

This article reviews major themes in the work of the late Donald Appleyard, who died suddenly in an automobile accident this past September. Written by his former research assistant, the article highlights his contributions to the field of environment and behavior, covering his research and publications, his teaching, and his professional career.

MAJOR THEMES IN THE WORK OF DONALD APPELYARD

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In September 1982, environmental psychologists lost one of their most outstanding colleagues, Donald Appleyard, age 54, when he was killed in a tragic high-speed auto accident in Athens, Greece. His work had long been an inspiration not only to environmental psychologists, but also to sociologists, architects, planners, engineers, and landscape architects. As a former graduate student, research assistant, and advisee of Professor Appleyard at the University of California, Berkeley, I was deeply saddened by his sudden death. This article is a small attempt to pay tribute to the work of Donald Appleyard, and especially to his major contributions to the field of environment and behavior.

Appleyard was educated at the Architectural Association in London, and at the Massachusetts Institute of Technology, where he received his masters degree in city planning. At MIT he began working with Kevin Lynch, and subsequently he taught there for six years. Though he moved on to Berkeley to accept a faculty position in the Departments

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of City Planning and Landscape Architecture in 1967, his relationship with Lynch remained a close one.

Through his classic book, *The Image of the City* (1960), Lynch's pioneering research in environmental cognition served as an inspiration for Appleyard's own research. As Appleyard (1978a: 551-552) later noted about Lynch's text: "Asking ordinary people what they perceived and felt about their cities was unheard of in the design fields at the time and still rather rare in planning. It broke out of the professional cocoon."

In 1963, along with Lynch and J. R. Myer, Appleyard co-authored *The View from the Road*, which applied concepts from *The Image of the City* to the design of freeway and highway systems. The book influenced several highways in America and elsewhere. Ideas from both books were expanded in Appleyard's later volume, *Planning a Pluralist City* (1976a). This important work applies the principles and concepts of environmental cognition to the design of the city of Ciudad Guayana, Venezuela. In one chapter, Appleyard refined Lynch's concepts of city imagery (see Appleyard, 1970).

Appleyard's predilection for studying the layperson's perception of the environment can also be seen in his most recent book, *livable Streets*, published in 1981. This work compares the experiences of living on three city streets having increasing levels of traffic. Among its key findings is that residents on the most heavily traveled streets were the least satisfied and knew the least neighbors (Appleyard, 1981: 70).

Historic preservation was another of Appleyard's research interests, culminating with his work, *The Conservation of European Cities*, which he edited in 1979. The book was based on a 1975 conference held in Rome on "Urban Conservation in Europe and America." It addresses a variety of issues confronting planners both in Europe and the United States, including living amid historical monuments, urban renewal conflicts, and citizen participation.

His numerous reports and monographs covered a series of six volumes dealing with the impact of the Bay Area Rapid Transit System on residential neighborhoods, co-authored with Frances Carp (Appleyard and Carp, 1973a, 1973b); a study of the city of San Diego, co-authored with Lynch (Appleyard and Lynch, 1975); urban design and architectural policies for Dodoma, the new capital of Tanzania; street management in Claremont, a college community some forty miles east of downtown Los Angeles; as well as a report published by the World Bank about environmental issues in the Mexico City area.

Along with Berkeley psychologist Kenneth Craik, Appleyard developed a new area of research in environmental simulation (Appleyard and Craik, 1978, 1979). Both scholars conducted innovative studies using the sophisticated Environmental Simulation Laboratory housed in the College of Environmental Design at UC Berkeley.

A major goal of the simulator is to improve the way in which proposed planning and design projects are communicated to the public. It also serves to provide a focus for assessing environmental impacts, particularly visual impacts mandated by the 1969 National Environmental Policy Act (NEPA), and for resolving environmental conflicts.

The lab features a moving television camera that closely recreates the experience of "walking," "driving," or "flying" over three-dimensional scale environmental models. By viewing the model through color films, videotapes, and closed circuit television, citizens can gain a more accurate picture of proposed environmental changes than through the use of more conventional devices such as sketches, perspective drawings, illustrated plans, and photographs of models.

Appleyard's most recent writings were in the budding area of environmental symbolism—exploring the hidden meanings and associations that people give to the landscape and the built environment. In an insightful piece called "Urban Trees and Forests: What Do They Mean?" Apple-

yard (1978c) examined the different sensory, instrumental, and symbolic meanings that form the basis of design, management, and political decisions about trees. People may perceive trees as shaped ornaments; as incense; as a mask over ugliness; as shade, shelter, or protection; as fire hazards; as producers of fruit, nuts, and leaves; as wood; and/or as places to climb and hide. Others may view trees as symbols of their own personalities or as symbols of city or national identity. He argues that by understanding the different meanings of urban trees, we might help clarify and resolve conflicts about their use.

