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Defending Suburbia: Exploring the Use of Defensive Urban Design Outside of the City Centre

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Abstract

Defensive urban design, also known as hostile, unpleasant, or exclusionary architecture is an intentional design strategy that uses elements of the built environment to guide or restrict behaviour in urban space as a form of crime prevention, protection of property, or order maintenance. It often targets people who use or rely on public space more than others, like people who are homeless and youth, by restricting the behaviours they engage in. From benches specially designed to prevent lying down to the addition of elements that are meant to deter skateboarding, forms of defensive design vary according to the behaviour it is intended to restrict. While much of the current research on the subject privileges the urban centre as the site of research, this paper expands the focus from the centre to the periphery. Taking two public spaces in Toronto's inner suburb of North York as a starting point, this paper examines how defensive urban design is used regulate, control, and maintain public space outside of the city centre.

Keywords: Public space, defensive urban design, hostile architecture, suburban space, CPTED

Résumé

Le design urbain défensif, également connue sous le nom d'architecture hostile, désagréable ou d'exclusion, est une stratégie de conception intentionnelle qui utilise des éléments de l'environnement bâti pour orienter ou restreindre les comportements dans l'espace urbain. Ce dernier se présente comme une forme de prévention du crime, de protection de la propriété ou de maintien de l'ordre. Le design urbain défensif cible souvent les personnes qui utilisent ou dépendent davantage de l'espace public que d'autres, comme les sans-abri et les jeunes, en limitant leurs comportements. Des bancs spécialement conçus pour empêcher de s'étendre, de même que divers éléments destinés à décourager la planche à roulette, les formes de design défensif varient en fonction du comportement qu'elle est censée restreindre. Une grande partie de la recherche actuelle sur ce sujet privilégie le centre urbain en tant que site de recherche. Or, cet article élargit la portée du centre à la périphérie. Cet article examine deux espaces publics situés dans la banlieue torontoise de North York afin d'illustrer comment le design urbain défensif est utilisé pour contrôler et maintenir les espaces publics en dehors du centre-ville.

Mots clés: espace public design urbain défensif, architecture hostile, banlieu, CPTED

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Introduction

Public space is often equated with urban life (Amin 2006) and centrality. Neil Smith and Setha Low write, "Public space is almost by definition urban space, and in many current treatments of public space the urban remains the privileged scale of analysis and cities the privileged site" (2006: 3). Cities and their urban centres are believed to encourage public life, encounter, and difference in shared public spaces like streets, parks, and squares. They are also perceived to be places of social unrest, violence, and crime due in part to their depiction in popular culture. In contrast, urban space on the periphery or suburban space, has been depicted as a refuge from the perceived social ills of the inner city, the chaos of urban life, and a retreat from the public sphere of work (Young & Keil 2010). Considered "less-than-urban," suburban space is thought to be mostly homogenous residential space, dominated by the private sphere, private property, and a lack of public life (Bain 2013; Keil 2018). This perpetuates the idea that public space and public life does not exist outside of the city centre.

Similarly, much of the literature on the topic of defensive urban design focuses on its use in central urban spaces (Tiesdell & Oc 1998; Bergamaschi, Castrignanò & De Rubertis 2014; Smith & Walters 2017; Doherty et al. 2008). From Mike Davis' (1990) account of the securitization and social cleansing of downtown Los Angeles to Maurizio Bergamaschi, Marco Castrignanò, and Pia De Rubertis' analysis of urban exclusion of Bologna's homeless population in the city centre, defensive urban design elements are thought to be "particularly found in public spaces characterized by a high fruition, and so frequented by a large number of residents and urban users... which usually coincide with central urban areas." (2014: 12). Through the example of North York, this paper seeks to address the lack of empirical research on suburban public space. The first part of this paper reviews relevant literature on defensive urban design and its design philosophy, Crime Prevention through Environmental Design (CPTED). It examines how the design of the built environment is used to regulate public space and discusses how these design strategies are exported throughout the city from the centre to the periphery as a form of best practice. The second part of the paper examines two forms of public space in the City of Toronto's inner suburb of North York, a civic square and a public park. Images included in this paper provide detail about the variety of forms and uses of defensive urban design. In addition to photographic documentation, research methods include observation, key informant interviews, and a review of planning and design documents.

