

# Public Places and Spaces

EDITED BY  
IRWIN ALTMAN  
University of Utah  
Salt Lake City, Utah

AND  
ERVIN H. ZUBE  
University of Arizona  
Tucson, Arizona

PLENUM PRESS • NEW YORK AND LONDON

## Control as a Dimension of Public-Space Quality

MARK FRANCIS

### INTRODUCTION

Public-space quality is attracting considerable attention. The number of new spaces has greatly expanded. At the same time, people are using existing and new public spaces in increasing numbers. As a result, the relationship of public spaces such as parks, plazas, and streets to the quality of urban life has attracted intense interest on the part of public officials, researchers, designers, and citizens (Hiss, 1987; Levine, 1984).

Several critical questions surround this public interest in the form and meaning of public space. How do public spaces support public culture and outdoor life? How does public space affect people's overall experience and satisfaction of living in towns and cities? What role do public spaces play in what Gehl (1987) has come to call the "life between buildings"? How can public spaces be best designed and managed to satisfy human needs and expectations? These concerns point to the need for expanded theory and improved practice in public space design and management.

A multiplicity of dimensions regarding public-space quality have been identified through past research and design and management practice (Francis, 1987b, 1988a; Goffman, 1963; Whyte, 1980). Several of these critical ingredients of successful public space are reviewed by other contributors to this volume. The purpose of the present chapter is to examine one important yet poorly understood dimension of public-space quality—people's right to control their use and enjoyment of public places. User control of public space is emerging

---

MARK FRANCIS • Department of Environmental Design, University of California-Davis, Davis, CA 95616. Research for this chapter was supported with grant #CA-D-EHT-4143-H from the University of California Agricultural Experiment Station.

from psychological and political theory and environmental design research as an essential ingredient for the success of urban places. It is part of an evolving public culture in the United States, where people are using outdoor space in greater numbers, with increased intensity, and for a wider range of activities than previously experienced in neighborhoods, on streets, and in urban centers.

Public spaces are participatory landscapes. Through human action, visual involvement, and the attachment of values, people are directly involved in public spaces. People claim places through feelings and actions. The public realm, as Lofland characterizes public space, is a publically perceived, valued, and controlled landscape. As pointed out by the Lennards (1984):

a public space . . . is at once both stage and theater, for in public the spectators may at any moment choose to become actors themselves. Successful public places accentuate the dramatic qualities of personal and family life. They make visible certain tragic, comic and tender aspects of relationships among friends, neighbors, relatives or lovers.

It is this direct or symbolic human involvement that invites an examination of control as a critical element of the values attached to urban spaces.

This chapter considers several aspects of user control and participation in public space. The evolving nature of public life is first examined to point to the effect of changes in demography and leisure time on the use of public environments. The shift of designers away from a romanticized European image of public space to a more Americanized form of public environment is discussed. The differing and often competing interests of various publics such as space managers, users, city officials, and designers in controlling spaces is introduced to show how control affects American public space design and management.

Control as a psychological construct and participation concept is reviewed to point to the individual and social benefits of perceived and real control in public environments. The direct contribution of personal control is outlined utilizing a conceptual framework advanced by Lynch (1981) for making "good" urban environments. Lynch's five dimensions of control—presence, use and action, appropriation, modification, and disposition—are discussed in terms of their relevance to public-space quality. Gardening is employed as an example to illustrate how user control is an increasing part of residential and city life.

Several controversial issues are also reviewed, including the conflict between private interests and public needs, the growing role of public space as home for the homeless and other disadvantaged groups, and the effect of control on perceived safety. Design and management techniques that increase user control of streets, parks, and plazas are also reviewed. The chapter concludes with a discussion of some future policy and research implications of increasing user control over public space, including a research agenda for control with respect to public environments.

## PUBLIC SPACE AND URBAN LIFE

Public spaces reflect ourselves, our larger culture, our private beliefs, and public values (Berman, 1986). Public space is the common ground where civility and our collective sense of what may be called "publicness" are developed and expressed. Our public environment serves as a reflection or mirror of individual behaviors, social processes, and our often conflicting public values.

An intense scholarly debate has raged for some time over the growth or decline of public life and culture. Strong positions have been drawn both for and against an increase in publicness in American life. Scholars such as Lofland (1973), Sennett (1977), and Brill (in Chapter 1, this volume) argue that American life has become more specialized, leading to a largely privatized society. Others, including Fisher (1981) and Glazer and Lilla (1987), observe that there is an expanding public culture and increased appetite for public space. This claim is supported by the commercial success of new festival marketplaces developed recently in many city centers and the increase in retail sales in downtowns and malls. Such evidence points to a renaissance taking place in both older as well as new types of public open spaces.

How does public life affect urban public space? Public life is evolving as part of a growing reaction to the privatization of American life. The isolation of suburban living, impersonal work environments, and the increased stress of modern life all contribute to an increased appetite on the part of many people for public space. The park or mall becomes a retreat, a form of refuge from the hectic daily schedule of appointments, faxing, car pools, and deadlines.

Many Americans still do not yet know how to use public space. People are often uncomfortable lingering for hours in a plaza watching the "place ballet," as Seamon and Nordin (1980) have characterized the changing life of dynamic public places in Europe. The behavioral rules are not clear for many types of public space. They are often limited at present to office workers sitting on benches during lunchtime periods and undesirables being discouraged from lingering for too long in a downtown plaza.

One of the most predominant forms of current public-space behavior can be characterized as recreational shopping, now a popular American family activity. The evening or weekend spent shopping in the mall or downtown marketplace is part of public life (Prus, 1987). Private developers have been quick to understand this consumer-oriented leisure activity by providing ample opportunities for food, performers, and benches. Public amenities and a highly articulated physical environment are used to support the browsing and buying behavior of recreational shopping. The rediscovery of the farmers' market, as reported by Robert Sommer in his chapter in this volume, is part of this trend, where people come together at the local park or downtown parking lot to buy fresh vegetables, meet friends, and exchange news with neighbors. Shopping is an important but still poorly understood aspect of public-space culture.

### THE CHANGING FACE OF PUBLIC SPACE

Changes in public life are transforming the design and management of public spaces. Existing spaces have become more controlled by owners, managers, and designers. Who uses spaces has become a primary concern of private-space managers, with design and management being used in favor of affluent users and against less desirable users such as teenagers, the elderly, and the homeless.

The designer's romanticized view of European public space has also shifted with the realization that the Italian piazza does not fit American public-space culture (Brill, Chapter 1, this volume). As Chidister (1988, p. 40) points out, "Few, if any, of today's plazas achieve the concentration of vital political, commercial, religious, and social functions that characterized the medieval piazza. Today's public spaces are more amenity than necessity." Increased understanding of the limits of the "Euro-Urbanist" (Brill, Chapter 1, this volume) view of American public space has led some to a search for more appropriate design models for public space (Behl, 1987; Glazer & Lilla, 1987).

