceptual factors or to use both functional and perceptual aspects of criteria in evaluation.

Because of the limitations of the children's environment, certain elements and criteria were not mentioned explicitly by the children in their evaluations. In other interviews these criteria were used; they will be defined in this chapter and their particular characteristics will be explained in Chapter V when the evaluated elements are discussed in greater detail.

The elements evaluated included those listed in Table Two of Chapter III. Most were grouped by related characteristics into such categories as "Building Types" and "Outdoor Details." Some were very specific and were presented separately as they did not sufficiently relate to any others.

The elements were generally ranked by the total number of evaluations per category. This ranking was biased to the environment shown in the photographs. The lack of vegetation and other natural features was reflected by the rank of this category in Table Four.
The rankings of the categories of elements evaluated were:

<table>
<thead>
<tr>
<th>Rank</th>
<th>No. of Eval.</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>266</td>
<td>Building Types</td>
</tr>
<tr>
<td>2</td>
<td>82</td>
<td>Open Space Types</td>
</tr>
<tr>
<td>3</td>
<td>57</td>
<td>Ground Surface &amp; Topography</td>
</tr>
<tr>
<td>4</td>
<td>26</td>
<td>Circulation</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>Outdoor Details</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
<td>Location Proximity</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>Vegetation</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>Traffic</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>People</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>Building Materials</td>
</tr>
</tbody>
</table>

The general category "everything and nothing" received 71 evaluations. A total of 555 evaluations were made. The categories and their component elements evaluated will be defined and generally discussed. The total number of evaluations per element will be given in parentheses.

Building Types: (266 evaluations)

1. (144) Residences included all the kinds of living accommodations referred to as houses by the children. The photographs did not show any single family detached houses; only multi-family houses, apartments and row house development around open spaces, such as Charlame Park, were presented.
2. (48) Store referred to the new Zayre's complex and the old, rather blighted stores across Warren Avenue from Zayre's.

3. (45) Y.M.C.A., the Roxbury Y.M.C.A. at 401 Warren Avenue.

4. (16) Schools referred to the old, red brick school across from Charlame Park on Humboldt Avenue.

5. (5) Fire Station referred to the one located south of the Y.M.C.A. on Warren Avenue.

6. (4) Gas station referred to the one which preceded the fire station and occupied the southeast corner lot at the intersection of Warren and Townsend.

7. (4) Prudential Center Tower.

8. Church (Not mentioned in Interview F, but referred to in other evaluations and discussions)

Open Space Types: (82 evaluations)

1. (25) Playground was located in the Charlame Park complex.

2. (25) Vacant lot referred to areas which were vacant of development and in various states of disuse; the area across from Charlame Park on Humboldt was the one most frequently referred to by the children; the other one mentioned was located on Warren Avenue, adjacent to and behind the Y.M.C.A.

3. (16) Yard referred to the ones found in the Charlame Park development.

4. (16) Playfield referred to the large areas for playing very active sports adjacent to the Y.M.C.A. and a part of the Y.M.C.A. complex.
Ground Surfacing and Topography: (57 evaluations)

1. (26) Trash included paper, broken bottles and glass, cans, broken furniture, tree branches and anything else which created clutter.

2. (24) Earth referred to bare and unkempt dirt or soil; it also referred to areas of ground which had once been planted in grass, but had since become worn and bare due to excessive use and activity.

3. (5) Sand.

4. Water

5. (2) Hill referred to the rises in topography in the area which peaked at the intersection of Townsend and Humboldt.

Circulation: (26 evaluations)

1. (12) Street

2. (9) Sidewalk

3. (5) Bus stop

Outdoor Details: (15 evaluations)

1. (12) Fences

2. (3) Gates

3. (Steps (Not mentioned in Interview F, but referred to in other evaluations and discussions.))

Location - Proximity: (12)

Referred to being close to something valued by the children; they preferred locations in close proximity to the Y.M.C.A.
Vegetation: (11 evaluations)
1. (9) Grass
2. (2) Tree
3. Flowers (Not mentioned in Interview F, but referred to in other evaluations and discussions)

Traffic (7 evaluations) included the vehicles and their movements.

People (4 evaluations)

Building Materials (3 evaluations) included the materials of construction, details and components, such as walls.

Everything (41 evaluations) referred to the totality of things seen and evaluated in a photograph. The children said they liked everything in Photograph Four.

Nothing (30 evaluations) was a general reference of elements in the same manner as "everything."

Communications and Signs were not mentioned in Interview F, but became a major element mentioned and used in the map and picturing drawing activities.

Color was greatly valued by the children, but was not explicitly mentioned in Interview F, due to the black and white photographs used. It became an element highly mentioned and used in the general art activities and in a discussion concerning the children's evaluation of the Roxbury Y.M.C.A.

Space was an element not mentioned in Interview F except implicitly as the criteria "Spacial Adequacy/Inadequacy." Interview G, "Space," dealt in particular with the child's reactions and attitudes toward space. The results were described in Chapter V..
The children's criteria for evaluation reflected the conditions of their environment. The rankings of the criteria emphasized the importance of visual character, physical condition and accommodation of play and activity as major determinates in preference and choice. The criteria were ranked according to the total number of evaluations per related criteria. Positive criteria resulted from the evaluations of things liked. Negative criteria resulted from the evaluations of things disliked. The majority of the criteria resulted in connotative pairs; for example, clean versus dirty. But in a few criteria, both the positive and negative connotation were not mentioned. An example: the children only mentioned the criteria "quiet;" an explicit mention of "noisy" was not given.
The resultant rankings of Table Four, Part A, were:

<table>
<thead>
<tr>
<th>Rank</th>
<th>No. of Combined Criteria Evaluated</th>
<th>No. of Individual Criteria Evaluated</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>140</td>
<td>+80</td>
<td>Positive Visual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Negative Visual</td>
</tr>
<tr>
<td>2</td>
<td>111</td>
<td>+31</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dirty</td>
</tr>
<tr>
<td>3</td>
<td>95</td>
<td>+86</td>
<td>Allows Play</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hinders Play</td>
</tr>
<tr>
<td>4</td>
<td>66</td>
<td>+46</td>
<td>New</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Old</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>+9</td>
<td>Safe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dangerous</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>+23</td>
<td>Variety of Choice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unlimited Choice</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>+24</td>
<td>Completeness</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
<td>+17</td>
<td>Accessibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inaccessibility</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>+14</td>
<td>Spacial Adequacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Spacial Inadequacy</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>+8</td>
<td>Quiet</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>+6</td>
<td>Strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weak</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>+6</td>
<td>Privacy</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>-9</td>
<td>Don't Know</td>
</tr>
</tbody>
</table>

The criteria were defined in the terms used by the children when participating in Interview F. These definitions are then further explained and described considering the observations and
evaluations made during the interview activity.

**Positive/Negative Visual:** (140)

*Positive Visual* (+80): "design, pretty, looks right, all looks nice, all nice." This criterion was perhaps too general to be weighted with the other more specific ones. The child used it to mean that he liked the way the total picture or scene looked. There might have been details that he individually disliked, but he was generally positive in his attitude toward the whole. Photograph Four was highly valued by all the children, nine of whom gave one of their criterion as "it is pretty." They then picked out particular things they liked and gave more specific criteria for evaluation. Also, in the same photograph they disliked such things as the torn up earth along the sidewalk and the trash on the ground, but overall they had a positive visual value toward the place in the photograph. This criterion was frequently used with the criteria of "clean, new, allows play, and safety."

*Negative Visual* (-60): "doesn't look right, looks bad, ugly." The overall meaning was in the same context as positive visual. Negative visual was often used in conjunction with the criteria of "dirty, old, hinders play, and dangerous."

**Clean/Dirty:** (111)

*Clean* (+31): "clean, not messed up, doesn't have rubbish." The degree of cleanliness and lack of clutter and
trash became the most used criterion of condition. The children did not just mean a lack of finger prints or writing on the wall, but also a sense of order. They would give clean as their criteria for liking and list a small area of trash as a disliked feature - if the overall condition was one of order. It was only used when responding to a liked element.

**Dirty** (-80): "dirty, messy, trashy, junky, beat up, ragged, will get muddy, broken glass." Dirty was predominantly used as a criterion when referring to something disliked. It, unlike clean, had to do with a sense of clutter and disorder. When verbally describing something as dirty, it was usually done with a grimace. The children constantly referred to such things as "that dirty old house, store or area."

Dirty was used as a criterion almost three times the number clean was.

The children showed a variation in their values and behavior in regard to "dirty." They constantly contributed to the clutter of their area and then criticized its presence. The fact that their environment was in constant clutter perhaps made their additions seem inconsequential.

**Allows/Hinders Play:** (95)

**Allows Play** (+86): "can play there, play, can do things, to play in." The ability of an element or relationship to allow, hinder or promote play became a major explicit and implicit criterion. The child's world centered around play
and included most activities if he liked them. It was included in this listing because it was explicitly mentioned. It was used only when evaluating something liked.

**Hinders Play (-9):** "can't play there, in the way."

This criterion was always used when evaluating something disliked and was often used in connection with danger. For example, a sidewalk next to a busy street was disliked because it was dangerous to play there. A trashy area was disliked because it did not allow play due to the broken glass and sticks which caused bodily injury.

**New/Old: (66)**

**New (+46):** "new." This criterion was a major factor in the children's evaluations. It was used when evaluating an element which "looked new." It was often used with the criteria of "cleanliness and contrast." The children tended to like anything they thought to be new. Their list of characteristics was related to shape, "modern style" and materials of construction. The children seemed to create a symbol for what they felt "new" to be. Age would not be so important a factor if the style of the element valued fit their idea of what "new" was, and if they did not know when the element had been built. One of Le Corbusier's early 1920 buildings would be considered new by the children. Of all the new residential developments in the area, Charlame Park was the "newest" in their opinion; it had
the rectilinear and metallic trimming so characteristic of their "new" symbol or definition; it was like the Prudential Center.

Old (-20): "old." This criterion reflected the same characteristics as new, except in the opposite sense. The children had their definition of what "old" was. It was often used in conjunction with the criterion "dirty." They seemed to have little concern for old things, no matter what their condition. They mentioned liking some old, historical buildings they had seen on a Y.M.C.A. tour, but their positive attitude seemed to be more concerned with the personality or event related to the building. They liked Paul Revere's House because of these reasons.

Safe/Dangerous: (28)

Safe (+9): "can't get hit by cars, no trash around to hurt you, don't have to play in the street." Safety was of concern to children mainly in relation to their play activities and places of play. It was always used in a positive manner.

Dangerous (-19): "dangerous to play, can get hurt by cars, could get hurt there, cars can run over you, not safe." This criterion was always used to evaluate something disliked, especially if related to play or mobile activities. The automobile was the main cause of danger; broken glass and trash were the second greatest concerns.
Variety of Choice/Limited Choice: (28)

Variety of Choice (+23): "things to do, more places to play, lots of activities, places to go, places to buy." This important criterion was related to activities and places to play. It was implicitly implied in most responses using location-proximity and accessibility as criteria. Other interviews dealt more with "variety of choice" and will be discussed in the next chapter.

Limited Choice (-5): "need more things to do, nothing that's fun," This criterion was not greatly used and then only for negative evaluations. The children's greater use of "variety of choice" usually implied that the variety was a contrast to what they had in general.

Completeness: "everything there, the way it's put together, the way they are built, even have furniture that matches in all the rooms." The sense of completeness that a development had was an interesting criterion used by the children. It was used only when evaluating residential development in Interview F, but was also mentioned in regard to the Y.M.C.A. and the Prudential Center during class discussions. Charlame Park was highly valued because it was completely furnished, had new stoves and refrigerators, and "it all matched." "There weren't any beds in the living room, either." The children never mentioned explicitly "incompleteness." This criterion was related to the children's ideas of design, structure, all the relationships and a sense of order.
at the larger scale. The sense of order that Charlame Park had appealed to the child; he was able to overlook the small scale clutter and disorder which often covered the ground (trash, etc.) in his overall evaluation of the development.

**Accessibility/Inaccessibility:** (19)

**Accessibility (+17):** "can cross the street to school, can get to the Y.M.C.A. quick, can catch bus there and go downtown." This criterion was closely related to the criterion of "location-proximity." The children valued the ability to get to a desired place easily. The bus stop in Photograph Eight was felt to be "the only decent thing there because you can catch a bus and go Downtown."

**Inaccessibility (-2):** "in the way, cars can run over you if you try to cross street." This criterion was not used a great deal. Cars were felt to be the main inhibitors of free movement.

**Spacial Adequacy/Inadequacy:** (17)

**Spacial Adequacy (+14):** "more room in houses, space to play in." This criterion related to "variety of choice" in that there were spaces in which to play many things. The children talked about spaciousness in regard to elements of residential and recreational development.

**Spacial Inadequacy (-3):** "space too skinny, no room to play." This criterion was implied when some children said that
Charlame Park homes had more room than their house did. The children's concern for their not being able to play on sidewalks because of the cracks and jagged edges, or the cars which were dangerous reflected the lack of spaces they had for play.

**Quiet:** (+8)

Quiet: "quiet, not noisy." This criterion was used only when making positive evaluations about residences; it was mentioned a great deal when talking about interior spaces and the ability of walls and floors to buffer sound transmission. This was a quality liked about the Y.M.C.A. building (a result from a general class discussion and not Interview F).

**Strong/Weak:** (8)

Strong (+6): "strong, sturdy." This criterion referred to the ability of an element to take wear and tear (durability). If an object was broken with little effort, the children saw this sign of weakness as a cause for its total destruction. It was related to cleanness in terms of physical condition and visual appearance.

Weak (-2): "weak, broken up, beat up too easily." This criterion referred to the inability of an element evaluated to withstand wear and tear; usually one which was in a torn and broken condition.
Privacy: (+6)

Privacy: "privacy." This criterion was related to variety of choice in places for play. It was not clear how important privacy was to the children. It was mentioned in class discussion in regard to interior spaces. It was mentioned in Interview J in relation to protection and safety. Behavioral scientists talk of the need for privacy for children, but usually related to the interior. The emphasis of this research was on the exterior, and thus results from Interview F were not conclusive enough for more substantial comments.

Natural and urban character were criteria of great importance to the children, but the photographs used did not stimulate the children sufficiently to respond to either of them. They used these criteria in the other interview activities, especially natural character. The children used "natural" in positive evaluations. Interviews E, G and J contained specific choices depending on the presence or absence of a natural feature, usually a tree. In every situation the choice was made because of the presence of the natural feature. The urban qualities represented by Prudential Center also became a comparison for judgment; elements and relationships were preferred because they were "more like the Prudential." An example was the children's selection of Charlame Park as their most preferred place to live in the Washington Park Area.

Contrast became an inherent, basic criterion in many evalua-
tions, especially those related to physical features. The children often mentioned liking something because it was different or "not like most things around here." The children's love for trees, grass, water and other natural features reflected the deficiencies of their environment. Newness and cleanliness were contrasts to the oldness and dirtiness of much of Roxbury. Charlame Park was preferred over similar development because it was "newer" and "more different;" it represented a vivid change in their previous residential exposure and choice. They were intrigued by the fact that it was different, and that it allowed them more things to do than in their own residential area.

Familiarity was also a basic criterion. Although the children valued newness and contrast greatly, their repetitive experiences with an element or relationship increased its value; whether the increase in value was positive or negative depended upon what inherent qualities the element or relationship possessed. Familiarity led to understanding, and understanding was important for positive value. An example was the two similar vacant areas. The future of one area was comprehended by the children, while the other was not. Therefore the former was more positively valued than the latter. Another example was the response given to why the children liked "their most favorite building." The children who listed their homes did so because they lived there; home and familiar surroundings gave them security.

"Elements Evaluated and Criteria"

Table Four was used to determine the correlation between elements valued and criteria for evaluation. The general rankings,
both horizontally and vertically, were useful in considering the children's reactions to their environment as represented in Interview F. The rankings could not be used inclusively for all elements and criteria of evaluation, but they provided a framework for determining what particular elements and relationships of the physical environment meant to the children.