Public Space

Public space in cities evokes images of shared urban spaces like parks, squares, plazas, streets, and sidewalks. These are spaces where public life plays out and are in theory accessible to everyone. Public space plays an important role in sustaining the public realm. Not only does it provide a setting for social encounter and difference (Bickford 2000; Mehta 2014), it also allows people to overcome social segregation (Kohn 2004). As a site of struggle, public space also informs our conception of "the public" and who is considered to be a part of it. Within public spaces, multiple groups of people struggle to make themselves visible, demand inclusion, and claim a right to occupy urban space (Mitchell 2015). Public space plays a central role in the political protests of groups like Black Lives Matter. For example, in the spring of 2016, activists set up a tent city outside of Toronto's city hall in Nathan Phillips Square to protest ongoing police violence and the decision not to charge a police officer who shot and killed an unarmed Black man ("Black Lives Matter Protest Continues" 2016). This occupation of public space made media headlines and directed attention to injustices faced by Toronto's Black community.

The form, function, and meaning of public space differ across numerous cultural traditions and is influenced by varying degrees of social and political control (Hou 2010). In North America, public space is often differentiated from private space in terms of ownership. Private property entails the right to exclude others from use or access to resources. This is shifting as we see that "many constituents of public space are privately owned, managed and regulated elements of the private sphere" (Smith & Low 2006: 5). Evelyn Ruppert argues that it is impossible to define public space in terms of ownership (2006). In Canada, public access becomes the legal criterion for public space, where different forms of state, collective, and private property are considered to be part of the public realm if it is freely accessible to the public for social interaction, leisure, or passage (Ruppert 2006; Cybriwsky 1999).

In the City of Toronto, many new and redeveloped public spaces are privately owned and operated. These spaces are produced through negotiation with private developers to include Privately-Owned Publicly Accessible Spaces (POPS) as part of their development application. Created to complement the city's existing parks and

public spaces, POPS are "a specific type of open space which the public is welcome to enjoy, but remain privately owned" (City of Toronto 2014). Although these privately owned and operated private spaces are not intended to replace city-owned parks and squares, they are becoming ubiquitous throughout Toronto, especially in quickly growing neighbourhoods where the high price of land makes it difficult for the city to secure enough public space for its growing population.

Access to various public spaces, whether they are publicly or privately owned and/or operated, depends on the regulatory regime of the space. Regulatory regimes are made up of a variety of practices which include laws, regulations, urban design, surveillance, and policing (Ruppert 2006). Ute Lehrer argues, "It is the interplay between the practices of people, and the control and regulatory mechanisms that defines the quality of public space" (1998: 206). Regulatory regimes shape the publicity of space through the targeting of certain activities, politics, and groups both materially (through law and urban design) and symbolically (through custom and conventions). The degree of control and access in public space varies from place to place. New surveillance technologies, modes of governance, and exclusionary practices vary in their application and depend on how they fit within existing social relations, political practices, and cultural traditions (Doherty, et al. 2008).

Defensive Urban Design

Defensive urban design, a component of the design philosophy CPTED, is an intentional design strategy that uses elements of the built environment to guide or restrict behaviour in urban space as a form of crime prevention, protection of property, or order maintenance. Also known as hostile, unpleasant, or exclusionary architecture it is a focus of study by researchers across disciplines such as urban studies (Atkinson 2003; Bannister et al. 2006; Bergamaschi, Castrignanò & De Rubertis 2014; Davis 1990; Doherty et al. 2008; Flusty 1994; Lehrer 1998; Mitchell 1997; Tiesdell & Oc 1998; Smith & Walters 2017), design (Lockton et al. 2008; Savičić & Savić 2012), philosophy (de Fine Licht 2017; Rosenberger 2017), and criminology (Peršak & Di Ronco 2017; Petty 2016). The variety of terms used to describe the design strategy reveals there is a need to develop a coherent definition as a basis for further empirical research. In this paper, the terms "defensive urban design" and "defensive architecture" are used interchangeably to describe design strategies and elements that work to control access and conduct in public space on a local scale. While some forms, like anti-loitering spikes are inherently "unpleasant" or "hostile" (Figure 1), these concepts do not adequately describe design features or devices that are neither unpleasant nor hostile, but still defend against unwanted use. This includes design features like planter ledges that are angled to deter skateboarding, but are still welcoming enough for people to sit on (Figure 2). Furthermore, the concept of "defensiveness" captures how the design strategy is used to protect property, defending space and amenities from unwanted use and vandalism.

