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Desire lines and defensive architecture in modern urban environments

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Abstract

Public space is being increasingly managed by defensive architecture, surveillance and other subtle filtering mechanisms to make it more palatable and attendant to the needs of capital. This reinforces social boundaries, making space inhospitable to those people whose presence is not welcome, and serves to 'discipline' city inhabitants into primarily consumption based modes of interacting with and in the city. However, disenfranchised urban populations still find ways to exist in and navigate these spaces. The purpose of this article is to highlight these ways by introducing the concept of 'desire lines' as a means of overcoming or re-imagining defensive space. We use Deleuze and Guattari's theory of desire as productive force, combined with De Certeau's notion of 'walking the city', to explore how individuals and social movements might practically, and in a metaphorical sense, create new collective paths, creating 'desire lines' of resistance and change within what is often an increasingly unforgiving and dominated urban environment, created by and for capital at the expense of a vibrant public realm.

Keywords

city, defensive architecture, desire lines, neoliberalism, public space

摘要

公共空间日益由防卫式建筑、监控和其他精细筛查机制管理，使之更加符合和迎合资本的需求。这强化了社会边界，使空间对于那些不受欢迎的人变得不友好，并起到了“规训”城市居民的作用，将其规制为主要以消费为基础的城市交互模式。但是，被剥夺了权利的城市人群依然找到了在这些空间中存在和游历的方式。本文的目的是通过引进“欲望路线”的概念（作为克服或重新想象防卫式空间的手段），来凸显这些方式。我们运用了德勒兹和瓜塔里将欲望视为生产力量的理论，并结合了德塞都“城市行走”的概念，探讨了在以牺牲有活力的公共空间为代价、由资本创造并为资本创造、往往日益不宽容的支配式城市环境中，个人和社会运动如何在实践意义上和隐喻意义上建立新的集体路径，创造抵抗和变革的“欲望路线”。

关键词

城市、防卫式建筑、欲望路线、新自由主义、公共空间

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Introduction

The city, as governable space, presents unique problems in contemporary urban environments. While many authors have written about how cities might be understood and categorised as social spaces (e.g. De Certeau, 1984; Lefebvre, 1991; Lofland, 1998), and the types of social relationships they contain, less attention (with the exception of De Certeau, 1984) has been given to how individuals routinely negotiate these urban spaces which contain both concrete social relationships and abstract institutional forces. These are the forces that also create boundaries of inclusion and exclusion in physical space and as a result render the social field corporeal.

The construction of space in the city is not a neutral act; it is brought into being by urban planners, shaped by the considerations of capital alongside other social agents. Property developers, the manifestation of abstract capital, have considerable influence on how the city is shaped. Coinciding with the neoliberalisation of urban governance, city governments have begun to devote fewer resources to non-commercial public spaces such as parks and city squares, and more to spaces that are easily governable by private interests and logic and that make quantifiable economic sense (Banerjee, 2001). That is, they can function as a means of generating continued revenue streams for city governments with risk transferred to the commercial sector. The success of these spaces for that purpose hinges on the 'type' of user they attract. Property developers, regardless of whether they are developing shopping centres, office blocks or apartment towers, wish to attract users with some level of disposable income so they are able to engage with the consumptive paradigm that commercially governed spaces demand.

Davis (2006 [1990]), in his now classic text on the privatisation of Los Angeles, examines these issues and highlights the way physical space in American and some European cities is becoming privatised to the point that he describes contemporary LA as a 'carceral city', dividing the rich and poor between their respective prisons of luxury and poverty. Davis also argues that this 'war' for physical space is a class war in which the 'semiotics of exclusion' (Davis, 2006 [1990]: 226) creates a deviant category of users who are prohibited, demonised and excluded from urban spaces.

Carceral cities have not appeared by accident; they are designed and produced by social actors. Users must conform to this imposed spatial logic in their everyday use of abstract places. Contemporary cities have become increasingly composed of abstract places (Lefebvre, 1991), as owners (both private and state) exercise their right to control the use of space both through design and regulation (e.g. Madden, 2010), resulting in urban space being controlled and privatised, excluding 'undesirables' such as homeless people, youth and minorities (Doherty et al., 2008; Mitchell, 2001, 2003; Mitchell and Staeheli, 2006). This control of urban space creates both social and spatial exclusion, and restricts the 'right to the city' (Lefebvre, 1991; Mitchell, 2003). The execution and practice of this spatial restriction differs between American and European contexts, largely due to differing historical legacies

