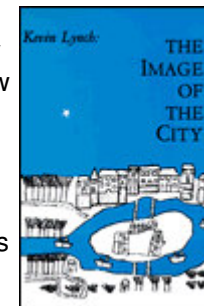




Kevin Lynch: City Elements Create Images in Our Mind, 1960 By Ethan Sundilson

Background

Kevin Lynch, born in 1918, was a significant contributor to city planning and city design in the twentieth century. Kevin Andrew Lynch was educated at Yale University, Rensselaer Polytechnic Institute, and most notably, Massachusetts Institute of Technology. At MIT, he went on to gain Professorship in 1963, and eventually earned professor emeritus status. Aside from research and teaching, Lynch was consultant to the state of Rhode Island, New England Medical Center, Boston Redevelopment Authority, Puerto Rico Industrial Development Corp., M.I.T. Planning Office, and other organizations. Throughout Lynch's outstanding career, he produced seven books. In his most famous work, *Image of the City* (1960) Lynch describes a five-year study that reveals what elements in the built structure of a city are important in the popular perception of the city. In his experimenting, he used Los Angeles, Boston, and Jersey City as case studies. By analyzing the results of this work, Lynch figured he would be able to observe specifically what about a city's built environment is important to the people who live there.



Innovation

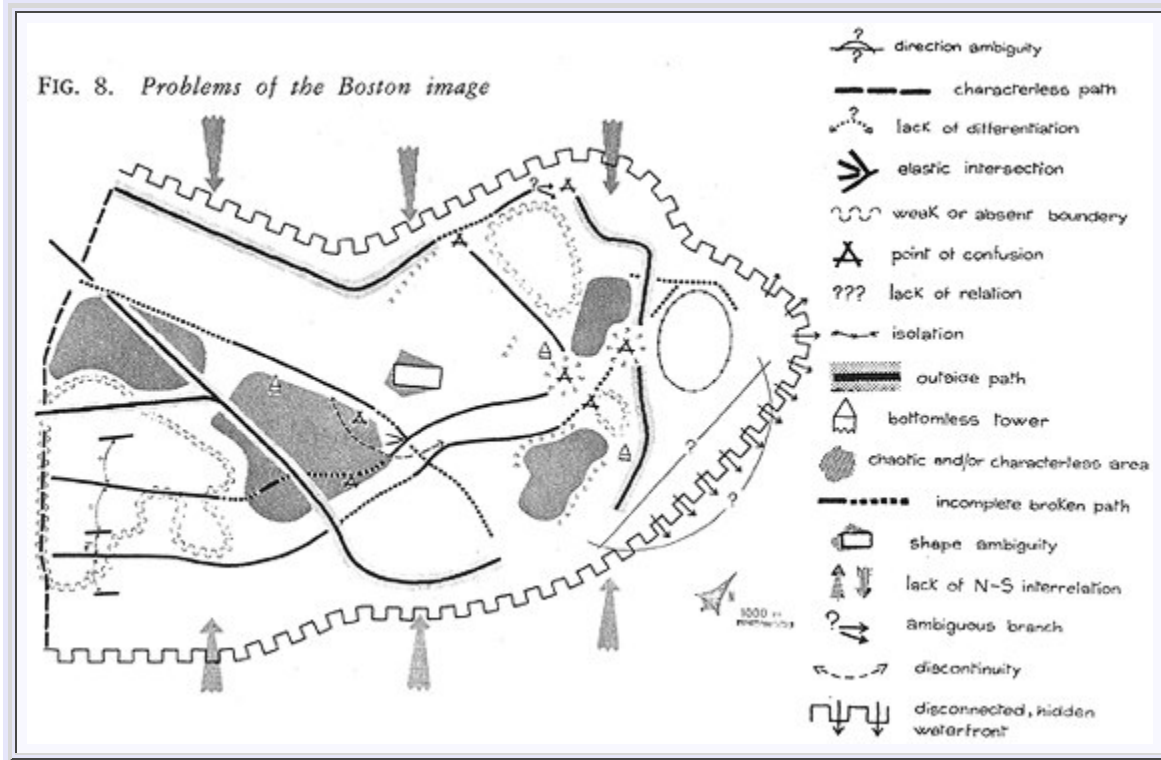
One of Lynch's innovations was the concept of **place legibility**, which is essentially the ease with which people understand the layout of a place. By introducing this idea, Lynch was able to isolate distinct features of a city, and see what specifically is making it so vibrant, and attractive to people. To understand the layout of a city, people first and foremost create a mental map. Mental maps of a city are mental representations of what the city contains, and its layout according to the individual. These mental representations, along with the actual city, contain many unique elements, which are defined by Lynch as a network of **paths, edges, districts, nodes, and landmarks**. First, paths are channels by which people move along in their travels. Examples of paths are roads, trails, and sidewalks. The second element, edges, are all other lines not included in the path group. Examples of edges include walls, and seashores.

