Defining a Public: The Management of Privately Owned Public Space

Jeremy Németh

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Abstract

This paper empirically explores the management of privately owned public space. It examines 163 spaces produced through New York City's incentive zoning programme, whereby developers provide and manage a public space in exchange for floor area ratio (FAR) bonuses. Developers of these bonus spaces employ a variety of management approaches, each correlating with common theories of spatial control in publicly owned spaces. However, as developer priorities are often fiscally driven, most approaches severely limit political, social and democratic functions of public space and produce a constricted definition of the public. As such, privately owned public spaces have deleterious effects on concepts of citizenship and representation, even as they become the new models for urban space provision and management.

1. Introduction

Publicly accessible spaces are important features of any vibrant and sustainable urban environment.¹ The best spaces present opportunities for discussion, deliberation and unprogrammed, spontaneous encounters with those maintaining diverse viewpoints on the world (Blomley, 2001; Rogers, 1998; Young, 1990, 2000). They are sites of social interaction and active citizenship, in which personal identities are constructed through unmediated human contact, educating the city-dweller about the 'other' and teaching

true urbanity (Rogers, 1998; Lofland, 2000). Ideally, these spaces serve as

the material location where social interactions and public activities of all members of the public occur (Mitchell, 2003a, p. 131).

Yet some argue that the ideal of a universally inclusive and unmediated space can never be met and that, since publicly accessible space is not homogeneous, "the dimensions and extent of its publicness are highly differentiated from instance to instance" (Smith and Low, 2006, p. 3; Mitchell, 2003a). This publicness, or the diversity of users constituting

Jeremy Németh is in the Department of Planning and Design, University of Colorado, CB 126, PO Box 173364, Denver, Colorado, 80206, USA. E-mail: jeremy.nemeth@ucdenver.edu.

'the public', is defined by managers charged with determining who uses a space and how. And as management approaches differ from space to space, the publicness of publicly accessible space is constantly formulated and reformulated. So the first step in understanding the extent of publicness or inclusiveness in a particular space or set of spaces is to determine the characteristic management approaches present.

This article explores the constitution of a public in a certain type of publicly accessible space, that which is owned and managed by the private sector. I pragmatically determine the dominant management approaches in such spaces and test whether, as is commonly claimed, the qualities and functions of ideal publicly accessible spaces are threatened by this increasingly predominant species of space (see Mitchell, 2003a; Kohn, 2004). While creating publicly accessible space where there was none before, most scholars criticise privately owned public spaces for restricting social interaction, constraining individual liberties and excluding certain undesirable populations (Sorkin, 1992). This article lends some support to this criticism and finds that such spaces contribute to, or perhaps accelerate, the demise of an inclusive public realm. However, I argue that this demise is neither absolute nor inevitable; instead, we are witnessing the rise of different kinds of space and, consequently, different conceptions of the public.

Privately owned public spaces are owned and operated by private developers and management firms. Urban planners first introduced these spaces several decades ago in an effort to provide the private sector with attractive incentives to achieve certain public goals. Now quite common in major cities, these spaces are most often constructed in exchange for floor area ratio (FAR) bonuses. This arrangement stipulates that developers may transgress the zoning code or construct

buildings that exceed maximum building envelope allowances in exchange for the provision and perpetual maintenance of a publicly accessible space. The resulting 'bonus spaces' are legally required to invite public access, but their physical configuration and design, as well as the regulations governing their use, are introduced and maintained by private interests rather than city planning or governmental agencies (Smithsimon, 2008).

The term 'publicly accessible space' refers to any variety of physical settings, from sidewalks to outdoor cafés to urban plazas. These locations can each be categorised in terms of their ownership, management, accessibility and relative publicness. Privately owned public space, then, is one type of publicly accessible space which itself encompasses a wide range of sites, including traditional retail establishments, malls and museums. Within the privately owned public space sub-category exists the bonus space, as defined earlier.²

The focus on bonus spaces is important for a number of reasons. First, the proliferation of bonus spaces is staggering. Although individual bonus spaces often consist of little more than an interior atrium or corporate plaza, their aggregate footprint can be quite large: 530 of these spaces exist in Manhattan alone, encompassing over 85 acres in total (Kayden, 2005). As public—private partnerships are the model for catalysing urban (re)development, bonus space is an increasingly common land use type in most major cities, particularly the fast-growing US hubs like Phoenix, Houston and Miami.

Secondly, bonus spaces differ from their publicly owned counterparts in a number of ways. Individual owners and managers of bonus spaces are responsible for setting and implementing their own management techniques. This is contrary to the experience of publicly owned spaces, where rules and regulations are generally uniform throughout a park district or jurisdiction. The inherent variability in the former makes determining their broader management approaches more difficult and partly explains the dearth of empirical work on this subject to date. Similarly, bonus space rules and regulations are not necessarily vetted with public agencies, so much less is known about their management approaches than techniques in cityowned and controlled spaces. As the events of September 11 ushered in a period of real and perceived loss of civil liberties due to government-sanctioned anti-terrorist legislation, it is important for those arguing for a universal 'right to the city' to understand the post-9/11 state of bonus space management if they are effectively and efficiently to contest such controls (Lefebvre, 1991; Mitchell, 2003b).

Thirdly, developers often receive massive floor area bonuses—and increased profits—as a result of these transactions. Urban planners and policy-makers must then understand the quality and nature of bonus spaces received in exchange. The database utilised in this study provides painstakingly detailed information on 530 bonus spaces in New York City created since 1961, but its potential to contribute to the discussion on bonus space management is yet untapped (but see Smithsimon, 2008). And since New York City's zoning resolution serves as a model for numerous other ordinances around the country, scholars must carefully study its products.

In the following section, I lay out the historical production and dominant critique of bonus spaces. I then apply an expert-validated methodological index³ to 163 bonus spaces in New York City, assessing each with scores based on the presence and intensity of certain management techniques (Németh and Schmidt, 2007). Scoring these bonus spaces yields a tremendous amount of descriptive data, but little insight into broader management approaches. To this end,

I conduct a principal components analysis of these data, reducing the 20 variables to seven uncorrelated components approximating a typology of management approaches. I discuss each approach in detail and show how bonus space managers often aim to order and filter users along lines of appropriateness (see Staeheli and Mitchell, 2008). Throughout this discussion, I acknowledge that, while similar phenomena occur in publicly owned spaces, the institutional framework governing bonus spaces introduces additional complexities and tensions, producing a severely constricted definition of the public.

2. Privatisation of Public Space

2.1 The Rise of Bonus Spaces

Some scholars support the use of the private sector to fulfil public needs in downtown areas, citing the ability of such partnerships to resuscitate failing centres (Garvin, 2002; Stone, 1989). Undoubtedly, in the prevailing model of redevelopment efforts in the US, cities leverage private investment to provide for the creation of publicly accessible spaces. Banerjee (2001) offers three key trends that contribute to the rise in bonus spaces. The first involves the increased use of the market, as opposed to the government, to provide public goods and services. Concurrently, the capacity of governments in providing for their citizenry has shrunk considerably. Secondly, the growth of transnational corporate power and the prioritisation of the global economy over local public interests have occurred at an accelerated pace. In this model, policy-makers see cities only as sites of investment, rather than places of social interaction. Thirdly, technologically advanced forms of communication have profoundly altered the character of social relations and redefined traditional conceptions of place and location (Banerjee, 2001, p. 10).

