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THE IMAGE OF THE CITY

Kevin Lynch

What does the city's form actually mean to the people who live there? What can the city planner do to make the city's image more vivid and memorable to the city dweller? To answer these questions, Mr. Lynch, supported by studies of Los Angeles, Boston, and Jersey City, formulates a new criterion — *imageability* — and shows its potential value as a guide for the building and rebuilding of cities.

The wide scope of this study leads to an original and vital method for the evaluation of city form. The architect, the planner, and certainly the city dweller will all want to read this book.

What the reviewers have said:

". . . Kevin Lynch has come up with a readable, tautly organized, authoritative volume that may prove as important to city building as Camillo Sitte's *The Art of Building Cities.*" — *Architectural Forum*

"City planners and urban designers everywhere will be taking account of his work for years to come . . . The importance of this book in the literature of urbanism is obvious. . . . we have lacked a theory of the city's visual perception based on objective criteria. For some strange reason, in the period dating from the late 19th Century in Germany and lasting until Lynch's efforts . . . there was no experimentation in the matter of how cities are perceived. All of us can be grateful for the resumption of this line of thought. The impact of this volume should be enormous." — Leonard K. Eaton, *Progressive Architecture*

"This small and readable book makes one of the most important modern contributions to large-scale design theory . . . To understand Lynch's audacity, one must go back to 1953, the year when he began his studies in perception with a travel period in Italy. This was several years before all the 'urban design' conferences, before the coining of the phrase, and at a time when respectable planners were concerned with anything but the exploration of urban form. It took a rebellious young teacher . . . fired by the inspiration of F. L. Wright (his sometime mentor), to turn the tables on thirty years of planners' neglect." — David A. Crane, *Journal of the American Institute of Planners*

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Lynch: The Image of the City

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III.

THE CITY IMAGE AND ITS ELEMENTS

There seems to be a public image of any given city which is the overlap of many individual images. Or perhaps there is a series of public images, each held by some significant number of citizens. Such group images are necessary if an individual is to operate successfully within his environment and to cooperate with his fellows. Each individual picture is unique, with some content that is rarely or never communicated, yet it approximates the public image, which, in different environments, is more or less compelling, more or less embracing.

This analysis limits itself to the effects of physical, perceptible objects. There are other influences on imageability, such as the social meaning of an area, its function, its history, or even its name. These will be glossed over, since the objective here is to uncover the role of form itself. It is taken for granted that in actual design form should be used to reinforce meaning, and not to negate it.

The contents of the city images so far studied, which are referable to physical forms, can conveniently be classified into five types of elements: paths, edges, districts, nodes, and landmarks.

Indeed, these elements may be of more general application, since they seem to reappear in many types of environmental images, as may be seen by reference to Appendix A. These elements may be defined as follows:

1. *Paths.* Paths are the channels along which the observer customarily, occasionally, or potentially moves. They may be streets, walkways, transit lines, canals, railroads. For many people, these are the predominant elements in their image. People observe the city while moving through it, and along these paths the other environmental elements are arranged and related.

2. *Edges.* Edges are the linear elements not used or considered as paths by the observer. They are the boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls. They are lateral references rather than coordinate axes. Such edges may be barriers, more or less penetrable, which close one region off from another; or they may be seams, lines along which two regions are related and joined together. These edge elements, although probably not as dominant as paths, are for many people important organizing features, particularly in the role of holding together generalized areas, as in the outline of a city by water or wall.

3. *Districts.* Districts are the medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters "inside of," and which are recognizable as having some common, identifying character. Always identifiable from the inside, they are also used for exterior reference if visible from the outside. Most people structure their city to some extent in this way, with individual differences as to whether paths or districts are the dominant elements. It seems to depend not only upon the individual but also upon the given city.

4. *Nodes.* Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is traveling. They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Or the nodes may be simply concentrations, which gain their importance from being the condensation of some use or physical character, as a street-corner hangout or an enclosed square. Some

of these concentration nodes are the focus and epitome of a district, over which their influence radiates and of which they stand as a symbol. They may be called cores. Many nodes, of course, partake of the nature of both junctions and concentrations. The concept of node is related to the concept of path, since junctions are typically the convergence of paths, events on the journey. It is similarly related to the concept of district, since cores are typically the intensive foci of districts, their polarizing center. In any event, some nodal points are to be found in almost every image, and in certain cases they may be the dominant feature.

