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Editors

Quality-of-Life Community Indicators for Parks, Recreation and Tourism Management

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Chapter 4

Publicly Accessible Space and Quality of Life: A Tool for Measuring the Openness of Urban Spaces

Jeremy Németh and Stephan Schmidt

Introduction

Safety and security are essential components of urban public space management, particularly since September 11, 2001. Although security is necessary for creating and maintaining publicly accessible spaces, making it a top priority is criticized as restricting social interaction, constraining individual liberties, and unjustly excluding certain populations. We argue that a focus on security and control over broader social goals such as openness and liberty can reduce the quality of life for particular individuals and groups. Therefore, this study examines legal, design, and policy tools used to exert social and behavioral control in publicly accessible urban spaces. Based on a review of the relevant literature as well as extensive site visits to public spaces in New York City, we create a comprehensive index that uses 20 separate indicators in four different broad categories to quantify the degree to which the use of a space is controlled. We demonstrate how the tool can be used and summarize the results of several recent applications. We then suggest several potential applications useful in planning practice and for testing theories about public space.

Vibrant public spaces are an integral part of the urban physical fabric, connecting disparate neighborhoods and encouraging interaction among an otherwise disparate constituency. At their best, public spaces can instill a sense of civic pride, encourage interaction among strangers, and promote inclusive democratic ideals. As such, the quality of public space, and of public life more generally, is directly dependent on its accessibility to a diversity of users. A more holistic conception of accessibility that moves beyond traditional interpretations of access as merely physical or visual is the concept of *openness*, defined herein as “the freedom or ability of people to achieve their basic needs in order to sustain their quality of life” (Lau & Chiu, 2003,

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p. 197). Thus a space which encourages freedom of use, behavior, and access is a more open and democratic space. Relating openness to quality of life requires us to more closely examine the factors that might limit or discourage freedom of use, such as the introduction of security measures and other actions taken to ostensibly protect users of public space.

In recent years, urban planners, geographers, and legal theorists have paid significant attention to security in public spaces as urban revitalization efforts are often fixated on the creation of safe spaces and the provision of public space is increasingly undertaken by the private sector (Davis, 1992; Ellin, 1996; Fyfe, 1998; Loukaitou-Sideris, 1996; Low, 2003; Pain, 2001). This emphasis on security has only been exacerbated since September 11, 2001 as owners and managers of parks and plazas frequently cite concerns over potential terrorist attacks as justification to increase behavioral control (Davis, 2001; Marcuse, 2002; Mitchell & Staeheli, 2005; Warren, 2002). However, some note that security concerns are nothing new, arguing that “the terrorist attacks . . . did not so much launch a new debate about public space as serve to intensify one that already exists” (Mitchell, 2003, p. 4).

These security measures have been criticized for restricting social interaction, constraining individual liberties, “militarizing” space, and excluding certain populations through interrelated legal, design, and policy tools (Davis, 1992; Graham & Marvin, 2001; Kohn, 2004). Some have argued that making security a top priority reduces the quality of life for marginalized populations while engendering a wholesale retreat from social life and an “end of public culture” (Banerjee, 2001; Mitchell, 1995; Sennett, 1978; Sorkin, 1992).

Yet, few studies have empirically tested such assertions or documented actual methods and approaches used to secure such spaces. Scholars have failed to heed appeals such as William Whyte’s (1988) call for a “stiff clarifying test” to assess public access rights. Mark Francis’s (1989) claim that “the effect of control on public environments raises several issues in need of further empirical study and design” and his request for “. . . a study of the role of control in the design, management, and use of different public-space types” have not been adequately addressed (p. 168). Studies involving observation-based research have been limited. Most either analyze a singular approach to controlling space, such as the use of legal measures or design techniques, or fail to objectively assess control, operating instead from the situated, experiential points of view of young people (Katz, 1998, 2006; Valentine, 1996, 2004), women (Day, 1999; Pain, 2001; Ruddick, 1996), racial and ethnic minorities (Jackson, 1998; McCann, 2000), or homeless persons (Mitchell, 1995, 2003).

One reason for this lack of pragmatic research is the absence of an adequate tool with which to conduct such an analysis. We address this oversight by operationalizing and testing a comprehensive, conceptually grounded index to allow researchers, city officials, and concerned citizens to empirically quantify the degree to which behavioral control is exerted over users of publicly accessible spaces (Németh and Schmidt, 2007) We rely on relevant literature and empirical observations of spaces in New York City to create this index. This chapter answers recent calls by critical

scholars to bridge the gap between the theoretical understandings of social and political space and the actual lived experiences of physical and material spaces (Low & Smith, 2006).

It is important to note that the term *public space* can be applied to a wide variety of social environments, from urban streets and sidewalks to suburban shopping malls and movie theaters to the public forums and chat rooms of the Internet. These locations vary along a continuum of relative publicness and can be categorized according to concepts of ownership, management, and accessibility. In this chapter we focus exclusively on parks, squares, and plazas (both publicly and privately owned) and refer to such sites as *publicly accessible spaces*.

Securing Space

There is a general consensus that “perceptions and feelings of personal safety are prerequisites for a vital and viable city” (Oc & Tiesdell, 1999, p. 265). This argument continues that the key to creating safer areas is the peopling of publicly accessible space, as the presence of others reassures users that there are an adequate number of “eyes on the street” to deter criminals and maintain a safe environment (Jacobs, 1961). This approach is based on two contentions: personal crime is more likely to occur in bleak, deserted areas and *fear* of public space often stems from the fact that there are very few people around. In his landmark study of New York plazas, Whyte (1988) also demonstrated that use begets more use. In other words, passersby are more likely to enter a heavily used space, and the busier a space is the more users it will attract (until some critical mass is reached). This relationship is self-reinforcing: In order for spaces to be perceived as safe they must be well used, but those with a choice will only use spaces that they perceive as safe.