In the current period of increasingly lean local government budgets, most major downtowns in North America and Europe have turned to powerful public–private partnerships to manage and maintain their publicly accessible spaces. Nowhere is this arrangement more visible than in New York City's 530 bonus spaces. As part of their famous 1961 zoning resolution, the city introduced an incentive programme whereby private developers were allowed to construct buildings taller or bulkier than legally permitted (Marcus, 1993).

It seemed a splendid idea. Developers wanted to put up buildings as big as they could. Why not harness their avarice? Planners saw a way. First, they would downzone. They would lower the limit on the amount of bulk a developer could put up. Then they would upzone, with strings. The builders could build over the limit *if* they provided a public plaza, or an arcade, or a comparable amenity (Whyte, 1988, p. 229).

The programme granted participating developers a bonus floor area ratio (FAR) up to 20 per cent of the total floor area of their building. At the time of the resolution, the average building FAR in commercial districts was 17 (Marcus, 1993). The new code lowered the density limit in commercial districts to 15 FAR, but allowed developers to add an extra 20 per cent of floor area if they provided a publicly accessible space, increasing the maximum FAR to 18.

The rationale for this agreement was relatively straightforward. Concerned with increasing publicly accessible space at ground level, planners reasoned that the city is better off with more publicly accessible spaces, more ground-level 'light and air', less street-level congestion, but bigger buildings, than with fewer publicly accessible spaces but smaller buildings (Kayden *et al.*, 2000, p. 22). The deal also made financial sense for developers. The incentive to increase the floor area of their

buildings—and therefore to command higher rents—was clearly enough to offset the cost of providing and maintaining a bonus space. Put another way, the developer 'pays' for bonus floor area by agreeing to allow public use of a portion of the lot (Kayden et al., 2000, p. 23). Indeed, the incentive was as popular as it was prudent. Kayden (1978) estimated that, between 1961 and 1975, 70 per cent of developers provided spaces that earned the maximum FAR bonus. The same study demonstrated that the ratio of bonus floor area value to the cost of providing a public space was 48 to 1: for every dollar spent on a public space, developers earned \$48 in additional profit (Kayden, 1978, p. 11).

From 1996 to 1999, Jerold Kayden, the Municipal Art Society and the New York City Department of Planning compiled a database of the 503 bonus spaces in New York City (27 more have been constructed between 1999 and 2008, bringing the total to 530). The database catalogued such features as the space's size, age, shape and architect, but also the number of chairs, tables, trees and other programming details. The study received accolades for its completeness and impressive detail, yet few have worked with this valuable database or conducted secondary analyses of the raw data. Such an omission is particularly grave since this incentive zoning programme continues to serve as a model for numerous urban zoning ordinances.

2.2 Dominant Critique of Bonus Spaces

Critics often argue that owners or managers of publicly accessible spaces consistently prioritise security concerns over social interaction. These parties often secure spaces by employing a wide variety of interrelated legal, design and policy tools to exclude certain undesirable populations (Németh and Schmidt, 2007). Most disparage this overt securitisation and exclusion on two major grounds. First, the desire to attract a

more orderly citizenry often comes at the expense of certain individuals being deemed objectionable or disorderly. Secondly, while policing, surveillance and strict use regulations might increase the perception of safety, these measures can also contribute to accentuating fear by increasing distrust among users (Ellin, 1996, p. 153).

These issues of security and exclusion are particularly relevant in spaces owned and operated by the private sector: although they are frequently the most popular spaces in contemporary cities, bonus spaces are not legally obligated to accommodate free speech, religious activity or unmediated political expression. Most critical scholarship decries the loss of constitutional rights in such spaces, arguing that this lack of accountability debilitates the notion of bonus spaces as traditional public forums in which protests, demonstrations and other First Amendment rights can be freely expressed. Don Mitchell has consistently demonstrated how courts have depleted the effectiveness of political dialogue by zoning and segregating political speech and protest in privately owned public spaces, as

dissident speakers have to remain outside the mall ... they must remain at a distance from the politicians and the delegates they seek to influence; they must picket only where they will have no chance of creating a meaningful picket line (Mitchell, 2003b, p. 42).

Other critics maintain that the privatisation of space signals the erosion of the public realm and the destruction of truly democratic expression, arguing that bonus spaces prioritise consumption for a more targeted audience, as opposed to supporting interaction among diverse groups (Crawford, 1992; Kohn, 2004). Valentine (1996) and Wilson (1991) have focused particularly on the intersection of space and gender, accusing some bonus spaces of constraining female use and reinforcing oppressive relations. Most critics proceed from

the assumption that political endorsement and substantiation of this new model of space will lead to the complete withdrawal of everyday citizens from the civic realm, signalling the 'end of public space' as we know it (Banerjee, 2001; Brill, 1989; Crawford, 1992; Kohn, 2004; Mitchell, 1995; Sorkin, 1992).

Yet how do bonus space management approaches differ from those in traditional publicly owned spaces? Any comparison requires baseline information on both types of spaces. While a considerable body of knowledge covers the management of traditional publicly owned spaces—see later—I show how few studies have empirically delineated the range of management approaches within the universe of bonus spaces. This article attempts to fill that important gap and discusses how such management approaches might differ from those in publicly owned spaces, setting the scene for future studies across public space categories.

2.3 Recent Work on Bonus Space Management

A number of studies outlining management approaches in publicly accessible spaces fail to examine specifically the spaces owned and managed by the private sector. Stephen Flusty (1994) documents five species of interdictory spaces—those spaces designed to filter or repel potential users—in his studies of publicly accessible spaces in Los Angeles. Sorkin (1992) and Aurigi and Graham (1997) discuss the shopping mall approach in their studies of the rise of virtual cities. Oc and Tiesdell (1999, 2000) outline four other approaches to managing space in city centres: regulatory, animated, panoptic and fortress. Németh and Schmidt (2007) adapted these techniques into four corresponding but slightly altered categories: laws/rules, design/ image, surveillance/policing and access/ territoriality. Yet none of these studies focuses specifically on bonus spaces.

The rare studies analysing bonus spaces have failed to outline explicitly their management approaches. For example, William Whyte and the Project for Public Spaces (1988) conducted visual observations of publicly accessible spaces in New York City—many of which are bonus spaces documenting the various ways people interact socially. And as earlier noted, Kayden et al. (2000) catalogued all 503 bonus spaces in New York City, a mammoth feat. Both of these studies were groundbreaking, but neither focused specifically on recording management approaches in these spaces. However, Smithsimon (2008) produced a set of categories from the relevant public space literature and applied the categories to some of New York City's bonus spaces. The study noted four major categories of exclusion present in these spaces: privatised, filtered, community and popular spaces. The current article builds on these studies and uses fieldwork completed in 2007 to develop more empirically derived management approaches in bonus spaces.