At the same time, new types of public spaces have been developed that respond to the changing public life of cities (Francis, 1987b). To address manager and owner concerns about undesirable uses and users, new types of spaces have been developed that often restrict public access and use. Examples include the lockable park that is fenced and closed at night and on weekends and the indoor atrium plaza designed to be visually separate from the street and patrolled by guards and closed-circuit cameras.

At the neighborhood scale, numerous community parks and gardens have been developed by neighborhood residents in response to the failure of some traditional public parks and playgrounds (Francis, Cashdan, & Paxson, 1984). These community-controlled sites also restrict access by fences and locks but several hundred keys are often checked out to neighborhood residents for a typical park. Community-controlled sites often experience equal or greater use and satisfaction than nearby public parks (Francis, 1987c), as was the case with a community garden and public park in downtown Sacramento, where the garden was found to be more highly valued by both users and nonusers on dimensions of beauty/visual quality, quality of facilities, and safety than the public park.

### THE PUBLICS OF PUBLIC SPACE

A discussion of public space raises the question, Who is public space for? In reality, public space is the meeting ground of the interests of many diverse groups. Studying the needs and agendas of these different publics is important for understanding how public space is developed, used, and valued (Vernez-Moudon, 1987).

Zube (1986) distinguishes between three types of publics involved in the



Figure 1. Jefferson Market Garden—a community-controlled and -developed garden in New York City.

public landscape. The first are “professionals,” who are involved in the development of plans and policies. The second he calls the “interested public”—those who perceive the plans as directly benefiting them. This group frequently has a direct role in shaping public space. The “general public” is the third category and it includes people who do not participate in making the plans or policies.

Using this framework as a starting point, a finer distinction of publics for public space can be proposed. At least five distinct groups or publics can be identified: *users*, *nonusers*, *space managers* and *owners*, *city officials*, and *designers* (see Table 1). Each has its own set of interests in controlling public space.

#### USERS

*Users* are those who frequent public places and rely on them for passive and active engagement. Rarely are they asked their opinions or directly involved in designing or managing public spaces. The social failure of a number of public spaces points to the need to better articulate the needs of users and directly engage them in public-space design.

An example where lack of attention to user needs led to the eventual demolition of a redesigned plaza is Richard Serra's *Titled Arc* sculpture in the Federal Plaza in lower Manhattan (Storr, 1985). In this commissioned public art project designed without user input, the artist erected a large curved metal structure in the center of the plaza blocking direct access to the building entrance. The building occupants protested, eventually winning a court case to have the sculpture removed. Had the designer simply spent a lunchtime informally talking to and observing users of the plaza, he might have recognized the inappropriateness of his proposal.

#### NONUSERS

Nonusers are another important and often neglected public space group. Many people pass by parks, plazas, and atriums on foot, in buses, and in cars without ever becoming users. How these sites are perceived is important for their overall value as public spaces. Studies of people's perception of places (Im, 1984; Zube, Sell, & Taylor, 1982) point to the importance of visual elements in landscape quality. A common problem with some new public places such as lockable parks and atriums is that they deny visual access to nonusers.

#### SPACE MANAGERS AND OWNERS

Space managers and owners represent a powerful and influential public space group. Either public (for example, a redevelopment authority) or private (for example, the owner of a building), these groups hire designers, strongly influence the assumptions that guide their work, and are responsible for the daily functioning of public spaces. In the past, some building owners have been interested in nonuse, discouraging public access to or ability to use a public place. Grace Plaza in New York City is a well-documented example (Carr, Francis, Rivlin, & Stone, in press). William Whyte (1980) has also documented several plazas that were purposely designed to discourage use by not providing comfortable seating.

TABLE 1. A FRAMEWORK OF THE PUBLIC INTERESTS IN PUBLIC SPACE

Major publics	Types	Public-space interests
Users	Age	Use
	Children	Recreation/leisure time
	Teenagers	Eating
	Adults	Shopping
	Elderly	Passive engagement
	Sex	Active engagement
	Male	Comfort
	Female	Visual quality
	Occupation/economic	
	Service	
Nonusers	Professional	Visual quality
	Unemployed/homeless	Effect on
		Local economy
		Tax base
Managers/owners	Developers	Image
	Building owners	Cost
	Banks	Profit/return on investment
	Tenants	Maintenance
	Space managers	
	Guards	
	Investors	
	Stockholders	
Public officials	Planners	Economic development
	Zoning officials	Design quality
	Public-works engineers	Relationship of projects to
	Police department	standards, codes, and
	Fire department	guidelines
Designers	Review bodies/commissions	
	Landscape architects	Technical
	Architects	Aesthetic quality
	Planners	Client acceptance
	Urban designers	Liability
	Technical consultants	Recognition
		(awards, published projects)

## PUBLIC OFFICIALS

Public officials are charged with the overall quality of the public landscape of towns and cities. City agencies typically responsible for public spaces include Departments of City Planning, Parks and Recreation, Real Estate, Public Works, etc. These agencies are faced with the difficult task of developing and maintaining new parks, streets, and squares as well as reviewing proposals for privately developed ones. An example of the complex and often competing



role of public agencies in public space policy can be seen in New York City, where over a dozen agencies are involved in open-space policy. Many of these agencies were working against one another. Departments of Park and Recreation, Planning, General Services, and Housing Preservation and Development are all involved in development of parks, community gardens, and waterfront areas. Most are not familiar with each other's projects and efforts are often duplicated. At the same time, the New York City Department of Real Estate has sold city-owned property slated for open-space development at public auction to private developers for housing. These problems led the Mayor to appoint an interagency Open Space Task Force to better coordinate city policy. Other cities such as Boston and San Francisco have also established cross-departmental groups to better coordinate open-space and housing policy.

The trend to give private developers greater responsibility for providing open spaces has presented public officials with a difficult challenge. For example, indoor atrium spaces are being developed in many cities as part of the official requirement for providing public space. Yet many of these places are not accessible to the public. This led the City of New York to require that building owners post signs stating that spaces were open to the public. Another example of the complex relationship between public and private interests in public-space management can be seen in a recent controversy over Bryant Park in midtown Manhattan. The New York City Park Department developed an agreement with a private nonprofit corporation to take over the management of the park. The group then proposed allowing a private developer to build a large and exclusive restaurant in the park. After intense debate, the proposal was defeated by environmental groups; however, management of Bryant Park remains in private hands.

#### DESIGNERS

Designers, such as landscape architects, architects, and urban designers, play an influential role in shaping public space. Design often defines the behavioral rules of public space, communicating what is allowed and what is forbidden in open spaces. Fences, gates, edges, surfaces, and lack of amenities can communicate strong messages to users about the lack of hospitality of a space. On the other hand, a water feature that encourages touching, comfortable benches, and shade trees on a hot day can invite use.