However, scholars criticize this emphasis on security on two major grounds. First, the desire to attract a more orderly citizenry often comes at the expense of certain individuals deemed objectionable or disorderly. As publicly accessible spaces are increasingly organized around consumption, those who contribute to the accumulation of capital by purchasing goods and services are welcomed, while those who fail to contribute are discouraged (Turner, 2002, p. 543; see also Fyfe & Bannister, 1998; Judd & Fainstein, 1999; Mitchell, 1995; Németh, 2006; Németh & Schmidt, 2009; Schmidt, 2004; Zukin, 1995). Put differently, “purifying and privatizing spaces to enhance the consumption experience of some comes at a price of social exclusion and a sense of increasing inequality for others” (Fyfe, 1998, p. 7). As potential users or consumers might be turned away by unruly or unconventional people, spaces must not be accessible to those “disorderly people [that] may deter some citizens from gathering in the agora” (Ellickson, 1996, p. 1180). Critics claim the exclusion of such undesirable individuals is often based on conceptions of race, class, gender, or physical appearance (see Carmona, Heath, Oc, & Tiesdell, 2003; Cresswell, 1996; Flusty, 1994; Shields, 1989; Sibley, 1995). Some argue that managers of publicly accessible spaces frequently fail to make the vital distinction between identity and conduct:

The mere identity of a person as homeless [for example]. . . should never disqualify that person from using the space. On the other hand, if that person's conduct. . . becomes such a nuisance to others that they are fully prevented from enjoying that space, then that person may legitimately be asked to. . . leave the space (Kayden, New York City Department of City Planning & Municipal Art Society of New York, 2000, p. 147).

Second, the identification of undesirable people requires that users be segregated into categories using concepts of appropriateness and orderliness. Wekerle and Whitzman (1995) suggest that “the paradox is that the law and order response kills the city it is purporting to save. It deepens the divisions and the fear of the ‘other’ which are among the most harmful effects of fear and crime” (p. 6). While policing, surveillance, and strict use regulations might stimulate perceptions of safety, they can also contribute to “accentuating fear by increasing paranoia and distrust among people” (Ellin, 1996, p. 153). Giving security priority over other spatial considerations forces owners and managers to act as “spatial police, regulators of bodies in space, deciding who can do what and be where, and even when” (Sandercock, 1998, p. 166; see Berman, 1986; Ruddick, 1996). This trend begins to restrict all users’ civil liberties and quality of life, just as it erodes the public realm and reduces the potential for democratic expression (Crawford, 1992; Sennett, 1978; Young, 2000).

While some scholars identify high usage as an indicator of a successful space (see Carmona et al., 2003; Kayden et al., 2000), others argue that use itself should not be the only measure of success. An underutilized space, for example, may offer people a quiet, contemplative place to withdraw from the stresses of urban life (Loukaitou-Sideris and Banerjee, 1998, p. 302). In addition, “activity alone is not a good gauge of the public values attached to a space. . . . use of an office tower plaza may be the result of a lack of meaningful alternatives” (Francis, 1989, p. 155). The goal of public space should extend beyond increasing the number of people who enter it to providing space that hosts a diversity of uses and users (Loukaitou-Sideris and Banerjee, 1998).

Political theorist Iris Young offers a normative ideal of publicly accessible space to which we subscribe. She argues that successful spaces must be universally accessible and must contribute to democratic inclusion by encouraging interaction between acquaintances and strangers (Young, 2000; see also Kohn, 2004). Such ideal spaces serve as “the material location where social interactions and public activities of *all* members of the public occur” (Mitchell, 2003, p. 131, emphasis added). However, this vision is utopian, and the ideal of a universally inclusive and unmediated space can never be met (Mitchell, 2003). Public space is not homogeneous, and “the dimensions and extent of its publicness are highly differentiated from instance to instance” (Smith and Low, 2006, p. 3). In addition, *the public* is a contested term and is constantly challenged and reformulated.

Consequently, ideal publicly accessible spaces are those that encourage social interaction among the most diverse set of users possible. However, we do not claim that the most open or accessible spaces are always the most successful or that they *necessarily* increase the quality of life of all users. Instead, successful public spaces adeptly balance liberty with personal security: While a mother with small child

might prefer a secure and controlled environment, a homeless person or group of teenagers might favor spaces lacking such mediation. An index measuring levels of spatial control would allow people to make and test assertions about a successful space based on their own set of ideals.

Approaches to Controlling Publicly Accessible Space

We can effectively group spatial management techniques into hard (or active) control and soft (or passive) control measures (Loukaitou-Sideris & Banerjee, 1998, pp. 183–185). Hard control involves the use of surveillance cameras, private security guards, and legal measures to bar certain activities like soliciting, smoking, loitering, or disorderly behavior. Soft control focuses on more symbolic techniques, such as access restriction during non-business hours, small-scale urban design measures (e.g., spikes on ledges), or the removal of public restrooms or food vendors that might attract undesirable users (see Whyte, 1988). Oc and Tiesdell (1999, 2000) further divided these groups into four major approaches: regulatory, fortress, panoptic, and animated. We utilize these categories as the point of departure for constructing our index.

Laws and Rules

Under the general category of hard control, legal and regulatory measures signal the appropriate use of a space and, consequently, what types of persons are allowed. In this sense, laws are important signifiers of a space's "social meaning" (Blomley, Delaney, & Ford, 2001, p. xix). Since publicly accessible spaces are increasingly owned and managed by the private sector, they are sometimes subject to the prescriptions of the property owner, and the rules governing these spaces are often more variable and inconsistent than those in publicly owned spaces. Rules can be "flexibly and differentially enforced in order to sustain an illusion of openness while maximizing management's control" (Kohn, 2004, p. 13). In many cities, planning codes specify that private owners can stipulate what they deem reasonable rules of conduct, and they are not subject to the same regulation or oversight as public owners (Kayden et al., 2000).

Surveillance and Policing

Another hard control technique is the use of surveillance cameras and security patrols. Urban planners and property managers often support the use of security cameras as a means to reduce criminal activity and alleviate fears of crime. In recent years, the prevalence of cameras in public locations has increased dramatically, even as research linking surveillance and decline in crime has been anything but conclusive. Indeed, most studies conclude that crime in the most scrutinized locations had simply been displaced to other areas of the city (Fyfe & Bannister, 1998, p. 262).

Electronic surveillance also stimulates concerns over privacy and civil liberties; some critics argue that managers use cameras to identify and exclude undesirable users based on appearance alone (Ellin, 1996; Koskela, 2000; Shields, 1989).

The use of security personnel to maintain order is another popular technique. Business improvement districts (BIDs) often hire private security guards to patrol neighborhood and commercial areas for signs of disorder “that drive shoppers, and eventually store owners and citizens, to the suburbs” (Siegel, 1992, p. 43; see MacDonald, 1996, 1998, 2002). BIDs are dependent on property owners to pay operating expenses and, consequently, adopt the priorities of their corporate clients rather than concerning themselves with social equity or quality of life issues (Christopherson, 1994; Katz, 2001; Zukin, 1995). This is generally true of the priorities and mandates of private security guards, which differ significantly from those of the traditional public police force. The primary concern of the private guard is to protect the property and interests of those paying his/her salary rather than the public interest (Oc & Tiesdell, 1999, p. 272).