3. Bonus Space Analysis

Until recently, one reason for the dearth of pragmatic research on bonus space management has been the absence of an adequate tool with which to conduct such analyses. However, Németh and Schmidt (2007) recently developed an index that quantifies the degree to which behavioural control is exerted over users of publicly accessible spaces. This index is comprised of 20 variables gauging everything from a space's legal or access restrictions to the intensity of surveillance and policing measures. For heuristic purposes, the authors organised these 20 operationalised variables into four categories derived from the literature on public space management. In addition, half of the variables indicate user control and half encourage free, open use of a space. A scoring rubric (0, 1 or 2) for each

variable is based on the presence and frequency of specific elements or characteristics rather than on subjective feelings of security or control. The higher the score a space receives (either overall, within a particular management category or on a specific variable), the more open it is and vice versa. The overall score is calculated by subtracting the total score for all features that control users from the total score for all features that encourage freedom of use. The highest possible overall score is 20 (most open), the lowest is –20 (least open), and a relatively neutral score is 0. (See Tables A1, A2 and A3 in the Appendix for variable and scoring details.)

I applied this index to 163 bonus spaces at 93 buildings in New York City from February to April 2007, visiting each site on weekdays from 10am to 2pm, when the highest usage generally occurs. Some buildings contain several smaller spaces and, because it is often impossible to determine where one space ends and another begins, my analysis is at the building level.

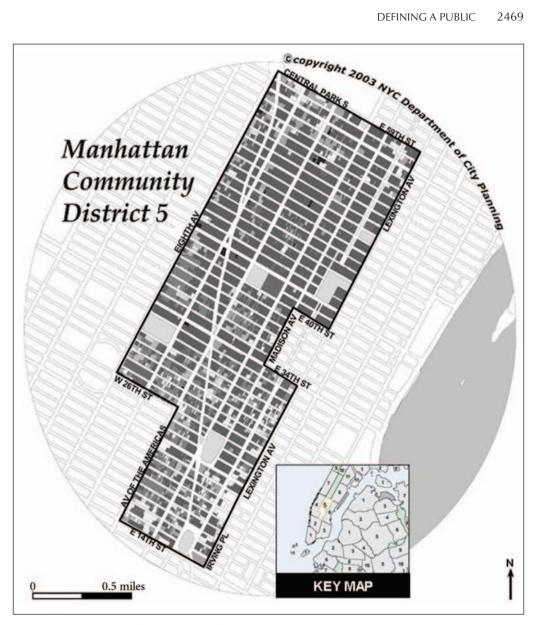
I limited the fieldwork to Central Midtown Manhattan, a very high density, heavily trafficked area (see Figure 1). The district is bounded on the south by 14th Street and on the north by 59th Street and is home to many high-profile corporate headquarters to whom security is an important priority. While the results of the application are unique to this neighbourhood, the findings can be attributed to other neighbourhoods exhibiting similar characteristics and conditions.

3.1 Descriptive Statistics

The median score for these spaces was 2.93 (SD = 3.82) and the mode was 3; Figure 2 shows the plotted total index scores. Most spaces received positive scores (more open) while overall ratings ranged from +11 to -6.

3.2 Principal Components Analysis

In order to determine whether these 20 separate variables worked together to form



Site visit study area: Central Midtown Manhattan Figure 1.

broader management approaches, I conducted a principal components analysis of the data. Principal components analysis reduces large amounts of descriptive data into explanatory components that describe whether and how variables are intrinsically linked. In this case, the analysis reduced these original variables to seven new, uncorrelated

components that together explain 64.9 per cent of the cumulative variance in the model. Table 1 shows that the first component alone explains 18 per cent of the model's variance.

The varimax rotation of the model maximised the variance on the new axes and obtained a more meaningful pattern of loadings on the new components. This provided

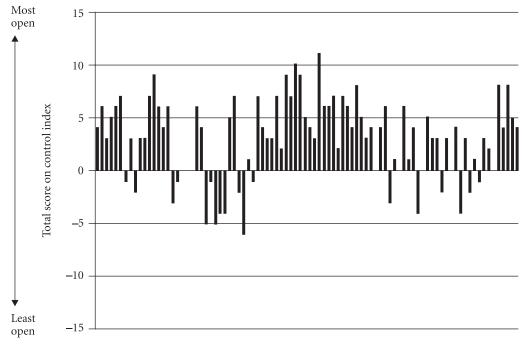


Figure 2. Scores of all 93 buildings in Central Midtown Manhattan

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Table 1.	Iotal	variance	explained

Component	Eigenvalue	Percentage of variance	Cumulative percentage
1	3.630	18.152	18.152
2	2.028	10.141	28.293
3	1.752	8.761	37.054
4	1.672	8.359	45.413
5	1.533	7.665	53.078
6	1.208	6.040	59.118
7	1.152	5.761	64.879

the model with a more straightforward interpretation, as each original variable has a high loading on only one of the new components. In Table 2, the higher loadings are in bold type; because this rotation produced relatively high loadings, I used 0.5 as the lower bound for the analysis. Table 3 provides descriptions of the final components as well as the highest-loading variables on each. These components represent a typology of management approaches in bonus spaces.

4. Bonus Space Management Approaches

4.1 Filtered Spaces

This component has five moderate- to highloading variables demonstrating the presence of five different features: subjective rules posted, general rules posted, public art/statues/cultural material, small-scale food consumption and security personnel. This approach takes the name from terms

 Table 2.
 Rotated component loadings

				Component	t		
	1	2	3	4	5	6	7
Visible sets of rules posted	0.737	0.098	0.204	-0.253	0.101	0.061	-0.091
Subjective rules posted	0.778	0.076	0.104	0.035	0.163	0.118	0.016
In business improvement district	0.183	0.072	0.267	0.606	-0.142	-0.103	0.094
Security cameras	-0.109	0.363	0.342	0.568	0.023	0.082	-0.008
Security personnel	0.548	-0.009	-0.087	0.227	-0.369	0.291	0.069
Secondary security personnel	-0.028	0.088	0.104	-0.028	0.134	0.809	0.053
Design implying appropriate use	-0.005	0.010	-0.123	-0.079	0.054	0.061	0.853
Presence of sponsorship	0.019	-0.171	0.025	0.447	0.096	0.439	0.393
Areas of restricted use	0.028	0.075	-0.056	-0.046	0.867	0.112	-0.002
Constrained hours of operation	0.036	0.037	0.817	0.071	-0.103	0.070	-0.015
Sign announcing 'public space'	0.204	-0.641	0.316	0.097	0.119	0.243	0.037
At a commercial building	0.091	-0.112	-0.211	0.731	0.124	0.055	-0.357
Restroom available	0.330	0.006	0.023	0.257	0.546	0.319	0.075
Diversity of seating types	0.300	-0.743	-0.032	0.060	0.184	-0.103	-0.008
Various microclimates	-0.043	-0.830	0.071	-0.128	-0.062	0.118	-0.214
Lighting to encourage night use	0.128	-0.654	-0.220	0.084	-0.148	-0.090	0.191
Small-scale food consumption	0.568	0.123	-0.061	0.251	0.021	-0.317	0.146
Art/visual enhancement	0.649	0.325	0.033	0.185	-0.084	-0.182	-0.121
Entrance accessibility	-0.146	0.028	-0.808	-0.070	-0.127	-0.009	0.095
Orientation accessibility	0.114	0.182	-0.253	0.073	-0.470	0.388	-0.324