#### CONTROL AS AN ENVIRONMENTAL CONCEPT

The goal of public control of the environment, as pointed out by J. B. Jackson (1984), is to "make favorable differences in the lives of the public." There is a long history in the United States of political and legal protection of the quality of the public environment. Examples of laws and regulations pro-

tecting the public landscape include the zoning of land use, general plans that control density, and design guidelines that control building heights.

Control of the public environment grows out of a tradition of community activism in the United States concerned with the enhancement of the civic environment (Zube, 1986). For example, in the late 19th century, numerous visual improvement societies existed for the protection and enhancement of public places. Local groups formed for the promotion of outdoor art and the development of town parks. These groups were also strong advocates for other types of civic improvements. Zube (1986) points out that by 1880 there were over 200 rural and community improvement associations in New England with more in other states. Cranz (1982) traces the influence of local concern for public health and improvement of the city in the early 20th century to the rise of the public playground, gymnasium, and schoolyard. The "city beautiful" movement was part of this social movement. Control as an environmental concept grows out of this tradition.

Environmental design research has also contributed useful information on the importance of the public environment. Research in the 1970s by William Whyte (1980) on use of urban plazas in New York City and subsequent studies (Gehl, 1987; Project for Public Spaces, 1981; Chidister, 1986) in diverse American and European cities identifies use as an important prerequisite to public-space quality. This perspective, simply stated, is that when a public space is heavily populated, it is successful.

However, a significant problem with use as a major indicator of success is the fact that activity alone is not a good gauge of the public values attached to a space. For example, the lunchtime use of an office tower plaza may be the result of a lack of meaningful alternatives. The space may be occupied but not loved. It is this deeper attachment to place that is ignored by a central focus on use as a measure of satisfaction.

More recently, concepts such as environmental meaning or one's connectedness to a place have been advanced as an important dimension of good public spaces (Carr *et al.*, in press; Francis, 1988a; Rapoport, 1982). The attachment of meaning to a public space can occur at several different levels. For example, human connectedness to a place can be at the individual level, as with a person experiencing a special event such as a wedding or memorable concert in a town park or public garden. Meaning can also be attached by a group to a public place, such as teenagers placing value on a certain street corner or an ethnic group's tradition of celebrating a festival on the same street at the same time every year. Meaning can also be at a national level as in the case of the millions of Americans and others who celebrate New Year's Eve in Times Square in New York City in their minds and through watching the events there on their television sets.

Another aspect of the attachment of meaning to a public space is through direct involvement in the designing or building of a place. Many examples of public spaces being designed with public participation now exist and those that have been documented through case study research point to the benefits of design participation (Iacofano, 1986). A current example is the design process

for the North Park in Battery Park City in lower Manhattan. Gary Hack and Stephen Carr of Carr Lynch Associates are engaging residents in the design of the park through a variety of participatory techniques. The developers of the park, Battery Park City Authority, report that this participatory process has enhanced the sense of attachment of residents to this new, large-scale community. A similar participatory process used by Davis Design Research to develop a master plan for the expansion of Central Park in Davis, California, has resulted in the fostering of a sense of local ownership and advocacy for the master plan.

Direct involvement of users in the construction and maintenance of a place also may enhance meaning or attachment to a public place. Hart (1978) has documented the importance of children's building and modification of the landscape in child development. Hester (1985) involved Manteo, North Carolina, residents in the design and construction of a boardwalk along the town's waterfront. He found that their involvement in construction added to increased use of the waterfront and greater satisfaction with the project. Similar results have been documented in the case of community-built gardens in several New York City (Francis, Cashdan, & Paxson, 1984) and Boston (Warner, 1987) neighborhoods.

An ingredient of meaning is the concept of control or people's ability to directly influence their own use and experience of a place. In one of the most comprehensive discussions of the importance of freedom and control in open spaces, Carr and Lynch (1981) argue that user satisfaction is determined largely by one's ability to control one's experience of the place. They cite examples such as the territorial claims over open spaces by some groups, such as drug dealers, which in turn deny others their right of access and use.

### CONTROL AS A PSYCHOLOGICAL CONSTRUCT

Control as a psychological concept has been a focus of considerable research and theoretical attention (Langer, 1975; Lefcourt, 1982; Wortman, 1975). The desirability of perceived control in a variety of situations has been found to be a prerequisite for a positive experience for some people (Burger & Cooper, 1979; Dougherty, 1988). Recently, Langer (1983) has conceptualized control to mean the "mindful process of mastering," which differs from previous views of control as achieving an outcome. Control has been defined in various ways in the social sciences, including the mindful process of mastery (Langer, 1983); efficacy (White, 1959); internal versus external control (Lefcourt, 1982); and process versus decision control (Tyler, Rasinski, & Spodick, 1985).

In person-environment studies, personal control has been found to be an important mediating variable in reducing stress (Ulrich & Simons, 1986) and the perception of crowding (Baldassare, 1979; Saegert, Mackintosh, & West, 1975). These studies support Lynch's (1981) suggestion that the environmental "fit" of a person and an environment is enhanced by the ability of a person to directly control or modify his or her environment. Retreating to a doorway at

a crowded bus stop or turning away from the person next to you on a crowded subway are examples of ways people adapt environments to fit their needs. When the ability to control the environment is reduced or eliminated, as in the case of an overcrowded apartment or noisy office environment, negative experiences such as stress or social withdrawal increase.

Territoriality is one key dimension of control. As defined by Altman (1975, p. 106), "Territoriality involves the mutually exclusive use of areas and objects by persons and objects." Brown (1987) reviews the structural characteristics of territoriality. Territories, she suggests, are a form of "markings" that promote display of personal identity and regulate social systems.

Altman (1975) distinguishes three types of territories that differ on dimensions of duration of occupancy and psychological centrality. Primary territories are settings such as homes and bedrooms, which are occupied for long periods of time and are central to their occupants. The last two types form the basis of a discussion of public space. Secondary territories such as a bar or neighborhood park are somewhat more accessible to a greater number of users but regular occupants exert some control over the space. These spaces take on a more collective ownership and shared public control. The third type is a public territory such as seats on a bus or a table in a restaurant, where occupancy is often determined on a "first come, first served basis" and for brief periods of time.

Applied to public space, the claiming of space by drug dealers or teenagers is an example of spatial territoriality in an urban park. For example, in a study and redesign of Exxon Mini Park in midtown Manhattan, Project for Public Space (PPS, 1981) found drug dealing to be a barrier to use of the plaza. The use of the plaza entry by drug dealers at lunchtime contributed to both underuse and misuse of the plaza. A redesign by PPS introduced food, comfortable seating, and a physical layout that provided for better visual surveillance by the plaza managers. As lunchtime use increased, the drug-dealing behavior shifted to other locations outside the plaza.