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(Huey, 2009; Tosi, 2007; Wacquant, 2001), but in both contexts they still reflect the increased influence of private capital and 'zero-risk' governance in the production and governance of ostensibly public spaces. The governance of these public spaces appears in multiple ways through mechanisms such as zero tolerance policing, anti-social conduct by-laws, privatisation, pervasive surveillance and exclusionary design. The rise in these disciplining practices coincides with the rise of neoliberalism as the dominant political and economic ideology, with the control of public space as one its fundamental strategies (Low and Smith, 2006: 15). Contemporary cities are (re)shaped by neoliberal ideologies, resulting (unsurprisingly) in controlling and exclusionary spaces often designed for protecting from or excluding the homeless (Mitchell and Staeheli, 2006), children and young people (Valentine, 1996) or the elderly (Buffel et al., 2013).

The creeping privatisation of urban spaces is partly justified by urban renewal strategies that seek to 'clean up' or gentrify neighbourhoods to make them more palatable to middle class consumers. This parochialisation of urban space (Lofland, 1998) filters diversity out of a place to provide one privileged category of user with a more familiar and comfortable environment, at the expense of other categories. Urban renewal projects seek to order and cleanse unruly and dirty urban spaces and remove some of the perceived (and actual) dangers of the city (Amendola, 1997: 182). The push for urban renewal means excluding minority and marginalised groups, which would otherwise undermine this project (MacLeod, 2002).

One of the ways in which space is aggressively regulated is 'defensive architecture'. Poor and otherwise disenfranchised people who lack the means to economically engage in 'renewed' spaces are managed away through both explicit and implicit design features. These techniques, borrowed from gated communities and shopping centres, such as CCTV, walls, fences, intimidatingly upmarket retail outlets and police intervention serve to physically move along undesirables (Davis, 2006 [1990]). This process means that access to public spaces becomes mediated by capital and the state in both construction and access. In 'renewing' the city, capital places both actual and social boundaries around urban neighbourhoods. In response, inhabitants and passers-through are required to embody the habitus of the economically privileged to validate their presence within these neighbourhoods. Those who are unable to conform to this habitus, if they can negotiate the physical constraints to occupying that space, may choose to avoid these spaces due to the potential for what Bourdieu and Wacquant (1992) term 'symbolic violence', or the 'subtle inculcation of power relations upon the bodies and dispositions of individuals' (McNay, 1999: 100) through fashion, displays of wealth and other demonstrations of belonging.

Given these constraints on an ideal form of the public realm manifest in public space, in this article we have two tasks: first, we review the physical obstacles to more democratic uses of space through the increasing use of defensive or disciplining architecture in contemporary Western cities, arguing that defensive architecture serves to 'discipline' city inhabitants into primarily consumption based modes of interacting with and in the city. This defensive architecture seeks to discipline 'undesirables' by designing against alternative uses of the city with the explicit purpose of excluding from public space those who engage in unsanctioned or undesired behaviours. This exclusion has implications for tolerance and diversity in the public sphere, and serves to corporealise and cement social fields and existing class structures. Our second task is to propose a novel

way to engage with this spatial defensiveness. We explore whether individuals might both practically and symbolically resist defensive and regulated space by creating 'desire lines' of resistance and change within what is often painted as an unforgiving environment. We draw on De Certeau's (1984) notion of 'walking the city' and Deleuze and Guattari's (1977) notion of desire as a productive force with the capacity to create and manipulate objects; in this case places. As Mitchell (2003: 51) states, the public sphere has an important role in managing the dialectics of 'inclusion and exclusion, order and disorder, rationality and irrationality, violence and dissent'.

Civility and tolerance: The function of diverse public realms

For the purposes of this article we define public space as those spaces accessible by all without the need to consume or in any other way justify one's presence. We acknowledge that a true spatial public realm is utopian, as space has always been subject to negotiation and control according to categories such as gender, social class and physical ability. However, we argue that neoliberalised space excludes without offering alternatives, or any pretence of the co-existence that might have existed previously in the city. Our normative position on public space conforms with authors such as Lofland (1998; see also e.g. Flusty, 1994; Iveson, 2008; Löw, 2016; Mitchell, 1997) who argue that the public realm provides a rich environment for learning, and for engaging in the public sphere through the practice of politics, and facilitates a more cosmopolitan outlook. Lofland also highlights the public realm's capacity for teaching civility towards diversity as one is confronted with others different to oneself. This civility is reliant on social distance and a modicum of segregation in order to make these encounters nonthreatening (Lofland, 1998: 240). Cities with robust public realms encourage limited, episodic and distant relationships between the self and other.