 Table 3.
 Extracted components

Component names	High-loading variables	Loadings
Filtered spaces	Subjective rules posted	0.778
	General rules posted	0.737
	Public art/statues/cultural material	0.649
	Small-scale food consumption	0.568
	Security personnel	0.548
Uninviting spaces	Various microclimates available	-0.830
	Diversity of seating types	-0.743
	Lighting to encourage night-time use	-0.654
	Sign announcing 'public space'	-0.641
Fortress environments	Constrained hours of operation	0.817
	Accessible/convenient entrances	-0.808
Panoptic places	At a commercial building	0.731
	In a business improvement district (BID)	0.606
	Security cameras present	0.568
Consumption spaces	Areas of restricted use (cafés, restaurants)	0.867
	Restrooms available	0.546
Eyes on the street	Secondary/natural surveillance	0.809
Small-scale design	Design to imply appropriate use	0.853

Note: Italicised variables load negatively so opposite definition contributes to component.

introduced in Sorkin (1992) and Aurigi and Graham (1997), which implies that certain techniques effectively filter or sort users to ensure an appropriate clientele. These spaces encourage public use by posting signs noting the public nature of the space, while introducing design amenities like fountains, trees and restrooms (see Figure 3). Owners and managers promote retail consumption by patrons of these spaces, which are often similar in appearance to shopping malls (Aurigi and Graham, 1997; Smithsimon, 2006). The popularity of these spaces requires managers to post extensive sets of rules governing appropriate use. Often these rules are subjective in nature (for example, rules that prohibit disorderly behaviour, loitering or large packages, or that require appropriate attire) and users are filtered in and out subject to judgements and selective enforcement by the property manager or security guard on duty. In this regard, subjective rules not only control how spaces are used, but by whom.

Managers of filtered spaces often implement a number of techniques to help public space to function more efficiently for the benefit of retail sales. Retailers require sterility and cleanliness to attract customers to their chain stores, drawing in customers by evoking a sense of familiarity (Day, 1999, p. 157). More recent redevelopment efforts centre on highprofile, high-end retail shopping destinations. Critics denounce these spaces for their emphasis on consumerism and indulgence, arguing that the diversity and culture of the cosmopolitan city are merged with a manufactured historicism, forming a packaged urbanity that encourages consumption over



Figure 3. Filtered space: consumption-based environment invites users with design and marketing techniques, but has rules and security within (photograph by author)

interaction (Boyer, 1992; Crawford, 1992; Gottdiener, 1986). In this way

using the façade of history and culture is a way to generate revenues and revitalize slumping property values (Turner, 2002, p. 545).

This commodification of public space is increasingly widespread, as major cities often rent out their central public squares for corporate or commercial events.

These 'theme park' spaces depend upon a complete environment of consumption-based activity and are often fantastic in their presentation, luring customers into stores and gift shops by presenting flashy colours and other visual stimuli (Boyer, 1992; Judd and Fainstein, 1999). The target of these strategies are consumers that are trendy, hip, urban, well-educated and, most importantly, ready to spend (Crawford, 1992).

4.2 Uninviting Spaces

Interestingly, four variables have moderate to high negative loadings on this second component: various microclimates available, diversity of seating types, lighting to encourage night-time use and sign announcing 'public space'. These negative loadings can either mean that these characteristics are absent in the bonus spaces described by this component or that their opposites are present. I interpret this component as describing spaces with no microclimate diversity (including sun shading and rain shelters), little to no seating, a distinct lack of night-time lighting and no sign announcing the space as a legally public entity—a feature required of all bonus spaces in New York City. These spaces bear a striking resemblance to the low-quality, unprogrammed, underutilised spaces deemed 'marginal' by Kayden et al. (2000) (see Figure 4).



Figure 4. Uninviting space: trash and dumpsters, plugged water drain and lack of seating all contribute to an empty space (photograph by author)

Particularly in the years immediately following New York City's 1961 Zoning Resolution, most bonus spaces consisted of nothing more than the paving of an open area or a concrete pad running alongside a high-rise building (Kayden et al., 2000). Such spaces were often purposefully privatised, as owners saw that the construction of empty plazas and arcades fronting their buildings would promote a beneficial and powerful corporate image (Smithsimon, 2008). Most developers felt that the construction of a barren plaza devoid of amenities fronting their building actually increased the market value of their building, as powerful corporations seeking to project an image of affluence "indulged in the luxury of empty space" (Willis, 1995, p. 141).

A number of critics discuss this tendency of bonus space owners to control space by actively discouraging public use. Whyte's empirical studies in the 1970s found most bonus spaces "were awful: sterile, empty spaces not used for much of anything" (Whyte, 1988, p. 234). Kayden *et al.* (2000) attributed their lowest 'marginal' rating to over 40 per cent of New York City's bonus spaces. Smithsimon (2008, p. 332) showed that over 50 per cent of bonus spaces in the city's busiest districts—Midtown and the Financial District—either failed to attract or actively repelled potential users.

Many of these uninviting spaces were constructed following significant and well-founded concerns regarding crime and safety in these barren plazas. Such concerns began to arise soon after the Resolution was enacted, as crime statistics demonstrated that incidents in these spaces rose steadily from the 1960s to the 1980s (Marcus, 1993, p. 64). In the late 1960s in particular, prostitution, vandalism and drug dealing "found a home" in the underutilised bonus spaces (Marcus, 1993, p. 86). As public fears increased, property owners began to implement crime-reducing techniques, placing spikes on ledges, removing benches that might attract homeless persons

and constructing illegal fences to keep the public out after day-time hours. This tendency to discourage use has left Manhattanites and visitors to the borough with nearly 40 acres of uninviting bonus spaces.

4.3 Fortressed Environments

The third component has two high loading variables: 'constrained hours of operation' loads positively, while 'accessible/convenient entrances' loads negatively. The component describes a management approach that limits use during certain hours of the day and has inconvenient or obstructed access to the space. The methods seem to correspond with those of the defensible space model originally espoused by Oscar Newman (1972) and the Crime Prevention through Environmental Design (CPTED) proponents (Clarke, 1992). The approach predominantly employs strict access controls and territorial exclusion to manage users. Davis (1992) and Loukaitou-Sideris (1996) describe how these 'fortressed' spaces are often oriented away from public sidewalks, have obscured street level access or have high enclosing walls and blank façades (see Figure 5). Such spaces are often located inside buildings with access only through guarded doors. In this regard, owners and managers of these spaces restrict not only physical access, but also visual and symbolic access (see Carr et al., 1992).