Gordon Savičić and Selena Savić, editors of the book *Unpleasant Design*, describe it as "a collection of techniques and strategies in urban design where social control is an inherent property of objects and places" (2014: 1). Control is exerted through the use of "silent agents," design elements that manage the behaviour of people without the need for authorities to interact with citizens. Silent agents can take many forms, depending on the behaviour they are designed to restrict (Savičić & Savić 2012). They can be implicit or explicit (Petty 2016; Smith & Walters 2017). Implicit forms are largely invisible to everyday users and become a normative part of the built environment. James Petty notes, "Their coercive functions remain hidden within other more socially palatable ones: 'bum-proof' benches still provide seating, sprinklers water parklands or only operate at night, and ultraviolet lighting still provides illumination" (Petty 2016: 76). Conversely, explicit forms of defensive urban design are understood to be coercive and hostile, especially to people who are targeted. These explicit forms, like anti-homeless spikes installed in doorways, often provoke outrage because they disrupt the aesthetic image and perceived identity of the space or city (Petty 2016).

The majority of defensive urban design elements target people who use or rely on public space more than others like people who are homeless or under-housed, substance users, skateboarders, and youth (Whyte 1980; Bergamaschi, Castrignanò & De Rubertis 2014). A variety of design elements have been developed to target particular behaviours they engage in like sleeping in public, loitering, and skateboarding. Since defensive urban design exerts spatial control on a local level or micro scale, "For something to be considered 'hostile,' it must enact its coercive function both selectively (in whom it targets) and directly to bodies, rather than indirectly or on a macro scale" (Petty 2016: 74). These defensive elements often take the form of everyday objects (seating, ledges, spatial barriers, and surface treatments) or devices (surveillance, light, and sound). Furthermore, some



Figure 1- Inherently hostile anti-loitering spikes (Paris, France). Photo by author.



Figure 2- Defensive planter ledge designed to discourage skateboarding (Toronto, Canada). Photo by author.

forms do not discriminate against specific populations and are used to defend space against the general public, like fences or barriers that restrict access to space. This added complexity produces a variety a forms that does not fit neatly into bounded categories.

Defensive space can be produced by a variety of actors, including the state, private sector, and individual property owners, in a number of ways (Kinder 2014; de Fine Licht 2017). First, existing infrastructure can be *modified* (or specially designed) so that pre-existing uses are no longer possible. Examples include seating

designed for only one individual or sloped in a way that leaning is the only option (Figure 3). Second, defensive design features can be *added* to a space to deter possible users. The addition of objects like centre bars on benches or anti-skate elements (Figure 4) restrict physical use while the addition of light, sound or surveillance devices changes how the space is experienced. For example, a device called the Mosquito uses sound to disperse loitering youth by emitting an irritating, high pitched sound at a frequency that only young people could hear (Siekierska 2017). Third, objects or public amenities can be *removed* from public spaces so that particular functions disappear. This is what I call "ghost amenities." These are public amenities like washrooms, benches, and water fountains that are often included in public spaces to make them more comfortable, but are absent due to disrepair, reduced operation, or intentional omission. This is done as a way to reduce maintenance costs, avoid vandalism, or to deter loitering. Although this spatial strategy is not discussed as much as the first two techniques, Karl de Fine Licht writes, "In many cases, it is much easier to remove a feature than to alter it or construct new architecture" (2017: 29). Furthermore, the addition or removal of defensive design elements can be temporary or permanent. While modifications to the built environment are often long-lasting, examples of temporary interventions include the erection of seasonal fences or barriers to restrict access to space or the placement of obstacles such as planters in doorways to deter panhandling.

