

PHYSICAL AND SOCIAL PERCEPTION  
AS FACTORS IN LOCAL AREA RECOGNITION

by

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Physical and Social Perception as Factors in Local Area Recognition

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This thesis examines several questions concerning the way people perceive "distinctive" Local Areas in the residential environment. What are the criteria used? What are the visual cues used to identify such areas? Of what importance are major physical-visual elements in determining the shape and boundaries of such areas?

The interview method is used in studying a socially heterogeneous group in a study area of highly varied social, physical and visual conditions. This area offers the interviewee a high degree of choice in the possible placement of boundaries in order to measure the effect and correlation between social identification and spatial identification.

The following hypotheses were advanced and were subsequently supported by findings:

- 1) Local Area identification is determined primarily by a wide variety of socio-economic variables which will vary as to their nature in different areas.
- 2) Persons identifying with one of a variety of socio-economic variables will perceive and structure their Local Area in a way related to this identification.
- 3) Physical and visual character is somewhat less important than socially significant areas and their boundaries except where they become symbolic of social content.

The findings indicate the interview method for Local Area analysis to be a relatively accurate measure of the placement and content of "distinctive" areas as they exist in the study area when compared to census or other available material. In addition, it provides a sensitive appraisal of the real and psychological effects of major physical elements present in the area and their effect on Local Area delineation.

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## INTRODUCTION

There have been woefully few studies concerning themselves with the perceived structure and spatial imagery of the urban environment. As a result of this deficiency, it is difficult to accurately know how people psychologically organize their surrounding space; what are the significant criteria used? What role do social or cultural factors of that person play in affecting this conceived image? Also, what, in fact, are the visual physical and psychological cues used in this process. By utilization of the interview method, this thesis will explore some of these questions in a particular study area. More specifically, the questions with which this thesis will deal are:

1. What are the distinctive areas present in the large scale residential pattern as determined by the residents themselves?
2. What criteria are used by people in forming these areas and how does it differ at different size scales--if at all?
3. How important are major physical or natural elements to these people in defining boundaries for these areas?
4. What is the effect of class position, economic level, racial character or ethnic background on the delineation of boundaries for Local Areas with which they can identify?
5. Are criteria for defining Local Areas the same for all groups or for all areas? How does it vary?
6. What effect do friendship patterns, local cohesiveness or degrees of community organization have upon the intensity of Local Area identification and the delineation of its boundaries. Conversely,

what effect does class level and identification have upon friendship patterns?

City Planning has many unresolved questions, not the least of which is how, in what way, and by what criteria should the city be divided to provide the most effective basis and units for planning? Or, should it be divided at all? Up until now, the only method of division which has received much support,<sup>1</sup> or use, for defining logical, "natural" areas relates to dividing the city into what can be termed "neighborhoods." This refers to the kind of area which, in a broad sense, is composed of generally homogeneous socio-economic characteristics occurring within a specific spatial area.<sup>2</sup>

That such distinct patterns of social and economic characteristics occur in the urban area is undeniable. These are usually composed of variables, which, because of economic forces and conditions, cultural desires, preferences, etc., have a definite spatial distribution characterized by the clustering and grouping together of relatively homogeneous elements. Conclusions presented by many studies offer voluminous evidence of this.<sup>3</sup>

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1. Or at least tacit support through its common and continued use by planners and social scientists.

2. There seem to be two principle views as to the structure of such areas. One of these views the "natural" area as a spatial unit limited by natural boundaries enclosing a homogeneous population with a characteristic moral order. The other emphasizes its biotic and community aspects and describes the natural area as a spatial unit inhabited by a population united on the basis of symbiotic relationships (Paul Hatt, "The Concept of Natural Area," American Sociological Review, No. 11, 1946). The distinction between the two is that the latter depends for its very existence on the statistical results--it lives as a "logical, statistical construct" (Paul Hatt--Ibid.). The other operates as a series of spatial and social factions which act as coercive influences upon all who inhabit the culturally or geographically defined area.

3. See studies by Duncan and Duncan "Residential Distribution and

In addition to the fact that this distribution does exist, many of these studies establish the fact that there occurs a direct correlation between the physical distance separating these two groups, and the social distance (when social distance is measured in terms of such factors as general income level, occupation, shared values and goals, etc.). Social equality is, in effect, often translated into physical proximity.<sup>4</sup> Spatial location, therefore, can to a large extent become reflective of social values.

However, with the pressure forces and conditions in cities--overall heterogeneity, high density, enforced contact--being what they are, there is considerable conflict in minds of social scientists as to the role these homogeneous areas play in the life of its residents.

What, for instance, is the degree of personal "self-identification" with such homogeneous areas? What is the degree of "community" established and how does this homogeneity operate as to cohesiveness, associations, friendship patterns, etc.? What is the degree of self perception of this area as a distinct socially or physically defined entity?

Louis Wirth conceived the urban population as consisting of heterogeneous, "atomized" individuals, torn from past social systems, unable to develop new ones, and therefore, prey to social anarchy in the city.<sup>5</sup> Gans presents what would appear to be a more realistic view by arguing that Wirth's formulation ignores the fact that a large proportion

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Occupational Stratification," American Journal of Sociology, 1960; Shevsky and Bell "Social Area Analysis," Stamford University Press; Park, Robert E., Human Communities, Glencoe Free Press, 1952; Beshers, James, Urban Social Structure, Glencoe Free Press, 1962.

4. Feldman and Tilly "The Interaction of Social and Physical Space" American Sociological Review 25, 1960.

5. Wirth, Louis "Urbanism as a way of Life," Am. Jour. of Sociology, 1938.

of the city population consists of relatively homogeneous groups, with social and cultural moorings that protect it from the consequences of number, density and heterogeneity.<sup>6</sup> In such cases, the way of life, the type of primary group associations, the patterns of friendships or kinship can be virtually unchanged from that of the small "community" in other, less urban areas, in maintaining its structure and sense of identity.

One definition of such a community defines it as being composed of an inclusive coherent group with the following chief characteristics: "(1) within it the individual can have most of the experiences and conduct most of the activities that are important to him; (2) it is bound together by a shared sense of belonging and feeling among its members that the group defines for their basic identity; he feels a sense of kinship with others who belong to it."<sup>7</sup> Gans assumes that this is only one of the kinds that can exist in the Urban Area; there can be many more. He brings out the fact that the city is composed of five different types of people<sup>8</sup> having diverse ways of life and varying degrees of attachment or identification with the city or to a particular area within. He states that it would be difficult to see how "common" patterns of group association or identification would be enacted with this wide range of diversity present; the nature of these neighborhoods must vary.

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6. Gans, Herbert, Urbanism and Suburbanism as Ways of Life, mimeographed.

7. Broom and Selznick, Sociology.

8. The "cosmopolites", the unmarried or childless, the "ethnic villagers," the "deprived" and the trapped and deprived.

The question also arises as to how people actually create a self-identity for themselves; what factors are the important ones in structuring this identity? One view of this is that "the self develops in a multitude of associations and the individual learns to think of himself as a particular kind of man. This is his 'salient identity.' A member of an old Boston family might think of himself as first of all a Bostonian. A member of Jehovah's Witnesses or similar sect will probably think of his sect membership as his salient identity. Racial or ethnic identities are also likely to be salient."<sup>9</sup>

Other important characteristics could be attached to and combined with the kind of salient identity mentioned above. His "composite" identity will be a multi-dimensional combination of individual characteristics including those such as general class level, relative status rank, distinctive occupational categories, age, interests, values, etc. All would contribute to shape the person's composite identity. For instance, it can be assumed that the individual conceives of himself as being at a particular point in the stratification system, possessing a specific "life style," set of values, etc., which can be used when comparing or identifying himself with other individuals or groups.

The individual components of this identity would appear able to shift in relative intensity depending on the particular situation with which the person was faced. For instance, the man from the old Boston family may not consider that to be the important part of his identity when attending the Harvard reunion.

Similarly, the individual could largely identify himself by

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9. Broom and Selznick, op. cit.



one of his socio-economic characteristics depending on the particular situation with which he was faced (e.g., a middle class Negro living in a middle class white area v. a middle class Negro living in a Negro working class area).

That this identity to group, class, etc., can be translated into spatial terms is suggested by findings in two research studies<sup>10</sup> dealing with the perception of the local community and neighborhood environment. In a study dealing in part with the perceptual organization of the west end of Boston, Marc Fried notes that it is not just the immediate place of residence that is significant, "but a large local region that partakes of powerful feelings of involvement and identity."<sup>11</sup> It was found that this identity could be translated into spatial terms "defining the zone of greatest personal significance or comfort from the larger area" of the west end.

The structure and perceived spatial pattern for this Local Neighborhood was found to vary greatly even between persons living in close proximity to one another. In effect, the same common and visually accessible physical "image" was translated into a wide variety of perceived images, each possessing not only differing limits and boundaries, but of subjectively defined content. The fact becomes apparent that "the image of a given reality may vary significantly between different observers."<sup>12</sup>

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10. Fried and Gleicher, "Some Sources of Residential Satisfaction in an Urban Slum," AIP Journal, November, 1961.

11. Ibid.

12. Lynch, Kevin, The Image of the City, M.I.T.-Harvard University Press.

The "barriers" or boundaries drawn by this working class group to define and surround these areas were, to a large degree, conceived of as being psychologically impenetrable. It was found that besides perceiving boundaries for their immediate area, the group organized physical space into a series of boundaries with a tendency for the permeability of such to decrease with increasing distance from the dwelling unit. These units were seemingly set up to establish for the observer areas of greatest attachment and identification (his Local Neighborhood), medium degrees of identification, and a larger area of minimum attachment.

Another study investigates<sup>13</sup> much this same area of concern. Hugh Laurence Ross attempts to define, through many interviews, the kinds of Local Communities residents of a large metropolis perceive in their environment. His findings indicate that Local Communities have specific properties and functions. Among the more important of these is "its role as the territorial basis of friendship ties from which the causes and effects of ecological segregation become more understandable."<sup>14</sup> He feels the Local Community may act as a "symbol" in metropolitan life, and may become highly important in "supplying tentative role definitions to unacquainted participants in social relationships." This suggests the fact that knowledge of areas by others outside that area is widespread and that a particular social level becomes associated with that area and its inhabitants.

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13. Ross, Hugh Laurence, "The Local Community: The Survey Approach," American Sociological Review, Vol. 27, 1962.

14. Ibid.

Ross also becomes interested in the location of limits and boundaries of Local Communities, as defined by Interviewees and especially the relationship between these boundaries and the particular type of person interviewed. This study was carried out on Beacon Hill in the interstitial area lying between the higher status area to the north and the cohesive West End district to the south. It provided conditions where ethnic identification could be made to the West End, if desired, and resulted in findings indicating that ethnic factors sometimes influence the delineation of the perceived Local Community.

Although the above studies are most valuable, there is still much more work to be done along these lines. Both the Ross and the Fried studies investigate areas which could hardly be called representative of physical conditions or social patterns of the larger urban area. They both deal with areas having high cultural cohesiveness (especially the West End), that are fairly similar in size, offer little differentiation in physical character, have few physical or "psychological" boundaries or divisions (except at the edges) and relatively little variation of class, status, race (although the Ross thesis measures status to some extent by locating the study area between differing classes).

The present thesis will study an area of the inner-suburbs (western Cambridge) containing many of the missing elements and conditions noted above. It utilizes a heterogeneous interview group, in an area of highly varied social, physical, spatial and visual conditions. It provides wider range of possible choices as to the perceived content and boundaries for the Local Areas to be defined. It attempts to measure the influence of a person's "identity" and social characteristics on what he considers to be his "Local" and surrounding areas and what effect

visual cues have for defining same.

In addition, it investigates the role and effectiveness of the survey approach as a tool of community analysis.

Largely as a result of the above, the following hypotheses are advanced and will be tested through means and under conditions outlined in the following section:

1. Local Area identification is determined primarily by a wide variety of socio-economic variables which will vary as to their nature in different areas.

2. Persons identifying with one of a variety of socio-economic variables will perceive and structure their Local Area in a way related to this identification.

3. Physical and visual character is somewhat less important than socially significant areas and their boundaries, except where they become symbolic of social content.

## METHOD OF APPROACH

### I. The Study Area

An area of Cambridge was chosen both from the standpoint of providing a wide variety of social and physical conditions and a general prior knowledge of the area--physical, visual and social--on the part of the interviewer. The latter seemed necessary in order to better analyze the information received and to aid in the selection of a representative group of interviewees. Even more important, however, is the choice of a study area to provide the interviewee with a maximum possible choice of solutions in the way this area can be "structured."

The area decided upon is located west of Harvard Square and bounded on its extremities by Kirkland Street, the Somerville Line, the Baltimore and Maine tracks at Porter Square, along these tracks to the Fresh Pond Parkway, along the Parkway to and along Memorial Drive, to Boylston Street, and returning to Harvard Square.

This area contains (See Map 1) whole or portions of census tracts 16, 20, 21, 22, 23, 24, 25, 26 and 27 as defined by the Bureau of the Census in their 1950 and 1960 population studies. Census materials available for this area includes statistics at the tract scale and limited information at the enumeration districts. There is no block data available for this area except for housing conditions.

The City of Cambridge defines the area as containing Wards 7, 8, 9 and 10. Each of these is divided into five precincts of numerically equal population. Many studies carried out by the city utilize this form of geographical division.

#### A. Development Pattern

Historically, the area grew in a radiating pattern from Harvard Square toward the Fresh Pond Parkway. There were few scattered or nucleated areas that developed first and possessed distinct "names" and social character, such as, for instance, in the Somerville area. (In that community, the early development was in a distinct series of neighborhoods, each physically separated and each with its own particular social level and "identity." These areas gradually merged and blended together and now, although retaining their original names, are neither physically delineated nor socially differentiated from each other.) Named neighborhoods did not seem to be developed in this way in Cambridge. They currently maintain a measure of individuality of physical and social character as well as by name.

#### B. Conditions Present in the Area

The area as a whole contains a wide variety of social, physical and visual conditions useful for the purposes of this study. The area is primarily a residential area with only a few areas that could be termed industrial or in heavy commercial use. Such districts are relatively small and occur almost exclusively on the borders of the study area. There is some incidence of mixed use in several portions, but this is quite small considering the area's total size.

1. Social - The study area can be divided into several major sections of relatively homogeneous social characteristics, along the line provided by hills running generally from east to west (See Map 3). These range from areas of very high income, with accompanying high quality housing, such as along Brattle Street, to relatively low income working-

class areas with less substantial housing conditions, such as in the western section. There are also sections which contain median income and social levels between these two opposites. Within each of these major divisions (Map 3), there still occurs a range and variety of social types and physical conditions; no one of these major areas can be considered completely homogeneous. Much of the study area is characterized by relatively small pockets of distinctly differing sub-sections of varying types and sizes.

In addition, the study area contains gradient areas lying between distinctly different class districts. These provide areas characterized by graduated heterogeneity rather than by uniformity of one particular status or class level.