These territorially controlled spaces are intended for resident or tenant use only; at commercial establishments, these spaces entertain use by building employees only. Fortressing most often takes place at the microspace level, as managers programme certain areas within a space for conditional use, such as cafés or restaurants that require patrons to pay in order to enter an area or sit at tables. Fortressing segregates users, determining who can and cannot enter, or who belongs in a particular area or does not (Oc and Tiesdell, 1999, p. 270).



Figure 5. Fortressed environment: iron fences limit physical and symbolic access and make space uninviting to potential users (photograph by author)

4.4 Panoptic Places

The fourth component has three variables with relatively high loadings: at a commercial building, in a business improvement district (BID) and security cameras present. This component describes spaces with heavy human and electronic surveillance: over 95 per cent of bonus spaces at commercial buildings in Central Midtown have two or more surveillance cameras (see Figure 6) and over 90 per cent of those in BIDs are also policed by security personnel (Németh, 2007). Taken from a term developed in the 18th century by Jeremy Bentham, the word 'panoptic' is used by urban observers to describe environments controlled by several forms of surveillance (Oc and Tiesdell, 2000).

Human surveillance is a controversial technique used in these spaces. As Manhattan bonus spaces are predominantly policed by private security guards employed by business improvement districts (BIDs), these personnel are beholden to the priorities of their corporate clients rather than a broader 'public interest' (Németh and Schmidt, 2007). The widespread use of electronic surveillance has also stimulated concerns over privacy and civil liberties as some claim that cameras are used to identify undesirables by appearance alone (Koskela, 2000). The prevalence of cameras in public locations has increased dramatically while research tying surveillance to actual crime reduction remains inconclusive (Németh and Schmidt, 2007). Some argue that panoptic places actually



Figure 6. Panoptic place: panning cameras and two private security guards (not shown) govern the small indoor space at the IBM building (photograph by author)

generate additional suspicion that the space needs a significant police and camera presence because of its dangerous disposition (Davis, 1992).

4.5 Consumption Spaces

This component has two variables with moderate to high loadings: areas of restricted use and restrooms available. Consumption spaces often result from the annexation of public space for private use, most often by restaurants, bars and cafés. A number of these eating establishments have a private restroom open to paying customers only. Realising that free public restrooms attract undesirable

users, owners of bonus spaces either lock them or leave them unmarked (Kayden et al., 2000, p. 59). Most consumption spaces contain a prominent commercial space within (see Figure 7). Kayden et al. (2000) cite numerous episodes of this commercial spillover, labelling the phenomenon brasserie bulge, café creep or trattoria trickle. In many cases, these private uses illegally invade large portions of the space, prohibiting use of tables and chairs by the non-consuming public. A set of design measures completes this private coding, often accomplished by demarcating sub-spaces with attractive fences, umbrellas or logos of the establishment.



Figure 7. Consumption space: large area within space taken over by café and restaurant, open to paying customers only (photograph by author)

The requirement that users become consumers to access public toilets is one of the more insidious functions of consumption spaces, particularly since restrooms are often a legal requirement for which a developer receives a significantly elevated FAR bonus. While free public toilets might be a convenience to a worker on lunch break or a family of tourists, they are necessities for individuals without a home or office in which to carry out this most natural human function. Making toilets available only to an establishment's paying customers deems this activity private, something that must take place only in private space. This decision criminalises homeless people themselves, questioning their very existence in

a world in which a whole class of people cannot be—simply because they have no place to be (Mitchell, 2003a, p. 171; see Waldron, 1991, for a more detailed line of argument).

4.6 Eyes on the Street

This component has only one variable with a high loading: secondary surveillance. Spaces described by this component use janitors, waiters or doorpersons to police the area (Figure 8). Jacobs (1961) maintained that these local employees provide the 'eyes on the street' to encourage civility, claiming that secondary surveillance personnel are actually more effective in maintaining order than security guards specifically charged with the task.

4.7 Small-scale Design

Only one variable loads on this component: design to imply appropriate use. This factor describes the technique wherein developers



Figure 8. Eyes on the street: doorman at Trump Tower provides eyes on the street and simultaneously screens users in and out of the bonus space (photograph by author)

commission small design measures to control user behaviour and make certain the space reads as private property. Whyte (1988) provides a number of these examples: metal spikes on ledges and canted, rolled or unsittable ledges; or bollards and barriers to discourage mobility (see Figure 9).

5. Discussion: Bonus Spaces in Context

This empirical analysis demonstrates that bonus space managers implement robust combinations of techniques to control who uses a space and how. Design, surveillance, legal and territorial techniques form relatively distinct and discrete combinations: the presence or absence of one measure seems to determine the presence or absence of another. This finding builds on previous analyses that examine singular dimensions of management, such as design practices or legal measures, and lends credibility to recent research arguing that management approaches in publicly accessible spaces are comprised of broader packages of measures (Németh and Schmidt, 2007).

The seven main management approaches correlate with some of the dominant approaches discussed in the literature on bonus space control and management. In particular, Smithsimon's (2008) discussion of exclusionary techniques in New York City's bonus spaces concludes that all bonus spaces



Figure 9. Small-scale design: features like spikes on ledges make places inhospitable and uninhabitable for users (photograph by author)

use either privatised, filtered, community or popular techniques. Smithsimon also determined that the filtered technique was an increasingly popular approach in the city's newest spaces, including Battery Park City, as he chronicled the longer trajectory from the earlier privatised spaces to the more recent emphasis on segregated, selectively accessible spaces.

In addition, Németh's empirical work (2007) determined that the filtered exclusion technique is the most common approach in Central Midtown, particularly in the busy, highprofile bonus spaces—those the City's zoning resolution calls 'covered pedestrian spaces' (for example, Trump Tower, Sony Plaza and IBM Building). As the zoning resolution grants the largest bonus floor area ratios for such spaces (up to 11:1), it is safe to assume

that these types of space will only become more common. Even now they serve as models of the zoning resolution and are lauded by all levels of government in the city.⁴ The filtered management approach is also more complex in nature than the other approaches and is differentially imposed on potential users, as managers screen in and out a desired audience.

As stated earlier, this filtered approach severely limits the openness of publicly accessible space. First, the approach is commonly present in spaces that are often well used, but by a distinctly filtered and hand-picked constituency. These spaces are generally less inclusive and often encourage singular uses and activities based on consumption only. Secondly, because the diversity of these spaces is contrived, filtered spaces limit meaningful

differences by restricting unmediated discussion and interaction to like-minded individuals. These spaces generally fail to connect diverse individuals and groups. Thirdly, filtered management approaches disable free flows of dialogue and personal expression, controlling behaviour with strict rules and regulations and monitoring activities with security personnel and cameras. In many bonus spaces, owners and managers are not legally obliged to provide space for dissent, protest or other forms of political expression. Finally, while these spaces are often visually and aesthetically pleasing, they promote a spectacle that celebrates consumption and capital 'exchange value' instead of its 'use value' (Gottdiener, 1986). These spaces often evoke historical images but frequently present themselves as inauthentic representations of an original.