As Lofland (1998) and Lefebvre (1991) both note, spaces with apparent public access are increasingly produced and controlled by private interests that dictate terms of use and engagement. Mitchell (2003) also highlights the ways in which material public spaces are produced through the practice of politics, which prioritises orderly and rational spaces, and as forums for particular, or controlled, political engagement. However, even these 'rational' and 'orderly' spaces traditionally understood as 'public' are becoming privatised and parochial as cities, reluctant or unable to carry debt, seek to divest responsibility for public investment in infrastructure and amenity to the private sector. Private sector investors as well as state actors have become more enthusiastic in sanitising and managing spaces that would otherwise have provided more 'equal access' to diversity. This means that public space has become a rather difficult term to accurately define, as truly public space is becoming rarer in the city.

Defensive urban architecture

When cities are focused on presenting and creating a safe, sanitised and controlled public realm they lose those qualities of civil interaction and diversity that characterise the public realm. The potential for unsettling or undesired encounters is managed away by defensive architecture which seeks to produce constrained, individualised and consumption based interactions with and in the city. This further narrows the definition of who is and who should be allowed in public space, with broader implications for democratic inclusion.

'Defensive' or 'hostile' architecture is designed to actively exclude particular

categories of person. This term is commonly used to describe architecture that discourages the homeless and itinerant. Bergamaschi, Castrignanò and De Rubertis (2014) examine the effects of anti-homeless architecture in Bologna, examining the role of public seating. They argue that public seating is a particular focus of defensive architecture. These new 'defensive' or 'disciplining' benches come in all shapes and sizes. Most common are benches divided by arm rests to make lying down impossible. Alternatively, benches have been transformed into single seats (for one person) as opposed to traditional bench seats (for seating multiple people). The new hallmark of urban furniture is that it must be so uncomfortable as to render prolonged sitting unappealing and lying down impossible. Not only does this design discourage homeless people from lying or sleeping on benches, it discourages other, public, social behaviours by groups such as the very old or the very young. This means that public benches lose their utility as spaces of social encounter, conversation and relaxation in favour of brief and individualised use (Lorenzetto, 2010), foreclosing the possibility for encounters with 'others' in the public realm. Defensive benches not only discipline the undesirables, but also penalise the broader public and deprive city inhabitants generally of places to rest and observe, encouraging a limited engagement with the cityscape outside of commercial venues and transactions.

Bergamashci et al. (2014: 51) note that the benches have been labelled as 'postmodern', 'hygienic' and 'bum-proof'. Whatever they are called, the bench becomes symbolic of the contest between public and private interests, between the city as a lived place and the city as a commercial place (Lorenzetto, 2010: 6). By making benches inhospitable to the homeless, the city becomes more governable and the public itself becomes increasingly disciplined in to 'appropriate' ways of use and engagement with privatised public space. Rendering benches inhospitable also makes them predictable, orderly and decorous.

In a similar vein, Davis (2006 [1990]), details the long and agonising planning decisions regarding the placement of public toilets in downtown Los Angeles. As part of the urban 'renewal' of the downtown core, the Community Redevelopment Agency bulldozed the remaining public toilet in Skid Row and subsequently decided not to include a new free-standing public toilet in their design for South Park (Davis, 2006 [1990]: 233). The Community Redevelopment Agency responsible for Downtown Los Angeles prefers to rely on 'quasi-public' restrooms such as toilets in retail areas and galleries as a way to discourage 'vagrants' from lingering in the Downtown area (Davis, 2006 [1990]: 234). Without these affordances, the city is made more inhospitable to those without the means to engage in consumption practices.

By focusing on objects such as benches and toilets as a nexus for control, the use of urban space is implicitly regulated and classed. However, these measures are not usually visible even when they are more visually obvious than the discreet lack of public toilets or comfortable benches. For example, 'anti-homeless' spikes installed outside a London residential complex in 2014 are designed to make the dry and sheltered places around the exterior of the building inhospitable to those sleeping rough (Davis, 2006 [1990]; Halliday and Siddique, 2014), and are a design feature that to most would have no meaning. However, to a homeless person the message is clear – 'this space is not for you' – and it further reinforces and solidifies the boundaries between social fields. Defensive architecture, once spotted, renders visible the machinations of capital in the production of physical space. Such architecture is not the result of thoughtlessness or poor planning, but rather it is a deliberate act to constrict the social field of the city.