Another factor introduced besides income class level and physical conditions is the presence of students and/or other university-connected persons. This group provided a situation in some areas in which the population could not be judged on solely economic or physical terms such as is provided in census data. For instance, low income areas with fairly poor living conditions but with a high percentage of students could not be judged by the same criteria as would normally be used to define a particular class level.

2. Physical - There are many major elements of a physical nature present in the area which could be expected to physically and psychologically divide the area by providing strong edges. These include elements of Harvard University, such as the Law School and the Divinity School, Harvard School of Education, Radcliffe College, Observatory Hill, etc. At a smaller scale, they include major commercial

areas and roads, such as Massachusetts Avenue, Brattle Street, Concord Avenue, and a variety of parks, schools, playgrounds and other public or institutional uses and functions. Map 4 includes uses and activities which are public and semi-public in nature and non-residential in character.

3. Congruence of Physical and Social Conditions - Housing in the study area for the most part is in the use for which it was originally designed. Only the Radcliffe-Peabody School area seems to have had a significant number of conversions from single-family to multiple units. Many of these were formerly large single-family units, since converted to apartments. However, the present true nature of this section is fairly apparent to the viewer. No important conflicts or misinterpretations of this sort on the part of the interviewer appeared during the course of the interviews.

4. Visual Image - A thorough but fairly generalized visual survey was carried out in the study area in order to determine the effect of the visual character upon the results received from interviews. (See Map 5, Visual Structure.) It includes: major areas, important districts of various kinds, gradient areas, nodal points, landmarks, topographical and other physical conditions, including open space, important roads and other elements of a highly visual-physical character.

#### C. Reputation

Certain areas within the study area--and immediately outside--are imbued with a distinct "reputational image" which was mentioned frequently in the course of the interviews; this it seems was one of the prime means for people to identify with or away from an area and provides



the interviewee with a real or implied ranking of "prestige level" and status. The areas outside the study area to the north, west and east, especially, had undesirable reputations. This was especially true of Somerville and North Cambridge, but somewhat less true of the western section of the mid-Cambridge area.

Within the survey area itself, named districts having a particular--desirable or undesirable--status image were: "The Huron Avenue Section"; "Brattle Street Area," "Avon Hill," the "Foster Street Area"; "Gray Gardens"; the "Radcliffe-Peabody School Area," Neighborhood Nine and the "Law School Area." Many other highly desirable or undesirable areas--seemingly quite as equally distinct in physical character or social distinctiveness were not mentioned in these terms.

#### D. Surrounding Areas

The areas around the study area vary considerably in character. Somerville to the east is characterized as being predominantly Irish and Italian in nationality, lower-income in economic character and typical Boston inner suburb two and three-story housing of the "decker" type in architectural style. The area is considered by the interviewees, if not grey in color, "grey" in spirit.

North Cambridge to the north (an unusual situation in the Boston area) is characterized by a working-class population, largely decker housing and a large French and Canadian element having strong intra-group ties. This area can be considered a step up from the Somerville area in physical conditions and status, but only a slight one.

The Strawberry Hill--Coolidge Hill area to the east is a

very high quality residential area. It is perhaps as high in terms of income, status and prestige as any place within the study area.

To the east and southeast, Harvard University provides an effective breaking point. Only one small area--at Francis Avenue and the Divinity School--does it connect to "mid-Cambridge." It does so with a sudden drop in the quality residential character immediately outside the study area. The mid-Cambridge area contains quite high density housing largely occupied by students and stands in contrast to large houses across Kirkland Street within the study area. Mid-Cambridge changes quite rapidly in character after the first few streets adjoining Harvard University and continues to grow increasingly like the Central Square area in character as one moves in that direction.

## II. The Interview Group

The interview group was picked at random to as large a degree as possible, although some modifications were made in both early and later stages of the study to achieve a more accurate and representative sampling. The initial selection was achieved by using police survey lists provided by the Cambridge Planning Board. In these lists population is divided into separate listings for each precinct and each ward. This enabled me to attain an initial list of interviewees in as nearly equal geographical distribution as possible. Names from each precinct were picked at random. This list was subject to some editing if it appeared that an overly high proportion of the list were employed in an atypical occupational group or were all of a seemingly unrepresentative age or sex. With a general knowledge of the study area, it was possible to achieve a fairly representative survey group containing five persons from each precinct.

As the study progressed, some areas seemed clearly to be providing such consistent results to the interview questions that it was decided to curtail interviews in such areas in favor of concentration on more districts where interesting conflicts seemed to be occurring. In addition, there was an effort to talk with diverse people in each area in order to study the effect a person's degree of identification or lack of same, with the particular class and social level in the area had upon replies to the questions asked.

Initial contact was made in the form of a letter sent to the five persons in each precinct selected from the adjusted police lists. This provided a base of eighty persons who had knowledge of the survey and were aware an interviewer might call.

A sample of the letter of transmittal is shown in Appendix A. Briefly, it states that they have been selected on a geographical basis and that time is requested for a brief interview concerning the subject matter briefly described.

It was felt necessary to offer some form of assurance that the study was a legitimate one. The M.I.T. telephone number and departmental extension was supplied for people to call in case of doubt. A number of people did, in fact, call for this reason or to offer times when they would be available. Many women preferred, for instance, to be interviewed at their place of work or at such times when their husband was home.

Besides the initial contact letter, each person was telephoned by my wife to schedule definite appointments. This was found necessary both to allay the fears of women and to save interview time due

to the high proportion of prospects--both women and men--who were either employed during the day time or were otherwise away from home during that period. It was found necessary to schedule many evening appointments for both this reason and to interview proportionate numbers of men.

There was some difficulty in arranging interviews. People could not quite bring themselves to believe that in truth I was really not a salesman or worse, "the strangler." Many initially felt they were not "qualified," as they had not lived in Cambridge for any great length of time, or were otherwise unfamiliar with Cambridge. It was sometimes difficult to convince them that the study was attempting to survey a representative group of people with varying levels of knowledge and familiarity and that extensive knowledge was not a requisite.

The interview itself proved much lengthier than originally anticipated or intended. What was designed to consume twenty to thirty minutes in practice ranged from a half hour upwards to two hours. The average time for each interview was well over an hour and probably closer to an hour and a half. However, it turned out that the interviews on an individual basis were successful. Greater amounts and depth of information were received than was originally anticipated.

All questions were asked of each interviewee and were meant to be "open-ended" in nature. The questions seemed to serve as good points and issues to talk about--and around--as a basis of discussion and in general seemed highly successful for the aims, purposes, and goals of the study. Great care was exercised to channel the discussion to the general order of the questions asked and also not to lead the

interviewee into answers which might be expected by the interviewer in a particular situation. The former was sometimes impossible due to the nature or size of the person's conceived environment, or by the person's specific social characteristics and group identification. Necessary adjustments were made in the interview format and sequence in such cases.

The questionnaire used for the interview is reproduced in Appendix B. The following is a brief review of what each question is designed to measure:

1. Tries to define the general area ("part of town") that the interviewee feels he lives in and can identify with as a special entity. How clear cut and distinct this area is to him. (This will be termed Local Area.)

2. Attempts to measure the person's criteria for judging this Local Area to be a distinct area. What it is that this Local Area "means" to him in terms that are important to him.

3. Tries to more specifically delineate the boundaries of that area. Persons were asked first to locate the boundaries by verbal description; the boundaries were not shown on the Study Area Map until after oral statements concerning its location had been made. This was done in order not to "lead" people into giving answers that might appear logical in map pattern.

4. Further attempts to measure the criteria by which the people judged it to be a single homogeneous area.

5. Attempts to measure what the person thinks of as distinct areas within the above larger scale Local Area unit. (This will

be termed the "Sub-Area.") This has the effect of reducing the scale being discussed with the interviewee.

6. Measures the differences, social, physical or other, which differentiates these areas from one another.

7. Pinpoints the boundaries of these sub-areas to as large an extent as possible and attempts to measure the reasons why boundaries are located at that particular point.

8. Initiates a further reduction in scale to what people think of as their "neighborhood." The question was presented as stated (see questionnaire) and no help was given as to what was meant by this term. The mention of the term "neighborhood" was purposely withheld up until this point to avoid implications of the scope of area being studied and to eliminate mental impressions and connotations which this term might hold in the mind of the interviewee and which might subsequently have a bearing on information received up until this point.

9. Delineates size and boundaries of this area.

10, 11, 12. Attempts to find whether there is any correlation between the size, shape and content of the neighborhood as drawn in questions 8 and 9 and the sub unit-scale as referred to in questions 5, 6, and 7. In addition, it seeks an answer to why the neighborhood is drawn as it is--social, physical, friendship patterns, day to day functional patterns, etc.

13, 14. Defines residential location of friends within the limits of Cambridge and takes note of the location of those residing outside the city. These questions were designed for a variety of purposes: 1) To measure the influence of friendship on the

the interviewee's drawing of boundaries at both the Local Area and sub-area scales and especially at the neighborhood scale. 2) To increase understanding of the interviewee with regard to how and to what extent the interviewee might identify himself with the people both in and outside the area. 3) To gain a further idea of the homogeneity or heterogeneity of both this area and outside areas so as to, if necessary, adjust the type interviewees selected in those areas. 4) To gain a basic understanding of the social equality of physically separated areas of the city.

A basic assumption was made for this question which stated that friendships would occur primarily between "equals" and would not be found to any large extent on an inter-class basis.

Questions 1 through 11 were designed to be open-ended and "non directional" in nature to give the interviewee the opportunity to express his thoughts and feelings with regard to the content and size of the various scale areas. Questions 12 through 14, and especially the succeeding questions in question 15, specifically question the interviewee as to the 1) distinctive social conditions present in his area, 2) distinctive physical conditions present and 3) the "sense of community" and organization to be found in the area.

Because of the nature of the questions asked prior to question 15, many of the questions were found to have already been answered and could be covered quite rapidly. Question 15 did in many cases fill in results which would have otherwise not been brought out as to the perceived character and conditions present within the community. Perhaps the most interesting group was questions j, k, l, u, v, w, and x

which were designed to measure 1) to what extent the person identified with the community and 2) how strong were the physical conditions, social forces and organizations available to stimulate this identification.

Results of the interviews were tabulated and analyzed both singly and collectively. Each interview resulted in a single map containing information and boundaries for the three community scales examined. Composite maps were made in order to achieve generalized results of the study area as a whole. Composite work maps of specific types, such as by class, race, ethnicity, degree of community identification, etc., were drawn as needed for purposes of analysis.

Although it was possible to receive only 41 actual definitions of a person's own Local Area (see table, page 91), definitions of that area by those in surrounding areas were useful in establishing higher statistical evidence for boundary placement and social composition. (Tables on page 91, however, are limited to descriptions by actual residents of an area.) For example, although only six "Working Class" people were interviewed from the Working Class area, that same district was drawn and described by a total of thirty-eight interviewees. Again, although only three interviewees actually lived in the Foster Street area, over thirty persons described that area in social and spatial terms.

Those reading this thesis should take careful note of tables indicating the actual relatively small numbers of interviews carried out. These tables, showing gross totals and totals by distinctive social groupings, underline the fact that the statistical base upon which conclusions are drawn is a small one and that results should be judged only in that light. In addition, the total number of persons interviewed in each



geographical area is quite low. (Spatial distribution of interviewees is shown in Map 8.) With such a small sampling, percentages discussed in following sections should be considered only as an indication that a certain fact might be true. It has not been the intent of this thesis to assert statements of indisputable fact, but rather to offer support, or lack of same, to somewhat similar but more statistically founded studies carried out in other areas but with differing social compositions or physical conditions. In this sense, the present study should be considered investigative in nature and preliminary in scope.

## FINDINGS

### I. Local Area Scale

Results gathered from the interview will be presented in two major sections. The first will deal primarily with significant social factors of groups and individuals and the effect they have on the way the interviewee perceives, identifies and organizes his local environment. The second will concern itself mainly with elements of a physical nature and their effect on these same issues.

It should be noted here that in many cases the physical conditions and social conditions present in an area are inseparable; a distinct social meaning can be implied by the physical nature and character of the housing style, siting, upkeep, etc. For instance, the architectural style of two and three-decker housing clearly denotes, in most cases, a particular social level within. For this reason, it was difficult in some cases to determine whether it was a change in social level or an accompanying change in physical conditions which constituted the reason for a boundary being placed in a particular area by the interviewee.

This could quite often be resolved through verbal answers to other questions and the points stressed by the interviewee in his various answers.

Also, comparison of answers from the interview with the results of the visual study carried out was useful in determining what criteria--visual or social--were used to determine area boundaries. In some areas (where visual-social incongruence was to be found) people would place a boundary on the exact area where physical conditions would

change so as to be indicative of decline in social status. Others would largely ignore such physical conditions and determine the edge at exactly the point where the decline in social status took place.

Effects of the visual environment will be described further in a later section.

A. Findings - General

Social factors, rather than physical elements or character seem to be the ones of dominant importance in the way the interviewee identifies and delineates his Local Area. This was found true throughout the study area. Composite maps, showing the Local Areas as drawn by the individual interviewees, in effect represent the generalized social structure and organization of that study area based on the class level and income, type of people present, ethnicity, race and other such related factors.



Self-identification with a particular social level or type will sometime determine the criteria, area and placement of boundaries for the interviewee's Local Area. This was seen to be especially apparent in areas where physical conditions were quite undifferentiated--in appearance, type, quality and conditions--but where varying class, racial or ethnic elements were present in distinct, geographically located groups.

Major physical elements, such as roads, railroads, large institutional sites, topographical changes, etc., appear as edges and boundaries on the Local Area composite map only when these occur at or near points of social division. They never occur within socially homogeneous areas. Conversely,

distinctive physical character of an area becomes important to the interviewees only when it falls within or coincides with districts of a relatively homogeneous class level. Such character was never recognized in itself as being the sole determinant of the Local Area.

Descriptions of social character of an area become increasingly tied to physical-visual cues as familiarity decreases (usually as distance from residence increases).

#### B. Findings - Social

This section will be sub-divided and will in turn review the effect of:

1. Class Level
  2. Distinctive social type
  3. Race and ethnicity
  4. Age and sex
  5. Social organization
  6. Social change
1. Effect of Class

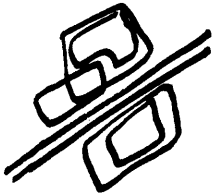
a) General - The class and status level of the people was the criteria most often referred to by all interviewees (80%) in defining and describing their Local Area. Boundaries for such areas were almost invariably drawn so as to enclose a relatively homogeneous or distinct class level or in differentiating it from surrounding areas. Exceptions and modifications of the above will be discussed in following sections.

Map 6 (Local Area Divisions) indicates this to be true. Strongest boundaries occur at points of major class division while

weaker, less frequently defined boundaries, occur where such change is of a lesser degree (such as at gradient areas or relatively minor rises or drops in class level. Also see Map 7, Existing Class Structure).

The survey area itself is quite sharply divided, into two major classes, one being distinctly working class and the other, although far more varied in range of income, level of status, etc., being "white-collar" and above. The dividing line separating these is along Upland Road and Huron Avenue, to the Fresh Pond Parkway. This general division of the city was recognized by all interviewees. No interviewee considered his part of town to straddle this class boundary.