Yet the question remains: are bonus space management approaches any different from other approaches in publicly owned spaces? I argue that a number of important differences exist.

5.1 Location and Quality Stratification

In most major cities, the location of publicly owned spaces is determined by comprehensive masterplans developed by city planning or parks and recreation departments with participation by community organisations and conservancy groups. While some argue that decisions on where to construct publicly owned parks are based on entrepreneurial priorities over social concerns (Katz, 2006), a number of cities-including New York City, Denver and San Francisco—have begun efforts to construct parks and other publicly accessible spaces in the most economically disadvantaged areas. Conversely, since all bonus spaces are 'attached' to a building, they are most often constructed during positive economic cycles in neighbourhoods attractive to the development industry (Kayden et al., 2000). By concentrating bonus spaces in areas

of interest to the private sector, the incentive zoning programme serves to widen the gap between more and less valuable neighbourhoods and between upper- and lower-income residents.

Similarly, bonus space construction, maintenance and programming budgets depend on funds dedicated by private development firms, while funding for traditional, publicly owned spaces comes directly out of city coffers and is dedicated through annual budgeting processes. So, as city budgets have become increasingly austere in recent years, funding for 'luxury' items such as new parks has decreased considerably, just as incentives for bonus space provision have become more and more common (Katz, 2006). This marketdriven production results in severe stratification between valuable and neglected spaces, or between "the poor that the market ignores and the well-to-do that it privileges" (Boyer, 1992, p. 204).

5.2 Public Forums

As investment in bonus spaces increases while parks and recreation budgets wane, the former are able to introduce additional amenities and high-profile programming. These sites become some of the most popular destinations in cities—Trump Tower in New York City claims to entertain tens of thousands of visitors daily—and the elements of public life, such as political flyering and leafleting, have moved to these locales (Banerjee, 2001, pp. 12-13). Owners of bonus spaces often respond to such actions by declaring their inherent right to exclude any person or group expressing political or religious views. Scholars document the numerous legal cases involving the 'public forum doctrine', where nearly all courts have sided with private property owners exercising this right.5

Put another way, bonus space owners have the *a priori* right to exclude anyone from their property, introducing a very different situation from that which exists in publicly owned spaces (Staeheli and Mitchell, 2008, p. xvi). This right allows private owners to use subjective regulations, interdictory design (Flusty, 1994) and heavy-handed surveillance to filter, segment, position and order the public along lines of appropriateness. This ordering results in a clearly defined *normative* public realm, demonstrating "how possibilities for association in publicly accessible space vary for different people" (Staeheli and Mitchell, 2008, p. xxiii).

5.3 Accountability and Oversight

In most major cities—New York City included —bonus space owners and managers develop the rules and regulations to govern user activity, contrary to the experience in publicly owned spaces where rules and regulations are generally uniform throughout a jurisdiction. The development and enforcement of rules and regulations in bonus spaces are more variable than in publicly owned spaces, especially since private security guards can "operate outside the legal limits imposed on police" (Frieden and Sagalyn, 1989, p. 234). Indeed, the only language in New York City's Zoning Resolution regarding the management of bonus spaces states that owners are required to implement "reasonable" rules of conduct (Kayden et al., 2000).

The institutional arrangements governing bonus spaces also introduce added complexity. Miller (2007) provides a number of examples demonstrating the lack of accountability and transparency in the regulatory and permitting process, making legal challenges confronting the design and management of bonus spaces extremely difficult. While similar management approaches may exist in publicly owned parks and plazas, regulations established by municipal planning departments are generally more accountable to rigorous public process and oversight.

5.4 Profit Motives

Property regimes, or the prevailing systems of laws, practices and relations governing property, are different in bonus spaces than in publicly owned spaces since the former are commonly owned, managed and operated by developers with fiscal mandates as opposed to broader social priorities. Bonus spaces introduce a set of tensions not present in their publicly owned and operated counterparts: once the developer constructs a building with the additional floor area, he or she must now operate and maintain a space and keep it accessible to a universal public (Kayden, 2005).

In response to this concern, many highprofile bonus spaces—especially those providing myriad opportunities for consumption —filter in an appropriate set of users through design and management techniques that code spaces as accessible only to a clearly defined, predictable public. This quest for predictability often results in orderly, sanitised, sterilised spaces based on a desire for security more than interaction. The filteringout of social and economic heterogeneity is more a positioning or ordering than it is total, outright exclusion. This filtering more narrowly prescribes the public and has important implications for homeless, activist or non-consumer populations deemed undesirable by the powers that be (Mitchell, 2003a, p. 142). These undesirables are made invisible and are screened out of space, while more desirable individuals are protected from the "unmediated confrontation with social difference" (Jackson, 1998, p. 178).

Harvey argues that balancing the economic concerns of the development industry with social concerns of urban advocates is impossible

To hold all the divergent politics of need and desire together with some coherent frame may be a laudable aim, but in practice far too many of the interests are mutually exclusive to allow their mutual accommodation (Harvey, 1992, page 591).

Interviews of bonus space developers in Minneapolis (Byers, 1998), as well as in Los Angeles and San Francisco (Loukaitou-Sideris and Banerjee, 1998), further demonstrate the intrinsically oppositional goals of the public and private sectors involved in these bonus space partnerships.

Perhaps most importantly, the bonus space model is problematic when viewed through a lens of citizenship and representation. The right of private parties to exclude certain individuals and groups from publicly accessible spaces is a question of citizenship, or "the right to be considered in the range of forums, alliances and nodes which constitute governance" (Rogers, 1998, p. 206). The denial of access to, or inclusion in, publicly accessible space then becomes a denial of citizenship and representation in our collective public forums. Citizenship and representation are directly related to visibility and to making physical appearances in publicly accessible space, so space cannot be called truly public if its "maintenance requires the marginalization or exclusion" of a particular constituency (Valentine, 1996, p. 217).

6. Conclusion and Future Research

The management approaches in bonus spaces examined in this study severely limit the ability to have an inclusive and diverse public realm, as the institutional arrangements governing these spaces enable owners and managers to filter and order users based on fiscally driven priorities and mandates. While these management approaches might also be present in publicly owned parks and plazas, bonus space owners and managers have the *a priori* ability to exclude certain types of people and certain types of activities, just as they are held to less stringent standards of accountability and oversight.

This study has important findings for planners, policy-makers, designers and those arguing for a universal 'right to public space'. It makes a primary empirical contribution to the literature on urban space security, management and behavioural control.

Although the various bonus space management approaches might be well known to most planners and urban designers in theory, the pragmatic methodology reveals what actually exists on the ground. The Németh–Schmidt index (2007) also identified the separate techniques that work together to form broader management approaches; this application in turn serves to validate further the index's utility. The methodological framework used in the article can be employed in different contexts and in a variety of public spaces, whether publicly or privately owned and managed.