While studies have shown that people often feel safer in the presence of security personnel (Day, 1999; Fyfe & Bannister, 1998), the overabundance of security often generates suspicion that a space is not safe enough to operate without such a significant police presence. Put another way, “the social perception of threat becomes a function of the security mobilization itself, not crime rates” (Davis, 1990, p. 224). Whyte (1988) and others have decried the use of such highly elaborate policing tactics, arguing instead that good places are fundamentally self-policing (p. 158). Managers of urban spaces are now increasingly likely to prefer more indirect, secondary surveillance provided by the janitors, maintenance staff, valets, receptionists, and doorpersons working in the space or its immediate vicinity (Németh, 2004). As Jacobs (1961) maintained, “no amount of police can enforce civilization where the normal, casual enforcement of it has broken down” (p. 41; see Oc & Tiesdell, 1997, 1999).

Design and Image

Design, an example of soft control, can be used both literally and symbolically to control behavior and use of publicly accessible space. Christopherson (1994) describes how in response to real or perceived threats to security, urban designers and architects can (often at the behest of property managers or owners) specify rigid, orderly arrangements to control activity. These decisions can either “reinforce or challenge existing patterns of inclusion or exclusion” (Kohn, 2004, p. 7), because they can dictate appropriate spatial use and render a space less inviting to those failing to use it in such a manner. If a designer specifies benches outfitted with metal crossbars to prohibit reclining homeless people, it becomes clear that decisions concerning physical design have sociocultural consequences (Oc & Tiesdell, 1997). In this sense, “urban design organizes bodies socially and spatially. . . [I]t can stage and frame those who inhabit its spaces” (Rendell, 1998, p. 84).

Critics like Mike Davis (1990) have maintained that designers use their power to fortify publicly accessible spaces, transforming them into defensive (or defensible)

bastions (see Ellin, 1996; Flusty, 1994; Mitchell, 1995). Whyte (1988) said that this response is calculated: Property owners often worry that if a place is made too attractive it will attract the very undesirable people they were trying to keep out in the first place. Physical redesigns become extremely attractive options since “design mechanisms are more expedient than having to legislate civility in public spaces” (Loukaitou-Sideris & Banerjee, 1998, p. 163).

However, many owners and managers of publicly accessible spaces believe, following Jane Jacobs, that the more people present in a space, the safer it will be. For this reason, managers entice potential users through measures that improve a space’s image and, subsequently, increase overall usage. Such techniques include the introduction of public restrooms, food vendors or kiosks, movable chairs, flexible seating, sculptures, and interactive art, as well as an increased attention to environmental factors such as sun, nighttime lighting, wind, shadows, and trees. In addition, owners often pay for such improvements through lucrative sponsorship deals with private corporations who finance the particular upgrade or addition (such as the HSBC Bank Reading Room or Evian-sponsored umbrellas in New York City’s Bryant Park or the Trump Organization’s Wollman Skating Rink in Central Park). Critics lament the overuse of visible advertising in public spaces, arguing that users prefer publicly accessible spaces as a retreat from the often unrelenting visual stimulation of billboards, signs, and posters that dominate urban environments (Loukaitou-Sideris & Banerjee, 1998).

Access and Territoriality

Access restrictions and territorial separation are another set of soft control techniques frequently used both to attract and to deter specific users (see Newman, 1972). This is accomplished by programming certain areas for restricted or conditional use, such as cafes or restaurants which require patrons to pay in order to enter an area or sit at tables. While the programming of activities like chess, bocce, or exercising dogs attracts certain users, this practice has a tendency to restrict large areas to single uses only, leaving others to crowd into the leftover space. In this regard, the division of territory can segregate users by determining who can and cannot enter and who belongs in a particular area and who does not (Oc & Tiesdell, 1999, p. 270).

Carr, Francis, Rivlin, and Stone (1992) divided access into three different forms: visual, physical, and symbolic (from Carmona et al., 2003). Visual access is the ability to look into a space. Whyte (1988) noted that “if people do not see a space, they will not use it” (p. 129). He astutely observed that a plaza’s relationship to the street and sidewalk is vital in attracting users into a space. By viewing just enough of a space to notice who is using it, and in what manner, people can quickly assess whether they would feel comfortable once inside.

Physical access involves one’s actual ability to enter a space. Physical access is denied if the manager of a (supposedly) publicly accessible space closes the space’s gates or locks its doors when it is legally required to be open or keeps a space open only to employees working in the building to which it is attached. Kayden (2005)

also describes how private owners of publicly accessible spaces can deny access to patrons by barricading the space behind plywood or closing a space for construction for many months without apparent end (p. 126).

Symbolic access concerns whether one feels welcome in a space. Passing through a constricted entry, gate, or door or even through a security checkpoint can make visitors feel uncomfortable. Owners and managers of spaces can accentuate such feelings by placing a physical barrier such as a dumpster or scaffolding at a space's most convenient or natural entry point (Kayden, 2005, p. 126). Loukaitou-Sideris and Banerjee (1998) described how many privately owned public spaces, especially those intended to project a certain corporate image, tend to be introverted and physically disconnected from the broader public realm. Designers achieve this disconnection by setting the space several steps above or below the public sidewalk: "[O]nce past three feet a space can become relatively inaccessible. . . it is not only a physical matter so much as a psychological one" (Whyte, 1988, p. 129).

An Index to Measure the Control of Publicly Accessible Spaces

These four major approaches form the basis of our index. In order to construct the index, we also relied on site visits to 171 publicly accessible spaces in New York City, which has over 1,700 parks, playgrounds, and recreation facilities totaling 28,000 acres (New York Parks and Recreation, 2006) and more than 500 privately owned but publicly accessible spaces comprising 82 aggregate acres (Kayden et al., 2000).

We limited our study to midtown Manhattan, a high-density pedestrian area with the greatest concentration of highly trafficked publicly accessible spaces in the city. Coterminous with the boundaries of Community Board 5 and roughly bounded on the south by 14th Street and on the north by 59th Street, the area includes many higher profile corporate headquarters and places of business whose owners and occupants view security as an important priority. We acknowledge that limiting the fieldwork to midtown Manhattan may have made our index less generalizable. Nevertheless, we feel these sites present a unique opportunity. First, the security of publicly accessible spaces, both public and private, is an especially significant issue in New York City, particularly since September 11, 2001. In addition, choosing heavily trafficked, high-profile spaces allows us to witness spatial control where it is most prominent and deliberate.