5. *Landmarks.* Landmarks are another type of point-reference, but in this case the observer does not enter within them, they are external. They are usually a rather simply defined physical object: building, sign, store, or mountain. Their use involves the singling out of one element from a host of possibilities. Some landmarks are distant ones, typically seen from many angles and distances, over the tops of smaller elements, and used as radial references. They may be within the city or at such a distance that for all practical purposes they symbolize a constant direction. Such are isolated towers, golden domes, great hills. Even a mobile point, like the sun, whose motion is sufficiently slow and regular, may be employed. Other landmarks are primarily local, being visible only in restricted localities and from certain approaches. These are the innumerable signs, store fronts, trees, doorknobs, and other urban detail, which fill in the image of most observers. They are frequently used clues of identity and even of structure, and seem to be increasingly relied upon as a journey becomes more and more familiar.

The image of a given physical reality may occasionally shift its type with different circumstances of viewing. Thus an expressway may be a path for the driver, and edge for the pedestrian. Or a central area may be a district when a city is organized on a medium scale, and a node when the entire metropolitan area is considered. But the categories seem to have stability for a given observer when he is operating at a given level.

None of the element types isolated above exist in isolation in the real case. Districts are structured with nodes, defined by

edges, penetrated by paths, and sprinkled with landmarks. Elements regularly overlap and pierce one another. If this analysis begins with the differentiation of the data into categories, it must end with their reintegration into the whole image. Our studies have furnished much information about the visual character of the element types. This will be discussed below. Only to a lesser extent, unfortunately, did the work make revelations about the interrelations between elements, or about image levels, image qualities, or the development of the image. These latter topics will be treated at the end of this chapter.

Paths

For most people interviewed, paths were the predominant city elements, although their importance varied according to the degree of familiarity with the city. People with least knowledge of Boston tended to think of the city in terms of topography, large regions, generalized characteristics, and broad directional relationships. Subjects who knew the city better had usually mastered part of the path structure; these people thought more in terms of specific paths and their interrelationships. A tendency also appeared for the people who knew the city best of all to rely more upon small landmarks and less upon either regions or paths.

The potential drama and identification in the highway system should not be underestimated. One Jersey City subject, who can find little worth describing in her surroundings, suddenly lit up when she described the Holland Tunnel. Another recounted her pleasure:

> You cross Baldwin Avenue, you see all of New York in front of you, you see the terrific drop of land (the Palisades) . . . and here's this open panorama of lower Jersey City in front of you and you're going down hill, and there you know: there's the tunnel, there's the Hudson River and everything. . . . I always look to the right to see if I can see the . . . Statue of Liberty. . . . Then I always look up to see the Empire State Building, see how the weather is. . . . I have a real feeling of happiness because I'm going someplace, and I love to go places.

Particular paths may become important features in a number of ways. Customary travel will of course be one of the strongest

mon, the visibility from long distances of its bright gold dome, all make it a key sign for central Boston. It has the satisfying qualities of recognizability at many levels of reference, and of coincidence of symbolic with visual importance.

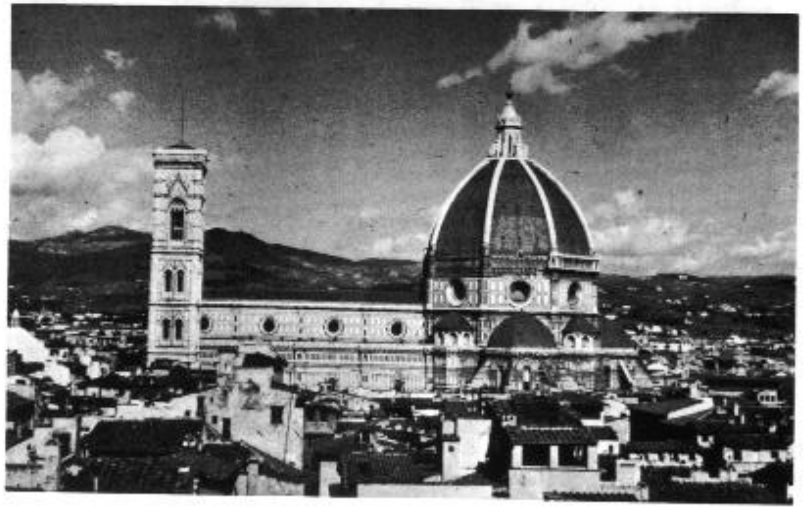
People who used distant landmarks did so only for very general directional orientation, or, more frequently, in symbolic ways. For one person, the Custom House lent unity to Atlantic Avenue because it can be seen from almost any place on that street. For another, the Custom House set up a rhythm in the financial district, for it can be seen intermittently at many places in that area.