Within the geographical limits of each of the two major class areas, considerable variations are found as to the way the interviewee, for various reasons, conceives of and structures his Local Area. However, these variations operate wholly internally to these large class areas.



Again at Massachusetts Avenue, another major point of social change, although a lesser one, no areas to the east of this road were included in the large, higher status Peabody School-Radcliffe area by the large majority of those questioned. All exceptions to this fall into one particular group (students) in which class is not the prime factor in their structuring of the environment. Somewhat lesser class changes occur at Mt. Auburn Street, Brattle Street and Concord Avenue, and this shows as such on Map 6.

For the study area as a whole, the greater class differences became between two adjoining areas, the less likely it was that overlap

or conflict between such areas would occur.

b) "One-Way Visibility" - Identification with a particular social class level has a marked effect on both the area size and boundary placement for what the interviewee considers to be his Local Area.



Persons in the "lower" of two socially rated groups were generally more expansive as to what was included in this area while the higher group tended to be the more restrictive. When posed the problem of what sections to include in his Local Area, a person living in the lower quality area would include areas of comparable quality and higher-- within reasonable limits. The people residing in the higher quality area of the two would generally limit the Local Area to his area alone (and higher, if present).

This situation was found throughout the study area and was not dependent on any particular social class level. Almost always-- when the necessary factors were present--an attempt, at least, was found to spatially identify one's own area with those of higher quality or class, while excluding those of even slightly inferior quality. This created considerable overlap, especially in higher quality areas.

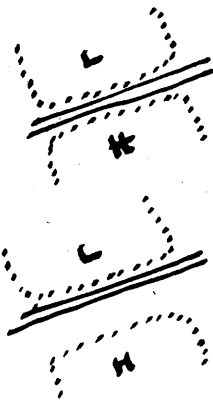
A good example of this can be seen in the results given by interviewees as to the area in which Avon Hill should be included. Those living on the Hill itself (all five) restricted their Local Area to just that area alone, while those living in other portions of the Peabody School area often (7 of 11) included Avon Hill in "their" area. Verbal descriptions of areas to the south of the hill by Avon Hill residents further identified the feeling of superiority held by hill

residents toward the "mostly students, transient" Peabody School area.

This was similarly true to the west of the Peabody School area where it borders on the start of the Brattle Street area. While many people in the Peabody area tended to identify and include areas between Concord Avenue and Brattle Street (7 of 16), none of the three living in the latter district itself considered any part of the Peabody School area to be within his own area.

Other cases similar to these can be found in the study area, such as to the east of Massachusetts Avenue, the Francis Avenue area and in sections where racial or ethnic considerations become a significant factor in boundary placement (as in the Fayerweather-Concord Area district).

In a few particular instances, such as the major social division near Huron Avenue (See Map 7), the relative class position of the interviewee seemed to determine the degree of "casualness" with which Local Area boundaries were drawn. 5 of 6 interviewees living in the working class area chose Huron Avenue as "just about" representing the boundary between their own section and the much higher housing quality, income and class area between Huron and Brattle Street. Those actually living in that area were far more specific as to where this boundary should be located. All 4 placed this line at a point representing eight to ten houses to the west of Huron Avenue, where housing conditions and class decline very sharply in the space of two or three houses. In addition, this fact was verbally stressed by those in the higher status area, which results in a "no man's land" unclaimed



by either group.

Interviewees seemed unable to recognize gradient areas lying between two areas of distinctly different social levels and being characterized by gradual change from one side to the other. Instead of recognizing it as a distinct area as such, limits would usually be drawn for their own Local Area at the beginning or end of such an area depending on whether it represented a rise or decline in class or quality. Persons were more than happy to associate themselves with areas of a higher class level but unwilling to accept any influence that would lower the summatory level of class or status in their own area.

There seemed to be little difficulty for the interviewee in defining or drawing boundaries around major areas having a totally mixed population (classes, types, etc.) when of a substantial size.

These commonly were verbally identified by their heterogeneous character and there seemed to be no less recognition of these than of areas with a distinctly homogeneous population.

The Peabody School-Radcliffe area, for instance, was universally defined as having a high mixture of classes and types.

c) Effect of Interviewee Class


1) Individuals - In cases where the interviewee was of a different class or status level than the "average" for the area, answers varied as to the interviewees' relative class position to this area. This position seemed to affect his conception of the social "content"



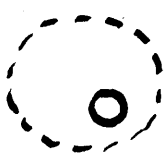
of that area. Those beneath the average often felt general equality (or at least no apparent or stated inferiority) and made reference to the fact that "all kinds of people live here" or "this is quite a socially mixed neighborhood." People above the Local Area class average usually felt the same area to be beneath their own status level and made plain the fact that they were "unlike the people here," "only here for a little while" or "my husband is a student, and we can't afford more."

There seemed to be no great difficulty for the people in identifying upwards, but there was an almost total inability to identify downwards to an average lower than themselves. Perhaps of the two, latter groups seemed to have greater ability to grasp and define the true nature of the area (although completely precise statistics to show exact class level in order to prove this were not available).

2) Groups - Several cases were encountered where small, very distinct groups of a particular atypical social class or type existed as "islands" within a much larger area. Examples of this are




Shaler Lane (Harvard student housing located within what was conceived of as the Foster Street area) and a small, new apartment complex at the lower end of Garden Street near the Cambridge City dump composed of young businessmen and professionals. In such cases, all four identified their Local Area as being these small (30-40 families in each), very physically and socially distinct areas which operated (friendships, communal open space in some cases, etc.) largely independent of the surrounding area. When questioned further as to whether this was really part of a larger area, those



interviewed felt that although it probably was in a geographical sense, they never considered it to be this in terms important to them.


Groups having a higher class or status rating than representative of the community showed less familiarity with the "structure" and boundaries of the larger area than when a person was able to identify with its specific social class. Often knowledge was limited to frequently used roads and public and semi-public facilities such as stores, churches, schools or playgrounds.

d) Effect of Familiarity on Class - The degree of familiarity on the part of the interviewee--except for almost total lack of same--did not seem to be a major factor in defining his Local Area.



(although records pertaining to length of residence were kept). Even interviewees who have lived in the area only a relatively short period of time seemed able to grasp the general location of social class boundaries, quite quickly; boundaries were drawn according to these. There was no significant differentiation of criteria or the way in which they organized the Local Area between this group, and longer-term residents (although seemingly relying more on visual clues to define changes in class).

e) Friendship patterns - Plotted friendship patterns showed a high percentage to exist within the boundary of what the person considered to be his class defined Local Area. Friendships outside this area connected primarily to areas described by the Interviewee as being generally equal in class level to his own. As



might be expected, fewest connections were found across areas of major social class division, indicating few inter-group friendships.

2. Social Type - Other factors besides class had an effect on the location of Local Area boundaries (although in a few cases these directly related to, and imply a certain class level by their nature). It was found that class level, as determined by measures of income, housing value or other such census type data could not, in all cases, accurately predict the boundaries to be drawn. It was found that different "kinds" of people within the same general class level sometimes identified with differing segments of the population and accordingly drew boundaries emphasizing such identification. Some of these differences showed in the explanations people gave in describing why a particular boundary was located at a particular point and would suggest that many other considerations besides class must be taken into account. What a person considers to be his spatially delineated Local Area actually seems to be a complex blend of his generalized class level (most important), social and economic background, style of life, aims, goals and interests in life, type and "status level" of his employment or full-time activity, racial or ethnic identification, etc.

a) Students and university-connected people provide the largest (statistical) evidence of the above. This is a group which cannot be measured solely in terms of income, quality of living accommodations, rent level, etc. It was found that self-identification to this group strongly dictated not only the size and location of boundaries but seemingly their conceived impressions of the social content of that area as well. Four (of five) in this group were the only ones considering



their Local Area to include the entire area surrounding Harvard Square. For them, Harvard Square itself was a focus of primary activity. Its boundaries included all areas in which students or teachers form a significant percentage of the population surrounding this focus and indicates the presence of a large scale specific "type of person" identification for this group. Three student interviewees referred to the area as being composed primarily of students, although this is not the case.

b) Three young businessmen living in parts of this same socially heterogeneous area, obviously having good starting jobs and being "on the way up" identify with a much smaller area. They



seem to choose this on the basis of its being one "socially correct" area for people in their present situation. It was characterized as "having many other young businessmen like myself, some teachers and a few students." Although this may be true for the area they drew, they have made certain by drawing boundaries so as to insure the most favorable social breakdown relative to their own "status position" and interests. They have excluded many of the adjoining areas of a slightly higher student concentration, which they seem to consider to be inferior in status, even though rent level, housing quality and other such measurable factors may be generally equal to or slightly lower than their own.

It was found in the course of the survey that many of these small areas, seemingly indistinct from the point of view of physical or visual conditions, housing quality or major differentiation of

class, have quite specific reputational images which denote their "desirability" and "status acceptability" for certain segments of the population. Included among these were areas termed:

"acceptable for people just starting out"

"the really 'fun' student area"

"O.K. for students"

"They have the kind of parties in that area where they throw the house key in...."

"lots of people with good backgrounds live here"

"that area has always been looked down upon--I don't know why really," "not very desirable"

"many young people have recently moved in; its really nicer than it looks."

These pretty vague terms for fairly specific areas, however, did give the interviewees a reputational quality to either identify with--or away from--and in cases it encouraged the drawing of boundaries, based on this factor of desirability, in locations where it would appear from statistics that none should appear.

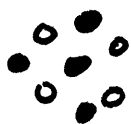
3. Racial and Ethnic Characteristics - The large "working class area," located in the western third of the study area, contains very little variety of class level (based on income, housing type or quality), or overall visual image. Differentiation in general upkeep and yard appearance is minimal both in the predominantly Negro area near the Concord Avenue-Huron Avenue intersection and the Irish-white area covering the remaining portions of this district. However, sharp differentiation in their conception of the "structure" of this area was found between the two racial groups. (Four were interviewed from each group.)

The four Negroes interviewed often identified with and preferred to identify themselves as a part of the large working class and seemed hesitant to consider themselves as part of the quite physically distinct Negro community. This racially defined group was usually mentioned only after speaking of class level aspects of the larger area. The four whites interviewed from this area (and others outside the area), on the other hand, usually eliminated the Negro district from "their part of town" by drawing relatively sharp boundaries around this area at the initial incidence of racial change.

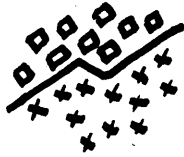


Negroes in the Negro area generally felt their area to be quite racially integrated. (One interviewee even took the trouble to point out on the map where and just how many white families actually lived in the area--which were considerable.) White people in other sections of the working class area did not mention this heterogeneous racial character--even along its border where it is, in fact, quite prevalent--and always referred to it as "the Negro area." Later in the survey when the four whites were asked specifically whether they thought there was any quality of mixture present, they felt that there was not.

As stated, the working class area was accurately defined along all its edges by almost all interviewees in terms of class level. Differences that occur within this area can be almost entirely attributed to racial identification or exclusion rather than major class change or physical differentiation.



Some ethnic identification was given the large working class area by people living outside its boundaries but usually in terms and derisive tones that were highly suggestive of a particular class level (e.g., the Irish Catholic area, et al).



There was little mention of the physical similarity (structure type, conditions of upkeep, etc.) characteristic to this area until brought out in direct questioning later in the interview; however, boundaries were usually drawn exactly at points where this characteristic homogeneity of structure type began and would indicate recognition and "symbolic association" of this housing type, with that particular working class group. (Also see Physical, Part C.)

4. Age and Sex - Neither age nor sex of the interviewee provided any significant differentiation of results. Husbands and wives interviewed separately, without chance to discuss questions to be asked, provided remarkably similar results both in the location of boundaries drawn and the criteria by which they were justified.

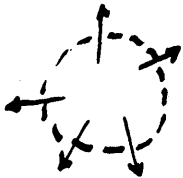
5. Social Organization - The interviewee's conception of his Local Area or "part of town" as a spatially defined identity was in some cases influenced by the degree of community cohesiveness and social organization present in that area.

a) Formal and informal associations - Local Area organizations seemed to be present to a larger degree in the area considered working class. Contact between individuals was often fostered through various church and parochial school functions and has seemed to have helped create a greater "sense of community" and group consciousness



within this group. The church acted, according to statements made in the interviews, as quite a strong community focus and symbolic center for the area and provided many opportunities for the formation of intra-group friendships and cohesion. Smaller groups were also present in the working class area and included various kinds of neighborhood civic and improvement associations and racial organizations, such as CORE, the NAACP, etc.

The kind of groups belonged to by members of the working class seemed better suited to increase cognizance of his Local Area (or a division within in the case of Negroes) as a distinct spatially defined area.



Those in higher income areas usually belonged to organizations that did not in any way relate to the Local Area in which they lived, but rather referred more to specific, definitive interests of the interviewee--professional groups, business associations, university clubs, organizations such as the Cambridge Community Association (CCA), etc. The type of organizations belonged to by this group were not such as to enforce Local Area community consciousness or identity.

b) Friendships - Interviewees in the working class area often mentioned how "close" or "friendly" they were with the neighbors, and the presence of large amounts of social intercourse occurring within their neighborhood between people living in proximity to one another.



More characteristic to the middle and higher classes was a greater desire and respect for privacy--their own and





those living close by. A surprisingly high proportion (45%) brought up the fact themselves that one of the things they liked best about Cambridge was their not feeling forced into friendship formation with "the neighbors." They seemed to feel friendships had a greater opportunity to exist through personal choice and preferences rather than by proximity or "enforced" neighborhood cohesion.

Plotted friendship patterns show those of the higher class groups to be more scattered and including many other areas of the city besides their own. The opposite is true of the "working class" groups. Friendships there seem more clustered in proximity to location of residence or within the district they consider to be their Local Area. Of those interviewed in this latter group, relatively few of their friends existed outside their own conceived Local Area.

Friendships within the upper class groups were often mentioned as being dictated largely by "interests" of the interviewee, the particular profession engaged in, or other similar factors and generally more unrelated to the spatial limits of his perceived image.

Although questions were not really designed for this purpose and only a statistically small amount of information was received concerning this, friendships based on this type of criterion were never mentioned in working class areas.

People did not seem as inclined to consider themselves as belonging to a particular group (professional, etc.) within the working class except in a more general way, such as based on major ethnic or racial distinctions.

The exact effect<sup>15</sup> of close friendship ties and community associations within the Local Area was an extremely difficult one to measure. However, from replies received it would seem that greater community identification did exist in working class areas. Those in higher classes identified more with 'Cambridge.'