Although the terms defensive or hostile design/architecture are relatively new (Petty 2016), the use of the built environment for spatial control is not. There is a long history of architecture used to fortify cities and to exclude unwelcome groups of people (de Fine Licht 2017; Petty 2016). On a local level, "barriers, walls and spiked fences have long been used to divide and protect the private from risks and dangers posed by the spontaneity of the public" (Petty 2016:73). Today's ubiquitous forms of defensive urban design differ from historical forms because design elements are often hidden in plain sight and are found in public spaces that meant to be accessible and inclusive. In fact, its use is often justified as a way to improve accessibility in public space. Recently in Iowa City, USA, traditional benches in the town centre were replaced with modified benches equipped with a centre bar. The street furniture changes were initially premised as a way to improve accessibility and increase seating opportunities. According to project lead Scott Sovers, "People are more likely to share a bench with a stranger if a physical barrier exists" (Smith 2018). While the bench changes were framed as a way to provide more seating options for more people, it was quickly discovered that other motivations were at play. The unearthing of minutes for a 2013 city council meeting revealed that the inclusion of the centre bars were debated as a means to move along the area's homeless population and to keep them from sleeping on the benches (Smith 2019).



Figure 3- Modified seating prevents users from lying down (Rome, Italy). Photo by author.



Figure 4- Anti-skate elements added to railing to deter skateboarders (Syracuse, USA). Photo by author.

Defensible Space

Today's defensive urban design strategies are derived from the work of Oscar Newman and his 1972 publication *Defensible Space*. Influenced by Jane Jacobs' (1961) work on natural surveillance (eyes on the street) and territorial identity, Newman developed the idea that crime can be controlled through the design of the built environment (Merry 1981). He believed residents could be empowered to defend their neighbourhood through the creation of defensible spaces. Defensible space is "a surrogate term for the range of mechanisms—real and symbolic barriers, strongly defined areas of influence, and improved opportunities for surveillance—that combine to bring an environment under the control of its residents" (Newman 1972: 3). Although there is a connection between poor design and crime, Sally Merry argues that good design does not necessarily prevent it. She writes, "Spaces may be defensible but not defended if the social apparatus for effective defense is lacking" (Merry 1981: 419). Without attention to social factors, architectural strategies alone are not sufficient for preventing crime.

Newman's work laid the groundwork for the design philosophy CPTED. Like defensible space, CPTED is based on the assumption that the manipulation of the built environment can produce behavioural effects that reduces real and perceived crime. Developed by C. Ray Jeffery in his 1971 book of the same title, CPTED is built upon three main design strategies: natural access control; natural surveillance; and territorial reinforcement. Natural strategies refer to the normal and routine use of the built environment where strategies like access control and surveillance are a by-product (Crowe, 2000). Access control reduces the opportunity for crime by restricting access to space, whereas natural surveillance works to provides clear sightlines. Territorial reinforcement uses physical design to create a sense of ownership in urban space by using design features to delineate public from private space (Crowe, 2000). Lesser known strategies include image/space management, legitimate activity support, and target hardening. Image/space management works to create a positive image of the built environment through routine maintenance and upkeep. Legitimate activity support, reinforced through design cues and signage, outlines acceptable behaviour in a given space (Cozens & Love 2015). Target hardening also works to restrict access by creating risk for offenders. It does so through the use of physical security mechanisms like locks and window bars. There is a direct link between CPTED and defensive urban design. Although defensive architecture is the physical (and often explicit) expression of CPTED principles, not all CPTED strategies result in its application. This is because CPTED uses multiple approaches for crime

prevention (as outlined above) while defensive urban design is just one of the approaches that it uses (similar to target hardening).

The power of CPTED philosophy is that it appeals to common sense. Crowe writes, "CPTED concepts, at least used in this work, are largely self-evident" (2000: 2) Advocated as a best practice, its use has expanded from its origins in the United States to Canada, the United Kingdom, Japan, the Netherlands, and Australia (Crowe 2000). Similarly, defensive urban design has been observed in countries like Canada (Chellew 2016), the United States (Davis 1990; Flusty 1994; Mitchell 1997), the United Kingdom (Petty 2016), Italy (Bergamaschi, Castrignanò & De Rubertis 2014), Sweden (de Fine Licht 2017), and Australia (Smith & Walters 2017).

CPTED strategies have been integrated into Toronto's urban spaces since the early 1990s with the adoption of the 1992 report *A Working Guide for Planning and Designing Safer Urban Environments*. Later revised in 1997 by Carolyn Whitzman and Gerda Wekerle and renamed the *Toronto Safer City Guidelines*, it was developed to be a tool for planning and design professionals. The guidelines integrate CPTED strategies to enhance safety and security in Toronto's public spaces. For example, strategies like natural surveillance are implemented through the creation of designated waiting areas on Toronto Transit Commission (TTC) subway platforms. These designated waiting areas are well lit, equipped with video surveillance, and are easily identifiable through signage. Although the City of Toronto has integrated CPTED principles in various planning and design documents like the *Toronto Safer City Guidelines*, the *Official Plan*, and *Urban Design Guidelines for POPS*, it does not have comprehensive document outlining how CPTED and defensive urban design should be applied or regulated. This is an issue as the city develops and redevelops its public spaces, from the centre to the periphery.