One reason people may be interested in more directly controlling places they use is that many parts of their everyday life are beyond their direct control. In a society where life has become anonymous and privacy is a legally guarded concept, some individuals and groups are working to create settings for greater public interaction and enjoyment. The concept of publicness or one's right to use the public environment has emerged as a central issue in urban design.

## CONTROL AS A PARTICIPATION CONCEPT

Direct participation in designing, building, and managing environments has been found to increase user satisfaction in a variety of spaces including communities, the workplace, and open spaces such as parks and playgrounds (Wandersman, 1981). The effects of participation need to be more fully studied by environmental design researchers (Francis, 1985), but, clearly, participation

in design has been found to increase a sense of attachment and ownership for many participants. For example, Iacofano (1986) reviewed several environmental design projects and found that participation was instrumental in fostering a sense of personal growth, self-actualization, and political efficacy.

Control has been advanced as an important goal of participation. Arnstein (1969), in an early and widely cited framework of citizen participation, suggests several levels of participation. In her "ladder of participation," citizen control is the ultimate goal of participation, followed by delegated power, partnership, placation, consultation, informing, therapy, and finally manipulation as decreasing degrees of participation and citizen power.

Hester (1987) cautions that participation does not always lead to equity and environmental justice. Like Arnstein, he points out that participation without real control over decision making can often lead to decreased environmental equity. Pateman (1970) argues that real environmental control implies a sharing of power. She attributes the limits of participation to basic structural problems of power and politics that often work against decentralized control over decision making. Politics and power have important influences on control.

This political view is useful for a discussion of public-space quality because it points out that control implies a sense of individual or group ownership or stewardship. When the degree of real or perceived control is limited, the amount of perceived responsibility over a place may be limited. For example, perceived control may reduce littering in a public plaza or reduce teenage graffiti in a neighborhood park by offering users a sense of caring for a place. Thus participation becomes a tool to achieve perceived control in public places.

#### CONTROL OF PUBLIC SPACE: A DEFINITION AND CONCEPTUAL FRAMEWORK

Kevin Lynch, in *Theory of Good City Form* (1981), offers a useful starting point for defining the importance of control in quality of place. He suggests that spatial control—or its absence—has strong psychological consequences such as contributing to anxiety, satisfaction, and pride. He proposes five forms of spatial control: presence, use and action, appropriation, modification, and disposition. A brief review of these rights is useful in understanding how control can be provided for in public space.

*Presence* is the right of access to a place. Without access, use and action are not possible. *Use and action* involve one's ability to use a space. *Appropriation* allows users to claim ownership, either symbolic or real, of a site. *Modification* is the right to change a space to facilitate use. *Disposition* is the ability to transfer one's use and ownership of a public place to someone else. Together, these spatial rights provide a conceptual definition of control in public space.

Following Lynch's framework, a preliminary definition of control of public places can be developed. *Control is the ability of an individual or group to gain access to, utilize, influence, gain ownership over, and attach meaning to a public place.*

TABLE 2. DIMENSIONS OF CONTROL IN PUBLIC ENVIRONMENTS

• Individual	• Group
• Symbolic	• Real
• Temporary	• Permanent
• Inclusionary	• Exclusionary
• One time	• Continuous

When conflicts arise between groups or individuals with competing interests, control becomes a process through which conflicts are identified, negotiated, and resolved.

Control can be either individual or group, as in the case of seniors or teenagers gathering in a park. Control can be real, as in the case of a group owning a site, or symbolic, as in a "Friends of the Park" group that takes on management responsibility for an open space. Control can also be temporary, existing for only certain times of the day, week, or year, or permanent, as in the complete control of a space. Control can be for one time only or continuous over a long period of time. Control can include or invite people into the process or place. It can also be exclusionary, restricting opportunities for involvement or use. Table 2 shows some dimensions of control in the public environment.

#### CONTROL IN THE PUBLIC LANDSCAPE: THE EXAMPLE OF GARDENING

The role of control in developing a satisfactory relationship to public space can be seen in one example—the growing interest in gardening as a recreational activity. A 1987 Gallup Poll found gardening to be the most popular of outdoor recreation activities surpassing jogging, swimming, fishing, and bicycling (National Gardening Association, 1987). Over 74 million American households reportedly garden, many on community sites. Americans spent \$17.4 billion on their lawns and gardens in 1987. This represented a 23% increase from 1986 spending levels. The sharp increase in the number of garden supply and seed catalogues is further evidence of the increased public interest and involvement in gardening (Francis & Hester, 1987).

Several studies have begun to point out the psychological and restorative benefits of gardens and gardening (Altman & Wohlwill, 1983; Francis 1987c; Kaplan, 1973). Kaplan's study of community gardens in Ann Arbor, Michigan, found that gardening produced increased self-esteem and contributed to satisfaction with other aspects of people's lives. Kimber (1973), in a study of Puerto Rican gardens, reported that "gardens . . . represent social territories in which persons define their own places and express their self images" (p. 7).

This sense of symbolic ownership and control is a major motivation in the increasing number of community garden projects in U.S. communities. In a

TABLE 3. SOME CONCEPTUAL DIFFERENCES BETWEEN A COMMUNITY-CONTROLLED COMMUNITY GARDEN AND A CITY-CONTROLLED PUBLIC PARK<sup>a</sup>

Public park	Community garden
<ul style="list-style-type: none"> <li>• Passive</li> <li>• Quiet/relax</li> <li>• Be alone</li> <li>• Clean/neat</li> <li>• To look at</li> <li>• Publicly controlled/managed</li> <li>• Permanent</li> <li>• Green attracts people</li> <li>• Liked</li> </ul>	<ul style="list-style-type: none"> <li>• Active</li> <li>• Activity/work</li> <li>• Get together</li> <li>• Messy but cared for</li> <li>• To participate in</li> <li>• User-controlled/managed</li> <li>• Temporary</li> <li>• People attract people</li> <li>• Loved</li> </ul>

<sup>a</sup> Adapted from Francis (1987c).

study of ten community-developed garden and park sites in New York City (Francis *et al.*, 1984), the desires to improve the appearance of the neighborhood and to grow fresh vegetables and flowers were the most frequently mentioned reasons people reported for getting involved in these projects. This intimate contact with and control over nature is one way urban residents create a sense of place for themselves. Other studies have identified as motivation both the visual preference for natural elements and vegetation (Schroeder, in press; Ulrich, 1979) and the active engagement gardening offers to people (Kaplan & Kaplan, 1987).

Community gardening as a human activity illustrates Lynch's framework. A garden must invite presence and be accessible. The process of gardening is both use and action—occupying a space and changing it. The gardener appropriates the space and directly modifies it through planting, pruning, and harvesting. The gardener is free to transfer the real or symbolic ownership of his or her plot to others.