Figure 33

The Duomo of Florence is a prime example of a distant landmark: visible from near and far, by day or night; unmistakable; dominant by size and contour; closely related to the city's traditions; coincident with the religious and transit center; paired with its campanile in such a way that the direction of view can be gauged from a distance. It is difficult to conceive of the city without having this great edifice come to mind.

But local landmarks, visible only in restricted localities, were much more frequently employed in the three cities studied. They

FIG. 33. *The Duomo, Florence*



ran the full range of objects available. The number of local elements that become landmarks appears to depend as much upon how familiar the observer is with his surroundings as upon the elements themselves. Unfamiliar subjects usually mentioned only a few landmarks in office interviews, although they managed to find many more when they went on field trips. Sounds and smells sometimes reinforced visual landmarks, although they did not seem to constitute landmarks by themselves.

Landmarks may be isolated, single events without reinforcement. Except for large or very singular marks, these are weak references, since they are easy to miss and require sustained searching. The single traffic light or street name demands concentration to find. More often, local points were remembered as clusters, in which they reinforced each other by repetition, and were recognizable partly by context.

A sequential series of landmarks, in which one detail calls up anticipation of the next and key details trigger specific moves of the observer, appeared to be a standard way in which these people traveled through the city. In such sequences, there were trigger cues whenever turning decisions must be made and reassuring cues that confirmed the observer in decisions gone by. Additional details often helped to give a sense of nearness to the final destination or to intermediate goals. For emotional security as well as functional efficiency, it is important that such sequences be fairly continuous, with no long gaps, although there may be a thickening of detail at nodes. The sequence facilitates recognition and memorization. Familiar observers can store up a vast quantity of point images in familiar sequences, although recognition may break down when the sequence is reversed or scrambled.

Element Interrelations

These elements are simply the raw material of the environmental image at the city scale. They must be patterned together to provide a satisfying form. The preceding discussions have gone as far as groups of similar elements (nets of paths, clusters of landmarks, mosaics of regions). The next logical step is to consider the interaction of pairs of unlike elements.

Such pairs may reinforce one another, resonate so that they enhance each other's power; or they may conflict and destroy

themselves. A great landmark may dwarf and throw out of scale a small region at its base. Properly located, another landmark may fix and strengthen a core; placed off center, it may only mislead, as does the John Hancock Building in relation to Boston's Copley Square. A large street, with its ambiguous character of both edge and path, may penetrate and thus expose a region to view, while at the same time disrupting it. A landmark feature may be so alien to the character of a district as to dissolve the regional continuity, or it may, on the other hand, stand in just the contrast that intensifies that continuity.

Districts in particular, which tend to be of larger size than the other elements, contain within themselves, and are thus related to, various paths, nodes, and landmarks. These other elements not only structure the region internally, they also intensify the identity of the whole by enriching and deepening its character. Beacon Hill in Boston is one example of this effect. In fact, the components of structure and identity (which are the parts of the image in which we are interested) seem to leapfrog as the observer moves up from level to level. The identity of a window may be structured into a pattern of windows, which is the cue for the identification of a building. The buildings themselves are interrelated so as to form an identifiable space, and so on.

Paths, which are dominant in many individual images, and which may be a principal resource in organization at the metropolitan scale, have intimate interrelations with other element types. Junction nodes occur automatically at major intersections and termini, and by their form should reinforce those critical moments in a journey. These nodes, in turn, are not only strengthened by the presence of landmarks (as is Copley Square) but provide a setting which almost guarantees attention for any such mark. The paths, again, are given identity and tempo not only by their own form, or by their nodal junctions, but by the regions they pass through, the edges they move along, and the landmarks distributed along their length.

All these elements operate together, in a context. It would be interesting to study the characteristics of various pairings: landmark-region, node-path, etc. Eventually, one should try to go beyond such pairings to consider total patterns.