The lack of design guidelines allows for a blanket application of defensive elements regardless of whether it is warranted. This is seen in a variety of newly (re)developed public spaces in Toronto where defensive architecture, like anti-skate elements are pre-emptively applied to seating and ledges before any conflicts arise, leading to the over-fortification of Toronto's public spaces. Furthermore, its widespread use and lack of empirical research and academic critique means there is a risk that defensive urban design is advocated as a best practice without any scrutiny in regards to why it is used, what kinds of spaces are produced, and how it impacts human wellbeing (de Fine Licht 2017; Smith & Walters 2017). In fact, defensive urban design has become so normalized in Toronto that it is depicted in real estate advertisements and in architectural renderings of future public spaces.

Although CPTED and defensive urban design has been adopted by planners, police departments, and governments all over the world, its use can be challenged in a number of ways. One major criticism levelled against CPTED and defensive urban design is that it is architecturally deterministic. As one CPTED practioner confessed, CPTED has its limitations. For example, it is believed that "Build it and they'll not only come, they'll conform to how you want them to. But that's not human nature. It's human nature to adapt to do something if you have the opportunity" (Personal Communication 07/12/2018). In other words, people can easily adapt to the built environment and use in in unpredictable ways even if it is designed to promote certain behaviours and deter others. For example, in Toronto's Joel Weeks Park, concrete ledges were specially designed with grooves to deter potential skateboarders. Over time, these grooves were adapted and filled in with concrete by park users so that these surfaces could again be skateboard upon, circumventing the defensive design. In addition, some critics note that CPTED merely displaces crime rather than preventing it (Kaplan 1973). While this may be the case, there is a need to conduct more research on this issue as evaluations of CPTED projects often do not measure whether crime is displaced to areas outside of study boundaries (Cozens & Love 2015). Finally, CPTED and defensive design strategies are often taught and implemented uncritically as a one-size-fits-all solution (Cozens & Love 2015). This general response to minor crimes and undesired behaviour is a simplistic solution to a highly complex problem (Ekblom 2011). This leads to the over-fortification of the built environment in areas that are not needed, while formulaic solutions can be inadequate to deal with more serious forms of crime and disorder.

Suburban Space

City versus suburbs has long been a theme in urban research (Keil 2018). Although there has been much work done on expanding the idea that "suburbanization now appears as general urbanization" (Young & Keil 2014: 5), suburban space is still contrasted with urban space (Niedt 2013). While urban space is associated with centrality, the inner city, and public life, suburban space is thought to be the domain of the private sphere. Robert Fishman explains suburban communities in eighteenth-century London were developed as a way to separate families from the perceived immoralities of the city (1987). During this time, central cities in Europe

and North America were considered to be not only the site of crime and disorder; they were also places that were overcrowded, polluted, and disease-ridden (Bain 2013). The suburbs represented a retreat from the chaos and depravities of urban life.

Renewed interest in the city centre as the site of revitalization and development has shifted how the suburbs are viewed. Now understood as problematic and "less-than-urban" (Keil 2018:19), the suburbs are thought to be uniform and homogenous spaces dominated by automobile use, mass-produced residential housing, and lacking in political, racial, and cultural diversity (Keil 2018; Niedt 2013). Although traditional postwar suburbs were built around the family, private space, home ownership, and new technologies of mobility, in many North American cities including Toronto, there has been a demographic and economic shift that is transforming traditional notions of suburban space (Niedt 2013; Parlette & Cowen 2010). Niedt writes, "As they age and become differentiated, suburbs are now understood variously as destinations for international migration, rich repositories of prewar and postwar history, and areas of growing poverty and deteriorating infrastructure" (Niedt 2013: 6). Furthermore, as the outward expansion of urban areas continues, distinctions between city and suburb become increasingly arbitrary (Phelps 2012).