In the previously cited study comparing perceptions regarding an adjacent community garden and public park in downtown Sacramento, control was found to be a key reason why both users and nonusers placed higher value on the gardens than the park (Francis, 1987b). Although fenced and locked, the gardens were valued by nonusers because they communicated a sense of caring for a place, something not communicated by the public park. Table 3 summarizes some conceptual and perceived differences between public parks and community gardens (Francis, 1987b).

The garden has also become part of the workplace with the advent of the employee garden popular in some corporate environments. For example, two insurance companies in Marin County north of San Francisco, Fireman's Fund and Amex Life Assurance Company, have set aside space for employee gardening. The garden site includes 15 plots but that does not satisfy the demand by employees who want space to raise vegetables and flowers. The companies put up the fence and supply the water; corporations such as Hewlett-Packard

in Palo Alto also have established employee gardening programs as part of their corporate landscape.

The expanded role of the urban garden as public space illustrates how gardens are becoming integrated into public life (Francis, 1988c). The garden is becoming part of the park, the plaza, the waterfront, the hospital, the homeless shelter, and housing for the elderly.

### SOME CONTROL ISSUES WITH RESPECT TO PUBLIC SPACE

There are several control issues of concern to public-space users, designers, and managers. They include the growing privatization of public space by corporations and building owners, the increasing use of public spaces by the homeless and other disenfranchised groups, and the role of user ownership and accessibility in satisfactory relationships with public space. These issues help to illustrate the different ways control influences public space perception and use.

#### PRIVATE INTERESTS VERSUS PUBLIC NEEDS

Public spaces are becoming increasingly privatized by owners and managers (Kinkowski, 1981). The privatization of open space raises basic questions regarding what a public space is for and who it serves. Private interests, including merchants, bankers, developers, and property owners, are actively involved in the making and managing of public spaces. These groups frequently exert strong influence over public-space design and policy.

An example of how control relates to open space is a proposal to build a multistory building on the site of the New York City Coliseum, located on the southwest corner of Central Park. The building, as originally proposed, would cast a large shadow over the park and critics argued that this would change the park's use. Some cities such as San Francisco have adopted tough policies to guarantee solar access to existing public spaces, but New York City has not, pitting development interests against park advocates. Only after the Municipal Arts Society provided a simulated photograph showing the shadow cast over the park did the city force the developers to scale back the project. People's right to solar access and thus enjoyment of public space promises to continue to be a major urban policy issue in the future.

#### PUBLIC SPACE AS HOME

Public space has become home for many people. Although there have always been homeless people in public spaces in cities, the homeless are populating parks, open plazas, and streets in increasing numbers. A current example is Golden Gate Park in San Francisco, which is permanent home to some people who live in the park's wild areas and in vans and autos on its perimeter.





Figure 2. Public space as home. Fig Tree Park in Santa Barbara, California.

Cities such as Los Angeles and New York are struggling to find better solutions to housing for the homeless, yet the problem is still growing and there are no clear answers. Downtown Sacramento is redesigning many of its downtown open spaces to exclude homeless people without planning or concern for alternative settings or shelter. One large-scale attempt to solve the problem was the urban campground for the homeless constructed in Los Angeles. Only after being compared to a modern "concentration camp" was the idea abandoned. The ability of homeless people to have control over their lives and environment is a central part of the solution to this larger social problem.

#### PERSONALIZATION AND PUBLIC SPACES

The ability of people to change or modify a public space is also important. There are several ways users directly personalize public environments. Examples include the opportunity for people to garden in a public plaza or move furniture in a park to be able to sit in the sun. Other ways are through popular art such as murals (Sommer, 1983). The sides of buildings in ethnic neighborhoods such as Hispanic communities in Los Angeles are now dotted with murals expressing local culture and politics.

There also are subtle and indirect ways people personalize public spaces. As part of a fund-raising effort for a new plaza in downtown Portland, Oregon, residents contributed to the purchase of bricks. The plaza is now paved with the bricks that bear the names of the donors and, part of the use of the plaza includes people finding familiar names of friends or neighbors. A similar but more emotional activity can be observed at the Vietnam Veterans Memorial in Washington, D.C., where visitors discover the names of relatives killed in the



Figure 3. Discovering names in the Vietnam Veteran's Memorial Wall, Washington, D.C.

Vietnam War in the granite wall and often leave flowers, photos, and other mementos. Another recent example of personalization of public space that communicates meaning to people is the AIDS quilt touring public spaces in several U.S. cities. The patchwork quilt covering the length of two football fields includes 2,176 panels created by friends and family members of AIDS victims.

Personalization raises important questions about how public space is perceived by different publics. User maintenance of an open space, such as elderly residents planting a flower box in a housing project entrance, communicates a sense of caring for the environment. This has been supported by some studies of public open spaces. As we have seen, nonusers of a community garden project in downtown Sacramento were found to place high value on the garden because they "read" that the place was cared for (Francis, 1987c).

On the other hand, personalization can discourage participation or result in negative perceptions by some publics. For example, groups taking over a

space such as the homeless camping on the Venice, California, beach is seen as a barrier for local residents to use and enjoy the public beach. Thus, personalization has qualitative dimensions that communicate messages of caring or neglect, access of restriction, and safety or fear.

#### ACCESSIBILITY

Access is an important prerequisite to realizing many other dimensions of public-space quality. For a space to be well used it must be accessible (Lynch, 1981). Access is also essential if people are going to be able to attach meaning to a public place. For example, teenagers' access to community places was found by van Vliet (1983) to be important for them to feel attached to a community. The access of the elderly to comfortable outdoor spaces provides opportunities for informal socializing and reduces a sense of isolation in housing projects.

Three types of access are important in public spaces. The first is the direct physical access to a plaza or park. Design devices such as doors, walls, and locked gates are being used by some public space designers and managers to physically block access to some spaces. Examples include lockable parks and atriums, now popular in corporate open-space design. Another form of access is social, where a space is open to different classes or types of users. For example, the City of Seattle surveyed public places, and found many to be inaccessible or poorly designed for children. A further example is public art, which is frequently not designed at a child's scale. A third type of access is visual, or the ability to see into a park or plaza. Visual access has been found by several researchers to be critical for people to feel safe and secure in a public place (Wiedermann, 1985). Nager and Wentworth (1976) found lack of visual access into Bryant Park to be a major barrier to people's use of the park. They also discovered that the visual barriers supported the role of the park as an active setting for drug dealing. Now over a decade after they made recommendations for removing some fences and lowering hedges on the borders of the park, park officials are implementing the recommendations after trying more expensive and less successful changes.

#### OWNERSHIP

Ownership is a direct form of spatial control. As sense of ownership increases, owner responsibility and concern for the quality of the environment often increases. Ownership can be either real or symbolic. Real ownership is when a space is legally owned by an individual, group, or corporation. The transfer of ownership from city government to private developers explains the increasing private control over public space. At the neighborhood scale, some parks and gardens have become owned as community land trusts by local residents who are legally responsible for preserving and maintaining the sites as permanent and publically accessible open spaces.