Most observers seem to group their elements into intermediate organizations, which might be called complexes. The observer senses the complex as a whole whose parts are interdependent and are relatively fixed in relation to each other. Thus many Bostonians would be able to fit most of the major elements of the Back Bay, the Common, Beacon Hill, and the central shopping, into a single complex. This whole area, in the terms used by Brown[8] in his experiments referred to in Chapter 1, has become one locality. For others, the size of their locality may be much smaller: the central shopping and the near edge of the Common alone, for example. Outside of this complex there are gaps of identity; the observer must run blind to the next whole, even if only momentarily. Although they are close together in physical reality, most people seem to feel only a vague link between Boston's office and financial district and the central shopping district on Washington Street. This peculiar remoteness was also exemplified in the puzzling gap between Scollay Square and Dock Square which are only a block apart. The psychological distance between two localities may be much greater, or more difficult to surmount, than mere physical separation seems to warrant.

Our preoccupation here with parts rather than wholes is a necessary feature of an investigation in a primitive stage. After successful differentiation and understanding of parts, a study can move on to consideration of a total system. There were indications that the image may be a continuous field, the disturbance of one element in some way affecting all others. Even the recognition of an object is as much dependent on context as on the form of the object itself. One major distortion, such as a twisting of the shape of the Common, seemed to be reflected throughout the image of Boston. The disturbance of large-scale construction affected more than its immediate environs. But such field effects have hardly been studied here.

The Shifting Image

Rather than a single comprehensive image for the entire environment, there seemed to be sets of images, which more or less overlapped and interrelated. They were typically arranged in a

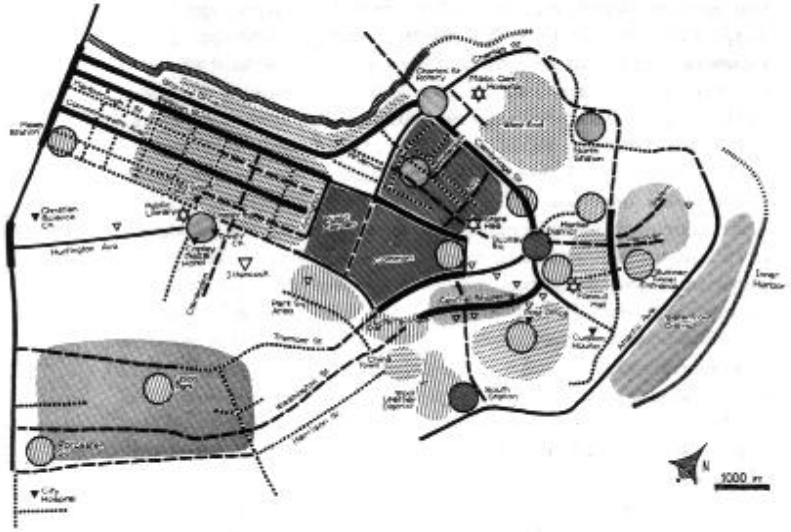
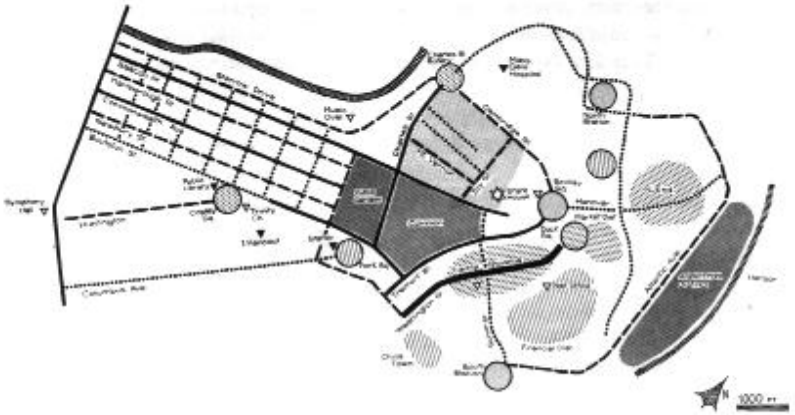