6. Social Change - A changing population type as an important criteria in determining the Local Area was not a large factor in the survey--with two significant exceptions.

a) The Foster Street area was characterized by some as being a quite physically defined area which was in the process of changing to a higher class and status population--although this is now nearly complete. Many of the houses here, originally built for servants of the large houses on Brattle Street were, until a few years ago, occupied by working class people. Many professionals have now bought and restored these to make this a highly desirable, "prestige" area. Boundaries for this area were always drawn outlining the area where such changes were occurring. Change in this case, according to verbal descriptions, seemed to be at least an aid in defining boundaries for this area.

b) In the area to the west of Upland Road (on the southerly edge of the Avon Hill area) some rehabilitation and

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15. There have been studies dealing with this aspect of "the community" and the varying associational and friendship formation characteristics of differing class and income groups; these largely confirm the findings of interviews. See: Kamarovosky, Am. Soc. Review, Vol. 11; Litwak, Eugene, Voluntary Associations and Neighborhood Cohesion, ASR; Fried, Marc and Gleicher, Peggy, Some Sources of Residential Satisfaction in an Urban Slum.

modernization has taken place. Many of these houses are now occupied by young professionals, faculty or others seeking relatively low-cost housing but with opportunities for design and improvement to structure and yard space. Although this area was not drawn specifically at the Local Area scale, it did appear in maps at the Sub-Area scale as characterized by the changing nature of its population and an increasing desirability.

C. Findings - Physical

Although recognition of class, "type" or other related social factors were of primary importance in the way people identify, define and relate to or away from a particular local community, major physical elements and character can be said to have effect, albeit limited, by the general social pattern on the exact organization, delineation and location of boundaries around such an area.

1. Elements<sup>16</sup> - Distinct social boundaries in the study area are often quite unclear. Changes between socially differing areas are often extended over a relatively considerable distance, forming gradient areas of varying sizes. Social boundaries may, or may not, be visible from major roads or travel paths; also a single area may improve in these factors from one side to another. The facade

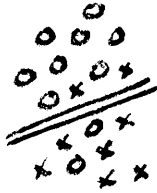


presented may or may not be reflective of the class level, housing type and conditions present to its rear.

When faced with drawing boundaries in such areas; large

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16. Physical elements include major roads, institutioned sites, parks, open space.



scale physical elements, such as roads, institutional sites, open space, had the effect of providing the interviewee with a "logical" visual, psychological and sometimes symbolic breaking-point to determine the edge for a particular area. In many sections of the study area, for instance, it was found that physical elements did not, in fact, represent the true point of class or other such division described by interviewees as being the primary reason for its placement in that location, although relatively not far away.<sup>17</sup>

Where no major social division was present in sections of the study area, a major physical element--no matter how large or seemingly significant--was never included as a boundary at the Local Area scale. Concord Avenue, for instance, did not appear as a boundary for any Local Area, although being a major traffic carrier and seemingly a psychological breaking point.

a) Roads - The path followed by landmarks along and the visibility or reputation of bordering districts was often mentioned as a factor determining this as a point of division. According to general descriptions made by interviewees, roads acted in the following ways:

1) "Seam" - between two areas of visibly differing character.

2) Barrier - hard edge between and physically separating areas.

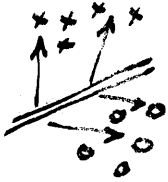
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<sup>17</sup>. As noted previously, however, a person's particular class identification will sometimes have effect on the degree of casualness with which this choice is made.

3) Implication - mental connection to visually hidden area by reputation, landmarks along, or familiarity.

4) Divider - producing division in areas gradient in character.

The road most frequently mentioned as a seam was Upland Road<sup>18</sup> which offers the observer views down the hill to the working class area (and especially in certain areas such as views between houses or across the Corcoran Playground to decker housing.) Wide, visually penetrable streets run off this road towards the top of Avon Hill and effectively show the character of that section.



Another road that provides the same basic function as a Local Area divider but of a different nature is Massachusetts Avenue. Rather than acting as a "seam" as does Upland Road, it acts much as a visual and physical barrier according to statements made by interviewees. Rarely do people ever seem to cross this road and especially so from west to east. There is significant change in physical character to either side which, although not as highly visible as along Upland Road, does still act for these people in much the same way. The shopping area along this road, most people

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18. Although no specifically mentioned by any interviewee, the direction of slope along this road and the quality of roadside conditions following this are completely congruent. For every perceptible rise or decline in elevation, there occurs a corresponding rise or decline in roadside housing conditions reaffirming those that exist up or down the hill to either side. Even turns, which were mentioned, in this road--at Raymond Street or by Newell Street--present forward views congruent of conditions existing in that direction. Other streets mentioned in much the same manner were Linnean Street.

state, acts as an edge to their own area rather than being a center or focus for a larger area--this could perhaps be because of its visual form which reinforces its role as a social division.

Another but less visually congruent road most people mentioned was Huron Avenue. However, in this case, more of the people interviewed were forced to rely on familiarity or reputation of the area to its rear. This road represented a symbolic division to many people but most were really not clear as to where this point of change



actually took place; some did not know if it took place at all. (Only one small visual trace of the higher quality area exists and that appears to follow Sparks Street in an entirely different direction.)


Major roads penetrating gradient districts between areas of differing physical or social character were sometimes picked as area borders; however, only as an arbitrary point of division.



b) Topography was important in helping interviewees describe change in class or distinct areas. Frequently mentioned were the terms "up the hill" to refer to higher class and "down the hill" to refer to lower class. However, the study area is nearly perfectly suited to encourage this topographical-social connection.

As in cases of other such physical elements as roads, open space, etc., topography was little mentioned in areas where little change in status occurred. For instance, topography was seldom referred to in the western Brattle Street area, where little social change of this sort exists.

c) Nodes and Landmarks - Nodes and landmarks of varying sizes and degrees of significance were often mentioned as being terminations or focal points for Local Areas or districts. Often

 mentioned as such were Sears and the Fire Station at Garden and Sherman Streets to signify the beginning of North Cambridge, the Law School and Cambridge Common as the start of Harvard Square, Peabody School as a focus of that area, Concord-Huron intersection as a focus of the working class area (although located at the edge and providing a termination for others), etc.

Landmarks, especially, seemed to provide the interviewee with a sense of visual connection between districts or Local Areas even when not occurring at that precise location. They acted in this sense as a symbol of entrance; also they acted as a symbol for visually hidden areas in some cases.

d) Open Spaces - When open space was mentioned, it was usually to provide the interviewee with views toward, penetrations into, or through, a particular area. It sometimes provided sharp, easily defined edges to areas (e.g., the Negro area, the working class area in numerous locations).

2. Physical Character<sup>19</sup> The role of physical character as a visual aid structuring the Local Area was often a difficult one to determine. It was necessary, but difficult, to learn the precise level of familiarity and knowledge possessed by the interviewee, about an area--real, reputational, etc. A high degree of familiarity could

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19. As opposed to Physical Elements. The character of an area includes the characteristic architecture, style, siting, space quality and visual texture.

effect the positioning of boundaries drawn due to greater knowledge of the actual social content of an area than is offered by visual cues.

Also it was found that the same sort of "upward-identification" occurred with structures and conditions by the lower of two ranked groups (e.g., housing value, rent level, etc.) as was found in social group identification. Verbal descriptions of their own living conditions usually compared favorably with those of somewhat higher quality. (Although probably highly related to group identification as social and physical conditions highly related reflect one another.)

a) General Class Identification - As might be expected the primary usefulness of visible physical character directly related to the identification of social class. Such easily accessible visual cues provided the interviewee with a simple, flexible, relatively accurate means—although generalized within certain limits of reliability—to identify class level and boundaries.

Those questioned usually only mentioned physical characteristics (of structures, homes, etc.) that could be quite directly related to, and identified with, their social rank. Most often mentioned were size, bulk, and especially value and quality.

Second in importance, based on frequency of description, was the general spatial quality and texture of the area (also somewhat descriptive of social content). Persons often described areas as being: "monotonous, all the houses are the same," "all jam-packed in together," "big houses but lots of surrounding yard space" or



"has quite an open feel" etc.

Distinct architectural styles such as Victorian, Colonial, etc. were infrequently mentioned, and even then, usually only after the above descriptions had been made. They did not seem important in defining the Local Area per se or helping in defining its boundaries (although becoming important at the Sub-Area scale). Only in the relatively small Foster Street area did this become important to any sizable degree; however, this section presents a unique situation where the commonly defined area is also in the process of social change.

No person identified his Local Area entirely on the basis of architectural distinction unless there was a corresponding and equally distinctive class associated with that particular character.

b) Social Type Identification - Although to a far more limited extent in both amount and reliability, the visual character was helpful for the interviewee in identifying certain social types such as "professionals," students, etc. Stockade or other similar types of board fences surrounding otherwise architecturally undistinguished houses, for instance, suggested to some the presence of professionals, architects, faculty, etc., who were generally atypical to the social class common to the area.

Also such seemingly small visual traces as the presence of many out-of-state license plates in an area denoted the fact for others that the population was composed largely of students.

Small visual cues of other sorts (such as chain link fence, phosphorescent storks in the yard, white walls or bookcases seen through windows at night, curtain types, religious statues, barbeque

grills, placement of ash cans, beer cans on window sills, etc.) although not frequently mentioned, can be assumed to have provided to at least some of these people with visual cues as to the social content of a particular area--accurately or unaccurately. Not many houses completely mask the "identity" of its occupants.

c) Incongruous Situations - When physical (and visual) conditions existed incongruous of the actual social conditions present, the role played by familiarity, indicated the high degree to which visual cues are used in defining Local Area boundaries.

The best example of this is along, and just off, Huron Avenue to the east of Concord Avenue. Many of these houses appear quite similar in character, design, etc., to those in the large working class area to the north and on which this small district borders. However, "many" young families of architects, young businessmen, teachers, etc., have bought houses in this area both for reasons of moderate prices (it is considered a "good value" area), and its proximity to the higher status Avon Hill area which borders it to the south.



Almost universally those persons interviewed (from outside this small district) having but limited familiarity with the area included this section within the area designated as working class. However, all who had a greater knowledge of the social conditions actually present within this district (and not living within) included this as a part of the Avon Hill section. The identification in this case seemed to be based on the apparent social structure as presented by an incongruent visual image.

Other conflicts such as this occurred to a lesser extent in the Foster Street area and portions of the Peabody School district.

3. Organization -

a) Structure of Local Areas - Local Areas could be pictured and mentally structured by the interviewee in a great variety of ways. Judging by statements made during the interviews, Local Areas can be placed into the following generally distinct categories:

Districts



1. Strong edged - Where edges are placed at a particular point by reason of major physical or psychological elements, distinctive physical character (inside or outside) or natural elements such as topography, etc. Internal character may vary but the Local Area itself can be quite easily spatially defined. Statements by interviewees would indicate that most felt the Avon Hill area to be in this classification; also the Law School and Oxford Street area (especially by those unfamiliar with that area) and the working class area. Often this area was accompanied by a distinct reputation such as in the Foster Street section.



2. Central focus - Area defined by and associated with a single or combination of internal foci of distinctive character. These could be landmarks, nodes, areas of intense familiarity, etc. The edges in such areas are less defined than its center and become sometimes more arbitrary as to their location. The



"Peabody School area" was of this type. The focus could also be linear such as was the case in the Brattle Street area or the working class area. (Concord Avenue acts as a focus rather than an edge.)



3. Symbolic Focus - Much like 2 except usually not spatially defined. Students provided major example of this in the survey area. Often with large random spatial distribution.



4. Node - Identification with very small area--such as Shaler Lane. Usually (in study area) of highly differing or distinctive social class or type.



5. Distinct Area - Often dictated by distinctive social types within generally otherwise homogeneous class area (e.g., Negro area, businessmen). Boundaries drawn surrounding this group and not reliant on the major road system.



6. Intermediary - Located between two significant areas and becomes important by providing zone of transition. This was often "open-ended" or gradient on one or more sides. This type infrequently appeared as a distinct area; rather it usually identified with one side or the other. Upland Road area is example of this type.

It often happened that the Local Area drawn by one person would be included as only part of that of another; or, the reverse

could be true. Therefore, each Local Area could have combinations of the above. For instance, a distinct or strongly bordered area for one person could provide an important area focus for another.

b) By nodes - In five interviews (four of which were students), it was found that organization of the study area was initially not by districts but rather by defining a set of nodes toward which space focussed. No precise boundaries were noted for each but each had vague areas of "drawing power" equal to its conceived importance. Nodes mentioned as such were: Harvard Square, Central Square, Porter Square, Inman Square and Observatory Hill.



#### D. Political and Administrative

1. Political and Quasi-Political boundaries - Named sections of the city, official or by "common usage," seemed to often produce a distinct "image" in the mind of the interviewee, affecting to some extent his positioning of its conceived boundaries.

Roughly two thirds of those interviewed were asked to draw and comment on "named" areas outside the study area. (Interviewee's were not aware of the scope of this area at the time this question was asked.) Specifically, these were "North Cambridge," the "Somerville Area," "Mid-Cambridge" and "Riverside."

Most of these named areas seemed to present a quite distinct, but generalized, "status image" in the mind of the Interviewee with which he associated and identified that area. This seemed to assess a distinct level of "Desirability" for that area and included such factors as its composite economic level, class position, conceived status,

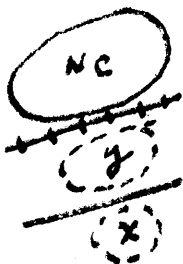
prestige level and reputation. Often mentioned were "visual images" of housing type, conditions and other elements of a physical nature and associated with the population characteristic of that area.

Interesting results were provided by these questions and in a few cases these "images" associated with named districts outside the study area influenced the delineation of Local Areas within.



a) 22 of 25 of those (x) living generally south of the Upland Road area considered "North Cambridge" to begin at Sears-Roebuck near Porter Square and following a line provided by Upland Road. The northern face of the hill provided for most people a convenient, easily identifiable point of social change which is visually strengthened by incidence of the "un-attractive," characteristic two-"decker" architectural style commonly associated with working class groups in the Boston inner suburbs.

However, it was interesting to note that 5 of 6 (y) questioned who lived to the north of this hill between Upland Road and the B & M Railroad identified "North Cambridge" with its conceived low



status image, as starting "across the tracks" and not including their own area. Both groups considered "North Cambridge" to be "undesirable," and possessing a low status-image. They seemingly did not wish to be included in the "North Cambridge area" as defined by those further to the south.

b) When questioned orally and without the aid of a map, five (of 8) interviewees located the Somerville City boundary as being "about at or just past Oxford Street." They failed to recognize that the Somerville border was almost one third of a mile away from Oxford Street

at one point. Rather they chose a location for placing this boundary at a point where physical conditions became representative of the physical (and related social) image held by the interviewee for that city.

Often, they were quite surprised in learning the true location of the true boundary and admitted, in effect, using this type of "association of image" for its placement.

2. School and School District Identification - Schools and school districts seemed to be an aid in helping some people in certain sections, to name, describe and identify with a particular area and was especially important in the Peabody School district. This elementary school is commonly regarded as the best--by quite a wide margin--in Cambridge. It was found that people very often choose the housing location, and a few of those interviewed mentioned they were in this district in such a way as to indicate they felt a definite status superiority because of this fact.

There seemed to be greater feeling that this school was an integral, important part of what they considered to be "their" Local Area. More people in this district, for instance, felt Peabody School to be somewhat of a symbolic center for their area, and they used this as a form of community focus with which they could identify. Public schools in other sections of the study area did not seem to provide a similar function.