Activity and visual criteria played a major role in the children's evaluations. Since activity related to an element's or relationship's ability to function, or allow the activity to take place, and since vision was only one aspect of the perceptual experiences of the children, the criteria for evaluation of Table Four were grouped in Part B as they related to their functional and perceptual characteristics. Some criteria seemed to relate equally to functional and perceptual aspects and were combined as one criterion. The Functional criterion included the explicitly mentioned functional criteria of "allows play and hinders play" and the more implicitly mentioned, functional criteria of "safe, dangerous, accessibility, inaccessibility, spacial adequacy and spacial inadequacy." The Perceptual criterion included the explicitly mentioned perceptual criteria of "positive visual and negative visual." No other criteria were felt to be so exclusively oriented to perceptual characteristics as to be included. The combined criterion Functional-Perceptual included "clean, dirty, new, old, variety of choices, limited choice, quiet, strong, weak and privacy."

Considering the photographs and the children's comments and results from the other interviews, the re-grouping seemed to be an interesting and logical arrangement. Further interviews and question-
ing more explicitly related to determining whether the element was evaluated on more functional or more perceptual criteria would be useful in providing more conclusive results.

This re-grouping was utilized to develop Part B of Table Four. The criteria were listed vertically with the other criteria and considered whether the response had been to a question of like or dislike. The elements evaluated were listed horizontally in their rank order. Using Part B of Table Four, the functional, perceptual or combined criteria used by the children in their evaluations were determined.

The results of Part B, Table Four showed that most evaluation involved both the combined functional and perceptual criteria. A total of 247 evaluations were related to this combined criteria. This included 137 positive and 110 negative evaluations. Functional criteria were most used with a total of 154 evaluations. This included 130 positive and 24 negative evaluations. Perceptual criteria resulted in 138 evaluations including 81 positive and 57 negative evaluations.

In relation to the categories of elements evaluated the functional, perceptual and combined criteria resulted in the following conclusions:

1. Residences were evaluated using both functional and perceptual criteria in the majority, but more specific considerations were given to perceptual criteria when considering them separately.

2. Stores were evaluated using both functional and perceptual criteria in the majority, but specific
considerations were practically equal with functional slightly greater than perceptual (12 to 10). The perceptual excitement provided by stores and commercial areas was almost as important as the functional activities and services provided. Perhaps, if the stores were not perceptually exciting, then their functional value would become more a necessity and acquire a neutral value.

3. The Roxbury Y.M.C.A. was highly valued for both functional and perceptual reasons. It was a new building of contrasting design and materials. It had established its strength and durability under excessive use and wear. And it had given the children a wide and varied program of activities. It would be difficult to say if either the building or the program would be as valued if separated.

4. Playgrounds were mostly valued for their functional characteristics. Even though the children disliked the trash there and called it ugly (perceptual criteria), they were more concerned as to whether it would hinder their ability to play. Broken cement and asphalt were visually disliked, but their prohibition toward running, jumping and bouncing balls was more negatively valued. The other open space types were similarly valued.

5. Ground surfacings and topography divided into two categories of value. Trash and earth were more
evaluated considering negative perceptual qualities and the combination. Sand and hills were positively valued because of their function; they promoted manipulative and mobile play.

6. Streets were negatively valued because of their hindrances to function; they made it difficult for the children to play nearby because of the cars which they allowed. Sidewalks and bus stops were valued more on a functional basis. The children liked the sidewalks for play even though cars were nearby and presented danger. They liked the bus stops because they provided them with accessibility to other things they valued; they also allowed them to leave their area.

7. Location-proximity was entirely evaluated on functional criteria. Closeness and accessibility were the important functions to be met.

8. Outdoor details, fences and gates, were mainly evaluated on functional criteria, but the condition of the fences involved sensuous criteria.

9. Vegetation was evaluated entirely on functional criteria in Interview F. However, other research activities showed that trees and grass were positively evaluated on perceptual criteria as well.

10. Traffic was evaluated on both functional and perceptual criteria. The children disliked the danger and hindrance vehicles provided in their
play, but they liked the accessibility to other places provided by the cars. The children disliked the cars because they were dirty, ugly, and smelly; many of their residential streets were filled with abandoned and dilapidated vehicles.

11. People were evaluated positively on a functional basis. They provided someone to play with or to take them downtown.

12. Building materials were evaluated on a combined criteria. Physical condition determined functional and visual response. The associative values of some materials contributed to the value of the element in which it was used. For example, concrete and steel were new, strong and usually positively valued.

Table Four reflected the inadequacies of the children's environment. The predominant contrasts between the old and new, the unchanging and the changing, presented little choice; there were no older areas which reflected both good condition and a sense that they would not soon be altered in some way. This may be a positive characteristic in that most of the changes were improvements.

The lack of vegetation and other usable natural features did not allow the children the range of choices they would like. Often where potentially usable natural features existed, they were so trash-laden and cluttered that the children could not use them. Perhaps the frustration caused by seeing the trees, high grass and hills in such unusable and forbidden condition resulted in the
"negative trees" and "negative vacant lots." The trees at the end of Bower Street were generally disliked by the children; they could not be approached due to the great piles of earth, debris and broken tree roots and branches in which they were located.

The children used criteria which reflected adult reactions. Attitudes appeared to become more caustic and negative as the age of the child increased; this substantiated similar findings as mentioned in the Introduction. The children's phenomenistic perceptual characteristics were shown in their rather spontaneous reactions to some of the photographs based on surface details and appearances. An overall evaluation of like or dislike would contain opposing evaluations on closer inspection. Their use of symbolism to define what "new" or "old" represented was also shown. Their evaluative approach of first seeing the total picture, forming an evaluation, and then looking for more specific details for further evaluation correlated well with the approach of the methods of research and study.

Table Four will be used in the following chapter for detailed discussion of the elements evaluated. The other interviews will be used to further substantiate the findings of this chapter and to provide more specific conclusions on the children's perception and values in their environment.
CHAPTER V

ELEMENTS EVALUATED

The evaluated elements listed in Chapter IV will be further discussed. The results of all the interviews and investigations will be used to provide more specific information and findings. The categories of elements ranked were generally consistent with the other research results except as related to "Vegetation" which was of much greater importance than shown. "Communications," "Color" and "Space" were other elements listed in Chapter IV but not mentioned in Interview F. Information regarding these elements was determined from the drawing activities and other interviews. The number and composition of evaluations from Table Four are included in parentheses.

Building Types: (+205, -61)

Residence: (+117, -27)

In Interview F residences and residential development were the most evaluated elements. Positive evaluations were approximately four times greater in number than negative ones. The major positive criteria used related to visual characteristics, physical condition and overall design and organization. Included were:
The children's preference for Charlame Park indicated the qualities and relationships they desired in their residential development. They also used the positive criteria of quietness (8), spacial adequacy (7) and allows play (4).

The negative criteria related primarily to physical condition and age; age being greatly dependent on similarity and deviation with "modern style." The children did not show any liking for any of the older residential development in the area and referred to those shown in the photographs as dirty (-13), old (-11) and ugly (-3).

Interview E questioned the children as to their housing preference. When asked to state preference on dwelling type, seven out of ten (four girls, three boys) chose the single family dwelling for these reasons: "trees and yards, a garage to put the car in, more rooms and looks better;" two out of ten (one boy, one girl) chose the tall apartment building: "a park, can see very far from the windows, lots of children to play with, and it is high;" one (a boy) chose the typical public housing project type as he liked the size of the houses (three and four story walkups). None of the children chose the six family double house or the row houses; they disliked these because they looked like the bad housing around
Shawmut Avenue in Roxbury that "gets torn down all the time;" the six family house was "made of wood and could burn up; houses like that were always burning up." Their preferences could be easily influenced by the presence of trees, yards and playgrounds. Comment was usually made if the houses were next to something else they liked or disliked.

Interview E included a sketch of a housing development which contained one family row houses with yards, trees, grassy areas, play sculpture, low walls for sitting and play, a pool of water and ground surfacing which was divided and defined in only one area. There was also a four story building with balconies. The children were asked if they liked the things they saw in the drawing and if they would like to live there. Nine of the ten children liked the development and would like to live there without qualifications. One child said that she liked it, but would not like to live there because there were no big spaces. Further questioning revealed that all the children wanted some big spaces (places to run and play ball) in the development or near the development, "just so you can walk there."

The things the children listed as liking about the development included the trees, things to play on, grass to sit and roll on, concrete to skate and ride on, wall around the cars to hide the cars and to play on, big windows in the houses to look out of, high buildings to "see far" from, water to play in and private yards.

The children were asked to make the ground surfaces as they would like for them to be. They added more grass areas, made the pool of water larger, put paving on some areas (smooth finished concrete), and added some areas for flowers. They did not want
any asphalt paving because "it sticks to your shoes in the summertime and you can't play on it," or any brick paving because "you can't run and skate on bricks." Their choices reflected the physical characteristics which were needed for their play activities.

Interview J asked the question: "What is your favorite kind of house to live in, and why?" The children's answers reflected a combination of what they were familiar with and what their desires were. The need for the qualities already mentioned were emphasized, and additional importance was given to the need for accommodation of play and the presence of other children with whom to play. The results were:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Housing Type</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Two family</td>
<td>Other kids to play with</td>
</tr>
<tr>
<td>2</td>
<td>Three family</td>
<td>Other kids to play with</td>
</tr>
<tr>
<td>2</td>
<td>Single family</td>
<td>Grass, garden, more room</td>
</tr>
<tr>
<td>1</td>
<td>Brick</td>
<td>I live in one.</td>
</tr>
<tr>
<td>1</td>
<td>Charlame Park</td>
<td>Clean, pretty</td>
</tr>
<tr>
<td>1</td>
<td>Grandmother's</td>
<td>In the country with woods to play in</td>
</tr>
<tr>
<td>1</td>
<td>Apartment</td>
<td>Lots of kids to play with</td>
</tr>
</tbody>
</table>

The choices differed from Interview E, in which they were shown examples with sketches and name of type. This, perhaps, meant that unless the children are shown examples for choice, they will choose the more familiar.

These results have shown the many considerations made by the children in evaluating residential development. Photographs will be presented with descriptions to show how they graphically depicted "their house."
Children's Drawings of "My House"

Girls and Boys
Drawing 9:

A seven year old boy drew a picture of the residential area in which he lives. His house is the one in the center. The rectangular shape on the roof next to the chimney is a skylight. He especially liked the skylight because it lit the stairway so he could see, and when it was clean he could see the sky.

Drawing 10:

A nine year old girl drew the picture of her house on the right. The rectangular area is the play park where she likes to jump rope. The lines at the bottom represent the divisions of the sidewalk which is bumpy.

Drawing 11:

A nine year old girl drew her house and yard. The dark vertical lines represent the picket fence which she likes. She is standing in the yard where she likes to play; she likes the fence because it keeps other people out and is safe. Her visual emphasis and detail of the fence reflected this.

Drawing 12:

A nine year old boy drew a picture of his single family house with a funny roof that "bends twice" (mansard). The heavily drawn windows in the center of the roof are skylights which he likes very much. His family's nameplate is on the door. He thought all houses should have nameplates so that one could tell who lived there.

Drawing 13:

A ten year old boy drew his apartment building as the
darker building in the center. It is on a street and there are no yards. It looks "just like everything else on the street." On the right is the Prudential. It is not actually on his street, but he can see it from there. He insisted on using a "straight-edge" to draw the Prudential because it was new.

Drawing 14:

An eleven year old boy drew the housing project in which he lives. "All the houses look just alike and there are a few trees around." He lives in the building on the left, which is drawn smaller. This could be interpreted to mean that he does not value it a great deal as the child usually draws those things which mean the most to him larger than the other objects represented in a picture.

Drawing 15:

An eleven year old boy drew his house on the left. It is an old house and has many rooms in it. It has a front porch which one reaches by climbing the steps. The house also has a basement. He likes the steps to sit on and talk. He also likes the skylight, which is drawn on the roof, because it lights the stairway.

Store: (+32, -16)

Stores were more positively evaluated than negatively primarily due to the activity they allowed and to the visual appearance. The stores evaluated in Interview F included a new one, Zayre's, and old ones. The only quality liked about the old ones was the activity they provided. The new Zayre's had not been completed
and the children did most of their shopping activity in the old stores.

The criteria ranking showed the comparative value of the old and new. The positive values were related to Zayre's with the exception of activity.

<table>
<thead>
<tr>
<th>Number of Evaluations</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12</td>
<td>Allows play (shopping activity in this situation)</td>
</tr>
<tr>
<td>+ 8</td>
<td>Positive visual</td>
</tr>
<tr>
<td>+ 7</td>
<td>New</td>
</tr>
<tr>
<td>+ 7</td>
<td>Old</td>
</tr>
<tr>
<td>+ 7</td>
<td>Dirty</td>
</tr>
<tr>
<td>+ 5</td>
<td>Variety of choice</td>
</tr>
</tbody>
</table>

Physical condition and variety of things to do showed another aspect of the children's evaluation toward building types and their function. The only other elements evaluated with the criteria "variety of choice" were the Y.M.C.A. and the playfield which was a part of the Y.M.C.A. complex. The children were very anxious for the new Zayre's to open because it would give them a new world of functional and perceptual experiences. It would also be in close proximity to their homes, and they could visit it freely and frequently.

Roxbury Y.M.C.A: (+45)

The children made no negative evaluations in regard to the Y.M.C.A. The positive criteria used for evaluation included: positive visual, clean, new, variety of choice and allows play - each receiving nine evaluations. The physical facilities and
activity programs afforded by the Y.M.C.A. made it a major focus of their life.

A discussion developed one day in art class on the children's opinion of the Y.M.C.A. building. Their reasons for valuing it so highly reflected the criteria which were determined. Notes taken during that discussion presented more detailed reactions which were interesting in their content; some of these were:

The spaces in the Y are big and not crowded; you can play freely.

The Y is strong; you can hit the walls and not hurt them. At home you can't do this because someone will tell you that you'll break something.

The concrete is good for the Y, but would not be good for a house because it scratches you when you lean against it.

The colors are good at the Y; some of them are "happy." Orange is a good color because it doesn't get dirty. (This comment made me ask why. The child then walked over to the orange doors on the cabinets and pointed out to come look closely at all the finger prints you couldn't see from a distance, and that the orange just got darker but didn't look dirty, like white which gets dirty too easily - a white wall covered with hand prints and foot smudges was pointed out; this child was nine years old; other children also made similar comments, probably stimulated though by this one.)

The floors at the Y are good because you can run and jump on them and not get fussed at by the people down below.

The balconies are fun to play on and watch the cars and people go by.

School: (+2, −1/4)

The school to which the children referred their evaluations
was not a positively valued building. The only positive evaluation related to the fact of its closeness to the residential area. The school represented a vivid example of their dislike for old buildings in decayed condition. The area surrounding the school contained derelict vacant lots, houses awaiting demolition and rehabilitation and Charlane Park, about one block away. The latter had the only positive value of adjacent development.

Other Building Types

The fire station (+5) was positively valued because it represented the safety afforded by the fire department. The children had great admiration for the firemen and their facilities because they put out the fires that happened all the time.

The Prudential Tower (+4) ranked as their favorite building; it was positively valued because of its greatly contrasting newness, height and identification status. The Prudential represented Downtown to the children. They liked to watch its lights go on and off at night. The antenna on the top was always drawn in their pictures of it. It was used as a standard for what something new should look and be like.

The gas station (-4) was negatively evaluated because it was dirty. All the children went to gas stations, but they did not regard them as elements of positive value. They mentioned the functions gas stations performed as valuable (air for your citycycle, gas for the car, penny bubble gum machines) but disliked the one shown in the photograph.

Churches were not evaluated in Interview F but they were in
a preliminary evaluation activity, Interview C. The children also drew pictures of churches. The majority of the children attended church. They liked the activities and the buildings. Churches usually had the height, the building materials and general overall contrasting visual character that the children liked. Drawing 27 in Chapter VI by a nine year old boy illustrated the attention the children paid to the church building. The drawing was intricately detailed and brilliantly colored and took over a hour to complete.

**Open Space Types:** (+58, -24)

**Playground:** (+24, -1)

The playground in the Charlame Park development was positively valued except for one evaluation of spacial inadequacy. The children liked the playground because it allowed play (+17), was safe (+4) and was visually pleasing (+3). The children's desire for places to play was beginning to be accommodated in the Washington Park area; the construction of the Y.M.C.A. had been the major addition, and the vacant lots offered possibilities that unfortunately were of such condition as to limit or prohibit play.