Symbolic ownership is a more common way users feel part of public places. The claiming of territory by teenagers populating benches in a park is one indicator of users' feeling a sense of ownership over a space. The results of perceived ownership have both positive and negative consequences. When ownership results in the exclusion of people who would like to use a space, access is denied. Ownership can also serve to invite people into a space by communicating a sense of caring or responsibility.

There are several direct benefits of ownership in community settings. Real or symbolic ownership of community gardens has been found to result in important psychological benefits such as increased self-esteem and satisfaction with significant aspects of people's lives (Kaplan, 1973; Kaplan & Kaplan, 1987). Home ownership increases positive attitudes of residents toward their neighborhood and fosters social contact.

#### SAFETY

To feel safe and secure in a space is also a prerequisite for space use (Stewart & McKenzie, 1978). Safety is a critical issue for the elderly and women in public spaces. Many women report not using parks and plazas because of fear of rape or other forms of physical violence (Wiedermann, 1985). An ability to feel a sense of control over a space, to be able to see in, to escape easily, or to gain assistance in times of crisis are examples of how a place can be made to feel more secure.

Urban vegetation contributes to one's sense of security and safety in public space. Schroeder (in press) reports on findings of a study in which people rated park photographs to determine perceived risk and safety. Long-view distances, open grassy areas, and water were associated with high degrees of perceived safety, whereas physical features such as dense vegetation, graffiti, and litter decreased the perception of safety. This concept supports physiological findings by Ulrich and Simons (1986) showing that scenes with vegetation promoted more relaxed and less stressful states than scenes lacking vegetation.

#### CONFLICT

The desire for diverse and often competing groups to control the design and management of a public place like a plaza or park will increase the amount of conflict in the development and management process (Berman, 1986). Yet conflict and negotiation are hallmarks of the democratic process and the concept of public space (Francis, 1987a). An example of the role conflict can play in urban design was the proposal to site the John Fitzgerald Kennedy Library in Harvard Square in Cambridge, Massachusetts, in the mid-1970s (Francis, 1975). The approval of the project was blocked because the developers did not let concerned community members participate in the design process, which could have led to a consensus plan and project approval. Instead, the developers chose to control the design process themselves and decided to relocate the

project to an undeveloped part of Boston where the project could avoid public scrutiny.

#### SOME DESIGN AND MANAGEMENT OPPORTUNITIES FOR INCREASING CONTROL IN PUBLIC SPACE

Good design and management are central to making good public places (Project for Public Spaces, 1984). How can an understanding of the role of personal control in public-space quality be more fully integrated into the design and management process for public places?

The direct participation of users in the design and management process is one mechanism to increase control (Florin & Wandersman, 1984). As discussed earlier, participation can increase the perceived attachment of people to environments they have input in designing or managing. For example, Becker (1977) found that the ability to participate in both design and management was an important ingredient in resident satisfaction with housing projects. There are now well established and tested techniques for maximizing user participation in public environmental design (Iacofano, 1985). They include workshops, user consultancy, participatory mapping, and surveys. Participation is also a useful device in articulating and negotiating between the often conflicting values of different groups in public open-space design. Participation was employed successfully to clarify and resolve different design values between children and adults for a neighborhood playground in Davis, California (Francis, 1988b).

Another way to involve the public in public-space decisions is environmental simulation. Films or photographs are used to present the visual impacts of proposed development as part of the public debate over proposed new projects. This technique has been used recently to present visual simulations of development proposals in New York City and San Francisco on public television to invite public comment. Utilizing models, the UC Berkeley Environmental Simulation Laboratory, under the direction of Peter Bosselmann, has prepared public television programs showing the visual effects of new buildings proposed on the East Side and Times Square areas in Manhattan, downtown San Francisco, and the UC Berkeley campus. The films became part of the public review process for the projects, helping decision makers and the public evaluate the qualitative aspects of new development.

People's interest in having greater control of places they use has affected the form and management of both older and newer types of urban open spaces. Following a typology developed for this purpose (Francis, 1987c), some specific ways personal control can be integrated into streets, parks, plazas, and downtown public spaces can be identified.

#### STREETS

Streets are an important part of the public landscape of cities (see Nasar, Chapter 2, this volume). For neighborhood streets, resident efforts to control

traffic speed and volume have been found by Appleyard (1981) and others to increase people's use of and attachment to streets they live on. A study of residential traffic control and street redesign in a West Germany city (Eubanks-Ahrens, 1985) found reduction or elimination of auto traffic greatly increased children's access to and use of streets.

Another way to increase people's sense of control over streets is the design of town trails, a mechanism used in many parts of Britain. Here streets serve as teachers of local history with an interpretive trail marked through areas of historic interest. School children, tourists, and local residents utilize the urban trail system to discover local architectural and cultural history (Goodey, 1975).

#### NEIGHBORHOOD PARKS

There are several ways people can be given a greater sense of control over neighborhood parks and playgrounds. Personal control can be applied to neighborhood parks and community open spaces through both symbolic and real ownership. Symbolic ownership can be achieved by initiating a "Friends of the Park" group or real ownership established when users own the park as a land trust. "Loose parts" such as natural elements can also be provided in playgrounds and neighborhood parks to support children's direct modification of the environment (Nicholson, 1971). These simple and low-cost elements serve to increase environmental competence and learning for children and teenagers (Hart, 1978; Hayward, Rothenberg, & Beasley, 1974).

#### PLAZAS AND DOWNTOWN PUBLIC SPACES

Design devices can be employed by designers to invite direct physical control and modification of plazas and downtown spaces. One is the ability to touch or become actively engaged with water. Another is the movable chair, which Whyte (1980) has shown to help people adapt plazas to their own needs such as sitting in the sun, being alone, or sitting in a group. Also, office workers could be given the opportunity to garden in plazas, thus communicating to others a sense of caring for the space while reducing the maintenance costs for the owner. As we have seen, this has already been successfully tested in some corporate office parks in California.

Farmer's markets are being introduced into public open spaces, such as downtown streets and central parks, and give people an opportunity to have greater control over the quality of food they purchase. As Sommer states (Chapter 3, this volume), a farmers' market renaissance is taking place in many communities. Public spaces such as parks and plazas in small towns and large cities are being redesigned to include markets. For example, a major program element in the reconstructed Copley Square in Boston is the provision of space for a farmers' market in the plaza. Based on the great success of the Davis, California, farmers' market, a permanent plaza is being planned for the market in the town's central park.