The only other school appearing in any way to have this same effect was the Catholic School (and church) near the corner of Huron and Concord Avenue. This was frequently mentioned by people living in

the predominantly Irish area working people class or by others in referring to this area as a separate physical and ethnic entity.



## II. Sub-Area and Neighborhood Scales

### A. Sub-Area Scale

Questions five, six and seven on the questionnaire concern themselves with the internal organization and structure of the Local Area. Whether the Local Area can be divided into distinct sub-areas and what type of criteria are used for those divisions--social, physical, political, familiarity, changing use or social level, etc.

It was found that the value of this set of questions was to a large extent dependent upon the relative size of the area the individual interviewee had originally chosen to be his Local Area. With the great variety of scales chosen by interviewees, it often happened the Local Area chosen by one person would be only considered as a Sub-Area by another; conversely, groupings and combinations of Local Areas were quite frequently made by others to form what they considered to be their own Local Area.

When a relatively large area was chosen, therefore, divisions within were often of a nature resemblant to those found at the Local Area scale (e.g., more emphasis on division by unique social groupings--areas picked as overall distinctive districts.).

The Peabody School district, for example, was originally conceived of as a Local Area in a wide variety of ways by differing people. Many considered Avon Hill to be a part of this area; others drew maps showing Grey Gardens, Observatory Hill and the Buckingham Street area all to lie within this same area. On the other hand, very small areas conceived of as Local Areas often provided a situation where the extreme homogeneity of its entirety prevented any

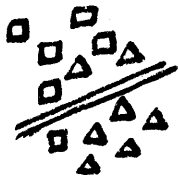
meaningful division. Shaler Lane, Grey Gardens, and the small new apartment section at the northern end of Garden Street, for instance, could not be divided at all. In other smaller areas, such as the Gracia Street areas or the Francis Avenue area, divisions seemed overly dictated by the road system and offered little social or physical differentiation of parts. Some stated that a division could not be made. Results shown in this section are taken from a somewhat arbitrarily determined middle range between these extremes and excluding areas composed of many individual Local Areas or being of a size and homogeneity preventing division.

1. Physical Character - In Map 9, Sub-Areas are shown in generalized, composite form, as defined by the interviewees. It was found that when interviewees divided their Local Area into sub-areas, they usually did so by higher utilization of physical criteria than social. This was found throughout the study area. Nodes, distinctive individual buildings, landmarks became highly important for indicating or symbolizing different sections within the larger Local Area. Also more mention was made of distinctive small districts and clusters of architectural styles, types of housing (apartments, single family, etc.), quality conditions (upkeep, structural quality and value), siting, bulk, etc.

Generally, the larger area chosen and considered to be the person's Local Area, the more likely this area was to be divided into distinct sub sections.

2. Physical Elements - It was at this scale that many important physical elements not mentioned at the Local Area scale--

such as roads, streets, institutional sites, landmarks, nodes, open space--had high significance for the interviewee in delineating particular sections of the Local Area. Many of such elements began to frequently appear in descriptions and were useful in differentiating, or delineating, distinct parts within the Local Area. However, as with this larger scale, these often only provided useful "guides" for drawing boundaries rather than actually distinguishing the actual



points of change. The same problems in achieving the exact location of social edges and boundaries at the Local Area were found to be present at this smaller scale.

Limits were often vague and gradient in character. With a generally less differentiated social group in the Local Area as compared to the study areas drawn, structures were often visually less differentiated to the observer; this produced considerable conflict and overlap in maps for this scale when interviewees attempted to draw precise homogeneous districts.



Usually only the most obvious physical characteristics were mentioned in defining sub-areas--such as changes from single family to two family; two family to apartments; residential to large-scale institutional, etc. Actual areas and their edges where these changes occurred were often diffused and resulted in a variety of boundaries for the same area.

3. Social Factors - Changes in social level, found most important in defining the Local Area scale, were apparently considered relatively minor in importance for defining areas at this smaller scale and were only infrequently mentioned. It seemed much easier

for those interviewed to ascertain the general limits of class and status, such as usually used to define the Local Area, than to attempt to organize this area into socially structured divisions at the Sub-Area scale. When mentioned at all, social differences within the Local Area were usually of the kind that could exist within a particular social level rather than crossing major status or class boundaries. Often such social factors had to do with areas of transiency or length of stay in a particular area, particular age groups located in certain areas or distinctive professional or occupational groupings. Many of the categories mentioned were often located in distinct clusters and could be associated with a particular type, style or quality of housing, such as small apartments in large apartment buildings for elderly ladies, mediocre quality apartments for students, etc.

The only instance where division of this scale was on a purely and distinctly socially oriented basis occurred when Negroes interviewed considered their racially defined district to be Sub-Areas of the larger working class area. As previously mentioned, whites in this area considered the Negroes to be not a part of their Local Area, and therefore, not a sub-section of that area.

Very frequently interviewees were only able to define "points" or very small areas which represented or symbolized these physical (or social) differences and were unable or unwilling to commit themselves to defining distinct areas with precise boundaries.

One third of all interviewees could not recognize any differentiation of parts in their Local Area by any criteria although

more than one-half of this group were from Local Areas which were relatively small in size and homogeneously distinct in physical and social character (Foster Street, Shaller Lane, Gracia Street were examples of this type area). In such areas, social and physical conditions, in fact, do not vary sufficiently so as to make a distinction of its parts possible or at all meaningful.

4. Structure - Interviewees used in dividing and structuring his Local Area. There were several methods:



a) distinct districts - Only when physical conditions were very distinct in the different parts of an area was it divided in this way; however, this was most often not the case. Local Areas were seldom divided entirely in this way, unless possessing a very strongly defined internal circulation system effective in providing visibility of these distinctive areas.



b) landmarks and nodes - Often at this scale people chose a distinct landmark or node or named object to symbolize the center of an area rather than attempting to define precise boundaries for that area. This technique was especially used by interviewees in cases where areas were of a heterogeneous nature. Such landmarks were often highly visible; however, they could exist as personal symbols through familiarity, previous experience, etc., and be of a quite undistinguishable nature to others.

Representative "nodes" could be of a variety of

sizes ranging from such as Arsenal Square to represent the hotel and large apartment house district, to naming Hurlburt Street as representing that quite physically distinct area. Often mentioned was "...and there over by such and such street."



c) Path system - In some areas and especially in smaller areas such as the Foster Street area, division within was highly dependent upon the street pattern. Other larger areas had major or distinctive street patterns which caused recognition of division (e.g., the Brattle Street and the Law School area, etc.)



d) Focus - When a Local Area had a strong build up toward a center around which it focussed, the area was usually not divided--especially in smaller areas such as the Buckingham School area.

This also often applied to topography as well.



e) Transition - Transition areas, between distinctive conditions to either side, were usually divided by any major physical element close to its center or area of median quality.

f) Combination - Most divisions of the Local Area were formed by various combinations of the above methods. For instance, the Peabody School area was commonly divided by the street system--Linnean and Chauncy Streets; by nodes or landmarks--Radcliffe College area, the Continental Hotel (representing the apartment house area), Peabody

School; and districts, such as between Shepard and Chauncy and the "small Hurlburt Street area."

B. Neighborhood Scale

There was found to be little relationship between the criteria used in determining the Local Area or Sub-Area scale and that used by interviewees in defining their "Neighborhood." This area was almost wholly dictated by "functional-use patterns" which provided the interviewee with a specific area of very intense familiarity through frequent use.

It should be mentioned that although the definition of the term "Neighborhood" was not discussed with the person, it is very possible that the sequence of questions as presented had a significant effect on what the interviewee felt was meant by the term "neighborhood." In most cases this was the second reduction in scale, and it might have been assumed that this was the sort of information and size of area desired for discussion. Results to this set of questions were extremely similar.

The shape of Neighborhoods as drawn was often highly irregular depending on the person's location relative to friends or often-used public and private facilities. There seemed to be little relation in the shape of this small spatial unit to the boundaries drawn for the other scales discussed earlier. For instance, characteristic architecture or a highly distinct social group in the person's immediate area did not seem to affect where neighborhood boundaries were placed.

Important factors that did have a bearing on the size and shape of the Neighborhood include:

1. street patterns
2. frequently used facilities of various kinds such as-- stores and shopping; schools; churches; parks; playgrounds; etc.
3. location of friendships
4. daily functional use and travel patterns

1. Street patterns - Local street patterns often greatly influenced the size and shape of the Neighborhood. The degree of accessibility to other streets, the shortest routes to commonly used local facilities and the general layout of the street system often dictated the area drawn.

For example, persons living in areas where streets were very long, with few interconnections (such as in the Walden Street section of the study area), might consider a very long or entire length of his street to be his neighborhood, but not include quite inaccessible parallel streets. Such streets might be extremely similar in nature and closer in terms of actual distance than the area drawn. However, only when important and frequently used or friendships were located on these adjoining streets were they included as a part of the neighborhood.

Also the neighborhoods drawn often had extremely irregular shapes because of the connections of residence to commonly used playgrounds, park, etc. via indirect or "short-cut" road and path systems.



2. Frequently Used Facilities - Such facilities when at all available were almost always included, or had connections to, the person's neighborhood. Of major importance were connections to local stores and shopping which appeared in almost all maps. Schools, playgrounds and parks were frequently mentioned if children were in a family. Such daily needs and requirements proved to be an extremely important factor in determining the size, shape and content of what the interviewee considered to be his "neighborhood."

3. Friendship Location - The location of friends in the area had much the same effect on the shape of the neighborhood as did the various kinds of facilities discussed above.

Conversely, the location of friends and frequency of contact often seemed to be dictated by the pattern of the road system indicating friendships being somewhat based on propinquity and accessibility.<sup>20</sup>

It was found that friendships were dictated by the road system to a larger extent in areas of "lower" socio-economic conditions.<sup>21</sup> Friendships were more important factors in the delineation of the shape of lower class neighborhoods than in areas of a higher social level.

4. Travel Patterns - Commonly used roads to travel outside

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20. Gans, Herbert, "Planning and Social Life," AIP Journal, 1961. Festinger and Katz, Social Pressures in Informal Groups.

21. This is somewhat supported by findings of a study carried out by Kamarovsky which studies the friendship patterns of housewives in varying socially ranked groups. Lower, or working class housewives, were found to possess far more friends located in extreme proximity to place of residence than did those in groups of high ranking.

the neighborhood or to other sections of the city sometimes had the effect of extending the limits of the neighborhood past what they might normally be. However, when neighborhood limits were defined in this way, less surety was expressed as to the location of their placement.

Generally, spatial patterns of class, status, etc., seemed to have only minimal effect in the way Neighborhood boundaries were drawn. Limits of these Neighborhood areas often crossed such boundaries of class change if an important shopping area was located in or past that area. Verbal descriptions justifying boundaries for the person's Neighborhood further indicated that social conditions present were not significant factors.

The only cases where these did appear significant were when those interviewed were of a distinctly different class level than the class average for the area. In such cases friendships in the area were fewer and often more widely scattered thus producing a more varied, larger neighborhood pattern. People such as this, located in areas atypical to their own class, in gradient areas and especially near the boundaries of areas with a status level identified with by the interviewee--usually by reason of greater numbers of friendships located in that direction.<sup>22</sup>

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22. "Where individuals are negatively oriented toward their neighbors...[They are] likely to realize the differences and disassociate themselves from that group." (Litwak, Eugene, "Voluntary Associations and Neighborhood Cohesion," American Sociological Review.) This showed up quite clearly in the study and especially at the neighborhood scale. It was especially apparent in groups referred as students and young, "not yet successful" businessmen.

Unfamiliarity or newness to the area, as might be expected, gave patterns more reliant on facilities than friendship locations.

Physical aspects of the environment, such as housing style, value, visual character, etc., had no major effect on neighborhood delineation except where these variables produced different types or classes of occupants and affecting friendship patterns of the individual, or the number of potential friendships.

### III. Effectiveness of Method

This section analyzes the effectiveness of the survey method for defining distinctive areas existing within the study area. Comparison will be made between the actual "distinctive" areas existing in the study area (as indicated by available census data) and the perceived structure, as shown in composite form, from interviews (See Maps 7, 6). The comparison will then turn to the effectiveness of the survey approach for establishing distinct homogeneous areas as compared to a more rigid method utilized by the Cambridge Planning Board.

#### A. Accuracy

Even considering the relatively small number of actual interviews carried out, the mapped results seem to show, when placed in composite form and compared with available (tract and block scale) census data, a generally accurate pattern of the homogeneous, "distinctive" areas occurring within the survey area.<sup>23</sup> Moreover, it provides a guide to the perceived relationship between Local Areas at

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23. The Hugh Larry Ross study largely supports the view that this will occur and distinctive characteristics can be mapped.

points of contact. It is suggested that a more complete field investigation could even further increase this accuracy.

"Major divisions" showing degree of differentiation between Local Areas (denoted by white or light grey on the Local Area Map) occur at points where census data would indicate these to be correct (e.g., where major differences of income, rent, etc., occur--note division at Upland Road-Huron Avenue and Massachusetts Avenue). Enumeration district data, although limited in scope and block data (mostly concerned with Housing statistics, including value) offer further support for the location of these major perceived divisions at these points.

Less frequently perceived boundaries (medium to dark grey) occur where figures of income, housing value, average rent, etc., indicate smaller differences between areas (note Concord Avenue, Garden Street, Linnean Street). Although not included in these maps, this same general accuracy was found in defining areas (and assessing values to the boundary) in areas adjoining the study area (e.g., toward Central Square and North Cambridge).

#### B. Relationship

Even more importantly, the interview method would seem to be effective in establishing the perceived relationship between areas. Census data can be plotted in ways that will show the clustering<sup>24</sup> of many variables. It can, for instance, show the spatial pattern created by level of income, or race, or housing value, or occupation

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24. Beshers, op. cit.

or any other such measurable criteria; with the use of color it can perhaps show two or perhaps even three of these at once. However, it is difficult, if not impossible, to organize this data in a way that reflects its actual psychological impact on individuals or groups; or, determines the actual way in which people will "identify" with or away from an area possessing such a "statistically based" character.

Gans states that "demographers may conclude that one area is more homogeneous than another with respect to age, income, etc., but we cannot predict from this. Social relationships are based not on census data but on subjectively experienced definitions of homogeneity and heterogeneity which terminate in judgments of compatibility or incompatibility...."<sup>25</sup>

It would seem that what the interview method is attempting to measure in this study is not the causes of such social relationships or social identifications as might be determined by census data, but rather the result of such "subjectively experienced definitions of homogeneity and compatibility."

The above, it was found, could be translated into spatial terms and played a role in the placement of boundaries of Local Areas in the study area.<sup>26</sup> It is suggested from this that two or more frequently overlapping perceived Local Areas could be interpreted as being ones having a distinct relationship of some kind to one another to a degree determined by the frequency with which the overlap occurs.

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25. Gans, Herbert J. "Planning and Social Life," AIP Journal, 1961.