We visited publicly accessible spaces with different ownership and management regimes in order to sample as wide a variety of spaces as possible. These include parks and places that are privately owned and managed (e.g., Trump Tower), publicly owned but privately managed (e.g., Bryant Park), and publicly owned and managed (e.g., Union Square). While control measures in publicly owned and managed spaces must conform to generally uniform standards,¹ the New York City Department of Planning stipulates that privately owned and managed spaces must only provide "reasonable rules of conduct" similar to those that apply in publicly owned parks and plazas (Kayden et al., 2000, p. 39). In fact, rules and regulations

in privately owned spaces need not be officially reviewed by the department (P. Schneider, New York Department of City Planning, personal communication, February 28, 2007). Although the right to free speech and assembly in publicly owned spaces is guaranteed by the First Amendment, this right does not necessarily extend to spaces owned and managed by the private sector.² For these reasons, privately owned or managed spaces often employ very different security and control measures from those used in publicly owned and managed spaces.

Based on our site visits, we operationally defined 20 variables for the index, grouped into the aforementioned categories, each of which represents a possible strategy for securing space (Oc & Tiesdell, 1999, p. 270). The 20 variables are divided into 10 indicating control of users and 10 indicating free use of the space. Table 4.1 describes the variables and scoring criteria for each, while Tables 4.2 and 4.3 provide a more detailed description of each variable.

Reliability

Since people's perceptions of space are both variable and subjective, we aimed to make the index more reliable by specifying objective, directly observable indicators, and provided a scoring rubric (0, 1, or 2) based on the presence and intensity of each variable. The overall index score for a given space should be calculated by subtracting the total score for all variables indicating control from the total score for all variables indicating free use. The lower the score, on both individual variables and overall, the more controlled the space, and the higher the score, the freer the use of the space. The highest possible overall score is 20 (least controlled), the lowest is -20 (very controlled); zero would indicate a perfectly neutral score. For illustrative purposes, the Appendix depicts the total scores for two publicly accessible spaces: Washington Square Park and Sony Plaza.

Since many of the better designed spaces in cities are of "a higher quality that now attracts the very public that some owners then attempt to discourage from using the space" (Kayden, 2005, p. 125), managers are often compelled to introduce additional security measures. Conversely, managers of underutilized public spaces may have no need to implement strong security regimes since there are no users to control (Lees, 1998). Therefore, the index accounts for variables that control users as well as variables that encourage free use to prevent better designed and more used spaces from scoring lower on the index (appearing more controlling) than their underutilized counterparts.

Validity

The index was then validated by a panel of experts, including two academics in planning and design and two practitioners in the field of urban planning and landscape architecture. The panelists were selected based on their knowledge of

Table 4.1 Index variables

	Approach	Scoring criteria
<i>Features that control users</i>		
Visible sets of rules posted	Laws/rules	0 = none present 1 = one sign or posting 2 = two or more signs
Subjective/judgment rules posted	Laws/rules	0 = none present 1 = one rule visibly posted 2 = two or more rules visibly posted
In business improvement district (BID)	Surveillance/policing	0 = not in a BID 1 = in a BID with maintenance duties only 2 = in a BID with maintenance and security duties
Security cameras	Surveillance/policing	0 = none present 1 = one stationary camera 2 = two or more stationary cameras or any panning/moving camera
Security personnel	Surveillance/policing	0 = none present 1 = one private security guard or up to two public security personnel
Secondary security personnel	Surveillance/policing	2 = two or more private security or more than two public personnel 0 = none present 1 = one person or space oriented toward reception 2 = two or more persons or one person w/ space oriented at reception
Design to imply appropriate use	Design/image	0 = none present 1 = only one or two major examples 2 = several examples throughout space
Presence of sponsor/advertisement	Design/image	0 = none present 1 = one medium sign or several small signs 2 = large sign or two or more signs

Table 4.1 (continued)

	Approach	Scoring criteria
Areas of restricted or conditional use	Access/territoriality	0 = none present 1 = one small area restricted to certain members of the public 2 = large area for consumers only or several smaller restricted areas
Constrained hours of operation	Access/territoriality	0 = open 24 h/day, 7 days/week, most days of year 1 = at least part of space open past business hours or on weekends 2 = open only during business hours or portions permanently closed
<i>Features encouraging freedom of use</i> Sign announcing “public space”	Laws/rules	0 = none present 1 = one small sign 2 = one large sign or two or more signs
Public ownership/management	Surveillance/policing	0 = privately owned and privately managed 1 = publicly owned and privately managed 2 = publicly owned and publicly managed
Restroom available	Design/image	0 = none present 1 = available for customers only or difficult to access 2 = readily available to all
Diversity of seating types	Design/image	0 = no seating 1 = only one type of stationary seating 2 = two or more types of seating or substantial movable seating
Various microclimates	Design/image	0 = no sun or no shade or fully exposed to wind 1 = some sun/shade, overhangs/shielding from wind and rain 2 = several distinct microclimates, extensive overhangs, trees
Lighting to encourage nighttime use	Design/image	0 = none present 1 = one type or style of lighting 2 = several lighting types (e.g., soft lighting, overhead, lampposts)

Table 4.1 (continued)

	Approach	Scoring criteria
Small-scale food consumption	Design/image	0 = none present 1 = one basic kiosk or stand 2 = two or more kiosks/stands or one larger take-out stand
Art/cultural/visual enhancement	Design/image	0 = none present 1 = one or two minor installations, statues, or fountains 2 = one major interactive installation or frequent free performances
Entrance accessibility	Access/territoriality	0 = gated or key access only, and at all times 1 = one constricted entry or several entries through doors/gates only
Orientation accessibility	Access/territoriality	2 = more than one entrance without gates 0 = not on street level or blocked off from public sidewalk 1 = street level but oriented away from public sidewalk 2 = visible with access off sidewalk (or fewer than five steps up/down)