The role of symbolism in environmental conflicts is addressed in another of Appleyard's (1979b, 1979c) recent works, namely an article entitled "The Environment as a Social Symbol," as well as in a working paper, "Patterns of Environmental Conflict: The Escalation of Symbolism," in which he proposes a communications model of environmental actions that helps to explain how symbols are transmitted and interpreted (and often misinterpreted). His (1978b) analysis of People's Park, the Berkeley Neighborhood Traffic Plan, and San Francisco's high-rise building controversy helps shed new light on several Bay Area environmental conflicts (Appleyard and Fishman, 1977).

Appleyard's exploration of symbolism was not restricted, however, to city-scale issues. He has a special interest in the symbolic meaning of the home, which he distinguishes from distant environments. His working paper (Appleyard, 1979e), "Inside vs. Outside: The Distortions of Distance," delivered at the Second Annual Symposium on Environmental Psychology at the University of California, Irvine last April, outlines major differences in the ways in which people perceive familiar and unfamiliar places. Some of the concepts in this paper, such as the search for authenticity in distant environments, are an outgrowth of his interest in the study of tourism and in the fascinating work of MacCannell (1976). Furthering the line of inquiry begun by Cooper (1974), Appleyard's (1979d) article on "Home" analyzes

how the home, its location and visibility, its interior and exterior appearance, as well as its surroundings and maintenance communicate messages to ourselves and to others.

One of Appleyard's greatest assets was his ability to communicate to different audiences. While helping to establish priorities for research in environmental psychology (Appleyard, 1973), he also informed planners of recent developments in environment and behavior (Appleyard, 1977). His bias was toward applying environmental psychology, especially in urban design and planning. He probably worked more closely with planners than anyone else in the environment and behavior field. Much of his work is also read and applied by transportation engineers (Appleyard, 1976b). His writing style was always simple and direct, and usually easy enough for a layperson to understand. Perhaps in this respect he followed the example of his mentor, Kevin Lynch.

At the time of his death, Appleyard left three manuscripts in progress. *Identity, Design and Place*, devoted to environmental symbolism, may be published posthumously. Plans continue for the publication of *Landscape Planning/Design: A Reader*, edited with Clare Cooper Marcus and Thomas Priestley. Work on a collection of reports on environmental simulation techniques had been underway with Peter Bosselmann and Kenneth Craik. The volume, *Understanding Media: Experiments in Public Communication*, is to be edited and completed by Bosselmann.

Altogether, this prolific writer authored and edited over 100 articles and professional reports, eleven books, as well as producing nine films and videotapes, the latter of which covered, among other things, the Marin County simulation model, the history of high-rise architecture in San Francisco, and a vision of San Francisco in the year 2000.

Appleyard's teachings at Berkeley enriched his students in a variety of areas. His core graduate course on "The Urban Environment" introduced students to environmental-behavior issues in cities. He supervised several fascinating

student research projects, a few of which vividly come to mind: evaluations of downtown Berkeley and an analysis of why many local residents don't use it, a study of Berkeley bicyclists and their evaluations of bikeways, and residents' perceptions of earthquake danger in North Berkeley.

Appleyard also team-taught a graduate seminar with Kenneth Craik, each year focusing on a different aspect of environmental psychology. Both Craik and Appleyard encouraged scholarly exchange among their students through a series of informal get-togethers held alternately at the two professors' homes. These sessions provided a forum for students to meet visiting guests to the university and to discuss and critique each other's research.

Appleyard's urban design courses, taught with Allan Jacobs, former Planning Director for the City of San Francisco, covered both theoretical and applied aspects of urban design, using case studies in the Bay Area. He also taught courses in environmental simulation and plan preparation.

In addition to his teaching duties at Berkeley, Appleyard served as a visiting lecturer at universities in over forty countries, including Italy, Germany, England, Greece, Japan, India, and the People's Republic of China. Professionally, he worked in architectural and planning practices in England and Italy, as well as here in the United States with, among others, Hugh Stubbins Associates in Cambridge, Massachusetts, and Wurster, Bernardi and Emmons in San Francisco. He consulted with a number of organizations, including the architectural firm of Skidmore, Owings and Merrill on the Baltimore freeway system, San Francisco State University on its campus plan, the San Francisco Department of City Planning on the famous Urban Design Plan, the Southern California Association of Governments, the United Nations, and the World Bank.

Appleyard's pioneering work in environmental psychology, city planning, and urban design caught the attention of countless academicians, professionals, and laypersons. In

my own experience working with him, I was constantly amazed at his ability to supervise several different research projects, prepare for his teaching, do his consulting work, and continue writing at a steady pace, all at the same time. He leaves behind a gap that is all but impossible to fill.

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