26. Ross, Hugh Larry, op. cit.

This could be determined by a wide variety of criteria as determined in the earlier findings. Map 6 attempts to show, in effect, the composite perceived structure of the study area as a result of these overlapping Local Areas as drawn by interviewees.

Another important, but negative, aspect of defining "distinctive" areas in a residential environment by use of census data, is the inability to take into account the psychological effects of major natural (topography, etc.), political or physical elements (roads, railroads, open space). The statistical "distinctive" area may not be the perceived distinctive area.

Also, census data cannot analyze the effect of a "prestige" location--"The good address," the areas "O.K. for students" or the areas considered "not very desirable" or other such areas important in the perceptual organization of a given area. In summation, the interview method defines the perceived "distinctive" areas within a particular area, yet does so in a way which measures the role of visual psychological and social conditions having a bearing on this perception.

#### C. Contrast of Approach

The effectiveness of the interview method for defining logical areas for planning purposes, as opposed to some other methods, and the Neighborhood Unit approach utilizing hard boundaries in particular, can be seen in the following illustration.<sup>27</sup>

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<sup>27</sup>. The assumption is made here that the perception of the organization and structure of an area is important in city or visual planning. Also, that it does in fact reflect to a large extent the actual conditions (status, organization, etc.) existing within an area. See Ross, Hugh Larry "The Local Community in the Metropolis," Harvard Ph.D. thesis, 1959.

Several years ago (1953) the Cambridge Planning Board defined what appeared to them to be the major "neighborhoods" in the city by this method (See Map 10). As stated by the Cambridge Planning Board,<sup>28</sup> these were drawn so as to embrace socially homogeneous areas outlined by "logical," major physical or natural boundaries (See Map, Map of Cambridge Boards). Quoting from the report in which this map appeared and that describes the rationale behind its design:

...The residential areas of the City [under this scheme] are geographically divided by natural and man made barriers of a physical nature. These include railroad lines, major traffic arteries and non-residential land such as areas of factories, stores, universities and open space. Geographical distance between parts of the city further effectively separates residential districts.

The residential areas of the City are [under this system of neighborhoods] further characterized by less tangible but nonetheless real social and economic groupings. These are reflected to some extent in physical form such as prevalent types of housing. Thus for example it was possible to divide the city into areas of high class, single family homes, areas of two and three family homes, areas of rooming houses and apartments, and areas of dilapidated tenements...[and] after considerable study the Neighborhood Unit principle was found to offer the best method of dividing Cambridge residential areas....

The lack of effectiveness in using this approach, at least in the study area, can be seen by comparing this map with that of Local Areas developed through interviews or that of census data as presented in Map 3. Differences and conflicts between these two maps (of what will be called Local Areas rather than "Cambridge Neighborhoods" as defined by the Planning Board) are indeed great in many areas. The areas drawn by the Planning Board and dictated

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28. Cambridge Planning Board, "Thirteen Neighborhoods--One City," Cambridge, Mass., 1953.

by hard boundaries seem to be extremely misrepresentative of the actual structure and organization of the study area. The following examples show instances where major conflicts between these two methods occur. Under the Neighborhood Theory, as defined, it is doubtful whether many of these conflicts could be resolved.

1. It was brought out through direct questioning that a majority of people consider North Cambridge to begin at Upland Road, not at the Boston and Maine railroad tracks as defined by the Cambridge Planning Board. This boundary was drawn by interviewees on the basis of where social, and accompanying physical conditions, become representative of the North Cambridge area.

A division of the study in this general location was the single-most consistent division drawn by the interviewees through the course of the entire study; all classes, types, racial or ethnic groups agreed on the general location of this boundary which is confirmed by census data.

Even persons interviewed having extremely limited knowledge or familiarity with the area felt that a major social division existed somewhere in the Upland Road area, although perhaps not mentioning this street by name. (The terms "on top of the hill" or "beyond the hill" were frequently mentioned as referring to the two social areas by the group unfamiliar with the area.) This is apparently not considered a significant division according to the authors of the "Map of Cambridge Neighborhoods" because of the fact that no major or other such important boundary is located in this area.



2. Again, the area division by the Planning Board at Concord Avenue, and their failure to include such a boundary along Huron Avenue does not seem to be reasonable from any standpoint. The entire area between Upland Road-Huron Avenue and the B & M Railroad tracks is distinctively working class in social level and contains little differentiation of physical character or visual conditions over its entirety. In addition, the small, racially distinct Negro "community" near the Huron Avenue-Concord Avenue intersection has been completely divided by the placing of Concord Avenue as a major Local Area "division."

Although Concord Avenue fits the technical definition of a physical boundary according to the Neighborhood Unit theory, it does not in this case act in this way. There is no social division of any significant amount present in this area.

During the course of the interviews, not one person considered Concord Avenue as being a Local Area boundary.<sup>29</sup>

3. The Foster Street area to the south of Brattle Street did not appear as a separate neighborhood on the Planning Board map, even though physical and social conditions differ significantly-- although to a lesser degree than the above. A "division" in some parts of this area would be one that might better fit the Neighborhood Unit theory.

4. Also the Planning Board does not consider the Fresh Pond Parkway as a major point of division because of what they

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29. As noted earlier, Concord Avenue acts for the people in the area as a focus rather than a boundary.

consider to be a general homogeneity of socio-economic characteristics to either side. In the interviews conducted, however, not one person considered his Local Area to extend across this major highway and to include the topographically distinct and physically separated Coolidge Hill area.

Many other distinctive physical or social groupings exist, as determined by the interviews, and appear to be important; however, none of these appear as such in the "Map of Cambridge Neighborhoods."

It would appear from these examples that the interview method of analysis, even in a study of such limited proportions, provided a more accurate, sensitive, spatial description of the actual physical and social conditions existing in the study area than does the Neighborhood Unit system--at least as applied by the Planning Board. Also it provides a better basis<sup>30</sup> for actually developing "neighborhoods" or "communities" than does the Planning Board system. In addition, it seems to take into account the psychological effects of major roads, open space, topography, etc., in a way more representative of their actual impact and role on the community organization and structure.

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30. See: Gans, Herbert J., "Planning and Social Life," AIP Journal, 1961. "...findings suggest social relationships are influenced by people's homogeneity with respect to a variety of characteristics.

## CONCLUSION

The interview method as described in Section II was designed to provide information as to how people organize and structure their environment at a variety of size scales. They were:

- 1) Local Area - what the person considers to be  
"his part of town."
- 2) Sub-Areas - divisions within the Local Area.
- 3) the "neighborhood"

An attempt was made to determine the relative importance between social factors and physical factors in the way each of these scales was organized in the mind of the Interviewee.

1. It was found that homogeneous social conditions of (class, status, type and race) were much more important as factors affecting the area structure as perceived by the individual than were the physical, visual and psychological effects of major physical elements (major roads, open space, changes in use, etc.).
2. Local Areas were far more dependent upon their particular and distinctive social content than on any sort of standardized size scale. Local Areas described by those interviewed ranged from being as small as the one described by residents of Shaler Lane, to as large as that defined by persons living in the large working class to the north of Upland Road. At all scales, however, the Local Areas existed on the same conceptual basis.
3. The boundary placement for the Local Area was found to be highly dependent upon the personal social characteristics and identification of the person by whom they were drawn.

4. When conditions were present, persons and groups tended to identify with areas both equal and above in social class rank and status. Boundaries were often drawn to produce this effect; never so as to include areas of inferior status quality.
5. Many areas have distinct status reputations and "social" images which seem to help people identify with or away from a particular area.
6. Physical elements become important as Local Area boundaries only at or near points of major class division. Physical character usually only becomes important to the interviewee at this same scale when it occurs within areas of relative social homogeneity.
7. Divisions within the Local Areas,<sup>31</sup> in the survey area, generally became less socially based.
8. Under conditions established by the survey method, delineation of the "Neighborhood" was primarily related to the area of most intense use and familiarity. It had little relation in form and criteria to the larger scales used.
9. The interview method of community analysis even at the small scale appeared to be a relatively accurate measure of the "distinctive areas" as they exist in the study area when compared to available census data or other material. In addition, it provided sensitive appraisal of the real and psychological effect of major physical elements and their effect on Local Area delineation.

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31. As adjusted.

M.I.T. LOCAL COMMUNITY STUDY

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8 Shepard Street  
Cambridge, Massachusetts

I would like to inform you that you have been selected as a possible participant in the MIT Local Community Study. This study will be carried out in cooperation with the Department of City and Regional Planning at MIT and is aimed at examining several aspects of the way people perceive of and organize their local environment. Your comments and opinions, received through an interview to be conducted sometime within the next two weeks, would be most gratefully received.

The interview itself is quite simple and will take only a few minutes of your time. It would be extremely helpful to us and perhaps interesting for you. The participants have been selected by geographical distribution and your participation is therefore regarded by us as most important.

This study is not connected with the Cambridge Planning Board, although they have been helpful in supplying materials and information.

Results of this study, in summary form, will be mailed to participants upon request sometime during the month of June.

Thank you for your cooperation.

Very truly yours,

Verification of this study may be attained by calling MIT at UN 4-6900, Ext. 4406.

## QUESTIONNAIRE

1. In what part of the city do you live?  
Does it have a name?  
Is it a distinct area?
2. Can you describe this area? (Y)  
What is it like?  
What distinguishes it from other areas?  
Tell me a little about it?
3. What are the boundaries of this area?  
Can you locate them?  
Why are they there?
4. Briefly describe the areas around this district?  
Can you locate their boundaries? Describe?
5. When you think of Y, do you think of it as one large district or a combination of relatively distinct sub-areas?
6. How do these differ from each other? Tell me about them?
7. What are the boundaries of these sub-areas?  
Can you locate them?  
Why are they there?  
Which one do you live in?
8. What do you think of as your "neighborhood"? (Z)  
What comes to your mind?
9. Can you locate its boundaries?
10. Based on physical or social criteria, can this area be distinguished from the surrounding area?
11. What do you feel causes you to draw it as you do?  
How does it relate to what you think of as a sub-area of the larger scale first mentioned?
12. Do you utilize the local facilities in the area? (school, stores, playgrounds, etc.)  
Often? Sometimes? Seldom? Never?
13. Think of as many friends or frequent acquaintances as possible that are included on this map. Where are they located?
14. Would you say they are pretty well representative of the general class level of the area in which they live?  
What is this for each? (see list)

Questionnaire - (continued)

15. When you think of X, do you think of any particular:

- (a) social class or level?
- (b) racial group
- (c) ethnic group
- (d) professional or occupational group
- (e) characteristic tenure
- (f) age group
- (g) marital status
- (h) educational achievement or intelligence level
- (i) level of cultural interest or activity
- (j) do you feel you are much like the people here?
- (k) really belong? How are you different?
- (l) do you identify with any other area than the one you are in? Any in which you would feel more comfortable?
  
- (m) distinguishable physical characteristics typical to the area?
- (n) architectural style, building type, etc.
- (o) housing type, dwelling unit size, etc.
- (p) rent level
- (q) distinctive boundaries of a strictly physical nature
- (r) level of upkeep, repair, disrepair
- (s) a typical area in the area representative of the rest?
- (u) area which seems to be a symbolic center for the area? such as a school, small shopping center, playground, etc.
  
- (v) degree of community cohesion, participation
- (w) community wide friendship patterns
- (x) community identification and self-awareness -- the area as a separate and distinct entity
- (y) Where does North Cambridge begin? Why symbolizes this?