Table 4.2 Variable definitions: features that control users

<p><i>Laws/rules</i> Visible sets of rules posted</p>	<p>Official, visible signs listing <i>sets</i> of rules and regulations (not individual rules) on permanent plaques or “table tents.” Listed rules should generally be objective and easily enforceable, like prohibitions against smoking, sitting on ledges, passing out flyers without permit, or drinking alcohol</p>
<p>Subjective/judgment rules posted</p>	<p>Official, visible signs listing individual rules describing activities prohibited after personal evaluations and judgments of desirability by owners, managers, or security guards. Such rules include no disorderly behavior, no disturbing other users, no loitering, no oversized baggage, or appropriate attire required</p>
<p><i>Surveillance/policing</i> In business improvement district (BID)</p>	<p>Spaces located in business improvement districts (BIDs) are more likely to have electronic surveillance and private security guards and less likely to include public input into decisions regarding park management. BIDs can employ roving guards to patrol especially problematic neighborhood spaces</p>
<p>Security cameras</p>	<p>Although cameras must be visible to observer to be counted, many cameras are hidden from view. Cameras are often located inside buildings or on surrounding buildings but are oriented toward space. Stationary cameras are more common, often less intimidating than moving/panning cameras</p>
<p>Security personnel</p>	<p>Scoring dependent on time of visit. Publicly funded police, park rangers, private security guards. For index, score only when security is dedicated to space. Since private security only directed by property owner, often more controlling (and score higher on index) since police trained more uniformly</p>
<p>Secondary security personnel</p>	<p>Scoring dependent on time of visit. Includes maintenance staff, doorpersons, reception, cafe or restaurant employees, bathroom attendants. Also, spaces often oriented directly toward windowed reception or information area to ensure constant employee supervision</p>

Table 4.2 (continued)

<i>Design/image</i>	
Design to imply appropriate use	Small-scale design to control user behavior or imply appropriate use. Examples might include metal spikes on ledges; walls, barriers, bollards to constrict circulation or to direct pedestrian flow; rolled, canted, or overly narrow and unsittable ledges; or crossbars on benches to deter reclining
Presence of sponsor/advertisement	Signs, symbols, banners, umbrellas, plaques tied to space's infrastructure, not to immediate services provided (e.g., cafes, kiosks). While non-advertised space is important for seeking diversion from city life, sponsored signs/plaques can push sponsors to dedicate resources for upkeep since company name is visible
<i>Access/territoriality</i>	
Areas of restricted/conditional use	Portions of space off-limits during certain times of day, days of week, or portions of year. Can also refer to seating/tables only open to cafe patrons, bars open only to adults, dog parks, playgrounds, corporate events open to shareholders only, spaces for employees of surrounding buildings only
Constrained hours of operation	While some spaces are permitted to close certain hours of day, spaces not open 24 h inherently restrict usage to particular population. Also, while usually due to lack of adequate supervision, spaces open only during weekday business hours clearly prioritize employee use over general public

Table 4.3 Variable definitions: features that encourage freedom of use

<p><i>Laws/rules</i> Sign announcing public space</p>	<p>Most zoning codes require publicly accessible spaces to exhibit plaques indicating such. Some spaces are clearly marked with signs denoting their public nature (e.g., New York’s Sony Plaza), but when a sign or plaque is hidden by trees/shrubs or has graffiti covering it, its intent becomes null</p>
<p><i>Surveillance/policing</i> Public ownership/management</p>	<p>Could fall in “laws/rules” approach, but more likely to impact type/amount of security, electronic surveillance in a space. Management often by conservancy or restoration corporation. Spaces can be publicly owned/publicly managed, publicly owned/privately managed, or privately owned/privately managed</p>
<p><i>Design/image</i> Restroom available</p>	<p>Clearly some spaces are not large enough to merit public restroom. Realizing that free public restrooms often attract homeless persons, managers often remove them altogether or locate them in onsite cafes or galleries available to paying customers only (or providing keyed access for “desirable” patrons)</p>
<p>Diversity of seating types</p>	<p>Amount of seating is often most important factor for encouraging use of public space. Users often evaluate entry to space based on amount of available seating and ability to create varying “social distances.” Movable chairs allow maximum flexibility and personal control in seating choice</p>
<p>Various microclimates</p>	<p>Spaces with various microclimate enclaves enlarge choice and personal control for users. Potential features might include shielding from wind; overhangs to protect from rain; areas receiving both sun and shade during day; or trees/shrubs/grass to provide connection with natural landscape</p>
<p>Lighting to encourage nighttime use</p>	<p>Studies indicate that vulnerable populations often avoid public spaces at night if not well lit. Lighting spaces encourages 24-h use, which has been shown to make visitors feel safer/more secure. However, critics argue that night lighting aids surveillance efforts and implies authoritative control</p>

Table 4.3 (continued)

Small-scale food consumption	Most agree that food vendors enhance activity and vitality. This variable only includes small cafes, kiosks, carts, or stands selling food, drinks, or simple convenience items. Sit-down restaurants, clothing stores, and other full-scale retail establishments are not described by this variable
Art/cultural/visual enhancement	Art and aesthetic attraction can encourage use. Variable can include stationary visual enhancements like statues, fountains, or sculptures, also rotating art exhibits, public performances, farmers' markets, street fairs. Interactive features encourage use and personal control by curious patrons (often children)
<i>Access/territoriality</i> Entrance accessibility	If a space has locked doors or gates, requires a key to enter, or has only one constricted entry, it often feels more controlled or private than one with several non-gated entrances. In indoor spaces where users must enter through doors or past checkpoints, symbolic access and freedom of use diminished
Orientation accessibility	Spaces must be well integrated with sidewalk and street, as those oriented away from surrounding sidewalk, or located several feet above or below street level, make space less inviting. Well-used spaces are clearly visible from sidewalk, and users should be able to view surrounding public activity

New York City (where the assessed spaces were located) and their expertise in the design and management of public spaces. First, we scored eight popular spaces using the index. Each panelist was then shown several representative photographs of these spaces. Panelists were asked to assess each a subjective score (from -20 to $+20$) based on the perceived openness of the space. The criteria used for evaluation were more subjective and experiential than the 20 variables included in the index. A simple correlation between the panelists' subjectively assigned scores and the actual overall scores on the index revealed a statistically significant correlation coefficient (r^2) of 0.81 ($p < 0.05$). This suggests that the two measures are similar and the index captures the phenomenon of interest.

Testing the Index

To assess the feasibility of the index, we document results of three initial studies that all utilized the index. Each study served to further validate the index and demonstrate its reliability via its deployment by several scorers in different contexts (but all in New York City).

First, we pilot tested the index in the 12 busiest parks and plazas in central midtown Manhattan. We visited the five largest, busiest, and most complex privately owned and managed spaces in the area, those identified as “destinations” by Kayden et al. (2000).³ We then chose four publicly owned and managed spaces and three publicly owned and privately managed spaces, each of which also exhibited the characteristics of a destination space.⁴ In separate and independent visits conducted during busy weekday lunchtime hours (between 10 a.m. and 2 p.m.) we rated each space according to the index. Results from simple t tests determined that scores from our two separate sets of visits were not significantly different, providing some evidence that our scoring system was rigorous enough to be objectively employed.