Next, districts are sections of the city, usually relatively substantial in size, which have an identifying character about them. A wealthy neighborhood such as Beverly Hills is one such example. The fourth element, nodes, are points or strategic spots where there is an extra focus, or added concentration of city features. Prime examples of nodes include a busy intersection or a popular city center. Finally, landmarks are external physical objects that act as reference points. Landmarks can be a store, mountain, school, or any other object that aids in orientation when way-finding.

Lynch sought to determine place legibility by administering an experiment, which consisted of questionnaire surveys, and interviews. The survey included thirty people in a central area of Boston, and fifteen each in populous Jersey City and Los Angeles. Boston was chosen on account of it being a very vivid city, containing many unique features that are difficult to navigate through. Next, Jersey City was chosen for its lack of distinctiveness. Finally, Los Angeles was selected because of it being a new city having relatively original form. The interview that accompanied the survey included requests for descriptions of the city, along with sketch maps (a drawing of their mental map), and a description of an imaginary trip through the city. Lynch found some very interesting consistencies in their imaginary trips, such as people veering off course to go through a vivid part of the city, and most people mentioning water and vegetation with pleasure in their responses. Another consistency in people's descriptions was a way-finding problem that people had, most notably in Boston, that coincided with the parts of the city that contained confusions, floating points, weak boundaries, isolations, ambiguities, and lack of character or differentiation. In addition to Boston, parts of Jersey City and Los Angeles were each found to be difficult to orientate in, on account of features lacking distinctness and identity.

Lynch made several conclusions from people's responses in the experiment. Lynch took the areas that people found vivid and assigned these areas a high **imageability** ranking. Imageability, another term introduced by Lynch, is the quality of a physical object, which gives an observer a strong, vivid image. He concluded that a highly imageable city would be well formed, would contain very distinct parts, and would be instantly recognizable to the common inhabitant. He also explains that a well-formed city is highly reliant upon the most predominant city element, paths. Examples of well-designed paths may include special lighting and having clarity of direction (not being comprised of confusing or ambiguous turns). Similarly, edges, districts, nodes, and landmarks are favorable contributors to imageability if they are meaningful, distinct, and not confusing. These elements, when placed in good form, increase human ability to see and remember patterns, and it is these patterns that make it easier to learn.

Lynch's findings have been implemented globally in city planning operations in recent years. Whether a new city is formed, or existing ones are further developed, residents have benefited from the use of more imageable city elements and clearer form. However, more research is currently being pursued in the related field of spatial cognition. Present research methods include using virtual environment technologies to investigate many unexplored areas. By using virtual environment technology, the experimenter can manipulate the geometry of the elements in the environment as well as their location in the virtual world (in a real world environment these alterations would be next to impossible). Specific research includes: finding specific angles of elements in a city that allow for easier wayfinding, and also determining how people position their head and body in relation to their environment in navigation. Recent results from this research suggest that people visualize their source location best when both head rotations and body translations are in sync with their visual cues. The previous spatial cognition research is a good addition to Lynch's research, as it aids in helping to determine precisely what about a city allows for easier perception and more accurate mental maps for the city dweller.



Publications

A theory of good city form. Cambridge: MIT Press, 1981.

Managing the sense of a region. Cambridge: MIT Press, 1976.

Site planning. Cambridge: M.I.T. Press, 1971.

What time is this place? Cambridge: MIT Press, 1972.

The Image of the City. Cambridge: M.I.T. Press, 1960.

Related Works

Banerjee, Tridib, and Michael Southworth, editors, *City Sense and City Design: Writings and Projects of Kevin Lynch.* MIT Press, 1990.

Cartwright, Richard M. *The design of urban space.* London: Architectural Press; New York: Halsted Press, 1980.

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