Given that suburban space is thought to be the domain of family life and the private sphere, it is assumed that very little space exists for public use. Public space is associated with centrality and suburban communities are often criticized for their lack of a physical public centre (Bain 2013; Martinson 2000). While postwar suburbs lack some of the traditional public spaces associated with urban centres (Parlette & Cowen 2010), public life plays out in neighbourhood parks, trails, streets, as well as in privately-owned, publicly accessible spaces like plazas, strip malls, and New Urbanist styled developments (Lehrer & Milgrom 1996; Parlette & Cowen 2010). Everyday practices transforms these spaces, blurring the divide between private and public (Parlette and Cowen 2010).

North York: The In-Between City

North York experienced tremendous spatial expansion as a postwar suburb from 1950-1980. The area, mostly used for agriculture in the 1950s, became the centre for industry for Metro Toronto in the 1970s (Whiteson 1982). North York was incorporated as a city in 1978 (Arsenault 1988) but was amalgamated along with the postwar suburbs of Scarborough and Etobicoke into the City of Toronto in 1999. Now an eclectic mix of residential, commercial, and industrial uses, it is marked by "an assemble of wild and often unexplainable mix of uses, untypical for either the inner or the classical suburb, [which] presents a landscape of extreme spatial and social segregation." (Young & Keil 2010: 90). Now considered to be one of Toronto's inner suburbs, North York is what Thomas Sieverts calls the "in-between city" (2003). The in-between city describes a new urban form that has developed beyond the traditional, more compact, uni-centred European city. In North America, the inbetween city encompasses old postwar suburbs as well as transitional zones between those suburbs and exurban developments on the further reaches of the periphery (Young & Keil 2010).

Mel Lastman Square

North York grew rapidly during a construction boom in the 1980s which led to the development of an urban centre or "a downtown uptown" (Du Toit Allsopp Hillier 1997; "North York Gets a Heart" 1978). The Municipal Building for the former City of North York opened in 1978 and was conceived to be the heart of a planned civic centre (Whiteson 1982). Keeping with this vision, the planning firm Coombes Kirkland Berridge was hired to develop a plan for a new civic centre, including the redevelopment of the library and a new public square (Mertins & Shim 1988). Named after the long-time mayor of North York, Mel Lastman Square opened in 1989 to provide outdoor civic space for the pre-amalgamated City of North York. Designed by Jones and Kirkland architects, the 20,000 square foot civic square was conceived to be a place of respite from the bustle of the city, a public amenity for nearby residents, and a gathering space for civic events (Mertins & Shim 1988). It includes a 600 seat amphitheatre, sloping terraces, public gardens, and a reflecting pool which doubles as an ice rink in the winter season. Over the years, Mel Lastman Square has become a popular gathering place for residents in North York and the rest of the city and is a site for civic celebrations, markets, political protests, and other informal gatherings. Although Mel Lastman Square was designed prior to the city's adoption and implementation of CPTED principles, defensive urban design elements in the form of surveillance cameras and modified benches

are used to control conduct and regulate access in the space. Since the square is publically owned and operated, city staff members are responsible for the ongoing operation and maintenance of the space.

Multiple methods of surveillance are observed in Mel Lastman Square. A number of wall mounted surveillance cameras are located in key locations like the entrance of the Civic Centre. Three additional surveillance cameras are located throughout the square, integrated into tall, blue "emergency" pillars equipped with a light and intercom which connects to Toronto Corporate Security. The square's proximity to the North York Centre allows for additional surveillance by private security personnel, observed walking along the shared pathway that borders the two spaces. Finally, numerous signs warn the public about the use of CCTV cameras. The explicit use of surveillance signs and devices in the square suggests that they were installed to be visible by users (Figure 5). Thought to deter crime, the presence of surveillance cameras is reassuring for some people, while others believe their visibility signifies danger (Atkinson 2003). This tension illustrates the need for more research on the topic. How does the visibility of surveillance devices influence how people use, navigate, and experience Toronto's public spaces?