The article also establishes the need for a number of future studies addressing related questions. First, do privately owned spaces maintain higher overall levels of control than those owned and managed by parks and recreation departments and other public agencies? And which ownership and management arrangements are better at balancing control and openness? Secondly, what types of publicly accessible spaces—in terms of location, size and age—are more or less controlled than others? Thirdly, are personal impressions of control/management felt differently by diverse users? And who actually uses these bonus spaces? Interviews with multiple users will begin to address these and other related questions. As bonus spaces become the model for the provision of publicly accessible space in many cities, these questions become all the more timely and relevant.

Notes

- I refer to all public spaces, including those owned or operated by the public or private sector, as 'publicly accessible spaces' throughout the paper.
- 2. The bonus spaces I examine in this article do not include spaces like Rockefeller Center or Paley Park, both privately owned public spaces provided as philanthropic 'donations' to the city of New York without any officially associated bonus.

- This index has been validated by a panel of experts in public space design and planning, including both professional practitioners and academics.
- P. Schneider, personal communication, February 2007.
- 5. See Marsh v. Alabama (1946), Lloyd Corp. v. Tanner (1972), and Pruneyard Shopping Center v. Robins (1980). Only five states—California, New Jersey, Oregon, Colorado and Massachusetts—allow protections for speech in such spaces (Kohn, 2004, p. 74).

References

- Aurigi, A. and Graham, S. (1997) Virtual cities, social polarisation and the crisis in urban public space, *Journal of Urban Technology*, 4, pp. 19–52.
- Banerjee, T. (2001) The future of public space: beyond invented streets and reinvented places, *Journal of the American Planning Association*, 67, pp. 9–24.
- Berman, M. (1986) Take it to the streets: conflict and community in public space, *Dissent*, 33, pp. 476–485.
- Blomley, N. (2001) Introduction, in: N. Blomley, D. Delaney and R. Ford (Eds) *The Legal Geographies Reader: Law, Power, and Space*, pp. 3–5. Oxford: Blackwell.
- Boyer, M. C. (1992) Cities for sale: merchandising history at South Street Seaport, 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.
- Brill, M. (1989) Transformation, nostalgia, and illusion in public life and public place, in: I. A. E. H. Zube (Ed.) *Public Places and Spaces*, pp. 7–29. New York: Plenum.
- Byers, J. (1998) The privatization of downtown public space: the emerging grade-separated city in North America, *Journal of Planning Education and Research*, 17, pp. 189–205.
- Carr, S., Francis, M., Rivlin, L. and Stone, A. (1992) *Public Space*. Cambridge: Cambridge University Press.
- Clarke, R. (1992) Situational Crime Prevention: Successful Case Studies. New York: Harrow and Heston.

- 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*, ch. 2. New York: Hill and Wang.
- 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.
- Day, K. (1999) Introducing gender to the critique of privatized public space, *Journal of Urban Design*, 4, pp. 155–178.
- Ellin, N. (Ed.) (1996) *Architecture of Fear*. Princeton, NJ: Princeton Architectural Press.
- Ellin, N. (1999) *Postmodern Urbanism*. Princeton, NJ: Princeton Architectural Press.
- Fainstein, N., Fainstein, S. and Schwarz, A. (1989) Economic shifts and land use in the global city, in: R. Beauregard (Ed.) *Atop the Urban Hierarchy*, pp. 45–86. New York: Rowman and Littlefield.
- Flusty, S. (1994) Building paranoia: the proliferation of interdictory space and the erosion of spatial justice. Los Angeles Forum for Architecture and Urban Design.
- Frieden, B. and Sagalyn, L. (1989) *Downtown, Inc.: How America Rebuilds Cities*. Cambridge, MA: The MIT Press.
- Garvin, A. (2002) *The American City: What Works*, *What Doesn't*. New York: McGraw-Hill.
- Goldberger, P. (1988) Trump: symbol of a gaudy, impatient time, *New York Times*, 31 January, p. 32.
- Gottdiener, M. (1986) *The Social Production of Urban Space*. Austin, TX: University of Texas Press.
- Harvey, D. (1992) Social justice, postmodernism and the city, *International Journal of Urban and Regional Research*, 16(4), pp. 588–601.
- 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.
- Judd, D. and Fainstein, S. (1999) *The Tourist City*. New Haven, CT: Yale University Press.
- 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. (1978) *Incentive Zoning in New York City: A Cost Benefit Analysis*. Cambridge, MA: Lincoln Institute of Land Policy.
- 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.
- Kayden, J., New York City Department of Planning and Municipal Art Society (2000) *Privately Owned Public Space: The New York City Experience.* New York: John Wiley and Sons.
- Kohn, M. (2004) Brave New Neighborhoods: The Privatization of Public Space. New York: Routledge.
- Koskela, H. (2000) The gaze without eyes: videosurveillance and the changing nature of urban space, *Progress in Human Geography*, 24(2), pp. 243–265.
- Krumholz, N. (1984) Recovery of cities: an alternative view, in: P. Porter and D. Sweet (Eds) Rebuilding America's Cities: Roads to Recovery, pp. 143–159. New Brunswick, NJ: Center for Urban Policy Research.
- Lefebvre, H. (1991) *The Production of Space*, trans. by D. Nicholson-Smith. Oxford: Blackwell.
- Ley, D. (1987) Styles of the times: liberal and neoconservative landscapes in inner Vancouver, 1968–1986, *Journal of Historical Geography*, 13(1),pp. 40–56.
- Lofland, L. (2000) Urbanity, tolerance and public space, in: L. Deben, W. Heinemeyer and D. van der Vaart (Eds) *Understanding Amsterdam: Economic Vitality, City Life and Urban Form.*Amsterdam: Het Spinhuis.
- Loukaitou-Sideris, A. (1996) Cracks in the city: addressing the constraints and potentials of urban design, *Journal of Urban Design*, 1, pp. 91–104.
- Loukaitou-Sideris, A. and Banerjee, T. (1998) *Urban Design Downtown: Poetics and Politics of Form.* Berkeley, CA: University of California Press.
- Marcus, N. (1993) Zoning from 1961 to 1991: turning back the clock, in: T. Bressi (Ed.) Planning and Zoning New York City. Yesterday, Today and Tomorrow, pp. 61–102. New Brunswick, NJ: Rutgers University Press.

- Miller, K. (2007) *Designs on the Public: The Private Lives of New York's Public Spaces*. Minneapolis, MN: University of Minnesota Press.
- 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, pp. 108–133.
- Mitchell, D. (2003a) *The Right to the City: Social Justice and the Fight for Public Space*. New York: The Guilford Press.
- Mitchell, D. (2003b) The liberalization of free speech: or how protest is silenced in public space, *Stanford Agora*.
- Németh, J. (2006) Conflict, exclusion, relocation: skateboarding and public space, *Journal of Urban Design*, 11(3), pp. 297–318.
- Németh, J. (2007) Security and the production of privately owned public space. Unpublished PhD thesis, Rutgers University, New Brunswick, NJ.
- Németh, J. and Schmidt, S. (2007) Toward a methodology for measuring the security of publicly accessible spaces, *Journal of the American Planning Association*, 73(3), pp. 283–297.
- Newman, O. (1972) Defensible Space: Crime Prevention through Urban Design. New York: Macmillan.
- Oc, T. and 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), pp. 265–286.
- Oc, T. and Tiesdell, S. (2000) Urban design approaches to safer city centres: 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.
- Rogers, A. (1998) The spaces of multiculturalism and citizenship, *International Social Science Journal*, 156, pp. 201–213.
- Ruddick, S. (1996) Constructing difference in public spaces: race, class and gender as interlocking systems, *Urban Geography*, 17, pp. 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: John Wiley and Sons.