**Vacant Lot:** (+4, -21)

The very negatively evaluated vacant lot was a major frustration to the children. They would have liked to play there, but debris and demolition work kept them away. The criteria for negative evaluation were: dirty (-7), negative visual (-5), and old (-2). The only desired quality was accessibility (+2) even though few of them played in them. Only the two middle-class oriented children gave the vacant lot positive evaluations.
Yard: (+14, -2)

The yard was a positively valued element to the children. It afforded them spatial adequacy (+7), positive visual characteristics (+4) and privacy (+3). Two negative evaluations referred to spatial inadequacy, and the backyards of Charlame Park were small, but they were better than what most of the children had.

Playfield: (+16)

The large, well grassed and maintained playfield of the Y.M.C.A. complex was highly valued by the children because it allowed play (+7) and it offered a variety of choice (+9) in activity possibilities. It was the only unobstructed and clean large area for play which the children had in the area.

Ground Surfacing and Topography: (+7, -50)

The evaluations reflected the quality of ground surfacing and topography in the children's environment. The trash (-26) and torn up earth (-24) were indicative of the area's physical condition which was either decayed, or in the process of rehabilitation or new construction. The positively valued sand (+5) and the hill (+2) reflected the children's desire for ground surfaces and topography which allowed play and activity.

The ability of the ground surfacing to allow or hinder play was of great importance to the children; this was further qualified by the state of condition and cleanliness. Interview J allowed the children to choose the ground surfacing they liked; the ranking was:
The children's familiarity with some of the surfacings was limited. Eight of them were not aware of what wood chips and sawdust were. The children's reasons for liking reflected their desire to play on, play with and play in materials which were safe and free from debris.

Water was an element constantly referred to by the children. The pool at the Y.M.C.A. was a favorite place for activity, and all the children liked the beach. Interview D, "Summer Activities," resulted in many drawings of things the children liked.
to do in the summer which required the presence and use of water. Hills were also valued by the children in Interview D. The winter activities were mentioned as opposites ("in the winter you can only ...") by the children and most included the necessity for slopes and variations in topography.

Circulation: (+19, -7)

Streets were positively evaluated if they were new (+3), clean (-1) and of positive visual character (+2). They were disliked because of the danger of the automobiles which used them. The urban renewal project which was most disliked by the children was the new six-lane roadway being constructed adjacent to and including Warren Avenue. The children felt this new expanse of concrete and traffic would be very difficult to cross and would create much noise and dirt.

Sidewalks were liked if they were new (+4) and allowed play (+4). They were disliked if in close proximity to fast moving automobiles (-1). The sidewalks were favorite places of play and congregation for the children. They disliked sidewalks which were rough and broken. Their favorite sidewalk was one made of smooth concrete with score lines that "didn't throw you off your skates." Brick and asphalt sidewalks were disliked because the bricks were too rough for play, and the asphalt was used to patch breaks in the concrete, or brick walks, and could not be skated upon. They also thought the latter to be ugly.

Bus stops were valued because they provided accessibility (+5) to other places. The children used the location of bus stops to describe how they went to different places in the city. They
thus became means by which the children organized their environment.

Outdoor Details: (+12, -3)

Fences were evaluated because of visual characteristics (+3, -1), strength of construction; strong (+3) and weak (-2), and privacy (+3). In Interview J the children were asked to choose the fence they most liked and tell why. Four of the ten children chose a hedge because it was like a tree, and they could hide and play in it; two chose the stone fence as it was strong and solid; two chose the brick fence because "bricks are strong and don't burn up;" one chose the wooden fence because it was like the one in his yard; and one chose a chain length fence because it was shiny, new and looked the best. The only fence not chosen was a picket one which they said was good to climb on (except for the sharp points), but it fell apart too easily (the area had many picket fences in various stages of disrepair).

Gates were liked by the children because they allowed play (+3). They said they liked to swing on gates, but their parents fussed at them for doing so.

Steps were not mentioned in Interview F, but Interview J asked the children if they liked steps and why. Five of the ten children said "yes" because they liked to play on them -- especially to "play house" and "play school." Four of ten said "no" because they made them tired when they had to climb them, and when they fell down them, they were hurt. They usually included steps in the drawings of their homes, and mentioned the things they liked to play on
them. As with most children, the steps became the child's stage for games of make-believe. The children who lived in older housing usually exaggerated the size of the steps, thus indicating the importance of them, whether it was positive or negative in value.

**Location-Proximity:** (+10, -2)

The location and proximity of residential development to activity centers and other things valued by the children contributed greatly to the value of the development. The accessibility (+10) and inaccessibility (-2) provided in new development should reflect the children's desire to be close to places for school, play and shopping.

**Vegetation:** (+10, -1)

Grass (+9) and trees (+1) were both valued positively because they allowed play. The inaccessible trees in a vacant lot were evaluated negatively (-1). The low number of evaluations afforded vegetation was indicative of the deficiency in the Washington Park environment of vegetation.

In Interview J grass was chosen as a favorite ground covering (8 of 10) along with leaves (9 of 10), another form of vegetation. The hedge was chosen as the favorite type of fence because it was like a tree. In Interview E housing and playground choice were based partially on the presence of trees and grass.

In Interview G, the children chose one space in preference to another because of the presence of trees. In the three questions of choice involving trees, the children chose the spaces (in each
question, the spaces were identical except for the presence of a tree in one and not in the other) with trees because the trees were visually pleasing ("pretty, looks nice") and allowed play. Trees also provided elements of contrast.

Flowers were positively valued by the children. Their drawings of nature scenes usually included many shapes and colors of flowers. The children often drew large pictures of flowers; this activity involved the participation of both the boys and girls. They liked the idea of having a garden where they could grow both flowers and vegetables.

Traffic and People: (+4, -7)

Traffic was evaluated negatively because it was negative visually, ugly (-5), dirty (-1) and dangerous (-1). The children liked automobiles for reasons of accessibility and disliked them because of the dirt and noise they caused. They also disliked the many abandoned cars in their areas filled with broken glass, whisky bottles, beer cans and rats.

People were positively evaluated because they allowed play (+4). The children liked other children. Interview J asked: "Do you like to be where there are a lot of people?" Eight of the ten children said "yes" because you could play with the people, and two said "no" but did not know why.

Building Materials: (+3)

The mention of building materials in the selection of walls, fences, ground surfacing and other elements showed the great value of the category from an inferred or indirect position of evaluation.
The liking of strong (+3), new and safe materials reflected the weak, old and dangerous condition of much of the children's physical environment. It reflected a major area of concern when materials were evaluated for both their functional and their social connotations.

Interview J asked the children to choose the kind of wall they most liked. Six of the ten children chose the brick wall because it was clean and strong; two chose the stone wall because it was solid and couldn't be broken into, and two chose the glass wall because they could see out.

It was often difficult to separate the meaning of elements into component values. The values tended to reflect overall ideas of the basic function of walls with major preference resulting from the building materials. The connotation which certain materials had made them a favorite wherever used with condition of cleanliness and repair being equal.

Communication was an important element in the children's environment. Both explicit and implicit signs were used by the child for orientation and exploration. The children's use of communication as it related to structuring the environment and change was discussed in the chapter on "Structure" and "Change." Methods of communication and signs were not explicitly mentioned in Interview F. Information was determined from the children's drawings and discussions.

Color was both an element and relationship valued and the basis for many criteria. The children's preference for most elements evaluated could be altered by their color. Building materials were
especially related to the qualifications of color.

The functional and perceptual criteria were also dependent on color. For example, the color of a wall partially determined what function could interact with it. A white wall would soon get dirty under heavy use while one of a darker color would allow the children more freedom in use. The children's color preferences could determine whether a wall was evaluated positively or negatively. The research did not involve a thorough investigation of the children's color preference, and thus more conclusive statements cannot be made. The major findings did show that the colors of an element must be related to its function.

Space was only implicitly mentioned in Interview F in terms of spacial adequacy and inadequacy. Interview G investigated the children's reactions to space. The value of space was related to its adequacy of accommodating the activity and being the "right" size -- as some spaces were good for running while others were better for sitting. A combination of all these qualities and the presence or absence of trash, decay and traffic resulted in its being evaluated as nice, ugly, safe or dangerous.

It was difficult to isolate the child's reaction to space from the extraneous details of physical condition. Interview G was rather abstract for the children's comprehension, but results were determined. Basing the proportion on the child's height, and stating the proportion ratio with the vertical dimension given first, the horizontal given second, and the depth dimension given third, the following conclusions were made:
Nine of ten children liked 1:2:2 spaces because: "a lot of people can be there, I can run all over."

Three of ten children liked "tunnel" spaces, 2:1:3 because: "its covered if it rains, it's like a tunnel."

Ten of ten children liked very big and field-like spaces; ones in which there was little or no feeling of enclosure. An example would be the Roxbury Playfield because: "it is big enough to play a lot of things."

Four of ten children liked "alley" spaces, 5:1:3 because: "it is tall."

Six of ten children liked "street" spaces, 3:6:30 because: "it is wide and long, a lot of room to run."

Four of ten children liked "tunnel" spaces, 1:1:5 because: "can sit down, crawl and hide."

Spaces of 1:2:2 proportions were most liked because they were more in scale with the children and represented proportion more typical to those found in their environment, especially the residential environment.

In a choice of preference for natural spaces involving hills, canyon or valley, forest and open field, seven of ten children chose the forest because: "there were trees, grass, could
play hide and seek and go camping." One chose the hills for climbing; another, the open field for running and another, none because there was no one in any of them to play with, and therefore he could not have any fun.

Children's spacial choice needed more study with greater depth control than the sketches allowed. The use of models would probably allow more conclusive evidence to be determined.

**Everything and Nothing: (+29, -42)**

The categories of "everything and nothing" referred to overall evaluations of the elements and relationships shown in the photographs of Interview F. The evaluations of "everything" included "positive visual (+7), negative visual (-6), clean (+2), dirty (-2), allows play (+9), dangerous (-4) and limited choice" (-5). The evaluations of "nothing" included "positive value (+9), negative value (-6), dirty (-4), safe (+2), and don't know (-9)." The positive evaluations of these overall inclusions were based mainly on the condition of the physical environment, and how it allowed activity and an overall sense of visual pleasure. The greater number of negative evaluations was typical of the children's characteristics in making evaluations. They tended to evaluate more if they liked the elements and less if they disliked the elements.

The elements evaluated by the children reflected their major life foci: the residence, activity centers and the movement between. Vegetation was shown to be a major element of evaluation and should be ranked between "Open Space Types: and "Ground Surfaces and Topography." The value of the presence of people in the environ-
ment was not sufficiently supported by data and investigation, but speculation would rank their relationship equal to vegetation.

The changes experienced by the children of Washington Park have met with general positive evaluation. The contrast, excitement and newness of the activities and elements contributed to their positive evaluation. No speculation was made as to how long such changes could be continued before their positive evaluations changed to negative.
CHAPTER VI

ACTIVITY AND VALUE

A major factor in the perception and evaluation process of the child was activity. Organized and unorganized play (walking, running, going shopping, going to the movies, visiting people, doing things and going places) were included in the definition of activity as used. Like all children, the child in the urban environment is active, but his range of things to do and places to go is different from the suburban and rural child in that he does not have all the open spaces and natural features which some of them have. The urban child has a fascinating world composed of concentrated activity and people. This concentration can become overwhelming and hindering for some of the children, especially those living in poverty. 110

Fortunately, the poverty areas of Boston are not as dense and chaotic as those in such cities as New York and Chicago. The child of Roxbury, however, shares many common problems with the children of other depressed areas. His social, economic and educational problems are similar. The differences are more related to density, amount of open space and accessibility. The child of Roxbury
at least has more open space, even if it is trash and garbage laden. The child of the Washington Park area of Roxbury has a variety of things to do and places to go; he has the vacant lots awaiting renewal and some new facilities like the Roxbury Y.M.C.A. with its playfields and programs of activity. There are also a few parks which can be attended, and bus stops and Dudley Station afford him limited accessibility to other areas.

In the general interview all the children were asked to identify things they did and places they used. This preliminary study was expanded and became Interviews H and I which were used here to show the activities of the children of Washington Park and the places they used. The ranking for "things you play" from Interview H were listed by percentage of participation in Part A of Table Five, "Children's Activities." Asterisks indicate activities most liked by the children.
### TABLE FIVE

**Children's Activities**

**Part A**

<table>
<thead>
<tr>
<th>90%</th>
<th>80%</th>
<th>70%</th>
<th>60%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>climb trees</strong></td>
<td><em>go shopping</em>*</td>
<td><em>play in your own backyard</em>*</td>
<td><em>go swimming at the Y.M.C.A.</em>*</td>
<td><em>roller skate on sidewalk</em>*</td>
</tr>
<tr>
<td><em>throw balls</em>*</td>
<td><em>go to movies</em>*</td>
<td><em>ride the bus</em>*</td>
<td><em>ride the subway</em>*</td>
<td><em>go on picnics</em>*</td>
</tr>
<tr>
<td><em>ride bicycles</em>*</td>
<td><em>play at playgrounds</em>*</td>
<td><em>go swimming at the beach</em>*</td>
<td><em>run on the sidewalk</em>*</td>
<td><em>play in fields</em>*</td>
</tr>
<tr>
<td><em>snow ball fight</em>*</td>
<td><em>go swimming at the beach</em>*</td>
<td><em>go to parties</em>*</td>
<td><em>work in garden</em>*</td>
<td></td>
</tr>
<tr>
<td><em>sing</em>*</td>
<td><em>ride the train</em>*</td>
<td>*walk through tall grass in your</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>climb on fences</strong></td>
<td><em>watch buildings put up</em>*</td>
<td>neighborhood**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>play with dogs and cats</em>*</td>
<td><em>play at school playgrounds</em>*</td>
<td>play on steps**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>go to the zoo</em>*</td>
<td><em>go to parties</em>*</td>
<td><em>go to parties</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>watch buildings being torn down**</td>
<td>*walk through tall grass in your</td>
<td><em>go to parties</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>neighborhood**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>dig holes in the ground</strong></td>
<td><em>play on steps</em>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>climb on jungle gym or monkey bars</strong></td>
<td>*walk through tall grass in the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>play with sand</em>*</td>
<td>country**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>build tree houses</em>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>build club houses</em>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>walk through tall grass in your neighborhood</em>*</td>
<td><em>play on steps</em>*</td>
<td><em>go to parties</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>go to school games</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>go on picnics</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>play in fields</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>catch insects</em>*</td>
<td>*walk through tall grass in the</td>
<td><em>go to school games</em>*</td>
<td><em>go to school games</em>*</td>
<td></td>
</tr>
<tr>
<td>go to the country and see cows and</td>
<td>country**</td>
<td><em>go to school games</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>horses**</td>
<td><em>build tree houses</em>*</td>
<td><em>go on picnics</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>build club houses</em>*</td>
<td><em>play in fields</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>play acting</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>play hopscotch</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE FIVE, Part A (Continued)

<table>
<thead>
<tr>
<th>40%</th>
<th>30%</th>
<th>20%</th>
<th>10%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>hit rocks with sticks</td>
<td>play in the leaves</td>
<td>go exploring downtown</td>
<td>go exploring around the yard</td>
<td>not done: look for treasure in vacant lots</td>
</tr>
<tr>
<td>watch traffic</td>
<td>baseball</td>
<td>play in ball fields</td>
<td>go exploring in the neighborhood</td>
<td>hockey</td>
</tr>
<tr>
<td>explore vacant buildings</td>
<td>football</td>
<td>play outside stores</td>
<td>ride the airplane</td>
<td>play in trash lots</td>
</tr>
<tr>
<td>pile rocks</td>
<td>ice skate</td>
<td>play in the woods at grandmother's</td>
<td>play in woods at grandmother's</td>
<td>play on rooftops</td>
</tr>
<tr>
<td>hide in boxes, crates</td>
<td>skate board</td>
<td></td>
<td></td>
<td>play in parking lots</td>
</tr>
<tr>
<td>walk on top of walls</td>
<td>look for treasure in the yard</td>
<td></td>
<td></td>
<td>play near factories</td>
</tr>
<tr>
<td>crawl through &quot;make-believe&quot; tunnels</td>
<td>play in cellars</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>climb in and on old cars</td>
<td>basketball</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>play with lumber</td>
<td>sit under trees and think</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>go exploring around the yard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>throw cans, bottles</td>
<td>sit under trees and look at the sky</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>roller skate in the street</td>
<td>play in alleys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>go exploring in the neighborhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>write on walls and fences</td>
<td>play in building halls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>play in wood chips or sawdust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>run in the street</td>
<td>play in construction areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>play inside stores</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In addition to the listing of activities, the children were asked the following questions which are presented with their resulting responses in Part B of Table Five:

**TABLE FIVE**

Part B

1. Where do you play the most and what do you play there?

Results:

<table>
<thead>
<tr>
<th>No.</th>
<th>Place</th>
<th>Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>House</td>
<td>House and school</td>
</tr>
<tr>
<td>3</td>
<td>Backyard</td>
<td>General play and games</td>
</tr>
<tr>
<td>2</td>
<td>Y.M.C.A.</td>
<td>General play, sports, art classes, games</td>
</tr>
</tbody>
</table>

2. Where do you play at night and what do you do?

<table>
<thead>
<tr>
<th>No.</th>
<th>Place</th>
<th>Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>House</td>
<td>Games, watch television</td>
</tr>
</tbody>
</table>

3. What is your favorite place to play and what do you play there?

Results:

<table>
<thead>
<tr>
<th>No.</th>
<th>Place</th>
<th>Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Y.M.C.A.</td>
<td>Games, sports</td>
</tr>
<tr>
<td>3</td>
<td>Yard</td>
<td>Games and general play</td>
</tr>
<tr>
<td>2</td>
<td>House</td>
<td>Games and general play</td>
</tr>
</tbody>
</table>

Interview I, "Places to Go", asked the children to mark in the appropriate space the places they went. They were also asked to distinguish which places they liked the most and the least. These were listed in Table Six, "Places Used by the Children," by
percentage of participation. The asterisks indicate places most liked, and the X's indicate places least liked by the children.