Modified seating is also observed in Mel Lastman Square. While some benches in the square are traditional in form with a backrest and two armrests located at each end of the bench, other benches are modified with a centre bar. When asked about the modified benches, a City of Toronto urban designer revealed the centre bars are used "to mostly deter anyone from sleeping on the benches" (Personal Communication 04/18/2018) (Figure 6). The modified benches line the entrance of the square where visibility from the street is the highest, whereas traditionally designed benches are dispersed throughout the rest of the square. While the addition of centre bars on benches are often premised as an accessibility feature for seniors and people with disabilities, it can actually conflict with accessibility goals because people of different abilities and body sizes cannot fit comfortably between the bars. In a radio interview on AMI-audio, Kelly MacDonald, the host of Kelly and Company admits, "Even I know how much I've hurt myself when they started taking away the benches in the subway system. You go to sit on a chair and your cane touches it. You spin around to sit down, used to the old bench that was longer. Now you have a bar in your backside because you were expecting more open space" (MacDonald 2016). Moreover, the addition of centre armrests on benches can restrict the flexibility of the bench, limiting how many users it can accommodate and how they want to use it.



Figure 5- Visible signs of surveillance (Mel Lastman Square, North York). Photo by author.

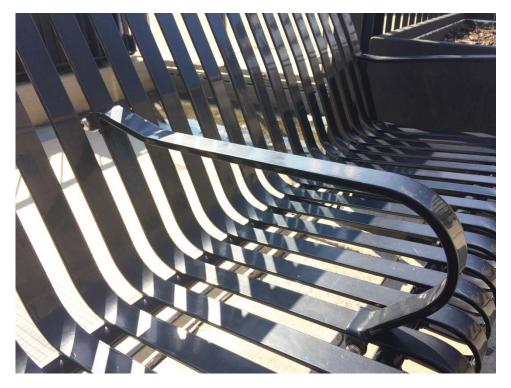


Figure 6- Centre armrest added to bench (Mel Lastman Square, North York). Photo by author.

Mel Lastman Square includes a combination of both old and new amenities like benches and planter boxes, which indicates that defensive elements have been added to the space over time, as a response to changing spatial needs. This is also seen in the modified benches, where it appears the center bars were not a part of the original manufacturing process and were added at a later date. Despite numerous signs prohibiting skateboarding and in-line skating, a skateboarder was observed rolling through the space. In contrast to defensive architecture, the square also includes an eclectic mix of inclusive design elements including placemaking and accessibility features. Amenities like ping pong tables, chessboards, and a public amphitheatre facilitate creativity and activity within the square, while yellow paint is used to increase visibility and improve accessibility for people using the stairs on the west side of the space. The uneven application of defensive and inclusive elements illustrates a tension over desires for security and image maintenance versus desires to make the space inviting and accessible for public use.

Gibson Park and Rose Garden

In the late nineties, a study was undertaken to examine the urban design of North York's City Centre. The report, drafted by Du Toit Allsopp Hillier, noted a lack of public space in the area and recommended the creation of more public parks and plazas through agreements with developers (Du Toit Allsopp Hillier 1997). Gibson Park and the nearby Rose Garden were created as a way to provide more public open space in an area experiencing increased density. Located at the corner of Yonge Street and Park Home Avenue, the two publically accessible spaces were included as part of the development of Gibson Square. Constructed by Menkes in 2015, Gibson Square consists of two 42-storey condominium towers connected by a podium with retail space (Yu 2010). Designed by landscape architects NAK Design Group, both Gibson Park and the Rose Garden received a full CPTED review. According to a City of Toronto urban designer, this informed the design of the parks, including path location, pedestrian circulation, planting, and lighting (Personal Communication 04/05/2018).

CPTED strategies used in Gibson Park include access control, territorial reinforcement, and natural surveillance. Access control, in the form of a metal fence, separates the publically owned park from the nearby property of a residential high-rise building. This also provides territorial reinforcement where the fence works to delineate public property from private. Although surveillance cameras are not located in the park, natural

surveillance is implemented through pedestrian level lighting and the creation of clear sightlines with attention to landscaping elements. Metal benches located at the west entrance of the park at Park Home and Beecroft Avenues are specially designed with a wavy pattern to encourage individual seating (Figure 7). The seating area in the centre of the park, next to the perennial garden includes both traditionally-styled benches and granite ledges, doubling as seating. Inch-long metal protrusions are embedded at regular intervals on the ledges (Figure 8). This is because, as a City of Toronto landscape architect revealed, "The metal protrusions are used as skateboard deterrents. This helps to prevent the benches or walls from being chipped, split or broken due to skateboarding" (Personal Communication 04/18/2018).