Second, a published study by Németh (2009) applied the index to 163 privately owned and managed spaces in New York City. Overall scores for each space clustered relatively uniformly around the zero score. This application produced such an extensive number of data points that it allowed the author to conduct a principal components analysis on the spaces. He determined that seven basic approaches to spatial control exist, ranging from the sorting and filtering of users to the outright exclusion of visitors through strict access controls.

Third, a study by Németh and Schmidt (in press) examined a subset of 151 publicly accessible spaces to determine whether differences exist among spaces that are publicly owned and those that are privately owned and what the nature of those differences are. The sites included 89 privately owned and managed spaces and 62 publicly owned and managed spaces. The study had several statistically significant findings; first, as expected, privately owned public spaces tended to be more controlled or behaviorally restrictive than publicly owned spaces; second, while both publicly and privately owned spaces tend to equally encourage public use and access, privately owned spaces additionally include elements which tend to control use and behavior within those spaces, and specifically, privately owned spaces

tended to employ additional surveillance/policing and access/territoriality restrictions than publicly owned spaces, although publicly owned spaces tended to have more rules and regulations.

A Demonstration of the Scoring Process

We demonstrate the scoring process with the following examples. Figures 4.1 and 4.2 depict the scoring for the variable *subjective or judgment rules posted*. Figure 4.1 shows that although the official rules of Washington Square Park urges users to “be courteous and respectful,” none of the rules are necessarily subjective in nature. Based on the scoring criteria in Table 4.1, the space received 0 on this variable. Figure 4.2 shows a typical table tent located on each of Sony Plaza’s 104 public tables. The rules prohibit “disorderly conduct,” “obscene gestures,” and “creating conditions that disturb others,” regulations that can only be enforced after a judgment by the enforcer. We scored the space 2 on this variable.

Figures 4.3 and 4.4 demonstrate the scoring of the variable *restroom available*. Figure 4.3 shows the outdoor, visible, publicly accessible restroom in Washington



Fig. 4.1 Washington Square Park rules



Fig. 4.2 Sony Plaza rules



Fig. 4.3 Washington Square Park restroom

Square Park. Figure 4.4 depicts the restroom at Sony Plaza, which was difficult to access as it is located inside the Sony Wonder exhibit. Following our criteria, we scored Washington Square Park 2 and Sony Plaza 1, since entry to the restroom was monitored during the day by Sony employees.

Fig. 4.4 Sony Plaza restroom location inside exhibit



As a final example, Figs. 4.5 and 4.6 illustrate how we scored the variable *entrance accessibility*. Figure 4.5 shows 1 of the 12 major entry points to Washington Square Park without gates and open 24 h. Figure 4.6 shows the entry to Sony Plaza through a set of glass doors. Because the entrant must cross through the symbolic barrier to the space, Sony Plaza received 1. Washington Square Park, with its multiple, ungated entry points, was scored 2 on this variable.

We encourage those using the index to obtain empirical data through independent visits by various users, owners, managers, or experts familiar with the spaces under examination. Separate observers should conduct multiple visits to the subject spaces to further check the validity of the index. This is particularly important when the index is applied outside New York City, since New York is an unusual case, as described above.

In addition, certain variables are time dependent. For example, a scorer may enter a space and find no security guards visible during the time he/she occupies the space. Another scorer may visit the space the following day or week and find several security guards present. In such cases, we recommend adopting the higher score, as it is obvious that the particular space does have several security personnel. To improve reliability, observers should make multiple visits, recording the time and date of each visit.



Fig. 4.5 Washington Square Park entry



Fig. 4.6 Sony Plaza entry

Conclusions and Future Research

This chapter proposes a comprehensive methodological tool to allow researchers, city officials, and citizens to empirically evaluate the degree to which control is exerted over users of publicly accessible spaces. However, we do not assert that a particular score on the index denotes a certain quality of life for a user. Quality of life is subjective and variable, as is one's desire to feel safe, secure, or controlled in public space. But we do argue that as behavioral control increases, individual choice decreases, and one's ability to position himself/herself in a situation that can *improve* our quality of life wanes. Therefore, the index is an important barometer that can be coupled with additional social indicators in measuring quality of life. We recommend social researchers add it to the burgeoning toolbox of indicators introduced in this volume and others.

As the index enables empirical testing of a number of questions, we suggest several potential applications for urban researchers, planners and policymakers, and neighborhood or community groups. First, are public spaces becoming increasingly restrictive and controlled over time, as some critics claim (Banerjee, 2001; Kohn, 2004)? The systematic application of our index allows researchers to monitor the changing presence and intensity of control, as owners and managers frequently update or alter their space's security measures. Second, Day (1999) and others argue that some of the most popular publicly accessible spaces are those that exert the most behavioral control over users. The index allows empirical testing of this and similar allegations correlating success, use, and control. Third, do certain socioeconomic or demographic populations prefer particular levels of spatial security? Researchers can apply the index to several sites and then compare scores with user counts and preference surveys to determine whether significant correlations exist.

Practitioners can apply these research findings to improve the design and maintenance of publicly accessible spaces and bring more balance to discussions concerning security and freedom of access and use. The index also enables planners, policymakers, and business improvement district (BID) officials to more efficiently and effectively assess levels of spatial control and adjust these levels based on a set of predetermined criteria. For example, planners could determine an ideal level of security based on the level of crime in a particular block or neighborhood. The application of the index could then suggest the need for an increase or decrease in the presence and intensity of certain measures. Similarly, planners are able to assess whether, as is commonly believed, crime rates and security levels are inversely related and determine which measures might be more or less effective in reducing criminal activity.

Finally, the index has important applications for neighborhood and community groups, local residents, students, and public and private organizations concerned about the steady erosion of civil liberties in the public realm. It can provide empirical evidence to defend claims that publicly accessible spaces are, in fact, becoming less accessible. Additionally, publicly available, interactive, and real-time scoring of such public spaces may be of interest to these parties. In this regard, the index can also serve to engage local communities and help facilitate public participation in the production of the built environment.