**TABLE SIX**

**PLACES USED BY THE CHILDREN**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Places Described</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100%</strong></td>
<td><strong>library</strong></td>
</tr>
<tr>
<td></td>
<td><strong>good store or supermarket</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Dudley Station</strong></td>
</tr>
<tr>
<td><strong>90%</strong></td>
<td><strong>churches</strong></td>
</tr>
<tr>
<td></td>
<td><em>5¢ and 10¢ store</em>*</td>
</tr>
<tr>
<td></td>
<td><strong>movies downtown</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Franklin Park</strong></td>
</tr>
<tr>
<td><strong>80%</strong></td>
<td>laundry</td>
</tr>
<tr>
<td></td>
<td>hospital</td>
</tr>
<tr>
<td><strong>70%</strong></td>
<td><em>post office</em>*</td>
</tr>
<tr>
<td></td>
<td>police station</td>
</tr>
<tr>
<td><strong>60%</strong></td>
<td>fire station</td>
</tr>
<tr>
<td></td>
<td>Charles River</td>
</tr>
<tr>
<td><strong>50%</strong></td>
<td><em>art museum</em>*</td>
</tr>
<tr>
<td></td>
<td>The Fenway</td>
</tr>
<tr>
<td></td>
<td>Beacon Hill</td>
</tr>
<tr>
<td></td>
<td>Harvard Square</td>
</tr>
<tr>
<td><strong>40%</strong></td>
<td>South End</td>
</tr>
<tr>
<td></td>
<td>Cambridge</td>
</tr>
<tr>
<td></td>
<td>Charlestown</td>
</tr>
<tr>
<td></td>
<td>Mystic Bridge</td>
</tr>
<tr>
<td><strong>30%</strong></td>
<td>Commonwealth Avenue Route 128</td>
</tr>
<tr>
<td></td>
<td>Callahan Tunnel</td>
</tr>
<tr>
<td></td>
<td>Shoppers' World</td>
</tr>
<tr>
<td><strong>20%</strong></td>
<td>the symphony</td>
</tr>
<tr>
<td></td>
<td>Xjunkyard</td>
</tr>
<tr>
<td></td>
<td>M.I.T.</td>
</tr>
<tr>
<td></td>
<td>Harvard University</td>
</tr>
<tr>
<td><strong>10%</strong></td>
<td>army surplus store</td>
</tr>
<tr>
<td></td>
<td>Massachusetts Avenue</td>
</tr>
</tbody>
</table>
The results to the questions listed in Part B of Table Five showed that the children's activities and play occurred primarily at their homes and the Y.M.C.A. The familiarity and use by the children of their homes and the Y.M.C.A. was reflected in their values. The residence was the most positively evaluated element in Interview F. Stores and Y.M.C.A. were second and third, respectively. The store was a center for the children's non-play activity. The children valued the store and related commercial activities for shopping, movies and general services. The act of going to the store was one of positive value.

The elements evaluated in Table Four were considered in relation to their use with the most liked activities (those with asterisk) in Table Five. Giving equal importance to all activities listed as most liked, scores were determined for the element evaluated by listing the number of times it was required in the use of the activity. The list of elements evaluated were modified and expanded due to the mention of ones not evaluated in Interview F. "Residential Development" was used to include both the residence and the yard as the children listed things which were done in the yard of their residence and required the use of both. "Transportation" was the category used to include riding buses, trains, subways and bicycles. "Animals" meant that the activity required dogs, cats or the animals at the zoo. The results were listed in Table Seven.
TABLE SEVEN

ELEMENTS AND ACTIVITIES

<table>
<thead>
<tr>
<th>Number of Activities Involved</th>
<th>Evaluated Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Residential Development</td>
</tr>
<tr>
<td>5</td>
<td>Y.M.C.A.</td>
</tr>
<tr>
<td>5</td>
<td>Playground</td>
</tr>
<tr>
<td>4</td>
<td>School</td>
</tr>
<tr>
<td>4</td>
<td>Vegetation</td>
</tr>
<tr>
<td>4</td>
<td>Ground Surfacing</td>
</tr>
<tr>
<td>4</td>
<td>Transportation</td>
</tr>
<tr>
<td>3</td>
<td>Animals</td>
</tr>
<tr>
<td>2</td>
<td>Store</td>
</tr>
<tr>
<td>2</td>
<td>Church</td>
</tr>
<tr>
<td>2</td>
<td>Sidewalks</td>
</tr>
<tr>
<td>1</td>
<td>Beach</td>
</tr>
<tr>
<td>1</td>
<td>Zoo</td>
</tr>
</tbody>
</table>

The results correlated with the relationship of value and activity mentioned with the exception of stores. Considering the high value given stores (double asterisk), and the fact that the children most valued stores and other commercial places in Table Six, the value of stores and store-activities were substantiated.

The results also reflected the high value of vegetation as mentioned in Chapter IV. If one grouped all the natural features
used in the most liked activities, the grouping would rank first. Natural features were involved in ten of the activities mentioned.

An investigation of Table Six showed that the majority of places visited were activity centers of various types (recreational, commercial, educational). The incidence of participation was dependent upon the kind of activity available at the "place," its appeal to the child and its accessibility for the child. The places with a double asterisk were ones which were very much liked by the child; these places reflected the range and variety of activity which the child desired. In the category of 100% incidence of participation, the library, food store or supermarket and Dudley Station showed the importance of the world of books, the always liked supermarket and the terminal of accessibility for the majority of the children in the area. The other double asterisk places were churches, movies downtown and the Boston Common and Public Garden. The church played an important role in the child's life with 90% of them attending. (Whether this action was voluntary or not was not known.) The movies in Downtown Boston and those of the Washington Street commercial area were a most favored place in spite of television (all the children being avid watchers). The Boston Common and Public Garden were visited on tours made through the Y.M.C.A. activity program and an occasional trip with a parent, older brother or sister or friend.

The drawings of the children expressed the interrelationship between activity and value. The results from Interview D, "Summer Activities," reflected the additional care and patience exerted by the children when drawing the "things they liked to do in the summer."
Examples of the drawings are included with descriptions to illustrate graphically some of the points mentioned.

Drawing 16:

A seven year old girl shows the park she likes to go to in the summer. The dark spots on the trees are holes in which birds and squirrels live.

Drawing 17:

An eight year old girl drew an exciting picture of a peacock she saw at the zoo. Her excitement in explanation was reflected in the extremely well colored and spontaneous drawing.

Drawing 18:

A nine year old girl drew her favorite place for the summer, Revere Beach, with bright sun, huge waves and children playing. The indication of race seen in this drawing was typical of all their drawings.

Drawings 19 and 20:

Two nine year old girls give their impression of Franklin Park. The swings, trees, benches and animals that they value so highly are drawn.

Drawing 21:

A ten year old girl reflects her love of picnics and good food. The setting in this drawing becomes more important than the
Children's Drawings of "Summer Activities"

Girls
Children's Drawings of "Summer Activities"

Boys
people participating. The girl said that there were no places to
go on picnics where she lived.

Drawing 22:

A ten year old girl drew a picture of Abraham Lincoln's
home that she saw once on a trip. It is in the woods with much
grass around.

Drawing 23:

A seven year old boy drew his version of Franklin Park.
The two girls on the right are playing hopscotch on the sidewalk.
He is swinging with his friend.

Drawing 24:

A seven year old boy drew the school where he goes for
special classes in the summer. The gate in his yard is shown by his
house. He likes to swing on the gate.

Drawing 25:

An eight year old boy likes to watch the big trucks in
the summer. The "swiggly" lines are the exhaust fumes of the truck.
He doesn't like the smell that trucks make.

Drawing 26:

An eight year old boy drew a fishing trip he would like to
take. He has never gone fishing but it looks like fun on television.
The usual drawings of this child were of much less detail and sophis-
tication than the ones he did of things he liked to do.

Drawing 27:

A nine year old boy drew a picture of the church he liked to attend in the summer. It is nice and cool inside, and there are picnics in the summer. The stained glass is of many beautiful colors.

Drawing 28:

A ten year old boy drew the summer football practices. The linear details in the top left corner are the stadium seats filled with people who "look like ants" because there are so many of them.

Drawing 29:

An eleven year old boy likes to hitch-hike in the summer and go to the country. He drew a picture of himself doing this.
CHAPTER VII

STRUCTURE AND VALUE

During the research and study the children referred implicitly to the structuring and organizing of their environment, but they did not refer to them explicitly. The references included degree of proximity, accessibility, "the way it is put together" - the organization of the parts, buildings of contrast and orientation (landmarks), centers of activity, trips to and from places and identity of areas. The children drew maps and pictures of their neighborhood. They listed the places they went in the Boston area. They questioned each other about "where do you live?" and "how do you get there?" They told of trips they had taken. In general, they gave many indications as to how they structured, ordered and identified the parts of their environment. In consideration of these factors, structure and value will be discussed.

The elements and relationships which the children used for structuring included activity foci, paths and identity features. The interrelationship between activity, perception and value became the major emphasis in the basis for structuring. The results
closely followed the findings of Jean Piaget's work on the child's conception of geometric relationships. This was shown in the maps which usually concentrated on some semblance of area into which activity foci were connected by lines or streets.

Many of the children had difficulty drawing a map and were allowed to substitute a "picture of their neighborhood." The picture often related as much about elements and relationships of structuring as the map.

Activity foci were the dominant features of organization and included in order of importance: the child's place of residence, the Roxbury Y.M.C.A., school, churches, stores and shopping areas (Washington Street and Downtown Boston) and M.B.T.A. terminals (Dudley Station most mentioned) When drawn, these places were identified by building shape, street number of name plate.

Paths linked the residence and activity centers. The most familiar ones included trips made between home and school, home and the Y.M.C.A., trips for shopping and other kinds of weekly activities, routes followed by buses (M.B.T.A., school and Y.M.C.A.), routes travelled by activity center program trips (several children described a tour they had made to Downtown Boston; it was a very vivid description and included such things as the State House, Paul Revere's House, a cemetery "all by itself in between big buildings," the Boston Common and the U. S. S. Constitution) and major streets which were used to relate the streets which lead to where the child lived.

Identity features included three types: elements of contrast, signs and symbols, and functional and social character-
istics. The elements of contrast recognized by the children were tall buildings and structures, new buildings and structures (or ones in perceptually worse or better condition than the ones adjacent to them), signs and symbols of particular contrast or prominence (especially large signs over expressways which gave directions), light effects (as the Prudential Center lit at night, search lights, the weather indicator of the John Hancock Building), sensations of movement (areas where there were always a lot of traffic and people, such as those around Dudley Station and the Washington Street Shopping Area) and location of noise (fire stations where the engines started from, streets frequently traveled by wailing police cars).

Signs and symbols included both those which were elements of high contrast and those of more obscure nature, such as street signs, names on mailboxes, name plates on doors, traffic signs and those which were not of visual prominence. This latter group was most used in drawing maps, giving directions and generally identifying parts of the environment. The children used simple signs like the Y.M.C.A. initials to distinguish one building from another. The drawings of several different kinds of buildings were often only distinguishable by the name added to the common symbol for building. The rootedness of signs and symbols was important to the children.

Functional and social characteristics included areas associated with embarkation and destination points, with a particular kind of condition (as old, new, clean, dirty, safe, dangerous), with friends or enemies, with activity centers and with any other
particular characteristic of special interest to the child.

These elements and relationships were combined to form various concepts or ideas of what a place was thought to be like by the children. Their scope of knowledge of Boston was difficult to conclusively determine, but it seemed to be limited to connections of their area around Washington Park with parts of Washington Street, Prudential Center and Downtown Boston. They could easily orient to where the downtown was because the tall buildings were visible from their area (There was a clear, panoramic view of this area from the Roxbury Y.M.C.A.) but other areas were not clearly known. Investigation more specifically related to this issue would have been necessary for greater detail.

The children's scope of knowledge of Roxbury was like a composite of the major streets and activity centers. They referred to an area as the ________ school area, around ________ school or around ________ activity center. Major stores and commercial strips were well known and of high value; the relationship to these places was from their homes, if a walkable distance, or from the bus stop to the place, if a bus was taken. Familiar trips by car were also used as reference paths. However, few of the children mentioned traveling by car. The children who were more car oriented in travel seemed to know less about how to get to places. The other children, oriented to public transit, told you "to catch the bus at a certain place, and it took you to such and such a place."

Public transit was highly valued by the children as it was their major means of accessibility. They also valued the activity places to which they traveled. A bus from the Y.M.C.A. came and picked
up some of the children; it also took them on tours and occasionally to the movies. These trips were described as catching the bus, and traveling to the destination.

Photographs were presented which show the typical kinds of maps and pictures drawn by the children of their neighborhood. The detail and accuracy which the children produced was dependent on their development. The photographs were indicative of the variety of abilities a particular age included. Description and comment will be given each drawing to explain the processes used by the children in representing the structure of their environment.

Drawing 30:

A seven year old girl drew a map of her neighborhood which included "Downtown." The map is actually the trip that she makes when she goes Downtown. She leaves her house, passes a church, catches the bus at the bus stop by the drugstore, goes Downtown and returns home over a hill. The linkages of activity centers shown here are a typical way for the children to draw their neighborhood. The ability shown in this map was above the average for seven year olds.

Drawing 31:

An eight year old boy drew this rather indistinguishable map. It is his neighborhood. The large marked area is a vacant area; the darker shape to the left is the Y.M.C.A.; the shape in the center is his house; the pointed shape at the bottom left corner is a church. This information was related by the author in his explanation. All of the drawings of this child were of this character.
Children's Maps of "My Neighborhood"

Girls and Boys
Children's Maps of "My Neighborhood"

Girls and Boys
Drawing 32:

An eight year old girl chose to put her school in the middle of the map. The map does not show the location of her home or even the street on which she lives. Other children concentrated on the Y.M.C.A. and did not locate their homes or street. This could mean that the school or Y.M.C.A. meant more to them than their home.

Drawing 33:

A nine year old boy drew his neighborhood as a maze of streets, overpasses and a very dominant railroad track (the lower heavy, vertical lines). Zayre's looks like the Prudential which probably reflects his attitude of their strong similarity of identity - both are new and are very rectangular, although heights are not at all similar. The signs over the expressway are dominant features; the child goes to New York via the Massachusetts Turnpike very often to visit members of his family. He remembers the signs of direction and that the Massachusetts Turnpike is near his home, or seems to be.