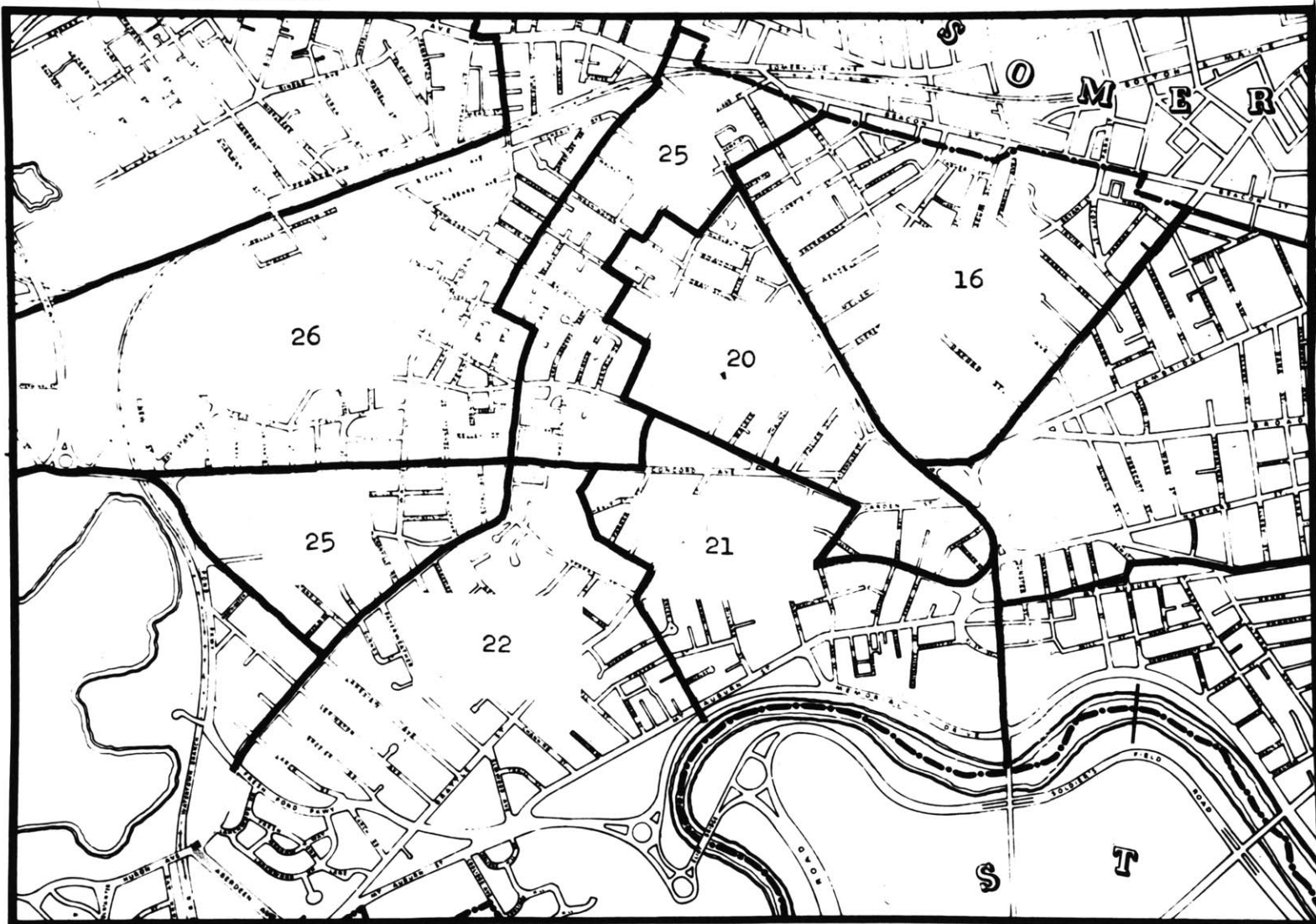
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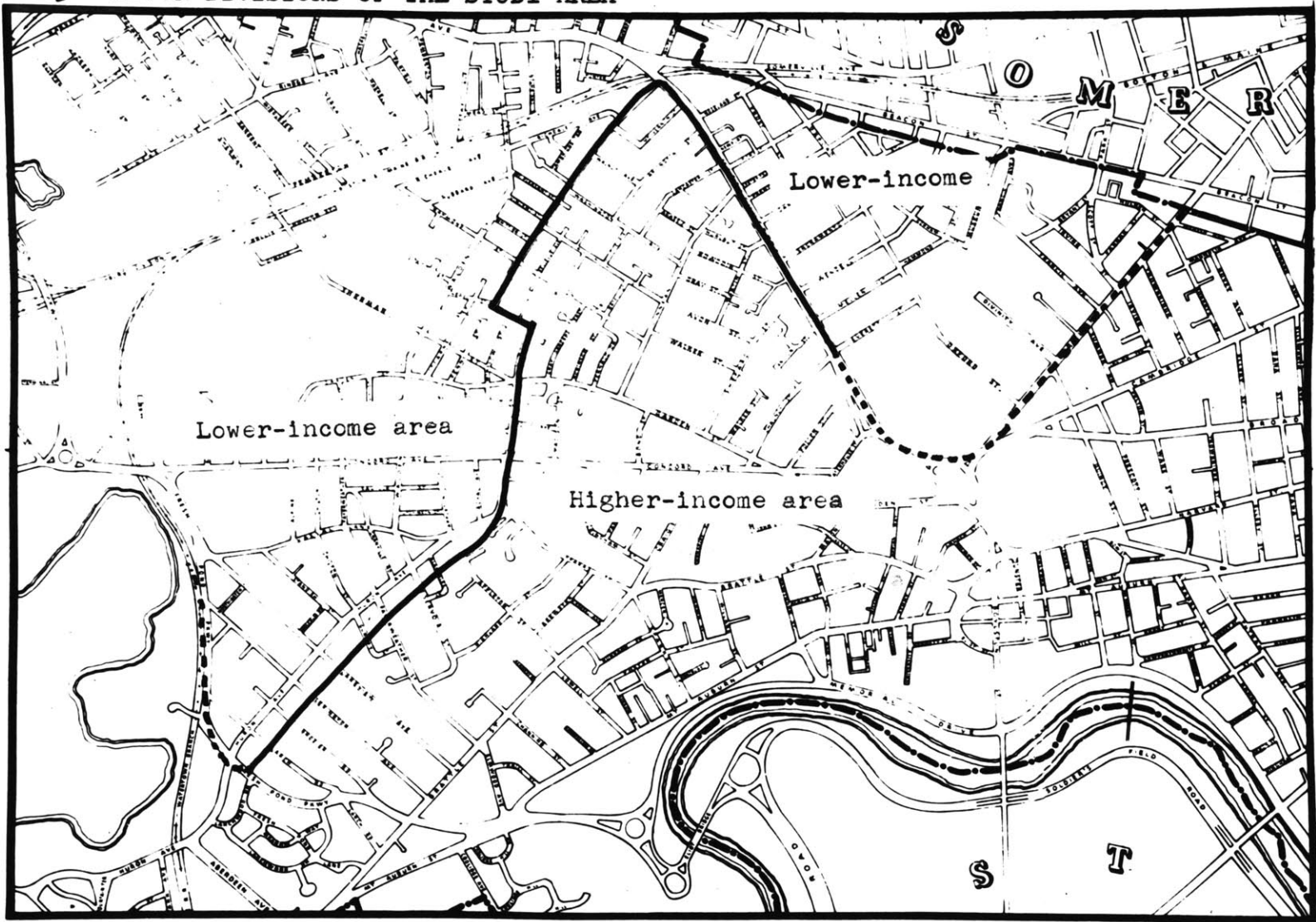
MAP I - CENSUS TRACTS



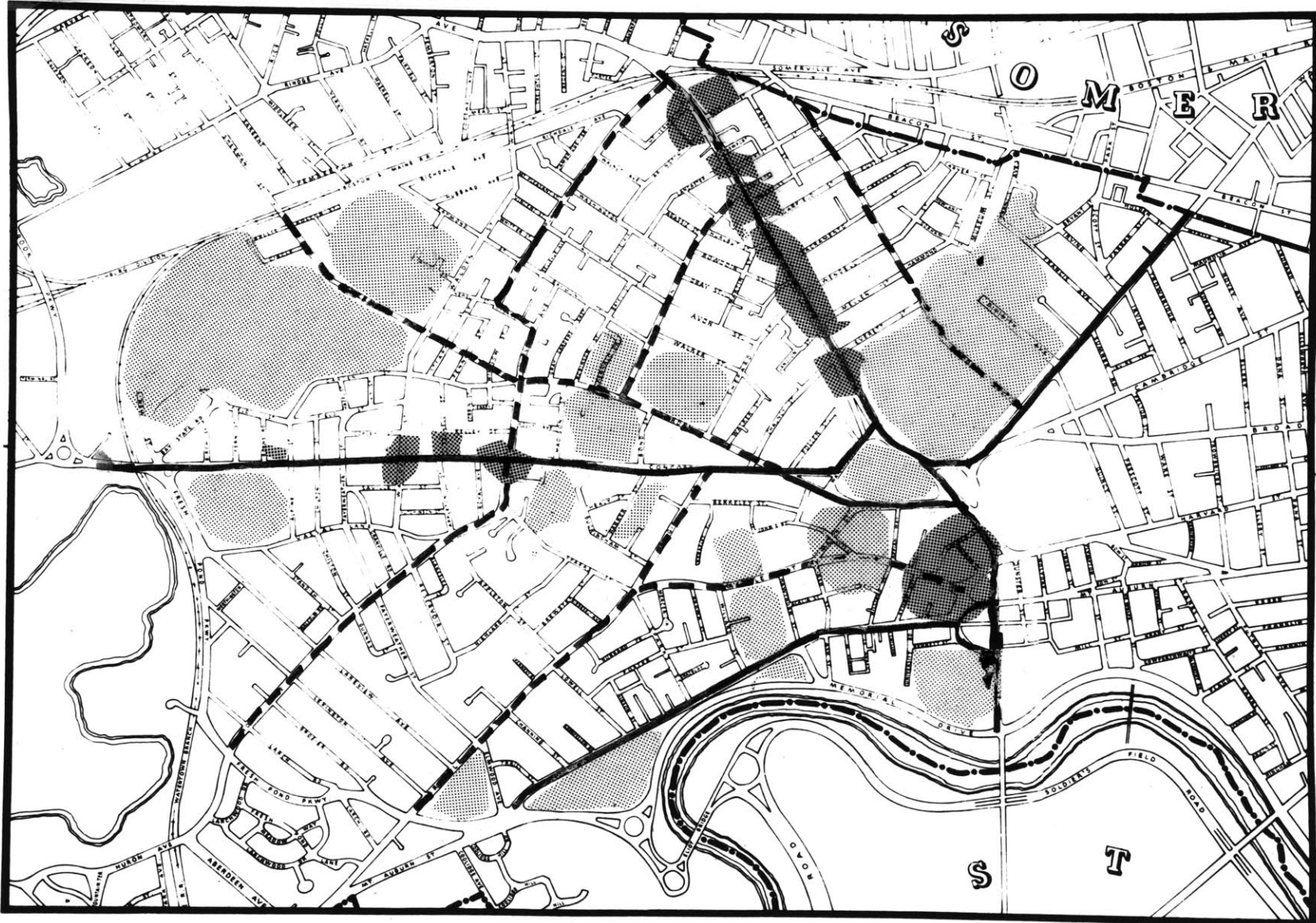
MAP 2 - TOPOGRAPHY



MAP 3 - MAJOR DIVISIONS OF THE STUDY AREA



Map 4 - Public and semi-public



MAP 5 - VISUAL STRUCTURE



### Notes to Maps

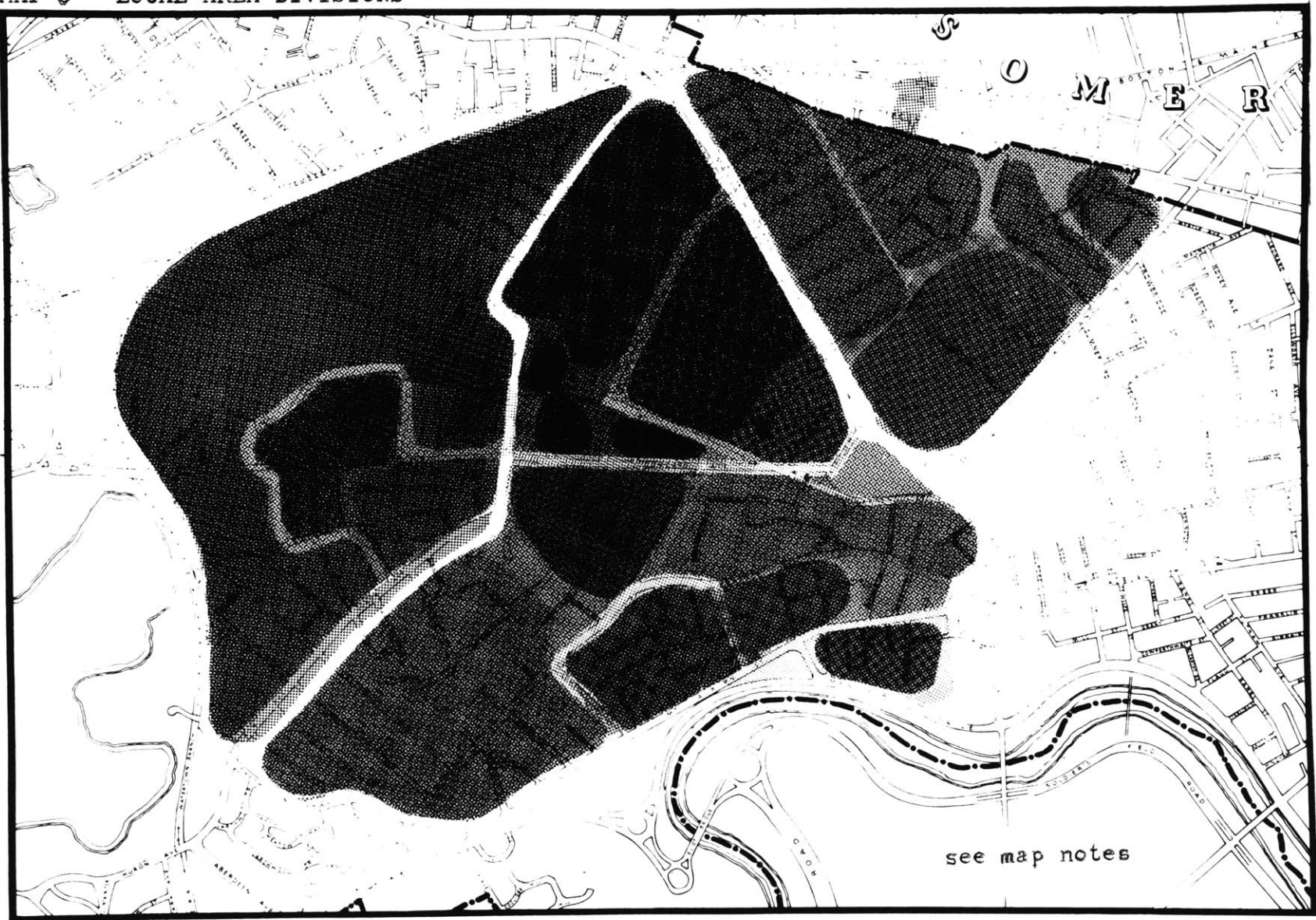
Map 6 - This map attempts to show results of interviews--at Local Area Scale--in composite generalized form. It indicates not only the Local Areas as determined by the individual interview but also the degree of conflict existing in spatial identification.

For instance, "white areas" such as at Massachusetts Avenue or Upland Road indicate that no interviewee considered this road to be within his Local Area. Medium grey areas, such as at Concord Avenue, indicate the fact that frequent overlap occurs between areas to either side.

Large rather uniformly grey districts, such as occur below Concord Avenue and extending the length of Brattle Street, indicate this was often considered as a single area by a high percentage of those interviewed. Darker grey areas within this section, such as the Buckingham School area, would indicate high inclusion of this area by those living outside this area.

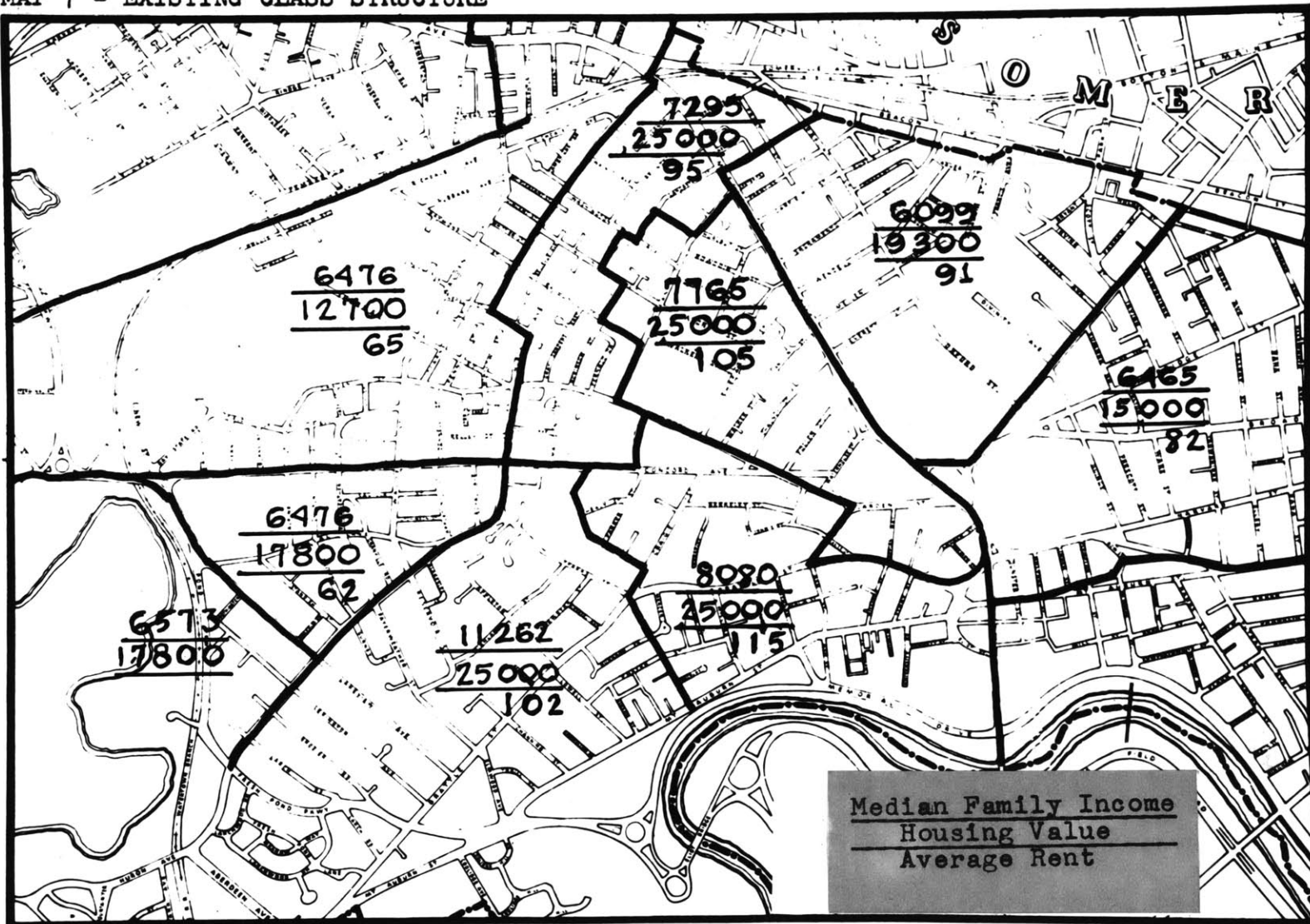
Intensity of black in this map should not be interpreted to mean "distinctiveness," but rather degree and amount of overlap and inclusion within other areas.