FIG. 35. *The Boston image as derived from verbal interviews*

FIG. 36. *The Boston image as derived from sketch maps*



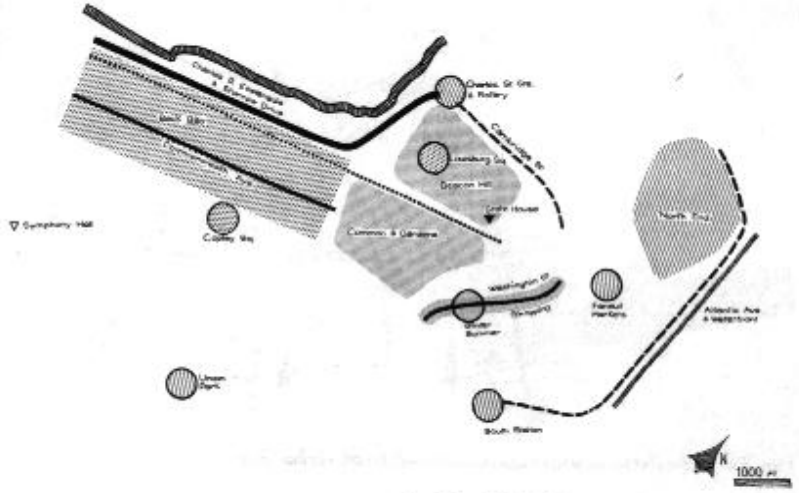
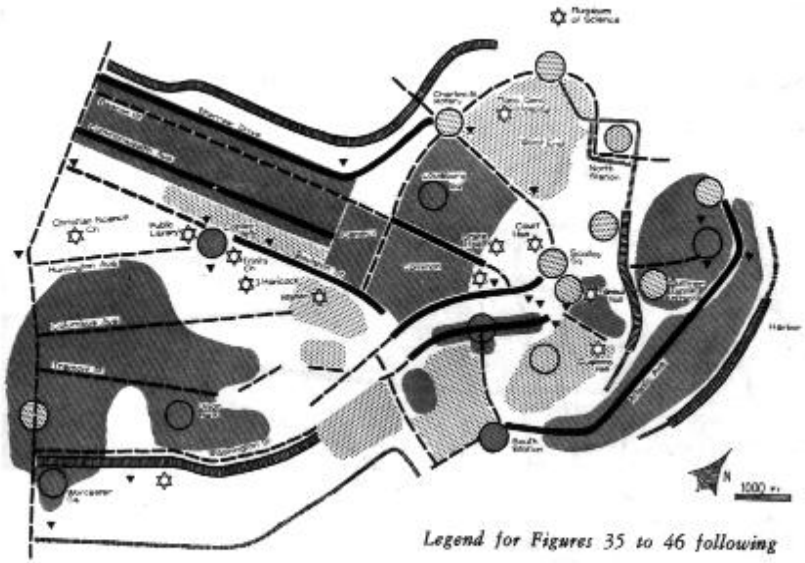
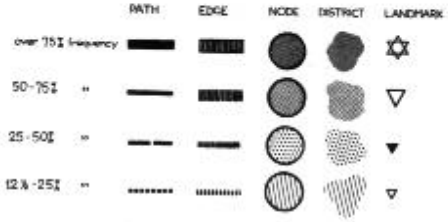


FIG. 37. *The distinctive elements of Boston*

FIG. 38. *The visual form of Boston as seen in the field*



Legend for Figures 35 to 46 following



While data on single elements and element types was perhaps adequate, there was a lack of information on element interrelations, patterns, sequences, and wholes. Better methods must be evolved to approach these vital aspects.

The Method as the Basis for Design

Perhaps the best way of summarizing this general critique of method is to recommend a technique of image analysis designed to by-pass many of the difficulties cited above and developed as the basis of a plan for the future visual form of any given city.

The procedure might begin with two studies. The first would be a generalized field reconnaissance by two or three trained observers, systematically covering the city both on foot and by vehicle, by night and day, and supplementing this coverage by several "problem" trips, as described above. This would culminate in a field analysis map and brief report, which would deal with strengths and weaknesses, and with general pattern as well as parts.

A parallel step would be the mass interview of a large sample, balanced to match the general population characteristics. This group, which could be interviewed simultaneously or in several parts, would be asked to do four things:

a. Draw a quick sketch map of the area in question, showing the most interesting and important features, and giving a stranger enough knowledge to move about without too much difficulty.

b. Make a similar sketch of the route and events along one or two imaginary trips, trips chosen to expose the length and breadth of the area.

c. Make a written list of the parts of the city felt to be most distinctive, the examiner explaining the meaning of "parts" and "distinctive."

d. Put down brief written answers to a few questions of the type: "Where is _____ located?"

The tests would be analyzed for frequency of mention of elements and their connections, for sequence of drawing, and for vivid elements, sense of structure, and composite image.

The field reconnaissance and the mass interview would then be compared for the relation of public image to visual form, to make a first-round analysis of the visual strengths and weakness of the whole area, and to identify the critical points, sequences, or patterns which are worth further attention.