Drawing 34:

A nine year old girl drew a very strange map which includes the Y.M.C.A., her home and the bus which takes her to the Y.M.C.A. The intense size of Zayre's indicates that it is important to her. The other details were not explained by her and were beyond interpretation.
Drawing 35:

A ten year old boy drew his neighborhood as a maze of streets, railroad tracks and a burning house. He said that houses are always burning around his neighborhood, but the fire engines come and put out the fires.

Drawing 36:

A ten year old boy drew his neighborhood. He lives next to Al's Store which is on the corner of Savin Street and Warren Avenue. The drawing does not show any relationship to Warren Avenue. The heavy lines on the store are the bars which keep people from "breaking in the store."

Drawing 37:

An eight year old drew a picture of his neighborhood. It only locates the Y.M.C.A. and Warren Street. The author lives in a housing project and catches a bus to the Y.M.C.A.

Drawing 38:

A ten year old girl passes Franklin Park and the D. & W. store on her way to the Y.M.C.A. She comes by car. The picture shows those things which are most valued by her on her trip to the Y.M.C.A.

Drawing 39:

An eleven year old boy drew his neighborhood where the "houses are all alike." The Drake's Cake Company is on his street.
The houses are identified by street numbers.

The children in drawing the maps and pictures of their neighborhood first drew the streets as lines. If a street sign was used, it was next drawn. The children's houses or most important building followed the initial street layout and street sign. Details to the house were added, followed by trees, fences and other characteristic details such as a taller building seen in the distance or a play area. If details were left out, the children added them after the overall structure was begun.

The children's linkages of the home and activity centers and areas was typical and reflected familiarity and value. The lack of order and clarity at the larger scale might reflect the environment's present condition of change. Children in this age group are usually able to draw maps with more sense of organization, especially those of nine years and older. Another factor could be the use of public transportation which connects points and follows the rather orderless system of Boston streets. The orientations were chaotic before the new detours, demolition of buildings and new development took place. All of these factors helped to explain the children's general inability to represent their environment at the larger scale.
CHAPTER VIII

CHANGE AND VALUE

The children of Washington Park were very conscious of the changes occurring in their environment. They had a very positive attitude toward most of them and a negative attitude of suspicion and wonderment toward others. Their attitude toward change and their consciousness of it were studied indirectly, mainly through observations. The results of the interviews and general study activities reflected several interesting aspects of change in the urban environment as experienced and seen by the children.

The categories of elements and features evaluated were conditioned and qualified by aspects of change; the resultant ranking of the categories reflected the effect of changing residential patterns and development. The child's positive attitude toward Charlame Park and preference for it over other new developments in the area because it "really looked new" showed the influence of contrasting details and character in their evaluations. Charlame Park was likened to the Prudential Center which was their favorite building. It was new, tall and different. The only
reservations they had toward the Prudential Tower and Charlame Park related to their permanence. The brick walls of Charlame Park seemed strong, but other parts of the complex were falling apart (fences, sidewalk edging, loose metal stripping), and that was not good. The Prudential was new and shiny, but it was all metal and glass, and experience with the new store fronts along Warren Avenue had shown them that these materials can be easily damaged. Perhaps they were afraid that these new elements of their environment would soon change to the condition of the older elements around them.

The Y.M.C.A. building was also a favorite; it was built of concrete and "big pieces of wood that are strong." The rather indestructible quality of the Y impressed the children. It also impressed the staff who marveled at the fact that so little damage had occurred considering the intense use which the physical facilities of the Y received. The evaluated elements showed the concern of the children for the condition and quality of their world, both the old and decayed which they valued negatively and the new and durable which they valued positively.

The children's criteria for evaluation were directly related to change. Their new world had given them increased play possibilities and new activities for participation. The conditioning qualities of value which were reflected in their emphasis on newness versus oldness and cleanliness versus dirtiness, good and bad condition and a sense of durability showed what the children had learned from the processes of change. They had been given the contrasts for comparison and judgment. Unfortunately, the obsession the children had for these new developments caused them to generally
value anything that looked new. One thing which showed that perhaps the obsession was not as inclusive as it first seemed were the choices the children made of building materials and the reasoning they used when criticizing certain aspects of the new developments.

The children were knowledgeable about such terms as urban renewal and urban redevelopment. They liked what they saw and talked about things they had heard were going to be built. Their main grievance about these developments was that some people had to move from their homes and had no place to go; they thought this to be very bad and hoped that it would not happen to them. Some of the children told how they would fight anyone who tried to move them.

The major development under construction which they disliked was the new expressway along Warren Avenue. They saw this wide expanse of concrete, soon to be filled with fast moving automobiles, as dangerous and a hindrance to their ease of movement in the area; the only good thing about the highway was that it was causing several old, boarded-up stores to be torn down. The intermediate states of change were not valued by them. This was evidenced by their avoidance of vacant areas awaiting construction.

Some areas around Washington Park have been partially cleared, but have not given any indication about future development. One such area was located across from Charlame Park and contained a hill and many trees. It looked like an interesting place to play, but the children did not like to go there. They said it "didn't look right" and that it scared them. The few standing
houses had been vacant for a long time and were good places for bums to hide. Some of the children thought the houses were haunted. The state of not knowing what would happen bothered the children. Another area in similar condition had a large sign which told what was to be built. This made a great difference to the children for they discussed the new things to be built -- just like Zayre's and Charlame Park." Evidently the planners and development authorities had not realized the uneasiness and apprehension which their unstated and unexplained actions caused the children involved.

The evidence of change usually provided the child with a kind of contrast; this became very important to the child for structuring his environment and probably was strongly valued. If a desired activity accompanied a change, then the change was usually welcomed. If the change obstructed activity as the new highway did, then it was disliked. However, they readily accepted inconveniences caused by change so long as they thought what was to come would be positive in value.

Change provided the children with new situations for their accommodation and reaction. It created new visual stimuli to increase their perceptual development. It provided them with elements and relationships for comparison and thus expanded their ability to evaluate the aspects of their environment. Change also represented that which was new and developing; in this sense it prepared them somewhat for the future. It may have even given them some sense that "tomorrow might be better."

All these aspects of change seemed to be of positive value for the children. However, none of the children in the class had
been negatively affected by change at the time. None of the children had been forced to leave their homes as they had heard other children were forced to do. They did not like the idea of leaving their homes, especially if there was "no place to go." If these children had been exposed to the possible traumatic experiences of relocation and change, then perhaps their attitude would not be so positive. They would probably be "willing to fight."

Hopefully, the changes in Washington Park will continue to be positive for the children who presently live there.
The objectives of the thesis were accomplished. The resulting data and information ranged from general relationships to specific details. The exploratory nature of the research and the ages of the subjects studied contributed to the wide spectrum of results. Each chapter has dealt with a particular aspect of children's perception and values in the urban environment. The resultant conclusions and speculations will be presented.

Survey of Written Material

The survey of the written material proved to be of much help in understanding and meeting the problems involved in the thesis proposed. However, greater emphasis should have been placed on material regarding interpretation of reactions to esthetic, social and functional characteristics of the environment. The complex intermixture of these aspects in the elements evaluated by the children and their criteria for evaluation made interpretation difficult.
Methods of Research and Study

The methods of research and study used and developed depended a great deal on experimentation, evaluation and reformulation. The field surveys produced much relevant material for introduction through questionnaires. Photographic recording of environmental characteristics and children's activities was helpful in determining content for interviews and class discussions.

Observation of the children in the field surveys and during the art class contributed much toward understanding their attitudes and values. Patience and flexibility were essential in dealing with their behavior and activity patterns. Trust and authority were necessary in establishing the discipline needed for the interview and art work.

Discussions with the staff of the Roxbury Y.M.C.A. provided much of the necessary background information on the children. Their advice and suggestions for maintaining interest and establishing rapport were invaluable. Individual and group discussions with the children helped in understanding their responses and actions. The children included more detail in their discussions, but often the drawing reflected their attitudes in a manner less biased and influenced by the adult world.

The art class served as a successful medium for the research, but more controls on attendance and interferences from outside the class were needed. The flexibility afforded by the Y.M.C.A. in the content of the class was necessary in order to experiment with interview techniques and subject matter for its acceptance and comprehension by the children. The classes could be much more
structured now that the problems and potentials have been understood.

The interviews proved to be very successful and could be condensed for future use. The use of pre-testing was essential in determining what methods the children could successfully accommodate. The range of interview methods possible was limited by the physical facilities and time. Much more experimentation is needed. The use of picture and map drawing, fill-in-the-blank mimeographed questionnaires, sketches and photographs for comparison and choice, connect-the-dot or other forms of "flexible" pictures for completion, open-ended and qualified questions and tape recording could be expanded greatly. The interviews which resulted provide a basis for further study and investigation of their use. The use of projected photographic methods was not investigated as the facilities had no means for light control. Suggestions for further study were included in Appendix B.

Washington Park Evaluation

The Washington Park Area provided the subjects, the facilities and the variety necessary to study the perception and values of poverty children in their changing urban world. The evaluations determined were related to the condition of Washington Park, and were not presented to be applicable to all poverty areas. The sample was small, but was felt to be representative of the seven to eleven year old children of the area. Research and study similar to that of this thesis should be continued in areas such as those investigated during the general interviews to determine the consistency of results in areas of contrasting environmental character. Even if
this were done, the results could be applied only to children of urban poverty.

Table Two, Evaluations Per Photograph, listed all of the elements and relationships mentioned by the children in their evaluations. The list showed that the children were conscious of the conditions of their environment, especially the good characteristics and the deficiencies. The children's sensitivity to the extremes was reflected in the evaluations made per photograph of Interview F. The photograph of the area they most liked received almost twice the number of evaluations as the photograph of the area most disliked.

Elements Evaluated and Criteria

The results of the interviews and other research methods were used to test the hypotheses of the thesis. The results were:

1. The children were able to make evaluations of choice and preference regarding elements and relationships of the environment. Their ability to do so generally increased from the ages of seven to eleven, but the development of their abilities was more important than chronological age. Often the seven year old responded as well to interviews as the nine year old. The examples of the children's drawings shown in the thesis indicated the variety of ability to be found at one age level.

2. Those elements and relationships of the environment with which the children have the most interaction are generally the most evaluated. The home, school and activity foci
and their related development were the most evaluated elements by the children, but elements of contrast and newness were also highly evaluated. Visual interaction was a very powerful factor. The Prudential Center Tower was an example of this: the children had very little actual physical contact with the Prudential Center, but they could see it from their area, and it became a symbol of newness for them.

3. A major factor in the perception and value of an element or relationship was its ability to hinder, allow or promote activity by the children. This was the third ranked criteria used by the children for evaluation. It became both an explicit and an implicit factor in the value of most elements.

4. The problems and conditions of poverty were major factors in the children's perception and value of the elements and relationships in the environment. The primary criteria for evaluation included newness versus oldness, cleanness versus dirtiness. The children intensely disliked the decay and trash of their environment and tended to reject older elements even if in good physical condition. Their evaluations reflected the inadequacies of their environment.

5. The elements "remembered from childhood\textsuperscript{113} by adults were, in general, the elements most seen and evaluated by the children in their environment. The ranking
differed in that physical conditions of the environment
were more evaluated by the children and the elements
listed as secondary in the group remembered by adults
were more evaluated by the children. For example,
cleanliness and dirtiness were listed by the children
more frequently as were schools and playgrounds.
Both the adults and the children held vegetation and
other natural features as primary elements of value.

6. The children were symbol oriented in their evaluations
and tended to rely on overall conditions, qualities and
attitudes. They developed a symbol for what "new" was
and implied. This was more dependent on being of
"modern style" than actual age as many buildings built
thirty or forty years ago would be considered to be "new"
by the children, if they did not know when it had been
built. This symbolic evaluation did not extend to
everything in the same manner. Several building materials
were preferred even though they were old; bricks were a
good example. The fact that bricks did not burn and
were strong made them a favorite over aluminum and glass.
The phenomenistic qualities of the children's perception
contributed to their "surface" and initial impact evalua-
tions. They were also prone to re-evaluate and find
disliked features in their liked elements, but the
initial, overall evaluations usually prevailed.
The perceptual stimuli deprivation of the children had made them extremely attentive to all of the new developments and changes in their environments. Most of these were of great contrast to that with which they had been familiar. The new building shapes, materials and facilities were highly valued by the children.

The values of the children reflected those of their family and society. They questioned adult viewpoints and did not always adhere to what their elders felt to be right. They were conditioned by adult opinion, and at times the conflict which resulted was mentioned in class discussions or interviews. For example, the children would often reject a play area with exposed earth because they could get dirty and their mother would not like that. However, their rejection of trash-filled vacant areas was not based on adult conditioning; they had been injured while attempting to play in such areas and knew that their activities would be restricted by such conditions.

At about the age of nine the children seemed to be most independent in their thinking; after that they gradually became more dependent on the opinions of their peers. Nine was a good age for determining less biased values. It was interesting to observe a group of children at this age argue points of value and very stubbornly stick to their individual attitudes.

Interview F, "Washington Park Evaluation," was used to determine elements and relationships evaluated by the children and their criteria for evaluation. The results were listed in Table Four, Elements Evaluated and Criteria. The elements evaluated were categorized and ranked. The ranking included in respective order of importance:
1. Building Types: residence, store, Y.M.C.A., school, fire station, Prudential and gas station
2. Open Space Types: playgrounds, vacant lot, yard and playfield
3. Ground Surfacing and Topography: trash, earth, sand and hill
4. Circulation: streets, sidewalks and bus stop
5. Outdoor Details: fences, gates
6. Location-Proximity
7. Vegetation: grass, trees
8. Traffic and People
9. Building Materials

Considering other interviews and observations, the category "Vegetation" should be ranked in equal importance with "Open Space Types." The deficiencies of the Washington Park environment did not provide sufficient vegetation and other natural features for evaluation. Other elements which were also of major importance were "Communications and Signs," "Color" and "Space." These were discussed in Chapter V.

The elements evaluated focused on the children's place of residence, activity center and recreational developments, shopping facilities and the school. The qualifiers of the environment were of major value: vegetation, ground surfacings and topography, outdoor details, people and traffic. The circulation features which linked the other features were valued for the accessibility they provided. The children valued those things which afforded them a service and allowed them to function without restriction and hindrance.

The children's criteria for evaluation were determined. Listed in rank order of importance they were:
1. Positive/negative visual
2. Clean/dirty
3. Allows/hinders play
4. New/old
5. Safe/dangerous
6. Variety of choice/limited choice
7. Completeness
8. Accessibility/inaccessibility
9. Spacial adequacy/inadequacy
10. Quiet
11. Strong/weak
12. Privacy

The criteria were further qualified as they related to the ability of an element or relationship to serve its function, provide perceptual value or a combination of both. These were classified as: allows/hinders function, positive/negative perceptual and positive/negative functional-perceptual. Most elements and relationships were evaluated using the combined criteria, their functional and perceptual, respectively.

Contrast and familiarity were basic criteria which generally affected all evaluations. Most elements and relationships of contrast in the children's environment were new and of recent change. Their familiar environment did not have the qualities of condition they liked (as cleanliness, allows play, newness, safety and the others), but it was their neighborhood, their home, their store and their school. The sense of ownership and belonging created a conflict in
their values. They would prefer the newer residence, but they would also reflect value for the one which was their home.

Activity and Value

Activity was found to be a major factor in the children's perception and evaluation. The ability of an element or relationship to allow or hinder play and activity was a primary criteria. This was extended to mean function in the functional/perceptual qualifications. The child of seven to eleven was physically and mentally active; he was constantly exploring and testing his environment. His interaction met with both ease and resistance; this helped him to grow physically and intellectually. The all-inclusiveness of activity in the child's world was characteristic of his growth and development processes.

For a more specific example of activity and value, the elements evaluated were compared with the places for play. A direct correlation was found. The residence, activity center and recreational developments were the most evaluated elements and also the locations of the children's play. A direct questioning of this issue to the children substantiated the interrelationship between activity and value.

Structure and Value

The children did not explicitly mention the structuring of their environment. They mentioned and valued location and proximity relationships. They talked of trips they made downtown and to activity foci. They gave directions to each other related to
questions of "Where do you live?" and "How do you get there?" They drew pictures and maps of their neighborhood which revealed the ways and means through which they oriented themselves and organized their environment. They valued accessibility.