MAP 6 - LOCAL AREA DIVISIONS



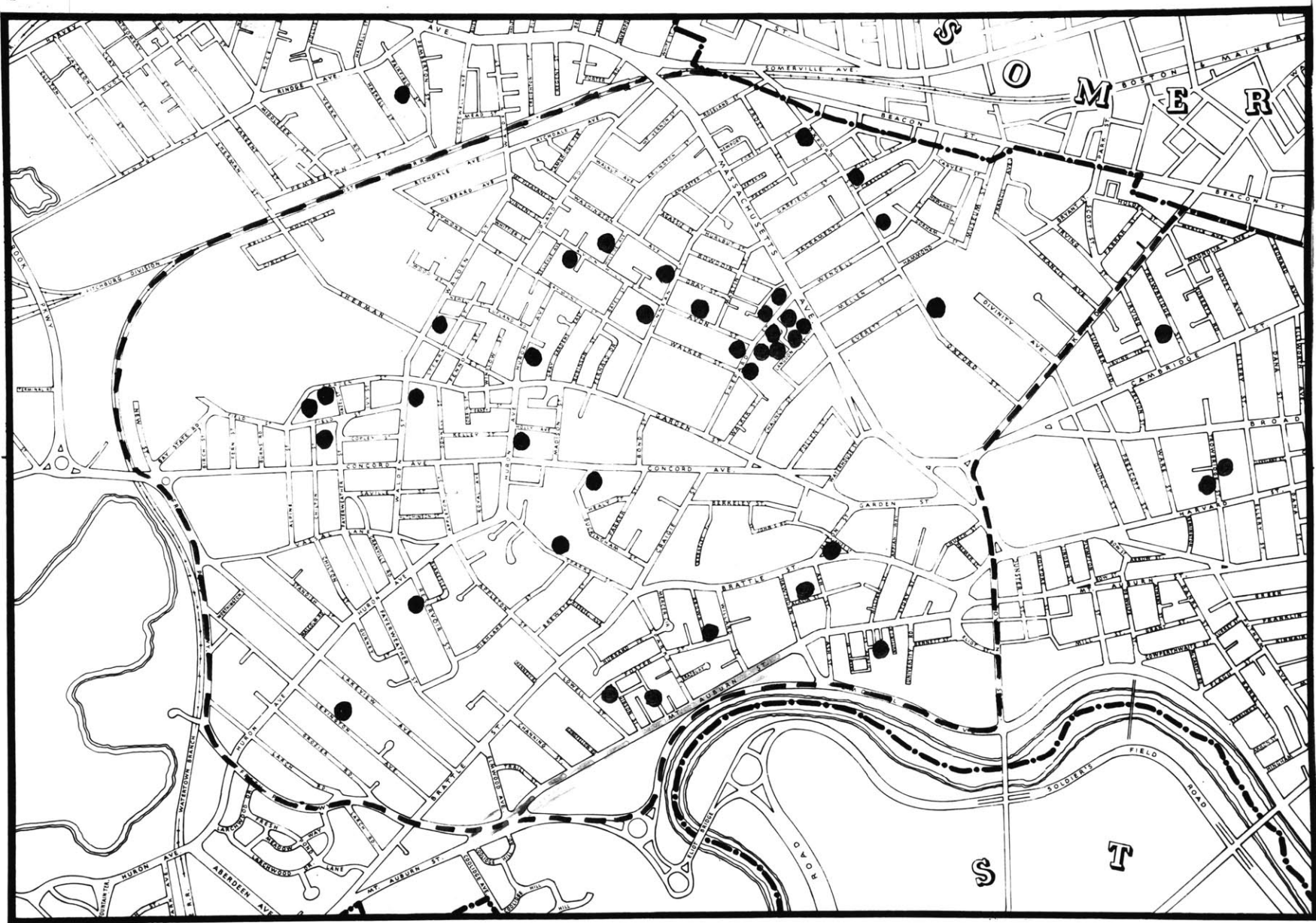


MAP 7 - EXISTING CLASS STRUCTURE

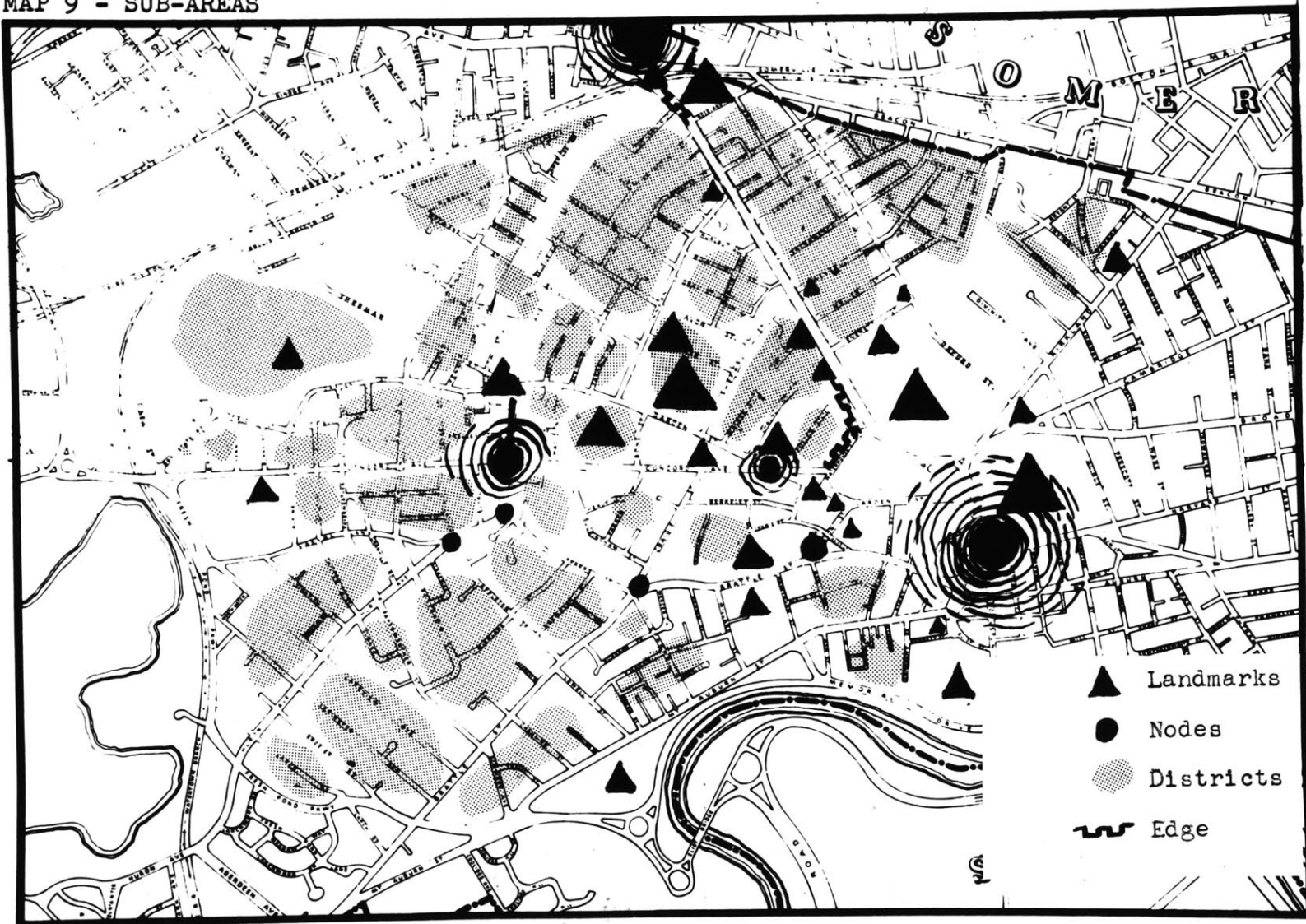


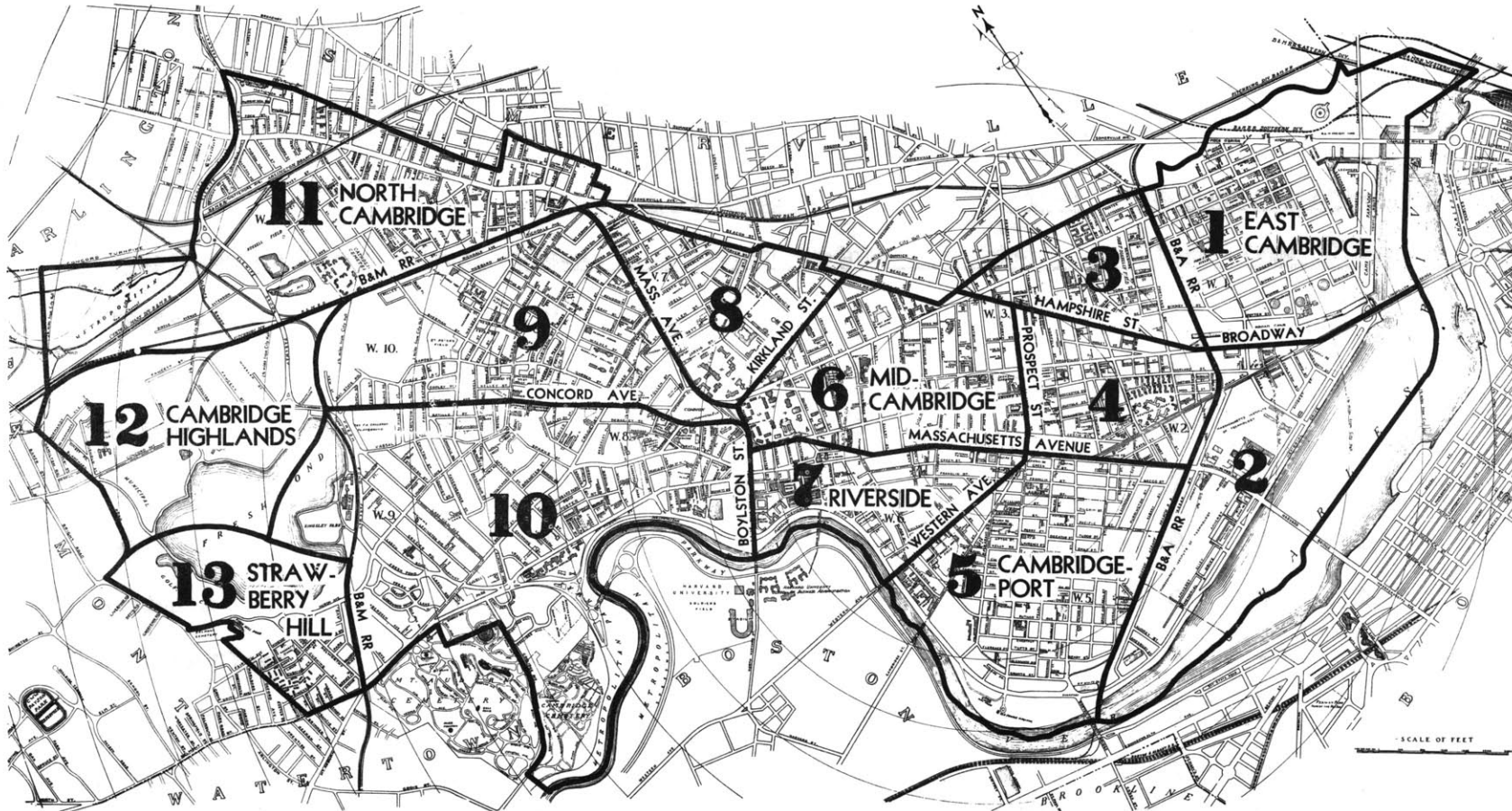
Median Family Income  
Housing Value  
Average Rent

Map 8 STUDY AREA AND INTERVIEW LOCATION



MAP 9 - SUB-AREAS





Map 10  
**Map of Cambridge Neighborhoods**

-06-

Occupation or Class	Total	Local Area Determined by				Sub-Area #Div- ided	Surrounding Areas By		
		Class	Type	Other	Points		Class	Type	Other
Professional	10	9	1	0	0	6	7	1	2
Faculty	5	5	0	0	1	3	4	0	1
Business	9	7	2	0	0	6	6	2	1
Schoolteachers	3	3	0	0	0	1	1	0	2
Retired	1	0	0	1	0	0	0	0	1
Students	5	1	4	0	4	4	0	3	2
Working Class	-	-	-	-	-	-	-	-	-
a) White	4	4	0	0	0	4	3	0	1
b) Negro	4	4	0	0	0	4	4	0	0
<b>Total</b>	<b>41</b>	<b>33</b>	<b>7</b>	<b>1</b>	<b>5</b>	<b>28</b>	<b>25</b>	<b>6</b>	<b>10</b>
<b>Percentage</b>	<b>100%</b>	<b>79%</b>	<b>17%</b>	<b>4%</b>	<b>12%</b>	<b>68%</b>	<b>61</b>	<b>15</b>	<b>25</b>

Occupation or Class	Social Class Identification with Local Area			Local Area Cohesion		Local Area Self-Awareness	
	Can Identify	Cannot Identify	Identify with other area	Felt Yes	Felt No	Felt Yes	Felt No
Professional	6	4	3	2	8	5	5
Faculty	4	1	1	2	3	2	3
Business	9	0	0	4	5	3	6
Schoolteachers	3	0	0	0	3	3	0
Retired	1	0	0	0	1	0	1
Students	4	1	0	0	5	1	4
Working Class	-	-	-	-	-	-	-
a) White	4	0	0	3	1	3	1
b) Negro	4	0	0	3	1	4	0
<b>Total</b>	<b>35</b>	<b>6</b>	<b>4</b>	<b>14</b>	<b>27</b>	<b>21</b>	<b>20</b>
<b>Percentage</b>	<b>85%</b>	<b>15%</b>	<b>10%</b>	<b>34%</b>	<b>66%</b>	<b>51</b>	<b>49</b>