Second-round investigation of these critical problems would then begin. Using a small sample, subjects would be asked in individual interviews to locate selected critical elements, to operate with them in brief imaginary trips, to describe them, to make sketches of them, to discuss their feelings and memories about them. A few subjects might be taken out to these special locations, making brief field trips involving them, and describing and discussing them on the spot. Direction inquiries to the element from various origins might also be made of a random sample of persons in the street.

When these second-round studies had been analyzed for content and problems, equally intensive field reconnaissance of these same elements would then be carried out. Detailed studies of identity and structure under many different field conditions of light, distance, activity, and movement would follow. These studies would use the interview results, but would be by no means limited to them. The detailed studies of Boston elements in Appendix C are possible models.

All this material would finally be synthesized in a series of maps and reports which would give the basic public image of the area, the general visual problems and strengths, the critical elements and element interrelations, with their detailed qualities and possibilities for change. On such an analysis, continuously modified and kept up to date, a plan for the future visual form of the region could be based.

Directions for Future Research

The preceding critique, and many of the pages in earlier chapters, point to unsolved problems. Some next steps of analysis are quite obvious; others, even more important, are harder to grasp.

An obvious next step is to use the analytical technique described just above for testing a more adequate sample of the population. Conclusions from this work would be on much sounder ground, and a technique suitable for practical application could be perfected.

Our knowledge of the subject would also be enriched if comparative studies were applied to a greater range of environments than the three cities actually studied. Very new and very old cities, compact and sprawling ones, dense and sparse, chaotic and highly ordered environments, might all produce characteristic differences in their image. How does the public image of a village differ from that of Manhattan? Is a lake city easier to conceptualize than a railroad town? Such studies would produce a storehouse of material

7

B.

THE USE OF THE METHOD

In applying the basic concept of imageability to the American city, we have used two principal methods: the interview of a small sample of citizens with regard to their image of the environment, and a systematic examination of the environmental image evoked in trained observers in the field. The value of these techniques is an important question, particularly since one of the objectives of our study was the development of adequate methods. Two different questions are contained within this general one: (a) how reliable are the methods, how truthful are they when they indicate a certain conclusion? and (b) how useful are they? Are the conclusions valuable in making planning decisions, and is the effort expended worth the result?

The basic office interview consisted in its essentials of a request for a sketch map of the city, for the detailed description of a number of trips through the city, and for a listing and brief description of the parts felt to be most distinctive or vivid in the subject's mind. This interview was conducted first in order to test the hypothesis of imageability; second, to gain some rough approximation to the public images of the three cities concerned, which might be compared to the findings of the field reconnaissance and so help to develop some suggestions for urban design; and

third, to develop a short-cut method for eliciting the public image in any given city. In these objectives, the method proved reasonably successful, except that there are doubts as to the generality of the public image so gained, as will be discussed below.

The office interview itself covered the following questions:

1. What first comes to your mind, what symbolizes the word "Boston" for you? How would you broadly describe Boston in a physical sense?
2. We would like you to make a quick map of central Boston, inward or downtown from Massachusetts Avenue. Make it just as if you were making a rapid description of the city to a stranger, covering all the main features. We don't expect an accurate drawing—just a rough sketch. [Interviewer is to take notes on the sequence in which the map is drawn.]

3a. Please give me complete and explicit directions for the trip that you normally take going from home to where you work. Picture yourself actually making the trip, and describe the sequence of things you would see, hear, or smell along the way, including the pathmarkers that have become important to you, and the clues that a stranger would need to make the same decisions that you have to make. We are interested in the physical pictures of things. It's not important if you can't remember the names of streets and places. [During recital of trip, interviewer is to probe, where needed, for more detailed descriptions.]

b. Do you have any particular emotional feelings about various parts of your trip? How long would it take you? Are there parts of the trip where you feel uncertain of your location?
[Question 3 is then to be repeated for one or more trips which are standardized for all interviewees, i.e., "go on foot from Massachusetts General Hospital to South Station," or "go by car from Faneuil Hall to Symphony Hall."]

4. Now, we would like to know what elements of central Boston you think are most distinctive. They may be large or small, but tell us those that for you are the easiest to identify and remember.
[For each of two or three of the elements listed in response to 4, the interviewer goes on to ask question 5:]

5a. Would you describe _____ to me? If you were taken there blindfolded, when the blindfold was taken off what clues would you use to positively identify where you were?

b. Are there any particular emotional feelings that you have with regard to _____?

c. Would you show me on your map where _____ is? (and, if appropriate:) Where are the boundaries of it?

6. Would you show me on your map the direction of north?