They organized or structured their environment in terms of their residence, activity foci, the connecting pathways and features of identity including landmarks, areas of contrast, signs and symbols and social and functional characteristics. Their scope of knowledge of their environment was limited to the area around their homes, the Roxbury Y.M.C.A., Washington Street shopping area, Dudley Station, downtown Boston and the Prudential Center, the latter dependent mostly on the visual contrast it offered to the children from their area.

Change and Value

The Washington Park Area was in constant change. The contrast between the old decaying area on the east side of Warren Avenue and the new developments on the west side also reflected the children's negative and positive evaluations, respectively. The children were generally in favor of the changes occurring in their environment. The new residential and recreational facilities had given them new elements for comparison and use. The new shopping center under construction would increase their range of commercial choices and commercial oriented activities.

The negative aspects of change centered on the intermediate stages of torn up earth and debris-laden vacant areas. The new roadway being constructed was also not positively valued because it
was felt to limit their accessibility in their local area and to be dangerous. Not knowing what was to happen in an area of demolition and clearance was disliked. The children were bothered by their lack of knowledge about development in one large vacant area and evaluated the area negatively. A similar area was valued particularly because a large sign told them what was to be constructed, and they liked the forecast. It would be like Zayre's and Charlame Park, two of their most valued developments.

Change expanded their knowledge and gave them examples for comparison. For the children interviewed it had been mainly a positive development, but none of them had been adversely affected at that time. They had not been exposed to the possible traumatic experiences of relocation and the other effects change could inflict.

The elements and relationships most valued in the environment by the children were determined and classified categorically. The children's criteria for evaluation were determined. The effects of activity on the children's perception and values in the environment were investigated. Methods of interviewing and categories of data were developed for use as a basis for further study and investigation. Having met the objectives to varying degrees of satisfaction, the thesis experience was concluded.

Mistakes have been made. More study and consideration are needed. And retrospect has again proven to be the wisest teacher. Despite the deficiencies it is felt that the assemblage of knowledge presented is interesting and hopefully useful.
APPENDIX A

THE INTERVIEWS

A primary contribution made by the research and study activities was the development of interviews and interview techniques. A detailed description of the interview activities can be found in Chapter II. Copies of the interviews are presented in this Appendix. Appendix B contains suggestions for further study related to the interviews.

The interviews used in the research and study experiences were:

Interview

A. General
B. Your Neighborhood
C. Perception and Places to Play
D. Summer Activities
E. Housing Type and Playground Choice
F. Washington Park Evaluation
G. Space
H. Play and Activity
I. Places to Go
J. Elements of the Environment
K. Design Your Place to Play
L. Old Versus New
INTERVIEW A - GENERAL

The results obtained from the questionnaires given in Washington Park are included in the form of graphs. Graph One shows activities of the children by percentage of participation. Graph Two shows places of play by percentage of participation. The results from the other three areas surveyed and interviewed can be found in Marcia L. McMahon's thesis, "The Relationship Between Environmental Setting and Curiosity in Children" (M.C.P. thesis, M.I.T., 1966).
A. GENERAL PRELIMINARY INTERVIEW

WHEN YOU PLAY, DO YOU DO ANY OF THESE THINGS?

- climb on fences
- walk on top of walls
- throw cans, bottles
- hit rocks with sticks
- dig holes in the ground
- play with sand
- crawl through tunnels
- write on walls, the ground
- climb on jungle gyms
- climb trees
- jump in or on tires
- climb on laundry poles (clothes lines)
- catch insects
- watch buildings being torn down
- watch buildings being put up
- watch traffic
- climb in and on old cars
- walk through tall grass
- explore vacant buildings
- pile rocks, bricks
- hide in boxes, crates
- look for treasure
**DO YOU PLAY IN ANY OF THESE PLACES?**

<table>
<thead>
<tr>
<th>Alleys</th>
</tr>
</thead>
<tbody>
<tr>
<td>sidewalks</td>
</tr>
<tr>
<td>backyards</td>
</tr>
<tr>
<td>building halls</td>
</tr>
<tr>
<td>cellars</td>
</tr>
<tr>
<td>vacant lots</td>
</tr>
<tr>
<td>rooftops</td>
</tr>
<tr>
<td>fields</td>
</tr>
<tr>
<td>front steps of houses</td>
</tr>
<tr>
<td>near factories</td>
</tr>
<tr>
<td>near railroad tracks</td>
</tr>
<tr>
<td>inside stores</td>
</tr>
<tr>
<td>outside stores</td>
</tr>
<tr>
<td>beach</td>
</tr>
<tr>
<td>parking lots</td>
</tr>
<tr>
<td>school playgrounds</td>
</tr>
<tr>
<td>other playgrounds</td>
</tr>
<tr>
<td>churches</td>
</tr>
<tr>
<td>cars</td>
</tr>
<tr>
<td>woods</td>
</tr>
<tr>
<td>parks</td>
</tr>
<tr>
<td>gardens</td>
</tr>
<tr>
<td>streets</td>
</tr>
</tbody>
</table>
GRAS ONE

ACTIVITIES FOR: WASHINGTON PARK

- go downtown
- ride bicycles
- play hopscotch
- throw balls
- look for treasure
- hide in boxes, crates
- pile rocks, bricks
- explore vacant bldgs
- walk through tall grass
- climb in and on old cars
- watch traffic
- watch bldgs, being put on
- watch bldgs, being torn down
- catch insects
- climb on laundry pol
- jump in and on tires
- climb trees
- climb on jungle gym
- and monkey bars
- write on walls, the ground
- crawl through tunnel
- play with sand
- air holes in the ground
- hit rocks with stick
- trench sand, catch
- walk on top of walls
- climb on fences
<table>
<thead>
<tr>
<th>Place</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>streets</td>
<td>100%</td>
</tr>
<tr>
<td>gardens</td>
<td>90%</td>
</tr>
<tr>
<td>parks</td>
<td>80%</td>
</tr>
<tr>
<td>woods</td>
<td>70%</td>
</tr>
<tr>
<td>cars</td>
<td>60%</td>
</tr>
<tr>
<td>churches</td>
<td>50%</td>
</tr>
<tr>
<td>other playground</td>
<td>40%</td>
</tr>
<tr>
<td>school playgrounds</td>
<td>30%</td>
</tr>
<tr>
<td>parking lots</td>
<td>20%</td>
</tr>
<tr>
<td>beach</td>
<td>10%</td>
</tr>
<tr>
<td>outside stores</td>
<td>0%</td>
</tr>
<tr>
<td>inside stores</td>
<td></td>
</tr>
<tr>
<td>near railroad tracks</td>
<td></td>
</tr>
<tr>
<td>near factories</td>
<td></td>
</tr>
<tr>
<td>front steps of house</td>
<td></td>
</tr>
<tr>
<td>fields</td>
<td></td>
</tr>
<tr>
<td>rooftops</td>
<td></td>
</tr>
<tr>
<td>vacant lots</td>
<td></td>
</tr>
<tr>
<td>cellars</td>
<td></td>
</tr>
<tr>
<td>building halls</td>
<td></td>
</tr>
<tr>
<td>yards</td>
<td></td>
</tr>
<tr>
<td>balconies</td>
<td></td>
</tr>
<tr>
<td>alleys</td>
<td></td>
</tr>
</tbody>
</table>

General Interview - Places for Play for: Washington Park
INTERVIEW B - "Your Neighborhood"

Maps and Pictures from this interview can be found in the chapter, "Structure and Value."
INTERVIEW C - "Perception and Places to Play"

Results from this interview can be found in the chapter, "Perception and Value." The photograph used for this interview is found below.
INTERVIEW D - "Summer Activities"

This interview provided a great deal of information on the child's ability to relate details of things perceived. The children responded very well to the request to draw a picture of "what you like to do in the summer;" many children who usually contributed only discipline problems became enthusiastic and produced several very expressive drawings. Photographs of typical drawings can be found in the chapter, "Activity and Value."
E. HOUSING TYPE AND PLAYGROUND CHOICE

NAME

PICTURE ONE:

Which one of the kinds of places to live would you like to live the most?

WHY?

PICTURE TWO:

WHICH one of the playgrounds in the picture would you like to play in the most?

WHY?

BE SURE YOUR NAME IS AT THE TOP OF THE PAGE
COLOR THE PLACE TO LIVE. DO YOU LIKE IT?_______ NAME:________
NAME ___________________________ AGE ______
ADDRESS __________________________________ TELEPHONE ___________________________

PICTURES AND QUESTIONS:

PICTURE ONE:
Do you like the place in the picture? [yes] [no]
Do you know the place?
Would you like to play there?

What would you like to do if you were in the place in the picture?

What do you like about the picture?

Why?

What do you dislike about the picture?

Why?

PICTURE TWO:
Do you like the place in the picture? [yes] [no]
Do you know the place?
Would you like to play there?

What would you like to do if you were in the place in the picture?

What do you like about the picture?

Why?

What do you dislike about the picture?
Do you like the place in the picture?  
Do you know the place?  
What would you like to do if you were in the place in the picture?  
What do you like about the picture?  
Why?  
What do you dislike about the picture?  
Why?
PICTURE: __________________________

Do you like the place in the picture? __________________________

Do you know the place? __________________________

What would you like to do if you were in the place in the picture? __________________________

What do you like about the picture? __________________________

Why? __________________________

What do you dislike about the picture? __________________________

Why? __________________________

PICTURE: __________________________

Do you like the place in the picture? __________________________

Do you know the place in the picture? __________________________

What would you like to do if you were in the place in the picture? __________________________

What do you like about the picture? __________________________

Why? __________________________

What do you dislike about the picture? __________________________

Why? __________________________
PICTURE

Do you like the place in the picture?    

Do you know the place?             

What would you like to do if you were in the place in the picture?  

What do you like about the picture?  

Why?                               

What do you dislike about the picture? 

Why?                               

PICTURE

Do you like the place in the picture?    

Do you know the place in the picture?             

What would you like to do if you were in the place in the picture?  

What do you like about the picture?  

Why?                               

What do you dislike about the picture? 

Why?
Of all the places you saw in the pictures which one did you like the best?

________________________________________________________________________

Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Of all the places you saw in the pictures which one did you dislike the most?

________________________________________________________________________

Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

LIST all the things you can remember from the pictures which you saw.

1. ______________________________________________________________________

2. ______________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

BE SURE YOUR NAME, ADDRESS AND TELEPHONE NUMBER ARE ON THE 1ST SHEET.
G. SPACE

NAME: ____________________________________________

The drawings are of different types of space. Pretend that you are the person in each of the spaces; then answer the questions about the spaces.

PICTURE ONE: ____________________________________________

what do you like about the space? ____________________________

Why? ____________________________________________________________________________

What do you dislike about the space? __________________________

Why? ____________________________________________________________________________

What would you like to do in the space?
______________________________________________________________________________

PICTURE TWO: ____________________________________________

what do you like about the space? ____________________________

Why? ____________________________________________________________________________

What do you dislike about the space? __________________________

Why? ____________________________________________________________________________

What would you like to do in the space?
______________________________________________________________________________

BE SURE THAT YOUR NAME IS AT THE TOP OF THE PAGE.
PICTURE THREE:

What do you like about the space?

______________________________

WHY?

______________________________

What do you dislike about the space?

______________________________

WHY?

______________________________

What would you like to do in the space?

______________________________

LIKE A BIG OPEN FIELD

PICTURE FOUR:

What do you like about the space?

______________________________

WHY?

______________________________

What do you dislike about the space?

______________________________

WHY?

______________________________

What would you like to do in the space?

______________________________

LIKE AN ALLEY

PICTURE FIVE:

What do you like about the space?

______________________________

WHY?

______________________________

What do you dislike about the space?

______________________________

WHY?

______________________________

What would you like to do in the space?

______________________________

LIKE A STREET
What do you like about the space?

WHY?

What do you dislike about the space?

WHY?

What would you like to do in the space?

What do you like about the space?

WHY?

What do you dislike about the space?

WHY?

What would you like to do in the space?

What do you like about the space?

WHY?

What do you dislike about the space?

WHY?

What would you like to do in the space?
PICTURE NINE:

Which of the spaces in the picture do you like best? ________________________
WHY? ________________________

PICTURE TEN:

Which of the spaces in the picture do you like best? ________________________
WHY? ________________________

PICTURE ELEVEN:

Which of the spaces in the picture do you like best? ________________________
WHY? ________________________

PICTURE TWELVE:

Which of the spaces in the picture do you like best? ________________________
WHY? ________________________
H. PLAY AND ACTIVITY

NAME: _____________________________

When you play, do you play any of these things?

Put a pencil \( X \) by the things you play
Put a red \( 0 \) by the things you like to play the most
Put a blue \( 0 \) by the things you don't play but would like to

Put the \( X \) in the first box on the left, then the red \( 0 \) and then the blue \( 0 \)

- climb on fences
- walk on top of walls
- throw cans, bottles
- hit rocks with sticks
- dig holes in the ground
- play with sand
- crawl through "make-believe" tunnels
- write on walls and fences
- write on the sidewalk
- climb on jungle gyms or monkey bars
- climb trees
- climb on laundry poles (clothes lines)
- catch insects
- play with dogs and cats
- go to the zoo
- go to the country and see cows and horses
- ride horses
- watch buildings being torn down
- watch buildings being put up
- watch traffic
- climb in and on old cars
- walk through tall grass in your neighborhood
- walk through tall grass in the country

BESURE THAT YOUR NAME IS AT THE TOP OF THE PAPER
explore vacant buildings
pile rocks, bricks
play with lumber
build tree houses
build club houses
hide in boxes, crates
look for treasure in the yard
look for treasure in vacant lots
baseball
football
basketball
throw balls
play hopscotch
ride bicycles
ice skate
snow ball fight
hang around the corner at night
play on steps
roller skate on the sidewalk
go sledding
roller skate in the street
skate board
soccer
hockey
go on picnics
go shopping
sit under trees and look at the sky
sit under trees and think
sing
go to school games
play at playgrounds
play at school playgrounds
go to parties
go exploring around the yard
go exploring in the neighborhood
go exploring downtown
go swimming at the YMCA
go swimming at the beach
go to the movies
play in the leaves
play in wood chips or sawdust
ride the bus
ride the subway
ride the airplane
ride the train
play in trash lots
run in the street
run on the sidewalk
play in alleys
play in your backyard
play in building halls
play in cellars
play on rooftops
play in fields
play at ball fields
play in parking lots
play near factories
play inside stores
<table>
<thead>
<tr>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>play outside stores</td>
</tr>
<tr>
<td>go to church</td>
</tr>
<tr>
<td>play in the woods at Grandmother's</td>
</tr>
<tr>
<td>play in parks</td>
</tr>
<tr>
<td>play on hills</td>
</tr>
<tr>
<td>play in construction areas</td>
</tr>
<tr>
<td>work in the garden</td>
</tr>
<tr>
<td>play acting</td>
</tr>
</tbody>
</table>

**LIST other things you do and where you do them:**

**LIST other things you don't play but would like to:**

**NAME other places you would like to play and what you would do there**

**Where do you play the most and what do you play there?**

**Where do you play at night and what do you do?**

**What is your favorite thing to play and where do you play it?**

**What is your favorite place to play and what do you play there?**
I. PLACES TO GO
NAME: ______________________________

DO YOU GO TO ANY OF THESE PLACES:

Put a pencil X by the places you go
Put a red 0 by the places you like the most
Put a blue 0 by the places you dislike the most

Use the boxes on the left side of the paper to mark in

<table>
<thead>
<tr>
<th>post office</th>
<th>churches</th>
<th>library</th>
<th>fire station</th>
</tr>
</thead>
<tbody>
<tr>
<td>food store or supermarket</td>
<td>5¢ &amp; 10¢ store</td>
<td>drugstore</td>
<td>laundry</td>
</tr>
<tr>
<td>movies downtown</td>
<td>army surplus store</td>
<td>hospital</td>
<td>Franklin Park</td>
</tr>
<tr>
<td>gas station</td>
<td>policestation</td>
<td>community center</td>
<td>art museum</td>
</tr>
<tr>
<td>The Fenway</td>
<td>The Symphony</td>
<td>Downtown Boston</td>
<td>Washington Street</td>
</tr>
<tr>
<td>junkyard</td>
<td>Boston Common and Public Garden</td>
<td>Charles River</td>
<td>Dudley Station</td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the country</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beacon Hill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvard Square</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massachusetts Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prudential Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South End</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columbia Point Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York City</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 129</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charlestown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mystic Bridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Callahan Tunnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haymarket Square</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopper's World</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lechmere's</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academy Homes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.I.T.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>new playground on Essex Street that is being built</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What place in your neighborhood do you like the most? __________