Changes to city benches and other controlling spatial hardware are a micro manifestation and are symptomatic of a broader project aimed at altering the affordances of the city. These design features not only regulate who is allowed in physical spaces, they also create social space as well. Thus, the defensive architecture that shapes and disciplines desire in the city also begins to dictate who is considered a member of the 'public'. There are also more macro strategies at work to both deter and disorient citizens in public space. The forces of neoliberal globalisation have not escaped architectural practice, and increasingly architectural solutions are applied cross-nationally to appeal to diverse clients in differing socio-political contexts; this is particularly true of large-scale urban developments, where global firms are selected at the expense of smaller local firms (Knox and Pain, 2010). This has resulted in what Dovey (2005) terms a 'silent complicity' between architects and the agendas of the politically and economically powerful. The resultant homogenisation of urban spaces means that designers are increasingly compelled to design for minimum public risk and maximum opportunity for consumption regardless of the client. This homogenisation of design has long been present in the car-based suburbia of North America and Australia, where the ability to walk and mark out subjective terrain is effectively removed by single use zoning, lack of pedestrian amenity and other car-focused spatial logics (Baker et al., 2006; Kunstler, 2010). However, the corporate gentrification of inner cities in these countries as well as in Europe (e.g. Barangaroo in Sydney, London's Docklands and the post-Olympic regeneration in Barcelona) is removing much of the idiosyncrasy and potential for discovery that once characterised more localised and vernacular urban terrain. That idiosyncrasy and heritage is replaced with the homogeneity of residential towers, high rent global retail brands and largely sterile public spaces, designed for safety, efficiency and retail exposure. Compounding this, historic and heritage residential buildings are often demolished to make way for more modern 'McMansions', a practice which strips these areas of their historical and idiosyncratic features (Hughes, 2016). The history of place, as written through iterative architectural choices, is erased and replaced with mass-produced and ahistorical dwellings. These are Augé's (1995: 77) 'non-places', devoid of any spatial and temporal identity, places upon which the individual has no desire or ability to inscribe the self in a 'world surrendered to solitary individuality' (Augé, 1995: 79). These places by their design severely inhibit the sort of social identity formation that underwrites communal ownership.

Highlighting the role of architecture in creating spaces of inclusion and exclusion is particularly important, because as Dovey (2005: 283) notes, 'we experience architecture primarily in states of distraction'. Occupied with the business of living, architecture is experienced first and examined second; an examination of a spatiality that we have already lived and embodied, which has already recursively and reflexively shaped our everyday practices. As our habitus is constructed through our embodied dispositions, architecture constructs a material field of discourse, sustaining patterns of authority silently and inevitably (Dovey, 2005). Thus, the question of defensive architecture is broader than its ability to keep urban spaces safe from disruption. As an actor, defensive architecture shapes the tenor of social relations in the city; while it may make cities cleaner and safe it also – perhaps unintentionally – renders urban space less diverse and congenial to all inhabitants. This means that defensive architecture has moved beyond its initial remit to make public space defensible against crime (e.g. Newman,

1972) to a broader focus that is more responsive to the needs of commercial interests than the needs of the community. As Bourdieu (2000) notes, social order is inscribed on our bodies through the dialectical relationship between bodies and spaces, of which defensive architecture and sanitised places are a part. Not only does physical space translate into social space but it also informs our embodied relationship within material spaces.

In Amin's (2008) post-humanist view of space, he goes beyond a characterisation of space as defined by the quality of human interaction, to focus instead on the role of built structures and the material realties of space as determinants of social relations; the 'entanglement and circulation of human and non-human bodies' (Amin, 2008: 5). Amin sets up an argument where the function of public space requires a reconsideration given the multiple sites and flows of democratic and political activity in contemporary civic life; that public space in contemporary life cannot not play the democratic function that is expected of it, due to 'privatization, excessive policing and downright neglect' (Amin, 2008: 7). There are two forces at work according to Amin – the decreasing importance of material space for political action and the contemporaneous degradation of that space (see also Barnett, 2007). This might be the case during periods of relative political stability; however, during times of crisis or public outrage, material space becomes very important, as witnessed in recent years in Istanbul (Taksim Square), in Jakarta (Istiqlal Square), at the Occupy demonstrations and at recent public rallies in the US in response to Trump's election. Mitchell combines these two points by defining a public space as a 'place within which a political movement can stake out the space that allows it to be seen. In public space, political organisations can represent themselves to a larger population' (Mitchell, 1995: 115). The purpose of political action in material space is to attract an audience in ways that cannot be effectively replicated in other ways.