- Smith, N. and Low, S. (2006) Introduction: the imperative of public space, in: N. Smith and S. Low (Eds) *The Politics of Public Space*, pp. 1–16. London: Routledge.
- Smithsimon, G. (2006) *The Shared City: Using and Controlling Public Space in New York City.* Unpublished PhD thesis, Columbia University, New York.
- Smithsimon, G. (2008) Dispersing the crowd: bonus plazas and the creation of public space, *Urban Affairs Review*, 43, pp. 325–351.
- Sorkin, M. (Ed.) (1992) Variations on a Theme Park: The New American City and the End of Public Space. New York: Hill and Wang.
- Staeheli, L. and Mitchell, D. (2008) *The People's Property? Power, Politics, and the Public.* New York: Routledge.
- Stone, C. (1989) Regime Politics: Governing Atlanta, 1946–1988. Lawrence, KS: University Press of Kansas.
- Turner, R. (2002) The politics of design and development in the postmodern downtown, *Journal of Urban Affairs*, 24, pp. 533–548.

- Valentine, G. (1996) Children should be seen and not heard: the production and transgression of adults' public space, *Urban Geography*, 17, pp. 205–220.
- Waldron, J. (1991) Homelessness and the issue of freedom, *UCLA Law Review*, 39, pp. 295–324.
- Whyte, W. (1988) *City: Rediscovering the Center.* New York: Doubleday.
- Willis, C. (1995) Form Follows Finance: Skyscrapers and Skylines in New York and Chicago. Princeton, NJ: Princeton Architectural Press.
- Wilson, E. (1991) *The Sphinx in the City: Urban Life, Control of Disorder, and Women*. London: Virago Press.
- Young, I. (1990) *Justice and the Politics of Difference*. Princeton, NJ: Princeton University Press.
- Young, I. (2000) *Inclusion and Democracy*. Oxford: Oxford University Press.
- Zukin, S. (1995) *The Cultures of Cities*. Cambridge, MA: Blackwell.

Appendix

Table A1. Index variables

	Category	Scoring criteria
Features encouraging freedo	om of use	
Sign announcing 'public space'	Laws/rules	0 = none present1 = one small sign2 = one large sign or two or more signs
At a commercial building	Surveillance/policing	0 = no office/commercial component 1 = mixed use – residential/commercial 2 = office/commercial component only
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 moveable 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

(Table A1 Continued)

	Category	Scoring criteria
Lighting to encourage night use	Design/image	0 = none present1 = one type or style of lighting2 = several lighting types
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/visual enhancement	Design/image	 0 = none present 1 = one or two minor installations, statues or fountains 2 = one major interactive installation; free performances
Entrance accessibility	Access/territoriality	 0 = gated or key access only and at all times 1 = one constricted entry; several entries through doors/gates 2 = more than one entrance without gates
Orientation accessibility	Access/territoriality	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 (fewer than five steps)
Features that control users Visible sets of rules posted	Laws/rules	0 = none present 1 = one sign or posting 2 = two or more signs
Subjective rules posted	Laws/rules	0 = none present1 = one rule visibly posted2 = two or more rules visibly posted
In 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 2 = two or more private security or more than two public personnel

(Continued)

(Table A1 Continued)

	Category	Scoring criteria
Secondary security personnel	Surveillance/policing	0 = none present 1 = one person or space oriented toward reception 2 = two or more persons or one person with space oriented at reception
Design implying appropriate use	Design/image	 0 = none present 1 = only one or two major examples 2 = several examples throughout space
Presence of sponsorship	Design/image	 0 = none present 1 = one medium sign or several small signs 2 = large sign or two or more signs
Areas of restricted use	Access/territoriality	 0 = none present 1 = one small area restricted to certain members of the public 2 = large area for consumers; several small restricted areas
Constrained hours of operation	Access/territoriality	 0 = open 24 hours/day, 7 days/week, most days of year 1 = part of space open past business hours or at weekends 2 = open business hours only; portions permanently closed

Table A2. Variable definitions: features encouraging freedom of use

0 0	
Variable	Definition
Laws/rules	
Sign announcing public space	Most zoning codes require publicly accessible spaces to exhibit plaques indicating such. Some spaces are clearly marked with signs denoting their public nature (for example, New York's Sony Plaza), but when a sign or plaque is hidden by trees/shrubs or has <i>graffiti</i> covering it, its intent becomes null
Surveillance/policing	
At a commercial building	Spaces located outside office buildings often allow use by public after business hours or at weekends. Spaces at residential buildings more likely to be open to residents only (often with key access). As most residences employ doorpersons/reception, after-hours surveillance is likely to be greater than at an office/commercial building

(Continued)

(Table A2 Continued)

Variable	Definition
Design/image	
Restroom available	Clearly, some spaces are not large enough to merit a public restroom. Realising that free public restrooms often attract homeless persons, managers often remove them altogether or locate them in on-site cafés or galleries available to paying customers only (or providing keyed access for 'desirable' patrons)
Diversity of seating types	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.' Moveable chairs allow maximum flexibility and personal control in seating choice
Various microclimates	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
Lighting to encourage nighttime use	Studies indicate that vulnerable populations often avoid public spaces at night if not well-lit. Lighting spaces encourages 24-hour 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
Small-scale food consumption	Most agree that food vendors enhance activity and vitality. This variable only includes small cafés, 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)
Access/territoriality	
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 are 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

Table A3. Variable definitions: features that control users

Official, visible signs listing sets 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
Official, visible signs listing individual rules describing activities prohibited after personal evaluations and judgements of desirability by owners, managers or security guards. Such rules include: no disorderly behaviour, no disturbing other users, no loitering, no oversized baggage, or appropriate attire required
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 neighbourhood spaces
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
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
Scoring dependent on time of visit. Includes maintenance staff, doorpersons, reception, café or restaurant employees, bathroom attendants. Also, spaces often oriented directly toward windowed reception or information area to ensure constant employee supervision
Small design to control user behaviour 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

(Continued)

(Table A3 Continued)

Variable	Definition
Presence of sponsor/advertisement	Signs, symbols, banners, umbrellas, plaques tied to space's infrastructure, not to immediate services provided (for example, cafés, 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
Access/territoriality	
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 café 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 hours inherently restrict usage to particular population. Also, while usually due to lack of adequate supervision, spaces open only during weekday business hours clearly prioritise employee use over general public