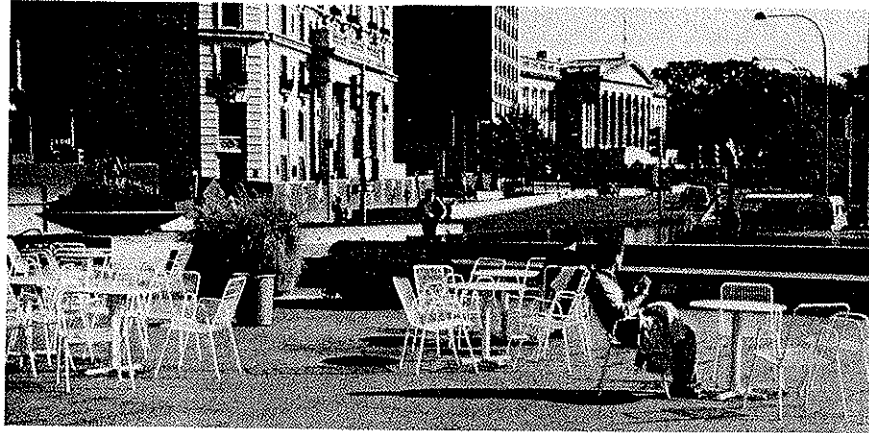


Figure 4. Movable chairs in Western Plaza, Washington, D.C.—an example of opportunities for personal control in public spaces.

#### FUTURE DIRECTIONS FOR RESEARCH AND DESIGN

The effect of control on public environments raises several issues in need of further empirical study and design exploration. One example of research needed is a study of the role of control in the design, management, and use of different public-space types. Traditional spaces such as parks and playgrounds need to be examined, as do newer and more innovative environments, such as waterfront areas, transit malls, and everyday public spaces including steps to public buildings and streetcorners. For example, how can users be made to feel more a part of privately provided public spaces such as atriums and indoor plazas? How does the management of urban streets affect residents' perceived or actual control of streets? How can greater user control contribute to decreased vandalism or improved maintenance of public spaces?

Ownership and territoriality as outcomes of control need to be more deeply examined to determine how they impact on the quality of public environments. Both the interests of different publics in controlling public places and how control relates to the decision-making process require further study. New methods for expanding public involvement must be developed and tested. The social and psychological impact of involvement or exclusion from the decision-making process also requires careful examination.

Innovative design ideas must be developed to provide opportunities for people to directly shape and arrange spaces they use. Flexibility and change can be better provided for in the physical design of public spaces. Designers must recognize the changing and often evolutionary nature of public spaces, and owners and managers need to support such efforts by funding evaluation and redesign on a continuing basis (Francis, 1987b). Control needs to occupy a larger part of the overall agenda for environmental design research.

## CONCLUSIONS

Public control has a long history of importance in civic improvement and will continue to shape the urban environment of the future. Public control also affects how the environment is used, perceived, and valued. Control is a mechanism by which people come to attach meaning—both positive and negative—to public places.

As seen in the research cited in this chapter, control of the public environment has both advantages and disadvantages. Control can contribute to a place being cared for or neglected. It can also nurture user responsibility for a place. Lack of control can foster a sense of neglect or disregard. Control by one individual or group can deny the right of access or use to other groups.

The process of making, managing, and changing public places needs to be an open democratic process engaging the ideas and interests of diverse individuals and groups. It is imperative that the design and management of public space remain part of the public arena. Only then can urban spaces become more fully integrated into our evolving public culture.

## REFERENCES

- Altman, I. (1975). *Environment and social behavior: Privacy, personal space, territory and crowding*. Monterey, CA: Brooks/Cole.
- Altman, I., & Wohlwill, J. F. (Eds.). (1983). *Behavior & the natural environment*. New York: Plenum Press.
- Appleyard, D. (1981). *Livable streets*. Berkeley, CA: University of California Press.
- Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35, 216–224.
- Baldassare, M. (1979). *Residential crowding in urban America*. Berkeley, CA: University of California Press.
- Becker, F. C. (1977). *User participation, personalization, and environmental meaning: Three field studies*. Ithaca, NY: Cornell University, Program in Urban & Regional Studies.
- Berman, M. (1986). Take it to the streets: Conflict and community in public space. *Dissent*, Fall, 33, 478–485.
- Brown, B. (1987). Territoriality. In D. Stokols & I. Altman, (Eds.), *Handbook of environmental psychology* (Volume 1, pp. 503–532). New York: Wiley.
- Burger, J. M., & Cooper, H. M. (1979). The desirability of control. *Motivation and Emotion*, 3, 381–393.
- Carr, S., Francis, M., Rivlin, L., & Stone, A. (in press). *Public space for public life*. New York: Cambridge University Press.
- Carr, S., & Lynch, K. (1981). Open space: Freedom and control. In L. Taylor (Ed.), *Urban open spaces* (pp. 17–18). New York: Rizzoli.
- Chidister, M. (1986). The effect of context on the use of urban plazas. *Landscape Journal*, 5, 115–127.
- Chidister, M. (1988). Reconsidering the piazza. *Landscape Architecture*, 78, 40–43.
- Cranz, G. (1982). *The politics of park design*. Cambridge, MA: M.I.T. Press.
- Dougherty, D. (1988). *Participation in community organizations: Effects of political efficacy, personal efficacy, and self-esteem*. Unpublished doctoral dissertation, Boston University, Boston, MA, Vol. 48, No. 10, Section A, p. 2578.