If we accept that the public realm in the classic and everyday sense is no longer fully dependent on material space, we still have the very real possibility of what Amin calls 'the qualities of multiplicity, conviviality, solidarity and maintenance' (Amin, 2008: 22) that public space can offer, but only if the non-human materiality of that public space is amenable to this. Although authors such as Barnett (2007) argue that we should treat material public places with a degree of caution, if not scepticism, as dramaturgical stages for public protest, the fact remains that the inability to conduct public protest, to make public statements or just to take a nap in contemporary sanitised spaces diminishes the more abstract public realm.

Desire lines: Walking the city

> Space is a doubt: I have constantly to mark it, to designate it. It's never mine, never given to me, I have to conquer it. (Perec, 1997: 91)

If the right to the city is a matter of 'spatial justice', then how do those marginalised by defensive architecture or merely space designed for only one purpose attain some measure of justice? The city is still inhabited by humans who have agency and the capacity to resist and navigate defensive architecture in its myriad forms. If defensive architecture works towards the 'purification of the city' (Bickford, 2000: 356) from danger, discomfort and confrontation, how can we read humans back into the city, despite the policing or defending of objects and capital, which seeks to foreclose creative and non-linear uses of space?

One way in which resistance to imposed space can be represented is through the

concept of 'desire lines', or the ways in which the subject is able to navigate an imposed spatial order. Desire lines are 'unsanctioned' lines of use, worn into a landscape by countless footsteps (Luckert, 2013: 318), or as Nichols (2014) calls them, spatial 'workarounds'. In its literal sense, the desire line is the grassy or muddy path inscribed in space where people have created their own route outside of those prescribed by abstract place makers. Paths are then either formalised over time or denied to their users through some form of defensive or sanitising architecture. The ways in which desire lines are co-opted into formal infrastructure demonstrates that their status as 'resistant' is temporal, complex and contingent. Desire lines mark resistance to an imposed order but also serve to alert the contemporary user to historical markers on space, such as the depressions worn in stone stairs by generations of use or structural paintwork worn away by leaning or passing bodies. Desire lines are socially constructed by the logic of efficiency or discovery, so to follow them is a social act, in solidarity with other users of space rather than with abstract place makers.

In the literature to date, desire lines have been treated literally, either as a transport planning tool (Throgmorton and Eckstein, 2000), a metaphor for user preference in information technology (Myhill, 2004) or in environmental history (Tiessen, 2007b). From an urban planning perspective, a 1959 Chicago area transportation study (State of Illinois, 1959) used the concept of desire lines as a way of describing and analysing the routes favoured by commuters – largely this type of practice has persisted within urban planning. By observing where people go, and how they use urban spaces, urban planners are better able to plan city infrastructure and development. Desire lines are a way of bridging the abstract (desire) and the material (patterns of use in urban spaces). Luckert (2013) uses desire lines in their literal sense to describe a way of seeing space that allows for an opening up of historical possibilities and provides a view of the less predictable and surprising aspects of lived space. Desire lines have certain characteristics that are of use to our exploration. First, they are social, although their inscription is the result of the actions of single or small groups of 'pioneers'. Also, they are the result of dissatisfaction with the intended use of space by abstract place makers. Finally, they must be sufficiently obvious for others to adopt for own their use (Nichols, 2014).

It is the desire line, taken from its literal sense as an inscription on the ground to its more metaphorical sense, a solidarity of users in space, or users taking space beyond its literal intended use, that we wish to explore further. Along these lines, a celebrated articulation of a similar idea is De Certeau's, who when examining spatial practices, specifically refers to walking in the city, which he argues is a 'human text' (De Certeau, 1984: 92), written by walkers at street level but read from a bird's eye view above the city by planners and cartographers. Walkers write the text of the city without being able to 'read' it with the distance and abstraction of a planner. De Certeau (1984) argues that the planner experiences the city as a concept, while the walker experiences it as a practice of everyday life. This, in part, may explain the potential disjunction between the intended and actual use of place – although planners of space are also the users of it.

It is easy to discount the subjectivity of users of space when so much is done by capital and the state to determine the way that public space is used – to remove people's right to choose the way in which they use space. De Certeau (1984) argues that we can understand the relationship between individuals and the places they inhabit by examining the practice of walking. The act of walking connects places to each other in

ways that are constrained by their position within a network of other places. The spatial ordering of things offers numerous possibilities that constrain and allow movement in and between spaces.