WHY? __________________________________________________________________________

What place in your neighborhood do you dislike the most? __________

WHY? __________________________________________________________________________
J. ELEMENTS OF THE ENVIRONMENT

NAME: ________________________________

PLEASE ANSWER THE FOLLOWING QUESTIONS:

1. Do you like fences? ___________ WHY? ____________________________

Put a circle around the fence below that you like the most:

[Drawings of different fences]

Why do you like the fence you circled? _______________________

2. Do you like walls? ___________ WHY? ____________________________

Put a circle around the wall below that you like the most:

[Drawings of different walls]

Why do you like the wall you circled? _______________________

3. Which of the following ground coverings do you like? Put an X by the ones you like:

- concrete
- cracked concrete
- asphalt
- stone
- wood chips
- sawdust
- grass
- broken glass
- leaves
- rocks
- sand
- water
- snow
- mud
- trash
- ice

Which one do you like the most? ________________________________

Why do you like it the best? ________________________________

3. Do you like to be where there are a lot of people? __________

Why?
4. Do you ever like to be alone? ___________ WHY? ___________

Where do you like to be alone at: ________________________________

5. Do you like to play with animals? ___________ Do you? ___________

What kind? ___________________________ Where? ____________________

6. Do you like steps? ___________ WHY? ___________________________

______________________________________________________________

7. What is your favorite kind of building? _________________________

WHY? ________________________________

8. What kind of building do you dislike the most? ___________________

WHY? ________________________________

9. What is your favorite kind of house to live in? ___________________

Why is it your favorite? _________________________________________

10. Do you like automobiles? ___________ Alot of them? ___________

Why? __________________________________________________________

11. Do you like big spaces? ___________ What is your favorite big space?

Why do you like it? _____________________________________________

12. Do you like little spaces? ___________ What is your favorite little space?

Why do you like it? _____________________________________________

13. What is your most favorite thing in the whole world? ___________

______________________________________________________________ Why is it your favorite? ___________

______________________________________________________________
K. DESIGN YOUR PLACE TO PLAY

NAME: _________________________________________

IF YOU COULD HAVE ANY PLACE TO PLAY JUST AS YOU WANTED IT, WHAT WOULD IT LOOK AND BE LIKE? DRAW A PICTURE OR PLAN OF IT BELOW:

NAME THE THINGS THERE TO PLAY ON: _________________________________________

__________________________________________________________________________

NAME THE THINGS YOU WOULD DO THERE: _________________________________________

__________________________________________________________________________
I. OLD VERSUS NEW (used with photographs)

NAME ______________________________ AGE ______________________________

ADDRESS ___________________________ TELEPONE ________________________

PICTURE A:

Do you like the place in the picture? ______________________________________

What would you like to do if you were in the place in the picture? ____________

What do you like about the picture? ______________________________________

WHY? ___________________________________________________________________

What do you dislike about the picture? _____________________________________

WHY? ___________________________________________________________________

PICTURE B:

Do you like the place in the picture? ______________________________________

What would you like to do if you were in the place in the picture? ____________

What do you like about the picture? ______________________________________

WHY? ___________________________________________________________________

What do you dislike about the picture? _____________________________________

WHY? ___________________________________________________________________

Which one of the pictures do you like best? _____________________________

WHY? ___________________________________________________________________
Interview L Photographs  "Old versus New"
APPENDIX B

SUGGESTIONS FOR FURTHER STUDY

In concluding the research and study activities, several changes and modifications needed in the interviews became apparent. Other ideas evolved on techniques not investigated, but which seemed to be interesting and useful possibilities. Appendix B will concentrate on methods and techniques of interviewing children concerning their perception and values in the urban environment.

Survey of Written Material

In surveying the written material many research activities were investigated. The ideas, methods and work of Jean Piaget and Jerome Bruner proved to be most helpful in pursuing the objectives of the thesis. Their many experiments and writings provided examples and techniques of interviewing and experimentation which were used in designing the interviews of this thesis. Further investigation of their work is suggested for anyone continuing studies in this area. A compilation of types and methods of experimentation and subject matter would be helpful for design and comparison.

Field Surveys

The field surveys should have incorporated forms with check lists for the presence or absence of environmental characteristics and details. The use of a Polaroid camera would have aided in recording photographically with the notes. A picture could be taken
and then used with tracing paper to point out particular relationships. The use of a conventional camera was helpful, but the time lapse between actual experience and finished prints was too long. Colored slides proved very effective and should be continued for use.

Motion picture taking would be effective in capturing the character and details of structures, space and the children's activities. This technique was not used. Time lapse movies taken of an area could be used to study changing physical and activity conditions. Much of the work of the students of Gyorgy Kepes in his visual design classes has potential use in field surveys.114

Observation

Use of the tape recorder should be further investigated. It did not prove successful in the work of this thesis, but it seemed to have possibilities. If the recorder is to be seen or noticed at all by the children, it should be shown to them immediately. The use of the recordings should be explained. The children should be allowed to "try out" the recorder and listen to themselves speak. Then a general question should first be asked; for example, about sports or television. Then the questions could gradually evolve to those desired in the research. The recorder should generally be limited for use with a few children; ten at the most, but preferably less. The recorder should work well with individual interviews; use in this manner should be incorporated.

Observation of art and interview activities if done with obvious note taking (like standing by the children and carefully writing down all they say) should be explained. The children were
very cautious and reserved when things were written down unexplained to them. Casual observation with only occasional note taking did not require explanation.

When giving the children a mimeographed interview, they were told what it was and how it was to be used. The fact that they were "helping" was stressed and was well received by them. They were quite willing to help as much as they could. No distortions in answers or change of content were noted between interviews known to be interviews and those not known. Interviews E through L were explained to the children and extra effort was expended on their part to complete the work asked of them.

Discussion

The use of informal discussion with the children was essential in building rapport. The additional comments and explanations given in oral expression were necessary in understanding their values and behavior characteristics. One might use the technique of telling the children that "we will all sit down and talk about ______." This of course preceded by an introduction to the subject and the use of some related element to stimulate discussion. For example, the children's obsession with Batman of television fame was used to discuss the big buildings in the city and other characteristics of the urban world of Batman. They liked to draw pictures of Batman, Robin, Batmobile and Bat cave. These figures were often used to generate enthusiasm for the day's activities; the content of which was later shifted to the questions or material under consideration.
Interviews

A summary of changes suggested for the Interviews of Appendix A are presented:

Interview A. "General": should include building type, residential and playground choice. Combining it with Interviews E and J would increase total time to about one hour and provide a more comprehensive framework for further investigation. The addition of the sketches created more interest for the children. Allowing them to color the sketches after completion gave them a greater sense of participation.

Interview B. "Your Neighborhood:" should try to get the child to attempt a map and a picture and not allow substitution. Aid could also be given in drawing. The "fill-in-the-map" technique of Hans and Martha Muchow could also be incorporated. An interesting experiment would be to let a group of children draw a map or arrange symbols into a representation of their environment (recording their reactions and discussion). This should then be followed by a discussion of the completed project. The use of models and symbols would also be useful for individual interviews.

Interview C. "Perception and Places to Play:" worked well as a preliminary test. Including a colored photograph of a place similar (or the same) to the black and white photograph would give indication of the effects of color. The interview could be used for pre-testing any type of element...
or relationship. It took approximately 30 minutes for completion (depending on complexity of photographs and number used, about 15 to 20 minutes per photograph) and worked well as beginning activity for a class session.

Interview D. "Summer Activities;" should be expanded to include other seasons. Also varying specific locations of play could be used as: "Draw a picture of what you like to do the most at your house, at the Y.M.C.A., when you go downtown, at school, etc."

Interview E. "Housing Type and Playground Choice;" should be expanded to include more choices with controls for vegetation, building materials, style and color. Photographs could be substituted for the sketches, although the sketches worked well.

Interview F. "Washington Park Evaluation;" should decrease number of photographs by using two or three which give overall views and two or three of typical details and conditions. The question: "What would you change in the picture if you could?" could be added. The open-ended question is preferred until more knowledge can be determined about the meaning of words of quantification and evaluation to the children.

Interview G. "Space;" should use models of spaces as the sketches were too abstract. Slides and movies could also be used if one could control for the effect of non-spatial
details and qualities. Taking the children (or a child) to different spaces might work, but the use of field trips or "walks" in general are felt to be more relevant for overall environmental experiences and not particular aspects.

Interview H. "Play and Activity:" should condense the list giving examples of types of activities, and then asking the child to list similar ones. A major problem had to do with frequency of participation. This was not determined in the interview and would have been useful in discussing activity and value. The child's inability to understand words of quantity in relation to frequency presents a major difficulty. More investigation in this area is needed.

Interview I. "Places to Go:" should be expanded to include frequency of participation and could be incorporated with Interview H.

Interview J. "Elements of the Environment:" proved to be very useful. The general procedure worked well. Other elements for investigation could be presented in a similar manner. The shortness and variety of subject matter and responses required contributed to its success. At a following general session children asked for more interviews "like the one with fences and walls." It was one of their favorites.

Interview K. "Design Your Place to Play:" was similar to Interview D. The use of the mimeograph sheet made it seem more "official" to the children. They liked the look of
being "official" or "important;" this approach could be used for determining other results.

Interview L. "Old versus New:" should be changed to control for building materials and style. The complete-the-dot picture was the only one used in the interview and was well received; this technique could be used as a means for introducing and determining other attitudes and evaluations.

The suggestions for change and modification of the thesis interviews introduced the consideration which should be made when interviewing children. These included the format of the interview, limitations of time and setting, complexity of the content, responses desired and language of asking and response.

The format of the interview should consider the methods and materials to be used and would include decisions regarding:

1. the size, color, texture and components of the material for response as related to the interaction required of the child, his age, manual dexterity, biases and general intellectual growth.

2. the layout of the materials, as blank sheets, mimeographed forms, maps, models with component parts, cut outs, paste on parts.

3. the implement for response, as pencil, crayon, ink, water paints, picking up and placing components, all related to the interaction required of the child and his abilities.
4. the responses of interaction and participation, as making choices, answering open-ended questions, answering specific questions, fill-in-the-blank, check the one most liked/disliked, check the one done ___ number of times, complete the numbered dots, finish the picture, color the thing most liked/disliked, draw a picture of ____, draw a map of ____.

5. the influence of succeeding material as it relates to the presentation of the overall desired investigation.

6. the particular visual characteristics of material used as photographs, drawings, slides, movies or models for evaluation, choice, ranking, identification, manipulation, correlation (also physical requirements such as light control).

The limitations of time and setting determine what can be asked, how it can be asked and for what length of time. A child can be asked certain kinds of questions for limited amounts of time varying with the age and development of the child, his interest in the subject matter, the responses desired and the conditions under which the interview is given, as a quiet, secluded room versus a noisy, active room. The children responded best to interviews involving sketches, choices to mark, things to draw and color, subjects of interest to them, short time durations (30 minutes to one hour) and limited number of major issues for consideration (two or three).
If lengthy interviews are given, they should be done in sequence with each major issue for consideration given as a segment of the sequence. A folder full of questionnaires should not be given or shown to the child at once, but each segment should be administered and then collected. Otherwise the children will be overwhelmed by the quantity, become restless and decrease in their ability to respond. Maintaining interest is dependent on time, setting and interest of subject matter.

A chaotic setting is very disturbing to the child if trying to complete an interview. The movement and talking of other children can disrupt an entire session. A mood must be established which, although rather noisy, limits physical movement. The children’s requests for permission to leave or move around should be limited.

The complexity of the content of the interview is important in that the child is best able to consider one major issue at a time. In Interview H, the children were asked to "put a pencil X by the things you play; put a red O by the things you like to play the most; and put a blue O by the things you don't play but would like to." The first two requests were easily performed, but the third was too complicated. The child first had to reconsider if he played the activity and then if he would like to play it. Mixing the symbols and the implements for response was also not successful. Each response required the child to change pencil or crayons. Additional spaces for marking X's would not have helped because it was difficult for the child to remember that each space had a question directly related. The questions should have requested only one response at a time or, at the most, responses which were related to direct value as liking or
disliking. Interview I used this latter approach and was administered with greater ease and success.

The responses desired from the children condition the choice of format used, the time and setting requirements, the complexity of content and the language used (especially as related to response). However, the age and level of development of the children will limit the range of responses attainable.

Responses desired are interrelated with the interaction and participation of the children desired or allowable. The use of the responses will also condition. The need for quantification and the validity of explicit versus implicit results must be considered.

All of these considerations are dependent on communication. The child must understand what he is to do before he can respond. Then the interviewer must be able to understand the response. The problems of communication were major limitations in data gathering. The meaning of words to the child was a constant concern in the thesis work. The main reason for using the "open-ended" questioning was due to the fact that little information exists on how children respond to choices of words for relative condition, frequency of participation and value.

The general questioning of the interviews used "like," "most like," "dislike" and "most dislike." Other words such as "least liked" were tested for comparison to "most disliked," but the children did not clearly understand what degree "least" implied. They could best respond to "like," "dislike" and "most." Frequency of participation was also difficult for understanding. The children could relate if they did or did not do a thing, or visit a place, but qualifications of
"all the time," "sometime," "frequently," "often," and others met only with confusion and the question, "What do you mean?"

Charles Osgood has studied the meaning of connotation and denotation of words in their use. His approach offers possibilities for use in interviewing. The interviewer must learn what words mean to the subjects interviewed. In regard to children, the interviewer must speak in the language understood by the child. For children this implies one set of meanings, for adolescents another, and for adults still another. This is further confused by the change in meaning of words over time and the effects of current jargon.

In working with the children of Washington Park, their meanings for various words were determined. The definitions of the words used as their criteria of evaluation were examples of the beginning of a list of word meanings for use in further interviews. A careful compilation of words should be made for use when interviewing a particular age group in a particular area. Perhaps eventually a dictionary could be developed.

Discussion and interview work with the children resulted in many word meanings. Interviews could be developed related particularly to the meaning of words. When asked directly, "What do you mean by _____?" the child responded with his meaning. Meaning was found to be generally consistent. The words and sayings of television, movies, "pop talk," magazines, comics and other mass media offer an area for investigation. Batman jargon became so common that even the staff members at the Y.M.C.A. often had to use it for communication with the children.

Another major problem of interpretation had to do with the
Separation of meaning between the elements of the physical environment and the stylistic, conditioning, activity and social factors. Other related problems included the effect of the interior space and use versus the exterior space and building design and the effect and influence of color and building material preference.

To begin the solution of these problems, controls must be instigated to limit the things to which the child could respond. This would have to be done for both separate qualities and combinations. The following suggestions are given as possibilities for beginning further study based on the results of this thesis and related readings:

1. Give children a list of words and objects, and ask them to define their meaning (would generally require individual interviewing until about the age of nine).

2. Survey the literature, mass media and educational materials of the children to determine their exposure. Try to determine the influences which cause change of meaning in words.

3. Develop games in which choices reflect the participants' values. For example, Monopoly and other parlor games often reflect the economic and social values of the players.

4. Try the approach used by Robert Wilson in studying adult values: "If you had $3,000 to spend, for what would you spend it?" Substitute sums of money or articles more relevant to the children.

5. Show the child a group of identical blocks, each
labeled as a type of building (school, church, residence, etc.) and ask him to tell which he likes best and why. The building type could be constant but the shape varied. Color, materials, descriptive adjectives (old, new, clean, dirty) could be used in similar ways to investigate their meaning.

6. An area could be shown like Charlame Park with the addition of one tower, or one "old" house, etc. and evaluations made. Similarly one row of houses like Charlame Park could be shown with towers. The composition could be varied and results recorded.