While anti-skateboarding elements reduce the need for maintenance, they can also present accessibility issues, especially for people who are blind or hard of seeing. If the anti-skateboard elements are not immediately apparent, there is a risk of injury if they are accidently encountered (MacDonald 2016). Skateboard deterrents also present tripping hazards for young children who may play on the surfaces. Additionally, a large concrete ledge installed on east side of Gibson Park is not modified with skateboard deterrents, despite signs of being skateboarded upon. The uneven application of defensive architecture raises the question, why are only some parts of the built environment defensively designed?

The neighbouring Rose Garden, a small park, or parkette, was created as a Privately-Owned Publically Accessible Space (POPS). It directly faces Yonge Street and frames the entrance to Gibson Square. While privately owned and operated, there is an agreement with the City of Toronto that the space be open to public use (City of Toronto 2014). As part of this agreement, POPS are required to include signage that clearly identifies the space as publically accessible, but no clear signage is located on the site. CPTED principles are also integrated into the design of the Rose Garden with features like pedestrian level lighting and clear sightlines. In addition, natural surveillance is facilitated through active uses that border the space in the form of restaurant patios located at each end of the parkette. Placemaking elements like moveable tables and chairs are available for public use during designated times. In contrast, specially designed benches equipped with a centre bar line the entrance of the parkette, closest to the street (Figure 9). Finally, granite ledges that line the space are equipped with skateboard deterrents. Interestingly, these ledges are still being skateboarded upon, despite the presence of defensive architecture (Figure 10). This demonstrates how defensive urban design does not always work as intended and how people are adaptable and can circumvent inflexible design elements.



Figure 7- Specially designed seating (Gibson Park, North York). Photo by author.



Figure 8- Skateboard deterrents (Gibson Park, North York). Photo by author.

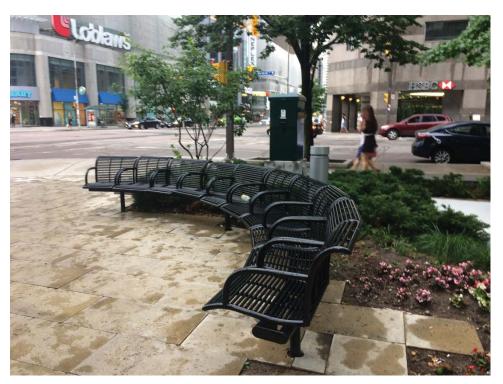


Figure 9- Benches specially designed to prevent people from lying down (Rose Garden, North York). Photo by author.

Defending Suburbia

Public spaces outside of the city centre are securitized with the same neoliberal development logic that is transforming central city neighbourhoods into landscapes of consumption. Some forms of defensive architecture such as specially designed seating and anti-skate surfaces are found in many new and redeveloped public spaces,



Figure 10- Undeterred skateboarders leave a black waxy residue on a defensive ledge (Rose Garden, North York). Photo by author.

regardless of their location within the city. Since Mel Lastman Square was designed and built before CPTED strategies were widely adopted throughout the city, it demonstrates how a public space can be adapted with defensive elements. This contrasts with nearby Gibson Park and Rose Garden which shows how CPTED strategies and defensive architecture are integrated into the design process, before any conflicts arise over spatial uses. While issues like homelessness are perceived to be concentrated in the city centre, the presence of modified and specially designed benches in North York's Mel Lastman Square, Gibson Park, and Rose Garden tell a different story. The benches, adapted to prevent people from lying down, target people who are homeless, where a bench is not only a place to rest, it is a part of their geography of survival. The anti-homeless benches in all three publically accessible spaces are located at the entrances, where visibility from the street is highest. This suggests the city is engaging in "street-level city image manipulation" (Atkinson 2003:1840).

Furthermore, defensive urban design and its wider design philosophy CPTED has become a best practice in cities around the world, including Toronto. Adopted by planners and designers despite the lack of empirical evidence supporting its use, it has become a new norm in Toronto's public spaces. This is a problem because the city has not developed design guidelines to govern its use. This leads to the addition of defensive elements in some spaces that do not need them, resulting in the over-fortification of the city. In addition, many forms of defensive architecture do not work as intended. This is seen in the Rose Garden where a ledge equipped with skateboard deterrents still shows signs of wear and use by skateboarders. People are adaptable and inflexible designs can be overcome.

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