De Certeau argues that the act of walking through a space (the urban environment) creates and transforms spatial signifiers into something else and has the potential to do (or undo) social spaces. The choices made by the walker mean that only a few possibilities from a constructed order are realised; conversely, the number of possibilities may be increased by taking unexpected routes, or limited through prohibitions, i.e. taking or not taking paths considered accessible or obligatory (De Certeau, 1984). The author Will Self advocates walking the city as an act of activism that has the potential to unsettle and disrupt the capitalist logic of the city which is steadily encroaching on public spaces (Townsend, 2016). The 'mass trespass' he advocates attempts to challenge and redraw the dictated logic of corporatised publics spaces (Townsend, 2016). Duff (2010: 883) also argues that in contemporary cities walking is a 'paradigmatic illustration of the force of practice and its role in the ongoing reproduction of place'. This is evident in Dovey's study of shopping malls, the archetypal private space masquerading as public space, where he notes that the more a place 'deploys the signifiers of public space' (Dovey, 2008: 136), the more people, particularly young people, will attempt to subvert the constructed order of that space by engaging in democratic public use. In fact, young people are often the pioneering inscribers of desire lines, particularly in the placelessness of suburbia, where a reliance on automobiles leaves much public space unused except by those too young to drive. It is these spaces which are used and re-purposed by the young to their own ends (Shearer and Walters, 2015). However, Dovey also notes that these acts of resistance are at best trivial and ultimately provide little promise in the face of the overwhelming logic of the privatised space of the mall and its surrounding environment. This rather bleak assessment also applies to De Certeau, who wrote at a time when all pervading surveillance and defensive architecture had not taken full hold in the developed West.

In some ways, desire lines can said to be to be similar to a *dérive*, a psychogeographical concept describing unplanned or drifting journeys through cities and urban landscapes. Debord (1958: n.p.) describes a *dérive* as a 'mode of experimental behaviour linked to the conditions of urban society: technique of rapid passage through varied ambiances'. The unplanned and drifting route of the *dérive* was a way to engage in new experiences by following the path of least resistance as a method of re-engagement with the urban environment (Debord, 1955). Desire lines are fundamentally different to the unplanned drifts of psychogeography and the wanderings of the *flaneur* (Benjamin, 1999). Desire lines are intentional patterns of (re)interpretation, and (re)positioning with the urban environment; careful, deliberate and at times subversive patterns which reimage and redraw the relationships within and between places through the physical act of walking. Walking allows us to consider the more abstract and subjective dimensions of individuals in urban environments, as well as reminding us of the importance of embodied and material acts in the creation of desire lines, and indeed place itself.

For desire lines to be of conceptual use, their meaning must be abstracted beyond just the physical creation of alternative pathways through constructed space. Desire lines demonstrate that despite these attempts to control space, humans will attempt to rewrite the spatial text from which walkers find themselves dislocated. By controlling space through defensive architecture and other means of passive and active

surveillance, all desire is *meant* to be eliminated and sublimated to the efficient, capitalist intent of most public space. If desire lines are 'desire manifest', then Deleuze and Guattari argue that desire has an infrastructural quality and is 'of the order of production' (Deleuze and Guattari, 1977: 296). Desire is not simply the response to the absence of things, but rather Deleuze and Guattari highlight its power as a productive force that can and does create its own objects. The productive function of desire is evident in the concept of desire lines, which deviate from defined structures and consequently generate new objects. Desire is neither good nor bad, but rather it is productive and able to have material effects in the social world. Using Deleuze and Guattari's interpretation of desire sensitises us to the material and abstract properties of desire lines, but most importantly to the real or productive effects of desire in urban environments. In this framework, humans as 'desiring-machine[s]' (Deleuze and Guattari, 1977) interface with the flows of urban networks and exert agency within these networks; in this instance defensive architecture and desire lines exist in complex networked structures of both human and non-human actors.

Within these networks, desire lines can result in material changes. Unsanctioned paths may be formalised into existing structures, in response to users' activity. This suggests that the rather depressing picture painted above – in which capital squeezes humanity from the city – may not necessarily be inevitable. While the picture presented by much research on the disciplining effect of defensive architecture appears to be rather grim, it does not fully account for the generative effect of desire; that where they can, people will navigate and use structures in ways that fit their needs. The paved desire path suggests, in certain circumstances, institutional flexibility and responsiveness and perhaps a way to reclaim the public realm.