In summary it is recommended that the studies of this thesis be modified with the suggested changes and continued in other areas of poverty with contrasting physical conditions (such as Columbia Point, South End, others). Further extension of the studies across a variety of densities and socio-economic classes could provide the planner with a greater understanding of the elements evaluated by children, their criteria for evaluation and the variances as related to physical, social and economic conditions. The age levels could also be extended to include adolescents and adults, but the studies, results and suggestions presented in this thesis related to children.
APPENDIX C

IMPLICATIONS FOR PLANNING

The implications of the thesis for planning were both general and specific. The primary implication was that values of children regarding their environment can be determined for consideration and use by the planner. The implications are presented in terms of suggestions for change and development in the Washington Park Area.

The elements evaluated by the children should be considered when planning and designing the new developments of the Washington Park Area. The following considerations should be made:

1. Residential development should use "modern style" similar to that of Charlame Park but there must be some contrast maintained. The low buildings should be intermixed with tower residence. More vegetation and spacial variety should be included. Large trees capable of taking the wear of children's use should be planted, preferably around and in the parking areas which serve as daytime play areas. Open spaces between the sizes of the backyards and parking areas should be incorporated for play. A greater variety of horizontal levels should be used such as stepped retaining walls for embankments and increased emphasis of the entrance to the living units. The edging and retaining walls for planting areas should be durable enough to take the play of children. A separation in level should be made between areas intended for
intense play and areas for viewing, perhaps containing flowers, shrubs and grass. The parking lot surfacings should be divided into some simple geometric design which could be used for boundaries and lines of demarcation in the children's play. Skylights and balconies should be used. Colors and materials of construction should consider the children's preference for durability and appropriateness to function. Brick, concrete, metal and glass are desirable for the primary structure with wood and other natural materials used in areas of less wear for contrast.

2. Stores are favorite places of activity and exploration for the children. They value accessibility to them. Small stores should be incorporated in the residential development at intervals of easy walking and away from conflict with major traffic arteries. Larger stores should be visually and physically accessible to the children through graphics and public transportation routes.

3. The Y.M.C.A. serves as a good example for other activity centers to follow. The physical facilities and program of activities are highly valued and used by the children. The variety of activities and services should be expanded to form some kind of overall area-wide activity organization. A community center with assembly and display facilities is needed to provide a place for greater interaction with the children of other areas. The
children's desire to display their art projects and see
the works of others could be used to help promote understand- ing between different areas, age and social groups. The children could also learn of changes and possibilities in their environment through such a center.

4. The old schools should be rehabilitated with contemporary materials and colors if retained; most of them should probably be replaced altogether. The outdoor facilities should be increased with a greater variety of vegetation, ground surfaces and play equipment. Schools could be located adjacent to playgrounds and playfields; thus using capital investments more wisely. The school could also serve as a recreation and activity center after formal school hours. The children liked to have their school close to their residence and not in proximity of fast moving automobiles.

5. The favorite building of the children, Prudential Tower, gives an indication that the children value knowing where things are located and that tall buildings should be clearly articulated. They should not be piled into huge mountains and masses. The vertical identification a tall building can provide should be considered when building new vertical structures. If the visually prominent symbol is rooted to an identifiable area or function, such as a center of some type, then it increases and clarifies the knowledge the children have of the environment. If many tall buildings were constructed without some unique-
ness for identity, the positive characteristics would be lost. The elements of contrast and identity play an important role in the value criteria of the children.

6. The evaluation of open space types showed that the children require a variety of spaces to satisfy their activity needs. The privacy and protection of a backyard at the place of residence are valued qualities. Even if the yard is small, it is still desired. Playgrounds should incorporate the conventional facilities with the abstract and sculptural qualities of more contemporary designs. Chain link fence should be replaced with hedges or trees, with lattice-like climbing walls and with low, sturdy walls which are strong and wide enough for running, sitting and general play. If chain link must be used, the size of the chain openings should be big enough to allow children to insert fingers and toes for climbing and should be strong enough to take the action. Wooden fences should be used for either textural qualities, or as surfaces for writing and drawing. Perhaps fiberglass or plastic panels would better serve the latter purpose. The children liked "outdoor blackboards."

7. Earth mounds, ramps, pyramids, ziggurats and natural topography should be used to give the children the variety of inclinations and levels they need for play. The surfacings of these forms should be varied and suitable for their function. Heavily used areas cannot be planted in grass. The children would prefer not to have grass at
all, if it is scattered with mud holes and areas of torn earth. Grass should be used in large playfields, areas for passive activities and for viewing. The children would prefer to have their areas paved with some material capable of withstanding the wear and tear of their activities. A paved area planted with big and sturdy trees (not the skinny twigs currently lining Bower Street) could provide much of the pleasure associated with grass.

Play areas should contain benches and levels for sitting and play. The design of the surfacing should be simply divided with smooth intersections in some areas and very abstract and curvilinear in others. There should be large areas of smooth finished concrete and a system of trails in the same material for roller skating, skateboarding, and cycling. Wood chips, pebbles and sand might be used in areas for manipulative play and for walking. Pools of water and fountains would be enjoyed by the children.

There should be facilities for messy play that are screened from view. Dirt, sand and water facilities should be available for making sand tarts and mud pies. Benches to serve as kitchen counters should be available. Other areas could incorporate the rough terrain and tall grass of the vacant lots, but not the broken glass and general debris.
The ground surface preferences were presented in Chapter V. The relationship shown between surfacing and function should be considered. Certain areas in the new developments were not appropriately surfaced for the function they served, and the worn out quality was very negatively evaluated by the children.

8. The circulation system of the area should be expanded to include more bus stops and special access buses for children. The symbols for the bus stop should reflect in some way their importance to the children. There should be covered and shielded waiting areas for cold and inclement weather. The children disliked having to stand in the rain and cold winds while waiting for the buses.

The new highway being constructed along Warren Avenue should be sunken in places with wide pedestrian bridges. It should have crossings over or under the road at two block intervals. These crossings could be both functional and visually exciting. Tunnels under the road could open into tree planted areas and become the imaginary "cave in the wilderness" of the children. Sculptured pedestrian bridges could give the children the sensation of height they desire. They would provide viewing platforms to watch the vehicles, an activity they like as long as it is not competitive with their safety.

Sidewalks should generally be smooth finished concrete
with a variety of division designs (the intersections should be as smooth as possible to allow skating). Some surfaces might be textured for tactile variety. Color should be used also. The surfacing of the sidewalks should reflect its multi-functions. Small play areas might be formed by doubling and tripling the width in places, adding benches, a tree and some interesting design or texture. The street corner would be a good place to widen the sidewalk and incorporate a platform for viewing and sitting, a wall for leaning, a tree for shade, a roof for protection, a kiosk to tell where the buses go and what activities are available, and a trash container.

9. Location and proximity of the residence to activity centers should be a major consideration of neighborhood design. When close proximity is not feasible, then accessibility should be provided through controlled pedestrian walks and bus service.

10. Most suggestions regarding outdoor details have already been mentioned. Lighting is another aspect for consideration. The children disliked the lack of lighting in the play areas. They were generally negative toward the lack of activity possibilities allowed in the evening. Light facilities should be included in the playgrounds and sidewalk activity areas.

11. Vegetation should be increased throughout the Washington Park area. The huge deficiencies were reflected in the
children's evaluations. The new development is especially devoid of trees and other usable vegetation. The new highway should be lined with trees. If large ones cannot be afforded, then intermittent planting of small and large should be used. The small trees in Charlame Park are being destroyed because they are not sturdy and large enough to withstand the children's desires for use and manipulation. Once a branch is broken, the weakness is shown, and an invitation for further destruction is made.

The children liked heavily wooded areas. This would be difficult to implement in an urban setting, but small areas could be heavily planted to create some of the denseness and mystery provided by the woods. The tops of the trees should touch and create the umbrella of shade even if the ground below must be relatively open for safety and maintenance. The ground surfacing should preferably be grass, but shade and use would soon destroy it; thus, pebble-textured concrete, wood chips, sand and gravel could be substituted.

Both evergreens and deciduous vegetation should be used. If a choice had to be made between the two, the children would prefer evergreens. They liked the colored leaves in autumn, but the bleakness of barren trees in winter was negatively evaluated.

12. The building material preferences should be considered
when designing new structures. One of the major reasons for preference of Charlame Park over Marksdale Gardens (the development on the hill and across the street from Charlame Park) was the choice of building materials. Charlame Park was brick, and parts of Marksdale Gardens were wooden shingled. The children associated the wood with the ability to burn. These houses were too much like the old houses on the east side of Warren Avenue. The durability of the Y.M.C.A. building was valued by the children. They respected its ability to take the extremely rough treatment and still look new and strong. Sturdy and nonflammable construction was highly valued functionally and perceptually.

13. Communication and signs in the area should be improved. Frequent and legible street signs should be used. Legible house numbers should be required. Signs telling where buses go and giving directions at major vehicular and pedestrian intersections should be used. Commercial advertisement should be rooted in location and function. The information/meeting/display center mentioned earlier could do much to expand the scope of knowledge of the children for their environment and help them to organize and structure it for orientation.

14. The color appropriateness of an element in regard to the intensity of its use and function should be considered. The comments of the children in their discussion of the Y.M.C.A. reflected their values regarding the use of color.
15. The children's attitudes toward space were mainly related to function. The correlation of space with function to be served by the space is important. The overuse of a space is reflected in the subsequent overuse and destruction of its qualifying and defining elements.

The proportions of space evaluated by the children gave some indication of spacial relationships to be considered for different kinds of activities. Although this area requires further study, the results offer a basis for speculation and experimentation.

The children's criteria for evaluation reflected the characteristics of their values. These criteria should be used to evaluate the existing conditions of Washington Park, the present planning developments and proposals and future changes. Many of the suggestions related to elements evaluated included implications of the criteria. The following particular considerations should also be made:

1. The children's attentiveness to the overall visual characteristics of the elements of their environment should be respected by assuring that closer examination will not reveal poor construction and only the cliches of being new, clean and strong.

The visual effects of contrast and familiarity often become conflicting because of the child's positive visual evaluations toward the new and contrasting and the
negative visual evaluations toward the old and familiar. The child values both that which is contrasting and familiar. By utilizing spot renewal and redevelopment in older areas, perhaps the old and new could be more integrated, and thus decrease the conflict and increase the understanding of change.

2. The child's consciousness of physical environmental conditions makes his life even more difficult in the trash-laden areas of Roxbury. Increased maintenance would do much toward relieving some of the stress due to these qualities. The positive criteria of clean, new, safe, quiet and strong were of major importance to the child in his reaction against the dirty, old, dangerous, noisy and weak characteristics of his environment.

Unfortunately parts of the new development reflecting the positive qualities are beginning to reflect the negative ones. This was mentioned by the children and gave them a sense of confusion and doubt. One could also detect the beginning of skepticism in the older children toward many of these new things which they thought to be good. "Modern style" should not be substituted for safe and durable construction.

3. The ability of the elements of the environment to allow or hinder play was a major criterion for evaluation. The new development should provide the spaces, surfacing and facilities necessary to accommodate the activity needs of the children. Active play such as running, jumping,
fighting, playing ball and riding bicycles is most constrained by the poverty environment and should be considered.

4. The sense of "everything being included that is needed" is a major criterion for consideration by the planner. Charlame Park and Marksdale Gardens reflected many of the qualities included in sense of completeness. With the addition of more spatial variety, durable ground surfacing and increased vegetation, these two developments could both be considered to have a sense of completeness, especially as evaluated by the children.

The children's positive evaluation of urban renewal and redevelopment should be used to make the transitions necessary in areas of poverty undergoing change more meaningful and of positive value. The suggested considerations included:

1. Present and future changes in the development should be explained through the use of signs, models, television programs, radio and other mass media in terms understandable by the children. The use of television and comic book personalities might be used to help the children understand what a new development will look like and what it will offer to them. For example, large signs should be erected on vacant sites with pictures of what is to be built.

2. If some of the children have to be relocated, their values of the present environment should be considered
in choosing a new one for them and in helping them make the transition.

3. New development should be intermixed with the old to modify the intense contrasts of the present situation. This might help to temper and condition the children's attitude toward newness and prepare them for possible disappointments in the future.

4. An overall planning approach should include both new development and rehabilitation. From the children's viewpoint, first developments should include well-designed, durable and contrasting examples of new activity, residential or landmark oriented facilities. Then improvement should be started on the less obvious elements and features of the environment; this including comprehensive rehabilitation, cleaning and maintenance. By initially focusing on the elements most perceived and valued by the children, the changes can be made more positive and understandable. This latter requirement will also greatly depend on the explanation and description symbols and techniques used to relay the information to the children. It is important that the changes represented be visually rooted to their function and possibilities for use.

The suggestions for change and development presented have concentrated on the area of Washington Park, but overall implications are inferred for use in other poverty areas. The values of the children
should be considered when making changes in the environment. The interaction of the child and his physical world produce effects which last a lifetime. The effects should promote positive growth and development and the hope that tomorrow will be better.
FOOTNOTES


4. Ibid.

5. Ibid., 259.

6. Ibid.


9. Ibid., 272-273.

10. Ibid., 348-349.


13. Ibid., 415.

14. Ibid.

15. Ibid.

16. Ibid., 424-429.

17. Ibid., 443.

18. Ibid.

19. Ibid.

20. Ibid.

FOOTNOTES (continued)

22. Ibid., 234.

23. Ibid., 17.

24. Ibid.


27. Ibid., 4.

28. Ibid.

29. Ibid.

30. Ibid., 5.

31. Ibid.

32. Ibid., 10.

33. Ibid.

34. Ibid.


37. Ibid.

38. Ibid.

39. Ibid., 132.

40. Ibid., 167.

41. Ibid.

42. Ibid., 133.

43. Ibid., 133.

44. Mendelowitz, op. cit., 51.
FOOTNOTES (continued)

45. Ibid., 69.
46. Ibid., 53.
47. Ibid.
48. Ibid.
49. Ibid.
50. Ibid., 55.
51. Ibid.
52. Ibid., 56.
53. Ibid.
54. Ibid.
55. Ibid., 57.
56. Ibid.
57. Ibid.
58. Ibid., 69.
59. Ibid.
60. Ibid., 70.
61. Ibid., 71.
62. Ibid.
63. Ibid.
64. Ibid.
65. Ibid.
66. Ibid.
69. Ibid., 26.
FOOTNOTES (continued)

70. Ibid.
71. Ibid., 51.
73. Ibid., 11.
74. Ibid., 3.
76. Schorr, op. cit., 12.
77. Ibid., 12.
78. Ibid., 13.
79. Ibid., 14.
80. Ibid.
81. Ibid., 17-22.
83. Ibid., 361.
84. Ibid.
85. Gesell, op. cit., 51.
87. Ibid., 43-47.
89. Ibid., 359.
90. Lukashok, op. cit.
FOOTNOTES (continued)

92. See Chapter II.

93. Schorr, op. cit., Chapter I.

94. Estimated by checking class roster with staff at Roxbury Y.M.C.A.

95. Checking report card grades, talks with social worker at Roxbury Y.M.C.A. and class observations.

96. Fighting, "throwing fits," cursing.

97. Opinion of Staff at Roxbury Y.M.C.A.

98. Ibid.

99. Ibid.

100. Gesell, op. cit.

101. Results from the general interviews in other three areas can be found in "The Relationship Between Environmental Setting and Curiosity in Children," by Marcia L. McMahon (M.C.P. Thesis 1966) M.I.T.; general interviews were done conjunctively with Marcia L. McMahon.

102. Children often referred to the mimeographed sheets as looking "important" or "official."

103. Mendelowitz, op. cit.

104. "Reasons" are groupings of quotes from the children recorded in class notes.


108. Schorr, op. cit., Chapter I.


110. Schorr, op. cit., Chapter I.

111. See Appendix A.
FOOTNOTES (concluded)

112. Piaget, op. cit.

113. Lukashok, op. cit.

114. Studio work in subjects 4.04 and 4.06 at M.I.T.

115. Muchow, op. cit.


117. Ibid.


119. Ibid.

120. Talk related to current "special" meanings of words, often resulting from mass media and phonograph records.

BIBLIOGRAPHY


Berlyne, D. E. *Complexity and Incongruity Variables as Determinants of Exploratory Choice and Evaluation Ratings*. Unpublished paper, University of Toronto, Department of Psychology.


Hall, Edward T. The Hidden Dimension. Chicago: University of Illinois Press, 1953(?).


BIBLIOGRAPHY (concluded)