Notes

1. For list of official rules and regulations in New York City’s parks, see New York City Department of Parks & Recreation’s *Rules* (1990) or its Web site <http://www.nycgovparks.org> (2007). These sources note that standard rules apply to all publicly owned and managed spaces unless expressly noted in a site-specific ordinance or approved variance.
2. A number of Supreme Court decisions have addressed the rights to speech and assembly in privately owned spaces: *Marsh v. Alabama* (1946); *Amalgamated Food Employees Union v. Logan Valley Plaza* (1968); *Lloyd Corp. v. Tanner* (1972); *Hudgens v. National Labor Relations Board* (1976); and *Pruneyard Shopping Center v. Robins* (1980).
3. Destination space is broadly defined by Kayden et al. (2000) as “high-quality public space that attracts employees, residents, and visitors from outside, as well as from the space’s immediate neighborhood” (p. 50).
4. We visited 12 spaces for the pilot test. Five were privately owned and managed: IBM Building, Rockefeller Center, Sony Plaza, Trump Tower, and World Wide Plaza. Three were publicly owned but privately managed: Bryant Park, Greeley Square, and Herald Square. Four were publicly owned and managed: Grand Army Plaza, Madison Square Park, Union Square Park, and Washington Square Park.

Appendix

Table 4.4 Sample scoring sheet comparing two random spaces: Washington Square Park and Sony Plaza

<i>Features that control users</i>	Approach	Wash. Sq. Park	Sony Plaza
Visible sets of rules posted	Laws/rules	2	2
Subjective/judgment rules posted	Laws/rules	0	2
In business improvement district (BID)	Surveillance/policing	0	2
Security cameras	Surveillance/policing	0	2
Security personnel	Surveillance/policing	1	2
Secondary security personnel	Surveillance/policing	0	2
Design to imply appropriate use	Design/image	0	1
Presence of sponsor/advertisement	Design/image	0	2
Areas of restricted or conditional use	Access/territoriality	2	2
Constrained hours of operation	Access/territoriality	1	1
<i>Total</i>		6	18
<i>Features encouraging freedom of use</i>			
Sign announcing “public space”	Laws/rules	2	2
Public ownership/management	Surveillance/policing	2	0
Restroom available	Design/image	2	1

Table 4.4 (continued)

<i>Features that control users</i>	Approach	Wash. Sq. Park	Sony Plaza
Diversity of seating types	Design/image	2	2
Various microclimates	Design/image	2	1
Lighting to encourage nighttime use	Design/image	2	1
Small-scale food consumption	Design/image	1	2
Art/cultural/visual enhancement	Design/image	2	1
Entrance accessibility	Access/territoriality	2	1
Orientation accessibility	Access/territoriality	2	2
<i>Total</i>		19	13
<i>Overall score</i>		13	-5

References

- Banerjee, T. (2001). The future of public space: Beyond invented streets and reinvented places. *Journal of the American Planning Association*, 67(1), 9–24.
- Berman, M. (1986). Take it to the streets: Conflict and community in public space. *Dissent*, 33(4), 476–485.
- Blomley, N., Delaney, D., & Ford, R. (Eds.). (2001). *The legal geographies reader*. Oxford: Blackwell.
- Carmona, M., Heath, T., Oc, T., & Tiesdell, S. (2003). *Public places – Urban spaces*. Oxford: Architectural Press.
- Carr, S, Francis, M, Rivlin, L and Stone, A. (1992). *Public space*. Cambridge: Cambridge University Press.
- Christopherson, S. (1994). The fortress city: Privatized spaces, consumer citizenship. In A. Amin (Ed.), *Post-fordism: A reader* (pp. 409–427). Oxford: Blackwell.
- Crawford, M. (1992). The world in a shopping mall. In M. Sorkin (Ed.), *Variations on a theme park: The new American city and the end of public space* (pp. 181–204). New York: Hill and Wang.
- Cresswell, T. (1996). *In place/out of place: Geography, ideology, and transgression*. Minneapolis, MN: University of Minnesota Press.
- Davis, M. (1990). *City of quartz: Excavating the future in Los Angeles*. London: Verso.
- Davis, M. (1992). Fortress Los Angeles: The militarization of urban space. In M. Sorkin (Ed.), *Variations on a theme park: The new American city and the end of public space* (pp. 154–180). New York: Hill and Wang.
- Davis, M. (2001). The flames of New York. *New Left Review*, 12, 34–50.
- Day, K. (1999). Introducing gender to the critique of privatized public space. *Journal of Urban Design*, 4(2), 155–178.
- Ellickson, R. (1996). Controlling chronic misconduct in city spaces: Of panhandlers, skid rows, and public space zoning. *Yale Law Journal*, 105(5), 1165–1248.
- Ellin, N. (1996). *Postmodern urbanism*. New York: Princeton Architectural Press.
- Flusty, S. (1994). *Building paranoia: The proliferation of interdictory space and the erosion of spatial justice*. West Hollywood, CA: Los Angeles Forum for Architecture and Urban Design.
- Francis, M. (1989). Control as a dimension of public space quality. In I. Altman and E. Zube (Eds.), *Public places and spaces: Human behavior and environment, Volume 10* (pp. 147–172). New York: Plenum.