To borrow from Deleuze and Guattari (1977), defensive architecture is one of the many micro-fascist regimes that shape social life. Deleuze and Guattari argue that by liberating our 'molecular flows' (i.e. desire), energy and desire can be channelled towards subverting the repression of micro-fascist regimes. To paint desire as simply resistant is, of course, an over-simplification. As Deleuze and Guattari argue, it is also a productive force, and does not simply exist in response to negative space. Deleuze and Guattari (1977) understand the May 1968 student protests as a collective manifestation of desire, in a way that destabilised institutional structures in mid-century France. The initially student-led protests went beyond the micro-political concerns of that group to encompass others, highlighting the power of desire to produce a collective; while the protests did not substantially change the use of space in Paris, they did spark numerous social and political concessions in response, liberalising a largely conservative country. This illustrates the fundamental interconnection between concrete and abstract forms of structure – unsettling the order of relations in physical space is a way to unsettle, challenge and change the relationships between the state and how it governs its citizens. Deleuze and Guattari (1977) argue that only in dismantling and challenging the micro-structures that shape social life can we defend the bigger project of democracy, which is what the loss and over-control (over-production) of public space ultimately threatens. It is easy to romanticise the positive, transformative power of desire writ large. However, desire, while still being a 'productive' force, can also transform public space in ways that are constraining and exclusionary – reorganising its possible affordances. As desire does not always manifest as resistance and revolution, some of its productive effects can be more difficult to account for, particularly when they are co-

opted into existing architectural structures or other social institutions.

Obvious manifestations of desire in the urban landscape include the Occupy Wall Street protests, held most famously in New York but also in various cities and locations around the world. These protests, in a similar way to the May 1968 student protests in France, visibly disrupted the 'natural' order of urban life, using public places including streets, parks and footpaths in ways that explicitly resisted their collectively accepted, or imposed, aims. While the Occupy Wall Street protests did not bring the US economy to a grinding halt, they share a similar approach to reappropriating privately held property, e.g. the student occupation of the Sorbonne in 1968, and Occupy Wall Street's occupation of Zuccotti Park.

The Occupy protests demonstrate that with enough desire, public places and the public sphere can merge and be re-purposed, at least temporarily, to reflect and encourage political engagement and diversity. While the physical presence of movements such as Occupy might be temporary, the spaces they occupied remain in symbolic form as a guide to future possibility in the imagination of the wider community, collectively mapping new possibilities for 'walking' the city, which might reconstruct its topology and patterns of use. The response to tragedies such as the 2015 Charlie Hebdo attacks was materially enacted in public spaces around the world; the massive floral tribute in Martin Place in Sydney following the Lindt Cafe Siege in 2014 and the spontaneous celebrations of events such as the fall of the Berlin Wall are all examples of the way in which new collective paths are created in the public imaginary and make a template for further breaches of the normal order of public space. They serve to reimpose a sense of the public sphere on public space.

The existence of desire lines in this case is not so much a physical path, but the memory and possibilities of an alternative use, socially mapped, for authoritarian public space. Politically excluded groups use material public space to make themselves heard and seen in the political sphere (Mitchell, 2003). Demonstrating a desire which is disorderly and unruly in nature is central to creating lines and paths of political representation within and between material and political publics. Public grief, celebration and protest are collective expressions of desire; they momentarily upend and disrupt the normal business and structure of the city and disrupt and challenge the trajectories of speed, capital and efficiency (Tiessen, 2007a). In democratic societies at least, they are repressed at governments' peril.

Returning to Deleuze and Guattari (1977, 1983), the 'nomad' (the vagabond or 'unsegregated') exists alongside the state, and the smooth space of the nomad versus the striated space of the state can coexist in the same place. The presence of the nomad becomes manifest in such instances as described above when a process reaches 'a critical threshold that pushes it into another pattern of activity, thus actualising singularities that were previously only implicit, its power to affect and be affected changes as well' (Lorraine, 2005: 164). It is when these singularities become explicit, even if only temporarily, that new desire lines are inscribed actually or metaphorically on places. In other words, there is a point, or discontinuity, in the everyday life of a space where it can no longer be imagined, or perhaps even function, as it has in the past. Lefebvre (1991) used a similar notion of the opportunity for change as a 'moment' of social practice where the alienating routines of everyday life were broken by moments of clarity; where something is apprehended. Lefebvre's constant reminders that these things can be ascribed to 'moments' is a useful way to ensure that what might otherwise have been conceived as symbolic (the

protest, the flash mob, the pop-up) are in fact potentially important as ways of re-conceiving space, of inscribing a desire line.

While the control of the city via defensive architecture and other methods of surveillance – such as CCTV – intended to compel compliance may seem complete, there is always the possibility that desire may work as a subverting force, provided that it is enacted socially rather than just individually. The built environment is a central part of the production of social life, and consequently embodies the values and priorities of those with the means and power to construct and maintain them (Sibley, 1995). Attending to lines of desire on the social-spatial urban landscape makes visible often opaque power relationships and those who are dominated and alienated by the built environments that further encode and reinforce these inequalities. As Foucault (1980: 149) argues:

> A whole history remains to be written of spaces – which would at the same time be the history of powers (both of these terms in the plural) – from the great strategies of geopolitics to the little tactics of the habitat.