- Eubanks-Ahrens, B. (1985). The impact of woonerven on children's behavior. *Children's Environments Quarterly*, 1, 39-45.
- Fischer, C. (1981). The public and private worlds of city life. *American Sociological Review*, 46, 306-316.
- Florin, P., & Wandersman, A. (1984). Cognitive social learning and participation in community development. *American Journal of Community Psychology*, 12, 689-708.
- Francis, M. (1975). Urban impact assessment and community involvement: The case of the John Fitzgerald Kennedy Library. *Environment & Behavior*, 7, 373-404.
- Francis, M. (1985). Research and design participation. In M. R. Beheshti (Ed.), *Design coalition team: Proceedings of the International Design Participation Conference* (pp. 211-221). Eindhoven, Netherlands: Department of Architecture and Planning.
- Francis, M. (1987a). The making of democratic streets. In A. V. Moudon (Ed.), *Public streets for public use* (pp. 22-39). New York: Van Nostrand Reinhold.
- Francis, M. (1987b). Some different meanings attached to a public park and community gardens. *Landscape Journal*, 6, 101-112.
- Francis, M. (1987c). Urban open spaces. In E. Zube & G. Moore (Eds.), *Advances in environment, behavior & design*, (Vol. 1, pp. 71-106). New York: Plenum Press.
- Francis, M. (1988a). Changing values for public spaces. *Landscape Architecture*, 78, 54-59.
- Francis, M. (1988b). Negotiating between children and adult design values in open space projects. *Design Studies*, 9, 67-75.
- Francis, M. (1988c). The urban garden as public space. Unpublished paper presented at the Future of Urban Open Space Symposium, University of California, Berkeley, October 29.
- Francis, M., Cashdan, L., & Paxson, L. (1984). *Community open spaces*. Washington, DC: Island Press.
- Francis, M., & Hester, R. (Eds.). (1987). *Proceedings of the Meanings of the Garden Conference*. Davis, CA: University of California, Center for Design Research.
- Gehl, J. (1987). *The life between buildings*. New York: Van Nostrand Reinhold.
- Glazer, N., & Lilla, M. (1987). *The public face of architecture: Civic culture and public spaces*. New York: Free Press.
- Goffman, E. (1963). *Behavior in public places: Notes on the organization of gatherings*. New York: Macmillan.
- Goodey, B. (1975). Urban trails: Origins and opportunities. *Journal of the Royal Town Planning Institute*, 61, 29-30.
- Hart, R. (1978). *Children's experience of place*. New York: Irvington.
- Hayward, D., Rothenberg, M., & Beasley, R. (1974). Children's play and urban playground types: A comparison of traditional, contemporary, and adventure playground types. *Environment & Behavior*, 6, 131-168.
- Hester, R. (1985). Subconscious landscapes in the heart. *Places*, 2, 10-22.
- Hester, R. (1987). Participatory design and environmental justice. *Journal of Architectural and Planning Research*, 4, 301-309.
- Hiss, T. (1987, June 22, 29). Experiencing places. *The New Yorker*, pp. 45-68, 37-86.
- Iacofano, D. (1986). *Public involvement as an organizational development process: A proactive theory for environmental planning program management*. Unpublished doctoral dissertation, University of California, Department of Landscape Architecture, Berkeley, CA, Vol. 48, No. 5, Section A, p. 1333.
- Im, S. B. (1984). Visual preferences in enclosed urban spaces. *Environment & Behavior*, 16, 235-262.
- Jackson, J. B. (1984). *Discovering the vernacular landscape*. New Haven, CT: Yale University Press.
- Kaplan, R. (1973). Some psychological benefits of gardening. *Environment & Behavior*, 5, 145-161.
- Kaplan, R., & Kaplan, S. (1987). The garden as restorative experience: A research odyssey.

- In M. Francis & R. Hester (Eds.), *Proceedings of the Meanings of the Garden Conference* (pp. 334–341). Davis, CA: University of California, Center for Design Research.
- Kimber, C. T. (1973). Spatial patterning in the dooryard gardens of Puerto Rico. *Geographical Review*, 63, 6–26.
- Kinkowski, W. S. (1981). *The malling of America*. New York: Morrow.
- Langer, E. (1983). *The psychology of control*. Los Angeles: Sage.
- Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 32, 311–328.
- Lefcourt, H. (1982). *Locus of control: Current trends in theory and research* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Lennard, S. H., & Lennard, J. L. (1984). *Public life in urban places*. Southampton: Gondolier Press.
- Levine, C. (1984, June). Making city spaces lovable places. *Psychology Today*, pp. 56–63.
- Lofland, L. (1973). *A world of strangers: Order and action in urban public space*. New York: Basic Books.
- Lofland, L. (in press). Social life in the public realm: A review essay. *Journal of Contemporary Ethnography*.
- Lynch, K. (1981). *Good city form*. Cambridge, MA: M.I.T. Press.
- Nagar, A. R., & Wentworth, W. R. (1976). *Bryant Park: A comprehensive evaluation of its image and use with implications for urban open space design*. New York: City University of New York, Center for Human Environments.
- National Gardening Association. (1987). *Gallup Poll National Gardening Survey*. Burlington, VT: Author.
- Nicholson, S. (1971). Theory of loose parts: How not to cheat children. *Landscape Architecture*, 61, 30–34.
- Pateman, C. (1970). *Participation and democratic theory*. Cambridge: Cambridge University Press.
- Project for Public Spaces. (1981). *What people do downtown: How to look at mainstreet activity*. Washington, DC: National Trust for Historic Preservation.
- Project for Public Spaces. (1984). *Managing downtown public spaces*. Chicago: Planners Press, American Planning Association.
- Prus, R. (1987). Developing loyalty: Fostering purchasing relationships in the marketplace. *Urban Life*, 15, 331–366.
- Rapoport, A. (1982). *The meaning of the built environment*. Los Angeles: Sage.
- Saegert, S., Mackintosh, E., & West, S. (1975). Two studies of crowding in urban public spaces. *Environment & Behavior*, 7, 159–184.
- Schroeder, H. (in press). Research on urban forests. In E. Zube & G. Moore (Eds.), *Advances in environment, behavior & design* (Vol. 2). New York: Plenum Press.
- Seamon, D., & Nordin, C. (1980). Marketplace as place ballet. *Landscape*, 24, 35–41.
- Sennett, R. (1977). *The fall of public man*. New York: Basic Books.
- Sommer, R. (1983). *Social design*. Englewood Cliffs, NJ: Prentice Hall.
- Stewart, J., & McKenzie, R. L. (1978). Composing urban spaces for security, privacy & outlook. *Landscape Architecture*, 68, 392–398.
- Stokols, D. (1987). Conceptual strategies of environmental psychology. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology* (Volume 1, pp. 41–70). New York: Wiley.
- Storr, R. (1985). Tilted arc. *Art in America*, September, 73, 91–97.
- Tyler, T. R., Rasinki, K. A., & Spodick, N. (1985). Influence of voice satisfaction with leaders: Exploring the meaning of process control. *Journal of Personality and Social Psychology*, 48, 72–81.
- Ulrich, R. S. (1979). Visual landscapes & psychological well being. *Landscape Research*, 4, 17–19.
- Ulrich, R. S., & Simons, R. F. (1986). Recovery from stress during exposure to everyday

- outdoor environments. In J. Archea *et al.* (Eds.), *Proceedings of the 17th Environmental Design Research Association Conference* (pp. 115–122). Washington, DC: Environmental Design Research Association.
- van Vliet, W. (1983). An examination of the home range of city and suburban teenagers. *Environment & Behavior*, 15, 567–588.
- Vernez-Moudon, A. (Ed.). (1987). *Public streets for public use*. New York: Van Nostrand Reinhold.
- Wandersman, A. (1981). A framework of participation in community organizations. *Journal of Applied Behavioral Science*, 17, 27–58.
- Warner, S. B. (1987). *To dwell is to garden*. Boston: Boston University Press.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297–333.
- Whyte, W. H. (1980). *The social life of small urban spaces*. Washington, DC: Conservation Foundation.
- Wiedermann, D. (1985). How secure are public open spaces? *Garten + Landschaft*, 85, 26–27.
- Wortman, C. (1975). Some determinants of perceived control. *Journal of Personality & Social Psychology*, 31, 282–294.
- Zube, E. H. (1986, April). *Public landscapes and public values*. Lecture given at the Department of Geography, University of Victoria, Victoria, British Columbia, Canada.
- Zube, E. H., Sell, J. L., & Taylor, J. G. (1982). Landscape perception: Research, application, and theory. *Landscape Planning*, 9, 1–33.