- Fyfe, N. (Ed.). (1998). *Images of the street: Planning, identity and control in public space*. New York: Routledge.
- Fyfe, N., & Bannister, J. (1998). The “eyes upon the street”: Closed-circuit television surveillance and the city. In N. Fyfe (Ed.), *Images of the street: Planning, identity and control in public space* (pp. 254–267). New York: Routledge.
- Graham, S., & Marvin, S. (2001). *Splintering urbanism: Networked infrastructures, technological mobilities and the urban condition*. London: Routledge.
- Jackson, P. (1998). Domesticating the street: The contested spaces of the high street and the mall. In N. Fyfe (Ed.), *Images of the street: Planning, identity and control in public space* (pp. 176–191). New York: Routledge.
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Vintage Books.
- Judd, D., & Fainstein, S. (1999). *The tourist city*. New Haven, CT: Yale University Press.
- Katz, C. (1998). Disintegrating developments: Global economic restructuring and the eroding of ecologies of youth. In T. Skelton and G. Valentine (Eds.), *Cool places: Geographies of youth culture* (pp. 130–144). London: Routledge.
- Katz, C. (2001). Hiding the target: Social reproduction in the privatized urban environment. In C. Minca (Ed.), *Postmodern geography: Theory and praxis* (pp. 93–112). Oxford: Blackwell.
- Katz, C. (2006). Power, space and terror: Social reproduction and the public environment. In S. Low and N. Smith (Eds.), *The politics of public space* (pp. 105–122). New York: Routledge.
- Kayden, J., New York City Department of City Planning and the Municipal Art Society of New York (2000). *Privately owned public space: The New York City experience*. New York: Wiley.
- Kayden, J. (2005). Using and misusing law to design the public realm. In E. Ben-Joseph and T. Szold (Eds.), *Regulating place: Standards and the shaping of urban America* (pp. 115–140). New York: Routledge.
- Kohn, M. (2004). *Brave new neighborhoods: The privatization of public space*. New York: Routledge.
- Koskela, H. (2000). The gaze without eyes: Video-surveillance and the changing nature of urban space. *Progress in Human Geography*, 24(2), 243–265.
- Lau, J., & Chiu., C. (2003). Accessibility of low-income workers in Hong Kong. *Cities*, 20(3), 197–204.
- Lees, L. (1998). Urban renaissance and the street: Spaces of control and contestation. In N. Fyfe (Ed.), *Images of the street: Planning, identity and control in public space* (pp. 236–254). New York: Routledge.
- Loukaitou-Sideris, A. (1996). Cracks in the city: Addressing the constraints and potentials of urban design. *Journal of Urban Design*, 1(1), 91–104.
- Loukaitou-Sideris, A., & Banerjee, T. (1998). *Urban design downtown: Poetics and politics of form*. Berkeley, CA: University of California Press.
- Low, S. (2003). *Behind the gates: Life, security, and the pursuit of happiness in fortress America*. New York: Routledge.
- Low, S. and Smith, N. (Eds.). (2006). *The politics of public space*. New York: Routledge.
- MacDonald, H. (1996). BIDs really work. *City Journal*, (Spring).
- MacDonald, H. (1998). BIDDing adieu. *City Journal*, (Autumn).
- MacDonald, H. (2002). Holiday homelessness hype. *City Journal*, (December).
- Marcuse, P. (2002). Urban form and globalization after September 11th: The view from New York. *International Journal of Urban and Regional Research*, 26(3), 596–606.
- McCann, E. (2000). Race, protest and public space: Contextualizing Lefebvre in the U.S. city. *Antipode*, 31(2), 163–184.
- Mitchell, D. (1995). The end of public space? People’s Park, definitions of the public, and democracy. *Annals of the Association of American Geographers*, 85, 108–133.
- Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space*. New York: The Guilford Press.
- Mitchell, D., & Staeheli, L. (2005). Permitting protest: Parsing the fine geography of dissent in America. *International Journal of Urban and Regional Research*, 29(4), 796–813.

- New York City Parks and Recreation (2006). *Frequently asked questions*. Retrieved November 1, 2006, from <http://www.nycgovparks.org>
- Newman, O. (1972). *Defensible space: Crime prevention through urban design*. New York: Macmillan.
- Németh, J. (2004). Redefining security in public space: The case of LOVE Park. *IEEE Technology and Society*, 23(4), 19–20.
- Németh, J. (2006). Conflict, exclusion, relocation: Skateboarding and public space. *Journal of Urban Design*, 11(3), 297–318.
- Németh, J. (2009). Defining a public: The management of privately owned public space. *Urban Studies*, 46(11), 1–28.
- Németh, J., & Schmidt, S. (2007). Toward a methodology for measuring the security of publicly accessible spaces. *Journal of the American Planning Association*, 73(3), 283–297.
- Németh, J. and Schmidt S. (2010). Space, place and the city: Emerging research on public space design and planning. *Journal of Urban Design*, 15(4):453–457.
- Oc, T. and Tiesdell, S. (Eds.). (1997). *Safer city centres: Reviving the public realm*. London: Paul Chapman Publishing Ltd.
- Oc, T., & Tiesdell, S. (1999). The fortress, the panoptic, the regulatory and the animated: Planning and urban design approaches to safer city centers. *Landscape Research*, 24(3), 265–286.
- Oc, T., & Tiesdell, S. (2000). Urban design approaches to safer city centers: The fortress, the panoptic, the regulatory and the animated. In J. Gold and G. Revill (Eds.), *Landscapes of defence* (pp. 188–208). London: Prentice Hall.
- Pain, R. (2001). Gender, race, age and fear in the city. *Urban Studies*, 38(5–6), 899–913.
- Rendell, J. (1998). Displaying sexuality: Gendered identities and the early nineteenth-century street. In N. Fyfe (Ed.), *Images of the street: Planning, identity and control in public space* (pp. 75–91). New York: Routledge.
- Ruddick, S. (1996). Constructing difference in public spaces: Race, class and gender as interlocking systems. *Urban Geography*, 17(2), 132–151.
- Sandercock, L. (1998). The death of modernist planning: Radical praxis for a postmodern age. In M. Douglass and J. Friedmann (Eds.), *Cities for citizens: Planning and the rise of civil society in a global age* (pp. 163–184). Chichester: Wiley.
- Schmidt, S. (2004). World wide plaza: The corporatization of urban public space. *IEEE Technology and Society*, 23(4), 17–18.
- Sennett, R. (1978). *The fall of public man*. New York: Vintage.
- Shields, R. (1989). Social spatialization and the built environment: The West Edmonton Mall. *Environment and Planning D: Society and Space*, 7, 147–164.
- Sibley, D. (1995). *Geographies of exclusion*. London: Routledge.
- Siegel, F. (1992). Reclaiming our public spaces. *City Journal*, 35–45, (Spring).
- Smith, N., & Low, S. (2006). “Introduction: The imperative of public space. In S. Low and N. Smith (Eds.), *The politics of public space* (pp. 1–16). New York: Routledge.
- Sorkin, M. (Ed.). (1992). Variations on a theme park: The new American city and the end of public space. New York: Hill and Wang.
- Turner, R. (2002). The politics of design and development in the Postmodern downtown. *Journal of Urban Affairs*, 24(5), 533–548.
- Valentine, G. (1996). Children should be seen and not heard: The production and transgression of adults’ public space. *Urban Geography*, 17(3), 205–220.
- Valentine, G. (2004). *Public space and the culture of childhood*. London: Ashgate.
- Warren, R. (2002). Situating the city and September 11th: Military urban doctrine, ‘pop-up’ armies and spatial chess. *International Journal of Urban and Regional Research*, 26(3), 614–619.
- Wekerle, G. and Whitzman, C. (1995). *Safe cities: Guidelines for planning, design and management*. New York: Van Nostrand Reinhold.
- Whyte, W. (1988). *City: Rediscovering the center*. New York: Doubleday.
- Young, I. (2000). *Inclusion and democracy*. Oxford: Oxford University Press.
- Zukin, S. (1995). *The cultures of cities*. Cambridge, MA: Blackwell.