Desire lines in their concrete sense represent 'little tactics', socially constructed, through which we might observe the history of a space and the power relationships it embodies. A desire line that diverts from a formalised path can inform us not only of the inadequacies of the structure, but of the institution's willingness to tolerate, accept and sometimes absorb alternative routes. As informal paths are concreted and subsumed into the existing network, these small rebellions demonstrate that institutions can be and are responsive to the persistent disruptions that desire lines represent.

Conclusion

> The most successful ideological effects are those that have no words, and ask no more than complicitous silence. (Bourdieu, 1977: 188)

Expanding the concept of 'desire lines' from its current limited scope is a useful tool for imagining how dominant forms of exclusion and social control in public spaces might be resisted. Presently, there is a limited body of scholarly literature that empirically examines how desire lines function in public spaces shaped by defensive architecture. There is a danger that defensive controls of the public are ignored, or are framed as beneficial (e.g. Carmona and Wunderlich, 2012). A lack of academic critique or investigation of the integration of defensive architecture in public space means that these means may be advocated as 'best practice' without the attendant debate that examines the type of social spaces they produce. In this article, we argue that desire lines, as both material objects and moments of social action, provide a framework for the further examination of urban spaces and human agency.

Desire lines are the manifestation of a common will, and serve to inscribe that will on space that is dominated by contemporary logics of capital and neoliberal governance. The power of this concept lies not in its literal meaning of inscribing new paths into an ordered space, but by its more metaphorical use where actions by individuals, groups and social movements provide a map in the collective imaginary about what may be possible in space beyond the uses publics are coerced or manipulated into exercising. Mapping desire lines attunes an individual's movements through inhospitable space both physical and relational. Desire lines emerge in the gaps allowed by existing impositions of public space, which may be poorly designed, circuitous or non-existent, pointing to alternative modes of use and engagement. They also allow us to consider the connection between the affective and material understandings of the city.

While De Certeau's account of walking allows us to consider the agency of humans in urban environments, his analysis is curiously silent on the affective properties of the city. By incorporating an analysis of desire alongside his account of 'doing' the city, we can provide an account of human agency that accounts for the 'affective dimensions of city life' (Duff, 2010: 881). As De Certeau explains, 'The chorus of idle footsteps … their swarming mass an innumerable collection of singularities. Their intertwined paths give their shape to spaces. They weave places together' (De Certeau, 1984: 97). Aided by De Certeau's (1984) 'walking the city' and the possibilities that it provides us for resistance to an imposed order, we can begin to map the emergent and desire-driven possibilities of urban spaces. By including an account of desire lines, which at the core are affective modes of engagement with the cityscape, we can begin to make visible the ways in which we are driven and able to add texture, meaning and possibilities for personal enrichment to places that might be otherwise thin, lean and impersonal (Casey, 2001). Thus, places are produced and woven together in both pragmatic and affective assemblages. Desire lines are temporally ordered, an emergent and unfixed process (like cities themselves) that provides us with a way of thinking through how people live in cities and urban spaces – and by extension how we live in, around and in resistance to the neoliberal ideologies embodied in much contemporary urban architecture. The defensive and disciplined city is not inevitable. It has the condition and possibility for change and flexibility. By testing the boundaries of taken for granted routes, the city's possibilities can be (re)mapped to be more responsive to human use. Of course, vested interests will attempt to re-exert control over contested spaces, but by mapping desire onto city spaces, we can begin to attend to the ways the city is being moulded, shaped, resisted and (re)written through action.

The importance of this perspective, politically, is that to act is to change. The arrangement of space in the service of homogenous big retail, corporate plazas, placeless hotels and the exclusionary requirements of public safety provides a non-coercive form of control over the users of these spaces. The introduction of protesters, loiterers, guerrilla gardeners or 'undesirables' into these spaces is a moral as well as a political act in that its *rational* justification has been precluded by the fundamentals of legal and normative capitalist claims. The seeds of doubt and an alternative vision about the rational use of these spaces can only be planted by an appeal to justice, empathy or aesthetics that resists their normative modes of governance. The existence of these desire lines of memory and possibility, in this case planted by Deleuze and Guattari's (1983) 'nomad', like the more material desire lines of muddy tracks in a grassy field, are reminders that the overwhelming logic of top down construction of public space is not the last word.

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